

KU-RING-GAI LOCAL PLANNING PANEL MEETING TO BE HELD ON MONDAY, 17 FEBRUARY 2025 AT 9:45AM BY ZOOM CONFERENCING

This meeting will be live streamed – click on the link below at 12:30pm on 17 February 2025 to watch the live stream

https://www.krg.nsw.gov.au/Council/Council-meetings/Ku-ring-gai-Local-Planning-Panel-KLPPmeetings/Ku-ring-gai-Local-Planning-Panel-meetings-live-stream

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AGENDA

** ** ** ** ** **

NOTE: For Full Details, See Council's Website – <u>www.krg.nsw.gov.au</u> under the link to business papers

APOLOGIES

DECLARATIONS OF INTEREST

GENERAL BUSINESS

GB.1 72 Ridge Street, Gordon – Torrens subdivision & new garage

4

File: EDA0365/24

Torrens title subdivision of one lot into two, construction of a new garage, driveway works to an existing front fence and tree removal

RECOMMENDATION

PURSUANT TO SECTION 4.16(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

- A. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as consent authority, under Section 4.16 of the Environment Planning and Assessment Act 1979, is satisfied that the request submitted under Clause 4.6 to vary the minimum lot size development standard contained in Clause 4.1(3) of KLEP 2015 has met the requirements of Clause 4.6(3). The Panel is also of the opinion that strict compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify the variation to the development standard.
- B. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as consent authority, under Section 4.16 of the Environment Planning and Assessment Act 1979, being satisfied that the proposed development would be in the public interest, grant development consent to eDA0365/24 for Torrens title subdivision of one lot into two and construction of a new garage, works to existing front fence and tree removal at 72 Ridge Street Gordon, subject to conditions contained in the Development Assessment Reports (Attachment A1). Pursuant to Section 4.53 of the Environmental Planning and Assessment Act 1979, this consent lapses if the approved works are not physically commenced within five years of the date of the Notice of Determination.

GB.2 100 Eton Road, Lindfield – Upgrade to Telecommunications facility

File: EDA0318/24

Upgrade of telecommunications facility

RECOMMENDATION

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, being satisfied that the proposed development would be in the public interest, grant development consent to eDA0318/24 for upgrade the existing telecommunications facility at 100 Eton Road, Lindfield, subject to conditions contained in the Development Assessment Report (**Attachment A1**). Pursuant to Section 4.53 of the Environmental Planning and Assessment Act 1979, this consent lapses if the approved works are not physically commenced within five years of the date of the Notice of Determination.

GB.3 Planning Proposal for 77 Kulgoa Road Pymble

File: S14501

To refer the Planning Proposal for 77 Kulgoa Road, Pymble to the KLPP for advice as required by the Local Planning Panels Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the *Environmental Planning and Assessment Act 1979.*

Recommendation:

That the KLPP advise Council that the Planning Proposal should proceed to Gateway Determination, subject to amendments.

GB.4 Planning Proposal for 40 Dumaresq Street Gordon

493

185

109

File: S14341

To refer the Planning Proposal for 40 Dumaresq Street, Gordon to the KLPP for advice as required by the Local Planning Panels Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the *Environmental Planning and Assessment Act 1979.*

Recommendation:

That the KLPP advise Council that the Planning Proposal should proceed to Gateway Determination, subject to amendments.

** ** ** ** ** **

Item GB.1

DEVELOPMENT APPLICATION

SUMMARY SHEET

REPORT TITLE:	72 RIDGE STREET, GORDON – TORRENS SUBDIVISION & NEW GARAGE
ITEM/AGENDA NO:	GB.1

APPLICATION NO:	eDA0365/24
ADDRESS:	72 Ridge Street, Gordon
WARD:	Gordon
DESCRIPTION OF PROPOSAL:	Torrens title subdivision of one lot into two, construction of a new garage, driveway works to an existing front fence and tree removal
APPLICANT:	Corona Projects Pty Ltd
OWNER:	W Hu
DATE LODGED:	6 September 2024
SUBMISSIONS:	Three submissions
ASSESSMENT OFFICER:	Bonnie Yue
RECOMMENDATION:	Approval

KLPP REFERRAL CRITERION:	A greater than 10% departure from a development standard.
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Ku-ring-gai Local Planning Panel Meeting - 17 February 2025

Item GB.1

To determine Development Application No eDA0365/24 for 72 Ridge Street, Gordon.

This application is reported to the Ku-ring-gai Local Planning Panel for determination as it proposes a departure from a development standard in excess of 10% in accordance with the Minister's S 9.1 Local Planning Panels Direction.

RECOMMENDATION

PURSUANT TO SECTION 4.16(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

- A. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as consent authority, under Section 4.16 of the Environment Planning and Assessment Act 1979, is satisfied that the request submitted under Clause 4.6 to vary the minimum lot size development standard contained in Clause 4.1(3) of KLEP 2015 has met the requirements of Clause 4.6(3). The Panel is also of the opinion that strict compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify the variation to the development standard.
- B. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as consent authority, under Section 4.16 of the Environment Planning and Assessment Act 1979, being satisfied that the proposed development would be in the public interest, grant development consent to eDA0365/24 for Torrens title subdivision of one lot into two and construction of a new garage, works to existing front fence and tree removal at 72 Ridge Street Gordon, subject to conditions contained in the Development Assessment Act 1979, this consent lapses if the approved works are not physically commenced within five years of the date of the Notice of Determination.

Ku-ring-gai Local Planning Panel Meeting - 17 February 2025

Item GB.1

GB.1 / 6

Bonnie Yue Senior Development Assessment Officer Selwyn Segall **Team Leader - Development Assessment**

Shaun Garland	Michael Miocic
Manager Development Assessment Services	Director Development & Regulation

Attachments:	A1 <u></u>	Development Assessment Report	2024/340786
	A2 <mark>↓</mark>	Location Sketch	2025/028010
	A3 <mark>↓</mark>	Zoning Sketch	2025/028014
	A4 <mark>.]</mark>	Amended Architectural and Subdivision Plans	2024/379816
	A5 <mark>↓</mark>	Stormwater Management Plans	2024/379814
	A6 <mark>.]</mark>	Amended Landscape Plans	2024/379815
	A7 <mark>.]</mark>	Clause 4.6 Variation Request- Minimum Lot Size	2024/293575
	A8 <mark>.]</mark>	Survey Plan	2024/293569

DEVELOPMENT APPLICATION

ASSESSMENT REPORT

REPORT TITLE	72 Ridge Street, Gordon - Torrens title subdivision of one lot into two and construction of a new garage, driveway, works to existing front fence and tree
	removal

APPLICATION NO	eDA0365/24	
PROPERTY DETAILS	72 Ridge Street, Gordon Lot B DP 306541 1653m ² R2 Low Density Residential	
WARD	GORDON	
PROPOSAL/PURPOSE	Torrens title subdivision of one lot into two and construction of a new garage, driveway, works to existing front fence and tree removal	
TYPE OF DEVELOPMENT	Local	
APPLICANT	Corona Projects Pty Ltd	
OWNER	W Hu	
DATE LODGED	6 September 2024	
RECOMMENDATION	Approval	

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PURPOSE OF REPORT

To determine Development Application No eDA0365/24 for Torrens title subdivision of one lot into two and construction of a new garage, driveway, works to existing front fence and tree removal.

This application is reported to the Ku-ring-gai Local Planning Panel for determination in accordance with the Minister's section 9.1 Local Planning Panels Direction as it proposes as it proposes a departure from a numerical development standard in excess of 10%.

INTEGRATED PLANNING AND REPORTING

Places, Spaces & Infrastructure

Community Strategic Plan	Delivery Program	Operational Plan
Long Term Objective	Term Achievement	Task
P2.1 A robust planning framework is in place to deliver quality design outcomes and maintain the identity and character of Ku-ring-gai.	Applications are assessed in accordance with state and local plans.	Assessments are of a high quality, accurate and consider all relevant legislative requirements.

EXECUTIVE SUMMARY

Issues	Lot size
Submissions	1 st notification period 23/09/2024 – 07/10/2024 3
	2 nd notification period 29/11/2024 – 13/12/2024 Nil
Land and Environment Court	N/A
Recommendation	Approval
HISTORY	
Site history	

The site has a history of residential use.

Previous applications history

A Pre-DA consultation was not undertaken with Council prior to the lodgement of this Development Application.

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ATTACHMENT NO: 1 - DEVELOPMENT ASSESSMENT REPORT

Council's records show previous applications relating to the site as follows:

Туре	Application	Description	Decision	Date
Minor heritage Works	MHW0004/24	Minor alterations to a heritage item	Approved	20/02/2024

Current Development Application History

Date	Action	
6 September 2024	Application lodged.	
16 September 2024	The application was notified to neighbouring property owners for a period of 14 days. Three submissions were received.	
06 November 2024	Council sent a preliminary assessment letter to the applicant seeking additional information as follows:	
	Engineering issues	
	Water management	
	 submit a stormwater drainage plan depicting each lot being able to implement its own water management system as part of any future residential development. 	
	 submit a licenced plumber's report to verify the existing drainage system for the existing dwelling on Proposed Lot 1 and confirm that the system functions hydraulically. 	
	iii. the drainage system for the site must be upgraded if no property drainage system currently exists.	
	iv. provide a 2,000 litres rainwater tank for the existing dwelling to be retained.	
	Vehicular access	
	 submit a new vehicular access within the road reserve off Holford Crescent for proposed Lot 2. 	
	ii. submit a driveway design.	
	Connection to services	
	 submit plans showing utility services for both lots, particularly the sewer main/ line that would be required to service the allotments. 	
	Planning issues	
	 the road crossing, hardstand area and driveway within the north-eastern side setback are redundant as a garage is 	

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	proposed to be accessed from Holford Crescent and should be deleted and replaced with soft landscape area.	
	 the white external walls are not supported. Submit an amended schedule of materials and finishes in accordance with KDCP Part 4C.10. 	
	Landscape issues	
	The landscape plan is not acceptable as it does not comply with Part 21.1 of the KDCP. The following is recommended:	
	i. replace monoculture planting of native species to the rear, northern side, southern side and front boundaries.	
	ii. garden beds are to be a minimum 1.5 metres wide and include a range of trees, shrubs and ground covers.	
	existing hedge of <i>Murraya paniculata</i> along the front boundary are to be indicated as retained and noted to be maintained at a maximum height of 1.2 metres.	
	iv. show two additional tall trees.	
	v. show Tree 7 as retained.	
	Heritage issues	
	i. proposed concrete driveway is unacceptable.	
	 ii. landscape plan includes monoculture planting of native species which is not sympathetic to the landscape character of the heritage item. 	
19 November 2024	The applicant responded to Council's preliminary assessment letter and submitted amended plans and additional information. The additional information and amended plans contained the following:	
	 i. amended architectural plans and landscape plan ii. stormwater plans iii. revised schedule of colours and materials iv. deletion of the existing driveway on Lot 1 v. location of driveway and garage for Lot 2 	
22 November 2024	The amended application was notified to neighbouring property owners for a period of 14 days. No submissions were received.	

THE PROPOSAL

The proposal is for Torrens title subdivision of one lot into two and construction of a new garage, driveway, works to existing front fence and tree removal. The proposed lots are as follows:

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- Lot 1: Proposed Lot 1 would be the south-eastern most allotment and would have a primary frontage to Ridge Street. It has a width of 21.946 metres, average depth of 37.64 metres and a total area of 825.89m². The existing dwelling known as No. 72 Ridge Street is contained within proposed Lot 1.
- Lot 2: Proposed Lot 2 would be the north-western most allotment and would have a frontage to Holford Crescent. It has a width of 22.25 metres and a depth of between 35.872 metres and 39.555 metres. Proposed Lot 2 has a total area of 827.11m².

The proposal seeks to vary the minimum 930m² lot size development standard under Kuring-gai LEP 2015.

The proposed works include:

- demolition of the existing garage and removal of part of the existing driveway to reinstate soft landscaping
- increase the height of the front fence to 1.2 metres and replace existing metal infill and gate with timber picket infill and gate
- a double garage and new driveway to Holford Crescent for proposed Lot 1
- a driveway to the western side of Holford Crescent, and driveway and garage to the southern side of Holford Crescent for proposed Lot 2
- removal of three trees (Trees 7, 8 and 13)

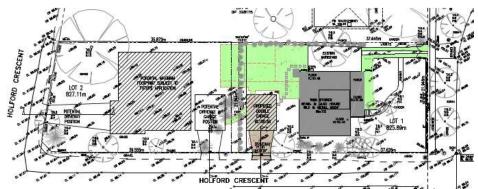


Figure 1: Proposed subdivision and development

THE SITE AND SURROUNDING AREA

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Figure 2: Aerial photograph of subject site and surrounding properties

Site description

The site is legally described as Lot B in DP 306541 and is known as No. 72 Ridge Street, Gordon **(Figure 2)**. The subject site is a corner block, with a primary frontage to Ridge Street, western rear boundary and the southern side boundary to Holford Crescent. The site is located on the north-western side of Ridge Street and is irregular in shape, having a width of 21.946 metres to Ridge Street and a site width of 22.25 metres to Holford Crescent. The site has an average depth of 75.349 metres, with a site area of 1,653m².

The existing development on the site comprises a two-storey dwelling house with a detached garage within the rear setback. Vehicular access to the detached garage is via a concrete driveway adjacent to the northern side boundary.

Constraint:	Application:
Visual character study category	Pre-1920
Easements/rights of way	No
Heritage Item – Local	Yes – Item No. I235 'Ridge Street Cottage Group'
Heritage Item – State	No
Heritage conservation area	No
Within 100m of a heritage item	Yes – No. 84 Ridge Street, No. 74 Ridge Street, No. 64 Ridge Street, No. 65 Ridge Steet and No. 57 Ridge Street, Gordon

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Bush fire prone land	No
Natural Resources Biodiversity	No
Natural Resources Greenweb	No
Natural Resources Riparian	No
Within 25m of Urban Bushland	Yes
Contaminated land	No



Figure 3: The subject site when viewed from Ridge Street

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Figure 4: The rear of the subject site

Surrounding development

The site is surrounded by low density residential development. The subdivision pattern in the immediate locality is predominantly rectilinear allotments, though some battle-axe and irregularly shaped allotments exist.

The adjoining property to the north-eastern side is known as No. 74 Ridge Street. Development on this site comprises a single occupancy dwelling house which is also a locally listed heritage item.

Properties further to the north-east and south at Nos. 76, 76A, 78, 80 Ridge Street and 68 Ridge Street, Gordon, were formally larger lots which were later developed as dual occupancies and then Torrens title subdivided.

Opposite and southwest of the site, is a Council owned reserve ("Nar-Rang Park / Holford Crescent Park") zoned RE1 Public Recreation.

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Figure 5: The heritage listed property (No. 74 Ridge Street, Gordon) located at the northeastern side of the subject site

CONSULTATION

Community

In accordance with Appendix 1 of the Ku-ring-gai Community Participation Plan, owners of surrounding properties were given notice of the original application. In response, three submissions from the following were received.

- 1. Virginia Eales, No. 68 Ridge Street, Gordon
- 2. Irene Loke and Adrian Liceralde, No. 47 Holford Crescent, Gordon
- 3. Andrew Owens, No. 74 Ridge Street, Gordon

The submissions raised the following issues:

Reduction in on street parking

The proposed double garage and driveway on Holford Crescent has been assessed by Council's Development Engineer. While parking on Holford Crescent is limited and one street parking space will be removed as a result of the new driveway, the new driveway will help alleviate this by offering an additional off-street space. There is also ample, unrestricted street parking in Ridge Street. The development provides off-street parking for the subdivided lots and complies with relevant standards with regard to parking provision. The design also ensures turning movements are within acceptable gradient limits as per AS 2890.1-2004. The proposed parking arrangements and traffic generated from the proposal is considered acceptable.

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Vehicle and pedestrian safety

In response to concerns about safety and visibility in the narrow laneway, the design allows for clear sightlines and turning movements. The new driveway will not impact on-street parking directly but will provide off-street parking, easing demand in the area. Holford Crescent is also not a busy traffic thoroughfare and in this instance the proposal is not expected to have a significant effect on traffic flows or traffic implications.

A kerb to Holford Crescent laneway should be provided

This is a matter for Council's Operations Department. If the DA is to be approved, a standard layback with kerb wing would be provided in accordance with Council's Driveway Specifications which is dealt separately under the driveway levels for Roads Act Approval.

Lighting impacts

The northern side boundary of No. 68 Ridge Street and No. 47 Holford Crescent directly adjoins Nar-Rang Park/Holford Crescent Park. The proposed garage and driveway for Lot 1 are located on the southern boundary, opposite Nar-Rang Park/Holford Crescent Park. To ensure the amenity of surrounding properties is maintained, conditions requiring that all external lighting be mounted, screened and directed in a way that it does not create a nuisance or light spill onto buildings on adjoining lots or public spaces are recommended (Conditions 17, 54, 68).

Future dwelling design

The DCP requires an indicative building footprint to assist in the merit assessment of an application for subdivision. The construction of a dwelling house on the proposed lot will require an application for development consent and this will provide an opportunity for an assessment against relevant planning controls.

A review of the indicative building footprint demonstrates that Lot 2 is capable of supporting a future dwelling house and compliance is likely to be achieved with the current requirements specified under the KDCP.

Amended plans submitted on 19 November 2024

The amended plans were notified and no submissions were received.

Internal Referrals

Heritage

Council's Heritage Advisor commented on the proposal as follows:

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Planning Instruments

Heritage Status

Local Heritage Item	Yes
Heritage Conservation Area	No
Immediate vicinity of a heritage item	No. 74 Ridge Street
	No. 65 Ridge Street

Statement of Significance

Council's heritage inventory sheet has the following Statement of Significance for the Heritage Item:

The Group

No. 72 Ridge Street is one cottage in a large group of early cottages in Ridge Street. They are demonstrative of the early history of Gordon, and rare as a collection of early vernacular cottages. They date to the Federation Period of 1890-1920. Research into the social history of the area by Ku-ring-gai Historical Society suggests the area was initially very tight knit, with families developing connections over several decades and generations. It is thought that prior to subdivision, most of these houses had enough land for small orchards or vegetable patches in addition to residences.

The Site

This land was originally part of a 220 acre land grant to John Terry Hughes in 1840. It was first subdivided under DP3337 in February 1897, by the mortgagees of the land Sarah Isabella Hogg and David Kircaldie who had come into possession of the land in August 1896. It was known as the Gordon Heights Estate. Ridge Street came into being with the subdivision.

The relevant lot, lot 73, was the first lot purchased from DP3377. It was acquired by William Ames, engineer, in June 1897. It contained 3 roods and 2 perches. A mortgage was taken out on the site in March 1905.

It does not appear that a dwelling was built on the site, with the address of Ames being in Chatswood in 1900, Liverpool 1903-1904, North Sydney 1905, then in Essex Street, Killara from 1906-1917.

In January 1908, the property was transferred to Alice Mary Allard, wife of Francis John Allard of Chatswood, auctioneer. Allard's residence in the period is listed as in Anderson St, Chatswood. In March 1914, it was transferred to Henry Shaw Clark of Naremburn, draper.

He is listed in Ridge Street from 1915 according to electoral rolls and the Sands Directory for that year, with his wife Frances. This residence was the first house on his land and known as 'Loch Lynne.' 1921 valuations describe it as a weatherboard cottage, double fronted, 2 rooms, kitchen and offices, iron roof.

At the time of the subdivision of Clark's landholding of lot 73 in 1923 (roughly in half; size not given), Loch Lynne was sited on Lot A. In 1926, Clark sold Lot A

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to Walter John Leaver, gardener. It was occupied by JW Allen from 1925-1926 previously, likely being rented by Clark before its sale. Aerials show this house on the previous Lot A has been demolished and that Holford Crescent is now located on its previous site.

In 1923, the DP shows lot Lot B, the subject site, as the site of a 'proposed cottage.' Lot B was retained by Clark after subdivision and sale of Lot A. The subject dwelling was built on the site between 1923 and 1926. It was likely constructed or completed by 1924, for its appearance in the 1925 edition of the Sands directory, then known as 'Whitehaven.'

In 1926 it was described as a double fronted brick cottage with iron roof. It was valued at 234 pounds unimproved, 1275 pounds improved. Clark married Frances Grimes around this time, who lived with her father Thomas Grimes and brother William Henry Grimes in the neighbouring 74 Ridge Street, known as Brighton. Thomas Grimes was also originally listed on his certificate of title as a draper from Naremburn.

A Miss B Clark lodged an application for additions to a dwelling in Ridge Street, Gordon on 7th July 1936 (#379). Given that no other individuals with the last name Clark are listed in the 1936 electoral roll for Ridge Street, it can reasonably be assumed that this relates to the subject site and that the first portion of the name may be an error.

It appears that there was an unsuccessful attempt to sell the property in December 1938. The following ad ran on the 14th of that month: "GORDON. — Brick Cottage, stone foundation. land, 72 X 250. £975. at a sacrifice. Selling to genuine, buyer. Clark, 72 Ridge St." Given the listed land dimensions this must be the subject property; however no change in ownership or mortgage variation is listed at any point around this time on the certificate of title. On 4th February 1939, the following ad ran: "NOW Inspect 72 Ridge Street. Gordon, reduced price, £875. Solid Investment, owner occupies." At this point it is evident that HS Clark also owned a property in Arncliffe which was also up for sale within days of 72 Ridge Street. This would suggest Clark was in some form of financial distress at the point but may have sold the Arncliffe property to rectify his situation. He retained 72 Ridge Street, Gordon, and again no transfer or mortgage variation occurs. Henry and Frances appear to have resided here together until her death in 1941, and his death in 1943 as listed on their death notices.

In September 1943 upon HS Clark's death, the property was transferred to Raymond Joseph Clark of Naremburn, Bread carter. In October 1954, the property was transferred to Russell Gordon Clark of Gordon, linesman. Until at least 1980, Russell Gordon Clark continued to occupy this property (according to most recent electoral rolls & 1989 inventory sheet). The current owner (Property and Rating, retrieved 10/07/2019) is listed as the Estate of Russell Gordon Clark, Care of: Asset Realty, implying that the subject property has remained in the ownership of the Clark family for almost 94 years.

Background

Comments were provided on the original proposal and the following conclusion and recommendations were made:

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Issue	Suggested amendment
Driveway	Part 19D.4.5
	The proposed concrete driveway is unacceptable. The applicant is to refer to the KDCP for appropriate driveway materials / finishes.
Landscaping	19D.3.2 + 19D.3.3
	19F.3.1
	The proposed landscape plan is not acceptable as it does not comply with the control. The design includes monoculture planting of native species which are not sympathetic to the Heritage Conservation Area landscape character. The issues with the proposed landscape plan can be conditioned – refer to landscaping conditions (Conditions 3, 13, 68).

Proposed amendments

KDCP compliance table

Development Controls	Complies
19A. Subdivision and site consolidation	
19A.2 Subdivision and site consolidation of a heritage item	
 Subdivision of a Heritage Item will only be supported where: the subdivision does not adversely affect the cultural significance of the Heritage Item. 	YES
ii) evidence of the historical setting, landscape and subdivision pattern can be recognised and/or retained.	YES
2. Subdivision or consolidation will not be permitted where the curtilage and setting of a Heritage Item and significant buildings within or adjoining the site, would be compromised.	YES
Note: Applications for subdivision and site consolidation of a Heritage Item will require a curtilage analysis within the Heritage Impact Statement with particular emphasis on the potential impact on garden settings.	

Commentary in response to Controls 1 and 2 in Part 19A.2 Subdivision and site consolidation of a heritage item

The proposed subdivision has no impact on the curtilage of the heritage item or the neighbouring heritage items at 65 and 74 Ridge Street. The subdivision is at the rear of the property the furthest part of the site from the two neighbouring heritage items.

There is little potential impact on garden settings. The site is surrounded by roads on three (3) boundaries – to the south-east (Ridge Street), south-west (Holford Crescent) and north-west (Holford Crescent) with a timber paling fence along the boundaries of most of the site. Furthermore, the rear garden has a large lawn area with vegetation planted along the perimeter. Any potential dwelling will be located within the lawn area and the perimeter vegetation will remain. There will be little to no impact by a potential dwelling on garden settings.

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The site proposed for subdivision is currently a large site which does not follow the existing subdivision pattern for the surrounding area. The proposed subdivision of the site will result with 2 lots that are approximately the same size as the surrounding lots and therefore the proposed subdivision will align with the existing subdivision pattern. The proposed subdivision will have no impact on the overall subdivision on the immediate surrounding area.

The heritage item (72 Ridge Street) garden setting is not considered as a dwelling with a contributory garden – the landscaping contributes little to the overall heritage of the site. The proposed subdivision will have a negligible impact on landscape setting of the site and the immediate surrounding area.

The heritage item has a first floor addition that is considered intrusive and the garden/ landscape setting provides no heritage contribution. The site has had many changes that have continually reduced the heritage significance of the item - due to this the site has no historical setting remaining.

Development Controls	Complies
19B DEMOLITION WITHIN HCAS AND DEMOLITION RELATED TO A	HERITAGE
19B.2 Demolition related to a Heritage Item	-
2. The demolition of a Heritage Item, including buildings, other	YES
structures, trees and landscape features, is not supported.	
3. Council will only consider the demolition of a Heritage Item where	N/A
an applicant can satisfactorily demonstrate:	
i) retention and stabilisation of the building or structure is	YES
unreasonable, taking into consideration the following: - the heritage	
significance of the property; - whether the building constitutes a	
danger to the public.	
ii) all alternatives to demolition have been considered with reasons	N/A
provided as to why the alternatives are not acceptable.	
Partial demolition of a Heritage Item	
4. In considering applications for partial demolition of a Heritage Item	
(including parts of buildings and other structures, trees and landscape	
features), Council will assess:	
i) the significance of the building part or structure and/or landscape	YES
features and whether its retention is considered necessary;	
ii) its contribution to the significance of the Heritage Item as a whole;	YES
iii) whether all alternatives to demolition have been considered with	YES
reasons provided as to why the alternatives are not acceptable.	-

Development Control	Complies
19D.2 Setbacks	
1. In addition to the side and rear setback controls in Section A of the KDCP, new development on the site of a Heritage Item is to comply with the following:	YES
i) building separation requirements to the nearest Heritage Item building element;	YES
ii) new adjacent development is not to exceed a facade height of 8m from existing ground level, including balustrades;	YES

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Development Control		Complies
9D.2 Setbacks New Development Height	Building Separation	
New Development neight	Requirement	
1 or 2 levels	Minimum 6m	
3 or more levels	Minimum 12m	
	opment has a façade height above 8m	YES
high from existing ground level, the façade is to be stepped back to		120
	paration in accordance with Figure 19D.2	
-1 in the KDCP.		
Development Control		Complies
19D.3 Gardens and Landsca		1/70
1. Trees, and garden element	s and structures which contribute to the	YES
	em are to be retained and conserved.	
	lements and structures can include, but	
	s, croquet lawns, grottos, ferneries,	
garden terracing, lawn edging		YES
	rticulturally and stylistically sympathetic tem. The use of similar materials such as	TES
sandstone, brick and gravel a		
	t species to avoid mono-cultural	YES
	es and as screen planting is encouraged.	123
	en buildings from the street are not	YES
permitted.		120
5. New driveways are to provi	de landscaping on side boundaries.	YES
	de landscaping on side boundaries.	YES YES
 New driveways are to provi Front boundary hedges are 		YES YES
6. Front boundary hedges are		YES
6. Front boundary hedges are Development Control		YES
6. Front boundary hedges are Development Control 19D.4 Access and Parking Driveways	to be a maximum 1.2m.	YES
6. Front boundary hedges are Development Control 19D.4 Access and Parking Driveways		YES Complies
 Front boundary hedges are Development Control 19D.4 Access and Parking Driveways Original and existing rear la retained. 	to be a maximum 1.2m.	YES Complies
 Front boundary hedges are Development Control 19D.4 Access and Parking Driveways Original and existing rear la retained. Where original concrete wh with grass in between. 	to be a maximum 1.2m. ane or side entry vehicle access is to be neel strips exist, they are to be retained	YES Complies YES
 Front boundary hedges are Development Control 19D.4 Access and Parking Driveways Original and existing rear la retained. Where original concrete wh with grass in between. New parking areas, garage 	to be a maximum 1.2m. ane or side entry vehicle access is to be neel strips exist, they are to be retained s and driveways are to be designed	YES Complies YES
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 Front boundary hedges are Development Control 19D.4 Access and Parking Driveways Original and existing rear la retained. Where original concrete wh with grass in between. Where original concrete wh with grass in between. New parking areas, garage carefully so that they do not d 5. Double garages should only Finishes to new or refurbished driveway finishes or be approp HCA. Painted, coloured, stan aggregate, pebblecrete or col driveways or driveway element 	to be a maximum 1.2m. ane or side entry vehicle access is to be reel strips exist, they are to be retained s and driveways are to be designed ominate. y be accessed by a single driveway. d driveways are to match original priate to the architectural style of the nped or stenciled concrete, pavers, oblestones are not to be used for new	YES Complies YES YES YES
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 Front boundary hedges are Evelopment Control 19D.4 Access and Parking Driveways Original and existing rear lateratined. Where original concrete whe with grass in between. New parking areas, garage carefully so that they do not de 5. Double garages should only Finishes to new or refurbished driveway finishes or be approphication (A. Painted, coloured, stant aggregate, pebblecrete or color driveways or driveway element Mew Garages and Carports 9. Where it is physically possing with the historic placement of 10. Garages and carports are 	to be a maximum 1.2m. ane or side entry vehicle access is to be neel strips exist, they are to be retained s and driveways are to be designed ominate. y be accessed by a single driveway. d driveways are to match original priate to the architectural style of the nped or stenciled concrete, pavers, oblestones are not to be used for new nts. ble, new car parking is to be consistent parking structures on the site. not permitted forward of the building line	YES Complies YES YES NO
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Development Control	Complies
19D.4 Access and Parking	
12. Only in exceptional circumstances and where a dwelling has a side setback of less than 3m, a hard stand area forward of the building line formed of suitable materials may be considered appropriate.	YES
13. New double garages to heritage items are not considered to be appropriate.	NO

19D.4 Access and Parking Equitable Access

Objectives

1. To ensure that modifications to provide access do not adversely affect significant built fabric.

Driveways

2. To allow for on-site car parking where possible while retaining the character of the property

3. To ensure that driveways do not have any adverse visual impact on the curtilage or setting of the heritage item

4. To minimise the visual impact of new car parking by locating it at the side or rear of properties

Battle-axe Driveways

5. To ensure battle-axe driveways do not detract from the curtilage or setting of the heritage item.

New Garages and Carports

6. To ensure that new garages and carports do not have any adverse impact on the curtilage or setting of the heritage item.

7. To ensure that car parking structures do not challenge the mass or bulk or mimic the architectural detailing of the heritage item.

8. To retain and conserve original and early coach houses, stables and motor garage as they contribute to the setting of the heritage item.

9. To conserve the streetscape by preventing level changes to the street presentation of Heritage Item buildings and their gardens.

10. To retain the existing street presentation of buildings and their gardens.

For the following reasons the objectives of the controls are achieved:

19D.4.13

The proposed double garage is located at the rear of the site and hidden from view from Ridge Street therefore street presentation of the heritage item would remain unchanged in this regard. The proposed double garage is accessed via Holford Crescent (not Ridge Street). The existing double garage on the site is to be demolished and replaced with a considerably smaller double garage. This is acceptable and would have a lesser visual impact on the setting of the heritage item.

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Development Control	Complies
19D.8 Fencing	
Original and Early Fences, Gates and Retaining Walls	
1. Original and early fences, piers, gates and retaining walls are to be retained and conserved. The height of original and early fences is not to be altered.	YES
2. Original face brick or sandstone fences are not to be rendered, coated or painted	YES

The existing fence is not original and therefore the modifications are acceptable.

Conclusion on demolition

The proposed demolition works, including the pruning or removal of trees, will have no more than a minimal impact on the integrity of the heritage item.

Development Control DEVELOPMENT IN THE VICINITY OF HERITAGE ITEMS OR HERITAGE	Complies
CONSERVATION AREAS (HCAS) 19F.1 Local Character and Streetscape	
General 1. All development in the vicinity of a Heritage Item or HCA is to include a Heritage Impact Statement (HIS). The HIS is to address the effect of the proposed development on a Heritage Item or HCA and demonstrate that the proposed works will not adversely impact upon significance, including any related heritage features within the identified curtilage and setting.	YES
Built Form	
2. Development on sites that either directly adjoin or are in the vicinity of a Heritage Item or an HCA is to have regard to:	YES
i) the form of the existing building or buildings including height, roofline, setbacks and building alignment;	YES
ii) dominant architectural language such as horizontal lines and vertical segmentation;	YES
iii) proportions including door and window openings, bays, floor-to-ceiling heights and coursing levels;	YES
iv) materials and colours;	YES
v) siting and orientation;	YES
vi) setting and context;	YES
vii) streetscape patterns.	YES
Views	
New development in the vicinity of a Heritage Item or HCA is to demonstrate that it will not reduce or impair important views to and from the Heritage Item from the public domain.	YES

Development Control	Complies
19F.2 Building Setbacks	
Setbacks	
1. The front setback of development adjacent to a Heritage Item or buildings	YES
within an HCA is to be greater than that of the Heritage Item or building within	
the HCA. Where variations in setbacks exist, the larger setback will apply.	

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Development Control	Complies
19F.3 Gardens and Landscaping	
Gardens, Setting and Curtilage	
1. Development in the vicinity of a Heritage Item or an HCA is to:	
<i>i)</i> retain original or significant landscape features associated with the Heritage Item or HCA, or which contribute to its setting. In particular, garden settings in the vicinity are not to be adversely affected in terms of overshadowing or physical impacts on significant trees;	YES
ii) retain the established landscape character of the Heritage Item or HCA including height of the tree canopy and density of boundary landscape plantings or otherwise reinstated them in the new development;	YES
iii) include appropriate screen planting on side and rear boundaries.	N/A

Development Control	Complies
19F.4 Fencing	
Original and Early Fences, Gates and Retaining Walls	
1. Original and early fences, piers, gates and retaining walls are to be retained and conserved. The height of original and early fences is not to be altered.	YES
2. Original face brick or sandstone fences are not to be rendered, coated or painted.	YES
3. The configuration, finishes and details of original sandstone retaining walls that are located at the street front boundaries (whether identified as contributory properties or not) are to be retained and conserved.	YES

Conclusion

The proposal will have a minimal impact on the heritage item and those heritage items within the vicinity of the subject site.

Landscaping

Council's Team Leader Landscape and Ecological Assessment commented on the proposal as follows:

KDCP COMPLIANCE TABLE			
Control	Proposed	Complies	
Part 3A.4 Trees and V	egetation		
C1. Any subdivision or consolidation development is to maximise the retention of and minimise the impacts on existing significant trees and vegetation on or adjacent to the site.		YES	

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F rr A F e	encroachment of less than 10% within the Tree Protection Zone (TPZ) is indicated in the Arborist report. This is a minor encroachment under AS4970-2009 and is acceptable as such. However, other works may potentially occur under exempt or complying development in future within the TPZ of this tree because of the subdivision.	
n b n	To guarantee a substantial area of the TPZ of T19 remains intact, while still allowing for a substantial building footprint, a condition is proposed requiring a Section 88B restriction be established (Condition 68).	
5 0 n e n c	The indicative building footprint is approximately 5.5 metres at its north-western corner to the trunk of T19. The TPZ of this tree is indicated to be 9.4 metres. It is suggested an exclusion area be established by way of an 88b instrument for a 7 metres radius from the trunk. This excludes changes of level and structures, except for approved driveways, within this radius.	
s C tt la g w w u la	It is noted that the proposal for Lot 2 includes two suggested driveway locations, one from Holford Crescent southern side boundary and one from the western boundary to Holford crescent. The atter option is preferred as the driveway and garage location to the southern boundary of Lot 2 would result in removal of trees T9-T12 (Palms) which would have a greater impact on the andscape and streetscape compared to the driveway from the lot's western boundary.	

KDCP COMPLIANCE TABLE			
Control	Proposed		Complies
Part 4A.4 Landscaping	g and Part 13 Tree and Ve		
C1. Landscape proposals are to retain existing trees where possible	The proposal includes the removal of: YES • T7 Camellia sasanqua T8 Trachycarpus sp (Windmill Plan) • T13 Cotoneaster sp. T13 Cotoneaster sp. T7 has been heavily pruned as it is under electrical wires and the proposed driveway results in a major encroachment due to the driveway, however its retention is recommended because it adds to the landscape and streetscape character (Conditions 3 & 13)		
C2. Tree replenishment and	Lot size	Number of trees	YES
planting to be	Less than 850m ²	3	
provided.	850m ² to 1,000m ²	5	

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	1	,001m² to 1,50	00m²	7		
	C	ver 1,500m ²		10 or as directed		
	withir poter minin The s oxyca appro 13). Lot 2 or mo	proposed Lot tially 5 addition num height of pecies Eucaly arpa are not co priate species includes 1 tree ore in height. A	1. The p nal trees 13 metres ptus fibro prisidereo are cond are cond e which is dditional	attain a total of 3 tre roposal includes capable of attainin s. sa and Fraxinus suitable and more ditioned (Condition s currently 13 metro tree planting withir	ga n es	
	the si	ibdivided lot is	s not requ	ired or practical.		
C3. Landscaping to include tall trees, small trees, shrubs and ground cover. Continuous rows of monoculture planting and high hedging to boundaries is to be avoided.	contro planti comp	ol as the desig ng of Murraya	n include panicula control d	t comply with this is monoculture ta. However, can be achieved by	/	YES
C4. Landscape designs are to reflect the prevailing landscape character of the area.		andscape plan dments by cor		table, subject to Condition 13).		YES
C5. New trees are to be distributed across the site and are to be located to accommodate the mature growth of both new and existing trees.		andscape plan ing this require		additional trees		YES
C6. Hedges near boundaries are not to impact the amenity of adjoining properties by blocking sunlight, bushland or water views or unreasonably shading neighbours' private open space or living areas in winter. Hedges are not to	The k	andscape plan	is accep	table in this regard	<i>I.</i>	YES

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· · ·		
grow to excessive height and are to be maintained at a height below 2 metres.		
Part 19 Heritage Items	and Heritage Conservation Areas	
19D.3 Gardens and Landscaping – Heritage Items	The landscape plan is subject to a condition requiring minor amendments to the proposed planting (Condition 13).	YES
Part 21 General Site D	esign	
21.1 Earthworks and Slope		
C3. Landscape cut or fill should not be more than 600mm above or below natural ground line.	Landscape cut and fill is not proposed.	YES
C5. Existing ground level is to be maintained for a distance of 2m from any boundary.	Existing ground level has been maintained for 2 metres from any boundary.	YES
C8. Retaining walls, excavated and filled areas are to be located and constructed to have no adverse impact on iii) trees and vegetation to be retained on site or on adjoining sites.	No excavated or retained areas.	YES
21.2 Landscape Design To ensure the landscape design and species selection is suitable to the site its context and considers the amenity of residents and neighbours.	The landscape plan is not acceptable as it includes monoculture planting of Murraya paniculata and tree species which are not suitable or are not tall trees for the purposes of tree replenishment. An amended landscape plan is conditioned (Condition 13) to ensure compliance with this control.	YES

The above landscape referral comments have been considered and it is agreed that the proposed development is satisfactory in relation to the relevant provisions under the DCP. The proposed tree removal and landscaping is acceptable subject to conditions, as referenced in the above referral comments. The proposal therefore satisfies the relevant objectives and controls under Parts 3A.4, 4A.2, 4A.4 and 13 of the KDCP and is supported in this regard.

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Engineering

Council's Senior Development Engineer commented on the proposal as follows:

KDCP COMPLIANCE	TABLE	
Control	Proposed	Complies
	n for Water Management	
24A.1 Development Type 1, 2, 3, 4, 5, 6, 7, 8	Type 8 – Subdivision	YES
24A.2 Location A, B, C, D	Location 'A' – Land that drains directly to Council's drainage system in the road or drainage reserve without the need for stormwater runoff to pass over another private property. The land can drain by gravity to Ridge Street and Holford Crescent. The property does not contain kerb and gutter in Holford Crescent. Road and property runoff is conveyed through a gravel strip at the edge of road bitumen and a new section of kerb in Holford Crescent.	YES
Part 24B. Stormwate	r Disposal from Location A Properties	
24B.2 Discharge to	The current proposal seeks approval for retention of	YES
kerb and Gutter/Table Drain	the existing dwelling and a new double garage on proposed Lot 1. An indicative building footprint on proposed Lot 2 has been shown on the submitted stormwater management plans prepared by KD Stormwater Pty Ltd indicating the ability of each lot to implement its own water management system as part of any future residential development.	120
	Proposed Lot 1 – Existing Dwelling to be retained	YES
	The existing house on proposed Lot 1 is to be retained. A 2,000 litres rainwater tank is proposed, which satisfies the minimum storage required by Table 24C.4-1 of the Ku-ring-gai DCP. Rainwater is to be reused for irrigation purposes.	
	The stormwater management plan depicts that runoff from a portion of the roof area will be directed to the 2,000 litres rainwater tank and overflow from the rainwater tank, along with the driveway runoff from the new double garage is to be discharged into the existing kerb and gutter in Ridge Street, which is acceptable.	YES
	Lot 2 – Proposed Subdivision Lot – Indicative Building Footprint	

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	An indicative building footprint for proposed Lot 2 has been shown on the submitted plans. Although no indicative on-site detention and retention locations have been shown, it is not anticipated that these systems will have any impact on the structural root zones of existing trees. The future detention and retention tanks can drain by gravity to the proposed 450 x 450 millimetres boundary pit and discharge to a new 150 millimetres high kerb in Holford Crescent. If the subdivision application is approved, all stormwater works are to be constructed. A road opening permit will be required (Condition 26).	
Part 24C.4 On-site St	tormwater Management	
Part 24C.4 Mandatory Rainwater Tank Requirements	A 2,000 litres rainwater tank for the existing dwelling for proposed Lot 1 has been provided to satisfy the minimum storage required by Table 24C.4-1 of the Ku-ring-gai DCP.	YES
Part 24C. 5 Controls	for On-site Detention	
Development Types 3, 4, 5 and 6 OSD provided in accordance with OSD calculation sheet.	Whilst the location of the OSD has not been shown, there is adequate provision for this system to be provided as well as providing adequate gravity discharge to the street. It is not anticipated that these systems will have any impact on the structural root zones of existing trees.	YES
	Parking & Part 22 General Access and Parking	-
Part 4B.1 Vehicle Access Part 22.2 General	The driveway crossings width of proposed Lot 1 and Lot 2 are 3.5 metres wide at the property boundary and along the access handle, which is compliant with Part 4B.1(5) of the Ku-ring-gai DCP.	YES
Vehicle Access		
22.2 General Vehicle Access	Access for the subdivided lots will be provided via a new vehicular crossing off Holford Crescent.	YES
Driveway gradients to comply with AS2890.1:2004 and Council's Driveway Criteria	A driveway longitudinal section has been provided for proposed Lot 1 (Section A-A), which depicts an approximate fall of 3.8% from the double garage to boundary.	YES
	A driveway longitudinal section has been provided for proposed Lot 2 with an approximate fall of 9.5% (Section C-C) and 4% (Section B-B) from the proposed double car space to the property boundary, satisfying the requirements of Australian Standard AS2890.1-2004 "Off-Street Car Parking".	YES

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As part of the subdivision works, new crossings within the road reserve shall be constructed as part of the subdivision works to provide readily available access to both lots (**Conditions 3, 59, 63**)

Subdivision		
Preliminary Plan of Subdivision	Acceptable for DA purposes.	YES
88B Instrument	Submission of an 88B instrument is required. A drainage easement and easement for services is to be created. Redundant easements shall be relinquished where applicable (Condition 55)	YES
Section 73 Certificate	A Section 73 (Sydney Water) Compliance Certificate for subdivision would be required as part of DA condition (Conditions 41, 58).	YES

Recommendation

The application is acceptable on engineering grounds, subject to recommended conditions of consent.

The above engineering referral comments have been considered and it is agreed that the proposed development is satisfactory in relation to the relevant provisions under the DCP. The development also provides water sensitive urban design measures and services on the subject site and is therefore consistent with Clause 6.5 of KLEP 2015.

STATUTORY PROVISIONS

State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 4 Remediation of land

The provisions of Chapter 4 require Council to consider the potential for a site to be contaminated. The subject site has a history of residential use and as such, it is unlikely to contain any contamination and further investigation is not warranted in this case.

Draft State Environmental Planning Policy (Remediation of Land)

The draft SEPP is a relevant matter for consideration as it is an Environmental Planning Instrument that has been placed on exhibition. New provisions will be added in the SEPP to:

- require all remediation work that is to be carried out without development consent, to be reviewed and certified by a certified contaminated land consultant
- categorise remediation work based on the scale, risk and complexity of the work
- require environmental management plans relating to post-remediation management of sites or ongoing operation, maintenance and management of on-site remediation measures (such as a containment cell) to be provided to Council

The site is unlikely to contain any contamination and further investigation is not warranted in this case.

State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 6

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Water catchments

The provisions of Clause 6.6 'Water quality and quantity' have been considered in the assessment of the proposal. The proposal includes measures to capture and minimise stormwater run off from the site that would adversely impact upon any natural waterbody or the regulated catchment. The proposal is consistent with the provisions of Clause 6.6 and Chapter 6 of the SEPP.

Local Content

Ku-ring-gai Local Environmental Plan 2015

Clause 1.2 Aims of the Plan

The proposal has been assessed against the relevant Aims of the Plan. The proposal is consistent with the Aims for the reasons given within the assessment report.

Zoning and permissibility

The site is zoned R2 Low Density Residential under KLEP 2015.

The proposed development seeks Torrens title subdivision of the site from one lot into two. Torrens title subdivision is permissible with development consent pursuant to Clause 2.6 in KLEP 2015.

The remaining proposed works in addition to the subdivision, including demolition works, garage, driveways, tree removal, front fence, landscaping and the like are permissible as they are ancillary works to permissible development. to subdivision or dwelling houses, are considered to be permissible upon the site.

Zone objectives:

The objectives of this zone are:

- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide for housing that is compatible with the existing environmental and built character of Ku-ring-gai.

The proposed development, including Torrens title subdivision, construction of new garage and driveways and removal of trees are consistent with the objectives of the zone in that it facilitates additional housing in the locality and is capable of supporting housing that is compatible with the built character of the low density residential environment. The proposed subdivision and associated works are satisfactory and meet the objectives under Part 19 Heritage Items and Heritage Conservation Areas of the KDCP. It will not result in an adverse impact to the heritage item on site or within the vicinity and therefore is compatible with the existing environmental and built character of Ku-ring-gai.

The proposed development is consistent with the zone objectives for the reasons discussed throughout this report.

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Development standards

Ku-ring-gai Local Environmental Plan 2015

Development standard	Proposed	Complies
CI 4.1 - Minimum subdivision lot size: Minimum Lot Size – 930m ²	Lot 1: 825.89m ² (104.11m ² or 11% variation to the control)	NO
	Lot 2: 827.11m ² (102.89m ² or 11% variation to the control)	NO
CI 4.1(3A) – Street frontage:	Lot 1: 21.946m	YES
18 metres, other than a battle-axe allotment	Lot 2: 22.25m	YES
CI 4.3 - Height of buildings: Maximum Building Height - 9.5 metres	Lot 1: No change is proposed to the height of the existing dwelling. New garage 4.45m Lot 2: No proposed dwelling.	YES N/A
CI 4.4 - Floor space ratio (FSR): Maximum Floor Space Ratio – Lot 1: 0.4:1/ Lot 2: 0.4:1 Gross Floor Area = Lot 1: 326.47m ² /Lot 2: 326.78m ²	Lot 1: G/F= 120.37m ² 1 st /F= 31.4m2 (excludes stairs) Garage= 35.85 GFA (excludes 31m ² garage) = 156.62 FSR= 0.19:1	YES
later Colorilations above based on the land are	Lot 2: No proposed dwelling.	N/A

Note: Calculations above based on the land area of 1653m² in accordance with the submitted survey plan, prepared by NCAFSURVEY Pty Ltd and dated 21/04/2024.

Clause 4.6 Exceptions to development standards

The proposed development breaches the minimum lot size development standard contained within the LEP. The applicant has made a submission pursuant to Clause 4.6 seeking to vary that development standard. Clause 4.6 provides flexibility in applying certain development standards and an assessment of the request to vary the development standard is provided below:

(1) The objectives of this clause are as follows-

(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,

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(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

(2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.

(3) Development consent must not be granted to development that contravenes a development standard unless the consent authority is satisfied the applicant has demonstrated that—

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

Development standard - Minimum Lot Size - Clause 4.1(3)

The proposed development does not comply with the minimum lot size standard. There is a, a shortfall of $104.11m^2$ and $102.89m^2$ for proposed Lot 1 and Lot 2, respectively.

An assessment of the applicant's Clause 4.6 variation request in respect of the minimum lot size standard is provided below:

Whether compliance with the development standard is unreasonable or unnecessary in the circumstances of the case

The applicant states that compliance with the development standard is unreasonable or unnecessary for the following reasons:

"Pursuant to clause 4.6(3)(a) of the LEP, and the applicable principle within Wehbe v Pittwater Council (2007) 156 LGERA 446, the variation to the minimum subdivision lot size development standard is acceptable in the circumstances of this case and compliance with the development standard is considered unreasonable and unnecessary because the proposed development is consistent with the objectives of the minimum subdivision lot size standard, notwithstanding non-compliance with the standard.

Consistency with the objectives of the standard:

The objectives of Clause 4.1 are articulated at Clause 4.1(1): -

1) The objectives of this clause are as follows-

(a) to ensure that lot sizes and dimensions are able to accommodate development consistent with relevant development controls and minimise risk to life and property from environmental hazards, including bush fires,

(b) to ensure that lot sizes and dimensions allow development to be sited to protect natural or cultural features including heritage items, remnant vegetation, habitat, and waterways, and provide for generous landscaping to support the amenity of adjoining properties and the desired character of the area,

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(c) to ensure that subdivision of low-density residential sites reflects and reinforces the predominant subdivision pattern of the area.

Objective (a) is concerned with providing lot sizes which are capable of accommodating development which complies with relevant development controls and minimises environmental hazards. The proposed subdivision provides adequate lot sizes which can appropriately support dwelling houses evidenced by compliance with Council's controls. This can be observed through the compliant indicative building footprint provided for Lot 2. The existing dwelling house maintains compliant setbacks, private open space, and built-upon area. The site is not burdened by any environmental hazards.

Objective (b) is concerned with ensuring lot sizes and dimensions allow development to be sited to protect natural or cultural features including heritage items, remnant vegetation, habitat, and waterways, and provide for generous landscaping to support the amenity of adjoining properties and the desired character of the area. The proposed subdivision allows for development which will enable the protection of generous landscaping to support both lots, this is demonstrated through compliance with the maximum BUA as per the KDCP. The subject site does not support any areas of significant biodiversity or waterways. The proposed resultant Lot 1 will retain the appropriate curtilage for the existing heritage item which is situated on the subject site.

Objective (c) is concerned with ensuring that subdivision reflects and reinforces the predominant subdivision pattern of the area. The proposed subdivision is consistent with the subdivision pattern seen at 76, 76A, 78 and 80 Ridge Street, and 53, 55, 57, and 59 Holford Crescent which range in area between approximately 411m²- 676m²."

It is agreed that the compliance with the development standard is unreasonable and unnecessary in this instance as the objectives of the standard are achieved for the reasons given above by the applicant. The proposed demolition, tree removal, subdivision and associated works (new garage, driveways, services and front fence) will not result in any significant adverse impacts upon the amenity of adjoining properties or public domain areas.

The proposed subdivision includes lot sizes and dimensions that can conserve the built heritage item and its curtilage and creates a new lot that accommodates a development capable of being consistent with KDCP including setbacks and associated built form controls.

The proposed lots will provide adequate landscaping to support the amenity of adjoining properties and the desired character of the area, subject to various conditions as referenced within this report. The proposal reflects and reinforces the predominant subdivision pattern of the area due to the proposed lot sizes and shapes which reflect the pre-existing variations to the development standard. The development will maintain the wide street frontage and rhythm of built form within the streetscape.

Whether there are sufficient environmental planning grounds to justify contravening the development standard

The applicant states that the following environmental planning grounds justify contravening the development standard:

• <u>Consistency with surrounding subdivision pattern</u>. The proposed subdivision is consistent with the subdivision pattern seen at 76, 76A, 78 and 80 Ridge Street,

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and 53, 55, 57, and 59 Holford Crescent within the immediate locality. The proposed lots are larger than the identified surrounding lots which range in area between approximately $411m^2 - 676m^2$, thus being consistent with the subdivision pattern of the area.

Additionally, as can be seen in the table below, the proposed lot sizes are consistent with other proposals which have been approved previously by Ku-ringgai Council within the Ku-ring-gai locality on lots which have similar characteristics to the subject site. Thus, demonstrating that the proposed lot sizes are consistent with lot sizes within the wider locality.

Address	Variation (%)
39 Holmes Street Turramurra	8.8%
27 Finlay Road Warrawee	6.5% and 10.8%
33 Highfield Road Lindfield	15.3%

- <u>Compliant development potential</u>. The variation to the lot size, facilitates the provision of an additional allotment for a future dwelling which is a permissible land use and which can assist with providing for the housing needs of the local community. The proposed subdivision demonstrates that the newly proposed lots are capable of generally complying with the relevant Council controls including setbacks, BUA, GFA, and vehicular access.
- <u>Unique site with three frontages</u>. The subject lot is a unique site which provides 3 street frontages to the south, east and west boundaries. Due to this lot arrangement, it ensures that the proposed site can accommodate for new vehicle access to the new lot which will not compromise or burden Lot 1 in any way. The new frontage will address Holford Crescent and be consistent with neighbouring frontages. The locality contains a number of similarly designed allotments which previously provided two frontages and therefore the proposal both reflects and reinforces the established subdivision pattern and residential character in the locality.
- <u>Retention of Heritage Item.</u> The proposed development entirely retains the Heritage Item which is located with Lot 1 and allows for sufficient area to be retained around the Item. The proposal is considered to maintain the Hertiage Significance of the Heritage Item.

As set out in 'Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118', the aforementioned environmental planning grounds do not rely on the benefits of the development as a whole, but rather they directly relate to the proposed minimum subdivision lot size aspect that contravenes the development standard.

For the reasons detailed in this request, I am of the opinion that there are sufficient environmental planning grounds for Council to be satisfied that the request is adequate and to allow appropriate flexibility."

As per the relevant case law 'environmental planning grounds', are those that relate to the subject matter, scope and purpose of the EPA Act, including the Objects in Section 1.3 of the Environmental Planning and Assessment Act. The environmental planning grounds advanced in the applicant's variation request must justify the contravention of the development standard, not simply promote the benefits of carrying out the development as a whole. Therefore, for the environmental planning grounds to be sufficient they must focus on the aspect or element of the development that contravenes the development standard.

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The grounds put forward by the applicant are sufficient to justify the proposed variation, with the exception of the argument using previously approved variations. That is irrelevant to the circumstances of the case.

The proposed lots are consistent with the predominant surrounding subdivision pattern, allotment sizes and configurations at Nos 76 Ridge Street, 76A Ridge Street, 78 Ridge Street, 57 Holford Crescent, 80 Ridge Street, 59 Holford Crescent and 68 Ridge Street **(Figure 6)**. The lot sizes and configurations will allow for retention of the existing trees and landscaping to both lots, with new infill planting provided generally along the north-western (rear), north- eastern and south-western (sides) boundary of Lot 1. The site has a north-western to south-eastern orientation. The indicative building footprints demonstrate that Lot 2 can accommodate buildings that meet solar access, visual privacy, landscape, private open space, and other design and amenity provisions in the Ku-ring-gai Development Control Plan. The future low density residential development will also be compatible in size and scale with the local area. The application demonstrates that the proposed development will conserve the heritage items on site and adjoining property within an appropriately enhanced setting and outlook.



Figure 6: Subdivision pattern of the locality showing varied lot sizes and types

Concurrence of the Planning Secretary

Planning Circular PS 20-002 issued on 5 May 2020 informed Council that it may assume concurrence for exceptions to development standards. However, any variation to a numerical standard that exceeds 10% or relates to a non-numerical standard must be considered by the Ku-ring-gai Local Planning Panel or the Sydney North Planning Panel. As the variation to the numerical standard is greater than 10% the application is required to be referred to the Ku-ring-gai Local Planning Panel for determination.

Development standards that cannot be varied

The variation to the development standard is not contrary to the requirements in subclauses (6) or (8) of Clause 4.6.

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Part 5 Miscellaneous provisions

Clause 5.10 – Heritage conservation

The subject site contains a heritage item, is located within 100m of heritage items (74 Ridge Street and 65 Ridge Street, Gordon) however is not within a heritage conservation area. The proposed works do not affect any known archaeological or Aboriginal objects or Aboriginal places of heritage significance.

The amended subdivision and landscape plans were assessed by Council's Heritage Advisor as having acceptable impacts on the aesthetic and historic setting of the heritage items, subject to recommended conditions relating to landscape detailing. The proposal will not adversely affect the heritage significance of the heritage item and heritage items within the vicinity of the site.

The development is consistent with the provisions of the clause to conserve heritage significance.

Part 6 Additional local provisions

Clause 6.2 – Earthworks

The proposed development will not restrict the existing or future use of the site, adversely impact on neighbouring amenity, the quality of the water table or disturb any known relics.

Clause 6.5 - Stormwater and water sensitive urban design

The objectives of this clause seek to avoid or minimise the adverse impacts of urban stormwater on the land on which development is to be carried out, adjoining properties, native bushland, waterways and groundwater systems.

The proposal has been considered against the objectives of this clause. The stormwater design adequately manages stormwater runoff, with no anticipated adverse impacts of stormwater runoff on adjoining properties. The proposal is consistent with the objectives of this clause.

Policy Provisions (DCPs, Council policies, strategies and management plans)

Ku-ring-gai Development Control Plan

Part 1A.5: General aims of the DCP

The proposed development has been assessed against the general aims of this DCP and is found to be acceptable in all relevant respects for the reasons given throughout this report.

Part 2: Site analysis

A site analysis which identifies the existing characteristics of the site and the surrounding area has been provided as part of the development application. The site analysis is considered to satisfy the objectives of this part of the DCP.

Part 3: Land consolidation and subdivision

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	COMPLIANCE TABLE			
	lopment control		Complies	
	3 land Consolidation and Subdivision			
3A –	General Controls for Consolidation a	ind Subdivision		
3A.1	Lot Shape, Orientation and Design			
	he lot shape, orientation and design of o emonstrate the following:	consolidated and subdivided	l lots is to	
i.	Ability for the lot to support the land use permitted under the zoning.	The proposed lots are able to support development in accordance with the R2 Low Density Residential zone.	YES	
ii.	Sharing of views.	The proposal does not impact views.	YES	
iii.	Protection and enhancement of the amenity, solar access, privacy, open space and views of the neighbouring lots.	The proposed lot configuration is able to cater satisfactory amenity to adjoining lots.	YES	
iv. Note: S	Minimisation of impacts of the development (including any asset protection zones required) on riparian or Greenweb lands. SEPP (Biodiversity & Conservation) 2021 -	The site is not mapped as riparian or greenweb lands.	YES	
	er 6 Water catchment may also apply.		-	
v.	Incorporation of the principles of water sensitive urban design.	The development provides water sensitive urban design measures to achieve the objectives of Clause 6.5 'Stormwater and water sensitive urban design.	YES	
vi.	Easements and servicing requirements.	Lot 1: 2,000 litres rainwater tank is proposed. Lot 2: proposed 450 x 450 millimetres boundary pit and discharge to a	YES	
		new 150 millimetres high kerb in Holford Crescent.		
vii.	Vehicular, pedestrian and bicycle access.	Lot 1: existing vehicular access via Ridge Street to be removed and new vehicular access created via Holford Crescent.	YES	
		Lot 2: Indicative driveways and garage to the western and southern side of Holford	YES	

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COMPLIANCE TABLE			
Development control	-	Complies	
	Crescent. The garage and driveway to southern side of Holford Crescent should be deleted for the retention of trees. This has been conditioned		
 viii. Respect for and conservation of cultural heritage including any Aboriginal place or site of heritage significance. Note: Refer to Part 20 for Subdivision and Consolidation for new development on a Heritage Item or a HCA. 	(Conditions 3, 13) Monoculture planting of native species shown to the rear, northern side southern side and front boundaries is to be replaced by planting of exotic species which are sympathetic to the character of the heritage item. A condition is recommended (Condition 13) to amend the landscape plan to meet the objectives of this control.	YES	
2. The block width, dimension, orientation and layout are to consider the existing subdivision pattern of the locality.	The proposed subdivision layout is consistent with the surrounding subdivision pattern that contains a number of regular and irregular shaped allotments including, Torrens title subdivision for the established dual occupancy and battle axe allotments that has resulted in similar shaped and sized lots as can be seen in Figure 6 .	YES	
3. New lot/s created are to be such that each lot with street frontage allows for the siting of a development which will address the street.	Lot 1 and Lot 2 have front boundary to address the street.	YES	
3A.3 Building Footprint			
1. Potential building footprints are to be identified on the site plan of all consolidations and subdivisions.	The proposal demonstrates a potential building footprint for proposed Lot 2 and an there is an existing dwelling to be retained on proposed Lot 1.	YES	

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COMPLIANCE TABLE			
Development control 2. Building footprints are to be located outside areas of ecological or heritage significance and to avoid the loss of trees.	Proposed The site is listed as a heritage item with the heritage listed dwelling to be retained within proposed Lot 1.	Complies YES	
	The proposed garage and driveway to the southern boundary of proposed Lot 2 is to be deleted to ensure existing palms trees (Tree 9-12) is to be retained, meeting the objective of this control. The proposed		
	development avoids the loss of trees and minimises impacts to existing trees on both the subject site, subject to conditions.		
3. The footprint is to be located in an accessible and practical location, preferably with relatively flat terrain, stable soil and geology.	The proposed building footprint is appropriately located.	YES	
 Note: A geotechnical report may be required for steeper sites. 4. The building footprint must be located and designed so as to allow useable open space that satisfies the open space requirements of the particular development type. 	The nominated building Footprint and retention of the existing dwelling will cater for adequate open space requirements for dwelling houses.	YES	
5. The footprint is to be applied in accordance with the minimum building setbacks.	Lot 1: existing dwelling and new garage	YES	
Lot 2: Front setback 12m (min) Secondary frontage 3.8m (min) Side setback 2m (single storey)/ 2.67 (upper floor) rear setback 8.97m	Lot 2: The future dwelling on Lot 2 is to be subject to future development approval. Front setback- 12m (min) and 13.8m (average) Secondary frontage – 3.8m – 4.5m Side setback – 2m Rear setback – 9.5m	YES	

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COMPLIANCE TABLE			
Development control	Proposed	Complies	
6. Practical and suitable access is to be provided from a public road to the building footprint.	Lot 1: existing driveway strip to Ridge Street is to be removed and new driveway to Holford Crescent.	YES	
	Lot 2: Driveway to western boundary/ Holford Crescent.	YES	
 The building footprint must be located in accordance with the requirements in Part 24 of the KDCP. 	The footprint is appropriately located to satisfy these requirements.	YES	
3A.4 Trees and Vegetation			
Any subdivision or consolidation proposal must demonstrate that the location and design of: i. building footprints; ii. access ways; iii. roadways, including perimeter roads or trails; iv. services; v. inter-allotment drainage easements; and vi. asset protection zones maximises the retention of and minimises impacts on existing significant trees and vegetation on or adjacent to the site.	The proposal demonstrates that the design and location of the access way/ driveway, services and water management will minimise tree impacts on site and on adjoining properties.	YES	
For the purposes of control 1 above, significant trees and vegetation includes but is not limited to cultural plantings, large and visually prominent trees, bushland and endangered ecological communities.	Tree 7 is proposed to be removed but can be retained. An exclusion area be established by way of an 88b instrument for a 7 metres radius from the trunk of Tree 19 Quercus palustris, Pin Oak on Lot 2. The above is conditioned (Condition 68).	YES	
Species are to be selected to minimise leaf drop and to avoid blockage of drainage systems.	Satisfactory	YES	
3A.5 Access			
Each lot must provide access from a constructed or dedicated public	Each lot offers clear vehicular and pedestrian access from the street.	YES	

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COMPLIANCE TABLE			
Development control	Proposed	Complies	
road. Where access is proposed to a section of unconstructed public road, the newly created lot will need to provide lawful, constructed access to Council's satisfaction.			
The maximum number of lots to be served by a single access handle connected to a public road is 3 lots.	Each proposed lot is serviced by a proposed single driveway.	YES	
Access for service vehicles, emergency vehicles and waste collection vehicles must be available. Note: If access is to be provided from a main road it must be in compliance with Transport for NSW requirements.	Access for emergency vehicles is available via the proposed driveway. Waste collection vehicles are able to service the allotments from the street.	YES	
Movement areas are to incorporate convenient, obvious and safe pedestrian and bike links from the lot to public transport services and local facilities.	Each lot has clear pedestrian access from the street.	YES	
The design and location of footpaths and driveways are to provide opportunities for surveillance and allow safe movement of residents and visitors.	Lot 1 and Lot 2: via Holford Crescent	YES	
3A.6 Infrastructure			
All lots shall be provided services such as electricity, gas, town water supply, sewerage and communications. Such services must be located underground where new road construction occurs, and in bush fire prone lands. Services are to be located in accordance with Figures 3A.6-1 & 3A.6-2 of the DCP. Note: In Bush fire Prone Lands, services are to be provided in accordance with the requirements of Planning for Bush Fire Protection (PBP).	Lot 1 with an existing dwelling is connected to utilities. Lot 2: To be conditioned (Conditions 20, 22, 62).	YES	
 Water management facilities, such as: Inter-allotment drainage for low level lots; on site detention for new roads and driveways; rain gardens or bio retention basins; are to be provided as required by Part 24 of the DCP. 	The plans demonstrate that each lot can implement its own water management system as part of any future residential development without affecting the other lots; and a controlled drainage system in accordance with Part 24 of the KDCP.	YES	

An assessment of the variations to the design controls identified in the compliance table is provided below.

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3A.3 Building footprint

Part 3A.3, Control 2 of the KDCP requires "building footprints are to be located outside areas of ecological or heritage significance and to avoid the loss of trees". The proposed garage and driveway located on the south-eastern corner of the proposed Lot 2 will result in the loss of the existing palms trees (Tree 9 to Tree 12) and fails to comply with the above KDCP control.

The objectives of the Part 3A.3 are:

- 1. To ensure new allotments have a suitable area for proposed development, associated structures and open space.
- 2. To protect the amenity of adjoining properties.
- 3. To ensure development is suited to the site.
- 4. To minimise risks from landslip, flooding and bush fire.
- 5. To ensure building footprints have minimal impact on existing trees and areas of ecological or heritage significance.

The revised plans indicate two driveways on the proposed Lot 2, one on the western side and one on the southern side of Holford Crescent, providing access to a detached garage and a garage within the building footprint. According to Part 4B.2, Control 3 of the KDCP, the provision of more than two car spaces is discouraged in areas with access to public transport. Given this control, the additional detached garage and driveway to the southern boundary are deemed unnecessary and should be deleted from the plans. This can be conditioned (**Condition 3**)

Council's Team Leader of Landscape and Tree Assessment also commented that the proposed detached "potential driveway & garage "to the southern boundary of proposed Lot 2 will require removal or have an adverse impact to the existing palms trees. To avoid the loss of trees and minimise impacts to existing palms trees (Trees 9-12), it is recommended that a consent condition specify the proposed garage and driveway to the southern boundary of Lot 2 is to be deleted.

Part 4: Dwelling Houses

The table below addresses the assessment criteria contained under Part 4 of the DCP.

DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses			
Development control	Proposed	Complies	
4A – Site Design			
4A.1 Local Character and Streetscape			
Visual Character			
Design components of new development are to be based on the existing predominant and high quality visual character of the local neighbourhood.	The proposed subdivision is consistent with the subdivision pattern of the street, which comprises of smaller lots.	YES	
The appearance of the dwelling is to maintain the local visual character by considering the following elements: i) visibility of on-site development when viewed from the street, public reserves and adjacent properties; and	Existing dwelling on Lot 1 remains unchanged. Lot 2: N/A as no proposed dwelling.	YES	

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DCP COMPLIANCE TABLE SECTION A - Pa	rt 4 Dwelling houses	
Development control	Proposed	Complies
ii) relationship to the scale, layout and character of the tree dominated streetscape		
of Ku-ring-gai.		
The prominent and high quality	A satisfactory site analysis	YES
characteristics of the neighbourhood are to	was provided.	
be identified and considered as part of the		
site analysis.		
Public Domain and Communal Space	Existing dwelling on Lot 1	YES
Development is to integrate with surrounding	remains unchanged for the	
sites by:	most part with a reduced	
i) haine of an annuariate anale retaining	site area. Although	
i) being of an appropriate scale retaining	reduced site area the	
consistency with the surrounds when	development will meet the	
viewed from the street, public domain or	underlying objectives of	
adjoining development and not exceeding	this control.	
two storeys;	Lot 2: N/A, as no proposed	
ii) minimising overshadowing; and	dwelling.	
iii) integrating built form and soft		
landscaping (gardens and trees) within the		
tree canopy that links the public and private		
domain throughout Ku-ring-gai.		
Visually Prominent Sites	The existing dwelling on	YES
Development on visually prominent sites is	site remains unchanged	
to:	and significant trees are to	
	be retained. The site is not	
i) be integrated into the existing landscape	considered visually	
through the site planning process and avoid	prominent.	
tall and bulky structures;		
ii) have a selection of external colours and		
finishes that are sensitive to the site and		
locality;		
iii) retain significant landscape and		
vegetation elements;		
iv) consider views to the site as well as		
iv) consider views to the site as well as		
those from the site; and		
v) soften visual impact by extensive		
landscaping including larger trees and		
shrubs.		
Colours of materials used in sites adjoining	Existing dwelling on Lot 1	YES
or in close proximity to bushland areas and	remains unchanged.	
conservation areas must be in harmony with		
the built and natural landscape elements of	Lot 2: N/A	
the area.	l	
4A.2 Building Setbacks		
Building Line (Front Setback)		

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DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses			
Development control	Proposed	Complies	
The location of development on the site is to demonstrate its consideration of:	The existing front setback of the dwelling house on Lot 1 and its relationship to the street and adjoining properties remains unchanged.		
 i) The existing setback of adjoining properties; 			
ii) The setback patterns of its street block; and	Lot 2: N/A		
iii) Council's minimum and average setback requirements.			
<u>Two storey</u> Low side – 9m (11m average) High side – 12m (14m average)	Lot 1: Front setback remains Lot 2: N/A (12m – 13.8m)	s unchanged.	
Building Line (Rear Setbacks)			
Where sites have a depth of less than 48m, a minimum rear setback of 25% of the average site depth is to be provided.	Lot 1: 12 metres Lot 2: N/A (indicative 9.5m)	YES YES	
Lot 1: 9.4 metres Lot 2: 9.4 metres			
Corner and Dual Frontage Sites Setbacks			
For building sites with a corner frontage, the front and rear boundary setbacks apply to the Primary street frontage as illustrated in Figure 4A.2-6 of the DCP.	Lot 1 primary frontage to Ridge Street. Front building setback remains unchanged.	YES	
	Lot 2 Primary frontage to Holford Crescent (north- western boundary)	YES	
Where a development seeks to change the secondary frontage into the primary frontage then the new primary frontage is to provide all setbacks in accordance with Part 4A.2 Building Line (front setback) of the DCP.	The proposal does not seek to change the primary and secondary frontage.	N/A	
The setbacks to the secondary street frontage on corner sites are 3.8m minimum and 4.5m average.	Lot 1: Unchanged 3.34m – 6.9m to the south-western boundary (secondary front elevation) therefore	NO	
	acceptable Lot 2: N/A (Indicative 3.8m – 4.5m)	YES	
Setbacks to side and rear boundaries shall be in accordance with the minimum setbacks applying to dwelling, which are not on corner lots.	Lot 1: No change to the side setback and complies with the rear setback control. Lot 2: indicative footprint complies with the minimum side and rear setback	YES	
4A.3 Built-Upon Area	setback		

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DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses				
Development control		Proposed	Complies	
Max BUA 56%				
Lot 1: 462.49m ²		Lot 1: 38.7% (319.64m ²)	YES	
Lot 2: 463.18m ²		Lot 2: 43.35% (358.58m ²)	YES	
The BUA of the front s	etback is to be	Lot 1: 15.85% (43.2/	YES	
maximum 30%		272.57m ²)		
		Lot 2: N/A		
4A.4 Landscaping				
Landscape proposals a		Tree 7 to be retained as	YES	
trees, where possible.	This may be achieved	conditioned (Conditions		
by:		3, 13).		
i) minimising change	s to existing ground			
levels;				
ii) confining building				
appropriate to pre-ex	isting building			
footprints.				
Landscaping is to inclu		The design includes	YES	
trees, shrubs and grou	nd covers.	monoculture planting of		
		native species which are		
		not sympathetic to the		
		Heritage Conservation		
		Area landscape character.		
		A condition is		
		recommended to replace		
		monoculture planting of		
		native species by planting		
		of exotic species, which		
		are sympathetic to the		
		character of the heritage		
	to volloct the	item.	VEC	
Landscape designs are prevailing landscape c		As above, subject to condition.	YES	
and relate to the existing		condition.		
terms of scale and plai				
terris or scale and plat	illing style.			
Tree replenishment		5 additional trees	YES	
Less than 850m ²	3 trees	provided. A condition is		
850m ² to 1,000m ²	5 trees	recommended requiring		
1,001m ² to 1,500m ²	7 trees	appropriate tree species		
Over 1,500m ²	10 trees or as	(Condition 13).		
	directed			
4B – Access and Par		I		
4B.1 Vehicle access	-			
Vehicular Access				
Wherever possible, dri	veways must be	The driveway will achieve	YES	
located so that driver and pedestrian sight		acceptable lines of sight.		
lines are clear.				
Driveways				
	veway is to be provided	Lot 1: one driveway to	YES	
on any property with a		Holford Crescent	_	
of less than 18m.				
of less than 18m.		Lot 2: one driveway to	YES	

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DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses			
Development control	Proposed	Complies	
The maximum crossing width for any	Crescent; and garage and driveway to southern side of Holford Crescent. The driveway and garage to the southern boundary is to be deleted for tree retention. This has been conditioned (Condition 3). Lot 1: The width of the	YES	
driveway, as measured at the front site boundary, is 3.5 metres. Council may allow a narrower width where trees may be adversely affected. Council may allow a wider width if site conditions require car parking accommodation to be provided close to the street boundary.	crossing is 3.5 metres at the secondary front boundary/ Holford Crescent. Lot 2: 3.5 metres.		
The location and construction of driveways and driveway crossings are to avoid disturbance (including altered soil level) to the root zones beneath the canopy of trees protected by Part 13 of the DCP.	Trees 7and 9-12 are to be retained by condition, as noted earlier (Condition 3).	YES	
Driveways designed in accordance with AS	So designed	YES	
2890.1 (2004) Off Street Car Parking 4B.2 Car Parking Provision			
Single occupancy dwellings are to provide 2	Lot 1: 2 spaces proposed	YES	
spaces on-site as determined by Part 4B.3(5) of the DCP.	via new double garage. Lot 2: N/A	TES	
The minimum dimensions of a residential parking space are to be: i) open carport 2.7 x 5.4 metres	Lot 1: 5.5 metres x 5.9 metres Lot 2: N/A	YES	
ii) unobstructed single garage 3.0 x 5.4 metres			
iii) double garage 5.4 x 5.4 metres The area of garages in excess of 31m ² is	The gross floor area of the	YES	
4B.3 Carports and Garages	the excess floor area of the garage exceeds 31m ² and the excess floor area has been included in the floor space calculation.	123	
	Lat 1: the propagad	VES	
The car parking spaces, whether covered or uncovered, are to be located at or behind the required front setback as specified in Part 4A.2(2) & (15) of the DCP, or behind the front building line defined by the existing dwelling where the dwelling is being retained, whichever is the lesser.	Lot 1: the proposed garage is located behind the side building line of the existing dwelling. Lot 2: Within the potential building footprint.	YES	
The scale and design of carport and garage structures are:	Satisfactory	YES	

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DCP COMPLIANCE TABLE SECTION A - Pa	rt 4 Dwelling houses	
Development control	Proposed	Complies
i) to be sympathetic to existing		
development on-site;		
ii) to consider adjacent buildings;		
iii) to consider proximity to drainage		
systems;		
iv) to be integrated into the building design:		
iv) to be integrated into the building design; and		
v) not to dominate the site, dwelling and		
landscape, or the streetscape.		
Width of any carport/garage visible from the	6 metres	YES
street is not to be greater than 6 metres		
(measured to the outer face of the exterior		
walls/columns/posts)		
If the site has frontage to more than one road	Complies	YES
or lane vehicle access is to be obtained from		
the road/lane that is lower on the road		
hierarchy or carries a lower volume of traffic		
Detached garage, single storey set back 1.5	Lot 1: 1.5m from the rear	YES
metres from side and rear boundaries	boundary	
	Lot 2: 2.6m	
4C – Building Design and Sustainability		
4C.1 Building Envelopes	Lat 4. Draw and draw and	VEO
The maximum height of a dwelling is 9.5 metres (including any garage, basement or	Lot 1: Proposed garage 4.2 metres	YES
metres (including any garage, basement of		
	4.2 metres	
the like) and present as a 2 storey dwelling	4.2 metres	
the like) and present as a 2 storey dwelling house.		YES
the like) and present as a 2 storey dwelling house. The following matters are to be considered	Lot 1: No changes with	YES
the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on		YES
the like) and present as a 2 storey dwelling house. The following matters are to be considered	Lot 1: No changes with	YES
the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on	Lot 1: No changes with existing dwelling	YES
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and 	Lot 1: No changes with existing dwelling	YES
the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing	Lot 1: No changes with existing dwelling	YES
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; 	Lot 1: No changes with existing dwelling	YES
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of 	Lot 1: No changes with existing dwelling	YES
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; 	Lot 1: No changes with existing dwelling	YES
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of living and private open space areas; 	Lot 1: No changes with existing dwelling	YES
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of living and private open space areas; iii) opportunities to minimise adverse 	Lot 1: No changes with existing dwelling	YES
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of living and private open space areas; iii) opportunities to minimise adverse impacts on any significant bushland, or 	Lot 1: No changes with existing dwelling	YES
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of living and private open space areas; iii) opportunities to minimise adverse 	Lot 1: No changes with existing dwelling	YES
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of living and private open space areas; iii) opportunities to minimise adverse impacts on any significant bushland, or distant views; 	Lot 1: No changes with existing dwelling	YES
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of living and private open space areas; iii) opportunities to minimise adverse impacts on any significant bushland, or distant views; iv) the relationship with the streetscape. 	Lot 1: No changes with existing dwelling	YES
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of living and private open space areas; iii) opportunities to minimise adverse impacts on any significant bushland, or distant views; iv) the relationship with the streetscape. Development is to avoid the creation of an overbearing effect upon adjoining 	Lot 1: No changes with existing dwelling Lot 2: N/A The existing dwelling and proposed garage are	
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of living and private open space areas; iii) opportunities to minimise adverse impacts on any significant bushland, or distant views; iv) the relationship with the streetscape. 	Lot 1: No changes with existing dwelling Lot 2: N/A The existing dwelling and proposed garage are within the building height	
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of living and private open space areas; iii) opportunities to minimise adverse impacts on any significant bushland, or distant views; iv) the relationship with the streetscape. Development is to avoid the creation of an overbearing effect upon adjoining development by: 	Lot 1: No changes with existing dwelling Lot 2: N/A The existing dwelling and proposed garage are	
 the like) and present as a 2 storey dwelling house. The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of living and private open space areas; iii) opportunities to minimise adverse impacts on any significant bushland, or distant views; iv) the relationship with the streetscape. Development is to avoid the creation of an overbearing effect upon adjoining 	Lot 1: No changes with existing dwelling Lot 2: N/A The existing dwelling and proposed garage are within the building height	

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DCP COMPLIANCE TABLE SECTION A - Pa	rt 4 Dwelling houses	
Development control	Proposed	Complies
ii) ensuring all built structures are within the		
building height plane as illustrated in Figure		
4C.1-2 of the DCP (4m @ 45°);		
iii) the relationship with the streetscape.		
4C.2 Building facades		
Extensive blank or unarticulated walls to	The proposed garage on	YES
street frontages will not be permitted.	Lot 1 does not have	
	extensive blank wall to the	
	street frontage.	
Corner sites are to address both primary and	Satisfactory	YES
secondary street frontages using building		
and landscaping elements such as feature		
windows, or other treatments to wall		
surfaces.		
4C.3 First Floor Design and Roof Forms		
First floor design	I	
Dwelling design is to avoid an overbearing	No change to the existing	YES
bulk/scale relationship with neighbouring	dwelling on Lot 1.	
properties. Consideration is to be given to		
avoiding large vertical wall surfaces by		
stepping back upper levels and containing		
within the existing/proposed roof space.		
Roof line	Let 4. Terresette tiles rest	VEC
Roof structures are to be designed to	Lot 1: Terracotta tiles roof	YES
minimise bulk and overshadowing of	in 27 degrees for	
neighbouring buildings and open spaces by:	proposed garage	
i) considered selection of material, colour	Lot 2: N/A	
and pitch;	LOUZ. N/A	
ii) use of low-angled pitched roofs providing		
that they are compatible with existing		
development and the streetscape		
character; or		
iii) inclusion of habitable rooms within the		
roof space.		
4C.4 Private Open Space		
At least one area of useable private open	Each lot has a depth >5m	YES
space which has a minimum depth of 5m and	and area > 50m ² .	
a minimum area of 50m ² is to be provided		
on each site. On steep sites Council may		
consider a reduction in the minimum depth		
requirement.		
		VEC
Private open space is to constitute at least	Each lot has a northernly	YES
Private open space is to constitute at least one north facing area providing adequate	Each lot has a northernly facing open space.	TES
Private open space is to constitute at least		TES

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DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses		
Development control	Proposed	Complies
 Solar access to habitable areas, recreational space and solar collectors on the site and on neighbouring sites is to be preserved by: i) consideration of siting and orientation of buildings; ii) use of setbacks which increase with building heights; iii) landscape design and location of vegetation including deciduous or tall trees; 	There is no proposed change to the existing dwelling on Lot 1. Proposed garage is single storey and will have no significant solar access impact to adjoining properties.	YES
iv) consideration of window locations and size.		
4C.6 Natural Ventilation		
Building design is to incorporate measures for natural cross ventilation as specified in Control 1.	Cross ventilation provided via windows and opening.	YES
Other Site Facilities The location and design of facilities such as	A mailbox for Lot 1 is	YES
 mailboxes, utility poles, bin storage and enclosures, clothes drying areas are to be an integrated and sympathetically designed as part of the site design and development. This may be achieved by: i) the undergrounding of utilities; ii) ensuring that clothes lines are not visible from the street; and iii) provision of bin enclosures. 	located alongside the existing driveway gate. One will be able to be provided for proposed Lot 2 for a future dwelling house. There is sufficient site area to provide facilities.	TES
For requirements on noise levels associated	Conditions are	YES
with air conditioning, kitchen, bathroom, laundry ventilation, or other mechanical ventilation systems and other plant refer to Part 23.8 of the DCP.	recommended to control noise impacts (Conditions 57, 70).	
4C.8 Fencing		
Front fences		
Fences are to: i) restrict visually solid forms (such as masonry, lapped and capped timber or brushwood) to 0.9m in height above existing ground level; and ii) restrict the height of visually transparent	Extend existing brick piers to 1.2m high, replace existing metal infill with timber picket infill panels, and a timber picket gate to Ridge Street on Lot 1. No fence is proposed for	YES
fences (such as metal grille or timber picket) to 1.2m. (a transparent fence has an open to solid ratio of not less than 1:3).	Lot 2.	

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DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses		
Development control	Proposed	Complies
Front fences in excess of 1.2m will only be permitted in areas where they are compatible and consistent with the streetscape. All such fences are to be set back at least 1m from the street boundary with provision of low maintenance screen planting in the setback area.	Lot 1: The proposed front fence and return fence is consistent with the streetscape of Ridge Street.	YES
Front fencing is to enable outlook from dwellings to the street for safety and surveillance and should be generally low and visually permeable.	Satisfactory	YES
High hedges along the entire front boundary are not encouraged, although shrub plantings are desirable.	A high hedge is not proposed.	YES
The footings of a fence within the structural root zone of a tree is not to adversely affect the health of the tree.	Acceptable.	YES
4C.9 Waste Management		
During the design of the development, construction waste is to be minimised by: i) using recycled materials, selecting materials that reduce waste or do not require disposal, or can be reused or recycled in the future;	A satisfactory waste management plan has been submitted with the development application.	YES
 ii) designing with minimal site disturbance by avoiding unnecessary excavation or fill. 		
Developments must allocate, within each property boundary, an area for storing Council waste and recycling bins, (1 X 120L, 2 x 240L, 1 x 360L) preferably located at the rear of the premises to minimise visual clutter. The storage area is to be a minimum of 3m from openable windows and integrated with the landscaping.	Sufficient space is available to accommodate waste and recycling bins.	YES
An area is to be nominated for on-site composting.	Sufficient area is provided within the rear part of the site for on-site composting.	YES
4C.10 Materials and Finishes		
External walls must be constructed of high quality and durable materials and finishes.	Satisfactory	YES
Large, unbroken expanses of any single material and finish (rendered or not) to building facades must be avoided.	Avoided single material and finish	YES
New development is to avoid extensive use of highly reflective or gloss materials on the exterior of buildings.	Highly reflective and gloss materials are not proposed	YES
The exterior finish material (e.g. sandstone or brick) must be integral to the overall building façade design and must not appear to be	The exterior brick veneer finish is integral to the façade design and does	YES

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DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses		
Development control	Proposed	Complies
cosmetic.	not appear cosmetic.	
Where additions and alterations are proposed, external materials and finishes must complement the existing building.	The proposed garage is to match the existing colours and finishes of the existing building.	YES
Colours		
The selection of a colour scheme for new development and in the restoration of existing facades is to comply with the guidelines in Control 8.	Proposed garage on Lot 1 is in midtone neutral colours consistent with the control.	YES

Ku-ring-gai Development Control Plan

Section B

Part 15 – Land Contamination

The site is not mapped as being contaminated and has a history of residential use and as such, it is unlikely to contain contamination and further investigation is not warranted in this case.

Part 19 – Heritage Items and Heritage Conservation Areas

The site is heritage listed and within 100 metres of other heritage items at No. 74 Ridge Street and No. 65 Ridge Street, however is not within a heritage conservation area.

A satisfactory Heritage Impact Statement was submitted with the application. The proposed development has been assessed against the relevant heritage provision under Part 19 of the KDCP. The proposal has minimal impact on the heritage item and those adjoining and nearby in particular the setting and landscaping subject to the landscape conditions. The indicative building envelope has been assessed as capable of accommodating a building form and scale that has acceptable impacts on neighbouring heritage items at No. 74 Ridge Street and No. 65 Ridge Street. The details of the building on the proposed Lot 2 and its impact on neighbouring land will be assessed under a separate future application.

Council's Heritage Advisor has raised no objection to the proposal, subject to conditions.

Ku-ring-gai Development Control Plan

Section C

Development Control Part 21 General Site Design	Proposed	Complies
21.1 – Earthworks and slope		
 Development consider site topography, drainage, soli landscapes, flora, fauna and bushfire hazard by: Stepping buildings down the site Locate finished ground level as close to the natural ground level as practicable 	Landscape cut and fill, and retaining wall are not proposed. Existing ground level has been maintained for 2	YES

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 Level changes to occur primarily within building footprint Minimum 0.6 metres width between retaining walls Maintain existing ground level within 2 metres from any boundary Limit slope for embankments to 1:6 (grassed) and 1:3 (soil stabilising vegetation) No fill and excavation within sensitive environments Minimise altered groundwater flows 	metres from any boundary.	
 Dwelling houses Excavation within building footprint must not exceed 1 metre 0.9 metre maximum fill 1.8 meters maximum level difference across the building footprint Retaining walls maximum 0.9 metre above NGL 	230 millimetres fill and 585 millimetres cut for the new garage on Lot 1.	YES
23.7 – Waste Management		
Efficient, effective and sustainable waste management practices	An adequate waste management plan has been submitted.	YES
23.9 – Visual Privacy		
Visual privacy maintained for occupants and for neighbouring dwellings.	The proposed garage is located at the south- western rear corner of Lot 1. The single storey structure is not considered to result in significant adverse impacts with regard to visual privacy.	YES
24 – Water Management		
This Part facilitates development in achieving the requirements of the clause titled 'Stormwater and water sensitive urban design' in KLEP 2015.	An assessment of the proposal against the controls in Part 24 has been undertaken.	YES

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Ku-ring-gai Contributions Plan 2010

The application proposes the Torrens title subdivision of 1 lot into 2 lots, which results in an increased demand for community infrastructure. In accordance with the Ku-ring-gai Contributions Plan 2010, the proposal would require a Section 7.11 contribution of **\$30,595.48** for the 1 additional residential lot created (**Condition 24**).

As per Part 5.3 of the Ku-ring-gai Council Section 7.12 Local Levy Contributions Plan 2023, a contribution for the construction work is not payable under that Plan, as a consent cannot be subject to more than one contribution plan and in the event of a conflict the Ku-ring-gai Contributions Plan 2010 prevails.

Housing Productivity Contribution

A Housing and Productivity Contribution (HPC) applies to the proposed development as it is for the subdivision of land on which development for the purposes of residential accommodation, which exists and is permitted. The contribution will assist in delivering essential state infrastructure such as schools, hospitals, major road and public transport infrastructure.

The application was lodged after 1 July 2024, therefore the new Ministerial Order applies. The proposed development generates a contribution rate of \$12,748.36 which is required to be paid prior to issue of a Subdivision Works Certificate (**Condition 25**).

 State Infrastructure Contributions

 Calculation summary
 Calculation breakdown

 Applicable plans and system calculated contributions amounts are shown in the first two columns. If the assessed amount is different to the system calculated amount, update the amount in column three.

 HPC Area
 System calculated contributions
 Contributions amount amount amount in the first two columns. If the assessed amount is different to the system calculated amount, update different amount in calculated amount (If different amount calculated amount)
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REGULATION

Section 61(1) of the Environmental Planning and Assessment Regulation 2021 requires the consent authority to consider the provisions of *Australian Standard AS 2601-2001: The demolition of structures.* The partial demolition of the existing structure(s) will be carried out in accordance with a work plan and statement of compliance that will be required to be submitted to the Principal Certifier prior to the commencement of any works. A condition to this effect has been included in the recommendation section of this report (**Condition 14**).

LIKELY IMPACTS

The likely impacts of the development have been considered within this report and are deemed to be acceptable, subject to the recommended conditions.

SUITABILITY OF THE SITE

The site is suitable for the proposed development for the reasons given throughout this

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assessment.

PUBLIC INTEREST

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by the Panel ensuring that any adverse effects on the surrounding area and the environment are minimised. The proposal has been assessed against the relevant environmental planning instruments and is deemed to be acceptable. On this basis, the proposal is not considered to raise any issues that are contrary to the public interest.

CONCLUSION

Having regard to the provisions of Section 4.15 of the Environmental Planning and Assessment Act 1979, the proposed development is considered to be satisfactory, subject to conditions.

RECOMMENDATION

PURSUANT TO SECTION 4.16(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

- A. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as consent authority, under Section 4.16 of the Environment Planning and Assessment Act 1979, is satisfied that the request submitted under Clause 4.6 to vary minimum lot size development standard contained in Clause 4.1(3) of KLEP 2015 has met the requirements of Clause 4.6(3). The Panel is also of the opinion that strict compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify the variation to the development standard.
- B. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as consent authority, under Section 4.16 of the Environment Planning and Assessment Act 1979, being satisfied that the proposed development would be in the public interest, grant development consent to eDA0365/24 for Torrens title subdivision of one lot into two and construction of a new garage, works to existing front fence and tree removal at 72 Ridge Street Gordon, subject to conditions. Pursuant to Section 4.53 of the Environmental Planning and Assessment Act 1979, this consent lapses if the approved works are not physically commenced within five years of the date of the Notice of Determination.

The conditions of the consent are set out as follows:

CONDITIONS THAT IDENTIFY APPROVED PLANS:

1. Approved architectural plans and documentation (new development)

The development must be carried out in accordance with the plans and documentation listed below and endorsed with Council's stamp, except as amended by other conditions of this Development Consent:

Plan no.	Drawn by	Dated
Architectural Plans		

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A02-C (Issue C) Site plan	Bean Project Management &	12/11/24
	Design	
A03-C (Issue C) Site Analysis plan	Bean Project Management &	12/11/24
	Design	
A04-B (Issue C) Proposed subdivision	Bean Project Management &	12/11/24
plan	Design	
A05-B (Issue B) Proposed double garage	Bean Project Management &	14/08/24
	Design	
A06-C (Issue C) Proposed front fence	Bean Project Management &	12/11/24
	Design	
Landscape Plans		
L/01 Revision C	Bluegum Design Services	18/11/24
L/02 Revision C	Bluegum Design Services	18/11/24
Stormwater Management Plans	• • •	•
DG 2873 Sheet 1 of 1	KD Stormwater Pty Ltd	14/11/24

Document(s)	Dated
Colours and finishes schedule prepared by Bean Project Management &	November 2024
Design	
Waste Management Plan	10/07/2024

Reason: To ensure that the development is in accordance with the Development Consent.

2. Inconsistency between documents

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this Development Consent prevail.

Reason: To ensure that the development is in accordance with the Development Consent.

3. Amended plans

Prior to the issue of a Subdivision Works Certificate, the Certifier shall be satisfied that the approved plans listed in Condition 1 above, have been amended in accordance with the requirements of this condition as well as other conditions of this Development Consent:

- a) Delete the proposed vehicle crossings, driveway and detached garage located at the southern corner of Lot 2.
- b) Show Tree 7 and Trees 9 to 12 as retained.
- **Reason:** To ensure that the development is in accordance with the Development Consent. To ensure retention of existing vegetation.

CONDITIONS TO BE SATISFIED PRIOR TO DEMOLITION, EXCAVATION OR CONSTRUCTION:

4. Asbestos works

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All work involving asbestos products and materials, including asbestos-cement-sheeting (ie. fibro), must be carried out in accordance with the guidelines for asbestos work published by Safework NSW.

Reason: To ensure public safety.

5. Notice of commencement

At least 48 hours prior to the commencement of any demolition, excavation or building works, a notice of commencement of building works or subdivision lodgement form and appointment of the Principal Certifier form shall be submitted to Council.

Reason: Statutory requirement.

6. Notification of builder's details

Prior to the commencement of any works, the Principal Certifier shall be notified in writing of the name and contractor licence number of the owner/builder intending to carry out the approved works.

Reason: Statutory requirement.

7. Sediment controls

Prior to any works commencing, sediment and erosion control measures shall be installed along the contour immediately downslope of any future disturbed areas.

The form of the sediment controls to be installed on the site shall be determined by reference to the Landcom manual '*Managing Urban Stormwater: Soils and Construction*'. The erosion controls shall be maintained in an operational condition until the development activities have been completed and the site is fully stabilised. Sediment shall be removed from the sediment and erosion control measures following each heavy or prolonged rainfall period.

Reason: To protect and enhance the natural environment.

8. Tree protection fencing

Prior to the commencement of any works, the tree protection zone of the listed trees is to be fenced off at the specified radius from the trunk/s to prevent any activities or storage of material within the fenced area. The fence/s shall remain in place and be kept intact until the completion of all demolition/building work.

Tree/Location	Radius in metres
T7 Camellia sasanqua/ adjacent the proposed driveway	2 metres
T9,10,11,12 – Palms	The fence is to follow the line of the proposed subdivision boundary to the rear of proposed Lot 1 adjacent to and for the length of the proposed garage.

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Reason: To protect existing trees.

9. Tree protective fencing type galvanised mesh

Tree protection fencing shall be constructed of galvanised pipe at 2.4 metres spacing and connected by securely attached chain mesh fencing to a minimum height of 1.8 metres.

Reason: To protect existing trees.

10. Tree protection signage

Prior to the commencement of any works, tree protection signage is to be attached to the tree protection fencing, displayed in a prominent position and repeated at 10 metres intervals or closer where the fence changes direction. Each sign shall contain in a clearly legible form, the following information:

The words:

- Tree protection zone/No access.
- This fence has been installed to prevent damage to the tree/s and their growing environment both above and below ground.

and the following information:

• The name, address, and telephone number of the developer/builder and project arborist

Reason: To protect existing trees.

11. Inspection of tree protection measures

Upon installation of the required tree protection measures, an inspection is to be conducted by the project arborist or the Principal Certifier to verify that tree protection measures comply with all relevant conditions of this Development Consent.

Reason: To protect existing trees.

12. Project arborist

Prior to the commencement of any works, a project arborist shall be engaged to ensure all tree protection measures and works are carried out in accordance with the conditions of this Development Consent.

The project arborist shall have a minimum AQF Level 5 qualification with a minimum of 5 years experience. Details of the arborist including name, business name and contact details shall be provided to the Principal Certifier and a copy shall be provided to Council.

Reason: To protect of existing trees.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF A SUBDIVISION WORKS CERTIFICATE:

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13. Amendments to approved landscape plan

Prior to the issue of a Subdivision Works Certificate, the Principal Certifier shall be satisfied that the approved landscape plan(s), listed below and endorsed with Council's stamp, have been amended in accordance with the requirements of this condition as well as other conditions of this Development Consent:

Plan no.	Drawn by	Dated
L01c	Bluegum Design	18/11/24

The above landscape plan shall be amended as follows:

- 1. Monoculture planting of Murraya paniculata shown to the rear and to northern side boundaries is to be amended to include at least 2 other exotic species of similar growth height and character to the proposed Murraya. Additional species may include Camellia sasangua, Loropetalum sp or similar.
- 2. Change the proposed Eucalyptus fibrosa to a locally occurring native canopy tree such as Angophora costata or Syncarpia glomulifera.
- 3. Change the proposed Fraxinus giffithii to the rear garden to a tall canopy tree such as Nyssa sylvatica or similar species.
- 4. Label and show Tree 7 Camellia sp as retained. Label all other shrubs (Camellia sasanqua) to the southern side setback and indicate as retained.

An amended plan, prepared by a landscape architect or qualified landscape designer, shall be submitted to the Principal Certifier with any application for a Subdivision Works Certificate.

Prior to the issue of any Subdivision Works Certificate, the Principal Certifier shall be satisfied that the landscape plan has been amended as required by this condition.

Reason: To ensure adequate landscaping of the site.

14. Statement of compliance with Australian Standards

The demolition work shall comply with the provisions of Australian Standard AS2601: 2001 The Demolition of Structures. The applicant must provide work plans required by AS2601: 2001 and a written statement from a suitably qualified person that the proposal contained in the work plan comply with the safety requirements of the Standard. The work plan and the statement of compliance shall be submitted to and approved by the Certifier prior to the commencement of any demolition works.

Reason: To ensure compliance with the Australian Standards.

15. Long service levy

A Subdivision Works Certificate shall not be issued until any long service levy payable under Section 34 of the *Building and Construction Industry Long Service Payments Act 1986* (or where such levy is payable by instalments, the first instalment of the levy) has been paid. In order to pay your levy, you will need to register an account with The Long Service Corporation on the online portal at <u>www.longservice.nsw.gov.au</u>.

Reason: Statutory requirement.

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16. Outdoor lighting

Prior to the issue of a Subdivision Works Certificate, the Principal Certifier shall be satisfied that all outdoor lighting will comply with AS/NZS 4282:2019 *Control of the obtrusive effects of outdoor lighting* and be mounted, screened and directed in a way that it does not create a nuisance or light spill on to buildings on adjoining lots or public places.

Details demonstrating compliance with these requirements are to be submitted to the Certifier prior to the issue of a Subdivision Works Certificate.

Reason: To provide high quality external lighting for security without adverse impacts on public amenity from excessive illumination.

17. Excavation for services

Prior to the issue of a Subdivision Works Certificate, the Principal Certifier shall be satisfied that no proposed underground services (ie: water, sewerage, drainage, gas or other service) unless previously approved by conditions of consent, are located beneath the canopy of any tree protected under the Ku-ring-gai Development Control Plan, located on the subject allotment and adjoining allotments.

Reason: To protect existing trees.

18. Driveway crossing levels

Prior to issue of a Subdivision Works Certificate, driveway and associated footpath levels for any new, reconstructed or extended sections of driveway crossings between the property boundary and road alignment must be obtained from Council. Such levels are only able to be issued by Council under the Roads Act 1993. All footpath crossings, laybacks and driveways are to be constructed according to Council's specifications "Construction of Gutter Crossings".

Specifications are issued with alignment levels after completing the necessary application form at Council's Customer Services counter and payment of the assessment fee. When completing the request for driveway levels application from Council, the applicant must attach a copy of the relevant development application drawing which indicates the position and proposed level of the proposed driveway at the boundary alignment.

This development consent is for works wholly within the property. Development consent does not imply approval of footpath or driveway levels, materials or location within the road reserve, regardless of whether this information is shown on the development application plans. The grading of such footpaths or driveways outside the property shall comply with Council's standard requirements. The suitability of the grade of such paths or driveways inside the property is the sole responsibility of the applicant and the required alignment levels fixed by Council may impact upon these levels.

The construction of footpaths and driveways outside the property in materials other than those approved by Council is not permitted.

Reason: To provide suitable vehicular access without disruption to pedestrians and vehicular traffic.

19. Ausgrid requirements

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Prior to issue of a Subdivision Works Certificate, Ausgrid must be contacted regarding the power supply for the subject development. A written response, detailing the full requirements of Ausgrid (including any need for underground cabling, substations or similar within or in the vicinity of the development) shall be submitted and approved by the Principal Certifier prior to issue of a Subdivision Works Certificate.

Any structures or other requirements of Ausgrid shall be indicated on the plans issued with the Subdivision Works Certificate, to the satisfaction of the Principal Certifier and Ausgrid. The requirements of Ausgrid must be met in full prior to the issue of a Subdivision Certificate.

Reason: To ensure compliance with the requirements of Ausgrid.

20. Utility provider requirements

Prior to issue of a Subdivision Works Certificate, the applicant must make contact with all relevant utility providers whose services will be impacted upon by the development. A written copy of the requirements of each provider, as determined necessary by the Principal Certifier, must be obtained. All utility services or appropriate conduits for the same must be provided in accordance with the specifications of the utility providers.

Reason: To ensure compliance with the requirements of relevant utility providers.

21. Telecommunications infrastructure

Prior to the issue of a Subdivision Works Certificate, satisfactory documentary evidence shall be provided to the Principal Certifier that arrangements have been made for the installation of fibre-ready facilities to all individual lots and/or premises so as to enable fibre to be readily connected to any dwelling that may be constructed.

Prior to the issue of the Subdivision Works Certificate, the provision of fixed-line telecommunications infrastructure in the fibre-ready facilities to all individual lots, shall be demonstrated to the Principal Certifier through a written agreement between the developer/owner and a carrier. The agreement will also confirm that the carrier is satisfied the fibre ready facilities are fit for purpose.

Reason: To ensure that telecommunications infrastructure is provided in accordance with the Commonwealth Telecommunications Act 1997.

22. Underground services

All electrical services (existing and proposed) shall be undergrounded from the proposed building on the site to the appropriate power pole(s) or other connection point. Undergrounding of services must not disturb the root system of existing trees and shall be undertaken in accordance with the requirements of the relevant service provided. Documentary evidence that the relevant service provider has been consulted and that their requirements have been met is to be provided to the Principal Certifier prior to the issue of a Subdivision Works Certificate. All electrical and telephone services to the subject property must be placed underground and any redundant poles are to be removed.

Reason: To provide infrastructure that facilitates the future improvement of the streetscape by location of service lines below ground.

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CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF ANY SUBDIVISION WORKS CERTIFICATE OR PRIOR TO DEMOLITION, EXCAVATION OR BUILDING WORKS (WHICHEVER COMES FIRST):

23. Infrastructure damage security bond and inspection fee

To ensure that any damage to Council property as a result of construction activity is rectified in a timely manner:

- (a) All work or activity undertaken pursuant to this development consent must be undertaken in a manner to avoid damage to Council property and must not jeopardise the safety of any person using or occupying the adjacent public areas.
- (b) The applicant, builder, developer or any person acting in reliance on this consent shall be responsible for making good any damage to Council property and for the removal from Council property of any waste bin, building materials, sediment, silt, or any other material or article.
- (c) The Infrastructure damage security bond and infrastructure inspection fee must be paid to Council by the applicant prior to both the issue of any Subdivision Works Certificate and the commencement of any earthworks or construction.
- (d) In consideration of payment of the infrastructure damage security bond and infrastructure inspection fee, Council will undertake such inspections of Council Property as Council considers necessary and will also undertake, on behalf of the applicant, such restoration work to Council property, if any, that Council considers necessary as a consequence of the development. The provision of such restoration work by the Council does not absolve any person of the responsibilities contained in (a) to (b) above. Restoration work to be undertaken by Council referred to in this condition is limited to work that can be undertaken by Council at a cost of not more than the Infrastructure damage security bond payable pursuant to this condition.
- (e) Release of the bond Upon receipt by Council of a Subdivision Works Certificate, Council will undertake an inspection of its Infrastructure and release the bond if no damage is found.

For development relating to more than 2 dwellings, there will be a six months holding period after the receipt by Council of the Subdivision Works Certificate, after which you may request Council to return any bond monies.

If there is damage found to Council property the bond will not be released until the damage has been rectified to Council's satisfaction.

(f) In this condition:

"Council property" includes any road, footway, footpath paving, kerbing, guttering, crossings, street furniture, seats, letter bins, trees, shrubs, lawns, mounds, bushland, and similar structures or features on any road or public road within the meaning of the Local Government Act 1993 (NSW) or any public place; and

"Infrastructure damage security bond and infrastructure inspection fee" means the Infrastructure damage security bond and infrastructure inspection fee as calculated in accordance with the Schedule of Fees & Charges adopted by Council as at the date of payment and the cost of any inspections required by the Council of Council property associated with this condition.

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Reason: To maintain public infrastructure.

24. Section 7.11 Local infrastructure contributions

This development is subject to a development contribution calculated in accordance with Kuring-gai Contributions Plan 2010, being a Contributions Plan in effect under the Environmental Planning and Assessment Act, as follows:

Key Community Infrastructure	Amount
Local recreation and cultural facilities; Local social facilities	\$3,490.35
Local parks and local sporting facilities	\$27,105.13
Total:	\$30,595.48

The contribution specified above is subject to indexation and will continue to be indexed to reflect changes in the Consumer Price Index (All Groups Sydney) and Established House Price Index (Sydney) until paid in accordance with Ku-ring-gai Contributions Plan 2010 subject to the requirement of any Ministerial Direction in effect under s7.17 which limits the maximum amount of local infrastructure contributions payable in this area.

Prior to payment, please contact Council directly to verify the current contribution payable.

The contribution shall be paid to Council prior to the issue of a Subdivision Works Certificate, Linen Plan, or Subdivision Certificate, <u>whichever comes first</u> in accordance with Ku-ring-gai Contributions Plan 2010.

Note: Copies of Council's Contributions Plan can be viewed at Council Chambers at 818 Pacific Hwy Gordon or on Council's website at <u>www.krg.nsw.gov.au</u>.

Reason: To ensure the provision, extension or augmentation of the Key Community Infrastructure identified in Ku-ring-gai Contributions Plan 2010 that will, or is likely to be, required as a consequence of the development.

25. Housing and productivity contribution

Prior to the issue of a Subdivision Works Certificate, the housing and productivity contribution (HPC) set out in the table below is required to be made.

Housing and productivity contribution	Amount
Housing and productivity contribution (base component)	\$12,748.36
Total Housing and productivity contribution	\$12,748.36

The HPC must be paid using the NSW planning portal.

At the time of payment, the amount of the HPC is to be adjusted in accordance with the Environmental Planning and Assessment (Housing and Productivity Contributions) Order 2024 (HPC Order).

The HPC may be made wholly or partly as a non-monetary contribution (apart from any transport project component) if the Minister administering the Environmental Planning and Assessment Act 1979 agrees.

The HPC is not required to be made to the extent that a planning agreement excludes the application of Subdivision 4 of Division 7.1 of the Environmental Planning and Assessment

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Act 1979 to the development, or the HPC Order exempts the development from the contribution.

The amount of the contribution may be reduced under the HPC Order, including if payment is made before 1 July 2025.

Reason: To require contributions towards the provision of regional infrastructure.

CONDITIONS TO BE SATISFIED DURING THE DEMOLITION, EXCAVATION AND CONSTRUCTION PHASES:

26. Road opening permit

The opening of any footway, roadway, road shoulder or any part of the road reserve (excluding where a Driveway Application and Roads Act Approval is required) shall not be carried out without a road opening permit being applied for and obtained from Council (and upon payment of any required fees) beforehand.

Reason: Statutory requirement (Roads Act 1993 Section 138) and to maintain the integrity of Council's infrastructure.

27. Prescribed conditions

The work shall comply with any relevant prescribed conditions of development consent under Sections 69, 70, 71, 72, 73, 74 and 75 of the Environmental Planning and Assessment Regulation 2021. For the purposes of section 4.17 (11) of the Environmental Planning and Assessment Act, the following conditions are prescribed in relation to a development consent for development that involves any building work:

28. Compliance with Building Code of Australia and insurance requirements under <u>Home Building Act 1989</u>

- 1) It is a condition of a development consent for development that involves building work that the work must be carried out in accordance with the requirements of the *Building Code of Australia*.
- 2) It is a condition of a development consent for development that involves residential building work for which a contract of insurance is required under the <u>Home Building</u> <u>Act 1989</u>, Part 6 that a contract of insurance is in force before building work authorised to be carried out by the consent commences.
- 3) It is a condition of a development consent for a temporary structure used as an entertainment venue that the temporary structure must comply with Part B1 and NSW Part H102 in Volume 1 of the *Building Code of Australia*.
- 4) In subsection (1), a reference to the *Building Code of Australia* is a reference to the Building Code of Australia as in force on the day on which the application for the construction certificate was made.
- 5) In subsection (3), a reference to the *Building Code of Australia* is a reference to the Building Code of Australia as in force on the day on which the application for development consent was made.
- 6) This section does not apply -
 - (a) to the extent to which an exemption from a provision of the *Building Code of Australia* or a fire safety standard is in force under the <u>Environmental Planning</u>

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and Assessment (Development Certification and Fire Safety) Regulation 2021, or

- (b) to the erection of a temporary building, other than a temporary structure to which subsection (3) applies.
- relevant date has the same meaning as in the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, section 19.

Erection of signs

- 1) This section applies to a development consent for development involving building work, subdivision work or demolition work.
- It is a condition of the development consent that a sign must be erected in a prominent position on a site on which building work, subdivision work or demolition work is being carried out -
 - (a) showing the name, address and telephone number of the principal certifier for the work, and
 - (b) showing the name of the principal contractor, if any, for the building work and a telephone number on which the principal contractor may be contacted outside working hours, and
 - (c) stating that unauthorised entry to the work site is prohibited.
- 3) The sign must be -
 - maintained while the building work, subdivision work or demolition work is being carried out, and
 - (b) removed when the work has been completed.
- This section does not apply in relation to -
 - (a) building work, subdivision work or demolition work carried out inside an existing building, if the work does not affect the external walls of the building, or
 - (b) Crown building work certified to comply with the *Building Code of Australia* under the Act, Part 6.

Notification of Home Building Act 1989 requirements

- 1) This section applies to a development consent for development involving residential building work if the principal certifier is not the council.
- 2) It is a condition of the development consent that residential building work must not be carried out unless the principal certifier for the development to which the work relates has given the council written notice of the following -
 - (a) for work that requires a principal contractor to be appointed
 - i. the name and licence number of the principal contractor, and
 - ii. the name of the insurer of the work under the <u>Home Building Act 1989</u>, Part 6,
 - (b) for work to be carried out by an owner-builder
 - i. the name of the owner-builder, and

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- ii. if the owner-builder is required to hold an owner-builder permit under the *Home Building Act 1989* the number of the owner-builder permit.
- 3) If the information notified under subsection (2) is no longer correct, it is a condition of the development consent that further work must not be carried out unless the principal certifier has given the council written notice of the updated information.
- 4) This section does not apply in relation to Crown building work certified to comply with the *Building Code of Australia* under the Act, Part 6.

Shoring and adequacy of adjoining property

- This section applies to a development consent for development that involves excavation that extends below the level of the base of the footings of a building, structure or work on adjoining land, including a structure or work in a road or rail corridor.
- 2) It is a condition of the development consent that the person having the benefit of the development consent must, at the person's own expense -
 - (a) protect and support the building, structure or work on adjoining land from possible damage from the excavation, and
 - (b) if necessary, underpin the building, structure or work on adjoining land to prevent damage from the excavation.
- 3) This section does not apply if -
 - (a) the person having the benefit of the development consent owns the adjoining land, or
 - (b) the owner of the adjoining land gives written consent to the condition not applying.

Reason: Statutory requirement.

29. Hours of work

Demolition, construction work and deliveries of building material and equipment must not take place outside the hours of 7.00am to 5.00pm Monday to Friday and 8.00am to 12 noon Saturday. No work and no deliveries are to take place on Sundays and public holidays.

Demolition and/or excavation using machinery of any kind must be limited to between 7.00am and 5.00pm Monday to Friday, with a respite break of 45 minutes between 12 noon and 1.00pm. No demolition and/or excavation using machinery of any kind is to occur on Saturdays, Sundays or public holidays.

Where it is necessary for works to occur outside of these hours (ie placement of concrete for large floor areas on large residential/commercial developments or where building processes require the use of oversized trucks and/or cranes that are restricted by Transport for NSW (TfNSW) from travelling during daylight hours to deliver, erect or remove machinery, tower cranes, pre-cast panels, beams, tanks or service equipment to or from the site), approval for such activities will be subject to the issue of an "outside of hours works permit" from Council as well as notification of the surrounding properties likely to be affected by the proposed works.

Failure to obtain a permit to work outside of the approved hours will result in regulatory action.

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Reason: To ensure reasonable standards of amenity for occupants of neighbouring properties.

30. Approved plans to be on site

A copy of all approved and certified plans, specifications and documents incorporating conditions of consent and certification (including the Subdivision Works Certificate if required for the work) shall be kept on site at all times during the demolition, excavation and construction phases and must be readily available to any officer of Council or the Principal Certifier.

Reason: To ensure that the development is in accordance with the determination.

31. Engineering fees

For the purpose of any development related inspections by Ku-ring-gai Council engineers, the corresponding fees set out in Council's adopted Schedule of Fees and Charges are payable to Council. A re-inspection fee per visit may be charged where work is unprepared at the requested time of inspection, or where remedial work is unsatisfactory and a further inspection is required. Engineering fees must be paid in full prior to any approval being granted under the Roads Act 1993.

Reason: To protect public infrastructure.

32. Dust control

During excavation, demolition and construction, adequate measures shall be taken to prevent dust from affecting the amenity of the neighbourhood. The following measures must be adopted:

- physical barriers shall be placed around or over dust sources to prevent wind or activity from generating dust
- earthworks and scheduling activities shall be managed to coincide with the next stage of development to minimise the amount of time the site is left cut or exposed
- all materials shall be stored or stockpiled at the best locations
- the ground surface should be dampened slightly to prevent dust from becoming airborne but should not be wet to the extent that run-off occurs
- all vehicles carrying spoil or rubble to or from the site shall at all times be covered to prevent the escape of dust
- all equipment wheels shall be washed before exiting the site using manual or automated sprayers and drive-through washing bays
- gates shall be closed between vehicle movements and shall be fitted with shade cloth
- cleaning of footpaths and roadways shall be carried out at least daily
- no advertising or signage is permitted to be attached to dust cloth material.

Reason: To protect the environment and the amenity of surrounding properties.

33. Use of road or footpath

During excavation, demolition and construction phases, no building materials, plant or the like are to be stored on the road or footpath without written approval being obtained from Council beforehand. The footpath shall be kept in a clean, tidy and safe condition during

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building operations. Council reserves the right, without notice, to rectify any such breach and to charge the cost of rectification against the applicant/owner/builder or any other responsible person, as the case may be.

Reason: To ensure safety and amenity of the area.

34. Toilet facilities

Toilet facilities must be available or provided at the work site before works begin and must be maintained until the works are completed. One toilet, plus one additional toilet for every 20 persons working at the site are to be provided. Each toilet must:

- a) be a standard flushing toilet connected to a public sewer, or
- b) have an on-site effluent disposal system approved under the Local Government Act 1993 <u>https://www.legislation.nsw.gov.au/</u>, or
- c) be a temporary chemical closet approved under the Local Government Act 1993 <u>https://www.legislation.nsw.gov.au/</u>.

Reason: Statutory requirement.

35. Recycling of building material (general)

During demolition and construction, the Principal Certifier shall be satisfied that building materials suitable for recycling have been forwarded to an appropriate registered business dealing in recycling of materials. Materials to be recycled must be kept in good order.

Reason: To facilitate recycling of materials.

36. Garbage receptacle

- 1. A garbage receptacle must be provided at the work site before works begin and must be maintained until all works are completed.
- 2. The garbage receptacle must have a tight fitting lid and be suitable for the reception of food scraps and papers.
- 3. The receptacle lid must be kept closed at all times, other than when garbage is being deposited.

Reason: To ensure appropriate construction site waste management and to avoid injury to wildlife.

37. Construction signage

All construction signs must comply with the following requirements:

- are not to cover any mechanical ventilation inlet or outlet vent
- are not illuminated, self-illuminated or flashing at any time
- are located wholly within a property where construction is being undertaken
- refer only to the business(es) undertaking the construction and/or the site at which the construction is being undertaken
- are restricted to one such sign per property
- do not exceed 2.5m²
- are removed within 14 days of the completion of all construction works

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Reason: To ensure compliance with Council's controls regarding signage.

38. Road reserve safety

All public footways and roadways fronting and adjacent to the site must be maintained in a safe condition at all times during the course of the development works. Construction materials must not be stored in the road reserve. A safe pedestrian circulation route and a pavement/route free of trip hazards must be maintained at all times on or adjacent to any public access ways fronting the construction site. Where public infrastructure is damaged, repair works must be carried out when and as directed by Council officers. Where pedestrian circulation is diverted on to the roadway or verge areas, clear directional signage and protective barricades must be installed in accordance with AS1742-3 (2009) "Manual for Uniform Traffic Control Devices for Work on Roads". If pedestrian circulation is not satisfactorily maintained across the site frontage, and action is not taken promptly to rectify the defects, Council may take actions to stop work, which may include the bringing of proceedings.

Reason: To ensure safe public footways and roadways during construction.

39. Services

Where required, the adjustment or inclusion of any new utility service facilities must be carried out in accordance with the requirements of the relevant utility authority. These works shall be at no cost to Council. It is the applicant's responsibility to make contact with the relevant utility authorities to ascertain the impacts of the proposal upon utility services (including water, phone, gas and the like). Council accepts no responsibility for any matter arising from its approval to this application involving any influence upon utility services provided by another authority.

Reason: Provision of utility services.

40. Erosion control

Temporary sediment and erosion control and measures are to be installed prior to the commencement of any works on the site. These measures must be maintained in working order during construction works up to completion. All sediment traps must be cleared on a regular basis and after each major storm and/or as directed by the Principal Certifier and Council.

Reason: To protect the environment from erosion and sedimentation.

41. Sydney Water Section 73 Compliance Certificate

An application for a **Section 73 Compliance Certificate** under the *Sydney Water Act 1994* shall be made through an authorised Water Servicing Co-ordinator. The applicant should refer to Sydney Water's web site at <u>www.sydneywater.com.au</u> or telephone 13 20 92. Following application a "Notice of Requirements" will detail water and sewer extensions to be built and charges to be paid. Please make early contact with the Co-ordinator, since building of water/sewer extensions can be time consuming and may impact on other services and building, driveway or landscape design.

Reason: Statutory requirement.

42. Arborist's inspection and reporting

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The tree/s to be retained shall be inspected and monitored by an AQF Level 5 arborist in accordance with the current version of **Australian Standard** AS 4970 - *Protection of trees on development sites* during and after completion of development works to ensure their long term survival.

The Principal Certifier must be provided with reports by the project arborist within 7 days of the inspection detailing the date of inspection, identifying the trees by their number, the location and species, tree health, compliance with conditions of the Development Consent, description of the works inspected, description of any impacts to trees and any rectification and/or mitigation works prescribed and/or undertaken.

Regular inspections and documentation shall be given by the arborist to the Principal Certifier. These are required, at the following times or phases of work, but may be given more regularly:

Tree/location	Time of inspection
T7 Camellia sasanqua/ adjacent the proposed driveway	Excavation for driveway

All works as recommended by the project arborist are to be undertaken by an experienced arborist with a minimum AQF Level 3 qualification.

Reason: To ensure protection of existing trees.

43. Retention of tree roots

No tree roots of 50 millimetres or greater in diameter located within the specified radius of the trunk/s of the following tree/s shall be severed or injured in the process of any works during the construction period. All pruning of roots less than 50 millimetres in diameter shall be undertaken by an experienced arborist/horticulturalist, with a minimum AQF Level 3 qualification.

Tree/location	Radius in metres
T7 Camellia sasanqua/ adjacent the proposed driveway	3m

Reason: To protect existing trees.

44. Approved tree works

Prior to the commencement of any works, the following is to be undertaken to the specified trees:

Tree/location	Approved tree works
T8 Trachycarpus sp (Windmill Palm)	removal
T13 Cotoneaster sp.	removal

All trees are to be clearly tagged and identified in accordance with the specifications in the arborist report prior to the removal or pruning of any tree/s.

Removal or pruning of any other tree on the site is not approved, excluding species and works exempt under Council's Development Control Plan.

Reason: To ensure that the development is in accordance with the Development Consent.

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45. Hand excavation

All excavation within the specified radius of the trunk/s of the following tree/s shall be carried out by hand digging and/or by an air knife and shall be supervised by an experienced arborist/horticulturist, with a minimum AQF Level 3 qualification. The arborist /horticulturalist shall provide a report to the Principal Certifier confirming compliance with this condition:

Tree/Location	Radius in metres
T7 Camellia sasanqua/ adjacent the proposed driveway	3m

Reason: To protect existing trees.

46. No storage of materials beneath trees

No activities, soil compaction, storage or disposal of materials shall take place beneath the canopy of any tree protected under Council's Development Control Plan at any time unless specified in other conditions of this consent.

Reason: To protect existing trees.

47. Removal of refuse

All builders' refuse, spoil and/or material unsuitable for use in landscape areas shall be removed from the site on completion of the building works.

Reason: To protect the environment.

48. Canopy replenishment trees to be planted

The canopy replenishment trees to be planted shall be maintained in a healthy and vigorous condition until they attain a height of 5 metres when they will be protected by Council's Development Control Plan. Any of the trees found faulty, damaged, dying or dead shall be replaced with the same species.

Reason: To maintain the treed character of the area.

49. On site retention of waste dockets

All demolition, excavation and construction waste dockets are to be retained on site, or at suitable location, in order to confirm which facility received materials generated from the site for recycling or disposal.

- each docket is to be an official receipt from a facility authorised to accept the material type, for disposal or processing
- this information is to be made available at the request of an authorised Council
 officer.

Reason: To protect the environment.

50. Maintenance of site

All materials and equipment must be stored wholly within the work site unless an approval to store them elsewhere is held.

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Waste materials (including excavation, demolition and construction waste materials) must be managed on the site and then disposed of at a waste management facility.

Any run-off and erosion control measures required must be maintained within their operating capacity until the completion of the works to prevent debris escaping from the site into drainage systems, waterways, adjoining properties and roads.

During construction:

- all vehicles entering or leaving the site must have their loads covered, and
- all vehicles, before leaving the site, must be cleaned of dirt, sand and other materials, to avoid tracking these materials onto public roads.

At the completion of the works, the work site must be left clear of waste and debris.

Reason: To ensure the site is appropriately maintained.

51. Control of construction noise (Australian Standard)

During excavation, demolition and construction phases, noise generated from the site shall be controlled in accordance with best practice objectives of AS 2436-2010 and NSW Environment Protection Authority Interim Construction Noise Guidelines.

Reason: To protect the amenity of neighbouring properties

52. Site fencing

The site must be secured and fenced prior to works commencing. All excavation, demolition and construction works shall be properly guarded and protected with hoardings or fencing to prevent them from being dangerous to life and property.

If the work involved in the excavation, demolition or construction of the development is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or building involves the enclosure of a public place, a hoarding or fence must be erected between the work site and the public place.

If necessary, a hoarding is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place (note that separate approval is required prior to the commencement of works to erect a hoarding or temporary fence on public property).

The work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons on public property.

The site shall be secured/locked to prevent access at the end of each day.

Any hoarding, fence or awning is to be removed when the construction work has been completed.

Reason: To ensure public safety.

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CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF A COMPLIANCE CERTIFICATE FOR SUBDIVISION WORKS:

53. Completion of landscape works

Prior to the issue of a Compliance Certificate for subdivision work, the Principal Certifier is to be satisfied that all landscape works have been undertaken in accordance with the approved plan(s) and conditions of this development consent.

Reason: To ensure that the landscape works are consistent with the Development Consent.

54. Outdoor lighting

Prior to the issue of the Compliance Certificate, for subdivision work, the Principal Certifier shall be satisfied that all outdoor lighting will comply with AS/NZS 4282:2019 *Control of the obtrusive effects of outdoor lighting* and is mounted, screened and directed in a way that does not create a nuisance or light spill on to buildings on adjoining lots or public places.

Reason: To provide high quality external lighting for security without adverse impacts on public amenity from excessive illumination.

55. Certification of drainage works

Prior to issue of a Compliance Certificate for subdivision work, the Principal Certifier is to be satisfied that:

- 1. The stormwater drainage works have been satisfactorily completed in accordance with the approved Subdivision Certificate drainage plans.
- The minimum retention and on-site detention storage volume requirements of Kuring-gai DCP Part 24 'Water Management' have been achieved. Council's 'On-Site Detention and Retention Certification sheet' shall be completed.
- 3. Retained water is connected and available for use.
- 4. All grates potentially accessible by children are secured.
- 5. Components of the new drainage system have been installed by a licensed plumbing contractor in accordance with the Plumbing and Drainage Code AS3500.3 and the Building Code of Australia.
- 6. All enclosed floor areas, including habitable and garage floor levels, are safeguarded from outside stormwater runoff ingress by suitable differences in finished levels, gradings and provision of stormwater collection devices.

Evidence from a qualified and experienced consulting civil/hydraulic engineer documenting compliance with the above is to be provided to Council prior to the issue of a Compliance Certificate.

Reason: To ensure appropriate stormwater management.

56. Certification of as-constructed driveway crossover and access handle

Prior to issue of a Compliance Certificate for subdivision work, the Principal Certifier is to be satisfied that:

- 1. The completed vehicular access complies with Australian Standard 2890.1 2004 "Off-Street car parking"
- 2. Finished driveway gradients and transitions will not result in the scraping of the

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underside of cars.

Evidence from a suitably qualified and experienced traffic/civil engineer demonstrating compliance with the above is to be provided to and approved by the Principal Certifier prior to the issue of a Compliance Certificate.

Reason: To ensure that vehicular access is compliant with Australian Standards and the Development Consent.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF A SUBDIVISION CERTIFICATE:

57. Submission of plans of subdivision (Torrens title)

For endorsement of a Subdivision Certificate, an original plan of subdivision, suitable for endorsement by Council shall be submitted to Council through the NSW Planning Portal. The following details must be submitted with the plan of subdivision and its copies:

- 1. The endorsement fee current at the time of lodgement.
- 2. The 88B instrument.
- 3. A copy of the Compliance Certificate for the subdivision works approved under Development Application No. eDA0365/24.
- 4. All surveyor's and/or consulting engineers' certification(s) required under this subdivision consent.
- 5. The Section 73 (Sydney Water) Compliance Certificate for the subdivision.
- 6. Proof of payment of any required S.711 contribution.

Council will check the conditions on the Development Consent for subdivision. Failure to submit the required information will delay endorsement of the linen plan and may require payment of rechecking fees. **Plans and copies of subdivision must not be folded.**

Reason: Statutory requirement.

58. Issue of subdivision certificate

The Subdivision Certificate must not be issued until all conditions of this Development Consent have been satisfied and a Final Compliance Certificate has been issued by the Principal Certifier.

Reason: To ensure that the development is completed prior to transfer of responsibility for the site and development to another person.

59. Requirements of public authorities for connection to services

Prior to the issue of a Subdivision Certificate, Council shall be satisfied that the requirements of any public authorities (e.g. Energy Australia, Sydney Water, Telstra Australia, AGL, etc) in regard to the connection, relocation and/or adjustment of the services affected by the proposed subdivision have been complied with. All costs related to the relocation, adjustment or support of services are the responsibility of the Applicant.

Details of compliance with the requirements of any relevant public authorities are to be submitted to Council.

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Reason: To ensure that services are available to the allotments of land.

60. Reinstatement of driveway crossings

Prior to issue of a Subdivision Certificate, Council is to be satisfied that following works have been completed:

- 1. Construction of the new driveway crossing and layback in accordance with the levels and specifications issued by Council.
- Removal of all redundant driveway crossings, pipe crossing and/or kerb laybacks. Full reinstatement of these sections to footway, and/or turfed verge and/or kerb and gutter to the satisfaction of Council.
- 3. Reinstatement works match surrounding adjacent infrastructure with respect to marrying of levels and materials.
- 4. Any sections of damaged grass verge are to be replaced with a non-friable turf of native variety to match existing.
- 5. Any public infrastructure damaged as a result of construction works on the subject site (including damage caused by, but not limited to, delivery vehicles, waste collection, contractors, sub contractors, concrete vehicles) has been repaired to the satisfaction of Council and at no cost to Council.

Reason: To protect and maintain public infrastructure and the streetscape.

61. Infrastructure repair - subdivision works

Prior to issue of a Subdivision Certificate, any infrastructure within the road reserve along the frontage of the subject site or within close proximity, which has been damaged as a result of subdivision works, must be fully repaired to the satisfaction of Council's Development Engineer and at no cost to Council.

Reason: To protect and maintain public infrastructure.

62. Provision of services

Prior to issue of a Subdivision Certificate, separate underground electricity, gas (if available) and phone or appropriate conduits for the same, must be provided to each allotment to the satisfaction of the utility provider. A suitably qualified and experienced engineer or surveyor is to provide certification that all new lots have ready underground access to the services of electricity, gas and phone. Alternatively, a letter from the relevant utility provider stating the same may be submitted to satisfy this condition.

Reason: Access to public utilities

63. Driveway construction (subdivision)

Prior to the issue of the Subdivision Certificate, Council is to be satisfied that the proposed access driveway has been constructed in accordance with the Architectural Plan Drawing No. A02-C, prepared by Bean Project Management & Design dated 22.05.24.

Reason: To provide suitable vehicular access without disruption to pedestrian and vehicular traffic.

64. Sydney Water Section 73 compliance certificate

Prior to the issue of a Subdivision Certificate, the Section 73 Sydney Water compliance

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certificate **which refers to the subdivision application** must be obtained and submitted to the Council.

Reason: Statutory requirement.

65. General easement/ R.O.W. provision and certification

Prior to issue of a Subdivision Certificate, a registered surveyor is to provide details to Council that all physical structures are fully contained within the proposed allotments or will be fully covered by the proposed burdens upon registration of the final plan of subdivision. Alternatively, where the surveyor is of the opinion that creation of burdens and benefits is not required, then proof to this effect must be submitted to the Principal Certifier.

Reason: To ensure that all physical structures are fully contained within the proposed allotments or will be fully covered by the proposed burdens upon registration of the final plan of subdivision.

66. Submission of 88b instrument

Prior to the issue of a Subdivision Certificate, an original instrument under Section 88B of the Conveyancing Act with the plan of subdivision, shall be submitted electronically to Council. Ku-ring-gai Council must be named as the authority whose consent is required to release, vary or modify the burdens.

Reason: To create all required easements, rights-of-carriageway, positive covenants, restrictions-on-use or other burdens/benefits as may be required.

67. Section 88b instrument - tree protection

Prior to the issue of any Subdivision Certificate, Council is to be provided with evidence of the creation of a restriction on the use of land under Section 88B of the Conveyancing Act 1919, burdening the area of land beneath the canopy of the following tree/s for a specified radius in metres from the trunk of that tree, the terms of which state that any excavations, soil level changes or construction works are prohibited with the exception of any driveway as approved by Council:

Tree No	Tree	Location	Radius
19	Quercus palustris	northwest corner of Lot 2	7m

Reason: To protect trees.

CONDITIONS TO BE SATISFIED AT ALL TIMES:

68. Outdoor lighting

All external lighting must:

- 1. Comply with AS/NZS 4282:2019: Control of the obtrusive effects of outdoor lighting and
- 2. Be mounted, screened and directed in a way that it does not create a nuisance or light spill on to buildings on adjoining lots or public places.

Reason: To protect the amenity of surrounding properties.

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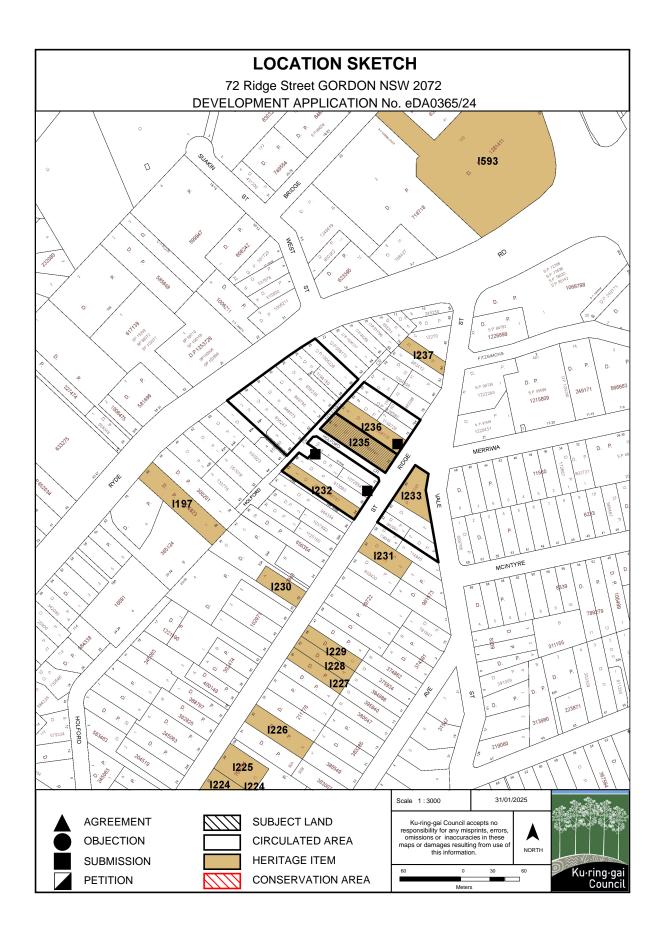
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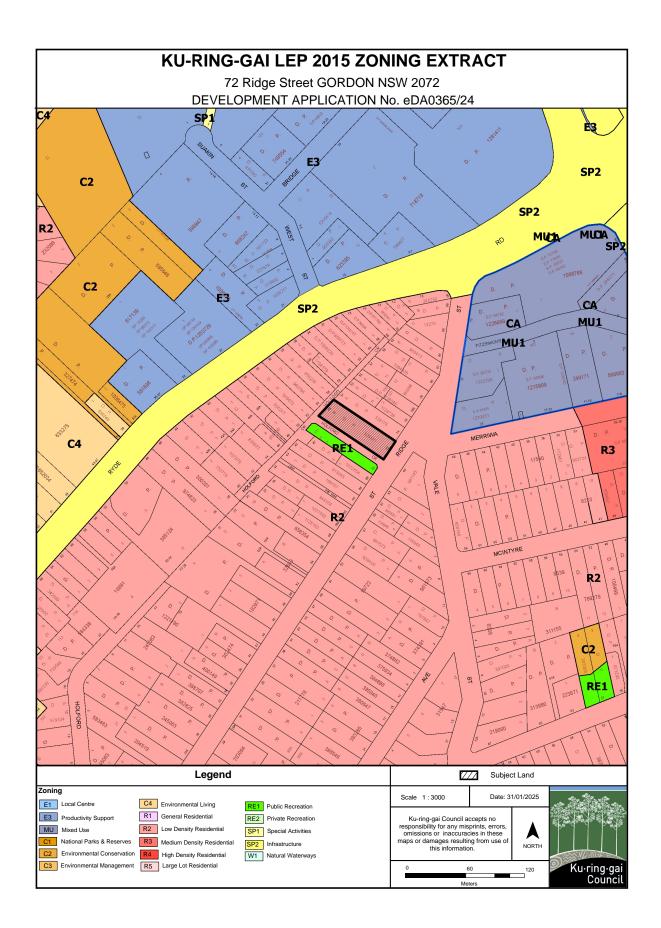
ATTACHMENT NO: 1 - DEVELOPMENT ASSESSMENT REPORT

ITEM NO: GB.1

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PROJECT
PROPOSED SUBDIVISION OF LOT B DP306541
72 RIDGE STREET, GORDON

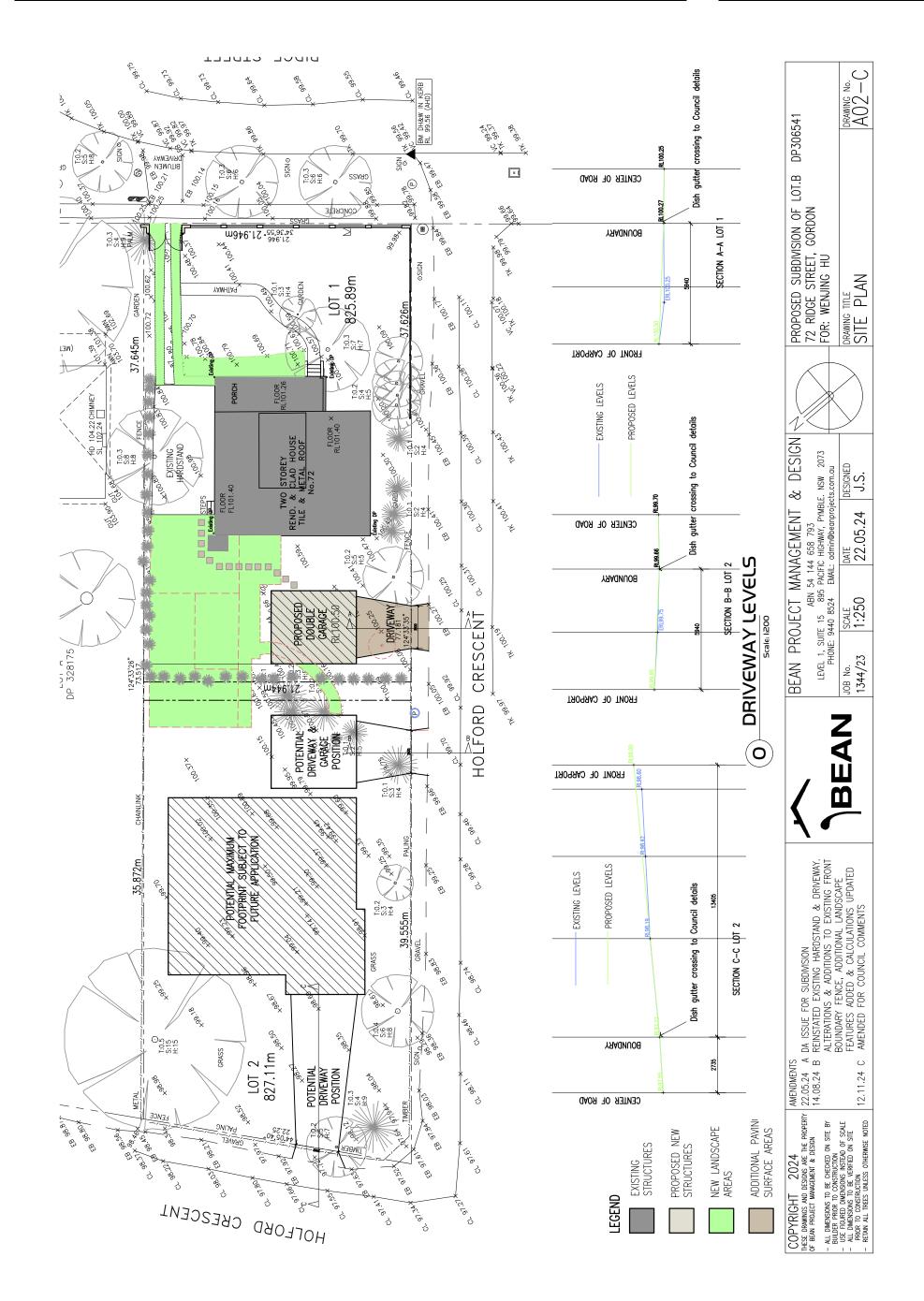
KU-RING GAI MUNICIPAL COUNCIL SUBJECT

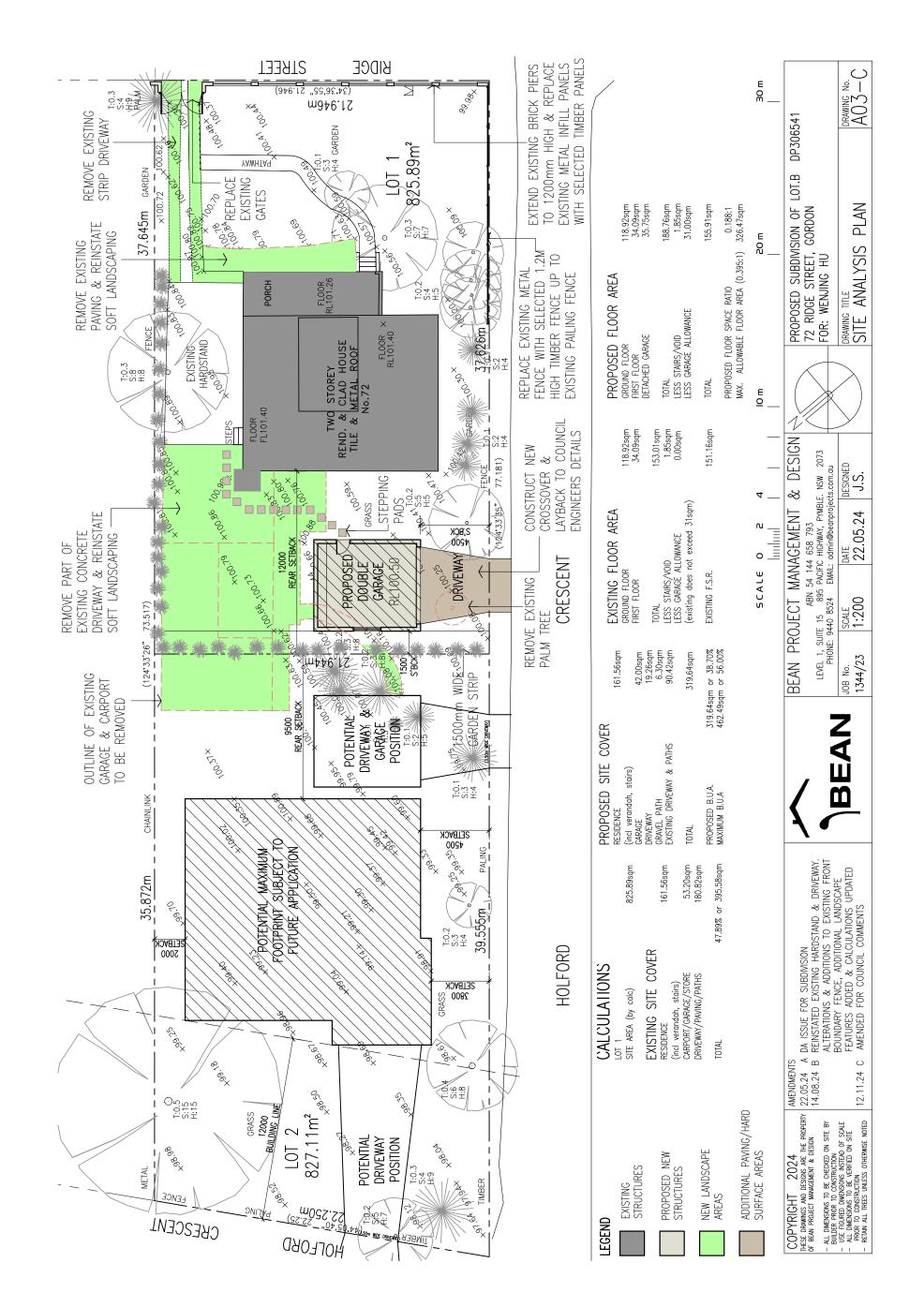
WENJING HU JOB No: 1344/23 CLIENT

DAT€ 22.05.24 14.08.24

- DA ISSUE FOR SUBDIVISION A B
- REINSTATED EXISTING HARDSTAND & DRIVEWAY ALTERATIONS & ADDITIONS TO EXISTING FRONT BOUNDARY FENCE, ADDITIONAL LANDSCAPE FEATURES ADDED & CALCULATIONS UPDATED AMENDED FOR COUNCIL COMMENTS
 - \mathbf{O} 12.11.24
 - DRAWING SCHEDULE
 - TITLE SHEET A01
- U U U M M U A02
- A03
- A04 A05 A06
- SITE PLAN 1:250 SITE ANALYSIS PLAN 1:200 PROPOSED SUBDIVISION PLAN 1:200 PROPOSED DOUBLE GARAGE 1:100 PROPOSED FRONT FENCE 1:100, 1:50

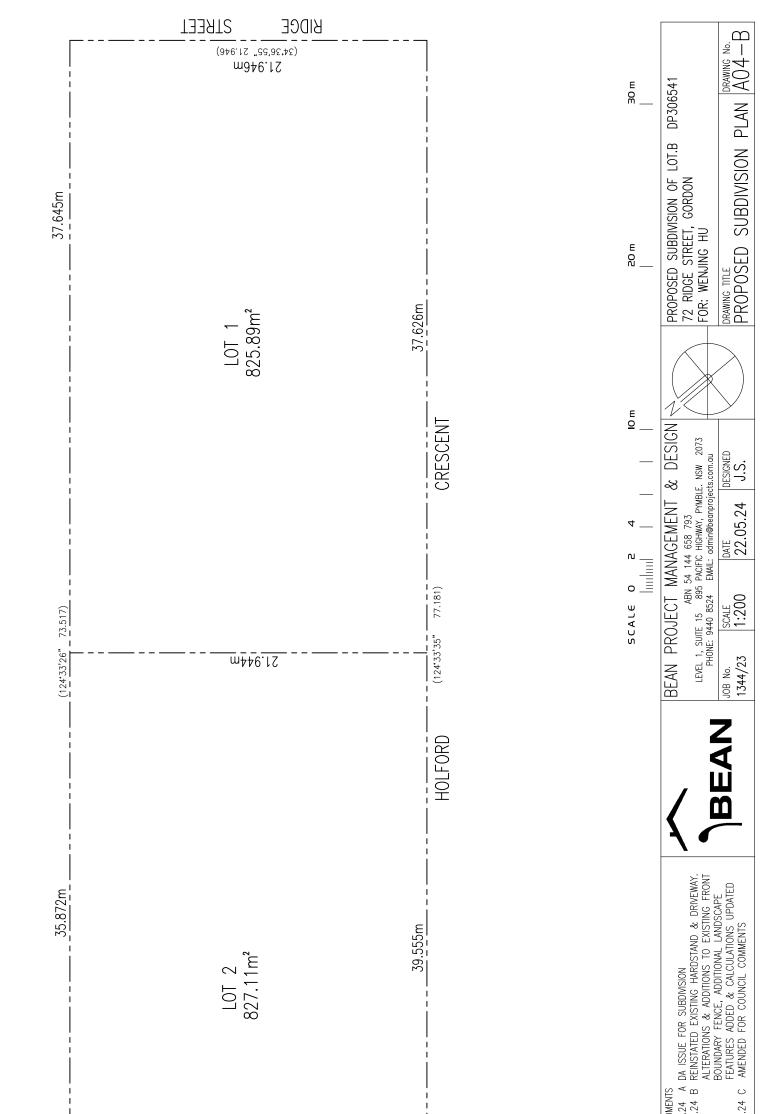






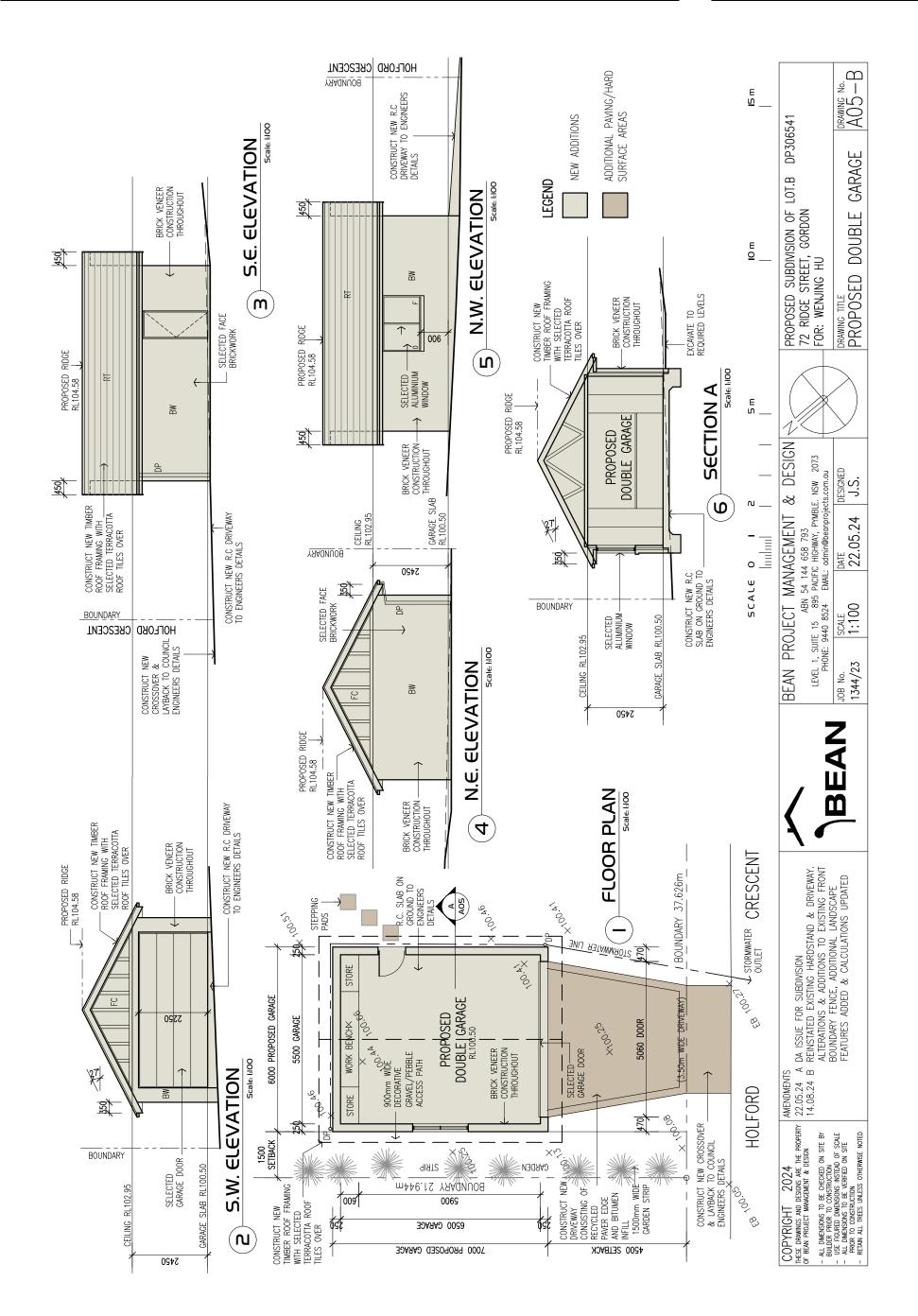
ITEM NO: GB.1

ATTACHMENT NO: 4 - AMENDED ARCHITECTURAL AND SUBDIVISION PLANS

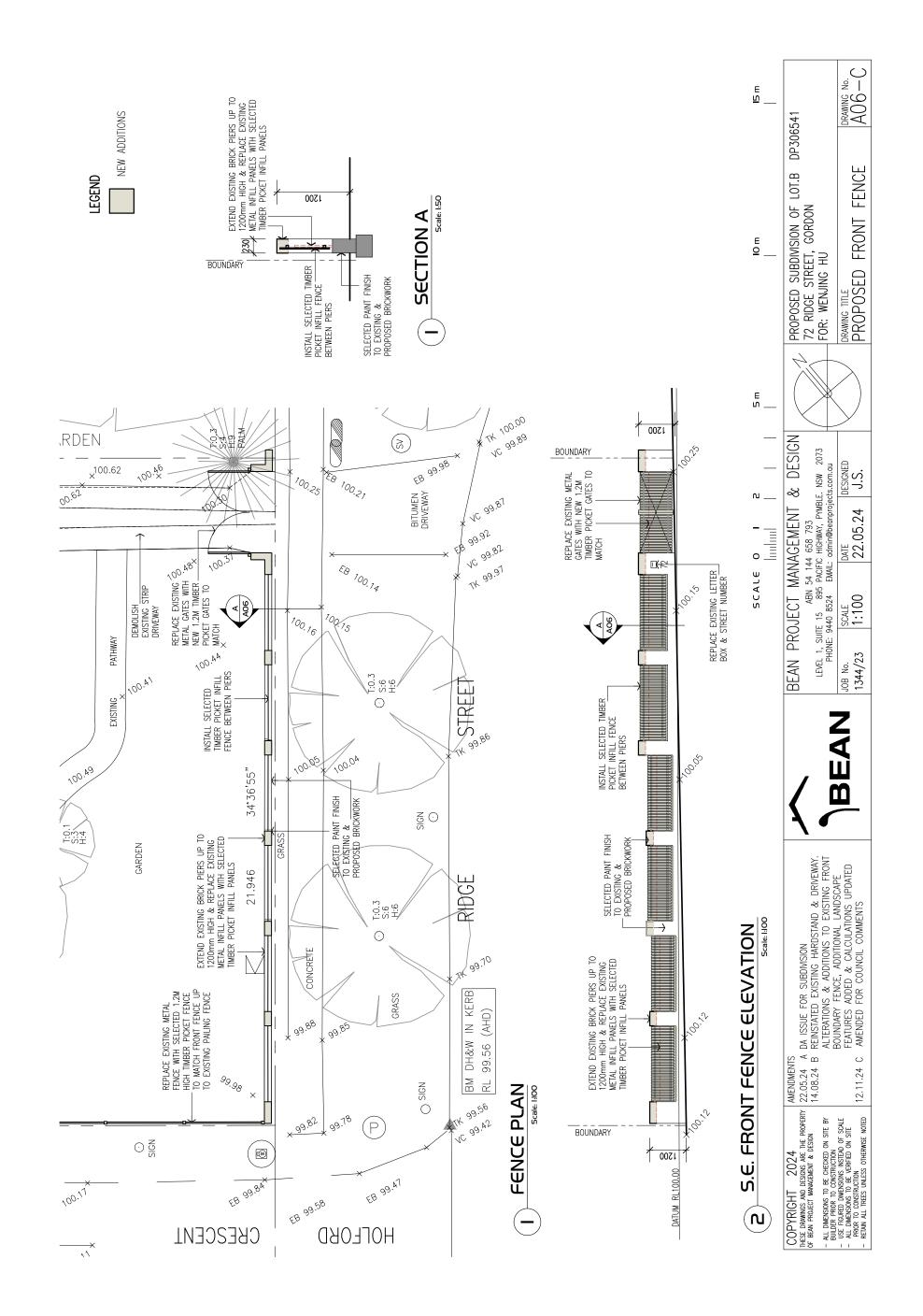


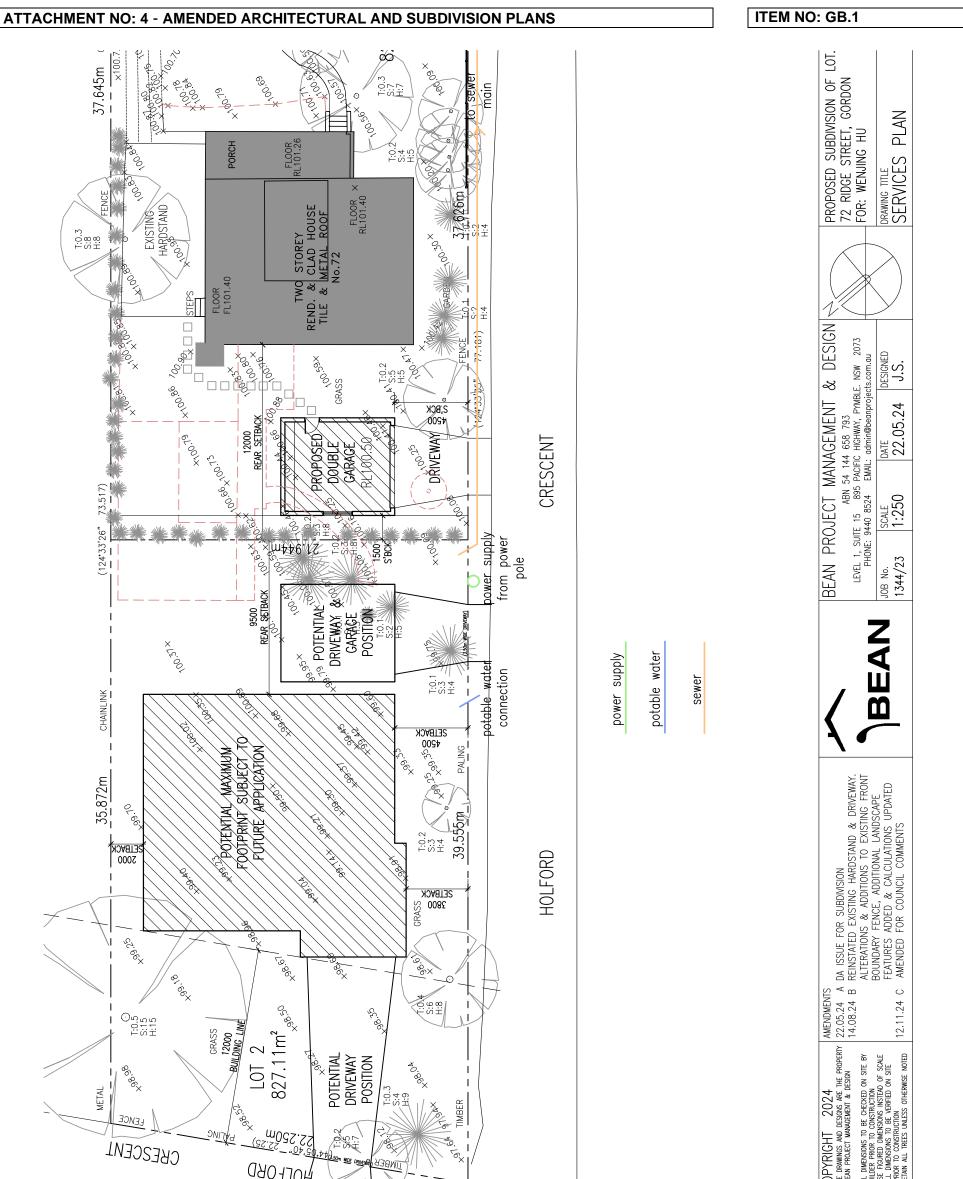
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RETAIN ALL TREES UNLESS OTHERWISE NOTED



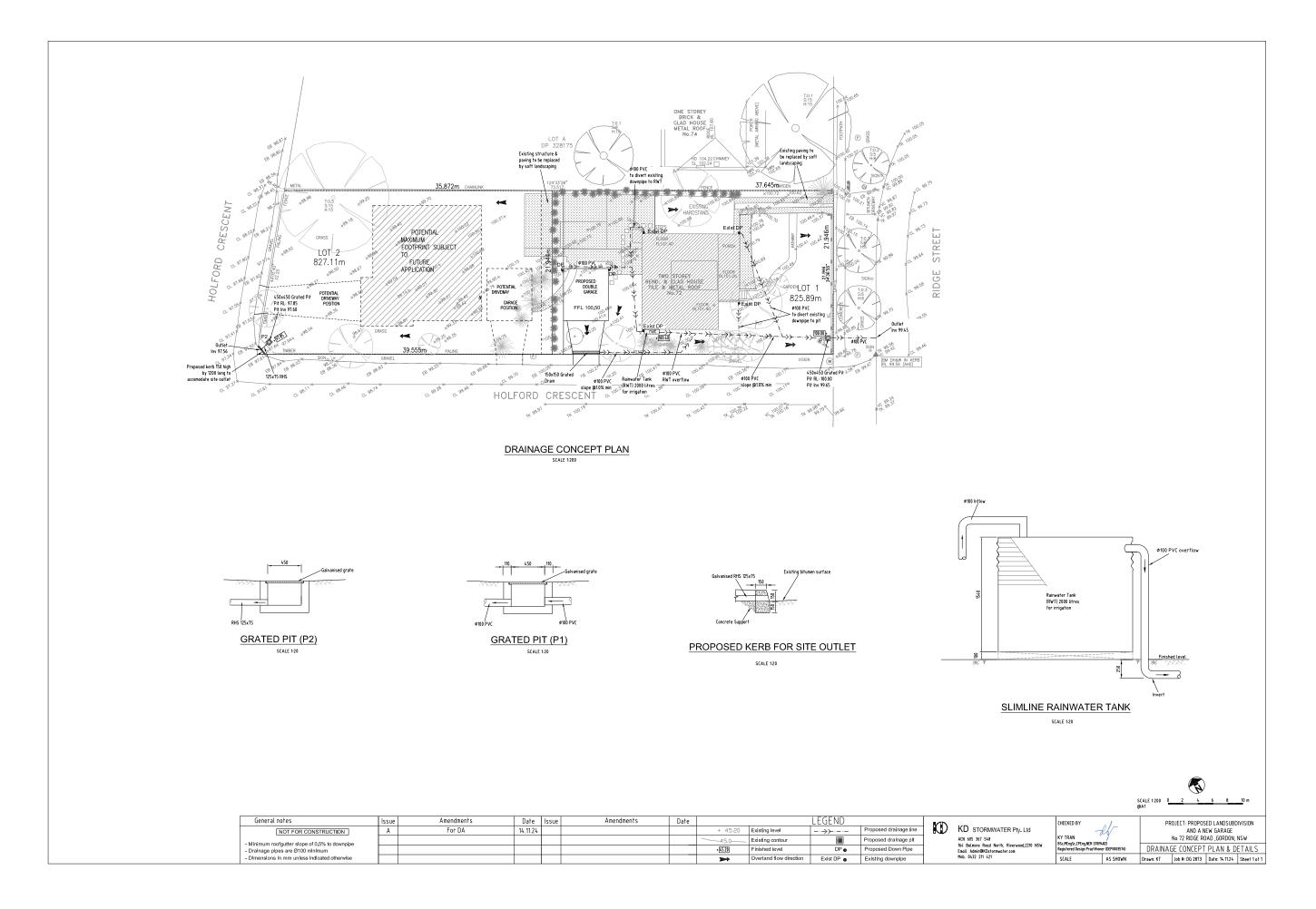


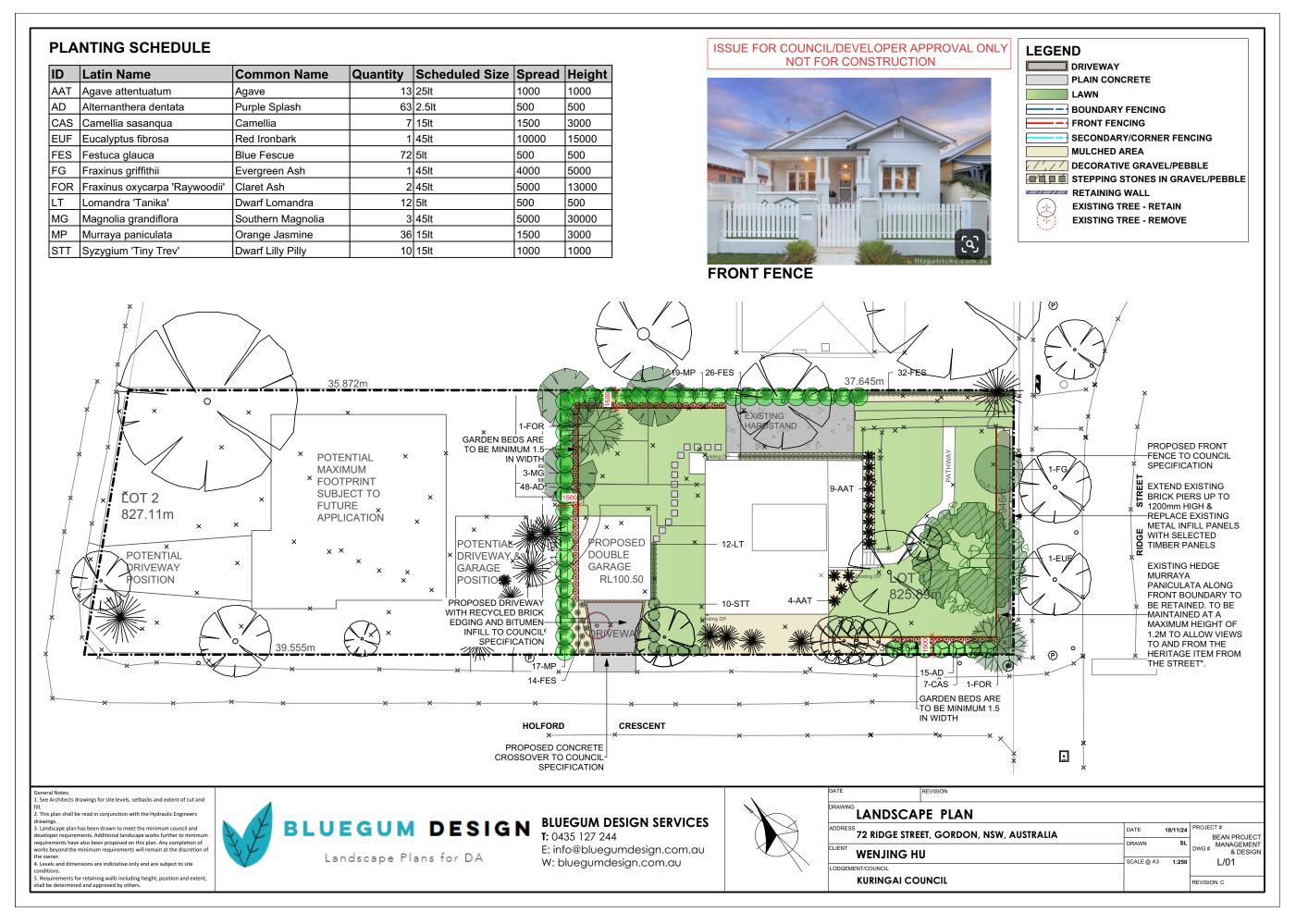




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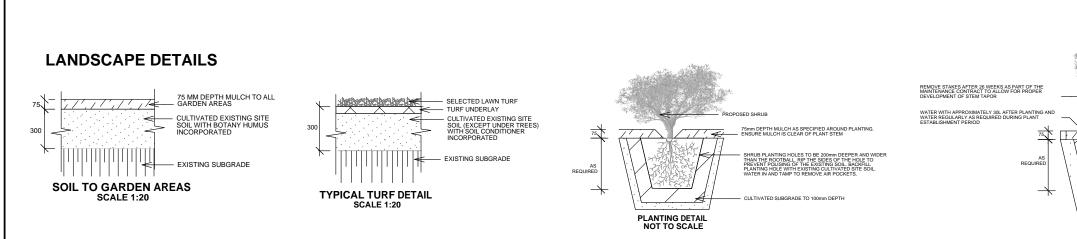




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ITEM NO: GB.1



OUTLINE LANDSCAPE SPECIFICATION

Tree Protection: Trees to be retained shall be protected during site works and construction by the erection of solid barricades to the specification of Council. Storage of machinery or materials beneath canopy of trees to be retained shall not be permitted. Changes to soil level and cultivation of soil beneath canopy of trees to be retained shall not be permitted unless under direct supervision of Landscape Architect. Existing trees shall be pruned to Landscape Architects onsite instructions.

Soil Preparation: Cultivate to depth of 300mm all proposed lawn & garden areas incorporating minimum 100mm depth of organic clay breaker into existing site soil. Do not cultivate beneath existing trees to be retained. In areas where fill is required gain required shapes & levels using a premium grade soil mix. In areas where excavation is required (if in clay) over excavate as required to to allow for installation of 500mm depth of premium grade topsoil mix to garden areas and 300mm depth of premium grade topsoil mix to lawn areas. Undertake all required action to ensure that no rootballs of proposed plants sit in clay wells and that all garden areas and lawn areas drain satisfactorily. Note it is intended that wherever possible existing levels shall not be altered through garden and lawn areas. It is the Contractors responsibility to ensure that the end result of the project is that all lawn and garden areas drain sufficiently (both surface & subsurface), are at required finished levels and have sufficient soil depths to enable lawn and plants to thrive and grow. Should alternative works to those specified be required to achieve the above result, Contractor shall inform Builder at time of Tender and request instructions.

Lawn Edging and Stepping Stones:(i) 125 x 25mm approved tanalith impregnated pine edging shall be installed, to lines as indicated on plan and staked with approved stakes at maximum 1500mm centres at ends and changes of direction; stakes shall be nailed to edging with approved galvanised steel nails. Top of edging shall finish flush with surrounding surfaces. Top of stakes shall finish 25mm below top of edging. (ii)Contractor shall install approved bricks on edge on a minimum 100mm deep x 90mm wide concrete footing with brick tor set in, to lines nominated on plan as brick edging. Bricks needing to be cut shall be done so with clean sharp cuts. Top of edging shall finish flush with surrounding finished surfaces. Approved sandstone stepping stones shall be positioned as indicated on plan on a 25mm river sand bed. Planting: Purchase plants from an approved nursery. Plants to be healthy & true to type & species. Set out plants to positions indicated on plan. Following approval, plant holes shall be dug approximately twice width and to 100mm deeper than plant rootballs that they are to receive. Base and sides of hole shall be further lossened. Fertiliser, followed by 100mm depth of topsoil mix shall then be placed into base of hole and lightly consolidated. Base of hole shall be torned to contain water around base of stern. Base of stern of plant shall flush with finished soil level. Once installed plant shall be thoroughly watered and maintained for the Contract. Staking: All trees shall be staked using 2 x 38mm x 38mm x 2000mm long hardwood stakes per plant and with hessian webbing ties installed to Landscape Architect's on site instructions. Mulching: Install 75mm depth of 25mm diameter hardwood mulch to all garden areas, coving mulch down around all plant stems & to finish flush with adjacent surfaces. Top of edging as an elawn to the contract. At time of the duration of the contract. At time of the duration of plant shall be over sown with an approved seal to Landscape Architect's on site instructions.

PLANT IMAGES





ATTACHMENT NO: 7 - CLAUSE 4.6 VARIATION REQUEST-MINIMUM LOT SIZE **ITEM NO: GB.1**



DEVELOPMENT APPLICATION

CI4.6 VARIATION REQUEST – Minimum Subdivision Lot Size

Subdivision of one (1) lot into two (2) lots and construction of a new garage

72 Ridge Street Gordon

May 2024

Corona Projects Pty Ltd | ABN 33 122 390 023 | Suite 106, Level 1, 35 Spring Street, Bondi Junction NSW 2022 | info@coronaprojects.com.au

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PROJECT DETAILS

Client:	Wenjing Hu
Subject land:	72 Ridge Street Gordon
Lot Description:	Lot B of Deposited Plan 306541
Proposed development:	Subdivision of one (1) lot into two (2) lots and construction of
	a new garage
Clause being varied:	Clause 4.1 Minimum subdivision lot size
Extent of variation:	11.19% (Lot 1) and 11.06% (Lot 2)
The report is prepared by	Lauren McNamara
	Bachelor of Planning (WSU)
The report is reviewed by	Mathew Fortunato
	Bachelor of Architecture and Environments (USYD)

I certify that the contents of the Clause 4.6 Variation request to the best of my knowledge, has been prepared as follows:

- In accordance with Section 4.12 of the Environmental Planning and Assessment Act 1979 and Clause 24 of the Environmental Planning and Assessment Regulation 2021;
- The statement contains all available information that is relevant to the environmental impact assessment of the proposed development;
- To the best of my knowledge the information contained in this report is neither false nor misleading.

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1.0 BACKGROUND

This Clause 4.6 variation is a written request to vary a development standard to support a development application for the subdivision of one (1) lot into two (2) lots and construction of a new garage at 72 Ridge Street Gordon. The proposal is in direct response to the growing housing needs of the Gordon locality. The subdivision is commensurate to many of the similar lots located within the immediate locality.

More specifically the proposal includes;

- Subdivision of one (1) lot into two (2) lots,
- Demolition of the existing double garage and driveway on Lot 1,
- Construction of a new double garage and driveway on Lot 1 accessed from Holford Crescent,
- Removal of one (1) tree.

Clause 4.1 of Ku-ring-gai Local Environmental Plan (LEP) 2015 relates to the minimum subdivision lot size requirements and states that *"The size of any lot resulting from a subdivision of land to which this clause applies is not to be less than the minimum size shown on the Lot Size Map in relation to that land".* The Minimum Subdivision Lot Size Map stipulates that the maximum minimum subdivision lot size for 72 Ridge Street Gordon is 930m².

The subdivision plan submitted with the Development Application at 72 Ridge Street Gordon indicate that the proposed lots have areas of 825.89m2 (Lot 1) and 827.11m2 (Lot 2). This results in a 11.19% (Lot 1) and 11.06% (Lot 2) variation to the development standard and non-compliance of 104.11m² (Lot 1) and 102.89m² (Lot 2).

The proposal is of a reasonable scale and provides a development which will assist to meet the future high demand for additional housing in the Gordon locality. The development is commensurate in scale and keeping in character with other lot sizes in the area. The variation results in the substantial increase in amenity for the subject site without producing any adverse impacts on the privacy, views, solar access and overall amenity of surrounding properties.

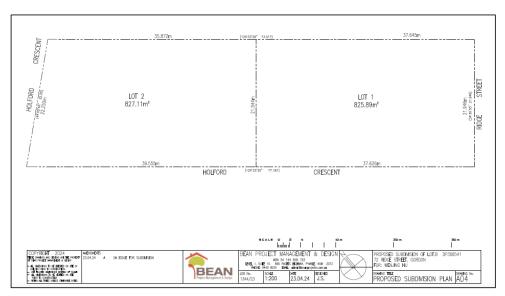


Figure 1 – Proposed Subdivision Plan (Bean Project Management and Design, 2024)

2.0 IS THE STANDARD A DEVELOPMENT STANDARD?

Clause 4.1 of the Ku-ring-gai Local Environmental Plan (LEP) 2015 states that:

(3) The size of any lot resulting from a subdivision of land to which this clause applies is not to be less than the minimum size shown on the Lot Size Map in relation to that land.

A development standard is defined in Section 1.4 of the Environmental Planning and Assessment Act 1979 ("EPA Act") to mean:

"provisions of an environmental planning instrument or the regulations in relation to the carrying out of development, being provisions by or under which requirements are specified or standards are fixed in respect of any aspect of that development, including, but without limiting the generality of the foregoing, requirements or standards in respect of:

- a) the area, shape or frontage of any land, the dimensions of any land, buildings or works, or the distance of any land, building or work from any specified point,
- b) the proportion or percentage of the area of a site which a building or work may occupy,

ATTACHMENT NO: 7 - CLAUSE 4.6 VARIATION REQUEST-MINIMUM LOT SIZE

72 Ridge Street Gordon - Cl4.6 Variation Request Report - Minimum subdivision lot size

- c) the character, location, siting, bulk, scale, shape, size, height, density, design or external appearance of a building or work,
- d) the cubic content or floor space of a building,
- e) the intensity or density of the use of any land, building or work,
- f) the provision of public access, open space, landscaped space, tree planting or other treatment for the conservation, protection, or enhancement of the environment,
- g) the provision of facilities for the standing, movement, parking, servicing, manoeuvring, loading, or unloading of vehicles,
- h) the volume, nature and type of traffic generated by the development,
- i) road patterns,
- j) drainage,
- k) the carrying out of earthworks,
- I) the effects of development on patterns of wind, sunlight, daylight, or shadows,
- m) the provision of services, facilities and amenities demanded by development,
- n) the emission of pollution and means for its prevention or control or mitigation, and
- o) such other matters as may be prescribed."

The minimum subdivision lot size control falls under subsection (a); therefore, the control is a development standard and Clause 4.6 of the Ku-ring-gai Local Environmental Plan 2015 is applicable.

3.0 CLAUSE 4.6 OF THE KU-RING-GAI LOCAL ENVIRONMENTAL PLAN 2015

The Standard Instrument LEP contains its own variations clause (Clause 4.6) to allow the variation of development standards. Clause 4.6 of the Standard Instrument is similar in tenor to the former State Environmental Planning Policy No. 1; however, the variations clause contains considerations which are different to those in SEPP 1. The language of Clause 4.6(3)(a)(b) and case law suggests a similar approach to SEPP 1 may be taken in part.

There is abundant judicial guidance on how variations under Clause 4.6 variations should be assessed. Some of these cases are taken into consideration in this request for variation.

While it is not necessary to refer to case law, we do so as it has become customary in sustaining requests under Clause 4.6.

4.0 THE ONUS ON THE APPLICANT

Under Clause 4.6(3)(a), it is the onus of the applicant to demonstrate: -

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

The judgement by Chief Justice Preston in *Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118* clarified the correct approach to Clause 4.6 variation requests, including that:

Paragraph 13 -15 of the judgement states: -

The permissive power in cl 4.6(2) to grant development consent for a development that contravenes the development standard is, however, subject to conditions. Clause 4.6(4) establishes preconditions that must be satisfied before a consent authority can exercise the power to grant development consent for development that contravenes a development standard

The first precondition, in cl 4.6(4)(a), is that the consent authority, or the Court on appeal exercising the functions of the consent authority, must form two positive opinions of satisfaction under cl 4.6(4)(a)(i) and (ii). Each opinion of satisfaction of the consent authority, or the Court on appeal, as to the matters in cl 4.6(4)(a) is a jurisdictional fact of a special kind: see Woolworths Ltd v Pallas Newco Pty Ltd (2004) 61 NSWLR 707; [2004] NSWCA 442 at [25]. The formation of the opinions of satisfaction as to the matters in cl 4.6(4)(a) enlivens the power of the consent authority to grant development consent for development that contravenes the development standard.

The first opinion of satisfaction, in cl 4.6(4)(a)(i), is that the applicant's written request seeking to justify the contravention of the development standard has adequately addressed the matters required to be demonstrated by cl 4.6(3). These matters are twofold: first, that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case (cl 4.6(3)(a)) and, secondly, that there are sufficient environmental planning grounds to justify contravening the development standard (cl 4.6(3)(b)). The written request needs to demonstrate both of these matters.

Accordingly, the matters required to be demonstrated by cl 4.6(3) are set out below using the relevant principles established by the Court.

Clause 4.6 (3) (a) - Compliance with the development standard is unreasonable or unnecessary in this particular case

Pursuant to clause 4.6(3)(a) of the LEP, and the applicable principle within *Wehbe v Pittwater Council* (2007) 156 LGERA 446, the variation to the minimum subdivision lot size development standard is acceptable in the circumstances of this case and compliance with the development standard is considered unreasonable and unnecessary because the proposed development is consistent with the objectives of the minimum subdivision lot size standard, notwithstanding non-compliance with the standard.

<u>Consistency with the objectives of the standard:</u> The objectives of Clause 4.1 are articulated at Clause 4.1(1): -

1) The objectives of this clause are as follows-

(a) to ensure that lot sizes and dimensions are able to accommodate development consistent with relevant development controls and minimise risk to life and property from environmental hazards, including bush fires,

(b) to ensure that lot sizes and dimensions allow development to be sited to protect natural or cultural features including heritage items, remnant vegetation, habitat, and waterways, and provide for generous landscaping to support the amenity of adjoining properties and the desired character of the area,

(c) to ensure that subdivision of low-density residential sites reflects and reinforces the predominant subdivision pattern of the area.

Objective (a) is concerned with providing lot sizes which are capable of accommodating development which complies with relevant development controls and minimises environmental hazards. The proposed subdivision provides adequate lot sizes which can appropriately support dwelling houses evidenced by compliance with Council's controls. This can be observed through the compliant indicative building footprint provided for Lot 2. The existing dwelling house maintains compliant setbacks, private open space, and built-upon area. The site is not burdened by any environmental hazards.

Objective (b) is concerned with ensuring lot sizes and dimensions allow development to be sited to protect natural or cultural features including heritage items, remnant vegetation, habitat, and waterways, and provide for generous landscaping to support the amenity of adjoining properties and the desired character of the area. The proposed subdivision allows for development which will enable the protection of generous landscaping to support both lots, this is demonstrated through compliance with the maximum BUA as per the KDCP. The subject site does not support any areas of significant biodiversity or waterways. The proposed resultant Lot 1 will retain the appropriate curtilage for the existing heritage item which is situated on the subject site.

Objective (c) is concerned with ensuring that subdivision reflects and reinforces the predominant subdivision pattern of the area. The proposed subdivision is consistent with the subdivision pattern seen at 76, 76A, 78 and 80 Ridge Street, and 53, 55, 57, and 59 Holford Crescent which range in area between approximately 411m²-676m². See figure 2 below highlighting the relevant lots.



Figure 2: Surrounding Sites (Sixmaps 2024)

For the above reasons, I am of the view that the variation requested, and the resultant development is consistent with the objectives of the development standard and an appropriate degree of flexibility is warranted.

Consequently, I conclude that strict compliance with the development standard is unreasonable or unnecessary in this particular case.

Clause 4.6 (3) (b) - That there are sufficient environmental planning grounds to justify contravening the development standard

Satisfaction as to sufficient environmental planning grounds is a matter for the Council to determine and can be site specific as set out in the judgement of *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118.

Paragraph 23 -24 of the judgement states: -

As to the second matter required by cl 4.6(3)(b), the grounds relied on by the applicant in the written request under cl 4.6 must be "environmental planning grounds" by their nature: see Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 90 at [26]. The adjectival phrase "environmental planning" is not

ATTACHMENT NO: 7 - CLAUSE 4.6 VARIATION REQUEST-MINIMUM LOT SIZE

72 Ridge Street Gordon - Cl4.6 Variation Request Report - Minimum subdivision lot size

defined but would refer to grounds that relate to the subject matter, scope and purpose of the EPA Act, including the objects in s 1.3 of the EPA Act.

The environmental planning grounds relied on in the written request under cl 4.6 must be "sufficient". There are two respects in which the written request needs to be "sufficient". First, the environmental planning grounds advanced in the written request must be sufficient "to justify contravening the development standard". The focus of cl 4.6(3)(b) is on the aspect or element of the development that contravenes the development standard, not on the development as a whole, and why that contravention is justified on environmental planning grounds. The environmental planning grounds advanced in the written request must justify the contravention of the development standard, not simply promote the benefits of carrying out the development as a whole: see Four2Five Pty Ltd v Ashfield Council [2015] NSWCA 248 at [15]. Second, the written request must demonstrate that there are sufficient environmental planning grounds to justify contravening the development standard so as to enable the consent authority to be satisfied under cl 4.6(4)(a)(i) that the written request has adequately addressed this matter: see Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 90 at [31].

The term 'environmental planning grounds' is not defined and may be interpreted with wide scope as has been the practice of the Land and Environment Court. The environmental planning grounds supporting variation are on the basis of:

Consistency with surrounding subdivision pattern. The proposed subdivision is consistent with the subdivision pattern seen at 76, 76A, 78 and 80 Ridge Street, and 53, 55, 57, and 59 Holford Crescent within the immediate locality. See figure 2 above highlighting the relevant lots. The proposed lots are larger than the identified surrounding lots which range in area between approximately 411m²-676m², thus being consistent with the subdivision pattern of the area.

Additionally, as can be seen in the table below, the proposed lot sizes are consistent with other proposals which have been approved previously by Ku-ring-gai Council within the Ku-ring-gai locality on lots which have similar characteristics to the subject site. Thus, demonstrating that the proposed lot sizes are consistent with lot sizes within the wider locality.

Address	Variation (%)
39 Holmes Street Turramurra	8.8%
27 Finlay Road Warrawee	6.5% and 10.8%
33 Highfield Road Lindfield	15.3%

- <u>Compliant development potential</u>. The variation to the lot size, facilitates the provision of an additional allotment for a future dwelling which is a permissible land use and which can assist with providing for the housing needs of the local community. The proposed subdivision demonstrates that the newly proposed lots are capable of generally complying with the relevant Council controls including setbacks, BUA, GFA, and vehicular access.
- <u>Unique site with three frontages</u>. The subject lot is a unique site which provides 3 street frontages to the south, east and west boundaries. Due to this lot arrangement, it ensures that the proposed site can accommodate for new vehicle access to the new lot which will not compromise or burden Lot 1 in any way. The new frontage will address Holford Crescent and be consistent with neighbouring frontages. The locality contains a number of similarly designed allotments which previously provided two frontages and therefore the proposal both reflects and reinforces the established subdivision pattern and residential character in the locality.
- <u>Retention of Hertiage Item</u>. The proposed development entirely retains the Heritage Item which is located with Lot 1 and allows for sufficient area to be retained around the Item. The proposal is considered to maintain the Hertiage Significance of the Heritage Item.

As set out in 'Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118', the aforementioned environmental planning grounds do not rely on the benefits of the development as a whole, but rather they directly relate to the proposed minimum subdivision lot size aspect that contravenes the development standard.

For the reasons detailed in this request, I am of the opinion that there are sufficient environmental planning grounds for Council to be satisfied that the request is adequate and to allow appropriate flexibility.

5.0 DEVELOPMENT IN THE PUBLIC INTEREST

Under Clause 4.6(4)(a) & (b), development consent must not be granted for development that contravenes a development standard unless:

- a) the consent authority is satisfied that
 - i. the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and
 - ii. the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and
- b) the concurrence of the Planning Secretary has been obtained.

Pursuant to Cl.4.6(4)(a), the Council must form the positive opinion of satisfaction that the applicant's written request has adequately addressed both of the matters required to be demonstrated by Clause 4.6(3)(a) and (b) and that the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out as set out in 'Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118'.

As demonstrated in section 4 above, the proposed development has satisfied the matters required to be demonstrated in Clause 4.6(3) by providing a written request that demonstrates:

- Compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, by establishing that the objectives of the development standard are achieved notwithstanding the non-compliance.
- 2. The environmental planning grounds relied on are sufficient to justify the development standard.

In accordance with the findings of Chief Justice Preston in *Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118,* the Consent Authority under Clause 4.6(4)(a)(i) must only be satisfied that the request addresses Clause 4.6(3). Under Clause 4.6(4)(a)(i) the Consent Authority is not to determine in their opinion whether the request satisfies the requirements of Clause 4.6(3)(a) and (b), just that the request has been made and that these items have demonstrated. The relevant items in Clause 4.6(3) have been demonstrated above.

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Clause 4.6 (4)(a)(ii) - The Public Interest

In relation to clause 4.6(4)(a)(ii) of the LEP, the proposed development is in the public interest because it is consistent with the objectives of the applicable minimum subdivision lot size standard under clause 4.1 as provided above in section 4, and the objectives for development in the R2 Low Density Residential zone as set out below.

The land is located in the R2 Low Density Residential zone. The objectives of the R2 Low Density Residential zone are: -

- To provide for the housing needs of the community within a low-density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide for housing that is compatible with the existing environmental and built character of Ku-ringgai.

The development is compatible with the zone objectives as:

The proposed development will continue to provide for the housing needs of the community within a low-density residential environment. The proposal will not impede on other land uses and their ability to provide facilities and services to meet the day to day needs of residents. The proposed development will continue to provide for housing that is compatible with the existing environment and built character of Ku-ring-gai.

The variation to the minimum subdivision lot size does not render the development incompatible with the zone objectives, in accordance with the approach of the former Chief Judge, Justice Pearlman in Schaffer Corporation v Hawkesbury City Council (1992) 77 LGRA 21, in Paragraph [27]:

'The guiding principle, then, is that a development will be generally consistent with the objectives, if it is not antipathetic to them. It is not necessary to show that the development promotes or is ancillary to those objectives, nor even that it is compatible.'

Taking into consideration the above, the proposed development is in the public interest as it is consistent with the objectives of the development standard and the R2 Low Density Residential zone. For these reasons, the proposal and the aforementioned variation does not undermine the integrity of

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ATTACHMENT NO: 7 - CLAUSE 4.6 VARIATION REQUEST-MINIMUM LOT SIZE

72 Ridge Street Gordon - Cl4.6 Variation Request Report - Minimum subdivision lot size

the minimum subdivision lot size development standard and its objectives, as well as the zoning objectives which have been adopted by Council as being in the public interest.

Clause 4.6 (4)(b) - The Concurrence of the Planning Secretary

Clause 4.6(4)(b) of the LEP requires the concurrence of the Secretary (of the Department of Planning, Industry and Environment) before the consent authority can exercise the power to grant development consent for development that contravenes a development standard.

The judgement by Chief Justice Preston in *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] *NSWLEC 118* clarifies the requirements pursuant to clause 4.6 (4)(b), stating that:

Paragraph 28 - 29 of the judgement states: -

The second precondition in cl 4.6(4) that must be satisfied before the consent authority can exercise the power to grant development consent for development that contravenes the development standard is that the concurrence of the Secretary (of the Department of Planning and the Environment) has been obtained (cl 4.6(4)(b)). Under cl 64 of the Environmental Planning and Assessment Regulation 2000, the Secretary has given written notice dated 21 February 2018, attached to the Planning Circular PS 18-003 issued on 21 February 2018, to each consent authority, that it may assume the Secretary's concurrence for exceptions to development standards in respect of applications made under cl 4.6, subject to the conditions in the table in the notice.

On appeal, the Court has the power under cl 4.6(2) to grant development consent for development that contravenes a development standard, if it is satisfied of the matters in cl 4.6(4)(a), without obtaining or assuming the concurrence of the Secretary under cl 4.6(4)(b), by reason of s 39(6) of the Court Act. Nevertheless, the Court should still consider the matters in cl 4.6(5) when exercising the power to grant development consent for development that contravenes a development standard: Fast Buck\$ v Byron Shire Council (1999) 103 LGERA 94 at 100; Wehbe v Pittwater Council at [41].

Accordingly, the matters in clause 4.6(5) of the LEP should still be considered when exercising the power to grant development consent for development that contravenes a development standard (Fast Buck\$ v Byron Shire Council (1999) 103 LGERA 94 at 100 and Webbe at [41]).

Clause 4.6 (5) states that:

(5) In deciding whether to grant concurrence, the Secretary is required to consider the following:

- a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and
- b) the public benefit of maintaining the development standard, and
- c) any other matters required to be taken into consideration by the Secretary before granting concurrence.

The proposal is not likely to raise any matter of significance for State or regional environmental planning. As addressed above, the non-compliance with the minimum subdivision lot size standard is considered to be in the public interest, and accordingly the public benefit, because the proposed development is consistent with the objectives of the Minimum subdivision lot size standard and the objectives of the R2 Low Density Residential zone.

Accordingly, the proposal is consistent with the matters required to be taken into consideration before concurrence can be granted under clause 4.6(5) of the LEP. The exceedance of the standard will not result in adverse amenity impacts and is in the public interest.

6.0 CONCLUSION

The purpose of the application is to apply for the subdivision of one (1) lot into two (2) lots and construction of a new garage at 72 Ridge Street. The nature of the proposal necessitates a variation to the minimum subdivision lot size development standard; however, the proposal will be commensurate to surrounding subdivision within the locality.

As development standards tend to be strictly numerical in nature, they fail to take into consideration the nature of the development, any site constraints, or qualitative aspects of the development or of the particular circumstances of the case. Clause 4.6 of the standard instrument LEP allows such an analysis to be carried out.

It has been demonstrated in this request that strict compliance with the minimum subdivision lot size development standard is both unreasonable and unnecessary and that there are sufficient environmental planning grounds to allow Council to form the opinion of satisfaction that this written request has adequately addressed the matters required to be demonstrated by Cl.4.6(3)(a) and (b).

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ATTACHMENT NO: 7 - CLAUSE 4.6 VARIATION REQUEST-MINIMUM LOT SIZE

72 Ridge Street Gordon - Cl4.6 Variation Request Report - Minimum subdivision lot size

Therefore, I request that council support the variation on the basis that this Clause 4.6 variation demonstrates that strict compliance with the development standard is both unreasonable and unnecessary and that there are sufficient environmental planning grounds to justify a variation to the development standard.

Prepared By:

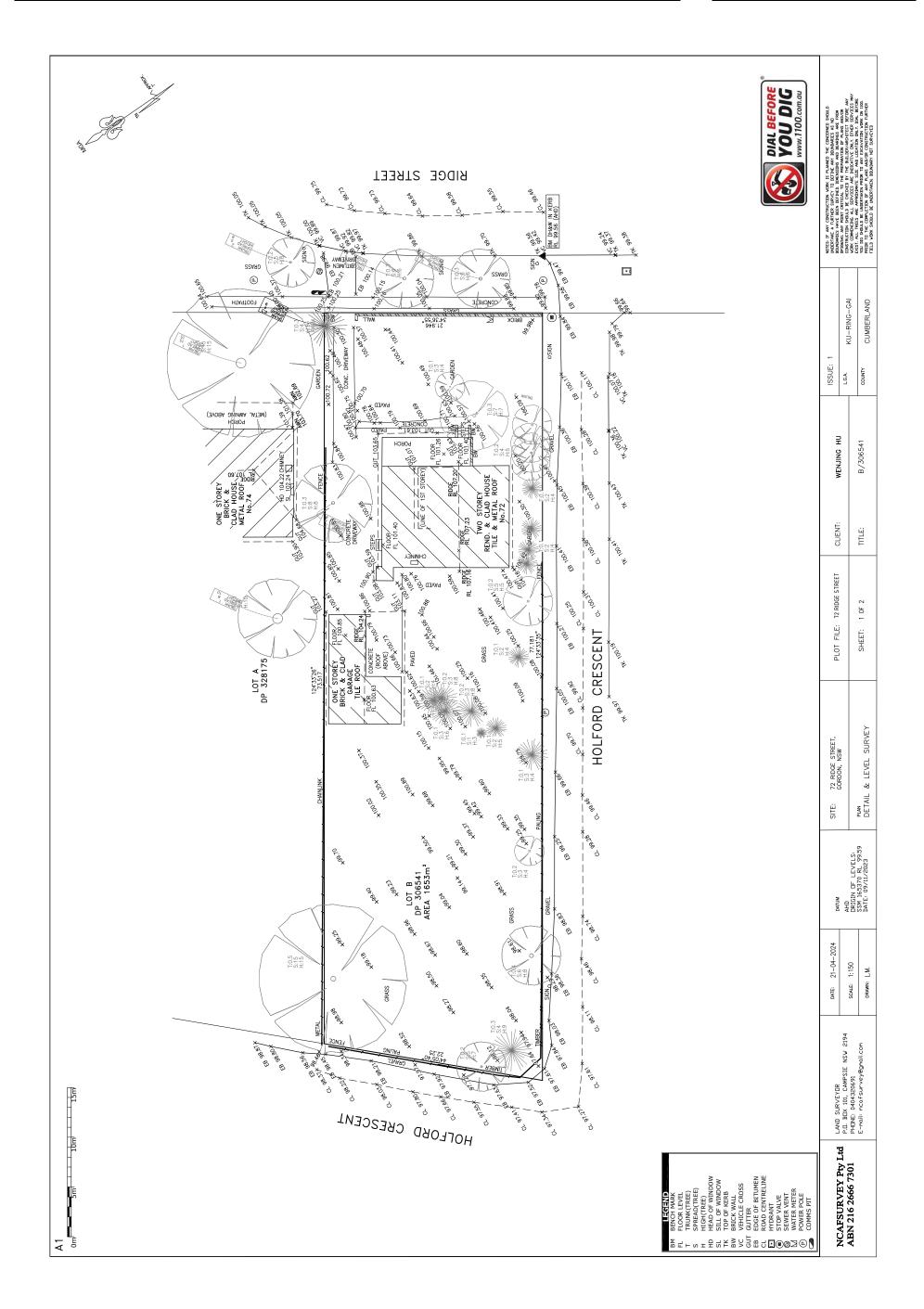
Lton

Lauren McNamara Town Planner/Project Manager **Bachelor of Planning (WSU)**

Matt Farturate

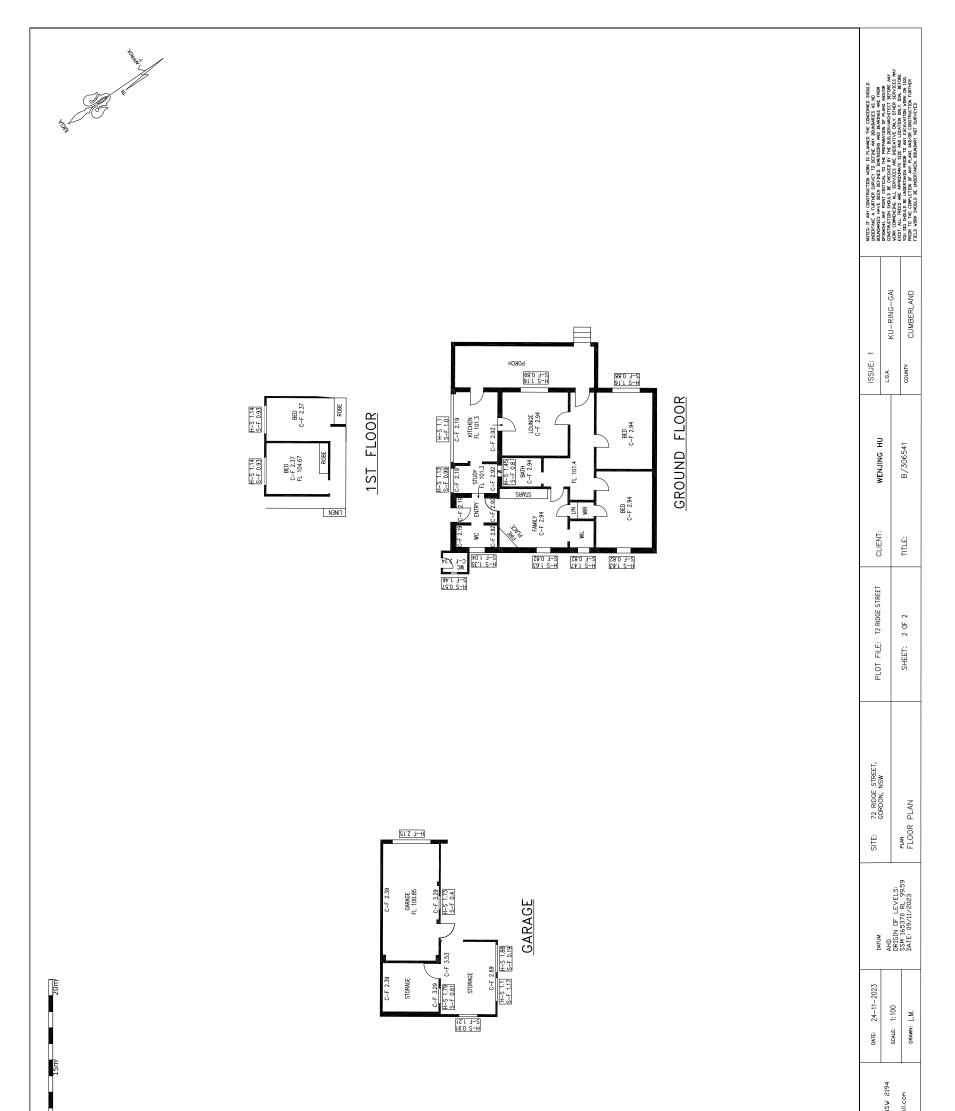
Reviewed By:

Mathew Fortunato Town Planner Bachelor of Architecture and Environment (USYD)



ATTACHMENT NO: 8 - SURVEY PLAN

ITEM NO: GB.1





Item GB.2

EDA0318/24

DEVELOPMENT APPLICATION

SUMMARY SHEET

REPORT TITLE:	100 ETON ROAD, LINDFIELD – UPGRADE TO TELECOMMUNICATIONS FACILITY	
ITEM/AGENDA NO:	GB.2	

APPLICATION NO:	eDA0318/24	
ADDRESS:	100 Eton Road, Lindfield	
WARD:	Roseville	
DESCRIPTION OF PROPOSAL:	Upgrade of telecommunications facility	
APPLICANT:	Max Peel (Aurecon Group Pty. Ltd. on behalf of Telstra Corporation Limited)	
OWNER:	NSW Department of Education	
DATE LODGED:	28 August 2024	
SUBMISSIONS:	Fifteen submissions	
ASSESSMENT OFFICER:	Raymond Law	
RECOMMENDATION:	Approval	

KLPP REFERRAL CRITERION:	Contentious development in respect of which 10 or more unique submissions, by way of objection, have been received.
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Ku-ring-gai Local Planning Panel Meeting - 17 February 2025

Item GB.2

GB.2/110

PURPOSE OF REPORT

To determine Development Application No eDA0318/24 for 100 Eton Road, Lindfield to upgrade the existing telecommunications facility.

The application is reported to the Ku-ring-gai Local Planning Panel for determination in accordance with the Minister's Section 9.1 Local Planning Panels Direction, as it is contentious development in respect of which 10 or more unique submissions, by way of objection, have been received.

RECOMMENDATION

Raymond Law

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, being satisfied that the proposed development would be in the public interest, grant development consent to eDA0318/24 for upgrade the existing telecommunications facility at 100 Eton Road, Lindfield, subject to conditions contained in the Development Assessment Report (**Attachment A1**). Pursuant to Section 4.53 of the Environmental Planning and Assessment Act 1979, this consent lapses if the approved works are not physically commenced within five years of the date of the Notice of Determination.

Jonathan Goodwill

2024/267607

Senior Develop	oment Assessment Officer	Team Leader Development Assessment
Shaun Garland Manager Deve	lopment Assessment Services	Michael Miocic Director Development & Regulation
Attachments:	 A1 Development Assessment R A2 Location Sketch A3 Zoning Sketch A4 Amended Architectural Plan A5 Environmental EME Report 	2025/026955 2025/026957

A6 Section 60 Approval under Heritage Act 1977

DEVELOPMENT APPLICATION

ASSESSMENT REPORT

REPORT TITLE	100 Eton Road, Lindfield - Upgrade of	
	telecommunications facility	

APPLICATION NO	eDA0318/24
PROPERTY DETAILS	100 Eton Road, Lindfield
	Lot 2 DP1151638
	48,180.00sqm
	Part MU1 - Mixed Use
	Part C3 – Environmental Management
	Part R1 – General Residential
WARD	ROSEVILLE
PROPOSAL/PURPOSE	Upgrade of telecommunications facility.
TYPE OF DEVELOPMENT	Local
APPLICANT	Max Peel (Aurecon Group Pty. Ltd. on behalf of Telstra Corporation Limited)
OWNER	NSW Department of Education
DATE LODGED	28 August 2024
RECOMMENDATION	Approval

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PURPOSE OF REPORT

To determine Development Application No. eDA0318/24 to upgrade a telecommunications facility.

The application is reported to the Ku-ring-gai Local Planning Panel for determination in accordance with the Minister's Section 9.1 Local Planning Panels Direction, as it is contentious development in respect of which 10 or more unique submissions, by way of objection, have been received.

INTEGRATED PLANNING AND REPORTING

Places, Spaces & Infrastructure

Community Strategic Plan	Delivery Program	Operational Plan
Long Term Objective	Term Achievement	Task
P2.1 A robust planning framework is in place to deliver quality design outcomes and maintain the identity and character of Ku-ring-gai.	Applications are assessed in accordance with state and local plans.	Assessments are of a high quality, accurate and consider all relevant legislative requirements.

EXECUTIVE SUMMARY

Issues	State heritage item Contentious development
Submissions	15 (14 unique)
Land and Environment Court	N/A
Recommendation	Approval

HISTORY

Site history

The subject site has a history of use as an educational establishment. The subject site formerly served as the 'Ku-ring-gai' campus for the 'University of Technology Sydney (UTS)'. In circa 2016, the 'Ku-ring-gai' campus was formally handed over to the New South Wales Department of Education and currently accommodates a school known as the 'Lindfield Learning Village'. The existing telecommunications facility was erected in 2004 at the roof level of the 'Ku-ring-gai' campus for the 'University of Technology Sydney (UTS)' and *"several minor upgrades have been carried out since 2003"* as stated in the applicant's Statement of Environmental Effects (SEE).

Previous applications history

A Pre DA consultation was undertaken with Council prior to the lodgement of this

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Development Application (PRE0043/22). The key issues identified by Council were:

- 1. Planning and approvals pathway;
- 2.
- State heritage significance; and Development Application planning considerations. 3.

Current Development Application History

Date	Action
28/08/2024	Application - eDA0318/24 lodged.
09/09/2024 – 09/10/2024	The application was notified in accordance with the Ku-ring-gai Community Participation Plan and the Environmental Planning and Assessment Act 1979 (nominated Integrated Development) to neighbouring property owners for a period of 30 days. A total of 15 submissions objecting to the proposal were received, with 14 of those being unique.
13/12/2024	Additional information was received via the NSW Planning Portal titled 'Response to Community Submissions', dated 13/12/2024.
13/12/2024	 Council sent a preliminary assessment letter to the applicant, advising that the following issues were required to be addressed: Amended architectural plans requested for: Removal of all 'UTS' annotations; and Referenced levels to be measured in accordance with the Australian Height Datum (AHD). Further clarification of the proposed 'Shroud' material. Further clarifications in height to the existing telecommunication facility. Request for submission of an Environmental Site Management Plan.
20/12/2024	 Amended plans were submitted which made the following changes to the application were submitted: Removal of 'UTS' annotations and revised to 'Lindfield Learning Village'. 'Shroud' material annotated as 'Makralon Polycarbonate'. Maximum building height of 'Proposed Shroud' annotated.

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ATTACHMENT NO: 1 - DEVELOPMENT ASSESSMENT REPORT

THE SITE

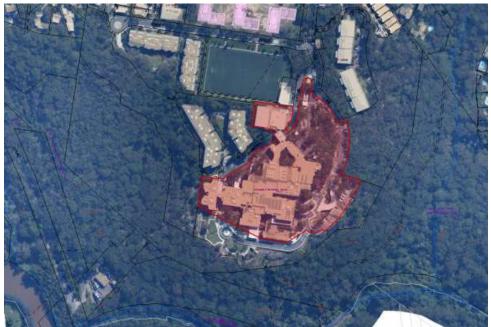


Figure 1 - aerial photograph of the subject site in red hatching and surrounding developments (source: Geocortex Viewer)

Site description

The site is legally described as Lot 2 in DP1151638 and is more commonly known as 100 Eton Road, Lindfield. It is an irregularly shaped allotment that has an area of 1.22ha (12,200sqm) and access is provided via Eton Road to the north. Vehicular access within the site is via an internal road network. The site generally falls from its high point in the north to the south, with a crossfall of approximately 22.50 metres.

The subject site currently accommodates 'Lindfield Learning Village', a co-educational school which caters for school children from Kindergarten to Year 12 (K-12). The site includes a 6-level building, various structures, indoor and outdoor facilities which are typically associated with an educational establishment. The subject site formerly served as the 'Ku-ring-gai' campus for the 'University of Technology Sydney (UTS)' and the existing telecommunications facility was erected in 2004 at its roof level (refer to **Figures 2** and **3**). In circa 2016, the 'Ku-ring-gai' campus was formally handed over to the New South Wales Department of Education who later established the 'Lindfield Learning Village' in 2019.

The site also contains bushland vegetation, as can be seen above in **Figure 1**, which directly contributes to the 'Lane Cove River State Recreation Area'.

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Figure 2 – view of existing telecommunications facility (source: applicant's Statement of Environmental Effects)



Figure 3 – view of existing telecommunications facility (source: applicant's Statement of Environmental Effects)

Constraint:	Application:
Visual character study category	Not categorised on map.
Easements/ rights of way	(G) – Right of Access Variable Width
	(G) – Easement for Services Variable
	Width
	(H) – Easement for Services (Whole of
	Lot)
	(L) – Lots 1, 2 and 3 are Limited in Depth

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	to RL 20 AHD and are Unlimited in Height – (Lot 1 DP 1043043 is the Stratum below) (M) – Lots 1 and 2 are Limited in Depth to
	RL 30 AHD and are Unlimited in Height – (Lot 1 DP 1043043 is the Stratum below)
	(N) - Lot 1 Unlimited in Depth and are
	Limited in Height to RL 65.0
	Lot 2 is Limited in Depth to RL 65.0 and
	Unlimited in Height
Heritage Item - Local	Yes - Lindfield Learning Village, former
	William Balmain Teachers College (1422 –
	Ku-ring-gai Local Environmental Plan
	2015)
Heritage Item - State	Yes – Lindfield Learning Village (02036 – State Heritage Register)
Heritage conservation area	No
Within 100m of a heritage item	Yes
Bush fire prone land	Yes
Natural Resources Biodiversity	Yes
Natural Resources Greenweb	Yes
Natural Resources Riparian	No
Within 25m of Urban Bushland	Yes
Contaminated land	No

Surrounding development

The surrounding locality is characterised by a variety of land-uses. The subject site directly adjoins R1 – General Residential, RE1 – Public Recreation and C3 – Environmental Management zoned land.

Adjoining the subject site to the north-west, is a residential flat building at 5 - 7 Dunstan Grove, Lindfield.

Adjacent to the site, to the north-east, is a residential flat building at 1 - 3 Tubbs View, Lindfield.

Directly adjoining the site to its north, are public recreational facilities, more commonly known as 'Charles Bean Oval' and 'Blair Wark, VC, Community Centre'.

Surrounding the site, from its south-east to south-west, is bushland which directly contributes to the 'Lane Cove River State Recreation Area'.

Beyond directly adjoining properties, the locality is generally characterised by various forms of residential development to the north of the subject site. Typically, the wider locality comprises of medium to high-density residential flat buildings, small, medium and large-lot single dwelling houses, and environmental conservation areas including 'Sugarbag Creek Reserve'.

THE PROPOSAL

The subject application proposes an upgrade to the existing telecommunications facility which exists at the roof level of 'Lindfield Learning Village' main campus building (refer to **Figures 2** and **3**). Specifically, the proposal comprises:

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ATTACHMENT NO: 1 - DEVELOPMENT ASSESSMENT REPORT

- Removal of 18 x existing panel antennas and associated legacy mounting steelwork, supporting existing antennas;
- ii. Installation of 18 x panel antennas, mounting steelwork and ancillary equipment to support new antennas;
- iii. Installation of feeder cables associated to new panel antennas;
- iv. Installation of a 'Shroud'; and
- v. Installation of junction boxes and utilities signage.

There are no works proposed within the road reserve.

The subject application does not constitute a 'Crown development application' as outlined below:

Section 4.32(1) of the Environmental Planning and Assessment Act 1979 (EP&A Act) defines a *'Crown development application'* as *"...a development application made by or on behalf of the Crown"* and continues in Section 4.32(2) by stating:

- 2) A reference in this Division to the Crown—
 - (a) includes a reference to a person who is prescribed by the regulations to be the Crown for the purposes of this Division, and
 - (b) does not include a reference to
 - *i.* a capacity of the Crown that is prescribed by the regulations not to be the Crown for the purposes of this Division, or
 - *ii.* a person who is prescribed by the regulations not to be the Crown for the purposes of this Division.

Section 294 [Crown development - the Act, s 4.32(2)(a)] of the Environmental Planning and Assessment Regulation 2021 defines '*Crown development*' as follows:

The following persons are prescribed as the Crown-

- (a) a public authority, other than a council,
- (b) an Australian university, within the meaning of the Higher Education Act 2001,
- (c) a TAFE establishment, within the meaning of the Technical and Further Education Commission Act 1990,
- (d) without limiting paragraph (a), a Crown cemetery operator, within the meaning of the Cemeteries and Crematoria Act 2013.

The EP&A Act defines a 'public authority' as follows:

public authority means-

- (a) a public or local authority constituted by or under an Act, or
- (b) a Public Service agency, or
- (c) a statutory body representing the Crown, or
- (d) a Public Service senior executive within the meaning of the Government Sector Employment Act 2013, or
- (e) a statutory State owned corporation (and its subsidiaries) within the meaning of the State Owned Corporations Act 1989, or
- (f) a chief executive officer of a corporation or subsidiary referred to in paragraph (e), or
- (g) a person prescribed by the regulations for the purposes of this definition.

The subject application was lodged by a representative of Aurecon Group Pty. Ltd., on behalf of Telstra Corporation Limited. Telstra are not recognised as either the 'Crown' or a 'public authority'. It is acknowledged that the subject site is owned by the NSW Department of Education and landowner's consent was provided for the purpose of the proposed works.

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However, the subject application was not made by or on behalf of the Crown and the subject application therefore does not constitute a *'Crown development application'*.

Amended plans submitted 20/12/2024

The amended plans proposed the following changes to the application:

- i. Removal of 'UTS' annotations and revised to 'Lindfield Learning Village'.
- ii. 'Shroud' material annotated as 'Makralon Polycarbonate Shroud'.
- iii. Maximum building height of 'Shroud' annotated.

CONSULTATION

Community

In accordance with Appendix 1 of the Ku-ring-gai Community Participation Plan and the Environmental Planning and Assessment Act 1979 (EP&A Act), owners of surrounding properties were given notice of the application. In response, a total of 15 submissions were received, with 14 of these submissions being unique submissions of objection. Submissions from the following were received:

- 1. Christopher Kezelos 35 Winchester Avenue, Lindfield.
- 2. Lee Dunford 12 Westbourne Road, Lindfield.
- 3. Adam Young 13 Blarney Avenue, Killarney Heights.
- 4. Ong Liling no address provided.
- 5. Hooi Huam 315/ 89 Bay Street, Glebe.
- 6. Susan Marray 10 Kywong Road, Elanora Heights.
- 7. April Goodman 13/ 9-15 Kings Avenue, Roseville.
- 8. Chunhoe Tan no address provided.
- 9. Julia Hobson 16 Quebec Avenue, Killara.
- 10. Matthew Huynh 615/ 5 Dunstan Grove, Lindfield.
- 11. Sally Ng no address provided.
- 12. Jacqui Dunford 12 Westbourne Road, Lindfield.
- 13. Vanessa Holtham no address provided.
- 14. Tanya Coates Lindfield.
- 15. Sharon and Jacqueline Simmons 111/7 Dunstan Grove, Lindfield.

The submissions raised the following issues:

Health and safety concerns from potential impacts of prolonged exposure to increased electromagnetic energy (EME) to students and staff at 'Lindfield Learning Village', surrounding residents of the facility and the greater locality

The subject application includes an 'Environmental EME Report' which provides summary levels of radiofrequency (RF) and electromagnetic energy (EME) associated to the proposal. The Australian Government has implemented standards for EME emissions associated with telecommunication facilities to ensure the safe development of such types of infrastructure. Council relies on these standards to ensure that any proposed telecommunication facilities achieve national health standards and do not pose unnecessary risks to the public.

Council is not the Authorised Regulatory Authority (ARA) in assessing human exposure levels to EME emissions. Rather, the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) are the nation's primary authority in assessing applications relating to this matter. It is noted that the 'Environmental EME Report' demonstrates compliance with the ARPANSA's safe levels of EME emissions and therefore compliant with Australian

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Communications and Media Authority (ACMA) EME regulations.

The 'Environmental EME Report' demonstrates that the EME levels (maximum of 3.04%) of the upgraded telecommunication facility is within the prescribed standards (100%). This position is supported by Council's Environmental Health Officer who does not object to the proposal, subject to the imposition of a condition of consent **(Condition 47)**.

Concerns are raised in relation to the community consultation procedure of the subject application.

The subject application was notified to owners of surrounding properties in accordance with the EP&A Act and the Ku-ring-gai Community Participation Plan. All submissions have been considered in the assessment of the application.

Concerns are raised over the location of the telecommunications facility at the 'Lindfield Learning Village', it should be re-located given the subject site's use as a Kindergarten to Year 12 (K-12) school.

The proposal involves modifications to an existing telecommunications facility to upgrade telecommunications servicing and the addition of a shroud. Principle 5 of the '*NSW Telecommunications Facilities Guideline, Including Broadband*' specifies that proposals for new mobile phone base stations are to undertake an alternative site assessment. Given the proposal involves an upgrade to an existing telecommunications facility rather than the construction of a new facility, an alternative site assessment is not required.

Concerns are raised in relation to the proposal resulting in an impact to the amenity and quality of life for residents.

The amenity of surrounding properties is unlikely to be compromised by the proposal. The proposal involves modifications and upgrades to an existing telecommunications facility, including the addition of a shroud. In relation to EME emissions, the 'Environmental EME Report' which supports the subject application demonstrates that the levels emitted are within prescribed national standards. In relation to visual amenity impacts, the proposed shroud is considered to result in an improvement to the structure's appearance by minimising visual clutter associated with the telecommunications facility by encasing associated antennae, mounting poles and ancillary equipment, ensuring it is not visible from the public domain.

Concern is raised in relation to upgrading the existing telecommunication's facility due to the removal of 'Existing Mounting Steelwork'.

An upgrade to the existing telecommunications facility is capable of being accommodated, including the removal of the '*Existing Mounting Steelwork*'. The removal of the '*Existing Mounting Steelwork*' does not impact the existing telecommunication facility's ability to accommodate upgrades to existing services.

Concerns are raised relating to improper site selection, the perceived lack of exploring alternative sites, and the proposal's unacceptability due to the subject site accommodating a K-12 school.

The proposal involves modifications to an existing telecommunications facility to upgrade telecommunications servicing and the addition of a shroud. Principle 5 of the '*NSW Telecommunications Facilities Guideline, Including Broadband*' specifies that proposals for new mobile phone base stations are to undertake an alternative site assessment. Given the proposal involves an upgrade to an existing telecommunications facility rather than the

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construction of a new facility, an alternative site assessment is not required.

Concerns are raised relating to the quality of the subject application's supporting documentation, with the current land-use of the subject site being a K-12 school and an inaccurate 'Environmental EME Report' stated to support the application.

The originally submitted architectural plans reflected the previous land-use being 'Lindfield UTS'. Council wrote to the applicant on 13/12/2024, in part, seeking to address this issue to reflect the site's current land-use, being the 'Lindfield Learning Village'. Amended plans were submitted to reflect the site's current land-use.

Furthermore, Council is not the Authorised Regulatory Authority (ARA) in assessing human exposure levels to EME emissions. Rather, ARPANSA are the nation's primary authority in assessing applications relating to this matter. It is noted that the 'Environmental EME Report' demonstrates compliance with the ARPANSA's safe levels of EME emissions and therefore compliant with ACMA EME regulations.

Given the above, it is considered that appropriate documentation and evidence has been presented in the subject application which allows for a complete merit assessment of the application.

Concern is raised in relation to inconsistency of the proposal with Clause 1.3 – Objects of the EP&A Act.

The application has been assessed against the relevant provisions under the EP&A Act. On merit, the proposal meets all the relevant aims and objectives of the relevant provisions, as detailed in this report. Specifically, the proposal is considered to meet the relevant Objects of the EP&A Act and is consequently recommended for approval.

Increased service coverage is unnecessary as sufficient coverage is presently achieved.

The applicant states that the upgrade to the existing telecommunications facility is to provide capacity for improved Fourth Generation (4G) and Fifth Generation (5G) coverage for the Lindfield community. Continual improvement to servicing existing infrastructure is reasonable.

Concern is raised in relation to the proposal's compliance with Section 4.1 – New Site Selection of the Industry Code – Mobile Phone Base Station Development (C564:2020).

It is acknowledged that the subject site is recognised as a 'Community Sensitive Location' as defined by the Industry Code given its association within the 'Lindfield Learning Village' being a K-12 school. However, as specified, Section 4.1 of the Industry Code – Mobile Phone Base Station Development (C564:2020) *"applies if a Carrier proposes to select a new site for the deployment of Mobile Phone Radiocommunications Infrastructure"*. The proposal does not involve new site selection, rather, an upgrade to an existing telecommunications facility. Therefore, an assessment against Section 4.1 is not applicable in this instance.

Amended plans submitted 20/12/2024

The amended plans were not notified as the proposed amendments do not result in a greater environmental impact than originally proposed.

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Internal Referrals

Heritage

Council's Heritage Advisor commented on the proposal as follows:

Summary – Acceptable

Statement of Heritage Impact

State Heritage Register listing contains the following Statement of Significance for the item:

The item is of state heritage significance for its historic values as a purpose designed and built Teacher's College of a scale previously unheard of in the history of Teacher Education until its 1968 design and construction.

The Lindfield Learning Village is of state heritage significance for its historically important role in the development of architecture in Australia in the second half of the twentieth century. The campus may also be historically significant for its contribution to landscape architecture in Australia and as an early example of the indigenous landscape design ethos.

The Lindfield Learning Village is of state heritage significance as it is a unique and highly significant example of Neo -Brutalist architecture combined with the influence of the Sydney School architecture on a large scale and applied to a concrete building. The campus is one of the most expressive examples of the 1960-70s Neo-Brutalist buildings, its brutalism being moderated by the way in which the campus was designed to respond to the topography and bushland setting. The campus is of state heritage significance as an outstanding example of design giving close attention to the role of the building as an educational facility, and the way in which spatial planning could facilitate interaction between students and teaching staff.

The Lindfield Learning Village is of state heritage significance for its important associations with government and private practice architects and landscape architects, including David Don Turner and Peter Stronach. The association of Bruce Mackenzie and Alan Correy with the campus is particularly significant, as the campus retains the ability to clearly demonstrate the landscape design and construction techniques associated with the work of these influential landscape architects. The site is a major example of the application of Mackenzie's philosophy of building carefully within a pristine natural environment rather than clearing the site and creating an 'artificial' natural landscape.

The building in its landscape setting is also of state heritage significance for its ability to demonstrate design philosophies and construction techniques associated with Neo Brutalism and Sydney School architecture popular in the 1970s. It is a rare and representative example of public architecture in the Neo-Brutalist style tempered by the architectural and landscape design influences of the Sydney School of Architecture. It is widely well regarded by members of the architecture profession having won various industry awards for its design and construction.

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Assessment Controls

The following objectives and controls of the Ku-ring-gai Development Control Plan 2024 (KDCP) apply:

Development Controls	Complies
19B. DEMOLITION WITHIN HCAS AND DEMOLITION RELATED TO A	
HERITAGE ITEM	
19B.2 Demolition related to a Heritage Item	
Partial Demolition of a Heritage Item	
 4. In considering applications for partial demolition of a Heritage Item (including parts of buildings and other structures, trees and landscape features), Council will assess: i) the significance of the building part or structure and/or landscape features and whether its retention is considered necessary; ii) its contribution to the significance of the Heritage Item as a whole; iii) whether all alternatives to demolition have been considered with reasons provided as to why the alternatives are not acceptable. 	

Comment:

Demolition includes parts of previously installed non-significant antenna, which is part of later added installations, not part of the item. This is acceptable.

Development Control	Complies
19D.7 Roof Forms and Structures Attached to Roofs	
Skylights, Solar Panels, Solar Water Heaters, Antennae and Other Roof	
Infrastructure	
Note: For placement of solar panels, solar water heating, antennas	
etc on Heritage Items refer to Chapter 2, Division 4 of Part 2.3 of	
SEPP (Transport and Infrastructure) 2021.	

The proposal involves only fabric which is not part of the heritage item, but part of later installations. This is acceptable.

In summary, no objection is raised to the proposal given the acceptable impact.

Assessment Officer's comment: Council's Heritage Advisor's assessment is concurred with.

Health

Council's Senior Environmental Health Officer undertook an assessment of the subject application and no concerns were raised, subject to the imposition of a condition of consent **(Condition 47)**.

<u>Assessment Officer's comment:</u> Council's Senior Environmental Health Officer's assessment and recommendation are concurred with.

External Referrals

Heritage Division (NSW Planning & Environment)

The subject application involves works associated to a local and state listed heritage item, 'Lindfield Learning Village' (02036). The application was referred to the Heritage Council of NSW as nominated Integrated Development.

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A Section 60 (HMS ID 5093) fast track application was granted on 15 December 2023 separately to the subject application. There are proposed works beyond the extent of development under the separate S60 application, which comprises the addition of 2 x safety signs. The Heritage Council of NSW advised that the proposed safety signs complied with the Standard Exemption 6 for modifications to non-significant telecommunications infrastructure. Consequently, a referral under the Heritage Act to the Heritage Council NSW was not required. Nevertheless, to ensure compliance with the GTAs for HMS ID 5093 and for completeness, it is recommended that **Condition 1** includes reference to the s60 application (HMS ID 5093) as an approved document. This will ensure that all conditions/ requirements of HMS ID 5093 are met with the development of the site.

Rural Fire Service

In accordance with the provisions of Section 4.14 of the Environmental Planning and Assessment Act 1979, Council has consulted with the Commissioner of the NSW Rural Fire Service, concerning measures to be taken with respect to the protection of persons, property and the environment from danger that may arise from a bush fire. The comments and recommendations provided by the Rural Fire Service are contained in a letter dated 19 September 2024, which is listed as an approved document in **Condition 1**.

It is acknowledged that the proposal involves the 'Shroud' material of 'Makralon Polycarbonate', being a combustible material which is inconsistent with the NSW RFS' recommendation. This proposed material is not Approved, as recommended in a condition of consent **(Condition 3).** An alternate, non-combustible material is to be utilised and consistent with the NSW RFS' recommendation.

STATUTORY PROVISIONS

Telecommunications Act 1997

The proposal involves an upgrade to the existing telecommunications facility located at the 'Lindfield Learning Village', being an item of local and state heritage significance. Commonwealth legislation requires carriers to comply with the Telecommunications Act 1997 and the Telecommunications Code of Practice 2021. The proposal is not considered to be a low-impact facility, as prescribed in the Telecommunications (Low-impact Facilities) Determination 2018 given the subject site comprises an area of environmental significance due to its state heritage listing. Therefore, development consent is required.

Heritage Act 1977

The Heritage Act 1977 is *"An Act to conserve the environmental heritage of the State".* The subject application involves works associated to a state listed heritage item, 'Lindfield Learning Village' (02036) and was referred to the Heritage Council of NSW as nominated Integrated Development.

A Section 60 (HMS ID 5093) fast track application was granted by the Heritage Council of NSW on 15 December 2023, which accompanied the subject development application in accordance with Section 63 of the Heritage Act 1977.

To ensure compliance with the prescribed conditions of the Heritage Council of NSW, a condition of consent (**Condition 1**) has been applied in the recommendation to include the S60 application (HMS ID 5093) as an approved document.

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State Environmental Planning Policy (Transport and Infrastructure) 2021

Division 21 of SEPP (Transport and Infrastructure) permits the development of a 'Telecommunication facility' which is defined as:

telecommunications facility means -

- (a) any part of the infrastructure of a telecommunications network, or
- (b) any line, cable, optical fibre, fibre access node, interconnect point, equipment, apparatus, tower, mast, antenna, dish, tunnel, duct, hole, pit, pole or other structure in connection with a telecommunications network, or
- (c) any other thing used in or in connection with a telecommunications network.

Section 2.143 of the SEPP specifies development which is permitted with consent as prescribed below:

2.143 Development permitted with consent

- Development for the purposes of telecommunications facilities, other than development in section 2.141 or development that is exempt development under section 2.20 or 2.144, may be carried out by any person with consent on any land.
- 2) Before determining a development application for development to which this section applies, the consent authority must take into consideration any guidelines concerning site selection, design, construction or operating principles for telecommunications facilities that are issued by the Planning Secretary for the purposes of this section and published in the Gazette.

In accordance with Schedule 4 Exempt and complying development in relation to telecommunication facilities – Chapter 2, Part 1 (Exempt Development), the proposal cannot be considered as an exempt form of development. Item 18, Column 1, 18(b) specifies:

Ancillary facilities to a telecommunications facility for any of the following purposes— (a) ...

(b) to screen or shroud antennas or telecommunications equipment (or both) to minimise their visibility and improve visual outcomes,

(C) ...

Item 18, Column 2, 18(1) specifies:

If located on a heritage item or in a heritage conservation area, the facilities must not be visible from the street at ground level from the property boundary.

The proposal involves the installation of a shroud on a state and locally listed heritage item and will be visible from the street at ground level from the property's boundary. Therefore, the proposal does not comprise exempt development and development consent is required.

In accordance with Section 2.143(2) of the SEPP, as the determining authority, Council must consider:

"any guidelines concerning site selection, design, construction or operating principles for telecommunications facilities that are issued by the Planning Secretary for the

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purposes of this section and published in the Gazette".

The relevant guideline is the '*NSW Telecommunications Facilities Guideline, Including Broadband*'. An assessment against the applicable Principles of the Guideline is provided below:

	Principle 1: Design and site telecommunications facilities to minimise visual impact		
	Principle Compliance/ Comment		
a.		The proposal involves an upgrade to an existing telecommunications facility which is mounted at the roof level of the 'Lindfield Learning Village'. A shroud is also proposed to the telecommunications facility which provides a practical solution to mitigate visual impacts both within and externally to the site.	
b.	telecommunications facilities, reduce visual clutter (particularly on tops of buildings) and ensure physical dimensions (including support mounts) are sympathetic to the scale and height of the building to which it is to be attached and to adjacent buildings.	The inclusion of the shroud minimises visual clutter associated with the telecommunications facility by encasing associated antennae, mounting poles and ancillary equipment to achieve compliance with this principle.	
C.	If a telecommunications facility protrudes from a building or structure and is predominantly seen against the sky, either match the prevailing colour of the host building or structure or use a neutral colour such as pale grey.	The existing telecommunications facility protrudes from the 'Lindfield Learning Village' rooftop. The Applicant proposes the shroud to be sympathetic in colour with the concrete finish of the 'Lindfield Learning Village'. Furthermore, a condition of consent is recommended by the Heritage Council of NSW for the proposed shroud to maintain a neutral colour which is sympathetic to the overall style and design of the subject building and consistent with the applicant's approach. This position is supported, and the recommendations of the Heritage Council of NSW are included in recommended Condition 1 .	
d.	Where possible and practical, screen or house ancillary facilities using the same colour as the prevailing background and consider using existing vegetation or new landscaping.	The proposed shroud will screen and house antennae, mounting poles and ancillary equipment to reduce the visual impact of the telecommunications facility. The applicant proposes the shroud to be sympathetic in colour to the concrete finish of the 'Lindfield Learning Village'. This position is supported and further reinforced by the Heritage Council of NSW by way of a recommended	

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Princi impac		ications facilities to minimise visual
	•	condition. The Heritage Council of NSW's recommendations are included in Condition 1 to ensure the proposed shroud maintains a neutral colour which is sympathetic to the overall style and design of the subject building.
e.	Locate and design a telecommunications facility in a way that responds to its setting (rural, residential, industrial or commercial).	The telecommunications facility is an existing structure at the 'Lindfield Learning Village' and the proposal is generally limited to upgrading the facility's servicing and the addition of a shroud. Nevertheless, the design has taken into consideration its setting by reducing visual clutter and finishing the structure in a neutral colour.
f.	Site and design a telecommunications facility located on or adjacent to a listed heritage item or within a heritage conservation area with external colours, finishes and scale sympathetic to the heritage item or conservation area.	The proposal involves the modifications to an existing telecommunications facility being located on a state and locally listed heritage item. A sympathetic colour to the subject building and the existing structure itself are proposed. This is further reinforced via a recommended condition of consent (Condition 1).
g.	Locate telecommunications facilities to minimise or avoid obstructing significant views of a heritage item or place, a landmark, a streetscape, vista or a panorama, whether viewed from public or private land.	The addition of the shroud to the existing telecommunications facility does not result in the obstruction to any significant views or vistas when viewed from either public or private land.
h.	Remove redundant components of existing facilities after upgrades.	All redundant components of the existing telecommunications facility are proposed to be removed as annotated on architectural plans.
i.	Where possible, consolidate telecommunications facilities to reduce visual clutter and work with other users on co-location sites to minimise cumulative visual impact.	The proposal consolidates and provides servicing for Optus, Vodaphone and Telstra carriers.
j.	Accord with all relevant industry design guides when siting and designing telecommunications facilities.	The siting and design of the proposed telecommunications facility is generally compliant with the New South Wales Telecommunications Facility Guidelines.
k.	Assess potential visual impact in alternative site assessments.	The proposal involves an upgrade to an existing telecommunications facility rather than the construction of a new facility. In this instance, an alternative site assessment is not required and visual impacts of the proposal are considered to be equal to or lesser than existing.

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	ple 2: Co-locate telecommunication	
Princi		Compliance/ Comment
a.	Consider extending an existing tower as a practical co-location solution to new towers.	The upgrade to the existing telecommunications facility will accommodate Telstra, Optus and Vodaphone carriers and will be a co- located facility.
b.	If choosing to co-locate, design, install and operate a telecommunications facility so that resultant cumulative levels of radio frequency emissions are within the maximum human exposure levels set out in RPS S-1.	The subject application is accompanied by an 'Environmental EME Report' which demonstrates that the cumulative EME levels at the subject site and surrounds (≤500m radius) are below the maximum human exposure levels as set out in RPS S-1.
Princi	ple 3: Meet health standards for ex	posure to radio emissions
Princi		Compliance/ Comment
	Design, install and operate a telecommunications facility so that maximum human exposure levels to radiofrequency emissions comply with RPS S-1.	The subject application is accompanied by an 'Environmental EME Report' which demonstrates that the cumulative EME levels at the subject site and surrounds (≤500m radius) are below the maximum human exposure levels as set out in RPS S-1.
b.	Using the format required by ARPANSA, report on predicted levels of EME surrounding any development covered by the Industry Code C564:2020 Mobile Phone Base Station Deployment, and how the development will comply with ACMA safety limits and RPS S-1.	The 'Environmental EME Report' specifies that the maximum EME level calculated for the proposal equates to 3.04%, which is 96.96% lower than the maximum public exposure limit (100%).
Princi	ple 4: Minimise disturbance and ris	Compliance/ Comment
	Ensure the siting and height of a telecommunications facility complies with the Commonwealth Civil Aviation Regulations 1998 and Airports (Protection of Airspace) Regulations 1996. Avoid penetrating any obstacle limitation surface (OLS) shown on a relevant OLS plan for an aerodrome or airport (as reported to the Civil Aviation Safety Authority) within 30 km of the	The existing telecommunications facility's siting is not altered. Conversely, the height of the existing structure is reduced by 0.34m. The applicant has confirmed compliance with this clause's requirements in the SEE.
b.	proposed development. Ensure no adverse radio frequency interference with any airport, port or Commonwealth defence navigational or	The applicant has confirmed compliance with this clause's requirements in the SEE.

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Princi	Principle 4: Minimise disturbance and risk, and maximise compliance		
	communications equipment, including the Morundah Communication Facility, Riverina.		
C.	Carry out the telecommunications facility and ancillary facilities in accordance with any manufacturer's installation specifications.	The applicant has confirmed compliance with this clause's requirements in the SEE.	
d.	Protect the structural integrity of any building or structure on which a telecommunications facility is erected.	The applicant has confirmed compliance with this clause's requirements in the SEE and the position that <i>"The proposed facility will not compromise the structural integrity of the building"</i> is supported.	
e.	Erect the telecommunications facility wholly within the boundaries of a property as approved by the relevant landowner.	The proposal is wholly contained within the subject site's boundaries.	
f.	Mitigate obstruction or risks to pedestrians or vehicles caused by the location of the facility, construction activity or materials used in construction.	Construction activity and materials used in the proposal's construction are unlikely to create obstructions or risks to either pedestrians or vehicles given the location of the existing telecommunication facility at the roof level of 'Lindfield Learning Village'. Nevertheless, a condition of consent (Condition 41) is recommended for temporary site fencing for the duration of the construction process to prevent damages to surrounding life or property.	
g.	Where practical, carry out work at times that minimise disruption to adjoining properties and public access and restrict hours of work to 7.00am and 5.00pm, Mondays to Saturdays, with no work on Sundays and public holidays.	A condition of consent (Condition 21) has been recommended restricting the hours of work. To this effect, the recommended hours of work are generally consistent with the Guideline's recommendation, with the exception of hours on Saturdays, which are restricted to 12pm.	
	Employ traffic control measures during construction in accordance with Australian Standard AS1742.3-2002 Manual of uniform traffic control devices – Part 3: Traffic control devices for works on roads.	A condition of consent (Condition 30) has been recommended to require compliance with <i>AS1742-3 (2009)</i> <i>'Manual for Uniform Traffic Control</i> <i>Devices for Work on Roads'.</i>	
i.	Identify the likelihood of harming an Aboriginal place and/or Aboriginal object and obtain approval from the Department of Premier and Cabinet if the impact is likely, or Aboriginal objects are found.	There is no anticipated likelihood of harming an Aboriginal place and/ or Aboriginal object. The proposal is limited to works at the roof level of the 'Lindfield Learning Village'.	

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Principle 4: Minimise disturbance and risk, and maximise compliance		
j. Reinstate, at your expense, stree	t The applicant's SEE states that "Any	
furniture, paving or other facilities	damage to the area will be reinstated to	
removed or damaged during	the original condition post construction"	
construction to at least the same	which is supported. Damage to public	
condition as that prior to	infrastructure is also unlikely as the	
installation.	proposal is wholly contained within the	
	subject site and construction works are at	
	the roof level of the 'Lindfield Learning	
	Village'.	

	Principle 5: Undertake an alternative site assessment for new mobile phone base stations		
Princi	ple	Compliance/ Comment	
a.	Include adequate numbers of alternative sites in the alternative site assessment as a demonstration of good faith.	The proposal does not involve a new mobile phone base station and is generally limited to the upgrading of existing facilities and the addition of a shroud structure.	
b.	In addition to the new site selection matters in Section 4 of the Industry Code C564:2020 Mobile Phone Base Station Deployment: • only include sites that meet coverage objectives, and that have been confirmed as available, with an owner agreeable to having the facility on their land • if the preferred site is a site owned by the Carrier, undertake a full assessment of the site • indicate the weight placed on selection criteria • undertake an assessment of each site before any site is dismissed.	The proposal does not involve a new mobile phone base station and is generally limited to the upgrading of existing facilities and the addition of a shroud structure.	

State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 4 Remediation of land

The provisions of Chapter 4 require Council to consider the potential for a site to be contaminated. The subject site has historically been used as an educational establishment. Council's records determine that the subject site is unlikely to contain any contamination and further investigation is not warranted in this case. Furthermore, the proposal involves the upgrade to an existing telecommunications facility at roof level of an existing building and does not require excavation to natural ground.

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State Environmental Planning Policy (Biodiversity & Conservation) 2021 - Chapter 2 Vegetation in non-rural areas

Chapter 2 of the SEPP applies to the issuing of permits for clearing of vegetation and is not relevant to the assessment of DAs which include tree removal. The subject site is mapped as biodiversity, however, the proposal does not involve tree removal and, in this regard, the proposal is negligibly impactful to the biodiversity values of the subject site. At the allocation of the subject application, Council's Team Leader Landscape and Ecological Assessment raised no concerns with the proposal and this position is supported.

State Environmental Planning Policy (Sustainable Buildings) 2022 – Chapter 3

The Sustainable Buildings SEPP encourages the design and construction of more sustainable buildings across NSW. Chapter 3 'Standards for non-residential development' of the SEPP applies to the following development types:

(a) the erection of a new building, if the development has an estimated development cost of \$5 million or more, or

(b) alterations, enlargement or extension of an existing building, if the development has an estimated development cost of \$10 million or more.

The proposal involves alterations to an existing building. However, the estimated development cost equates to \$611,600.00 which does not exceed a value greater than \$10,000,000.00. Therefore, this SEPP is not applicable to the proposal.

Draft State Environmental Planning Policy (Remediation of Land)

The draft SEPP is a relevant matter for consideration as it is an Environmental Planning Instrument that has been placed on exhibition. New provisions will be added in the SEPP to:

- require all remediation work that is to be carried out without development consent, to be reviewed and certified by a certified contaminated land consultant
- categorise remediation work based on the scale, risk and complexity of the work
- require environmental management plans relating to post-remediation management of sites or ongoing operation, maintenance and management of on-site remediation measures (such as a containment cell) to be provided to Council

The site is unlikely to contain any contamination and further investigation is not warranted in this case.

Local Content

Ku-ring-gai Local Environmental Plan 2015

Clause 1.2 Aims of the Plan

The proposal has been assessed against the relevant Aims of the Plan. The proposal is consistent with the Aims for the reasons given within the assessment report.

Zoning and permissibility

The subject site is zoned Part MU1 – Mixed Use, Part C3 – Environmental Management and Part R1 – General Residential. The proposed development is defined as a

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telecommunications facility' and is directly sited on land zoned MU1 which comprises the 'Lindfield Learning Village'. The proposed development is permitted with consent.

Zone objectives

The objectives of the zone MU1 - Mixed Use are:

- To encourage a diversity of business, retail, office and light industrial land uses that generate employment opportunities.
- To ensure that new development provides diverse and active street frontages to attract pedestrian traffic and to contribute to vibrant, diverse and functional streets and public spaces.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To encourage business, retail, community and other non-residential land uses on the ground floor of buildings.
- To support the integrity and viability of adjoining local centres by providing for a range of "out of centre" retail uses such as specialised retail premises and compatible business activities.

The proposed development is not contrary to the MU1 zone objectives. It will improve local telecommunication infrastructure and servicing for its users. Therefore, the proposed development is not inconsistent with the zone's objectives.

Development standards

Clause 4.3 – Height of buildings

The proposal comprises the upgrading of an existing telecommunications facility at 'Lindfield Learning Village' which is a communication device. As the calculation of building height does not include communication devices, as detailed in the '*building height*' definition below, the height control does not apply to this proposal. Nevertheless, it is noted that the proposal will slightly reduce the overall height of the existing tower by 0.34m.

building height (or height of building) means -

- (a) in relation to the height of a building in metres—the vertical distance from ground level (existing) to the highest point of the building, or
- (b) in relation to the RL of a building—the vertical distance from the Australian Height Datum to the highest point of the building,

including plant and lift overruns, but <u>excluding communication devices, antennae</u>, satellite dishes, masts, flagpoles, chimneys, flues and the like.

Part 5 Miscellaneous provisions

Clause 5.10 – Heritage conservation

The subject site contains a heritage item, is not located within 100m of an Item, and is not within a heritage conservation area. The proposed works do not affect any known archaeological or Aboriginal objects or Aboriginal places of heritage significance. The application has been considered by Council's Heritage Advisor who raises no concerns with the proposal.

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Part 6 Additional local provisions

Clause 6.3 - Biodiversity protection

The site is mapped as land comprising biodiversity significance. However, the proposed works relate to an existing structure located at roof level which is not within biodiversity mapped land.

Clause 6.5- Stormwater and water sensitive urban design

It is not anticipated that the proposal will create additional stormwater runoff and, accordingly, a condition of consent **(Condition 34)** is recommended to ensure stormwater runoff is directed to the existing system which services the 'Lindfield Learning Village'.

Policy Provisions (DCPs, Council policies, strategies and management plans)

Part 1A.5 - General aims of the DCP

The proposed development has been assessed against the general aims of the KDCP and is acceptable in all relevant respects for the reasons given throughout this report and for the specified reasons below:

- i. The upgrade to the existing telecommunication facility enhances the future character of the Ku-ring-gai Local Government Area and positively contributes to the Lindfield community to provide capacity for improved Fourth Generation (4G) and Fifth Generation (5G) coverage.
- ii. The addition of a shroud and the upgrading of the existing telecommunications facility maintains the relationship with neighbouring development uses whilst providing improved servicing and aesthetic appearance from the public domain.
- iii. The proposal promotes ecologically sustainable development by developing on existing infrastructure rather than the creation of a new telecommunications facility/ network.
- iv. The proposal ensures the heritage significance of the Heritage Item is conserved and the proposal does not detrimentally impact the Item's local and state significance.
- v. The proposal ensures the appropriate management of bush fire risks through the implementation of appropriate construction standards (subject to conditions).
- vi. The proposal has been notified in accordance with the Ku-ring-gai Community Participation Plan and the EP&A Act to provide public participation which is proportionate to its potential environmental impact. The matter will also be considered at a public meeting of the Ku-ring-gai Local Planning Panel providing further opportunity for the public to be involved in the decision-making process.

Part 2 - Site analysis

Adequate plans and associated documentation support the subject application and identify the existing characteristics of the site and the surrounding area. The submitted site analysis satisfies the objectives of this part of the KDCP.

Part 16 – Bushfire risk

The site is mapped as bush fire prone land.

In accordance with the provisions of section 4.14 of the Environmental Planning and

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Assessment Act 1979, Council has consulted with the Commissioner of the NSW Rural Fire Service, concerning measures to be taken with respect to the protection of persons, property and the environment from danger that may arise from a bush fire. NSW RFS does not object the proposal and have provided a condition of consent which has been applied in the recommendation.

It is acknowledged that the proposal involves the 'Shroud' material of 'Makralon Polycarbonate', being a combustible material and inconsistent with the NSW RFS' recommendation. This proposed material is not Approved, as recommended in a condition of consent **(Condition 3).** An alternate, non-combustible material is to be utilised and consistent with the NSW RFS' recommendation.

Part 19 – Heritage and Conservation Areas

The site is heritage listed, is not within 100m of another heritage item, and is not within a heritage conservation area. The proposal relates to fabric which is not part of the heritage item, but part of later installations. Accordingly, the proposal has minimal impact on the significance of the heritage item.

Section C

Part 23.10 - Construction, Demolition and Disposal

An Environmental Site Management Plan (ESMP) did not accompany the subject application. However, given construction and demolition works are at the roof level of the 'Lindfield Learning Village', there are no concerns raised in this regard and suitable conditions of consent (Condition 33, 35, 38 and 41) are recommended to ensure appropriate site work measures are imposed.

Part 24 - Water management

Condition 34 requires that stormwater runoff is directed to the existing system which services 'Lindfield Learning Village'. The requirements of this Part of the KDCP are satisfied.

Ku-ring-gai Contributions Plan 2023

The subject application is not subject to an exemption under Part 7.5 – Exemptions from s7.12 contributions – General. Therefore, the development attracts a Section 7.12 contribution of \$6,116.00 which is required to be paid prior to the issue of any Construction Certificate **(Condition 18)**.

LIKELY IMPACTS

The likely impacts of the development have been considered within this report and are deemed to be acceptable subject to recommended conditions.

SUITABILITY OF THE SITE

The site is suitable for the proposed development for the reasons given throughout this report.

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PUBLIC INTEREST

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by the Panel ensuring that any adverse effects on the surrounding area and the environment are minimised. The proposal has been assessed against the relevant environmental planning instruments and is deemed to be acceptable. On this basis, the proposal is not considered to raise any issues that are contrary to the public interest.

CONCLUSION

Having regard to the provisions of section 4.15 of the Environmental Planning and Assessment Act 1979, the proposed development is satisfactory and therefore recommended for approval, subject to conditions.

RECOMMENDATION

PURSUANT TO SECTION 4.16(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, being satisfied that the proposed development would be in the public interest, grant development consent to eDA0318/24 for upgrade the existing telecommunications facility at 100 Eton Road, Lindfield, subject to conditions. Pursuant to Section 4.53 of the Environmental Planning and Assessment Act 1979, this consent lapses if the approved works are not physically commenced within five years of the date of the Notice of Determination.

The conditions of the consent are set out as follows:

CONDITIONS THAT IDENTIFY APPROVED PLANS:

1. Approved architectural plans and documentation (new development)

The development must be carried out in accordance with the plans and documentation listed below and endorsed with Council's stamp, except as amended by other conditions of this Development Consent:

Plan no.	Drawn by	Dated
Architectural Plans		
Sheet no. – S1. Issue – 5.	LB (Telstra)	08/04/24
Sheet no. – S1-1. Issue – 6.	LB (Telstra)	08/04/24
Sheet no. – S1-2. Issue – 5.	LB (Telstra)	08/04/24
Sheet no. – S3. Issue – 8.	LB (Telstra)	08/04/24
Sheet no. – S3-1. Issue – 5.	LB (Telstra)	08/04/24
Sheet no. – E1. Issue – 7.	LB (Telstra)	08/04/24
Sheet no. – E2. Issue – 1.	LB (Telstra)	08/04/24
Sheet no. – E4-1. Issue – 1.	LB (Telstra)	08/04/24
Sheet no. – T3. Issue – 1.	LB (Telstra)	08/04/24
Sheet no. – T3-1. Issue – 1.	LB (Telstra)	08/04/24
Sheet no. – T3-2. Issue – 1.	LB (Telstra)	08/04/24

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LB (Telstra)	08/04/24
LB (Telstra)	08/04/24
LB (Telstra)	28/03/24
LB (Telstra)	08/04/24
	LB (Telstra) LB (Telstra)

Document(s)	Dated
NSW Rural Fire Service Determination letter. Ref: DA20240902003580-	19/09/2024
Original-1	
Heritage NSW Section 60 (Heritage Act 1977) Approval Letter. HMS	15/12/2023
Application ID: 5093.	

Reason: To ensure that the development is in accordance with the Development Consent.

2. Inconsistency between documents

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this Development Consent prevail.

Reason: To ensure that the development is in accordance with the Development Consent.

3. Amended architectural plans

Prior to the issue of any Construction Certificate, the Certifier shall be satisfied that the approved plans listed in Condition 1 above, have been amended in accordance with the requirements of this condition as well as other conditions of this Development Consent:

- The 'Shroud' material denoted 'Makralon Polycarbonate' is not approved. An alternate, non-combustible material is to be utilised and consistent with the requirement of the approved document titled 'NSW Rural Fire Service Determination Letter' (DA20240902003580-Original-1) dated 19/09/2024. The colour and finish of the alternate material is to be neutral in colour and sympathetic to the overall style and design of the main complex of the 'Lindfield Learning Village'.
- **Reason:** To ensure compliance with bushfire requirements and to minimise impacts on the setting and views.

4. No demolition of extra fabric

Alterations to, and demolition of, the existing building shall be limited to that part of the

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ATTACHMENT NO: 1 - DEVELOPMENT ASSESSMENT REPORT

existing building as documented on the approved plans (by way of notation or otherwise). No approval is given for removal and/or rebuilding of any part of the existing building which is shown to be retained by the approved plans.

Reason: To ensure compliance with the Development Consent.

CONDITIONS TO BE SATISFIED PRIOR TO DEMOLITION, EXCAVATION OR CONSTRUCTION:

5. Asbestos works

All work involving asbestos products and materials, including asbestos-cement-sheeting (ie. fibro), must be carried out in accordance with the guidelines for asbestos work published by Safework NSW.

Reason: To ensure public safety.

6. Notice of commencement

At least 48 hours prior to the commencement of any demolition, excavation or building works, a notice of commencement of building works or subdivision lodgement form and appointment of the Principal Certifier form shall be submitted to Council.

Reason: Statutory requirement.

7. Notification of builder's details

Prior to the commencement of any works, the Principal Certifier shall be notified in writing of the name and contractor licence number of the owner/builder intending to carry out the approved works.

Reason: Statutory requirement.

8. Access through public reserve is not permitted

Access for construction purposes shall not be gained through the adjoining public reserve. Should no alternative access exist, an application for access to the construction site via the public reserve shall be submitted to Council for consideration and approval prior to the commencement of works. Parking of construction vehicles and employee vehicles on public reserves is also not permitted.

Reason: To protect public reserves.

9. Temporary construction exit

A temporary construction exit, together with necessary associated temporary fencing, shall be provided prior to commencement of any work on the site and shall be maintained throughout the duration of construction works.

Reason: To reduce or prevent the transport of sediment from the construction site onto public roads.

10. Construction waste management plan

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ATTACHMENT NO: 1 - DEVELOPMENT ASSESSMENT REPORT

Prior to the commencement of any works, the Principal Certifier shall be satisfied that a waste management plan, prepared by a suitably qualified person, has been prepared in accordance with the waste management controls in the Ku-ring-gai Development Control Plan.

The plan shall address all issues identified in the DCP, including but not limited to: the estimated volume of waste and method for disposal for the construction and operation phases of the development.

Reason: To ensure appropriate management of construction waste.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE:

11. Airspace

Prior to the issue of any Construction Certificate, a report which demonstrates the following must be submitted to the Certifier:

- (a) Compliance with relevant site and height requirements specified by the Civil Aviation Regulations 1998 and the Airports (Protection of Airspace) Regulations 1996.
- (b) The development does not penetrate any OLS shown on any relevant OLS plan prepared for an aerodrome or airport within 30 km of the proposed development and reported to the Civil Aviation Safety Authority.

Reason: Statutory requirement.

12. Statement of compliance with Australian Standards

The demolition work shall comply with the provisions of Australian Standard AS2601: 2001 The Demolition of Structures. The applicant must provide work plans required by AS2601: 2001 and a written statement from a suitably qualified person that the proposal contained in the work plan comply with the safety requirements of the Standard. The work plan and the statement of compliance shall be submitted to and approved by the Certifier prior to the commencement of any demolition works.

Reason: To ensure compliance with the Australian Standards.

13. Long service levy

A Construction Certificate shall not be issued until any long service levy payable under Section 34 of the *Building and Construction Industry Long Service Payments Act 1986* (or where such levy is payable by instalments, the first instalment of the levy) has been paid. In order to pay your levy, you will need to register an account with The Long Service Corporation on the online portal at <u>www.longservice.nsw.gov.au</u>.

Reason: Statutory requirement.

14. Ausgrid requirements

Prior to issue of any Construction Certificate, Ausgrid must be contacted regarding the power supply for the subject development. A written response, detailing the full requirements of Ausgrid (including any need for underground cabling, substations or similar within or in the vicinity of the development) shall be submitted and approved by the Certifier prior to issue of

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any Construction Certificate.

Any structures or other requirements of Ausgrid shall be indicated on the plans issued with the Construction Certificate, to the satisfaction of the Certifier and Ausgrid. The requirements of Ausgrid must be met in full prior to the issue of an Occupation Certificate.

Reason: To ensure compliance with the requirements of Ausgrid.

15. Utility provider requirements

Prior to issue of any Construction Certificate, the Applicant must make contact with all relevant utility providers whose services will be impacted upon by the development. A written copy of the requirements of each provider, as determined necessary by the Certifier, must be obtained. All utility services or appropriate conduits for the same must be provided in accordance with the specifications of the utility providers.

Reason: To ensure compliance with the requirements of relevant utility providers.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF ANY CONSTRUCTION CERTIFICATE, SUBDIVISION WORKS CERTIFICATE OR PRIOR TO DEMOLITION, EXCAVATION OR BUILDING WORKS (WHICHEVER COMES FIRST):

16. Infrastructure damage security bond and inspection fee

To ensure that any damage to Council property as a result of construction activity is rectified in a timely manner:

- (a) All work or activity undertaken pursuant to this development consent must be undertaken in a manner to avoid damage to Council property and must not jeopardise the safety of any person using or occupying the adjacent public areas.
- (b) The applicant, builder, developer or any person acting in reliance on this consent shall be responsible for making good any damage to Council property and for the removal from Council property of any waste bin, building materials, sediment, silt, or any other material or article.
- (c) The Infrastructure damage security bond and infrastructure inspection fee must be paid to Council by the applicant prior to both the issue of any Construction Certificate and the commencement of any earthworks or construction.
- (d) In consideration of payment of the infrastructure damage security bond and infrastructure inspection fee, Council will undertake such inspections of Council Property as Council considers necessary and will also undertake, on behalf of the applicant, such restoration work to Council property, if any, that Council considers necessary as a consequence of the development. The provision of such restoration work by the Council does not absolve any person of the responsibilities contained in (a) to (b) above. Restoration work to be undertaken by Council referred to in this condition is limited to work that can be undertaken by Council at a cost of not more than the Infrastructure damage security bond payable pursuant to this condition.
- (e) Release of the bond Upon receipt by Council of an Occupation Certificate, Council will undertake an inspection of Councils Infrastructure and release the bond if no damage is found.

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For development relating to more than 2 dwellings, there will be a six months holding period after the receipt by Council of the final occupation certificate, after which you may request Council to return any bond monies.

If there is damage found to Council property the bond will not be released until the damage has been rectified to Council's satisfaction.

(f) In this condition:

"Council property" includes any road, footway, footpath paving, kerbing, guttering, crossings, street furniture, seats, letter bins, trees, shrubs, lawns, mounds, bushland, and similar structures or features on any road or public road within the meaning of the Local Government Act 1993 (NSW) or any public place; and

"Infrastructure damage security bond and infrastructure inspection fee" means the Infrastructure damage security bond and infrastructure inspection fee as calculated in accordance with the Schedule of Fees & Charges adopted by Council as at the date of payment and the cost of any inspections required by the Council of Council property associated with this condition.

Reason: To maintain public infrastructure.

17. Construction certificate plans

Construction Certificate plans must be consistent with the approved plans and documents referred to in Condition 1 of this Development Consent, as modified by any other conditions of consent.

Reason: To ensure that the works are carried out in accordance with the Development Consent.

18. Bush fire risk certification

Prior to the issue of any Construction Certificate, the Certifier must be satisfied that the Construction Certificate is in accordance with, and adopts and implements, the requirements in the document prepared by the NSW Rural Fire Service that is listed in Condition 1 of this consent.

Reason: To ensure that the development is in accordance with the Development Consent.

19. Section 7.12 fixed development consent levy contributions

In accordance with Section 4.16 of the Environmental Planning and Assessment Act 1979 and Ku-ring-gai Council s7.12 Local Levy Contributions Plan 2023, \$6,116.00 based on development costs of \$611,600.00, shall be paid to Council to provide for additional local infrastructure improvements in accordance with the works programme listed in the s7.12 Contributions Plan.

Contributions payable will be adjusted in accordance with the provisions of the Ku-ring-gai Council s7.12 Local Levy Contributions Plan 2023 and inflated by the Consumer Price Index (All Groups Sydney) until they are paid. Contact Council to ensure your payment is current prior to payment. See Council's website for more information about inflation and paying contributions.

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- (a) prior to the issue of the Subdivision Certificate where the development is for subdivision; or
- (b) prior to the issue of the first Construction Certificate where the development is for building work; or
- (c) prior to issue of the Subdivision Certificate or first Construction Certificate, whichever occurs first, where the development involves both subdivision and building work; or
- (d) prior to the works commencing where the development does not require a Construction Certificate or Subdivision Certificate.

It is the professional responsibility of the Principal Certifier to ensure that the monetary contributions have been paid to Council in accordance with the above timeframes.

Ku-ring-gai Council s7.12 Local Levy Contributions Plan 2023 may be viewed at on Council's webpage at <u>www.krg.nsw.gov.au</u> or a copy may be inspected at Council's Administration Centre during normal business hours.

CONDITIONS TO BE SATISFIED DURING THE DEMOLITION, EXCAVATION AND CONSTRUCTION PHASES:

20. Road opening permit

The opening of any footway, roadway, road shoulder or any part of the road reserve (excluding where a Driveway Application and Roads Act Approval is required) shall not be carried out without a road opening permit being applied for and obtained from Council (and upon payment of any required fees) beforehand.

Reason: Statutory requirement (Roads Act 1993 Section 138) and to maintain the integrity of Council's infrastructure.

21. Prescribed conditions

The work shall comply with any relevant prescribed conditions of development consent under Sections 69, 70, 71,72, 73, 74 and 75 of the Environmental Planning and Assessment Regulation 2021. For the purposes of section 4.17 (11) of the Environmental Planning and Assessment Act, the following conditions are prescribed in relation to a development consent for development that involves any building work:

Compliance with Building Code of Australia and insurance requirements under Home Building Act 1989

- 1) It is a condition of a development consent for development that involves building work that the work must be carried out in accordance with the requirements of the *Building Code of Australia*.
- 2) It is a condition of a development consent for development that involves residential building work for which a contract of insurance is required under the <u>Home Building</u> <u>Act 1989</u>, Part 6 that a contract of insurance is in force before building work authorised to be carried out by the consent commences.

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Reason: To cater for the increased demand for upgrades in the public domain resulting from cumulative developments in accordance with Ku-ring-gai Council s7.12 Local Levy Contributions Plan 2023.

- It is a condition of a development consent for a temporary structure used as an entertainment venue that the temporary structure must comply with Part B1 and NSW Part H102 in Volume 1 of the *Building Code of Australia*.
- 4) In subsection (1), a reference to the *Building Code of Australia* is a reference to the Building Code of Australia as in force on the day on which the application for the construction certificate was made.
- 5) In subsection (3), a reference to the *Building Code of Australia* is a reference to the Building Code of Australia as in force on the day on which the application for development consent was made.
- 6) This section does not apply -
 - (a) to the extent to which an exemption from a provision of the Building Code of Australia or a fire safety standard is in force under the <u>Environmental Planning</u> <u>and Assessment (Development Certification and Fire Safety) Regulation 2021</u>, or
 - (b) to the erection of a temporary building, other than a temporary structure to which subsection (3) applies.
- relevant date has the same meaning as in the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, section 19.

Erection of signs

- 1) This section applies to a development consent for development involving building work, subdivision work or demolition work.
- It is a condition of the development consent that a sign must be erected in a prominent position on a site on which building work, subdivision work or demolition work is being carried out -
 - (a) showing the name, address and telephone number of the principal certifier for the work, and
 - (b) showing the name of the principal contractor, if any, for the building work and a telephone number on which the principal contractor may be contacted outside working hours, and
 - (c) stating that unauthorised entry to the work site is prohibited.
- 3) The sign must be -
 - (a) maintained while the building work, subdivision work or demolition work is being carried out, and
 - (b) removed when the work has been completed.
- 4) This section does not apply in relation to -
 - (a) building work, subdivision work or demolition work carried out inside an existing building, if the work does not affect the external walls of the building, or
 - (b) Crown building work certified to comply with the *Building Code of Australia* under the Act, Part 6.

Reason: Statutory requirement.

22. Hours of work

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Demolition, construction work and deliveries of building material and equipment must not take place outside the hours of 7.00am to 5.00pm Monday to Friday and 8.00am to 12 noon Saturday. No work and no deliveries are to take place on Sundays and public holidays.

Demolition and/or excavation using machinery of any kind must be limited to between 7.00am and 5.00pm Monday to Friday, with a respite break of 45 minutes between 12 noon and 1.00pm. No demolition and/or excavation using machinery of any kind is to occur on Saturdays, Sundays or public holidays.

Where it is necessary for works to occur outside of these hours (ie placement of concrete for large floor areas on large residential/commercial developments or where building processes require the use of oversized trucks and/or cranes that are restricted by Transport for NSW (TfNSW) from travelling during daylight hours to deliver, erect or remove machinery, tower cranes, pre-cast panels, beams, tanks or service equipment to or from the site), approval for such activities will be subject to the issue of an "outside of hours works permit" from Council as well as notification of the surrounding properties likely to be affected by the proposed works.

Failure to obtain a permit to work outside of the approved hours will result in regulatory action.

Reason: To ensure reasonable standards of amenity for occupants of neighbouring properties.

23. Approved plans to be on site

A copy of all approved and certified plans, specifications and documents incorporating conditions of consent and certification (including the Construction Certificate if required for the work) shall be kept on site at all times during the demolition, excavation and construction phases and must be readily available to any officer of Council or the Principal Certifier.

Reason: To ensure that the development is in accordance with the determination.

24. Site notice

A site notice shall be erected on the site prior to any work commencing and shall be displayed throughout the works period.

The site notice must:

- □ be prominently displayed at the boundaries of the site for the purposes of informing the public that unauthorised entry to the site is not permitted
- □ display project details including, but not limited to the details of the builder, Principal Certifier and structural engineer
- □ be durable and weatherproof
- display the approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice
- □ be mounted at height of 1.6 metres above natural ground on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted

Reason: To ensure public safety and public information.

25. Dust control

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During excavation, demolition and construction, adequate measures shall be taken to prevent dust from affecting the amenity of the neighbourhood. The following measures must be adopted:

- physical barriers shall be placed around or over dust sources to prevent wind or activity from generating dust
- earthworks and scheduling activities shall be managed to coincide with the next stage of development to minimise the amount of time the site is left cut or exposed
- all materials shall be stored or stockpiled at the best locations
- □ the ground surface should be dampened slightly to prevent dust from becoming airborne but should not be wet to the extent that run-off occurs
- □ all vehicles carrying spoil or rubble to or from the site shall at all times be covered to prevent the escape of dust
- □ all equipment wheels shall be washed before exiting the site using manual or automated sprayers and drive-through washing bays
- gates shall be closed between vehicle movements and shall be fitted with shade cloth
- □ cleaning of footpaths and roadways shall be carried out at least daily
- no advertising or signage is permitted to be attached to dust cloth material.

Reason: To protect the environment and the amenity of surrounding properties.

26. Use of road or footpath

During excavation, demolition and construction phases, no building materials, plant or the like are to be stored on the road or footpath without written approval being obtained from Council beforehand. The footpath shall be kept in a clean, tidy and safe condition during building operations. Council reserves the right, without notice, to rectify any such breach and to charge the cost of rectification against the applicant/owner/builder or any other responsible person, as the case may be.

Reason: To ensure safety and amenity of the area.

27. Toilet facilities

Toilet facilities must be available or provided at the work site before works begin and must be maintained until the works are completed. One toilet, plus one additional toilet for every 20 persons working at the site are to be provided. Each toilet must:

- a) be a standard flushing toilet connected to a public sewer, or
- b) have an on-site effluent disposal system approved under the Local Government Act 1993 <<u>https://www.legislation.nsw.gov.au/></u>, or
- c) be a temporary chemical closet approved under the Local Government Act 1993 <<u>https://www.legislation.nsw.gov.au/></u>.

Reason: Statutory requirement.

28. Recycling of building material (general)

During demolition and construction, the Principal Certifier shall be satisfied that building materials suitable for recycling have been forwarded to an appropriate registered business dealing in recycling of materials. Materials to be recycled must be kept in good order.

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Reason: To facilitate recycling of materials.

29. Garbage receptacle

- 1. A garbage receptacle must be provided at the work site before works begin and must be maintained until all works are completed.
- 2. The garbage receptacle must have a tight fitting lid and be suitable for the reception of food scraps and papers.
- 3. The receptacle lid must be kept closed at all times, other than when garbage is being deposited.

Reason: To ensure appropriate construction site waste management and to avoid injury to wildlife.

30. Construction signage

All construction signs must comply with the following requirements:

- □ are not to cover any mechanical ventilation inlet or outlet vent
- are not illuminated, self-illuminated or flashing at any time
- are located wholly within a property where construction is being undertaken
- □ refer only to the business(es) undertaking the construction and/or the site at which the construction is being undertaken
- □ are restricted to one such sign per property
- \Box do not exceed 2.5m²
- are removed within 14 days of the completion of all construction works

Reason: To ensure compliance with Council's controls regarding signage.

31. Road reserve safety

All public footways and roadways fronting and adjacent to the site must be maintained in a safe condition at all times during the course of the development works. Construction materials must not be stored in the road reserve. A safe pedestrian circulation route and a pavement/route free of trip hazards must be maintained at all times on or adjacent to any public access ways fronting the construction site. Where public infrastructure is damaged, repair works must be carried out when and as directed by Council officers. Where pedestrian circulation is diverted on to the roadway or verge areas, clear directional signage and protective barricades must be installed in accordance with AS1742-3 (2009) "Manual for Uniform Traffic Control Devices for Work on Roads". If pedestrian circulation is not satisfactorily maintained across the site frontage, and action is not taken promptly to rectify the defects, Council may take actions to stop work, which may include the bringing of proceedings.

Reason: To ensure safe public footways and roadways during construction.

32. Services

Where required, the adjustment or inclusion of any new utility service facilities must be carried out in accordance with the requirements of the relevant utility authority. These works shall be at no cost to Council. It is the applicant's responsibility to make contact with the relevant utility authorities to ascertain the impacts of the proposal upon utility services (including water, phone, gas and the like). Council accepts no responsibility for any matter arising from its approval to this application involving any influence upon utility services provided by another authority.

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Reason: Provision of utility services.

33. Structures to be clear of drainage easements

During all phases of demolition, excavation and construction, it is the full responsibility of the applicant and their contractors to:

- ascertain the exact location of the Council drainage pipe traversing the site in the vicinity of the works
- take full measures to protect the in-ground Council drainage system
- ensure dedicated overland flow paths are satisfactorily maintained through the site

Drainage pipes can be damaged through applying excessive loading (such as construction machinery, material storage and the like). All proposed structures and construction activities are to be sited fully clear of Council drainage pipes, drainage easements, watercourses and trunk overland flow paths on the site. Trunk or dedicated overland flow paths must not be impeded or diverted by fill or structures unless otherwise approved.

If a Council drainage pipeline is uncovered during construction, all work is to immediately cease and the Principal Certifier and Council must be contacted immediately for advice. Any damage caused to a Council drainage system must be immediately repaired in full as directed by Council and at no cost to Council.

Reason: To protect existing Council infrastructure and maintain over land flow paths.

34. Erosion control

Temporary sediment and erosion control and measures are to be installed prior to the commencement of any works on the site. These measures must be maintained in working order during construction works up to completion. All sediment traps must be cleared on a regular basis and after each major storm and/or as directed by the Principal Certifier and Council.

Reason: To protect the environment from erosion and sedimentation.

35. Drainage to existing system

Stormwater runoff from all new impervious areas and subsoil drainage systems shall be piped to the existing site drainage system. The installation of new drainage components must be completed by a licensed contractor in accordance with AS3500.3 (Plumbing Code) and the NCC (BCA). No stormwater runoff is to be placed into the Sydney Water sewer system. If an illegal sewer connection is found during construction, the drainage system must be rectified to the satisfaction of Council and Sydney Water.

Reason: To protect the environment.

36. No storage of materials beneath trees

No activities, soil compaction, storage or disposal of materials shall take place beneath the canopy of any tree protected under Council's Development Control Plan at any time unless specified in other conditions of this consent.

Reason: To protect existing trees.

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37. Removal of refuse

All builders' refuse, spoil and/or material unsuitable for use in landscape areas shall be removed from the site on completion of the building works.

Reason: To protect the environment.

38. On site retention of waste dockets

All demolition, excavation and construction waste dockets are to be retained on site, or at suitable location, in order to confirm which facility received materials generated from the site for recycling or disposal.

- each docket is to be an official receipt from a facility authorised to accept the material type, for disposal or processing
- this information is to be made available at the request of an authorised Council officer.

Reason: To protect the environment.

39. Maintenance of site

All materials and equipment must be stored wholly within the work site unless an approval to store them elsewhere is held.

Waste materials (including excavation, demolition and construction waste materials) must be managed on the site and then disposed of at a waste management facility.

Any run-off and erosion control measures required must be maintained within their operating capacity until the completion of the works to prevent debris escaping from the site into drainage systems, waterways, adjoining properties and roads.

During construction:

- all vehicles entering or leaving the site must have their loads covered, and
- □ all vehicles, before leaving the site, must be cleaned of dirt, sand and other materials, to avoid tracking these materials onto public roads.

At the completion of the works, the work site must be left clear of waste and debris.

Reason: To ensure the site is appropriately maintained.

40. Vibration

Vibration emitted from activities associated with the demolition, excavation, construction and fitout of buildings and associated infrastructure shall satisfy the values referenced in Table 2.2 of the Environment Protection Authority Assessing Vibration - a Technical Guideline.

Reason: To protect residential amenity during construction.

41. Control of construction noise (Australian Standard)

During excavation, demolition and construction phases, noise generated from the site shall be controlled in accordance with best practice objectives of AS 2436-2010 and NSW Environment Protection Authority Interim Construction Noise Guidelines.

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Reason: To protect the amenity of neighbouring properties

42. Site fencing

The site must be secured and fenced prior to works commencing. All excavation, demolition and construction works shall be properly guarded and protected with hoardings or fencing to prevent them from being dangerous to life and property.

If the work involved in the excavation, demolition or construction of the development is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or building involves the enclosure of a public place, a hoarding or fence must be erected between the work site and the public place.

If necessary, a hoarding is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place (note that separate approval is required prior to the commencement of works to erect a hoarding or temporary fence on public property).

The work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons on public property.

The site shall be secured/locked to prevent access at the end of each day.

Any hoarding, fence or awning is to be removed when the construction work has been completed.

Reason: To ensure public safety.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE:

43. Electromagnetic emissions

Prior to issue of an Occupation Certificate, the levels of radio frequency (RF) electromagnetic energy (EME) around the telecommunication facility shall be measured by a suitably qualified person using methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). The Principal Certifier and Council shall be issued:

- A report in the format required by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) that shows predicted levels of EME surrounding the development will comply with the safety limits imposed by the Australian Communications and Media Authority and the Electromagnetic Radiation Standard.
- 2. A report showing compliance with the C564:2020 Mobile Phone Base Station Deployment Industry Code.

Reason: Statutory requirement.

44. Infrastructure repair

Prior to issue of an Occupation Certificate and upon completion of any works which may cause damage to Council's property, the Principal Certifier must be satisfied that any damaged public infrastructure caused as a result of construction works (including damage caused by, but not limited to, delivery vehicles, waste collection, contractors, sub-

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contractors, concrete vehicles) is fully repaired to the satisfaction of Council and at no cost to Council.

Reason: To protect public infrastructure.

45. Bush fire risk certification

Prior to the issue of an Occupation Certificate, the Principal Certifier shall be satisfied that all requirements in the document prepared by the NSW Rural Fire Service and listed in Condition 1 of this consent have been complied with.

Reason: To ensure that the development is in accordance with the Development Consent.

CONDITIONS TO BE SATISFIED AT ALL TIMES:

46. Compliance with bush fire requirements

All ongoing recommendations identified in the approved document prepared by the NSW Rural Fire Service, and listed in Condition 1 of this consent, must be complied with at all times.

Reason: To ensure the continual implementation of measures to manage bushfire risk.

47. Encroachment over burdens

No part of any structure shall encroach over any easement and no loadings are to be imposed upon utilities within any easement unless approved by the owner(s) of the land having the benefit of the easement, or the person having benefit of any easement in gross, or the owner of any such utilities.

This Development Consent does not set aside or affect in any way the exercise of any rights-at-law which may be conferred upon any parties by the existence and/or terms of the grant of any easements or rights-of-carriageway on or over the subject lot(s). It is the applicant's responsibility to ensure that any rights-at-law are investigated and upheld. Council accepts no responsibility for any claim for any matter or thing arising from its approval to this application involving any encroachment or other influence upon any easement or right-of-carriageway.

The Applicant's attention is directed to the rights of persons benefited by any easement or right-of-carriageway concerning the entry and breaking up of a structure approved by this consent. In the event that such a structure causes damage, blockage or other thing requiring maintenance to infrastructure within the easement or right-of-carriageway, or access is required to carry out maintenance, Council accepts no responsibility in this regard.

Reason: To ensure compliance with the Development Consent.

48. Noise control - mechanical plant

Noise levels associated with mechanical plant installed on the premises must not be audible within any habitable room in any other neighbouring residential premises before 7.00am and after 10.00pm. Outside of these restricted hours noise levels associated with mechanical plant installed on the premises either as an individual piece of equipment or in combination must not emit a noise level greater than 5dB(A) above the background noise (LA90, 15 min)

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when measured at the nearest adjoining property boundary. The background (LA90, 15 min) level is to be determined without the source noise present.

Reason: To protect the amenity of neighbouring residential occupants and neighbouring properties.

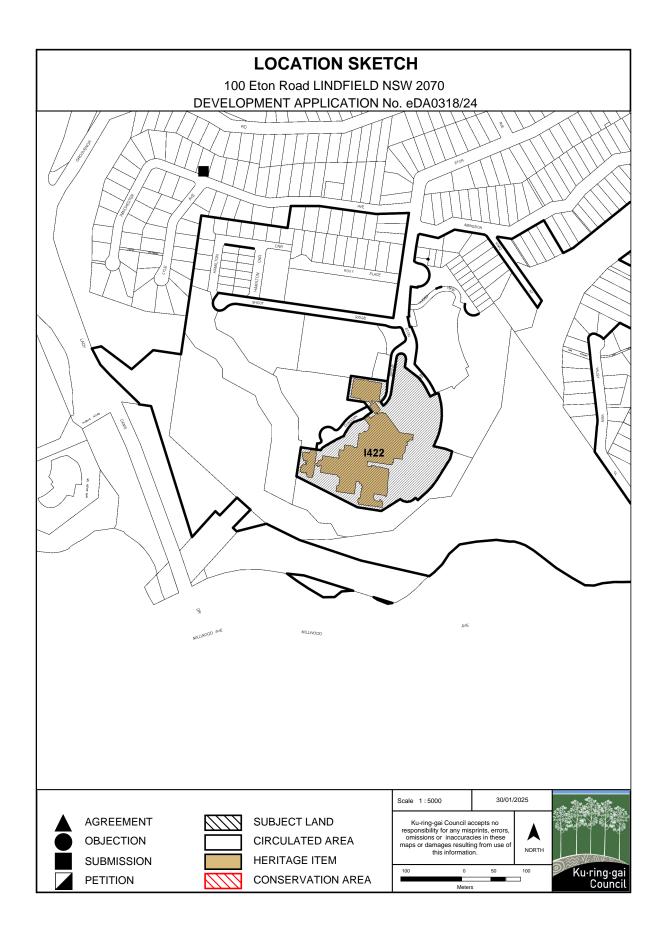
49. Separate consent for signage

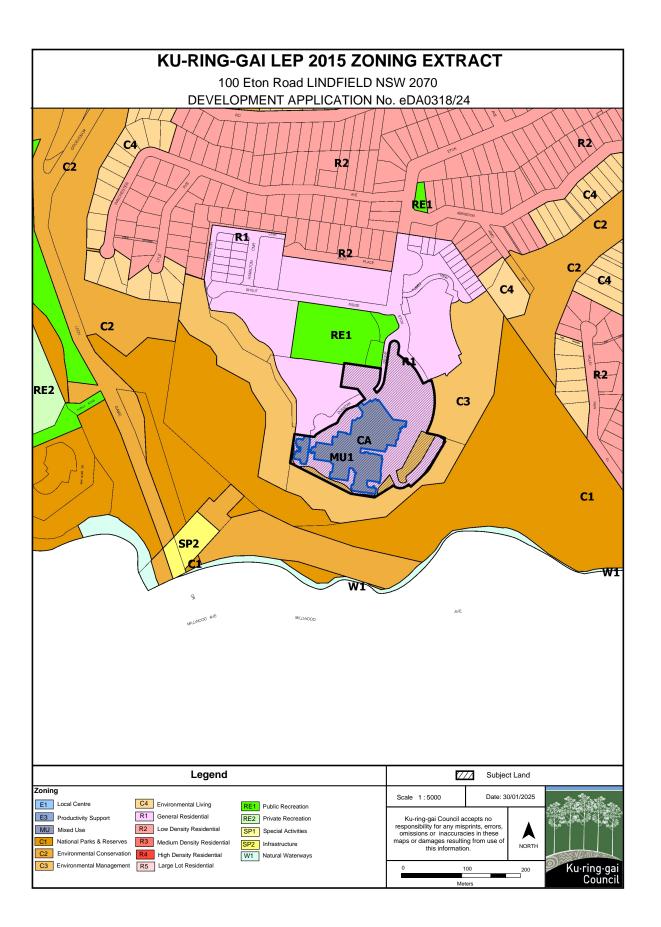
Development Consent must be obtained for any signs which are either externally fitted or applied, prior to the erection of any such signs. This does not apply to signs which are classified as being "Exempt Development".

Reason: To protect residential amenity.

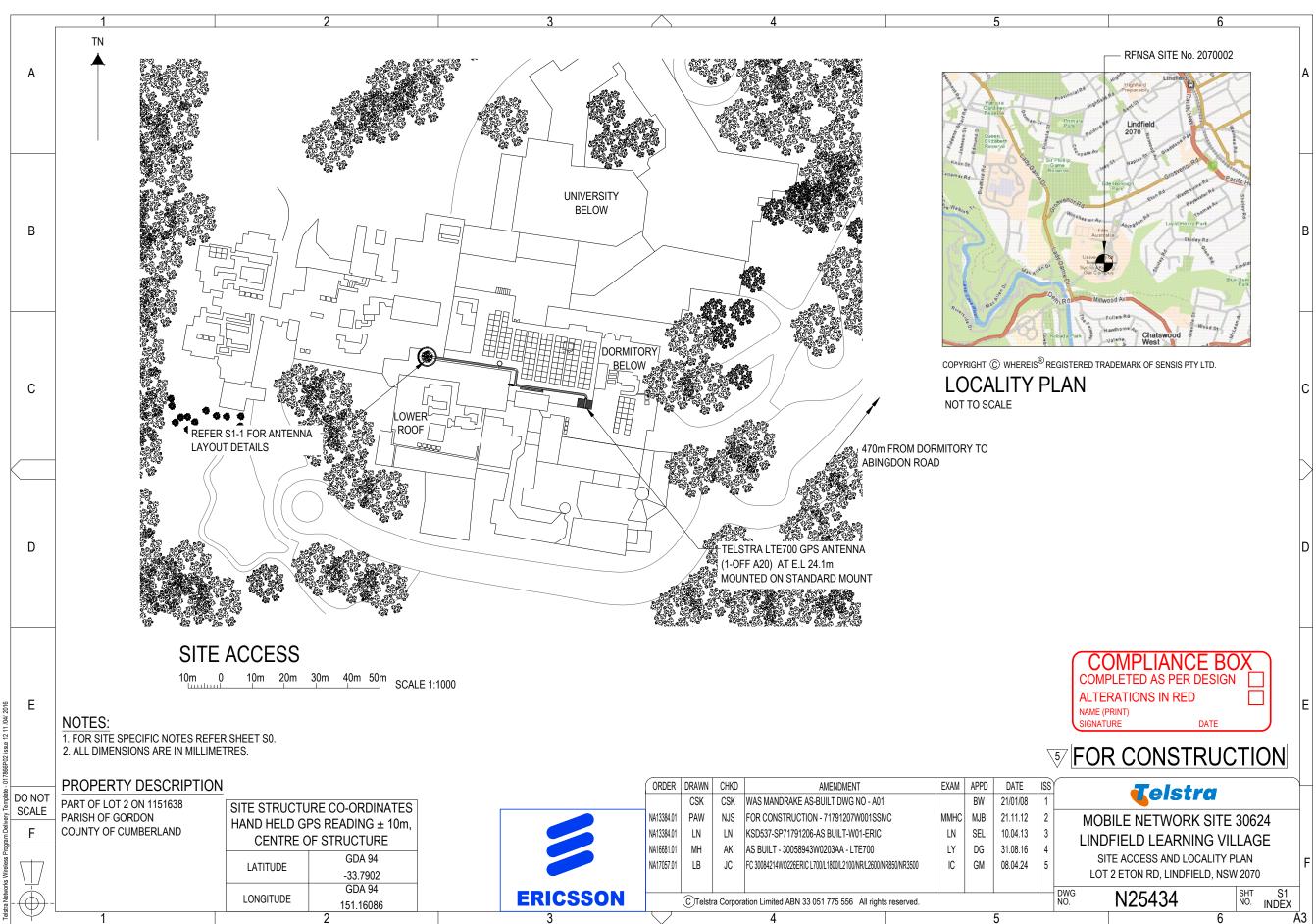
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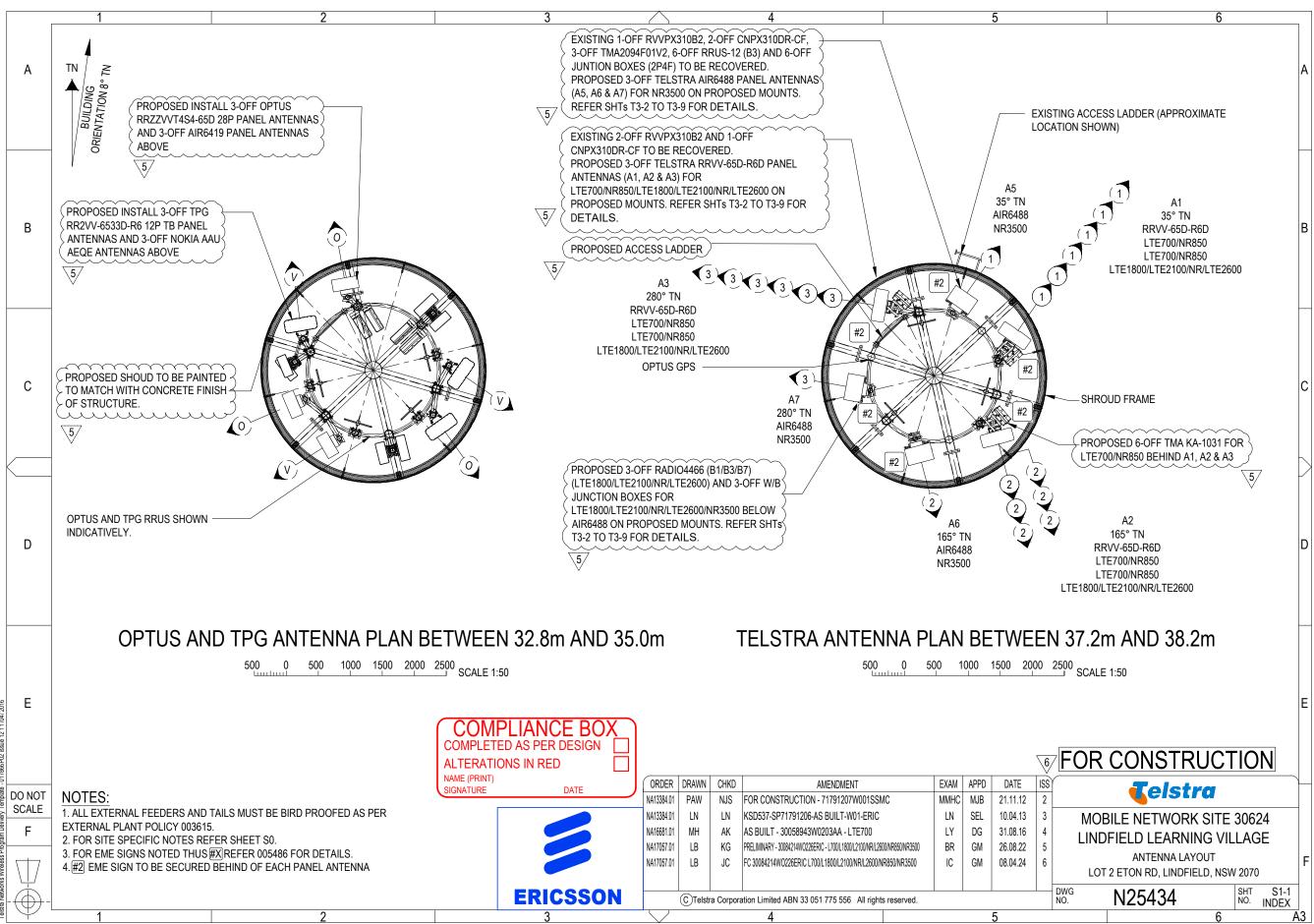




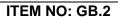
ATTACHMENT NO: 4 - AMENDED ARCHITECTURAL PLANS



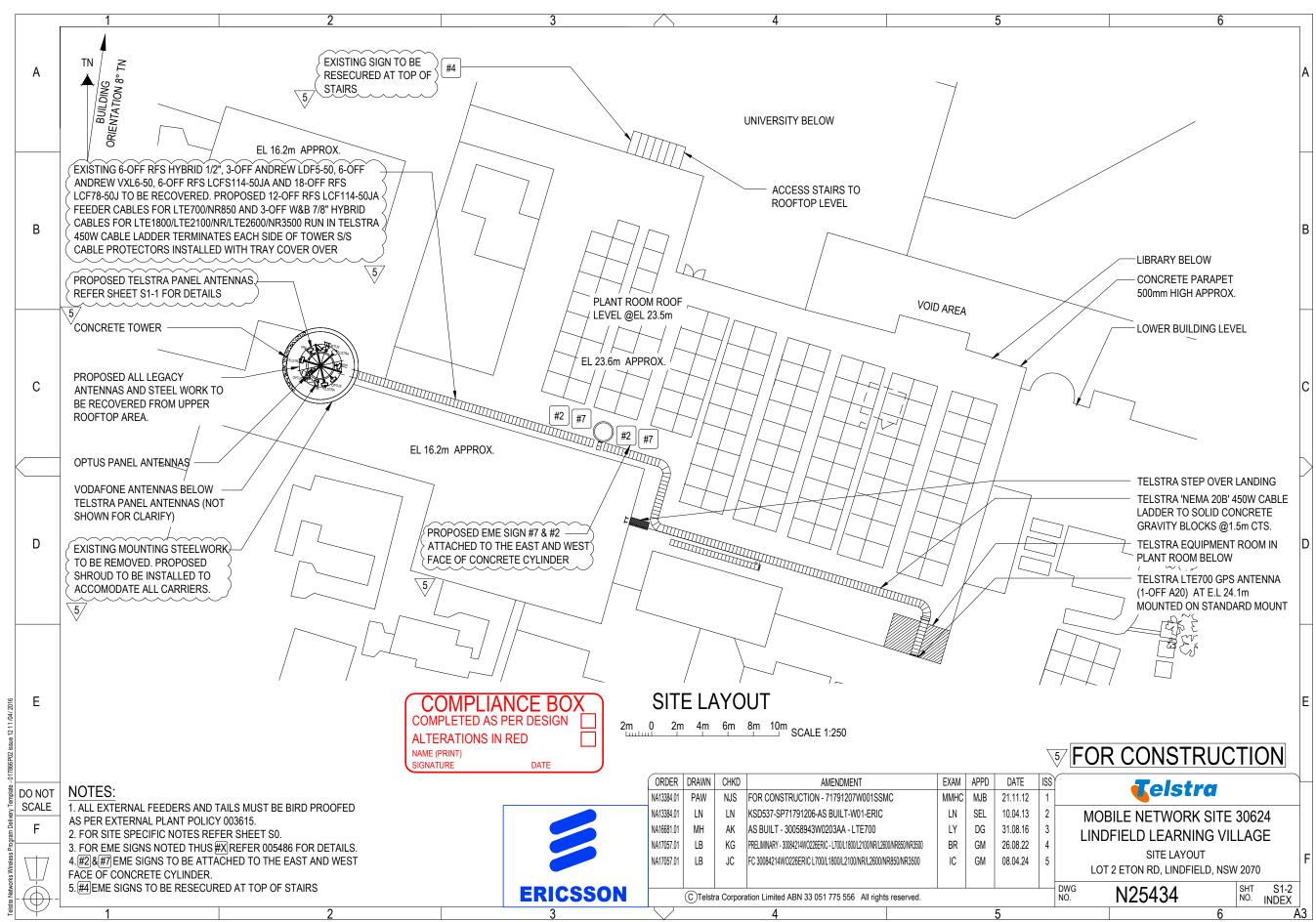
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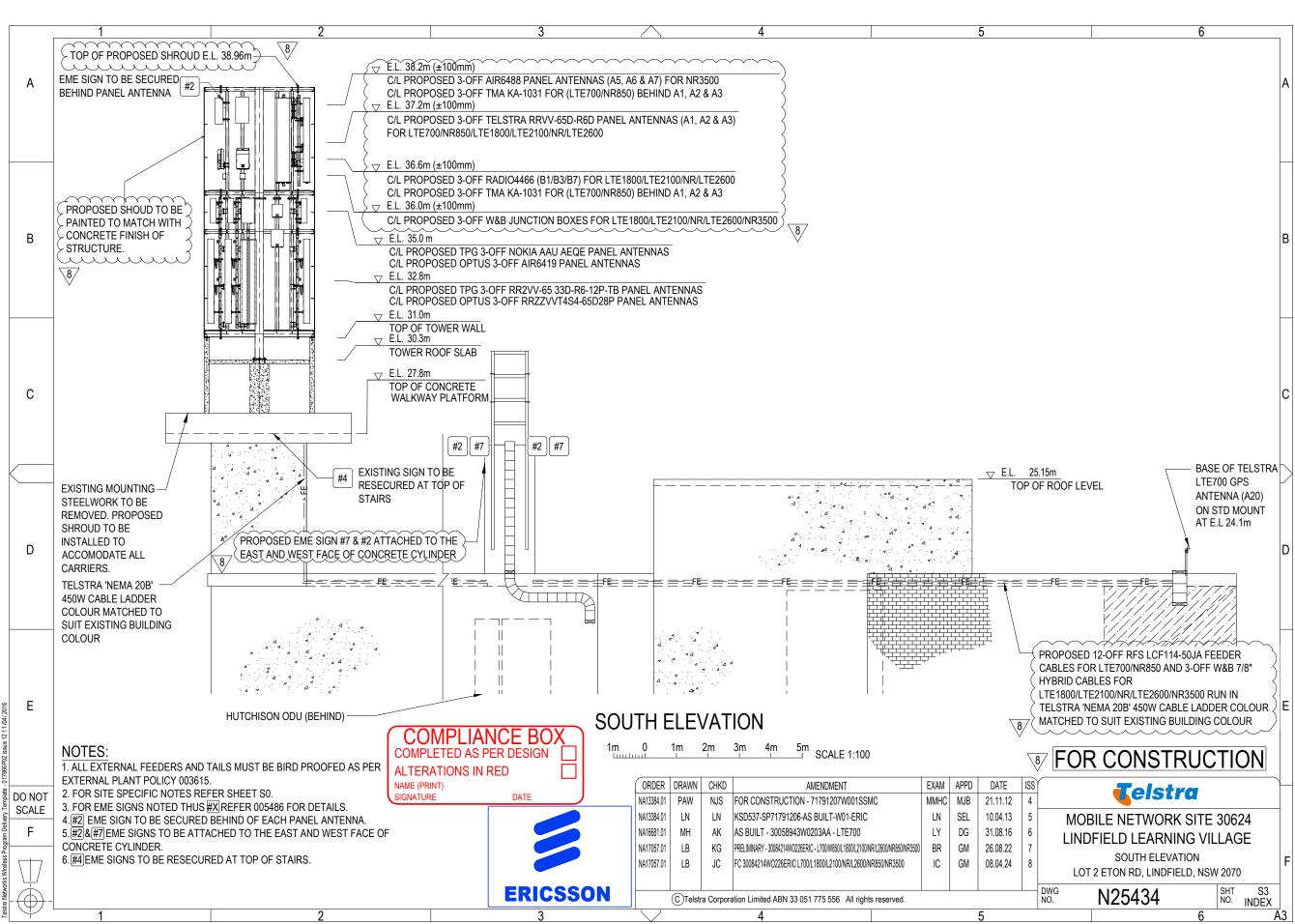
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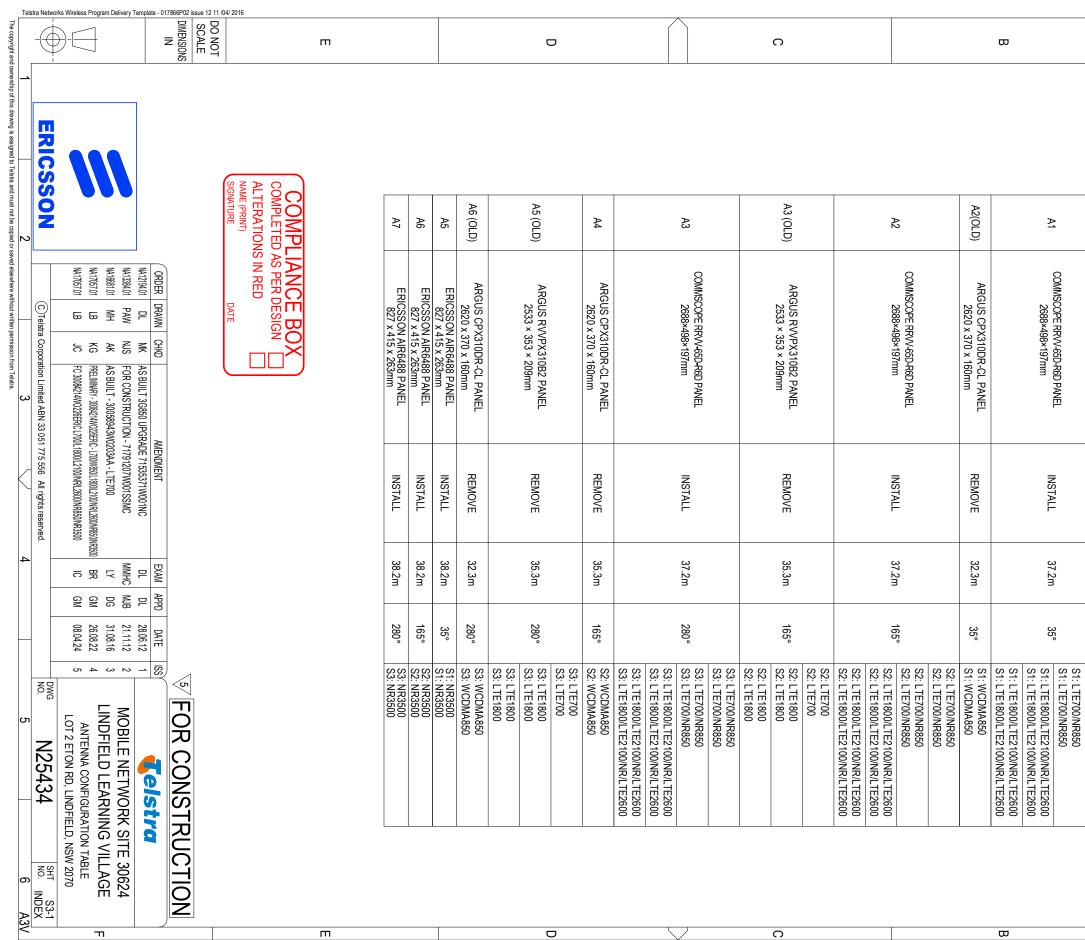


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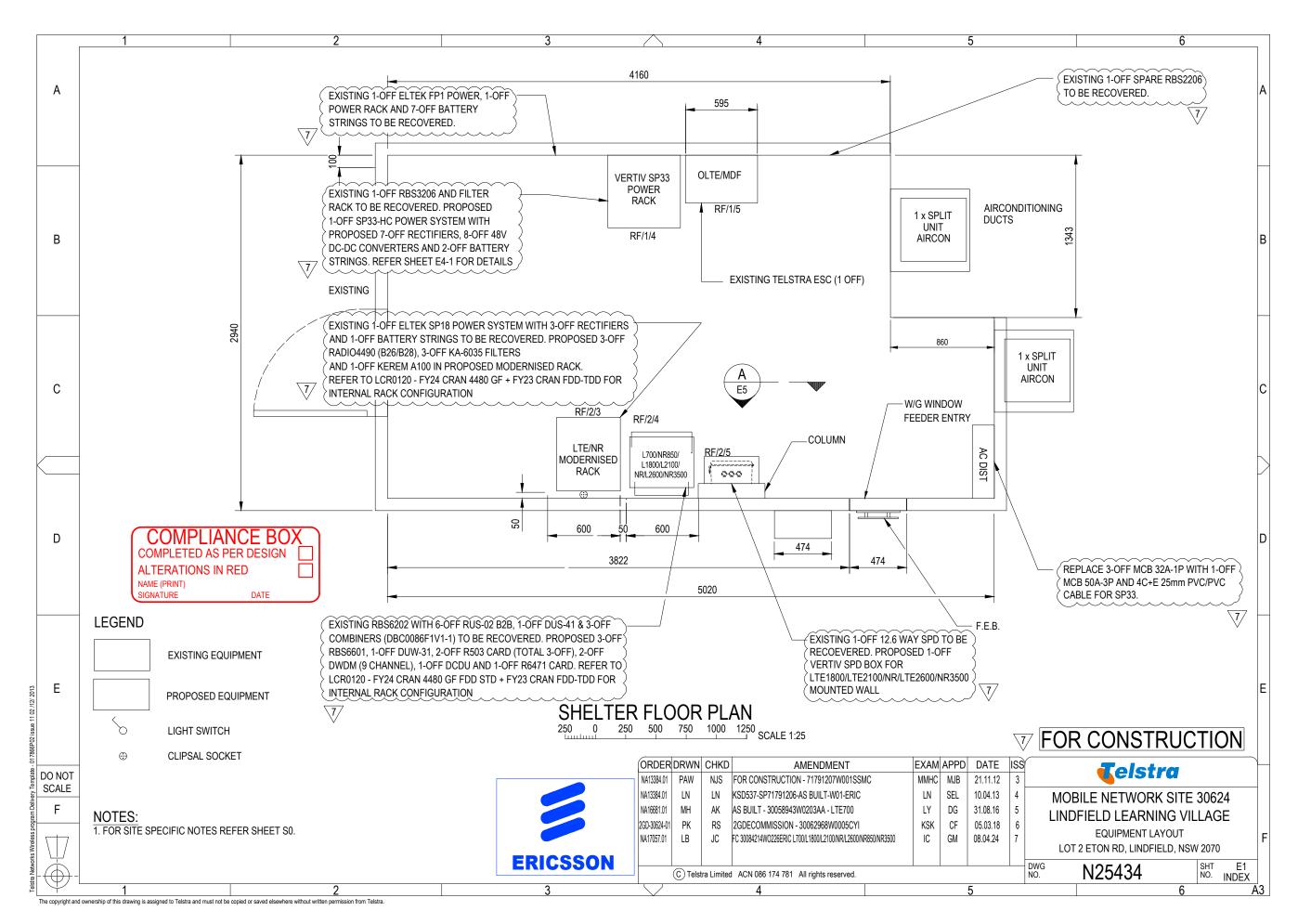
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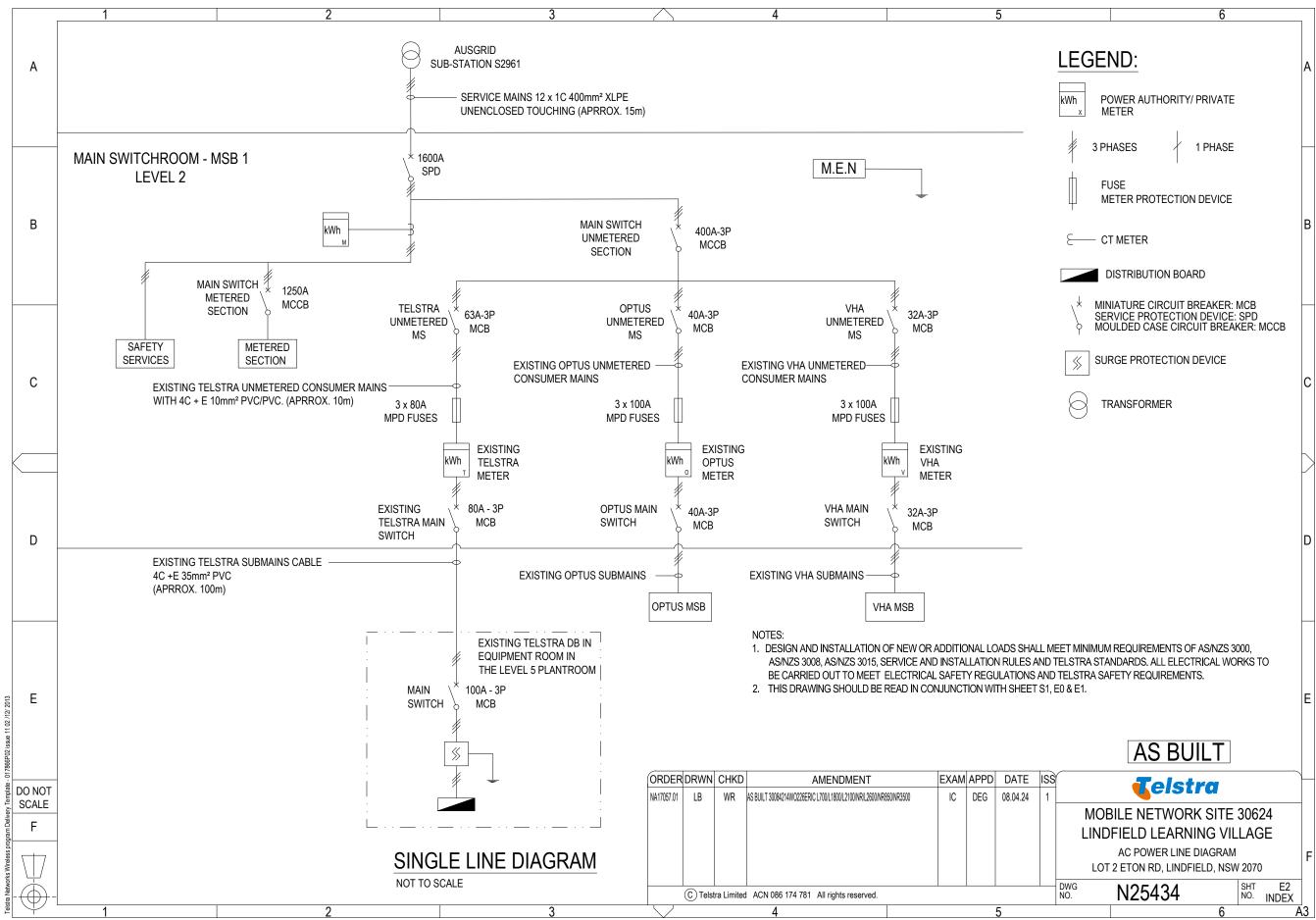
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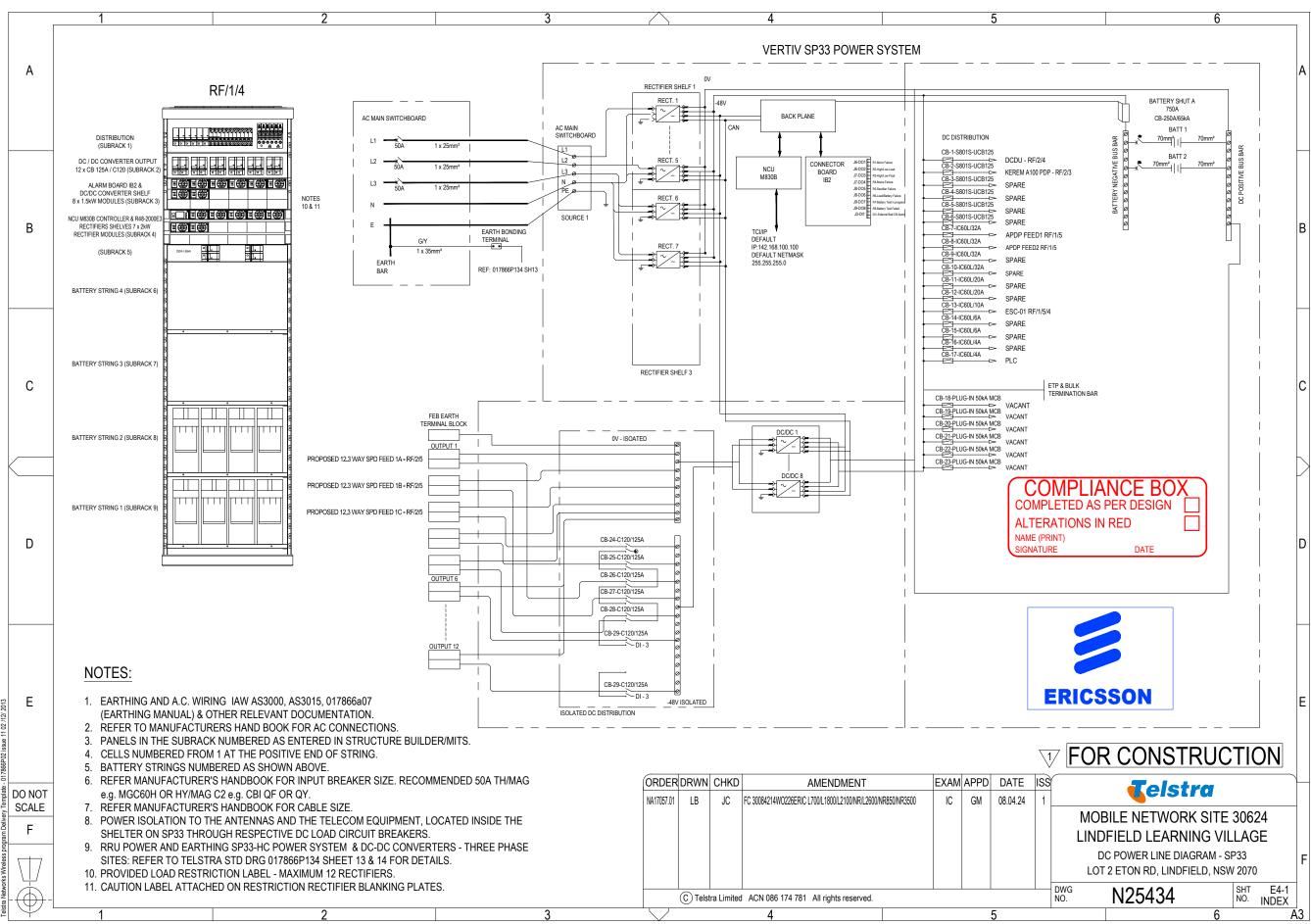




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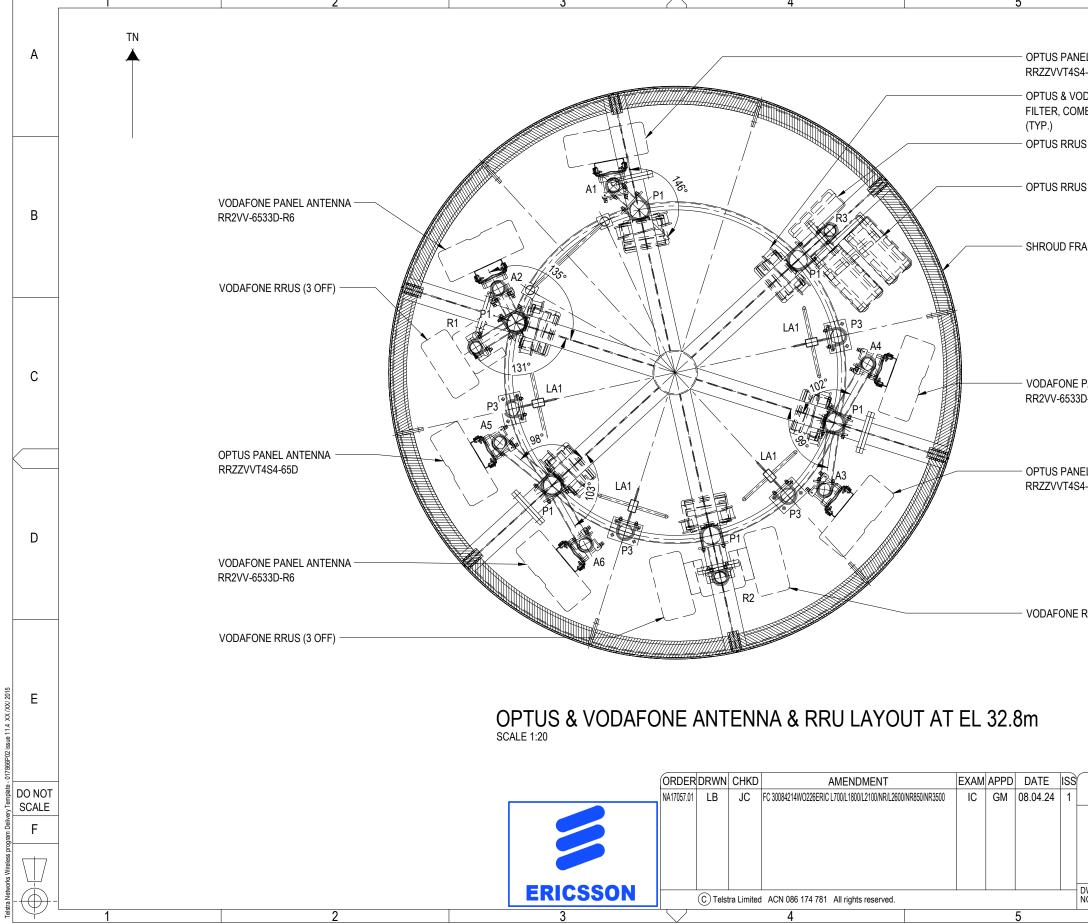




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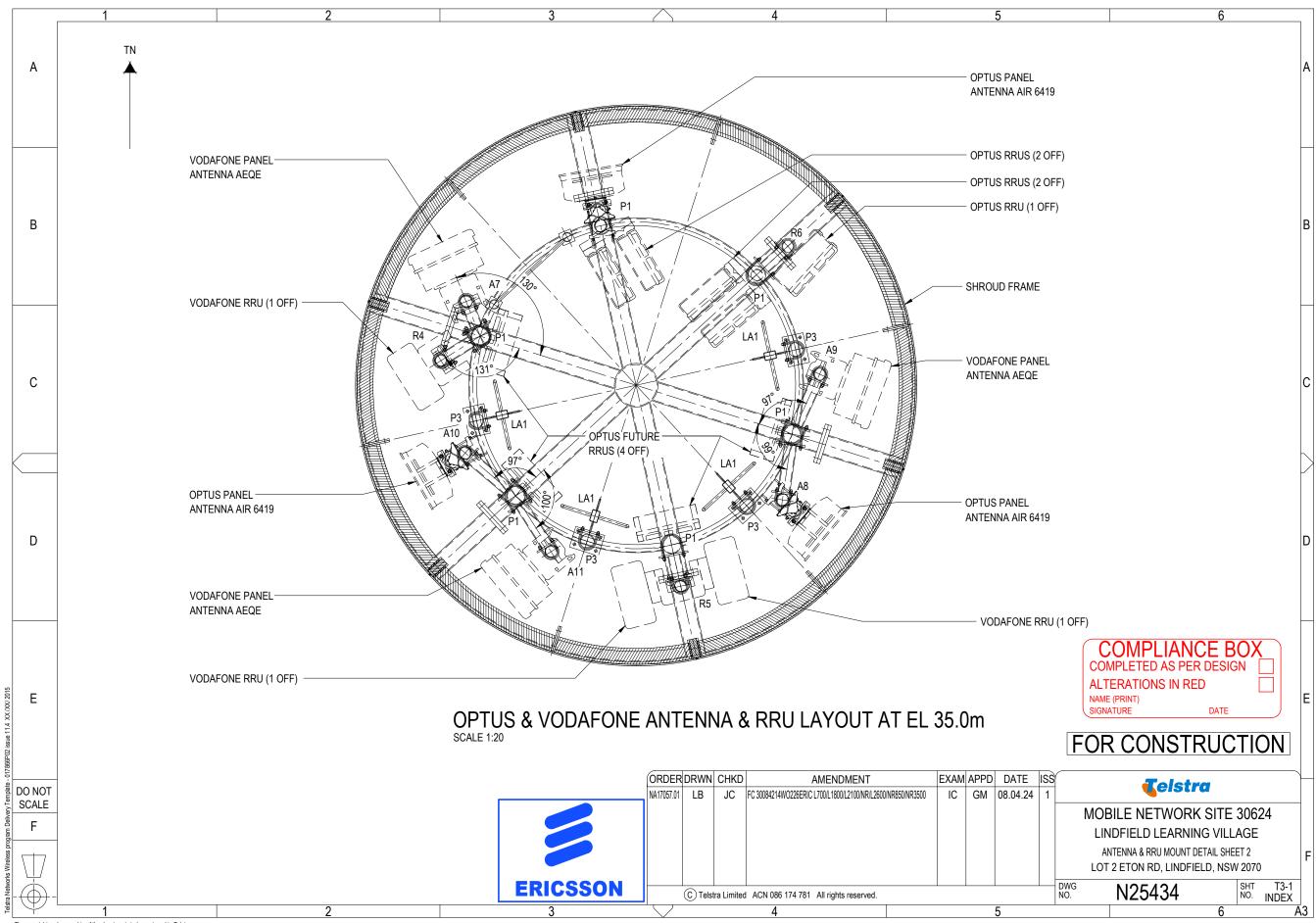
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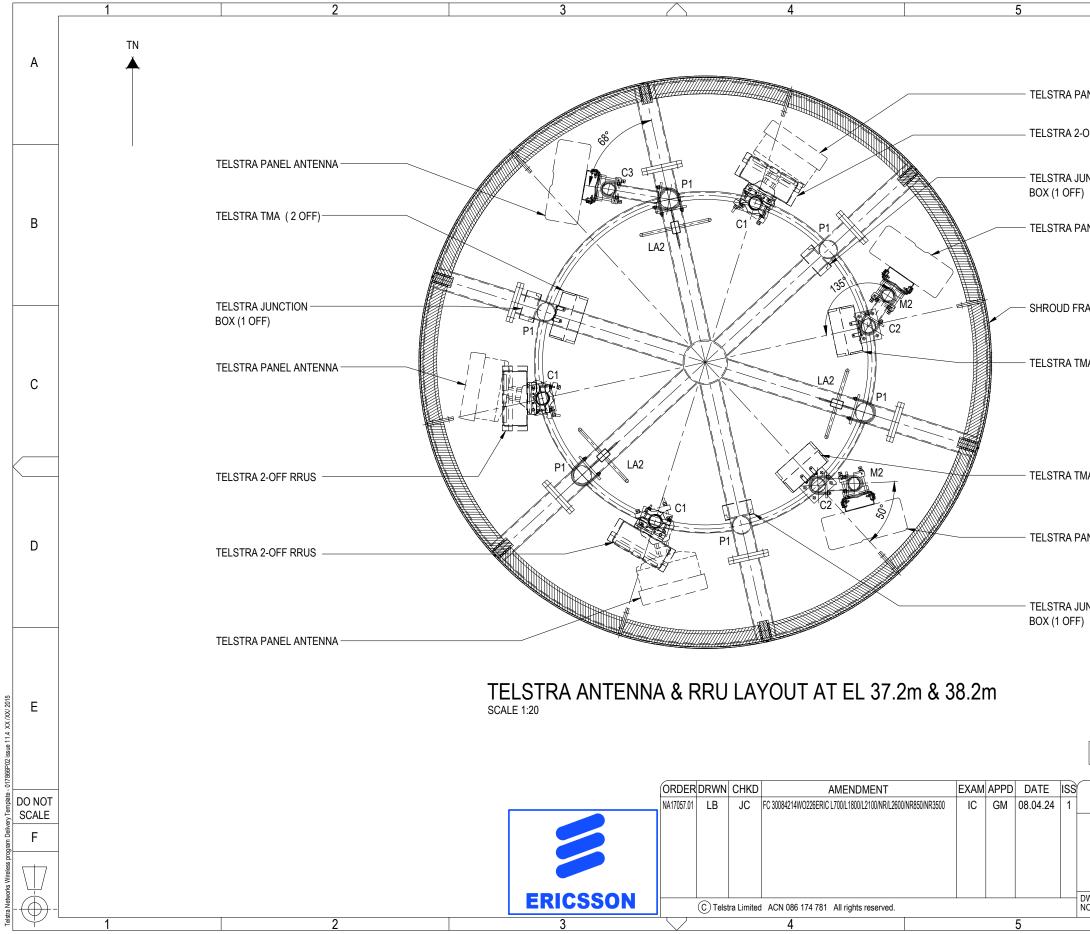
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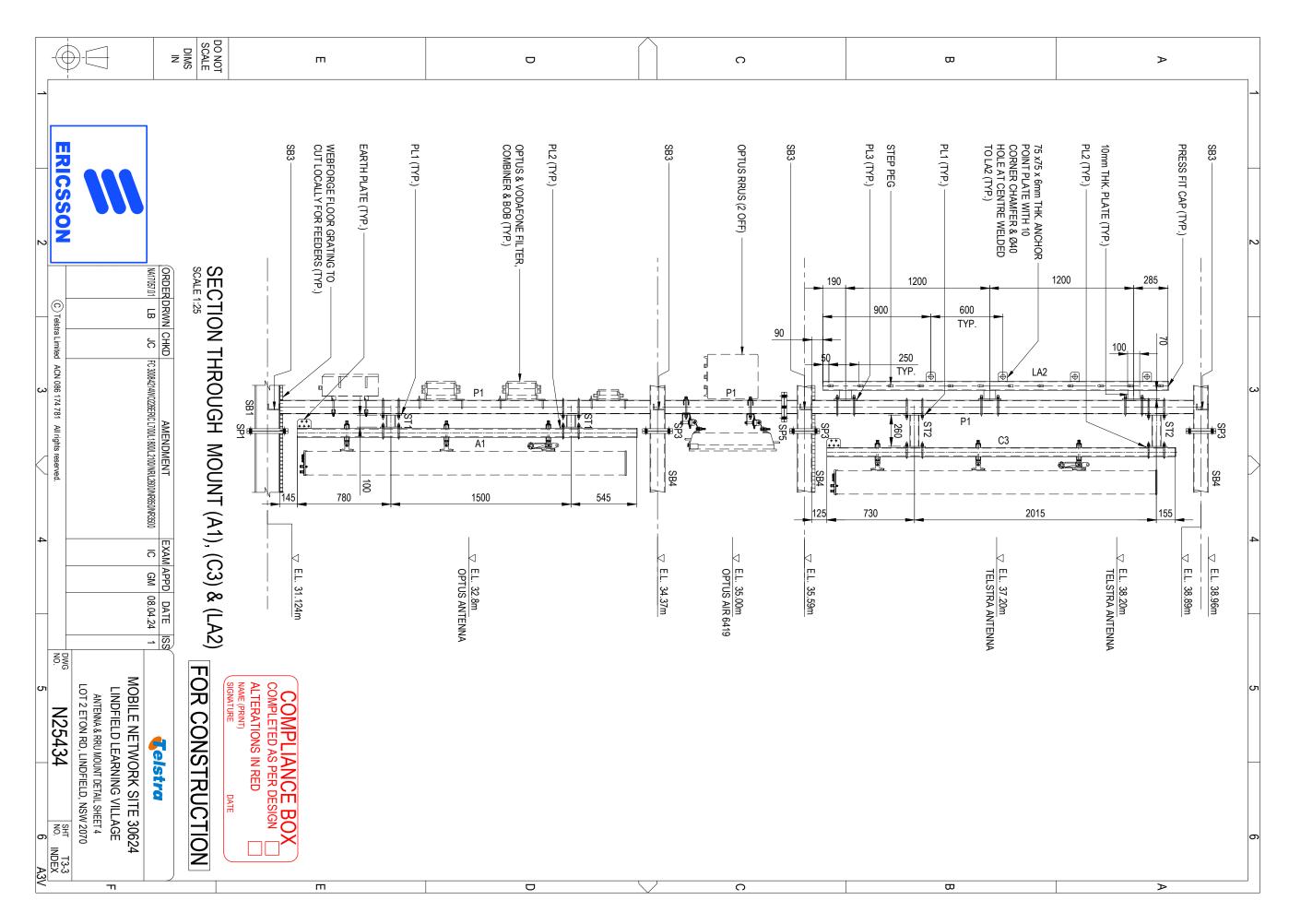


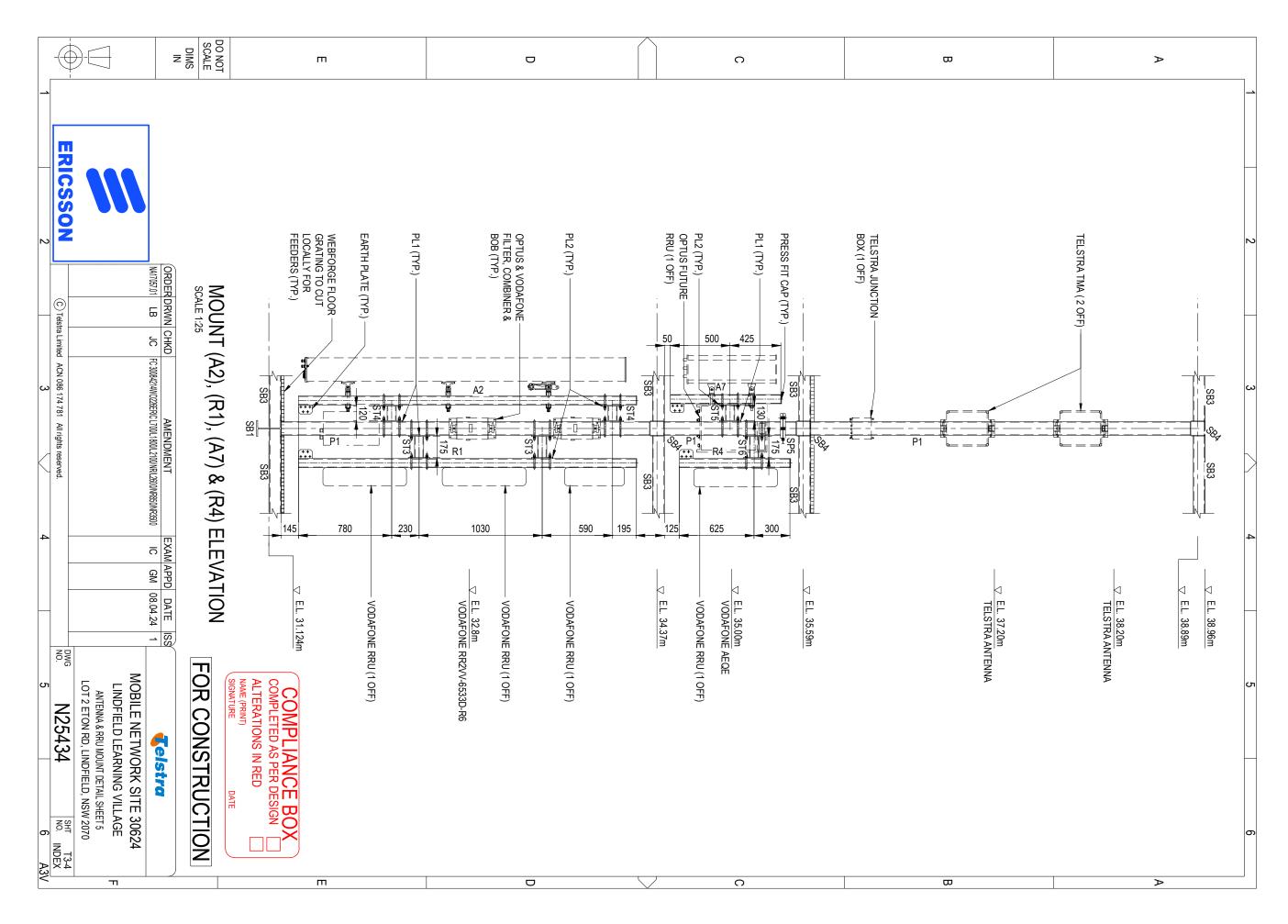




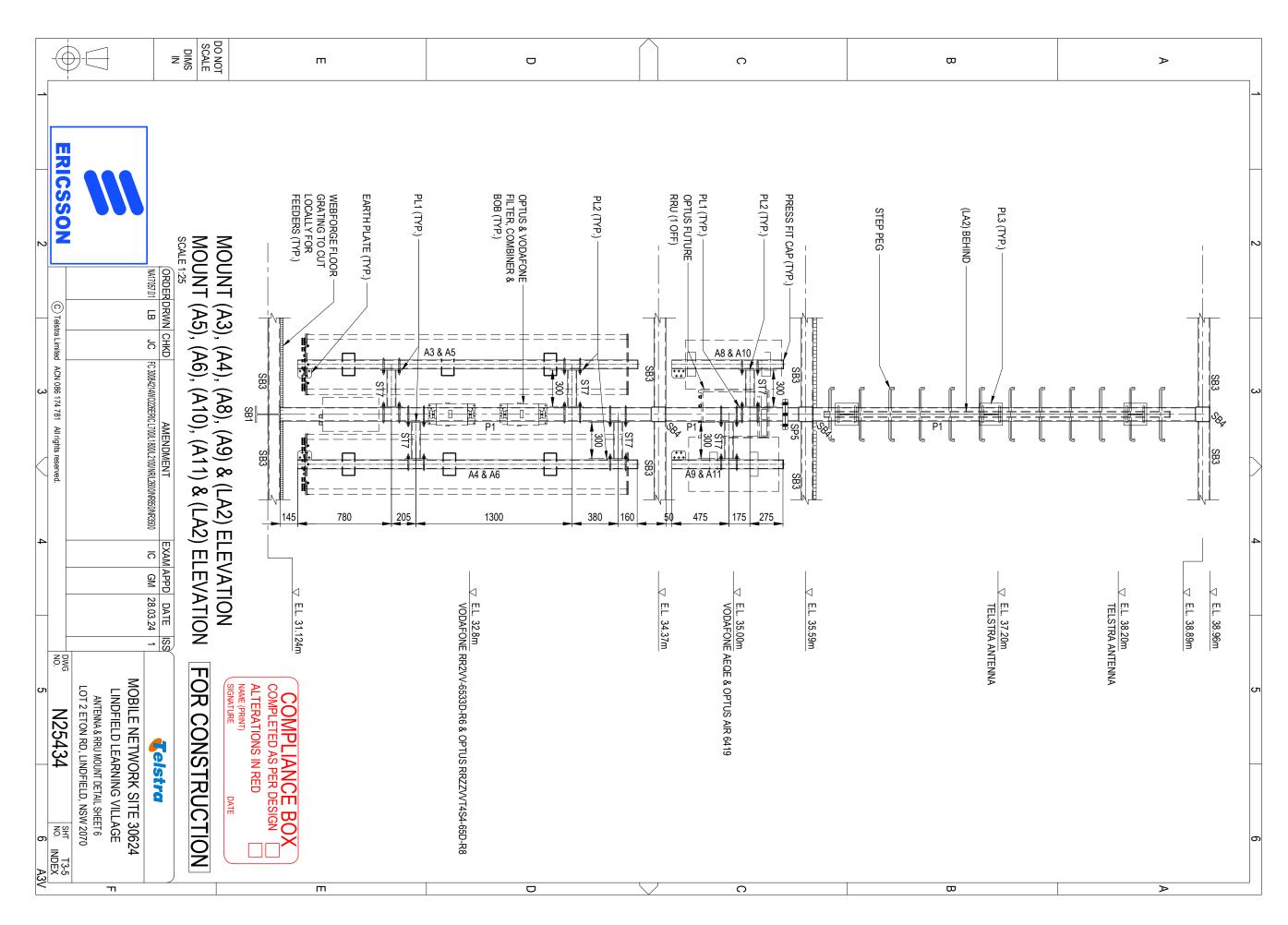
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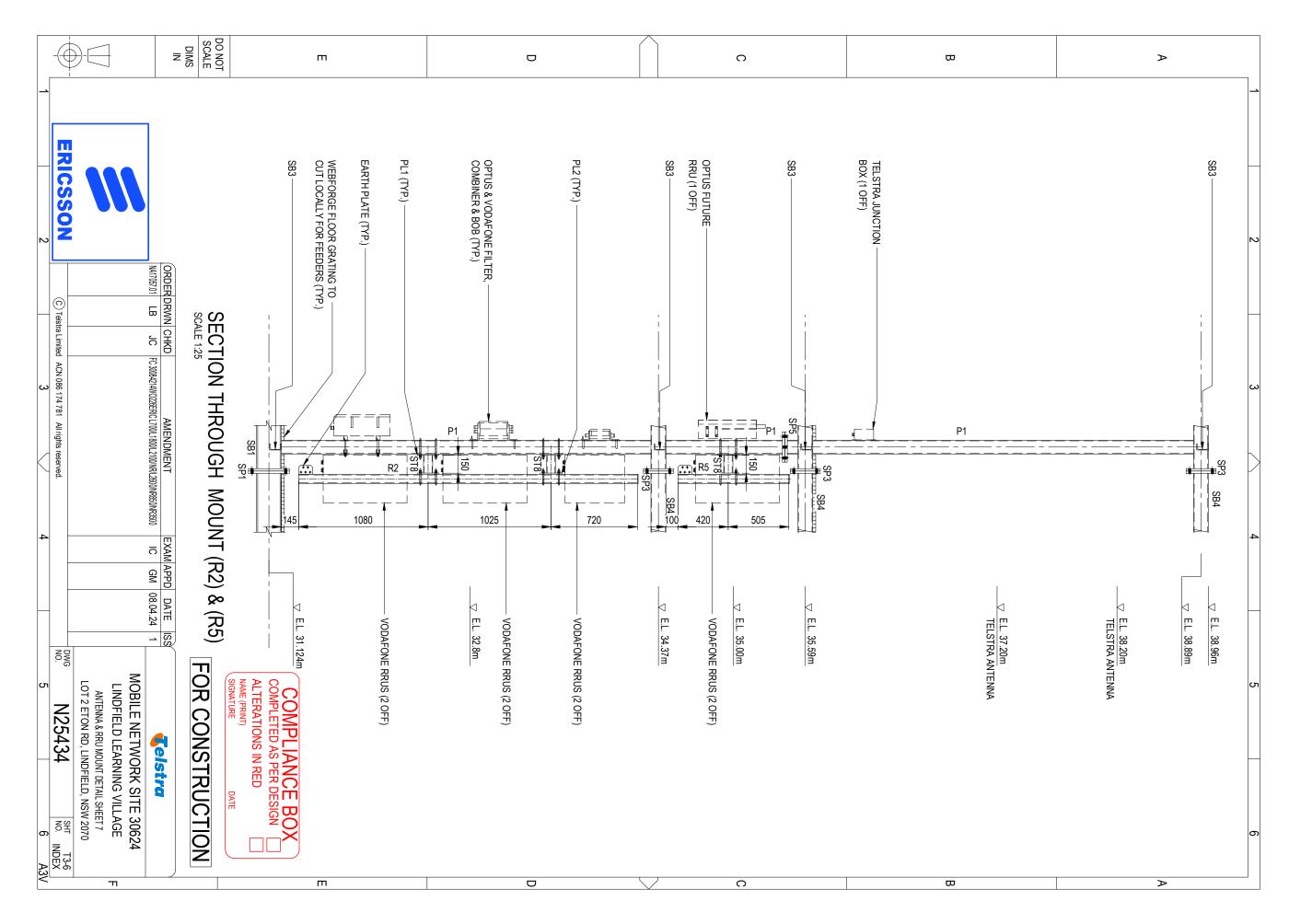




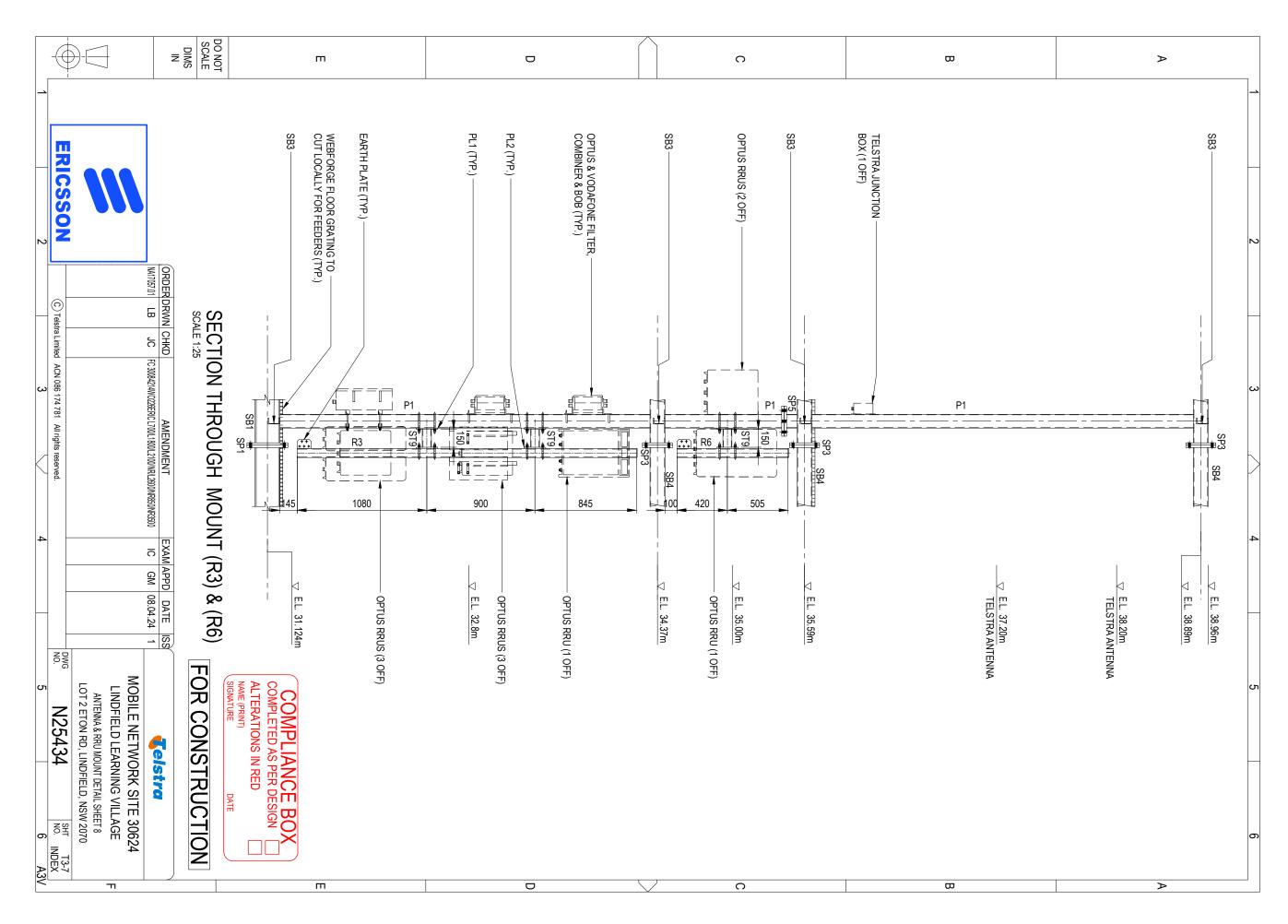
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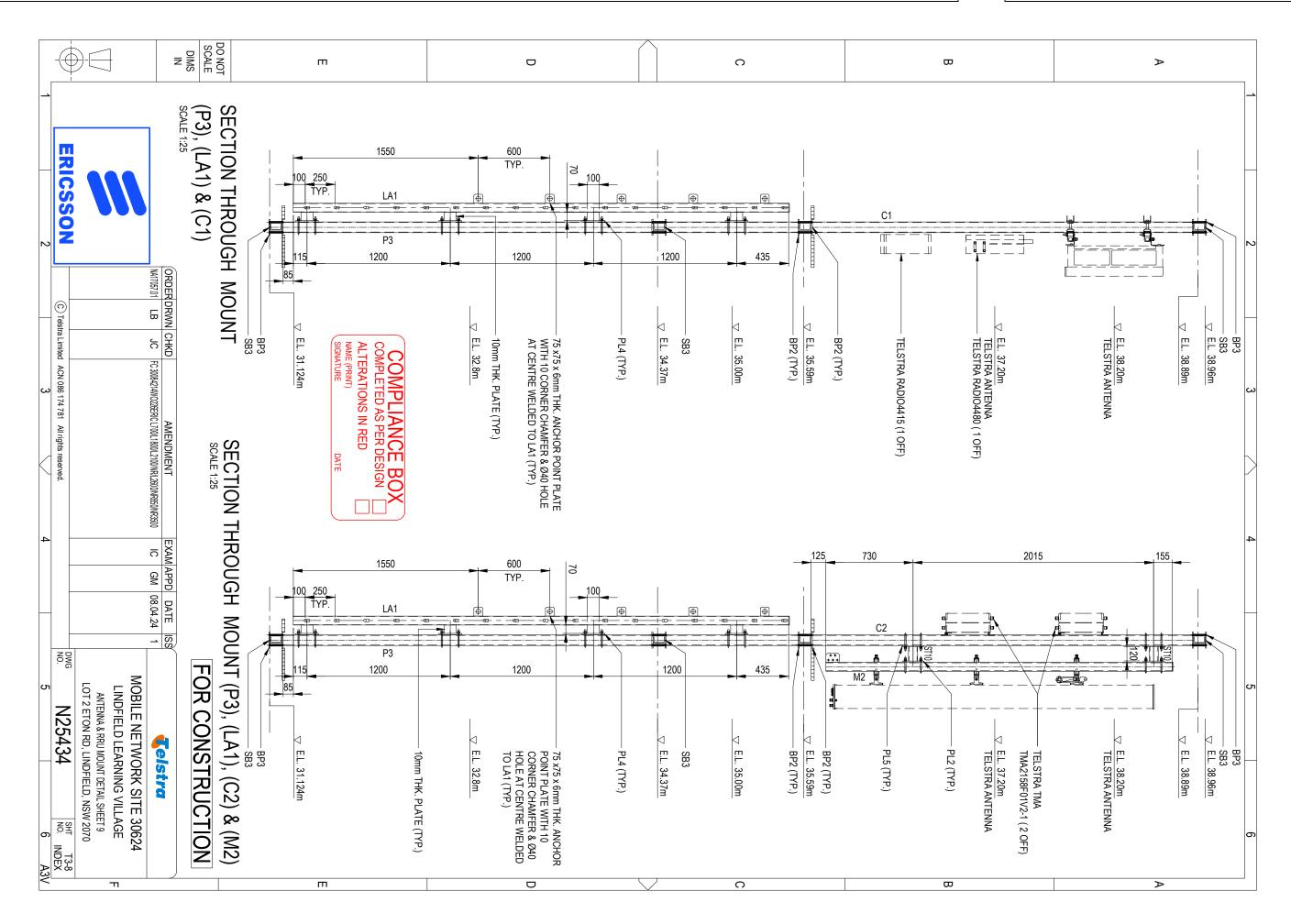


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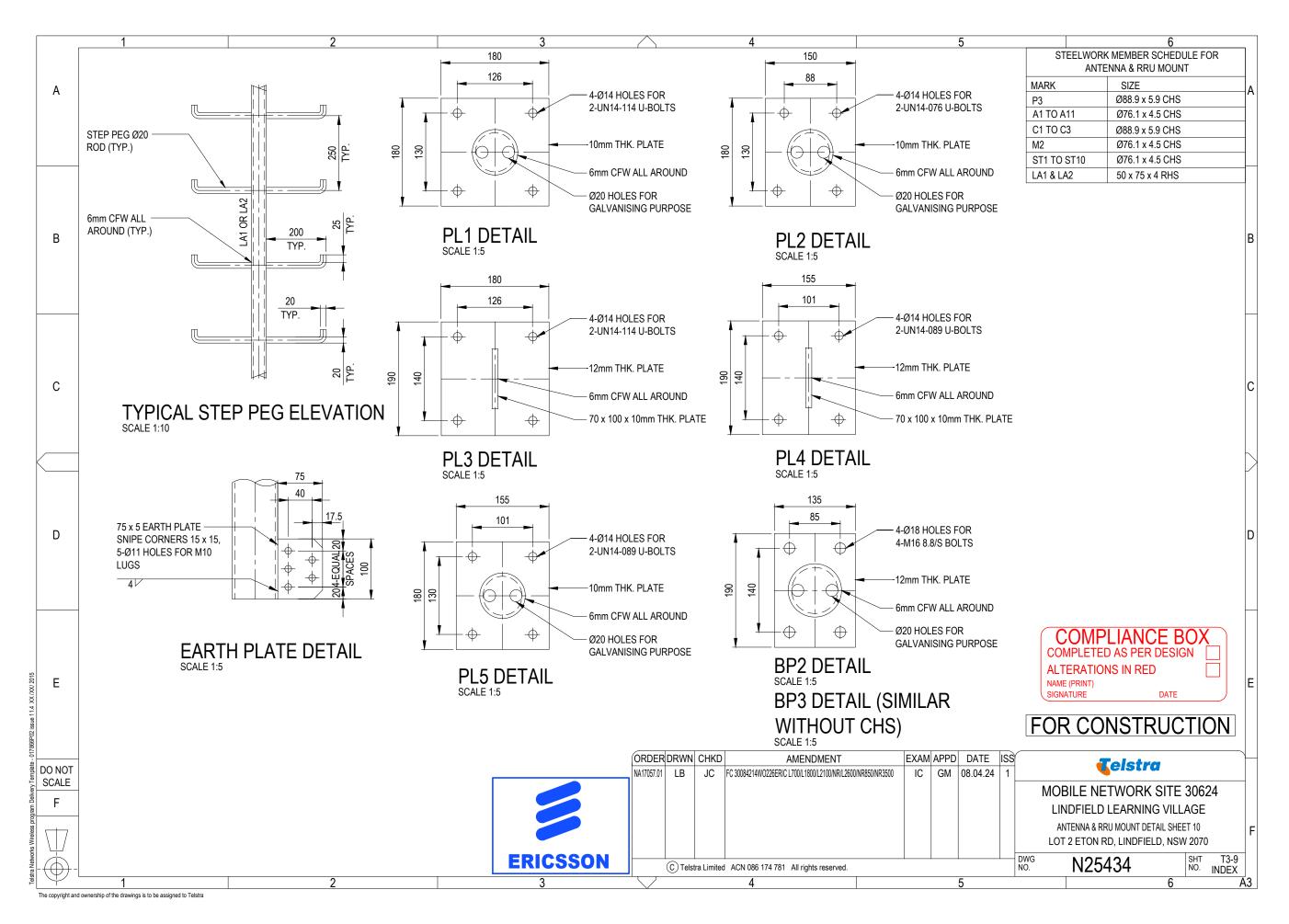
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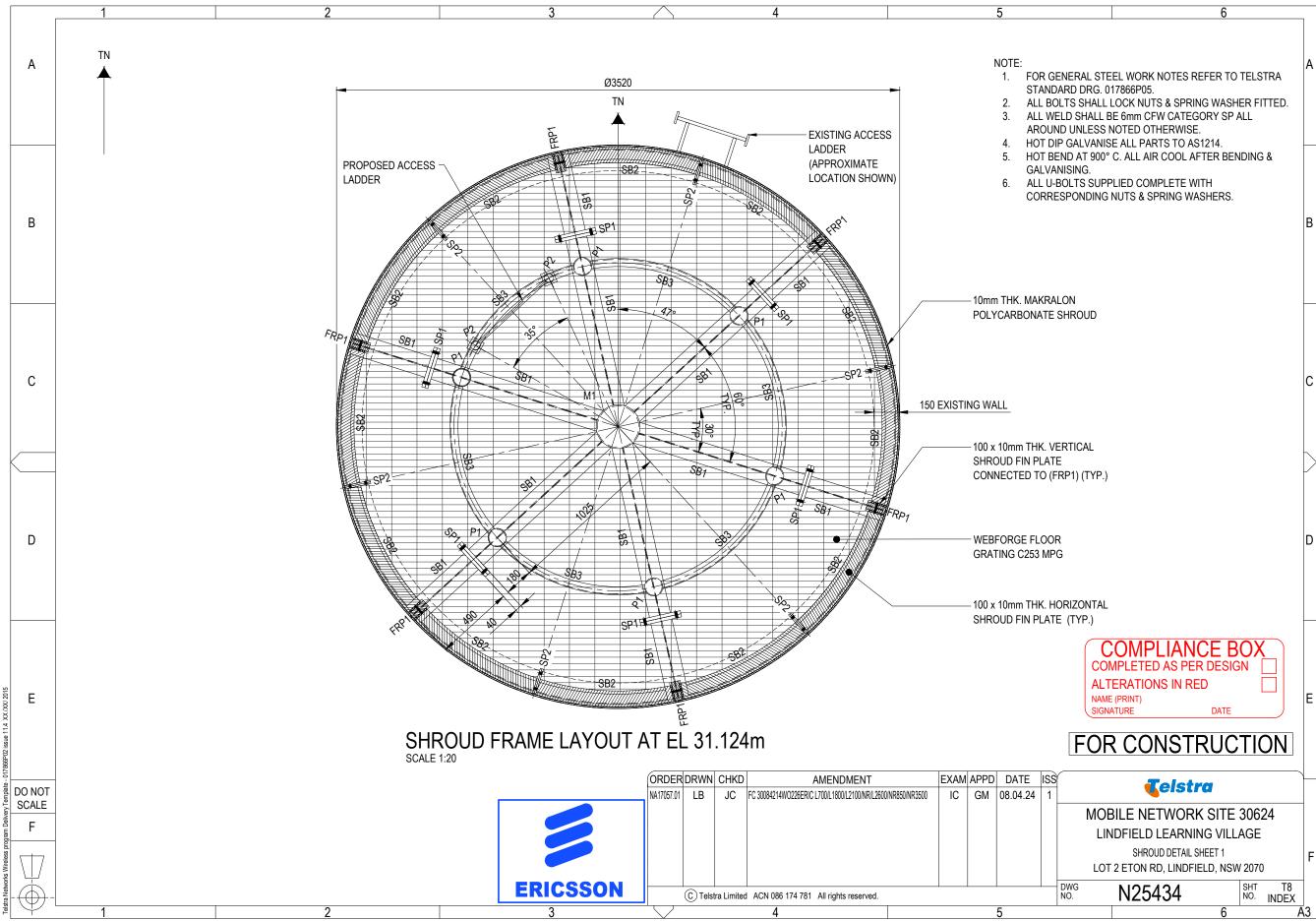
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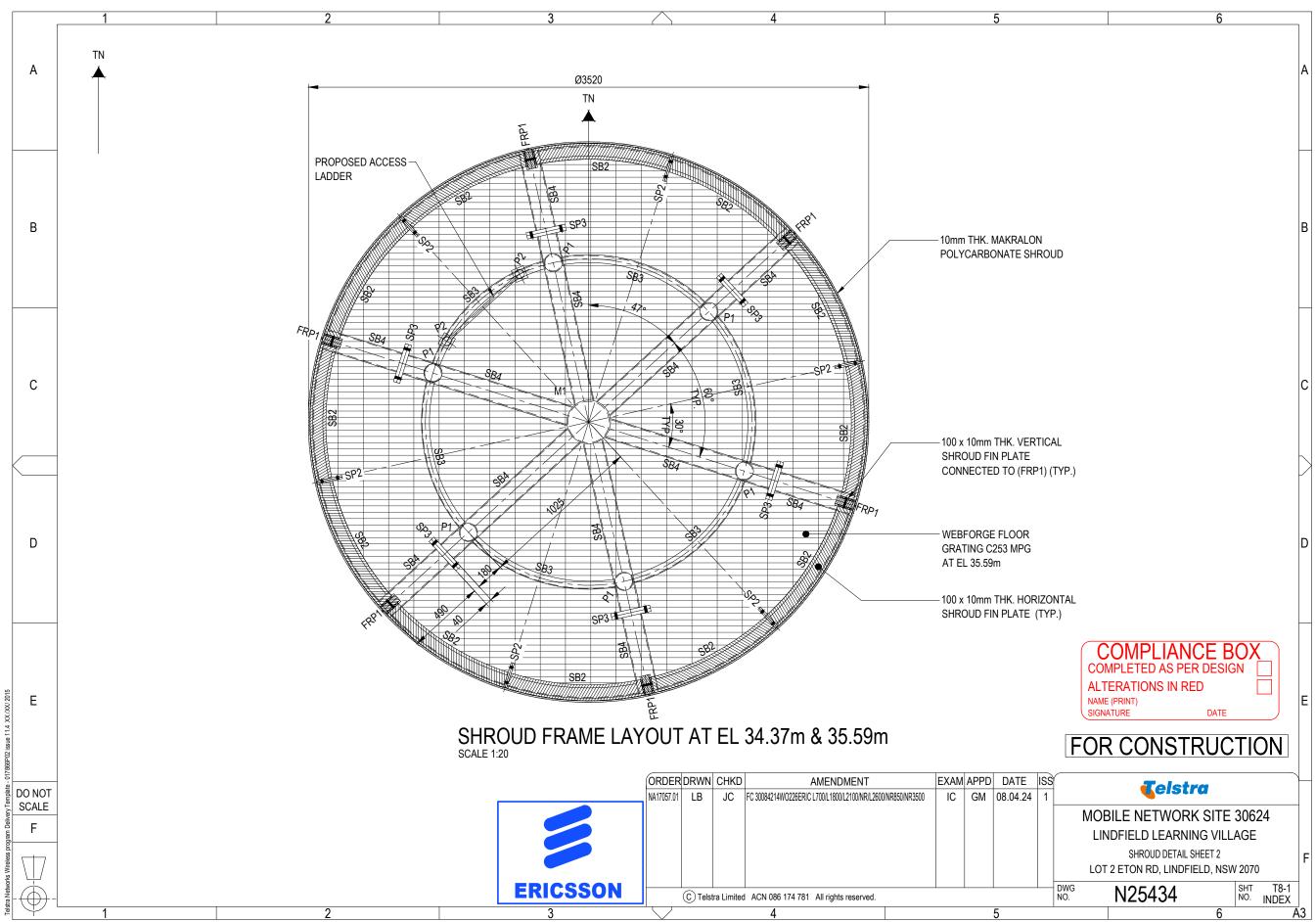


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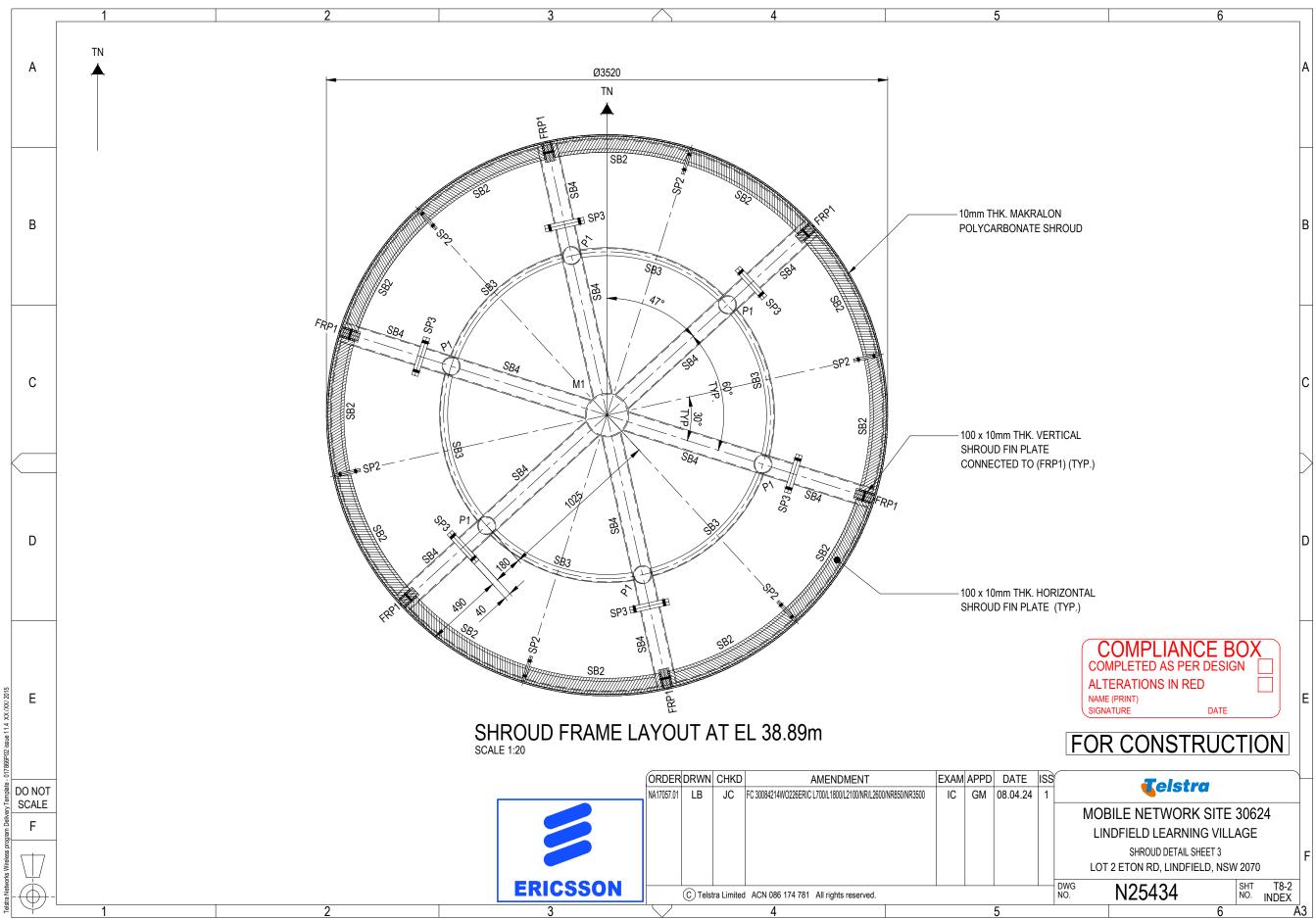


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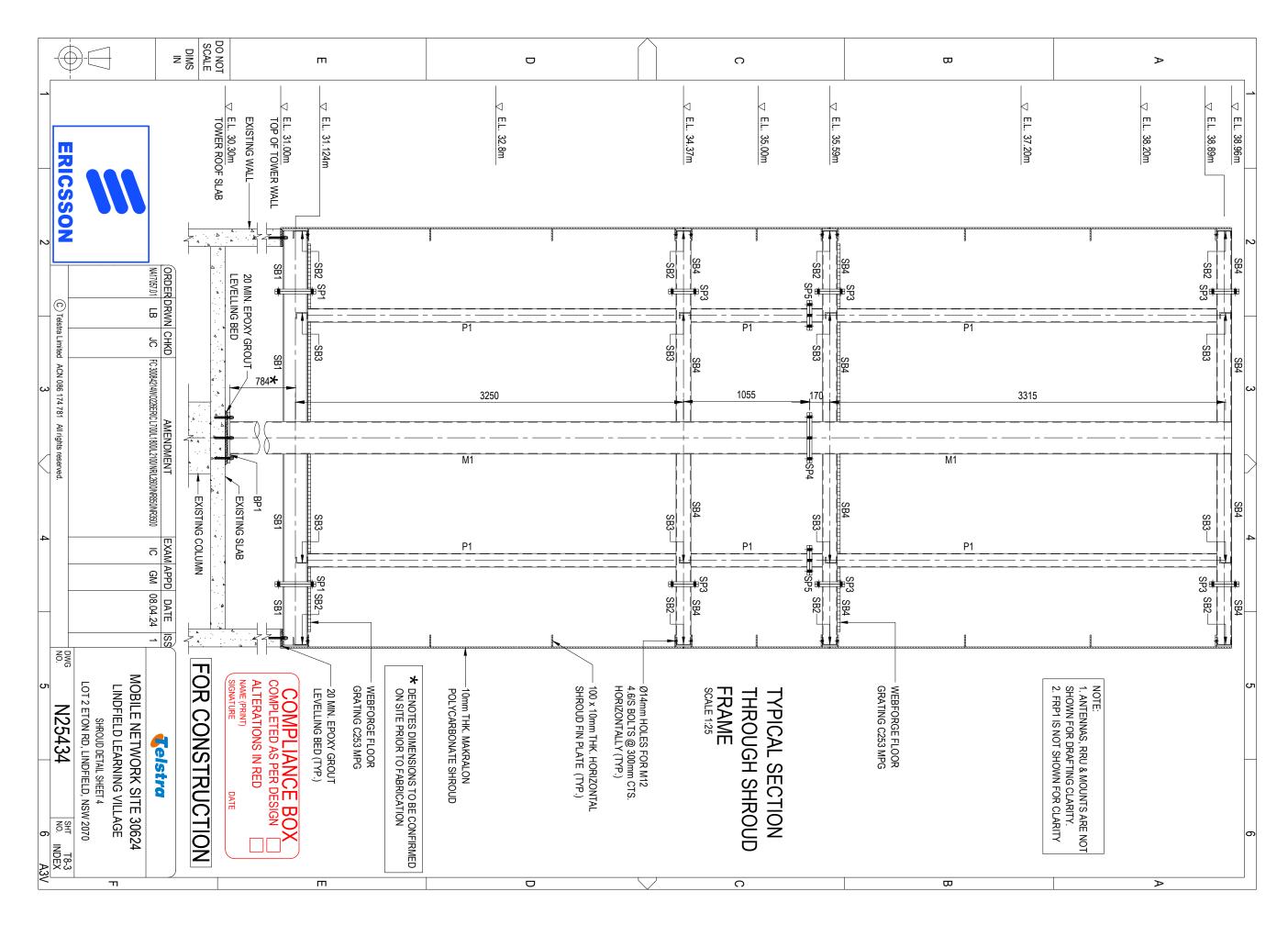


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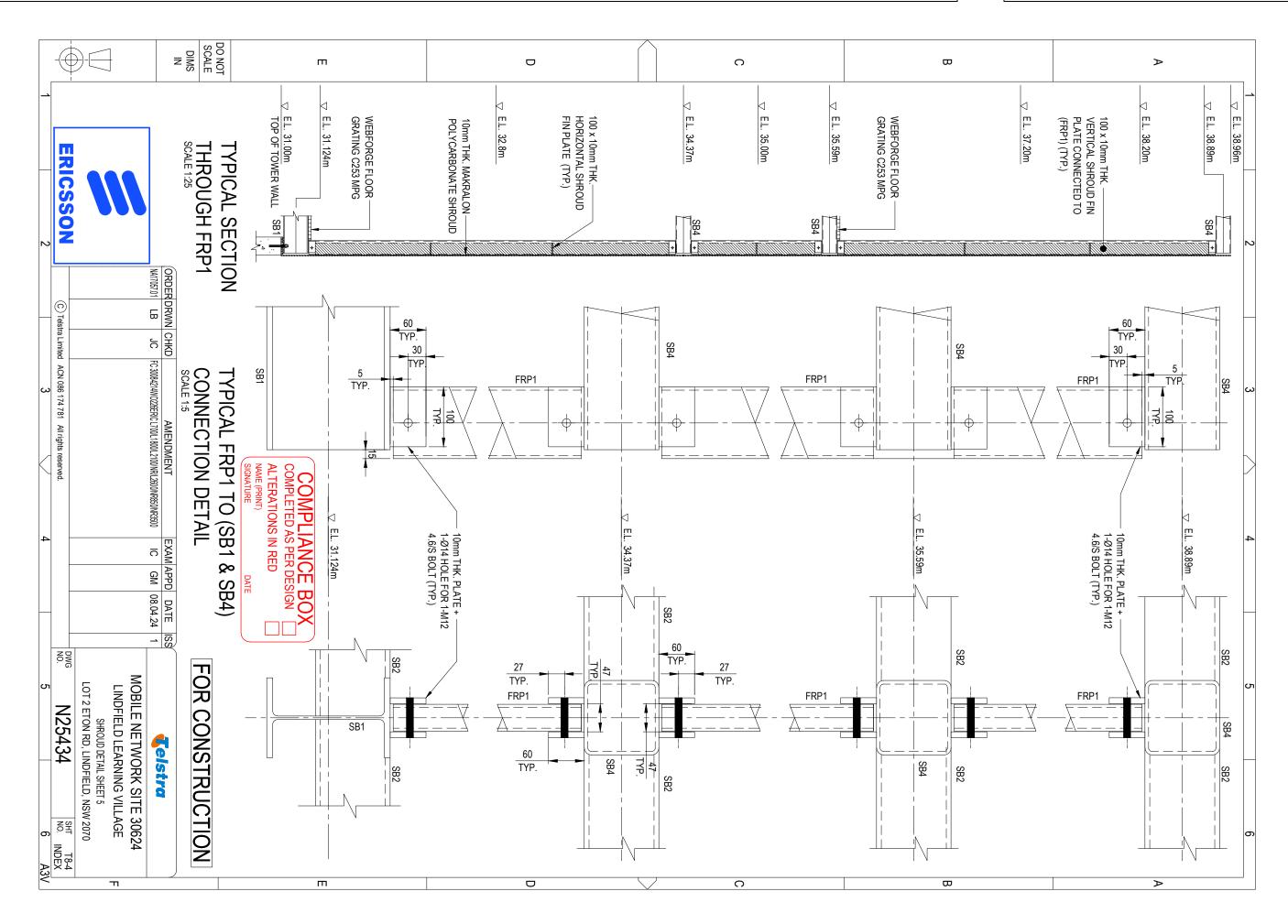
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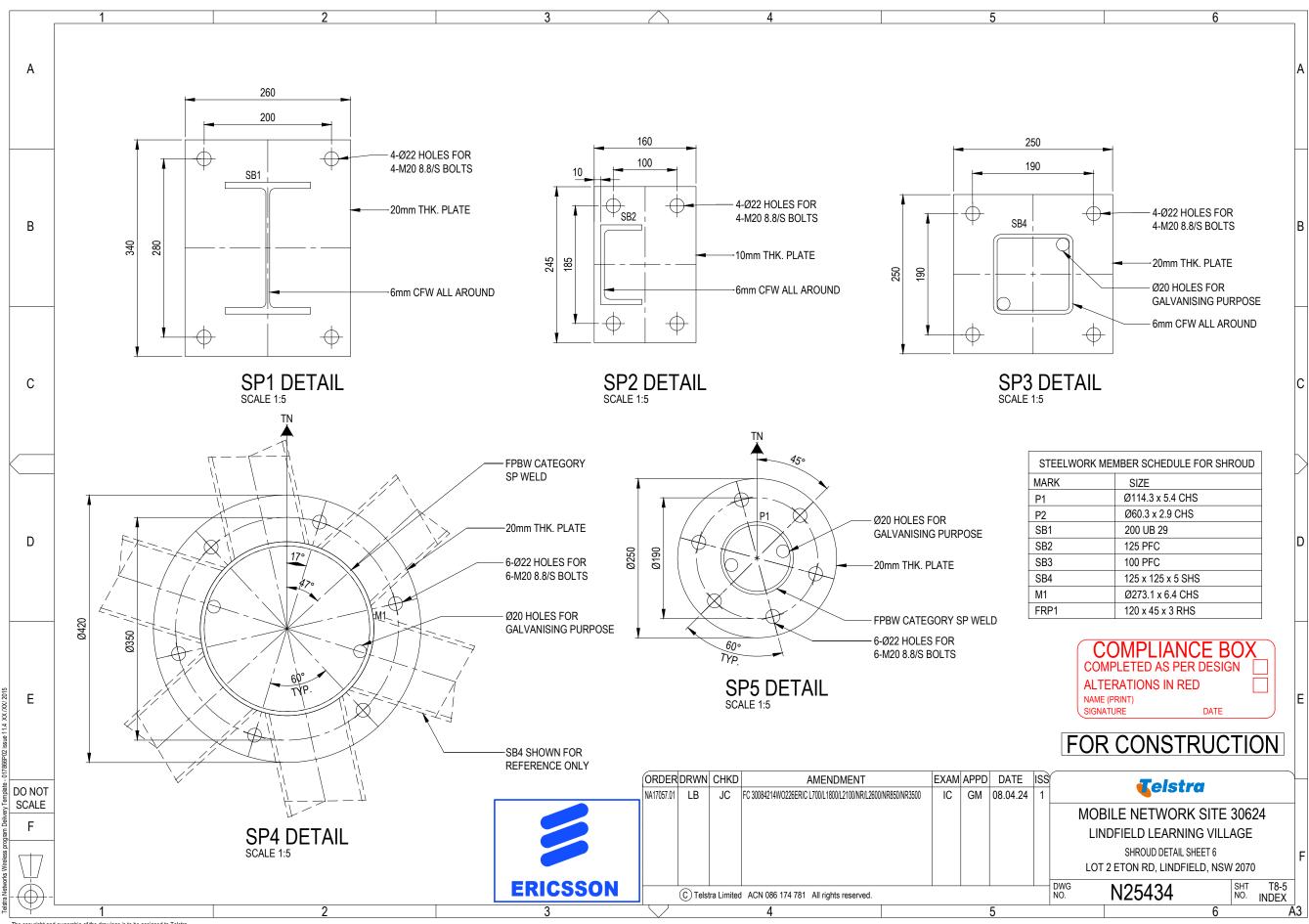


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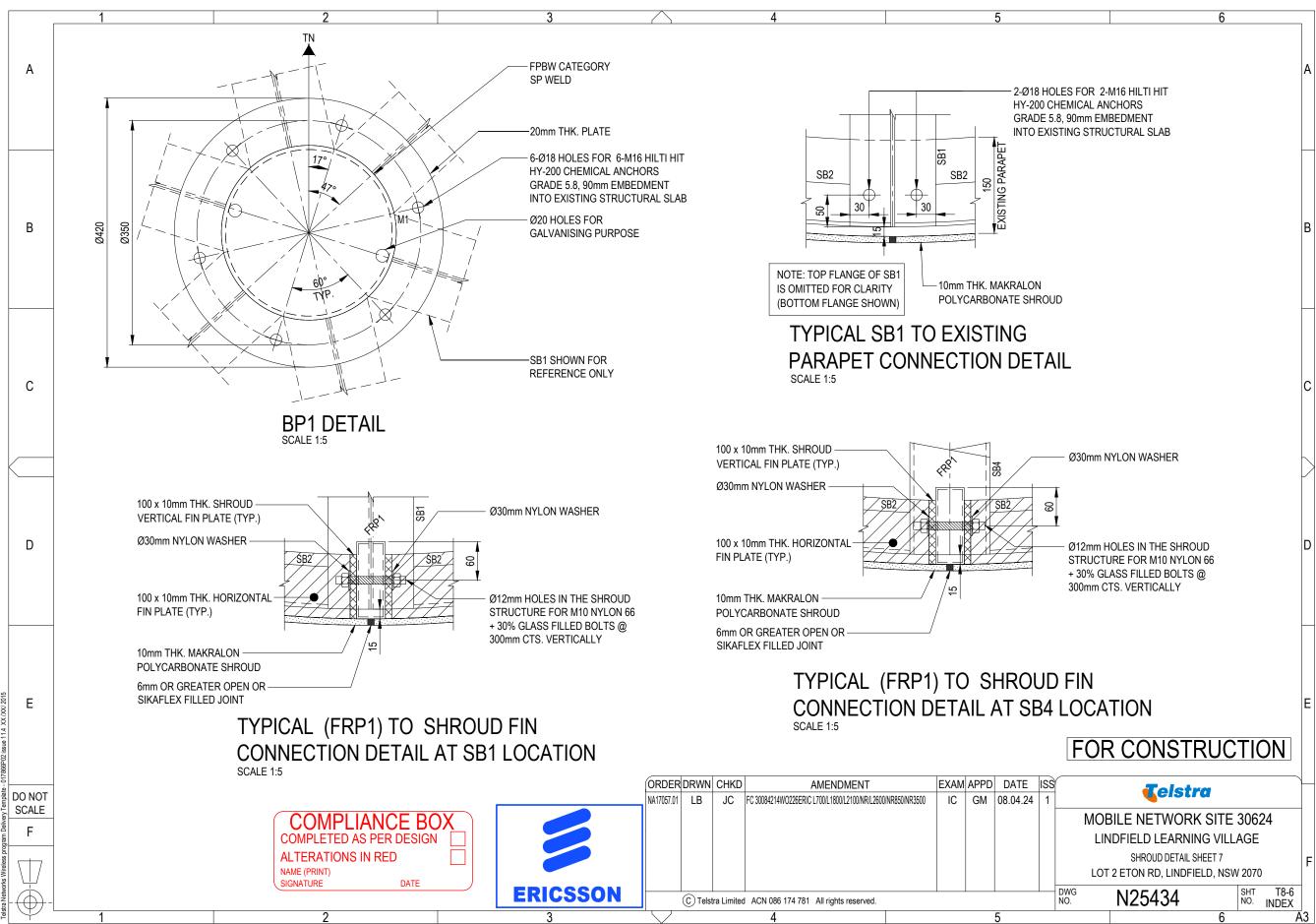


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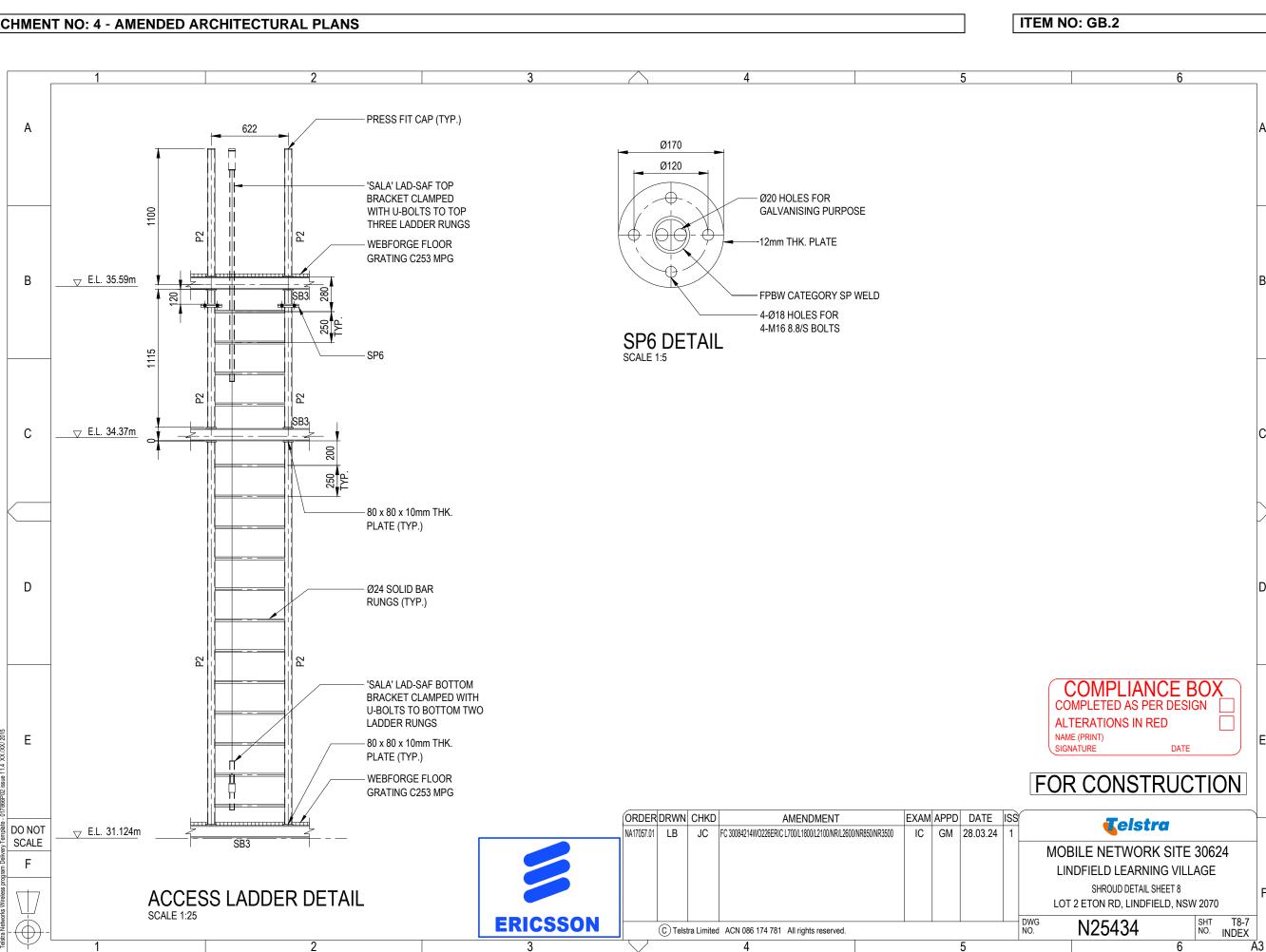




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Enviror			
Location	100 ETON RD, LINDFIELD NSW		
Date	30/04/2024	RFNSA No.	2070002

How does this report work?

This report provides a summary of levels of radiofrequency (RF) electromagnetic energy (EME) around the wireless base station at 100 ETON RD, LINDFIELD NSW 2070. These levels have been calculated by Ericsson using methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). A document describing how to interpret this report is available at ARPANSA's website: <u>A Guide to the Environmental Report</u>.

A snapshot of calculated EME levels at this site

The maximum EME level calculated for the existing systems at this site is	The maximum EME level calculated for the proposed changes at this site is 3.04%		
0.83%			
out of 100% of the public exposure limit, 196 m from the location.	out of 100% of the public exposure limit, 177 m from the location.		
Opening Production States	EME levels with the proposed changes		
	Distance from the site	Percentage of the public exposure limit	
	0-50 m	1.56%	
Alternation (50-100 m	2.44%	
	100-200 m	3.04%	
	200-300 m	2.98%	
	300-400 m	1.64%	
and the second	400-500 m	0.83%	

For additional information please refer to the EME ARPANSA Report annexure for this site which can be found at <u>http://www.rfnsa.com.au/2070002</u>.

Radio systems at the site

This base station currently has equipment for transmitting the services listed under the existing configuration. The proposal would modify the base station to include all the services listed under the proposed configuration.

		Existing	Proposed		
Carrier	Systems Configuration		Systems	Configuration	
Optus	3G, 4G	WCDMA2100, LTE1800, WCDMA900, LTE2100	3G, 4G, 5G	WCDMA900, LTE1800, LTE2300 (proposed), LTE700 (proposed), LTE2600 (proposed), NR/LTE2100, LTE900 (proposed), NR2300 (proposed), NR3500 (proposed)	

Issued by: Ericsson, NAD (v1.0.194395.59072) Environmental EME report (v12.4 Feb 2021)

Produced with RF-Map 2.1 (Build 3.3)

ATTACHMENT NO: 5 - ENVIRONMENTAL EME REPORT

Telstra	3G, 4G	WCDMA850, LTE1800, LTE700	3G, 4G, 5G	WCDMA850, LTE700, NR850 (proposed), LTE1800, LTE2100 (proposed), NR/LTE2600 (proposed), NR3500 (proposed), LTE850 (proposed)
Vodafone	4G	LTE850, LTE1800	5G	NR/LTE700 (proposed), NR/LTE850, NR/LTE1800, NR/LTE2100 (proposed), NR3500 (proposed)

Issued by: Ericsson, NAD (v1.0.194395.59072) Environmental EME report (v12.4 Feb 2021)

Produced with RF-Map 2.1 (Build 3.3)

An in-depth look at calculated EME levels at this site

This table provides calculations of RF EME at different distances from the base station for emissions from existing equipment alone and for emissions from existing equipment and proposed equipment combined. All EME levels are relative to 1.5 m above ground and all distances from the site are in 360° circular bands.

	Existing configuration			Proposed configuration		
Distance from the site	Electric field (V/m)	Power density (mW/m²)	Percentage of the public exposure limit	Electric field (V/m)	Power density (mW/m²)	Percentage of the public exposure limit
0-50m	2.51	16.77	0.19%	7.39	145.04	1.56%
50-100m	2.70	19.35	0.23%	9.32	230.32	2.44%
100-200m	4.69	58.35	0.83%	9.16	222.78	3.04%
200-300m	4.64	57.06	0.80%	9.05	217.42	2.98%
300-400m	3.40	30.73	0.42%	6.81	123.02	1.64%
400-500m	2.54	17.14	0.23%	4.85	62.51	0.83%

Calculated EME levels at other areas of interest

This table contains calculations of the maximum EME levels at selected areas of interest, identified through consultation requirements of the <u>Communications Alliance Ltd Deployment Code C564:2020</u> or other means. Calculations are performed over the indicated height range and include all existing and any proposed radio systems for this site.

Maximum cumulative EME level for the proposed configuration

Location	Height range	Electric field (V/m)	Power density (mW/m²)	Percentage of the public exposure limit
Lindfield Learning Village	0-8 m	8.42	188.20	2.13%
Park	1-3 m	3.38	30.31	0.33%
Residence	0-4 m	4.16	45.91	0.60%

Issued by: Ericsson, NAD (v1.0.194395.59072) Environmental EME report (v12.4 Feb 2021)

Produced with RF-Map 2.1 (Build 3.3)



Department of Planning and Environment

HMS Application ID: 5093

Mr Enis Ruzdic Aurecon Group 73 MILLER ST NORTH SYDNEY NSW 2060 **By email:** enis.ruzdic@aurecongroup.com

Dear Mr Ruzdic

APPLICATION UNDER SECTION 60 OF THE HERITAGE ACT 1977

Lindfield Learning Village (formerly William Balmain Teachers College) State Heritage Register No. 02036

Address:	100 Eton Road, LINDFIELD NSW 2070
Proposal:	Proposed upgrade to an existing tower structure which is part of a heritage listed building. This site contains Telstra and Optus equipment and requires an upgrade on behalf of both carriers.
Section 60 fast track application no:	HMS ID 5093, received 28 November 2023

As delegate of the Heritage Council of NSW (the Heritage Council), I have considered the above fast track application, including those matters identified under section 62 of the Heritage Act 1977. Pursuant to section 63 of the Act, approval is granted subject to the following conditions:

Approved development

1. All work shall comply with the information contained within:

a. Engineering drawings, prepared by Telstra as listed below:

Dwg No	Dwg Title	Date	Rev
Project Na	me: Mobile Network Site 30624 Lindfield UTS		
S1-1	Antenna Layout	26/08/22	5
S1-2	Site Layout	26/08/22	4
S3	South Elevation	26/08/22	7
S3-1	Antenna Configuration Table	26/08/22	4
-	Shroud Layout - Elevation	-	-

4PSQ, 12 Darcy Street, Parramatta NSW, 2150 Locked Bag 5020, Parramatta 2124 (02) 9873 8500

www.environment.nsw.gov.au/topics/heritage

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	[Layout Plan - Base Platform; Upper Platform; Roof Frame]	-	-
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b. Statement of Heritage Impact - Lindfield Learning Village, prepared by Aurecon, dated 21 September 2023.

EXCEPT AS AMENDED by the conditions of this approval:

Former Astronomy Tower

- The significant fabric and penetrations where telecommunications elements are being removed, is to be conserved/made good by specialist tradespersons under supervision of the heritage consultant. Off-board impressions, varied textures, patina and variety of the concrete colour and texture are significant features/finishes which are to be conserved.
- The proposed installation of the concrete shroud addition shall be carried out in such a manner as to minimise damage to or removal of historic fabric and shall not obscure historic features. Any new penetrations through heritage fabric shall be minimised. Where possible, existing service points shall be used.
- 4. Colour and finish of the concrete shroud addition should be neutral in colour and sympathetic to the overall style and design of the main complex.

Reason: To minimise impact on significant fabric and to allow significant fabric and elements to remain visible. To minimise impact upon setting and views.

Signage

5. Utility signage location should be as unobtrusive as possible and installed at the least prominent elevation.

Reason: To minimise impacts upon the setting and views.

Heritage consultant

6. A suitably qualified and experienced heritage consultant must be nominated for this project. The nominated heritage consultant must provide input into the detailed design, provide heritage information to be imparted to all tradespeople during site inductions, and oversee the works to minimise impacts to heritage values. The nominated heritage consultant must be involved in the selection of appropriate tradespersons and must be satisfied that all work has been carried out in accordance with the conditions of this consent.

Reason: So that appropriate heritage advice is provided to support best practice conservation and ensure works are undertaken in accordance with this approval.

Photographic archival recording

7. A photographic archival recording must be prepared prior to the commencement of the works, during the works (after removal of telecommunication equipment and steel strapping), and at the completion of works. This recording should be in accordance with <u>How to prepare archival recordings of heritage</u> items and <u>Photographic recording of heritage items using film or digital capture</u>. The digital copy of the archival record must be provided to Heritage NSW.

Reason: To capture the condition and appearance of the place prior to, during, and after modification of the site which impacts significant fabric.

Specialist tradespersons

 All work to, or affecting, significant fabric shall be carried out by suitably qualified tradespersons with practical experience in conservation and restoration of similar heritage structures, materials and construction methods.

Reason: So that the construction, conservation and repair of significant fabric follows best heritage practice.

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Site protection

- Significant built and landscape elements are to be protected during site preparation and the works from potential damage. Protection systems must ensure significant fabric, including landscape elements, is not damaged or removed.
- 10. Potential vibration impacts created by the proposed works shall be monitored by a structural engineer to ensure that the SHR item is adequately protected from potential damage.
- 11. If damage occurs to the SHR item during the works, works must cease immediately, and remedial action undertaken prior to any further works being undertaken. The Heritage Council of NSW must be notified and additional assessment and approval may be required prior to works continuing based on the extent of remedial works required.

Reason: To ensure significant fabric including vegetation is protected during construction. To ensure the condition of the SHR item is adequately recorded prior to the works. To ensure any damage caused is adequately remediated.

Compliance

12. If requested, the applicant and any nominated heritage consultant may be required to participate in audits of Heritage Council of NSW approvals to confirm compliance with conditions of consent.

Reason: To ensure that the proposed works are completed as approved.

Duration of approval

13. This approval will lapse five years from the date of the consent unless the building works associated with the approval have physically commenced.

Reason: To ensure the timely completion of works.

Advice

Sections 1.1 and 5.5 of the submitted Statement of Heritage Impact refer to consultation with Heritage NSW, however this could not be confirmed following a search of Heritage NSW systems or discussions with Heritage NSW staff.

Section 148 of the Heritage Act 1977 (the Act), allows people authorised by the Minister to enter and inspect, for the purposes of the Act, with respect to buildings, works, relics, moveable objects, places or items that is or contains an item of environmental heritage. Reasonable notice must be given for the inspection.

Unexpected discoveries during works

If during works under this approval, you unexpectedly discover a relic or believe you may have discovered an historical archaeological 'relic', notification is required under s146 of the Heritage Act 1977. If you believe you have unexpectedly discovered an Aboriginal object, notification is required under s89A of the National Parks and Wildlife Act 1974.

In these scenarios work must cease in the affected area(s) and the following notifications are required (a **relic - the Heritage Council of NSW and an Aboriginal object - Heritage NSW)**. Additional assessment and approval may be required under the relevant legislation prior to works continuing in the affected area(s) based on the nature of the discovery.

Right of appeal

If you are dissatisfied with this determination appeal may be made to the Minister under section 70 of the Act.

It should be noted that an approval under the Act is additional to that which may be required from other Local Government and State Government Authorities in order to undertake works.

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Stamped documents

Any stamped documents (e.g. approved plans) for this application are available for the Applicant to download from the Heritage Management System at https://hms.heritage.nsw.gov.au under 'My Completed Applications.'

If you have any questions about this correspondence, please contact Veerle Norbury, Senior Assessments Officer at Heritage NSW on (02) 9873 8500 or <u>heritagemailbox@environment.nsw.gov.au</u>

Yours sincerely

Rochelle Johnston

Rochelle Johnston Senior Manager, Major Projects Heritage NSW Department of Planning and Environment As Delegate of the Heritage Council of NSW 15 December 2023

cc: Ku-Ring-Gai Council, kmc@kmc.nsw.gov.au

4PSQ, 12 Darcy Street, Parramatta NSW, 2150 Locked Bag 5020, Parramatta 2124

(02) 9873 8500

www.environment.nsw.gov.au/topics/heritage

4

PLANNING PROPOSAL FOR 77 KULGOA ROAD PYMBLE

EXECUTIVE SUMMARY

PURPOSE OF REPORT:	To refer the Planning Proposal for 77 Kulgoa Road, Pymble to the KLPP for advice as required by the Local Planning Panels Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the <i>Environmental Planning and Assessment Act 1979.</i>
BACKGROUND:	A formal pre-lodgement meeting was held on 1 August 2022.The Planning Proposal was submitted on 6 February 2024. The Planning Proposal was incomplete. Following the submission of revised documentation, the assessment of the Planning Proposal commenced on 19 September 2024.
COMMENTS:	The Planning Proposal seeks to:
	 Rezone the site from C4 Environmental Living to R2 Low Density Residential;
	 amend Minimum Lot Size from 1500sqm to 930sqm; and
	• amend Floor Space Ratio from 0.2:1 to 0.3:1.
RECOMMENDATION: (Refer to the full Recommendation at the end of this report)	That the KLPP advise Council that the Planning Proposal should proceed to Gateway Determination, subject to amendments.

PURPOSE OF REPORT

To refer the Planning Proposal for 77 Kulgoa Road, Pymble to the KLPP for advice as required by the Local Planning Panels Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the *Environmental Planning and Assessment Act 1979.*

BACKGROUND

Site Description and Local Context

The site that is the subject of this Planning Proposal is 77 Kulgoa Road, Pymble (Lot 4, DP29244). The site is a battle-axe block, which has a frontage of 4.6m to Kulgoa Road. The access handle is approximately 50m long. The main portion of the site is generally rectangular in shape. The site has a total area of 2555sqm.

The site is currently zoned C4 Environmental Living under KLEP 2015 and contains a part one/part two storey dwelling house with detached garage. The site also contains ancillary structures including a swimming pool adjoining the house and tennis court is located on the eastern portion of the site.

The portion of the site developed with the dwelling, garage and ancillary swimming pool and tennis court is relatively flat. From the eastern boundary of the tennis court the site falls steeply to the north-east.

The perimeter of the site is vegetated with a mixture of native and exotic trees. Remnant Sydney Turpentine Ironbark Forest (Critically Endangered Ecological Community) canopy trees are located along the northern and eastern boundaries of the site. The subject site is mapped as containing Biodiversity on the KLEP 2015 Biodiversity Map and mapped as Support for Core Biodiversity Lands and Biodiversity Corridor and Buffer on the KDCP Greenweb map. The subject site is not mapped as containing bushfire prone land.



Image: Aerial 77 Kulgoa Road, Pymble



KLEP 2015 Biodiversity Mapping Extract



KDCP Greenweb Mapping Support for Core Biodiversity Lands Biodiversity corridors and buffer





Item GB.3

S14501





Adjacent to the northern boundary of the site are two long, narrow pieces of land comprising:

- an easement for water supply, zoned SP2 Infrastructure; and
- the Vista Street Bushland Reserve zoned C2 Environmental Conservation and owned by Ku-ring-gai Council.

The other surrounding sites are all residential, with those sites adjoining the water supply easement and Bushland Reserve being zoned C4 Environmental Living, and all others being zoned R2 Low Density Residential.



Image – Zoning Map Extract 77 Kulgoa Road Pymble and surrounding sites

COMMENTS

The Planning Proposal seeks to amend the Ku-ring-gai Local Environmental Plan 2015 to rezone the site from C4 Environmental Living to R2 Low Density Residential and amend the development standards applying to the site as follows:

KLEP 2015 – Zoning and Develo	pment Standards – 77 Kulgoa Ro	ad, Pymble
	Existing	Proposed
Zoning	C4 Environmental Living	R2 Low Density Residential
Floor Space Ratio	0.2:1 (mapped) 0.24:1 (Clause 4.3(2D)	0.3:1
Minimum Lot Size	1500sqm	930sqm

The intended outcome of the Planning Proposal is to rezone the subject site and reduce the minimum lot size so that the site may be subdivided into two lots of approximately 1168sqm and 1391sqm in size.

The subject site is in the same ownership as the adjoining battleaxe lot, 73 Kulgoa Road which is zoned R2 Low Density Residential

Chronology of Assessment

A pre-lodgement meeting was held on 1 August 2022. The Planning Proposal was submitted on the Planning Portal on 6 February 2024. The Planning Proposal was incomplete. Revised information was submitted on 11 July 2024 and 6 September 2024. Following the payment of fees, the Planning Proposal was formally lodged and assessment commenced on 19 September 2024.

Merit

A Planning Proposal is not a Development Application and does not consider the specific detailed matters for consideration under Section 4.15 of the *Environmental Planning and Assessment Act 1979.* A Planning Proposal only relates to an LEP amendment and cannot be tied to a specific development. The proposed amendments need to be acceptable as an outcome on the site regardless of the subsequent approval or refusal of a future Development Application.

A Planning Proposal must demonstrate the site specific and strategic merit of the proposed amendments.

The Planning Proposal and Appendices are included at Attachments A2-A8.

The following is an assessment of the relevant merits of the Planning Proposal:

Site Specific Merit Assessment

Zoning

The Planning Proposal seeks to rezone the site from C4 Environmental Living to R2 Low Density Residential. The C4 Environmental Living zone is a residential zone which provides for low impact

Item GB.3

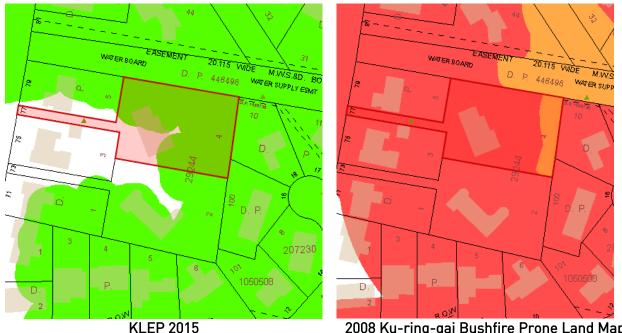
residential development in areas with special ecological, scientific or aesthetic values. The main permitted land use for both the C4 Environmental Living zone and the R2 Low Density Residential zone is 'dwelling houses', with both zones also permitting secondary dwellings.

In considering the Planning Proposal, the reason for the C4 Environmental Living zoning applying to 77 Kulgoa has been investigated, particularly given the similarity with the neighbouring battle axe site 73 Kulgoa Road which is zoned R2 Low Density Residential.

During the preparation of the Ku-ring-gai Local Environmental Plan 2015 the C4 Environmental Living zone was applied to areas '*where a combination of ecological values and risks support greater restrictions on land uses and development*'. At the time that the KLEP 2015 was prepared, the subject site was mapped as containing both biodiversity values relating to the remnant Blue Gum High Forest / Sydney Turpentine Ironbark Forest and as being Bushfire Prone Land category 1. As a result of these factors, the site was zoned C4 Environmental Living.

Subsequent to the C4 Environmental Living being put in place in 2015, Council's Bushfire Prone Land Map was updated in 2017. As part of this update, the subject site was not identified as bushfire prone land. The Bushfire Prone Land Map was again updated in 2024, which resulted in further retreat of the bushfire prone land mapping in the surrounding area.

Since 2002 there have been 3 revisions of the *Guide For Bush Fire Prone Land Mapping* (NSW Rural Fire Service). This guideline is the basis for defining what land parcels are defined as being termed '*bush fire prone land*'. The differences in the classification of the three categories of Bush Fire Prone Land (and their associated buffers) and the spatial delineation of the landscape in terms of bush fire hazard is due to the refinement of the guidelines since 2002, particularly as to what spatial arrangements of vegetation constitute a real hazard in terms of fire behaviour and potential impact.



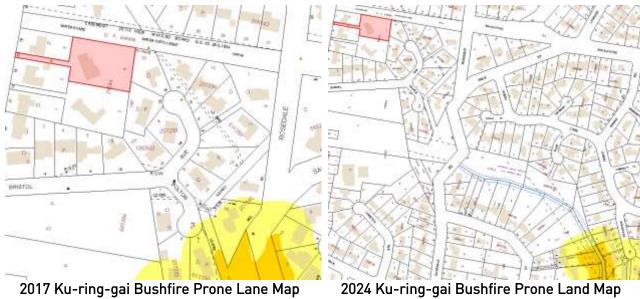
Biodiversity Map

2008 Ku-ring-gai Bushfire Prone Land Map Category 1 BFPL shown in orange

Item GB.3

The latest version of the guideline gives details of how vegetation (hazard) is assessed in terms of being/not being an area of Bush Fire Prone Land. The vegetation exclusion '*rules*' have assisted in refining the mapping – in terms of actual hazard.

In the case of 77 Kulgoa Road, Pymble the bushland tracts of Dalyrmple-Hay Nature Reserve (to the north) and High Ridge Creek Reserve (to the southeast) are the nearest defined Category 1 and 2 hazard areas and with the latest exclusion guidelines, smaller vegetation remnants and narrow corridors are now not included as Bush Fire Prone Land.



77 Kulgoa Road Pymble is no longer identified with any bushfire prone land mapping

024 Ku-ring-gai Bushfire Prone Land Map Further retreat of bushfire prone land mapping from area surrounding site.

Given the current mapping attributes on the site and the lack of a '*combination*' of environmental values and risks, it is reasonable to consider the proposed R2 Low Density Residential zone appropriate, consistent with the zoning of the adjoining battle axe site 73 Kulgoa Road Pymble.

Low and Mid-Rise Housing Policy – Dual Occupancy

On 1 July 2024 Stage 1 of the Low and Mid-Rise Housing (LMR) SEPP commenced which:

- Permitted dual occupancies and semi-detached dwellings on all R2 Low Density Residential zoned land via a development application; and
- Switched off the Complying Development pathway under the Codes SEPP until 1 July 2025 to allow Councils to consider an evidence based minimum lot size for their local government area. Failure to nominate a minimum lot size will result in the automatic application of a 400sqm minimum lot size as per

As the Planning Proposal is seeking to rezone the site to R2 Low Density Residential, it must now be assumed that development for dual occupancy is a permissible land use within the proposed zone.

Item GB.3

The Complying Development pathway for dual occupancy under the Codes SEPP does not apply to battle axe lots, so any development for dual occupancy would have to be through a Development Application pathway.

Council is currently in the process of seeking feedback from the community and the Department of Planning, Housing and Infrastructure on potential options for a minimum lot size for dual occupancy development. Based on the options the minimum lot size for dual occupancy on the subject site could be between 1015sqm – 1075sqm.

Minimum Lot Size

The Planning Proposal seeks to amend the minimum subdivision lot size development standard applying to the site from 1500sqm to 930sqm. This would enable the potential subdivision of the site into two (x2) lots. The proposed 930sqm minimum lot size is consistent with the minimum lot size applying to the adjoining R2 Low Density Residential zoned sites and is considered appropriate.

Floor Space Ratio

The Planning Proposal seeks to amend the mapped Floor Space Ratio Development Standard applying to the site from 0.2:1 to 0.3:1.

Despite the mapped 0.2:1, Clause 4.4(2D) provides a slide scale calculation for land zoned C4 Environmental Living which overrides the mapped FSR. As the site is over 1,500sqm the calculation is ((250 + (0.15 x site area))/site area :1, which equates to maximum FSR of 0.24:1 currently applying to the site.

The proposed mapped Floor Space Ratio Development Standard of 0.3:1 is consistent with the Floor Space Ratio development standard that applies to the adjoining R2 Low Density Residential sites and is considered appropriate. Also noting, that despite the mapped Floor Space Ratio Clause 4.4 (2A) will apply to land zoned R2 Low Density Residential. This clause provides a sliding scale based on lot size.

More than 1,700 square metres	0.3:1
More than 1,000 square metres but not more than 1,700 square metres	((170 + (0.2 × site area)) / site area):1
More than 800 square metres but not more than 1,000 square metres	((120 + (0.25 × site area)) / site area):1
800 square metres or less	0.4:1

Biodiversity

The subject site is mapped on the KLEP 2015 Biodiversity Map due to vegetation on the site being identified as Blue Gum High Forest / Sydney Turpentine Ironbark Forest, (Critically Endangered Ecological Community), and mapped as Support for Core Biodiversity Lands and Biodiversity Corridor and Buffer on the KDCP Greenweb map.

The Planning Proposal does not seek to amend the current biodiversity mapping. Accordingly, the KLEP 2015 Biodiversity mapping and Clause 6.3, KDCP Greenweb mapping and controls, and CEEC protections will still continue to apply to any proposed R2 Low Density Residential development on the site. These protections should be manageable as the main biodiversity assets are located towards the boundaries of the subject site.

Strategic Merit Assessment

Greater Sydney Region Plan and North District Plan

The Planning Proposal is consistent with the objectives of the *Greater Sydney Region Plan – A Metropolis of Three Cities*, in particular:

- Objective 10. Greater housing supply
- Objective 11. Housing is more diverse and affordable
- Objective 27. Biodiversity is protected, urban bushland and remnant vegetation is enhanced

The Planning Proposal is consistent with the planning priorities of the North District Plan, in particular:

- Planning Priority N5. Providing housing supply, choice and affordability, with access to jobs, services and public transport
- Planning Priority N16. Protecting and enhancing bushland and biodiversity

Ku-ring-gai Local Strategic Planning Statement

The Planning Proposal is consistent with the following local planning priorities:

- K3. Providing housing close to transport, services and facilities to meet the existing and future requirements of a growing and changing community
- K4. Providing a range of diverse housing to accommodate the changing structure of families and households and enable ageing in place
- K12. Managing change and growth in a way that conserves and enhances Ku-ring-gai's unique visual and landscape character
- K28. Improving the condition of Ku-ring-gai's bushland and protecting native terrestrial and aquatic flora and fauna and their habitats
- K29. Enhancing the biodiversity values and ecosystem function services of Ku-ring-gai's natural assets
- K31. Increasing, managing and protecting Ku-ring-gai's urban tree canopy

Section 9.1 Ministerial Directions and State Environmental Planning Policies (SEPPs)

The Planning Proposal is not inconsistent with the State Environmental Planning Policies (SEPPs) applicable to the site. Many of these SEPPs contain detailed provisions and controls which would only apply at the Development Application stage.

The Planning Proposal is consistent with the applicable s9.1 Ministerial Direction, specifically those relating to:

• 3.1 Residential Zones

Item GB.3

Amendments required to Planning Proposal

The assessment of the Planning Proposal has found that there are a number of amendments required to the Planning Proposal and supporting studies in order to provide more clarity prior to the public exhibition of the Planning Proposal. The amendments are generally minor editorial in nature or requests for further clarification in supporting studies and are required to ensure the Planning Proposal is in accordance with the *Local Environmental Plan Making Guideline* (August 2023).

The table of amendments is included at **Attachment A1** which details the required amendments to be made to the Planning Proposal if Council is to support it being submitted to the Department of Planning, Housing and Infrastructure and proceed to public exhibition.

INTEGRATED PLANNING AND REPORTING

Community Strategic Plan	Delivery Program	Operational Plan
Long Term Objective	Term Achievement	Task
P2.1 A robust planning framework is in place to deliver quality design outcomes and maintain the identity and character of Ku-ring-gai	P2.1.1 Land use strategies, plans and processes are in place to protect existing character and effectively manage the impact of new development	P2.1.1.2 Continue to review the effectiveness of existing strategies, local environmental plans, development controls plans and processes across all programs

Theme 3: Places, Spaces and Infrastructure

GOVERNANCE MATTERS

The process for the preparation and implementation of Planning Proposals is governed by the provisions contained in the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2021*.

Local Planning Panel's Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the *Environmental Planning and Assessment Act 1979* requires Council to refer all Planning Proposals prepared after 1 June 2018 to the Local Planning Panel for advice, before the Planning Proposal is forwarded to the Minister for a Gateway Determination.

RISK MANAGEMENT

This is a privately initiated Planning Proposal. Council needs to determine its position on the matter as to whether the Planning Proposal should proceed to Gateway Determination.

FINANCIAL CONSIDERATIONS

The Planning Proposal was subject to the relevant application fee under Councils 2024/2025 Schedule of Fees and Charges. The cost of the review and assessment of the Planning Proposal is covered by this fee.

SOCIAL CONSIDERATIONS

The amendments sought by the Planning Proposal would enable the delivery of one additional residential lot with one additional dwelling house to meet existing and future requirements of a growing and changing community.

ENVIRONMENTAL CONSIDERATIONS

Remnant Sydney Turpentine Ironbark Forest (Critically Endangered Ecological Community) canopy trees are located along the northern and eastern boundaries of the site. The subject site is mapped as containing Biodiversity on the KLEP 2015 Biodiversity Map and mapped as Support for Core Biodiversity Lands and Biodiversity Corridor and Buffer on the KDCP Greenweb map.

It is considered that R2 Low Density Residential zoning is appropriate for the site, and any future development will be required to comply with the existing biodiversity protections of the KLEP, KDCP and CEEC. Future low density residential development should be manageable on the site, noting the main biodiversity assets are located towards the boundaries of the site.

COMMUNITY CONSULTATION

The Planning Proposal has not been subject to community consultation. In the event that the Planning Proposal is issued a Gateway Determination by the Department of Planning, Housing and Infrastructure the Planning Proposal would be placed on statutory public exhibition in accordance with the requirements of the Gateway Determination and Council's community participation plan.

INTERNAL CONSULTATION

The assessment of the Planning Proposal has involved consultation and assessment with Council's Natural Areas Team Leader.

SUMMARY

A Planning Proposal has been submitted for 77 Kulgoa Road, Pymble which seeks to make the following amendments to the Ku-ring-gai Local Environmental Plan 2015:

- Rezone from C4 Environmental Living to R2 Low Density Residential;
- amend mapped Floor Space Ratio development standard from 0.2:1 to 0.3:1; and
- amend Minimum Lot Size development standard from 1500sqm to 930sqm.

The Planning Proposal has been assessed and found to have sufficient strategic and site-specific merit to enable it to proceed to Gateway Determination and public exhibition, subject to the amendments outlined in **Attachment A1**.

RECOMMENDATION:

The Ku-ring-gai Local Planning Panel advise Council that:

A. The Planning Proposal, amended as per the Table of Amendments **Attachment A1**, be submitted to the Department of Planning, Housing and Infrastructure for a Gateway Determination.

S14501

Alexandra Plur Urban Planner			Craige Wyse Team Leader Urban Planning	
Antony Fabbro Manager Urba		ritage Planning	Andrew Watson Director Strategy & Environment	
Attachments:	A1 <u>↓</u> A2 <u>↓</u>	Pymble Planning Proposal 77 Kulgoa PP-2024-1994	ning Proposal 77 Kulgoa Road a Road Pymble 21 August 2024 -	2025/006335 2025/006348

- A3 Appendix A Aboricultural Report 77 Kulgoa Road, Pymble 2025/006365 A4. Appendix A - Tree Protection Plan - 77 Kulgoa Road Pymble 2025/008055 Appendix B - Biodiversity Development Assessment Report A5<mark>.]</mark> 2025/006356 (BDAR) - 77 Kulgoa Road, Pymble Appendix C - Urban Design Outcome Study Plan of Subdivision 2025/006351 A6<mark>1</mark> R2 zone - 77 Kulgoa Road, Pymble A7 Appendix D - Concept Stormwater Outcome Study - 77 Kulgoa 2025/006361 Road Pymble Appendix E - Site Photographs 77 Kulgoa Road Pymble 2025/006353 A8<mark>1</mark>
 - A9. Appendix D Pre-Planning Proposal Meeting Minutes 77 2025/006352 Kulgoa Road, Pymble

PLANNING PROPOSAL - 77 Kulgoa Road, Pymble

TABLE OF ASSESSMENT

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Planning Proposal			
PAGE	SECTION	COMMENT	RECOMMENDATION
General			
Throughout document	Throughout document	Remove brackets from around zoning names e.g. R2 (Low Density Residential)	Remove brackets from around zoning names
Throughout document	Throughout document	Include wither a Figure number or Image number for each image/figure in the document. Ensuring numbering is chronological. E.g. Figure 1 – Subject Site Aerial. When referring to images/figures in text, refer to figure number/image number e.g. "as shown by Figure 1"	Include figure numbers for all images
Throughout document	Throughout document	When referring to studies as part of a response, refer to the full title (not abbreviation) and the appendix number.	Refer to full title of studies and include appendix number
Introduction / Executive Summary	Summary		
p.1	Brief overview and background to the Planning Proposal Paragraph 6 & 7	Paragraphs 6 and 7 are repetition of summary already provided in this section. Delete.	Delete
p.1	Brief overview and background to the Planning Proposal Paragraph 11	Delete first sentence "This proposal is a minorresidential lot". Repetition of summary already provided in this section.	Delete
p.2	Land to which the planning proposal applies	 Lot and DP to be included after address. Combine as one bullet point. Listing in two bullet points looks like two sites. 77 Kulgoa Road, Pymble being Lot 4 DP29244 	Amend



PLANNING PROPOSAI	PLANNING PROPOSAL - 77 Kulgoa Road, Pymble		TABLE OF ASSESSMENT 2
p.2	Land to which the planning proposal applies	Image. Add either Figure 1 or Image 1 under image, and refer to "image 1" in text.	Amend
p.2	Land to which the planning proposal applies	Amend last sentence to reference the KLEP 2015 Biodiversity Mapping to provide clarification on what biodiversity mapping is being referred to. <i>This is the canopy tree cover that is mapped as "Biodiversity" on the Terrestrial Biodiversity map under the KLEP 201</i> 5	Amend
p.3 and p.4	Existing Planning Controls	Delete the list of existing planning controls (SEPPs, LEP, DCP). These are not relevant.	Delete
p.4	Proposed Amendments	Delete "proposed amendments" heading and text. This is repetition of Part 2 Explanation of Provisions – which is where the proposed amendments are required to be detailed.	Delete
Part 1 – Objectives or intended outcomes	ended outcomes		
ю. Ō	Intended Outcomes	 Some of the listed intended outcomes are not outcomes but justification or how the proposed changes are to be achieved. These need to be deleted. This section is only a statement of what is planned, not why or how it is to be achieved. Delete the following: Dot point 2 "By realigning the only parcel" Dot point 3 "KLEP Mapping" Dot point 3 "In achieving" Dot point 10 "In providing housing" 	Amend and Delete
Part 2 Explanation of provisions	visions		
p.6	Proposed zoning and mapping amendments	To ensure clear explanation of the amendments sought and remove any justification for amendments which is to be included in Part 3, amend the text as follows:	Amend

PLANNING PROPOSAL	PLANNING PROPOSAL - 77 Kulgoa Road, Pymble		TABLE OF ASSESSMENT	e
		 Amendment 1: Rezone site from C4 Environmental Living to R2 Low Density Residential Amendment 2: Amend Minimum Lot Size Development Standard from 1550sqm to 930sqm Amendment 3: Amend Floor Space Ratio Development Standard from 0.2:1 to 0.3:1 		
9.d	Proposed zoning and mapping amendments	Delete three paragraphs under Amendment dot points – these are unnecessary as this section only needs to clearly explain the changes that are proposed. If there is no amendment to the biodiversity map, then it is unnecessary to state that that it will be unchanged. <i>"All other maps"</i> <i>"Biodiversity mapping"</i>	Delete	
p.6	Existing planning control	Delete 'Existing Planning Controls' from this section – does not answer question that forms part of the Planning Proposal LEP Making Guideline requirements.	Delete	
Part 3 Justification of str	Part 3 Justification of strategic and site-specific merit	erit		
Section A – Need for the planning proposa	planning proposal			
p.7	First paragraph	Delete first paragraph. The text here does not answer a question that forms part of the Planning Proposal LEP Making Guideline requirements.	Delete	
p.7-12	Q1 – Is the planning proposal a result of an endorsed local strategic planning statement (LSPS), strategic study or report?	• The response does not provide an answer to this question. The response needs to be amended to first state that – <i>No, the planning proposal is not the result of an endorsed LSPS, Strategic Study or report.</i> The response can then go on the describe the various studies that have been undertaken to underpin the planning proposal.	Amend	

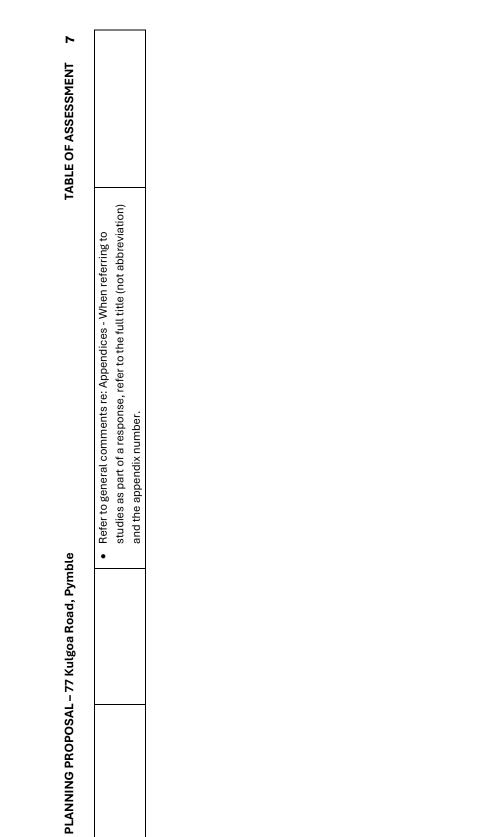
 The d study study Asset Addition Addition Addition Addition addition over the study writte attact be ar tooking the study biodi study study attact be ar tooking biodi study attact be study attact by biodi study study attact be study attact by biodi study attact biodi study attact biodi study study study attact biodi study study attact biodi study study attact biodi study study attact biodi study attact	 The dot points need to be grouped under headings relating to each study e.g. Concept Urban Design Scheme, BDAR, Arboricultural Assessment. Add figure numbers to images. Additional amendments to dot points: Dot point 1 - reference to 'ground truthing' study. The way this is written makes it seem like there is an actual study. If so - it should be attached to the planning proposal. If not - then the wording needs to be amended to 'The proposal is the result of ground truthing the site, looking at' 	
 Addition Addition Dot p writte attac attac be an bot p biodi supp bot p 	dditional amendments to Images. dditional amendments to dot points: Dot point 1 - reference to ' <i>ground truthing' study</i> . The way this is written makes it seem like there is an actual study. If so - it should be attached to the planning proposal. If not - then the wording needs to be amended to ' <i>The proposal is the result of ground truthing the site</i> , <i>looking at</i> '	
 Dot p writte writte writte writte attac be ar looki biodi biodi supp bot p 	Dot point 1 – reference to <i>'ground truthing' study.</i> The way this is written makes it seem like there is an actual study. If so – it should be attached to the planning proposal. If not – then the wording needs to be amended to <i>'The proposal is the result of ground truthing the site, looking at'</i>	
 be ar (look) bot p biodi supp Dot p scen 	be amended to ' <i>The proposal is the result of ground truthing the site</i> , looking at'	
Dotp biodi supp • Dotp scen		
• Dot p	Dot point 2 – 'the documentation provides and assessment of the biodiversity' – replace 'the documentation' with exactly which	
Dot p scen	supporting studies from the appendices.	
	Dot point 3 – reference to future low density residential development scenario. The site has a current low density residential development	
scen	scenario. This needs to be amended to link to the amendments	
soug	sought being such as the reduced minimum lot size which would enable future potential subdivision.	
• Dot p	Dot point 11 (p.8) – reference to VMP. There is not a VMP submitted	
BDAF	as part of planning proposal. Amend to refer to Aboricultural Keport, BDAR or Tree protection plan.	
• ال	Option 2 – response talks about the degree of variation to the Amend	end
proposal the best 1500 means of achieving the Resp	1500sqm minimum lot size and how this would not be supported. Response should also be amended to include reference to Clause	
ended	4.6 (6)(a) which prevents Clause 4.6 variations being used for the	
outcomes, or is there a subd better way?	subdivision of C4 zoned land into 2 lots less than the minimum area.	
Section B – Relationship to the strategic planning framework	nework	

PLANNING PROPOSAL	PLANNING PROPOSAL - 77 Kulgoa Road, Pymble		TABLE OF ASSESSMENT	S
p.16 - 31	Q3 – Will the planning proposal give effect to the objectives and actions of the applicable regional, or district plan or strategy (including any exhibited draft plans or strategies)?	 "As detailed in the strategic review section" – What is the strategic review section? amend to refer to exact question/section of planning proposal. Table GSRP – In consistency column add either Consistent/Inconsistent to each response prior to explanation. 	P	
p.41	Q6 – Is the planning proposal consistent with applicable State Environmental Planning Policies (SEPPs)?	 SEPP 65 Design Quality of Residential Flat Development – repealed an now included in Chapter 4 of Housing SEPP 2021. Move text to within Housing SEPP column. SEPP Building Sustainability 2022 – amend title to SEPP Sustainable Buildings 2022 	þ	
p.46	Q7 – Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?	5.1 Integrating Land Use and Transport and 6.1 Residential Zones – Amend Response includes reference to Transit Orientated Development (TOD) policies and TOD SEPP. This should be removed as the site is not subject to the provisions of the NSW Governments TOD program or TOD SEPP.	Þ	
Section C – Environment	Section C – Environmental, social and economic impact	ipact		
p.49 p.51	Q8 – 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?	 Response needs to be amended to first state whether the site contains any critical habitat, threatened species, populations or ecological communities, or their habitats. The site contains Sydney Turpentine Ironbark Forest Critically Endangered Ecological Community. The response needs to state the likelihood of any adverse impacts arising a result of the proposal on this. 'Council can provide conditions of consent to ensure the further protection (and improvement) of this vegetation via conditions and a VMP which would manage weeds and replenish with suitable 	P	

PLANNING PROPOSAI	PLANNING PROPOSAL - 77 Kulgoa Road, Pymble		TABLE OF ASSESSMENT
		supportive plant species' – note that this a planning proposal and not a development application. Council cannot impose any conditions on future development as part of this process.	
p.54 p.55	Q9 – Are there any other likely environmental effects of the planning proposal and how are they proposed to be managed?	 'The proposal is consistent with zoning objectives and housing policies as detailed in the policy assessment tables in Part 3 of this Planning Proposal' – Amend response to refer to specific Q in planning proposal. Reference to Part 3 is too broad and vague. Diagram on p.54 is too small to read clearly. Enlarge and add Figure/Image number. 	Amend
p.56	Q10 – Has the planning proposal adequately addressed any social and economic effects?	 Second dot point 'Diverse, more affordable' – response includes reference to TOD SEPP. Not relevant to this site. Remove. 	Amend
Part 4 – Mapping			
p.58	Part 4 Mapping	 Amend first sentence – The existing proposed mapping' The existing and proposed mapping 	Amend
Part 5 – Community Consultation	sultation		
p.61	Part 5 Community Consultation	 Reference to DPE / Department of Planning, Housing and the Environment, Biodiversity and Conservation – this has been renamed to Department of Planning, Housing and Infrastructure (DPHI) and Department of Environment and Heritage 	Amend
Appendices			
p.62 Contents	Appendix A	Appendix A contains both the Aboricultural Impact Assessment and the Tree Protection Plan. As these are separate reports, they should	Amend

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be separate Appendices. Update contents page and any references throughout document.



PLANNING PROPOSAL – 77 Kulgoa Road, Pymble	TABLE OF ASSESSMENT	œ
Urban Design Outcome Study – Subdivision Plan		
COMMENT	RECOMMENDATION	
Sufficient.	No change.	

PLANNING PROPOSAL - 77 Kulgoa Road, Pymble

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TABLE OF ASSESSMENT

Biodiversity Development Assessment Report	
COMMENT	RECOMMENDATION
Minor update to the Ecological report prior to exhibition.	Amend
Ecological assessment only considers STIF - not the BGHF as mapped on north of the site. The report should be updated to clarify if BGHF is possible, or a potential transition between BGHF and STIF, with consideration to vegetation on	
neighbouring properties.	

PLANNING PROPOSAL – 77 Kulgoa Road, Pymble

RECOMMENDATION	

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TABLE OF ASSESSMENT

RECOMMENDATION	Amend
COMMENT	The location of the proposed easement needs further detail, or assumed assessment similar to ecological report (3.1). This is through a heavily vegetated area on the site and easement works are not considered in the TPP.

ATTACHMENT NO: 1 - TABLE OF AMENDMENTS - PLANNING PROPOSAL 77 KULGOA ROAD PYMBLE

Tree Protection Plan

PLANNING PROPOSAL - 77 Kulgoa Road, Pymble

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TABLE OF ASSESSMENT

Arboricultural Impact Assessment	
COMMENT	RECOMMENDATION
Arborist report should be updated prior to exhibition.	Amend
The location of the proposed easement needs further detail, or assumed assessment similar to ecological report (3.1). This is through a heavily vegetated area on the site and easement works are not considered in the TPP.	
T61 and T62 are listed for retention, but in the building footprint.	

PLANNING PROPOSAL – 77 Kulgoa Road, Pymble	TABLE OF ASSESSMENT 12
Concept Stormwater Outcome Study	
COMMENT	RECOMMENDATION
Sufficient.	No change.

PLANNING PROPOSAL

Proposal:

Rezone No. 77 Kulgoa Road Pymble from C4 (Environmental Living) to

R2 (Low Density Residential)

Ku-ring-gai Local Environmental Plan ('KLEP') 2015 Amendment

21 August 2024

Prepared by Natalie Richter Planning

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- APPENDIX A Arboricultural Report ('AIA') and Tree Protection Plan ('TPP')
- APPENDIX B Biodiversity Development Assessment Report ('BDAR')
- APPENDIX C Concept Urban Design Outcomes Study
- APPENDIX D Concept Stormwater Outcome Study
- APPENDIX E Site Photographs
- APPENDIX F Pre-Planning Proposal Meeting (Minutes)

EXECUTIVE SUMMARY

Brief overview and background to the Planning Proposal

The Planning Proposal seeks the rezoning of No. 77 Kulgoa Road Pymble from C4 (Environmental Living) to R2 (Low Density Residential).

This change to the zoning of the site would align with the R2 (Residential Low Density) zoning that applies to allotments adjoining the subject site and which also prevails in the surrounding area.

The proposed zoning change, involving 1 x C4 (Environmental Living) site, is modest in scale and results in the existing allotment becoming capable of subdivision into 1 x additional lot only via the proposed change to minimum lot size and density provisions.

The proposal upholds strategic planning objectives in relation to environmental management, minimum lot sizes, housing density and typology as the resultant lot size and future housing yield would match with the directly surrounding area.

The proposal is supportable on site-specific merit as the rezoning would maintain the low density development potential of the site and would be in context in terms of creating consistent size lots.

Rezoning of the site to R2 (low density) would allow the adjustment of relevant density Development Standards (Minimum Lot Size and FSR) to create a 1 into 2 land subdivision and future housing to match the prevailing housing and density character.

This is based on a review of the development potential of the site, a 'ground truthing', of the site and its environment in terms of allowing subdivision at the prevailing density in relation to the environmental capacity of the site and the ability for future development to protect biodiversity.

Qualified and experienced environmental consultants have been engaged to review the ecological and environmental factors associated with the site and surrounds. The findings and recommendations have been assessed to confirm the residential development capacity of the site for R2 (Low Density Residential) purposes.

The land has a history of approved residential development and landscaping, and this means that trees and mapped biodiversity are located around the periphery of the site. Key biodiversity is largely outside the site on the adjoining SP2 zoned Water Supply land and associated bushland.

This renders the land capable of low density residential development that is in line with the prevailing character of the area, and that can readily comply with environmental protection requirements, KLEP Development Standards and Ku-ring-gai Development Control Plan ('KDCP') design provisions. On this basis, the proposed rezoning is appropriate and confirms that the current (C4 Environmental Living) is unnecessary for this site.

This proposal is a minor rezoning request that retains the low density residential development potential of the site and is modest in enabling a future subdivision to create 1 x additional low density residential lot. As the proposed rezoning and likely redevelopment can be achieved without undue impact on environmental attributes of the site and surrounds, the rezoning is supportable both in terms of strategic outcomes but also on merit.

A minor rezoning to adjust the single C4 (Environmental Living) lot to align with the prevailing R2 (Low Density Residential) zoning of the area constitutes an orderly development and although modest in scale, desirably, would enable an additional home at a time when housing supply is so restricted.

A Planning Proposal is the appropriate mechanism to achieve this.

Land to which this Planning Proposal applies

- 77 Kulgoa Road, Pymble NSW 2073
- Lot 4 and DP 29244



Supporting Detail: Subject Site, Aerial view

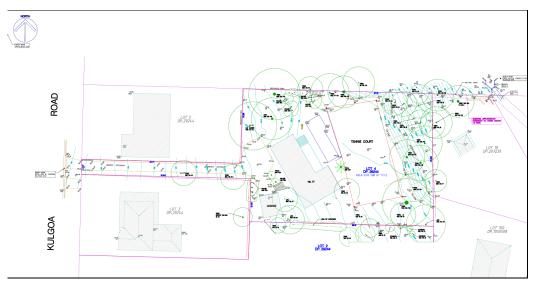
The subject site is legally described as 4 in DP 29244 or No. 77 Kulgoa Road, Pymble and is highlighted in red in the above aerial photograph.

The property is located on the eastern, lower side of Kulgoa Road and runs in an east west direction.

The subject site is a large, spacious, residentially developed, battle axed rectangular shaped lot which has a total area of 2,555m². The site contains a large 2 storey dwelling house with a swimming pool and outdoor area at the rear, garden areas and a tennis court/cleared area at the rear (near the rear boundary).

No. 77 has an exclusive driveway measuring 4.57m width from the Kulgoa Road frontage and with a length of around 51.8m.

The land predominantly has a gentle slope to the north east. The rear and northern boundaries are characterised by tall tree cover. This is the canopy tree cover that falls within the biodiversity" mapping which applies.



Supporting Detail: Site Survey by Hammond Smeallie Surveyors

The site adjoins a water supply reserve directly to the north which has extensive trees and vegetation and is zoned SP2 (Water Supply System).

The sites to the south and opposite along Kulgoa Road are zoned R2 (Residential Low Density). The subject site comprises a single site which is zoned C4 (Environmental Living), at the end of an R2 (Low Density Residential) row along the subject side of Kulgoa Road.

Properties in the area have a low density residential character and are developed with large houses and ancillary structures (pools, tennis courts) set within generous setbacks and a distinctly landscaped setting. With the exception of different zoning, the subject site and surrounding properties are outwardly the same in development, density, spatial separation and landscaped setting.

Lot sizes and shapes vary, with many being smaller than the subject lot (refer to the survey extract above showing lot arrangements).

The general area topography slopes gradually towards the rear boundary of the site. The subject site is adjoined to the rear by land covered by trees in the valley/High Ridge Gully.

The site is conveniently located within walking distance of bus services along Mona Vale Road, Woodlands Avenue.

Pymble Railway Station and shops and the Gordon shopping/commercial area and Gordon train station are within a broader walking distance from the site

The site is also located close to the St Ives Shopping Village which also provides medical, business, community and commercial services.

A range of community facilities, small parks and schools exist in the locality.

Existing Planning Controls

• State policies:

State Environmental Planning Policy ('SEPP') (Biodiversity and Conservation) 2021 State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 State Environmental Planning Policy (Housing) 2021 State Environmental Planning Policy (Industry and Employment) 2021 State Environmental Planning Policy (Planning Systems) 2021

3

State Environmental Planning Policy (Primary Production) 2021 State Environmental Planning Policy (Resilience and Hazards) 2021 State Environmental Planning Policy (Resources and Energy) 2021 State Environmental Planning Policy (Sustainable Buildings) 2022 State Environmental Planning Policy (Transport and Infrastructure) 2021

• Ku-ring-gai Local Environmental Plan ('KLEP') 2015:

- Zoning C4 Environmental Living (and adjoins zone R2 Low Density Residential and SP2 Water Supply System)
- Height of Buildings Standard (KLEP) 9.5m
- Floor Space Ratio Development Standard (KLEP) 0.2:1 (also in reference to Clause 4.4 2D of the KLEP)
- Minimum Lot Size 1500m²
- Not heritage affected
- Not Land Reservation Acquisition affected
- Acid Sulfate Soils Class 5 (not constrained and site is altered)
- Terrestrial Biodiversity/Biodiversity mapped (details in maps below)
- Not bushfire mapped
- Not flood affected
- Not riparian mapped land

• Ku-ring-gai Development Control Plan ('KDCP') 2024:

- Entire KDCP document, objectives and controls relating the environment, amenity and low density residential development.

Proposed Amendments:

- Rezone Lot 4 in DP 29244, No. 77 Kulgoa Road, from C4 (Environmental Living) to R2 (Low Density Residential) to be consistent with the zoning of residential sites to the south and opposite along Kulgoa Road. To reflect the capacity of the land to support an additional housing lot.
- 2. Change KLEP 2015 mapping to adjust the minimum lot size to 930m² to match the surrounding properties and to reflect the capacity of the land for low density housing.
- 3. Change KLEP 2015 mapping to allocate an FSR of 0.3:1 (subject to Clause 4.4 2D of the KLEP) to match the R2 (Low Density Residential) zoning allocation and the capacity of the land to support a minor increase to local low density housing. The proposed zoning and density allowance change would enable the low density outcome to match the prevailing character and density of housing in the area.

Technical Studies Relied On:

This planning submission is accompanied by the attached documents for Council's consideration:

- Biodiversity Development Assessment Report/Feasibility Study ('BDAR') prepared by Fraser Ecological Consulting, Issue G, 10 July 2024.
- Arboriculture Assessment and Proposed Tree Protection Plan ('TPP') prepared by Australis Tree Management, 11 July 2024 (following a tree survey).
- Detail Survey, prepared by Hammond Smeallie and Co. Surveyors, 2 July 2020.
- Indicative subdivision lot layout with trees and the 2 indicative lots plotted. Showing
 potential future proposed subdivision by Hammond Smeallie and Co. Surveyors (Issue D,
 17 January 2023).
- Initial Concept Stormwater Management details (Issue A, July 2024) by ING Consulting Engineers (which takes into account the above documents and is based on the tree and survey plans).

PART 1 – OBJECTIVES AND INTENDED OUTCOMES

Objectives:

To provide additional housing by way of future subdivision potential through the proposed rezoning of 77 Kulgoa Road from C4 (Environmental Living) to R2 (Low Density Residential).

Intended Outcomes:

The intended outcome is:

- To provide reasonable development potential of the land to supply housing opportunities for Ku-ring-gai by enabling a future 2'x lot subdivision potential.
- By realigning the only parcel of C4 (Environmental Living) in this section of Kulgoa Road to
 match the surrounding zoning which provides subdivision development potential with a
 minimum lot size for subdivision of 930m².
- KLEP Mapping is proposed to change to reflect an R2 capacity with a minimum lot size of 930m² and floor space ratio ('FSR') of 0.3:1 and allow a subdivision to reflect the prevailing adjoining pattern.
- To provide a supportive tree, ecological, urban design and stormwater concept study and future subdivision concept to show the development capacity and potential contribution this available site can make to local housing. This is demonstrated to be consistent with the prevailing low density character of the area, to provide spacious lots and to retain peripheral canopy trees.
- To provide for modest, area characteristic, additional housing in a serviced, well-located area to accord with State and local housing objectives.
- To allow the reasonable development of a largely cleared and developed piece of 2,555m² land by adjusting the density standards in a controlled way to release an additional housing block.
- To allow the development of available and altered land which is close to services, community infrastructure and roads.
- To change the development potential of the land to match that of surrounding land along Kulgoa Road and provide an additional, sustainable subdivision/housing opportunity which can also ensure the protection of biodiversity (as demonstrated in the TPP and BDAR documents).
- In achieving this sustainable and appropriate low density housing, to provide an additional lot for low density housing and assist in boosting local housing and to assist in alleviating housing pressure.
- In providing housing in appropriate locations, this has the potential to minimise the impact of residential development on other more sensitive areas.
- To promote the efficient and sustainable use of land, providing housing within accessible and well-located areas to meet all levels of local and State planning objectives via a managed environmental outcome to promote the orderly and economic use of land as required by the objectives of the *Environmental Planning and Assessment Act, 1979.*

PART 2 – EXPLANATION OF PROVISIONS

Proposed Zoning and Mapping Amendments:

This Planning Proposal incorporates amendments to the KLEP 2015 as follows:

• Amendment 1: Rezone 1 x single Lot 4 in DP 29244 (No. 77 Kulgoa Road Pymble) at the end of a row of R2 (Low Density Residential) lots from C4 (Environmental Living) to R2 (Residential Low Density).

• Amendment 2: Change the LEP map to decrease the mapped minimum subdivision lot size of the lot from 1,500m² as currently, to 930m² to reflect the development capacity of the land and in accordance with the R2 (Residential Low Density) zone.

• Amendment 3: adjust the FSR Development Standard provisions to match the R2 Residential Low Density) zoning (mapping change and application of Clause 4.4 of the KLEP).

All other maps would remain the same.

Biodiversity mapping would remain applicable to guide outcomes for future development.

The maximum height map and Development Standard would not change noting that mapped height is consistent with both the R2 (Low Density Residential) and C4 (Environmental Living) zones.

Existing Planning Controls:

• State policies:

State Environmental Planning Policy (Biodiversity and Conservation) 2021 State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 State Environmental Planning Policy (Housing) 2021 State Environmental Planning Policy (Industry and Employment) 2021 State Environmental Planning Policy (Planning Systems) 2021 State Environmental Planning Policy (Primary Production) 2021 State Environmental Planning Policy (Resilience and Hazards) 2021 State Environmental Planning Policy (Resources and Energy) 2021 State Environmental Planning Policy (Sustainable Buildings) 2022 State Environmental Planning Policy (Transport and Infrastructure) 2021 Draft SEPP reforms (Housing SEPP)

• Ku-ring-gai Local Environmental Plan ('KLEP') 2015:

- Zoning C4 Environmental Living (and adjoins zone R2 Low Density Residential and SP2
 Water Supply System)
- Height of Buildings Standard (KLEP) 9.5m
- Floor Space Ratio Development Standard (KLEP) 0.2:1 (also in reference to Clause 4.4 2D of the KLEP)
- Minimum Lot Size 1500m²
- Not heritage affected
- Not Land Reservation Acquisition affected
- Acid Sulfate Soils Class 5 (not constrained and site is altered)
- Terrestrial Biodiversity/Biodiversity mapped (details in maps below)
- Not bushfire, flood or riparian mapped
- Ku-ring-gai Development Control Plan ('KDCP') Amended 25 March 2024:
 - Provisions relating to subdivision, residential development, trees and vegetation, water management and biodiversity management, general controls and objectives.

PART 3 – JUSTIFICATION OF STRATEGIC AND SITE-SPECIFIC MERIT

Justification of strategic and potential site-specific merit, outcomes and the process for their implementation

The following merit assessment against the strategic framework is presented based on the following informing reviews:

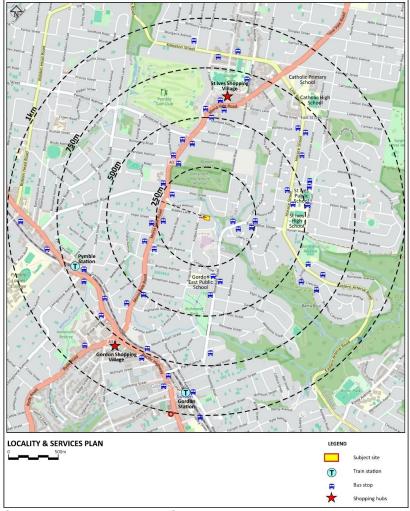
- Site inspection.
- Review of property and mapping information, zoning, constraints and bushfire mapping.
- Pre-Planning Proposal meeting with Council staff (1 August 2022) following preparation of initial tree, lot layout and ecological study with a planning summary.
- Refinement of ecological, survey and arboricultural comments in response to Council Pre-Planning Proposal meeting minutes (attached at Appendix F). Updates following the Pre-Planning Proposal meeting include: a detailed tree study, set outs of potential dwelling footprints within tree protection zones, additional site details/levels and a concept stormwater layout. These documents have been further reviewed by the project ecologist and supportive documents are provided within the appendices.
- Development of an initial drainage and development concept plan to forecast and demonstrate the balance of possible development with environmental protection in the context of planning requirements.
- Detailed review of the proposed zoning according to the strategic planning framework and justification within the Planning Proposal.

A. NEED FOR THE PLANNING PROPOSAL

Q1. Is the planning proposal a result of an endorsed local strategic planning statement ('LSPS'), strategic study or report?

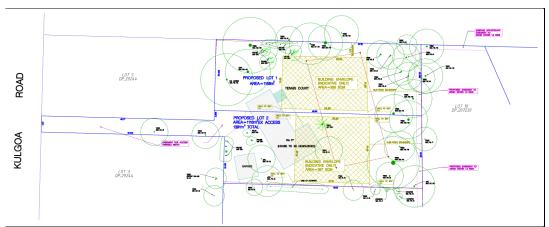
- The Planning Proposal is the result of a 'ground truthing' study of the site which looks at the existing land modification and existing built improvements, relevant LEP and vegetation maps and identifies trees and provides a concept stormwater layout.
- The documentation provides an assessment of the biodiversity on the site and adjoining the site/in close proximity.
- The studied outcome and supporting documents detail that the site is largely altered and trees are at the periphery and can be protected in a future low density residential development scenario. Development of the site could be designed and managed so as not to result in removal or adverse impact on biodiversity as this is largely at the exterior and around the boundaries.
- Subject to a Tree Protection Plan ('TPP') and Vegetation Management Plan ('VMP'), development is demonstrated in the concept Urban design/subdivision plan and TPP to be able occur at the proposed R2 (Low Density Residential) and at the proposed density and lot size whilst also protecting the area character, tree cover and biodiversity.
- Sustainable water management can occur which would protect trees and be sustainable for the surrounding natural environment.
- The proposed zoning of the site to R2 (Low Density Residential) is within the environmental capacity of the site as demonstrated in the attached Urban Design Outcome Study documents.
- The proposed rezoning of the site to R2 (Low Density Residential), to match surrounding residential lots, with appropriate minimum lot size and density provisions would fully align with the character of the area, maintain the desired natural and living environment as well as provide a reasonable and efficient subdivision and housing opportunity.

- Increasing housing supply is a fundamental imperative at Federal, State and local levels. This proposal will enable 1 x additional allotment at the characteristic density pattern. This would then create the subsequent potential for a new home to be built as well as a new home to be redeveloped following an R2 (Low Density Residential) land subdivision.
- The modesty of the rezoning proposal for this site confirms it's suitability environmentally and in terms of local planning strategic objectives, it is highly desirable as it will increase housing supply. This is consistent with current national, State and local housing policies.
- The proposed zoning change is supported by urban development concept plan (subdivision layout) which demonstrates the possible outcomes to accord with planning objectives for Ku-ring-gai, housing and environmental/biodiversity protection.
- The potential lot and housing layout demonstrated in the Urban Design Outcome Study shows that development would be commensurate with the area and allow the protection of the peripheral trees and adjoining biodiversity. A TPP and VMP are provided in the supporting documents to demonstrate that peripheral significant vegetation can be retained and protected with the proposed increased housing density.
- The outcome would align with the surrounding pattern and maintain the liveability of Ku-ring-gai in terms of detached dwellings on large lots within landscaping.
- The outcome would blend with the 'established fabric of the area and the retention of the dominant large lot low density and garden and tree canopy character' in accordance with the Ku-ring-gai Local Strategic Planning Study ('KLSPS') (p 41).
- This allows forward planning to deliver dwellings 'in a way that supports the area's intrinsic character and the growth of sustainable communities though examining opportunities and challenges and provision in, and around, existing centres across the local government areas, including alignment with transport and infrastructure' (p 42 KLSPS).
- The proposal releases a residential lot, in a suitable setting, to meet the character of the area and to provide well-located and accessible housing to services in line with the *Ku-ring-gai Housing Strategy*.
- This accords with the North Plan and KLSPS by 'providing housing close to transport, services and facilities to meet the existing and future requirements of a growing and changing community' (priority H1 of the KLSPS). The proposal would increase housing close to transport and services as is detailed in the following plan extract which shows the bus stops and rail network close to the site. Bus stops are located within close walking distance which deliver people to local shops and railway stations (St Ives, Gordon, Pymble) which connect the area to employment areas via rail and metro services. The site is within longer walking distance to Gordon railway station and Gordon business and commercial centre.



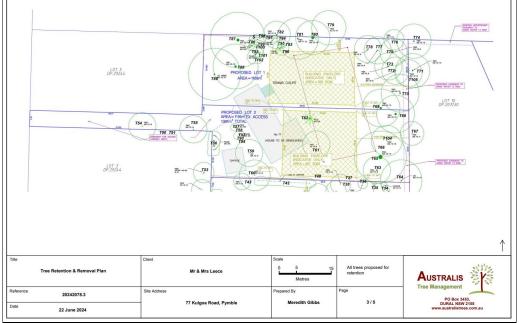
Supportive Map: Transport and Services located within 1k radius of the site

- The additional housing opportunity would contribute to resilient housing by providing housing in areas which are not constrained by risk such as flooding or bushfire and utilising land efficiently to boost housing supply.
- This would provide for efficient use and re-development of residential/urban land which is already altered, serviced and developed and cleared as an existing house with ancillary uses.
- The proposed density and housing outcome is consistent with the LSPS as the proposal can provide housing potential in existing available areas, promoting a compact and well-located residential area without adverse impact to the important environmental elements of Ku-ring-gai.
- The proposal, enabling 1 x singular R2 low density lot addition within the existing residential low density setting would not place additional pressure on open space or other community resources in accordance with LSPS objectives.
- The proposal provides housing close to transport and promotes the strategic objective of the '30 minute city' and access to existing centres and transport (Pymble, St Ives, Gordon). Refer to the transport and local centre map above.



Supporting Detail: Extract Site Outcome/Lot Arrangement, Hammond Smeallie and Co

- The concept urban design outcome is based on/guided by ecological and arboricultural assessments.
- Indicative building platforms are shown, and a concept stormwater plan is provided along the rear boundary. This has been commented on within the BDAR.
- These collectively demonstrate that future development is feasible from the environmental management perspective in terms of protecting key peripheral trees, levels around trees and therefore protecting adjoining biodiversity.
- To demonstrate this, a TPP has been prepared to support this concept to demonstrate the outcome of the proposed zoning and subdivision lot size/density adjustment.

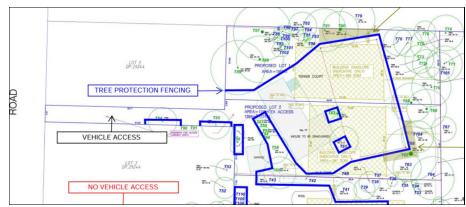


Supporting Document - Arboricultural Assessment and Tree Protection Plan ('TPP')

• A tree assessment has been completed for the site and its boundaries in order to understand the potential for impacts on and off the site (in relation to potential R2 low density subdivision to 930m²).

 It is demonstrated that well designed development can ensure protection of mapped biodiversity and other significant vegetation.

This assessment of site capability for R2 (Low Density Residential) has been informed by the following TPP which is adopted in the Urban Design Outcome Study/potential lot layout to demonstrate that the land can be developed for the purposes of low density housing under the R2 (Residential Low Density) zoning and development allowances, whilst also maintaining the area character and protecting mapped biodiversity and other mature vegetation around the boundaries.



Supporting Detail: TPP by Australis Trees

 Building on the assessment of trees, a BDAR by Fraser Ecological has assessed the capability of the site and Council's requirements and community expectations that any subsequent development is capable of adequately protecting existing vegetation, not creating fragmentation (as the area is altered) and that the proposal would be consistent with the objectives of the Ku-ring-gai planning controls relating to the protection and management of biodiversity.

The BDAR provides details of the site, species, the proposal and vegetation and fauna communities and summarises that the site can support the proposed density and zoning outcome without adverse impacts or biodiversity fragmentation.

The BDAR concludes the degree of potential disturbance would be minimal and that future residential uses could be supported and could provide a valuable opportunity to enhance the local biodiversity via the development of appropriate VMP/s, weed management and improved vegetation to connect with the adjoining biodiversity.

VMP's are a commonly applied mechanism through development to ensure ongoing management and promotion of biodiversity via protection and appropriate re-planting where a site is located close to biodiversity corridors/ biodiversity mapped area.

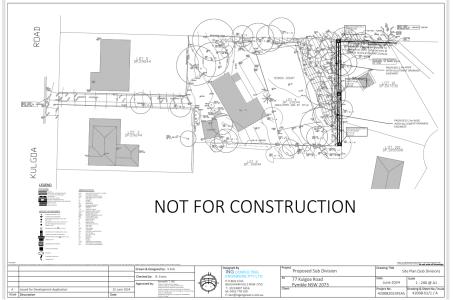
This planning proposal demonstrates that environmental protection can be enhanced for this site and locality, as suitable building platforms can be achieved in the future.

R2 (Low Density Residential) scale development could occur over existing altered areas with minimal disturbance to existing vegetation based on the TPP which details the potential housing footprints and which allows for the protection

of peripheral trees. This is also given the existing substantially altered and cleared areas over most of the site.

A VMP can be implemented as a condition of future development to support the appropriate design of housing on site, ensuring that re-landscaping would be appropriate to support the adjoining biodiversity as part of future low density/R2 (Low Density Residential) development.

 A concept stormwater plan is provided in conjunction with the arboricultural/AIA and BDAR reports. It demonstrates that stormwater infrastructure can be provided in line with Council requirements that controls stormwater and manages water discharge while ensuring protection of trees and nearby biodiversity to accommodate a development outcome with an R2 (Low Density Residential) density.



Supporting Document – Concept Stormwater Plan:

• The BDAR makes an assessment of the proposed stormwater as follows: 'A stormwater drainage easement (1.2m wide) has been proposed along the eastern (rear) boundary of all proposed lots.

All trees are proposed for retention within this area which is currently subject to heavy weed invasion. As a precautionary measure, it has been assumed 0.2ha of native vegetation may be indirectly impacted for the installation of stormwater drainage at the rear of the proposed lots as well as edge effects.

This has been taken into account into the BAM C credit calculation. Council can provide conditions of consent to ensure the further protection of this vegetation.'

The BDAR also indicates that the area proposed for stormwater is heavily weed infested and that this could be improved as part of the proposed outcome via weed management and appropriate planting.

Q2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

Option 1 – Zoning Review/Rezoning as requested:

This option involves the assessment of the site specifically in terms of the appropriate zoning based on the context and specific/unique site situation, as measured against strategic objectives and site-specific merit.

It is the most orderly and logical approach to rezone the site. The planning proposal is supported in legislation as a mechanism for reconsidering the zoning of a site and aligns with industry best practice in making such an application.

The Planning Proposal process is robust, open and transparent and is subject to review by the community through consultation, the Local Planning Panel as an expert panel and the elected Council as representatives of our community.

The rezoning option is put forward as the best and most comprehensive option for the following reasons:

- Given the direct, R2 (Low Density Residential) character, pattern and zoning context, the proposed rezoning/zoning adjustment of the subject, single 1 x C4 (Environmental Living) site in the subject row, to match in with the R2 (Low Density Residential) zone and prevailing context, to reflect the environmental capacity and location of the site to support housing is considered to be the most logical and orderly way to adjust the development allowances for the subject site, to alter the mapping and reflect the environmental capacity of the site to release land for housing.
- This adjustment would create a consistent zoning pattern along the subject section of Kulgoa Road, to match most of the southern and opposite adjoining blocks for this end of Kulgoa Road.
- The proposed rezoning track has been chosen as it is considered that the existing zoning is overly restrictive and is inconsistent with the viability of the land to support and supply sustainable housing. Future development would be required to be environmentally sustainable irrespective of lot size. A lot size of 930m² which is consistent with others in the row is capable of providing low density and environmentally sustainable outcomes as detailed in the supportive documents and Urban Design Outcome Study/lot layout.
- The subject single C4 (Environmental Living) site is 'bookended' to the northern side by the adjoining SP2 (Water Supply) zone. This means that this single lot could be transferred to match the southern adjoining R2 (Low Density Residential) lots without requiring further adjustments as the SP2 (Water Supply) zone provides a 'zone boundary'. This means that this change would not create precedent or pressure for any broader change. This is a unique and 'contained' rezoning and is based on a review of the specific site situation, review of biodiversity and tree factors and the demonstrated outcome for consistent development to be achieved to support state and local housing supply.
- Given this is site specific and intended to rezone 1 x single C4 (Environmental Living) lot at the end of a prevailing R2 (Low Density Residential) row of lots, based on site specific ground truthing of the biodiversity map layer and specific context, opportunities and constraints, this would not place pressure on other areas also being rezoned.
- Selected rezoning of the 1 x lot, as proposed as this key option is considered to be the most clear-cut way of adjusting the current C4 (Environmental Living) zoning to match the R2 (Low Density Residential) zoning. This is considered appropriate given that the site may have been allocated the C4 (Environmental Living) zoning in isolation from adjoining sites as part of a desktop analysis undertaken at the time of the implementation of the KLEP and with reference to the mapped biodiversity layer. The biodiversity has been assessed on a site specific basis and is largely off site, however the biodiversity map layer extends over the site.

- This Planning Proposal approach enables the required comprehensive review and 'ground truthing' of the opportunities and constraints provided by the site in terms of the presence of biodiversity and whether the C4 (Environmental Living) is the right zoning to allow reasonable residential development to contribute serviced and accessible land, to boost housing.
- Considered and sustainable increase of housing in accessible and serviced areas is consistent with current NSW requests to increase housing in urban areas.
- This change is based on site specific studies and Urban Design Outcome Study put forward. These show that the outcome would be commensurate with the existing pattern of housing and environmentally sustainable in relation to allowing low density residential development to not adversely impact or fragment nearby biodiversity and to allow substantial trees to be protected. The site is not bushfire prone and would not require asset management, which could otherwise compromise vegetation on site.
- The concept Urban Design Outcome Study, potential stormwater plan and tree and ecological studies demonstrate that with its boundary planting and careful tree protection and vegetation management, an R2 (Low Density Residential) change to match the side adjoining properties and adjoining R2 (Low Density Residential) context would be appropriate and allow the protection and improvement of local biodiversity.
- This Planning Proposal request to rezone the site is made having undertaken consultation with Council staff and by undertaking and presenting a comprehensive assessment of zoning/Development Standard change.
- The Planning Proposal and specific site review is considered the best way to achieve the intended development and lot pattern outcome and to update the zoning map and density maps to match properties along Kulgoa Road.

It is not uncommon for ground truthing of a site to be undertaken alongside a more specific site and contextual analysis to demonstrate that a specific rezoning has strategic merit. It cannot be expected that every site is examined in this way through the development of an LEP and there is opportunity in legislation for a Planning Proposal to be lodged to seek such a rezoning to allow the realisation of ideal density and development potential which is consistent with the environment, planning objectives and the residential density pattern and context.

It has been demonstrated through detailed analysis and ground truthing that this site presents opportunities and viability in terms of zoning to match the R2 (Low Density Context), to provide an additional large residential lot opportunity which would match in terms of zoning, density and character with the surrounding area and allow the protection of trees and nearby valued biodiversity.

A specific study of the property and zoning within the context and ground truthing the development potential of the site and the ecological status has been undertaken to detail why the lot should be zoned for R2 (Low Density Residential).

As identified in the supporting studies relating to ecology and tree protection, ecological community is located adjacent to the site and can be protected and not fragmented.

Further, rezoning of this specific site creates an opportunity for enhancement of biodiversity protection in weed management and replenishment planting via development.

Biodiversity values located around the boundaries of the site and on adjoining land to the north, north-east can be protected via the TPP recommended and provided as a supporting document.

Option 2 – Potential Creation of a Smaller Lot Size via a Development Application ('DA') and subject to KELP 2015 Clause 4.6 which allows Variations to Development Standards (for Lot Size):

- No alternate planning pathway is feasible to seek the variation of density outcomes. This is because a Development Application could not be supported where a prohibited use is proposed. In this case, were it proposed to place a second dwelling on the subject site, this would not be a permissible form of development under the current zoning.
- Likewise, if a Development Application was pursued to seek to amend the minimum allotment size requirement of 1500m² to 1200m² for example, the degree of variation would fall outside a variation that could be supported under Clause 4.6 of the KLEP 2015. This would be likely to be viewed as precedent and as a result, has the potential to undermine the integrity of the LEP development standard.
- This option would involve applying for development approval for subdivision of the lot which would require a Clause 4.6 variation seeking a smaller lot size to match the prevailing smaller lot sizes (given the needlessly large Minimum Lot Size Development Standard attached to the C4 (Environmental Living) zoning.
- For this reason, and to support a robust and consistent approach to Development Standards for Ku-ring-gai, Clause 4.6 Variations are generally not encouraged for development assessment.
- Council largely does not accept Clause 4.6 submissions seeking to vary adopted KLEP Development Standards such as for Minimum Lot Size, Building Height and FSR.
- Clause 4.6 variations can have the effect of undermining Development Standards and allowing some can place pressure on setting 'precedents' for other Clause 4.6 variations for changing lot sizes, which is not desirable broadly for Ku-ring-gai. The proposed approach would simply adjust the Minimum Lot Size and FSR standard to correct what appears to be a mapping anomaly, based on the ground truthing of possibilities for the site and to match the row and context.
- Consequently, variations to Minimum Lot Size and FSR via 4.6 would not be the best way when the zoning and associated Development Standards can simply just be adjusted to match the side and opposite adjoining land via the zoning alteration of the 1 x site to become R2 (Low Density Residential).
- Adjustment of the zoning and relevant development standards and LEP maps would allow a future subdivision and commensurate/reasonable density outcome to match the direct context without the need for Clause 4.6 requests and support, as this sort of variation is unlikely to be supported via a DA.

Option 3 – Zone Boundary Provisions:

• Zone boundary transition allowances are not considered to apply in this situation and could not be utilised for subdivision at a density consistent with R2 (Low Density).

The most reasonable way is to comprehensively review the site and the context and to adjust the zoning of this piece of land to match in with the adjoining R2 (Residential Low Density) zoning in terms of achieving the objectives and intended outcomes of this Planning Proposal.

Option 4 - Additional Permitted Uses Under Schedule 1 of the KLEP

• Inclusion of the site within Schedule 1 would be a possible track however this is not considered to be the best way.

Schedule 1 in the KLEP 2015 is generally used to allow existing use sites to continue as a specific use, acknowledge an existing use or enable dual occupancies on certain land (in accordance with allowances provided under superseded planning instruments).

Schedule 1 is intended to be use in exceptional circumstances, as an enabling clause in the KLEP to permit a specific land use for a specific site, often in isolation of other surrounding sites.

In this instance, it makes sense to allow a minor adjustment of zoning and development allowances to match the row of properties and as this site is bookended by SP2 (Water Supply) zoned land.

B. RELATIONSHIP TO STRATEGIC PLANNING FRAMEWORK

Q3. Will the planning proposal give effect to the objectives and actions of the applicable regional, or district plan or strategy (including any exhibited draft plans or strategies)?

As detailed in the Strategic Review section, the proposal demonstrates consistency with the LSPS, North Plan, Greater Sydney Plan and local policies.

The Planning Proposal to rezone the subject lot from C4 (Environmental Living) to R2 (Low Density Residential) would allow an additional housing opportunity to deliver on housing for the local area, in a well located and serviced area.

The outcome would be sustainable and would meet the objectives of protecting the environment and existing tree canopy throughout Ku-ring-gai.

The outcome is demonstrated in the concept subdivision layout, the viable TPP (preserving trees around the boundaries), the provision of supportive stormwater management and the BDAR assessment which indicates that the development would not fragment biodiversity.

Freeing up available land for appropriate development by allowing a 1 into 2 lot subdivision will assist in reducing pressure on land which contains more risks for development (eg. flood affected, bushfire prone) and land which is not currently serviced or located in accessible areas (near transport and centres).

The proposal is consistent with the Greater Sydney Region Plan as detailed in the following table:

CONSISTENCY WITH GREATER SYDNEY REGION PLAN 2056		
Directions	Objectives	Consistency
Infrastructure and colla	boration	
1. A city supported by infrastructure	Objective 1: Infrastructure supports the three cities	The proposal supports development around existing serviced areas and public transport (bus routes available along Mona Vale Road, shopping areas and rail transport at Gordon and Pymble).
	Objective 2:	

	Infrastructure aligns with forecast growth – growth infrastructure compact	This accessibility to transport, roads and local centres and services promotes housing in the right places in accordance with the objectives.
	Objective 3: Infrastructure adapts to meet future needs	The proposal does not create any need for additional infrastructure and will have an imperceptible impact on existing services and
	Objective 4:	infrastructure, with 1 x additional R2 low density lot potential.
	Infrastructure use is optimised	The proposal seeks zoning to allow for a density to suit the R2 context and provide for the subdivision of an additional lot within an area which is well serviced and supported by existing transport and services/infrastructure.
		This minor, and sustainable increase of low density housing on available, altered and developable land is considered to optimise the use of existing infrastructure via a minor increase in housing in a well- connected and well serviced area (existing road and driveway access is available to Kulgoa Road.
		Existing open space and social infrastructure exists around Pymble and Gordon to support a rezoning to R2 (Low Density Residential), enabling 1 x additional low density lot.
2. A collaborative city	Objective 5: Benefits of growth realised by collaboration of governments, community and business	The proposed zoning adjustment would allow the subdivision of available land in a sustainable way to assist in delivering housing for Ku-ring-gai (Sydney and NSW). This modest increase in housing supply in a well located suburban area aligns with the collaboration requirements in planning for housing in NSW.
		The intended outcome is protective of the environment and consistent with R2 planning objectives and would at the same time, increase the housing contribution of Ku-ring- gai to the current, well-documented national and NSW housing shortage. All local government areas have been requested to increase housing supply.
		Councils are required to update Local Environmental Plans to align with housing priorities and provide consistency with the <i>Metropolis of 3</i> <i>Cities</i> .
		The proposal to allow R2 (Low Density Residential) zoning and density (allowing a subdivision with a 930m ² Minimum Lot Size), still provides a very generous lot size (in the suburban Sydney context). This outcome is consistent with the

		low density and 'treed area character, providing space between homes. The proposed zoning change can maintain environmental objectives such that subdivision to an R2 (Residential Low Density) yield and development outcome would be consistent with the objectives of the R2 zone in terms of density and amenity. The resultant density would be environmentally sustainable as the site is not unduly constrained and biodiversity can be reasonably protected and managed despite a smaller lot size, dwelling footprint and stormwater service arrangement. The proposed minor and carefully studied and managed increase in residential density to match the area is considered consistent with local and metropolitan planning strategies to boost housing. This accords with the local strategies and State of reviewing plans and planning for growth and unlocking much needed well located housing opportunities. The proposal provides housing
3. A city for people	Objective 6:	close to urban services (local centres (St Ives, Pymble and
	Services and infrastructure meet the changing needs of communities	Gordon) which offer commercial, employment and medical services as well as proximity of high-quality parks, schools (Pymble and Gordon Public Schools) and private schools (St Ives, Pymble and Wahroonga), community facilities and local transport options (St Ives, Pymble and Gordon).
		This promotes the desired 'great spaces to live' and ideal connection of people and employment, transport and services.
		Providing housing close to these facilities and within easy driving, walking, and bus stop distance provides a supportive living environment for different ages, mobility levels and life stages.
	Objective 7:	The outcome would improve the availability of environmentally resilient housing opportunities close
	Communities are healthy, resilient and socially connected	to culturally diverse supportive areas and shops.
	Objective 8:	St lves and Gordon cater for specific foods/restaurants and deli's, culturally diverse restaurants.
	Greater Sydney's communities are culturally rich with diverse neighbourhoods	Community facilities such as St Ives and Gordon libraries cater for different age and interest groups.

	Objective 9: Greater Sydney celebrates the arts and supports creative industries and innovation	This existing established social/cultural infrastructure supports diverse groups. The site is well located by bus and train transport to other culturally diverse areas of Sydney such as Chatswood and the city and provides connections to other significant areas and Sydney cultural events and opportunities (Vivid, New Year events, festivals etc). Increasing new land/housing in this ideal location promotes the ability for diverse groups to establish and grow in the area and in turn support local creative and cultural industries. This is considered to support Ku-ring-gai in terms of the local economy and diversity with a minor uplift in population to utilise services and facilities. The proposed zoning to R2 (Low Density Residential) would unlock an additional housing opportunity with a smaller lot size. This represents managed increase in housing within this ideal location to promote community health and wellbeing in accordance with the aims of the plan. Housing targets and needs are
4. Housing the city	Objective 10: Greater housing supply Objective 11: Housing is more diverse and affordable	 evolving and currently under review given the well reported current housing shortage in NSW and Sydney. There is a need for new housing to ne increased around well located, serviced and accessible areas and for housing to be more affordable (referring to State Policies relating to Diverse and Well Located Homes and Transit Oriented Development). Housing is to be in reach of the population/affordable and to be increased in established areas, to consolidate – particularly around well serviced areas (Transit Oriented Development). The current land size is comparatively large for a suburban lot at 2559m². It is a well-known reality in looking at real estate prices and sales that suburban land in Ku-ring-gai is expensive by Sydney standards in terms of the evidence provided in real estate sales as to the comparative costs of land and housing in this area compared with other areas in Sydney. Houses and ancillary developments (pools and tennis courts) on larger on larger blocks of land attract higher sales prices just by virtue of

	the land values and cost of land and with comparatively larger lots and houses.
	Housing affordability is driven by a complex range of factors centred around supply and demand and locational factors. The North Shore is a well established residential area with housing close to rail lines and services, with high amenity housing, spaciously set out and private homes, with large gardens and within garden suburbs.
	These are some of the factors which lead to comparatively expensive real estate.
	The proposal would result in the ability to subdivide an additional lot according to the R2 (Low Density Residential) lot size standards which are smaller than the C4 (Environmental Living) lot size (930m ² of land versus 1,500m ² of land).
	Smaller lot sizes are generally more affordable than a larger lot within the same location. To this end, the potential subdivision of the site would enable 2 x comfortably sized, R2 low density residential parcels of land (maintaining the above attributes) rather than 1. These can potentially be sold at a lesser cost individually, than if the much larger existing lot was to be sold as 1 x larger parcel.
	While land values largely sit outside planning considerations, it is important to note that the proposed rezoning seeks potential for a future 2 x lot subdivision only, within the environmental capacity of the land, at the same spacious and landscaped character and surrounds, to match the leafy character and to protect peripheral biodiversity. This would allow an additional lot to be able to be purchased and 2 x lots to be able to be re-developed into contemporary housing to meet current needs in terms of housing choice, opportunities and affordability levels whilst also remaining consistent with the prevailing density, natural environment and landscaped area character.
	The proposal does not seek to upzone the land to release higher density multi-unit development. The proposed rezoning maintains low density residential potential that could potentially realise 1 x additional residential lot.

	The outcome would promote housing choice in terms of providing a smaller lot although consistent with large lots in the area.
	This would allow the development of modern, R2 style housing to meet contemporary BASIX and living space/amenity standards and a choice of housing types (single/2 storey) to suit different family structures and age/accessibility levels.
	The housing density put forward in Urban Design Outcome Study, with a relevant TPP and VMP and discussion of biodiversity indicates that the site has the capacity to subdivided at the Minium Lot Size of 930m ² whilst protecting peripheral trees and the biodiversity which is adjacent to the site. This could readily support a large dwelling footprint or secondary dwelling/dwelling arrangement whilst protecting gardens and boundaries.
	This proposed low density zoning and potential for 930m ² subdivision would free up available and already serviced land, to contribute to 'area appropriate development' and boost housing numbers in the right place.
	The proposed reduction in the minimum lot size which would be achieved in connection with the rezoning would allow the desired level of urban intensification in well- serviced areas, connected to transport.
	The subject site is demonstrated to be able to be developed for R2 (Low Density Residential) housing which would match with the area whilst retaining the peripheral important bushland/natural values.
	The proposed zoning change and future potential low density development would not fragment biodiversity as indicated in the BDAR and substantial trees can be protected irrespective of the development in accordance with the submitted TPP.
	The studies indicate that biodiversity is off the site and the site is suitable for the proposed development yield. The BDAR and TPP indicate that the site could be subdivided to R2 (Low Density Residential) standards and supported by stormwater to also protect large stands of existing trees around the boundaries, to protect the biodiversity setting.

5. A city of great places	Objective 12: Great places that bring people together Objective 13:	Consequently, this Planning Proposal delivers on the objective of 'greater housing supply' as well as improving diversity and affordability via a smaller and potentially more affordable minimum lot size entitlement. The benefits of providing an additional housing opportunity in this well located area are discussed above. This area is well located to bring people together and provide great places. This property is within close
	Environmental heritage is conserved and enhanced	proximity to transport, other areas in Sydney and great places around Pymble, Gordon and St Ives with all that those areas have to offer in terms of restaurants, events, medical and financial services and community facilities and activities.
		The proposed R2 (Low Density Residential) zoning would not create adverse implications for environmental heritage as the site has no listed or mapped heritage values and is not close to any listed items.
		The proposed zoning change and alteration of R2 (Low Density Residential) density for the subject site would allow protection of local heritage in other areas by increasing housing numbers in the right and available areas. This land is available and viable for subdivision and development.
		2 x lots can be developed to provide sustainable housing within this enjoyable place to live with pleasant local parks, services and walks.
		Biodiversity and environmental heritage can be maintained and protected as demonstrated in the attached documents.
Productivity		
6. A well connected city	Objective 14: A metropolis of three cities – integrated land use and transport creates walkable and 30-minute cities	Providing additional housing near services and transport (road/bus and rail areas) accords with the priority of developing the '30 minute City' - increasing accessible housing close to jobs, services, and transport and access connections.
		Increasing housing promotes business activity in the accessible/nearby St Ives, Pymble and Gordon Centres with a small number of additional households engaging in local commerce, employment and investment.

7. Jobs and skills for the city	Objective 22: Investment and business activity in centres	The subject land is close to commercial areas, employment opportunities in retail, medical, office and hospitality areas (Pymble, Gordon and St Ives). The land is within 30 minutes of other key employment areas such as Hornsby, Chatswood and St Leonards/North Sydney, Ryde/Macquarie Park employment and University area and the City of Sydney. This proximity provides jobs and skills close by and aligns with the '30 minute City' objective of providing housing with employment and other supportive needs. This assists with providing non-car transport to reduce congestion and fuel and time expensive travel times.
Quatainakillitu		
Sustainability 8. A city in landscape	Objective 25: The coast and waterways are protected and healthier	The proposed zoning of the subject site to match the adjoining R2 (Low Density Residential) area can achieve the necessary retention of existing biodiversity and
	Objective 27: Biodiversity is protected, urban	Iandscaping for the site and direct context as detailed in the supportive TPP, BDAR, stormwater and concept urban design plans.
	bushland and remnant vegetation is enhanced	The urban tree canopy can be protected via tree protection measures which are outlined in the
	Objective 28: Scenic and cultural landscapes are	TPP. This protects biodiversity in line with objective 27. The BDAR makes the following
	protected Objective 29:	summary: The vegetation at the rear of the
	Environmental, social and economic values in rural areas are maintained and enhanced	site has been mapped by Council and the NSW DPE (NSW Statewide PCT mapping) as Sydney Turpentine Ironbark Forest (Figure 12 and 13). • Vegetation Formation: Wet
	Objective 30: Urban tree canopy cover is increased	Sclerophyll Forests (Grassy sub- formation) • Vegetation Class: Northern Hinterland Wet Sclerophyll Forests • PCT Name: Sydney Turpentine Ironbark Forest
	Objective 31:	PCTID: 3262 Sydney Turpentine Ironbark Forest in the Sydney Basin Bioregion is listed as Critically
	Public open space is accessible, protected and enhanced	Endangered under the Biodiversity Conservation Act 2016 and Environment Protection and Biodiversity Conservation Act 4000
	Objective 32:	Biodiversity Conservation Act 1999.
	The Green Grid links parks, open spaces, bushland and walking and cycling paths	The AIA prepared by Australis Tree Management dated June 2024 states that all locally native trees are proposed for retention.
		Stormwater can be managed,

	noting the existing 1.2m drainage easement towards the rear, north- eastern corner of the site. All trees are proposed for retention within this area which is currently subject to heavy weed invasion. As a precautionary measure, it has been assumed 0.2ha of native vegetation may be indirectly impacted for the installation of stormwater drainage at the rear of the proposed lots as well as edge effects. This has been taken into account into the BAM-C credit calculation.
	Council can provide conditions of consent to ensure the further protection of this vegetation. The proposed re-zoning of 77 Kulgoa Ave Pymble will support a potential future subdivision into 2 x lots outside the tree protection zones of locally native trees belonging to the Sydney Turpentine Ironbark Forest Critically Endangered Ecological Community.
	Tree protection fencing are indicated to be able to be provided to ensure all remnant native trees are protected during any essential subdivision works.
	The land is not mapped as bushfire prone land, therefore, an Asset Protection Zone for potentially resulting in additional vegetation clearing will not be required. Any native vegetation along the rear of the site can be subject to a future Vegetation Management Plan ('VMP') provided to Council (prior to the release of the Subdivision Certificate as part of a future subdivision application).
	Weed, vegetation, biodiversity and water management can be provided as outlined as part of future development proposals via the recommended VMP as part of per BDAR recommendation.
	The proposal would facilitate the reduction of weed growth and appropriate replenishment tree planting. This could be conditioned via future development and subject to area appropriate conditions.
	Weed and vegetation management as part of development would benefit the existing broader/adjacent ecology.
	Planting can be provided to be consistent with the surrounding biodiversity and canopy via the recommended VMP as part of future development and to comply with Council's relevant biodiversity development controls.

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		The proposal would promote the health and care of waterways and remnant vegetation as detailed in the BDAR.
		The proposal is consistent with the biodiversity and landscape objectives of the plan.
9. An efficient city	Objective 33:	The proposed zoning to enable a small increase in sustainable
	A low-carbon city contributes to net- zero emissions by 2050 and mitigates climate change	housing opportunities/options wou promote housing within green and shaded areas, sheltered from extreme heat in this area surrounded by green canopy.
	Objective 34:	Contemporary housing would be in
	Energy and water flows are captured, used and re-used	accordance with sustainability building principles and ensure on- site water re-use via water tanks and passive solar design via planning controls.
	Objective 35: More waste is re-used and recycled to support the development of a circular economy	Water can be managed on site to protect the trees at the rear as detailed. Rainwater reuse would b expected as part of future contemporary housing developments for the 2 lots which could be achieved via R2 (Low Density Residential) subdivision.
		Housing would be required to comply with building sustainability requirements. This would include the inclusion of low water use appliances for new development in accordance with contemporary building sustainability standards.
		Circular economy and waste recycling can be promoted as part of contemporary housing and sustainability outcomes in accordance with current building and development requirements. Future consent conditions for low density housing would promote waste management.
10. A resilient city	Objective 36:	The site is not mapped as bushfire or flood prone and is in an area which is readily able to be drained
	People and places adapt to climate change and future shocks and	via the slope and the rear adjoining drainage easement.
	stresses	The possible additional lots
	Objective 37:	demonstrated in the Urban Design Outcome Study could be managed to ensure appropriate stormwater
	Exposure to natural and urban	management.
	hazards is reduced	The site is not bushfire prone or affected by flooding, landslip etc.
	Objective 38:	The site provides suitable land for low density residential
	Heatwaves and extreme heat are managed	development. Providing housing in suitable areas can have the effect of alleviating pressure on less appropriate and more high risk lan reducing exposure of people and

		 hazards in other more hazardous areas. Being surrounded by mature trees which can be protected and within a leafy garden suburb, this proposal would provide housing which would be resilient to extreme heat. Housing in the right locations will reduce the need for suburban sprawl and damage to other areas in Sydney which may have more sensitive environments. The proposed zoning change to
11. Implementation	Objective 39: A collaborative approach to city planning	 The provised zoluting change to facilitate R2 subdivision and sustainable housing uplift, in a well located area, which allows environmental protection and sustainable housing would promote the review of housing for Ku-ring-gai in accordance with the implementation of the above detailed objectives of the <i>Metropolis of 3 Cities</i> plan. This action would comply with the NSW State government areas to consider mechanisms in local planning to increase supply of housing to support the population.

The following assessment is provided in relation to the specific priorities of the North District Plan as detailed in the following table:

CONSISTENCY WITH NORTH DISTRICT PLAN		
Directions	Planning Priority/Actions	Consistency
Infrastructure and col	laboration	
A city supported by infrastructure	N1: Planning for a city supported by infrastructure N2 Collaboration	The Planning Proposal is consistent with the key elements to achieve the vision for the future of the North District which include: •enhancing the role of the Sydney Eastern Economic Corridor, including North Sydney as part of the Harbour CBD. • supporting jobs growth in strategic centres, including health and education precincts and facilitating innovation. • sustaining local centres to provide jobs, services and amenity. • providing fast and efficient transport connections to achieve a '30 minute city'. • retaining and managing industrial and urban services land. • creating and renewing great places while protecting heritage and local character and improving places for people. • improving walking and safe cycling ways. • enhancing foreshore access to Sydney Harbour and the district's waterways.

		access to open space and increasing urban tree canopy. • retaining the environmental, social and economic values of the Metropolitan Rural Areas. The proposal would enhance the area and the Eastern Economic Corridor by boosting accessible housing close to a range of local and accessible employment areas (close to local centres and larger employment centres via fast transport connections). The proposal aligns with collaboration objectives in terms of local and state governments working together with community members towards providing appropriate and sustainable housing uplifts and housing to support Sydney.
Liveability		
A city for people	N3: Providing services and social infrastructure to meet people's changing needs	Consistent. The proposal would not change existing services, nor does it create a need for intensification or augmentation of services or social infrastructure. This is because the proposal would facilitate the future development of 1 x additional lot via the adjusted minimum lot size for subdivision and herein a single household to add to the R2 setting as an appropriate density for the area. The impact of this level of increase in density would be imperceptible. The creation of an additional allotment and dwelling would increase the rate base from which funding for Council services and infrastructure is provided. This is considered to be a benefit in terms of supporting local infrastructure and supporting the minor density change.
	N4: Fostering healthy, creative, culturally rich and socially connected community	Consistent. This sustainable housing release outcome accords with the objectives to promote culturally rich and culturally supportive communities. This would create a carefully managed and minor increase in housing within this ideal location to promote community health and wellbeing in accordance with the aims of the plan.
Housing the city	N5: Providing housing supply, choice and affordability with access to jobs, services and public transport	Consistent. Providing housing within easy and close distance of a network of services and employment via existing available bus and train public transport service to a variety of locations (via bus – Mona Vale Road and rail- Gordon). Walking and cycling are options in this area. The subject site is well located in terms of local employment centres such as St lves, Pymble and Gordon as well as transport connections to the North

		Sydney and City areas and Macquarie Park employment and business/education areas. Additional housing would support jobs, centres with the additional population to visit, spend and work in local centres. This promotes housing which is well located in relation to work as well as other supportive lifestyle needs. Housing on available and serviced land, in the right location will promote urban consolidation and development around transport lines and deliver on the ideal of the '30 minute city'. This Planning Proposal to rezone the available land to R2 (Low Density Residential) would provide for sustainable infill and renewal of this existing area whilst also protecting local character, local biodiversity and heritage. The proposed change from C4 (Environmental Living) to R2 (Low Density Residential) would allow the
		creation of additional large, environmentally sustainable housing lot to increase housing opportunities and to meet increasing housing demands, providing the required supply.
A city of great places	N3. Providing services and social infrastructure to meet people's changing needs N4. Fostering healthy, creative, culturally rich and socially connected communities N5. Providing housing supply, choice and affordability, with access to jobs, services and public transport N6: Creating and renewing great places and local centres, and respecting the District's heritage	Consistent. In terms of housing targets, the Plan indicates an objective to: 'deliver the 20-year strategic housing target, councils should, in local housing strategies, investigate and recognise opportunities for long term housing supply associated with city-shaping transport corridors; growing, emerging and new centres; and other areas with high accessibility'. The proposal involves a minor increase to housing via the rezoning to match the context and to create the potential for smaller subdivision lot size and density provisions. The proposed unlocking of this developable, unconstrained piece of land to become R2 (Low Density Residential) in terms of density and use will allow for the managed and careful renewal of the area. This would allow for the appropriate zoning of this land and for the land to contribute to R2 low density in conformity with the area. This outcome would allow smaller lot sizes, and a subdivision of 1 into 2 lots and housing. This would promote the sustainable use and development of existing serviced and altered suburban land to provide additional new R2 (Low Density Residential) scale housing.

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N10: Growing investment, business opportunities and jobs in strategic centres N12: Delivering integrated land use and transport planning and a 30-minute city	The proposal provides a smaller lot which by land area would be more affordable. The potential future subdivision would allow housing supply and choice which would also be consistent with the prevailing lot and housing density pattern. This would provide housing close to services, jobs and employment (St Ives, Pymble, Gordon and areas connected by bus and rail transport such as Ryde, Chatswood, Hornsby, St Leonards, North Sydney and the City). Smaller lots and the opportunity to build contemporary housing/redevelopment would promote providing housing for smaller family sizes and a range of needs/choice. Consistent. Additional housing would support jobs, centres and amenity to support strategic and local centres, providing additional population to rely on businesses and services. Consistent. The proposal would increase well located housing opportunities within easy and close distance of a network of public transport and road services leading to employment in a variety of locations (via bus – Mona Vale Road and rail- Gordon). These services connect residents with shops, leisure and community activities, entertainment, services and employment. Development around transport lines will deliver on the ideal of the '30 minute city'. Walking and cycling are options in this area. The proposal utilises residential land and does not provide pressure on urban services land.
N15: Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways	Consistent. Given the urban/suburban context and being well away from coastal areas, no change is involved in relation to the Harbour or the district waterways.
N16: Protecting and enhancing bushland and biodiversity	Consistent. Protection of trees which are recognised as forming an important part of vegetation communities and the local ecology can be achieved. The ability to protect trees via R2 (Low Density Residential) development outcomes is demonstrated in the
	business opportunities and jobs in strategic centres N12: Delivering integrated land use and transport planning and a 30-minute city N15: Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways N16: Protecting and enhancing

N17: Protecting and enhancing scenic and cultural landscapes	Consistent. This Planning Proposal to rezone the available, readily developable land to R2 (Low Density Residential) would provide for low density housing contribution where this would be consistent with the area character/lot pattern and landscaped character. Therefore, this would not adversely impact on scenic or cultural landscapes.
	Low density dwelling development can be achieved whilst also protecting the important biodiversity and natural landscape which surrounds the area.
	Being of a development density which is in context with the surrounding area, and which retains tree cover, the proposal would protect and enhance the scenic landscape.
	Future development would occupy the already altered and developed/cleared area. Therefore, the change in canopy and scenic quality would not be significant.
	As indicated in the Urban Design Outcome Study with the generous house footprint layouts, spatial separation can be provided and setbacks from the trees around the boundaries.
	Potential housing can be nestled within trees, as is characteristically the case with housing along Kulgoa Road.
	Future planting and tree protection would be provided according to R2 (Low Density Residential) housing/density design requirements which would apply to any future Development Application for low density housing.
N19: Increasing urban tree canopy cover and delivering Green Grid connections	Consistent. Additional trees can be provided for the urban canopy and to suit the biodiversity context and to support environmental resilience.
	Planting and appropriate vegetation would be required in accordance with planning controls for future housing.
	As detailed in the BDAR, a VMP can be provided to ensure that future planting would replenish the area and support the adjoining biodiversity.
N20: Delivering high quality open space	Consistent. Housing in this location and use of existing residential land would not change open space. This area is located within walking proximity to a number of small and larger local parks and open spaces which would increase the desirable high amenity residential outcome.

An efficient city	N21: Reducing carbon emissions and managing energy, water and waste efficiently	Consistent. The proposed lot arrangements which would result from an R2 (Low Density Residential) subdivision would provide the expected contemporary building design for energy efficiency, building sustainability and waste and water efficiency via re use on site and water/waste minimisation. The proposal meets the objectives of promoting the retention/protection/supplementation of green areas in accordance with local character and environmental objectives.
A resilient city	N22: Adapting to the impacts of urban and natural hazards and climate change	Consistent. This is not sensitive land in terms of hazards such as landslip, coastal protection/management, flooding or bushfire. This opportunity provides for housing in the right areas. Providing sustainable housing opportunities within this area could assisting in alleviating pressure on more sensitive local environments in the pursuit of housing delivery/capacity.

Q4.Is the planning proposal consistent with a Council LSPS that has been endorsed by the Planning Secretary or GSC, or another endorsed local strategy or strategic plan?

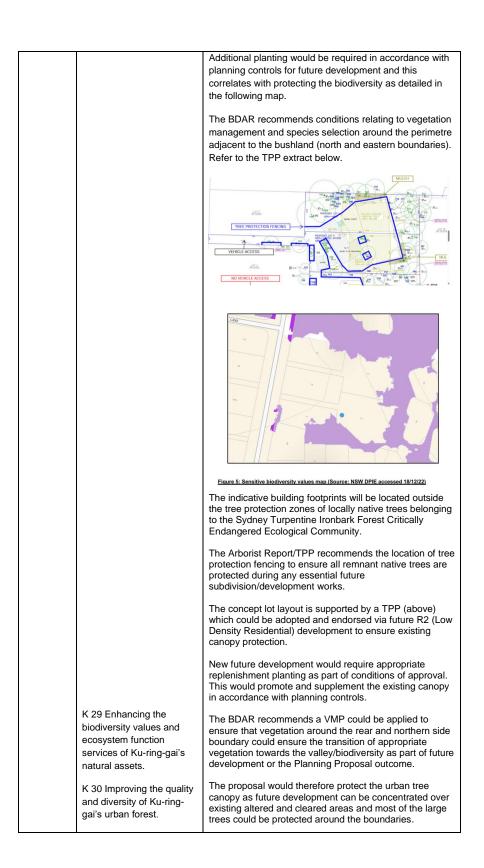
The following is a summary of the consistency of the Planning Proposal with the policies.

Local Strategy	Summary LSPS	Assessment/Consistency
Local Strategic Planning Statement (LSPS)	The Ku-ring-gai Local Strategic Planning Statement (LSPS) was adopted by Council in March 2020 and plans for Ku-ring-gai's economic,	Consistent. The proposed managed and appropriate zoning of the site as R2 (Low Density Residential) is consistent with specific Ku-ring-gai planning objectives which seek to build upon what is important to the Ku-ring-gai community. The proposed zoning change, to match the established
	social and environmental land use needs to 2036. The LSPS highlights that	character and density of the area would allow for a subdivision to 930m ² which is a generous low density housing lot size.
	the over 65 population will grow significantly with over 10,000 additional residents within this age group by 2036, accounting	The smaller lot size would allow an additional housing opportunity which to match in size and arrangement with surrounding lots along Kulgoa Road. This would provide for an additional lot and housing in an ideal, well located, serviced, high amenity, established location.
	for almost 50% of the overall population growth. The LSPS notes that the area has a high aging population and highlights	The supportive studies detail that with the zoning change and associated density provision changes associated, would allow for the protection of mature trees and biodiversity which are important to the character of the area and Ku-ring-gai.
	the need to investigate housing provision for this age group to enable ageing in place, including	Trees and peripheral biodiversity can be protected around the boundaries and vegetation management can be provided to protect the adjoining natural areas.
	through consideration of LEP clauses that support housing for the aged. The LSPS includes the	This outcome would accord with the expressed values of the Ku-ring-gai community which include: the importance of protecting heritage and the natural environment, protecting species/biodiversity and the sense of place/green and leafy nature of streets and to build

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following relevant planning priorities:around areas accessed by public transport to alleviate traffic congestion.K3. Providing housing close to transport, services and facilities to meet the existing and future requirements of a growing and changing communityThe proposed zoning and density outcome would be consistent with the surrounding low density area character and create consistent, additional housing wit this landscaped context.In terms of housing requirements of a growing and changing communityIn terms of housing response, the LSPS – Part 2 – Liveability –details that the 2016 census indicated a prevalence of single detached residences and this area characteristically low density.
close to transport, services and facilities to meet the existing and future requirements of a growing and changing community existing community requirements of a growing and changing community
and changing community Liveability –details that the 2016 census indicated a prevalence of single detached residences and this area
diverse housing to accommodate the changing structure of families and households and enable ageing in
Intersteringplace.K5. Providing affordablehousing that retains andstrengthens the localresident and businesscommunity.
Whilst this area would not likely be selected as an area for social and affordable housing (which might be smal housing tenures concentrated around town centre renewal areas), providing a smaller range/R2 block siz in this area is considered to improve affordability levels insofar as a larger lot size within the same location wo cost commensurately more.
The 'liveability' section indicates: 'The key challenge in the provision of additional housin in Ku-ring-gai, is its integration into the established fabre of the area and the retention of the dominant large lot I density, garden and tree canopy character'. The propo- meets this challenge as the housing can integrate with the natural environment. The site provides the opportunity. The proposed outcome would allow important biodiversity and tree cover to be preserved despite the opportunity redevelop the existing altered area on the site effectively to accommodate 2 x new houses (and ancillary residential development). This aligns with community values for providing living whilst protecting character.
Planning Priority K3 – providing housing close to transport, services and facilities to meet the existing an future requirements of a growing and changing population.
The proposal promotes housing close to bus connection along Mona Vale Road and nearby railway stations at Pymble and Gordon which provide connection with oth areas around Sydney. This area is close to Pymble, St Ives and Gordon Centres which are well supplied with services and facilities including employment, shopping medical and professional/community services. This will support the growing and changing population and mee range of lifestyle, accessibility and lifecycle needs.
Access to public transport provides options rather than complete reliance on private car transport.

	Planning Priority K4 – providing a range of diverse housing to accommodate the changing structure of families and households and enable aging in place.
	The proposed release of an additional housing lot and the potential future redevelopment of the residential site for the purpose of 2 x new houses and potentially secondary dwellings/dual occupancy within a sustainable/already altered footprint.
K 21 A 20 Minute City	This would promote housing for a range of needs. Modern housing formats and plans which would be utilised can provide for ageing in place, care of elders within the family home and multi-generational living options.
K 21 - A 30 Minute City. Prioritising new development and housing in locations that enable 30 minute access to key	K 21 30 Minute City. Prioritising new development and housing in locations that enable 30 minute access to key strategic centres.
strategic centres.	Consistent . Increased and sustainable additional housing opportunity is provided around infrastructure, utilising existing serviced areas for housing supply.
	In this location, housing is close to transport (bus and rail) and is close to Gordon and St Ives Centres, creating additional economic support for those centres with additional population.
	The proposed minor potential housing uplift in this well accessed location to bus stops, the St Ives Centre and close to rail networks as demonstrated promotes the '30 minute' location of these homes to larger service and employment and community centres such as Hornsby, Gordon, Chatswood and St Leonards. These areas include business, health and employment hubs.
K 28 Improving the condition of Ku-ring-gai's bushland and protecting	K 28 Improving the condition of Ku-ring-gai's bushland and protecting native terrestrial and aquatic flora and fauna and their habitats.
native terrestrial and aquatic flora and fauna and their habitats.	Consistent. The proposed potential Urban Design Outcome Study demonstrates that biodiversity and bushland can be protected and supported R2 Low Density Residential development density.
	The Arboriculture and BDAR studies and Urban Design Outcome Study indicate that the altered and available land (occupied by a large house and tennis court, pool, driveways and gardens) is available to be redeveloped as smaller lots with housing.
	This provides 2 x large low density residential lots, to match the pattern of the area and to use the existing altered parts of the site for an additional residential allotment and 2 potential new houses.
	The Urban Design Outcome Study demonstrates a similar footprint to what is there now. The concept and supportive studies indicate that large dwelling footprints can be provided within the context of tree protection zones and to allow peripheral areas to be weed and vegetation managed, with the potential for additional landscaping and soft areas around new dwellings.
	The TPP provides for the protection of canopy trees.



K 31 Increasing, managing and protecting Ku-ring- gai's urban tree canopy. K 32 – 34 Protecting green grids, connections and	K 29 Enhancing the biodiversity values and ecosystem function services of Ku-ring-gai's natural assets. For the above reasons, R2 (Low Density Residential) zoning and development can protect and enhance biodiversity values and protection of the adjoining ecology.
walking tracks. K 38 – 42 Reducing emissions in Ku-ring-gai	Consistent . As detailed the proposal involves the rezoning of a large, altered site (large house, driveways, gardens, swimming pool and tennis court).
towards Net Zero targets. Redicing waste.	The BDAR and Arborist Assessments find that the 'biodiversity' around the site is around the boundaries.
K 39- 40 Reducing vulnerability and increasing resilience t the impacts of climate change. Increasing the urban tree canopy to create greener, cooler places.	These boundaries would not change and planting around boundaries can be protective despite a potential zoning and density change to support 1 x additional residential lot with generous building footprint. The achievable protection of peripheral trees is demonstrated in the TPP put forward which details that trees can be provided around future lot/house footprint layouts.
K43. Mitigating the impacts of urban and natural hazards.	Therefore, the proposal would preserve and potentially enhance biodiversity and ecosystem into the future.
The LSPS includes an action to undertake a	K 30 Improving the quality and diversity of Ku-ring-gai's urban forest.
housing strategy to inform the long term strategy for delivery of housing across	Consistent . As detailed in comment above. The proposal would protect the adjoining valley corridor of bushland.
the LGA. The Planning Proposal	K 31 Increasing, managing and protecting Ku-ring-gai's urban tree canopy.
directly aligns with the objectives of the LSPS as	Consistent. Refer to the above comment.
it by providing additional seniors housing and medium density housing	K 32 – 34 Protecting green grids, connections and walking tracks.
within the LGA, retaining tree canopy where possible and providing high quality landscaping, and improving the mitigation of bushfire risk.	Consistent . As detailed in comment above. The proposal would protect the adjoining valley corridor of bushland. The BDAR indicates that the proposal would not fragment biodiversity or the bushland. The rear and northern boundaries of the site would not change, nor would any publicly accessible areas or walking tracks.
	K 38 – 42 Reducing emissions in Ku-ring-gai towards Net Zero targets. Reducing waste.
	K 39- 40 Reducing vulnerability and increasing resilience the impacts of climate change. Increasing the urban tree canopy to create greener, cooler places.
	K40. Increasing urban tree canopy and water in the landscape to mitigate the urban heat island effect and create greener, cooler places.
	Consistent. Development can promote energy efficiency and reduction in greenhouse gases via expectations and design/sustainability/energy and water management controls which will apply to future low density housing development.
	Minor increases in housing in accessible, already serviced, and central/accessible areas reduces the pressure on needing to drive long distances to services

		and to meet residential needs.
		The land is already altered in terms of environmental presentation and there would not be the need for substantial tree or vegetation removal to accommodate development. An R2 outcome can maintain the 'treed' context.
		This provides a cool and shaded environment which reduces energy needs in cooling.
		The proposal will enable protecting of the valley biodiversity and existing peripheral trees and is therefore consistent with the objective of increasing and maintaining the urban tree canopy to mitigate the urban heat island effect.
		K43. Mitigating the impacts of urban and natural hazards.
		The subject site is not affected by hazards and provides a viable housing option, reducing the pressure on more vulnerable areas which may be subject to flood or fire hazards.
		The proposed low density outcome can support sustainable water management and not add to flooding issues (as detailed).
Local Housing Strategy (LHS)	Summary of Plan/Objectives The Ku-ring-gai Housing Strategy was adopted by Council in October 2020 and highlights the following in relation to delivering housing in the LGA over the life of the strategy. As of June 2020 3,179, dwellings have been delivered to meet the 0-5 year housing target of 4,000 dwellings The LSPS has a 6-10 year target of 3,000 to 3,600 dwellings	Consistent The LHS sets recommendations for housing provision in the Ku-ring-gai LGA for the 20 year period between 2016 to 2036. The LHS indicates on page 8 that within Ku- ring-gai there is: An ageing population and declining proportion of younger people. A shift in household structures, with the average household size becoming smaller over time. By utilising residual capacity under existing planning controls and allowing for housing in the right locations supplemented by the delivery of seniors housing development and alternative dwellings, the housing needs of Ku-ring-gai's community will be balanced with the protection of local character, heritage and biodiversity assets in line with community feedback. The proposed zoning change to R2 (Low Density Residential) would deliver on objectives relating to the release and availability of well serviced and well-located land, to boost housing close to work and services in sustainable areas.
	capacity within the existing planning controls of 2,700 dwellings on sites currently zoned R3, R4, and B4. This dwelling yield will meet the 0-5 year dwelling target with any remaining capacity contributing to the 6-10 year target Residual capacity within	Utilisation of the available land to allow an area and environmentally appropriate subdivision size for an additional housing opportunity would also assist housing delivery in accordance with current State policies which actively seek to lift affordable housing, housing diversity and housing numbers/supply generally across Sydney. The proposed rezoning of this single lot to match in with the adjoining R2 (Low Density Residential) land is considered to accord with the Ku-ring-gai Housing Strategy in terms of utilising existing residentially
	the current planning controls will be	

1	
supplemented by the	allocated land to the highest and best use and for
delivery of seniors housing	contribution to achieving housing uplift.
and alternative dwellings such as secondary	The proposal is consistent with the Housing Strategy in
dwellings, group homes	that releasing housing on existing serviced and well
and boarding houses	located, accessible land, close to services and transport,
where permissible.	with smaller block sizes and opportunity for new housing
	types will promote affordable and achievable housing for
The Strategy was	a range of family types and needs.
subsequently approved by	
DPE in July 2021, subject	This may include the ability to provide and design
to a number of	contemporary housing formats to provide for
requirements, including	intergenerational needs and to support older people
the following:	ageing in place supported by younger family members.
Council is to commit to a	There is the ability to provide ageing in place and smaller family structures, support for older children and
work program to identify	affordable rental housing via the potential to provide
areas for additional	secondary dwellings within the R2 (Low Density
medium density housing	Residential) zone.
opportunities outside of	
primary local centres such	The proposal tests the current zoning and density
as Roseville, Roseville	allocation and provides evidence that the site is not
Chase, Killara, Pymble,	constrained, is largely altered and that development can
Wahroonga, West Gordon	be achieved to promote housing and area consistent
and North St Ives as	density and pattern whilst also protecting the
identified in the Ku-ring-gai	environment, tree canopy and adjoining biodiversity
LSPS for potential delivery	This outcome will assist with Council's requirement to
in	provide housing in line with the NSW Governments
the 2031 to 2036 period. A	requirements and requests.
planning proposal(s) for	
these centres is to be	This is submitted to assist with the monitoring required for
submitted to the	housing under the strategies.
Department for Gateway	
determination by	
December 2023. Where	
this work is not pursued by	
Council the Department	
welcomes place-based	
approaches by	
landowner/developers to	
explore opportunities for	
additional medium density	
housing in locations that	
are well served by transport, services and	
facilities.	
Council is to monitor and	
review the supply and	
delivery of housing, in	
particular to track its	
performance against the	
6-10 year housing target	
and establish targets for	
seniors and medium	
density housing to	
determine whether future	
changes to the LEP and/or	
DCP are required to	
incentivise or encourage	
housing diversity and	

diversity of housing typologies.	
These requirements highlight the need for greater housing diversity within the LGA. The Planning Proposal is directly aligned with this objective.	

Local Strategy	Summary Plan	Assessment/Consistency
Ku-ring-gai Community Strategic Plan	The Ku-ring-gai Council's Community Strategic Plan (adopted 26 June 2018) sets out aspirations, vision and long term objectives of the Ku-ring-gai community and is the long term strategic plan for the future of the Ku- ring-gai local government area.	Consistent. The proposal is considered to provide a sustainable balance in terms of protecting the environment, renewing areas, increasing land for assisting with housing supply, providing accessible and well-located housing and allowing the protection of heritage and more sensitive areas. As detailed, the proposal would not cause fragmentation of the biodiversity which adjoins the site and trees can be protected around the boundaries despite the development uplift.
	The vision contained in the Plan is: 'Our community vision is a Ku-ring-gai that is a creative, healthy and liveable place where people respect each other, conserve the magnificent environment and society for the children and grandchildren of the future'. Residents expressed value in retaining the highly valued bushland character of the area and the healthy environment and benefits to society that the area provides.	The rezoning and minor increase to housing opportunities would build upon the type of housing options within this pleasant residential and environmental setting. Providing sustainable housing within this environment aligns with the community values. The potential Urban Design Outcome Study is demonstrated to provide a housing outcome which is consistent with the landscaped and garden character and would utilise existing available land efficiently. This allows additional numbers of residents to enjoy Ku-ring-gai's bushland residential aesthetic. The proposal would not detrimentally impact on the provision of open space and parkland which is also a key strategy of the <i>Community Strategic Plan</i> . This is an existing residentially zoned site. For these reasons, the proposal is consistent with the 'Liveability' aims of the plan and would achieve consistency with Council's residential and environmental planning controls.

Q5. Is the planning proposal consistent with any other applicable State and regional studies or strategies?

Net Zero Plan

Sustainable development and energy efficient housing can be constructed to comply with energy standards which are driven by Net Zero targets. Future housing projects would be expected to comply with current energy efficiency, energy efficiency design, waste minimisation, sustainable water and building sustainability requirements.

Surrounded by forest and tree cover, these lots are protected from urban heat. Trees can be protected around the site as detailed in the supporting TPP and via a VMP as discussed in the BDAR.

It is submitted that in line with urban consolidation objectives, providing moderately increased housing in a high amenity, shaded and landscaped area to assist in reducing energy needs involved with developing outer, un-serviced areas. The zoning change would allow the subdivision of the large lot into R2 (Low Density Residential) to release land for subdivision of 1 into $2 \times 930m^2$ lots and to provide $2 \times housing opportunities in place of 1 which will match in density, scale and landscaping with the area.$

Water Plan

Water management can be provided on site and to be re-used without adverse effect and to conserve water and the natural environment in accordance with current planning, sustainability and design requirements for water saving and stormwater.

State Infrastructure Strategy

The proposal uses land well which is located close to roads (Mona Vale Road and the Pacific Highway) with bus connections.

The site is located within bus/walking distance to Pymble and Gordon Railway Stations providing connection to public transport.

The site is located within walking distance and bus trip distance to established centres such as St Ives Shopping Centre (Mona Vale Road), Pymble Station Street shopping/business and medical services and Gordon shopping/business and medical and administrative/Council services. This provides the site with close connection and proximity to important supportive social infrastructure, transport networks and essential infrastructure/utility services.

The proposed zoning adjustment to allow the subdivision of the land in accordance with the R2 (Low Density) Zone and associated density standards would promote the creation of an additional lot of land and 2 x potential additional housing development opportunities close to services. Future low density residential development can support the use of transport and reduce the need for long distance car commutes given this proximity to serviced areas. This aligns with transit oriented urban consolidation objectives of all planning frameworks. The proposed zoning therefore represents the efficient and economic use of serviced land.

NSW 2021: A Plan to Make NSW Number One NSW 2021

The plan's strategies include to 'rebuild the economy, provide quality services, renovate infrastructure, restore government accountability, and strengthen our local environment and communities'.

This Planning Proposal is consistent with the following relevant goal/target:

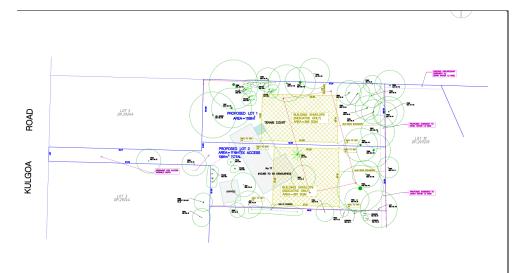
'Goal 5, Target 1: Improve housing affordability and availability and to partner with local councils to ensure that targets for housing and growth and the priorities within the subregional plans and regional plans are reflected in relevant planning proposals and in local planning instruments'.

The proposed zoning adjustment will provide a consistent lot pattern and density outcome to match the adjoining sites and established area character.

Allowing an R2 (Low Density Residential) zone designation and associated adjustment Lot Size and FSR Development Standards will match the surrounding area and will allow subdivision to create smaller lots, and an additional housing opportunity.

This careful and appropriate density increase is demonstrated in the supporting documentation to also accord with biodiversity and tree protection objectives and to represent sustainable development as the land is already largely cleared and altered.

Allowing R2 (Low Density Residential) zoning will allow smaller lot sizes which can provide more affordable parcels of land (smaller allotment size). This would create housing in well serviced and accessible areas and consolidate land in a measured way in accordance with a range of planning policies.



Supportive Detail: Proposed R2 (Residential Low Density), 930m² lot and dwelling footprint layout over existing areas to protect boundary trees.

This provides a demonstrated R2 scale Urban Design Outcome Study/lot outcome to protect trees and biodiversity as detailed in the Urban Design Outcome and supportive documents.

Q6. Is the planning proposal consistent with applicable State Environmental Planning Policies (SEPPs)?

The following table identifies the key applicable SEPPs and outlines this Planning

Proposal's consistency with those SEPPs.

	Comment on Consistency
Planning systems) 2021 Consistent.	sal involves a proposal for a local planning instrument
	change which would allow subdivision. This would not be integrated
r 4: Concurrences and The Planning Propo ts making planning ins	sal follows the guidelines and requirements in terms of trument changes.
	ing is considered appropriate given the current housing orted across all media State and nationally.
facing metropolitan and now recently im to increase housing	Ainns has publicly spoken on the housing supply problems Sydney and the wider state and made it clear via planned plemented updates to State Policies (Housing) the need opportunities for each local government area, as well as le of housing types, sizes and affordability levels.
ecology have been density lot size and	sal is considered justifiable on the basis that the site and studied and discussed in detail. The proposed R2 low potential future large dwelling layout (and associated trated to allow the protection of these areas as required ing objectives.
The proposed rezor shortage widely report The NSW Premier M facing metropolitan and now recently im to increase housing broadening the range The Planning Propo ecology have been density lot size and services) is demons	ing is considered appropriate given the cu orted across all media State and nationally Alinns has publicly spoken on the housing s Sydney and the wider state and made it clu plemented updates to State Policies (Hous opportunities for each local government ar je of housing types, sizes and affordability sal is considered justifiable on the basis th studied and discussed in detail. The propo potential future large dwelling layout (and a trated to allow the protection of these area

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The adjustment of the subject property from an overly restrictive and unnecessary C4 (Environmental Lving) zoning to R2 (Low Density medicinos) (Weillocated housing opportunity with a smaller iand size in Kur- ing-gal to assist in meeting current housing needs. R2 (Low Density Residentia) would still allow the required biodiversity protection. SEPP (Biodiversity and Conservation) 2021 Consistent. Residentia) would still allow the required biodiversity protection. Consistent. Chapter 2: Vegetation in non-rural areas Consistent. Chapter 4: Koala habitat protection 2021 The report indicates that the proposal would not adversely impact on fauna species or hobitat and would not determentally effect or fragment the vegetation community. The proposal is consistent with Biodiversity conservation bigitation and guidelines. Chapter 5: Hawkesbury-Nepean River The area is not known to be koala habitat. Chapter 6: Sushiand in urban area (Chapter 10: Sydney Harbour Catchment The BDAR offers suggestions in relation to burb management. replensimment platining, and vouid acet bio would acet biodiversity but entance it line with planning objectives. This would acet biodiversity plat and would be expected to not only protect the significant biodiversity plat and would be expected to not only protect the significant biodiversity plat and would be expected to comply with current water management and reuse development controls. Chapter 10: Sydney Harbour Catchment SetDep (Aceta) and Aceta) and would be acceptable in terms of the potential site absorption, re- use and disposal of warator beaure hathag area conton founded in relation to water quali	SEPP	Comment on Consistency
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Chapter 4: Koala habitat protection 2021 The report indicates that the proposal would not adversely impact on fauna species or habitat and would not detrimentally effect or fragment the vestication community. The proposal is consistent with Biodiversity conservation legislation and guidelines. Chapter 7: Canal estate development The area is not known to be koala habitat. Chapter 9: Hawkesbury-Nepean River The BDAR offers suggestions in relation to future management, replenishment planting, and vegetatives. This would acceptably protect the bushland within this urban area for the ecology, tree over and cooling and in relation to local area character. This would enable the protection of the aesthetic value of this 'treed' area. As detailed in the concept stormwater plans, the future low density residential development would be expected to nortols. SEPP (Resilience and Hazards) 2021 Consistent. Chapter 1: Coastal management Chapter 3: Aczardous and offensive development Consistent. Chapter 4: Remediation of land Consistent. SEPP (Industry & Employment) 2021 Consistent. Chapter 3: Advertising and signage Consistent. SEPP Building Sustainability 2022 Consistent. SEPP Building Sustainability 2022 Consistent. SEPP (Transport and Infrastructure Chapter 3: Educational establishment and child care facilities Consistent. SEPP (Precincts-Eastern Harbour CUI) 2021 Consistent. </td <td>2021 Chapter 2: Vegetation in non-rural</td> <td>Refer to the BDAR assessment which documents in detail the biodiversity and conservation mapping, trees/flora and fauna and cross references with the Arboricultural Assessment and tree survey/TPP outcome document as a</td>	2021 Chapter 2: Vegetation in non-rural	Refer to the BDAR assessment which documents in detail the biodiversity and conservation mapping, trees/flora and fauna and cross references with the Arboricultural Assessment and tree survey/TPP outcome document as a
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City) 2021 The site is not within a state significant precinct and is demonstrated in the document review as consistent with the 3 Cities plan. Chapter 2: State significant precincts Consistent.	Chapter 3: Educational establishment	The site is not directly affected by specific chapters within these SEPPs. The
SEPP (Housing) 2021 Consistent.	City) 2021	The site is not within a state significant precinct and is demonstrated in the
	Chapter 2: State significant precincts	
	SEPP (Housing) 2021	

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SEPP	Comment on Consistency
	The principles of SEPP Housing include:
	 The principles of this Policy are as follows— (a) enabling the development of diverse housing types, including purposebuilt rental housing, (b) encouraging the development of housing that will meet the needs of more vulnerable members of the community, including very low to moderate income households, seniors and people with a disability, (c) ensuring new housing development provides residents with a reasonable level of amenity, (d) promoting the planning and delivery of housing in locations where it will make good use of existing and planned infrastructure and services, (e) minimising adverse climate and environmental impacts of new housing development, (f) reinforcing the importance of designing housing in a way that reflects and enhances its locality, (g) supporting short-term rental accommodation as a home-sharing activity and contributor to local economies, while managing the social and environmental impacts from this use, (h) mitigating the loss of existing affordable rental housing.
	The development encourages housing supply to support the local population in providing an additional housing opportunity and the potential to build 2 x new houses (and potentially secondary dwellings).
	A zoning for low density housing can minimise environmental impacts as existing trees and surrounding biodiversity can be maintained.
	The housing density which would result from R2 (Low Density Residential) allowances would be in character with the surrounding area.
	Large housing footprints are demonstrated in the Urban Design Outcome Study to be able to be provided on a 930m2 lot size whilst retaining spatial separation from other homes and providing planted areas
	R2 zonings can accommodate Secondary Dwellings and now potentially dual occupancy developments as a format, under the Housing SEPP. This will support housing numbers, types and affordability given the smaller land sizes and more compact homes.
	Secondary dwellings can promote low density affordable rental housing and support younger and older family members in living independently with the family.
	Any development which is proposed and able to be proposed in the R2 (Low Density Residential) land under either state or local approval tracks for this site would need to be consistent with allowable density, site coverage, landscaping, setback requirements and environmental controls and conditions.
	Development would be required to comply with numeric planning controls applicable to low density. In turn, compliance will protect the boundary planting and ecology and the site provides as detailed a large cleared available area for low density uses.
	Biodiversity mapping applies at the boundaries and therefore protection of trees and biodiversity (and area character) will be required to be assessed with all levels of biodiversity protection legislation and development controls.
	Future development would therefore be expected to sympathise with and protect this biodiversity context.
	It is expected that tree protection and appropriate weed and vegetation management would be expected as part of proposals/consent conditions.
	As discussed, TPP and VMP's can be required for future development.
SEPP Exempt and Complying Development Codes 2008	Consistent. The Codes SEPP would be relevant to the site as far as allowing low density residential uses.
The Codes SEPP aims to provide streamlined assessment processes for development certain types of development that are of minimal environmental impact and identifying types of complying development that	This would potentially lead to dwelling houses, secondary dwellings and ancillary developments to these uses which are permissible in both the C4 (Environmental Living) and R2 (Low Density Residential) zones. R2 residential housing would be required to comply with specific clauses and

SEPP	Comment on Consistency
may be carried out in accordance with complying development codes.	lead to appropriate development outcomes, water management, energy efficiency. site coverage and scale and amenity outcomes and tree protection.

Q7. Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

The following table identifies applicable s9.1 Ministerial Directions and outlines this Planning Proposal's consistency with those Directions.

Directions under S9.1	Objectives Consistency			
1. PLANNING SYSTEMS				
1.3 Approval and Referral Requirements This direction applies to all relevant planning authorities when preparing a planning proposal.	The objective of this direction is to ensure that LEP provisions encourage the efficient and appropriate assessment of development.	Consistent. The Planning Proposal which seeks an adjustment to zoning is consistent with the objective of encouraging efficient and appropriate development and promoting housing.		
		The subject site and Urban Design Outcome Study indicate that housing and ancillary space and facilities can be situated largely over the existing altered area, with peripheral and significant planting protected around the boundaries. The lot size and density patter would match the prevailing pattern.		
		This minor and sustainably release of exiting residential land for improved efficiency near resources on serviced and buildable land and near transport (whilst also protecting significant boundary and adjoining tree cover) is in accordance with the orderly and efficient us of land.		
1.4 Site Specific Provisions This direction applies to all relevant planning authorities when preparing a planning proposal that	The objective of this direction is to discourage unnecessarily restrictive site specific planning controls.	Consistent. The proposal seeks a zoning adjustment to match in with the adjoining zone and to avoid site specific controls.		
will allow a particular development to be carried out.		The proposal to rezone the land to R2 (Low Density Residential) would have the effect of removing undue and unnecessary restriction on the ability to subdivide. R2 subdivision can occur whilst achieving the biodiversity and tree protection objectives of the Ku-ring-gai planning controls.		
3. BIODIVERISTY AND CONSERVA	ΤΙΟΝ			
3.1 Conservation zones This direction applies to all relevant planning authorities when preparing a planning proposal.	The objective of this direction is to protect and conserve environmentally sensitive areas.	Consistent. This matter and the ability of the rezoning, lot size and Urban Design Outcome Study to protect trees and allow conservation is well documented within this document and the supporting studies and plans.		
		The development outcome and density can provide housing whilst also ensuring that the vegetation and biodiversity values around the periphery can be protected.		
		The proposal is therefore consistent with this direction.		
3.2 Heritage Conservation	The objective of this direction is to conserve items, areas, objects and places of environmental heritage	Consistent. The proposal is not directly near or affected by any heritage designation and this is not a		

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Directions under S9.1	Objectives	Consistency
This direction applies to all relevant planning authorities when preparing a planning proposal.	significance and indigenous heritage significance.	development constraint for the subject Planning Proposal.
4. RESILIENCE AND HAZARDS	3	
4.1 Flooding This direction applies to all relevant planning authorities that are responsible for flood prone land when preparing a planning proposal that creates, removes or alters a zone or a provision that affects flood prone land.	The objectives of this direction are to: (a) ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the <i>Floodplain Development Manual</i> 2005, and (b) ensure that the provisions of an LEP that apply to flood prone land are commensurate with flood behaviour and includes consideration of the potential flood impacts both on and off the subject land.	Consistent. As discussed, the site is not flood affected and sustainable drainage could be provided. The future lots and houses would be expected to comply with water management standards (required for applications for future development) to promote on site absorption via appropriate density as well as water re-use and sustainable management solutions to comply with sustainability and water management standards. The proposed minor zoning adjustment is not considered to create concern or exacerbate stormwater runoff issues for the area, water courses or adjoining land. This is because stormwater management is demonstrated as part of the possible low density residential development outcome/with the indicative stormwater layout. Future development would be expected to comply with best practice for water sensitive development as part of development controls. The stormwater management concept has been designed by a relevantly qualified engineer in concert with arboricultural and environmental consultants. It is their professional view following detailed assessment, that the site is capable of sustaining the development potential proposed. This has been revised by the ecologist and would not create adverse impacts on important biodiversity. The proposed density is within the environmental capacity of the site.
4.2 Coastal Management This direction applies when a planning proposal authority prepares a planning proposal that applies to land that is within the coastal zone, as defined under the Coastal Management Act 2016 - comprising the coastal wetlands and littoral rainforests area, coastal vulnerability area, coastal environment area and coastal use area - and as identified by chapter 3 of the State Environmental Planning Policy (Resilience and Hazards) 2021.	The objective of this direction is to protect and manage coastal areas of NSW.	Consistent. The subject site is well separated from any coastal areas and would not adversely impact.
4.3 Planning for Bushfire Protection This direction applies to all local government areas when a relevant planning authority prepares a planning proposal that will affect, or is in proximity to, land mapped as bushfire prone land.	The objectives of this direction are to: (a) protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and	Consistent. As noted, the subject site and surrounding sites are not mapped as bushfire prone. Future housing is not governed by codes relating to this issue. Unlocking this opportunity on available and serviced/cleared land is submitted reduce pressure on less viable areas in relation to

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Directions under S9.1	Objectives	Consistency
This applies where the relevant planning authority is required to prepare a bush fire prone land map under section 10.3 of the EP&A Act, or, until such a map has been certified by the Commissioner of the NSW Rural Fire Service, a map referred to in Schedule 6 of that Act.	(b) encourage sound management of bush fire prone areas.	environmental risk and hazard. This provides a safe housing opportunity. This would allow the protection of life and property in the face of increasing fires and climate change.
 4.4 Remediation of Contaminated Land This direction applies when a planning proposal authority prepares a planning proposal that applies to: (a) land that is within an investigation area within the meaning of the Contaminated Land Management Act 1997, (b) land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out, (c) the extent to which it is proposed to carry out development on it for residential, educational, recreational or childcare purposes, or for the purposes of a hospital – land: i. in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a purpose referred to in Table 1 to the contaminated land planning guidelines has been carried out, and ii. on which it would have been lawful to carry out such development during any period in respect of which there is no knowledge). 	The objective of this direction is to reduce the risk of harm to human health and the environment by ensuring that contamination and remediation are considered by planning proposal authorities.	Consistent. The site has been historically been developed as 1 x single detached dwelling with a pool, tennis court and extensive garden areas. Therefore, contamination is unlikely. The minor change of residential zoning would not create risk and is consistent with the direction.
4.5 Acid Sulfate Soils This direction applies to all relevant planning authorities that are responsible for land having a probability of containing acid sulfate soils when preparing a planning proposal that will apply to land having a probability of containing acid sulfate soils as shown on the Acid Sulfate Soils Planning Maps held by the Department of Planning, Housing and Infrastructure.	to all relevant at are avoid significant adverse environmental impacts from the use of land that has a probability of containing acid sulfate soils. If the Planning Proposal to al from C4 (Environmental Liv residential) effectively envir type of low density develop a more efficient/smaller lot s The planning, The site is Class 5 and not of residential use and develop The Planning Proposal to al from C4 (Environmental Liv residential) effectively envir type of low density develop a more efficient/smaller lot s The proposed change there	
5. TRANSPORT AND INFRAST	RUCTURE	-
5.1 Integrating Land Use and Transport This direction applies to all relevant planning authorities when preparing a planning proposal that will create, alter or remove a zone or a	The objective of this direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives:	Consistent. As detailed, the proposal is entirely consistent with this direction as the adjustment of zoning will allow an additional lot to be subdivided.

Directions under S9.1	Objectives	Consistency
provision relating to urban land, including land zoned for residential, business, industrial, village or tourist purposes.	 (a) improving access to housing, jobs and services by walking, cycling and public transport, and (b) increasing the choice of available transport and reducing dependence on cars, and (c) reducing travel demand including the number of trips generated by development and the distances travelled, especially by car, and (d) supporting the efficient and viable operation of public transport services, and (e) providing for the efficient movement of freight. 	This area is located close to bus services and train services as well as being located close to community infrastructure, open spaces and commercial centres. In accordance with the strategic planning documents which apply (as discussed), this area is a great place to live, is well connected to jobs and would reduce the need to use private travel to access necessary lifestyle needs. The proposed opportunity for a minor housing uplift in this well serviced location would enable the use of available and viable land, to promote more affordable block sizes, and allow more people to live in this high amenity environment. This would create lot patterns whilst retaining the conservation/biodiversity values of the adjoining land. The outcome would support the use of transport, reduce reliance on cars (given the options of local transport and walking to shops and free up the roads for freight/neutral change in line with Transit Oriented Development ('TOD') policies.
5.2 Reserving Land for Public Purposes This direction applies to all relevant planning authorities when preparing a planning proposal.	The objectives of this direction are to: (a) facilitate the provision of public services and facilities by reserving land for public purposes, and (b) facilitate the removal of reservations of land for public purposes where the land is no longer required for acquisition.	Consistent. The proposal does not create issues in terms of the adjoining SP2 (Water Supply) land which would remain. The proposal would not change the availability of land for services as this is the minor zoning adjustment of existing residential land (residential to residential use).
6. HOUSING		
6.1 Residential Zones This direction applies to all relevant planning authorities when preparing a planning proposal that will affect land within an existing or proposed residential zone (including the alteration of any existing residential zone boundary), or any other zone in which significant residential development is permitted or proposed to be permitted.	The objectives of this direction are to: (a) encourage a variety and choice of housing types to provide for existing and future housing needs, (b) make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services, and (c) minimise the impact of residential development on the environment and resource lands.	Consistent. As detailed, the Planning Proposal is entirely consistent with this Direction and all layers of metropolitan and state planning which seek to promote well connected housing, near jobs services and transport and in the right places. The Planning Proposal is consistent with TOD priorities and the necessary urban consolidation of Sydney to accommodate the population to alleviate sprawl. The proposed zoning alteration to allow a reasonable, and still generous, 930m ² lot size (as opposed to 1,500m ² lot size) would unlock additional land for appropriate scaled
		This action would increase the opportunity to subdivide to create relatively spacious residential lots to be consistent with the pattern and to maintain the peripheral bushland. This would provide more families with housing options. The proposed outcome is consistent with the pattern of the area as low density housing and would not compromise the development of smaller housing tenures in

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Directions under S9.1	Objectives	Consistency
		locations right next to stations and centres (within 400-800m). More intense density is to be provided around the station areas via the TOD program via SEPP (Housing) 2021. It is noted that 'Secondary Dwellings' for affordable rental and support housing are permissible within both the C4
		(Environmental Living) and R2 (Low Density Residential) zones and therefore there would be no change in terms of the possibility of this typology to boost affordable and varied housing (via lot size choice and additional residential land availability).
		The ability to create an additional secondary dwelling opportunity on the possible additional lot is a future benefit in terms of the delivery of affordable housing options.
		Development would always be considered in connection with the need to protect biodiversity as the local biodiversity map and NSW biodiversity values maps are not proposed to change and would remain appropriate development guides.
		That is, the key setting and peripheral tree context would remain carefully considered and managed in accordance with the various layers of biodiversity, conservation and bushland management legislation and planning guidelines.
		Smaller lot sizes offer the potential to improve affordability and properties within financial reach.
		Allowing the proposed development outcome on this well serviced and relatively unconstrained/viable land would have the broader effect of minimising the pressure on the environment and other resource lands.
		Urban consolidation will assist in the minimisation of suburban sprawl, commute times and inefficiencies associated with needing to travel large distances for work etc.
6.2 Caravan Parks and Manufactured Home Estates	The objectives of this direction are to:	Consistent. The site is not affected by this direction, not being a caravan park or home estate.
This direction applies to all relevant planning authorities when preparing a planning proposal.	(a) provide for a variety of housing types, and	
This direction does not apply to Crown land reserved or dedicated for any purposes under the <i>Crown</i> <i>Land Management Act 2016</i> , except Crown land reserved for accommodation purposes, or land dedicated or reserved under the <i>National Parks and Wildlife Act</i> 1974.	(b) provide opportunities for caravan parks and manufactured home estates.	
7. INDUSTRY AND EMPLOYMENT		
7.1 Business and Industrial Zones This direction applies to all relevant planning authorities when preparing a planning proposal that will affect land within an existing or	The objectives of this direction are to: (a) encourage employment growth in suitable locations, (b) protect employment land in	Consistent. The subject site is not a business or industrial zone and is not proposed to change from being a low density residential based zone.
proposed business or industrial zone (including the alteration of	business and industrial zones, and	The proposed zoning change would not adversely impact any surrounding business

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Directions under S9.1	Objectives	Consistency		
any existing business or industrial zone boundary).	(c) support the viability of identified centres.	or industrial zone, involving a change in residential zoning of the subject land from C4 (Environmental Living) allowing residential low density development to R2 (Low Density Residential) to simply alter the density and subdivision lot size allowances. Being residentially zoned land, this would not adversely impact on employment zoned lands and would not negatively impact on the viability of identified employment centres, being well outside of those.		
9. PRIMARY PRODUCTION				
9.1 Rural Zones	The objective of this direction is to protect the agricultural production value of rural land.	Consistent. The subject site is not a rural zone and is not proposed to change from being a low density residential based zone. The proposed zoning change would not implicate any surrounding rural zone. Concentration of residential uses in appropriate areas such as is proposed is considered to have the effect of protecting outer and metropolitan rural zones from being impacted by housing and land release pressure.		

C. ENVIRONMENTAL, SOCIAL AND ECONOMIC IMPACT

Q8. 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 Ecological Assessment/BDAR assesses the site in the context of the intended subdivision resulting from the proposed zone change. This assessment is based on the AIA provided and the Urban Design Outcome Study/subdivision layout and stormwater concept outline developed underneath the BDAR and AIA/TPP detailing the potential for a potential future R2/930m² subdivision.

This assessment provides a comprehensive review of the potential impact in relation to species and habitat in terms of land subdivision.

The proposal will have minimal environmental impacts and likely positive impact on balance through the implementation of VMPs/TPPs.

The Arborist Report ("AIA) indicates:

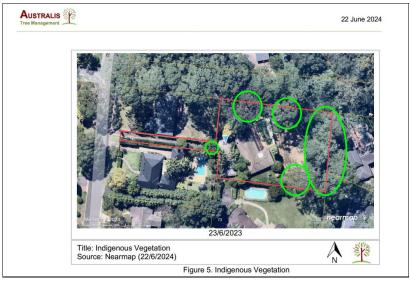
The site contains indigenous, planted native and exotic tree species of varying ages and stages of maturity. Indigenous vegetation community is located onsite. This is assessed in the BDAR.

The subject site has been partially modified with the removal of most of the native under storey, ground cover plants and shrubs prior to 1943.

The subject dominant trees together with other indigenous trees in the surrounding residences are connected to the remainder of the ecological communities nearby.

Young indigenous trees are highly valued for retention and protection. Indigenous tree species assessed are:

- Tree No. 71 Angophora costata (Smooth-barked Apple)
- Tree No. 70 Eucalyptus pilularis (Blackbutt)
- Tree No. 87 Eucalyptus punctata (Grey Gum)
- Tree No.'s 65, 68, 69, 80 & 81 Eucalyptus saligna (Sydney Blue Gum)
- Tree No.'s 74 & 79 Pittosporum undulatum (Sweet Pittosporum)
- Tree No.'s 72, 73 & 105 Syncarpia glomulifera (Turpentine)



Supportive Detail: Map showing significant trees from the AIA

The AIA contains management recommendations and TPP to provide for the protection of the significant trees which indicates that R2 (Low Density Subdivision) is possible on the site whilst ensuring tree and biodiversity protection.

The indicates that the current canopy cover is 67% and with the TPP and recommended management measures this large area of canopy for the site can be protected around the boundaries via the suggested large, R2 (Low Density Residential) dwelling footprints.

The BDAR considers the tree details provided by Australis Trees and the suggested subdivision lot layout in terms of the ecological presentation and site situation.

The assessment summarises that the proposal would satisfy the provisions of Clause 13.1 of the KDCP in relation to Tree and Vegetation works and would be consistent with Part 18 of the KDCP in relation to Biodiversity Protection. The assessment considers the composition of the site and characteristics.

The TPP sets out that peripheral trees would be protected for canopy continuity and to maintain the leafy area character and landscaped privacy screening between lots.

Tree No.	Species	TPZ	Proposed Status	Tree N	p. Species	TPZ	Proposed Status	Tree No	Species	TPZ	Proposed Status
34	Juniperus communis (Juniper)	2.4m	Retain	73	Syncarpia glomulifera (Turpentine)	6.0m	Retain	103	Camellia reticulata (Reticulata Camellia)*	2.0m	Retain
35	Juniperus communis (Juniper)	2.0m	Retain	74	Pittosporum undulatum (Sweet Pittosporum)	4.8m	Retain	104	Celtis australis (Nettle Tree)*	6.0m	Retain
36	Buxus sp (Buxus)*	2.0m	Retain	75	Brachychiton acerifolius (Illawarra Flame Tree)	4.8m	Retain	105	Syncarpia glomulifera (Turpentine)	3.6m	Retain
37	Camellia reticulata (Reticulata Camellia)	2.4m	Retain	76	Grevillea robusta (Silky Oak)	24.0m	Retain	106	Tibouchina lepidota 'Alstonville' (Alstonville Tibouchina)*	2.0m	Retain
38	Pittosporum tenuifolium (Pittosporum)*	2.0m	Retain	77	Celtis australis (Nettle Tree)*	7.2m	Retain	107	Tibouchina lepidota 'Alstonville' (Alstonville Tibouchina)*	2.0m	Retain
40	Cettis australis (Nettle Tree)*	2.0m	Retain	78	Callistemon salignus (Willow Bottlebrush)	5.1m	Retain	108	Tibouchina lepidota 'Alstonville' (Alstonville Tibouchina)*	2.0m	Retain
42	Juniperus communis (Juniper)	2.0m	Retain	79	Pittosporum undulatum (Sweet Pittosporum)	2.4m	Retain	109	Tibouchina lepidota 'Alstonville' (Alstonville Tibouchina)*	2.0m	Retain
43	Camellia reticulata (Reticulata Camellia)	2.0m	Retain	80	Eucalyptus saligna (Sydney Blue Gum)	9.6m	Retain	110	Tibouchina lepidota 'Alstonville' (Alstonville Tibouchina)*	2.0m	Retain
49	Glochidion ferdinandi (Cheese Tree)	6.0m	Retain	81	Eucalyptus saligna (Sydney Blue Gum)	4.8m	Retain				
53	Callistemon salignus (Willow Bottlebrush)	3.0m	Retain	82	Ligustrum lucidium (Large Leaf Privet)*	3.6*	Retain				
54	Thuja plicata (Western Red Cedar)	4.8m	Retain	83	Livistona chinensis (Chinese Fan Palm)	3.0m	Retain				
55	Glochidion ferdinandi (Cheese Tree)	6.0m	Retain	84	Livistona chinensis (Chinese Fan Palm)	3.0m	Retain				
56	Archontophoenix cunninghamiana (Bangalow Palm) multiple	3.0m	Retain	85	Livistona chinensis (Chinese Fan Palm)	3.0m	Retain				
57	Archontophoenix cunninghamiana (Bangalow Palm)	3.0m	Retain	86	Livistona chinensis (Chinese Fan Palm)	3.0m	Retain				
58	Archontophoenix cunninghamiana (Bangalow Palm)	3.0m	Retain	87	Eucalyptus punctata (Grey Gum)	8.4m	Retain				
59	Jacaranda mimosifolia (Jacaranda)	4.8m	Retain	88	Cedrus deodara (Deodar Cedar)	8.4m	Retain				
59	Jacaranda mimosifolia (Jacaranda)	4.8m	Retain	89	Ulmus glabra (Scotch Elm)	7.2m	Retain				
60	Jacaranda mimosifolia (Jacaranda)	5.1m	Retain	90	Archontophoenix cunninghamiana (Bangalow Palm)	3.0m	Retain				
61	Camellia reticulata (Reticulata Camellia)	2.4m	Retain	91	Archontophoenix cunninghamiana (Bangalow Palm)	3.0m	Retain				
62	Livistona chinensis (Chinese Fan Palm)	3.0m	Retain	92	Archontophoenix cunninghamiana (Bangalow Palm)	3.0m	Retain				
63	Cedrus deodara (Deodar Cedar)	6.0m	Retain	93	Archontophoenix cunninghamiana (Bangalow Palm)	3.0m	Retain				
64	Jacaranda mimosifolia (Jacaranda)	6.0m	Retain	94	Archontophoenix cunninghamiana (Bangalow Palm)	2.4m	Retain				
65	Eucalyptus saligna (Sydney Blue Gum)	12.0m	Retain	95	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain				
66	Stenocarpus sinuatus (Fire Wheel Tree)	2.4m	Retain	96	Howea forsteriana (Kentia Palm)	2.0m	Retain				
67	Dead	N/A	Retain	97	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain				
68	Eucalyptus saligna (Sydney Blue Gum)	6.0m	Retain	98	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain				
69	Eucalyptus saligna (Sydney Blue Gum)	7.2m	Retain	99	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain				
70	Eucalyptus pilularis (Blackbutt)	4.8m	Retain	100	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain				
71	Angophora costata (Smooth-barked Apple)	6.6m	Retain	101	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain				
72	Syncarpia glomulifera (Turpentine)	4.8m	Retain	102	Ravenea rivularis (Majesty Palm)	2.4m	Retain				
	* Exempt from Council Protetcion										

Supportive Detail: Tree Protection Listing/Schedule for the Site (in connection with the TPP plan)

The BDAR Report makes recommendations as to appropriate and supportive future planting (50% locally indigenous species) and species that reflect the relevant discussed vegetation communities of the site and via a VMP.

The concept stormwater plan indicates that existing mature trees and landforms can be protected via the stormwater being connected to the rear easement area. This can be achieved to support the potential subdivision and R2 (Low Density Residential) lot layout as detailed below.

As a precautionary measure, the BDAR and TPP assume 0.2ha of native vegetation may be indirectly impacted for the installation of stormwater drainage at the rear of the properties as well as edge effects. This has been taken into account into the BAM-C credit calculation.

Council can provide conditions of consent to ensure the further protection (and improvement) of this vegetation via conditions and a VMP which would manage weeds and replenish with suitable supportive plant species.

It is anticipated that the subdivision would therefore allow the retention of most of the trees on site and protect biodiversity and habitat.

The AIA indicates that trees can be protected via appropriate construction management and that works are unlikely to impact on the trees on adjoining land. A tree protection schedule and details are provided within the AIA and associated TPP. Further, that the arborist report has provided the location of tree protection fencing to ensure all remnant native trees are protected during any essential subdivision works.

The BDAR indicates that the building envelopes indicated as part of the Urban Design Outcome Study for subdivision would be located outside the tree protection zones of locally native trees belonging to the *Sydney Turpentine Ironbark Forest Critically Endangered Ecological Community*. There is no Areas of Outstanding Biodiversity Value ('AOBV') on the site. Around 45% of the site can be classified as native vegetation cover and this can be seen as largely around the boundaries on the site plans with the house, pool, driveway and tennis court occupying a substantial area of the site.

As the subject site is not mapped as bushfire prone land, an Asset Protection Zone for potentially resulting in additional vegetation clearing will not be required for future dwellings. Any native vegetation along the rear of a future subdivision would be subject to a future VMP which can be

provided to Council prior to the release of the Subdivision Certificate. This would normally be a requirement for the subdivision and development of land adjoining mapped biodiversity

No threatened fauna species were observed on the subject site during the site assessment. Fauna habitat within the site is further detailed in (Table 7 of the BDAR).

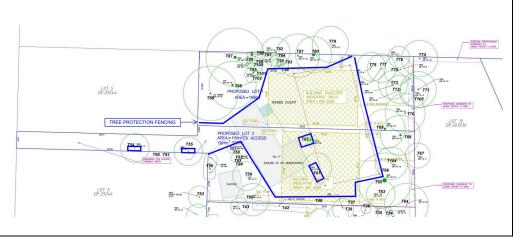
Desktop analysis revealed a number of threatened fauna species have the potential to utilise habitat on the Subject Site during part of their lifecycles (Table 8 BDAR).

There was no potential for significant impact upon all potentially occurring *Biodiversity Conservation Act* listed threatened species therefore no assessment under the '5-Part Test Assessment of Significance' was required.

It has been assessed that there was no potential for significant impact upon all potentially occurring listed threatened species therefore no assessment under the *Significant Impact Guidelines for Matters of National Environmental Significance* (MNES) was required.

The ecological assessment for the Planning Proposal concludes that due to the existing presentation and the existing, substantial disturbed area, that the proposed future subdivision works which could occur following zoning for R2 (Low Density Residential) are unlikely to result in a significant impact such that a local viable population or occurrence of any of the threatened species would be placed at risk of extinction. The detailed assessment is provided in the BDAR.

Based on the above summary of ecological and tree assessment documents, the Planning Proposal and zoning change would not adversely impact on significant tree cover or fragment the biodiversity values which are connected with the adjoining bushland.

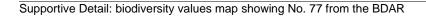


Supportive Detail: TPP and lot layout to protect trees and biodiversity values

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Figure 5: Sensitive biodiversity values map (Source: NSW DPIE accessed 18/12/22)



The above Urban Design Outcome Study next to the Sensitive Biodiversity Values Map shows that R2 (Low Density Residential) density housing can be accommodated on the site whilst protecting the peripheral stands of trees and surrounding/adjoining biodiversity.

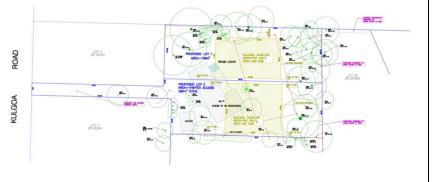
The supportive documents undertaken with this Planning Proposal demonstrate that substantial tree cover around the boundaries can be maintained as detailed and native local species/communities, local habitat or ecology can be protected in those areas. The area of potential development occupies an already altered/disturbed area and future development of those altered areas can be achieved to promote housing and also to manage, protect and replenish vegetation on the site.

The proposed rezoning to R2 (Low Density Residential) is supportable as future development to comply with R2 development provisions and allowances can occur as ecologically sustainable future development.

Q9. Are there any other likely environmental effects of the planning proposal and how are they proposed to be managed?

• The environmental impacts of the proposal would be commensurate with low level alteration anticipated for low density housing. Adjoining, surrounding, opposite development comprises detached houses within garden settings at an R2 (Low Density Residential) density (aligning with the current lot site standard of 930m²). As noted, the area proposed for the potential 2 x lots is already altered and developed with residential structures.

- By rezoning the site to R2 (Low Density Residential) this would transition the density standards over to be consistent and the minimum lot size for subdivision would be 930m². This would remove the overly restrictive subdivision minimum lot size standard and replace it with the more reasonable and appropriate minimum lot size Development Standard (connected with R2).
- The anticipated development layout for the R2 (Low Density Residential) outcome presented demonstrates that large, detached house footprints to comply with R2 controls.
- This can be seen below and is consistent with the surrounding lot sizes.



- Future low density residential development would be expected to protect the environment in accordance with local and state planning controls and conditions (State Environmental Planning Policies, the aims and objectives of the KLEP and zone and the controls within the KDCP which relate to housing outcomes such as amenity, built upon area, tree management).
- If housing was to be delivered under state controls, this would be required to comply with built form, water management landscaping, water management, energy efficiency/sustainability and tree provisions.
- Assessments, conditions and controls for future R2 (Low Density Residential) development proposals would always be applied to the specific presentation, features, constraints, tree cover etc of the site.
- Important characteristics of this site and context include substantial and mature trees, plant community, habitat, landform, and scenic/bushland values. These can be retained in accordance with the TPP as discussed.
- As detailed in the tree and BDAR reports, the residential development of the site could/would be subject to TPP (as it would be currently), site management and potentially VMP's to ensure the protection of trees and biodiversity around the site and adjoining. This would ensure protection of existing and replenishment of suitable plants to ensure the on-going protection of the adjoining biodiversity as part of future development.
- As water can be drained away and would be expected to be contained and controlled, this is not expected to cause adverse impacts to the ecology, land or any watercourses. The disturbance for this is assessed as minimal.
- Given the proposal is for low density residential, there would not be considerable or noticeable increase to traffic in the area.
- The potential creation of 1 x additional lot can be readily supported by the local road network. An existing access driveway exists and would be utilised and upgraded for a land subdivision.
- The existing driveway is wide enough to support access to the potential lots and provides appropriate gradients.
- Improved drainage can be provided through formalisation of access which would include stormwater servicing. This would reuse and upgrade existing altered areas and not create additional environmental disturbance.

- The additional lot and household would not place unreasonable pressure on social or open space resources.
- Additional development contributions levied on subdivisions would assist in supportive updates to balance development.
- The proposal is consistent with zoning objectives and housing policies as detailed in the policy assessment tables in Part 3 of this Planning Proposal.
- Any proposal for subdivision and subsequent new dwellings would require DA approval and the finite details would be assessed, managed, conditioned through that process.
- This Planning Proposal demonstrates however that compliant and considerate outcomes can be achieved in line with planning objectives.
- It is therefore considered that there are no other impacts associated with the proposal.

Q10. Has the planning proposal adequately addressed any social and economic effects?

- Existing social infrastructure is located within the area to support the proposal. The minor change to density (1 x additional possible lot) is not considered to create undue pressure on social infrastructure and would rather increase the availability of well-located housing to existing beneficial community and social infrastructure.
- The proposal would create a compelling benefit of increasing housing via 1 x additional residential lot with the potential to provide for 1 x house, secondary dwelling development (and now potentially a dual occupancy style) to reflect existing allowable subdivision sizes. This supports housing for the Ku-ring-gai and Sydney communities in a sustainable and area appropriate way within this high amenity neighbourhood. Providing well located housing is considered to constitute a social and economic benefit.
- The additional lot which could be created would offer the opportunity to build new purpose-built houses on the 2 x new potential lots, to meet current sustainability and housing choice needs. This has the benefit of creating housing to support contemporary needs, with the potential for secondary dwellings to support housing affordability and accommodate intergenerational housing, including allowing care of the ageing population in an independent setting, with family.
- A sustainable increase in housing opportunities with an additional lot and future new homes with potential for secondary dwellings accords with N5 of the Kuring-gai Local Strategic Planning Statement which looks for 'providing housing supply, choice and affordability with access to jobs, services and public transport.' As detailed, this is an area close to bus, rail and commercial services.
- This opportunity would have the effect of reducing lot size and therefore creating more affordable building blocks to support families. Affordable by Ku-ring-gai standards. With the land values, a smaller achievable land size under an R2 (Low Density Residential) zoning (930m² as opposed to 1500m² land size) leads to less m² and cost/m² to purchase. Logically, a larger land area with large house, pool and tennis court is more costly to purchase than a smaller land size/undeveloped piece of land to build on. This provides housing opportunity and choice to provide a smaller block. Providing supply in a time of demand this. This is not adding to costs of housing. This addresses a Planning Direction from the Minister to allow supply to outstrip demand. This will contribute to the effort to increase supply which will have an overall impact on cost. Increasing supply is legislated in State planning policies.
- The need for intergenerational living (space and opportunity within housing design and layout to care for the young and older generations and support ageing parents, adult children and their children etc) is a well-documented social imperative of all housing studies. Many families are living together under one roof to care for the young and old, provide ageing in place supported by family

and reducing the need to rely on external support services. It is well reported that adult children are staying in the home to save money, manage costs of living and sometimes raise their own children with the additional support of grandparents. This can particularly be the case at the current time where mortgage stress is on the increase and housing affordability/renting opportunities are becoming more and more difficult to attain in Sydney. This problem is reflected in the current federal and state drive to unlock more rental housing.

- Supporting housing for affordability and housing different generations living together can improve social wellbeing, connection and cater for diverse and evolving social/cultural housing needs.
- Diverse, more affordable and different housing typologies and opportunities are mandated within recent amendments to *State Environmental Policy (Housing)* 2021 to create diversity in housing, TOD and more affordable housing types. The SEPP seeks to plan in the development of different housing types and affordability levels (eg. secondary dwellings) and to create different sorts of living arrangements to support different life cycle needs and family sizes.
- Allowing families to age in place with an ageing population and allowing grown up children to remain in the home and save to afford their own places is an important part of alleviating the current housing and housing affordability shortage. It is noted that Priority K 4 of the *Ku-ring-gai Local Planning Policy* indicates 'providing a range of diverse housing to accommodate the changing structure of families and households and enable ageing in place'. Also 'providing affordable housing that retains and strengthens the local residential and business community'.
- The proposed rezoning would provide the ability to provide an additional, low density residential lot, plus the re-development of the of altered site to accommodate 2 x new low density residential housing opportunities (with the opportunity for additional secondary dwellings for low cost housing).
- The smaller block sizes, ability to create different housing formats and the ability to accommodate intergenerational housing support as part of these new opportunity naturally increases the potential for local housing affordability in line with this priority.
- Providing homes close to work, employment, support services, health services, entertainment areas and transport creates social benefit and interaction given the opportunities provided to residents of a well-connected area (eg. the 30 minute city ideal).
- An increase in population density, albeit minor in this case, is considered to support the existing consumer base supporting local businesses and the creative industries.
- Additional developer contributions and rates generated by sustainable, low density subdivision is considered to support the improvement of community infrastructure in terms of boosted funding.
- The proposal accords with the intrinsic values of low density housing for Ku-ringgai and is demonstrated to be able to support housing which can protect the important local character and biodiversity.

D. INFRASTRUCTURE (LOCAL, STATE AND COMMONWEALTH)

Q11. Is there adequate public infrastructure for the planning proposal?

- The area and subject site are well serviced by existing and well-established public infrastructure and services (services, roads transport, community support).
- Bus services and associated stops are located within walking distance (within 400m) on Mona Vale Road and Woodlands Avenue.

- Railway stations are located at Gordon and Pymble. One additional low density
 residential lot would not place undue pressure on existing transport services
 which are able to support the local population of Kur-ring-gai.
- Local schools (St Ives, Pymble and Gordon) can support the resultant minor addition of an additional lot.
- The increase in population density likely resulting for this proposal (1 x additional low residential lot) would have an imperceptible impact on public services and infrastructure.
- In addition, the collection of rates and developer contributions which would apply for future R2 housing development would support infrastructure provision. The Planning Proposal does not have an adverse impact on public infrastructure.
- Services exist for the site given its current residential development. Minor services upgrades would be expected to support 1 x additional residential lot which would be the desired outcome. This would not add substantial pressure and would release a small, single opportunity to build on of already serviced land for housing.
- The site is located close to public transport with bus services along Mona Vale Road and Woodlands Avenue, and trains from Gordon and Pymble stations.
- As detailed in the Urban Design Outcome Study and stormwater concept, sustainable stormwater management can be supported to meet local requirements and protect the adjoining trees and biodiversity/community of trees.

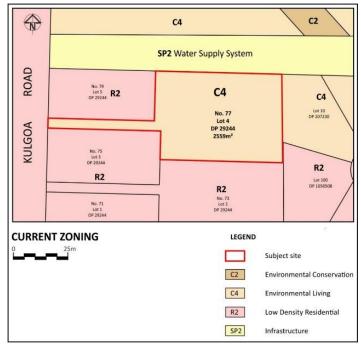
E. STATE AND COMMONWEALTH INTERESTS

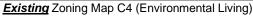
Q12. What are the views of state and federal public authorities and government agencies consulted in order to inform the Gateway determination?

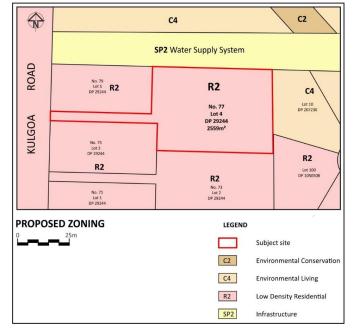
At the time of preparation, no formal consultation has been carried out with State and/or Commonwealth Public Authorities. Notwithstanding, consultation will be carried out in accordance with the requirements of a Gateway Determination.

PART 4 - MAPPING

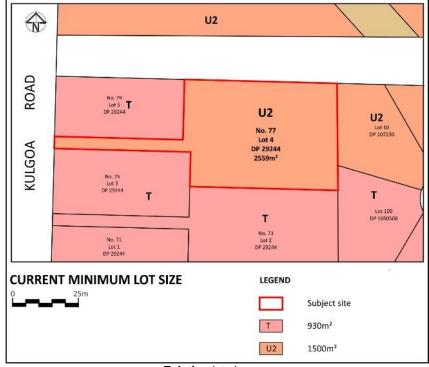
The existing <u>proposed mapping</u> changes to KLEP 2015 are demonstrated in the following map extracts:



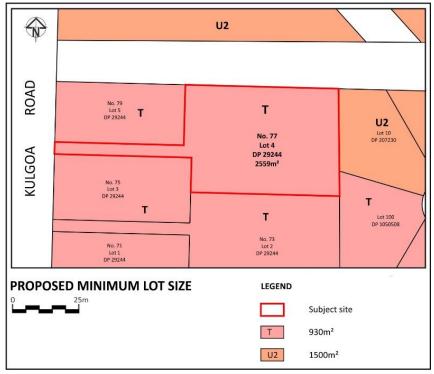




Proposed Zoning Map Proposed Zoning to R2 (Low Density Residential)

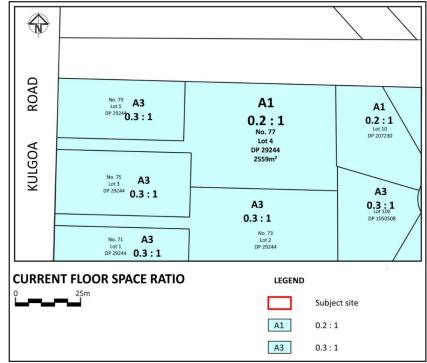


Existing lot size map

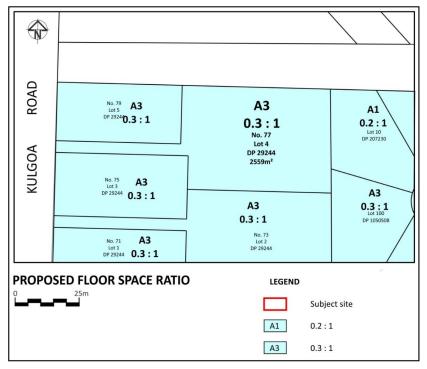


Proposed minimum lot size

59



Existing floor space ratio map



Proposed floor space ratio

60

PART 5 – COMMUNITY CONSULTATION

Details of the community consultation that is to be undertaken on the planning proposal

At the time of preparation, no formal consultation has been carried out with State and/or Commonwealth Public Authorities. Government agency and public consultation requirements will be detailed in the Gateway Determination and conducted accordingly. It is anticipated that a number of government agencies may need to be consulted, such as the following:

- Department of Planning, Housing and the Environment, Biodiversity and Conservation
- Transport for NSW
- Sydney Water
- Ausgrid

The Planning Proposal will be placed on public exhibition in accordance with the , should DPE support the proposal. Confirmation of the public exhibition period and requirements for consultation will be detailed as part of the Gateway Determination.

PART 6 – PROJECT TIMELINE

Stage	Timeframe and/or date
Consideration by Council	
Council decision	
Gateway determination	
Pre-exhibition	
Commencement and completion of public exhibition period	
Consideration of submissions	
Post-exhibition review and additional studies	
Submission to the Department for finalisation (where applicable)	
Gazettal of LEP amendment	

APPENDIX A – Arboricultural Assessment ('AIA') and Suggested Tree Protection Plan ('TPP') to support the Planning Proposal– 77 Kulgoa Road Pymble APPENDIX B – Biodiversity Development Assessment Report ('BDAR') – 77 Kulgoa Road Pymble APPENDIX C – Urban Design Outcome Study – Potential Plan of Subdivision for 77 Kulgoa Road Pymble APPENDIX D – Urban Design/Stormwater Concept Plan – Plan of Subdivision for 77 Kulgoa Road Pymble **APPENDIX E – Site Photographs**

APPENDIX F – Pre-Planning Proposal Meeting Minutes





Arboriculture Impact Assessment

Lot 4 in DP29244 77 Kulgoa Road, Pymble NSW 2073

Commissioned By: Mr & Mrs Leece C/-Natalie Richter Planning PO Box 59, MT COLAH NSW 2079

Date: Reference: Revision: 11 July 2024 20242078 5

Prepared By:

Meredith Gibbs (Dip. Hort. Arb.) Arboriculture Qualification AQF 5

Australis Tree Management PO Box 3453 DURAL NSW 2158 Email: info@australistrees.com.au

11 July 2024

Document Details

Document Title	Arboriculture Impact Assessment		
Client	Mr & Mrs Leece		
Client Contact	Natalie Richter Planning		
Property Details	77 Kulgoa Road, Pymble		
Legal Description	Lot 4 in DP29244		
LGA	Ku-ring Gai Council		
Zone	C4 - Environmental Living: (pub. 5-11-2021)		
Written By	Meredith Gibbs		

20221842 1 20221842 2		
20221842 2	20 December 2021	For Client Review
	20 January 2022	Minor updates and corrections
20232962 3	24 March 2023	For Client Review
20242078 4	22 June 2024	Updated – For Client Review
20242078 5	11 July 2024	Minor corrections

mgill

Meredith Gibbs Australis Tree Management 11 July 2024

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

Reference 20242078.5 2 / 71

ATTACHMENT NO: 3 - APPENDIX A - ABORICULTURAL REPORT - 77 KULGOA ROAD, PYMBLE

11 July 2024

Disclaimer

Australis Tree Management has no affiliation with any private contractors, associations or nurseries involved in the tree removal and pruning business. This ensures an impartial approach to all recommendations given regarding tree removals, tree hazard inspections and surveys. The Principal of the business, Meredith Gibbs, has a certificate level 5 in Arboriculture obtained from Northern Sydney Institute, Ryde TAFE College, NSW in 2003.

This report/assessment is made solely for the use and benefit of the client named on the front of this report. No liability or responsibility whatsoever, in contract or tort, is accepted to any third party who may rely on the report/assessment wholly or in part. Any third party acting or relying on this report / assessment in whole, or in part, does so at their own risk.

The addressee is required to peruse the report and contact Australis Tree Management within fourteen days for corrections. The addressee is also required to advise if any of the information or data supplied is inaccurate or incomplete, thereby affecting the conclusions and recommendations given in this report.

Any required updates, reassessments or re-examinations of the original report required by any other party will incur a fee.

Because of the nature of living organisms and the circumstances and condition that can affect their health and well-being this report will have a validity of 3 months from the date hereof. Where further information/data is supplied to Australis Tree Management, which nullifies the original report then a further fee will apply.

No responsibility can be taken for incorrect or misleading information provided by the client or other parties

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Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

Reference 20242078.5 3 / 71

11 July 2024

1. Summary

Australis Tree Management has been commissioned by Natalie Richter Planning on behalf of their client Mr & Mrs Leece to complete an *Arboriculture Impact Assessment* (AIA) in accordance with *AS4970 Protection of trees on development sites*. '*TreeAZ*' (Version 10.10-ANZ) was used to determine retention values.

The *Arboriculture Impact Assessment* undertook assessment of sixty-seven (67) existing trees within the subject site and within 3m of boundaries on adjoining properties to establish tree retention values the health and condition of the trees, potential impacts from proposed works and to provide recommendations regarding tree retention and tree protection. The tree defects and symptoms that were encountered have been discussed and a detailed tree schedule is included in Appendix A.

The proposed development is for demolition of the dwelling and tennis court with associated works for the subdivision of the sites into 2 lots.

The inspection at 77 Kulgoa Road, Pymble was performed on the 2 February 2023 by visibly inspecting the trees from accessible points at ground level from the subject site and public areas only. I completed a modified *Tree Survey Form* (Matheny & Clark, 1994), applied *'TreeAZ'* ratings (Barrell, 2016) as well as taking supporting photographs of the trees.

In total sixty-seven (67) trees were assessed. All trees are selected for retention and will require tree protection measures to ensure their long-term survival.

		Onsite	Adjoining
TrooAZ	'A'	25 trees	5 trees
TreeAZ	'Z'	26 trees	11 trees

Recommendations are provided to protect trees from the activities associated with the proposed demolition works areas. Trees proposed for retention will require tree protection measures throughout the development works to ensure their long-term survival. Recommendation is also made to restrict vehicle access to one driveway to protect the low canopies of trees.

The *Tree Protection Plan and Specifications* form part of the overall construction documentation package. These must be followed throughout all construction phases of the project. The tree protection plans provide a layout of tree protection fencing and other tree protection measures.

Tree protection specifications are detail requirements for the qualified project arborist engaged throughout the construction process. It includes tree management, monitoring guidelines and project hold points. All tree protection measures are to be in place and certified by the project arborist prior to commencement of demolition works or site establishment. All TPZ areas are to be maintained throughout the period of the works.

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

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Acronyms

Abbreviation	Term	Definition		
АТМ	Australis Tree Management			
DBH	Diameter at breast height	The diameter of a tree's stem typically measured with a diameter tape at 1.4 metres height (AS4970-2009).		
DCP	Development Control Plan			
ENCR	Encroachment	Proposed or existing TPZ encroachments (AS4970-2009)		
LEP	Local Environmental Plan			
LGA	Local Government	t Authority		
SRZ	Structural Root Zone	The SRZ is the area required for tree stability. A larger area is required to maintain a viable tree (AS4970-2009).		
ТРР	Tree Protection Plan	Showing the TPZs for trees being retained taking into account the proposed developmer (AS4970-2009).		
TPZ	Tree Protection Zone	The tree protection zone (TPZ) is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable (AS4970-2009).		

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

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2. Introduction

2.1. Brief

Mr and Mrs Leece have provided instruction to assess the health and condition of the selected trees located at 77 Kulgoa Road, Pymble. This includes selected trees within the vicinity of the proposed works. To prepare and Arboriculture Impact Assessment on the proposed impacts of the development works on the selected trees. This report will provide recommendations regarding tree protection during the demolition process.

2.2. Project Description

The development proposed is for the demolition of the existing dwelling at No. 77 for the subdivision into 2 lots. All trees are proposed for retention.

2.3. Site Description

The site is a well-kept residential site has natural indigenous with planted native and exotic vegetation throughout. The grounds are in good condition.

2.4. Aims

- Undertake field surveys for tree health and condition.
- Conduct a literature review on the tree defects and symptoms.
- Search databases for relevant tree species information including Council Tree Protection Policies.
- Identify Tree Protection Zones for all trees assessed and assess the likely impacts from the development on the trees.
- Provide preliminary advice and tree protection recommendations for trees proposed for retention and protection.

2.5. Qualifications and Experience

This report has been based upon site observations and the assessment of the subject trees. Conclusions have been reached from experience and follow up research. Qualification details are included in the appendix.

Australis Tree Management (Meredith Gibbs) provides consulting arborist services only and does not provide services such as climbing, pruning, tree removal, root investigations or root pruning. This report is and impartial professional assessment only and does not derive any financial benefit from specifying pruning or other physical services.

2.6. Documents Provided

Supplier	Date Supplied	Document Date	File Name
Hammond Smealie & Co Pty	22/12/2022	30/11/2022	14989 SUB DESIGN WITH TREES.pdf
Ltd	30/1/2023	30/11/2022	14989 SUB DESIGN BE.pdf

Table 1. Documents Provided

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

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2.7. Scope

This report is only concerned with the health and condition of the subject trees and the potential impacts from the proposed development. Root mapping, invasive structural strength of the trees, soils assessments or aerial inspections were not performed. This report has been prepared in accordance with Ku-ring Gai Council requirements. It includes a detailed assessment based on the site visit and the documents provided.

Recommendations may be provided regarding alterations to the proposed design or construction methods to mitigate detrimental impacts on the subject trees. All tree species assessed (including unprotected trees) are located in the 'Tree Schedule' in Appendix A.

2.8. Field Visit

The unaccompanied site visit was conducted on Thursday, 2 February 2023. All observations were from ground level without detailed investigations. The weather at the time of the inspection was sunny and clear with adequate visibility

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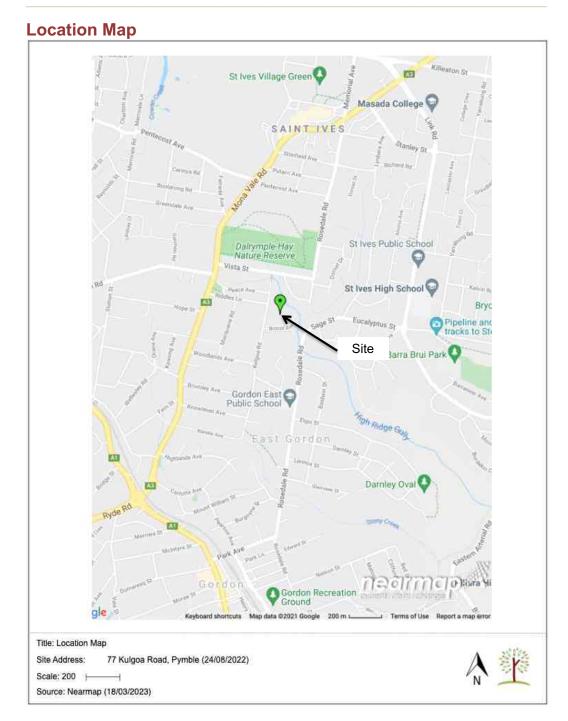


Figure 1. Location Map

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

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3. The Site

3.1. Brief Site Description

Kulgoa Road is located in the residential suburb of Pymble, located approximately 20km north from the Sydney CBD in the Upper North Shore region. Number 77 is on the eastern side of the road surrounded by similar residential developments.

The site is zoned as C4 - Environmental Living: (pub. 5-11-2021) and is not located within the council specified heritage area and does not contain any heritage items. The properties consist of dwellings, garages and swimming pools.

The subject site is located within the Ku-ring Gai LGA and is assessed and protected under the legislation and controls in Table 1. Note that Ku-ring Gai Council is still transitioning from pre-amalgamation LEPs and DCPs.

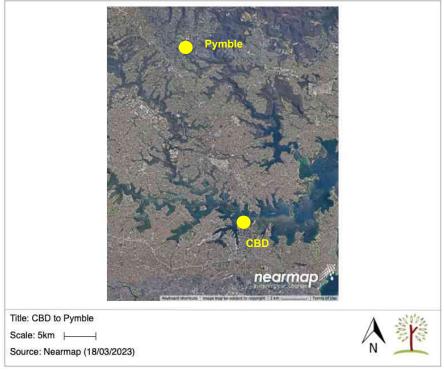


Figure 2. CBD to Pymble Map

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3.2. Site History

A review of historical aerial imagery shows that vegetation on the site is regrowth from historical clearing as well as from ongoing maintenance regimes. (SIXmaps 2022).

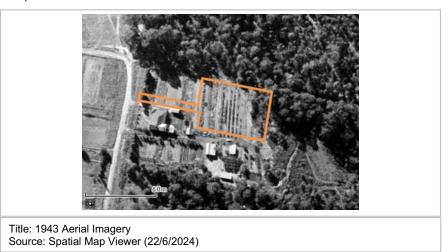


Figure 3. 1943 Aerial Imagery



Figure 4. Aerial Site Images

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3.3. Climate

Pymble is located approximately 12km from the nearest weather station at Sydney Olympic Park. The area has an annual mean average temperature between 16.9°C and 27.6°C, with the annual mean rainfall averaging 190mm. The site is flat and exposed to the east with prevailing winds coming from the south.

3.4. Microclimates

The site is moderately protected by residential buildings and vegetation creating protection from strong winds. The trees located on the southern side of the site influence the microclimate in that area by providing significant protection from poor weather and provide significant shading. The existing grasses and gardens also result in cooler microclimates. The available light levels throughout the site are adequate for vegetation growth. There is no permanent fixed irrigation on site.

3.5. Location of the Trees

The assessed trees are located predominately around the boundaries of the site. The trees have been located on the supplied site plan (Gary Skow dated 30/11/2022) and numbered accordingly. These plans are illustrative purposes only and should not be used directly for scaling measurements. Tree No.'s. 37, 40, 66, 90 and 91 were not located on the supplied survey plan and have been approximately located therefore inaccuracies may occur.

3.6. Underground Services

Underground Service locations were not identified on the supplied site survey.

3.7. Onsite Vegetation

The site contains indigenous, planted native and exotic tree species of varying ages and stages of maturity. Indigenous vegetation community is located onsite. Please refer to Ecologist report for more information. The subject site has been partially modified with the removal of most of the native under storey, ground cover plants and shrubs prior to 1943. The subject dominant trees together with other indigenous trees in the surrounding residences are connected to the remainder of the ecological communities nearby. Young indigenous trees are highly valued for retention and protection.

Indigenous tree species assessed are:

- Tree No. 71 Angophora costata (Smooth-barked Apple)
- Tree No. 70 Eucalyptus pilularis (Blackbutt)
- Tree No. 87 Eucalyptus punctata (Grey Gum)
- Tree No.'s 65, 68, 69, 80 & 81 Eucalyptus saligna (Sydney Blue Gum)
- Tree No.'s 74 & 79 Pittosporum undulatum (Sweet Pittosporum)
- Tree No.'s 72, 73 & 105 Syncarpia glomulifera (Turpentine)

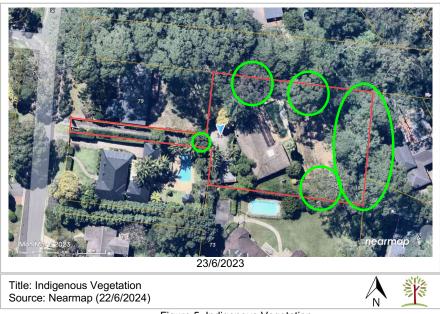


Figure 5. Indigenous Vegetation

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

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4. Urban Heat Island

4.1. Urban Development

Increased urban densification and the loss of green spaces means that mature trees are increasingly valuable for to reduce heat. Existing trees require sufficient access to soil water or must be irrigated and in prime condition to provide maximum benefits. *The Urban Heat Island (UHI) dataset measures the effects of urbanisation on land surface temperatures across Sydney Greater Metropolitan Area for the Summer of 2015-2016. UHI shows the variation of temperature to a non-urban vegetated reference, such as heavily wooded areas or national parks around Sydney* (SEED 2022). The UHI indicates that the subject site is 1.8°C above baseline.

Residential areas are exposed to significant urban heat island effects caused by thermal energy being absorbed into man-made hard surfaces and radiating heat back into the local environment (NSW SEED).

Hard surfaces absorb heat and become significantly hotter than vegetated areas. Trees are the most effective infrastructure elements for localised cooling and mature trees have higher cooling potential than smaller younger trees, though young trees have the greatest potential for cooling in the future.

Daytime near-surface air temperature declined with increasing height and canopy density providing significant cooling benefits. However, reversed at night when tall trees with dense canopies restricted longwave radiative cooling and trapped warm air beneath their crowns. To mitigate increasing urban heat through trees can be devised to local scale (Wujeska-Klause and Pfautsch, 2020).

4.2. Canopy Cover

The NSW government has set targets to increase the urban tree canopy cover throughout Sydney with a target of 40% tree canopy cover in suburban areas. The current percentage of canopy coverage for this site is 67% (SEED, 2022).

4.3. Benefits of Trees

Trees provide shade and evaporative cooling which helps reduce the urban heat island effect. Increased urban densification and the loss of green spaces means that mature trees are increasingly valuable for to reduce heat. Existing trees require sufficient access to soil water or must be irrigated and in prime condition to provide maximum benefits. Trees transperitive cooling process reduces the thermal load from sunshine.

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5. Relevant Government Legislation

5.1. Relevant Government Legislation

Local Government	
Ku-ring Gai Council Local Environmental Plan (2015)	
Ku-ring Gai Council Development Control Plan (2015)	
State Government	
Biodiversity and Conservation (2021)	
Heritage Act (1977)	
Environment Protection and Biodiversity Conservation Act (1999)	
Vegetation in Non-Rural Areas [NSW] (2017)	

Table 2. Relevant Government Legislation

5.2. Vegetation in Non-Rural Areas [NSW] (2017)

The State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 includes provisions requiring the preservation of trees and bushland within Central Coast Council LGA.

Aims of Policy

The aims of this Policy are: (a) to protect biodiversity values of trees and vegetation in non-rural areas of

the State, and

(b) to preserve the amenity of non-rural areas of the State through the

preservation of trees and other vegetation.

5.3. SEPP (Biodiversity and Conservation) 2021

The State Environmental Planning Policy (*Biodiversity and Conservation*) 2021 includes provisions requiring the preservation of trees and bushland within Ku-ring Gai Council LGA.

5.4. Council Tree Protection

This report relies on the information contained within Ku-ring Gai Local Environmental Plan and Development Control Plan. This report may include trees on adjoining properties that are likely to be impacted by the proposed development regardless of the definition contained in the Tree and Vegetation DCP Part 13. Council may require a greater setback from proposed structures to ensure the preservation and protection of the tree. A separate permit to prune any trees within or adjacent to the property and/or any pruning of tree roots must be obtained from Council prior to any works being undertaken.

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5.5. Exempt Tree Species

The following tree species are listed in councils' list of exempt species, exempt of works or undersized.

Tree No.	Species	Exempt Species or Undersize
40, 77 & 104	Celtis sp (Nettle)	Exempt Species
82	Ligustrum lucidium (Broad Leaf Privet)	Exempt Species
Fable 3. Exempt ⊺	Tree Species	

5.6. Threatened Species

The subject tree species are not listed in the NSW Biodiversity Conservation Act (2016) or the Environment Protection and Biodiversity Conservation Act (1999).

5.7. Biosecurity Act 2015

The following tree species are listed in the Biosecurity Act (2015) and classed as 'General'. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimized, so far as is reasonably practicable.

Tree No.	Species
40, 77 & 104	Celtis sinensis (Chinese Nettle)
82	Ligustrum lucidium (Broad Leaf Privet)
74 & 79	Pittosporum undulatum (Sweet Pittosporum)
Table 4. Biosecurit	ty Act Listed Tree Species

6. Tree Assessment

6.1. Information Collected

Information collected includes tree species, dimensions, tree health and condition, tree assessment ratings and tree protection zones etc. Trees located on adjoining properties will be inspected from the ground on the subject site or public land only. All relevant information is included in the Tree Schedule (Appendix A). The inspection (*Visual Tree Assessment, Mattheck & Breloer, 1994*) was of a preliminary nature and did not involve any climbing or detailed investigation beyond what was visible from accessible points at ground level.

In accordance with AS 4970-2009 tree trunk diameters were measured with a diameter tape at 1.4m high (unless stated). Tree heights are measured with a clinometer and canopy spreads estimated accordingly and confirmed with Near Map.

Post site inspection calculations and assessments were made of the following and are included in the Tree Schedule located in Appendix A.

6.2. Methodology

The following relevant information was compiled for consideration of the proposed works. Further information can be found in the appendices.

- Tree Survey Form (Matheny & Clark, 1994)
- Visual Tree Assessment (Mattheck & Breloer, 1994)
- TreeAZ (Barrell, 2010) (Version 10.10-ANZ)
 - 'A' Moderate and high-quality trees suitable for retention for more than 10 years, and worthy of being a material constrain
 - 'Z' Low quality trees not worthy of being material constraint
 - TreeAZ 'A' category trees are not required to be retained, although this is recommended. TreeAZ 'Z' category trees are not required to be removed. If they pose no risk to life or property it is recommended that they be retained.
- Australian Standard 4970-2009 Protection of trees on development sites
 - This document describes the best practices for the planning and protection of trees on development sites. The procedures described are based on plant biology and current best practices as covered in recently published literature.
 - In accordance with AS 4970-2009 tree trunk diameters were measured with a diameter tape at 1.4m high (unless stated). Tree heights are measured with a clinometer and canopy spreads estimated accordingly.
 - Tree Protection Zone Tree Protection Zone (TPZ) is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable. If the proposed encroachment is less than 10% of the area of the TPZ and is outside the SRZ, detailed root investigations should not be required. The area lost to this encroachment should be compensated for elsewhere and

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contiguous with the TPZ.

- Structural Root Zone The SRZ is the area required for tree stability. A larger area is required to maintain a viable tree.
- Minor Encroachment If the proposed encroachment is less than 10% of the area of the TPZ and is outside the SRZ, detailed root investigations should not be required. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ. Variations must be made by the project arborist considering relevant factors.
- Major Encroachment If the proposed encroachment is greater than 10% of the TPZ or inside the SRZ, the project arborist must demonstrate that the tree(s) would remain viable. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ. This may require root investigation by non-destructive methods and consideration of relevant factors.
- AS 4373 2007 Pruning of amenity trees
 - The objective of this revision is to reflect current arboricultural practices. The recommendations given in this Standard are intended to apply specifically to urban and amenity trees but exclude pruning for fruit production and silviculture.

6.3. Species identification

Tree species identification of the subject trees was determined by visible features only at the time of the inspection. Every effort is made to correctly identify the subject trees where time permits. It is not based upon comparison against herbarium specimens. Photographs are compared with varying text listed in 'References'.

6.4. Photography

Photographs were taken using an iPhone, iPad or Nikon D5000. In low light levels photographs maybe altered to improve visual quality, this involves adjustments to exposure, contrast, reduction of shadows and increased sharpness. No adjustments to vibrancy that alter natural colours were applied.

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7. Results

A total of sixty-seven (67) trees were assessed on site and within 5m of boundaries. * Exempt (Unprotected) trees – 36, 38, 39, 40, 41, 44, 67, 77, 82, 103, 104, 106, 107, 108, 109 & 110

7.1. 'TreeAZ' and Life Expectancy

7.1.1. **'A'** - Moderate and high-quality trees suitable for retention for more than 10 years, and worthy of being a material constraint.

Tree No.	Species	Life Expectancy
72, 73 & 105	Syncarpia glomulifera (Turpentine)	40+yrs
71	Angophora costata (Smooth-barked Apple)	40+yrs
88	Cedrus deodara (Deodar Cedar)	40+yrs
65, 68, 69, 80 & 81	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	40+yrs
47	Podocarpus elatus (Brown Pine)	40+yrs
48	Eucalyptus microcorys (Tallowwood)	40+yrs
49 & 55	Glochidion ferdinandi (Cheese Tree)	40+yrs
54	Thuja plicata (Western Red Cedar)	15-40yrs
56 - 58, 89 - 94	Archontophoenix cunninghamiana (Bangalow Palm) multiple	40+yrs
59 & 60	Jacaranda mimosifolia (Jacaranda)	40+yrs
54	Thuja plicata (Western Red Cedar)	15-40yrs
62	<i>Livistona chinensis</i> (Chinese Fan Palm)	40+yrs
70	Eucalyptus pilularis (Blackbutt)	40+yrs
74	<i>Pittosporum undulatum</i> (Sweet Pittosporum)	5-15yrs
75	<i>Brachychiton acerifolius</i> (Illawarra Flame Tree)	40+yrs
76	Grevillea robusta (Silky Oak)	15-40yrs
87	Eucalyptus punctata (Grey Gum)	40+yrs
89	Ulmus glabra (Scotch Elm)	40+yrs

Table 5. TreeAZ 'A' Trees and Life Expectancy

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Tree No.	Species	Life Expectancy
41	<i>Viburnum odoratissimum</i> (Sweet Viburnum)	15-40yrs
35 & 42	Juniperus communis (Juniper)	15-40yrs
36	<i>Buxus sp</i> (Buxus)	15-40yrs
37, 43, 61 & 103	<i>Camellia reticulata</i> (Reticulata Camellia)	40+yrs
38 & 79	Pittosporum tenuifolium (Pittosporum)	15-40yrs
40 & 104	Celtis australis (Nettle Tree)	40+yrs
50	Grevillea robusta (Silky Oak)	<5yrs
53	<i>Callistemon salignus</i> (Willow Bottlebrush)	5-15yrs
63	Cedrus deodara (Deodar Cedar)	15-40yrs
64	Jacaranda mimosifolia (Jacaranda)	40+yrs
66	<i>Stenocarpus sinuatus</i> (Fire Wheel Tree)	40+yrs
67	Dead	dead (no hollows)
77	Celtis australis (Nettle Tree)	15-40yrs
78	<i>Callistemon salignus</i> (Willow Bottlebrush)	15-40yrs
82	<i>Ligustrum lucidium</i> (Large Leaf Privet)	40+yrs
83 – 86, 95, 97 - 101	<i>Livistona chinensis</i> (Chinese Fan Palm)	40+yrs
96	Howea forsteriana (Kentia Palm)	40+yrs
102	Ravenea rivularis (Majesty Palm)	40+yrs
106 - 110	Tibouchina lepidota 'Alstonville' (Alstonville Tibouchina)	<5yrs

7.1.2. **'Z'** - Low quality trees not worthy of being material constraint.

Table 6. TreeAZ 'Z' Trees and Life Expectancy

7.2. Tree Significance

Tree Significance Assessment Criteria (IACA)

Low	Medium	High
49, 54 – 58, 62, 64, 74, 75, 83 – 86, 89 - 102	34-38, 40, 42– 44, 53, 59 – 61, 63, 66, 67, 76 – 70, 82, 103, 104, 106 - 110	65 68 – 73, 80, 81, 87, 88 & 105

Table 7. Tree Significance

7.3. Determining the Tree Protection Zone (AS4970-2009)

- The radius of the TPZ is calculated for each tree by multiplying its DBH × 12.
- TPZ = DBH×12
- Where DBH = trunk diameter measured at 1.4 m above ground
- Radius is measured from the centre of the stem at ground level.

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- A TPZ should not be less than 2m nor greater than 15m (except where crown protection is required). Clause 3.3 covers variations to the TPZ.
- The TPZ of palms, other monocots, cycads and tree ferns should not be less than 1 m outside the crown projection.

7.4. Trees Proposed for Retention

All trees are proposed for retention. Trees located adjacent to structures proposed for demolition that will require strict protection are listed below.

7.5. Trees Located Adjacent to Demolition Works

Species	TPZ
Jacaranda mimosifolia (Jacaranda)	4.8m
Camellia reticulata (Reticulata Camellia)	2.4m
Eucalyptus saligna (Sydney Blue Gum)	12m
Stenocarpus sinuatus (Fire Wheel Tree)	2m
Eucalyptus saligna (Sydney Blue Gum)	7.2m
Eucalyptus saligna (Sydney Blue Gum)	9.6m
Eucalyptus saligna (Sydney Blue Gum)	4.8m
	Jacaranda mimosifolia (Jacaranda)Camellia reticulata (Reticulata Camellia)Eucalyptus saligna (Sydney Blue Gum)Stenocarpus sinuatus (Fire Wheel Tree)Eucalyptus saligna (Sydney Blue Gum)Eucalyptus saligna (Sydney Blue Gum)

Table 8. Trees Located Adjacent to Demolition Works

7.6. Trees Located Adjacent to Indicative Building Envelopes

The following trees have indicative building envelopes within their TPZ's. These trees must be given the opportunity for retention within any future proposed developments.

Tree No.	Species	TPZ	Proposed Encroachment
37	Camellia reticulata (Reticulata Camellia)	2.4m	100%
42	Juniperus communis (Juniper)	2.0m	7.2%
61	Camellia reticulata (Reticulata Camellia)	2.4m	100%
62	Livistona chinensis (Chinese Fan Palm)	3.0m	100%
63	Cedrus deodara (Deodar Cedar)	6.0m	4.0%
65	Eucalyptus saligna (Sydney Blue Gum)	12.0m	6.2%
77	Celtis australis (Nettle Tree)	7.2m	1.8%
78	<i>Callistemon salignus</i> (Willow Bottlebrush)	5.1m	4.9%
80	Eucalyptus saligna (Sydney Blue Gum)	9.6m	3.5%
81	Eucalyptus saligna (Sydney Blue Gum)	4.8m	6.9%
83	Livistona chinensis (Chinese Fan Palm)	3.0m	28.6%
95	Livistona chinensis (Chinese Fan Palm)	2.4m	28.6%
96	Howea forsteriana (Kentia Palm)	2.0m	38.6%

Table 9. Onsite Trees Proposed for Removal

7.7. Trees Proposed for Pruning

There are no trees that require pruning for the proposed development works.

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8. The Proposed Development

The development proposed is for the subdivision of the sites into 2 lots and for the demolition of selected structures. The following must be considered and assessed to their impacts to trees.

8.1. Tree Tolerance

Generally, older and larger trees tolerate construction impacts less. Different species also have different tolerance of injury and disturbance. Importantly it needs to be stressed, that a tree does not "heal" from injury. Any injury made to a tree, results in the tree expending considerable energy reserves to create new growth that "seals" and surrounds a wound and then attempting to compensate structurally and physically for any losses. Impacts to trees are therefore cumulative and a series of otherwise small and unrelated impacts can easily result in the death of a tree.

A tree that is already compromised or showing signs of stress is far less likely to tolerate construction impacts due to its lower levels of energy reserves and already weakened state. Therefore, a tree that is only in a fair condition or poor condition is less likely to tolerate construction impacts than a young tree in good or excellent condition.

Weakened or stressed trees are also far less able to combat the myriad of normal environmental stresses and pathogens that are naturally imposed against them such as drought, decay, fungi, bacteria and insect pests.

The site works proposed will result in site disturbances, excavation and re-grading. This means that some trees will require removal. Only those trees that have a reasonable and practical chance of being successfully retained have been targeted for retention and protection.

8.2. Demolition

The demolition and removal of structures can cause damage to trees if work occurs within TPZ's. Machinery used for demolition must stay outside of TPZ's or within existing hard surface or previous structure platforms to prevent compaction of the root system and damage to the canopy. Tree protection fencing must be in place prior to demolition. If demolition of structures must occur within any TPZ then organic mulch must be applied at a depth of no greater than 70mm. If a temporary path is required within any TPZ then a cell structure of a suitable strength can be temporarily laid.

8.3. Approved Tree Removal

Trees approved by council for retention must be protected during the removal of other trees approved for removal. Roots larger than 50mm originating from removed trees must remain without root zone disturbances.

8.4. Construction Activities

The proposed demolition activities are likely to result in site disturbances and may cause detrimental impacts to the subject trees. Generally, soil disturbances occur at a minimal 1.5m from the works. Soil compaction can occur with foot traffic as well as

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machinery. This reduces available water and oxygen to penetrate the root zone resulting in death to fibrous roots used for moisture and nutrient uptake.

8.5. Vehicle Access

All construction access and deliveries are to be made from the driveway for No. 77 Kulgoa Road.

8.6. Proposed Earthworks

Earthworks machinery cause significant soil compaction which causes the top layer of roots to die. Roots require oxygen to respire and function. Soil compaction also kills mycorrhizal fungi (a beneficial fungi).

Cutting soil levels can seriously damage tree roots. The removal of woody roots can jeopardise the tree stability as well as significantly reducing its life expectancy and removing shallow feeder roots will result in immediate water stress. The maximum amount of undisturbed soil within any TPZ is beneficial.

Raising soil levels within any TPZ reduces gaseous exchanges. Overtime, decay and diseases may develop and reduce the life expectancy of the tree. Impacts may not be noticeable for many years.

8.7. Proposed Fencing

Proposed fences or boundary walls located within TPZ's must be constructed at the existing fence depth or proposed fence sections or panels must be suspended. Support footings or fence support posts must be hand excavated allowing a minimum 100mm distance from roots measuring greater than 50mm in diameter. Hand excavated must occur within any TPZ to protect roots measuring greater than 50mm in diameter.

8.8. Erosion and Sediment Control Fencing

Erosion and sediment control fencing located within the TPZ's must not be excavated. A soil strip may be mounded 200mm. Star pickets must not be installed within any Structural Root Zone.

8.9. Soil Water Availability

Trees adapt to the existing distribution of soil water in its own particular situation and to the usual fluctuations of water supply that exists. Newly constructed roads, paths, roofs and other impermeable surfaces located upslope from trees prevent rainwater from entering the soil and seeping downslope to trees. Therefore, removing rainwater and redirecting soil water will lead to a deterioration in health and reduced life expectancy for trees located the down slope from the development.

8.10. Wind Exposure

Trees growing in dense stands become prone to windthrow when surrounding trees are removed, which exposes the remaining trees to the full force of the wind. Trees growing in an open environment are generally shorter and strongly tapered. The construction of buildings adjacent to trees results in the removal of surrounding trees that provide protection. Buildings also alter to natural wind directions. These changes

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are likely to increase wind stresses on retained trees, which may result in branch failures until the tree has time to adapt and strengthen to the new conditions.

8.11. Proposed Encroachment Impacts

- Trees with a <10% encroachment proposed are considered to have a 'minor' encroachment in accordance with AS4970-2009 or low-level impact. These trees can be retained and protected during the development processes.
- Trees with between 10% and 20% encroachment proposed are considered to have a 'major' encroachment in accordance with AS4970-2009 or a moderate level of impact and require individual specifications for work within their TPZ's.
- Trees with >20% encroachment proposed are considered to have a significant level of impact where roots and canopy may be significantly impacted on and are unlikely tolerate the proposed works.

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9. Discussion

9.1. Trees Located Adjacent to Demolition Works

- 9.1.1. Tree No. 59 Jacaranda mimosifolia (Jacaranda)
 - 9.1.1.1. This planted, exotic tree is located on site and is protected by council. This young tree has a spreading habit and is growing in a dominant class with adequate form. It is expected to increase in size by approximately 100% as it matures. It has a dominant trunk with the crown showing average (3) health. The amount of deadwood was determined as low and small being approximately <10% of the canopy with epicormic growth being varying ages and sizes at approximately <10%. No significant issues were sighted; therefore, the structural condition appears to be fair.
 - 9.1.1.2. The root zone is garden with a garage and the dwelling nearby. The surrounding structures provide partial protection from strong winds and the tree provides minor shading to an existing open space.
 - 9.1.1.3. This tree has a 'TreeAZ' rating of 'A2' and an estimated life expectancy of 40+yrs. It is considered low in significance (IACA, 2010).
 - 9.1.1.4. The existing dwelling is proposed for demolition and located approximately 3.6m from the trunk within approximately 7% of the TPZ. Therefore, the tree will require protection.
- 9.1.2. Tree No. 61 Camellia reticulata (Reticulata Camellia)
 - 9.1.2.1. This planted, exotic tree is located on site and is protected by council. This mature tree has a spreading habit and is growing in a dominant class with dense form. It is expected to increase in size by approximately 50% as it ages. It has a multi trunked trunk with the crown showing good (4) health with no significant issues sighted.
 - 9.1.2.2. The root zone is grass with the dwelling and a pool fence nearby. The tree does not provide significant shading.
 - 9.1.2.3. This tree has a '*TreeAZ*' rating of 'Z1' and an estimated life expectancy of 40+yrs. It is considered low in significance (IACA, 2010).

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- 9.1.3. Tree No. 65 Eucalyptus saligna (Sydney Blue Gum)
 - 9.1.3.1. This seeded, indigenous tree is located on site and is protected by council. This mature tree has a spreading habit and is growing in a codominant class with adequate form. It is expected to increase in size by approximately 10% as it ages. It has a dominant trunk with the crown showing average (3) health. The amount of deadwood was determined as varying ages and sizes being approximately 10%-25% of the canopy with epicormic growth being varying ages and sizes at approximately 10%-25%. The tree has minor previously failed branches, one with bracket fungi, 5-10cm diametre trunk cavities. The structural condition appears to be fair without structural strength testing to determine otherwise.
 - 9.1.3.2. The root zone is grass with a tennis court nearby. The tree provides major shading to an existing open space and currently provides screening to an adjoining property.
 - 9.1.3.3. This tree has a '*TreeAZ*' rating of 'A2' and an estimated life expectancy of 40+yrs. It is considered high in significance (IACA, 2010).
 - 9.1.3.4. The existing tennis court is proposed for demolition and located approximately 1.5m from the trunk within approximately 19% of the TPZ. Therefore, the tree will require strict protection.
- 9.1.4. Tree No. 66 Stenocarpus sinuatus (Fire Wheel Tree)
 - 9.1.4.1. This planted, native tree is located on site and is protected by council. This young tree has an upright habit and is growing in a dominant class with dense form. It is expected to increase in size by approximately 100% as it ages. It has a dominant trunk with the crown showing good (4) health. The amount of deadwood was determined as low and small being approximately <10% of the canopy with epicormic growth being low and young at approximately <10%. The tree has basal suckers, and the structural condition appears to be fair.</p>
 - 9.1.4.2. The root zone is weeds with a tennis court nearby. The nearby vegetation provides partial protection from strong winds and the tree provides minor shading to an existing open space as well as currently provides screening to an adjoining property.
 - 9.1.4.3. This tree has a 'TreeAZ' rating of 'Z1' and an estimated life expectancy of 40+yrs. It is considered low in significance (IACA, 2010).

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- 9.1.4.4. The existing tennis court is proposed for demolition and located approximately 1m from the trunk within approximately 6% of the TPZ. Therefore, the tree will require strict protection.
- 9.1.5. Tree No. 69 *Eucalyptus saligna* (Sydney Blue Gum)
 - 9.1.5.1. This seeded, indigenous tree is located on site and is protected by council. This mature tree has a spreading habit and is growing in a codominant class with adequate form. It is expected to increase in size by approximately 10% as it ages. It has a dominant trunk with the crown showing average (3) health. The amount of deadwood was determined as low and small being approximately <10% of the canopy with epicormic growth being low and young at approximately <10%. No significant issues sighted; therefore, the structural condition appears to be fair.</p>
 - 9.1.5.2. The root zone is grass with the tennis court nearby. The tree provides major shading to an existing open space as well.
 - 9.1.5.3. This tree has a '*TreeAZ*' rating of 'A2' and an estimated life expectancy of 40+yrs. It is considered high in significance (IACA, 2010).
- 9.1.6. Tree No. 80 Eucalyptus saligna (Sydney Blue Gum)
 - 9.1.6.1. This remnant, indigenous tree is located on site and is protected by council. This mature tree has a spreading habit and is growing in a dominant class with adequate form. It is expected to increase in size by approximately 10% as it ages. It has a dominant trunk with the crown showing average (3) health. The amount of deadwood was determined as varying ages and sizes being approximately 10%-25% of the canopy with epicormic growth being varying ages and sizes at approximately 10%-25%. No significant issues were sighted.
 - 9.1.6.2. The root zone is grass with a tennis court nearby. The nearby vegetation provides partial protection from strong winds and the tree provides major shading to an existing open space.
 - 9.1.6.3. This tree has a '*TreeAZ*' rating of 'A2' and an estimated life expectancy of 40+yrs. It is considered high in significance (IACA, 2010).
 - 9.1.6.4. The existing tennis court is proposed for demolition and located approximately 3.7m from the trunk within approximately 22% of the TPZ. Therefore, the tree will require strict protection.

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- 9.1.7. Tree No. 81 Eucalyptus saligna (Sydney Blue Gum)
 - 9.1.7.1. This remnant, indigenous tree is located on site and is protected by council. This semi mature tree has a spreading habit and is growing in a dominant class with adequate form. It is expected to increase in size by approximately 20% as it ages. It has a dominant trunk with the crown showing average (3) health. The amount of deadwood was determined as varying ages and sizes being approximately 10%-25% of the canopy with epicormic growth being varying ages and sizes at approximately 10%-25%. No significant issues were sighted.
 - 9.1.7.2. The root zone is grass with no structures nearby. The nearby vegetation provides partial protection from strong winds and the tree provides major shading to an existing open space.
 - 9.1.7.3. This tree has a '*TreeAZ*' rating of 'A2' and an estimated life expectancy of 40+yrs. It is considered high in significance (IACA, 2010).
 - 9.1.7.4. The existing tennis court is proposed for demolition and located approximately 4.3m from the trunk within approximately 1% of the TPZ. Therefore, the tree will require protection.

9.2. Impact on Surrounding Area

- 9.2.1. The existing trees provide significant shading and protection from strong winds and storms asl well as some screening from adjoining properties.
- 9.2.2. The proposed demolition works are unlikely to detrimentally impact the health and stability of the subject significant trees.

10. Recommendations

10.1. Trees Requiring Protection

- 10.1.1. Tree No. 59 Jacaranda mimosifolia (Jacaranda) is a dominant and young exotic tree located onsite. It is in fair condition with a 'TreeAZ' rating of 'A2', a 40+yrs life expectancy and low in significance. The existing dwelling proposed for demolition encroaches the 4.8m TPZ by a minor 7%.
 - Recommendations

0

- o Demolition machinery to work from hard surfaces only
 - Tree protection fencing required
- 10.1.2. Tree No. 61 *Camellia reticulata* (Reticulata Camellia) is a dominant and mature exotic tree located onsite. It is in fair condition with a *'TreeAZ'* rating of 'Z1', a 40+yrs life expectancy and low in significance. The existing dwelling proposed for demolition encroaches the 2.4m TPZ by a minor 6%.
 - Recommendations
 - o Demolition machinery to work from hard surfaces only
 - Tree protection fencing required
- 10.1.3. Tree No. 65 *Eucalyptus saligna* (Sydney Blue Gum) is a codominant and mature indigenous tree located onsite. It is in fair condition with a *'TreeAZ'* rating of 'A2', a 40+yrs life expectancy and high in significance. The existing tennis court proposed for demolition encroaches the 12m TPZ by a major 19%.
 - Recommendations
 - Demolition machinery to work from hard surfaces only
 - o Mulch using composted leaf mulch
 - Apply micro irrigation to TPZ remaining connected to a designated water sourceTree protection fencing required
 - Tree protection fencing required
- 10.1.4. Tree No. 66 Stenocarpus sinuatus (Fire Wheel Tree) is a dominant and young native tree located onsite. It is in good condition with a 'TreeAZ' rating of 'Z1', a 40+yrs life expectancy and low in significance. The existing tennis court proposed for demolition encroaches the 2.4m TPZ by a minor 6%.
 - Recommendations
 - Demolition machinery to work from hard surfaces only
 - Tree protection fencing required

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- 10.1.5. Tree No. 69 *Eucalyptus saligna* (Sydney Blue Gum) is a codominant and mature indigenous tree located onsite. It is in fair condition with a '*TreeAZ*' rating of 'A2', a 40+yrs life expectancy and high in significance. The existing tennis court proposed for demolition encroaches the 7.2m TPZ by a major 17%.
 - Recommendations
 - Demolition machinery to work from hard surfaces only
 - Mulch using composted leaf mulch
 - Apply micro irrigation to TPZ remaining connected to a designated water sourceTree protection fencing required
 - Tree protection fencing required
- 10.1.6. Tree No. 80 *Eucalyptus saligna* (Sydney Blue Gum) is a dominant and mature indigenous tree located onsite. It is in fair condition with a '*TreeAZ*' rating of 'A2', a 40+yrs life expectancy and high in significance. The existing tennis court proposed for demolition encroaches the 9.6m TPZ by a major 22%.
 - Recommendations
 - o Demolition machinery to work from hard surfaces only
 - Mulch using composted leaf mulch
 - Apply micro irrigation to TPZ remaining connected to a designated water sourceTree protection fencing required
 - Tree protection fencing required
- 10.1.7. Tree No. 81 Eucalyptus saligna (Sydney Blue Gum) is a dominant and semi mature indigenous tree located onsite. It is in fair condition with a 'TreeAZ' rating of 'A2', a 40+yrs life expectancy and high in significance. The existing tennis court proposed for demolition encroaches the 4.8m TPZ by a minor 1%.
 - Recommendations
 - o Demolition machinery to work from hard surfaces only
 - o Tree protection fencing required

11. Tree Protection and Management Programme

11.1. Tree Retention & Removal List

Protected trees only

Tree No.	Species	TPZ (m)	Status
34	Juniperus communis (Juniper)	2.4m	Retain
35	Juniperus communis (Juniper)	2.0m	Retain
37	Camellia reticulata (Reticulata Camellia)	2.4m	Retain
42	Juniperus communis (Juniper)	2.0m	Retain
43	Camellia reticulata (Reticulata Camellia)	2.0m	Retain
45	Cupressus sempervirens var. stricta (Pencil Pine)	2.4m	Retain
46	Cupressus sempervirens var. stricta (Pencil Pine)	2.4m	Retain
47	Podocarpus elatus (Brown Pine)	7.2m	Retain
48	Eucalyptus microcorys (Tallowwood)	8.4m	Retain
49	Glochidion ferdinandi (Cheese Tree)	6.0m	Retain
50	Grevillea robusta (Silky Oak)	2.4m	Retain
51	Callistemon salignus (Willow Bottlebrush)	4.2m	Retain
52	Callistemon salignus (Willow Bottlebrush)	2.0m	Retain
53	Callistemon salignus (Willow Bottlebrush)	3.0m	Retain
54	Thuja plicata (Western Red Cedar)	4.8m	Retain
55	Glochidion ferdinandi (Cheese Tree)	6.0m	Retain
56	Archontophoenix cunninghamiana (Bangalow Palm) multiple	3.6m	Retain
57	Archontophoenix cunninghamiana (Bangalow Palm)	3.6m	Retain
58	Archontophoenix cunninghamiana (Bangalow Palm)	2.4m	Retain
59	Jacaranda mimosifolia (Jacaranda)	4.8m	Retain
60	Jacaranda mimosifolia (Jacaranda)	5.1m	Retain
61	Camellia reticulata (Reticulata Camellia)	2.4m	Retain
62	Livistona chinensis (Chinese Fan Palm)	6.0m	Retain
63	Cedrus deodara (Deodar Cedar)	6.0m	Retain
64	Jacaranda mimosifolia (Jacaranda)	6.0m	Retain
65	Eucalyptus saligna (Sydney Blue Gum)	12.0m	Retain
66	Stenocarpus sinuatus (Fire Wheel Tree)	2.4m	Retain
68	Eucalyptus saligna (Sydney Blue Gum)	6.0m	Retain
69	Eucalyptus saligna (Sydney Blue Gum)	7.2m	Retain
70	Eucalyptus pilularis (Blackbutt)	4.8m	Retain
71	Angophora costata (Smooth-barked Apple)	6.6m	Retain
72	Syncarpia glomulifera (Turpentine)	4.8m	Retain
73	Syncarpia glomulifera (Turpentine)	6.0m	Retain
74	Pittosporum undulatum (Sweet Pittosporum)	4.8m	Retain
75	Brachychiton acerifolius (Illawarra Flame Tree)	4.8m	Retain
76	Grevillea robusta (Silky Oak)	24.0m	Retain
78	Callistemon salignus (Willow Bottlebrush)	5.1m	Retain
79	Pittosporum undulatum (Sweet Pittosporum)	2.4m	Retain
80	Eucalyptus saligna (Sydney Blue Gum)	9.6m	Retain
81	Eucalyptus saligna (Sydney Blue Gum)	4.8m	Retain
<u>83</u>			
	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain
84 85	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain
	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain
86	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain
87	Eucalyptus punctata (Grey Gum)	8.4m	Retain
88	Cedrus deodara (Deodar Cedar)	8.4m	Retain
89	Ulmus glabra (Scotch Elm)	7.2m	Retain
90	Archontophoenix cunninghamiana (Bangalow Palm) 0. Tree Retention and Removal List	3.6m	Retain

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Tree Retention and Removal List Continued

Tree No.	Species	TPZ (m)	Status
91	Archontophoenix cunninghamiana (Bangalow Palm)	3.6m	Retain
92	Archontophoenix cunninghamiana (Bangalow Palm)	2.4m	Retain
93	Archontophoenix cunninghamiana (Bangalow Palm)	2.4m	Retain
94	Archontophoenix cunninghamiana (Bangalow Palm)	2.4m	Retain
95	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain
96	Howea forsteriana (Kentia Palm)	2.0m	Retain
97	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain
98	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain
99	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain
100	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain
101	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain
102	Ravenea rivularis (Majesty Palm)	2.4m	Retain
105	Syncarpia glomulifera (Turpentine)	3.6m	Retain

Table 10. Continued -Tree Retention and Removal List

11.2. Tree Protection Measures

These specifications are for the trees identified and selected for retention including any tree located on adjoining properties.

- 11.2.1. **Tree Protection** All tree parts must be protected This includes roots, trunks and branches. *The TPZ distance is measured radially from the trunk*.
- 11.2.2. Fencing A 1.8m chain wire fence, secured and fastened to prevent movement be installed in accordance with AS4970-2009 protection of trees on development sites and AS 4687-2007 Temporary Fencing and Hoarding. The TPZ distances are located within the tree schedule. Woody roots must not be damage during fencing TPZ fencing installation. The installation of all required tree protection fencing must include shade cloth attached to the fencing to reduce transport of dust, particulates and liquids from entering the tree protection zone. No fence relocation is permitted without Arborist permission.
- 11.2.3. **Ground Protection** Ground surface protection must be installed if construction access is required through any TPZ. Protected with boarding (ie scaffolding board or plywood sheeting or similar material), placed over a layer of mulch to a depth of at least 100mm and geotextile fabric. The protective boarding must be left in place for the duration of the construction and development. The existing concrete driveways are to be left in-situ and forms part of the ground surface protection.
- 11.2.4. **Signage** "Tree Protection Zone, No Entry". With project arborist contact details to be attached to the protective fencing.
- 11.2.5. **Machinery Movements** Machinery movements must be kept outside of TPZ's or on hard surfaces within TPZ's.

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- 11 July 2024
- 11.2.6. **AS4970-2009** Activities generally excluded from the TPZ include but are not limited to;
 - soil cutting or fill including trenching
 - machine excavation including trenching;
 - excavation for silt fencing;
 - soil cultivation, disturbance or compaction;
 - stockpiling, storage or mixing of materials;
 - preparation of chemicals, including preparation of cement products;
 - parking of vehicles and plant;
 - disposal of liquids and refuelling;
 - dumping of waste;
 - disposal of building materials;
 - was placement of fill;
 - lighting of fires;
 - soil level changes;
 - temporary or permanent installation of utilities and signs, and
 - physical damage to the tree.
 - site offices or shed locations
- 11.2.7. Canopy Pruning No pruning is expected.
- 11.2.8. **Mulch** Within the TPZ fencing up to 100mm of *COMPOSTED* organic mulch must be applied to help retain moisture levels, suppress weed growth and reduce tree stress. Mulch must be in accordance with AS4454-2012 Composts, soil conditioners and mulches.
- 11.2.9. **Irrigation** All trees must be thoroughly watered regularly throughout the development process. This is dependent on weather conditions where more water applied during hot and or winding weather. Micro-irrigation lines must be connected to a designated water source that remains connected throughout the development works. and forward-facing sprayers from the fence line for use during and post construction activities.
- 11.2.10. **Tree Damage** If any tree is damaged the project arborist should be notified, engaged to inspect and provide advice as well as written documentation to be supplied to the certifying authority.
- 11.2.11. **Fertilisation** Any tree requiring fertilisation should be performed at the discretion of the site arborist only.

11.3. Tree Monitoring Schedule

- 11.3.1. During site occupation all TPZ's and trees must be monitored, assessed and recorded by the project arborist according to council's determinations.
- 11.3.2. Any work that occurs within a TPZ must be witnessed and directed by the project arborist.

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

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- 11.3.3. In the event that any tree is declining in health the project arborist shall be engaged to supply written remedial applications that must be applied immediately.
- 11.3.4. Any excavation work within a Tree Protection Zone must be monitored by the project arborist.

11.4. Project Arborist Monitoring

1	Project arborist (level 5) must oversee tree retention with written confirmation from the owner or site manager
2	All tree related matters must be discussed with the project arborist
3	The builder / site manager is responsible to inform the project arborist of any issues during works
4	Project arborist must maintain a <u>monthly</u> log including site visits, notes and photographs
5	Project arborist must provide feedback the builder, site manager or council

Table 11. Project Arborist Monitoring

11.5. Project Arborist Supervision

An Arborist with minimum qualifications in Arboriculture of Level 5 (under the Australian Qualification Framework) must oversee various stages of work within the Tree Protection Zone of any tree listed for retention. The Arborist must certify compliance with each key milestone as detailed below.

1	Project arborist to mark or tag all trees to be removed (red) and retain (green) with confirmed and agreement with site manager prior to ANY onsite works
2	Project arborist to mark tree protection fencing locations prior to ANY onsite works
3	During demolition of any ground surface materials (paving, concrete, grass etc) within the Tree Protection Zone (TPZ) of any tree to be retained
4	During any excavation and trenching which has been approved by Council within the TPZ of any tree to be retained
5	During any Landscape works within the TPZ of any tree to be retained

Table 12. Project Arborist Supervision

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11.6. Project Arborist Hold Points

Hold Point	Task	Timing
1	Tree Protection Plan be onsite prior to works (AS4970-2009)	
2	Approve tree tagging for tree retention and removal	Prior to demolition of any structures
4	Inspect Tree Protection Fencing with signage (AS4970-2009)	
5	Install Trunk Protection where applicable	As required prior to works proceeding
6	Supervise all work within any TPZ's	As required during works
7	Tree Inspection	Monthly during all construction works
8	Final Tree Inspection	Post construction

Table 13. Project Arborist Hold Points

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

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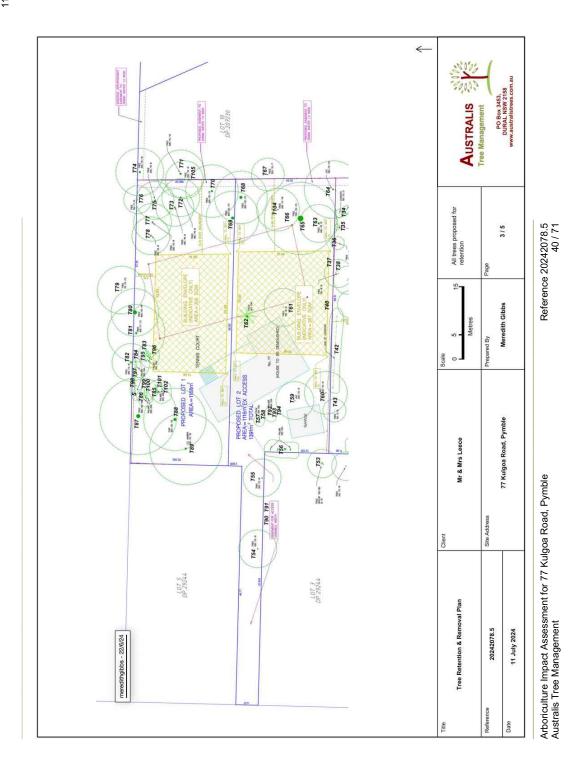
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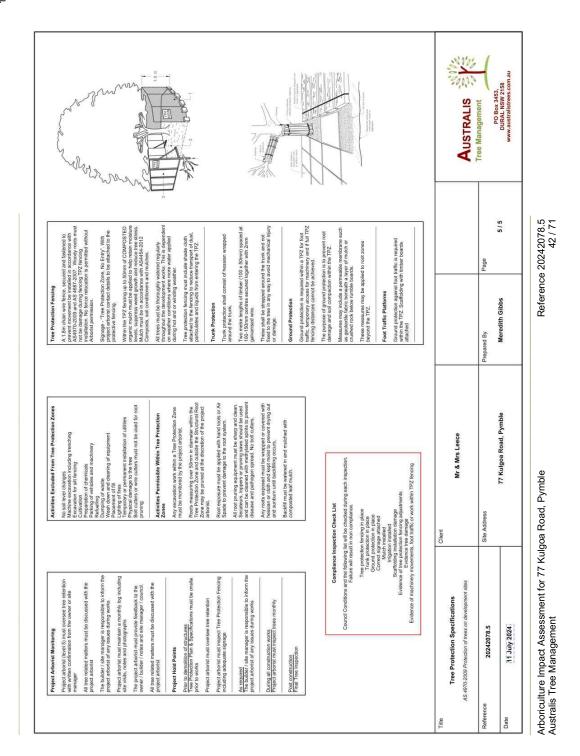
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Mark update Description Desc		-	Retain	74	Pittosporum undulatum (Sweet Pittosporum)	4.8m		104	Celtis australis (Nettle Tree)*		6.0m	Retain
Contraction			Retain	75	Brachychiton acertiolius (Illawarra Flame Tree)	4.8m		105	Syncarpia glomulifera (Turpentine	(3.6m	Retain
Image: constraint of the	lia)		Retain	76	Grevillea robusta (Silky Oak)	24.0m		106	Trbouchina lepidota 'Alstonville' (A	dstonville Tibouchina)*	2.0m	Retain
Image: state			Retain	F	Cetts australis (Nettle Tree)*	7.2m		107	Tibouchina lepidota 'Alstonville' (A	dstonville Tibouchina)*	2.0m	Retain
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Image: constraint of the line Im			Retain	80	Eucalyptus saligna (Sydney Blue Gum)	9.6m		110	Tibouchina lepidota 'Alstonville' (A	dstonville Tibouchina)*	2.0m	Retain
Implementation Impleme			Retain	10	Eucalyptus saligna (Sydney Blue Gum)	4.8m						
Implementation Impleme	ush)	1	Retain	82	Ligustrum lucidium (Large Leaf Privet)*	3.6*	Retain					
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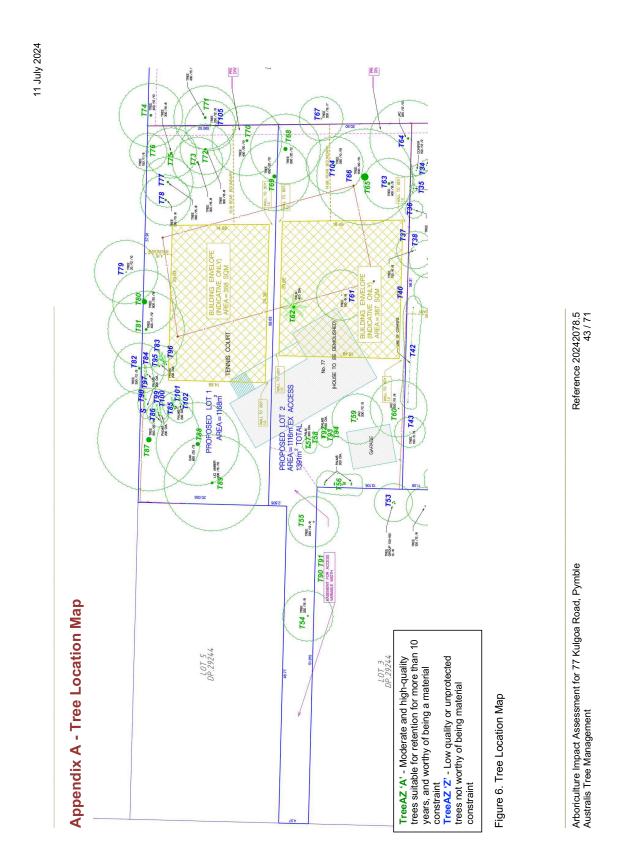




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-	Juniperus communis (Juniper)	adjoining 73 Kulgoa	20	20	6.0	1.0 1.0 1.0 1.0 mature	1.0 mature	15-40yrs	codominant	fair	good (4)	fair	N/A N/A	exotic	Z1	Yes	2.4 1.7	no works		%0	Retain
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36	Buxus sp (Buxus)	adjoining 73 Kulgoa	10	20	3.0	2.0 2.0 2.0 2.0 mature	2.0 mature	15-40yrs	dominant	fair	good (4)	fair	N/A N/A	exotic	Z1	No	2.0	no works	-	%0	Retain
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			10 10		h & Con	Health & Condition no significant issues sighted	nt issues sig	hted													
				Existir	ng Struo.	Existing Structure N/A			Existing Str.	Existing Structure Distance	nice	Existin	Existing Structure Obstruction %	uction %							
38		adjoining 73 Kulooa	10	20	4.0	2.0 2.0 2.0 2 N S E V	2.0 mature	15-40yrs	dominant	fair	good (4)	fair	N/A N/A	exotic	Z1	No	2.0	no works		%0	Retain
	(Pittosporum)	Road		Health	h & Con	Health & Condition lean	0														
				Existir	ing Struc.	Existing Structure N/A			Existing Str.	Existing Structure Distance	nce	Existin	Existing Structure Obstruction %	uction %							
40	Celtis australis (Nettle Tree)	adjoining 73 Kulgoa	10	10	5.0	2.0 2.0 2.0 2.0 young N S E W	5.0 young	40+yrs	dominant	fair	average (3)	fair	0% <10%	exotic	53	oN N	2.0	no works		%0	Retain
		Road		Health	h & Con	Health & Condition no significant issues sighted	nt issues sig	hted													
				Existi	ing Struc	Existing Structure N/A			Existing Str	Existing Structure Distance	nce	Existi	Existing Structure Obstruction %	uction %							
42	Juniperus communis (Juniper)	adjoining 73 Kulgoa Road	S	5 Hoalth	3.0	1.0 1.0 1.0 N S E	1.0 mature W	15-40yrs hted	codominant	fair	good (4)	fair	N/A N/A	exotic	Z1	Yes	2.0	indicative building envelope (lot 3)	1.5	7%	Retain
				Existit	Existing Structure	ture N/A			Existing Str	Existing Structure Distance	лае	Existit	Existing Structure Obstruction %	uction %							
43	Camellia reticulata (Reticulata Camellia)	adjoining 73 Kulgoa	2	10	5.0	1.0 1.0 1.0 1.0 mature	1.0 mature	40+yrs	dominant	fair	average (3)	fair	0% <10%	exotic	Z1	Yes	2.0	no works		%0	Retain
		коад		Health	h & Con	Health & Condition no significant issues sighted	nt issues sit	hted													
				Existin	Existing Structure	ture N/A			Existing Str	Existing Structure Distance	INCB	Existi	Existing Structure Obstruction %	uction %							
49	Glochidion ferdinandi (Cheese Tree)	adjoining 75 Kulgoa	50 25 25	60	12.0	2.0 2.0 2.0 2.0 mature	2.0 mature	40+yrs	codominant	fair	average (3)	fair	<10% <10%	native	A2	Yes	6.0 2.7	no works		%0	Retain
		Road		1 7	h & Con		nt issues sig	hted				2	2		2			5		1	5
				Existi	Existing Structure	ture N/A			Existing Str	Existing Structure Distance	nce	Existi	Existing Structure Obstruction %	uction %							
53	Callistemon salignus adjoining (Willow Bottlebrush) 75 Kulgos	adjoining 75 Kulgoa	25	30	10.0	3.0 3.0 3.0 N S E	3.0 mature W	5-15yrs	dominant	poor	decline (2)	fair	50%-75% <10%	native	Z4	Yes	3.0 2.0	no works		%0	Retain
	-	Road		Health	h & Con	Health & Condition decline / stress	ess														
				Existin	Existing Structure	ture N/A			Existing Str.	Existing Structure Distance	Ance	Existin	Existing Structure Obstruction %	uction %							

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5	Species	Location	DBH (cm) multi (cm)	n) DGL	it. Height (m)	ght Canopy (m) radius		Age Class	Expectancy	Class	Condition	Crown Condition	Condition	Epicormics	Type	AZ	Protected	1 SRZ (m)	Proposed Works	Distance (m)	Proposed Encr	Proposed Status
11	Thuja plicata (Western Red Cedar)	onsite	40	40	12.0	0 3.0 3.0 N S	3.0 2.5 3.0 I	3.0 mature		dominant	fair	average (3)	poor	<10% N/A	exotic	A2	Yes	4.8 2.3	no works		%0	Retain
				Hea	atth & Co.	ndition inc	Health & Condition included bark in scaffold union at 2m	scaffold u	nion at 2m													
				Exis	Existing Structure	Inture N/A	4			Existing Str	Existing Structure Distance	Ince	Existin	Existing Structure Obstruction %	action %							
100	Glochidion ferdinandi onsite (Cheese Tree)	onsite	50	50	10.0		3.5 3.5 3.5 3.5 mature		40+yrs	codominant	fair	average (3)	fair	<10% <10%	native	A2	Yes	6.0 2.5	no works		%0	Retain
				Неа	aith & Co	indition no	tealth & Condition no significant issues sighted	sues sighte	p										1			
				Exis	Existing Structure	Inture N/A	А			Existing Stu	Existing Structure Distance	nce	Existin	Existing Structure Obstruction %	action %							
1405	Archontophoenix cunninghamiana	onsite	30	-	8.0	2.0	2.0 2.0 2.0 1 S E W	2.0 mature	40+yrs	dominant	poog	good (4)	poog	0% N/A	native	F2	Yes	3.6	no works		%0	Retain
ΞĒ	ultiple			Hes	atth & Co	on notition	Health & Condition no significant issues sighted	sues sighte	p													
1				Exis	Existing Structure	Inture N/A	٨			Existing Str	Existing Structure Distance	ance	Existin	Existing Structure Obstruction %	iction %							
I A D	Archontophoenix cunninghamiana	onsite	30	-	8.0	2.0 2.0 N S	.0 2.0 2.0 mature		40+yrs	dominant	poog	good (4)	poog	0% N/A	native	A2	Yes	3.6	no works		%0	Retain
9	Bangalow Palm)			Hea	ith & Co	on notition	Health & Condition no significant issues sighted	sues sighte	p						-						1	
				Exis	Existing Structure	Inture N/A	4			Existing Str	Existing Structure Distance	ance	Existin	Existing Structure Obstruction %	action %							
V U	Archontophoenix cunninghamiana	onsite	20	-	8.0		2.0 2.0 2.0 2.0 mature		40+yrs	dominant	poog	good (4)	poob	0% N/A	native	A2	Yes	2.4	no works		%0	Retain
5	Sangalow Palm)			Hea	nth & Co	on notition	dealth & Condition no significant issues sighted	sues sighte	p													
			_	Exis	Existing Structure	Inture N/A	ч			Existing Str	Existing Structure Distance	ance	Existin	Existing Structure Obstruction %	action %							
15		onsite	40	50	6.0	4.0	3.5 3.5 4.5 vound		40+vrs	dominant	fair	averade (3)	fair	<10%	exotic	A2	Yes	4.8	No. 77 dwelling	3.6	7%	Retain
FS	mimosifolia (Jacaranda)					N	S E W							<10%				2.5	demolition			
11				Hea	alth & Co	indition no	Health & Condition no significant issues sighted	sues sighte	g													
			_	Exis	Existing Structure		No. 77 dwelling demolition	demolition		Existing Str	Existing Structure Distance	ance 4m	Existin	Existing Structure Obstruction %	action 96 7%							
1 EZ	Jacaranda mimosifolia (Jacaranda)	onsite	42 30 30	50 Healt	7.0	3.0 3 N 5	50 7.0 3.0 3.0 3.0 9.0 40 Health & Condition N S E W 40	oung	+yrs	dominant	fair	average (3)	fair	<10% <10%	exotic	A2	Yes	5.1 2.5	na warks		%0	Retain
				Exis	Existing Structure	Icture N/A	8	0	•	Existing St	Existing Structure Distance	moe	Existin	Existing Structure Obstruction %	action %							
OF	Camellia reticulata ((Reticulata Camellia)	onsite	20 10 10	20	5.0		2.0 2.0 2.0 2.0 mature		40+yrs	dominant	fair	good (4)	fair	0% <10%	exotic	Z1	Yes	2.5	Indicative building envelope (lot 2)	0.0	100%	Retain
			10 10	-	atth & Co	indition no	Health & Condition no significant issues sighted	sues sighte	p							-						
-			_	Exis	Existing Structure		No. 77 dwelling demolition	demolition		Existing Str	Existing Structure Distance	mce 2m	Existin	Existing Structure Obstruction %	action % 6%							
122	Livistona chinensis (Chinese Fan Palm)	onsite	50		8.0		2.0 2.0 2.0 2.0 semi N s E W mature		40+yrs	dominant	poog	good (4)	poob	0% N/A	native	A2	Yes	6.0	Indicative building envelope (lot 2)	0.0	%0	Retain
				Heia	Health & Condition	Indition no	Health & Condition no significant issues sighted	sues sighte	p	Evietion St.	Evistine Structure Distance	and am		Presidente Obieter	1000 In motion			F				
-				š.	VAL France		Guillawn 1.1.	aemonioman		no funeixo	norma pisin		EXISIN	Existing structure obstruction 7a				5				
OB	Cedrus deodara (Deodar Cedar)	onsite	50	55	10.0	0 3.0 3 N 5	3.0 3.0 3.0 semi s E W mature		15-40yrs	suppressed	fair	low (2-3)	poor	<10% N/A	exotic	Z10	Yes	6.0 2.6	indicative building ervelope (lot 2)	5.0	4%	Retain
				Hea	aith & Co	Health & Condition poor form	or form			Eulotion Ct.	And Dist.	the second s	- 11 - 11 - 11 - 11 - 11 - 11 - 11 - 1		100							
				EXIS	uis buis	IN anno	۲			Existing Sti	Existing Structure Distance	9000	Existin	Existing Structure Obstruction %	uction %							

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Species		Location	DBH (cm) multi (cm)	m) (cm)	L Height) (m)	r Canopy (m) radius	Age Class	Life Expectancy	Crown Class	Tree Condition	Crown Condition	Structure	Deadwood Epicormics	Type	Tree	Council	TPZ (m) SRZ (m)	Proposed Works	Distance. I (m)	Proposed 1	Proposed Status
Jacaranda mimosifolia		onsite	50 30	50	9.0	4.0 6.0 3.0 3 N S E M	3.0 semi w mature	40+yrs	dominant	fair	average (3)	poor	<10% <10%	exotic	Z5	Yes	6.0 2.5	no works		%0	Retain
randa)			40	Hea	ith & Cond ting Structu	Health & Condition lean Existing Structure N/A			Existing 5	Existing Structure Distance	tance	Existin	Existing Structure Obstruction %	uction %							
Eucalyptus saligna (Sydney Blue Gum)		onsite	100	100	0 20.0	7.0 7.0 N S	7.0 8.0 mature	40+yrs	codominant	fair	average (3)	fair	10%-25% 10%-25%	indigenous	A2	Yes	12.0 3.3	indicative building envelope (fot 2)	5.8	6%	Retain
				Hea	Ith & Cond ting Structu	Health & Condition minor previo Existing Structure tennis court	ously failed b	ranches, on	e with bracket Existing 5	bracket fungi / deadwood / Existing Structure Distance 2m	Health & Condition minor previously failed branches, one with bracket fung/ / deadwood / 5-10cm diametre trunk cavities Evoluty Structure Tennis court Existing Structure Disance 2m Existing Structure Otion	t diametre t	etre trunk cavities Existing Structure Obstruction %	uction % 19%							
Stenocarpus sinuatus onsite (Fire Wheel Tree)	uatus e)	onsite	20	50	8.0	2.0 2.0 2.0 2.0 young N S E W	6unod 0.	40+yrs	dominant	poog	good (4)	fair	<10% <10%	native	Z1	Yes	2.4 1.7	no works		%0	Retain
				Hea	Health & Condition Existing Structure	Health & Condition basal suckers Existing Structure tennis court	S		Existing 5	Existing Structure Distance	tance 1m	Existin	Existing Structure Obstruction %	uction % 6%							
		adjoining 18 Bristol Ave	q			N S E	M	dead (no hollows)			dead				Z4						
			2	Hea	Health & Condition				Eviotion	Eviction Structure Distance	farra	- Contraction	100								
				LAD	innine fuit	-			- Bunsiva	simemus mis	sance	EXISTIN	Existing Structure Obstruction %	ection %e							
Eucalyptus saligna (Sydney Blue Gum)	-	onsite	50	60	17.0	7.0 7.0 6.0 6.0 N S E W	v mature	40+yrs	codominant	fair	average (3)	fair	<10% <10%	indigenous	A2	Yes	6.0 2.7	no works		%0	Retain
				103	im & cona		ousiy railed p	rancnes	0.000		10,000		2 400 TO 800	200 000							
				Exis	Existing Structure	Ine N/A			Existing :	Existing Structure Distance	tance	Existin	Existing Structure Obstruction %	uction %							
Eucalyptus saligna (Sydney Blue Gum)		onsite	60	65	20.0	7.0 7.0 6.0 6.0 mature N S E W	6.0 mature W	40+yrs	codominant	fair	average (3)	fair	<10% <10%	indigenous	A2	Yes	7.2 2.8	na works		%0	Retain
				неа	the Cond		ut issues sign	ted													
			_	Exis	Existing Structure	ure tennis court			Existing	Existing Structure Distance 4m	tance 4m	Existin	Existing Structure Obstruction %	uction % 17%							
Eucalyptus pilularis (Blackbutt)	-	onsite	40	50 Heal	18.0 tth & Candi	50 18.0 3.0 3.0 4.0 4.0 N S E W Heath & Candition stress	.0 semi v mature	40+yrs	codominant	fair	average (3)	fair	<10% 25%-50%	indigenous	A2	Yes	4.8 2.5	no works		%0	Retain
				Exis.	ting Structu	Existing Structure N/A			Existing 1	Existing Structure Distance	tance	Existin	Existing Structure Obstruction %	uction %							
Angophora costata (Smooth-barked		adjoining 18 Bristol Ave	55 ve	60	20.0	5.0 5.0 5.0 N S E	5.0 semi w mature	40+yrs	dominant	fair	average (3)	fair	<10% <10%	indigenous	A2	Yes	6.6 2.7	no works		%0	Retain
_				Hea	th & Cond-		nt issues sigh	ted													
				Exis	Existing Structure	ure N/A			Existing :	Existing Structure Distance	tance	Existin	Existing Structure Obstruction %	uction %							
Syncarpia glomulifera onsite (Turpentine)	ulifera	onsite	40	50	16.0	4.0 4.0 4.0 4.0 young	6unoó 0.	40+yrs	intermediate	fair	average (3)	fair	<10% N/A	indigenous	A2	Yes	4.8 2.5	no works		%0	Retain
				Hea	Ith & Cond		nt issues sigh	Ited													
				Exis	Existing Structure	In N/A			Existing 1	Existing Structure Distance	tance	Existin	Existing Structure Obstruction %	uction %							
Syncarpia glomulifera onsite (Turpentine)	ulifera	onsite	50	60	18.0	5.0 5.0 5.0 5 N S E N	5.0 semi w mature	40+yrs	intermediate	fair	average (3)	fair	<10% N/A	indigenous	A2	Yes	6.0 2.7	no works		%0	Retain
				Hea	Ith & Cond	Health & Condition no significant issues sighted	nt issues sigh	ited			Page 10			1					-		
				EXIS	ning ounce	AIN DIA			Existing .	Existing Structure Distance	tance	Existin	Existing Structure Obstruction %	uction %							

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	Location	smulti (cm)	m) (cm)	(m) ((m) radius	Class	Expectancy	Class	Condition	Candition	Condition	Epicormics	Type	AZ	Protected	SRZ (m)	Proposed Works	(m)	Proposed Encr	Status
	adjoining 18 Bristol Ave	e 40	40	10.0	0	5.0 mature W	5-15yrs	codominant	fair	average (3)	fair	<10% N/A	indigenous	A2	Yes	4.8 2.3	no works		%0	Retain
			Exist	Health & Condition Existing Structure	Health & Condition climber Existing Structure N/A			Existing St	Existing Structure Distance	lance	Existing	Existing Structure Obstruction %	iction %							
Brachychiton acerifolius (Illawarra	onsite	40	45	15.0	5.0 5.0 N S	5.0 5.0 semi <i>E</i> W mature	40+yrs	codominant	poog	average (3)	good	<10% <10%	native	A2	Yes	4.8 2.4	no works		%0	Retain
			Hea	Ith & Cor		ant issues sigh	ited	and the second se					1 Contraction							
		_	EXOS	Exosong sourcinite	A/N anti			Existing SI	Existing Structure Distance	lance	Existing	Existing Structure Obstruction %	iction %							
	onsite	200	250	11.0	3.0 3.0 3.0 N S E	3.0 young W	15-40yrs	codominant	fair	average (3)	fair	<10% N/A	native	A2	Yes	24.0 4.9	no works		%0	Retain
			Hea	Ith & Con	Health & Condition no significant issues sighted	ant issues sigl	Ited													
			Exis	ting Struk	Existing Structure N/A			Existing St	Existing Structure Distance	tance	Existin	Existing Structure Obstruction %	iction %							
	onsite	60	60	8.0	6.0 3.0	3.0 mature	15-40yrs	codominant	poor	average (3)	poor	<10%	exotic	Z5	No	7.2	indicative	6.0	2%	Retain
					ш	À						<10%				2.7	building envelope (lot 1)		males.	111111111111111111111111111111111111111
			Hea.	thh & Cor.	Health & Condition trunk wound	pt				t										
			Exis	Existing Structure	A/N ant			Existing SI	Existing Structure Distance	ance	Existing	Existing Structure Obstruction %	uction %							
Callistemon salignus (Willow Bottlebrush)	onsite	42 30	50	13.0	4.0 4.0 N S	4.0 4.0 mature	15-40yrs	codominant	fair	average (3)	poor	<10% <10%	native	Z5	Yes	5.1	indicative building	3.5	5%	Retain
		30	Hea	th & Con	dition included b:	ark within cod	ominant sterr	is (burficating	at 1m) ar	Health & Condition included bark within codominant stems (burficating at 1m) and scaffold unions		20	_			2.4				
			Exis	Existing Structure	ture N/A			Existing St	Existing Structure Distance	lance	1	Existing Structure Obstruction %	iction %							
11				ΗĒ																
	adjoining SP2 Water Sunnly	20	30	8.0	3.0 3.0 3.0 N S E	3.0 3.0 mature	15-40yrs	dominant	fair	good (4)	fair	<10% <10%	indigenous	Ā	Yes	2.4	no works		%0	Retain
	Andrho		Hea	Ith & Cor		ant issues sigh	nted													
- 11	1	_	Exis	Existing Structure	ture N/A			Existing St	Existing Structure Distance	lance	Existin	Existing Structure Obstruction %	uction %							
Eucalyptus saligna (Sydney Blue Gum)	onsite	80	06	20.0	5.0 5.0 5.0 N S E	5.0 5.0 mature	40+yrs	dominant	fair	average (3)	fair	10%-25% 10%-25%	indigenous	A2	Yes	9.6 3.2	indicative building envelope (lot 1)	3.4	3%	Retain
			Hea	th & Cor	Health & Condition no significant issues sighted	ant issues sigh	Ited													
- 1			Exis	ting Stru	Existing Structure tennis court	τ		Existing St	Existing Structure Distance	ance 4m	Existin	Existing Structure Obstruction %	action % 22%							
Eucalyptus saligna (Sydney Blue Gum)	onsite	40	50	16.0	5.0 4.0 2.0 7.0 N S E W	7.0 semi w mature	40+yrs	dominant	fair	average (3)	fair	10%-25% 10%-25%	indigenous	A2	Yes	4.8 2.5	indicative building envelope (lot 1)	3.0	%1	Retain
			Hea	th & Con	Health & Condition no significant issues sighted	ant issues sigh	Ited		5											
			Exis	Existing Structure	ture tennis court	Ψ		Existing St	Existing Structure Distance	ance 4m	Existing	Existing Structure Obstruction %	uction % 1%							
Ligustrum lucidium (Large Leaf Privet)	adjoining SP2 Water	30	40	12.0	3.0 3.0 3.0 3.0 mature	3.0 mature W	40+yrs	dominant	fair	average (3)	fair	N/A N/A	exotic	Z3	No	3.6 2.3	no works		%0	Retain
	Supply		Hea	th & Con		ant issues sigh	ted													
			Exis	Existing Structure	A/N ant			Existing St	Existing Structure Distance	tance	Existing	Existing Structure Obstruction %	uction %							
Livistona chinensis (Chinese Fan Palm)	onsite	20	-	6.0	2.0 2.0 2.0 2.0 young N S E W	2.0 young	40+yrs	dominant	poog	good (4)	good	0% N/A	native	Z1	Yes	2.4	indicative building envelope (lot 1)	1.0	%0	Retain
			Hea	Wh & Con	Health & Condition no significant issues sighted	ant issues sigh	ited													
			Exis,	ting Struk	Existing Structure N/A			Existing St	Existing Structure Distance	tance	Existing	Existing Structure Obstruction %	uction %							

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Encr Status	0% Retain			0% Retain			0% Retain			0% Retain				0% Retain			0% Retain			0% Retain			0% Retain			0% Retain		0% Retain			
(m)					112					-																					
SRZ (m) Works	no works			no works	×		no works			no works				no works			no works			no works			no works			no works		no works			
ad SRZ (2.4			2.4			2.4			8.4	2.9			8.4 3.0			7.2 2.5			3.6			3.6			2.4		2.4	_		
Protected	Yes			Yes			Yes	-		Yes				Yes			Yes			Yes			Yes			Yes		Yes	_		
AZ	Z1			Z1			Z1			s A2	-			A2			A2			A2			A2			A2		A2	-		
Type	native		truction %	native		truction %	native		truction %	indigenous		truction %		exotic		truction %	exotic		truction %	native		truction %	native		truction %	native	truction %	native	-		truction %
Epicomics	0% N/A		Existing Structure Obstruction %	0% N/A		Existing Structure Obstruction %	0% N/A		Existing Structure Obstruction %	<10%	<10%	Existing Structure Obstruction %		<10% <10%		Existing Structure Obstruction %	<10% <10%		Existing Structure Obstruction %	0% N/A		Existing Structure Obstruction %	0% N/A		Existing Structure Obstruction %	0% N/A	Existing Structure Obstruction %	%0	N/A		Existing Structure Obstruction %
Condition	good		Exist	good	2	Exist	poob		Exist	fair		Exist		fair		Exist	fair		Exist	poob		Exist	poob		Exist	pood	Exist	poob			Fxid
Condition	good (4)		nce.	good (4)		псө	good (4)		nce	average (3)		nce		average (3)		nce	average (3)		nce	good (4)		nce	good (4)		uce	good (4)	008	good (4)			000
Condition	poob		Existing Structure Distance	poob		Existing Structure Distance	poog		Existing Structure Distance	fair		Existing Structure Distance		fair		Existing Structure Distance	fair		Existing Structure Distance	poob		Existing Structure Distance	poob		Existing Structure Distance	poog	Existing Structure Distance	poob			Existing Structure Distance
Class	dominant		Existing SI	dominant		Existing SI	dominant		Existing St	dominant	poontee	Existing St		dominant		Existing SI	dominant		Existing St	dominant		Existing SI	dominant		Existing St	dominant	Existing St	dominant			Existing SI
Expectancy	40+yrs	ped		40+yrs	bed		40+yrs	bed		40+yrs	ad / minor o			40+yrs	bei		40+yrs	bed		40+yrs	ted		40+yrs	ted		40+yrs ted	5	40+yrs	1	na	
Class	bunok	sues sight		2.0 young	sues sight		bunok	sues sight		mature	cine cinhi	ific cone		mature	sues sight		mature	sues sight			sues sight		mature	sues sight		mature sues sight	2	mature	alata atab	undis sans	
(m) radius	2.0 2.0 2.0 2.0 N S E W		N/A	2.0 2.0 2.0 2.0 N S E W	Health & Condition no significant issues sighted	N/A	2.0 2.0 2.0 2.0 N S E W	Health & Condition no significant issues sighted	N/A	100	Health & Condition on similiant issues sinhted / minor deartwood	N/A		5.0 5.0 4.0 5.0 mature N S E W	Health & Condition no significant issues sighted	N/A	5.0 5.0 3.0 6.0 mature	Health & Condition no significant issues sighted	N/A	2.0 2.0 2.0 2.0 mature	Health & Condition no significant issues sighted	N/A	2.0 2.0 2.0 2.0 mature		N/A	8.0 2.0 2.0 2.0 40 N S E W 40	N/A	2.0 2.0 2.0	N S E W	ream a communi fla significant issues signifed	N/A
(m) (i	5.0 2	& Candition	Existing Structure	5.0 2	& Condition	Existing Structure	5.0 2	S Condition	Existing Structure	16.0 8	Condition	Existing Structure		16.0 5	& Condition	Existing Structure	16.0 5	S Condition	Existing Structure	10.0 2	& Condition	Existing Structure	10.0 2	& Condition	Existing Structure	8.0 2	Existing Structure	8.0 2	Condition of	o contanto	Existing Structure
(cm)		Health	Existing		Health	Existing		Health &	Existing	75	Hoatth	Existing		80	Health a	Existing	50	Health a	Existing		Health	Existing		Health (Existing	Heatth	Existing		Line Mile	mean	Existing
multi (cm)	20		_	20			20			70				70			60			30		~	30			20		20			
Location	onsite			onsite			onsite			onsite				onsite			onsite			adjoining 75 Kulgoa	Road		adjoining 75 Kulgoa	Коад		onsite		onsite			
Species	Livistona chinensis (Chinese Fan Palm)			Livistona chinensis (Chinese Fan Palm)			Livistona chinensis (Chinese Fan Palm)			Eucalyptus punctata	(Grey Gum)			Cedrus deodara (Deodar Cedar)			Ulmus glabra (Scotch onsite Elm)				(Bangalow Palm)		Archontophoenix cunninghamiana (Bannalow Palm)			Archontophoenix cunninghamiana (Bangalow Palm)		Archontophoenix	(Bangalow Palm)		
No.	84			85			86			87			11	88			89			06			91			92		93			

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onetto 30 8.0
Actionropheenix onsite 20 8.0 2.0 2.0 2.0 mature 40+yrs dominant cunninghamiant fangdaw Paris
Livisiona chinensis onsite 20 6.0 2.0 2.0 2.0 young 40+yrs dominant (Chinese Fan Palm) $\frac{20}{N-5} = \frac{2}{N}$
no significant issues sighted
Existing Structure NIA Existing Structure Distance
Howea forsteriana onsite 15 2.0 2.0 2.0 2.0 young 40+yrs dominant (Kentia Palm) N S E W
Health & Condition no significant issues sighted
Existing Structure Distance Existing Structure Distance
Livisiona chinensis onsite 20 50 2.0 2.0 2.0 2.0 young 40 +yrs dominant (Chinese Fan Palm)
Health & Condition Ino significant issues sighted Existing Structure MIA Conditional Distance
Y/N
Unistona chinensis onsite 20 5.0 2.0 2.0 2.0 2.0 young 40+yrs dominant (Chinese Fan Paim) $\frac{1}{N}$ $\frac{5}{E}$ $\frac{1}{W}$
Health & Condition no significant issues sighted
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Prenut & Contructor TIO Significant issues signteed Existing Structure NLA Existing Structure Distance
Livisiona chinensis onsite 20 5.0 2.0 2.0 2.0 90 ung 40+yrs dominant (Chinese Fan Palms) v s E w
Health & Condition no significant issues sighted
Existing Structure Distance
Ravenea rvularis onsite 20 5.0 2.0 2.0 2.0 9.0 40+yrs dominant (Majesty Palm) ////////////////////////////////////
2
Camella reticulata onsite 15 30 3.0 2.0 2.0 2.0 2.0 semi n semi n 40+yrs dominant (Retrolata Camellia) n s n s mature a dominant
10 Health & Condition no significant issues sighted
Existing Structure N/A

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92	Species	Location	DBH (cm) multi (cm)	(ma) (cm)	Height (m)	it Canopy (m) radius	Age Class	Life Expectancy	Crown Class	Tree Condition	Crown Condition	Structure Condition	Deadwood Epicormics	Type	Tree AZ	Council Protected	TPZ (m) SRZ (m)	Proposed Works	Distance (m)	Proposed Encr	Proposed Status
100	Cettis australis (Nettle Tree)	onsite	50 30	50	8.0	4.0 4.0 4.0 4.0 mature N S E W	mature	40+yrs	dominant	fair	average (3)	fair	<10% <10%	exotic	Z3	No	6.0 2.5	no works		%0	Retain
			30	Healt	h & Con	th & Condition. no significant issues sighted	ssues sigh	ed													
			_	Exist	Existing Structure	ture tennis court			Existing St	Existing Structure Distance 4m	1ce 4m	Existin	Existing Structure Obstruction %	action % 13%							
1000	Syncarpia glomulifera onsite (Turpentine)	onsite	30	40	12.0	4.0 4.0 4.0 4.0 young	bunok	40+yrs	intermediate	fair	average (3)	fair	<10% N/A	indigenous	A2	Yes	3.6 2.3	no works		%0	Retain
				Healt	h & Con	dition no significant	issues sigh	ed												1	
				Exist.	ing Struc	Existing Structure N/A			Existing St	Existing Structure Distance	108	Existin	Existing Structure Obstruction %	ution %							
10.0	bidota	onsite	2	10	4.0	1.0 1.0 1.0 1.0 N S E W	1.0 mature	<5yrs	dominant	poor	decline (2)	poor	25%-50% 25%-50%	exotic	Z1	No	2.0	no works		%0	Retain
e l	e libouchina)			Healt	h & Con	dition decline / stres	s							2							
				Exist.	ing Struc	Existing Structure N/A			Existing St	Existing Structure Distance	108	Existin	Existing Structure Obstruction %	action %							
100	bidota	onsite	۵	10	4.0	1.0 1.0 1.0 1.0 mature	mature	<5yrs	dominant	poor	decline (2)	poor	25%-50% 25%-50%	exotic	Z	No	2.0	no works		%0	Retain
4	e Tibouchina)			Healt	h & Con	dition decline / stres	s														
_			-	Exist.	ing Struc	Existing Structure N/A			Existing St	Existing Structure Distance	100	Existin	Existing Structure Obstruction %	action %							
1 0	Tibouchina lepidota 'Alstonville' (Alstonvill e Tibouchina)	onsite	ي ع	10	3.0	1.0 1.0 1.0 1.0 mature N S E W	mature	<5yrs	dominant	poor	decline (2)	poor	25%-50% 25%-50%	exotic	z	°N N	2.0 1.5	no works		%0	Retain
•	forming on a			Heatt	h & Con	Health & Condition decline / stress	s														
				Existi	ing Struc	ture N/A			Existing St	Existing Structure Distance	nce	Existin	Existing Structure Obstruction %	action %							
1 1	bidota	onsite	2	10	4.0	1.0 1.0 1.0 1.0 mature	mature	<5yrs	dominant	poor	decline (2)	poor	25%-50% 25%-50%	exotic	Z1	oN N	2.0 1.5	no works		%0	Retain
- C	e ribouchina)			Healt	th & Condition	dition decline / stress	s														
			_	Exist.	Existing Structure	hure N/A			Existing St	Existing Structure Distance	100	Existin	Existing Structure Obstruction %	iction %							
1	pidota	onsite	14 10	30	4.0	2.0 2.0 2.0 2.0 N S E W	2.0 mature	<5yrs	dominant	poor	decline (2)	poor	25%-50% 25%-50%	exotic	Z1	°N N	2.0 2.0	no works		%0	Retain
<i></i>	e riboucnina)		10	Healt	h & Con	Health & Condition decline / stress	s														
				Existi	ing Struc.	ture N/A			Existing St	Existing Structure Distance	109	Existin	Existing Structure Obstruction %	action %							

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Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management



ATTACHMENT NO: 3 - APPENDIX A - ABORICULTURAL REPORT

- 77 KULGOA ROAD, PYMBLE

Location

Adjoining Property / Nature Strip / On Site

Dimensions

Diameter at breast height at 1.4m (DBH) / Diameter at ground level (DGL)

Height

Height measured in meters determined with a clinometer or estimated by eye

Canopy spread measured in diametre on NearMap or estimated by eye on site Canopy

- Age Class
 - Young Recently planted or seeded
- Semi mature < 20% of life expectancy
 - Mature 20% 80% of life expectancy
- Over mature > 80% of life expectancy

Life Expectancy

>5 years / 5-15 years / 15-40 years / 40+ years

Crown Class

- Dominant Crown extends above general canopy; not restricted by other trees.
- Co-dominant Crown forms the bulk of the general canopy but crowded by other trees.
- Intermediate Crown extends into dominant / co dominant canopy but quite crowded on all sides.
 - Emergent Crown development restricted from surrounding trees.

 - Suppressed Crown development restricted from overgrowing trees.

Growth Habit:

- Upright straight upright narrow canopy •
- Leaning trunk leaning from the root base

11 July 2024 Fair - The crown is not significantly restricted. Minor signs of pests and diseases. Some signs of damage or branch failures from storms. Some signs of Poor - The crown is significantly restricted. Major signs of pests and diseases. Significant signs of damage or branch failures where structural integrity Medium - Between 10% and 50% of the canopy - Small, <10mm diameter and <2 metres in length / Large, >10mm diameter and >2 metres in length Dead - The tree is no longer capable of photosynthesis, osmosis and turgidity. Any dead tree must be assessed for hollow bearing capabilities and reduced health or potential decline. They tree may improve in health or deteriorate in health and condition and may improve with remedial works. Good - The crown is unrestricted. Free of pests, diseases and obvious structural issues. Has adequate vigour, foliage volume, size and colour. High - Greater than 50% of the canopy - Small, <10mm diameter and <2 metres in length / Large, >10mm diameter and >2 metres in length Low - Less than 10% of the canopy - Small, <10mm diameter and <2 metres in length / Large, >10mm diameter and >2 metres in length Poor - Wounds with fungal fruiting bodies, excessive included bark unions, numerous previous failures, significant wounds. Senescent - The tree is overmature and show irreversible decline, dying or nearly dead. 4 - Good, 90-100% canopy density; little or no dieback or other problems Fair - Minor wounds, minor included bark unions, minor deadwood etc. may be compromised or the tree is in decline and unlikely to recover. 5 - Excellent, 100% canopy density; no deadwood or other problems 2 - Declining, 20-60% canopy density; twig and branch dieback 3 - Average / Iow vigour, 60-90% canopy density; twig dieback 1 - Severe decline, <20% canopy density; major dead wood Sparse - thin foliage density with open areas in the canopy Good - No significant issues and good foliage volume Symmetrical - even and balanced in all directions Dense - full and dense foliage within the canopy Asymmetrical - uneven canopy No longer present at location. habitat potential. Structural Condition **Crown Condition Free Condition** Crown Form Deadwood Removed

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 Low - Less than 10% of the canopy - young / mature Medium - Between 10% and 50% of the canopy - young / mature High - Greater than 50% of the canopy - young / mature Low - Angle Less than 15° lean Medium - Angle Less than 15°-30° lean High - Angle Less than 30° - 45° lean Significant - Greater than 45° lean Significant - Greater than 45° lean 	
Medium - Between 10% and 50% of the canopy - young / rr High - Greater than 50% of the canopy - young / mature aning Trees Low - Angle Less than 15° lean Medium - Angle Less than 15°-30° lean High - Angle Less than 30° - 45° lean Significant - Greater than 45° lean significant - Greater than 45° lean	
High - Greater than 50% of the canopy - young / mature aning Trees Low - Angle Less than 15° lean Medium - Angle Less than 15°-30° lean High - Angle Less than 30° - 45° lean Significant - Greater than 45° lean significant - Greater than 45° lean	ature
aning Trees Low - Angle Less than 15° lean Medium - Angle Less than 15°-30° lean High - Angle Less than 30°- 45° lean Significant - Greater than 45° lean se Type	
Low - Angle Less than 15° lean Medium - Angle Less than 15°-30° lean High - Angle Less than 30° - 45° lean Significant - Greater than 45° lean e Type	
Medium - Angle Less than 15°-30° lean High - Angle Less than 30°- 45° lean Significant - Greater than 45° lean e Type	
High - Angle Less than 30°- 45° lean Significant - Greater than 45° lean se Type	
Significant - Greater than 45° lean se Type	
ie Type Fradramic Consistent that account mathematics and are produinted to	
Francis Consist that and under and are restricted to	
Endemic - Species that occur naturally and are restricted to a given area.	a given area.
Exotic - An introduced plant from outside Australia.	
Indigenous - Species that occur naturally to a given area but may not be restricted to only that area.	may not be restricted to only that area
Native - A general term referring to any plant indigenous to Australia including cultivars.	vustralia including cultivars.
Root Zone	
 Compacted / Garden / Grass / Mulched / Natural Bush / Paved / Soil level lowered / Soil level raised Structures 	ed / Soil level lowered / Soil level raise
ו פורכי סמומפיד סטיףמווי אפומוממו שאיפווויפי ואסמע שוואפשאי טכמו	Iveway - Ocal
Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble	Reference 20242078.5

Appendix D - Site Photographs



Figure 7. Tree No.'s 65, 66, 104, 67, 68 and 69

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Appendix E - Thumbnail Photographs



34 Juniperus communis (Juniper)



35 Juniperus communis (Juniper)



36 Buxus sp (Buxus)



37 Camellia reticulata (Reticulata Camellia)



38 Pittosporum tenuifolium (Pittosporum)



40 Celtis australis (Nettle Tree)



42 Juniperus communis (Juniper)



43 Camellia reticulata (Reticulata Camellia)



49 Glochidion ferdinandi (Cheese Tree)



53 Callistemon salignus (Willow Bottlebrush)



54 Thuja plicata (Western Red Cedar)



55 Glochidion ferdinandi (Cheese Tree)

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56 Archontophoenix cunninghamiana (Bangalow Palm) multiple



57 Archontophoenix cunninghamiana (Bangalow Palm)



58 Archontophoenix cunninghamiana (Bangalow Palm)



59 Jacaranda mimosifolia (Jacaranda)



60 Jacaranda mimosifolia (Jacaranda)



61 Camellia reticulata (Reticulata Camellia)



62 Livistona chinensis (Chinese Fan Palm)



Cedrus deodara (Deodar Cedar)



64 Jacaranda mimosifolia (Jacaranda)



65 Eucalyptus saligna (Sydney Blue Gum)



66 Stenocarpus sinuatus (Fire Wheel Tree)



67 Dead

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68 Eucalyptus saligna (Sydney Blue Gum)



69 Eucalyptus saligna (Sydney Blue Gum)



70 Eucalyptus pilularis (Blackbutt)



71 Angophora costata (Smoothbarked Apple)



72 Syncarpia glomulifera (Turpentine)



73 Syncarpia glomulifera (Turpentine)



74 Pittosporum undulatum (Sweet Pittosporum)



Brachychiton acerifolius (Illawarra Flame Tree)



76 Grevillea robusta (Silky Oak)



77 Celtis australis (Nettle Tree)



78 Callistemon salignus (Willow Bottlebrush)



79 Pittosporum undulatum (Sweet Pittosporum)

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80 Eucalyptus saligna (Sydney Blue Gum)



81 Eucalyptus saligna (Sydney Blue Gum)



82 Ligustrum lucidium (Large Leaf Privet)



83 Livistona chinensis (Chinese Fan Palm)



84 Livistona chinensis (Chinese Fan Palm)



85 Livistona chinensis (Chinese Fan Palm)



86 Livistona chinensis (Chinese Fan Palm)



87 Eucalyptus punctata (Grey Gum)



88 Cedrus deodara (Deodar Cedar)



89 Ulmus glabra (Scotch Elm)



90 Archontophoenix cunninghamiana (Bangalow Palm)



91 Archontophoenix cunninghamiana (Bangalow Palm)

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92 Archontophoenix cunninghamiana (Bangalow Palm)



93 Archontophoenix cunninghamiana (Bangalow Palm)



94 Archontophoenix cunninghamiana (Bangalow Palm)



95 Livistona chinensis (Chinese Fan Palm)



96 Howea forsteriana (Kentia Palm)



97 Livistona chinensis (Chinese Fan Palm)



98 Livistona chinensis (Chinese Fan Palm)



Livistona chinensis (Chinese Fan Palm)



100 Livistona chinensis (Chinese Fan Palm)



101 Livistona chinensis (Chinese Fan Palm)



102 Ravenea rivularis (Majesty Palm)

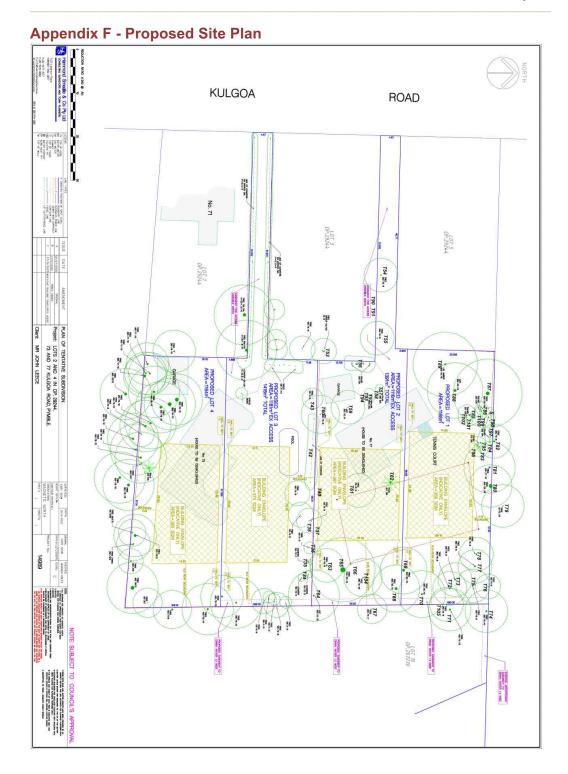


103 Camellia reticulata (Reticulata Camellia)

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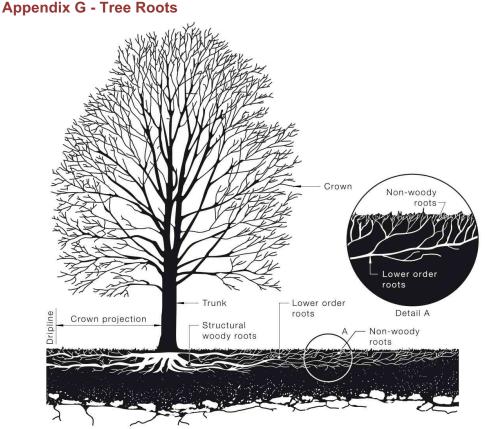


Figure 8. Tree Roots

Structural Woody Roots are large, woody roots that the tree requires for anchorage and support.

Lower Order Roots are used for anchorage, storage and transportation of water and nutrients

Non-woody Roots are fine, fibrous roots that take up water and minerals. Most absorbing roots grow upward into surface layers and mulch

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Appendix H - Glossary

Shigo, A.L. (1986) A New Tree Biology Dictionary. *Docktor, D (2001) City of Palo Alto, Tree Technical Manual.

Bark* - All tissue outside the vascular cambium. Bark is usually divided into inner bark active phloem and aging and dead crushed phloem.

Basal - Lower trunk area of the tree.

Branch*- Organ which supports leaves, flowers and fruit.

Branch collar* - Trunk tissue that forms around the base of a branch between the main stem and the branch wood and trunk wood to meet. Formed by compaction or expansion as the girth of the branch and trunk increase.

Canopy - The part of the crown composed of the leaves and small twigs.

Cavity - An open wound, characterized by the presence of decay and resulting in a hollow (Matheny & Clarke, 1994).

Codominant stems* - Stems or trunks of about the same size originating from the same position from the main stem.

Compaction - Compaction of soils causes roots to die due to lack of oxygen and water.

Compartmentalization* - Dynamic tree defence process involving protection features that resist the spread of pathogens.

Crown* - Portion of the tree consisting of branches and leaves and any part of the trunk from which branches arise.

Crown Projection - Area within the dripline or beneath the lateral extent of the crown (Geiger, 2004) **Decay*** - Degeneration and delignification of plant tissue, including wood, by pathogens or microorganisms.

Dieback - Dieback is the reduction in the dynamic mass of a tree as twigs and branches die and are walled off by protection boundaries.

Epicormic shoots* - Shoots produced by dormant buds within the bark or stems of a tree as a result of stress, lopping or increase light. Epicormic shoots usually have a weaker form of branch attachment. **Included bark*** - Inwardly formed bark at the junction of branches or codominant stems.

Kino - A dark red to brown resin-like substance produced by the trees in the genera Eucalyptus and other related genera. Kino forms when living cells are injured and infected.

Lopping* - Random cutting of branches or stems between branch union or at internodes on young trees.

Mycorrhiza - A symbiotic, non pathogenic, or weakly pathogenic association of fungi and non woody, absorbing roots of plants. The common belief is that the mycorrhiza help the tree with mineral absorption, especially phosphorus.

Microorganisms - An organism of microscopic size. Bacteria, the tree pathogens, may be as small as 3 microns wide by 5 microns long.

Pathogen - Any agent that causes disease.

Photosynthesis - A process where chlorophyll in plants traps the energy of the sun in a molecule of carbon dioxide and water that is called sugar.

Roots - An organ of a tree that serves to maintain mechanical support, to provide water and essential elements from the soil through absorption, and to store energy reserves.

Stem* - Organ which supports branches, leaves flowers and fruit.

Tree* - Long lived woody perennial plant greater than (or potentially greater than) 3m in height with one or relatively few stems.

Trunk* - The main stem.

Wound*- An opening that is created when the bark is cut, removed or injured.

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Appendix I - TreeAZ (Barrell 2010)

TreeAZ Categories (Version 10.10-ANZ)

		Category Z: Unimportant trees not worthy of being material constraint
	Loc	al policy exemptions: Trees that are unsuitable for legal protection for local policy reasons
	incl	uding size, proximity and species
	1	Young or insignificant small trees, i.e. below the local size threshold for legal protection, etc
	2	Too close to a building i.e exempt from legal protection because of proximity etc
	3	Species that cannot be protected for other reasons, i.e. scheduled noxious weeds, out of
	3	character in a setting of acknowledged importance, etc
	Hig	h risk of death or failure: Trees that are likely to be removed within 10 years because of acute
	hea	Ith issues or severe structural failure
	4	Dead, dying, diseased or declining
		Severe damage and/or structural defects where a high risk of failure cannot be satisfactorily
	5	reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive
		imbalance, overgrown and vulnerable to adverse weather conditions, etc
	6	Instability, i.e. poor anchorage, increased exposure, etc
	Exc	essive nuisance: Trees that are likely to be removed within 10 years because of unacceptable
	imp	act on people
Z	7	Excessive, severe and intolerable inconvenience to the extent that a locally recognized court
	'	or tribunal would be likely to authorize removal, i.e. dominance, debris, interference, etc
		Excessive, severe and intolerable damage to property to the extent that a locally recognized
	8	court or tribunal would be likely to authorize removal, i.e. severe structural damage to
		surfacing and buildings, etc
	Goo	od management: Trees that are likely to be removed within 10 years through responsible
	mar	nagement of the tree population
		Severe damage and/or structural defects where a high risk of failure can be temporarily
	9	reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive
		imbalance, vulnerable to adverse weather conditions, etc
	10	Poor condition or location with a low potential for recovery or improvement, i.e. dominated by
	10	adjacent trees or buildings, poor architectural framework, etc
	11	Removal would benefit better adjacent trees, i.e. relieve physical interference, suppression,
		etc
	12	Unacceptably expensive to retain, i.e. severe defects requiring excessive levels of
		maintenance, etc
		rees with a high risk of death/failure (Z4, Z5 & Z6) or causing severe inconvenience (Z7 & Z8) at
		assessment and need an urgent risk assessment can be designated as ZZ. ZZ trees are likely
		itable for retention and at the bottom of the categorization hierarchy. In contrast, although Z
		ot worthy of influencing new designs, urgent removal is not essential and they could be retained
in the	shor	t term, if appropriate
Cated	gory	A Important trees suitable for retention for more than 10 years and worthy of
		iterial constraint
		significant defects and could be retained with minimal remedial care

	in ig	
A	.1	No significant defects and could be retained with minimal remedial care
Α	2	Minor defects that could be addressed by remedial care and/or work to adjacent trees
A	.3	Special significance for historical, cultural, commemorative or rarity reasons that would warrant extraordinary efforts to retain for more than 10 years
A	4	Trees that may be worthy of legal protection for ecological reasons (Advisory requiring specialist assessment)

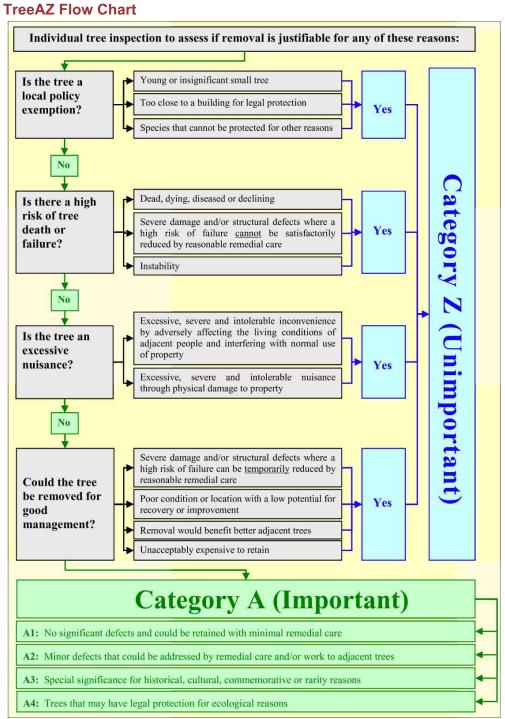
NOTE: Category A1 trees that are already large and exceptional or have the potential to become so with minimal maintenance, can be designated as AA at the discretion of the assessor. Although all A and AA trees are sufficiently important to be material constraints, AA trees are at the top of the categorization hierarchy and should be given the most weight in any selection process.

TreeAZ is designed by Barrell Tree Consultancy (www.barrelltreecare.co.uk) and is reproduced with their permission

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Appendix J - Tree Significance Assessment Criteria (IACA)

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Tree Significance - Assessment Criteria

1. High Significance in landscape

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

2. Medium Significance in landscape

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

3. Low Significance in landscape

- The tree is in fair-poor condition and good or low vigour;
- The tree has form atypical of the species;
- The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings,
- The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area, The tree is a young specimen which may or may not have reached dimension to be protected by local Tree Preservation orders
- or similar protection mechanisms and can easily be replaced with a suitable specimen,
- The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa in situ tree is inappropriate to the site conditions,
- The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms, The tree has a wound or defect that has potential to become structurally unsound.
- Environmental Pest / Noxious Weed Species
- The tree is an Environmental Pest Species due to its invasiveness or poisonous/ allergenic properties,
- The tree is a declared noxious weed by legislation. Hazardous/Irreversible Decline
- The tree is structurally unsound and/or unstable and is considered potentially dangerous
- The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

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

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

IACA 2010, IACA Significance of a Tree, Assessment Rating System (STARS), Institute of Australian Consulting Arboriculturists, www.iaca.org.au

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

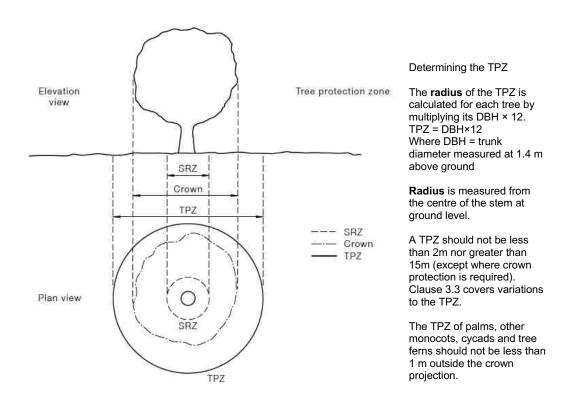
Reference 20242078.5 65/71



Appendix K - Tree Protection Zones AS4970-2009

Tree Protection Zone

The tree protection zone (TPZ) is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable.



TPZ is measured radially from the trunk

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

Reference 20242078.5 66 / 71

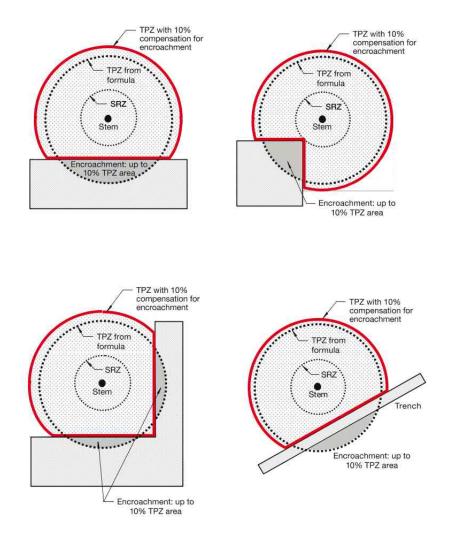
Appendix L - Tree Protection Zone Encroachments AS4970-2009

Minor Encroachments

The proposed encroachment is less than 10% of the area of the TPZ and is outside the SRZ. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ.

Major Encroachments

The proposed encroachment is greater than 10% of the TPZ or inside the SRZ, the project arborist must demonstrate that the tree(s) would remain viable. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ. This may require root investigation by non-destructive methods.



Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

Reference 20242078.5 67 / 71

Appendix M - Qualifications & Experience

Meredith Gibbs

Updated January 2023

Qualifications:

- 1999 Advanced Certificate in Urban Horticulture
- 2002 Horticulture Diploma (Arboriculture) AQF Level 5
- 2002 Occupational Health & Safety course
- 2002 Risk Management course
- 2002 Smart Train 008397
- 2010 Collecting Catchment Data
- 2011 Quantified Tree Risk Assessment
- 2014 Quantified Tree Risk Assessment
- 2015 Horticulture Diploma (Arboriculture) AQF Level 5
- 2018 White Card Number 2234996

Practical experience:

1996 - 1998 Nursery Hand - Horticulturist

- 1988 2001 Garden Maintenance Horticulturist
- 1997 2004 Silver Springs Nursery (Owner/Operator)
- 2000 Australis Tree Management (Owner/Operator)

Memberships and affiliations:

Arboriculture Australia Australian Institute of Horticulture Australian Plant Society of NSW Burrendong Botanic Garden & Arboretum International Society of Arboriculture Quantified Tree Risk Assessment Registered User Society of Municipal Arborists Waite Arboretum Women in Arboriculture

Insurance:

Professional Indemnity Insurance

Liberty International Underwriters

\$10,000,000.00

Policy No. HC-ME-SPC-01-104260

Public Liability Insurance

Liberty International Underwriters \$20,000,000.00 Policy No. 463763

Pro Bono Work:

Middle Dural Public School

Continuing Professional Development:

NAAA Conference, Mature Trees, 2001

- Claus Mattheck Seminar 2001
- ISAAC Conference Parramatta 2004
- AILA Tree Management Forum 2005
 - Jeremy Barrell Tree AZ & Report Writing Workshop 2006
- A Practitioner's Guide to Visual Tree Assessment Mike Ellison 2007
- Quantified Tree Risk Assessment Workshop Mike Ellison 2007

ITEM NO: GB.3

11 July 2024

ISAAC Conference - Brisbane 2008 ISAAC Conference Workshop Dr. David Lonsdale 2008 ISAAC Conference Workshop Dr. Phillip Gibbons 2008 ISAAC Conference - Newcastle 2009 ISAAC Conference - Adelaide 2010 ISA International Conference Parramatta 2011 ISA International Conference Workshop Dr. Ken James 2011 Arboriculture Australia Annual Conference - Sunshine Coast 2014 Arboriculture Australia Annual Conference - Adelaide 2015 Arboriculture Australia Annual Conference - Canberra 2017 Jeremy Barrell Arboriculture Australia Workshop 2017 Arboriculture Australia Annual Conference - Hobart 2018 Arboriculture Australia Annual Conference - Alice Springs 2019 Arboriculture Australia Annual Conference - Gold Coast 2022 **Past Projects** Pennant Street, Castle Hill, 2006 Fairway Drive, Kellyville, 2012 Summit Care, Baulkham Hills, 2013 105-115 Portman Street, Zetland, 2016 114 Tallawong Road, Rouse Hill, 2016 2 Lexington Drive, Bella Vista, 2016 The Hermitage, Gledswood Hills, 2010-2019 105 Cudgegong Road, Rouse Hill Development, 2018 33 Greenwich Road, Greenwich Redevelopment, 2017- 2022 Gosford Park Redevelopment, 2019 Blacktown Workers Sports Club Redevelopment, 2016-2019 Gregory Hills Industrial Estate, 2019 Grand Reve, Castle Hill, 2020 Carrington Road, Castle Hill, 2020 Solent Circuit, Norwest, 2021 Hubertus Country Club, Luddenham, 2021 McCall Gardens, Terry Road, Box Hill, 2022

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

Reference 20242078.5 69 / 71

Appendix N - Bibliography and References

AS 4373 (2007) *Pruning of Amenity Trees*, Standards Australia, Standards Association of Australia, NSW, Australia.

AS 4970 (2009). *Protection of Trees on Development Sites*, Standards Australia, Standards Association of Australia, NSW, Australia.

Australian Government Dept of Agriculture, Water and the Environment (1999) *Environmental Protection and Biodiversity Conservation Act*

Barrell, J. & Wadey, M. (2006) Workshop Manual, Trees on Construction Sites. Barrell Treecare Ltd, UK.

Barrell, J (2016) TreeAZ Assessment Rating. Barrell Treecare Ltd, UK.

Brooker, I. & Kleinig, D. (1999), Field Guide to Eucalyptus, Volume 1, South-Eastern Australia. Blooming Books. Sydney, Australia.

Docktor, D. (2001) *City of Palo Alto, Tree Technical Manual*, The City of Palo Alto Department of Planning and Community Environment. Palo Alto, California, USA.

Fairley, A. & Moore, P. (1989) *Native Plants of the Sydney District.* Kangaroo Press, Kenthurst NSW Australia.

Greater Sydney Commission (2021) *Increasing urban tree canopy cover and delivering Green Grid connections, Planning Priority C16.* https://www.greater.sydney/central-city-district-plan/sustainability/city-its-landscape/increasing-urban-tree-canopy-cover-and.

Harris, R.W., Clark, J.R., Matheny, N.P. (1999). Arboriculture Integrated Management of Landscape Trees, Shrubs and Vines. Third Edition. Prentice Hall, Upper Saddle River, New Jersey, USA.

IACA (2010) IACA Significance of a Tree, Assessment Rating System (STARS), Institute of Australian Consulting Arboriculturists, Australia, www.iaca.org.au

Johnson, T (2015) Trees and permeable paving: future symbionts. Treenet, Myrtle Bank, SA, Australia.

Matheny, N & Clark, J.R (1994) A Photographic Guide to The Evaluation of Hazard Trees In Urban Areas. International Society of Arboriculture. USA.

Matheny, N & Clark, J.R (1998) *Trees and Development. A Technical Guide to Preservation of Trees During Land Development.* International Society of Arboriculture. Exponet Publishers, Inc. Hagerstown In. USA.

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

Near Map (2022) www.nearmaps.com.au

NSW Government (2022) *Biodiversity Values Map* for 73 & 77 Kulgoa Road, Pymble. Visited 18/3/2023. https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap

NSW Government Department of Primary Industries (2022) *NSW Weed Wise.* Visited 18/3/2023 http://weeds.dpi.nsw.gov.au

NSW Government (2022) *NSW Planning Portal* for 73 & 77 Kulgoa Road, Pymble. Visited 18/3/2023. https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address

NSW National Parks & Wildlife Service (1995) *Threatened Species Conservation Act.* NSW NPWS, Hurstville, NSW, Australia.

Phillips, R. (1978) Trees in Britain, Europe and North America. Pan Books, London, UK.

Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

Reference 20242078.5 70 / 71

11 July 2024

Rowell, R.J. (1991) Ornamental Flowering Trees in Australia. UNSW, Sydney Australia.

Rowell, R.J. (1996) Ornamental Conifers for Australian Gardens. UNSW, Sydney Australia.

Shigo, A.L. (1986) A New Tree Biology Dictionary, Shigo and Trees Associates, New Hampshire, USA.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

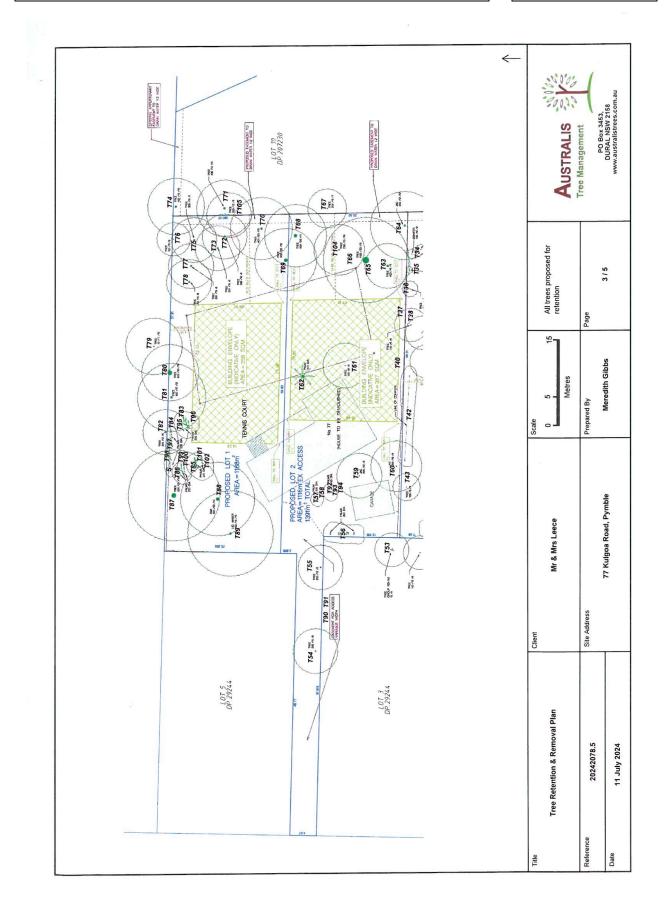
Wujeska-Klause, Agnieszka & Pfautsch, Sebastian (2020) *The Best Urban Trees for Daytime Cooling LeaveNights Slightly Warmer Urban Studies*. School of Social Sciences, Locked Bag 1797, Penrith, NSW 2751, Australia Forests 2020, 11, 945; doi:10.3390/f11090945

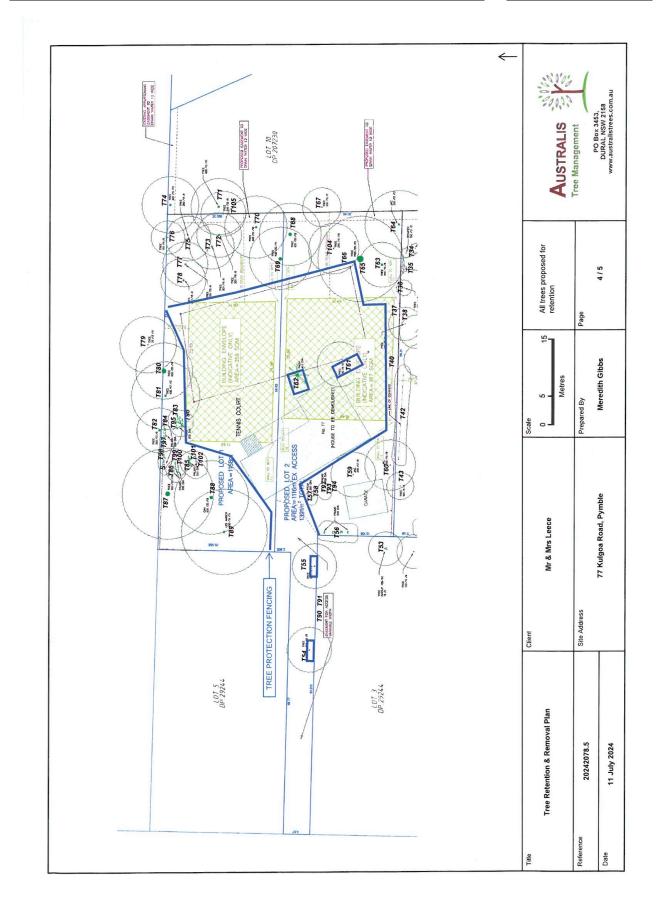
Arboriculture Impact Assessment for 77 Kulgoa Road, Pymble Australis Tree Management

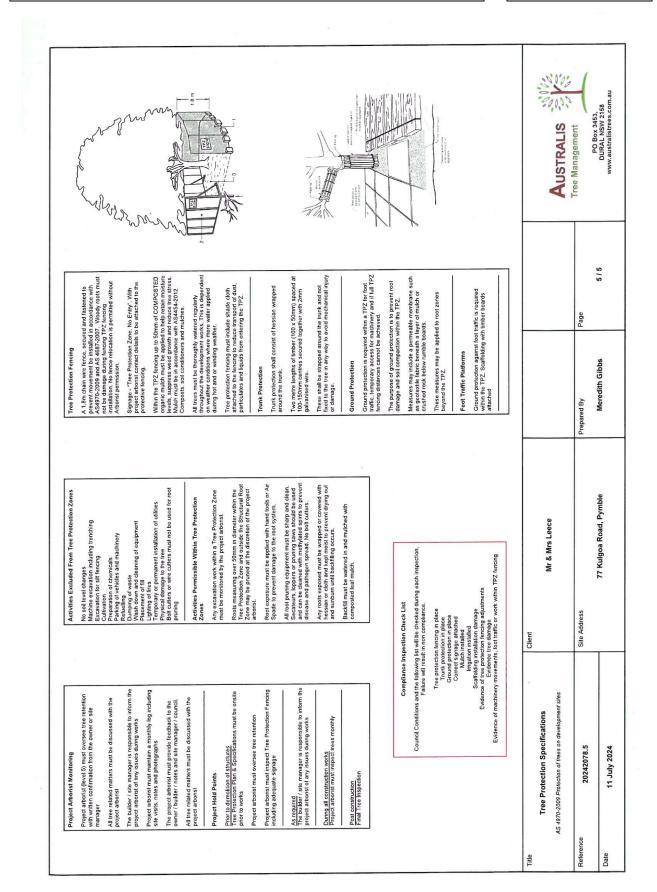
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	Australis Tree Management	Tree Protection Plan	AS 4970-2009 Protection of trees on development sites	Site Address: 77 Kulgoa Road, Pymble	Mr & Mrs Leece	Date: 11 July 2024	Reference: 20242078.5	Prepared By: Meredith Glbbs	PO Box 3453, DURAL NSW 2158 www.australistrees.com.au
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Tree No. Species			Proposed Status	Tree N	Tree No. Species	TPZ	Proposed Status	Tree No	Tree No. Species		TP2 F	Proposed Status
Juniperus communis (Juniper)		2.4m	Retain	73	Syncarpia glomuitera (Turpentine)	6.0m	Retain	103	Carnellia reticulata (Reticulata Carnellia)*		2.0m F	Retain
Juniperus communis (Juniper)		2.0m	Rotain	74	Pittosporum undulatum (Sweet Pittosporum)	4.8m	Retain	104	Celtis austrails (Nettle Tree)*		E OH	Relain
Buxus sp (Buxus)*	1	2.0m	Retain	75	Brachychiton aceritolius (Illawarra Flame Tree)	4.8m	Retain	105	Syncarpia glomulifera (Turpentine)		3.6m F	Retan
Camellia reticulata (Reticulata Camelia)		2.4m	Retain	76	Grevilvea robusta (Siky Oak)	24.0m	Retain	108	Tibouchina lepidota 'Alstonville' (Alstonville Tibouchina)'		2.0m	Retain
Pittosporum tenuitolium (Pittosporum)*		2.0m	Retain	ш	Cettis australis (Nettle Tree)*	7.2m	Retain	107	Tibouchina lepidota 'Alstonville' (Alstonville Tibouchina)'		2.0m	Retain
Celtis australis (Nettle Tree)*		2.0m	Retain	78	Califistemon salignus (Willow Bottlebrush)	5.1m	Retain	108	Tibouchina lepidola 'Alstonville' (Alstonville Tibouchina)*		2.0m	Relain
Juniperus communis (Juniper)		2.0m	Retain	79	Pritosporum undulatum (Sweet Pittosporum)	2.4m	Retain	109	Tibouchina lepidota 'Astonville' (Alstonville Tibouchina)*			Retain
Camella reticulata (Reticulata Camella)		2.0m	Retain	8	Eucalyptus saligna (Sydney Blue Gum)	9.6m	Retain	110	Tibouchina lepidola 'Alstonville' (Alstonville Tibouchina)'			Retain
Glochidion ferdinandi (Cheese Tree)		6.0m	Rotain	18	Eucalyptus saligna (Sydney Blue Gum)	4.8m	Retain					
Califstemon salionus (Willow Bottlebrush)		3.0m	Retain	82	Lioustrum lucidium (Laroe Leaf Privet)"	3.6*	Retain					
Thuja plicata (Western Red Cedar)			Retain	83	Livistona chinensis (Chinese Fan Paim)	3.0m	Retain					
Glochidion ferdinandi (Cheese Tree)			Retain	3	Livistona chinensis (Chinese Fan Pa'm)	3.0m	Retain					
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Jacaranda mimostolia (Jacaranda)	la (Jacaranda)	4.8m	Retain	88	Cedrus deodara (Deodar Cedar)	8.4m	Retain					
Jacaranda mimositolia (Jacaranda)	la (Jacaranda)	4.8m	Relain	68	Ulmus glabre (Scotch Elm)	7.2m	Retain					
Jacaranda mimositolia (Jacaranda)	lia (Jacaranda)	5.1m	Retain	05	Archontophoentx cunninghamiana (Bangalow Paim)	3.0m	Relain					
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Eucalyptus saligna (Sydney Blue Gum)	Sydney Blue Gum)	12.0m	Retain	95	Livistona chinensis (Chinese Fan Paim)	2.4m	Retain					
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Eucalyptus pilularis (Blackbutt)	(Blackbutt)	4.8m	Retain	100	Livistona chinensis (Chinese Fan Palm)	2.4m	Retain					
Angophora costata (Angophora costata (Smootn-barked Apple)	6.6m	Rétain	101	Livistona chinensis (Chinese Fan Paim)	2.4m	Relain					
Syncarpia glomulitera (Turpentine)	a (Turpentine)	4.8m	Retain	102	Ravenea rivularis (Majesty Palm)	2.4m	Retain					
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BIODIVERSITY DEVELOPMENT ASSESSMENT REPORT

PROPOSED RE-ZONING OF 77 KULGOA AVE PYMBLE

Prepared by:

Fraser Ecological

665 The Scenic Road Macmasters Beach NSW 2251

Mob: 0423238193 Ph: 02 4382 2962 Email: <u>alohafraser@gmail.com</u>

Site Details:	77 Kulgoa Road Pymble
Prepared by:	Alex Fraser B.Sc., G.Cert.EnvMgt&Sus.
	BAAS18156 Accredited Assessor
	Fraser Ecological Pty Ltd
	A BN – 797 637 40114
	M: 0423238193 Email: alohafraser@gmail.com
Prepared for:	John Leece (c/o Natalie Richter Planning)
Reference No.	BDAR Rev G
Document Status & Date:	10th July 2024

BDAR – 77 KULGOA AVENUE PYMBLE

Page A-I

Abbreviations

Abbreviation	Meaning
AOBV	Areas of Outstanding Biodiversity Value
AWTS	Aerated Wastewater Treatment System
APZ	Asset Protection Zone (bushfire protection)
BAM	Biodiversity Assessment Methodology
BAM - C	Biodiversity Assessment Method Calculator
BC Act	Biodiversity Conservation Act 2016
BDAR	Biodiversity Development Assessment Report
BOS	Biodiversity Offsets Scheme
DA	Development Application
DCP	Development Control Plan
DEC	Department of Environment and Conservation
DECC	Department of Environment and Climate Change
DPIE	NSW Department of Planning, Industry and Environment (formerly OEH)
DEE	Department of Environment and Energy
EEC	Endangered Ecological Community
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
На	Hectare
HTE	High Threat Exotic
LEP	Local Environmental Plan
LGA	Local Government Area
MU	Map Unit
NPWS	NSW National Parks and Wildlife Service
OEH	Office of Environment and Heritage
PCT	Native vegetation classification system approved by NSW Plant Community Type Control Panel
PFC	Projected Foliage Cover
SAII	Serious and Irreversible Impacts
SEPP	State Environmental Planning Policy
TBCD	Threatened Biodiversity Data Collection

BDAR – 77 KULGOA AVENUE PYMBLE

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GLOSSARY

Acronym/ Term	Definition
Accredited Biodiversity Assessor	Individuals accredited by the Department of Planning, Industry
	and Environment (DPIE) to apply the Biodiversity Assessment
	Method.
Biodiversity credit report	The report produced by the Credit Calculator that sets out the
	number and class of biodiversity credits required to offset the
	remaining adverse impacts on biodiversity values at a
	development site, or on land to be biodiversity certified.
Biodiversity Offsets	Management actions that are undertaken to achieve a gain in
	biodiversity values on areas of land in order to compensate for
	losses to biodiversity from the impacts of secondary dwelling.
Biodiversity values	The composition, structure and function of ecosystems,
	including threatened species, populations and ecological
	communities, and their habitats.
Ecosystem credit	The class of biodiversity credit that relates to a vegetation type
	and the threatened species that are reliably predicted by that
	vegetation type (as a habitat surrogate).
Locality	A 1500m buffer area surrounding the Subject Land
Native Vegetation	Means any of the following types of plants native to New South
	Wales: (a) trees (including any sapling or shrub), (b)
	understorey plants, (c) groundcover (being any type of
	herbaceous vegetation), (d) plants occurring in a wetland.
Proposal	The development, secondary dwelling, activity or action
	proposed.
SAII entity	Species and ecological communities that are likely to be the
	subject of serious and irreversible impacts (SAIIs)
Species credit	The class of biodiversity credit that relate to threatened
	species that cannot be reliably predicted to use an area of land
	based on habitat surrogates. Species that require species
	credits are listed in the Threatened Biodiversity Data
	Collection.
Subject Land	The footprint of the proposed development.
Subject Properties	77 Kulgoa Road Pymble

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BDAR – 77 KULGOA AVENUE PYMBLE

CERTIFICATION

I, Alex Fraser of Fraser Ecological, hereby state that this Biodiversity Development Assessment Report (BDAR) for a proposed re-zoning of 77 Kulgoa Ave Pymble has been prepared in accordance with the Biodiversity Assessment Method (BAM) 2020 established under the NSW *Biodiversity Conservation Act 2016*.

Fieldwork for this project was undertaken by Alex Fraser. Report writing was undertaken by Alex Fraser.

My qualifications are:

Alex Fraser, Principal Ecologist B.Sc. (Hons) Certificate 3 Natural Area Restoration BAM Accredited Assessor (BAAS 18156) Member of the Ecological Consultants Association of NSW

Conflicts of Interest

The Accredited Assessors have signed an agreement to abide by the Accredited BAM Assessor Code of Conduct. The authors declare in accordance with the Assessors Code of Conduct that no actual, perceived, or potential conflicts of interest exist.

Disclaimer

This document may only be used for the purposes for which it was commissioned. Fraser Ecological accepts no liability or responsibility in respect of any use or reliance upon this report by any third party. Unauthorised use of this report in any form is prohibited.

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Alex Fraser B.A Applied Science (Hons), Cert 3 Natural Area Restoration BAAS18156 Accredited Assessor Principal Ecologist, Fraser Ecological

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EXECUTIVE SUMMARY

Fraser Ecological has been engaged to prepare a Biodiversity Development Assessment Report (BDAR) for a residential development ('the Proposal' or 'the Project') at 77 Kulgoa Road Pymble, in the Ku-ring-gai Council local government area. The proposal is proposed re-zoning of 77 Kulgoa Ave Pymble to support a potential future subdivision into 2 lots.

This BDAR has been prepared in accordance with the Office of Environment and Heritage (OEH) (2020) Biodiversity Assessment Method (BAM). The Biodiversity Offset Scheme (BOS) applies to the Proposal, as it would require clearing of native vegetation that is mapped on the Biodiversity Values Map (BVM). Note, this is a 'streamlined assessment', in accordance with Appendix C of the BAM ('Streamlined assessment module – Small area').

The Subject Property currently contains existing dwellings, areas of cleared exotic lawn, tennis court, pools, landscaped areas, ornamental garden plantings and remnant Sydney Turpentine Ironbark Forest canopy trees (at the rear of the properties), situated within an urban residential setting.

The canopy tree species present include mixture of locally indigenous species Sydney Turpentine Ironbark Forest, planted native and exotic tree species of varying ages and stages of maturity.

The subject site has been partially modified with the removal of most of the native understorey, groundcover plants and shrubs prior to 1943. There is a high proliferation of introduced environmental weed species at the rear of the property including:

- Trad (Tradescantia flumiensis)
- Madeira Vine (Anredra cordifolia)
- Blackberry Nightshade (Solanum nigrum)

The subject dominant trees together with other indigenous trees in the surrounding residences are connected to the remainder of the ecological communities nearby.

Indigenous tree species occurring on-site are (tree numbering system corresponding with arborist report):

- Tree No.'s 7 & 71 Angophora costata (Smooth-barked Apple)
- Tree No. 1 *Eucalyptus acmenoides* (White Mahogany)
- Tree No. 70 Eucalyptus pilularis (Blackbutt)
- Tree No. 87 *Eucalyptus punctata* (Grey Gum) Tree No.'s 27, 65, 68, 69, 80 & 81 *Eucalyptus saligna* (Sydney Blue Gum)
- Tree No.'s 74 & 79 Pittosporum undulatum (Sweet Pittosporum)
- Tree No.'s 2, 3, 4, 5, 6, 8, 9, 10, 11, 14, 16, 19, 21, 24, 26, 72, 73 & 105 *Syncarpia glomulifera* (Turpentine)

• Glochidion ferdinandi (Cheese Tree)

The vegetation at the rear of the site has been mapped by Council and the NSW DPE (NSW Statewide PCT mapping) as Sydney Turpentine Ironbark Forest (Figure 12 and 13).

- Vegetation Formation: Wet Sclerophyll Forests (Grassy sub-formation)
- Vegetation Class: Northern Hinterland Wet Sclerophyll Forests
- PCT Name: Sydney Turpentine Ironbark Forest
- PCTID: 3262

Sydney Turpentine Ironbark Forest in the Sydney Basin Bioregion is listed as Critically Endangered under the BC Act 2016 and EPBC Act 1999.

The Arborist Impact Assessment Report prepared by Australis Tree Management dated June 2024 states that all locally native trees are proposed for retention.

A stormwater drainage easement (1.2m wide) has been proposed along the eastern (rear) boundary of all proposed lots. All trees are proposed for retention within this area which is currently subject to heavy weed invasion.

As a precautionary measure, it has been assumed 0.2ha of native vegetation may be indirectly impacted for the installation of stormwater drainage at the rear of the properties as well as edge effects. This has been taken into account into the BAM-C credit calculation. Council can provide conditions of consent to ensure the further protection (and improvement) of this vegetation.

The two indicative building envelopes will be located outside the tree protection zones of locally native trees belonging to the Sydney Turpentine Ironbark Forest Critically Endangered Ecological Community. The arborist report has provided the location of tree protection fencing to ensure all remnant native trees are protected during any essential subdivision works.

The land is not mapped as bushfire prone land, therefore, an Asset Protection Zone for potentially resulting in additional vegetation clearing will not be required for future dwellings.

Any native vegetation along the rear of proposed Lot 1-4 can be subject to a future Vegetation Management Plan provided to Council prior to the release of the Subdivision Certificate.

Vegetation Zone	PCT	Area Impacted (indirectly for water drainage easement)	Current Vegetation Integrity Score	Future Vegetation Integrity Score (factoring a Future vegetation management plan may be implemented for weed removal)	Number of Ecosystem Credits Required
1	PCT 3262	0.02	28.6	28.6	1

The following Vegetation Integrity Score (VIS) was determined for the STIF CEEC (Vegetation 1):

To assist the consent authority, the guidance document Guidance to assist a decisionmaker to determine a serious and irreversible impact includes criteria that enable the application of the four principles set out in clause 6.7 of the BC Regulation to identify the species and ecological communities that are likely to be the subject of serious and irreversible impacts.

Sydney Turpentine Ironbark Forest in the Sydney Basin Bioregion is listed as Critically Endangered under the *BC Act 2016* and *EPBC Act 1999* and is listed as a threatened entity in the Threatened Biodiversity Data Collection (DPIE 2021d).

Due to the potential sensitivity of this ecological community to any impact, a determination of whether or not the proposed impacts are serious and irreversible is to be undertaken in accordance with Section 9.1 of the BAM (DPIE 2020a) as outlined in Table 5.5.

The proposal avoids impacts to significant biodiversity values of the site.

I INTRODUCTION

Fraser Ecological has been engaged, to provide a Biodiversity Development Assessment Report (BDAR) for the proposed development at 77 Kulgoa Road Pymble, in the Ku-ringgai Council local government area.

See Figure 1 and 2 for the location & aerial maps showing property boundaries.

The proposed development includes proposed re-zoning of 77 Kulgoa Ave Pymble to support a potential future subdivision into 2 lots. As part of the planning proposal, it seeks to rezone 77 Kulgoa Road, Pymble from C4 Environmental Living to R2 Low Density Residential, and amend the minimum lot size and floor space ratio development standards that apply to the site.

This assessment takes into account Council's Pre-planning Proposal Application Meeting Report letter dated 1st August 2022 states that with regards to ecological impacts:

- It is required for all trees within the subject lots and any trees with tree
 protection zones (TPZs) intersecting subject lots to be included in the
 Aboricultural Impact Assessment and all trees requiring protection to be
 detailed in the Tree Protection Plan.
- The AIA and TPP need to be reviewed and updated against the proposed development, including demolition, construction, access, storage areas, landscaping etc.
- Include recommendations for the avoidance, mitigation, and/or offsetting of tree impacts likely to result from the proposed development.
- · Vegetation communities need to be determined/verified by survey.
- If the vegetation is determined to be characteristic of a community listed as an EEC, need to determine whether it meets the legal definition including condition class criteria of that EEC(s) in the relevant listings.
- Flora species to be determined by survey with findings reported on.
- Threatened flora species recorded on site or with the potential to occur on the site, and potential impacts likely to result from the proposed development, are to be reported on.
- A fauna habitat assessment is to be completed and reported on.
- An appraisal of the likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal.
- Determination of the type(s) of impact assessment(s) required under the Biodiversity Conservation Act 2016, the Environment Protection and Biodiversity Conservation Act 1999, the Ku-ring-gai Local Environmental Plan 2015, and the Ku-ring-gai Development Control Plan 2016, and any other legislation relevant to the results of the biodiversity assessment.
- Recommendations for the avoidance, mitigation, and/or offsetting of biodiversity impacts likely to result from the proposed development.

The subject site itself is on the NSW DPE's Sensitive Biodiversity Values Map (<u>https://www.environment.nsw.gov.au/biodiversity/biodiversity-values-map.htm</u>) and is trigger this requirement for this assessment as BDAR (Figure 4).

This BDAR will be prepared as a site-based 'Streamlined assessment module – small area development that requires consent' as it does not exceed the area clearing threshold for small area developments as outlined in the BAM (DPIE 2020a; Table 1).

BAM plot/ quadrat for the purposes of this BDAR were undertaken on the 21 June 2023 by Fraser Ecological.

I.I Description of the site and proposal

The Subject Property is located in the suburb of Pymble, within the Ku-ring-gai Local Government Area (LGA). The Subject Property currently contains existing dwellings, areas of cleared exotic lawn, landscaped areas and remnant Sydney Turpentine Ironbark Forest canopy trees, situated within an urban residential setting.

The Subject Site is zoned 'C4 Environmental Living' and mapped 'Biodiversity' mapped lands under the Ku-ring-gai LEP 'Natural Resource - Biodiversity Map' under the Ku-ring-gai Local Environmental Plan 2015 (KLEP).

The properties consist of an existing dwelling, garage, tennis court and swimming pool.

All areas associated with the proposed development are hereby known as the Subject Site.

Clause 13.1 of the KDCP 2020 relates to Tree and Vegetation works.

The proposed development satisfies the objectives of Part 18 Biodiversity Protection because the proposed development will:

- Conserve the natural environment of Ku-ring-gai by locating the proposed development largely within existing built and cleared areas;
- Retain and improve existing bushland by committing by not removing existing trees;
- Support the protection of threatened ecological communities by protecting and preserving existing trees indicative of the Sydney Turpentine Ironbark Forest Critically Endangered Ecological Community (CEEC);
- Capture carbon through the planting of additional vegetation within the Subject Site;
- Allow for adaption of native flora, fauna and ecological communities within the designated proposed planting areas.

The proposed development satisfies the objectives of Part 18 Biodiversity Protection because the proposed development will:

- Conserve the natural environment of Ku-ring-gai by locating the proposed development largely within existing built and cleared areas;
- Retain and improve existing bushland by committing by retaining a majority of the existing trees;
- Support the protection of threatened ecological communities by protecting and preserving existing trees indicative of the Sydney Turpentine Ironbark Forest Critically Endangered Ecological Community (CEEC);
- Capture carbon through the planting of additional vegetation within the Subject Site;
- Allow for adaption of native flora, fauna and ecological communities within the designated proposed planting areas.

I.2 Aim and Approach

This report has been prepared in accordance with the BAM (DPIE 2020a) and aims to:

- Describe the biodiversity values present within the Subject Land, including the extent of native vegetation, vegetation integrity and the presence of Threatened Ecological Communities (TECs);
- Determine the habitat suitability within the Subject Land for candidate threatened species;
- Prepare an impact assessment in regard to potential impacts of the proposed development on biodiversity values, including potential prescribed impacts and SAIIs within the Subject Land;
- Discuss and recommend efforts to avoid and minimise impacts on biodiversity values; and
- Calculate the biodiversity credits (i.e., ecosystem credits and species credits) that measure potential impacts of the rezoning proposal on biodiversity values. This calculation will inform the decision maker as to the number and class of offset credits required to be purchased and retired as a result of the proposed development.

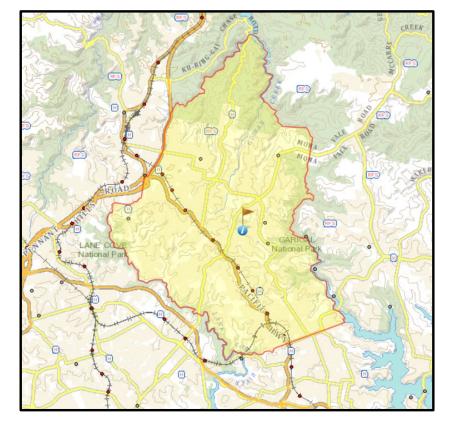


Figure 1: Locality map (Source: SIX Maps.com)

BDAR – 77 KULGOA AVENUE PYMBLE



Figure 2: Locality aerial map (Source: SIX Maps.com)

BDAR – 77 KULGOA AVENUE PYMBLE



Figure 3: Aerial map showing property boundaries (Source: SIX Maps.com)

BDAR – 77 KULGOA AVENUE PYMBLE

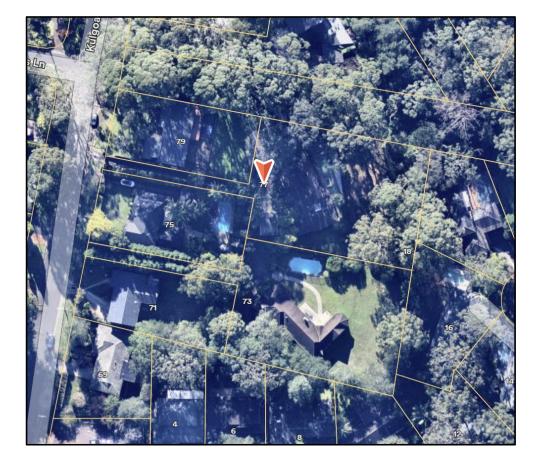


Figure 4a: Aerial map showing property boundaries (Source: Nearmap.com)

BDAR – 77 KULGOA AVENUE PYMBLE



Figure X: Cadastral map (Source: Ku-ring-gai Interactive mapping viewer)

BDAR – 77 KULGOA AVENUE PYMBLE



Figure 5: Sensitive biodiversity values map (Source: NSW DPIE accessed 18/12/23)

BDAR – 77 KULGOA AVENUE PYMBLE

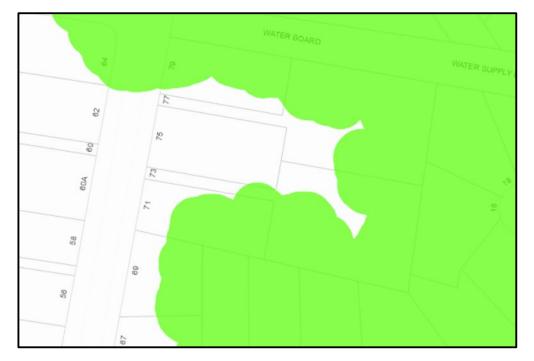


Figure 5: The Subject Site with Ku-ring-gai Environmental Mapping (Natural Resources - Biodiversity)

BDAR – 77 KULGOA AVENUE PYMBLE



(NR riparian lands layer)

BDAR – 77 KULGOA AVENUE PYMBLE

I.2.1 Database Searches

The following database searches were undertaken, in order to compile a list of threatened flora and fauna species predicted to occur in the area:

- Review of threatened fauna and flora records within a 10 km radius of the site, contained in the OEH Atlas of NSW Wildlife (NSW BioNet).
- Review of the MNES records within a 10 km radius of the site, using the Commonwealth Department of Environment and Energy (DEE), EPBC Act Protected Matters Search Tool.

I.2.2 Vegetation Mapping

Southeast NSW Native Vegetation Classification and Mapping (NSW OEH 2011 update)- SCIVI. VIS_ID 2230

Classification and descriptions of native vegetation types of southeast NSW (including the South Coast and parts of the eastern tablelands), and map of extant distribution of these veg types at 1:100 000 interpretation scale. Based on the South Coast - Illawarra Vegetation Integration (SCIVI) Project, which aimed to integrate many previous vegetation classification and mapping works to produce a single regional classification and map plus information on regional conservation status of vegetation types, to inform the South Coast and Illawarra Regional Strategies. Vegetation classification based on a compilation of ~ 8,500 full-floristic field survey sites from previous studies. Classified vegetation types referred to previous studies. Distribution of veg types was mapped by spatial interpolation (modelling) from classified sites, using a hybrid decision-tree/expert system. Final model was cut to \'extant\' boundaries using a compiled coverage of aerial photograph interpretation (API) of woody and wetland vegetation boundaries. A total of 189 vegetation types were identified, and types related to Endangered Ecological Communities are highlighted.; VIS_ID 2230.

The Native Vegetation of the Sydney Metropolitan Area - Version 3.1 (OEH, 2016) VIS_ID 4489

This layer contains digital mapping of the native vegetation communities of the Sydney Metropolitan area. Vegetation communities have been derived from the analysis of 2200 floristic sites collated for the study area. Identified vegetation communities have been related to currently listed threatened ecological communities listed under the NSW TSC Act, 1995 and the Commonwealth EPBC Act, 1999. Native vegetation communities have been mapped using a combination of detailed image interpretation, relationships between sample sites and abiotic environmental variables. The derived digital data layer includes fields that describe the vegetation community, interpreted dominant species and understorey characteristics, interpretation confidence, disturbance type and severity,

NSW vegetation formation and classes and related NSW Plant Community Types. These are described in detail in technical reports OEH (2016) The Native Vegetation of the Sydney Metropolitan Area. Volume 1: Technical Report. Version 3.0. Office of Environment and Heritage Sydney. OEH (2016) The Native Vegetation of the Sydney Metropolitan Area. Volume 2: Vegetation Community Profiles. Version 3.0. NSW Office of Environment and Heritage, Sydney. Version 3.0 of the Native Vegetation of the Sydney Metropolitan Area updates the Plant Community Type and Biometric Vegetation Type of each map unit.

I.2.3 Literature Review

Information sources reviewed included, but were not necessarily limited to:

- Aerial Photograph Interpretation (API);
- Relevant guidelines, including:
 - OEH Biodiversity Assessment Method, 2017 No 469
 - NSW Guide to Surveying Threatened Plants (OEH, 2016)
 - 'Species credit' threatened bats and their habitats: NSW survey guide for the Biodiversity Assessment Method (OEH, 2018)
 - Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities (Department of Environment and Conservation (DEC), 2004)
- OEH Threatened Species, Populations and Ecological Communities website
- Commonwealth DEE Species, Profile and Threats Database;
- OEH Threatened Species, Populations and Ecological Communities website
- Commonwealth DEE Species, Profile and Threats Database;
- Threatened species survey and assessment guidelines: field survey methods for fauna: Amphibians (DEC 2009);
- NSW Guideline to Surveying Threatened Plants (OEH 2016b);
- Operational Manual for BioMetric 3.1. (DECCW 2011);
- Survey guidelines for Australia's threatened birds. Guidelines for detecting birds listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth of Australia 2010a);
- Survey guidelines for Australia's threatened bats. Guidelines for detecting bats listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999(Commonwealth of Australia 2010b);
- Survey guidelines for Australia's threatened frogs. Guidelines for detecting frogs listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth of Australia 2010c);
- Survey guidelines for Australia's threatened mammals. Guidelines for detecting

- mammals listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth of Australia 2011);
- Survey guidelines for Australia's threatened orchids.
- Guidelines for detecting bats listed as 'threatened' under the Environment Protection and Biodiversity Conservation Act 1999(Commonwealth of Australia 2013).

It was not possible to determine with certainty all the fauna that utilise habitats in the subject site. This is because of the likely seasonal occurrences of some fauna species, the occasional occurrence of vagrant species, and because some species are difficult to detect because of their timid or cryptic behaviour. Therefore, in addition to targeted fauna surveys, investigations comprised an assessment of fauna habitats present on site and an indication of their potential to support native wildlife populations and, in particular, threatened species.

Section 4.2 outlines the reasoning behind why no additional targeted fauna surveys were considered necessary for the proposed development. This mainly because no candidate 'species credit' species will be affected by the proposal as potential habitat is absent.

1.2.4 Other sources and consultant reports

A desktop survey was performed to ensure all relevant documentation is considered when preparing the plan. Documents and other information resources utilised include:

- Aerial photographs (Google Maps, NearMaps & DPI Land Information)
- NSW Land and Property Information SIX Maps Viewer (<u>https://maps.six.nsw.gov.au/</u>)
- The Southeast NSW Native Vegetation Classification and Mapping (NSW OEH 2010) mapped using QGIS software overlaid with cadastral boundaries obtained from the NSW Planning Portal database collection
- Soil Landscapes of the Sydney 1:100,000 Sheet (Chapman and Murphy 1989) using the Espade Version 2.0 managed by the NSW Office of Environment and Heritage accessed 18th December 2022
- Survey plans prepared by Hammond Smealie & Co Pty Ltd dated 30/11/22
- Proposed plans prepared by ING Consulting Engineers dated June 2024
- Arborist Impact Assessment Report prepared by Australis Tree Management dated 22nd June 2024

2 LANDSCAPE FEATURES

2.1 IBRA Bioregions and Subregions

Dominant landscape forms have been used to divide Australia into bioregions. The site is within the **NSW Sydney Basin IBRA bioregion** and **Cumberland IBRA Subregion**.

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2.2 NSW Landscape Regions (Mitchell Landscapes)

Mitchell Landscapes are used to describe areas in NSW in a broad sense and group together areas with relatively homogenous geomorphology, soils and broad vegetation types and are mapped at a scale of 1:250000.

The subject site is within the Pennant Hills Ridges Landscape (Figure 8). This landscape region has an estimated cleared fraction of 0.88 and has 'over-cleared' land status.

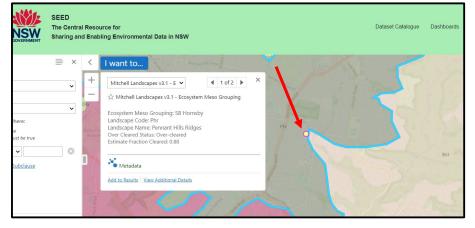


Figure 6: Location of site within the Pennant Hills Ridges Mitchell Landscape (red arrow)

BDAR – 77 KULGOA AVENUE PYMBLE

2.3 Native Vegetation Extent

All areas of native vegetation cover, within the site and within a 1,500 m buffer area surrounding the site, have been mapped; see Figure 9. It is estimated, from this mapping, that the native vegetation cover would be the 30% (30-70% category) provided within the BDAR manual and this was used in the BAM Offsets calculator (Section 6).

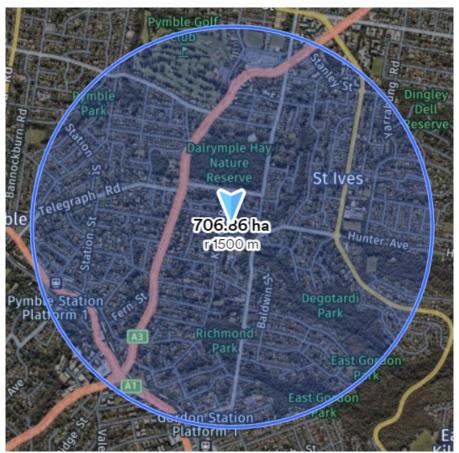


Figure 7:1500m buffer area of the site

2.4 Wetland, Rivers, Streams and Estuaries

No significant wetlands, rivers, streams and estuaries are present within the subject land.

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No water courses are mapped as occurring within the Subject Property under the Kuring-gai LEP 'Natural Resource – Riparian Land Map'. As such, the objectives of the clause will be addressed within this report.

The objectives of this clause are to:

Protect and improve:

- water quality within waterways;
- the stability of the bed and banks of waterways;
- aquatic and riparian habitats;
- ecological processes within waterways and riparian lands;
- threatened species, communities, populations and their habitats; and
- scenic and cultural heritage values of waterways and riparian lands.

In deciding whether to grant development consent for development on land to which this clause applies, the consent authority must consider:

whether the development is likely to have an adverse impact on the following;

- water quality in the waterway;
- the natural flow regime, including groundwater flows to a waterway;
- aquatic and riparian habitats and ecosystems;
- the stability of the bed, shore and banks of the waterway;
- the free passage of native aquatic and terrestrial organisms within or along the waterway and riparian land; and
- public access to, and use of, any public waterway and its foreshores.

any opportunities for rehabilitation or re-creation of any waterway and its riparian areas; and

any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

Development consent must not be granted to any development on land to which his clause applies unless the consent authority is satisfied that the development;

- is consistent with the objectives of this clause;
- integrates riparian, stormwater and flooding measures;
- is designed, sited and will be managed to avoid any potential adverse environmental impacts; and
- if a potential adverse environmental impact cannot be avoided by adopting feasible alternatives-the development minimises or mitigates any such impact to a satisfactory extent.

2.5 **Connectivity Features**

The biodiversity value of corridor networks is well known. Landscapes that retain more connections between patches of otherwise isolated areas of vegetation are more likely to maintain more numerous and more diverse populations of various plant and animal species (Lindenmayer and Fischer, 2006). Conversely, a lack of landscape connectivity can have a range of negative impacts on species populations (Lindenmayer and Fischer, 2006). It is thought that if existing remnants are left to persist without sufficient immigration to maintain genetic diversity, continued losses of biodiversity are certain (Parker *et al.* 2008).

The proposed development will not fragment bushland or significantly impact upon the corridor function of bushland on site as trees will be retained around the development site.

The central and south-eastern extents of the proposed development have been mapped as 'Biodiversity Corridors and Buffer Areas' within the Ku-ring-gai Council Greenweb Mapping (Figure 7).

The objectives of this category include:

- To manage areas providing a buffer to Core and Support for Core Biodiversity Lands;
- To reduce edge effects and to improve the health, connectivity and function of local ecosystems; and
- To revegetate and restore Biodiversity Corridors, significant vegetation and habitat across the landscape.

The following controls apply to lands mapped as 'Biodiversity Corridors and Buffer Areas':

- The siting and design of development must minimise edge effects on Greenweb.
- Planting is to consist of:
 - not less than 50% locally native species;

species that reflect the relevant vegetation communities within the area; and

a mix of groundcover, shrubs and trees.

Within Biodiversity Corridors (refer to maps in 18R.1 of the DCP):

- landscaping and revegetation must be designed to consolidate fragmented and linear vegetation and habitat areas within the site and adjacent sites; and
- the width of Biodiversity Corridors should be enhanced and gaps and barriers reduced or minimised.

Future landscape planting should be undertaken in line with relevant requirements including:

- not less than 50% locally native species;
- species that reflect the relevant vegetation communities within the area; and
- a mix of groundcover, shrubs and trees, and is to exclude monocultures.

2.6 Areas of Geological Significance and Soil Hazard Features

Not present.

The Subject Site is situated on a slight slope, with elevation ranging between 160 m Australian Height Datum (AHD) in the south and 166 m in the north AHD.

The Subject Site occurs predominately on the Glenorie soil landscape. The Glenorie soil landscape comprises undulating to rolling low hills on Wianamatta Group shales. Local relief 50-80 m, slopes 5-20%. Narrow ridges, hillcrests and valleys. Extensively cleared tall open-forest (wet sclerophyll forests). Soils are shallow to moderately deep (<100 cm) red podzolic soils crests; moderately deep (70–150 cm) red and brown podzolic soils on upper slopes (Chapman et al. 2009).

A small section in the south-eastern extent is mapped as the Lucas Heights soil landscape. This soil landscape is characterised by gently undulating crests and ridges on plateau surfaces of the Mittagong formation (alternating bands of shale and fine-grained sandstones). Local relief to 30 m, slopes <10%. Rock outcrop is absent. Extensively or completely cleared, dry sclerophyll low forest and woodland. Soils moderately deep (50–150 cm), hardsetting yellow podzolic soils and yellow soloths.

BDAR – 77 KULGOA AVENUE PYMBLE

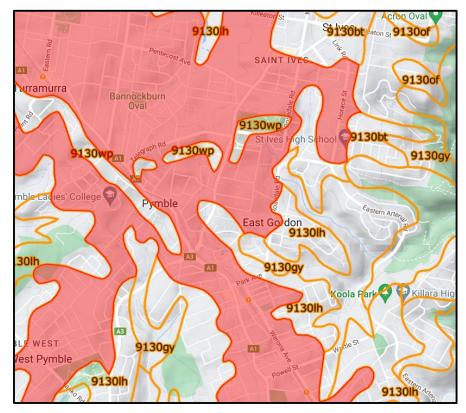


Figure 8: The site is located within the Glenorie Soil Landscape (Source: E-Spade Version 2.0 managed by the NSW Office of Environment and Heritage)

BDAR – 77 KULGOA AVENUE PYMBLE

2.7 Areas of Outstanding Biodiversity Value

Under the BC Act, the Minister for the Environment may declare Areas of Outstanding Biodiversity Value (AOBV). These are special areas that contain irreplaceable biodiversity values that are considered important to NSW, Australia or globally.

No listed AOBV occur within the site or within a 1,500 m buffer around the site.

BDAR – 77 KULGOA AVENUE PYMBLE

2.8 Site Context

2.8.1 Native Vegetation Cover

Native vegetation cover is calculated as a percentage cover on the subject land and the surrounding 1,500 m buffer area. Cover estimates are based on the cover of native woody and non-woody vegetation relative to the approximate benchmarks for the PCT, considering vegetation condition and extent.

The native vegetation cover is estimated at approximately 45%.

2.8.2 Patch Size

Patch size is used to describe an area of intact native vegetation, that includes native vegetation with a gap of less than 100 m from the next area of moderate to good condition native vegetation. This gap is less than or equal to 30 m for non-woody ecosystems.

The patch size for the vegetation on-site is two (2) hectares amongst a heavily urbanised landscape.

BDAR – 77 KULGOA AVENUE PYMBLE

3 NATIVE VEGETATION

3.1 Native Vegetation Extent Within the Site

The total area of native vegetation (Vegetation Zone 1) occurring within the subject site has an overly conservative of 0.2 ha for the BAM calculator.

A stormwater drainage easement (1.2m wide) has been proposed along the eastern (rear) boundary of all proposed lots. All trees are proposed for retention within this area which is currently subject to heavy weed invasion.

As a precautionary measure, it has been assumed 0.2ha of native vegetation may be indirectly impacted for the installation of stormwater drainage at the rear of the proposed lots as well as edge effects. This has been taken into account into the BAM-C credit calculation.

3.2 Plant Community Types (PCTs)

3.2.1 Vegetation zones and plant species recorded on site

The Subject Property currently contains existing dwellings, areas of cleared exotic lawn, tennis court, pools, landscaped areas, ornamental garden plantings and remnant Sydney Turpentine Ironbark Forest canopy trees (at the rear of the properties), situated within an urban residential setting.

The canopy tree species present include mixture of locally indigenous species Sydney Turpentine Ironbark Forest, planted native and exotic tree species of varying ages and stages of maturity.

The subject site has been partially modified with the removal of most of the native under storey, ground cover plants and shrubs prior to 1943. There is a high proliferation of introduced environmental weed species at the rear of the property including:

- Trad (Tradescantia flumiensis)
- Blackberry Nightshade (Solanum nigrum)
- Madeira Vine (Anredra cordifolia)

The subject dominant trees together with other indigenous trees in the surrounding residences are connected to the remainder of the ecological communities nearby.

Indigenous tree species occurring on-site are (tree numbering system corresponding with arborist report):

- Tree No.'s 7 & 71 Angophora costata (Smooth-barked Apple)
- Tree No. 1 *Eucalyptus acmenoides* (White Mahogany)
- Tree No. 70 *Eucalyptus pilularis* (Blackbutt)

- Tree No. 87 *Eucalyptus punctata* (Grey Gum) Tree No.'s 27, 65, 68, 69, 80 & 81 *Eucalyptus saligna* (Sydney Blue Gum)
- Tree No.'s 74 & 79 Pittosporum undulatum (Sweet Pittosporum)
- Tree No.'s 2, 3, 4, 5, 6, 8, 9, 10, 11, 14, 16, 19, 21, 24, 26, 72, 73 & 105 *Syncarpia glomulifera* (Turpentine)
- Glochidion ferdinandi (Cheese Tree)

The following exotic introduced tree species are listed in the Biosecurity Act (2015):

- Tree No.'s 40, 77 & 104 Celtis sinensis (Chinese Nettle)
- Tree No.'s 82 Ligustrum lucidum (Broad Leaf Privet)

Other introduced planted tree species recorded on-site included:

- Archontophoenix cunninghamiana (Bangalow Palm)
- Cedrus deodara (Deodar Cedar)
- Fraxinus griffithii (Evergreen Ash)
- Melaleuca incana (Grey Honey Myrtle)
- Citharexylum spinosum (Fiddlewood)
- Melaleuca bracteata (Revolution Green)
- Laurus nobilis (Bay Tree)
- Leptospermum petersonii (Lemon Scented Tea Tree)
- Juniperus communis (Juniper)
- Camellia reticulata (Reticulata Camellia)
- Cupressus sempervirens var. stricta (Pencil Pine)
- Podocarpus elatus (Brown Pine)
- Eucalyptus microcorys (Tallowwood)
- Grevillea robusta (Silky Oak)
- Callistemon salignus (Willow Bottlebrush)
- Thuja plicata (Western Red Cedar)
- Glochidion ferdinandi (Cheese Tree)
- Jacaranda mimosifolia (Jacaranda)
- Livistona chinensis (Chinese Fan Palm)
- Stenocarpus sinuatus (Fire Wheel Tree)
- Brachychiton acerifolius (Illawarra Flame Tree)
- Grevillea robusta (Silky Oak)
- Callistemon salignus (Willow Bottlebrush)
- Livistona chinensis (Chinese Fan Palm)

- Ulmus glabra (Scotch Elm)
- Howea forsteriana (Kentia Palm)

PCT classification

The vegetation at the rear of the site has been mapped by Council and the NSW DPE (NSW Statewide PCT mapping) as Sydney Turpentine Ironbark Forest (Figure 12 and 13).

Vegetation Formation: Wet Sclerophyll Forests (Grassy sub-formation)

Vegetation Class: Northern Hinterland Wet Sclerophyll Forests

PCT Name: Sydney Turpentine Ironbark Forest

PCTID: 3262

Sydney Turpentine Ironbark Forest in the Sydney Basin Bioregion is listed as Critically Endangered under the BC Act 2016 and EPBC Act 1999.

Sydney Turpentine Ironbark Forest (Benson and Howell 1990) is a tall wet sclerophyll forest found on fertile shale soils in the high rainfall districts of Sydney's north shore. It is dominated by Sydney blue gum (Eucalyptus saligna), blackbutt (Eucalyptus pilularis) and turpentine (Syncarpia glomulifera) with a number of other eucalypts occurring patchily. A sparse to open cover of small trees is found at most sites and includes a variety of sclerophyllous and mesophyllous species. The ground layer is variable in both composition and cover. It may be ferny, grassy or herbaceous depending on topographic situation and disturbance history.

At some sites vines and climbers are prolific. Sydney Turpentine Ironbark Forest is found on a range of shale or shale-influenced substrates in areas receiving between 900 and 1300 millimetres of mean annual rainfall. This includes elevated gullies, ridgelines, crests and slopes underlain by Wianamatta shales as well as small gully heads where downslope movement of shale soil lies above sandstone bedrock. In these latter situations sandstone outcrops may be present, although occupying only a minor component of the site.

Typically the community occurs at altitudes above 117 metres above sea level although it is known to occur as low as 30 metres and as high as 185 metres. It is most common across the ridgelines between Castle Hill and St Ives with small areas occurring in Ryde, Lane Cove and Willoughby where it is found at lower elevations.

Like most STIF remnants it is considered to be in poor condition. Due the lack of any groundcover or shrub species, the site is considered to contain low native resilience (ability of the soil seedbank to regenerate to a fully structured vegetation community).

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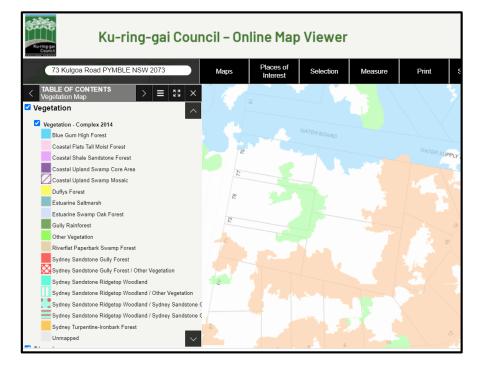
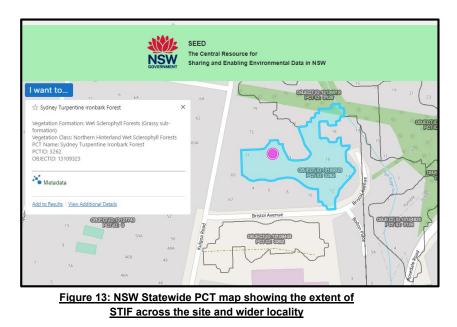


Figure 12: The subject site has been mapped by Council as Sydney Turpentine Ironbark Forest (orange polygon)



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3.2.2 Plot-based Floristic Vegetation Surveys

Plot-based floristic vegetation surveys were conducted, in accordance with s.5.2.1.9 of the BAM, by Alex Fraser on the 20/6/23 and their location is shown in Figure 14.

One 20 m x 20 m plot were sampled for the presence of flora species. The plot was carefully examined to identify all flora species present. Searches continued until it was confident that all flora species within a plot were detected. Data collected for each species included:

- Stratum and layers in which each species occurs
- Growth form for each species
- Scientific and common name for each species
- Percentage foliage cover (PFC) across the plot, of each species rooted in or overhanging the plot
- Abundance rating for each species

Plant Community Types (PCTs) on the site were identified according to the NSW PCT classification described in the BioNet Vegetation Classification.

One PCT (No.3262) was identified on the site and is described below.

Plot data is provided in Appendix B.

The location of the BAM plot is provided within Figure 14 (below).

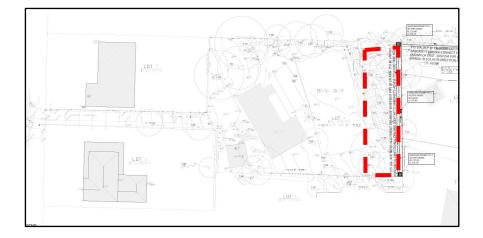


Figure 14: Location of BAM Plot (red shaped rectangle)

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Photograph 1: BAM Plot midline (view south)

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Photograph 2: BAM Plot midline (view north)

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Photograph 3: Rear of the subject site shown presence of native and introduced species



Photograph 4: Rear of the subject site showing native species with understorey dominated by exotic species



Photograph 5: Northern boundary of the site (eastern view)



Photograph 6: Northern boundary of the site (western view)

Table 1: Plants recorded on-site

Scientific name (Common name)
Angophora costata (Smooth-barked Apple) – STIF species
Eucalyptus acmenoides (White Mahogany) – STIF species
Eucalyptus pilularis (Blackbutt) – STIF species
Eucalyptus punctata (Grey Gum) – STIF species
Eucalyptus saligna (Sydney Blue Gum) – STIF species
Pittosporum undulatum (Sweet Pittosporum) – STIF species
Syncarpia glomulifera (Turpentine) – STIF species
Glochidion ferdinandi (Cheese Tree) – STIF species
Celtis sinensis (Chinese Nettle)*
Ligustrum lucidum (Broad Leaf Privet)*
Archontophoenix cunninghamiana (Bangalow Palm)**
Cedrus deodara (Deodar Cedar)*
Fraxinus griffithii (Evergreen Ash)*
Melaleuca incana (Grey Honey Myrtle)**
Citharexylum spinosum (Fiddlewood)*
Melaleuca bracteata (Revolution Green)**
Laurus nobilis (Bay Tree) *
Leptospermum petersonii (Lemon Scented Tea Tree)**
Juniperus communis (Juniper)*
Camellia reticulata (Reticulata Camellia)*
Cupressus sempervirens var. stricta (Pencil Pine)*
Podocarpus elatus (Brown Pine)**
Eucalyptus microcorys (Tallowwood)**
Grevillea robusta (Silky Oak)**
Callistemon salignus (Willow Bottlebrush)**
Thuja plicata (Western Red Cedar)**
Jacaranda mimosifolia (Jacaranda)*
Livistona chinensis (Chinese Fan Palm)*
Stenocarpus sinuatus (Fire Wheel Tree)**
Brachychiton acerifolius (Illawarra Flame Tree)**
Ulmus glabra (Scotch Elm)*
Howea forsteriana (Kentia Palm)**
Erhrarta erecta (Panic Veldt Grass)*
Tradescantia flumiensis (Trad)*
Solanum nigrum (Blackberry Night Shade)*
Oplismenus imbecillis (Basket grass) – STIF species
Dichondra repens (Kidney Weed) – STIF species
Hedychium gardnerianum (Introduced Ginger)*
Anredera cordifolia (Madeira vine)*
Lonicera japonica (Japanese Honeysuckle)*
Agapanthus praecox (Agapanthus)*
Thirsium vulgare (Spear Thistle)*
Ochna serrulata (Mickey Mouse Plant)*

*Denotes introduced species

** Denotes planted native species not locally indigenous to the STIF vegetation community

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3.2.3 Fauna habitat and species

No threatened fauna species were observed on the Subject Site during the site assessment. Fauna habitat within the Subject Site is further detailed in (Table 7).

Desktop analysis revealed a number of threatened fauna species have the potential to utilise habitat on the Subject Site during part of their lifecycles (Table 8). There was no potential for significant impact upon all potentially occurring BC Act listed threatened species therefore no assessment under the '5-Part Test Assessment of Significance' was required. There was no potential for significant impact upon all potentially occurring EPBC Act listed threatened species therefore no assessment under the significant impact upon all potentially occurring EPBC Act listed threatened species therefore no assessment under the Significant Impact Guidelines for Matters of National Environmental Significance (MNES) was required.

It was deemed that the proposed works are unlikely to result in a significant impact such that a local viable population or occurrence of any of the threatened species aforementioned will be placed at risk of extinction.

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Table 2: Fauna habitat values of the site

Habitat component	Site values
Coarse woody debris	Absent.
Rock outcrops, bush rock, caves, crevices and overhangs	Absent.
Culverts, bridges, mine shafts, or abandoned structures	Absent.
Nectar/lerp-bearing Trees	Syncarpia glomulifera, Eucalyptus pilularus and Angophora costata were recorded within the Subject Site. These trees may provide intermittent nectar and/or lerp sources for nomadic nectivores.
Nectar-bearing shrubs	Absent.
Koala and Greater Glider feed trees.	Syncarpia glomulifera, Eucalyptus pilularus and Angophora costata are considered Koala feed treed and occur within the Subject Site. Koalas are unlikely to be present.
Large stick nests	Absent.
Sap and gum sources	Present. Syncarpia glomulifera, Eucalyptus pilularus and Angophora costata occur within the Subject Site.
She-oak fruit (Glossy Black	Absent.
Cockatoo feed) Soft-fruit-bearing trees	Present – exotic planted species such as Camelia
Dense shrubbery and leaf litter	Absent.
Tree hollows	Absent.
Decorticating bark	Absent.
Wetlands, soaks and streams	Absent.
Open water bodies	Absent.
Estuarine, beach, mudflats, and rocky foreshores	Absent.

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3.3 Vegetation Integrity Assessment (BAM -C)

3.3.1 Vegetation Zones

For the purposes of the BAM, a vegetation zone is an area of native vegetation on the site that is the same PCT and has a similar broad condition state. The assigned vegetation zone for the PCT occurring on the site are described below.

3.3.2 Patch Sizes

A patch size area has been assigned to each vegetation zone, as a class. Patch size classes are provided in Table 3.

Table 3: Patch Size Classes

РСТ	Vegetation Zone	Patch Size Class
Plant Community Type (PCT) PCT 3262 – Sydney Turpentine Ironbark Forest		2ha

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3.3.3 Vegetation Integrity Scores

Each vegetation zone identified on the site has been surveyed to obtain a quantitative measure for each zone, of the composition, structure and function attributes listed in Table 3 of the BAM. These attributes are listed below:

- Growth form groups used to assess composition and structure:
 - o Tree
 - o Shrub
 - o Grass and grass like
 - o Forb
 - o Fern
 - o Other
- Attributes used to assess function:
 - o Number of large trees
 - o Tree regeneration
 - Tree stem size class
 - o Total length of fallen logs
 - o Litter cover
 - High threat exotic vegetation cover
 - Hollow-bearing trees

Plot-base surveys were conducted, in accordance with s.5.3.4 of the BAM, by an ecologist (Alex Fraser). Survey plots were established around a central 50 m transect and included:

- One 400 m² (20 m x 20 m) plot to assess the composition and structure attributes listed above.
- One 1000 m² (20 m x 50 m) plot to assess the function attributes: number of large trees, stem size class, tree regeneration and length of logs.
- Five 1 m² sub-plots to assess average litter cover (and other optional groundcover components).

See previous Figure 14 for plot location. Plot data is provided in Appendix B. Table 4 details the vegetation integrity scores for each vegetation zone.

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Table 4: Vegetation	Integrity Scores
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РСТ	Vegetation Zone	Composition Condition Score	Structure Condition Score	Function Condition Score	Vegetation Integrity Score
PCT 3262	Vegetation Zone 1	13.6	28.1	61.4	28.6

3.4 Sydney Turpentine Ironbark Forest (STIF) Listing under the EPBC Act 1999

In order to be protected as a matter of national environmental significance areas of the ecological community must meet both:

- The key diagnostic characteristics (Table 5); and
- At least the minimum condition thresholds (Table 6).

The vegetation mapped within the Subject Land as STIF does not meet the Key Diagnostic Features for the community (Table 5), nor does it meet the key condition thresholds required to meet the EPBC Act listing status (Table 6).

Therefore, areas mapped as Sydney Turpentine Ironbark Forest (STIF) within the Subject Land do not conform to the EPBC Act listed Sydney Turpentine Ironbark Forest (Threatened Species Scientific Committee 2009) and no further assessment under the EPBC Act is required for this vegetation in the Subject Land.

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Table 5: Key diagnostics features required to meet the EPBC Listing Status for Sydney Turpentine Ironbark Forest (Threatened Species Scientific Committee 2009).

	Status in the Project Area
Thresholds	Sydney Turpentine Ironbark Forest PCT 3262 (Canopy)
The distribution of PCT 3262 is between Sutherland and the Hornsby plateau. The Hornsby Plateau is the adjoining Mitchell landscape immediately to the northeast of the subject land and the suburb of Sutherland is approximately 50 km to the south. Therefore, the subject land is within the distribution of PCT 3262.	Yes
 Mean annual rainfall of PCT 3262 is 900 to 1250 mm and BOM (2021) rainfall data suggest the site would receive rainfall within that range (mean annual rainfall for Parramatta station 066124 since 1965 is 966mm). 	Yes
\cdot Elevations of PCT 3262 are between 10 and 180 m asl and site contour data indicates the subject land is mostly within this range at 152-188 m.	
· Soils are described as shale and shale-enriched sandstone soils. The soil landscape of the subject land is Glenorie (OEH 2020) which is typically underlain by Wianamatta shale with topsoils of friable dark brown loam. The topsoils on the subject land generally appeared to be brown sandy	
The dominant tree species of the CEEC are described as including Syncarpia glomulifera and Eucalyptus paniculata, but the Final Determination also explains that a range of other tree species (including E. globoidea, E. punctata, E. resinifera, E. pilularis, E. acmenoides, E saligna and Angophora floribunda) may co-occur or even dominate. The subject land contains a mixed canopy of Syncarpia glomulifera, Eucalyptus paniculata, E. punctata, E. pilularis, E. acmenoides, E. pilularis and Angophora floribunda and meets the CEEC canopy description. Other canopy species may occur in association with the typical dominants and may be locally dominant at some sites. The descriptions of several STIF ecotonal vegetation communities (Cumberland Plain Woodland, Blue Gum High Forest, Shale Sandstone Transition Forest, Sydney Sandstone Ridgetop Woodland and Sandstone Gully Forest) provided in the Final Determination (4.4- 4.7) also support the definition of the vegetation at the rear of the subject land toward STIF.	Yes – The minimum projected foliage cover of canopy trees is 10% or more; and The tree canopy is typically dominated by Angophora costata (Smooth-barked Apple), Tree No. 1 Eucalyptus acmenoides (White Mahogany) Tree No. 2 Eucalyptus purchata (Grey Gum) Tree No.'s 27, 65, 68, 69, 80 & 81 Eucalyptus sunctata (Grey Gum) Tree No.'s 27, 65, 68, 69, 80 & 81 Eucalyptus saligna (Sydney Blue Gum) Tree No.'s 74 & 79 Pittosporum undulatum (Sweet Pittosporum) Tree No.'s 2, 3, 4, 5, 6, 8, 9, 10, 11, 14, 16, 19, 21, 24, 26, 72, 73 & 105 Syncarpia glomulifera (Turpentine) Glochidion ferdinandi (Cheese Tree)
A stratum of small trees may occur, including Pittosporum undulatum (sweet pittosporum), Trema aspera (native peach) and Acacia parramattensis (Parramatta wattle). Where present, a shrub layer may include Polyscias sambucifolia (elderberry panax), Notelaea longifolia (mock olive), Leucopogon juniperinus (prickly beard-heath), Pittosporum revolutum (rough fruit pittosporum), Breynia oblongifolia (breynia), Maytenus silvestris (narrow-leaved orangebark) and Ozothamnus diosmifolius (white dogwood). Where present in its natural state, the ground layer may include Oplismenus aemulus (basket grass), Pseuderanthemum variabile (pastel flower), Echinopogon ovatus (forest hedgehog grass) Microlaena stipoides (weeping grass) and Themeda triandra (kangaroo grass).	Yes - Pittosporum undulatum (Sweet Pittosporum) present

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Table 6 Key diagnostics features required to meet the EPBC Listing Status for Sydney Turpentine Ironbark Forest (Threatened Species Scientific Committee 2009).

Category and Rationale	Thresholds	Thresholds Present within the Project Area
A. Core thresholds that apply under most circumstances: patches with an understorey dominated by natives and a minimum size that is functional and consistent within mapping unit size applied in NSW.	Minimum patch size is >0.5ha. AND >50% of the perennial understorey vegetation cover is made up of native species.	No. The patch size is <0.5ha and <50% of the perennial understorey vegetation cover is made up of native species.
OR		
B. Larger patches which are inherently variable due to their rarity.	The patch size is >5ha; AND >30% of the perennial understorey vegetation cover is made up of native species.	No. The patch size is <5ha and <30% of the perennial understorey vegetation cover is made up of native species.
OR		
C. Patches with connectivity to large native vegetation remnants in the landscape.	The path size is >0.5ha; AND ≥30% of the perennial understorey vegetation cover is made up of native species; AND The patch is contiguous with a native vegetation remnant (any native vegetation where cover in each layer present is dominated by native species) that is ≥5ha in area.	No. The patch size is <0.5ha and <30% of the perennial understorey vegetation cover is made up of native species and the patch is not contiguous with another native vegetation remnant that is ≥5ha.
OR		
D. Patches that have large mature trees or trees with hollows (habitat) that are very scarce on the Cumberland Plain.	The patch size is >0.5ha in size; AND ≥30% of the perennial understorey vegetation cover is made up of native species; AND The patch has at least one tree with hollows per hectare or at least one large tree (≥80 cm dbh) per hectare from the upper tree layer species outlined in the Description and Appendix A.	No. The patch size is <0.5ha and <30% of the perennial understorey vegetation cover is made up of native species and the patch does not have at least one tree with hollows per hectare or at least one large tree >80cm dbh per hectare.
Sydney Turpentine Ironbark Forest (STIF) w thresholds for Sydney Turpentine Ironbark Fo listing.		

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4 THREATENED SPECIES

4.1 Ecosystem Credit Species

Ecosystem credit species are those where the likelihood of occurrence of the species or elements of the species' habitat, can be predicted by vegetation surrogates and landscape features, or for which targeted survey has a low probability of detection. The Threatened Biodiversity Data Collection (TBCD) has identified several ecosystem credit species as requiring assessment as shown on the following page.

4.2 **Species Credit Species (Candidate Species)**

Species credit species (or candidate species) are those where the likelihood of occurrence of the species or elements of suitable habitat for the species, cannot be confidently predicted by vegetation surrogates and landscape features and can be reliably detected by survey. The TBDC has identified several candidate species as requiring assessment as provided on the following page (Table 7).

In accordance with S.6.5.1.1. a species survey must be undertaken for all species credit species identified as likely to occur on the site based upon the application of Steps 1-3 in Section 6.4.

Based upon the low quality of fauna habitat proposed for removal, no species credit species are likely to occur on-site. Therefore, no targeted fauna surveys were considered necessary.

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Table 7: Candidate species inclusion/ exclusion justification table

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Table 7: Candidate species assessment

Biodiversity Offset Credits required?	Q	°Z	No	No	No	No
No. of BIONET records in the locality (accessed 28/6/23)	20	ო	2	9	17	0
Biodiversity risk weighting	Very High -3	Very High -3	Very High -3	Very High -3	Very High -3	Very High -3
Present within subject land?	n/a	h/a	n/a	n/a	n/a	n/a
Targeted survey conducted?	°N	°Z	No	No	No	0 N
Included in assessment	This species is known to breed in caves, tunnels, mines and culverts. As such habitat constraints are not present within the Subject Land, this species was excluded from the assessment	This species is known to occur within two kilometres of rocky areas containing cares. overhangs. escanpments, outcrops, or crevices, or within two kilometres of old mines or tunnels. Whilst hilly terrain was observed within the surrounding locality of the Subject Land, aerial imagery revealed no such geological features (caves, overhangs escanpment etc.) within or adjacent to the Subject Land. It is therefore unlikely such habitat features would occur within the area surrounding the Subject Land. As such, this species was excluded from the assessment.	This species is known to breed in caves, tunnels, mines and culverts. As such habitat constraints are not present within the Subject Land, this species was excluded from the assessment.	No, the subject land is not within the important areas mapped for this species	No, the subject land is not within the important areas mapped for this species	The Thick Lip Spider Orchid is known from the Sydney area (old records), Wyong, Ulladulla and Braidwood in
Scientific name	Miniopterus orianae oceanensis	Chalinolobus dwyeri	Miniopterus australis	Anthochaera phrygia	Lathamus discolor	Caladenia tessellata
Common name	Large Bent- winged Bat (breeding)	Large-eared Pied Bat	Little Bent- winged Bat	Regent Honeyeater	Swift Parrot	Thick Lip Spider Orchid

ATTACHMENT NO: 5 - APPENDIX B - BIODIVERSITY DEVELOPMENT ASSESSMENT REPORT (BDAR) - 77 KULGOA ROAD, PYMBLE

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Biodiversity Offset Credits required?		
No. of Biodive BIONET Offset records in Credits the required locality (accessed 28/6/23)		
Biodiversity risk weighting		
Present within subject land?		
Targeted survey conducted?		
Included in assessment	NSW. Populations in Klama and Queanbeyan are presumed extinct. It was also recorded in the Huskisson area in the 1930s. The species occurs on the coast in Victoria from east of Melboume to almost the NSW border. Generally found in grassy sclerophyll woodland on clay loam or sandy solls, though the population near Braidwood is in low woodland with stony soll. The single leaf regrows each year. Flowers appear between September and November (but apparently generally late September or early October in extant southern populations). The habitat is degraded to the point where the species will no longer be present. This is reflected in the low vegetation integrity score of 13.4 on-	site.
Scientific name		
Common name		

THREATENED SPECIES PREVIOUSLY RECORDED WITHIN 10KM OF THE SITE

 Table A: Threatened plants previously recorded within 10km of the subject site (NSW Bionet and EPBC Protected Matters Database undertaken June 2023)

Scientific Name	BC Act	EPBC Act	ROTAP	Habitat
Darwinia biflora	>		2K	Occurs in Gosford and Sydney districts where it grows in sclerophyll forest, scrub and swamps (Harden 1992). Usually found in sites with a strong shale influence (NSW National Parks and Wildlife Service, 2002).
Epacris purpurascens var. purpurascens	>		2K	Occurs in Gosford and Sydney districts where it grows in sclerophyll forest, scrub and swamps (Harden 1992). Usually found in sites with a strong shale influence (NSW National Parks and Wildlife Service, 2002).
Leucopogon fletcheri E1 ssp. fletcheri	E1		2R	Occurs in dry eucalypt woodland or in shrubland on clayey lateritic soils, generally on flat to gently sloping terrain along ridges and spurs (Royal Botanic Gardens 2005 and Department of Environment and Conservation 2005).
Eucalyptus camfieldii	>	>	2Vi	Occurs from Tomago to the Royal National Park where it grows in coastal shrub heath in sandy soils on sandstone {Harden, 2002 #5}.
Eucalyptus nicholii	>	>	3V	Occurs from Niangala to Glenn Innes where it grows in grassy sclerophyll woodland on shallow relatively infertile soils on shales and slates (Harden, 1991; DLWC, 2001). Endemic on the NSW Northern Tablelands, of limited occurrence, particularly in the area from Walcha to Glen Innes; often on porphyry or granite (Brooker and Kleinig 1999).
Eucalyptus scoparia	E1	>	2Vi	Occurs in Queensland and reaches its southern limit in NSW. In NSW it is known from three locations all near Tenterfield in the far northern New England Tableland Bioregion where it grows on well drained granitic hilltops, slopes and outcrops, often as scattered trees in open forest and woodland (Royal Botanic Gardens 2004).
Acacia bynoeana	E1	>	3V	Occurs south of Dora Creek-Morisset area to Berrima and the Illawarra region and west to the Blue Mountains. It grows mainly in heath and dry sclerophyll forest on sandy soils (Harden, 2002 #5). Seems to prefer open, sometimes disturbed sites such as trail margins and recently burnt areas. Typically occurs in association with Corymbia gummifera, Eucalyptus haemastoma, E. gummifera, E. parramattensis, E. sclerophylla, Banksia serrata and Angophora bakeri (NSW National Parks and Wildlife Service, 1999 #61).
Acacia gordonii	E1	ш	2K	Occurs in the lower Blue Mountains from Bilpin to Faulconbridge and also in the Glenorie district. Grows on sandstone outcrops and amongst rock platforms in dry sclerophyll forest and heath {Harden, 2002 #5; NSW Scientific Committee, 1997 #298}. Specifically this species occurs in Sydney Sandstone Ridgetop Communities (James, 1997 #69).

Scientific Name	BC Act	EPBC Act	ROTAP	Habitat
Acacia pubescens	>	>	3Va	Restricted to the Sydney Region from Bilpin to the Georges River and also at Woodford where it usually grows in open sclerophyll forest and woodland on clay soils. Typically it occurs at the intergrade between shales and sandstones in gravely soils often with ironstones (Harden, 2002 #5,NSW National Parks and Wildlife Service, 2003 #14).
Hibbertia superans	ш			The species occurs on sandstone ridgetops often near the shale/sandstone boundary. Occurs in both open woodland and heathland, and appears to prefer open disturbed areas, such as tracksides(Royal Botanic Gardens 2005 and Department of Environment and Conservation 2005).
Galium australe	E4			Previously presumed extinct in NSW, this species is now known from a number of sites in coastal regions. In NSW, this species has been recorded in moist gullies of tall forest, Eucalyptus tereticornis forest, coastal Banksia shrubland, and Allocasuarina nana heathland. In other States the species is found in a range of near-coastal habitats, including sand dunes, sand spits, shrubland and woodland (Royal Botanic Gardens 2005 and Department of Environment and Conservation 2005).
Melaleuca deanei	>	>	3R	Occurs in coastal districts, including western Sydney (e.g. Baulkham Hills, Liverpool shires) from Berowra to Nowra where it grows in wet heath on sandstone and shallow/skeletal soils near streams or perched swamps (James, 1997 #69, Harden, 2002 #5).
Syzygium paniculatum	^	>	3Ri	Occurs between Buladelah and St Georges Basin where it grows in subtropical and littoral rainforest on sandy soils or stabilized dunes near the sea {Harden, 2002 #5}.
Grevillea juniperina ssp. juniperina	>			Restricted to western Cumberland Plain, Marsden Park, Rooty Hill, Riverstone, Plumpton, Castlereagh NR, Blacktown, Penrith and north to Pitt Town, where it grows in open dry sclerophyll (eucalypt-dominated) forest or woodland, at altitudes of less than about 50 m, in sandy to clay-loam soils and red pseudolateritic or sandy gravels (Royal Botanic Gardens, 2005 #404; Fairley, 2004 #523). More specifically it grows in Cumberland Plain Woodland and Castlereagh Woodland, typically in moist sites, often beside creeks on acidic soils and often recorded on road verges. Restricted to red sandy to clay soils (often lateritic) on Wianamatta Shale and Tertiary Alluvium (NSW Scientific Committee, 2000 #582).
Persoonia hirsuta ssp. hirsuta	E1		3Ki	Occurs from Gosford to the Royal National Parkand Hill Top to Glen Davis and Putty inland where it grows in woodlands and dry sclerophyll forest on sandstone or very rarely on shale. Typically occurs as isolated individuals or very small populations (NSW Scientific Committee, 1998 #64, Royal Botanic Gardens, 2005 #404). Habitat in Castle Hill is considered to be "critical habitat" {James, 1997 #69}.
Persoonia mollis subsp. maxima	ш	ш		Highly restricted, known from the Hornsby Heights-Mt Colah area north of Sydney in the Sydney Basin Bioregion. Occurs in three populations (described on a catchment basis) located over an approximate north-south range of 5.75 km and east-west distance of 7.5 km. Additional locations may exist outside the current distribution.
				Occurs in sheltered aspects of deep gullies or on the steep upper hillsides of narrow gullies on Hawkesbury Sandstone. These habitats support relatively moist, tall forest vegetation communities, often with warm temperate rainforest influences.

Scientific Name	BC Act	EPBC	ROTAP	Habitat
		Act		
				Associated species: Smooth Barked Apple Angophora costata, Sydney Peppermint Eucalyptus piperita, Red Bloodwood Corymbia gummifera, Turpentine Syncarpia glomulifera, Coachwood Ceratopetalum apetalum and Black Wattle Callicoma serratifolia.
Persoonia nutans	E1	ш	2Ei	Confined to the Cumberland Plain where it grows in Castlereagh Scribbly Gum Woodlands and Agnes Banks Woodlands {NSW National Parks and Wildlife Service, 2001 #77; Harden, 2002 #5; James, 1997 #69}.
Genoplesium baueri V	>		3R	Grows in sparse sclerophyll forest and moss gardens over sandstone; from the Hunter Valley to Nowra district {Royal Botanic Gardens, 2004 #9}.
Pimelea curviflora var. curviflora	>	>		Confined to coastal areas around Sydney where it grows on sandstone and laterite soils. It is found between South Maroota, Cowan, Narrabeen, Allambie Heights, Northmead and Kellyville, but its former range extended south to the Parramatta River and Port Jackson region including Five Dock, Bellevue Hill and Manly. Usually occurs in woodland in the transition between shale and sandstone, often on Lucas Heights soil landscape {NSW Scientific Committee, 1998 #65, James, 1997 #69; James, 1999 #68; Harden, 2000 #2}.
Tetratheca glandulosa	>	>	2V	Occurs from Mangrove Mountain to the Blue Mountains where it grows in sandy or rocky heath or scrub {Harden, 1992 #3}.
Tetratheca juncea	>	>	3Vi	Occurs in coastal districts from Buladelah to Port Macquarie where it grows in dry sclerophyll forest and occasionally swampy heath in sandy, {Harden, 1992 #3} low nutrient soils with a dense understorey of grasses. Specifically it is known to occur within Smooth-barked Apple Woodland and Coastal Foothills Spotted Gum Woodland {NSW National Parks and Wildlife Service, 2000 #392; NSW National Parks and Wildlife Service, 2000 #393; NSW National Parks and Wildlife Service, 2000 #344}.
BC Act (Biodiversity Co	onservatio	n Act 201	16): E1 =Cri	BC Act (Biodiversity Conservation Act 2016): E1 =Critically Endangered E= Endangered V= Vulnerable

EPBC Act (Environment Protection Biodiversity Conservation Act 1999): E1 = Critically Endangered E= Endangered V= Vulnerable

ROTAP CODES Source: Briggs, J.D. & Leigh J.H. (1988) Rare or threatened Australian plants. Plant Codes: Distribution 1: Known from type collection only. 2: Geographic range < 100km. 3: Geographic range < 100km. Conservation E: Endangered (at risk of disappearing in 1 or 2 decades) V: Vulnerable (at risk of disappearing in 20 - 50 years). R: Rare (rare in Australia but currently not endangered or vulnerable). K: Poorly known Reservation. C: Population reserved adequately reserved (>1000 plants). I: Inadequately reserved (<1000 plants) - Adequacy of reservation unknown.

ITEM NO: GB.3

Scientific Name	BC Act	EPBC Act	Habitat	Potential habitat
Pseudophryne australis (Red-crowned Toadlet)	>		Occurs within 160 km of Sydney where it is restricted to Hawkesbury Sandstone. It breeds in deep grass and debris adjacent to ephemeral drainage lines. When not breeding individuals are found scattered on sandstone ridges under rocks and logs {Cogger, 2000 #20}.	N
Callocephalon fimbriatum (Gang-gang Cockatoo)	>		Occurs in wetter forests and woodland from sea level to an altitude over 2000 metres, timbered foothills and valleys, coastal scrubs, farmlands and suburban gardens {Pizzey, 1997 #24}.	No
Calyptorhynchus lathami (Glossy Black-Cockatoo)	>		Occurs in eucatypt woodland and forest with Casuarina/Allocasuarina spp. Characteristically inhabits forests on sites with low soil nutrient status, reflecting the distribution of key Allocasuarina species. The drier forest types with intact and less rugged landscapes are preferred by the species. Nests in tree hollows (Garnett, 2000 #21; NSW National Parks and Wildlife Service, 1999 #55).	oZ
Lathamus discolor (Swift Parrot)	E1	EM	Breeding occurs in Tasmania, majority migrates to mainland Australia in autumn, over-wintering, particularly in Victoria and central and eastern NSW, but also south-eastern Queensland as far north as Duaringa. Until recently it was believed that in New South Wales, swift parrots forage mostly in the western Queensland as far north as Duaringa. Until recently it was believed that in New South Wales, swift parrots forage mostly in the western slopes region along the inland slopes of the Great Dividing Range but are patchily distributed along the north and south coasts including the Sydney region, but new evidence indicates that the forests on the coastal plains from southerm to north and south coasts including the Sydney region, but new evidence indicates that the forests on the coastal plains from southerm to northern NSW are also extremely important. In mainland Australia is semi-nomadic, foraging in flowering ucaltypts in eucalypts in eucalypts the sociations, prediction, including along drainage lines and isolated rural or urban remnants, and for sites with flowering Acacia pyronantha, is indicated. Sites used vary from year to year. (Garnett, 2000 #21), (Swift Parrot Recovery Team, 2001 #396).	2
Lophoictinia isura (Square-tailed Kite)	^	×	This species hunts primarily over open forest, woodland and mallee communities as well as over adjacent heaths and other low scrubby habitats in wooded towns. It feeds on small birds, their eggs and nestlings as well as insects. Seems to prefer structurally diverse landscapes {Gamett, 2000 #21}.	No
Ninox strenua (Powerful Owl)	>		A sedentary species with a home range of approximately 1000 hectares it occurs within open eucalypt, casuarina or calitris pine forest and woodland. It often roosts in denser vegetation including rainforest of exotic pine plantations. Generally feeds on medium-sized mammals such as possums and gliders but will also eat birds, flying-foxes, rats and insects. Prey are generally hollow dwelling and require a shrub layer and owls are more often found in areas with more old trees and hollows than average stands {Gamett, 2000 #21}.	Yes – potential foraging habitat. Cretitcal brabitat absent.
Petroica rodinogaster (Pink Robin)	^		Found in open forest and woodland including native tea-tree scrubs. Rarely found in open cleared areas. Breeds in dense gullies in temperate rainforests {Pizzey, 1997 #24}.	No
Tyto tenebricosa (Sooty Owl)	>		Occurs in wet eucalypt forest and rainforest on fertile soils with tall emergent trees. Typically found in old growth forest with a dense understorey but also occurs in younger forests if nesting trees are present nearby. It nests in large hollows within eucalypts and occasionally caves. It hunts in open and closed forest for a range of arboreal and terrestrial mammals including introduced	No

Table B: Threatened fauna previously recorded within 10km of the subject site (NSW Bionet and EPBC Protected Matters Database undertaken on the 21st September 2021)

Xanthomyza Phrygia E1 EN Xanthomyza Phrygia E1 EN (Regent Honeyeater) V C Miniopterus schreibersii V C Miniopterus australis V C Miniopterus australis V C Mormopterus norfolkensis V C	species and sometimes birds (Garnett, 2000 #21). EM Docurs mostly in box-ironbark forests and woodland and prefers the wet, fertile sites such as along creek flats, broad river valleys and footbills. Riparian forests with Casuarina cunninghamiana and Amyema cambagei are important for feeding and breeding. Important food frees include Eucalyptus sideroxylon (Mugga Ironbark), E. albens (White Box), E. melliodora (Yellow Box) and E. leucoxylon (Yellow Gum) (Carnett, 2000 #21). C Usually found in well timbered valleys where it forages on small insects above the canopy. Roosts in caves, old mines, stormwater channels and sometimes buildings and often return to a particular nursery cave each year (Churchili, 1998 #26). C Feeds on small insects beneath the canopy of well timbered habitats including rainforest, Melaleuca swamps and dry sclerophyll forests. Roosts in caves and the sclerophyll forests. Roosts in caves and the sclerophyll forests. Roosts in caves and the static range in NSW. Nesting sites are in areas where limestone mining is preferred (Strahan, 1995 #185).	No Yes – potential foraging foraging foraging foraging foraging breatiat breeding breeding breeding breeting br
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	Feeds on small insects beneath the canopy of well timbered habitats including rainforest, Melaleuca swamps and dry sclerophyll forests. Roosts in caves and tunnels and has specific requirements for nursery sites. Distribution becomes coastal towards the southern limit of its range in NSW. Nesting sites are in areas where limestone mining is preferred (Strahan, 1995 #185).	ritical reeding abitat bsent. Vo fes - otential
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	rorests. Hoosts in caves and unnels and has specific requirements for huisery sites. Lustinguidon becomes coastal rowards the southern limit of its range in NSW. Nesting sites are in areas where limestone mining is preferred {Strahan, 1995 #185}.	to /es – ootential
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	Thought to live in sclerophul forest and woodland. Small colonies have been found in tree hollows or under loose bark. It feeds on	toraging
	increase and the forest contract and the forest addree (Phinteen) and a 200 4/201 increase of a standard of the forest addree (Phinteen) and the forest addree (Phint	habitat.
	insects above the totest cartopy of in creatings at the totest edge {criaticality, 1990 #20}.	Critical
		hreeding
		habitat
		absent.
Saccolaimus Havivantris	Occurs in eucatypt forest where it feeds above the canopy and in mallee or open country where it feeds closer to the ground.	
Vellow-hellied Sheathtail Rat	Generally a solitary species but sometimes found in colonies of up to 10. It roosts in tree hollows. Thought to be a migratory	No
	species {Churchill, 1998 #26}.	
>	Usually roosts in tree hollows in higher rainfall forests. Sometimes found in caves (Jenolan area) and abandoned buildings.	Yes –
	Forages within the canopy of dry sclerophyll forest. It prefers wet habitats where trees are more than 20 metres high {Churchill,	potential
	1998 #26).	foraging
Contract Contraction Contraction		habitat.
		Critical
		breeding
		habitat
		absent.
Phascolarctos cinereus V	Found in sclerophyll forest. Throughout New South Wales, Koalas have been observed to feed on the leaves of approximately 70	No

Scientific Name (Common Name)	BC Act	EPBC Act	Habitat	Potential habitat
(Koala)			species of eucalypt and 30 non-eucalypt species. However, in any one area, Koalas will feed almost exclusively on a small number of preferred species. The preferred tree species vary widely on a regional and local basis. Some preferred species in NSW include Forest Red Cum Eucalyptus tereticoomis, Grey Cum E. punctata, Monkey Cum E. cypellocarpa and Ribbon Gum E. viminalis. In coastal areas, Tallowwood E. microcorys and Swamp Mahogany E. robusta are important food species, while in inland areas White Box E. albers, Bimble Box E. populnea and River Red Cum E. cometal are favoured (NSW National Parks and Wildlife Service, 1999 #43; NSW National Parks and Wildlife Service, 2003 #31}.	
Pteropus poliocephalus (Grey-headed Flying-fox)	>	>	Occurs in subtropical and temperate rainforests, tall sclerophyll forests and woodiands, heatths and swamps. Urban gardens and cultivated fruit crops also provide habitat for this species. Feeds on the flowers and nectar of eucalypts and native fruits including IIIly pillies. It roosts in the branches of large trees in forests or mangroves {NSW National Parks and Wildlife Service, 2001 #56; Churchill, 1998 #26}.	Yes – potential foraging habitat. breeding habitat absent.
Scoteanax rueppellii (Greater Broad-nosed Bat)	>		The preferred hunting areas of this species include tree-lined creeks and the ecotone of woodlands and cleared paddocks but it may also forage in rainforest. Typically it forages at a height of 3-6 metres but may fly as low as one metre above the surface of a creek. It feeds on beetles, other large, slow-flying insects and small vertebrates. It generally roosts in tree hollows but has also been found in the roof spaces of old buildings {Churchill, 1998 #26}.	Yes – potential roosting and habitat. Critical breeding habitat absent.
Chalinolobus dwyeri Large-eared Pied Bat	>	>	Occurs in moderately wooded habitats and roosts in caves, mine tunnels and the abandoned, bottle-shaped mud nests of Fairy Martins. Thought to forage below the forest canopy for small flying insects (Churchill, 1998 #26).	No
Little Lorikeet	>		Forages primarily in the caropy of open Eucalyptus forest and woodland, yet also finds food in Angophora, Melaleuca and other tree species. Riparian habitats are particularly used, due to higher soil fertility and hence greater productivity. Isolated flowering trees in open country, e.g. paddocks, roadside remnants and urban trees also help sustain viable populations of the species. Freeds mostly on nectar and pollen, occasionally on native fruits such as misitetee, and only rarely in orchards Gregarious, travelling and feeding in small flocks (<10), though often with other lorikeets. Flocks numbering hundreds are still occasionally observed and may have been the norm in past centuries. Roosts in treekops, often distant from feeding areas. Nests in proximity to feeding areas if possible, most typically selecting hollows in the limb or trunk of smooth-barked Eucalypts. Entrance is small (3 cm) and usually high above the ground (2–15 m). These nest sites are often used repeatedly for decades, suggesting that preferred sites are limited. Riparian trees often chosen, including species like Allocasuarina. Nest uper suggesting that preferred sites are limited. Riparian trees when flowering is prolific, Little Lorikeet pairs can breed twice, producing 3-4 young per attempt. However, the survival rate of fledglings is unknown(NSW National Parks and Wildlife Service, 2003 #31).	Yes – potential roosting and foraging habitat. breeding habitat absent.
Varied Sitella	>		Inhabits eucalypt forests and woodlands, especially those containing rough-barked species and mature smooth-barked gums with dead branches, mallee and Acacia woodland. Feeds on arthropods gleaned from crevices in rough or decorticating bark, dead branches, standing dead trees and small branches and twigs in the tree canopy. Builds a cup-shaped nest of plant fibres and	Yes – potential roosting and

4.3 **Description of Impacts**

4.3.1 Potential Direct Impacts

Vegetation and habitat removal

The Arborist Impact Assessment Report prepared by Australis Tree Management dated June 2024 states that all locally native trees are proposed for retention.

A stormwater drainage easement (1.2m wide) has been proposed along the eastern (rear) boundary of all proposed lots. All trees are proposed for retention within this area which is currently subject to heavy weed invasion.

As a precautionary measure, it has been assumed 0.2ha of native vegetation may be indirectly impacted for the installation of stormwater drainage at the rear of the proposed lots as well as edge effects. This has been taken into account into the BAM-C credit calculation. Council can provide conditions of consent to ensure the further protection of this vegetation.

The proposed re-zoning of 77 Kulgoa Ave Pymble will support a potential future subdivision into two indicative building envelopes will be located outside the tree protection zones of locally native trees belonging to the Sydney Turpentine Ironbark Forest Critically Endangered Ecological Community. The arborist report has provided the location of tree protection fencing to ensure all remnant native trees are protected during any essential subdivision works.

The land is not mapped as bushfire prone land, therefore, an Asset Protection Zone for potentially resulting in additional vegetation clearing will not be required.

Any native vegetation along the rear of the site can be subject to a future Vegetation Management Plan provided to Council (prior to the release of the Subdivision Certificate as part of a future subdivision application).

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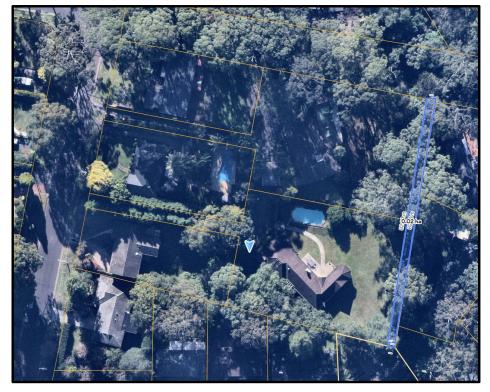


Figure 9: Precautionary area of calculated impacts for proposed 1.2 m wide easement to drain water that would be required to facilitate the proposed rezoning application

Risk of runoff, erosion and sedimentation, during construction

Surface water quality may be affected during construction activities. Construction activities could potentially encourage soil erosion and increase the sediment loads in downstream areas. Further, accidental leaks/spills of oil, fuel, cement or other substances entering watercourses could pollute surface waters.

The Construction Environment Management Plan (CEMP) can be provided with the application addresses these issues es (prior to the release of the Construction Certificate).

Temporary noise, dust, light and vibration disturbance, during construction work

Impacts of noise, dust, light and vibration upon fauna are difficult to predict. Potential impacts may include effects on predator-prey interactions and changes to mating and nesting behaviour.

The Construction Environment Management Plan (CEMP) can be provided with the application addresses these issues (prior to the release of the Construction Certificate).

BDAR – 77 KULGOA AVENUE PYMBLE



4.3.2 Potential Indirect Impacts

Potential indirect impacts to flora and fauna include:

Minor hydrological changes

Hard surfaces created as a result of construction typically cause some hydrological changes; however, in this case, hydrological changes are expected to be very minor.

4.3.3 Indirect impacts

Indirect impacts occur when the proposal or activities relating to the construction or operation of the proposal affect native vegetation, threatened ecological communities and threatened species habitat beyond the Subject Site. Impacts may also result from changes to land-use patterns, such as an increase in vehicular access and human activity on native vegetation, threatened ecological communities and threatened species habitat (Table 8 below).

BDAR – 77 KULGOA AVENUE PYMBLE

Indirect Impact	Extent and duration	Threatened species, threatened ecological communities and their habitats likely to be affected.	Consequences of the impacts for the bioregional persistence of the threatened species, threatened ecological communities and their habitats.
(a) inadvertent impacts on adjacent habitat or vegetation	The proposed development may lead to enhanced weed infiltration into adjacent habitat by enhanced edge effects. This impact is likely to be restricted the immediate area surrounding future dwellings to a couple of metres.	Nil	Edge effects will not be created and increase weed intensity and reduce vegetation integrity.
(b) reduced viability of adjacent habitat due to edge effects	The proposed development may lead to enhanced weed infiltration into adjacent habitat by enhanced edge effects. This impact is likely to be restricted the immediate area surrounding the future dwellings to a couple of metres.	Nil	Edge effects will not be created and increase weed intensity and reduce vegetation integrity.
(c) reduced viability of adjacent habitat due to noise, dust or light spill	The proposed works are unlikely to significantly exacerbate any of these issues which are all currently in effect within surrounding lots, or otherwise unlikely to occur within the Subject Site.	Nil	Nil
(d) transport of weeds and pathogens from the site to adjacent vegetation	The proposed development may lead to enhanced weed infiltration into adjacent habitat by enhanced edge effects. This impact is likely to be restricted the	Nil	Edge effects will not be created and increase weed intensity and reduce vegetation integrity.

Table 8: Indirect impacts, extent and duration and consequences

BDAR – 77 KULGOA AVENUE PYMBLE

Indirect Impact	Extent and duration	Threatened species, threatened ecological communities and their habitats likely to be affected.	Consequences of the impacts for the bioregional persistence of the threatened species, threatened ecological communities and their habitats.
	immediate area surrounding the dwelling to a couple of metres. Active weed control efforts will be undertaken prior to and post construction.		
(e) increased risk of starvation, exposure and loss of shade or shelter	This issue is unlikely to occur on the Subject Site. It is unlikely that any threatened fauna relies on habitat within the Subject Site, such that the proposed impacts will lead to increased risks from starvation, exposure, shade and shelter. All habitat resources removed will be replaced through implementation of the recommendations outlined in this report.	Nil	Nil
(f) loss of breeding habitats	No hollow bearing trees are present on-site	Nil	The implementation of the actions prescribed in this report should see an increase in the availability of potential habitat for these threatened species within the Subject Site.
(g)tramplingofthreatened flora species	This issue is not likely to affect the Subject Site. No threatened flora species were identified within the Subject Site.	Nil	Nil
 (h) inhibition of nitrogen fixation and increased soil salinity 	This issue is not likely to affect the Subject Site.	Nil	Nil

BDAR – 77 KULGOA AVENUE PYMBLE

Indirect Impact	Extent and duration	Threatened species, threatened ecological communities and their habitats likely to be affected.	Consequences of the impacts for the bioregional persistence of the threatened species, threatened ecological communities and their habitats.
(i) fertiliser drift	This issue is not likely to affect the Subject Site.	Nil	Nil
(j) rubbish dumping	This issue is not likely to affect the Subject Site.	Nil	Nil
(k) wood collection	This issue is not likely to significantly affect the Subject Site.	Nil	Nil
(I) bush rock removal and disturbance	No bush rock occurs on- site.	Nil	Nil
(m) increase in predatory species populations	It is unlikely that the proposed works will influence or alter predatory species populations.	Nil	Nil
(n) increase in pest animal populations	It is unlikely that the proposed workswillinfluenceoralter pest species populations.	Nil	Nil
(o) increased risk of fire	This issue is not relevant to the Subject Site as there is little identified bushfire hazard.	Nil	Nil
(p)disturbancetospecialist breeding and foraging habitat, e.g. beach nesting for shorebirds.	Thereisnospecialist breedingor foraging habitat on the Subject Site. The site contains a stand of mixed, nectar producing canopy trees which can provide intermittent nectar resources for several threatened fauna species.	Nil	Nil

4.3.4 Prescribed and Uncertain Impacts

This list of impacts includes all of those impacts on biodiversity values not caused by direct vegetation clearing or development that have been prescribed by the Biodiversity Conservation Regulation 2017 (Table 9).

BDAR – 77 KULGOA AVENUE PYMBLE

Will there be impacts on any of the following	Yes/No	If Yes, must address all of the assessment questions from section 9.2.1 of the BAM
Species or ecological communities associated with karst, caves, crevices, cliffs and other features of geological significance	No	n/a
Habitat of threatened species or ecological communities associated with rocks	No	n/a
Habitat of threatened species or ecological communities associated with human made structures	No	n/a
Habitat of threatened species or ecological communities associated with non-native vegetation	No	n/a
Connectivity of different areas of habitat of threatened species that facilitates the movement of those species across their range	Yes	Habitat connectivity continues to exist across the site. It is unlikely that the small area of impact will interrupt connectivity for any threatened fauna or flora species.
Movement of threatened species that maintains their life cycle	Yes	Habitat connectivity continues to exist across the site. It is unlikely that the small area of impact will interrupt movement of any threatened fauna or
Water quality, water bodies and hydrological processes that sustain threatened species and threatened ecological communities (including subsidence or upsidence resulting from underground mining or other development)	No	n/a
Wind turbine strikes on protected animals	No	n/a
Vehicle strikes on threatened species of animals or on animals that are part of a TEC	No	n/a

Table 9: Potential Prescribed or Uncertain Impacts of the Proposed Action

BDAR – 77 KULGOA AVENUE PYMBLE

4.4 Avoidance of Impacts

The Arborist Impact Assessment Report prepared by Australis Tree Management dated June 2024 states that all locally native trees are proposed for retention.

We were engaged during the preliminary design concept phase to ensure that all locally native trees are retained as part of the proposed development.

The proposed re-zoning of 77 Kulgoa Ave Pymble aims to support a potential future subdivision that will include two indicative building envelopes will be located outside the tree protection zones of locally native trees belonging to the Sydney Turpentine Ironbark Forest Critically Endangered Ecological Community.

The Arborist Impact Assessment Report has provided the location of tree protection fencing to ensure all remnant native trees are protected during any essential subdivision works (refer to the tree protection plan provided on the following page).

BDAR – 77 KULGOA AVENUE PYMBLE

4.5 Minimisation of Impacts

Several mitigation measures are proposed to minimise potential impacts; these are summarised in Table 10. These include measures to be implemented in the preconstruction, construction and post-construction phases. It is considered that these measures would serve to minimise any potential direct or indirect impacts.

Table 10: Mitigation measures proposed to minimise potential impacts

Action	Outcome/measure	Risk/ consequence of residual impacts	Timing	Responsibility
Project location	The location of the proposed development has been positioned in order to avoid and minimise the potential resulting impacts on biodiversity values within the Subject Site, where possible.	Risk = low Consequence = Harm to native vegetation and native fauna	Pre- construction phase	Proponent
Project design	The proposed development has been designed to avoid and minimise impacts on native vegetation and habitat where possible within the Subject Site. Where this is not possible, mitigation measures have been designed and recommended to reduce potential ecological impact. While there will be some impact on native vegetation, this falls above the Biodiversity Offset Scheme threshold. The design of the proposed development includes the retention of a majority of the trees on the property plus the re-planting of locally indigenous species.	Risk = low Consequence = Harm to native vegetation and native fauna	Pre- construction phase	Proponent
Tree protection	Australian Standard 4970 (2009) Protection of Trees on Development Sites (AS-4970) outlines that a Tree Protection Zone (TPZ) is the principal means of protecting trees on development sites. It is an area isolated from construction disturbance so that the tree remains viable. Ideally, works should be avoided within the TPZ. A Minor Encroachment is less than 10% of the TPZ and is outside the SRZ. A Minor Encroachment is considered acceptable by AS-4970 when it is compensated for elsewhere and contiguous within the TPZ. A Major Encroachment is greater than 10% of the	Risk = low Consequence = Harm to native vegetation and native fauna. Proliferation of weeds.	Pre- construction phase	

BDAR – 77 KULGOA AVENUE PYMBLE

Action	Outcome/measure	Risk/ consequence of residual impacts	Timing	Responsibility
	TPZ or inside the SRZ. Major Encroachments generally require root investigations undertaken by non- destructive methods or the use of tree sensitive construction methods			
Avoidance of hollow-bearing trees	No hollow-bearing trees occur within the proposed development footprint.	Risk = low Consequence = Loss of fauna habitat. Loss of native vegetation.	Construction phase	Proponent
Avoidance of woody debris	Woody debris within the development footprint should be relocated, by the proponent to the area of native vegetation in the northern extent of the Subject Site.	Risk = low Consequence = Loss of fauna habitat.	Construction phase	Proponent
Erosion and sedimentation	Appropriate erosion and sediment control must be erected and maintained at all times during construction. As minimum such measures should comply with the relevant industry guidelines such as 'the Blue Book' (Landcom 2004).	Risk = low Consequence = Degradation of vegetation,	Construction phase	Construction Contractor
Erosion protection fencing	Temporary fencing should be erected around the extent of native vegetation to be retained in order to minimise any disturbance resulting from the proposed construction works.	Risk = high Consequence = Permanent damage or degradation of vegetation.	Construction phase	Construction Contractor
Storage and Stockpiling (Soil and Materials)	Allocate all storage, stockpile and laydown sites away from any native vegetation that is planned to be retained. Avoid importing any soil from outside the site as this can introduce weeds and pathogens to the site.	Risk = moderate Consequence = Harm to native vegetation and native fauna	Construction phase	Construction Contractors
Weed eradication and suppression	All priority weeds should be eradicated across all areas of the Subject Site. Very low weed invasion was recorded on-site. Any weeds should be continually supressed and prevented from re- establishing within retained native vegetation.	Risk = moderate Consequence = Harm to native vegetation and native fauna habitat.	Construction phase and Post- construction phase	Proponent
Stormwater	The proposed development is unlikely to result in significant changes to stormwater runoff so it is expected there will be no exacerbated impact on native species of flora and fauna. Stormwater flow from future dwellings and hard surfaces will be directed to newly installed water storage tanks. Prior to any release, all stormwater is to be piped through any tanks that may be required by the regulating authorities.	Risk = low Consequence = Harm to native vegetation and native fauna habitat.	Post- construction phase	Proponent Construction Architect
Wastewater	All sewerage produced on site will be directed towards the existing urban treatment system.	Risk = low Consequence = Harm to native vegetation and native fauna habitat.	Post- construction phase	Proponent

BDAR – 77 KULGOA AVENUE PYMBLE

A Construction Environment Management Plan (CEMP) can be provided with the application prior to the release of the Construction Certificate to address all issue in Table 10.

BDAR – 77 KULGOA AVENUE PYMBLE

5 IMPACT SUMMARY

BDAR – 77 KULGOA AVENUE PYMBLE

5.1 Impacts Which Require an Offset

Tables 11 and 12 provide a summary of the impacts that require an offset, under the BAM.

Vegetation Zone	PCT	Area Impacted (indirectly for water drainage	Current Vegetation Integrity Score	Future Vegetation Integrity Score (factoring a Future	Number of Ecosystem Credits Required
		easement)		vegetation management plan may be implemented for weed removal)	
1	PCT 3262	0.02	28.6	28.6	1

Table 11: Vegetation Zones Requiring an Offset

Table 12: Threatened Species Requiring an Offset

Species	Area of Impacted Habitat	Number of Species Credits Required
NIL	NIL	0

5.2 Impacts Not Requiring an Offset

N/A

5.3 Identification of Areas Not Requiring Assessment

N/A

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5.4 Serious and Irreversible Impacts (SAII's)

An impact is to be regarded as serious and irreversible if it is likely to contribute significantly to the risk of a threatened species or ecological community becoming extinct because:

- it will cause a further decline of a species or ecological community that is currently observed, estimated, inferred or reasonably suspected to be in a rapid rate of decline
- it will further reduce the population size of the species or ecological community that is currently observed, estimated, inferred or reasonably suspected to have a very small population size
- it is an impact on the habitat of the species or ecological community that is currently observed, estimated, inferred or reasonably suspected to have a very limited geographic distribution
- the impacted species or ecological community is unlikely to respond to measures to improve its habitat and vegetation integrity and therefore its members are not replaceable.

These principles are set out in clause 6.7 of the Biodiversity Conservation Regulation 2017.

Species and ecological communities with a 'very high' biodiversity risk weighting will be a potential serious and irreversible impact (SAII). These 'potential SAII entities' are identified within the BAM calculator (OEH 2018b).

The determination of serious and irreversible impacts on biodiversity values is to be made by the consent authority in accordance with the principles set out in the BC Regulation.

To assist the consent authority, the guidance document Guidance to assist a decisionmaker to determine a serious and irreversible impact includes criteria that enable the application of the four principles set out in clause 6.7 of the BC Regulation to identify the species and ecological communities that are likely to be the subject of serious and irreversible impacts.

Sydney Turpentine Ironbark Forest in the Sydney Basin Bioregion is listed as Critically Endangered under the *BC Act 2016* and *EPBC Act 1999* and is listed as a threatened entity in the Threatened Biodiversity Data Collection (DPIE 2021d).

Due to the potential sensitivity of this ecological community to any impact, a determination of whether or not the proposed impacts are serious and irreversible is to be undertaken in accordance with Section 9.1 of the BAM (DPIE 2020a) as outlined in Table 13.

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Table 13: Sydney Turpentine Ironbark Forest SAII assessment

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Table 13:- Additional Impact Assessment for STIF CEEC at Risk of an SAII

No	Assessment Criteria	SAII Assessment Information
2a	The assessor must consult the TBDC and/or other sources to report on the current status of the TEC including: Evidence of reduction in geographic distribution as the current total geographic extent of the TEC in NSW AND the estimated reduction in geographic extent of the TEC since 1970 (not including impacts of the proposal)	It is difficult to ascertain the 1970 extent; however, the STIF Final determination estimates that there has been a 90% reduction in the total geographic extent of STIF since European Settlement (ie since 1788). The STIF Final Determination states the following in relation to a reduction in geographic extent: ' <i>Only 6% of the original extent of the community remained in 1988 (Benson, D. & Howell, J. 1990 Proc. Ecol. Soc. Aust. 16, 115-127) in the form of small and fragmented stands. Although some areas occur within conservation reserves, this in itself is not sufficient to ensure the long term conservation of the Community unless the factors threatening the integrity and survival of the Community are ameliorated.". Based on aerial photography flown in November 1998, Tozer (2003) estimated the total extent of woody vegetation referred to as Shale Sydney Turpentine Ironbark Forestwas 11 054 (±1 564) ha (upper and lower plausible bounds, sensu Keith et al. 2009), representing 8.8 (±1.2)% of the pre-European distribution of the community. Patches of the community lacking woody vegetation are very small in extent and can be considered to be included within the plausible bounds. For that part of the community's distribution to the east of the Hawkesbury-Nepean River, earlier mapping at coarser resolution by Benson & Howell (1990b) suggests a similar level of depletion, with an estimated 6 420 ha of 'Shale Sandstone Transition Forests', representing 6% of the pre-European distribution east of the Hawkesbury-Nepean River, an update of Tozer's (2003) map, based on interpretation of imagery flown in January-March 2007 shows that the extent of Sydney Turpentine Ironbark Forest east of the Hawkesbury – Nepean River had declined by 442±46 ha, a reduction of 5.2±0.6% in 9 years (NSW Scientific Committee & Simpson 2008). These estimates indicate that the geographic distribution of the community has undergone a very large reduction over a time frame appropriate to the life cycle and habitat characteristics of its component sp</i>
2bi	The assessor must consult the TBDC and/or other sources to report on the current status of the TEC including: Extent of reduction in ecological function for the TEC using evidence that describes the degree of environmental degradation or disruption to biotic processes indicated by: change in community structure	The STIF Final Determination states the following in relation to the change in community structure: "Remnants of STIF have historically been subjected to a range of anthropogenic disturbances including logging, grazing by domesticated livestock and burning at varyingintensities (Benson and Howell 1994). These disturbances have affected thestructure and potentially the composition of remnants. For example, the density and average basal diameter of trees in remnants sampled by Benson and Howell (1994) suggested that the removal of large older trees has led to higher densities of smaller trees such that remnants typically have the structure of regrowth forest."

ITEM NO: GB.3

ATTACHMENT NO: 5 - APPENDIX B - BIODIVERSITY DEVELOPMENT ASSESSMENT REPORT (BDAR) - 77 KULGOA ROAD, PYMBLE

No	Assessment Criteria	SAII Assessment Information
2bii	The assessor must consult the TBDC and/or other sources to report on the current status of the TEC including: Extent of reduction in ecological function for the TEC using evidence that describes the degree of environmental degradation or disruption to biotic processes indicated by: change in species composition	
2 <i>b</i> iii	The assessor must consult the TBDC and/or other sources to report on the current status of the TEC including: Extent of reduction in ecological function for the TEC using evidence that describes the degree of environmental degradation or disruption to biotic processes indicated by: disruption of ecological processes	The STIF Final Determination states the following in relation to the disruption of ecological processes: "The threats to STIF listed above are ongoing and likely to cause continuing declines in geographic distribution and disruption of biotic processes and interactions." The reduction in the geographic distribution of Shale Sydney Turpentine Ironbark Forest was initially due to tree-felling for timber and clearing for crops and pastures (Benson & Howell 1990a). Benson & Howell (1990b) estimated that the community had been reduced to approximately half of its pre-European extent by 1850. Following World War II, there was a marked acceleration in urban and industrial development, which continues to deplete the distribution of the community to the present day. These trends appear likely to continue into the future as the urban area continues to expand to accommodate Sydney's increasing population, which is projected to grow by 1.0-1.1 million people during the 20 years 2007-2026 and 2.2-3.3 million during the 50 years 2007-2056 (Australian Bureau of Statistics 2008). Recent draft plans to develop growth centres in north-west and south-west Sydney, for example, identify staged release of land for residential and employment development over the next 25 years.
		These areas contain approximately 2000 ha (one-fifth) of the estimated remaining Shale Sydney Turpentine Ironbark Forestbased on Tozer (2003), of which about two-thirds will be available for development, the loss of which is planned for offsetting through voluntary land acquisition and/or the establishment of conservation agreements on lands outside the Growth Centres (Growth Centres Commission 2007) for the primary purpose of biodiversity conservation. While important examples of Sydney Turpentine Ironbark Forest are represented within conservation reserves, much of the remaining area of the community occurs on private land or on public easements, where it is at risk from small-scale clearing associated with housing, industrial development

		and transport infrastructure. There are significant logistic and technological constraints and time lags associated with efforts to restore the community (Wilkins et al. 2003; Nichols 2005; Nichols et al. 2005). 'Clearing of native vegetation' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.
T re T ir u d d p a	The assessor must consult the TBDC and/or other sources to eport on the current status of the TEC including: Extent of reduction n ecological function for the TEC using evidence that describes the legree of environmental legradation or disruption to biotic processes indicated by: invasion and establishment of exotic pecies	The STIF Final Determination states the following in relation to weed invasion: "Remnants of Sydney Turpentine-Ironbark Forest are subject to ongoing invasion by an extensive range of naturalised plant species. Weed invasion is exacerbated by the proximity of remnants to areas of rural and urban development and the associated influx of both weed propagules from gardens and nutrients contained in stormwater runoff, dumped garden refuse and animal droppings (Leishman 1990, Benson and Howell 1994, Leishman et al. 2004, Smith and Smith 2010). Species such as Ligustrum lucidum (Large-leafed Privet) and Ligustrum sinense (Small-leafed Privet) are highly invasive under conditions of enhanced soil nutrients and have been recorded in at least half of all plots sampling STIF by Tozer (2003). Other frequently recorded species include the shrubs Ochna serrulata (Mickey Mouse Plant), Phytolacca octandra (Inkweed), Sida rhombifolia (Paddy's Lucerne) and Chrysanthemoides monilifera (Bitou Bush/Boneseed), the scandent shrubs Lantana camara (Lantana) and Asparagus aethiopicus (Asparagus Fern), the climbers Araujia sericifera (Moth Vine), Asparagus asparagoides (Bridal Creeper) and Hedera helix (English Ivy) and the grasses Paspalum dilatatum (Paspalum), Ehrhata erecta (Panic Veldtgrass) and Setaria parviflora (Tozer 2003)".

No	Assessment Criteria	SAII Assessment Information
2bv	The assessor must consult the TBDC and/or other sources to report on the current status of the TEC including: Extent of reduction in ecological function for the TEC using evidence that describes the degree of environmental degradation or disruption to biotic processes indicated by: degradation of habitat	There is no information regarding evidence that describes the degree of environmental degradation or disruption to biotic processes indicated by degradation of habitat.
2bvi	The assessor must consult the TBDC and/or other sources to report on the current status of the TEC including: Extent of reduction in ecological function for the TEC using evidence that describes the degree of environmental degradation or disruption to biotic processes indicated by: fragmentation of habitat	The STIF Final Determination states the following in relation to fragmentation of STIF habitat: "Remnants of Sydney Turpentine-Ironbark Forest are typically small and fragmented and are susceptible to continuing attrition through clearing for routine land management practices due to the majority of remnants being located in close proximity to rural land or urban interfaces (Benson and Howell 1994; Tozer 2003)."
2ci	The assessor must consult the TBDC and/or other sources to report on the current status of the TEC including: Evidence of restricted geographic distribution, based on the TEC's geographic range in NSW according to the: extent of occurrence	The STIF Final Determination states the following with respect to extent of occurrence in NSW: "The distribution of Sydney Turpentine-Ironbark Forest is highly restricted. The extent of occurrence (EOO) of STIF is 4,479 km2 based on a minimum convex polygon enclosing known occurrences of the community as interpreted in Sections $4.2 - 4.10$ and using the method of assessment recommended by IUCN (Bland et al. 2017). The estimated area of occupancy (AOO) is $12\ 10\ km \times 10\ km$ grid cells, the scale recommended for assessing AOO by IUCN and applying a minimum occupancy threshold of 1% (Bland et al. 2017)."
2cii	The assessor must consult the TBDC and/or other sources to report on the current status of the TEC including: Evidence of restricted geographic distribution, based on the TEC's geographic range in NSW according to the: area of occupancy	The STIF Final Determination states the following with respect to extent of occurrence in NSW: "Tozer et al. (2010) estimated some 2,300 ha of STIF remains". "Additional remnants of STIF have been mapped by BMCC (2003) (a total of 190 ha) and Smith and Smith (2008) (148 ha). Combining these maps with the maps of Tozer et al. (2010) and NSW OEH (2013ab) gives an estimated 2,940 ha of STIF remaining"

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2ciii The assessor must consult the TBDC and/or other sources to report on the current status of the TEC including: Evidence of restricted geographic distribution, based on the TEC's geographic range in NSW according to the: number of threat-defined locations	The Final Determination indicates that there is very little STIF CEEC within conservation reserves and "unreserved areas are subject to the threat of vegetation clearing". Reserved areas are described as follows: "An estimated 280 ha of STIF (less than 1% of the pre-European extent) is distributed among 15 reserves (with a minimum area of 0.5 ha) under the management of the NSW National Parks and Wildlife Service (Tozer et al. 2010; BMCC 2003; Smith and Smith 2008; NSW OEH 2013a). This includes 112 ha in Bargo SCA, 49 ha in Blue Mountains NP, 25 ha in Lane Cove NP and 22 ha in Newington NR. A further 254 ha occurs in Crown Reserves and 36 ha is preserved in perpetuity under Biobanking or Conservation Agreements. The total area under reservation is estimated to be 570 ha, equivalent to less than 2% of the estimated pre-1750 distribution or 20% of the remaining extent."
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No	Assessment Criteria	SAII Assessment Information
2d	The assessor must consult the TBDC and/or other sources to report on the current status of the TEC including: Evidence that the TEC is unlikely to respond to management	There is no information regarding evidence that the TEC is unlikely to respond to management. The Department of Environment and Conservation (NSW). (2005) Document - Recovering Bushland on the Cumberland Plain: Best practice guidelines for the management and restoration of bushland. Department of Environment and Conservation (NSW), Sydney outlines theoretical and practical'best practice' guidance for the restoration of STIF, including examples of small remnant patches.
3	Where the TBDC indicates data is 'unknown' or 'data deficient' for a TEC for a criterion listed in Subsection 9.1.1(2.), the assessor must record this in the BDAR or BCAR.	It is difficult to ascertain the 1970 extent of the TEC when most studies have focussed on pre-European extent, therefore pre-European data is referenced in (2a). No information was able to be presented in relation to (2bv) and (2d).
4ai	Include data and information on the impact on the geographic extent of the TEC by estimating the total area of the TEC to be impacted by the proposal: in hectares. Data and information should include direct impacts (i.e. from clearing) and indirect impacts where partial loss of the TEC is likely as a result of the proposal.	The Arborist Impact Assessment Report prepared by Australis Tree Management dated June 2024 states that all locally native trees are proposed for retention. A stormwater drainage easement (1.2m wide) has been proposed along the eastern (rear) boundary of all proposed lots. All trees are proposed for retention within this area which is currently subject to heavy weed invasion. As a precautionary measure, it has been assumed 0.2ha of native vegetation may be indirectly impacted for the installation of stormwater drainage at the rear of the proposed lots as well as edge effects. This has been taken into account into the BAM-C credit calculation. Council can provide conditions of consent to ensure the further protection of this vegetation. The proposed re-zoning to facilitate 2 future indicative building envelopes will be located outside the tree protection zones of locally native trees belonging to the Sydney Turpentine Ironbark Forest Critically Endangered Ecological Community. The arborist report has provided the location of tree protection fencing to ensure all remnant native trees are protected during any essential subdivision works. The land is not mapped as bushfire prone land, therefore, an Asset Protection Zone for potentially resulting in additional vegetation clearing will not be required. Any native vegetation along the rear of the site can be subject to a future Vegetation Management Plan provided to Council prior to the release of the Subdivision Certificate.

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4aii	Include data and information on the impact on the geographic extent of the TEC by estimating the total area of the TEC to be impacted by the proposal: as a percentage of the current geographic extent of the TEC in NSW. Data and information should include direct impacts (i.e. from clearing) and indirect impacts where partial loss of the TEC is likely as a result of the proposal.	According to the Final Determination the current estimate of STIF CEEC in NSW is 2,940 ha. The total area impacted by the proposed is less than 0.02 ha. Therefore, the impact of the proposal on the geographic extent is estimated at less than 0.01%.
4bi	The extent that the proposed impacts are likely to contribute to further environmental degradation or the disruption of biotic processes of the TEC by: estimating the size of any remaining, but now isolated, areas of the TEC; including areas of the TEC within 500 m of the development footprint or equivalent area for other types of proposals.	This patch will not be fragmented by the proposal.

No	Assessment Criteria	SAII Assessment Information				
4bii	The extent that the proposed impacts are likely to contribute to further environmental degradation or the disruption of	The total area of the STIF CEEC patch in the east of the subject lan greater than 2 ha if all trees within surrounded backyards and r frontages are taken into consideration.				
	biotic processes of the TEC by: describing the impacts on connectivity and fragmentation of the remaining areas of TEC measured by:	No fragmentation will occur as existing STIF trees along the eastern boundary will be retained and it is expected that the flora and fauna within the Forest will be able to readily disperse between these two areas.				
	 distance between isolated areas of the TEC, presented as the average distance if the remnant is retained AND the average distance if the remnant is removed as proposed, and estimated maximum dispersal distance for native flora species characteristic of the TEC, and other information relevant to describing the impact on connectivity and fragmentation, such as the area to perimeter ratio for remaining areas of the TEC as a result of the development 	including areas off-site on adjacent properties. The removal of one tree				
4biii	The extent that the proposed impacts are likely to contribute to further environmental degradation or the disruption of	The Vegetation Integrity (VI) of the STIF CEEC vegetation is 28.6 and is made up of thefollowing scores for composition, structure and function:				
	biotic processes of the TEC by: describing the condition of the	PCT Vegetation Zone Composition Structure Function Vegetation Condition Condition Condition Integrity				
	TEC according to the vegetation integrity score for the relevant vegetation zone(s) (Section 4.3). The assessor must also include the relevant composition, structure and function condition scores for each vegetation zone.	Score Score <th< td=""></th<>				
5	The assessor may also provide new information that demonstrates that the principle identifying that the TEC is at risk of an SAII is not accurate.	N/A				

6 **BIBLIOGRAPHY**

- Cropper, S. (1993). *Management of Endangered Plants*. CSIRO Publications, East Melbourne, Victoria.
- Department of Environment and Resource Management (2011). *National recovery plan for the large-eared pied bat Chalinolobus dwyeri*. Report to the Department of Sustainability, Environment, Water, Population and Communities, Canberra.
- DEC (2004). Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities. Working Draft November 2004.
- DEE (2008). Approved Conservation Advice for Cynanchum elegans (White-flowered Wax Plant). A statement for the purposes of approved conservation advice (s266B of the Environment Protection and Biodiversity Conservation Act 1999).
- DEE (2008). Approved Conservation Advice for Cryptostylis hunteriana (Leafless Tongue-orchid). A statement for the purposes of approved conservation advice (s266B of the Environment Protection and Biodiversity Conservation Act 1999).
- DEE (2018). Species Profile and Threats Database. Accessed June-Septemer 2018. < http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>
- DEWHA (2013). Matters of National Environmental Significance Significant Impact Guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999. Commonwealth of Australia.
- Harden, G. (ed) (2002). *Flora of New South Wales, Volume 2*. Revised edition. New South Wales University Press, NSW.
- Harden, G. (ed) (2000). *Flora of New South Wales, Volume 1*. Revised edition. New South Wales University Press, NSW.
- Harden, G. (ed) (1993). *Flora of New South Wales, Volume 4*. New South Wales University Press, NSW.
- Harden, G. (ed) (1992). *Flora of New South Wales, Volume 3.* New South Wales University Press, NSW.
- Morcombe, M. and Stewart, D. (2010). *The Michael Morcombe eGuide to the Birds of Australia*. PDA Solutions Pty Ltd.
- NSW Office of Water (2012). *Guidelines for Riparian Corridors on Waterfront Land*. July 2012.
- NSW Scientific Committee (2012) Listing guidelines version 1.3, January 2012. Guidelines for interpreting listing criteria for species, populations and ecological communities under the NSW Threatened Species Conservation Act.
- OEH (2016). NSW Guide to Surveying Threatened Plants (OEH, 2016)
- OEH (2017). Biodiversity Assessment Method, 2017 No 469.
- OEH (2017). Guidance to Assist a Decision-maker to Determine a Serious and Irreversible Impact.

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- OEH (2018a) Saving NSW Threatened Species, accessed June-September 2018. http://www.environment.nsw.gov.au/threatenedspecies/.
- OEH (2018b) Atlas of NSW Wildlife (BioNET), accessed June-September 2018. http://www.bionet.nsw.gov.au/.
- OEH (2018c) Six Maps, accessed June-September 2018. http://maps.six.nsw.gov.au/apps/channels-3.5/?config=vegetation.
- OEH (2018d). 'Species credit' threatened bats and their habitats: NSW survey guide for the Biodiversity Assessment Method. 3 October 2018
- Robinson, L. (2003). *Field Guide to the Native Plants of Sydney*. 3rd ed. Kangaroo Press, Cammeray NSW.
- Robinson, M. (1998). A Field Guide to Frogs of Australian. New Holland Publishers (Australia Pty Ltd).
- Rose, H. & Rose, C. (2012). *Grasses of Coastal NSW*. Department of Primary Industries, NSW.
- Richardson, F.J., Richardson, R.G. and Shepherd, R.C.H. (2016). *Weeds of the South-East: An Identification Guide for Australia*. 3rd Edition. R.G and F.J. Richardson, Meredith Vic.
- Scotts, D. (2003). Key habitats and corridors for forest fauna: A landscape framework for conservation in north-east New South Wales. NSW NPWS Occasional Paper 32, NSW National Parks and Wildlife Service, Sydney.
- Triggs, B. (2004). *Tracks, Scats and Other Traces: a Field Guide to Australian Mammals.* Oxford University Press, Australia.
- Van Dyck, S., Gynther, I. and Baker, A. (2013). *Field Companion to the Mammals of Australia*. New Holland Publishers, Sydney.

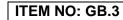
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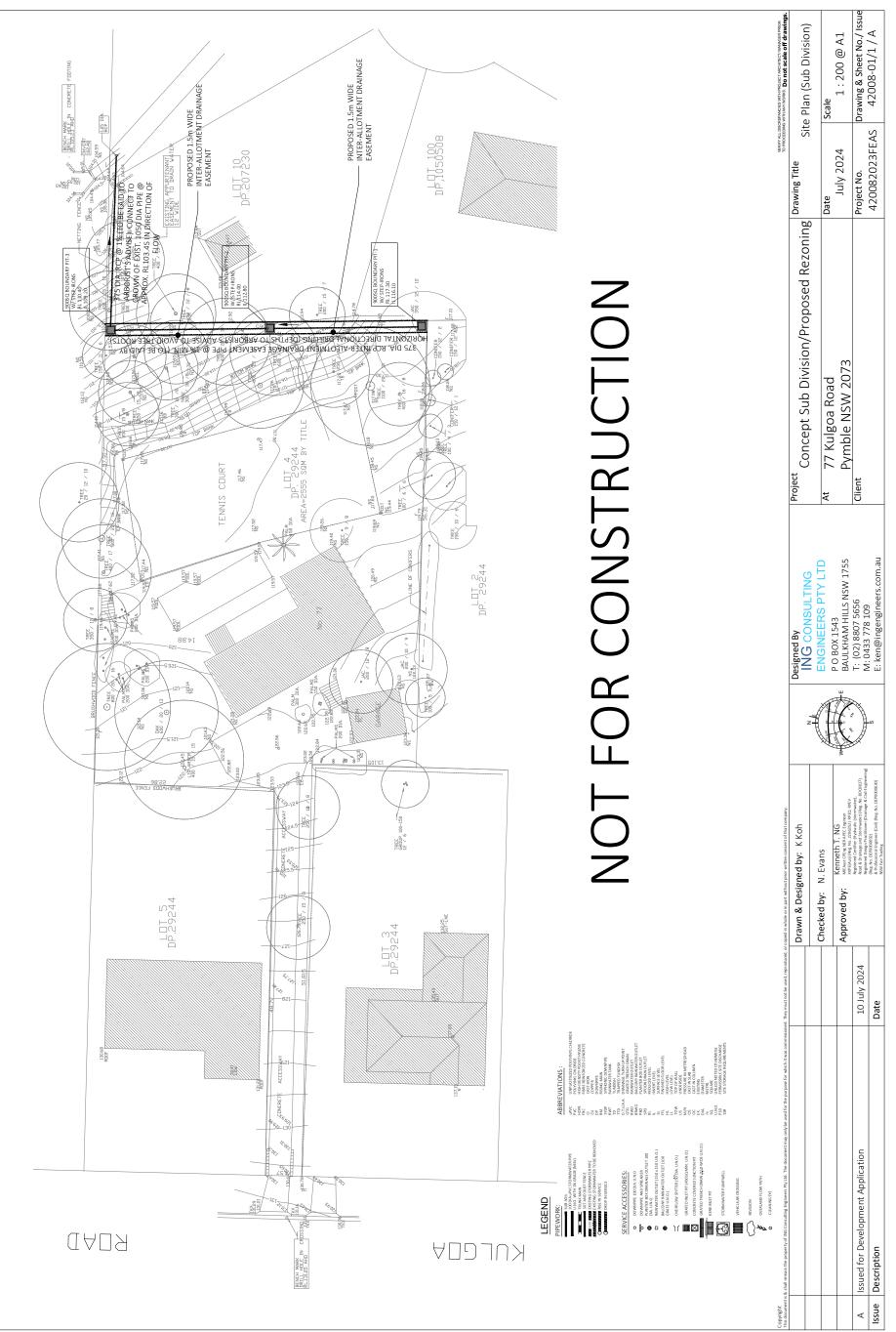
APPENDIX A SITE PLANS

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APPENDIX B PLOT DATA

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BAM Site – Field Survey Form

Survey Name		Date	Zone ID	Recorders	
73 &77 Kulgoa Ro	ad Pymble	20 June 2023	1	Alex Fraser	
Zone: 56	Datum: MGA	Plot ID: 1	Plot dimension	s: 50x20 m	Photo #: 1 and 2
Easting: 329267	Northing: 6265026	IBRA region: Sydn	ey Basin	Midline bearing	from 0 m:
Vegetation Formation: Wet Sclerophyll Forests (Grassy sub-formation)					Confidence H
Vegetation Class: Northern Hinterland Wet Sclerophyll Forests					
Sydney Turpentine Ironbark Forest PCTID: 3262 EEC: Yes - STIF CEEC					Confidence H

Record easting and northing at 0m on midline. Dimensions (Shape) of 0.04ha base plot.

BAM Attribute (400m ² plot)	Sum values		Cover: 0.1, 0.2, 0.3
	Count of native richness	Cover	1,2,3,,10, 15, 20, 25, 100% (foliage cover). <i>Note:</i>
Trees	8	34	0.1% cover is approx 63x63 cm
Shrubs	0	0	or a circle about 71 cm diameter,
Grasses etc.	1	1	0.5% approx. 1.4 x 1.4m, 2% cover is approx. 2 x 2m, 5% = 4
Forbs	0	0	x 5m, 25% 10 x 10m
Ferns	0	0	
Other	1	1	
High threat weed cover		28.5	

BAM Attribute (1000m ² pl	ot)		Counts apply when the number of
DBH	#Tree Stems Count	#Stems with Hollows	tree stems within a size class is ≤ 10. Estimate can be used when >
80 + cm	2	-	10 (eg. 10, 20, 30100, 200). For
50 – 79 cm	4	-	a multi-stemmed tree, only the
30 – 49 cm	4	-	largest living stem is included in the count / estimate. Tree stems must
20 – 29 cm	3	-	be living.
10 – 19 cm	-	-	
5 – 9 cm	-	-	For hollows, count only the
<5 cm	-		presence of a stem containing hollows. For a multi-stemmed tree.
Length of logs (m) (≥ 10 cm diameter, >50cm in length)	Tally: 0	Total: 0	only the largest stem is included in the count/estimate. Stems may be dead and may be shrubs.

BAM Attribu	ite (1	x 1	m ple	ots)																
	Litt	er co	over	%		Bar %	e g	roun	d co	over	Cry	ptog	am o	ovei	r %	Roo	ck co	over 9	%	
Subplot	5	15	25	35	45	5	15	25	35	45	5	15	25	35	45	5	15	25	35	45
score % in each	70	70	70	70	70															

BAM Vegetation Survey Datasheet

Average	70		
of the 5			
subplots			

Litter cover includes leaves, seeds, twigs, branchlets and branches (less than 10cm in diameter)

BAM Vegetation Survey Datasheet

400m ²	² plot: Sheet1_ of 1_	Survey Name	Plot ID		Reco	rders		
Date:	20/6/23	73 &77 Kulgoa Road Pymble	2		Alex	Fraser		
GF Code	Top 3 native species in each gro name mandatory. All other nat species name where practicable	ive and exotic species: fu		Cover	Abund	Stratum	Voucher	Photo #
Т	Angophora costata		N	5	1			
Т	Syncarpia glomulifera		N	15	2			
Т	Eucalyptus saligna		N	5	1			
Т	Eucalyptus piluarus		N	3	1			
Т	Pittosporum undulatum	1	N	1	1			
Т	Brachychiton acerifoliu	s	N	3	1			
Т	Grevillea robusta		N	5	1			
Т	Celtis sinensis		E	5	1			
Т	Cedrus deodara		E	5				
Т	Jacaranda mimosifolia		E	2				
Т	Camellia reticulata		E	3				
	Tradescantia flumiensi	s	HTE	10				
	Solanum nigrum		E	0.1				
G	Oplismenus imbecillis		N	1				
OG	Dichondra repens		N	1				
	Hedychium gardnerian	um	E	0.1				
	Anredera cordifolia		HTE	15				
	Lonicera japonica		HTE	2				
	Agapanthus praecox		Е	1		1		
	Ehrharta erecta		HTE	1				
	Thirsium vulgare		HTE	0.5				
	Ochna serrulata		E	0.1				
Т	Stenocarpus sinuatus		N	2	1			

BAM Site – Plot Species List

N: native, E:exotic, HTE: high threat exotic, GF – circle code if 'top 3'

Cover: 0.1, 0.2, 0.3,...., 1,2,3,....,10, 15, 20, 25, 100% (foliage cover). Note: 0.1% cover is approx.. 63x63 cm or a circle about 71 cm diameter, 0.5% approx. 1.4 x 1.4m, 2% cover is approx. 2 x 2m, 5% = 4 x 5m, 25% 10 x 10m Abundance: 1, 2, 3,10, 20, 30, 100, 200,...., 1000Stratum: E – emergent, C – canopy, M – mid-storey / sub canopy, S – shrub layer, G – ground layer

BAM Vegetation Survey Datasheet

APPENDIX C QUALIFICATION, LICENSING AND CERTIFICATION

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Alexander Fraser

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Key skills

- 12+ years private ecological consulting (Fraser Ecological Consulting)
- 15 + years local government ecological assessment for DAs (Hornsby Shire Council current employer)
- 10 + years Land & Environment Court expert witness experience
- 2 years state government ecological assessment (NSW OEH)
- High level botanical field identification skills, plot surveys and project management
- Fauna survey and field assistant experience
- **Biodiversity Assessment** Reporting (BDAR) preparation and Stewardship Site (BSAR) under the NSW **BOS Credit Scheme**

Qualifications

Bachelor Environmental Science (Honours) Southern Cross University

Certificate 3 Natural Area Restoration

Certificate 3 Vertebrate Animal Pest Control (NSW DPI, Orange)

NPWS Scientific Licence - S10445

Animal Ethics Authority - 11/4299

Accredited under the Biodiversity Assessment Methodology - BAM (Accreditation No. BAAS18156)

Practising member of NSW Ecological Consultants Association (ECA)

Summary

Alex Fraser (Principal Ecologist, Fraser Ecological) has extensive experience in DA related ecological assessment as both an assessor (Hornsby Shire Council) and private consultancy (Fraser Ecological) which actively and currently involve a wide array projects. Fraser Ecological is based locally on the Central Coast, however, project experience extends to South Coast, Blue Mountains, Mid-north Coast and mainly in the Sydney Basin Bioregion.

Previous work roles include ecological consulting for Parsons Brinckerhoff (large infrastructure), NPWS threatened species unit (biodiversity surveys), former NSW Department of Climate Change/ OEH (SIS DGRs and major projects assessment) and Hornsby Shire Council (DA assessment officer) have focussed primarily on ecological survey, development assessment, project management and policy development for consent authorities.

Alex offers high level botanical ID and field survey skills which includes targeted surveys and BAM plot surveys. Fraser Ecological has extensive experience in the preparation of over 15 BDARs under the new BC Act 2016 BOS credit trading scheme. Alex has experience dealing with consent authorities including Council, Crown Lands, Metropolitan Land Council, RFS, Biodiversity Conservation Trust and Department of Planning for major projects including SSDI proposals.

Fraser Ecological has established a wide network of ecological specialists including the Royal Botanic Gardens and Australian Museum as well academic institutions for expert advice when required. Alex is a current member of the North Sydney Regional Land Managers Group that includes staff from Central Coast Council, Northern Beaches, Ku-ring-gai Council, Hornsby Council (HSC), NPWS and Crown Lands) as project manager developing the Natural Area Recreation Strategy for HSC. Current main role at Council is development assessment and review of Flora and Fauna Reports and Biodiversity Assessment Reports.

Fraser Ecological has been engaged by various Councils (Central Coast, Ku-ring-gai, Liverpool City, Blacktown City Council, Hornsby Shire Council and Hawkesbury City Council) to undertake biodiversity assessments for major civil works projects. He is continuously providing biodiversity assessments for private clients for a range od development proposals across coastal and western NSW. We have also undertaken threatened flora and fauna species survey and monitoring for the NSW OEH Save our Species grants.

Key skills:

- Targeted flora and fauna surveys
- BAM plots in accordance with the BAM
- Ecological monitoring & Opportunity and Constraints mapping
- Preparation of BDARs, BAM calculator and credit reporting
- Retirement of credits for approved projects via BCT and brokers
- Establishment of stewardship sites and other offset packages
- Expert witness reporting and attendance in the LAFC Compliance investigations and auditing
- Preparation of Vegetation Management Plans
- Preparation of Nestbox Monitoring Plans



Planning, Industry & Environment

CERTIFICATE OF ACCREDITATION AS A BIODIVERSITY ASSESSMENT METHOD ASSESSOR under the *Biodiversity Conservation Act 2016* (NSW)

BAM Assessor		
Alexander Fraser		
Accreditation number	Accreditation date (Date of issue)	Expiry Date of
BAAS18156	17 October 2021	17 October 2024

The person named above is accredited under section 6.10 of the *Biodiversity Conservation Act 2016* (NSW) (**BC Act**) as a Biodiversity Assessment Method Assessor to apply the Biodiversity Assessment Method in connection with the preparation of biodiversity stewardship site assessment reports, biodiversity development assessment reports and biodiversity certification assessment reports pursuant to Part 6 of the BC Act.

The accreditation is in force until and including the Expiry Date. The accreditation is subject to the conditions set out in the *Accreditation Scheme for the Application of the Biodiversity Assessment Method*, under the BC Act, and the conditions specified on the reverse of this certificate.

LUCIAN MCELWAIN

Manager Ecosytem Programs Department of Planning, Industry & Environment

NOTES

- DPIE maintains a register of Accredited Biodiversity Assessment Method (BAM) Assessors accessible from the DPIE website.
- The BAM Assessor's accreditation expires on the Expiry Date unless renewed in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method. It is the BAM Assessor's responsibility to monitor the Expiry Date of their accreditation, and apply for any renewal with sufficient time for the application to be processed prior to the Expiry Date.
- Words and expressions used in this accreditation instrument and which are also used in the Act have the same meaning.

SUMMARY OF CONDITIONS UNDER SCHEME

The following are conditions of all accreditations granted under the Scheme:

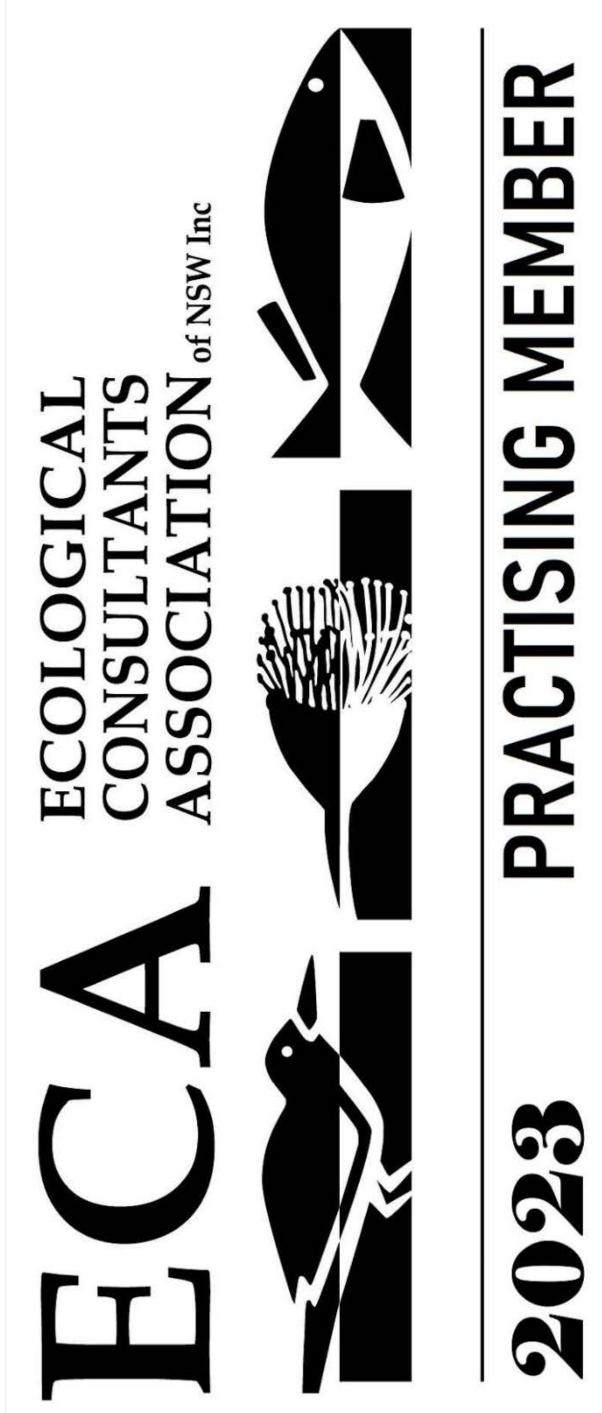
- an accredited person must prepare Biodiversity Assessment Reports (and conduct surveys and other activities in connection with the preparation of such reports) in accordance with:
 - a. the Biodiversity Assessment Method Manual,
 - b. the Credit Calculator Operational Manual,
 - c. Accredited Person Code of Conduct.
 - d. this Scheme,
 - e. any guidance materials published by the Department of Planning, Industry and Environment in connection with preparation of Biodiversity Assessment Reports or the application of the BAM
 - f. any accreditation requirements notified by the Department of Planning, Industry and Environment to the accredited assessor from time to time.
- 2. an accredited person must maintain a detailed and up to date working knowledge of, and comply with, all relevant legislation.
- 3. an accredited person must maintain records of surveys and assessments, including field data sheets and targeted flora and fauna surveys, undertaken and used as part of the preparation of a Biodiversity Assessment Report, for at least ten years after certification of the relevant Biodiversity Assessment Report.
- 4. all records required kept by an accredited person must be in legible form, or in a form that can be readily be reduced to a legible form.
- 5. an accredited person must provide to the Department of Planning, Industry and Environment any information related to biodiversity assessment reports required to be provided by all accredited persons, or by a group of accredited persons, by way of a notice specified on a website maintained by it, in the form and within the time frames required in that notice.
- 6. an accredited person must comply with any scientific licence conditions relating to survey records.
- 7. an accredited person must possess, or operate under, an appropriate scientific licence as required for the type work, they are completing in the Biodiversity Offsets Scheme.

Note. Information that the Environment Agency Head (EAH) may require to be provided may include information collected during the application of the BAM such as site specific survey data.

Note. In addition to the conditions above, accredited persons must comply with obligations under the BC Act and regulations, including Part 6 Division 3 of the BC Act. Failure to comply with any of the conditions above may result in the EAH exercising the power to vary, suspend or cancel that accreditation under Part 5 of this Scheme.

Certificate of Accreditation for Alexander Fraser (BAM Assessor Number BAAS18156) as a Biodiversity Assessment Method Assessor under the *Biodiversity Conservation Act 2016*

Issued by the Department of Planning, Industry & Environment 4 Parramatta Square,12 Darcy Street | Locked Bag 5022, Parramatta NSW 2124 Email: info@environment.nsw.gov.au Website: www.dpie.nsw.gov.au



ITEM NO: GB.3

20250217-KLPP-Crs-2025/032626/459

APPENDIX D BAM SUMMARY REPORTS

BDAR – 77 KULGOA AVENUE PYMBLE

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NSN

BAM Biodiversity Credit Report (Variations)

Details
posal
Pro

Assessment Id 00041481/BAAS18156/23/00041482	Proposal Name 73 Kulgoa Road Pymble	BAM data last updated *
Assessor Name	Assessor Number	BAM Data version *
Alex FRASER	BAAS18156	61
Proponent Name(s)	Report Created	BAM Case Status
John Leece	11/01/2024	Finalised
Assessment Revision	Assessment Type	Date Finalised
2	Part 4 Developments (Small Area)	11/01/2024
BOS entry trigger BOS Threshold: Biodiversity Values Map	* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.	partial update of the BAM aligned with Bionet.

Potential Serious and Irreversible Impacts

Name of threatened ecological community	Listing status	Name of Plant Community Type/ID
Sydney Turpentine-Ironbark Forest in the Sydney Critically Endangered 3262-Sydney Turpentine Ironbark Forest Basin Bioregion Ecological Community	Critically Endangered Ecological Community	3262-Sydney Turpentine Ironbark Forest
Species		
Nil		
Internet to the second of the second s		

Additional Information for Approval

PCT Outside Ibra Added

None added

Assessment Id

NSW GOVERNMENT

BAM Biodiversity Credit Report (Variations)

mizod Bonchmarks PCTs With Cust

PCT				
No Changes				
Predicted Threatened Species Not On Site				
Name				
No Changes				
Ecosystem Credit Summary (Number and class of biodiversity credits to be retired)	biodiversity credits to be retired)			
Name of Plant Community Type/ID	Name of threatened ecological community Area of impact HBT Cr No HBT Cr Total credits to be retired	Area of impact HBT C	Cr No HBT Cr	Total credits to be retired

								be retired
3262-Sydney Turpentine Ironbark Forest		Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion	Forest in the		0.2	0	~	1.00
3262-Sydney Turpentine	Like-for-like credit retirement options	ement options						
Ironbark Forest	Class	Trading group	Zone	НВТ	Credits	IBRA region		
	Sydney Turpentine- Ironbark Forest in the Sydney Basin Bioregion This includes PCT's: 3262	1	3262_Poor No	°Z	-	Cumberland, Burragorang, Pittwater, Sydney Cataract, Wollemi and Yengo. or Any IBRA subregion that is within 100 kilometers of the outer edge of the impacted site.	Surragorang, Pi act, Wollemi an or region that is w the outer edge	id Yengo. vithin 100 e of the
Species Credit Summary No Species Credit Data								

Like-for-like options **Credit Retirement Options**

Assessment Id

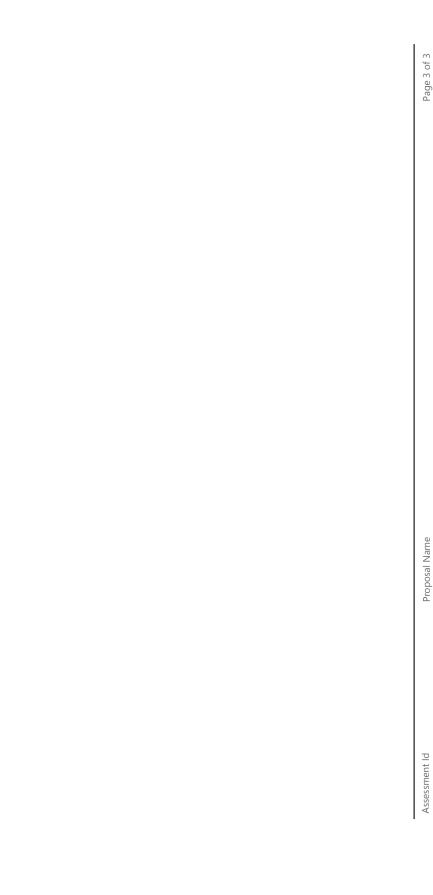
73 Kulgoa Road Pymble Proposal Name 00041481/BAAS18156/23/00041482

Page 2 of 3

ITEM NO: GB.3

73 Kulgoa Road Pymble

00041481/BAAS18156/23/00041482



BAM Biodiversity Credit Report (Variations)

SOVERNMENT

NSW GOVERNMENT	BAM	BAM Biodiversity Credit Report (Like for like)	(Like for like)
Proposal Details			
Assessment Id	Pr	Proposal Name	BAM data last updated *
00041481/BAAS18156/23/00041482	73	73 Kulgoa Road Pymble	22/06/2023
Assessor Name	As	Assessor Number	BAM Data version *
Alex FRASER	BA	BAAS18156	61
Proponent Names	Re	Report Created	BAM Case Status
John Leece	11	11/01/2024	Finalised
Assessment Revision	As	Assessment Type	Date Finalised
2	Ра	Part 4 Developments (Small Area)	11/01/2024
BOS entry trigger	* Disclain	* Disclaimer: BAM data last updated may indicate either complete or partial update of the	or partial update of the
BOS Threshold: Biodiversity Values Map	BAM calc	BAM calculator database. BAM calculator database may not be completely aligned with Bionet.	npletely aligned with Bionet.
Potential Serious and Irreversible Impacts	ts		
Name of threatened ecological community	Listing status	Name of Plant Community Type/ID	
Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion	Critically Endangered Ecological Community	3262-Sydney Turpentine Ironbark Forest	
Species			

(e)

GOVERNMENT GOVERNMENT	BAM Biodiversity Credit Report (Like for	eport (Like for
Proposal Details		
Assessment Id	Proposal Name	BAM data last u
00041481/BAAS18156/23/00041482	73 Kulgoa Road Pymble	22/06/2023
Assessor Name Alex FRASER	Assessor Number BAAS18156	BAM Data versi 61
Proponent Names John Leece	Report Created 11/01/2024	BAM Case Statu Finalised
Assessment Revision 2	Assessment Type Part 4 Developments (Small Area)	Date Finalised 11/01/2024
BOS entry trigger	* Disclaimer: BAM data last updated may indicate either complete or partial update of	r complete or partial update of

Poten

Name of threatened ecological community	Listing status	Name of Plant Community Type/ID
Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion	Critically Endangered Ecological Community	3262-Sydney Turpentine Ironbark Forest
Species		
Nil		
Additional Information for Approval		

Approval 0 U 2

Proposal Name 00041481/BAAS18156/23/00041482 Assessment Id

73 Kulgoa Road Pymble

Page 1 of 4

BAM Biodiversity Credit Report (Like for like)

PCT Outside Ibra Added

None added

PCTs With Customized Benchmarks

PCT

PCT	
No Changes	
Predicted Threatened Species Not On Site	

Predicte

No Changes Name

Ecosystem Credit Summary (Number and class of biodiversity credits to be retired)

Name of Plant Community Type/ID	Name of threatened ecological community	Area of impact HBT Cr No HBT Total credits to Cr be retired	HBT Cr	No HBT Cr	Total credits to be retired
3262-Sydney Turpentine Ironbark Forest	Sydney Turpentine-Ironbark Forest in the Svdnev Basin Bioregion	0.2	0	-	~

Proposal Name 00041481/BAAS18156/23/00041482 Assessment Id

73 Kulgoa Road Pymble

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BAM Biodiversity Credit Report (Like for like)

3262-Sydney Turpentine	Like-for-like credit retirement options	ement options				
Ironbark Forest	Name of offset trading Trading group	Trading group	Zone	НВТ	Credits	IBRA region
	Sydney Turpentine- Ironbark Forest in the Sydney Basin Bioregion This includes PCT's: 3262		3262_Poor	0 N	-	 Cumberland, Burragorang, Pittwater, Sydney Cataract, Wollemi and Yengo. or Any IBRA subregion that is within 100 kilometers of the outer edge of the innoced cire

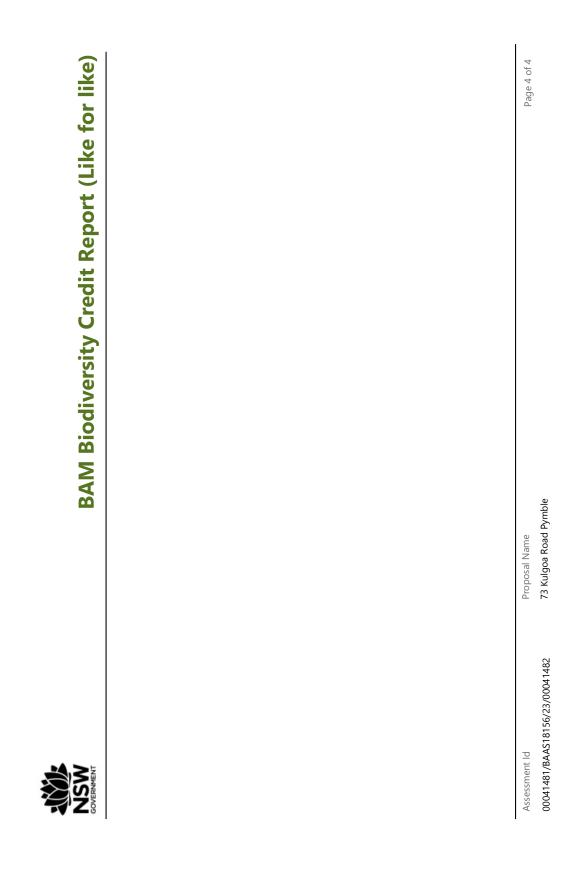
Species Credit Summary No Species Credit Data **Credit Retirement Options**

Like-for-like credit retirement options

Proposal Name 73 Kulgoa Road Pymble

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BAM Candidate Species Report

Proposal Details

Assessment Id	Proposal Name	BAM data last updated *
00041481/BAAS18156/23/00041482	73 Kulgoa Road Pymble	22/06/2023
Assessor Name	Report Created	BAM Data version *
Alex FRASER	11/01/2024	61
Assessor Number	Assessment Type	BAM Case Status
BAAS18156	Part 4 Developments (Small Area)	Finalised
Assessment Revision	Date Finalised	BOS entry trigger
2	11/01/2024	BOS Threshold: Biodiversity Values Map

* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.

List of Species Requiring Survey

Name Presence Survey Months

Threatened species Manually Added

None added

Threatened species assessed as not on site

Refer to BAR for detailed justification

Common name	Scientific name	Justification in the BAM-C
Broad-headed Snake	Hoplocephalus bungaroides	Geographic limitations
Darwinia peduncularis	Darwinia peduncularis	Refer to BAR
Eastern Australian Underground Orchid	Rhizanthella slateri	Refer to BAR
Haloragodendron lucasii	Haloragodendron lucasii	Geographic limitations
Julian's Hibbertia	Hibbertia spanantha	Refer to BAR
Large Bent-winged Bat	Miniopterus orianae oceanensis	Refer to BAR
Large-eared Pied Bat	Chalinolobus dwyeri	Refer to BAR
Little Bent-winged Bat	Miniopterus australis	Refer to BAR

Assessment Id

Proposal Name

Page 1 of 2

00041481/BAAS18156/23/00041482

73 Kulgoa Road Pymble

ATTACHMENT NO: 5 - APPENDIX B - BIODIVERSITY DEVELOPMENT ASSESSMENT REPORT (BDAR) - 77 KULGOA ROAD, PYMBLE



BAM Candidate Species Report

Regent Honeyeater	Anthochaera phrygia	Refer to BAR
Scrub Turpentine	Rhodamnia rubescens	Refer to BAR
Swift Parrot	Lathamus discolor	Refer to BAR

Assessment Id 00041481/BAAS18156/23/00041482 Proposal Name 73 Kulgoa Road Pymble Page 2 of 2

BAM Credit Summary Report

Proposal Details

Assessment Id	Proposal Name	BAM data last updated *
00041481/BAAS18156/23/00041482	73 Kulgoa Road Pymble	22/06/2023
Assessor Name	Report Created	BAM Data version *
Alex FRASER	11/01/2024	61
Assessor Number	BAM Case Status	Date Finalised
BAAS18156	Finalised	11/01/2024
Assessment Revision	Assessment Type	BOS entry trigger
2	Part 4 Developments (Small Area)	BOS Threshold: Biodiversity Values Map
* Disclari	* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator	or partial update of the BAM calculator

* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.

Ecosystem credits for plant communities types (PCT), ecological communities & threatened species habitat

one V	egetatio	 Vegetatio TEC name 	Current	Change in	Are	Change in Are Sensitivity to	Species	BC Act Listing	EPBC Act	Biodiversit Potenti Ecosyste	Potenti	Ecosyste
2			Vegetatio	Vegetatio Vegetatio a loss	e	loss	sensitivity to	status	listing status	y risk al SAII m credits	al SAII	m credits
Z	zone		Ē	n integrity	(ha)	n integrity (ha) (Justification) gain class	gain class			weighting		
Ċ	ame		integrity	(loss /								
			score	gain)								

Proposal Name 73 Kulgoa Road Pymble

Assessment Id 00041481/BAAS18156/23/00041482

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ATTACHMENT NO: 5 - APPENDIX B - BIODIVERSITY **DEVELOPMENT ASSESSMENT REPORT (BDAR) - 77 KULGOA** ROAD, PYMBLE

ITEM NO: GB.3

ort	-	-	-		Si S	Page 2 of 2
Sep					Species credits	Page
nary I	2.50 True	Subtot al	Total		Potential SAII	
: Sumi	- U				EPBC Act listing status	
Credit	Not Listed				EPBC / status	
BAM Credit Summary Report	Critically Endangered Ecological Community				BC Act Listing status	
	High Sensitivity to Gain				Sensitivity to Sensitivity to loss gain (Justification) (Justification)	υ
	0.2 Population size				Sensitivity to loss (Justification)	Proposal Name 73 Kulgoa Road Pymble
	0.0 0.2				Area (ha)/Count (no. individuals)	Propo 73 Kul
	t 28.6			species	Change in habitat condition	
	The Ironbark Fores: Sydney Turpentine - Ironbark Forest in the Sydney Basin Bioregion			Species credits for threatened species	Vegetation zone Habitat condition Change in name (Vegetation habitat Integrity) condition	56/23/00041482
ACCERCIANENT COVERNMENT	Sydney Turpentine Ironbark Forest 1 3262_Poor Sydney Turpentine- Ironbark Forest in the Sydney Basin Bioregion			Species credits	Vegetation zone H name (Assessment Id 00041481/BAAS18156/23/00041482

ATTACHMENT NO: 5 - APPENDIX B - BIODIVERSITY DEVELOPMENT ASSESSMENT REPORT (BDAR) - 77 KULGOA ROAD, PYMBLE



BAM Predicted Species Report

Proposal Details

Assessment Id	Proposal Name	BAM data last updated *
00041481/BAAS18156/23/00041482	73 Kulgoa Road Pymble	22/06/2023
Assessor Name	Report Created	BAM Data version *
Alex FRASER	11/01/2024	61
Assessor Number	Assessment Type	BAM Case Status
BAAS18156	Part 4 Developments (Small Area)	Finalised
Assessment Revision	BOS entry trigger	Date Finalised
2	BOS Threshold: Biodiversity Values Map	11/01/2024

* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.

Threatened species reliably predicted to utilise the site. No surveys are required for these species. Ecosystem credits apply to these species.

Common Name	Scientific Name	Vegetation Types(s)
Barking Owl	Ninox connivens	3262-Sydney Turpentine Ironbark Forest
Black Bittern	Ixobrychus flavicollis	3262-Sydney Turpentine Ironbark Forest
Black-chinned Honeyeater (eastern subspecies)	Melithreptus gularis gularis	3262-Sydney Turpentine Ironbark Forest
Black-necked Stork	Ephippiorhynchus asiaticus	3262-Sydney Turpentine Ironbark Forest
Broad-headed Snake	Hoplocephalus bungaroides	3262-Sydney Turpentine Ironbark Forest
Brown Treecreeper (eastern subspecies)	Climacteris picumnus victoriae	3262-Sydney Turpentine Ironbark Forest
Diamond Firetail	Stagonopleura guttata	3262-Sydney Turpentine Ironbark Forest
Dusky Woodswallow	Artamus cyanopterus cyanopterus	3262-Sydney Turpentine Ironbark Forest
Eastern Coastal Free-tailed Bat	Micronomus norfolkensis	3262-Sydney Turpentine Ironbark Forest
Eastern False Pipistrelle	Falsistrellus tasmaniensis	3262-Sydney Turpentine Ironbark Forest

Assessment Id

Proposal Name

00041481/BAAS18156/23/00041482

73 Kulgoa Road Pymble

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BAM Predicted Species Report

Eastern Osprey	Pandion cristatus	3262-Sydney Turpentine Ironbark Forest
Flame Robin	Petroica phoenicea	3262-Sydney Turpentine Ironbark Forest
Gang-gang Cockatoo	Callocephalon fimbriatum	3262-Sydney Turpentine Ironbark Forest
Glossy Black- Cockatoo	Calyptorhynchus lathami	3262-Sydney Turpentine Ironbark Forest
Greater Broad-nosed Bat	Scoteanax rueppellii	3262-Sydney Turpentine Ironbark Forest
Grey-headed Flying- fox	Pteropus poliocephalus	3262-Sydney Turpentine Ironbark Forest
Hooded Robin (south-eastern form)	Melanodryas cucullata cucullata	3262-Sydney Turpentine Ironbark Forest
Large Bent-winged Bat	Miniopterus orianae oceanensis	3262-Sydney Turpentine Ironbark Forest
Little Bent-winged Bat	Miniopterus australis	3262-Sydney Turpentine Ironbark Forest
Little Eagle	Hieraaetus morphnoides	3262-Sydney Turpentine Ironbark Forest
Little Lorikeet	Glossopsitta pusilla	3262-Sydney Turpentine Ironbark Forest
Masked Owl	Tyto novaehollandiae	3262-Sydney Turpentine Ironbark Forest
Painted Honeyeater	Grantiella picta	3262-Sydney Turpentine Ironbark Forest
Powerful Owl	Ninox strenua	3262-Sydney Turpentine Ironbark Forest
Regent Honeyeater	Anthochaera phrygia	3262-Sydney Turpentine Ironbark Forest
Rosenberg's Goanna	Varanus rosenbergi	3262-Sydney Turpentine Ironbark Forest
Speckled Warbler	Chthonicola sagittata	3262-Sydney Turpentine Ironbark Forest
Spotted-tailed Quoll	Dasyurus maculatus	3262-Sydney Turpentine Ironbark Forest
Square-tailed Kite	Lophoictinia isura	3262-Sydney Turpentine Ironbark Forest
Swift Parrot	Lathamus discolor	3262-Sydney Turpentine Ironbark Forest
Varied Sittella	Daphoenositta chrysoptera	3262-Sydney Turpentine Ironbark Forest
White-bellied Sea- Eagle	Haliaeetus leucogaster	3262-Sydney Turpentine Ironbark Forest
White-throated Needletail	Hirundapus caudacutus	3262-Sydney Turpentine Ironbark Forest
Yellow-bellied Sheathtail-bat	Saccolaimus flaviventris	3262-Sydney Turpentine Ironbark Forest

Assessment Id

Proposal Name

Page 2 of 3

00041481/BAAS18156/23/00041482

73 Kulgoa Road Pymble



BAM Predicted Species Report

Threatened species Manually Added

None added

Threatened species assessed as not within the vegetation zone(s) for the PCT(s) Refer to BAR for detailed justification

Common Name	Scientific Name	Justification in the BAM-C

Assessment Id 00041481/BAAS18156/23/00041482 Proposal Name 73 Kulgoa Road Pymble Page 3 of 3

BAM Vegetation Zones Report

ROAD, PYMBLE

ATTACHMENT NO: 5 - APPENDIX B - BIODIVERSITY

DEVELOPMENT ASSESSMENT REPORT (BDAR) - 77 KULGOA

Proposal Details

BAM data last updated *	22/06/2023	BAM Data version *	61	BAM Case Status	Finalised	BOS entry trigger	BOS Threshold: Biodiversity Values Map	* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.
Assessment name	73 Kulgoa Road Pymble	Report Created	11/01/2024	Assessment Type	Part 4 Developments (Small Area)	Date Finalised	11/01/2024	* Disclaimer: BAM data last updated may ind BAM calculator database. BAM calculator da Bionet.
Assessment Id	00041481/BAAS18156/23/00041482	Assessor Name	Alex FRASER	Assessor Number	BAAS18156	Assessment Revision	2	

Vegetation Zones

Management zones	
Minimum number of plots	~
Area	0.2
Condition	Poor
PCT	3262-Sydney Turpentine Ironbark Forest Poor
Name	3262_Poor
#	~ -

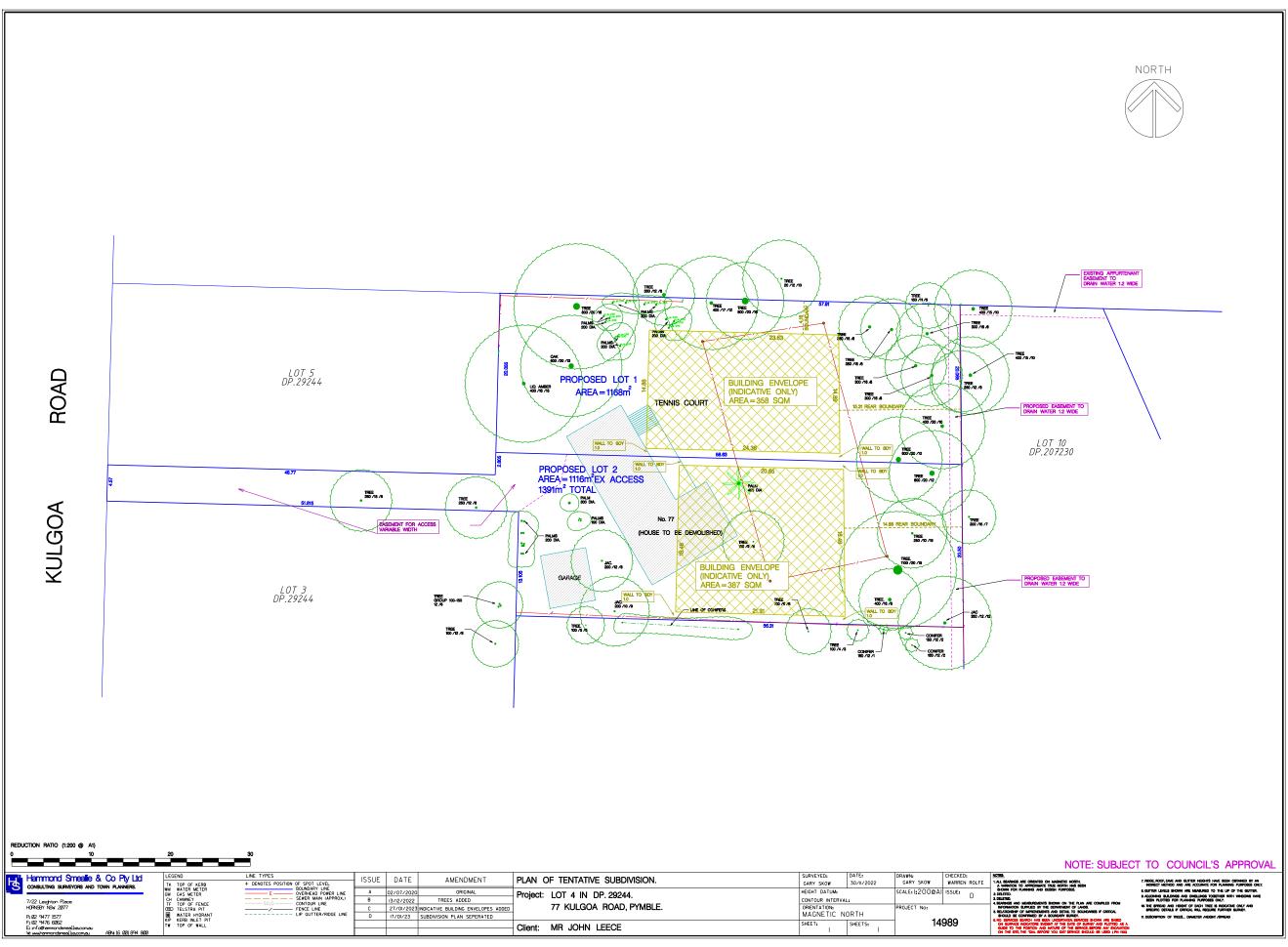
Proposal Name 73 Kulgoa Road Pymble

00041481/BAAS18156/23/00041482

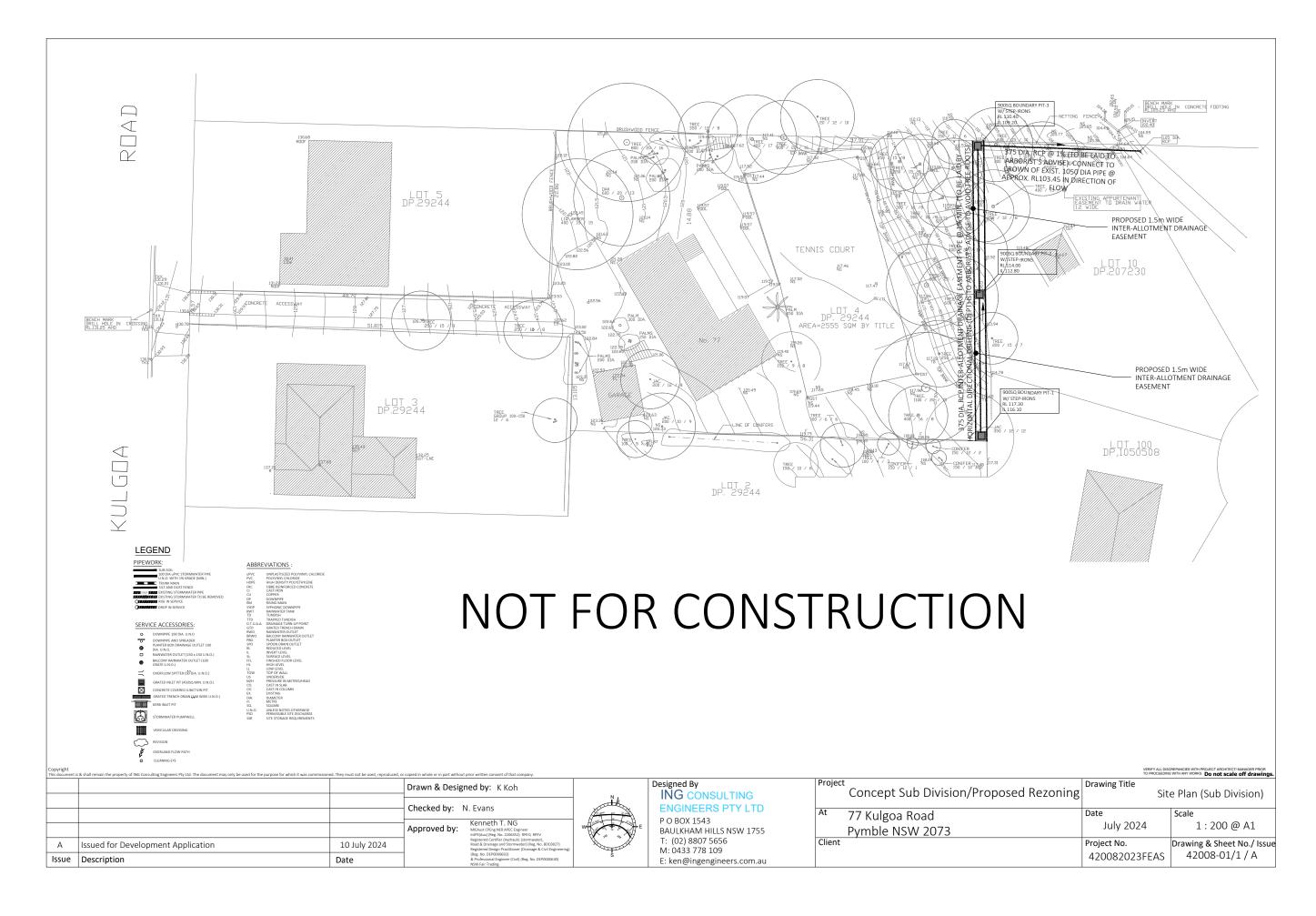
Assessment Id

ITEM NO: GB.3

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ITEM NO: GB.3

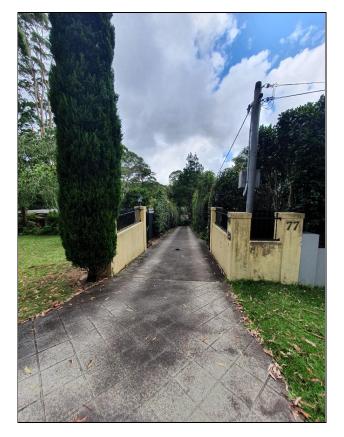
Photographs, 77 Kulgoa Road, Pymble



Streetscape, showing the site - No. 77 Kulgoa Road and trees which adjoin to the north



Streetscape and adjoining house from Kulgoa Road



Existing driveway and adjoining properties along Kulgoa Road



Looking up the driveway from the site to Kulgoa Road



Existing house, garden and swimming pool



Existing tennis court and rear boundary



Showing northern boundary and existing pool and side boundary vegetation



Existing tennis court, pool and house



Tennis court, pool and house, altered area



Tennis court, rear and southern side boundaries



Tennis court and rear boundary



Northern side boundary next to pool - looking back to the existing house

1

Ku-ring-gai

PRE-PLANNING PROPOSAL APPLICATION - MEETING REPORT

REFERENCE No:	2021/381101	021/381101				
SITE ADDRESS:	• 77 Kulgoa Road, Pym	ıble				
PROPOSAL:	Amend Zoning from C4 to standards	o R2 and amend the ass	sociated development			
DATE OF MEETING:	1 August 2022					
PRESENT AT MEETING:	Council					
	Name	Title				
	Antony Fabbro	Manager, Urban Plan	ning and Heritage			
	Craige Wyse	Team Leader Urban F	Planning			
	Sybylla Brown	Natural Areas Program	n Leader			
	Angela Smidmore	Urban Planner				
	Matthew Le Guay	Student Urban Planne	er			
	Applicant / Representative					
	Name Capacity					
	Natalie Richter Natalie Richter Planning					
	John Leece	Property owner				
DOCUMENTS/ REPORTS:	Document(s)	Dated	Reference			
	Ecological Options and Constraints Assessment	N/A	<u>2022/177619</u>			
	Arboriculture Impact Assessment	20 January 2022	<u>2022/177619</u>			
	Tree Protection Plan	20 January 2022	<u>2022/177619</u>			
	Subdivision Plan	17 March 2022	<u>2022/177619</u>			
AFFECTED PLANNING INSTRUMENT:	Ku-ring-gai Local Enviro	nmental Plan 2015				
KEY ISSUES:	 Strategic and site Aboricultural and Subdivision plan 	e-specific merit biodiversity assessmer	nt			

DISCLAIMER

The information contained in this pre-planning proposal meeting report does not bind Council officers; the elected Council members or other bodies in any way whatsoever and does not guarantee that a planning proposal will be endorsed by Council.

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PRE-PLANNING PROPOSAL APPLICATION - MEETING REPORT

DESCRIPTION

Planning proposal

- The proponent gave an overview of the planning proposal as outlined in the initial feasibility study.
- The proponent outlined the intention to enable the land subdivision of both number 73 and 77 Kulgoa Road, Pymble each into two lots, to create a total of four lots.
- The planning proposal seeks to rezone 77 Kulgoa Road, Pymble from C4 Environmental Living to R2 Low Density Residential, and amend the minimum lot size and floor space ratio development standards that apply to the site
- As part of the rezoning feasibility review, a number of supporting documents have been prepared to review the ecological and environmental factors affecting the site, including an Ecological Feasibility Study, an Arborist Assessment and Proposed Tree Protection Plan and a Proposed Subdivision Sketch Plan.

OVERVIEW OF ISSUES

The following is an overview of matters to be considered for the preparation of the planning proposal identified by Council staff:

<u>Strategic Planning Framework – Greater Sydney Region Plan, The North District Plan, Local</u> <u>Strategic Planning Statement and the Housing Strategy</u>

For a planning proposal to have strategic merit, the proposal needs to align with the NSW strategic planning framework. The planning proposal should include reasonable justification explaining how and why strategic merit is achieved and needs to address all relevant principles, objectives and actions in the relevant strategic plans.

It is acknowledged that the Ku-ring-gai LSPS and Housing Strategy are not aligned in terms of the direction for future housing.

1. Housing Strategy

At OMC 22 September 2020 a report was considered on the public exhibition of the draft Housing Strategy. In considering the report, Council resolved to adopt an amended Housing Strategy that would provide for all new housing to 2036 from existing capacity within the current planning controls only (i.e no rezoning or increases in height or FSR).

The Department of Planning, Industry and Environment issued a Letter of Approval on 16 July 2021, which outlines that approval of the Ku-ring-gai Local Housing Strategy is conditional, as it is



PRE-PLANNING PROPOSAL APPLICATION - MEETING REPORT

subject to a number of requirements and advisory notes, many of which are inconsistent with Councils adopted position of 22 September 2020.

At OMC 16 November 2021 Council considered a report on the Housing Strategy Letter of Approval, and resolved that Council reject the conditions in the Letter of Approval.

2. LSPS

Key considerations in the LSPS that need to be addressed include the Local Planning Priorities related to housing and sustainability.

Biodiversity

Council has identified some inconsistencies within the Arboriculture Impact Assessment (AIA) and Tree Protection Plan (TPP) with ground truthing conducted during a site visit on 25th July 2022. There are also a number of additional surveys and assessments to be completed and reported on to support the planning proposal.

- It is required for all trees within the subject lots and any trees with tree protection zones (TPZs) intersecting subject lots to be included in the Aboricultural Impact Assessment and all trees requiring protection to be detailed in the Tree Protection Plan.
- The AIA and TPP need to be reviewed and updated against the proposed development, including demolition, construction, access, storage areas, landscaping etc.
- Include recommendations for the avoidance, mitigation, and/or offsetting of tree impacts likely to result from the proposed development.
- Vegetation communities need to be determined/verified by survey.
- If the vegetation is determined to be characteristic of a community listed as an EEC, need to determine whether it meets the legal definition including condition class criteria of that EEC(s) in the relevant listings.
- Flora species to be determined by survey with findings reported on.
- Threatened flora species recorded on site or with the potential to occur on the site, and potential impacts likely to result from the proposed development, are to be reported on.
- A fauna habitat assessment is to be completed and reported on.
- Fauna surveys are to be completed and reported on. Survey methodology and targeted species should be informed by the results of the fauna habitat assessment and occurrence records.
- Threatened fauna species recorded on site or with the potential to occur on the site, and potential impacts likely to result from the proposed development, are to be reported on.



PRE-PLANNING PROPOSAL APPLICATION - MEETING REPORT

- An appraisal of the likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal.
- Determination of the type(s) of impact assessment(s) required under the Biodiversity Conservation Act 2016, the Environment Protection and Biodiversity Conservation Act 1999, the Ku-ring-gai Local Environmental Plan 2015, and the Ku-ring-gai Development Control Plan 2016, and any other legislation relevant to the results of the biodiversity assessment.
- Recommendations for the avoidance, mitigation, and/or offsetting of biodiversity impacts likely to result from the proposed development.

Review of alternative approaches

It is recommended that a review of alternative approaches to achieve or give effect to the intended outcomes of the planning proposal is considered in Part 3 of the planning proposal. This may include seeking to vary applicable development standards regarding minimum lot size and floor space ratio via clause 4.6 of the LEP. It should be evident from this assessment that the proposed approach is the most efficient approach to delivering the desired outcome.

Site analysis

An urban design study should be prepared that includes a site analysis and indicative subdivision plan that incorporates potential building footprints that are consistent with the relevant controls of Part 3 and Part 4 of the Ku-ring-gai DCP. This indicative subdivision plan should also be prepared the potential subdivision of 77 Kulgoa Road, Pymble independent of 73 Kulgoa Road, Pymble.

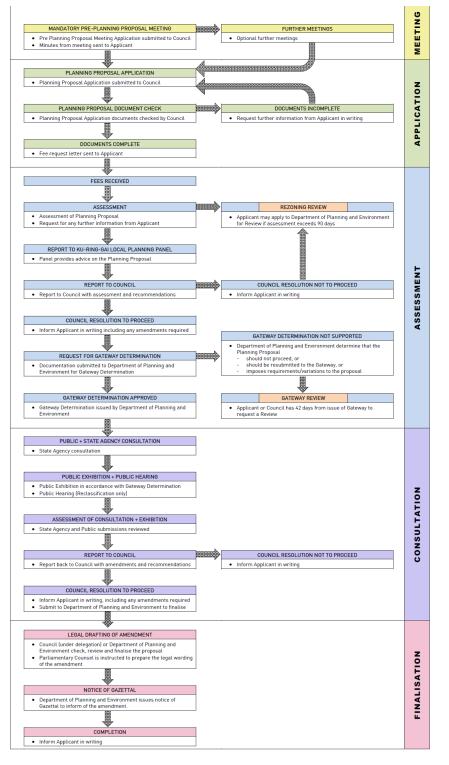
Planning Proposal format

Included as an attachment to these minutes is a word template to assist in the preparation of the planning proposal. Whilst it is the current intention to lodge a development application to facilitate the subdivision of the sites, the planning proposal needs to focus on the amendments sought to the local environmental plan (LEP) to change the land zoning and development standards of the site.



PRE-PLANNING PROPOSAL APPLICATION - MEETING REPORT

PLANNING PROPOSAL PROCESS



Ku-ring-gai Council

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PRE-PLANNING PROPOSAL APPLICATION - MEETING REPORT

PLANNING PROPOSAL REQUIREMENTS

To assist in the preparation of the Planning Proposal, a WORD template is attached to this meeting report.

General

A full list of the documents required for the submission is included in the *Planning Proposal Application Form* available from Council's website, and includes the following documents:

- a *planning proposal* in the format specified below, with any supporting studies being attached as Appendices;
- the *application form* and all other documentation, letters and declarations identified on the Form.

Supporting Studies

As identified in the 'Overview of Issues', the following supporting studies are required to provide the evidence to justify the proposed amendments and are to be submitted with the planning proposal.

1. Urban Design Study including indicative subdivision plans
2. Aboriculture Impact Assessment
3. Tree Protection Plan
4. Flora and Fauna Assessment

Planning proposal

Ku-ring-gai Council expects a high standard of documentation for planning proposals. Examples of Ku-ring-gai Council's planning proposals may be viewed on on the NSW Planning Portal '*Planning proposals online'*: <u>https://www.planningportal.nsw.gov.au/ppr</u>

The planning proposal is to be set out and include all information as stated in <u>Local Environmental</u> <u>Plan Making Guideline (December 2021).</u>

The *Guideline* requires the planning proposal to be set out in 6 parts as below. The planning proposal is required to follow the layout with the use of the same headings, subheadings, questions and numbering. Should a part not be relevant to the planning proposal, it must still be included with a brief statement why it is not relevant. All the 6 parts are necessary for the planning proposal to be considered as a complete document.

Each part and each question is required to be answered fully with a detailed explanation and full justification within that section. If evidence is being drawn from the supporting studies, then the



PRE-PLANNING PROPOSAL APPLICATION - MEETING REPORT

relevant parts should be included or quoted, it is not sufficient to say '*refer to appendix xx*'. The evidence needs to be presented in the body of the planning proposal.

In the interest of transparency, the planning proposal should use plain English as it needs to be easily understood by the community. To assist the preparation of the planning proposal a template is attached, which provides detailed guidance on the matters to be considered when responding to each section.

APPLICATION REQUIREMENTS AND FEES

Planning proposal application form

The Application Form is available on Councils website: <u>https://www.krg.nsw.gov.au/Planning-and-</u> <u>development/Planning-policies-and-guidelines/Planning-proposals</u> and must be completed in detail and ensure landowners consent is provided for all sites that form part of the planning proposal.

Lodgement of planning proposal and commencement of assessment

The planning proposal will need to be uploaded to the Planning Portal. Council will review the submitted planning proposal for completeness, this means that all required forms and documents have been provided and the planning proposal is in a form that could be adopted by Council to be forwarded to the Department of Planning for a Gateway Determination. Following the review Council will either send:

- a letter confirming documentation is complete and requesting fees be paid; or
- a letter requesting further information to be submitted.

Commencement of the assessment of the planning proposal will only begin when the application is complete and the fees have been paid.

Fees and Charges

Amendment	Category	Fees*
Pre-Planning Proposal meeting Application seeking	Standard	\$35,000 plus
amendment/s to an LEP involving sites less than	Amendments -	advertising costs
5000sqm in area, with any one or more of the following	Minor	
proposed LEP amendment types:		
• To change the land use zone where the proposal		
is consistent with the objectives identified in the		
LEP for that proposed zone.		
That relates to altering the principal development		
standards of the LEP.		

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•	That relates to the addition of a permissible land		
	use or uses and/or any conditional arrangements		
	under Schedule 1 Additional Permitted Uses of		
	the LEP.		
•	That is consistent with an endorsed		
	District/Regional Strategic Plan and/or LSPS.		
•	Relating to the classification or reclassification of		
	public land through the LEP.		
All planning proposal applications are subject		Advertising	\$4,000
to advertising costs payable upon Gateway			
Deterr	mination approval.		
		1	

*as per Councils 2022-2023 fees and charges.

Note: the planning proposal will be subject to the current fees and charges at the time the proposal is formally accepted by Council.

The planning proposal fee is payable upon Council reviewing the submitted documentation for completeness, and a fee request letter being sent requesting payment of fees. Formal lodgement of the planning proposal occurs once the fees have been paid.

Should the planning proposal proceed to public exhibition, an additional fee for advertising costs are payable upon the issuing of a Gateway determination by Department of Planning and Environment.

When an application results in additional assessment or review of the planning proposal, an hourly rate of **\$220/hr** (as per Councils 2022-2023 fees and charges) will be charged for the extra work undertaken.

Further Guidance

For further guidance on key steps and information on the planning proposal process and the roles of Council and the Department of Planning and Environment, including the review of decisions, please refer to:

- Councils website : <u>https://www.krg.nsw.gov.au/Planning-and-development/Planning-policies-and-guidelines/Planning-proposals</u>
- Department of Planning and Environment website: <u>https://www.planning.nsw.gov.au/Plans-</u> <u>for-your-area/Local-Planning-and-Zoning</u>
- Department of Planning and Environment guideline: <u>https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/LEP-Making-Guideline.pdf?la=en</u>

ATTACHMENTS



PRE-PLANNING PROPOSAL APPLICATION - MEETING REPORT

The following documents are attached to this meeting report to assist in the preparation of the planning proposal and supporting studies:

Council WORD template for planning proposals

PLANNING PROPOSAL FOR 40 DUMARESQ STREET GORDON

EXECUTIVE SUMMARY

PURPOSE OF REPORT:	To refer the Planning Proposal for 40 Dumaresq Street, Gordon to the KLPP for advice as required by the Local Planning Panels Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the <i>Environmental Planning and Assessment Act 1979.</i>	
BACKGROUND:	A formal pre-lodgement meeting was held on 9 May 2023. The Planning Proposal was submitted on 18 October 2023. The Planning Proposal was incomplete. Following the submission of revised documentation in December 2023 and February 2024 and payment of fees, the assessment of the Planning Proposal commenced on 28 March 2024.	
	The Planning Proposal considered by the KLPP on 19 August but was deferred to obtain further clarity on the details of the proposal.	
	Amended documentation was received on 16 Decembe 2024 to address the Panels advice.	
COMMENTS:	The Planning Proposal seeks to amend the <i>Ku-ring-gai</i> Local Environmental Plan 2015 as follows:	
	 Rezone from R2 Low Density Residential to R3 Medium Density Residential; 	
	 Amend Height of Buildings Development Standard from 9.5m to 11.5m; 	
	 Amend Floor Space Ratio Development Standard from 0.3:1 to 0.8:1; and 	
	• Amend Minimum Lot Size Development Standard from 930sqm to 1,200sqm.	
RECOMMENDATION: (Refer to the full Recommendation at the end of this report)	That the KLPP advise Council that the Planning Proposal should proceed to Gateway Determination, subject to amendments.	

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PURPOSE OF REPORT

To refer the Planning Proposal for 40 Dumaresq Street, Gordon to the KLPP for advice as required by the Local Planning Panels Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the *Environmental Planning and Assessment Act 1979*.

BACKGROUND

Ku-ring-gai Local Planning Panel 19 August 2024

The Planning Proposal was originally considered at the KLPP 19 August 2024. At this meeting it was decided:

- A. That consideration of the Planning Proposal be deferred to obtain further clarity on the details of the proposal and that the Council officers prepare a further report to the Panel in consultation with the Proponent.
- *B.* The Panel recommends that the proponent address the additional information and matters identified by Council in Attachment 10 of the Assessment Report.
- C. Advisory Note:

The following matters should be considered in a further assessment:

The Panel supports the reported ambition of the planning proposal (at page 16) to resolve local drainage issues by enabling the consolidated redevelopment of Nos38 and 40 Dumaresq Street. However, further analysis is required to demonstrate the planning proposal aligns with this ambition and the flood risk considering all applicable policies on flooding, including Direction 4.3 – Flooding under Section 9.1 of the EP&A Act, KLSPS goal K43.

The Panel agrees with Council's recommendation that the Planning Proposal should be supported by the inclusion of a high-quality documentation package including a fully developed urban design report. Concept plans should reflect the proposed land use, Height of Building (HOB) and Floor Space Ratio (FSR) outcome sought for the combined site.

Following the deferral, the proponent submitted amended documentation on 16 December 2024 to address the matters outlined in the Panels advice. A table detailing the Panels advice from the KLPP meeting on 19 August 2024 and compliance with the required amendments is included at **Attachment A1.**

This report has been updated to include consideration and assessment of the amended documentation submitted.

Site Description and Local Context

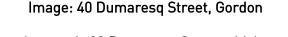
The site that is the subject of this Planning Proposal is 40 Dumaresq Street Gordon (Lot 1 DP1006588 and Lot 2 DP1006588). The site is generally rectangular is shape with a frontage of

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approximately 20m to Dumaresq Street. Lot 1 has an area of 1415.1sqm and Lot 2 has an area of 60sqm. The site has a combined area of 1475.1sqm.

The site falls steeply from each corner of the lot towards a low point approximately halfway along the western boundary. There is a localised depression through the middle of the lot, which is known to provide an overland flow path through the site for any runoff from the upstream properties.

The site is currently zoned R2 Low Density Residential and contains a part one, part two storey dwelling house, with vehicle access provided on the western boundary to Dumaresq Street.



Adjacent to the subject site to the east is 38 Dumaresq Street which currently comprises a single storey dwelling house, is in the same ownership as the subject site and is zoned R3 Medium Density Residential.

Further to the east on the corner of Dumaresq Street and Hanson Way is 34-36 Dumaresq Street which is currently under construction for 9 townhouses which are 3 storeys in height. Dumaresq Street on the eastern side of Hanson Way is zoned R4 High Density Residential and characterised 5-6 storey residential flat buildings.

To the west of the site are low density residential dwellings, and the streetscape is characterised by significant tree canopy and vegetation.

Opposite the site are sites zoned R3 Medium Density Residential, with Development Consent at 43-47 Dumaresq Street for 14 townhouses.

The subject site is located approximately 350m from the Pacific Highway and the Gordon Centre. The site is located approximately 70m from Gordon Glen, a small park on the opposite side of Dumaresq Street which contains a playground and seating.



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Image: Surrounding context

COMMENTS

The Planning Proposal seeks to amend the *Ku-ring-gai Local Environmental Plan 2015* to rezone the site from R2 Low Density Residential to R3 Medium Density Residential and amend the development standards applying to the site as follows:

KLEP 2015 – Zoning and Development Standards – 40 Dumaresq Street Gordon					
	Existing	Proposed			
Zoning	R2 Low Density Residential	R3 Medium Density Residential			
Floor Space Ratio	0.3:1	0.8:1			
Height of Buildings	9.5m	11.5m			
Minimum Lot Size	930sqm	1,200sqm			

The objective of the Planning Proposal is to rezone the subject site to R3 Medium Density Residential so that it may be consolidated and developed together with 38 Dumaresq Street, which is in the same ownership. This would overcome the isolated status of 38 Dumaresq Street.

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Chronology of Assessment

A pre-lodgement meeting was held on 9 May 2023. The Planning Proposal was submitted on the Planning Portal on 18 October 2023. The Planning Proposal was incomplete. Revised information was submitted on 11 December 2023 and 23 February 2023. Following the payment of fees, the Planning Proposal was formally lodged and assessment commence on 28 March 2024.

Merit

A Planning Proposal is not a Development Application and does not consider the specific detailed matters for consideration under Section 4.15 of the *Environmental Planning and Assessment Act 1979.* A Planning Proposal only relates to an LEP amendment and cannot be tied to a specific development. The proposed amendments need to be acceptable as an outcome on the site regardless of the subsequent approval or refusal of any future Development Application.

A Planning Proposal must demonstrate the site specific and strategic merit of the proposed amendments.

The Planning Proposal and Appendices are included at **Attachment A2-A11**.

The following is an assessment of the relevant merits of the Planning Proposal:

Site Specific Merit Assessment

Zoning – History, Interface, Isolation and Surrounding Context

The subject site is current zoned R2 Low Density Residential and is the boundary of the transition from R3 Medium Density to R2 Low Density on the southern side of Dumaresq Street. To the west downslope is also zoned R2 Low Density Residential and to the east is zoned R3 Medium Density Residential. Further to the east (opposite side of Hanson Way) up Dumaresq Street is zoned R4 High Density Residential.

The adjoining three (3) properties to the east – 38, 36, and 34 Dumaresq Street- are zoned R3 Medium Density Residential. During the preparation of the *Ku-ring-gai Local Environmental Plan (Local Centres) 2012* Council considered that these sites were highly impacted by overlooking, scale and overshadowing from the adjoining high density residential development and upzoned the three sites to R3 Medium Density Residential. It was considered that the R3 Medium Density Residential zoning on these sites would enable site amalgamation and the ability to achieve a comprehensive development that would be able to mitigate the overlooking and scale impacts. It was envisioned that 38, 36 and 34 Dumaresq Street would be amalgamated as one development site.

Council has commonly used the application of the R3 Medium Density Residential zone as an interface or transition zone between areas of high density and low density. This approach results in a stepping down of development density, so as not to have a poor interface of low density adjoining high density development.

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Image: Zoning Context

While it was Council's intentions that 34, 36 and 38 Dumaresq Street be redeveloped as one consolidated lot, Development Application REV0005/19 was approved in 2020 for the construction of 9 townhouses on 34 and 36 Dumaresq Street. This approval and subsequent commencement of construction has resulted in 38 Dumaresq Street now being considered an isolated site as it does not meet the minimum lot size (1200sqm) or depth (24m) requirements for multi dwelling housing under Clause 6.6 of the KLEP 2015, and therefore unable to meet the full development potential of its R3 zoning. In granting the approval, the issue of the isolation of 38 Dumaresq Street was the subject of in-depth assessment, and it was demonstrated that there were numerous negotiation attempts and reasonable offers made to the owner of 38 Dumaresq Street.

A key justification within the Planning Proposal for the rezoning of the subject site at 40 Dumaresq Street is to enable 38 and 40 Dumaresq Street which are currently in the same ownership to be developed together for the purpose of 'multi dwelling housing' and overcome the isolation of 38 Dumaresq Street. The proposed rezoning of the site to R3 Medium Density Residential will allow for a better planning outcome on the site by providing for the orderly and economic development of residential land by allowing the site to be redeveloped with the adjoining property and overcome the isolation, while maintaining the local character.

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Image: Adjoining isolated site and development site

Height and Floor Space Ratio

The Planning Proposal seeks to apply a height of buildings development standard of 11.5m (3 storey) to the subject site. This is the typical height of buildings development standard that is applied to R3 Medium Density zoned sites throughout Ku-ring-gai. The Planning Proposal seeks to apply a Floor Space Ratio development standard of 0.8:1 to the subject site. This is the typical Floor Space Ratio development standard that is applied to R3 Medium Density zoned sites throughout Ku-ring-gai.

The Urban Design Study submitted includes a reference scheme modelling the proposed height and floor space ratio development standards on the site.

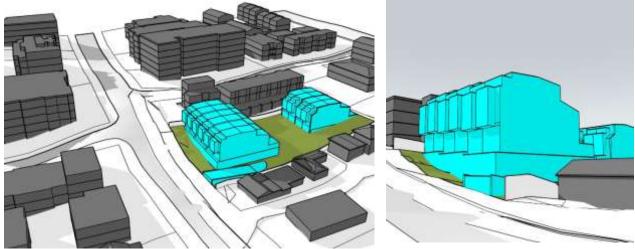


Image: Reference Scheme Multi Dwelling Housing – Urban Design Study

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The resulting development from the proposed height and FSR controls is of a scale that is sympathetic to the surrounding context, specifically the adjoining townhouse development at 34-36 Dumaresq and the low-density dwellings at 42 and 42a Dumaresq Street. In addition, the development scheme is able to achieve approximately 50% deep soil, retain significant trees across the site and allows for the integration of the overland flow path through the site.

Minimum Lot Size

The Planning Proposal seeks to apply a minimum lot size development standard of 1,200sqm to the subject site. This is the standard minimum lot size development standard that is applied to R3 Medium Density zoned sites throughout Ku-ring-gai, and this is consistent with the 1,200sqm minimum lot size required under Clause 6.6 for the development of multi dwelling housing in the R3 Medium Density.

Traffic and Transport

The Planning Proposal has the following favourable transport aspects:

- Residents in the Statistical Area of the site use public transport more for their journeys to work than the Gordon suburb as a whole.
- Based on the work destinations of current residents in nearby surrounding Statistical Areas, nearby Strategic Centres are expected to be key work destinations for future residents of the site.
- The site is located within 700m of Gordon station, which provides access to the Sydney Trains and Sydney Metro network. The demand resulting from the Planning Proposal is modest and unlikely to impact on train or platform capacity.
- The site is well positioned to take advantage of the recent opening of the Chatswood to Sydenham component of Sydney Metro, and future conversion to rapid bus line of the existing express bus service from Chatswood to Dee Why, as well as future frequent bus services between Mona Vale and Macquarie Park.
- There is a good selection of retail, health/medical, leisure/recreational and community/cultural facilities within a 10 minute walk of the site.
- Due to the modest number of additional vehicle trips expected to be generated from the site, the proposal is not expected to have significant additional impact on the operation of the intersection of the Pacific Highway and Dumaresq Street.

The following transport constraints were found with respect to the Planning Proposal:

The local cycling network in the area is largely underdeveloped, limiting local and regional cycling connectivity.

• Public Primary and High Schools are not within walking distance, although this is moderated somewhat by school buses that travel near the site.

Flood and Stormwater

The site has been identified as being impacted by the Overland Flow Flood Planning Area, and in addition the owner has stated they have experienced flooding from 34-36 Dumaresq Street. The Planning Proposal is supported by a Flood Management Report, DRAINS and HEC-RAS modelling.

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The report and modelling propose a swale/channel through the naturally occurring low point on the site to convey the overland flow through the property.

Flood Report notes "For the downstream neighbouring property, the proposed works (including the upsizing of the existing pipe to a Ø750mm pipe) will result in a reduced flow entering their land, at a reduced depth of flow. Even though the velocity at the most downstream section is slightly higher than the pre-development scenario, the velocity depth product is effectively unchanged at this downstream section." (p.16) and "Given the nature of the dedicated channel, the higher velocity achieved within the dedicated space will not impose a danger on people, vehicles or buildings, as the magnitude of flow reaching the downstream property is reduced, as well as the depth of flow. The velocity depth product on the downstream section is proof that the safety for the neighbouring land is not compromised." (p.17)

Biodiversity

The site contains Landscape Remnant mapping as well as identified Sydney Turpentine-Ironbark Forest vegetation at the rear of the site. The reference scheme and ecological reports submitted with the Planning Proposal indicate that the STIF endangered ecological community species can be retained, and that the rezoning can be accommodated without significant impact to the biodiversity.

Strategic Merit Assessment

Greater Sydney Region Plan and North District Plan

The Planning Proposal is consistent with the objectives of the Greater Sydney Region Plan – A Metropolis of Three Cities in particular:

- Objective 4. Infrastructure is optimised
- Objective 10. Greater housing supply
- Objective 11. Housing is more diverse and affordable
- Objective 14. Integrated land use and transport creates walkable and 30-minute cities

A Metropolis of Three Cities outlines that liveability incorporates access to housing, transport and employment, as well as social, recreational, cultural and creative opportunities. Provision of housing close to public transport and services and facilities improves the opportunity for people to walk and cycle to local shops and services. The proposal is consistent with these principles.

The Planning Proposal is consistent with the planning priorities of the North District Plan, in particular:

- Planning Priority N1. Planning for a city supported by infrastructure
- Planning Priority N5. Providing housing supply, choice and affordability, with access to jobs, services and public transport
- Planning Priority N6. Creating and renewing great places and local centres, and respecting the districts heritage
- Planning Priority N12. Delivering integrated land use and transport planning and a 30minute city

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The Planning Proposal will allow for additional housing supply in a location that enables good access via public transport to key strategic centres such as Chatswood, St Leonards, Hornsby and Macquarie. The Planning Proposal is in accordance with the North District Plan priorities to focus housing in locations that support the 30 minute city and provide access to jobs, services and public transport.

Ku-ring-gai Local Strategic Planning Statement

The Planning Proposal is consistent with the following local planning priorities:

- K3. Providing housing close to transport, services and facilities to meet the existing and future requirements of a growing and changing community
- K4. Providing a range of diverse housing to accommodate the changing structure of families and households and enable ageing in place
- K12. Managing change and growth in a way that conserves and enhances Ku-ring-gai's unique visual and landscape character
- K21. Prioritising new development and housing in locations that enable 30min access to key strategic centres
- K28. Improving the condition of Ku-ring-gai's bushland and protecting native terrestrial and aquatic flora and fauna and their habitats

The LSPS contains the overarching local planning priority regarding the provision of housing close to transport, services and facilities, and then provides additional specific detail about each centre and its suitability for additional housing and timing. The LSPS sets out that Gordon Local Centre is a Primary Centre as it contains a local railway station and bus routes on an arterial road corridor and meets the criteria for 30 minute access to a strategic centre, as well as being supported by retail services and community facilities. The timing noted in the LSPS for future housing delivery in 2021-2026, and 2026-2031. The Planning Proposal is consistent with these provisions in the LSPS.

The Planning Proposal is consistent with the principles for the location of additional housing as set out in the LSPS:

- Locate high density housing types within a 10 min walk (800m radius) of Primary and Secondary Local Centres
- Locate medium density built forms and other housing types on interface and transition areas where they function as a buffer between differing scale of building or differing land use types
- In considering areas for future medium and high density housing form, the following areas are to be avoided:
 - Heritage conservation areas.
 - Areas of visual or aesthetic quality and character.
 - Areas within or affecting scenic and cultural landscapes.
 - Areas of intact tree canopy where the built form does not sit under the canopy.
 - Areas with multiple constraints including steep topography.
 - Areas with environmental values.
 - Areas that are bushfire prone and with evacuation risk.
 - Centres with limited transport and service access until improvements are implemented.

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The site that is the subject of the Planning Proposal is not constrained by heritage, scenic or cultural landscape or bushfire prone land. While the site does have intact tree canopy and environmental values, the site has capacity to accommodate additional housing and ensure future development is located outside of areas of environmental values.

Ku-ring-gai Housing Strategy and Letter of Approval Conditions

Council's adopted Ku-ring-gai Housing Strategy provides all new dwellings to 2036 from capacity within the existing planning controls and zoning. As the Planning Proposal is seeking to upzone the site and amend the development controls to enable delivery of more housing on the site, it is inconsistent with the Housing Strategy.

The amendments sought by the Planning Proposal will enable the delivery of an addition 10 townhouse style dwellings on the site under the R3 Medium Density zoning and provisions contained in the KLEP 2015 for multi dwelling housing.

In approving the Ku-ring-gai Housing Strategy, the Department of Planning, Industry and Environment issued a number of approval conditions, one of which is:

2. Consistent with Priority K3 of the Ku-ring-gai Local Strategic Planning Statement (LSPS), Council is to commence a masterplan, or accommodate proponent-led planning proposal(s) with good planning outcomes, for Gordon, Lindfield and/or Turramurra local centres. Planning proposal(s) for these centres are to be submitted to the Department for Gateway Determination by December 2022. Where this work is not pursued by Council the Department welcomes good place-based approaches by landowner/developers.

At OMC 16 November 2021 Council resolved to reject the Housing Strategy conditions of approval. As Council has not committed to a work program, the subject Planning Proposal submitted by the landowners is consistent with the requirements of Condition 2. The Planning Proposal will enable the provision of additional housing on the site in an area that is close to public transport, services and community facilities.

Section 9.1 Ministerial Directions and State Environmental Planning Policies (SEPPs)

The Planning Proposal is not inconsistent with the State Environmental Planning Policies (SEPPs) applicable to the site. Many of these SEPPs contain detailed provisions and controls which would only apply at the Development Application stage. The Planning Proposal is consistent with the applicable s9.1 Ministerial Direction, specifically those relating to:

- 3.1 Residential Zones
- 3.4 Integration of Land Use and Transport

Low and Mid-Rise Housing Policy

From 15 December 2023 – 23 February 2024, the NSW Department of Planning, Housing and Infrastructure (DPHI) placed on exhibition an Explanation of Intended Effect (EIE) *'Changes to create low and mid-rise housing'*. Following the exhibition, DPHI released the *Low and Mid-Rise Housing Policy Refinement Paper* (April 2024). The following amendments are proposed to enable the delivery of additional low and mid-rise housing within NSW and the Six Cities Region:

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Low Rise – Terraces and Townhouses

On land zoned R2 (low density residential) within 800m of station and nominated centres:

- terraces and townhouses up to 9.5m high and FSR 0.7:1
- manor houses up to 9.5m high and floor space ratio 0.8:1.

On all land zoned R2 (low density residential)

• Dual occupancies up to 9.5m high and FSR of 0.65:1, provided the minimum lot size is 450 square metres and a minimum 12m in width.

Mid-rise Apartment Buildings and Shop-top Housing

On land zoned R4 (high density) and R3 (medium density) within 400m of stations and nominated centres:

- Height:
 - o 22m high for residential flat buildings
 - o 24m for shop top housing
 - Maximum 6 storey
- Floor Space Ratio of 2.2:1

On land within 400m-800m of stations and nominated centres:

• R3 (medium density): up to 16m high (approx. 4 to 5 storey) apartments at a floor space ratio of 2:1

Gordon local centre will be a nominated centre, and the subject site is located within 800m of the E1 Local Centre zone. Accordingly, the Low Rise provisions will apply to the subject site under the current R2 Low Density Residential zoning, and the Mid-Rise provisions will apply should the site be rezoned to R3 Medium Density Residential as sought by this Planning Proposal.

The State Environmental Planning Policy (Housing) Amendment (Dual Occupancies and Semidetached Dwellings) 2024 (Amendment SEPP) commenced on 1 July 2024. The DPHI has advised that the other low and mid-rise housing reforms will commence sometime in 2025.

The commencement of the Low and Mid-Rise Housing Reforms will have significant impact on the Planning Proposal and outcomes on the site. Should the subject site be rezoned to R3 Medium Density Residential as sought in this Planning Proposal, the site will be able to be developed under the 'Mid-rise' provisions which permit a residential flat building of 22m (6 storey) and an FSR of 2.2:1 (based on the details contained in the *Low and Mid-Rise Housing Policy Refinement Paper* April 2024).

This will result in an inconsistent pattern of development along Dumaresq Street, Gordon with the transition from high density apartments at the top of Dumaresq Street, to medium density townhouses on 34-36 Dumaresq Street and then back to high density apartments on 38 Dumaresq Street and the subject site.

Item GB.4



The amended Urban Design Study includes a reference scheme for a 6 storey residential flat building on the subject site under the provisions of the Low and Mid Rise Housing Policy.

Image – Reference Scheme B Residential Flat Building – Urban Design Study

The R3 Medium Density Residential zone will effectively be comparable to the R4 High Density Residential zone within Ku-ring-gai, as it will allow 6 storey residential flat buildings. There will be a disconnect between the original intention of the R3 Medium Density Residential zone to provide an interface between the R4 High Density Residential and R2 Low Density Residential. There is considerable change in height from the current controls (9.5m) in the KLEP 2015, to the 22m permitted by the reforms.

A challenge arises at the interface of the subject site with the adjacent properties to the west – 42 and 42a Dumaresq Street – which are zoned R2 Low Density Residential and currently contain existing low density detached houses. 42 and 42a Dumaresq and other properties located to the west of the subject site zoned R2 Low Density Residential, would also be able to be redeveloped under the Low and Mid-Rise Housing Reforms utilising the low-rise provisions in order to mitigate potential impacts from the adjoining 6 storey mid-rise development. The low-rise provisions include:

- Multi dwelling housing (terraces and townhouses) with a height of 9.5m and FSR of 0.7:1
- Manor houses with a height of 9.5m and FSR of 0.7:1

Council's Strategic Traffic Engineer has reviewed the weekday peak hour traffic generation from the R3 Medium Density Townhouse proposal vs the Mid-Rise 6 Storey apartment proposal.

Current Proposal			
	Peak Traffic Generation (vehicle trips per hour)	Less Existing Traffic Generation (vehicle trips per hour)	Net Peak Hour Traffic Generation (vehicle trips per hour)
10 Townhouses (0.65 trips per dwelling)	7	2	5

10

Item GB.4 Low-Mid Rise Scenario

2

The impacts of the additional 3 trips during the peak hour generated by the mid-rise scenario over
the current proposal would not be noticeable in any traffic modelling of nearby intersections.

It is noted that the Flood Report emphasises that a residential flat building development on the site with a covered culvert is not appropriate due to maintenance, blockage risk and lack of alternative path for surcharging water during an emergency. i.e. an open air channel is recommended. However, the Urban Design Reference Scheme for a residential flat building spans across the site and existing depression, with no open air channel. It is recommended that prior to submission to Gateway Determination that the Urban Design Study Residential Flat Building Reference Scheme to be updated to align with the recommendations of the Flood Report, by showing an open air channel.

Alternative Scenarios to the TOD SEPP

48 Apartments

(0.19 trips per dwelling)

On 8 May 2024 Council resolved to commence studies and alternative scenarios around the four Transport Orientated Development Precincts - of Gordon, Killara, Lindfield and Roseville. On 30 October 2024 Council resolved to place 5 scenarios on public exhibition. The alternative scenarios examine different percentages of Heritage Conservation Area protection, different building heights and different spread and were placed on public exhibition from 15 November to 17 December 2024.

Scenario 3b – Preserve, Intensify and Expand looks at preserving all HCA's within 400m of stations and expanding the spread of new dwellings from 400m to 800m. As part of this scenario building heights ranging from 5-8 storeys are extended down Dumaresg Street, from Hansen Way to Vale Street.

8

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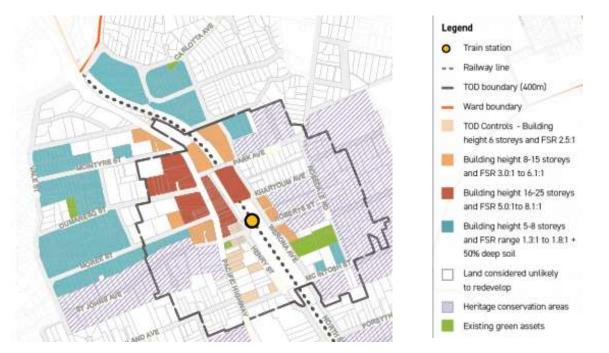


Image: Public Exhibition Version Council Alternative Scenario 3b Gordon

Council will consider community feedback at a meeting in March 2025. If there is support for a preferred scenario, Council may request the NSW Government for approval to formally exhibit it to replace the TOD policy. The exhibition will be a further opportunity for the public to comment.

Recommended Amendments prior to Gateway Determination

It is recommended that prior to submission to Gateway Determination that the Planning Proposal documentation be updated as follows:

- Table addressing S9.1 Flooding in Flood Report, Planning Proposal and Urban Design Study to be updated to change reference from *Floodplain Development Manual (2005)* to *Floodplain Risk Management Manual (2023)*
- Urban Design Study Residential Flat Building Reference Scheme to be updated to align with the recommendations of the Flood Report, by showing an open air channel.

INTEGRATED PLANNING AND REPORTING

Theme 3: Places, Spaces and Infrastructure

Community Strategic Plan	Delivery Program	Operational Plan
Long Term Objective	Term Achievement	Task
P2.1 A robust planning	P2.1.1 Land use strategies,	P2.1.1.2 Continue to review the
framework is in place to deliver	plans and processes are in	effectiveness of existing
quality design outcomes and	place to protect existing	strategies, local environmental
maintain the identity and	character and effectively	plans, development control
character of Ku-ring-gai	manage the impact of new	plans and processes across all
	development	programs

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GOVERNANCE MATTERS

The process for the preparation and implementation of Planning Proposals is governed by the provisions contained in the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000*.

Local Planning Panels Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the *Environmental Planning and Assessment Act 1979* requires Council to refer all Planning Proposals prepared after 1 June 2018 to the Local Planning Panel for advice, before the Planning Proposal is forwarded to the Minister for a Gateway Determination under Section 3.34 of the Environmental Planning and Assessment Act 1979.

RISK MANAGEMENT

This is a privately-initiated Planning Proposal. Council needs to determine its position on the matter as to whether the Planning Proposal should proceed to Gateway Determination.

FINANCIAL CONSIDERATIONS

The Planning Proposal was subject to the relevant application fee under Council's 2023/2024 Schedule of Fees and Charges. The cost of the review and assessment of the Planning Proposal is covered by this fee.

SOCIAL CONSIDERATIONS

The amendments to the height of buildings and floor space ratio sought by the Planning Proposal would enable the delivery of new dwellings in order to meet the existing and future requirements of a growing and changing community:

- approximately 10 townhouse style dwellings on a consolidated development site with the adjoining property 38 Dumaresq Street under the proposed R3 Medium Density development standards of 0.8:1 and 11.5m
- approximately 48 apartments on a consolidated development site with the adjoining property 38 Dumaresq Street under the provisions contained in the Low and Mid-Rise Housing Reforms.

ENVIRONMENTAL CONSIDERATIONS

The site has been identified as being impacted by the Overland Flow Flood Planning Area, and in addition the owner has stated they have experienced flooding from 34-36 Dumaresq Street.

The site contains Landscape Remnant mapping as well as identified Sydney Turpentine-Ironbark Forest vegetation at the rear of the site. The reference scheme and ecological reports submitted with the Planning Proposal indicates that the STIF endangered ecological community species can be retained, and that the rezoning can be accommodated without significant impact to the biodiversity.

COMMUNITY CONSULTATION

In the event that the Planning Proposal is issued a Gateway Determination by the Department of Planning, Housing and Infrastructure the Planning Proposal would be placed on statutory public exhibition in accordance with the requirements of the Gateway Determination, and Council's Community Participation Plan.

Item GB.4

The assessment of the Planning Proposal has included internal consultation with Council staff with expertise in planning, natural areas, traffic and transport and Urban Design has informed the recommendations of this Report.

SUMMARY

A Planning Proposal has been submitted for 40 Dumaresq Street Gordon. The Planning Proposal seeks to:

- Rezone from R2 Low Density Residential to R3 Medium Density Residential
- Amend Height of Buildings Development Standard from 9.5m to 11.5m
- Amend Floor Space Ratio Development Standard from 0.3:1 to 0.8:1
- Amend Minimum Lot Size Development Standard from 930sqm to 1,200sqm

The objective of the Planning Proposal is to rezone the subject site to R3 Medium Density Residential so that it may be consolidated and developed together with 38 Dumaresq Street, which is in the same ownership. This would overcome the isolated status of 38 Dumaresq Street.

The rezoning to R3 Medium Density Residential and the associated development standards which would enable a townhouse style development are considered to demonstrate site specific and strategic merit.

The forthcoming Low and Mid-Rise Housing reforms complicate the Planning Proposal as they will have significant impact on the development outcomes on the site. Should the subject site be rezoned to R3 Medium Density Residential as sought in this Planning Proposal, the site will be able to be developed under the 'Mid-rise' provisions which permit a residential flat building of 22m (6 storey) and an FSR of 2.2:1.

RECOMMENDATION:

That that Ku-ring-gai Local Planning Panel advise Council that:

- A. Prior to submission to Gateway Determination that the Planning Proposal documentation be updated as follows:
 - 1. Table addressing S9.1 Flooding in Flood Report, Planning Proposal and Urban Design Study to be updated to change reference from *Floodplain Development Manual (2005)* to *Floodplain Risk Management Manual (2023)*
 - 2. Urban Design Study Residential Flat Building Reference Scheme to be updated to align with the recommendations of the Flood Report, by showing an open air channel.
- B. That the amended Planning Proposal be submitted for a Gateway Determination.

Item GB.4

Urban Planner

Team Leader Urban Planning

Antony Fabbro Manager Urban & Heritage Planning

Attachments:	A1 <u></u>	Review Table Amended Documents KLPP - 40 Dumaresq Street Gordon	2024/366174
	A2 <u>↓</u>	Planning Proposal 40 Dumaresq Street Gordon (December 2024)	2025/022448
	АЗ <mark>.]</mark>	Appendix A - Concept Plans 40 Dumaresq Street Gordon	2024/255202
	A4 <mark>.]</mark>	Appendix B - Shadow Diagrams 40 Dumaresq Street Gordon	2024/255209
	A5 <u>↓</u>	Appendix C - Urban Design Report 40 Dumaresq Street Gordon	2025/022450
	A6 <u>↓</u>	Appendix D - Arboricultural Impact Assessment (December 2024) 40 Dumaresq Street Gordon	2025/022444
	A7 <u>↓</u>	Appendix E - Tree Relocation Methodology (Magnolia Mature) - 40 Dumaresg Street, Gordon	2024/213532
	A8 <u>↓</u>	Appendix F - 40 Dumaresq Street, Gordon - Ecological Assessment Report (29 Nov 2024)	2025/022445
	A9 <u>↓</u>	Appendix G - Flood Management Report (December 2024) 40 Dumaresq Street Gordon	2025/022447
	A10 <mark>↓</mark>	Appendix H - TRAFFIC REPORT 40 Dumaresq Street Gordon	2024/255220
	A11 <u></u>	Appendix I - Site Survey - 40 Dumaresq Street, Gordon	2024/255238

PLANNING PROPOSAL – 40 Dumaresq Street Gordon	street Gordon	TABLE OF ASSESSMENT 1
Ku-ring-gai Local Planning Par	nel Advice 19	ig Panel Advice 19 August 2024 – Additional Information
Flooding		
Panel Advice	Amended Documentation Submitted	Council Comment
C. Advisory Note The Panel supports the reported ambition of the planning proposal (at page 16) to resolve local drainage issues by enabling the consolidated redevelopment of Nos38 and 40 Dumaresq Street. However, further analysis is required to demonstrate the planning proposal aligns with this ambition and the flood risk considering all applicable policies on flooding, including Direction 4.3 – Flooding under Section 9.1 of the EP&A Act, KLSPS goal K43 goal K43	 HEC-RAS Models Flood Management Report Planning Proposal - Ministerial Direction 4.1 	 A table has been provided which addresses S9.1 Direction - Flooding in the Flood Report, the Planning Proposal and Urban Design Study. It is noted that the Flood Report emphasises that a residential flat building development on the site with a covered culvert is not appropriate due to maintenance, blockage risk and local of alternative path for surcharging water during an emergency. i.e. an open air channel is recommended. However, the Urban Design Reference Scheme for a residential flat building spans across the site and existing depression, with no open air channel. a Table addressing S9.1 Flooding in Flood Report, Planning Proposal and Urban Design Study to be updated to change reference from <i>Floodplain Development Manual (2005)</i> to <i>Floodplain Risk Management Manual (2023)</i> Urban Design Study Residential Flat Building Reference Scheme to be updated to align with the recommendations of the Flood Report.
Panel Advice	Amended Documentation Submitted	Council Comment
C. Advisory Note The Panel agrees with Council's recommendation that the Planning Proposal should be supported by the inclusion of a high-quality documentation	 Urban Design Report 	Yes The Planning Proposal was originally submitted with concept architectural plans for a townhouse style development on the site. Council recommended, and the Panel agreed that a fully development urban design report was required to support the proposal. An Urban Design Report has been submitted which reflects the HOB and FSR standards sought

PLANNING PROPOSAL – 40 Dumaresq Street Gordon	treet Gordon		TABLE OF ASSESSMENT	MENT 2
package including a fully developed urban design report. Concept plans should reflect the proposed land use, Height of Building (HOB) and Floor Space Ratio (FSR) outcome sought for the combined site.		for the site.		
Attachment A10 – Table of Assessment				
Panel Advice		Council Comment		
B. The Panel recommends that the proponent address the additional information and matters identified by Council in Attachment 10 of the Assessment Report.	ponent address tified by Council	Attachment A10 of the original assessment report was a Table of Assessment which detailed the required amendments to be made to the Planning Proposal if Council were to support it being submitted to the Department of Planning, Housing and Infrastructure for a Gateway Determination and proceed to public exhibition.	vas a Table of Assessment ng Proposal if Council wer using and Infrastructure fo	which detailed e to support it ır a Gateway
		The Attachment A10 Table of Assessment is outlined below, along with a review of the amended documentation for compliance with the recommended amendments.	d below, along with a revie scommended amendments	w of the.
Planning Proposal				
PAGE	SECTION	COMMENT FROM ATTACHMENT A10 TABLE OF ASSESSMENT KLPP 19 AUGUST 2024	RECOMMENDATION FROM ATTACHMENT A10 TABLE OF ASSESSMENT KLPP 19 AUGUST 2024	COMPLIANCE
General				
Site Area	Planning Proposal, Application Form and Survey	Inconsistency with site area. Planning Proposal states 1485sqm, Application form states 1415sqm and title states 1505sqm. Survey only provides total area for 38 and 40 Dumaresq Street and not individually for 40 Dumaresq. Council GIS outlines that site area is 1367 (Lot 1)+ 120 (Lot 2) =1487sqm.	Refer to comments provided for "Site Survey" in table below	Yes

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PLANNING PROPOSAL – 40 Dumaresq Street Gordon	treet Gordon		TABLE OF ASSESSMENT	MENT 3
Track changes	Throughout planning proposal	Removal all track changes	Amend Planning Proposal to removal all track changes	Yes
Appendix G ad Appendix H	Throughout planning proposal	Removal Appendix G DRAINS modelling and Appendix H HEC-RAS modelling from Planning Proposal. These are technical flood models that were used to inform the content within the Flood Management Report (Appendix F) and Council has reviewed as part of assessment – but do not need to be attached to planning proposal for public exhibition as specific computer programs are required to open these files.	Remove Appendix G and Appendix H from Planning Proposal.	Yes
Development yield	Throughout planning proposal	The planning proposal will result in the site being capable of development under the mid-rise housing provisions of the proposed Low and Mid-Rise Housing Reforms. All references to development yield of 10 dwellings should be updated to note this is under the R3 development standards of the KLEP 2015 and KDCP, but also include an approximate development yield of the site/combined sites under the mid-rise provisions which would allow 6 storey residential flat buildings. Councils modelling has suggested this could be approximately 48 dwellings.	Update development yield throughout Planning Proposal to note 10 dwellings under the provisions of the KLEP 2015 and KDCP Include approximate development yield under the provisions of the proposed Low and Mid Rise Housing reforms.	
Introduction / Executive Summary				
Existing Planning Controls	p.4-7	Existing Planning Controls - Maps included in existing planning controls have highlighted both 40 and 38 Dumaresq Street. The Planning Proposal only relates to 40m Dumaresq Street, so the identification of 38 Dumaresq Street needs to be	Amend maps to remove highlight/identification	Yes

PLANNING PROPOSAL – 40 Dumaresq Street Gordon	Street Gordon		TABLE OF ASSESSMENT	MENT 4
		removed from maps.	of 38 Dumaresq Street Gordon.	
Proposed Amendments	p.8-9	Proposed Amendments – The mapping included under Proposed Amendments should be deleted. The Description of proposed amendments and mapping is sufficiently addressed under Part 2 and Part 4 of Planning Proposal. Inclusion of proposed mapping here is unnecessary duplication.	Delete 'Proposed Amendments' Mapping from pages 8- 9.	Yes
Part 1 – Objectives or intended outcomes				
	р.1	Delete last four (4) paragraphs beginning with "Finally it is proposed to arrend the lot size map" - these paragraphs are not the objective or intended outcome but the explanation of how the arrendments will be achieved (Part 2) and Justification (Part 3).	Delete last four (4) paragraphs beginning with " <i>Finally it is</i> proposed to amend the lot size map"	Yes.
Part 2 Explanation of provisions				
	p.12 -13	The proposed maps do not have any key to identify the different colours/letters. Land Zoning Map – Proposed – the boundary of the site is inconsistent with the boundary shown on all other proposed maps and seems to include the road reservation. Needs to be amended.	Include a key to each of the proposed maps. Amend Land Zoning Map Proposed to removal road reservation from boundary of site.	Yes
Part 3 Justification of strategic and site-spe	site-specific merit			
Section A – Need for the planning proposal				

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PLANNING PROPOSAL – 40 Dumaresq Street Gordon	Street Gordon		TABLE OF ASSESSMENT	SMENT	ß
Q1 - Is the planning proposal a result of an	p.15-p.18	The response is considered adequate, with a few	Amend from 'Ku-ring-	Yes	
endorsed LSPS, strategic study or report?		minor amendments required to reduce duplication	gai Planning Priorities'		
		and correct minor errors.	to 'Ku-ring-gai Local		
		 Incorrect reference to Ku-ring-gai Planning 	Planning Priorities'		
		Priorities – should be Ku-ring-gai Local Planning	Include a statement		
		Priorities.	about how Planning		
		 Need to include a statement that while the 	Proposal is not a direct		
		Planning Proposal is not a direct action arising	action within the LSPS,		
		from the LSPS, it is consistent with a number of	but is consistent with		
		the key local planning priorities relating to the	a number of the key		
		location, timing and delivery of additional	local planning		
		housing.	priorities relating to		
		Remove paragraph with discussion of proposal	the location, timing		
		changes to development standards of p.16	and delivery of		
		'Further, it is proposed to amend the Lot Size	additional housing.		
		Map, - unnecessary duplication.	Remove paragraph on		
			development		
			standards of p.16		
			'Further, it is proposed		
			to amend the Lot Size Map'		
Q2 – Is the planning proposal the best	p.19	The response is considered adequate, with minor	Remove paragraph on	Yes	
means or achieving the objectives of intended outcomes, or is there a better		amendments to remove duplication throughout	development		
way?		planning proposal:	standards 'Further, it		
		 Remove paragraph describing proposed 	is proposed to amend		
		changes to development standards "Further, it			
		is proposed'			

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PLANNING PROPOSAL - 40 Dumaresq Street Gordon	street Gordon		TABLE OF ASSESSMENT	MENT 6
Section B – Relationship to the strategic planning framework	anning			
Q3 – Will the planning proposal give effect to the objectives and actions of the applicable regional or district plan or strategy (including any exhibited draft plans or strategies)?	p.20-24	 The response is considered adequate, with minor amendments to remove duplication: P.21 Remove paragraphs <i>The purpose of the Planning proposal is to rezone</i> 'which is repeated x2 on page 21 P.23 – reference to Housing Strategy Letter of Approval Condition <i>"to identify areas for medium density housing outside a local centre, with a planning proposal for new dwellings to be submitted by December 2023" – this is a summary of Condition 6, which relates to identifying areas outside of the primary local centre, and as such this condition does not aply. The reference should be updated to refer to Condition 2, which outlines that Council is to accommodate proponent led planning outcomes for the Gordon, Lindfield and Turramurra Local Centres.</i> 	Remove x2 repeated paragraphs on p.21 explaining purpose of planning proposal ' The purpose of the Planning Proposal is to rezone' Delete reference 'to identify areas for medium densify housing outside a local centre , with a planning proposal for new dwellings to be submitted by December 2023' – and replace with assessment of how proposal is consistent with Housing Strategy Letter of Approval Condition 2.	Yes
Q4 – Is the planning proposal consistent with a Council LSPS that has been endorsed by the Planning Secretary or GSC, or another endorsed local strategy or strategic plan?	p.24-25	Response is insufficient as it does not provide any specific reference to Local Planning Priorities in LSPS.	Amend response to Q4 to include specific assessment of how planning proposal is consistent /	yes

TABLE OF ASSESSMENT 7	ant with ocal Priorities in the Ku- IPS. (, K12, (29, K30, (36, K43, (as	Response should be No. updated to include Recommended brief summary from that this be Traffic assessment amended prior (below) which details to submission what centres can be for Gateway access in 30mins by Determination.	Amend Planning yes Proposal to include discussion on exhibited Low and Mid Rise Housing Reforms and the implications this will have for the planning proposal and development on the site under the
TABL	inconsistent with relevant Local Planning Priorities contained in the Ku- ring-gai LSPS. e.g. K3, K4, K8, K12, K21, K28, K29, K30, K31, K35, K36, K43 - remove 'as detailed oreviously'	Response should be updated to include brief summary from Traffic assessment (below) which detail what centres can be access in 30mins by train and by bus.	Amend Planning Proposal to include discussion on exhibited Low and M Rise Housing Reform and the implications this will have for the planning proposal ar development on the site under the
		Response notes that the site is within close proximity to Gordon Station and bus stops on the Pacific Highway but provides no analysis on how this meets the direction for a 30minute city. Response should be updated to include brief summary from Traffic assessment (below) which details what centres can be access in 30mins by train and by bus.	SEPP HOUSING – LOW AND MID RISE HOUSING REFORMS Planning Proposal should be amended to include discussion on the exhibited Low and Mid-Rise Housing reforms, and the potential implications this will have on the development outcomes enabled on the site under the proposed R3 Medium Density Residential zoning.
reet Gordon		p.26	p.27
PLANNING PROPOSAL – 40 Dumaresq Street Gordon		Q5-Is the planning proposal consistent with any other applicable state and regional studies or strategies?	Q6 - Is the planning proposal consistent with applicable SEPPs?

- 40 DUMARESQ STREET GORDON

PLANNING PROPOSAL – 40 Dumaresq Street Gordon	treet Gordon		TABLE OF ASSESSMENT	MENT 8
			Density Residential zoning	
Q7 – Is the planning proposal consistent with applicable Ministerial Directions (section 9.1 Directions) or key government priority?	p.28-30		No change	
Section C – Environmental, social and econ	and economic impact			
Q8 – Is there a likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected because of the proposal?	p.31		No change	
Q9 – Are there any other likely environmental effects of the planning proposal and how are they proposed to be managed?	p.31-33	Remove duplication of what is proposed by planning proposal: P.32 'The planning proposal seeks to rezone' P.32 'Further it is proposed to amend the lot size map' 	Remove duplication of what is proposed by planning proposal: - P.32 'The planning proposal seeks to rezone' • P.32 'Further it is proposed to arrend the lot size map'	×es
Q10 – Has the planning proposal adequately addressed any social and economic effects?	p.32	1	No change	ı
Section D – Infrastructure (Local, State and Commonwealth)	Commonwealth)			
Q11 – Is there adequate public infrastructure for the planning	p.33		No change	ı

ATTACHMENT NO: 1 - REVIEW TABLE AMENDED DOCUMENTS KLPP

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proposal? Deposal - State and Commowealth - 20	PLANNING PROPOSAL – 40 Dumaresq Street Gordon	itreet Gordon		TABLE OF ASSESSMENT	MENT 9
Acadith P.34 Names of agencies need to be updated. in order in order Names of agencies need to be updated. in order P.34 Names of agencies need to be updated. in order P.34 Names of agencies need to be updated. in order P.35-38 Maps showing the current controls/zoning have highlighted both 40 and 38 Dumaresq Street. The Planning Proposal only relates to 40. The maps showing the current planning controls will need to be amended to remove the identification from 38 Dumaresq Street. P.35-38 Maps showing the current planning controls/zoning have highlighted both 40 and 38 Dumaresq Street. The Planning controls will need to be amended to remove the identification from 38 Dumaresq Street. P.35-38 Planning Proposal only relates to 40. The maps showing the current planning controls will need to be amended to remove the identification from 38 Dumaresq Street. P.35-38 Planning Proposed maps and seems to include the oundary of the site is inconsistent with the boundary of the site is inconsistent with the boundary of the rolad reservation. Needs to be amended. P.33 P.33 Planning Proposed maps and seems to include the rolad reservation. Needs to be amended.	proposal?				
s and P.34 Names of agencies need to be updated. in order in order in order ation? Amount of the index of agencies need to be updated. ation? Amount of the index of agencies need to be updated. ation? Amount of the index of agencies need to be updated. ation? Amount of the index of a mount of the index of the inghighted both 40 and 38 Dumaresq Street. The Planning Proposal only relates to 40. The maps showing the current planning controls will need to be amended to remove the identification from 38 Dumaresq Street. p.35-38 Dumaresq Street. p.35-38 Planning Proposal only relates to 40. The maps into will need to be amended to remove the identification from 38 Dumaresq Street. p.35-38 Dumaresq Street. p.35-38 Dumaresq Street. p.33 Reference is made to the promosed - the boundary of the site is inconsistent with the boundary of the road reservation. Needs to be amended. p.39 Reference is made to the Pre-Planning Proposal	Section E – State and Commonwealth				
p.35-38 Maps showing the current controls/zoning have highlighted both 40 and 38 Dumaresq Street. The Planning Proposal only relates to 40. The maps showing the current planning controls will need to be amended to remove the identification from 38 Dumaresq Street. Land Zoning Map - Proposed - the boundary of the site is inconsistent with the boundary of the site is inconsistent with the boundary of the road reservation. Needs to be amended. p.39 Reference is made to the Pre-Planning Proposal Meeting with Council staff, but no details of date.	Q12 – What are the views of state and federal public authorities and government agencies consulted in order to inform the Gateway Determination?	P. 34	Names of agencies need to be updated.	 Update agency names: Department of Planning, Housing and Infrastructure Department of Climate Change, Energy, the Environment and Water 	yes
p.35-38 Maps showing the current controls/zoning have highlighted both 40 and 38 Dumaresq Street. The Planning Proposal only relates to 40. The maps showing the current planning controls will need to be amended to remove the identification from 38 Dumaresq Street. Land Zoning Map – Proposed – the boundary of the site is inconsistent with the boundary shown on all other proposed maps and seems to include the road reservation. Needs to be amended. p.39 Reference is made to the Pre-Planning Proposal Meeting with Council staff, but no details of date.	Part 4 Maps				
Land Zoning Map – Proposed – the boundary of the site is inconsistent with the boundary shown on all other proposed maps and seems to include the road reservation. Needs to be amended. p. 39 Reference is made to the Pre-Planning Proposal p. 39 Meeting with Council staff, but no details of date.		p.35-38	Maps showing the current controls/zoning have highlighted both 40 and 38 Dumaresq Street. The Planning Proposal only relates to 40. The maps showing the current planning controls will need to be amended to remove the identification from 38 Dumaresq Street.	Amend maps to remove highlight/identification of 38 Dumaresq Street Gordon.	yes
p.39 Reference is made to the Pre-Planning Proposal Meeting with Council staff, but no details of date.			Land Zoning Map – Proposed – the boundary of the site is inconsistent with the boundary shown on all other proposed maps and seems to include the road reservation. Needs to be amended.	Amend Land Zoning Map Proposed to removal road reservation from boundary of site.	
Reference is made to the Pre-Planning Proposal Meeting with Council staff, but no details of date.	Part 5 Community Consultation				
		p.39	Reference is made to the Pre-Planning Proposal Meeting with Council staff, but no details of date.	Amend to include reference to the date (9 May 2023) that Pre-	yes

PLANNING PROPOSAL – 40 Dumaresq Street Gordon	itreet Gordon		TABLE OF ASSESSMENT 10
			Planning Proposal Meeting was held.
Part 6 Project Timeline			
	p.40	Project timeline to be updated	Project timeline to be updated.

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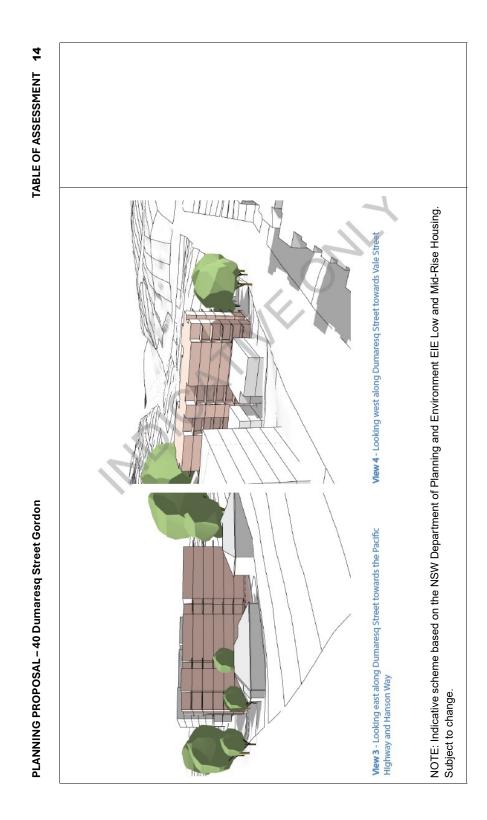
Concept Architectural Plans	
COMMENT FROM ATTACHMENT A10 TABLE OF ASSESSMENT KLPP 19 AUGUST 2024	RECOMMENDATION
Height and Floor Space Ratio	Concept Plans / Urban
The Planning Proposal seeks to apply the typical 11.5m / 0.8:1 FSR development standards that are applied to R3 Medium Density sites throughout Ku-ring-gai.	Design Study is to show a reference scheme to full potential of 11.5m and FSR
The concept architectural plans only include one elevation / cross section of the reference scheme – but it appears that the reference scheme is below the proposed 11.5m maximum height of buildings development standard proposed for the site.	of 0.8:1. If site is not capable of achieving full 11.5m/0.8:1 FSR the Urban
There is no detail on the concept architectural plan which outlines what the FSR of the reference scheme is, however p.16 of the Planning Proposal document outlines that 'the concept development provides a gross floor area of approximately 1,560sqm, representing a floor space ratio (FSR) of approximately 0.63:1'. The reference scheme is also below the proposed 0.8:1 FSR development standard proposed for the site.	Design Study should recommend a site-specific height and FSR based on sites capacity/constraints.
The Concept Plans / Urban Design Study should be amended to show a reference scheme to the full potential of the height of buildings and floor space ratio development standards being sought (11.5m / 0.8:1). Alternatively if site is not capable of achieving full 11.5m/0.8:1 FSR then the Urban Design Study should recommend site specific height and FSR based on sites capacity/constraints.	
The resulting development from the proposed height and FSR controls is of a scale sympathetic to the surrounding context, specifically the adjoining townhouse development at 34-36 Dumaresq and the low density dwellings at 42 and 42a Dumaresq Street. In addition, the development scheme is able to achieve approximately 50% deep soil, retain significant trees across the site and allows for the integration of the overland flow path through the site.	
Council Comment and Compliance	
Yes	

Amended Urban Design Study submitted which shows reference scheme of full potential of development standards on the site - 0.8:1 and 11.5m.

Low and Mid Rise Housing Reforms	Provide a full Urban Design
	Study to support the
The commencement of the Low and Mid-Rise Housing Reforms which will significantly increase the permitted residential	proposed amendments
density on the site should it be rezoned to R3 Medium Density Residential. The R3 Medium Density Residential zone will	with consideration of:
effectively be comparable to the R4 High Density Residential zone within Ku-ring-gai, as it will allow 6 storey residential flat	
buildings. There will be a disconnect between the original intention of the R3 Medium Density Residential zone to provide an	Development
interface between the R4 High Density Residential and R2 Low Density Residential.	outcome enabled
	by KLEP 2015 /
Council has undertaken indicative modelling of the mid-rise provisions on the combined site (38-40 Dumaresq).	KDCP (multi
	dwelling/townhous
	e at 11.5m / 0.8:1
	FSR)
	Development
	outcome enabled
	by Mid-rise
	provisions of
	housing reform
	(residential flat
	building at 22m /
	2.2:1 FSR)



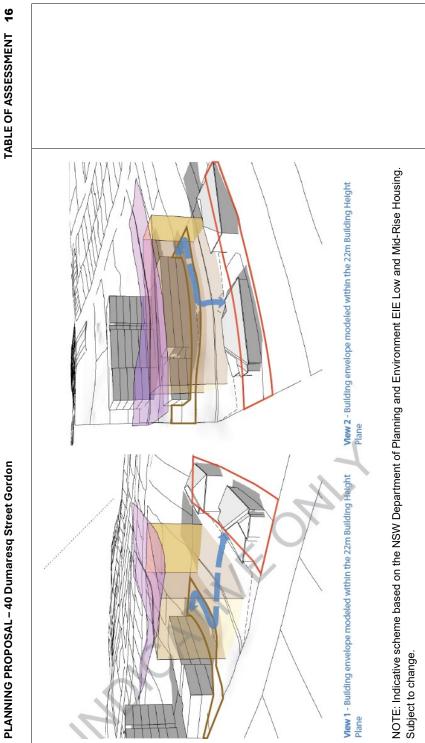
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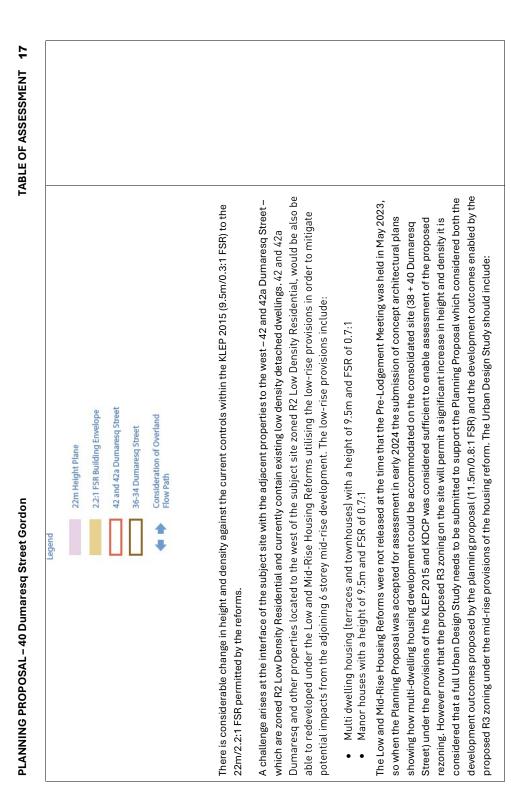


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- 40 DUMARESQ STREET GORDON



ATTACHMENT NO: 1 - REVIEW TABLE AMENDED DOCUMENTS KLPP

ATTACHMENT NO: 1 - REVIEW TABLE AMENDED DOCUMENTS KLPP	
- 40 DUMARESQ STREET GORDON	

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PLAN	PLANNING PROPOSAL – 40 Dumaresq Street Gordon	TABLE OF ASSESSMENT 18
•	Solar access and Overshadowing analysis	
•	Massing analysis	
•	View analysis	
•	Consideration of the integration and design of the overland flow path	
•	Consideration of the retention of mature trees on the site	
•	Interface with adjoining properties	
Coun	Council Comment and Compliance	
Amen	Amended Urban Design Study submitted includes a reference scheme showing an apartment building under the exhibition provisions of the Low and Mid Rise	ovisions of the Low and Mid Rise

Housing Policy which are intended to apply to the site.

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PLANNING PROPOSAL – 40 Dumaresq Street Gordon

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Shadow Diagrams	
COMMENT FROM ATTACHMENT A10 TABLE OF ASSESSMENT KLPP 19 AUGUST 2024	RECOMMENDATION
The shadow diagrams show that the reference scheme will not result in adverse overshadowing impact to the adjoining Update shadow diagrams in properties. However, the shadow diagrams are based on the concept architectural plans which show a reference scheme that is below the full 11.5m/0.8:1 FSR. height and floor space ratio development standards that are proposed demonstrate overshadowing within the planning proposal.	Update shadow diagrams in required Urban Design Study to demonstrate overshadowing impacts from permitted
Due to the north/south orientation of the block any overshadowing of the adjoining properties will not result in adverse impacts.	development under the mid-rise provisions (22m/2.2:1FSR)
Additional shadow diagrams and analysis will need to be submitted in the recommended Urban Design Study which demonstrates the overshadowing impacts from permitted development under the mid-rise provisions (22m/2.2:1 FSR).	
Council Comment and Compliance	
Yes	
Shadow diagrams submitted for development under mid-rise provisions	

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PLANNING PROPOSAL – 40 Dumaresq Street Gordon

Site Survey	
COMMENT FROM ATTACHMENT A10 TABLE OF ASSESSMENT KLPP 19 AUGUST 2024	RECOMMENDATION
Survey only provides total area for 38 and 40 Dumaresq Street and not individually for 40 Dumaresq.	Update survey to provide total area for individual sites – 38 Dumaresq and 40 Dumaresq.
	Update Planning Proposal documentation with site area from
	survey.
Council Comment and Compliance	
Yes	
Amended Site Survey has been submitted which provides individual site areas for both 38 Dumaresq Street and 40 Dumaresq Street Gordon, being:	Jumaresq Street Gordon, being:
• 38 = 972.9sqm	
 40 = 1415.1sqm and 60sqm 	
 Total = 2448som 	

PLANNING PROPOSAL – 40 Dumaresq Street Gordon

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Aboriculture Impact Assessment Report	
COMMENT FROM ATTACHMENT A10 TABLE OF ASSESSMENT KLPP 19 AUGUST 2024	RECOMMENDATION
Travers bushfire and Ecology (12 Dec 2023) Rotes tree loss due to storm damage in a 2021 storm event – photos provide in background of report. The damage to amage to	Ecological Assessment Report and Arborist Report need to be amended so that they are
<i>Cedrus deodara</i> appears to be related to a tree permit from 2019/2020. Aerial images show canopy loss in STIF consistent mapped area between 2018 and 2020 is not covered by the tree permit relating to the <i>Cedrus deodara</i> . Photos provided do not clearly show if it is just loss of canopy from existing trees, may also be related to works on number <i>e</i> number <i>e</i> number <i>e</i> neighbouring properties (41 Moree).	amended so that they are consistent with references to number and species of tree removal.
 Ten (10) trees recommended for removal (2 on adjoining properties); One Magnolia recommended to retain via transplant - Tree relocation methodology included – this will need to be confirmed at DA stage 	
 Conclusions note presence of 18 trees – however 19 trees are noted in list (with 2 from neighbouring properties) this needs to be clear at DA stage. Promoved since for carbon CTIF EFC encrose 	
 Replace all removed trees within the landscape design, ensuring the inclusion of species with a <i>minimum</i> Replace all removed trees within the landscape design, ensuring the inclusion of species with a <i>minimum</i> mature height of 8m – Replacement requirements may be different at DCP stage, larger trees are likely required and will need to be accommodated for on the landscape plan. 	
Overall it appears Tree and Canopy impacts will be manageable at DA stage	
Council Comment and Compliance Aborist Report has been updated in line with Council required amendments regarding trees to be removed and retained. Ecological Report has been updated to include reference to removal of Firewheel Tree.	

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PLANNING PROPOSAL – 40 Dumaresq Street Gordon

Ecological Assessment Report	
COMMENT FROM ATTACHMENT A10 TABLE OF ASSESSMENT KLPP 19 AUGUST 2024	RECOMMENDATION
Travers bushfire and Ecology (16 August 2023)	Ecological Assessment Report and Arborist Report need to be
Notes that intention is to retain the EEC at rear of property (section 2.2)	amended so that they are consistent with references to
	number and species of tree
 It is recommended that the three (3) trees at the rear of the property be protected, ie, no more than 10% of their tree protection zone impacted such that there is minimal impact on the TEC. On the basis of the rezoning proposal and the existing trees in the TEC being of sufficient health, they will be retained. 	removal.
 The mitigation measures identify that landscaping is to predominately utilise species of Sydney Turpentine Ironbark Forest origin that will provide some level of native understorey to enhance remnant PCT 3262. 	
 The Test of Significance in Appendix 3 concludes that the proposal will not cause a significant impact upon the Sydney Turpentine Ironbark Forest for the rezoning proposal. 	
Notes: development requires removal of 6 trees on site – this is not consistent with the Arb report which also has a Firewheel tree, 2 Jacarandas and a Camellia being removed – 10 trees in total need to clarify: o 2 x Cupressus sempervirens (Pencil Pine)	
 1 x Magnolia spp 1 x Ligustrum lucidum (Broad-leaved Privet) - neighbouring site 1 x Nerium oleander (Oleander) and; - neighbouring site 1 x Cettis sinensis (Chinese Hackberry) 	
Test of significance and further information in the report indicate that ecological impacts can be delt with at DA stage	
Overall, information in the report supports that rezoning can be accommodated without significant impact to biodiversity.	
Council Comment and Compliance Aborist Report has been updated in line with Council required amendments regarding trees to be removed and retained.	

Ecological Report has been updated to include reference to removal of Firewheel Tree.

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PLANNING PROPOSAL – 40 Dumaresq Street Gordon

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Methodology for Relocating a Mature Magnolia Tree	
COMMENT FROM ATTACHMENT A10 TABLE OF ASSESSMENT KLPP 19 AUGUST 2024	RECOMMENDATION
Noted. This will need to be confirmed at DA stage.	No change.

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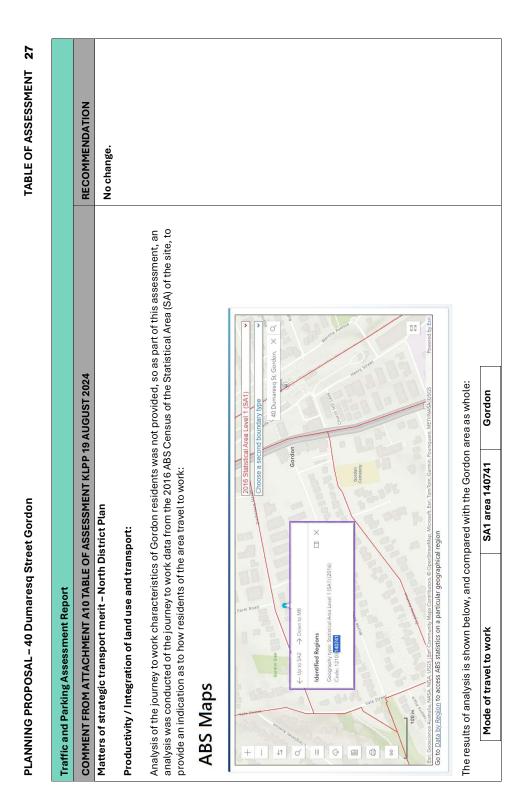
Flood Management Report / Drains Models / HEC-RAS Models	
COMMENT FROM ATTACHMENT A10 TABLE OF ASSESSMENT KLPP 19 AUGUST 2024	RECOMMENDATION
Henry & Hymas - H&H Consulting Engineers Pty Ltd (February 2024)	Flood Management
Proposal includes formed swale to convey flows through the site:	Report to be amended to
In all models, the formalised proposed swale/channel is through the naturally occurring low point, as marked and hatched in blue in Appendix D. The swale is proposed to have a 3m wide hase and batters on each side at clone of 14-1V. In to a denth of maximum 400mm	information regarding
For Worst case scenario, blocked pipes. drn The flow of $2.9m^3/s$ is safely conveyed through the proposed swale, reaching a maximum flow	the changed velocity
Noting most other scenarios demonstrate a depth of 300 or below, there are depths of 320, 370. Noting that these mainly relate to 600dia	channelisation of flood
scenarios it shourd be noted that the lined development will heed to comply with the salety requirements of the DCF and any nows above 300mm depth may be too deep.	flows and impacts on
	downstream dwellings.
HEC-RAS results section (P15) notes an increase in Flood hazard at section 0 (most downstream end of the site) – this relates to changed	The report needs to
velocity resulting from channelisation of flood flows (pre = 1.61 m/s; post =4.01 m/s). This issue needs to be more clearly addressed than the	confirm that there are
information provided on p14. The report needs to confirm if there are feasible measures that can be implemented at DA stage, with clear	feasible measures that
evidence, to ensure that this increase in velocity and subsequent increase in Hazard category will not cause damage to the downstream account. This is marticularly immortant rived the location of dwallings on the downstream lat	can be implemented
אי סקבולי. ווווז וא קטרגנעוטו א ווויחסו מוור פעבון גווב וסרטנטון סו מאבוווופא סון גווב מסאוואני בטוון וסנ	(with clear evidence) to
The DRAINS modelling confirmed that upsizing of the existing pipe through the site from a Ø600 pipe to a Ø750 pipe will be necessary to safely	ensure the increase in
	velocity and increase in
This will need to be incorporated into DA design plans.	hazard category will not
	cause damage to
	downstream properties.
	Urban Design Study to
	be submitted which
	demonstrate how flood
	management / overland
	flow can be addressed

as part of site

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	redevelopment for residential flat building
Council Comment and Compliance Flood Report notes "For the downstream neighbouring property, the proposed works (including the upsizing of the existing pipe to a Ø750mm pipe) will result in a reduced	mm pipe) will result in a reduced
Jow energy then tank, at a reacted actual Jow. Even though the velocity at the most downs can is sugney ingret than the pre-averophient scenary, the velocity achieved within the dedicated depth product is effectively unchanged at this downstream section." (p.16) and "Given the nature of the dedicated channel, the higher velocity achieved within the dedicated space will not impose a danger on people, vehicles or buildings, as the magnitude of flow reaching the downstream property is reduced, as well as the depth of flow. The velocity depth product on the downstream section is proof that the safety for the neighbouring land is not compromised." (p.17)	reveropment scenary, the verousy y achieved within the dedicated ell as the depth of flow. The
It is noted that the Flood Report emphasises that a residential flat building development on the site with a covered culvert is not appropriate due to maintenance, blockage risk and local of alternative path for surcharging water during an emergency. i.e. an open air channel is recommended. However, the Urban Design Reference Scheme for a residential flat building spans across the site and existing depression. with no open air channel.	: appropriate due to recommended. However, the nannel.
Recommended Amendments prior to Gateway:	
 Table addressing S9.1 Flooding in Flood Report, Planning Proposal and Urban Design Study to be updated to change reference from Floodplain Development Manual (2005) to Floodplain Risk Management Manual (2023) 	erence from <i>Floodplain</i>
Urban Design Study Residential Flat Building Reference Scheme to be updated to align with the recommendations of the Flood Report.	e Flood Report.

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PLANNING PROPOSAL – 40 Dumaresq Street Gordon

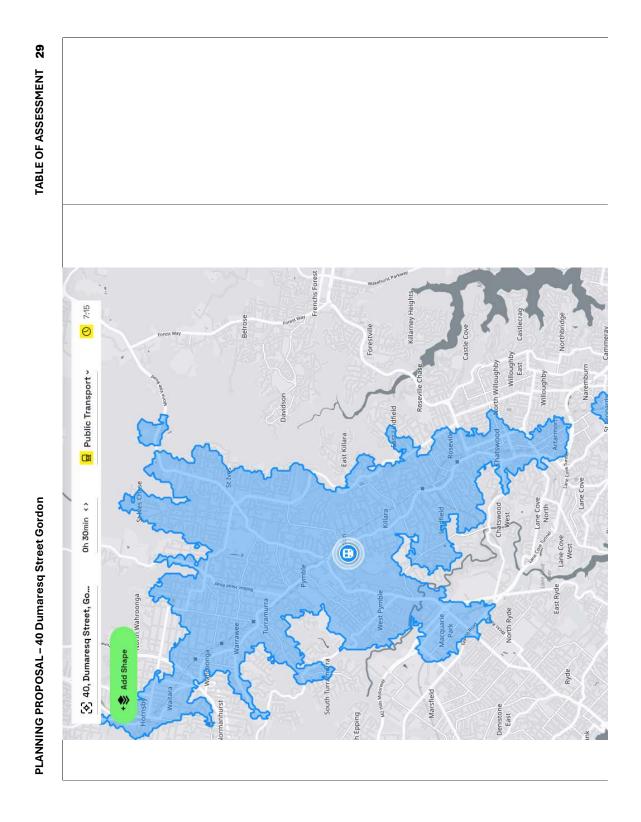
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passenger)		-	
Public transport (train, bus)	51%	45%	
Active transport (walking and cycling)	6%	4%	
This indicates that locations in close proximity to good public transport tend to be less reliant on private vehicles for their journeys to work.	good public transport te	end to be less reli	ant on private vehicles for their
An analysis of Statistical Area encompassing the SA1 area was undertaken, which would provide an indication of the work destinations of future residents of the planning proposal. The work destinations of its residents were as follows:	SA1 area was undertake oposal. The work destir	en, which would p lations of its resid	provide an indication of the work dents were as follows:
Work destination	Proportion		
Sydney/Inner City	31%		

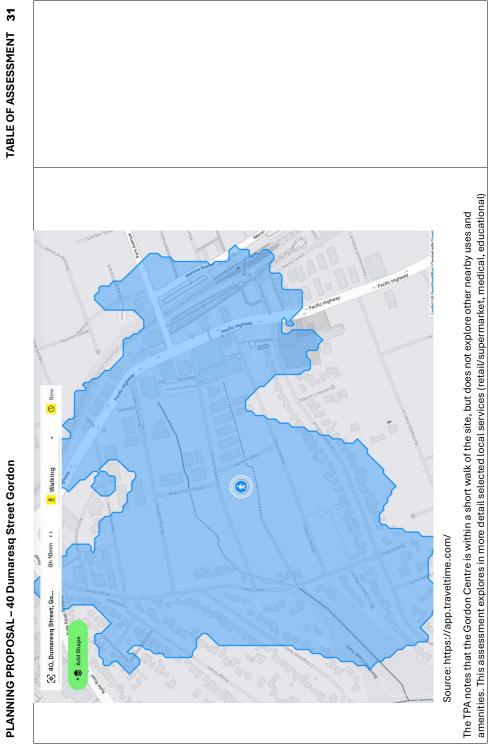
Work destination	Proportion
Sydney/Inner City	31%
Ku-ring-gai LGA	21%
Chatswood - Lane Cove area	14%
Ryde area	%6
North Sydney – Mosman area	6%
Parramatta area	4%
Hornsby area	3%
Northern Beaches area	3%
Inner West area	3%
Inner South-West area	3%
Other	3%
Total	100%

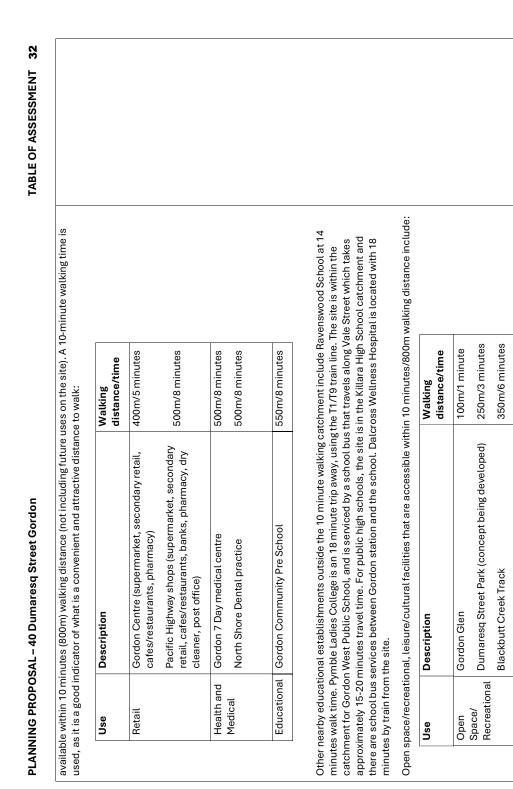
Below is a travel time map indicating the 30-minute catchment by public transport from site (including walk time to the nearest station/bus stop):



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Source: https://app.traveltime.com/		
Within 30 minutes travel by public transport of the site are the Strategic Centres of Chatswood, St Leonards, Macquarie Park and Hornsby. However, once the Chatswood to Sydenham component of Sydney Metro opens (expected in the 2 nd half of 2024), North Sydney and Barangaroo/Sydney CBD would lie within 30 minutes travel time from the site (due to faster travel times by metro).		
Based on the destinations of current workers in nearby surrounding Statistical Areas, nearby Strategic Centres are expected to be key work destinations for future residents of the site. In summary, the site provides a good degree of access to jobs in nearby Strategic Centres, consistent with the North District Plan's Planning Priority N12 (Delivering integrated land use and transport planning and a 30-minute city).		
Liveability		
Section 3 of the TPA discuss the walking and cycling facilities in the vicinity of the site, and notes that footpaths are generally provided on all roads in the surrounding area. There are a number of traffic signal-controlled pedestrian crossing facilities on Pacific Highway in the vicinity of the site that enable access to the eastern side of Gordon and Gordon station / bus interchange. The diagram below shows the extent of the 10-minute walking catchment from the site:		

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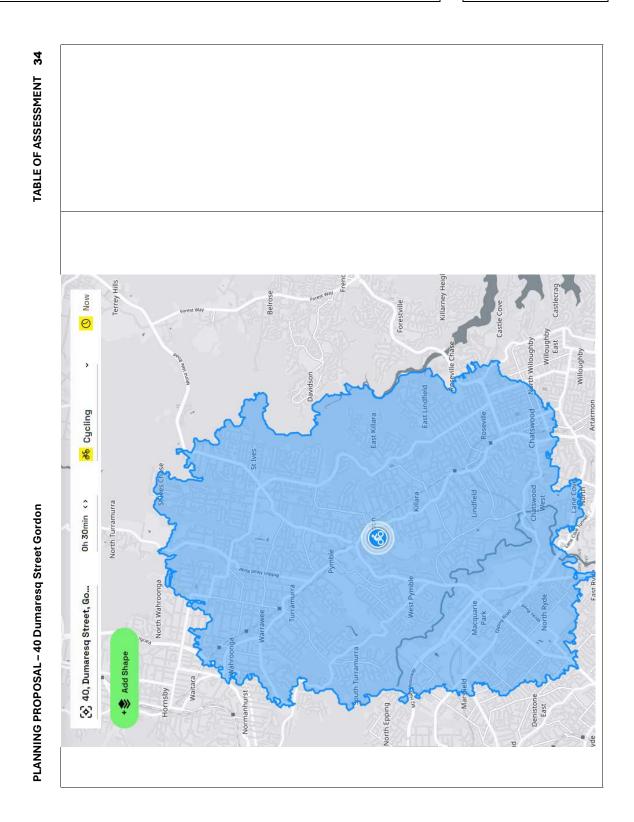
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		alking					
450m/9 minutes 500m/10 minutes 600m/10 minutes	800m/10 minutes	acilities outside the 10 minute/800m wa				educational leisure/recreational and	
Gordon Library Ku-ring-gai Historical Society Church of St. John the Evangelist Lifeline		Other selected nearby recreational, leisure and community and cultural facilities outside the 10 minute/800m walking distance catchment include:	Gordon Golf Club – 750m/12 minutes	City Golf Gordon – 900m/13 minutes	Gordon Recreation Grounds – 900m/14 minutes	From this assessment, there is a good selection of retail, health/medical, educational leisure/recreational and community/cultural facilities within a 10 minute walk of the site.	The extent of the 30 minute cycling catchment is shown below:
Community & Cultural		Other selected nearby distance catchment in	Gordon Go	City Golf G	Gordon Rev	From this assessment, community/cultural fa	The extent of the 30 mi

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Source: app.traveltimeplatform.com Centres such as Chatswood and Macquarie Park would be within a 30-minute bicycle ride. Future links identified in the Strategic Cycleway Corridors - Eastern Harbour City released by Transport for NSW in April 2022 would improve cycling connections to Chatswood:		
]

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corridors will connect key centres and major points of interest. Exact routes will be 30 strategic cycleway corridors have been identified for the Eastern Harbour City, Extensions to corridors will also be considered to connect riders to recreational subject to detailed design and collaboration with councils and the community. making up approximately 250 km of network (as indicated in the map). The Dee hs For CBDs and strategic centres will develop Local links developed by councils are activity hubs including major parklands and beaches. igher density of cycleway Strategic Cycleway Corridor network map Vote

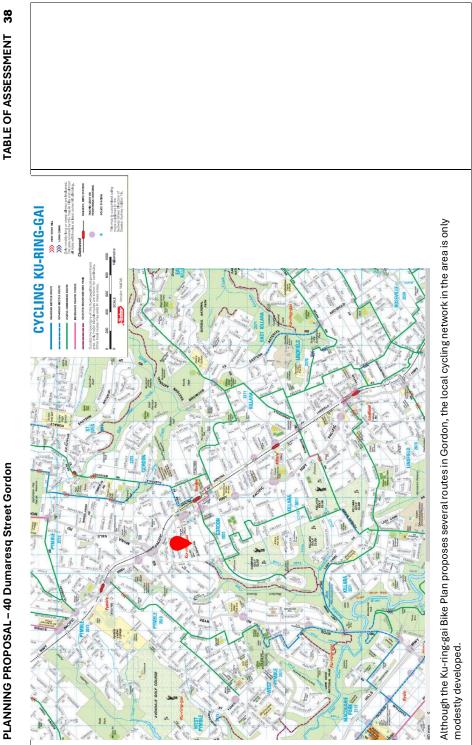
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PLANNING PROPOSAL – 40 Dumaresq Street Gordon

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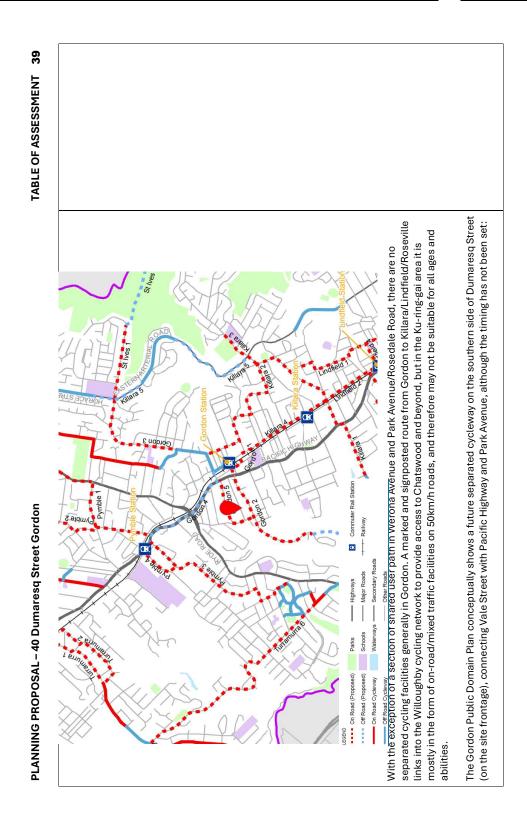
Sydney Sydney apic Pk and amatta

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Provision of safe, separated cycling facilities along the Strategic Cycleway Corridors would provide further access to Gordon, Chatswood, Hornsby and potentially to Frenchs Forest.	
In terms of local access, below is an extract of the Ku-ring-gai Cycling Map, showing existing cycling facilities (blue) and other unmarked routes currently used by cyclists (green):	

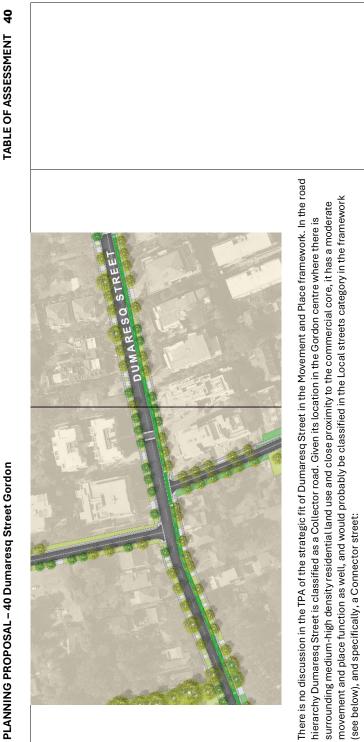




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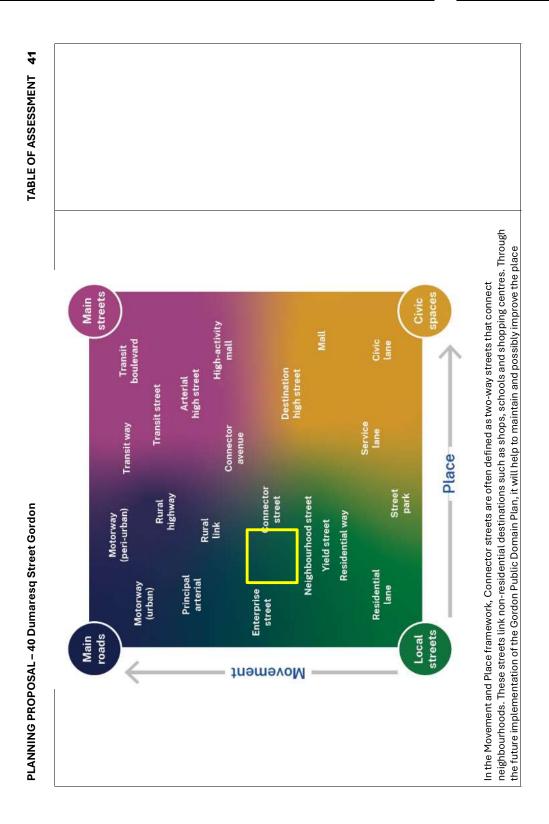


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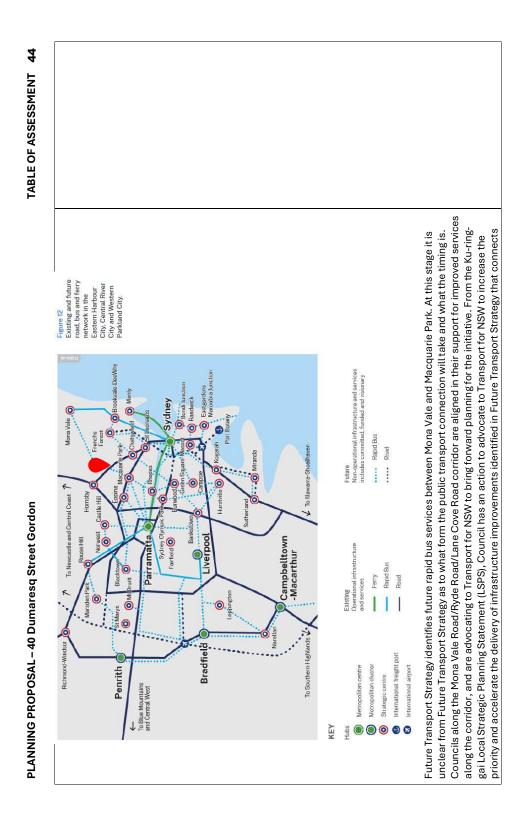
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function of the Connector continuing to provide the r	function of the Connector street environment (through street tree planting, street lighting and separated cycleway) while continuing to provide the movement function between Vale Street and Pacific Highway.	reet tree planting, stre le Street and Pacific H	et lighting and sep. Highway.	arated cycleway) while	
Sustainability					
The Ku-ring-gai DCP speci railway station but there is parking required in the DC parking could be provided impacts, and improve affo	The Ku-ring-gai DCP specifies a minimum and maximum rate of car parking for multi-dwelling housing within 800m of a railway station but there is no assessment to determine whether the site has the capacity to provide the quantum of car parking required in the DCP. Given the good accessibility of the site and proximity to a variety of amenities and services, parking could be provided at the lower end of the range in the DCP to reduce excavation, material costs and environmental impacts, and improve affordability. Parking provision will be addressed in more detail in a future development application.	rate of car parking for whether the site has th of the site and proxim the DCP to reduce ex be addressed in more	mutti-dwelling hou le capacity to provic ity to a variety of ar cavation, material s detail in a future d	sing within 800m of a le the quantum of car nenities and services, costs and environmental evelopment application.	
Matters of strategic trans	Matters of strategic transport merit – Ku-ring-gai Local Strategic Planning Statement (LSPS)	Strategic Planning S	tatement (LSPS)		No change.
Transport infrastructure capacity	capacity				
The entrance to Gordon ra TPA does not comment on dwellings on the site would	The entrance to Gordon railway station is located 700m away from the site (or approximately 11 minutes walk time). The TPA does not comment on station platform capacity for additional patrons however it is unlikely that the additional 8 dwellings on the site would impact on station or train capacity at Gordon.	way from the site (or a dditional patrons how acity at Gordon.	approximately 11 m ever it is unlikely th	inutes walk time). The at the additional 8	
The two nearest bus stops lves/Mona Vale, Macquari the TIA on the level of occt	The two nearest bus stops are on Pacific Highway just south of Dumaresq Street. Bus services from this stop travel to St lves/Mona Vale, Macquarie Park/Macquarie University and West Pymble. There were no observations or measurements in the TIA on the level of occupancy of these bus services or bus stops.	uth of Dumaresq Stree d West Pymble. There bus stops.	st. Bus services fron » were no observati	n this stop travel to St ons or measurements in	
From Opal data collected during a	during a week in March 2023, the nearby bus stops have the following usage characteristics:	ne nearby bus stops h	ave the following us	age characteristics:	
Stop ID	Location/Designation	Tap on	Tap off		
Routes/services		(weekly numbers)	(weekly numbers)		
207212					
195/196/197			-		
560	Pacific Hwy at Moree St	009	Less than 50		
562					

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	06N					
	207214					
	195/196/197					
	560	Pacific Hwy opp Dumaresq St	Less than 50	670		
	562	;				
	06N					
The nu people	imbers recorded at tl etravelling to/from G	The numbers recorded at the stops range from 90-110 passengers per weekday, which suggest they are popular stops for people travelling to/from Gordon but not necessarily connecting to Gordon station.	sengers per weekday, ecting to Gordon stati	which suggest the on.	sy are popular stops for	
Since the therefore, proposal.	the numbers of resid ore, that there would sal.	Since the numbers of residents of the proposal that would use a bus for journeys to work is modest, it is unlikely, therefore, that there would be insufficient capacity on buses or at the stops to accommodate additional demand from the proposal.	use a bus for journeys es or at the stops to a	s to work is modes ccommodate addi	t, it is unlikely, tional demand from the	
New tr impact	ransport proposals/ ts to the proposal ir	New transport proposals/strategies or capacity improvements foreshadowed in Future Transport Strategy, and its impacts to the proposal in terms of travel behaviour.	ements foreshadowe	ed in Future Trans	port Strategy, and its	



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45
TABLE OF ASSESSMENT

PLANNING PROPOSAL – 40 Dumaresq Street Gordon	TABLE OF ASSESSMENT
Ku-ring-gai internally and with nearby centres, including improvements to bus connections from Mona Vale to Macquarie Park (followed by Bus Rapid Transit).	
The latest advice from TfNSW is that it is planning a frequent bus service which will operate between Mona Vale and Macquarie Park (circa 2030) and then enhancing to a Rapid Bus Service (circa 2036) as identified in the Future Transport. However, these service improvements are currently unfunded.	
A rapid bus route is also identified between Chatswood and Dee Why (via Frenchs Forest). This is currently operating as an "express service" although it is unclear what the timeframe is for its upgrade to rapid bus route.	
Future residents of the proposal would benefit from an upgrade to a rapid bus route in that it may bring the Frenchs Forest strategic centre within 30 minutes travel time from the site, and improve travel times to Macquarie Park.	
Potential impact resulting from future use (expansion/intensification).	
The TPA notes that the intersection of Pacific Highway and Dumaresq Street currently operates at Level of Service B (good operation with acceptable delay and spare capacity). This aligns with Council's assessment of the intersection in previous investigation work.	
The TPA notes that the forecast net additional development traffic to be approximately 5 vehicle trips per hour during the morning peak and evening peak. This equates to an average of 1 additional vehicle movement every 12 minutes during the peak periods. Modelling was undertaken and indicates that the Level of Service would not change since the increase traffic movements would be negligible and therefore will have no noticeable effects on the Pacific Highway and the surrounding road network. Given the relatively modest impacts of the proposal, this conclusion is supported.	
State agency discussion (Transport for NSW), including road widening and pinch points program requirements, and any potential alteration/expansion of bus services along the corridor.	
There is no evidence of correspondence between Transport for NSW and the Proponent regarding future road proposals. Transport for NSW has previously advised Council is that it is planning a frequent bus service which will operate between Mona Vale and Macquarie Park and then enhancing to a Rapid Bus Service as identified in the Future Transport. If the Planning Proposal proceeds to Gateway, Transport for NSW will be providing a response as part of consultation with state agencies and would clarify whether the proposal would be affected by the future expansion of these services as well as any.	

PLANNING PROPOSAL – 40 Dumaresq Street Gordon

PLANNING PROPOSAL – 40 Dumaresq Street Gordon	TABLE OF ASSESSMENT 46
Summary of assessment	No change.
The Planning Proposal has the following favourable transport aspects:	
 Residents in the Statistical Area of the site use public transport more for their journeys to work than the Gordon suburb as a whole. 	
 Based on the work destinations of current residents in nearby surrounding Statistical Areas, nearby Strategic Centres are expected to be key work destinations for future residents of the site. 	
The site is located within 700m of Gordon station, which provides access to the Sydney Trains and Sydney Metro network. The demand resulting from the Planning Proposal is modest and unlikely to impact on train or platform	
 capacity. The site is well positioned to take advantage of the imminent opening of the Chatswood to Sydenham component of Sydney Metro, and future conversion to rapid bus line of the existing express bus service from Chatswood to Dee Why, as well as future frequent bus services between Mona Vale and Macquarie Park. 	
 There is a good selection of retail, health/medical, leisure/recreational and community/cultural facilities within a 10 minute walk of the site. 	
Due to the modest number of additional vehicle trips expected to be generated from the site, the proposal is not expected to have significant additional impact on the operation of the intersection of Pacific Highway and	

Dumaresq Street.

The following transport constraints were found with respect to the Planning Proposal:

Public Primary and High Schools are not within walking distance, although this is moderated somewhat by school The local cycling network in the area is largely underdeveloped, limiting local and regional cycling connectivity. buses that travel near the site. • ٠

additional traffic generation, an amended Traffic Report is not Due to minor increase in required. Traffic Generation Analysis Townhouses vs possible scenario under Low and Mid-Rise Housing SEPP **Current Proposal**

ITEM NO: GB.4

PLANNING PROPOSAL – 40	AL – 40 Dumaresq Street Gordon	t Gordon			TABLE OF ASSESSMENT 47	47
	Peak Traffic Generation	Less Existing Traffic Generation	Net Peak Hour Traffic Generation			
	(vehicle trips per hour)		(vehicle trips per hour)			
10 Townhouses (0.65 trips per dwelling)	7	2	ß			
Low-Mid Rise Scenario	2					
48 Apartments (0.19 trips per dwelling)	10	2	œ			
The impacts of the addi would not be noticeable	The impacts of the additional 3 trips during the peak hour generated by the low-mid rise scenario over the current proposal would not be noticeable in any traffic modelling of nearby intersections.	ak hour generated by the 'nearby intersections.	low-mid rise scenario over	the current proposal		

PLANNING PROPOSAL

To rezone Lots 1 and 2 in Deposited Plan 1006588 (No. 40 Dumaresq Street, Gordon) from R2 – Low Density Residential to R3 – Medium Density Residential pursuant to the Ku-ring-gai Local Environmental Plan 2015

December 2024

Prepared by: James Lovell and Associates

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EXECUTIVE SUMMARY

Overview

The purpose of the Planning Proposal is to rezone the subject site ("the site") from R2 – Low Density Residential to R3 – Medium Density Residential pursuant to the Ku-ring-gai Local Environmental Plan (LEP) 2015.

The site formally comprises Lots 1 and 2 in Deposited Plan 1006588, and is commonly known as No. 40 Dumaresq Street, Gordon.

The site is located on the southern side of Dumaresq Street, approximately mid-way between the Pacific Highway to the east and Vale Street to the west. The site encompasses an area of approximately 1,475.1m² and is generally rectangular in shape with a frontage of 20.98 metres to Dumaresq Street. The site is currently occupied by a single storey detached dwelling above a partially excavated garage.

The site is held in common ownership¹ with the adjoining property to the north identified as No. 38 Dumaresq Street, Gordon. That property is zoned R3 – Medium Density Residential. The boundary between No's 38 and 40 Dumaresq Street currently forms the boundary between the R2 – Low Density Residential and R3 – Medium Density Residential zones.

On 16 March 2020, Council granted Development Consent (DA No. 0168/17) in relation to the two (2) adjoining properties further to the north identified as No's 34 and 36 Dumaresq Street, Gordon. The approved development provides for the construction of nine (9) townhouses and associated facilities.

Clause 6.6 of the Ku-ring-gai LEP 2015 specifies that development consent must not be granted for the erection of *"multi dwelling housing"* or a *"residential flat building"* unless the lot has an area of at least 1,200m² and minimum dimensions (width and depth) of at least 24 metres (if the area of the land is less than 1,800m²).

The site identified as No. 38 Dumaresq Street has an area of approximately 972.6m², with a frontage of 14.935 metres to Dumaresq Street. As such, No. 38 Dumaresq Street is now an undersized (or isolated) lot with an area and site frontage that do not satisfy the requirements of Clause 6.6 of the LEP for *"multi dwelling housing"*.

In the circumstances, the purpose of the proposed rezoning of No. 40 Dumaresq Street from R2 – Low Density Residential to R3 – Medium Density Residential is to enable No's 38 and 40 Dumaresq Street to be developed together for the purposes of *"multi dwelling housing"* and overcome the *"isolation"* of No. 38 Dumaresq Street arising from the combined development of No's 34 and 36 Dumaresq Street.

In addition, the property further to the west (No. 42 Dumaresq Street) has previously been subdivided to create two (2) allotments, with the site accommodating a total of four (4) dwelling houses. In the circumstances, there is no realistic potential of that land being further developed in any substantial way in the foreseeable future.

¹ No. 38 Dumaresq Street is owned by Ms. Stella Chen and No. 40 Dumaresq Street is owned by Jessco Pty Ltd, a company owned by Ms. Chen.

The topographical features of the locality are such that the land generally falls downhill towards the west, with the boundary between No's 40 and 42 Dumaresq Street being the approximate point at which the topography becomes more level.

Further, there are localised stormwater and drainage issues in the immediate surrounds, and the consolidated development of No's 38 and 40 Dumaresq Street provides the opportunity to resolve those issues for the benefit of No. 42 Dumaresq Street.

The boundary between the R2 – Low Density Residential and R3 – Medium Density Residential on the opposite side of Dumaresq Street is located further to the west, and opposite No. 42 Dumaresq Street. In that regard, on 2 November 2023, the Land and Environment Court upheld an appeal (*Winim Developments Pty Limited v Ku-ring-gai Council [2023] NSWLEC 1651*) with the agreement of the parties for the construction of 14 townhouses at No's 43 – 47 Dumaresq Street, Gordon.

Further, the boundary between No's 40 and 42 Dumaresq Street represents the most appropriate boundary between the R2 – Low Density Residential and R3 – Medium Density Residential zones.

Finally, it is proposed to amend the Lot Size Map (to specify a minimum lot size of $1,200m^2$), the Height of Buildings Map (to specify a maximum building height of 11.5 metres) and the Floor Space Ratio Map (to specify a maximum floor space ratio of 0.8:1). The proposed amendments to the Maps are intended to provide consistency with the controls applying to the adjoining land zoned R3 – Medium Density Residential.

In summary, the proposed rezoning of No. 40 Dumaresq Street will overcome the isolation of No. 38 Dumaresq Street and allow No's 38 and 40 Dumaresq Street to be consolidated and developed together.

In that regard, a set of Concept Architectural Plans (and shadow diagrams) have been prepared to demonstrate the site (when developed in conjunction with No. 38 Dumaresq Street) is capable of accommodating a *"multi dwelling housing"* development consisting of ten (10) dwellings in a form that will comply with the applicable planning controls relating to building height, floor space ratio (FSR), landscaped area, boundary setbacks, private open space and off-street car parking.

Further, the concept development has been carefully designed to accommodate the recommendations and findings of the *Arboricultural Impact Assessment Report* (*Appendix D*), the *Ecological Assessment Report* (*Appendix F*) and the *Flood Management Report* (*Appendix G*).

Finally, the NSW Department of Planning, Housing and Infrastructure has placed on public exhibition an *Explanation of Intended Effects* (EIE) *"Changes to create low and mid-rise housing"*. The Council has requested consideration be given to the potential implications of proposed initiatives on the development potential of the site.

In that regard, Concept Architectural Plans have been prepared to demonstrate the site (when developed in conjunction with No. 38 Dumaresq Street) is hypothetically capable of accommodating a *"residential flat building"* consisting of approximately 48 dwellings, however it not the intention of this Planning Proposal to facilitate that form of development.

Background

The subject site was included under the provisions of the Ku-ring-gai Local Centres LEP 2012 which was then consolidated into the Ku-ring-gai LEP 2015 on 28 June 2021. The Ku-ring-gai LEP 2015 adopted the same minimum lot size and frontage requirements as the former LEP.

The former LEP was informed by a range of studies, including studies considering the interface between zone boundaries. The former LEP adopted a number of measures to address the interface between boundaries, including utilising road carriageways and/or heritage items as zone boundaries where possible, and including medium density zones between high and low density zones.

The properties at No's 34 - 38 Dumaresq Street are generally intended to function as an interface (or transition) between the high density residential zone to the east, and the low density residential zone to the west. Interestingly, the same transition on the opposite side of Dumaresq Street is located further to the west, and opposite No. 42 Dumaresq Street.

The circumstances have changed since the introduction of the Ku-ring-gai LEP 2015. In particular, No's 34 and 36 Dumaresq Street are now held in common ownership, and No's 38 and 40 Dumaresq Street are now held in common ownership (different owners from No's 34 and 36 Dumaresq Street).

Further, the approved development at No's 34 and 36 Dumaresq Street is such that No. 38 Dumaresq Street is now an undersized (or isolated) lot with a lot size and frontage that do not satisfy the requirements of Clause 6.6 of the LEP for *"multi dwelling housing"*.

Land to which this Planning Proposal Applies

The site formally comprises Lots 1 and 2 in Deposited Plan 1006588, and is commonly known as No. 40 Dumaresq Street, Gordon.

The site is located on the southern side of Dumaresq Street, approximately mid-way between the Pacific Highway to the east and Vale Street to the west. The site encompasses an area of approximately 1,475.1m², and is generally rectangular in shape with a frontage of 20.98 metres to Dumaresq Street.



Figure 1 – Location



Figure 2 – Site

Existing Planning Controls

The site is currently zoned R2 – Low Density Residential.



Figure 3 – Current Land Zoning Map

ATTACHMENT NO: 2 - PLANNING PROPOSAL 40 DUMARESQ STREET GORDON (DECEMBER 2024)



The site is currently subject to a minimum lot size control of 930m².

Figure 4 – Current Lot Size Map

The site is currently subject to a maximum building height of 9.5 metres.



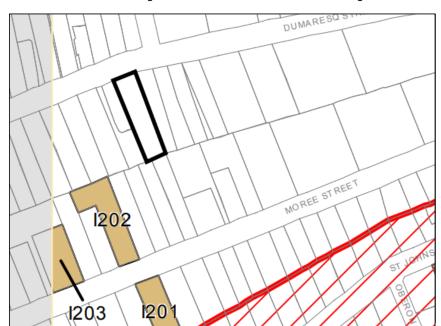
Figure 5 – Current Height of Buildings Map

ATTACHMENT NO: 2 - PLANNING PROPOSAL 40 DUMARESQ STREET GORDON (DECEMBER 2024)



The site is currently subject to a maximum floor space ratio of 0.3:1.

Figure 6 – Current Floor Space Ratio Map



The site is not identified as a heritage item and is not located within a heritage conservation area.

Figure 7 – Current Heritage Map

ATTACHMENT NO: 2 - PLANNING PROPOSAL 40 DUMARESQ STREET GORDON (DECEMBER 2024)



The site is identified as Class 5 on the Acid Sulfate Soils Map.

Figure 8 – Current Acid Sulfate Soils Map

The site is not identified on the Riparian Lands and Watercourses Map.



Figure 9 – Current Riparian Lands and Watercourses Map

Finally, the Planning Proposal does not propose (or require) any changes to the Heritage Map, Acid Sulfate Soils Map or the Riparian Lands and Watercourses Map.

Technical Studies Relied On

The Planning Proposal is supported by the following technical studies:

- 1. Concept Architectural Plans prepared by Cracknell & Lonergan Architects dated 30 August 2024 (Appendix A).
- Shadow Diagrams prepared by Cracknell & Lonergan Architects dated 30 August 2024 (Appendix B).
- 3. Urban Design Report prepared by Cracknell & Lonergan Architects dated 12 December 2024 (Appendix C).
- Arboriculture Impact Assessment Report prepared by Travers Bushfire & Ecology dated 2 December 2024 (Appendix D).
- 5. Methodology for Relocating a Mature Magnolia Tree prepared by Travers Bushfire & Ecology dated 9 November 2023 (Appendix E).
- 6. Ecological Assessment Report prepared by Travers Bushfire & Ecology dated 29 November 2024 (Appendix F).
- 7. Flood Management Report prepared by Henry & Hymas dated December 2024 (Appendix G).
- 8. *Traffic and Parking Assessment Report* prepared by Varga Traffic Planning dated 21 August 2023 (*Appendix H*).
- 9. Site Survey prepared by Bee & Lethbridge, Revision 00, dated 19 September 2024 (Appendix I).

PART 1 – OBJECTIVES AND INTENDED OUTCOMES

The objective and intended outcome of the Planning Proposal is to rezone No. 40 Dumaresq Street, Gordon from R2 – Low Density Residential to R3 – Medium Density Residential pursuant to the Kuring-gai LEP 2015.

In that regard, Clause 6.6 of the Ku-ring-gai LEP 2015 specifies that development consent must not be granted for the erection of *"multi dwelling housing"* or a *"residential flat building"* unless the lot has an area of at least 1,200m² and minimum dimensions (width and depth) of at least 24 metres (if the area of the land is less than 1,800m²).

The site identified as No. 38 Dumaresq Street has an area of approximately 972.6m², with a frontage of 14.935 metres to Dumaresq Street. As such, No. 38 Dumaresq Street is now an undersized (or isolated) lot with an area and site frontage that do not satisfy the requirements of Clause 6.6 of the LEP for *"multi dwelling housing"*.

In the circumstances, the purpose of the proposed rezoning of No. 40 Dumaresq Street from R2 – Low Density Residential to R3 – Medium Density Residential is to enable No's 38 and 40 Dumaresq Street to be developed together for the purposes of *"multi dwelling housing"* and overcome the *"isolation"* of No. 38 Dumaresq Street arising from the combined development of No's 34 and 36 Dumaresq Street.

Further, the boundary between No's 40 and 42 Dumaresq Street represents the most appropriate boundary between the R2 – Low Density Residential and R3 – Medium Density Residential zones.

In summary, the proposed rezoning of No. 40 Dumaresq Street will overcome the isolation of No. 38 Dumaresq Street and allow No's 38 and 40 Dumaresq Street to be consolidated and developed together.

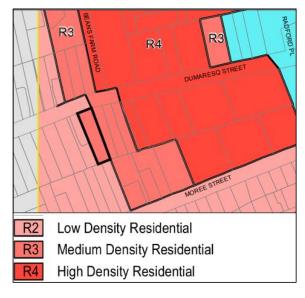
In that regard, a set of Concept Architectural Plans (*Appendix A*) (and shadow diagrams (*Appendix B*)) have been prepared to demonstrate the site (when developed in conjunction with No. 38 Dumaresq Street) is capable of accommodating a "*multi dwelling housing*" development consisting of ten (10) dwellings in a form that will comply with the applicable planning controls relating to building height, floor space ratio (FSR), landscaped area, boundary setbacks, private open space and off-street car parking.

Further, the concept development has been carefully designed to accommodate the recommendations and findings of the *Arboricultural Impact Assessment Report* (*Appendix D*), the *Ecological Assessment Report* (*Appendix F*) and the *Flood Management Report* (*Appendix G*).

PART 2 – EXPLANATION OF PROVISIONS

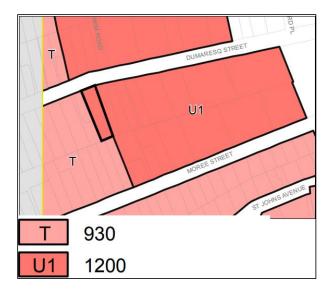
The objective and intended outcome will be achieved by an amendment to the Ku-ring-gai LEP 2015 which involves the following:

 Amend the Land Zoning Map in the Ku-ring-gai LEP 2015 to rezone the site from R2 – Low Density Residential to R3 – Medium Density Residential pursuant to the Ku-ring-gai LEP 2015.



Proposed Land Zoning Map

 Amend the Lot Size Map in the Ku-ring-gai LEP 2015 to change the minimum lot size control from 930m² to 1,200m².



Proposed Lot Size Map

•

Amend the Height of Buildings Map in the Ku-ring-gai LEP 2015 to change the maximum building height from 9.5 metres to 11.5 metres.



Proposed Height of Buildings Map

• Amend the Floor Space Ratio Map in the Ku-ring-gai LEP 2015 to change the maximum floor space ratio from 0.3:1 to 0.8:1.



Proposed Floor Space Ratio Map

PART 3 – JUSTIFICATION OF STRATEGIC AND SITE-SPECIFIC MERIT

Strategic Merit

A. NEED FOR THE PLANNING PROPOSAL

Q1. Is the planning proposal a result of an endorsed local strategic planning statement (LSPS), strategic study or report?

Ku-ring-gai Local Strategic Planning Statement

The *Ku-ring-gai Local Strategic Planning Statement* (LSPS) was adopted by Council on 17 March 2020. The LSPS is generally intended to draw together the priorities and actions for future land use planning from Council's existing land use plans and policies and present an overall land use vision for Ku-ring-gai.

The site is located within the *Priority Investigation Areas for Future Housing (2021-26)* within the *Primary Local Centre of Gordon.*

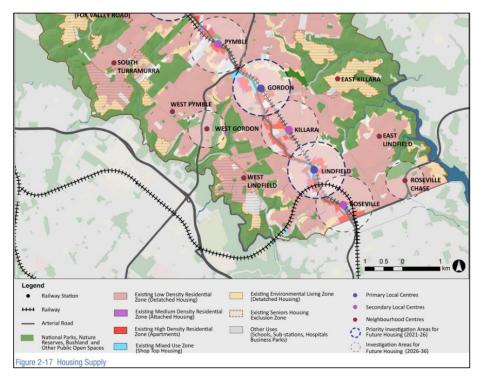


Figure 11 – Priority Investigation Areas for Future Housing (2021-2026)

The Planning Proposal is consistent with the Ku-ring-gai Local Planning Priorities in terms of:

- K3. Providing housing close to transport, services and facilities to meet the existing and future requirements of a growing and changing community.
- K4. Providing a range of diverse housing to accommodate the changing structure of families and households and enable ageing in place.
- K5. Providing affordable housing that retains and strengthens the local residential and business community.
- K43. Mitigating the impacts of urban and natural hazards.

In relation *Planning Priority K3*, the site is located immediately adjacent to land zoned R3 – Medium Density Residential, and within approximately 700 metres of *Gordon Railway Station*.

Gordon Railway Station is situated on the T1 North Shore and T9 Northern Line, operating between Berowra and City via Gordon, as well as between Hornsby and North Shore via the City. The train services operate out of Gordon Railway Station every 5 – 15 minutes throughout the day.

Further, there are also a number of bus services which traverse along the Pacific Highway, in the vicinity of the Gordon local centre. The site is located within approximately 350 metres of bus stops located on both side of the Pacific Highway.

The site is located approximately 260 metres walk from the *Gordon Centre* shopping centre where there is a wide range of essential shops and services such as a *Woolworths* supermarket, fruit market, liquor stores, post office, gymnasiums, pharmacy and newsagency.

The Gordon local centre is expected to undergo significant redevelopment in the coming years. As such, it is anticipated that in addition to the current supermarket and shops within the *Gordon Centre*, there will be a range of other shops and services provided in future developments within easy walking distance of the site, including a new *Aldi* supermarket currently under construction opposite the *Gordon Centre*.

The site is located within the catchments of *Gordon West Public School* and *Killara High School*, and there are a series of Catholic and non-Government Schools in the general locality including *Our Lady* of *Perpetual Succour West Pymble* and *Ravenswood School for Girls*.

Further, the locality is well serviced by recreational facilities including *Gordon Golf Course* and the bushland surrounding *Amaroo Gully*.

In relation to *Planning Priority K4*, the *Concept Architectural Plans* (*Appendix A*) (and shadow diagrams (*Appendix B*)) have been prepared to demonstrate the site (when developed in conjunction with No. 38 Dumaresq Street) is capable of accommodating a "*multi dwelling housing*" development consisting of ten (10) dwellings.

The additional dwellings will contribute to the range and diversity of housing options in the locality, and accommodate the changing structures of families and households, and enable options for ageing in place.

In relation to *Planning Priority K5*, the provision of additional housing within a well serviced locality will contribute to housing affordability. Further, the future residents of the additional dwellings will strengthen and support the infrastructure, services and businesses within the surrounding locality, including the Gordon local centre.

In relation to *Planning Priority K43*, the site is identified as being impacted by an overland flow flood planning area, and the consolidated development of No's 38 and 40 Dumaresq Street provides the opportunity to resolve the localised drainage issues in the immediate surrounds, and the recommendations of the *Flood Management Report* (*Appendix G*) have been incorporated in the *Concept Architectural Plans* (*Appendix A*).

In summary, the Planning Proposal is not a direct action within the LSPS but is consistent with a number of the key local planning priorities relating to the location, timing and delivery of housing.

Further, the Planning Proposal is supported by a series of technical studies as follows:

Concept Architectural Plans and Shadow Diagrams

A set of Concept Architectural Plans (*Appendix A*) (and shadow diagrams (*Appendix B*)) have been prepared to demonstrate the site (when developed in conjunction with No. 38 Dumaresq Street) is capable of accommodating a *"multi dwelling housing"* development consisting of ten (10) dwellings in a form that will comply with the applicable planning controls relating to building height, floor space ratio (FSR), landscaped area, boundary setbacks, private open space and off-street car parking.

Further, the concept development has been carefully designed to accommodate the recommendations and findings of the *Arboricultural Impact Assessment Report* (*Appendix D*), the *Ecological Assessment Report* (*Appendix F*) and the *Flood Management Report* (*Appendix G*).

The Planning Proposal seeks to the rezone No. 40 Dumaresq Street from R2 – Low Density Residential to R3 – Medium Density Residential to enable No's 38 and 40 Dumaresq Street to be developed together for the purposes of *"multi dwelling housing"* and overcome the *"isolation"* of No. 38 Dumaresq Street arising from the combined development of No's 34 and 36 Dumaresq Street.

Clause 6.6 of the Ku-ring-gai LEP 2015 specifies that development consent must not be granted for the erection of *"multi dwelling housing"* or a *"residential flat building"* unless the lot has an area of at least 1,200m² and minimum dimensions (width and depth) of at least 24 metres (if the area of the land is less than 1,800m²).

The site (when developed in conjunction with No. 38 Dumaresq Street) encompasses a total area of approximately 2,457.6m² which overcomes the *"isolation"* of No. 38 Dumaresq Street arising from the combined development of No's 34 and 36 Dumaresq Street.

Further, the concept development extends to a maximum height of approximately 11 metres provides a gross floor area of approximately 1,560m², representing a floor space ratio (FSR) of approximately 0.8:1.

Accordingly, the concept development comfortably complies with all of the relevant provisions of the LEP.

The Ku-ring-gai Development Control Plan (DCP) is generally intended to supplement the provisions of the LEP and provide more detailed objectives and controls to guide future development. Part 6 of the DCP provides objectives and controls for *"Multi-Dwelling Housing"*.

The primary controls (in conjunction with the LEP controls) comprise a maximum site coverage of 40% of the site area, a minimum landscaped area of 40% of the site area, a front boundary setback of 10 metres, a rear boundary setback to 6 metres, and side boundary setbacks of 3.0 metres.

The concept development provides a site coverage of approximately 40% of the site area and a deep soil landscaped area approximately 55% of the site area. The concept development provides a front boundary setback of approximately 6 - 7 metres to provide a transition between the approved

development to the east and the existing development to the west, a rear boundary setback of 6 mertres, and side boundary setbacks of 1.5 metres (adjacent to the driveway of the approved development to the east, and 5 - 12 metres along the western boundary.

Further, the individual dwellings are generally orientated towards the front and rear of the site, circumstances in which the objectives and controls relating to visual and acoustic privacy can readily be satisfied.

Finally, the site generally has a north-south orientation circumstances in which the potential impacts on the adjoining properties to the east and west are limited to either the morning or afternoon periods in mid-winter but not both, and the adjoining dwelling to the south is substantially setback from the common boundary.

In that regard, the shadows diagrams demonstrate the surrounding properties will continue to receive very good levels of sunlight during mid-winter and at all other times of the year.

In the circumstances, the concept development substantially complies with the relevant provisions of the DCP and where minor variations are contemplated, the variations either achieve the objectives of the controls, or could be addressed as part of the ultimate design process.

Arboriculture Impact Assessment Report

The Arboriculture Impact Assessment Report (Travers Bushfire & Ecology, 2 December 2024) (Appendix D) identified 19 trees in and around the site, including two (2) trees identified as having "high significant value".

The report includes a series of recommendations "to ensure responsible and sustainable development while preserving the local ecosystem" and concludes that:

By implementing these recommendations, the re-zoning at 40 Dumaresq Street, Gordon, can strike a balance between progress and environmental conservation, ensuring a sustainable and responsible approach that benefits the natural ecosystem.

Further, the *Concept Architectural Plans* (*Appendix A*) contemplate the relocation of a mature Magnolia Tree located towards the eastern boundary of the site, and the *Methodology for Relocating a Mature Magnolia Tree* (*Appendix D*) has been prepared to accompany the Planning Proposal.

Ecological Assessment Report

The Ecological Assessment Report (Travers Bushfire & Ecology, 29 November 2024) (Appendix E) includes an assessment of the existing flora, fauna, watercourses and wetlands in the relation to the site and concludes that:

Given the lack of habitat attributes on site and presence of only three (3) remnant trees at the rear of the property, rezoning the site from R2 to R3 should be feasible from an ecological perspective. The proponent has intentions on retaining the vegetation on site, so from a rezoning perspective, this should be seen as meeting the 'avoidance' requirements of BAM 2020, and it has been assumed that the remnant native trees will be retained for the test of significance.

Flood Management Report

The Flood Management Report (Henry & Hymas, December 2024) (Appendix G) provides an analysis of the catchments and existing infrastructure upstream of the property to determine the extent of water management structures to be implemented within the site both above and below ground.

The Report includes a series of recommendations regarding the upsizing of pipes and the sizing of the swale/channel and concludes that:

By implementing of the above-mentioned proposed works, it can be ensured that the property at 38-40 Dumaresq Street will continue to safely convey all flow from the upstream catchment via both piped and channelled infrastructure without having a detrimental impact on any of the adjacent or downstream properties.

Traffic and Parking Assessment Report

The *Traffic and Parking Assessment Report* (*Varga Traffic Planning*, 21 August 2023) (*Appendix H*) includes an assessment of the impacts associated with the development of the site (in conjunction with No. 38 Dumaresq Street) for the purposes of approximately ten (10) dwellings.

The Assessment concludes that:

It is clear that the site is considered to be highly accessible to essential services and public transport options.

If approved, the planning proposal would result in a nett increase in the traffic generation potential of the consolidated sites of approximately 5 vph during commuter peak periods.

That increase in traffic activity of 5 vph during commuter peak periods is minimal, and will clearly not have any unacceptable traffic implications in terms of road network capacity and traffic-related environmental effects.

Q2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The purpose of the proposed rezoning of No. 40 Dumaresq Street from R2 – Low Density Residential to R3 – Medium Density Residential is to enable No's 38 and 40 Dumaresq Street to be developed together for the purposes of *"multi dwelling housing"* and overcome the *"isolation"* of No. 38 Dumaresq Street arising from the combined development of No's 34 and 36 Dumaresq Street.

"Multi dwelling housing" is prohibited in the R2 – Low Density Residential zone, circumstances in which the proposed rezoning is the best (and only), most efficient and most time-effective approach to delivering the desired outcome.

Again, the proposed amendments to the Lot Size, Height of Buildings and Floor Space Ratio Maps is the best, most efficient and most time-effective approach to delivering the desired outcome.

B. RELATIONSHIP TO STRATEGIC PLANNING FRAMEWORK

Q3. Will the planning proposal give effect to the objectives and actions of the applicable regional, or district plan or strategy (including any exhibited draft plans or strategies)?

Greater Sydney Region Plan – A Metropolis of Three Cities

The Greater Sydney Region Plan – A Metropolis of Three Cities is a regional plan developed by the Greater Sydney Commission which presents a vision and innovative actions for managing Greater Sydney's growth and enhancing its status as one of the most liveable global cities.

The plan includes a 20-year housing target of 92,000 new private dwellings across northern Sydney, to be built between 2016 and 2036. The projection for the Ku-ring-gai Council area is based on the provision of 10,660 new dwellings by 2036, or 11.5% of the North District Plan's 20- year target.

The purpose of the Planning Proposal is to rezone No. 40 Dumaresq Street from R2 – Low Density Residential to R3 – Medium Density Residential to enable No's 38 and 40 Dumaresq Street to be developed together for the purposes of *"multi dwelling housing"* and overcome the *"isolation"* of No. 38 Dumaresq Street arising from the combined development of No's 34 and 36 Dumaresq Street.

In that regard, it is anticipated that the site (when developed in conjunction with No. 38 Dumaresq Street) will be capable of accommodating a *"multi dwelling housing"* development consisting of approximately ten (10) dwellings.

Accordingly, the Planning Proposal will provide additional housing opportunities in the Gordon locality, the Planning Proposal is consistent with at least the following objectives identified in the *Greater Sydney Region Plan – A Metropolis of Three Cities*.

Objective 4: Infrastructure Use is Optimised

Maximise the utility of existing infrastructure assets and consider strategies to influence behaviour changes, to reduce the demand for new infrastructure, including supporting the development of adaptive and flexible regulations to allow decentralised utilities.

The site is located immediately adjacent to land zoned R3 – Medium Density Residential, and within approximately 700 metres of *Gordon Railway Station*.

Gordon Railway Station is situated on the T1 North Shore and T9 Northern Line, operating between Berowra and City via Gordon, as well as between Hornsby and North Shore via the City. The train services operate out of Gordon Railway Station every 5 – 15 minutes throughout the day.

Further, there are also a number of bus services which traverse along the Pacific Highway, in the vicinity of the Gordon local centre. The site is located within approximately 350 metres of bus stops located on both side of the Pacific Highway.

The site is located approximately 260 metres walk from the *Gordon Centre* shopping centre where there is a wide range of essential shops and services such as a *Woolworths* supermarket, fruit market, liquor stores, post office, gymnasiums, pharmacy and newsagency.

The Gordon local centre is expected to undergo significant redevelopment in the coming years. As such, it is anticipated that in addition to the current supermarket and shops within the *Gordon Centre*, there will be a range of other shops and services provided in future developments within easy walking distance of the site, including a new *Aldi* supermarket currently under construction opposite the *Gordon Centre*.

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The site is located within the catchments of *Gordon West Public School* and *Killara High School*, and there are a series of Catholic and non-Government Schools in the general locality including *Our Lady* of *Perpetual Succour West Pymble* and *Ravenswood School for Girls*.

Further, the locality is well serviced by recreational facilities including *Gordon Golf Course* and the bushland surrounding *Amaroo Gully*.

In the circumstances, the Planning Proposal is consistent with the objective of optimising the use of existing infrastructure.

Objective 10: Greater Housing Supply

Providing ongoing housing supply and a range of housing types in the right locations will create more liveable neighbourhoods and support Greater Sydney's growing population.

It is anticipated that the site (when developed in conjunction with No. 38 Dumaresq Street) will be capable of accommodating a *"multi dwelling housing"* development consisting of approximately ten (10) dwellings.

In the circumstances, the Planning Proposal is consistent with the objective of providing opportunities for an additional supply and range of housing in an appropriate location.

Objective 11: Housing is More Diverse and Affordable

A range of housing types provides for the needs of the community at different stages of life and caters for diverse household types. It means that as people age they can move into smaller homes and age in their own neighbourhoods, while young adults leaving home can stay close to their families and communities.

It is anticipated that the site (when developed in conjunction with No. 38 Dumaresq Street) will be capable of accommodating a *"multi dwelling housing"* development consisting of approximately ten (10) dwellings.

In the circumstances, the Planning Proposal is consistent with the objective of providing opportunities for more diverse and affordable housing.

Objective 37: Exposure to Natural and Urban Hazards is Reduced

Avoid locating new urban development in areas exposed to natural and urban hazards and consider options to limit the intensification of development in existing urban areas most exposed to hazards.

The site is identified as being impacted by an overland flow flood planning area, and the consolidated development of No's 38 and 40 Dumaresq Street provides the opportunity to resolve the localised drainage issues in the immediate surrounds, and the recommendations of the *Flood Management Report* (*Appendix G*) have been incorporated in the *Concept Architectural Plans* (*Appendix A*).

North District Plan

The North District Plan has been developed to support the Greater Sydney Region Plan. The 20year District Plan seeks to manage growth in the context of economic, social and environmental matters to achieve the 40-year vision for Greater Sydney. It contains planning priorities and actions for implementing the Greater Sydney Region Plan at the district level and is a bridge between regional and local planning.

The North District Plan notes that:

The North District will continue to grow over the next 20 years with demand for an additional 92,000 dwellings. This will be provided through urban renewal, around new and existing infrastructure, land release and infill developments.

The focus of growth will be on well-connected walkable places that build on local strengths and focus on quality public places.

Local Centres such as Gordon and Pennant Hills are accessible with bus and rail networks linking to strategic centres.

The *Greater Sydney Regional Plan* includes a 20-year housing target of 92,000 new private dwellings across northern Sydney, to be built between 2016 and 2036. The projection for the Kuring-gai Local Government Area (LGA) is based on the provision of 10,660 new dwellings by 2036, or 11.5% of the 20-year target of the *North District Plan*.

It is anticipated that the site (when developed in conjunction with No. 38 Dumaresq Street) will be capable of accommodating a *"multi dwelling housing"* development consisting of approximately ten (10) dwellings.

Accordingly, the Planning Proposal will provide additional housing opportunities in the Gordon locality, the Planning Proposal is consistent with *Planning Priority N5 – Providing housing supply, choice and affordability, with access to jobs, services and public transport* which aims to provide greater housing supply and more diverse and affordable housing.

New housing must be in the right places to meet demand for different housing types, tenure, price points, preferred locations and design. Housing supply must be coordinated with local infrastructure to create liveable, walkable neighbourhoods with direct, safe and universally designed pedestrian and cycling connections to shops, services and public transport.

The site is located immediately adjacent to land zoned R3 – Medium Density Residential, and within approximately 700 metres of *Gordon Railway Station*. Further, the site is located within approximately 350 metres of bus stops located on both side of the Pacific Highway.

The site is located approximately 260 metres walk from the *Gordon Centre* shopping centre, and the locality is well serviced by schools and recreation facilities.

In the circumstances, the Planning Proposal is consistent with the objective of providing opportunities for an additional supply and range of housing in an appropriate location.

Finally, Objective 37 of Planning Priority N22 is "Exposure to natural and urban hazards is reduced". In that regard, the site is identified as being impacted by an overland flow flood planning area, and the consolidated, and the consolidated development of No's 38 and 40 Dumaresq Street provides the opportunity to resolve the localised drainage issues in the immediate surrounds, and the recommendations of the *Flood Management Report* (Appendix G) have been incorporated in the Concept Architectural Plans (Appendix A).

Ku-ring-gai Housing Strategy to 2036

The *Ku-ring-gai Housing Strategy to 2036* is generally intended to inform the implementation of the *Greater Sydney Region Plan – A Metropolis of Three Cities* and the North District Plan.

In that regard, the Housing Strategy (as amended) notes that:

The New South Wales State Department of Planning, Industry and Environment released the 2019 Population Projections on 16th of December 2019.

Based on the December 2019 projections, the NSW government estimates that by 2036, Kuring-gai's resident population will reach 147,809 people – an increase of over 20% or 25,337 new residents from 2016.

The *Draft Housing Strategy* was submitted to the Department of Planning, Industry and Environment on 14 December 2020, and a *Letter of Support* (approval) was issued on 16 July 2021. The *Letter of Support* (approval) was subject to a number of additional requirements/amendments including, (Condition 2) which outlines that Council is to accommodate proponent led planning proposals with good planning outcomes for the Gordon, Lindfield and Turramurra Local Centres.

On 16 November 2021, Council resolved:

That Council reject the conditions in the Letter of Approval (1-12) issued by the Department of Planning, Industry and Environment on 16 July 2021, and further debate on this matter be under the authority of the newly elected Council in 2022.

Irrespective, the site is located within the *Priority Investigation Areas for Future Housing (2021-26)* within the *Primary Local Centre of Gordon*.

The site is located immediately adjacent to land zoned R3 – Medium Density Residential, and within approximately 700 metres of *Gordon Railway Station*. Further, the site is located within approximately 350 metres of bus stops located on both side of the Pacific Highway.

The site is located approximately 260 metres walk from the *Gordon Centre* shopping centre, and the locality is well serviced by schools and recreation facilities.

In the circumstances, the Planning Proposal is consistent with the objective of providing opportunities for an additional supply and range of housing in an appropriate location.

Finally, *Housing Priority H1* is to *"Manage and monitor the supply of housing in the right locations"*, and the *Housing Objectives* are expressed as follows:

» To monitor the delivery of housing within areas close to services, cultural and community facilities, and within a 10 minute walking distance to key public transport nodes.

» To provide homes in areas that can support the creation and growth of vibrant Local Centres and a thriving local economy.

» To ensure the delivery of housing is in coordination with provision of local and state infrastructure and services.

The site is located immediately adjacent to land zoned R3 – Medium Density Residential, and within approximately 700 metres of *Gordon Railway Station*.

Gordon Railway Station is situated on the *T1* North Shore and *T9* Northern Line, operating between Berowra and City via Gordon, as well as between Hornsby and North Shore via the City. The train services operate out of Gordon Railway Station every 5 – 15 minutes throughout the day.

Further, there are also a number of bus services which traverse along the Pacific Highway, in the vicinity of the Gordon local centre. The site is located within approximately 350 metres of bus stops located on both side of the Pacific Highway.

The site is located approximately 260 metres walk from the *Gordon Centre* shopping centre where there is a wide range of essential shops and services such as a *Woolworths* supermarket, fruit market, liquor stores, post office, gymnasiums, pharmacy and newsagency.

The Gordon local centre is expected to undergo significant redevelopment in the coming years. As such, it is anticipated that in addition to the current supermarket and shops within the *Gordon Centre*, there will be a range of other shops and services provided in future developments within easy walking distance of the site, including a new *Aldi* supermarket currently under construction opposite the *Gordon Centre*.

The site is located within the catchments of *Gordon West Public School* and *Killara High School*, and there are a series of Catholic and non-Government Schools in the general locality including *Our Lady* of *Perpetual Succour West Pymble* and *Ravenswood School for Girls*.

Further, the locality is well serviced by recreational facilities including *Gordon Golf Course* and the bushland surrounding *Amaroo Gully*.

The Concept Architectural Plans (Appendix A) (and shadow diagrams) (Appendix B) have been prepared to demonstrate the site (when developed in conjunction with No. 38 Dumaresq Street) is capable of accommodating a "multi dwelling housing" development consisting of ten (10) dwellings.

The additional dwellings will contribute to the range and diversity of housing options in the locality, and accommodate the changing structures of families and households, and enable options for ageing in place.

Finally, the provision of additional housing within a well serviced locality will contribute to housing affordability. Further, the future residents of the additional dwellings will strengthen and support the infrastructure, services and businesses within the surrounding locality, including the Gordon local centre.

Q4. Is the planning proposal consistent with a Council LSPS that has been endorsed by the Planning Secretary or GSC, or another endorsed local strategy or strategic plan?

The Planning Proposal is consistent with the *Ku-ring-gai Local Strategic Planning Statement* (LSPS), including Planning Priorities K3, K4, K8, K12, K21, K28, K29, K30, K31, K35, K36 and K43.

In particular, the site is located immediately adjacent to land zoned R3 – Medium Density Residential, and within approximately 700 metres of *Gordon Railway Station*.

Gordon Railway Station is situated on the T1 North Shore and T9 Northern Line, operating between Berowra and City via Gordon, as well as between Hornsby and North Shore via the City. The train services operate out of Gordon Railway Station every 5 – 15 minutes throughout the day.

Further, there are also a number of bus services which traverse along the Pacific Highway, in the vicinity of the Gordon local centre. The site is located within approximately 350 metres of bus stops located on both side of the Pacific Highway.

In the circumstances, it is anticipated that the centres of Gordon, Hornsby, Chatswood and Macquarie Centre could be accessed within approximately 30 minutes.

The site is located approximately 260 metres walk from the *Gordon Centre* shopping centre where there is a wide range of essential shops and services such as a *Woolworths* supermarket, fruit market, liquor stores, post office, gymnasiums, pharmacy and newsagency.

The Gordon local centre is expected to undergo significant redevelopment in the coming years. As such, it is anticipated that in addition to the current supermarket and shops within the *Gordon Centre*, there will be a range of other shops and services provided in future developments within easy walking distance of the site, including a new *Aldi* supermarket currently under construction opposite the *Gordon Centre*.

The site is located within the catchments of *Gordon West Public School* and *Killara High School*, and there are a series of Catholic and non-Government Schools in the general locality including *Our Lady* of *Perpetual Succour West Pymble* and *Ravenswood School for Girls*.

Further, the locality is well serviced by recreational facilities including *Gordon Golf Course* and the bushland surrounding *Amaroo Gully*.

The Concept Architectural Plans (Appendix A) (and shadow diagrams) (Appendix B) have been prepared to demonstrate the site (when developed in conjunction with No. 38 Dumaresq Street) is capable of accommodating a "multi dwelling housing" development consisting of ten (10) dwellings.

The additional dwellings will contribute to the range and diversity of housing options in the locality, and accommodate the changing structures of families and households, and enable options for ageing in place.

Finally, the provision of additional housing within a well serviced locality will contribute to housing affordability. Further, the future residents of the additional dwellings will strengthen and support the infrastructure, services and businesses within the surrounding locality, including the Gordon local centre.

Q5. Is the planning proposal consistent with any other applicable State and regional studies or strategies?

Future Transport 2056 (Transport for NSW)

Future Transport 2056 sets the 40-year vision, directions and principles for customer mobility in NSW, guiding transport investment over the longer term. It presents a glimpse of the large economic and societal shifts that will be seen in the future to ensure rapid advances in technology and innovation are harnessed to create and maintain a world-class, safe, efficient and reliable transport system.

The Vision expressed in Future Transport 2056 includes:

The 30 minute city will be one where people can conveniently access jobs and services within 30 minutes by public or active transport, 7 days a week. The vision is based on research that indicates that if people are required to travel more than 90 minutes a day, their quality of life and the liveability of their city is impacted.

The site is located immediately adjacent to land zoned R3 – Medium Density Residential, and within approximately 700 metres of *Gordon Railway Station*. Further, the site is located within approximately 350 metres of bus stops located on both side of the Pacific Highway.

The site is located approximately 260 metres walk from the *Gordon Centre* shopping centre, and the locality is well serviced by schools and recreation facilities.

In the circumstances, the Planning Proposal is consistent with the objective of providing opportunities for an additional supply and range of housing in an appropriate location.

Q6. Is the planning proposal consistent with applicable State Environmental Planning Policies (SEPPs)?

SEPP	COMMENT ON CONSISTENCY
SEPP (Biodiversity and Conservation) 2021	Chapter 2 requires approval for the removal of the vegetation, and Chapter 4 relates to koala habitat protection. The Planning Proposal is accompanied by an <i>Ecological Assessment Report</i> (<i>Travers Bushfire & Ecology</i> , 29 November 2024) (<i>Appendix F</i>) which concludes that " <i>Given the lack of habitat attributes on site</i> <i>and presence of only three</i> (3) <i>remnant trees at the rear of the</i> <i>property, rezoning the site from R2 to R3 should be feasible from</i> <i>an ecological perspective. The proponent has intentions on</i> <i>retaining the vegetation on site, so from a rezoning perspective,</i> <i>this should be seen as meeting the 'avoidance' requirements of</i> <i>BAM 2020, and it has been assumed that the remnant native</i> <i>trees will be retained for the test of significance".</i> Further, the <i>Ecological Assessment Report</i> (<i>Appendix F</i>) notes that " <i>No Koala use trees will be impacted and therefore the</i> <i>proposed development will not impact on Koala habitat and it is</i> <i>considered that no further assessment for Koala is required".</i> Irrespective, the provisions of the SEPP will apply at the Development Application stage.
SEPP (Resilience and Hazards) 2021	Clause 4.6 specifies that a consent authority must not consent to the carrying out of development on land unless it has considered whether the land is, or is likely to be contaminated, and if the land is, or is likely to be contaminated, whether the land requires remediation before the land is developed for the proposed use. The site has an established and long-standing history of residential use and evidently has not been zoned or used for

The Planning Proposal is and/or will be consistent with the following applicable SEPP's:

	industrial, agricultural or defense purposes at any times in the lands recent history. In the circumstances, there is no evidence to suggest that the land is likely to be contaminated to the extent that would render it unsuitable for continued residential use. Irrespective, the provisions of the SEPP will apply at the Development Application stage.
SEPP (Sustainable Buildings) 2023	SEPP (Sustainable Buildings) 2023 aims to encourage sustainable residential development. The future development of the site will be subject to the provisions of the SEPP, and the development of the site will need to meet the relevant requirements for sustainability.
SEPP (Housing) 2021	It is anticipated that the site (when developed in conjunction with No. 38 Dumaresq Street) will be capable of accommodating a <i>"multi dwelling housing"</i> development consisting of approximately ten (10) dwellings. In those circumstances, the SEPP would not specifically apply. Irrespective, the provisions of the SEPP will apply at the Development Application stage in the event an alternate form of permissible development is proposed.
SEPP Exempt and Complying Development Codes 2008	It is anticipated that the site (when developed in conjunction with No. 38 Dumaresq Street) will be capable of accommodating a <i>"multi dwelling housing"</i> development consisting of approximately ten (10) dwellings. In those circumstances, the SEPP would not specifically apply. Irrespective, the provisions of the SEPP will apply at the Development Application stage in the event an alternate form of permissible development is proposed.

Finally, the NSW Department of Planning, Housing and Infrastructure has placed on public exhibition an *Explanation of Intended Effects* (EIE) *"Changes to create low and mid-rise housing"*. The Council has requested consideration be given to the potential implications of proposed initiatives on the development potential of the site.

In that regard, Concept Architectural Plans have been prepared to demonstrate the site (when developed in conjunction with No. 38 Dumaresq Street) is hypothetically capable of accommodating a *"residential flat building"* consisting of approximately 48 dwellings, however it not the intention of this Planning Proposal to facilitate that form of development.

Q7. Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

The Planning Proposal is and/or will be consistent with the following applicable Section 9.1 Directions:

Section 9.1 Direction	Objectives	Consistency	
Focus Area 1: Plannir	Focus Area 1: Planning Systems		
1.1 Implementation of Regional Plans	The objective of this direction is to give legal effect to the vision, land use strategy, goals, directions and actions contained in Regional Plans.	Consistent. The Planning Proposal is consistent with the <i>Greater Sydney Region Plan</i> and the <i>North District Plan</i> .	
1.3 Approval and Referral Requirements	The objective of this direction is to ensure that LEP provisions encourage the efficient and appropriate assessment of development.	Consistent. The Planning Proposal does not include provisions that require concurrence, consultation or referral to a Minster of public authority.	
1.4 Site Specific Provisions	The objective of this direction is to discourage unnecessarily restrictive site specific planning controls.	Consistent. The Planning Proposal seeks to rezone the site to an existing zone (R3 – Medium Density Residential), and amend the Lot Size Map, the Height of Buildings Map and the Floor Space Ratio Map to provide consistency with the controls applying to the adjoining land zoned R3 – Medium Density Residential.	
Focus Area 4: Resilie	nce and Hazards		
4.1 Flooding	The objectives of this direction are to ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the Floodplain Development Manual 2005, and that the provisions of an LEP that apply to flood prone land are commensurate with flood behaviour and includes	Consistent. The Planning Proposal is accompanied by a <i>Flood Management</i> <i>Report</i> (<i>Henry & Hymas</i> , December 2024) (<i>Appendix G</i>) which includes a series of recommendations regarding the upsizing of pipes and the sizing of the swale/channel and concludes that: <i>By implementing of the above-</i> <i>mentioned proposed works, it can be</i> <i>ensured that the property at 38-40</i>	

	consideration of the potential flood impacts both on and off the subject land.	Dumaresq Street will continue to safely convey all flow from the upstream catchment via both piped and channelled infrastructure without having a detrimental impact on any of the adjacent or downstream properties.
4.4 Remediation of Contaminated Land	The objective of this direction is to reduce the risk of harm to human health and the environment by ensuring that contamination and remediation are considered by planning proposal authorities.	Consistent. The site has an established and long-standing history of residential use and evidently has not been zoned or used for industrial, agricultural or defense purposes at any times in the lands recent history. In the circumstances, there is no evidence to suggest that the land is likely to be contaminated to the extent that would render it unsuitable for continued residential use.
Focus Area 5: Transp	ort and Infrastructure	
5.1 Integrating Land Use and Transport	The objective of this direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the planning objectives of improving access to housing, jobs and services by walking, cycling and public transport, and increasing the choice of available transport and reducing dependence on cars, and reducing travel demand including the number of trips generated by development and the distances travelled, especially by car, and supporting the efficient and viable operation of public transport services, and providing for the efficient movement of freight.	Consistent. The site is located within the <i>Priority Investigation Areas for</i> <i>Future Housing (2021-26)</i> within the <i>Primary Local Centre of Gordon</i> . The site is located immediately adjacent to land zoned R3 – Medium Density Residential, and within approximately 700 metres of <i>Gordon</i> <i>Railway Station</i> . Further, the site is located within approximately 350 metres of bus stops located on both side of the Pacific Highway. The site is located approximately 260 metres walk from the <i>Gordon Centre</i> shopping centre, and the locality is well serviced by schools and recreation facilities. In the circumstances, the Planning Proposal is consistent with the objective of providing opportunities for an additional supply and range of housing in an appropriate location.
Focus Area 6: Housin	g	

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6.1 Residential Zones	The objectives of this	Consistent. The site is located within
	direction are to encourage a variety and choice of housing	the Priority Investigation Areas for Future Housing (2021-26) within the
	types to provide for existing	Primary Local Centre of Gordon.
	and future housing needs, make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services, and minimise the impact of residential development on the environment and resource lands.	The site is located immediately adjacent to land zoned R3 – Medium Density Residential, and within approximately 700 metres of <i>Gordon</i> <i>Railway Station</i> . Further, the site is located within approximately 350 metres of bus stops located on both side of the Pacific Highway. The site is located approximately 260 metres walk from the <i>Gordon Centre</i> shopping centre, and the locality is well serviced by schools and recreation facilities. In the circumstances, the Planning Proposal is consistent with the objective of providing opportunities for an additional supply and range of housing in an appropriate location.

Further, assessment in relation to Ministerial Direction 4.1 – Flooding as follows:

Direction 4.1 Flooding (1) A planning proposal must include provisions that give effect to and are consistent with:		
(b) the principles of the Floodplain Development Manual 2005,	lots. For this reason, the Report was further developed to provide accurate sizing of a proposed dedicated channel to continue to provide a safe means of conveying the same overland flow through the site. The purpose of the channel is	
(c) the Considering flooding in land use planning guideline 2021, and	to retain the existing flow path, while also allocating a well- defined structure to keep the conveyance of flow safe through the developed site. The channel is proposed to be a the same location as the existing path to not negatively or adversely affect adjacent or downstream properties. The Report demonstrates that, by sizing the channel appropriately, the flow can be fully conveyed by the propose channel, leaving the rest of the land unaffected by flooding. In doing so, it can be ensured that the proposed	

	development will not affect the safe occupation of and efficient evacuation of people in the event of a flood. The proposed works incorporate appropriate measures to manage risk to life from a flood by both providing a channel to convey the overland flow and by keeping the habitable floors away from the channel and above the flood level. By adopting those principles, the proposal is consistent with the Flood Prone Land Policy, the principles of the Floodplain Development Manual (2005) and the land use planning guidelines 2021.	
(d) any adopted flood study and/or floodplain risk management plan prepared in accordance with the principles of the Floodplain Development Manual 2005 and adopted by the relevant council.	The site falls within the area of study covered by the Blackbutt Creek Flood Study prepared by Jacobs and dated December 2014. The 1%AEP Flood risk map (Figure A-10 in Appendix A) shows the site with localised hatching indicating all three levels of low, medium and high hazard. However, the hazard levels are all strictly shown across the site in correspondence with the existing overland flow path crossing the lots. It is to be noted that with the proposed works, the natural overland flow path is maintained and further formalised into a dedicated channel. By doing so, the development is maintaining the natural conveyance of flow through the lots unchanged. Additionally, all new developments are proposed to be constructed clear of the dedicated channel and at a level that is higher than the flood level to ensure the buildings are not negatively impacted by any flow through the site.	
(2) A planning proposal must not rezone land within the flood planning area from Recreation, Rural, Special Purpose or Conservation Zones to a Residential, Employment, Mixed Use, W4 Working Waterfront or Special Purpose Zones.	The site is currently zoned for residential purposes.	
(3) A planning proposal must not contain provisions that apply to the flood planning area which:		
(a) permit development in floodway areas	The overland flow through the site is maintained and a dedicated channel is proposed to contain the flooding within the channel. The development is proposed to be outside said dedicated channel and is proposed to also be above the level of flooding.	

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(b) permit development that will result in significant flood impacts to other properties	The modelling documented by the Report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment.	
(c) permit development for the purposes of residential accommodation in high hazard areas	Part of the site is identified as high hazard in Blackbutt Creek Flood Study. This is shown as a localised point-form on the downstream extremity of the existing overland flow path within the property.	
	The development proposes the formalisation of the existing overland flow path into a dedicated channel to fully contain the flow crossing through the site.	
	Therefore, not changing to the way the overland flow is conveyed through the site, while providing a contained and safer means of conveyance for the overland flow.	
	Additionally, the development of the proposed buildings is completely kept outside and clear of the channel, as well as the portion of the site categorized as high hazard.	
(d) permit a significant increase in the development and/or dwelling density of that land,	The development proposes the formalisation of the existing overland flow path into a dedicated channel to fully contain the flow crossing through the site.	
	Therefore, not changing to the way the overland flow is conveyed through the site, while providing a contained and safer means of conveyance for the overland flow.	
	Additionally, the development of the proposed buildings is completely kept outside and clear of the channel, as well as the portion of the site categorized as high hazard. Accordingly, the increase in dwellings on the site is being safely and appropriately managed.	
(e) permit development for the purpose of centre-based childcare facilities, hostels, boarding houses, group homes, hospitals, residential care facilities, respite day care centres and seniors housing in areas where the occupants of the development cannot effectively evacuate,	N/A	
(f) permit development to be carried out without development consent except for the purposes of exempt development or agriculture. Dams, drainage	N/A	

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canals, levees, still require development consent,	
(g) are likely to result in a significantly increased requirement for government spending on emergency management services, flood mitigation and emergency response measures, which can include but are not limited to the provision of road infrastructure, flood mitigation infrastructure and utilities, or	The modelling documented by the Report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment. Consequently, not likely to result in a significantly increased requirement for government spending on emergency management services.
(h) permit hazardous industries or hazardous storage establishments where hazardous materials cannot be effectively contained during the occurrence of a flood event.	N/A
	ot contain provisions that apply to areas between the flood kimum flood to which Special Flood Considerations apply
(a) permit development in floodway areas	The overland flow through the site is maintained and a dedicated channel is proposed to contain the flooding within the channel. Additionally, the development is proposed to be outside said dedicated channel and is proposed to also be above the level of flooding.
(b) permit development that will result in significant flood impacts to other properties	The modelling documented by this report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment.
(c) permit a significant increase in the dwelling density of that land,	The development proposes the formalisation of the existing overland flow path into a dedicated channel to fully contain the flow crossing through the site.
	Therefore, not changing to the way the overland flow is conveyed through the site, while providing a contained and safer means of conveyance for the overland flow.
	Additionally, the development of the proposed buildings is completely kept outside and clear of the channel, as well as the portion of the site categorized as high hazard. Accordingly, the increase in dwellings on the site is being safely and appropriately managed.

ATTACHMENT NO: 2 - PLANNING PROPOSAL 40 DUMARESQ STREET GORDON (DECEMBER 2024)

(d) permit the development of centre-based childcare facilities, hostels, boarding houses, group homes, hospitals, residential care facilities, respite day care centres and seniors housing in areas where the occupants of the development cannot effectively evacuate,	N/A
(e) are likely to affect the safe occupation of and efficient evacuation of the lot, or	The overland flow through the site is maintained and a dedicated channel is proposed to contain the flooding within the channel. The development is proposed to be outside said dedicated channel and is proposed to also be above the level of flooding. Safe and efficient evacuation onto Dumaresq Street can be provided.
 (f) are likely to result in a significantly increased requirement for government spending on emergency management services, and flood mitigation and emergency response measures, which can include but not limited to road infrastructure, flood mitigation infrastructure and utilities 	The modelling documented by the Report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment. Consequently, not likely to result in a significantly increased requirement for government spending on emergency management services.
(5) For the purposes of preparing a planning proposal, the flood planning area must be consistent with the principles of the Floodplain Development Manual 2005 or as otherwise determined by a Floodplain Risk Management Study or Plan adopted by the relevant council.	Council's Blackbutt Creek Flood Study applies to this land. The flood maps presented within the flood study only show localised flooding through the properties in correspondence of the overland flow path. As such, the proposal is to maintain the existing path unchanged and convey the flow with a formalised channel in order to keep the rest of the land unaffected by flooding.

C. ENVIRONMENTAL, SOCIAL AND ECONOMIC IMPACT

Q8. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected because of the proposal?

The Planning Proposal is accompanied by an *Ecological Assessment Report (Travers Bushfire & Ecology*, 29 November 2024) **(Appendix F)** which includes an assessment of the existing flora, fauna, watercourses and wetlands in the relation to the site and concludes that:

Given the lack of habitat attributes on site and presence of only three (3) remnant trees at the rear of the property, rezoning the site from R2 to R3 should be feasible from an ecological perspective. The proponent has intentions on retaining the vegetation on site, so from a rezoning perspective, this should be seen as meeting the 'avoidance' requirements of BAM 2020, and it has been assumed that the remnant native trees will be retained for the test of significance.

Q9. Are there any other likely environmental effects of the planning proposal and how are they proposed to be managed?

Bushfire

The site is not identified or mapped as bushfire prone land.

Indigenous and Non-Indigenous Cultural Heritage

The site is not identified as a heritage item and is not located within a heritage conservation area. Further, there are no heritage items in the vicinity of the site.

Finally, a search of the AHIMS provided by the New South Wales (NSW) Department of Environment and Heritage reveals that no *"Aboriginal sites"* or *"Aboriginal Places"* have been recorded within a 200 metre radius of the site.

Flooding

The Planning Proposal is accompanied by a *Flood Management Report* (*Henry & Hymas*, December 2024) (*Appendix G*) which provides an analysis of the catchments and existing infrastructure upstream of the property to determine the extent of water management structures to be implemented within the site both above and below ground.

The Report includes a series of recommendations regarding the upsizing of pipes and the sizing of the swale/channel and concludes that:

By implementing of the above-mentioned proposed works, it can be ensured that the property at 38-40 Dumaresq Street will continue to safely convey all flow from the upstream catchment via both piped and channelled infrastructure without having a detrimental impact on any of the adjacent or downstream properties.

Contamination

The site has an established and long-standing history of residential use and evidently has not been zoned or used for industrial, agricultural or defense purposes at any times in the lands recent history.

In the circumstances, there is no evidence to suggest that the land is likely to be contaminated to the extent that would render it unsuitable for continued residential use.

Development Concept

A set of Concept Architectural Plans (*Appendix A*) (and shadow diagrams) (*Appendix B*) have been prepared to demonstrate the site (when developed in conjunction with No. 38 Dumaresq Street) is capable of accommodating a *"multi dwelling housing"* development consisting of ten (10) dwellings in a form that will comply with the applicable planning controls relating to building height, floor space ratio (FSR), landscaped area, boundary setbacks, private open space and off-street car parking.

Further, the concept development has been carefully designed to accommodate the recommendations and findings of the *Arboricultural Impact Assessment Report* (*Appendix D*), the *Ecological Assessment Report* (*Appendix F*) and the *Flood Management Report* (*Appendix G*).

Clause 6.6 of the Ku-ring-gai LEP 2015 specifies that development consent must not be granted for the erection of *"multi dwelling housing"* or a *"residential flat building"* unless the lot has an area of at least 1,200m² and minimum dimensions (width and depth) of at least 24 metres (if the area of the land is less than 1,800m²).

The site (when developed in conjunction with No. 38 Dumaresq Street) encompasses a total area of approximately 2,457.6m² which overcomes the *"isolation"* of No. 38 Dumaresq Street arising from the combined development of No's 34 and 36 Dumaresq Street.

Further, the concept development extends to a maximum height of approximately 11 metres provides a gross floor area of approximately 1,560m², representing a floor space ratio (FSR) of approximately 0.8:1.

Accordingly, the concept development comfortably complies with all of the relevant provisions of the LEP.

The Ku-ring-gai Development Control Plan (DCP) is generally intended to supplement the provisions of the LEP and provide more detailed objectives and controls to guide future development. Part 6 of the DCP provides objectives and controls for *"Multi-Dwelling Housing"*.

The primary controls (in conjunction with the LEP controls) comprise a maximum site coverage of 40% of the site area, a minimum landscaped area of 40% of the site area, a front boundary setback of 10 metres, a rear boundary setback to 6 metres, and side boundary setbacks of 3.0 metres.

The concept development provides a site coverage of approximately 40% of the site area and a deep soil landscaped area approximately 55% of the site area. The concept development provides a front boundary setback of approximately 6 - 7 metres to provide a transition between the approved development to the east and the existing development to the west, a rear boundary setback of 6 mertres, and side boundary setbacks of 1.5 metres (adjacent to the driveway of the approved development to the east, and 5 - 12 metres along the western boundary.

Further, the individual dwellings are generally orientated towards the front and rear of the site, circumstances in which the objectives and controls relating to visual and acoustic privacy can readily be satisfied.

Finally, the site generally has a north-south orientation circumstances in which the potential impacts on the adjoining properties to the east and west are limited to either the morning or afternoon periods in mid-winter but not both, and the adjoining dwelling to the south is substantially setback from the common boundary.

In that regard, the shadows diagrams demonstrate the surrounding properties will continue to receive very good levels of sunlight during mid-winter and at all other times of the year.

In the circumstances, the concept development substantially complies with the relevant provisions of the DCP and where minor variations are contemplated, the variations either achieve the objectives of the controls, or could be addressed as part of the ultimate design process.

Q10. Has the planning proposal adequately addressed any social and economic effects?

The proposed rezoning of No. 40 Dumaresq Street will overcome the isolation of No. 38 Dumaresq Street and allow No's 38 and 40 Dumaresq Street to be consolidated and developed together.

In that regard, it is anticipated that the site (when developed in conjunction with No. 38 Dumaresq Street) will be capable of accommodating a *"multi dwelling housing"* development consisting of approximately ten (10) dwellings.

The site is located immediately adjacent to land zoned R3 – Medium Density Residential, and within approximately 700 metres of *Gordon Railway Station*. Further, the site is located within approximately 350 metres of bus stops located on both side of the Pacific Highway.

The site is located approximately 260 metres walk from the *Gordon Centre* shopping centre, and the locality is well serviced by schools and recreation facilities.

The Planning Proposal will generate positive and social impacts associated with the provision of an additional supply and range of housing in an appropriate location.

D. INFRASTRUCTURE (LOCAL, STATE AND COMMONWEALTH)

Q11. Is there adequate public infrastructure for the planning proposal?

The site is located immediately adjacent to land zoned R3 – Medium Density Residential, and within approximately 700 metres of *Gordon Railway Station*. Further, the site is located within approximately 350 metres of bus stops located on both side of the Pacific Highway.

The site is located approximately 260 metres walk from the *Gordon Centre* shopping centre, and the locality is well serviced by schools and recreation facilities.

Further, the Planning Proposal is accompanied by a *Traffic and Parking Assessment Report* (*Varga Traffic Planning*, 21 August 2023) (*Appendix H*) which includes an assessment of the impacts associated with the development of the site (in conjunction with No. 38 Dumaresq Street) for the purposes of approximately ten (10) dwellings.

The Assessment concludes that:

It is clear that the site is considered to be highly accessible to essential services and public transport options.

If approved, the planning proposal would result in a nett increase in the traffic generation potential of the consolidated sites of approximately 5 vph during commuter peak periods.

That increase in traffic activity of 5 vph during commuter peak periods is minimal, and will clearly not have any unacceptable traffic implications in terms of road network capacity and traffic-related environmental effects.

E. STATE AND COMMONWEALTH INTERESTS

Q12. What are the views of state and federal public authorities and government agencies consulted in order to inform the Gateway determination?

Government agency and public consultation requirements will be detailed in the Gateway Determination and conducted accordingly. It is anticipated that a number of government agencies may need to be consulted including:

- Department of Planning, Housing and Infrastructure
- Department of Climate Change, Energy, the Environment and Water
- Office of Environment and Heritage
- Transport for NSW
- Sydney Water
- Ausgrid

PART 4 – MAPPING

LAND ZONING MAP



Current Land Zoning Map (R2 - Low Density Residential)

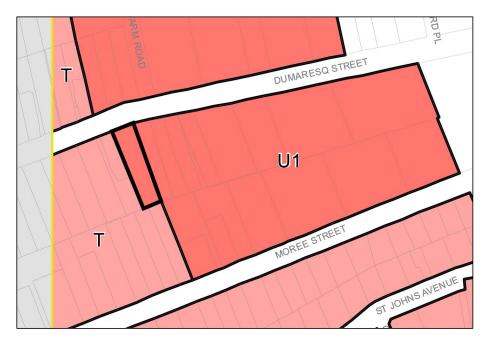


Proposed Zoning Map (R3 – Medium Density Residential)

LOT SIZE MAP



Current Lot Size Map (930m²)

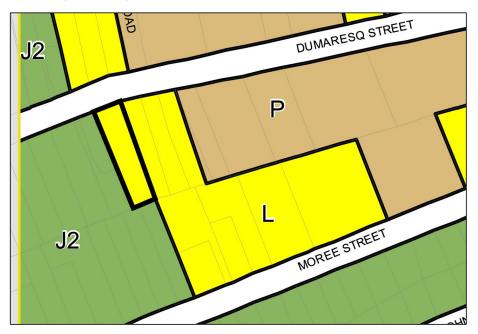


Proposed Lot Size Map (1,200m²)

HEIGHT OF BUILDINGS MAP



Current Height of Buildings Map (9.5 metres)



Proposed Height of Buildings Map (11.5 metres)

FLOOR SPACE RATIO MAP



Current Floor Space Ratio Map (0.3:1)



Proposed Floor Space Ratio Map (0.8:1)

PART 5 – COMMUNITY CONSULTATION

The Applicant attended a formal Pre-Planning Proposal Meeting with Council staff on 9 May 2023.

Further, the Planning Proposal will be made available for 28 days for community/agency consultation and undertaken in accordance with any determinations made by the Gateway.

The Planning Proposal will be made available on Council's website and in accordance with Council's Community Participation Plan. Additionally, notification of the exhibition of the Planning Proposal will be provided to adjoining landholders prior to its commencement.

PART 6 – PROJECT TIMELINE

Stage	Timeframe and/or date
Consideration by Council	22 September 2024
Council decision	
Gateway determination	
Pre-exhibition	
Commencement and completion of public exhibition period	
Consideration of submissions	
Post-exhibition review and additional studies	
Submission to the Department for finalisation (where applicable)	
Gazettal of LEP amendment	

APPENDIX A –

CONCEPT ARCHITECTURAL PLANS PREPARED BY CRACKNELL & LONERGAN ARCHITECTS, DATED 30 AUGUST 2024

APPENDIX B -

SHADOW DIAGRAMS PREPARED BY CRACKNELL & LONERGAN ARCHITECTS DATED 30 AUGUST 2024

APPENDIX C –

URBAN DESIGN REPORT PREPARED BY CRACKNELL & LONERGAN ARCHITECTS DATED 12 DECEMBER 2024

APPENDIX D -

ARBORICULTURAL IMPACT ASSESSMENT REPORT PREPARED BY TRAVERS BUSHFIR & ECOLOGY DATED 2 DECEMBER 2024

APPENDIX E –

METHODOLGY FOR RELOCATING A MATURE MAGNOLIA TREE PREPARED BY TRAVERS BUSHFIR & ECOLOGY DATED 9 NOVEMBER 2023

APPENDIX F –

ECOLOGICAL ASSESSMENT REPORT PREPARED BY TRAVERS BUSHFIR & ECOLOGY DATED 29 NOVEMBER 2024

APPENDIX G -

FLOOD MANAGEMENT REPORT PREPARED BY HENRY & HYMAS DATED DECEMBER 2024

APPENDIX H –

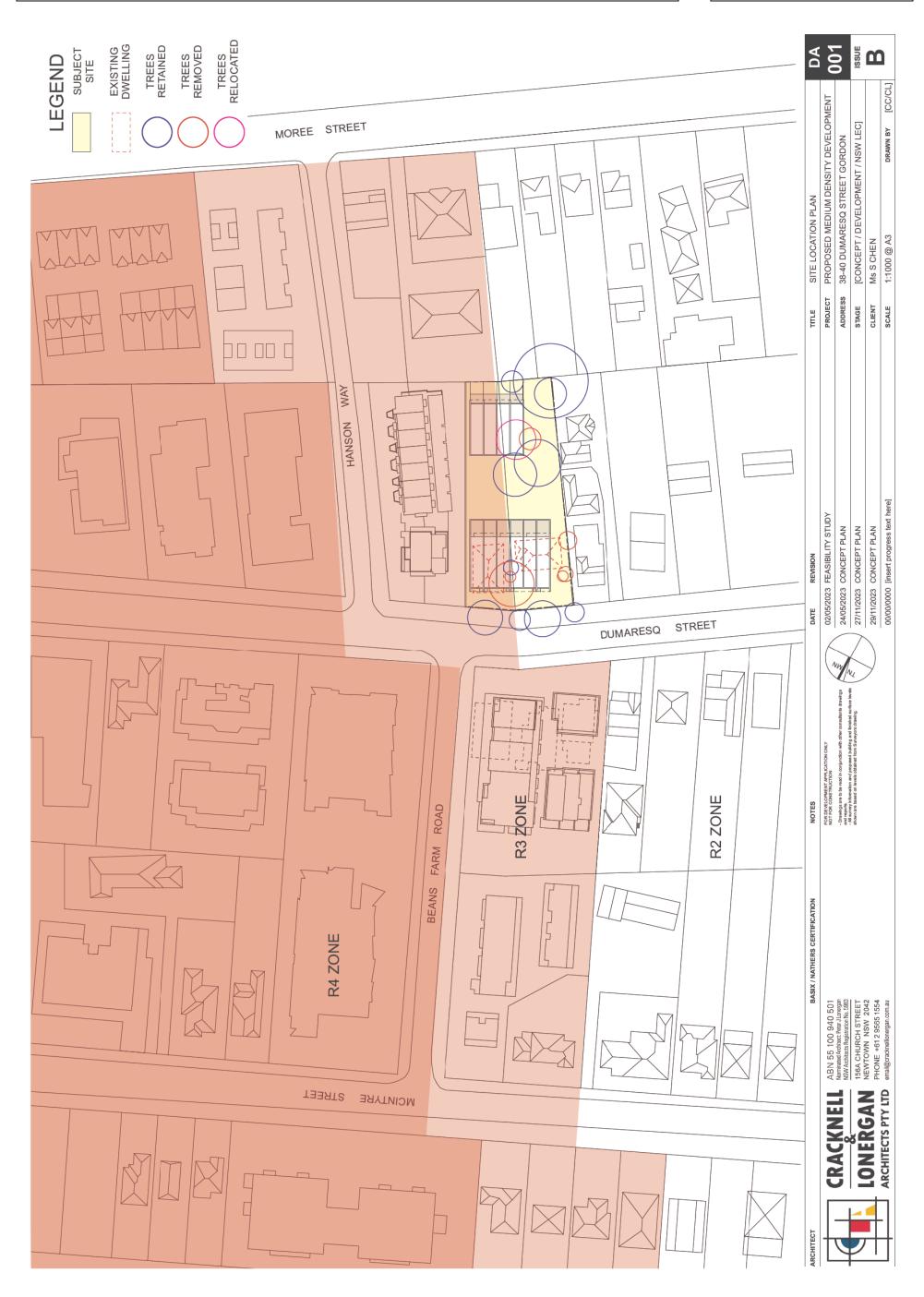
TRAFFIC AND PARKING ASSESSMENT REPORT PREPARED BY VARGA TRAFFIC PLANNING DATED 21 AUGUST 2023

APPENDIX I –

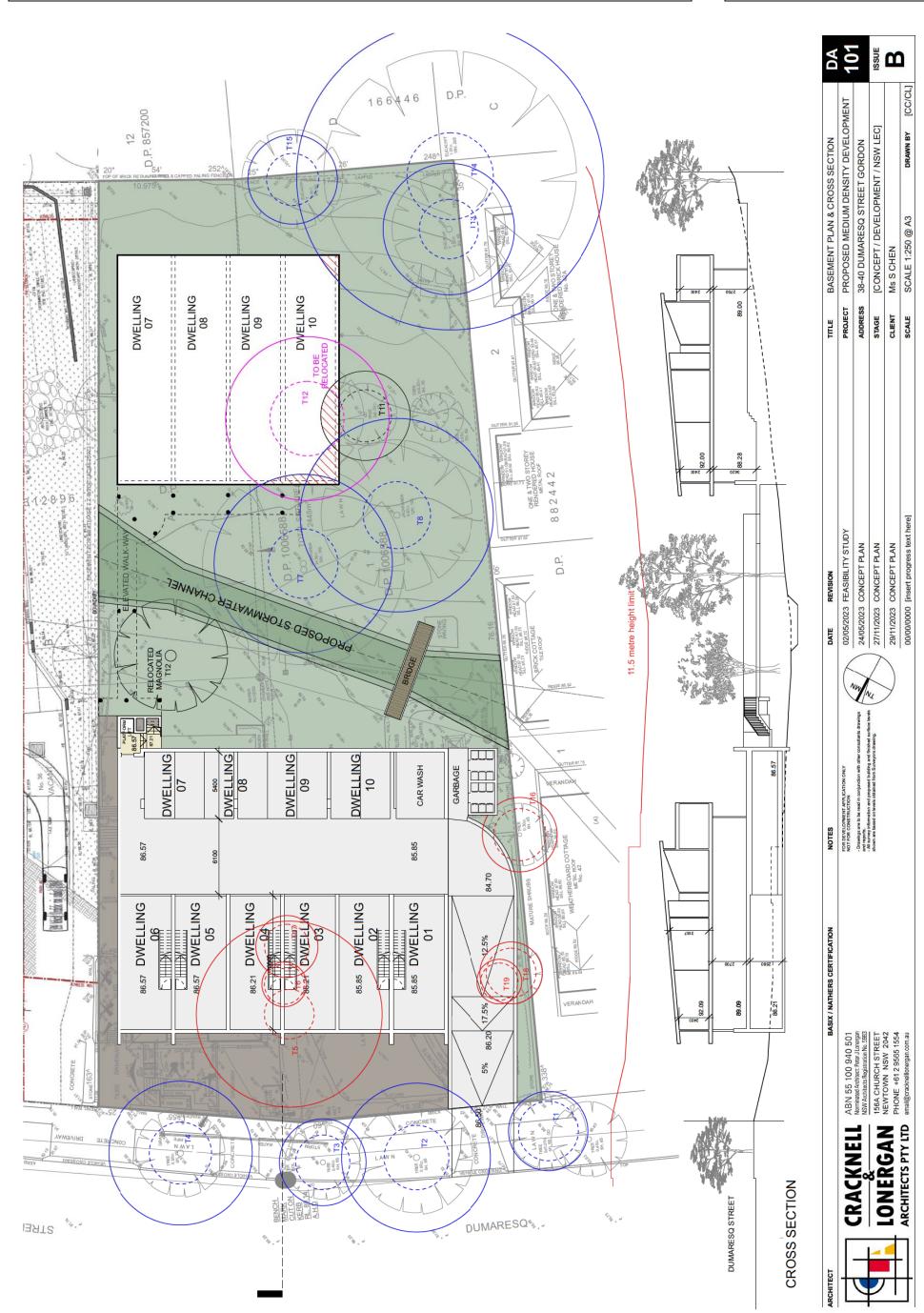
SITE SURVEY PREPARED BY BEE & LETHBRIDGE REVISION 00 DATED 16 SEPTEMBER 2024

ATTACHMENT NO: 3 - APPENDIX A - CONCEPT PLANS 40 DUMARESQ STREET GORDON

ITEM NO: GB.4



20250217-KLPP-Crs-2025/032626/612



ATTACHMENT NO: 3 - APPENDIX A - CONCEPT PLANS 40 DUMARESQ STREET GORDON

ITEM NO: GB.4

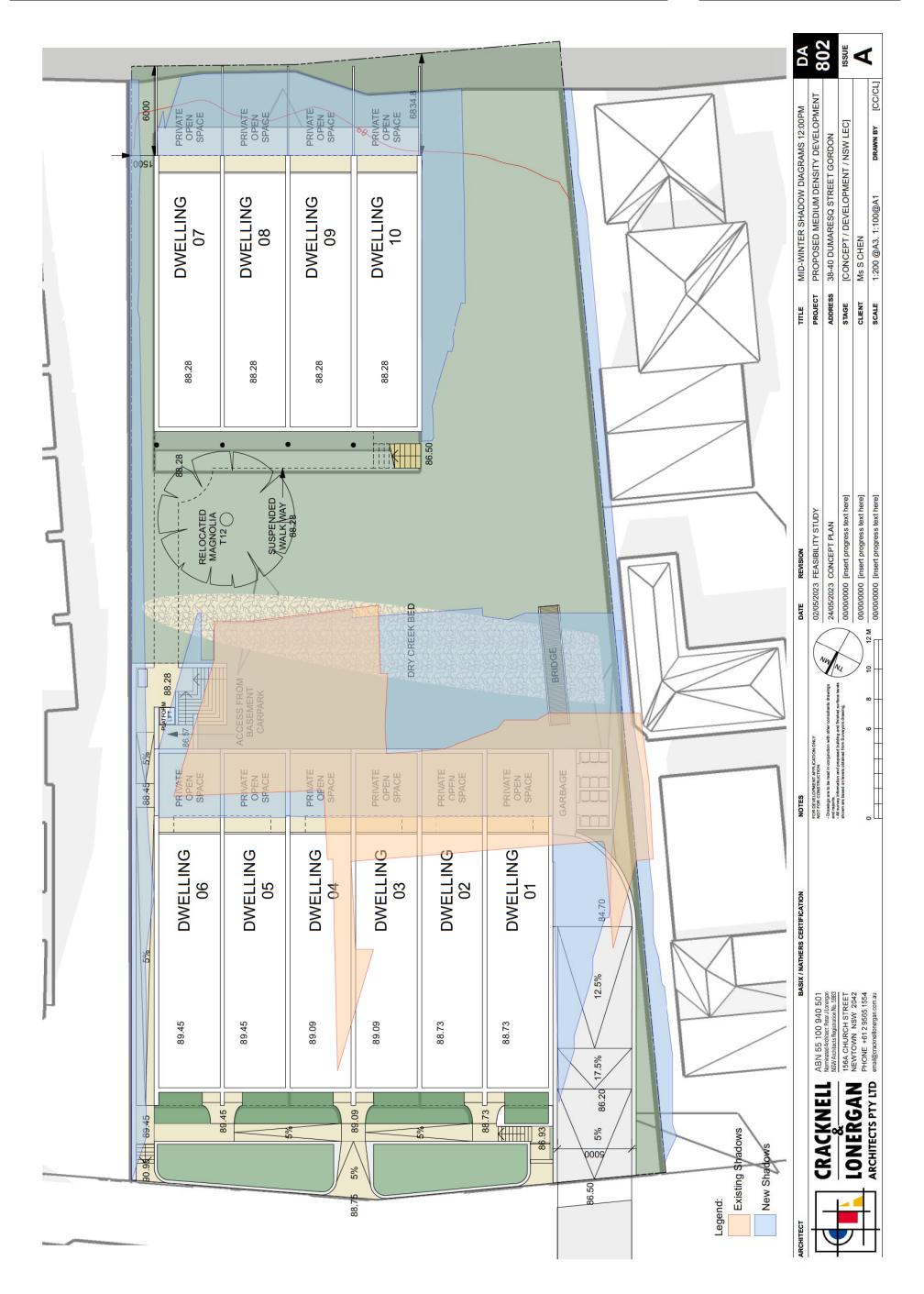


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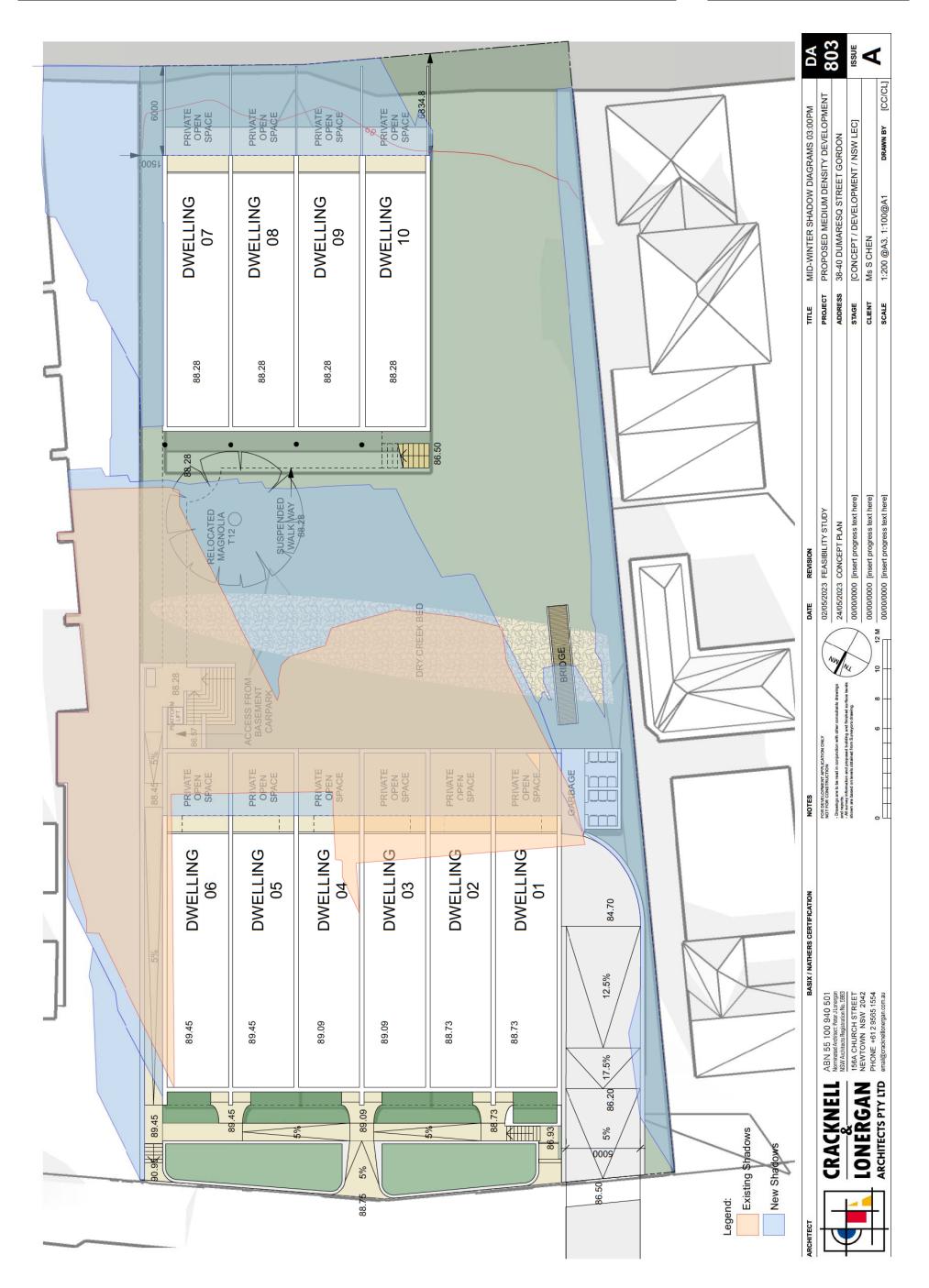
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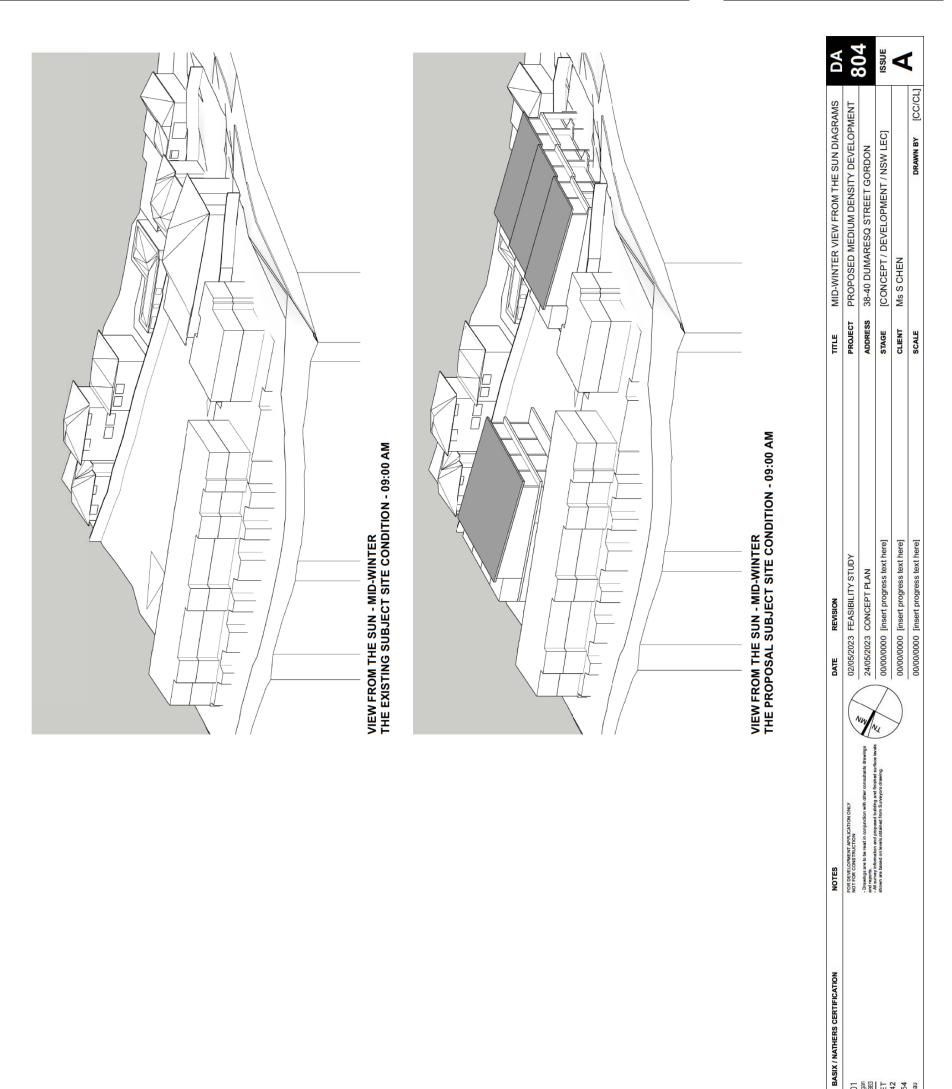


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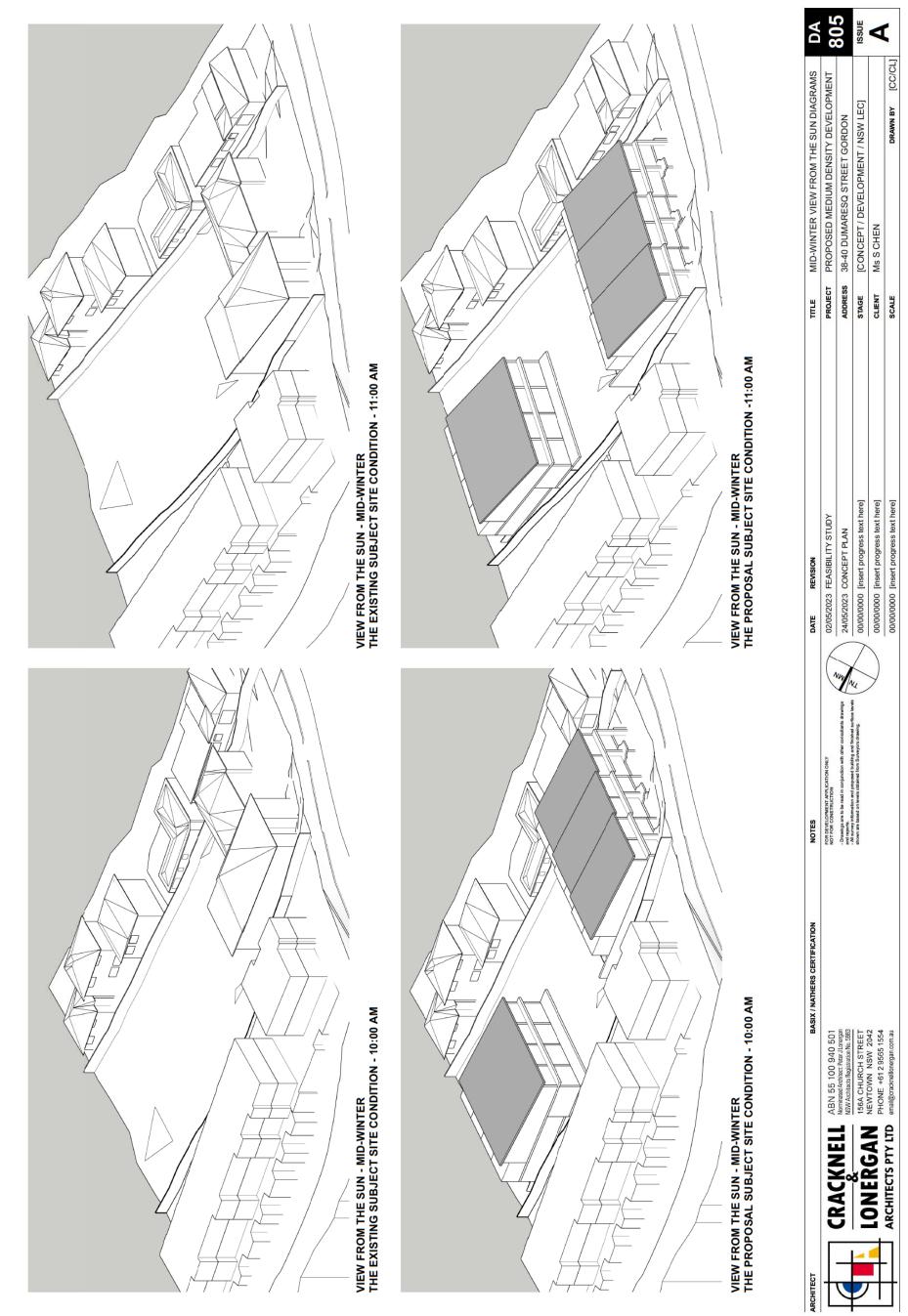


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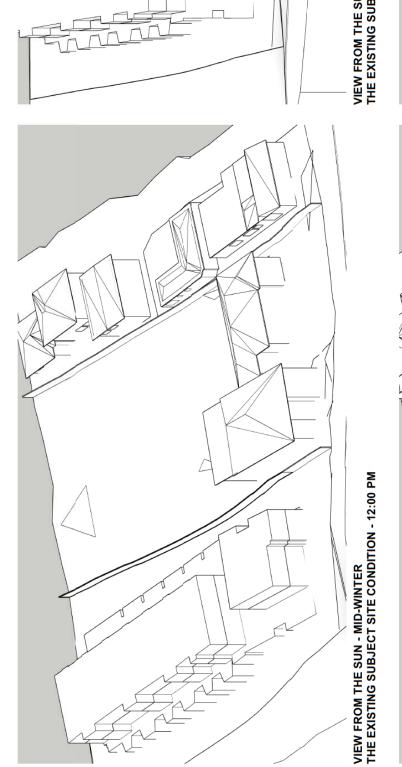






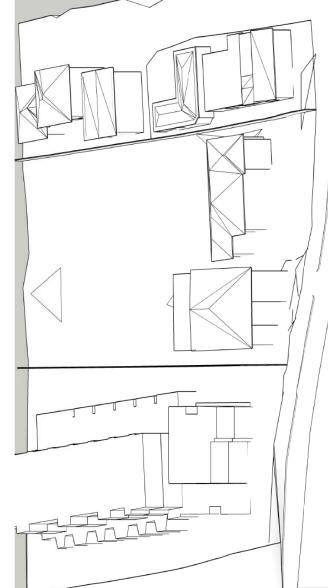


ITEM NO: GB.4

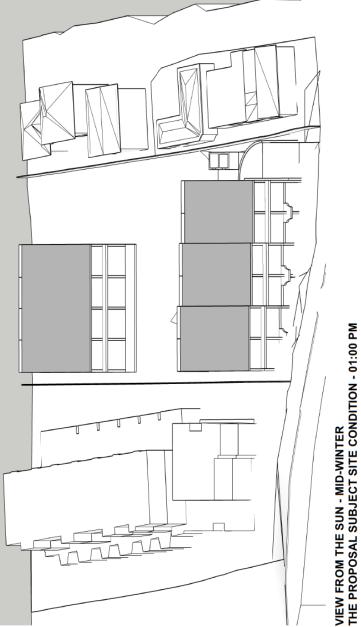








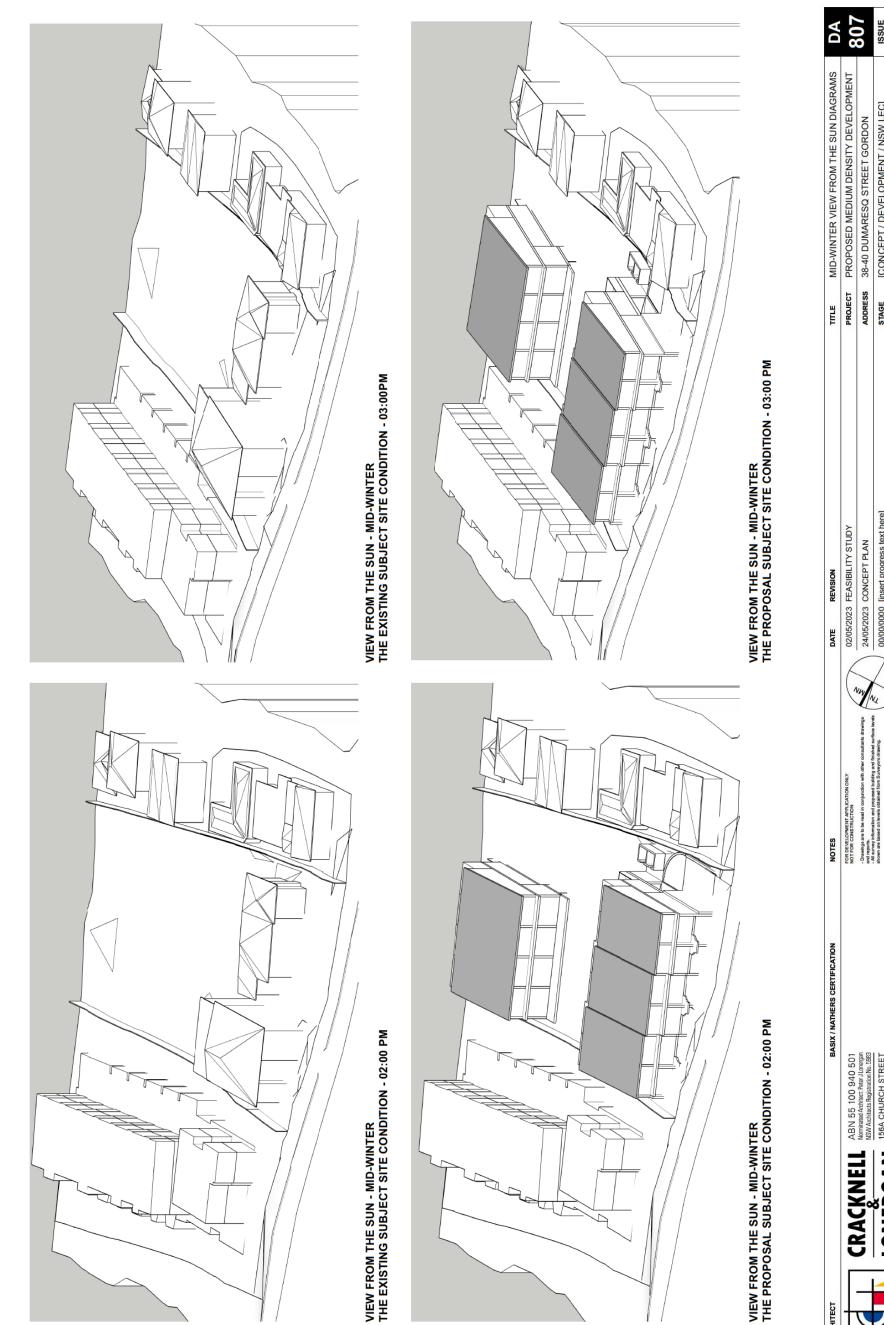
VIEW FROM THE SUN - MID-WINTER THE EXISTING SUBJECT SITE CONDITION - 01:00PM







VIEW FROM THE SUN - MID-WINTER THE PROPOSAL SUBJECT SITE CONDITION - 12:00 PM



ITEM NO: GB.4

[CONCEPT / DEVELOPMENT / NSW LEC] Ms S CHEN

STAGE CLIENT SCALE

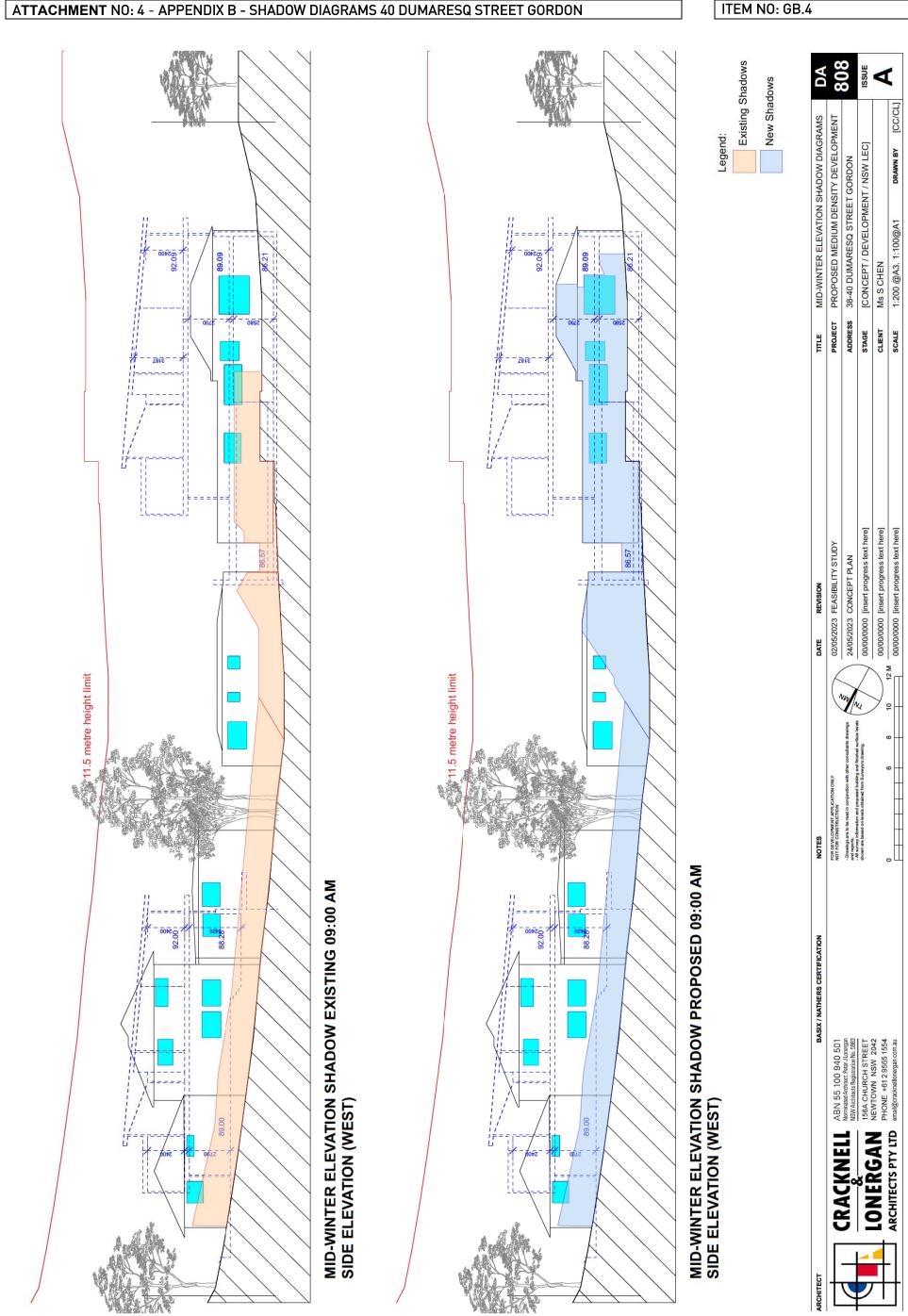
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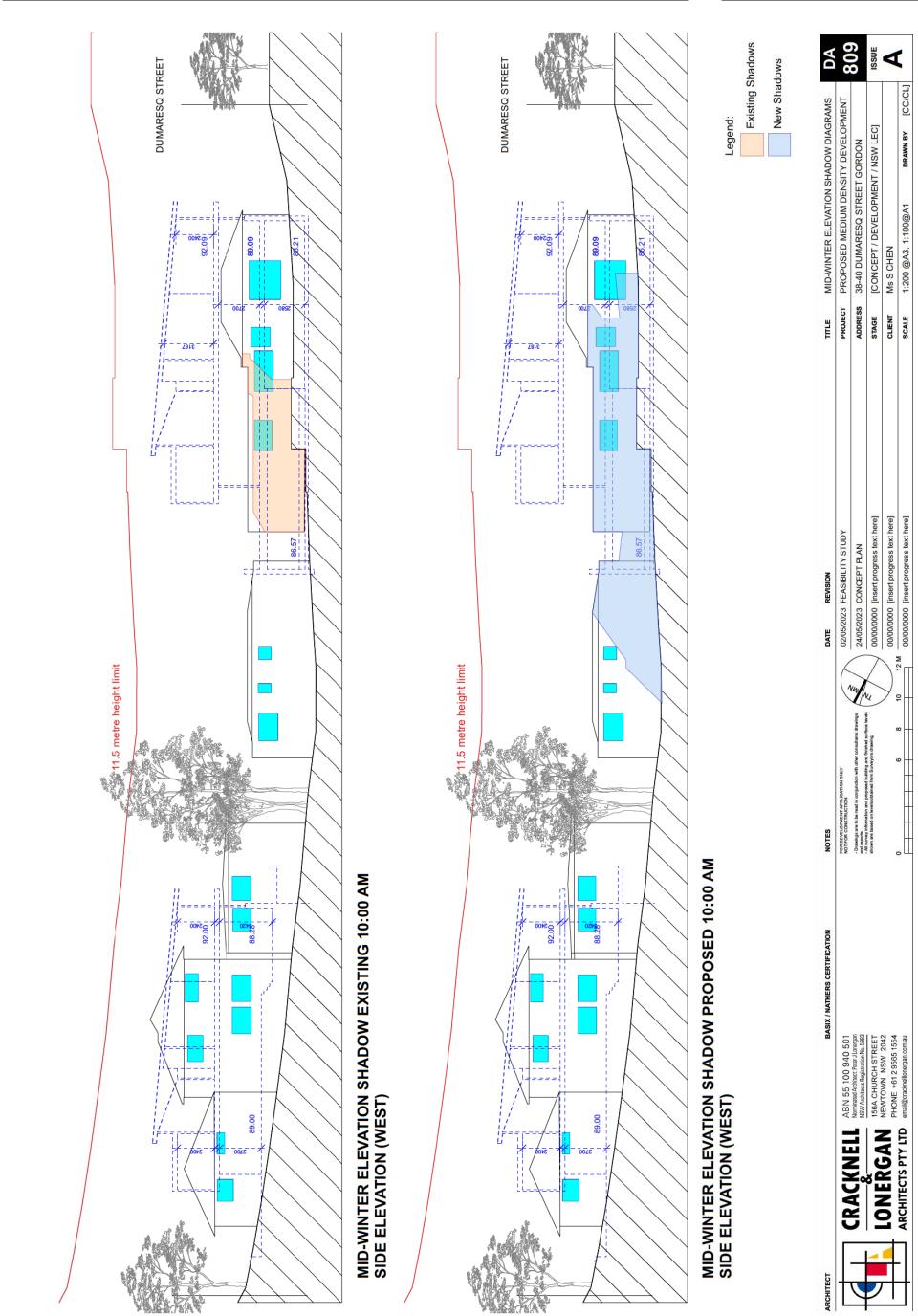
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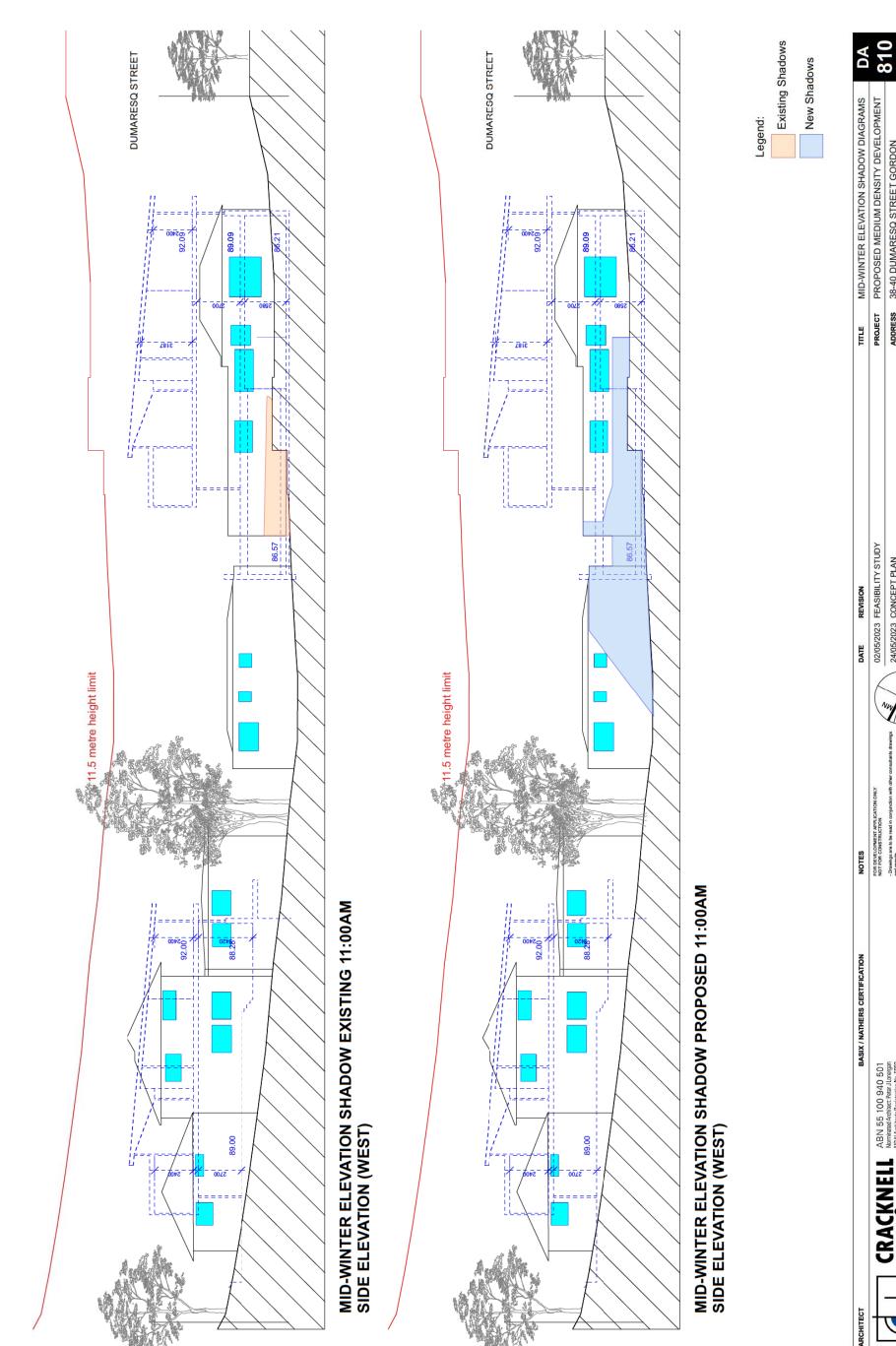
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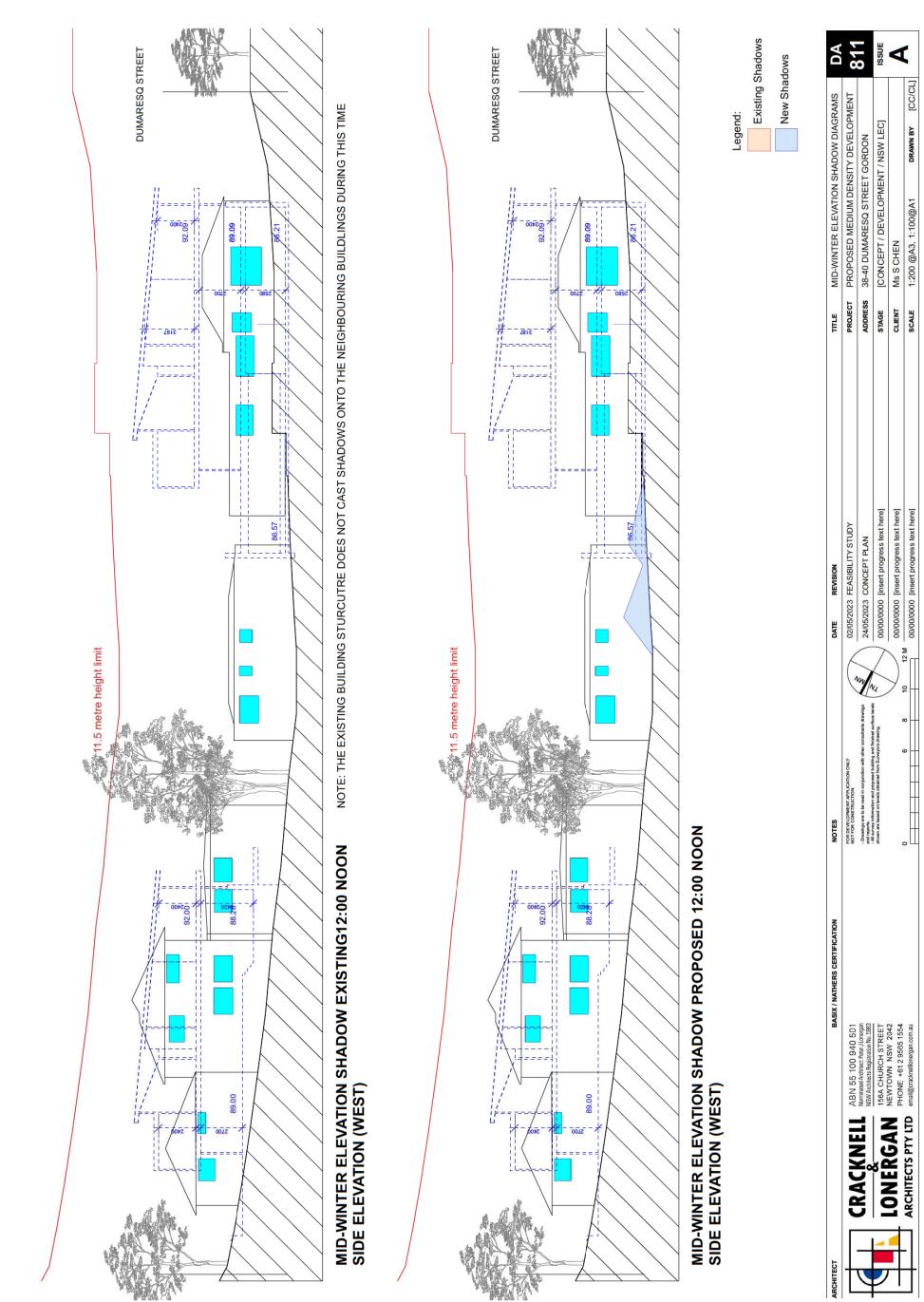
ITEM NO: GB.4



ITEM NO: GB.4

[CC/CL] PROPOSED MEDIUM DENSITY DEVELOPMENT [CONCEPT / DEVELOPMENT / NSW LEC] Ms S CHEN DRAWN BY 38-40 DUMARESQ STREET GORDON 1:200 @A3, 1:100@A1 ADDRESS STAGE CLIENT SCALE 00/00/0000 [insert progress text here] 00/00/0000 [insert progress text here] 00/00/0000 [insert progress text here] 24/05/2023 CONCEPT PLAN 12 M N 9 ultants drawings Drawings are to be read in conjunction with other c and reports
 and reports
 and proposed building and fi shown are based on hevis obtained from Surveyord FOR DEVELOPMENT APPLICATION ONLY NOT FOR CONSTRUCTION °T





Urban Design Report

40 Dumaresq Street, Gordon Darramurragal Country

Proposal:

To rezone the subject site from R2 Low Density Residential to R3 Medium Density Residential pursuant to the Ku-ring-gai Local Environmental Plan 2015



ISSUE B

Site Registration

Lot 1 & 2 in D.P. 1006588

Prepared on Prepared for 12 December 2024 S. Chen

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	9.3	Flood Management	
9.0	Conclusion		00

Prepared On: 11 SEPTEMBER 2024 [Draft] 14 OCTOBER 2024 [Final]

Project Address: 40 Dumaresq Street, Gordon Darramurragal Country

Prepared For:

S. Chen

Prepared By: Cracknell & Lonergan Architects Pty Ltd

Report Set Up By: [HC] Draft Report By: [HC] Reviewed By: [PL]



ABN 55 100 940 501 Nominated Architect: Peter J Lonergan NSW Architects Registration No. 5983

156a Church Street Newtown NSW 2042 (02) 9565 1554 email@cracknelllonergan.com.au www.cracknelllonergan.com.au

1.0 Executive Summary

1.1 Purpose of Report

This Urban Design Report has been prepared to supplement the planning proposal on behalf of the owners of the land known as 38-40 Dumaresq Street, Gordon. The site has a legal description of Lot 1 & Lot 2 in D.P. 10006588 and Lot A in D.P. 312896. The planning proposal relates exclusively to the rezoning of No. 40 Dumaresq Street, Gordon, being Lot 1 & Lot 2 in D.P. 1006588 from R2 - Low Density Residential to R3 - Medium Density Residential. The adjoining site is already zoned R3.

The submission of the planning proposal follows a pre-lodgement meeting with the Council and the proposal was referred to the Ku-ring-gai Local Planning Panel, with the outcome being a request for further information which is partially addressed by the preparation of this report.

The combined holding of three lots totals 2448 sqm, with No. 40 Dumaresq St representing 1475 sqm or 60% of the combined holding. The site comprises a principal frontage to Dumaresq Street and is affected by an existing overland flow path which bisets the front and rear of the property.

The subject site is currently occupied by a single dwelling house.

This Urban Design Report has been undertaken to:

- Review and identify the relationship of the site to adjoining R3 Medium Density Residential lots.
- Review the relationship of the site to the proposed height, floor space ratio (FSR), minimum lot size, indicative built form and public domain outcomes proposed, having regard to the Ku-ring-gai Strategic Planning Statement and Housing to 2036 policy guides.
- Consider the merits of the planning proposal in terms of the proposal's ability to aid Ku-ring-gai Council in acheiving the housing targets established within the Northern District Plan.
- Identify the development opportunites for the site, assessing the feasibility
 of the site to accommodate an appropriate transitional built form between
 adjoining R3 Medium Denisty Residental (north) and R2 Low Density
 Residential (south) contexts.
- Feasibility of the site is considered in terms of two options a multi-dwelling housing (townhouses) scheme and considers the implications of policy changes currently being considered by the NSW Government which would enable development of a residential flat building for the site. The feasibility assesses indicative built forms in terms of housing provision, open space, vehicle access, overshadowing impacts and other relevant matters.
- Consideration of these options will involve the demolition of the existing dwellings on site and rezoning of the lot from R2 to R3

Urban Design Report | 40 Dumaresq Street, Gordon Darramurragal Country | Prepared on 12 December 2024 for S. Chen

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1.2 Key Findings

Ultimately, the report demonstrates that the planning proposal, if endorsed would facilitate delivery of a multi-residential dwellings (townhouses) scheme comprising approximately 10 - 12 individually stratatitled townhouses with adequate off-street parking, private open space and natural cross ventilation and solar amenity without compromising the amenity of adjoining properties.

The Planning Proposal seeks to amend the KLEP in the following manner for No. 40 Dumaresq Street:

- Land Zone Amend the Land Zoning from R2 Low Density Residential to R3 Medium Density Residential.
- Height of Buildings Amend the Height of Buildings from 9.5 Metres ('J2') to 11.5 Metres ('L').
- Floor Space Ratio Amend the Floor Space Ratio from 0.3:1 (J2) to 0.8:1 (L).

This report provides a detailed analysis of the physical and strategic planning constrains and the opportunites of the site, and considers that the relevant environmental, social and economic impacts of the Proposal and its merit is consistent with the relevant matters for consideration.

In particular, support for the Planning Proposal is demonstrated through the Urban Design Report in the following matters:

- Provision of additional residential floor space within proximity to Chatswood CBD and Hornsby CBD confirming Gordon's location as a key local centre within 30 minutes public transport connection to these hubs.
- Assisting Ku-ring-gai in achiving its target of additional new dwellings by 2036, in an area well serviced by public transport.
- Providing orderly development of land which transitions between the high density residential areas (R4) to the north, and low density residential housing (R2) to the south.
- Providing additional residents' access to jobs and services.
- Providing opportunity for accelerating housing supply, choice and improving affordability within the locality. This is achieved by providing opportunities for new housing to meet the demand of different typologies, tenure, price points and additional choice in the locality.
- Protecting the natural environment and reducing existing hazards by providing a development opportunity which will address existing site stormwater overflow issues.

The proposal, being broadly consistent with the strategic planning goals for the North District Plan is presented to Ku-ring-gai Council with the hope that arising from the consideration of this Planning Proposal, that the Council will resolve to support the changes to the LEP as detailed in the Planning Proposal document and forward the Proposal to the Department of Planning, Housing and Infrastructure (DPHI) for a Gateway Determination.

Pèter onergan

Architect & Director of Desig Cracknell Lonergan Architects Pty Limited NSW Architects Registration No. 5983

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Urban Design Report | 40 Dumaresq Street, Gordon Darramurragal Country | Prepared on 12 December 2024 for S. Chen | 3 of 86



2.1 Site Description

Include the location, site boundaries, topography, orientation, and any notable site features.

The project site description and location is summarised as follows:

Street Address	40 Dumaresq Street, Gordon (Subject site for Planning Proposal)
	38 Dumaresq Street, Gordon (Site subject of 'isolation' to be developed in tandem with this planning proposal).
Legal Definition	Lot 1 & 2 in D.P. 1006588
Country	Darramurragal Country
Site Area	1485 sqm (Affected by Rezoning Proposal) - No. 40 Dumaresq St, Gordon 972 sqm (Not Affected by Rezoning - 'Isolated' Site) - No. 38 Dumaresq St, Gordon 2457 sqm (Combined Site Area) - No. 38 & No. 40 Dumaresq St, Gordon
Brief Site Description	The site subject of the planing proposla is located on the Southern Side of Dumaresq Street. The site is approximately mid-way between Pacific Highway to the East and Vale Street to the West. The site encompasses an area of approximately 1485 sqm and has a generally rectangular shape, with a frontage of 20.98 metres to Dumaresq Street. The site is currently occupied by a single storey detached dwelling house above a partially excavated garage.
Topography	There are a number of topographical changes bounded by the property subject of this urban design report. The site along the boundary generally slopes downhill from East to West. The area dips significantly between approximately RL. 90.98 at the north-east corner of the site down to a stormwater channel dip in the lawn (approximately bisecting the site, with levels ranging between RL. 84.96 to RL. 86.34. There is a significant overland flow (stormwater) channel which runs from east to west along the site, which is addressed as part of the stormwater matters contained in the planning proposal.
Public Transport	The subject site is well serviced by public transport. The site is within 800metres walking distance to Gordon Railway Station, with regular timetabled rail services to Hornsby (north), Chatswood (South-East) and Sydney CBD (South-East). The subject site is also serviced by a number of bus routes along Pacific Highway, providing regular route access to St. Ives, Macquarie University and Mona Vale.
Existing Services	The site is currently serviced by regular communications, electricity, gas and water lines. As previously identified there is an overland stormwater flow issue which is addressed as part of this urban design report and planning proposal.

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Fig. 01 | Aerial Map of the Subject Site & Locality (14 September 2024) Source: NearMaps Service



Fig. 02 | Aerial Oblique Image of the Subject Site for the Planning Proposal (April 2024) Source: NearMaps Service

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2.2 Surrounding Context

The site subject of the planing proposla is located on the Southern Side of Dumaresq Street. The site is approximately mid-way between Pacific Highway to the East and Vale Street to the West. The site encompasses an area of approximately 1485 sqm and has a generally rectangular shape, with a frontage of 20.98 metres to Dumaresq Street. The site is currently occupied by a single storey detached dwelling house above a partially excavated garage. There are a number of topographical changes bounded by the property subject of this urban design report. The site along the boundary generally slopes downhill from East to West. The area dips significantly between approximately RL. 90.98 at the north-east corner of the site down to a stormwater channel dip in the lawn (approximately bisecting the site, with levels ranging between RL. 84.96 to RL. 86.34. There is a significant overland flow (stormwater) channel which runs from east to west along the site, which is addressed as part of the stormwater matters contained in the planning proposal.



Fig. 03 | View of the Rear Yard from No. 38-40 Dumaresq Street, noting construction progress of adjoining townhouses which has resulted in site isolation. (October 2024)



Fig. 04 | View of the Rear Yard from No. 38-40 Dumaresq Street, noting construction progress of adjoining townhouses which has resulted in site isolation. (October 2024)

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Fig. 05 | View of the townhouses from the boundary setback between No. 38 Dumaresq St and the townhouses (October 2024)



Fig. 06 | View of the townhouses from Hanson Way. (October 2024).



Fig. 07 | Alternate view of the townhouses from Hanson Way. (October 2024)

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Fig. 08 | View from the rear yard of No. 38 Dumaresq Street looking in an easterly direction toward the adjoining development site (No. 34 - 36 Dumaresq St) and the apartment buildings beyond.



Fig. 09 | View from the rear yard of No. 38 Dumaresq Street looking in an northeasterly direction toward the adjoining development site (No. 34 - 36 Dumaresq St) and the apartment buildings beyond.



Fig. 10 | The rear of No. 38 Dumaresq Street, with No. 40 adjoining (left). Note that there is no fencing between the properties atm.

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Fig. 11 | Adjoining sites at No. 34 - 36 Dumaresq Street, Gordon. The site is now under construction for multidwelling housing (townhouses).

Fig. 12 | Rear Yard of No. 38 and No. 40 Dumaresq Street.

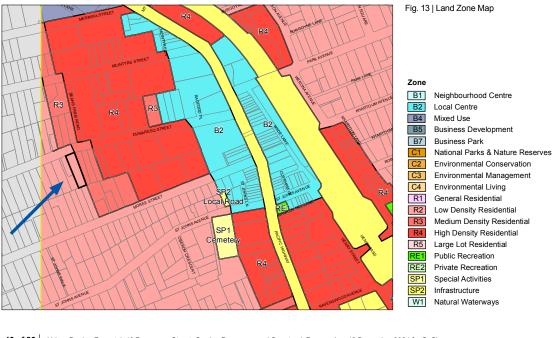
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2.3 Existing LEP Condition

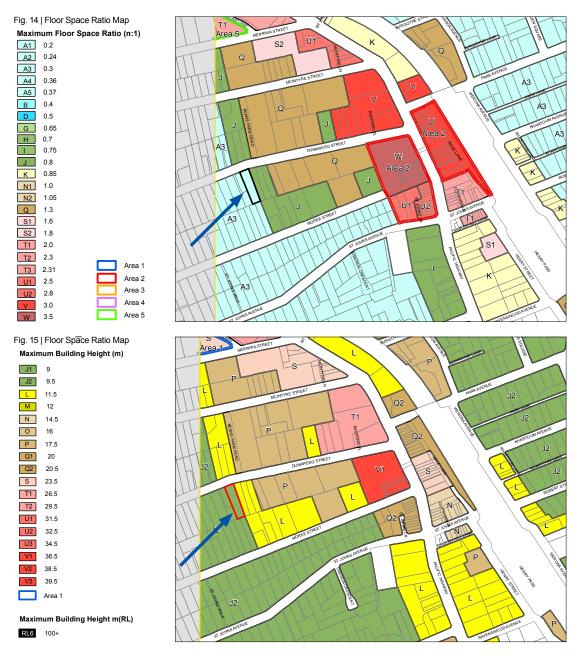
The submission of the planning proposal follows a pre-lodgement meeting with the Council and the proposal was referred to the Ku-ring-gai Local Planning Panel, with the outcome being a request for further information which is partially addressed by the preparation of this report.



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2.3 Existing LEP Condition



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2.3 Existing LEP Condition





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2.4 Existing Ku-ring-gai Development Control Plan (March 2024)

Development on the site will be subject to the provisions of the KDCP2024. The KDCP provides detailed guidelines and environmental standards for new development within the Ku-ring-gai LGA. It aims to promote high quality, sustainable development, which is consistent with Council's vision for Ku-ring-gai and responds appropriately to the natural and built enviornment.

The KDCP2024 provides al avered approach, with multiple parts being applicable to any future DA across the site. Accordingly, as a result of the planning proposal for multi-dwelling housing, Part 6 Multi-Dwelling Housing will be of particular relevance to any future development.

Other improtant elements of the DCP that relate to the proposed development in Gordon includes specific locality controls. Additionally, as the site is affected by overland flow paths (stormwater management), technical guidance on water management is required as part of this project.

From a review of the DCP requirements, it is noted that the proposed planning proposal does not require an amendment to the DCP, nor does it require the preparation of a site-specific DCP. The existing DCP provisions are considered appropriate and sufficient for the governance of a future DA which would apply to the combined sites of 38 - 40 Dumaresq Street, Gordon.

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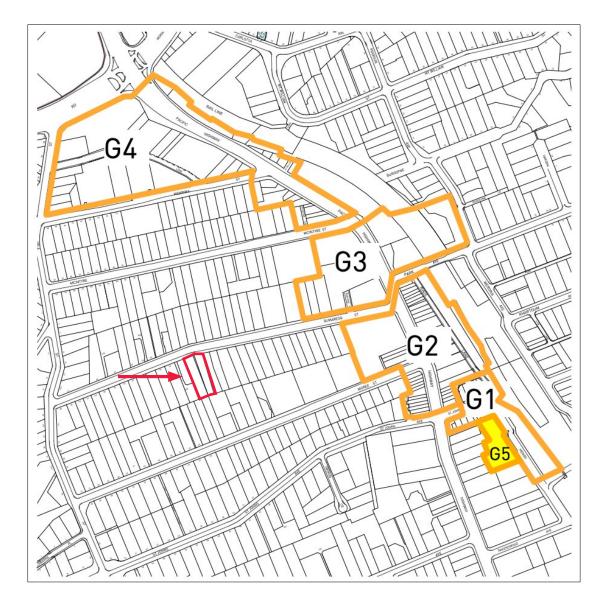


Fig. 20 | Ku-ring-gai DCP 2024. Core Urban Precincts of the Gordon Local Centre. Circled area shows the subject site's proximity to these core areas.

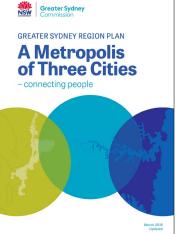
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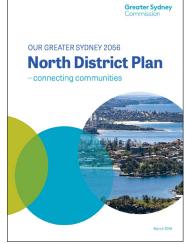
Strategic Planning Context 3.0

3.1 Policy Identification

There are a wide range of plans and policies which apply to the suburb of Gordon at both a State Government and Local Council level.

The following assessment is a summary of the key applicable plans and policies, along with the relevant objectives from these documents which have been captured in this Report for their relevance to the proposed rezoning proposal.





Greater Sydney Region Plan -A Metropolis of Three Cities

The Greater Sydney Region Plan is an overarching strategy for growing and shaping the Greater Sydney Metropolitan Area. It sets a 40-year vision (to 2056) and establishes a 20-year plan to manage growth and change for Greater Sydney in the context of social, economic and enviornmental matters. The plan was adopted in March 2018 and seeks to reposition Sydney as a metropolis comprised of three cities - the Western Parkland City, the Central River City and the Eastern harbour City. In the same vien as the former A Plan for Growing Sydney, the Plan provides 10 high level policy directions and 40 objectives which inform the District Plans, Local Plans and Planning Proposals which follow in the planning hierarchy.

The North District Plan supplements and underpins the Greater Sydney Region Plan which sets the 20-year vision for the Harbour City District thorugh 'Planning Priorities' that are linked to the Region Plan. Under this Plan, the subject site is located within the Eastern Economic Corridor.

The North District Plan

Rezoning of the subject site would remain consistent with the overarching objectives, as identified above. In the subsequent section, a discussion on the alignment of the planning proposal with the relevant objectives of the North District Plan will be highlighted.

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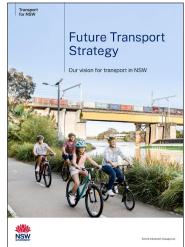
Strategic Planning Context

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Staying Ahead: State Infrastructure Strategy 2022-2042 Infrastructure NSW

The NSW State Infrastructure Strategy 2022-2042 brings together the infrastructure investment and land use planning of the Future Transport Strategy 2056 and Greater Sydney Region Plan and is underpinned by the 2018 strategy plan, Building Momentum, which established a pipline of investment for infrastructure that is underway or in advanced planning. The Strategy sets out the NSW Government's vision for infrastructure over the next 20 years, focussing on aligning investment with sustainable growth. For Metropolian Sydney, the principal aim is to provide residents with access to jobs and services within 30 minutes of their home, known also as the '30-minute city' model.



Future Transport 2056

Future Transport 2056 sets out the 40-year vision, directions and principles for customer mobility in NSW guiding transport investment over the longer term. It presents a glimpse of the large economic and societal shifts that will be seen in the future to ensure rapid advances in technology and innovation are harnessed to create and maintain a world-class, safe, efficient and reliable transport system.

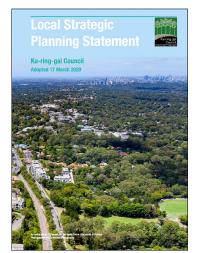
The strategy is informed by the State Infrastructure Strategy, with the principal aim of achiving the '30-minute city' model for urban areas such as metropolitan Sydney.

The strategy identifies a number of key attributes linked to strategic areas which measures the livability of a place, centred around the accessibility to jobs, services and recreation facilities without the overreliance on private cars.

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3.0 Strategic Planning Context





Ku-ring-gai Local Strategic Planning Statement

The Ku-ring-gai Local Strategic Planning Statement (LSPS) was adopted by Council on 17 March 2020. The LSPS is intended to draw together the priorities and actions for future land use planning from Council's existing land use plans and policies and provide for an overall land use vision for the loclaity.

The site is situated within Gordon as a key local centre, and further identifies it as a priority investigation area for future housing (2021-2026). In this sense, the proposed rezoning of No. 40 Dumaresq Street to facilitate coordinated, regularised development for two properties -No. 38 and No. 40, will serve to aid the Ku-ring-gai Local Government Area in achieving this target, by providing appropriately proportioned development in walkable areas close to local centres without detrimentally impacting existing amenity in lower density suburban areas.

Ku-ring-gai Housing Strategy to 2036

The Ku-ring-gai Housing Strategy to 2036 is generally intended to inform the implementation of the Greater Sydney Region Plan and the North District Plan.

The Draft Housing Strategy was submitted to the Department of Planning, Industry and Environment (Now the Department of Housing, Planning and Industry) in December 2020, and a Letter of Support (approval) was issued on 16 July 2021. The Letter of Support was subject to a number of additional requirements and amendments including, inter alia, a requirement "to identify areas for medium density housing outside a local centre, with a planning proposal for new dwellings to be submitted by December 2023." The Council resolved to reject this approval in November 2021.

Irrespective of this rejection, the subject site is not directly impacted by the Department's requirements and is wholly consistent with the original Housing Strategy prepared by the Council.

The subject site is located within the Gordon Local Centre and adjoins property marked as "Undeveloped Land" with a "High Potential" for uptake in the provision of medium density residential housing. The Planning Proposal is consistent with this Housing Strategy prepared by the Council and would be capable of achieving the stated aims of the strategy as detailed in a subsequent section of this report.

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3.0 Strategic Planning Context

3.2 Greater Sydney Region Plan - A Metropolis of Three Cities

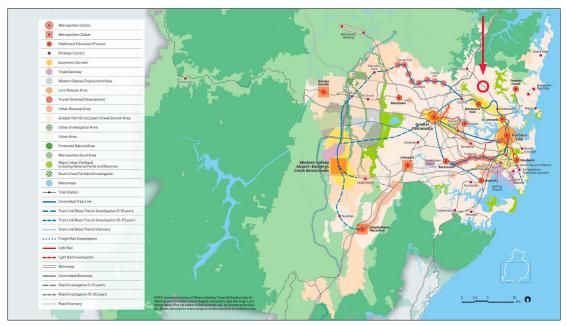


Fig. 21 | Greater Sydney Regional Plan | Source: Greater Sydney Region Plan - A Metropolis of Three Cities (2018) The Subject Locality has been circled and denoted by the arrow.

The Greater Sydney Region Plan - A Metropolis of Three Cities is a regional plan developed by the Greater Sydney Commission which presents a vision and innovative actions for managing Greater Sydney's growth and enhancing its status as one of the most liveable global cities.

The plan includes a 20-year housing target of 92,000 new private dwellings across northern Sydney, to be built between 2016 and 2036, or 11.5% of the North District Plan's 20-year target.

The purpose of the Planning Proposal subject of analysis in this Urban Design Report is to rezone No. 40 Dumaresq Street from R2-Low Density Residential to R3 - Medium Dennsity Residential, thereby regularising the use of an isolated R3 property (No. 38) and enabling an appropriate development to take place across the two properties. The isolation of the single R3 property arises due to an approved (and now under construction) multi-dwelling housing townhouses development at No. 34 - 36 Dumaresq Street.

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The proposed rezoning to R3 - Medium Denisty Residential would provide additional housing opportunites in the Gordon Locality, and is consistent iwth the objectives of the Greater Sydney Region Plan. The following are objectives from the Greater Sydney Regional Plan considered to be of key relevance to the proposed rezoning project:

Objective 4: Infrastructure Use is Optimised

- The subject site is located within 700 metres walking distrance from Gordon Railway Station. The station is situated on the T1 North Shore & T9 Northern Line, providing services between Berowra and City via Gordon and between Hornsby and North Shore via the City.
- There subject site is located within approximately 350 metres walking distance from bus stops on both sides of Pacific Highway. Currently, five bus routes are serviced by these stations, with connections to St. Ives Chase, Mona Vale, West Pymble, Macquarie University and St. Ives Shopping Centre.
- The subject site is approximately 260 metres walking distance from Gordon Centre, a shopping facility with a diverse range of essential services including but not limited to groceries, liquor, post office, gymnasium, pharmacy and news agents.
- The subject site is within the catchments of Gordon West Public School and Killara High School, as well as non-Government and Catholic schools, being Our Lady of Perpetual Succour West Pymble and Ravenswood School for Girls.
- The subject site is well serviced by local recreational amenities, inlcuding the Gordon Golf Course and the bushland walks around the Amaroo Gully.

Objective 10: Greater Housing Supply

 The proposal would regularise the site under a single use, R3 - Medium Density Housing, enabling a range of appropriate residential uses to facilitate the delivery of more housing, consistent with this objective.

Objective 11: Housing is More Diverse and Affordable

 The permissible residential uses of the R3 - Medium Density Residential, encompassing multi-dwelling housing and residential flat buildings (under the Low and Mid-Rise Housing Policy) would be subject to controls around unit mix and typologies, facilitating delivery of greater housing choice and options to ease pressures on existing housing available in the area.

Objective 37: Exposure to Natural and Urban Hazards is Reduced

- As part of this project, and noting that the site is subject to overland flow flood planning, the planning proposal and any future development on the site would need to resolve the localised drainage issues in the immediate area.

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3.3 The North District Plan

The North District Plan has been developed to support the Greater Sydney Region Plan. The 20-year District Plan endeavours to manage growth within the context of socio-economic and ecological matters to facilitate achieving the principal aims of the 40-year vision for Greater Sydney. The District Plan contains planning priorities and actions for implementing the Greater Sydney Region Plan at a district level and serves as a bridging policy between regional and local planning frameworks.

In this context, it is of particular relevance to note that:

The North District will continue to grow over the next 20 years with demand for an additional 92,000 dwellings. This will be provided thorugh ubran renewal, around new and existing infrastructure, land release and infill developments.

The focus of growth will be on well-connected walkable places that build on local strengths and focus on quality public places.

Local Centres such as Gordon and Pennant Hills are accessible with bus and rail networks linking to strategic centres.

The planning proposal is therefore squarely aligned with the objectives for the North District, being within walking distance of Gordon Railway Station, a number of local bus routes and directly linked to the strategic local centres and Sydney CBD as part of the Eastern Harbour City.

The planning proposal is particularly aligned to two of the North District's planning priorities:

Planning Priority N5 - Providing housing supply, choice and affordability with access to jobs, services and public transport.

Acknowledging the North District's anticipated housing demand of 92,000 dwellings, the Ku-ring-gai Local Government Area has been projected to provide 10,660 new dwellings by 2036 under this plan, representing 11.5% of the 2036 housing target.

The proposed rezoning of No. 40 Dumaresg Street to facilitate coordinated, regularised development for two properties - No. 38 and No. 40, will serve to aid the Kuring-gai Local Government Area in achieving this target, by providing appropriately proportioned development in walkable areas close to local centres without detrimentally impacting existing amenity in lower density suburban areas

The proposed development as discussed previously is highly accessible, being within 800 metres of a railway station to Sydney CBD and within 400 metres of bus networks to local centres including St. lves and Macquarie University. The subject site is also within 400 metres walking distance of a shopping centre, with good access to a diverse range of public and retail services.

Planning Priority N22 - Adapting to the Impacts of Urban and Natural Hazards and Climate Change.

The proposed development includes relevant flood management measures to address existing identified overland flow issues. A future development on the subject site would present an opportunity to resolve the localised drainage issues, reducing the risk of natural hazards in the area

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3.0 Strategic Planning Context

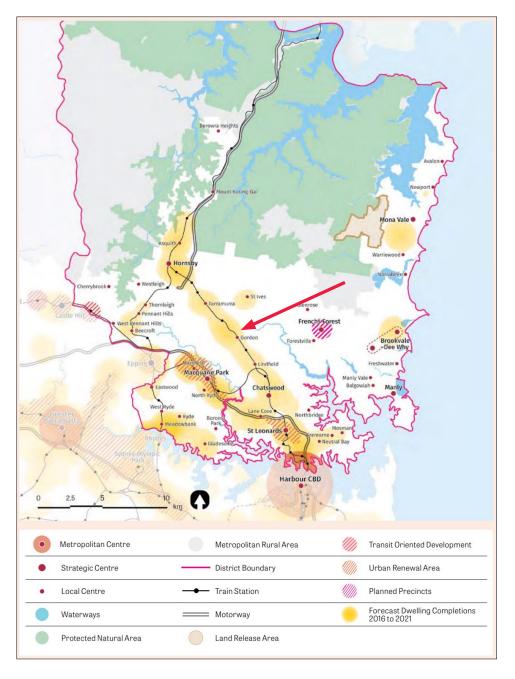


Fig. 22 | The North District Plan - Anticipated Future Housing Supply | Source: The North District Plan - Eastern Harbour City (2018) The Subject Locality has been denoted by the arrow.

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3.4 Staying Ahead: State Infrastructure Strategy 2022-2042 Infrastructure NSW

The NSW State Infrastructure Strategy provides a detailed review of projects and investments across a number of programs in NSW, including particular focus on the creation of 30-minute cities and 15-minute neighbourhoods. These strategies are linked in part to the comprehensive Transport 2056 initiative which is assessed in the subsequent section of this report.

Within the context of the Infrastructure Strategy, the following recommendations are aligned with the aim of this planning proposal:

Recommendation 44

Deliver more housing, jobs, amenities and services in locations where there is spare capacity in existing and planned infrastructure.

The planning proposal seeks to alter the zoning of No. 40 Dumaresq Street from R2 - Low Density Residential to R3 - Medium Density Residential. The principal goal for this is to enable economic, orderly and regular development of the combined lots No. 38 and No. 40, the latter of which is currently a site isolated property with an R3 zoning.

This subject site is within proximity to both existing railway infrastructure and bus networks. The moderate increase in urban density facilitated by this planning proposal will enable delivery of more housing in the locality, where there is an opportunity to further enhance use of pre-existing transport infrastructure to facilitate urban density.

This is ultimately tied to and facilitates the Northern District's need to accommodate over 10,500 additional dwellings in the Ku-ring-gai Local Government Area, as expected within the Northern District Plan for the Eastern Harbour City.

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3.5 Future Transport 2056

The Future Transport 2056 vision sets a number of strategic directions on the improvement of existing transport networks and infrastructure, alongside future plans for enhanced networks of transportation to supplement the expected development of Greater Sydney in the context of the three cities plan and the aim of achieving 30-minute metropolitan cities and 15-minute liveable, walkable community neighbourhoods. Strategic directions which are of particular significance in the context of this planning proposal are considered below:

C1.1 Enhance 30-minute metropolitan cities

Existing transit networks are capable of facilitating the locality's integration into a 30-minute city. The subject site (including walking time to the station) is within reach of two regional centres - Chatswood and Hornsby, both of which are significant hubs for business and commerce within the Greater Sydney region. Private transport networks is being enhanced locally through connections along the Pacific Highway to the NorthConnex Motorway and the Beaches Link and existing M2 Motorway. The enhancement of housing opportunities through the planning proposal will therefore increase the availability of housing within key infrastructural corridors.

C2.1 Support car-free, active, sustainable transport options

A number of public transport options including major bus and rail network connections are within walking distance of the site. The subject site is within 800 metres of Gordon Railway Station and within 400 metres of bus stations along Pacific Highway. The subject site is also within 400 metres of a local shopping centre (15 minutes walking distance), providing access to retail and commercial necessities.

C2.3 Integrate emerging mobility choices

The planning proposal demonstrates that off-street parking (vehicular, motorcycle and bicycle) are capable of being integrated into this project. This provides for a range of future resident choice in mobility through the area and provides opportunities for integrated electrification to enable appropriate transition to electric vehicles by residents, if desired. It is noted that car sharing is also currently being considered by the local government area and subject to future development, may provide additional mobility options for local residents.

C3.1 Provide transport choices for people no matter where they live.

As stated previously, the planning proposal highlights the accessiblility of the area. The site is located within rail and bus networks and is supplemented by the development opportunities for providing a range of off-street parking options for vehicles, motorcycles and bicycles. There is therefore a high range of options available which facilitates diversity of choice for future residents of the area

C3.2 Develop an inclusive transport system enabling access to services and places for all

As stated previously, the planning proposal highlights the accessiblility of the area. The site is located within rail and bus networks and is supplemented by the development opportunities for providing a range of off-street parking options for vehicles, motorcycles and bicycles. There is therefore a high range of options available which facilitates diversity of choice for future residents of the area.

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P4.3 Use space and assets more sustainably

A significant aspect of the Greater Sydney plan and the North District plan is to facilitate delivery of more urban housing in highly accessible areas. As demonstrated previously, the subject site is within 800 metres of Gordon Railway Station and within 400 metres of bus stations along Pacific Highway. The subject site is also within 400 metres of a local shopping centre (15 minutes walking distance), providing access to retail and commercial necessities. In this context, the site is considered to be highly accessible and the planning proposal's desire to increase housing opportunities by enabling the development of medium density housing will serve to use existing transport infrastructure assets more responsibly and sustainably.

E2.2 Stabilise Greater Sydney's traffic

As previously discussed, the subject site's accessibility to public transport facilitates opportunities for different forms of travel to be taken by residents. Greater reliance on public transport networks will reduce over dependence on private vehicles, supporting the stabilisation of existing and foreshadowed traffic issues in the area.

Fig. 23 | Existing and Future Road, Bus and Ferry Network in the Eastern Harbour City, Central River City and Western Parkland City. | Source: Future Transport 2056 Subject locality is circled in red denoted by the arrow.



Fig. 24 | Existing and Future Rail Network in the Eastern Harbour City, Central River City and Western Parkland City. | Source: Future Transport 2056 Subject locality is circled in red denoted by the arrow.

3.0 Strategic Planning Context

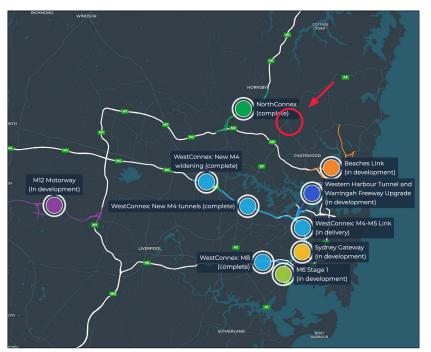


Fig. 25 | Existing and Future Motorway Network in the Eastern Harbour City, Central River City and Western Parkland City. Source: Transport for NSW (Roads & Marintime Services) -Community Analytics Subject locality is circled in red denoted by the arrow.



Fig. 26 | Existing Trains NSW railway and metro line connections in Sydney. Source: Transport for NSW - Trains NSW Network Map (Extract) Subject locality is circled in blue denoted by the arrow.

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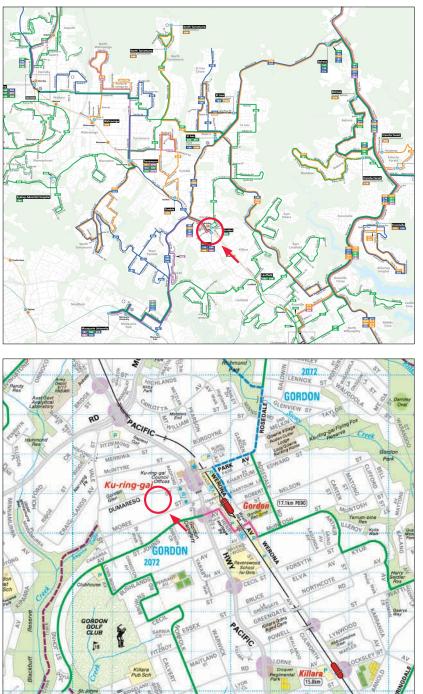


Fig. 27 | Existing Bus network within the Gordon / Hornsby area. Source: Transport for NSW - Bus Network Map (Extract) Subject locality is circled in red denoted by the arrow.

Fig. 28 | Existing cycle lanes in proximity to the subject site. Source: Ku-ring-gai Council Cycleways Map (Extract) Subject locality is circled in red denoted by the arrow.

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Ku-ring-gai Local Strategic Planning Statement

The Ku-ring-gai Local Strategic Planning Statement (LSPS) was adopted by Council on 17 March 2020. The LSPS is generally intended to draw together the priorities and actions for future land use planning from Council's existing land use plans and policies and provide for an overall land use vision for the loclaity.

The North District Plan and identifies Gordon as a key local centre, and further identifies it as a priority investigation area for future housing (2021-2026). In this sense, the proposed rezoning of No. 40 Dumaresg Street to facilitate coordinated, regularised development for two properties - No. 38 and No. 40, will serve to aid the Kuring-gai Local Government Area in achieving this target, by providing appropriately proportioned development in walkable areas close to local centres without detrimentally impacting existing amenity in lower density suburban areas

The LSPS provides for a number of key priorities and the relevant items are considered and responded to in this section, demonstrating the planning proposal's ability to support Ku-ring-gai's strategic planning goals of achieving these planning priorities.

K3 Providing housing close to meet the existing and future requirements of a growing and changing community.

The subject site is located within 700 metres walking distrance from Gordon Railway Station. The station is situated on the T1 North Shore & T9 Northern Line, providing services between Berowra and City via Gordon and between Hornsby and North Shore via the City.

There subject site is located within approximately 350 metres walking distance from bus stops on both sides of Pacific Highway. Currently, five bus routes are serviced by these stations, with connections to St. Ives Chase, Mona Vale, West Pymble, Macquarie University and St. Ives Shopping Centre.

The subject site is approximately 260 metres walking distance from Gordon Centre, a shopping facility with a diverse range of essential services including but not limited to groceries, liquor, post office, gymnasium, pharmacy and news agents.

The subject site is within the catchments of Gordon West Public School and Killara High School, as well as non-Government and Catholic schools, being Our Lady of Perpetual Succour West Pymble and Ravenswood School for Girls.

The subject site is well serviced by local recreational amenities, inlcuding the Gordon Golf Course and the bushland walks around the Amaroo Gully.

K4 Providing a range of diverse housing to accomodate the changing structure of families and households and enable ageing in place.

The planning proposal would result in the orderly development of land between 38 and 40 Dumaresq Street, enabling a greater range of housing options beyond the limited typologies afforded under the existing R2 - Low Density Residential zoning. The zoning enables the development of inter alia, multi dwelling housing (townhouses) which would add to the range of housing typologies available in the local area, facilitating choice and supporting the needs of increasing diversity of options for young families and those ageing in place.

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K5 Providing affordable housing that retains and strengthens the local residential and business community.

The provision of additional housing within a well serviced locality will contribute to housing affordability. Furthermore, the future residents of the additional dwellings will stregnthen and support the infrastructure, services and local businesses within the area, including Gordon Local Centre.

K21 Prioritising new development and housing in locations that enable 30 minute access to key strategic centres.

The proposed development of No. 38 - 40 Dumaresq Street would facilitate use of existing transit networks which are capable of facilitating the locality's integration into a 30-minute city. The subject site (including walking time to the station) is within reach of two regional centres - Chatswood and Hornsby, both of which are significant hubs for business and commerce within the Greater Sydney region. Private transport networks is being enhanced locally through connections along the Pacific Highway to the NorthConnex Motorway and the Beaches Link and existing M2 Motorway. The enhancement of housing opportunities through the planning proposal will therefore increase the availability of housing within key infrastructural corridors.

K39 Reducing the vulnerability, and increasing resilience, to the impacts of climate change on Council, the community and the natural and built environment.

The subject site has been identified as being impacted by an overland flow flood planning matter. The proposed rezoning of No. 40 Dumaresq Street, underpinned by the desire to consolidate and develop No. 38 - 40 will facilitate resolution of localised drainage issues in the immediate surrounds. This is consistent with the recommendations of a Flood Management Report prepared as part of the Planning Proposal package of documents.

K43 Mitigating the impacts of urban and natural hazards.

The subject site has been identified as being impacted by an overland flow flood planning matter. The proposed rezoning of No. 40 Dumaresq Street, underpinned by the desire to consolidate and develop No. 38 - 40 will facilitate resolution of localised drainage issues in the immediate surrounds. This is consistent with the recommendations of a Flood Management Report prepared as part of the Planning Proposal package of documents.

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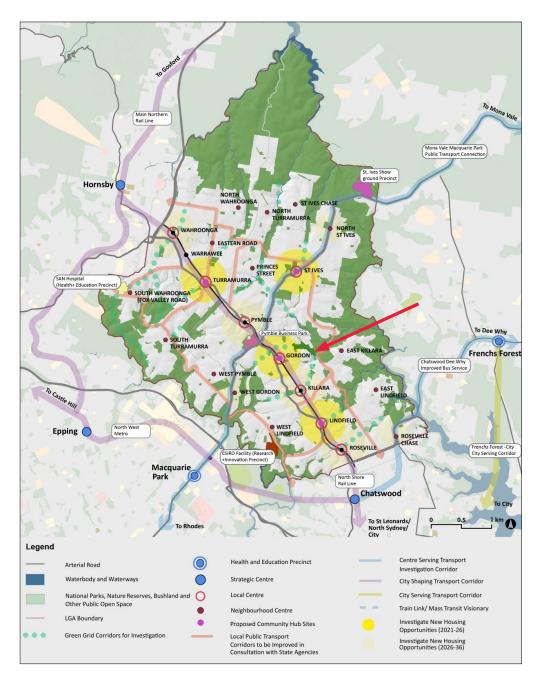


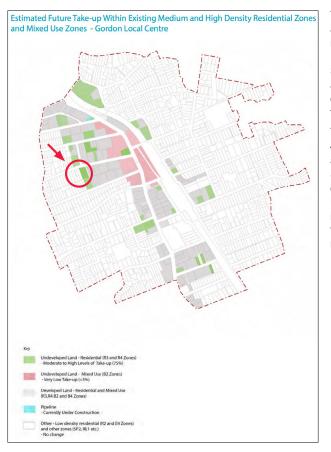
Fig. 29 | New Housing Opportunities Investigation Areas - The North District (Ku-ring-gai) | Strategic Planning Statement The Subject Locality has been denoted by the arrow.

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Ku-ring-gai Housing Strategy to 2036



The planning proposal supplements the ability to address the residual 'undeveloped land' identified in Council's Housing Strategy to 2036 document. Existing development under construction at No. 34-36 Dumaresq Street has isolated the property at No. 38 Dumaresq Street, limiting the ability to develop multi-dwelling housing as envisaged in the Council's 2036 plan.

The planning proposal seeks to rezone No. 40 Dumaresq Street to facilitate the orderly amalgamation of No. 38 and No. 40 Dumaresq Street into a single property capable of being developed under the provisions of R3 Medium Density Residential Development. The proposal is aligned to the Housing Priorities outlined in the strategy as demonstrated in the table of responses on the subsequent pages.

Fig. 30 | Estimated Future Take-Up Within Existing Medium and High Density Residential Zones and Mixed Use Zones | Gordon Local Centre | Source: Ku-ring-gai Housing Strategy to 2036

The Subject Locality has been denoted by the arrow and red circle..

ISSUE B

3.0 Strategic Planning Context

Strategy Objective	Compliance	Response	
Housing Priority H1			
Manage & Monitor the Supply of Housing in the Right Locations			
To monitor the delivery of housing within areas close to services, cultural and community facilities, and within a 10 minute walking distance to key public transport nodes.	COMPLIANCE ACHIEVED	 The planning proposal would facilitate the orderly development of medium density housing at No. 38-40 Dumaresq Street. The subject site is identified as being a highly accessible area with a 10 minute walking distance estimated to facilitate access to key services including (but not limited to): <u>Transport Hubs</u> - Gordon Railway Station & Bus Stations Along Pacific Highway. Connections via these to Sydney CBD, Macquarie University, Hornsby CBD and St. Ives Shopping Centre. <u>Local Essential Services</u> - Gordon Shopping Centre is within 10 minutes walk, with access to groceries (Woolworths), Gordon Medical Centre, Blooms The Chemist (Pharmecutical Services), Community Preschool, retail food and drink options. <u>Community & Recreation Facilities</u> - Access to parkland at Amaroo Gulley, Gordon Glenn and education resources via Gordon Public Library and the Council Offices and Chambers, facilities at Gordon Mini-Golf and Perfect Placement Tennis Coaching. On this basis, it is concluded that the subject site is considered highly accessible and well serviced by key local amenities. 	
To provide homes in areas that can support the creation and growth of vibrant Local Centres and a thriving local economy.	COMPLIANCE ACHIEVED	The creation and growth of vibrant local centres and the thriving of local businesses and economies is necessarily reliant upon people who choose to live in close proximity to such businesses and services. Providing housing so that people have the option to live in these areas is the first step toward supporting and maintaing vibrant local economies. The planning proposal services this aim by regularising and optimising the sites No. 38 - 40 Dumaresq Street to enable economic, orderly and appropriate housing within Gordon Centre whilst also ensuring appropriate transition in scales between the residential apartments in the heart of the centre, and lower density suburban detached houses in the suburban context of the locale.	
To ensure the delivery of housing is in coordination with provision of Icoal and state infrastructure and services.	COMPLIANCE ACHIEVED	The North District Plan and the Ku-ring-gai Local Strategies both identify Gordon as an important Local Centre which will undergo development, urban densification and change. This change is to facilitate managed sustainable growth of the area to achieve the aims of the 30-minute-city and 15-minute-neighbourhood. Existing local amenities already satisfy the requirement for achieving the '15-minute- neighbourhood' aspiration. Further improvements to local infrastructure including a new 'Aldi' grocery store along Pacific Highway will add to the diversity of grocery options. The Transport 2056 plan demonstrates that Gordon will remain well connected via current and future planned road and rail networks, including the implentation of rapid-bus transit in the near future. The delivery of housing in this area will benefit from upcoming state infrastructure and will sustainable use existing community services.	

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Strategic Planning Context 3.0

Strategy Objective	Compliance	Response
Housing Priority H2		
Encourage Diversity & Cho	oice of Housing	l
To encourage a mix of dwelling types and sizes	CAPABLE OF COMPLIANCE	The planning proposal would enable the amalgamation of No. 38 and No. 40 Dumaresq Street into a property of sufficient size to overcome the 'site isolation' caused by the townhouse development at No. 34 - 36 Dumaresq Street. The planning proposal would therefore enable the development of multi dwelling housing on the site, facilitating the increase in housing diversity and provision of an improved mix of dwelling types and sizes in the local area.
To investigate housing affordability	CAPABLE OF COMPLIANCE	Increasing the delivery of housing in key local centres to provide for additional housing adjacent to well serviced areas alongside diversification of the housing mix are core attributes central to improving housing affordability. The planning proposal would accomplish this by enabling the development of multi dwelling housing as a transitional typology between an area currently dominated by medium rise residential flat buildings and single dwelling detached houses.
To ensure new homes are accessible and meet mobility needs.	CAPABLE OF COMPLIANCE	In conformity with the Access to Premises Standards and relevant Livable Housing Policies, including the Housing Provisions of the NCC, new homes constructed on the property (if the planning proposal were to recieve gateway determination) would be capable of compliance with relevant access to premises and mobility standards. Detailed design choices such as
Housing Priority H3		
Increasing liveability, susta	inability and a	rea character through high-quality design
To encourage housing that contributes to healthy and active neighbourhoods.	CAPABLE OF COMPLIANCE	The planning proposal would enable development of multi-dwelling housing that is capable of contributing to a healthy and active neighbourhood. The proposal would facilitate delivery of housing accessible to the natrual reserves of Amaroo Gulley and Golf Course, as well as access to key servies which support safe, healthy and active lifestyles for future residents.
To facilitate high quality housing that is responsive to Ku-ring-gai's local character.	CAPABLE OF COMPLIANCE	The planning proposal would regularise the use of No. 38 and No. 40 Dumaresq Street, overcoming the site isolation caused by the amalgamation of adjoining lots and enabling a responsive multi dwelling housing development to take place. The delivery is consistent both with the future urban density of the area and capable of providing a scale transition between higher density residential apartments to the north and east, and lower density detached housing to the south and west.

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3.0 Strategic Planning Context

Strategy Objective	Compliance	Response	
Housing Priority H3 (contin	Housing Priority H3 (continued)		
Increasing liveability, sustainability and area character through high-quality design			
To promote housing that meets high sustainability performance targets.	CAPABLE OF COMPLIANCE	The proposed development on the site, subject of gateway determination for this planning proposal would be required to address a number of sustainable outcomes within relevant planning frameworks. This would include both SEPP BASIX and NatHERS Star Ratings to achieve a minimum level of sustainable outcomes. Passive measures including natural solar access, cross ventilation and reliance on alternate transport methods will also contribute to the future development's sustainable outcomes. The planning proposal's regularisation of land zoning for the site would enable these to take place, thus supporting delivery of housing which would be capable of compliance with this housing priority objective.	



Fig. 31 | 10-Minute Walking Map | Estimated accessible areas by walking within a 10-minute radius from the subject site, highlighting access to key services and facilities | Source: Travel App & Google Maps (Composite by CLA)

The Planning Proposal 4.0

4.1 Objectives & Intended Outcomes

4.1.1 Summary

The objective and intended outcome of the Planning Proposal is to rezone No. 40 Dumaresq Street, Gordon from R2 - Low Density Residential to R3 - Medium Density Residential pursuant to the Ku-ring-gai LEP 2015.

In that regard, Clasue 6.6 of the Ku-ring-gai LEP 2015 specifies that development consent must not be granted for the erection of "multi dwelling housing" or a "residential flat building" unless thel ot has an area of at least 1,200 sqm and a minimum width and depth of lot dimension of at least 25 metres (if the area of the land is less than 1,800 sqm).

The site identifies as No. 38 Dumaresq Street has an area of approximately 923 sqm (per survey), with a street frontage of 14.935 metres to Dumaresq Street. As such, No. 38 Dumaresq Street is now an underzied (or isolated) lot with an area and site frontage that does not satisfy the requirements of CI.6.6 of the LEP for "multi dwelling house."

In the circumstances, the purpose of the proposed rezoning of No. 40 Dumaresg Street from R2 - Low Density Residential to R3 - Medium Density Residential is to enable the amalgamation of properties at No. 38 and No. 40 Dumaresq Street to facilitate orderly and economic development for the principal purpose of "multi dwelling housing" and overcome the site isolation of No. 38 Dumaresg Street arising from the combined development (now under construction) of No. 34 and No. 36 Dumaresq Street.

Additionally, the boundary between No. 40 and No. 42 DUmaresq Street represents the most appropriate boundary between the R2 - Low Density Residential and R3 -Medium Density Residential Zones, representing an appropriate transition in urban density in the context of the planning maps for the area.

Finally, it is proposed to amend the Lot Size Map (to specify a minimum lot size of 1,200 sqm), the Height of Buildings Map (to specify a maximum building height of 11.5 metres) and the Floor Space Ratio Map (to specify a maximum floor space ratio of 0.8:1). The proposed amendments are to provide consistency of the controls for No. 40 Dumaresg Street in line with the proposed rezoning of land and consistency with the zoning controls applicable already to No. 38 Dumaresq Street.

In summary, the proposal for the rezoning of No. 40 Dumaresq Street is to over overcome the site isolation of No. 38 Dumaresq Street and allow the economic, orderly and appropriate consolidation and development of No. 38 - 40 Dumaresq Street as a single consolidated site for the purposes of multi dwelling housing permitted under a R3 - Medium Density Residential zoning within the KLEP 2015.

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4.0 Planning and Policy Context

4.1.2 Objectives

The Proposal will amend the Ku-ring-gai Local Environmental Plan 2015 (KLEP2015) so that an alternative set of planning controls will apply to the site No. 40 Dumaresq Street, Gordon which will:

- Enable the orderly and feasible redevelopment of the combined sites No. 38 40 Dumaresq Street, Gordon for 'multi-dwelling housing',
- Ensure that new development responds positively to adjacent land uses,
- Facilitate the redevelopment of the site with an outcome that achieves a greater diversity of housing options in an are with close proximity to public transport, essential services and retail/ recreational facilities, consistent with the planning objectives of the North District Plan,
- Exhibit consistency with State Government policy by encouraging and facilitating residential growth in areas with a high degree of livability (15-minute neighbourhoods) and high connectivity (30-minute cities),
- Facilitate delivery of housing which assists in meeiting the stated goals of the housing accord and housing targets established for the area by the State Government,
- Provide for greater housing diversity choice within the Gordon locality, by offering a housing typology as an alternative to traditional freestanding houses and medium rise apartments,
- Provide for an appropriate built form in a transitional zoning between the urban local centre and the suburban landscape of Gordon,
- Provide an opportunity for new residential interfaces with Dumaresq Street to be achieved to deliver a fine grain urban outcome.

Overall, it is considered that the proposal will have positive benefits for the community and would be in the public interest.

4.1.3 Intended Outcomes

The Planning Proposal will enable the development of a multi-dwelling residential development which incorproates appropriately scaled housing that will:

- Ensure appropriate hieght transitions across the site,
- Create greater legibility of built form across the site,
- Create greater diversity in housing,
- Respond appropriately to its context in terms of density and scale,
- Minimise external impacts such as overshadoiwng of neighbours,
- Ensure a high level of amenity is enabled for future occupants and nearby residential dwellings.

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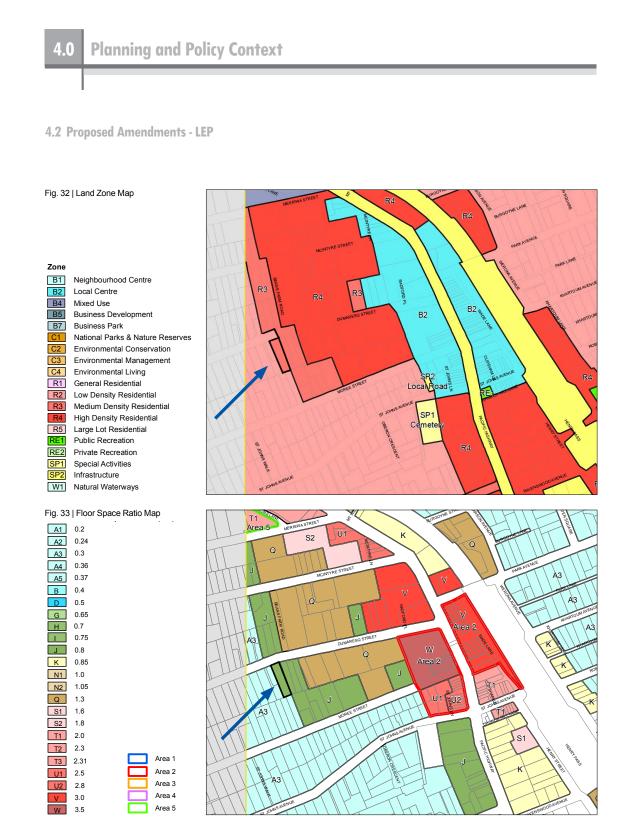
Planning and Policy Context 4.0

4.2 Proposed Amendments - LEP

The following section details the proposed amendments to the LEP subject this Planning Proposal A tabulated summary of the changes to applicable controls, alongside the proposed amendments to the LEP Maps is supplied. Note: Only the maps which are to be changed as a result of this Planning Proposal are altered and shown.

LEP Provision	Existing Control	Proposed Control	Status
Ku-ring-gai LEP 2015			
Land Zone	R2 - Low Density Residential	R3 - Medium Density Residential	Changed
Maximum Floor Space Ratio	0.3:1	0.8:1	Changed
Maximum Building Height	9.5 metres	11.5 metres	Changed
Minimum Lot Size	930 sqm	1200 sqm	Changed
Acid Sulphate Soil	Class 5	Class 5	Unchanged
Water Courses	No Applicable Control	No Applicable Control	Unchanged
Heritage	No Applicable Control	No Applicable Control	Unchanged

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4.0 Planning and Policy Context

4.2 Proposed Amendments - LEP



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5.1 Reference Scheme Overview

The following section details the proposed amendments to the LEP subject this Planning Proposal A tabulated summary of the changes to applicable controls, alongside the proposed amendments to the LEP Maps is supplied. Note: Only the maps which are to be changed as a result of this Planning Proposal are altered and shown.

LEP Provision	Existing Control	Proposed Control	Status
Ku-ring-gai LEP 2015			
Land Zone	R2 - Low Density Residential	R3 - Medium Density Residential	Changed
Maximum Floor Space Ratio	0.3:1	0.8:1	Changed
Maximum Building Height	9.5 metres	11.5 metres	Changed
Minimum Lot Size	930 sqm	1200 sqm	Changed
Acid Sulphate Soil	Class 5	Class 5	Unchanged
Water Courses	No Applicable Control	No Applicable Control	Unchanged
Heritage	No Applicable Control	No Applicable Control	Unchanged

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5.0 Reference Scheme A - Multi-Dwelling Housing

5.2 Conceptual Massing & Form



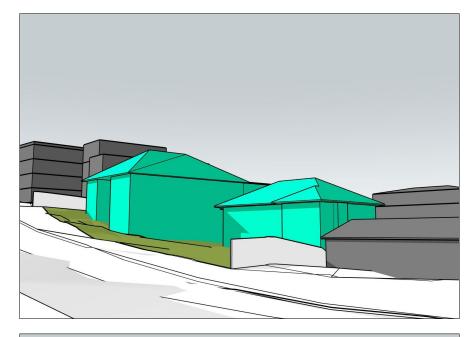
Fig. 36 | Bulk and scale of existing subject site and locality.



Fig. 37 | Bulk and scale of proposal on subject site and surrounding existing development.

5.0 Reference Scheme A - Multi-Dwelling Housing

5.2 Conceptual Massing & Form





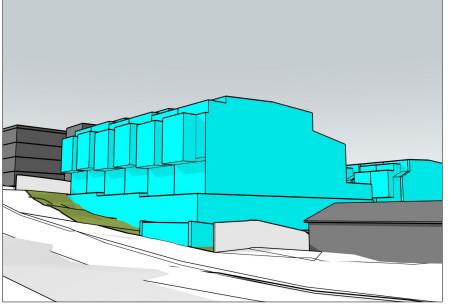


Fig. 39 | View of proposed development looking uphill along Dumaresq Street.

5.0 Reference Scheme A - Multi-Dwelling Housing

5.3 Anticipated Development Yield

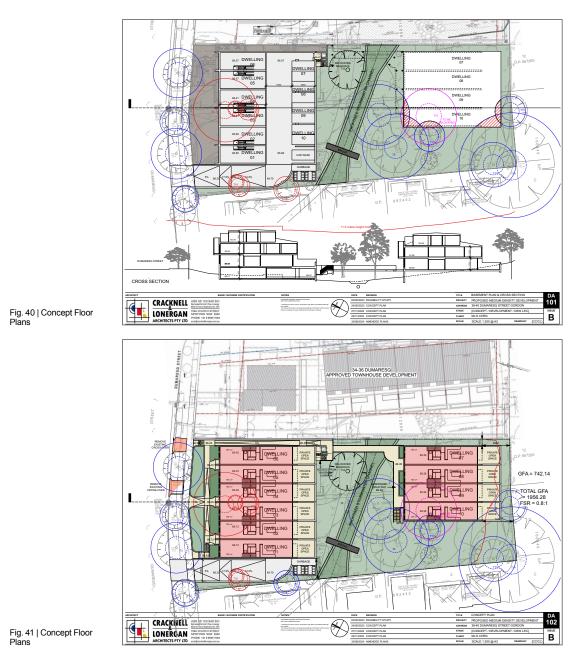
The planning proposal would be capable of devliering a multi-dwelling housing (townhouses) scheme which would facilitate the delivery of approximately 10 townhouses. The development metrics and yield is summarised by the table below.

Item	Metric
Type of Development	Multi-Dwelling Housing (Townhouses)
Typologies	4 Bedroom + Study (Typical)
Number of Units	10 Units
Gross Floor Area	1956.28sqm
Maximum Floor Space Ratio	0.8:1 (0.8:1 permissible)
Maximum Building Height	Average between 10.5 metres to 11.5 metres
Subdivision Type	Strata Subdivision (Individual Lots)
Carparking	20 car spaces (2 per unit) 1 Car Wash bay

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5.0 Reference Scheme A - Multi-Dwelling Housing

5.3 Anticipated Development Yield



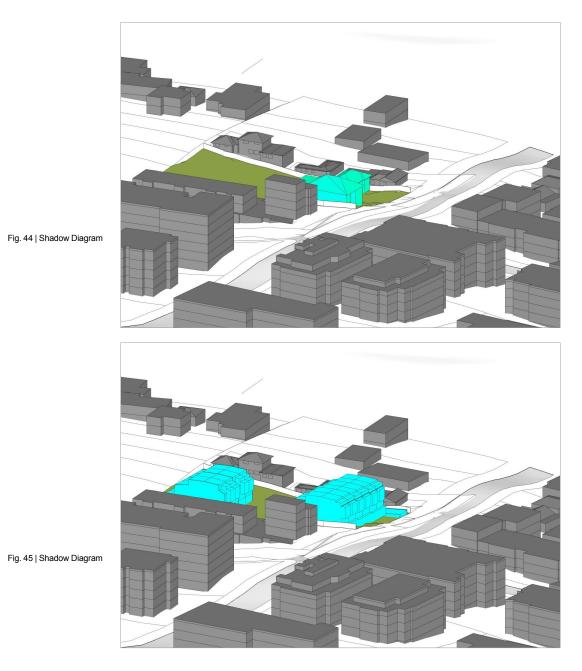
5.0 Reference Scheme A - Multi-Dwelling Housing

5.3 Anticipated Development Yield



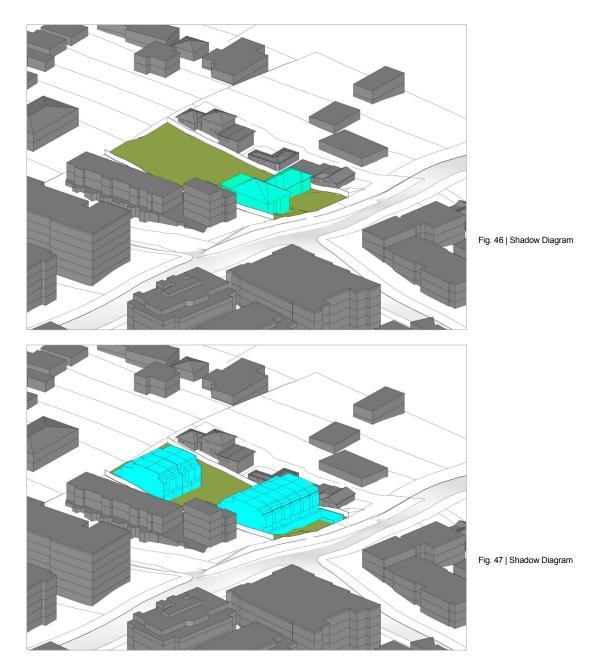
5.0 Reference Scheme A - Multi-Dwelling Housing

5.4 Solar Analysis



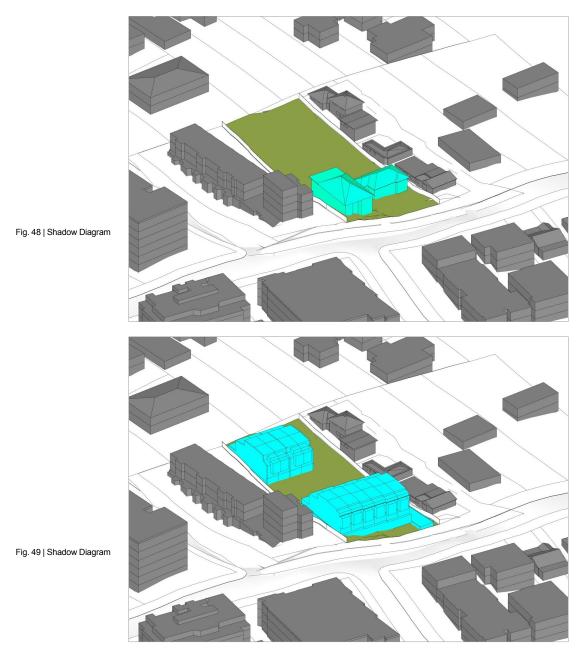
5.0 Reference Scheme A - Multi-Dwelling Housing

5.4 Solar Analysis



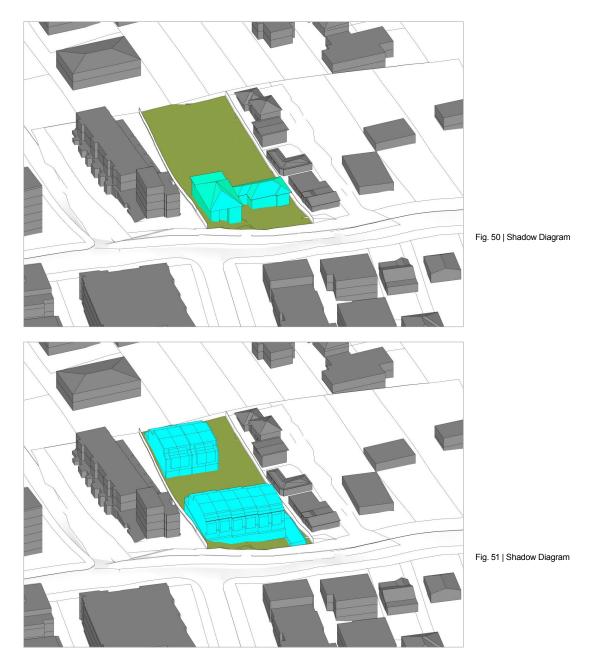


5.4 Solar Analysis



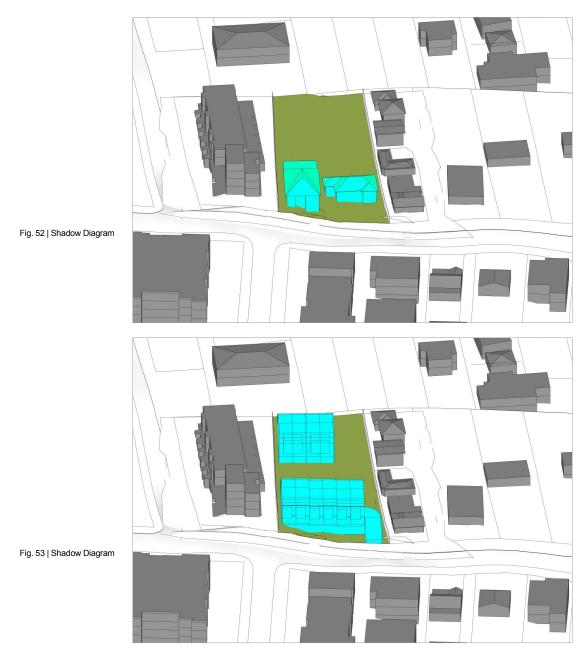
5.0 Reference Scheme A - Multi-Dwelling Housing

5.4 Solar Analysis



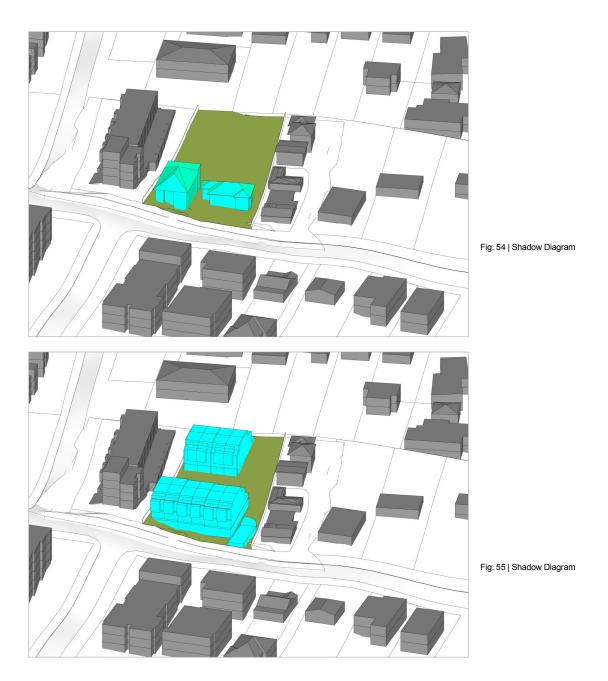


5.5 Solar Analysis



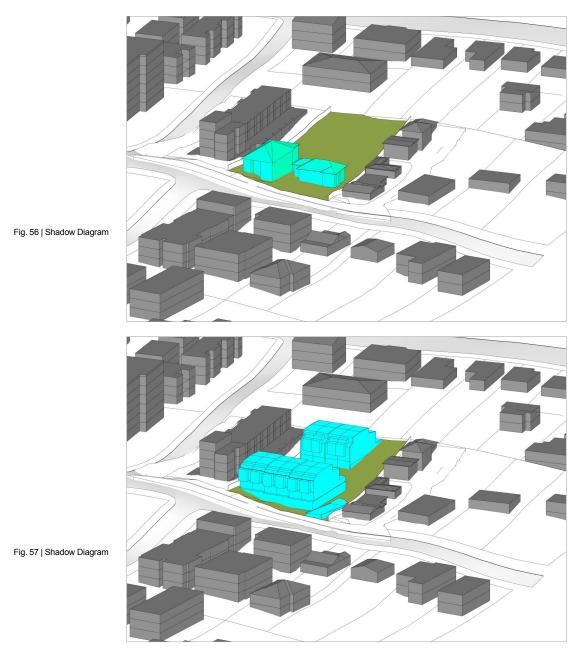
5.0 Reference Scheme A - Multi-Dwelling Housing

5.5 Solar Analysis





5.5 Solar Analysis



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6.1 Reference Scheme Overview

It should be first noted that the intended outcome of this planning proposal is to enable the development of a multi-dwelling residential development which incorproates appropriately scaled housing that will:

- Ensure appropriate hieght transitions across the site,
- Create greater legibility of built form across the site,
- Create greater diversity in housing,
- Respond appropriately to its context in terms of density and scale,
- Minimise external impacts such as overshadoiwng of neighbours,
- Ensure a high level of amenity is enabled for future occupants and nearby residential dwellings.

The development of a townhouses (multi-dwelling housing)scheme was the original intent of this planning proposal. However, following amendments to government policy during the pre-application process (known as the Low and Mid-Rise Housing Policy), a requirement to consider the impacts of an alternative residential flat building scheme has been requested. This section provides this required assessment and consideration of an alternative to the preferred multi-dwelling housing proposal.

The following section details the proposed amendments to the LEP subject this Planning Proposal.A tabulated summary of the changes to applicable controls, alongside the hypothetical amendments to the LEP Maps is supplied. The hypothetical amendments carry little, if any weight given the preliminary nature of the policy amendments are still subject of ongoing review and have neither been gazetted, nor implemented for this site.

LEP Provision	Existing Control	Hypothetical Control	Status
Ku-ring-gai LEP 2015	Ku-ring-gai LEP 2015		
Land Zone	R2 - Low Density Residential	R3 - Medium Density Residential Low & Mid-Rise Housing Policy	Changed
Maximum Floor Space Ratio	0.3:1	2.2:1	Changed
Maximum Building Height	9.5 metres	22 metres	Changed
Minimum Lot Size	930 sqm	21m Lot Width (No Minimum Lot Size)	Changed
Acid Sulphate Soil	Class 5	Class 5	Unchanged
Water Courses	No Applicable Control	No Applicable Control	Unchanged
Heritage	No Applicable Control	No Applicable Control	Unchanged

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6.0 Reference Scheme B - Residential Flat Building

6.2 Conceptual Massing & Form



Fig. 58 | Bulk and scale of existing subject site and locality



Fig. 59 | Bulk and scale of proposal on subject site and surrounding existing development.

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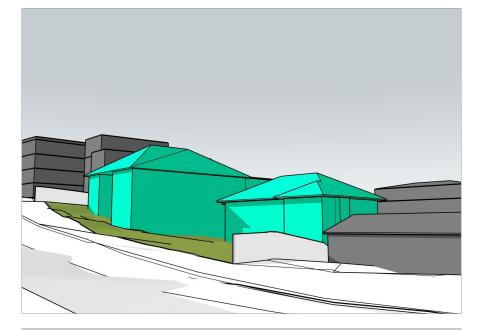


Fig. 60 | View of existing subject site looking uphill along Dumaresq Street



Fig. 61 | View of proposed development looking uphill along Dumaresq Street.

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6.0 Reference Scheme B - Residential Flat Building

6.3 Hypothetical Development Yield

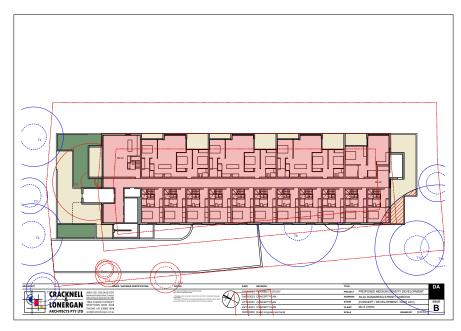
The planning proposal would be capable of devliering a residential flat building scheme which would facilitate the delivery of approximately 48 residential flats. The development metrics and yield is summarised by the table below.

Item	Metric
Type of Development	Residential Flat Building
Typologies	One Bedroom Units Two Bedroom Units Three Bedroom Units
Number of Units	48 Units
Gross Floor Area	5025 sqm
Maximum Floor Space Ratio	2.05:1 (2.2:1 permissible)
Maximum Building Height	22 metres
Subdivision Type	Strata Subdivision
Carparking	50 Parking Spaces

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6.0 Reference Scheme B - Residential Flat Building

6.3 Anticipated Development Yield





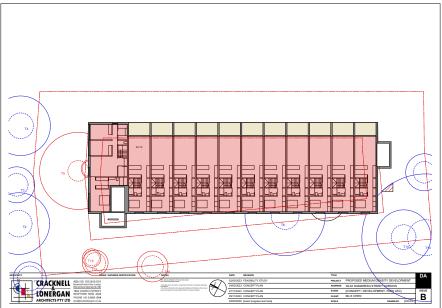


Fig. 63 | Floor Plans

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Reference Scheme B - Residential Flat Building 6.0

6.3 Anticipated Development Yield



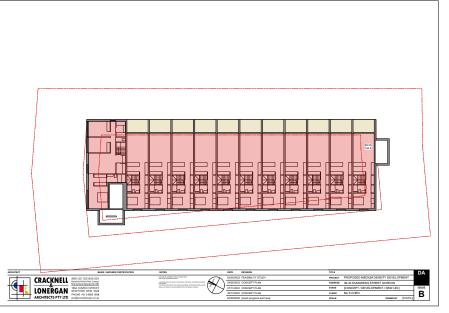


Fig. 65 | Floor Plans

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Reference Scheme B - Residential Flat Building 6.0

6.4 Solar Analysis

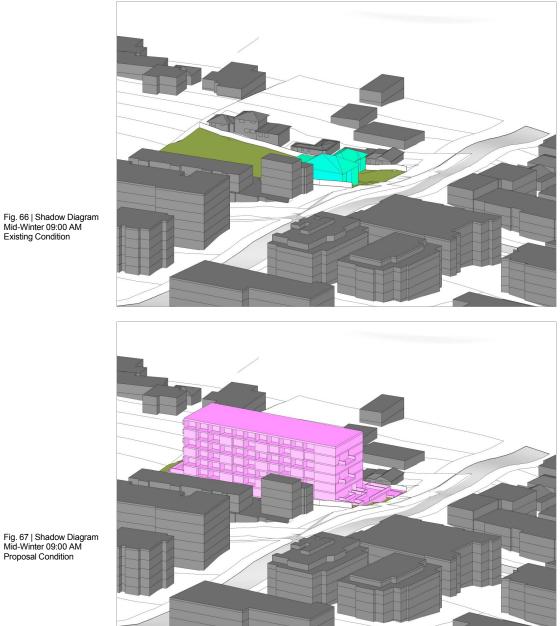


Fig. 67 | Shadow Diagram Mid-Winter 09:00 AM Proposal Condition



Reference Scheme B - Residential Flat Building 6.0

6.4 Solar Analysis

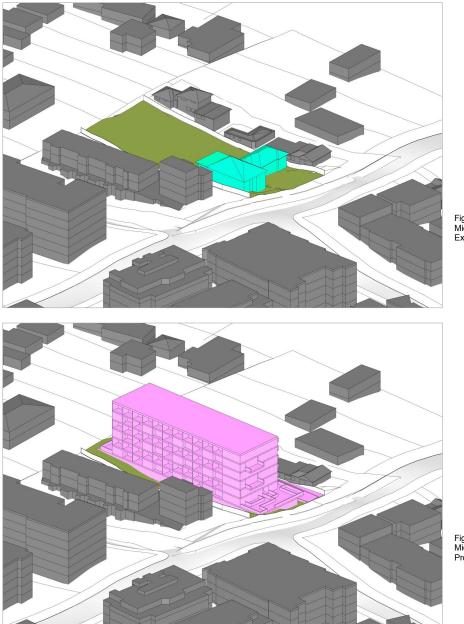


Fig. 68 | Shadow Diagram Mid-Winter 10:00 AM Existing Condition

Fig. 69 | Shadow Diagram Mid-Winter 10:00 AM Proposal Condition

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Reference Scheme B - Residential Flat Building 6.0

6.4 Solar Analysis



Fig. 70 | Shadow Diagram Mid-Winter 11:00 AM Existing Condition



Reference Scheme B - Residential Flat Building 6.0

6.4 Solar Analysis



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6.0 Reference Scheme B - Residential Flat Building

6.4 Solar Analysis



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Reference Scheme B - Residential Flat Building 6.0

6.4 Solar Analysis



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Reference Scheme B - Residential Flat Building 6.0

6.4 Solar Analysis



Fig. 79 | Shadow Diagram Mid-Winter 03:00 PM Proposal Condition



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Comparitive Analysis of Reference Schemes 7.0

7.1 Evaluatory Considerations under the EPAA1979

EPAA1979 Evaluative Matters under s4.15	Scheme A Response Multi-Dwelling Housing	Scheme B Response Residential Flat Building
(1) Matters for consideration— general In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application—	Refer to sub-sections below.	Refer to sub-sections below.
(a) the provisions of—		
(i) any environmental planning instrument, and	Capable of Compliance.	Capable of Compliance.
	The proposed multi-dwelling housing scheme would be capable of compliance with the adjusted planning and zoning requirements subject of this planning proposal. The development principally would be compliant with the R3 Medium Density Residential Land Zone for the site, would be capable of compliance with the maximum 11.5 metre height control and the maximum 0.8:1 permissible floor space ratio within the LEP. Relevant State Enviornmental Planning Policies which apply to this site are assessed in the next section of this report.	The implementation of the low and mid- rise housing policy for the area would potentially supercede the environmental planning controls within the R3 Medium Density Residential Land Zone from the KLEP and instead, state-wide controls would apply, encompassing street frontage, height and development of a residential flat building under SEPP Housing. The proposed SEPP Housing development is theoretically plausible in the context of a permissible FSR of 2.2:1, a height of 22 metres. Relevant State Enviornmental Planning Policies which apply to this site are assessed in the next section of this report.
(ii) any proposed instrument that is or has been the subject	Not Applicable.	Capable of Compliance.
of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	For the purposes of developing a medium density residential project, there would be no other applicable proposed instruments which require consideration under this planning proposal.	The low and mid-rise housing policy provisions are currently under active consideration and do not, as yet, apply to the site, meaning that this proposal is currently prohibited within the zone. The permissibility of this development would be contingent upon the policy being extended to the Gordon locality. As stated previously, if this provision was to be applicable, it would be possible to develop a compliant residential flat development scheme on the site.

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7.0 Comparative Analysis of Reference Schemes

7.1 Evaluatory Considerations under the EPAA1979

EPAA1979 Evaluative Matters under s4.15	Scheme A Response Multi-Dwelling Housing	Scheme B Response Residential Flat Building
(iii) any development control plan, and	Capable of Compliance	Capable of Compliance
	The proposed development would be capable of compliance with the various sections of the DCP, particularly the provisions for multi-dwelling housing. The proposed development would not require a site-specific DCP to be developed as existing provisions are capable and sufficient at governing any future DA for the subject site.	The proposed development would be capable of compliance with the various sections of the DCP, particularly the provisions for residential flat buildings. The proposed development would not require a site-specific DCP to be developed as existing provisions are capable and sufficient at governing any future DA for the subject site.
(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and	Not Applicable. From the planning proposal, subject to its approval, it is not foreshadowed that there would be any necessity or requirement to enter into a Voluntary Planning Agreement for this particular project.	Not Applicable. From the planning proposal, subject to its approval, it is not foreshadowed that there would be any necessity or requirement to enter into a Voluntary Planning Agreement for this particular project.
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),	Capable of Compliance. Any future DA would be required to comply with the required submission format and requirements outlined in the EPAR2021, for which the proposal is capable of compliance with.	Capable of Compliance. Any future DA would be required to comply with the required submission format and requirements outlined in the EPAR2021, for which the proposal is capable of compliance with.
(v) (Repealed)		
that apply to the land to which the development application relates,		

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Comparative Analysis of Reference Schemes 7.0

7.1 Evaluatory Considerations under the EPAA1979

EPAA1979 Evaluative Matters under s4.15	Scheme A Response Multi-Dwelling Housing	Scheme B Response Residential Flat Building
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	See below.	See below.
Environmental Impacts	Positive Impacts. The proposed development will ultimately have a positive environmental impact upon the locality, providing an opportunity for site consolidation to address an existing overland stormwater drainage matter. Furthermore, whilst some trees are proposed to be removed as part of a potential future development, options for transplanting mature trees, as well as implementation of a new landscape strategy as part of future development to support local biodiversity will result in positive natural built environment perspective, the proposal will have the potential to provide quality housing which provides a transition in urban density and scale along the streetscape, enahncing the streetscape between the higher density areas of Dumaresq Street to the north and east, with the low density detached housing to the south and west. The development would therefore be a positive urban contribution to the area.	Limited Positive Impacts The proposed development will have a limited positive impact upon the locality. Compared to the townhouses project, a much more substantial invervention into the natural landscape will be required, resulting in the proposed removal of multiple trees. Whilst there will be a positive outcome achieved by thealignment of overland flow paths, the overall development is expected to have a footprint in excess of 60% of the site, resulting in limited opportunities for mature tree and landscaping to be implemented. From a built environment perspective, the residential flat building scheme will have a positive impact in terms of increasing urban density, providing additional housing choice and delivering apartments in an area with minimum solar, amenity, ventilation standards. From an urban view however, the development would be considered potentially incompatible with the transitional nature of the site. The permissible 6 storey form would be an imposing bulk upon the streetscape, incongruious with the adjoining townhouses and dwellings, and would result in adverse overshadowing impacts upon neighbouring sites. The impacts of this development are generally consistent with the Council's assessment report at the first LPP meeting.

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7.0 Comparative Analysis of Reference Schemes

7.1 Evaluatory Considerations under the EPAA1979

EPAA1979 Evaluative Matters under s4.15	Scheme A Response Multi-Dwelling Housing	Scheme B Response Residential Flat Building
Social Impacts	Positive Impacts. The proposal as demonstrated in the technical policy analysis has the potential to address critical housing diversity needs, providing improved choice and adding to the townhouse provision of the area (also known as the 'missing middle'). The proposal would provide a greater selection of housing options for people wishing to move to the Gordon area, as well as support local businesses and infrastructure without compromising or unnecessarily burdening existing networks. The proposal would be a moderate uplift in urban density which would serve as transition between areas of higher density and existing established suburban detached houses.	Limited Positive Impacts The proposal as demonstrated in the technical policy analysis has the potential to address critical housing diversity needs, providing improved choice and adding to the delivery of one, two and three bedroom apartments in the area. The proposal would provide a greater selection of housing options for people wishing to move to the Gordon area, as well as support local businesses and infrastructure but given this density exceeds the traditional R3 development density, there is a risk in the overburdening of local infrastructure without alignment of investment in Gordon local centre by State and Local levels of government. The proposal would be a substantial uplift in urban density, but which may not be immediately compatible with adjoining one, two and three storey buildings along this section of Dumaresq Street.
Economic Impacts	Positive Impacts. The proposal would have a positive short and long term economic impact upon the area. The proposal will result in the short-term creation of construction jobs, supporting the economy of Sydney and result in the uplift of value and quality of housing in the local area. The moderate increase in urban density has the potential to improve the economic output of the local centre, with increased population to support local businesses.	Positive Impacts. The proposal would have a positive short and long term economic impact upon the area. The proposal will result in the short-term creation of construction jobs, supporting the economy of Sydney and result in the uplift of value and quality of housing in the local area. The moderate increase in urban density has the potential to improve the economic output of the local centre, with increased population to support local businesses.

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Comparative Analysis of Reference Schemes 7.0

7.1 Evaluatory Considerations under the EPAA1979

EPAA1979 Evaluative Matters under s4.15	Scheme A Response Multi-Dwelling Housing	Scheme B Response Residential Flat Building
(c) the suitability of the site for the development,	The proposal as noted is suitable for development of multi-dwelling housing (townhouses). The development would be of a scale, form, typology and density comparable to other R3 Medium Density Dwellings along Dumaresq Street, would facilitate the consolidation of an R3 site which is currently isolated by adjoining development and would help provide a transition in urban density and scaleb between the neighbouring R4 and R2 land zones.	Noting that a development of this type is expected to have adverse environmental and social impacts, the suitability of this proposal is questionable. The development of a residential flat building would not be consistent with the scale of development in its immediate surroundings, which is bounded by single detached homes to the sout-west and bounded by townhouse developments to the north-east. The proposed increase of site density to almost 50 units is also likely to cause adverse impacts and strain upon existing infrastructure networks, which would be detrimental to the wellbeing of the local area. The impacts of this development are generally consistent with the Council's assessment report at the first LPP meeting.
(d) any submissions made in accordance with this Act or the regulations,	Not Applicable at this stage. Public submissions will be addressed as part of this planning proposal process and will be addressed as part of any future Development Application.	Not Applicable at this stage. Public submissions will be addressed as part of this planning proposal process and will be addressed as part of any future Development Application.
(e) the public interest.	The economic and orderly development of land is one of the core objectives of the EPAA1979. The proposed changes to the local enviornmental plan would enable the development of a townhouses project which, whilst moderately increasing the urban density, will result in the creation of quality development, without compromising neighbourhood amenity or unreasonably burdening local infrastructure. The proposed diversification of housing choice and provision of additional options is considered to be a positive impact which supports the public interest. Overall therefore, the proposed development of multi-dwelling housing in the area is considered to be in the public interest.	The development has some merit in that it will offer a range of housing choice and improve the supply of housing in an area with good public transport and infrastructure access. The proposed development may however be argued as being inconsistent with the medium density character of the streetscape, with a potential six storey form which could be regarded as inappropriate along a streetscape which predominantly consists of one, two and three storey developments. Overall, in comparison to a permissible townhouse development, the townhouses would be considered a development scale which is more aligned to the public interest.

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7.0 Comparative Analysis of Reference Schemes

7.2 Consistency with State Environmental Planning Policies (SEPPs)

SEPP Title	Scheme A Response Multi-Dwelling Housing	Scheme B Response Residential Flat Building
SEPP (Resilience & Hazards) 2021	Capable of Compliance The subject site is not known to have been the site of contaminated soil. A Preliminary Site Investigation can be prepared as part of a future DA to address matters arising as it relates to this SEPP.	
SEPP (Transport & Infrastructure) 2021	Capable of Compliance The subject proposal would be capable of comp Transport and Infrastructure SEPP. Assessmer report to determine the potential increase in car supplied as part of a future DA.	t by analysis of a traffic impact assessment
SEPP (Building Sustainability Index: BASIX) 2004	Capable of Compliance Accompanying a future development, a BASIX Certificate with minimum performance standards for energy, thermal comfort, ventilation and water sensitive design will be supplied. A multi-dwelling development would be capable of compliance.	
SEPP (Housing) 2021	Not Applicable A proposal which is for multi-dwelling housing (townhouses) would not be subject to the requirements of SEPP (Housing) 2021.	Capable of Compliance A proposal for residential flat buildings would need to take into consideration the provision for apartment design contained within this policy (formerly SEPP65). These would require compliance with minimum development standards related to unit size, floor to ceiling heights, car parking restrictions and other controls. The planned scheme for this study demonstrates that it would be possible to develop a scheme in complaince with these provisions, subject of a future DA and detailed design development.

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Comparative Analysis of Reference Schemes 7.0

7.2 Consistency with State Environmental Planning Policies (SEPPs)

SEPP Title	Scheme A Response Multi-Dwelling Housing	Scheme B Response Residential Flat Building
DRAFT - Low & Mid-Rise Housing Policy	Not Applicable A proposal which is for multi-dwelling housing (townhouses) would not be subject to the policy.	Capable of Compliance Under the proposed provisions of this policy, a scheme comprisng of up to six storeys, with basement level parking and approximately 48 units is predicted for the site. A preliminary review, encompassing the necessary setback requirements prescribed by the Apartment Design Guide alongside height of ceilings (habitable spaces), solar access, cross ventilation and car parking would be capable of compliance.
SEPP (Biodiversity & Conservation) 2021	Capable of Compliance	

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7.0 Comparative Analysis of Reference Schemes

7.3 Summary & Conclusion - Preferred Development Option

Having undertaken an analysis of the impacts of the two developments, it is concluded that the most appropriate development for the site would be for the development of townhouses.

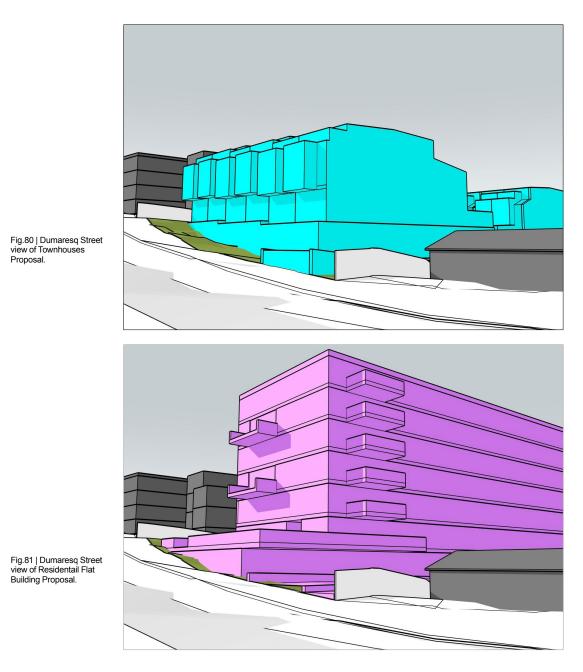
As noted in the assessment table under the EPAA1979, the R3 Medium Residential Zoning appropriately facilitates the

development of a multi-dwelling housing (townhouses) proposal and as stated throughout this report, the original and primary purpose of this Planning Proposal has always been for the facilitation of developing a compliant multi-dwelling housing (townhouses) scheme. The development will provide an appropriate transition between the higher-density residences uphill on Dumaresq Street, and the adjoining three storey terraces on the corner of Dumaresq Street and Hanson Way (currently under construction). The resulting townhouses scheme presents an appropriate bulk, scale, form and would provide an appropriate scale transition along the streetscape with the single and two storey houses downhill.

20250217-KLPP-Crs-2025/032626/708

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Comparative Analysis of Reference Schemes 7.0



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Other Relevant Considerations 8.0

8.1 Flood Planning

In accordance with Council's policy, a commentary on the flood planning for the subject site for this plannign proposal is provided.

Consideration	Response	
Consideration		
(a) the NSW Flood Prone Land Policy(b) the principles of the Floodplain Development Manual 2005,	The modelling and analysis conducted as part of the Flood Management Report accepts that the site is characterised by the presence of an overland flow path crossing through the lots. For this reason, the Report was further developed to provide accurate sizing of a proposed dedicated channel to	
(c) the Considering flooding in land use planning guideline 2021, and	 developed to provide accurate sizing of a proposed dedicated channel to continue to provide a safe means of conveying the same overland flow through the site. The purpose of the channel is to retain the existing flow path, while also allocating a well-defined structure to keep the conveyance of flow safe through the developed site. The channel is proposed to be at the same location as the existing path to not negatively or adversely affect adjacent or downstream properties. The Report demonstrates that, by sizing the channel appropriately, the flow can be fully conveyed by the proposed channel, leaving the rest of the land unaffected by flooding. In doing so, it can be ensured that the proposed development will not affect the safe occupation of and efficient evacuation of people in the event of a flood. The proposed works incorporate appropriate measures to manage risk to life from a flood by both providing a channel to convey the overland flow and by keeping the habitable floors away from the channel and above the flood level. By adopting those principles, the proposal is consistent with the Flood Prone Land Policy, the principles of the Floodplain Development Manual (2005) and the land use planning guidelines 2021. 	
(d) any adopted flood study and/or floodplain risk management plan prepared in accordance with the principles of the Floodplain Development Manual 2005 and adopted by the relevant council.	The site falls within the area of study covered by the Blackbutt Creek Flood Study prepared by Jacobs and dated December 2014. The 1%AEP Flood risk map (Figure A-10 in Appendix A) shows the site with localised hatching indicating all three levels of low, medium and high hazard. However, the hazard levels are all strictly shown across the site in correspondence with the existing overland flow path crossing the lots. It is to be noted that with the proposed works, the natural overland flow path is maintained and further formalised into a dedicated channel. By doing so, the development is maintaining the natural conveyance of flow through the lots unchanged. Additionally, all new developments are proposed to be constructed clear of the dedicated channel and at a level that is higher than the flood level to ensure the buildings are not negatively impacted by any flow through the site.	
(2) A planning proposal must not rezone land within the flood planning area from Recreation, Rural, Special Purpose or Conservation Zones to a Residential, Employment, Mixed Use, W4 Working Waterfront or Special Purpose Zones.	The site is currently zoned for residential purposes.	



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8.0 Other Relevant Considerations

Consideration	Response	
(3) A planning proposal must not contain provisions that apply to the flood planning area which:		
(a) permit development in floodway areas	The overland flow through the site is maintained and a dedicated channel is proposed to contain the flooding within the channel. The development is proposed to be outside said dedicated channel and is proposed to also be above the level of flooding.	
(b) permit development that will result in significant flood impacts to other properties	The modelling documented by the Report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment.	
(c) permit development for the purposes of residential accommodation in high hazard areas	Part of the site is identified as high hazard in Blackbutt Creek Flood Study. This is shown as a localised point-form on the downstream extremity of the existing overland flow path within the property. The development proposes the formalisation of the existing overland flow path into a dedicated channel to fully contain the flow crossing through the site. Therefore, not changing to the way the overland flow is conveyed through the site, while providing a contained and safer means of conveyance for the overland flow. Additionally, the development of the proposed buildings is completely kept outside and clear of the channel, as well as the portion of the site categorized as high hazard.	
(d) permit a significant increase in the development and/or dwelling density of that land,	The development proposes the formalisation of the existing overland flow path into a dedicated channel to fully contain the flow crossing through the site. Therefore, not changing to the way the overland flow is conveyed through the site, while providing a contained and safer means of conveyance for the overland flow. Additionally, the development of the proposed buildings is completely kept outside and clear of the channel, as well as the portion of the site categorized as high hazard. Accordingly, the increase in dwellings on the site is being safely and appropriately managed.	
(e) permit development for the purpose of centre-based childcare facilities, hostels, boarding houses, group homes, hospitals, residential care facilities, respite day care centres and seniors housing in areas where the occupants of the development cannot effectively evacuate,	N/A	

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Other Relevant Considerations 8.0

Consideration	Response
(f) permit development to be carried out without development consent except for the purposes of exempt development or agriculture. Dams, drainage canals, levees, still require development consent,	N/A
(g) are likely to result in a significantly increased requirement for government spending on emergency management services, flood mitigation and emergency response measures, which can include but are not limited to the provision of road infrastructure, flood mitigation infrastructure and utilities, or	The modelling documented by the Report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment. Consequently, not likely to result in a significantly increased requirement for government spending on emergency management services.
(h) permit hazardous industries or hazardous storage establishments where hazardous materials cannot be effectively contained during the occurrence of a flood event.	N/A
	tain provisions that apply to areas between the flood n flood to which Special Flood Considerations apply which:
(a) permit development in floodway areas	The overland flow through the site is maintained and a dedicated channel is proposed to contain the flooding within the channel. Additionally, the development is proposed to be outside said dedicated channel and is proposed to also be above the level of flooding.
(b) permit development that will result in significant flood impacts to other properties	The modelling documented by this report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment.
(c) permit a significant increase in the dwelling density of that land,	The development proposes the formalisation of the existing overland flow path into a dedicated channel to fully contain the flow crossing through the site. Therefore, not changing to the way the overland flow is conveyed through the site, while providing a contained and safer means of conveyance for the overland flow. Additionally, the development of the proposed buildings is completely kept outside and clear of the channel, as well as the portion of the site categorized as high hazard. Accordingly, the increase in dwellings on the site is being safely and appropriately managed.



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8.0 Other Relevant Considerations

Consideration	Response
(d) permit the development of centre-based childcare facilities, hostels, boarding houses, group	N/A
homes, hospitals, residential care facilities, respite day care centres and seniors housing in	
areas where the occupants of the development cannot effectively evacuate,	
(e) are likely to affect the safe occupation of and efficient evacuation of the lot, or	The overland flow through the site is maintained and a dedicated channel is proposed to contain the flooding within the channel. The development is proposed to be outside said dedicated channel and is proposed to also be above the level of flooding. Safe and efficient evacuation onto Dumaresq Street can be provided.
(f) are likely to result in a significantly increased requirement for government spending on emergency management services, and flood mitigation and emergency response measures,	The modelling documented by the Report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment. Consequently, not likely to result in a significantly increased requirement for government spending on emergency management services.
which can include but not limited to road infrastructure, flood mitigation infrastructure and utilities	
(5) For the purposes of preparing a planning proposal, the flood planning area must be consistent with the principles of the Floodplain Development Manual 2005 or as otherwise determined by a Floodplain Risk Management Study or Plan adopted by the relevant council.	Council's Blackbutt Creek Flood Study applies to this land. The flood maps presented within the flood study only show localised flooding through the properties in correspondence of the overland flow path. As such, the proposal is to maintain the existing path unchanged and convey the flow with a formalised channel in order to keep the rest of the land unaffected by flooding.

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Conclusion

This Urban Design Report has been prepared to supplement the planning proposal on behalf of the owners of the land known as 38-40 Dumaresq Street, Gordon. The site has a legal description of Lot 1 & Lot 2 in D.P. 10006588 and Lot A in D.P. 312896. The planning proposal relates exclusively to the rezoning of No. 40 Dumaresq Street, Gordon, being Lot 1 & Lot 2 in D.P. 1006588 from R2 -Low Density Residential to R3 - Medium Density Residential. The adjoining site is already zoned R3.

The Planning Proposal associated with this report seeks to amend the KLEP to permit multi-dwelling housing and moderate uplift in the height and FSR on the large consolidated site to facilitate economic and orderly delivery of a residential development as well as addres the site isolation of No. 38 Dumaresq Street which arises from the current development of townhouses at No. 34-36 Dumaresg Street, Gordon

Through an analysis of the relevant planning policies it is believed that the planning proposal will result in the delivery of residential development which is more appropriately responsive to the locality of the site and meet the future needs of the surrounding area in terms of housing choice and diversity. The site is highly suitable to medium density development in the form of townhouses given:

- · The site is adjacent to townhouses (under construction) and an adjoining R3 Medium Density Lot.
- · The site is within easy walking distance of key civic, commercial and communal amenities.
- · The site is within 400metres of regular bus services and within 800metres of regular heavy rail service which delivers high accessibility to regional and civic centres in Svdnev.
- · The site, due to its size, tenure and form, provides an opportunity for moderate uplift which will help the Council meet its obligations under the National Housing Accord.

The Planning Proposal demonstrates that the multi-dwelling housing (Townhouses) option is capable of responding appropriately to the future built form of the Gordon Local Centre and does not adversely impact the adjoining developments of a lower density further along Dumaresq Street.

It is noted from this Urban Design Report that a speculative alternative for residential flat buildings, subject to a hypotehetical application of new planning policies (known as Low and Mid-Rise Housing Policy) would deliver a built form of up to six storeys, and would lead to development of up to 48 units. A preliminary bulk, scale and streetscape analysis however would question the feasibility of such a project on the site which is not foreshadowed to be possible given severe environmental impacts (particularly flood management and biodiversity loss). As a result, it is fully believed that the multi-dwelling housing (townhouses) project is considered to be the most appropriate form of development for the site and it is the recommendation of this report that the townhouse development is the contextually appropriate development for the site.

The Planning Proposal is consistent with Council and NSW Government priorities to provide incrased hosuing in close proximity to existing centres that are benefited by access to services, facilities and public transport.

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ARBORICULTURE IMPACT ASSESSMENT REPORT

www.traversecology.com.au

ITEM NO: GB.4

Proposed Development

- 40 Dumaresq Street, Gordon
- Prepared for: Jessco Pty Ltd

2 December 2024 (REF: 23JES02)

ARBORICULTURE IMPACT ASSESSMENT REPORT

40 Dumaresq Street, Gordon

Prepared Jessco Pty Ltd

for:

Prepared by: ArborSure (trading entity of TBE Environmental)

Michael Sleeth (Diploma in Arboriculture) - AQF5 Arborist Authors:

2 December 2024 Date:

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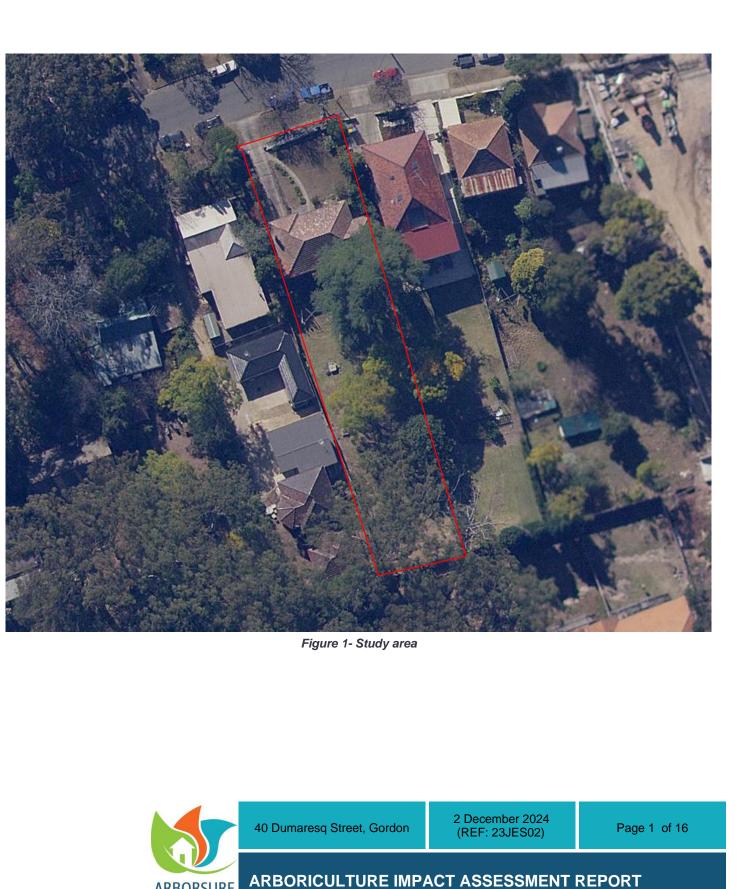
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ITEM NO: GB.4

PROPOSED WORKS

Arborsure (trading entity of TBE Environmental Pty Ltd) has been commissioned by Jessco Pty Ltd to formulate a comprehensive Arboricultural impact assessment (AIA) in adherence to AS4970-2009: The Protection of Trees on Development Sites, as well as pertinent planning guidelines and legislation.

The property known as 40 Dumaresq Street; Gordon, is proposed to be rezoned from R2 to R3 with a proposed development.

BACKGROUND

The site contains landscape remnant mapping as well as identified Sydney Turpentine Ironbark Forest vegetation at the rear of the site. Ku-ring-gai Council has requested information regarding the removal of trees that were mapped landscape remnant to the rear of the site. The owner has stated that they have lost trees through a large storm. An Arboriculture Impact Assessment (AIA) is required which includes all trees present on the site and trees on adjacent land parcels that have Tree Protection Zones (TPZ) extending into the subject site.

Tree works where conducted on the site as part of a 2021 storm event. Photos show damaged trees.



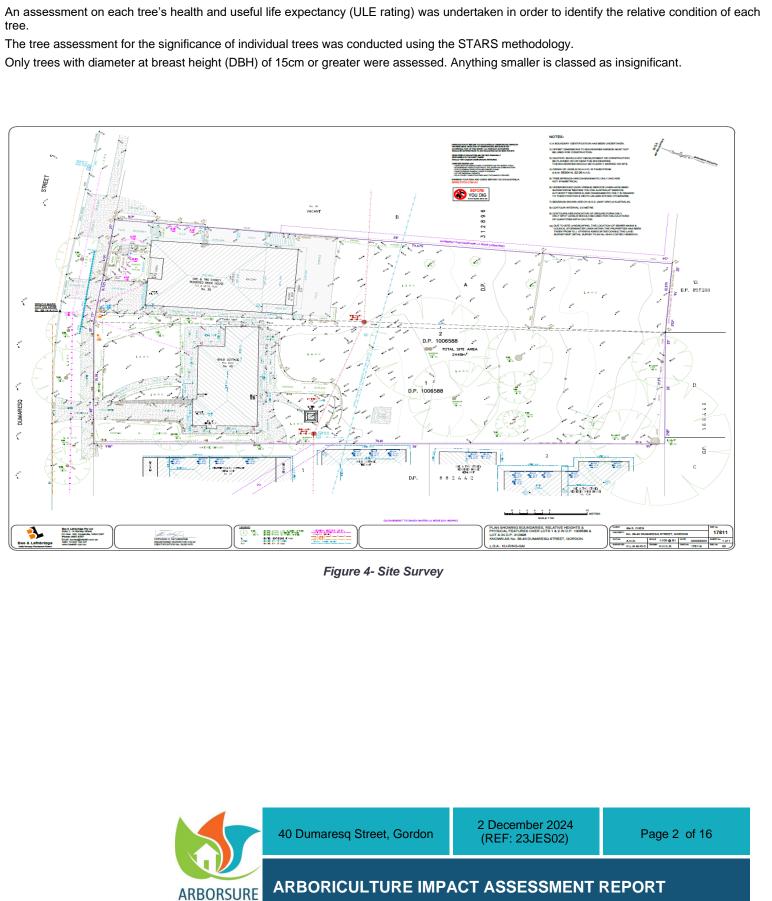
Figure 2 - Storm damage Nick Rickard nick.rickard@modog.com.au

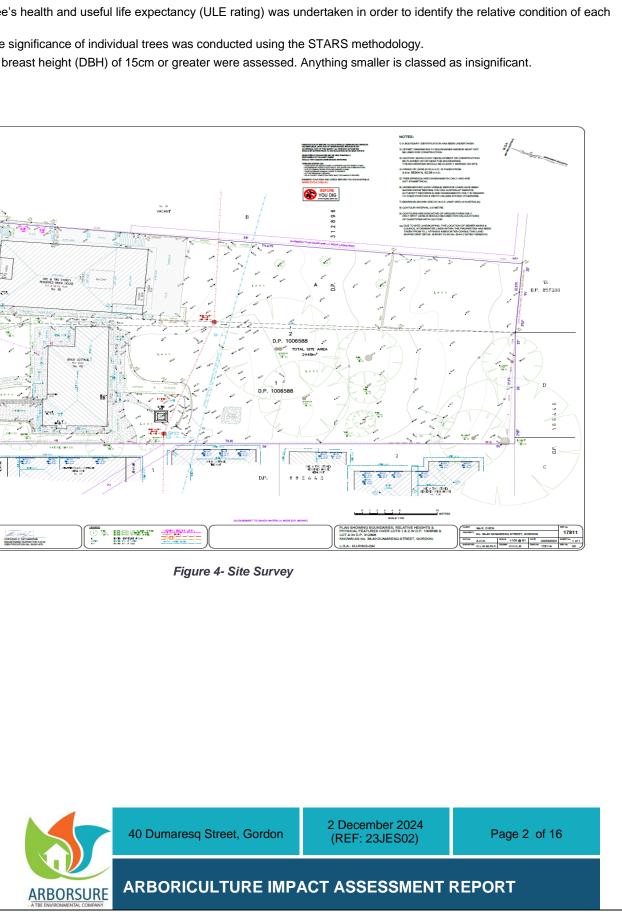
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Figure 3 - Storm damage Nick Rickard nick.rickard@modog.com.au

Wed 5/07/2023 9:34





METHODOLGY

The following survey and assessments were undertaken from Tuesday 18 July 2023 with respect to each tree. A comprehensive site assessment has been conducted to identify all eighteen (18) trees in and around the property.

Each tree has been carefully evaluated for its structural integrity, including an examination of its trunk, branches, and any signs of decay or damage. The trees have been evaluating for stability and take into account any factors that may impact the trees health and condition:

- Tree height was measured with Nikon pro were possible, height was estimated.
- When reading could not be gathered tree height, was estimated. .
- Tree diameter at breast height (DBH) using and basal (base) using DBH measuring . tape.
- Canopy spread and vigour measurement where estimated.
- Photos taken using a smart phone.

A metal tag embossed with the tree number (e.g., T001, T002 etc.) was attached to each tree. The location of each tree was plotted using a handheld Trimble GPS unit (subject to GPS accuracy at the time of survey).

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Attachment 3.

Condition

SULE 1

SULE 2

SULE 3

SULE 4

Low Landscap Significance

0

4

2

0

Visual significance

TREE CONDITION AND LIFE EXPECTENCY

Condition

The assessment of tree condition is undertaken by visual inspection of the tree and takes into account the condition of the roots, trunk, branches, foliage, previous pruning, pests, disease, and the surrounding environment that may influence the condition of the tree.

Useful life expectancy (ULE)

The condition information is used to determine the Useful Life Expectancy (ULE) of each tree and takes into account the age of the tree, the life span of the species, local environmental conditions, recent climactic conditions, the location of the tree and risk to persons and or property.

The ULE methodology takes into account whether a tree can be retained with an acceptable level of risk based on the information available at the time of inspection. A ULE assessment is not static as it relates to the tree's health and the surrounding conditions. Whilst it is recognised that changes to the tree's condition will affect the assessment, changes to the surrounding environment may result in changes to the ULE assessment.

Table 1 - Useful Life Expectancy (ULE) (Barrell, 2009)

Category	Description
1	Long: Life span greater than 40 years
2	Medium: Life span from 15 to 40 years
3	Short: Life span from 5 to 15 years
4	Remove: Should be removed within 5 years

ENVIRONMENTAL SIGNIFICANCE

Trees need to be considered with regard to the overall environment and are subject to specific legislation such as:

- Biodiversity Conservation Act (NSW) 2016,
- Environmental Protection and Biodiversity Conservation Act (Commonwealth) 1999,
- Biosecurity Act (NSW) 2015, and
- Environmental Pest Species.

Biodiversity Conservation Act (NSW) 2016

The Schedules of the BC Act list a number of species, populations and ecological communities that are classified as critically endangered, endangered, or vulnerable. Where a site is not Biodiversity Certified, the proposal typically needs to be assessed by a biodiversity development assessment report (BDAR) to accompany a development proposal. The proposal may require offsetting through the Biodiversity Offset Scheme if:

- a) the proposal impacts biodiversity lands mapped by DPE,
- b) the proposal impacts above nominated threshold areas, or
- c) a test of significance identifies a significant impact.

If parts of the subject site are not Biodiversity Certified and there are parts of the property that are, Biodiversity Certified meaning that those parts have been recognised for their efforts to conserve and protect the local biodiversity. Biodiversity certification is a process that evaluates a property's management practices and overall impact on the environment, and awards certification to those that meet specific criteria and standards.

Environmental Protection and Biodiversity Conservation Act (Commonwealth) 1999

The Schedules of the EPBC Act list a number of species and ecological communities that are classified as critically endangered, endangered, or vulnerable. The EPBC Act requires the preparation of an impact assessment if an activity or development is likely to have an effect on species or ecological communities listed in the schedules of the EPBC Act.

Biosecurity Act (NSW) 2015

There are a number of pest or exotic species that are listed within specific regions within the NSW Biosecurity Act. These listings contain detailed descriptions of each listed species, their habitat and reproductive attributes and the recommended control or eradication methods as well as actions required with regard to reporting, transport, or sale of each species.

Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion

Open forest, with dominant canopy trees including Turpentine Syncarpia glomulifera, Grey Gum Eucalyptus punctata, Grey Ironbark E. paniculata and Thin-leaved Stringybark E. eugenoides. In areas of high rainfall (over 1050 mm per annum) Sydney Blue Gum E. saligna is more dominant. The shrub stratum is usually sparse and may contain mesic species such as Sweet Pittosporum, Pittosporum undulatum and Elderberry Panax Polyscias sambucifolia.

(Office of Environment & Heritage, 2023)

Environmental Pest Species

There are a number of environmental pest species that are not listed in the BC Act (2016), the EPBC Act (1999), or the Biosecurity Act (2015). These species commonly cause problems within or adjacent to developed or urban areas. These species can have aggressive, fast growing, or fast reproduction attributes which replaces other species. They can have destructive root systems which cause damage to pipes, structures, foundations, and services. Some environmental pest species can be undesirable within natural bushland areas by degrading and / or dominating habitats and reducing natural biodiversity. Environmental pest species are not classified as noxious but are recognised by Councils and other authorities as pest species and in many cases are exempt from protection under Council's Tree Preservation Orders.

Several species on the site are considered as invasive species in NSW Department of Primary industries https://www.dpi.nsw.gov.au/:

- Nerium Oleander (Oleander)
- Celtis sinensis (Chinese hackberry)
- Ligustrum lucidum (broad-leaf privet)

TREE SIGNIFICANCE

Landscape significance

The Institute of Australian Consulting Arboriculturists (IACA) have established a Significance of a Tree, Assessment Rating System (STARS) to assess the landscape significance of a tree. The rating system utilises structured qualitative criteria to assist in determining the retention value for a tree. There are two phases to the STARS Assessment. The first is an assessment of tree attributes with respect to High, Medium and Low

Significance. Subsequently, the Tree Retention Value matrix shown in Attachment 3 – Tree Significance Criteria is used to determine the priority for removal and retention.

The significance of a tree with regard to the landscape is generally assessed as one of the following:



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- Significant Prominent from a broad landscape perspective.
- High Prominent from a neighbourhood perspective
- Medium prominent from adjacent areas surrounding the site, and Low – prominent from a site perspective only.
- Once the landscape significance of an individual tree has been assessed, the retention value can be determined.
- A breakdown of the tree significance and retention values are provided in

Visually significant trees are assessed with respect to the average attribute values of other trees in the wider locality. A tree with well above average height, girth or spread is considered to be 'of Visual Significance'. The visual significance of a specific tree can also consider other parameters such as girth, canopy spread, health, aesthetic appearance, or location (e.g., on a hilltop, or as the centrepiece of a formal garden).

- These parameters can also occur in combinations (e.g., height, spread and good form in a prominent location) for each tree.
- Table below shows significance of trees on the site

e	Medium Landscape Significance	High Landscape Significance
	5	2
	4	0
	0	0
	1	0

Table 2- Tree landscape significance

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DEVELOPMENT PLANNING AND TREE PROTECTION ZONES

Retention and removal of trees

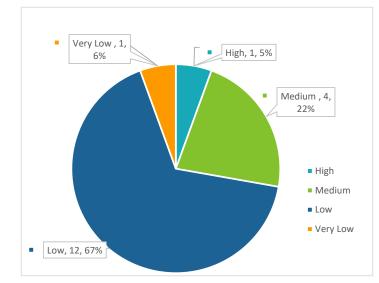
Preserving existing trees on a site is a complex undertaking that requires consideration of various factors, including the location and condition of the trees, as well as the potential impact of construction activities on the trees' root systems and canopies. Retaining existing trees can promote a more sustainable and environmentally friendly design that benefits both the local ecosystem and the community. However, in some cases, tree removal may be necessary. For example, trees that are diseased, damaged, or pose a safety or environmental risk to the community may need to be removed.

In addition, weed species can compete with trees for resources and may require removal to ensure the health and longevity of the endemic and habitat trees. In cases where Structural Root Zone encroachment occurs, tree removal may also be necessary to comply with legal and regulatory requirements.

It is important to work with a certified arborist or other qualified professional to assess the situation and determine the best course of action. The impact of tree removal on the surrounding environment and community should also be considered, such as the loss of shade, cooling benefits, and wildlife habitat.

Chart below shows the retention significance for trees on the site





Tree protection setbacks

Development footprints which impact on more than 10% of a Tree Protection Zone (TPZ) will usually require the removal of that tree. Development footprints shall be located away from retained trees such that adequate clearances are provided for the Tree Protection Zone (TPZ) and there is no encroachment upon the Structural Root Zone (SRZ).

Disturbance within the TPZ can be detrimental to the tree's root system and in turn affect the stability, health, and condition of the tree.

Major encroachments into tree protection zones

Where the proposed development activity is greater than the 10% loss of TPZ area (m2), the activity is considered to be a major encroachment into the TPZ.

Where major encroachments are to occur within the TPZ of trees intended to be retained, it must be demonstrated that the works or activities will not have minimal significant impact upon the health and condition of the tree. To demonstrate this, detailed root mapping investigation by non-invasive methods may be necessary. Other factors such as age class, health, vigour, trunk lean, disturbance tolerance of the species, and building design may need to be taken into account in the arboriculture assessment.

Where major encroachments are proposed to occur into the TPZ then the Structural Root Zone (SRZ) of the tree will also be taken into account and avoided if possible.

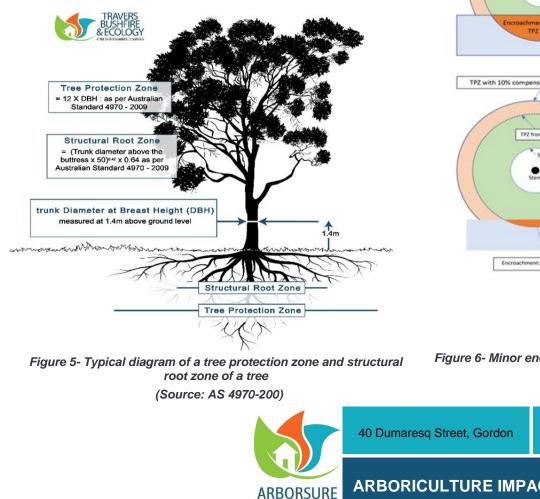
Where trees have multiple trunks, an assessment needs to consider the number and diameter of each trunk. Based upon the Australian Standard for Protection of Trees on Development Sites, AS 4970-2009, the Diameter at Breast Height (DBH) of multi-trunk trees is calculated by:

 $DBH = \checkmark (DBH_1)^2 + (DBH_2)^2 + (DBH_3)^2$

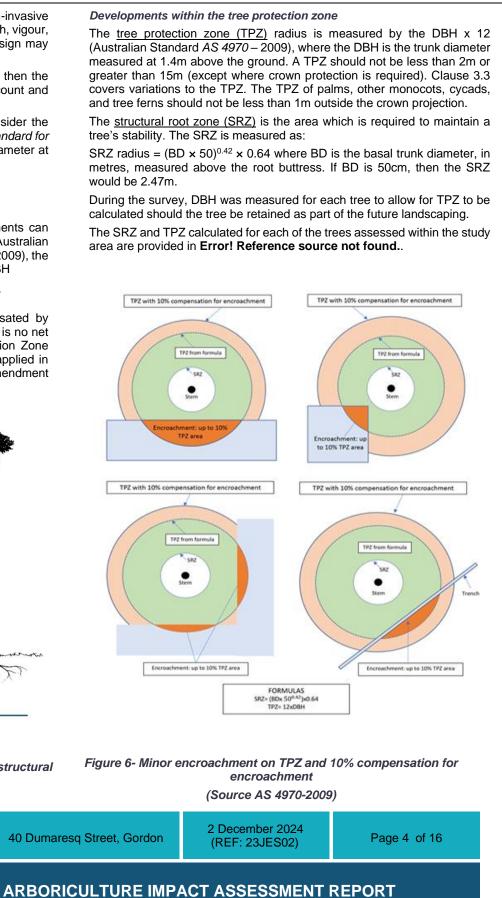
Minor encroachments into tree protection zones

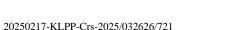
Based upon AS4970-2009 some minor development encroachments can occur within the calculated TPZ provided that: Based upon the Australian Standard for Protection of Trees on Development Sites (AS 4970-2009), the radius of the TPZ for a single tree is calculated as: TPZ = 12 x DBH

- No more than 10% of the area (m²) of the TPZ is removed. •
- The area to be removed is outside the SRZ. •
- The area (m²) to be removed or disturbed is compensated by • increasing the TPZ radius in other directions so that there is no net loss in area (m²) of the original calculated Tree Protection Zone (TPZ). To determine the SRZ and TPZ, the following is applied in accordance with Australian Standard AS 4970 - 2009 - Amendment 1-2010



would be 2.47m.





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TREE PROTECTION MEASURES

When working in close proximity of any tree to be retained or the nominated TPZ located within or adjacent to potential development areas, the following general management principles should be adopted:

- · earthworks around subject trees are to be undertaken in the presence of an AQ5-certified arborist who may provide additional onsite advice.
- machine digging within the root mass of the subject tree (or trees) is to be minimised and, where possible, replaced by hand digging.
- any exposed roots of the subject tree should be wrapped and protected during exposure and be replaced in a similar position prior to disturbance.
- inspection of retained trees by an AQ5-certified arborist should be conducted annually to 3 years after development completion.

Any retained tree on site will require protection both during and after development construction, applying the following.

Tree protection guidelines:

The following guidelines are proposed in relation to any trees that may be retained within or adjacent to the proposed works area:

- i. Installation of a TPZ will be required surrounding any retained tree or group of trees. This TPZ can generally be provided by preserving an area equivalent to that shown in ATTACHMENT 1 - TREE PLANS. A SRZ will apply to all retained trees in close proximity to work areas. No more than 10% of the TPZ should be impacted by earthworks with no infiltration into the SRZ. The TPZ is to be compensated elsewhere on the impacted tree to compensate for the loss of small areas of the TPZ. This is achieved by increasing the TPZ to an equivalent area to the area of impacted TPZ Error! Reference source not found.
- ii. Trees to be retained, and in close proximity to any works, are to be protected by temporary fencing. Such temporary fencing can be constructed from plastic mesh, post and wire or temporary chain link fence panels. All fence posts and supports are to be located clear of the roots and have sufficient strength to support the fence without bending or collapsing. TPZs in close proximity to proposed works are to be marked and sign posted. The protection fencing is not to be removed or altered without the approval an appointed arborist. TPZ fencing is to be inspected on a regular basis and maintained in good condition.
- iii. All trees nominated for removal are to be removed only after the temporary fencing of the trees to be retained has been completed and prior to any construction activity or bulk earthworks. Approved tree removal operations in the vicinity of retained trees are to be undertaken in a manner that avoids canopy or root damage and / or soil compaction to any TPZ associated with any retained tree. Such works should be supervised by a qualified arborist.
- iv. Stumps are to be ground not dozed or dug out unless they impact on the installation of services, roads or building works.
- v. All excavation including but not limited to trenches, footings and major earth movement are to be avoided within TPZs.
- vi. Stockpiling materials and soils within TPZs are to be avoided.
- vii. All machinery and vehicles are to be excluded from TPZs during all operations.
- viii. Where the proposed works are likely to cause excessive dust generation, the tree is to be protected with shade cloth on the tree protection fence to minimise dust collection on the leaves.
- ix. The following activities prohibited within TPZs includes but is not limited
 - machine excavation (including trenching)
 - excavation for silt fencing
 - cultivation
 - storage
 - preparation of chemicals, including cement products

- parking of vehicles or plant
- refuelling
- dumping of waste
- refuelling
- wash down or cleaning of equipment
- placement of fill
- lighting of fires
- soil level changes
- temporary or permanent installation of signs
- Physical damage to trees.
- x. Any works undertaken within TPZs are to be supervised and certified (photographed and documented) by a qualified arborist.
- xi. Where advised by the arborist, trunk, and branch protection (Figure 5) is to be installed to a minimum height of 2m using materials and positioning as advised by an appointed arborist.
- i. Where advised by the arborist, other temporary root protection measures (Figure 13) such as thick mulch (50-100mm deep) or crushed rock below rumble boards, are to be installed to prevent root damage and soil compaction within the TPZ.
- ii. Scaffolding is to be erected outside of the TPZ, where unavoidable, protection measures are to be specified by the appointed arborist.
- iii. All services are to be routed outside of the TPZ. Where not possible the arborist will specify directional drilling (at least 600mm deep) or manual excavation to avoid impacted on the in-situ roots subject to the works and potential root damage.
- iv. If pruning is required it is to be undertaken by an arborist in accordance with AS4373 to prevent structural damage, disease, and poor form.

General tree protection measures during construction

Prior to earthworks or construction, the removal of the trees identified for removal should be undertaken with particular attention given to ensure that no damage occurs to any part of the retained trees such as canopy foliage, branches, trunk or SRZ.

Prior to demolition or earthworks, secure protective fencing is to be erected around individual trees or groups of trees that have been identified as being retained. This fencing shall be located no closer than the extent of the TPZ of each retained tree (refer to the Tree Retention and Removal Plan). Where the structure to be demolished is within the TPZ the protective fencing shall be aligned to be a maximum of 0.5m away from the structure to be demolished.

Where the approved construction footprints encroach into the TPZ, protective fencing must be aligned no further than 0.5 metre away from the proposed structure or footprint.

The purpose of the fencing is to protect the tree roots, trunk, and branches, and to minimise detrimental impacts on the trees during demolition and construction. Fencing shall be 1.8m high chain mesh material securely fixed to steel supporting posts with top and bottom strainer top or steel pipe rails. Chain-link fencing panels are acceptable but must have connectors top and bottom to each adjoining panel.

The site supervisor shall ensure that at all times during site works that no activities, stockpiles, storage, disposal of materials, vehicle access or vehicle and machinery parking shall take place within the areas encompassed by the tree protection fencing. The site supervisor shall also ensure that the protective fences remain secure throughout the development work period.

ARBORSURE

Construction scaffolding can be erected within the tree protection fencing provided that each of the weight distribution points are spread over a minimum of 2m² and these points are over existing soil levels to avoid soil compaction.

40 Dumaresq Street, Gordon



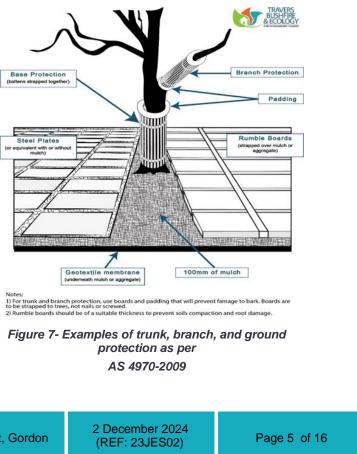
Specific excavation for services that require critical fall (e.g., sewer, stormwater) may be undertaken within the tree protection fencing provided that trenching is dug using hand tools, thrust or directional boring or vacuum excavation, and tree roots are not severed unless they spatially conflict with the installed pipes. This work within the tree protection fencing must be carried out under the instructions from an experienced and suitably qualified project arborist.

All access within the tree protection fencing for temporary and permanent works must be carried out under the instruction of an experienced and suitably qualified project arborist.

Tree protection fencing must remain in a functional condition throughout the demolition and construction works and can only be removed to allow for works identified in the landscape plan.

Landscape works in the vicinity of retained trees must be sympathetic to tree retention and existing ground levels within the TPZ. The natural ground contours and depth within TPZs located outside of the construction or earthworks footprint must remain unchanged.

Any tree damage that occurs to trees or tree roots during site works is to be treated by an experienced and suitably qualified arborist. Where branch pruning works are required, all pruning works including the removal of deadwood are to be undertaken in accordance with Australian Standard AS 4373-1996 – Pruning of Amenity Trees and the work is to be undertaken by an experienced and suitably qualified arborist.



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Trees shall be inspected at regular intervals by the project arborist or at critical stages during the demolition and construction stages to identify signs of stress and recommend remedial action such as mulching and irrigation.

Tree protection fencing

Temporary tree protection fencing should be erected before any machinery or materials are brought onto the site and before the commencement of works (including demolition and bulk earthworks). Once erected, protective fencing must not be removed or altered without approval by the project arborist. The fencing is to be fully secured to restrict access onto the protected root zone.

AS 4687 specifies applicable fencing requirements. Installed construction fencing on the recommended alignment of the TPZ fencing can be installed as part of the protective fencing.

For construction crews, signage identifying the TPZ shall be placed at 10m intervals along the TPZ barrier fencing. These signs will face towards the development site and shall have lettering that complies with AS 1319. These signs will also specify the severe penalties for harming the TPZ in any way.

TPZ barrier fencing is to be inspected on a regular basis and maintained in good condition. Any works within the mapped TPZs is to be supervised (for excavation works) or under the direction of an AQ5 qualified arborist to limit damage to root zones and to install additional root, trunk, and branch protection measures.



Figure 8 - Example signage for tree protection







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Option 1: 10 Townhouses

This design option proposes the development of 10 townhouses. It involves the removal of seven trees from the site, however Tree 12 has been identified for transplantation. A detailed methodology for this process was submitted by Travers Bushfire & Ecology (TBE) in November 2023, outlining specific steps to relocate Tree 12 with minimal stress and optimise its chances of survival in the new location.

Key aspects of the transplant methodology include:

Preliminary Assessment.

Evaluating the tree's health, root system, and environmental conditions.

Site Preparation:

Ensuring the new location matches the tree's current needs in terms of soil composition, moisture, and sunlight.

Root Pruning and Pre-Move Preparation:

Pruning the roots to encourage fine root growth and prepare the tree for relocation.

Excavation and Lifting:

Careful excavation and lifting techniques to protect the root ball and tree structure.

Post-Transplant Care:

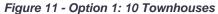
Providing irrigation, mulching, and protective measures against stress factors during the establishment phase.

Option 2: Multistorey Development

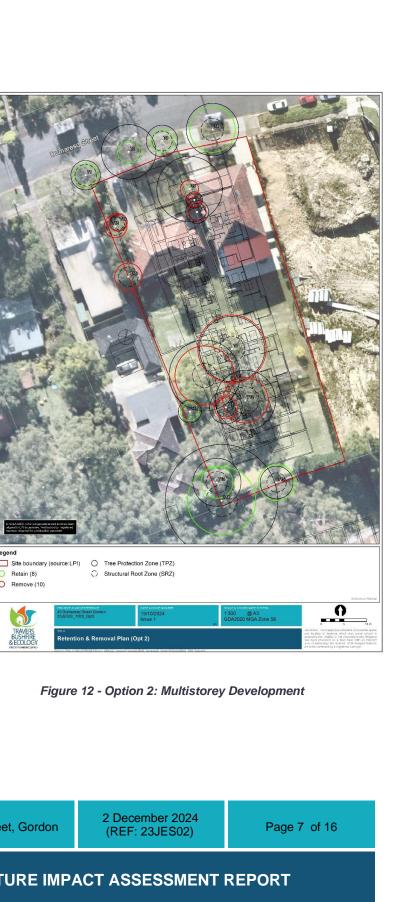
This option involves the construction of a multistorey development and requires the removal of eight trees from the site. Unlike Option 1, this proposal does not include any tree transplants or relocations. The tree removals will comply with local environmental guidelines, and measures will be taken to mitigate the impact on the surrounding landscape. However, without the transplantation efforts, the loss of tree coverage may be greater than in Option 1.













RECOMMENDATIONS

Based on the assessment of the trees in and around the site at 40 Dumaresq Street, Gordon, and the presence of remnants from the Sydney Turpentine Ironbark Forest, the following recommendations are suggested to ensure responsible and sustainable development while preserving the local ecosystem:

Tree Removal and Transplantation:

- Remove the following trees (T5, T6, T7, T16, T17, T18, T19 and **option 2** only Tree 12) within the design footprint
- A methodology has been submitted to transplant tree 12 for option 1

Tree Replacement:

• Replace all removed trees within the landscape design, ensuring the inclusion of species with a minimum mature height of 8m.

Permissions of Tree Removal:

• Obtain necessary permissions from the landowner of adjacent property to remove trees 16 and 18, considering their potential impact on the development.

Tree Protection Plan:

• Implement a comprehensive tree protection plan before demolition, covering the duration of the project to safeguard any retained trees within or around the development area.

Preservation of Significant Trees:

- Emphasise the prioritisation of trees with high significance, notably the mature Eucalyptus pilularis (Black Butt), acknowledging their crucial role in maintaining biodiversity.
- For **option 1** only, given its significance, exhaust all possible efforts to retain T12 by transplanting it and seamlessly integrating it into the landscape design. Present a detailed methodology outlining the transplanting process.

Construction activities around Tree 13,14 and 15:

- No heavy machinery excavations permitted.
- Light machinery or hand digging is allowed within the Tree Protection Zone (TPZ) of Tree 13, 14 and 15.
- All excavations within the TPZ must be supervised by the project arborist.

Invasive Species Control:

• Address the presence of invasive species among the identified trees. Implement suitable control measures to prevent their spread and minimise negative impacts on the site's biodiversity.

Vegetation Disturbance Mitigation:

• During the development process, minimise the removal or disturbance of existing vegetation. Adopt construction practices that avoid root damage and soil compaction to protect the health of remaining trees.

Monitoring and Compliance:

• Establish a monitoring and compliance program to ensure effective implementation of the recommended measures.

Health Assessment and Tracking:

 Regularly assess the health and condition of both preserved and newly planted trees throughout the development process to track their progress.

Arborist Consultation:

 Consult with a suitably qualified arborist to ensure that all recommended measures are effectively implemented.

By adhering to these recommendations, the development of 40 Dumaresq Street, Gordon, can strike a balance between progress and environmental conservation, ensuring a sustainable and responsible approach that benefits the natural ecosystem

CONCLUSIONS

The development options for 40 Dumaresq Street, Gordon, necessitate a careful balance between construction objectives and environmental conservation. Option 1, which involves the construction of 10 townhouses, takes a balanced approach that prioritises ecological preservation. A notable advantage of this option is the inclusion of a transplantation plan for Tree 12, demonstrating a commitment to retaining significant vegetation on the site. This initiative not only helps preserve part of the natural landscape but also fosters ecological balance. The detailed transplantation methodology ensures the careful relocation of the tree, optimising its chances of survival.

Furthermore, Option 1 requires the removal of only seven trees, minimising the overall environmental impact of the development. The incorporation of sustainability measures, such as replacing removed trees with species that can achieve significant heights, aligns with long-term goals for tree management and ecological preservation.

However, this option presents certain challenges which are a normal part of the development assessment process. The need to protect and transplant Tree 12, along with safeguarding Trees 13, 14, and 15, may limit design flexibility for the townhouse layout, which could affect the overall functionality of the project. Irrespective, it is anticipated that an appropriate arboricultural outcome can be achieved.

Option 2, in contrast, proposes a multistorey development that involves the removal of eight trees without any provision for transplantation. The loss of trees without mitigation measures raises more significant concerns regarding biodiversity and environmental sustainability.

In summary, while Option 1 offers substantial advantages in terms of environmental preservation and a balanced approach to development, Option 2 comes at the expense of greater ecological impact. Therefore, it is essential to implement a comprehensive strategy that prioritises tree protection, sustainable practices, and community engagement for both options. Ensuring that the development proceeds in a manner that respects and protects the local ecosystem will be critical. A robust tree protection plan will play a vital role in maintaining the health and integrity of the remaining vegetation, ultimately enhancing the ecological value of the site.

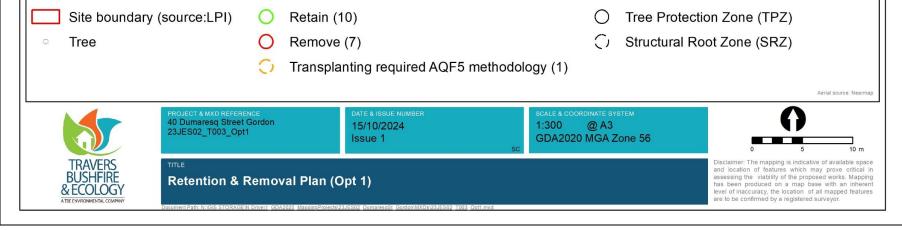
The final identification of trees to be removed will be confirmed during the Development Application (DA) stage, allowing for further assessment and mitigation where necessary



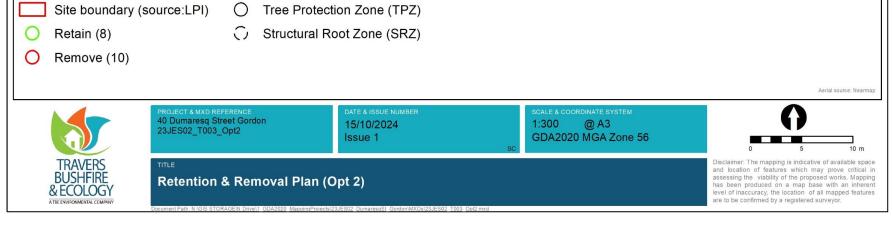
ATTACHMENT 1 – TREE PLANS



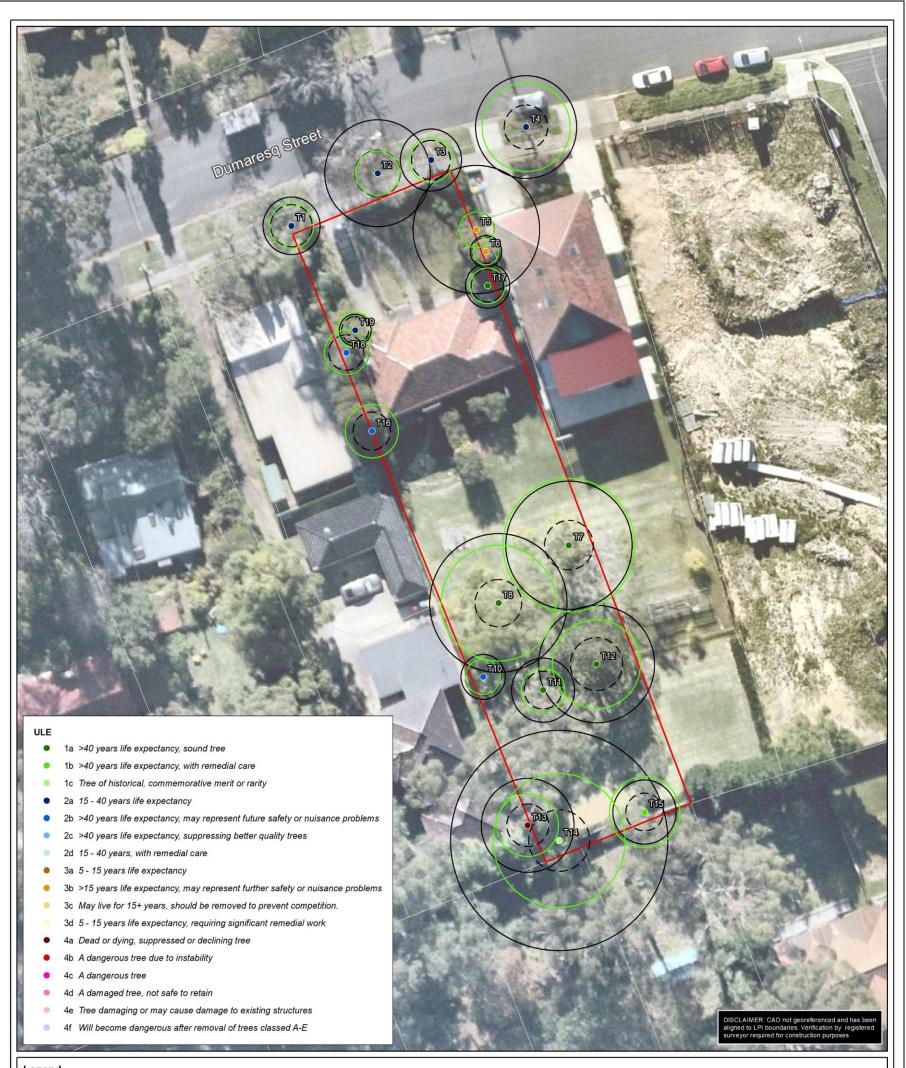
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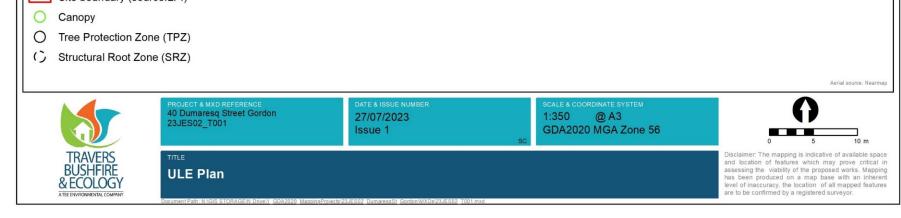


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Legend

Site boundary (source:LPI)





	O Canopy	Z tree			
	O Tree Protectio	on Zone (TPZ)			
	 Structural Room 	ot Zone (SRZ)			Aerial source: Nearmap
		PROJECT & MXD REFERENCE 40 Dumaresg Street Gordon 23JES02_T002	date & issue number 27/07/2023 Issue 1	scale & coordinate system 1:350 @ A3 GDA2020 MGA Zone 56 sc	
	TRAVERS BUSHFIRE & ECOLOGY ATELENVIRONMENTAL COMMINY	TITLE AZ Plan	Projects/23JES02 DumaresoS1 Gordon/MXDs/23JES02 T002.	nxd	Disclaimer: The mapping is indicative of available space and location of features which may prove critical in assessing the viability of the proposed works. Mapping has been produced on a map base with an inherent level of inaccuracy, the location of all mapped features are to be confirmed by a registered surveyor.
_					

						A	TACH	IMENT 2 -	TRE	E ASS	SESSME	NT DATA	TABLE						
Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Visual significance rating	Short ULE	Short AZ	lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Retain/ Remove Option 1	Retain/ Remove Option 2	Comments	
Τ1	Murraya	Murraya paniculata	27	45	5	5	60	2	2a	A2	15-40yrs	Medium	Medium	3.2	2.4	Retain	Retain	under power lines Council land	
Τ2	European ash	Fraxinus excelsior	50	55	6	5	50	2	2a	A2	15-40yrs	Medium	Low	6.0	2.6	Retain	Retain	under power lines Council land	
Т3	European ash	Fraxinus excelsior	29	38	5	5	55	2	2a	A2	15-40yrs	Medium	Low	3.5	2.2	Retain	Retain	power lines, deciduous	
Τ4	European ash	Fraxinus excelsior	48	50	6	10	60	2	2a	A1	15-40yrs	Medium	Low	5.8	2.5	Retain	Retain	power lines	
Т5	Pencil pine	Cupressus sempervirens	60	31	12	4	45	1	3b	Z5	15-40yrs	Low	Low	7.2	2.0	Remove	Remove	included, starting to split, decay	
Т6	Pencil pine	Cupressus sempervirens	15	17	12	3	45	1	3b	A2	15-40yrs	Low	Low	1.8	1.6	Remove	Remove	decay, borers	
Τ7	Jacaranda	Jacaranda mimosifolia	60	65	13	15	65	3	1a	A1	>40yrs	Medium	Low	7.2	2.8	Remove	Remove	reasonable form and structure, Introduced	
Т8	Jacaranda	Jacaranda mimosifolia	65	59	14	13	65	3	1a	A1	>40yrs	Medium	Low	7.8	2.7	Retain	Remove	reasonable form and structure, Introduced	
T10	Magnolia	Magnolia spp	21	32	9	4	35	1	2b	Z5	>40yrs	Low	Low	2.5	2.1	Retain	Retain	decay in trunk has been looped	
T11	Firewheel tree	Stenocarpus sinuatus	30	35	14	5	65	2	1a	A1	>40yrs	Medium	Medium	3.6	2.1	Retain	Remove	reasonable form	
T12	Magnolia	Magnolia spp	55	78	14	10	70	3	1a	A1	>40yrs	High	Medium	6.6	3.0	Retain with transplant required	Remove	reasonable structure, aged tree	
T13	Turpentine	Syncarpia glomulifera	44	46	19	7	55	2	4a	A2	>40yrs	Medium	Medium	5.3	2.4	Retain	Retain	suppressed, deadwood	
T14	Blackbutt	Eucalyptus pilularis	100	110	26	15	70	3	1c	A2	>40yrs	High	High	12.4	3.5	Retain	Retain	epicormic growth, branch failure, minor deadwood	
	40 Dumaresq Street, Gordon 2 December 2024 (REF: 23JES02) Page 13 of 16 ARBORICULTURE IMPACT ASSESSMENT REPORT																		



Tree tag	Common name	Scientific name	DBH (cm)	Basal diameter (cm)	Height (m)	Spread (m)	Vigour (%)	Visual significance rating	Short ULE	Short AZ	lifespan	STARS significance	STARS retention value	TPZ (m)	SRZ (m)	Retain/ Remove Option 1	Retain/ Remove Option 2
T15	Turpentine	Syncarpia glomulifera	30	35	14	8	55	2	1b	A2	>40yrs	Medium	Medium	3.6	2.1	Retain	Retain
T16	Broad-leaf privet	Ligustrum lucidum	25	35	6	6	50	1	2b	Z3	15-40yrs	Low	Very Low	3.0	2.1	Remove	Remove
T17	Camellia	Camellia spp	21	25	6	4	60	2	1a	A1	15-40yrs	Medium	Low	2.5	1.8	Remove	Remove
T18	Oleander	Nerium oleander	21	30	8	5	50	1	2b	Z3	15-40yrs	Low	Low	2.5	2.0	Remove	Remove
T19	Chinese hackberry	Celtis sinensis	15	16	6	4	45	1	2a	Z2	5-15yrs	Low	Low	1.8	1.5	Remove	Remove

Legend for table

- Significance Value Attachment 3
- Tree Retention Value Attachment 4
- A-Z Categories Attachment 5
- Tree ULE Categories Attachment 6



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n/ ve 1 2		Comments	
n		epicormic limb failure	
ve	adjoinir	ng property, Invasive species	
ve		Introduced	
ve	adjoinii	ing property Invasive species	
ve	2m fro	m dwelling, Invasive species	
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ATTACHMENT 3 – TREE SIGNIFICANCE CRITERIA

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

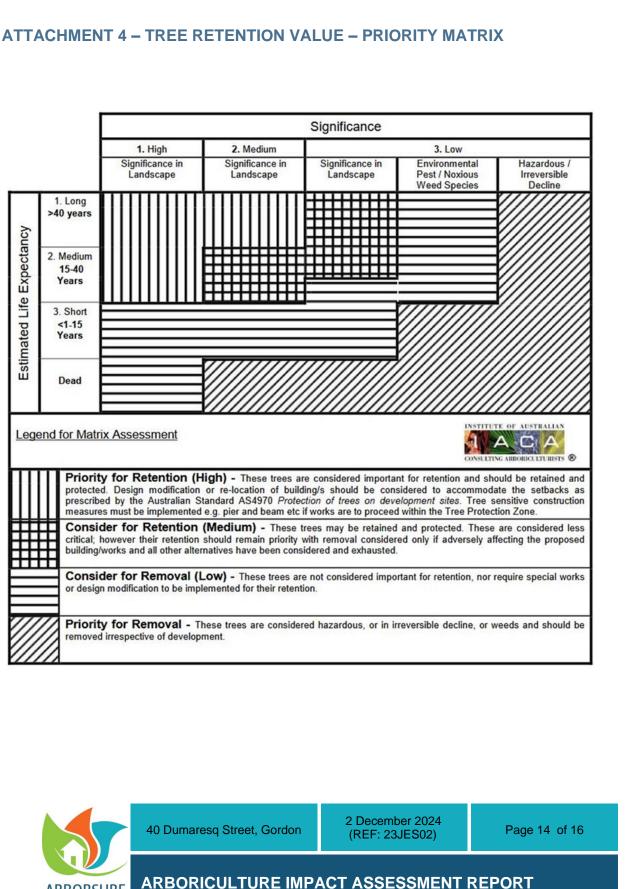
3. Low Significance in landscape

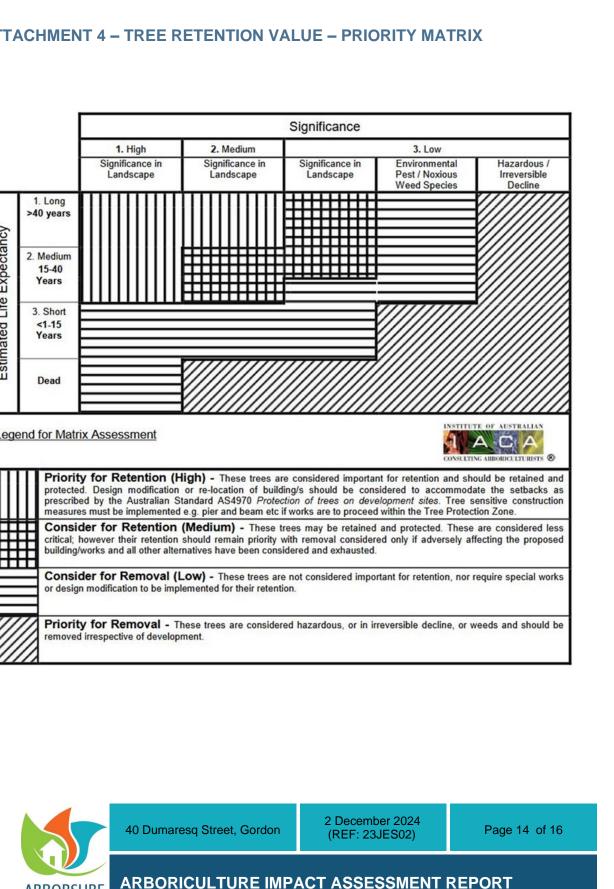
- The tree is in fair-poor condition and good or low vigour;
- The tree has form atypical of the species;
- The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings,
- The tree provides a minor contribution or has a negative impact on the 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.

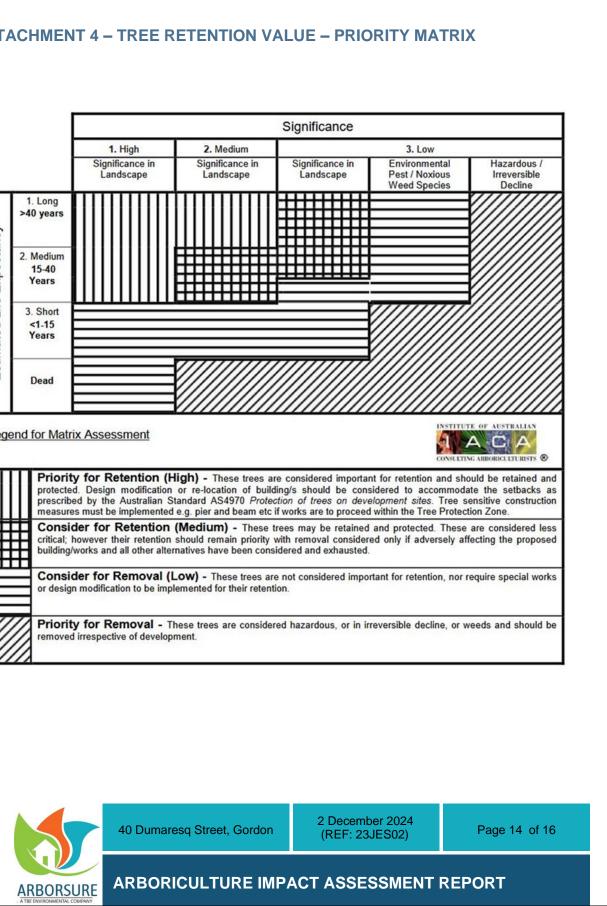
The tree is to have a minimum of three (3) criteria in a category to be classified in that group.

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









ATTACHMENT 5 – TREE A-Z CATEGORIES

ATTACHMENT & _ III E TREE CATECORIES

CAUTION: TreeAZ assessments must be carried out by a competent person qualified and experienced in arboriculture. The following category descriptions are designed to be a brief field reference and are not intended to be self-explanatory. They must be read in conjunction with the most current explanations published at www.TreeAZ.com.

Category Z: Unimportant trees not worthy of being a material constraint

Local policy exemptions: Trees that are unsuitable for legal protection for local policy reasons including size, proximity and species Z1 Young or insignificant small trees, i.e. below the local size threshold for legal protection, etc

- Too close to a building, i.e. exempt from legal protection because of proximity, etc Z2
- Species that cannot be protected for other reasons, i.e. scheduled noxious weeds, out of character in a **Z**3 setting of acknowledged importance, etc

High risk of death or failure: Trees that are likely to be removed within 10 years because of acute health issues or severe structural failure

- 74 Dead, dying, diseased or declining Severe damage and/or structural defects where a high risk of failure <u>cannot</u> be satisfactorily reduced by Z5 reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, overgrown
- and vulnerable to adverse weather conditions, etc **Z6** Instability, i.e. poor anchorage, increased exposure, etc
- Excessive nuisance: Trees that are likely to be removed within 10 years because of unacceptable impact on people Excessive, severe and intolerable inconvenience to the extent that a locally recognized court or tribunal
- **Z**7 would be likely to authorize removal, i.e. dominance, debris, interference, etc Excessive, severe and intolerable damage to property to the extent that a locally recognized court or
- **Z8** tribunal would be likely to authorize removal, i.e. severe structural damage to surfacing and buildings, etc
- Good management: Trees that are likely to be removed within 10 years through responsible management of the tree population Severe damage and/or structural defects where a high risk of failure can be temporarily reduced by
- reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, vulnerable 7.9 to adverse weather conditions, etc
- Poor condition or location with a low potential for recovery or improvement, i.e. dominated by adjacent Z10 trees or buildings, poor architectural framework, etc
- Removal would benefit better adjacent trees, i.e. relieve physical interference, suppression, etc Z11
- Unacceptably expensive to retain, i.e. severe defects requiring excessive levels of maintenance, etc Z12

NOTE: Z trees with a high risk of death/failure (Z4, Z5 & Z6) or causing severe inconvenience (Z7 & Z8) at the time of assessment and need an urgent risk assessment can be designated as ZZ. ZZ trees are likely to be unsuitable for retention and at the bottom of the categorization hierarchy. In contrast, although Z trees are not worthy of influencing new designs, urgent removal is not essential and they could be retained in the short term, if appropriate.

Category A: Important trees suitable for retention for more than 10 years and worthy of being a material constraint

- No significant defects and could be retained with minimal remedial care A1
- Minor defects that could be addressed by remedial care and/or work to adjacent trees A2
- Special significance for historical, cultural, commemorative or rarity reasons that would warrant extraordinary A3 efforts to retain for more than 10 years
- A4 Trees that may be worthy of legal protection for ecological reasons (Advisory requiring specialist assessment)

NOTE: Category A1 trees that are already large and exceptional, or have the potential to become so with minimal maintenance, can be designated as AA at the discretion of the assessor. Although all A and AA trees are sufficiently important to be material constraints, AA trees are at the top of the categorization hierarchy and should be given the most weight in any selection process.

TreeAZ is designed by Barrell Tree Consultancy (www.barrelltreecare.co.uk) and is reproduced with their permission

	1 – Long	2 – Medium	3 – Short	4 – Removal	5 – Moved or Replaced
	Trees that appeared to be retainable at the time of assessment for more than 40 years with an acceptable level of risk	Trees that appeared to be retainable at the time of assessment for 15 – 40 years with an acceptable level of risk	Trees that appeared to be retainable at the time of assessment for 5 – 15 years with an acceptable level of risk	Trees that should be removed within the next 5 years	Trees which can be reliably removed or replaced
3	Structurally sound trees located in positions that can accommodate future growth	Trees that may only live between 15 and 40 years	Trees that may only live between 5 and 15 years	Dead, dying, suppressed or declining trees through disease or inhospitable conditions	Small trees less than 5m ir height
;	Trees that could be made suitable for retention in the long term by remedial care	Trees that may live for more than 40 years but would be removed for safety or nuisance reasons	Trees that may live for more than 15 years but would be removed for safety or nuisance reasons	Damaged trees through structural defects including cavities, decay, included bark, wounds or poor form	Trees that have been pruned to artificially control growth
D		Trees that could be made suitable for retention in the medium term by remedial care	Trees that require substantial remedial tree care and are only suitable for retention in the short term	Damaged trees that are clearly not safe to retain	
				Trees that may live for more than 5 years but should be removed to prevent interference with more suitable individuals or to provide space for new plantings	
-				Trees that are damaging or may cause damage to existing structures within 5 years	
à				Trees that will become dangerous after removal of other trees for reasons given in (A) to (F)	



GLOSSARY

AQF3 Arborist

A professional arborist who has completed a Certificate III in Arboriculture, which is a qualification under the Australian Qualifications Framework (AQF) at level 3. This qualification typically includes skills in tree climbing, pruning, and basic tree assessment.

AQF5 Arborist

An arborist who has completed a Diploma of Arboriculture, which is a qualification under the Australian Qualifications Framework (AQF) at level 5. This gualification usually includes advanced skills in tree management, risk assessment, and planning.

AS 4970-2009

Australian Standard for the protection of trees on development sites, providing guidelines for tree assessment and protection during construction activities.

AZ Tree Assessment

An assessment process used to evaluate trees based on various criteria such as age, size, health, and significance. This assessment provides valuable information for tree management and preservation efforts.

Ecological Stability

The ability of an ecosystem to maintain its structure and function over time despite external stressors.

Landscape Architect

A professional who designs outdoor areas, landmarks, and structures to achieve environmental, social-behavioural, or aesthetic outcomes.

Native Plant Species

Plants that are indigenous to a specific geographic area and have evolved to thrive in that particular environment.

Root Zone

The area of soil surrounding a tree's roots, critical for water and nutrient absorption.

STARS (Significance of a Tree Assessment Rating System)

A system used to evaluate and categorise trees based on their ecological, aesthetic, and cultural significance.

Structural Root Zone (SRZ)

The area around a tree's roots that is essential for tree stability and health. This zone must be protected from construction activities to prevent root damage and ensure the tree's long-term survival.

Tree Protection Zone (TPZ)

An area around a tree that is protected from construction activities to preserve the tree's health and stability.

Tree Preservation

The practice of maintaining and protecting trees, especially during development or construction activities.

Tree Significance Chart

A chart categorising trees based on their assessed value and significance.

Tree Assessment Data Table

A detailed table providing specific data on each tree assessed, including its value, condition, and other relevant attributes.

Sustainable Practices

Methods of development and construction that aim to minimise environmental impact and promote long-term ecological health.



REFERENCES

https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10789. (2023, July 30).Retrieved from https://www.environment.nsw.gov.au/: https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10789

Office of Environment & Heritage . (2023, July 24). Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion profile. Retrieved from https://www.environment.nsw.gov.au/: https://www.environment.nsw.gov.au/

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METHODOLAGY FOR RELOCATING A MATURE MAGNOLA TREE

40 Dumaresq Street, Gordon

Authors:	Michael Sleeth – Diploma of Arboriculture (AQF5)
Date:	9/11/23
File:	JES02TREE

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Disclaimer:

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The mapping is indicative of available space and location of features which may prove critical in assessing the viability of the proposed works. Mapping has been produced on a map base with an inherent level of inaccuracy, the location of all mapped features is to be confirmed by a registered surveyor.

Introduction

This arboriculture methodology has been prepared by Travers bushfire & ecology for the purpose to relocating a mature Magnolia on the eastern side of the site, known as 40 Dumaresq Street, Gordon.



Figure 1 Tree location

The Tree

Condition:

An assessment of tree condition was undertaken on Tuesday 18 July 2023 by an AQF5 arborist. This inspection was a visual inspection of the tree and considered the condition of the roots, trunk, branches, foliage, previous pruning, pests, disease. The tree appears, at the time of inspection, in good condition with only minimal defects.



Figure 2 The tree

Methodolagy

Timing:

The best time to transplant a mature Magnolia tree is during its dormant season, which is typically in late autumn, early winter. Transplanting during this period minimises stress on the tree and increases the chances of success.

Prepare the new location:

Choose a new planting site with similar soil and lighting conditions to the current location of the Magnolia tree.

Dig a hole at the new location that is at least twice the size of the tree's root ball. The hole should be deep enough to accommodate the entire root system.

Root ball preparation:

Start by digging a trench around the tree, at a distance of at least 3m to 6m from the trunk, this is outside the structural root zone (SRZ) of the tree. The trench should be deep enough to expose the main lateral roots.

Use a sharp clean saw to cut through the roots, severing them cleanly. Make sure to maintain the integrity of the root ball as much as possible.

Manually excavate the root ball by digging under and around it.

This may be a time-consuming process, as you want to minimise root damage.



Figure 3-Root ball preparation

Prune the tree:

Pruning the tree's branches and roots to reduce stress during transplantation.

However, avoid excessive pruning, as it can harm the tree, ensure this is supervised by an AQF5 arborist.

Covering the roots once pruned is recommended with plastic sheeting to prevent desiccation of the new roots.

If the tree is not too large, a tree spade can be used to prune roots prior to relocation.

Trim any damaged or dead branches, but do not remove more than one-third of the tree's canopy.



Figure 4 root protection

Lift and transport:

Use a mechanical tree spade to lift the tree from its current location. Make sure to support the root ball and lift it as a single unit.

Transport the tree to the new location, ensuring that the root ball remains intact and protected. Avoid dragging the tree or exposing the roots to the air for an extended period.



Figure 5 tree lift

ATTACHMENT NO: 7 - APPENDIX E - TREE RELOCATION METHODOLOGY (MAGNOLIA MATURE) - 40 DUMARESQ STREET, GORDON

Planting:

Place the tree in the prepared hole at the new location, ensuring that it sits at the same depth it was previously planted.

Fill the hole with the original soil or a mixture of soil and organic matter. Water the tree thoroughly to help settle the soil and remove any air pockets.



Figure 6 Tree planting

Create an opening (trench) that can be back filled with soil to prevent severed roots from drying out and facilitate root regeneration as seen in photo above.

Mulch and care:

Apply a layer of mulch around the base of the tree to help conserve moisture and regulate soil temperature.

Keep the tree well-watered, especially during the first year after transplantation.

Monitor the tree's health and provide additional care as needed.

Transplanting a mature Magnolia tree is a significant undertaking and may require the assistance of professionals with the right equipment. Make sure to follow these steps and consider seeking guidance from a local arborist or tree specialist for a successful transplant.



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ITEM NO: GB.4



ECOLOGICAL ASSESSMENT REPORT

Proposed Development Lot 1 DP 1006588 40 Dumaresq Street Gordon

> 29 November 2024 (REF: 23JES02)

www.traversecology.com.au

ECOLOGICAL ASSESSMENT REPORT

Proposed Rezoning

Lot 1 DP 1006588, 40 Dumaresq Street, Gordon

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File:	23JES02



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The mapping is indicative of available space and location of features which may prove critical in assessing the viability of the proposed works. Mapping has been produced on a map base with an inherent level of inaccuracy, the location of all mapped features is to be confirmed by a registered surveyor.

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LIST OF ABBREVIATIONS

APZ	asset protection zone
BAM	Biodiversity Assessment Method (2020)
BC Act	Biodiversity Conservation Act (2016)
BC Reg	Biodiversity Conservation Regulation (2017)
BCAR	Biodiversity Certification Assessment Report
BDAR	Biodiversity Development Assessment Report
BOS	Biodiversity Offset Scheme
BPA	bushfire protection assessment
BSSAR	Biodiversity Stewardship Site Assessment Report
CEEC	Critically endangered ecological community
CM Act	Coastal Management Act 2016
DAWE	Commonwealth Department of Agriculture, Water and the Environment (superseded by DCCEEW)
DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment and Water
DCP	development control plan
DEC	NSW Department of Environment and Conservation (superseded by DECC from April 2007)
DECC	NSW Department of Environment and Climate Change (superseded by DECCW from October 2009)
DECCW	NSW Department of Environment, Climate Change and Water (superseded by OEH from April 2011)
DEWHA	Commonwealth Department of Environment, Water, Heritage & the Arts (superseded by SEWPAC)
DOEE	Commonwealth Department of Environment & Energy (superseded by DAWE)
DPE	NSW Department of Planning and Environment
DPIE EEC	NSW Department of Planning, Industry and Environment (superseded by DPE)
EPA	endangered ecological community Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act (1979)
EPBC Act	Environment Protection and Biodiversity Conservation Act (1999)
FM Act	Fisheries Management Act
IBRA	Interim Biogeographic Regionalisation for Australia
LEP	local environmental plan
LGA	local government area
LLS Act	Local Land Services Act (2013)
NES	national environmental significance
NPW Act	National Parks and Wildlife Act (1974)
NRAR	Natural Resources Access Regulator (NSW)
NSW DPI	NSW Department of Industry and Investment
OEH	Office of Environment and Heritage (superseded by DPIE from August 2019)
PCT	plant community type
PFC	projected foliage cover
RFS	NSW Rural Fire Service
SAII	Serious And Irreversible Impacts
SEPP	State Environmental Planning Policy
SEWPAC	Commonwealth Dept. of Sustainability, Environment, Water, Population & Communities (superseded by DOEE)
SIS	species impact statement
SULE	safe useful life expectancy
TEC	threatened ecological community
TPZ	tree preservation zone Threatened Species Conservation Act (1005) Supercoded by the Riadiversity Conservation Act (2016)
TSC Act	Threatened Species Conservation Act (1995) – Superseded by the Biodiversity Conservation Act (2016) vegetation management plan
VMP	vegetation management plan

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1. BACKGROUND

Travers bushfire & ecology has been engaged to undertake an ecological assessment report at Lot 1 DP 1006588, 40 Dumaresq Street, Gordon within Ku-ring-gai local government area (LGA) for a proposed rezoning application. The extent of this entire lot is shown in Figure 1-1. The 'study area' also includes Lot A DP 312896, 38 Dumaresq Street which is the lot immediately adjacent to the east. No. 38 is already zoned appropriately for the proponent, however no. 40 is currently zoned for low density residential development.

For the future proposal, and at DA stage post rezoning, it is expected that the lots will be amalgamated and a Biodiversity Assessment Report will be produced to support the proposal.

The proposal shall be assessed under the Biodiversity Conservation Act (BC Act), 2016.



Figure 1-1 – Study area in red (Source: Nearmap, May 2023)

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1.1 Proposed rezoning

The existing zoning has no. 38 as R3 - Medium Density Residential, whilst no. 40 is R2 - Low Density Residential. For the proponent to achieve their goal of medium density residential development across the two lots, no. 40 would require rezoning to R3. A description of the proposal is provided below:

- The planning proposal seeks to rezone 40 Dumaresq Street from R2 Low Density Residential zoning to R3 Medium Density Residential zoning.
- The owner of 40 Dumaresq Street is also the owner of the adjacent 38 Dumaresq Street.
- Currently 38 Dumaresq Street is zoned R3 Medium Density Residential, however it does not meet the site frontage and lot size requirements of Clause 6.6 of the Ku-ringgai Local Environmental Plan 2015 for a medium density lot, which is stopping the site to realise its full development potential. In addition, the current redevelopment of 34-36 Dumaresq Street has removed any development potential of the lot, resulting in 38 Dumaresq Street to be an isolated lot.
- If the planning proposal to rezone 40 Dumaresq Street to R3 Medium Density were to be successful the proponent will seek to consolidate 38 and 40 Dumaresq Street into one site.

From the pre-planning proposal meeting notes, Council has noted or requested the following information:

- The site contains Landscape remnant mapping as well as identified Sydney Turpentine-Ironbark Forest vegetation at the rear of the site. Council requested information regarding the removal of trees that were mapped landscape remnant to the rear of the site. The owner stated they lost a few trees through a large storm.
- An Arboriculture assessment is required that includes all trees present on the site and trees on adjacent land parcels that have Tree protection Zones extending into the subject site. As the site contains Landscape Remnant Greenweb mapping, a Fauna and Flora Report should be provided as part of the planning proposal documents.

There is a concept proposal for medium density residential development over the site, shown as Option 1 and Option 2 within this report. See figures on the next pages for the two respective layout options.

1.2 Site description

Table 1-1 provides a summary of the planning, cadastral, topographical, and disturbance details of the development footprint.

Table 1-1 – Site features

	40 Dumaresg Street, Gordon
Location	40 Dunalesq Street, Soluon
Area	Approximately 1,487m ² (via Council mapping)
Local government area	Ku-ring-gai LGA
Zoning	R2 Low Density Residential
Grid reference	328512E 6263377N MGA-56

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Elevation	Approximately 86-90m AHD	
Topography	Site situated on a gradual north facing aspect	
Geology and soils	Geology: Lucas Heights (9130lh) - Mittagong Formation—interbedded shale, laminite and fine to medium grained quartz sandstone. Minor outcrops of Hawkesbury Sandstone and Ashfield Shale may occur with overlying Quaternary alluvium in some locations. Soils: The study area is located on the Woodland soil landscape. wl1— Loose dark brown sandy loam - This is a loose apedal single-grained sandy loam with porous sandy fabric. It occurs as topsoil (A horizon). Common inclusions are sub-angular or rounded stones (10–20%) and charcoal fragments.	
Catchment, drainage and steam order	There is drainage through the middle of the site draining towards the southeast into adjoining properties and eventually into 1 st order stream Amaroo Gully.	
Existing land useThere are two existing residential dwellings on each 38 and 40 Dumaresq Street, Gordon. The site is currently zoned as R2 L Density Residential.		
Connectivity features	There is very poor connectivity to the site. There are existing residential developments to the north, south, east and west.	



Figure 1-2 - Option 1, 10 townhouse layout (ground floor plan)



Figure 1-3 – Option 2, multistorey development layout (ground floor plan)

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2. FLORA

2.1 Survey

Botanical survey was undertaken on 18 July 2023 over a time frame of approximately 2.5 hrs.

Botanical survey included a random meander in accordance with Cropper (1993) to gain a full species list of the plants within the site. A review of the Atlas of NSW Wildlife (DPE 2023) was undertaken prior to the site visit to determine threatened species previously recorded within 10 km of the development footprint, and relevant target searches were undertaken as suited, generally as near-linear transects underneath or adjacent to remnant canopy vegetation.

All naturally occurring species were identified to species level where possible, and are listed in Appendix 1.

2.2 Vegetation communities

The *Native Vegetation of the Sydney Metropolitan Area* (OEH 2013) maps the following vegetation communities within the site:

PCT 1281 - Sydney Turpentine-Ironbark Forest

The State Vegetation Type Map (DPE 2022) maps the following vegetation communities within the site:

PCT 3262 - Sydney Turpentine Ironbark Forest

Field verification of the study area found the following vegetation communities:

- PCT 3262 Sydney Turpentine Ironbark Forest (0.01 ha) (assumed to be impacted in part)
- Exotic Planted Vegetation (0.11 ha)

Details of these vegetation communities are provided below in Table 2-1.

Table 2-1 – Observed vegetation communities

	l ocation within				Area	Conservation status	IIS
Community	site and condition	Canopy	Midstory	Ground layer	(ha)	BC Act	EPBC
PCT 3262 Sydney Turpentine Ironbark Forest	Southwestern corner of the site. Highly degraded	Eucalyptus piularis, Syncarpia glomulifera	n/a	Cynodon dactylon, Lobelia purpurescens	0.01 ha	Sydney Turpentine- Ironbark Forest in the Sydney Basin Bioregion	Does not meet the criteria for listing as Turpentine- Ironbark Forest of the Sydney Basin Bioregion
Exotic Planted Vegetation	Exotic planted vegetation occurs around existing dwellings and as planted gardens	Magnolia grandiflora, Jacaranda mimosifolia, Stenocarpus sinuatus, Fraxinus exelsior	Strelitzia reginae, Camellia sasanqua, Camellia japonica, Bambusa vulgaris, Citrus limon, Gardenia magnifica	Stenotaphrum secundatum, Cynodon dactylon, Lobelia purpurescens, oxalis spp. Erhrharta erecta, Hedra helix	0.11 ha	2	۶

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Photo 1 - Exotic Planted Vegetation towards south of site



Photo 2 - Exotic Planted vegetation towards the north of site

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Photo 3 – Exotic Planted Vegetation



Photo 4 - Exotic Planted Vegetation at front of site

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Photo 5 - Eucalyptus pilularis and Syncarpia glomulifera on southwestern corner of site

2.3 Threatened flora species

BC Act - A search of the Atlas of NSW Wildlife (DPE, 2023) indicated a list of species that have been recorded within a 10 km radius of the development footprint. These species are listed in Table 7-3Table 7-4 – Threatened fauna species habitat assessment (Appendix 2) and are considered for potential habitat within the development footprint.

EPBC Act – A review of the schedules of the *EPBC Act* indicated the potential for a list of threatened flora species to occur within a 10 km radius of the development footprint. These species have also been listed in Table 7-3 Appendix 2 for consideration of potential to occur.

Based on the habitat assessment within Table 7-3 (Appendix 2) it is considered that the development footprint provides potential habitat for the following threatened flora species. These species will be considered in the test of significance within Appendix 3:

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Scientific name	BC Act	EPBC Act	Potential to occur
Macadamia integrifolia	-	V	\checkmark
Syzygium paniculatum	E1	-	\checkmark

Table 2-2 – Threatened flora species with suitable habitat present

All threatened species in both the BioNet (NSW) and *EPBC Act* coordinate search (National) were considered to have low potential suitable habitat within the study area because of previous clearing and landscaping works, past and ongoing land management practices, unsuitable previous vegetation type or distance to known specimens.

Both species listed above, would likely only occur if they were planted, and even then, would not be classed as a significant find due to them potentially deviating genetically from the natural gene pool.

For DA purposes, if the proposal required a BDAR with offsetting due to impacting the remnant trees along the southern boundary, a different set of threatened species would need to be considered under a streamlined small area BDAR.

2.4 Endangered flora populations

No endangered flora populations occur within Ku-ring-gai LGA.

2.5 Threatened ecological communities

PCT 3262 is commensurate with the *BC Act* listed Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion which is listed as Critically Endangered. The TEC is highly degraded, composing of only 3 trees and an understorey of landscape plantings with limited native species. The TEC being highly degraded and fragmented means that:

a) it would rarely support threatened flora habitat as seed material does not have the capacity to move in and out of the site, or does not have the ability to regenerate due to the ongoing practices on site such as landscaping, mowing and pedestrian use, and;
b) the TEC is not delineated from harmful activities and will eventually succumb to attrition as there is nothing currently protecting the TEC.

Within the study area, all remnant native vegetation has been assigned PCT 3262 and considered to be part of this Threatened ecological community (TEC). The total area of PCT 3262 equates to 0.01 ha. It has been identified that four (4) trees of nineteen (19) have high significant value (*TBE 2024a*), with one (1) *Eucalyptus pilularis*, likely to be remnant of the original forest. The arboriculture report (*TBE 2024a*) identified that the native trees at the rear of the property were of sufficient condition and health to warrant them being retained. After rezoning, the arboriculture report will need to reassess the trees against the location of the buildings, driveways and ancillary features including cut and fill plans. It is recommended that the three (3) trees (T13, T14 & T15) at the rear of the property be protected, i.e., no more than 10% of their tree protection zone impacted such that there is minimal impact on the TEC. On the basis of the rezoning proposal and the existing trees in the TEC being of sufficient health, they will be retained.

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The mitigation measures identify that landscaping is to predominately utilise species of Sydney Turpentine Ironbark Forest origin that will provide some level of native understorey to enhance remnant PCT 3262.

The Test of Significance in Appendix 3 concludes that the proposal will not cause a significant impact upon the Sydney Turpentine Ironbark Forest for the rezoning proposal.

With respect to the *EPBC Act*, this community forms part of the Turpentine-Ironbark Forest of the Sydney Basin which is listed as Critically Endangered. Turpentine-Ironbark Forest is only considered when patches are in good condition, the vegetation has some characteristic components from all structural layers, where tree canopy is greater than 10% and patch size is greater than one hectare. At this site, none of these considerations are applicable due to the highly degraded nature of this plant community and thus it does not meet the definition under the *EPBC Act* and no assessment under the *EPBC Act* is required.

The state test of significance assessment (Appendix 3) and a review of *EPBC* impact criteria (Appendix 4) has concluded that the proposed development will not have a significant impact on threatened flora species or TECs. Therefore, (a) a Species Impact Statement is not required in respect to flora for the proposal and (b) biodiversity offsetting is not required (under this trigger).

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3. FAUNA

3.1 Survey / Habitat assessment

A fauna habitat assessment was undertaken during the botanical survey to identify the habitat types available, the quality and any specific or important features. A habitat tree assessment was undertaken at this time.

The fauna assessment is based on desktop analysis, threatened species records (DPE 2023) and habitat attributes identified during the flora survey. Particular note was taken to search for the following potential threatened fauna species habitat:

Habitat feature	Present / Absent?
Dural Land Snail shelter habitat opportunity	absent
Observations for presence of potential <i>Allocasuarina</i> trees for foraging by Glossy Black-Cockatoo	absent, but on adjoining lands likely
Koala habitat features	the site is not core koala habitat (refer to section 3.5)
Hollow-bearing trees present	absent
Presence of any raptor nests	absent
Terrestrial shelters, burrows and/or hollows	absent
Connectivity potential to and from the site	
Presence of drainages for frog species habitat	absent

Table 3-1 - Habitat features

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Figure 3-1 – Local connectivity

Figure 3-1 shows the location of the site in a local context. There is good connectivity for fauna movement in Amaroo Gully to the south-west of the site, however the vegetation between the head of the gully and the site which is 300 m, is highly fragmented and generally only consists of some remnant trees at the front or rear of the properties. Going upslope and further east north-east towards the Pacific Highway, the land is zoned B4 – high density residential and E1 – local centre. These types of zonings are not very conducive to retaining trees, and there is very few remaining in those lots. As such, the site is not part of a connected corridor for fauna movement, however the remnant trees at the rear of the property may be an important small stepping stone within a fragmented environment for the more mobile species.

3.2 Threatened fauna species

BCAct - A search of the Atlas of NSW Wildlife (DPE, 2023) provided a list of threatened fauna species previously recorded within a 10 km radius of the development footprint. These species are listed in Table 7-4 (Appendix 2) and are considered for potential habitat within the study area.

EPBC Act – A review of the schedules of the *EPBC Act* identified a list of threatened fauna species or species habitat likely to occur within a 10 km radius of the development footprint. These species have also been listed in Table 7-4.

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In accordance withTable 7-4 the following state and nationally listed threatened fauna species are considered to have suitable habitat with varying potential to occur within the study area. The state listed species will be considered in the test of significance (Appendix 3):

Table 3-2 below provides threatened fauna species with suitable habitat present.

Table 3-2 –	Threatened	fauna species	with suitable	e habitat present
-------------	------------	---------------	---------------	-------------------

Common name	BC Act	EPBC Act	Potential to occur
Grey-headed Flying-Fox	V	V	High
Large Bent-winged Bat	V	-	High
Powerful Owl	V	-	High
White-bellied Sea-Eagle	V	-	Moderate
Eastern pygmy-possum	V	-	Moderate
Little bent-winged Bat	V	-	Moderate
Re-crowed Toadlet	V	-	Low
Rosenberg's Goanna	V	-	Low
White-threated Needle-tail	Р	V	Low
Black Bittern	V	-	Low
Square-tailed Kite	V	-	Low
Eastern Osprey	V	-	Low
Gang-gang Cockatoo	V	V	Low
Little Lorikeet	V	-	Low
Swift Parrot	E1	CE	Low
Barking Owl	V	-	Low
Southern Brown Bandicoot	E1	Е	Low
Koala	E1	Е	Low
Eastern Coastal Free-tailed Bat	V	-	Low
Large-eared Pied Bat	V	V	Low
Easten False Pipistrelle	V	-	Low
Southern Myotis	V	-	Low
Greater Broad-nosed Bat	V	-	Low

The state test of significance assessment (Appendix 3) and a review of *EPBC* impact criteria (Appendix 4) has concluded that the proposed development will not have a significant impact on threatened fauna species. Therefore, (a) a Species Impact Statement is not required in respect to fauna for the proposal and (b) biodiversity offsetting is not required (under this trigger).

Fisheries Management Act (FM Act) – No habitats suitable for threatened aquatic species were observed within the study area and as such the provisions of this act do not require any further consideration.

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3.3 Protected migratory species (National)

The *EPBC Act* Protected Matters Report provides additionally listed terrestrial, wetland and marine migratory species of national significance likely to occur, or with habitat for these species likely to occur, within a 10 km radius of the development footprint. The habitat potential of migratory species is considered in Table 7-5 – Protected migratory bird habitat assessment (Appendix 2).

No nationally protected migratory bird species were recorded present within the study area during the survey. Migratory species protected under the *EPBC Act* do not likely contain any breeding habitat or habitat otherwise of importance within the study area.

3.4 Endangered fauna populations

There is one (1) endangered fauna population within Ku-ring-gai LGA:

Ku-ring-gai LGA has an endangered Gang-gang Cockatoo population, estimated between 18-40 pairs. Gang-gangs utilise *Eucalyptus* trees as a source of food and breeding habitat (hollows) and a variety of exotic species trees. Although the proposed development will require the removal of two (2) Gang-gang exotic use trees (*Cupressus sempervirens*), there has been no observed hollows present to provide breeding habitat. The removal of these trees is not likely to limit food resources or impact the Ku-ring-gai population.

3.5 State Environmental Planning Policy (Biodiversity and Conservation) 2021 – Koala Habitat Protection

Chapter 4 of State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Koala Habitat Protection) applies to land within LGAs listed under Schedule 2 of the Policy. As the study area falls under the Ku-ring-gai LGA, it is considered that Koala SEPP 2021 applies to this development proposal.

Land to which this policy applies in accordance with Section 4.4 of the SEPP 2021 is as follows:

- (1) This Chapter applies to each local government area listed in Schedule 2.
- (2) The whole of each local government area is-
 - (a) in the koala management area specified in Schedule 2 opposite the local government area, or
 - (b) if more than 1 koala management area is specified, in each of those koala management areas.
- (3) Despite subsection (1), this Chapter does not apply to-
 - (a) land dedicated or reserved under the <u>National Parks and Wildlife Act 1974</u>, or acquired under Part 11 of that Act, or
 - (b) land dedicated under the Forestry Act 2012 as a State forest or a flora reserve, or
 - (c) land on which biodiversity certification has been conferred, and is in force, under Part 8 of the <u>Biodiversity Conservation Act 2016</u>, or

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- (d) land in the following land use zones, or an equivalent land use zone, unless the zone is in a local government area marked with an * in Schedule 2—
 - (i) Zone RU1 Primary Production,
 - (ii) Zone RU2 Rural Landscape,
 - (iii) Zone RU3 Forestry.

The land is listed in **Schedule 2 Ku-ring-gai LGA and is zoned R2 Low Density Residential**, therefore SEPP 2021 applies. Please Note that SEPP 2020 applies in lands zoned as RU1, RU2 and RU3 in accordance with SEPP 2020.

There is currently no approved Koala Plan of Management (KPoM) for the LGA that this site is located in. Therefore, before Council may grant consent to a development application for consent to carry out development on the land, Council must assess whether the development is likely to have any impact on Koalas or Koala habitat.

If Council is satisfied that the development is likely to have low or no impact on koalas or Koala habitat, the council may grant consent to the development application. If the council is satisfied that the development is likely to have a higher level of impact on Koalas or Koala habitat, the council must, in deciding whether to grant consent to the development application, take into account a koala assessment report for the development.

As of July 2023, the nearest Koala record to the study area was a rehabilitation record in 2019 approximately 4.5 km to the North of site. Within a 10 km radius, Koala populations are sporadic, with only 8 records within 10 km radius.

Under Schedule 2 of SEPP 2021, Ku-ring-gai falls within the Central Coast Koala Management Area. Two (2) tree species were recorded in the study area which are considered to be Koala use tree species within this Management Area under Schedule 2 of Koala SEPP 2021. These species are *Eucalyptus pilularis, and Syncarpia glomulifera*. No Spot Assessment Technique (SAT) survey was undertaken during botanical survey.

It is considered that this study area does not comprise Core Koala Habitat and given the vegetation on site is primarily planted exotics, the study site also does not constitute as potential Koala habitat as defined by SEPP 2020.

A total of seven (7) tree within Option 1 are to be removed with 1 (one) tree to be transplanted and include:

- 2 x Cupressus sempervirens (Pencil Pine)
- 1 x Jacaranda mimosifolia (Jacaranda)
- 1 x Ligustrum lucidum (Broad-leaved Privet)
- 1 x Camellia spp.
- 1 x Nerium oleander (Oleander) and
- 1 x Celtis sinensis (Chinese hackberry)

A total of ten (10) trees for Option 2 are to be removed as per Option 1 but also:

- 1 x Jacaranda mimosifolia (Jacaranda)
- 1 x Magnolia spp. (Magnolia)
- 1 x Stenocarpus sinuatus (Firewheel tree)

No Koala use trees will be impacted and therefore the proposed development will not impact on Koala habitat and it is considered that no further assessment for Koala is required.

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Figure 3-2 – Design Option 1 - Flora & fauna survey effort & results

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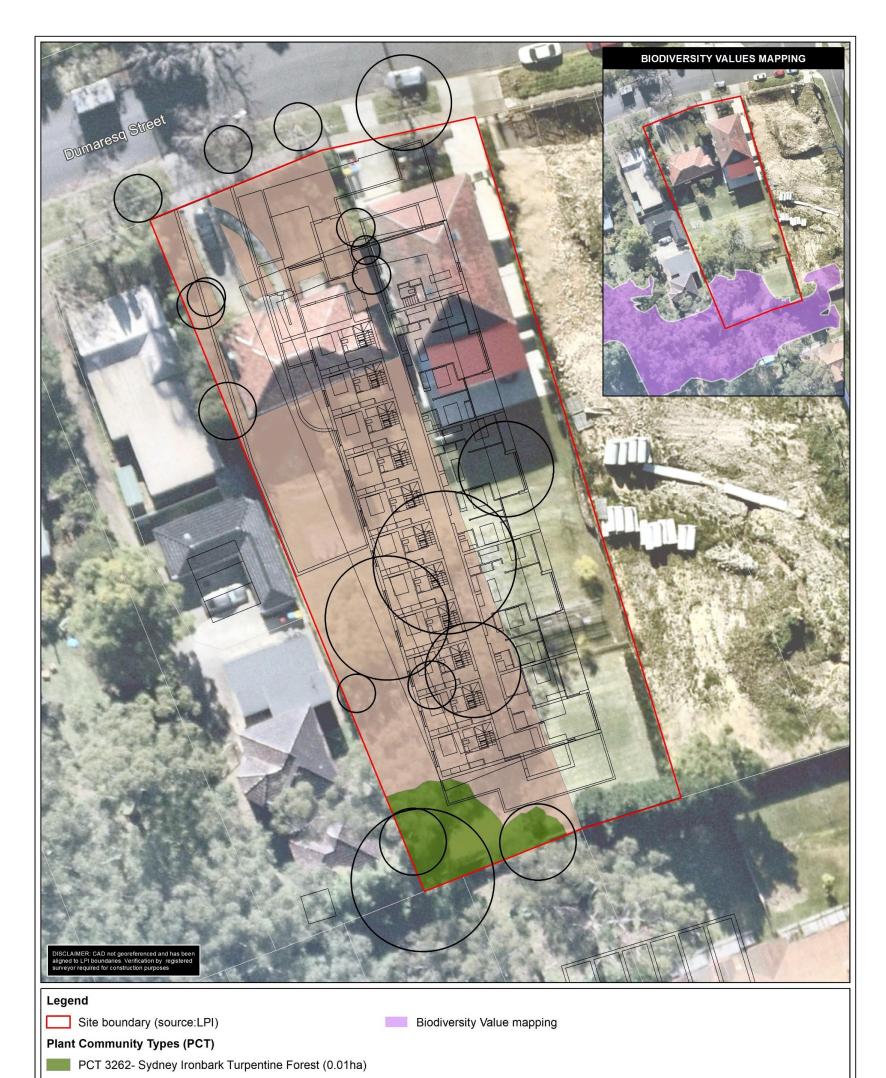




Figure 3-3 – Design Option 2 - Flora & fauna survey effort & results

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4. WATERCOURSES & WETLANDS

4.1 Endangered wetland communities

A number of wetland communities have been listed as an 'endangered ecological community' under the NSW *BC Act*.

Impacts on wetland communities must be assessed under the *BC Act* and if present the management of wetland communities must be given due consideration in accordance with the objectives and principles of management as contained within the NSW Wetlands Policy (2010), and appropriate management as determined by NSW DPIE - Office of Water in their general terms of approval. This may include but not limited to the provision of buffers, management of stormwater runoff and maintenance of natural inflows or runoff into those wetland communities.

- Artesian springs ecological community
- Castlereagh Swamp Woodland Community
- Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner bioregions
- Coastal Upland Swamp in the Sydney Basin bioregion
- Coolibah–Black Box woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain and Mulga Lands bioregions
- Freshwater Wetlands on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions
- Kurri sand swamp woodland in the Sydney Basin Bioregion
- Lagunaria swamp forest on Lord Howe Island
- Maroota Sands swamp forest
- Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion
- Swamp oak floodplain forest of the NSW North Coast, Sydney Basin and South East Corner bioregions
- Swamp sclerophyll forest on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions
- The shorebird community occurring on the relict tidal delta sands at Taren Point
- Upland wetlands of the drainage divide of the New England Tableland Bioregion
- Wingecarribee Swamp

No endangered wetland communities were present within the study area and therefore a referral to NRAR is not required for impacts on waterfront land.

4.2 Groundwater dependent ecosystems (GDEs)

Groundwater dependent ecosystems are communities of plants, animals and other organisms whose extent and life processes are dependent on groundwater. Some examples of ecosystems which depend on groundwater are:

- wetlands;
- red gum forests, vegetation on coastal sand dunes and other terrestrial vegetation;

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- ecosystems in streams fed by groundwater;
- limestone cave systems;
- springs; and
- hanging valleys and swamps.

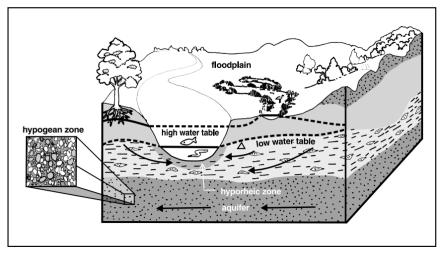


Figure 4-1 – Alluvial groundwater system discharging into a river

Groundwater dependent ecosystems are therefore ecosystems which have their species composition and their natural ecological processes determined by groundwater (NSW State Groundwater Dependent Ecosystems Policy April 2002).

Groundwater Dependent Ecosystems (GDEs) were not observed within the study area and therefore the policy does not require any further consideration. A referral to NRAR is not required for impacts on waterfront land.

4.3 Watercourse assessment

There is an unnamed ephemeral drainage line which flows through the middle of the property. This drainage line flows into Amaroo Gully and ultimately into Blackbutt Creek towards the south as shown in Figure 4-2.

The proposed development will not impact on watercourses or drainage lines shown in Figure 4-2. A referral to NRAR is not required for impacts on waterfront land.

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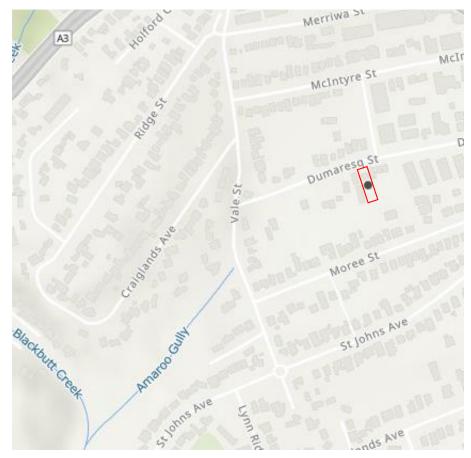


Figure 4-2 – Watercourses mapped onsite (site boundary in red) (Source: Water Management (general) Regulation 2018 hydroline spatial data 1.0)

4.4 Coastal wetlands

The NSW DPE Coastal Wetlands and Littoral Rainforests Area Map

(https://geo.seed.nsw.gov.au/Public_Viewer/index.html?viewer=Public_Viewer&locale=en-AU) identifies that the site is not mapped as "coastal wetlands" or "proximity area for coastal wetlands" Further consideration of this SEPP is therefore not required.

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5. BIODIVERSITY IMPACT ASSESSMENT

5.1 Biodiversity Offsets Scheme (BOS)

The *BC Act* repeals the *Threatened Species Conservation Act* 1995, the *Nature Conservation Trust Act* 2001 and the animal and plant provisions of the *National Parks and Wildlife Act* 1974. Together with the *Biodiversity Conservation Regulation* 2017, the *BC Act* establishes a new regulatory framework for assessing and offsetting biodiversity impacts on proposed developments and clearing. It establishes a framework to avoid, minimise and offset impacts on biodiversity from development through the Biodiversity Offsets Scheme (BOS). Where development consent is granted, the authority may impose as a condition of consent an obligation to retire a number and type of biodiversity credits determined under the Biodiversity Assessment Method (BAM).

Where development consent is granted, the authority may impose as a condition of consent an obligation to retire a number and type of biodiversity credits determined under the BAM.

The Biodiversity Offsets Scheme applies to:

- local development (assessed under Part 4 of the Environmental Planning and Assessment Act 1979) that triggers the Biodiversity Offsets Scheme Threshold or is likely to significantly affect threatened species based on the test of significance in section 7.3 of the Biodiversity Conservation Act 2016
- state significant development and state significant infrastructure projects, unless the Secretary of the Department of Planning, Industry and Environment and the environment agency head determine that the project is not likely to have a significant impact
- biodiversity certification proposals
- clearing of native vegetation in urban areas and areas zoned for environmental conservation that exceeds the Biodiversity Offsets Scheme threshold and does not require development consent
- clearing of native vegetation that requires approval by the Native Vegetation Panel under the <u>Local Land Services Act 2013</u>
- activities assessed and determined under Part 5 of the Environmental Planning and Assessment Act 1979 (generally, proposals by government entities) if proponents choose to 'opt in' to the Scheme.

Proponents will need to supply evidence relating to the triggers for the Biodiversity Offsets Scheme Threshold and the test of significance (where relevant) when submitting their application to the consent authority.

5.2 Threshold assessment

The BOS includes three (3) elements to the threshold test – an area trigger, a Biodiversity Values Land Map trigger and the Test of Significance. If impacts exceed at least one of these triggers, the Biodiversity Offset Scheme applies to the proposed clearing.

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5.2.1 Biodiversity Values Land Map

Biodiversity Values Land has been partially mapped within the study area – an offset is required under this trigger if any of the Biodiversity Values Land is to be impacted. Figure 5-1 below shows the site (blue) in relation to those areas (coloured mauve) as having biodiversity values.

It should be noted however that the current mapping for Biodiversity Values attributed to STIF appears to exceed the actual area of STIF identified during the botanical survey. Comparative areas of current mapped Biodiversity Values Land and the identified extent of PCT 3262 is shown in Figure 5-1 – Biodiversity values land (purple) relative to the development footprint (blue).

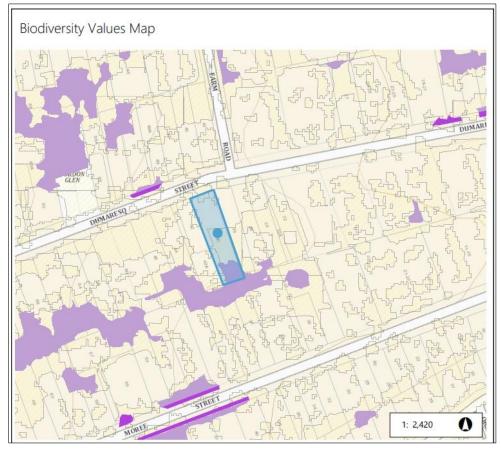


Figure 5-1 – Biodiversity values land (purple) relative to the development footprint (blue) (Source: DPIE – Biodiversity Values Map July 2023)

5.2.2 Area clearing threshold

The area threshold varies depending on the minimum lot size (shown in the Lot Size Maps made under the relevant Local Environmental Plan (LEP), or actual lot size (where there is no minimum lot size provided for the relevant land under the LEP).

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Table 5-1 – BOS entry threshold report

Dat	e of Report Generation	27/06/2023 9:59 AM
Biod	iversity Values (BV) Map Threshold - Results Summary	
1	Does the development Footprint intersect with BV mapping?	yes
2	Was ALL of the BV Mapping within the development footprinted added in the last 90 days? (dark purple mapping only, no light purple mapping present)	no
3	Date of expiry of dark purple 90 day mapping*	N/A
4	Is the Biodiversity Values Map threshold exceeded?	yes
5	Size of the development or clearing footprint	1,511.7 sqm
6		.,
	Native Vegetation Area Clearing Estimate (NVACE)	835.4 sqm
7	Method for determining Minimum Lot Size	LEP
<i>'</i>		
8	Minimum Lot Size (10,000sqm = 1ha)	930 sqm
	Minimum Lot Size (10,000sqm = 1ha) Area Clearing Threshold (10,000sqm = 1ha)	930 sqm 2,500 sqm
8		

Table 5-1 identifies that the BOS entry threshold report has determined the area threshold based on the minimum lot size of 930m², and the area clearing threshold for which the BOS applies is 2,500m². Clearing of 'native vegetation' that exceeds 2,500m² will require a biodiversity offset to be obtained. Note that 'native vegetation' includes planted native species. The development proposal will require the clearing of no native vegetation; therefore, offsetting will not be required under this trigger.

5.2.3 Test of Significance

A detailed test of significance has been applied to Little Bent-winged Bat, Large Bent-winged Bat, Grey-headed Flying-fox, Eastern Pygmy Possum, Barking Owl, White-bellied Sea Eagle and Sydney Turpentine Ironbark Forest within Appendix 3 in accordance with Section 7.2 of the *BC Act*. The test of significance for threatened entities has concluded a non-significant impact.

5.2.4 Areas of Outstanding Biodiversity Value (AOBV)

Areas of Outstanding Biodiversity Value are special areas with irreplaceable biodiversity values that are important to the whole of New South Wales, Australia or globally.

The relevant legislative provisions for AOBV are Part 3, BC Act 2016 and Part 3, BC reg. 2017.

AOBV declarations in New South Wales include the following:

• Gould's Petrel – critical habitat declaration

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- Little penguin population in Sydney's North Harbour critical habitat declaration
- Mitchell's Rainforest Snail in Stotts Island Nature Reserve critical habitat declaration
- Wollemi Pine critical habitat declaration

None of the above occur within the development footprint or will be indirectly impacted.

5.3 Streamlined assessment modules

If for the DA the biodiversity values mapped areas are impacted in any way, the BOS will be triggered. A small area module can apply to developments where impacts are minor within set threshold limits if the biodiversity values mapping does not relate to core Koala habitat. For this site, the biodiversity values relate to protected vegetation, not core Koala habitat, thus if the BOS is triggered, a streamlined assessment under the small area's module can be applied given then area of impact would not exceed the threshold for its application.

The BAM contains three streamlined assessment modules that are set out in Appendices B, C and D of the BAM. The streamlined assessment modules include specific requirements to assess the impacts on biodiversity values for the purpose of preparing a BDAR. These streamlined assessment modules may be used where the proposal impacts on:

- a) scattered trees (Appendix B)
- b) a small area (Appendix C)
- c) planted native vegetation, where the planted native vegetation was planted for purposes such as street trees and other roadside plantings, windbreaks, landscaping in parks and gardens, and revegetation for environmental rehabilitation (Appendix D)

Appendices B, C and D of the BAM set out the circumstances where each of the streamlined assessment modules can be used to assess a proposal and the specific assessment requirements.

The streamlined assessment modules for scattered trees and planted native vegetation may be used in conjunction with the full BAM to assess particular parts of the subject land under a single BDAR.

Streamlined assessment module	Criteria for application	Does the impacted vegetation meet this criterion?	Can this module be applied?
	Scattered trees are defined as species listed in the tree growth form group that:		
Scattered trees	a. have a percent foliage cover that is less than 25% of the benchmark for tree cover for the most likely plant community type and are on category 2-regulated land and surrounded by category 1-exempt land on the Native Vegetation Regulatory Map under the LLS Act, or	no	no

Table 5-2 – Streamlined assessment modules

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Streamlined assessment module	Criteria for application	Does the impacted vegetation meet this criterion?	Can this module be applied?
	b. have a DBH of greater than or equal to 5 cm and are located more than 50 m away from any living tree that is greater than or equal to 5 cm DBH, and the land between the scattered trees is comprised of vegetation that are all ground cover species on the widely cultivated native species list, or exotic species or human-made surfaces or bare ground, or	no	
	c. are three or fewer trees that have a DBH of greater than or equal to 5 cm and are within a distance of 50 m of each other, that in turn, are greater than 50 m away from the nearest living tree that is greater than or equal to 5 cm DBH, and the land between the scattered trees is comprised of vegetation that are all ground cover species on the widely cultivated native species list, or exotic species or human-made surfaces or bare ground.	no	
Small area	 Is the area of native vegetation clearing less than or equal to the thresholds as shown in Table 5-3 (BAM Table 12)? This depends on minimum or actual lot size: For lot size <1 ha, threshold is ≤1 ha For lot size 1–40 ha, threshold is ha ≤2 ha For lot size 40–1000 ha, threshold is ≤3 ha For lots size 1000 ha, threshold is ≤5 ha 	This module may be applied in biodiversity values are impacted at the DA stage, as the impact would be less than 1 ha.	Possibly
Planted native vegetation	Is any planted native vegetation impacted?	Yes, however for such a small area and only a few select trees/shrubs, it is more likely to be considered in a BAR at DA stage under prescribed impacts.	Unlikely

Table 5-3 – Area clearing limits for application of the small area development module

Minimum lot size associated with the property *	Maximum area clearing limit for application of the small area development module
Less than 1 ha	≤1 ha
Less than 40 ha but not less than 1 ha	≤2 ha
Less than 1000 ha but not less than 40 ha	≤3 ha
1000 ha or more	≤5 ha

*shown in the lot size maps made under the relevant local environmental plan (LEP), or actual lot size (where there is no minimum lot size provided for the relevant land under the LEP

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5.3.1 Streamlined assessment module - small area

Table 5-2 identifies that if any native vegetation is impacted, it will fall within the levels whereby a streamlined assessment for small areas may be applicable.

5.3.2 Streamlined assessment module - planted native vegetation

Planted native vegetation occurs as scattered planted specimens and includes nonthreatened species *Acmena smithii*, *Platycerium bifurcatum* and *Stenocarpus sinuatus* within the site. Appendix D of the BAM can be applied to this vegetation. In this case, assessment of the planted native vegetation answers yes to question 5 of the *D.1 Decision-making key*:

"Is the native vegetation (including individuals of a threatened flora species) planted for functional, aesthetic, horticultural or plantation forestry purposes? This includes examples such as: windbreaks in agricultural landscapes, roadside plantings (including street trees, median strips, roadside batters), landscaping in parks, gardens and sport fields/complexes, macadamia plantations or teatree farms?"

As the study area is so small and there are only a few native trees/shrubs planted on site as opposed to a full planting, these may be assessed in the prescribed impacts of a BAR for the future DA.

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5.4 Ecological impacts

The prescribed, direct, indirect and cumulative ecological impacts have been considered in respect to recorded biodiversity, threatening processes and extent of impact as a result of the proposed works. They will need to be considered at the development application stage in further detail as part of the BDAR if triggered by final design.

Prescribed impacts that will need to be considered as the result of the development application stage are prescribed (subject to subclause (2) of the *BC Reg*) as biodiversity impacts to be assessed under the biodiversity offsets scheme. The prescribed potential impacts relevant to the development proposal are:

- Human made structures,
- Non-native vegetation,
- Vehicle strikes on threatened species of animals or on animals that are part of a threatened ecological community

The consequences of these prescribed impacts are minor, particularly given that each of them may be ameliorated through appropriate management measures which are tabulated in the following sections.

As part of the rezoning process, we are reviewing two (2) proposed options for residential development on site. Option 1 is the development of 10 townhouses, and Option 2 is a 6-storey residential complex. The overall development footprint for both options is very similar. Surveyed trees 13, 14 and 15 (from the Arboriculture Impact Assessment) refer to the remnant native trees in the south-western corner of the site. Under Option 1, the arborist has suggested that all 3 trees are likely to be retained. Under Option 2, more trees will be removed on site, however the 3 remnant trees could also quite likely be retained.

In terms of ecological impact of the rezoning, it will have very minor impacts on local ecology that could be improved over time through more appropriate planting of native trees and understorey in landscaping beds around the property.

It is assumed that only some peripheral native groundcovers would be impacted by the proposal within the area mapped as Sydney Turpentine Ironbark Forest, less than 0.01 ha $(100m^2)$ for both Option 1 and 2.

The impact for either option will also impact mapped biodiversity values land. Before lodgement of the DA, the proponent may seek to have the mapping modified on the site. Any impact on biodiversity values land will trigger the requirement of the BOS. Based on area alone, the maximum credit value would be 1 ecosystem credit, and potentially may require 1 species credit for Large-eared Pied Bat unless it can be confirmed there is no habitat within a 2 km radius of the site. The cost of the credits for these entities are very high, so the proponent should look into either a) have the biodiversity values map amended, or b) trim back the development footprint at the rear to avoid impacts on biodiversity values as they don't just relate to the trees, but all layers of vegetation.

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Mitig
5.5

The following mitigation measures are recommended to avoid, minimise or ameliorate the above potential ecological impacts, address threatening processes and to guide a more positive ecological outcome for threatened species and their associated habitats.

Table 5-4 – Mitigation Measures

)
Action / Technique	Outcome	Timing / Frequency	Responsibility
Sediment and erosion control measures in accordance with Managing Urban Stormwater: Soils and Construction (Landcom 2004) to minimise impact of possible sedimentation to local drainage lines.	Maintain integrity of nearby bushland habitat and natural topsoil soil by preventing deposition	Prior to any clearing works. Ongoing during all exposed soil stages until landscaping is completed	Project Ecologist / Contractors
Temporary fencing - Where they adjoin the development areas, the boundaries of the conserved vegetation areas shall be clearly marked out on-site to ensure their protection. All areas of natural vegetation retention shall be protected by fencing, prior to construction, to ensure that these areas are not damaged during the construction phase.	the development areas, the Maintain integrity of remaining as shall be clearly marked out natural habitat of natural vegetation retention truction, to ensure that these tion phase.	Prior to construction / habitat Project Ecologist dearance Contractors	Project Ecologist / Contractors
Prior to any habitat removal, a comprehensive search for fauna and habitat is to be undertaken to relocate any terrestrial individuals and native species clearance clearance individuals. The second	Reduce potential for impact on native species	Immediately prior to land clearance	Project Ecologist
Management of any other displaced fauna	Prevent direct impacts on Prior to and during habitat Project Ecologist nesting and terrestrial native removal / Adaptive fauna species management required	Prior to and during habitat removal / Adaptive management required	Project Ecologist
Utilise flora species of local origin for landscaping, particularly thoseAssist in the preservation ofPost constructionfrom PCT 3262 (Sydney Turpentine Ironbark Forest)local fauna feed resources	Assist in the preservation of local fauna feed resources	Post construction	Contractors

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5.6 Avoidance and minimisation actions

Given the impact of development and condition of TECs, threatened plants or any notable habitat features, the following avoidance actions have been undertaken to either avoid or minimise impacts on biodiversity values:

- The proposal shall be located to maximise usage of already cleared / impacted areas
- The intent is that no native vegetation will be impacted, and the arborist report supports the retention of the three (3) remnant native trees at the rear of the property
- The proposed concept plans (Option 1 & Option 2) have generally been located to avoid all impacts on lands mapped as having Biodiversity Values
- Rezoning the site will not impact on TEC Sydney Turpentine Ironbark Forest remnant trees. Concept plans are setback from the boundary to potential retain the three (3) trees pertaining to this remnant, however refinement may be required to see how these are sighted against the tree protection zones, biodiversity values mapping, and impacts from shading.
- The rezoning seeks to remove 7 trees for Option 1 or 10 trees for Option 2 including the following for Option 1:
 - 2 x Cupressus sempervirens (Pencil Pine)
 - 1 x Jacaranda mimosifolia (Jacaranda)
 - 1 x Ligustrum lucidum (Broad-leaved Privet)
 - 1 x Camellia spp.
 - 1 x Nerium oleander (Oleander) and
 - 1 x Celtis sinensis (Chinese Hackberry)

For Option 2, the following additional trees will be impacted:

- 1 x Jacaranda mimosifolia (Jacaranda)
- 2 x *Magnolia* spp. (Magnolia)
- The development within Option 1 requires the transplantation of one (1) exotic tree species:
 - 1 x Magnolia spp (tree 12).



6. CONCLUSION

Ecological survey assessment has been undertaken in accordance with relevant legislation including the *Environmental Planning and Assessment Act* 1979, the *Biodiversity Conservation Act* 2016, the commonwealth *Environment Protection and Biodiversity Conservation Act* 1999 and the *Fisheries Management Act* 1994.

6.1 Recorded biodiversity

In respect of matters required to be considered under the *Environmental Planning and Assessment Act 1979* and relating to the species and provisions of the *Biodiversity Conservation Act 2016*, No threatened fauna species no threatened flora species, no endangered populations and one (1) TEC *Sydney Turpentine Ironbark Forest in the Sydney Basin Bioregion* were recorded within the study area. The vegetation on site does not qualify for inclusion under the *EPBC Act* definition, being too small and too degraded.

6.2 Impact summary

The state assessment of significance (Appendix 3) has concluded that the proposed development will not have a significant impact on any threatened species, populations or TECs. Therefore, (a) a Species Impact Statement is not required for the proposal and (b) biodiversity offsetting is not required under this trigger. The BOS may still be triggered at DA stage if biodiversity values are impacted.

6.3 Ecological constraints and considerations

The ecological constraints present within the study area are summarised below.

- The native vegetation present on the site is commensurate with the critically endangered TEC Sydney Turpentine Ironbark Forest. The current proposal has successfully shown avoidance of any impacts to remnant trees in vegetation extent, but that does not preclude impacts to any native species in the ground layer. The impacts are very minor, but these occur in an area that has been mapped as containing biodiversity values. However, in the event that future development proposals indicate potential impacts on the Sydney Turpentine Ironbark Forest, it will be obligatory to conduct a Biodiversity Development Assessment Report unless the mapping is changed / amended or the development footprint is moved. The BDAR will need to include a Biodiversity Credit Assessment to determine the offsetting requirements for the proposal. An assessment of Serious and Irreversible Impacts will also be needed for entities including *Sydney Turpentine Ironbark Forest*.
- Figure 5-1 shows that Biodiversity Values Land is mapped to the south west of the proposed development area. However, the current mapping for Biodiversity Values attributed to STIF appears to exceed the actual area of STIF identified during the botanical survey. Comparative areas of current mapped Biodiversity Values Land and the identified extent of PCT 3262 is shown in Figure 5-1. Should the proposed development show impacts on lands mapped as having Biodiversity Values and a subsequent Council request for a BDAR is imposed, it is considered that the proponent may apply for a mapping review of the land.

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https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity-offsetsscheme/about-the-biodiversity-offsets-scheme/when-does-bos-apply/biodiversity-valuesmap/biodiversity-values-map-review

6.4 Suitability of the proposed rezoning

Given the lack of habitat attributes on site and presence of only three (3) remnant trees at the rear of the property, rezoning the site from R2 to R3 should be feasible from an ecological perspective. The proponent has intentions on retaining the vegetation on site, so from a rezoning perspective, this should be seen as meeting the 'avoidance' requirements of BAM 2020, and it has been assumed that the remnant native trees will be retained for the test of significance.

There are 2 options within the master plan for the rezoning. We are of the opinion that whilst both have a very similar development footprint impact, the proposed Option 1 townhouse development will impact less trees and will have a much less shade impact on retained trees of Sydney Turpentine Ironbark Forest origin.

The proposal should consider how the remnant trees are going to be protected in perpetuity and how native landscaping can improve the local amenity and provide a food resource for some local fauna, to a higher degree than what is currently present.

6.5 Requirements for a DA

This report may be updated for a DA submission <u>if</u> the plans do not impact biodiversity values land and the BOS is not triggered.

Any impact to biodiversity values land, or the required removal of and of the three (3) trees at the rear of the property will trigger a BDAR and the Biodiversity Offset Scheme (BOS).

If the proposal does trigger the BOS, the proponent may apply to have the biodiversity values remapped as they appear to be slightly larger that what has been verified on site.

If the BOS is still triggered, the streamlined assessment for small areas can be applied, whereby only potential entities at risk of serious and irreversible impacts (SAIIs) require assessment.

Proposed Option 2 appears to be impacting biodiversity values land. As, such the BOS will be triggered and a streamlined assessment would be required, or alternatively, the proponent may seek to have the biodiversity values land reviewed before the DA assessment.

The arborist assessment report will require updating to consider ancillary impacts such as water, sewer, NBN, and cut/fill applications around the site, and the proximity of each tree to these.

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7. **BIBLIOGRAPHY**

Bladon, R. V., Dickman, C. R., and Hume, I. D. (2002). Effects of habitat fragmentation on the demography, movements and social organization of the eastern pygmy possum (*Cercartetus nanus*) in northern New South Wales. *Wildlife Research* 29, 105–116.

Churchill, S. (2008). Australian Bats. Allen & Unwin

Cropper, S. (1993) Management of endangered plants. CSIRO Publications, Melbourne.

DEC (2004) Survey and Assessment: Guidelines for developments and activities (working draft), New South Wales Department of Environment and Conservation, Hurstville, NSW.

DECC (2005) Flying-fox Camp Management Policy

DECC (Department of Environment and Climate Change NSW) (2007). Threatened species assessment guidelines: the assessment of significance. Department of Environment and Climate Change NSW.

DECCW & Water NSW (2010). *NSW Wetlands Policy* – NSW Department of Environment, Climate Change.

Department of the Environment (2014). Approved Conservation Advice for Turpentine-Ironbark Forest in Sydney Basin Bioregion. Canberra: Department of the Environment.

Department of the Environment (2017). Haliaeetus leucogaster in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat.

- DPE (2019) *Biodiversity Assessment Method Operational Manual: Stage 2.* State of NSW and Department of Planning, Industry and Environment.
- DPE (2020) *Biodiversity Assessment Method.* State of NSW and Department of Planning, Industry and Environment.
- DPE (2022) State Vegetation Type Map (Eastern NSW)

DPE (2023) Atlas of NSW Wildlife (BioNet).

Dwyer, P.D. (1995a) Common Bentwing-bat (*Miniopterus schreibersii*). In *The Mammals of Australia*. R. Strahan (Ed.) Reed Books, Chatswood.

Dwyer, P.D. (1995b) Little Bentwing-bat (Miniopterus australis). In The Mammals of Australia. R. Strahan (Ed.) Reed Books, Chatswood.

Eby, P. & Lunney, D. (2002) *Managing the Grey-headed Flying-fox as a threatened species in NSW*, Royal Zoological Society of New South Wales;

Garnett, S. T. and Crowley, G. M. (2000) *The Action Plan for Australian Birds 2000*. Natural Heritage Trust. Environment Australia, Canberra ACT.

Goldingay, R. L. (2011). Characteristics of tree hollows used by Australian arboreal and scansorial mammals. *Australian Journal of Zoology* 59, 277–294.

Higgins, P. J. (Ed). (1999) Handbook of Australian, New Zealand and Antarctic Birds. Volume 4: Parrots to Dollarbird. Oxford University Press, Melbourne.

Ecological Assessment Report

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Hoye, G.A. & Hall L.S. (2008) Eastern Bentwing-bat (*Miniopterus schreibersii oceansis*). In *The Mammals of Australia*. R. Strahan (Ed.) Reed New Holland, Sydney.

Kavanagh, R. P. (1997) *Ecology and Management of Large Forest Owls in South-eastern Australia.* PhD thesis, University of Sydney, Sydney.

Lindsey, T. R. (1992) *Encyclopedia of Australian Animals - Birds*. Angus and Robertson Publishers, Sydney.

NSW National Parks and Wildlife Service (2001) Grey-headed Flying-fox (*Pteropus poliocephalus*) Threatened Species Information;

- OEH (2016) The Native Vegetation of the Sydney Metropolitan Area. NSW Office of Environment and Heritage, Sydney
- OEH (2017) *Biodiversity Assessment Method.* NSW Office of Environment and Heritage, Sydney.
- OEH (2018b) *Biodiversity Assessment Method Operational Manual Stage 1.* NSW Office of Environment and Heritage, Sydney.
- OEH (2018c) *Threatened Species Test of Significance Guidelines*. NSW Office of Environment and Heritage, Sydney.

Office of Environment & Heritage. (2023). Large Bent-winged Bat – profile. https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10534

Robinson, L. (2003) Field Guide to the Native Plants of Sydney. 3rd ed. Simon & Shuster.

Rueegger, N.N., Goldingay, R.L. and Brooks, L.O. (2012). Does nest box design influence use by the eastern pygmy-possum? *Australian Journal of Zoology* 60, 372-380.

Schodde, R. and Tidemann, S. (Eds) (1986) *Readers Digest complete book of Australian Birds.* Second Edition. Reader's Digest Services Pty Ltd, Sydney.

Snoyman, S. (2008) *Micro-climate Preferences of the Grey-headed Flying-fox, Pteropus Policephalus (Chiroptera: Pteropodidae), within the Sydney Region.* Macquarie University, Honours Thesis, Dept of Environmental Sciences.

Strahan, R. (Ed) (1995) The Mammals of Australia The Australian Museum/Reed Books Sydney.

TBE (2024a) Arboricultural Impact Assessment Report. Travers bushfire & ecology

Tideman, C.R., Eby P., Parry-Jones K.A. and Nelson J.E. (2008) Grey-headed Flying-fox *Pteropus poliocephalus* Temminck, 1825. In *The Mammals of Australia*. Strahan, R. (ed). Reed Books, Chatswood;

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Appendix 1. Flora & Fauna Species Lists

Table 7-1 – Flora species recorded (Appendix 1)

Family	Scientific name	Common name	
TREES			
Sapindaceae	Acer palmatum*	Japanese Maple	
Theaceae	Camellia japonica*	Japanese Camellia	
Theaceae	Camellia sasanqua*	Sasanqua Camellia	
Cannabaceae	Celtis occidentalis*	Hackberry	
Rutaceae	Citrus limon*	Lemon Tree	
Cupressaceae	Cupressus sempervirens*	Mediterranean Cypress	
Myrtaceae	Eucalyptus pilularis	Blackbutt	
Oleaceae	Fraxinus excelsior*	European Ash	
Bignoniaceae	Jacaranda mimosifolia*	Jacaranda	
Magnoliaceae	Magnolia grandiflora*	Magnolia	
Proteaceae	Stenocarpus sinuatus	Firewheel Tree	
Myrtaceae	Syncarpia glomulifera	Turpentine	
SHRUBS			
Myrtaceae	Acmena smithii	Lillypilly	
Bambuseae	Bambusa vulgaris*	Common Bamboo	
Hydrangeaceae	Hydrangea macrophylla*	Hydrangea	
Rubiaceae	Gardenia magnifica*	Gardenia	
Euphorbiacae	Euphorbia pulcherrima*	Poinsettia	
Rutaceae	Murraya paniculata*	Orange Jessamine	
Berberidaceae	Nandina domestica*	Sacred bamboo	
Ochnaceae	Ochna serrulata*	Micky Mouse Plant	
Rosaceae	Rhaphiolepis indica*	Indian Hawthorn	
Ericaceae	Rhododendron spp.*	Azalea	
Strelitziaceae	Strelitzia reginae*	Bird of Paradise	
GROUNDCOVERS			
Amaryllidaceae	Agapanthus spp. *	Agapanthus	
Asparagaceae	Agave spp. *	Agave	
Asphodelaceae	Aloe vera*	Aloe vera	
Asparagaceae	Aspidistra elatior*	Cast Iron Plant	
Asparagaceae	Asparagus aethiopicus*	Asparagus fern	
Crassulaceae	Bryophyllum spp. *	Mother of Millions	
Asparagaceae	Chlorophytum comosum*	Spider Plant	
Amaryllidaceae	Clivia miniata*	Bush Lily	
Commelinaceae	Commelina cyanea	Scurvy weed	
Poaceae	Cynodon dactylon	Blue Couch	
Iridaceae	Dietes grandiflora*	Fairy Iris	
Poaceae	Ehrharta erecta*	Panic Veldtgrass	
Asparagaceae	Liriope muscari*	Lily Turf	
Lobeliaceae	Lobelia purpurascens	Whiteroot	
Liliaceae	Nothoscordum borbonicum*	Onion Weed	

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Family	Scientific name	Common name	
Oxalidaceae	Oxalis spp. *	-	
Pittosporaceae	Pittosporum undulatum	Sweet pittosporum	
urticaceae	Parietaria judaica*	Pellitory	
Polypodiaceae	Platycerium bifurcatum	Elk Horn	
Poaceae	Stenotaphrum secundatum*	Buffalo grass	
comellinaceae	Tradescantia fluminensis*	Wandering Jew	
Asteraceae	Taraxacum officinale*	Dandelion	
Apocyanaceae	Trachelospermum jasminoides*	Star jasmine	
VINES			
Moraceae	Ficus pumila*	Climbing fig	
Araliaceae	Hedera helix*	lvy	
Convolvulaceae	Ipomea indica*	Morning Glory	
Convolvulaceae	lpomea purpurea*	Common Morning Glory	
* denotes exotic species TS denotes threatened species			

It should be noted that not all garden, cultivar or landscape species have been identified as part of this assessment.

Table 7-2 – Fauna species recorded (Appendix 1)

Common name	Common name Scientific name Method observed				
Birds					
Noisy Miner Manorina melanocephala O W					
Mammals					
Rabbit *	Rabbit * Oryctolagus cuniculus P				
^{TS} indicates threate ^{MS} indicates Migrate All species listed a ^{PR} indicates specie					
E - Nest/roost H - Hair/feathers/skin P - Scat W - Heard call F-Tracks/scratchings K - Dead Q - Camera X - In scat FB - Burrow O - Observed T - Trapped/netted Y - Bone/teeth/shell G - Crushed cones OW- Obs & heard call U- Anabat/ultrasound Z - In raptor/owl pellet					

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Appendix 2. Threatened Flora & Fauna Habitat Assessment

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Table 7-3 – Threatened flora species habitat assessment (Appendix 2)

	Considered in test of significance test (√) Refer to Appendix 3	Q	e	Q	ę	2
	Considered test of significan test (√) Refer to Appendix	C	C	C	C	C
	Potential to occur	оц Ц	е С	unlikely	unlikely	e e
If not recorded on site	Record(s) from recent years (y/n) Notes 1,2 & 3	ou	ou	yes	yes	ou
If not recor	Nearby and / or high number of record(s) (y/n) Notes 1,2 & 3	2	2	yes	yes	Q
	Suitable habitat present (y/n)	ou	Q	Q	0 L	Q
	Recorded on site (y/n)	Q	ou	Q	ou	ou
	Growth form and habitat requirements Distribution limit	Erect or spreading shrub to 0.3 m high growing in heath and dry sclerophyll open forest on sandy soils. Often associated with disturbed areas such as roadsides. <i>Distribution limits N-Newcastle S-</i> <i>Berrima</i> .	Shrub to 4 m high. Dry sclerophyll forest on coast and adjacent ranges. Distribution limits N-Nelson Bay S-Georges River.	Erect or spreading shrub to 0.8 m high. Grows in heath or understorey of woodland on or near shale-capped ridges underlain by Hawkesbury sandstone. <i>Distribution limits N-Gosford S-</i> <i>Cheltenham</i> .	Erect shrub to 1.5 m high growing in sclerophyll forest and scrub and near creeks and swamps on sandstone. Distribution limits N-Gosford S-Blue Mountains.	Stringybark to 10 m high. Grows on coastal shrub heath and woodlands on sandy soils derived from alluviums and Hawkesbury sandstone.
	EPBC Act	>		>	,	>
	BC Act	Щ Ш	>	>	>	>
	Scientific name DATABASE SOURCE	Acacia bynoeana _{DPE} EPBC	Callistemon linearifolius ^{DPE}	Darwinia biflora DPE EPBC	Epacris purpurascens var. purpurascens ^{DPE}	Eucalyptus camfieldii DPE EPBC

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ATTACHMENT NO: 8 - APPENDIX F - 40 DUMARESQ STREET, GORDON - ECOLOGICAL ASSESSMENT REPORT (29 NOV 2024)

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	Considered in test of significance test (✓) Refer to Appendix 3	ê	ĉ	ĉ	ĉ	2
	Potential to occur	ou	Q	ou	Q	ou
If not recorded on site	Record(s) from recent years (y/n) Notes 1,2 & 3	ou	ou	ou	ou	n/a
If not recor	Nearby and / or high number of (y/n) Notes 1,2 & 3	2	2	2	2	n/a
	Suitable habitat present (y/n)	ou	e	0 L	0 L	02
	Recorded on site (y/n)	ou	QU	QU	QU	ou
	Growth form and habitat requirements Distribution limit	This species is widely planted as an urban street tree and in gardens but is quite rare in the wild. It is confined to the New England Tablelands of NSW, where it occurs from Nundle to north of Tenterfield, largely on private property.	A terrestrial orchid that grows in sparse sclerophyll forest and moss gardens over sandstone. Flowers Feb–Mar. Distribution limits N – Hunter Valley S – Nowra.	A small lithophytic fern with fronds generally <5 cm. Occurs in rainforest and wet sclerophyll forest in the coastal divisions of NSW. Usually grown on rocks.	Erect to spreading shrub 0.5-1.5 m tall. Grows on soils derived from Wianamatta Shale, laterite and Tertiary alluvium. <i>Distribution limits St Marys-</i> <i>Londonderry-Prospect</i> .	Straggling shrub to 1.5 m high. Grows in open forest on sheltered slopes near creeks. Distribution limits Ku-ring-gai Plateau and Mt Wilson.
	EPBC Act	>	ш		•	ш
	BC Act	>	Ē	Ē	>	Ē
	Scientific name DATABASE SOURCE	Eucalyptus nicholii _{DPE}	Genoplesium baueri DPE EPBC	Grammitis stenophylla ^{DPE}	Grevillea juniperina subsp. juniperina DPE	Haloragodendron Iucasii DPE EPBC

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	Considered in test of significance test (√) Refer to Appendix 3	2	ou	Q	yes	ou
	Potential to occur	ou	ou	ou	yes	ou
If not recorded on site	Record(s) from recent years (y/n) Notes 1,2 & 3	ę	ou	ou	yes	ou
If not recor	Nearby and / or high number of (y/n) Notes 1,2 & 3	2	оц С	2	yes	2
	Suitable habitat present (y/n)	ê	ou	0 L	e	ê
	Recorded on site (y/n)	ę	ou	ou	2	ou
	<i>EPBC</i> Growth form and habitat requirements Act Distribution limit	Grows in forest with canopy species including <i>E. pilularis, E. resinitera, C. gummitera</i> and <i>A. costata.</i> The understorey is open with species of Poaceae, Orchidaceae, Fabaceae and Liliaceae. Flowers Oct-Nov with odd flowers throughout the year. Substrate is identified as a light clay occurring on a shale sandstone soil transition.	Erect shrub to 2 m high. Grows in heath and open forest on Hawkesbury sandstone. <i>Distribution limits Hornsby Plateau</i> .	Shrub to 5 m high. Grows on forested slopes. Distribution limits near watershed of Lane Cove River.	The species was known to occur in north-east New South Wales and was collected from Carnden Haven, and there are specimens also from Lismore. This species grows in remnant rainforest, indefers partially open areas such as rainforest edges.	Shrub to 3 m high. Grows in heath on sandstone. Distribution limits N-Gosford S-Nowra.
	EPBC Act	Ю	>	>	>	>
	BC Act	E4A	>	>	•	>
	Scientific name DATABASE SOURCE	Hibbertia spanantha DPE EPBC	Lasiopetalum joyceae ^{DPE EPBC}	Leptospermum deanei DPE EPBC	Macadamia integrifolia EPBC	<i>Melaleuca deanei</i> DPE EPBC

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	Considered in test of significance test (^v) Refer to Appendix 3	2	e	ĉ	yes	2	ĉ	
	Potential to occur	ou	Q	0 L	yes	ou	Q	
If not recorded on site	Record(s) from recent years (y/n) Notes 1,2 & 3	ou	ou	<u>e</u>	yes	ou	O	
If not recor	Nearby and / or high number of record(s) (y/n) Notes 1,2 & 3	2	2	2	yes	2	Q	
	Suitable habitat present (y/n)	ou	ou	e e	0 L	0L	Q	
	Recorded on site (y/n)	ou	ou	2	ou	ou	ou	
	Growth form and habitat requirements Distribution limit	Woody herb or sub-shrub to 0.2-1.2 m high. Grows on Hawkesbury Sandstone near shale outcrops. <i>Distribution Sydney</i> .	Underground orchid that is poorly known. Grows in sclerophyll forests. Usually only seen if the soil is disturbed. Flowers in Oct – Nov.	Shrub or small tree to 25 m high found in rainforest and riparian vegetation along the coast and up to 600 m ASL. Flowers in late winter through to spring, with a peak in October, and fruits typically begin to appear in December in the Sydney region. Distribution limits N-Tweed Heads S-Batemans Bay.	Small tree. Subtropical and littoral rainforest on sandy soil. Distribution limits N-Forster S-Jervis Bay.	Spreading shrub to 0.2 m high. Sandy or rocky heath or scrub. <i>Distribution limits N-Mangrove</i> Mountain S-Port Jackson.	In NSW known from two localities, Cape Solander in Botany Bay National Park in southern Sydney, and Bago State Forest south of Tumut. Grows in heath.	
	EPBC Act	>	ш	Ю	>	ı	,	
	BC Act	>	>	E4A	>	>	E4A	
	Scientific name DATABASE SOURCE	Pimelea curviflora var. curviflora DPE EPBC	Rhizanthella slateri DPE EPBC	Rhodamnia rubescens _{DPE EPBC}	Syzygium paniculatum ^{DPE EPBC}	Tetratheca glandulosa ^{DPE}	Thelymitra atronitida ^{DPE}	

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Table 7-4 – Threatened fauna species habitat assessment (Appendix 2)

				If not recor	If not recorded on site		Considered
EPBC Act	Preferred habitat Distribution limit	Recorded on site (y/n)	Suitable habitat present	# records within 10km since July 2002	# records within ~500m since July 2002	Potential to occur	in test of significance (y/n) Refer to Appendix 3
ш	Terrestrial inhabitant of rainforest and open forests. Distribution limit: N-Border Ranges National Park. S-Narooma.	ou	Q	7	0	OU	ou
	Prefers sandstone areas, breeds in grass and debris beside non-perennial creeks or gutters. Individuals can also be found under logs and rocks in non-breeding periods. <i>Distribution</i> <i>limit: N-Pokolbin. S-near Wollongong.</i>	2	2	65	ο	2	0
	Hawkesbury sandstone outcrop specialist. Inhabits woodlands, dry open forests and heathland sheltering in burrows, hollow logs, rock crevices and outcrops. <i>Distribution limit:</i> <i>N-Nr Broke. S-Nowra Located in scattered</i> patches near Sydney, Nowra and Goulburn.	2	2	8	0	ĉ	2
	Occurs in dense rainforests with a substantial understorey where it feeds entirely on fruit. Distribution limit: N-Tweed Heads. S- Wollongong.	2	2	-	0	OL	OL
	Occurs in tropical to warm temperate terrestrial wetlands, estuarine and littoral habitats such as mangroves, tidal mudflats, floodplains, open woodlands, irrigated lands, bore drains, sub-artesian pools, farm dams and sewerage ponds. <i>Distribution limit</i> : <i>N</i> - <i>Tweed Heads. S-Nowra</i> .	2	2	~	0	ê	о с
ш	Found in or over water of shallow freshwater or brackish wetlands with tall reedbeds, sedges, rushes, cumbungi, lignum and also in ricefields, drains in tussocky paddocks, occasionally saltmarsh, brackish wetlands. Distribution limit: N-North of Lismore. S- Eden.	ĉ	2	~	0	СL СL	2

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						If not recor	If not recorded on site		Considered
Common name Scientific name Database source	BC Act	EPBC Act	Preferred habitat Distribution limit	Recorded on site (y/n)	Suitable habitat present	# records within 10km since July 2002	# records within ~500m since July 2002	Potential to occur	in test of significance (y/n) Refer to Appendix 3
Black Bittern Ixobrychus flavicollis ^{DPE}	>		Found in shadowy, leafy waterside trees such as callistemons, casuarinas, paperbarks, eucalypts, mangroves and willows along tidal creeks, freshwater and brackish streams and ponds, sheltered mudflats and oyster slats. <i>Distribution limit: N-Tweed Heads. S-South of</i> <i>Eden.</i>	e	2	ω	o	2	2
White-bellied Sea Eagle (<i>Haliaeetus</i> <i>leucogaster</i>) DPE	>		Occupies coasts, islands, estuaries, inlets, large rivers, inland lakes and reservoirs. Sedentary: dispersive. N-Tweed Heads. S- South of Eden.	2	poor	52	0	moderate	yes
Little Eagle Hieraaetus morphnoides	>		Utilises plains, foothills, open forests, woodlands and scublands; river red gums on watercourses and lakes. <i>Distribution limit - N-</i> <i>Tweed Heads</i> . <i>S-South of Eden.</i>	Q	e	N	0	Q	2
Square-tailed Kite Lophoictínia isura _{DPE}	>		Utilises mostly coastal and sub-coastal open forest, woodland or lightly timbered habitats and inland habitats along watercourses and mallee that are rich in passerine birds. Distribution limit: N-Goondiwindi. S-South of Eden.	ĉ	unlikely foraging habitat	1	0	low	yes
Eastern Osprey Pandion cristatus	>		Utilises waterbodies including coastal waters, inlets, lakes, estuaries and offshore islands with a dead tree for perching and feeding. Distribution limit: N-Tweed Heads. S-South of Eden.	Q	2	ω	0	2	2
Gang-gang Cockatoo <i>Callocephalon</i> <i>fimbriatum</i> ^{DPE}	>		Prefers wetter forests and woodlands from sea level to > 2,000 m on the Great Dividing Range, timbered foothills and valleys, timbered watercourses, coastal scrubs, farmlands and suburban gardens. <i>Distribution limit: mid north</i> coast of NSW to western <i>Victoria</i> .	ĉ	unlikely foraging habitat	ω	0	low	yes
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						If not recor	If not recorded on site		Considered
Common name Scientific name ^{Database source}	BC Act	EPBC Act	Preferred habitat Distribution limit	Recorded on site (y/n)	Suitable habitat present	# records within 10km since July 2002	# records within ~500m since July 2002	Potential to occur	in test or significance (y/n) Refer to Appendix 3
South-eastern Glossy Black- Cockatoo Calyptorhynchus <i>lathami lamthami</i> ope EPBC	>	>	Open forests with Allocasuarina species and hollows for nesting. Distribution limit: N-Tweed Heads. S-South of Eden.	ê	e	۲	O	2	2
Little Lorikeet Glossopsitta pusilla DPE	>		Inhabits forests, woodlands; large trees in open country; timbered watercourses, shelterbeds, and street trees. <i>Distribution limit: N-Tweed Heads. S-South of Eden.</i>	OL	unlikely foraging habitat	Q	0	low	yes
Swift Parrot Lathamus discolour DPE EPBC	ш	ш	Inhabits eucalypt forests and woodlands with winter flowering eucalypts. <i>Distribution limit</i> . <i>N-Border Ranges National Park.</i> S-South of Eden.	OL	unlikely foraging habitat	Ø	0	low	yes
Turquoise Parrot Neophema pulchella ^{DPE}	>		Inhabits coastal scrubland, open forest and timbered grassland, especially ecotones between dry hardwood forests and grasslands. Distribution limit: N-Near Tentertield. S-South of Eden.	0 L	2	-	0	02	OU
Barking Owl <i>Ninox connivens</i> DPE	>		Inhabits principally woodlands but also open forests and partially cleared land and utilises hollows for nesting. <i>Distribution limit: N-Border</i> <i>Ranges National Park. S-Eden.</i>	OL	unlikely foraging habitat	Q	0	low	yes
Powerful Owl <i>Ninox strenua</i> ^{DPE}	>		Forests containing mature trees for shelter or breeding and densely vegetated gullies for roosting. Distribution limits: N-Border Ranges National Park. S-Eden.	OL	poor – no breeding habitat	705	ო	high	yes
Masked Owl Tyto novaehollandiae	>		Open forest and woodlands with cleared areas for hunting and hollow trees or dense vegetation for roosting. <i>Distribution limit:</i> N- Border Ranges National Park. S-Eden.	0 L	2	N	o	ou	2

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						If not recor	If not recorded on site		Considered
Common name Scientific name ^{Database source}	BC Act	EPBC Act	Preferred habitat Distribution limit	Recorded on site (y/n)	Suitable habitat present	# records within 10km since July 2002	# records within ~500m since July 2002	Potential to occur	In test of significance (y/n) Refer to Appendix 3
White-throated Needletail ^{MS} <i>Hirundapus</i> <i>caudacutus</i> DPE EPBC	ı	>	Airspace over forests, woodlands, farmlands, plains, lakes, coasts, towns; companies often forage along favoured hilltops and timbered ranges. Breeds Siberia, Himalayas, east to Japan. Summer migrant to eastern Australia. Distribution limit: N-Tweed Heads. S-South of Eden.	e	unlikely foraging habitat	თ	O	low	yes
Brown Treecreeper Climacteris picumnus victoriae	>		Occupies eucalypt woodlands, open woodland lacking a dense understorey with fallen dead timber. Distribution limit: (Sub species victoriae) Central NSW west of Great Div. Cumberland Plains, Hunter Valley, Richmond, Clarence, and Snowy River Valleys.	2	2	-	0	2	2
Varied Sittella Daphoenositta chrysoptera ^{DPE}	>		Open eucalypt woodlands / forests (except heavier rainforests); mallee, inland acacia, coastal tea-tree scrubs; golf courses, shelterbelts, orchards, parks, scrubby gardens. Distribution limit: N-Border Ranges National Park. S-South of Eden.	2	2	-	0	2	2
Dusky Woodswallow <i>Artamus</i> <i>cyanopterus</i> ^{DPE}	>		Found in woodlands and dry open sclerophyll forests, usually dominated by eucalypts, including mallee associations. It has also been recorded in shrublands and heathlands and various modified habitats, including regenerating forests; very occasionally in moist forests or rainforests. Prefers habitat with an open understorey. Often observed in farmland tree patches or roadside remnants. <i>Widespread in eastern</i> , southern and south-western Australia.	2	2	~	0	2	2
Spotted-tailed Quoll Dasyurus maculatus DPE EPBC	>	ш	Dry and moist open forests containing rock caves, hollow logs or trees. Distribution limit: N-Mt Warning National Park. S-South of Eden.	0 L	2	2	0	ou	2

EPBC Preferred habitat Act Distribution limit
Utilises a range of habitats containing thick ground cover - open forest, woodland, heath, cleared land, urbanised areas and regenerating bushland. <i>Distribution limit: N-</i> <i>Kempsey. S-South of Eden.</i>
V Inhabits both wet and dry eucalypt forest on high nutrient soils containing preferred feed trees. Distribution limit: N-Tweed Heads. S-South of Eden.
Found in a variety of habitats from rainforest through open forest to heath. Feeds on insects but also gathers pollen from banksias, eucalypts and bottlebrushes. Nests in banksias and myrtaceous shrubs. <i>Distribution</i> <i>limit</i> : N-Tweed Heads. S-Eden.
Favours forests with a diversity of eucalypt species, due to seasonal variation in its preferred tree species. Population density is optimal at elevation levels at 845 m above sea level. Prefer overstorey basal areas in old- growth tree stands. Highest abundance typically in taller, montane, moist eucalypt forests, with relatively old trees and abundant hollows <i>Distribution limit: N.Border Ranges</i> <i>National Park. S. South of Eden.</i>
Found in a variety of habitats including rainforest, mangroves, paperbark swamp, wet and dry open forest and cultivated areas. Forms camps commonly found in gullies and in vegetation with a dense canopy. Distribution limit: N-Tweed Heads. S-Eden.
Rainforests, sclerophyll forests and woodlands. Distribution limit: N-North of Walgett. S-Sydney.

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						If not recor	If not recorded on site		Considered
Common name Scientific name Database source	BC Act	EPBC Act	Preferred habitat Distribution limit	Recorded on site (y/n)	Suitable habitat present	# records within 10km since July 2002	# records within ~500m since July 2002	Potential to occur	in test of significance (y/n) Refer to Appendix 3
Saccolaimus flaviventris DPE									
Eastern Coastal Free-tailed Bat Micronomus norfolkensis	>	ı	Inhabits open forests and woodlands foraging above the canopy and along the edge of forests. Roosts in tree hollows, under bark and buildings. <i>Distribution limit:</i> N- <i>Woodenbong. S-Pambula</i> .	Q	unlikely foraging habitat	50	0	low	yes
Large-eared Pied Bat <i>Chalinolobus dwyeri</i> DPE EPBC	>	>	Warm-temperate to subtropical dry sclerophyll forest and woodland. Roosts in caves, tunnels and tree hollows in colonies of up to 30 animals. Distribution limit: N-Border Ranges National Park. S-Wollongong.	2	unlikely foraging habitat	7	0	low	yes
Eastern False Pipistrelle <i>Falsistrellus</i> tasmaniensis	>		Recorded roosting in caves, old buildings and tree hollows. Distribution limit: N-Border Ranges National Park. S-Pambula.	2	unlikely foraging habitat	10	o	low	yes
Little Bent-winged Bat <i>Miniopterus</i> ^{DPE}	>		Roosts in caves, old buildings and structures in the higher rainfall forests along the south coast of Australia. Distribution limit: N-Border Ranges National Park. S-Sydney.	2	foraging possible	117	o	medium	yes
Large Bent-winged Bat <i>Miniopterus orianae</i> oceanensis	>		Prefers areas where there are caves, old mines, old buildings, stormwater drains and well-timbered areas. <i>Distribution limit: N-</i> <i>Border Ranges National Park.</i> S-South of Eden.	2	foraging possible	232	o	high	yes
Southern Myotis <i>Myotis macropus</i> ^{DPE}	>	•	Roosts in caves, mines, tunnels, buildings, free hollows and under bridges. Forages over open water. Distribution limit: N-Border Ranges National Park, S-South of Eden.	2	unlikely foraging habitat	36	0	low	yes
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							If not recor	If not recorded on site		Considered
Common name Scientific name ^{Database source}	name name ^{urce}	BC Act	EPBC Act	Preferred habitat Distribution limit	Recorded on site (y/n)	Suitable habitat present	# records within 10km since July 2002	# records within ~500m since July 2002	Potential to occur	In test of significance (y/n) Refer to Appendix 3
Greater Broad- nosed Bat Scoteanax rueppelli	Broad- <i>leppellii</i>	>		Inhabits areas containing moist river and creek systems, especially tree lined creeks. Distribution limit: N-Border Ranges National Park. S-Pambula.	e	unlikely foraging habitat	18	0	low	yes
New Holland Mouse <i>Pseudomys</i> novaehollandiae ^{EPBC}	Mouse	•	>	Occurs in heathlands, woodlands, open forest and paperbark swamps and on sandy, loamy or rocky soils. Coastal populations have a marked preference for sandy substrates, a heathy understorey of leguminous shrubs less than 1 m high and sparse ground litter. Recolonise of regenerating burnt areas. Distribution limit: N-Border Ranges National Park. S-South of Eden.	2	2	ო	0	2	e
Dural Land Snail <i>Pommerhelix</i> d <i>uralensis</i> ^{EPBC}	shail	ш	ш	Occurs on shale-sandstone transitional forest landscapes within the Blue Mountains, Penrith, The Hills, Wollondilly, Hornsby and Parramatta LGA's. Occurs in low abundance and shetters under rocks or inside curled-up bark, beneath leaves and light woody debris. <i>Distribution limit:</i> St Albans to Mulgoa with most records from The Hills LGA.	2	2	-	0	2	e
DPE	- Denote	ss spec	sies lister	- Denotes species listed within 10 km of the development footprint on the Atlas of NSW Wildlife	int on the At	las of NSW V	Vildlife			
EPBC	- Denote	ss spec	cies lister	- Denotes species listed within 10 km of the development footprint in the EPBC Act habitat search	int in the EP	BC Act habit	at search			
TBE	- Denote	es addit	tional sp	- Denotes additional species considered by Travers bushfire & ecology to have potential habitat based on regional knowledge and other records	scology to he	tve potential	habitat based on r	egional knowledg	e and other re	scords
>	- Denote	ss vulne	erable lis	- Denotes vulnerable listed species under the relevant Act						
E or E1	- Denote	enda	angered	- Denotes endangered listed species under the relevant Act						
E4a or CE	- Denote	es critic	ally end	- Denotes critically endangered listed species under the relevant Act	t Act					
NOTE:	 This f 'recor 'neart 	ield is i ds' refe y' or 'r	not cons er to tho: ecent' re	 This field is not considered if no suitable habitat is present within the development footprint 'records' refer to those provided by the <i>Atlas of NSW Wildlife</i> 'nearby' or 'recent' records are species specific accounting for home range, dispersal ability and life cycle 	thin the deve r home rang	elopment fool e, dispersal a	iprint ability and life cycle	υ		
Unlikely	Represe	ents suc	ch a low	Represents such a low margin but not enough to 100% rule it one. A test of significance is required	ne. A test of	significance	is required.			

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Database source	2	Act	Act	Distribution limit	(u/k)	habitat present	10km since July 2002	e #	# records within Potential to ~500m since occur July 2002	Potential to occur	(y/n) Refer to Appendix 3)) r to dix 3	
Not likely	Means 0%	s chang	ge of oc	Means 0% change of occurring, despite there being potential habitat. A test of significance is not applied to these species.	oitat. A test of	significance	e is not applied	d to the:	se species.				
A detailed asses	sment in s	accord	lance v	A detailed assessment in accordance with Section 1.7 of the EPA Act will be completed for these species in Appendix 3 of this report.	e completed t	for these s	pecies in Ap	pendix	3 of this rep	ort.			
Table 7-5 provide <i>Act</i> Protected Mi	es an asse atters Tool	ssmer I. Natio	nt of po onally	Table 7-5 provides an assessment of potential habitat within the study area for nationally <i>protected</i> migratory fauna species recorded within 10 km on the <i>EPBC</i> Act Protected Matters Tool. Nationally <i>threatened</i> migratory species are instead considered above in Table 7-4.	or nationally , ead consider	<i>protected</i> I red above	migratory fau in Table 7-4.	na spe	scies recorde	d within 10	km on	the <i>E</i>	:PBC
						F	Table 7-5 – Protected migratory bird habitat assessment (Appendix 2)	ected m	nigratory bird l	habitat assess	sment (Apper	idix 2)
Common name	0	Pr	eferre	Preferred habitat			Suitable habitat		Ň	ded cito Commonto			
Scientific name	0	W	igrato	Migratory breeding			present (y/n)	ent	(J/lu)				
Oriental Cuckoo (<i>Cuculus optatus</i>)		Ma inse	ainly inha ects and	Mainly inhabits forests, occurring in coniferous, deciduous and mixed forest. It feeds mainly on insects and their larvae, foraging for them in trees and bushes as well as on the ground.	and mixed fores s as well as on th	t. It feeds me e ground.	ainly on no	0	ou				
White-throated Needletail (<i>Hirundapus caudacutus</i>)	leedletail dacutus)	Air alo <i>mi</i> ç	space ov ing favou grant to e	Airspace over forests, woodlands, farmlands, plains, lakes, coasts, towns; companies often forage along favoured hilltops and timbered ranges. <i>Breeds Siberia, Himalayas, east to Japan. Summer migrant to eastern Australia.</i>	oasts, towns; coi a, <i>Himalayas</i> , ea	mpanies often st to Japan. S	forage Summer yes	õ	2	See Section assessment.	٦ 3.3	for	
Black-faced Monarch (<i>Monarcha melanopsis</i>)	arch 1opsis)	Ra ope unc	Rainforests, open woodls <i>uncommon</i> .	Rainforests, eucalypt woodlands; coastal scrubs; damp gullies in rainforest, eucalypt forest, more open woodland when migrating. Summer breeding migrant to coastal south east Australia, otherwise uncommon.	es in rainforest, e coastal south eas	eucalypt fores st Australia, oti	t, more herwise no	0	2	See Section assessment.	٦ 3.3	for	
Spectacled Monarch (<i>Monarcha trivirgatus</i>)	arch atus)	Un wel	Understorey of moul well below canopy. Stephens from Sept.	Understorey of mountain / lowland rainforest, thickly wooded gullies, waterside vegetation, mostly well below canopy. Summer breeding migrant to south-east Qld and north-east NSW down to Port Stephens from Sept / Oct to May. Uncommon in southern part of range.	t gullies, watersic Old and north-ea t of range.	de vegetation, st NSW down	mostly to Port no	0	ê				
Satin Flycatcher (<i>Myiagra cyanoleuca</i>)	(nca)	He coa Au	eavily veg astal fore stralia an	Heavily vegetated gullies in forests, taller woodlands, usually above shrub-layer; during migration, coastal forests, woodlands, mangroves, trees in open country, gardens. Breeds mostly south-east Australia and Tasmania over warmer months, winters in north east Qld.	/ above shrub-la <mark>v</mark> y, gardens. <i>Bree</i> i east Qld.	yer; during mi ds mostly sou	gration, <i>uth-</i> east no	0	ê				
Rufous Fantail (<i>Rhipidura rufifron</i> s)	(su	Un inle bui.	idergrowt and and c ildings. <i>B</i> i <i>st</i> NSW <i>ii</i>	Undergrowth of rainforests / wetter eucalypt forests / gullies; monscon forests, paperbarks, sub- inland and coastal scrubs; mangroves, watercourses; parks, gardens. On migration, farms, streets buildings. Breeding migrant to south-east Australia over warmer months. Altitudinal migrant in north- east NSW in mountain forests during warmer months.	s; monsoon fores gardens. On mig ier months. Altitu	sts, paperbark Iration, farms, dinal migrant ii	s, sub- streets no n north-	0	2	See Section assessment.	٦.3 3.3	for	
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in test of significance Considered

(n/n)

Potential to

records within

records within
10km since July

Suitable habitat

Recorded on site

> **Distribution limit Preferred habitat**

EPBC Act

BC

Common name Scientific name Database source

If not recorded on site

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Comments

Recorded on si<u>te</u>

Suitable habitat present

(N/n)

(u/v)

ı.

2

Р

The yellow wagtail typically forages in damp grassland and on relatively bare open ground at edges of rivers, lakes and wetlands, but also feeds in dry grassland and in fields of cereal crops.

Preferred habitat Migratory breeding

Common name Scientific name

'ellow Wagtail Motacilla flava) ITEM NO: GB.4

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Appendix 3. Test of Significance

Flora and fauna survey and habitat assessments of the study area have resulted in the identification of suitable habitat for the following threatened biodiversity that was recorded present or considered otherwise with varying potential to occur. The potential for any direct or indirect impacts on species has been considered and noted.

Table 7-6 – Threatened flora impact summary (Appendix 3)

Scientific name	BC Act	EPBC Act	Potential to occur	Potential habitat impact
Macadamia integrifolia	-	V	unlikely	Removal of 0.01 of potential habitat
Syzygium paniculatum	V	V	unlikely	Removal of 0.01 of potential habitat

Table 7-7 – Threatened fauna impact summary (Appendix 3)

Common name	BC Act	Potential to occur	Potential habitat impact
Grey-headed Flying-Fox	V	High	Direct – on low potential foraging
Large Bent-winged Bat	V	High	Direct – on low potential foraging
Powerful Owl	V	High	Direct - on low potential foraging / roosting
White-bellied Sea-Eagle	V	Moderate	Direct – on low potential foraging and unlikely roosting
Eastern Pygmy-possum	V	Moderate	Direct – on low potential foraging
Little Bent-winged Bat	V	Moderate	Direct – on low potential foraging
White-throated Needletail	Р	Low	Direct – on unlikely potential foraging
Square-tailed Kite	V	Low	Direct – on unlikely potential seasonal foraging
Gang-gang Cockatoo	V	Low	Direct – unlikely on low potential foraging
Little Lorikeet	V	Low	Indirect - on unlikely potential foraging
Swift Parrot	E1	Low	Indirect - on unlikely potential foraging
Barking Owl V Low Indirect – on unlikely potential foraging Koolo E1 Low Indirect – on unlikely potential foraging		Indirect – on unlikely potential foraging	
Barking Owl V Low Indirect – on unlikely potential foraging Koala E1 Low Indirect – on unlikely potential foraging		Indirect – on unlikely potential foraging	
Eastern Coastal Free-tailed Bat	V	Low	Indirect – on unlikely potential foraging
Large-eared Pied Bat	V	Low	Direct – on unlikely foraging
Easten False Pipistrelle	V	Low	Direct – on unlikely foraging
Southern Myotis	V	Low	Direct – on unlikely foraging
Greater Broad-nosed Bat	V	Low	Direct – on unlikely foraging

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Endangered populations

- No flora endangered populations
- One (1) endangered fauna population- Gang-gang Cockatoo population is the Hornsby and Ku-ring-gai Local Government Areas

Threatened ecological communities

Sydney Turpentine Ironbark Forest

BC ACT 2016 - SECTION 7.3

TEST OF SIGNIFICANCE

As outlined in Section 7.2 of the *BC Act* development or an activity is *likely to significantly affect threatened species* if:

- (a) It is likely to significantly affect threatened species or ecological communities, or their habitats, according to the test in Section 7.3, or
- (b) The development exceeds the threshold if the BOS applies to the impacts of the development on biodiversity values, or
- (c) It is carried out in a declared area of outstanding biodiversity value.

With respect to (a) above, and outlined in Section 7.3 of the *BC Act*, the following *test of significance* is a set of five main considerations, with sub-considerations for determining whether proposed development or activity likely to significantly affect threatened species or ecological communities, or their habitats.

(a) In the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

Contained at the rear of the property is approximately 0.01 ha of remnant Sydney Turpentine Ironbark Forest. It is the intention of the proponent to likely retain the trees in this location within both proposed design options as they are of satisfactory health and condition, and they are mapped as having biodiversity values that if removed, would trigger the BOS.

If trees are being retained, then potential foraging habitat by the above-listed fauna species will not be impacted and not place a local population of the species at risk of local extinction. Also, potential roosting or perching habitat for threatened birds will not be impacted.

The site is located in an urban area with high fragmentation whereby remnant vegetation is primarily existing as singular or small groups of trees with no native understorey.

Specific breeding habitat for threatened fauna is absent from the site, which is the key factor in determining whether or not a proposal will impact the life cycle of a species. In this case, it is unlikely, and therefore will not place a local population at risk of local extinction.

Species recorded present during survey, previously recorded nearby or with high potential to occur and requiring further discussion given potential impacts are further discussed in detail below.

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Summary of threatened species

Macadamia integrifolia

Macadamia integrifolia is not naturally known to occur in the wild in NSW and proximal records exist (*Bionet Atlas 2023*) near the site, likely due to being planted specimens.

Potential habitat occurs within the site only as a planted garden specimen; however, a flora survey was conducted, and no individuals were identified. This species was also not located during any previous site surveys. Therefore, the proposal will not likely have a significant impact upon the lifecycle of the species such that it may be placed at risk of local extinction.

Syzygium paniculatum

Syzygium paniculatum is a small to medium rainforest tree that grows to 8m tall. It is found only in NSW, in a linear coastal strip from Upper Landsdowne to Conjola State Forest.

Potential habitat occurs within the site only as a planted garden specimen due to other proximal records (*Bionet Atlas 2023*) however, a flora survey was conducted, and no individuals were identified. This species was also not located during any previous site surveys. Therefore, the proposal will not likely have a significant impact upon the lifecycle of the species such that it may be placed at risk of local extinction.

Grey-headed Flying-fox

Grey-Headed Flying-foxes are canopy feeding frugivores and nectarivores, inhabiting a wide range of habitats including rainforest, mangroves, paperbark forests, wet and dry sclerophyll forests and cultivated areas. This species roosts in camps, which may contain tens of thousands of individuals.

Camps are commonly formed in gullies, typically not far from water and usually in vegetation with a dense canopy (Tidemann 1998). Camps can be found in riparian rainforest patches, Melaleuca stands, mangroves, riparian woodland or modified vegetation in urban areas. Loyalty to a site is high and some camps in NSW have been used for over a century (NSW NPWS 2001). Some camps are used at the same time every year by hundreds of thousands of flying-foxes while others are used sporadically by a few hundred individuals (Strahan 1995). Generally foraging is within 20 km of camps but individuals are known to commute up to 50 km to a productive food source.

Numerous Grey-headed Flying-fox records exist within a 10 km radius of the study site. It is acknowledged that this species is highly likely to occur. However, given the proposed development requires the removal of no native vegetation and seven (7) exotic tree species including 2 x *Cupressus sempervirens* (Pencil Pine), 1 x *Jacaranda mimosifolia*, 1 x *Ligustrum lucidum* (Broad-leaved Privet), 1 x *Nerium oleander* (Oleander) and 1 x *Celtis sinensis* (Chinese hackberry), within Option 1. For Option 2, there will be an additional three (3) trees being 1 x *Jacaranda mimosifolia* (Jacaranda) and 2 x *Magnolia* spp. (Magnolia). No habitat of any significance to this species will be impacted. The current development footprint also does not provide any suitable roosting, or subsequent breeding habitat. Foraging habitat is otherwise well represented in the surrounding locality such that removal of exotic vegetation set for removal will not significantly impact on a local population.

Little Bent-winged Bat & Large Bent-winged Bat

These two species are considered here together because of their similar roosting/breeding habitat requirements and subsequent assessment outcome.

The Little Bent-winged Bat forages below the canopy within open forests and woodlands, feeding on small insects (Dwyer 1995b). This species roosts in caves, tunnels, tree hollows

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and occasionally old buildings (Dwyer 1995b). Caves are an important resource for this species, particularly for breeding where maternity caves must have suitable temperature, humidity and physical dimensions to permit breeding (Dwyer 1995b). One record exists of this species utilising a tree hollow however hollows are not currently considered as preferred habitat for this species (pers. com. Brad Law).

The Large Bent-winged Bat forages above and below the canopy within open forests and woodlands, feeding on small flying insects, predominantly moths (Dwyer 1995). The Large Bent-winged Batis known to roost in a range of habitats including stormwater channels, under bridges, occasionally in buildings, old mines and, in particular, caves (Dwyer 1995). Caves are an important resource for this species, particularly for breeding where maternity caves must have suitable temperature, humidity and physical dimensions to permit breeding (Dwyer 1995). Roost sites in tree hollows have not been reported within the literature reviewed. This species has not been identified as utilising culverts for maternity roosts. Maternity roosts rather are occupied by up to 100 000 females with only 12 maternity roosts known throughout the complete range (Hoy & Hall 2008).

It is considered that the development footprint provides suitable foraging only habitat for the Little Bent-winged Bat and Large Bent-winged Bat. It is expected that anywhere between 1 and 10 individual bats of each species would routinely utilise the study area for foraging. The Little Bent-winged Bat would forage more predominantly below the canopy where an open structure below the shrub layer permits. The Large Bent-winged Bat would forage more predominantly above the canopy and down in more open areas. Concentrated activity is likely in some locations such as along the creek, forest fringes and trails, particularly for the Large Bent-winged Bat.

Whilst foraging by both species may be more concentrated in some habitats (most based on structure and insect activity) no specific valued habitat features within the study area are identified. Foraging habitat is otherwise well represented in the surrounding locality such that removal of habitat will not significantly impact on a local population.

'Potential breeding habitat' as defined by *The BAM Bat Guide* for these species includes "caves, tunnels, mines or other structures known or suspected to be used". No such habitat exists within the study area or nearby, therefore is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

Given the highly mobile nature of both of these species, the absence of any important habitat, their known ability to move across and utilise some urban landscapes and that the proposed development will not inhibit local movements and dispersal, neither species will be likely significantly impacted by the proposed habitat clearance.

Eastern Pygmy-possum

The Eastern Pygmy-possum is found from rainforest through sclerophyll forest to tree heath. The habitats of particular importance are those in which certain species of banksia dominate because they provide an important winter food source (Ward 1990; Bladon et al. 2002; Tulloch 2004; Rueegger et al. 2012). Eastern Pygmy-possums usually shelter alone in tree cavities, rotten stumps, holes in the ground, disused bird nests and possum drays and in vegetation thickets such as Xanthorrhoea species (Menkhorst, 1996). Although the EPP may use a range of different shelter types, it appears that it is the tree hollows that are required for breeding (Tulloch 2004; Harris 2008; Rueegger et al. 2012). In particular, tree cavities of sufficient size (>5 cm diameter) appear critical for a female pygmy-possum to raise a litter.

Female EPPs build nests from various native plant species using fresh leaf material (Ward 1990; Rueegger et al. 2012). This distinguishes EPP nests from other small mammals such

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as the brown antechinus which builds nests mostly from dead eucalypt leaves (Goldingay personal observations).

Detailed investigation in New South Wales has revealed that home ranges are typically 3-7 ha in area (Law et al. 2013), and this is likely to hold true elsewhere because all studies report overnight movements of up to 300-500 m (Ward 1990; Bladon et al. 2002; Tulloch & Dickman 2006; Law et al. 2013). Law et al. (2013) estimated mean home range size for males and females to be 3.1 ha.

Apart from females with young in the nest, individuals may utilise a number of nest sites within the home range (Turner and Ward, 2008; Menkhorst, 1996). An important determinant of habitat quality may be the proportion of the year in which pollen is available and the species is usually associated with floristically diverse shrub community, especially those including Banksia species. However, populations also occur in box-ironbark associations where the understorey is sparse but relatively diverse (Menkhorst, 1996).

Two (2) native pollen producing tree species are present on the proposed development site, *E. pilularis* and, *Syncarpia glomulifera*, which are potential food and habitat resources for eastern pygmy possums, However, these trees are unlikely to provide quality habitat as they do not contain any hollows. This site is also unlikely to contain useful foraging habitat as there isn't a floristically diverse shrub community. As of July 2023, the closest record to the site is approximately 1km to the east that was recorded in 2004, However, given the absence of any important habitat within the study site and lack of connectivity to nearby observation locations, the proposed development will not inhibit local movements and dispersal, this species will not be significantly impacted by the proposed habitat clearance.

White-bellied Sea-Eagle

The White-bellied Sea-Eagle is mostly recorded in coastal lowlands, but can occupy habitats up to 1400 m above sea level on the Northern Tablelands of NSW. It also extends inland along some of the larger waterways, especially in eastern Australia. Habitats occupied are characterised by the presence of large areas of open water (larger rivers, freshwater swamps, lakes, billabongs, reservoirs, but also saltmarsh and sewage ponds). They also occur at sites near the sea or sea-shore, such as around bays and inlets, beaches, reefs, lagoons, estuaries and mangroves. Birds have been recorded in (or flying over) a variety of terrestrial habitats including coastal dunes, tidal flats, grassland, heathland, woodland, forest (including rainforest) and even urban areas.

Breeding territories are located close to water, and mainly in tall open forest or woodland, although nests are sometimes located in other habitats such as dense forest (including rainforest), closed scrub or in remnant trees on cleared land. The breeding season extends from June to January and the nest is a large structure composed of sticks and lined with leaves, grass or seaweed. Pairs usually return to the same breeding territory each year, and often the same nest, although territories tend to contain one or two additional, less developed nests. Breeding pairs tend to be widely dispersed and are generally separated by distances of several kilometres or more.

Given that the site does not provide habitat for breeding or foraging, this site could be used as roosting area for this species. However, as White-bellied sea-eagles are highly mobile and have the ability to move across and use urban landscapes, the development will not inhibit local movements and dispersal.

Powerful Owl

The Powerful Owl breeds in open or closed sclerophyll forests and woodlands, including wet sclerophyll forest and dry sclerophyll forest and woodlands. They nest in large hollows in large

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old trees; usually living Eucalyptus, within or below canopy in stumps or broken-off trunks. A pair is generally faithful to a traditional nesting hollow. Powerful Owls form pairs for life, and are strongly territorial (Higgins 1999). Powerful Owls are sedentary within home ranges of about 1,000 hectares within open eucalypt, casuarina or Callitris pine forest and woodlands, though they often roost in denser vegetation, including rainforest or exotic pine plantations. (Garnett & Crowley 2000). Powerful Owls feed mainly on those medium-sized species of arboreal marsupials that are most readily available at any given locality (Lavazanian et.al. (1994).

There are 705 records of powerful owls within a 10km radius of the proposed development site. Due to the high number of records around the site is it possible that Owls may fly through the site at times, traveling to more suitable habitat for breeding and foraging. However, there is no suitable roosting or breeding habitat on site. Therefore, the development will not inhibit local movements and dispersal or impact on any stage of their lifecycles.

(b) In the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:

i. Is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or

One (1) TEC - Sydney Turpentine Ironbark Forest was observed within the site.

The Sydney Turpentine Ironbark Forest occurs within the southern portion of the site. This community occupies approximately 0.01 of the site.

The Threatened Species Test of Significance Guidelines (OEH 2018c) define local occurrence as:

"the ecological community that occurs within the study area. However, the local occurrence may include adjacent areas if the ecological community on the study area forms part of a larger contiguous area of that ecological community and the movement of individuals and exchange of genetic material across the boundary of the study area can be clearly demonstrated."

The local occurrence is small and fragmented in the locality due to urbanisation and new developments surrounding the site from similar rezoning proposals. Impacts to 0.01 ha for Option 1 & Option 2 of vegetation would not be considered significant enough in this context to place the TEC at risk of local extinction as these trees are being retained within both proposed design options.

ii. Is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,

It is unlikely that the proposed development will adversely modify the composition of this community such that its local occurrence is likely to be placed at risk of extinction due to high fragmentation and highly degraded nature of the TEC.

(c) In relation to the habitat of threatened species or ecological community:

It is considered that the habitat attributes of the development footprint provide known or potential habitat for *Macadamia integrifolia* and *Syzygium paniculatum*, Powerful Owl, Eastern Pygmy Possum, Grey-headed Flying-fox, Little Bent-winged Bat, White-bellied Sea Eagle, Sydney Turpentine Ironbark Forest.

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i. The extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and

The site has an area of 0.15 ha which comprises approximately of 0.01 ha of native vegetation in a degraded state. It is likely the vegetation will retain insitu, however the maximum impact to the vegetation would be 0.01 ha.

ii. Whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and

The development footprint is covered by a highly fragmented and degraded areas and is current fragmented by surrounding development on the east and western boundaries and Dumaresq Street to the north. The proposal will not fragment or isolate currently connected areas of habitat. The planning proposal has been designed to be located predominantly within the existing cleared areas of the site which are already degraded and fragmented.

Therefore, it is considered that known habitat for a threatened species, population or ecological community within the local area and region is unlikely to become isolated or fragmented as a result of the proposal.

iii. The importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality

In respect to threatened fauna species recorded or with potential to occur the proposed area of impact is not likely of high quality, of any breeding importance or central to the home range requirements of any species such that behaviour or ecology of these species will be significantly altered in any way.

(d) Whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),

The development footprint is within an area of declared outstanding biodiversity value. The development proposal will not have any adverse effects on any declared area of outstanding biodiversity value (either directly or indirectly) due to the depauperate nature of the vegetation.

(e) Whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.

A key threatening process is defined as a process that threatens, or could threaten, the survival or evolutionary development of species, populations or ecological communities.

The current list of key threatening processes, and whether the proposed activity is recognised as a threatening process, is shown below.

Listed key threatening process	Develop process	ment a th ?	reatening
	Likely	Possible	Unlikely
Aggressive exclusion of birds by Noisy Miners (Manorina melanocephala)		~	
Alteration of habitat following subsidence due to longwall mining			✓
Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands			✓

Table 7-8 – Key threatening processes (Appendix 3)

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Listed key threatening process	Develop process		threatening
Anthropogenic Climate Change			✓
Bushrock removal			✓
Clearing of native vegetation		✓	
Competition and habitat degradation by feral goats			1
Competition and grazing by the feral European Rabbit (<i>Oryctolagus cuniculus</i>)			1
Competition from feral honeybees			✓
Death or injury to marine species following capture in shark control programs on ocean beaches			1
Entanglement in, or ingestion of anthropogenic debris in marine and estuarine environments			~
Forest Eucalypt dieback associated with over-abundant psyllids and bell miners			1
High frequency fire resulting in the disruption of life-cycle processes in plants and animals and loss of vegetation structure and composition			~
Herbivory and environmental degradation caused by feral deer			✓
Importation of red imported fire ants into NSW			✓
Infection by <i>Psittacine circoviral</i> (beak and feather) disease affecting endangered psittacine species and populations			1
Infection of frogs by amphibian chytrid causing the disease chytridiomycosis			✓
Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae			√
Infection of native plants by Phytophthora cinnamomi			✓
Introduction of the large earth bumblebee (Bombus terrestris)			1
Invasion and establishment of exotic vines and scramblers		✓	✓
Invasion and establishment of Scotch Broom (Cytisus scoparius)			√
Invasion and establishment of the Cane Toad (Bufo marinus)			✓
Invasion, establishment and spread of Lantana camara			✓
Invasion of native plant communities by bitou bush & boneseed <i>Chrysanthemoides monilifera</i>			~
Invasion of native plant communities by exotic perennial grasses			1
Invasion of native plant communities by African Olive (Olea europaea subsp. cuspidata)			~
Invasion of the Yellow Crazy Ant (Anoplolepis gracilipes)			√
Loss of Hollow-bearing trees			✓
Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants		√	
Loss and/or degradation of sites used for hill-topping by butterflies			√
Predation and hybridisation by feral dogs (Canis lupus			√

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Listed key threatening process	Development a th process?	reatening
familiaris)		
Predation by the European Red Fox (Vulpes vulpes)		✓
Predation by the Feral Cat (Felis catus)		✓
Predation by Gambusia holbrooki Girard, 1859 (plague minnow or mosquito fish)		✓
Predation by the Ship Rat (Rattus rattus) on Lord Howe Island		✓
Predation, habitat degradation, competition & disease transmission from Feral pigs (<i>Sus scofa</i>)		✓
Removal of dead wood and dead trees		✓

The above key threatening processes have been considered in reference to the proposal. It was considered that the proposal may contribute to a small degree to a number these processes as described below. It was not considered that the proposal will have a large or significant impact on any of the following key threatening processes. Some mitigation measures have been listed under each process to minimise or reduce such impacts upon those processes.

Summary of "likely" or "possible" Key Threatening Processes

This section identifies what mitigation measures can be implemented to address threatening processes.

Aggressive exclusion of birds by Noisy Miners (Manorina melanocephala)

Noisy Miners have been recorded present within the study area. It is likely that Noisy Miners from within the study area may be slightly displaced as a result of habitat removal for the development, resulting in increased impacts from this species on other native birds in the nearby surrounds. Given the high degree of disturbance in the local surrounds it is expected that the Noisy Miner is already at impacting numbers in these areas.

Clearing of native vegetation

As a worse-case scenario, 0.01 ha of vegetation may be impacted. It is not known if there will be any direct impacts on the vegetation, however it is expected that the remnant native trees will be retained insitu given that their removal would likely trigger the BOS. There may be indirect impacts to retained trees from minor changes to the hydrology from additional hard surfaces nearby and potentially more runoff, and shading, pending the height of the buildings and the remnant trees being located on the south side of the buildings.

Invasion and establishment of exotic vines and scramblers

The development footprint currently contains exotic vine and scrambler species such as *Ipomoea indica* (Morning Glory), *Ipomoea carica* (Coastal Morning Glory) and *Tradescantia fluminensis* (Wandering Jew). The planning proposal will provide an opportunity to remove, control and possibly eradicate these species within the development footprint. This will result in a beneficial outcome by reducing the likelihood of this Key Threatening Process (KTP) from impacting on the site.

Invasion of native plant communities by exotic perennial grasses

The proposal is of a class of development recognised as a threatening process due to possible incursions of grasses such as *Stenotaphrum secundatum* (Buffalo). However, the vegetation within the development footprint is of a degraded nature and the planning proposal is not expected to significantly increase the prevalence of exotic perennial grasses. It is expected

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that the planning proposal will decrease the number of exotic grass species and will provide an opportunity to manage the area with regard to weed invasion.

Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants

The proposal could potentially be a class of development recognised as a threatening process if invasive garden plants are utilised as part of the landscaping and allowed to spread into retained vegetation. It is therefore recommended that native plant species commensurate with STIF be utilised as part of the future landscaping works and weed control is applied to reduce the potential for spread and establishment of invasive garden plants.

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Appendix 4. EPBC Significance Assessment Criteria

Under the *EPBC Act* an action will require approval from the Australian Government Environment Minister if the action has, will have, or is likely to have, a significant impact on a matter of national environmental significance. The following significant impact criteria were sourced from the *EPBC Act* Policy Statement 1.1 (May 2006):

CRITICALLY ENDANGERED AND ENDANGERED SPECIES

Significant impact criteria

An action is likely to have a significant impact on a critically endangered or endangered species if there is a real chance or possibility that it will:

- Lead to a long-term decrease in the size of a population;
- Reduce the area of occupancy of the species;
- Fragment an existing population into two or more populations;
- Adversely affect habitat critical to the survival of a species;
- Disrupt the breeding cycle of a population;
- Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline;
- Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat;
- Introduce disease that may cause the species to decline; or
- Interfere with the recovery of the species.

What is a population of a species?

A 'population of a species' is defined under the *EPBC Act* as an occurrence of the species in a particular area. In relation to critically endangered, endangered or vulnerable threatened species, occurrences include but are not limited to:

- a geographically distinct regional population, or collection of local populations; or
- a population, or collection of local populations, that occurs within a particular bioregion.

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What is habitat critical to the survival of a species or ecological community?

- What is habitat critical to the survival of a species or ecological community?
- 'Habitat critical to the survival of a species or ecological community' refers to areas that are necessary:
- • For activities such as foraging, breeding, roosting, or dispersal;
- For the long-term maintenance of the species or ecological community (including the maintenance of species essential to the survival of the species or ecological community, such as pollinators);
- • To maintain genetic diversity and long-term evolutionary development; or
- • For the reintroduction of populations or recovery of the species or ecological community.

Such habitat may be, but is not limited to: habitat identified in a recovery plan for the species or ecological community as habitat critical for that species or ecological community; and/or habitat listed on the Register of Critical Habitat maintained by the Minister under the *EPBC Act*.

VULNERABLE SPECIES

Significant impact criteria

An action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:

- lead to a long-term decrease in the size of an important population of a species;
- reduce the area of occupancy of an important population;
- fragment an existing important population into two or more populations;
- adversely affect habitat critical to the survival of a species;
- disrupt the breeding cycle of an important population;
- modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline;
- result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat;
- introduce disease that may cause the species to decline; or
- interfere substantially with the recovery of the species.

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What is an important population of a species?

An 'important population' is a population that is necessary for a species' long-term survival and recovery. This may include populations identified as such in recovery plans, and/or that are:

- Key source populations either for breeding or dispersal;
- Populations that are necessary for maintaining genetic diversity; and/or
- Populations that are near the limit of the species range.

CRITICALLY ENDANGERED AND ENDANGERED ECOLOGICAL COMMUNITIES

Significant impact criteria

An action is likely to have a significant impact on a critically endangered or endangered ecological community if there is a real chance or possibility that it will:

- Reduce the extent of an ecological community;
- Fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines;
- Adversely affect habitat critical to the survival of an ecological community;
- Modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns;
- Cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting;
- Cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to:
 - assisting invasive species, that are harmful to the listed ecological community, to become established; or
 - causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community; or
- Interfere with the recovery of an ecological community.

MIGRATORY SPECIES

Significant impact criteria

An action is likely to have a significant impact on a migratory species if there is a real chance or possibility that it will:

 Substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species;

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- Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species; or
- Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species.

What is important habitat for a migratory species?

An area of 'important habitat' for a migratory species is:

- a) Habitat utilised by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species; and/or
- b) Habitat that is of critical importance to the species at particular life-cycle stages; and/or
- c) Habitat utilised by a migratory species which is at the limit of the species range; and/or
- d) Habitat within an area where the species is declining.

What is an ecologically significant proportion?

Listed migratory species cover a broad range of species with different life cycles and population sizes. Therefore, what is an 'ecologically significant proportion' of the population varies with the species (each circumstance will need to be evaluated). Some factors that should be considered include the species' population status, genetic distinctiveness and species-specific behavioural patterns (for example, site fidelity and dispersal rates).

What is the population of a migratory species?

'Population', in relation to migratory species, means the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries including Australia.

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FLOOD MANAGEMENT REPORT

PROPOSED REZONING 40 DUMARESQ STREET, GORDON, NSW

Revision 07 DECEMBER 2024

Our Job No. 230309



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1. INTRODUCTION

1.1. General

This report has been prepared to accompany the proposed application to re-zone the property located at 40 Dumaresq Street, Gordon (Lot 1 and Lot 2 DP1006588). The locality sketch of the site is shown in Figure 1 below.



Figure 1 - Locality Sketch

The site is located within Ku-ring-gai Council Local Government Area and as such, the stormwater management addressing water quality and quality measures will be required to meet Ku-ring-gai Council's requirements.

This report will focus on the analysis of the catchments and existing infrastructure upstream of the property to determine the extent of water management structures to be implemented within the site both above and below ground.



2. SITE DESCRIPTION

2.1. Local and Regional Context

The property subject of the rezoning application is 40 Dumaresq Street, however, since the overall development will include 40 Dumaresq Street as well 38 Dumaresq Street, the flood study has been conducted to include both lots.

The overall site (38 & 40 Dumaresq Street) is bounded by Dumaresq Street along the northern boundary and residential lots along the eastern, western and southern boundaries. Access to the property is currently from Dumaresq Street via two driveway crossings.

The site is found to be graded rather steeply from each corner of the lot towards a low point approximately halfway along the western boundary. The site survey reveals the presence of a localised depression through the middle of the lot, extending approximately from the halfway point on the eastern boundary, to the halfway point on the western boundary. Under the current site conditions, this depression is known to provide an overland flow path through the site for any runoff from the upstream properties, in an east to west direction.

The site is currently largely pervious, being occupied by two single dwellings but being surrounded by landscape and trees. It appears as though there are no water quality or quantity measures provided for the existing stormwater.

The proposed works will involve the demolition of the existing dwellings and rezoning of the lot from Zone R2 to Zone R3. The purpose of the rezoning is to facilitate a townhouse development; however, Council has also requested consideration be given to a residential flat development.

The townhouse design proposes the erection of a total of ten (10) townhouses, arranged in such a way to allow the naturally occurring depression through the site to be retained in the form of a more formalised open swale/channel. Only pedestrian access is required in this area and it is proposed to be provided in the form of footbridges. This is considered as the optimal solution as it allows to more closely mimic the existing site conditions. The proposal would include the construction of an open-air formalised channel through the same area of the site as the existing overland flow path. By being open air, any blockages in the channel can be easily observed and removed. Additionally, the floor level of the proposed dwellings will be required to incorporate a freeboard from the top water level reached in the channel.

The apartment units design requires a larger footprint that completely spans over the existing depression through the site, therefore imposing the existing swale to be completely channeled through a culvert structure crossing underneath the development. This arrangement is not recommended as the construction of the culvert underneath the building means that the only access to the culvert would be from either the most upstream or the most downstream end of the culvert. No access can be provided anywhere else along the length of the channel. Blockages through the length of the channel would not be visible until surcharge becomes visibly observable at the upstream end. Additionally, due to the shape and location of the development on the land, there is no opportunity to provide an emergency alternative path for surcharging water. In the event of an unknown blockage, the impact will likely be in the form of extensive water damage of the apartments along the eastern elevation due to the absence of an emergency overflow path.

Based on these considerations, the following flood study exercise focuses on the proposal of an open-air channel trough the site to convey all runoff in a similar manner as the existing conditions. This proposal is consistent with the concept townhouse design.



3. STUDY

3.1. Catchments

A catchment plan has been prepared based on the available information:

- Site survey for 38-40 Dumaresq Street, issued by Bee & Lethbridge Pty Ltd, dated 03/03/2023
- H&H drawings 13537_C1_C100[C], 13537_C1_C210[B] for 34-36 Dumaresq Street
- Dumaresq St. to Moree St. Road design drawings issued by Taylor Thomson Whitting, Job n.161584, drawing n.C04, rev. P10
- LIDAR generated GIS contours data
- 28-30 and portion of 32 Dumaresq St, Gordon Flood Study and Stormwater management by Hyder Consulting Pty Ltd, dated November 2012
- Visual inspection of Dumaresq Street, Moree Street and Hanson Way

The total catchment has been split into eleven (11) catchments. Each catchment will be explained in the following paragraphs. The overall catchment plan can be found in Appendix A.

Dumaresq Street is found to be generally grading from the high point for the area, corresponding with Pacific Highway, in a westerly direction towards Vale Street. The section of Dumaresq Street included between Pacific Highway and Hanson Way appears to be characterized by a number of existing stormwater lintel pits along the southern side of the road, capturing the runoff from the road itself and directing it via a system of pits and pipes towards Vale Street. Kerb and gutters existing along the full extent of the road to convey all overland runoff towards the existing pits. Mapping of the existing stormwater infrastructure within Dumaresq Street has not been made available but it has been assumed for the street drainage to not be discharging at the Hanson Way culvert (refer to Appendix E for design drawing of Hanson Way, by others).

At the intersection of Dumaresq Street with Hanson Way, the road grading evidently shows that any runoff from Dumaresq Street will not be falling towards Hanson Way due to an existing dish-drain forcing all the runoff to continue falling down Dumaresq Street. Therefore, Dumaresq Street and all properties draining to it can be excluded from the calculations of upstream catchment reaching the culvert under Hanson Way and the property at 38-40 Dumaresq Street.

Catchment 1 comprises Gordon Shopping centre and a number of residential lots just downstream from the retail centre. Gordon Shopping Centre is found to be discharging onto Dumaresq Street via a number of kerb outlet pipes, while the residential lots have been assumed to be discharging directly to the existing stormwater pits on Dumaresq Street. The existing stormwater line is found to extend towards Vale Street and therefore not discharge towards the culvert underneath Hanson Way.

Catchment 2 comprises the properties from 7 Moree Street to 31 Moree Street. These properties do not have any kerb outlets discharging directly to the kerb on Moree Street. The site contours for these properties suggest a general fall from the south-eastern corner towards the north-western corner of each lot. Furthermore, it is visible from Google maps that a channel existing through the back of all these properties, directly aligned with the culvert under Hanson Way. For the purpose of this study, Catchment 2 has been assumed as draining through the back of the properties into a channel, directed towards the culvert under Hanson Way.

Catchment 3 is that of Hanson Way itself. The exact extent of this catchment has been delineated by analysis of the existing contours. The catchment is found to partially extend to the high point located on Moree Street, approximately in correspondence of the property at 32 Moree Steet. This catchment is directed to the low point within Hanson Way, where



three (3) lintel pits exist. In case of full blockage of these pits, the flow from this catchment will be ponding at the same location and, eventually, spill over the kerb and flow through the property at 34-36 Dumaresg Street.

Catchment 4 is that of the property at 34-36 Dumaresq Street. This catchment naturally falls to the low point along the western boundary, where an existing swale extends through the downstream property.

The existing culvert under Hanson Way is currently freely discharging into this property and, once this lot is developed, a swale will be directing the flow from the culvert towards the middle of the property at 38-40 Dumaresq Street, where a naturally occurring swale exists. The existing 600mm diameter pipe crossing through the middle of the site will also be redirected as part of the redevelopment, be upsized to a Ø750 pipe and be diverted around the proposed buildings. The pipe diversion will stub back into the existing Ø600 pipe crossing through the downstream property via means of a junction pit over the pipe connection (JP6). Catchment 4 will also ultimately discharge through pit JP6 into the existing underground stormwater pipe.

Catchment 5 represents the extent of catchment from the neighbouring properties flowing into the property at 34-36 Dumaresq Street. This flow is collected and managed within the same property and discharged at pit JP6 into the existing in ground pipe continuing through 38-40 Dumaresq Street.

Catchment 6 is that of the property at 38-40 Dumaresq Street. This property appears to currently have two (2) discharge points into the existing inground Ø600 pipe which crosses the site from east to west. To avoid backflowing problems due to the upsizing to a Ø750 pipe upstream, the existing pipe will also be upsized to Ø750mm.

Following redevelopment of this site, the stormwater from the subject lot will be managed via implementation of On-Site Detention (OSD) in order not to increase the flow into the existing pipe. Implementing an OSD system will allow to retain the additional flow generated by the developed site, and control the discharge to ensure no additional flow is discharged towards the downstream properties and onto the existing infrastructure.

As previously mentioned, the property within catchment 6 is characterized by a naturally occurring overland flow path through the middle of the lot. As part of the same redevelopment, this path will be formalised into a properly formed swale/channel to safely manage the overland flow from the upstream properties, including that from catchment 7.

Catchment 7 represents the extent of catchment from the neighbouring properties flowing into the property at 38-40 Dumaresq Street. The flow from this catchment will be managed within the downstream property and directed through the formalised swale/channel through the middle of the site.

Catchments 8, 9, 10 and 11 are catchments tied to Moree Street. Catchment 9, shown hatched in pink, represents Moree Street itself, a portion of Pacific Highway and number of properties draining via kerb outlet directly onto the Highway. Catchments 9, 10 and 11 are properties along Moree Street that are found to either have a kerb outlet onto the street or have been assumed to discharge directly into one of the existing stormwater pits on the road. The lots hatched in green are those found to be discharging directly to the kerb with individual outlets. The lots hatched in red are those that were found to not have a kerb outlet but be in proximity of a stormwater pit. Those lots (red hatched) are assumed to be directly discharging into the existing drainage system.

Moree Street appears to be graded quite steeply from the local high point at Pacific Highway towards Vale Street. The road is characterised by a localised low point, in correspondence of which, two (2) stormwater lintel pits exist on either side of the road at 22-24 Moree Street. The road catchment extends further to a high point at 32 Moree Street to then continues falling towards Vale Street. In case of blockage of these pits, ponding will occur on the road. Spilling from the low point will occur onto a nearby steep driveway at 21-27 Moree Street (Figure 22). Flow running down this driveway will eventually be drained through the pits and pipes running through the same properties and ultimately discharge at the



culvert under Hanson Way. The approximate delineation of the pipe run form Moree Street to the Hanson Way culvert has been marked on the catchment plan in Appendix B.



Figure 2 - Driveway in Moree Street near sag location

As part of catchment 11, the row of properties at the back of those on Moree Street have also been included. These are the properties included between 23 St. Johns Avenue and 45 St. Johns Avenue. These lots are found to not have kerb discharge points and no street drainage to discharge to. Therefore, they have been assumed to follow the natural fall of the ground and discharge through the neighbouring properties on Moree Street

This entire cumulative catchment is collected via existing pits and pipes on Moree Street and through some of the properties to ultimately discharge into the existing culvert under Hanson Avenue.

3.2. DRAINS modelling

The computer software DRAINS (version 2023.02.8444.20204) was used to build a rainfall runoff model for the area to include the catchment for the site subject of this report and all the neighbouring catchments described in the earlier sections of this report. The catchment flows have been quantified to investigate potential impact on the property, the existing infrastructure and check whether the proposed swale/channel and pipe upsizing implementations will be sufficient to manage all the upstream flows both overland and inground.

The nature of the catchments has conservatively been modelled to be as impervious as the lots appear at present. It is understood that implementation of OSD would have been supported by Council for all the most recent redevelopments although, as it is not possible to establish exactly at which rate each of the redevelopments would be discharging their stormwater, a "worst-case scenario" approach has been adopted. Therefore, all the properties that appear to have a high percentage of imperviousness have been modelled as such, even though, in reality, these lots would be discharging at a lower rate via on-site stormwater detention tanks.



The same assumption has been applied to the proposed future development at 38-40 Dumaresq Street, as OSD will be proposed as part of the works, to ensure the development won't have a negative impact on the downstream properties. Detailed design of the stormwater detention strategy will be developed as part of the design drawings and engineering report for the property at a later stage.

Several DRAINS models have been prepared and analysed:

- 230309 DRAINS -worst case scenario, blocked pipes.drn
- 230309 DRAINS -worst case scenario, blocked pipes EX600.drn
- 230309 DRAINS -worst case scenario, blocked pipes EX600 50block.drn .
- 230309 DRAINS -flow through pipes.drn
- 230309 DRAINS -flow through pipes EX600
- 230309 DRAINS -flow through pipes EX600 50block

As part of the modelling process, in order to maintain a conservative approach, the time of concentrations have been applied to the individual catchments as 5min for paved areas and 10min for grassed areas. Large catchments such as catchment 2 and the cumulative catchment 8, 9, 10, 11 have been modelled with more detailed data by specifying the flow path length, slope and retardance coefficient n.

The models "230309 DRAINS -worst case scenario, blocked pipes.drn" and "230309 DRAINS -flow through pipes.drn" have been setup to model the existing in ground pipe within 38-40 Dumaresq Street to be upsized to a Ø750mm pipe. All other four models, characterized by the text "EX600" in the file name, have been modelled to retain the existing inground pipe as Ø600.

In all models, the formalised proposed swale/channel is through the naturally occurring low point, as marked and hatched in blue in Appendix D.

The swale is proposed to have a 3m wide base and batters on each side at slope of 1H:1V, up to a depth of maximum 400mm, as shown in the schematic section in Figure 3 below. Some widening of the channel is proposed at the upstream and downstream ends of the channel to allow a smooth transition in the landform.

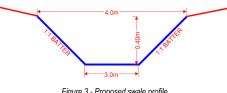


Figure 3 - Proposed swale profile

This channel represents the infrastructure being proposed to convey the overland flow through the property to ensure a safe conveyance of the overland flow after re-development. By maintaining the proposed channel at the same location as the existing natural depression, the proposed works ensure to maintain the existing overland flow path unchanged for all adjacent, upstream and downstream properties.

In all revisions, catchments 4 and 5 are piped through the system to pit JP6 as a pipe connection for both catchments is proposed as part of the redevelopment of 34-36 Dumaresq St. Catchment 6 is applied as a concentrated flow upstream of the pipe through 38-40 Dumaresq Street as a conservative modelling strategy.



It is to be noted that the existing invert levels of the pipe through the site at 38-40 Dumaresq Street are not known, although the exact existing levels will not have a major effect on the overland flow or the extent of piped flow. Pipe invert levels have been assumed for the purpose of this modelling exercise to achieve a minimum 500mm cover over the proposed upsized pipe and the same levels have been retained for the revisions modelling the pipe with its original size.

DRAINS MODEL SET 1 - UPSTREAM STORMWATER NETWORK BLOCKAGE

230309 DRAINS - Worst case scenario, blocked pipes.drn

The first model aims to represent the absolute worst-case scenario in terms of blockage in the upstream stormwater infrastructure. A schematic image of the DRAINS model for a 1 in 100yr storm event can be found in Appendix B. The following assumptions have been made:

- All stormwater pipes on Moree St. to be blocked
- The existing Ø750 pipe under Hanson Way to be blocked
- Downstream pipe upsized from Ø 600 to Ø750

With this model, the intent is to calculate the maximum possible flow that the swale through the site will be required to convey when the upstream stormwater infrastructure fails. This is achieved when the upstream system of pits experiences extensive blockages and pipes fail to convey the flow from the upstream catchments. As a result, the total upstream flow has to be treated as overland flow through the swale/channel.

On the basis of the assumptions mentioned above, the cumulative catchment including catchments 2, 8, 9, 10 and 11 has been modelled to be reaching the existing culvert under Hanson Way without being piped. In a 1 in 100yr storm event, the concentrated flow produced by this cumulative catchment is 2.74m³/s. This flow rate of 2.74m³/s appears to be matching with the design flow calculated by Craig & Rhodes of 2.7m³/s in their flood study report prepared in support of the design and sizing of the culvert under Hanson Way.

In the DRAINS model, the flow of 2.74m³/s is directed through the culvert under Hanson Way and through the swale within 34-36 Dumaresq Street, ultimately reaching 38-40 Dumaresq Street and flowing through the proposed swale/channel, together with catchment 7 incoming from the neighbouring properties at the back. The total flow through the proposed swale is calculated to be 2.9m³/s.

Catchments 3 to 6 are modelled to be piped through the proposed upsized Ø750mm pipe through the site, putting a total flow of 0.6m³/s through the pipe, as shown in Figure 4.



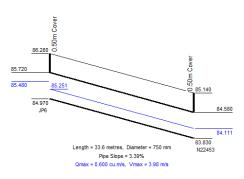
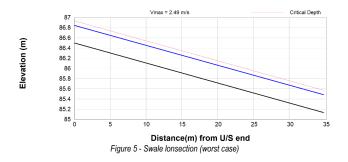


Figure 4 - 750mm diameter pipe long section

An overflow of 16L/s is observed from pit JP6. Any overflow has been modelled to be directed to the proposed swale within the site, further adding to the overland flow to be channeled in the proposed swale. The 16L/s overflow has been included in the 2.9m³/s previously mentioned as the total flow through the swale.

The flow of 2.9m³/s is safely conveyed through the proposed swale, reaching a maximum flow depth of 350mm as depicted in the channel longsection in Figure 5 below.





230309 DRAINS -worst case scenario, blocked pipes EX600.drn

When the previously discussed model is amended to maintain the existing pipe downstream as Ø600, the flow through the swale is observed to be the same of 2.9m³/s.

This is due to the magnitude of the flow that would directly reach the upstream end of the site as concentrated surface runoff, which is not possible to be all captured by one pit and pipe.

230309 DRAINS -worst case scenario, blocked pipes EX600 50block.drn

A further development of the same model is to apply a 50% physical blockage to the existing pipe. This is done by means of modelling a Ø300 pipe instead of a Ø600 pipe, which results in an increased flow of 3.27 m³/s through the swale.

DRAINS MODEL SET 2 - DOWNSTREAM BLOCKAGES

The second set of DRAINS models aims to model the maximum flow to be conveyed by the pipe and swale through the site when the upstream pipe system is not experiencing full blockages. To ensure a realistic and conservative approach is maintained, blockage factors have still been applied for the on grade and sag pits, at 20% and 50% respectively. A schematic image of the DRAINS model for a 1 in 100yr storm event can be found in Appendix C.

Catchment 2 is directly drained though the culvert under Hanson Way, while catchments 8, 9, 10 and 11 are assumed to be piped from Moree Street through to the existing 750mm pipe under Hanson Way. Catchment 3 is modelled to be drained by the sag pits within Hanson Way, while catchments 4 to 7 remain as per the previous model.

230309 DRAINS -flow through pipes.drn

In this specific model, the pipe through the site has been modelled as upsized with a 750mm diameter to match the upstream pipe diversion.

As the sizing and levels of the pipe coming from Moree Street is not available, the flow produced by Catchments 8-11 has been modelled as baseflow within the receiving pit. By running the 1 in 100yr model, some overflow is experienced at this location. Only 0.76m³/s appears to be piped, while 1.03m³/s is expected to surcharge and flow through the existing culvert, ultimately reaching the proposed swale at 38-40 Dumaresq Street.

Under these circumstances, the model shows that when the pipe system upstream is not blocked, the flow through the swale is reduced to 2.26m³/s, which equates to a depth of 300mm of water through the swale, as shown in the longsection in Figure 6.

The modelling of the piped flows also reveals a flow of 1.28m³/s being conveyed by the Ø750 pipe through the site (refer to Figure 7). This is a larger flow compared to that of the previous model as more flow is allowed to be carried by the stormwater system.



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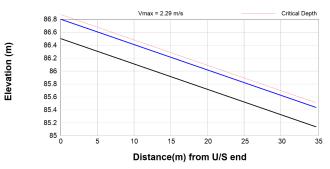


Figure 6 - Swale longsection when downstream pipe is upsized to Ø750

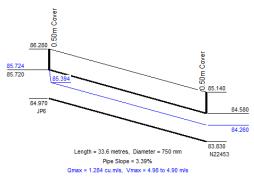
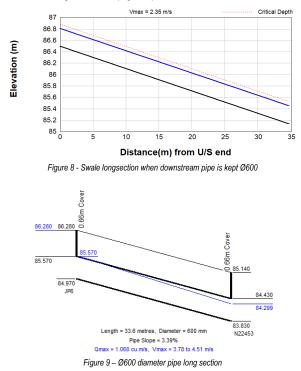


Figure 7 - Ø750 diameter pipe long section (flow through pipes)



230309 DRAINS -flow through pipes EX600.drn

When this model is amended to maintain the existing pipe downstream as Ø600, the flow through the pipe is observed to be reduced to 1.07m³/s (Figure 9), therefore increasing the flow through the swale to 2.43m³/s, which equates to a slightly higher depth of 320mm of water through the swale (Figure 8).





230309 DRAINS -flow through pipes EX600, 50block.drn

A further development of the same model is to apply a 50% physical blockage to the existing pipe. This is done by means of modelling a Ø300 pipe instead of a Ø600 pipe. This results in an increased flow of 0.21m³/s being conveyed through the pipe and 3.29m³/s being conveyed through the swale, resulting in a water depth of 370mm.

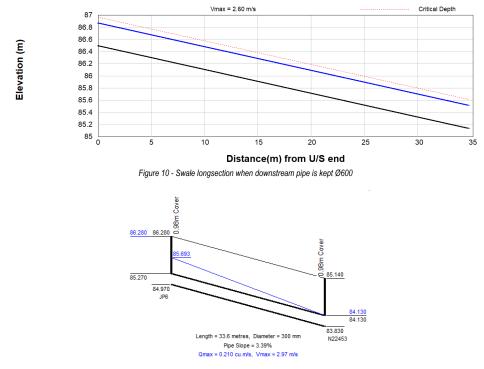


Figure 11 - Ø600 diameter pipe modelled as 50% blocked long section

With this second set of models, the intent is to verify whether the proposed Ø750 pipe is a sufficient upsize from the current Ø600 pipe that exists in ground. As it can be seen from the pipe lonsection in Figure 7, the pipe appears to offer sufficient capacity for the larger flows to be safely conveyed through and past the site and provide an alleviation of flow through the swale through the property.

It is to be noted that these are conservative models, as the catchment from 38-40 Dumaresq St. has been applied at the upstream end of the pipe. In reality, the inflow from the site will happen at a point further downstream within the property, discharging from an OSD tank.



3.3. HEC-RAS modelling

The HEC-RAS Modelling was undertaken to provide accurate water surface levels through the site and to ensure the development has no impact on adjoining properties. HEC-RAS is designed to perform one-dimensional hydraulic calculations for any natural or constructed channels. Data requirements for the model include:

- Creek/channel cross-section information at various locations along the waterway.
- Additional cross-section features (e.g., ineffective flow areas, levees, blocked obstruction etc.)
- Surface roughness, Manning's "n" values.
- Hydraulic structures e.g., culverts, bridge, lateral structures, storage area etc.
- Flow rates and locations of changes in flow rate along the waterway; and
- Definition of upstream and downstream boundary conditions.

The HEC-RAS project adopted cross-sections manually cut on the existing terrain profile and on the proposed channel, as well as boundary conditions to calculate water levels from the input flow.

For the pre-development scenario, cross-sections number 9, 7, 6, 5, 4, 3, 2 and 0 were cut at the most significant points along the property to capture changes in grade and shape of the existing valley crossing the site. For the post-development scenario, cross-sections number 9, 8, 7 are cut through the upstream funnelling section of the channel, where section 7 represents the start of the regular shaped channel. Cross-sections 3, 2, 1, 0 are cut through the downstream widening portion of the channel, where section 3 represents the downstream end of the regular shaped segment of channel.

In both models, river station 9 represents the most upstream section along the northern boundary and river station 0 represents the most downstream section, along the southern boundary. The arrangement of the applied sections is shown in Appendix D.

In accordance with the Ku-ring-gai Development Control Plan Part 24R.7, item number 6, where an enclosed drainage system exists in the catchment studied, the overland flow rate is to be determined as occurring during the greater of the 100yr storm event with the stormwater system operating at 50% capacity or the 5yr storm event operating with the enclosed system fully blocked. For this exercise, the grater flow has been found to be the one associated with the first set of circumstances, being a 100yr storm event with the stormwater system operating at 50% capacity.

The applied flow has been obtained with the DRAINS modelling with the downstream existing Ø600 pipe being 50% blocked and running a 100yr storm event. For the pre-development HEC-RAS model, the applied flow is of 3.29m³/s, as shown in the DRAINS modelling results in Appendix C for the modelling option with the existing downstream pipe to remain a Ø600mm pipe. However, for the post-development HEC-RAS model, the adopted flow is 2.9m³/s, as this is the flow that will be experienced by the system when the Ø600mm pipe is upsized to a Ø750mm pipe (as modelled in the DRAINS model "230309 DRAINS - Worst case scenario, blocked pipes.drn").

The HEC-RAS analysis has been undertaken for both the pre-developed and post-developed conditions. This is so that comparisons can be drawn to demonstrate the impact of the development on the flow through the land. The resultant flows through these cross sections in HEC-RAS can be found in Appendix F.

The HEC-RAS channel long section representations can be found in Appendix G.



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The setup parameters of contraction and expansion coefficients have been adopted as 0.1 and 0.3, respectively. The Manning's 'n' value has been set at different values depending on the section. In the pre-development model, section 9, 7, 6, 5, 4, 3 and 2 have been setup with n=0.035 to represent the short grass existing conditions. Section 0 has been modelled with n=0.012 to reflect the conditions of the concrete path on the neighbouring property downstream. In the post-development model, sections 9, 8, 7, 6, 5, 4 and 3 have been setup with n=0.035 (short grass). Sections 2 and 1 have been setup with n=0.050 to reflect the proposal for rip-rap rocks to be proposed on the downstream end of the channel. Section 0 has been set up with n=0.012 (concrete path), similarly to the pre-development model.

Due to the nature of the flow in the catchment, a mixed flow regime analysis was adopted. Running of both models highlighted that, in both cases, the most critical scenario is that achieved with a supercritical flow regime.

Boundary conditions for each stream are required in order to perform the calculations; the boundary condition adopted for both upstream and downstream conditions is the normal depth, based on a fall of around 3% as per existing ground conditions.

River station 0, as the most downstream section, has been modelled to be the same in both the pre-development and the post development scenario.

In the model for the pre-development scenario, all sections have been entered to replicate the existing natural shape of the ground.

In the model for the post-development scenario, the section of channel included between river stations 6 and 3 has been modelled to form the proposed channel as per the profile in Figure 3, with a 3m wide base, a depth of 400mm and a batter of 1H:1V on each bank.

River stations 8, 7, 2 and 1 have been modelled to represent the transitioning shape of the channel from the natural surface to the regular channel upstream, and from the regular channel to the natural surface downstream.

HEC-RAS Results

The analysis of the pre-development scenario reveals the existence of a flow that spreads through a shallow but very wide area through the property at relatively low velocities. The flow depth ranges from 0.20m to 0.63m and the velocity ranges from 1.50m/s to 2.86m/s. In accordance with the general flood hazard vulnerability curve from the Technical Flood Risk Management Guideline: Flood hazard, the land would be classified as risk category H5.

In the post-development scenario, the flow is concentrated in a dedicated channel, therefore greatly reducing the area affected by the flow crossing through the property and remaining distant from any adjacent building. In this case the flow depth ranges from 0.160m to 0.400m. The velocity ranges from 0.98m/s to 3.36m/s. In accordance with the general flood hazard vulnerability curve, the land would still be generally classified as category H5 at all sections.

From pre-development to post-development, the overall maximum ponding depth is reduced from 630mm to a maximum of 400mm. It is to be noted that the land affected by the ponding water is a dedicated channel to which access will be restricted. The surrounding land, previously affected by the overland flow and classified as hazard category H5, will be no longer be affected by the flow crossing through the property and become safe usable space.

Crossing of the channel will only be allowed by means of footbridges or suspended walkways, set well above the top water level of the channel. Access to the channel itself will be limited and controlled by fencing that will be proposed to be installed along the banks of the channel, with access allowed only for authorised maintenance Contractors.



The finished floor levels for the proposed dwellings will be required to be set to allow appropriate freeboard from the top water level in the channel.

For the downstream neighbouring property, the proposed works (including the upsizing of the existing pipe to a Ø750mm pipe) will result in a reduced flow entering their land, at a reduced depth of flow. Even though the velocity at the most downstream section is slightly higher than the pre-development scenario, the velocity depth product is effectively unchanged at this downstream section. The higher velocity is understood to be due to the velocity carried through the upstream sections which have a channel-like regular shape, while in the pre-development state the flow is allowed to spread out over a much larger area. In the pre-development model, the velocity depth product at section 0 is found to be 0.21*2.63=0.55. In the post- development model, the velocity depth product at the same downstream section is found to be 0.17*3.36=0.57.

Management of the flow on the downstream end of the channel will need to be addressed in the form of appropriately designed and sized rip-rap and scour protection to slow down the flow and ensure no scouring of the land.

Refer to the table below, comparing the results from the pre-development and the post-development model.

River	Max. Flow	Depth (m)	Veloci	ty (m/s)	Flow A	rea (m2)	Top Wi	dth (m)
Station n.	Pre	Post	Pre	Post	Pre	Post	Pre	Post
9	0.33	0.33	1.76	1.03	1.87	3.00	10.66	12.77
8	-	0.34	-	0.98	-	2.95	-	9.24
7	0.31	0.29	1.50	1.65	2.19	1.75	10.98	6.34
6	0.24	-	1.66	-	1.98	-	11.46	-
5	0.33	-	1.68	-	1.96	-	10.14	-
4	0.24	-	2.39	-	1.38	-	10.32	-
3	0.63	0.40	1.62	2.11	2.03	1.38	10.76	3.97
2	0.20	0.17	2.86	2.68	1.15	1.08	11.48	6.42
1	-	0.16	-	2.34	-	1.24	-	8.07
0	0.21	0.17	2.63	3.36	1.25	0.86	10.18	9.05

Table 1 - HEC-RAS results comparison for pre and post scenarios

4. CONCLUSIONS

The modelling of flows through the property at 38-40 Dumaresq Street analysed a number of different scenarios to determine whether the existing inground stormwater pipe is capable to convey the flows from the upstream catchments and to appropriately size a channel to be formed through the property to convey all overland flows.

The DRAINS modelling confirmed that upsizing of the existing pipe through the site from a Ø600 pipe to a Ø750 pipe will be necessary to safely convey all upstream flows. By upsizing the pipe to a diameter of 750mm, the size of the stormwater drainage within the property will be at least matching that of the upstream pipes within 34-36 Dumaresq Street and that of the existing pipe under Hanson Way. As a consequence, upsizing the existing pipe will also alleviate the flow running across the site and proposed channel.



The proposed sizing of the swale/channel through the property has been confirmed to be appropriate to convey all the overland flow from the upstream catchments with both DRAINS and HEC-RAS modelling, up to and including the flows obtained in a 1 in 100yr storm event in the worst-case scenario where the upstream or downstream stormwater infrastructure experiences failure due to blockages.

The proposed swale, as indicated in Figure 3, will be of trapezoidal shape with a 3m wide base, 1V:1H sloped sides and up to 400mm deep. With these dimensions, the swale will be capable of conveying the largest calculated flow of 2.9m³/s by reaching a maximum depth of 400mm, as observed when the existing in-ground pipe is upsized to a Ø750 pipe. The top of water level achieved within the channel will need to be considered in calculating the minimum habitable floor level for any future development on the subject land, in accordance with Council's freeboard requirements.

Given the nature of the dedicated channel, the higher velocity achieved within the dedicated space will not impose a danger on people, vehicles or buildings, as the magnitude of flow reaching the downstream property is reduced, as well as the depth of flow. The velocity depth product on the downstream section is proof that the safety for the neighbouring land is not compromised.

Furthermore, HEC-RAS modelling provided detailed insight on the behaviour of the flow through the proposed channel. The modelling shows that providing a dedicated channel largely reduces the extent of the top width of flow across the property when compared to the existing conditions. Therefore, implementing a channel through the property will reduce the extent of affected land, it will decrease the level of risk associated with overland flow through the site and increase the usability of the land. Appropriate scour protection measures will need to be designed and implemented for the downstream portion of the channel to ensure the flow is well managed and to prevent scouring of the land.

By implementing of the above-mentioned proposed works, it can be ensured that the property at 38-40 Dumaresq Street will continue to safely convey all flow from the upstream catchment via both piped and channelled infrastructure without having a detrimental impact on any of the adjacent or downstream properties.



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5. S9.1 Direction – 4.1 Flooding

In response to Council's request of additional clarifications related to flooding matters, responses have been provided to the individual components and objectives extrapolated from the NSW Department of Planning, Housing and Infrastructure policy for Local Planning Directions.

Direction 4.1 Flooding				
(1) A planning proposal must include provisions that give effect to and are consistent with:				
(a) the NSW Flood Prone Land Policy	The modelling and analysis conducted as part of this report accepts that			
(b) the principles of the Floodplain Development Manual 2005,	the subject site is characterized by the presence of an overland flow path crossing through the lots. For this reason, the study was further developed to provide accurate sizing of a proposed dedicated channel to continue to provide a safe means of conveying the same overland flow			
(c) the Considering flooding in land use planning guideline 2021, and	through the site. The purpose of the channel is to retain the existing flow path, while also allocating a well-defined structure to keep the conveyance of flow safe through the developed site. The channel is proposed to be at the same location as the existing path to not negatively or adversely affect adjacent or downstream properties. This report demonstrates that, by sizing the channel appropriately, the flow can be fully conveyed by the proposed channel, leaving the rest of the land unaffected by flooding. In doing so, it can be ensured that the proposed development will not affect the safe occupation of and efficient evacuation of people in the event of a flood. The proposed works incorporate appropriate measures to manage risk to life from a flood by both providing a channel to convey the overland flow and by keeping the habitable floors away from the channel and above the flood level. By adopting those principles, the proposal is consistent with the Flood Prone Land Policy, the principles of the Floodplain Development Manual (2005) and the land use planning guidelines 2021.			
(d) any adopted flood study and/or floodplain risk management plan prepared in accordance with the principles of the Floodplain Development Manual 2005 and adopted by the relevant council.	The development falls within the area of study covered by the Blackbutt Creek Flood Study prepared by Jacobs and dated December 2014. The 1%AEP Flood risk map (Figure A-10 in Appendix A) shows the proposed site with localised hatching indicating all three levels of low, medium and high hazard. However, the hazard levels are all strictly shown across the site in correspondence of the existing overland flow path crossing the lots. It is to be noted that with the proposed works, the natural overland flow path is maintained and further formalised into a dedicated channel. By doing so, the development is maintaining the natural conveyance of flow through the lots unchanged. Additionally, all new developments are proposed to be constructed clear of the dedicated channel and at a level that is higher than the flood level to ensure the buildings are not negatively impacted by any flow through the site.			



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(2) A planning proposal must not rezone land within the flood planning area from Recreation, Rural, Special Purpose or Conservation Zones to a Residential, Employment, Mixed Use, W4 Working Waterfront or Special Purpose Zones.	Refer to response by Planning Consultant.					
(3) A planning proposal must not contain provisions that apply to the flood planning area which:						
(a) permit development in floodway areas	The overland flow through the site is maintained and a dedicated channel is proposed to contain the flooding within the channel. The development is proposed to be outside said dedicated channel and is proposed to also be above the level of flooding.					
(b) permit development that will result in significant flood impacts to other properties	The modelling documented by this report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment.					
(c) permit development for the purposes of residential accommodation in high hazard areas	Part of the site identified as high hazard in Blackbutt Creek Flood Study. This is shown as a localised point-form on the downstream extremity of the existing overland flow path within the property. The development proposes the formalisation of the existing overland flow path into a dedicated channel to fully contain the flow crossing through the site. Therefore, not changing to the way the overland flow is conveyed through the site, while providing a contained and safer means of conveyance for the overland flow. Additionally, the development of the proposed buildings is completely kept outside and clear of the channel, as well as the portion of the site categorized a s high hazard.					
(d) permit a significant increase in the development and/or dwelling density of that land,	Refer to response by Planning Consultant.					
(e) permit development for the purpose of centre- based childcare facilities, hostels, boarding houses, group homes, hospitals, residential care facilities, respite day care centres and seniors housing in areas where the occupants of the development cannot effectively evacuate,	N/A					
(f) permit development to be carried out without development consent except for the purposes of exempt development or agriculture. Dams, drainage canals, levees, still require development consent,	N/A					
(g) are likely to result in a significantly increased requirement for government spending on emergency management services, flood mitigation and emergency response measures, which can include but are not limited to the provision of road infrastructure, flood mitigation infrastructure and utilities, or	The modelling documented by this report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment. Consequently, not likely to result in a significantly increased requirement for government spending on emergency management services.					



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(h) permit hazardous industries or hazardous storage establishments where hazardous materials cannot be effectively contained during the occurrence of a flood event.	N/A					
(4) A planning proposal must not contain provisions that apply to areas between the flood planning area and probable maximum flood to which Special Flood Considerations apply which:						
(a) permit development in floodway areas	The overland flow through the site is maintained and a dedicated channel is proposed to contain the flooding within the channel. Additionally, the development is proposed to be outside said dedicated channel and is proposed to also be above the level of flooding.					
(b) permit development that will result in significant flood impacts to other properties	The modelling documented by this report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment.					
(c) permit a significant increase in the dwelling density of that land,	Refer to response by Planning Consultant.					
(d) permit the development of centre-based childcare facilities, hostels, boarding houses, group homes, hospitals, residential care facilities, respite day care centres and seniors housing in areas where the occupants of the development cannot effectively evacuate,	N/A					
(e) are likely to affect the safe occupation of and efficient evacuation of the lot, or	The overland flow through the site is maintained and a dedicated channel is proposed to contain the flooding within the channel. The development is proposed to be outside said dedicated channel and is proposed to also be above the level of flooding. Safe and efficient evacuation onto Dumaresq Street can be provided.					
(f) are likely to result in a significantly increased requirement for government spending on emergency management services, and flood mitigation and emergency response measures, which can include but not limited to road infrastructure, flood mitigation infrastructure and utilities	The modelling documented by this report indicates no offsite impacts to neighbouring or downstream properties as a result of the redevelopment. Consequently, not likely to result in a significantly increased requirement for government spending on emergency management services.					



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(5) For the purposes of preparing a planning proposal, the flood planning area must be consistent with the principles of the Floodplain Development Manual 2005 or as otherwise determined by a Floodplain Risk Management Study or Plan adopted by the relevant council. As mentioned above, Council's Blackbutt Creek Flood Study applies to this land. The flood maps presented within the flood study only show localised flooding through the properties in correspondence of the overland flow path. As such, the proposal is to maintain the existing path unchanged and convey the flow with a formalised channel in order to keep the rest of the land unaffected by flooding.

DECLARATION

I have examined the site, existing improvements and proposed development. In accordance with accepted engineering practice, I have undertaken a flood study of the adjacent drainage system and can confirm the accuracy of my calculated results. I declare that the proposed development will be safeguarded from flooding and flood damage associated with the design flood standard as defined in Part 24 of the Ku-ring-gai DCP and will not adversely affect any other structures or properties.

Yours faithfully,

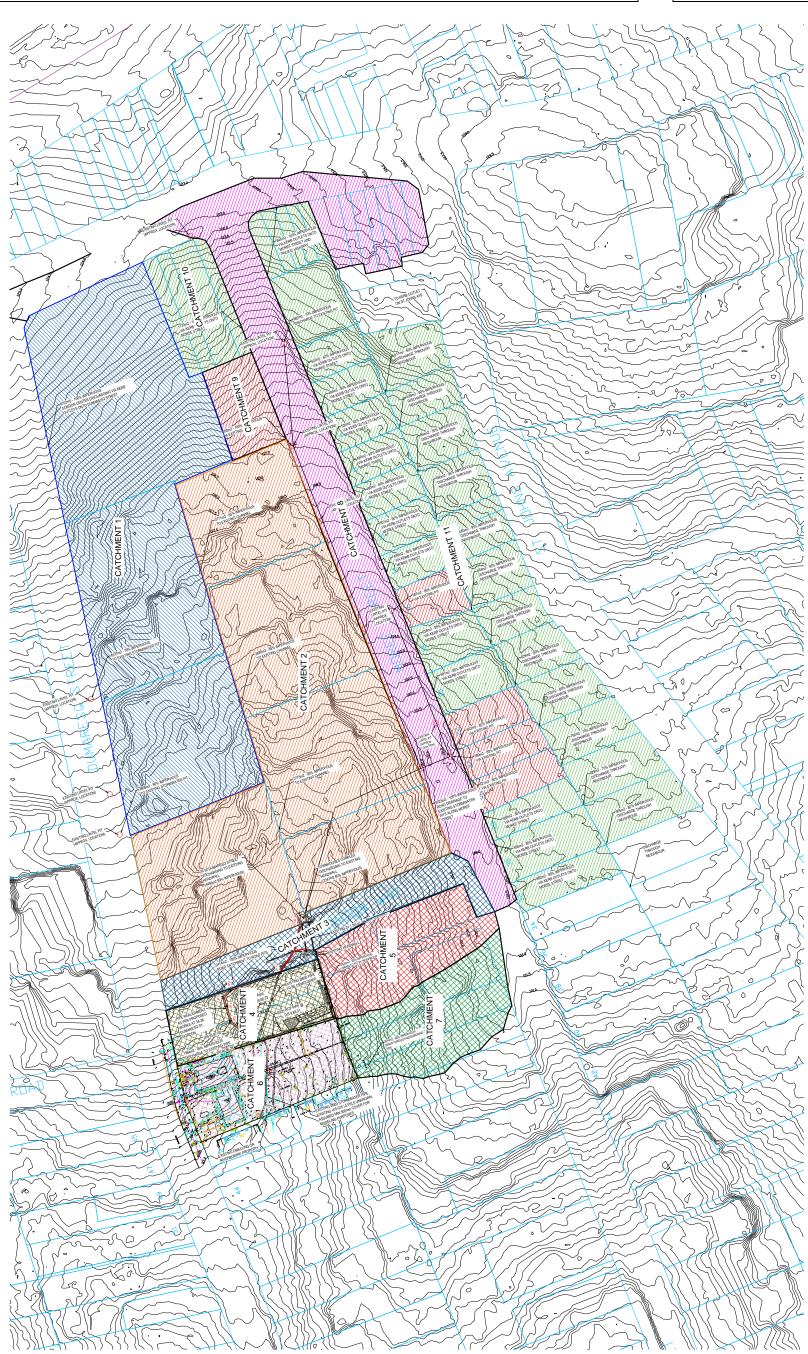
ANDREW FRANCIS For, and on behalf of, H & H Consulting Engineers Pty Ltd.

ITEM NO: GB.4



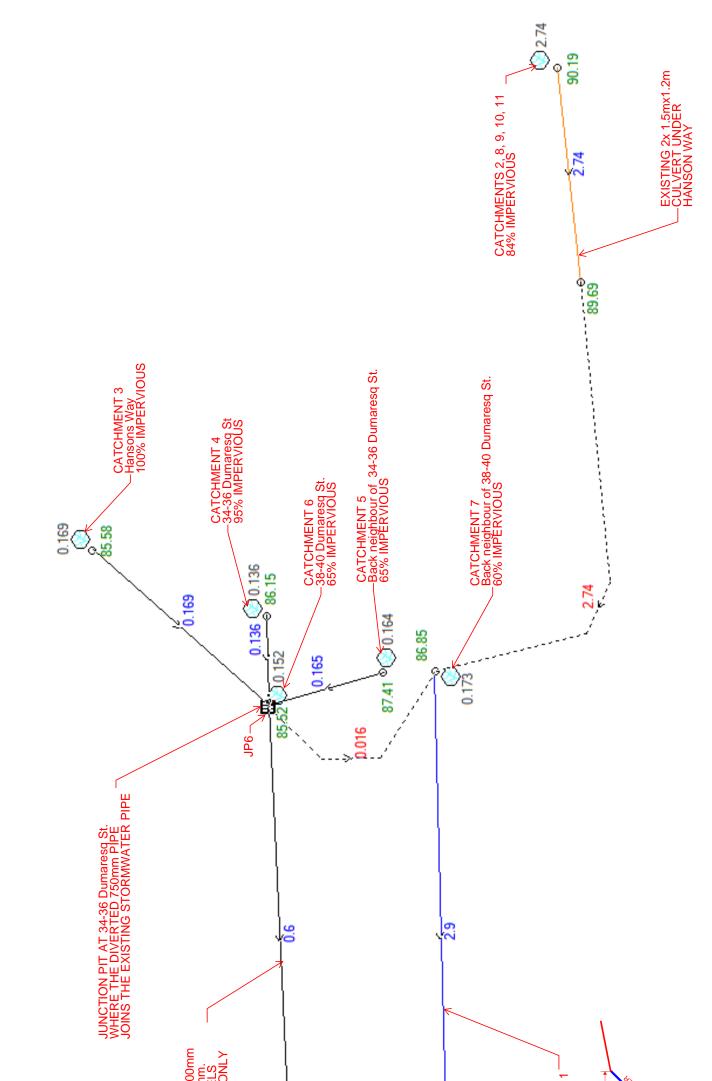
APPENDIX A - CATCHMENT PLAN

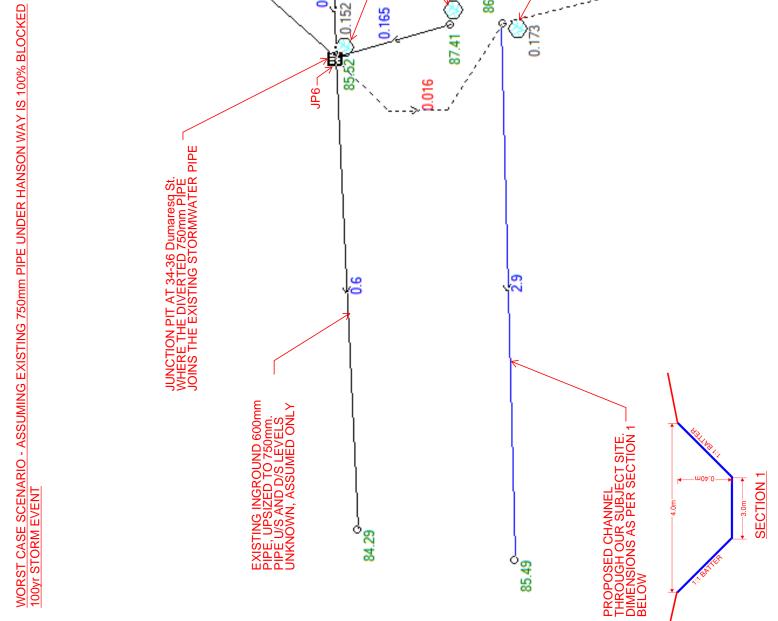
ITEM NO: GB.4





APPENDIX B – DRAINS Worst Case Scenario DRAINS MODEL WITH UPSTREAM BLOCKAGE AND EXISTING PIPE UPSIZED TO Ø750



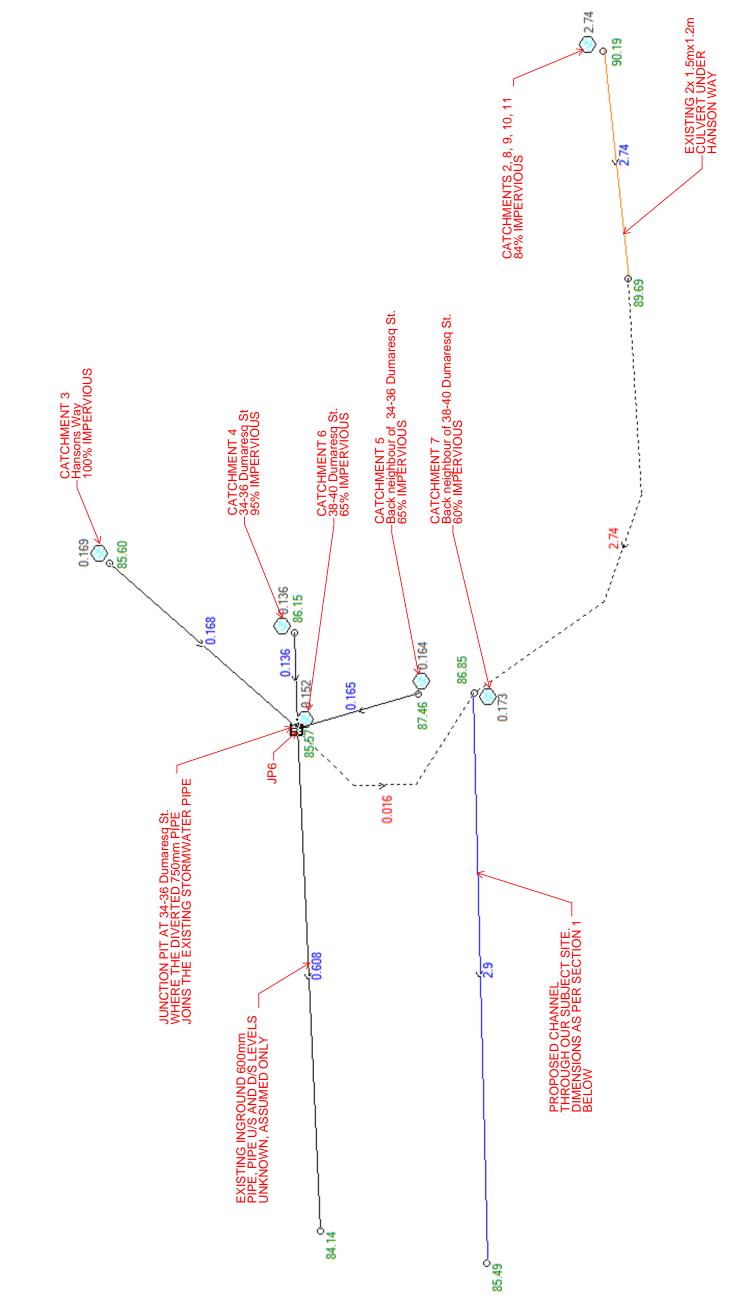


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DRAINS MODEL WITH UPSTREAM BLOCKAGE AND EXISTING Ø600 PIPE

ITEM NO: GB.4

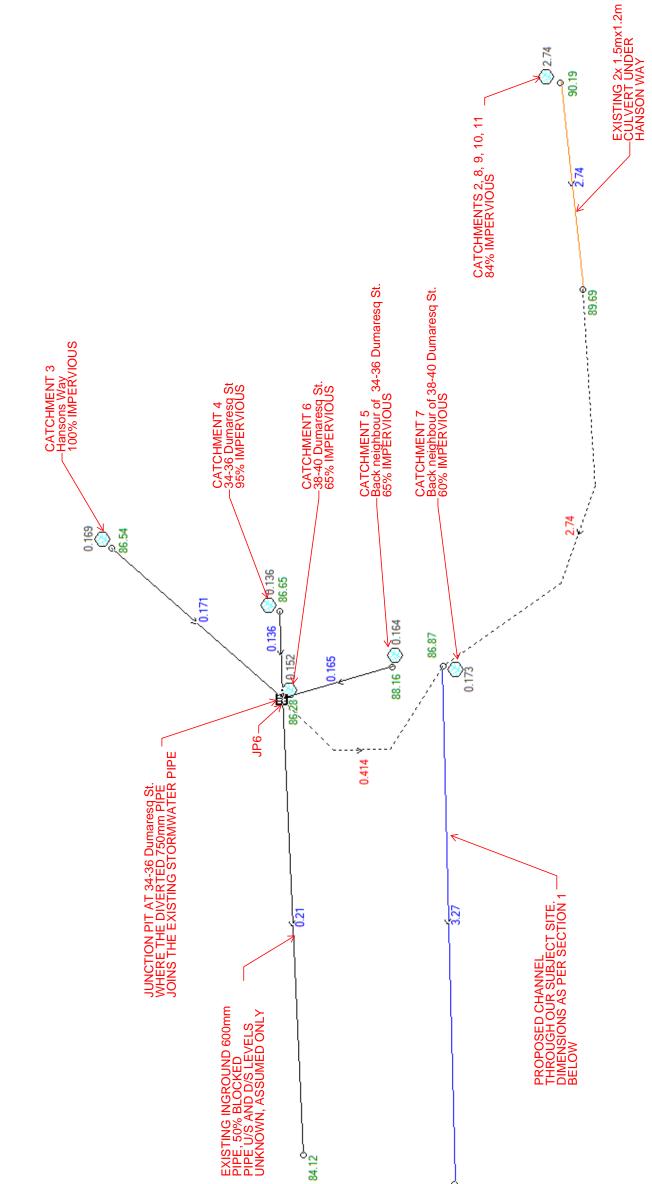




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DRAINS MODEL WITH UPSTREAM BLOCKAGE AND EXISTING Ø600 PIPE WITH 50% BLOCKAGE





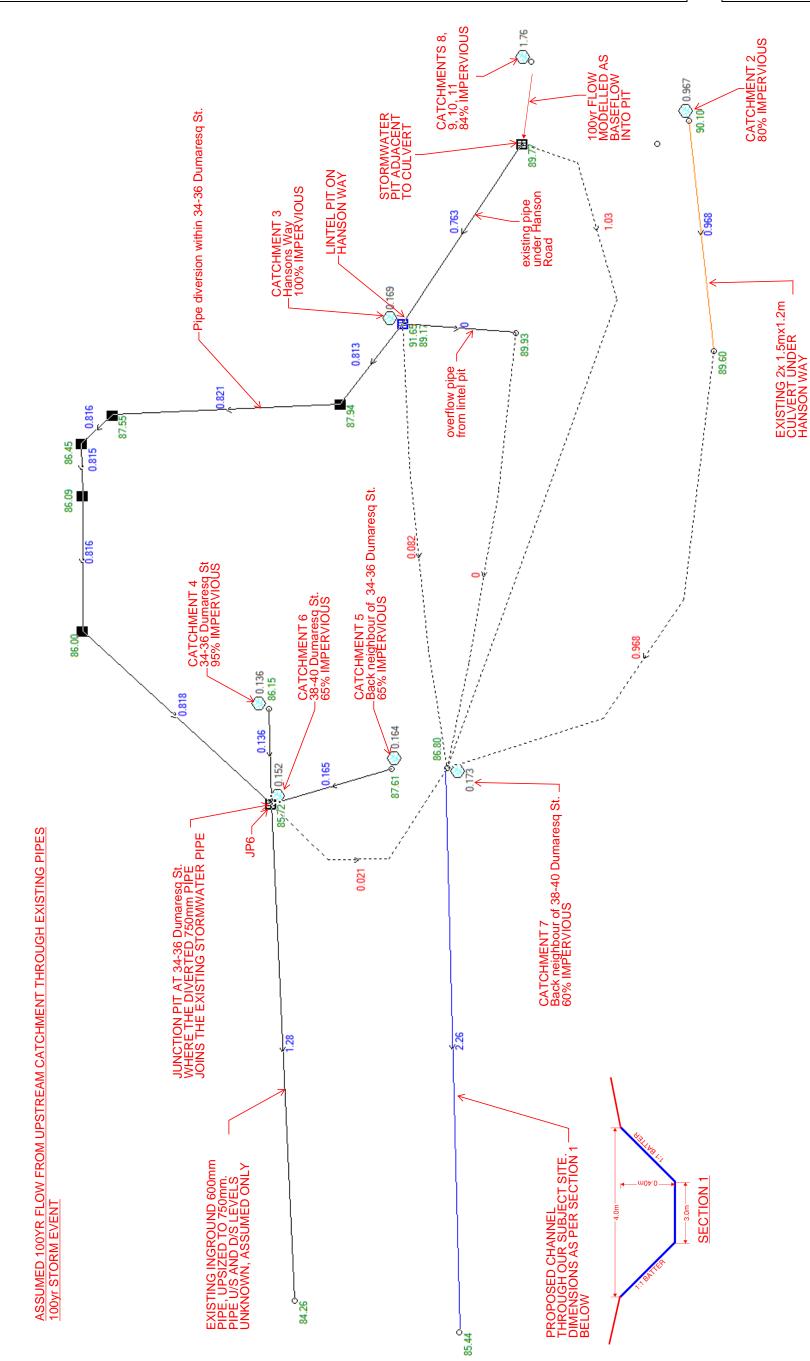
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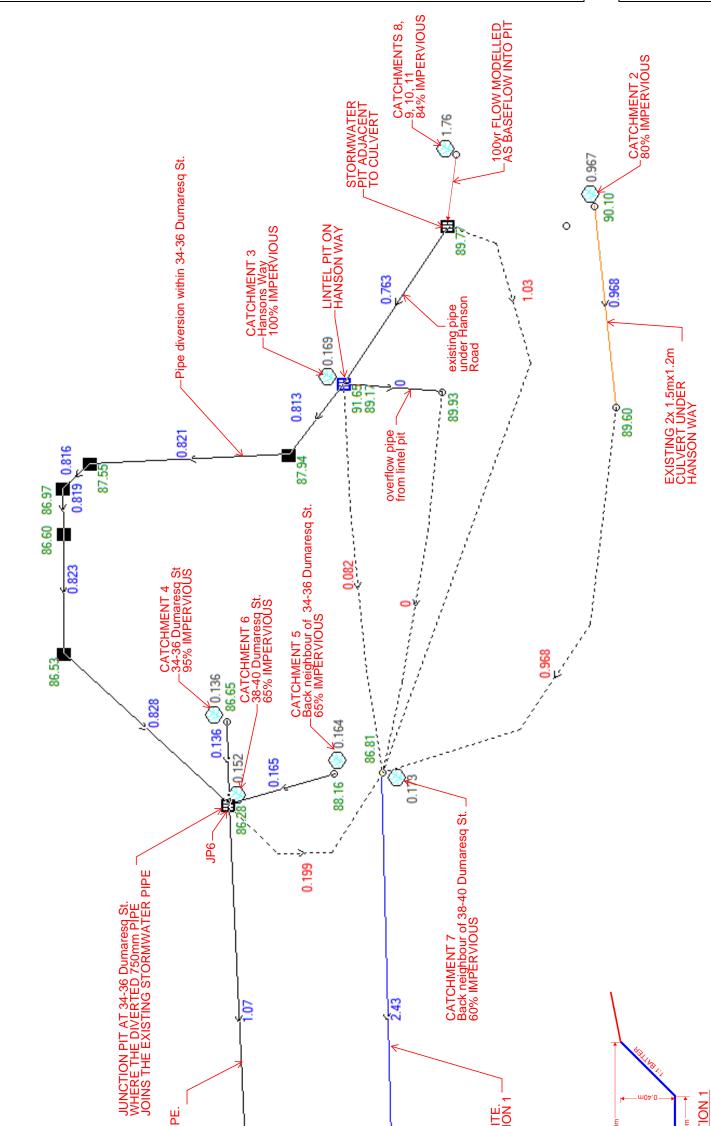
APPENDIX C – DRAINS Flow through pipes DRAINS MODEL WITH EXISTING DOWNSTREAM PIPE UPSIZED TO Ø750

ITEM NO: GB.4

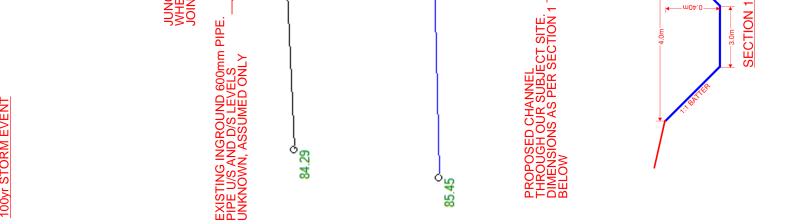




DRAINS MODEL WITH EXISTING DOWNSTREAM PIPE MODELLED AS Ø600



ASSUMED 100YR FLOW FROM UPSTREAM CATCHMENT THROUGH EXISTING 600mm DIAMETER PIPE 100yr STORM EVENT



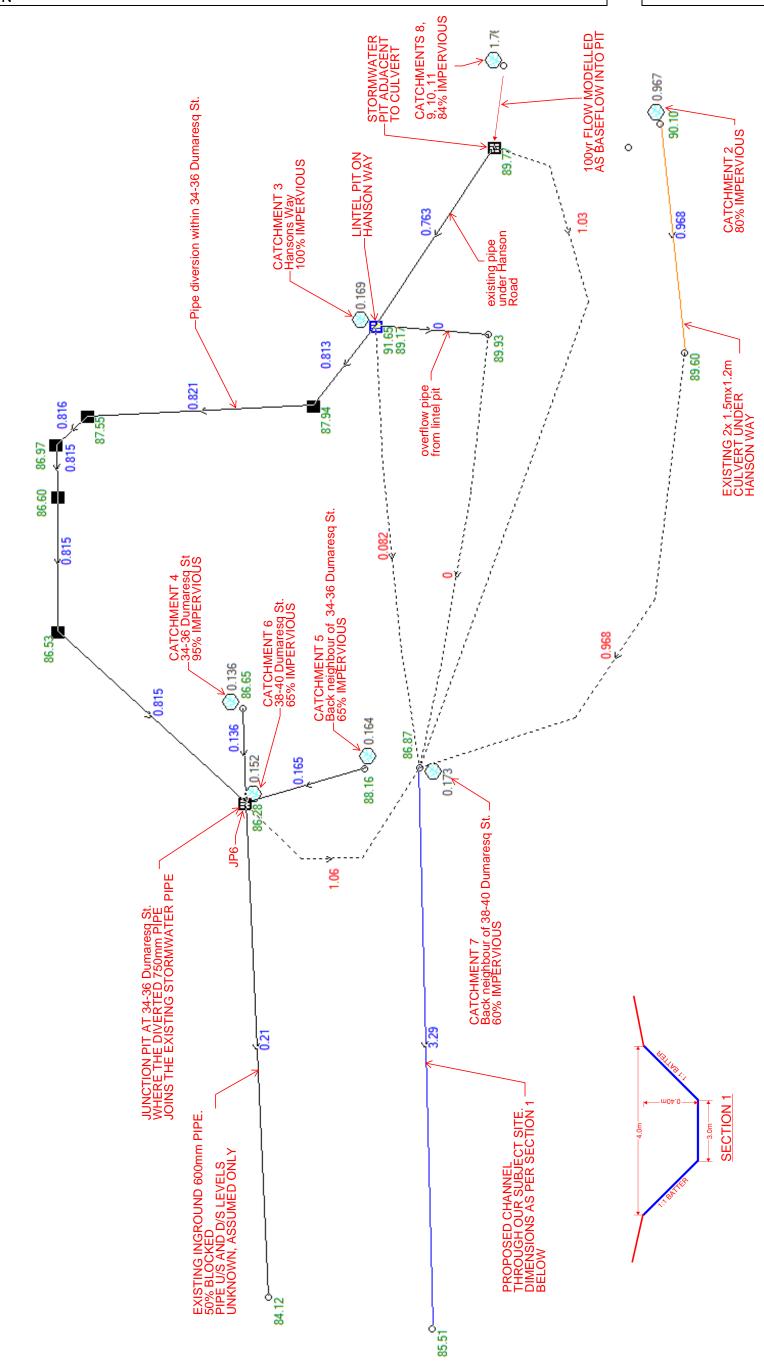
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DRAINS MODEL WITH EXISTING DOWNSTREAM PIPE MODELLED AS Ø600, 50% BLOCKED



ITEM NO: GB.4

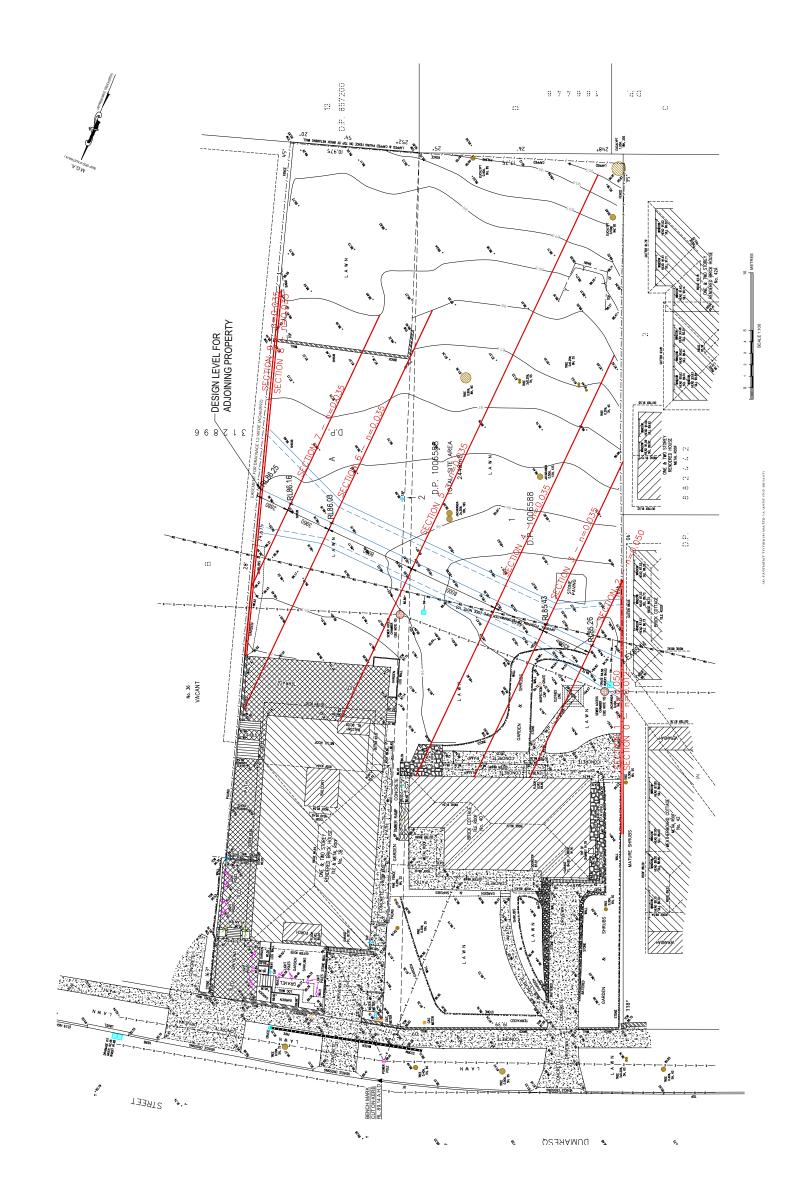


ASSUMED 100YR FLOW FROM UPSTREAM CATCHMENT THROUGH EXISTING 600mm DIAMETER PIPE, 50% BLOCKED 100yr STORM EVENT

20250217-KLPP-Crs-2025/032626/846

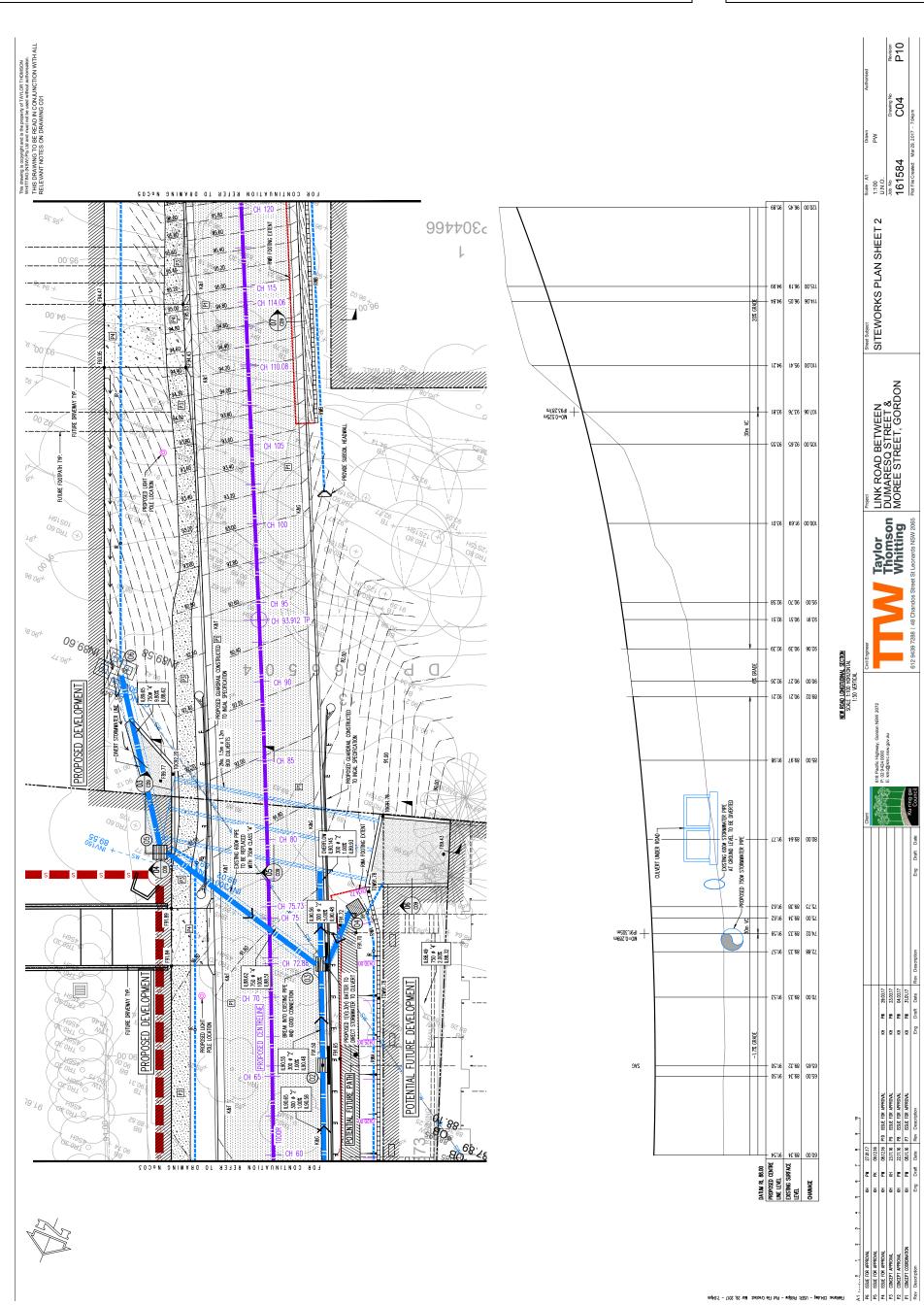


APPENDIX D – SWALE/CHANNEL CONFIGURATION





APPENDIX E - DESIGN DRAWING HANSON WAY

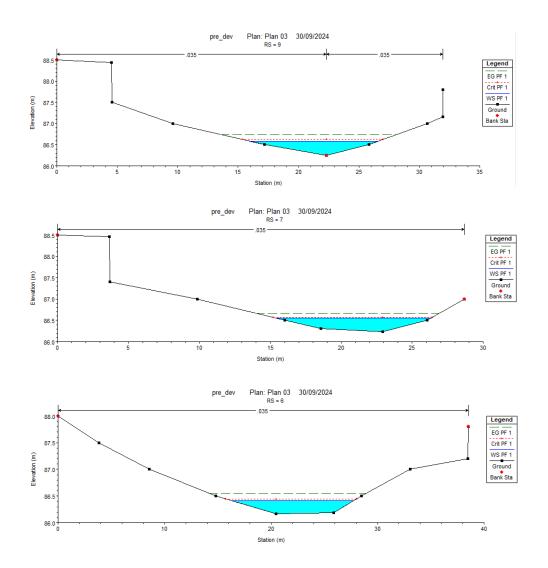


ITEM NO: GB.4



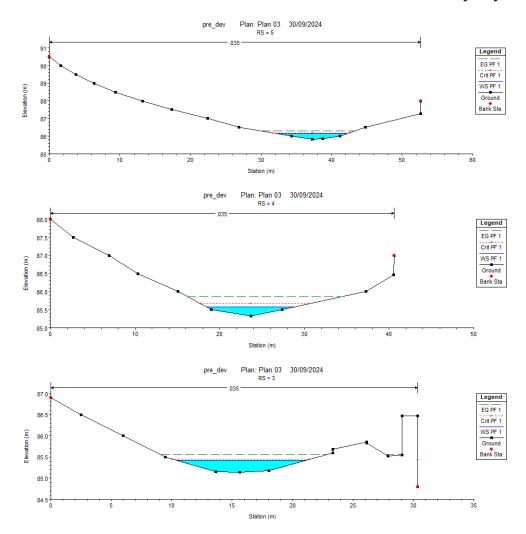
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APPENDIX F – HEC-RAS SECTIONS PRE-DEVELOPMENT SECTIONS



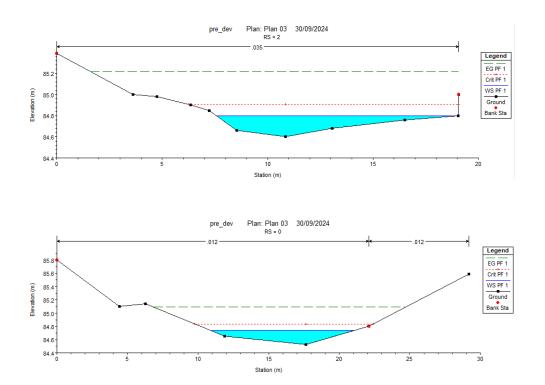


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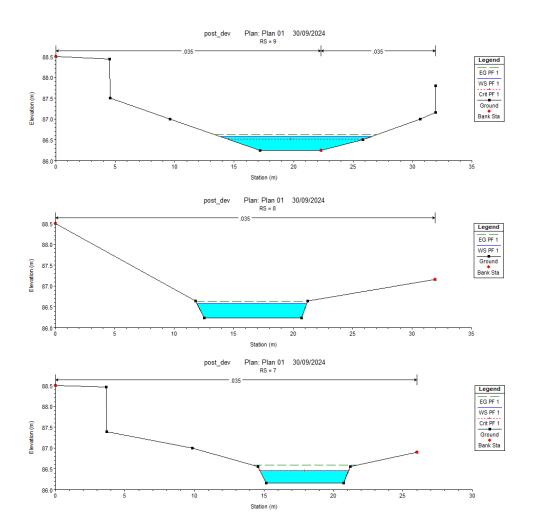
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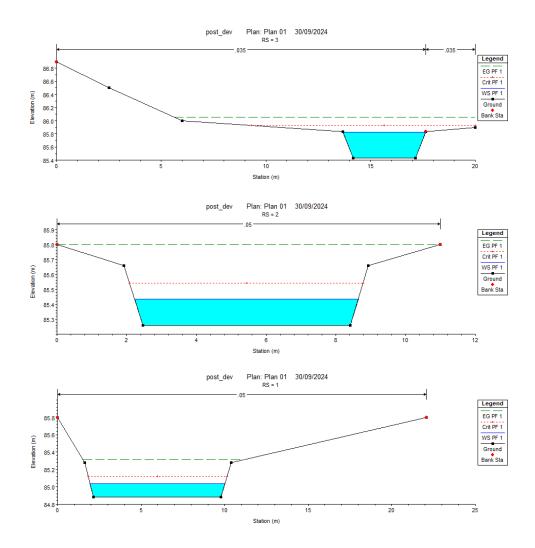
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POST-DEVELOPMENT SECTIONS



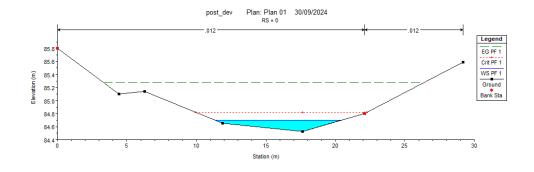


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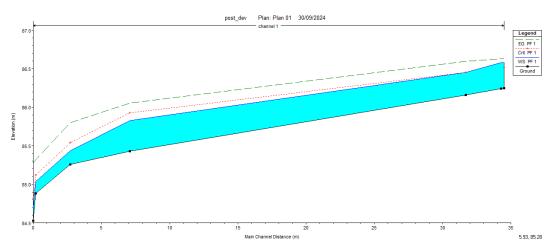
APPENDIX G - HEC-RAS LONGSECTIONS



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PRE-DEVELOPMENT LONGSECTION pre_dev Plan: Plan 03 30/09/2024 87. Legend EG PF 1 Crit PF 1 WS PF 1 86. 86. levation 85. 85.0 84.5 10 15 20 25 30 Main Channel Distance (m)

POST-DEVELOPMENT LONGSECTION



Planning Proposal for a Proposed Residential Development

38-40 Dumaresq Street, Gordon

TRAFFIC AND PARKING ASSESSMENT REPORT

21 August 2023

Ref 23204



Suite 6, 20 Young Street, Neutral Bay NSW 2089 - PO Box 1868, Neutral Bay NSW 2089 Ph: 9904 3224

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Figure 2	Site
Figure 3	Road Hierarchy
Figure 4	Existing Traffic Controls
Figure 5	Existing Public Transport Services
Figure 6a & 6b	Existing & Proposed Cycleways

Document Verification

Location:	38-40 Dumaresq Street, Gordon	Job Number		23204	
Revision	Details	Prepared		Approved	
		By	Date	By	Date
Draft 01	Initial Draft for Review	DL	17/07/23	RV	21/8/23

1. INTRODUCTION

This report has been prepared to accompany a planning proposal to Ku-ring-gai Council to rezone 40 Dumaresq Street to R3 - Medium Density Residential so that it is consistent with the existing zoning of the adjacent site at 38 Dumaresq Street (Figures 1 and 2).

Number 38 Dumaresq Street is currently zoned R3 – Medium Density Residential, however it does not meet the site frontage and lot size requirements of Clause 6.6 of the Ku-ring-gai LEP 2015 for a medium density lot, which prevents that site from realising its full development potential.

In addition, the current redevelopment of 34-36 Dumaresq Street has removed any potential for amalgamation with that lot, resulting in 38 Dumaresq Street becoming an isolated lot.

If the planning proposal to rezone 40 Dumaresq Street to R3 - Medium Density Residential were to be successful, the proponent will seek to consolidate 38 and 40 Dumaresq Street into one site. The owner of 38 Dumaresq Street is also the owner of 40 Dumaresq Street.

It is envisaged that the consolidated lot would have a development potential of approximately 10 dwellings which would result in a *nett increase* in the traffic generation potential of the consolidated sites of approximately 5 vehicles per hour (vph) during commuter peak periods, as detailed in Chapter 3 of this report.

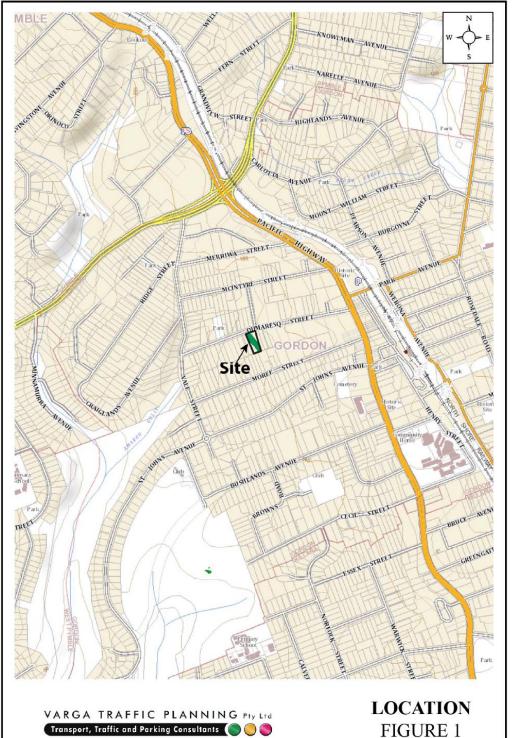
That *nett increase* in traffic activity of 5 vph is *minimal*, and will clearly not have any unacceptable traffic implications in terms of road network capacity or traffic-related environmental effects.

The site is situated approximately 700m walking distance west of Gordon Railway Station, and is within easy walking distance to the *Gordon Centre* shopping centre located on the corner of the Pacific Highway and Dumaresq Street intersection.

The purpose of this report is to assess the traffic and parking implications of the planning proposal and to that end this report:

- describes the site and provides details of the planning proposal
- reviews the road network in the vicinity of the site, and the traffic conditions on that road network
- estimates the traffic generation potential of the planning proposal, and assigns that traffic generation to the road network serving the site
- assesses the traffic implications of the planning proposal in terms of road network capacity
- reviews the geometric design features of the proposed car parking and loading facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking and loading provided on the site.

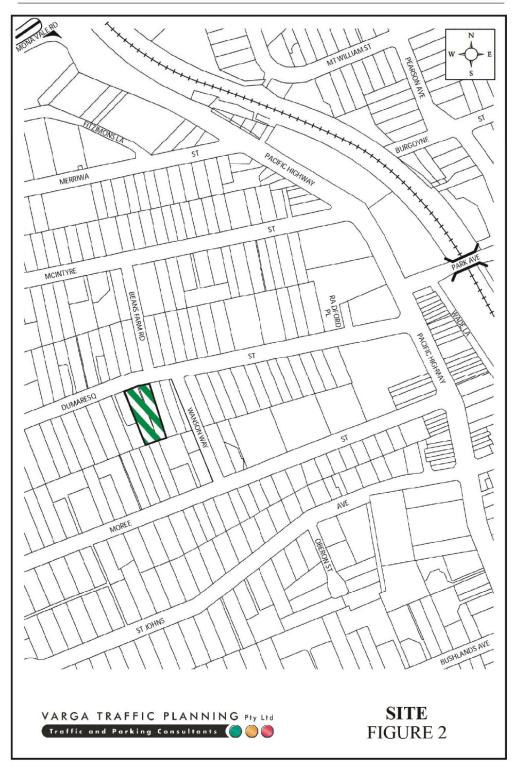
ATTACHMENT NO: 10 - APPENDIX H - TRAFFIC REPORT 40 DUMARESQ STREET GORDON



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ATTACHMENT NO: 10 - APPENDIX H - TRAFFIC REPORT 40 DUMARESQ STREET GORDON

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2. PLANNING PROPOSAL

Site

The subject site is located on the southern side of Dumaresq Street, approximately 50m west of Hanson Way, a recently constructed local road. The site has a street frontage approximately 36 metres in length and comprises numbers 38 & 40 Dumaresq Street. The site occupies an area of approximately 2,448m².

The subject site is currently occupied by two dwelling houses, each with separate vehicular access driveways off Dumaresq Street.

A recent aerial image of the site and its surroundings is reproduced below, showing the recently completed local road, Hanson Way. The approved DA0168/17 for a residential development next door to the east, at 34-36 Dumaresq Street, is currently under construction.



Existing Planning Controls

No. 40 Dumaresq Street, the western part of the site, is currently zoned R2 - Low Density *Residential* with an FSR of 0.3:1, and height controls up to 9.5m.

No. 38 Dumaresq Street, the eastern part of the site, is currently zoned *R3 – Medium Density Residential* with an FSR of 0.8:1, and height controls up to 11.5m.

Planning Proposal

This planning proposal seeks approval to rezone 40 Dumaresq Street from R2 – Low Density Residential zoning to R3 – Medium Density Residential, to be consistent with the existing zoning of the adjacent site at Number 38 Dumaresq Street.

If the planning proposal to rezone 40 Dumaresq Street was approved, the proponent would seek to consolidate 38 and 40 Dumaresq Street into one site, noting that the owner of 38 Dumaresq Street is also the owner of 40 Dumaresq Street.

It is envisaged that the consolidated lot would have a development potential of approximately 10 dwellings.

Off-street car parking would be provided in a basement car parking area in accordance with Council's requirements and in accordance with the relevant Australian Standards, with vehicular access to be provided via a single driveway off Dumaresq Street.

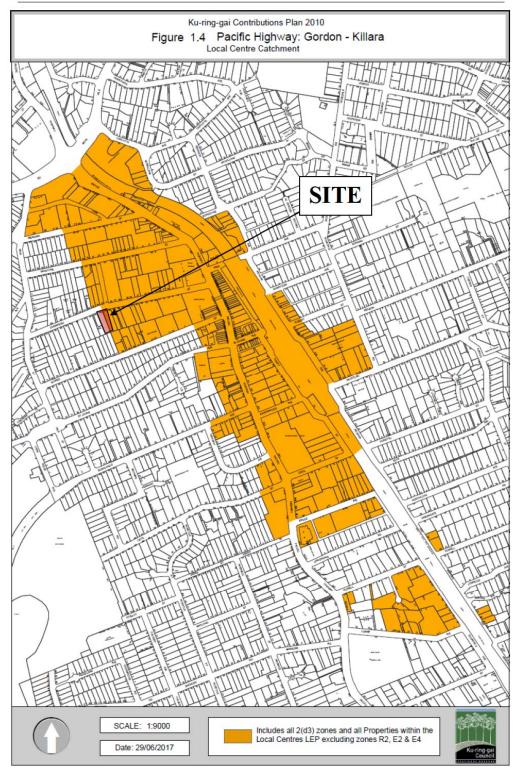
Replacing the two existing dwelling houses on the site with approximately 10 dwellings which would result in a *nett increase* in the traffic generation potential of the consolidated sites of 5 vph during commuter peak periods, as detailed in Chapter 3 of this report.

Gordon Local Centre

Ku-ring-gai Council's Section 94 Contributions Plan 2010 identifies a number of proposed upgrades to the road network and public domain of Gordon.

A map illustrating the boundaries of the Gordon local centre precinct, and a map of the Gordon 'Town Centre Facilities Plan' are reproduced on the following pages.





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The two sites straddle the boundary of the Gordon local centre precinct, one of the largest of the eigth centres located within Ku-ring-gai LGA. Council's vision for the precinct is as follows:

- creating a distinct commercial precinct that provides a range of services, facilities and experiences
- providing opportunities for new specialty retail, cafés and restaurants to be located away from the Pacific Highway
- encouraging restaurants, cafés, outdoor dining and offices fronting onto rear lanes, thereby contributing to increased activity and passive surveillance.

Council's consolidation and subdivision objectives are described in *Part 3A General Controls for Consolidation and Subdivision* of the *Ku-ring-gai Local Centres DCP 2016*. The *DCP* details a number of objectives in relation to land consolidation within the local centres, including the following:

Objectives

- 01 To ensure consolidation and subdivision create usable and regularly shaped lots that relate to the site conditions and the context
- 02 To ensure the design of residential development encourages engagement with the surrounding community
- 03 To encourage lot size and shape that supports a practical and efficient layout to meet the intended use
- 04 To ensure consolidation patterns create usable allotments which relate to the site conditions and allow for development that is suited to the site, its context and strategic intent
- 05 To achieve orderly and economic development
- 06 To prevent sites from becoming isolated and unable to be developed in accordance with KLEP (Local Centres) 2012
- 07 To encourage consolidation of sites to enable efficiency through shared facilities and amalgamated site services, such as car parking, recycling and waste collection
- 08 To provide workable building footprints that allow future development that meets the requirements of this plan

The planning proposal seeks approval for the rezoning of 40 Dumaresq Street of the land from R2 – *Low Density Residential* to R3 – *Medium Density Residential*, to match the zoning controls of the adjacent site at 38 Dumaresq Street.

The proposed rezoning would allow consolidation of the two sites and the construction of a new residential development comprising approximately 10 dwellings, similar in nature to the adjoining development located at 34-36 Dumaresq Street, which is currently under construction (DA0168/17).

Planned Infrastructure Road Upgrades

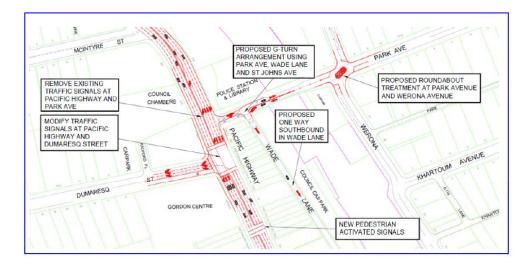
The infrastructure upgrades identified to support the growth of the Gordon town centre precinct is outlined within *Part 14D.3 Proposed Community Infrastructure* document, and the *Ku-ring-gai Contributions Plan 2010*, and is reproduced on the following page.

The new roads identified in Items 3 and 4 below have been completed. Both of these new local roads, 'Beans Farm Road' and 'Hanson Way' are located in the immediate vicinity of the site, and provide improved connectivity between the local roads on the western side of the Pacific Highway.

Modification to traffic signals to suit one way flow at the intersection of Pacific Highway and St Johns Avenue.
New pedestrian activated signals on the Pacific Highway just north of Moree Street intersection.
3 New 13 metre wide street, two way traffic, between Dumaresq Street and Moree Street.
4 New 13 metre wide street, two way traffic, between Dumaresq Street and McIntyre Street.
Section 15 metre wide street, two way traffic, with on-street parking between Moree Street and St Johns Avenue.
One way traffic and other modifications to St Johns Avenue east side.
Upgrade works to existing Council owned walkway (widened through development setbacks).
8 Reconstruction of Wade Lane as one way street (south bound) with on-street parking and public parking under.
Embellishment works for new railway square at St Johns Avenue and Wade Lane intersection.
Demolition of existing multi-storey car park and construction of a new urban park on Council owned land along Wade Lane.
Modification of the traffic signals at the intersection of Pacific Highway and Dumaresq Street and removal the traffic signals at the intersection Pacific Highway and Park Street to improve traffic flow.
Conversion of Park Avenue to one way traffic (east bound) and reduction of the road width to improve pedestrian conditions.
13 Modification to the railway bridge on Park Avenue to provide wider footpaths.
Improvements to the existing pedestrian way between Dumaresq Street and McIntyre Street.
Construction of a new urban park on Council owned land in Dumaresq Street.
Construction of a multi-purpose community facility.
Provision of a new bus stop on the highway servicing the strategic bus corridor link to Macquarie Centre.
Reconstruction of Fitzsimmons Lane to be a 15 metre wide right-of-way with footpaths both sides and on-street parking.
Embellishment of the footpath areas throughout the area including underground power lines, new lighting, high quality paving and furniture and street tree planting.
20 Installation of new traffic lights at intersection of Ravenswood Avenue and Pacific Highway
Ocnstruction of a new Gordon bus interchange, incorporating taxi stands, a kiss-and-ride area, and an underground commuter car park.

The proposed upgrade of the Pacific Highway/Dumaresq Street intersection identified in Items 11 and 12 is yet to be undertaken. These improvements comprise an upgrade of the Pacific Highway/Dumaresq Street intersection and the removal of the Park Street signals from intersection to improve the efficiency of traffic signal operations.

The proposed upgrade of the signalised intersection is illustrated on the figure below.



3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by Transport for NSW (TfNSW) is illustrated on Figure 3.

The Pacific Highway is classified by TfNSW as a *State Road* and provides the key northsouth road link in the area, linking North Sydney to Hornsby and beyond. It typically carries three traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island. Clearway restrictions apply during commuter peak periods.

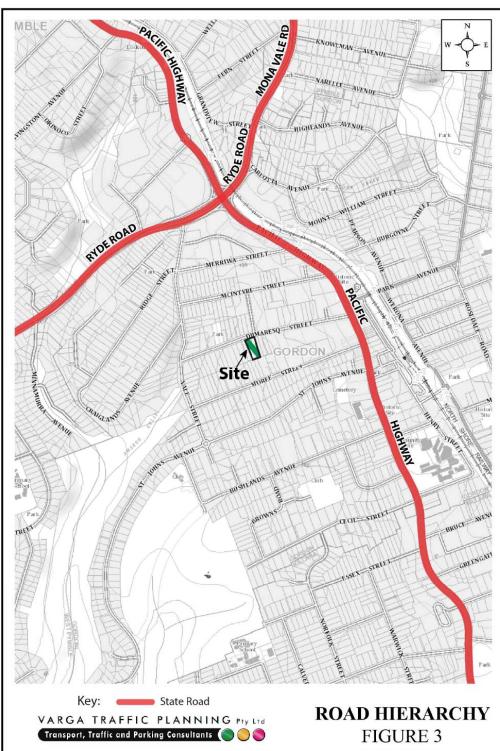
Mona Vale Road and Ryde Road are also classified by TfNSW as *State Roads* which provide the key east-west road link in the area, linking West Pymble to Mona Vale. They typically carry three traffic lanes in each direction in the vicinity of the site with turning bays provided at key locations.

Dumaresq Street is a local, unclassified road which is primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted on both sides of the road.

Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

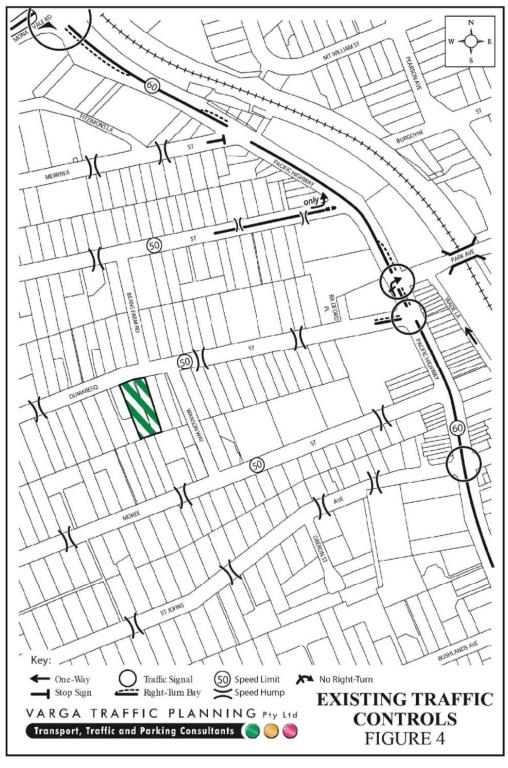
- a 60 km/h SPEED LIMIT which applies to the Pacific Highway
- a 50 km/h SPEED LIMIT which applies to Dumaresq Street and all other local roads in the area
- TRAFFIC SIGNALS in the Pacific Highway where it intersects with Dumaresq Street, Park Avenue and St Johns Avenue



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- a RIGHT TURN HOLDING BAY in the Pacific Highway where it intersects with Dumaresq Street
- NO RIGHT TURN restriction northbound in Pacific Highway turning onto Park Avenue
- SPEED HUMPS at regular intervals along Dumaresq Street and all other local roads in the surrounding area.

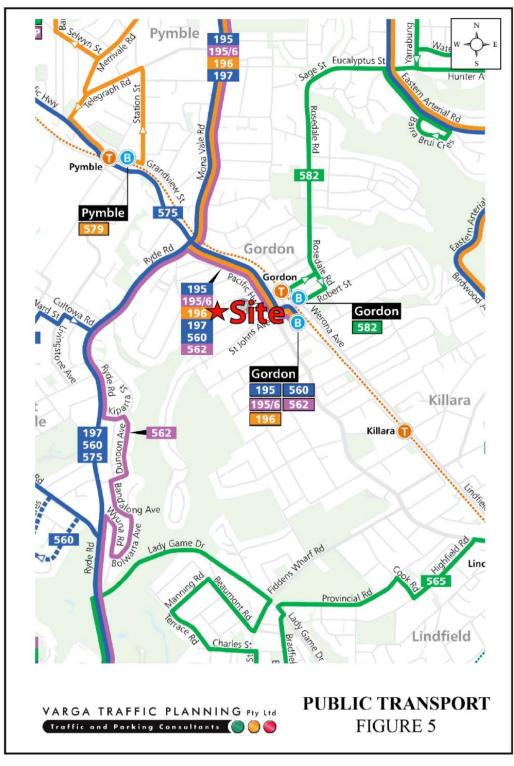
Existing Public Transport Services

The existing public transport services located in the vicinity of the site are illustrated on Figure 5. The subject site is located approximately 700m walking distance of Gordon Railway Station.

Gordon Railway Station is situated on the T1 North Shore & T9 Northern Line, operating between Berowra and City via Gordon, as well as between Hornsby and North Shore via City. Train services operate out of Gordon Railway Station every 5-15 minutes throughout the day.

There are also a number of bus services which traverses along the Pacific Highway, in the vicinity of the Gordon local centre, which includes the following bus routes:

- Route 195 which operates 7 days per week between Gordon and St Ives Chase, with services every 30 minutes throughout the weekday and every 45-60 minutes on the weekends
- Route 196 which operates 7 days per week between Gordon and Mona Vale via St Ives Showground, Belrose Super Centre and Pittwater Shopping Centre. Services typically operate every 30-60 minutes throughout the weekday and every 60 minutes on the weekends



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- Route 197 which operates 7 days per week between Mona Vale and Macquarie University via Pittwater Shopping Centre, Belrose Super Centre, Gordon, Pymble, Macquarie Centre and Macquarie Park. Services typically operate every 15-30 minutes throughout the weekday and every 60 minutes on the weekends
- Route 560 which operates 7 days per week between Gordon and West Pymble, with services every 15-30 minutes throughout the weekday and every 40-60 minutes on the weekends
- Route 562 which operates on weekdays only, between Gordon and Macquarie University via Pymble, West Pymble, Macquarie Centre and Macquarie Park. A total of 3 services are available throughout the day.

The abovementioned bus services can also be used to interchange with connecting train services at railway stations in the Northern Sydney region area including Macquarie Park and the Macquarie University Campus Interchange.

In addition, the site also lies within the Gordon local centre precinct and a short walking distance to the existing *Gordon Centre* shopping centre where there is a wide range of essential shops and services such as a Woolworths supermarket, fruit market, liquor stores, post office, gymnasiums, pharmacy and newsagency.

As noted in the foregoing, the Gordon local centre is expected to undergo significant redevelopment in the coming years. As such it is anticipated that in addition to the current supermarket and shops within the *Gordon Centre*, there will be a range of other shops and services provided in future developments within easy walking distance of the site, including a new Aldi supermarket currently under construction opposite the *Gordon Centre*.

On the above basis, it is clear that the site is considered to be highly accessible to essential services and public transport options.

Existing Pedestrian Infrastructure

Walking is the most sustainable form of transport and has a significant part to play in the transport system. Well established pedestrian facilities are generally provided on both sides of all roads in the Gordon Local Centre Precinct, in particular within the vicinity of the Gordon Railway Station connecting to/from the site, which encourages walking as an active form of transport and in keeping local residents and businesses connected.

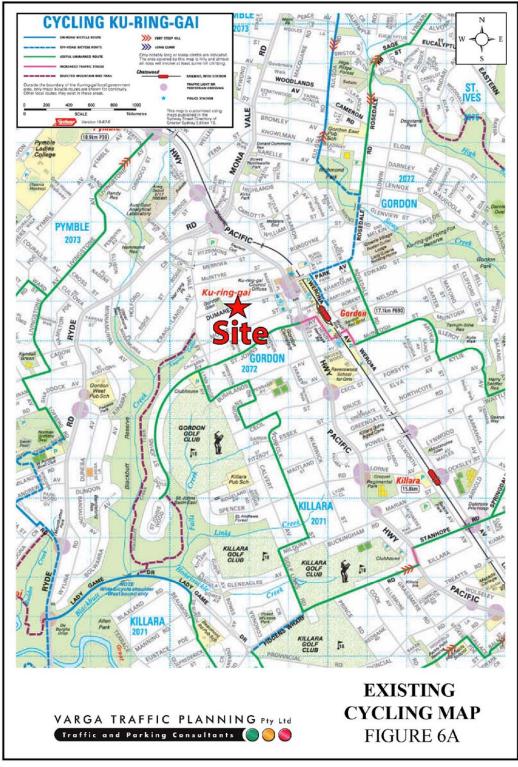
Footpaths are generally provided on both sides of all roads in the local surrounding area. This includes all site frontages, thereby providing safe means of pedestrian access to/from the site.

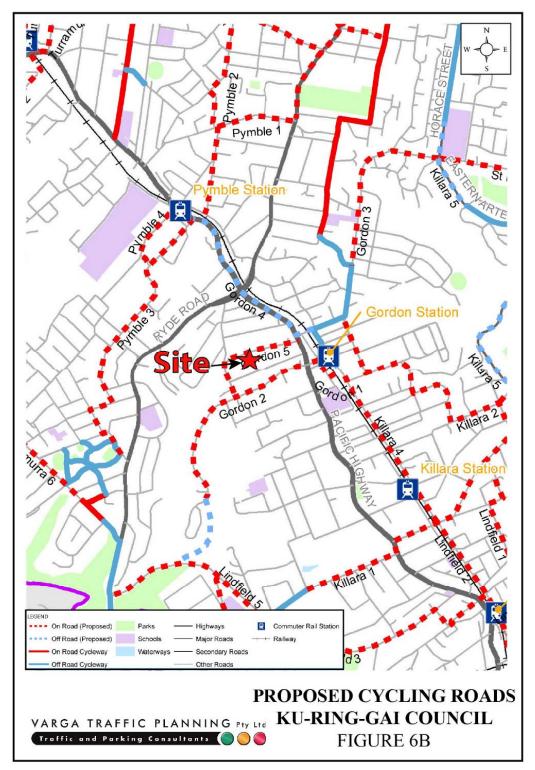
Local Bicycle Routes

Travelling by bicycle is also healthy and good for the environment, not to mention transportation cost savings when compared to driving. The existing cycleways in the vicinity of the site are illustrated on Figure 6a, noting the following:

- to Gordon Golf Club from Dumaresq Street via the Blackbutt Creek (dedicated bike) Track
- to Macquarie Park from Dumaresq Street via the Blackbutt Creek Track, Lady Game Drive and Ryde Road
- to Macquarie University and North Ryde from Dumaresq Street via the Blackbutt Creek Track, Lady Game Drive, Ryde Road, Fontenoy Road, Khartoum Road and Waterloo Road
- to Lindfield and University of Technology Sydney (UTS) Ku-ring-gai Campus from Dumaresq Street via the Blackbutt Creek Track, Lady Game Drive.

Ku-ring-gai Council has also commissioned *GHD Pty Ltd* to develop the "Ku-ring-gai Bike Plan" to increase the number and proportion of trips made by bicycles.





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The plan builds on the main existing bicycle routes and identifies the potential for more dedicated bicycle lanes and paths to be installed around the Ku-ring-gai LGA and also the improvements including directional signage/line marking provisions along these routes. An outline and description of the priority routes within the Gordon Local Centre are reproduced below, as follows:

Route Name	Туре	Authority	Description
Gordon 1	On Road Bicycle Lane	Council	Werona Avenue (between Park Avenue - Nelson Street)
	Bridge	RailCorp/ Council	Werona Avenue (between Park Avenue - Nelson Street)
Gordon 2	Off Road Path	Council	St Johns Avenue (between Lady Game Drive - Pacific Highway)
	On Road Mixed Traffic	Council	St Johns Avenue (between Lady Game Drive - Pacific Highway)
Gordon 3	Off Road Shared Path	Council	Rosedale Road (between Lennox Street - Amesbury Avenue)
	On Road Mixed Traffic	Council	Rosedale Road (between Lennox Street - Amesbury Avenue)
Gordon 4	Off Road Shared Path	RMS	Pacific Highway (between Park Avenue - Pymble Station
Gordon 5	On Road Mixed Traffic	Council	Dumaresq Street/Vale Street (between St Johns Avenue - Pacific Highway)

Existing Traffic Conditions

An indication of the existing traffic conditions on the road network in the vicinity of the site is provided by *weekday* peak period traffic surveys as well as throughout Saturday undertaken as part of this traffic study.

The traffic surveys were undertaken in Pacific Highway where it intersects with Dumaresq Street on Thursday 20th and Saturday 22nd July, 2023.

The results of the traffic surveys are reproduced in full in Appendix A and reveal that:

- two-way traffic flows in Pacific Highway are typically in the order of 3,300-3,000 vehicles per hour (vph) during the AM & PM peaks respectively, with a Saturday peak typically in the order of 3,000 vph
- two-way traffic flows in Dumaresq Street are typically in the order of 150 vph during the AM peak period, *increasing* to 260 vph during the PM peak period, with a Saturday peak typically in the order of 250-300 vph
- cumulative traffic flows at the Pacific Highway/Dumaresq Street intersection were in the order of 3400 vph, 3100 vph and 3300 vph during the AM/PM and Saturday peaks respectively.

Projected Traffic Generation

The traffic implications of development proposals primarily concern the effects of the *additional* traffic flows generated as a result of a development and its impact on the operational performance of the adjacent road network.

An indication of the traffic generation potential of the development proposal is provided by reference to the Roads and Maritime Service's publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002).*

The RMS *Guidelines* are based on extensive surveys of a wide range of land uses and nominates the following traffic generation rates which are applicable to the planning proposal:

 Medium Density Residential Flat Buildings

 3 bedroom apartments:
 0.5-0.65 peak hour vehicle trips/dwelling

The RMS *Guidelines* also make the following observation in respect of medium density residential flat buildings:

Definition

A *medium density* residential flat building is a building containing at least 2 but less than 20 dwellings. This includes villas, town houses, flats, semi-detached houses, terrace or row houses and other medium density developments. This does not include aged or disabled persons' housing.

Application of the above traffic generation rates to the potential 10 residential dwellings envisaged by the planning proposal yields a traffic generation potential of approximately 7 vehicle trips per hour (vph) during both the weekday AM and PM peak hour.

That projected future level of traffic generation potential should however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by the existing uses of the site, in order to determine the *nett increase (or decrease)* in traffic generation potential expected to occur as a consequence of the planning proposal.

The RMS *Technical Direction (TDT 2013/04a)* nominates the following traffic generation rates which are applicable to the existing development:

Low Density Residential Dwellings

- AM: 0.95 peak hour vehicle trips per dwelling
- PM: 0.99 peak hour vehicle trips per dwelling

Application of the above traffic generation rates to the two existing dwelling houses on the site yields a traffic generation potential of approximately 2 vph during both the AM and PM peak hour.

Accordingly, it is likely that the proposed development will result in a *nett increase* in the traffic generation potential of the site of approximately 5 vph during the AM and PM commuter peak periods, as set out below:

Projected Nett Increase in Peak Hour Traffic Generation Potential of the Site as a Consequence of the Planning Proposal

	AM	PM
Planning Proposal Traffic Generation Potential:	6.5 vph	6.5 vph
Less Existing Planning Controls Traffic Generation Potential:	-1.9 vph	-2.0 vph
NETT INCREASE IN TRAFFIC GENERATION POTENTIAL:	4.6 vph	4.5 vph

Notwithstanding, for the purposes of this assessment it has been assumed that *all* of the projected future traffic flows of 7 vph in the AM and PM commuter peak periods respectively, will be new or *additional* to the existing traffic flows currently using the adjacent road network.

That projected increase of just 5 vph in the traffic generation potential of the site as a consequence of the planning proposal is *statistically insignificant*, particularly when compared with existing traffic flows in order of 3300 vph at the Pacific Highway/Dumaresq Street intersection.

It is therefore clear that the planning proposal will not have any unacceptable traffic implications in terms of road network capacity, nor will any further road improvements or infrastructure upgrades be required, as is demonstrated by the following section of this report.

Traffic Implications - Road Network Capacity

The traffic implications of development proposals primarily concern the effects that any *additional* traffic flows may have on the operational performance of the nearby road network. Those effects can be assessed using the SIDRA program which is widely used by the RMS and many LGA's for this purpose. Criteria for evaluating the results of the analysis are reproduced at the end of Chapter 3.

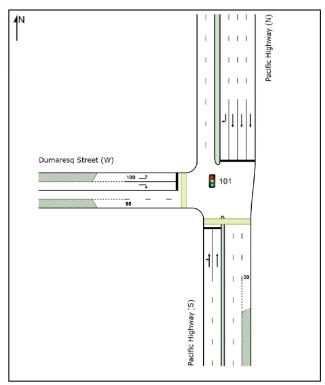
The results of the SIDRA analysis of the Pacific Highway and Dumaresq Street intersection are summarised on Table 3.1 below, revealing that:

- the intersection currently operates at *Level of Service "B"* under the existing traffic demands for the current planning controls on the site, with total average vehicle delays in the order of 17.7 seconds/vehicle
- under the projected future traffic demands expected to be generated by the *planning proposal*, the intersection will continue to operate at *Levels of Service "B"*, with increases in total average vehicle delays of *less than* 1 second/vehicle.

PACH		2 3.1 - RESU HWAY & D			LYSIS OF INTERSECT	ION				
Key Indicators			g Planning (affic Dema		Proposed Planning Proposal Traffic Demands					
		AM	PM	SAT	AM	PM	SAT			
Level of Service		В	В	В	В	В	В			
Degree of Saturation		0.639	0.831	0.666	0.639	0.832	0.667			
Average Vehicle Delay (see	cs/veh)									
Pacific Highway (South)	L T	27.3 21.6	32.9 27.1	27.9 22.1	27.4 21.6	33.0 27.3	27.9 22.1			
Pacific Highway (North)	T R	8.4 13.5	6.2 21.6	6.8 16.1	8.4 13.6	6.2 21.6	6.8 16.2			
Dumaresq Street (West)	L R	36.4 53.0	39.3 53.9	39.3 55.2	36.5 53.1	39.4 53.9	39.5 55.3			
TOTAL AVERAGE VEH DELAY	ICLE	14.8	20.9	17.5	14.9	21.0	17.6			

ARGA TRAFFIC PLANNING PTY LTD

The *existing* intersection layout adopted in the SIDRA analysis of the Pacific Highway and Dumaresq Street intersection, is shown in the figure reproduced below.



Existing Pacific Highway & Dumaresq Street intersection layout

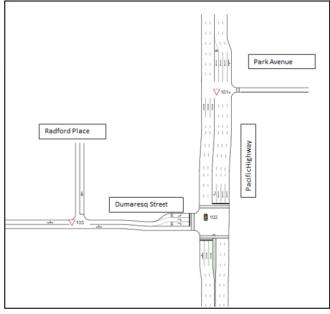
In summary, the results of the SIDRA capacity analysis confirm that the *existing* Pacific Highway and Dumaresq Street intersection would continue to operate at current Levels of Service, with *no* appreciable increase in total average vehicle delays as a consequence of the planning proposal. The detailed SIDRA capacity analysis "movement summaries" are reproduced in **Appendix B**.

As previously noted, Gordon Town Centre will undergo road upgrades to support development within the area in accordance with Council's s94 Contribution Plans.

Those road improvements and future developments formed the base line of the traffic assessment undertaken for the Aldi Supermarket (DA0610/17) which is now under construction on the north-western corner of the Pacific Highwa7/Dumaresq Street intersection, at 810-818 Pacific Highway, Gordon.

ARGA TRAFFIC PLANNING PTY LTD

Extracts from the approved Aldi Supermarket Traffic Impact Assessment report prepared by *Cardno Pty Ltd¹* is reproduced below, illustrating the future base line network layout.



Future upgraded Pacific Highway and Dumaresq Street intersection

The results of the SIDRA capacity analysis undertaken in the Aldi Supermarket Traffic Impact Assessment report are illustrated on *Table 6-6 Future Base Line Intersection Performance* and *Table 6-7 Future Base Line Intersection Performance With Development* in that report, and are reproduced below, revealing that:

• the *upgraded* 'Baseline' Pacific Highway and Dumaresq Street intersection will operate at *Level of Service* "*A*" under the existing AM traffic demands, with total average vehicle delays in the order of 11.3 seconds/vehicle, and at *Level of Service* "*B*" under the existing PM traffic demands and throughout the Saturday peak period, with total average vehicle delays in the order of 16.4 and 20.0 seconds/vehicle, respectively

¹ Cardno "Traffic Impact Assessment – Aldi Gordon" (14 November 2017)

under the approved future traffic demands expected to be generated by the *Aldi* Supermarket development, the intersection will continue to operate at *Levels of* Service "A", during the AM peak period, and at *Level of Service* "B" during the PM peak and throughout the Saturday peak, with increases in total average vehicle delays of *less than* 1-2 seconds/vehicle.

T-LL CO	-	Developer	Internet and	Det
aple 0-0	ruture	Daseline	Intersection	Performance

		AM Peak Hour			PM Peak Hour		SAT Peak Hour				
Assessment Year	DoS	Average Delay (sec)	LoS	DoS	Average Delay (sec)	LoS	DoS	Average Delay (sec)	LoS		
Pacific Highway /	0.44	5.6	LOS			LOS			LOS		
Park Avenue			Α	0.39	5.6	A	0.34	5.6	A		
Pacific Highway /	0.57	11.3	LOS			LOS			LOS		
Dumaresq Street			Α	0.65	16.4	В	0.67	20.0	В		
Dumaresq Street /	0.13	6.3	LOS			LOS			LOS		
Radford Place			Α	0.17	6.5	A	0.17	6.5	A		

Table 6-7 Future Baseline Intersection Performance with Development

		AM Peak Hour			PM Peak Hour			SAT Peak Hour				
Assessment Year	DoS	Average Delay (sec)	LoS	DoS	Average Delay (sec)	LoS	DoS	Average Delay (sec)	LoS			
Pacific Highway / Park Avenue	0.44	5.6	los A	0.39	5.6	LOS A	0.34	5.6	LOS A			
Pacific Highway / Dumaresq Street	0.57	11.9	LOS A	0.66	17.0	LOS B	0.71	21.9	LOS B			
Dumaresq Street / Radford Place	0.13	6.3	LOS A	0.17	6.6	LOS A	0.17	6.6	LOS A			

The Aldi Traffic Impact Assessment concluded that traffic generated by the site will have a negligible impact on the surrounding intersections, with existing Level of Service "A/B" performance maintained under future conditions.

It follows that the *nett increase* of 5 vph generated by the subject planning proposal would also have a negligible impact on the surrounding road network, particularly given that the *nett increase* of 5 vph is *statistically insignificant* in comparison to the traffic generation potential of the Aldi Supermarket.

In any event, the SIDRA capacity analysis conducted as part of this traffic study confirms that projected increase of just 5 vph will clearly not have any appreciable effect on the performance of the Pacific Highway/Dumaresq Street intersection, with a *negligible* increase in total average vehicle delays of 0.1 second/vehicle, and *no change* to the current *Level of Service*.

Criteria for Interpreting Results of Sidra Analysis

1. Level of Service (LOS)

LOS	Traffic Signals and Roundabouts	Give Way and Stop Signs
'A'	Good operation.	Good operation.
'B'	Good with acceptable delays and spare capacity.	Acceptable delays and spare capacity.
'C'	Satisfactory.	Satisfactory but accident study required.
'D'	Operating near capacity.	Near capacity and accident study required.
'E'	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode.	At capacity and requires other control mode.
'F'	Unsatisfactory and requires additional capacity.	Unsatisfactory and requires other control mode.

2. Average Vehicle Delay (AVD)

The AVD provides a measure of the operational performance of an intersection as indicated on the table below which relates AVD to LOS. The AVD's listed in the table should be taken as a guide only as longer delays could be tolerated in some locations (ie inner city conditions) and on some roads (ie minor side street intersecting with a major arterial route).

Level of Service	Average Delay per Vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way and Stop Signs
Α	less than 14	Good operation.	Good operation.
В	15 to 28	Good with acceptable delays and spare capacity.	Acceptable delays and spare capacity.
С	29 to 42	Satisfactory.	Satisfactory but accident study required.
D	43 to 56	Operating near capacity.	Near capacity and accident study required.
E	57 to 70	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode.	At capacity and requires other control mode.

3. Degree of Saturation (DS)

The DS is another measure of the operational performance of individual intersections.

For intersections controlled by traffic signals² both queue length and delay increase rapidly as DS approaches 1, and it is usual to attempt to keep DS to less than 0.9. Values of DS in the order of 0.7 generally represent satisfactory intersection operation. When DS exceeds 0.9 queues can be anticipated.

For intersections controlled by a roundabout or GIVE WAY or STOP signs, satisfactory intersection operation is indicated by a DS of 0.8 or less.

² The values of DS for intersections under traffic signal control are only valid for cycle length of 120 secs.

4. CONCLUSION

The foregoing analysis has found that:

- this planning proposal seeks to rezone 40 Dumaresq Street to R3 Medium Density Residential, to be consistent with the adjacent site at 38 Dumaresq Street
- if the planning proposal is successful, the proponent will seek to consolidate 38 and 40 Dumaresq Street into one site
- the consolidated site would have a development potential of approximately 10 dwellings
- if approved, the planning proposal would result in a *nett increase* in the traffic generation potential of the consolidated sites of approximately 5 vph during commuter pcak periods
- that increase in traffic activity of 5 vph during commuter peak periods is *minimal*, and will clearly not have any unacceptable traffic implications in terms of road network capacity and traffic-related environmental effects
- the SIDRA capacity analysis of the nearby Pacific Highway/Dumaresq Street intersection indicates that:
 - the intersection would continue to operate at current Levels of Service with no appreciate increase in total average vehicle delays as a consequence of the *nett increase* of 5 vph as a consequence of the planning proposal
 - no road improvements or intersection upgrades would be required as a consequence of the planning proposal

It is therefore reasonable to conclude that the planning proposal will not have any unacceptable implications in terms of road network capacity or traffic-related environmental effects.

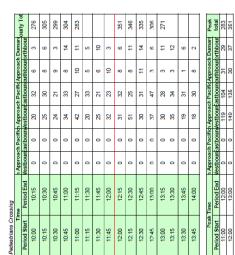
APPENDIX A

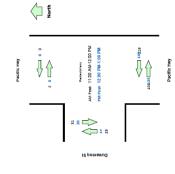
TRAFFIC SURVEY DATA

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FFIC SURVEY SURVEY & MACLARY COMMUNICATION		75	ach Pacific HwW	299 21	360 35	298 32	334 26	331 18	315 41	353 31	323 36	285 42	291 29	314 27	337 23		336 35	296 15	313 21	ach Pacific HwW	NB	1322 126 1222 121	2 U U U U U U U U U U U U U U U U U U U
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APPENDIX B

SIDRA MOVEMENT SUMMARIES

Site: 101 [Existing Thursday AM peak (Site Folder: General)]

Pacific Highway & Dumaresq Street intersection

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehi	cle M	ovemen	nt Perfo	rmance										
Mov ID	Tum	INF VOLU	PUT JMES	DEM. FLO		Deg. Satn		Level of Service		ACK OF EUE	Prop. Que	Effective Stop	Aver. No.	Aver Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] m		Rate	Cycles	km/l
South	h: Paci	ific Highv	vay (S)											
1	L2	34	2	34	5.9	0.601	27.3	LOS B	23.7	173.0	0.76	0.69	0.76	38.5
2	T1	1137	57	1137	5.0	* 0.601	21.6	LOS B	23.8	173.5	0.76	0.68	0.76	24.3
Appr	oach	1171	59	1171	5.0	0.601	21.8	LOS B	23.8	173.5	0.76	0.68	0.76	25.0
North	: Pacit	fic Highw	ay (N)											
8	T1	2010	71	2010	3.5	0.639	8.4	LOS A	25.7	185.6	0.52	0.48	0.52	38.8
9	R2	90	0	90	0.0	* 0.208	13.5	LOS A	1.6	11.4	0.61	0.70	0.61	40.9
Appr	oach	2100	71	2100	3.4	0.639	8.7	LOS A	25.7	185.6	0.53	0.49	0.53	39.0
West	: Dum	aresq Str	reet (W)											
10	L2	37	1	37	2.7	* 0.174	36.4	LOS C	1.5	10.5	0.93	0.72	0.93	25.4
12	R2	106	2	106	1.9	* 0.347	53.0	LOS D	5.6	39.7	0.93	0.78	0.93	24.5
Appro	oach	143	3	143	2.1	0.347	48.7	LOS D	5.6	39.7	0.93	0.76	0.93	24.7
All Vehic	les	3414	133	3414	3.9	0.639	14.8	LOS B	25.7	185.6	0.62	0.57	0.62	31.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Mov	Input	Dem.	Aver.			BACK OF	Prop.E			Travel	
ID Crossing	Vol.	Flow	Delay	Service	QUE [Ped	EUE Dist]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped				sec	m	m/sec
South: Pacific	Highwa	y (S)									
P1 Full	144	144	54.5	LOS E	0.5	0.5	0.96	0.96	223.5	219.7	0.98
West: Dumare	esq Stre	et (W)									
P4 Full	27	27	54.2	LOS E	0.1	0.1	0.95	0.95	219.7	215.2	0.98
All Pedestrians	171	171	54.4	LOS E	0.5	0.5	0.95	0.95	222.9	219.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: VARGA TRAFFIC PLANNING | Licence: NETWORK / 1PC | Processed: Wednesday, 26 July 2023 11:37:04 AM

Site: 101 [Existing Thursday PM peak (Site Folder: General)]

Pacific Highway & Dumaresq Street intersection

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehi	cle M	ovemer	nt Perfo	rmance										
Mov ID	Tum	INF VOLU [Total	PUT JMES HV 1	DEM FLO [Total		Deg. Satn		Level of Service		ACK OF EUE Dist]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m		Trate	Cycles	km/h
South	n: Paci	fic Highv	vay (S)											
1	L2	86	0	86	0.0	0.831	32.9	LOS C	42.0	298.8	0.91	0.86	0.93	35.6
2	T1	1588	35	1588	2.2	* 0.831	27.1	LOS B	42.1	300.2	0.91	0.86	0.93	21.0
Appro	bach	1674	35	1674	2.1	0.831	27.4	LOS B	42.1	300.2	0.91	0.86	0.93	22.3
North	: Paci	fic Highw	ay (N)											
8	T1	1218	30	1218	2.5	0.385	6.2	LOS A	11.5	82.3	0.39	0.35	0.39	42.5
9	R2	101	0	101	0.0	* 0.314	21.6	LOS B	2.9	20.3	0.79	0.75	0.79	35.1
Appro	bach	1319	30	1319	2.3	0.385	7.4	LOS A	11.5	82.3	0.42	0.38	0.42	41.
West	: Dum	aresq Str	reet (W)											
10	L2	124	0	124	0.0	* 0.616	39.3	LOS C	5.3	36.9	1.00	0.79	1.02	24.
12	R2	137	0	137	0.0	* 0.443	53.9	LOS D	7.3	51.4	0.95	0.79	0.95	24.3
Appro	bach	261	0	261	0.0	0.616	46.9	LOS D	7.3	51.4	0.97	0.79	0.98	24.
All Vehic	les;	3254	65	3254	2.0	0.831	20.9	LOS B	42.1	300.2	0.72	0.66	0.73	27.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Mov	Input	Dem.	Aver.			BACK OF	Prop. E			Travel	
ID Crossing	Vol.	Flow	Delay	Service	QUE [Ped	EUE Dist]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Pacific	Highwa	y (S)									
P1 Full	231	231	54.7	LOS E	0.8	0.8	0.96	0.96	223.7	219.7	0.98
West: Dumare	esq Stre	et (W)									
P4 Full	54	54	54.3	LOS E	0.2	0.2	0.95	0.95	219.8	215.2	0.98
All Pedestrians	285	285	54.6	LOS E	0.8	0.8	0.96	0.96	222.9	218.8	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: 101 [Existing Saturday peak (Site Folder: General)]

Pacific Highway & Dumaresq Street intersection

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Mov	Tum	INP	UT	DEM	AND	Deg.	Aver.	Level of	95% B/	ACK OF	Prop.	Effective	Aver.	Aver
ID		VOLU [Total	IMES HV]	FLO [Total		Satn		Service		EUE Dist]	Que	Stop Rate	No. Cycles	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/t
South	h: Paci	fic Highw	ay (S)											
1	L2	121	0	121	0.0	0.666	27.9	LOS B	28.2	200.0	0.79	0.74	0.79	38.0
2	T1	1222	21	1222	1.7	* 0.666	22.1	LOS B	28.4	201.9	0.79	0.73	0.79	23.8
Appro	oach	1343	21	1343	1.6	0.666	22.6	LOS B	28.4	201.9	0.79	0.73	0.79	25.9
North	n: Paci	fic Highw	ay (N)											
8	T1	1509	15	1509	1.0	0.472	6.8	LOS A	15.7	110.6	0.43	0.39	0.43	41.4
9	R2	154	0	154	0.0	* 0.404	16.1	LOS B	3.5	24.5	0.71	0.74	0.71	38.9
Appro	oach	1663	15	1663	0.9	0.472	7.7	LOS A	15.7	110.6	0.45	0.42	0.45	40.9
West	: Dum	aresq Str	eet (W)											
10	L2	124	0	124	0.0	* 0.616	39.3	LOS C	5.3	36.9	1.00	0.79	1.02	24.5
12	R2	177	0	177	0.0	* 0.572	55.2	LOS D	9.7	68.2	0.97	0.81	0.97	24.0
Appro	oach	301	0	301	0.0	0.616	48.6	LOS D	9.7	68.2	0.98	0.80	0.99	24.2
All Vehic	les	3307	36	3307	1.1	0.666	17.5	LOS B	28.4	201.9	0.64	0.58	0.64	30.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Mov	Input	Dem.	Aver.	Level of /	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossin	g Vol.	Flow	Delay	Service	QUE [Ped	EUE Dist]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Pacif	ic Highwa	ay (S)									
P1 Full	284	284	54.8	LOS E	0.9	0.9	0.96	0.96	223.8	219.7	0.98
West: Duma	resq Stre	et (W)									
P4 Full	67	67	54.3	LOS E	0.2	0.2	0.95	0.95	219.8	215.2	0.98
All Pedestrians	351	351	54.7	LOS E	0.9	0.9	0.96	0.96	223.0	218.8	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: 101 [Proposed Thursday AM peak (Site Folder: General)]

Pacific Highway & Dumaresq Street intersection

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Mov ID	Tum	INP VOLU		DEM/ FLO		Deg. Satn		Level of Service		ACK OF EUE	Prop. Que	Effective Stop	Aver. No.	Aver Speed
IJ		[Total veh/h	HV] veh/h	[Total veh/h	₩3 HV] %	v/c	sec	Service	[Veh. veh	Dist]	Que	Rate	Cycles	km/h
South	n: Paci	fic Highw	ay (S)											
1	L2	37	2	37	5.4	0.603	27.4	LOS B	23.8	173.6	0.76	0.69	0.76	38.5
2	T1	1137	57	1137	5.0	* 0.603	21.6	LOS B	23.9	174.2	0.76	0.69	0.76	24.3
Appro	bach	1174	59	1174	5.0	0.603	21.8	LOS B	23.9	174.2	0.76	0.69	0.76	25.1
North	: Pacit	fic Highw	ay (N)											
8	T1	2010	71	2010	3.5	0.639	8.4	LOS A	25.7	185.6	0.52	0.48	0.52	38.8
9	R2	91	0	91	0.0	* 0.210	13.6	LOS A	1.6	11.5	0.61	0.70	0.61	40.9
Appro	bach	2101	71	2101	3.4	0.639	8.7	LOS A	25.7	185.6	0.53	0.49	0.53	39.0
West	: Dum	aresq Str	eet (W)											
10	L2	40	1	40	2.5	* 0.188	36.5	LOS C	1.6	11.3	0.94	0.72	0.94	25.4
12	R2	109	2	109	1.8	* 0.357	53.1	LOS D	5.8	40.9	0.93	0.78	0.93	24.5
Appro	bach	149	3	149	2.0	0.357	48.6	LOS D	5.8	40.9	0.93	0.76	0.93	24.
All Vehic	les	3424	133	3424	3.9	0.639	14.9	LOS B	25.7	185.6	0.62	0.57	0.62	31.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Mov	Input	Dem.	Aver.	Level of /	WERAGE	BACK OF	Prop. E	ffective	Travel	Travel	Aver
ID Crossing	Vol.	Flow	Delay	Service	QUE [Ped	EUE Dist]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Pacific	Highwa	y (S)									
P1 Full	144	144	54.5	LOS E	0.5	0.5	0.96	0.96	223.5	219.7	0.98
West: Dumare	esq Stre	et (W)									
P4 Full	27	27	54.2	LOS E	0.1	0.1	0.95	0.95	219.7	215.2	0.98
All Pedestrians	171	171	54.4	LOS E	0.5	0.5	0.95	0.95	222.9	219.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: 101 [Proposed Thursday PM peak (Site Folder: General)]

Pacific Highway & Dumaresq Street intersection

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Mov	Tum	INP	UT	DEM	AND	Deg.	Aver.	Level of	95% B/	ACK OF	Prop.	Effective	Aver.	Aver
ID		VOLU		FLO		Satn	Delay	Service		EUE	Que	Stop		Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] m		Rate	Cycles	km/i
South	h: Paci	fic Highw	ay (S)											
1	L2	89	0	89	0.0	0.832	33.0	LOS C	42.2	300.4	0.91	0.86	0.94	35.5
2	T1	1588	35	1588	2.2	* 0.832	27.3	LOS B	42.3	301.8	0.91	0.86	0.94	20.9
Appro	oach	1677	35	1677	2.1	0.832	27.6	LOS B	42.3	301.8	0.91	0.86	0.94	22.3
North	: Pacit	fic Highw	ay (N)											
8	T1	1218	30	1218	2.5	0.385	6.2	LOS A	11.5	82.3	0.39	0.35	0.39	42.5
9	R2	104	0	104	0.0	* 0.323	21.6	LOS B	3.0	21.0	0.80	0.75	0.80	35.0
Appro	oach	1322	30	1322	2.3	0.385	7.4	LOS A	11.5	82.3	0.42	0.38	0.42	41.1
West	: Dum	aresq Str	eet (W)											
10	L2	125	0	125	0.0	* 0.621	39.4	LOS C	5.3	37.2	1.00	0.80	1.02	24.5
12	R2	137	0	137	0.0	* 0.443	53.9	LOS D	7.3	51.4	0.95	0.79	0.95	24.3
Appro	bach	262	0	262	0.0	0.621	46.9	LOS D	7.3	51.4	0.97	0.79	0.98	24.4
All Vehic		3261	65	3261	2.0	0.832	21.0	LOS B	42.3	301.8	0.72	0.66	0.73	27.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian I	Movem	ent Per	forman	ce							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of A Service	AVERAGE QUE [Ped	BACK OF UE Dist]	Prop.Et Que	fective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Pacific	Highwa	y (S)									
P1 Full	231	231	54.7	LOS E	0.8	0.8	0.96	0.96	223.7	219.7	0.98
West: Dumare	esq Stre	et (W)									
P4 Full	54	54	54.3	LOS E	0.2	0.2	0.95	0.95	219.8	215.2	0.98
All Pedestrians	285	285	54.6	LOS E	0.8	0.8	0.96	0.96	222.9	218.8	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: 101 [Proposed Saturday peak (Site Folder: General)]

Pacific Highway & Dumaresq Street intersection

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Mov ID	Tum	INP VOLU	IMES	DEM. FLO	ws	Deg. Satn		Level of Service	QU	ACK OF EUE	Prop. E Que	ffective Stop	Aver. No.	Aver Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] m		Rate	Cycles	km/t
South	n: Paci	fic Highw	vay (S)											
1	L2	124	0	124	0.0	0.667	27.9	LOS B	28.3	200.7	0.79	0.74	0.79	38.0
2	T1	1222	21	1222	1.7	* 0.667	22.1	LOS B	28.5	202.6	0.79	0.73	0.79	23.
Appro	bach	1346	21	1346	1.6	0.667	22.7	LOS B	28.5	202.6	0.79	0.73	0.79	26.0
North	: Pacif	fic Highw	ay (N)											
8	T1	1509	15	1509	1.0	0.472	6.8	LOS A	15.7	110.6	0.43	0.39	0.43	41.4
9	R2	158	0	158	0.0	* 0.415	16.2	LOS B	3.6	25.4	0.71	0.74	0.71	38.
Appro	bach	1667	15	1667	0.9	0.472	7.7	LOS A	15.7	110.6	0.45	0.42	0.45	40.9
West	: Duma	aresq Str	eet (W)											
10	L2	127	0	127	0.0	* 0.631	39.5	LOS C	5.4	38.0	1.00	0.80	1.03	24.
12	R2	180	0	180	0.0	* 0.582	55.3	LOS D	9.9	69.5	0.97	0.81	0.97	24.
Appro	bach	307	0	307	0.0	0.631	48.7	LOS D	9.9	69.5	0.98	0.81	1.00	24.
All Vehic	les	3320	36	3320	1.1	0.667	17.6	LOS B	28.5	202.6	0.64	0.58	0.64	30.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

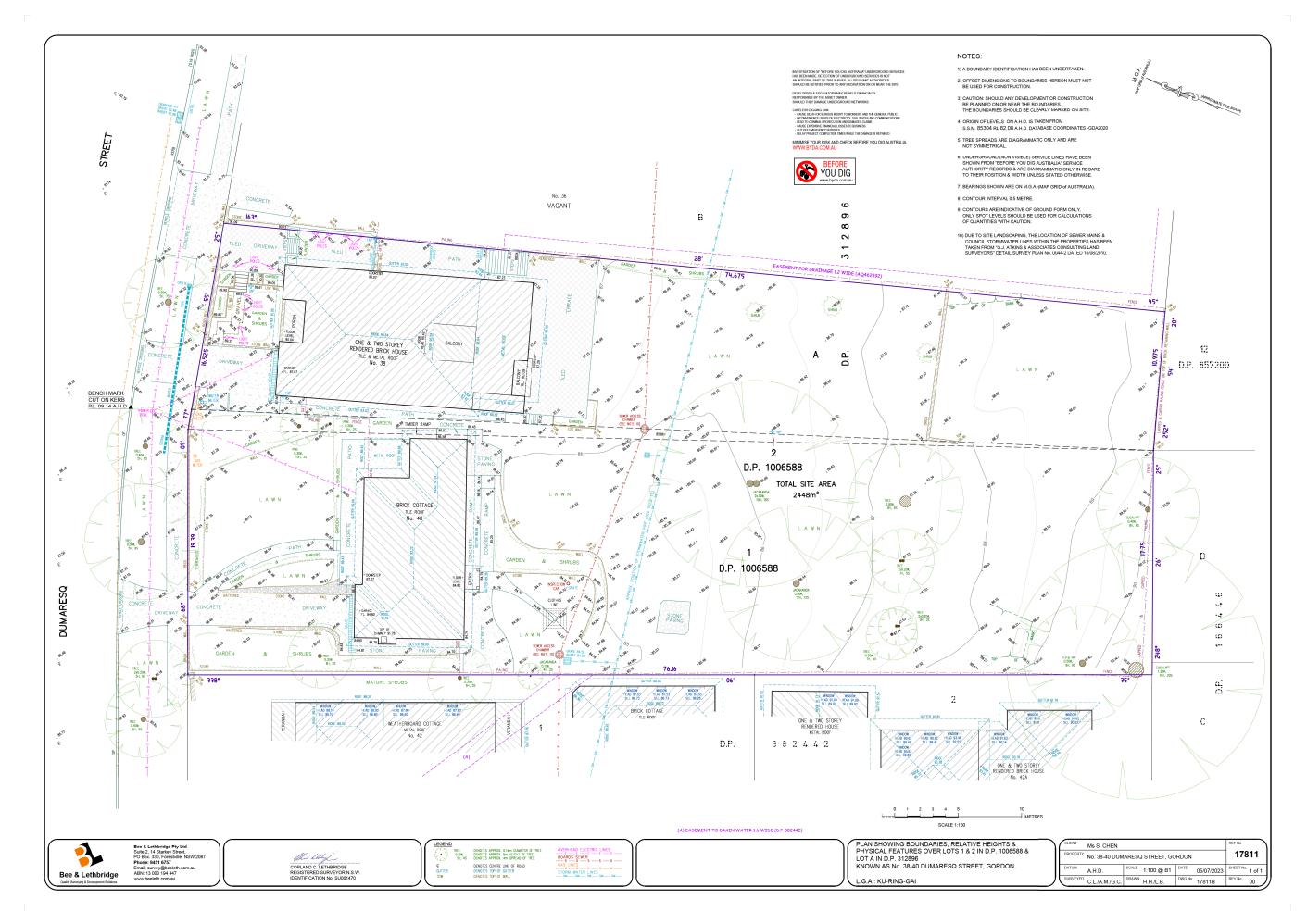
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian I	Movem	ent Per	forman	ce							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of / Service	AVERAGE QUE [Ped		Prop.E Que	ffective Stop Rate	Travel Time	Travel Dist. :	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Pacific	Highwa	iy (S)									
P1 Full	284	284	54.8	LOS E	0.9	0.9	0.96	0.96	223.8	219.7	0.98
West: Dumare	esq Stre	et (W)									
P4 Full	67	67	54.3	LOS E	0.2	0.2	0.95	0.95	219.8	215.2	0.98
All Pedestrians	351	351	54.7	LOS E	0.9	0.9	0.96	0.96	223.0	218.8	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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