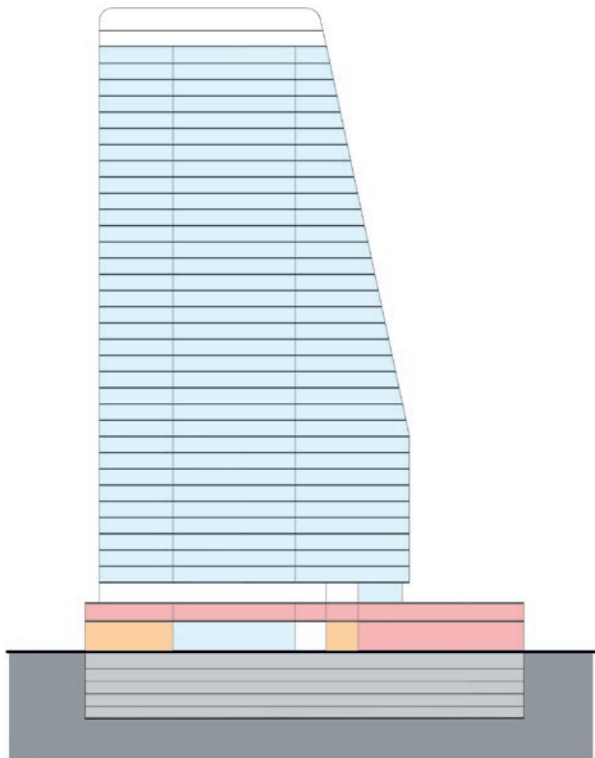




10.0 TOWER ANATOMY

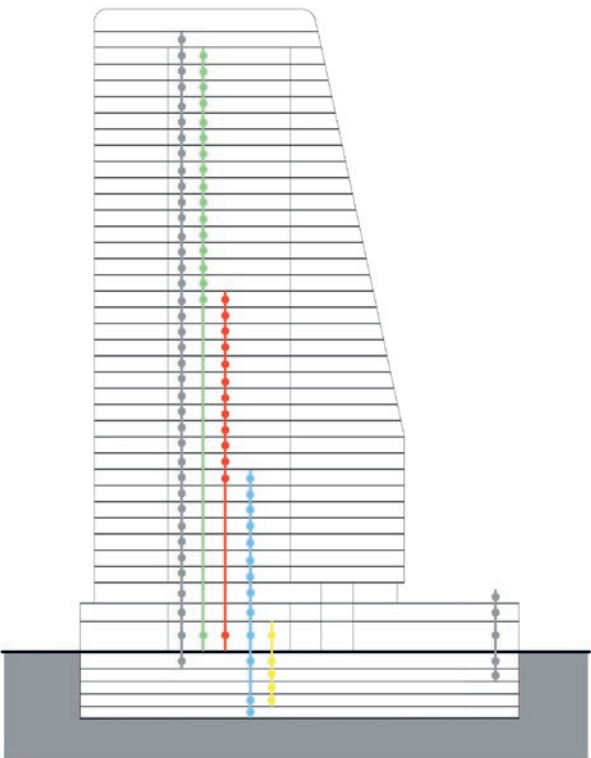
TOWER ANATOMY

The services, structure, and lifting strategies are integrated seamlessly with the architecture.



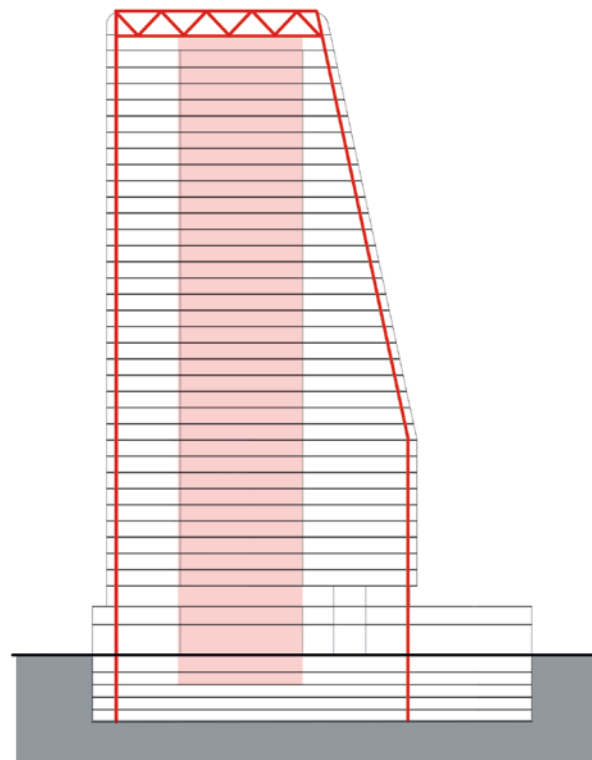
USES

/ The proposal is composed of a single mixed use tower comprising three podium retail / mixed use and landscaped terrace floors (Ground, Mezzanine, Level 01, Level 02) and 33 commercial floors (Levels 03-35)
/ Plant floors are located at Level 2 concealed beneath the Tower and two further floors are located at Levels 36 and 37
/ Parking levels are accessed on grade due to the large falls of the site and located on 5x levels from Lower ground to Level B4. Parking facilities are provided for Car Share, Commercial tenancies, retail tenancies and other ancillary requirements

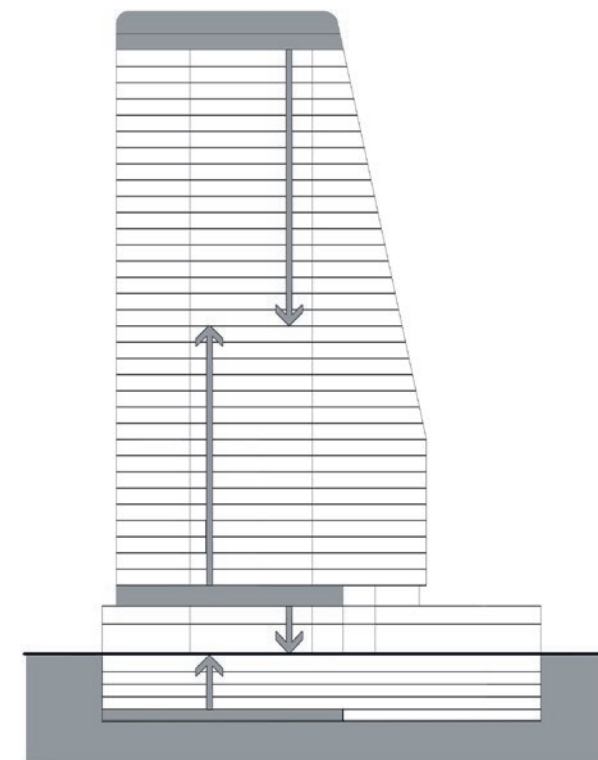


VERTICAL TRANSPORT

There are 4x low-rise lifts serving levels 1 to 9, 6x mid-rise lifts serving levels 10 to 21, and 6x high rise lifts serving levels 22 to 35. A dedicated goods lift extends through the tower. 2x shuttle lifts are provided to basement levels to allow direct access from parking to Lobby.

**STRUCTURE**

The structural system developed consists of post tensioned concrete floor structure with limited columns on the floor plate. The column grid has been developed to allow an efficient floor framing system to be developed for the building and ensure the planning requirements of the building are satisfied.

**PLANT**

Plant levels are provided at the top and bottom of the tower. This enables flexible tenancy take up without mid level interruption.





APPENDIX A: ARCHITECTURAL DRAWING SET

APPENDIX B

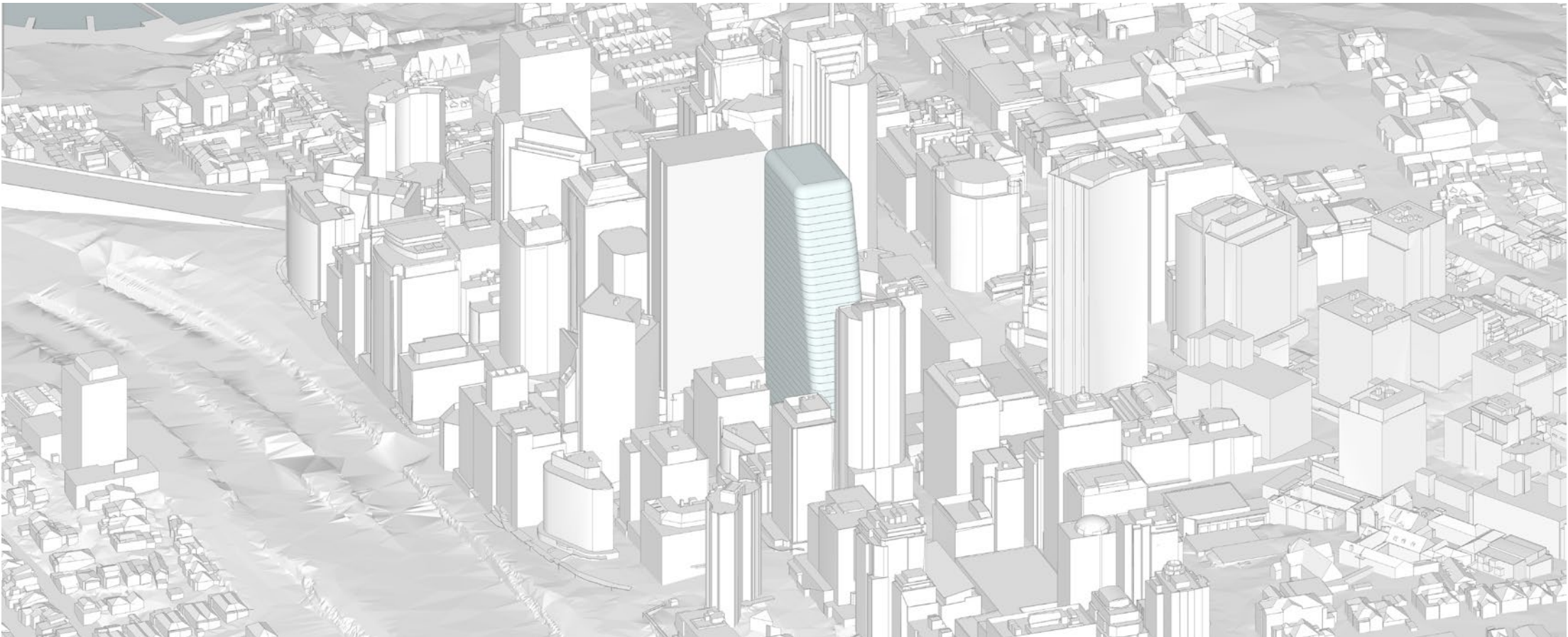
SOLAR - SPECIAL

AREAS

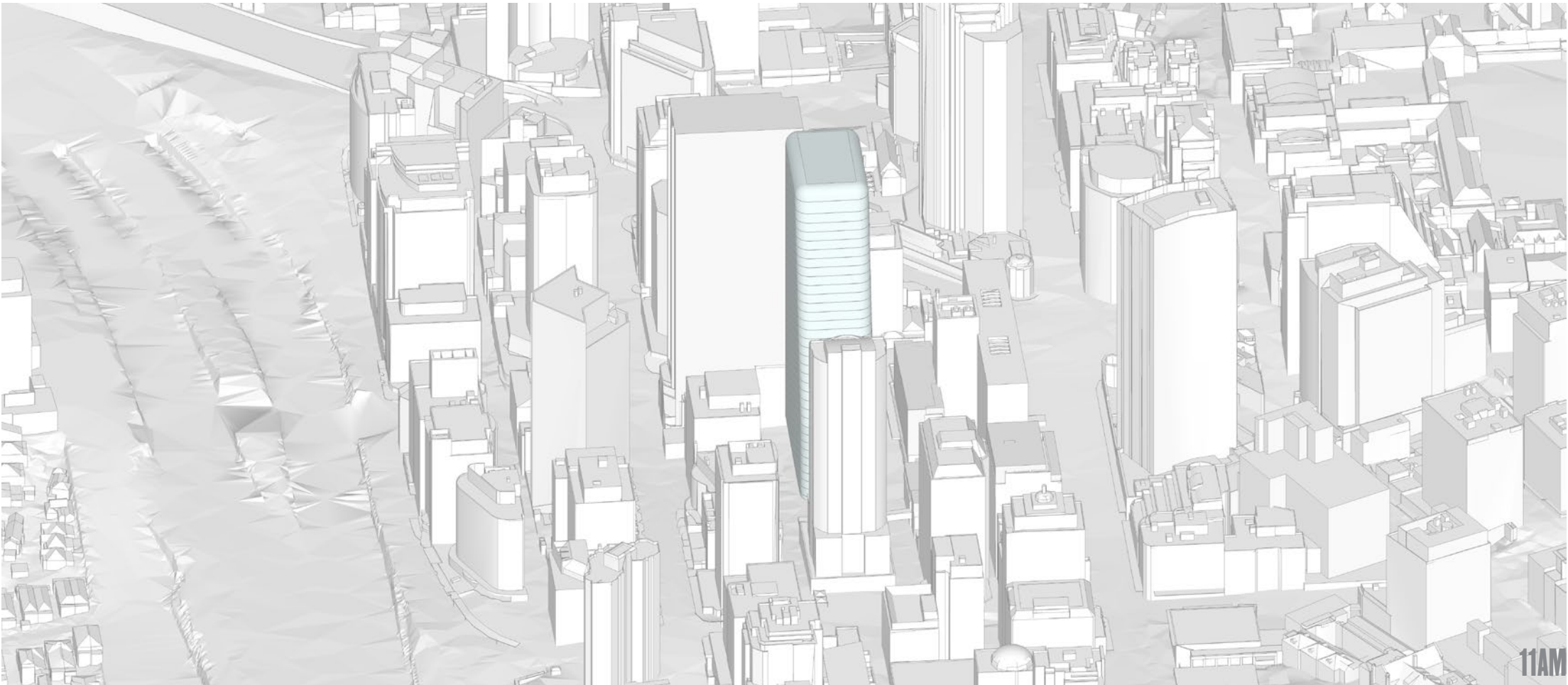
NOTE:
The following diagrams demonstrate that there is no overshadowing impact on the basis of the following criteria.

- / North Sydney LEP 2013 identifies certain areas as special areas with regard to overshadowing. These areas are not to be overshadowed between the hours of 10am - 2pm on the winter solstice. They have been overlayed on the Sun's eye diagrams below where shadows are closest to these areas.
- / The North Sydney Centre Capacity and Land Use Study proposes overshadowing be controlled by a restriction on additional overshadowing to residential land outside the NSC between 10 am and 2pm
- / The changes contained in the North Sydney Centre Capacity and Land Use Study proposes overshadowing be measured consistent with current requirements except for the removal of Elizabeth Plaza and Blue Street Plaza from the Special Area definition

21 JUNE - WINTER SOLSTICE



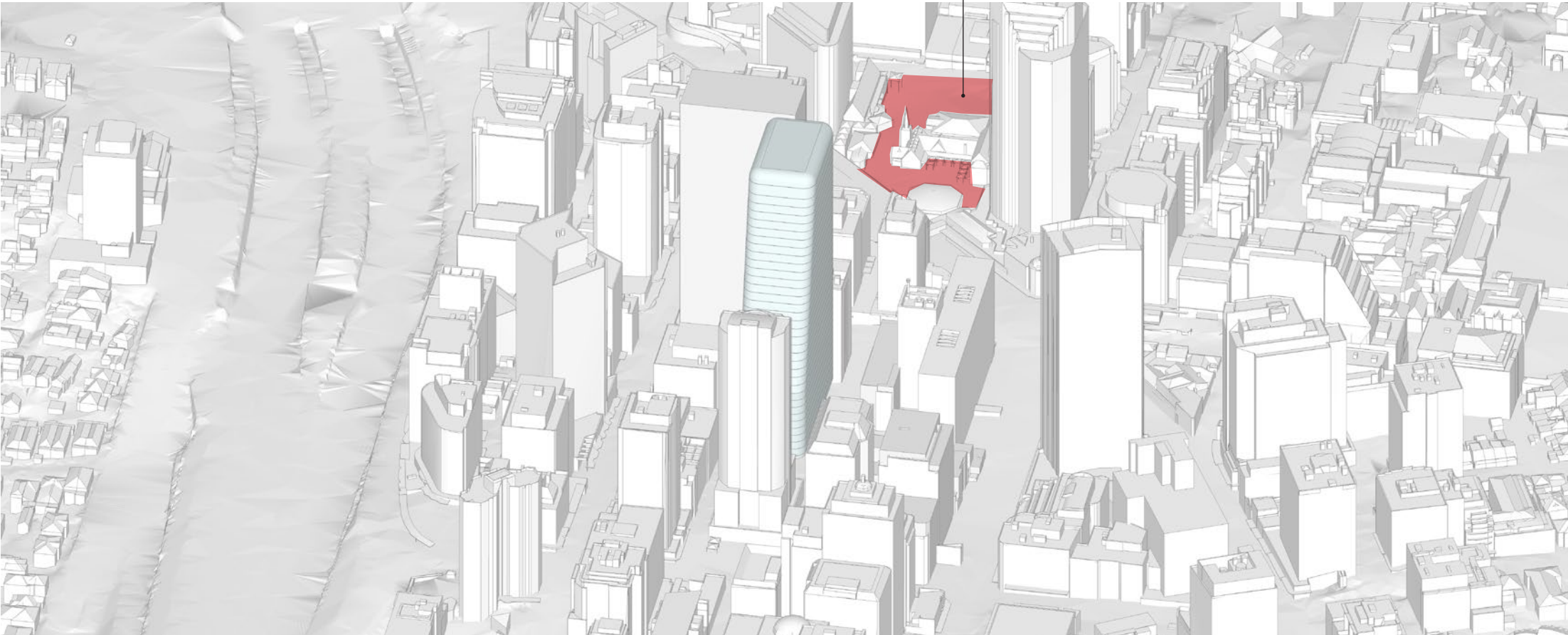
10AM



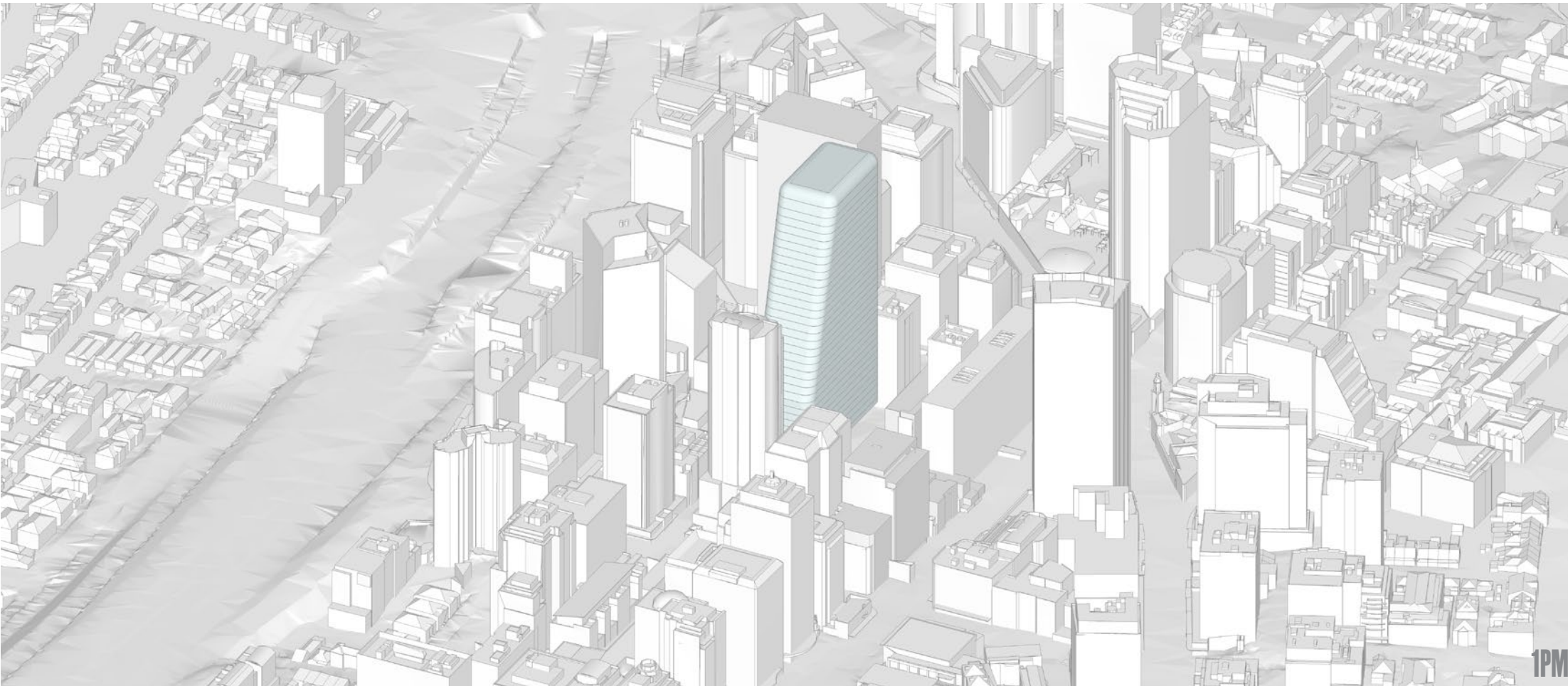
11AM

21 JUNE - WINTER SOLSTICE

Greenwood Plaza special area. As demonstrated there is no overshadowing before 12pm



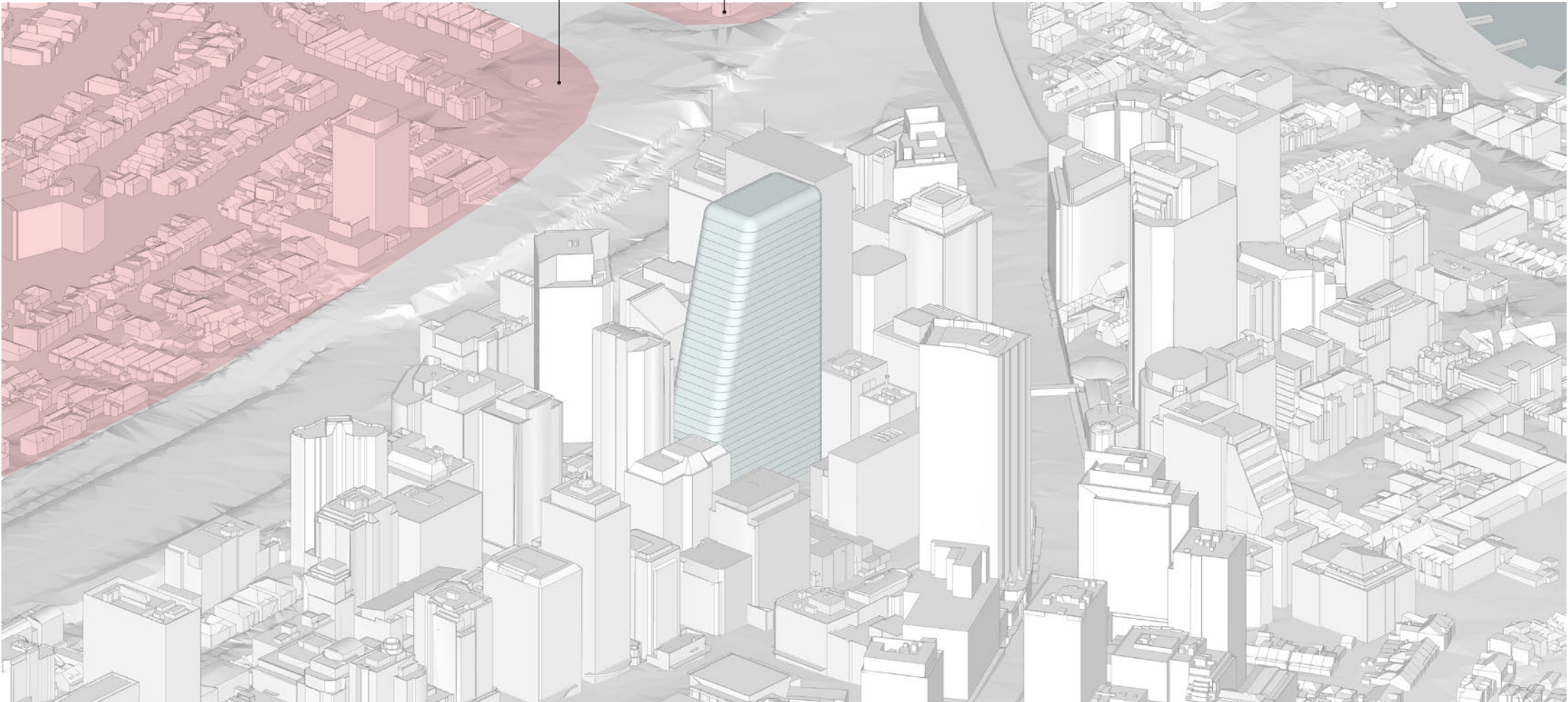
12PM



1PM

21 JUNE - WINTER SOLSTICE

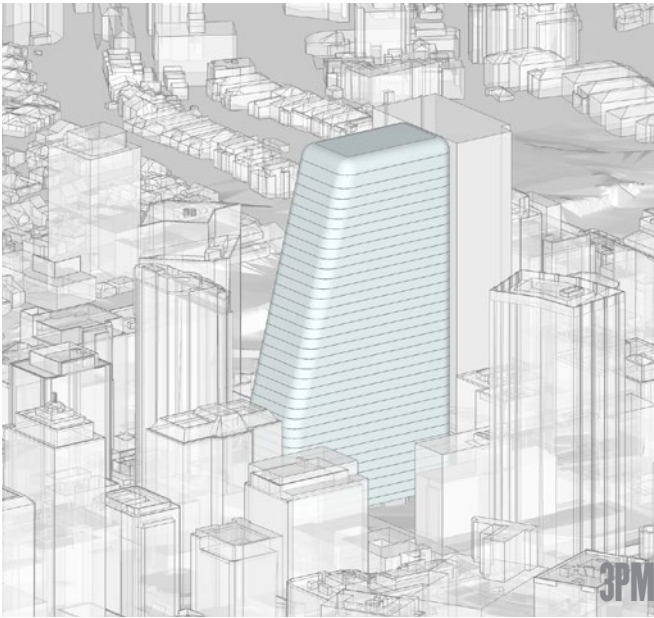
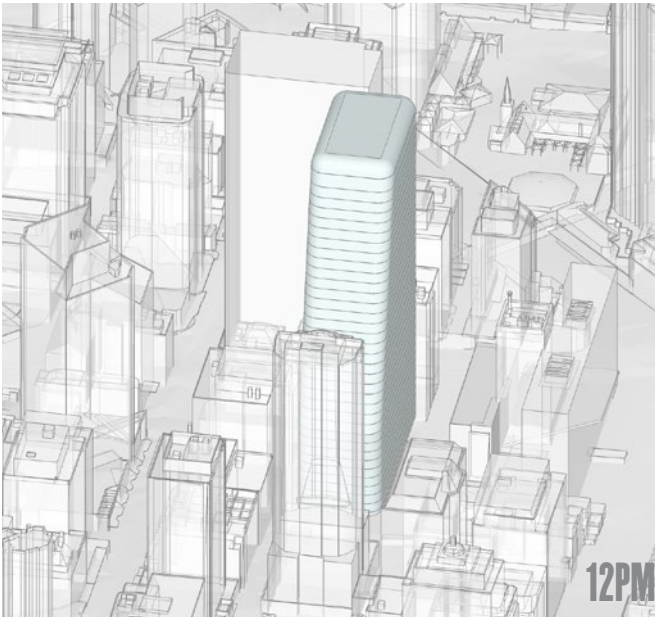
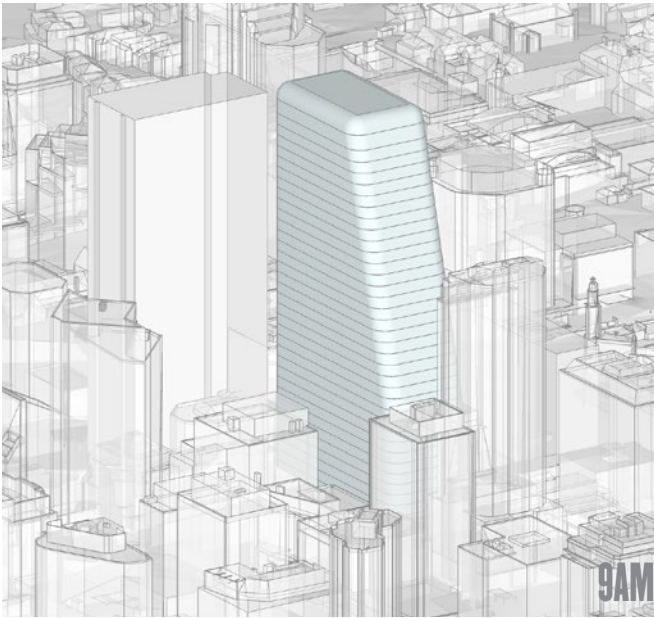
Neutral Bay / Kirribilli residential area. As demonstrated there is no overshadowing after 2pm



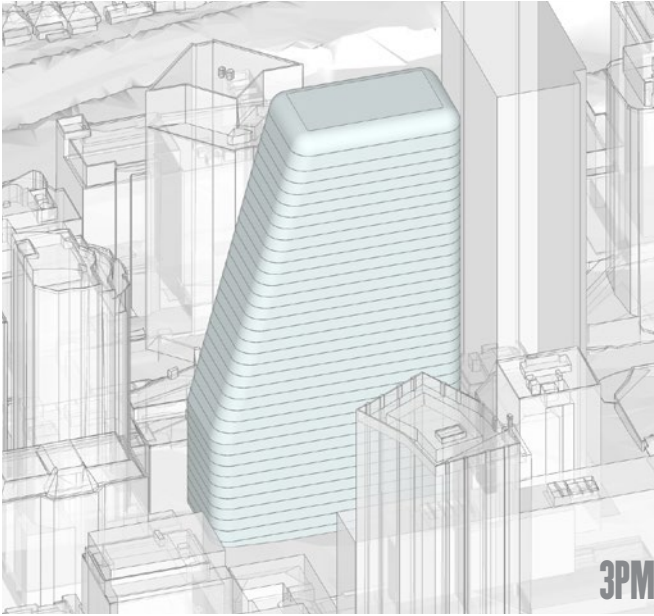
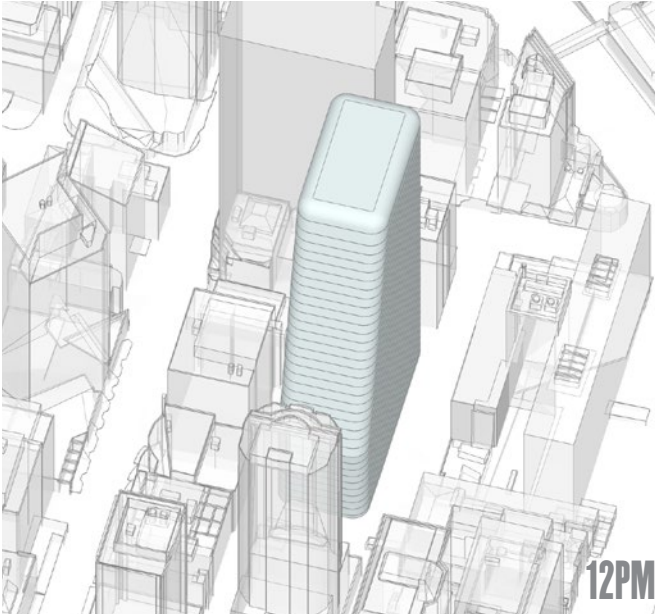
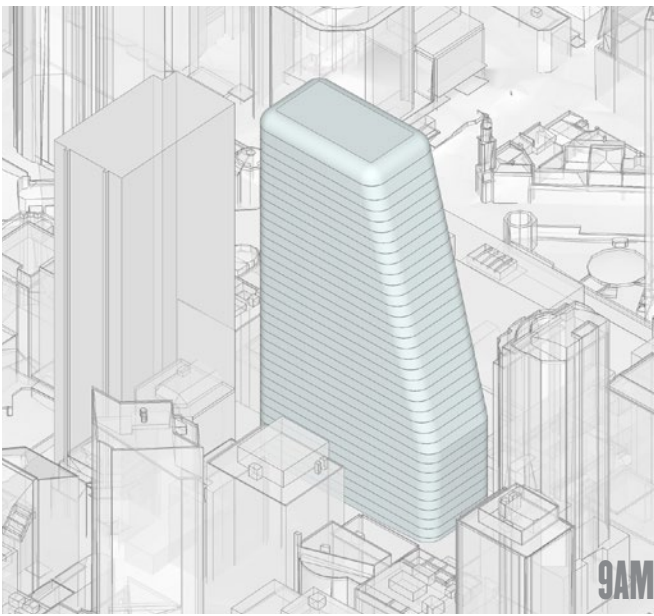
2PM

APPENDIX C
SOLAR - GENERAL

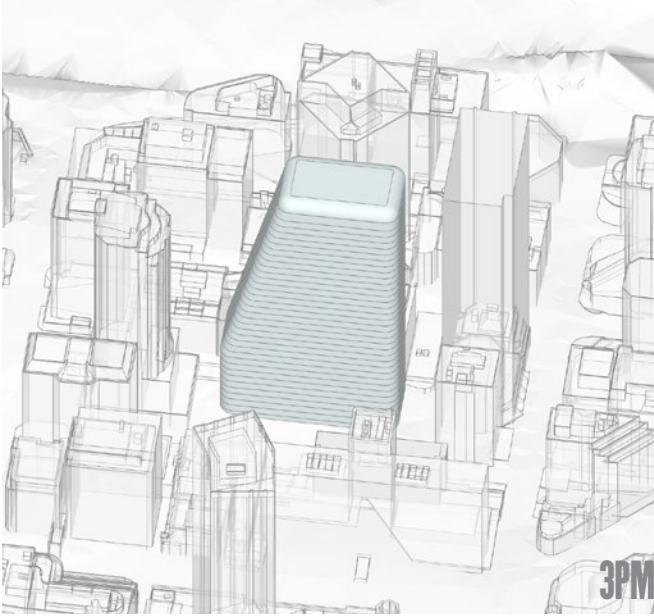
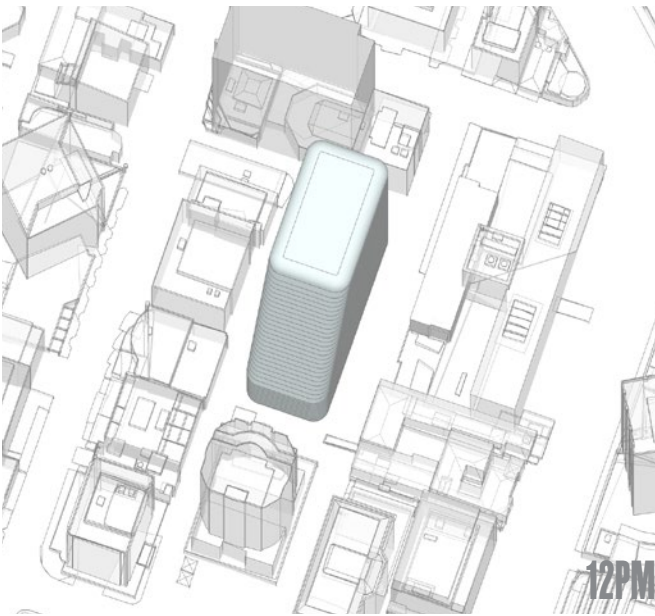
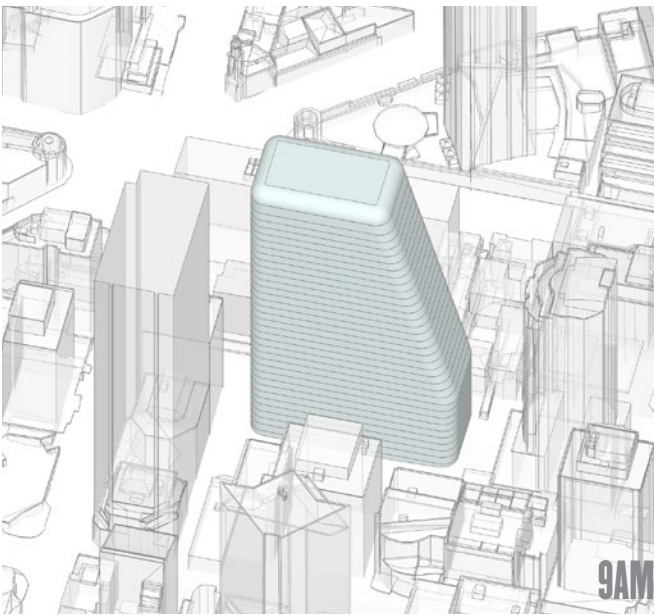
21 JUNE - WINTER SOLSTICE



21 SEPT/MARCH - EQUINOX



21 DECEMBER - SUMMER SOLSTICE



APPENDIX D - STRUCTURAL ANALYSIS / DESIGN

A structural system has been designed and developed in between Bates Smart and Enstruct to prove the proposed building design and ensure that an efficient structural solution is provided.

The structural system developed consists of post tensioned concrete floor structure with limited columns on the floor plate. The column grid has been developed to allow an efficient floor framing system to be developed for the building and ensure the planning requirements of the building are satisfied. The lateral system for the building consists of a reinforced concrete core structure utilising the concrete core walls of the lift, stair and services zone of each floor plate with these walls extending from base level of the building to top of the building and dropping off as the core diminishes in size through the height of the building. The core structure is provided with an east/west outrigger at the upper plant level to provide the required lateral stiffness and strength in the weak direction of the core. This allows a lateral system to be provided for the building without impacting on the floor plate functionality. The tapered northern edge of the building is achieved via two inclined column on this façade providing support to the northern edge of the building at all levels.

The principal structural elements of the building are:

- Floor Plate: Post tensioned band beams and slabs
- Lateral Structure: Reinforced concrete core wall system (jump formed) with east/west outriggers at the upper plant level
- Columns: Reinforced high strength concrete

All structural elements have been designed to utilise conventional construction techniques which will allow for an efficient structural program for the building construction with the structural components and their arrangement being consistent with conventional Australian high rise construction practice.

