

SOLAR ANALYSIS REPORT AUGUST 2018

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Title: St Aloysius' College Solar Analysis

Prepared for: St Aloysius' College

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CONTENTS

Introduction and Findings	1
Proposed Shadows	2
Possible Shadows Impact Analysis	4



INTRODUCTION AND FINDINGS

RobertsDay has been engaged by St Aloysius' College to carry out Solar Analysis for the Upper Pitt Street component of the St Aloysius' College Refurbishment project, Plan Magis.

The following shadow diagrams analyse the shadow impacts caused by the proposed development on Upper Pitt Street. In general, the built form envelope forms a setback, allowing sunlight to reach adjoining properties.

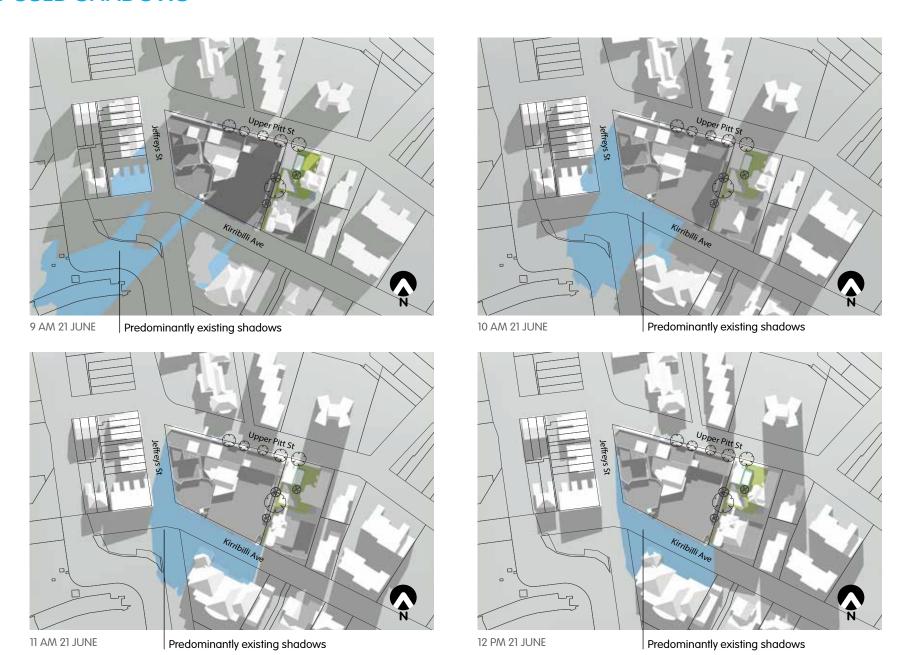
The diagrams on page 2 and 3 highlight the ground floor plane that is impacted by the whole property including the proposed additional elements in BLUE. These diagrams show changes in shadows at hour intervals on the winter solstice (June 21). Shadows are predominantly existing shadows in the morning and in the afternoon. The additional elements do not adversely impact the adjoining buildings along Kirribilli Avenue. The shadow diagrams illustrate that there is little impact on existing private and public open space and it is balanced throughout the day.

On page 4-6, the diagrams compare changes in shadows between the existing situation and the proposal in residential building on 208/88 Kirribilli Avenue NSW 2061. Although there is some overshadowing on upper windows between the hours of 1pm and 3pm, these windows still receive minimum 2 hours of direct sunlight on the winter solstice.

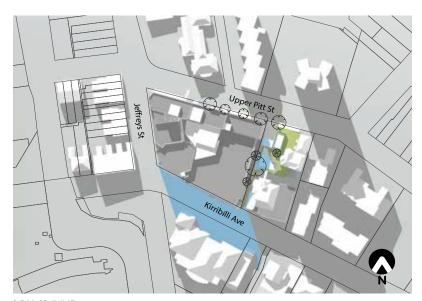
Overall, the solar analysis of the proposal reveals that shadows are predominantly existing in the morning. The afternoon overshadowing caused by proposed additional elements is also little, and the affected windows in the residential building on 208/88 Kirribilli Avenue remain fully compliant with the Apartment Design Guide (ADG) direct sunlight requirement.



PROPOSED SHADOWS



PROPOSED SHADOWS



1 PM 21 JUNE



3 PM 21 JUNE



2 PM 21 JUNE





POSSIBLE SHADOWS IMPACT ANALYSIS



Studied building (208/88 Kirribilli Avenue NSW 2061)

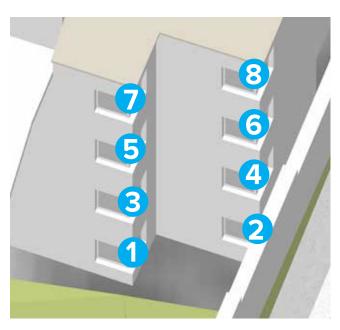


Table of windows with possible impact:

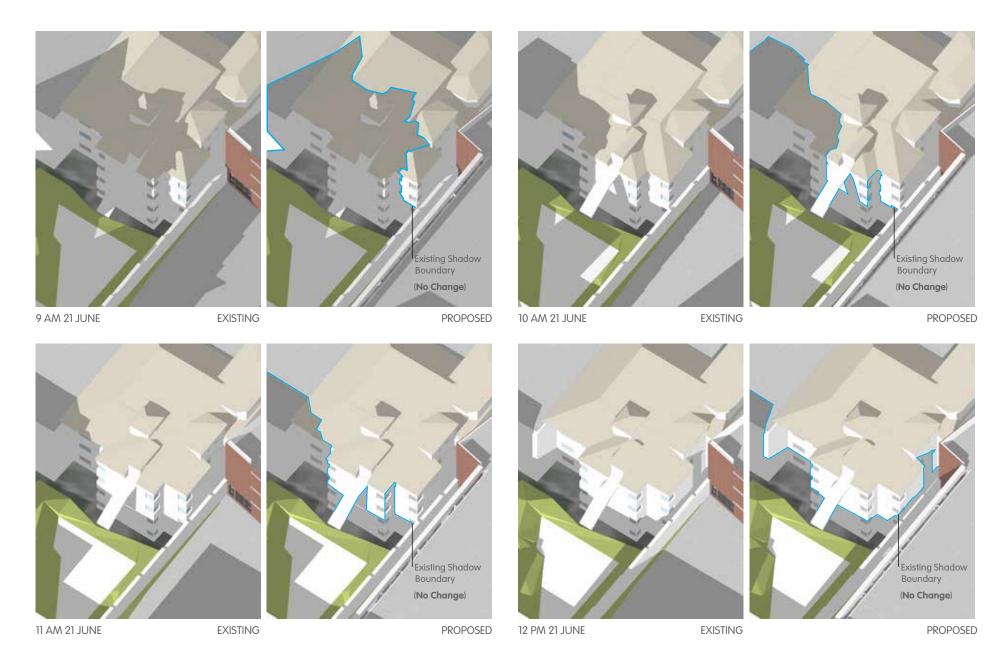
Window Nº	Existing direct sunlight (hr) 9am-3pm	Proposed direct sunlight (hr) 9am-3pm	Lost hours
1	Oh	Oh	N/A
2	Oh	Oh	N/A
3	Oh	Oh	N/A
4	1h (10:30am-11:30am)	1h (10:30am-11:30am)	N/A
5	4h (9:30am-1:30pm)	3h (9:30am-12:30pm)	1h
6	3h (9am-12pm)	3h (9am-12pm)	N/A
7	5.5h (9:30am-3pm)	3.5h (9:30am-1pm)	2h
8	5h (9am-2pm)	3h (9am-12pm)	2h

Summary of Findings

The proposal will not affect the existing situation for windows 1, 2, 3, 4 and 6. For windows 5, 7 and 8, the proposed amount of direct sunlight remains fully compliant with the Apartment Design Guide (ADG) which requires minimum 2 hours direct sunlight between 9am and 3pm at mid-winter.

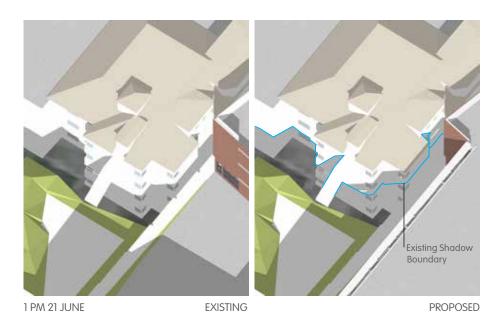


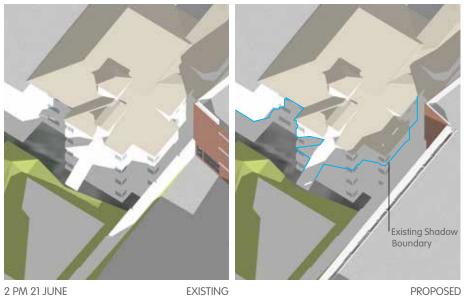
POSSIBLE SHADOWS IMPACT ANALYSIS

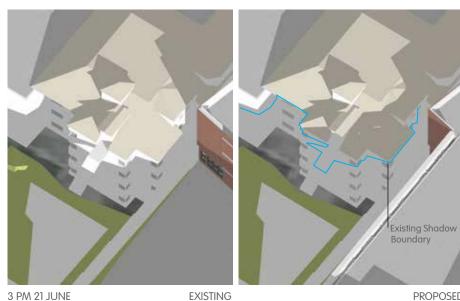




POSSIBLE SHADOWS IMPACT ANALYSIS







PROPOSED



