Musson Cattell Mackey Partnership

GRACORP PROPERTIES

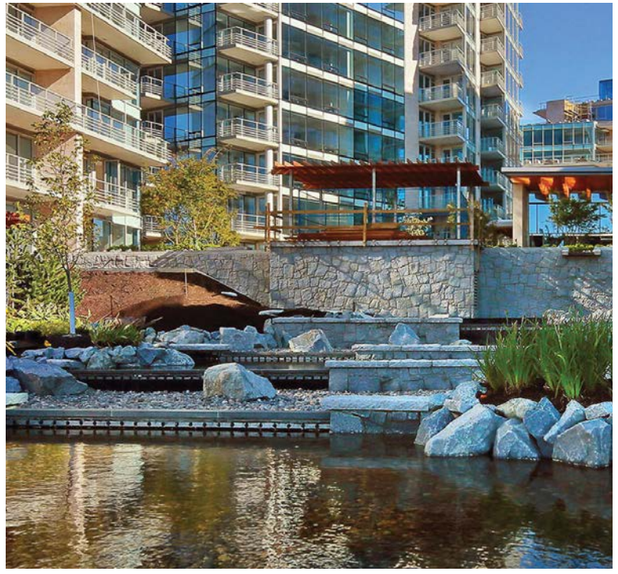
PFS STUDIO

WEST 39TH AVENUE

427 - 449 West 39th Ave

VIRTUAL OPEN HOUSE
May 2022

PROJECT TEAM



Gracorp Properties

"As part of the Graham Group, Gracorp is committed to developing projects with lasting value, that will continue to serve end-users for decades to come. The Graham Group is one of Canada's leading construction companies and has been recognized as one of Canada's Best Managed Companies and Top Employers."

Musson Cattell Mackey Partnership

Musson Cattell Mackey Partnership operates a full service architectural and interior design practice from downtown Vancouver employing a complement of some 100+ architects, technicians, and designers. We are primarily engaged in commercial, residential, and master planning projects. Our strength is an experience.

PFS Studio

"PFS Studio is a leading Canadian planning, urban design and landscape architecture firm offering consulting services nationally and internationally on a wide range of projects for both the public and private sectors. The firm has been in practice for over thirty years (formerly as Phillips Farevaag Smallenberg)..."

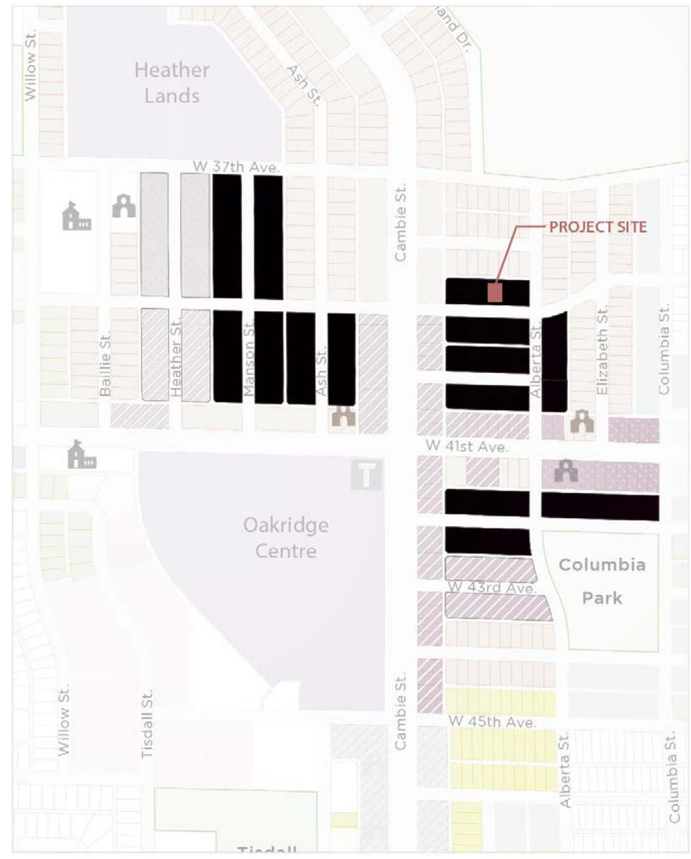
MORRISON HERSHFIELD

NEMETZ (S/A) & ASSOCIATES LTD.
CONSULTING ENGINEERS

AMEGroup
consulting mechanical engineers

rjc Read Jones Christoffersen
Consulting Engineers

CONTEXT PLAN



Neighbourhood Context

The project site sits among a developing suburbian hub aligned to the prospects of the Cambie Corridor official community plan. The project would contribute affordable rentals and provide access to prominent city parks (ie. Queen Elizabeth and Columbia Park) at walking distances, while taking advantage of local bike lanes and transit routes that connect to the city's main arterial corridors. It is also in close proximity to the Canada Line and the developing Oakridge Centre community located further south.

Policy Context

As part of Phase 3 of the Cambie Corridor Planning Program, the Cambie Corridor Plan aims to transform existing RS-1 single family neighbourhoods identified by Staff into walkable communities where more people will be able to live, work, shop, learn, and play.

STREETSCAPE

Elevation - W39th Avenue North

Elevation - W39th Avenue South

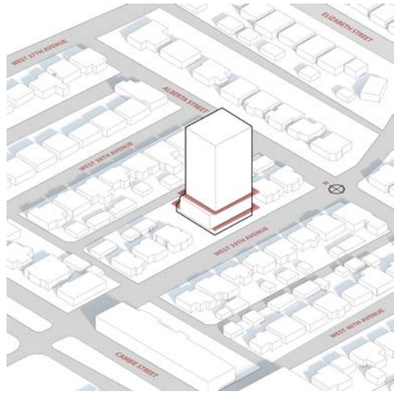
Elevation - Lane

BUILDING FORM

MASSING STUDY

Augmentation
The design begins with a simple massing to deter from it's obvious contextual deliniation. The tower massing is adjusted to create a relief and recess from the podium block.

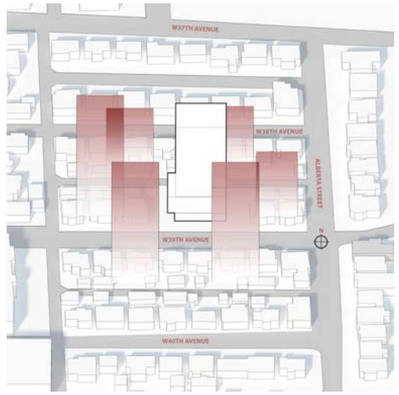
Connection
The ground level is indented on the west facade to maximize outdoor area with the goal of providing ample exterior amenity space to support social activities within the community.



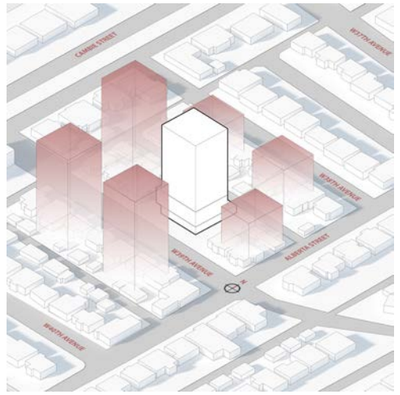
Identity
The ground, podium, and tower levels are further divided at pivotal intersections to create a sense of identity among the varying functional spaces.

FUTURE CONTEXT STUDY

Pioneer
The development takes the initial stride in shaping the Cambie Corridor within the suburban arterials of West 39th Avenue to create a baseline for future buildings.

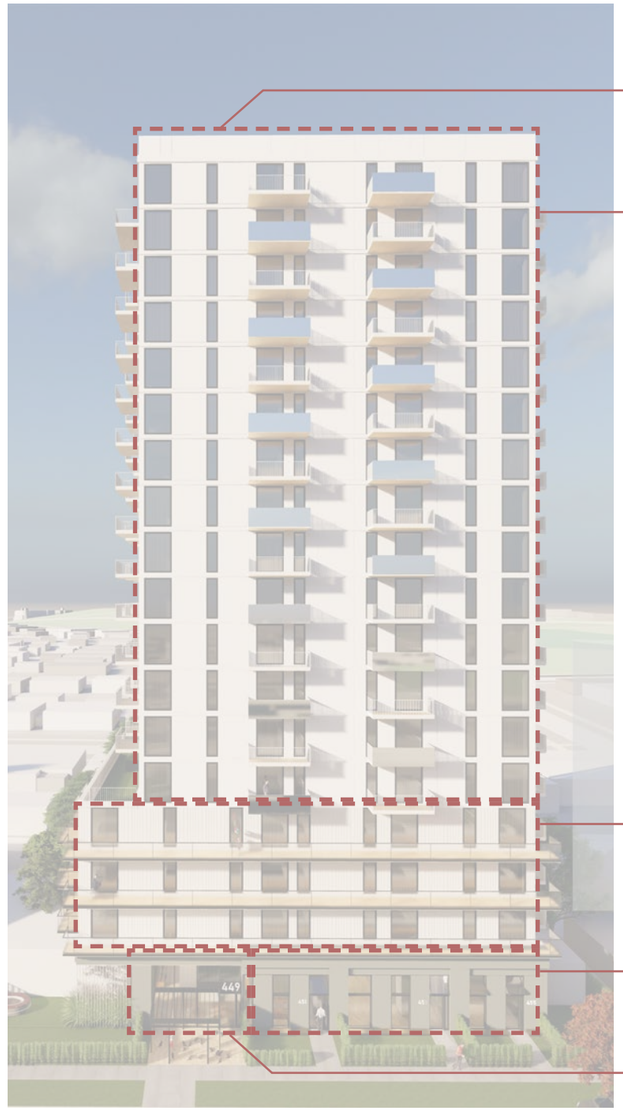


Separation
The building design is organized methodically to provide enough distance and staggering of future adjacent developments.



Gradiation
The project concept aims to align with the guideline strategies of molding a gradation of building heights from the main street and the inward properties.

BUILDING PROGRAM



Amenity
Accessible
Rooftop

Residential
Market Rental
Level: 5-18

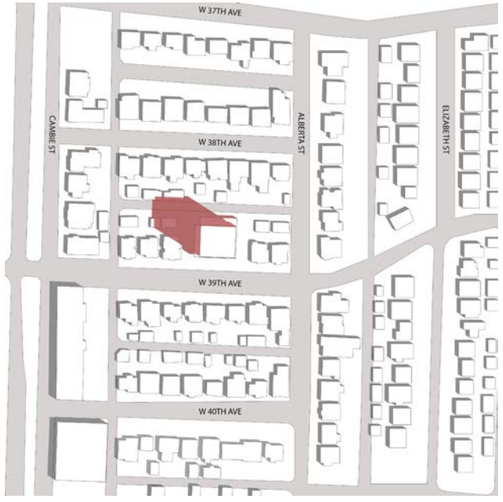
Amenity
Indoor Facilities
Outdoor Play Area
Level: 1

Residential
Below Market
Rental
Level: 2-4

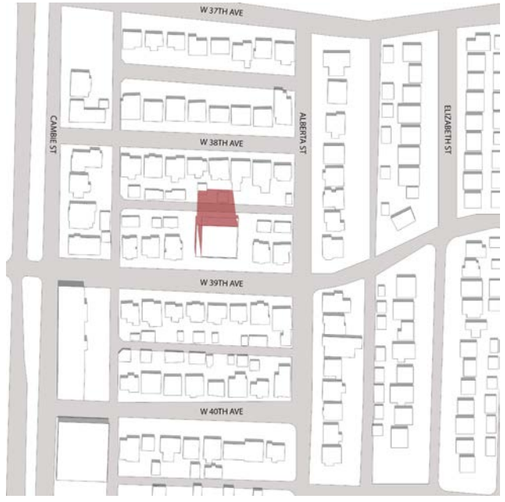
Residential
Townhouses
Market Rental
Level: 1

Residential
Lobby Entrance
Level: 1

SHADOW STUDY

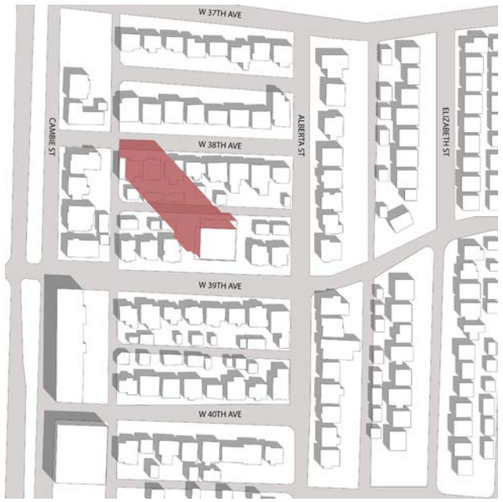


Summer Solstice - 10AM

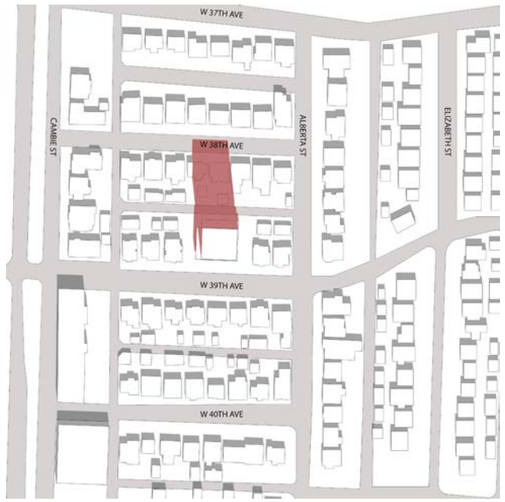


Summer Solstice - 12PM

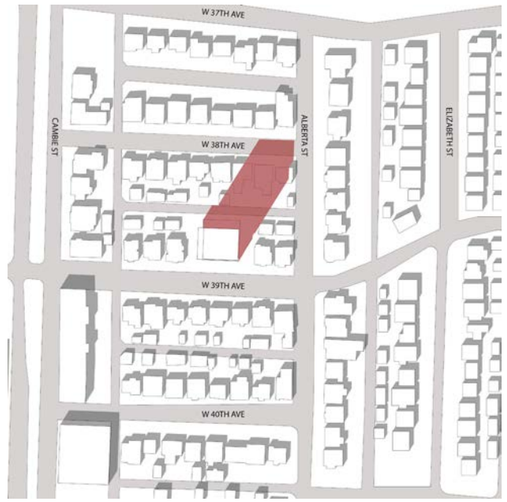
Summer Solstice - 2PM



Spring Equinox - 10AM



Spring Equinox - 12PM



Spring Equinox - 2PM

STATISTICS

PROJECT DATA

Site Area	19,052 ft²
Proposed FSR	6.10
Proposed Zoning	CD-1
Proposed Height	18-Storey

UNIT TYPOLOGY

TYPE	*BMR	**MR	AVERAGE SIZE (ft²)
Townhouse	0	3	1493 ft²
3-Bedroom	6	0	842 ft²
2-Bedroom	7	55	712 ft²
1-Bedroom	18	56	492 ft²
Studio	3	28	376 ft²
Total Units	**34**	**142**	

*Below Market Rental (BMR)
**Market Rental (MR)

RENTAL TYPOLOGY

TYPE	PERCENT	GROSS AREA (ft²)
Market Rental	80%	79,466 ft²
Below Market Rental	20%	19,550 ft²
Total Stalls	**100%**	**99,016 ft²**

PARKING STALLS

TYPE	COUNT
Residential	46
Visitor	9
Accessible	7
Total Stalls	**69**

*Accessible stalls equates 2

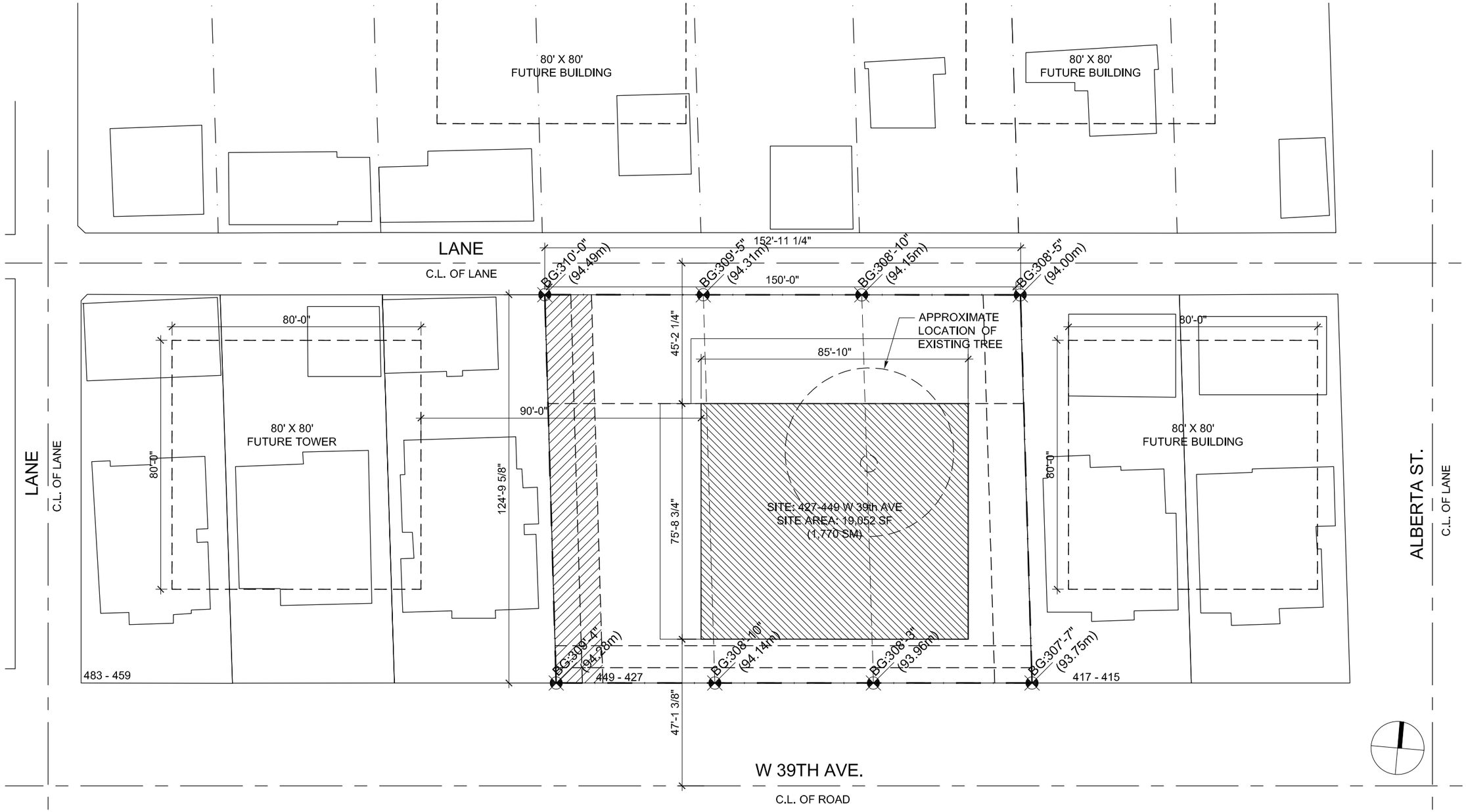
BICYCLE STORAGE

TYPE	COUNT
Class A	337
Class B	10

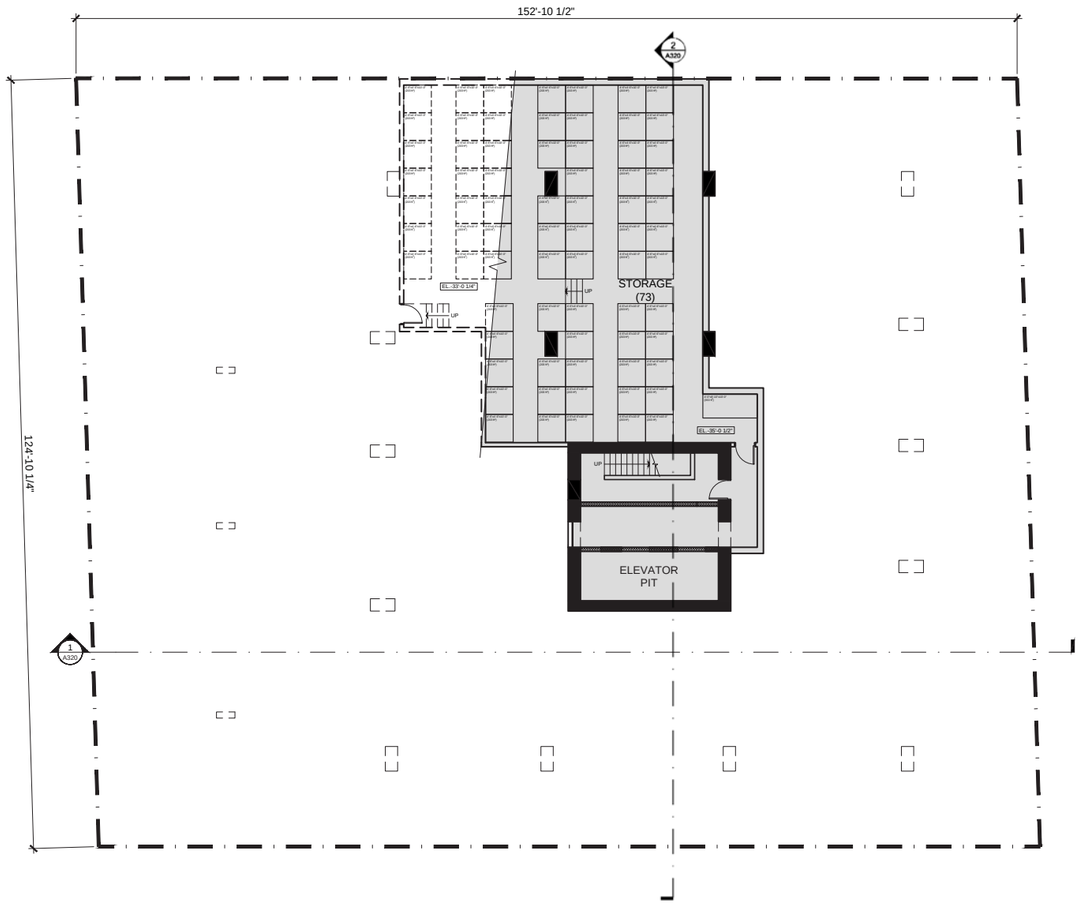
LOADING

TYPE	COUNT
Class A (PASSENGER)	1
Class B	1

SITE PLAN

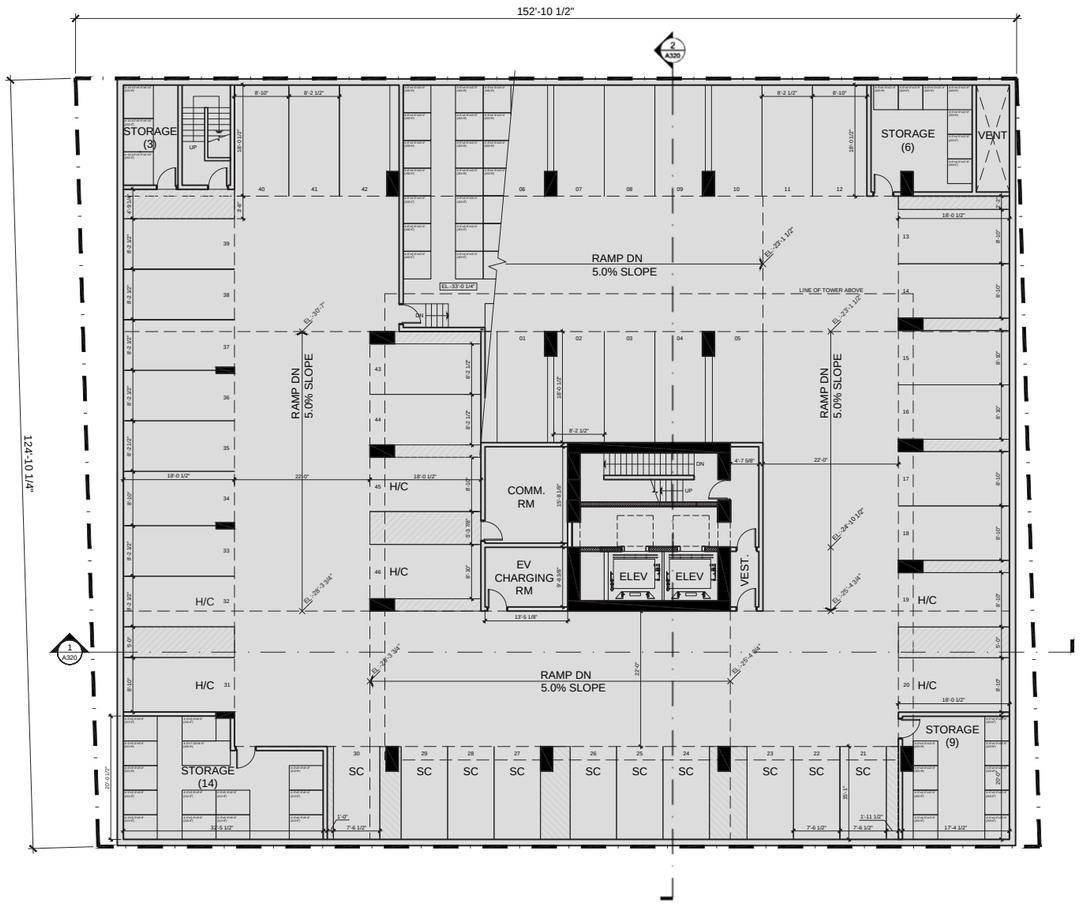

80' X 80'
FUTURE BUILDING
80' X 80'
FUTURE BUILDING
LANE
C.L. OF LANE
BG:310'-0"
(94.49m)
152'-11 1/4"
BG:309'-5"
(94.31m)
150'-0"
BG:308'-10"
(94.15m)
BG:308'-5"
(94.00m)
80'-0"
45'-2 1/4"
APPROXIMATE
LOCATION OF
EXISTING TREE
85'-10"
80'-0"
90'-0"
80' X 80'
FUTURE TOWER
80'-0"
124'-9 5/8"
75'-8 3/4"
SITE: 427-449 W 39th AVE
SITE AREA: 19,052 SF
(1,770 SM)
80' X 80'
FUTURE BUILDING
80'-0"
LANE
C.L. OF LANE
ALBERTA ST.
C.L. OF LANE
BG:309'-4"
(94.28m)
BG:308'-10"
(94.14m)
BG:308'-5"
(93.96m)
BG:307'-7"
(93.75m)
483 - 459
449 - 427
417 - 415
47'-1 3/8"
W 39TH AVE.
C.L. OF ROAD

FLOOR PLANS



P2 STORAGE PLAN

- RESIDENTIAL (MARKET RENTAL)
- RESIDENTIAL (BELOW MARKET RENTAL)
- AMENITY
- COMMON AREA
- EXCLUSIONS



P2 PARKING PLAN

- RESIDENTIAL (MARKET RENTAL)
- RESIDENTIAL (BELOW MARKET RENTAL)
- AMENITY
- COMMON AREA
- EXCLUSIONS

May
2022

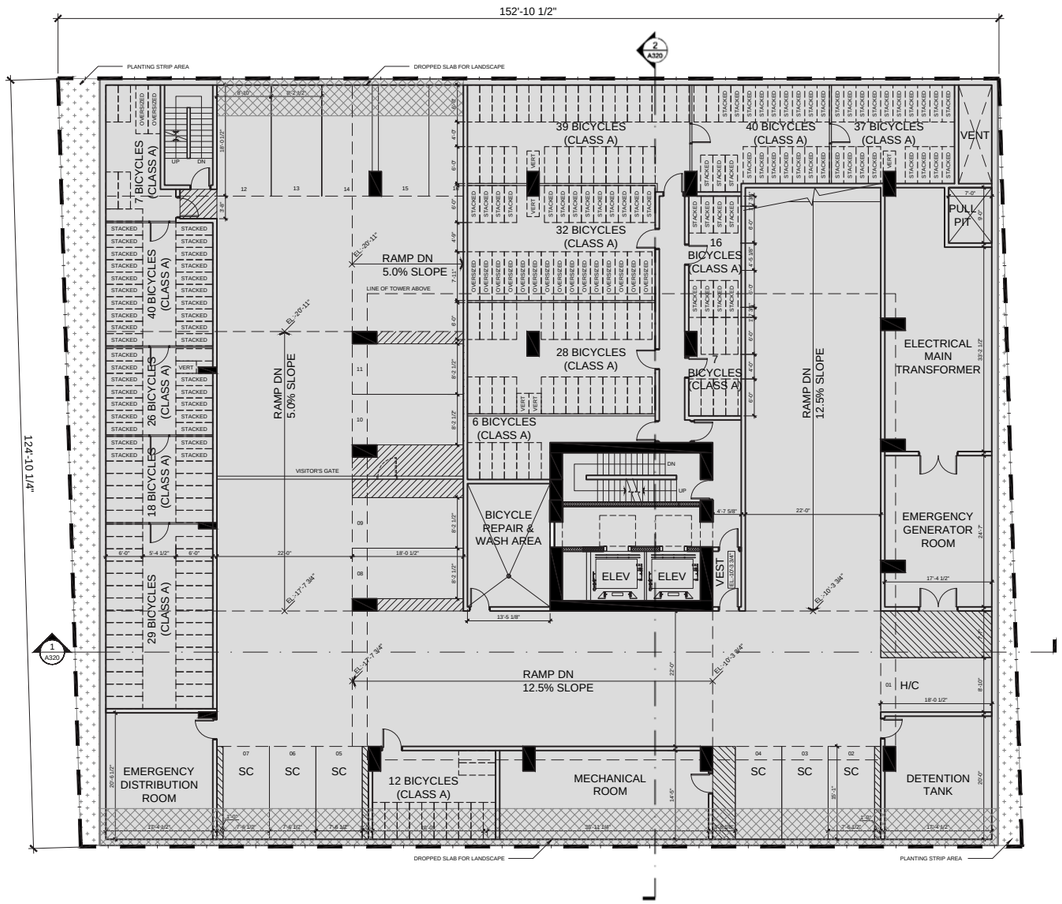
427-449 W39TH AVENUE
Virtual Open House
Presentation Boards

Architects
Designers
Planners

MCM

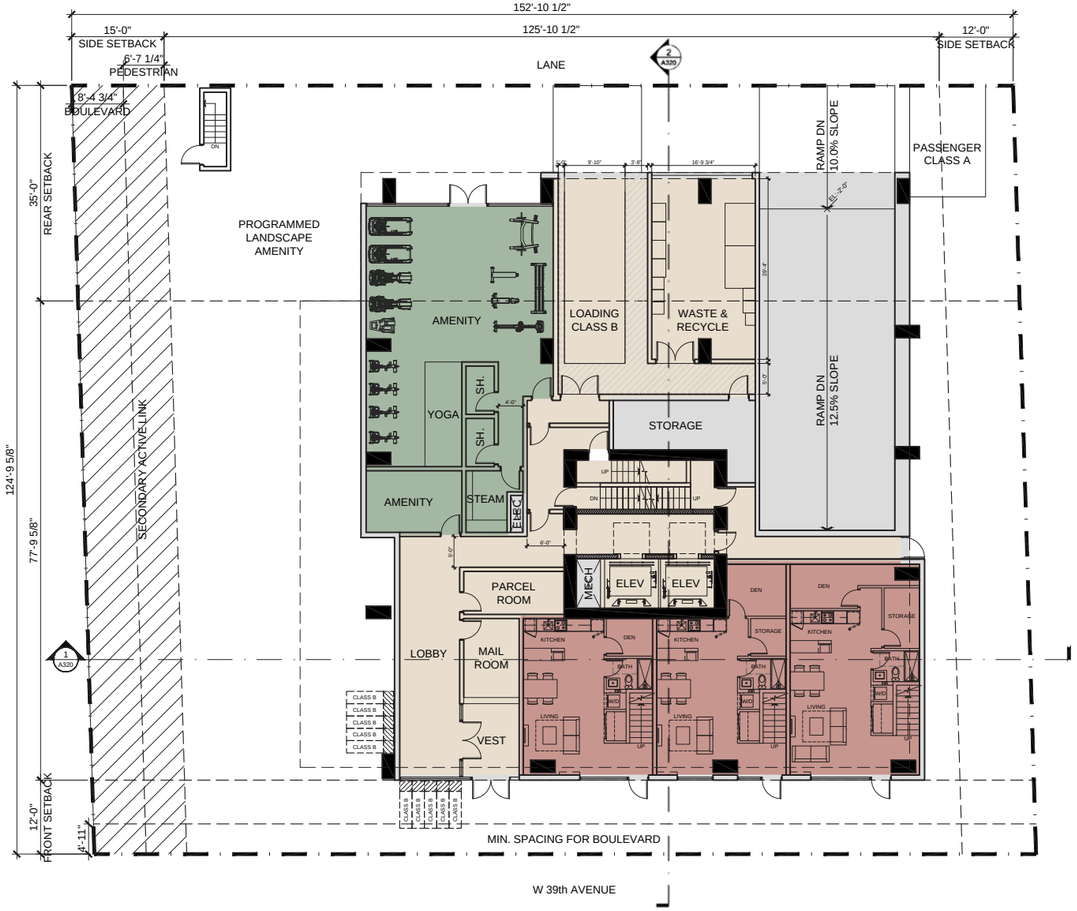
Musson Cattell Mackey Partnership

FLOOR PLANS



P1 PARKING PLAN

- RESIDENTIAL (MARKET RENTAL)
- RESIDENTIAL (BELOW MARKET RENTAL)
- AMENITY
- COMMON AREA
- EXCLUSIONS



L1 FLOOR PLAN (GROUND)

- RESIDENTIAL (MARKET RENTAL)
- RESIDENTIAL (BELOW MARKET RENTAL)
- AMENITY
- COMMON AREA
- EXCLUSIONS

May
2022

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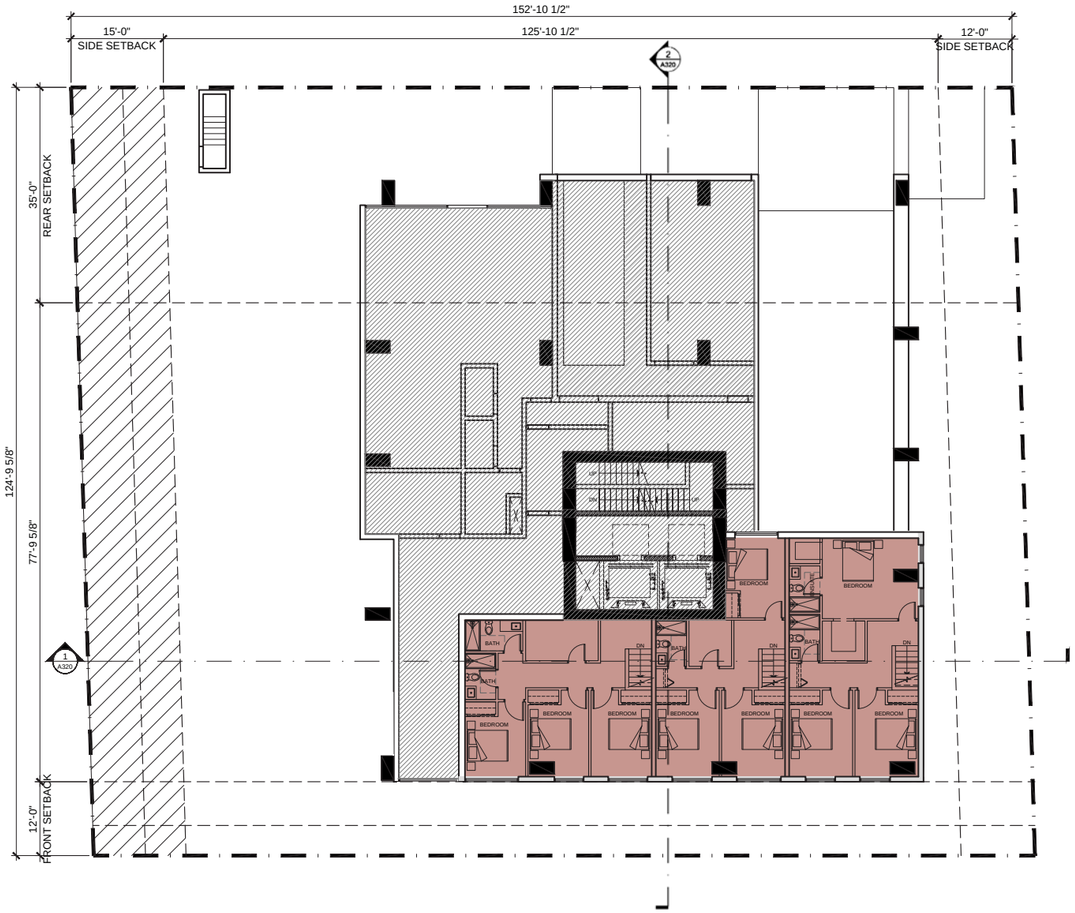
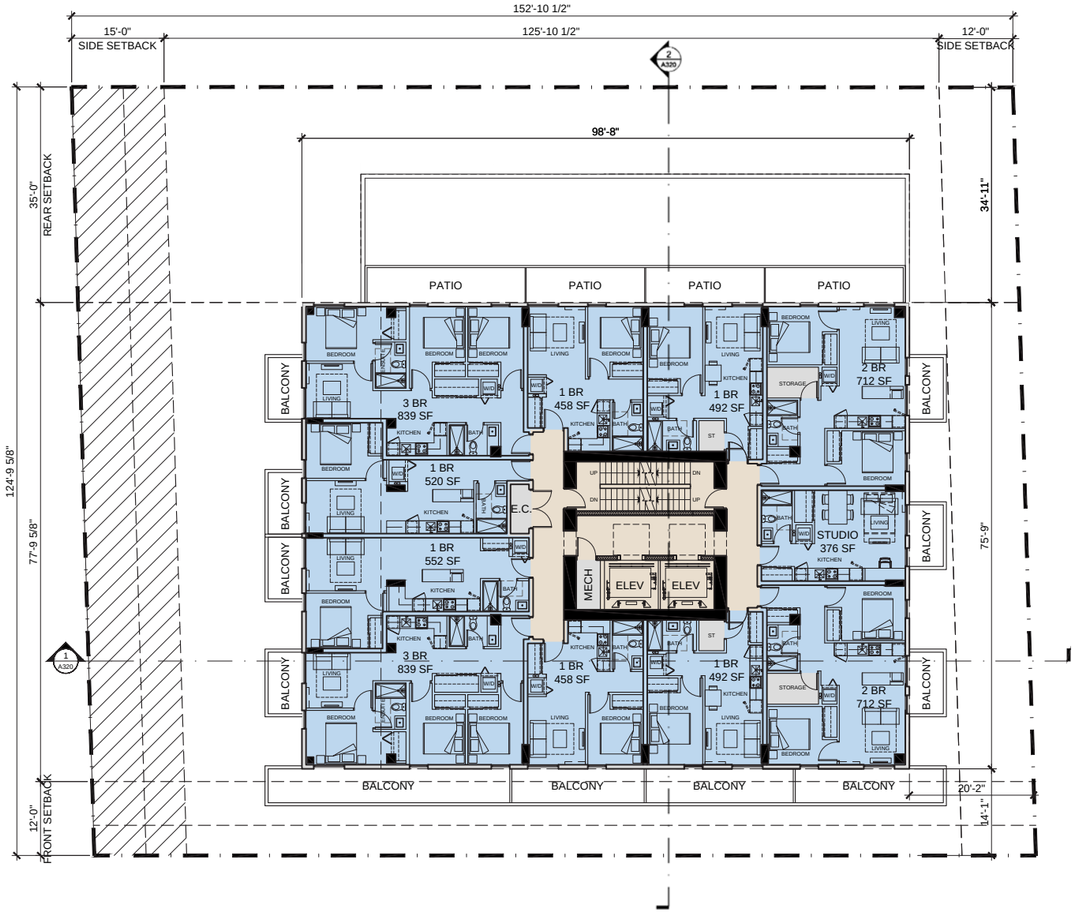
FLOOR PLANS



L1 FLOOR PLAN (UPPER)

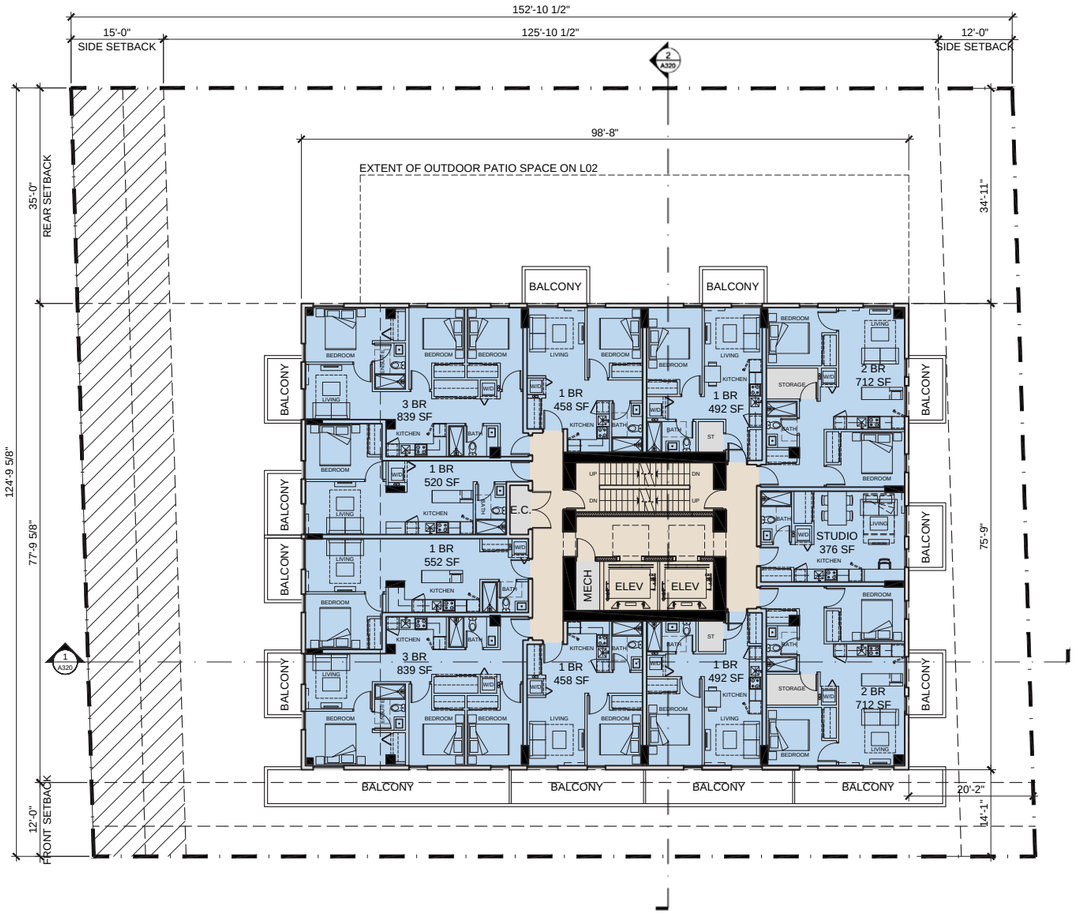
- RESIDENTIAL (MARKET RENTAL)
- RESIDENTIAL (BELOW MARKET RENTAL)
- AMENITY
- COMMON AREA
- EXCLUSIONS



L2 FLOOR PLAN

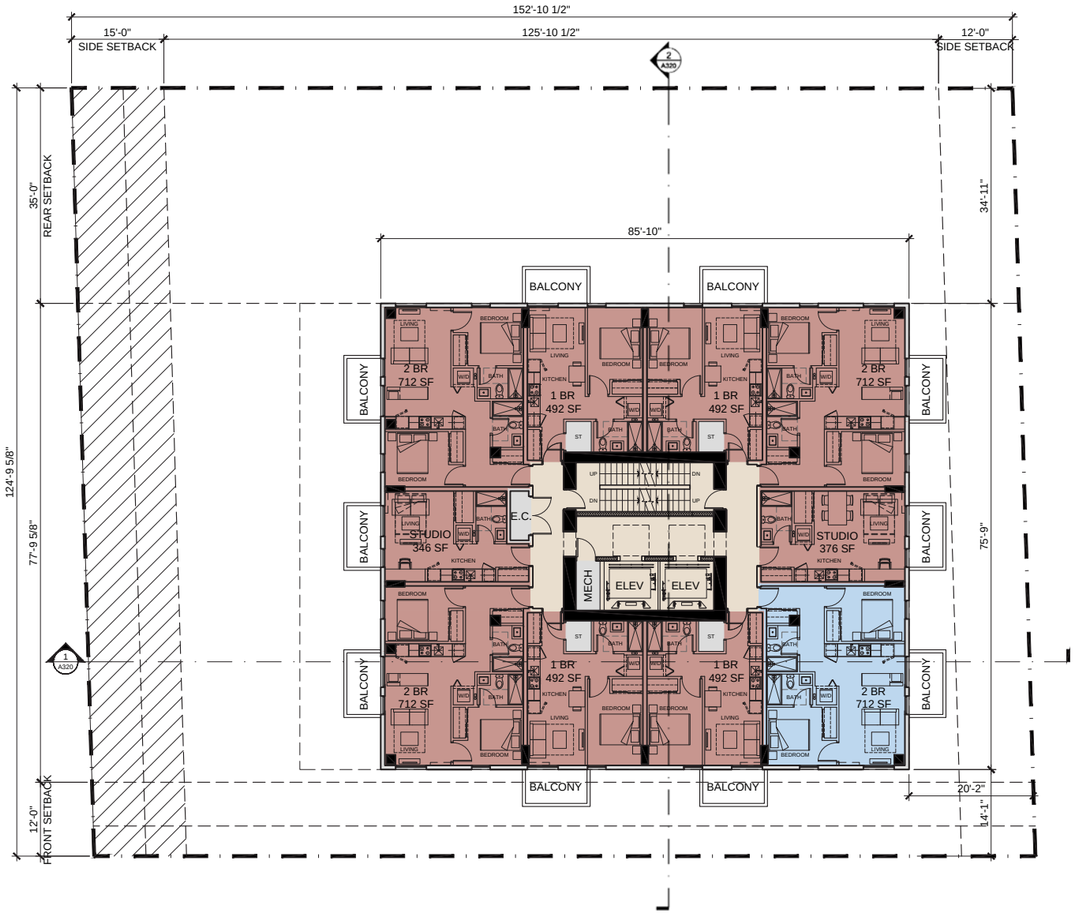
- RESIDENTIAL (MARKET RENTAL)
- RESIDENTIAL (BELOW MARKET RENTAL)
- AMENITY
- COMMON AREA
- EXCLUSIONS

FLOOR PLANS



L3-L4 FLOOR PLAN

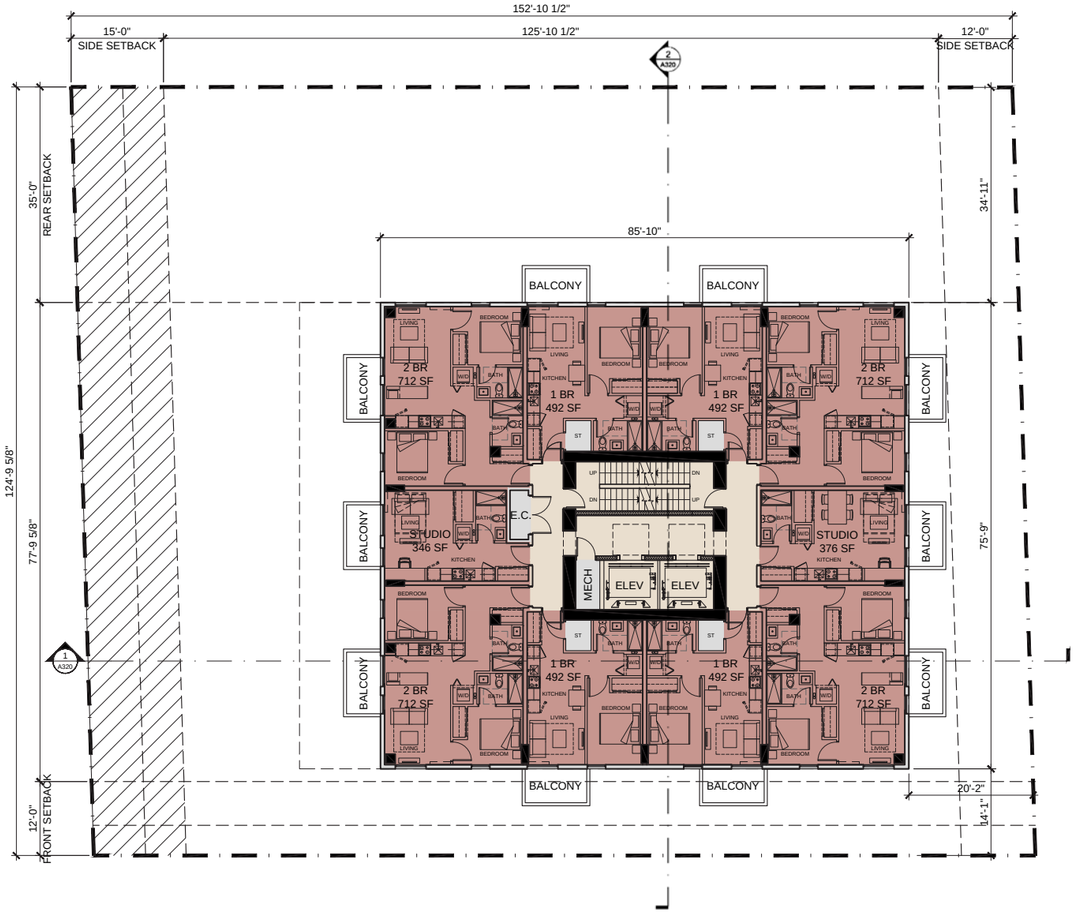
- RESIDENTIAL (MARKET RENTAL)
- RESIDENTIAL (BELOW MARKET RENTAL)
- AMENITY
- COMMON AREA
- EXCLUSIONS



L5 FLOOR PLAN

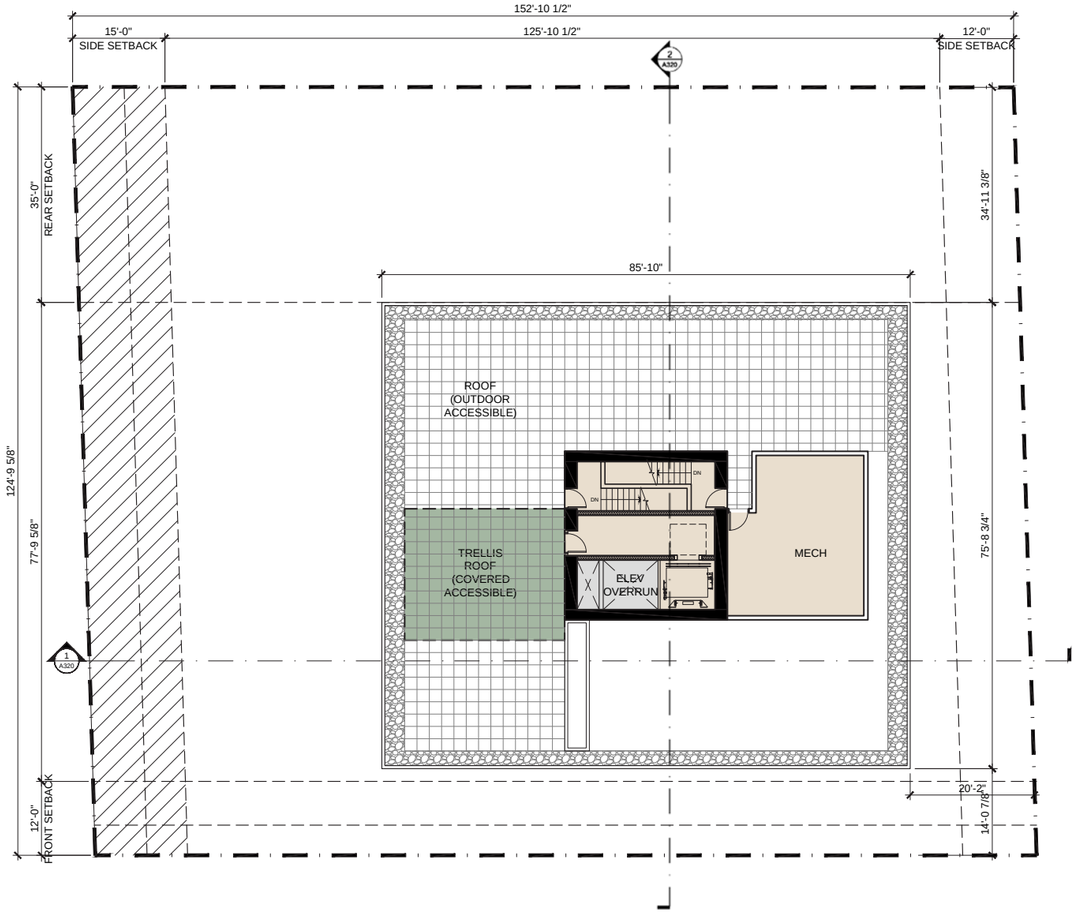
- RESIDENTIAL (MARKET RENTAL)
- RESIDENTIAL (BELOW MARKET RENTAL)
- AMENITY
- COMMON AREA
- EXCLUSIONS

FLOOR PLANS



L6-L18 FLOOR PLAN

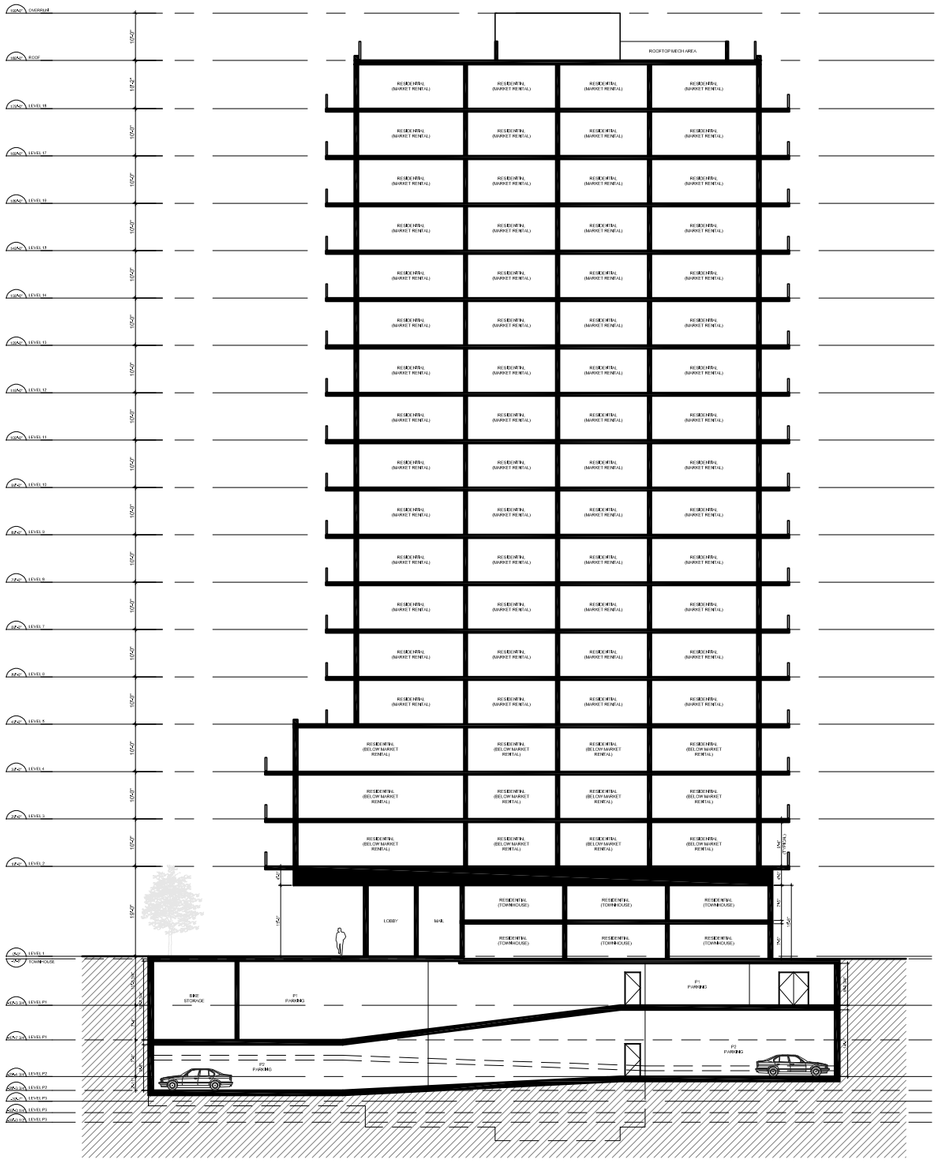
- RESIDENTIAL (MARKET RENTAL)
- RESIDENTIAL (BELOW MARKET RENTAL)
- AMENITY
- COMMON AREA
- EXCLUSIONS



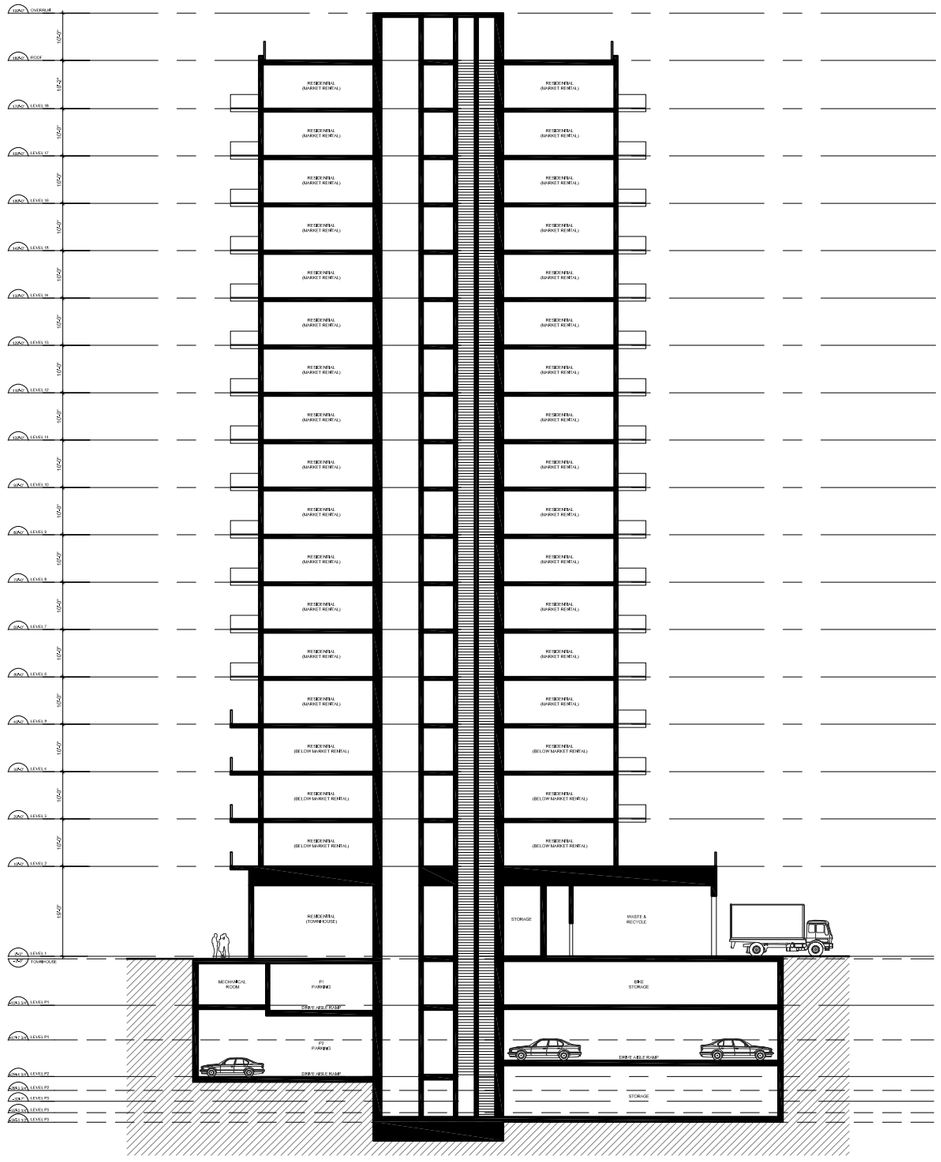
ROOF PLAN

- RESIDENTIAL (MARKET RENTAL)
- RESIDENTIAL (BELOW MARKET RENTAL)
- AMENITY
- COMMON AREA
- EXCLUSIONS

SECTION



SECTION 1



SECTION 2

May
2022

427-449 W39TH AVENUE
Virtual Open House
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Planners

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ELEVATIONS

SOUTH ELEVATION

EAST ELEVATION

NORTH ELEVATION

WEST ELEVATION

SUSTAINABILITY

GREEN BUILDINGS POLICY FOR REZONING
LOW EMISSIONS GREEN BUILDINGS - RESIDENTIAL

Performance Limits

The project aims to achieve minimum performance limits outlined by the City of Vancouver (CoV):

Table B.1.2Ab
- Residential High-Rise: 7+ storeys (18 storeys)
- TEUI: 130 kWh/m^2 (116.2 kWh/m^2)
- TEDI: 40 kWh/m^2 (30.9 kWh/m^2)
- GHGI: 5.0 kgCO2/m^2 (1.3 kgCO2/m^2)

*Estimated design values in brackets

Embodied Emissions

The project life-cycle equivalent annual carbon dioxide emissions ($kgCO_2e/m^2$) will be calculated and reported through a whole-building life cycle assessment.

The report will outline:
- Embodied emissions intensity in $kgCO_2e/m^2$
- Total life-cycle embodied emissions in $kgCO_2e/m^2$
- Equivalent annual embodied emissions intensity in $kgCO_2e/m^2/yr$

Integrated Rainwater Management and Green Infrustructure

The project will establish a management of the site's rainfall through integrated management and Green Infrastructure (GI) through:

- Return first 24mm of rainwater/day into natural pathways or evapotranspiration
- Treat the next 24mm of rainwater/day to remove pollutants
- Convey safely rainwater form storm events over 48mm per day

Whole Building Airtightness

The project whole-building airtightness will be tested (ASTM E779 or equivalent) and reported to meet the minimum requirements:

- Air leakage target of 2.0 L/s*m^2 @75 Pa
- Suite-level air-leakage target of 1.2 L/s*m^2 @50 Pa
- Airtightness testing on 10% of the first 100 units and 5% of above units

Refrigerant Emisions

The project life-cycle equivalent annual carbon dioxide emissions ($kgCO_2e/m^2$) of refrigerants will be calculated and reported.

Insuite Wall-Mount HP: 0.80 $kgCO_2e/m^2$
Packaged DHW ASHP: 0.0 $kgCO_2e/m^2$
Split AC: 0.1 $kgCO_2e/m^2$

*Estimated design values

Low Emitting Materials

The materials proposed for the project containing volatile organic compounds (VOC's) or added urea formaldehyde will be minimized by meeting the standards of Green Seal, Green Label Plus, FloorScore, South Coast Air Quality Management District Rules.

Energy System Sub-metering

The project will provide:
- Separate master metering for each energy utility
- Sub-metering of all major energy end-uses and major space uses

Verified Direct Ventilation

The project will be designed to:
- Incorporate a ventilation system that provides outdoor air directly to all occupiable spaces
- Designed with flow rates to be tested and verified

Indoor Air Quality Testing

The project will test for any formaldehyde, particulates, ozone, total VOC's and carbon monoxide before occupancy is established with reported results communicated to the city.

RENDERINGS

WEST 39TH AVENUE & ALLEY WAY

WEST 39TH AVENUE & ALBERTA STREET

WEST 39TH AVENUE - BUILDING FRONT

LANE WAY - BUILDING REAR

LANDSCAPE

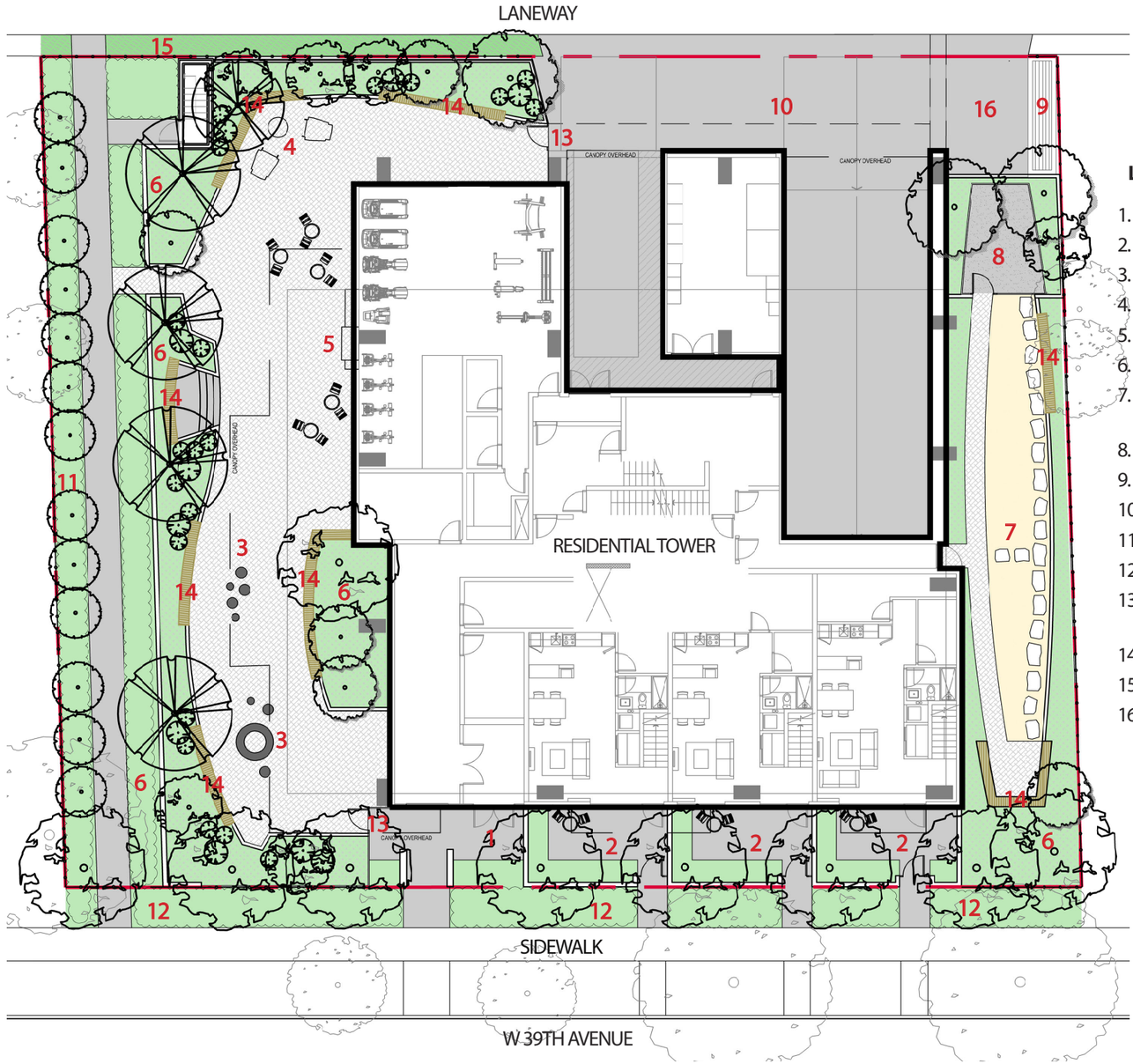
CONCEPTUAL LANDSCAPE APPROACH

The landscape plan is prepared as an ensemble of interconnected residential amenity terraces placed within a heavily planted garden setting surrounding the project.

The main entry walk from the street passes through enhanced boulevard planting and a feature planting area with low flanking walls to the covered entry court.

The terraces are prepared as outdoor 'living rooms' with seating edges and space for moveable furnishings. On the west side, the front terrace offers a diverse array of seating and playable furnishings for sitting, sunning, and casual play; and the rear terrace takes on a more programmed character associated with the covered amenity terraces. Between them a slightly raised deck lends an additional seating perch, and a feature landscape island provide a visual focus from the lobby. On the east, a long narrow terrace is planted with an urban meadow which includes a dog relief area on the north end and a series of benches around its perimeter. The curving geometries improve spatial interest and definition the sequence of rooms, with thickened plantings all at corners to enhance a residential landscape character, typical of the surrounding neighbourhood.

The townhouse units facing West 39th are fronted with typical private terraces with low screen fences and gates to the street. A series of trees within these terraces are coordinated with trees framing the main entry, and complement the existing ornamental trees retained in the city boulevard.



PFS STUDIO

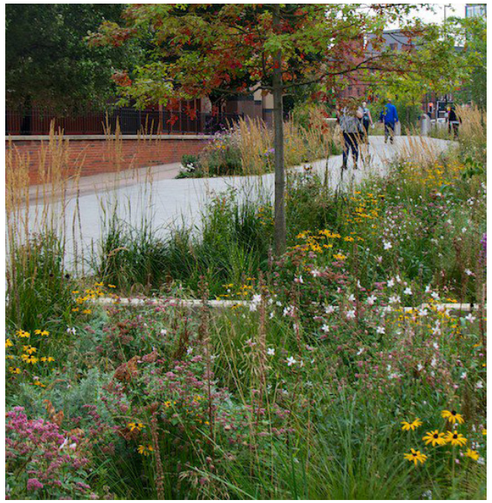
LEGEND

1. Main Entry
2. Townhouse Terraces
3. Feature Element
4. Lounge Chairs & Fire Pits
5. BBQ
6. Shrub & Perennial Plantings
7. Low Meadow Planting w/ Stepping Stones
8. Dog Relief Area
9. Mechanical Vent
10. Vehicular Approach
11. Perimeter Hedge
12. Boulevard Plantings
13. Gated Entry to Amenity Terraces
14. Seating along Planted Edges
15. Laneway Planting
16. Class A Loading Stall

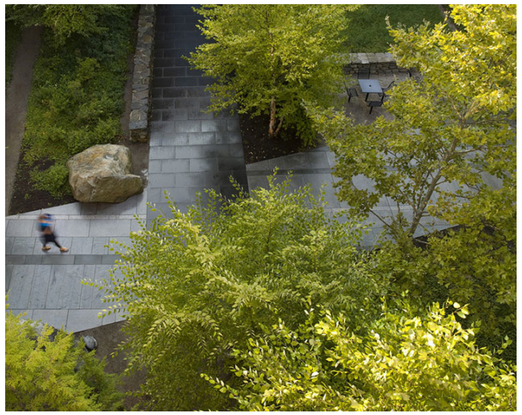
LANDSCAPE

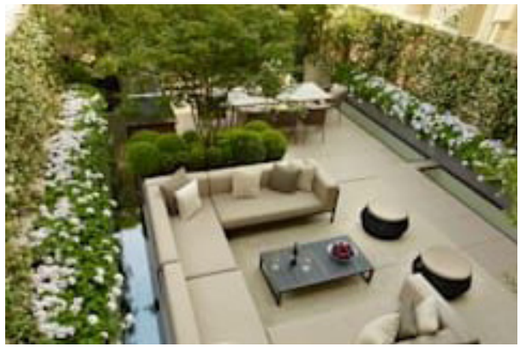
PRECEDENT IMAGES - TYPICAL LANDSCAPE TREATMENTS

Boulevard Interface

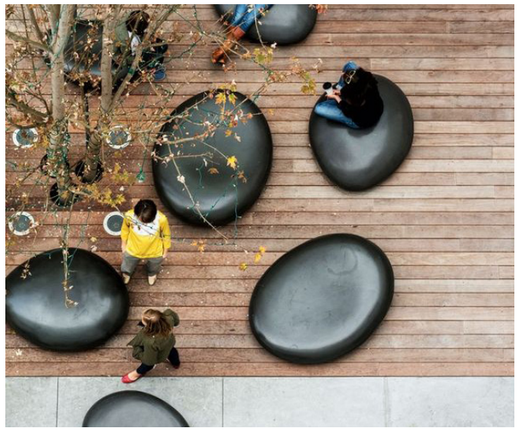


Laneway Planting





Outdoor 'Living Room' Terraces



Playable Seating

Garden Rooms with Seating