Appendix 1 **Design Evolution** 

## **MASTERPLAN SUMMARY**



#### **Key Elements of Design as Developed from Previous Engagement with Council**

- Develop masterplan diagrams to incorporate relocation of main open space to northern corner
- Detail shadow studies of surrounding precinct with impacts shown in 3D

#### **Design Strategy**

- Concentrating height in the centre of the site, and with solar access maintained for surrounding properties
- Lower scale edges to surrounding properties
- Creating significant active edges through precinct
- A masterplan that is distinctly stageable and deliverable

Scheme meets all the strategic objectives of the council masterplan with regards to:

- Built Form
- Land Use
- Connectivity
- Place-making and Public Realm

#### **Deviations from the Preliminary Masterplan**

- Proposed built form is demonstrated to achieve required levels of amenity to surrounding properties
- Enhanced pedestrian connectivity is provided by further clustering of towers and liberating ground plane
- Significant open space is created at the gateway to Fairfield

#### **Development Summary**

- FSR 3.50:1
- Height 82.1m
- Zone B4 Mixed Use
- 1,489 Dwellings
- 17,600m<sup>2</sup> Commercial/Retail
- 7900m² Open Space

## INITIAL DEVELOPMENT OPTIONS

#### **Design Outcome Based On Current Site Controls**

existing controls on the site.

FSR 2.5:1

Height 26m

Zone B4 Mixed Use

956 Dwellings

17,000 Commercial/Retail

#### How this scheme won't meet the urban design objectives of the town centre design study

- This scheme is an example of what can be achieved under the Lack of community open space, all open space contained within private developments
  - Perceived density with entirely mid rise precinct
  - Permeability only achieved through street connections
  - Termination of retail environment at existing mall plaza with limited ability to draw civic uses further north
  - · Lack of diverse uses on site to match current levels of feasibility

#### **Fairfield Forum Design Study Option**

This scheme is the masterplan developed from the Fairfield Council design study. The scheme was designed by TPG and LFA urban designers.

FSR 3:1

Height 64m

Zone B4 Mixed Use

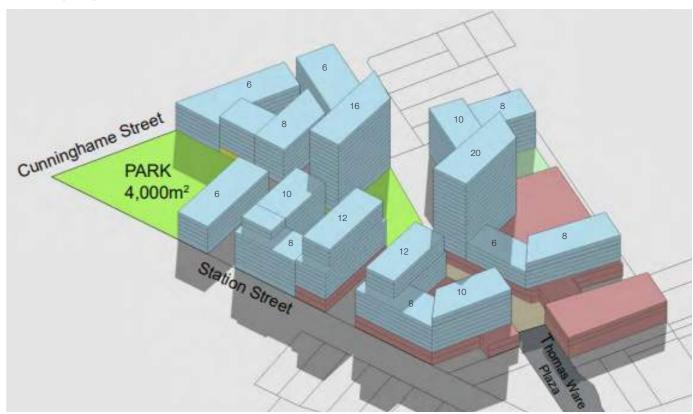
1,000-1,200 Dwellings

27,450 Commercial/Retail

5,500m<sup>2</sup> Open Space







## **DESIGN OPTIONS INVESTIGATIONS**

#### Scheme - May 2017

This scheme proposed 2 street connections, connecting Ware Street to Station Street. However, it does not allow for any public open space.

FSR 2.5:1

Height 26m

Zone B4 Mixed Use

956 Dwellings

17,000m<sup>2</sup> Commercial/Retail

12000m<sup>2</sup> Open Space



#### Scheme - August 2017

This scheme proposed an increase in height in the centre of the site to decrease the overall building footprint and increase open space on the site. This scheme proposes a public park to the north-east corner.

FSR 3.5:1

Height 86m

Zone B4 Mixed Use

1,519 Dwellings

17,500m<sup>2</sup> Commercial/Retail

7000m<sup>2</sup> Open Space



## **DEVELOPED DESIGN OPTIONS**

#### Scheme - January 2018

This scheme proposes an increase in height in the centre of the site to decrease the overall building footprint and increase open space on the site. This scheme proposes a public park to the north-west corner.

FSR 3.5:1

Height 86m

Zone B4 Mixed Use

1,519 Dwellings

17,500m<sup>2</sup> Commercial/Retail

8400m<sup>2</sup> Open Space



#### Scheme - July 2018

This scheme proposes a redistribution of height through the site to decrease the overall building footprint and increase open space on the site. This scheme proposes a public park to the north-east corner.

FSR 3.5:1

Height 86m

Zone B4 Mixed Use

1,519 Dwellings

17,500m<sup>2</sup> Commercial/Retail

7000m<sup>2</sup> Open Space





## **DEVELOPED DESIGN OPTIONS**

#### Scheme - Current

This scheme retains the location and size of the park on the north-east corner. The schemes explores relocation of Market square towards the centre of the precinct allowing for clear visual and pedestrian links from park. Residential towers adapted to optimise solar access and create visual interest with variance through articualtion of massing.

FSR 3.5:1

Height 82.1m

Zone B4 Mixed Use

1,489 Dwellings

17,600m<sup>2</sup> Commercial/Retail

7900m<sup>2</sup> Open Space

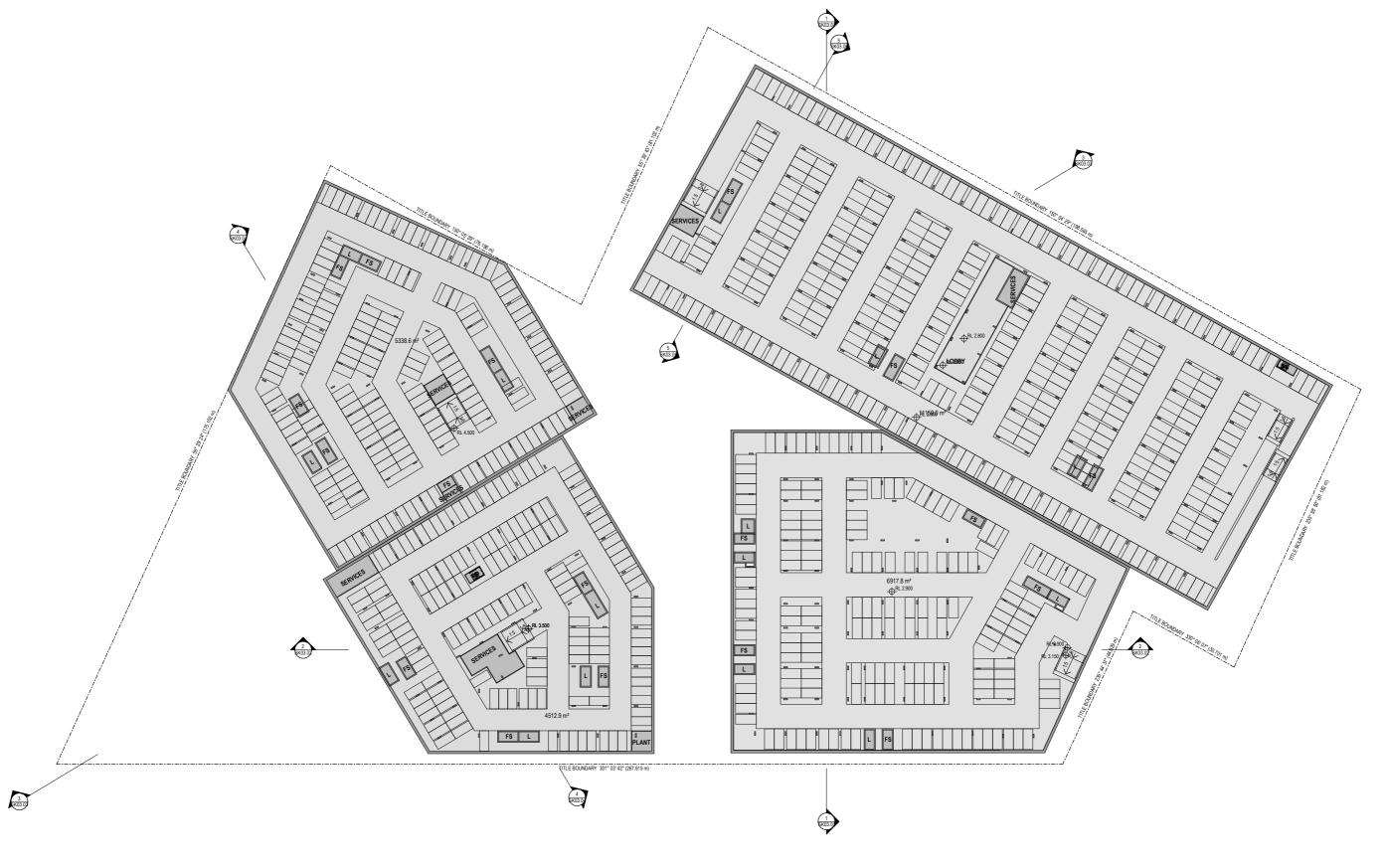




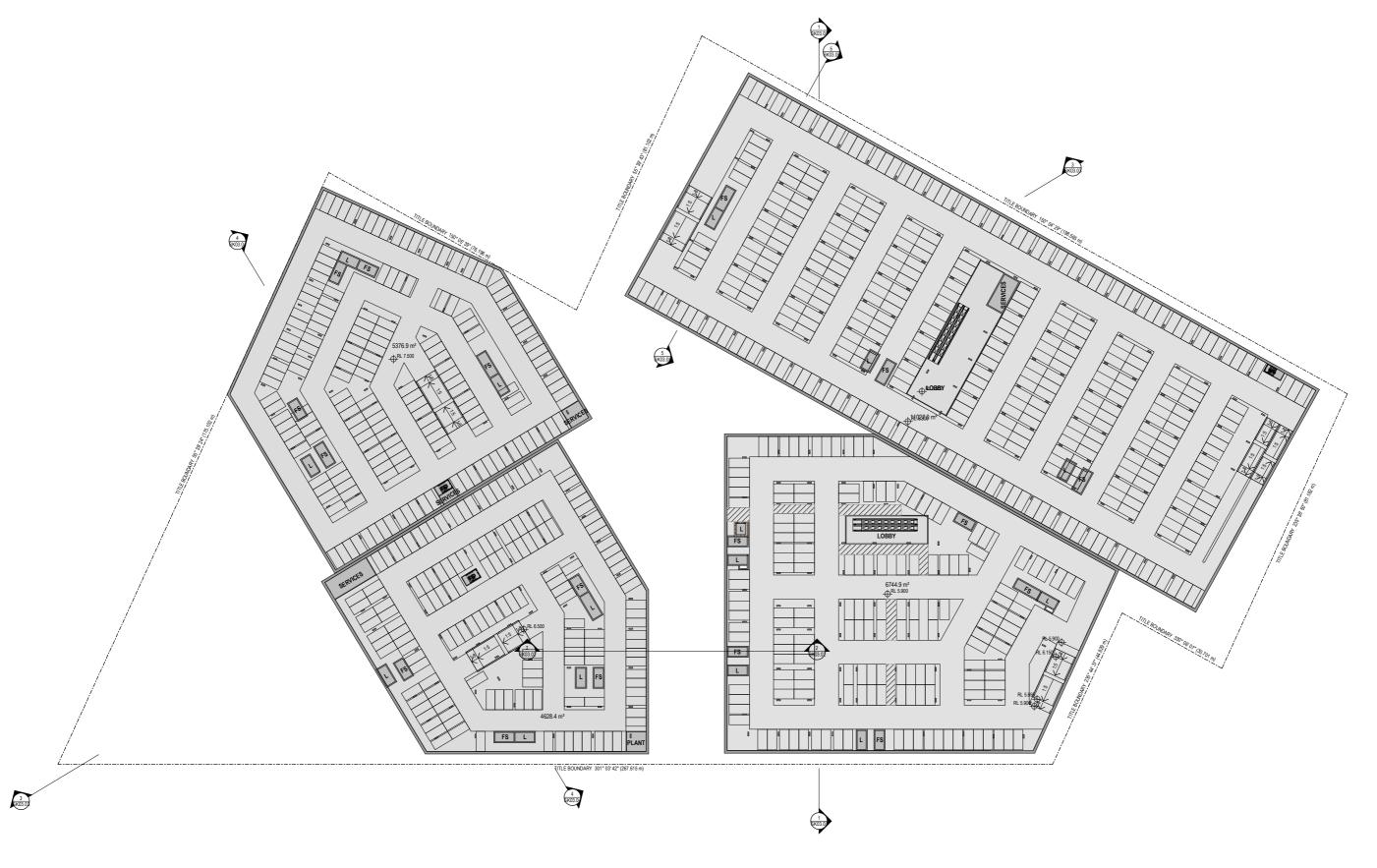
Appendix 2

# Plans & Sections

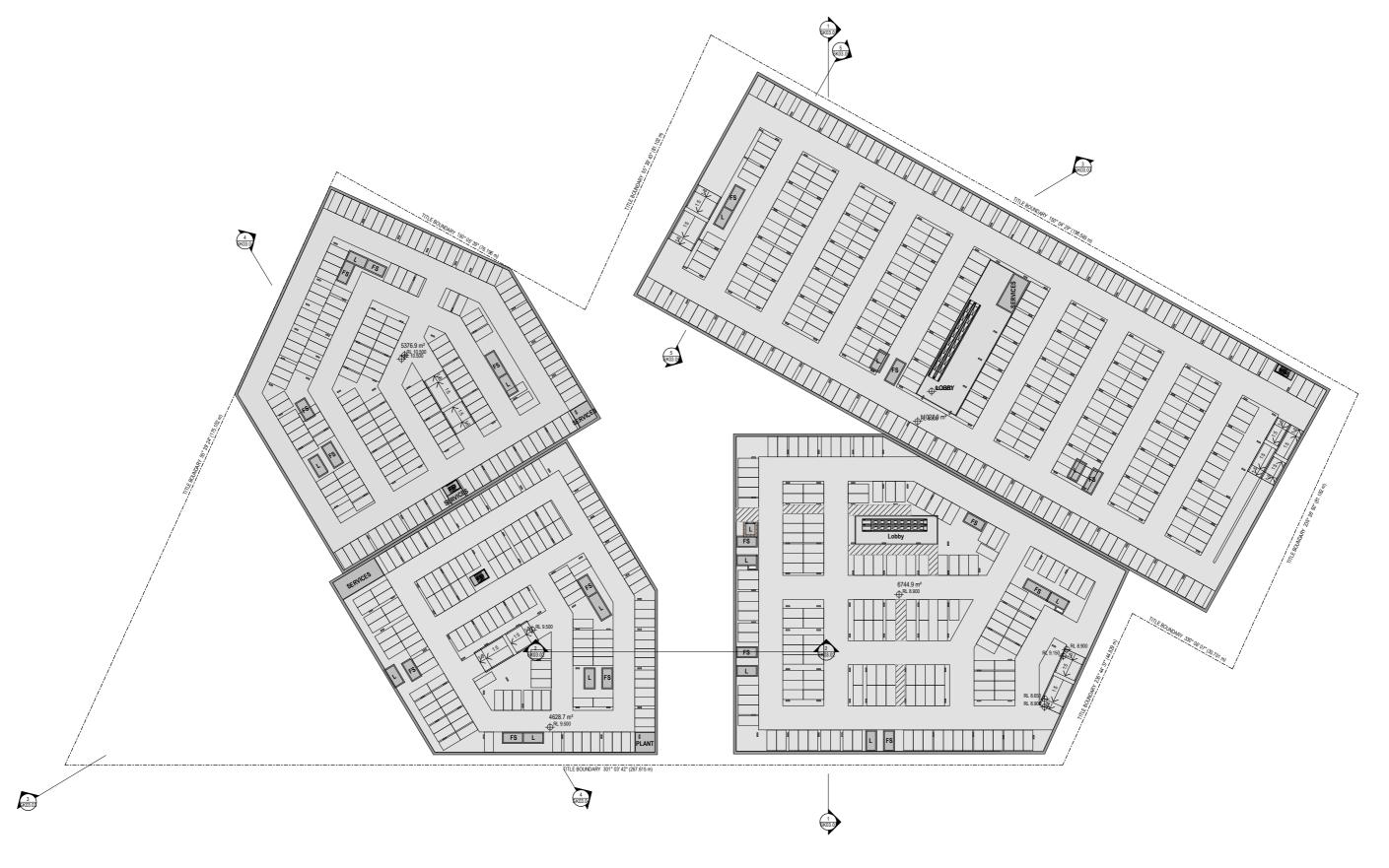
## **BASEMENT 3**



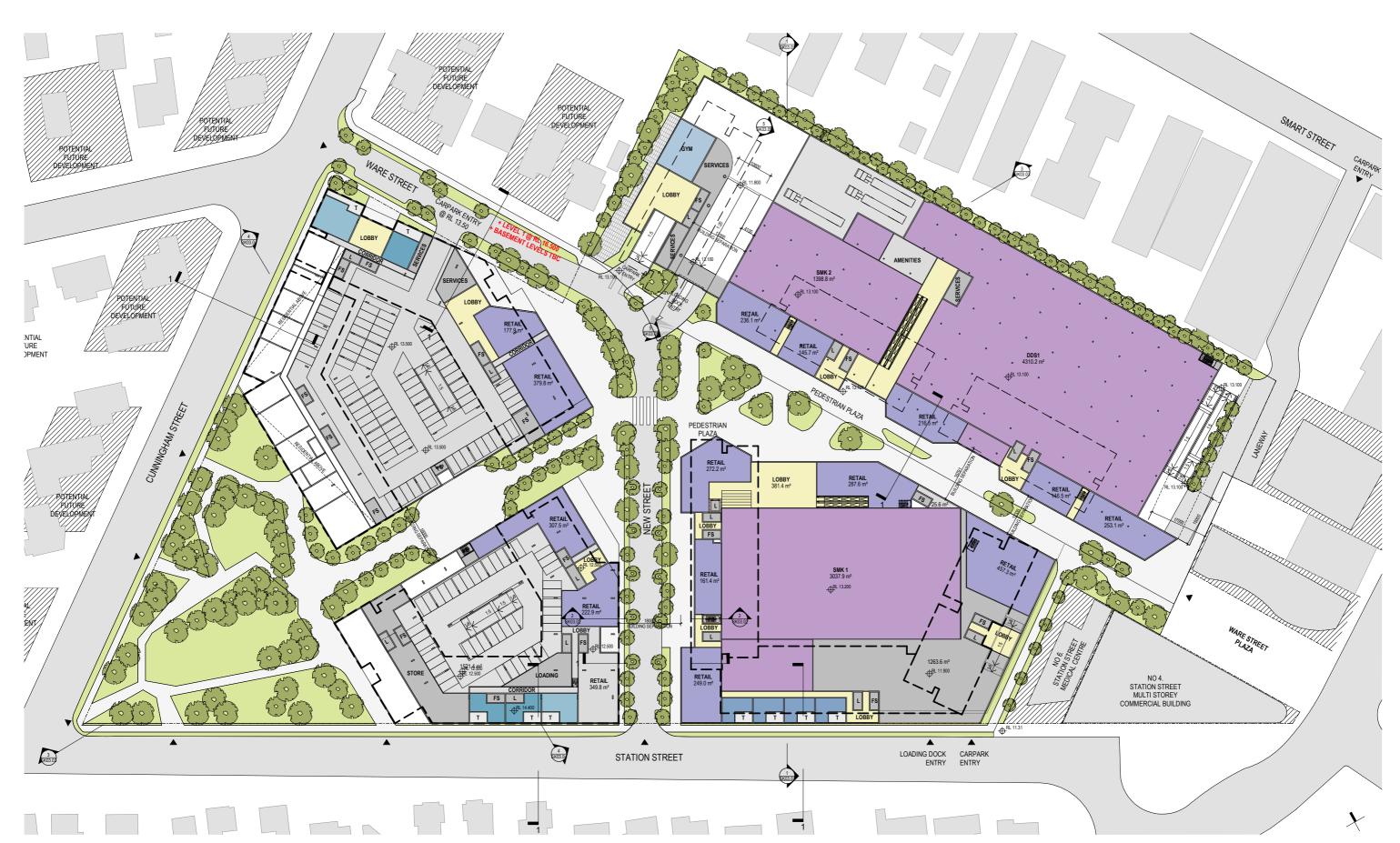
## **BASEMENT 2**



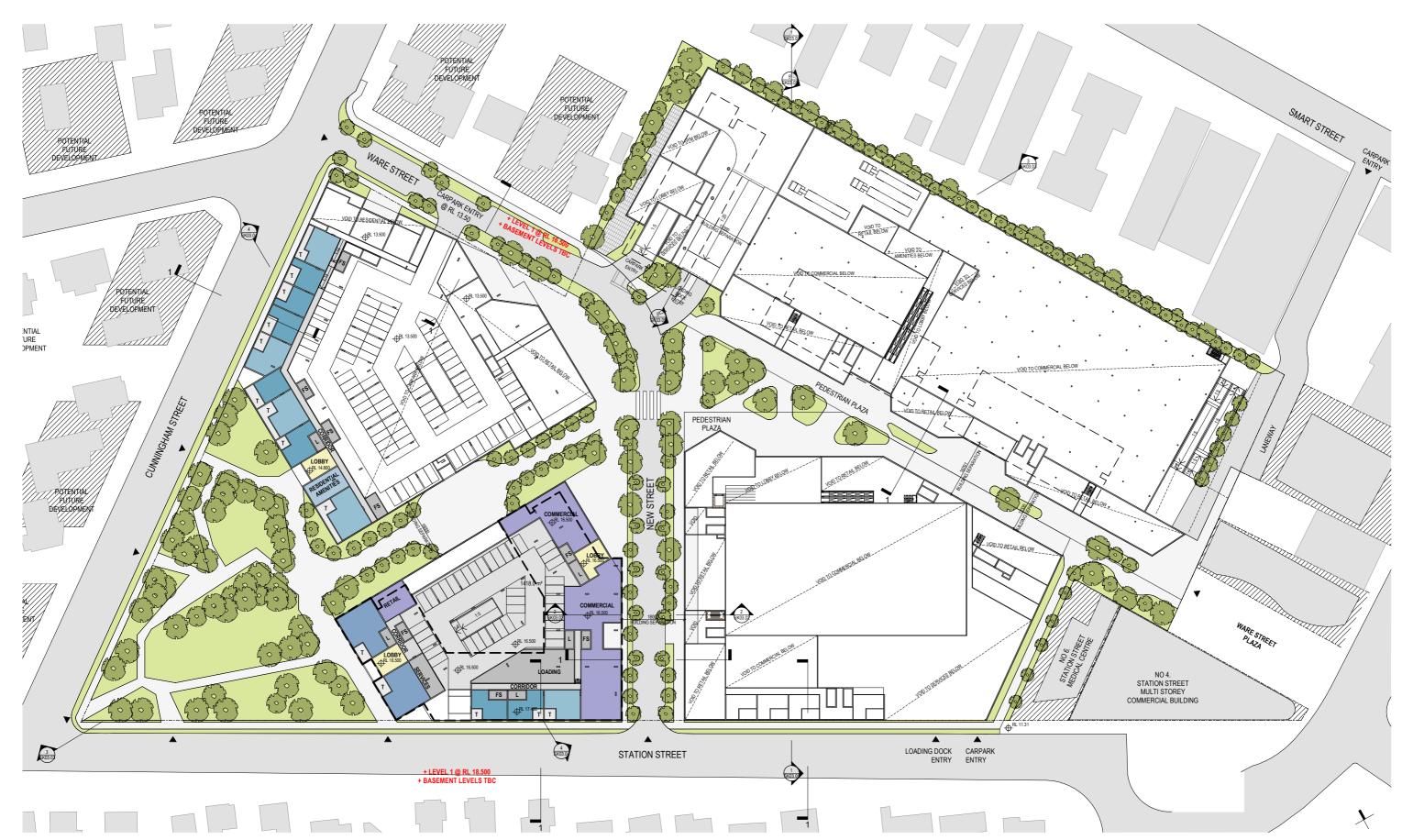
## **BASEMENT 1**



## **GROUND LEVEL**

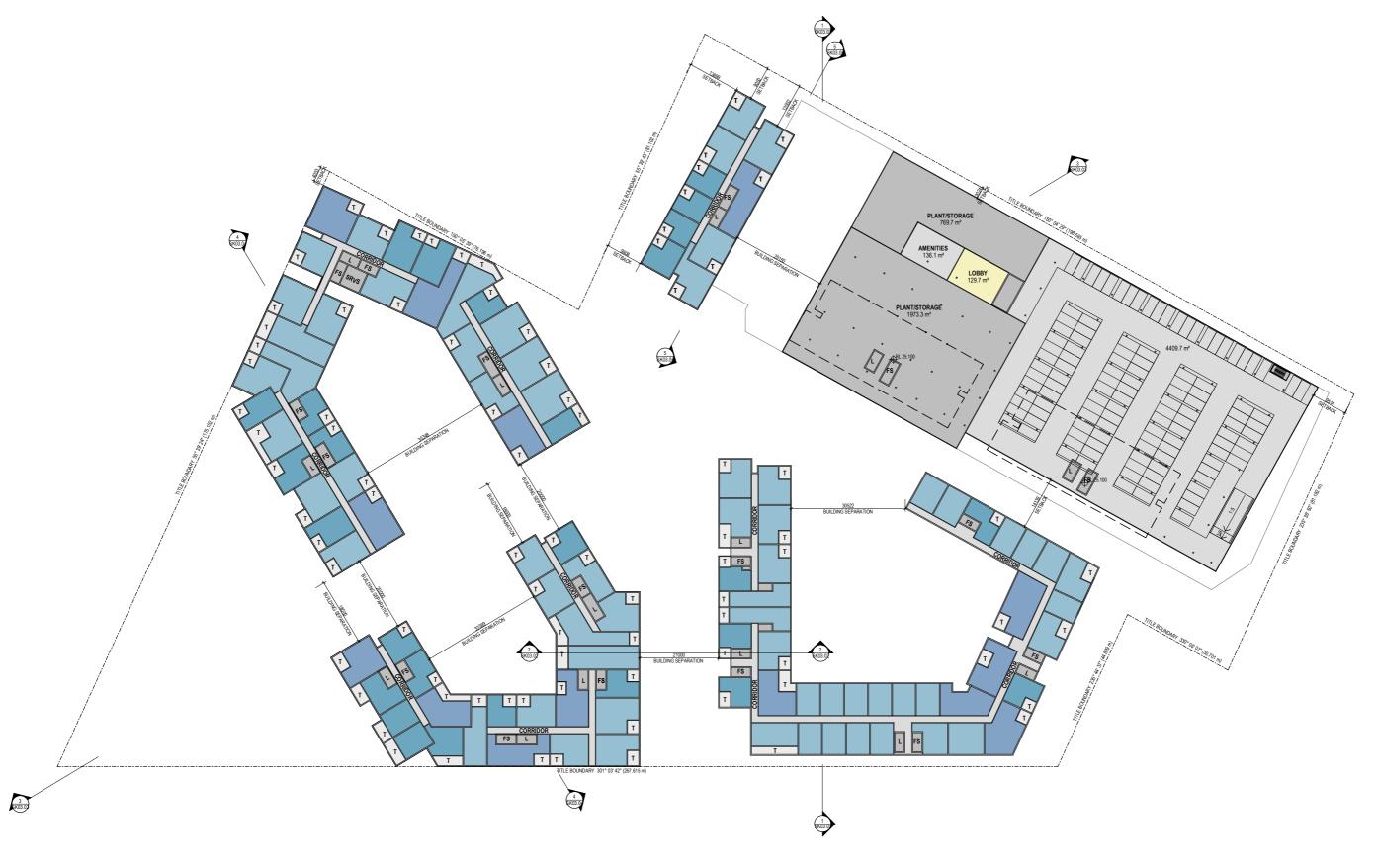


## **GROUND UPPER**

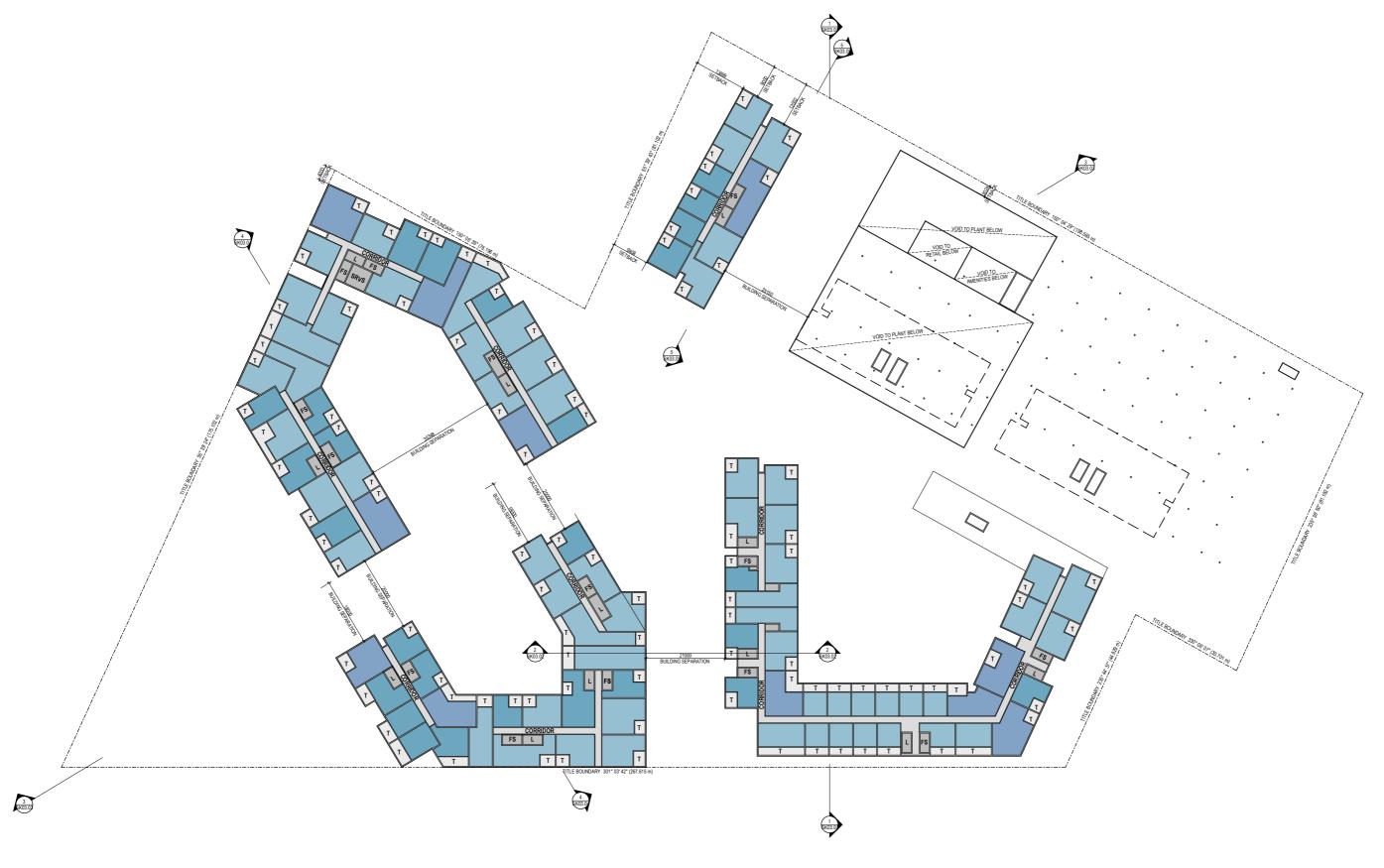




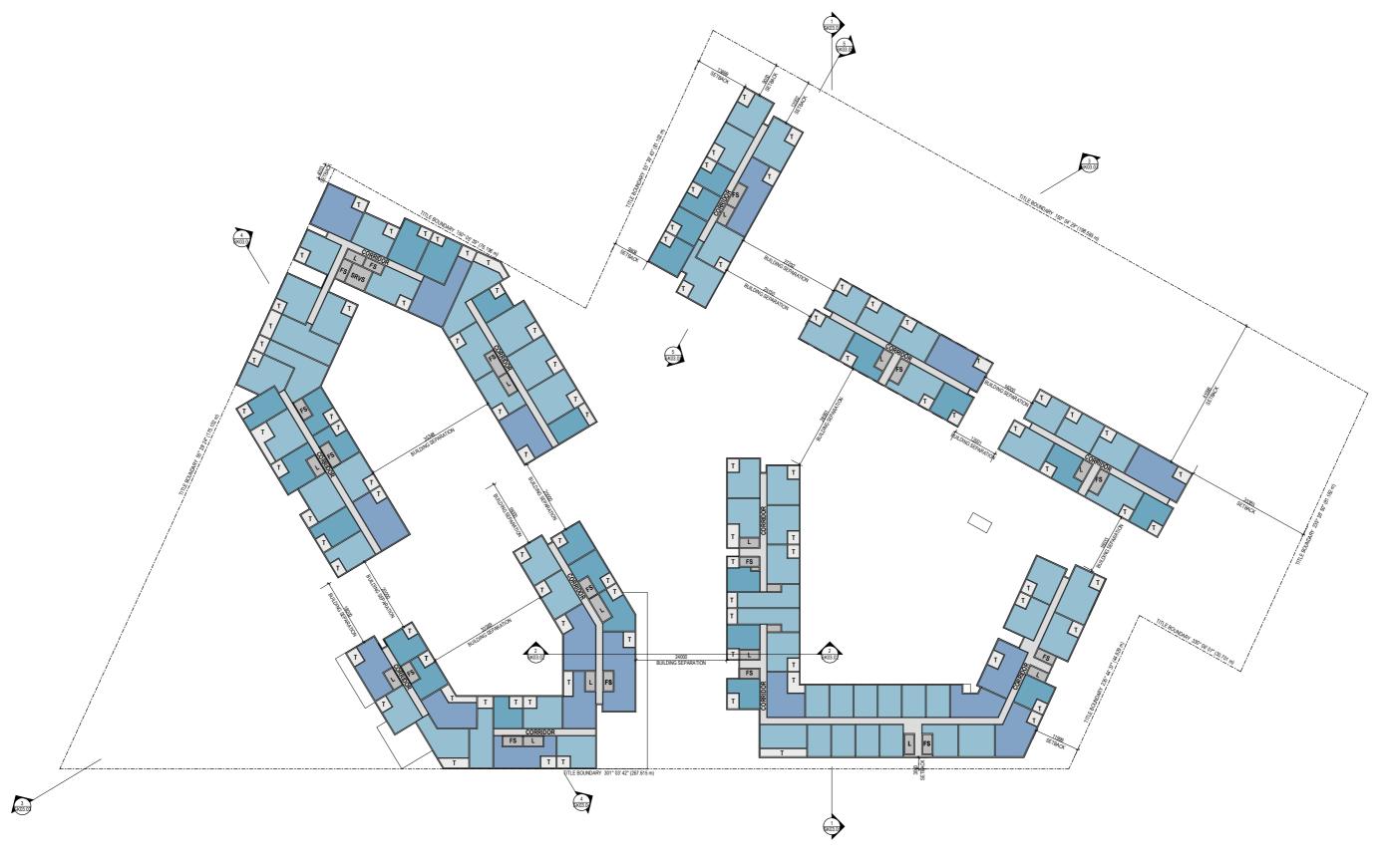




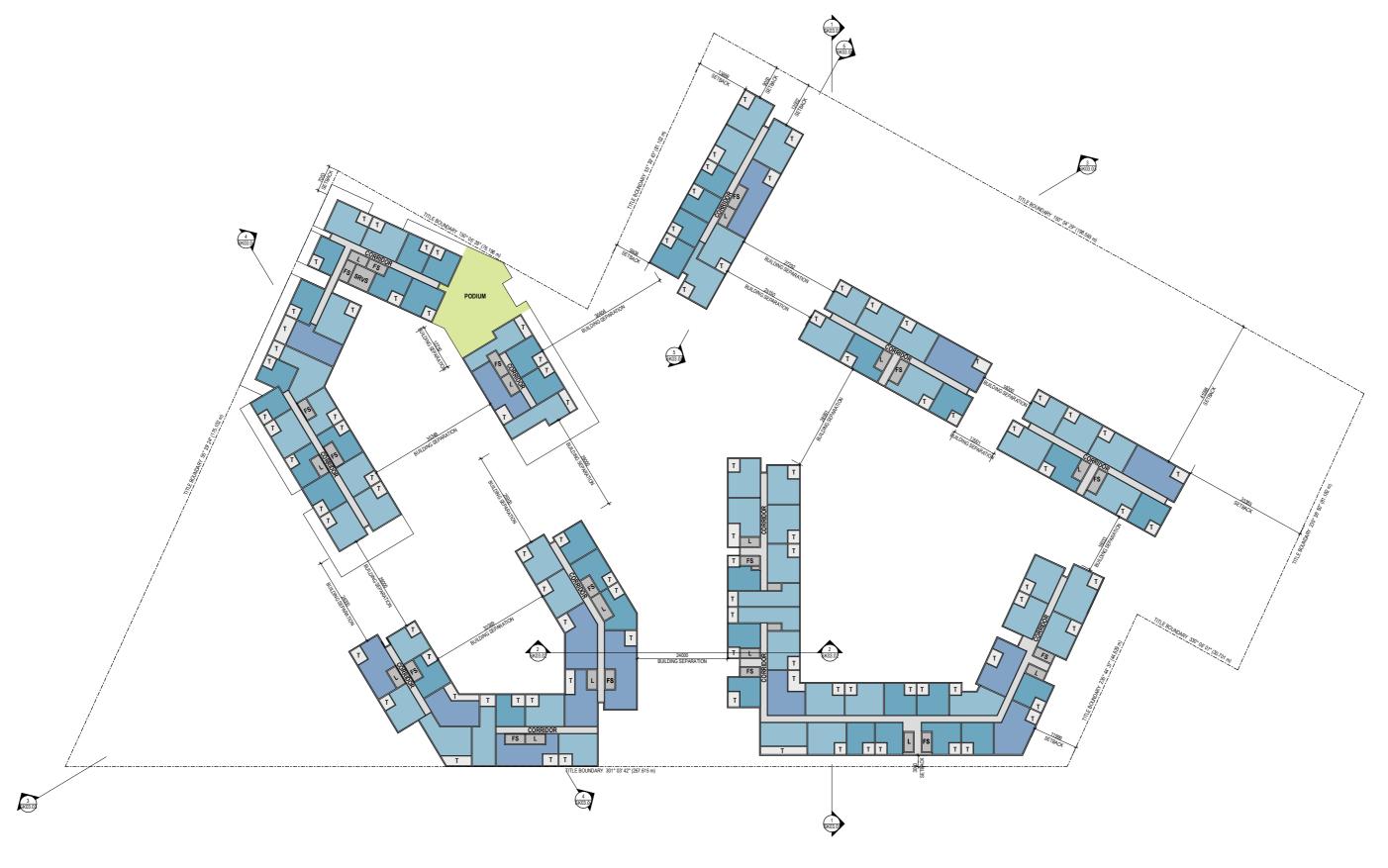




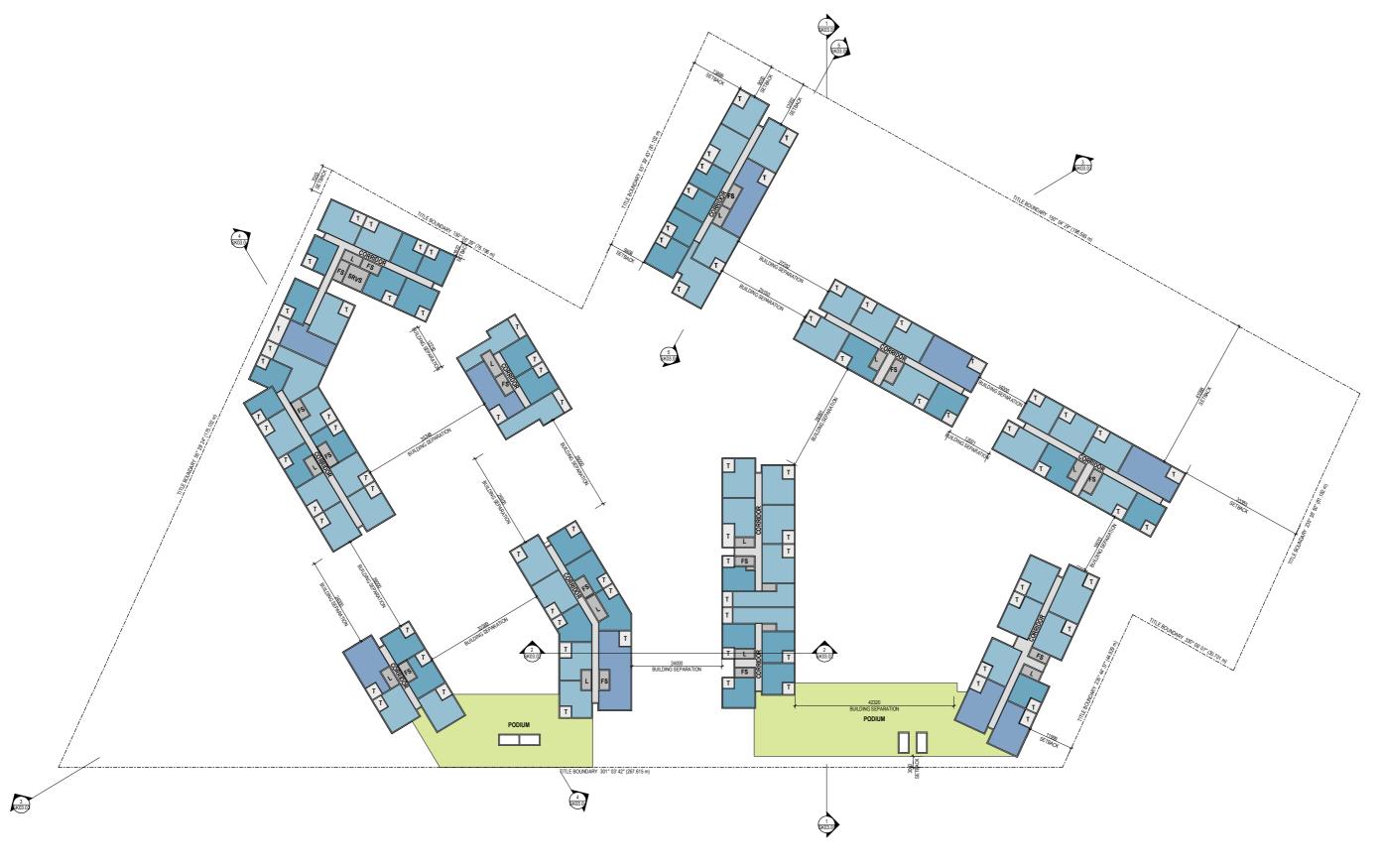




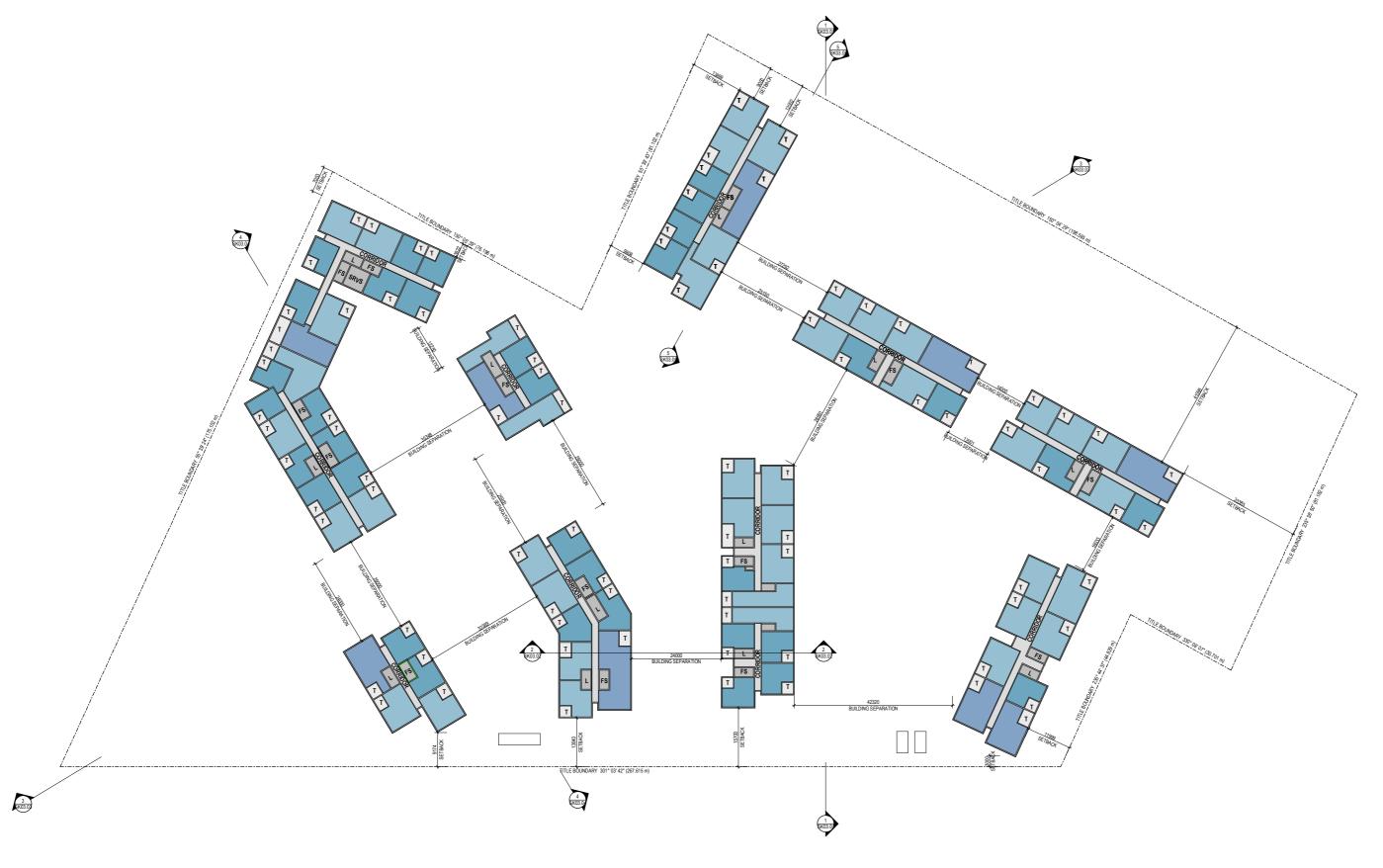




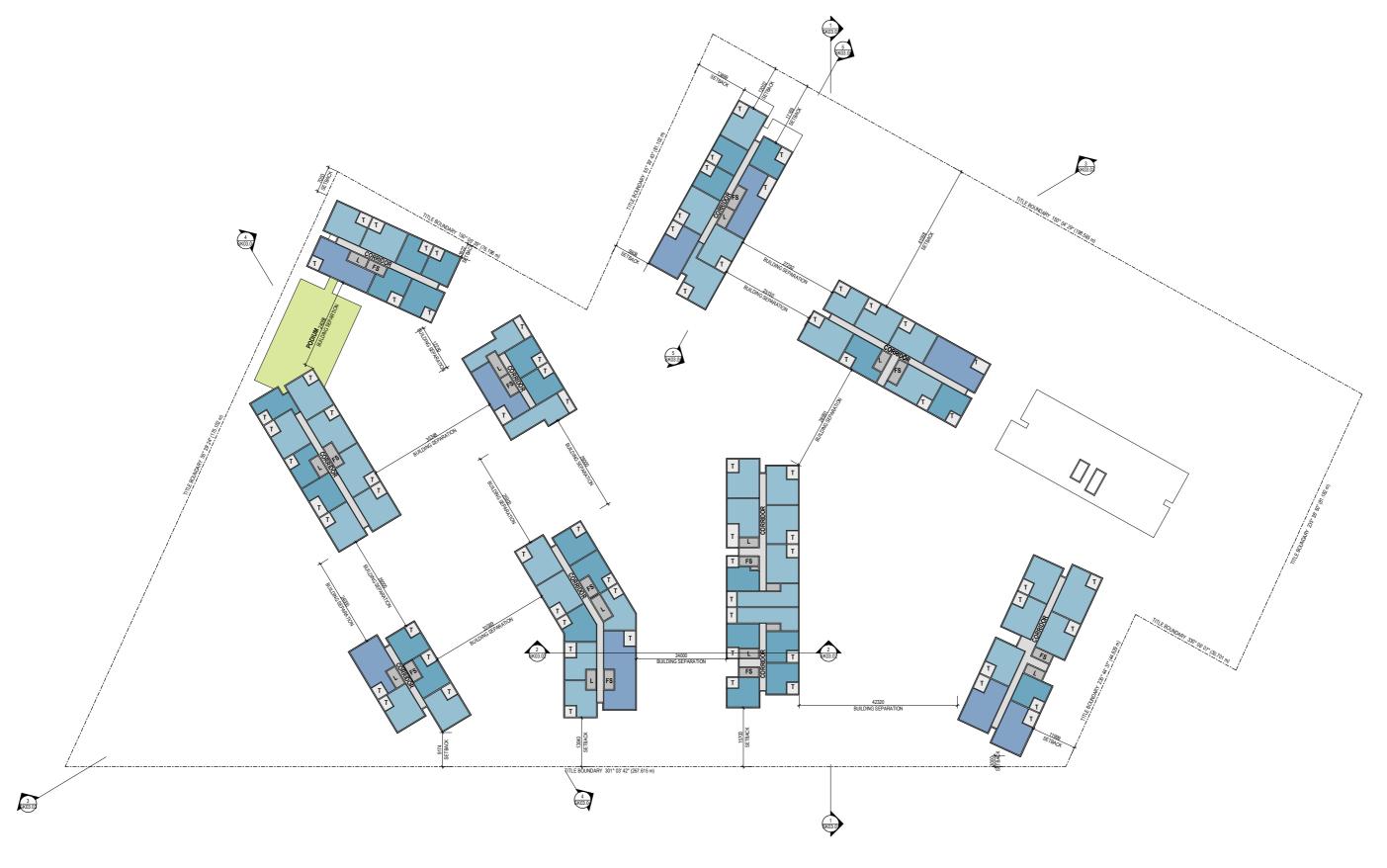




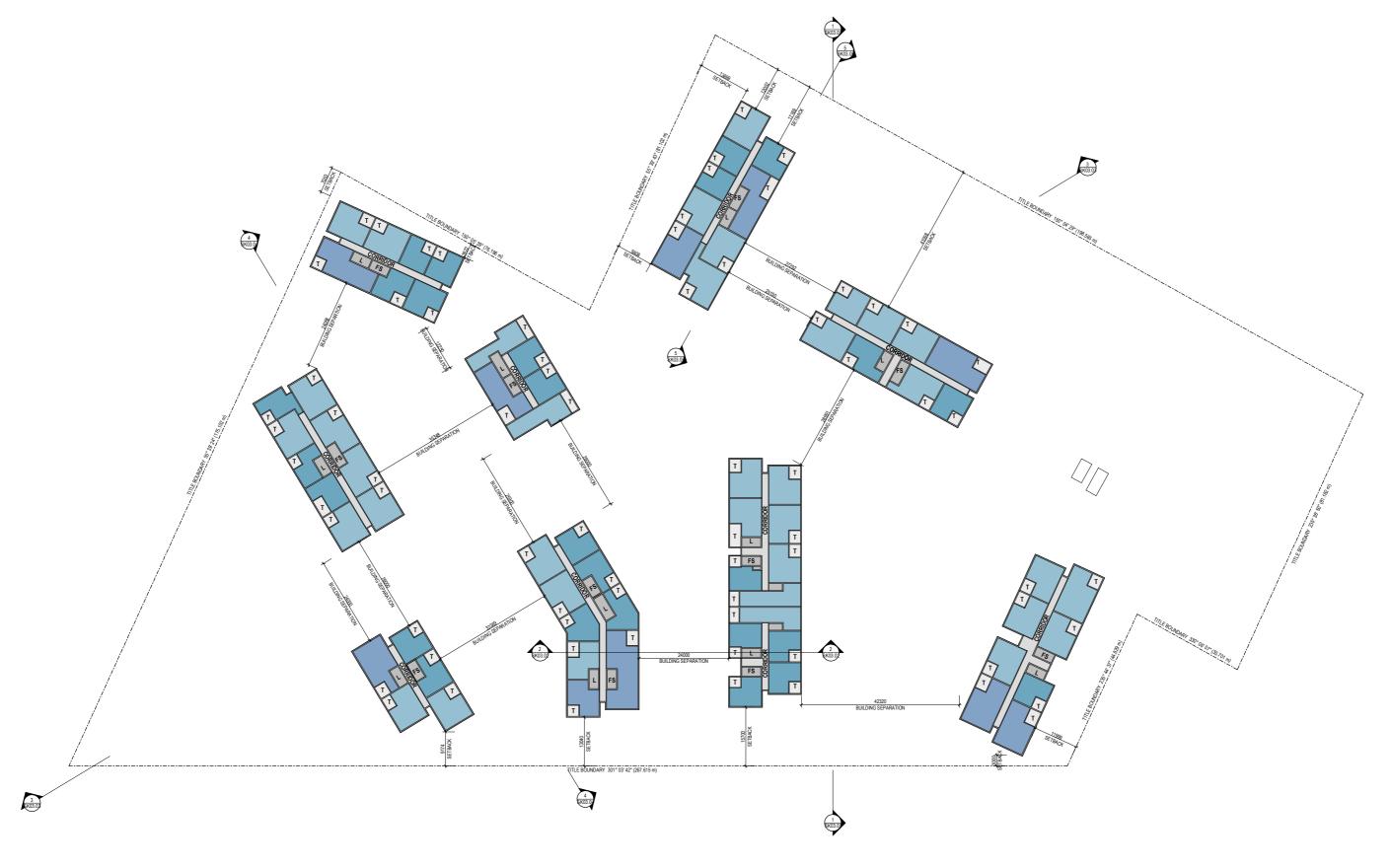


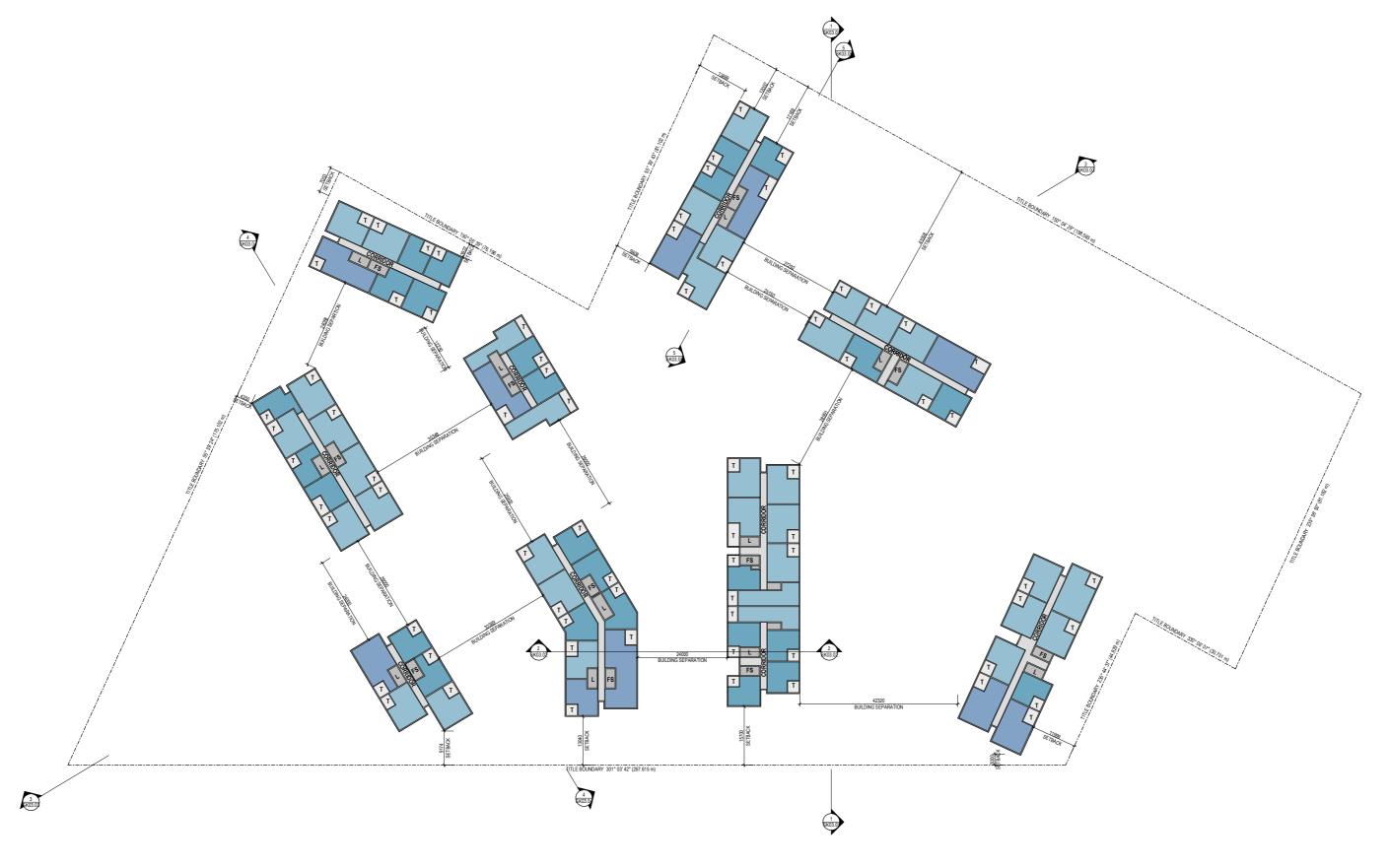


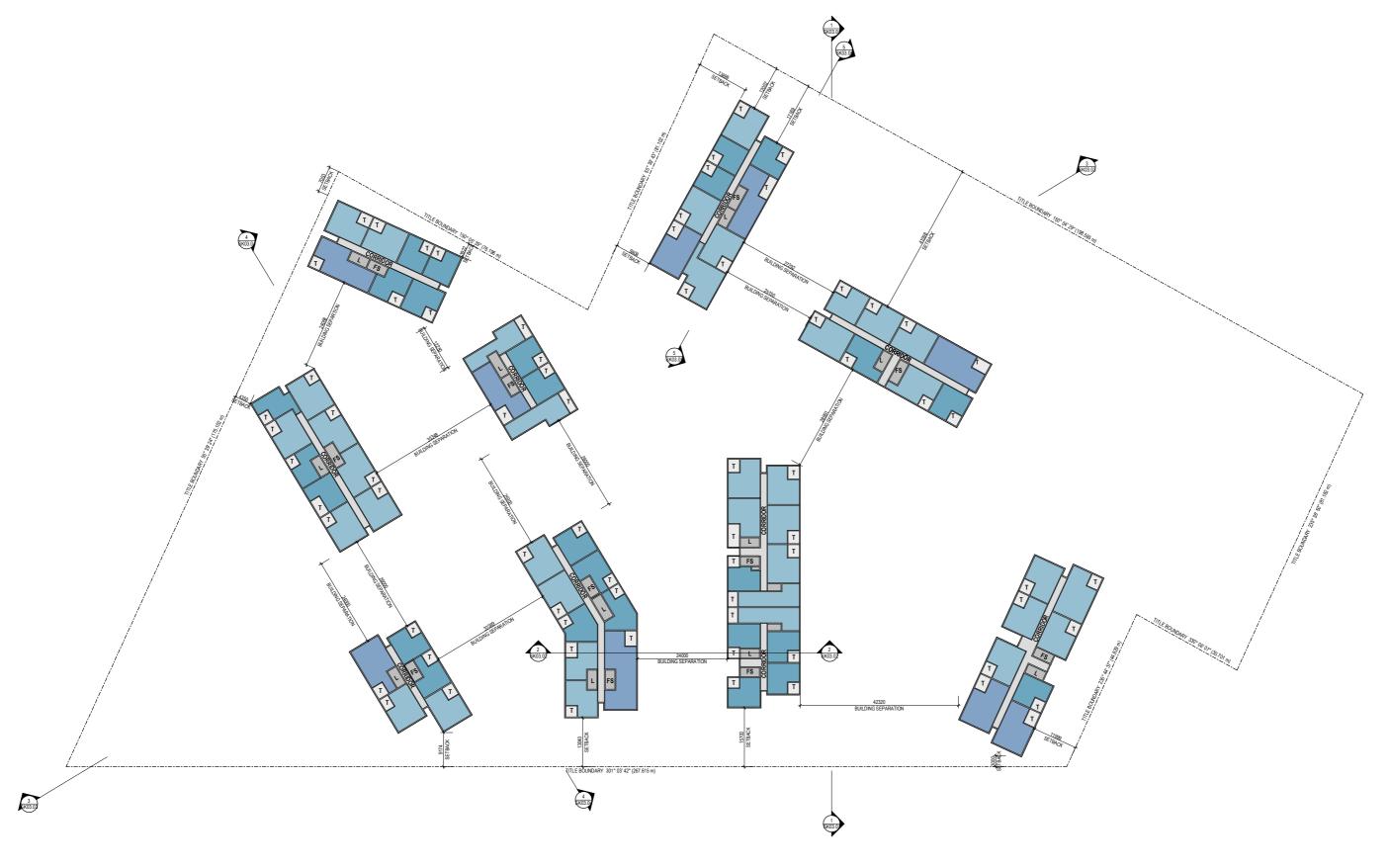


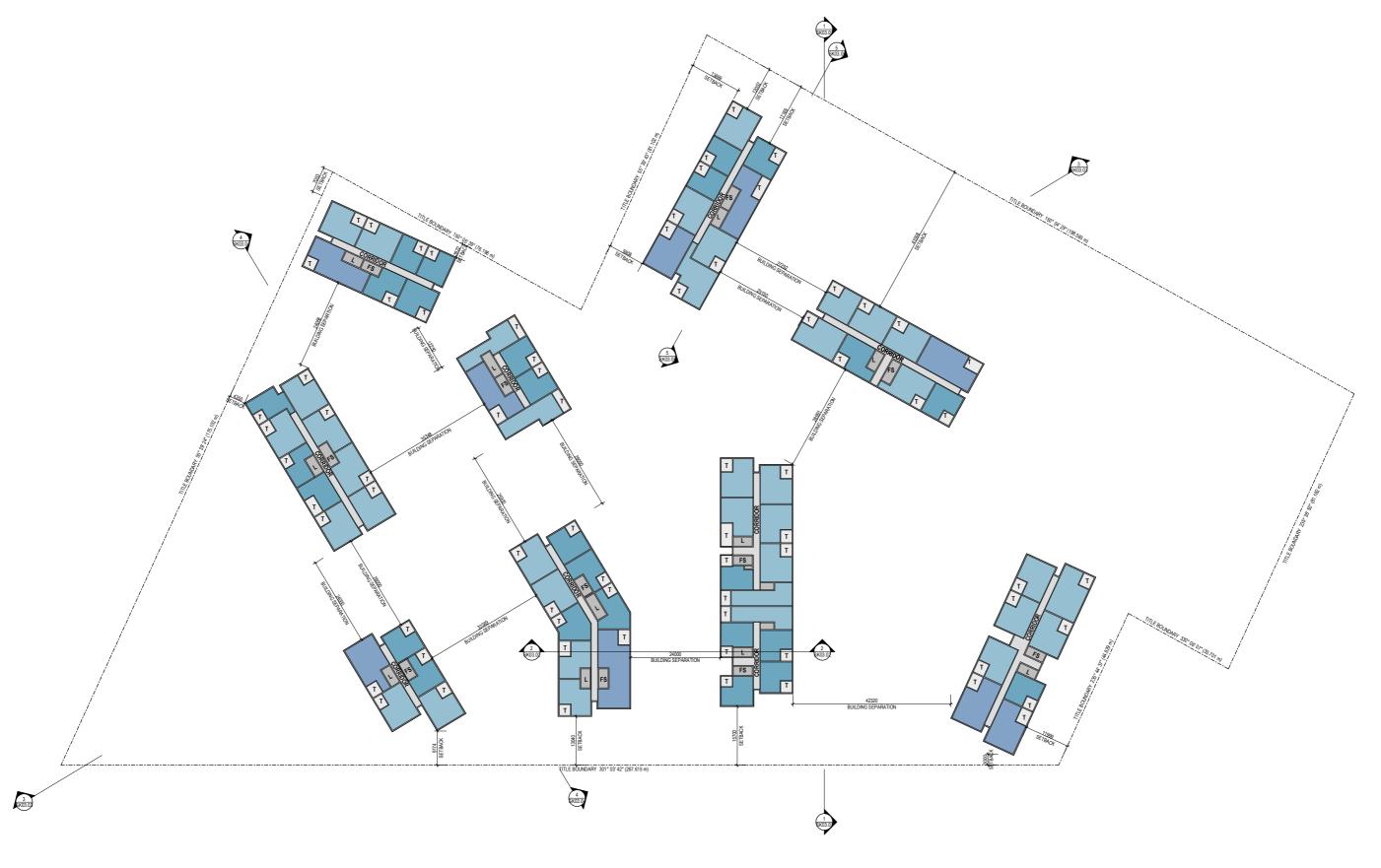


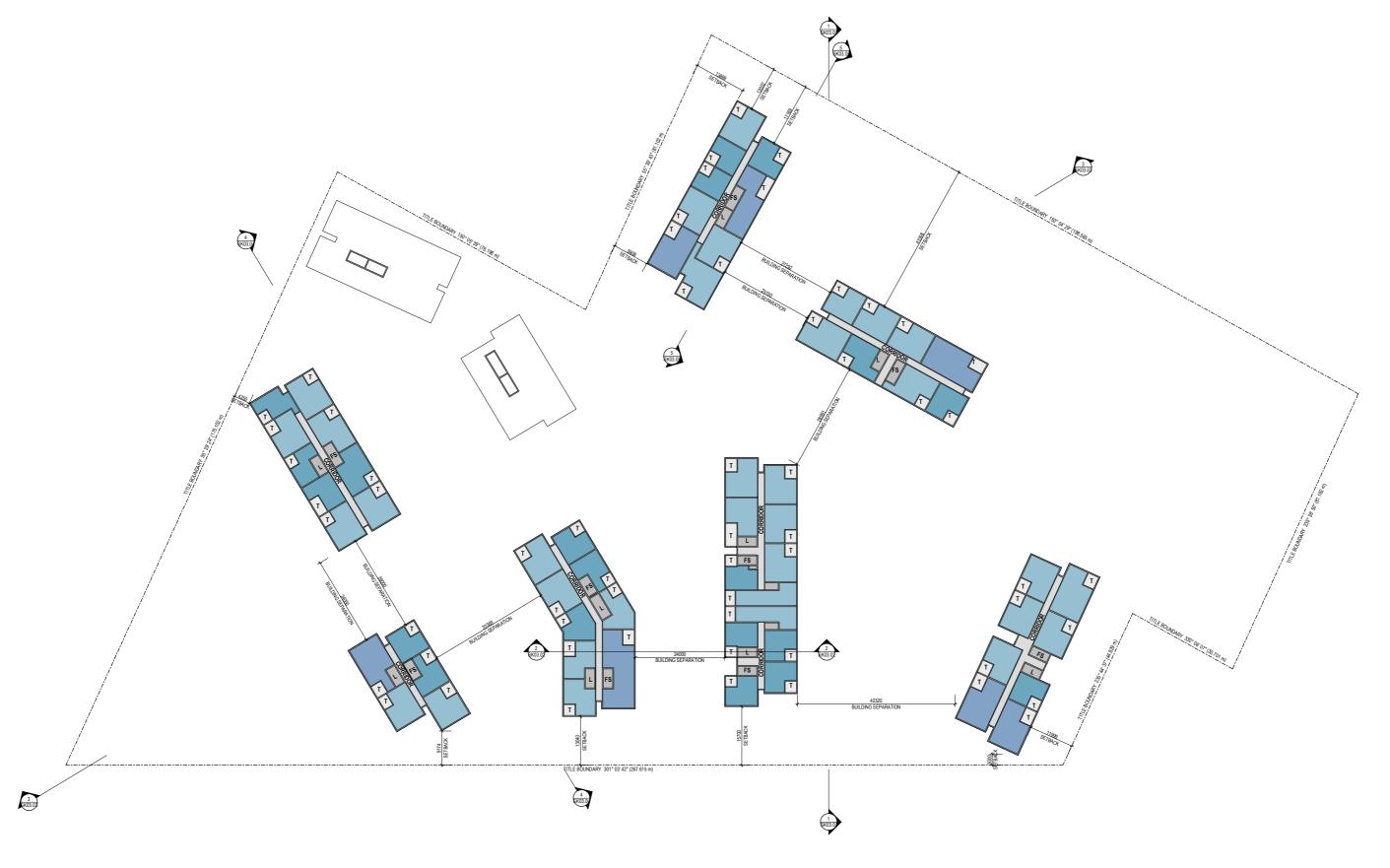


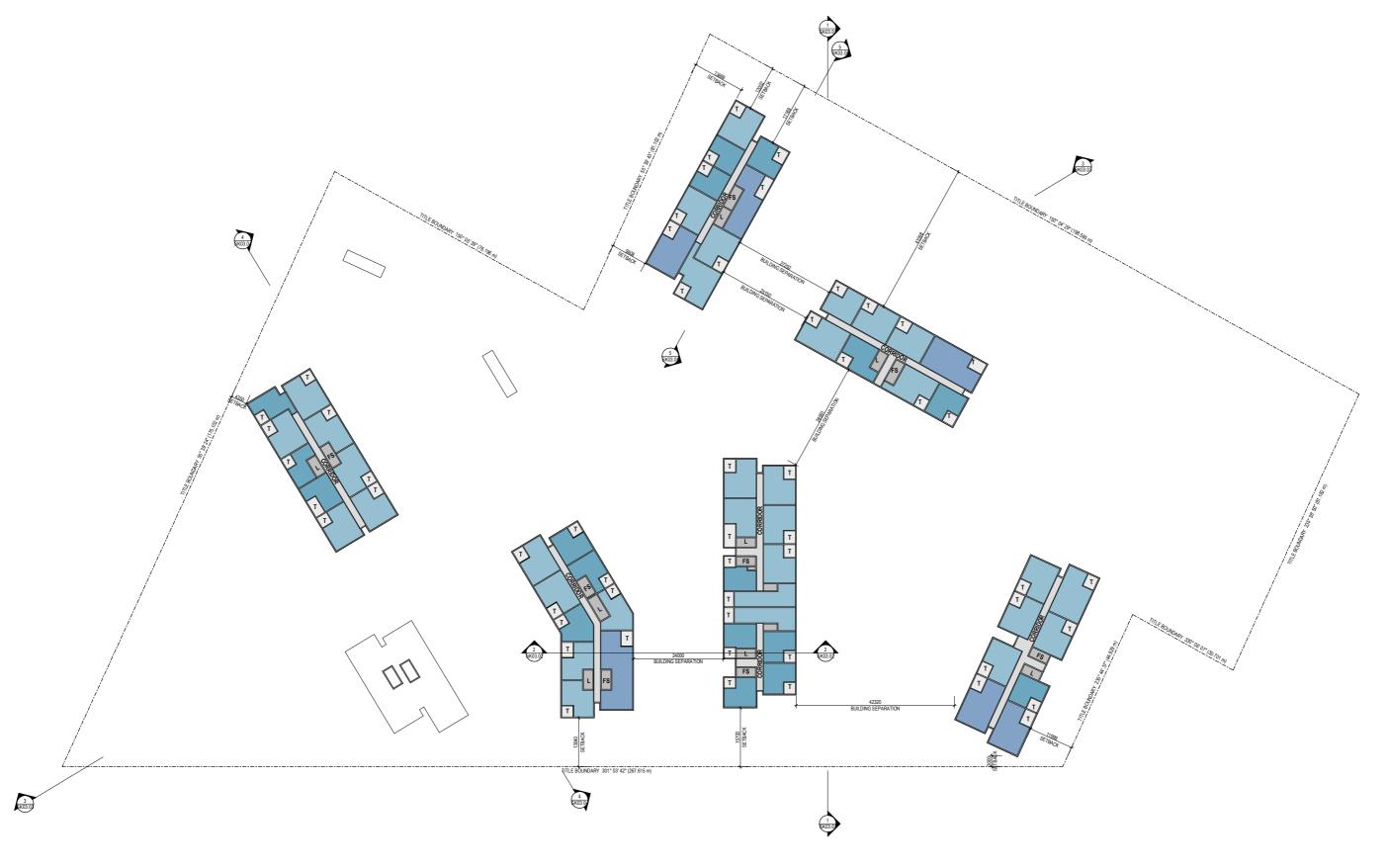


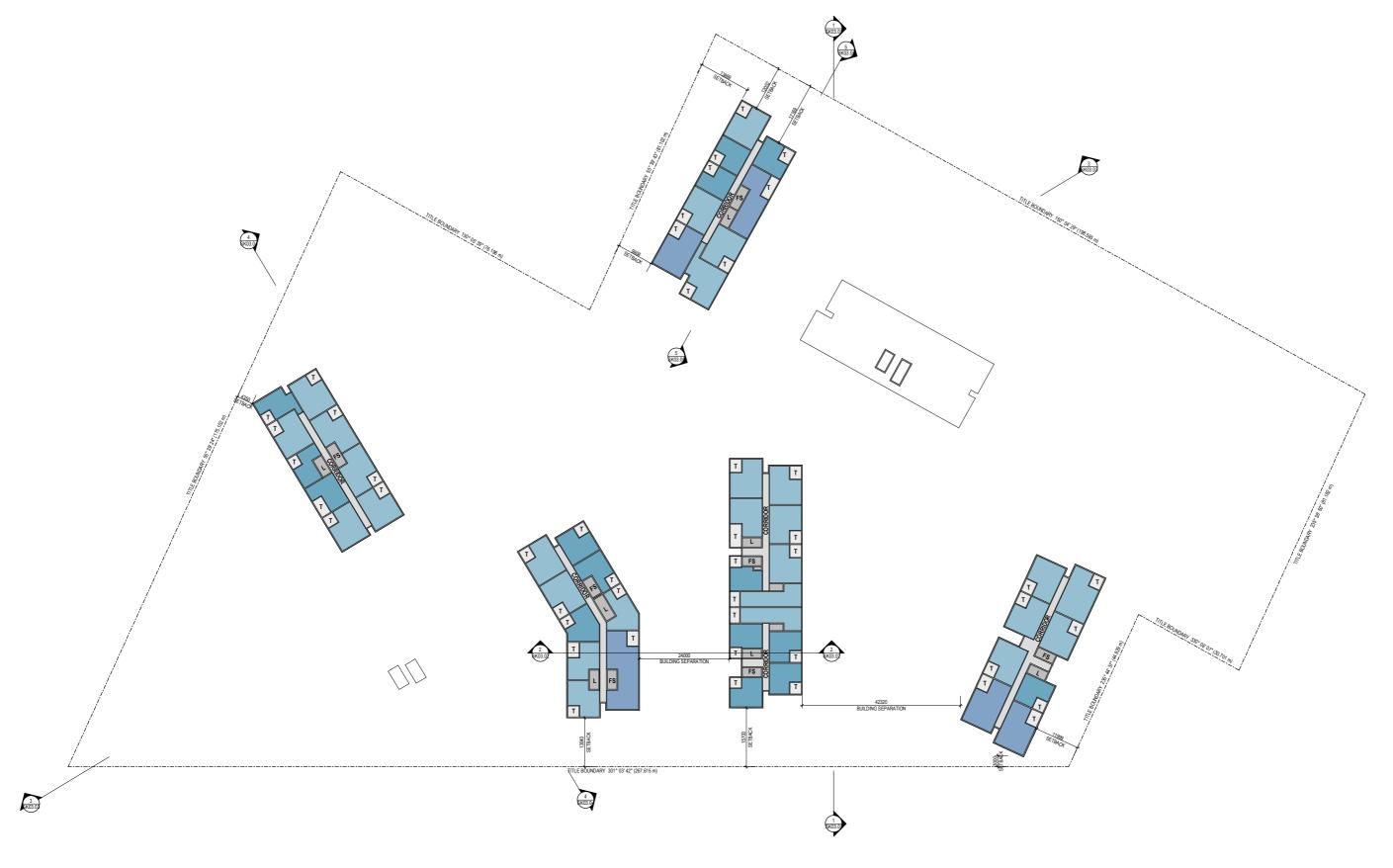


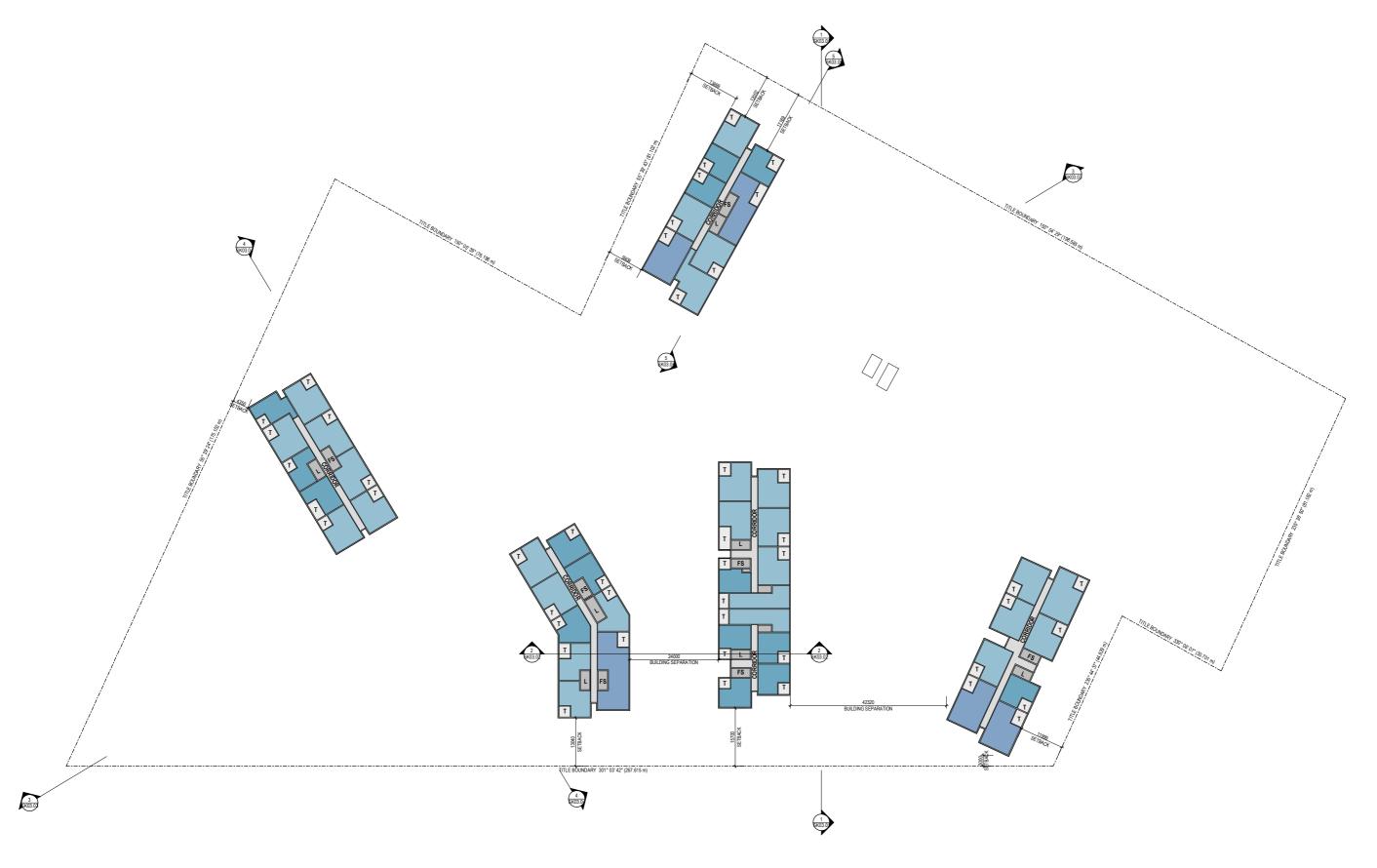


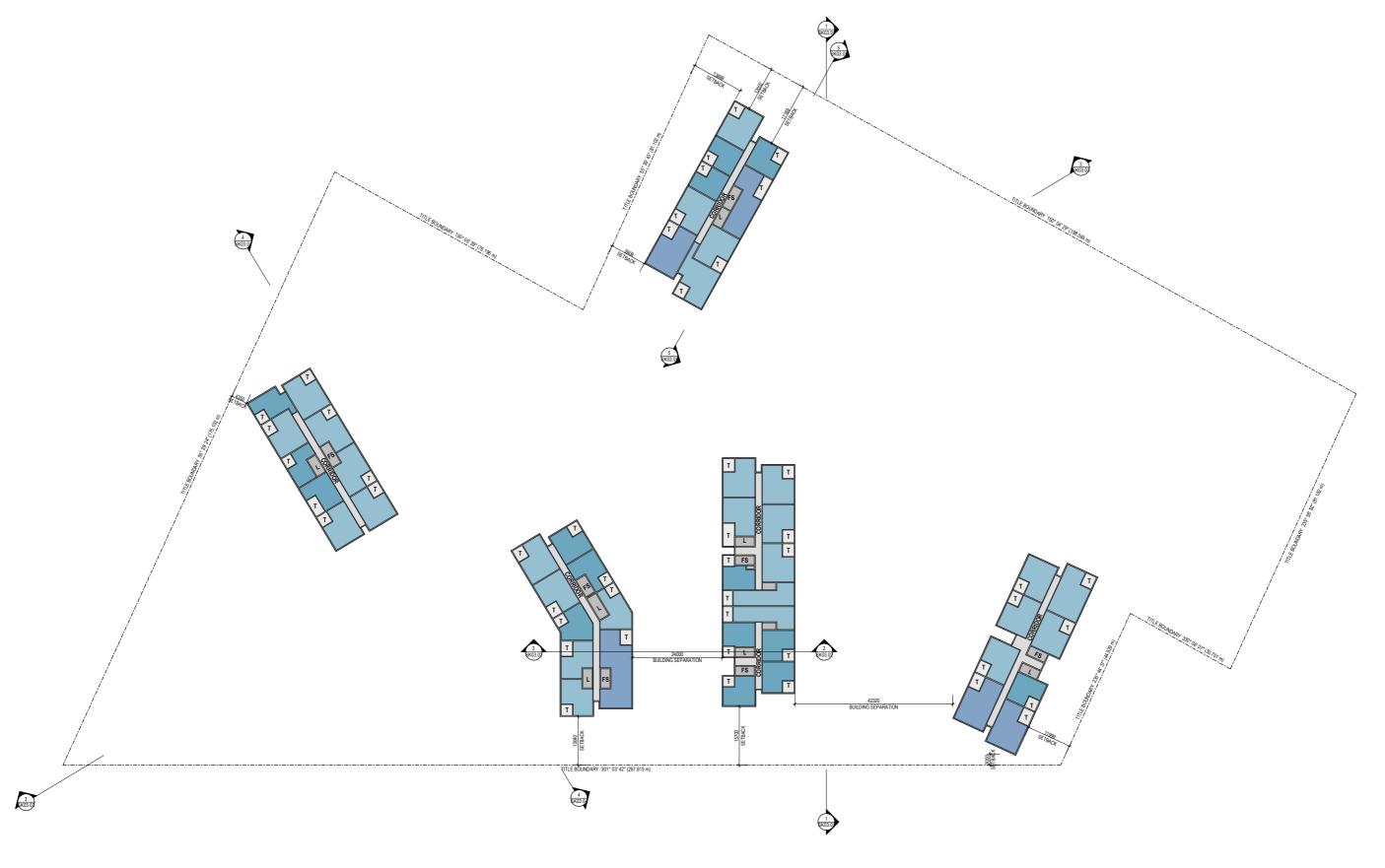


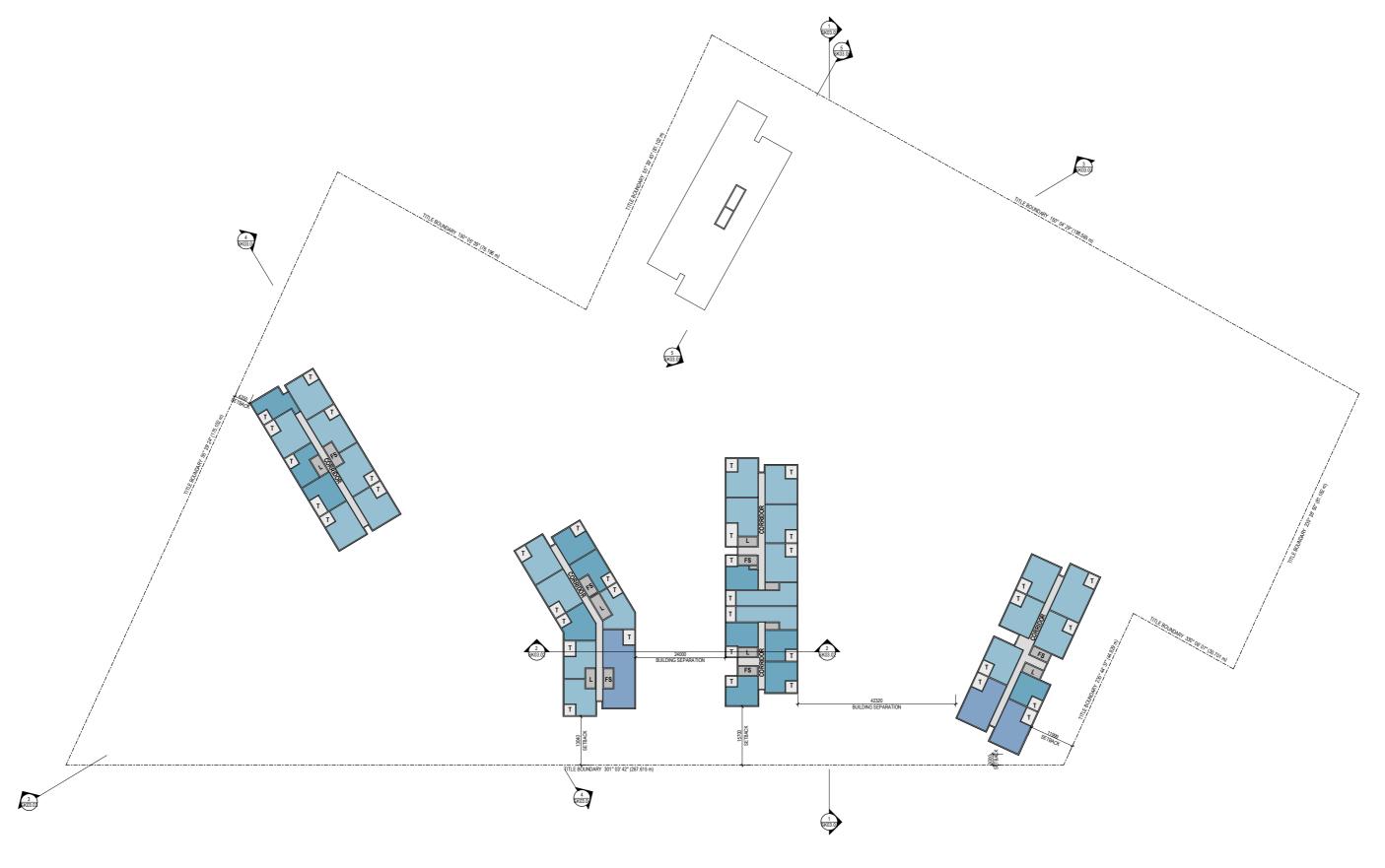


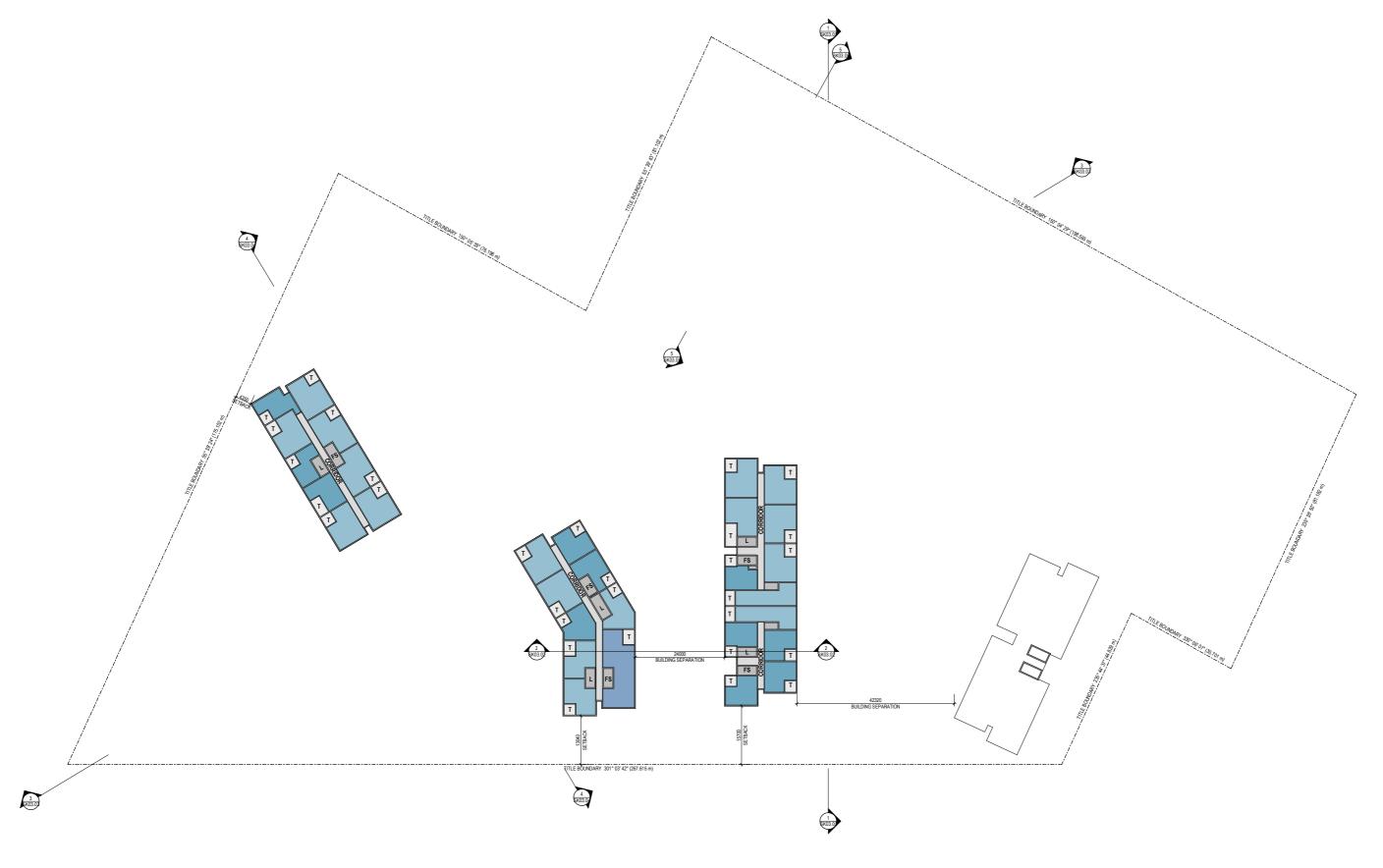


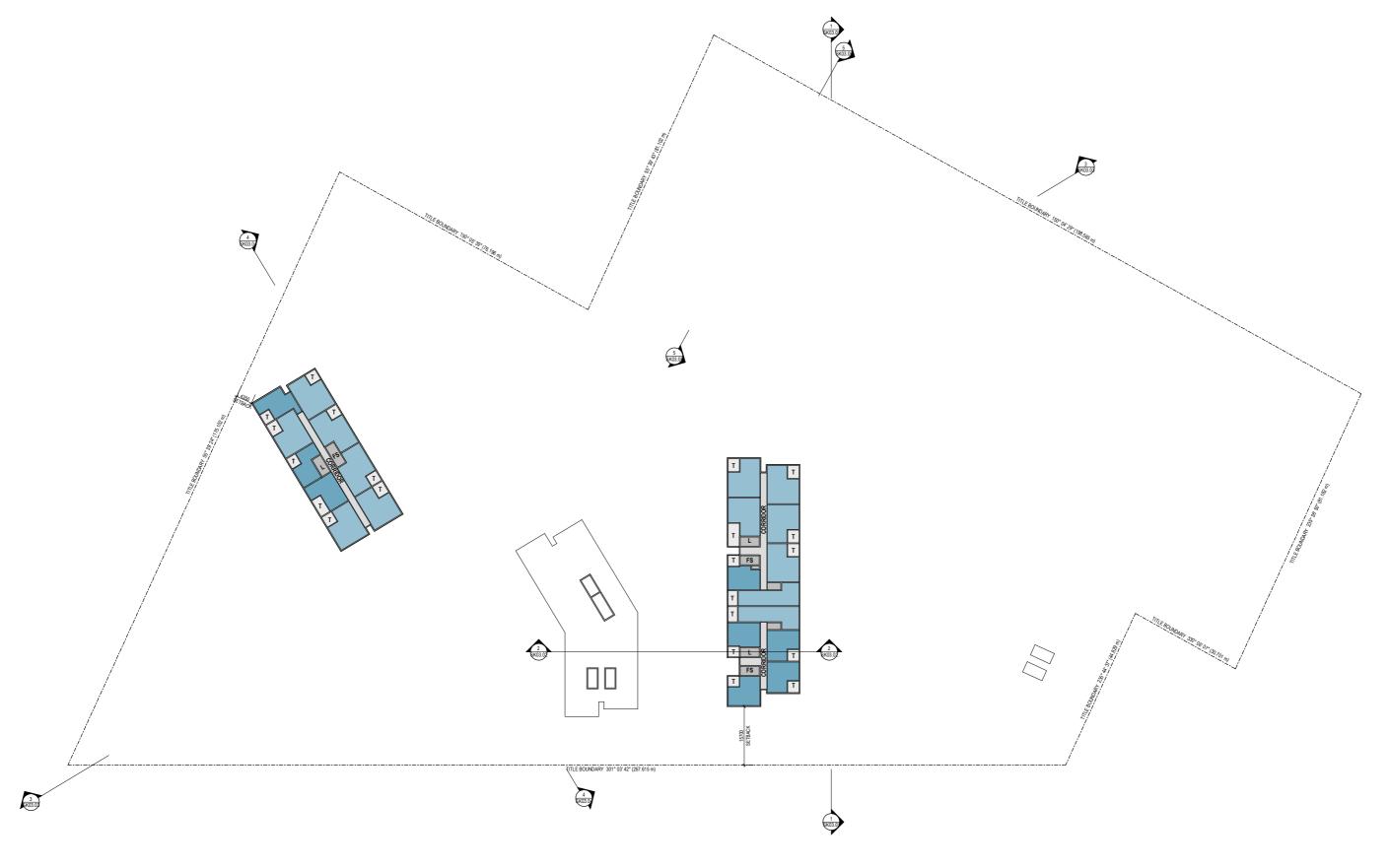


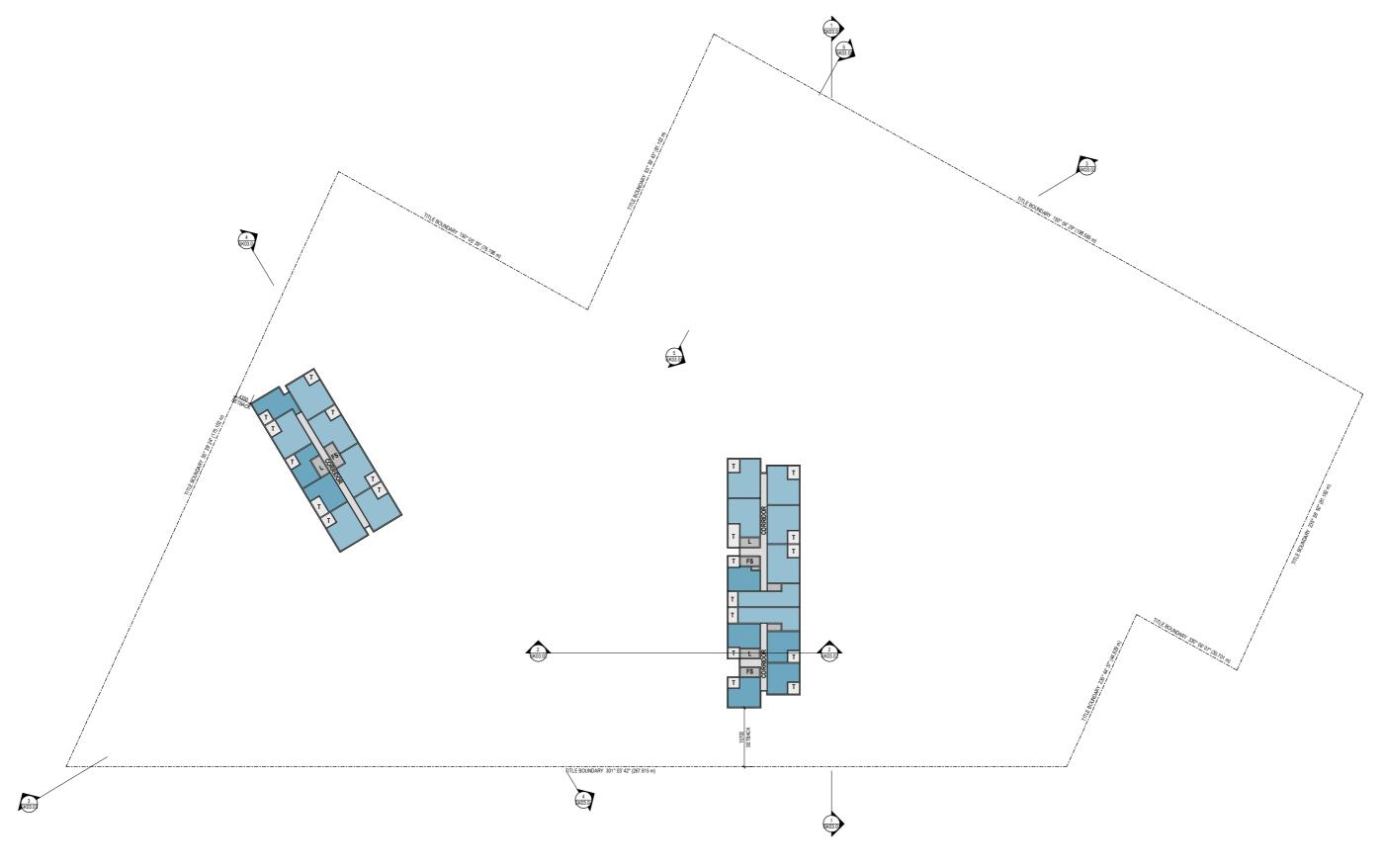


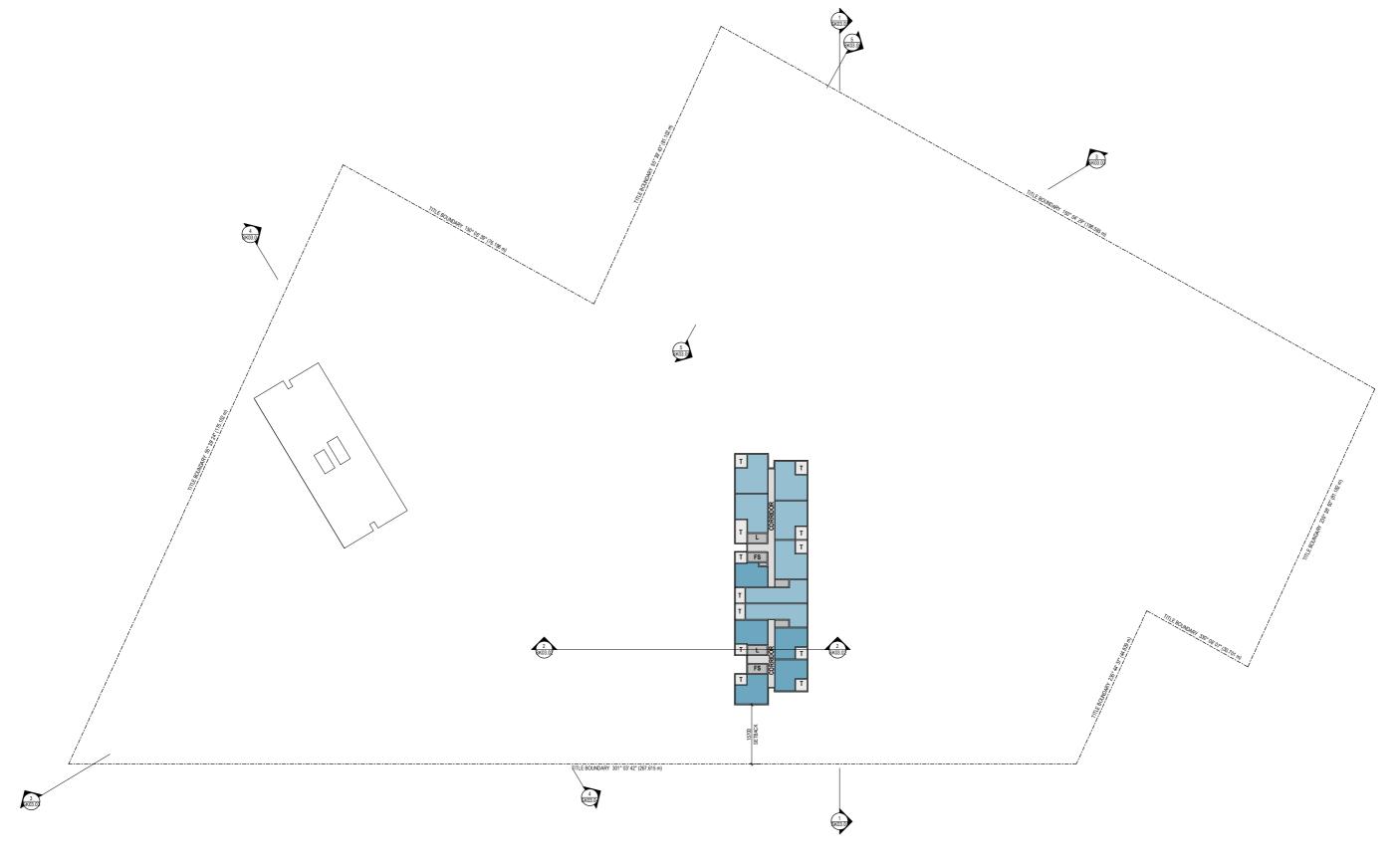


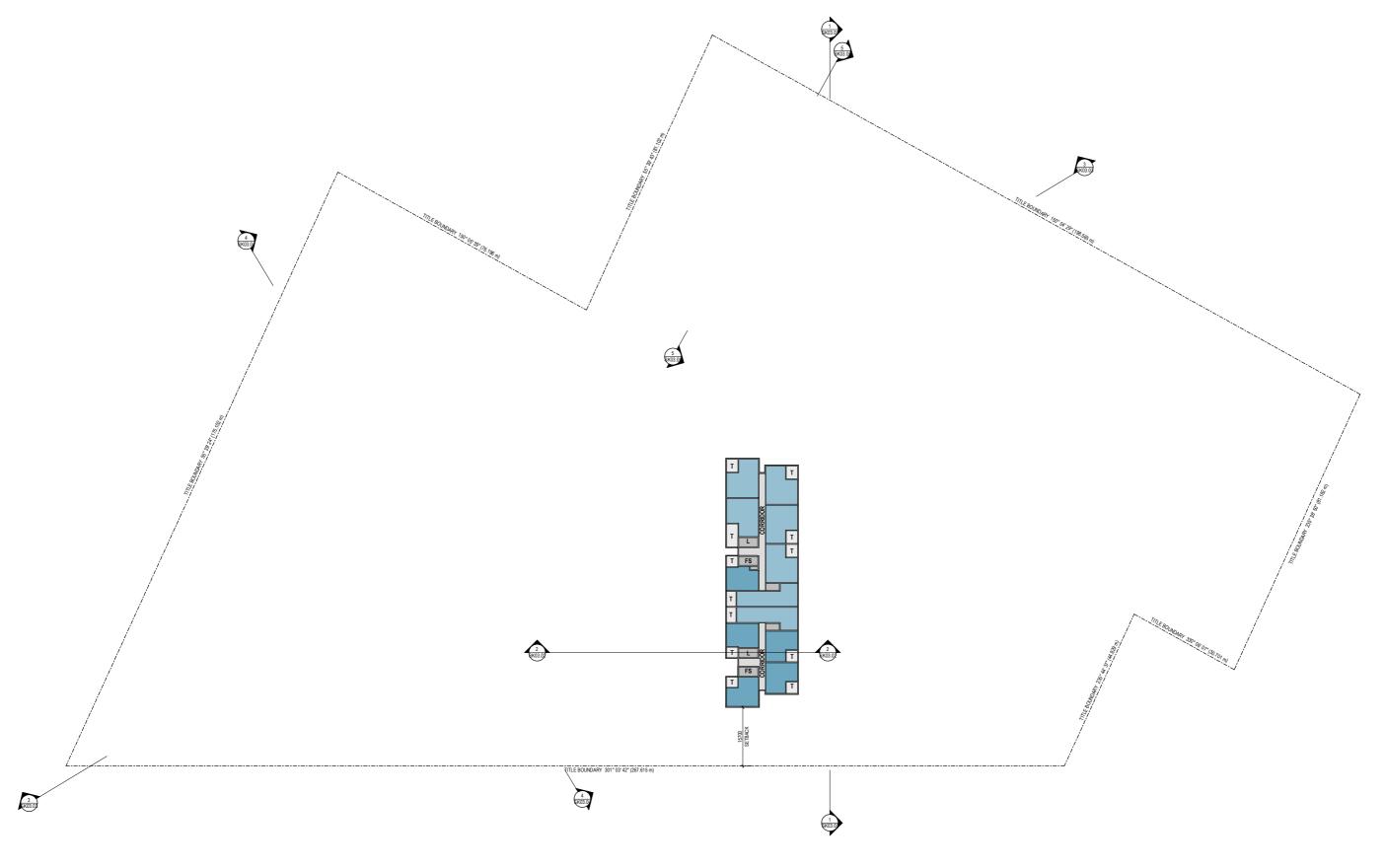






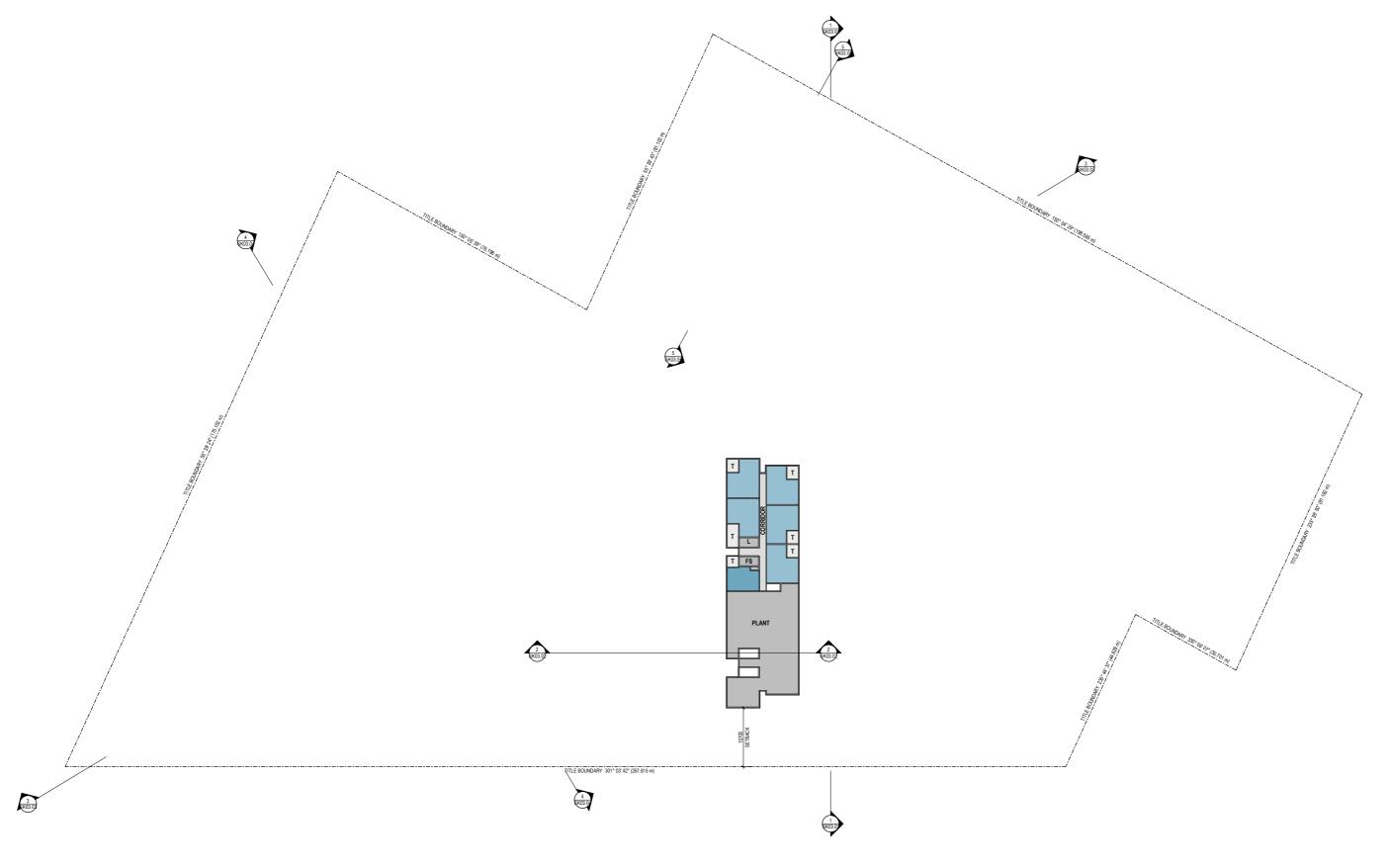




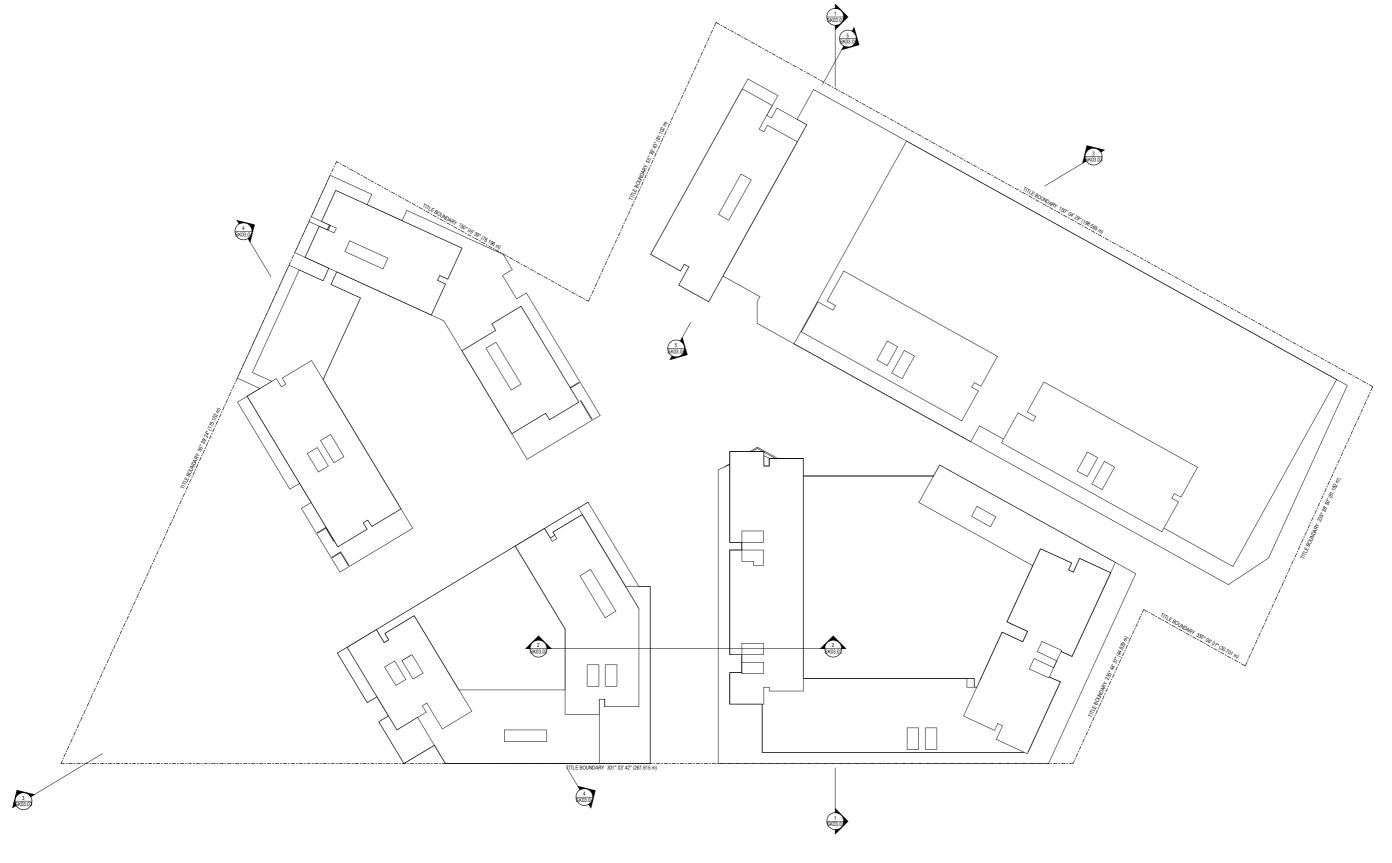


### **PLANS**

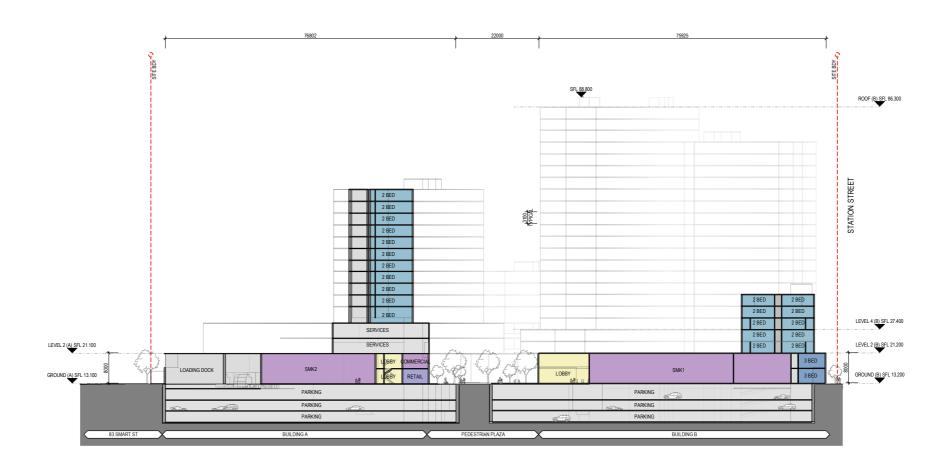
# LEVEL 25



# **PLANS ROOF**



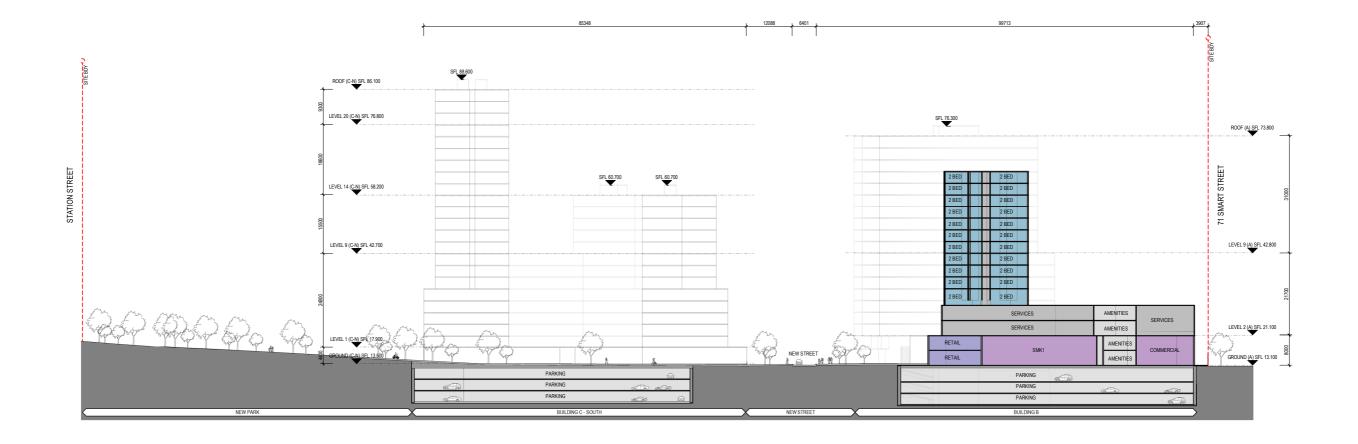
# SECTION 1 SITE A/B



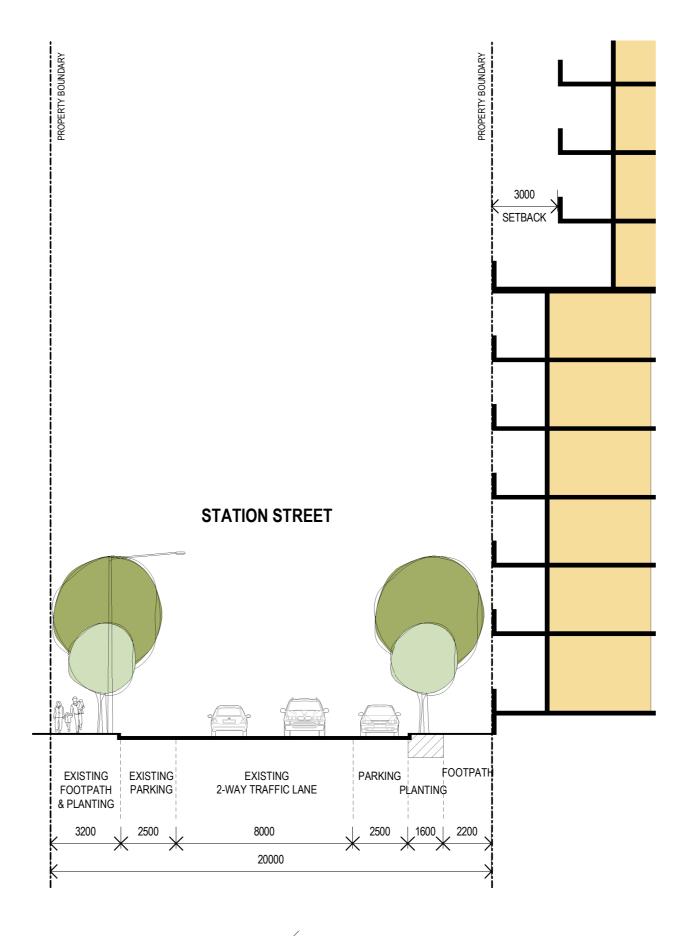
# SECTION 2 SITE B/C



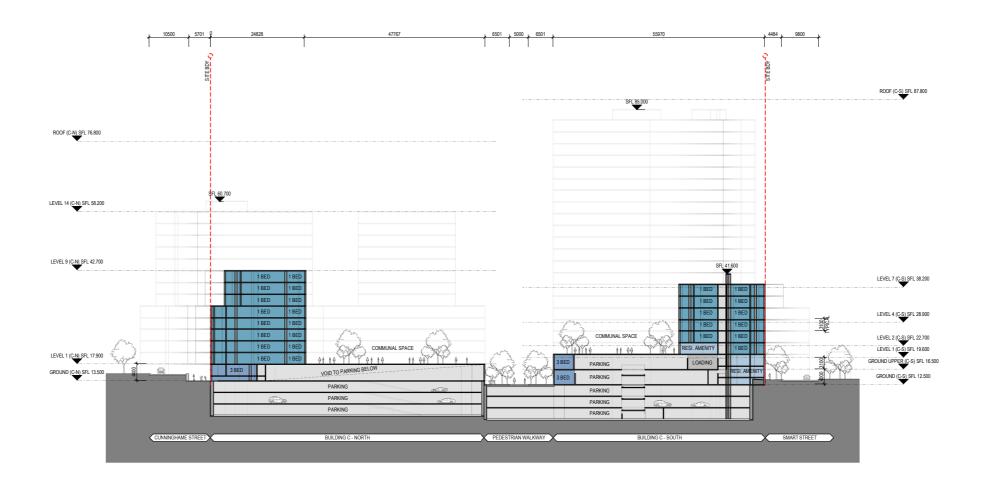
# SECTION 3 SITE C/A



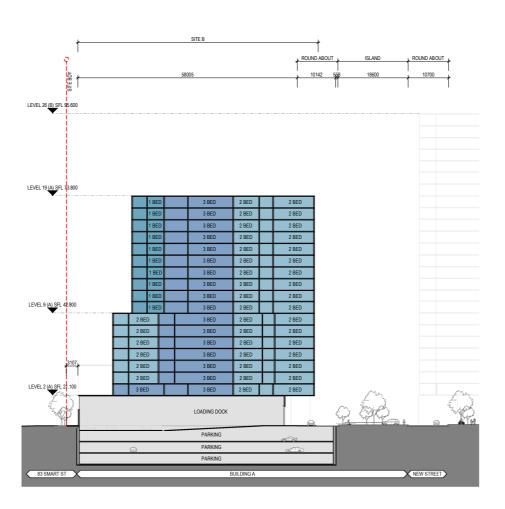
# **SECTION 4 SITE C**



# SECTION 5 SITE C/C



# SECTION 6 SITE A/A



# Appendix 3 **Solar Analysis**

# **SOLAR ANALYSIS DESIGN CONCEPT**

#### Summary

The design Team has carried out the following shadow analyses • Solar analysis of surrounding residential properties on to demonstrate how the proposed built form approach minimises additional overshadowing beyond the sites boundaries, and therefore impacts on surrounding development beyond the current planning controls. Similarly, shadow studies of new proposed open spaces within the site have been undertaken, along with preliminary studies of the proposed built form with relation to future residential apartment layouts satisfying the objectives of the Apartment Design Guide.

#### Surrounding development impacts

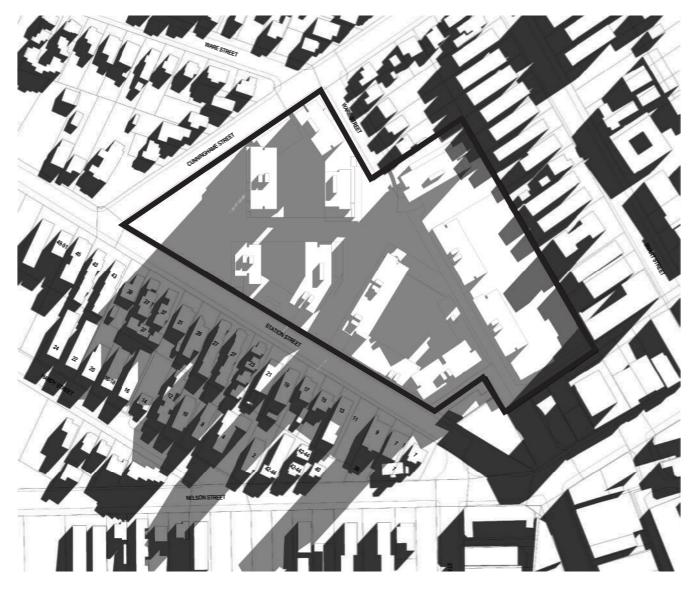
Station Street

#### **Open Spaces**

- Analysis of solar access provided by proposed built form to Existing and expanded Ware street plaza
- Analysis of solar access provided by proposed built form on subject site, and future increase of density north of Cunninghame street

#### **Residential Building Facades**

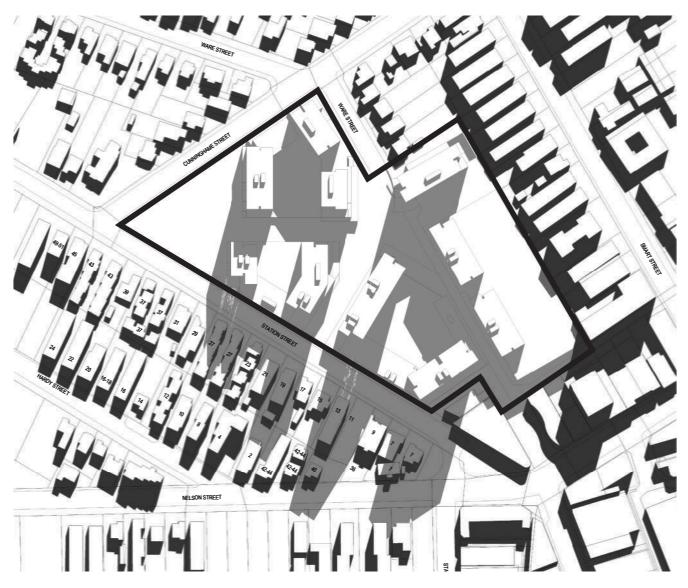
- · Point of view studies demonstrating overall proportion of building façades on subject site that receive sun
- Point of view studies demonstrating extent of properties beyond site impacted by proposed development

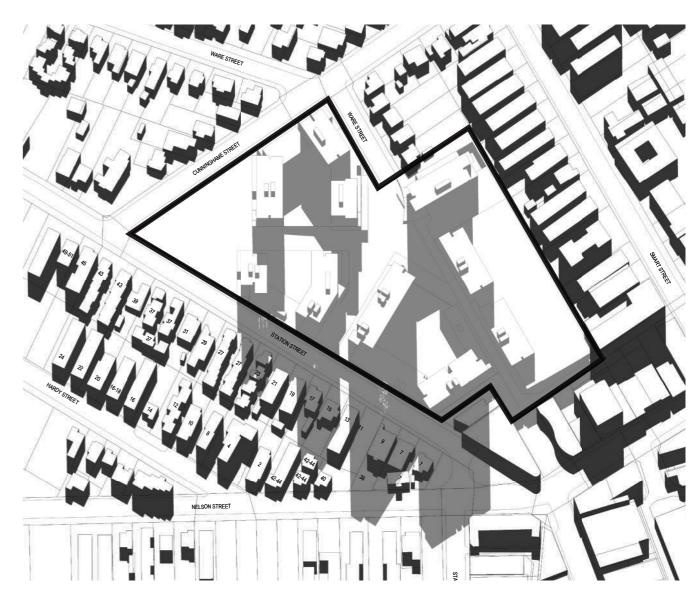




**WINTER 9 AM** 

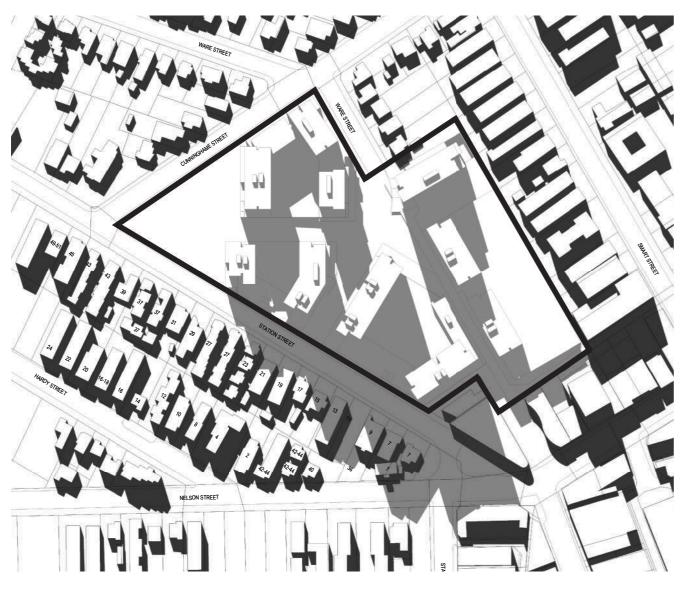
**WINTER 10 AM** 

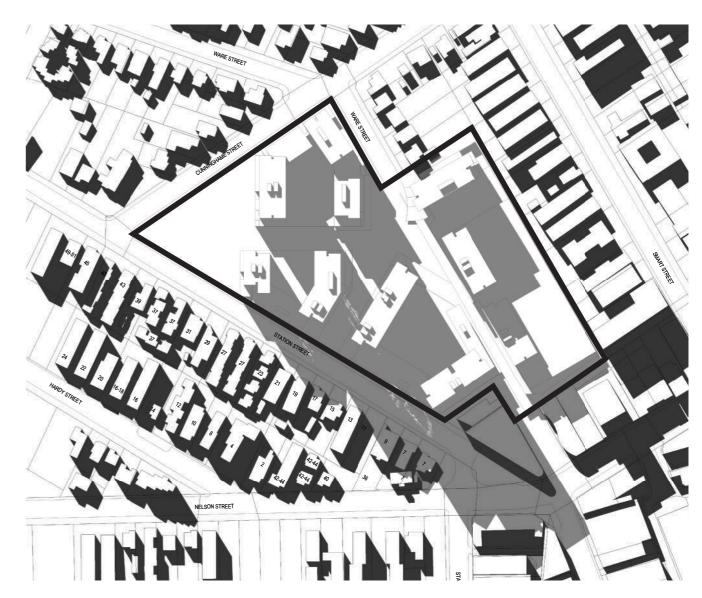




**WINTER 11 AM** 

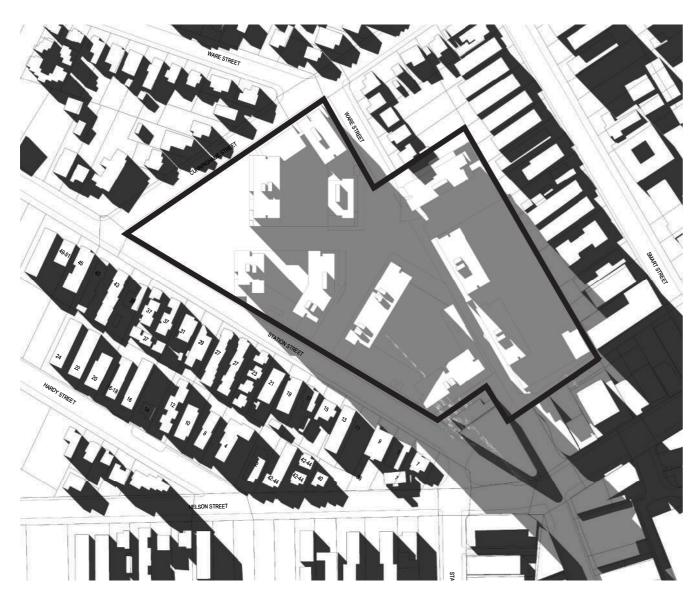
**WINTER 12 PM** 





**WINTER 1 PM** 

**WINTER 2PM** 



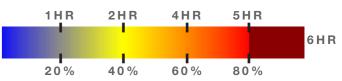
**WINTER 3 PM** 

# SURROUNDING DEVELOPMENT IMPACTS **SOUTHERN NEIGHBOURS**

#### **VIEW FROM SOUTH**



#### **LEGEND**



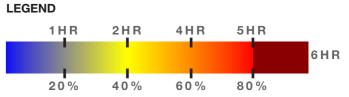
The accompanying solar impacts have been analysed on adjacent developments with areas receiving sunlight shown in the attached images. The colour legends show areas that receive two hours or more being yellow, orange or red in tone.

The current zoning and uses have been considered for amalysis of neigbouring sites, with commercial and vacant plots exluded. Residential and used sites have been analysed to ensure they have access to daylight to their communal open spaces and building facades.

# SURROUNDING DEVELOPMENT IMPACTS **SOUTHERN NEIGHBOURS**

#### **VIEW FROM NORTH**

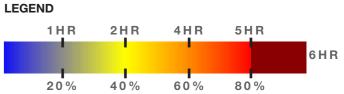




# SURROUNDING DEVELOPMENT IMPACTS SOUTHERN NEIGHBOURS

#### **PLAN VIEW**





# SURROUNDING DEVELOPMENT IMPACTS **SOUTHERN NEIGHBOURS**

#### **NOT ANALYSED**

STATION STREET				
29	Medical			
11	Empty Lot			
9	Medical			
7	Church			
NELSON STREET				
36	Car Park			
40	Empty Lot			

#### EXISTING

#### **PROPOSED**

#### COMPARISON

Address	East Face Compliance	TOD	Hours	West Face Compliance	TOD	Hours	
STATION STREET							
45	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	
43	NO	0900 - 1000	1	YES	1015 - 1500	4.75	
39	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	
37	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	
31	NO	0900 - 1015	1.25	YES	1015 - 1415	3.75	
27	NO	0900 - 1000	1	YES	1015 - 1500	4.75	
23	NO	0900 - 1000	1	YES	1015 - 1400	3.75	
21	NO	0900 - 1000	1	YES	1015 - 1500	4.75	
19	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	
17	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	
15	NO	0900 - 1000	1	YES	1015 - 1500	4.75	
13	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	
NELSON STREET							
42-44	NO	0900 - 1030	1.5	YES	1045-1500	4.25	
HARDY	STREET						
2	NO	0900 - 1015	1.25	YES	1030 - 1400	3.5	
4	NO	0900 - 1000	1	YES	1015 - 1500	4.75	
8	NO	0900 - 1000	1	YES	1015 - 1500	4.75	
10	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	
12	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	
14	NO	0900 - 1015	1.25	YES	1030 - 1300	2.5	
16-18	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	
20	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	
22	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	
24	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5	

Address	East Face Compliance	TOD	Hours	West Face Compliance	TOD	Hours
STATIO	N STREET					
45	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5
43	NO	0900 - 1000	1	YES	1015 - 1500	4.75
39	NO	0930 - 1015	0.75	YES	1030 - 1500	4.5
37	NO	1000 - 1015	0.25	YES	1030 - 1500	4.5
31	NO		0	YES	1030 - 1415	3.75
27	NO		0	YES	1115 - 1500	3.75
23	NO		0	YES	1030 - 1115/1200 - 1400	2.75
21	NO	0900 - 9045	0.75	YES	1100 - 1200/1245 - 1500	3.25
19	NO	9045 - 1015	0.50	YES	1130 - 1230/1315 - 1500	2.75
17	NO	1000 - 1015	0.25	YES	1030 - 1045/1315 - 1500	2
15	NO	0900 - 1000	1	YES	1045 - 1130/1245 - 1315/1400 - 1500	2.5
13	NO	0945 - 1015	0.50	YES	1130 - 1200/1300 - 1500	2.5
NELSO	N STREET					
42-44	NO	0930 - 1000	0.50	YES	1045-1500	4.25
HARDY	STREET					
2	NO	1000 - 1015	0.25	YES	1045 - 1400	3.25
4	NO	0915 - 1000	0.75	YES	1015 - 1500	4.75
8	NO		0	YES	1015 - 1500	4.75
10	NO	0945 - 1015	0.50	YES	1030 - 1500	4.5
12	NO	0915 - 0930/1000 - 1015	0.50	YES	1030 - 1500	4.5
14	NO	1000 - 1015	0.25	YES	1030 - 1300	2.5
16-18	NO	0930 - 1015	0.75	YES	1030 - 1500	4.5
20	NO	0915 - 1015	1	YES	1030 - 1500	4.5
22	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5
24	NO	0900 - 1015	1.25	YES	1030 - 1500	4.5

Address	East Face Difference	West Face Compliance					
STATION STREET							
45	0	0					
43	0	0					
39	-0.5	0					
37	- 1	0					
31	-1.5	0					
27	- 1	- 1					
23	- 1	- 1					
21	-0.25	-1.5					
19	-0.75	-1.75					
17	- 1	-2.5					
15	0	-2.25					
13	-0.75	- 2					
NELSO	NELSON STREET						
42-44	- 1	0					
HARDY	STREET						
2	- 1	-0.25					
4	-0.25	0					
8	- 1	0					
10	-0.75	0					
12	-0.75	0					
14	- 1	0					
16-18	-0.5	0					
20	-0.25	0					
22	0	0					
24	0	0					

# **OPEN SPACES**

# STATION STREET PARK AND PLAZA SOLAR ANALYSIS



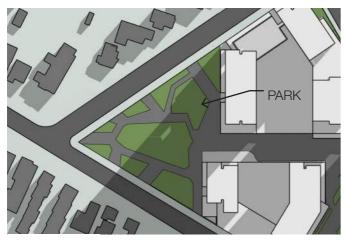
# **OPEN SPACES**

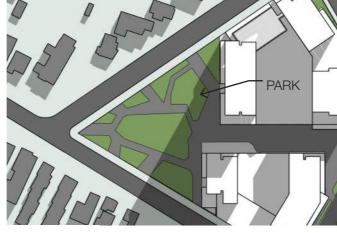
# STATION STREET PARK SOLAR ANALYSIS

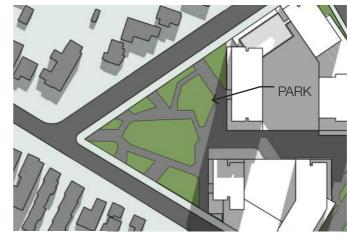
Impact measured at 22nd June

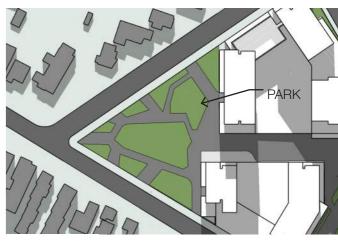
- From 12pm 100% of the park is no longer overshadowed by the Fairfield Forum development
- Future proposed 6 storey development to the north west of the park will begin to overshadow the proposed park from 2pm

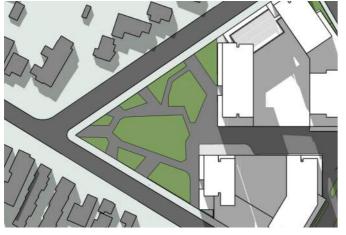
Park Total Area - 4,000m<sup>2</sup>

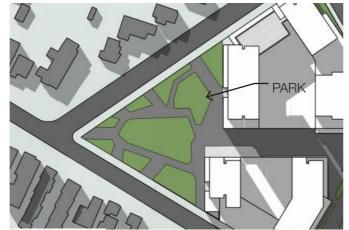


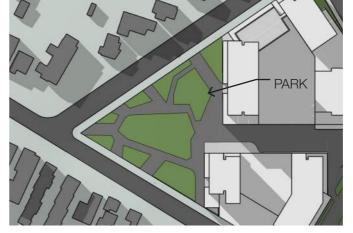


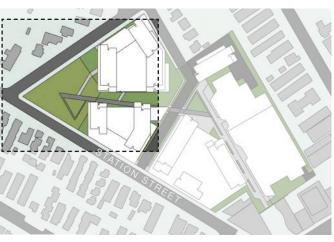










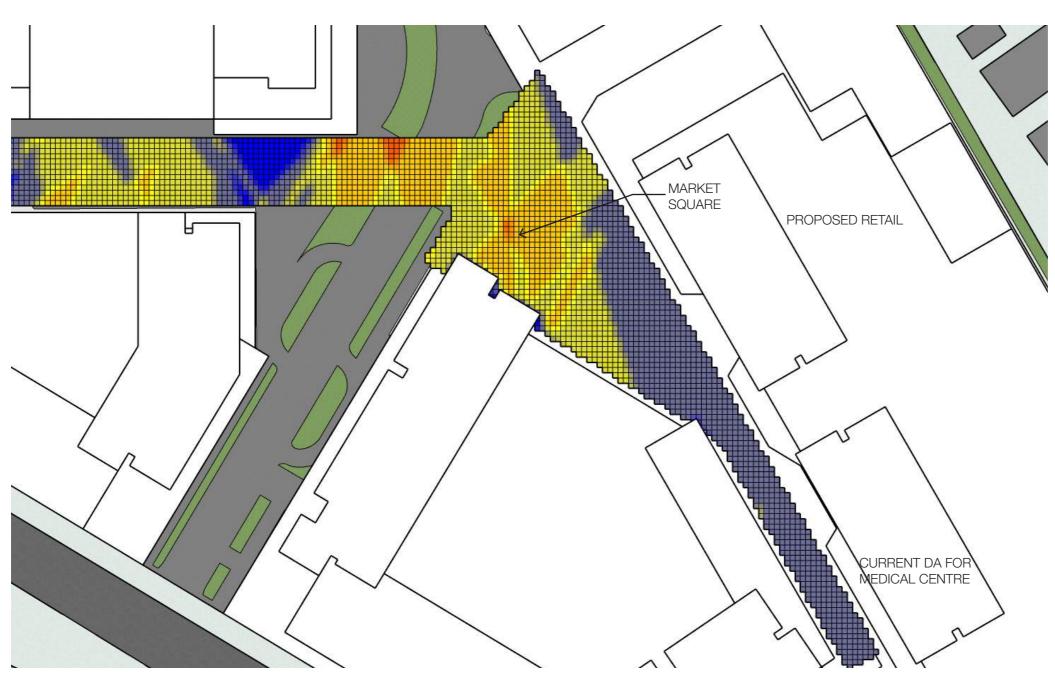


2 PM 1 PM

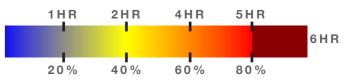
3 PM

KEY PLAN

# OPEN SPACES MARKET SQUARE SOLAR ANALYSIS

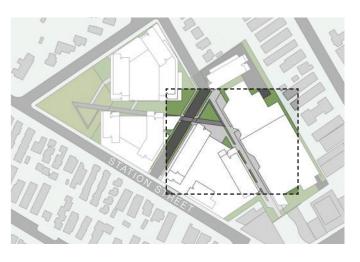


#### **LEGEND**



Impact measured at 22nd June between 9am and 3pm.

- The market square is designed to achieve maximum solar access during the middle of the day in mid winter
- Over 50% of the Market Square receives 2 or more hours of sunlight.



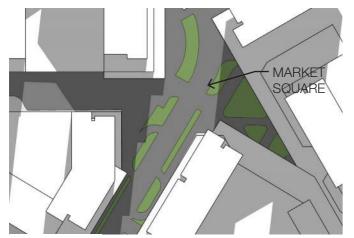
# **OPEN SPACES** MARKET SQUARE SOLAR ANALYSIS

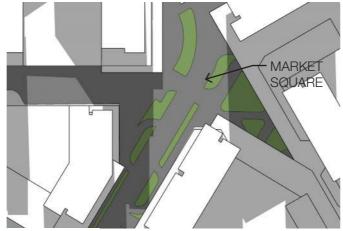
Impact measured at 22nd June

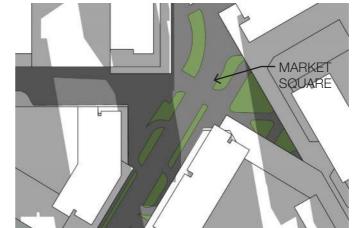
 The sunlight hours are maintained within the typical lunch time between 1130 and 2pm

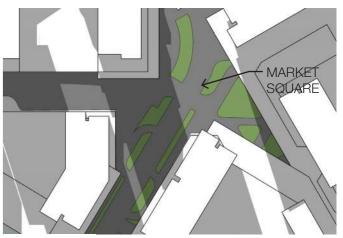
Market Square Total Area - 1,200 m<sup>2</sup>

Existing Thomas Ware Plaza Total Area - 600m<sup>2</sup>



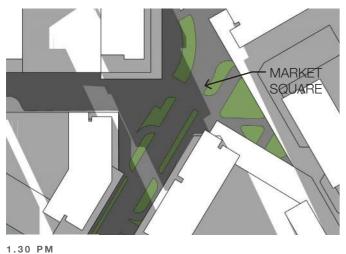


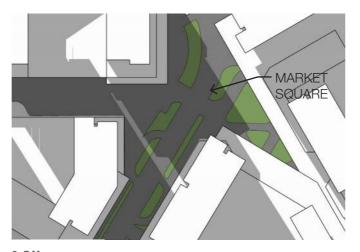


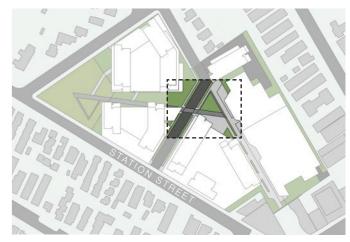


11.30 AM

12.30 PM





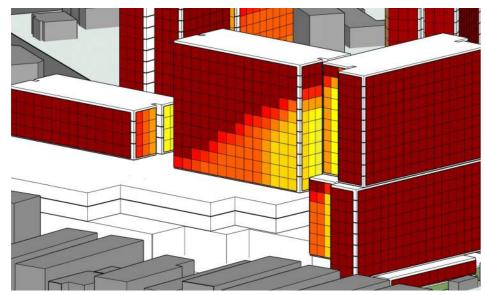


KEY PLAN

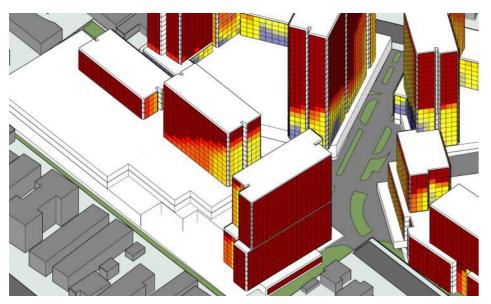
# RESIDENTIAL BUILDING FACADES SITE A

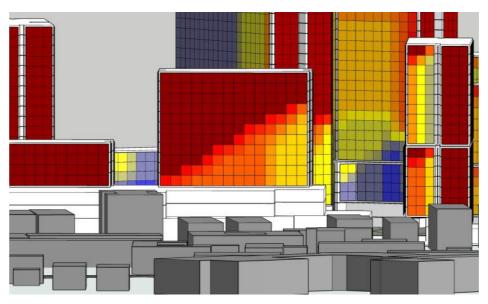
Solar impacts have been analysed on the proposed residential forms. Areas recieving sunlight are marked according to the attached colour legend, with 2+ sunlight hours marked in yellow, orange or in red tones.

The solar analysis which has been conducted throughout this document is based off this solar testing which is demonstated

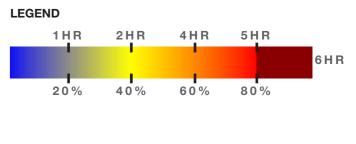


VIEW 1





VIEW 2



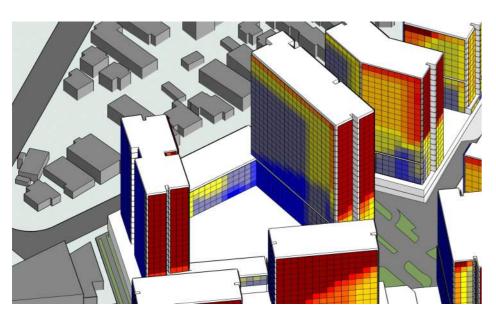
# RESIDENTIAL BUILDING FACADES SITE B

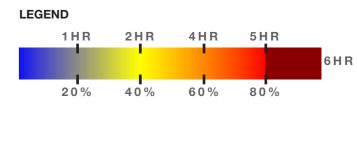
Solar impacts have been analysed on the proposed residential forms. Areas recieving sunlight are marked according to the attached colour legend, with 2+ sunlight hours marked in yellow, orange or in red tones.

The solar analysis which has been conducted throughout this document is based off this solar testing which is demonstated



VIEW 1



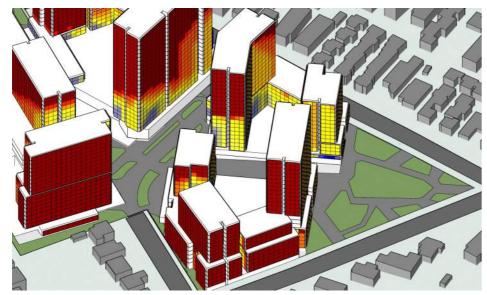


VIEW 3

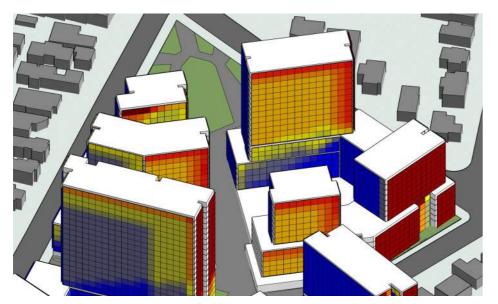
# RESIDENTIAL BUILDING FACADES SITE C

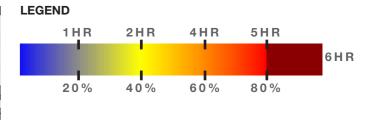
Solar impacts have been analysed on the proposed residential forms. Areas recieving sunlight are marked according to the attached colour legend, with 2+ sunlight hours marked in yellow, orange or in red tones.

The solar analysis which has been conducted throughout this document is based off this solar testing which is demonstated



VIEW 1





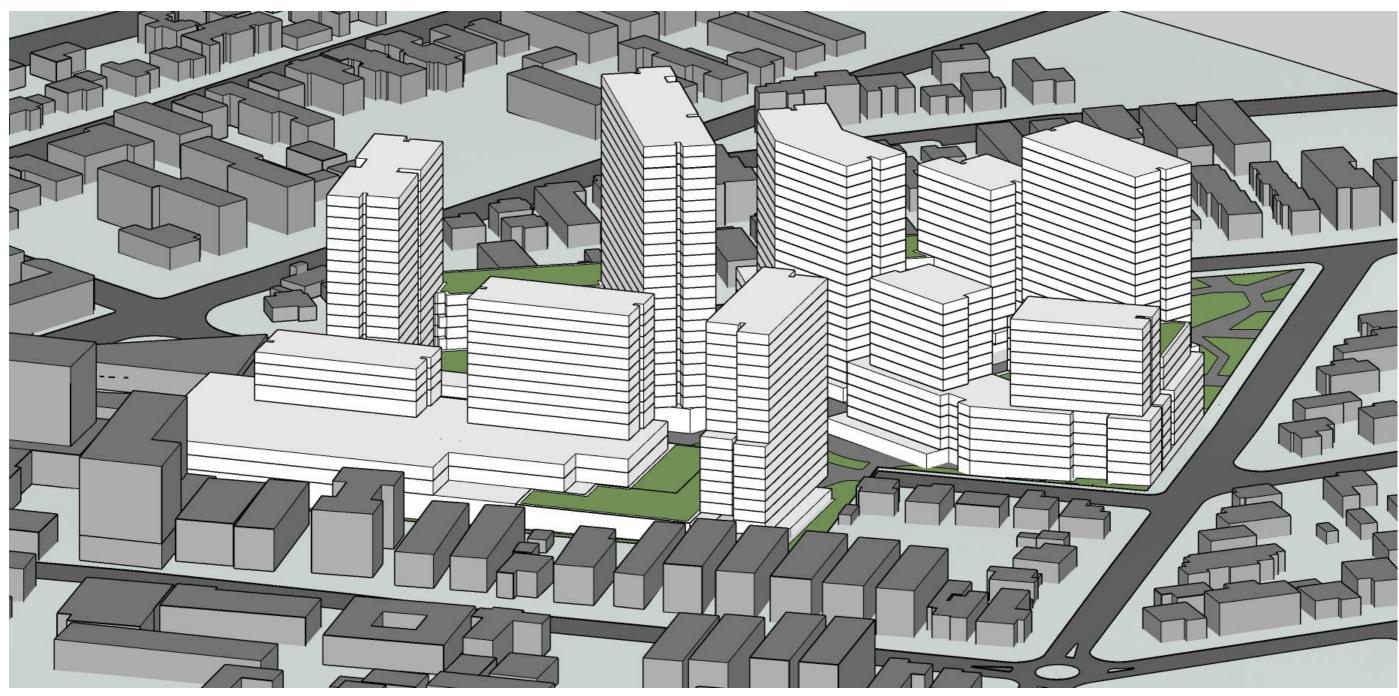
# POINT OF VIEW SOLAR ANALYSIS

## 9.00 AM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-



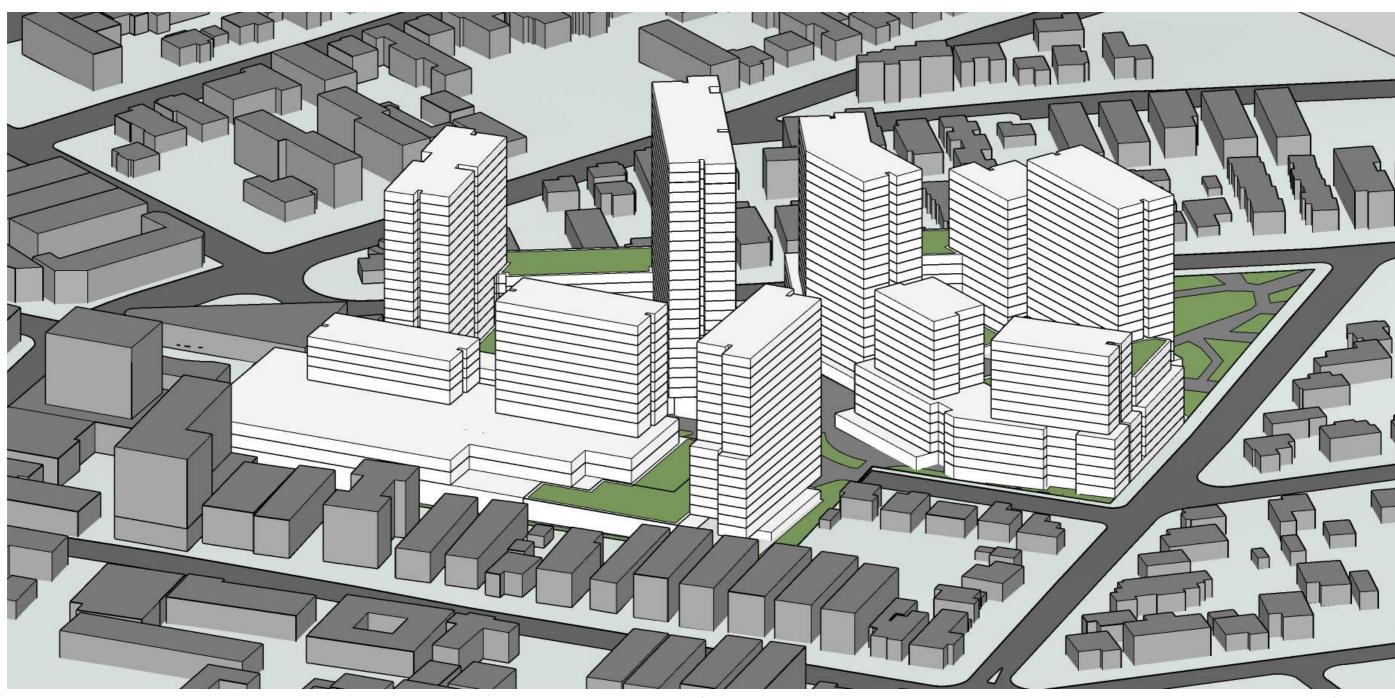
# POINT OF VIEW SOLAR ANALYSIS

# 9.30 AM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

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Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-



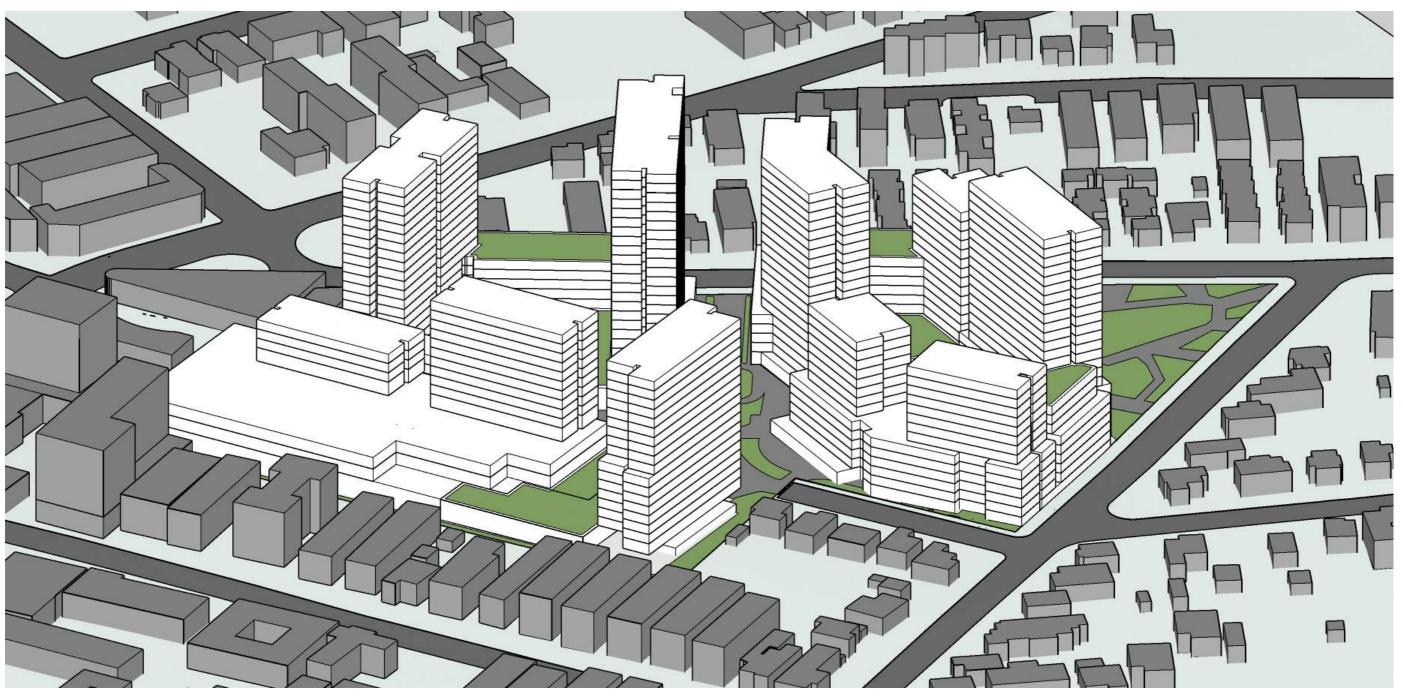
# POINT OF VIEW SOLAR ANALYSIS

# 10.00 AM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-



# POINT OF VIEW SOLAR ANALYSIS

# 10.30 AM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-



# POINT OF VIEW SOLAR ANALYSIS

# 11.00 AM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in midwinter.



# POINT OF VIEW SOLAR ANALYSIS

# 11.30 AM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-



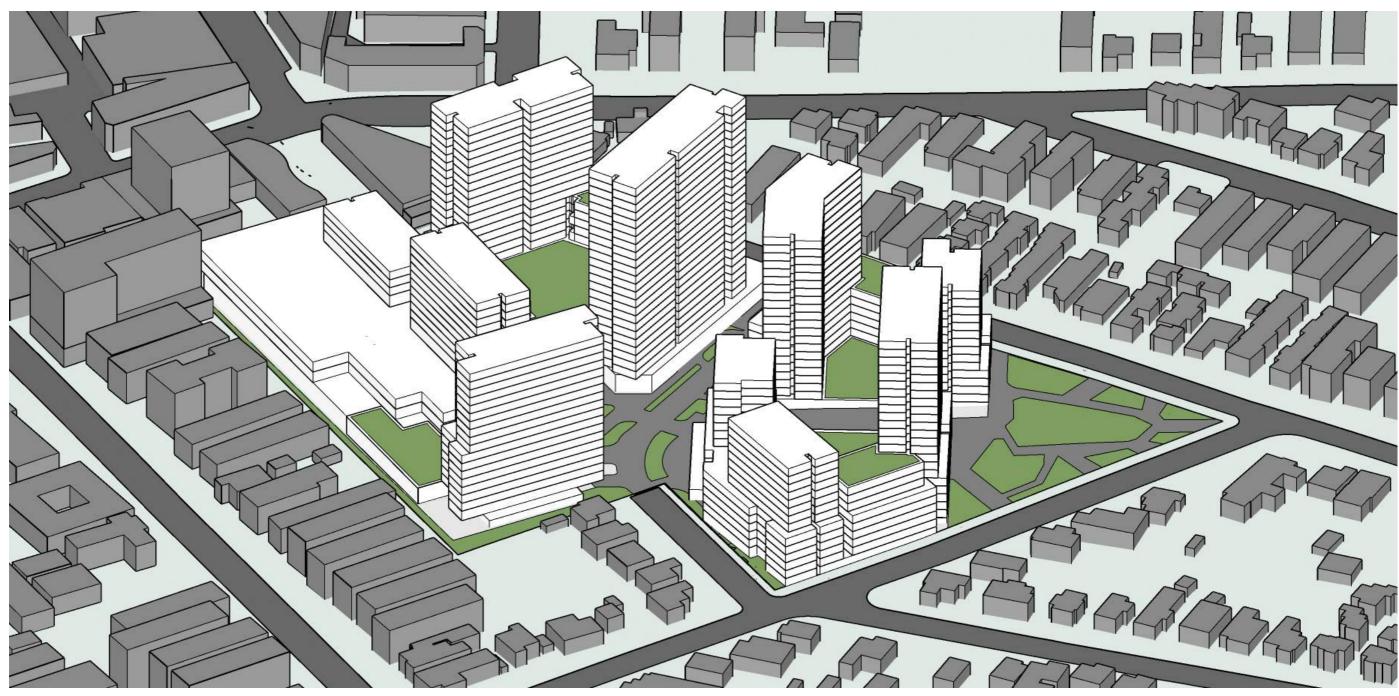
# POINT OF VIEW SOLAR ANALYSIS

# 12.00 PM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-



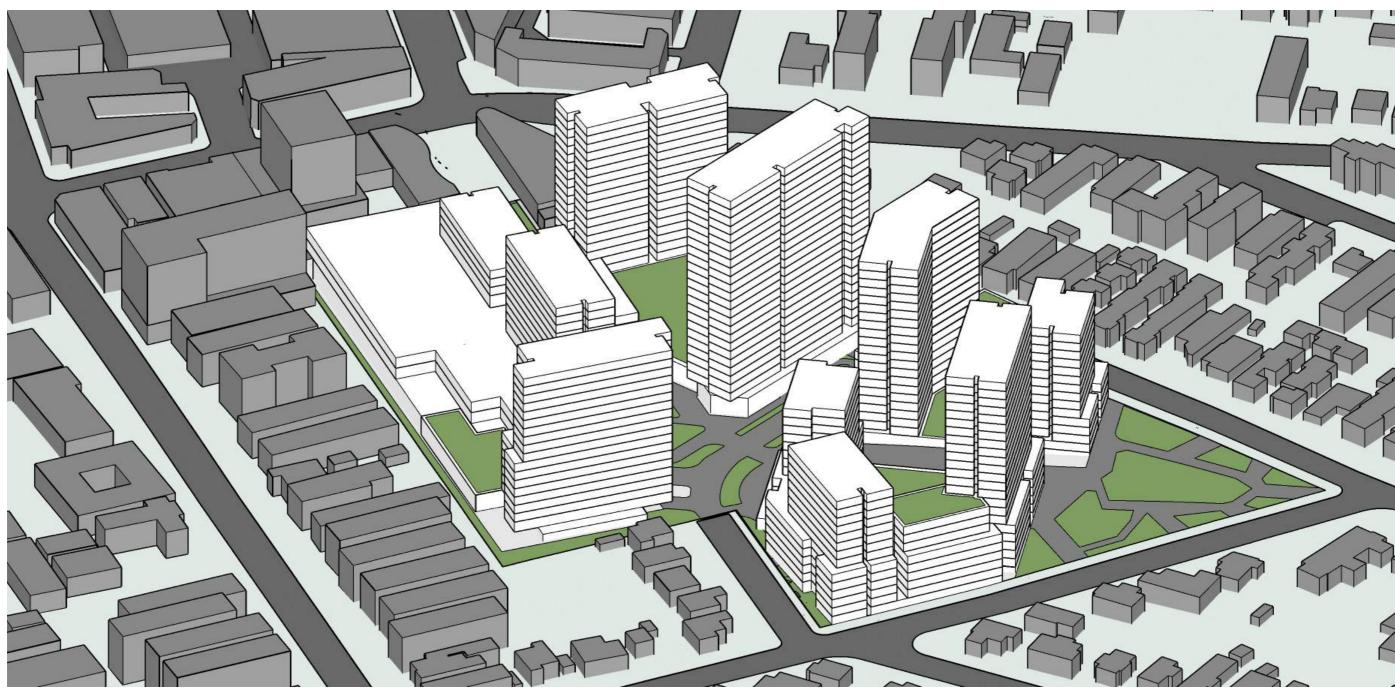
# POINT OF VIEW SOLAR ANALYSIS

# 12.30 PM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-



# POINT OF VIEW SOLAR ANALYSIS

## 1.00 PM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-



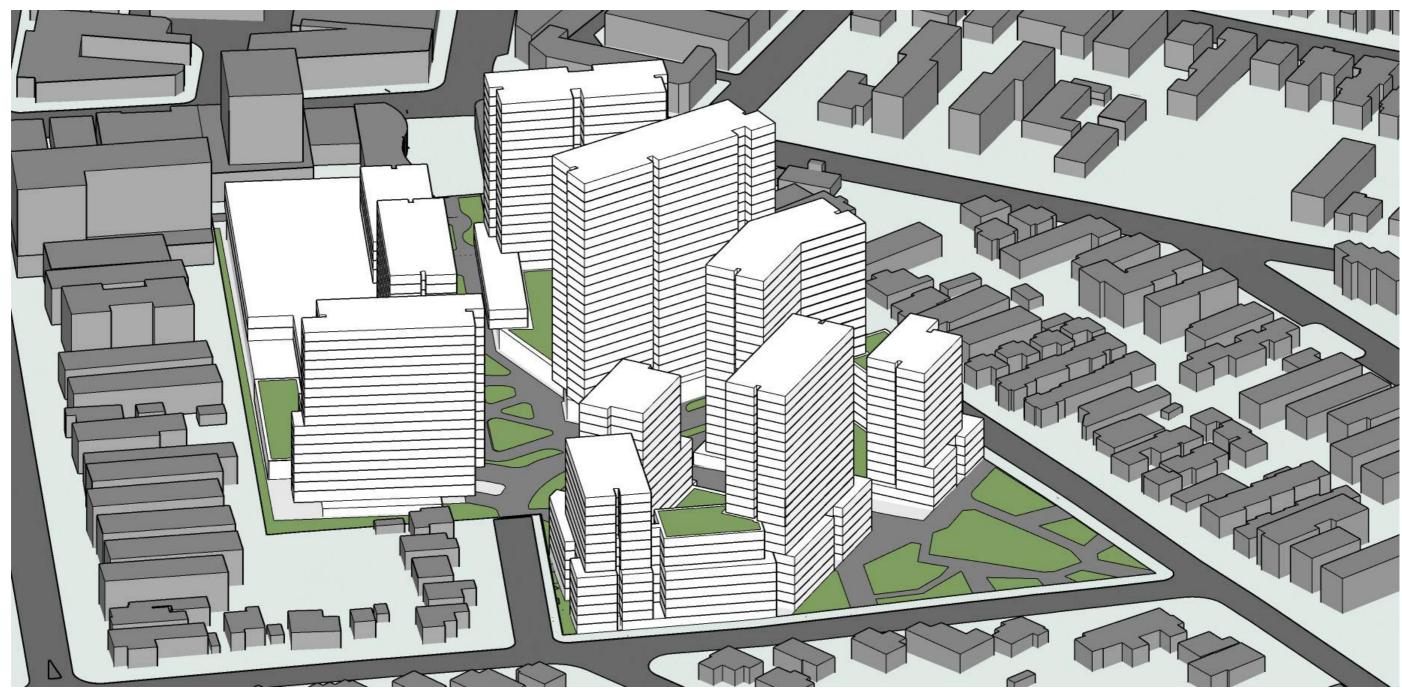
# POINT OF VIEW SOLAR ANALYSIS

## 1.30 PM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-



# POINT OF VIEW SOLAR ANALYSIS

# 2.00 PM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-



# POINT OF VIEW SOLAR ANALYSIS

## 2.30 PM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-



# POINT OF VIEW SOLAR ANALYSIS

# 3.00 PM

Point of view solar study shows impact of future development on adjacent sites measured at 22nd June.

The scheme has the ability to comply with Solar Access requirements internally.

Point of view solar studies show the areas of the proposed masterplan that receive sun at different hours of the day in mid-

