

Department of Planning, Housing and Infrastructure
Locked Bag 5022
Parramatta NSW 2124

Attn: Akshay Bishnoi

29 June 2026

Re: Submission to SSD-95747716 – 8A, 14 and 16 Buckingham Road, Killara

Dear Akshay,

We refer to State Significant Development (SSD) application No. SSD-95747716, which proposes a seven (7) storey residential flat development above 3 level of basement (proposal) at the three (3) existing properties at 8A, 14 and 16 Buckingham Road, Killara. The 3 properties are all battle-axe lots, relying on long access handles entering from Buckingham Road.

The proposal has been lodged under State Environmental Planning Policy (Housing) 2021 ('Housing SEPP') low and mid rise (LMR) housing provisions and in addition seeks to rely on the in-fill affordable housing bonus provisions under the Housing SEPP.

SJB Planning has been engaged by the owners of 18 Buckingham Road, Killara (No. 18) to review the proposal and prepare a submission. We write to formally object to the proposal.

The detailed submission is attached to this letter, with a summary provided below:

- The development site is constrained due to the lack of street frontage, highly unusual shape and uncharacteristic relationship with the neighbouring properties over which it looks to the north and north-west. For the reasons outlined in this submission, the scale of development proposed is not suitable for the constrained site.
- The EIS and accompanying information lodged with the application effectively ignores any meaningful analysis of the impact on No. 18. There is no visual impact analysis and no privacy impact analysis.
- Based on our professional analysis the proposal will have an overwhelming and unacceptable visual bulk impact as well as an unacceptable loss of privacy. A visual impact assessment is included as Annexure 1 to the submission.
- The proposed entry and exit vehicular access drive ramp and structure immediately adjoining No. 18 will have an unacceptable amenity impact. The proposal ignores the Ku-ring-gai Development Control Plan site specific controls for vehicular access to the development site, with a disproportionate, unacceptable and unjustifiable direct impact on No. 18. An existing access driveway servicing a single dwelling house at 16 Buckingham Road (No. 16) is proposed to be replaced with a double lane entry and exit ramp servicing 79 apartments, as well as accommodating large vehicles including waste collection. The vehicular ramp and tunnel also result in the removal of all existing trees and vegetation in this part of the site.

- The application documentation fails to properly record the history of the very recent death of two Sydney Blue Gum trees (identified as T1 and T2 in the DA documentation) on the site. Travers Bushfire and Ecological (Travers report) have been engaged by the owners of No. 18 to review the DA documentation. The Travers report is included at Annexure 2 and confirms that there are deficiencies in the Applicant's Arboricultural Impact Assessment, both in relation to T1 and T2 as well as other matters identified, including the need for an increased setback of the development footprint to a significant Blackbutt tree on No.18.
- Also in relation to trees T1 and T2 we wish to advise that the owners of No. 18 contend that the two Blue Gums have been unlawfully poisoned and have complained to Ku-ring-gai Council and the EPA to that effect. A copy of a letter forwarded to the Council in 2024 regarding the death of T1 is included as Annexure 3. The owners of No. 18 have also obtained legal advice that, whilst the unlawfulness of the poisoning of T1 and T2 does not preclude the Applicant from applying for development consent, the consideration of future development on the site should be undertaken without regard to the past unlawful acts of poisoning the trees. The legal advice is that this is because the unlawful user of land should gain no advantage from having established an unlawful use: *Ralph Lauren Pty Ltd v New South Wales Transitional Coastal Panel [2018] NSWLEC 207* at [128] (Preston CJ). The ecological impacts of the development should therefore be assessed on the basis that the two Blue Gum trees have not been poisoned.
- The Travers report reviews the Applicant's BDAR Waiver Request and whether the Applicant has appropriately assessed the biodiversity values, the impacts on the biodiversity values and whether adequate mitigation measures have been implemented. The Travers report concludes that the BDAR Waiver Request is notably deficient in a number of areas.
- Unacceptable traffic impacts. McLaren Traffic Engineering (McLaren report) have undertaken a review of the material provided with the development application and have concluded that the proposal in its current form is unsuitable for a number of reasons. A summary of the findings of the McLaren report is included in more detail in this submission, and the full report is included at Annexure 5.
- The proposal fails to properly consider the relevant provisions of Ku-ring-gai Local Environmental Plan (KLEP) 2015 clause 6.6 *Requirements for multi dwelling housing and residential flat buildings*.
- The DA documentation does not meet the requirements of the SEARs dated 3 October 2025. The application does not address the relevant contributions plan(s) (item 3), does not adequately assess visual privacy (item 7) and does not address visual impact on No. 18 (item 8). DPHI should consider whether the application meets the requirements of Item 5 - Design Quality of the SEARs dated 3 October 2025.
- The documentation supporting the proposal does not appear to meet the requirements of Item 4 - Engagement of the SEARs dated 3 October 2025. Engagement undertaken prior to the lodgement of the DA was unsatisfactory and inconsistent with *Undertaking Engagement Guidelines for State Significant Projects*. No draft plans or documents to provide meaningful information were provided to the community during the pre-lodgement process. There was no information regarding building heights, setbacks, screening, landscaping, visual impact, overshadowing etc.
- For reasons relating to the above matters, and as discussed in more detail in the attached objection, the exceedance of the height of building development standard is unjustified. The Applicant has failed to demonstrate that compliance with the development standard is unreasonable or unnecessary in the circumstances, or that there are sufficient environmental planning grounds to justify the contravention of the development standard.

Based on our review of the proposal, together with the separate visual impact, ecological, arboricultural and traffic reports, we submit, on behalf of the owners of No.18, that the proposal should be rejected.

Should you require any further information, please do not hesitate to contact myself on (02) 9380 9911 or by email at smcdonald@sjb.com.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'smcdonald', written in a cursive style.

Stuart McDonald
Director

Annexures

- 1. Visual Impact Assessment - SJB Architects**
- 2. Biodiversity and Arboriculture Review - Travers Bushfire and Ecology**
- 3. Letter to Ku-ring-gai Council 18 April 2024 - Ethos Urban**
- 4. Tree Inspection Report 12 March 2024 - Arborist Network**
- 5. Traffic Review - McLaren Traffic Engineering**

Submission to SSD-95747716 – 8A, 14 and 16 Buckingham Road, Killara

1. Statutory Context of the Proposal

1.1 Housing SEPP in-fill housing provisions

SSD-95747716 (proposal) seeks to rely on the in-fill housing provisions under Chapter 2 of the Housing SEPP.

1.1.1 Future character

Section 20 (3) provides that

- (3) *Development consent must not be granted to development under this division unless the consent authority has considered whether the design of the residential development is compatible with—*
- (a) the desirable elements of the character of the local area, or*
 - (b) for precincts undergoing transition—the desired future character of the precinct.*

The part of Killara in which the development site lies is undergoing transition but importantly is also at the interface with an established low density residential precinct in character.

The appropriate reference document in determining the desired future character is Part 14N of Ku-ring-gai Development Control Plan (KDCP) and which applies specifically to 8A, 14 and 16 Buckingham Road. The site specific provisions were introduced when the development site was recently rezoned to R4 High Density Residential and so, in our opinion, are relevant to the consideration of desired future character.

The site specific Objectives for the future character are:

- 1. To ensure new development is integrated and consistent with the Ku-ring-gai landscape character.*
- 2. To reduce the impacts of bulk and scale on adjacent residential neighbourhoods and Heritage Items.*
- 3. To provide a transition between new medium to high density residential buildings and the adjacent established low density residential neighbourhood fronting Buckingham Road.*
- 4. To retain the character of the Buckingham Road streetscape.*
- 5. To ensure long term improvement and protection of the Blue Gum High Forest.*

Part 14N of KDCP includes controls that provide greater detail regarding vehicular access, small footprint buildings, building setbacks, layout respecting adjoining heritage items, open space, deep soil areas and mitigation of impacts on the Blue Gum High Forest.

Notwithstanding that the proposed development relies on LMR provisions of the Housing SEPP, there remains a statutory requirement to consider whether the design of the development is compatible with the desired future character, and in our opinion a relevant reference document that details the desired future character is Part 14N of KDCP.

The development site was recently the subject of a planning proposal (endorsed by the Minister for Planning via the Gateway determination) which identified a lower scale of development as being appropriate for the site. That planning proposal had been publicly exhibited and implemented by way of site specific amendments to KLEP 2015. The resulting scale of development arising from these recently implemented amendments to KLEP 2015 can reasonably be understood as reflecting Council's, and the community's, expectations for the desired future character of the site and area. Whilst not determinative, we are of the opinion that the assessment and determination of the DA should pause before granting a development consent which is antithetical to those recently adopted controls for the site.

Our analysis against the Future Character Objectives is included below.

To ensure new development is integrated and consistent with the Ku-ring-gai landscape character

Comment:

The proposal includes the complete removal of existing trees and other vegetation within the battle-axe access handles of 14 and 16 Buckingham Road. This includes the removal of two large dead Blue Gum trees that have died in the last two years, both of which are part of the Blue Gum High Forest Critically Endangered Ecological Community.

The vegetation is mapped by the NSW Department of Environment and Heritage as having a high biodiversity value, that is particularly sensitive to impacts from development.

The introduction of the entry and exit vehicular ramp and tunnel along these access handles results in the loss of all of the existing vegetation and due to the scale of the proposed infrastructure, provides little opportunity for compensatory planting.

The vehicular ingress and egress to the development site is inconsistent with the development controls for the site, detailed in Section 14N of KDCP which requires vehicular access in and out of the site to be via a maximum 3m wide one way loop road with entry between 8 and 10 Buckingham Road and exit between 12 and 18 Buckingham Road. Deep soil landscape screening is to be provided and maximised to the length of the access handle boundary with 10 and 18 Buckingham Road.

McLaren Traffic Engineering (Annexure 5) have reviewed the proposal on behalf of the owners of No.18 and have confirmed that the development is capable of accommodating a one-way loop with vehicles entering at the western access handle and vehicles exiting the development site via the eastern access handle.

McLaren Traffic Engineering (McLaren report) have considered the appropriate vehicular access and movements for development on the site and have recommended a solution that would facilitate a one-way loop system to and from Buckingham Road into and out of the development site. This solution would achieve the KDCP desired outcome for deep soil landscaping adjoining No. 18, including compensatory planting, as well as equitably distribute the amenity impacts of traffic movements to the east and west of the site, rather than the full concentration of impacts falling on No. 18. The McLaren report is discussed in more detail in Section 2.3 of this submission.

To reduce the impacts of bulk and scale on adjacent residential neighbourhoods and Heritage Items.

And

To provide a transition between new medium to high density residential buildings and the adjacent established low density residential neighbourhood fronting Buckingham Road.

Comment:

The proposal is demonstrably inconsistent with these objectives. The overwhelming visual bulk of the seven (7) storey building directly adjoining and overlooking No. 18 is unjustified and unacceptable, as seen in the images below prepared with the assistance of SJB Architects.



Figure 1: existing outlook from the living area of No. 18 to the rear garden and rear boundary with No.16. The existing carport structure on No. 16, forming part of the development site can be seen in the far ground. The 7 storey development will have 22 apartments oriented directly towards the rear of No. 18 as shown in further figures below in this submission.

The visual impact assessment prepared by SJB Architects is included as Annexure 1, with selected excerpts below.

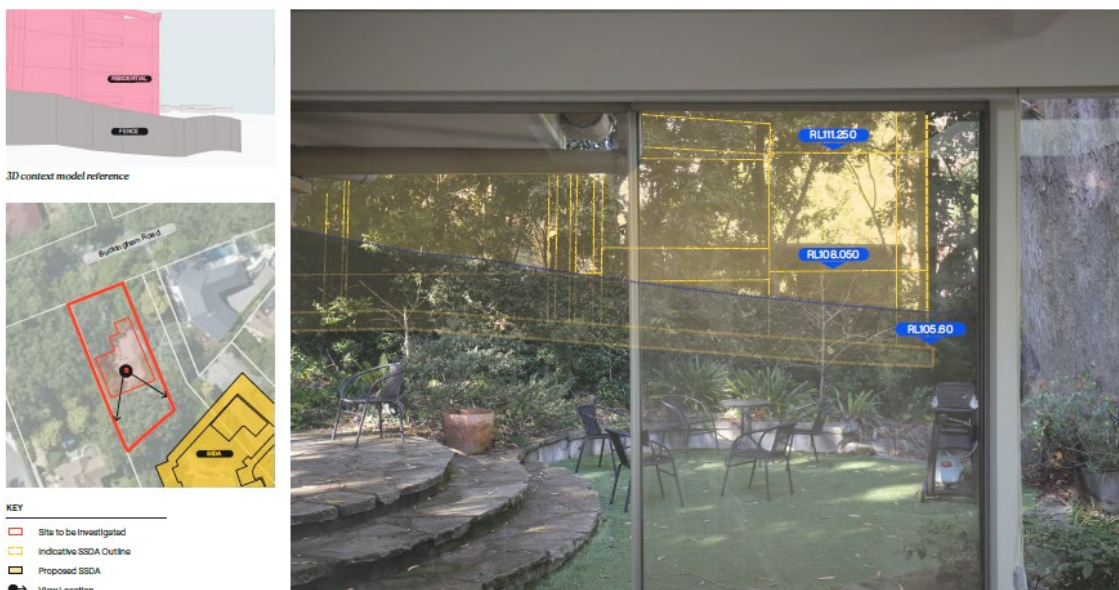


Figure 2: “wire” frame outline of visual bulk that will be seen from the living area of No. 18. (Source SJB Architects)



Figure 3: “wire” frame outline of visual bulk that will be seen from the principal private open space of No. 18. (Source SJB Architects)



Figure 4: “wire” frame outline of visual bulk that will be seen across both the rear and side boundaries from the principal private open space of No. 18. (Source SJB Architects)

The width of the four (4) storey component of the building directly overlooking No.18 is approx. 39m, approximately double the length of the rear boundary between No. 18 and No. 16 (see Figure 5 below). It is an excessive mass of wall rising to seven (7) storeys. The height, bulk and scale of the proposal is an abrupt and unsympathetic change in scale, footprint and built form when compared to the low density residential development with which it adjoins. There is no adequate attempt to provide a built form transition, instead crudely applying the maximum building height and floor space with little or no analysis of the impacts.

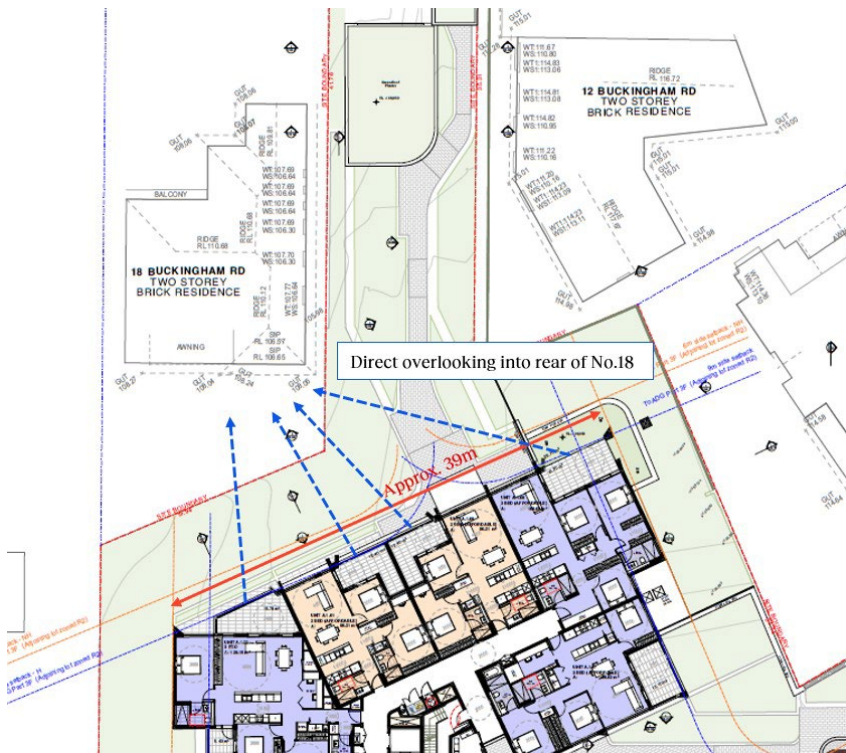


Figure 5: width of the building and direct lines of sight of the built form oriented towards No. 18. Source: underlying architectural drawing DA104 Rev B, BKA Architecture, with additional information included by SJB Planning

The proposal includes 22 apartments directly oriented to towards the rear garden and living area of No. 18 (see Figure 5 above and Figure 6 below). From the second storey (RL 108.05) to the seventh storey (RL 124.500) there are 20 balconies and living areas with a direct line of site into the rear garden (approx. RL 104-105) and existing floor-to-ceiling glass living room windows (floor level approx. RL 104).

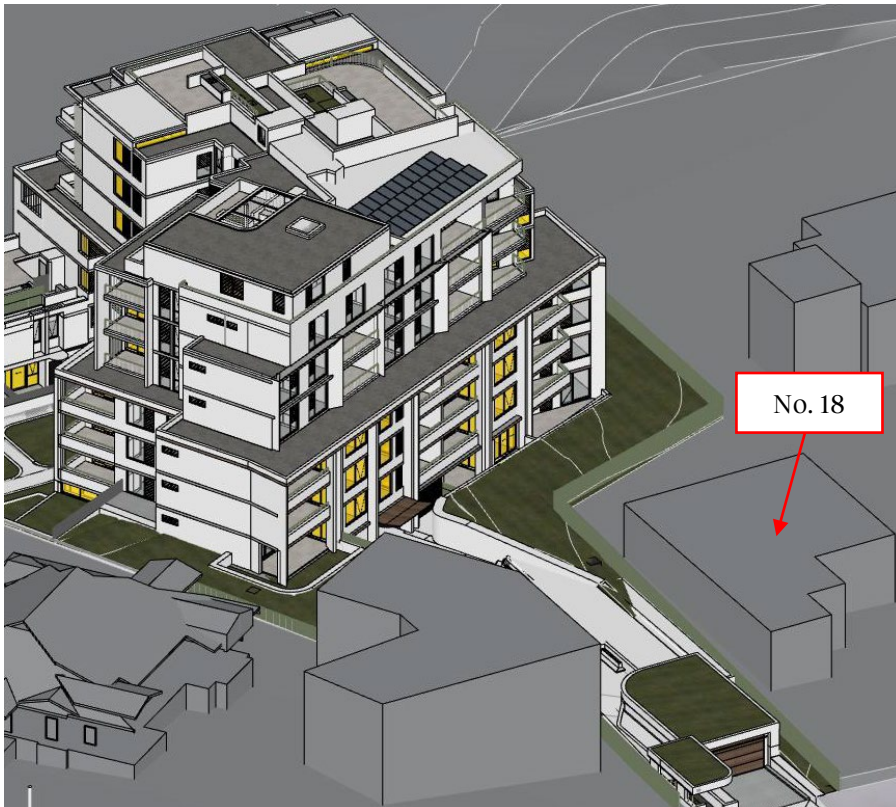


Figure 6: balconies and living areas directly oriented towards the rear of No. 18. (Source: BKA Architecture)

The application documentation, including the EIS, the Visual Impact Assessment and Visual Impact Montages effectively ignore the highly sensitive relationship of the development site with No.18 and the impacts associated with the development.

To retain the character of the Buckingham Road streetscape.

Comment

The existing landscaped character of the Buckingham Road streetscape will be lost and replaced with the vehicular entry and exit infrastructure as shown below.



Figure 7: the landscaped entrance to No. 14 and No.16 Buckingham Road.

This will be replaced as shown below in Figure 8.



Figure 8: Vehicular and pedestrian access infrastructure at the entrance to the access handles of No. 14 and No.16. Source: Visual Impact Assessment Virtual Ideas.

The extent of the removal of vegetation, including two Blue Gums, and the associated extent of driveway infrastructure, is inconsistent with the desired future character as expressed in KDCP. The desired future outcome is a single lane vehicular access point with generous deep soil planting providing a physical separation to the boundary to No.18 and achievement of the desired landscaping when also viewed from the street.

To ensure long term improvement and protection of the Blue Gum High Forest.

Comment

As mentioned earlier in this submission, unfortunately two Blue Gums located on the development site, located along the existing No. 14 and No.16 access handles, have recently died. These previously healthy trees were central to the framing of the KDCP provisions for the development site, allowing for a reasonable development form and footprint and a rational vehicular access arrangement that allowed for the retention of the two trees. The DA proposes the removal of these two trees (identified as T1 and T2) and does not propose any compensatory planting.

The Travers report, included as Annexure 2, notes that the Applicant's aboricultural assessment identifies the site as containing mapped Blue Gum High Forest, a Critically Endangered Ecological Community and that limited consideration has been given by the Applicant to the significance of the remnant Blue Gum High Forest and the trees that contribute to that associated community. These trees represent important remnants of a critically endangered ecological community, and they contribute to the ecological function and landscape character of the site.

1.1.2 Landscaped area

Section 19(b)(ii) of the Housing SEPP provides a non-discretionary development standard of a minimum of 30% of the site area required to be for landscaped area.

Landscaped area is defined in the Dictionary to the Housing SEPP and is included below:

landscaped area means the part of the site area not occupied by a building and includes a part used or intended to be used for a rainwater tank, swimming pool or open-air recreation facility, but does not include a part used or intended to be used for a driveway or parking area.

The term *building* is not defined in the Housing SEPP but is defined in Section 1.4 of the Environmental Planning and Assessment Act (EPA Act) 1979. The definition is:

building includes part of a building, and also includes any structure or part of a structure (including any temporary structure or part of a temporary structure), but does not include a manufactured home, moveable dwelling or associated structure within the meaning of the Local Government Act 1993.

The Applicant's calculations of landscaped area are inconsistent with these definitions as detailed below. Also outlined below are further comments on the methodology used by the Applicant in calculating landscaped area.

The calculations of landscaped area are provided within the architectural drawings.

Drawing DA004 Rev B, and several other associated drawings, include a note:

Battle-axe handles used as access handles are excluded from the deep soil and landscaping required area calculations, as per DCP Part 7.A.6.6 and the KDCP definition of deep soil landscaping, "Note: For the purposes of calculating deep soil landscaping and landscaped areas, any access handle on battle axe sites is excluded."

Battle-axe handle of No. 8A Buckingham Rd has been reinstated as landscaped area, and therefore included in deep soil calculations.

Reduced site area = 4,520.0

Based on the Applicant's calculation of a reduced site area, which in turn is relied upon for the purposes of calculating landscaped area, the reduced 30% compliant figure is 1,356sqm. The Applicant has sought to reduce the site area in order to reduce the calculation of required landscape area.

This methodology is incorrect. Development Control Plans, including KDCP, are not a relevant matter for the calculation of landscaped area. The EIS Appendix C Statutory Compliance Table doesn't even reference KDCP Part 7.A.6.6 (used by the architect) as being relevant.

For the purposes of calculating landscaped area, the site area is 4,989sqm. 30% of this site area is 1,496.7sqm

Secondly, some of the areas included in the measurement of landscaped area are inconsistent with the definition.

Drawing number DA014 Rev B, an excerpt of which is included below, includes areas that contain the building, for example the vehicular tunnel.



Figure 9: ground floor landscaped area. (Source: BKA Architecture)

Drawing DA015 Rev B, includes the roof of the vehicular ramp and roof of the pedestrian entry gate. These are buildings. Drawings D016 and D107 Rev B include areas on the upper floors of the building. All of these calculations are inconsistent with the definition.

The Applicant has not demonstrated compliance with the minimum landscaped area requirements included in section 19(b)(ii) of the Housing SEPP.

1.2 Ku-ring-gai Local Environmental Plan (KLEP) 2015

KLEP 2015 applies to the development.

Clause 6.3 – biodiversity protection

The Travers report at Annexure 2 provides a thorough review of the Applicant's consideration of the biodiversity and ecological values of the development site. The review focusses on whether the Applicant's BDAR Waiver has appropriately assessed the biodiversity values, the impacts on the biodiversity values and whether adequate mitigation measures have been implemented.

The existing biodiversity values of the site include:

- Sydney Blue Gum High Forest remnants including a large significant *Eucalyptus pilularis* (Tree 15) within 18 Killara Road (adjoining property downslope of the subject site) forming part of the Blue Gum High Forest (BGHF) downslope at 18 Killara Road and 22 Killara Road.
- The development site is part mapped as Swift Parrot Habitat.
- Dead remnant Blue Gum High Forest (BGHF) trees located on the development site (*Eucalyptus saligna*) along the boundary of 14, 16 and 18 Buckingham Road.
- A significant *Harpephyllum caffrum* (Kaffir Plum) on the development site – a high value non-native species – suitable food source for the Threatened Species Grey-headed Flying-Fox.
- A small trunk hollow (10cm x 10 cm) located in a remnant *Eucalyptus saligna* at 22 Killara Road.
- Habitat created by exotic landscape species and planted native vegetation including species *Callistemon* sp., *Grevillea robusta*, *Banksia integrifolia*.

The Travers report also identifies that two Blue Gum trees on the development site (T1 and T2) have been impacted by likely unauthorised damage and/or poisoning of BGHF trees. This raises a concern that the Applicant is gaining advantage from an unauthorised action. These trees would have provided high biodiversity value within the development site and are commensurate with the Critically Endangered Ecological Community Blue Gum High Forest of the Sydney Basin Bioregion listed both under the Commonwealth EPBC Act 1999 and the State BC Act 2016.

The Travers report concludes that the Applicant's BDAR Waiver has not adequately demonstrated an avoidance of impact as required under the Biodiversity Conservation Act. This in particular relates to T15 which based on ground truthing has underestimated the DSH and an insufficient Notional Root Zone and Tree Protection Zone. The supporting arboriculture assessment do not fully address the ecological and arboriculture significance of the subject site and adjoining lands.

The Applicant's BDAR Waiver has not adequately addressed or considered the loss of Important Mapped Habitat for the critically endangered Swift Parrot.

The Travers report also advises that insufficient space has been given to remnants of the BGHF and doesn't show that it provides sufficient room for Blue Gum High Forest trees to have long term viability. As a potential Serious and Irreversible Impact (SAII) entity, direct and indirect impacts of the proposed development on BGHF and associated mitigation measures need greater investigation.

The BDAR Waiver does not consider alternatives that can enhance the longevity of Blue Gum High Forest trees within the subject site. The design has taken an aggressive approach to the building footprint. To demonstrate that the BGHF will remain viable in the landscape, the application needs to increase the setback to Tree 15 to 14.4m as the NRZ and the TPZ given the same dimension. The landscape plan is to be enhanced allowing the BGHF to be maintained in perpetuity. The BDAR Waiver and landscape plan do not respond sufficiently an avoidance of impact and mitigation on BGHF.

Based on the findings of the Travers report we submit that the Applicant has failed to demonstrate that the requirements of clause 6.3 of KLEP 2015 have been met. This is a threshold issue as clause 6.3(4) provides that:

- (4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development—
- (a) is consistent with the objectives of this clause, and
 - (b) is designed, and will be sited and managed, to avoid any potentially adverse environmental impact or, if a potentially adverse environmental impact cannot be avoided—
 - (i) the development minimises disturbance and adverse impacts on remnant vegetation communities, habitat and threatened species and populations, and
 - (ii) measures have been considered to maintain native vegetation and habitat in parcels of a size, condition and configuration that will facilitate biodiversity protection and native flora and fauna movement through biodiversity corridors, and
 - (iii) the development avoids clearing steep slopes and facilitates the stability of the land, and
 - (iv) measures have been considered to achieve no net loss of significant vegetation or habitat.

Clause 6.6 - requirements for multi-dwelling housing and residential flat buildings

The objectives of clause 6.6 (1) are:

- (a) to provide site requirements for development for the purposes of multi dwelling housing and residential flat buildings so as to provide for the orderly and economic development of residential land while maintaining the local character, and
- (b) to ensure that lot sizes and dimensions of medium and high density residential sites allow for generous landscaped areas and setbacks to ensure the amenity of adjoining properties and to support the desired future character of these areas.

Clause 6.6(4) states:

For the purposes of this clause, if a lot is a battle-axe lot or other lot with an access handle, the area of the access handle is not to be included in calculating the lot size.

The EIS supporting the development application identifies the three (3) lots that make up the development site as “battleaxe allotments” (p10). The 3 battle-axe lots are shown below as items 1-3, being an extract of Figure 2 of EIS. It is clear that the three (3) lots all have access handles.



Figure 10: The 3 battle-axe lots (1-3) that comprise the development site. Source EIS, Colliers

Pursuant to the provisions of clause 6.6(4) the areas of the three (3) access handles are to be excluded from the calculation of lot size. The owners of No. 18 have obtained legal advice confirming this to be the case. The EIS confirms that the “site area” “not including battle-axe and access handles” is 4,160sqm (p70).

Relying on the Applicant’s own calculation, and consistent with the provisions of KLEP 2015 clause 6.6(4), the site area for the purposes of calculating floor space ratio is 4,160sqm.

The maximum floor space ratio (FSR) applying to the site is 1.95:1. This FSR, when applied to a site area of 4,160sqm, provides for a maximum gross floor area (GFA) of 8,112sqm.

The development application proposes a GFA of 9,475.17sqm, which in turn results in a FSR of 2.277:1, a significant FSR non-compliance without explanation or justification.

2. Unacceptable impacts of development

The proposal will result in significant adverse and unacceptable impacts.

2.1 Unacceptable visual bulk

The unacceptable visual impact of excessive building bulk oriented directly towards the rear garden and living room of No.18, as well as along the side boundary of No. 18 has been detailed under Section 1 in this submission and is also documented in Annexure 1. Further details are included below.

Along the common side boundary between No. 18 and No. 16 the proposal is to remove all existing trees and vegetation and replace with the ingress and egress driveway and dive ramp, with the built form located approx. 1.5 from the common boundary. Kitchen and bedroom windows along this side of No. 18 have a sill height of approx. RL 106.



Figure 11: bedroom windows of three (3) bedrooms at No.18 (locations 2, 3 and 4 in SJB Architects VIA Annexure 1)



Figure 12: outlook to side boundary from kitchen at No.18 (location 1 in SJB Architects VIA Annexure 1)

The extent and proximity of the two-way driveway is shown in the extract of the architectural drawing DA012 Rev B below in Figure 13. The location of side boundary windows is also shown.

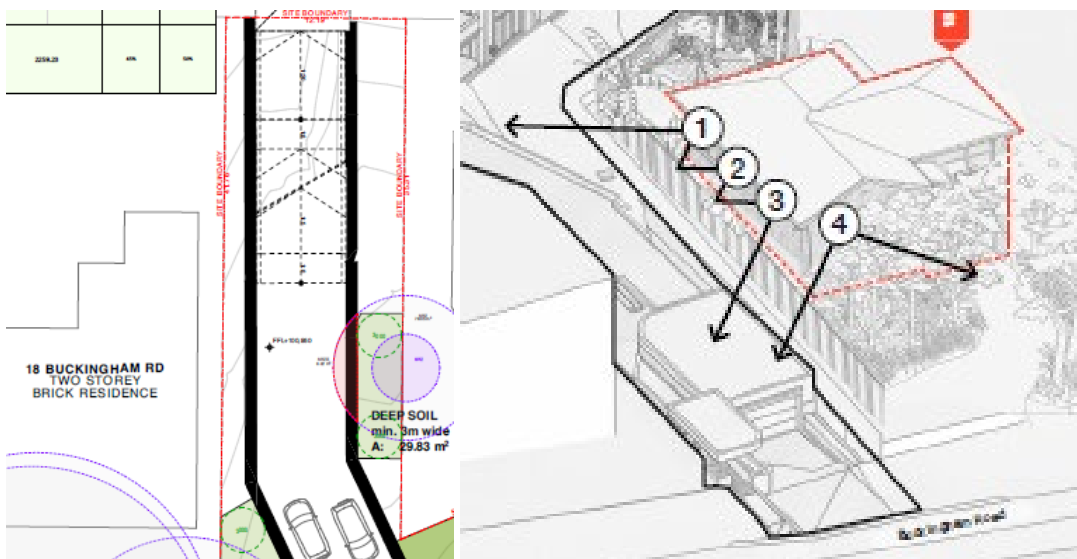


Figure 13: location of driveway structure immediately adjacent to No 18 (left). (Source BKA Architecture drawing DA012 Rev B and SJB Architecture VIA (right))

Unfortunately, the DA documentation has ignored the direct and demonstrable impacts and little or no care has been taken to moderate a transition in the built form directly adjoining No. 18.

The DA is inconsistent with Item 6 of the SEARs issued on 3 October 2025 as the proposal has failed to respond to the context and site characteristics.

The DA is inconsistent with Item 7 of the SEARs issued on 3 October 2025 as the proposal is substantially deficient in assessing the amenity impacts, including visual privacy.

The DA is inconsistent with Item 7 of the SEARs issued on 3 October 2025 as the proposal is substantial deficient in assessing the visual impact, particularly relating to No. 18.

2.2 Unacceptable overlooking and privacy impacts

The extent of potential overlooking has also been detailed under Section 1 of this submission. The building has been directly oriented towards the rear of No. 18 with the result a maximisation of impacts as a result of the insensitive design.

The DA is inconsistent with Item 7 of the SEARs issued on 3 October 2025 as the proposal is substantially deficient in assessing the amenity impacts, including visual privacy.

2.3 Unacceptable traffic impacts

The McLaren Traffic Engineering review of the DA is summarised below:

- The Transport Impact Assessment (TIA) submitted with the proposal does not adequately assess the safe operation of the proposed driveway location. The proposed design is significantly non-compliant with AS2890.1 and AS2890.2 with regard to sight distance for passing and exiting vehicles, pedestrians and cyclists. The design provides 13m of sight distance when 60m to 69m is required. The design is likely to result in collisions and is unacceptable, beyond being non-compliant.
- The TIA does not adequately assess compliance of the proposal for heavy vehicles such as the council waste vehicle. There is no reference to the commercial vehicle standard of AS2890.2:2018. The design exceeds the maximum grade for that vehicle of 20% by proposing a driveway with 25% maximum grade.
- The TIA incorrectly reports the available bus and train services in the vicinity of the site, it also incorrectly qualitatively assesses this provision.
- The TIA inconsistently references AM and PM peak periods for traffic analysis purposes without explanation of which times were used and why.
- The TIA did not survey nor analyse the impact of the proposal on the intersection of Buckingham Road and Warwick Street despite being within the area of influence.
- The TIA does not assess the midblock carrying capacity of Buckingham Road which has restricted lane widths and requires one-way traffic for some segments when kerbside parking occurs.
- The TIA does not assess the inadequate provision for pedestrian access with goods during removal type operations. The stepping stone design for the eastern pedestrian entrance is unsuitable and should be modified to a continuous accessible path of travel.
- The TIA has poorly drawn swept paths of the SRV which show it colliding with kerbside parking. It does not demonstrate that the driveway as designed is capable of support turning movements, especially for an SRV turning across a 15% downgrade ramp fully laden.
- The TIA uses a High-Public-Transport-Accessibility rate for traffic generation. A conservative assessment should test the driveway for a Low-Public-Transport-Accessibility rate of movements for turning risk assessment or internal queueing impacts.

The McLaren report does consider the provisions of Part 14N of KDCP. A one-way loop for vehicle circulation is supported, although it is recommended that entry be via the western access handle and exit via the eastern access handle.

The McLaren report considers and responds to a statement in the application Architectural Design Report that states that the eastern access handle is of insufficient width and that there is excessive steepness of the natural terrain, making it not suitable for compliant vehicle access. The McLaren report details how vehicular movement via the eastern access handle is in fact capable of being achieved.

2.4 Acoustic impacts

The Acoustic Report accompanying the DA is deficient as it does not analyse the potential noise impacts associated with the vehicles, including heavy vehicles, using the vehicular entry and exit ramp adjoining No. 18. The structure appears to be setback only 1.5m from the common boundary and will facilitate all vehicle movements into and out of the development site.

The Acoustic Report assesses traffic noise likely to impact on the future apartments within the development and recommends specific design measures to address the impact but makes no analysis of the additional traffic generated by the development on No. 18 and no analysis of impacts of movements into and out of the site.

The architectural plans include an area of communal open space directly adjacent to the side boundary with No. 18, setback approx. 1.5m and proposed at approx. the same height as the sill height of the side windows of No. 18, including bedroom windows. The Acoustic Report does not acknowledge or analyse the potential noise impacts from this communal area on No. 18.

In our opinion there will be additional and obtrusive noise impacts associated with the development and the Applicant's analysis is substantially deficient in considering this likely impact.

2.5 Landscaping, tree loss and tree impacts

As noted earlier in this submission, the development site contains two dead Blue Gum trees, identified as T1 and T2 in the DA documentation.

The Travers report identifies that the sudden and severe nature of decline of T1 over a period of three (3) months, combined with evidence of repeated basal cutting, indicates that the tree's condition is unlikely to be the result of natural senescence alone and is consistent with deliberate external interference. The historical context is not reflected within the Applicant's Arboricultural Impact Assessment (AIA). The apparent vandalism and chemical exposure should be clearly documented to ensure T1 condition is accurately represented and not solely attributed to natural decline. There is no evidence of natural decline provided within the AIA and is not supported by ground-truthing undertaken by Travers.

Similarly, T2 has undergone a rapid and marked decline with symptoms consistent with possible poisoning, herbicide exposure, or other severe physiological stress. The AIA does not adequately address this sudden deterioration or the possibility of unlawful interference contributing to the tree's current condition. The Travers report identifies that, as T2 is a remnant Sydney Blue Gum associated with the mapped Blue Gum High Forest ecological community, its decline represents a significant reduction in both ecological and landscape values on the site. The circumstances surrounding this deterioration should be clearly acknowledged within the assessment to ensure an accurate baseline condition is established.

The recent death of T1 and T2 has potentially reduced ecological constraints on the development site. Travers recommend replacement planting of these trees. The AIA does not adequately assess, report and sufficiently address the documented history of the rapid decline affecting T1 and T2, including the evidence of suspected unlawful interference. The Arboriculture assessment is remiss in that it does not adequately discuss or qualify the contribution of retained trees to visual screening, privacy and neighbourhood amenity. Retained boundary and adjoining trees provide an important landscape buffer between the

proposed development and surrounding residential properties, assisting in maintaining privacy, softening built form, and contributing to the established treed character of the locality.

The owners of No. 18 contend that T1 and T2 have been unlawfully poisoned and have complained to Kuring-gai Council and the EPA to that effect. A copy of the complaint to the Council made on behalf of the owners by Ethos Urban (now Colliers Urban Planning) from 2024 is included at Annexure 3, together with a report on the apparent poisoning of the tree included as Annexure 4. The owners of No. 18 have also obtained legal advice that, whilst the unlawfulness of the poisoning of T1 and T2 does not preclude the Applicant from applying for development consent, the consideration of future development on the site should be undertaken without regard to the past unlawful acts of poisoning the trees. The legal advice is that this is because the unlawful user of land should gain no advantage from having established an unlawful use: *Ralph Lauren Pty Ltd v New South Wales Transitional Coastal Panel [2018] NSWLEC 207* at [128] (Preston CJ). The ecological impacts of the development should therefore be assessed on the basis that the two Blue Gum trees have not been poisoned.

The tree nominated as T15, an existing Blackbutt, is located at No. 18. The Travers report identifies that the AIA has erroneously quantified measurement data to fully substantiate impact conclusions in relation to T15 as well as Trees T13 and T14, both of which are located on the development site and close to the boundary with No.18. The location of T13-T15 are shown in the extract of the landscape plan, included below.



Figure 14: location of trees T13, T14 and T15. T15 is at the rear of No. 18.

In relation to T15, the Travers review is:

Whilst Tree 15 is assessed as having negligible impact based on the available information, the DSH has been recorded incorrectly resulting in a much smaller Notional Root Zone being provided. The impact on this tree is higher than determined by the arborist report and has not determined the NRZ or expected impacts or resulting TPZ in accordance with AS4970-2025. Given that this tree is high conservation value tree given it forms part of the Critically Endangered Ecological Community - Blue Gum High Forest. A greater set back is recommended and the impact on the NRZ be avoided.

The Arboriculture impact Assessment is to be rejected for Trees 13, 14 and 15, including supplementary surveying and root mapping where appropriate, to provide greater certainty regarding tree retention outcomes and construction impacts. The Arboriculture assessment has incorrectly measured tree DSH measurement for Tree 15 resulting in a reduced reported Notional Root Zone which is inconsistent with AS4970-2025.

The setback to T15 is required to be increased from 12m to 14.4m.

2.6 Ecological Impacts

The Travers report identifies that the Applicant's BDAR Waiver has not adequately demonstrated an avoidance of impact as required under the Biodiversity Conservation Act. This in particular relates to T15 which based on ground truthing has underestimated the DSH and an insufficient Notional Root Zone and Tree Protection Zone. The Applicant's supporting arboriculture assessment do not fully address the ecological and arboriculture significance of the subject site and adjoining lands.

The Applicant's BDAR Waiver has not adequately addressed or considered the loss of Important Mapped Habitat for the critically endangered Swift Parrot.

Insufficient space has been given to remnants of the BGHF and doesn't show that it provides sufficient room for Blue Gum High Forest trees to have long term viability. As a potential Serious and Irreversible Impact (SAII) entity, direct and indirect impacts of the proposed development on BGHF and associated mitigation measures need greater investigation.

The BDAR Waiver does not consider alternatives that can enhance the longevity of Blue Gum High Forest trees within the subject site. The design has taken an aggressive approach to the building footprint. To demonstrate that the BGHF will remain viable in the landscape, the Travers review confirms that the development design is required to increase the setback to T15 to 14.4m.

The BDAR Waiver does not sufficiently evaluate indirect impacts associated with building mass, increased shading and suppression of native vegetation, and artificial lighting. Shadow impacts on existing trees of BGHF are required to be provided and the building design is to minimise indirect impacts on remnant canopy of BGHF. The BDAR Waiver and landscape plan do not respond sufficiently an avoidance of impact and mitigation on BGHF.

Based on the Travers report, the Applicant has not satisfied the mandatory provisions of clause 6.3 of KLEP 2015.

2.7 Unacceptable and unjustified building height

Measuring building height

The potential maximum building that is reliant upon the combination of the LMR and Infill affordable housing provisions of the Housing SEPP is not a given, and bonuses may may not be achieved on all sites due to site constraints and local impacts. The DPHI Practice Note of December 2023 "*In-fill affordable housing*" makes it clear at page 12 that:

"The full extent of the in-fill affordable housing bonuses should not be treated as an entitlement."

Lack of justification

The Applicant is required to demonstrate 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.

For the reasons we state elsewhere in this submission regarding the excessive building height, bulk and scale, the Applicant has failed to demonstrate that compliance with the standard is unreasonable or unnecessary or that there are sufficient environmental planning grounds to justify the contravention.

The proposal, due to the unreasonable and unacceptable direct impacts on No. 18, is excessive in height, bulk and scale.

2.8 Compatibility and contextual fit under the Housing SEPP

Section 1.1.1 of this submission discusses the Applicant's omission in acknowledging and assessing the desired future character of the area as expressed in Part 14N of KDCP, introduced at the time of rezoning the land to R4 High Density Residential.

More broadly, the accepted approach to considering and determining compatibility has been established by the NSW Land and Environment Court (Court). The Court includes a Planning Principle that addresses compatibility with context as detailed in *Project Venture Developments v Pittwater Council [2005] NSWLEC 191 (Project Venture)*. Relevant sections of the judgement are included below:

Planning principle: compatibility in the urban environment

- "22 *There are many dictionary definitions of compatible. The most apposite meaning in an urban design context is capable of existing together in harmony. Compatibility is thus different from sameness. It is generally accepted that buildings can exist together in harmony without having the same density, scale or appearance, though as the difference in these attributes increases, harmony is harder to achieve.*
- 23 *It should be noted that compatibility between proposed and existing is not always desirable. There are situations where extreme differences in scale and appearance produce great urban design involving landmark buildings. There are situations where the planning controls envisage a change of character, in which case compatibility with the future character is more appropriate than with the existing. Finally, there are urban environments that are so unattractive that it is best not to reproduce them.*
- 24 *Where compatibility between a building and its surroundings is desirable, its two major aspects are physical impact and visual impact. In order to test whether a proposal is compatible with its context, two questions should be asked.*
 - *Are the proposal's physical impacts on surrounding development acceptable? The physical impacts include constraints on the development potential of surrounding sites.*
 - *Is the proposal's appearance in harmony with the buildings around it and the character of the street?*
- 25 *The physical impacts, such as noise, overlooking, overshadowing and constraining development potential, can be assessed with relative objectivity. In contrast, to decide whether or not a new building appears to be in harmony with its surroundings is a more subjective task. Analysing the existing context and then testing the proposal against it can, however, reduce the degree of subjectivity.*
- 30 *Conservation areas are usually selected because they exhibit consistency of scale, style or material. In conservation areas, a higher level of similarity between the proposed and the*

existing is expected than elsewhere. The similarity may extend to architectural style expressed through roof form, fenestration and materials.”

Project Venture applies a consistent framework for decision-making in relation to a proposal being compatible with surrounding development. This planning principle provides that in an urban design context, compatibility is ‘capable of existing together in harmony’. Though buildings of different densities or scales can exist, harmony is harder to achieve as the difference in these attributes increases.

Based on the Court Planning Principle the proposal must be seen as incompatible. In the context of adjoining low density and low scale residential development, the proposal represents between a six and seven storey difference in building height in relation to surrounding development, which is comprised of local heritage items that are between one and two storeys in height.

The principles of *Project Venture* acknowledge that compatibility with the future character of an area is more appropriate than with the existing character where planning controls envisage such a change.

Two questions should be asked in order to test whether a proposal is compatible with its context. These are discussed below in relation to the proposal:

1. *Are the proposal’s physical impacts on surrounding development acceptable? The physical impacts include constraints on the development potential of surrounding sites.*

The proposal will result in both “character” and direct transition impacts to surrounding development and in the case of No. 18 quite severe detrimental impacts. These impacts have not been properly or adequately considered or analysed by the Applicant. Based on our assessment, as detailed in this submission, the impacts are substantial and unacceptable

2. *Is the proposal’s appearance in harmony with the buildings around it and the character of the street?*

The following elements of the proposal cause disharmony with surrounding development and the streetscape when examining both the established and desired future character:

- Significant building height, bulk and scale with no transition between properties; and
- Uncharacteristic building footprint.

As discussed in Section 1 of this submission, Section 20(3) of the Housing SEPP states:

“(3) Development consent must not be granted to development under this division unless the consent authority has considered whether the design of the residential development is compatible with—

- (a) the desirable elements of the character of the local area, or*
- (b) for precincts undergoing transition—the desired future character of the precinct.”*

Compatibility and design quality are discussed further under Section 2.9 below which addresses Chapter 4 of the Housing SEPP, associated with residential apartment design.

The in-fill affordable housing compatibility test and design principles for residential apartment development both require an examination into the desirable elements of the area’s character in existing and future circumstances. Both matters also require a consideration of the context of areas identified for change or undergoing transition.

In response to the jurisdictional matters of the Housing SEPP that relate to the compatibility and contextual fit of the proposal within the locality, development consent should not be granted for the below reasons:

Section 20

- The development is not compatible with the desirable elements of the character of the local area.
- While this LMR affected part of Killara is undergoing a transition the development will not be compatible with the desired future character.

Section 147

- The quality of the design of the residential apartment development is not satisfactory with regard to the design principles under Schedule 9 (see section 2.9 below).

2.9 Design quality

Design quality is a mandatory consideration in the determination of any development application.

Section 1.3(g) of the *Environmental Planning and Assessment (EP&A) Act 1979* identifies good design as an Object of the Act:

“(g) to promote good design and amenity of the built environment,”

Section 20 of the Housing SEPP, associated with infill affordable housing, requires that the development design must be compatible with the desired future character of the area. This jurisdictional requirement requires a detailed analysis of the likely future character, acknowledging all of the constraints that are likely to impact on, and in some cases, notably restrict, future development outcomes and associated urban character. These matters are discussed in detail within this submission.

Chapter 4, section 142 of the Housing SEPP associated with residential apartment development includes in the Aims:

“(b) to achieve better built form and aesthetics of buildings, streetscapes and public spaces,”

Section 147 of the Housing SEPP requires the consideration of the Schedule 9 design principles associated with residential apartment development.

In relation to the Design Principles, the following comments are provided:

- **1 Context and neighbourhood character** - the Architectural Design Report and the EIS do not adequately consider the location context, and in particular development constraints associated with battle-axe lots, lack of street frontage and uncharacteristic transitional relationship with neighbouring properties to the north and north-west. The proposal will be an “island” site adjoined by development to the west and north of much lower scale and density given these constraints. This is discussed in more detail in this submission.
- **2 Built form and scale** - for the reasons detailed above and elsewhere in this submission, the design will be an excessive scale, bulk and height within the location, given the context and constraints. In particular the proposal will present an unacceptable bulk and scale and visual impact on No. 18
- **6 Amenity** - the scale of the development on the comparatively large extremely site will negatively influence the external amenity for the neighbour at No. 18.

- **9 Aesthetics** – as mentioned above, the sheer scale of the large and uncharacteristic site and associated excessive scale of the proposal will have an unacceptable visual impact within both the existing and likely future context.

Having reviewed the proposal and in turn considered the relevant provisions applicable in the assessment and determination of the proposal, we are of the opinion that the proposal does not exhibit good design within its context.

3. Documentation Inadequacies

As detailed in this submission, the documentation provided with the DA is inadequate and inconsistent in regard to:

- Visual impact analysis
- Design quality
- Traffic impacts
- Ecological impacts
- Tree impacts
- Acoustic analysis
- Assumptions regarding future development and future context
- Desired future character
- Community engagement

4. Conclusion

The development site is constrained due to the lack of street frontage, highly unusual shape and uncharacteristic relationship with the neighbouring properties over which it looks to the north and north-west. For the reasons outlined in this submission, the scale of development proposed is incompatible with the desired future character of the location and is not suitable for the constrained site.

The EIS and accompanying information lodged with the application effectively ignores any meaningful analysis of the impact on No. 18. There is no visual impact analysis and no privacy impact analysis. Based on our professional analysis the proposal will have an overwhelming and unacceptable visual bulk impact as well as an unacceptable loss of privacy.

The proposal will result in unacceptable impacts on existing trees located on the development site and on No. 18.

The proposal relies on the removal of two Blue Gums, T1 and T2 that have recently died. The owners of No. 18 have obtained legal advice that the consideration of future development on the site should be undertaken without regard to past unlawful acts of poisoning the trees, which is alleged to have occurred. The legal advice is that this is because the unlawful user of land should gain no advantage from having established an unlawful use: *Ralph Lauren Pty Ltd v New South Wales Transitional Coastal Panel [2018] NSWLEC 207* at [128] (Preston CJ). The ecological impacts of the development should therefore be assessed on the basis that the two Blue Gum trees have not been poisoned.

The Travers report included at Annexure 2 identifies that the Applicant's BDAR Waiver has not adequately demonstrated an avoidance of impact as required under the Biodiversity Conservation Act and is deficient in regard to a number of matters.

The proposal will result in unacceptable traffic impacts, being unsuitable for a number of reasons, as detailed in this submission, and in more detail in Annexure 5.

The proposal fails to properly consider the relevant provisions of Ku-ring-gai Local Environmental Plan (KLEP) 2015 clause 6.6 *Requirements for multi dwelling housing and residential flat buildings*.

The DA documentation does not meet the requirements of the SEARs dated 3 October 2025. The application does not address the relevant contributions plan(s) (item 3), does not adequately assess visual privacy (item 7) and does not address visual impact on No. 18 (item 8). DPHI should consider whether the application meets the requirements of Item 5 - Design Quality of the SEARs dated 3 October 2025.

Based on our review of the proposal, together with the separate visual impact, ecological, arboricultural and traffic reports, we submit, on behalf of the owners of No.18, that the proposal should be rejected.

Annexure 1: Visual Impact Assessment – SJB Architects

18 Buckingham Road, Killara

VIA Study

Prepared for
SJB Planning

Issued
June 2026

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SJB acknowledges the Traditional Custodians of the lands, waters, and skies, and their perpetual care and connection to Country where we live and work. We support the Uluru Statement from the Heart and accept its invitation to walk with Aboriginal and Torres Strait Islander people in a movement of the Australian people towards a better future.

We believe that inequity enshrined in our society continues to significantly disadvantage our First Nations colleagues, friends, and community. Following the referendum, we are personally and professionally recommitting our support of Aboriginal and Torres Strait Islander people. We will continue to strive for (re)conciliation by acting with integrity and passion, in an effort to address this imbalance in our country and create lasting generational change.



Certified Management Systems

ISO 9001:2015 Quality Management System
ISO 45001:2018 Occupational Health & Safety Management System
ISO 14001:2015 Environmental Management System

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ABN 20 310 373 425
ACN 081 094 724

Nominated Architects
Adam Haddow 7188
Emily Wombwell 10714
John Pradel 7004
Jonathan Tondi 11981
Nick Hatzi 9380

VIA Context

The proposed State Significant Development Application (SSDA) encompasses the lots at 8A, 14 and 16 Buckingham Road, Killara. The subject site at 18 Buckingham Road is located immediately adjacent to the southern boundary of the SSDA and is identified as a site warranting further planning investigation.

The SSDA, as currently configured, presents a built form of considerable scale and bulk at the interface with 18 Buckingham Road. At this boundary, the proposed development reaches its maximum height and massing, with limited articulation, setback, or transition in built form relative to the adjoining site.

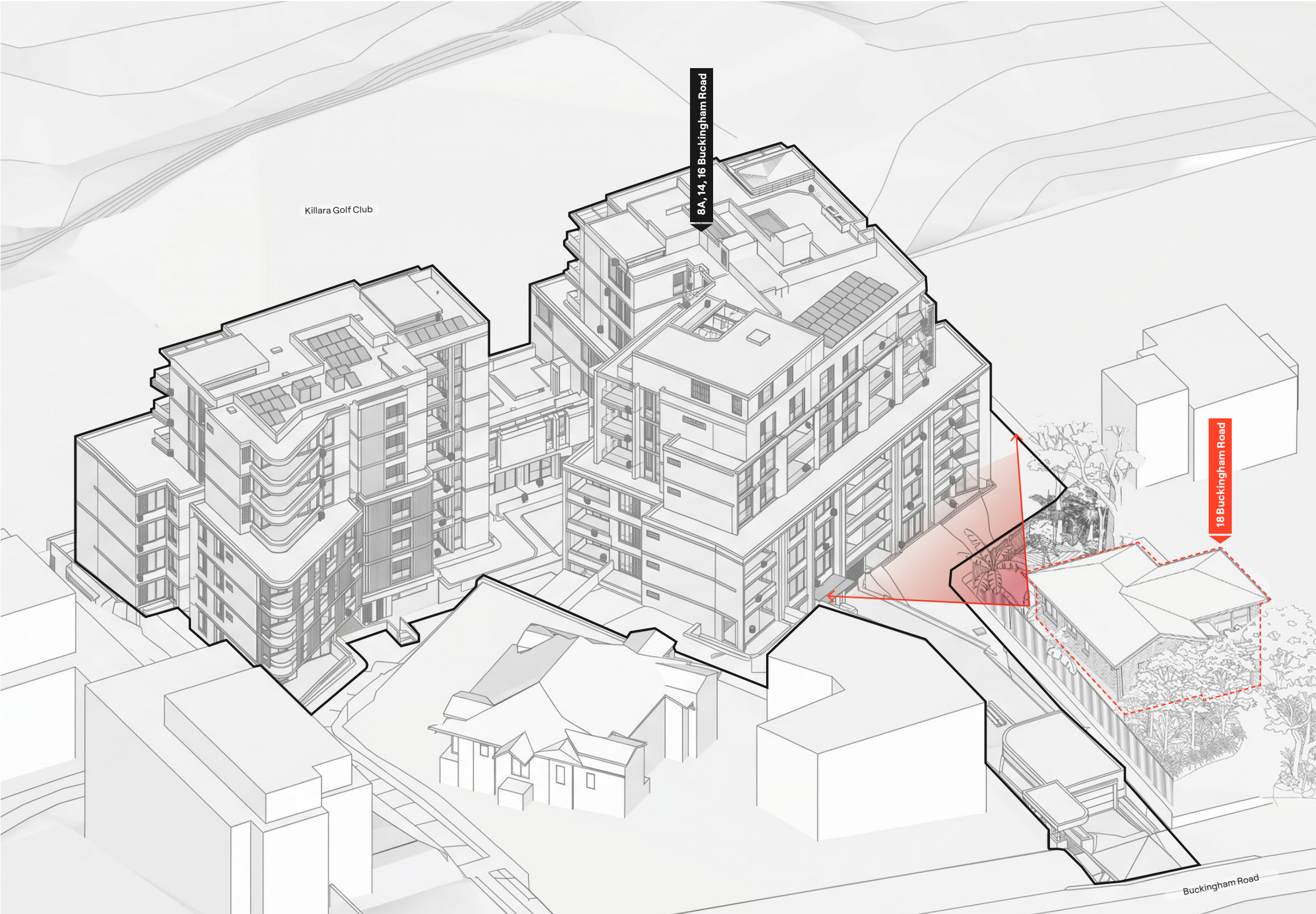
This assessment examines the extent to which the scale and bulk of the proposed SSDA would impose upon the development potential and amenity of 18 Buckingham Road.



KEY

 Site to be Investigated

 Proposed SSDA



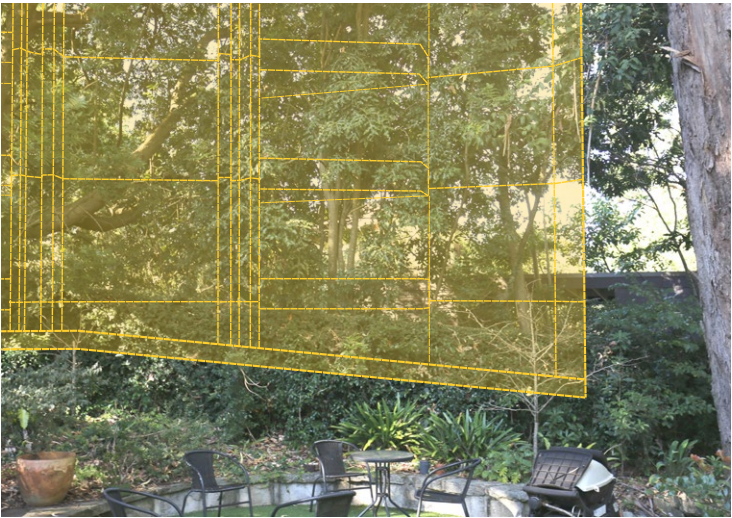
VIA - Overview

The following six photomontages have been prepared to illustrate the visual impact of the proposed SSDA upon the subject site at 18 Buckingham Road, Killara. Each image depicts the indicative building envelope of the SSDA (shown in yellow) superimposed over photographs taken from identified vantage points within and immediately adjacent to the subject site. The view locations are identified on the site plan at left and are numbered 1 through 6.

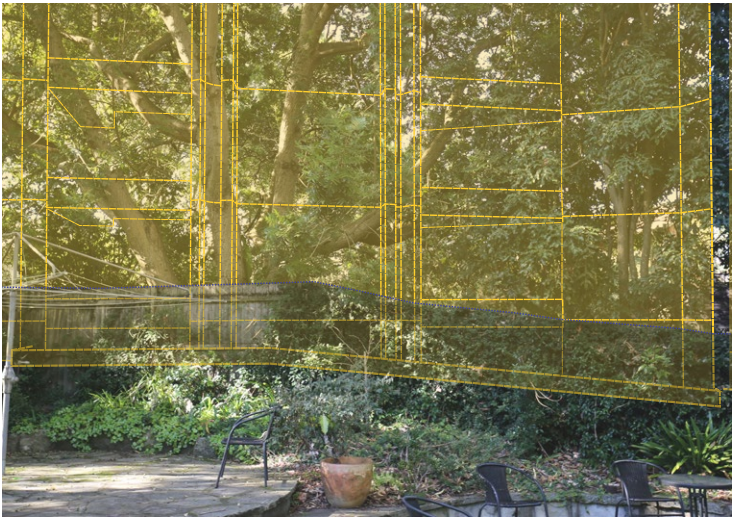
The selected viewpoints represent the principal aspects from which the proposed development would be experienced by occupants and visitors of 18 Buckingham Road. These include views from the private open space to the south of the dwelling (Views 1-3), the eastern boundary of the site (View 4), the public domain along Buckingham Road (View 5), and from within the primary living space of the existing dwelling (View 6).



- KEY
- Site to be Investigated
 - Indicative SSDA Outline
 - Proposed SSDA
 - View Location



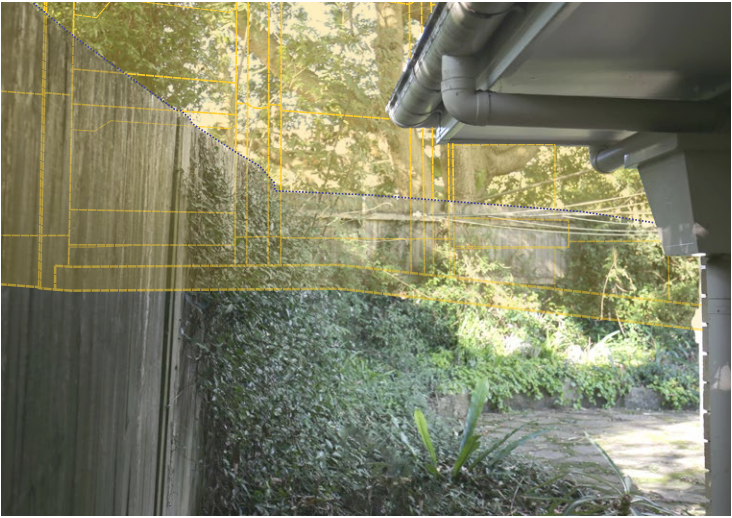
View 1 - Backyard facing South



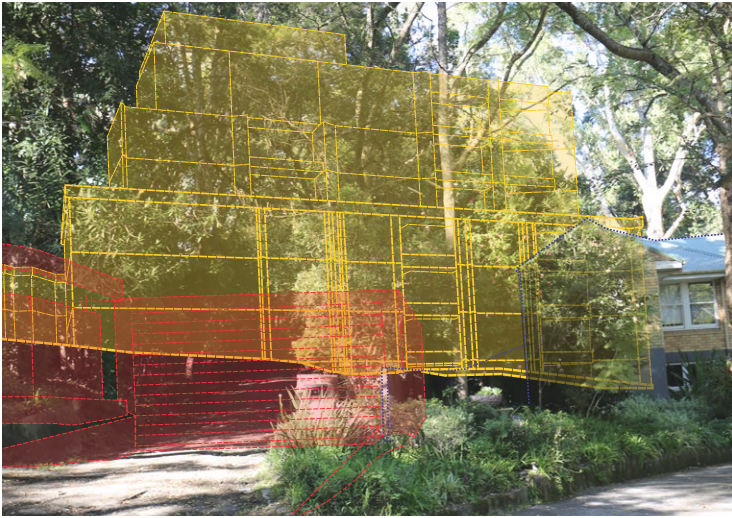
View 2 - Backyard facing South



View 3 - Backyard facing South



View 4 - Eastern edge looking South

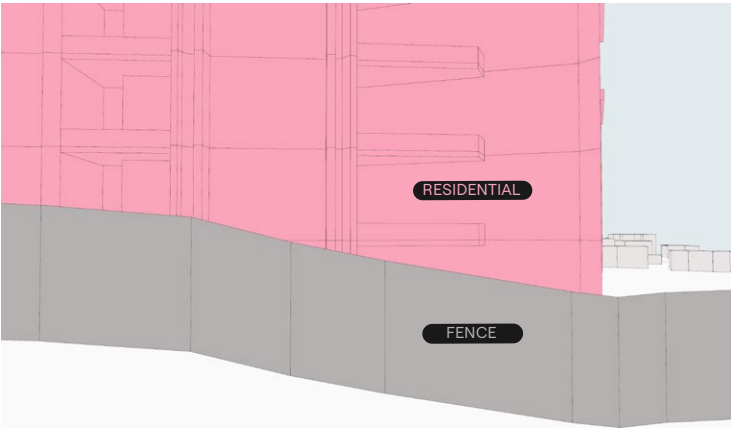


View 5 - From Buckingham Road



View 6 - Primary Living Space

VIA - View 1

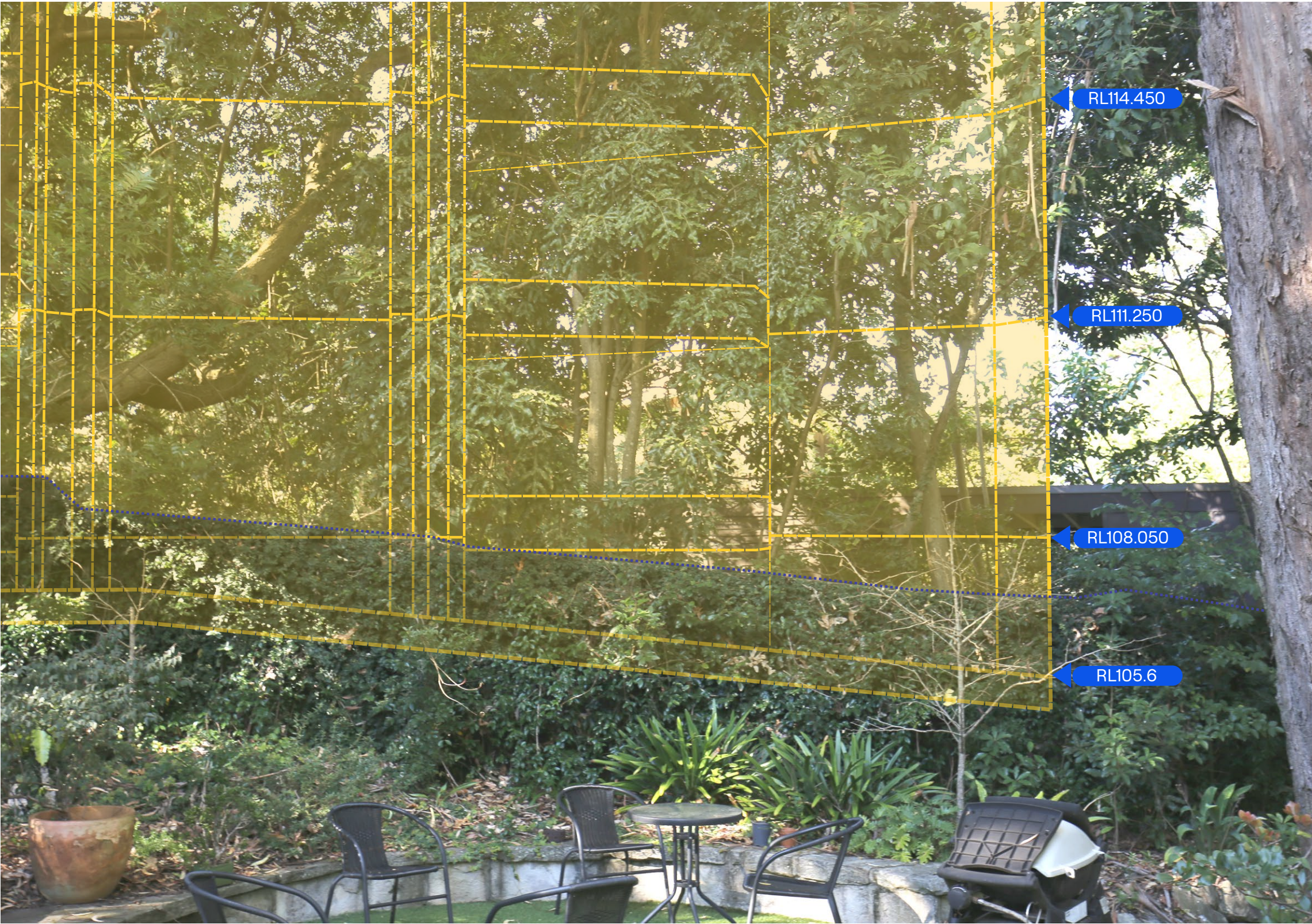


3D context model reference

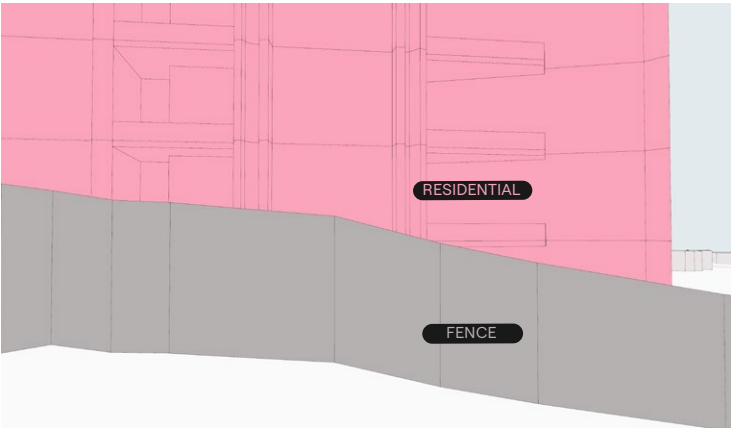


KEY

- Site to be Investigated
- Indicative SSDA Outline
- Proposed SSDA
- View Location



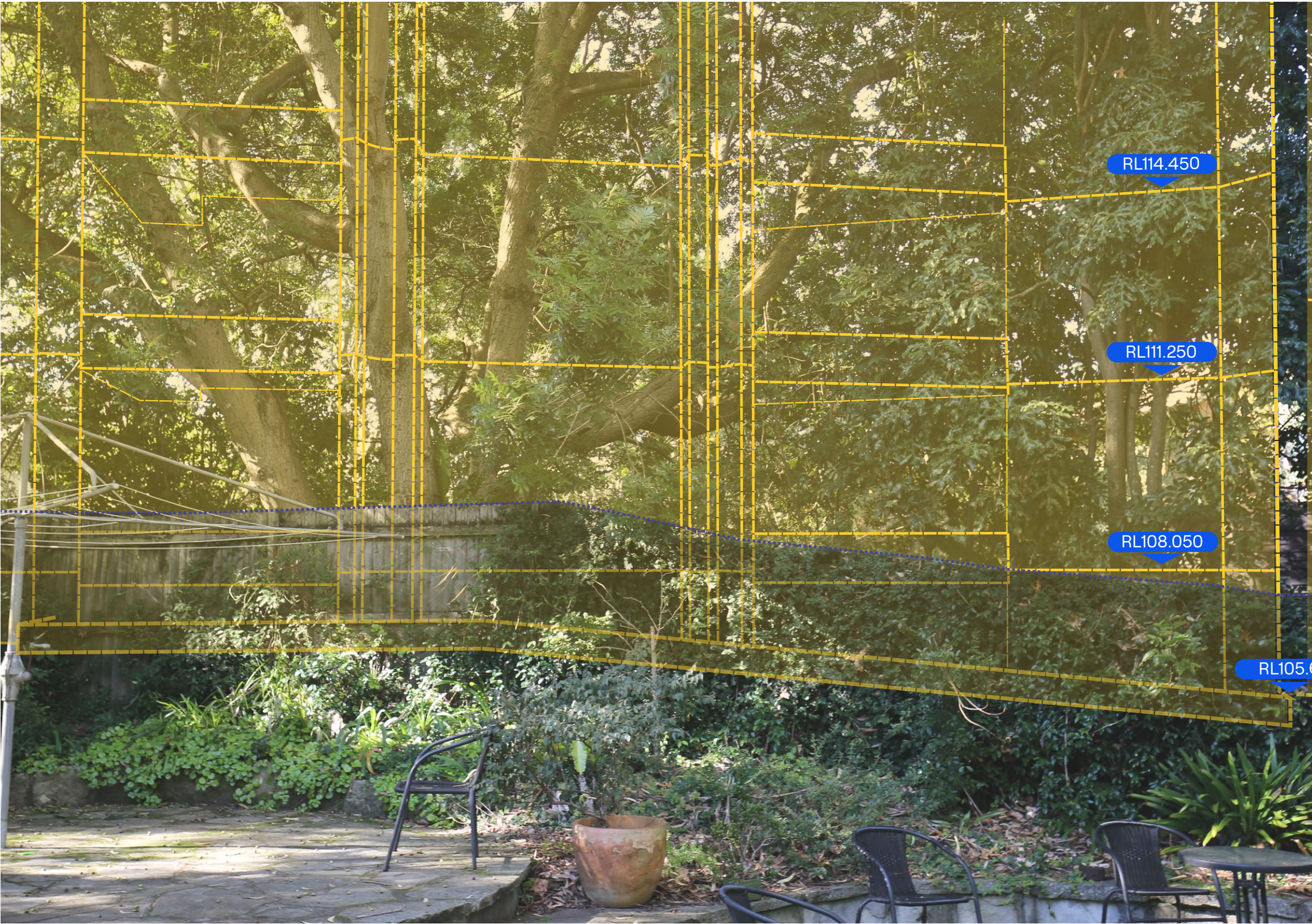
VIA - View 2



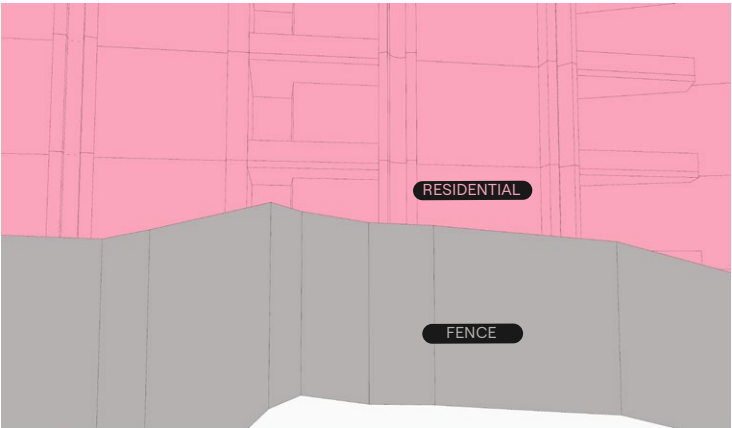
3D context model reference



- KEY
- Site to be Investigated
 - Indicative SSDA Outline
 - Proposed SSDA
 - View Location



VIA - View 3



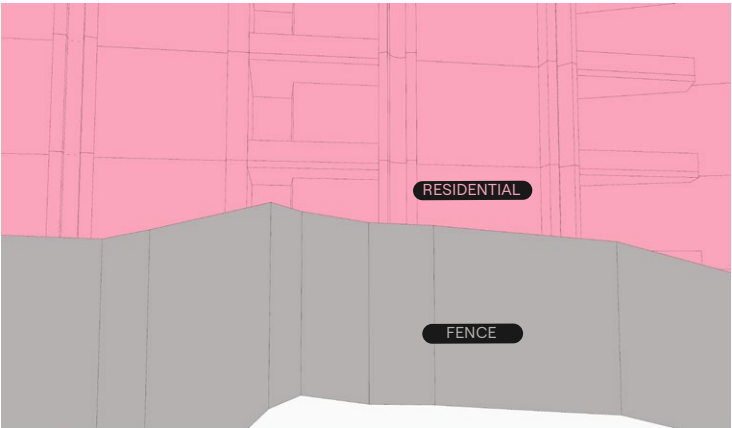
3D context model reference



- KEY
- Site to be Investigated
 - Indicative SSDA Outline
 - Proposed SSDA
 - View Location



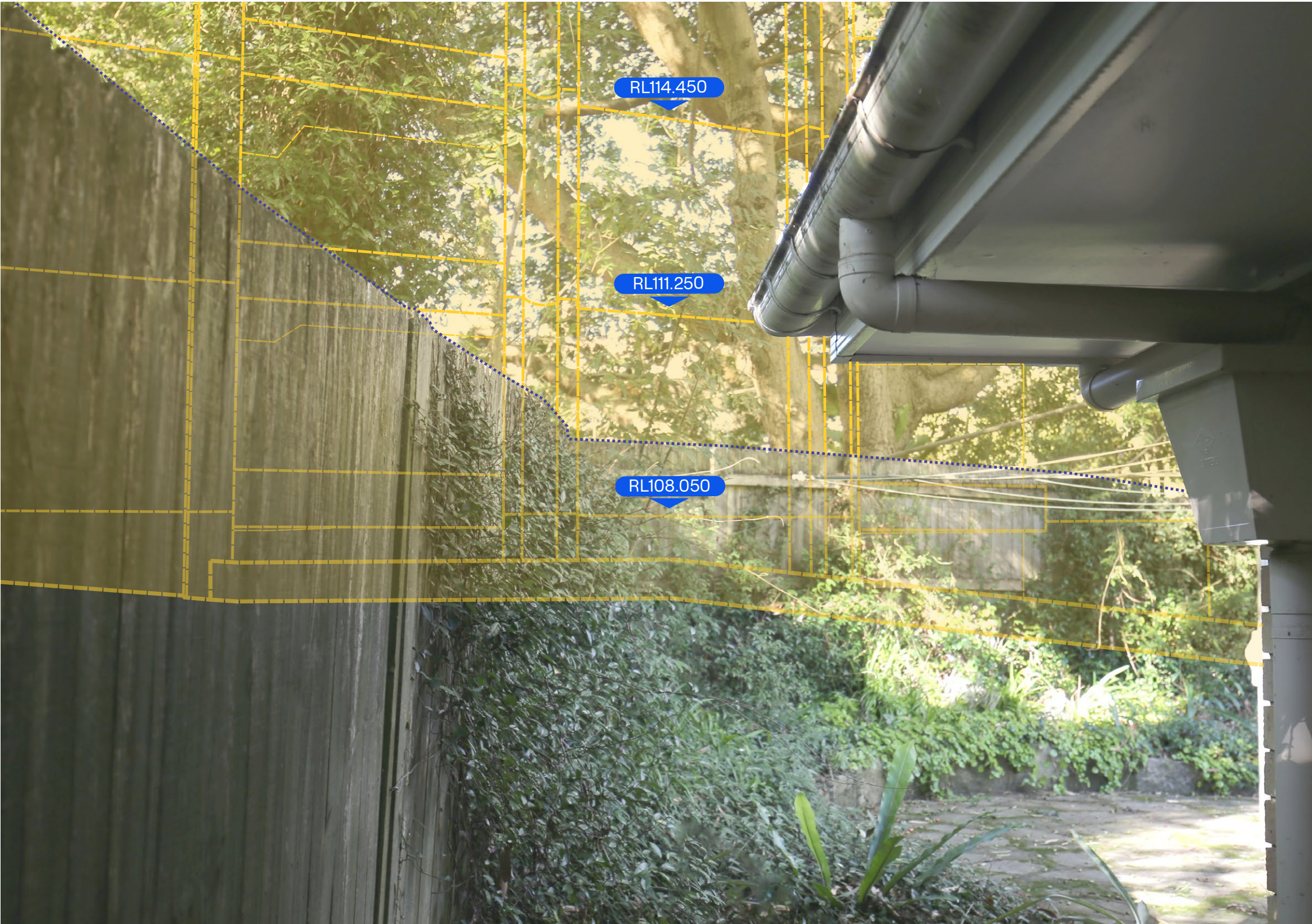
VIA - View 4



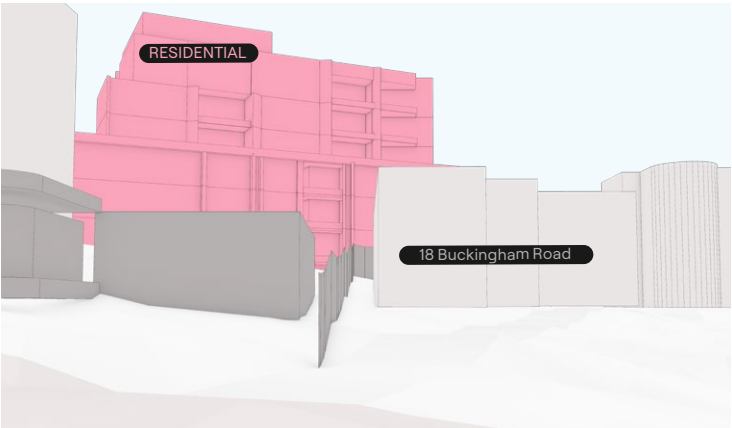
3D context model reference



- KEY
- Site to be Investigated
 - Indicative SSDA Outline
 - Proposed SSDA
 - View Location



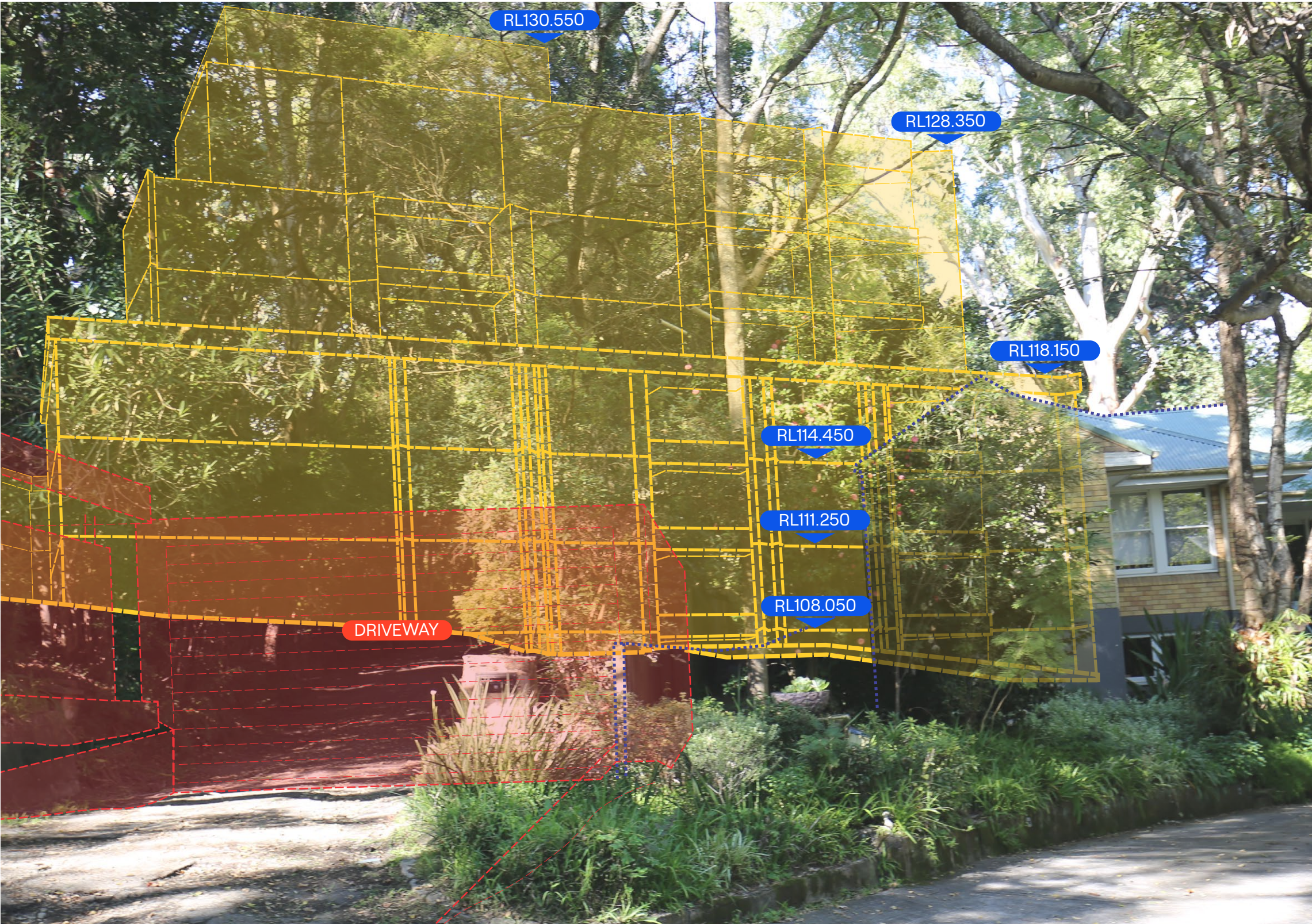
VIA - View 5



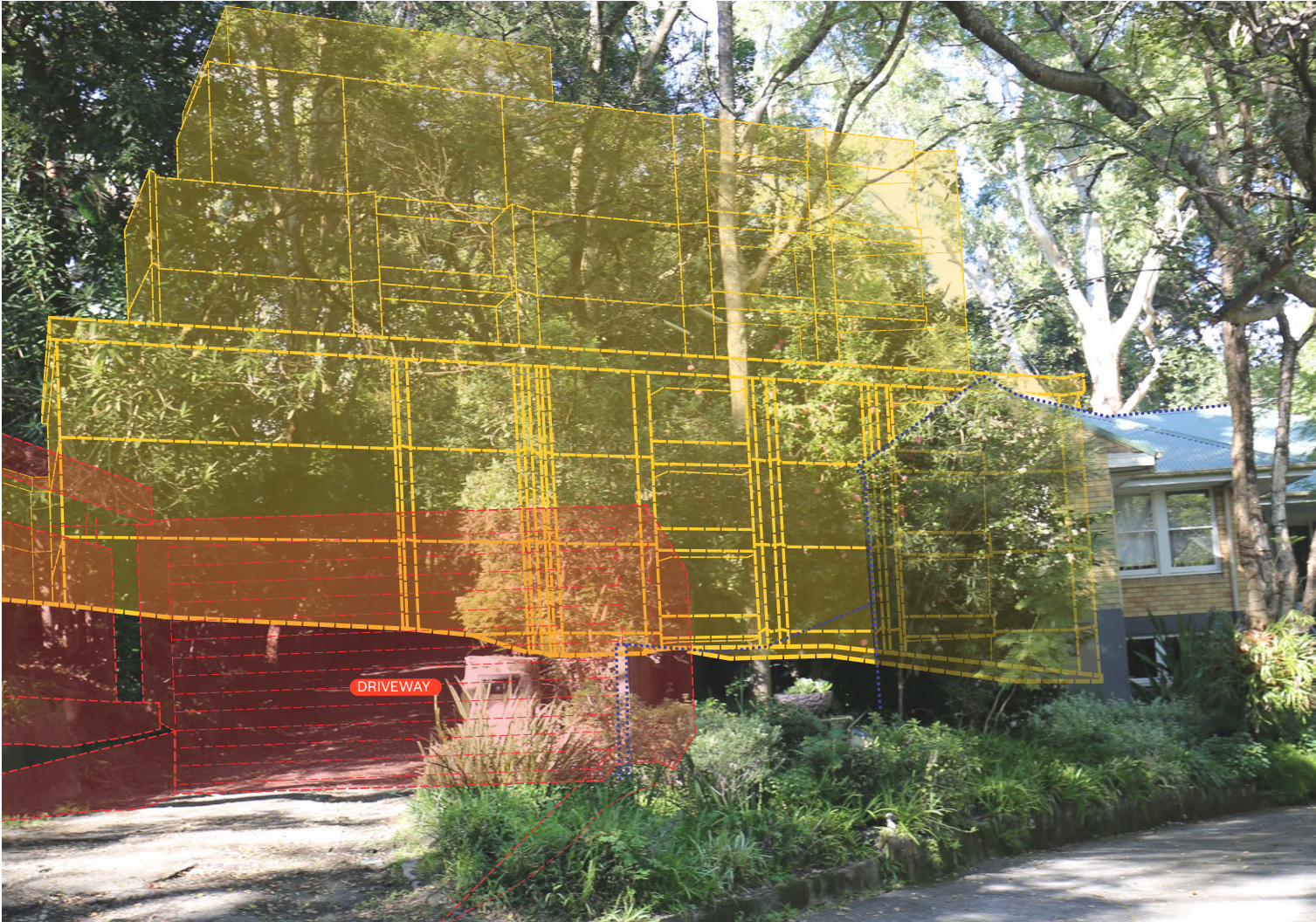
3D context model reference



- KEY
- Site to be Investigated
 - Indicative SSDA Outline
 - Proposed SSDA
 - View Location



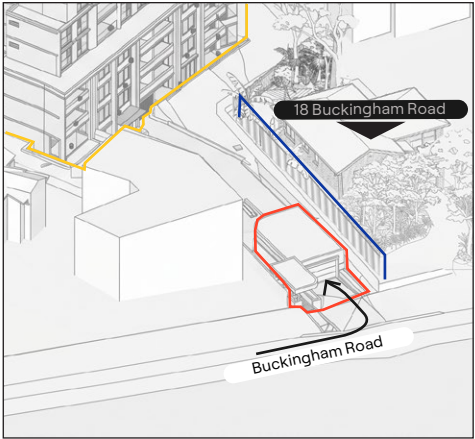
VIA - View 5 Comparison



Proposed Driveway CGI



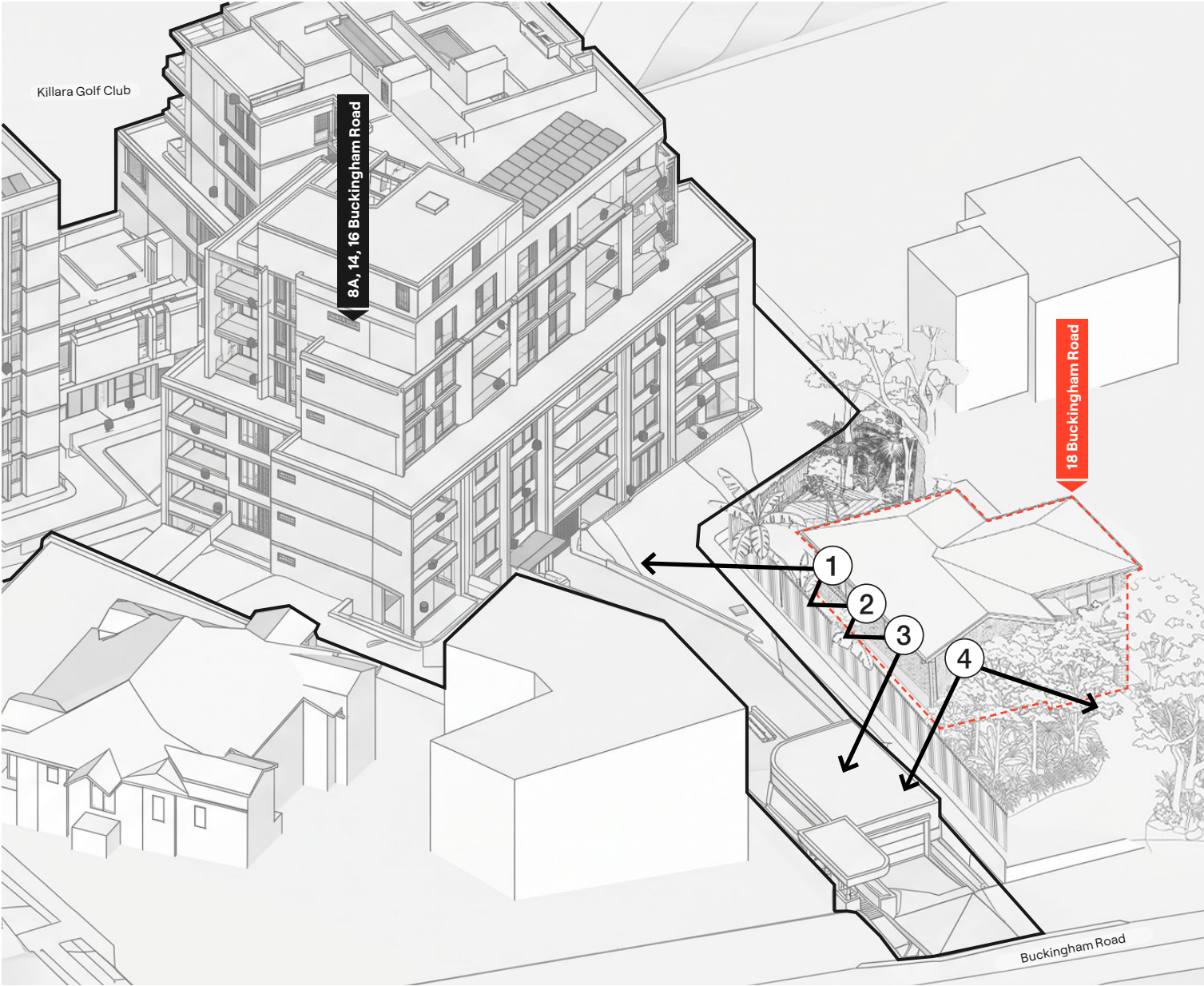
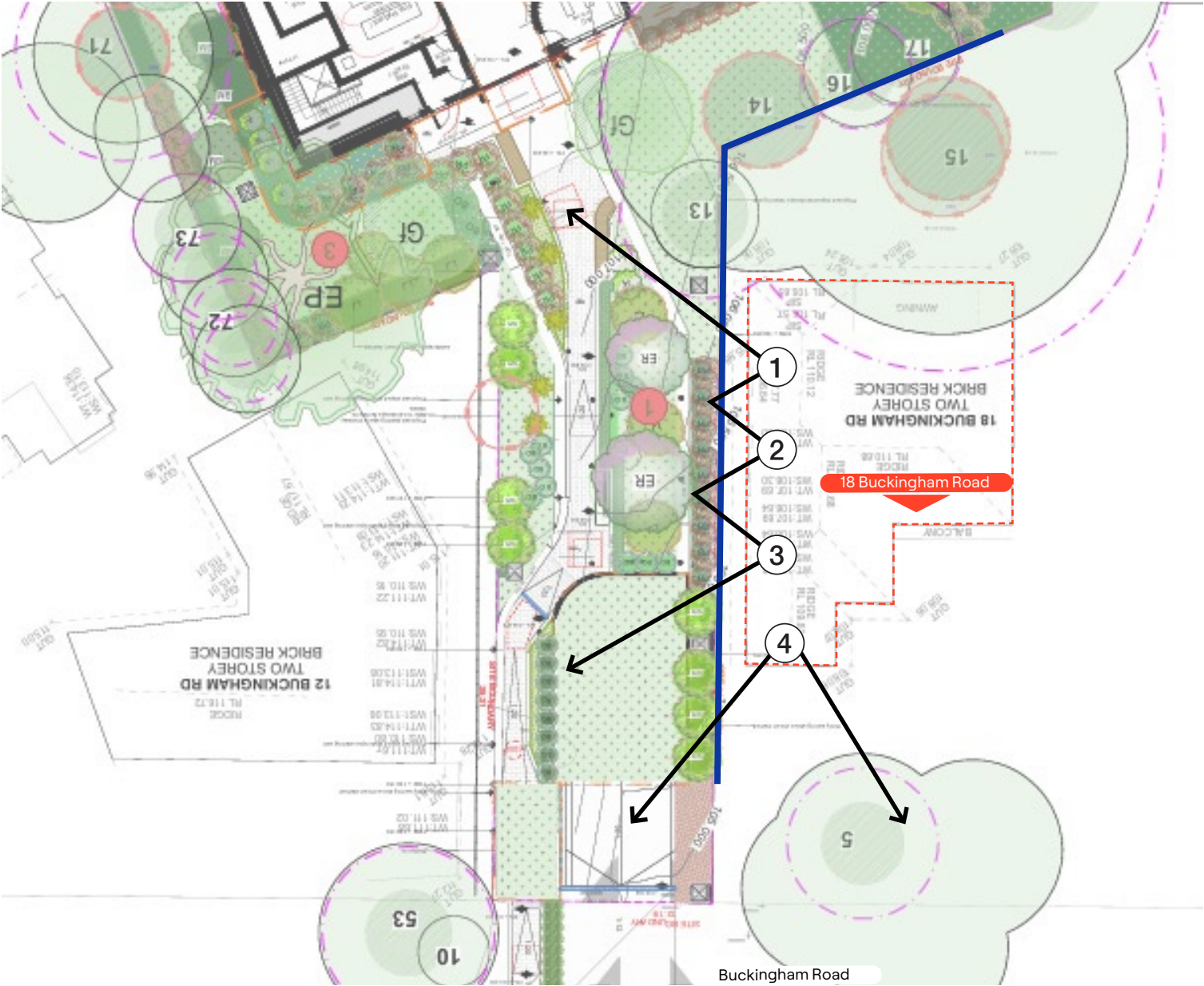
Proposed Landscape Plan



Axon Diagram

KEY	
	Driveway
	Indicative SSDA Outline
	Fence / Roof Line

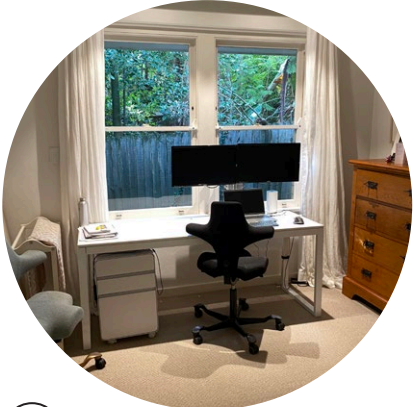
VIA - View 5 Eastern Interface



- KEY
- Subject Site
 - Views
 - Fence Line



① KITCHEN



② BED 1

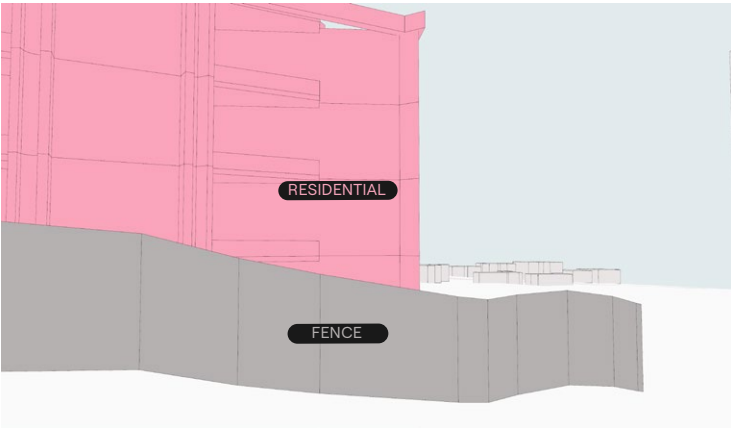


③ BED 2



④ BED 3

VIA - View 6

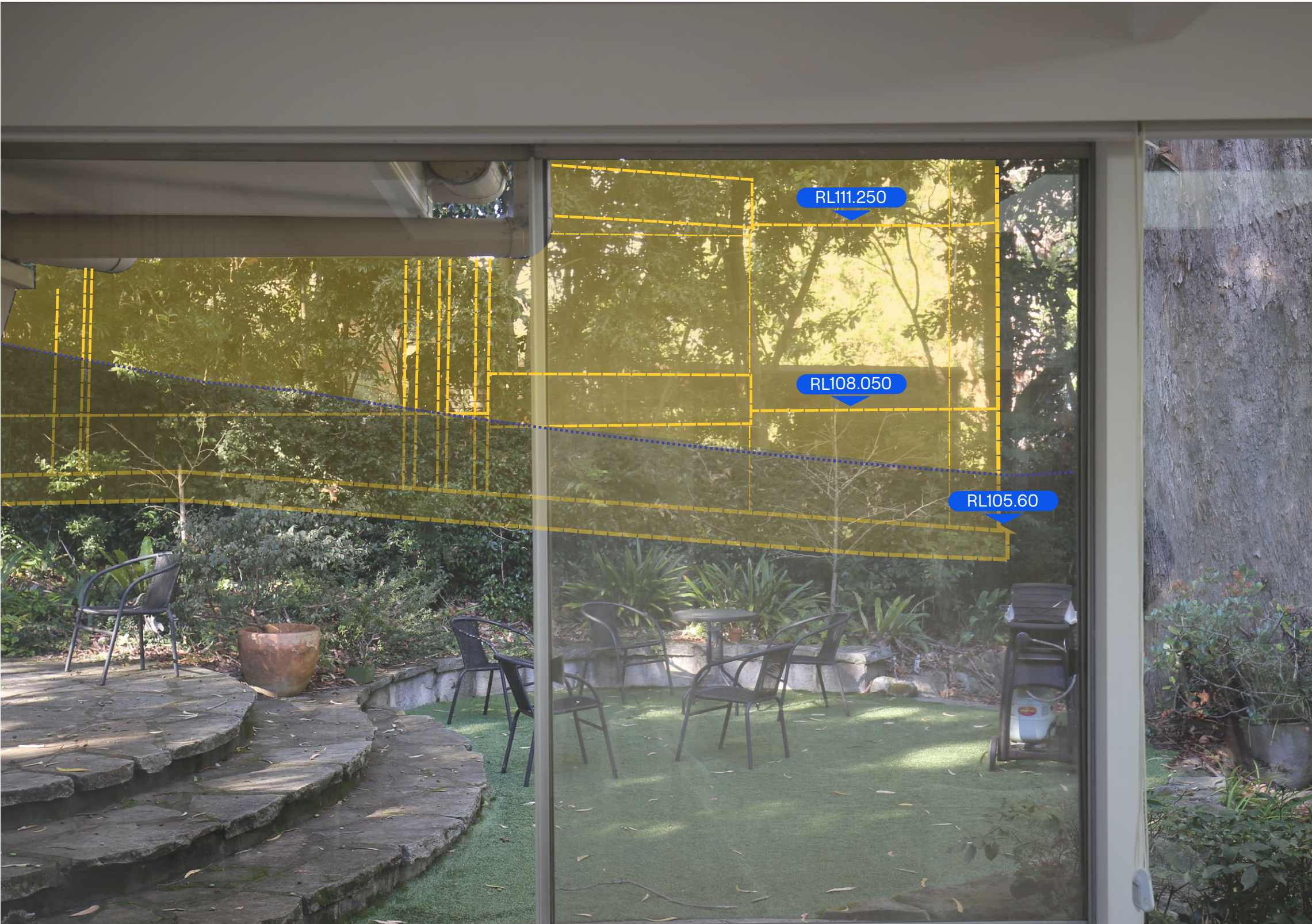


3D context model reference



KEY

- Site to be Investigated
- Indicative SSDA Outline
- Proposed SSDA
- View Location



SJB is passionate about the possibilities of architecture, interiors, urban design and planning. Let's collaborate.



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Annexure 2: Biodiversity and Arboriculture Review – Travers Bushfire and Ecology

Our Ref: UET02.1 – Killara

Date 27 June 2026

To whom it may concern,

Re: Peer Review of Residential Development with In-Fill Affordable Housing – 8A, 14 and 16 Buckingham Road, Killara (SSD -95747716)

Biodiversity and Arboriculture Review

We have undertaken a peer review of the documentation related to State Significant Development application SSD – 95744716 at 8A, 14 and 16 Buckingham Road, Killara.

A site inspection, undertaken by Sara Peters (B. Pl. Sc) – BAM Accredited Assessor BAAS26023 and Michael Sleeth (AFQ5 Arborist) – was undertaken on 22 June 2026 within 18 Buckingham Road, Killara and the entrance way/ roadside of 8A, No 14 and 16 Buckingham Road, Killara.

Arboricultural Review Summary

I refer to the *Arboricultural Impact Assessment (AIA) Report for SSD – 95747716 prepared by Seasoned Tree Consulting 2026* and the *Tree Inspection Certificate; Sydney Blue Gum prepared by Arborist Network 2024* (File Number CD2610)

Following a review of the Arboricultural Impact Assessment prepared for the proposed development at 8A, 14 and 16 Buckingham Road, Killara, several matters warrant further assessment, particularly in relation to Trees 1, 3, 13, 14 and 15, the site's association with the Blue Gum High Forest ecological community, and the contribution of retained trees to neighbouring amenity.

I note the following components of an arboriculture impact assessment that is to be determined for the purposes of determining the health, condition, protection zones and levels of encroachment as a result of the proposed development.

The following data was collected from each tree during the site assessment.

- Age class Diameter at Standard Height (DSH Trunk/Stem diameter at 1.4m above ground level) – centimetres
- Diameter above Buttress (DAB trunk diameter above the root flare near the base of the tree- (generally estimated if access to the base of the tree is not available in the instance of neighbours' trees or inaccessible vegetation)
- Estimated height - metres Estimated crown spread (diameter of crown) - metres
- Health Structural condition
- Amenity value
- Safe Useful Life expectancy (SULE)
- Trees AZ retention value,

- An assessment of the trees condition was made using the Visual Tree Assessment (VTA) method (Mattheck & Breloer, 1994).

Key definition include:

4.1 The Tree Protection Zone (TPZ) is defined as a specified zone above and below ground and at given offsets from the trunk set aside to protect a tree's roots and canopy where these might be damaged by a development. AS4970-2025 The Protection of Trees on Development Sites lists three (3) levels of encroachment into the Tree Protection Zone of a tree, where the NRZ calculation ($DSH \times 12$) is used as a starting point.

4.2 Minor encroachments are those of 10% or less of the NRZ area. This encroachment is unlikely to cause a significant impact to health, structure or longevity. While considered minor, a contiguous area to the NRZ is required and incorporated into a Tree Protection Zone unless it can be demonstrated tree viability will not be affected.

4.3 Moderate encroachments are those between 10-20% of the NRZ area but not within the SRZ. Further investigations are required to demonstrate that the tree will remain viable, which are noted in section 3.3.2 of the standard and mentioned below. A larger contiguous area of the NPZ is required to be incorporated into the Tree Protection Zone unless it can be demonstrated the tree will remain viable.

4.4 Major encroachments are those greater than 20% of the NRZ, or within the SRZ. Alternative design options should be explored, or it must be demonstrated otherwise that the tree will remain viable. Detailed investigations are necessary, which may include exploratory root investigations, relevant literature or examples of similar encroachments. Similarly to Minor and Moderate encroachments, an area similar to the encroachment must be incorporated into the Tree Protection Zone unless it can be demonstrated the tree will remain viable.

The assessment identifies the site as containing mapped Blue Gum High Forest, a Critically Endangered Ecological Community. Whilst this is acknowledged within the AIA report, limited consideration has been given to the significance of the remnant Blue Gum High Forest and the trees that contribute to that associated community. These trees represent important remnants of a critically endangered ecological community, and they contribute to the ecological function and landscape character of the site.

Tree 1

Tree 1 (*Eucalyptus saligna* – Sydney Blue Gum) is identified as dead and recommended for removal. However, supporting file notes and inspection records indicate that the tree was subject to significant prior disturbance and suspected unlawful interference. Inspection of aerial imagery confirm that the tree suddenly died between 7 December 2023 and March 12, 2024. There was no evidence of decline prior to this period. A site inspection undertaken on 12 March 2024 by the Arborist Network, recorded severe canopy decline, with approximately 90% of foliage described as marcescent and shedding. The inspection also documented multiple chainsaw cuts at the base of the tree, with no evidence of basal lesions, lightning strike, or other natural failure mechanisms.

			(m)	(m)	(sqm)		
1	Dead <i>Eucalyptus saligna</i> , Sydney Blue Gum		14.4	3.9	651.4	Footprint Tree is completely dead and all the canopy has been removed down to standing trunk (prior to the site visit of Thursday 15th January 2026) The rest of the tree should be removed and replaced with the same species. The dead tree should be fully removed with replacement habitat features installed into neighbouring trees.	Remove and replace.

Soil conditions were recorded as moist, with a previously unidentified water leak subsequently located and rectified. Based on the observed symptoms and site conditions, the decline was assessed at the time as being most consistent with herbicide exposure applied as a potential root drilling. This is supported by a report prepared by the Arborist Network 2024, where a site inspection was undertaken on March 12, 2024, and confirmation of decline and herbicide application is the apparent cause of decline.

The sudden and severe nature of decline a period of 3 months (based on aerials as shown below), combined with evidence of repeated basal cutting, indicates that the tree's condition is unlikely to be the result of natural senescence alone and is consistent with deliberate external interference.



Photo 1 – Evidence of basal cutting of T1



Photo 2 – December 2023 (Nearmaps)



Photo 3 – March 2024 (Nearmaps)

The historical context is not reflected within the current Arboricultural Impact Assessment. The apparent vandalism and chemical exposure should be clearly documented to ensure Tree 1's condition is accurately represented and not solely attributed to natural decline. There is no

evidence of natural decline provided within the AIA and is not supported by ground-truthing undertaken for the purposes of this review.

Tree 2 (Eucalyptus saligna – Sydney Blue Gum)

Tree 2 (*Eucalyptus saligna* – Sydney Blue Gum) is recorded as completely dead within the Arboricultural Impact Assessment. The assessment recommends full removal of the dead tree and replacement with the same species, along with installation of habitat features within neighbouring trees.

No clear evidence is provided within the assessment to confirm the exact cause of death. However, the tree is recorded as having failed without documented evidence of a gradual decline consistent with natural senescence.

2	Dead/ majority declining <i>Eucalyptus saligna</i> , Sydney Blue Gum	74	10.8	3.3	366.4	Footprint Tree is completely dead and part of the canopy has been removed down to standing trunk (prior to the site visit of Thursday 15th January 2026) The rest of the tree should be removed and replaced with the same species. The dead tree should be fully removed with replacement habitat features installed into neighbouring trees.	Remove and replace.
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Given the nature of the observed condition at the time of inspection, the circumstances are considered potentially consistent with external interference. This should be acknowledged within the assessment to ensure the baseline condition is accurately represented.

As Tree 2 is a remnant Sydney Blue Gum associated with the Blue Gum High Forest ecological community, its loss represents a reduction in the ecological, habitat and landscape values of the site. Replacement planting with the same species is supported, along with the incorporation of habitat features within retained trees to assist in maintaining local ecological function.



Photo 4 – Tree 2

Tree 15 (*Eucalyptus pilularis* – Blackbutt)

This tree is located on adjoining land and is reported as a minor Tree Protection Zone encroachment of the proposed development at approximately 3 per cent based on the assessed DBH. Based on the assessed Basal Diameter, no encroachment into the Structural Root Zone is proposed, and a substantial contiguous rooting area will remain unaffected. Based on the information presented, the proposed development is reported to have a negligible impact on the health, structural stability and long-term viability of the tree, reported as a low-level encroachment of under 10%.

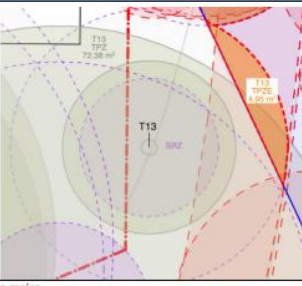
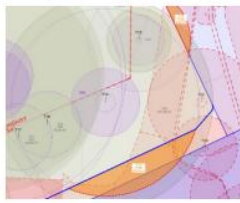
The Arboricultural Impact Assessment has erroneously quantified measurement data to fully substantiate impact conclusions across Trees 13, 14 and 15. Therefore the impact on these trees have not been properly determined and greater setbacks from these trees are recommended. The provided dimensions of T15 are shown below.

Tree ID	Species	Retention value	NRZ radius (m)	SRZ Radius (m)	TPZ Area (sqM)	TPZ encroachment	Discussion/ Conclusion	Recommendation
15	<i>Eucalyptus pilularis</i> , Blackbutt	AA	12	3.4	452.4	Minor	Tree is located outside of the subject site and will be subject to a minor calculated encroachment of up to 3%.	Retain.

Given the formula for determining the NRZ is $(DSH \times 12)$. This puts the measured DSH at 100. The measured DSH of T15 is 120cm. The correct DSH is 14.4m. Whilst Tree 15 is assessed as having negligible impact based on the available information, the DSH has been recorded incorrectly resulting in a much smaller Notional Root Zone being provided. The impact on this tree is higher than determined by the arborist report and has not determined the NRZ or expected impacts or resulting TPZ in accordance with AS4970-2025. Given that this tree is high conservation value tree given it forms part of the Critically Endangered Ecological Community – Blue Gum High Forest. A greater set back is recommended and the impact on the NRZ be avoided.

Trees 13 and 14

Further arboriculture impact assessment is to be undertaken in relation to Trees 13, 14, to verify encroachment extents, and ensure that the impacts on the trees have been properly assessed. Further justification of the tree protection measures are to be provided to ensure that valuable trees are retained in the landscape and the proposed minimises impacts on the local visual and aesthetic characteristics of the site.

Tree ID	Species	Retention value	NRZ radius (m)	SRZ Radius (m)	TPZ Area (sqM)	TPZ encroachment	Discussion/ Conclusion	Recommendation
13	<i>Harpephyllum caffrum</i> , Kaffir Plum	A2	4.8	2.4	72.4	Minor	Tree is located beside the proposed driveway entrance area and will be subject to a minor calculated encroachment of up to 5 sqm (7%). This percentage of encroachment is acceptable under the AS4970-2025 (Protection of Trees on Development Sites) and the tree can be retained in a viable condition. 	Retain and protect.
14	<i>Harpephyllum caffrum</i> , Kaffir Plum	A2	8.76	3.2	241.1	Major	Tree will be subject to a major encroachment from the proposed site cut for driveway and building basement construction of 26.54sqm= 11%. This species of tree is tolerant of construction impact and root pruning and can be retained with the proposed design. It is possible that 1 x first order limb that grows towards the development footprint will require pruning (of up to 250mm in diameter) 	Retain and protect.

Tree 14 provides a very high amenity value with a large DSH of a combined 73 cm and canopy spread of 20m and is a mature specimen. The high amenity value of the tree 14 is supported by the trees assessment within the AIA.

Summary of Key Arboricultural to be addressed in the AIA

The AIA does not adequately assess, report and sufficiently address the documented history of the rapid decline affecting T1 and T2, including the evidence of suspected unlawful interference.

The Arboriculture assessment is remiss in that it does not adequately discuss or qualify the contribution of retained trees to visual screening, privacy and neighbourhood amenity. Retained boundary and adjoining trees provide an important landscape buffer between the proposed development and surrounding residential properties, assisting in maintaining privacy, softening built form, and contributing to the established treed character of the locality.

As a result of erroneous measurement of the trees dimensions, the AIA does not adequately address the high conservation value of the remnant Blue Gum High Forest trees. The AIA in its current form misrepresents the required setbacks and impacts on the existing tree due to an improper assessment of the DBH.

The proposed tree protection zones and landscaping does not sufficiently respond to or provide sufficient tree protection, replacement of trees that have been unlawfully impacted. The provision of enlarged setbacks around trees is maintain the integrity of the Blue Gum High Forest tree canopy in the urban landscape.

The landscape plan, and AIA do not adequately respond to the provision of visual screening for adjoining neighbours provided by the existing trees and insufficient planting and landscape setback is proposed to provide a visual buffer. Existing mature trees provide effective screening to adjacent dwellings and public viewpoints, reducing direct lines of sight and assisting in mitigating overlooking between properties. Vegetated screening is particularly important in maintaining residential amenity in a setting characterised by an established tree canopy cover. Consequently, further green space is to be incorporated into the landscape design through increased setbacks, planting of BGHF species in particular shrub and subcanopy species, and enhancement of BGHF as a key green space and biodiversity outcome of the project.

The arboriculture assessment and supplementary survey information is to be completed in accordance with the Australian Standard for tree protection **AS 4970:2025** (*Protection of trees on development sites*). Trees 13, 14 and 15 are to be reassessed to accurately verify tree locations, Notional Root Zone (NPZ) and Structural Root Zone (SRZ) encroachments, construction setbacks and potential root impacts. T15 DSH has not been accurately reported and the NR is estimated at 14.4m not 12m. Given that this tree is high conservation value tree given it forms part of the Critically Endangered Ecological Community – Blue Gum High Forest. A greater set back is recommended and the impact on the NRZ is to be avoided to reflect the requirements of the avoid, minimise and mitigate process under the Biodiversity Conservation Act 2016.

Subsequently the arboriculture assessment is to include tree protection, revegetation and understorey management to support the long-term condition and integrity the retained trees

in an urban landscape particularly in regard to the value of trees representative of Blue Gum High Forest.

Biodiversity Review

I make reference to the BDAR Waiver Request prepared by SLR Consulting Australia (21 March 2026). A review of the BDAR Waiver Request prepared by SLR Consulting Australia (21 March 2026) has been undertaken in conjunction with the Arborist Report prepared by Seasoned Tree Consulting (April 2026), in reference to the documentation for the application of the proposal.

This review has focussed on whether the BDAR Waiver has appropriately assessed the biodiversity values, the impacts on the biodiversity values and whether adequate mitigation measures have been implemented.

Existing Biodiversity Values

The existing biodiversity values of the site include:

- Sydney Blue Gum High Forest remnants adjoining the subject site including
- A large significant *Eucalyptus pilularis* (Tree 15) within 18 Buckingham Road (adjoining property downslope of the subject site) forming part of the Blue Gum High Forest downslope at 18 Buckingham Road and 22 Buckingham Road.
- The site is part mapped as Swift Parrot Habitat
- Dead remnant Blue Gum High Forest trees (*Eucalyptus saligna*) along the boundary of 14, 16 and 18 Buckingham Road.
- A significant *Harpephyllum caffrum* (Kaffir Plum) – a high value non-native species – suitable food source for the Threatened Species Grey-headed Flying-Fox.
- A small trunk hollow (10cm x 10 cm) located in a remnant *Eucalyptus saligna* at 22 Buckingham Road.
- Habitat created by exotic landscape species and planted native vegetation including species *Callistemon* sp., *Grevillea robusta*, *Banksia integrifolia*

Unauthorised poisoning of trees

Selected trees have been impacted by likely unauthorised damage and/or poisoning of BGHF trees. This raises a concern that the applicant is gaining advantage from an unauthorised action. These trees would have provided high biodiversity value within the subject site and are commensurate with the Critically Endangered Ecological Community Blue Gum High Forest of the Sydney Basin Bioregion listed both under the Commonwealth *EPBC Act 1999* and the State *BC Act 2016*.



Photo 5 – The remnant deceased Blue Gum – Tree 2(Eucalyptus saligna) at the entrance of 14, 16 and 18 Buckingham Road and the deceased trees to the rear of the entrance.

The historical aerial images of the site show the changes in the landscape and then the sudden loss of trees that suggested these trees were targeted at a key entrance to the site. The loss of the trees has given the applicant an advantage that would otherwise have formed a significant restriction on the access to the development site.



Photo 6 – January 2010



Photo 7 – December 2023



Photo 8 – March 2024



Photo 9 – June 2026

As Swift Parrots forage almost exclusively in the canopy, the protection of existing canopy is of importance to protect its foraging habitat. Maintaining the available habitat for Swift Parrot is an important long-term strategy and one that all developments in land mapped as Swift Parrot habitat should consider when preparing landscape plans and utilising native species that will support future supplies of foraging canopy.

Blue Gum High Forest is listed as a Critically Endangered Ecological Community under both State and Commonwealth legislation and is recognised as a potential SAI entity. Remnant examples of the community occur within the locality, including on adjoining properties, roadside reserves and downslope vegetation. Similarly, under the *EPBC Act*, isolated canopy trees and small stands characteristic of Blue Gum High Forest are recognised as important biodiversity reservoirs.

The NSW Scientific Committee recognises that the ecological community often persists as highly modified remnants, including isolated canopy trees and small tree clusters lacking a native understorey, following widespread clearing of large old trees.

This demonstrates the importance of protecting, allowing sufficient space for the trees to grow uninhibited, limited or no shadow affectation and revegetation of mid and understorey species to support the biotic soil environment and mycorrhizal relationships that the trees depend on for long term conditioning and longevity. Landscape plans in particular are to demonstrate how the proposed development will support and maintain canopy health through enhancement of the understorey.

In accordance with section 6.3A of the *BC Act 2016*, avoidance is the first and most crucial step of the mitigation hierarchy, followed by minimisation, mitigation and offsetting. As the AIA has not accurately assessed the NRZ, the impact on this tree is not properly assessed. Consequently, the project is impacting on a remnant of BGHF. By not properly assessing the impacts on a Critically Endangered Ecological Community the BDAR waiver has not appropriately and sufficiently assessed impacts to the CEEC. In this situation the applicant is recommended to demonstrate full avoidance of impact or submit a small area (streamlined) BDAR. The BDAR Waiver should be rejected along with the AIA to have the impacts properly determined.

Given the presence of a CEEC onsite and the potential impact on BGHF, the application represents a potential Serious and Irreversible Impact (SAII). It is important that the development application demonstrates adequate avoidance of impacts, or it cannot be confirmed that the application satisfies the requirements of the Biodiversity Conservation Act.

The application must demonstrate a design iterative process that considers options that will in fact adequately avoid and sufficiently mitigate the impacts. Given the close proximity of the development to the BGHF, the impact on the remnant trees should have been properly assessed through a small area (streamlined) BDAR. This is to account for both direct and indirect impacts such as encroachment into the rootzones, shadow impacts, impacts on the soils and the long-term health of the trees in such close proximity to the proposed buildings.

An increased setback of 14.4m from the trunk of the tree and exclusion of impacts within this zone would be considered an avoidance of impact. The application has not demonstrated sufficient avoidance therefore the application should be rejected. Design modification is highly recommended to avoid this complication.

In association the Arboriculture assessment, the application should propose measures that provide sufficient growth room for the existing BGHF remnant trees and further recruitment.

Measures that enhance and improve the longevity of the BGHF remnants are to be incorporated into the landscape design and to include signature CEEC trees such as *Eucalyptus saligna*.

Vegetation abundance

The following attributes are assessed under a BDAR waiver for vegetation abundance:

Where vegetation is present on the development site, provide a map on digital aerial photography or the best available imagery of the development site showing:

- *native vegetation (including grasslands and other non-woody vegetation types) and non-native vegetation*
- *the area of land that is directly impacted by the proposed development, including related infrastructure such as roads, pipelines, access tracks, temporary material stockpiles, asset protection zones and powerlines, if applicable.*

Describe how the proposed development avoids impacts on native vegetation and identify the likelihood and extent of any remaining impacts including removal of isolated or cultivated native plants

The BDAR waiver provides a map of the vegetation extent within the site as shown below.

The Biodiversity Assessment Method 2020 defines the area of land that is directly impacted by the proposed development, including access roads and areas to store construction materials is to be shown and accurately represented. The term *development footprint* is also taken to include clearing footprint, except where the reference is to a small area development or a major project development. The BDAR waiver has not been prepared adequately to assess the full impacts of the development footprint and does not properly assess the impacts associated with civil works, landscaping and stormwater in particular.

The BDAR waiver does not address the direct impacts on non-native vegetation abundance in relation to services (ancillary impacts), such as stormwater, as shown below, and is not included within the impact footprint of development, which is evident along the driveway between 16 and 18 Buckingham Road and including the proposed pedestrian access along 8A when viewing the ground floor plans, civil and stormwater plans.

Figure 2 below shows the mapped building footprint, not a development footprint which has not been adequately mapped to demonstrate the full impact of the proposed works. The BDAR Waiver is to clearly show those areas impacted by works and those that are not the development footprint increased to cover the services to be installed.



Figure 2 – Development footprint (Blue) as mapped within the BDAR waiver

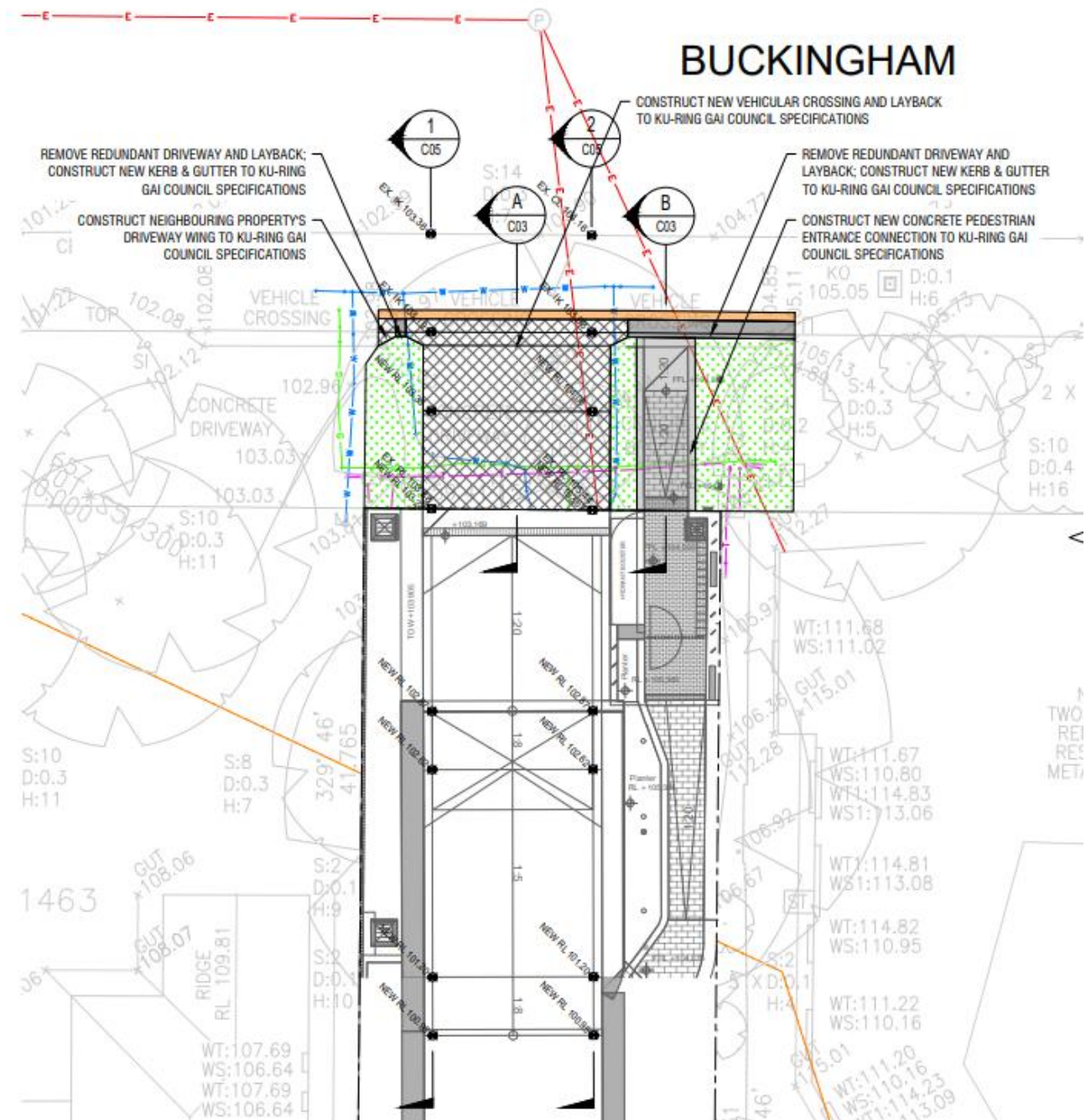


Figure 3 – Driveway entrance between 18 and 16 Buckingham Road (prepared by SMART Structures Australia 2026)

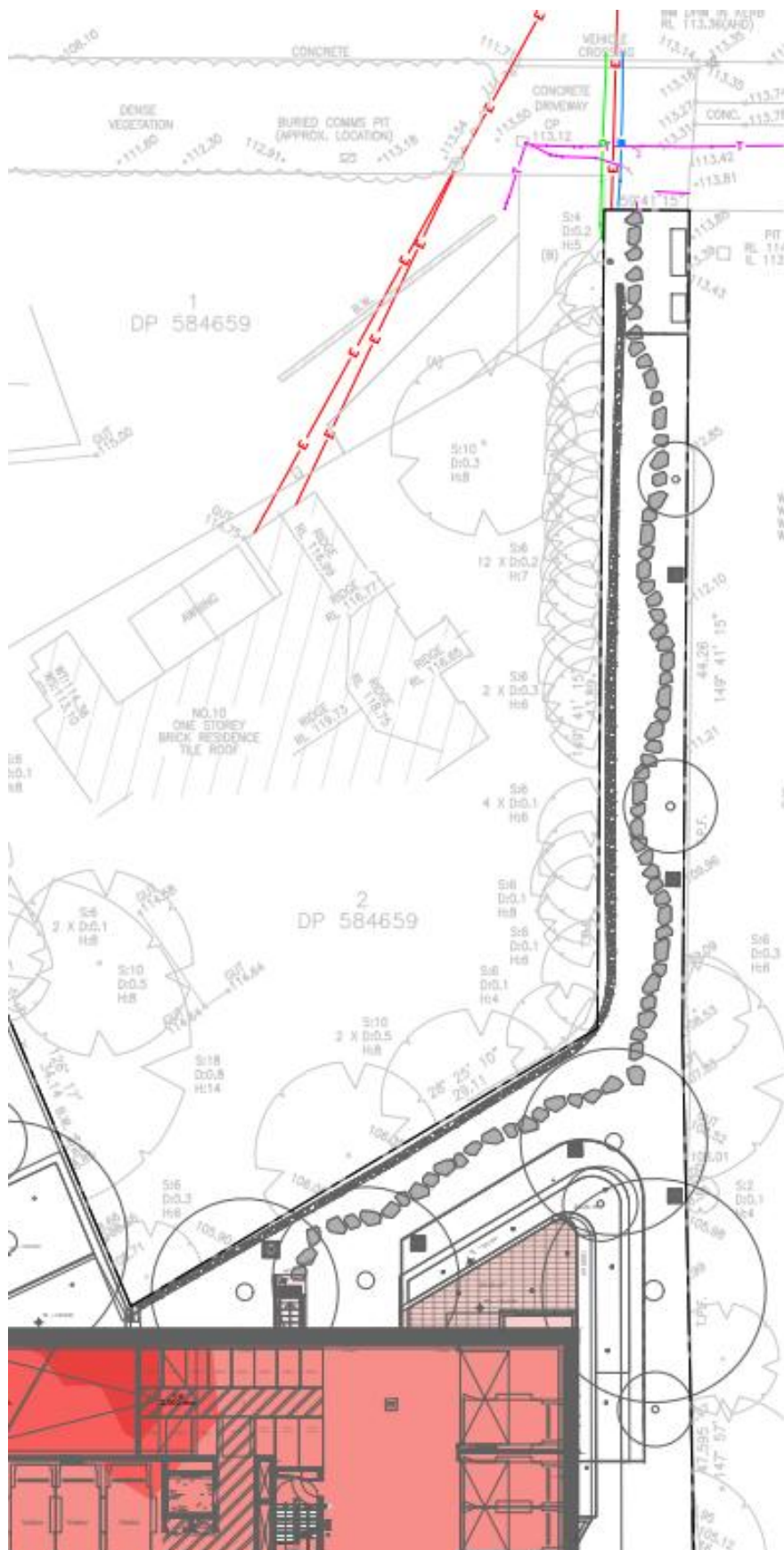


Figure 4 – Proposed pathway entrance of 8A not considered as part of the development footprint (prepared by SMART Structures 2026)



Figure 5 – Proposed entry and exit pathways which are not included within the development footprint (prepared by BKA Architecture 2026)



Figure 6 – Preliminary Plans for Ground Floor Stormwater noting the stormwater pipes along 8A and between 16 & 18 (prepared by SMART Structures Australia)

Vegetation integrity

The following attributes are assessed under a BDAR waiver for vegetation integrity:

Describe the vegetation integrity and any impacts on vegetation integrity of identified plant communities. For example, information on impacts from proposed development to vegetation cover, structure, condition and function. This can include details on the presence of weeds, disturbance, planted native vegetation and species and growth form diversity.

Vegetation integrity within the site is described within the BDAR Waiver as lacking full structure with remnant canopy. Vegetation is highly exotic and is restricted to canopy trees commensurate with PCT 3136 Blue Gum High Forest in the frontage and neighbouring lots.

The access at 16 Buckingham Road, has evidence mature trees (*Eucalyptus saligna*) belonging to this community prior to their demise) and would have likely been considered to be of significant biodiversity value and commensurate with the Critically Endangered listed community

The landscape is proposed to be enhanced using species belonging to the BGHF community as shown in the landscape plans prepared below. The planting though does not accommodate areas to allow replacement planting of *Eucalyptus saligna* and the footprint aggressively uses the site allowing mostly for retention of trees on adjoining lots.

The building is tightly fitted into the landscape but effectively strangles the landscape proposed. Further space should be given for BGHF planting in a manner that provides a sustainable vegetated landscape. Tree 15 is to be afforded greater setback to include the full NRZ measured at 14.4m from the trunk.

Insufficient setback has been given for Tree 15, consequently the vegetation integrity of this tree and hence BGHF will be put at risk and likely degrade over time.



Habitat suitability

The following attributes are assessed under a BDAR waiver for habitat suitability:

Identify any threatened species or ecological communities or their habitat on the development site. Describe how the proposed development avoids impacts on habitat suitability and identify the likelihood and extent of any remaining impacts including the impacts of development on the following habitat of threatened species or ecological communities:

- karst, caves, crevices, cliffs and other geological features of significance
- rocks
- human-made structures
- non-native vegetation (prescribed under clause 6.1(1)(a) of the BC Regulation).

Impacts may include the removal or modification (e.g. noise, light, etc.) of the habitat of threatened species or ecological communities.

The BDAR waiver sufficiently considers existing human – made structures with no habitat features suitable for permanent roosts. Microbats are likely to use the subject site for temporary roosting purposes subject to the degree of habitat provided in the building matrix and external structures.

The Powerful Owl was recorded in the immediate locality in 2023. As significant areas of treescape will be removed the site will become less suitable as a foraging landscape for Powerful Owl.

Mitigation measures for impacts on nightlife such as Powerful Owl and Microbat species has not been discussed or considered sufficiently and no formal lighting report has been prepared as stated within the EIS prepared by Colliers 2026.

Habitat trees including potential roost trees for Powerful Owl and likely prey species have been identified in the local surrounds and the site in its current state will likely contain prey species including rats, mice, ring tails and brush tailed possums.

The BDAR Waiver has not attempted to mitigate lighting impacts such as identified within the National Light Pollution and Wildlife Guidelines (DCCEE 2023).

Artificial light from the proposed development impacts fauna species in terms of behaviour and/or physiology, alter the availability of habitat or food resources and can attract predators and invasive pests.

To minimise light pollution, the following measures can be easily integrated into the building design:

- Window film on buildings will be installed to reduce light export by 75% (most common tinting for external windows).
- Install light baffles, deflectors and shields to direct light away from protected habitat.
- Non-reflective dark-coloured surfaces should be used where possible.
- Access pathways are to use low lumen and restricted height lighting (<0.5m) with directional shields. Light fixtures are to be located as close to the ground as possible and shielded.
- Avoid the use of external lighting on buildings facing the protected restoration area.
- Strategic native species or hedge planting to create a dark night space for nocturnal fauna.

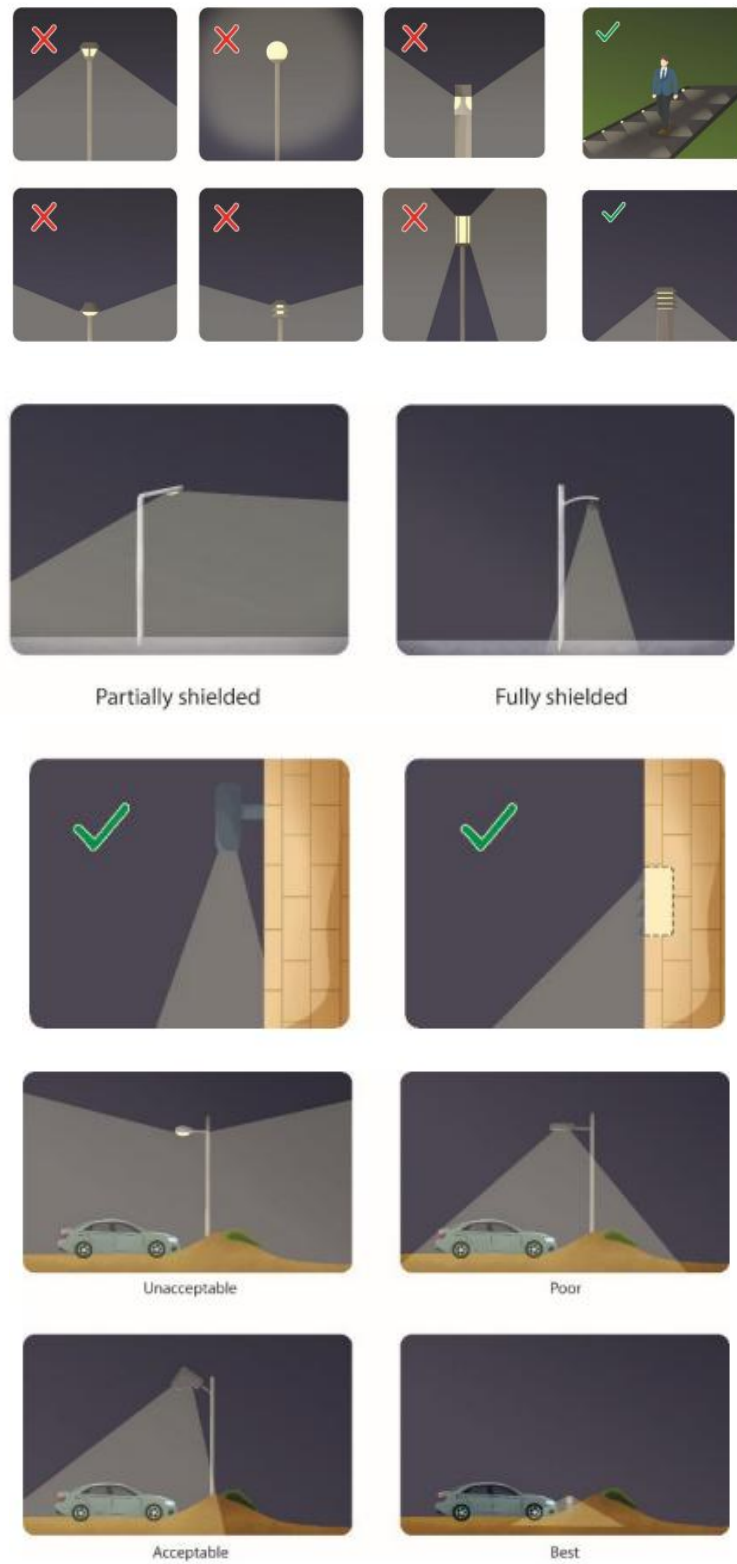


Figure 9 – Examples of outdoor wildlife friendly lighting for accessways, target areas
(National Light Pollution Guidelines for Wildlife - DEE 2023)

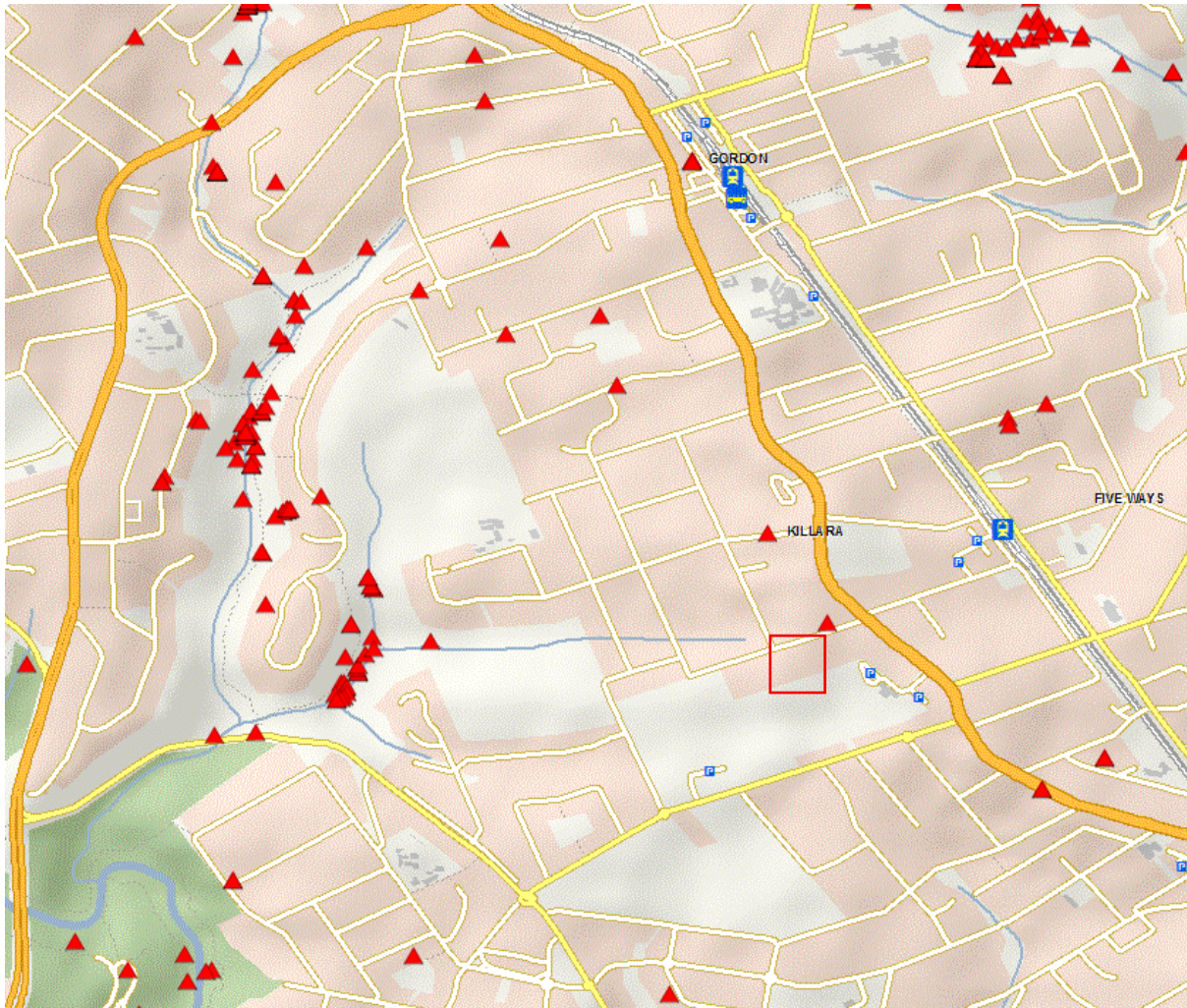


Figure 10 – Powerful Owl Records with subject site locality (red)

The landscape plans do not allow for sufficient visual barriers to intercept light from the proposed development. Insufficient mid-storey species are proposed to be planted as part of the landscape plans and doesn't provide opportunity for Powerful Owl to utilise the landscape. The proposed driveway is uncomfortably close to the adjoining lot boundary. To ensure sufficient setback from T15 an addition 2.4m is to be provided.

Threatened species abundance

The following attributes are assessed under a BDAR waiver for threatened species abundance:

Describe how the proposed development avoids impacts on threatened species abundance and identify the likelihood and extent of any remaining impacts including:

- *Impacts of vehicle strikes on threatened species of animals or on animals that are part of a threatened ecological community (prescribed under clause 6.1(1)(f) of the Regulation).*
- *Impacts on threatened species, for example, microbats, associated with the demolition of human-made structures (prescribed by 6.1 (1) a (iii) of the Regulation).*

- Impacts on threatened species habitat associated with non-native vegetation (prescribed by 6.1 (1) a (iv) of the Regulation).
- Impacts on threatened species habitat associated with non-natural water bodies (prescribed by 6.1 (1) a (iii) of the Regulation). For example, threatened frogs such as the green and golden bell frog in landfill areas, drains and brick pits.

BGHF Native Groundcover mix

REFER TO SHEET MATRIX DETAILS -
VEGETATION MANAGEMENT
ZONES/UNDERSTOREY PLANTING

Groundcover Mix (Sun):

Total of (63m² total)

Dianella caerulea

Dianella revoluta

Myoporum parvifolium

Hardenbergia violacea

Hibbertia scandens

Viola hederacea

Pot size: 140mm

Mature H x S: < .5m

Qty Required: 810m² Refer to Sheet x Matrix

Groundcover Mix (Shade):

Total of 260m² total)

Mature H x S: 0.45m x 0.65m

Ferns

Pot size: 140mm

Adiantum aethiopicum

Blechnum cartilagineum

Doodia aspera

Mature H x S: 0.1m x spreading

Groundcovers

Dichondra repens

Pratia purpurascens

Pot size: Tube stock

Qty Required: 300m² Refer to Sheet x Matrix



MIX 1



MIX 2



Figure 11 – Zoom of groundcover planting only with legend with remnant trees retained within the boundary of 16 and 18 Buckingham Road (Concept Landscape Plan 2026)

The proposal will decrease the abundance and use of the site by potential threatened species and the design doesn't provide habitat structures or features to mitigate the loss of potential roosting habitat.

Habitat connectivity

The following attributes are assessed under a BDAR waiver for habitat connectivity:

Identify whether the development site contributes to habitat connectivity. Describe how the proposed development avoids impacts on habitat connectivity and identify the likelihood and extent of any remaining impacts of development on the connectivity of different areas of habitat of threatened species that facilitates the movement of those species across their range (prescribed under clause 6.1(1)(b) of the BC Regulation).

The site does not form a natural habitat connectivity however provides a stepping – stone of connectivity to Lane Cove National Park to the southeast. Despite being exotic vegetation with a partial remnant canopy of Blue Gum High Forest adjoining the subject site, it provides a local source of resources and habitat for small arboreal mammals, reptiles and birds within the locality.

Given the aggressive impact on the footprint greater landscaped space should be provided to mitigate the loss of habitat and to expand the extent of BGHF. It is acknowledged that the landscape plan proposes revegetation of BGHF species, but further enhancement can be achieved and provide a better outcome.

Threatened species movements

The following attributes are assessed under a BDAR waiver for threatened species movements:

Describe how the proposed development avoids impacts on threatened species movement and identify the likelihood and extent of any remaining impacts of development on movement of threatened species that maintains their lifecycle (prescribed under clause 6.1(1)(c) BC Regulation).

Whilst the site does not contain dense native understorey – it does contain mid – storey exotic species and canopy which potentially provides habitat for highly transient species as a stepping stone throughout the local landscape. Despite local records of this species being present within the locality the proposed build and associated landscape do not provide any mitigating measures. The proposed aggressive building mass within the site will likely exclude the use of the site for Powerful Owl. There are no external habitat structures proposed to enhance the building fabric for microbats and lighting has not been designed to minimise the impact of lights on wildlife.

Flight path integrity

The following attributes are assessed under a BDAR waiver for Flight path integrity:

Identify whether flight paths of protected animals occur over the development site. Protected animals are animals of a species listed or referred to in Schedule 5 of the BC Act. They include any species of birds, mammals, amphibians or reptiles that are native to Australia or that periodically or occasionally migrate to Australia. Describe how the proposed development avoids impacts on flight path integrity and identify the likelihood and extent of any remaining impacts. Note: The impacts of wind turbine strikes on protected animals are prescribed under clause 6.1(1)(e) of the BC Regulation. It is, therefore, unlikely that a BDAR waiver would be issued for a proposed wind farm

The subject land does not form part of a known flight path for protected animals with exception to Powerful Owls and likely foraging microbat species. The proposed development consists of 7 – storeys and potentially hinder fauna species utilising the local area and reducing the foraging value of the landscape. There is a missed opportunity for enhancement of roof habitat

for microbat species and structures suitable for roosting opportunities. Adopting wildlife friendly lighting design will enhance the proposed development for local wildlife.

Water Sustainability

Describe how the proposed development avoids impacts on water sustainability and identify the likelihood and extent of any remaining impacts of development on water quality, water bodies and hydrological processes that sustain threatened species and threatened ecological communities (including from subsidence or subsidence resulting from underground mining or other development) (prescribed under clause 6.1(1)(d) of the BC Regulation)

No hydrological features were identified within the subject site. No riparian corridors were identified within proximity to the subject site.

Mitigation measures

The following mitigation measures are to be undertaken to improve the biodiversity outcomes:

- Native revegetation to be enhanced specifically adjoining remnant trees of Blue Gum High Forest for maintaining the integrity and long-term viability of the BGHF to provide a visual barrier for lighting controls.
- Increased set back of 2.4m to Tree 15 – *Eucalyptus pilularis* to demonstrate an avoidance of impact on BGHF.
- Enhancing the existing high biodiversity values and enriching the existing BGHF in perpetuity to maintain the integrity of the vegetation associated with the CEEC.
- Reduced building footprint and provision of greater separation to the BGHF trees.
- Provide suitable artificial or augmented hollows for microbats, prey species of Powerful Owl as part of the building structure.
- Adopt to Lighting controls and specifications as outlined within the (National Light Pollution Guidelines for Wildlife - DCCEEW 2023).

Conclusion

The review concludes that the BDAR Waiver has not adequately demonstrated an avoidance of impact as required under the Biodiversity Conservation Act. This in particular relates to T15 which based on ground truthing has underestimated the DSH and an insufficient Notional Root Zone and Tree Protection Zone. The supporting arboriculture assessment do not fully address the ecological and arboriculture significance of the subject site and adjoining lands.

The BDAR Waiver has not adequately addressed or considered the loss of Important Mapped Habitat for the critically endangered Swift Parrot.

Insufficient space has been given to remnants of the BGHF and doesn't show that it provides sufficient room for Blue Gum High Forest trees to have long term viability. As a potential Serious and Irreversible Impact (SII) entity, direct and indirect impacts of the proposed development on BGHF and associated mitigation measures need greater investigation.

Iterative designs are to be provided to demonstrate an avoidance of impact on BGHF for a BDAR Waiver to apply. Otherwise, a small area (Streamlined) BDAR will need to be submitted to demonstrate compliance with the Biodiversity Conservation Act. This will then result in removal of a potential Serious and Irreversible Impact (SII).

The BDAR Waiver does not consider alternatives that can enhance the longevity of Blue Gum High Forest trees within the subject site. The design has taken an aggressive approach to the building footprint. To demonstrate that the BGHF will remain viable in the landscape, the application is to increase setback to Tree 15 to 14.4m as the NRZ and the TPZ given the same dimension. The landscape plan is to be enhanced allowing the BGHF to be maintained in perpetuity.

While the assessment appropriately addresses matters relating to flight path integrity, water sustainability, geological habitat features and the limited suitability of existing structures for threatened microbats, it does not sufficiently evaluate indirect impacts associated with building mass, increased shading and suppression of native vegetation, and artificial lighting. Shadow impacts on existing trees of BGHF is to be provided and the building design is to minimise indirect impacts on remnant canopy of BGHF.

Evidence of apparent vandalism, basal cutting and suspected herbicide exposure associated with Tree 1, together with the rapid decline of Tree 2 following the arboriculture assessment warrants further investigation and has not been reported accurately leading to a misrepresentation of the actions taken on trees in particular that would have hindered access to the site. The applicant has gained an advantage from an unauthorised action.

The BDAR Waiver and landscape plan do not respond sufficiently an avoidance of impact and mitigation on BGHF.

The Arboriculture impact Assessment is to be rejected for Trees 13, 14 and 15, including supplementary surveying and root mapping where appropriate, to provide greater certainty regarding tree retention outcomes and construction impacts. The Arboriculture assessment has incorrectly measured tree DSH measurement for Tree 15 resulting in a reduced reported Notional Root Zone which is inconsistent with AS4970-2025.

The application demonstrates an aggressive land take and insufficient space for ensuring the viability of BGHF remnants. Modification to the access design adjoining T15 will assist in resolving this but greater setbacks and landscaping of BGHF is recommended.

Yours faithfully,



Michael Sheather-Reid
Managing Director - **Travers bushfire & ecology**



www.traverseecology.com.au

Annexure 3: Letter to Ku-ring-gai Council

18 April 2024 – Ethos Urban

18 April 2024

2211003

Mr David Marshall
Acting General Manager
Ku-ring-gai Council
Locked Bag 1006
Gordon NSW 2072

Attention:

- Councillors of Ku-ring-gai Council; and
- Director of Development & Regulation

Dear Mr Marshall,

Unauthorised poisoning of Blue Gum tree 14-16 Buckingham Road, Killara

We have been engaged by the owners of 18 Buckingham Road, Killara to prepare this letter to Ku-ring-gai Council in relation to the poisoning of a substantial tree at the neighbouring property, being 14-16 Buckingham Road, Killara. The tree is located in the middle of the shared driveway at 14-16 Buckingham Road, as shown in **Figure 1** below. The tree is a *Eucalyptus saligna* tree which forms part of the Blue Gum High Forest critically endangered ecological community (CEEC) under the *Biodiversity Conservation Act 2016*.

The purpose of this letter is to request that:

- (1) Council takes compliance action in respect of the poisoned tree; and
- (2) Council requires that the tree be retained as a habitat tree to ensure that the future redevelopment of the site does not benefit from the unlawful action (irrespective of who conducted the action).

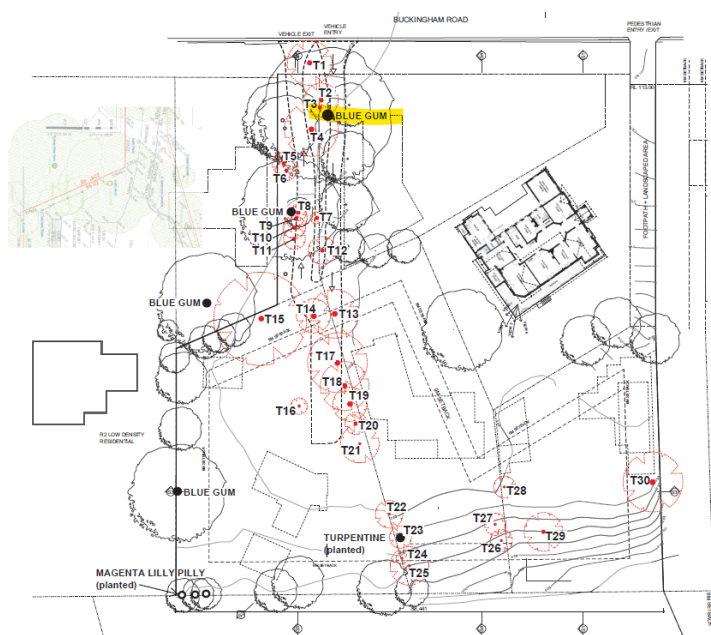


Figure 1 Location of poisoned tree

Source: Extract of Tree Retention Plan by Gelder Group Architects (submitted with Planning Proposal)

The owners of 18 Buckingham Road obtained advice from Mr Mark Hartley, Senior Consulting Arborist (AQF Level 8) of The Arborist Network, who visited the site and advised that, based on his observations on 12 March 2024, it appears that the tree has been poisoned (see **Attachment 1**).

1.0 Background

The apparent poisoning of this tree follows the recent rezoning of 8A, 14 and 16 Buckingham Road from R2 Low Density Residential to R4 High Density Residential to facilitate the redevelopment of that site for 2-3 storey residential flat buildings.

As part of the rezoning, the *Ku-ring-gai Development Control Plan* (DCP) was amended to insert site-specific controls in Part 14N of the DCP. The new controls require the retention of the Blue Gum tree (and others) in any redevelopment of the site, and allow for only one-way vehicular access via the driveway at 14-16 Buckingham Road to minimise potential impacts on the tree and our clients' amenity (see **Figure 2** below – the poisoned tree is 'T1').



Figure 14N.2-1:
Plan indicating proposed vehicular and pedestrian access

Legend

-  Pedestrian Access
-  Vehicle Access - One Way
-  Open Space Heritage Setback Zone
-  Deep Soil Landscape Screening to Access Handle 10 and 18 Buckingham Road
-  T1, T2, T3 - Blue Gum High Forest Critically Endangered Ecological Community
-  Existing Trees

Figure 2 Extract from Part 14N of Ku-ring-gai DCP

Source: Ku-ring-gai DCP

We note that the original proposal sought two-way vehicular entry and exit from the driveway of 14 and 16 Buckingham Road, as well as pedestrian access. Following our detailed submissions on the proposal, supported by advice from an ecologist, Council amended the DCP controls to allow only one-way access through this driveway.

Notwithstanding this, advice from Travers Ecology (that supported our earlier submissions on the Planning Proposal) suggests that **the tree will not survive** (see **Attachment 2**). Travers Ecology advised that the substantial increase in vehicular movements that is proposed along 14 and 16 Buckingham Road is likely to lead to increased compaction of the root zone of Blue Gums (and therefore not *only* the poisoned tree) along the driveway, which will deteriorate their resilience and in the long term it is unlikely that they will be retained. **Furthermore, the driveway will not be wide enough to accommodate construction vehicles and will need to be widened and the vegetation will need to be reduced.** To be adequate for entry and exit of construction vehicles, a width of 4 m would be required. Therefore, there is likely to be an impact on the Blue Gum High Forest by construction activities.

We raised construction matters in our submission, but we understand that Council did not take this into consideration in determining the Planning Proposal and DCP amendment as construction impacts are relevant to the development application (DA) stage and not the Planning Proposal stage.

Based on the above, we believe that the purpose of poisoning the tree was to facilitate the redevelopment of the subject site. The applicant could be preparing DA documentation which supports our submission that construction vehicles would not be able to access the site while the subject Blue Gum tree remains.

Of course, we note that this unlawful, destructive act should not be accepted as a means to change the intent of the DCP through the DA in any event given that there are other protected trees which remain and require protection as well as the ecological corridor.

2.0 The ecological significance of the tree

The key findings of the advice from Travers Ecology are summarised below.

- Approximately 0.7ha of land within 8A, 14 and 16 Buckingham Road are mapped as Biodiversity Values Land under the *Biodiversity Conservation Regulation 2017*. Consequently, the future redevelopment of the site will trigger the Biodiversity Offsets Scheme and a Biodiversity Development Assessment Report (BDAR) will be required.
- The mature *Eucalyptus saligna* (and also *Eucalyptus pilularis*) trees within the proposal area conform to the Blue Gum High Forest CEEC.
- The Blue Gum High Forest CEEC is also on the Department of Planning, Housing and Infrastructure's list of entities that it has assessed as "*likely to be at risk of serious and irreversible impacts*" (SAIL) from development under Part 4 of the *Environmental Planning and Assessment Act 1979*.¹
- The concept of SAIL is fundamentally about protecting threatened entities that are most at risk of extinction from potential development. The consent authority is required to refuse a Part 4 development that is considered to have a serious and irreversible impact on a SAIL entity. This will be determined at the DA stage.
- The proposal involves the removal of vegetation in the understorey that is important for foraging and as a distributional pathway for a diverse range of fauna. Given that Powerful Owl records are recent and plentiful within the immediate locality, it is likely that prey species are active, including Common Ring-tailed Possums, Common Brush-tailed Possums, roosting birds, and smaller ground-dwelling animals. In Travers Bushfire and Ecology's opinion, impacts on this vegetation will impact on the prey species. Not only does this impact on the Powerful Owl but also other potential species foraging, and migratory behaviour would be impacted.
- The substantial increase in vehicular movements that is proposed along 14 and 16 Buckingham Road is likely to lead to increased compaction of the root zone of Blue Gums along the driveway, which will deteriorate their resilience **and in the long term it is unlikely that they will be retained.** Furthermore, the driveway will not be wide enough to accommodate construction vehicles and will need to be widened and the vegetation will need to be reduced. To be adequate for entry and exit of construction vehicles, a width of 4 m would be required. Therefore, there is likely to be an impact on the Blue Gum High Forest by construction activities. Overhanging vegetation along the No. 16 driveway will also need to be removed to accommodate construction and emergency vehicles. This driveway is currently an attractive area, with birds dispersing, feeding and foraging. This vegetation also provides an aesthetic visual screen to the residents of 18 Buckingham Road and its loss is of concern to the residents.

¹ <https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity-offsets-scheme/local-government-and-other-decision-makers/serious-and-irreversible-impacts-of-development>

3.0 Our request to Council

In light of the above, on behalf of the owners of 18 Buckingham Road, we request that:

- (1) Council takes compliance action in respect of the poisoned tree; and
- (2) Council requires that the tree be retained as a habitat tree to ensure that the future redevelopment of the site does not benefit from the unlawful action (irrespective of who conducted the action).

The report by Mr Hartley (see **Attachment 1**) states that, if the tree does not recover, there is no reason that it cannot be retained as a habitat tree. To this end, it is requested that Council requires the landowner (or whoever poisoned the tree) to investigate what understory planting or retention is necessary to help the tree survive.

It is very important to our clients that nobody benefits from the unlawful poisoning and future removal of the tree. The tree should be retained now, and in any future redevelopment of the site to ensure that it continues to contribute to the biodiversity of the site and wider locality.

Our clients do not want the tree to be removed because:

- It has ecological significance, provides habitat for native fauna in the area and forms part of the ecological corridor;
- It contributes to the visual/scenic amenity of the streetscape; and
- Its retention would prevent two-way traffic in a future redevelopment from utilising the driveway, which would negatively impact the tree, the ecological corridor and our clients' amenity (noise, air quality and privacy).

We trust that this letter and attachments provide sufficient information to enable Council to take compliance action to ensure the tree is retained and that future redevelopment of the adjoining property does not benefit from unlawful actions. Please do not hesitate to contact me if you wish to discuss this important matter further.

Yours sincerely,



Yvette Carr

Director

0412-050-221

ycarr@ethosurban.com

Annexure 4: Tree Inspection Report 12

March 2024 – Arborist Network



File notes for: Sean Yates

Document date: XXXX

Site address: 14-16 Buckingham Road
Killara

File number: CD2610

Tree inspected: Sydney Bluegum (*Eucalyptus saligna*)

Concerns were raised regarding a tree that has been poisoned on the neighbouring property.

A site inspection took place on 12th March 2024. The tree was shedding and about 90% of the canopy was marcescent. Examination of the base of the tree revealed numerous chainsaw cuts. There was no evidence of any basal lesions or of lightning strike. The soil was moist, and a water leak had recently been discovered and rectified.

Based on the decline and the site observations it would appear that the tree has been poisoned. The most likely herbicide is one with a Glyphosate base. While testing may

be able to verify this there is no antidote to any herbicide. That said there are still some general steps you can take to help the tree recover. Here are some guidelines:



Image 1: Location of some of the cuts at the base of the tree. These are located all around the base of the tree.

1. **Wash the cuts:** Rinse the cuts with a saturated calcium carbonate solution. Repeat, then flush with water.
2. **Wash the tree:** Wash the tree with plenty of fresh water to remove any herbicide from all tree surfaces. In addition, plenty of water should be applied to any exposed soil to help dilute any herbicide that gets into the soil.
3. **Monitor the tree:** Monitor the tree to see if it recovers. Provide irrigation during hot, dry weather and control any insect or disease problems. Do not fertilise the tree until a moderate and sustained recovery is observed.
4. **Be patient:** It may take some time for the tree to recover, so be patient and continue to care for it.

5. **Use a Molasses drench:** Some tree experts recommend using molasses as a soil amendment to help the tree recover¹. Molasses is a natural source of carbohydrates that can stimulate microbial activity in the soil, and this can help break down the herbicide and improve soil health. In addition, sugars can be transported through membrane proteins and thus may help supplement the carbohydrate needs of the tree while it is recovering.

It is important to keep in mind that the effectiveness of this method is not proven, but the cost is negligible when compared against the tree's value. These steps are not guaranteed to save the tree, but they can help minimise the damage and give the tree the best chance of recovery.

If the tree does not recover, there is no reason that it can't be retained as a habitat tree. To this extent, it may be appropriate to raise the matter with the council and point out that regardless of who poisoned the tree, retaining the tree as a habitat tree for five to ten years will ensure that the offender does not benefit from their actions and at the same time no innocent party would be unduly disadvantaged.

**Mark Hartley**

Senior Consulting Arborist- AQF Level 8
Grad Cert Arboriculture (1st Class Honours)
Dip Hort (Arboriculture) with Distinction
Dip Arboriculture, Dip Horticulture
LMAA; LMISA; LMIPS
ISA Certified Arborist WC-0624 (since 1990)
Registered Consulting Arborist™ #0005
ISA Tree Risk Assessment Qualified
Registered QTRA user (No. 807)
Member - Society of Risk Analysis Australia & NZ

¹ Apply at 10 ml per metre square every month for six to 12 months.

Annexure 5: Traffic Review – McLaren Traffic Engineering



**PEER REVIEW OF
THE PROPOSED STATE SIGNIFICANT DEVELOPMENT APPLICATION FOR A
HIGH-DENSITY RESIDENTIAL DEVELOPMENT
AT 8A, 14 AND 16 BUCKINGHAM ROAD, KILLARA**



**Address: Shop 7, 720 Old Princes Highway Sutherland NSW 2232
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**Telephone: +61 2 9521 7199
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Division of RAMTRANS Australia ABN: 45067491678 RPEQ: 19457

Transport Planning, Transport Impact Assessments, Road Safety Audits, Expert Witness

Development Type: State Significant Development Application for a High-Density Residential Development

Site Address: 8A, 14 and 16 Buckingham Road, Killara

Prepared for: SJB Planning

Document reference: 260091.FA

Status	Issue	Prepared By	Checked By	Approved By	Date
Draft	A	PK			24 June 2026
Final	A	PK			25 June 2026

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EXECUTIVE SUMMARY

- The Transport Impact Assessment (TIA) submitted with the proposal does not adequately assess the safe operation of the proposed driveway location. The proposed design is significantly non-compliant with AS2890.1 and AS2890.2 with regard to sight distance for passing and exiting vehicles, pedestrians and cyclists. The design provides 13m of sight distance when 60m to 69m is required. **The design is likely to result in collisions and is unacceptable**, beyond being non-compliant.
- The TIA does not adequately assess compliance of the proposal for heavy vehicles such as the council waste vehicle. There is no reference to the commercial vehicle standard of AS2890.2:2018. The design **exceeds the maximum grade** for that vehicle of 20% by proposing a driveway with 25% maximum grade.
- The TIA incorrectly reports the available of bus and train services in the vicinity of the site, it also incorrectly qualitatively assesses this provision.
- The TIA inconsistently references AM and PM peak periods for traffic analysis purposes without explanation of which times were used and why.
- The TIA did not survey not analyse the impact of the proposal on the intersection of Buckingham Road and Warwick Street despite being within the area of influence.
- The TIA **does not assess the midblock carrying capacity** of Buckingham Road which has restricted lane widths and requires one-way traffic for some segments when kerbside parking occurs.
- The TIA does not assess the **inadequate provision for pedestrian access** with goods during removal type operations. The stepping stone design for the eastern pedestrian entrance is unsuitable and should be modified to a continuous accessible path of travel.
- The TIA has poorly drawn swept paths of the SRV which show it **colliding with kerbside parking**. It does not demonstrate that the driveway as designed is capable of support turning movements, especially for an SRV turning across a 15% downgrade ramp fully laden.
- The TIA uses a High-Public-Transport-Accessibility rate for traffic generation. A conservative assessment **should test the driveway for a Low-Public-Transport-Accessibility rate** of movements for turning risk assessment or internal queueing impacts.

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McLaren Traffic Engineering (MTE) was commissioned by SJB Planning to provide a Peer Review of the proposed State Significant Development Application for a High-Density Residential Development at 8A, 14 and 16 Buckingham Road, Killara. This report is a peer review of the proposal, as well as any supporting and relevant documentation assessing or supporting the proposal, with regards to traffic, parking and road safety.

A transport impact assessment is an objective appraisal of the implications of a particular development on the surrounding transport networks. This includes impact to pedestrians, cyclists, motorists, passengers, public transport users, and freight and servicing vehicles. The guideline for preparing a transport impact assessment is detailed in the *TfNSW Guide to Transport Impact Assessment Version 1.1 - 20124* (GTIA) which outlines the steps to developing a transport impact assessment.

This peer review provides an exhaustive review of the *Transport Impact Assessment* by *Genesis Traffic (dated 6 May 2026) (TIA)* section by section, on its merits. Any section herein references the same section in the TIA up to and including **Section 10**, then **Section 11** is additional to the TIA.

1 Introduction

1.1 Background

No comment.

1.2 Secretary's Environmental Assessment Requirements

No comment.

1.3 Scope of Assessment

No comment.

1.4 Reference Documents

The TIA does not include AS2890.2:2018 Off-street Commercial Vehicle Facilities as one of the reference documents. Considering waste collection will be conducted on-site by a 6.4m SRV or larger, it is a requirement that AS2890.2 be complied with. The requirements for the design of waste facilities are not part of the other parts of the AS2890 set and as such the proposal was not fully assessed according to the correct standard. This is quite important as the characteristics of larger vehicles change the design of vehicle facilities considerably. Heavy vehicles are generally being able to negotiate ramps of lesser maximum grade, requiring different levels of clearance to obstructions, sight distance measurements based on different driver heights and different vehicle manoeuvring templates.

It is poor traffic engineering practice to not have any assessment of the proposal against the correct traffic engineering standards and it could lead either geometric impracticability or adverse safety outcomes.

2 Proposed Development

No comment.

3 Existing Conditions

3.1 **Site and Surrounding Context**

Based on the experience of this firm in the Land and Environment Court, the walking distance from a site is the distance from the pedestrian access at the property boundary, along reasonable and legal walking connections, taking formed/paved pedestrian paths where possible. A desktop assessment using recent aerial imagery measures 630m walking distance from the site to the nearest pedestrian entrance to Killara Train Station.

3.2 **Road Network**

The TIA does not reference *movement and place* function (and impact on *movement and place* function as a result of the development) as required by the GTIA. Each road within the area of influence should have their functions described.

- a) Pacific Highway is a Secondary Arterial road with the function of a Principal Arterial road according to the movement and place framework. This implies heavy traffic flows, interrupted by regular intersections and excess direct access to the road from neighbouring properties.
- b) Stanhope Road is a Suburban Connector Street according to the movement and place framework.
- c) Buckingham Road is a Suburban Yield Street and a Suburban Residential Way south of Warwick Street according to the movement and place framework. Common issues from the framework which apply to Buckingham Street include:

poor sight lines for people walking due to parked vehicles

poor sight lines from and into driveways due to parked vehicles

a lack of safe priority crossings at intersections and mid-block

a lack of footpaths or single-side or narrow footpaths

private driveways affecting street character consistency and downgrading footpaths

- d) Cecil Street is a Suburban Neighbourhood Street according to the movement and place framework.
- e) Norfolk Street is a Suburban Neighbourhood Street according to the movement and place framework.
- f) Warwick Street is a Suburban Neighbourhood Street according to the movement and place framework.
- g) Spencer Road is a Suburban Neighbourhood Street according to the movement and place framework.
- h) Fiddens Wharf Road is an Urban/Suburban Yield Street and a Suburban Residential Way south of Warwick Street according to the movement and place framework

The TIA does not fully describe Pacific Highway correctly as while clearways apply for parts of the day, the TIA misses that “No Stopping” restrictions apply at all times.

3.3 Traffic Controls

The TIA duplicates the reference to traffic signals at Spencer Street. It is uncertain why, though perhaps this is referring to the additional set of signals at Lorne Avenue.

The TIA does not reference the pedestrian signals on Pacific Highway adjacent Buckingham Road which it should. The presence of those signals is a principal pedestrian connectivity and safety infrastructure inclusion to allow safe and convenient access to public transport for the subject site.

The TIA supposes that “No Right Turn” is the sufficient detail for the Buckingham Road intersection, however the presence of a raised median preventing the movement is important and relevant traffic control detail.

The TIA does not reference loading zones and bus zones which are active on Pacific Highway and describe a conflict mixed use traffic environment serving several purposes.

3.4 Existing Public Transport Infrastructure

The TIA does not make it clear what the green radius on Figure 3-3 represents. While it is assumed to be an 800m line-of-sight radius, that does not align well with the 400m-800m walking distance reference. Without an exhaustive audit, several of the bus stops shown are outside 1200m walking distance.

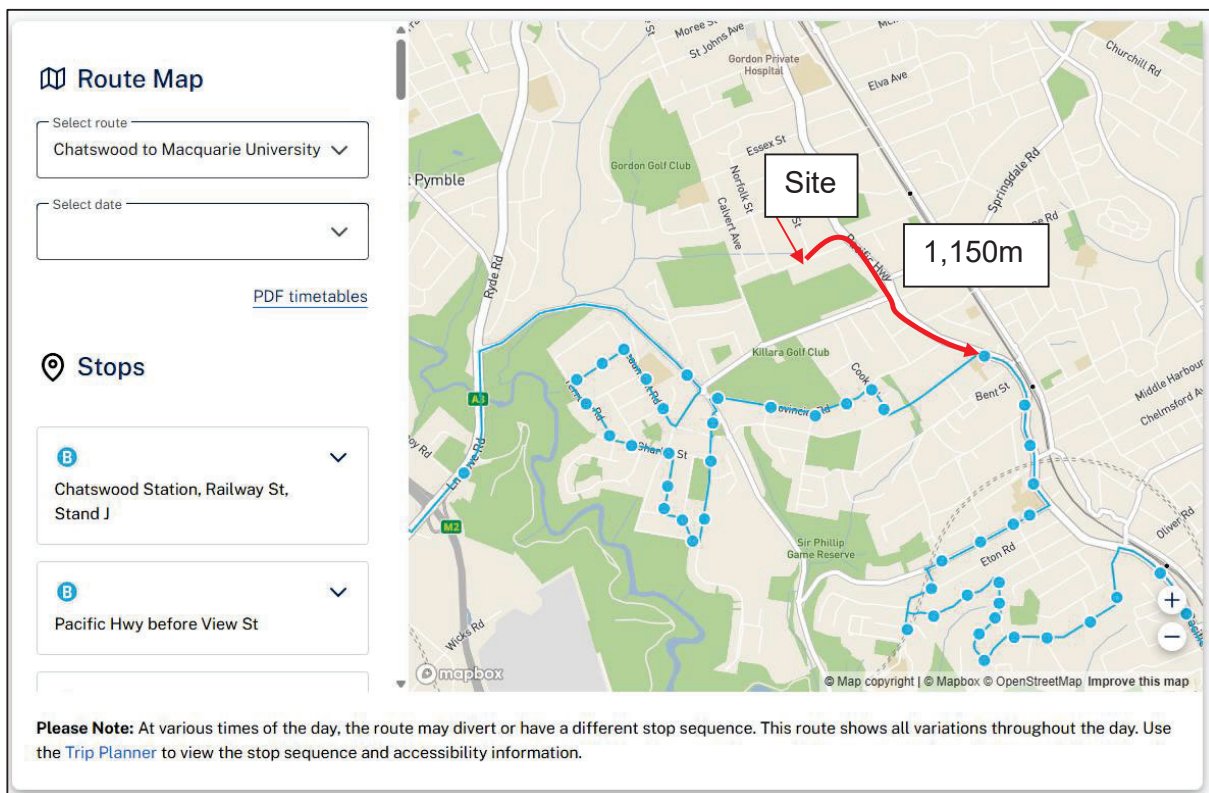
3.4.1 Train Services

As mentioned earlier the 600m walking distance is 630m, though the estimation in the TIA was not a disingenuous approximation when the site is well within 800m walking distance to a train station.

The TIA does not assess train service provision clearly and certainly not correctly. It asserts that the dual platform station at Killara is visited by 59 services per hour in the AM Peak and 67 services per hour in the PM Peak. That would be approximately two-minute headways which is not achievable on the Sydney Trains network. Sydney Train lines typically have a maximum capacity of 3-3.5 minute headways for heavily congested lines. There must be an error in the number of trains per hour, the time-period, inclusion of extra lines or services which don't stop at the subject station or something else. In any case, Killara Train station is well served by approximately 20 services per hour (two-way) in the AM 7-9am period and similar in the PM peak hours.

3.4.2 Bus Services

The TIA asserts that the site is within walking distance of “*high-frequency bus services*”. It then only two services, one of which is an overnight “*Nightrider*” route and the other which is does not have a stop within 1,000m walking distance of the site. This is poor traffic engineering practice and presents the development incorrectly.



The SEPP (Housing) 2021 identifies that an accessible area is a site within 400m walking distance of a bus stop with hourly servicing from 6am to 9pm on weekdays. That does not even make the site *accessible* on the basis of bus services alone as the bus stops are outside the walking distance radius. It is incorrect that 1 service per hour per direction is high-frequency. High-frequency would be approximately 10 minute headways, at which point commuters would no longer consult timetables. The site is otherwise in an accessible location due to train service proximity, though that is separate from this section.

accessible area means land within—

(a) 800m walking distance of—

- (i) a public entrance to a railway, metro or light rail station, or*
- (ii) for a light rail station with no entrance—a platform of the light rail station, or*
- (iii) a public entrance to a wharf from which a Sydney Ferries ferry service operates, or*

(c) 400m walking distance of a bus stop used by a regular bus service, within the meaning of the [Passenger Transport Act 1990](#), that has at least 1 bus per hour servicing the bus stop between—

- (i) 6am and 9pm each day from Monday to Friday, both days inclusive, and*

(ii) 8am and 6pm on each Saturday and Sunday.

3.4.3 Car Share

No comment.

3.5 **Existing Active Transport Infrastructure**

3.5.1 Bicycle Routes

No comment.

3.5.2 Pedestrians

The TIA does not acknowledge the lack of pedestrian infrastructure between the two frontages on Buckingham Road. It is not immediately clear if the comment made regarding lighting of footpaths is accurate as a site inspection was not completed as part of this peer review. It is worth noting that there appears to be excess vegetation adjacent the footpath on the northern side of Buckingham Road.

3.5.3 Crash History

The TIA provides crash data for 2019-2023 and states that 2024 was not available. The 2024 crash data was made available on or before 15 October 2025 and the report is dated 6 May 2026. A review of the 2024 crash data was conducted by MTE and found nil crashes within 300m in 2024.

3.5.4 Existing Traffic Conditions

The TIA did not reference available Annual Average Daily Traffic data for Pacific Highway which has is available through TfNSW and has two relevant counters, with one in Killara north of the site and another in Lindfield south of the site.

The TIA does not have a traffic survey for the intersection of Buckingham Road and Warwick Street, despite that intersection certainly being within the *area of influence*, given the right turn restriction at Buckingham Road. A survey should be completed for both the AM and PM commuter peaks to examine any changes as a result of the proposal.

The TIA references traffic survey data and “*morning (AM) and afternoon (PM) commuter peaks*”, however does not specify in the body of the report which times they occur. The body further does not describe the date or times surveyed. Dates and times are important to ensure the surveys were not conducted during holiday periods and to allow identification of how peak hours may be shifted from underlying commuter peaks due to individual large developments such as a shopping centre or school. The dates, survey times and peak times are contained within the raw data in the annexures.

The TIA references SIDRA traffic modelling software however does not specify which edition of the software was used. The SIDRA micro-analytical modelling software has 11 versions which each produce different results for the same underlying intersection layout and volumes. For the purposes of review, assessment and comparison it is necessary to utilise a like-for-like model which requires the version information to be provided. The version

number can be found in the SIDRA outputs reproduced in the annexures of the TIA which states that *SIDRA INTERSECTION 10.0* was used. That is an appropriate version in 2026.

The TIA table 3-7 does not show the level of service (performance) of the worst movement or approach for both intersections. Simply stating which is the worst movement without stating how the movement is operating is inappropriate as that does not give sufficient detail to make a comparison. Queue lengths and delays on minor road approaches to a classified road are generally not the priority, however could produce adverse impacts or be above capacity. At these locations the apparent statistical impact to the intersection as a whole, such as average delay for 40 minor road vehicles vs 1500 for the intersection, is diluted by the dominance of the major road volumes. This is especially true when the southbound movement on Pacific Highway is fully isolated by a median and is unimpacted by the Buckingham Road intersection. Likewise, it states the worst movement is the West LT but does not state why. It could be due to queues, degree of saturation or average delay, but should be specific why in the body of the report. The SIDRA Movement Summaries are provided in the annexures of the TIA.

The TIA does not appear to examine the pedestrian traffic signals adjacent to Buckingham Road nor state to which degree the analysis of the Buckingham Road intersection might have downstream capacity restraints as a result. It appears that default pedestrian crossing volumes were used throughout the analysis due to those movements being unsurveyed in the same peak periods.

The TIA should make the SIDRA files available for review, assessment and audit.

The TIA states that “*local road network operating with ample spare capacity under existing traffic demand*”. It is unclear if *local* refers to the vicinity of the site or the roads owned and operated by Council. Further, given the constraints on Buckingham Road, it does not appear that a suitable assessment has been conducted of the mid-block traffic carrying capacity of the surrounding roads as it would appear that between the two existing site driveways that occasionally two-way passing is restricted and vehicles must wait either end of kerbside parking for oncoming traffic.

4 Parking Assessment

4.1 *Car Parking Requirement*

The TIA uses the DCP Part 7B.1 rather than Part 22R.1 without stating why. The proposal is within 800m walking distance of a train station and so Part 7B.1 is appropriately utilised.

The TIA includes several accessible parking spaces for residents which have an adjacent shared space of 2.4m width. Given the proposal has both a maximum and minimum parking rate, it would be appropriate to clarify whether the shared spaces behind garage doors and assigned on Strata for specific tenancies, could be used in the future as additional parking spaces. If they can be easily modified to facilitate additional parking, and there is a likelihood of that occurring by any tenant not requiring an accessible space, then a check against the maximum parking rates should be completed. It appears that as a result of accessibility or otherwise that up to 13 spaces would be usable by tenants which are not counted in the report. This would increase the actual provision from 109 for residents to 122. This number is still below the maximum of 134 for residents and is acceptable.

4.2 *Bicycle Parking Requirement*

The TIA provides a suitable quantum of bicycle parking though does not address Section 22.7-1:iii of the DCP which states “*access paths have a minimum width of 1.5m to accommodate a person pushing a bicycle, and adequate sight lines for safety*”. No suitable assessment of sightlines for arriving or departing cyclists. This is a significant deficiency in the design of the proposal as there is a substantial sight distance obstruction for all users departing the western access for vehicles, bicycles and pedestrians. A sight distance assessment has not been adequately provided for either the driveway or footpath serving the western access handle and any proper assessment would find inadequate sight distance to approaching vehicles. It is very poor traffic engineering practice to propose the design put forward and the proposal will significantly and adversely impact the safety and ongoing operation of the frontage road.

4.3 *Motorcycle Parking Requirement*

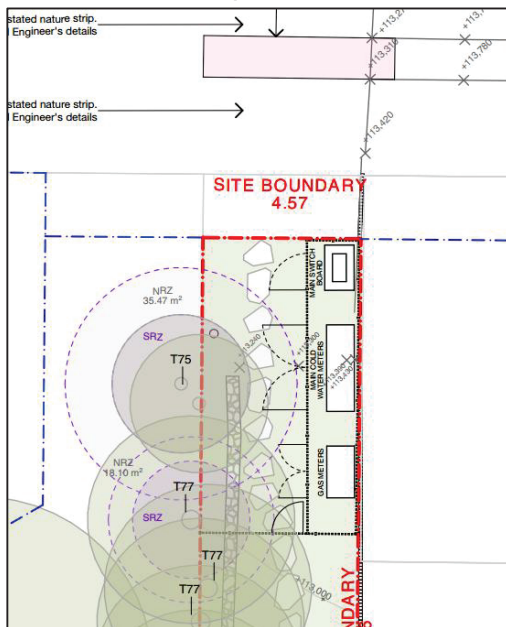
No comment.

4.4 *Loading and Servicing Requirement & Arrangement*

The TIA states that waste collection will be conducted on-site, as would be expected for a 79-unit development, however no reference to AS2890.2 has been made. It is unclear how a heavy vehicle such as a waste vehicle could be assessed without any reference to the relevant standard.

The TIA should fully consider the demands for heavy vehicles, including removalist vehicles. If removals were to be conducted on-street then carting of goods would occur most likely on the eastern pedestrian access, which is currently shown as stepping stones. Stones of this nature do not appear appropriate for trolley access. Using approximations of 35 / 65% occupied / rental and 9 / 1.42 years of average occupant turnover, there are going to be approximately 39 move ins and 39 move outs per year, or 3 events per week requiring

removal activity. This is significant and suitable arrangements for the safety and convenience of operators and tenants should be made.



5 Access and Circulation Design

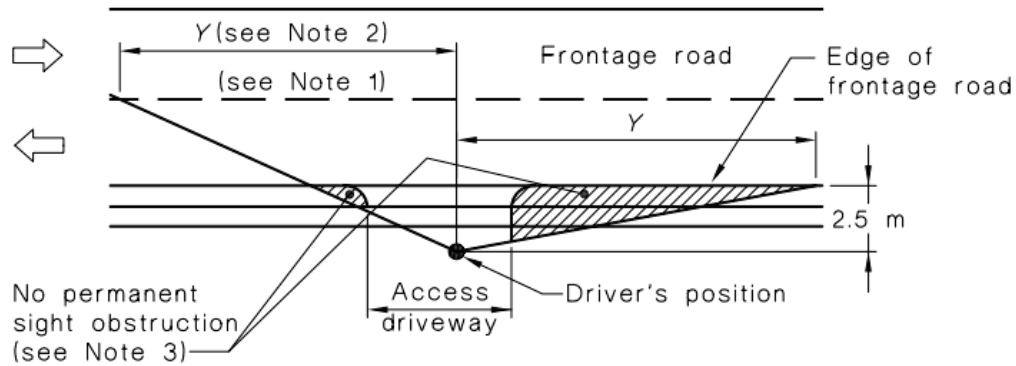
5.1 Access

The TIA does not consider the DCP Part 22.2-4 which states “*Vehicle and pedestrian access to buildings are to be separated and clearly distinguished. Vehicle access is to be located a minimum of 3m from pedestrian entrances*”. The proposal includes a directly adjacent pedestrian access, contrary to the DCP. While it is not certainly an issue to have mixing of pedestrian access and vehicle access in this manner, it would appear that no consideration at all has been made. The TIA should consider the DCP intent for safety, convenience and orderly operation of the access to the site, which it does not appear to have included.

5.2 Design Assessment and Internal Circulation

5.2.1 MTE Stopping Sight Distance

The TIA states that the proposal requires 45m Sight Distance for 50km/h and that the proposal complies with that requirement. The TIA has not conducted the Minimum Stopping Sight Distance nor Desirable 5s Gap Distance assessment correctly. This is a major safety issue. The TIA attempts to provide an assessment in the annexures by drawing a 45m line east from the exiting driveway driver location. The starting location on the driveway is approximately correct. The ending location of the line-of-sight line extends some 6.5m from the southern kerb line, which outside is of the westbound driving lane. It is also not even within the eastbound driving lane and is within the kerbside parking lane. The correct end location is approximately along the adjacent kerb line, which as drawn is only 13m as shown below. 13m of sight distance is insufficient and the design does not comply with AS2890.1.

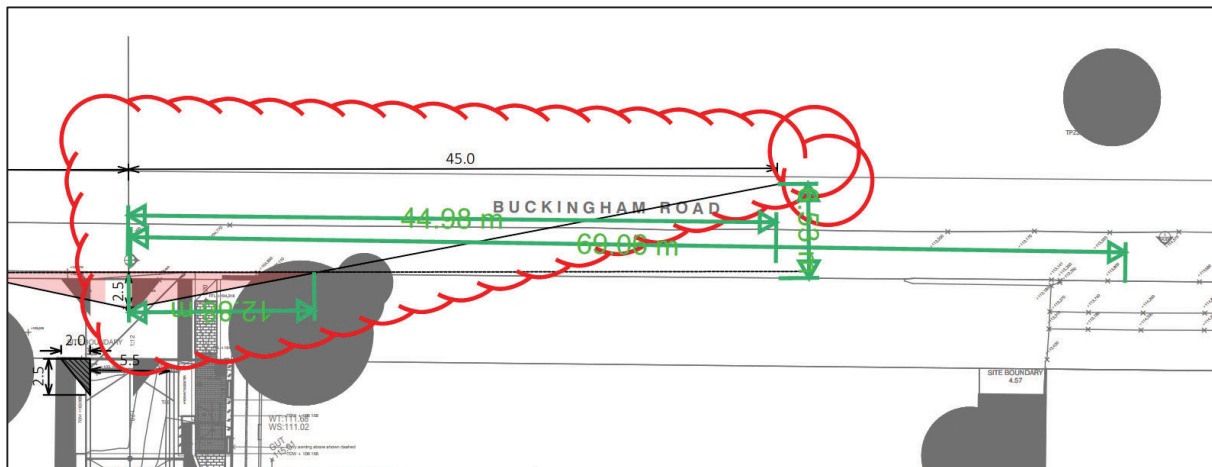


Frontage road speed (Note 4) km/h	Distance (Y) along frontage road m		
	Access driveways other than domestic (Note 5)		Domestic property access (Note 6)
	Desirable 5 s gap	Minimum SSD	
40	55	35	30
50	69	45	40
60	83	65	55
70	97	85	70
80	111	105	95
90	125	130	Use values from 2 nd and 3 rd columns
100	139	160	
110	153	190	

Table 3.1: Approach sight distance (ASD) and corresponding minimum crest vertical curve size for sealed roads ($S < L$)

Design speed (km/h)	Based on approach sight distance for a car ⁽¹⁾ $h_1 = 1.1, h_2 = 0, d = 0.36^{(2)}$					
	$R_T = 1.5 \text{ sec}^{(3)}$		$R_T = 2.0 \text{ sec}$		$R_T = 2.5 \text{ sec}$	
	ASD (m)	K	ASD (m)	K	ASD (m)	K
40	34	5.3	40	7.2	–	–
50	48	10.5	55	13.8	–	–
60	64	18.8	73	24.0	–	–
70	83	31.1	92	38.9	–	–
80	103	48.5	114	59.5	–	–
90	126	72.3	139	87.3	151	104
100	151	104	165	124	179	146
110	–	–	193	171	209	198
120	–	–	224	229	241	264
130	–	–	257	301	275	344
Truck stopping capability provided by the minimum crest curve size ⁽⁴⁾	$h_1 = 2.4 \text{ m}, h_2 = 0 \text{ m}, d = 0.22$					

- 1 If the average grade over the braking length is not zero, calculate the approach sight distance (ASD) values using the correction factors in Table 3.4 (or use Equation 1) by applying the average grade over the braking length.
- 2 In constrained locations (typically lower volume roads, less important roads, mountainous roads, lower speed urban roads and tunnels), a coefficient of deceleration of 0.46 may be used. For any horizontal curve with a side friction factor greater than the desirable maximum value for cars (in constrained locations), use a coefficient of deceleration of 0.41. The resultant crest curve size can then be calculated using the relevant equations in AGRD Part 3 (Austroads 2016a).
- 3 A 1.5 sec reaction time is only to be used in constrained situations where drivers will be alert. Typical situations are given in Table 5.2 of AGRD Part 3. The general minimum reaction time is 2 sec.
- 4 This check case assumes the same combination of design speed and reaction time as those listed in the table, except that the 120 km/h and 130 km/h speeds are not used.



For an approaching vehicle to be seen, react to and brake in time to avoid an exiting vehicle or pedestrian crossing to/from the pedestrian path to/from the site, they require Minimum Stopping Sight Distance. This is measured longitudinally along the kerb line, or centreline of the road for curves, at which point a physical conflict would occur. Where AS2890.1 provides tabulated data for Minimum SSD, the values correlate to rounded (to nearest 5m) data from

Austrroads Guide to Road Design Part 4A Table 3.6 as reproduced below. This table should also be read in conjunction with Table 3.4 which adjusts braking distances required relative to the slope of the frontage road.

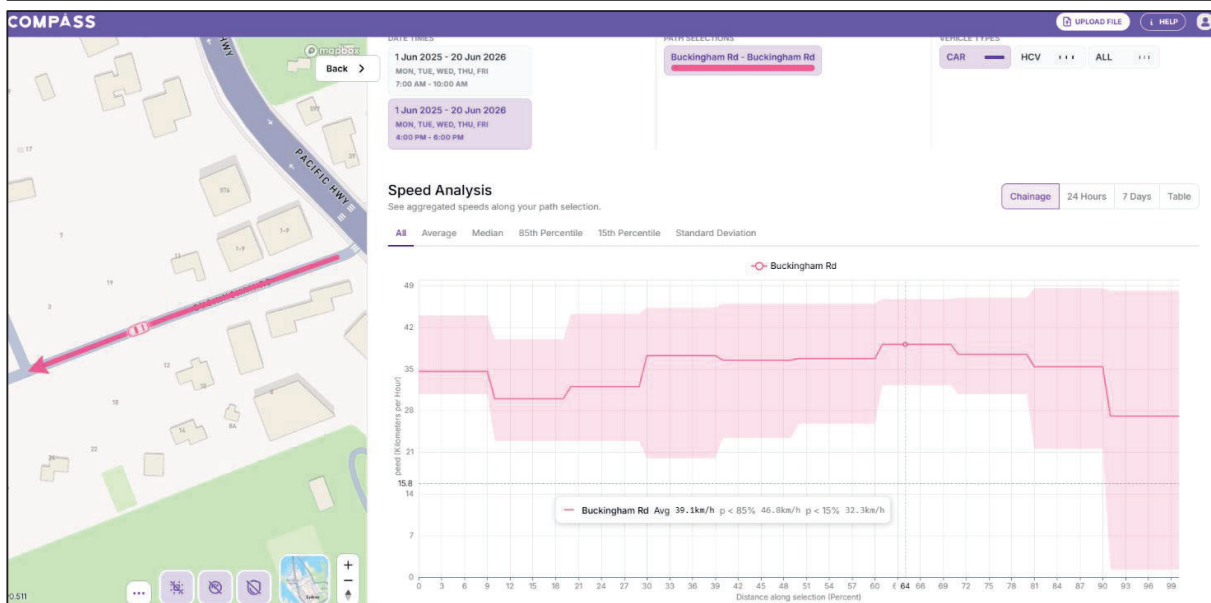
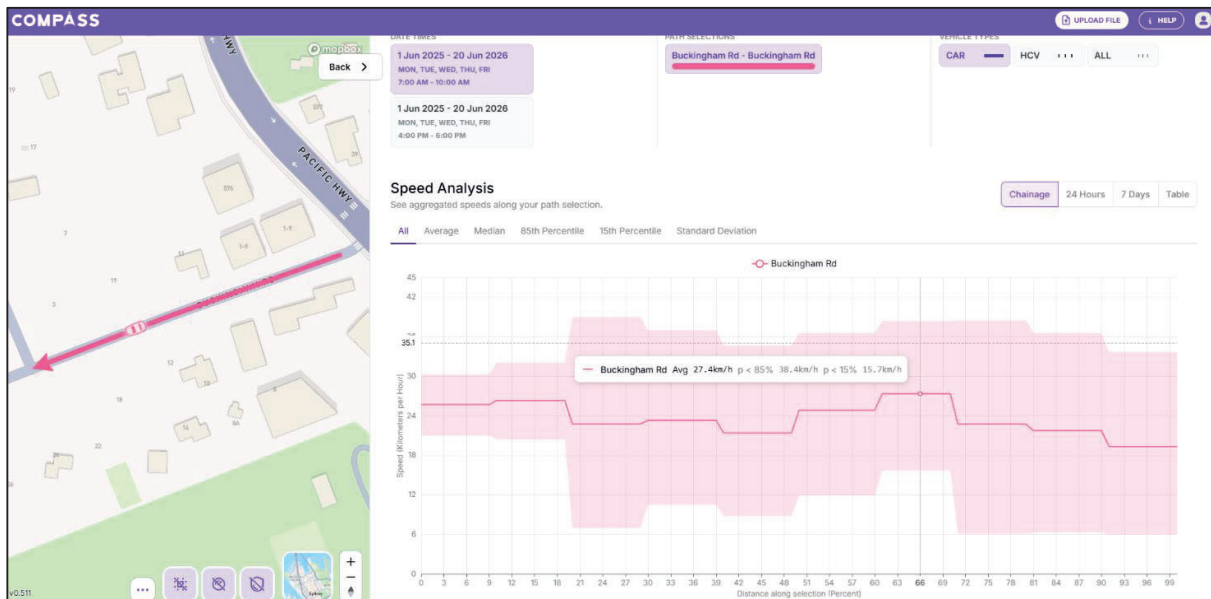
Table 3.4: Grade corrections to ASD and SISD (cars)

Design speed (major road) (km/h)	Correction (m)							
	Upgrade				Downgrade			
	2%	4%	6%	8%	2%	4%	6%	8%
40	-1	-2	-2	-3	1	2	3	5
50	-1	-3	-4	-5	2	3	5	8
60	-2	-4	-6	-7	2	5	8	11
70	-3	-5	-8	-10	3	7	11	15
80	-4	-7	-10	-13	4	9	14	20
90	-5	-9	-13	-16	5	11	18	25
100	-6	-11	-16	-20	6	14	22	31
110	-7	-13	-19	-24	8	17	26	38
120	-8	-16	-22	-29	9	20	31	45
130	-10	-18	-26	-34	11	23	37	53

Note: This table to be used in conjunction with Table 3.2.

The slope of the frontage road based on the survey plans is 15% between driveways, based on 9.7m RL change over 64.5m. While the Austrroads table does not include correction factors for road that steep, a linear extrapolation provides that an additional 1.0m braking distance should be provided per 1% of downgrade on approach, or approximately 15m additional braking distance to account for slope.

The Buckingham Road eastbound travel speeds were analysed using Compass IOT movement analysis and found that during the AM and PM peak periods the 85th percentile westbound vehicle speeds along the frontage were 38km/h and 47km/h as shown below. Since the design speed is the greater of the speed limit or the 85th percentile, the speed limit of 50km/h should be used for design purposes.



The correct SSD then is $45\text{m} + 15\text{m} = 60\text{m}$. The proposal has shown 13m of SSD which is insufficient and does not comply with AS28980.1. The under provision by 78% is unacceptably unsafe and **cannot be supported on safety grounds in its current design.**

It is expected that a competently prepared Road Safety Audit (RSA) would have highlighted the above deficiencies. It would be likely to also observe that the subject segment of road has extensive canopy coverage such that the road will regularly have leaf litter on the road surface which will reduce direct contact with the road surface. This would additionally inhibit braking ability and be more likely to results in collisions with departing vehicles, cyclists and pedestrians.

5.2.2 MTE Desirable 5 Second Gap

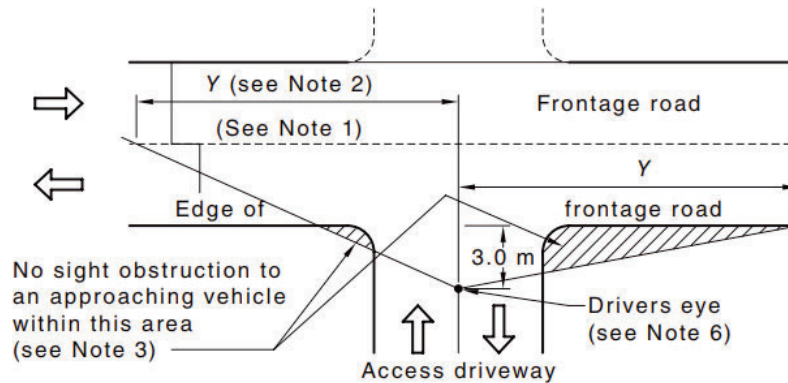
For an exiting vehicle to knowingly select a 5 second gap in traffic they require sight distance of 5 seconds of an approaching vehicle at design speed. For the subject driveway that is

50km/h x 5 seconds = 69m. The provision of 13m sight distance is insufficient and does not comply with AS2890.1 nor Austroads. The under provision by 81% is unacceptably unsafe and **cannot be supported on safety grounds in its current design.**

Table 3.6: Table of minimum gap sight distances ('D' metres) for various speeds

Critical gap acceptance time (t _a) (secs)	85 th percentile speed of approaching vehicle (km/h)										
	10	20	30	40	50	60	70	80	90	100	110
4	11	22	33	44	55	67	78	89	100	111	122
5	14	28	42	55	69	83	97	111	125	139	153
6	17	33	50	67	83	100	117	133	150	167	183
7	19	39	58	78	97	117	136	155	175	194	214
8	22	44	67	89	111	133	155	178	200	222	244
9	25	50	75	100	125	150	175	200	225	250	275
10	28	56	83	111	139	167	194	222	250	278	305

The TIA should have also included sight distance assessments according to AS2890.2 which would be even worse for compliance due to a heavy vehicle having a 3m driver setback from the kerb, rather than 2.5m for a car. A heavy vehicle exiting the proposed driveway location is an unacceptable risk to public road safety and **cannot be supported on safety grounds in its current design.**



Frontage road speed (see Note 4) km/h	Distance (Y) along frontage road (see Note 5) m	
	5 s gap	8 s gap
40	55	89
50	69	111
60	83	133
70	97	156
80	111	178
90	125	200
100	139	222
110	153	244

5.2.3 MTE Ramp Grade

The TIA states correctly that for a private (or residential) carpark that a maximum of 25% grade applies and that the provision of 1:4 satisfies compliance. This is incorrect as the provision for heavy vehicles like the SRV should also be considered and is stated by Council to only be able to negotiate grades up to 1:5 or 20%. This is shown in Section 5.3 of the TIA which mixes the two up by stating “*The maximum grade of the driveway is to be a maximum of 1 in 5 (25%)*”. The lack of compliance consideration to AS2890.2 is poor traffic engineering practice. The relevant extract from Council’s waste guide is provided below.

For a residential flat building, waste will be collected by a small waste truck. The headroom minimum required is 2.6 metres and the area must be clear of any overhead obstructions such as air conditioning ducts and sprinklers. This clearance is an absolute minimum and designers would be well advised to adopt a greater margin for greater flexibility.

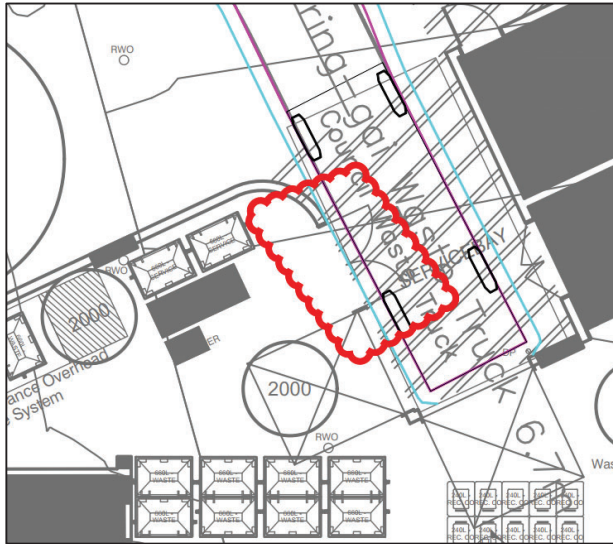
The waste truck must be able to turn within the site in order to enter and leave in a forward direction and the maximum ramp grade is 20%.

5.3 Loading and Servicing Circulation

The TIA should have checked the SRV compliance against AS2890.2. The TIA incorrectly assess the proposal of 25% maximum grade as compliant with the requirement of 20% maximum grade for the Council waste vehicle. The ramp will need to be modified to prevent

a loaded waste vehicle having insufficient traction or power and being trapped inside the basement.

The TIA shows door access to the waste room only having the doors opening into the service bay which then does not have a clear width of 3.5m. Confirmation would be required to ensure the doors also swing inwards as otherwise this is not compliant and would make carting of bins more difficult for collection staff.



5.4 Swept Path Analysis

The TIA has swept paths of the 6.7m waste vehicle turning right from the proposed driveway location. Those swept paths extend into the kerbside parking on the northern side of Buckingham Road which is not compliant. Buckingham Road is narrow, approximately 7m wide along the frontage of the proposed driveway location. With kerbside parking of 2.1m width this would permit at 4.9m width for two-way passing which is possible at very low speeds for B99 vehicles (private cars). Given the waste vehicle is designed under AS2890.2, the minimum width on a straight road for an SRV is 6.2m. It is likely then that passing vehicles will not be able to meet minimum clearances between vehicles and side swipe type collisions will be common.

6 Traffic Assessment

6.1 Existing Traffic Generation

No comment.

6.2 Development Traffic Generation

The TIA utilises rates of traffic generation based on High Density with High Public Transport Accessibility, from the TfNSW Guide to Transport Impact Assessment 2024. Comparison of the Journey to Work data for Killara (2016 and 2021) shows that public transport use is high, especially by train, aligning closely for the car usage rate of “Sub Metropolitan – Low PTAL”, though within the range of the High PTAL rate as well. The site is also within 800m of a train station. As such either of the two traffic generation rates could be used, though if this firm were to complete the same assessment then the same resulting trip rate would likely be used.

METHOD OF TRAVEL SUBURB LEVEL (SAL) KILLARA (NSW)	Mode	2016	NSW avg	2021	NSW avg
	Drove (car, driver)	44.6% (2,140)	58.8%	25.3% (1,247)	43.6%
	Car passenger	2.9% (138)	4.3%	1.7% (85)	3.2%
	Train	31.8% (1,524)	11.3%	4.5% (222)	2.8%
	Bus	0.7% (35)	4.4%	0.3% (13)	1.1%
	Ferry	0% (0)	0.3%	0% (0)	0%
	Tram / Light rail	0.1% (6)	0.1%	0% (0)	0%
	Bicycle	0.6% (28)	0.7%	0.2% (9)	0.4%
	Walked only	1.9% (91)	3.9%	1% (48)	2.5%
	Worked from home	7.9% (379)	4.9%	54.7% (2,699)	31.1%
	Other method	1.6% (77)	2.4%	0.6% (29)	1.7%
	Did not go to work	7.9% (380)	8.7%	11.7% (576)	13.3%
	Total workers	4,794	3,346,919	4,936	7,333,016

Source: ABS Census 2016 (SSC) & 2021 (SAL) — MTW15P (15 travel modes), place of usual residence (abs.gov.au) - 2021 employed: 4,936 - 2016 employed: 4,794

Consideration of movements at the driveway according to the higher of the two rates would be appropriately conservative, even if network trips were generally modelled at the lower of the two rates. This would imply design at the driveway based on $0.19P + 1.79$ or $0.19 \times 129 + 1.79 = 26$ or 75% higher than the TIA. For any capacity or safety analysis at the driveway, such as if a one-way system with traffic lights were to be considered, then this generation rate would be appropriate.

6.3 Overall Traffic Generation

No comment.

6.4 Development Trip Distribution

The TIA uses 2021 Journey to Work data but should consider using 2016 data which was not during Covid-19 effected periods. In the 2021 data some 67% of people worked from home which is not reliable data on which to rely for vehicle movements in the general case. Examination of the 2016 produces not dissimilar results to that in the TIA regarding trip distribution however.

No comment.

Comments generally as per previous comments regarding use of SIDRA and the outputs, without referring to the interpretation used within the body of the report. Likewise, that Queue Lengths and Average Delay (Level of Service) are not shown for the worst movements.

The TIA is not clear about which times are being modelled in the SIDRA modelling. While it is assumed that 16:30pm to 15:30pm is intended to be either 16:30 to 17:30 or 4:30pm to 5:30pm, it is not certain.

 Site: [1 (2)] Buckingham Road | Pacific Highway (2025-Existing Development - PM Peak)

Output produced by SIDRA INTERSECTION Version: 10.0.3.210

PM Peak 16:30pm-15:30pm
Site Category: Base Year
Stop (Two-Way)

Site Scenario: 1 | Local Volumes

6.7 Cumulative Impact Assessment

No comment.

7 Preliminary Construction Traffic Management Plan

No comment.

7.1 *Scope of Works*

No comment.

7.2 *Overview of Construction Works*

7.2.1 Construction Program

The TIA uses estimated trip numbers which seems unrealistically low. It does not separate heavy vehicle trips from worker trips nor does it examine peak periods vs average generation. It is unlikely that during the excavation period for example that a total of 3 vehicles (3 in + 3 out = 6 trips) will arrive at the site for the whole day. While this is a preliminary CTMP, it should nonetheless be reasonable in its assumptions.

7.2.2 Construction Hours

No comment.

7.2.3 Construction Vehicle Route

No comment.

7.2.4 Emergency Vehicle Access

No comment.

7.2.5 Materials Handling

No comment.

7.2.6 Traffic Guidance Scheme

No comment.

7.2.7 Construction Worker Parking

The TIA does not estimate a reasonable parking demand that might be expected. This is poor traffic engineering practice. While there does not appear to be inadequate on-street parking supply to accommodate the likely demand, it is good practice to make an estimation against which an assessment could be conducted.

7.2.8 Site Induction

No comment.

7.3 *Construction Impact*

7.3.1 Public Notification & Communication

No comment.

7.3.2 Road Serviceability

No comment.

7.3.3 Impact on Public Transport Services

No comment.

7.3.4 Impact on Emergency Vehicle Access

No comment.

7.3.5 Impact on Road Network

No comment.

7.3.6 Impact on Pedestrians

No comment.

8 Preliminary Green Travel Plan

8.1 *Objectives of GTP*

No comment.

8.2 *Proposed Target Mode Share*

The TIA uses 2021 mode share data which is unreliable, noting that 67% of workers were working from home during the census period. 2016 data should be used. If the correct data were used it would be seen that Killara already enjoys a high degree of public transport use, predominantly by train. Indeed the 2016 data shows that existing public transport use was above 30%, far exceeding the proposed targets of the TIA.

8.3 *Indicative Measure*

No comment.

8.4 *8.4 Monitoring and Evaluation*

No comment.

9 TfNSW Consultation

No comment.

10 Recommendation and Mitigation Measures

10.1 Conclusion

The TIA states that the development has been “...*assessed against the relevant AS2890 design requirements*”. This is not true and the proposed development has compliance issues which would result in significant adverse road safety. The proposal in its current form is unsuitable and is likely to result in collisions for exiting vehicles, cyclists and pedestrians.

The TIA does not mention nor consider the requirements of AS2890.2 for spatial or safety requirements and is significantly deficient for sight distance as well as ramp grades exceeding the maximum permitted grade.

10.2 Mitigation Measures

Refer to previous comments on sight distance, ramp grades, service bay obstructions, pedestrian access, road safety and other similar comments.

11 Additional Documents

11.1 DCP Part 14N

The DCP provides a desired character and provision for pedestrians and vehicles. The DCP recommendations are reproduced below. The eastern handle appears to be some 4.5m width. This width could readily accommodate the width of the Council Waste Vehicle which is 2.04m wide. Adding 0.3m clearance either side, plus 0.3m kerb width would be $1.2m + 2.04m = 3.24m$ width wall-to-wall. An SRV in AS2890.2 for comparison requires 4.1m width wall-to-wall or 3.6m wall-to-wall for a B99 in AS2890.1. MTE supposes that subject to detailed civil design that a functional width is available for vehicle access via the eastern access handle.



What size is the small waste collection vehicle?

- overall length is 6.30 metres
- turning circle is 13.8 metres
- maximum pay load is 2.40 tons
- overall height is 2.25 metres
- overall width is 2.04 metres
- rear axle load is 5.64 tons.

The DCP recommends that the eastern access handle be an entry, however MTE does not support this outcome as that would leave the western access as the exit which is unsuitable. The western access does not present the same safety issues if provided as an entryway. MTE recommends that many of the road safety issues observed in the proposal could be mitigated by shifting the exit activity to the eastern handle.

The DCP does not consider pedestrian access and safety adequately, with the location shown to be unsafe if no works are completed along the frontage to 12 and 10 Buckingham Road. It is recommended that works within the verge fronting 12 and 10 Buckingham Road be considered for the subject proposal to enhance pedestrian connectivity and safety.

11.2 Architectural Design Report (ADR)

The ADR states that due to the “...*insufficient width and excessive steepness of the natural terrain, this handle is deemed not suitable for compliant vehicle access.*” While the width is addressed elsewhere, a compliant ramp could have the following characteristics starting at the boundary line:

- 6m at 5%
- 2m at 17.5%
- 36.6m at 20%
- 2m at 12.5%

This design would correspond to the 46.6m long access handle and achieve some 8.2m RL difference from RL113.2 to RL105. It is uncertain whether a basement at that level would be suitable, though a one-way system would readily be able to ramp appropriately between the two access handles. Adding an additional 16.2m length after the access handle widens, would permit an additional 4.05m RL change down to RL100.95 which is the proposed FFL of basement 1.

