MEMORANDUM

DATE:	May 25, 2022	**RWDI REFERENCE #:** 1904405
TO:	Simon Joseph	**Email:** Simon.Joseph@jhg.com.au
FROM:	Ryan Danks	**Email:** ryan.danks@rwdi.com
	Michael Pieterse	michael.pieterse@rwdi.com
RE:	**Overshadowing – Southern Precinct Update** **Waterloo Metro Quarter**	

Dear Simon,

RWDI understands changes have been proposed to the height of plant areas located on the roof of Waterloo Metro Quarter (WMQ) Building 3. We have been requested to assess whether the current design inclusive of proposed changes is compliant with the SSDA submission. The criteria for the site were previously set out in Appendix LL Overshadowing Analysis submitted as part of the EIS for SSDA 10437.

For reference the shadow criteria are:

1. *Development does not result in any additional overshadowing of Alexandria Park after 10am on 21 June*
2. *No more than 30% of Alexandria Park excluding the oval…is overshadowed by the development as measured at any time after 9:00 am on 21 June.*

With respect to criterion 1, the modifications at the roof top of Building 3 do not penetrate the 10 am solar plane, thus the development remains in compliance with this portion of the regulations.

With respect to criterion 2, the shadowed park area was recomputed for the 9 AM (i.e., the most onerous) test time using the same methodology as previous RWDI analyses. The analysis found that there is no increase in the overshadowing impact due to the changes in the roof layout since submission of Appendix LL of the EIS for SSDA 10437, and criterion 2 is still being achieved.

Therefore, the proposed development is predicted to be compliant with both criteria for Alexandria Park and consistent with the previous analysis.

Do not hesitate to contact us if there are any further questions regarding this study.

GENERAL STATEMENT OF LIMITATIONS

This memorandum was prepared by RWDI Australia Pty Ltd ("RWDI") for Mirvac & John Holland Group ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("Project"). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared.

This report has endeavored to provide a robust and suitably conservative analysis of the potential effects of reflected sunlight, contextualized based on current industry and academic research, and common best practices. Regulation and enforcement of performance requirements is the responsibility of the relevant regional regulatory authority.

This analysis assumes reasonable and responsible behavior on the part of people in the vicinity of the project. A reasonable and responsible person would not purposely look towards a bright reflection, purposely prolong their exposure to reflected light or heat, or otherwise intentionally try to cause discomfort/harm to themselves or others and/or damage to property.

Because the contents of this report may not reflect the final design of the Project or subsequent changes made after the date of this report, RWDI recommends that it be retained by Client during the final stages of the project to verify that the results and recommendations provided in this report have been correctly interpreted in the final design of the Project.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilize the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and to understand the different factors which may impact the conclusions and recommendations provided.