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BUILDING

139,225 GROSS FLOOR AREA (GFA)

120.901 SF RESIDENTIAL GFA

18,324 SF RETAIL GFA

84'-10" TALL ABOVE MEAN GRADE

8 FLOORS ABOVE GRADE

BASEMENT: PARKING

FLOOR 1: RETAIL

FLOORS 2 - 8: RESIDENTIAL

120 RESIDENTIAL UNITS

VEHICLE PARKING

60 RESIDENTIAL PARKING SPACES

0.5 SPACE PER RESIDENTIAL UNIT

10 RETAIL PARKING SPACES LOCATED AT 222 JACOBS STREET (PARCEL J/K)

0.5 SPACE PER 1,000 SF (SEE APPENDIX I, NOTE d ON PAGE 108)

BICYCLE PARKING

LONG TERM TOTAL: **127** SPACES

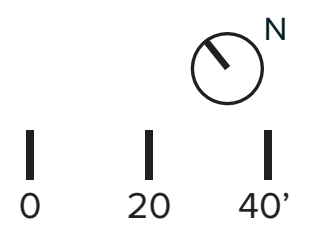
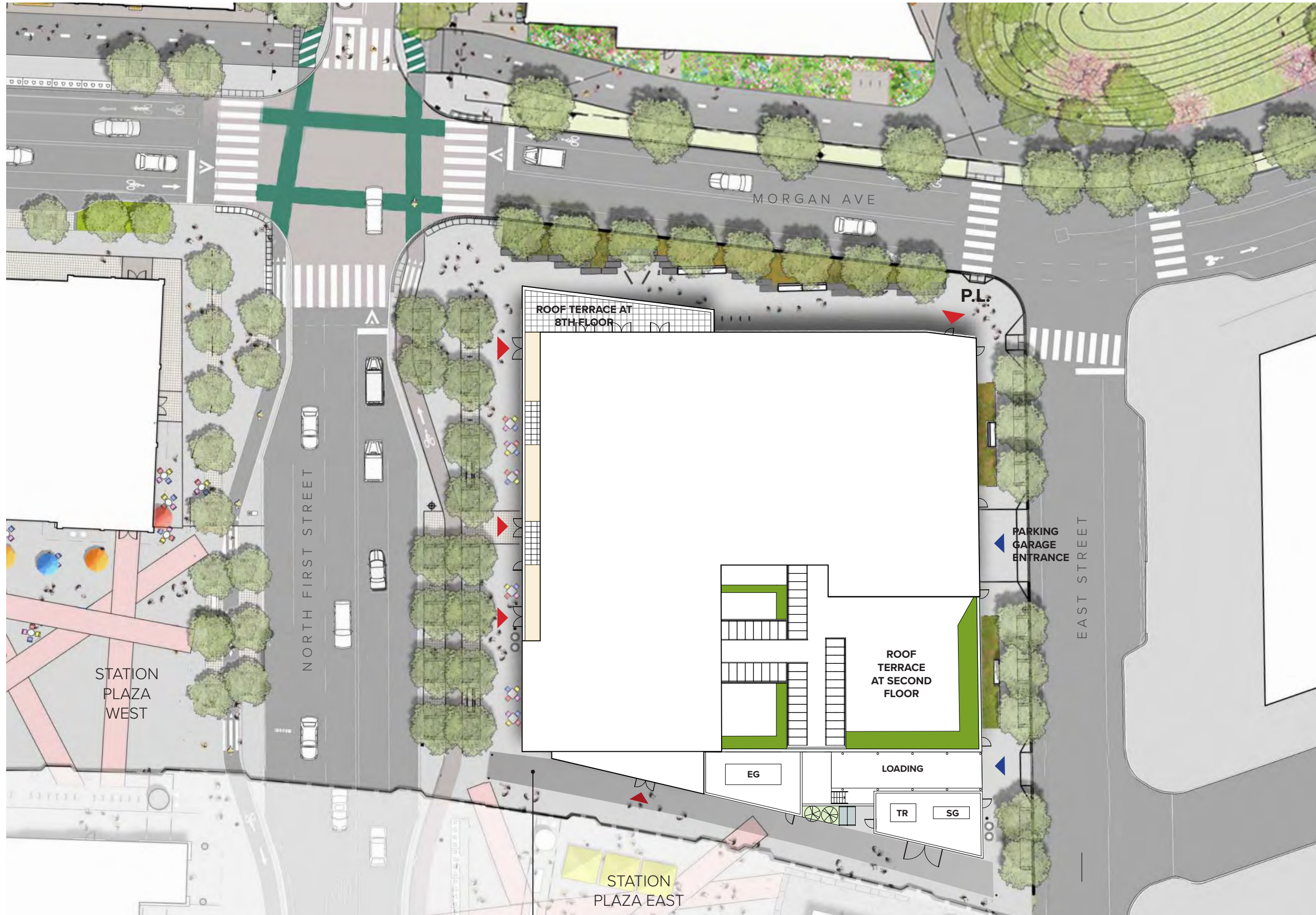
RESIDENTIAL: **125** SPACES

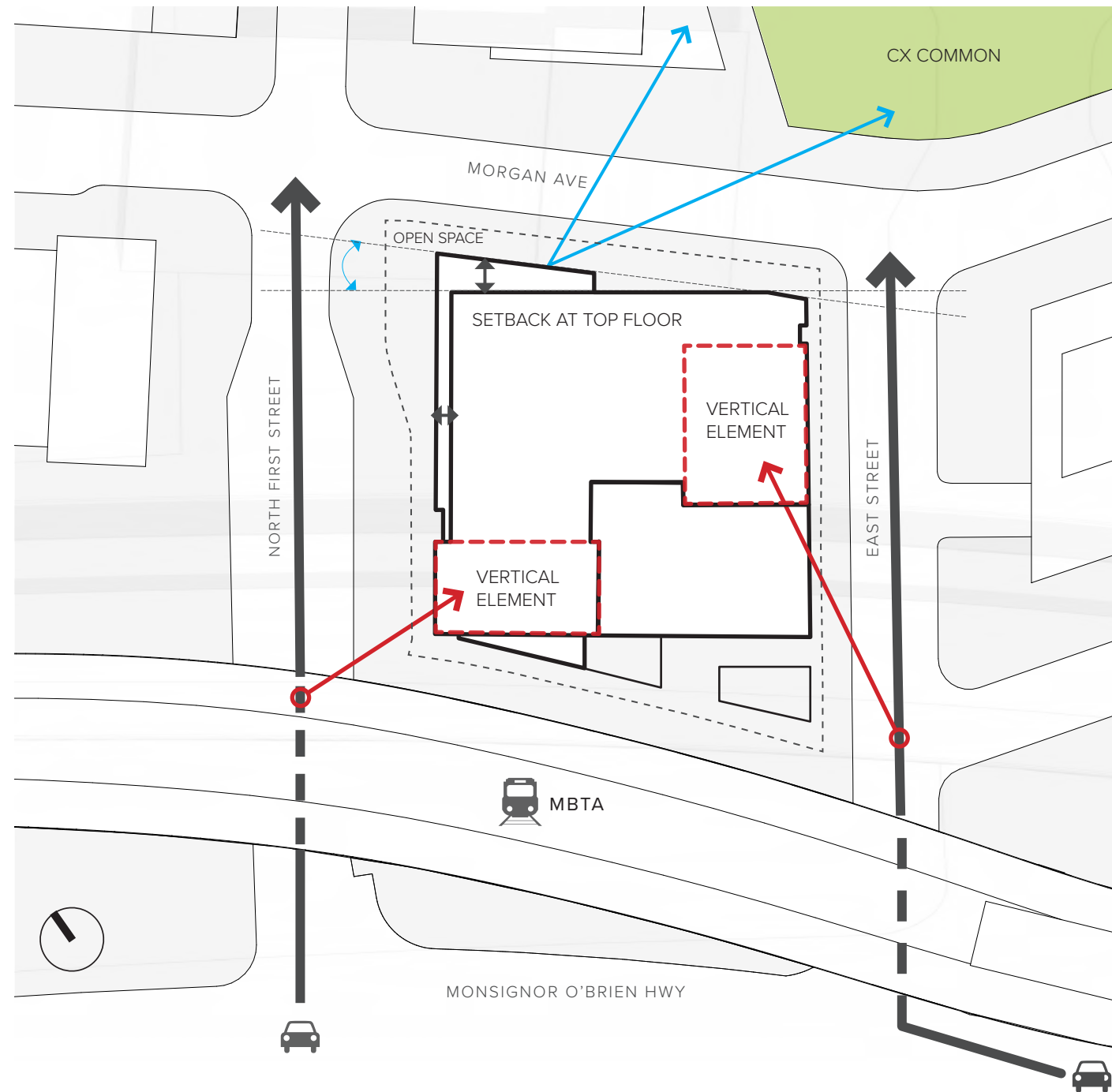
RETAIL: **2** SPACES

SHORT TERM TOTAL: **23** SPACES REQUIRED, **24** SPACES PROVIDED

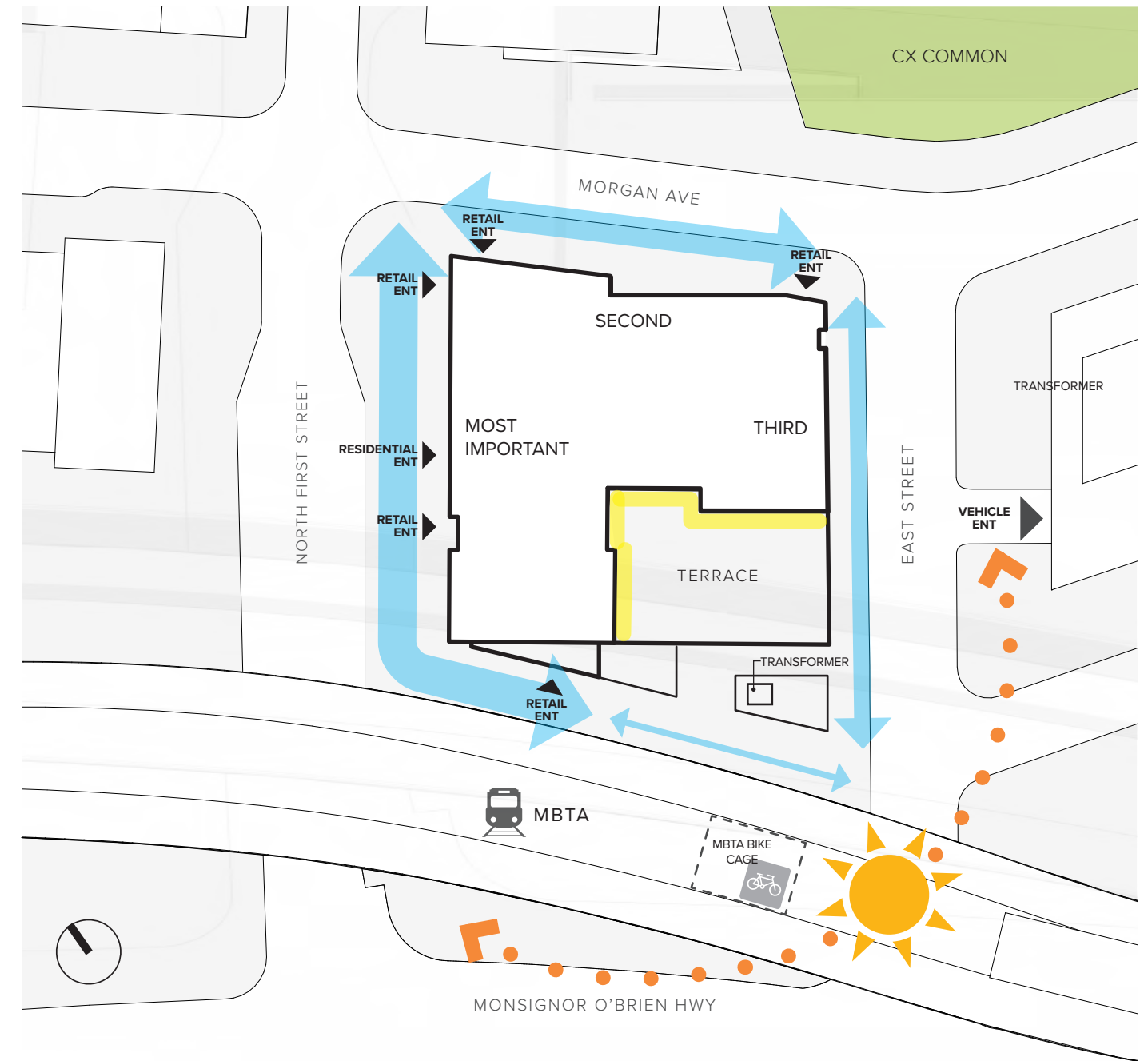
RESIDENTIAL: **12** SPACES

RETAIL: **11** SPACES





- VERTICAL ELEMENTS MARK ENTRY TO CAMBRIDGE CROSSING
- NORTH FACADE ANGLES TOWARDS CX COMMONS
- SETBACK AT TOP FLOOR BREAKS DOWN BUILDING MASSING



- BUILDING HAS NO BACK, BUT THERE IS A HIERARCHY OF "FRONTS"
- "L" SHAPED MASSING OPENS COURTYARD TO SOLAR EXPOSURE AND MOVES UNITS FURTHER FROM MBTA TRAINS





BASE / MIDDLE / TOP
ARTICULATION BREAKS
DOWN THE MASSING OF THE
BUILDING.

TOP

MIDDLE

BASE

CORNER TOWER SIGNALS
THE ENTRANCE TO
CAMBRIDGE CROSSING
DEVELOPMENT.

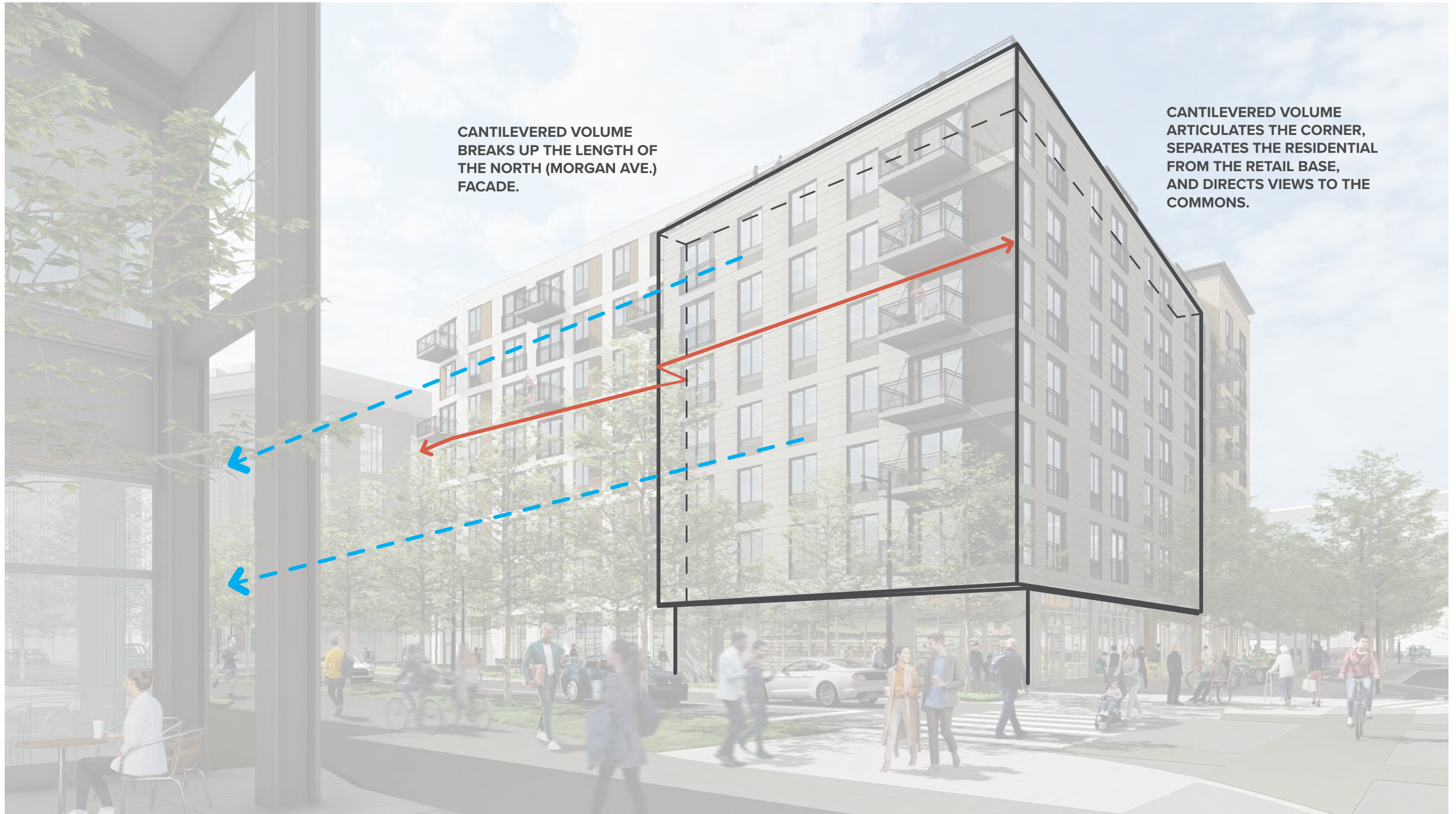
BASE EXPRESSION
CONTINUES ALONG
STATION PLAZA.











CANTILEVERED VOLUME
BREAKS UP THE LENGTH OF
THE NORTH (MORGAN AVE.)
FACADE.

CANTILEVERED VOLUME
ARTICULATES THE CORNER,
SEPARATES THE RESIDENTIAL
FROM THE RETAIL BASE,
AND DIRECTS VIEWS TO THE
COMMONS.





**ARTICULATED VOLUMES
BREAK DOWN THE SCALE
OF THE BUILDING.**

**BALCONIES PROVIDE
RESIDENTIAL SCALE AND
PROVIDE VISUAL VARIETY
WITHIN THE WHITE GRID.**







EAST TOWER SIGNALS
ENTRANCE TO CAMBRIDGE
CROSSING DEVELOPMENT.

BASE ARTICULATION
PROVIDES SMALLER SCALE
TO STATION PLAZA.

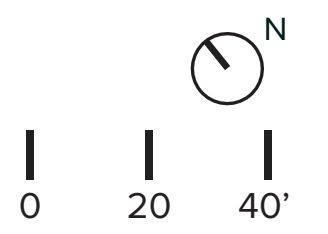
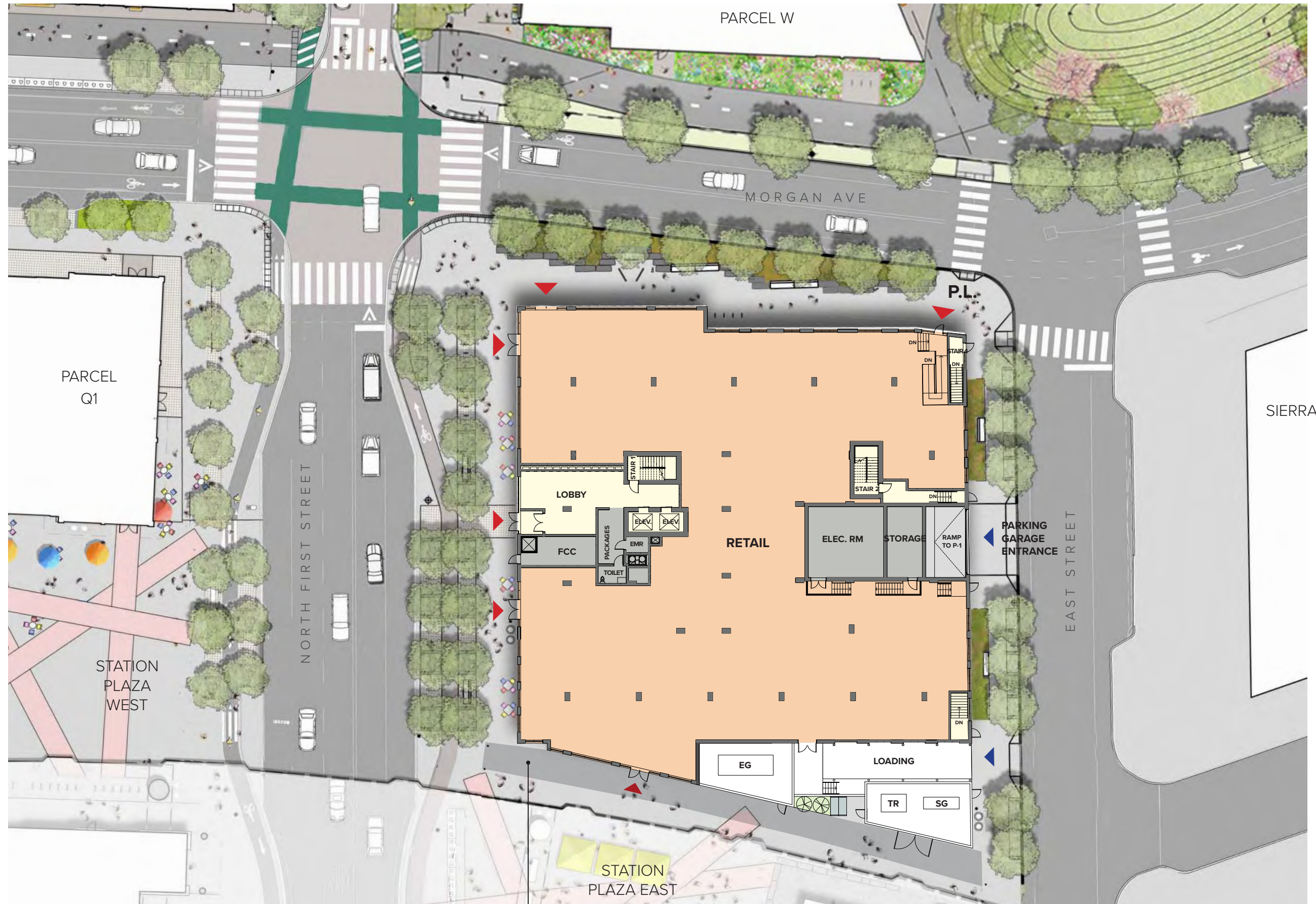












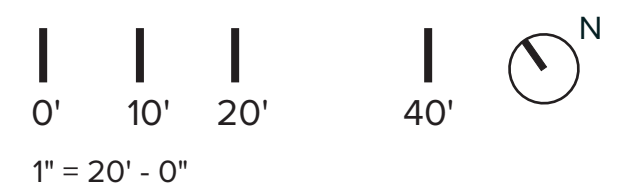
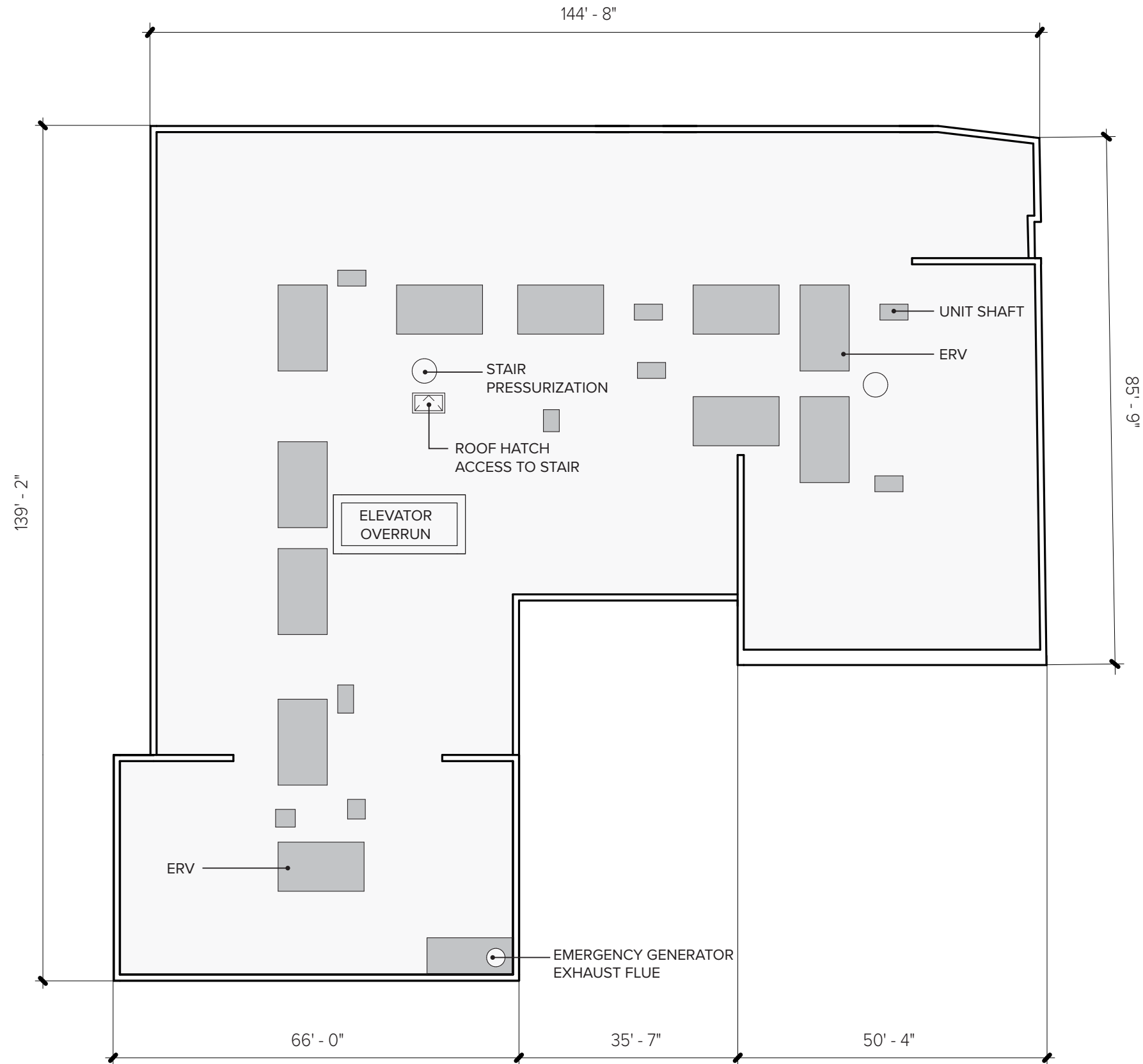


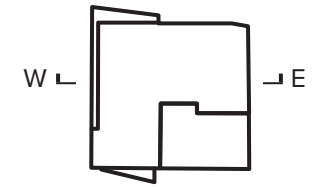
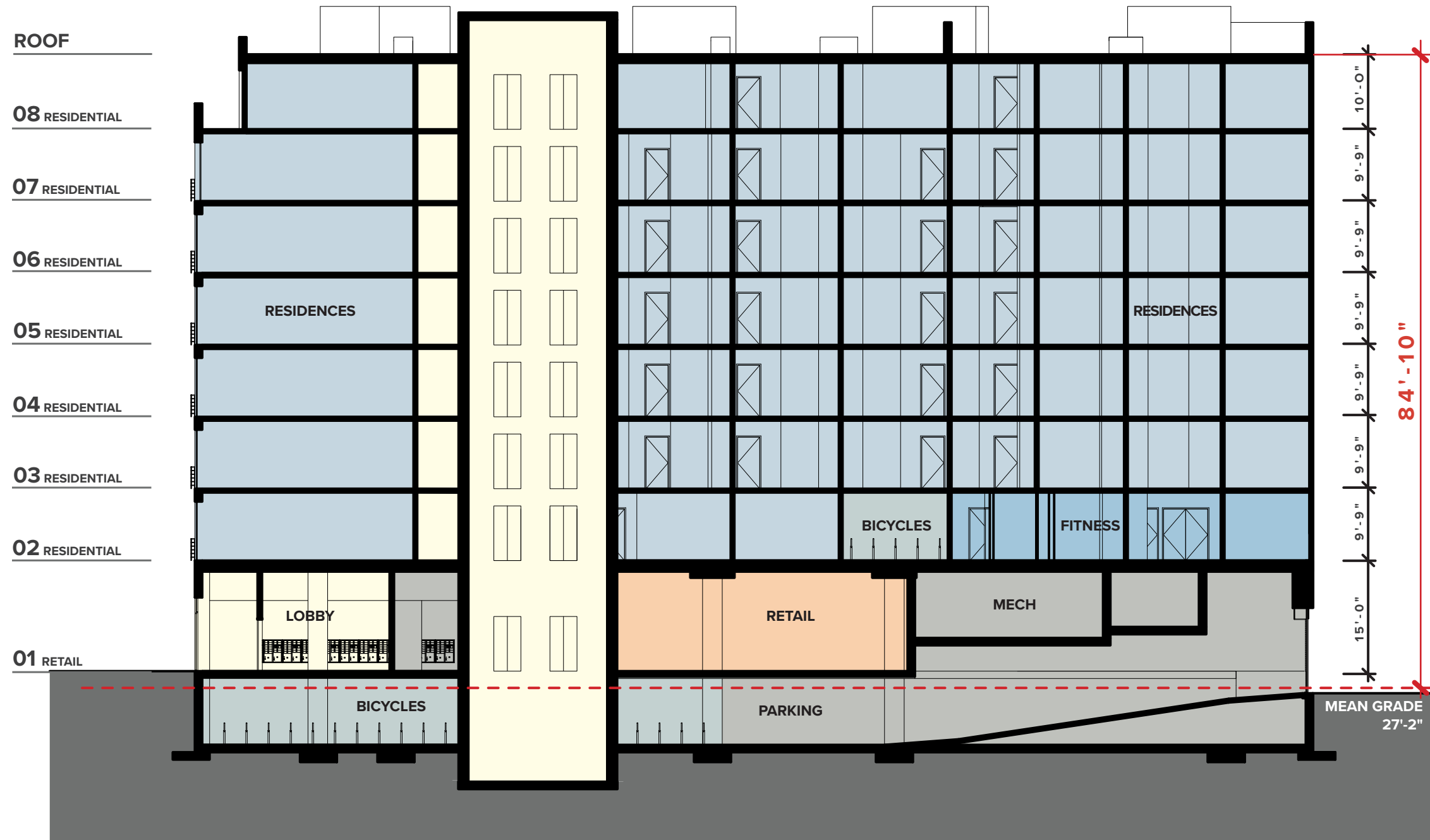




84' - 3"

















**ENLARGED ELEVATIONS AT GROUND FLOOR
NORTH | MORGAN AVENUE**

CAMBRIDGE CROSSING



EAST | EAST STREET



**ENLARGED ELEVATIONS AT GROUND FLOOR
SOUTH | STATION PLAZA EAST**

CAMBRIDGE CROSSING

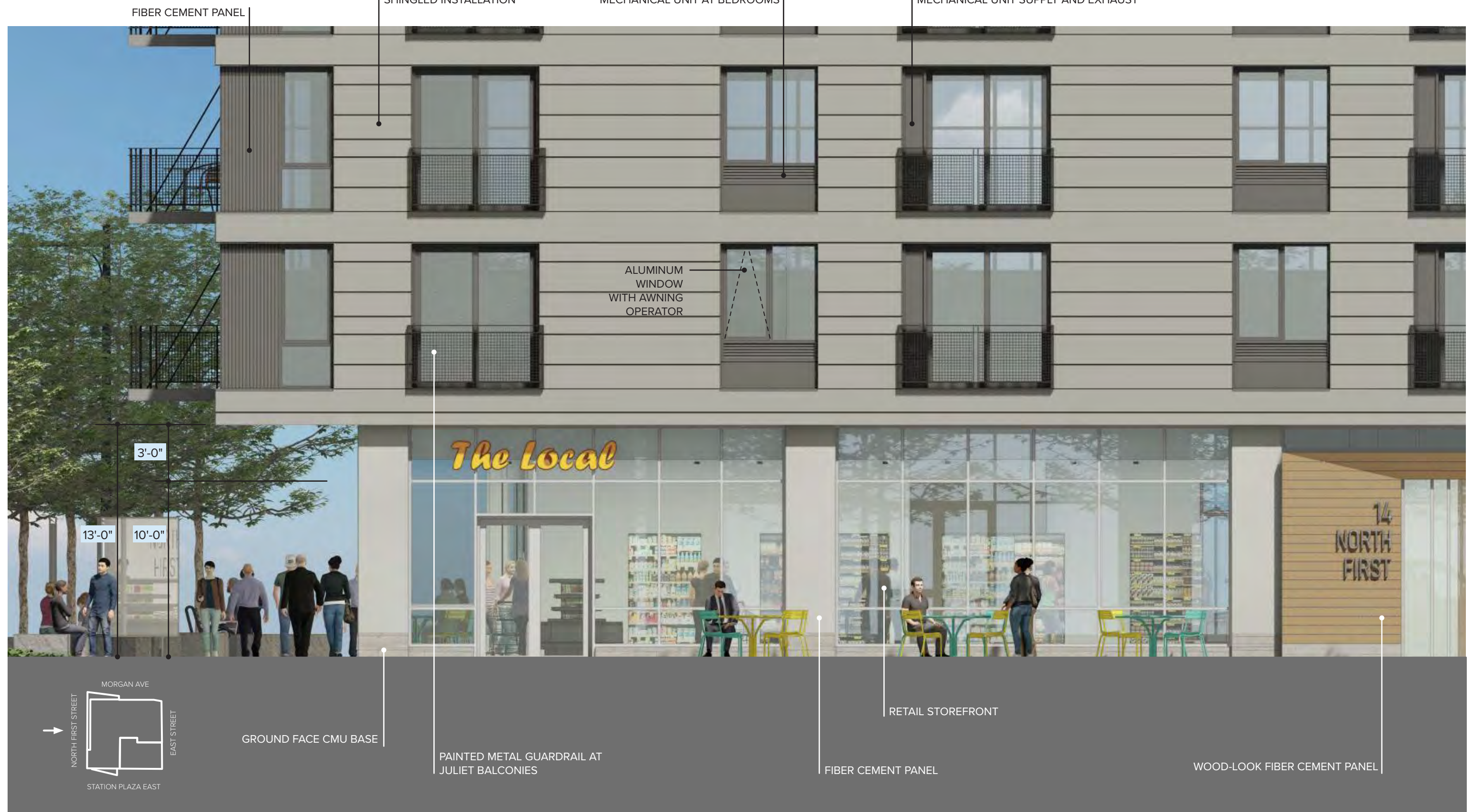


WEST | NORTH FIRST STREET



EXTERIOR DESIGN | WEST ELEVATION

CAMBRIDGE CROSSING



FIBER CEMENT PANEL

FIBER CEMENT PANEL,
SHINGLED INSTALLATION

LOUVER FOR THROUGH-WALL
MECHANICAL UNIT AT BEDROOMS

METAL PANEL INTEGRATED INTO SLIDING DOOR OPENING FOR
MECHANICAL UNIT SUPPLY AND EXHAUST

ALUMINUM
WINDOW
WITH AWNING
OPERATOR

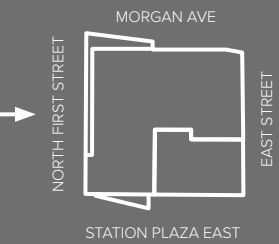
3'-0"

13'-0"

10'-0"

The Local

1/4
NORTH
FIRST



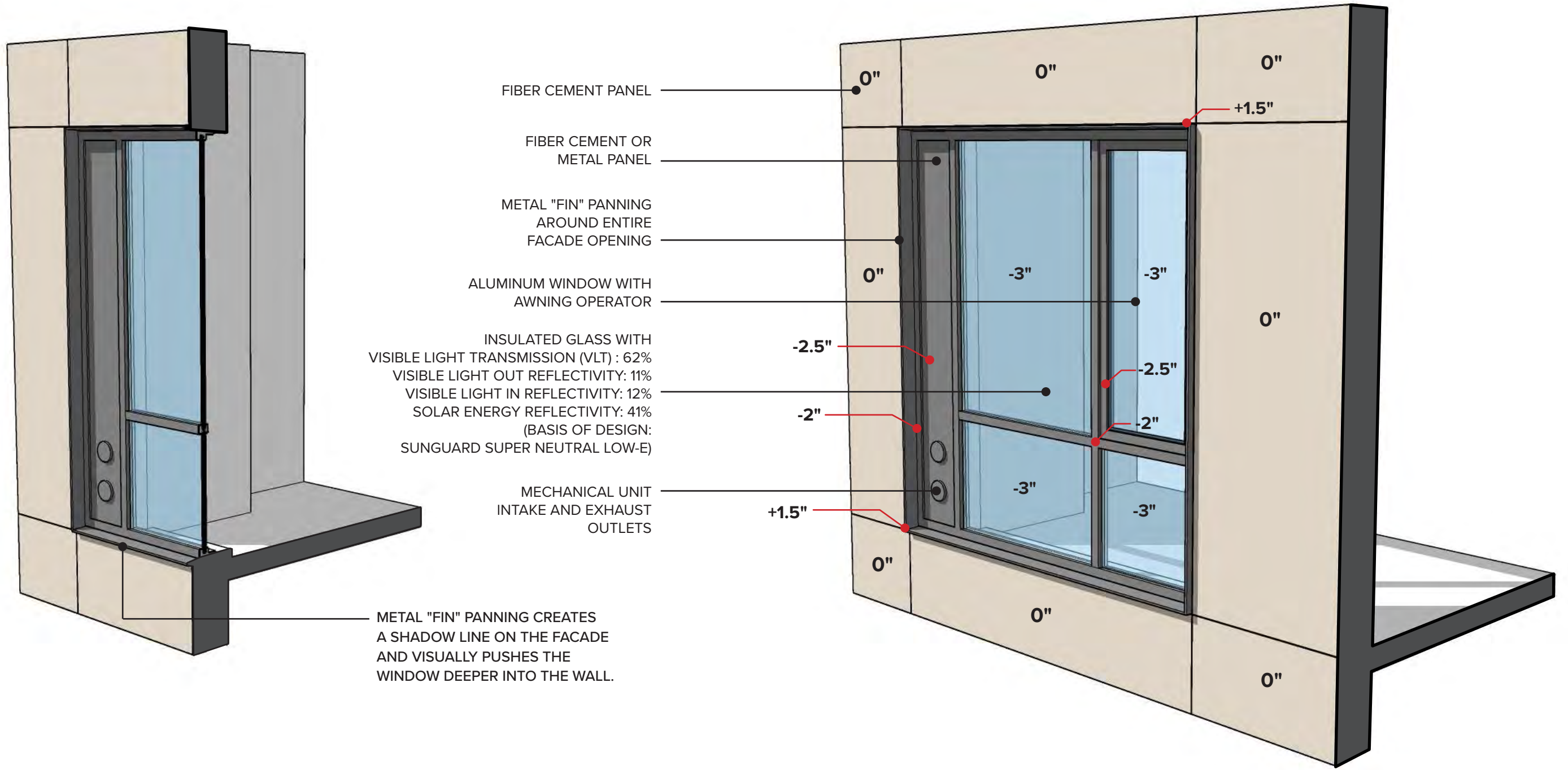
GROUND FACE CMU BASE

PAINTED METAL GUARDRAIL AT
JULIET BALCONIES

RETAIL STOREFRONT

FIBER CEMENT PANEL

WOOD-LOOK FIBER CEMENT PANEL



FIBER CEMENT PANEL

FIBER CEMENT OR METAL PANEL

METAL "FIN" PANNING AROUND ENTIRE FACADE OPENING

ALUMINUM WINDOW WITH AWNING OPERATOR

INSULATED GLASS WITH
 VISIBLE LIGHT TRANSMISSION (VLT) : 62%
 VISIBLE LIGHT OUT REFLECTIVITY: 11%
 VISIBLE LIGHT IN REFLECTIVITY: 12%
 SOLAR ENERGY REFLECTIVITY: 41%
 (BASIS OF DESIGN: SUNGUARD SUPER NEUTRAL LOW-E)

MECHANICAL UNIT INTAKE AND EXHAUST OUTLETS

METAL "FIN" PANNING CREATES A SHADOW LINE ON THE FACADE AND VISUALLY PUSHES THE WINDOW DEEPER INTO THE WALL.

SECTION

TYPICAL WINDOW OPENING

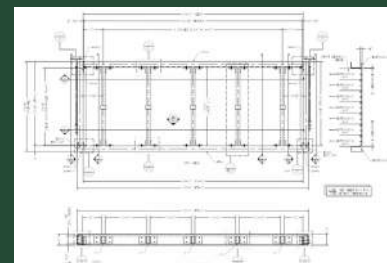


The system pictured above is an example of past custom work. Other top rail profiles and infill options are available. Speak with a Kane Innovations estimator for more details.

Prefabricated Hanging Balcony System

NOTE:
IMAGE IS FOR METAL MESH PANEL REFERENCE ONLY.
THE PROPOSED BALCONIES FOR THIS PROJECT WILL HAVE FINISHED SOFFIT PANELS UNDERNEATH.

ELEVATION



DESIGN CRITERIA

- **Top Rail:** TR-028, square, 2" tall x 2-1/8" wide
- **Posts:** 2" square
- **Infill:** 3/16" diameter woven rod mesh (2" x 2")
- **Balcony Framing:** 3" x 6" aluminum tubes
- **Balcony Joists:** 2" x 4" aluminum tubes
- **Finish:** Kane Innovations standard powder coat color meeting AAMA 2604 (AAMA 2605 available)

Guardrail Live Load Criteria

- 100 pounds per lineal foot in any direction on top of guard.
- 50 pounds applied horizontally over area equal to 1 foot square of intermediate rails, balusters and panel filler including openings and space between rails.
- Concentrated load and uniform loads need not to be assumed to act concurrently.



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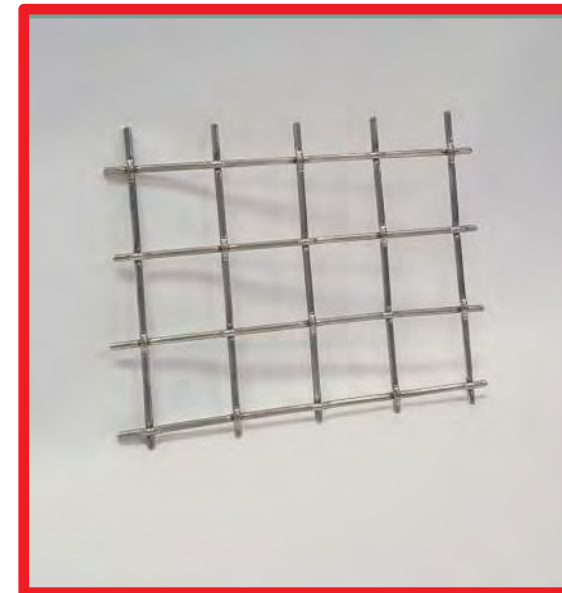


Wire Mesh Railing Infill Options



3" Wide x 1" Tall
3/16" Diameter Rod

PROPOSED



2" Wide x 2" Tall
3/16" Diameter Rod



1" Wide x 1" Tall
3/16" Diameter Rod



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Swiss Pearl, www.swisspearl.com/references



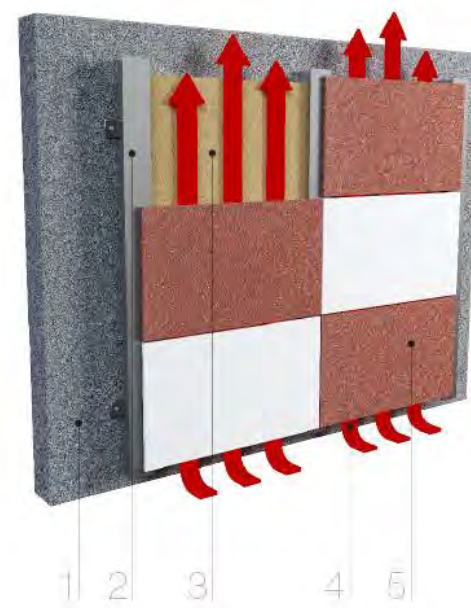
Rear Ventilation System Maximum longevity to exterior cladding

Providing considerable energy savings for any building, the environmentally friendly ventilated facade system and Swisspearl fiber cement panels are not only a good contribution to climate protection, they also offer a great opportunity to enhance the durability, appearance and value of a building.

All Swisspearl panels are specially designed for rainscreen cladding applications with rear ventilation. Combined with each other, they become the most reliable system from the technical construction viewpoint. This cladding system effectively protects the building and its structure from the elements for a long time. Furthermore, it reduces humidity and the air circulation optimizes the efficiency of insulation. Therefore, there will be no problem with mold, fungi, etc. The rot-resistant and non-combustible panels are extremely durable and virtually maintenance free – an attractive solution with many advantages."

Maximum longevity to exterior cladding The five main components

The typical rainscreen system is based on natural rear ventilation. It is most reliable, sustainable and provides maximum longevity to exterior cladding. Ventilating facade systems consist of five main components:



1. Support structure

The exterior wall of a building is mainly made of concrete, CMU blocks, brickwork, steel or timber frame with studs and planked by gypsum boards.

2. Sub frame

Swisspearl facade panels are installed on timber or metal supports.

3. Thermal insulation layer

The advantage of an exterior thermal insulation is to keep the entire building structure at a constant temperature and to minimize thermal bridges and thus reduce the loss of energy to a minimum. Economical as well as ecological advantages result.

4. Ventilated cavity

The main task of the air cavity is the evacuation of moisture and excess heat. Thanks to the pressure difference between bottom and top, the air circulation occurs naturally.

5. Swisspearl Cladding

The outer skin of the building envelope has two main functions; to be aesthetically pleasing as well as protecting against influences from climate and environment.



NORTH ELEVATION | MORGAN AVENUE



EAST ELEVATION | EAST STREET

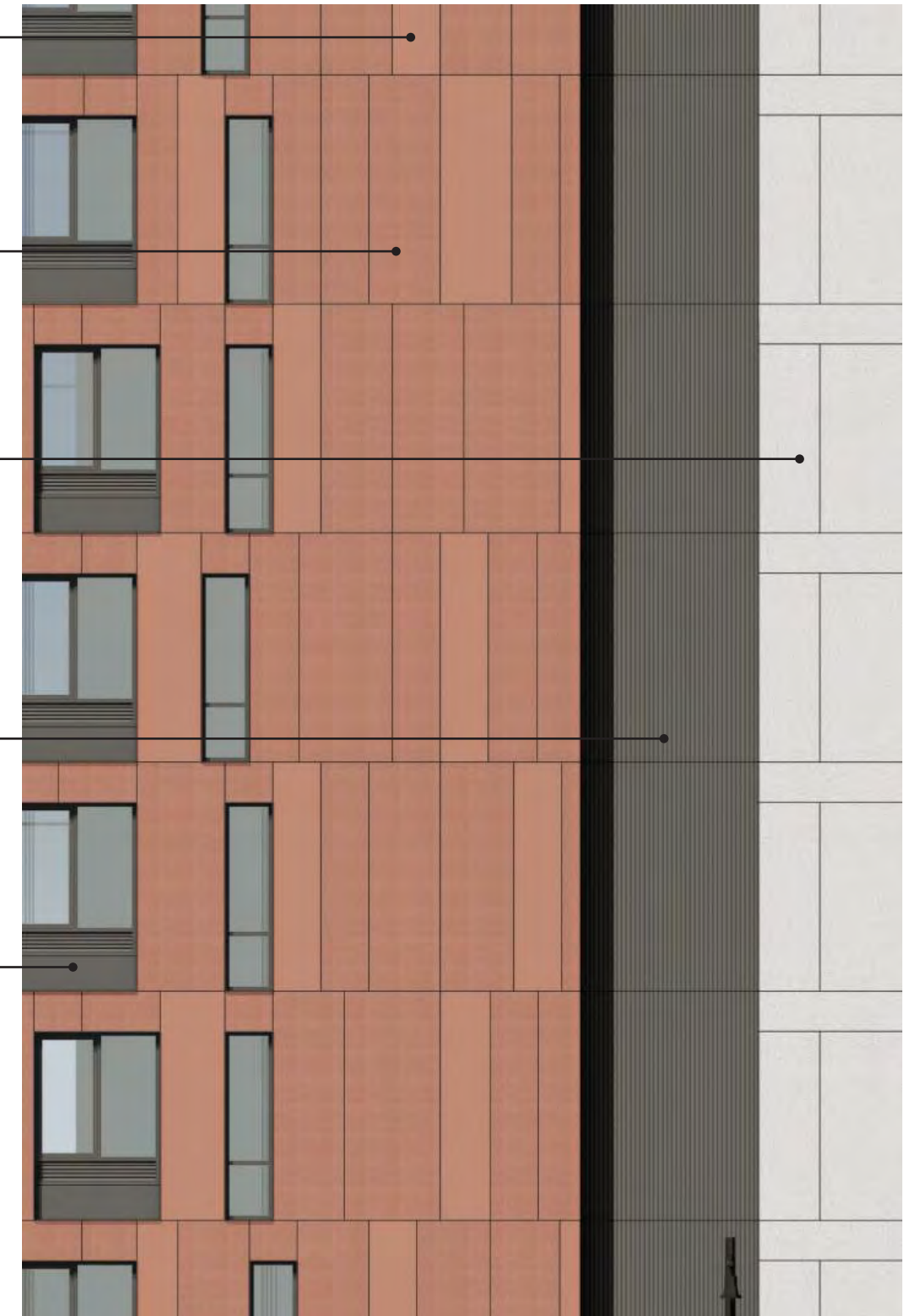


WEST ELEVATION | NORTH FIRST STREET

SOUTH ELEVATION | STATION PLAZA EAST



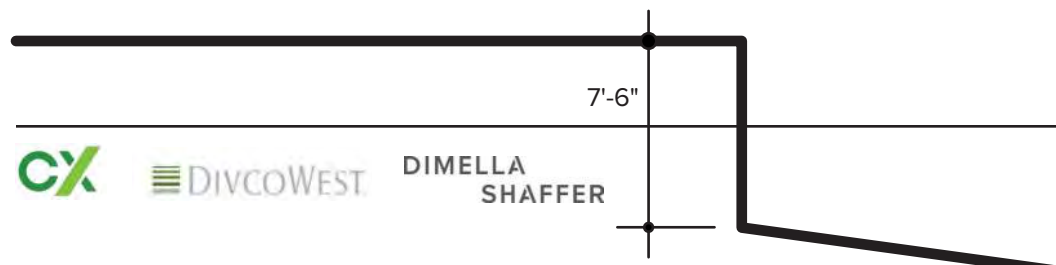
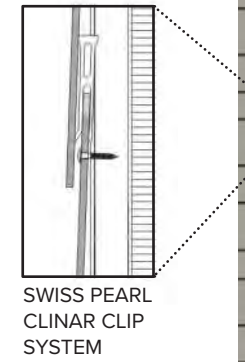
EAST ELEVATION | EAST STREET

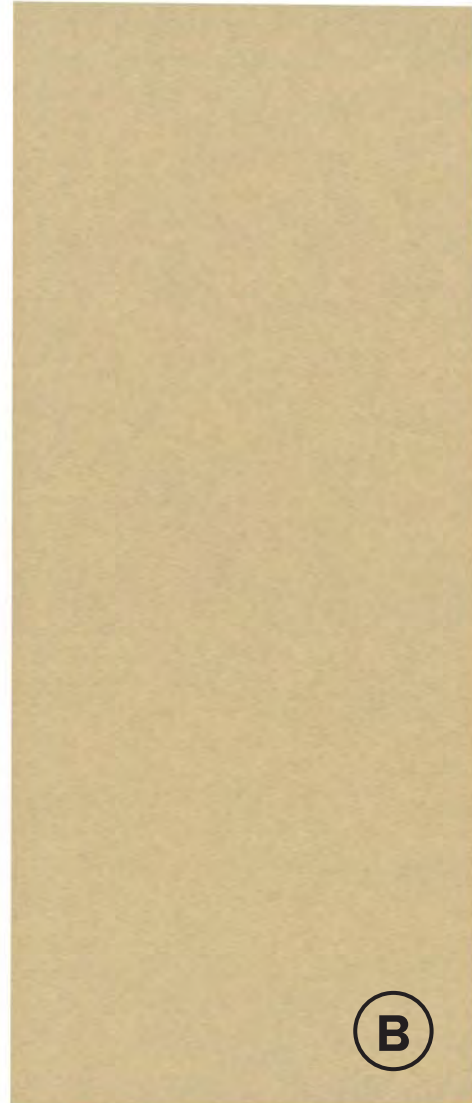


NORTH ELEVATION | MORGAN AVE



WEST ELEVATION | NORTH FIRST STREET





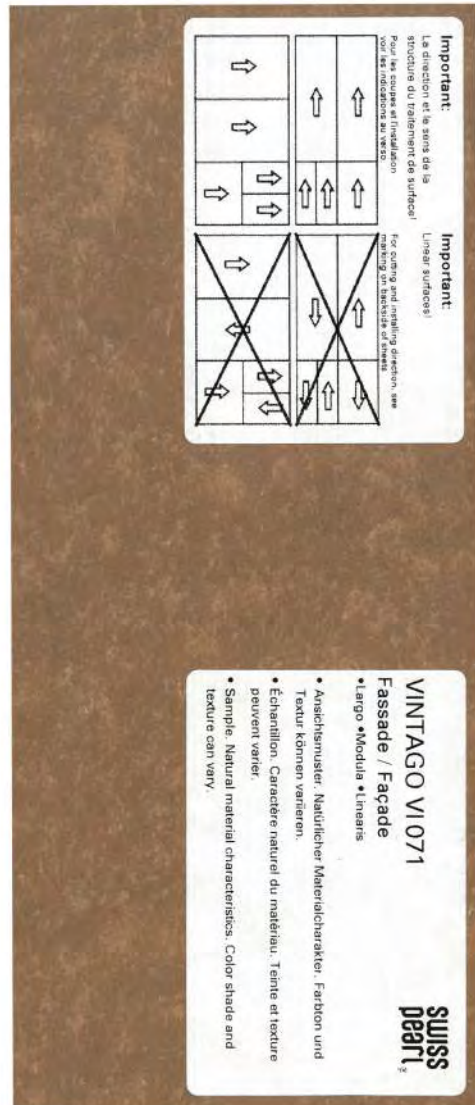


WINDOW FINISH: DARK BRONZE

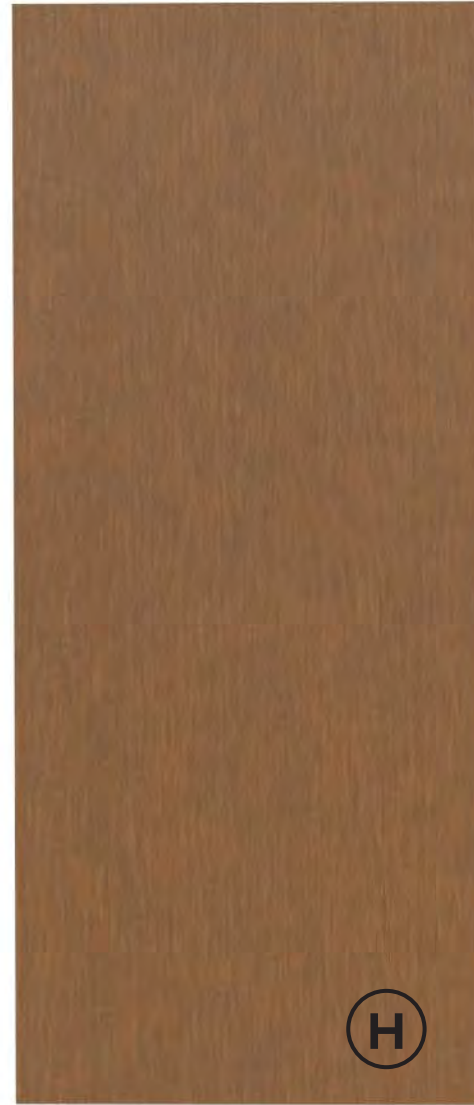




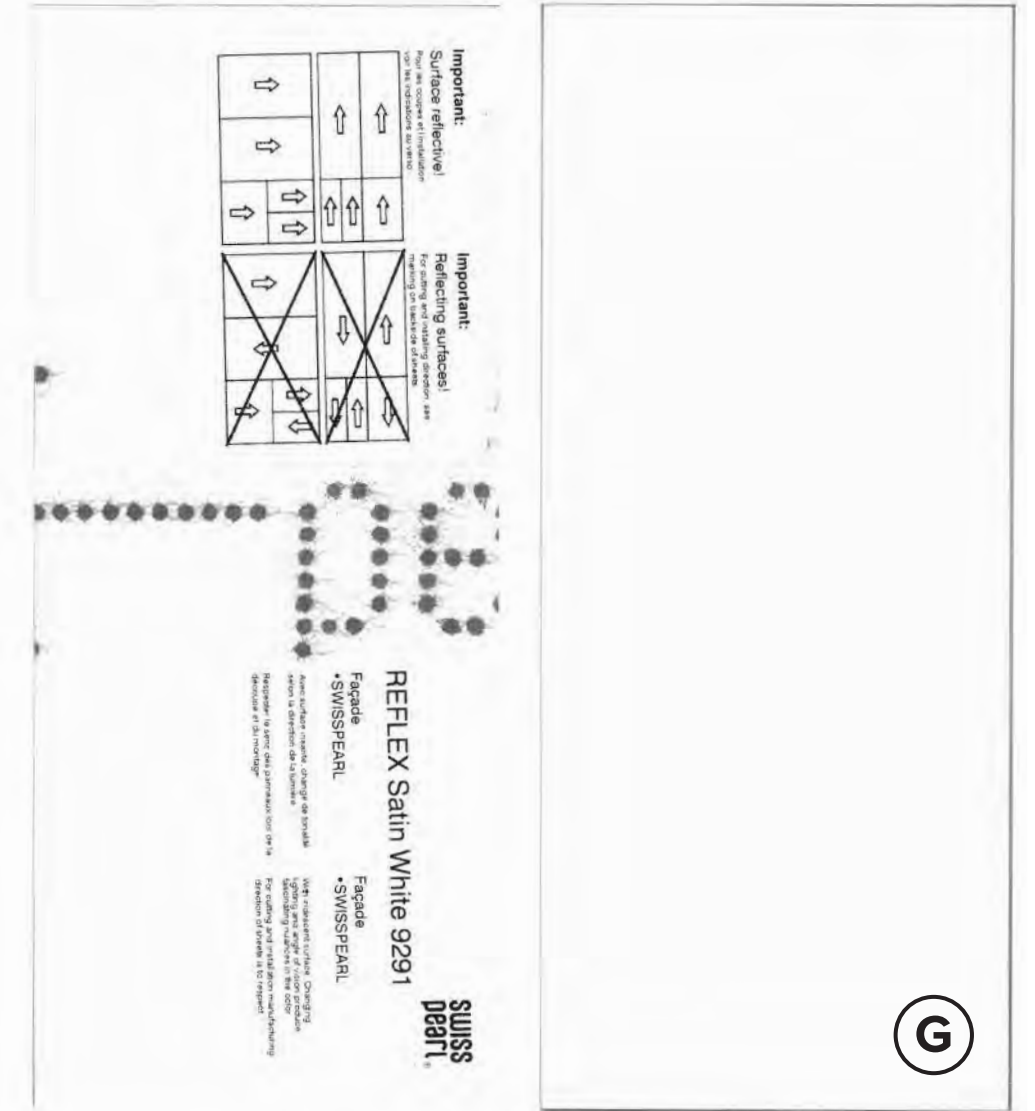
BALCONY METAL & GUARD RAIL FINISH: DARK BRONZE



I



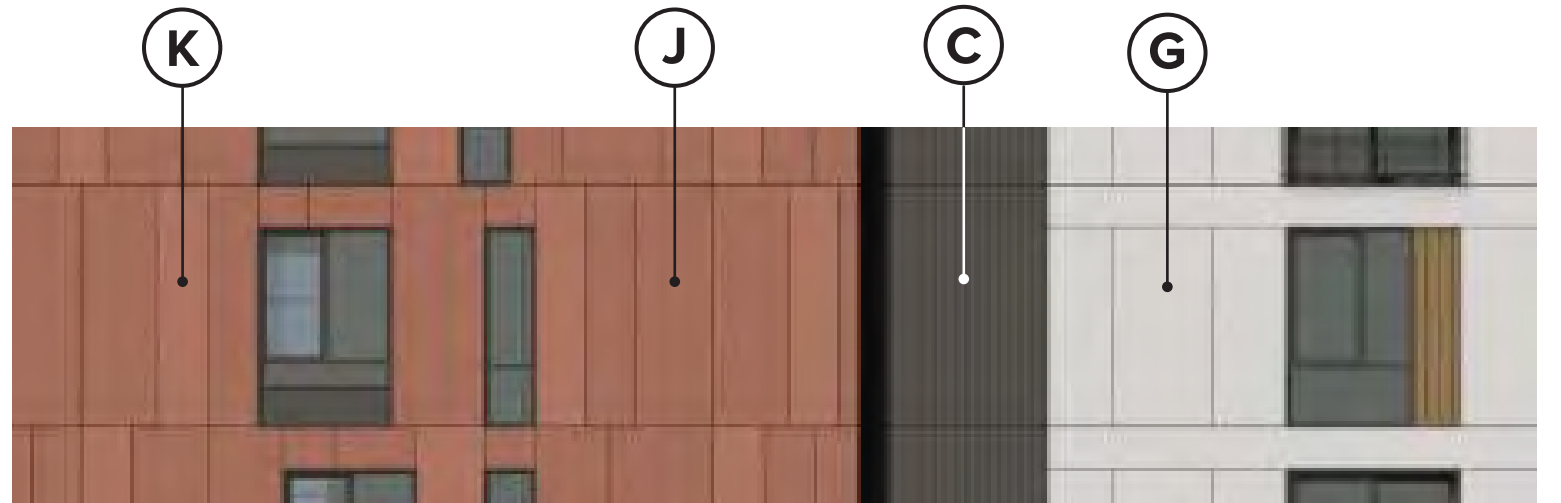
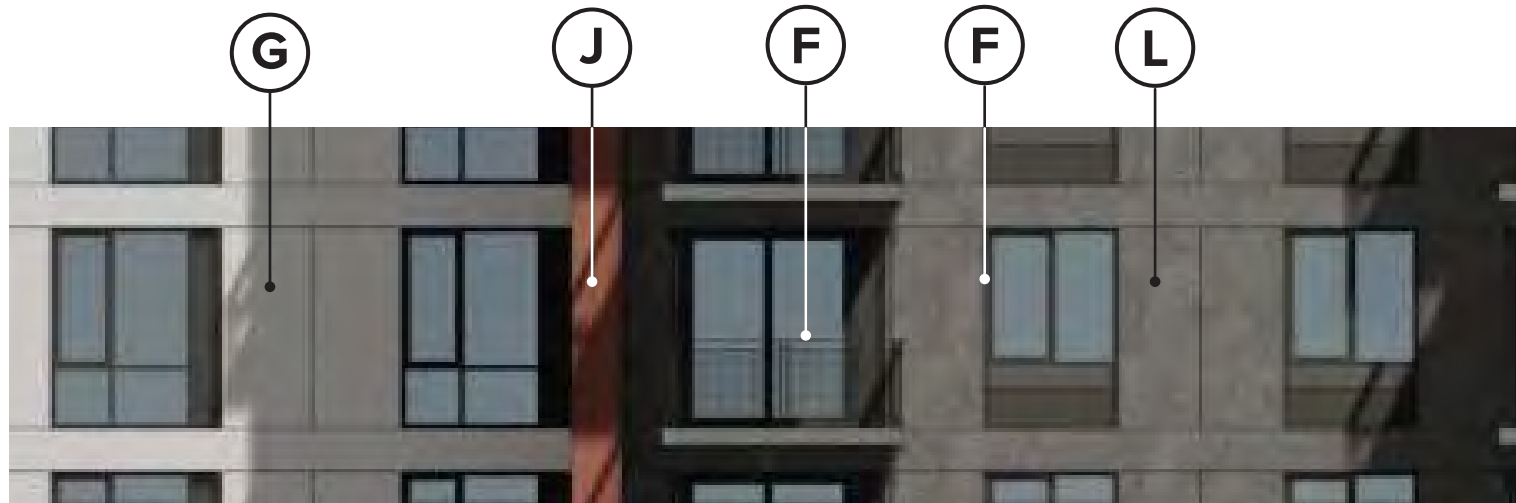
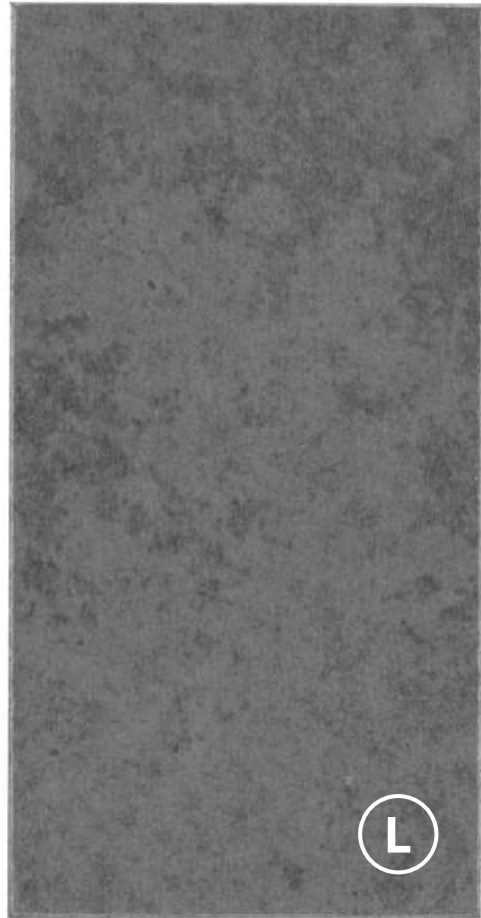
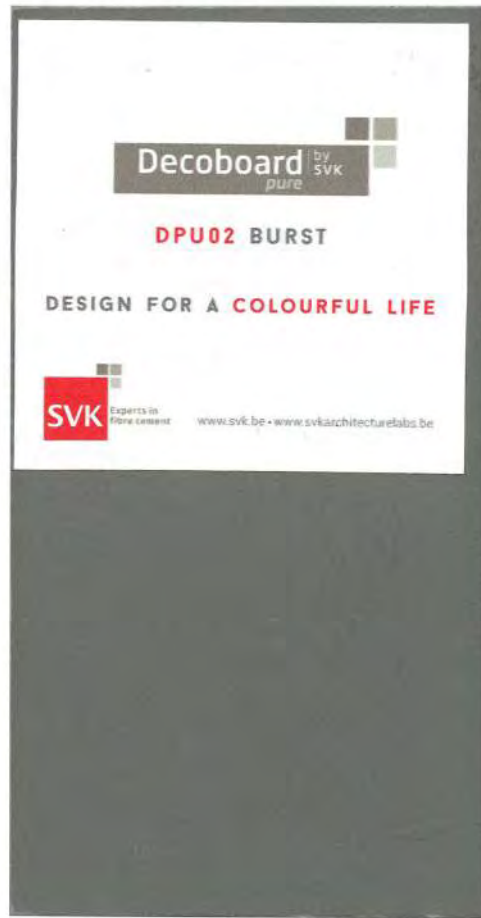
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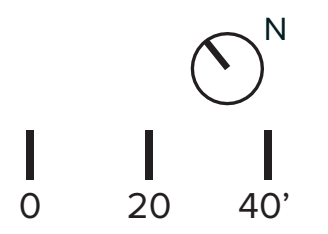
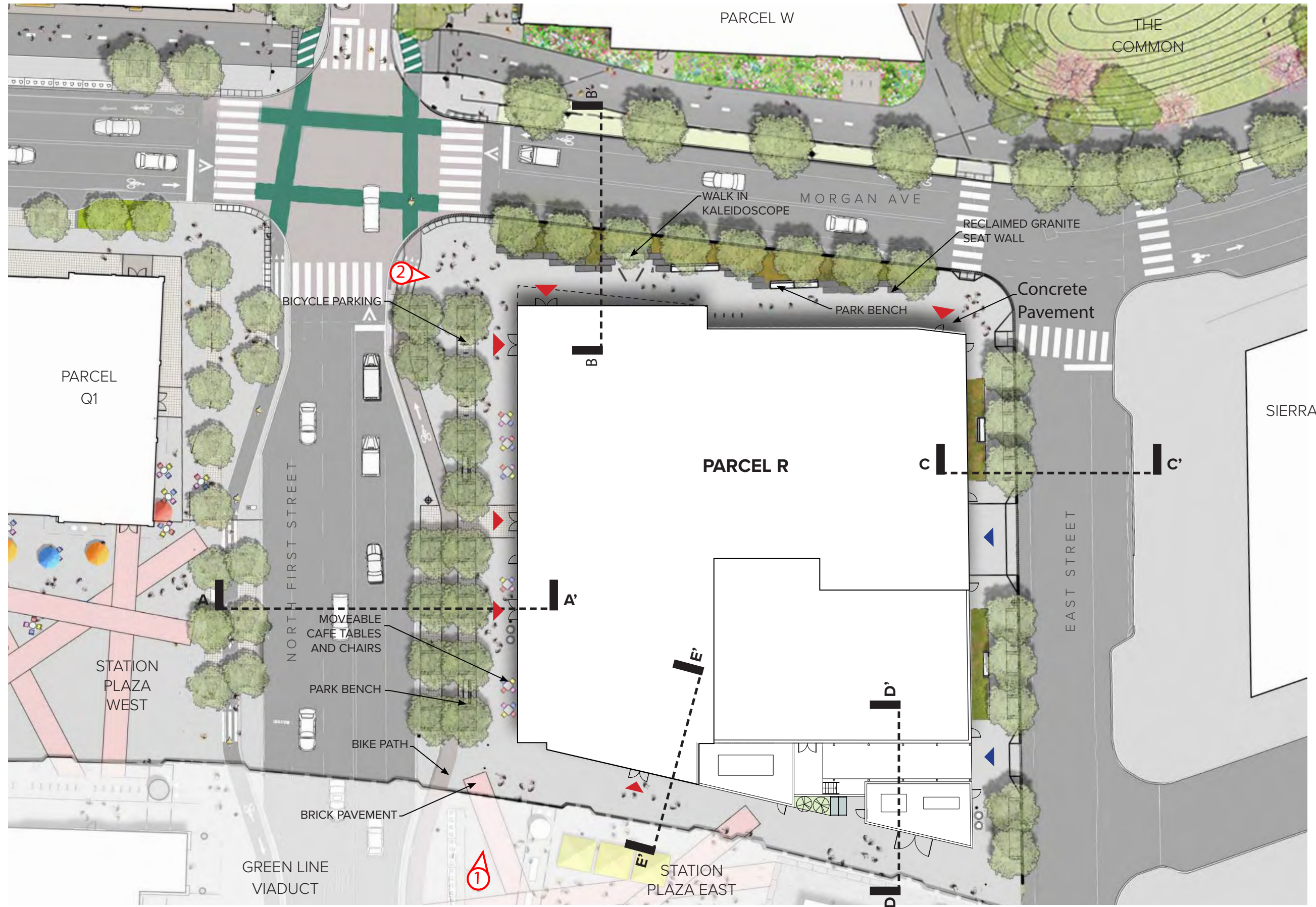
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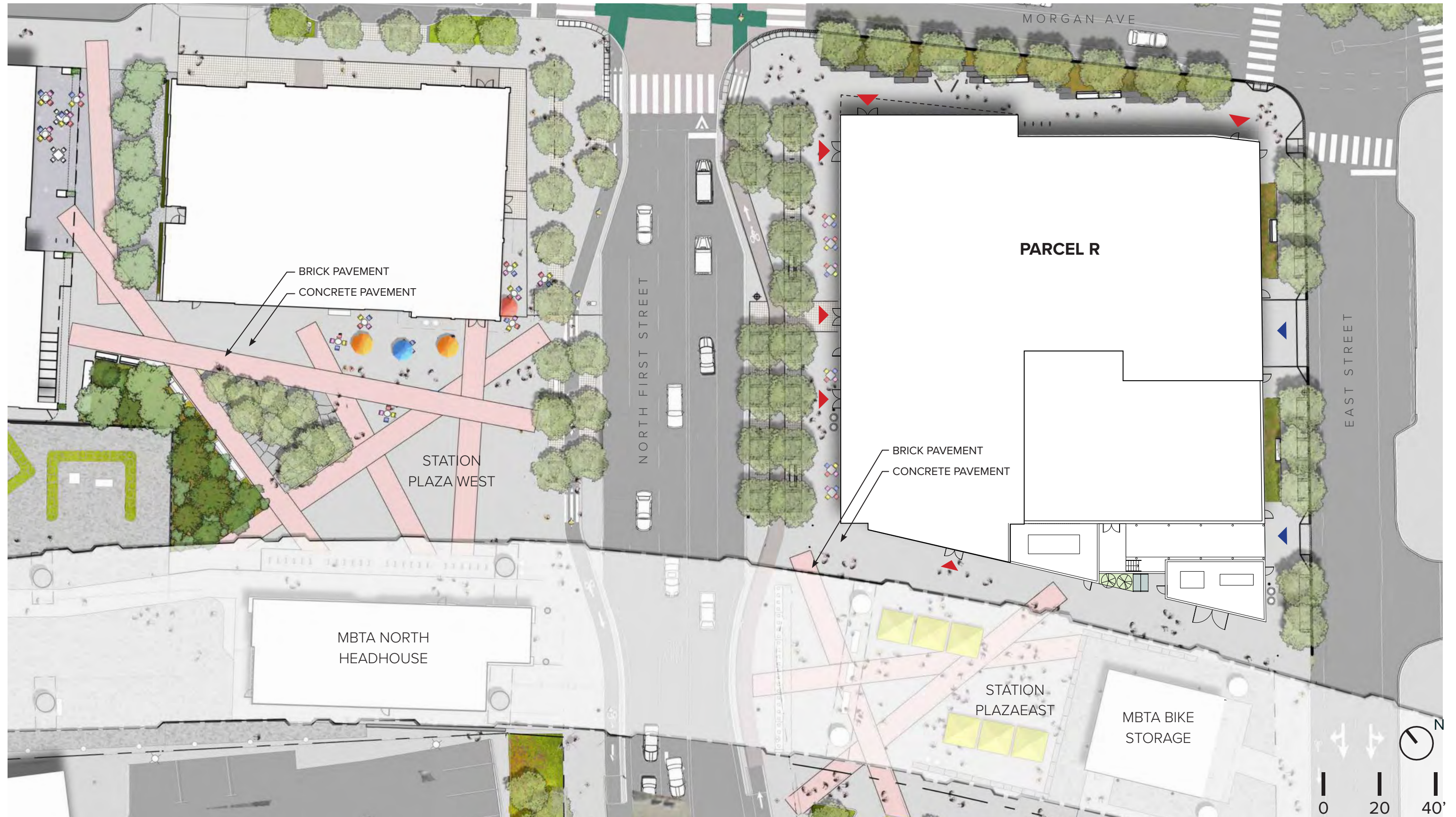


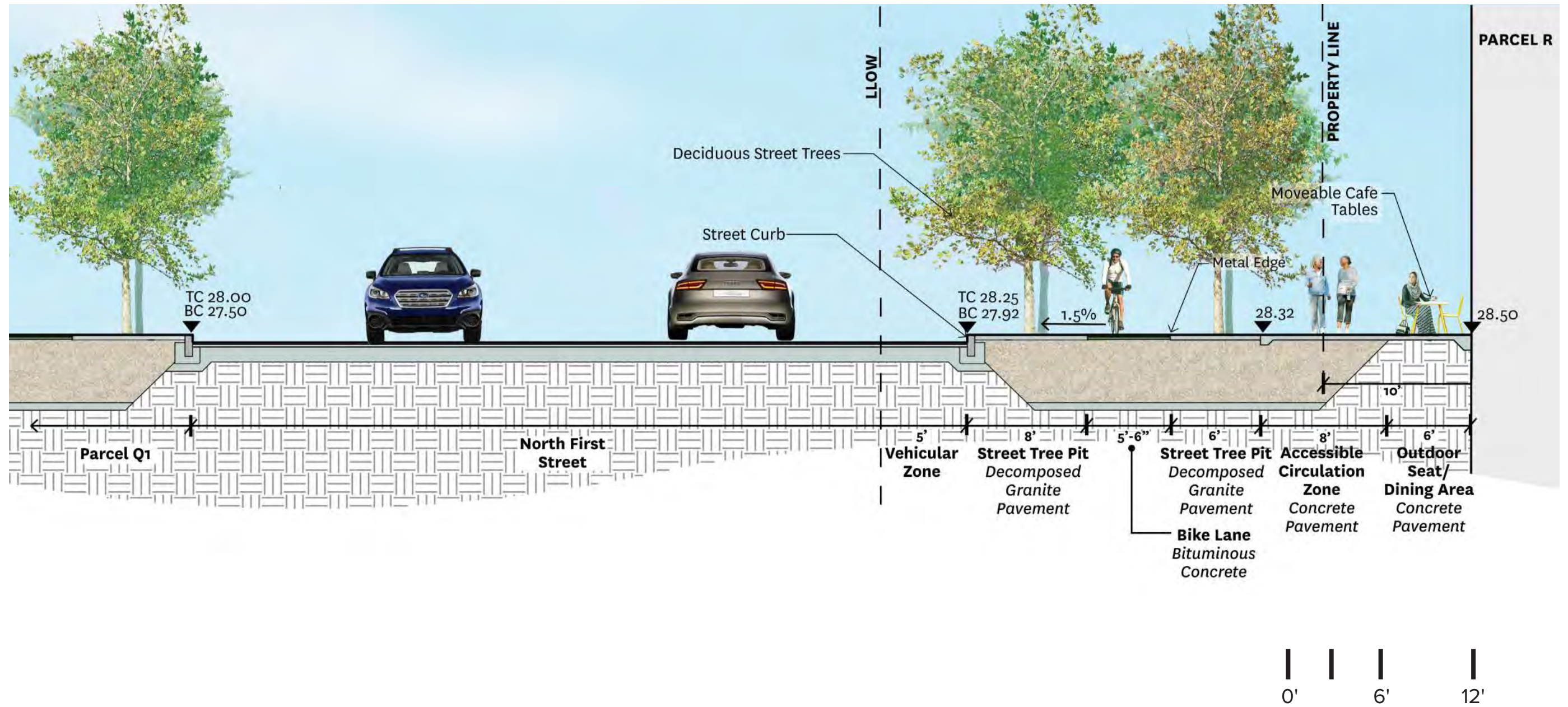
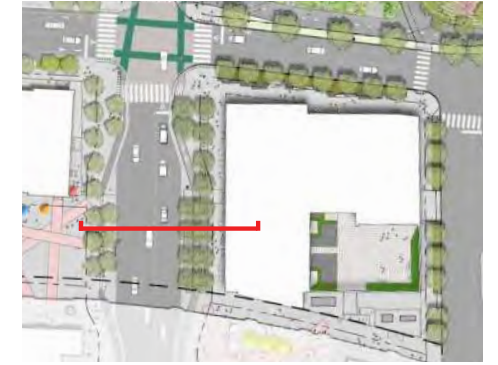


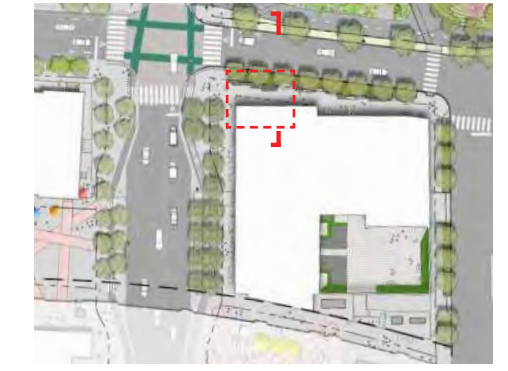
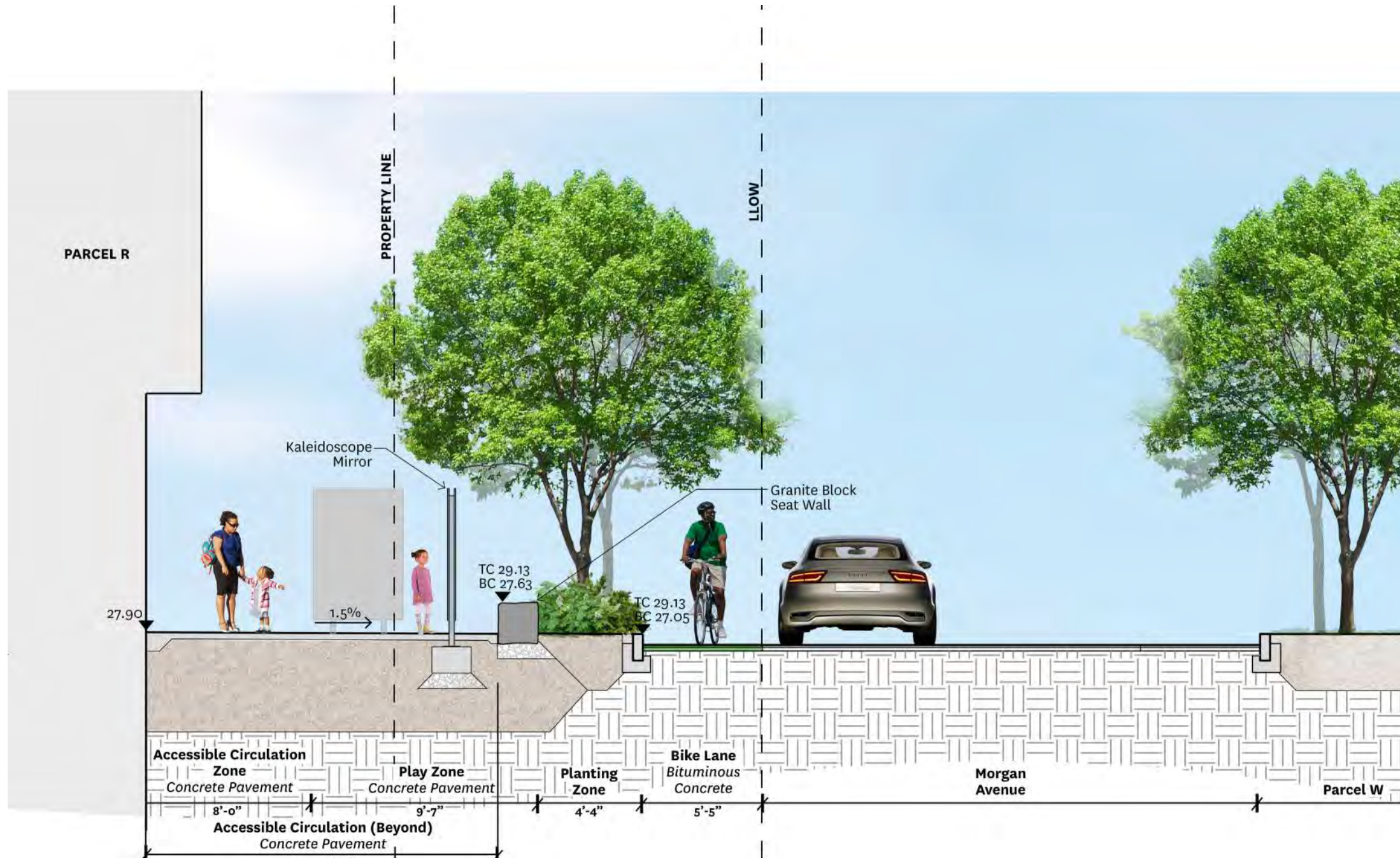
All program elements in this view are within a 5 minute walk from the Parcel R building.





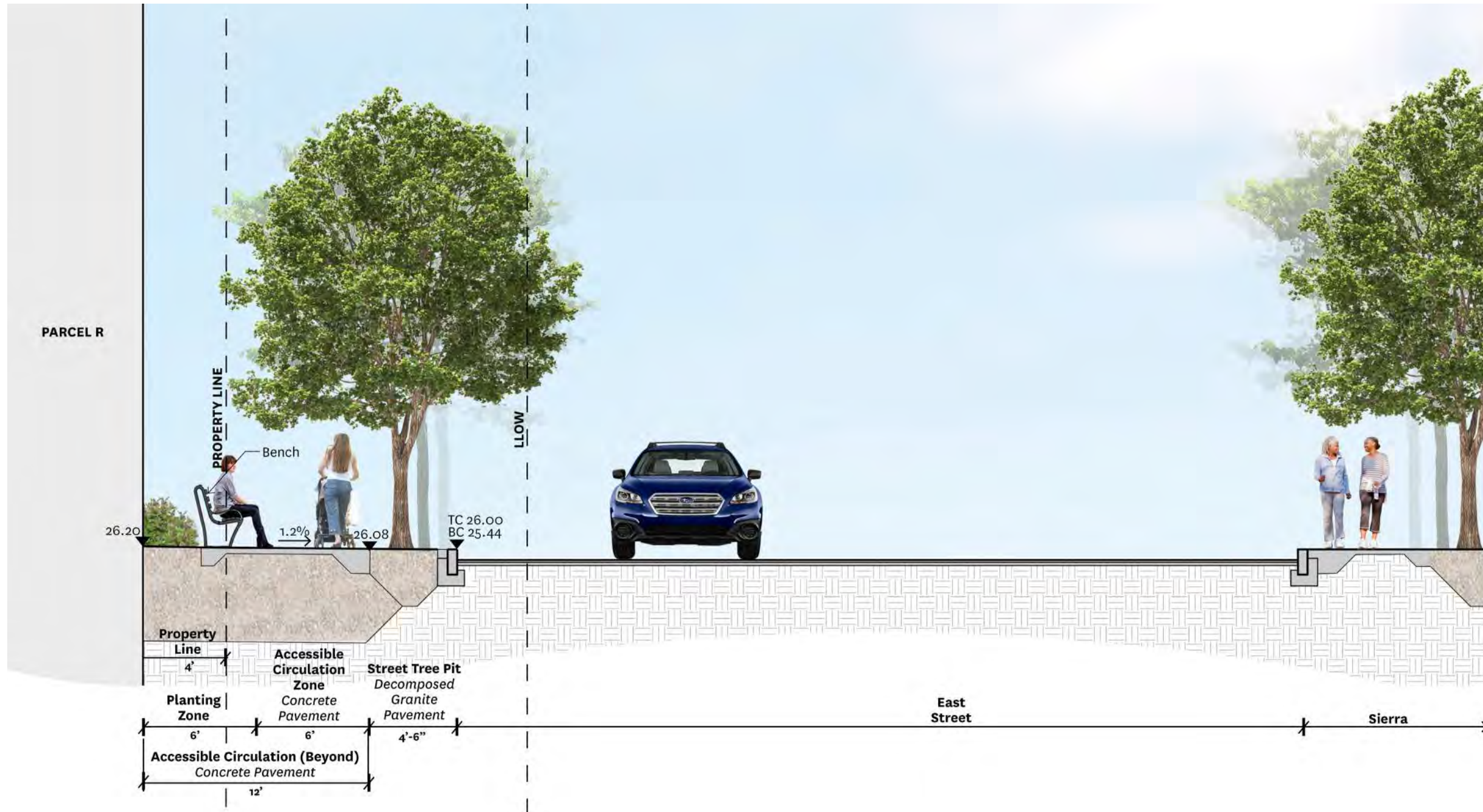


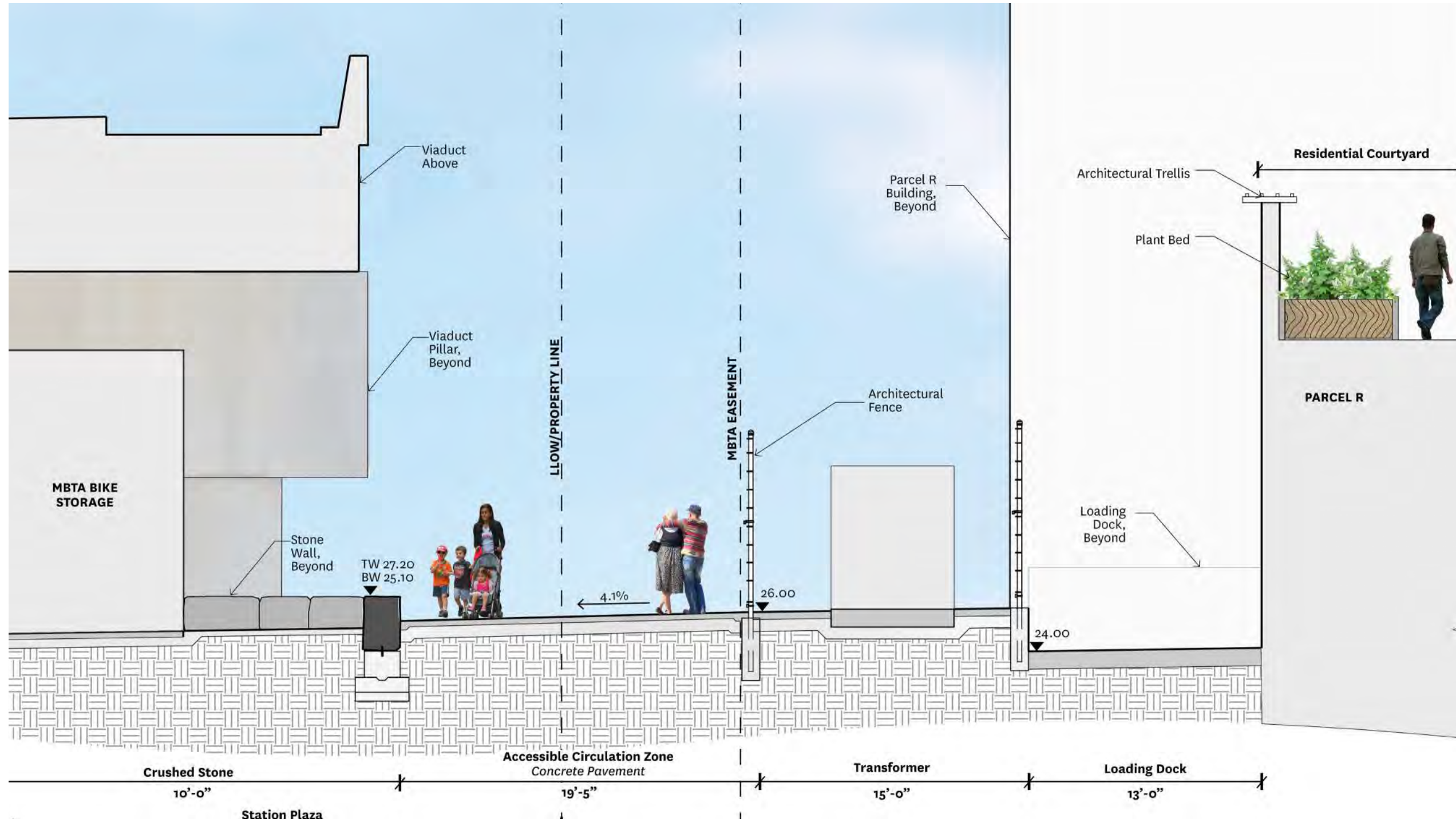


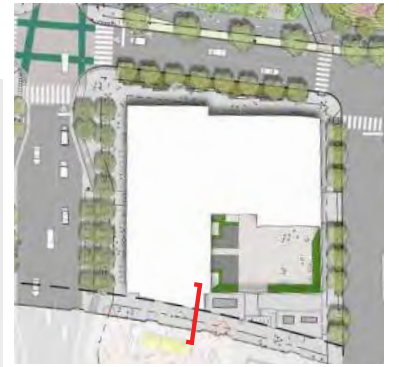
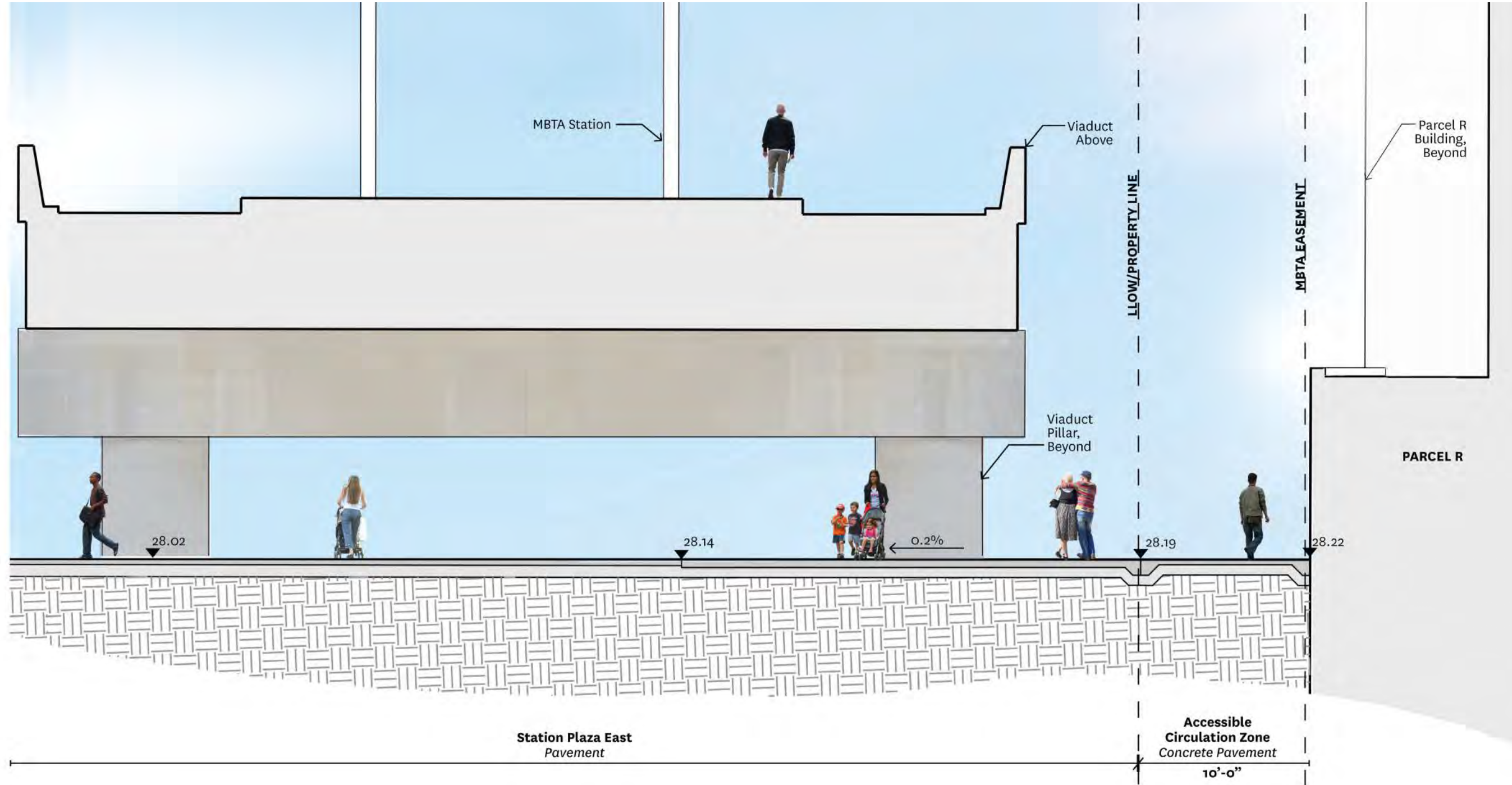


- TALK TUBE
- KALEIDOSCOPE MIRROR GROUPING
- MIRRORED SURFACES











Rendered image is intended for landscape and plaza design review. As a result of the proposed landscape density, views of the building design may be obscured.



Rendered image is intended for landscape and plaza design review. As a result of the proposed landscape density, views of the building design may be obscured.

SITE LIGHTING DIAGRAM

CAMBRIDGE CROSSING



LP-S: Street Light Pole



LP-P: Pedestrian Scale Light Pole

SITE FURNISHINGS



STONE SETTS PAVEMENT



DECOMPOSED GRANITE PAVEMENT



CONCRETE PAVEMENT



BRICK PAVEMENT



BICYCLE RACK



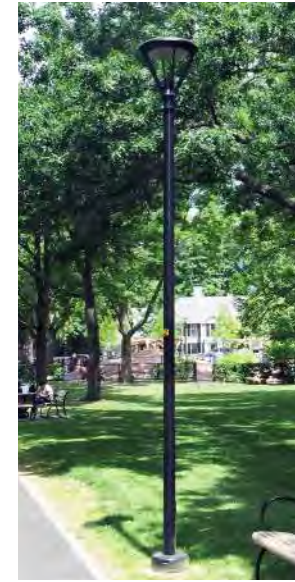
TRASH RECEPTACLE



ASH URN



LIGHT POLE - STREET



LIGHT POLE - PEDESTRIAN



PLANT BED RAIL



BENCH



BACKLESS BENCH



MOVABLE TABLES AND CHAIRS



KALEIDOSCOPE MIRRORS



TALK TUBE

STREET AND LANDSCAPE TREES

CAMBRIDGE CROSSING



CELTIS OCCIDENTALIS
HACKBERRY



GINKGO BILOBA
GINKGO



GYMNOCLADUS DIOICUS
KENTUCKY COFFEE TREE "ESPRESSO"



TILIA CORDATA
LITTLELEAF LINDEN



ULMUS 'MORTON GLOSSY'
'TRIUMP' ELM



GLEDITSIA TRIACANTHOS VAR. IN-
ERMIS HONEY LOCUST "SKYLINE"



THUJA OCCIDENTALIS
AMERICAN ARBORVITAE



PICEA ABIES 'CUPRESSINA'
NORWAY SPRUCE



ACER RUBRUM 'ARMSTRONG'
ARMSTRONG RED MAPLE



OSTRYA VIRGINIANA
HOP HORNBEAM**



AMELANCHIER CANADENSIS
SERVICEBERRY



HALESIA CAROLINA
COMMON SILVERBELL

ALL TREES ARE INCLUDED IN THE CITY OF CAMBRIDGE RECOMMENDED SPECIES LIST.

** TREES INCLUDED IN THE ADDITIONAL RECOMMENDED LIST FROM URBAN FOREST MASTER PLAN

SHRUBS, VINES, AND GROUNDCOVER

CAMBRIDGE CROSSING



KALMIA LATIFOLIA
MOUNTAIN LAUREL



HAMAMELIS X INTERMEDIA 'ARNOLD PROMISE'
WITCH HAZEL



HYDRANGEA QUERCIFOLIA
OAKLEAF HYDRANGEA



ILEX GLABRA
INKBERRY



ILEX VERTICILLATA
WINTERBERRY HOLLY



RHODODENDRON 'DELAWARE VALLEY WHITE'
DELAWARE VALLEY WHITE AZALEA



CEANOTHUS AMERICANUS
NEW JERSEY TEA



COMPTONIA PEREGRINA
SWEET FERN



FOTHERGILLA GARDENIA
DWARF FOTHERGILLA



LIRIOPE MUSCARI
LILY TURF



HEDERA HELIX
ENGLISH IVY



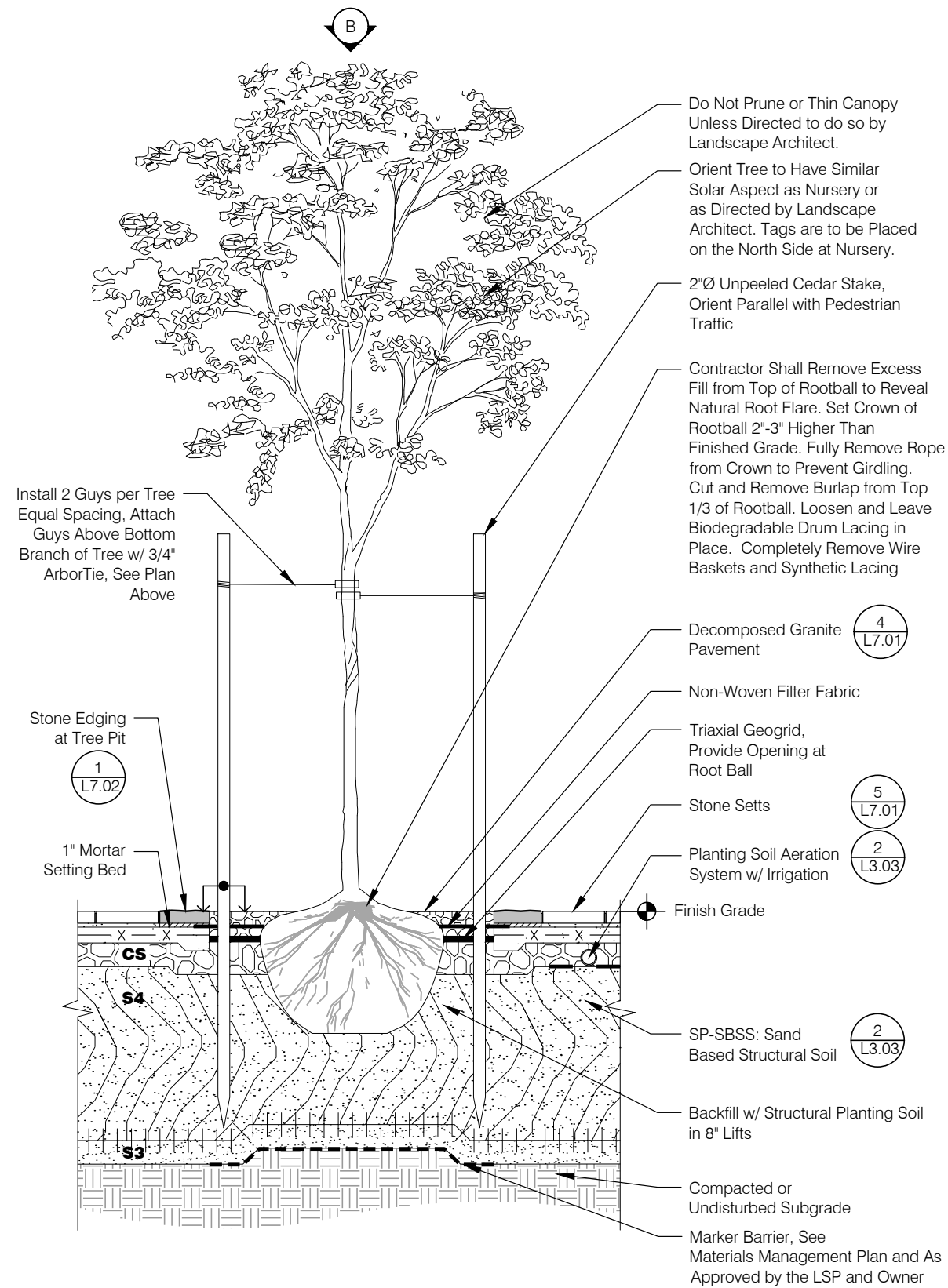
WISTERIA FLORIBUNDA
JAPANESE WISTERIA



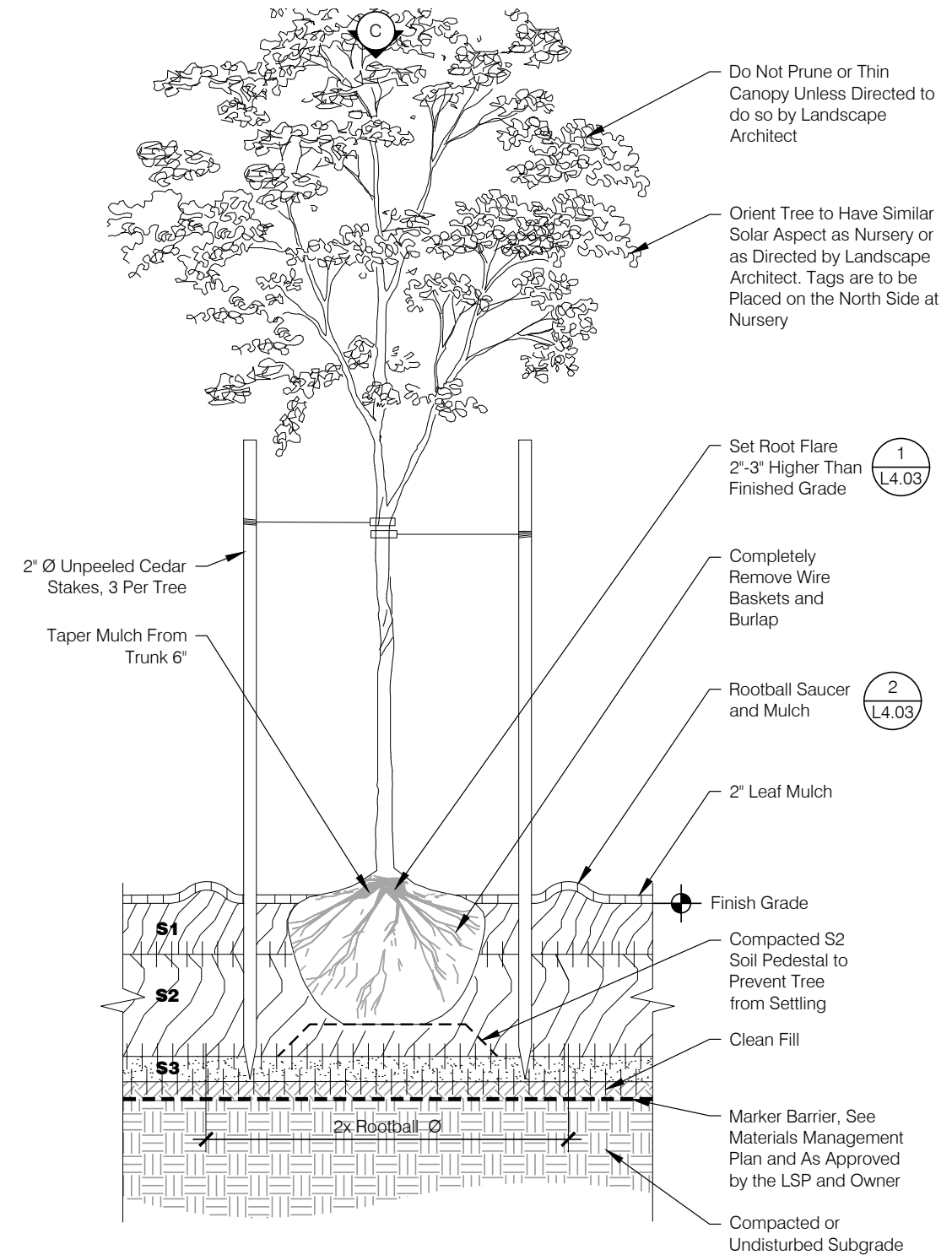
WISTERIA SINENSIS
CHINESE WISTERIA



ARISTOLOCHIA MACROPHYLLA
DUTCHMAN'S PIPE



TREE PLANTING AT STREET TREE PIT

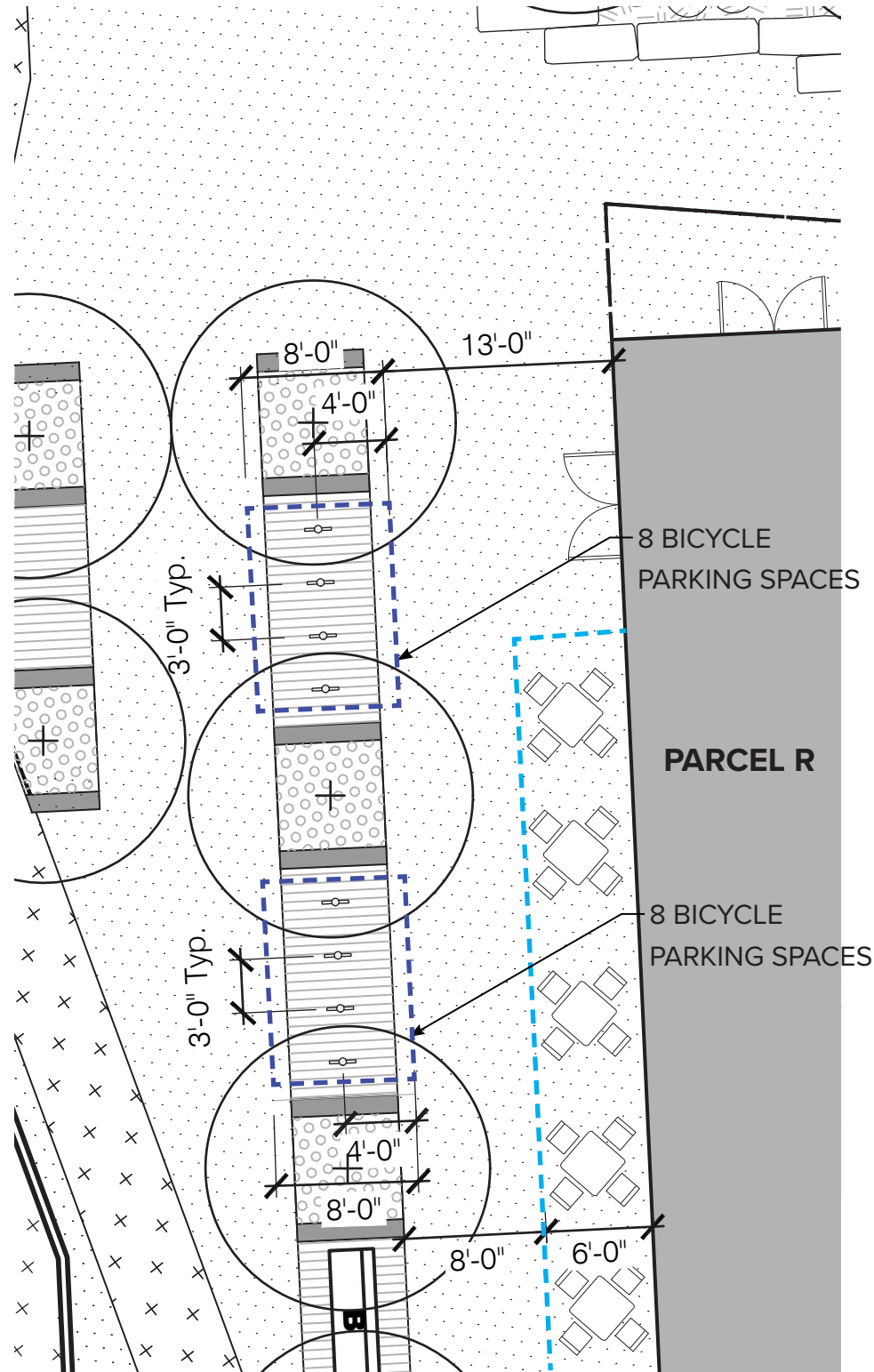


TREE PLANTING AT PLANT BED

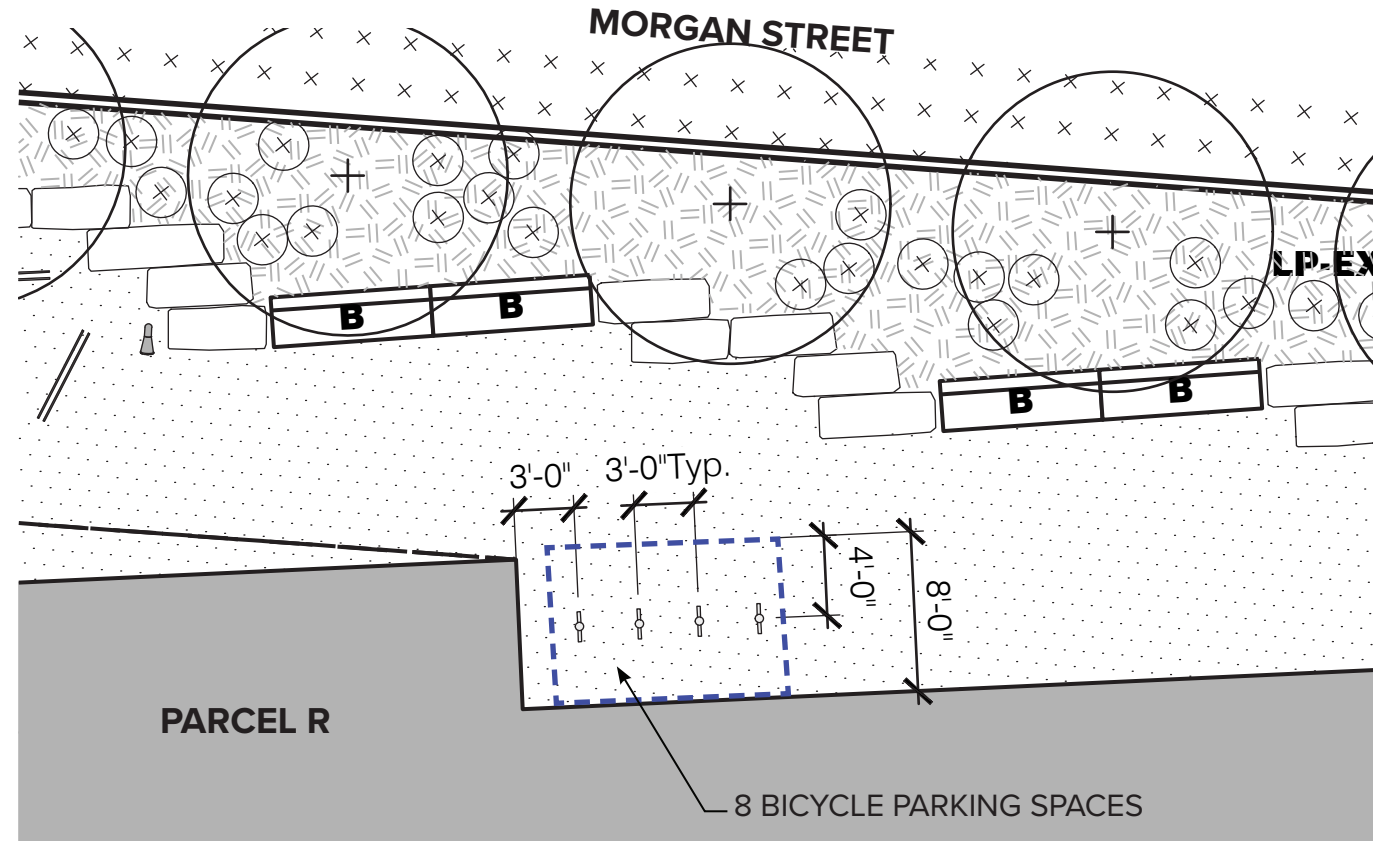


SHORT TERM BICYCLE PARKING PLAN

CAMBRIDGE CROSSING



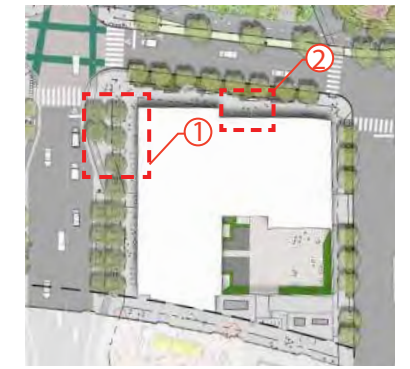
1. BICYCLE PARKING ON NORTH FIRST STREET



2. BICYCLE PARKING NORTH OF BUILDING

MATERIAL KEY

	UNIT PAVING
	DECOMPOSED GRANITE
	BROOM FINISH CONCRETE
	PLANT BED
	FLUSH STONE BAND



BICYCLE RACK



TOTAL **127** BICYCLE SPACES: 125 RESIDENTIAL, 2 RETAIL

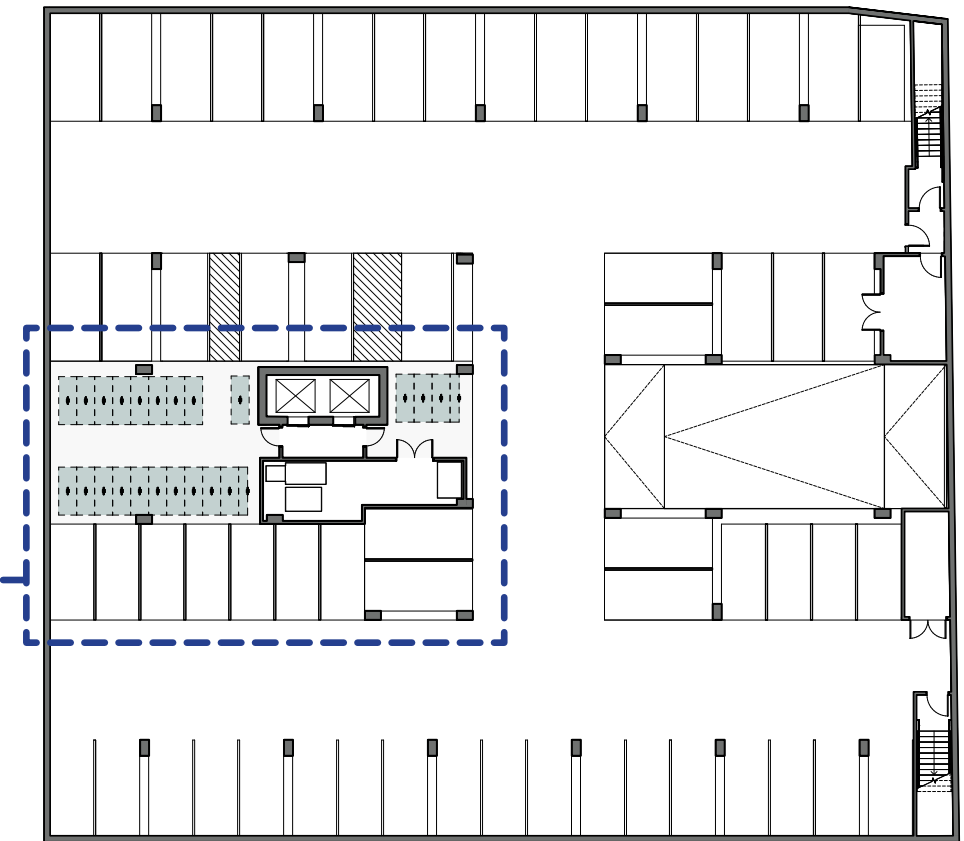
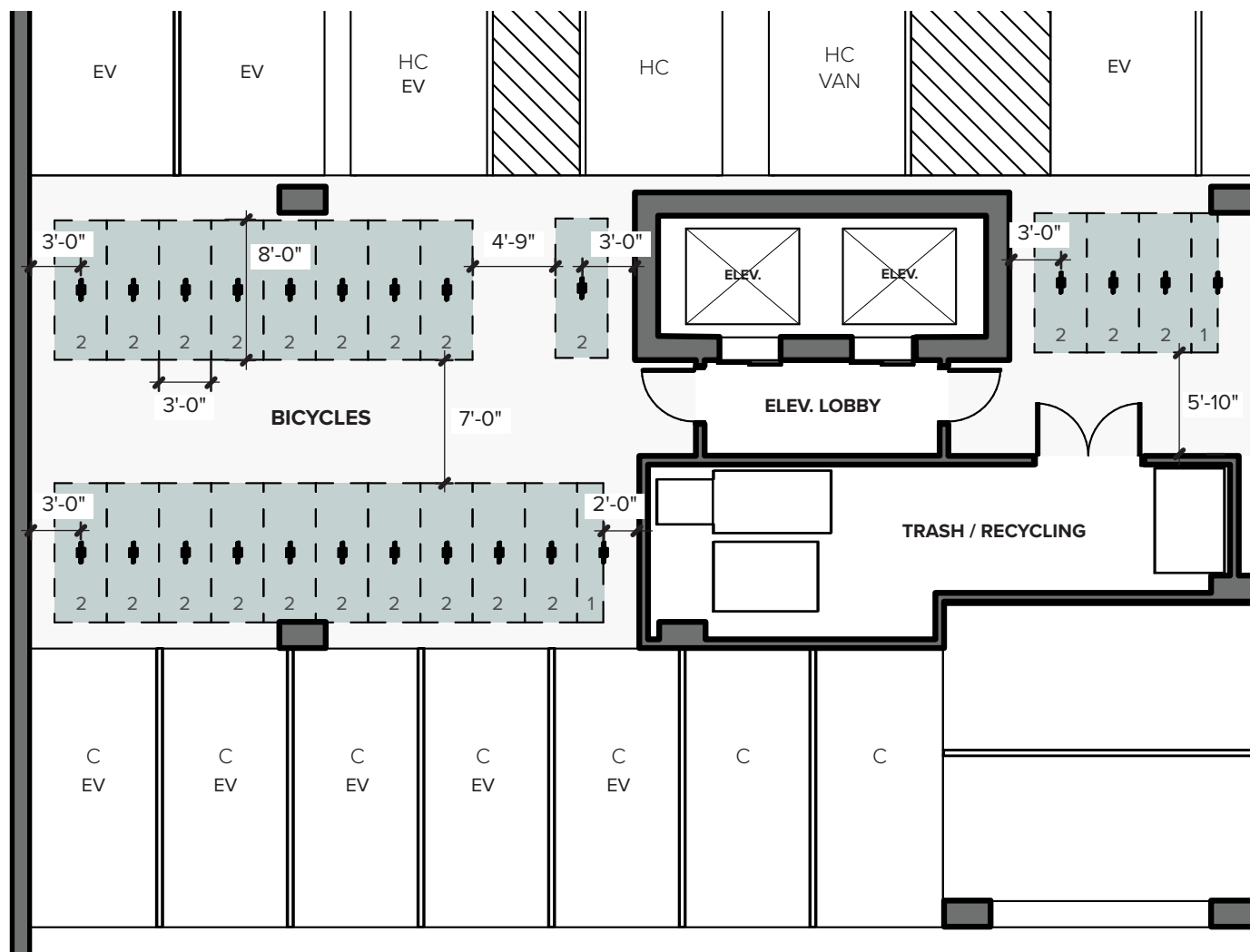
BASEMENT: 46 RESIDENTIAL BICYCLE SPACES

LEVEL 1: 2 RETAIL BICYCLE SPACES

LEVEL 2: 79 RESIDENTIAL BICYCLE SPACES

5% TANDEM (7 SPACES) REQUIRED.

8 TANDEM SPACES PROVIDED.



BASEMENT: **46** BIKE SPACES



LONG TERM BICYCLE PARKING PLAN | FIRST AND SECOND FLOORS

TOTAL **127** BICYCLE SPACES: 125 RESIDENTIAL, 2 RETAIL

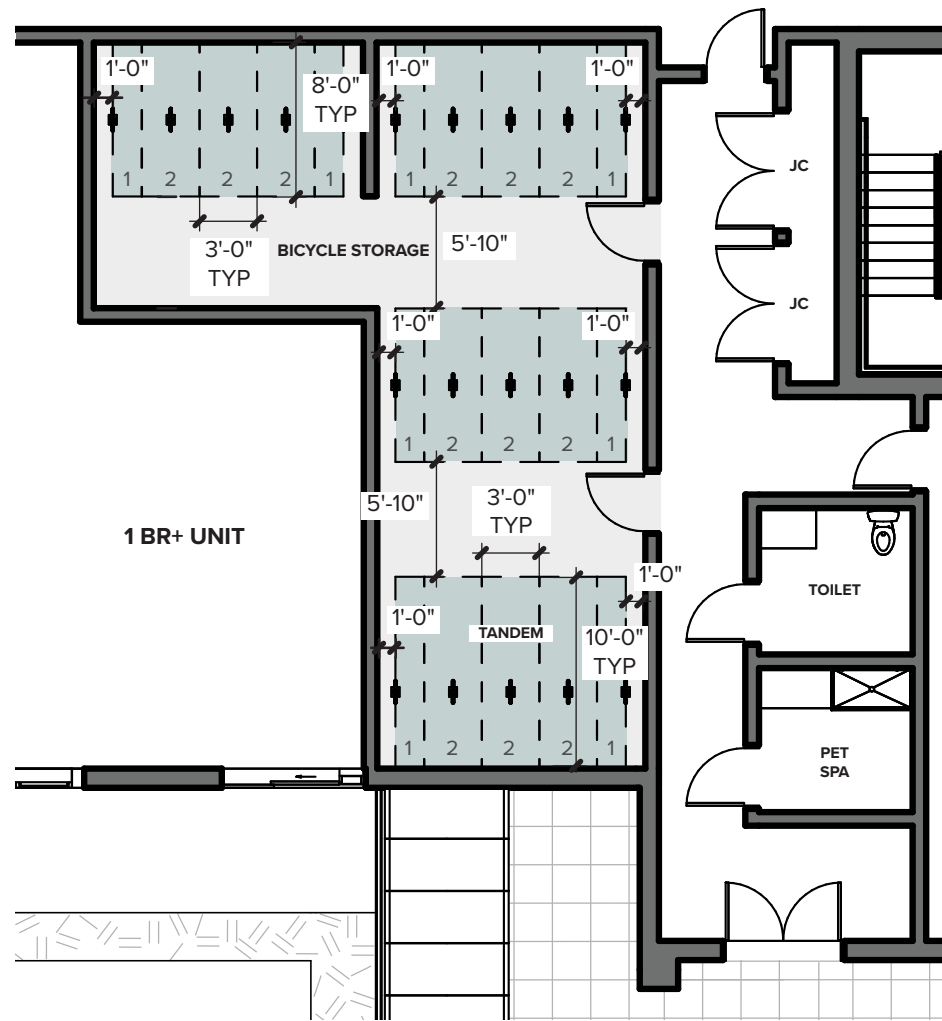
BASEMENT: 46 RESIDENTIAL BICYCLE SPACES

LEVEL 1: 2 RETAIL BICYCLE SPACES

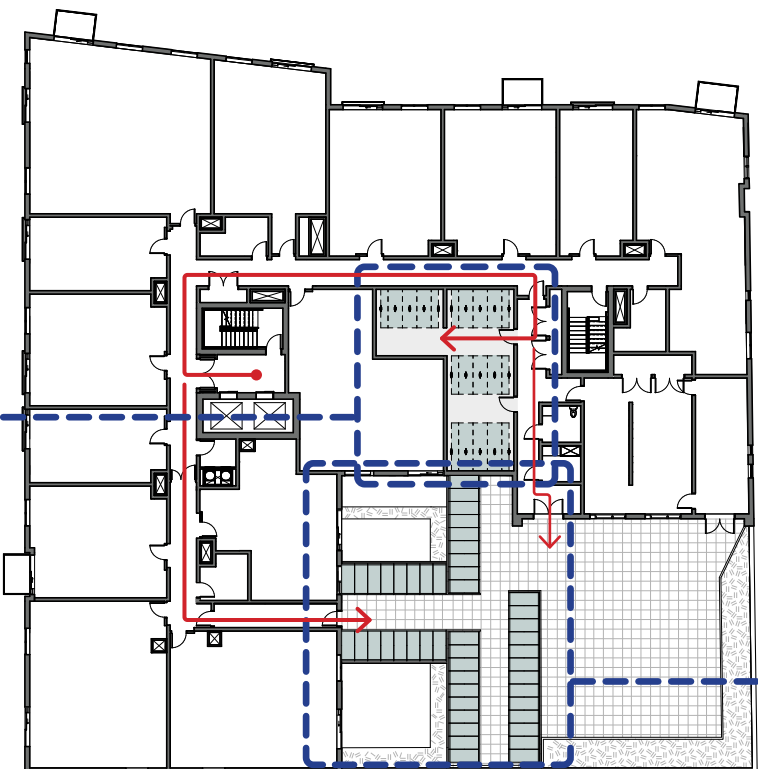
LEVEL 2: 79 RESIDENTIAL BICYCLE SPACES

5% TANDEM (7 SPACES) REQUIRED.

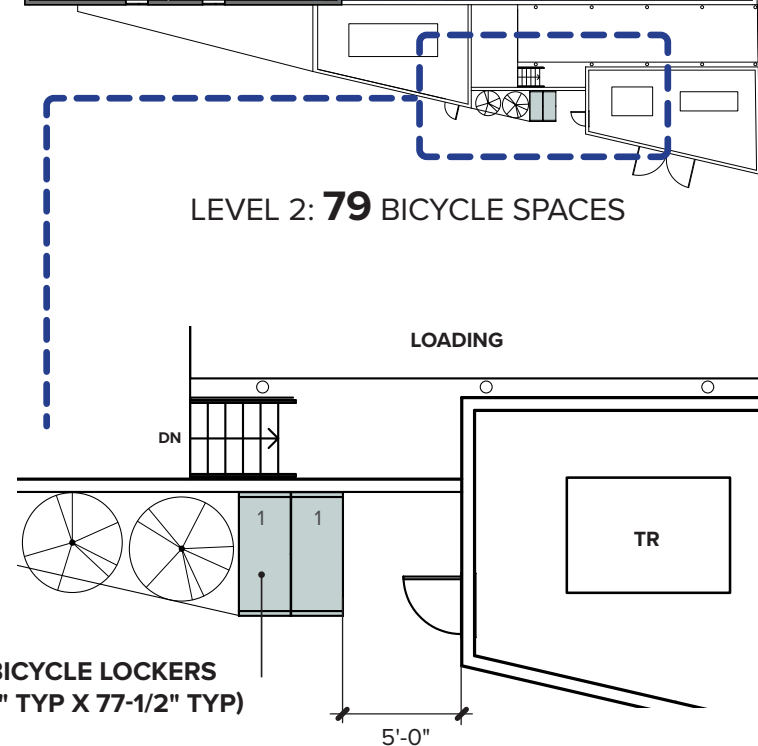
8 TANDEM SPACES PROVIDED.



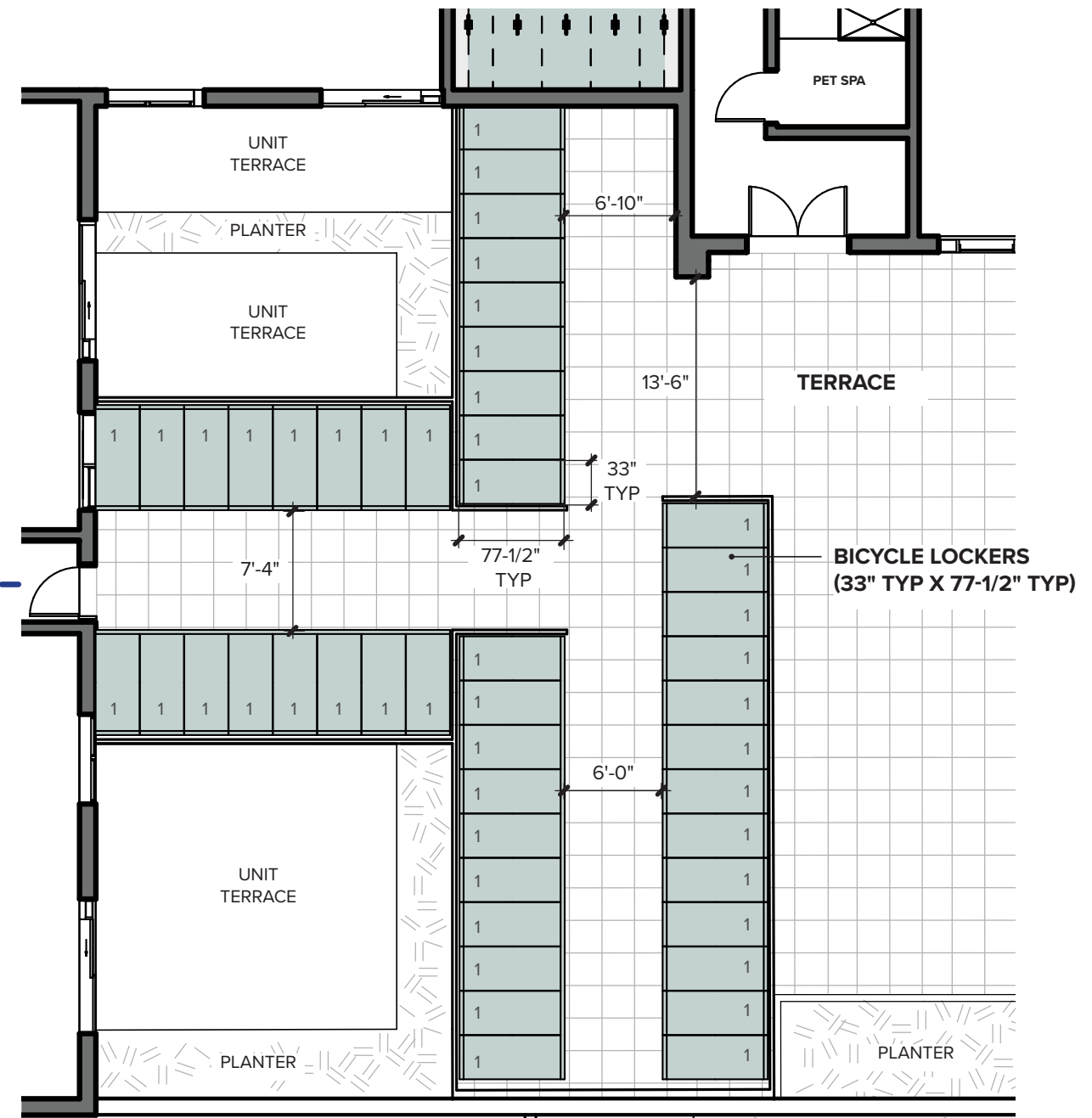
32 SPACES INSIDE



LEVEL 2: **79** BICYCLE SPACES



LEVEL 1: **2** BICYCLE SPACES



47 SPACES OUTSIDE





EcoPark Standard Model

EcoPark™ Series bike lockers are CycleSafe's economy locker, offering the quality features of our flagship ProPark bike locker series with a reduced footprint.

When analyzing strength, low transportation costs, reduced maintenance expense and an estimated over 25 year design life, the EcoPark series provides a better value for bike lockers.

Each space-efficient unit is comprised of two triangular stalls, forming a space-reduced two-door two-bike unit, or a one-door rectangular unit can be specified to accommodate one or two bikes.

Doors and tops constructed of structural compression-molded composite with graffiti/UV-1 resistant coating, and TGIC-coated steel side panels. EcoPark units fit in compact spaces with a smaller footprint, or may be set against a wall with a single door for a one or two bike unit, or link in a row to accommodate multiple bikes.

[Customer Testimonials](#)

[Read more...](#)



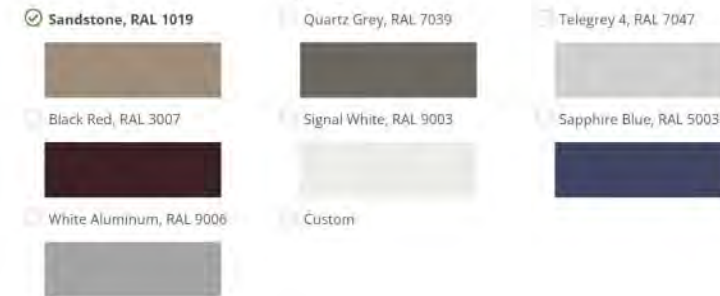
CHOOSE OPTIONS:

ENTRY DOORS



FINISH

Sandstone is standard. Others include upcharge.



DOOR LOCK

T-Handle is standard. Others include upcharge. [More about lock options.](#)



DOCUMENTS

DESCRIPTION



CAD

Features

- Capacity – one or two bicycles
- 33" W x 77 1/2" L x 50 1/4" H
- 9 square-foot area per bike parked
- Approx. 410 lbs for single unit
- Compression molded SMC doors and tops with high-strength ribs and bosses
- UV and graffiti-resistant polyurethane finish
- Flame resistant to UL-1 rating
- Built-in Chicago Ace II high-security locks
- Mechanical and electronic lock options
- Side by side freestanding design
- Simple components for easy installation
- Ships kit form / quick assembly / low freight
- Re-locatable and expandable

Benefits

- Extended product life span
- Minimal maintenance costs
- Moderate thermal conductivity
- Contoured roof repels water or dirt

SKUs

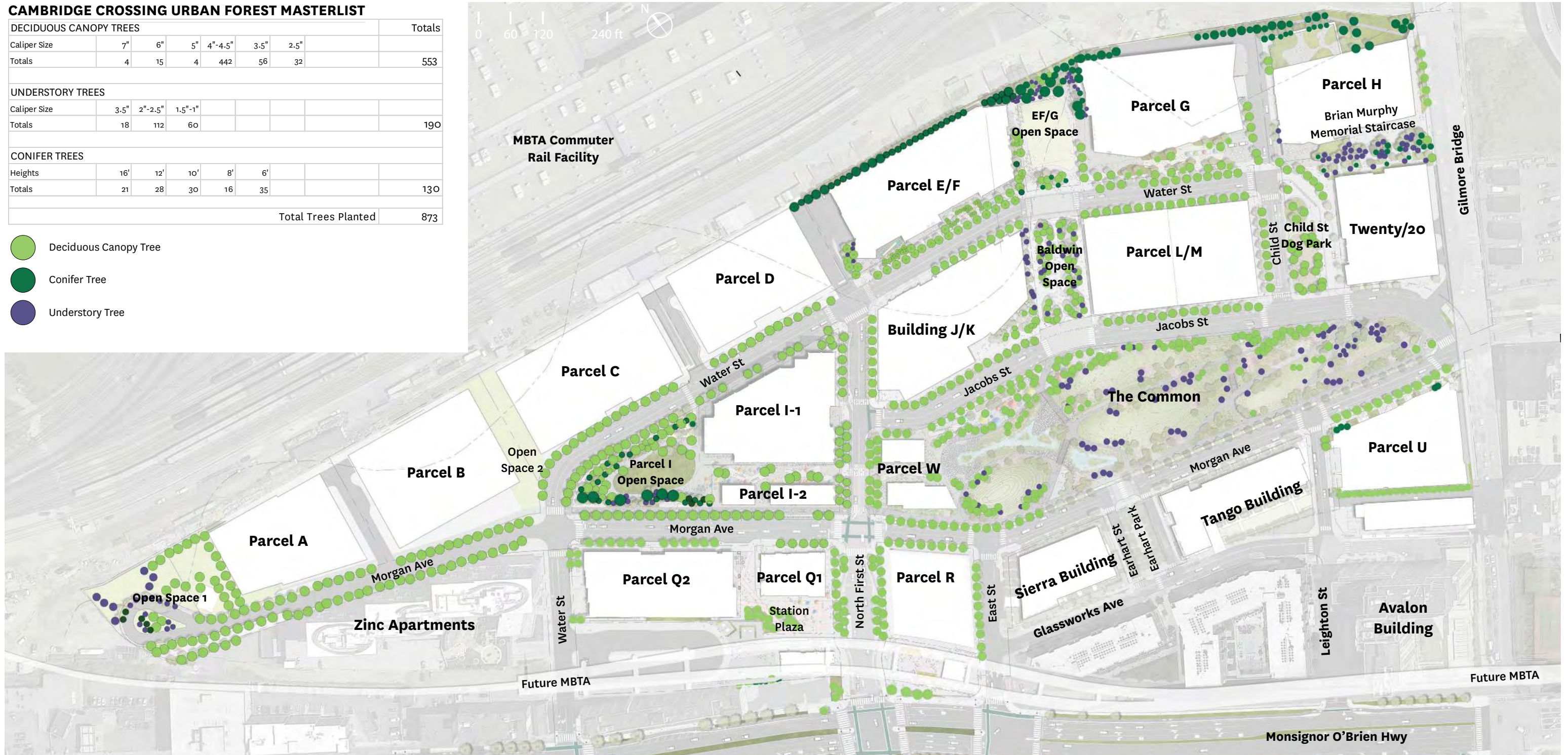
- 19504: 1-Door Access
- 19502: 2-Door Access



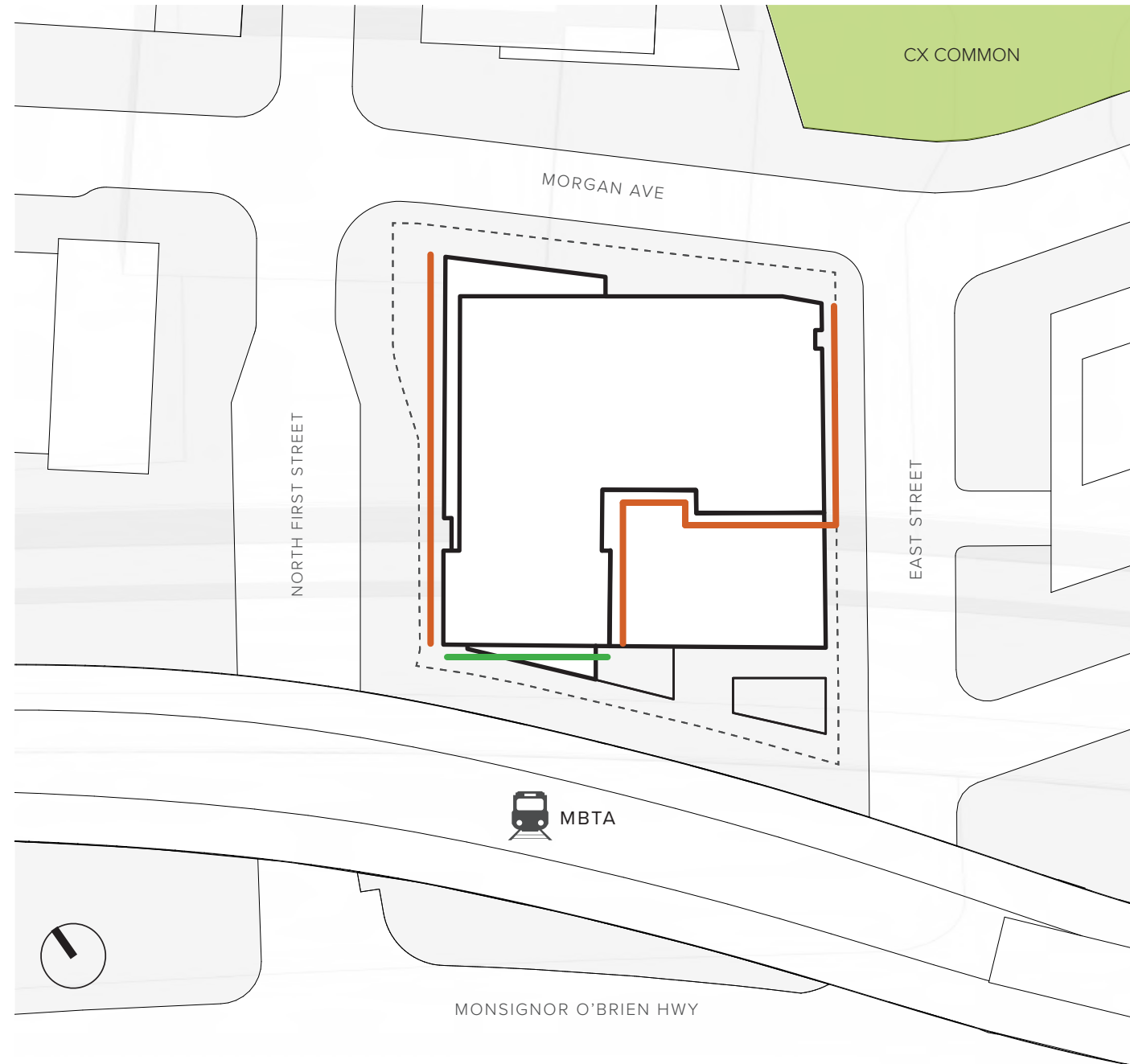
CAMBRIDGE CROSSING URBAN FOREST MASTERLIST

DECIDUOUS CANOPY TREES							Totals
Caliper Size	7"	6"	5"	4"-4.5"	3.5"	2.5"	
Totals	4	15	4	442	56	32	553
UNDERSTORY TREES							Totals
Caliper Size	3.5"	2"-2.5"	1.5"-1"				
Totals	18	112	60				190
CONIFER TREES							Totals
Heights	16'	12'	10'	8'	6'		
Totals	21	28	30	16	35		130
Total Trees Planted							873

- Deciduous Canopy Tree
- Conifer Tree
- Understory Tree



Page	Section	Cambridge Urban Forest Technical Report Nov 2019	Compliance	Check
120	4.2 Response Strategies - Prioritize Where to Act	Build Robust Canopy Corridor - To pri-oritize efforts to create distinct Canopy Corridors, the City should focus efforts on planting along primary arteries and neighborhood connectors, around existing public transit stations, and along the most commonly used walking, running and bicycle routes, especially where they connect to publicly accessible open spaces.	The streetscapes of Parcel R are planted with high canopy trees to create a robust canopy corridor along public R.O.W consistent with the rest of Cambridge Crossing. Additionally, large vine structures match the scale of Parcel R and enhance the green connection to the Common, across Morgan Avenue.	✓
127	4.3 Target Strategies to Urban Condition	A 44 acres project called Cambridge Crossing in East Cambridge will introduce a new mixed use neighborhood. Planting opportunities will depend on the zoning ordinance guiding the development in these areas. These are two large areas of the city that will experience new construction where zoning can influence planting opportunity.	NorthPoint East Cambridge Design Guideline released in 2016 has developed a robust set of guidelines to decide the nature of different types of open spaces and streetscapes with expanded planting and enhanced sidewalk. Parcel R not only meets the guideline but maximizes planting opportunity by introducing vegetated structures on plant beds.	✓
152	4.5 Strategy Toolbox - Design Strategies	To create a resilient urban forest, this plan recommends: — Plant well-adapted species with a higher climate resiliency score (refer to Section 3.5 Climate Resilience Score) — Plant fewer species that already have met their proportion limits — Diversify forest to the extent possible	Proposed species for street trees at Parcel R complies with the recommended planting list (p153 & p154) from the technical report. Planting list has been revised to include additional tree species from the urban forest master plan to add diversity.	✓
157	4.5 Strategy Toolbox - Design Strategies 2C	Redesign streets to create optimal conditions when constraints limit tree viability - In these optimal approaches, planting balled and burlapped trees is a viable approach. Though a bare root planting is quicker to establish, there is also benefit to having a larger canopy at planting is situations where the ideal conditions can be provided, e.g. good drainage, good aeration, large soil volumes.	All trees in Cambridge Crossing, including Parcel R, will be planted as balled and burlapped with optimal planting conditions with 3'-4' of continuous soil volume with good drainage and aeration system, consistent with the rest of Cambridge Crossing.	✓
165	4.5 Strategy Toolbox - Design Strategies 2C	Create a continuous planting strip with expanded soils volume and multiple stories of vegetation in a pervious pavement	The streetscapes of Parcel R creates continuous 5' wide planting strip along morgan ave with expanded soil volume. The trees will be planted in Decomposed Granite Pavement with stone setts pavements in between, consistent with the rest of Cambridge Crossing.	✓



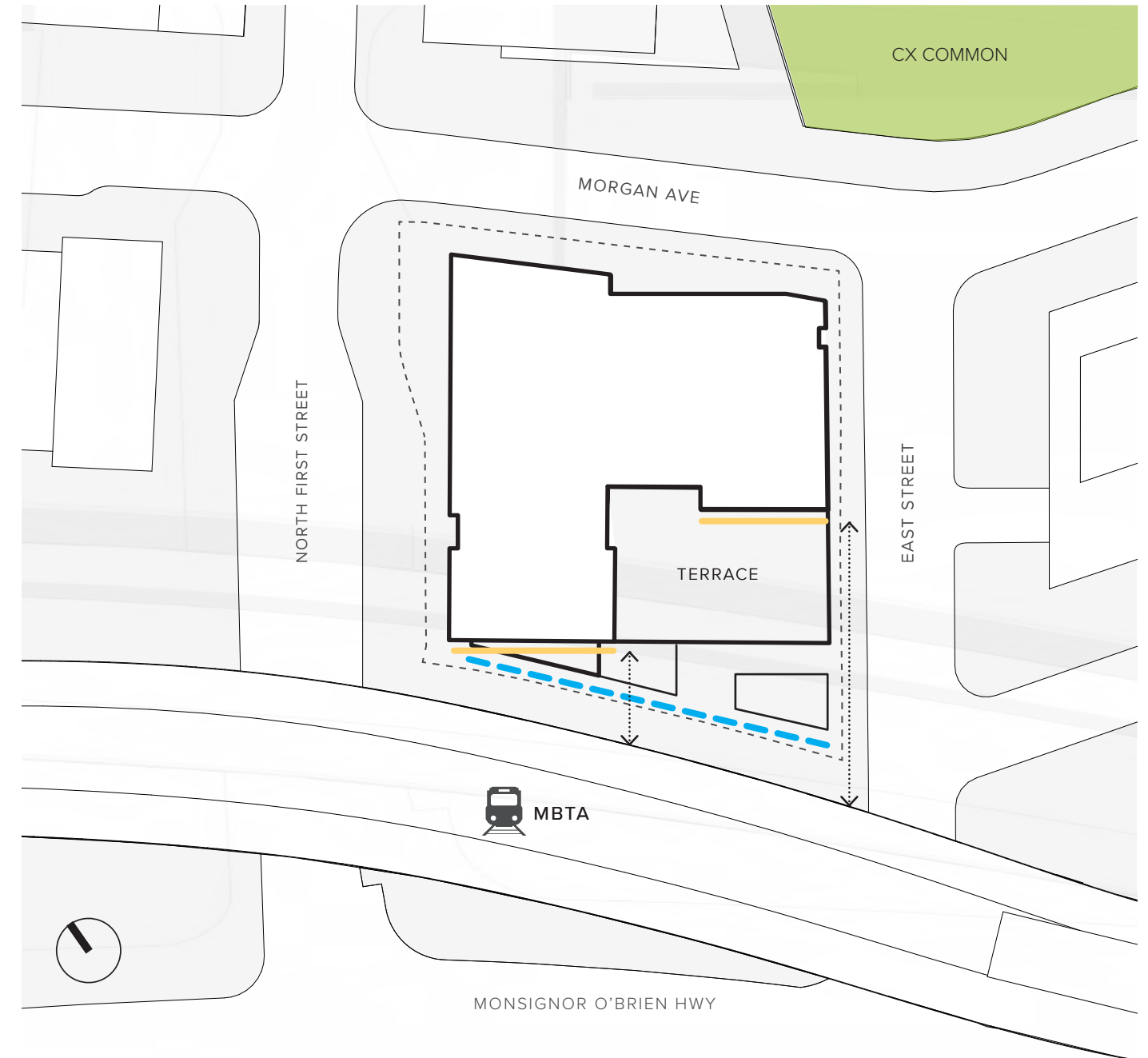
ENHANCED RESIDENTIAL GLAZING AT BUILDING FACES NEAR MBTA VIADUCT AND STATION

— 1 1/8" IGU WITH ONE LAMINATED GLASS LITE

GOALS: STC 38 AND OITC 29

— 1" IGU WITH INTERIOR STORM WINDOW WITH 1/4" GLASS LITE AND 2"-4" BETWEEN UNITS

GOALS: STC 44 AND OITC 33



— GROUND FLOOR RETAIL FACADE AND EQUIPMENT ENCLOSURES ARE PARALLEL TO THE MBTA VIADUCT.

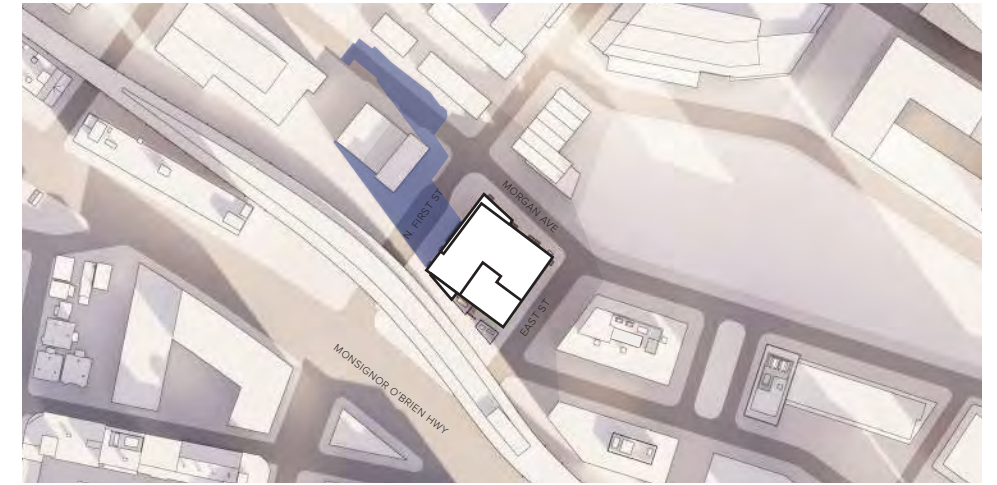
— RESIDENTIAL FACADES ARE HELD BACK TO MAXIMIZE DISTANCE FROM MBTA VIADUCT BUT STILL HONOR THE BUILDING CONCEPT/MASSING. FENESTRATION MINIMIZED ON SOUTHERNMOST FACADE.



9 AM



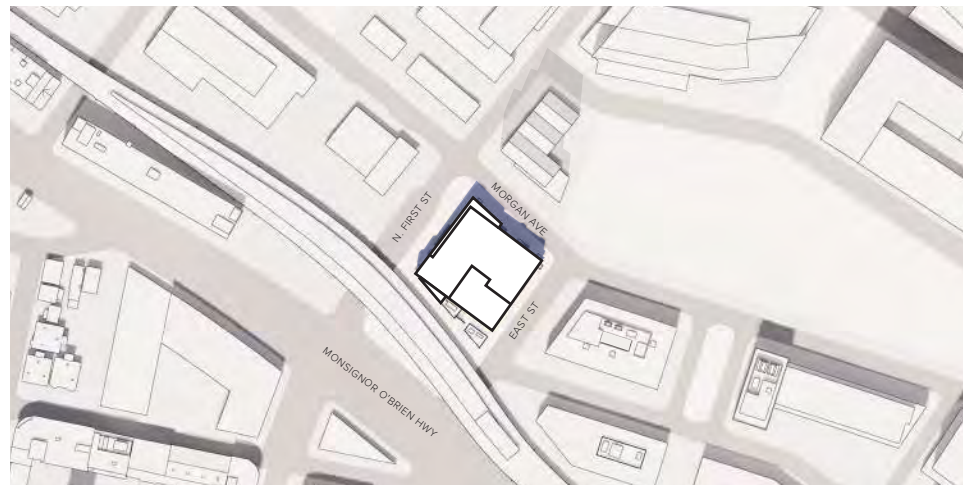
9 AM



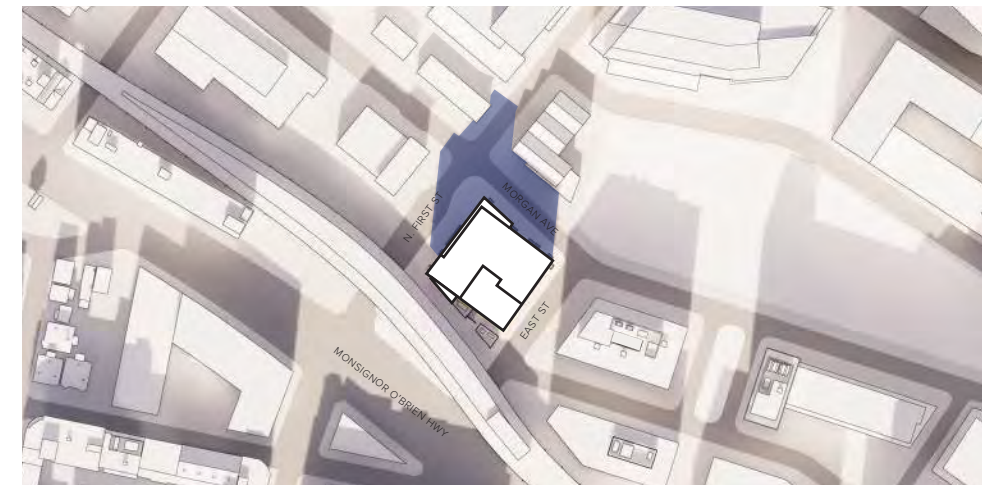
9 AM



12 PM



12 PM



12 PM



SPRING & FALL EQUINOX

3 PM



SUMMER SOLSTICE

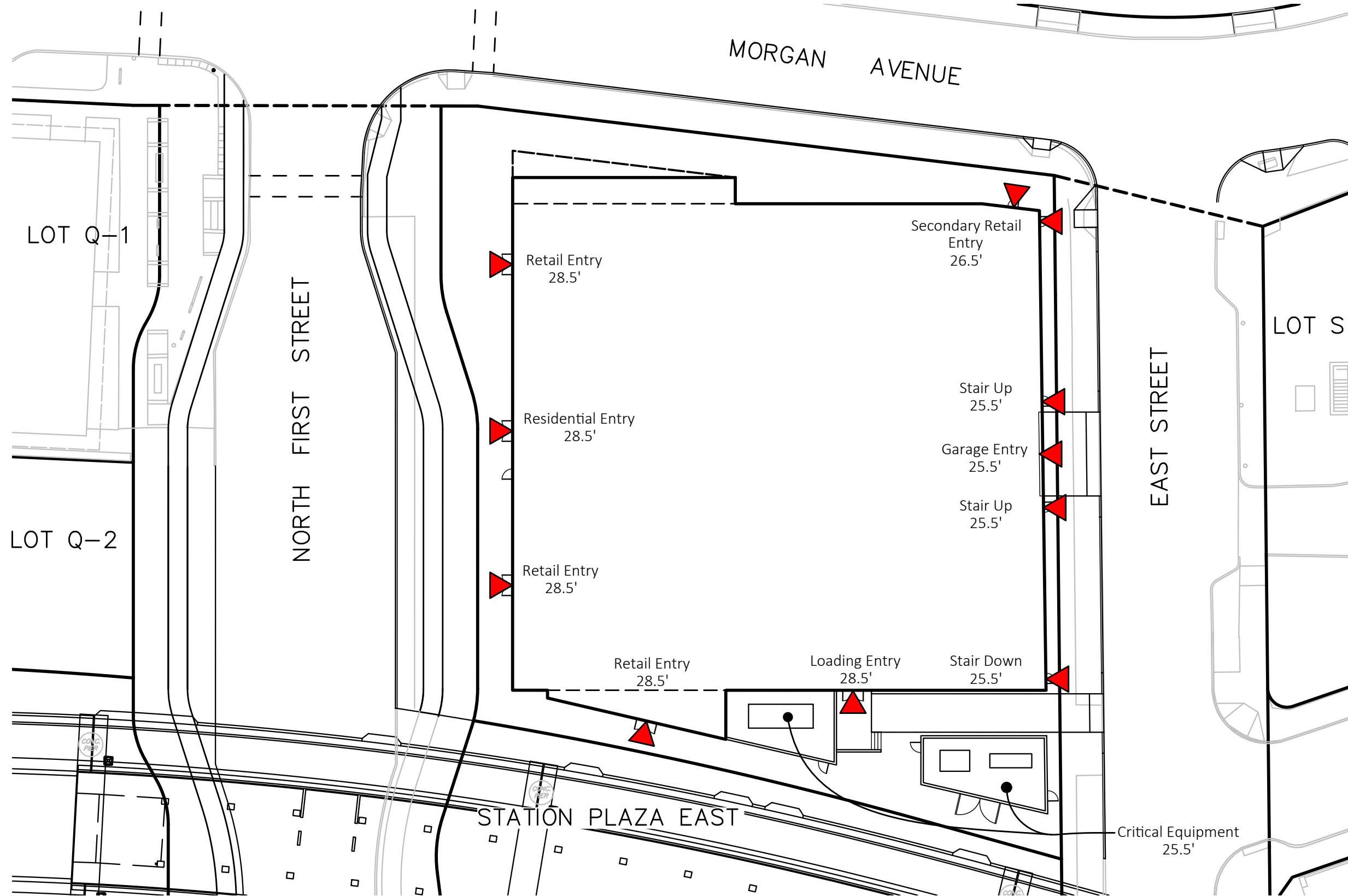
3 PM



WINTER SOLSTICE

3 PM

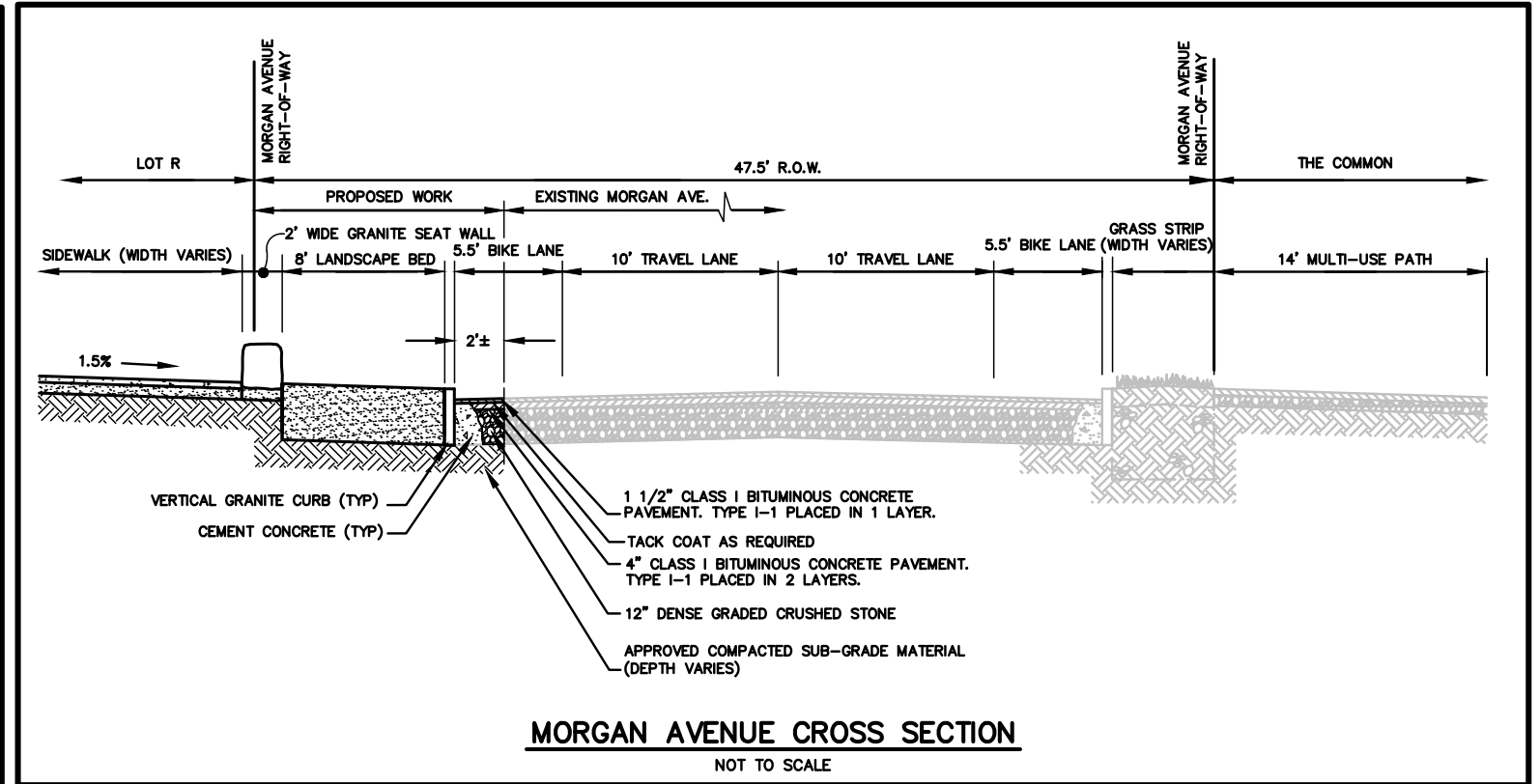
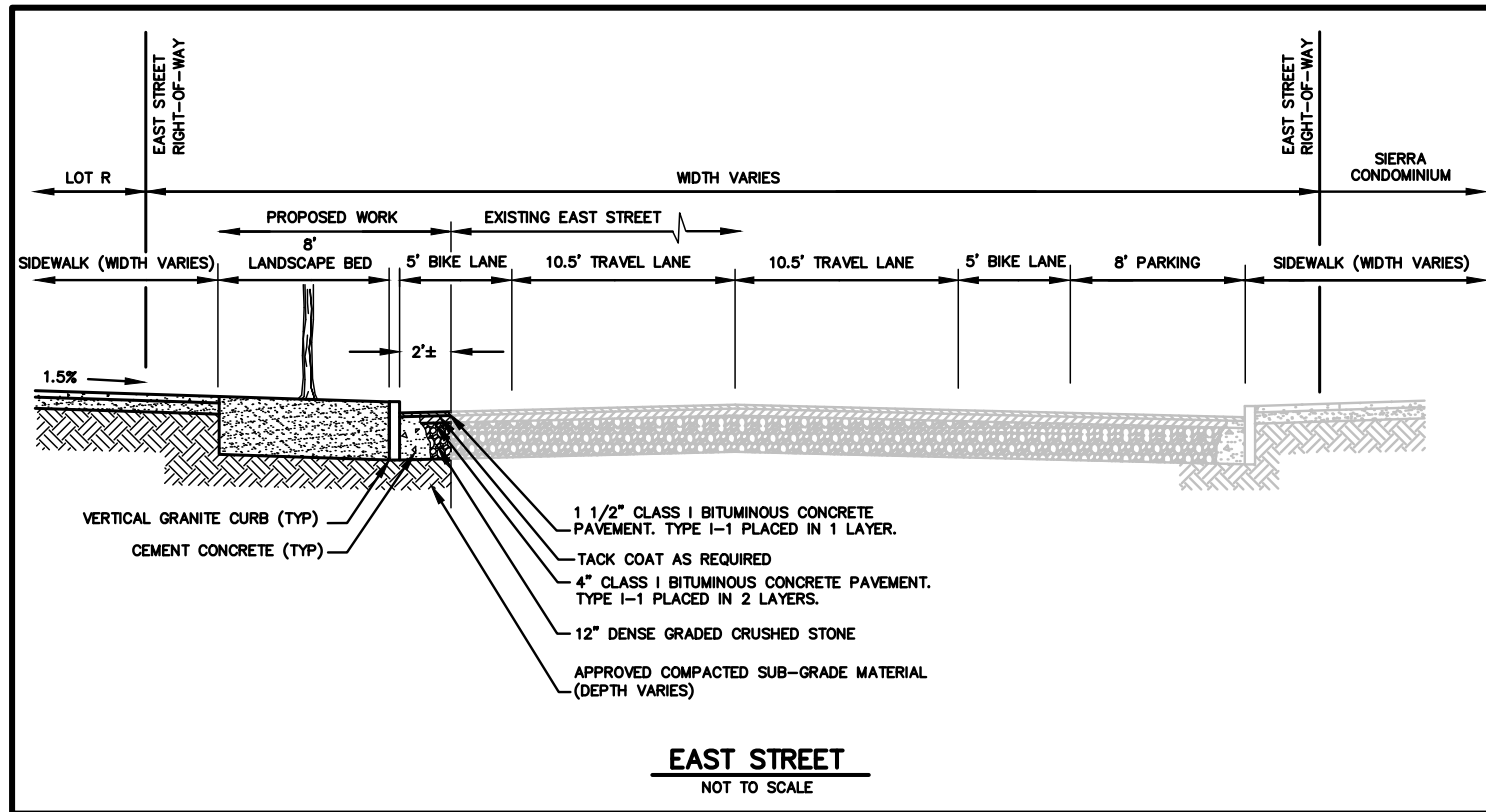
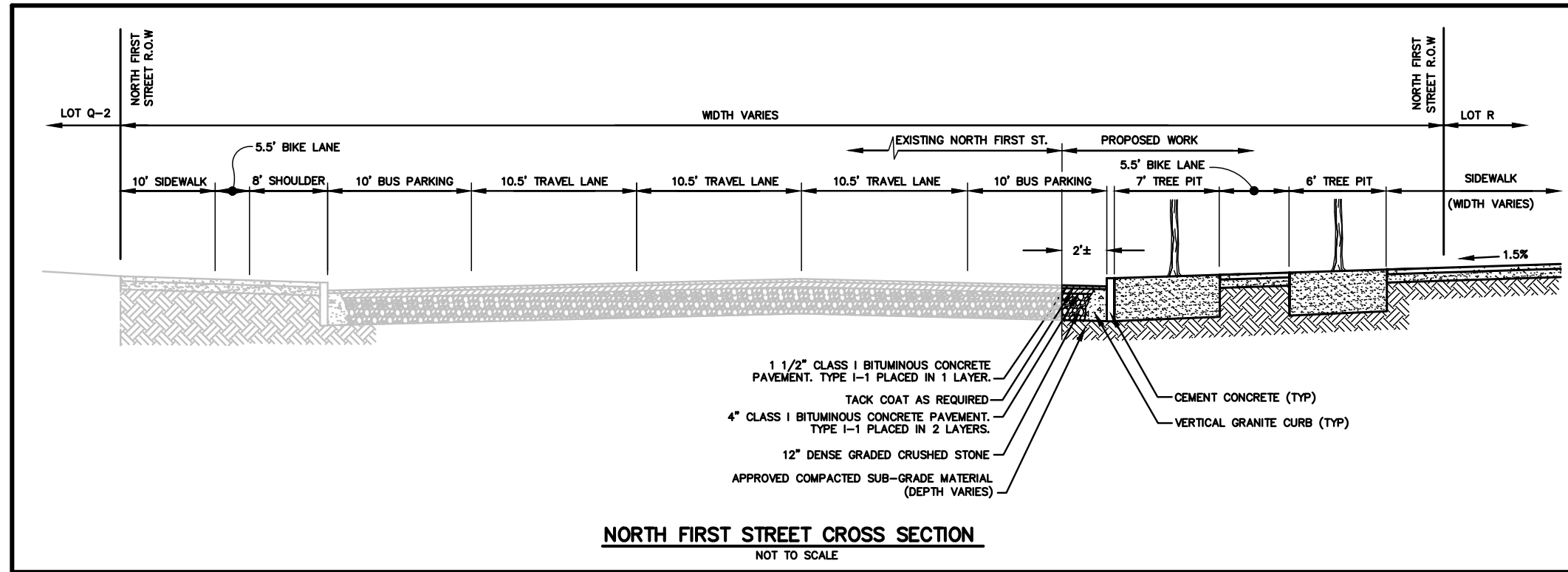


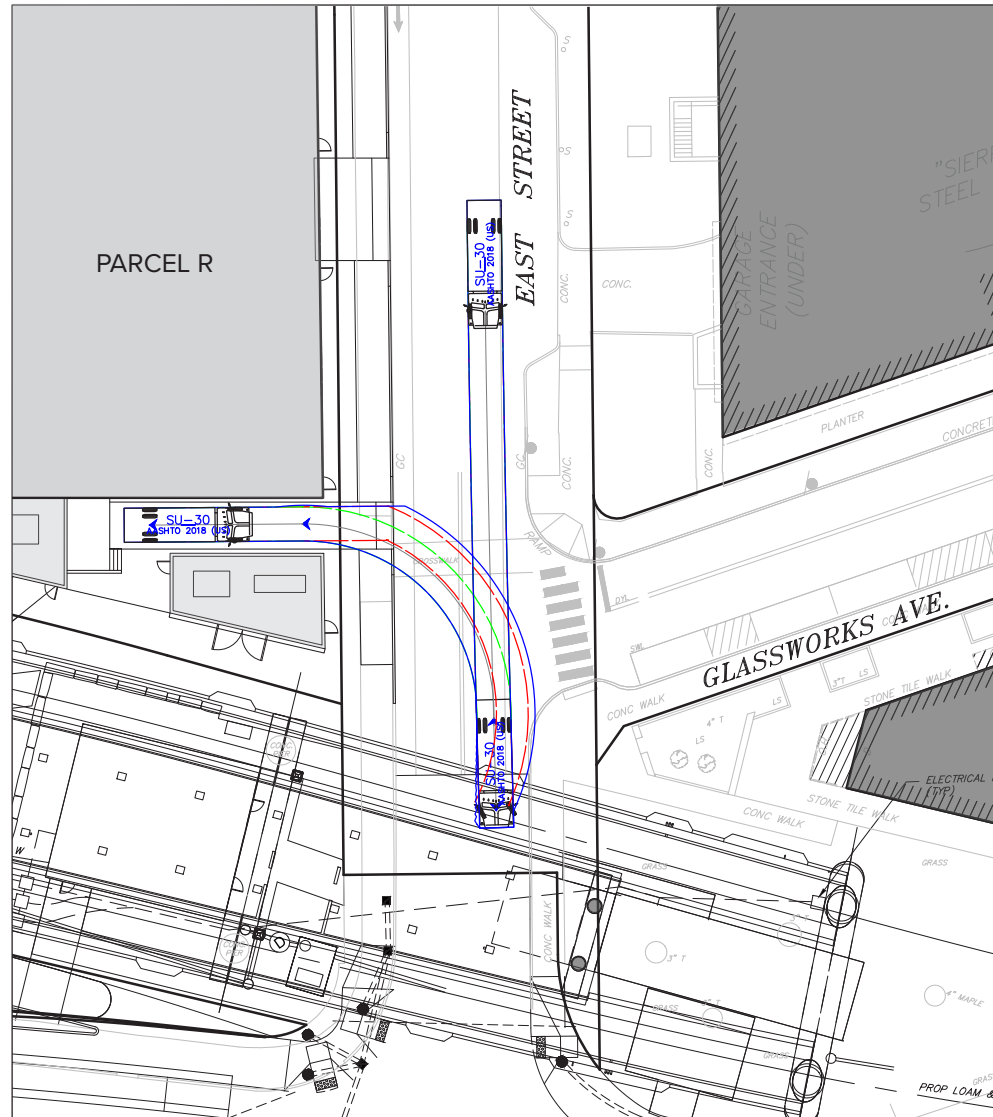


RESILIENCE STRATEGIES

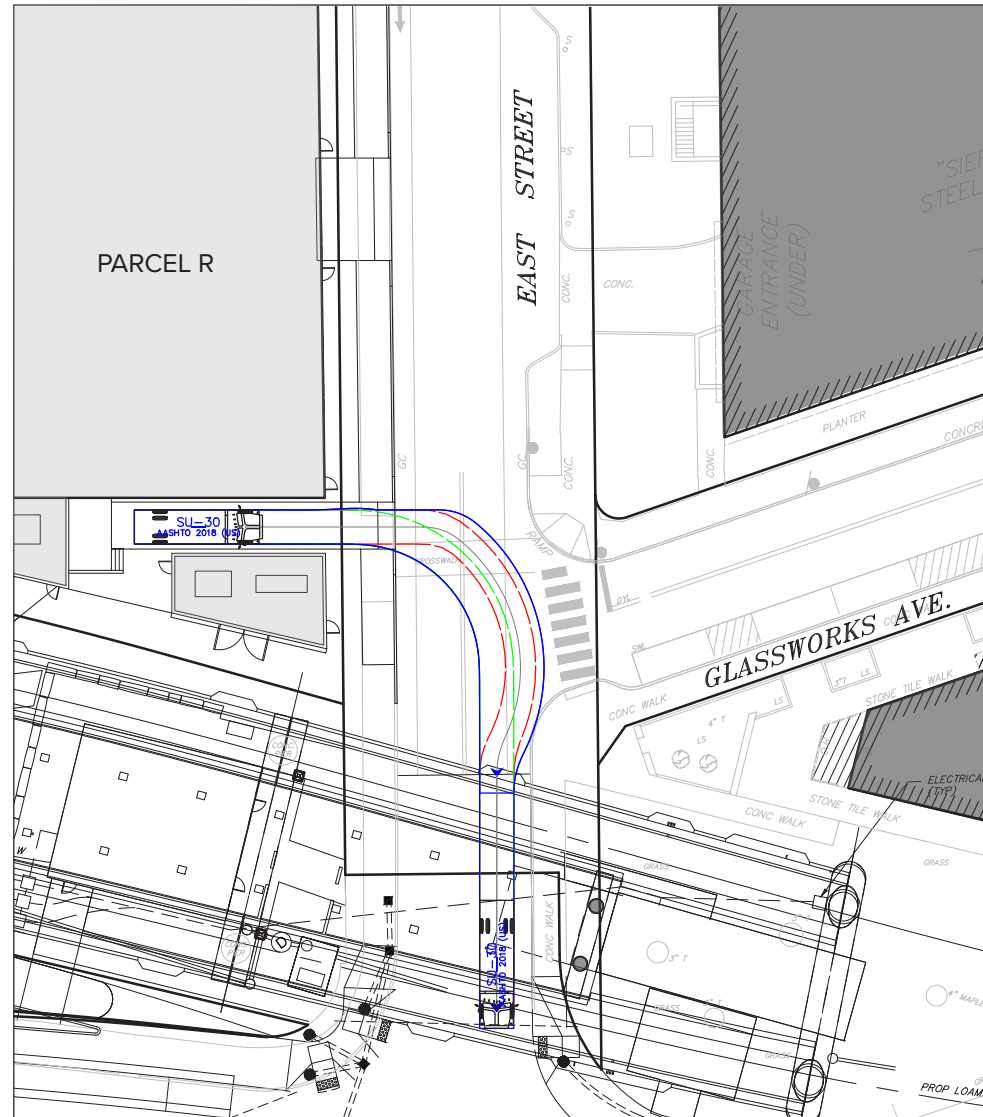
1. Parcel R site and surrounding roadways are located above elevation 24.0', the sea level rise / storm surge level for a 1% (100-year) storm in 2070 as designated by the Cambridge Climate Change Vulnerability Assessment (CCVA).
2. The first floor has been set at elevation 28.5' with the lowest retail entrances at 26.5' to avoid any potential flooding of ground floor entrances due to flooding of the adjacent stormwater infrastructure.
3. Critical building equipment has been set above elevation 24.0'.



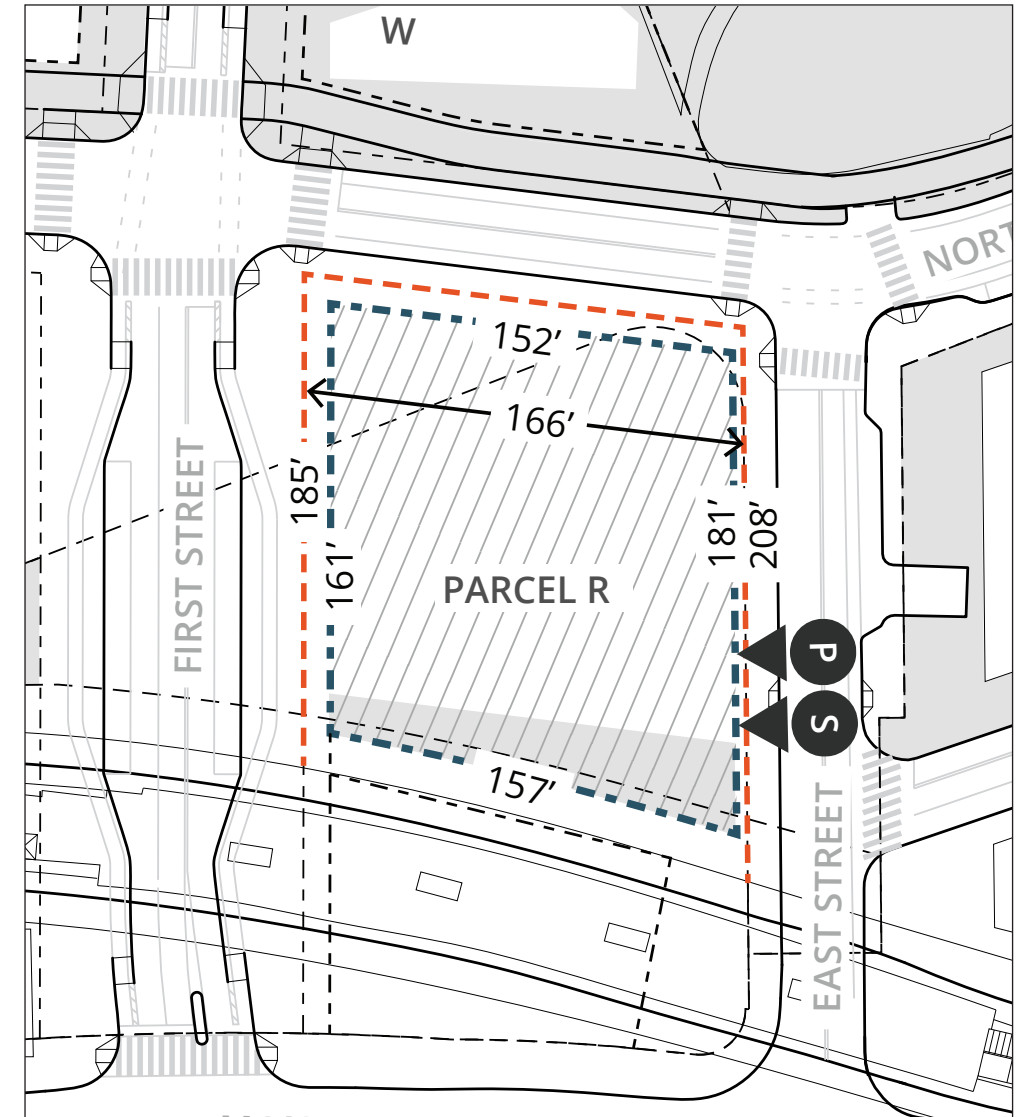




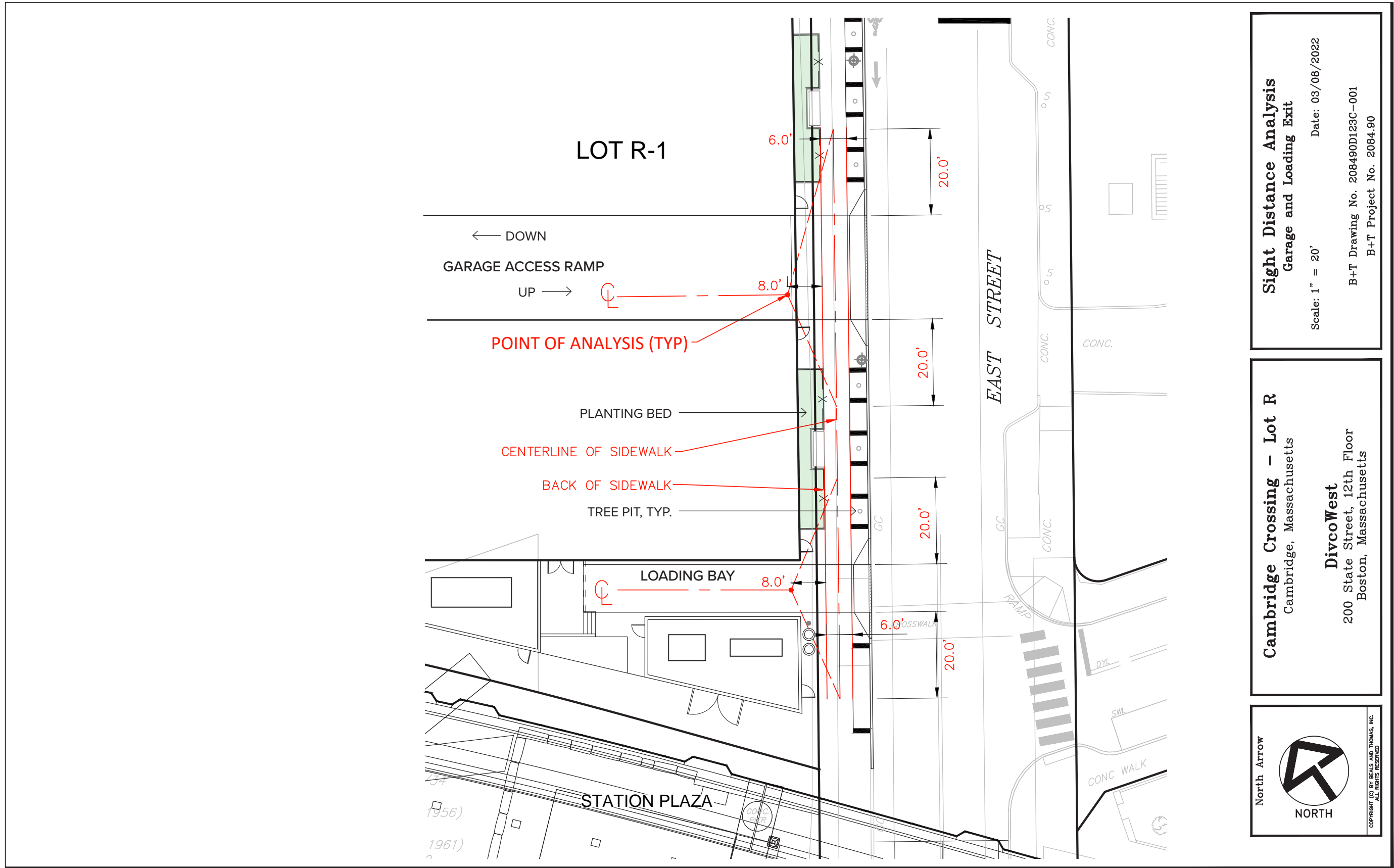
TRUCK MOVEMENT IN



TRUCK MOVEMENT OUT

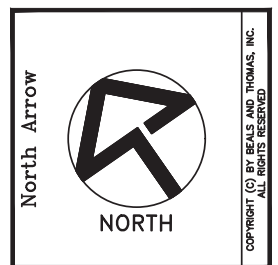


LOCATION OF PARKING ENTRANCE AND LOADING IN DESIGN GUIDELINES



Sight Distance Analysis
 Garage and Loading Exit
 Date: 03/08/2022
 Scale: 1" = 20'
 B+T Drawing No. 208490D123C-001
 B+T Project No. 2084.90

Cambridge Crossing - Lot R
 Cambridge, Massachusetts
DivcoWest
 200 State Street, 12th Floor
 Boston, Massachusetts





LEED v4 for Building Design and Construction: Multifamily Midrise

Project Checklist

Project Name:

Cambridge Crossing — Parcel R

Date:

Y	?	N		
1		1	Credit	Integrative Process
				2

13	2	15	Location and Transportation		15
Y			Prereq	Floodplain Avoidance	Required
PERFORMANCE PATH					
		15	Credit	LEED for Neighborhood Development Location	15
PRESCRIPTIVE PATH					
8			Credit	Site Selection	8
3			Credit	Compact Development (106 units/ 1.06 acres = DU/acre)	3
2			Credit	Community Resources	2
	2		Credit	Access to Transit	2

4	0	3	Sustainable Sites		7
Y			Prereq	Construction Activity Pollution Prevention	Required
Y			Prereq	No Invasive Plants	Required
2			Credit	Heat Island Reduction	2
		3	Credit	Rainwater Management	3
2			Credit	Non-Toxic Pest Control	2

10	0	12	Water Efficiency		12
Y			Prereq	Water Metering	Required
PERFORMANCE PATH					
		12	Credit	Total Water Use	12
PRESCRIPTIVE PATH					
6			Credit	Indoor Water Use	6
4			Credit	Outdoor Water Use	4

15	8	14	Energy and Atmosphere		37
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Energy Metering	Required
Y			Prereq	Education of the Homeowner, Tenant or Building Manager	Required
15	5	10	Credit	Annual Energy Use	30
	2	3	Credit	Efficient Hot Water Distribution	5
	1	1	Credit	Advanced Utility Tracking	2

3	1	5.5	Materials and Resources		9
Y			Prereq	Certified Tropical Wood	Required
Y			Prereq	Durability Management	Required
1			Credit	Durability Management Verification	1
	1	4.5	Credit	Environmentally Preferable Products	5
2		1	Credit	Construction Waste Management	3

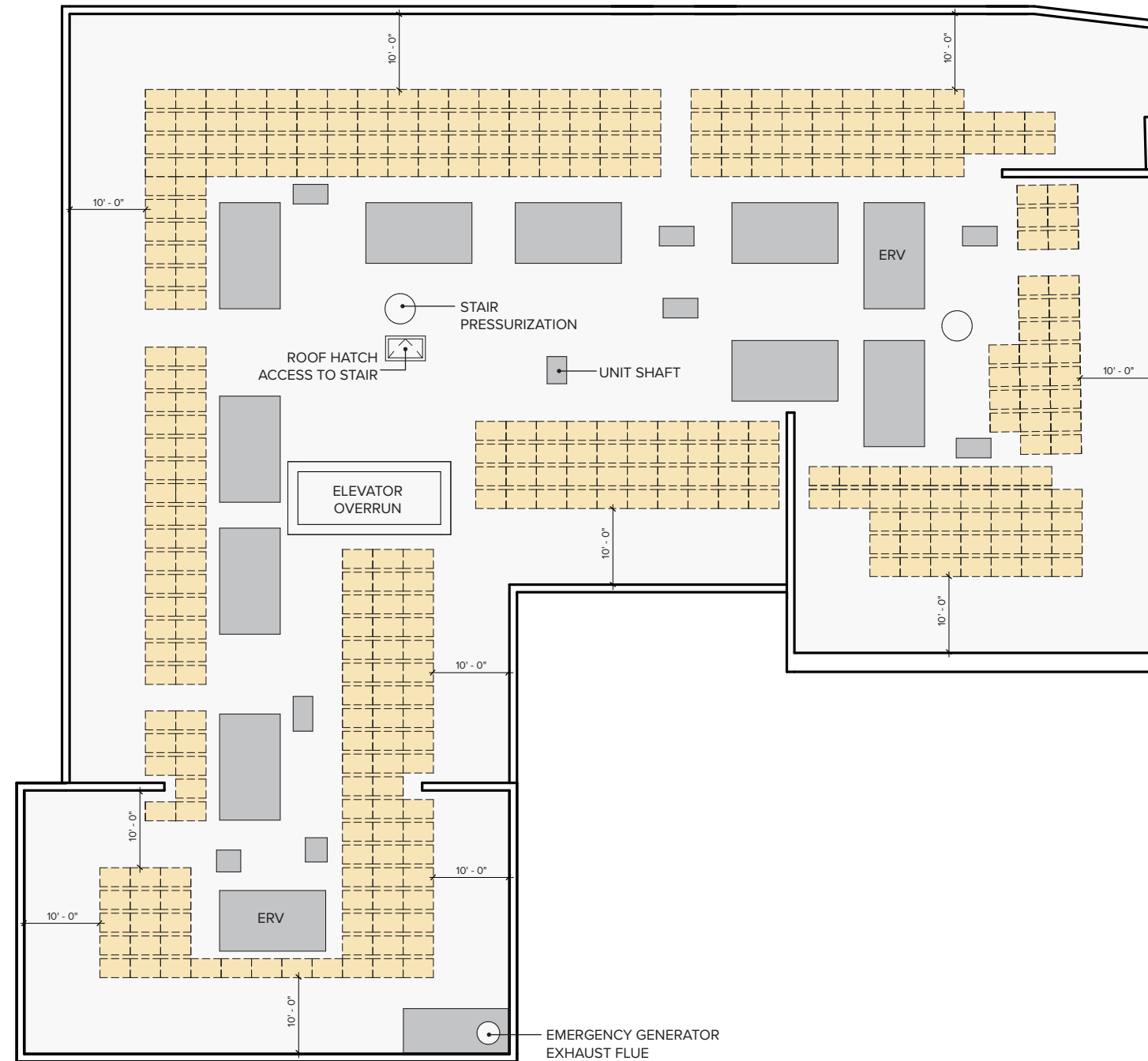
11	0	7	Indoor Environmental Quality		18
Y			Prereq	Ventilation	Required
Y			Prereq	Combustion Venting	Required
Y			Prereq	Garage Pollutant Protection	Required
Y			Prereq	Radon-Resistant Construction	Required
Y			Prereq	Air Filtering	Required
Y			Prereq	Environmental Tobacco Smoke	Required
Y			Prereq	Compartmentalization	Required
3			Credit	Enhanced Ventilation	3
		2	Credit	Contaminant Control	2
2		1	Credit	Balancing of Heating and Cooling Distribution Systems	3
		3	Credit	Enhanced Compartmentalization	3
2			Credit	Enhanced Combustion Venting	2
1			Credit	Enhanced Garage Pollutant Protection	1
2		1	Credit	Low Emitting Products	3
1			Credit	No Environmental Tobacco Smoke	1

2	4	0	Innovation		6
Y			Prereq	Preliminary Rating	Required
1			Credit	Innovation	1
	1		Credit	LEED AP Homes	1
	1		Credit	LEED AP Homes	1
	1		Credit	LEED AP Homes	1
	1		Credit	LEED AP Homes	1
1			Credit	LEED AP Homes	1

3	1	0	Regional Priority		4
0	1		Credit	Regional Priority: Access to Transit (1)	1
1			Credit	Regional Priority: Annual Energy Use (15)	1
1			Credit	Regional Priority: Nontoxic Pest Control (2)	1
1			Credit	Regional Priority: Heat Island Reduction (2)	1

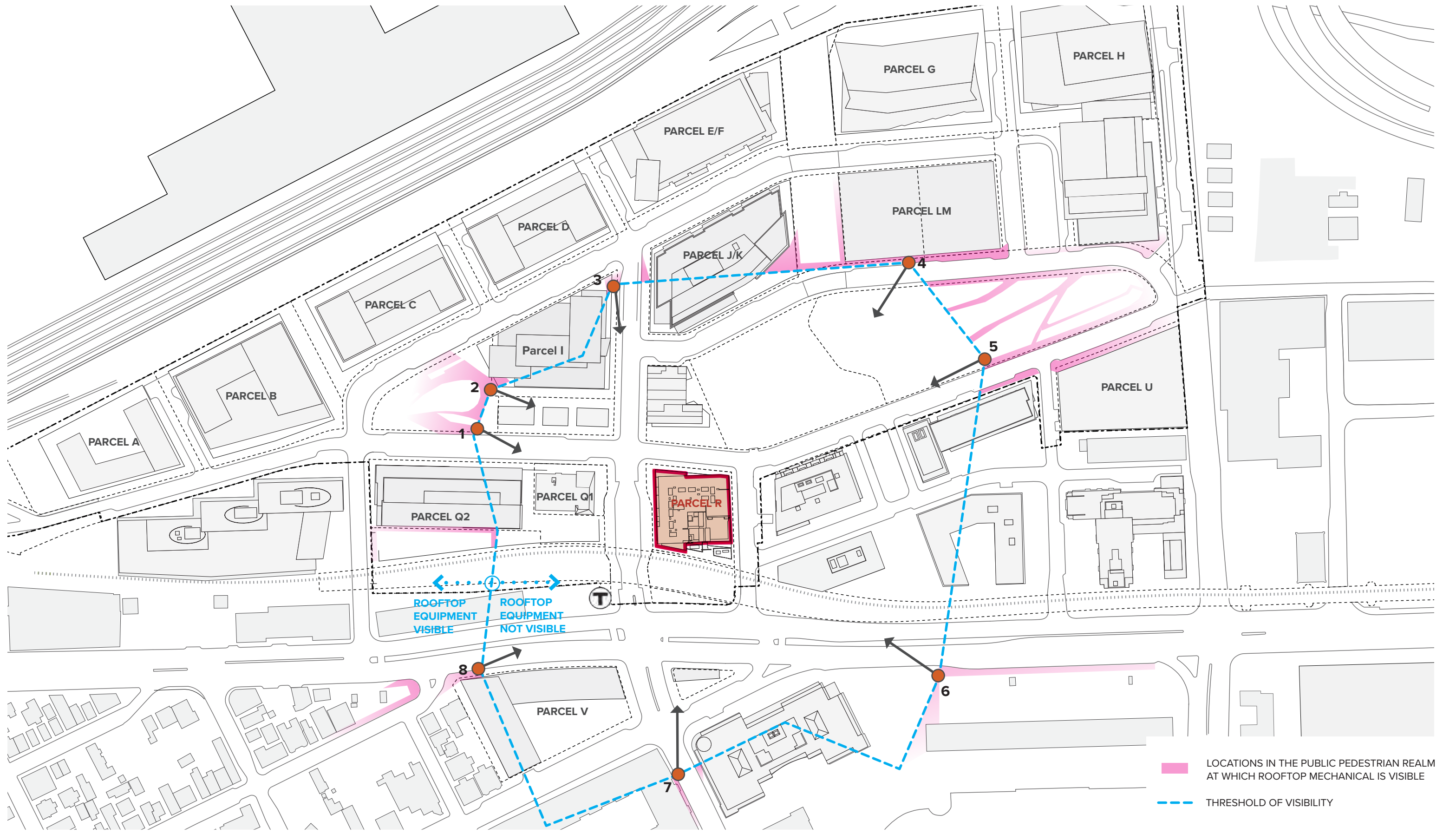
62.0	16	58	TOTALS		Possible Points: 110
Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110					

SOLAR READY ROOF STUDY		
QUANTITY OF RED PANELS	341	PANELS
AREA PER PANEL	10	FT ²
AREA OF USEABLE PANEL	3855	FT ²
ENERGY OUTPUT	17.5	W/FT ²
OUTPUT CAPACITY	67,463	Watt-hr
OUTPUT CAPACITY	68	kWh
ANNUAL PRODUCTION	55	MWh/year
ESTIMATED BUILDING ANNUAL ELECTRICAL CONSUMPTION	7,350	MWh/year
PV PANELS (% OF ANNUAL CONSUMPTION)	0.74	%



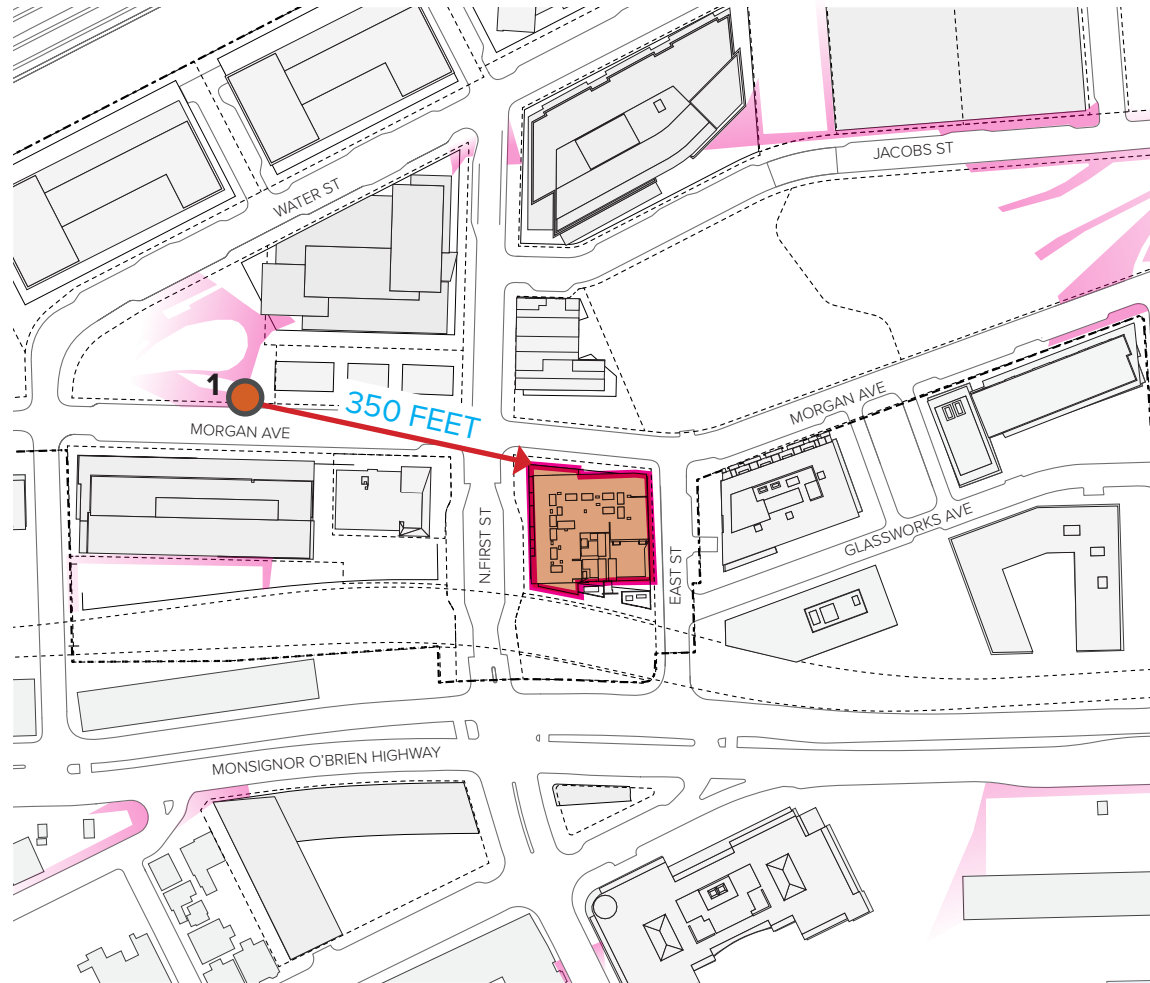
ROOFTOP MECHANICAL SIGHT LINE DIAGRAM

CAMBRIDGE CROSSING

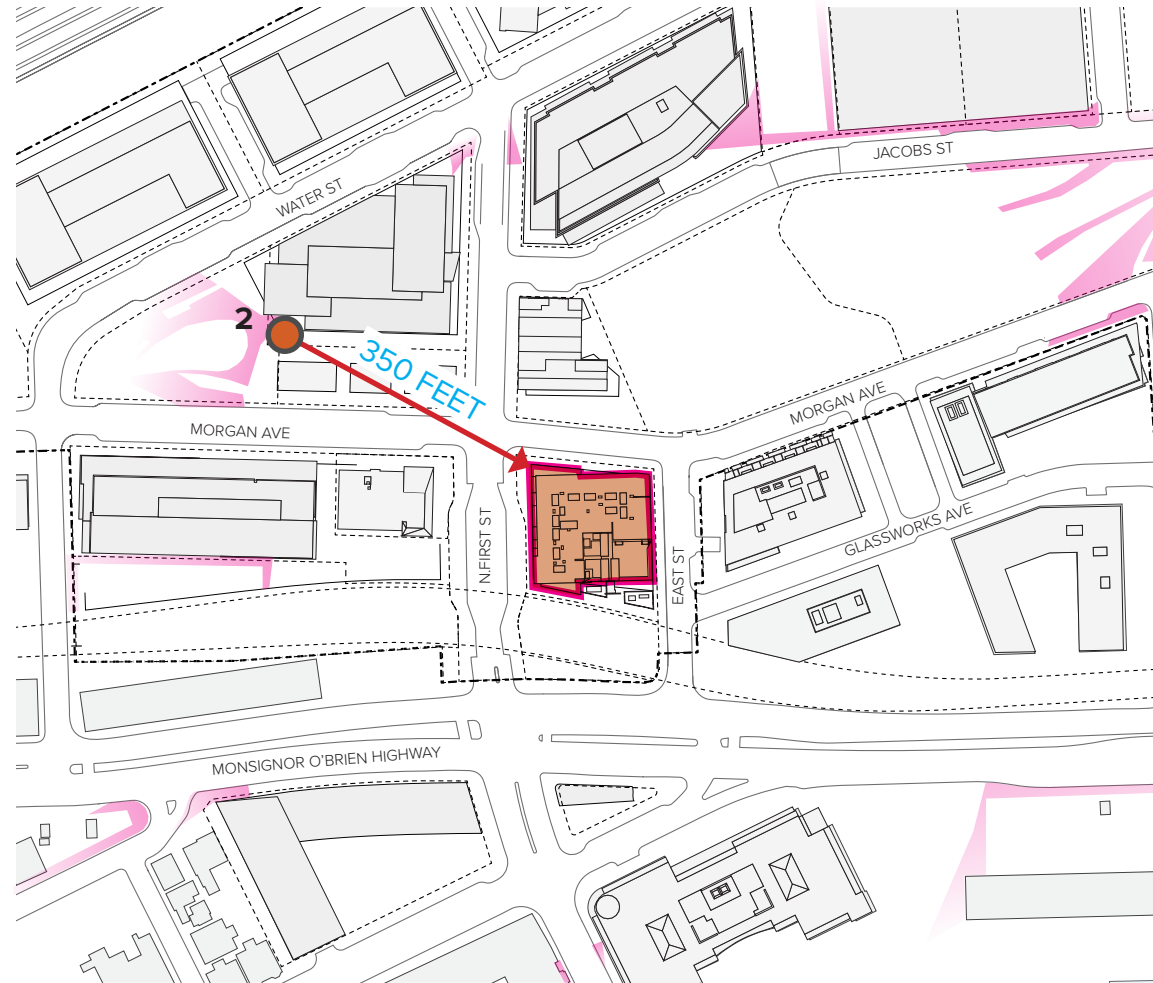


- LOCATIONS IN THE PUBLIC PEDESTRIAN REALM AT WHICH ROOFTOP MECHANICAL IS VISIBLE
- THRESHOLD OF VISIBILITY

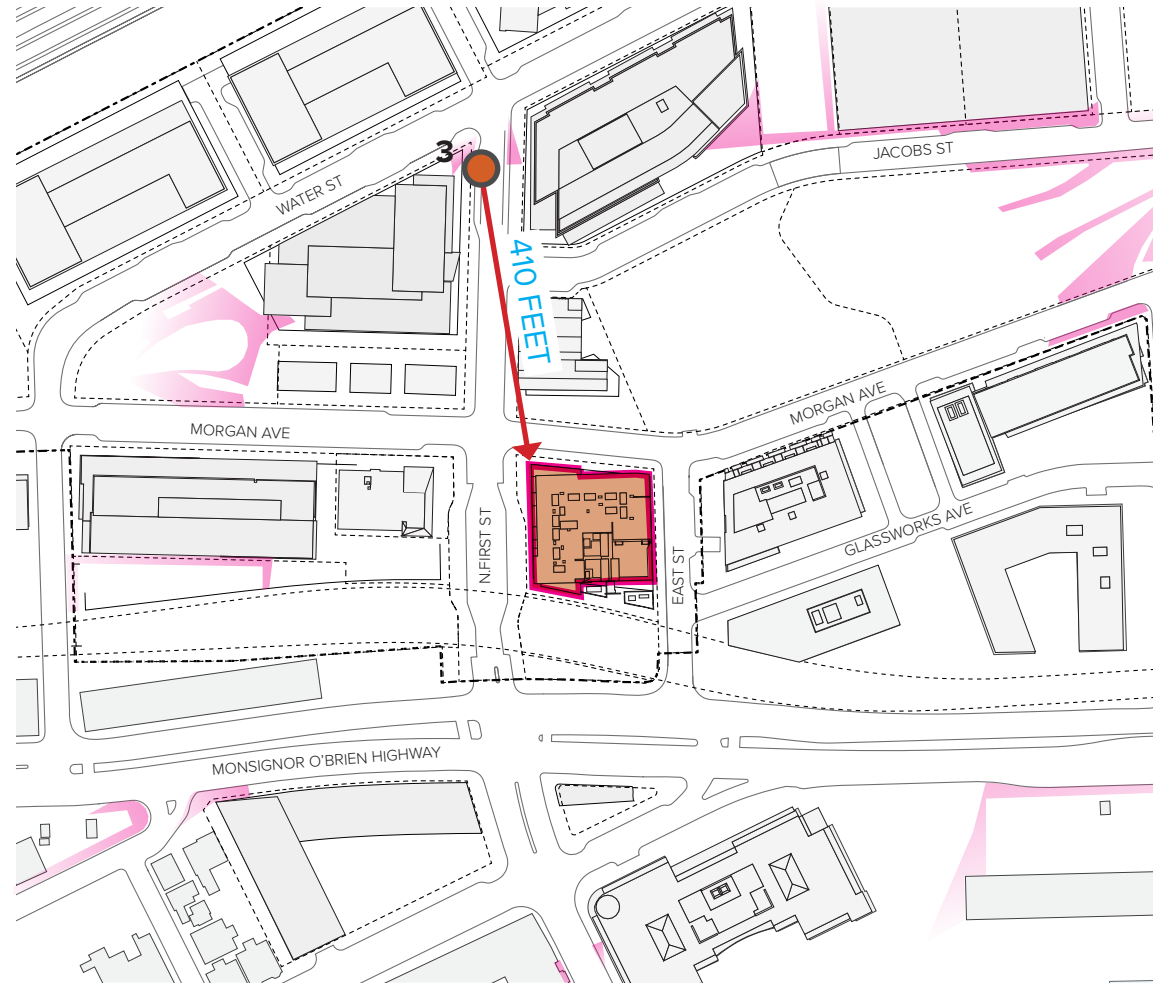
VIEW 1
MORGAN AVENUE



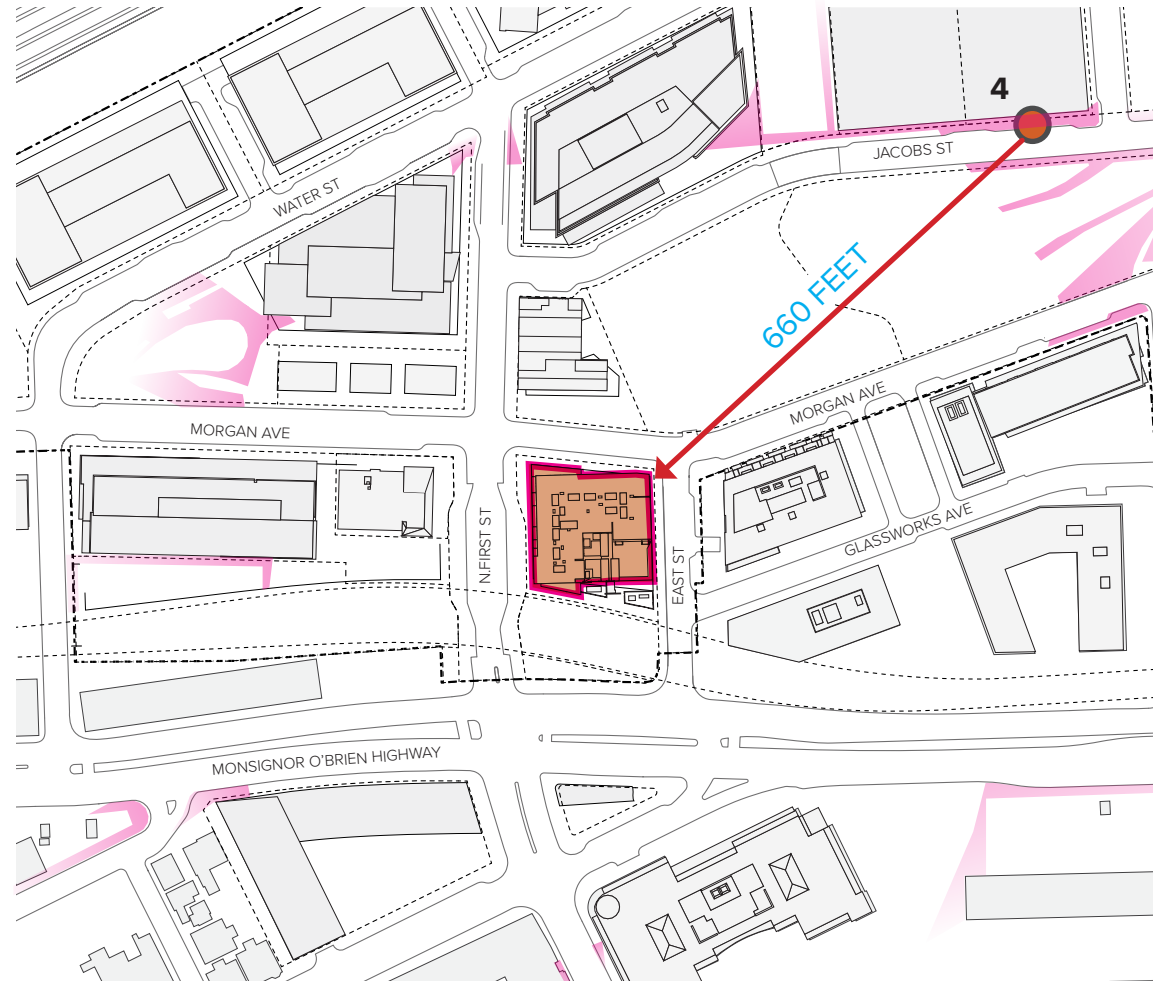
VIEW 2
PARCEL I PARK



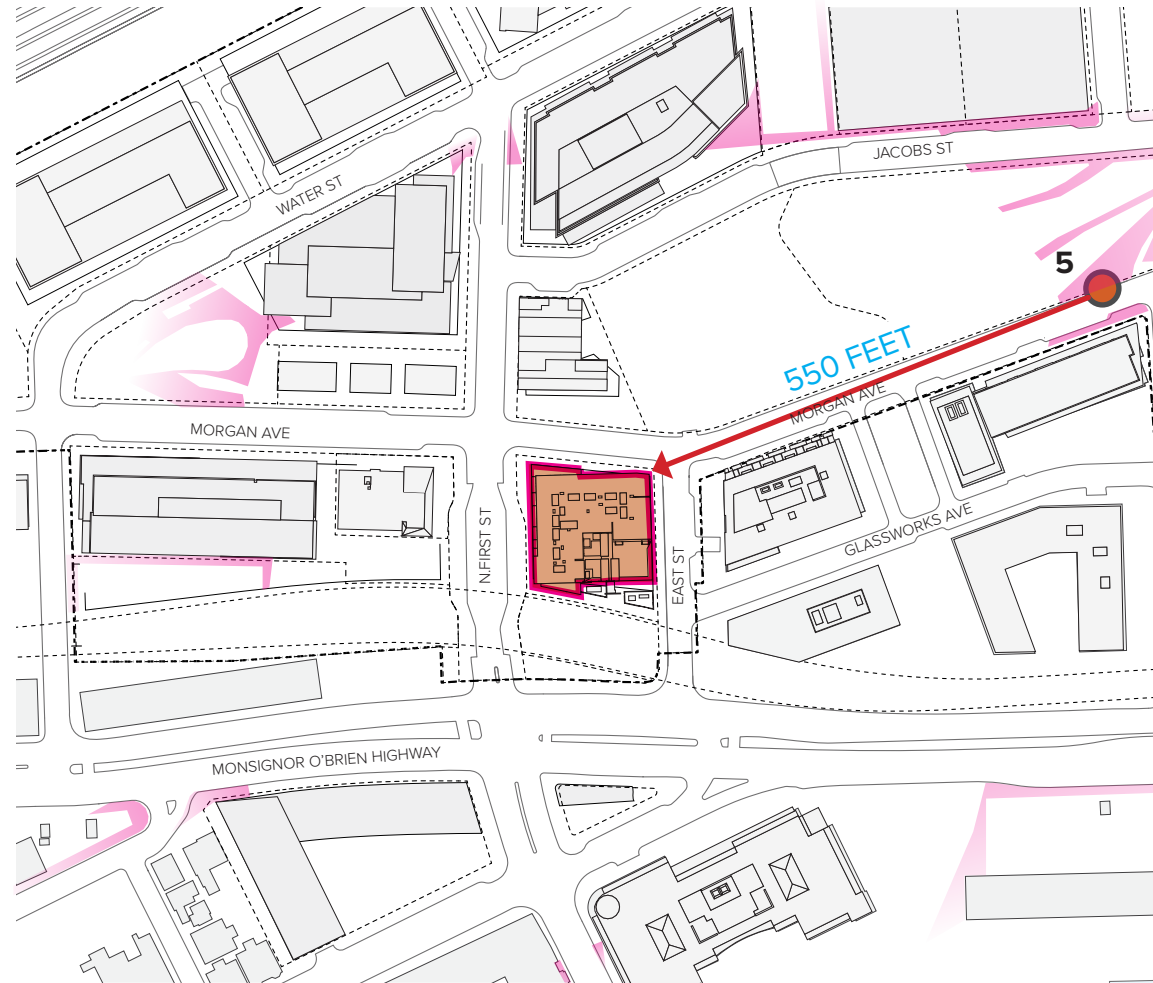
VIEW 3
NORTH FIRST STREET



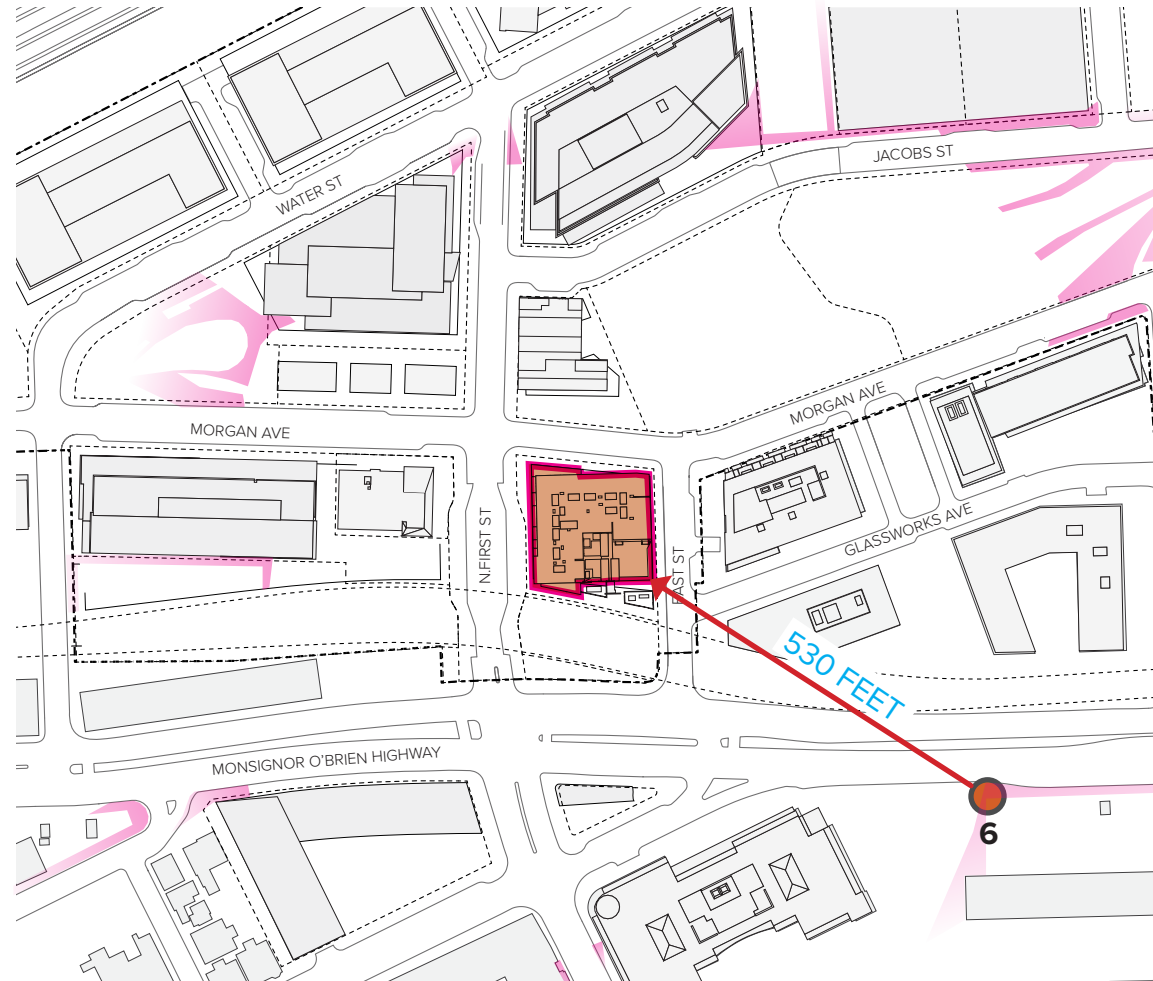
VIEW 4
JACOBS STREET



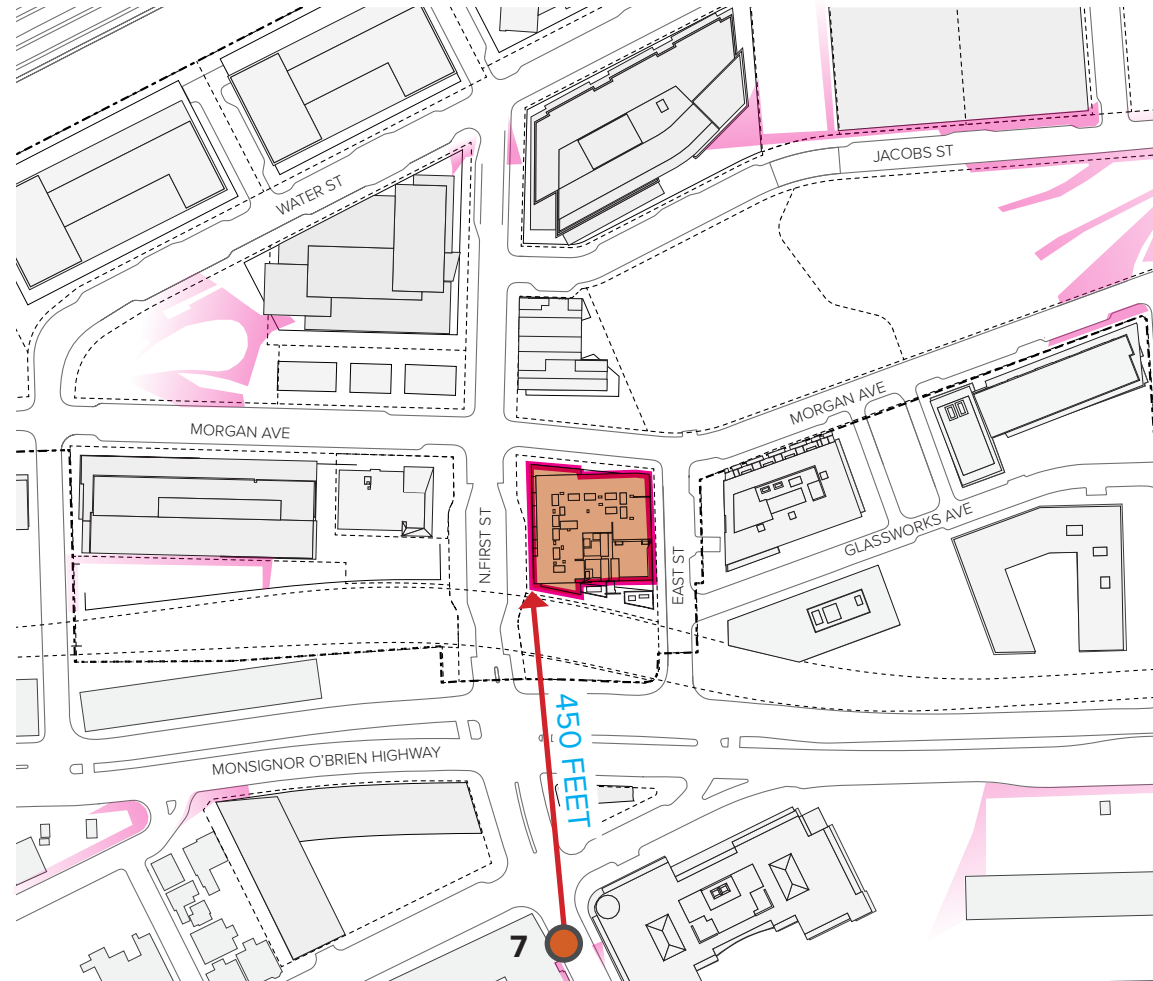
VIEW 5
MORGAN AVENUE



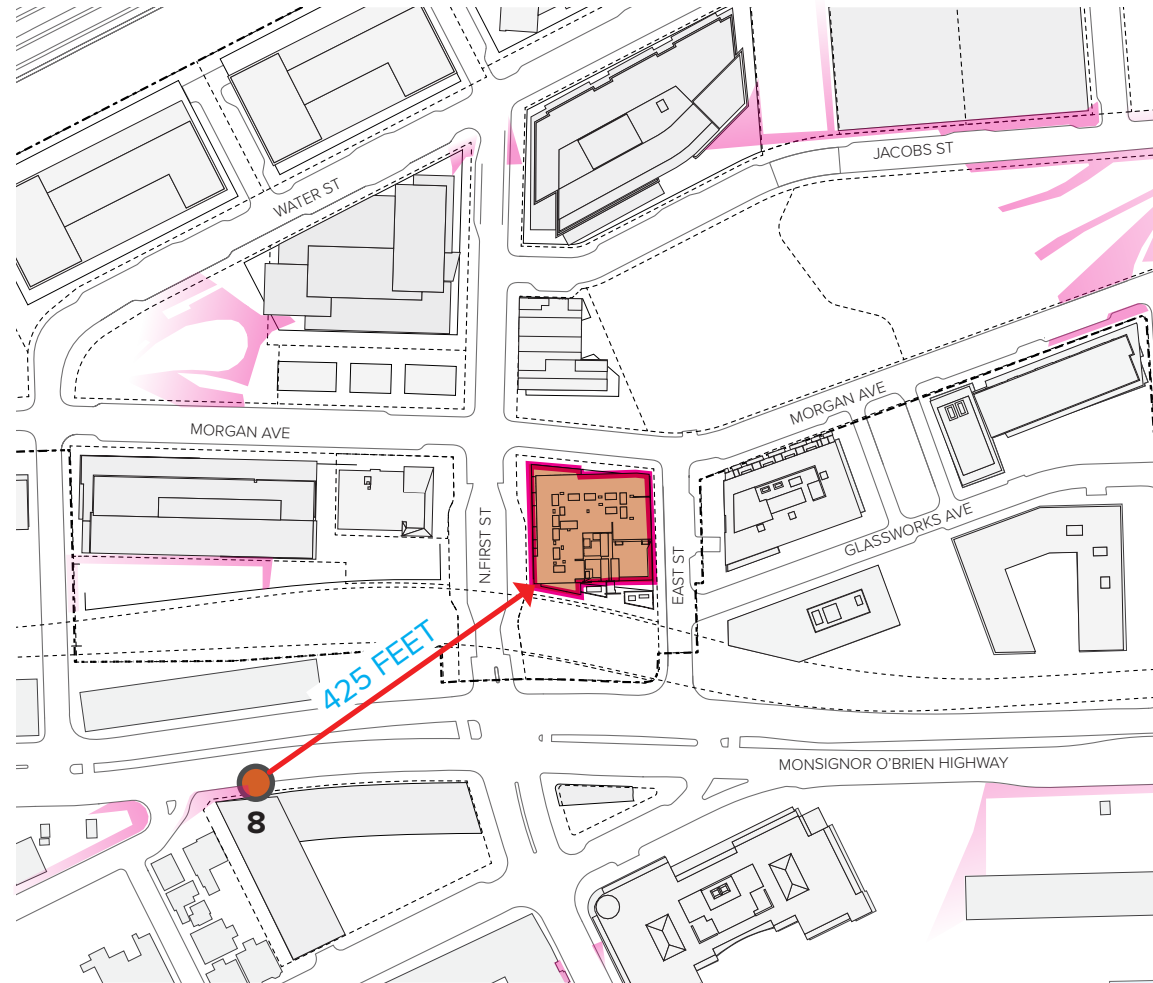
VIEW 6
MONSIGNOR O'BRIEN HIGHWAY



VIEW 7
FIRST STREET



VIEW 8
MONSIGNOR O'BRIEN HIGHWAY



SECTION	GUIDELINE DESCRIPTION	COMPLIANCE	CHECK
Preface	The layout of the new North Point neighborhood is driven in large part by the desire to structure a contiguous public realm that is well integrated into the surrounding neighborhoods. The streets, sidewalks, central park, and green fingers are designed to hold together as a single network, while providing formal and functional variety. The city block structure sets up an urban street scape to create a hierarchy of uses, clarity of circulation, human scale and an animated public and pedestrian realm. Buildings exhibiting a diversity of architectural expressions, establish a comfortable pedestrian scale common to all building types, framing streets and enlivening the sidewalks with entrances, life, and activity.	The design for Parcel R is consistent with the goals and objectives of the urban plan for North Point. The individual design criterion below demonstrate how Parcel R responds to specific design objectives for this site, as well as the larger urban context.	✓
Preface	Design principles used to create the North Point Master Plan emphasize the importance of a variety of scales and forms to support a diversity of experiences throughout the 45-acre site. Each parcel is intended to relate to its immediate surroundings as well as the larger context. The larger context is defined by overall image, legibility, cohesiveness, scale, character, connections, and movement. Local context determinants include orientation, solar exposure, parking, views to the surroundings and the central park, definition of un-built open spaces, public-private hierarchy, strategic location/program/opportunity, the integration of multiple uses and interfaces with transit. This urban design framework builds on the Eastern Cambridge Design Guidelines and sets out the basic parameters that will shape the built form.	Parcel R responds to it's surrounding context, in addition to the larger master plan, through a series of massing moves as discussed in the points below.	✓
1.0 Urban Structures			
1.3 Green Connections	Provide a clear, public, legible and green connections.	The Parcel R plans include enhanced sidewalks, and rows of trees that link the common and Monsignor O'Brien Highway, framing a view corridor to North Point Common.	✓
1.5 Master Plan - Exhibit 06 - Conceptual Land Use	Parcel R is to be developed as a Residential, Commercial or Mixed Use Parcel.	Parcel R will be a Mixed-Use Building consisting of Residential and Retail Uses	✓
1.5 Master Plan 0 Exhibit 08 - Zoning Envelope	Parcel R sits within 2 zoning height restrictions: 65' and 85'.	Parcel R is to be designed to be in compliance with the 85' maximum allowable building height per Exhibit 08 Zoning Envelope.	✓
1.5 Master Plan - Exhibit 10 - Conceptual Retail Plan	Parcel R is designated to have Retail Programming at grade.	Parcel R is proposing retail at grade level which will front North First Street, Morgan Avenue and East Street.	✓
2.0 Built Forms			
2.1 Scale and Massing	Building orientation should take advantage of exposure to sun and views to both the green spaces and surrounding attractions.	'L' shaped massing selected to maximized solar exposure and locate units as far as possible from MBTA tracks.	✓
2.1 Scale and Massing	Buildings should avoid continuous massing longer than 100 feet facing residential streets and 200 feet facing mixed-use and retail streets. If massing extends beyond this length, it should be made permeable and visually articulated as several smaller masses using different materials or colors, vertical breaks, bays, or other architectural elements.	The facades of Parcel R on Morgan Avenue, North First Street and East Street, are permeable and visually articulated with several smaller masses by using different material colors, vertical breaks, bays, and other architectural elements.	✓

SECTION	GUIDELINE DESCRIPTION	COMPLIANCE	CHECK
2.1 Scale and Massing	In addition to the above limits, buildings should reflect a rhythm and variation appropriate to the urban context. For example, this can be achieved by expressing bay widths of sixteen to twenty five feet for residential buildings and twenty-five to fifty feet for mixed-use and retail buildings	At an urban scale, the use of color on the facades helps breakdown the massing, and also creates variation on the skyline. Dimensionally, the facades are based on a 14 foot grid, appropriate for residential units. Within this grid, additional scaling items such as inset frames, extended caps, and subtle material differentiation helps create depth and interest to the facade. The addition of balconies adds residential scaling to the building.	✓
2.1 Scale and Massing	Buildings should have a clearly expressed base, middle, and top. This may be achieved through a variety of materials, fenestration, architectural detailing, massing, or other elements. In order to achieve this, the following guidelines should be considered: Buildings should have a carefully articulated base of one or two floors with a high level of transparency, lightness, and detail at the ground floors allowing views inward and outward	Parcel R massing has an expressed base, middle, and top at its most important corner of North First Street and Morgan Street. The base of the building holds the street edge around the perimeter of the site, with some sculpting and articulation to promote retail identity. The materiality of the base is primarily warm tones and metal, consistent with the surrounding retail structures. The building form consists of intersecting masses, with tall elements marking the entrances to Cambridge Crossing on North First Street and East Street. The massing towards East Street and Morgan Avenue responds more to its existing residential context	✓
2.1 Scale and Massing	A line of expression at the second floor is encouraged to humanize the scale of the buildings and create an intimate pedestrian experience (this should be achieved by means of material articulation or architectural detailing)	The change in facade at the second floor enhances the pedestrian experience by creating human scale for an eight story building.	✓
2.1 Scale and Massing	The mid-section of buildings should consider light penetration, continuity, and consistency of built mass while allowing for individual architectural detailing	The mid-section of the building employs vertically oriented openings to maximize daylight penetration into the units, while creating a consistent residential character on the facade. Inset frames and horizontal detailing create visual depth and a crafted aesthetic.	✓
2.1 Scale and Massing	The base and middle of buildings should be built to the street line with courtyard openings and setbacks for cafés where appropriate	Parcel R's base defines the street edge, and the mass is pulled back on the North side to create a dramatic cantilever above space for cafe outdoor seating. The cantilever and mass hold the urban street edge along North First Street, and steps back at the top.	✓
2.1 Scale and Massing	Use variations in height and architectural elements such as parapets, cornices and other details to create interesting and varied roof lines and to clearly express the tops of buildings. Taller buildings should be articulated to avoid a monolithic appearance and should emphasize vertically-oriented proportions Vertically-oriented proportions should be achieved by setting back the taller portions from the base and middle	The two vertical massing elements have parapets which accentuate their height. The cantilevered mass is topped by a railing indicating human occupation on the terraces above. The white 'L' shaped mass has a tight parapet detail to differentiate it from the other masses. The different masses avoid a monolithic appearance and accentuate vertically oriented proportions.	✓
2.1 Scale and Massing	N/A	N/A	
2.1 Scale and Massing	Consider legibility of the building top both by day and night, while demonstrating responsible use of lighting and energy consistent with sustainability and city requirements	The project will comply with all dark sky requirements, by increasing night sky visibility, improve nighttime vision, and color rendition of outdoor lighting. The design reduces light pollution and glare from outdoor lighting fixtures and reduces excessive light levels to conserve energy.	✓

SECTION	GUIDELINE DESCRIPTION	COMPLIANCE	CHECK
2.1.1 Build-To Line	The build-to line is a line that runs parallel to the property line at which construction of a building facade is to occur at North Point. It is a suggested setback from the property line and varies from street to street and parcel by parcel with the intention of providing a generous sidewalk and public realm design along all North Point streets. While no structural elements can be placed beyond the build-to line, certain architectural elements and projections that maintain the spirit of the setback can be considered as a part of the design review.	The Parcel R building footprint falls within the build-to line. On the North side, under the cantilevered mass, more generous sidewalks are provided.	✓
2.1.2 Public Streets	Set back portions of the building above sixty-five feet by at least ten feet from the principal facade where possible.	The setback occurs at the 7th floor above grade with occupiable terraces and balconies.	✓
2.1.2 Public Streets	<p>Where appropriate, design setbacks to include balconies and rooftop terraces See “EXHIBIT: 14 SETBACK DIAGRAM”</p> <p>Buildings should have a clearly expressed base, middle, and top. This may be achieved through changes in material, fenestration, architectural detailing, or other elements</p> <p>Setbacks may be allowed to accommodate street furniture, street trees, or generous sidewalks</p> <p>For retail and office uses, build to the build to line or provide small setbacks (5 to 15 feet) for café seating, benches, or small open spaces.</p>	Parcel R utilizes setbacks as well as an amenity terrace on the second floor. Insets and massing articulation at the podium particularly at the North side under the cantilever, serve to create retail identity, café seating, and intuitive building entries.	✓
2.1.2 Public Streets	Locate loading docks on side streets or service alleys away from residential areas and open spaces whenever possible	One loading dock for Parcel R is located along East Street at grade in the location designated in the North Point Guidelines.	✓
2.1.3 Park Edges	The buildings must conform to overall district height limits as per the zoning requirements	Parcel R is in compliance with the 85’ maximum allowable building height per zoning.	✓
2.1.3 Park Edges	Locate buildings to minimize shadows on North Point Common (especially in the afternoon) and, where feasible, on other open spaces	Refer to Shadow Studies.	✓
2.1.3 Park Edges	<p>Shops, cafés and other public uses that enliven the parks are encouraged adjacent to open spaces</p> <p>For retail and office uses, build to the lot line or provide small setbacks (5 to 15 feet) from the right-of-way for café seating, benches, or small open spaces</p>	Insets and massing articulation at the podium serve to create retail identity and areas for outdoor café seating. Above the podium, the massing is in a 'L' configuration to create a southern facing amenity terrace with access to daylight.	✓

SECTION	GUIDELINE DESCRIPTION	COMPLIANCE	CHECK
2.1.4 Roof Tops	Screening is encouraged to conceal rooftop mechanicals and should be in the same language as the rest of the architecture	Rooftop equipment is setback from all roof edges, pushed to the middle and shielded from view from grade by the building's parapet.	✓
2.1.4 Roof Tops	To the extent possible, provisions should be made so that future cellular installations may be placed upon the building without detriment to the architecture, e.g. a blank wall of a mechanical screen may be conceived as such a location	N/A	✓
2.1.4 Roof Tops	Rooftop mechanical equipment should be designed in accordance with the Cambridge Noise Ordinance and attention should be given to the placement and shielding of mechanical equipment so as to reduce the noise experienced by receptors on other parcels	The acoustic report confirms that the project complies with applicable City of Cambridge noise regulations.	✓
2.2.1 Residential Blocks	Electrical transformers should be located either inside buildings or with appropriate landscape screening if outside	The transformer is located south of the Parcel R Building along the MBTA tracks at grade, and is appropriately screened.	✓
2.2.2 Mixed-Use Blocks	Mixed-use blocks or commercial blocks are blocks that include housing and/or commercial uses, with a mix of active uses strongly encouraged on the ground floor. Mixed-use blocks may include R.	The Parcel R building will include one or more of the retail uses listed in the guidelines including Retail Shops, Restaurants, and/or Cafes	✓
2.2.3 Retail Blocks - Ground Floor Retail	At least seventy-five percent of the street frontage of the proposed retail in "EXHIBIT: 10 CONCEPTUAL RETAIL PLAN" should be occupied by retail uses, including cafés and restaurants Retail entrances should be located on public streets or primary pedestrian areas and on corners wherever possible Retail entrances should relate to crosswalks and pathways that lead to bus stops and transit stations	Street frontage on North First Street is 77% for retail uses, while Morgan Ave has 100% frontage for retail uses. All retail entrances are located on primary pedestrian areas on North First Street and Morgan Avenue, including the corner. Retail entrances on North First Street relate to the new Lechmere T entrance across the street and are accessible via new crosswalks.	✓
2.2.3 Retail Blocks - Ground Floor Retail	Retail within North Point should be as transparent as possible to maximize visibility of street-level uses Ground floor facades should permit a clear view from the sidewalk to the interior space of the building (seventy-five percent transparent surface is encouraged, and reflective glass is discouraged)	Glazing is transparent and greater than 75% of the retail facade. The ground floor facades will permit clear view from sidewalk to interior spaces of the building. Glass storefronts within the building facade will be installed by retail tenants to allow for some degree of customization.	✓
2.2.3 Retail Blocks - Ground Floor Retail	Plan for tenant awnings or canopies that create a sense of enclosure over sidewalks and provide identity for tenants	Retail tenants will have the option to propose and install retail awnings and canopies.	✓

SECTION	GUIDELINE DESCRIPTION	COMPLIANCE	CHECK
2.2.3 Retail Blocks - Ground Floor Retail	<p>Design the building to accommodate changes in retailers and retail store size over time. This may entail making the ground floor retail facade bay structure flexible, so that in the future retail spaces can be demised to include multiple bays or portions of a single bay.</p> <p>Where appropriate, provide a facade bay structure that relates to the architecture of the building while allowing for signage, storefront and architecture within each bay that offers an opportunity for the individual expression of each retail storefront.</p>	<p>The design approach for the base retail section accommodateS changes in retail use and size over time. This is achieved primarily by maintaining a flat ground floor. By not stepping the first floor slab, flexibility to demise the first floor is maintained over time. The storefront provides flexibility for retailers while providing a bay structure that relates to the architecture of the building and allowing the individual expression of the retail storefront with signage and canopies.</p>	✓
2.3.1 Architectural Character - Residential	<p>Create varied architecture and avoid flat facades by using bays, balconies, porches, and other projecting elements.</p> <p>Where buildings are set back at upper stories, lower roofs may be used as balconies, balustrades, and gardens</p> <p>Utilize architectural articulation such as: varied facade planes, changes in material, fenestration, architectural detailing, or other elements to break down the scale of large buildings</p>	<p>Parcel R utilizes setbacks and roof terraces throughout the building. Insets and massing articulation at the podium serve to create retail identity, café seating, and intuitive building entries. Above the podium, the massing is set back to create a southern facing amenity terrace with access to daylight. At the eighth floor setback there is an amenity terrace for building residents facing the common.</p>	✓
2.3.3 Lighting	<p>Public realm, multi-use path and exterior building lighting is an important consideration for the identity of the project. Lighting should enhance the retail and pedestrian experience, bicycle nighttime safety and neighborhood connectivity of North Point.</p> <p>However, lighting design shall be respectful of its impact on the surrounding context including the other residential buildings in North Point, surrounding neighborhoods including East Cambridge.</p>	<p>Site lighting has been coordinated with MVVA, our landscape architect and designed to enhance the retail and pedestrian experience, bicycle nighttime safety and neighborhood connectivity, while at the same time being respectful of the surrounding context and residential neighborhood to the East.</p>	✓
2.4 Environmental Guidelines - LEED Principles	<p>Energy efficient building envelope and system design Compliance with LEED certification standards is required. Investigation of other evolving energy efficiency standards is encouraged. Consider building designs with a view to future proofing to allow for additional energy efficiency measures at a later date, should there not be an opportunity to achieve those measures at the time of construction. For example, buildings should be designed with a “solar ready” roof structure where possible, so that when photo-voltaic technology has evolved it can be installed more easily.</p>	<p>The Parcel R building will be designed to achieve a minimum certification of LEED v4 Gold - see the LEED checklist and narrative.</p> <p>Parcel R roof is designed to be solar ready. Refer to “Solar Ready” roof diagram on page 76.</p>	✓
2.4 Environmental Guidelines - LEED Principles	<p>Rooftop mechanical equipment should be sited and shielded to protect neighboring uses from excessive noise. Mechanical penthouses and vertical roof projections should be designed as part of each building composition.</p>	<p>Rooftop mechanical equipment will be set back from the buildings edge towards the middle to minimize visibility from ground level.</p>	✓

SECTION	GUIDELINE DESCRIPTION	COMPLIANCE	CHECK
2.4 Environmental Guidelines - Wind	<p>The massing, articulation and orientation of the buildings in the North Point Master Plan considers best practice passive design approach to wind comfort. Detailed wind studies will be conducted with each building design review to meet the pedestrian wind comfort standards. Building designs should follow these wind guidelines:</p> <p>Design new buildings and open spaces to mitigate negative wind impacts on streets and public spaces.</p>	<p>Based on the wind-tunnel testing:</p> <ul style="list-style-type: none"> • Wind speeds on and around the existing site are comfortable for the intended pedestrian use throughout the year. • With the addition of the proposed development, wind conditions at all the grade-level areas assessed, including the main entrances and sidewalks, are expected to be comfortable for the intended pedestrian usage during both the summer and winter seasons. 	✓
2.4 Environmental Guidelines - Climate Resiliency	<p>The North Point Master Plan has taken into account the need for climate resiliency by raising grade across the entire site approximately ten to twelve feet, so that much of North Point will be above currently projected storm surge food levels. Nonetheless, individual building designs should also take climate resilience into account.</p>	<p>The design for Parcel R locates the transformer at grade at the south side of the site above the design flood elevation of 24'. In addition, the emergency generator is also located at grade above the design flood elevation of 24'.</p>	✓
2.5 Parking/Service	<p>While underground parking is preferable everywhere, if above ground parking is to be built it should be designed so as not to be visible from public streets or pathways, to the extent feasible. Above ground structured parking should be lined with active uses (shops, cafés, etc.) Along major public streets, or with housing units along residential buildings.</p>	<p>Parking for Parcel R residential use is located in the underground parking garage. Parking for Parcel R retail uses will be located within the existing underground garage at 222 Jacobs Street.</p>	✓
2.5 Parking/Service	<p>Locate vehicular parking entrances and loading docks on side streets or alleys and provide safe pedestrian access from public streets. Where it is necessary to locate parking entrances on major streets, the building design shall try to make these entrances unobtrusive to the pedestrian movement and shall maintain the quality of public realm. Parking and loading access are to be designed to provide safe sight lines and/or visual/audible warning systems for exiting vehicles in order to avoid conflicts between those vehicles and pedestrians on sidewalks</p>	<p>The loading dock and garage entrance have been located along East Street and are arranged to mimic the typical retail bays. The activation of a storefront entrance with unit balconies above further help to enliven this facade. The consolidation of loading functions to East street has allowed retail spaces to wrap continuously along the MBTA plaza, North First Street, Morgan Avenue and East Street facades. Vehicular parking entrances and loading dock are located on East Street in the exact location shown in the Design Guidelines.</p>	✓

ARTICLE	SUB SECTION		ZONING ORDINANCE REGULATION	COMPLIANCE	CHECK
3.000	3.10	Division of the City into Zoning Districts	(49) North Point Residence, Office, and Business District Various uses governed buy the requirements of Article 16.000	This project includes Retail and Residential uses which are allowable under Article 16.000	✓
4.000	4.30	Use Regulations -Table of Use Regulations			
4.000	4.31	Use Regulations - Residential Uses	(G) Multi-Family dwellings	This project includes 120,901 GFA of Multi-Family Dwellings	✓
4.000	4.35	Use Regulations - Retail Business and Consumer Services Establishments	(A-S)	This project includes 18,324 GFA of Retail Uses	✓
5.000		Development Standards		Development standards as listed in the North Point Design Guidelines are followed	✓
6.000		Off Street Parking and Loading Requirements and Nighttime Curfew on Large Commercial Through Trucks.			
6.00	6.12	Applicability: The off street parking and loading provisions of this Article 6.000 shall apply as follows:	(a) For new structures erected and new uses of land established or authorized after the effective date of this Article 6.000 or any amendment thereto, as well as for external additions of Gross Floor Area to existing structures for any use, accessory off street parking and loading facilities shall be provided as required by the regulations for the districts in which such structures or uses are located.	This project follows the regulations as listed in Cambridge Zoning Ordinance Article 16.000	✓
6.00	6.30	Parking Quantity Requirements			
6.00	6.31	Required Amount of Parking	Required Amount of Parking. Off street parking facilities shall be provided for each use of a lot or structure in the amount specified in the schedule of parking requirements contained in Subsection 6.36. Said schedule specifies the amount of accessory off street parking required for each type of land use listed in "Table of Use Regulations" in this Ordinance. The amount of required parking is also based on the intensity of development permitted in the district in which the use is located.	Parcel R provides required off street parking in one level of underground parking for residential uses. Retail parking is to be located in 222 Jacobs Street, where parking was allocated for this use. See use-based parking requirements below.	✓

ARTICLE	SUB SECTION		ZONING ORDINANCE REGULATION	COMPLIANCE	CHECK
6.00	6.34	Parking Space Size Allocation	No more than 50% shall be designed for compact cars	Parcel R has 50% compact car spaces.	✓
6.00	6.36	Schedule of Parking and Loading Requirements	See Table 6.36	Parking has been provided per the referenced table, see below.	✓
6.00	6.36.1	Residential Uses			
		(g) Multifamily Dwelling	1 space per dwelling unit Loading Facility Long Term Bicycle Parking (6.107.2) - R2 Short Term Bicycle Parking (6.107.3) - R2	0.5 spaces per dwelling unit 1 Loading Dock Space for retail 125 Long Term Bicycle Parking 12 Short Term Bicycle Parking	✓
6.00	6.36.5	Retail Business and Consumer Service Establishments	No Retail parking required per 16.51	21 retail parking spaces have been provided at 222 Jacobs Street (1 space per 900 sf)	✓
6.00	6.40	Design and Maintenance of Off Street Parking Facilities			
6.00	6.42	Dimensions of Off-Street Parking Spaces (minimum)	Regular Space: 90 deg - 8'-6"w x 18'-0"d x 7-6"h - 22'-0" Width of Aisle Compact Space: 90 deg- 7'-6"w x 16'-0"d x 7-6"h - 20'-0" Width of Aisle Accessible Space: 90 deg- 12'-0"w x 18'-0"d x 7-6"h - 22'-0" Width of Aisle	Parking spaces and drive aisles meet required dimensions. Refer to floor plans for parking garage layouts.	✓
6.00	6.80	Required Amount of Loading Facilities			
6.00	6.83	Minimum Number of Off Street Loading Bays	Land Use Category: 6.36.5 Retail Business and Consumer Service Establishment a. Store for Retail Sale of Merchandise - Loading Facility Category B e. and/or f. Restaurant - Loading Facility Category C Category C 0,000 GFA - 10,000 GFA - No Loading Bays Required 0,000 GFA = 24999 GFA - 1 Loading Bay Required 25,000 GFA - 64,999 GFA - 2 Loading Bays Required	Loading Facility Category B is used in determining number of loading docks. The project includes 18,324 GFA of Retail, so 1 Loading Bay is required.	✓

ARTICLE	SUB SECTION		ZONING ORDINANCE REGULATION	COMPLIANCE	CHECK
6.000	6.91	Location and Layout of Loading Facilities	Where a building or lot contains uses requiring compliance with loading facility categories A and B the first required bay shall be no less than ten (10) feet in width, fifty (50) feet in length and fourteen (14) feet in height. Each additional required loading bay for such requirements to be exclusive of drives and maneuvering space.	The project contains loading facility category B. The designed loading bay dimension is 50' L x 10' W x 14' H.	✓
6.000	6.104.1	Long Term Bicycle Parking	Long-Term Bicycle Parking shall be provided within the building containing the use or uses that it is intended to serve, or within a structure whose pedestrian entrance is no more than two hundred feet (200') from a pedestrian entrance to such building. Long-Term Bicycle Parking serving multiple uses or buildings may be pooled into a single area, enclosure or facility. Where Long-Term Bicycle Parking is located adjacent to motor vehicle parking or loading facilities, a physical barrier shall be provided to prevent damage to bicycles by other vehicles.	Long Term Bicycle Parking for residential is located in enclosed spaces within the building. Dedicated bicycle rooms are placed in the below grade parking garage and on Level 2, and individual bicycle lockers are provided on the Level 2 terrace. Long term parking for retail is located in bicycle lockers at the south face of the property, near the southwest retail entrance.	✓
6.000	6.104.2	Short Term Bicycle Parking	Private Lot. Short-Term Bicycle Parking on a private lot shall be located within fifty feet (50') feet of a pedestrian entrance to the building or buildings containing the use or uses it serves. For buildings or uses requiring more than eight (8) Short-Term Bicycle Parking Spaces, some of the required spaces may be located at a greater distance from the entrances, so long as eight (8) Short-Term Bicycle Parking Spaces are available within fifty feet (50') of any entrance.	Short term bicycle parking is located 30' from a pedestrian entrance and therefore complies.	✓

ARTICLE	SUB SECTION		ZONING ORDINANCE REGULATION	COMPLIANCE	CHECK
6.000	6.105.1	Bicycle Racks	<p>Long-Term Bicycle Parking or Short-Term Bicycle Parking requirements may be satisfied by the installation of Bicycle Racks which meet the design and layout standards set forth in this Subsection. Installers of Bicycle Racks may consult the City of Cambridge Bicycle Parking Guide, 2008 or later version, for illustrations of acceptable Bicycle Rack design and layout.</p> <p>(d) To provide adequate space to store and remove a standard bicycle, there shall be at least three feet (3') clear horizontal distance from the center point of the Bicycle Rack in a direction perpendicular to the length of the bicycle, and at least four feet (4') clear horizontal distance from the center point of the Bicycle Rack in each direction parallel to the length of the bicycle.</p> <p>Where twenty (20) or more Bicycle Parking Spaces are required, at least five percent (5%) of the required spaces must provide an additional two feet (2') of space parallel to the length of the bicycle to accommodate tandem bicycles or bicycles with trailers.</p>	<p>Long and Short Term Bicycle Parking Racks will comply with the recommendations put forth in the "City of Cambridge Bicycle Parking Guide" (version 2008 or Later).</p> <p>The project requires 127 Long-Term Bicycle Spaces. Of those, 7 Spaces (5%) will accommodate tandem bicycles or bicycles with trailers</p> <p>Residential bicycle parking requirements:</p> <ul style="list-style-type: none"> • Long Term 125 • Short Term 12 <p>Retail bicycle parking requirements:</p> <ul style="list-style-type: none"> • Long Term 2 • Short Term 11 	✓
6.000	6.106.1	Access Standards for Bicycle Parking - Primary Access	<p>All Bicycle Parking Spaces must be accessible by way of at least one clear, stabilized-surface access route. Such access route shall connect to the Bicycle Parking Spaces from any point or points along the public right of way from which bicyclists would be reasonably expected to approach the site, and shall meet the following additional requirements:</p> <p>a. The primary access route must be at least five (5) feet in width.</p> <p>b. If there is a change in grade from the public right-of-way to the Bicycle Parking Spaces, then the primary access route must have a slope no greater than five percent (5%), or may have a slope of no greater than eight percent (8%) if level landings are provided at every thirty (30) feet of linear distance; or access may be provided by means of an elevator with minimum interior dimensions of eighty (80) inches by fifty-four (54) inches.</p> <p>c. The primary access route must not require lifting bicycles over any steps or stairs.</p> <p>d. All access routes must be clear of obstructions, which shall include Bicycle Parking Spaces, motor vehicle parking spaces and loading spaces; however, doors or gates that must be opened to access the Bicycle Parking Spaces shall not be considered obstructions so long as they may be conveniently opened and closed by bicycle users.</p>	<p>a. The primary route is a minimum of 5'-0" Clear</p> <p>b. The project will use the main elevator to access Bicycle Rooms on multiple levels. Dimensions will meet the minimum dimensions of 80"x 54".</p> <p>c. There are no steps or stairs along the primary route.</p>	✓

ARTICLE	SUB SECTION		ZONING ORDINANCE REGULATION	COMPLIANCE	CHECK
6.000	6.107	Required Quantities of Bicycle Parking	Schedule of Long-Term Bicycle Parking Requirements		
6.000	6.107	Long Term Bicycle Parking	Minimum rates of Long-Term Bicycle Parking shall apply to specified categories of land use as set forth below. For specific land uses, the following categories are cross-referenced in the Schedule of Parking and Loading Requirements set forth in Section 6.36 of this Zoning Ordinance. In the case of any inconsistency between the list of included uses as set forth below and the categorization set forth in Section 6.36, the categorization in Section 6.36 shall control.	Long term bicycle parking has been provided per the calculations below.	✓
6.000	6.107	Long Term Bicycle Parking	Category R2 - Townhouse Dwellings, Multifamily Dwellings, Trailer Park or Mobile Home Park:		
6.000	6.107	Long Term Bicycle Parking	1.00 Space per Dwelling unit for the first twenty (20) units in a building	First 20 units = 20 Spaces	✓
6.000	6.107	Long Term Bicycle Parking	1.05 Spaces per Dwelling unit for all units over twenty (20) in a building	Remaining 100 Units = 105 Spaces	✓
6.000	6.107	Long Term Bicycle Parking	Total Long Term Bicycle Parking Spaces Required For R2	Long Term Bicycle Parking 125 Spaces	✓
6.000	6.107	Long Term Bicycle Parking	Category N4 - Retail Stores, Consumer Service Uses, Commercial Recreation and Entertainment		
6.000	6.107	Long Term Bicycle Parking	0.10 space per 1,000 square feet	18,324 GSF = 1.8 (2) Spaces	✓
6.000	6.107	Long Term Bicycle Parking	Total Long Term Bicycle Parking Spaces Required For N4	2 Long Term Bicycle Parking Spaces	✓
6.000	6.107	Short Term Bicycle Parking	Minimum rates of Short-Term Bicycle Parking shall apply to specified categories of land use as set forth below. For specific land uses, the following categories are cross-referenced in the Schedule of Parking and Loading Requirements set forth in Section 6.36 of this Zoning Ordinance. In the case of any inconsistency between the list of included uses as set forth below and the categorization set forth in Section 6.36, the categorization in Section 6.36 shall control.	Short term bicycle parking has been provided per the calculations below.	✓
6.000	6.107	Short Term Bicycle Parking	Category R2 - Townhouse Dwellings, Multifamily Dwellings, Trailer Park or Mobile Home Park:		
6.000	6.107	Short Term Bicycle Parking	0.10 Spaces per Dwelling Unit on a Lot	120 Units = 12 Spaces	✓
6.000	6.107	Short Term Bicycle Parking	Total Short Term Bicycle Parking Spaces Required For R2	12 Short Term Bicycle Parking Spaces	✓

ARTICLE	SUB SECTION		ZONING ORDINANCE REGULATION	COMPLIANCE	CHECK
6.000	6.107	Short Term Bicycle Parking	Category N4 - Retail Stores, Consumer Service Uses, Commercial Recreation and Entertainment		
6.000	6.107	Short Term Bicycle Parking	0.60 space per 1,000 square feet	18,324 GSF = 11.00 (11) Spaces	✓
6.000	6.107	Short Term Bicycle Parking	Total Short Term Bicycle Parking Spaces Required For N4	11 Short Term Bicycle Parking Spaces	✓
16.000	16.51	Parking and Loading Requirements	Off-street parking and loading requirements shall be the same as currently specified in Article 6.000 and in the Schedule of Parking and Loading Requirements applicable to the Residence C-3, Office 3, Business B and Industry B districts, except as modified below.	Required parking per category has been provided, see calculations below.	✓
16.000	16.51	Minimum and Maximum Parking Requirements	Accessory off street parking shall be provided as follows:		
16.000	16.51	Residential Uses:	1 space per unit minimum and 1.5 spaces per unit maximum	N/A	✓
16.000	16.51	Retail and Consumer Service Uses:	No accessory parking shall be required if the retail and consumer service uses are located on the ground floor and front on and have a public entry directly onto a publicly accessible street.	21 retail parking spaces have been provided in 222 Jacobs Street	✓

MAAB	SECTION		ZONING ORDINANCE REGULATION	COMPLIANCE	CHECK
	23.1	General	Any person who has lawful control of improved or enclosed private property used as off-street parking for businesses, auditoriums, sporting or recreational facilities, cultural centers, or general public use where the public has the right of access as invitees or licensees, shall cause such parking areas, including temporary parking areas to comply with 521 CMR. For parking related to residential and transient lodging facilities, See 521 CMR 8.00: TRANSIENT LODGING FACILITIES and 521 CMR 10.3, Parking Spaces.	All provided parking to comply with 521 CMR.	✓
	23.2.1	Number	Accessible spaces shall be provided as follows: Total Parking in Lot: 201-300 Required Minimum Number of Accessible Spaces: 7	Total Parking in Garage: 60 Accessible Spaces: 2	✓
	23.2.2		One in every eight accessible spaces, but not less than one, shall be van accessible, See 521 CMR 23.4.7.	Van Spaces : 1	✓

MAAB	SECTION		ZONING ORDINANCE REGULATION	COMPLIANCE	CHECK
	23.3.4	Location	Accessible parking spaces shall be located as follows: Garages: In multi-level garages where no elevator is provided, such spaces shall all be located near the accessible entrance. See special van requirement in 521 CMR 23.4.7.	See 521 CMR 23.4.7	✓
	23.4.1	Parking Spaces	Shall Comply with the Following: Width: Accessible parking spaces shall be at least eight feet (8' = 2438mm) wide, plus the access aisle.	See Cambridge Zoning Ordinance 16.6.42 for parking space dimensions	✓
	23.4.2		Length: The length of accessible parking spaces shall be at least the same as for parking spaces generally in accordance with 780 CMR: The State Building Code or local zoning requirements. Parked vehicles shall not reduce the clear width of an accessible route by overhanging or protruding into it.	See Cambridge Zoning Ordinance 16.6.42 for parking space dimensions	✓
	23.4.7		Van Accessible spaces shall comply with the following: a. Provide minimum vertical clearance of eight feet, two inches (8'2" = 2489mm) at the parking space and along at least one vehicle access route to such spaces from site entrance(s) and exit(s). b. Each space shall have a sign designating it "Van Accessible" as required by 521 CMR 23.6, c. All such spaces may be grouped on one level of a parking structure. d. Eight foot minimum (8' = 2438mm) wide space.	The Van access route and Van accessible Space has been accommodated on Parking Level P1	✓



Project Description

Parcel R is a new residential building situated between North First Street, Morgan Avenue, East Street, and the MBTA Green line tracks with views of Commons. The new Lechmere station abuts the site to the South. The building will be activated at the ground level with retail on all sides, reinforcing the pedestrian experience and walkability of the development. Ornamental trees, low-level landscaping and pedestrian-scaled lighting will enhance the pedestrian movement entering Cambridge Crossing

Parcel R is an eight-story structure in a L-shaped configuration, with the ground floor dedicated to the entrance lobby, retail, and support spaces. One basement level will house vehicular and bicycle parking along with additional support spaces. The second and eighth floor contain outdoor amenity space for the residents.

This new residential building will fill in the urban block, providing street wall continuity with the adjacent structures along both Morgan Avenue and North First Street. The building continues the residential fabric on Morgan Avenue, defined by Tango and Sierra.

Streetscape and Massing

The main entrance to the building is on North First Street, the main entrance to Cambridge Crossing and its principle retail street. This entrance location, along with the scale of the street, the double of street trees, and elevated cycle tracks in front of the building, reinforces the arrival to Cambridge Crossing and provides an improved pedestrian connection to the East Cambridge neighborhood.

The building's form and expression takes its cues from its surrounding context and residential program. The response is a building of simple 'L' shape massing, primarily cement panels, and well-proportioned window placement. The building has four fronts and activates the plaza to the South. Landscaping is used to build up an extra story massing at the Southeast corner of the plinth. The large-scale massing elements, one on East Street and one on the North Street mark the entrance to Cambridge Crossing.

Building Height

Consistent with the Northpoint East Cambridge Design Guidelines, the building height is less than the 85'-0" limit above mean grade.

Sustainability

Energy efficiency will be integrated into all aspects of the design including a high-performance building envelope, efficient mechanical systems with heat recovery, and day lighting strategies. The project will be compliant with the IECC 2018 energy code as documented in Appendix AA of the 9th edition of the Massachusetts State Building Code. The project will incorporate water conservation strategies, and extensive storm water management provisions. This project design is integrated into the site design of the Cambridge Crossing campus. The project will be LEED Gold certified.

Acoustics

The project will be compliant with the Noise Ordinance of the City of Cambridge.

Transportation

Cambridge Crossing – Parcel R (the Project) is located within the master-planned Cambridge Crossing mixed-use development which includes new roadways and sidewalks with on-road and separated bicycle lanes (North First Street) and a multi-use path connecting Minuteman Bike-way to the Somerville Community Path. Cambridge Crossing provides improved vehicle, bicycle, and pedestrian access to East Cambridge via First Street and Cambridge Street. The Project is also uniquely well-served by mass transit facilities, specifically the MBTA's Green Line Lechmere Station with northbound and southbound headhouses located directly across North First Street and East Street, respectively.

A total of 127 long term, covered and secure, bicycle parking spaces will be provided for the building tenants and residents on second floor and in the garage of the building. Additional short-term bicycle parking will be located on-site to accommodate 23 bicycles and a 24-bicycle Blue Bike dock is located to the south of the Project within Station Plaza East. Vehicular parking for the building at a ratio of 0.50 space per residential unit will be located in the garage below grade.



Water Service

In accordance with the Cambridge Water Department Construction and Operating Procedures, the Project will incorporate redundant domestic water services and a fire protection service. The services will utilize existing valved service stubs provided from recently constructed 12" water mains within North First Street and Morgan Avenue. All work will be installed per Cambridge Water Department standards.

Sanitary Sewer

The sanitary sewer system for Cambridge Crossing has been master-planned to collect sewage via gravity sewer and convey flows to a pump station at the end of Morgan Avenue where it is then pumped via force main within Water Street and Gore Street to the MWRA sewer in Medford Street, Somerville. The pump station was designed for the full build-out of Cambridge Crossing and provides capacity for adjacent developments (22 Water Street, Lechmere Station, Avalon Bay properties, Regatta River View, Education First 1 and 2). In accordance with MEPA review and MWRA approval, Cambridge Crossing has removed Infiltration/Inflow (I/I) in accordance with applicable permits.

Stormwater

The stormwater management system for Cambridge Crossing (CX) has been master-planned to provide water quality treatment, total suspended solids removal, phosphorus removal, and promote groundwater recharge to the maximum extent practical as defined by the 2008 Massachusetts Department of Environmental Protection (DEP) Stormwater Management Handbook and the City of Cambridge Department of Public Works Wastewater and Stormwater Drainage Use Regulations.

In accordance with the stormwater masterplan for CX, roof runoff from the Project will be directed east to the newly installed infiltration chambers where nutrient removal can occur, and groundwater can be recharged. Overflow from the sub-surface infiltration system will drain to the pond in CX Common, and finally be conveyed via piping to the Lechmere Canal. All stormwater BMPs were designed to treat a minimum of the first one inch of runoff generated by on-site impervious areas.

Retail

Parcel R provides an excellent opportunity to add more desirable retail space and further enhance ground floor activation at Cambridge Crossing.

The site is well positioned at the gateway of Cambridge Crossing, perpendicular to the new Lechmere MBTA Station and the beginning of the main CX retail corridor with double-sided retail storefronts running north along both sides of North First Street and terminating at the intersection of North First Street and Water Street. Additionally, Parcel R serves as an extension of the existing retail corridor located on First Street in East Cambridge and welcomes people coming across the east side of Monsignor O'Brian Highway ("MOB") to Cambridge Crossing and the new Lechmere Station.

A key advantage of the Parcel R building design is retail frontage on all four facades with the main frontages on North First Street and Morgan Avenue and partial frontages facing MOB and East Street. This expansive retail presence will activate and enliven the surrounding streets and sidewalks and add to the critical mass of ground floor uses necessary to support a healthy retail ecosystem at CX. We anticipate outdoor seating and other outdoor "spill" along sections of the storefronts providing even more opportunity for activity and visual excitement.

The proposed building on Parcel R will include 17,500 rentable square feet of retail space on the ground floor. This makes it the largest contiguous retail space in all of Cambridge Crossing. With that advantage there are many potential tenants under consideration including:

- Small format grocery store
- Wine and spirits
- Specialty foods purveyor (e.g., butcher, cheese monger etc.)
- Restaurant & Bar
- Bookstore
- Technology retail store
- Pharmacy or apothecary
- Pet goods and services
- Personal services (spa, hair, nails etc.)

We look forward to expanding and enhancing the retail opportunities at Cambridge Crossing and Parcel R provides an outstanding opportunity to accomplishing that goal.

Areas & Unit Counts

Level	GFA	Unit accommodation				Unit totals	Parking	
		3 BR/2 ba	2 BR/2 ba	1 BR/1 ba	Studio/1 ba		Car	Bicycle
Basement	992						60	47
Ground Floor	21,128	0	0	0	0			
Floor 2	15,778	1	2	7	4	14		80
Floor 3	16,697	1	3	7	8	19		
Floor 4	17,068	1	3	7	8	19		
Floor 5	17,015	1	3	7	8	19		
Floor 6	17,068	1	3	7	8	19		
Floor 7	17,015	1	3	7	8	19		
Floor 8	16,464	0	6	2	3	11		
Total	139,225	6	23	44	47	120	60	127
		5%	19%	37%	39%	100%		

Vehicle Parking

Total spaces	Commercial	Residential	Ratio (car : unit)
60	* see Note	60	0.50

Bicycle Parking

Residential	Long term	1.00 x 20 = 20	
		1.05 x 100 = 105	
		125 spaces	5% (7 spaces) need to accommodate tandems or trailers (3' x 10')
	Short term	0.10 x 120 =	12 spaces
	Total	137 spaces	
Retail	Long term	2 spaces	0.1 space per 1,000 GSF
18,324 SF	Short term	11 spaces	0.6 space per 1,000 GSF
	Total	13 spaces	

*Note: Zoning Section 13.76.1 that allows us to pool parking on a different parcel in CX. Retail parking provided at 222 Jacobs Street (Parcel J/K).

Appendix I - Dimensional Form

Address: Parcel R, 14 North First Street

	Allowed/Required	Existing	Proposed	Granted
Total FAR	2.9	0		
Residential	N/A	N/A	N/A	
Non-Residential	N/A	N/A		
Inclusionary Bonus	0	0		
Total GFA in Sq. Ft.	134,051 (MIN.)	0	139,225	
Residential	118,293	0	120,901	
Non-Residential	15,758 (MIN.)	0	18,324	
Inclusionary Bonus	0	0		
Max. Height	65'-85' max	N/A		
Range of heights	65'-85' max	N/A	84'-10"	
Lot Size	46,343	46,343		
Lot Area/DU	N/A (a)	0		
Total Dwelling Units	[Same as Proposed]	0	120	
Base Units	[Same as Proposed]	0		
Inclusionary units	11.5% of the Total Dwelling Units	0	14	
Min. Lot Width	N/A	N/A		
Min. Yard Setbacks	N/A (a)	N/A		
Front	N/A (a)	N/A		
Side Left	N/A (a)	N/A		
Side Right	N/A (a)	N/A		
Rear	N/A (a)	N/A		
Total % Open Space	N/A (b)	N/A		
Usable	N/A (b)	N/A		
Other	N/A (b)	N/A		
Off Street Parking	[Same as Proposed]		60	
Min #	Residential Use (c); Retail Use (d)	0	60 residential spaces	
Max #	Residential Use (c); Retail Use (d)	0	10 retail spaces (provided at 222 Jacobs Street)	
Handicapped	3	0	3	
Bicycle Spaces	LT: 1 space/DU for the first 20 units; 1.05 space/DU above 20 units (Residential); 0.10 space/1000 sf (Retail) ST: 0.10 space/DU (Residential); 0.60 space/1,000 sf (Retail)	0	Residential LT: 125 / ST: 12 Retail LT: 2 / ST: 11	
Loading Bays	Residential Use: N/A; Retail Use: 1 min	0	1	

Notes

- (a) CZO 13.74.4: There is no specified minimum lot area per dwelling unit requirement and no requirement with respect to minimum widths or minimum front, side or rear yards in the PUD-6 District.
- (b) Special Permit (#179), Condition 3: Open Space limitations apply on a PUD-wide, not parcel-specific basis.
- (c) Special Permit (#179), TPTD Memorandum: Residential minimum of 0.5 spaces/unit and residential maximum of 1 space/unit, but not to exceed 0.75 spaces/unit upon completion of the Cambridge Crossing development.
- (d) CZO 13.76: No accessory parking shall be required if the retail and consumer service uses are located on the ground floor and front on and have a public entry on to a publicly accessible street. However, if retail parking is provided, the Special Permit prescribes a retail maximum of 0.5 spaces/ 1,000 sf.



33 Moulton Street
Cambridge MA 02138
617 499 8000
acentech.com



November 1, 2021

Frank Valdes, AIA
DiMella Shaffer
281 Summer Street
Boston, MA 02210

Email: FValdes@dimellashaffer.com

Subject **Community Noise Assessment Summary**
Cambridge Crossing Parcel R
Cambridge, MA
Acentech Project No. J633183

Dear Frank:

We have reviewed noise data for the rooftop equipment currently planned, per the mechanical noise data and roof plans you emailed to us on September 13, 2021. Based on our 3-D computer environmental noise model of the site and surrounding buildings, we have confirmed that the project's current design complies with applicable City of Cambridge noise regulation at the abutting properties.

As the project design advances, we will continue to advise you regarding appropriate noise mitigation as needed to comply with applicable regulations.

* * * * *

Sincerely,

Benjamin E. Markham, LEED AP
Principal Consultant

CC: Jay Bliefnick, PhD (Acentech)

REPORT



**PEDESTRIAN WIND STUDY
CAMBRIDGE CROSSING PARCEL R**
RWDI #2104846
October 15, 2021



EXECUTIVE SUMMARY

RWDI was retained to conduct a pedestrian wind assessment for the proposed Cambridge Crossing Parcel R in Cambridge, MA (Image 1). Based on our wind-tunnel testing for the proposed development under the Existing and Proposed configurations (Images 2A and 2B, respectively), and the local wind records (Image 3), the potential wind comfort conditions are predicted as shown on site plans in Figures 1A through 2B, while the associated wind speeds are listed in Table 1. These results can be summarized as follows:

- Wind speeds on and around the existing site are comfortable for the intended pedestrian use throughout the year.
- With the addition of the proposed development, wind conditions at all the grade-level areas assessed, including the main entrances and sidewalks, are expected to be comfortable for the intended pedestrian usage during both the summer and winter seasons.
- Wind speeds on the Levels 2 and 8 terraces of the proposed development are predicted to be comfortable for passive patron usage throughout the year, which is appropriate.
- The pedestrian wind safety criterion is expected to be met at all the assessed areas for both the Existing and Proposed configurations.

CAMBRIDGE CROSSING PARCEL R

CAMBRIDGE, MA

PEDESTRIAN WIND STUDY
RWDI # 2104846
October 15, 2021

<p>SUBMITTED TO</p> <p>Frank Valdes, AIA Principal FValdes@dimellashaffer.com</p> <p>Dimella Shaffer 24 Farnsworth Street, 4th Floor Boston, MA 02210 T: 614.426.5004</p>	<p>SUBMITTED BY</p> <p>Shivani Jariwala, M.E.Sc. Technical Coordinator Shivani.Jariwala@rwdi.com</p> <p>Rose Babaei, Ph.D. Technical Coordinator Rose.Babaei@rwdi.com</p> <p>Saba Saneinejad, Ph.D. Senior Technical Coordinator / Associate Principal Saba.Saneinejad@rwdi.com</p> <p>Edyta Chruscinski, P.Eng., PMP, LEED AP Senior Project Manager / Associate Edyta.Chruscinski@rwdi.com</p> <p>RWDI 600 Southgate Drive Guelph, Ontario N1G 4P6 T: 519.823.1311 x 2505 F: 519.823.1316</p>
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LIST OF FIGURES

Figure 1A: Pedestrian Wind Comfort Conditions – Existing – Summer
Figure 1B: Pedestrian Wind Comfort Conditions – Proposed – Summer

Figure 2A: Pedestrian Wind Comfort Conditions – Existing – Winter
Figure 2B: Pedestrian Wind Comfort Conditions – Proposed – Winter

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Table 1: Pedestrian Wind Comfort and Safety Conditions

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1 INTRODUCTION

RWDI was retained to conduct a pedestrian wind assessment for the proposed Cambridge Crossing Parcel R project in Cambridge, MA. This report presents the project objectives, approach and the main results from RWDI's assessment.

1.1 Project Description

The project (site shown in Image 1) is located to the south side of North Point Blvd. and is located between North First Street and East Street. It consists of an 8-story residential building at an approximate height of 87 ft, with outdoor terraces at Levels 2 and 8 of the building.

1.2 Objectives

The objective of the study was to assess the effect of the proposed development on local conditions in pedestrian areas on and around the study site and provide recommendations for minimizing adverse effects, if needed. This quantitative assessment was based on wind speed measurements on a scale model of the project and its surroundings in one of RWDI's boundary-layer wind tunnels. These measurements were combined with the local wind records and compared to appropriate criteria to assess wind comfort and safety in pedestrian areas. The assessment focused on critical pedestrian areas, including the building entrances, public sidewalks, and Level 2 & 8 terrace areas.



Image 1: Aerial View of Site and Surroundings (Photo Courtesy of Google™ Earth)

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2 BACKGROUND AND APPROACH

2.1 Wind Tunnel Study Model

To assess the wind environment around the proposed project, a 1:300 scale model of the project site and surroundings was constructed for the wind tunnel tests of the following configurations:

- A - Existing: Existing site with existing surroundings (Image 2A), and,
- B - Proposed: Proposed project with existing surroundings and future masterplan buildings (Image 2B).

The wind tunnel model included all relevant surrounding buildings and topography within an approximately 1200 ft radius of the study site. The wind and turbulence profiles in the atmospheric boundary layer beyond the modelled area were also simulated in RWDI's wind tunnel. The wind tunnel model was instrumented with 44 specially designed wind speed sensors to measure mean and gust speeds at a full-scale height of approximately 5 ft above local grade in pedestrian areas throughout the study site. Wind speeds were measured for 36 directions in a 10-degree increments. The measurements at each sensor location were recorded in the form of ratios of local mean and gust speeds to the mean wind speed at a reference height above the model. The placement of wind measurement locations was based on our experience and understanding of the pedestrian usage for this site.

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Image 2A: Wind Tunnel Study Model - Existing Configuration

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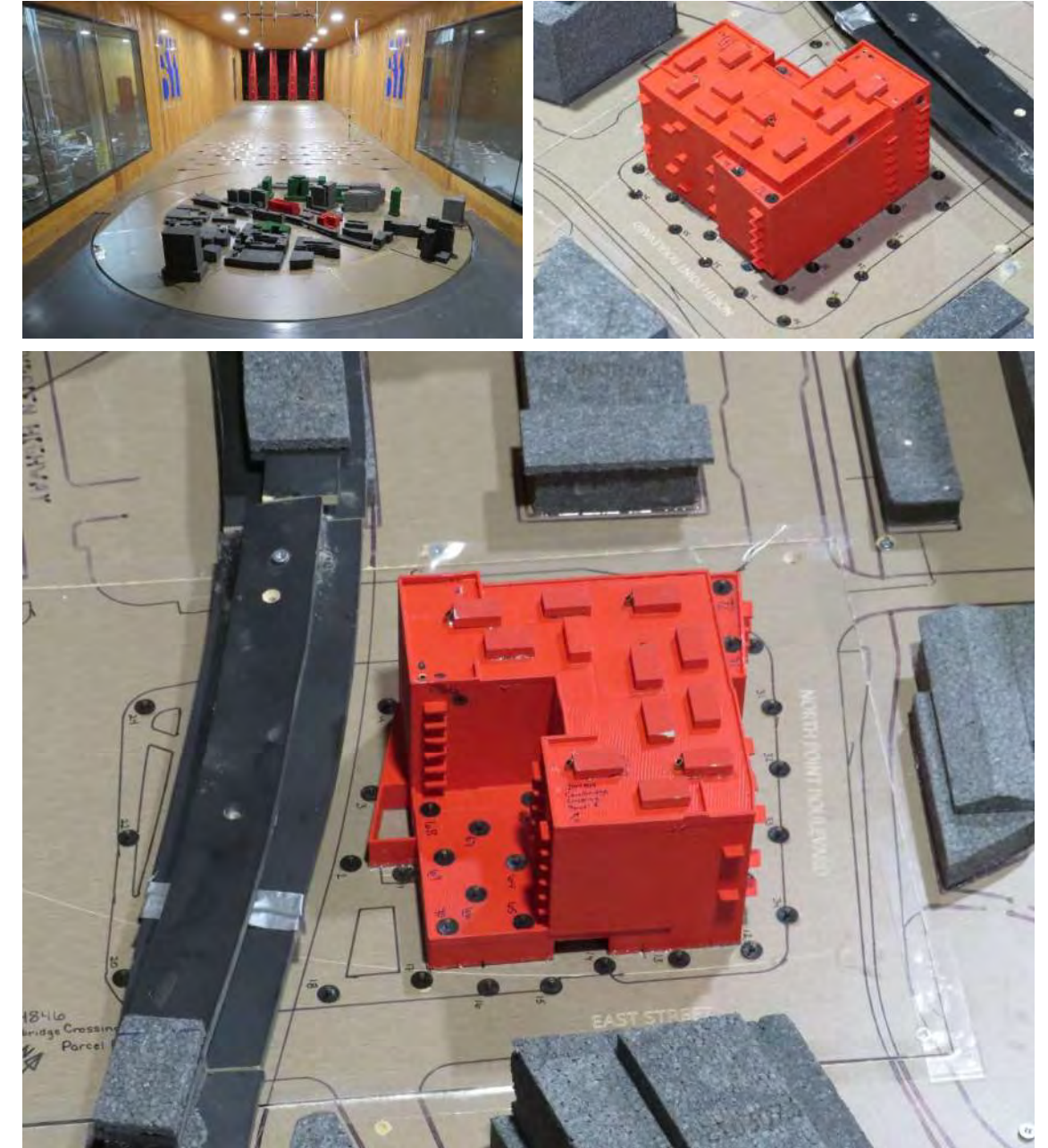


Image 2B: Wind Tunnel Study Model - Proposed Configuration

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2.2 Meteorological Data

Wind statistics recorded at Boston Logan International Airport between 1995 and 2020, inclusive, were analyzed for the Summer (May through October) and Winter (November through April) seasons. Image 3 graphically depicts the directional distributions of wind frequencies and speeds for these two seasons. Winds from the southwest and northwest quadrants are predominant throughout the year, as indicated by the wind roses. Strong winds of a mean speed greater than 15 mph measured at the airport (at an anemometer height of 30 ft) occur for 14.8% and 27.7% of the time during the summer and winter seasons, respectively.

Wind statistics were combined with the wind tunnel data to predict the frequency of occurrence of full-scale wind speeds. The full-scale wind predictions were then compared with the wind criteria for pedestrian comfort and safety.

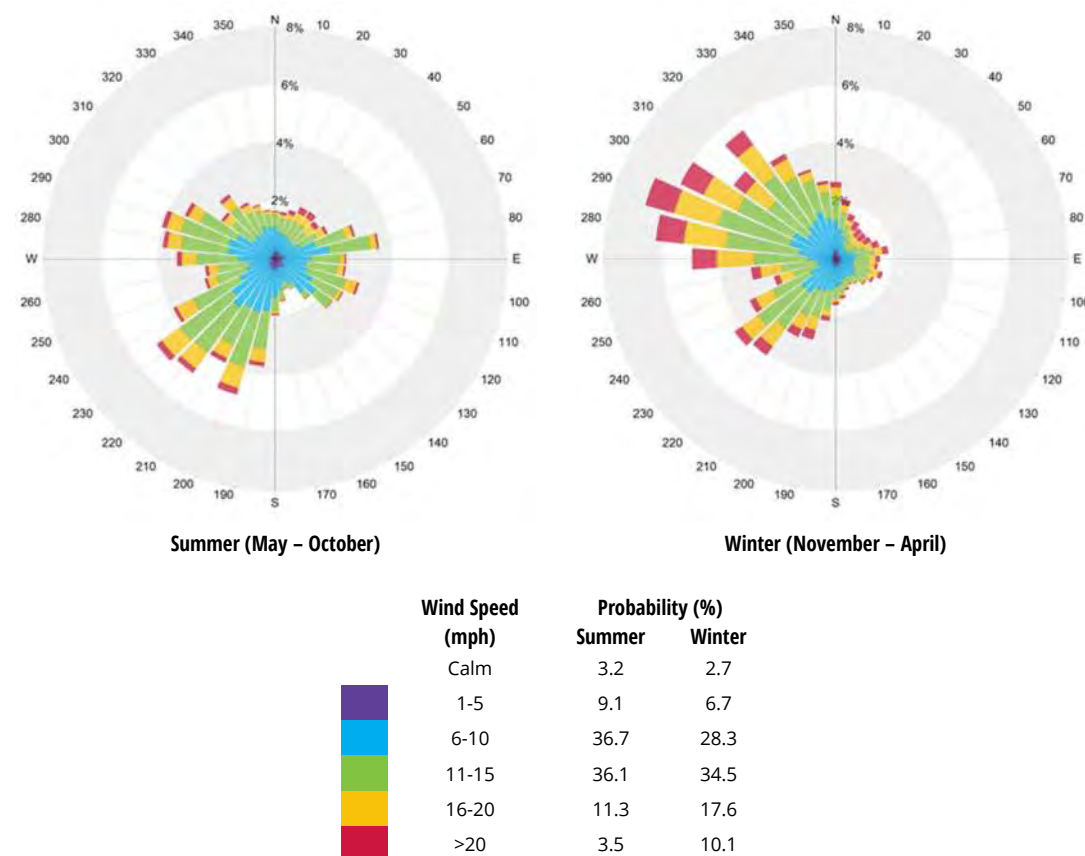


Image 3: Directional Distribution of Winds Approaching Boston Logan International Airport between 1995 and 2020

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2.2 RWDI Pedestrian Wind Criteria

The RWDI pedestrian wind criteria, which have been developed by RWDI through research and consulting practice since 1974, are used in the current study. These criteria have been widely accepted by municipal authorities as well as by the building design and city planning community. Regional differences in wind climate and thermal conditions as well as variations in age, health, clothing, etc. can affect a person's perception of the wind climate. Therefore, comparisons of wind speeds for the existing and proposed building configurations are the most objective way in assessing local pedestrian wind conditions. In general, the combined effect of mean and gust speeds on pedestrian comfort can be quantified by a Gust Equivalent Mean (GEM).

Comfort Category	GEM Speed (mph)	Description
Sitting	≤ 6	Calm or light breezes desired for outdoor restaurants and seating areas where one can read a paper without having it blown away
Standing	≤ 8	Gentle breezes suitable for main building entrances, bus stops, and other places where pedestrians may linger
Strolling	≤ 10	Moderate winds that would be appropriate for window shopping and strolling along a downtown street, plaza or park
Walking	≤ 12	Relatively high speeds that can be tolerated if one's objective is to walk, run or cycle without lingering
Uncomfortable	> 12	Strong winds of this magnitude are considered a nuisance for all pedestrian activities, and wind mitigation is typically recommended

Notes:
 (1) GEM Speed = max (Mean Speed, Gust Speed/1.85) and Gust Speed = Mean Speed + 3*RMS Speed;
 (2) Wind conditions are considered to be comfortable if the predicted GEM speeds are within the respective thresholds for at least 80% of the time between 6:00 and 23:00. Nightly hours between 0:00 and 5:00 are excluded from the wind analysis for comfort since limited usage of outdoor spaces is anticipated; and,
 (3) Instead of standard four seasons, two periods of summer (May to October) and winter (November to April) are adopted in the wind analysis, because in a cold climate such as that found in Cambridge, there are distinct differences in pedestrian outdoor behaviours between these two-time periods.

Safety Criterion	Gust Speed (mph)	Description
Exceeded	> 56	Excessive gust speeds that can adversely affect a pedestrian's balance and footing. Wind mitigation is typically required.

Notes:
 (1) Based on an annual exceedance of 9 hours or 0.1% of the time for 24 hours a day; and,
 (2) Only gust speeds need to be considered in the wind safety criterion. These are usually rare events, but deserve special attention in city planning and building design due to their potential safety impact on pedestrians.

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3 RESULTS AND DISCUSSION

The predicted wind conditions are shown on site plans in Figures 1A through 2B located in the “Figures” section of this report. These conditions and the associated wind speeds are also represented in Table 1, located in the “Tables” section of this report. The following is a detailed discussion of the suitability of the predicted wind conditions for the anticipated pedestrian use of each area of interest.

Wind conditions that meet the safety criterion are predicted at all locations for all configurations assessed.

3.1 Grade Level (Locations 1 through 34)

Wind conditions comfortable for walking or strolling are appropriate for sidewalks and walkways as pedestrians will be active and less likely to remain in one area for prolonged periods of time. Lower wind speeds conducive to standing are preferred at main entrances where pedestrians are apt to linger.

3.1.1 Existing Configuration

Existing wind speeds are comfortable for sitting or standing during the summer (see Figure 1A), and comfortable for standing or strolling during the winter season (see Figure 2A) at most locations at and around the project site.

3.1.2 Proposed Configuration

With the addition of the proposed masterplan to the site, the wind comfort conditions are comfortable for sitting and standing around the Parcel R building and surrounding sidewalks during the summer season (Figure 1B), which is ideal for the intended usage. Seasonally stronger wind speeds during the winter season will result in increased wind activities around the site (Figure 2B). However, wind conditions will remain comfortable for standing and strolling, which is suitable for active pedestrian usage of these areas.

Throughout the year, the wind conditions at the building entrances near Locations 1, 5, 6, and 7 are anticipated to be comfortable for sitting and standing (Figures 1B & 2B), which is ideal for the intended usage of the entrance areas.

3.2 Above-Grade Levels (Locations 35 through 44)

It is generally desirable for wind conditions on terraces intended for passive activities to be comfortable for sitting more than 80% of the time in the summer. During the winter, the area would not be used frequently, and increased wind activity would be considered appropriate.

Wind conditions at the Level 2 and Level 8 terrace areas are predicted to be comfortable for sitting during the summer season, and for sitting and standing during the winter season, these conditions are ideal for passive pedestrian usage of these terrace areas (Figure 1B & 2B).

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4 APPLICABILITY OF RESULTS

The wind conditions presented in this report pertain to the model of the Cambridge Crossing Parcel R project constructed using the drawings and information listed below. Should there be any design changes that deviate from this list of drawings, the wind condition predictions presented may change. Therefore, if changes in the design are made, it is recommended that RWDI be contacted and requested to review their potential effects on wind conditions.

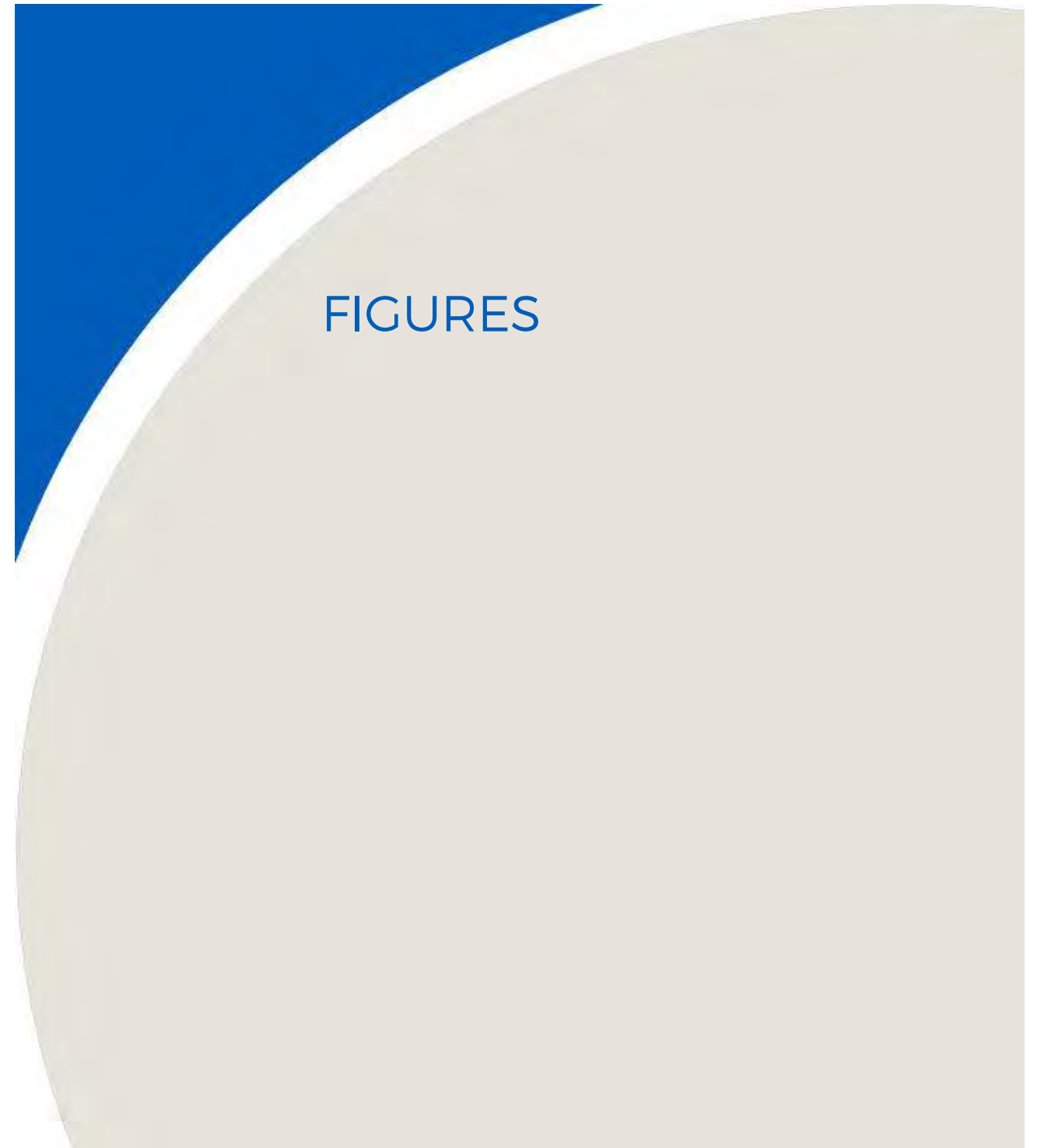
File Name	File Type	Date Received (dd/mm/yyyy)
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CAMBRIDGE CROSSING PARCEL R
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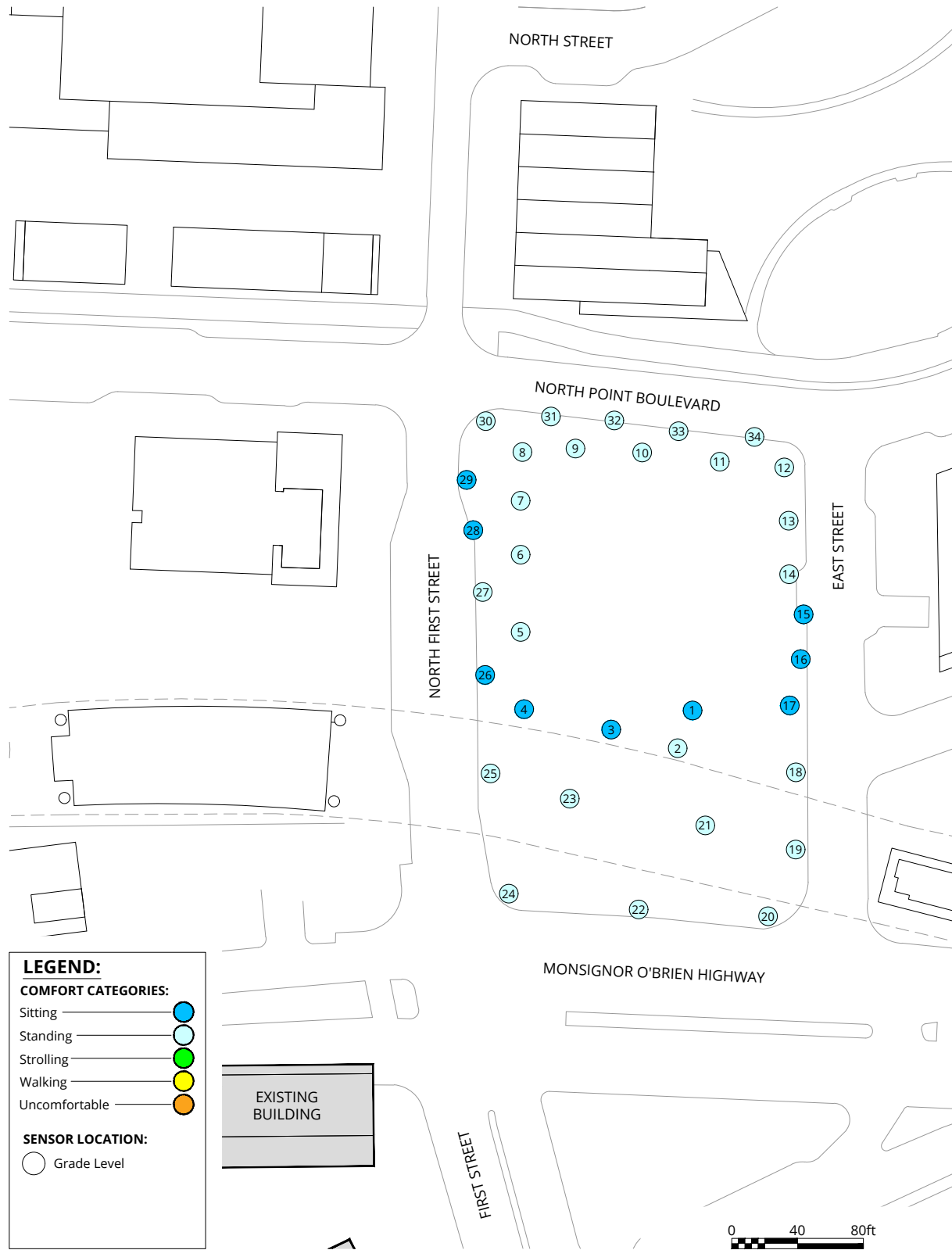
5 REFERENCES

1. ASCE Task Committee on Outdoor Human Comfort (2004). *Outdoor Human Comfort and Its Assessment*, 68 pages, American Society of Civil Engineers, Reston, Virginia, USA.
2. Williams, C.J., Hunter, M.A. and Waechter, W.F. (1990). "Criteria for Assessing the Pedestrian Wind Environment," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.36, pp.811-815.
3. Williams, C.J., Soligo M.J. and Cote, J. (1992). "A Discussion of the Components for a Comprehensive Pedestrian Level Comfort Criteria," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.41-44, pp.2389-2390.
4. Soligo, M.J., Irwin, P.A., and Williams, C.J. (1993). "Pedestrian Comfort Including Wind and Thermal Effects," *Third Asia-Pacific Symposium on Wind Engineering*, Hong Kong.
5. Soligo, M.J., Irwin, P.A., Williams, C.J. and Schuyler, G.D. (1998). "A Comprehensive Assessment of Pedestrian Comfort Including Thermal Effects," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.77&78, pp.753-766.
6. Williams, C.J., Wu, H., Waechter, W.F. and Baker, H.A. (1999). "Experiences with Remedial Solutions to Control Pedestrian Wind Problems," *Tenth International Conference on Wind Engineering*, Copenhagen, Denmark.
7. Lawson, T.V. (1973). "Wind Environment of Buildings: A Logical Approach to the Establishment of Criteria", *Report No. TVL 7321*, Department of Aeronautic Engineering, University of Bristol, Bristol, England.
8. Durgin, F. H. (1997). "Pedestrian Level Wind Criteria Using the Equivalent average", *Journal of Wind Engineering and Industrial Aerodynamics*, Vol. 66, pp.215-226.
9. Wu, H. and Kriksic, F. (2012). "Designing for Pedestrian Comfort in Response to Local Climate", *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.104-106, pp.397-407.
10. Wu, H., Williams, C.J., Baker, H.A. and Waechter, W.F. (2004), "Knowledge-based Desk-Top Analysis of Pedestrian Wind Conditions", *ASCE Structure Congress 2004*, Nashville, Tennessee.



APPENDIX B | WIND STUDY

CAMBRIDGE CROSSING

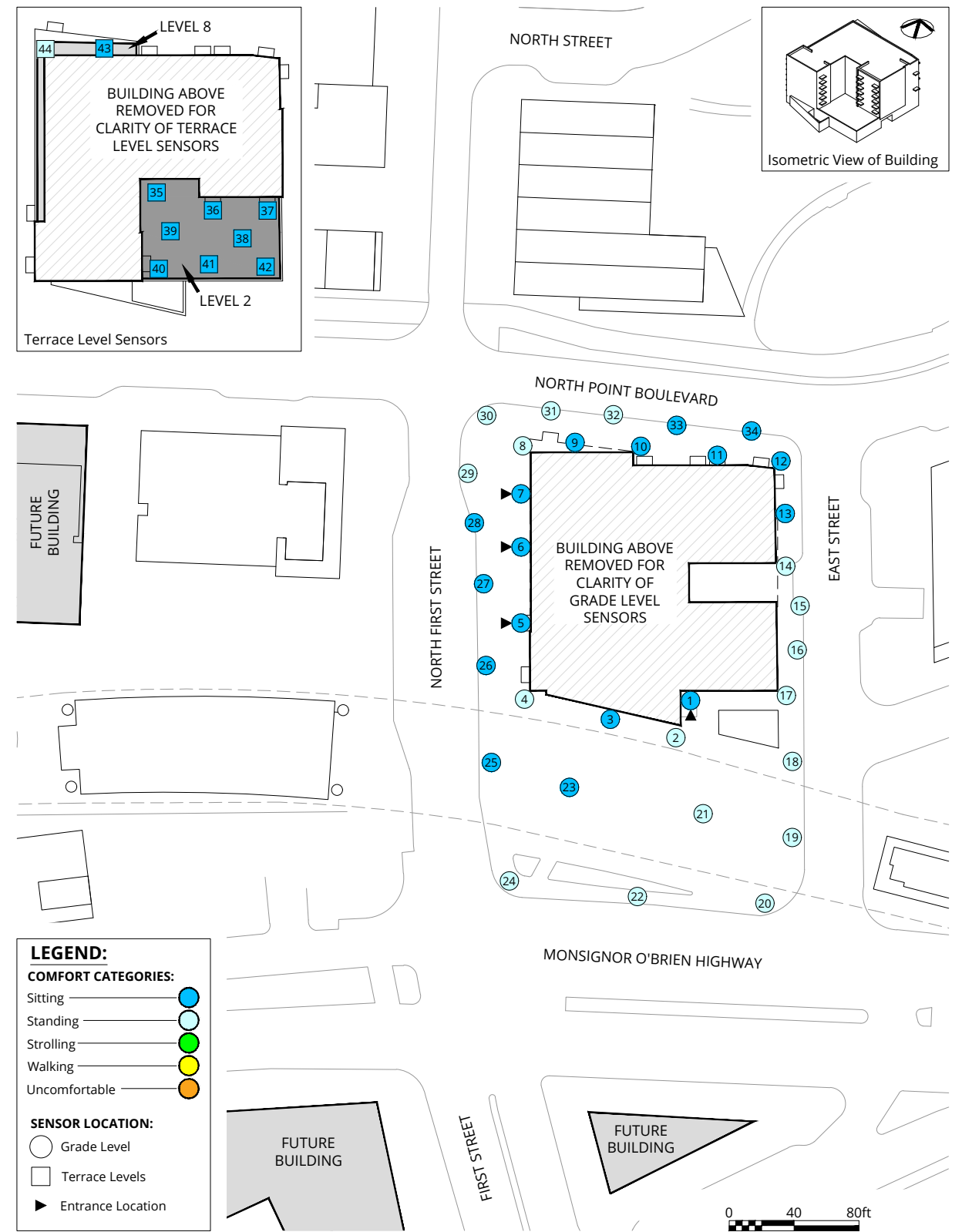


Pedestrian Wind Comfort Conditions
Existing Configuration
Summer (May to October)
Cambridge Crossing Parcel R - Cambridge, MA

True North

Drawn by: GRE Figure: 1A
Approx. Scale: 1"=80'
Date Revised: Oct. 5, 2021

Project #2104846

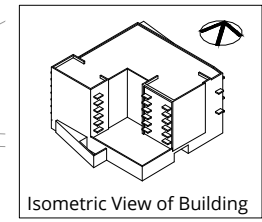
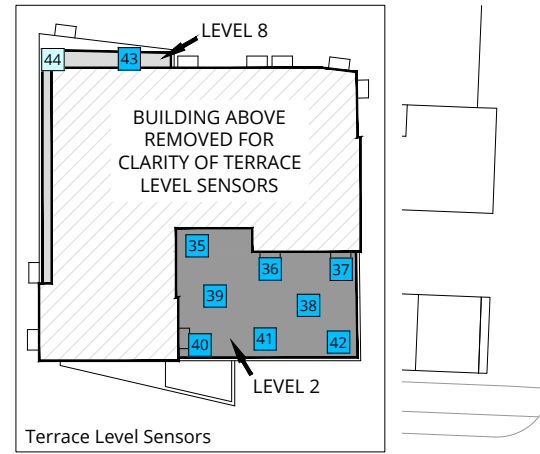


Pedestrian Wind Comfort Conditions
Proposed Configuration
Summer (May to October)
Cambridge Crossing Parcel R - Cambridge, MA

True North

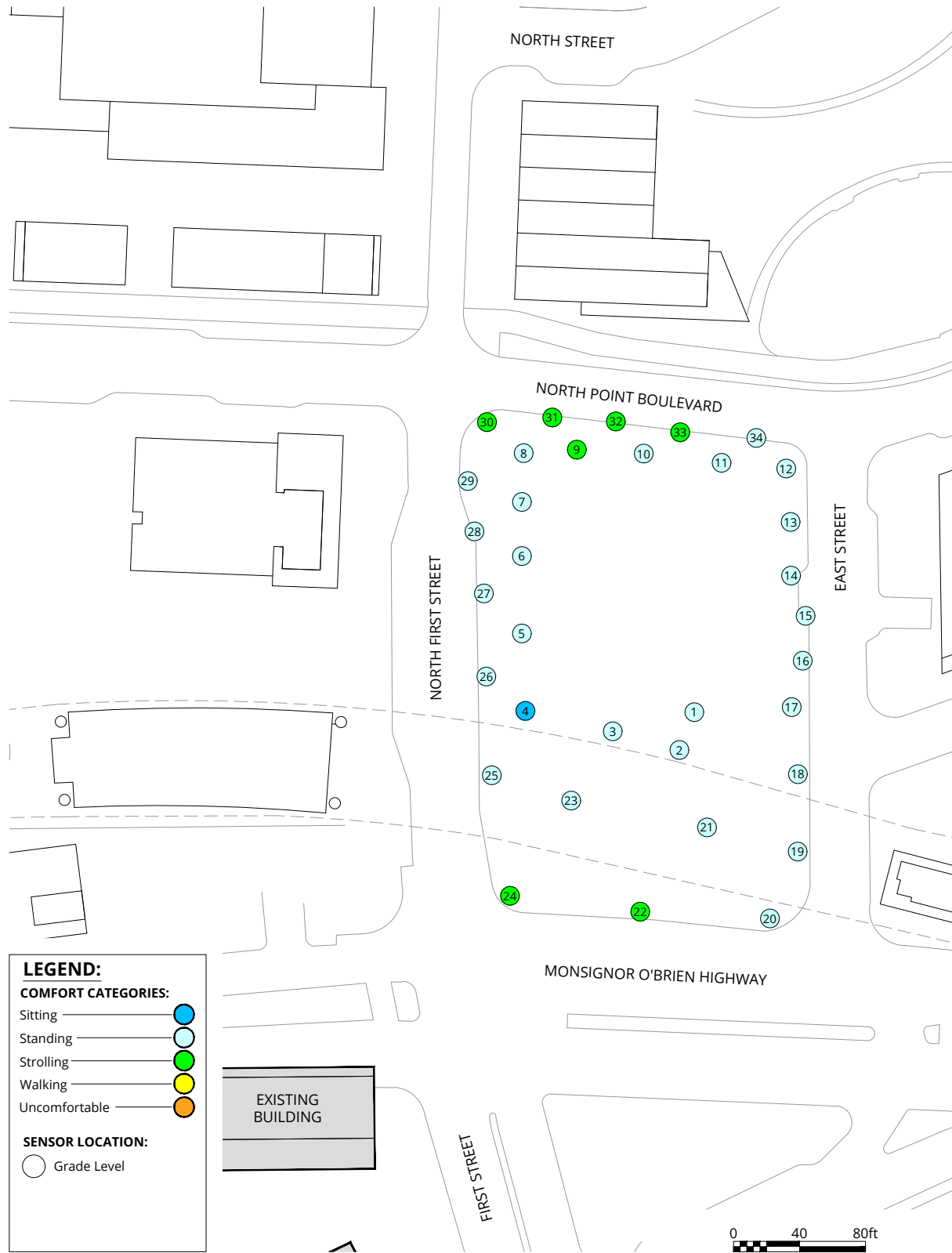
Drawn by: GRE Figure: 1B
Approx. Scale: 1"=80'
Date Revised: Oct. 5, 2021

Project #2104846



APPENDIX B | WIND STUDY

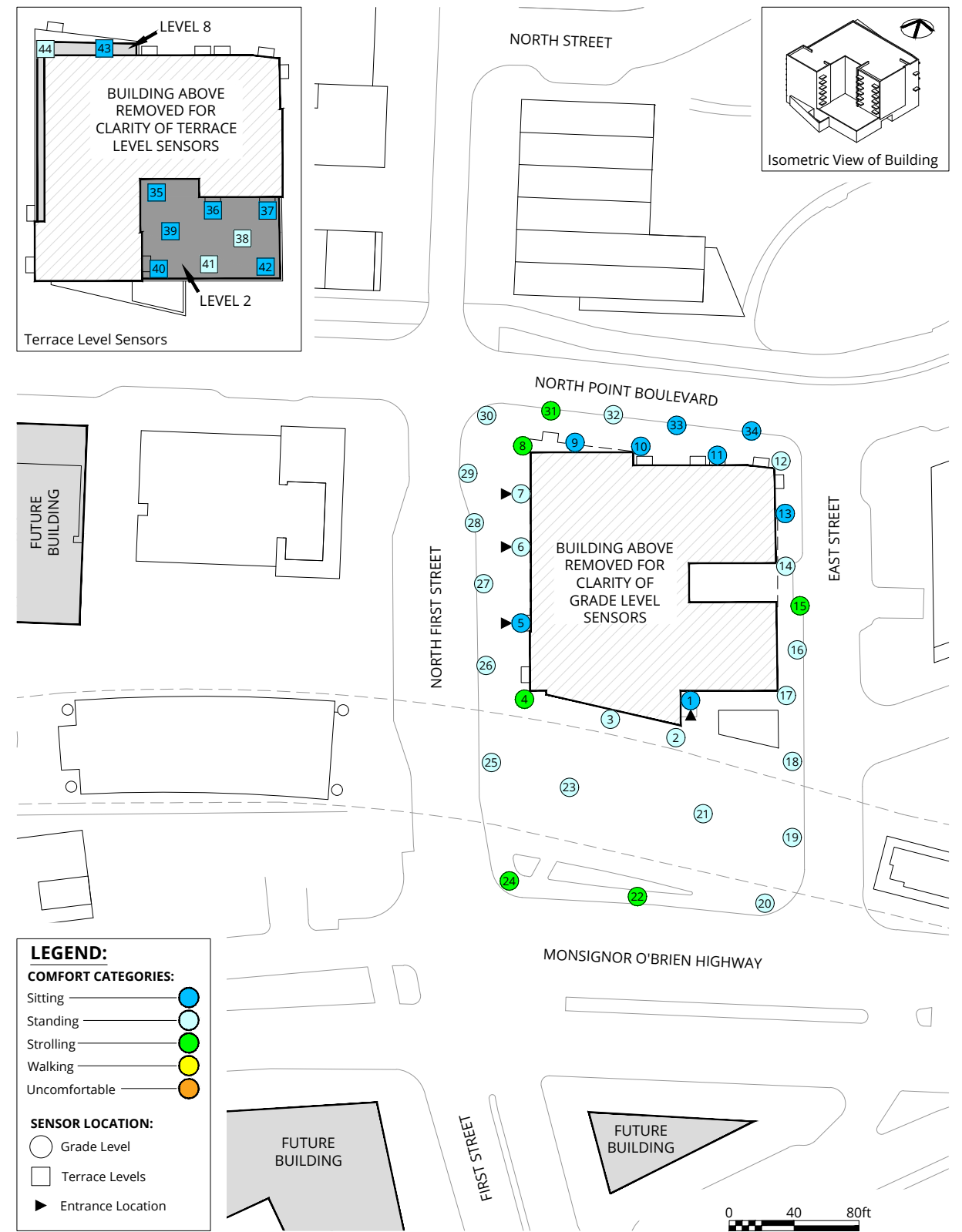
CAMBRIDGE CROSSING



Pedestrian Wind Comfort Conditions
 Existing Configuration
 Winter (November to April)
 Cambridge Crossing Parcel R - Cambridge, MA

True North

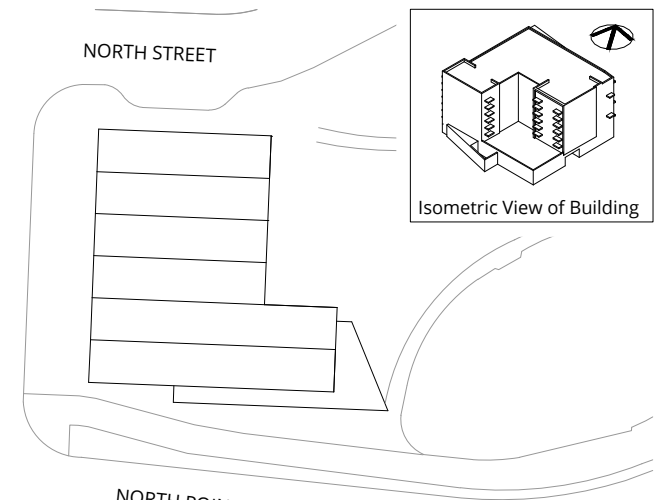
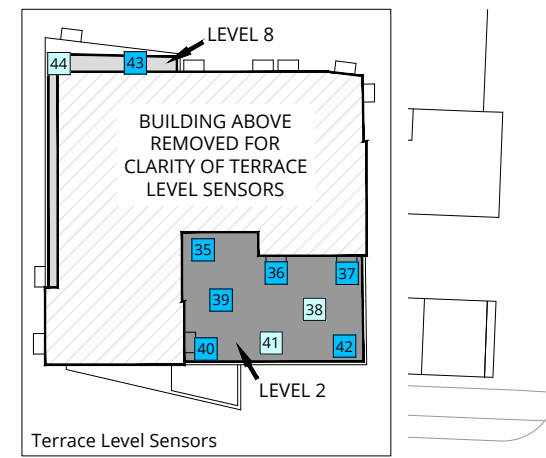
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Pedestrian Wind Comfort Conditions
 Proposed Configuration
 Winter (November to April)
 Cambridge Crossing Parcel R - Cambridge, MA

True North

Drawn by: GRE Figure: 2B
 Approx. Scale: 1"=80'
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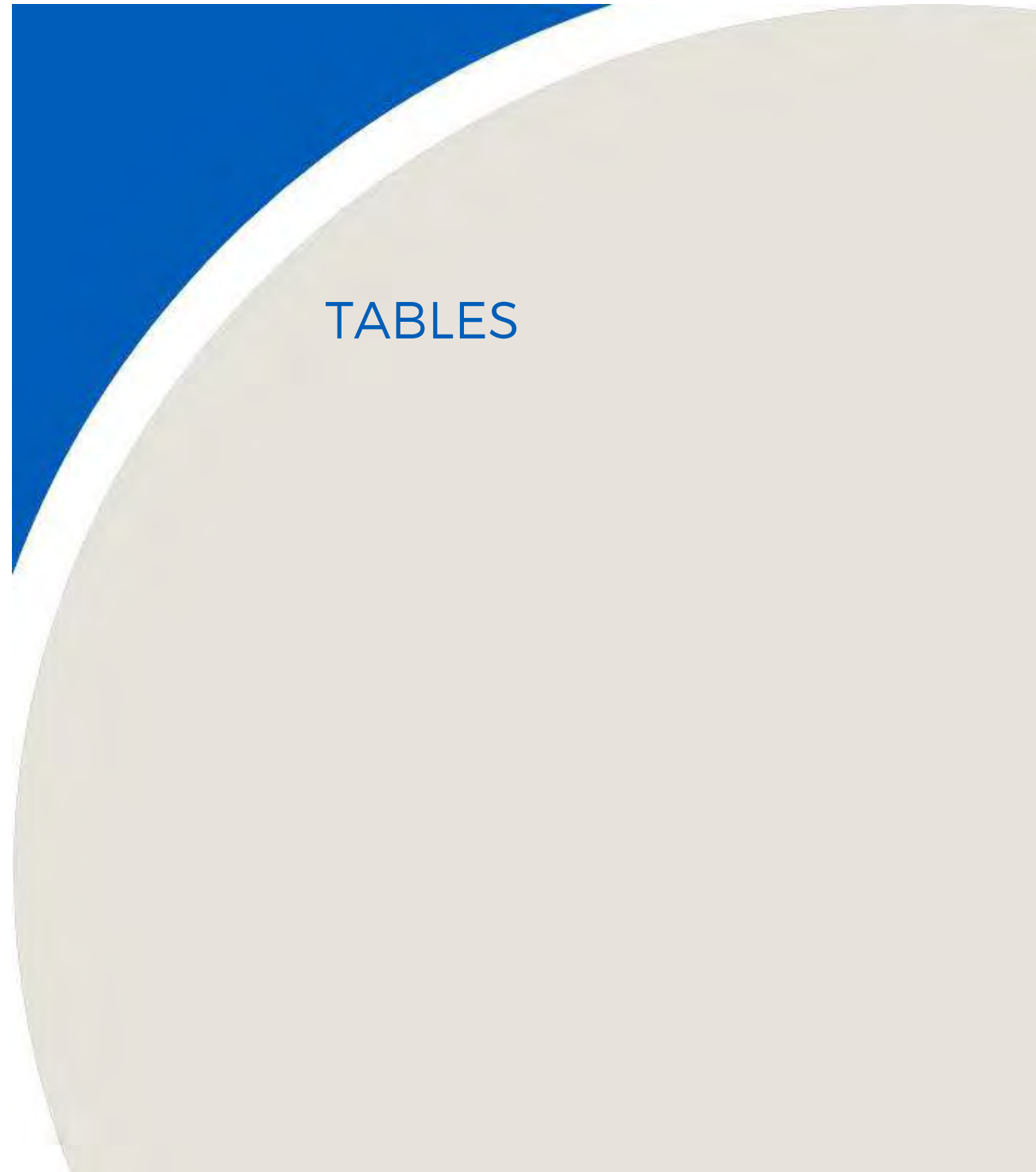


Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Configuration	Wind Comfort				Wind Safety	
		Summer		Winter		Annual	
		Speed (mph)	Rating	Speed (mph)	Rating	Speed (mph)	Rating
1	Existing	6	Sitting	7	Standing	34	Pass
	Proposed	4	Sitting	4	Sitting	17	Pass
2	Existing	7	Standing	7	Standing	34	Pass
	Proposed	7	Standing	8	Standing	29	Pass
3	Existing	6	Sitting	7	Standing	35	Pass
	Proposed	6	Sitting	7	Standing	29	Pass
4	Existing	6	Sitting	6	Sitting	35	Pass
	Proposed	7	Standing	9	Strolling	37	Pass
5	Existing	7	Standing	8	Standing	37	Pass
	Proposed	4	Sitting	6	Sitting	22	Pass
6	Existing	7	Standing	8	Standing	35	Pass
	Proposed	6	Sitting	7	Standing	26	Pass
7	Existing	7	Standing	7	Standing	34	Pass
	Proposed	6	Sitting	7	Standing	30	Pass
8	Existing	7	Standing	8	Standing	34	Pass
	Proposed	8	Standing	9	Strolling	37	Pass
9	Existing	7	Standing	9	Strolling	34	Pass
	Proposed	5	Sitting	6	Sitting	26	Pass
10	Existing	7	Standing	8	Standing	36	Pass
	Proposed	6	Sitting	6	Sitting	37	Pass
11	Existing	7	Standing	8	Standing	40	Pass
	Proposed	6	Sitting	5	Sitting	36	Pass
12	Existing	8	Standing	8	Standing	45	Pass
	Proposed	6	Sitting	7	Standing	32	Pass
13	Existing	7	Standing	8	Standing	47	Pass
	Proposed	6	Sitting	6	Sitting	29	Pass
14	Existing	7	Standing	7	Standing	42	Pass
	Proposed	7	Standing	7	Standing	37	Pass
15	Existing	6	Sitting	7	Standing	36	Pass
	Proposed	8	Standing	9	Strolling	42	Pass
16	Existing	6	Sitting	7	Standing	31	Pass
	Proposed	8	Standing	8	Standing	40	Pass



Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Configuration	Wind Comfort				Wind Safety	
		Summer		Winter		Annual	
		Speed (mph)	Rating	Speed (mph)	Rating	Speed (mph)	Rating
17	Existing	6	Sitting	7	Standing	32	Pass
	Proposed	7	Standing	8	Standing	40	Pass
18	Existing	7	Standing	8	Standing	35	Pass
	Proposed	7	Standing	8	Standing	35	Pass
19	Existing	7	Standing	8	Standing	30	Pass
	Proposed	7	Standing	8	Standing	32	Pass
20	Existing	7	Standing	8	Standing	32	Pass
	Proposed	7	Standing	8	Standing	32	Pass
21	Existing	7	Standing	8	Standing	35	Pass
	Proposed	7	Standing	8	Standing	31	Pass
22	Existing	7	Standing	9	Strolling	34	Pass
	Proposed	7	Standing	9	Strolling	33	Pass
23	Existing	7	Standing	8	Standing	36	Pass
	Proposed	6	Sitting	7	Standing	27	Pass
24	Existing	7	Standing	9	Strolling	34	Pass
	Proposed	7	Standing	9	Strolling	34	Pass
25	Existing	7	Standing	8	Standing	35	Pass
	Proposed	6	Sitting	7	Standing	29	Pass
26	Existing	6	Sitting	7	Standing	34	Pass
	Proposed	6	Sitting	7	Standing	27	Pass
27	Existing	7	Standing	8	Standing	33	Pass
	Proposed	6	Sitting	7	Standing	25	Pass
28	Existing	6	Sitting	7	Standing	32	Pass
	Proposed	6	Sitting	7	Standing	29	Pass
29	Existing	6	Sitting	7	Standing	33	Pass
	Proposed	7	Standing	8	Standing	33	Pass
30	Existing	7	Standing	9	Strolling	37	Pass
	Proposed	7	Standing	8	Standing	39	Pass
31	Existing	7	Standing	10	Strolling	36	Pass
	Proposed	8	Standing	9	Strolling	39	Pass
32	Existing	7	Standing	10	Strolling	36	Pass
	Proposed	7	Standing	7	Standing	41	Pass

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Configuration	Wind Comfort				Wind Safety	
		Summer		Winter		Annual	
		Speed (mph)	Rating	Speed (mph)	Rating	Speed (mph)	Rating
33	Existing	7	Standing	9	Strolling	40	Pass
	Proposed	6	Sitting	6	Sitting	35	Pass
34	Existing	8	Standing	8	Standing	43	Pass
	Proposed	6	Sitting	6	Sitting	35	Pass
35	Existing	-	-	-	-	-	-
	Proposed	3	Sitting	4	Sitting	15	Pass
36	Existing	-	-	-	-	-	-
	Proposed	5	Sitting	6	Sitting	24	Pass
37	Existing	-	-	-	-	-	-
	Proposed	5	Sitting	5	Sitting	24	Pass
38	Existing	-	-	-	-	-	-
	Proposed	6	Sitting	7	Standing	30	Pass
39	Existing	-	-	-	-	-	-
	Proposed	4	Sitting	5	Sitting	22	Pass
40	Existing	-	-	-	-	-	-
	Proposed	4	Sitting	4	Sitting	20	Pass
41	Existing	-	-	-	-	-	-
	Proposed	6	Sitting	7	Standing	30	Pass
42	Existing	-	-	-	-	-	-
	Proposed	6	Sitting	6	Sitting	27	Pass
43	Existing	-	-	-	-	-	-
	Proposed	6	Sitting	6	Sitting	30	Pass
44	Existing	-	-	-	-	-	-
	Proposed	7	Standing	8	Standing	34	Pass

Season	Months	Hours	Comfort Speed (mph)	Safety Speed (mph)
Summer	May - October	6:00 - 23:00 for comfort	(20% Seasonal Exceedance)	(0.1% Annual Exceedance)
Winter	November - April	6:00 - 23:00 for comfort	≤ 6 Sitting	≤ 56 Pass
Annual	January - December	0:00 - 23:00 for safety	7 - 8 Standing	> 56 Exceeded
Configurations				
Existing	Existing site and surroundings		9 - 10 Strolling	
Proposed	Project with existing surroundings and future masterplan buildings		11 - 12 Walking	
			> 12 Uncomfortable	



Memorandum

To: John Weigel
Mark Johnson
DivcoWest

Date: February 28, 2022

Project #: 13369.00

From: Laura Castelli
VHB

Re: East Street Crosswalks

As requested by DivcoWest, VHB has consolidated our thoughts and understanding regarding the crosswalk across East Street at Glassworks Avenue and provided a summary herein.

Crosswalk History

Although on DivcoWest property, the crosswalk at this location was striped in early 2016 by Avalon at commencement of construction for Avalon’s residential development adjacent to Cambridge Crossing. The intent of this crosswalk was to provide a safer accessible pedestrian route along Glassworks Avenue from the existing residential buildings, Sierra and Tango, to Monsignor O’Brien Highway (MOB) during construction. At that time, the existing pedestrian path down the south/east side of East Street was to be interrupted by construction and laydown facilitated by Avalon. Construction of the property effected is now complete and the development is no longer owned by Avalon. At no time did Avalon or the City of Cambridge approach DivcoWest about maintaining the crosswalk after construction and as such, no coordination occurred in the development of Parcel R, which was approved to included loading access on East Street. The location of the crosswalk is in direct conflict with the Parcel R loading dock and an adjacent transformer and switch gear building.

Current Conditions

In addition to the request to replace the crosswalk and completion of Parcel R construction, the City has also requested that DivcoWest remove the existing apex curb ramp adjacent to Sierra and replace it with two perpendicular curb ramps serving each crosswalk (one across East Street and one across Glassworks Avenue) separately. It is noted that these curb ramp modifications were required of Avalon as part of their special permit process, but the City did not enforce completion of the measure.

VHB has reviewed the location of the crosswalk across East Street at Glassworks Avenue and has concerns about crosswalk safety given the adjacent loading dock location (Parcel R). Maintaining a crosswalk at this location will incur noteworthy conflicts between pedestrians in the crosswalk and trucks backing into the loading dock. We note the following with respect to pedestrians who may use the crosswalk and their desired travel path:

- The crosswalk, in its midblock location, does not directly serve pedestrian destinations or provide reduced pedestrian travel time between Glassworks Avenue and MOB.
- There are not pedestrian destinations located along the portion of East Street between Glassworks and MOB. While sidewalk will be provided an operational at all times, this section of East Street provides access to the

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Memorandum

From: Laura Castelli
VHB
Ref: 13369.00
February 28, 2022
Page 2

loading dock, transformer building, generator, and the backside of the new Lechmere Station. No station access is provided directly from East Street beyond its intersection with MOB.

- The East Street/MOB crosswalk is roughly 120 feet to the south and connects directly to the Lechmere headhouse and associated facilities (bike storage, etc).
- Pedestrians destined to that area from the former Avalon property would utilize internal site pathways the MOB/East Street crosswalk, as it is closer and more direct.
- Other than buildings Sierra and Tango, pedestrians destined to that area from other locations within CX would likely cross East Street at Morgan Street (175’ from Glassworks Avenue) and continue south to MOB.
- From buildings Sierra and Tango, pedestrians would cross Glassworks Avenue and cross East Street at MOB. Given that the destinations are also located at MOB, these pedestrians are not routed out of their way or inconvenienced by removal of the midblock crosswalk.
- Pedestrians heading into CX from the headhouse or across MOB have the opportunity to cross East Street at MOB or Morgan Avenue. Those two crosswalks will be less than 300’ apart.

Given concerns about the midblock crosswalk’s proximity to the Parcel R loading dock, the lack of destinations pedestrians need to access between MOB and Parcel R, and the relatively short distance (less than 300’) between existing crosswalks across East Street at MOB and at Morgan Avenue, VHB does not believe any pedestrian access would be restricted or inconvenienced if the crosswalk were removed.

Further, given the recent direction by the City of Cambridge and MassDOT to maintain Museum Way as a single lane approach to MOB, VHB has additional concerns about queuing impacts and vehicles frequently backing over the crosswalk and obstructing sight distance as Cambridge Crossing is further developed. All parties are in agreement of the benefits of serving as advocates of improved pedestrian and bicycle access and safety throughout this area, however, documented pre-pandemic congestion issues along Museum Way (prior to East Street or North First Street being viable alternative routes), lead us to overall safety concerns given the midblock crossing’s proximity to the East Street/MOB traffic signal.

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CATEGORY	CDD STAFF COMMENT	RESPONSE
LANDSCAPE		
1.	How can a resident access open space, as that is important to families?	A new diagram that shows Cambridge Crossing campus open spaces and other amenity programs has been provided on page 51.
2.	The building looks a little "loose" on the site and the sidewalks appear too large.	The building footprint extends to the site's build-to lines as they are defined in the Cambridge Crossing Design Guidelines. A new diagram that shows the site's build-to guidelines, and the adjacent sidewalk dimensions, has been provided on page 53.
3.	It would help to see the locations of adjacent buildings to the north and east, to see how the proposed building's footprint aligns.	An overall context site plan has been added on page 3. And the landscape site plan has been enlarged to show the adjacent buildings.
4.	Is the understory planting at the street trees a good idea? Would this cause issues for security and sight lines?	The understory plantings have been eliminated.
5.	Why do paved brick paths lead to raised cycle tracks? This could be potentially confusing.	The brick paving bands have been held back from intersecting with the bicycle paths to avoid any potential confusion. A new diagram that shows the overall paving strategy for Parcel R, Station Plaza East and West, Parcel Q1 and Q2 has been added to page 54.
6.	Short term bicycle parking needs to be located near building entrances.	Short term bicycle racks are located at both the northwest corner of the site, adjacent to the main retail entrance, and at the north face of the building between the two Morgan Avenue retail entrances. Bicycle parking layout plans at 1"=10' have been included on pages 67–68.
7.	Please provide standard tree planting details for review.	Tree planting details are provided on page 66.
8.	Does the project have a green roof?	No, the project does not have a green roof.
9.	Please provide sections that show right-of-way dimensions up to the building facade.	The right-of-way dimensions are illustrated in the section diagrams provided on pages 55–50.
10.	Can playful elements be integrated into the design of the public realm? Perhaps something for families with small children.	Yes. Playful elements that will be provided along the Morgan Avenue sidewalk include a set of talking tubes and also a series of internally focused kaleidoscope mirrors. See page 56 for details. The underside of the cantilevered corner volume will also have a mirrored surface for added entertainment and delight.
BUILDING FORM / MATERIALS		
11.	Should exterior cladding materials other than fiber cement panels be considered? The proposed textured panel is good. Would this product be Hardiboard? Joints and fasteners will need to be evaluated. Fiber cement panels look flimsy and flat, particularly at the window openings.	We are intending to use SwissPearl fiber cement panels, not James Hardie products. Material sample photographs are provided on pages 44–50. SwissPearl's Clinar Clip system, which features panels installed as shingles, will be used on the cantilevered volume at the northwest corner. This system will provide a strong horizontal shadow line between the courses and also has no visible fasteners. The typical window opening components have been highlighted on page 40.
12.	The grey color of the fiber cement panels looks grey and dull.	We have modified some of the fiber cement color selections. Please see the renderings and elevations and also material images on pages 44–50.
13.	There should be plane changes/recesses where materials change.	There are indeed plane changes that correspond to material changes. See pages 44 and 45 for exterior wall profiles that correspond to the enlarged elevations.

CATEGORY	CDD STAFF COMMENT	RESPONSE
14.	Perhaps a different balcony guard detail would differentiate this project from other residential buildings. Can the juliet balconies have glass guards?	Instead of vertical pickets, we are proposing a wire mesh guard for both the projecting and juliet balconies. Glass will not work at the juliet balconies since that would impede the airflow to and from the mechanical units via the intake and exhaust outlets that are located behind the guard.
15.	Many of the balconies extend over sidewalks; someone could drop something off a balcony onto the sidewalk below.	The Cambridge Crossing design guidelines allow for non-structural elements to extend out beyond the build-to line (2.1.1. Build-to Line). Cantilevered balconies will be detailed with a raised edge above the floor surface to prevent objects from rolling off the edge. While the balconies do not extend over the property line, they do extend past the build-to line, which is allowed by the Design Guidelines.
16.	Should building facades be parallel to streets, and should south facade be parallel to the MBTA viaduct?	The west and east facades of the building are parallel to their corresponding streets. The cantilevered volume on the north facade is parallel to Morgan Avenue. The south facing facades are held back from the MBTA viaduct as much as possible for acoustic separation (see page 75) while still honoring the massing concept of the building. The ground floor retail and outdoor equipment enclosures along the south facade are indeed parallel to the MBTA viaduct.
17.	How thick are the residential wings? How do studio units lay out in a wing of that thickness?	Overall building dimensions and unit areas are shown on the updated floor plans.
18.	Can the building be more of a “C” shape?	No. Residential units are too deep and the site is too narrow for a C-shaped courtyard scheme to work. Such a design would also result in an unsatisfactory acoustical environment for the courtyard and the units that would face it, as noise from the MBTA would reverberate in this space.
19.	Garage vehicular entrance and loading dock look well hidden. Please provide details on sight lines.	Please see sight line analysis diagram on page 81.
20.	Please clarify how the loading area works.	The loading area is an exterior dock outside the main volume of the building that is connected directly to the retail space. Truck turning radii are shown on page 80.
21.	Can the transformer go inside the building? If outside, can it have a more substantial enclosure?	No. The transformer vault spatial requirements from Eversource would have negatively impacted the retail area and also the unit count of the building. The required vertical clear dimension would either push the building up over the height limit or necessitate eliminating a residential floor from the building. And pushing the transformer vault lower in the building would compromise the parking level and also not conform to the resiliency requirements. The proposed transformer enclosure is based on specific requirements from the electrical provider and features wood-look planks on the outside that are also featured in the building facades, tying these equipment screening elements to the material expression of the building.
22.	Can there be a more substantial definition of the southeastern corner, perhaps with a trellis? This corner of the building looks like a “missing tooth.” It is not a strong enough urban corner.	We have developed an alternate design of this corner that extends the vertical piers up past the amenity deck floor, culminating in an overhead trellis which wraps around the entire corner of the podium. This defines a larger implied volume which is more visually substantial at this urban corner.
23.	There is a concern about the parapet height and if that is enough to shield the rooftop equipment from view.	We have developed a sight-line analysis which defines points around the building in the public way at which rooftop equipment become visible over the parapet. These points are at a substantial distance away from the building, where visually they don’t have a negative effect on one’s perception of the building and the local urban environment. See pages 84–92.
RETAIL / NORTHWEST CORNER		
24.	Is the project considering an anchor tenant for the retail? If so, would this have implications for the design?	The retail space is configured in one contiguous space on a single floor level, to accommodate the most flexibility in the retail lease out. The design has retail exposures on all facades and various entrance opportunities.

CATEGORY	CDD STAFF COMMENT	RESPONSE
25.	The corner of the building at Morgan Avenue / North First Street could be more interesting. Could there be a two-story retail expression on the elevation? Something special? A corner that celebrates the intersection?	We looked at incorporating a two-story retail expression, but felt that this confused the otherwise simple massing strategy of the cantilevered volume extending out over the Morgan Avenue sidewalk and the programmatic separation of the residential from the retail at the second floor podium level. We have however incorporated a textured accent panel that wraps around the northwest corner and establishes a vertical element that enhances the corner expression.
26.	The ground floor looks too low, with 12 feet to the bottom of the cantilever. Retail is tucked under the building mass and is hard to see.	The bottom of the cantilevered volume has been lifted to 13 feet above the sidewalk, and we have lightened the color of the retail storefront to make it more distinguishable from the wall of the residential volume above. See page 39.
27.	Another ground floor entrance is needed along Morgan Avenue. Can the retail entrance be at the northwest corner?	We have added a retail entrance along the Morgan Avenue side. Since the sidewalk grading slopes down toward the east, this entrance is also located at the northwest corner to avoid any breaks in the retail floor slab.
28.	Could corner residential windows strengthen the northwest corner?	A textured accent panel now wraps the corner and ties incorporates the window openings on both facades. This feature creates a stronger vertical element at the corner which draws one's eyes down to the main retail entrances at this corner.
29.	The building needs a North First Street address.	The new address is 14 North First Street.
VEHICLE AND BICYCLE PARKING		
30.	What off-site parking spaces are provided for retail?	21 off-site retail parking spaces are provided at Parcel J/K, located at 222 Jacobs Street.
31.	The planning board is asking for 25% of the parking spaces to have EV charging stations, with the capacity to increase to 100% in the future.	Parking spaces with EV charging stations have been identified on the basement floor plan.
32.	How are the exterior long-term bicycle spaces covered and how does one access them?	Individual bicycle lockers are provided at the outdoor terrace at the second floor. These bicycle lockers are accessed through the residential lobby to the elevator up to the second floor corridor that extends out to this courtyard space.
33.	Long-term bicycle parking plans need to be at 1"=10' scale.	Please see updated plans on pages 69 and 70.
SUSTAINABILITY / UTILITIES		
33.	Can the commercial space go all electric as the rest of the building?	There will be no gas service to the base building. In a retail tenant wishes to pursue a gas connection, this will be considered a separate project.
34.	The planning board is also interested now in embodied carbon.	The design team can provide this calculation at the appropriate point in the Article 22 process.
35.	The design guidelines call for acoustical treatment to address noise and vibration from the MBTA.	See diagram on page 75 that shows how the residential windows respond to their proximity to the elevated MBTA station and railway.
36.	Resiliency will be reviewed; confirm flood elevations.	Potential flood elevations are shown on page 77.

CATEGORY	CDD STAFF COMMENT	RESPONSE
37.	What infrastructure is covered in the masterplan and what is not?	Cambridge Crossing Infrastructure to be completed as part of Parcel R development includes the construction of final streetscape surrounding Parcel R. Specifically, granite curbing, sidewalks, landscaping, and lighting, and construction of the separated bike lane on the east side of North First Street. The construction of utility service connections may be required within North First Street, Morgan Avenue, and East Street, but the construction of all utility mains was previously completed under the Roadway and Infrastructure Project.
38.	Can the solar panels be installed, and not just planned for?	No, we are only providing the infrastructure for a possible future solar panel installation.
39.	Was Passive House considered? If not PH, can at least WELL certification be used as a guideline?	Passive House was not considered, but the WELL certification requirements may be used as a design guideline for this project.
40.	Can a cool factor calculation be provided, even though it is not required of this project? It is unclear how it would work in a PUD.	The architect and landscape architect will work together to provide this calculation later in the design process.
MISCELLANY / GRAPHICS		
41.	Please provide information on unit mix, unit sizes and unit counts. Providing 5% three-bedroom units is good.	Unit areas are provided on the updated floor plans, and unit mix and count are provided on page 108.
42.	All elevations and plans need to have dimensions and graphic scales. The depth of facades also need to be dimensioned.	Dimensions are provided on the updated plans and elevations. Facade depth/plane change diagrams are provided on pages 44 and 45.
43.	Provide views of the project from Monsignor O'Brien Highway and East Cambridge.	These additional views are provided on pages 23 and 24.
44.	It was hard to orient oneself with the perspective renderings. Each rendering should have a key plan.	Key plans have been provided for all project renderings, building sections, etc.
45.	Renderings need to be accurate in their depiction of the ground plane, street markings, curb conditions, etc.	Renderings have been updated accordingly.

CATEGORY	CDD STAFF COMMENT	RESPONSE
LANDSCAPE		
1.	There is a crosswalk on East Street missing on the site plan.	Referenced crosswalk was a temporary measure implemented by Avalon that will be removed as part of this project. Background information is being provided separately to Cambridge TP&T.
BUILDING FORM / MATERIALS		
2.	Fiber cement panels still seem a little dark and the brown panels look a little green.	Photographs of all the materials were provided in the revised graphic submission package. We would be happy to provide material samples for review. We reviewed the samples out on the site and feel that the selections work well visually with the existing buildings in the area.
3.	Should the building face angle to align with the MBTA viaduct?	For reasons stated previously relative to building form and acoustic remediation, we will keep the geometry above the plinth as presented. The geometry of the plinth follows and is aligned with the viaduct geometry.
4.	Can there be a canopy at the south-facing retail?	No. We cannot build any permanent structure within the MBTA maintenance easement.
5.	Can the piers at the retail frontage be pushed back into the building so that the glazing is continuous?	There are structural concrete columns behind each of these piers. Pushing them into the building would be in conflict with the basement parking configuration.
6.	Can the Eversource enclosure be made more into a feature? Can the grey wall bridge the gap between the two enclosures?	Eversource has very particular requirements for their equipment enclosures and do not allow plants to grow on the screen walls. We have extended the wall to fill the entire gap between the two enclosures, reduced the opening width in the wall, and have provided a planting bed and the long-term retail bicycle lockers in this "notch" See image on page 22.
7.	The southwest (brown) tower cornice seems too small.	We have increased the scale of the cornice so that its scale relates better to the tower volume. Please see revised south elevation on page 35, west elevation on page 36, and renderings on pages 8 and 23.
8.	The south facade of the southwest (brown) tower is too bland; too much wall surface. Needs something more.	We have broadcast the openings over the entire facade in a uniform grid that is aligned with the building's overall window to wall ratio and proportions. Please see revised south elevation on page 35 and renderings on pages 18, 21, 23 and 24.
BICYCLE PARKING		
9.	There look to be some dimensional discrepancies for short term bicycle racks along North First Street.	Please see updated short term bicycle plan on page 68.
10.	Short term bicycle racks need to be located within 50' of building entrances.	The Cambridge zoning ordinance (6.104.2.a) provides that some of the required spaces may be located at a greater distance from an entrance if at least 8 of the required number of spaces are located within 50'. The current design has 16 spaces within 50 feet of the main entrances.
11.	Bike parking needs some work to comply with zoning. Bicycle racks must be 3' from the side walls, not 1' or 2'.	The Cambridge zoning ordinance (6.105.1.b) provides that if "a bicycle rack meets the spacing requirements on one side of the stand but not the other (as may be the case where a bicycle rack is attached to a wall), then it may provide on bicycle parking space." This is our long-term bicycle spaces are counted. To achieve the most efficient bicycle storage and to work with structural bearing walls on the second floor, some bicycle racks are located closer to side walls than 3', and these conditions accommodate one bicycle.
12.	Details of the outside covered bicycle parking need to be submitted for review. Parking needs to be weather protected, not just covered.	We are providing individual bicycle lockers at the second floor courtyard, one locker per bicycle. Please see revised layout and sample product on pages 70 and 71.

CATEGORY	CDD STAFF COMMENT	RESPONSE
MISCELLANEOUS		
13.	Where is the required dimensional form?	It is provided on page 108.
MISCELLANEOUS		
14.	Some of the graphics are confusing, e.g. showing the podium courtyard plan on the site plan, etc.	The podium courtyard has been removed from the plans on pages 52-54, 62, 67 and 72 for clarification. The MBTA easement has also been identified on the plans on pages 6, 25 and 53.
15.	More information on units is desired, e.g. floor plans, finishes, etc.	The client team will work in the city as on past projects and this information will be provided as the design process proceeds.
16.	There is a laundry room on the eighth floor. Is there laundry units in the units themselves?	Yes, en-suite laundry will be provided in all units. The eighth floor laundry room will be a residential amenity and will have full-size washing machines and dryers to accommodate residents' larger items, e.g. bedspreads, blankets, etc.

CATEGORY	CCD STAFF COMMENT	RESPONSE
BUILDING AND DESIGN		
1.	Renderings – it would be good if the key diagram showed some of the surrounding context – e.g. when you’re standing in the common.	Revised key plans are provided on renderings on pages 8, 10-13, 15, 17, 18, and 20-24.
2.	Provide a night rendering.	Two new night renderings are provided on pages 11 and 13.
3.	Elevations should include dimensions and note materials (e.g. rooftop mechanical units (are they unscreened and accurately represented?)).	Dimensions and material notes have been provided. See elevations on pages 33 through 36.
4.	Provide zoomed-in elevations of all ground floor areas.	Enlarged elevations of the ground floor have been provided on pages 37 through 39.
5.	Façade detail sheet 36 – provide dimensions, including window reveal depth from façade, and fin depths..	The requested information has been provided on page 40.
6.	Exterior design materials – include all materials – glass (including VLT & Reflectance), metal elements, balconies railings, etc.	Exterior cladding materials, and window and metal finishes have been provided in previous submissions. New materials and assemblies are included on pages 40 and 41.
7.	Landscape sections – what is the pedestrian circulation zone width if the tenant space is occupied by outdoor tables and chairs? That should be reflected in the sections. Seems narrow.	See landscape sections on pages 55 through 59.
8.	Can we please get another north-south section closer to the corner of the T-plaza and First Street?	The new landscape section is provided on page 59.
9.	Site Plan (Landscape) – provide contours or spot levels so we can understand the grade changes around the site, especially with the T-plaza.	Spot elevations have been added to the landscape plan on page 53.
10.	Short term bicycle plan - should show the tenant space with possible outdoor dining and provide dimensions.	See page 68.
11.	Submit full wind study.	The full wind study report is provided in Appendix B on page 110.
12.	We strongly discourage use of fiber cement panels on the first floor – it has consistently weathered poorly throughout the city when salt and snow are considered.	There is a ground face block base under all of the fiber cement panels, ranging from 16" to 24" in height, which raises these panels up off the sidewalk, away from snow and salt. See images on page 43. Swiss Pearl is a high-density fiber cement rain screen panel system that is air-cured and tested against extreme heat, freezing temperatures and hail impact, delivering outstanding results, unlike Hardie or Nichi-Ha. See product information on page 42.
13.	Consider using metal egg-crate panel in lieu of steel mesh for the transformer screening.	We will explore this option and coordinate with Eversource.
14.	Also, it would help if the transformer wall is capped w/a stone or extruded metal trim so to appear finished.	A metal cap will be added to the top of the equipment enclosure fences.
TRANSPORTATION		
15.	There is still an issue with the missing pedestrian crosswalk on the north side of East Street at Glassworks. Ave. The curb cut for the loading dock where the crosswalk is needs to be addressed.	Please see VHB memorandum provided in Appendix C on page 121.
16.	Page 73. I’ll check with Patrick if he is ok with the sight line diagrams. The drivers eye should be at least 6 feet behind back of sidewalk, I’m not sure they did it that way.	Line of sight is measured 8 feet from back of pedestrian way consistent with previous Cambridge Crossing approvals. Landscaping and site furnishings are utilized to maintain the pedestrian way out from the face of building to increase sight lines at driveways.

CATEGORY	CCD STAFF COMMENT	RESPONSE
17.	I need to see a plan for the 2 bike locker showing dimensions of how a bike will get in and out of the lockers. (page 20).	Please see enlarged plan at the bottom of page 70.
18.	It looks like they added bike lockers on the terrace. It's a little unfortunate cause that space would be better for more pedestrian uses and green space and not use up so much space with the bike lockers.	The bike lockers for building residents are on the second level residential terrace because they do not fit on the ground level pedestrian environment. Additional bike storage space is included in the building on the parking level. Secure and weatherproof storage lockers offer the best and most compact solution to meet the quantity requirements.
19.	Page 24. They show terrace surrounded by bike locker, so it's not clear how people will get into the terrace without being blocked by the bike lockers.	The spaces labeled ' terraces ' are private terraces accessible only from the units.
20.	May want to check with ISD cause they show 27 regular spaces and 30 compact spaces. Zoning requires no more than 50% compact spaces. I'm not sure how ISD interprets accessible spaces and if they count as regular size spaces. They may be ok, but they I recommend they confirm with ISD.	The three accessible spaces are regular-sized spaces. There are 30 regular spaces and 30 compact spaces, which meets the 50% maximum for compact spaces. See page 30 for clarification.
21.	The short-term bike layouts look ok (page 60). You should also check with Adi.	We acknowledge the comment and confirm that the bike spacing is compliant.
22.	The long-term bike layouts in the basement look acceptable. Note, they have 7 feet aisle width and only need 5 feet. Maybe they can use space more efficiently – i.e. add storage lockers in a front row of the bike racks by using 2 feet of space.	We are keeping this space a little flexible anticipating the space requirements for the electric vehicle charging stations.
23.	Page 62. I'm not a fan of them putting bike rack only 1 foot parallel from a wall, but it's ok by not counting the space between the wall and rack as a bike space. You should check with Adi.	We acknowledge the comment and confirm that the bike rack in question is compliant.
24.	Page 62. Not sure about bike lockers on the terrace.	The bike lockers comply with the city requirements. Secure and weatherproof storage lockers on the second level residential terrace offer the best and most compact solution to meet the quantity requirements.