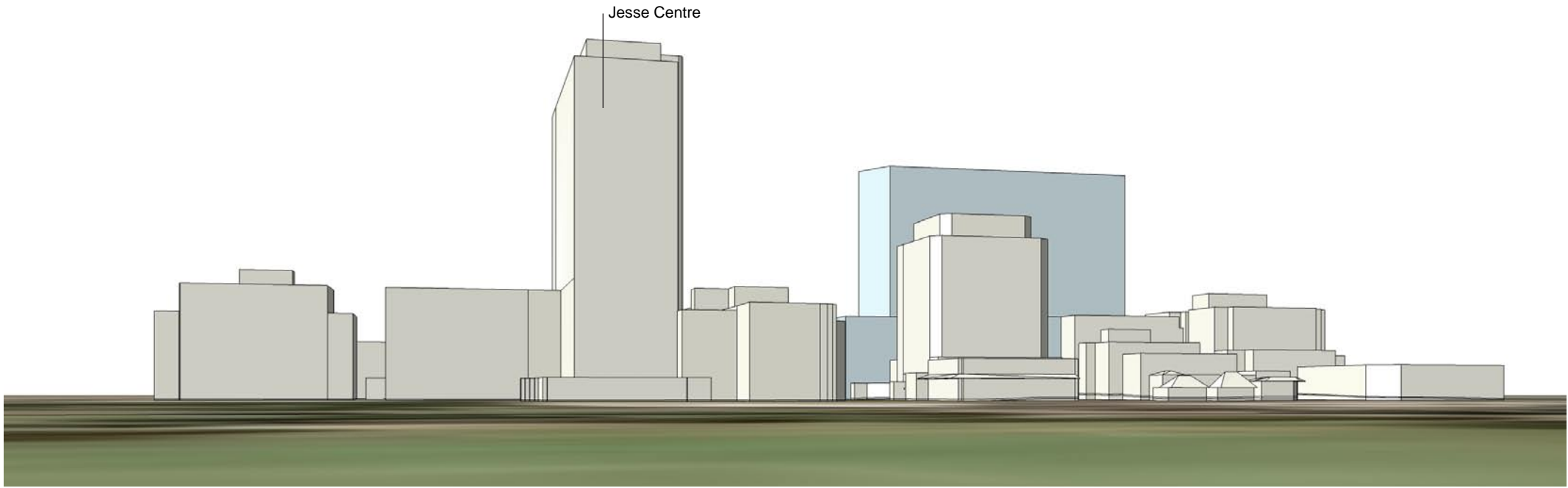


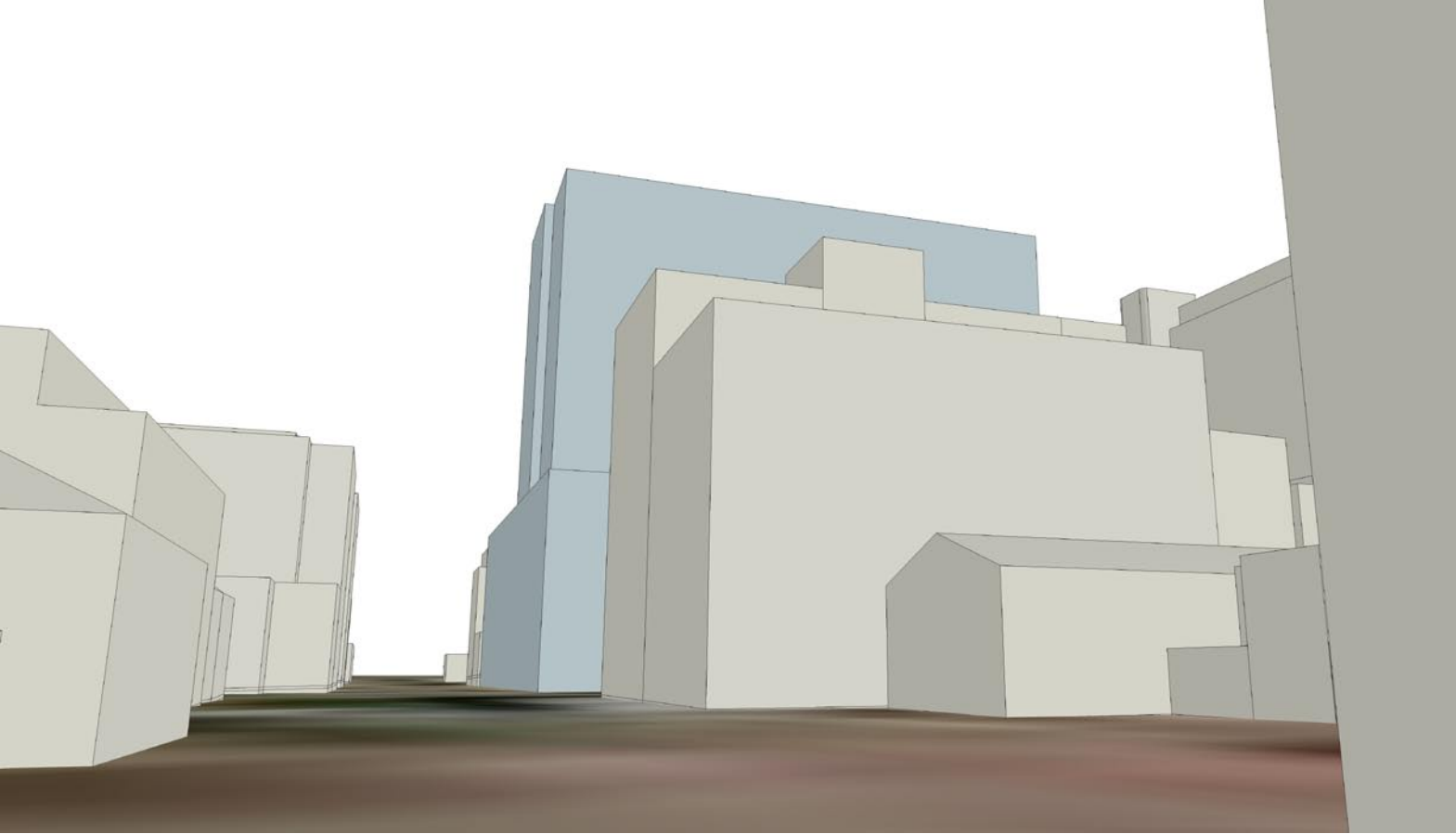
Proposed envelope



Existing approved DA envelope



Proposed envelope



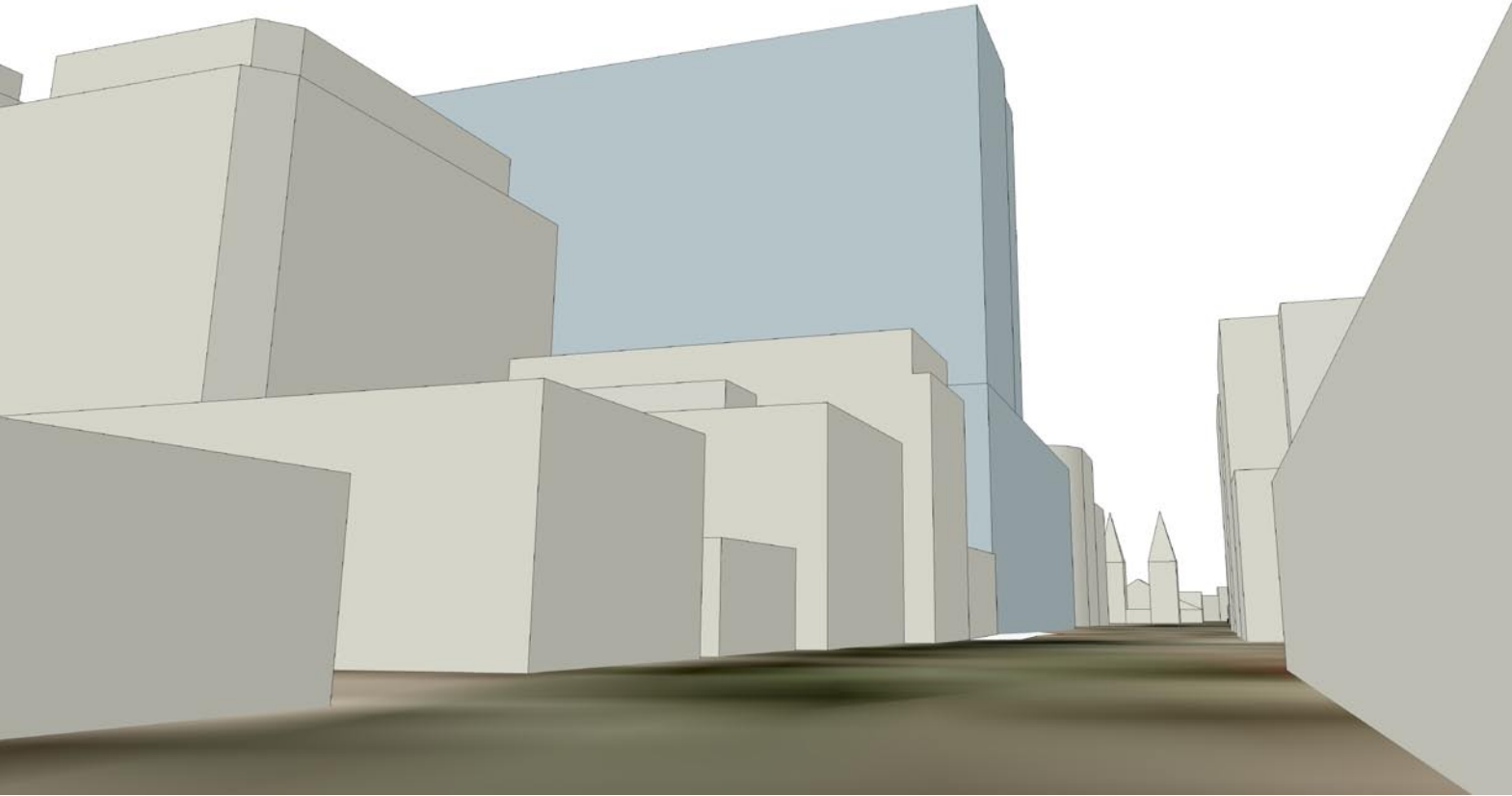
Existing approved DA envelope

Proposed envelope

10. Contextual View Analysis

iii. View 3b -

View towards St John's Cathedral along Hunter St looking south- east

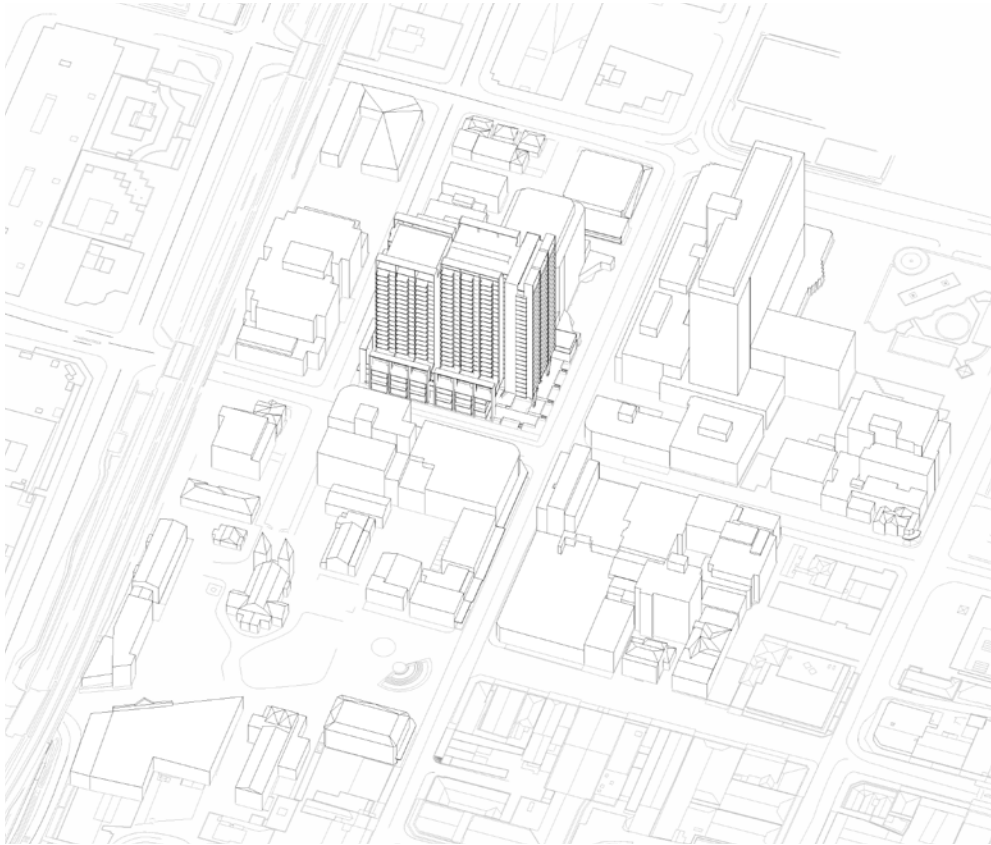


Existing approved DA envelope

Proposed envelope

11. Shadow Diagrams - Views from the sun

i. Summer Solstice (Dec 21st)



9:00am



12 midday



3:00pm

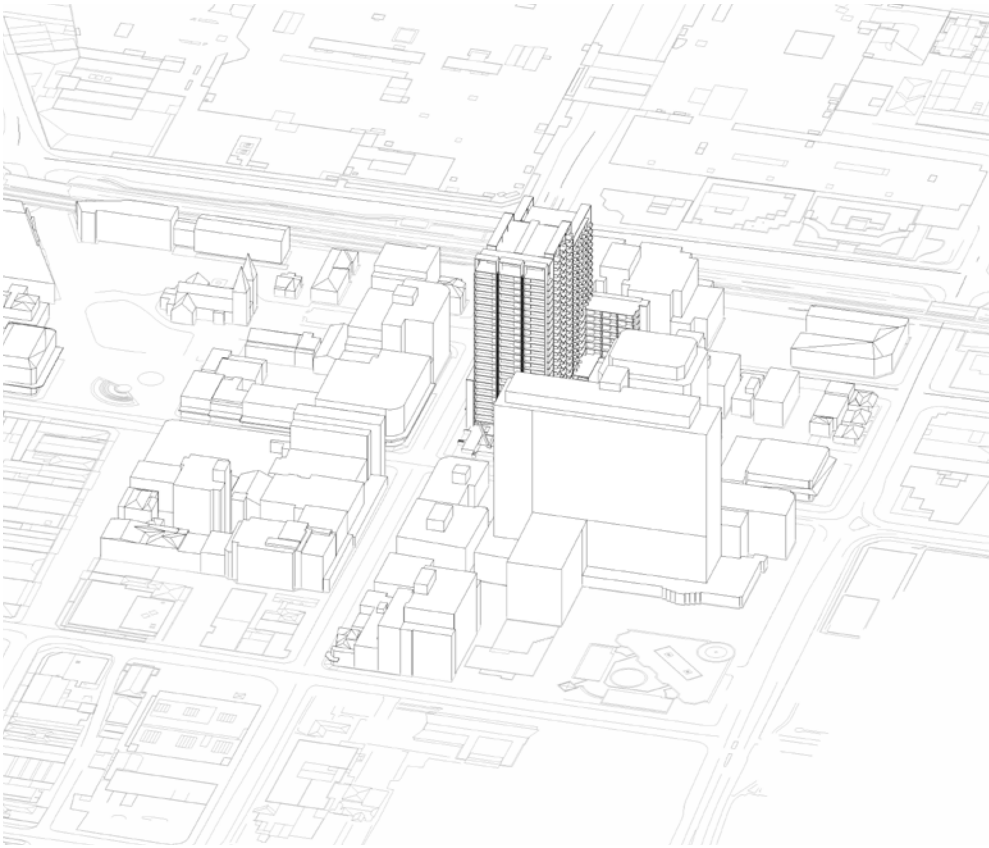
11. Shadow Diagrams - Views from the sun

ii. Winter Solstice (June 21st)

9:00am



12 midday

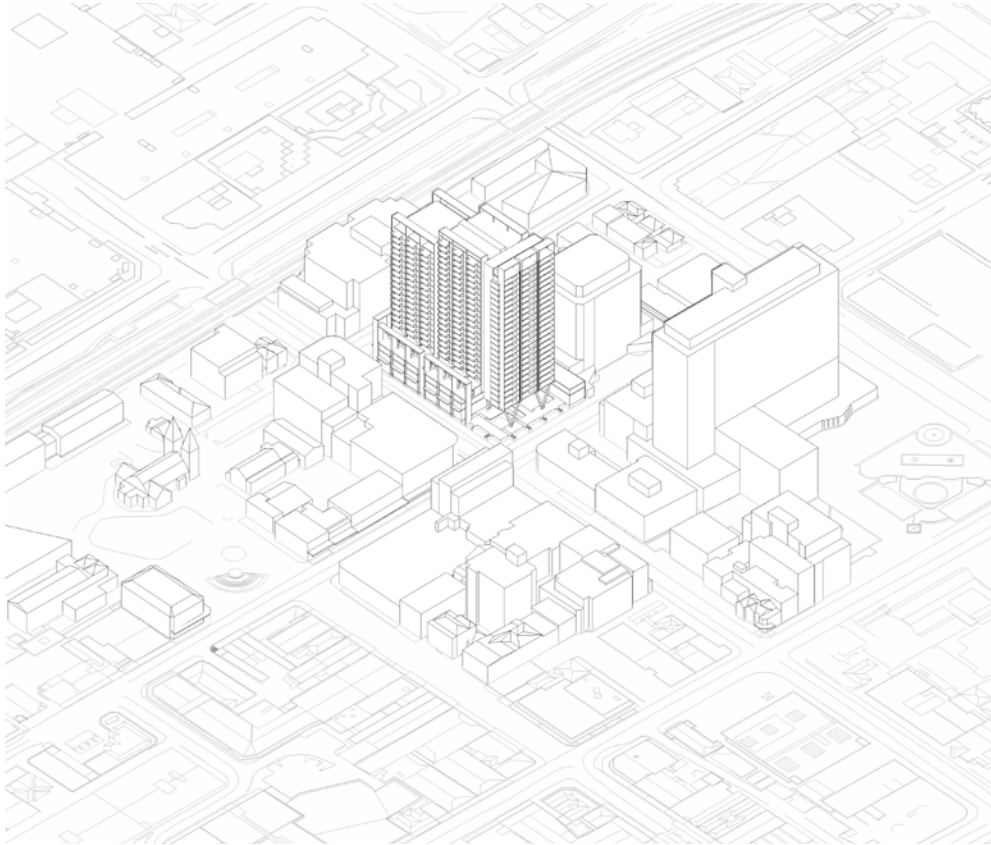


3:00pm

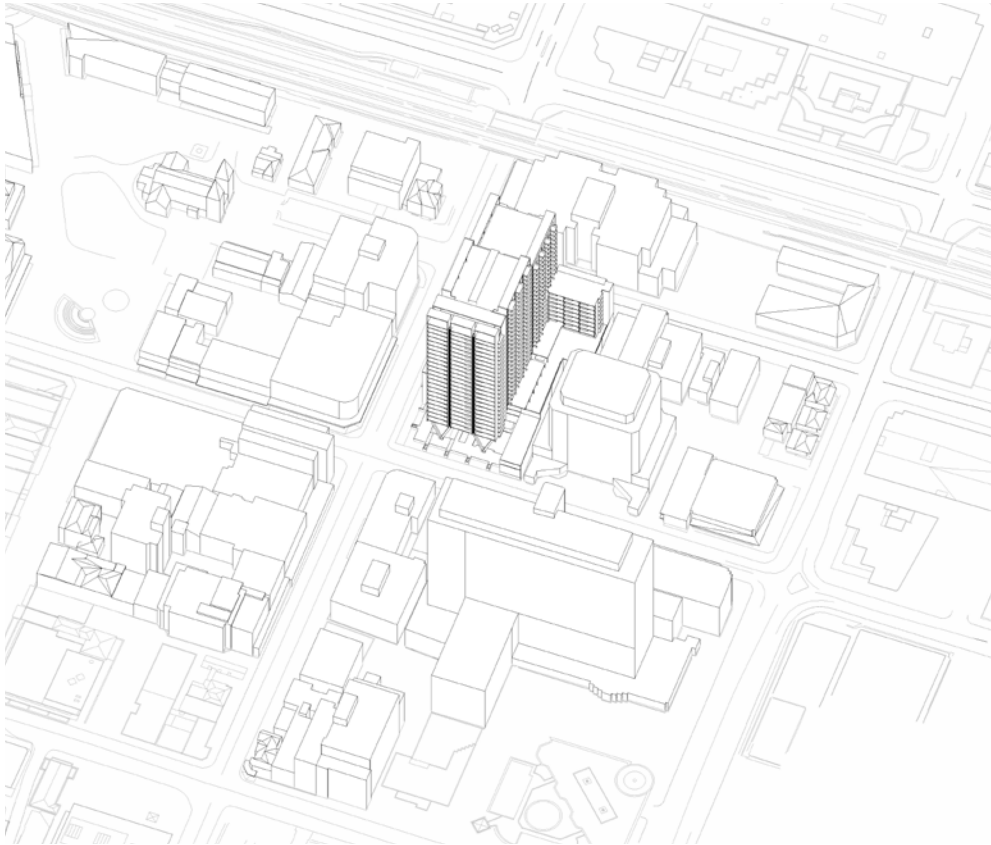


11. Shadow Diagrams - Views from the sun

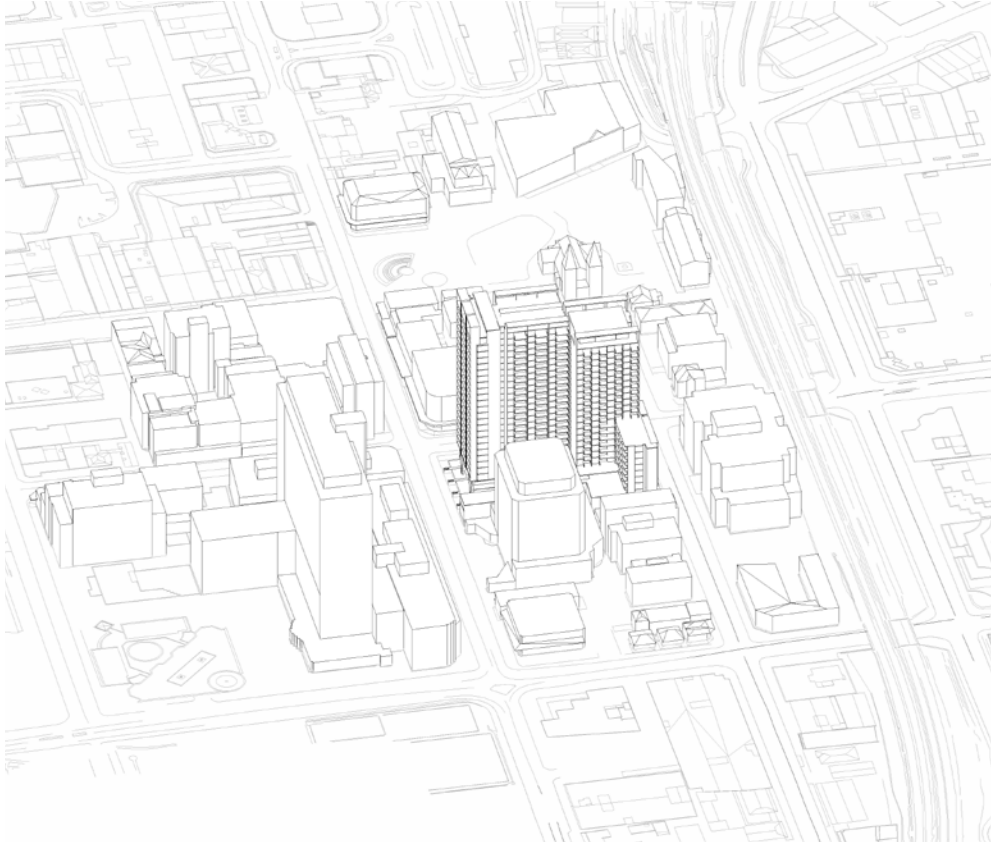
iii. Equinox (March/ September 21st)



9:00am



12 midday



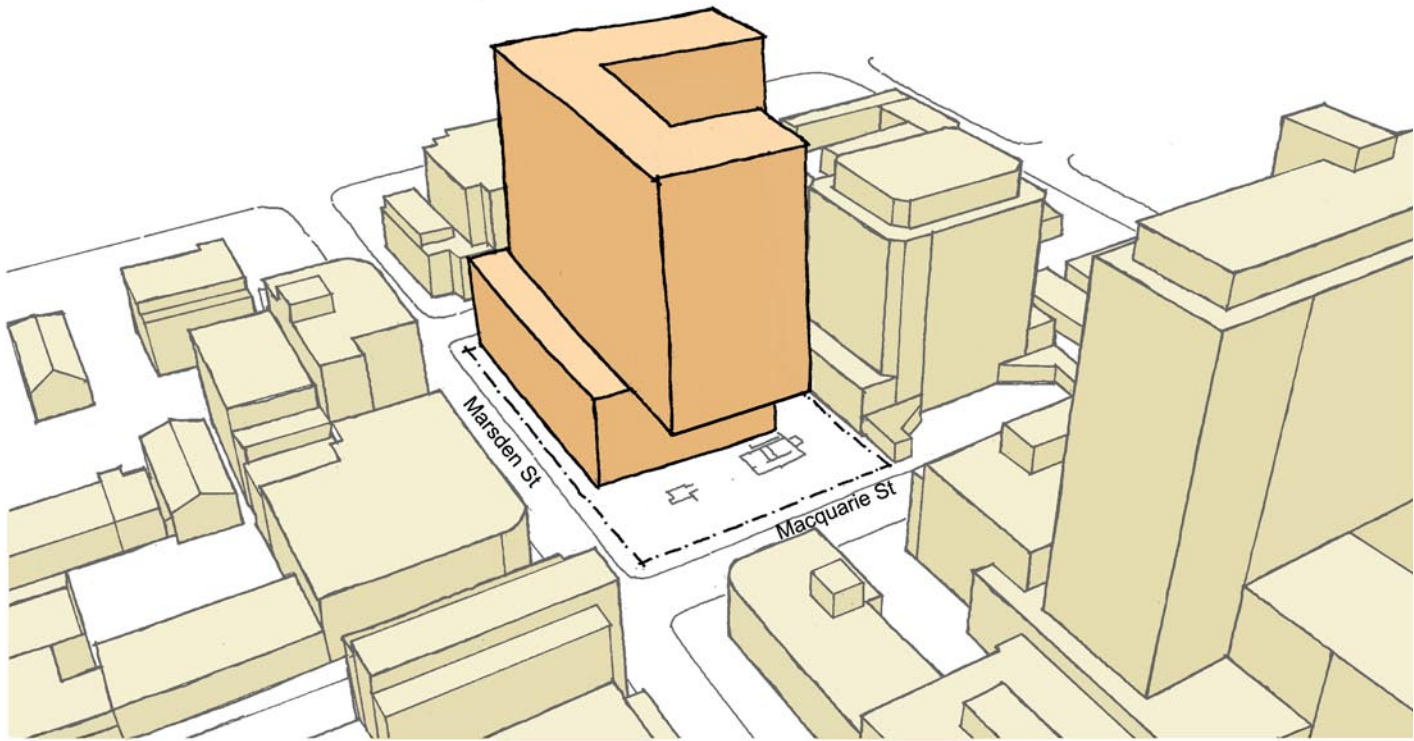
3:00pm

71

*GFA is the used area to determine the Floor Space Ratio (ref. Parramatta City Centre LEP) measured to the inner face of buildings, excluding lifts, stairs, plant, carparking, loading, basement storage, balconies
 ** Gross Building Area is the total gross floor area of the building excluding carpark & balconies. Efficiency=GFA/GBA
 *** Nett Saleable Area is the nett areas, excludes circulation, walls, etc. Efficiency =Nett/GBA

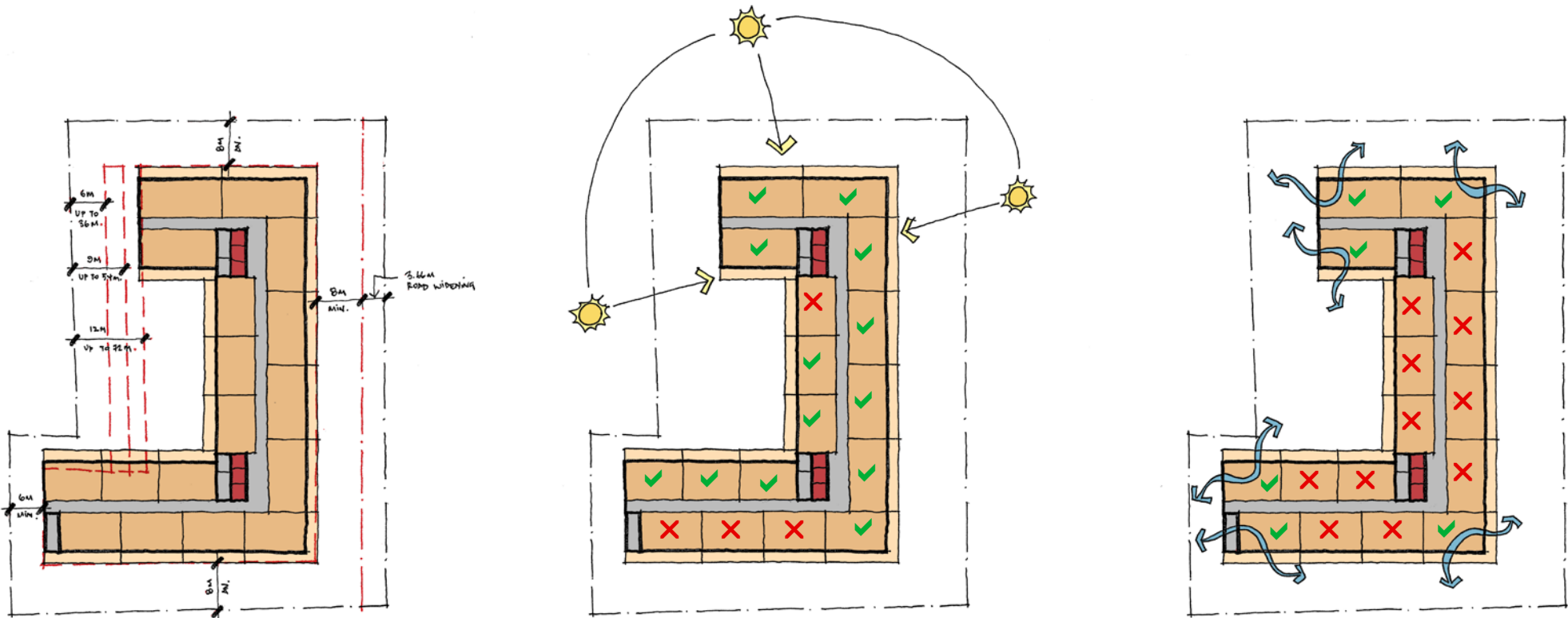
13. Appendix

i. Massing Studies



1. Building Form -

Courtyard Block



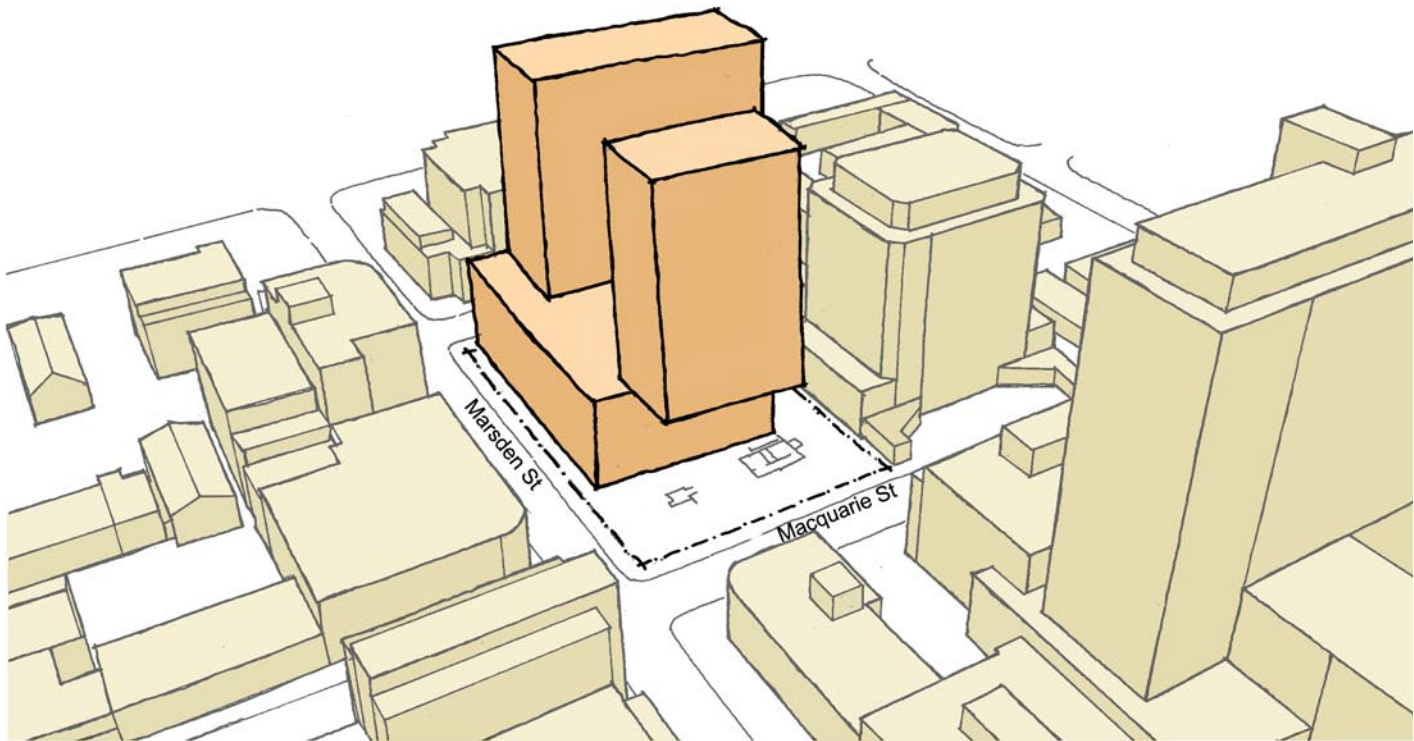
DCP setback controls
> complies with setbacks
> 17 apartments/ typical floor

SEPP65 -
Solar Access (min. 70%)
> 13 apartments/ typ floor
= 76%
South-facing Apartments (max. 10%)
> 3 apartments/ typ floor
= 17%

SEPP65 -
Cross-ventilation (min. 60%)
> 6 apartments/ typ floor
=35%

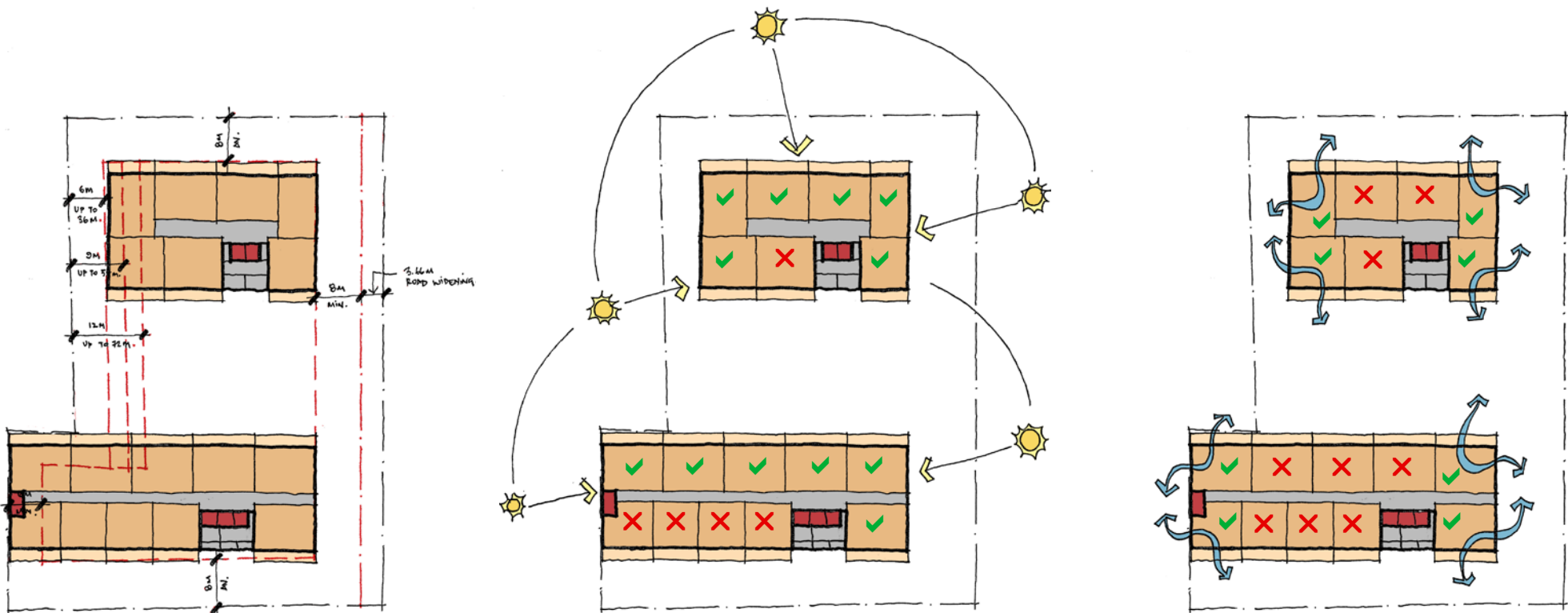
13. Appendix

i. Massing Studies



2A. Building Form -

Two Linear East-West Blocks with central core



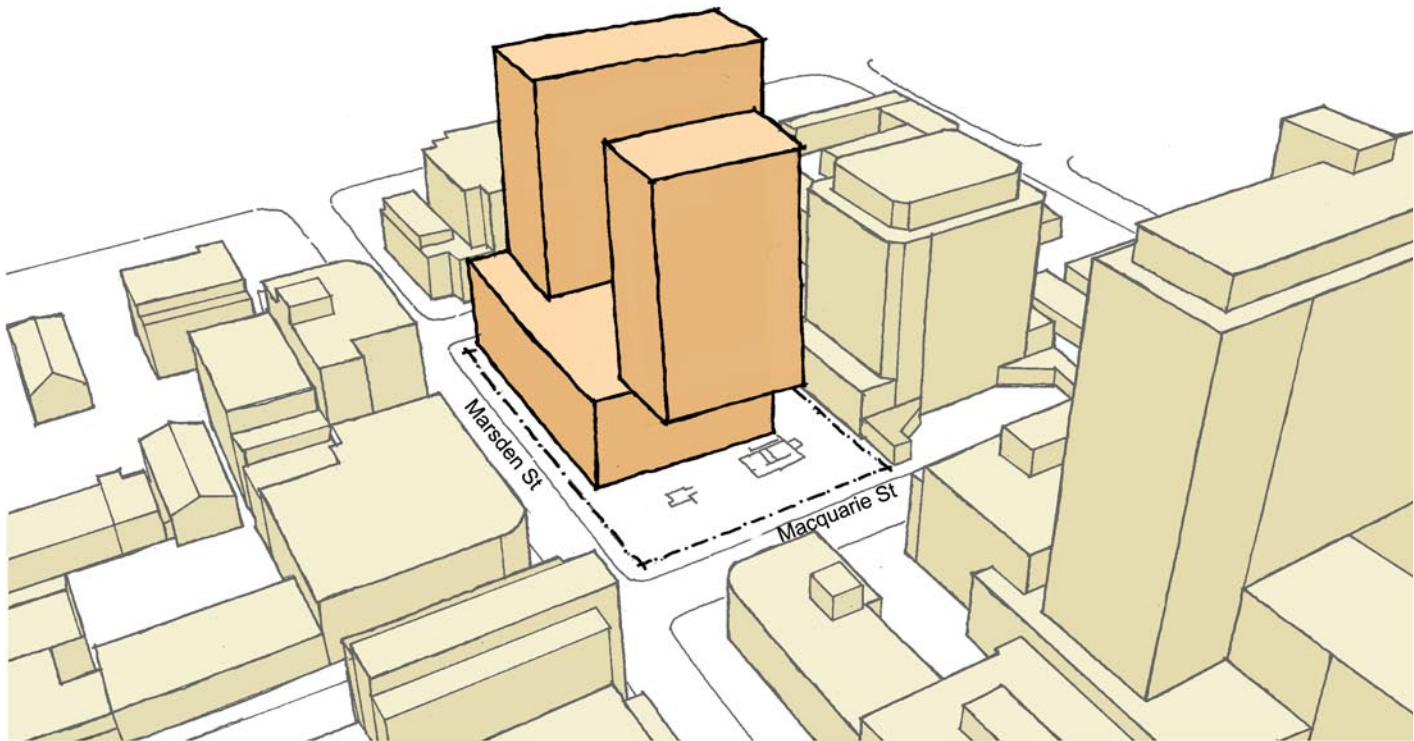
DCP setback controls
> non-complying at south-western end
> 17 apartments/ typical floor

SEPP65 -
Solar Access (min. 70%)
> 12 apartments/ typ floor
= 70%
South-facing Apartments (max. 10%)
> 5 apartments/ typ floor
= 20%

SEPP65 -
Cross-ventilation (min. 60%)
> 8 apartments/ typ floor
=47%

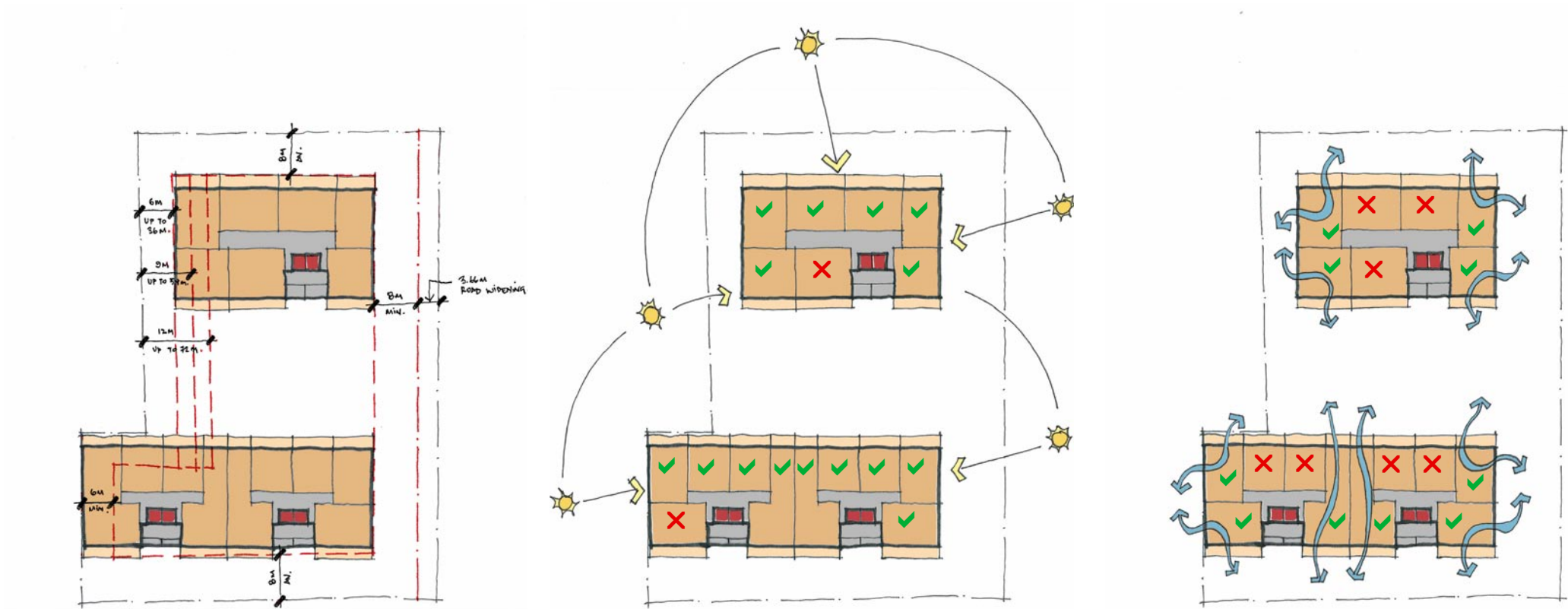
13. Appendix

i. Massing Studies



2B. Building Form -

Two Linear East-West Blocks with multiple core



DCP setback controls

- > non-complying at south-western end
- > 17 apartments/ typical floor

SEPP65 -

Solar Access (min. 70%)

- > 15 apartments/ typ floor
- = 88%

South-facing Apartments (max. 10%)

- > 2 apartments/ typ floor
- = 12%

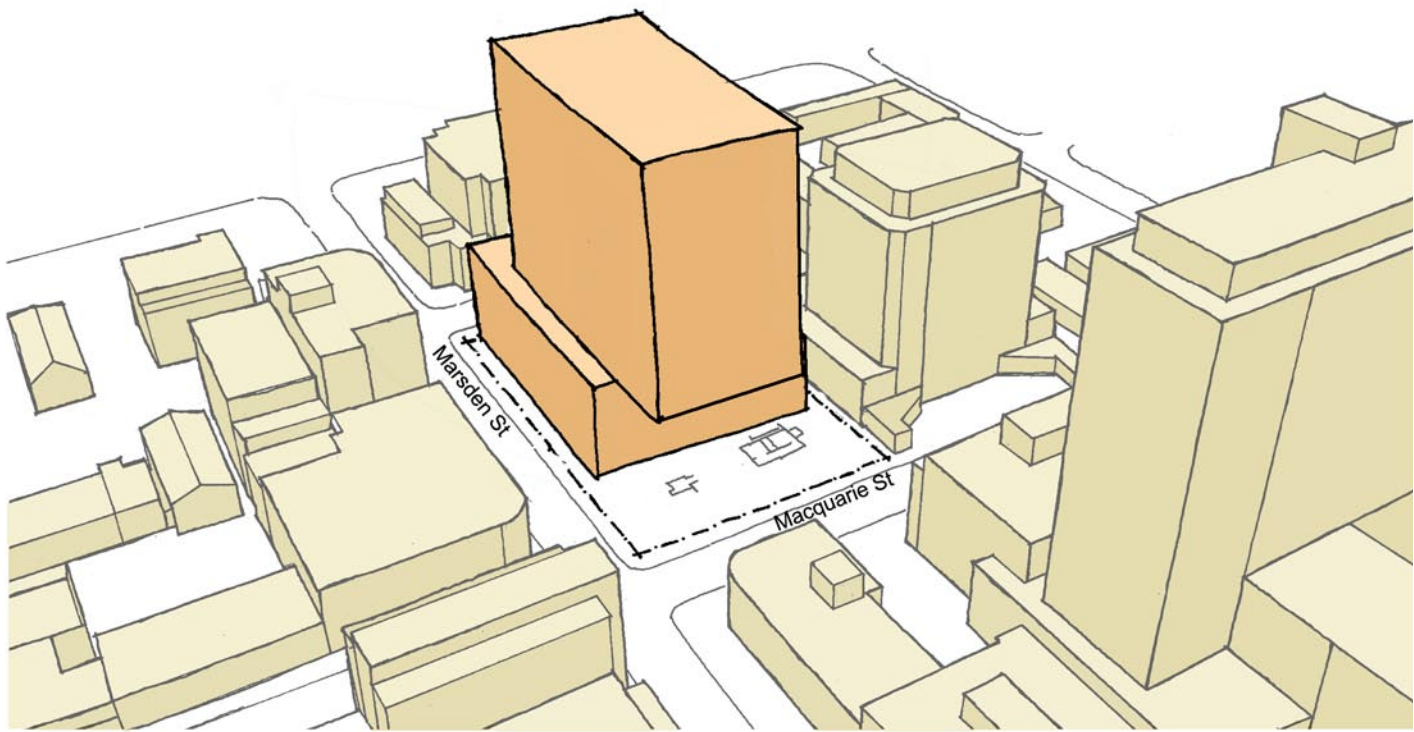
SEPP65 -

Cross-ventilation (min. 60%)

- > 10 apartments/ typ floor
- =59%

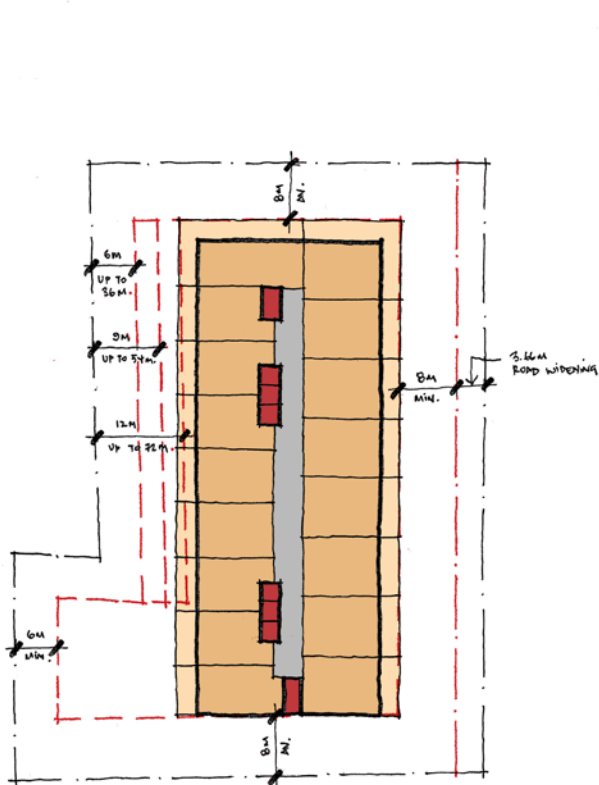
13. Appendix

i. Massing Studies



3. Building Form -

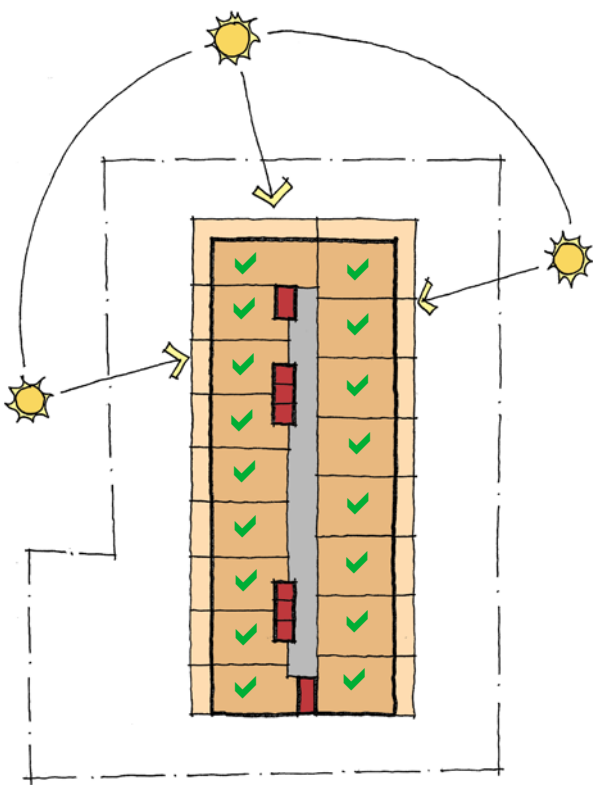
Linear N-S Tower



DCP setback controls

> complies with setbacks

> 17 apartments/ typical floor



SEPP65 -

Solar Access (min. 70%)

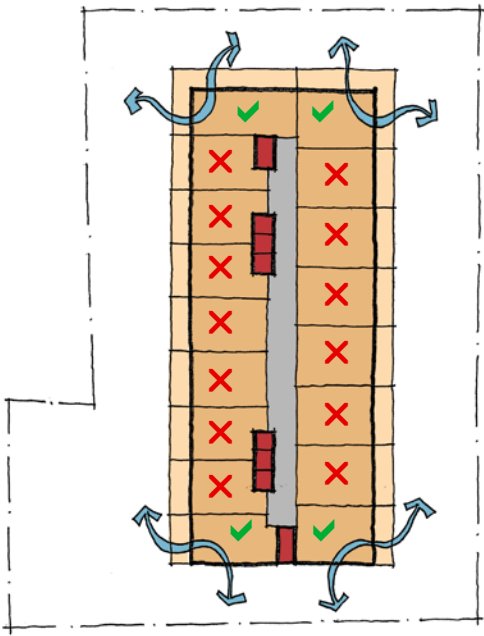
> 17 apartments/ typ floor

= 100%

South-facing Apartments (max. 10%)

> 0 apartments/ typ floor

= 0%



SEPP65 -

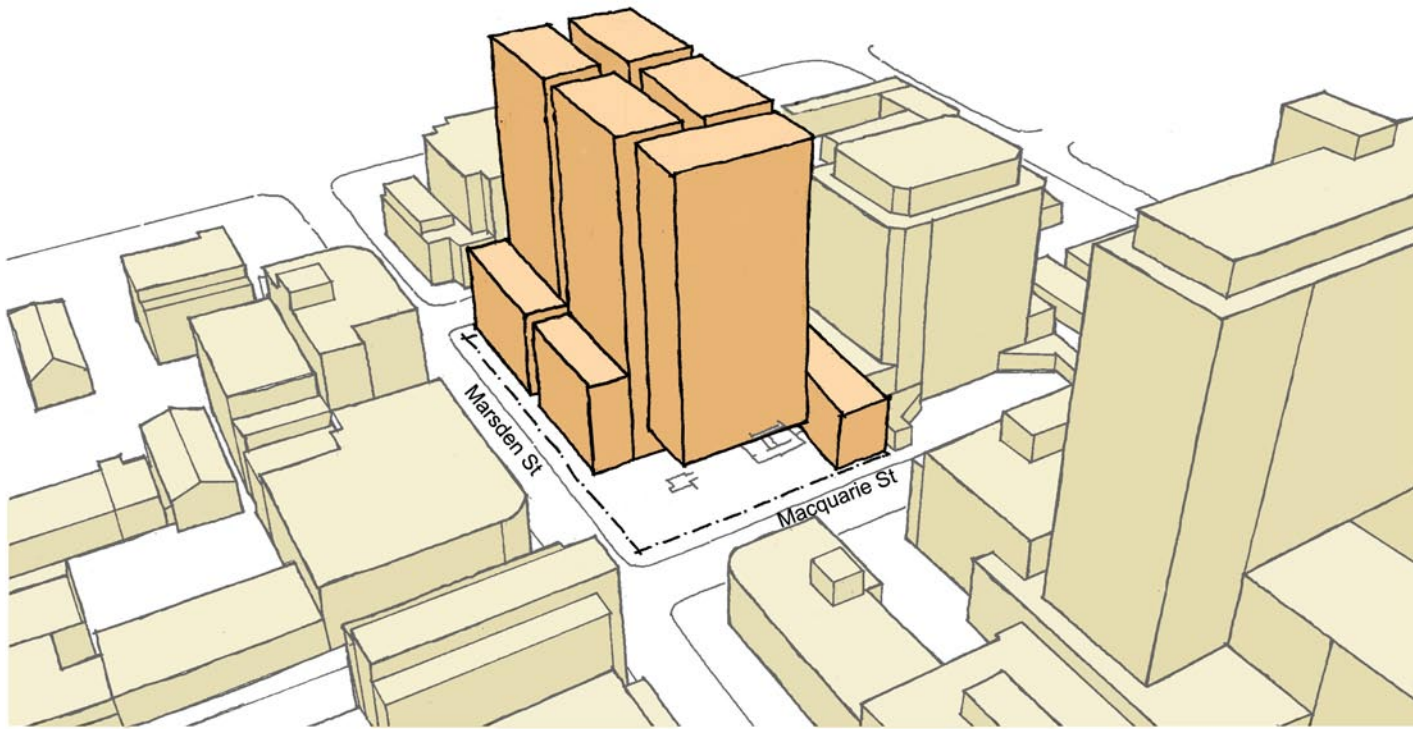
Cross-ventilation (min. 60%)

> 4 apartments/ typ floor

=24%

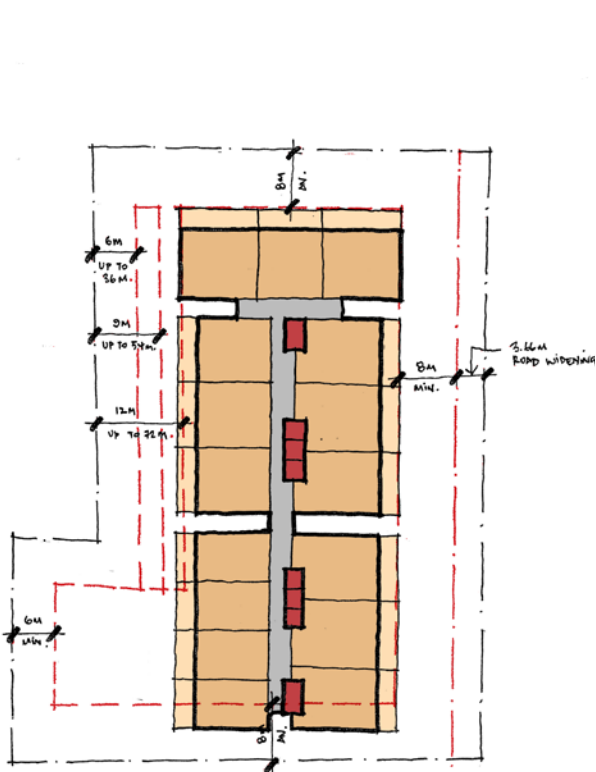
13. Appendix

i. Massing Studies



4. Building Form -

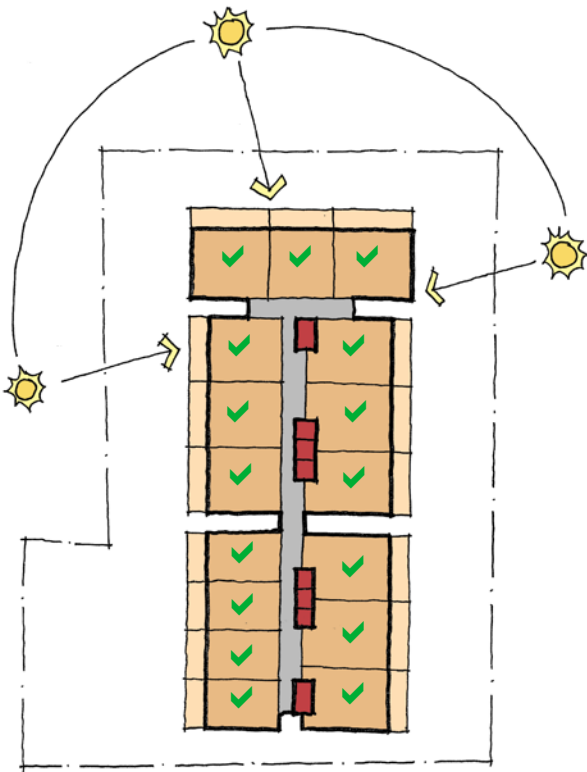
Linear N-S Tower articulated with vertical slots



DCP setback controls

> complies with setbacks

> 16 apartments/ typical floor



SEPP65 -

Solar Access (min. 70%)

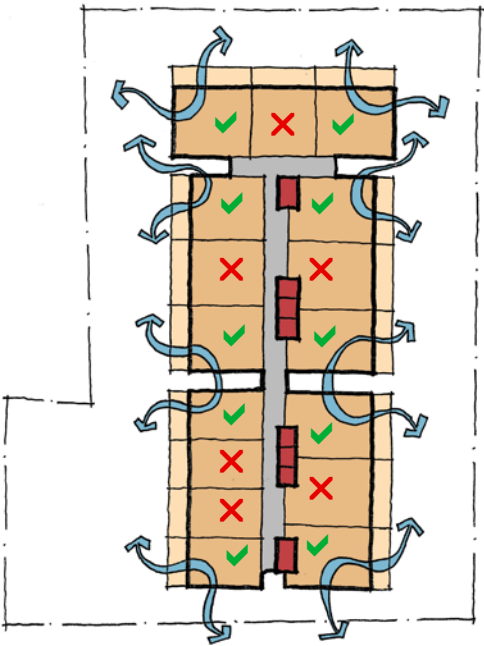
> 16 apartments/ typ floor

= 100%

South-facing Apartments (max. 10%)

> 0 apartments/ typ floor

= 0%



SEPP65 -

Cross-ventilation (min. 60%)

> 10 apartments/ typ floor

= 63%

13. Appendix

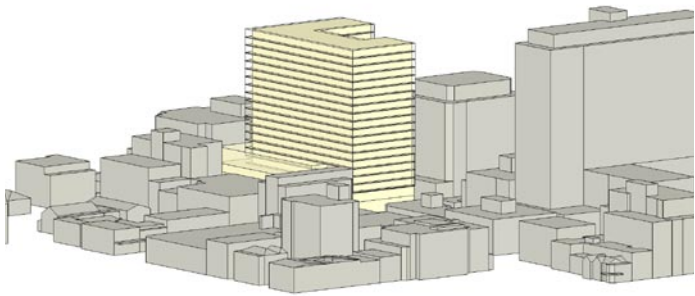
i. Massing Studies

Solar Comparison - Winter Solstice June 21
Views from the sun

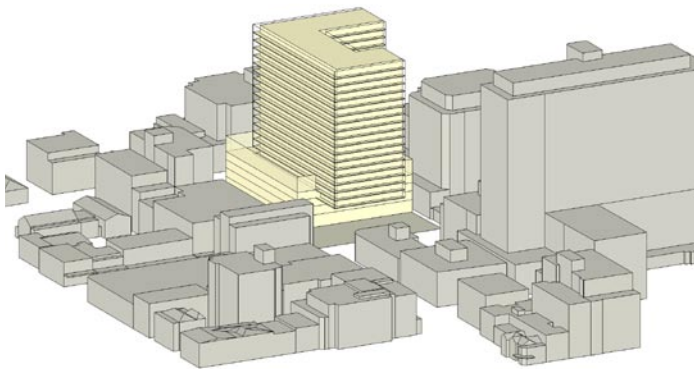
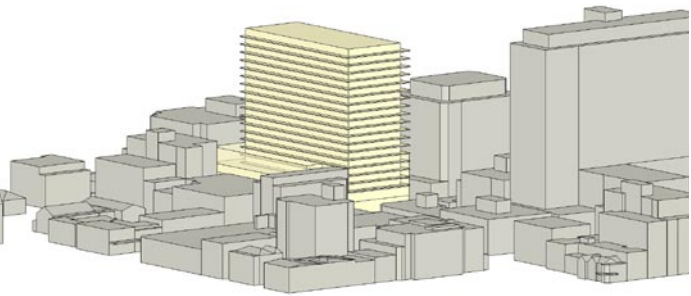
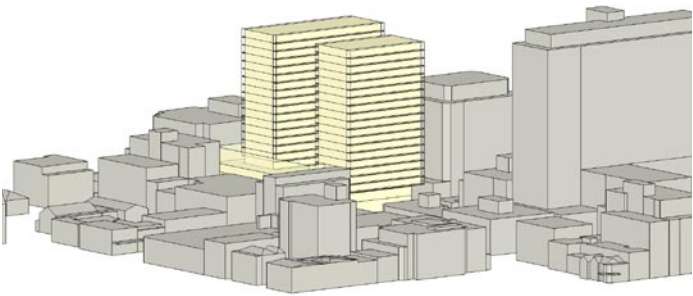
Option 1 - Perimeter Block

Option 2 - Two Linear East-West Blocks

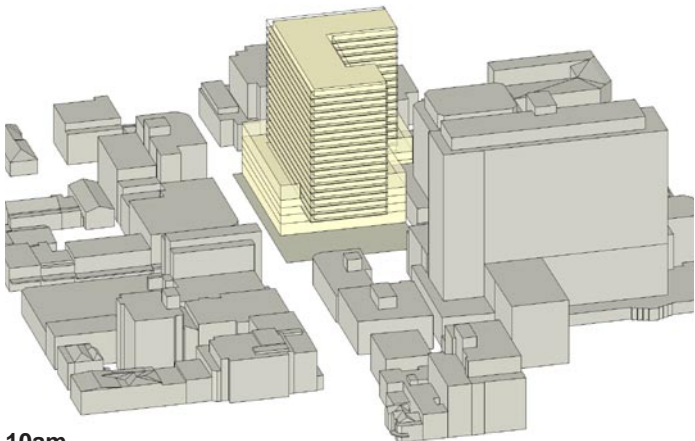
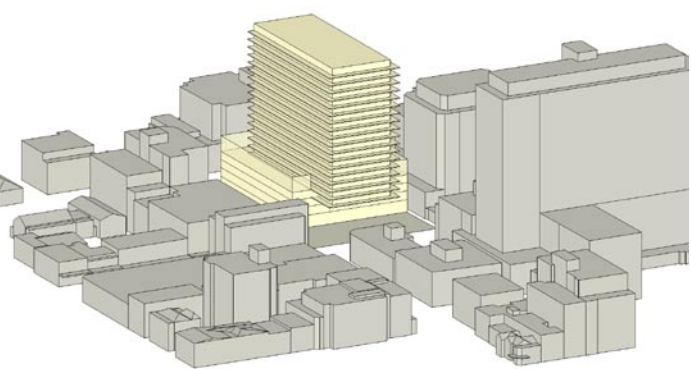
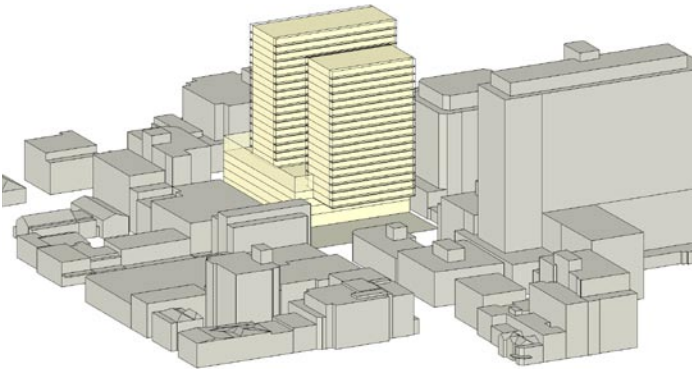
Option 3 - Linear North-South Block



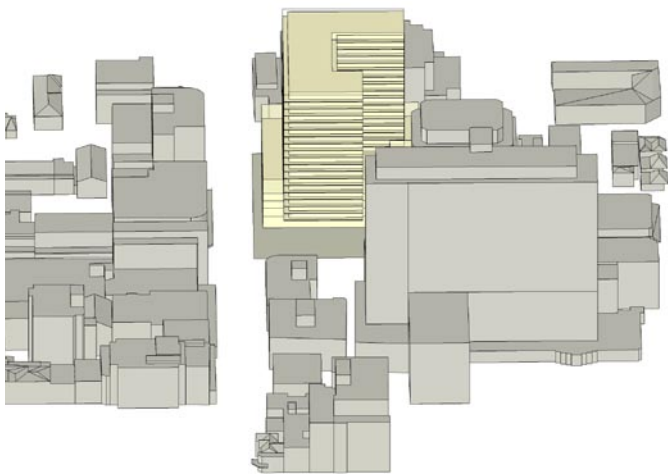
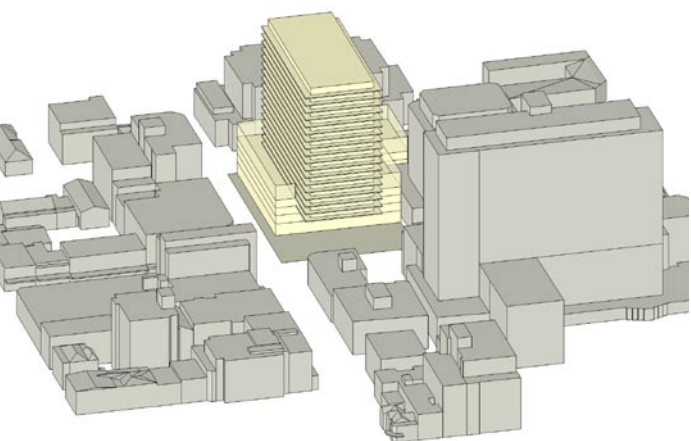
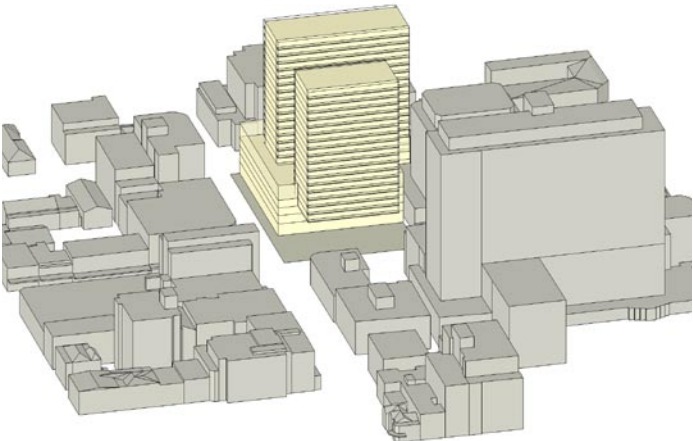
8am



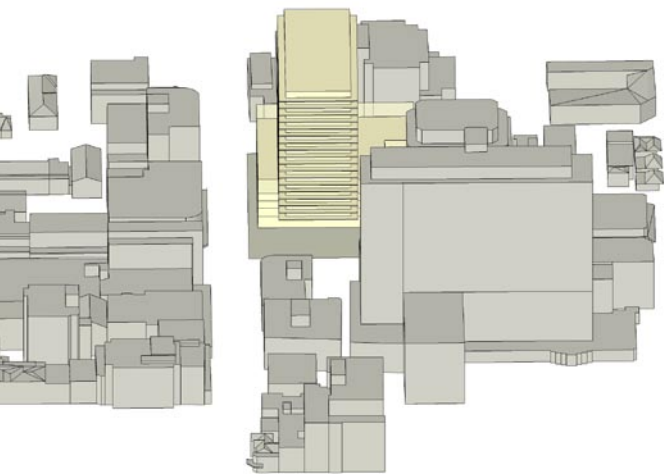
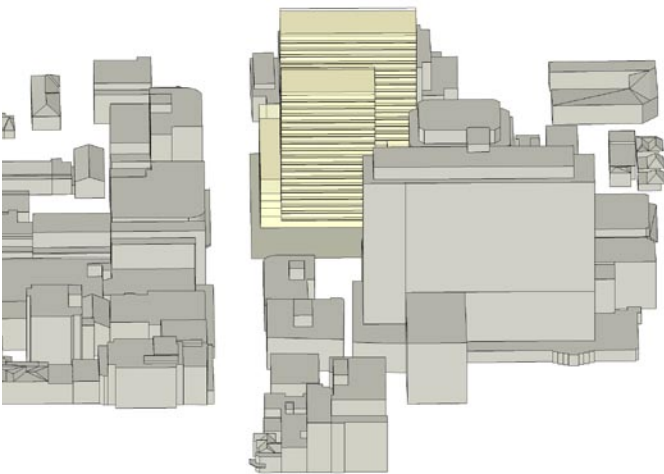
9am



10am



11am

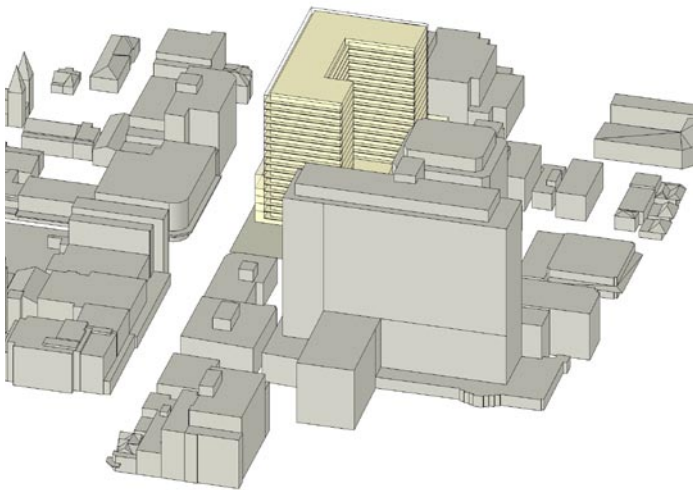


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i. Massing Studies

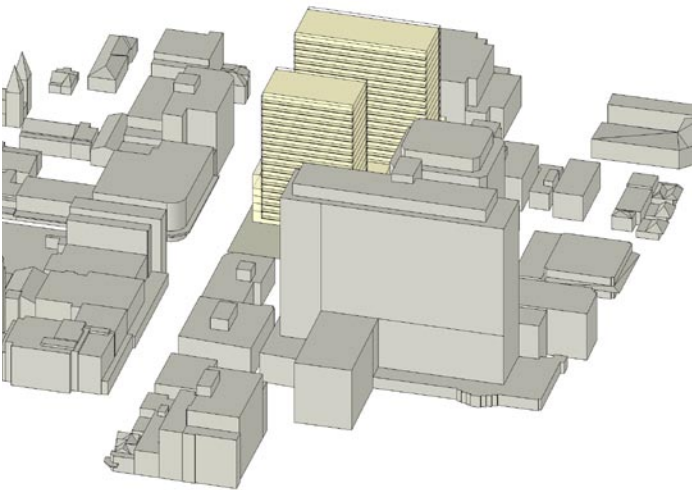
Solar Comparison - Winter Solstice June 21
Views from the sun

Option 1 - Perimeter Block

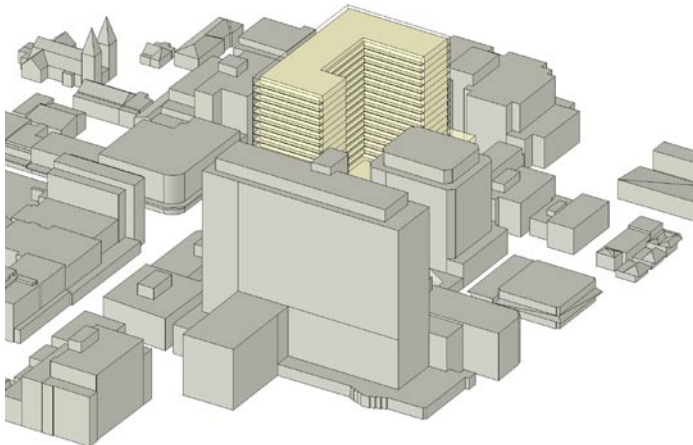
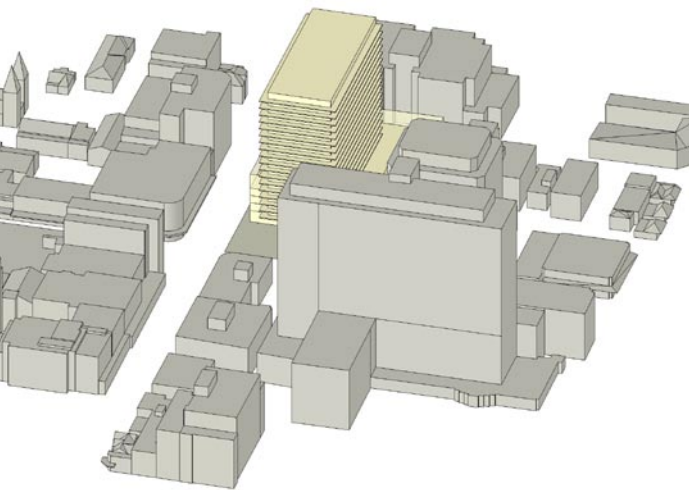


12 midday

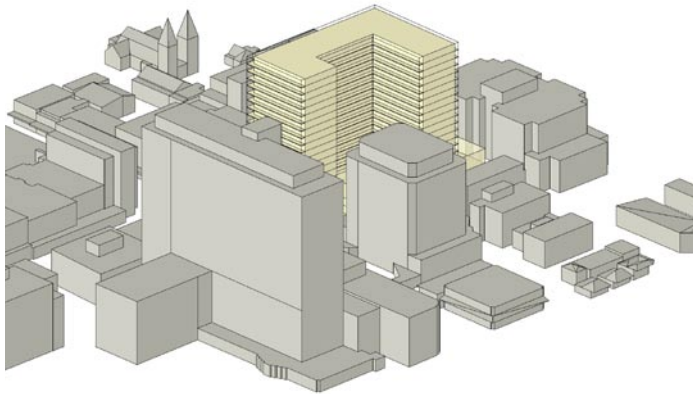
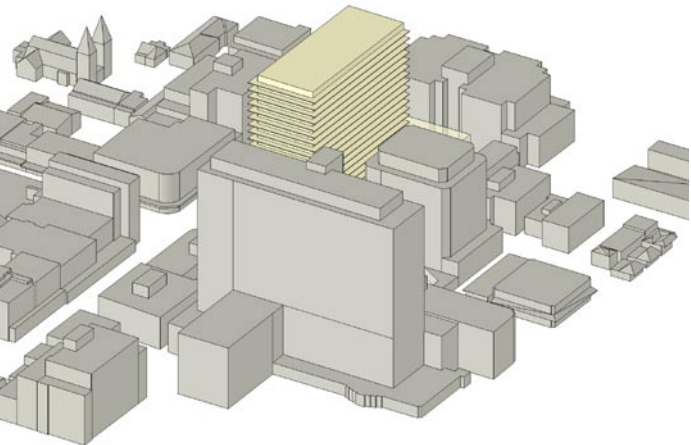
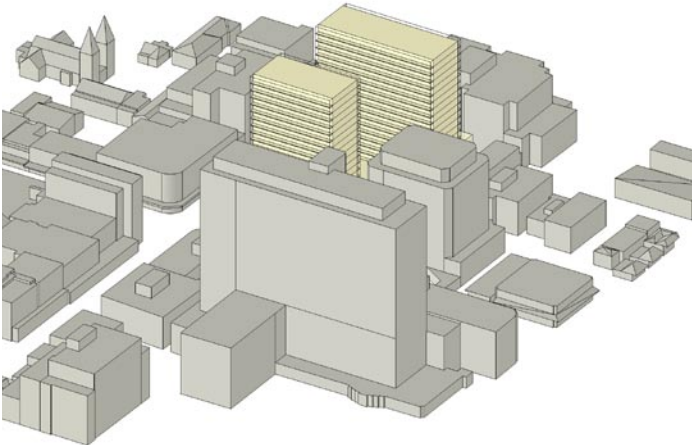
Option 2 - Two Linear East-West Blocks



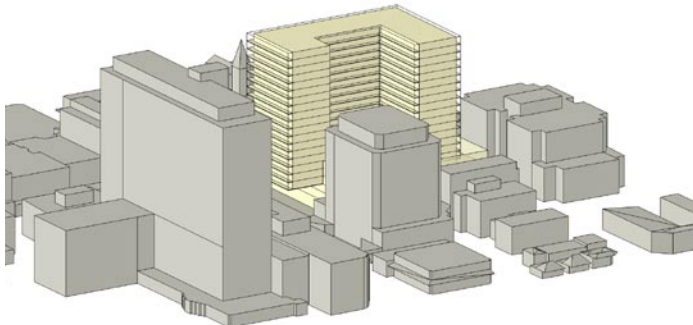
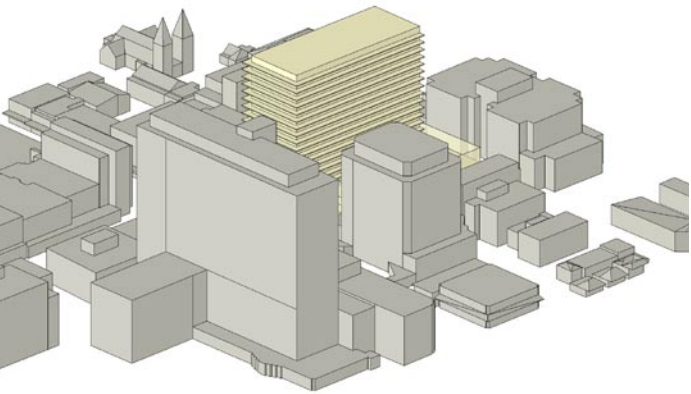
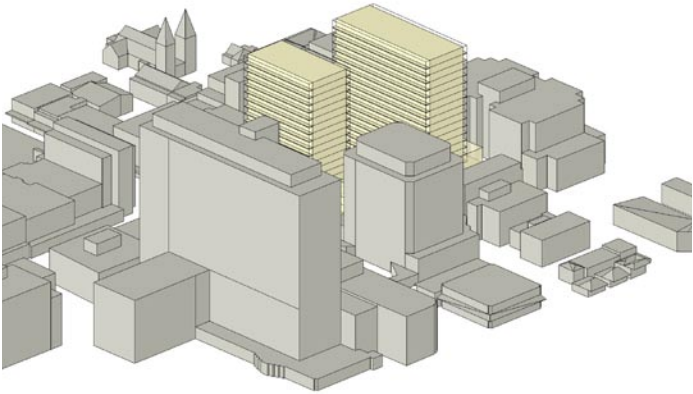
Option 3 - Linear North-South Block



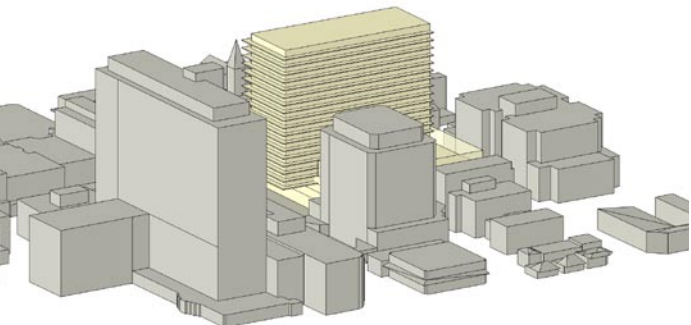
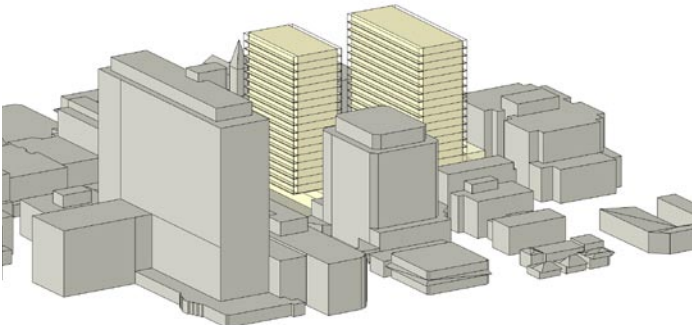
1pm



2pm



3pm

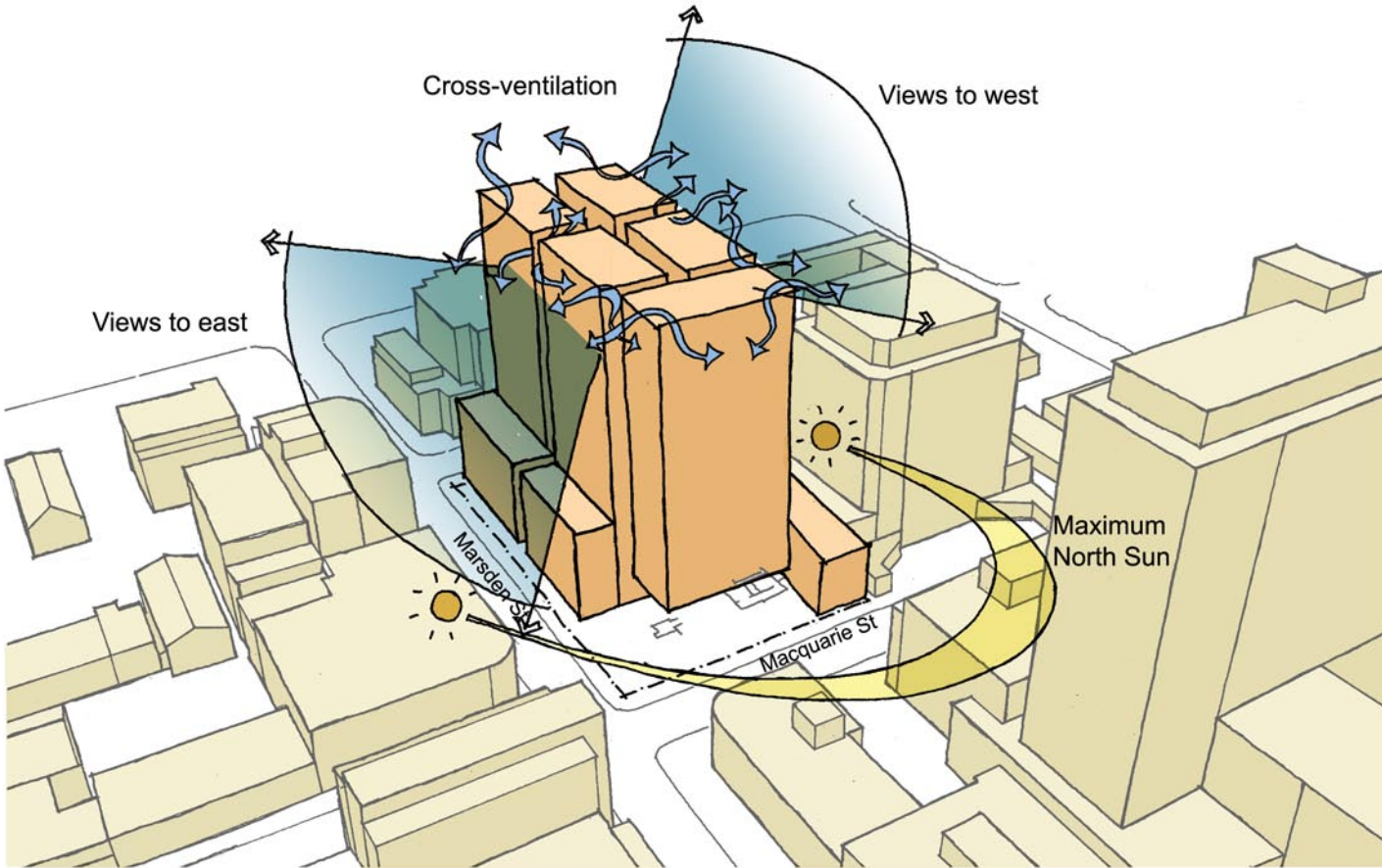


13. Appendix

i. Massing Studies

Comparitive Analysis

	Solar Access	South-Facing Apartments	Cross-Ventilation	DCP setbacks compliance
SEPP 65 - Residential Flat Design Code	70% minumum receive 2hrs sunlight mid-winter (for dense urban sites)	10% maximum	60% minimum	
OPTION 1 - Courtyard Block	✓ 76%	✗ 17%	✗ 35%	✓
OPTION 2A - Two linear E-W towers with central core	✓ 70%	✗ 20%	✗ 47%	✗
OPTION 2B - Two linear E-W towers with multiple cores	✓ 88%	✗ 12%	✗ 59%	✗
OPTION 3 - Linear N-S tower	✓ 100%	✓ 0%	✗ 24%	✓
OPTION 4 - Linear N-S tower with slots	✓ 100%	✓ 0%	✓ 63%	✓



4. Building Form -
Linear N-S Tower articulated with vertical slots