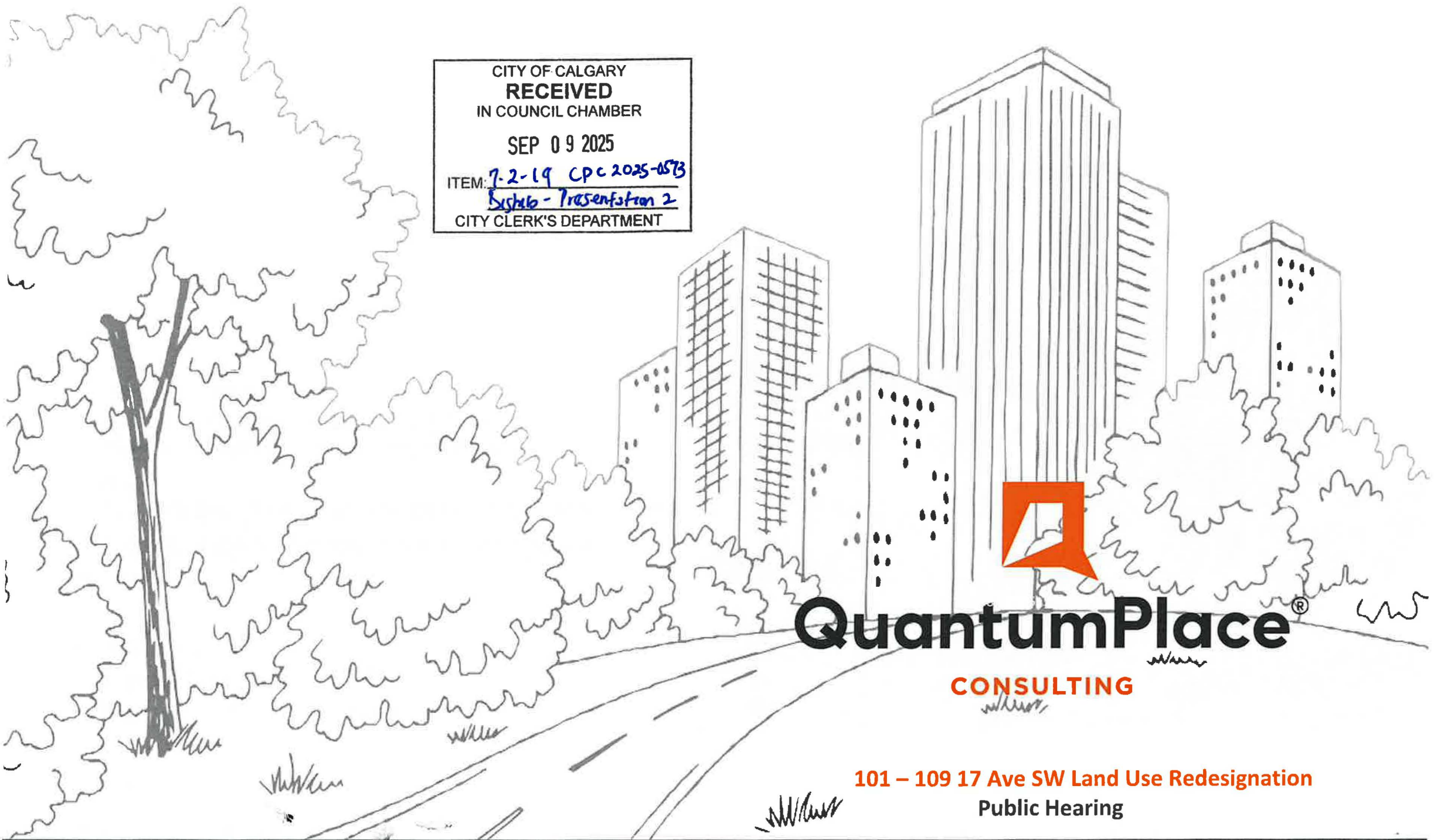


CITY OF CALGARY  
**RECEIVED**  
IN COUNCIL CHAMBER  
  
SEP 09 2025  
ITEM: 7-2-19 CPC 2025-0573  
Exhibit - Presentation 2  
CITY CLERK'S DEPARTMENT



**QuantumPlace**®

**CONSULTING**

**101 - 109 17 Ave SW Land Use Redesignation**  
**Public Hearing**

## 101 ON 17 AVE SW

### LAND USE AMENDMENT

- C-COR2 h46 f3 to DC based on C-COR1
- Max height 70m (~20 storeys)
- Max FAR 8.0

#### DC Rationale:

- Innovative Ideas: shadow and sun exposure strategy
- Unusual Site Constraints: compact site and lack of rear lane
- Unique Characteristics: unique position acts as a transition from downtown as well as a catalyst for future development in the area



Massing Concept  
To be refined at DP stage

# 101 on 17 Ave SW

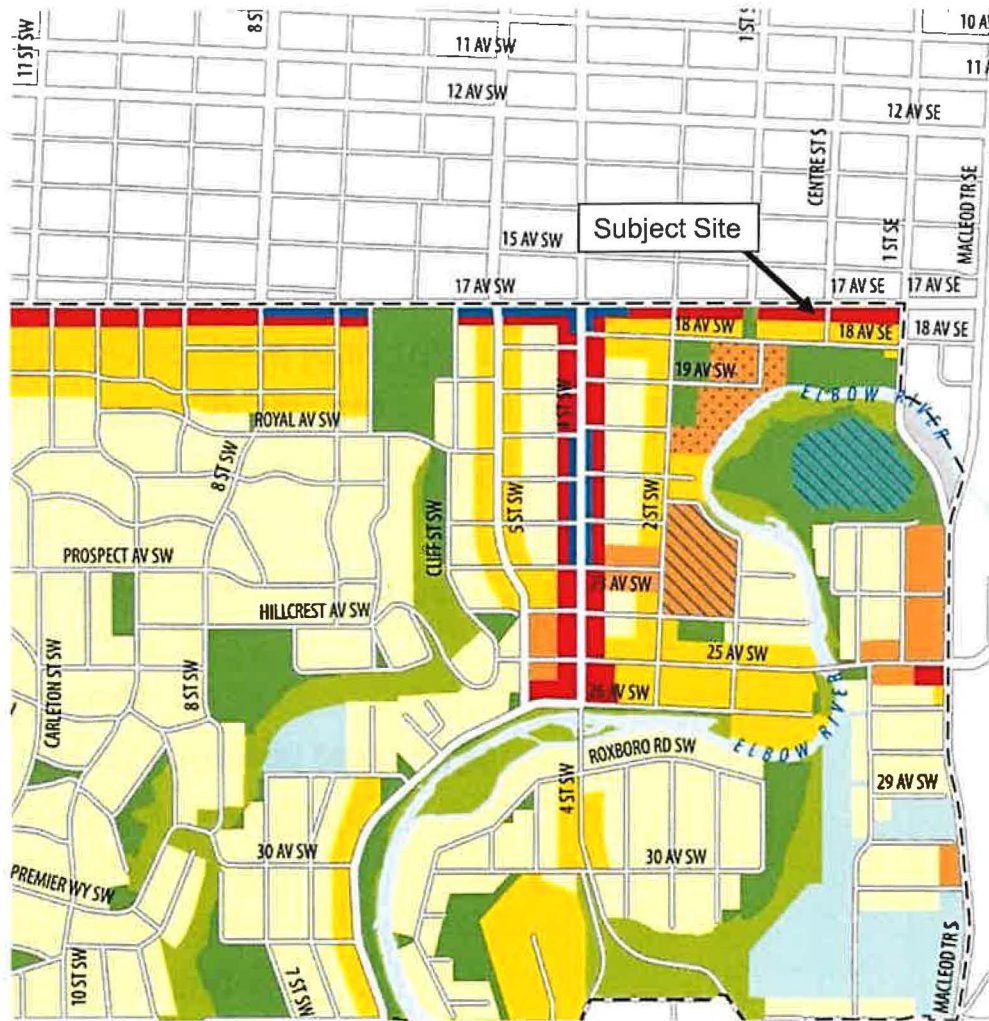
## TIMELINE

- Pre-app spring 2024
- UDRP May 2024
- CBMCA Meeting
- Submission Nov. 2024
- Virtual info session Nov. 2024
- DTR1 Dec. 2024
- UDRP Jan. 2025
- DTR1 Response Feb. 2025
- DTR2 Mar. 2025
- CBMCA Response Mar. 2025
- Admin Meeting Apr. 2025
- WECLAP adopted May 2025
- Comm. with Admin. Apr. – Jul. 2025
- Comm. with CBMCA & BNA Apr. – Jul. 2025
- Comm. with Ward 8 office ongoing
- CPC Jul. 2025



Massing Concept  
To be refined at DP stage

# WEST ELBOW COMMUNITIES LAP



- Legend**
- |                          |                                      |                                   |                            |
|--------------------------|--------------------------------------|-----------------------------------|----------------------------|
| <b>Urban Form</b>        | <b>Commercial Corridor</b>           | <b>Regional Campus</b>            | <b>Special Policy Area</b> |
| Neighbourhood Commercial | Natural Areas                        | No Urban Form Category            | Active Frontage            |
| Neighbourhood Flex       | Parks and Open Space                 | <b>Additional Policy Guidance</b> | Plan Area Boundary         |
| Neighbourhood Connector  | City Civic and Recreation            | Comprehensive Planning Site       |                            |
| Neighbourhood Local      | Private Institutional and Recreation | Industrial Transition             |                            |

Adapted from Map 3: Urban Form (WECLAP)



- Legend**
- |                                  |                              |                      |
|----------------------------------|------------------------------|----------------------|
| Limited (up to 3 Storeys)        | High (up to 26 Storeys)      | Natural Areas        |
| Low - Modified (up to 4 Storeys) | Highest (over 26 Storeys)    | Parks and Open Space |
| Low (up to 6 Storeys)            | Modified Building Scale Area | Plan Area Boundary   |
| Mid (up to 12 Storeys)           | No Scale Modifier            |                      |

Adapted from Map 4: Building Scale (WECLAP)

# SHADOW STRATEGY

The DC requires a narrow point tower that would create a slim, fast-moving shadow through Humpy Hollow Park so there are no periods of extended shadow on any one area of the park.

<p><b>2.4.2.1 Site Design (p.65)</b></p>	<p>i. Development adjacent to or facing parks and open space, including interfaces separated by a lane or a street, should: i. activate the park and open space through site and building design; iv. minimize shadow impacts.</p> <p>j. A shadow study may be required at the planning application stage for development adjacent to parks and open space to ensure minimal daytime spring and fall shadow impacts.</p>
<p><b>2.5.1 Main Streets (p.72)</b></p>	<p>c. Buildings should minimize shadow impacts onto the sidewalk and public spaces on the opposite side of the street, measured during the spring and fall equinoxes. Measures to minimize shadow impacts may include: i. reduced floor plates; ii. tower separation; iii. stepbacks; iv. tower orientation, dimensions and location.</p>



Height: 70m (20 storeys)

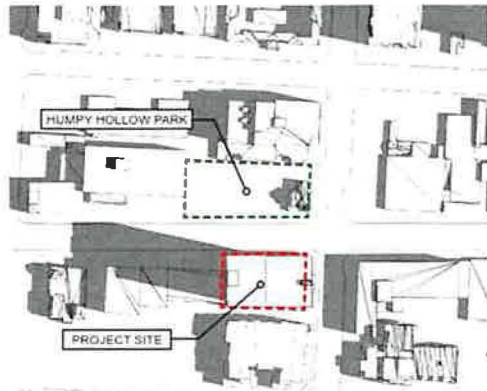
FAR: 7.85

Tower Floor Plate: 485sqm

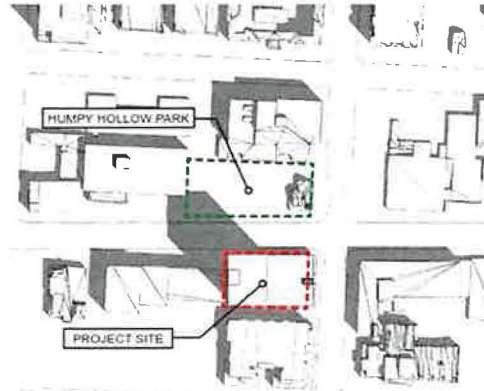
Massing Concept  
To be refined at DP stage

# SHADOW STUDY

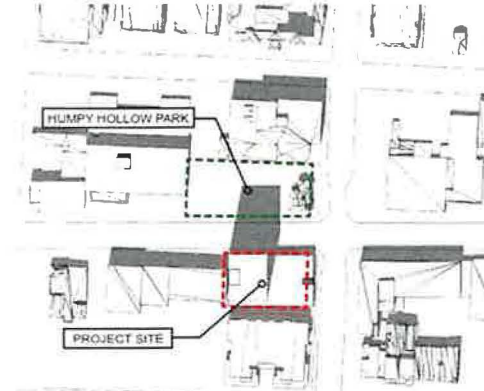
## SUMMER SOLSTICE



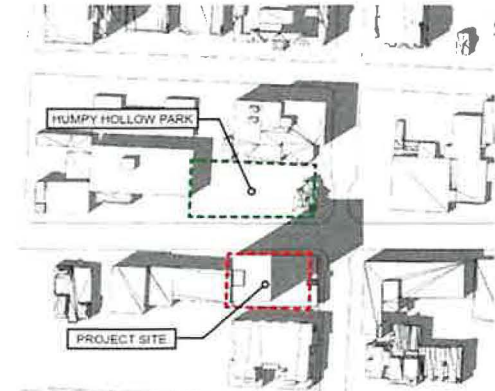
JUNE 21 10:00 AM



JUNE 21 12:00 PM



JUNE 21 2:00 PM



JUNE 21 4:00 PM

## WINTER SOLSTICE



DECEMBER. 21 10:00 AM



DECEMBER. 21 12:00 PM

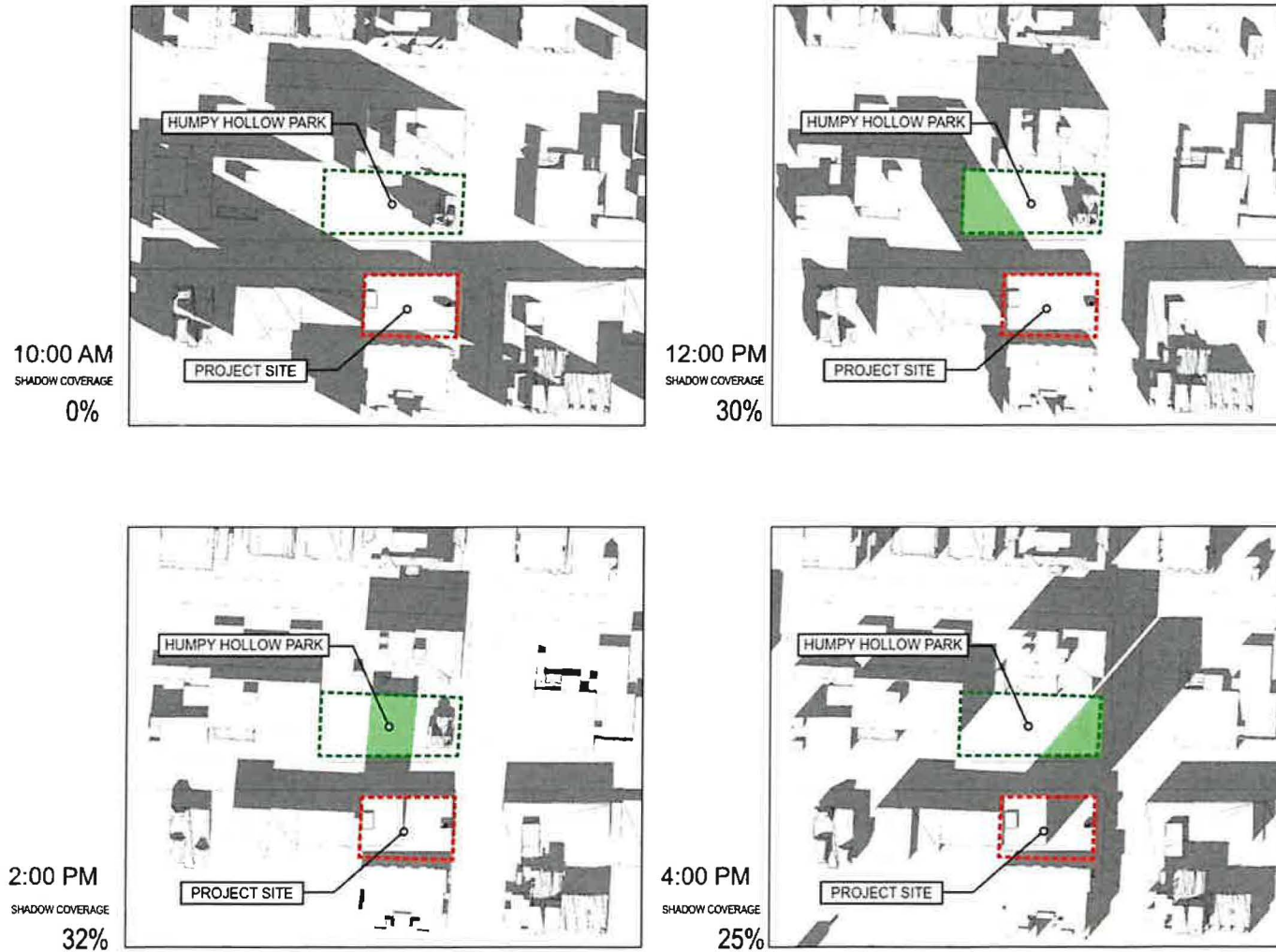


DECEMBER. 21 2:00 PM



DECEMBER. 21 4:00 PM

# SHADOW STUDY – PERCENTAGE SHADOW ON HUMPY HOLLOW PARK MARCH 20



Average % of park shadow coverage during daytime hours: **21.75%**

Compare to  
8 Storey Block: **21.75%**

# SHADOW STUDY – PROPOSED MASSING & 8 STOREY OVERLAY

Spring equinox (March 20)



- 20-storey tower shadow
- 8-storey block shadow
- Humpy Hollow Park

- 8-storey massing casts prolonged shadows on south-central portion of Humpy Hollow Park and 17 AV SW
- Tower massing casts a narrow shadow that moves across the park leading to a different shadow every hour

# FEASIBILITY STUDY

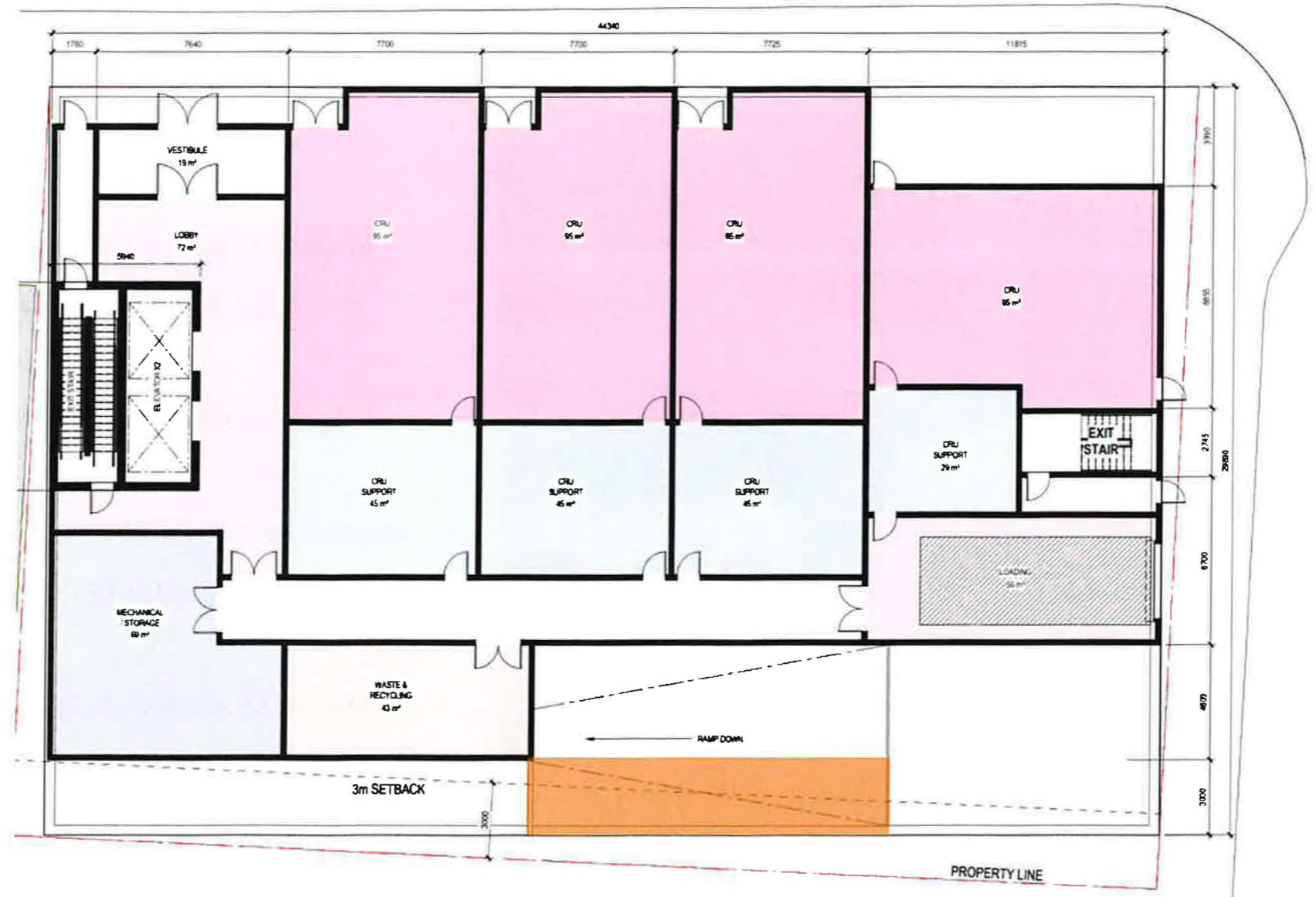
17th AVE SW

FAR 7.00

Total Residential Units: ~100

Total building height: 70m

Amendment to the DC at CPC allows for the parkade ramp to extend into the setback.



## SUMMARY

Proposed land use is superior to the 8-storey block:

- Does not unduly shadow the 17<sup>th</sup> Ave SW streetscape
- No portion of Humpy Hollow Park is in shadow for prolonged periods of time
- Provides moments of respite during extreme heat events
- Contextually sensitive to the Duke residential building to the south
- Provides ~30 more housing units (100 compared to 70)

Therefore, we request that Council consider CPC's recommendation to give three readings to the proposed bylaw.



Massing Concept  
To be refined at DP stage

Questions?

Thank You.

quantumplace.ca  
587.350.5172

1026 16th Ave NW, Suite 203  
Calgary, AB | T2M 0K8



A large, stylized, light orange letter 'A' graphic that serves as a background for the text. It has a geometric, faceted appearance with various shades of orange.

# Supplemental Slides

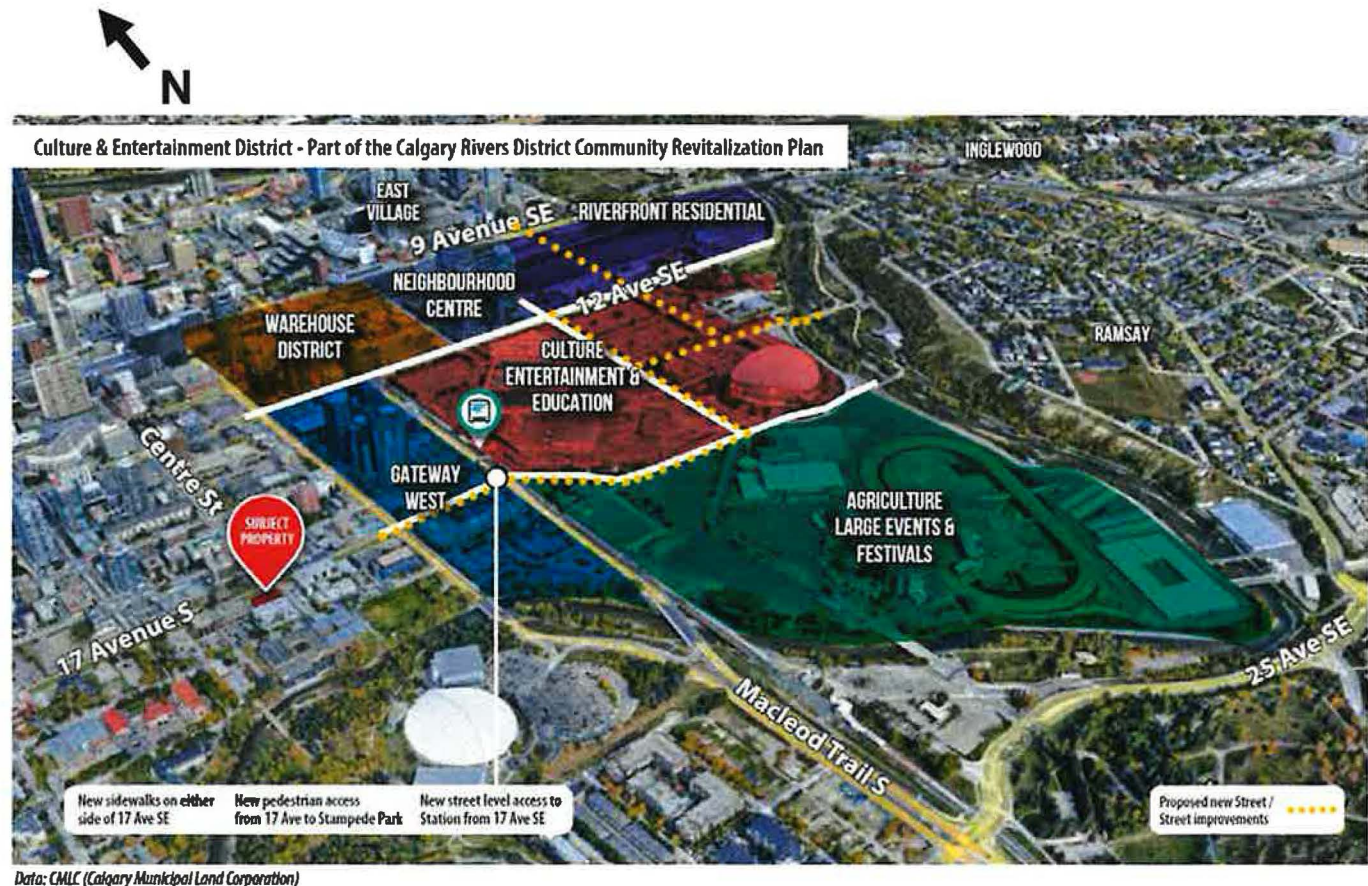
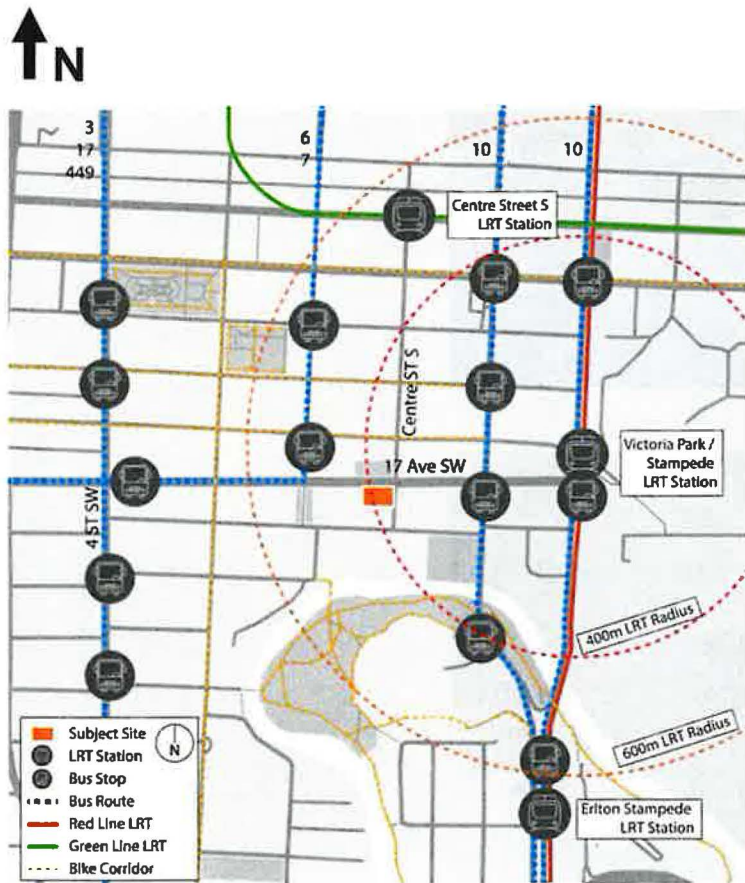


**SITE CONTEXT**  
STREET LEVEL



# SITE CONTEXT

## PUBLIC INVESTMENT IN THE AREA



**SITE CONTEXT**  
AERIAL PERSPECTIVE



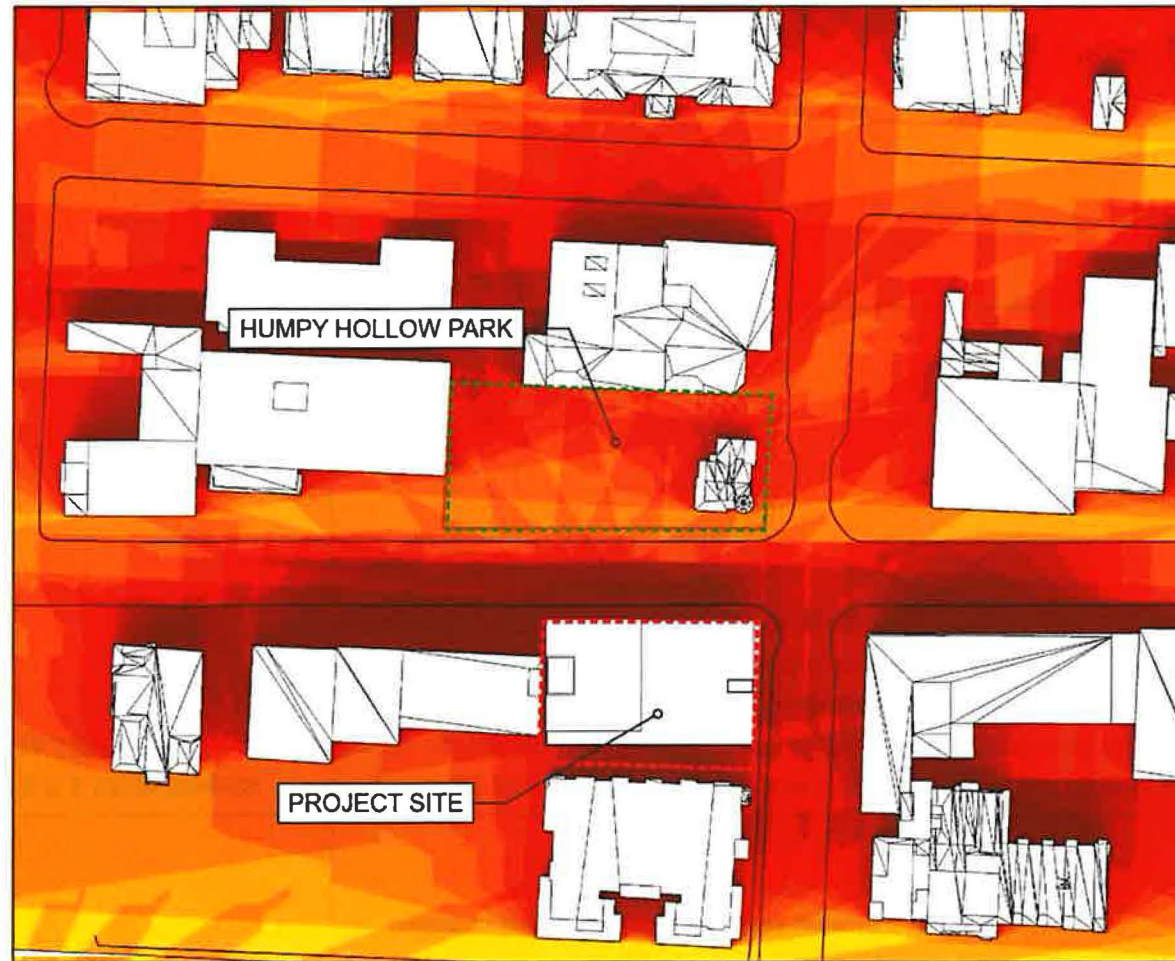
## WEST ELBOW COMMUNITIES LAP – POLICY ALIGNMENT

Policy reference	Relevant policy text	Alignment
<b>2.2.1 Neighbourhood (p.34)</b>	At all scales, redevelopment should consider existing context, parcel layout, building massing, and landscaping to sensitively integrate into the community.	<b>Aligned.</b> We have shown extensive thought and consideration to the optimization of sunlight access to streets and open spaces. In addition, we have updated the proposed Direct Control district to restrict the tower floor plate and to allow for greater flexibility in tower placement at the development permit stage. We are committed to collaborating with the adjacent neighbour to ensure that the proposed massing at development permit will be suitable.
<b>2.3.5 High Scale (p.62)</b>	b. Development in High Scale areas should: i. be designed to reduce the impacts of wind at the ground floor and to optimize sunlight access to streets and open spaces.	<b>Aligned.</b> This is a development permit level policy however, at the land use level, we have already shown extensive thought and consideration to the optimization of sunlight access to streets and open spaces. Further efforts to design with the impact of wind in mind will be undertaken at the development permit stage.
<b>2.4.2.1 Site Design (p.65)</b>	i. Development adjacent to or facing parks and open space, including interfaces separated by a lane or a street, should: i. activate the park and open space through site and building design; iv. minimize shadow impacts.	<b>Aligned.</b> This is a development permit level policy, the initial massing provided proposes an outdoor patio on the northeast corner of the site, promoting activity between the site and Humpy Hollow Park across the street. We have already shown extensive thought and consideration to the optimization of sunlight access to streets and open spaces.
	j. A shadow study may be required at the planning application stage for development adjacent to parks and open space to ensure minimal daytime spring and fall shadow impacts.	<b>Aligned.</b> Both a traditional shadow study and a sun exposure study have been provided at submission and resubmission showing extensive thought and consideration to the optimization of sunlight access to streets and open spaces. We have also included a study showing shadow cast on Humpy Hollow Park as a percentage of the area of the park in this latest submission.

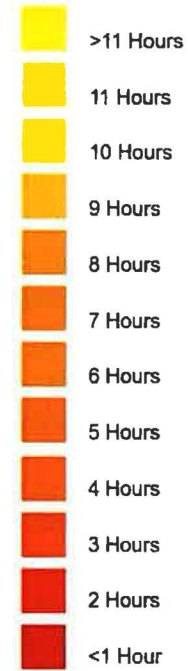
## WEST ELBOW COMMUNITIES LAP – POLICY ALIGNMENT

Policy reference	Relevant policy text	Alignment
<b>2.4.2.2 Building Design (p.67)</b>	a. Development should be designed to: vi. reduce the negative impacts of wind at the ground floor and optimize sunlight access to the public space, open spaces, and amenity spaces.	<b>Aligned.</b> This is a development permit level policy that applies specifically to the site itself and not adjacent sites. The initial massing has considered the experience of amenity spaces however, this will be further explored at the development permit stage.
<b>2.5.1 Main Streets (p.72)</b>	c. Buildings should minimize shadow impacts onto the sidewalk and public spaces on the opposite side of the street, measured during the spring and fall equinoxes. Measures to minimize shadow impacts may include: i. reduced floor plates; ii. tower separation; iii. stepbacks; iv. tower orientation, dimensions and location.	<b>Aligned.</b> This policy does not specify lowering building height below the maximum building scale as a tool – although we have done this by reducing to 20 storeys. We have incorporated all these tools into our analysis and landed on the application height as submitted. The proposed DC requires a narrow point tower and podium massing but allows for flexibility in the placement of the tower at the development permit stage. The proposed DC requires stepbacks above a two-storey podium and a restricted floor plate for the tower. The DC allows flexibility at the development permit stage to work with the City, community, and adjacent neighbour to the west on tower placement.

# SHADOW STUDY – SUNLIGHT EXPOSURE



HOURS OF SUNLIGHT  
 SPRING EQUINOX  
 MARCH 20, 2024  
 12 HOUR PERIOD  
 8:00 AM - 8:00 PM



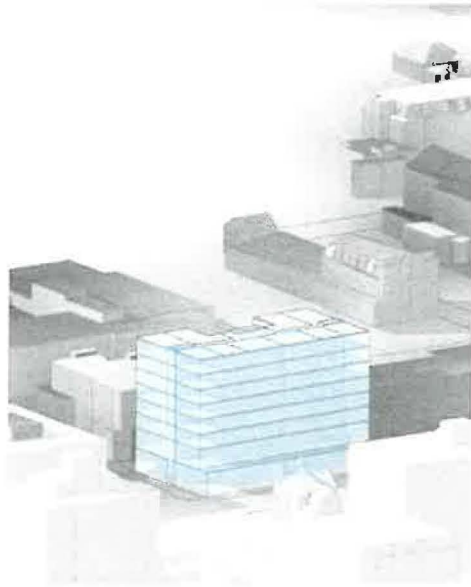
APPROX. AVERAGE DAYLIGHT HOURS ON HUMPY HOLLOW PARK\*  
**9 HRS** Compare to 8 Storey Block: **9 HRS**

\*APPROXIMATED HOURS ACROSS A 12 HOUR PERIOD AS AN AVERAGE ACROSS ENTIRE PARK SITE AND INTERPRETED FROM SHADOW STUDY OVERLAYS.

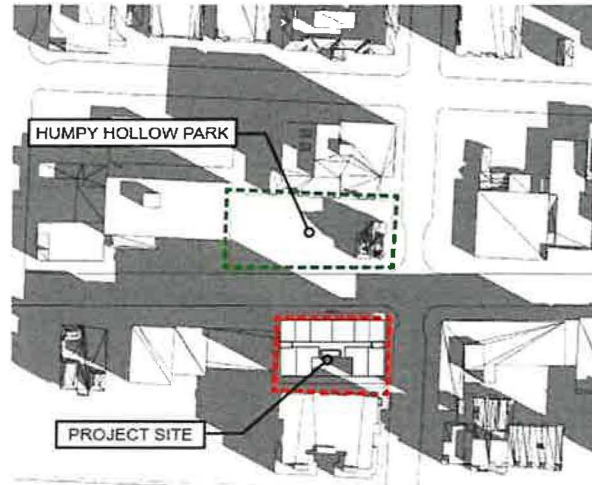
\*Approach based on 'The impact of dynamic thermal experiences on pedestrian thermal comfort: A whole-trip perspective from laboratory studies' (Huihui Zhao, 2024).

# SHADOW STUDY

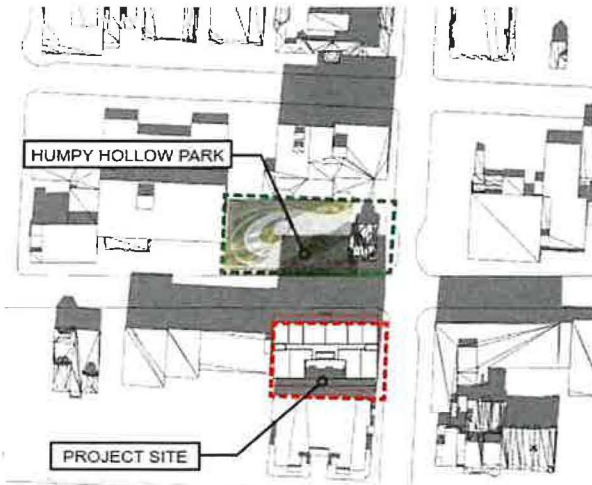
## 8-STOREY BLOCK



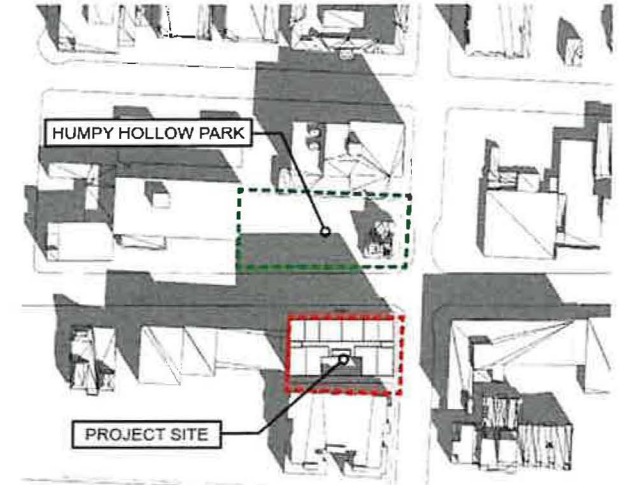
SHADOW STUDIES  
SUGGESTED LAND USE - 8 STOREY  
BLOCK MASSING F.A.R. 7.0



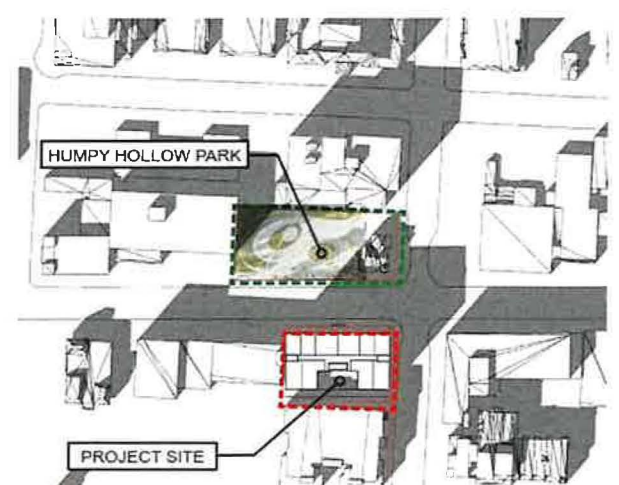
SPRING/AUTUMN EQUINOX  
10:00 AM



SPRING/AUTUMN EQUINOX  
2:00 PM



SPRING/AUTUMN EQUINOX  
12:00 PM



SPRING/AUTUMN EQUINOX  
4:00 PM

# SHADOW STUDY

## 7 STOREY BLOCK

- 7-storey block shadow study provided by Administration
- Administration stated they would support a maximum 7-8 storey block massing
- Based on shadows extending a maximum of 20% of the linear depth of the park

March 21 10:00am



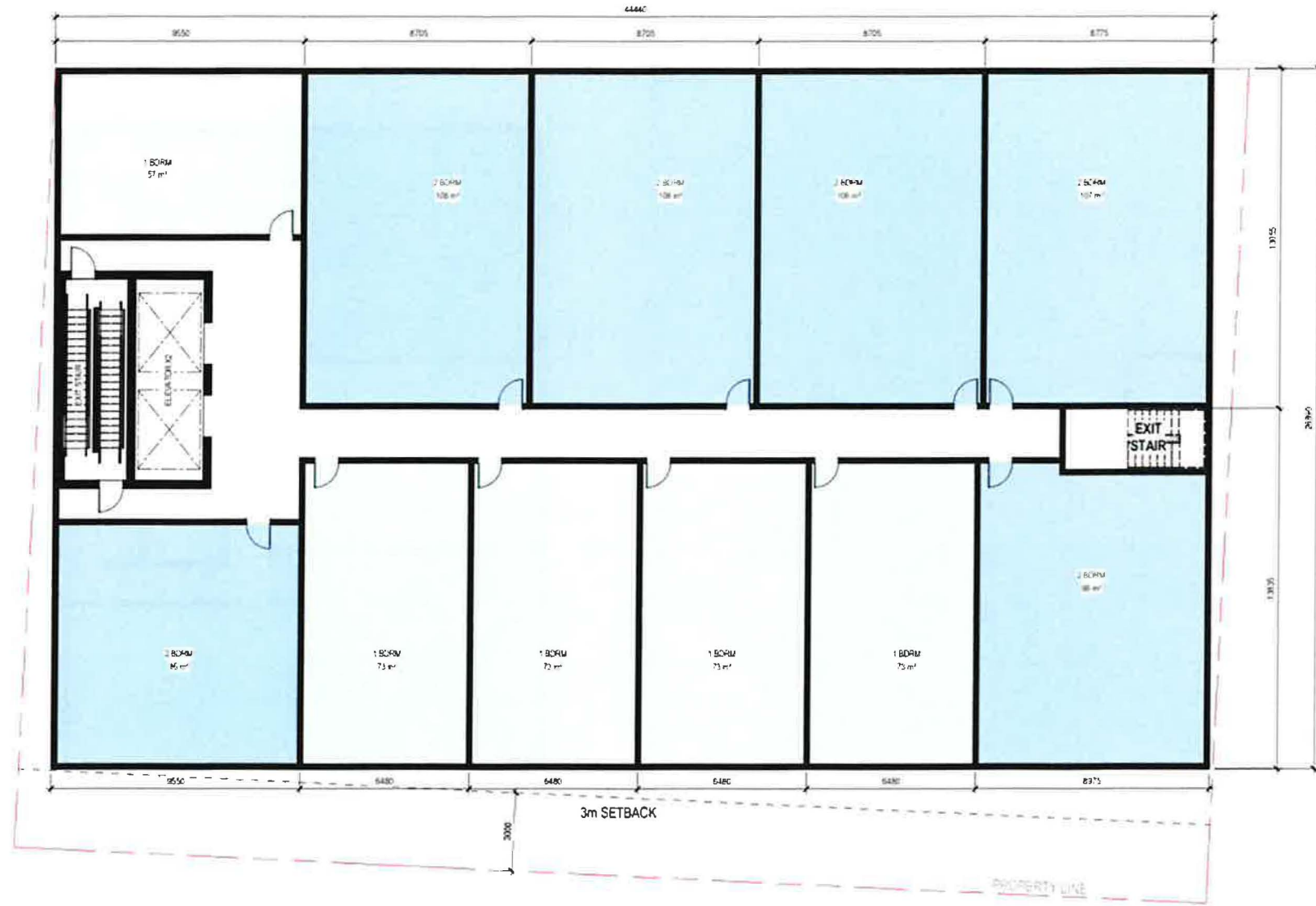
March 21 12:00pm



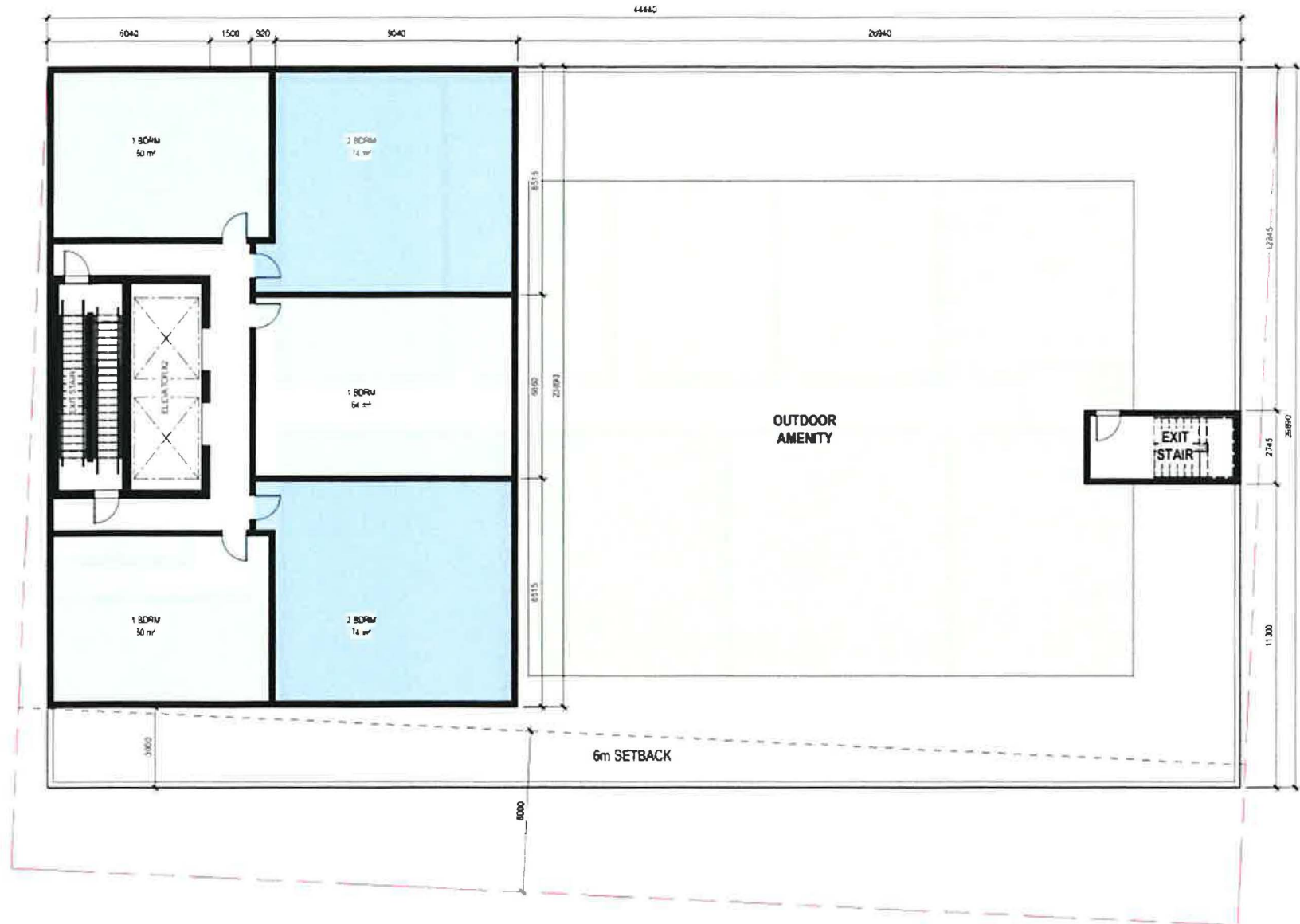
March 21 4:00pm



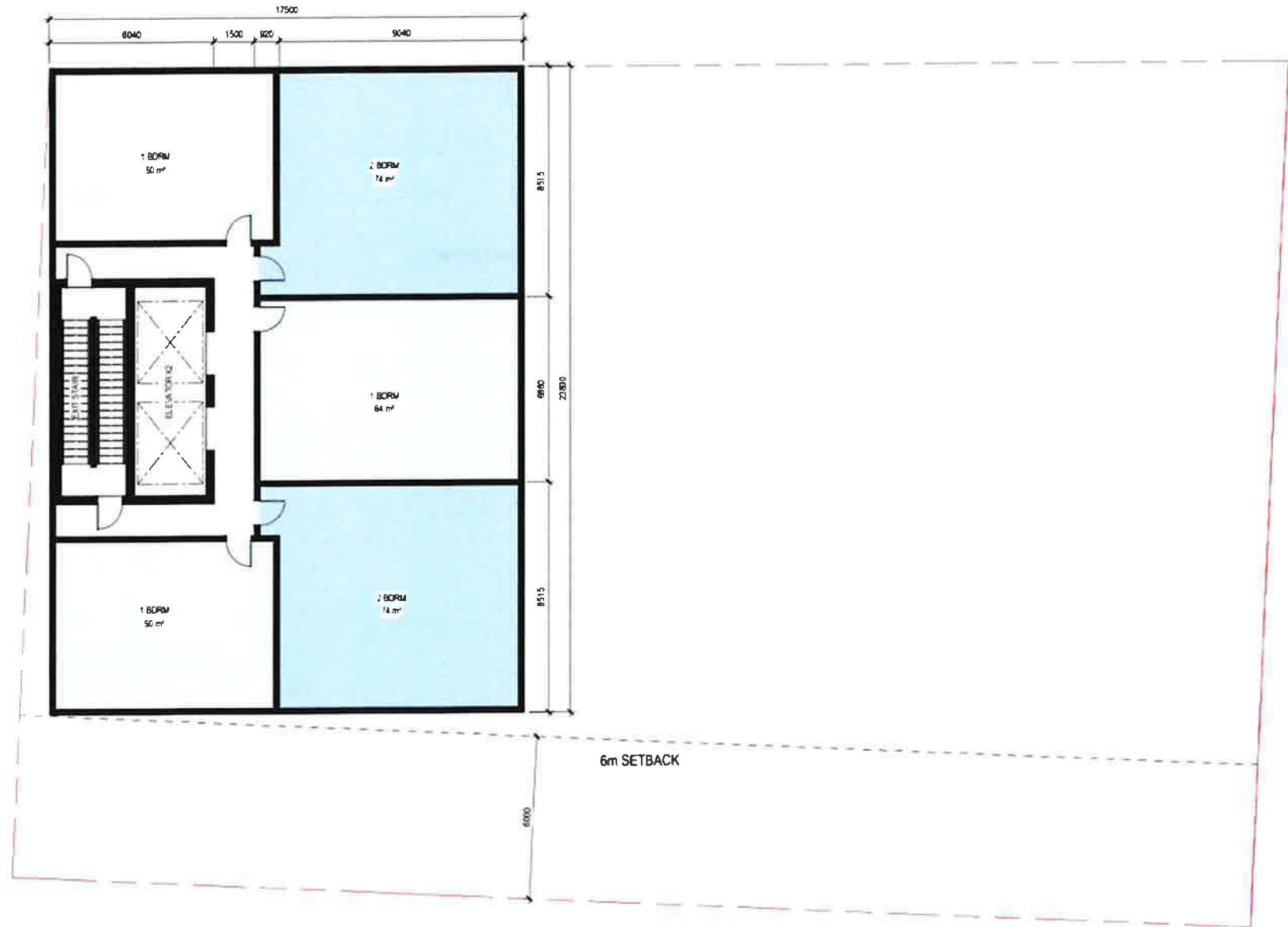
# L2 TOWNHOUSES



L3  
TOWER - BASE



L4 – L20  
TOWER – TYPICAL





# CONCEPT - MASSING



# DESIGN PRECEDENT

## SPATIAL & TACTILE EXPERIENCE



The Rockwell  
Hill West Architects  
New York, New York



The Rockwell  
Hill West Architects  
New York, New York



The Rockwell  
Hill West Architects  
New York, New York



La Fromagerie  
London, U.K.



Allia Villa  
Depth of Field Design Studio  
Riyad, Saudi Arabia



The House of Courtyards  
Modo Designs & Anblack Design Studio  
Ahmedabad, India



Luxe Apartments  
Cameron Chisholm Nicol Architects  
Perth, Australia



The Marquina Lover - Gingsite 698  
Ginggaanbal Architects  
Bangkok, Thailand

# MATERIAL PALETTE

SPATIAL & TACTILE EXPERIENCE

