Further Solar Analysis in support of the Planning Proposal for 185 Military Road

29 October 2024 / REV C



1. Summary

AJC Architects have prepared the following solar analysis study to respond to the Sydney North Regional Planning Panel's 14 May 2024 evaluation of the Planning Proposal for 185 Military Road ('185MR PP').

The analysis finds that the 185MR PP does not result in any overshadowing of any north facing windows in any residential properties in Yeo Street. The shadow of the 185MR PP is largely contained within that of the Gateway approval for the neighbouring site's Woolworths Planning Proposal for 1-7 Rangers Road and 50 Yeo Street ('WOW PP'), and so does not affect any residential windows on Yeo Street.

This short study responds to the following instruction from the Regional Planning Panel:

"the maximum Height of Building (HOB) is to be set to 44m including all roof structures, subject to further detailed modelling to ensure no further overshadowing of any north facing windows in any residential properties in Yeo Street at mid winter above and beyond that projected by Council's rescinded Military Road Corridor Planning Study and the Gateway approval for the neighbouring site at 1-7 Rangers Road and 50 Yeo Street as to be compliant with the Apartment Design Guide. Any necessary amendments to the proposal to achieve these requirements should not result in a reduction of the proposed ground level setbacks to Military Road and splayed setback area to the proposed public plaza"

Responding to this feedback, AJC reviewed the 185MR PP against the impact of the Woolworths PP to determine what, if any, additional overshadowing impact on the residential properties on Yeo Street may occur due to the current proposal.

Extensive overshadowing analysis was undertaken by the proponent behind the WOW PP, who determined that the indicative scheme included in the exhibited rezoning would result in 80.5% of all north-facing windows on 53-59 Yeo Street retaining more than 2 hours of sun between 9am and 3pm at mid winter:

- 3 hours of solar access to 4 out of 6 north-facing windows of the 3-storey unit at 59 Yeo St.
- 3 hours of solar access to 10 out of 18 north-facing windows of the 3-storey unit at 57 Yeo St.
- 3 hours of solar access to 8 out of 8 north-facing windows of the 2-storey single residence at 55 Yeo St.
- 3 hours of solar access to 7 out of 7 north-facing windows of the 2-storey single residence at 53 Yeo St.

This represents less overshadowing than that projected by Council's rescinded Military Road Corridor Planning Study, and so is used as the comparison for the current project.

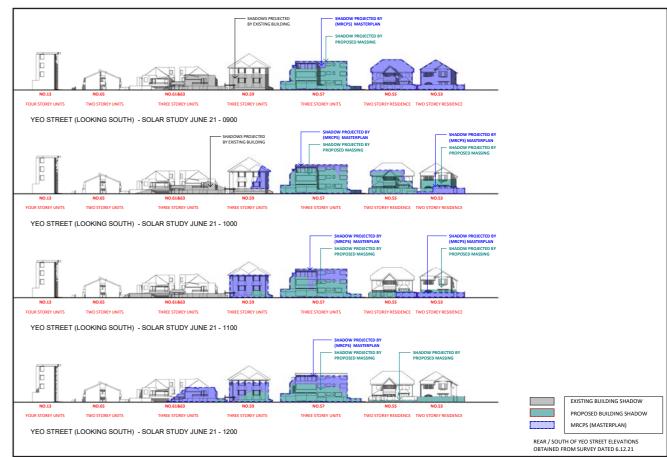
Analysis of the 185MR PP using the same context model shows that no north facing residential windows on 53-59 Yeo Street are further impacted by the proposal, and so there will be no change to the above metrics.

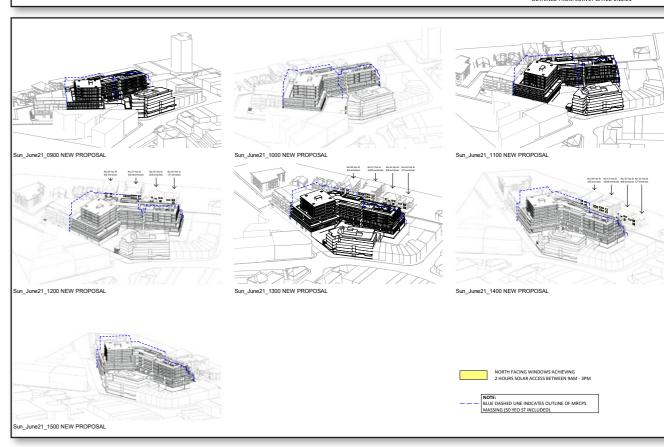
Additional overshadowing is seen at 3pm on a residential building at 65 Yeo Street, however this shadow only affects the blank wall parapet and roof of that building. Additional overshadowing of the Yeo Street frontage of 153 Wycombe Road at 9am (building elevation and garage) and 10am (garage only), however this is a non-residential building.

Consequently, this report concludes that the 185 PP fully satisfies the Regional Planning Panel's instruction that "no further overshadowing [shall occur] of any north facing windows in any residential properties in Yeo Street at mid winter above and beyond that project by Council's rescinded Military Road Corridor Planning Study and[/or] the Gateway approval for the neighbouring site".

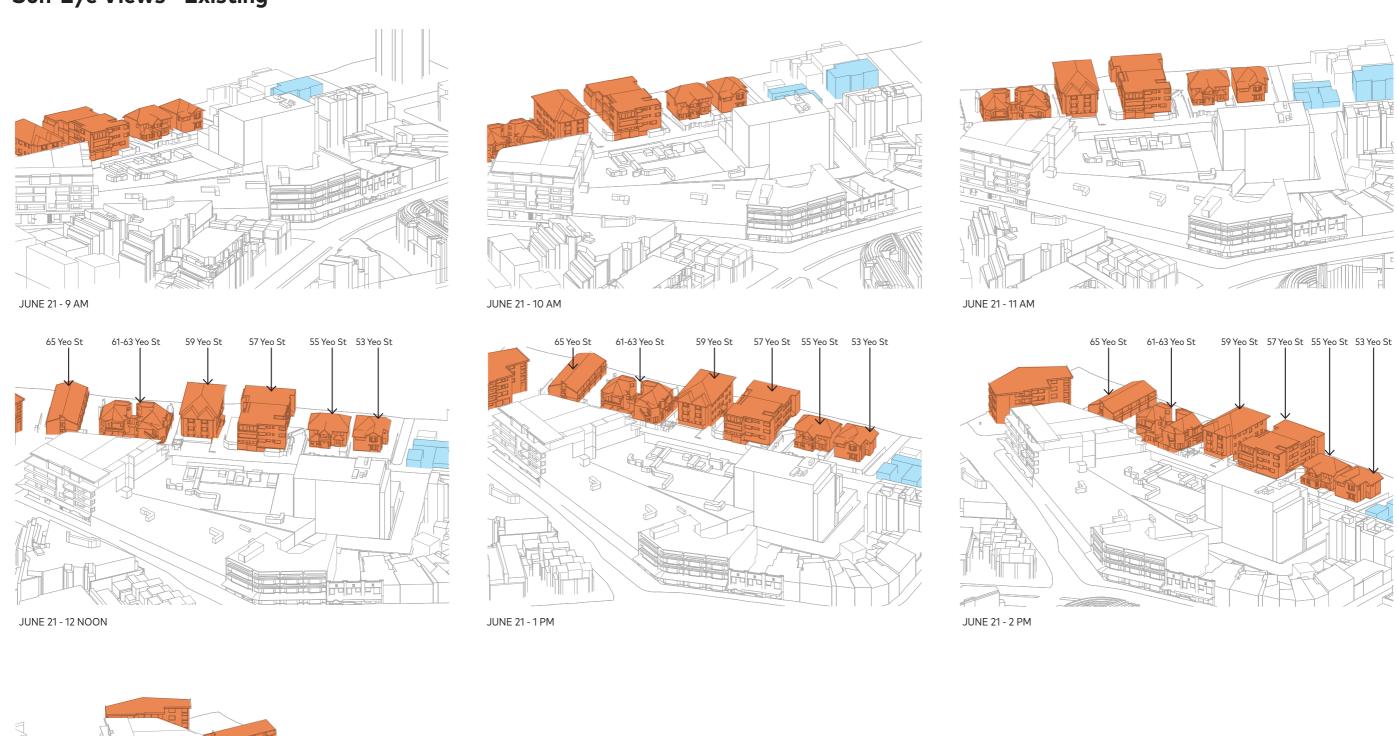
No amendments to the proposal are necessary to achieve these requirements.

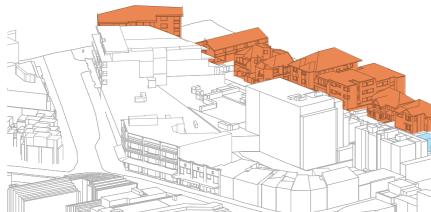
ANALYSIS UNDERTAKEN IN EXHIBITED WOOLWORTHS PLANNING PROPOSAL:





2. Sun-Eye Views - Existing



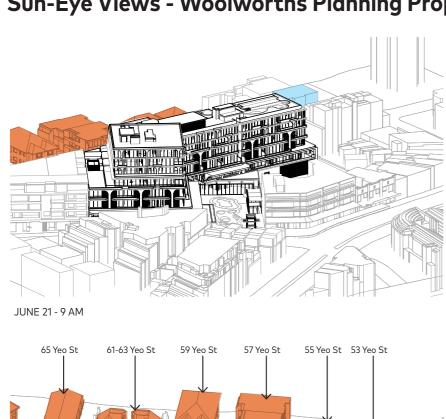


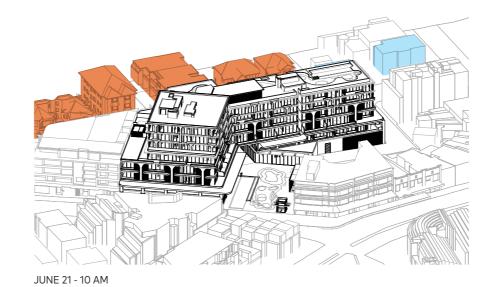
JUNE 21 - 3 PM

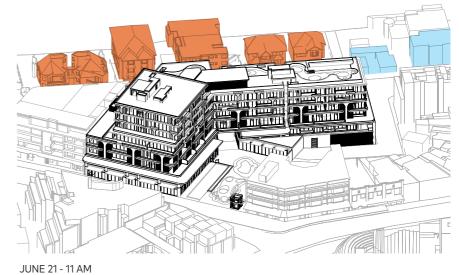
Residential buildings facing Yeo St.

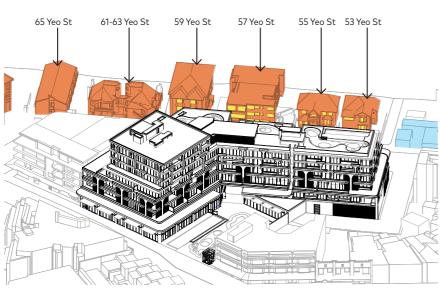
Non-residential buildings facing Yeo St.

Sun-Eye Views - Woolworths Planning Proposal Only

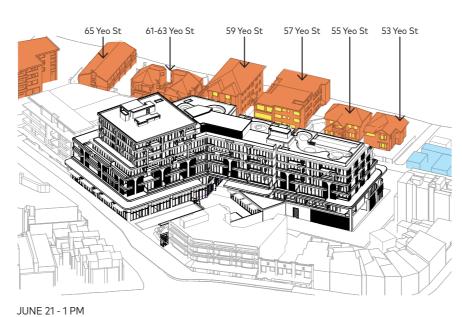


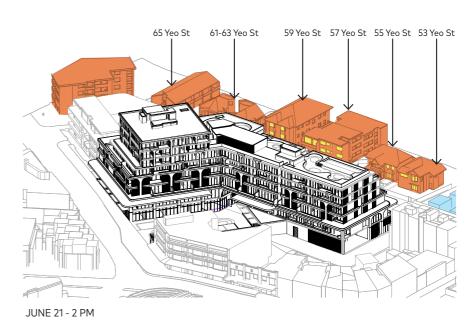






JUNE 21 - 12 NOON



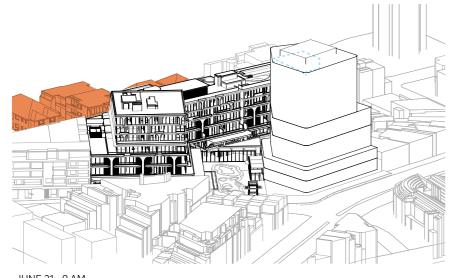




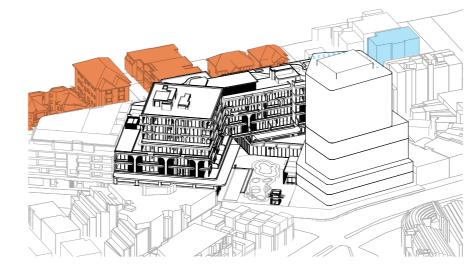
JUNE 21 - 3 PM

North facing windows achieving 2 hours solar access between 9AM - 3PM. Residential buildings facing Yeo St. Non-residential buildings facing Yeo St.

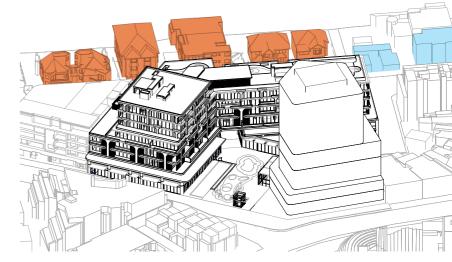
4. Sun-Eye Views - 185 Military Road & Woolworths Planning Proposals



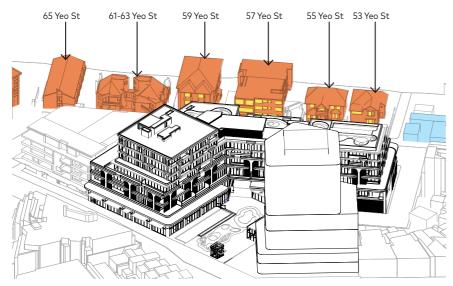




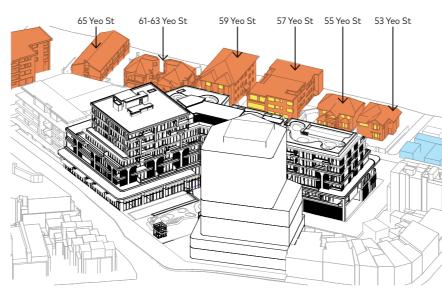
JUNE 21 - 10 AM



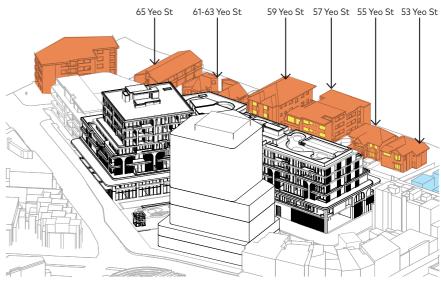
JUNE 21 - 11 AM



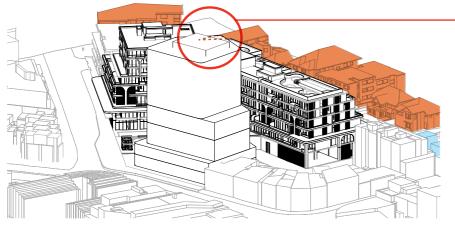
JUNE 21 - 12 NOON



JUNE 21 - 1 PM



JUNE 21 - 2 PM



JUNE 21 - 3 PM

Minor additional overshadowing of parapet and roof refer to next page

North facing windows achieving 2 hours solar access between 9AM - 3PM.

Residential buildings facing Yeo St.

Non-residential buildings facing Yeo St.

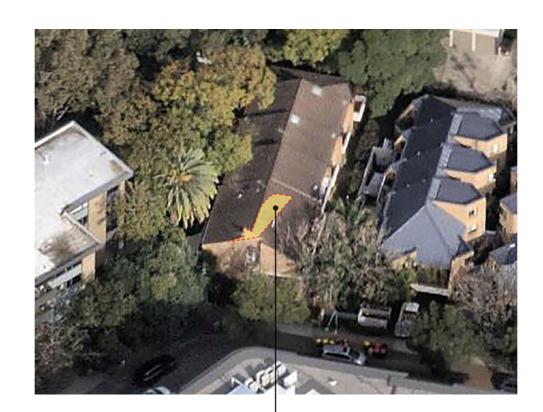
5. Further Study of 3pm Impact on 65 Yeo Street



The diagrams and photos on this page illustrate the minimal additional overshadowing on 65 Yeo Street at 3pm at Mid-Winter by the Military Rd PP.

65 Yeo is a block of 5, 2-storey Townhouses, with dining and living on the ground floor and bedrooms on the upper floor.

The extent of the approved overshadowing by the WOW PP is shown in light brown, and the additional impact by 185 Military Rd is shown in yellow. In the existing condition diagram, the aerial and street view photos, it can be seen that any additional overshadowing will only affect the blank parapet wall and the roof of the affected building. The overshadowing is therefore considered negligible, with no additional overshadowing impact caused by the planning proposal for 185 Military Road.





Approximate extent of expected additional overshadowing of 65 Yeo St, at 3pm