



WDLs Block 5 - Rekai Centre

Detailed Design

July 21st, 2021

Project Description

Rekai Centre

Proponent: Rekai Centres

Design Team: Montgomery Sisam Architects, PMA, Footprint, Blackwell

Review Stage: Detailed Design

Background

- **Rekai Centres** is a non-profit charitable corporation that owns and operates two long-term care homes in downtown Toronto.
- **Rekai** has been actively pursuing the site and working with the Province and Waterfront Toronto for the past ten years.
- The development was previously brought to DRP for Schematic Design in September 2020 and Issues Identification in November 2017.
- Rekai Centres closed on the land with Infrastructure Ontario in January 2020

Development Partnership

- **Options for Homes** is no longer involved in the project and the development will not contain a residential component.
- **Waterfront Toronto** and **Rekai Centers** signed a development agreement in December 2017.

Project Description

Scope Overview

- Long Term Care home with 348 beds (increased from 220-264 proposed in 2017).
- The current proposal has been endorsed by local resident associations.
- WT has always felt that this is an important use and exciting project for the WDL.

Timeline

- Rekai Centres has submitted a Preliminary Project Review to determine whether the project needs to go through a rezoning or site plan with minor variances.
- May 2021 – Site Plan Application submitted to the City
- Q2 2022 – Target Construction Start
 - Q2 2021 Enabling Works
 - Q3/4 2022 Below Grade Work
 - Q1 2023 Above Grade Superstructure
 - Q3 2025 Completion

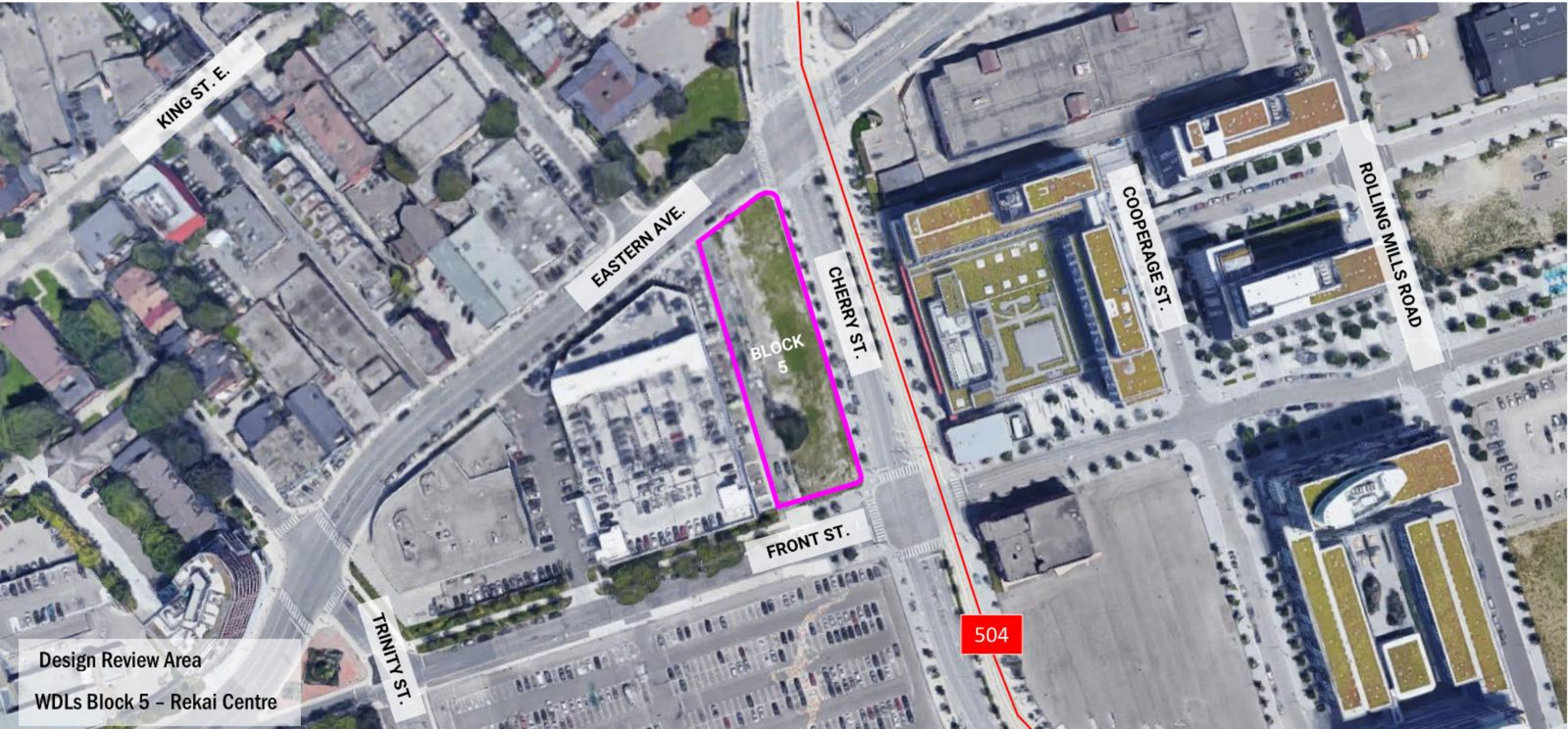
Existing Site Context

Rekai Centre

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Review Stage: Detailed Design



Design Review Area
WDLs Block 5 - Rekai Centre

504

Existing Site Context

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VOLVO
TORONTO

HONDA
DOWNTOWN

BLOCK 5

EASTERN AVE.

CHERRY ST.

COOPER
KOO FAMILY
YMCA

FRONT ST.

FUTURE
BLOCKS 3,4,7

FUTURE BLOCK
10

Existing Site Context

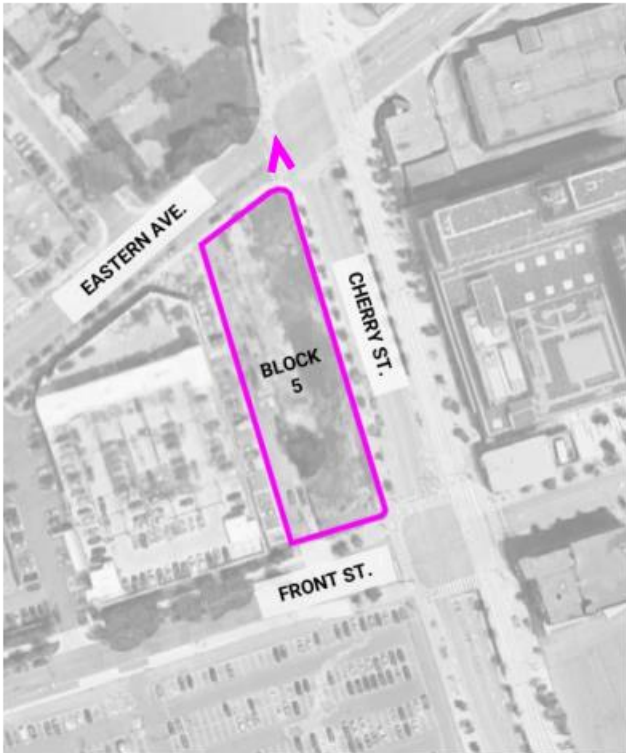
Rekai Centre

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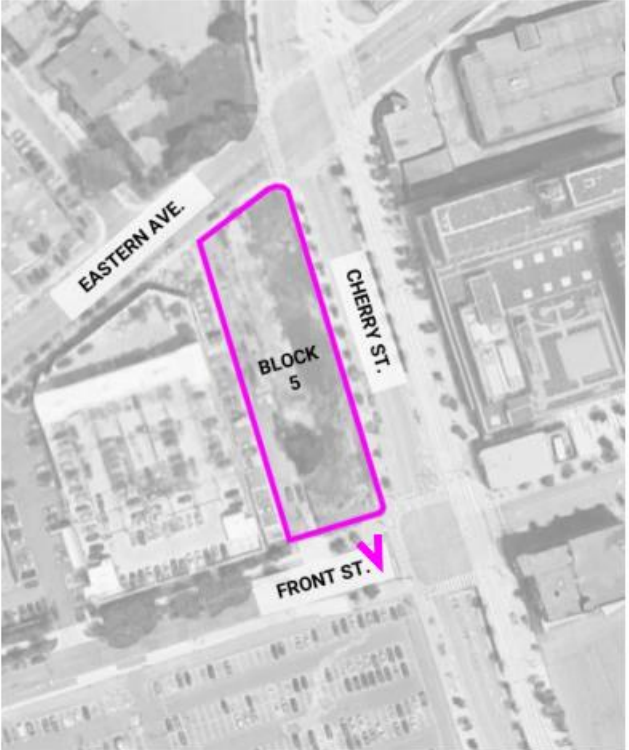
Review Stage: Detailed Design

South facing at Eastern Ave and Cherry Street



Existing Site Context

North facing at Front Street



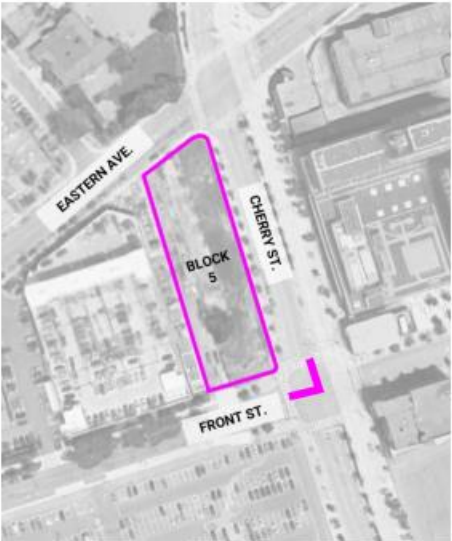
Existing Site Context

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Review Stage: Detailed Design



Looking northwest at the intersection of Front St. and Cherry St.

Zoning Context

Rekai Centre

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Review Stage: Detailed Design

Secondary Plan Areas: Central Waterfront & King-Parliament

King-Parliament Secondary Plan Update

Land Use: Mixed Use Areas

West Don Lands Policy Area (rezoned lands west of Cherry Street)

Zoning: CR (H) SS2 (x346) - Holding Zone

Maximum height: 32 metres

Setbacks and Stepbacks: 3 metre setback at-grade from the lot line adjacent to a street, and 16 metre streetwall height with 3 metre stepback above

Project Approval Stage

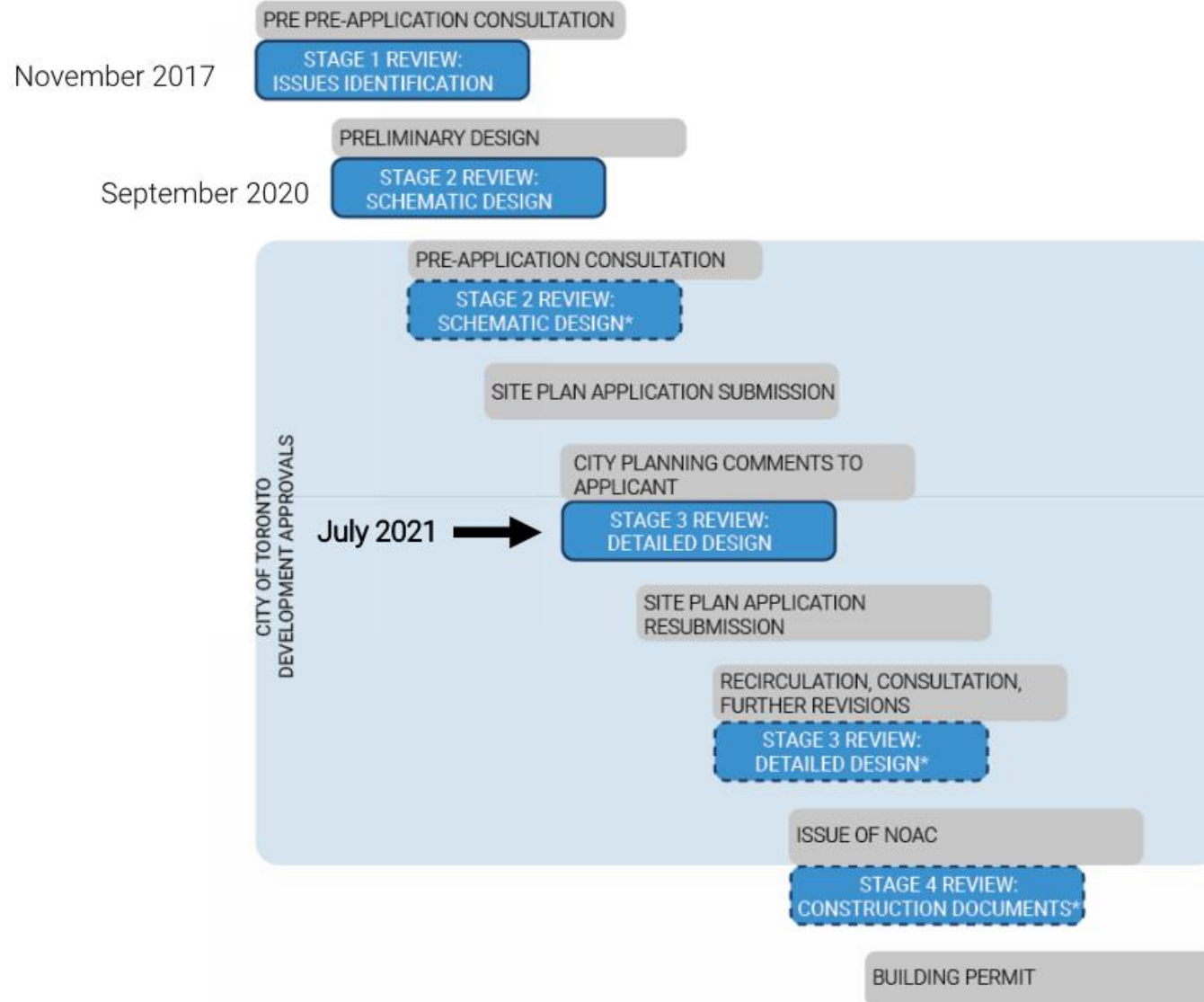
DRP Stream 2: Public land – Site Plan Approval

Rekai Centre

Proponent: Rekai Centres

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Review Stage: Detailed Design



Recap from September 2020

Schematic Design Consensus Comments

General

- Appreciated the design and presentation.
- Supportive of a state-of-the-art long-term care facility built in the city during the COVID crisis.
- Supportive of the project vision of creating not just an institution but a home for the residents.

Building

- Further develop the north and south facades, consider bringing them closer to the quality of the east and west elevations.
- The west elevation has a different facing condition from the east, consider finetuning the west façade treatment to the context.
- Further maximize the Cherry Street façade for opportunities of animation and interaction with the street, including:
 - Improving the front door entrance design and visibility from street.
 - Consider operable openings to allow program spill out onto Cherry Street.
 - Further exploring the range of programs and uses contemplated for the ground floor common space.
- Consider the benefits and importance of natural light and sun exposure, especially during the winter, on the interior design and layout of the common spaces.
- Consider further improving the amenities for the rooms, i.e. opportunity for plantings on the balcony.

Recap from September 2020

Schematic Design Consensus Comments

Landscape

- Ensure the streetscape design along Cherry Street maximizes opportunities for sitting and watching city life for the residents.
- Ensure outdoor terraces are comfortable for residents and protected from heavy winds.

Sustainability

- Explore solar wall as a strategy.
- Recommended a wind study for the building.
- To ensure best practice for air quality design, an air flow connectivity analysis is recommended.
- Explore prefab construction to reduce cost, construction waste, and the potential of expediting the construction process.

Areas for Panel Consideration

Waterfront Toronto and City of Toronto

Rekai Centre

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Review Stage: Detailed Design

Building

- Does the Panel support the revised façade designs and cladding material on the north and south elevations?
- Do the wall section and envelope details reinforce the vision and experience of the building?

Public Realm and Landscape

- Does the revised ground floor support active uses and encourage animation along the Cherry street frontage?
- Are there opportunities for additional planting and/or animation along Front Street and Eastern Avenue?
- Do the roof terrace designs and landscape details support the vision of outdoor microclimates for residents?
i.e. plant species and outdoor comfort.

Sustainability

- Has the design team adequately implemented the key strategies in meeting the targets?

WATERFRONT TORONTO DESIGN REVIEW PANEL
STAGE 3 // DETAILED DESIGN // JULY 21, 2021



THE REKAI CENTRE

AT CHERRY PLACE

MontgomerySisam



1

**WATERFRONT
TORONTO
DESIGN REVIEW
PANEL MATERIAL**

1 // WATERFRONT DESIGN REVIEW PANEL MATERIAL

1.3 Summary of Changes

- The design team have studied the north and south facades and have refined the proportions of the reveals in these walls as well as the introduction of wider and deeper vertical fins in the glazed portions of these elevations. These walls are the anchoring elements of the building in that they are conceived of as the side gables of the 'book shelves' and are required to be solid in order to allow bedrooms to be located on these corner conditions. As such, the team feels that the improvements in the proportions of the wall and it's treatment are an improvement over the previous scheme. The glazed portions of these elevations relate to the end of the two corridors on the resident floors and we have introduced more substantial vertical fins on these faces as well as horizontal metal grate elements to assist with sun shading. The niches created by these vertical fins introduce seating areas for residents that become lounge areas for both residents and staff.
- Although the west elevation has a different treatment than the east the program (ie. resident bedrooms, amenity spaces) remain the same. As such we have taken efforts to ensure that the articulation of both elevations is similar to ensure as democratic a building as possible.
- We have relocated the front door so that it faces directly to Cherry Street and we have increased the size of the lounge area that is adjacent to this space to try to encourage interaction with the street.
- We have introduced niches in the thickened wall that divides the main arcade space from the tenant spaces (Dialysis Clinic, Seniors Assessment Centre) and the necessary back of house spaces (loading, garbage room, etc.) These niches will have seating for residents and visitors to enjoy and interact with the street life along Cherry Street.
- Although the proposal of introducing plantings at each resident window is an idea that we support, the maintenance cost and restrictions on window opening dimensions have discouraged us from pursuing this further.

DRAFT

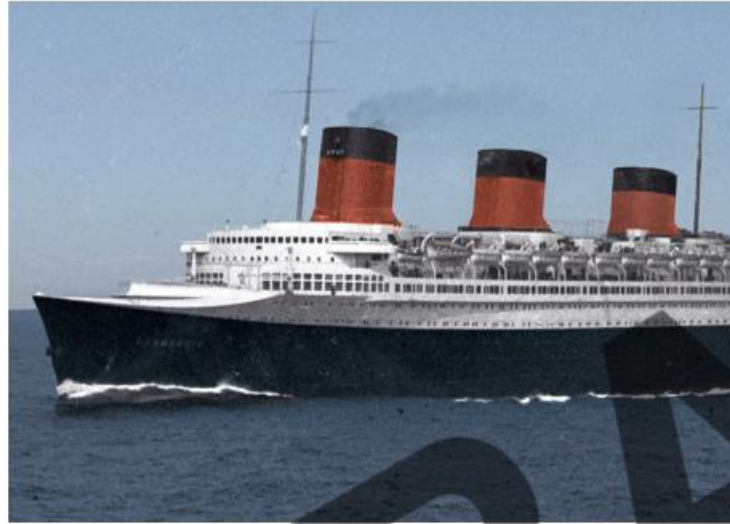
CONTEXT **2**

THE REKAI CENTRE AT CHERRY PLACE

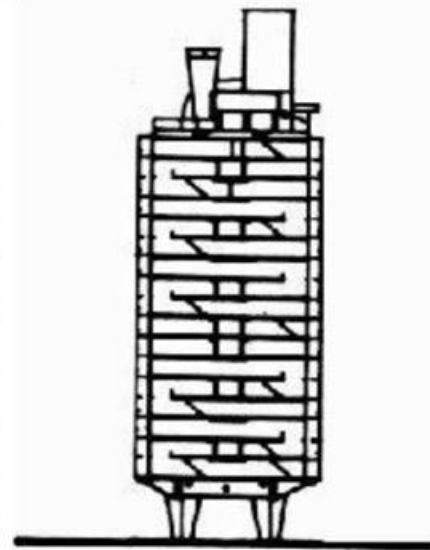
ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

BUILDING AS AN OCEAN LINER



BUILDING AS A LIBRARY OF RESIDENTS



2 // CONTEXT
2.3 Site Context

THE REKAI CENTRE AT CHERRY PLACE
ARCHITECT / DESIGNER: MONTGOMERY SISAM
REVIEW STAGE: STAGE 3: DETAILED DESIGN



2 // CONTEXT

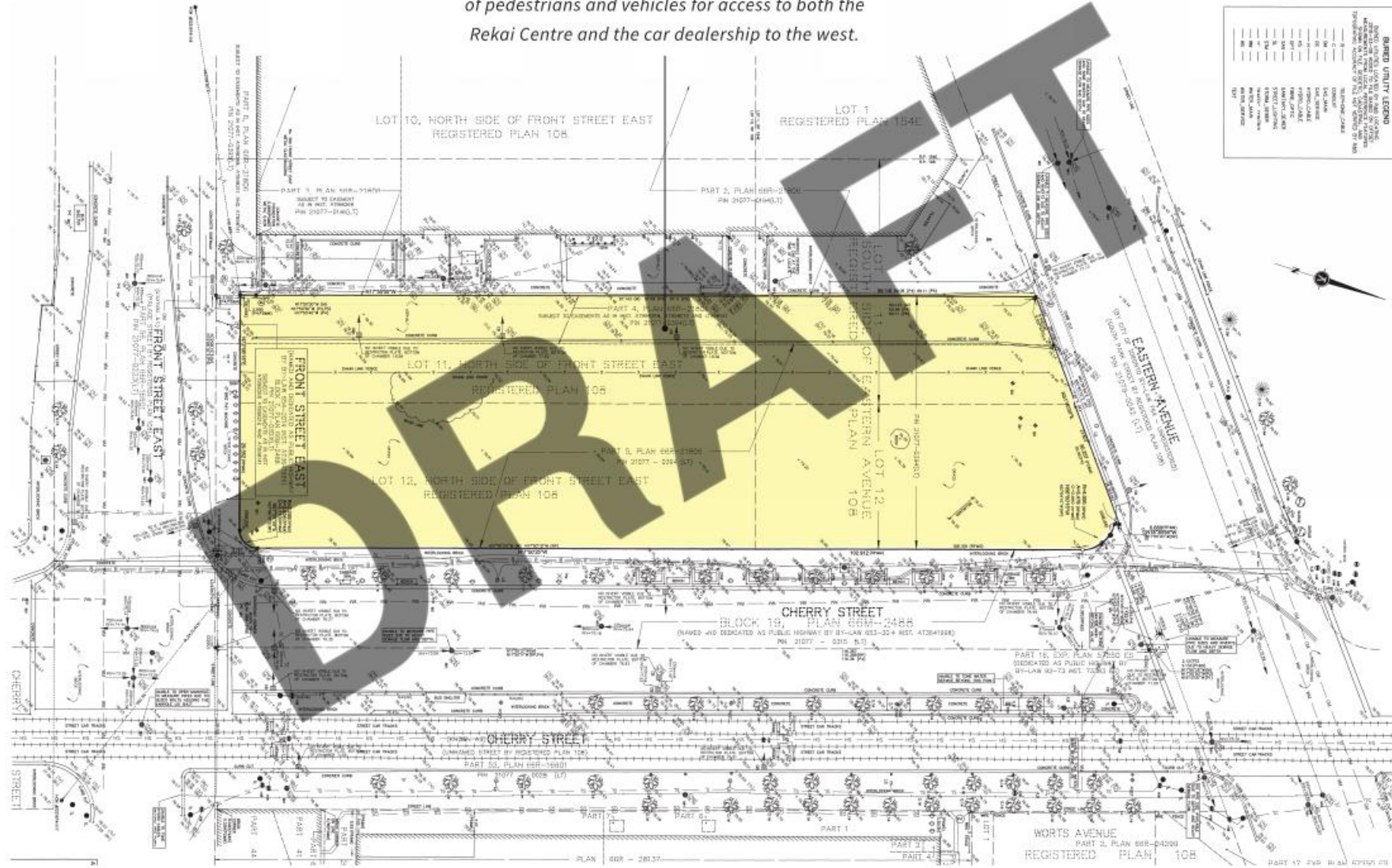
2.4 Ownership Map

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

Easement is owned by Reikai and will allow movement of pedestrians and vehicles for access to both the Reikai Centre and the car dealership to the west.



DRAFT

3

**DESIGN
STRATEGY**

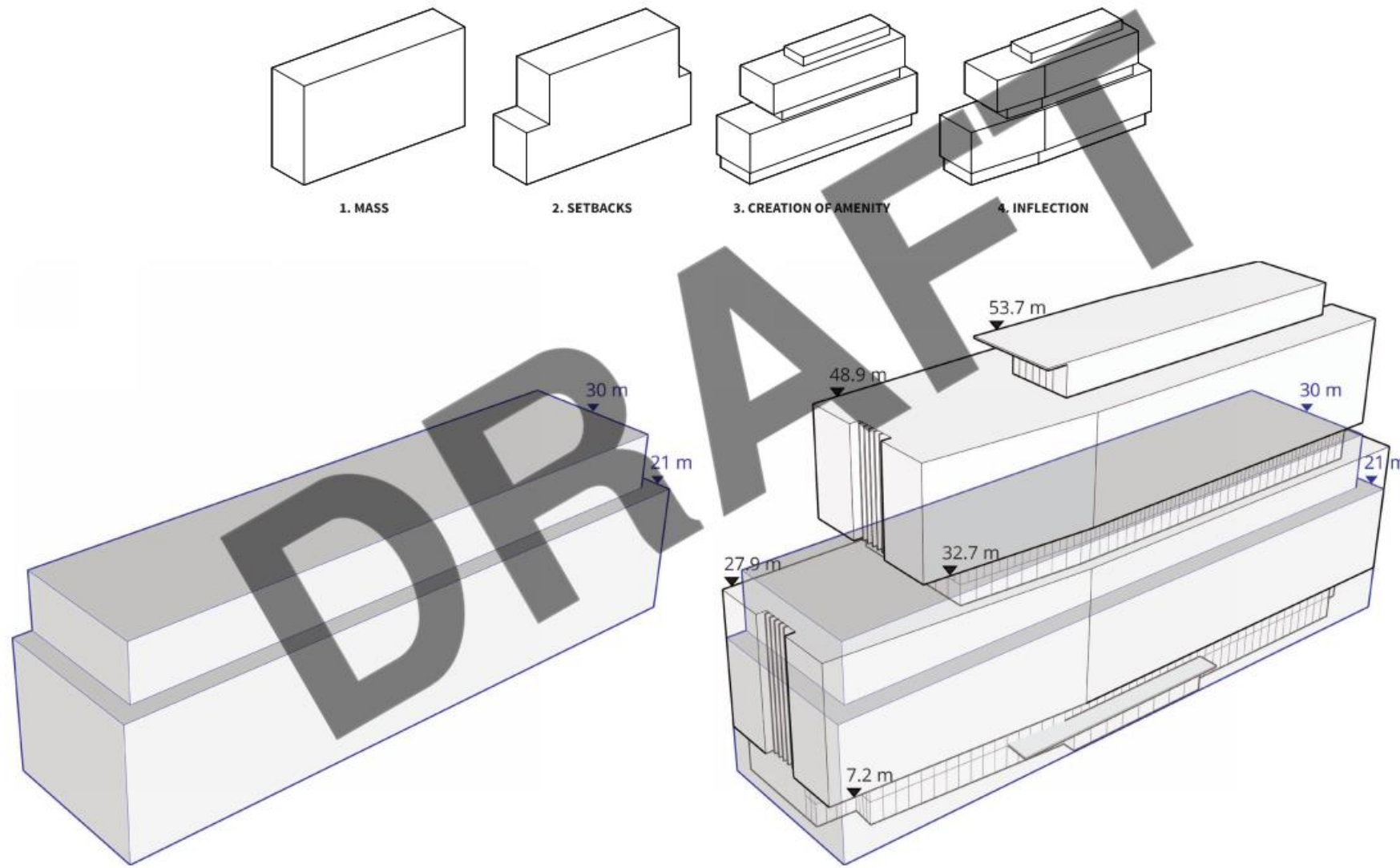
3 // DESIGN STRATEGY

3.5 Site Strategy

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

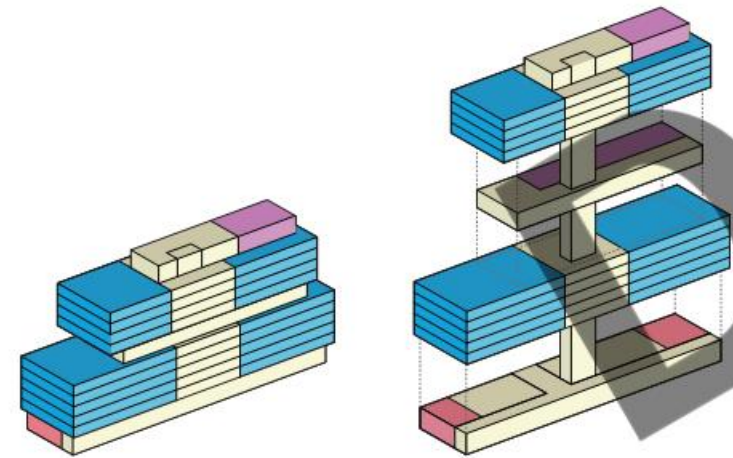


3 // DESIGN STRATEGY

3.6 Program Diagram

THE REKAI CENTRE AT CHERRY PLACE
ARCHITECT / DESIGNER: MONTGOMERY SISAM
REVIEW STAGE: STAGE 3: DETAILED DESIGN

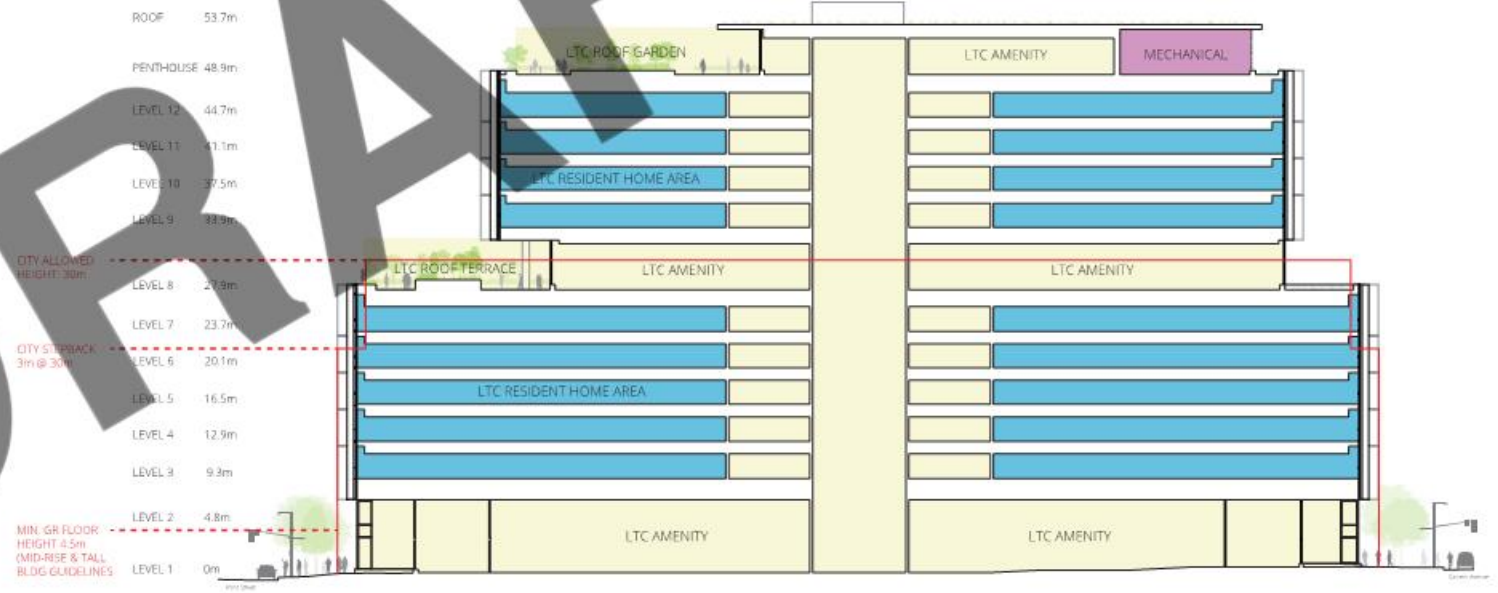
- LTC COMMON AMENITY AREAS
- DIALYSIS CLINIC / TENANT AREAS
- RESIDENT HOME AREAS
- BUILDING SYSTEMS



PROGRAMME - EXPLODED AXONOMETRIC

GFA 23,773 SQM
STATISTICS 348 BED LTC
DENSITY 57.3% BUILDING FOOTPRINT / LOT AREA X 100 (%)

HEIGHTS 13 STOREYS
AREAS 22,643 SQM LONG-TERM CARE FACILITY; 631 SQM TENANTS; 499 SQM PSW TRAINING COLLEGE.



PROGRAMME - BUILDING SECTION

3 // DESIGN STRATEGY

3.9 Typical Issues Summary /

3.12 Innovation Strategy

Key Design Challenges:

- With limited below grade space and no vehicular access to the lower level it has been challenging to ensure that there is sufficient space on the ground floor for the tenant spaces, and all of the support spaces that are required for a building of this size (Type G Loading Space, Garbage / Recycling Rooms, Bike Storage Room, etc.) and with the volume of deliveries that are expected each day.
- Ensuring that there is parking for essential staff as well as lay-by space for visitors etc.
- Working with the neighbouring property to ensure the use of the easement is satisfactory.
- Costs associated with items such as heightened glass guardrails on the terrace levels to ensure noise and wind are mitigated as well as addressing safety concerns with very tall glass that exceeds MLTC requirements.
- One of the first high-rise Long Term Care buildings means that there are new operational challenges with the movement of food and supplies specifically at peak meal times.
- Ensuring that we have sufficient green – roof area as well as dealing with water retention have been difficult given the building's need for terrace space and intensive mechanical systems.

Innovation Strategies:

- Introducing both amenity and mechanical / electrical spaces on level 8 in the middle of the building allows for reduced size of duct shaft sizes and avoids large air handling units being placed on the uppermost roof. This also provides residents with wonderful views towards the lake, downtown and the surround neighbourhood.
- Creating an arcade along Cherry Street with niches for residents and visitors to spend time and engage with street life.
- Creating negative pressure isolation rooms in the building to deal with future outbreaks and contagious diseases amongst a frail population.
- Introduction of a Personal Support Worker (PSW) educational program that is housed directly within the building helps to ensure that staff are receiving hands-on, real-life experience and grows the profession.
- Introduction of support spaces within the building (Dialysis Clinic and Seniors Assessment Centre) allow resident's access to critical services and alleviate strain on the hospital system.

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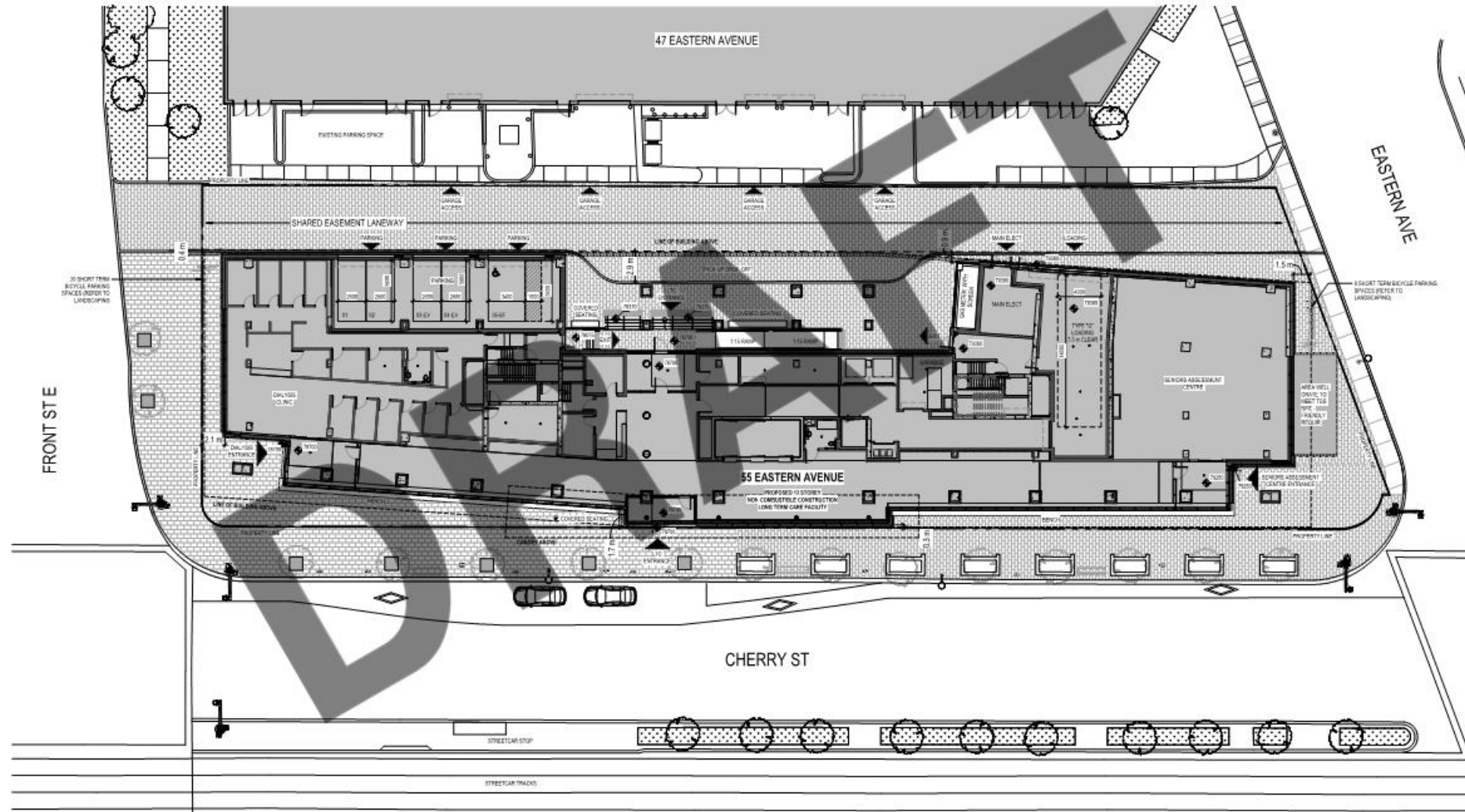
4

**DESIGN
DOCUMENTATION**

4 // DESIGN DOCUMENTATION

4.1 Site Plans

THE REKAI CENTRE AT CHERRY PLACE
ARCHITECT / DESIGNER: MONTGOMERY SISAM
REVIEW STAGE: STAGE 3: DETAILED DESIGN

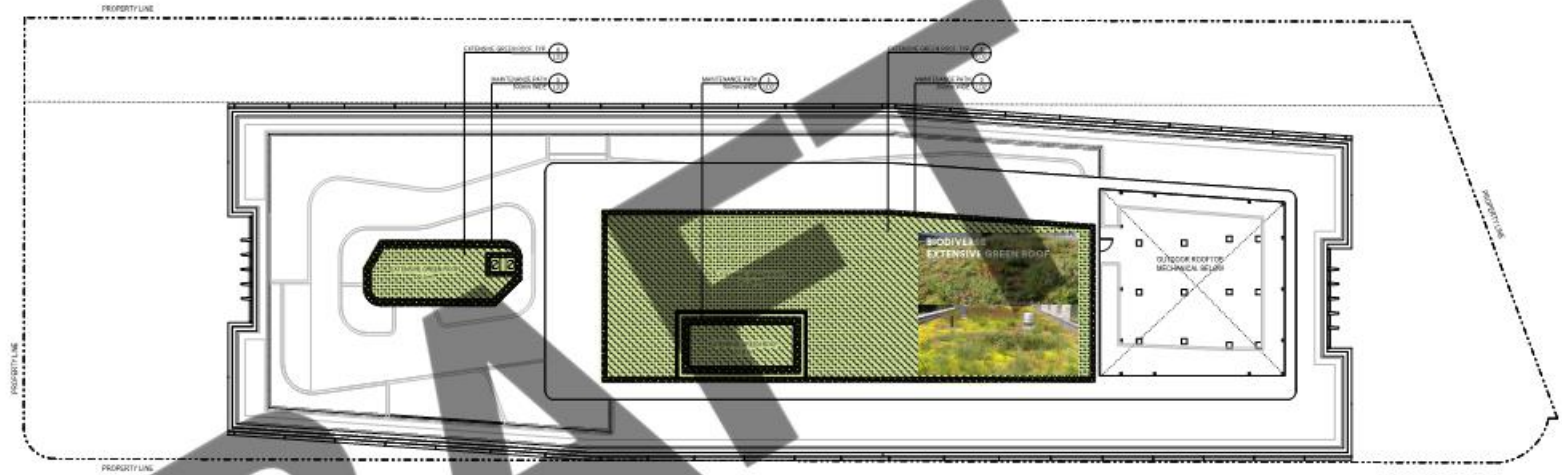


SITE GROUND PLAN - (NOT TO SCALE)

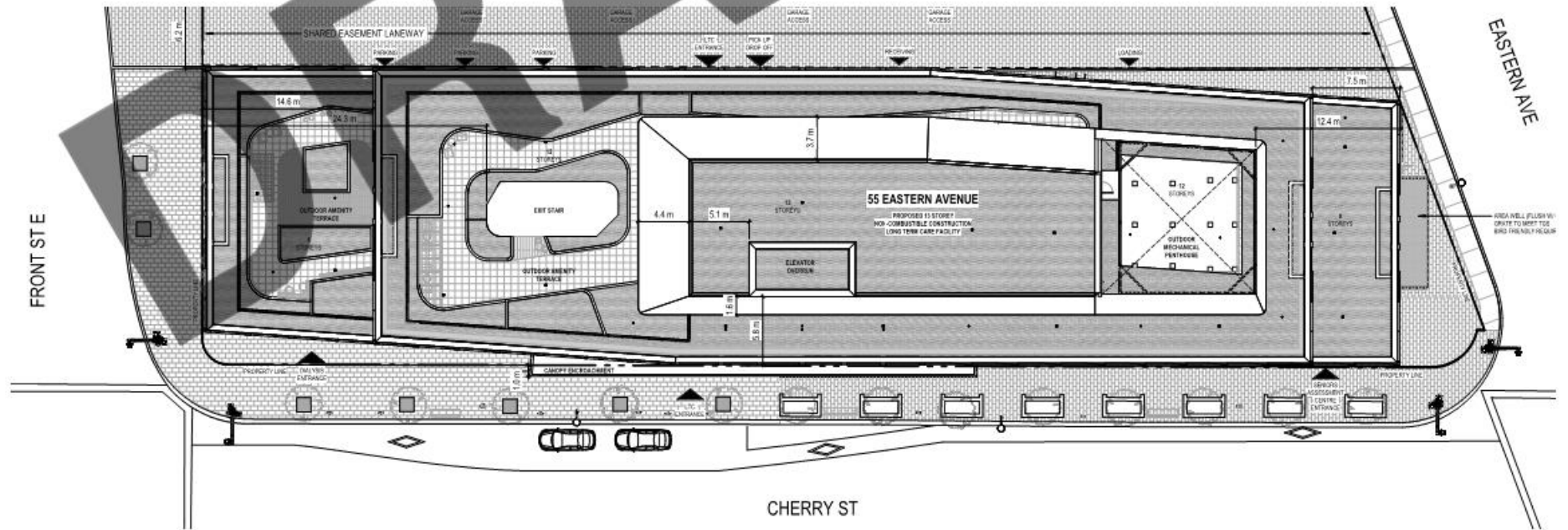
4 // DESIGN DOCUMENTATION

4.2 Roof Plans

GREEN ROOF PLAN - (NOT TO SCALE)



SITE ROOF PLAN - (NOT TO SCALE)

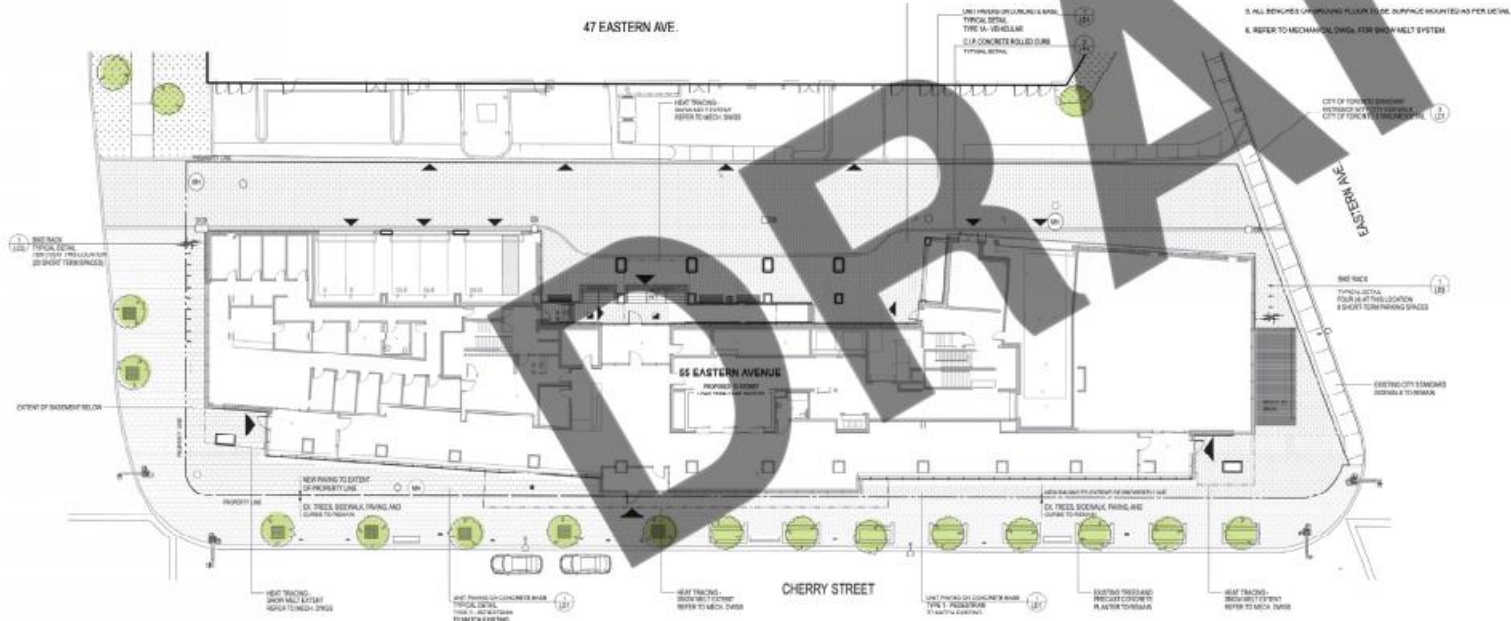


4 // DESIGN DOCUMENTATION

4.5 Landscape Plans

THE REKAI CENTRE AT CHERRY PLACE
 ARCHITECT / DESIGNER: MONTGOMERY SISAM
 REVIEW STAGE: STAGE 3: DETAILED DESIGN

GROUND PALETTE

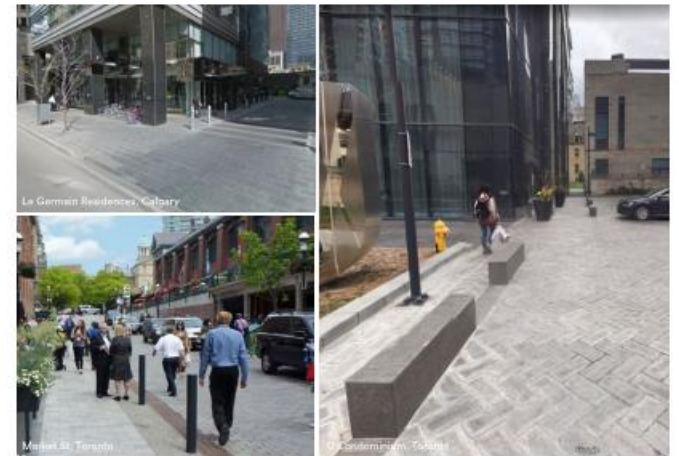


LANDSCAPE PLAN GROUND LEVEL - (NOT TO SCALE)



SPATIAL CHARACTERISTICS

- Curbless roadway with continuous paving allows seamless movement between walkway and roadway zones
- Pedestrian zone distinguished by bollards, flush curbs, and tactile plates
- Paved surface visually reinforces sense of place

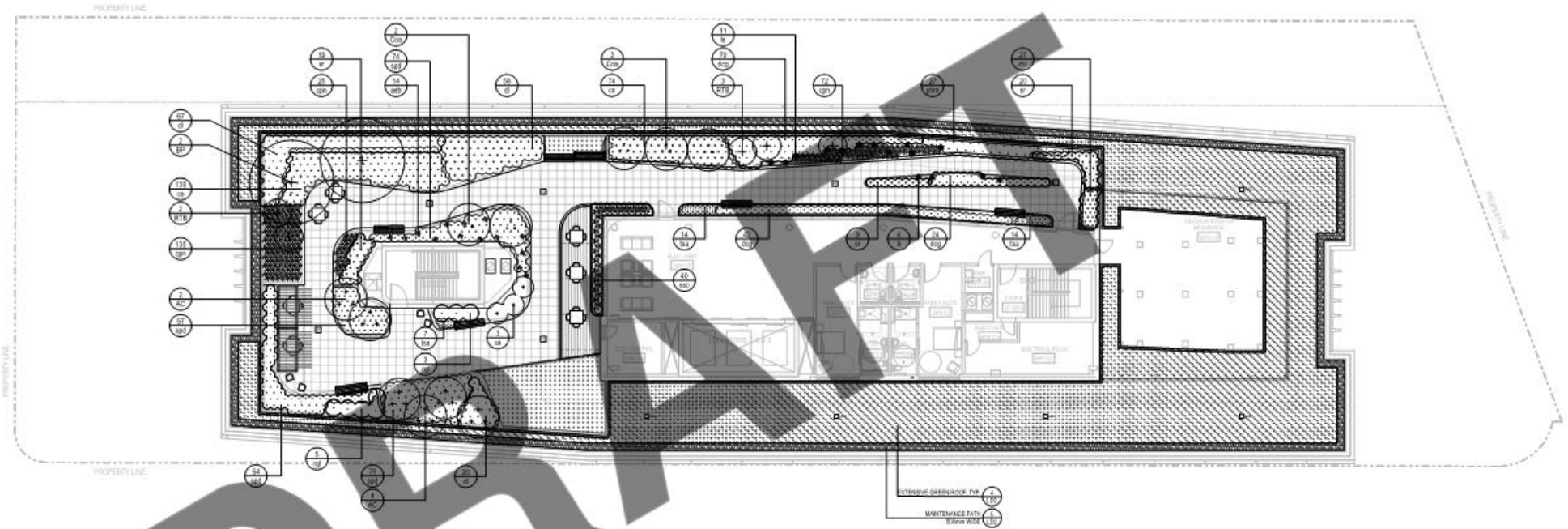


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4.5 Landscape Plans (continued)

THE REKAI CENTRE AT CHERRY PLACE
ARCHITECT / DESIGNER: MONTGOMERY SISAM
REVIEW STAGE: STAGE 3: DETAILED DESIGN

**ROOF TOP TERRACE
PLANTING PLAN -
(NOT TO SCALE)**



PHYSICAL MODEL



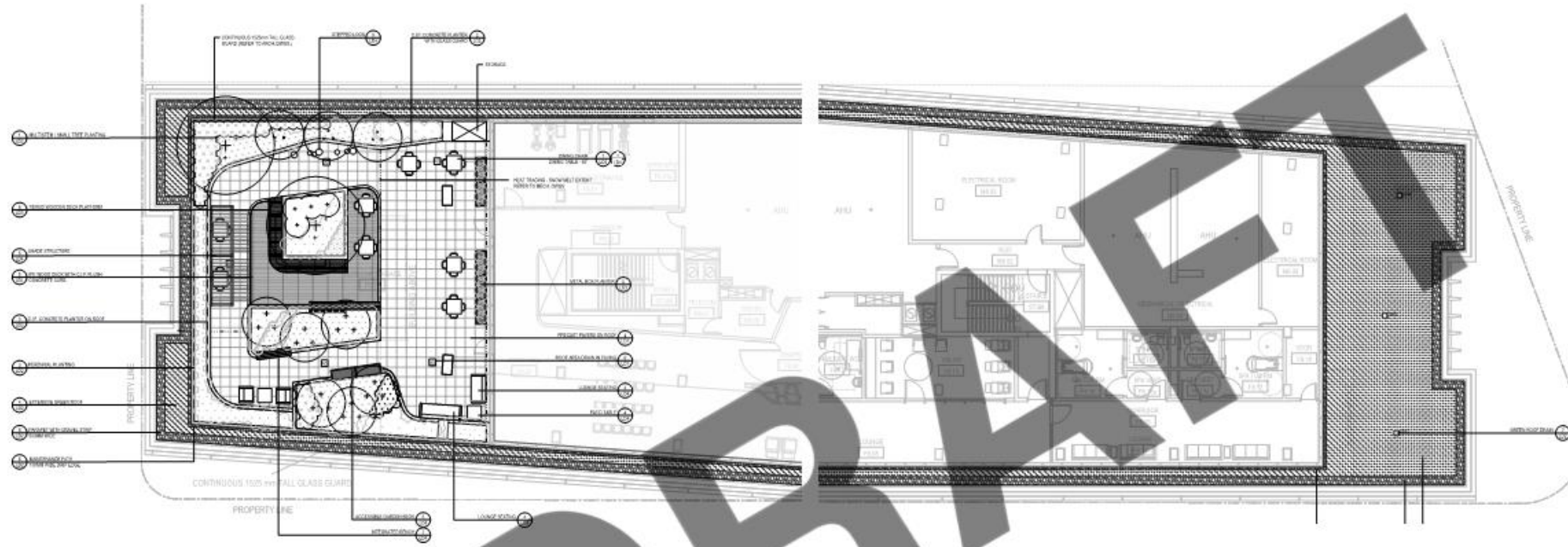
LEVEL 8 TERRACE VIEW



ROOF TOP TERRACE VIEW

4 // DESIGN DOCUMENTATION

4.6 Materials Plans



TERRACE PALETTE



TERRACE FURNISHINGS



LEVEL 8 – TERRACE MATERIAL AND LAYOUT PLAN (SOUTH SIDE)

LEVEL 8 – TERRACE MATERIAL AND LAYOUT PLAN (NORTH SIDE)

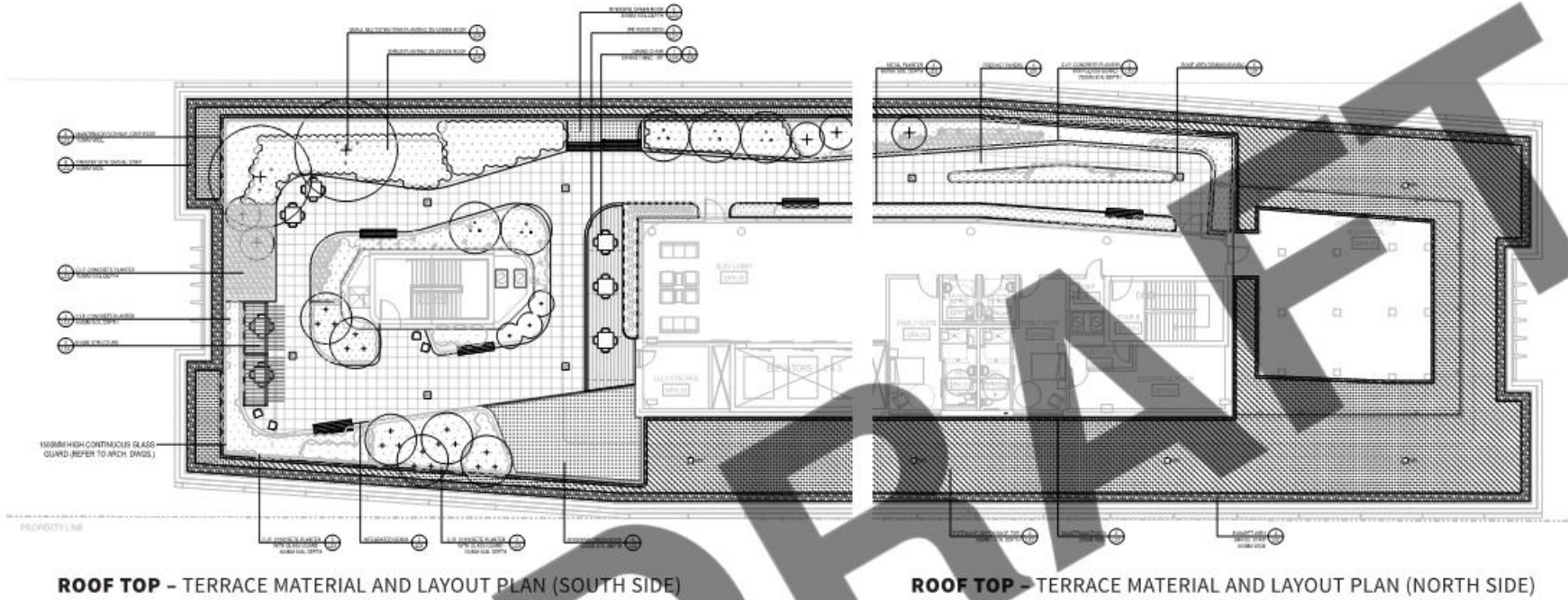
LEVEL 8 TERRACE PLANT LIST

Material	Qty	Botanical Name	Common Name	Size	Native	Drought Tolerant
TREES:						
BP	2	Betula Papyrifera multistem	Paper Birch	3x70mm	Yes	Yes
SMALL TREES / LARGE SHRUBS						
AC	3	Amelanchier canadensis	Serviceberry	70mm	Yes	Yes
Coa	3	Cornus alternifolia	Pagoda Dogwood	70mm	Yes	Yes
SHRUBS / GRASSES / PERENNIALS:						
dl	32	Diervilla lonicera	Bush Honeysuckle	50cm	Yes	Yes
tsc	17	Thymus serpyllum 'Alba'	Creeping Thyme	9 cm	Yes	Yes
dca	58	Deschampsia caespitosa 'Goldtau'	Tufted Hair Grass	2 gal	Yes	Yes
phm	8	Panicum virgatum 'Heavy Metal'	Heavy Metal Switch Grass	2 gal	Yes	Yes
rgl	10	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	60cm	Yes	Yes
spd	222	Sporobolus heterolepis	Prarie Dropseed	2 gal	Yes	Yes
rhi	23	Rudbeckia hirta	Black-eyed Susan	2 gal	Yes	Yes
ssc	20	Schisachyrium scoparium	Little Bluestem	2 gal	Yes	Yes



4 // DESIGN DOCUMENTATION

4.6 Materials Plans (continued)



ROOF TOP – TERRACE MATERIAL AND LAYOUT PLAN (SOUTH SIDE)

ROOF TOP – TERRACE MATERIAL AND LAYOUT PLAN (NORTH SIDE)

ROOF TOP TERRACE PLANT LIST

Material	Qty	Botanical Name	Common Name	Size	Native	Drought Tolerant
TREES:						
BP	2	Betula Papyrifera multistem	Paper Birch	3x/10mm	Yes	Yes
SMALL TREES / LARGE SHRUBS						
Coa	5	Cornus alternifolia	Pagoda Dogwood	70mm	Yes	Yes
ATC	6	Amelanchier canadensis	Servestberry	70mm	Yes	Yes
RTB	5	Rhus typhina 'Ballguy'	Tigers Eyes Outleaf Sumac	125cm	Yes	Yes
SHRUBS / GRASSES / PERENNIALS:						
lea	35	Thymus serpyllum 'Alba'	Creeeping Thyme	9 cm	Yes	Yes
dl	87	Diervilla lonicera	Bush Honeysuckle	50cm	Yes	Yes
agd	274	Sparganium heterophyllum	Prairie Dropseed	2 gal	Yes	Yes
phm	27	Panicum virgatum 'Heavy Metal'	Heavy Metal Switch Grass	2 gal	Yes	Yes
sr	46	Solidago rigida	Stiff Goldenrod	1 1/2 gal	Yes	Yes
ssc	40	Schisachyllum scoparium	Little Bluestem	2 gal	Yes	Yes
dcg	136	Deschampsia caespitosa 'Goldtau'	Tufted Hair Grass	2 gal	Yes	Yes
cpn	232	Carex pennsylvanica	Pennsylvanian Sedge	1 lb	Yes	Yes
rhi	27	Rudbeckia hirta	Black-eyed Susan	2 gal	Yes	Yes
le	15	Liatris spicata	Dense blazing Star	1 lb	Yes	Yes
rgl	8	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	60cm	Yes	Yes
esb	14	Allium 'Summer Beauty'	Summer Beauty Allium	1 gal	Yes	Yes



GREEN ROOF PLANT LIST

ID	Qty	Botanical Name	Common Name	Size
PERENNIALS:				
al		Aster laevis	Smooth aster	plug
at		Asclepias tuberosa	Butterfly Milkweed	plug
bg		Bouteloua gracilis	Blue grama grass	plug
cp		Carex pennsylvanica	Forest sedge	plug
cr		Campanula rotundifolia	Harebell	plug
cv		Coreopsis verticillata 'Moonbeam'	Moonbeam Tickseed	plug
dcg		Deschampsia caespitosa 'Goldtau'	Gold Dew Tufted Hair Grass	plug
ea		Eriophorum angustifolium	Fireweed	plug
fv		Fragaria virginiana	Wild Strawberry	plug
lc		Liatris cylindracea	Cylindrical blazing aster	plug
lp		Lupinus perennis	Wild Lupine	plug
lep		Liatris spicata	Dense blazing star	plug
pvh		Panicum Virgatum 'Heavy Metal'	Heavy Metal Switch Grass	1 gal.

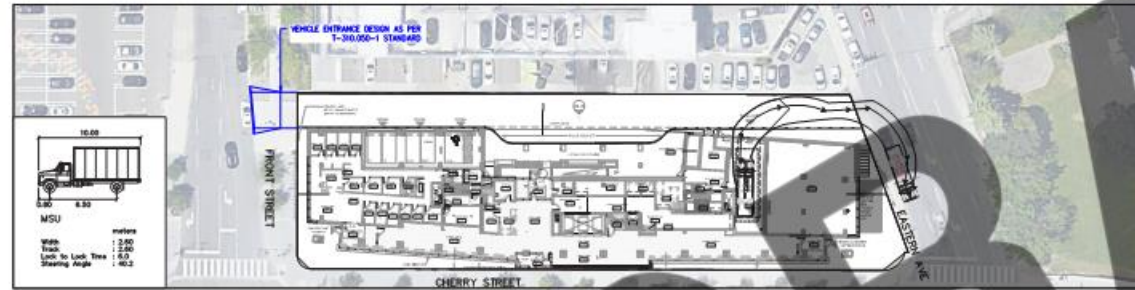
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4.7 Parking Plans

PRIVATE GARBAGE TRUCK – ENTRY / EXIT PATH



LAYBY – ENTRY / EXIT PATH



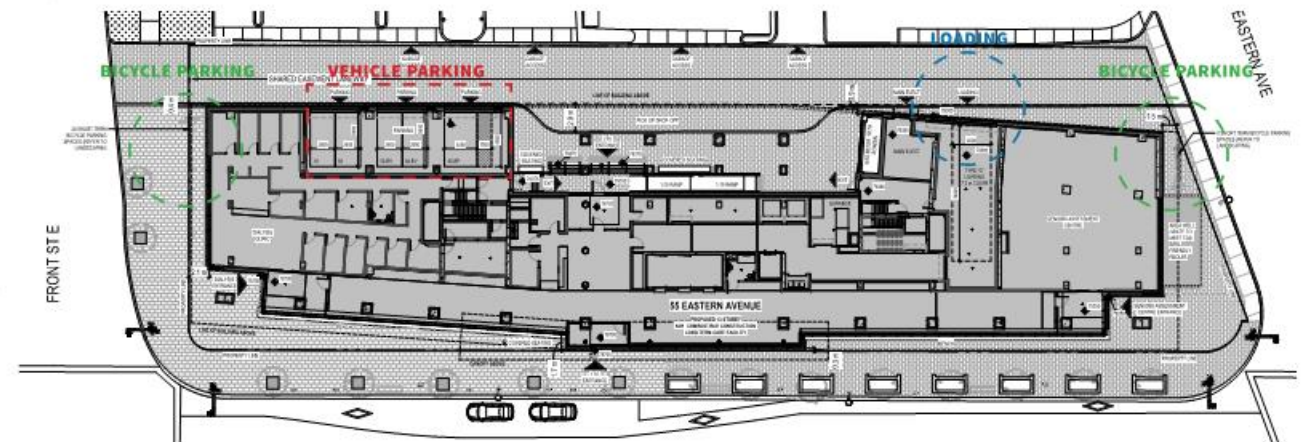
MOVING / DELIVERY TRUCK – ENTRY / EXIT PATH

LAYBY – ENTRY / EXIT PATH



PUBLIC PARKING SUPPLY NEARBY SUBJECT SITE (400M)

In total, an estimate of 987 public parking spaces are available in the nearby area. Of the total, 869 spaces are provided by Green P parking (on-street parking, as well as parking lots and garages), whereas the 118 on-street parking spaces with differing limits will permit short visits. Therefore, the proposed development's visitor parking shortfall of 111 spaces will be accommodated by the many public parking facilities nearby if they choose to drive to the subject site.



4 // DESIGN DOCUMENTATION

4.10 Site Sections

THE REKAI CENTRE AT CHERRY PLACE
ARCHITECT / DESIGNER: MONTGOMERY SISAM
REVIEW STAGE: STAGE 3: DETAILED DESIGN



LONGITUDINAL SECTION - (NOT TO SCALE)

TRANSVERSE SECTION - TERRACE GARDENS

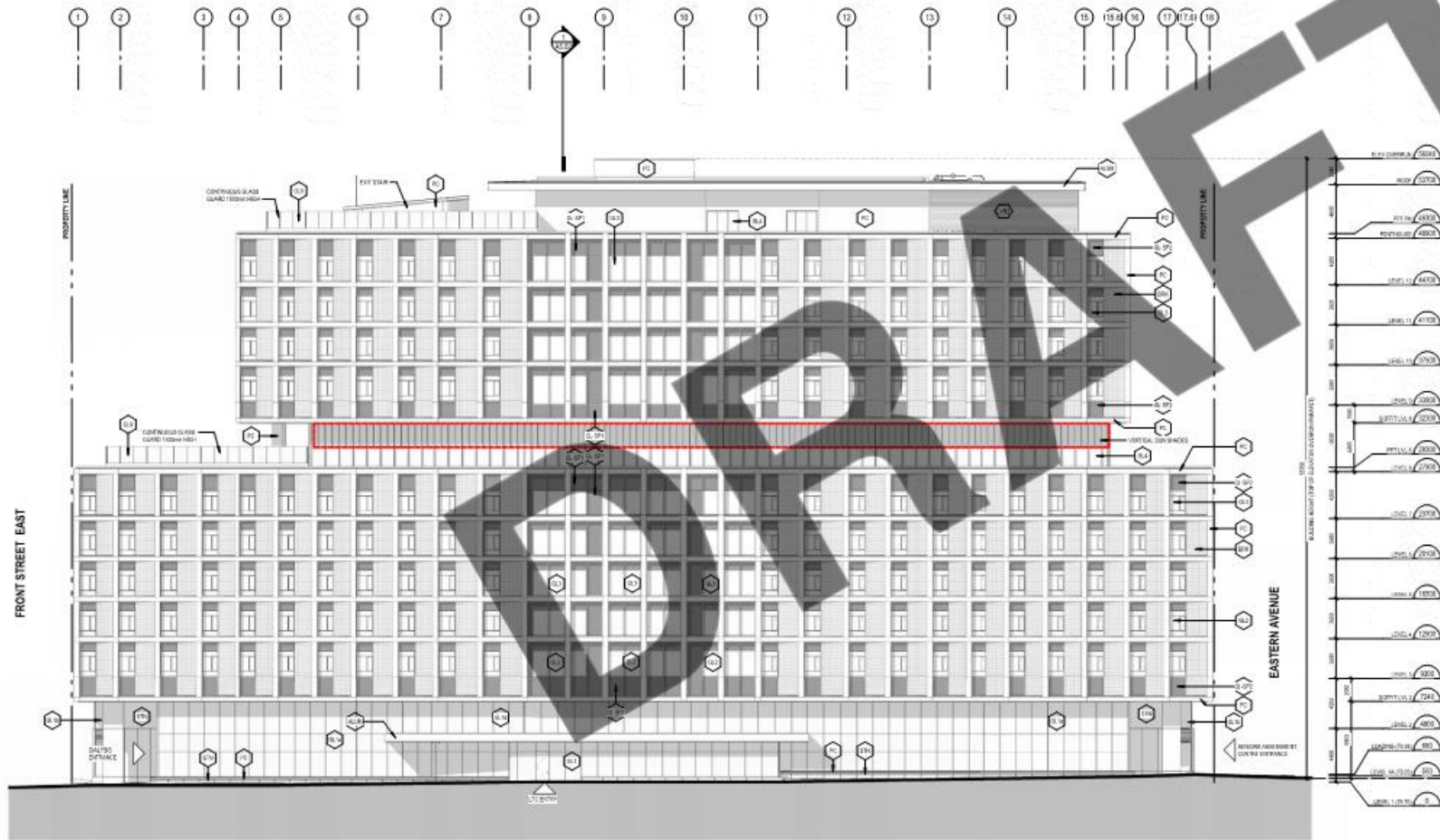


TRANSVERSE SECTION - AMENITY SPACE

4 // DESIGN DOCUMENTATION

4.11 Building Elevations

THE REKAI CENTRE AT CHERRY PLACE
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 REVIEW STAGE: STAGE 3: DETAILED DESIGN



EAST ELEVATION - (NOT TO SCALE)



PERSPECTIVE EAST ELEVATION



PHYSICAL MODEL

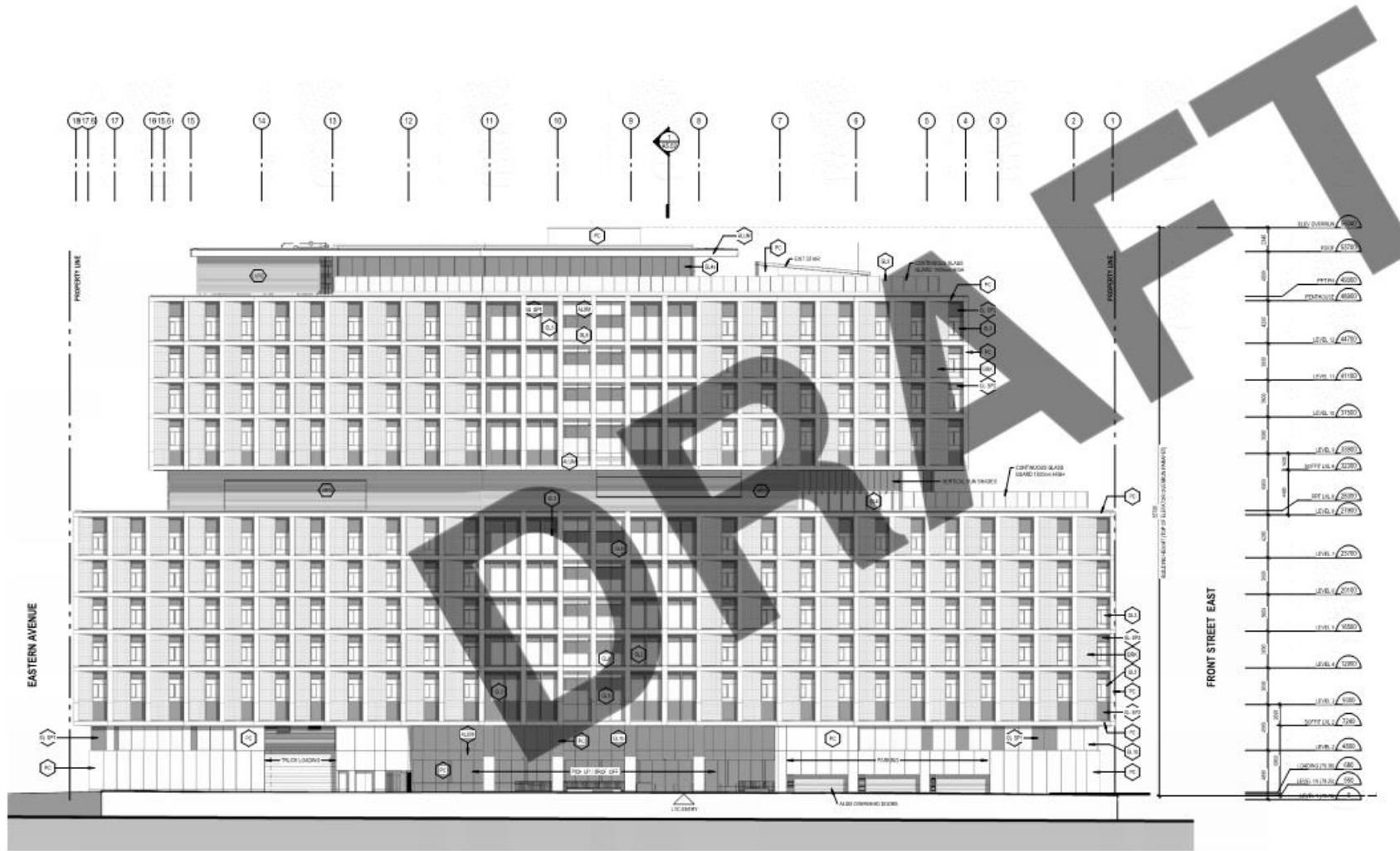
4 // DESIGN DOCUMENTATION

4.11 Building Elevations (continued)

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN



WEST ELEVATION - (NOT TO SCALE)



PERSPECTIVE WEST ELEVATION



PHYSICAL MODEL

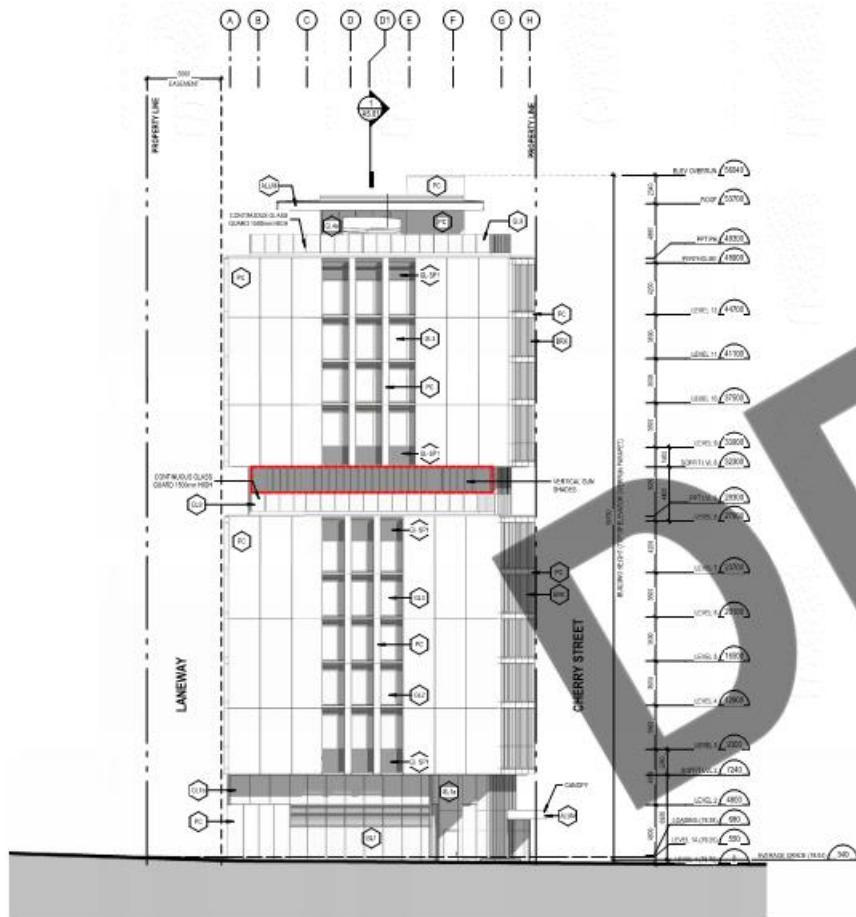
4 // DESIGN DOCUMENTATION

4.11 Building Elevations (continued)

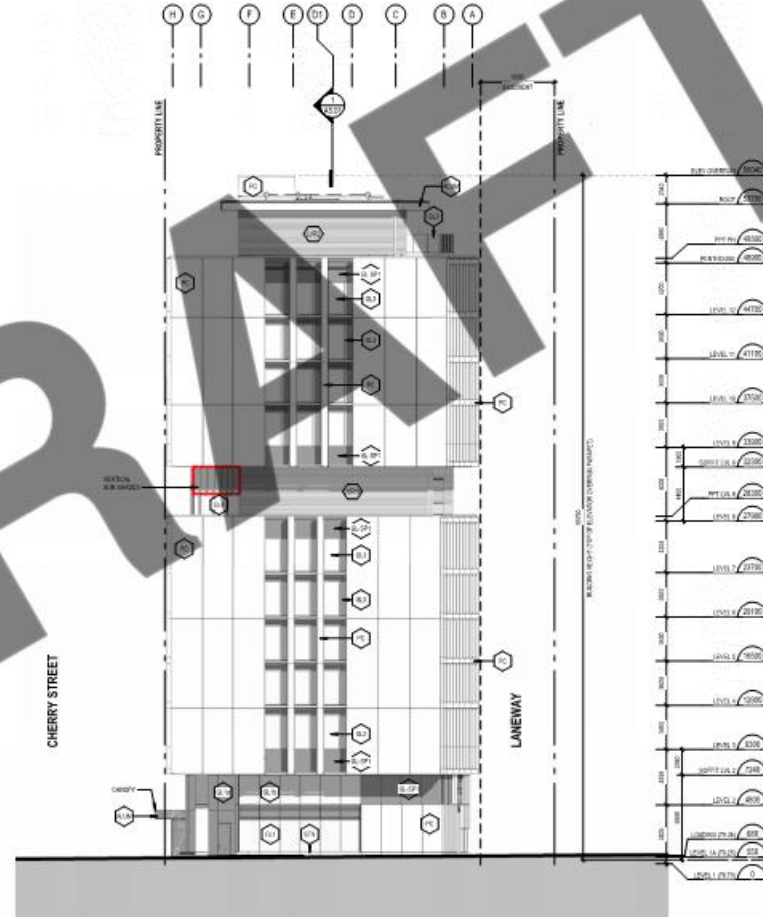
THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN



SOUTH ELEVATION - (NOT TO SCALE)



NORTH ELEVATION - (NOT TO SCALE)



PERSPECTIVE SOUTH ELEVATION

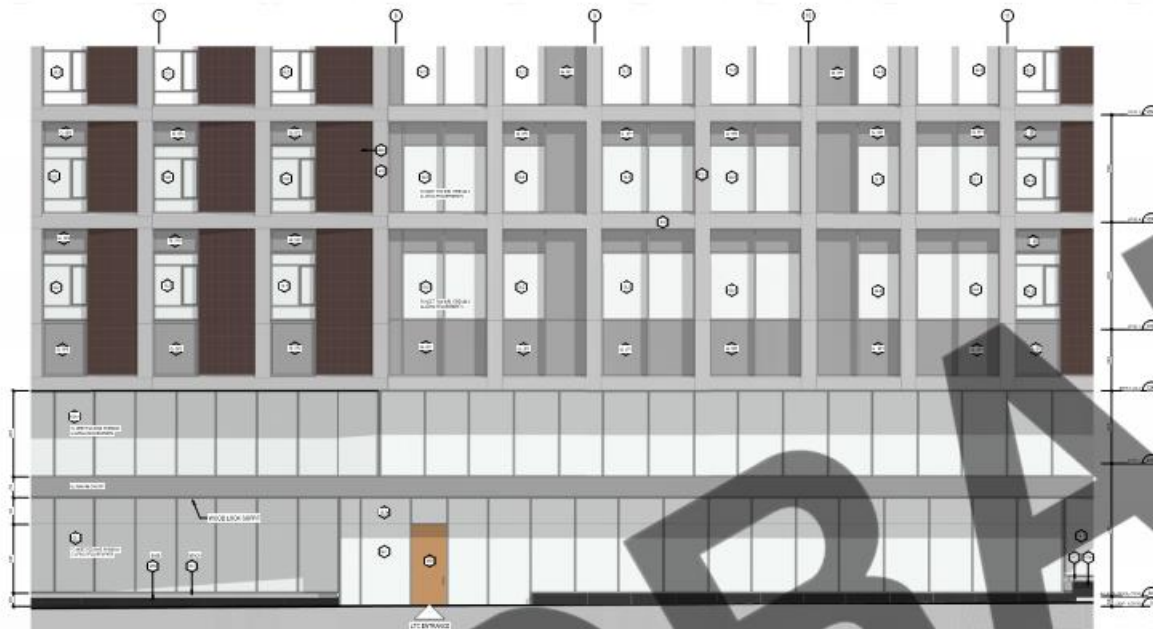


PERSPECTIVE NORTH ELEVATION

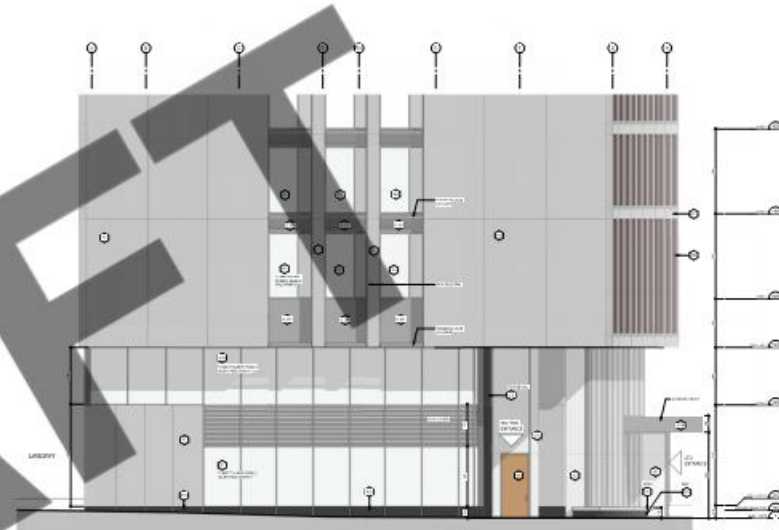
4 // DESIGN DOCUMENTATION

4.12 Ground Floor Elevations

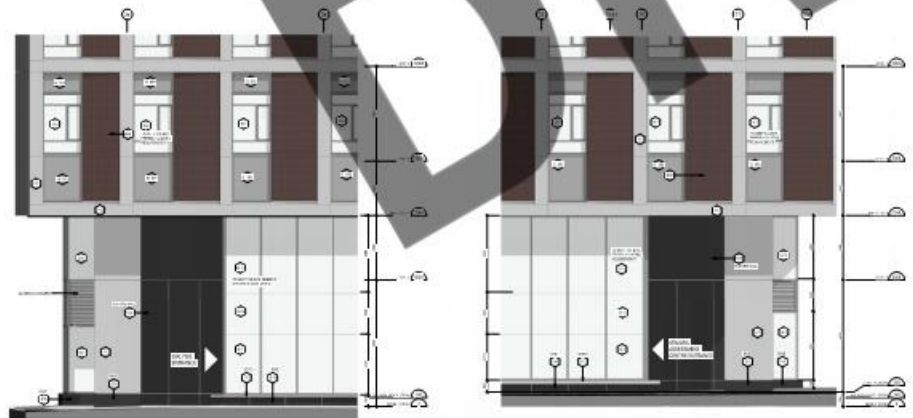
THE REKAI CENTRE AT CHERRY PLACE
ARCHITECT / DESIGNER: MONTGOMERY SISAM
REVIEW STAGE: STAGE 3: DETAILED DESIGN



CHERRY STREET ENTRY - (NOT TO SCALE)

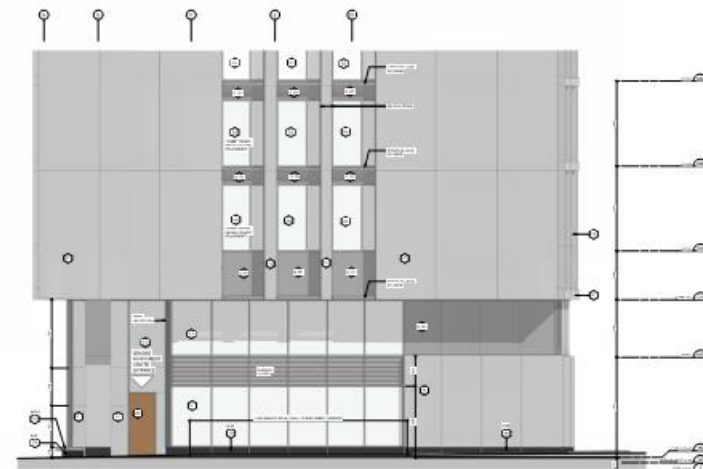


FRONT STREET - (NOT TO SCALE)



CHERRY AT FRONT - (NOT TO SCALE)

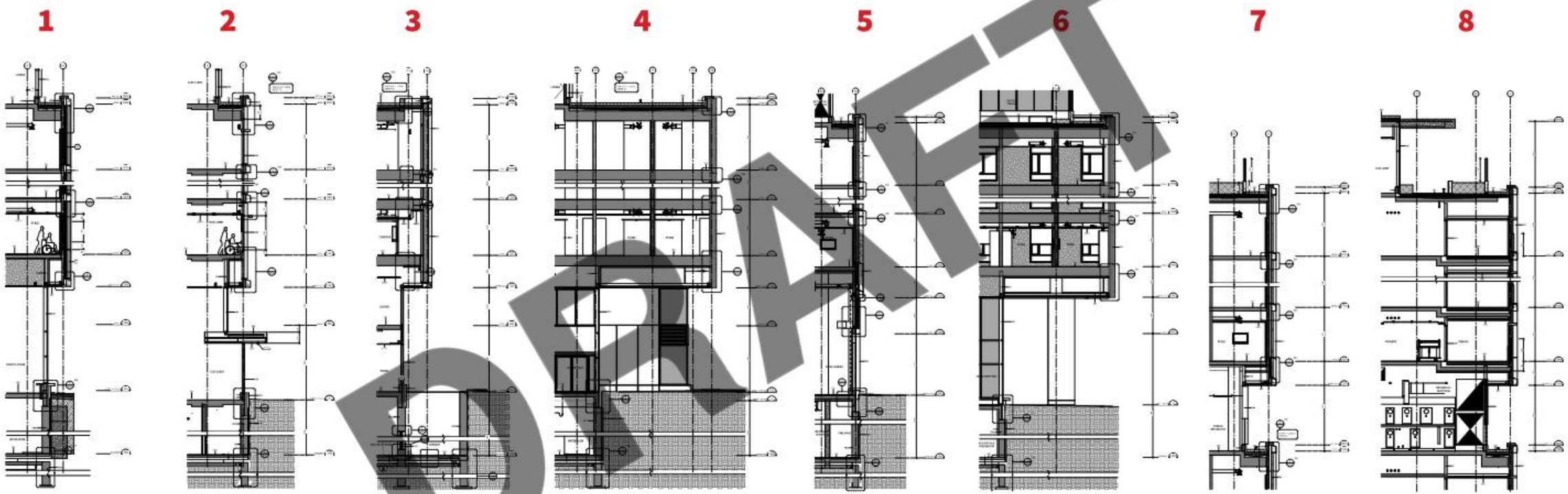
CHERRY AT EASTERN - (NOT TO SCALE)



EASTERN AVENUE - (NOT TO SCALE)

4 // DESIGN DOCUMENTATION

4.13 Key Wall Cross Sections



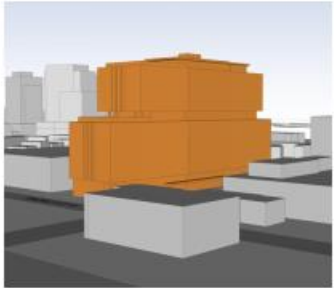
- 1 EAST N ENTRY ATRIUM**
- 2 EAST AT ENTRY**
- 3 NORTH AT AREA WAY**
- 4 NORTH AT ENTRY**
- 5 WEST AT LOADING**
- 6 SOUTH AT ENTRY**
- 7 WEST AT FITNESS**
- 8 WEST AT RHA TERRACES**

4 // DESIGN DOCUMENTATION

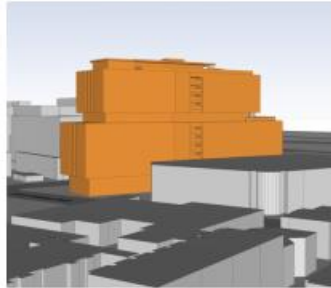
4.14 3D Renderings – Project

THE REKAI CENTRE AT CHERRY PLACE
ARCHITECT / DESIGNER: MONTGOMERY SISAM
REVIEW STAGE: STAGE 3: DETAILED DESIGN

FRONT VIEW



REAR VIEW



PHYSICAL MODEL



EXTERIOR – RHA RESIDENT ROOM



PERSPECTIVE – EAST ELEVATION



PERSPECTIVE – WEST ELEVATION

4 // DESIGN DOCUMENTATION

4.14 3D Renderings – Project (continued)

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

PERSPECTIVE – ATRIUM LOOKING SOUTH



PERSPECTIVE – CHERRY STREET LOOKING NORTH



PERSPECTIVE – FRONT DESK LOOKING NORTH



PERSPECTIVE – GROUND FLOOR



PERSPECTIVE – GROUND FLOOR



PERSPECTIVE – GROUND FLOOR

4 // DESIGN DOCUMENTATION

4.14 3D Renderings – Project (continued)

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

PERSPECTIVE – CORNER EASTERN AVENUE &
CHERRY STREET LOOKING SOUTH



PERSPECTIVE – LEVEL 8 GYM



PERSPECTIVE – TYPICAL RHA LOUNGE AT
NORTH & SOUTH END OF CORRIDORS



PERSPECTIVE – MEZZANINE



PERSPECTIVE – MEZZANINE



PHYSICAL MODEL

4 // DESIGN DOCUMENTATION

4.15 3D Renderings – Public Realm

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN



PERSPECTIVE – EAST



PERSPECTIVE – WEST

4 // DESIGN DOCUMENTATION

4.15 3D Renderings – Public Realm (continued)

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN



PERSPECTIVE – SOUTH SIDE

5

**ECOLOGY,
ENERGY AND
SUSTAINABILITY**

- 27.6% energy reduction – Achieving the optional TGS v3 Tier 2.
 - LEED Gold V4 – Achieving WT’s MGBRs v2.1.
 - Roof plan and electrical designed to accommodate solar PV.
- Building will pursue (i) enhanced commissioning and (ii) airtightness testing.
 - Retaining minimum of 10mm of rainfall.
 - 41% potable water savings using low-flow fixtures.
 - 75% diversion of construction and demolition waste.
 - Low Window-to-wall ratio (32.1%).
- **Shading Strategies:** Angled precast frames on the East façade, horizontal sunshades on the South façade. Motorized roller shades.
- **Thermal Break Strategies:** Min 4x insulation overlap at building bases, thermally broken z-girts and minimized precast anchors, insulated terraces / balconies.
 - **Envelope Strategy:** LEED Gold / Tier 2 TGS energy targets.
Inverted roof assembly with green roof.

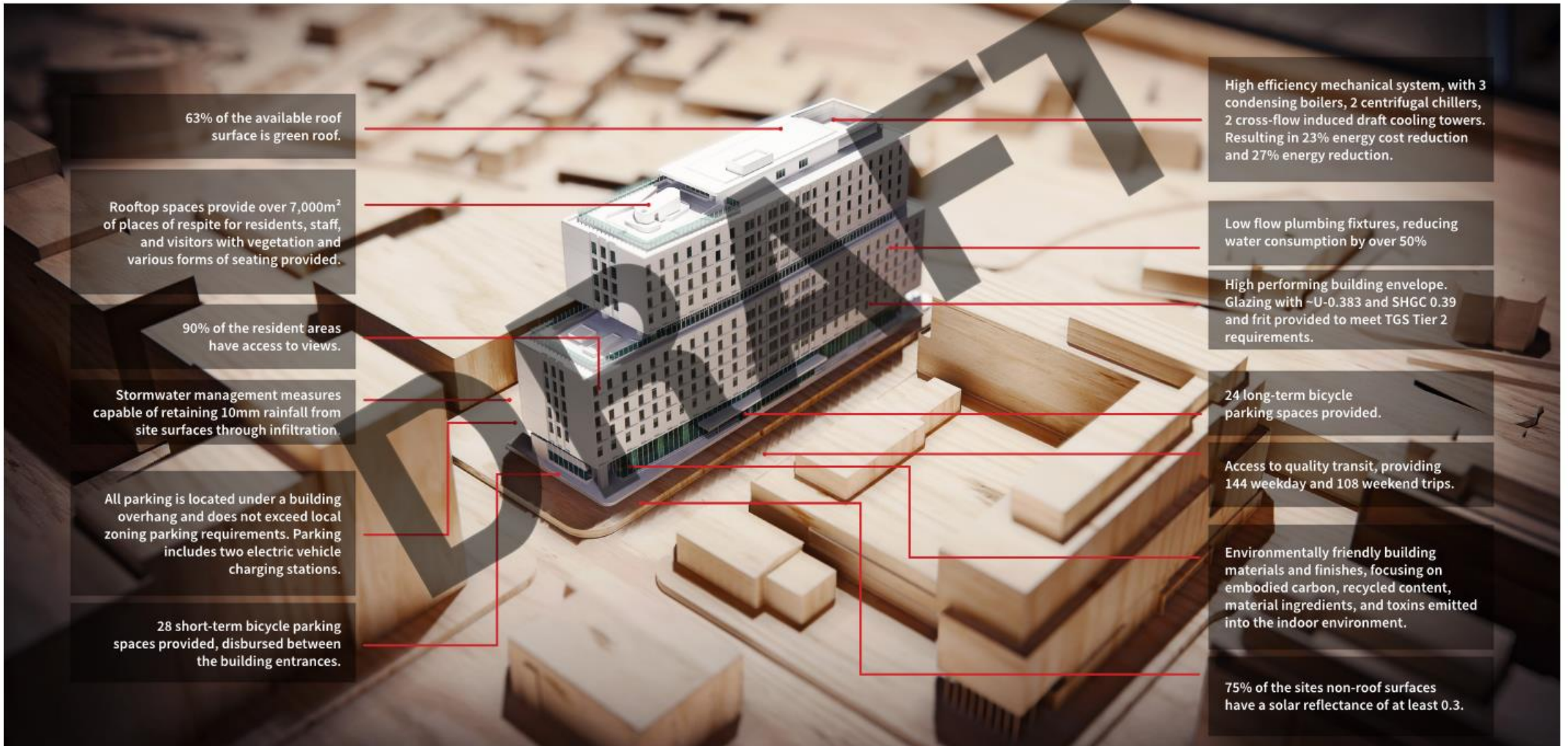
5 // ECOLOGY, ENERGY AND SUSTAINABILITY

5.2 Integration Diagram

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN



5 // ECOLOGY, ENERGY AND SUSTAINABILITY

5.3 Energy Modelling + other VSM

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

Currently targeting
23.6% energy cost savings
(11 LEED Points)
and **25%** energy savings.

- (TGS v3 Tier 2 energy performance benchmark).
- No EUI targets identified as a requirement for this project.
- Low/zero carbon not identified as a goal for this project.
- High-level discussions between MSA, S+A, and Footprint regarding requirements to obtain Zero carbon certification.
- Additional energy model assumptions for the design included in 60% Energy Review.

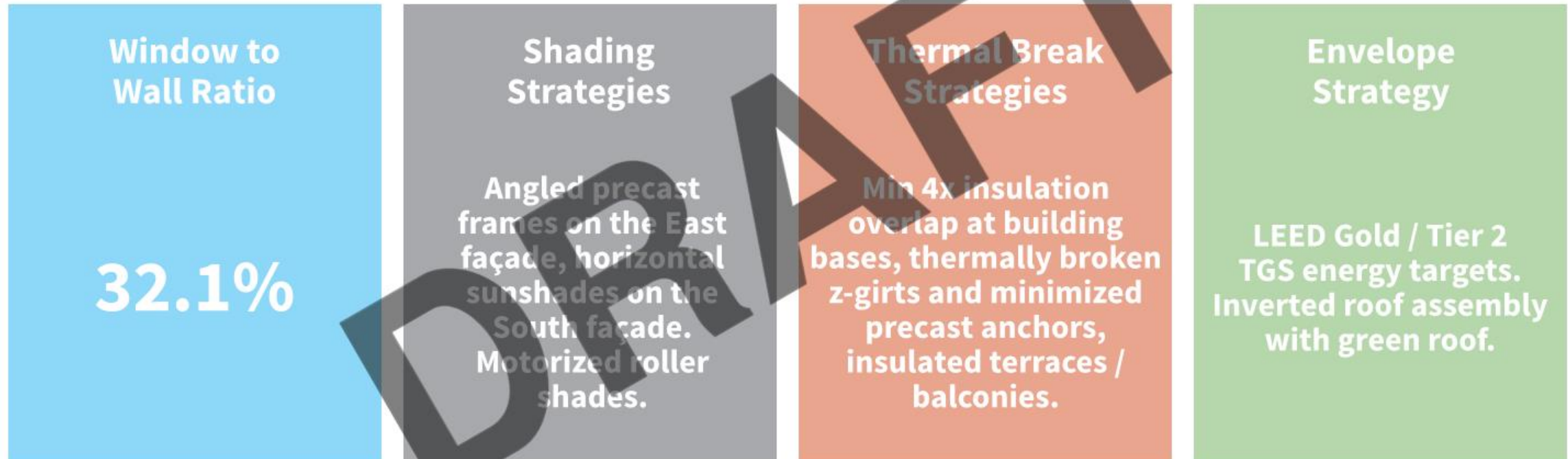
5 // ECOLOGY, ENERGY AND SUSTAINABILITY

5.4 Sustainable Building Design Details

THE REKAI CENTRE AT CHERRY PLACE

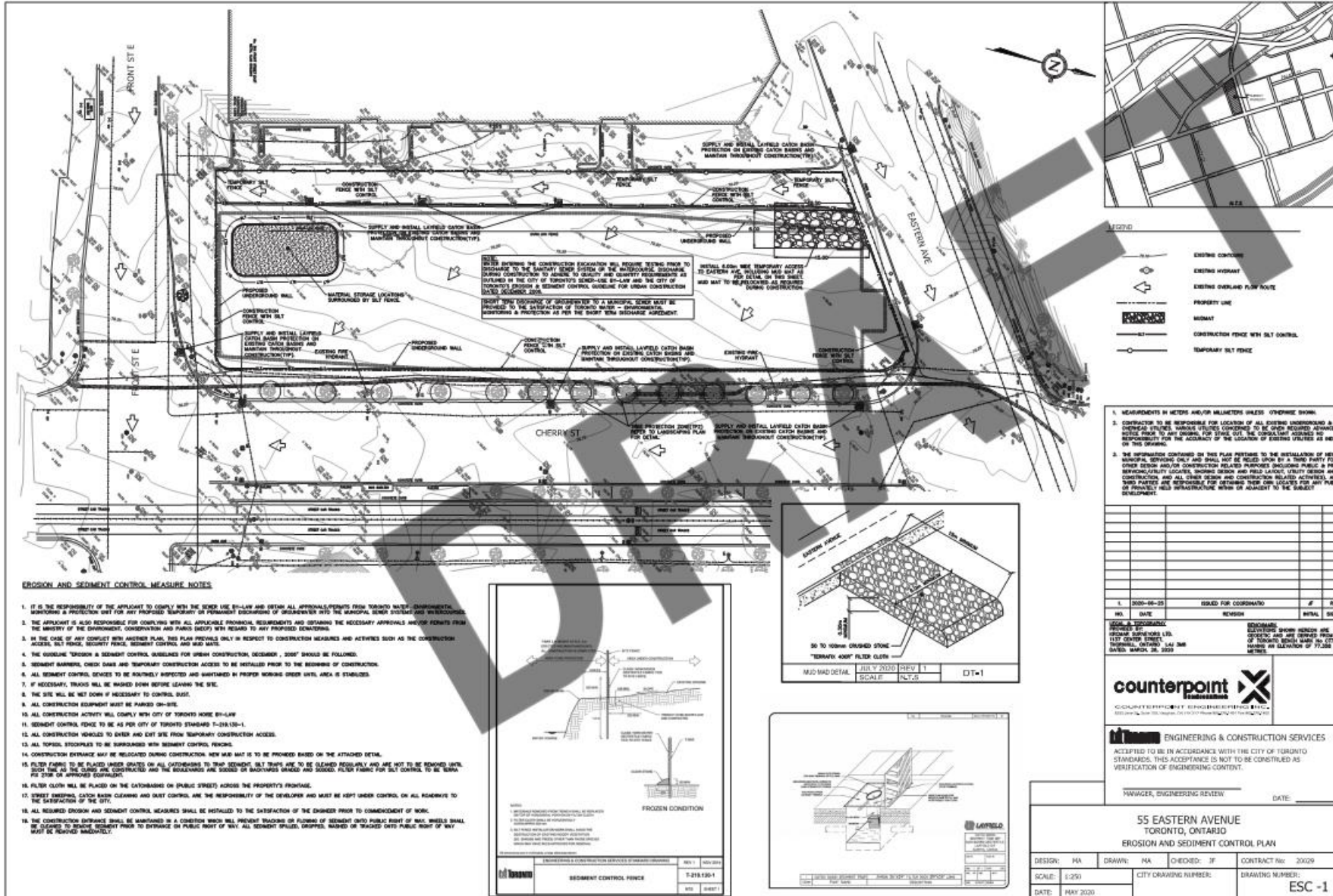
ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN



5 // ECOLOGY, ENERGY AND SUSTAINABILITY

5.7 Ecological Strategy (Water Management Strategy)



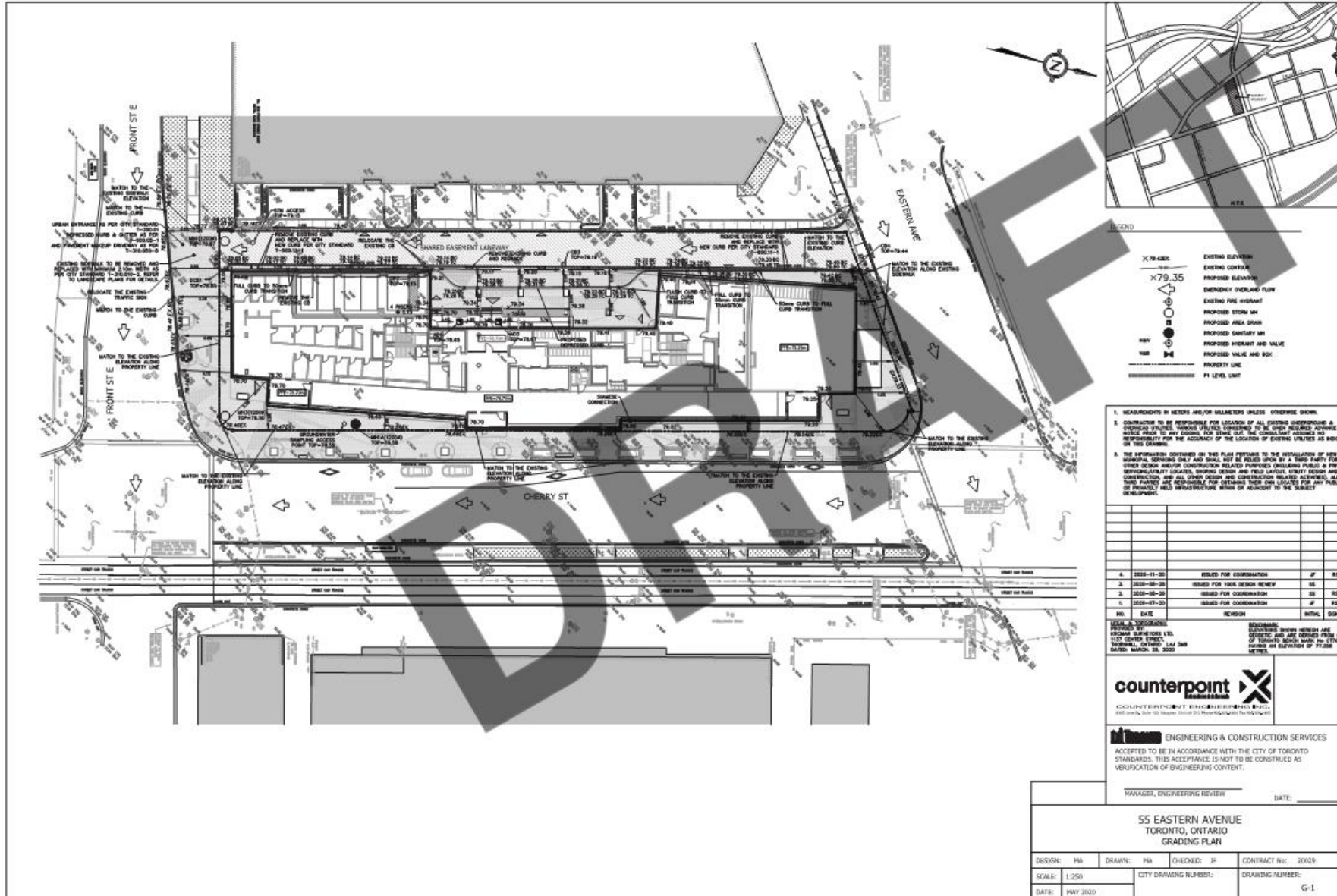
WATER MANAGEMENT STRATEGY

TGS Tier 2 requirement is to design stormwater measures capable of retaining stormwater from a minimum of 10 mm depth of rainfall from all site surfaces through infiltration, evapotranspiration and water harvesting and reuse.

5 // ECOLOGY, ENERGY AND SUSTAINABILITY

5.7 Ecological Strategy (Site Grading)

THE REKAI CENTRE AT CHERRY PLACE
 ARCHITECT / DESIGNER: MONTGOMERY SISAM
 REVIEW STAGE: STAGE 3: DETAILED DESIGN



1. NEARPOINTS IN METERS AND/OR MILLIMETERS UNLESS OTHERWISE SHOWN.
2. CONTRACTOR TO BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UNDERGROUND AND ABOVEGROUND UTILITIES. PROVIDE UTILITY LOCATIONS TO BE CHECKED AGAINST RECORD PLANS TO BE OBTAINED FOR STAKE OUT. BE CONSULTANT ADVISED OF ANY DISCREPANCY FOR THE ACCURACY OF THE LOCATION OF EXISTING UTILITIES AS INDICATED ON THIS DRAWING.
3. THE INFORMATION CONTAINED ON THIS PLAN PERTAINS TO THE INSTALLATION OF NEW SANITARY, SEWERAGE ONLY AND SHALL NOT BE RELIED UPON BY A THIRD PARTY FOR ANY OTHER DESIGN AND/OR CONSTRUCTION RELATED PURPOSES INCLUDING PUBLIC AND PRIVATE INFRASTRUCTURE LOCATIONS, EXISTING DESIGN AND FIELD LAYOUTS, UTILITY DESIGN AND CONSTRUCTION, AND ALL OTHER DESIGN AND CONSTRUCTION RELATED ACTIVITIES. ALL THIS PARTY AND RESPONSIBLE FOR OBTAINING THEIR OWN LOCATIONS FOR ANY PUBLICLY DEVELOPED FIELD INFRASTRUCTURE WITHIN OF ADJACENT TO THE SUBJECT.

NO.	DATE	REVISION	INITIALS	SIGNED
1.	2020-11-20	ISSUED FOR COORDINATION	JF	RS
2.	2020-08-28	ISSUED FOR FINAL DESIGN REVIEW	SS	JS
3.	2020-08-28	ISSUED FOR COORDINATION	SS	JS
4.	2020-07-20	ISSUED FOR COORDINATION	JF	RS

SEAL & DESIGNER:
 ARCHITECT: MONTGOMERY SISAM
 5157 CENTER STREET, TORONTO, ONTARIO M4J 1A8
 DATED: MARCH 28, 2020

RECORDING:
 ELEVATION: 77.35 METER WHICH ARE GEOMETRIC AND ARE OBTAINED FROM CITY OF TORONTO RECORD MAP NO. C100
 DATED: MARCH 28, 2020



Engineering & Construction Services
 ACCEPTED TO BE IN ACCORDANCE WITH THE CITY OF TORONTO STANDARDS. THIS ACCEPTANCE IS NOT TO BE CONSTRUED AS VERIFICATION OF ENGINEERING CONTENT.

MANAGER, ENGINEERING REVIEW: _____ DATE: _____

55 EASTERN AVENUE
 TORONTO, ONTARIO
 GRADING PLAN

DESIGN: HA	DRAWN: HA	CHECKED: JF	CONTRACT NO: 2020
SCALE: 1:250	CITY DRAWING NUMBER:		DRAWING NUMBER:
DATE: MAY 2020			G-1

DRAFT

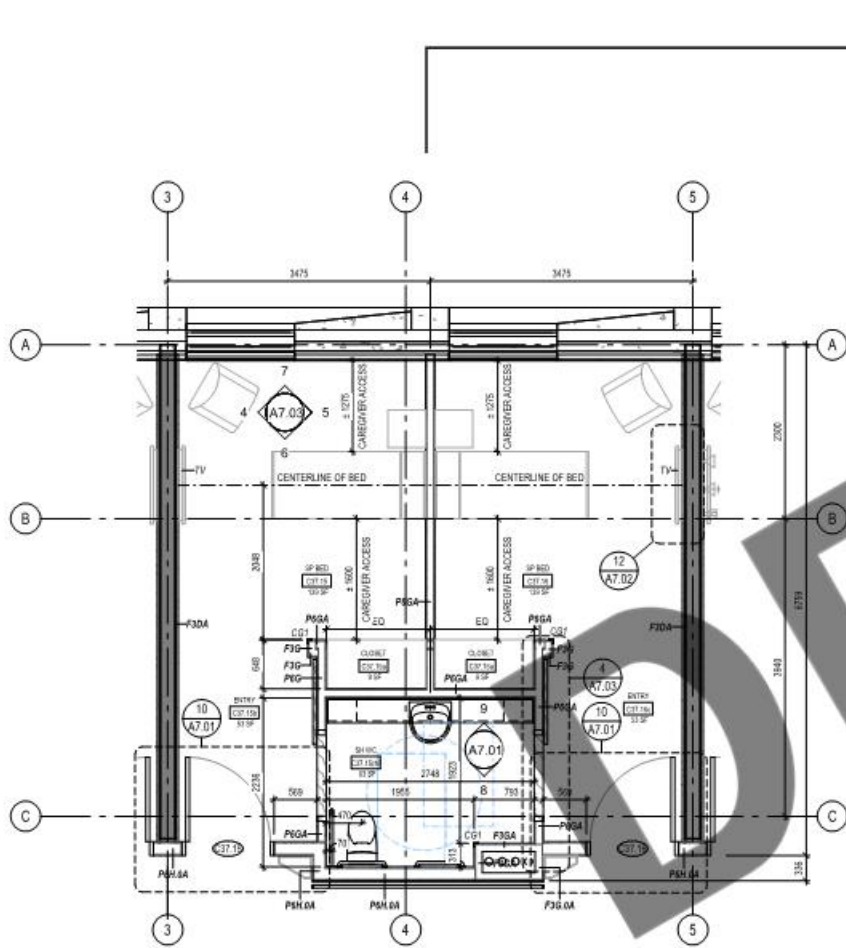
6

DETAILS AND FINISHES

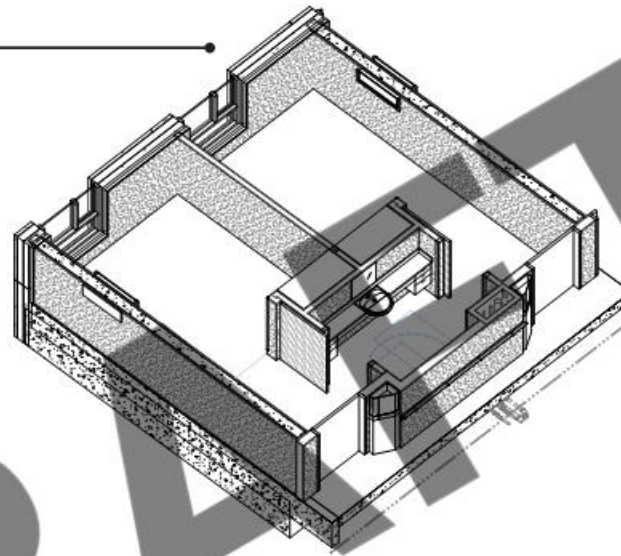
6 // DETAILS AND FINISHES

6.1 Unit Plans

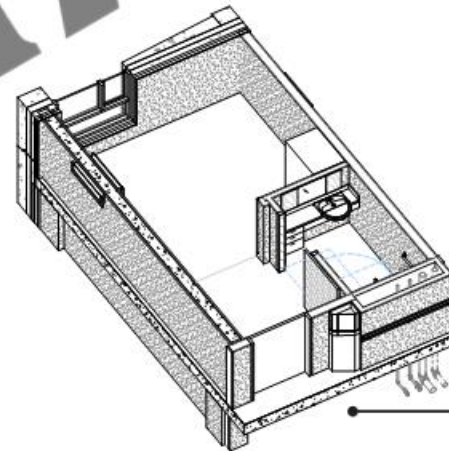
THE REKAI CENTRE AT CHERRY PLACE
ARCHITECT / DESIGNER: MONTGOMERY SISAM
REVIEW STAGE: STAGE 3: DETAILED DESIGN



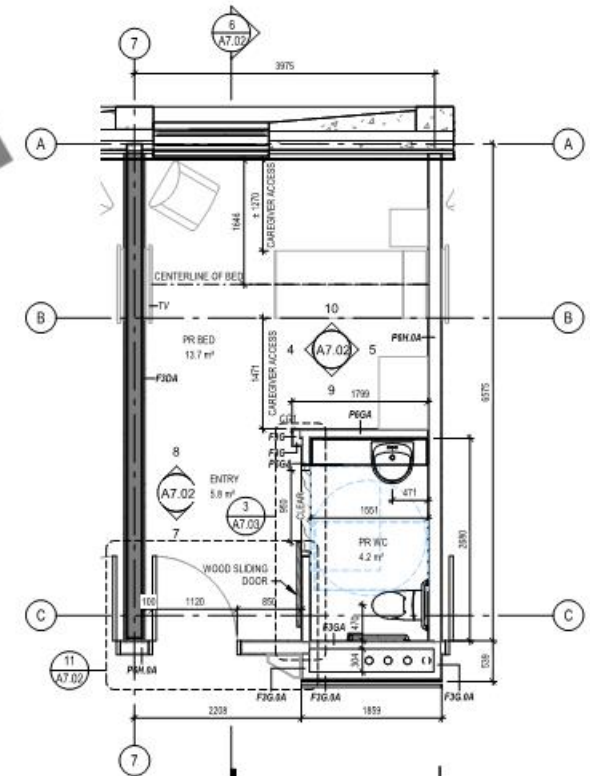
PLAN - SEMI-PRIVATE BEDROOM



AXONOMETRIC - SEMI-PRIVATE BEDROOM



AXONOMETRIC - PRIVATE BEDROOM



PLAN - PRIVATE BEDROOM

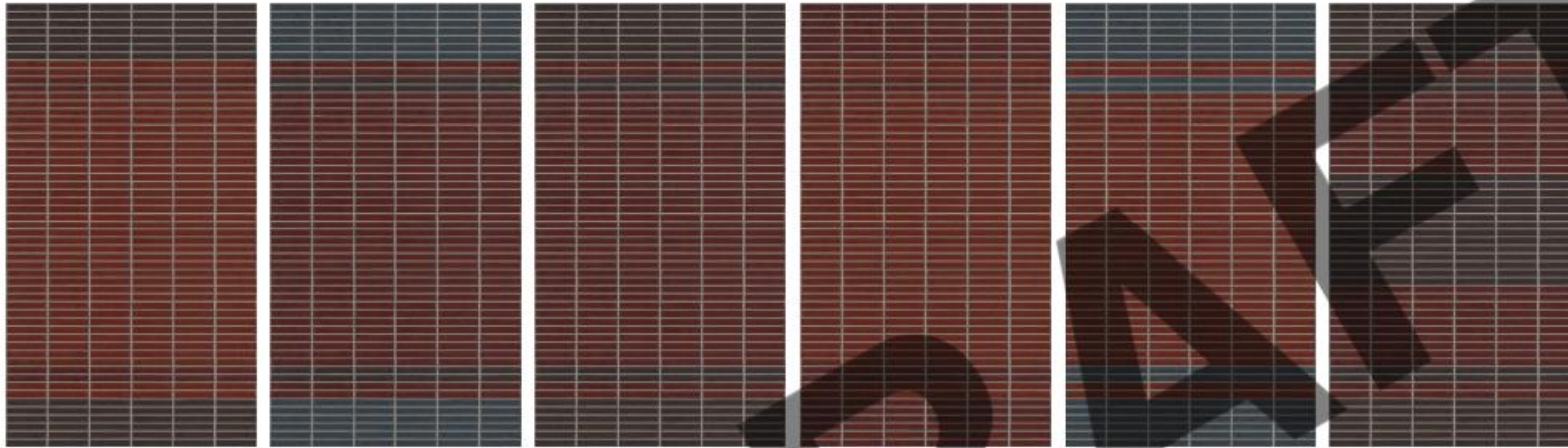
6 // DETAILS AND FINISHES

6.3 Material Palette + Samples

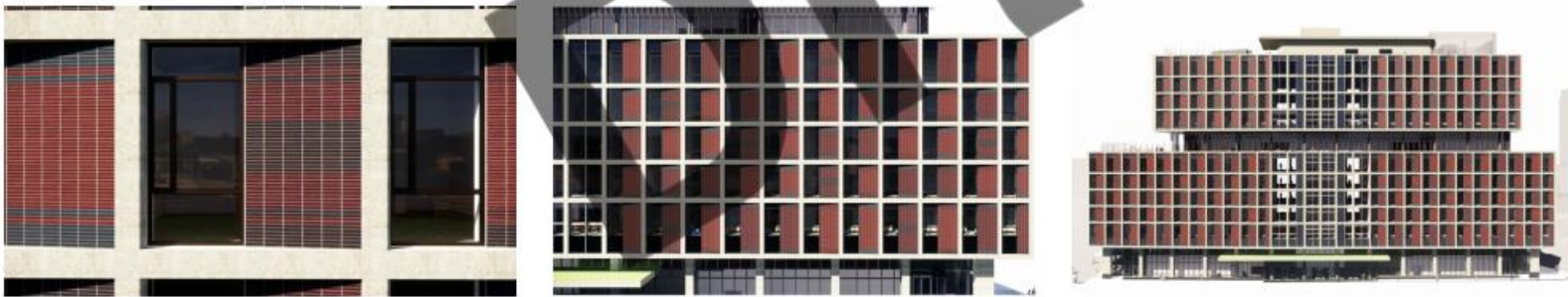
THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN



PRECAST BRICKSLIP PANEL TYPES



PRECAST BRICKSLIP PATTERN STUDY

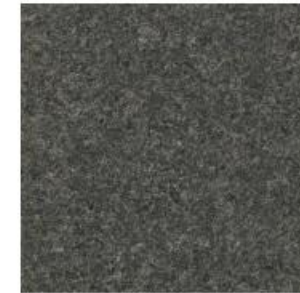
PRECAST CONCRETE
EXTERIOR CLADDING



DARK GRANITE PLINTH



DARK BRONZE ANODIZED
ALUMINUM CURTAIN WALL /
WINDOWS



WHITE OAK SOFFIT PANEL



6 // DETAILS AND FINISHES

6.4 Six Critical Detail Drawings

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

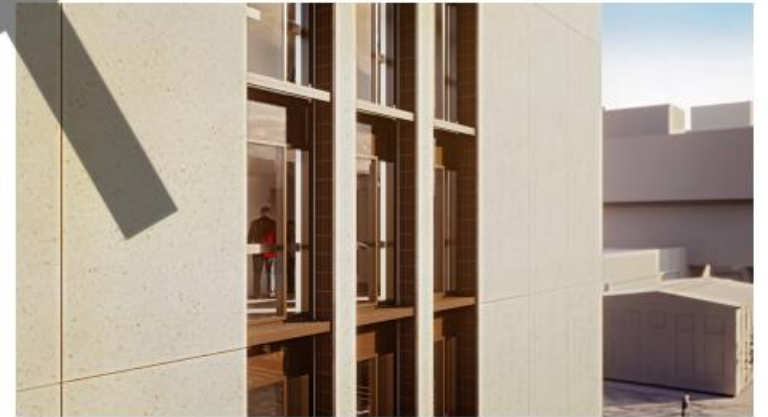
CHERRY STREET ENTRY SOFFIT AND PLINTH



GROUND FLOOR PLINTH AND COLUMN CLADDING



NORTH & SOUTH VERTICAL FINIS & SUN SHADING HORIZONTAL



GROUND FLOOR PLINTH AND BENCH



LANEWAY RESIDENT ENTRANCE



TERRACE GLASS GUARD AND SUPPORTS

6 // DETAILS AND FINISHES

6.5 Mechanical + HVAC Strategy

Heating Systems

- The central boiler plant located in the basement mechanical room and consist of three ultra-high efficiency, condensing, forced draft dual fuel (natural gas / #2 fuel oil) boilers each sized for approximately 40% of the total heating water requirement.
- Heating water pumps (run/run/standby) will vary flow in response to building requirements through the use of variable speed drives (VFDs).

Cooling Systems

- A central chiller plant located in the basement mechanical room will produce chilled water for cooling.
- The chilled water plant shall be a variable primary flow pumping system.
- The chiller plant will consist of two Magnetic Bearing Centrifugal chillers operating on HFC-134a refrigerant.
- The chilled water pumping system shall consist of three primary pumps (run/run/standby).
- The chilled water pumps shall vary flow in response to the building requirements through the use of variable speed drives (VFDs).
- The condenser water plant will consist of a two cell cross-flow induced draft cooling tower located on the roof.

Air Handling Systems

- The facility will be heated, cooled and ventilated by eight air handling units all located in the level 8 mechanical room.
- The suites will be serviced by constant volume re-heat 100% outdoor air systems with energy recovery wheels. All heating and cooling will be provided through the central air system with a hydronic hot water re-heat coil in the terminal branch ductwork that serves each suite or room.
- The bathroom exhaust for each suite shall be centrally collected and exhaust via the air handling unit heat recovery sections.
- The amenities and ancillary areas will be serviced by horizontal 4-pipe fan coils with ventilation air distributed to the FCUs by a dedicated outdoor air system (DOAS).
- The main lobby shall be served by a dedicated recirculating air handling unit.
- Dedicated air systems will be provided for the loading dock, parking garage, kitchen and isolation rooms.

Plumbing and Drainage

- The Plumbing System shall conform to the Ontario Building Code (OBC).
- A complete system of roof drains and storm drainage piping shall be provided.
- Domestic hot water will be generated by two gas-fired condensing water heaters.

Medical Gas Systems

- Medical gas systems shall confirm to CSA Z7396.1.
- An oxygen manifold supply system shall be installed in the Level 8 Mechanical Room and distributed to levels 7 and 9 where outlets are required.

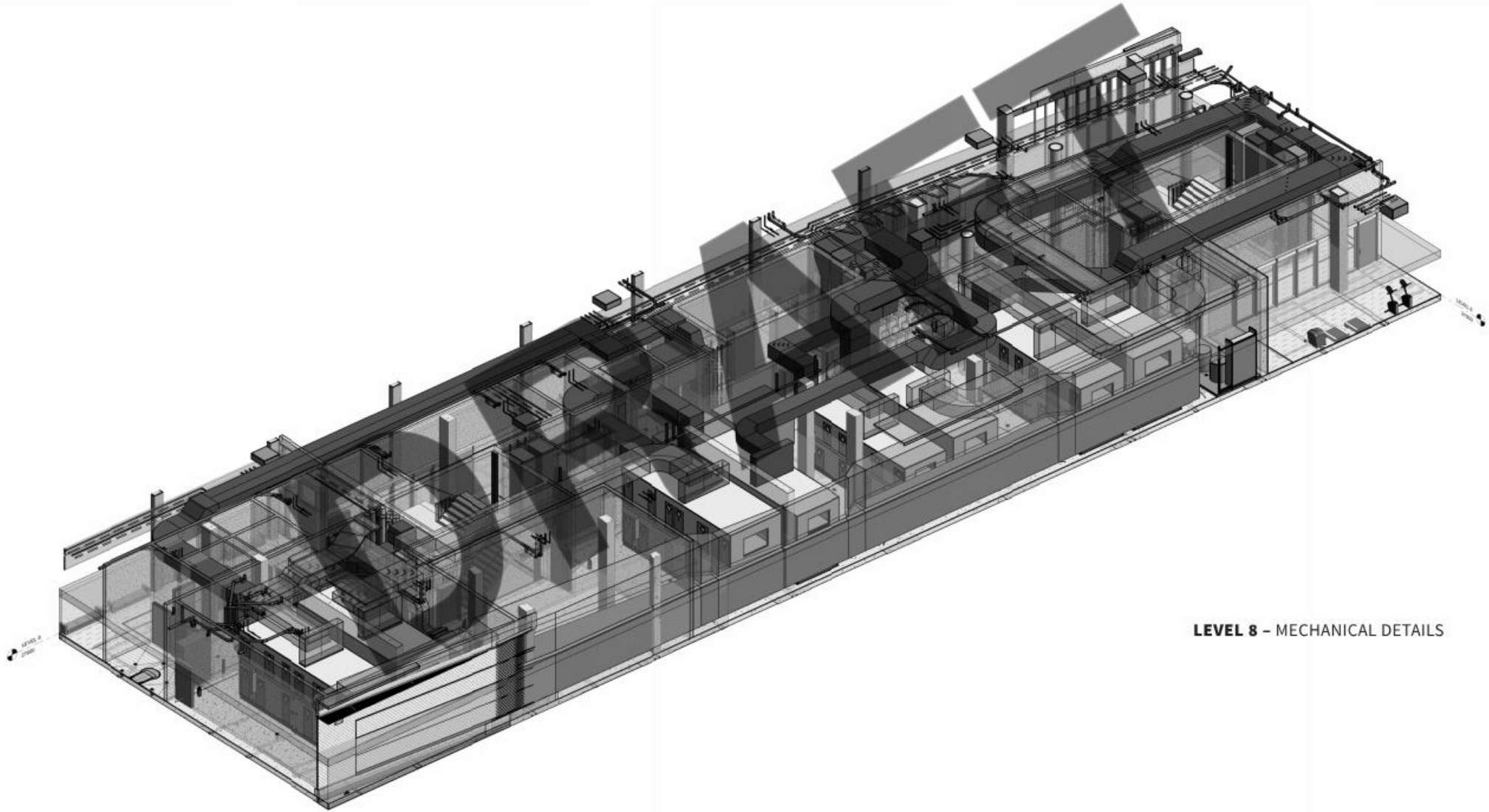
6 // DETAILS AND FINISHES

6.5 Mechanical + HVAC Strategy (continued)

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN



LEVEL 8 - MECHANICAL DETAILS

6 // DETAILS AND FINISHES

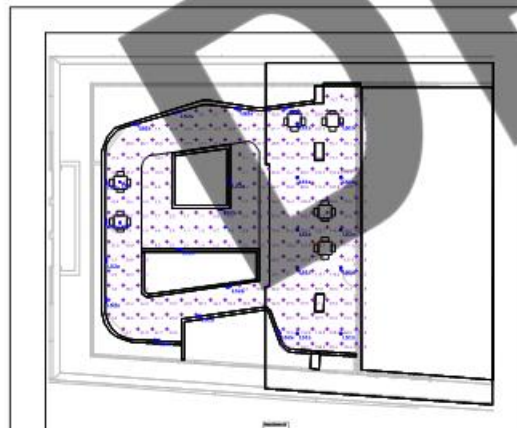
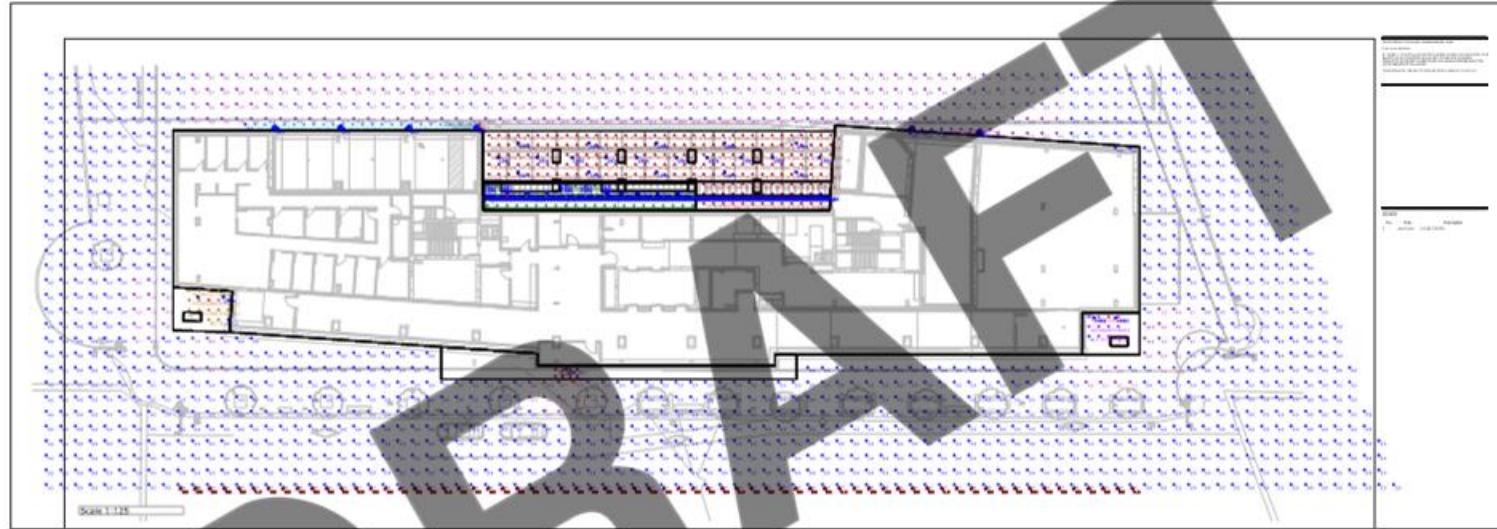
6.7 Signage and Lighting Strategy

THE REKAI CENTRE AT CHERRY PLACE

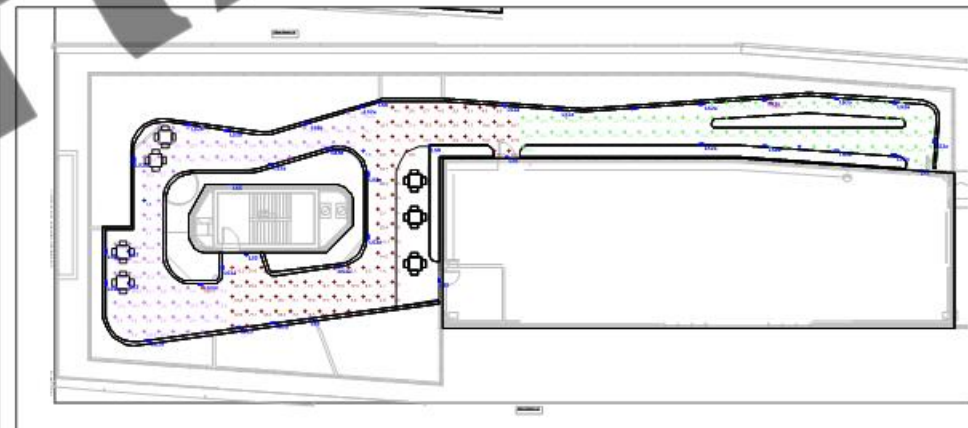
ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

LIGHTING - SITE PLAN



LIGHTING - LEVEL 8



LIGHTING - ROOF TOP LEVEL

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APPENDIX

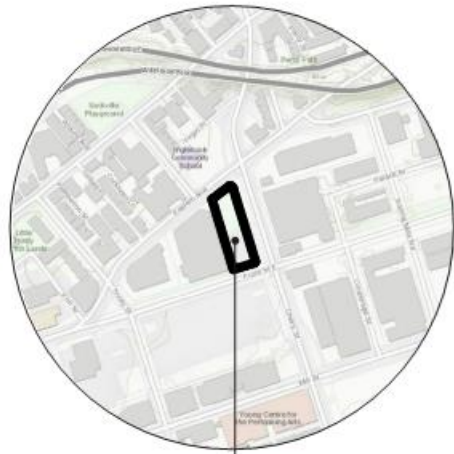
2 // CONTEXT

2.2 Site Context Plan

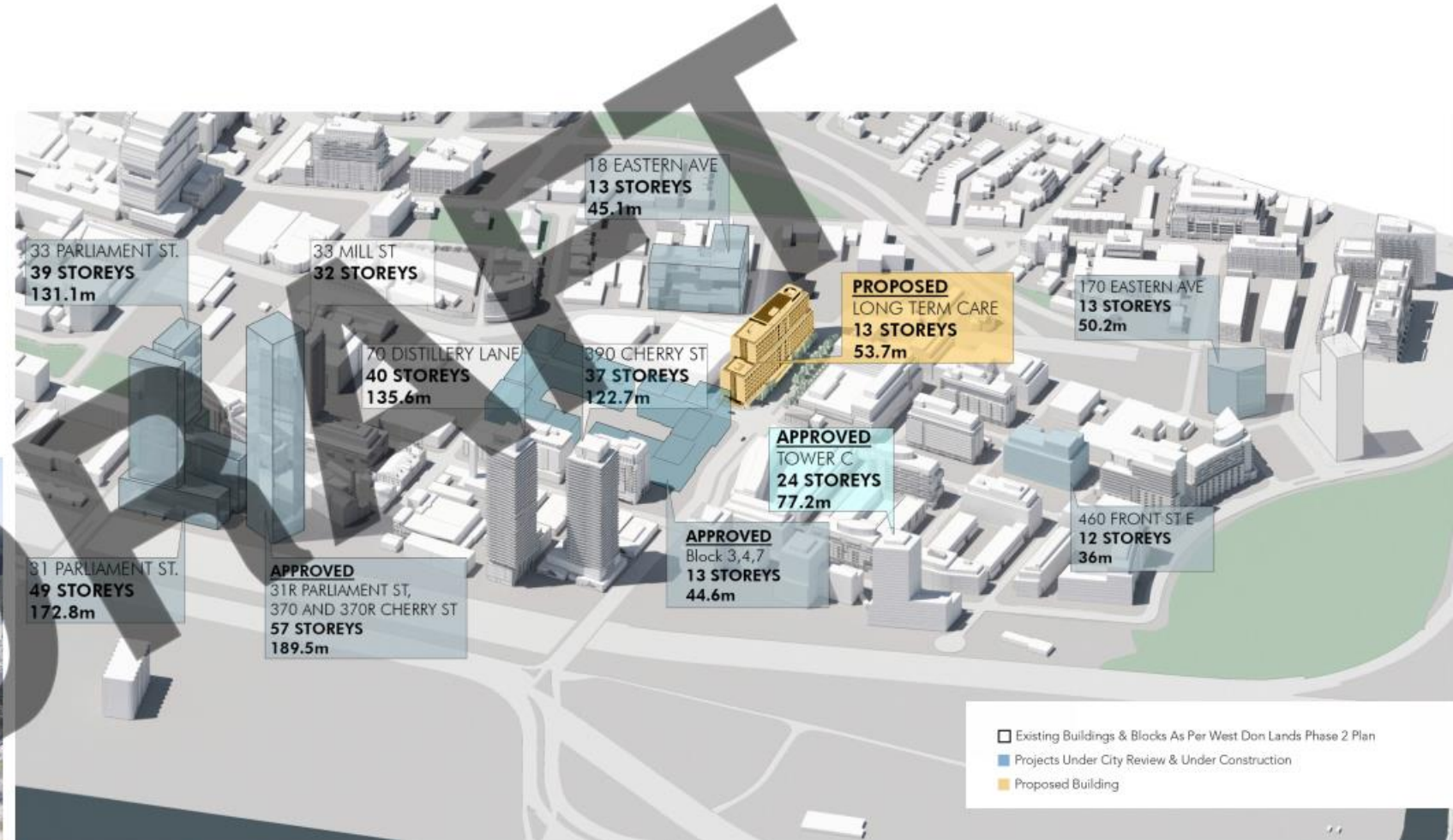
THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN



SITE AXONOMETRIC

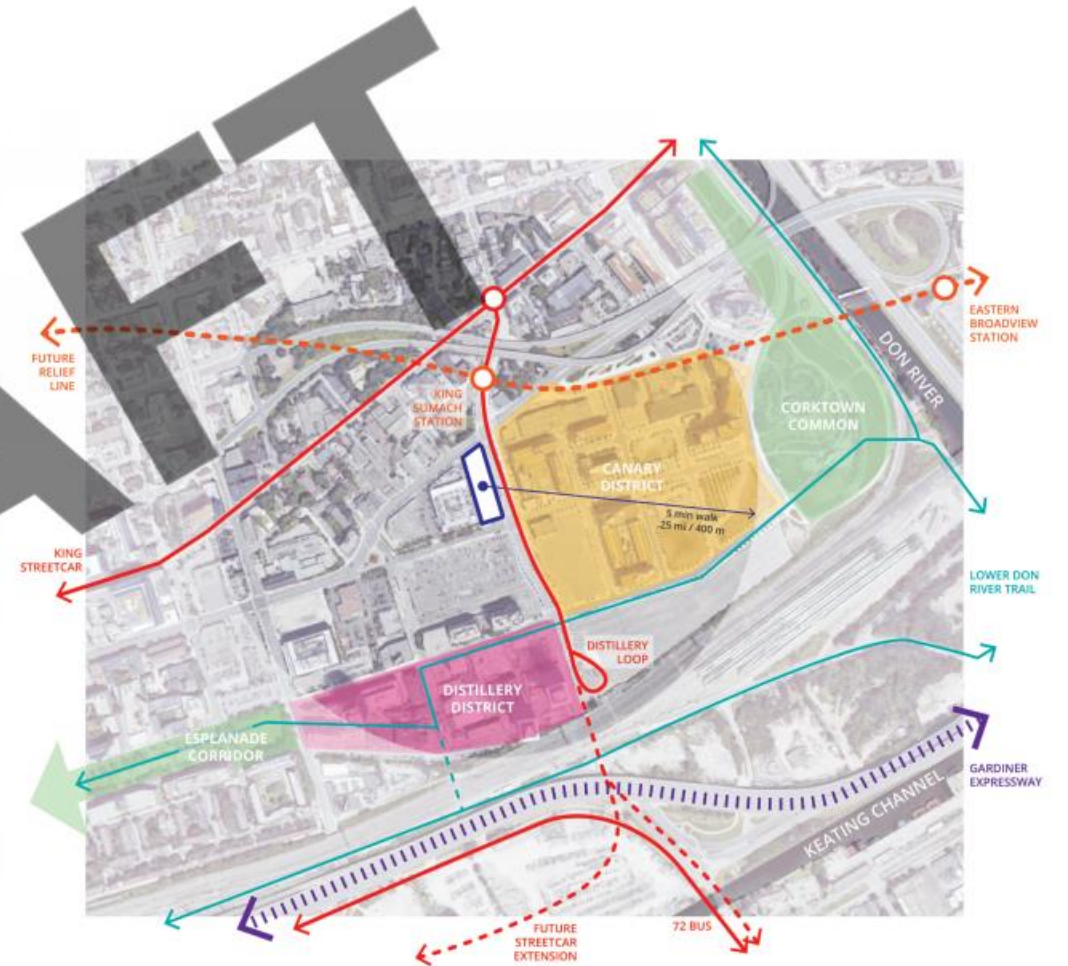
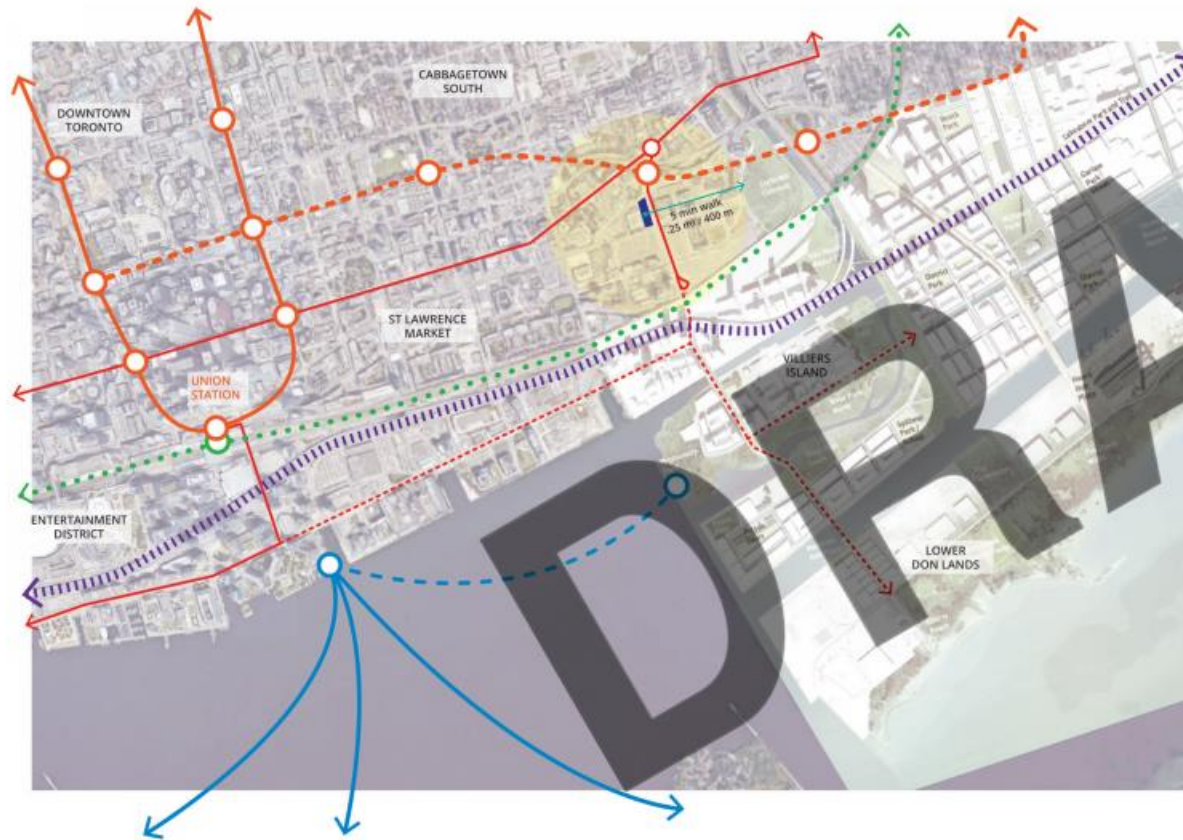


BUILDING CONTEXT

3 // DESIGN STRATEGY

3.7 Circulation Diagram

THE REKAI CENTRE AT CHERRY PLACE
ARCHITECT / DESIGNER: MONTGOMERY SISAM
REVIEW STAGE: STAGE 3: DETAILED DESIGN



4 // DESIGN DOCUMENTATION

4.8 Upper Floor Plans

THE REKAI CENTRE AT CHERRY PLACE

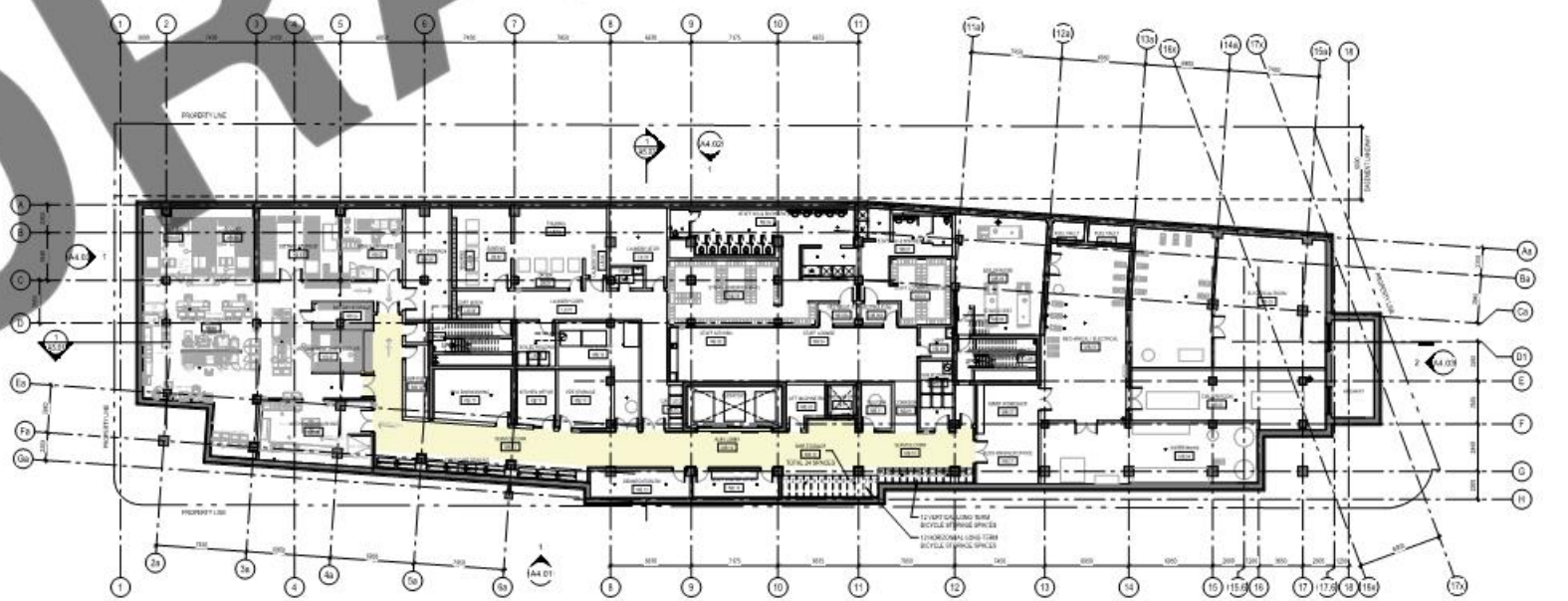
ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

PLAN - LEVEL 1 (NOT TO SCALE)



PLAN - BASEMENT LEVEL (NOT TO SCALE)



4 // DESIGN DOCUMENTATION

4.8 Upper Floor Plans (continued)

THE REKAI CENTRE AT CHERRY PLACE

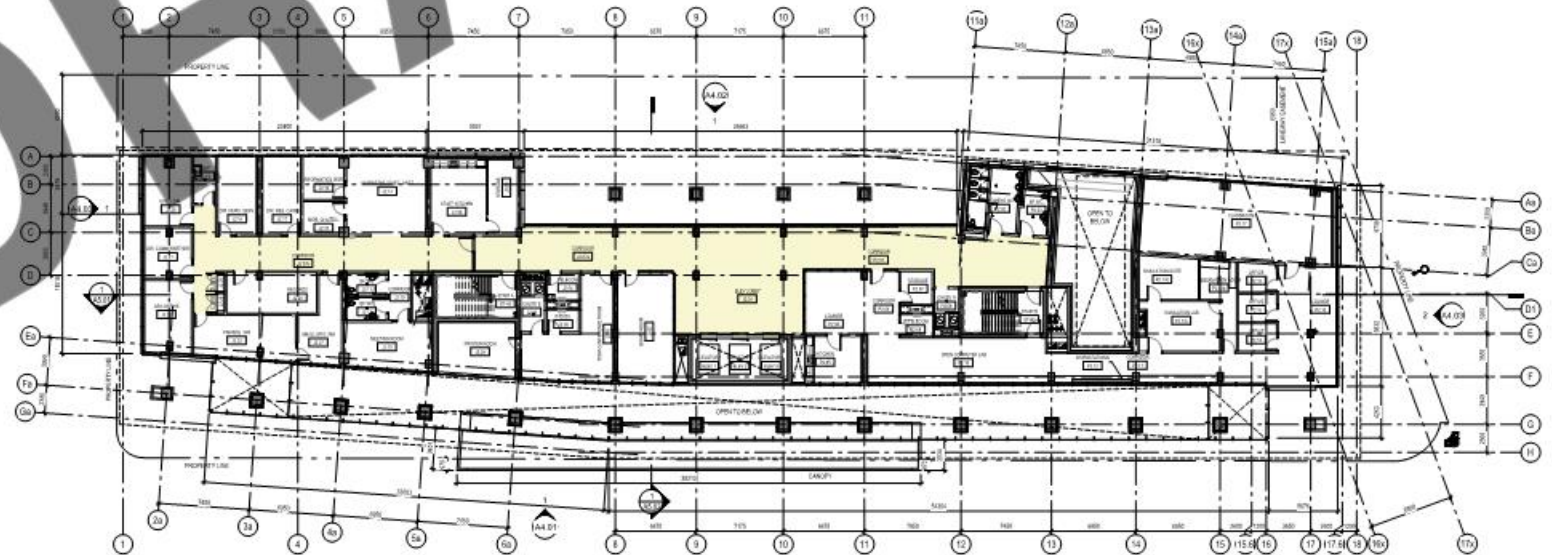
ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

TYPICAL PLAN - LEVELS 3 - 7 (NOT TO SCALE)



PLAN - LEVEL 2 (NOT TO SCALE)



4 // DESIGN DOCUMENTATION

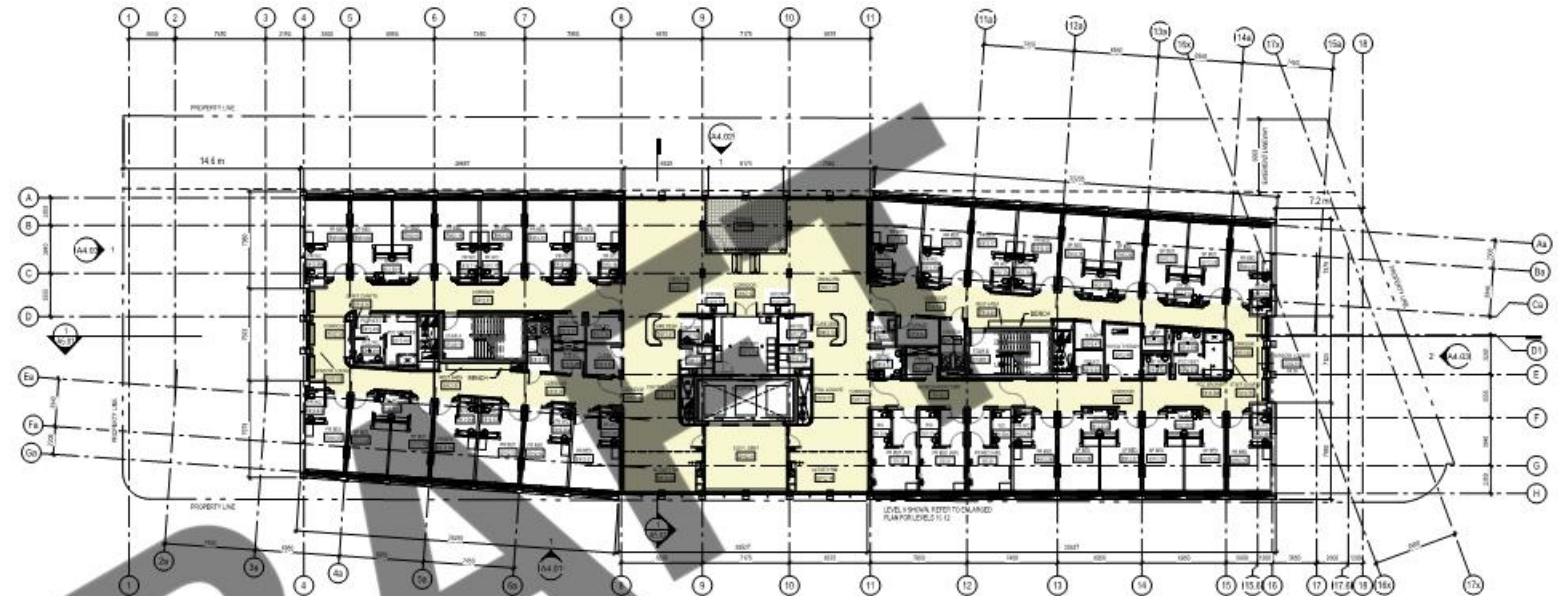
4.8 Upper Floor Plans (continued)

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

TYPICAL PLAN - LEVEL 9 - 12 (NOT TO SCALE)



PLAN - LEVEL 8 (NOT TO SCALE)



4 // DESIGN DOCUMENTATION

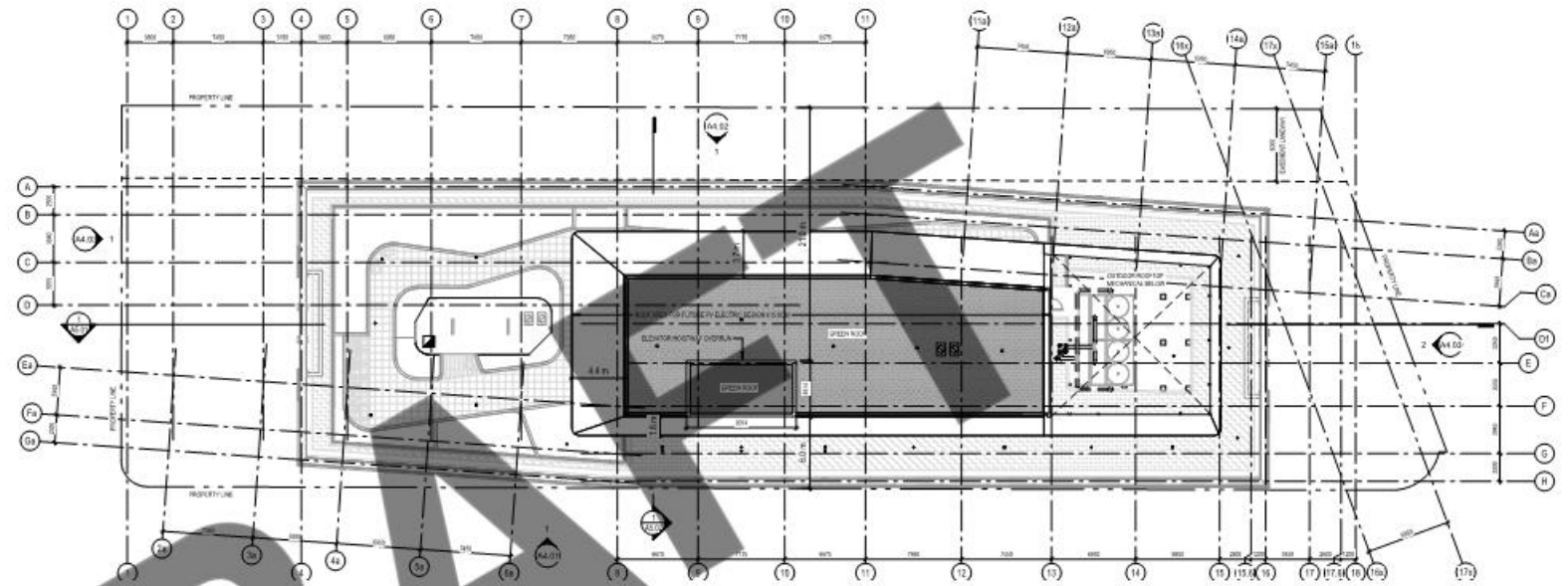
4.8 Upper Floor Plans (continued)

THE REKAI CENTRE AT CHERRY PLACE

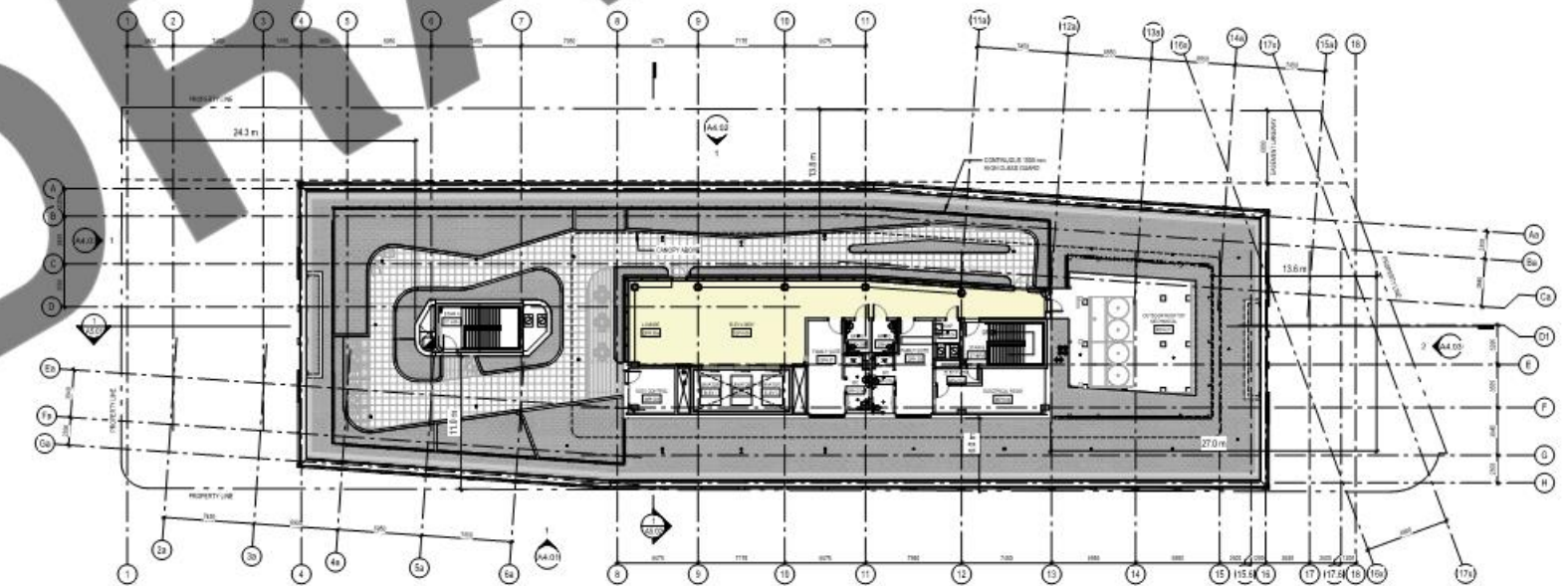
ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN

PLAN - ROOF (NOT TO SCALE)



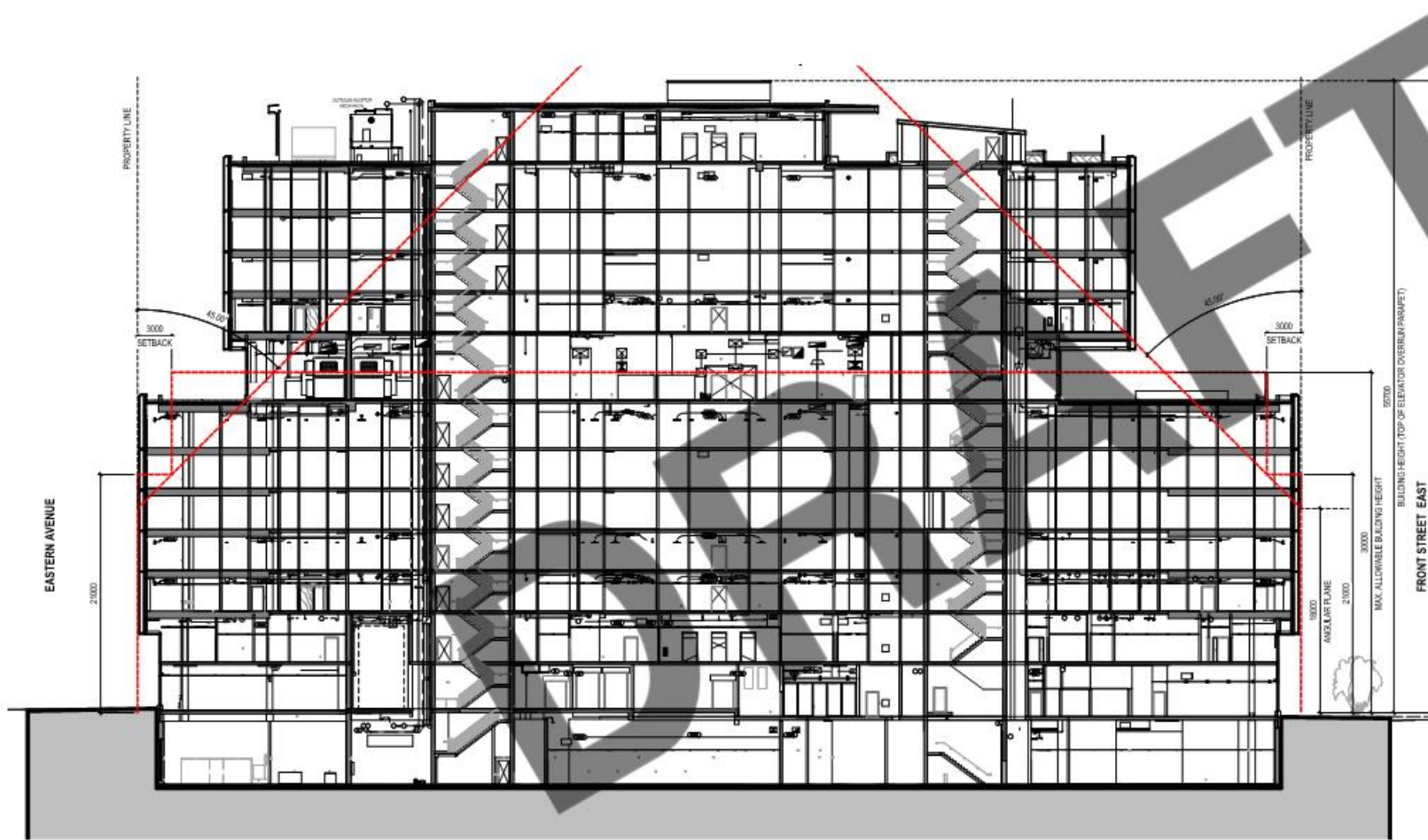
PLAN - PENTHOUSE LEVEL (NOT TO SCALE)



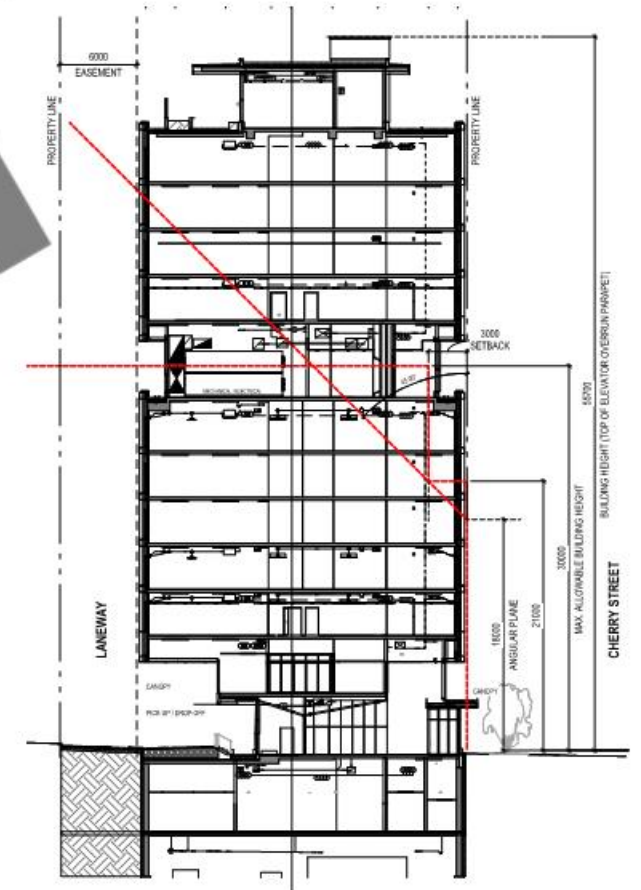
4 // DESIGN DOCUMENTATION

4.9 Building Sections

THE REKAI CENTRE AT CHERRY PLACE
ARCHITECT / DESIGNER: MONTGOMERY SISAM
REVIEW STAGE: STAGE 3: DETAILED DESIGN



BUILDING SECTION - LONGITUDINAL (NOT TO SCALE)

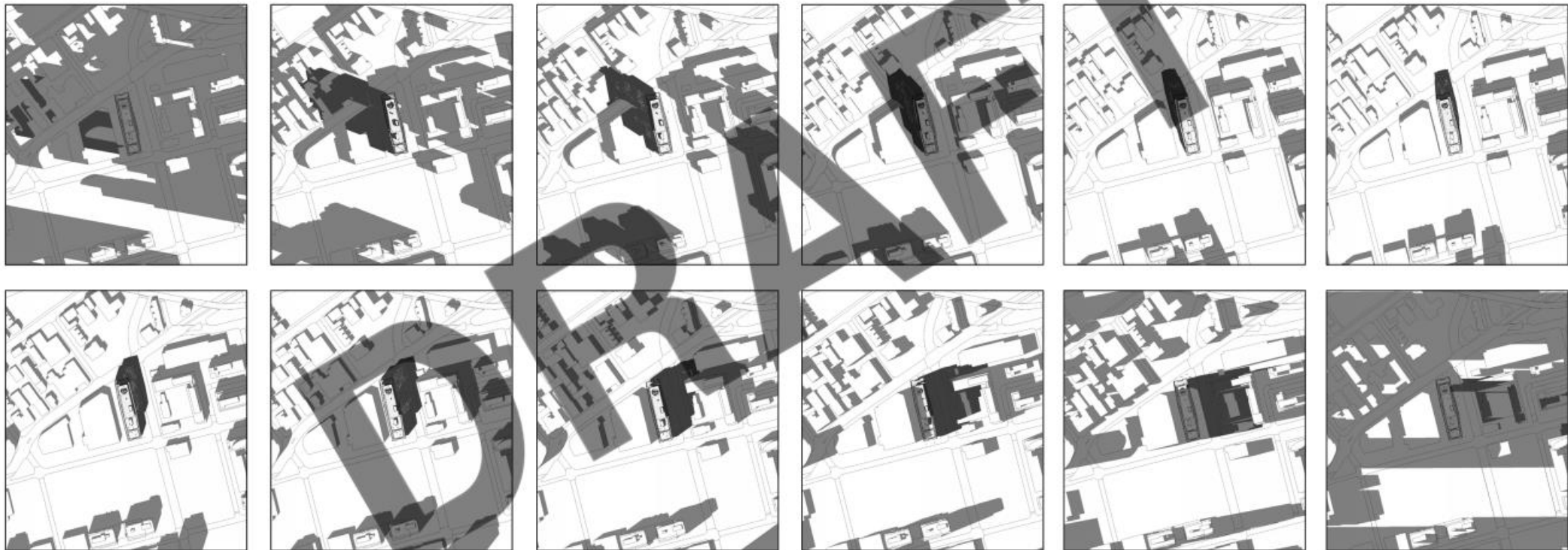


BUILDING SECTION - TRANSVERSE (NOT TO SCALE)

4 // DESIGN DOCUMENTATION

4.16 Shadow Studies

THE REKAI CENTRE AT CHERRY PLACE
ARCHITECT / DESIGNER: MONTGOMERY SISAM
REVIEW STAGE: STAGE 3: DETAILED DESIGN



SHADOW STUDIES – SPRING EQUINOX

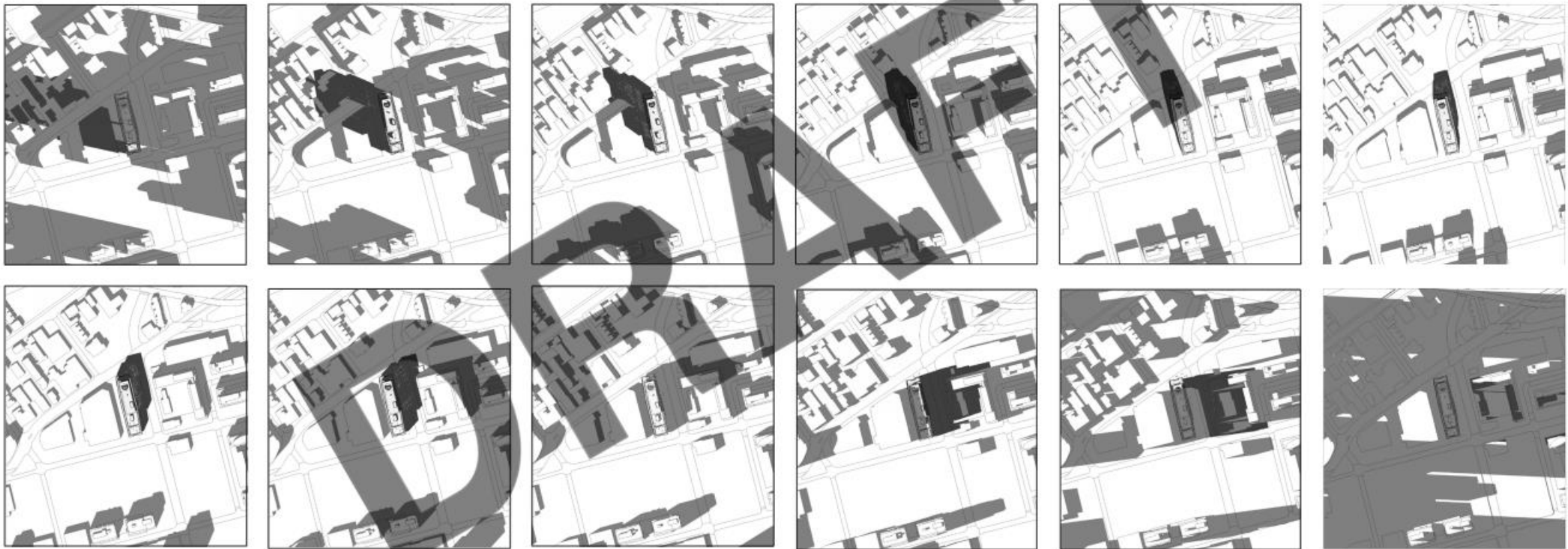
4 // DESIGN DOCUMENTATION

4.16 Shadow Studies (continued)

THE REKAI CENTRE AT CHERRY PLACE

ARCHITECT / DESIGNER: MONTGOMERY SISAM

REVIEW STAGE: STAGE 3: DETAILED DESIGN



SHADOW STUDIES – AUTUMN EQUINOX