

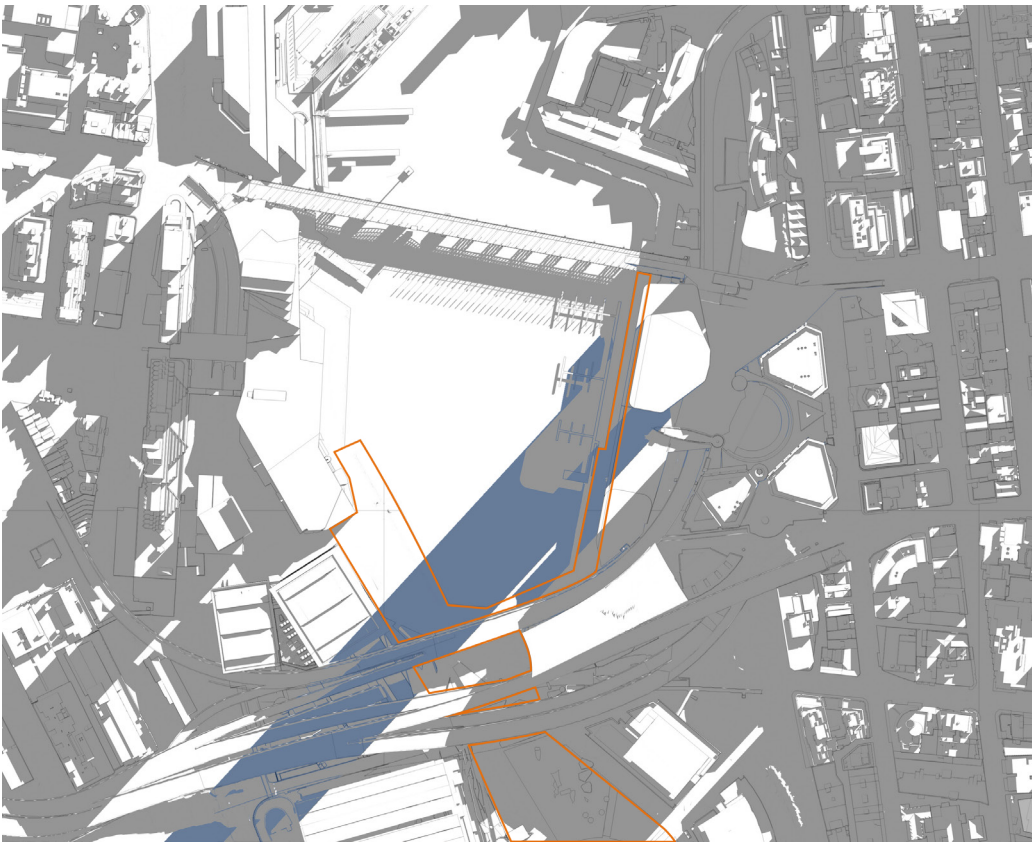
4.8 Solar Access

The following solar analysis has been conducted to assess the environmental impact of the proposed envelope through quantitative and qualitative methods. In summary there are no shadow impacts on current LEP controls identified. Further to this solar analysis has been conducted on the following areas as requested in SEARS.

Summary

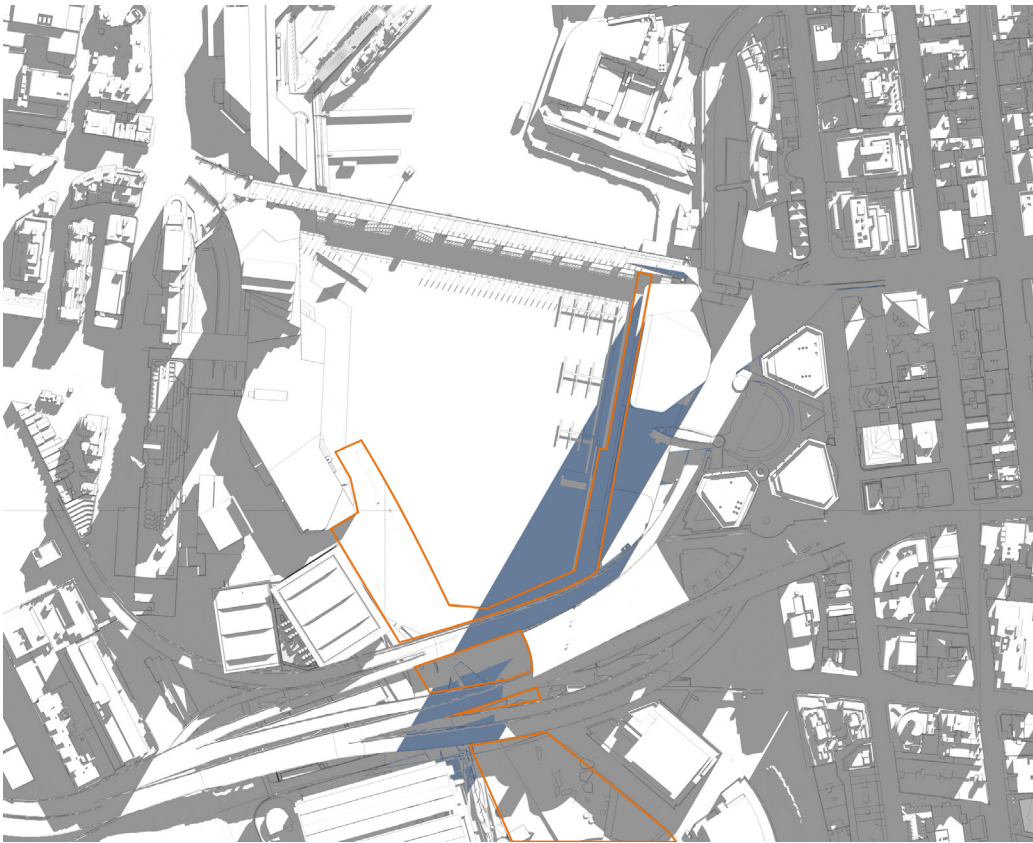
- Foreshore**  
No overshadowing after 11:20am
- Tumbalong Park**  
No overshadowing Mid winter 12-2pm, relative to Ribbon approval
- Sydney Square**  
No additional overshadowing
- Town Hall Square**  
No overshadowing Dec 21, June 21 and March 21  
3:45-4:10 (25min max) additional shadow August 31 / April 14
- Adjacent Residential Developments**  
Astoria and 230-238 Sussex Street  
No Mid winter additional overshadowing
- New public park**  
The new public park and terraced podium will provide significant additional locations to enjoy solar access in a range of settings. This is considered to provide a net benefit to the public domain across all considerations.

June 21



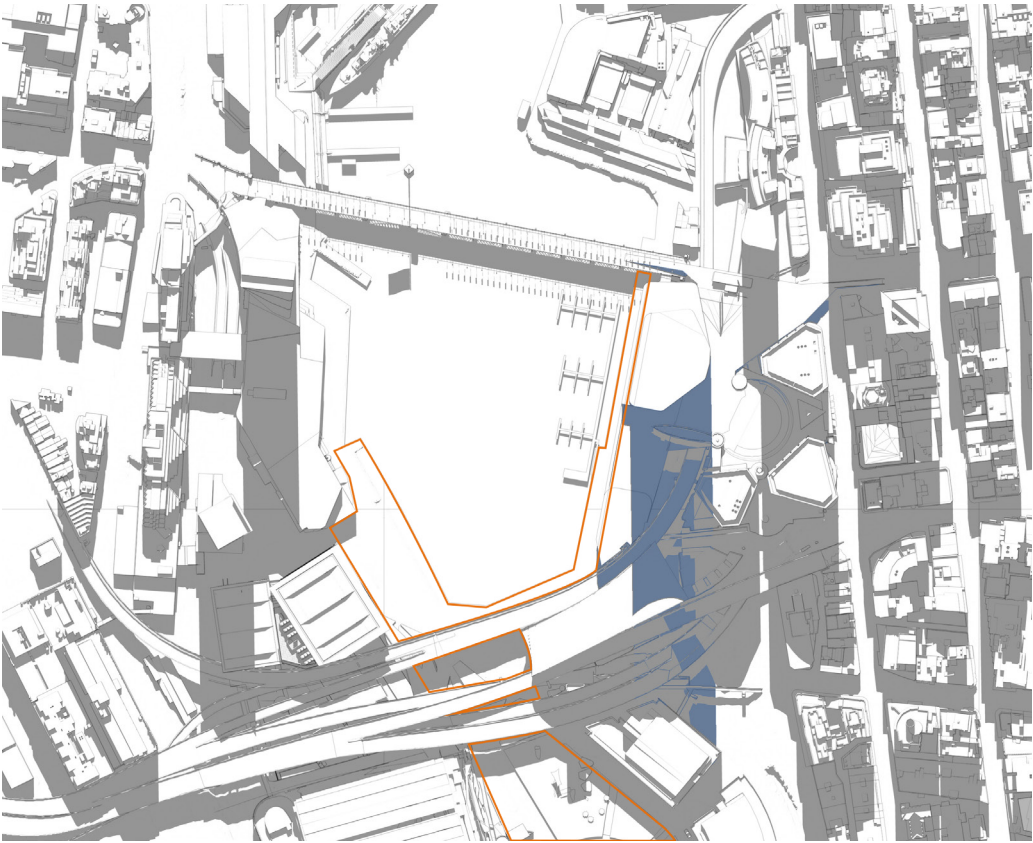
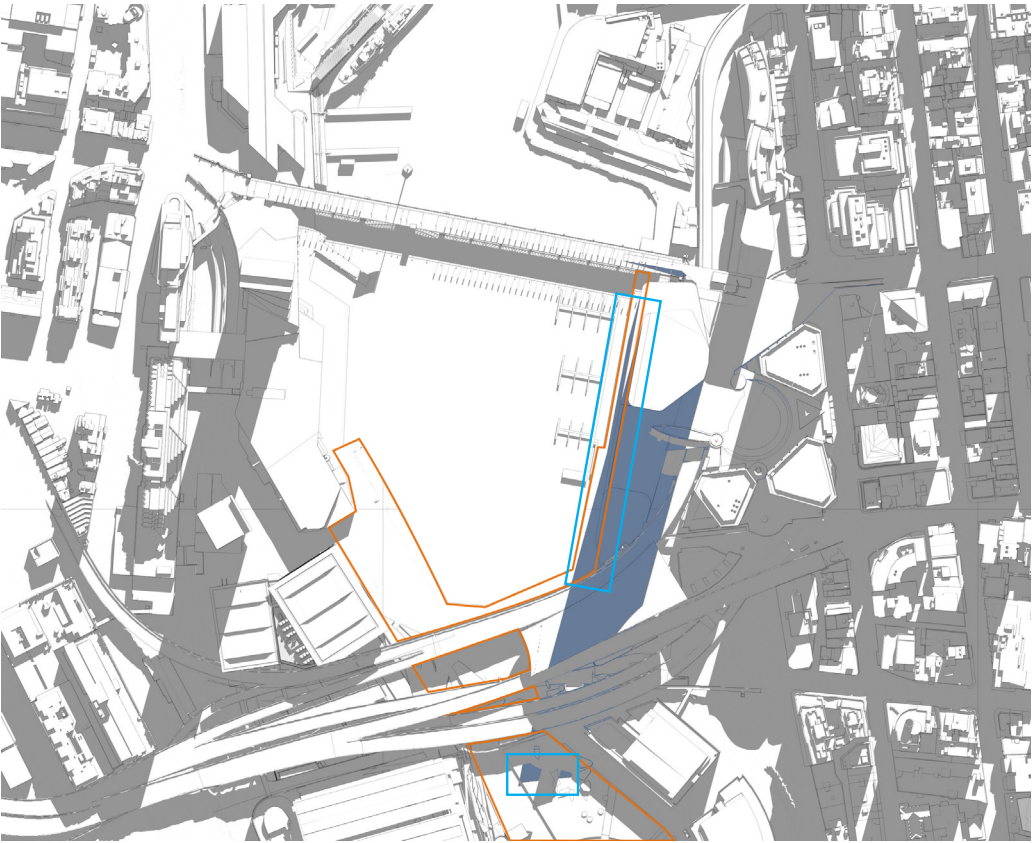
9am

10am



11am

12pm





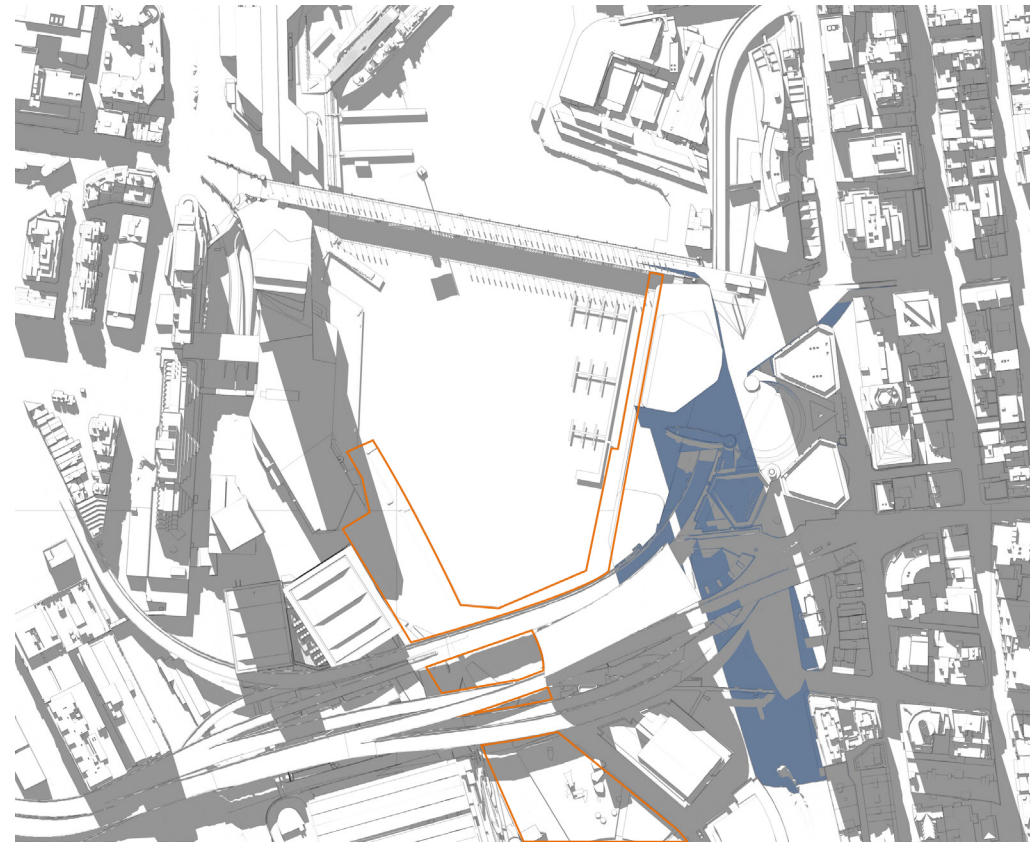
## SEARS

### Foreshore and Boulevard, Tumbalong Green, Foreshore walk

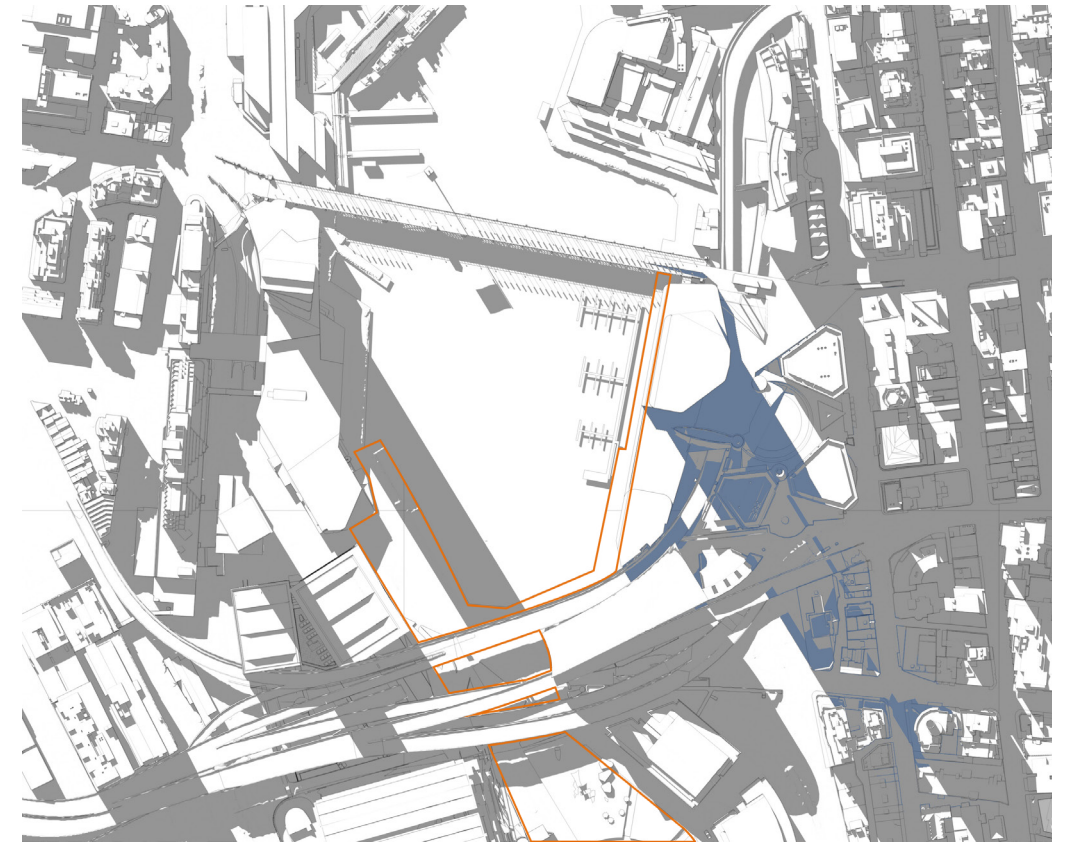
The following shadow plans for mid Winter (June 21) shows that there is no overshadowing from the proposed envelope to the Foreshore, Boulevard and Tumbalong Green at the traditional critical lunch period (12-2pm).

There is a limited area of overshadowing to Tumbalong Green either side of the tunnel stack identified at 11am.

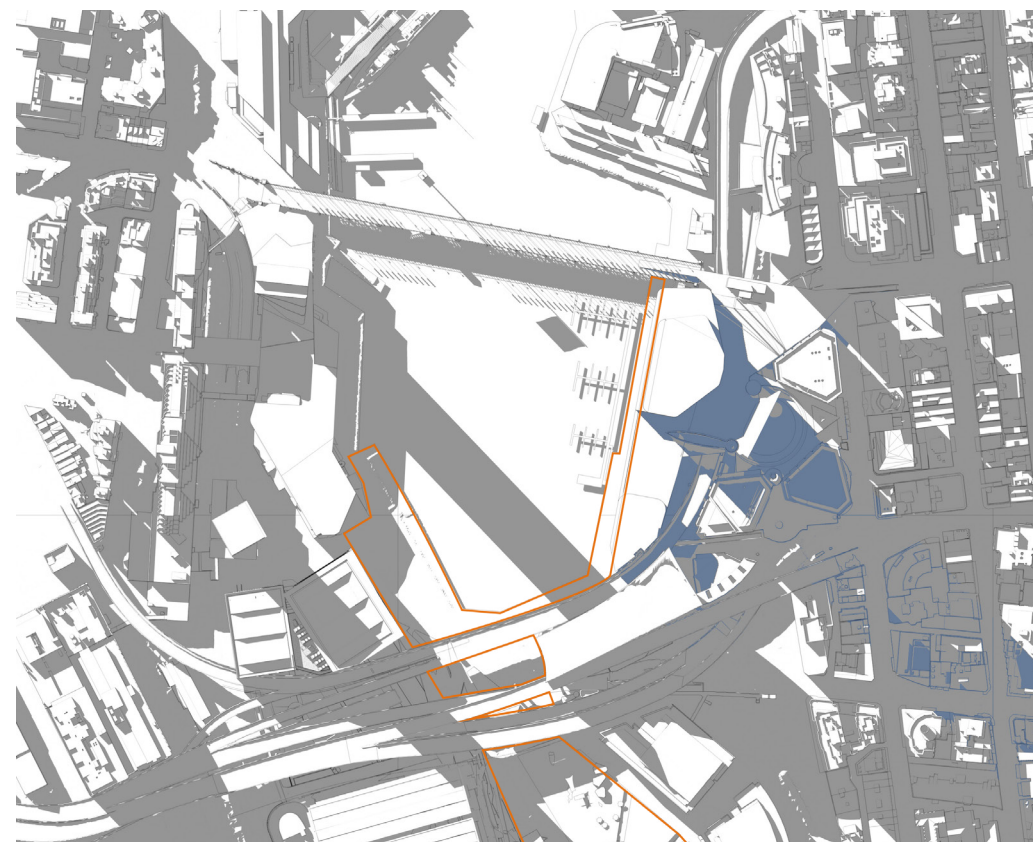
June 21



1pm



2pm



3pm

Note: Solar analysis based on proposed envelope. Final design massing within the envelope is anticipated to have improved solar access than analysed in this report.

Tumbalong Park

A Solar analysis has been conducted measuring the solar exposure over time and area over the Tumbalong Park, relative to existing development.

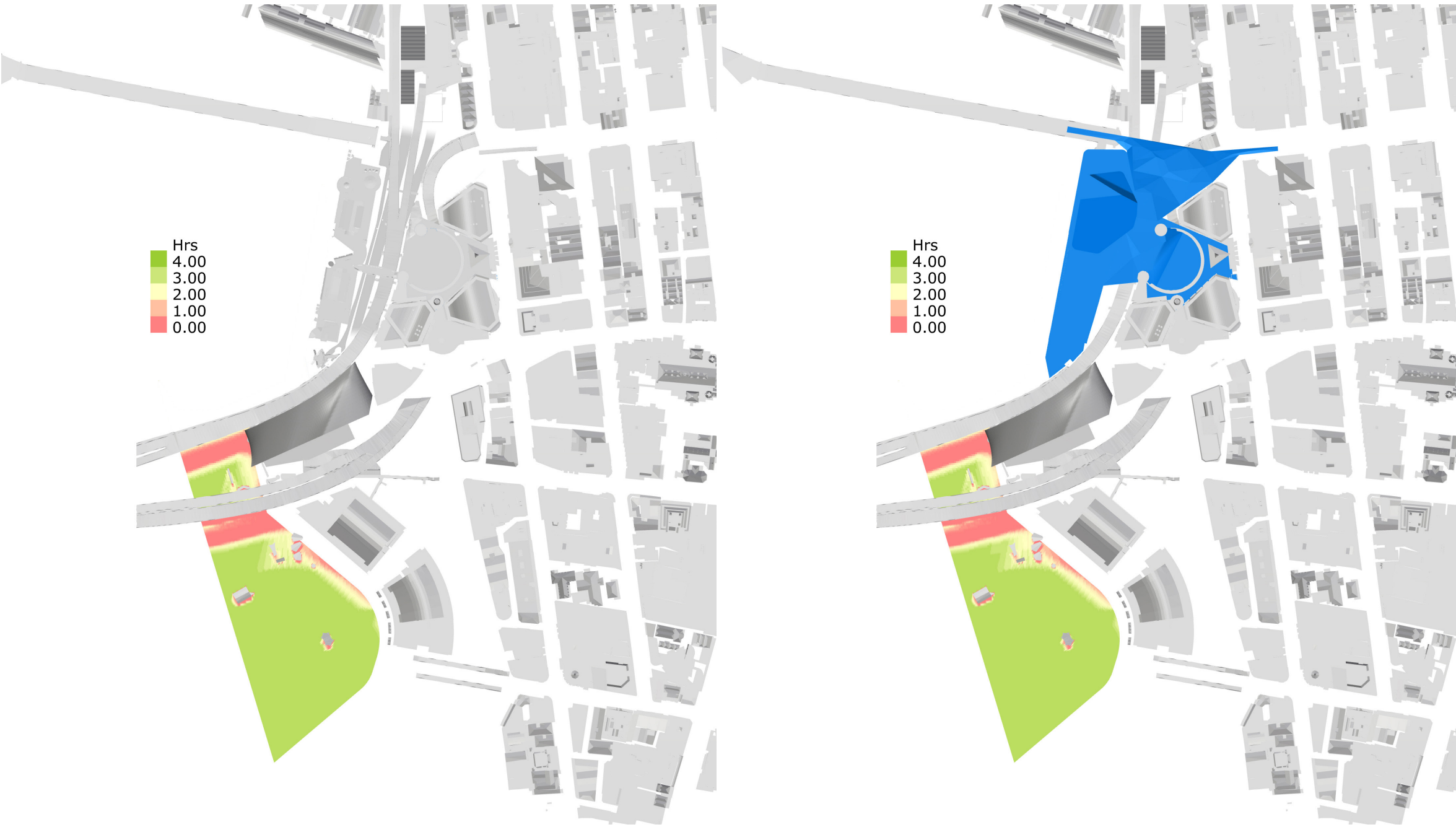
The following diagrams show that on June 21st there is negligible difference between the the proposed envelope and existing. A more comprehensive study has been undertaken between December 21st 9am-5pm and June 21 11am-3pm. This study shows that there is also negligible difference between the the proposed envelope and existing at Tumbalong Park.

Note: Solar analysis based on proposed envelope. Final design massing within the envelope is anticipated to have improved solar access than analysed in this report.

June 21st 11am-3pm

Existing

Proposed

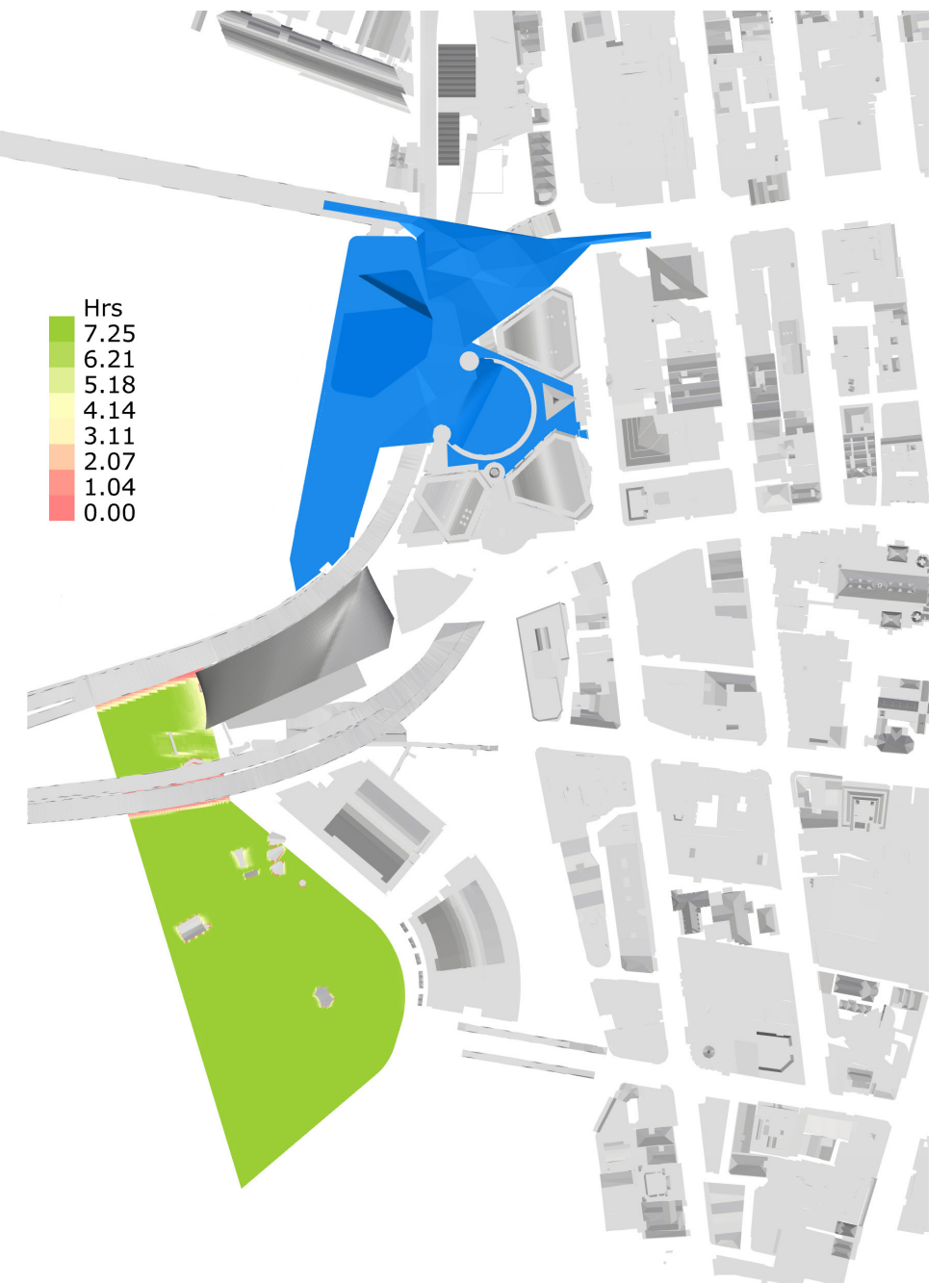
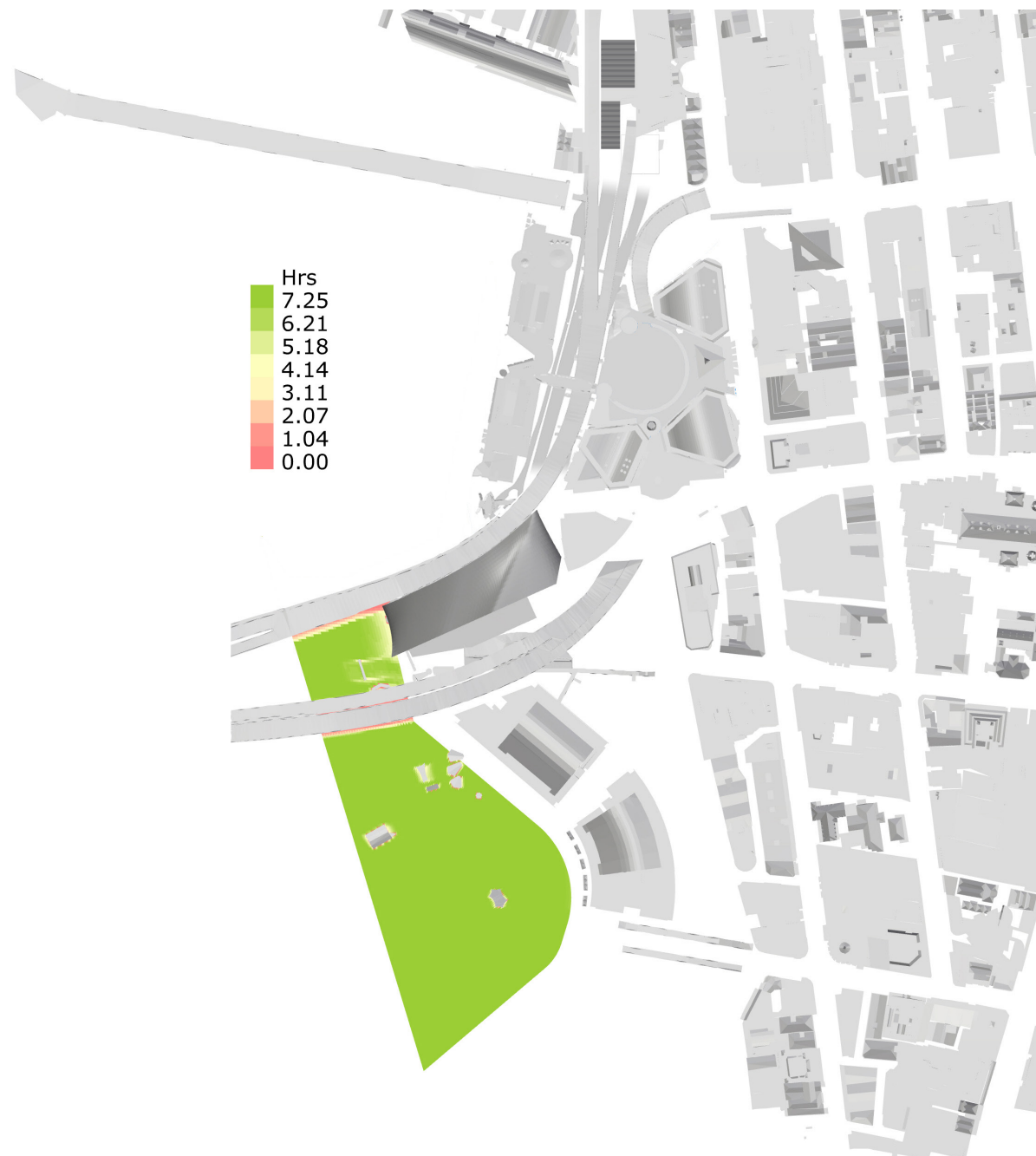




December 21st 9am-5pm

Existing

Proposed

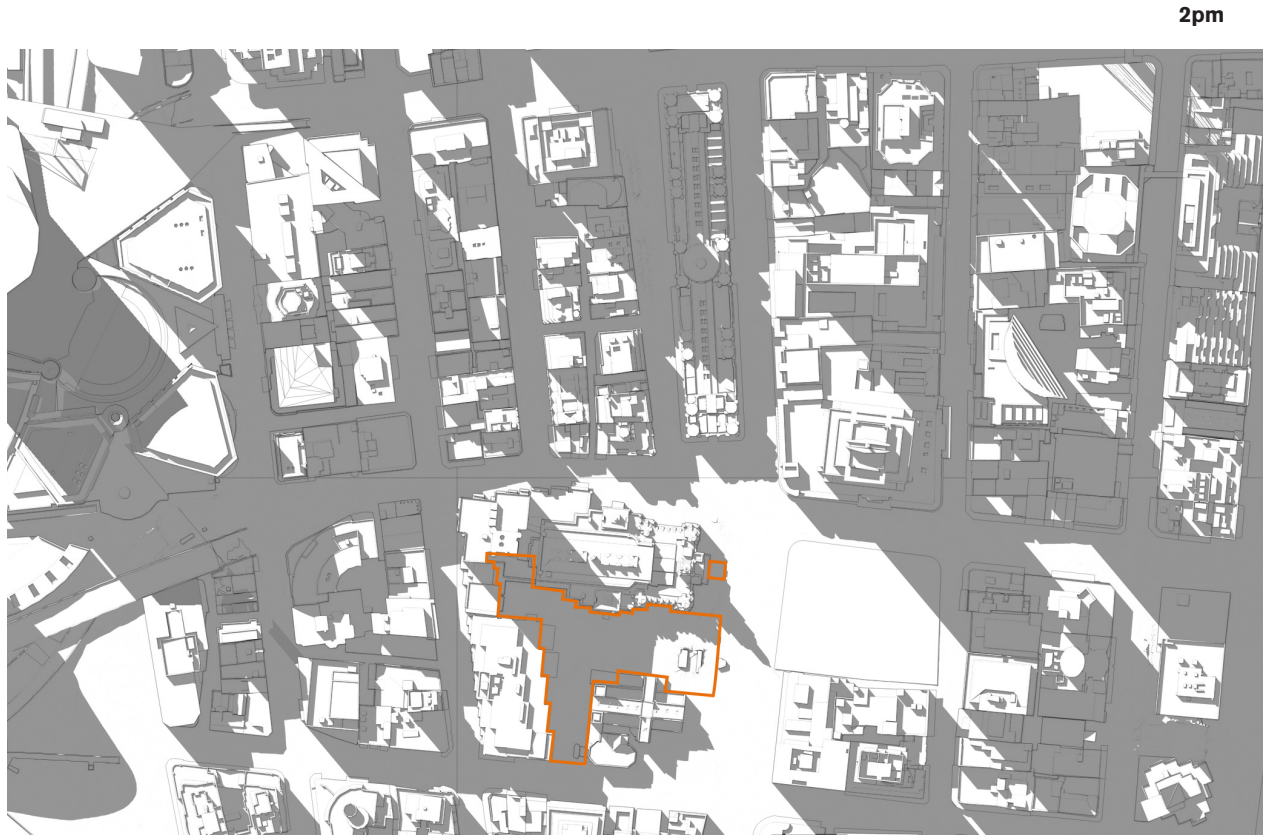


# Sydney LEP 2012 (Sydney Square and Town Hall Steps)

See following for shadow plans at hourly intervals for April 14th and August 31st (either side of the protected period). June 21st has also been reviewed. The shadow plans show that there is no additional overshadowing on in the CoS 2012 LEP protected spaces Sydney Square and Town Hall Steps from the proposed envelope.

Note: Solar analysis based on proposed envelope. Final design massing within the envelope is anticipated to have improved solar access than analysed in this report.

April 14th



August 31th

