

Cambridge, Massachusetts

Design Review Application - Parcel I Retail



Presented by:

DW NP Property, LLC c/o DivcoWest Real Estate Investments 200 State Street, 12th Floor Boston, MA 02109



Prepared by:

Beals and Thomas, Inc. Reservoir Corporate Center 144 Turnpike Road Southborough, MA 01772

In collaboration with:

Prellwitz Chilinski Associates Michael Van Valkenburgh Associates, Inc. Galluccio & Watson, LLP Goulston & Storrs PC

Submitted in Compliance with the City of Cambridge Zoning Ordinance and M.G.L. c.40A

May 23, 2018



Southborough, MA 01772-2104

F 508.366.4391 www.bealsandthomas.com Regional Office: Plymouth, MA

T 508.366.0560

May 23, 2018

Mr. H. Theodore Cohen, Chair Cambridge Planning Board 344 Broadway Cambridge, MA 02139

Via: Hand Delivery

Reference: Cambridge Crossing Parcel I Retail Design Review Application

PB #179

Cambridge, Massachusetts B+T Project No. 2084.56

Dear Chairman Cohen and Members of the Board:

On behalf of the Applicant, DW NP Property, LLC (an affiliate of DivcoWest), Beals and Thomas, Inc., respectfully re-submits this Design Review Application for Parcel I Retail (the Site), which is part of the larger Cambridge Crossing (formerly known as NorthPoint) development. The proposed development on Parcel Retail is two retail buildings containing a total of approximately 6,771 sf of Gross Floor Area (GFA). Parcel I Retail is located entirely within Cambridge. This re-submission incorporates comments and revisions provided by the Board and the Cambridge Planning staff.

As shown on the master plan included as part of this Application, the Site is bounded by Parcel I Residential to the north, Parcel I open space to the west, Northpoint Boulevard to the south, and the North First Street to the east.

The Site is currently undeveloped vacant land. Parcel I is one of twenty (20) building parcels in the Cambridge Crossing mixed-use development. To date, condominium buildings on Lot S and Lot T, a rental residential building on Lot N, North Point Common, Child Street Park and related infrastructure and other public amenities (including the Brian P. Murphy Memorial Staircase) have been constructed at Cambridge Crossing. In addition, Parcel JK has obtained Design Review approval in Cambridge and Somerville, and building permit applications have been procured in both cities. The Parcel JK building is currently under construction. The surrounding roadway network was approved by the Planning Board on September 2, 2016, as part of Major Amendment #6, and is currently under construction.

The Parcel I Retail buildings contain approximately 6,771 sf of GFA in total. The eastern building is proposed to have $\pm 4,388$ sf of GFA, with the western building containing $\pm 2,383$ sf of GFA. The buildings are proposed to be, generally, ± 16 feet in height, with the roofs of both buildings sloped to a height of ± 21 feet at the highest point. A total of 73 short-term bicycle parking spaces will be provided on-site, which includes those located as part of Parcel I Residential, Parcel I Retail, and Parcel I Open Space.

Mr. H. Theodore Cohen, Chair Cambridge Planning Board May 23, 2018 Page 2

In addition, the Applicant intends to subdivide the Parcel in the manner depicted on the enclosed Draft Subdivision Plan prepared by Beals & Thomas, Inc., dated December 21, 2016, and last updated February 23, 2018, to create three (3) separate parcels within what is now Parcel I: Parcel I-1, I-2, and I-3. The final subdivision plan will be submitted at a later date for approval and endorsement by the Planning Board.

As part of this application, we have included fifteen (15) copies, as well as a flash drive containing an electronic version, of the following materials for review by the Cambridge Planning Board:

- Site Plans:
- Floor Plans and Building Sections;
- Architectural Elevations;
- A Zoning Compliance Summary;
- LEED/Green Building Compliance Summary;
- Shadow Study;
- Wind Study;
- Acoustical Report and Noise Mitigation Narrative;
- Preliminary Signage Plan;
- Compliance Checklist Zoning Ordinance and NorthPoint Design Guidelines;
- Materials showing the cross-sections of abutting streets;
- Subdivision Plan, previously approved by the Cambridge Planning Board; and
- Draft Subdivision Plan.

There are no changes proposed to the approved uses on the Site nor are there any changes to the layout of roads serving the Site from that shown on the approved 40-scale Roadway Network Schematic Plan.

The Cambridge Crossing team is excited to meet with the Planning Board to review and discuss the evolution of design of the proposed project. Thank you for your consideration of the enclosed.

Very truly yours,

BEALS AND THOMAS, INC.

John P. Gelcich, AICP

Senior Planner

JPG/mac/208456PT002C



CAMBRIDGE CROSSING

DEVELOPMENT STATUS TABLE

Phase 1a

Building	Use(s)	Approved GFA per Special Permit Appendix I	GFA approved in thru Design Review	Project Status (i.e., Special Permit, Design Review Completed, Under Construction, Construction Completed)
N	Residential	394,000	394,0001	Construction Completed. Occupied.
111	Retail	8,600	8,600	Construction Completed. Occupied.
S	Residential	112,398	112,398	Construction Completed. Occupied.
T	Residential	242,194	242,194	Construction Completed. Occupied.
JK	Office/Laboratory	370,000 Total	351,192	Under construction.
	Retail	TBD	14,700	Under construction.
W	Retail	18,000	16,337	Design Review Complete.
Q1	Retail	17,675 ²	17,675	Minor Amendment Approved for GFA Increase. Revised Design Review to be submitted.
L	Residential	286,000 Total		Special Permit approval. Design Review timing TBD.
L	Retail	TBD (Allowed)		Special Permit approval. Design Review timing TBD.
M	Residential	208,400 Total		Special Permit approval. Design Review timing TBD.
IVI	Retail	TBD (Required)		Special Permit approval. Design Review timing TBD.
I	Residential	390,000 Total		Special Permit approval. Design Review timing TBD.
1	Retail	TBD		Special Permit approval. Design Review timing TBD.

 ${1\atop \ \ \, } \ Development\ of\ Parcels\ N,\ S\ and\ T\ was\ completed\ before\ issuance\ of\ Major\ Amendment\ No.\ 6,\ and,\ therefore,\ the\ revision\ of\ Appendix\ I.\ As\ a\ result,\ Appendix\ I\ reflects\ the\ as-built\ GFA\ of\ each\ of\ N,\ S\ and\ T.$

 $^{^2}$ Increased by Amendment No. 7 (Minor) from 14,000 square feet of GFA to 17,675 square feet of GFA.

Phase 1b

Building	Use(s)	Approved GFA per Special Permit Appendix I	GFA approved in thru Design Review	Project Status (i.e., Special Permit, Design Review Completed, Under Construction, Construction Completed)
G	Office/Laboratory	410,000	451,000	Special Permit approval. Design Review Submitted. Design Review completed in Boston.
Н	Office/Laboratory	375,000	347,600	Special Permit approval. Design Review Submitted. Design Review completed in Boston.
EF	Office/Laboratory	400,000 Total	410,590	Special Permit approval. Design Review submitted in Somerville.
EI	Retail	TBD		Special Permit approval. Design Review submitted in Somerville.
С	Mixed-Use	348,000		Special Permit approval. Design Review timing TBD.
U	Office/Laboratory	320,000		Special Permit approval. Design Review timing TBD.

Phase 2

Building	Use(s)	Approved GFA per Special Permit Appendix I	GFA approved in thru Design Review	Project Status (i.e., Special Permit, Design Review Completed, Under Construction, Construction Completed)
A	Residential	175,000		Special Permit approval. Design Review timing TBD.
В	Residential	373,000 Total		Special Permit approval. Design Review timing TBD.
Б	Retail	TBD (Allowed)		Special Permit approval. Design Review timing TBD.
D	Mixed Use	340,000		Special Permit approval. Design Review timing TBD.
02	Office/Laboratory	147,387 Total		Special Permit approval. Design Review timing TBD.
Q2	Retail	TBD (Required)		Special Permit approval. Design Review timing TBD.
D	Mixed Use	148,945 Total		Special Permit approval. Design Review timing TBD.
R	Retail	TBD (Required)		Special Permit approval. Design Review timing TBD.
17	Residential	199,855 Total		Special Permit approval. Design Review timing TBD.
V	Retail	TBD (Required)		Special Permit approval. Design Review timing TBD.

Special Permit #179, Condition 19.d.

Statistical Summary of Dwelling Units Constructed

	Total					All Residential Units						
Donael	Total Residential	Approved	Use(s)	Stud				2 Bedroom		3 Bedroom		
Parcel	Units	GFA	Use(s)	No. Units	Avg. SF	No. Units	Avg. SF	No. Units	Avg. SF	No. Units	Avg. SF	
N	355	402,600	Residential Retail	74	501	180	732	85	1,030	16	1,392	
S	99	112,398	Residential	0		94	921	5	1,285	0		
T	230	242,194	Residential	40	663	138	878	51	1,044	1	1,923	
JK		365,892	Office/Laboratory Retail	1	1	1	1					

	A 66 J - J - J - J			Affordable Residential Units ¹								
Parcel	Affordable Residential	Approved	Use(s)	Stu	Studio		1 Bedroom		2 Bedroom		3 Bedroom	
Parcei	Units	GFA	Use(s)	No. Units	Avg. SF	No. Units	Avg. SF	No. Units	Avg. SF	No. Units	Avg. SF	
N	41	402,600	Residential Retail	8	516	21	734	10	1,062	2	1,407	
S	12	112,398	Residential		-	11	887	1	1,179	1		
T	26	242,194	Residential	4	678	15	834	6	999	1	1,839	
JK		365,892	Office/Laboratory Retail		1		1		1			

Issued: May 16, 2018

JPG/208402OT41

¹ This chart assumes that these residential properties and affordable units are in compliance with the associated affordable housing covenants as on record at the Middlesex County Registry of Deeds (Parcel N: Book 61574 Page 442; Parcel S: Book 45918 Page 224; Parcel T: Book 46408 Page 98). Additional information regarding these properties is available from the Housing Department at CDD.

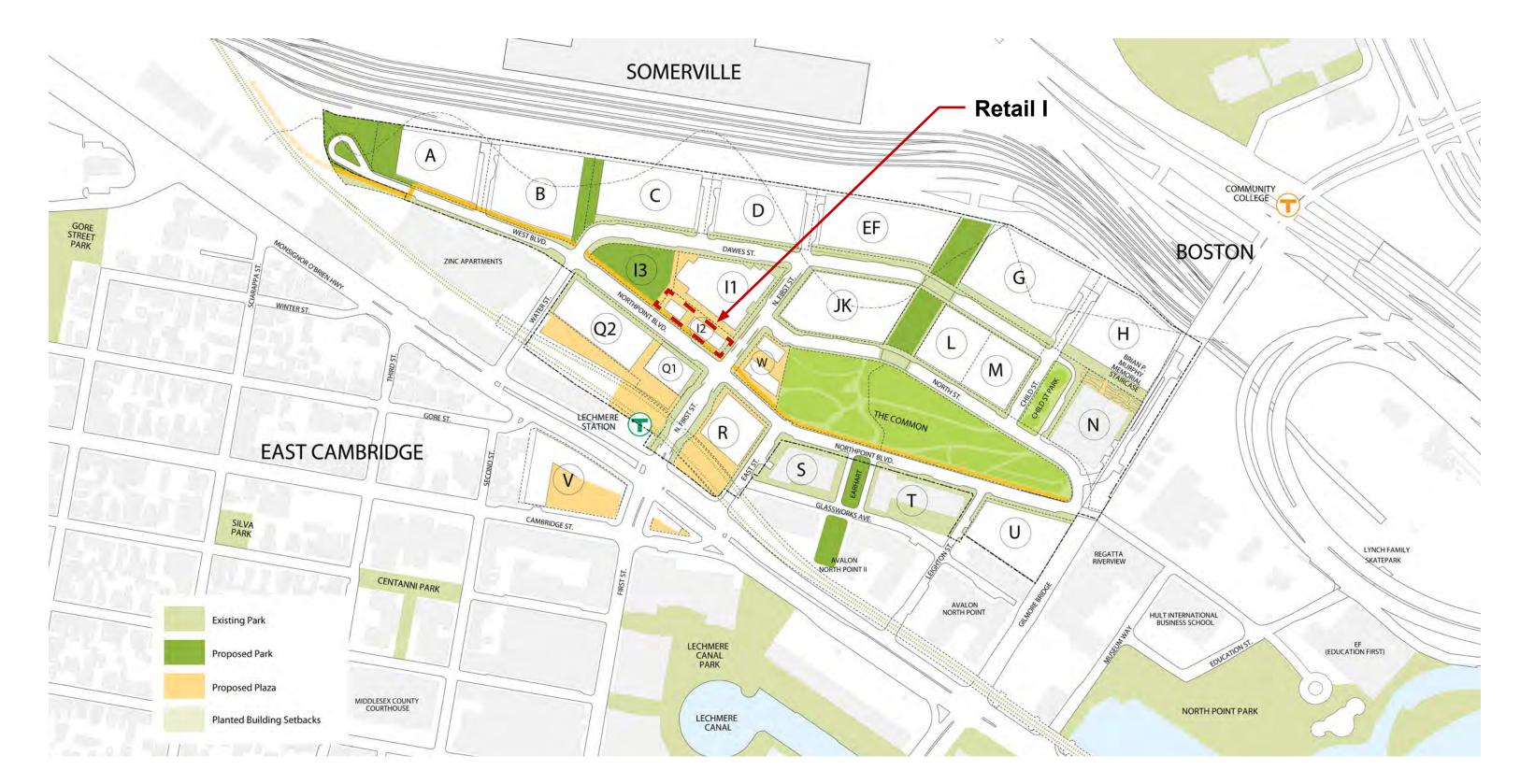






MICHAEL VAN VALKENBURGH ASSOCIATES INC **CAMBRIDGE CROSSING - Parcel I Retail**

Cambridge, MA



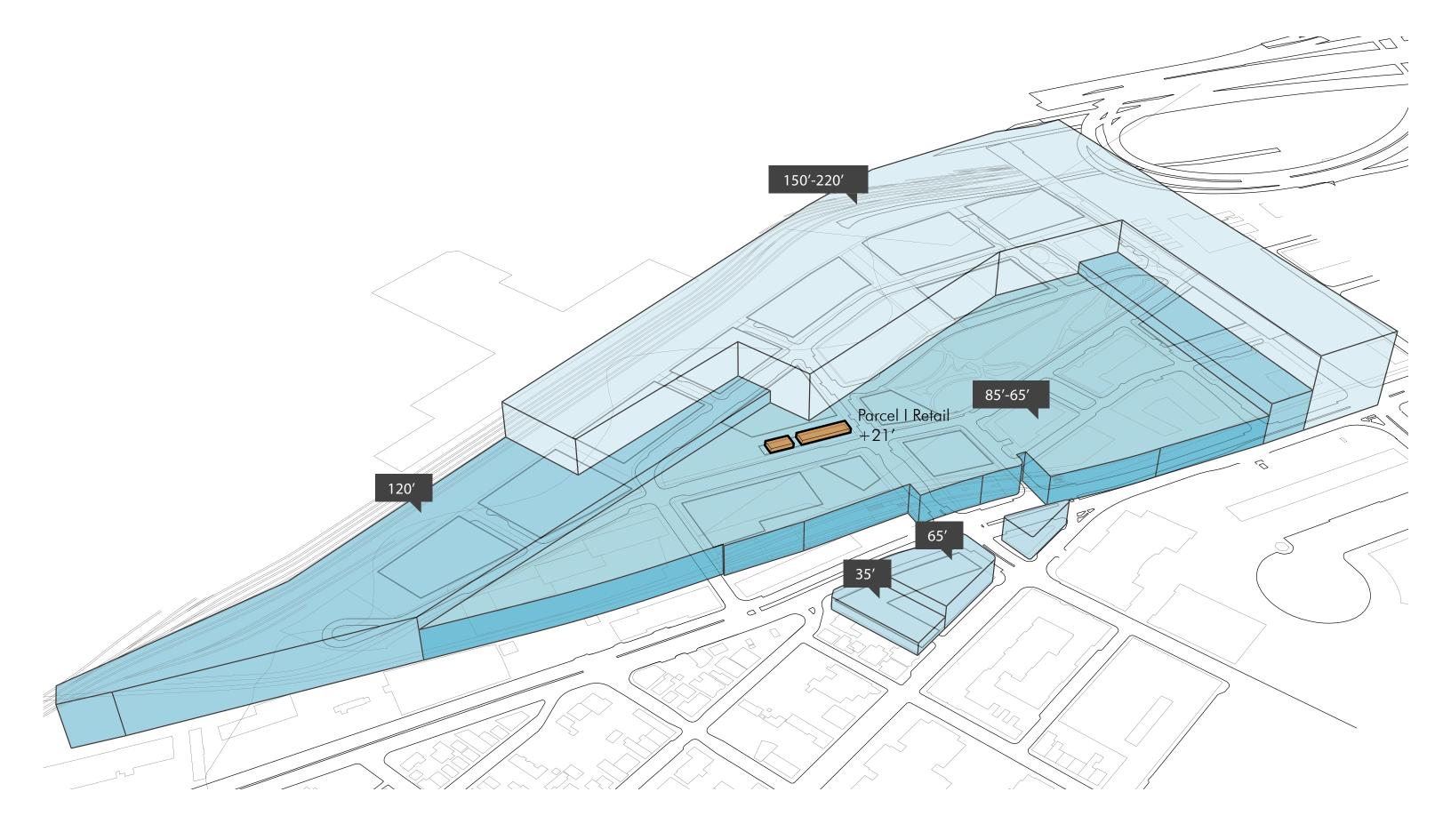






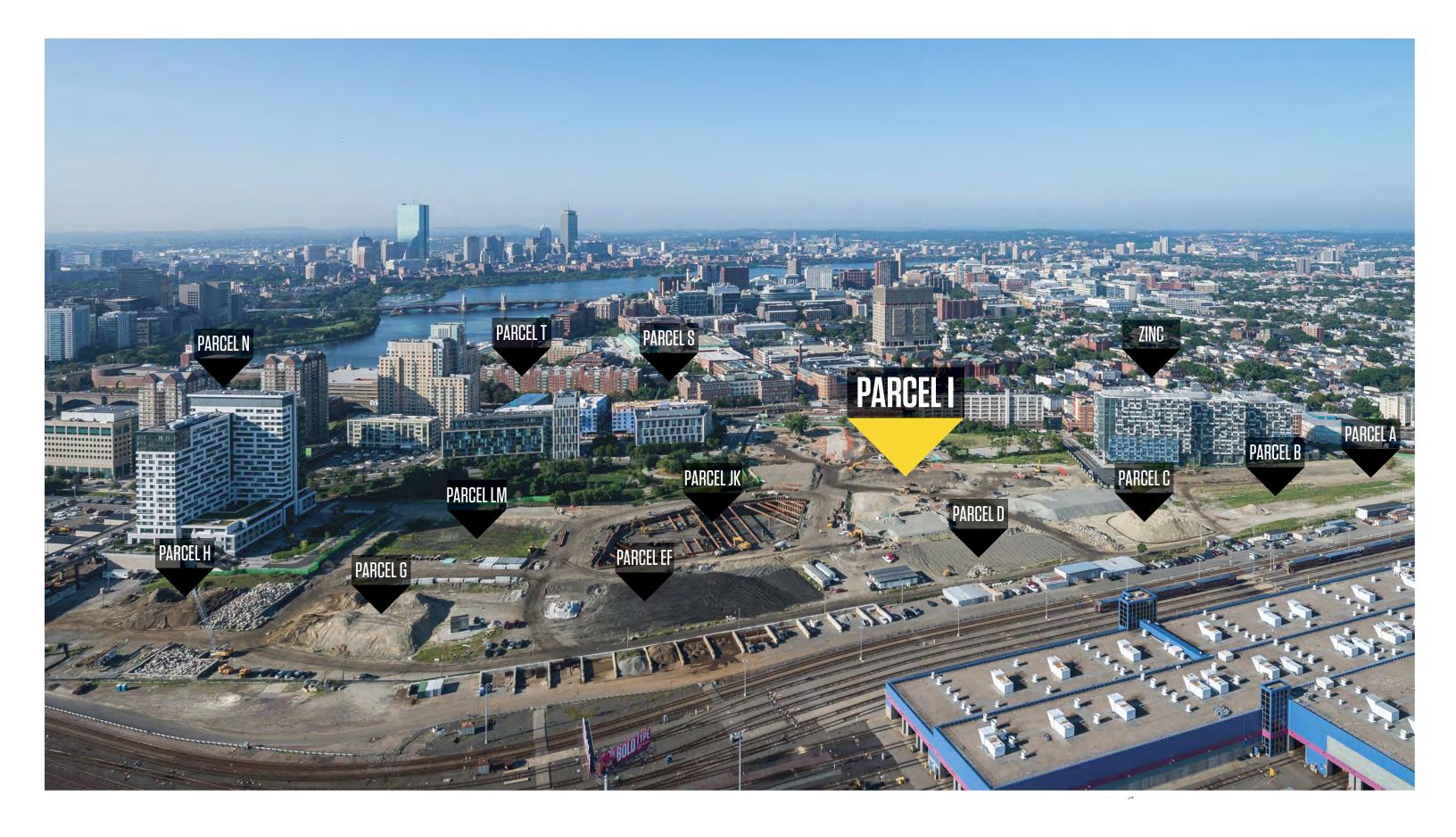


















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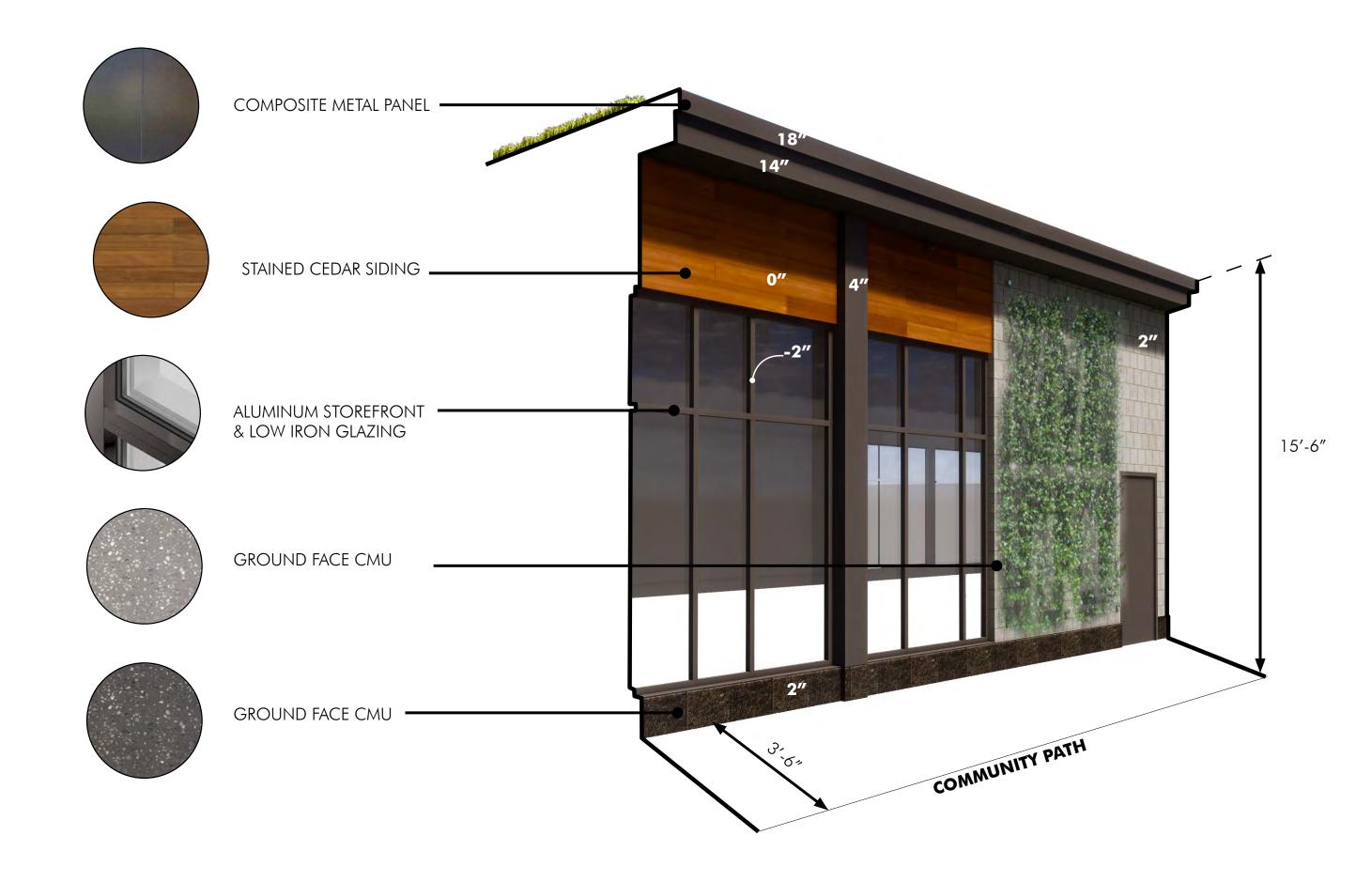




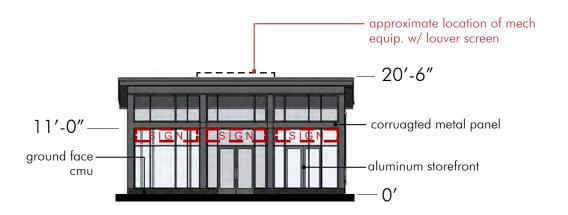
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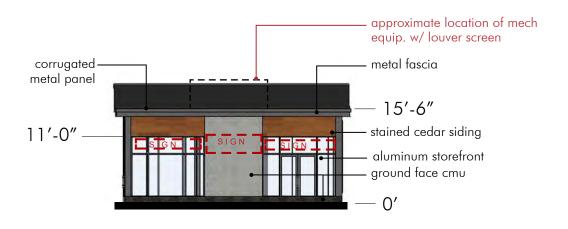




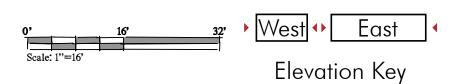




West Building - West Elevation

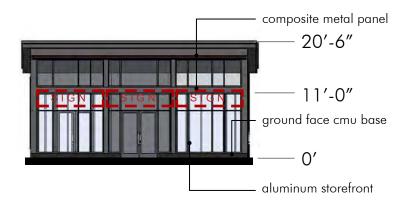


East Building - West Elevation





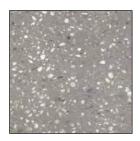
West Building - East Elevation



East Building - East Elevation



stained cedar siding



ground face cmu



aluminum storefront system



ground face cmu

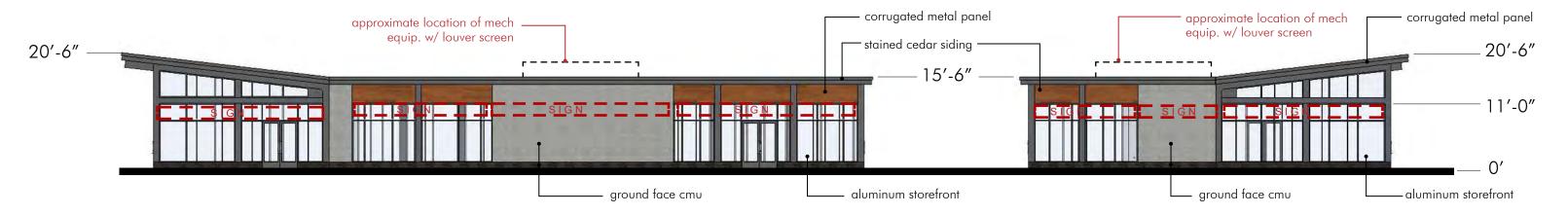


composite metal panel

SIGN potential signage zone

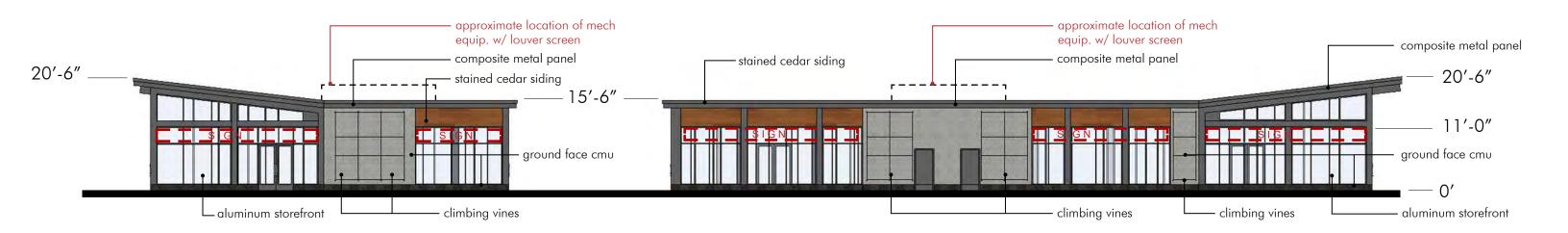
SIGNAGE - Article 7.16.22: Total of all signs shall not exceed 1sf per linear foot of sign frontage. (Building I West = 192 sf max, Building I East = 332sf max) Projecting Signs: 13 sf max, 1 per establishment Wall Sign: 60sf max or 1sf per foot of frontage





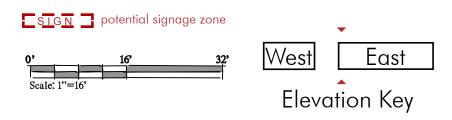
East Building - North Elevation

West Building - North Elevation

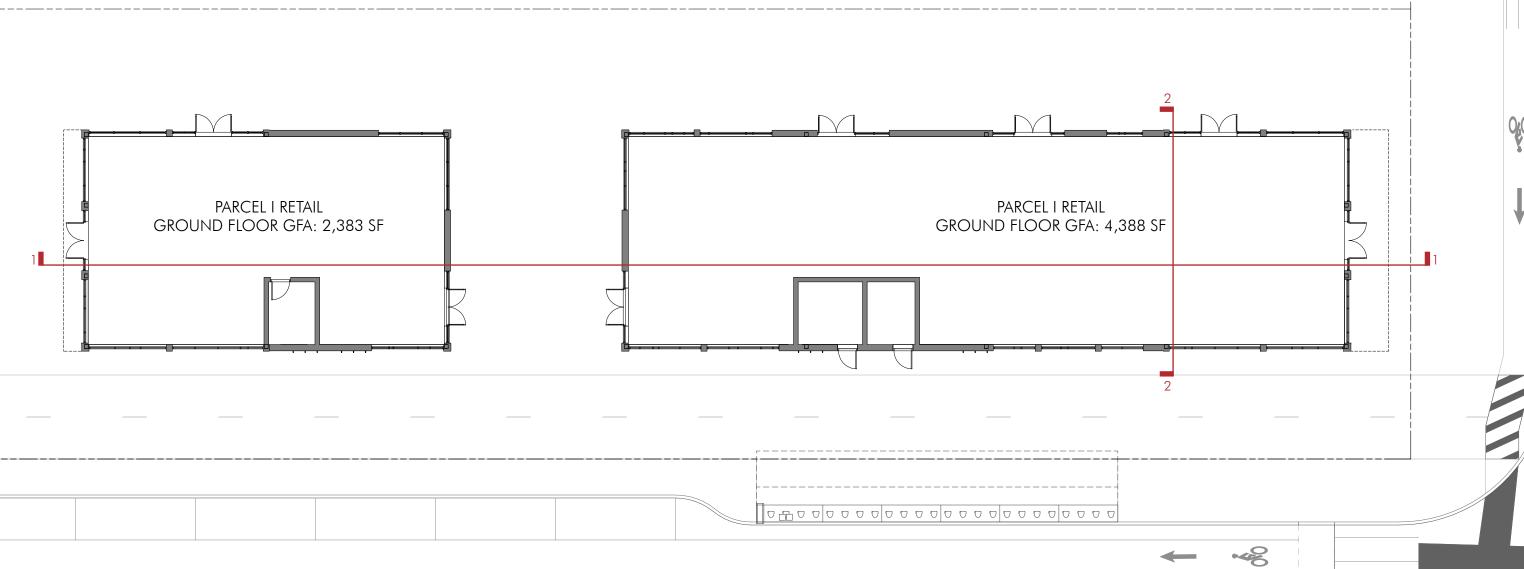


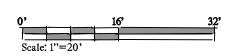
West Building - South Elevation

East Building - South Elevation







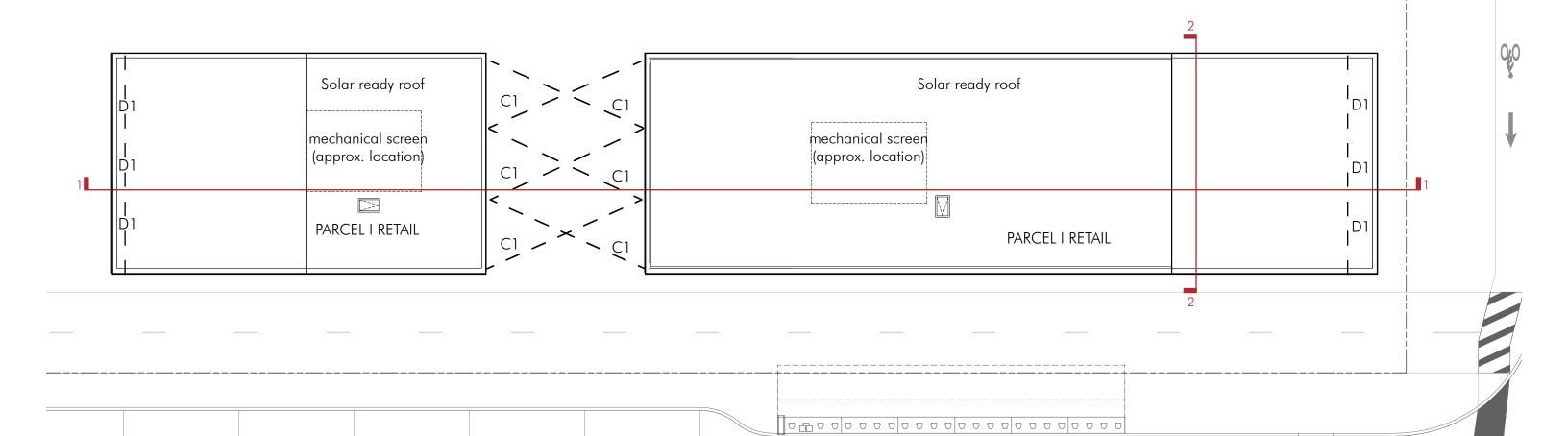




PARCEL I RETAIL TOTAL TOTAL GFA: 6,771 SF PARCEL I-2: 17,825 +/- SF









Building Mounted Exterior Lighting

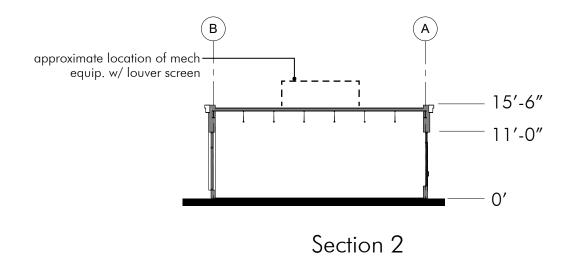
C1 - Suspended dimmable festoon LED lighting with frosted globe lens between east and west retail buildings

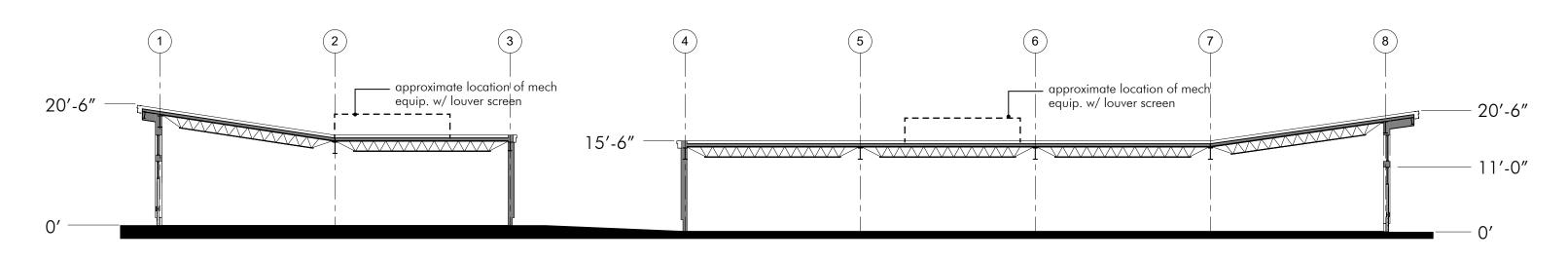
D1 - LED downlight with medium beam distribution mounted at exterior overhangs

All site lighting for Parcel I is being designed to minimize light pollution and light trespass.
Exterior building lighting is mainly focused on the plaza area, with the primary concern of pedestrian safety.

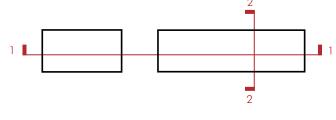
EXTERIOR LIGHTING FIXTURE KEY

C = CATENARY LIGHTD = DOWNLIGHT

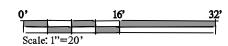




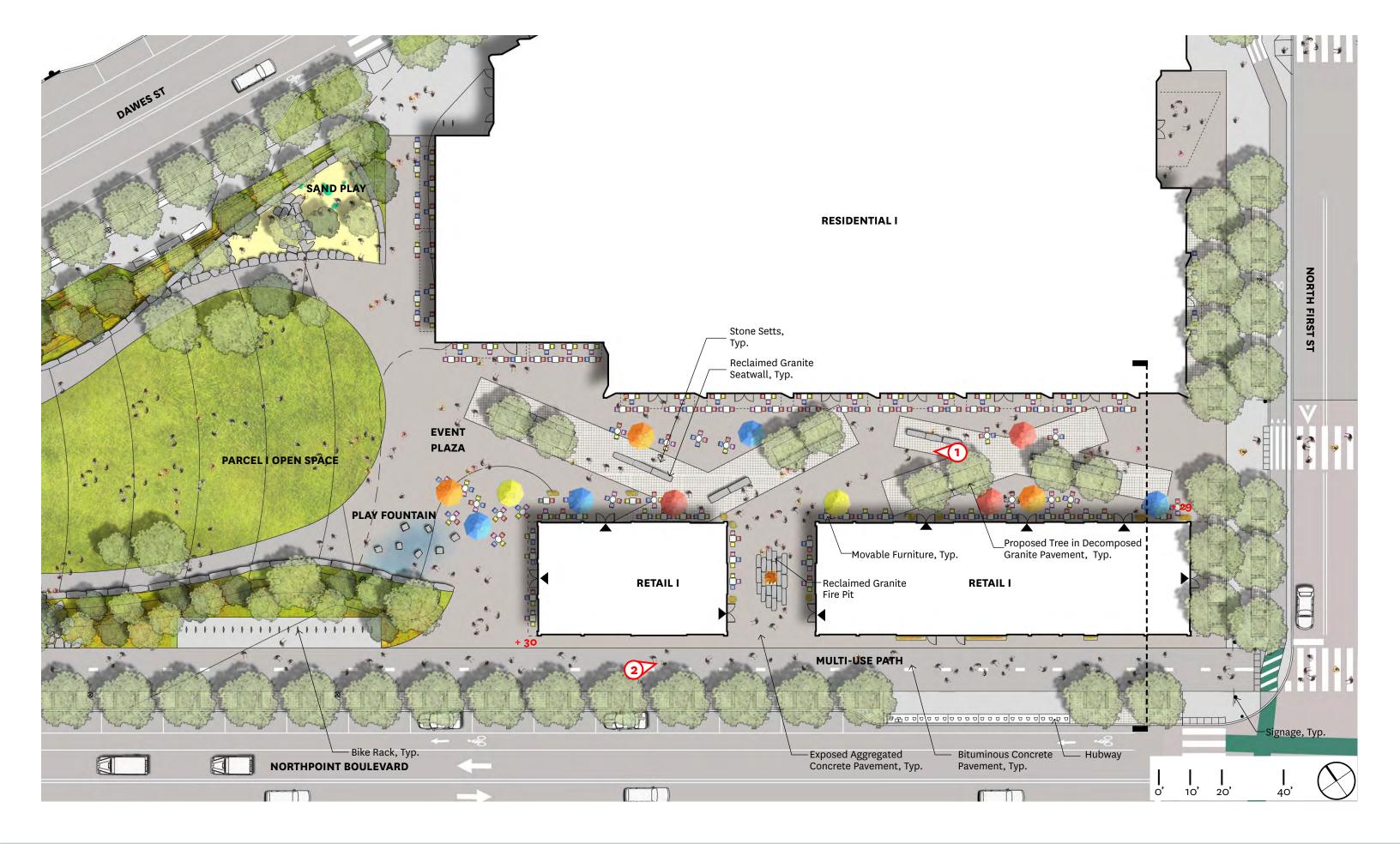
Section 1



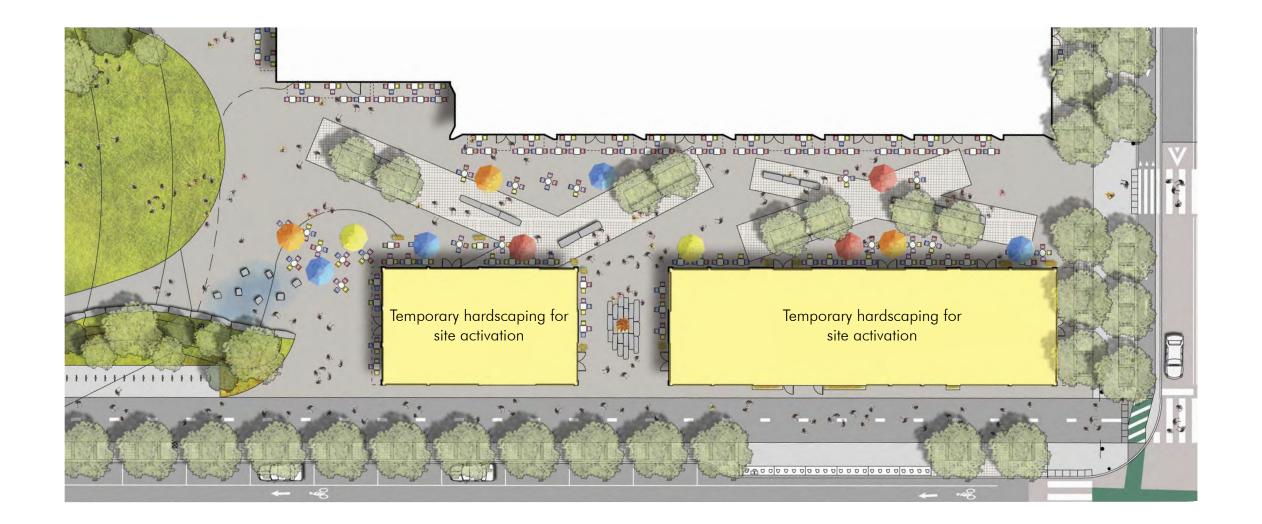
Section Key





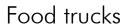






Examples of Temporary Activation





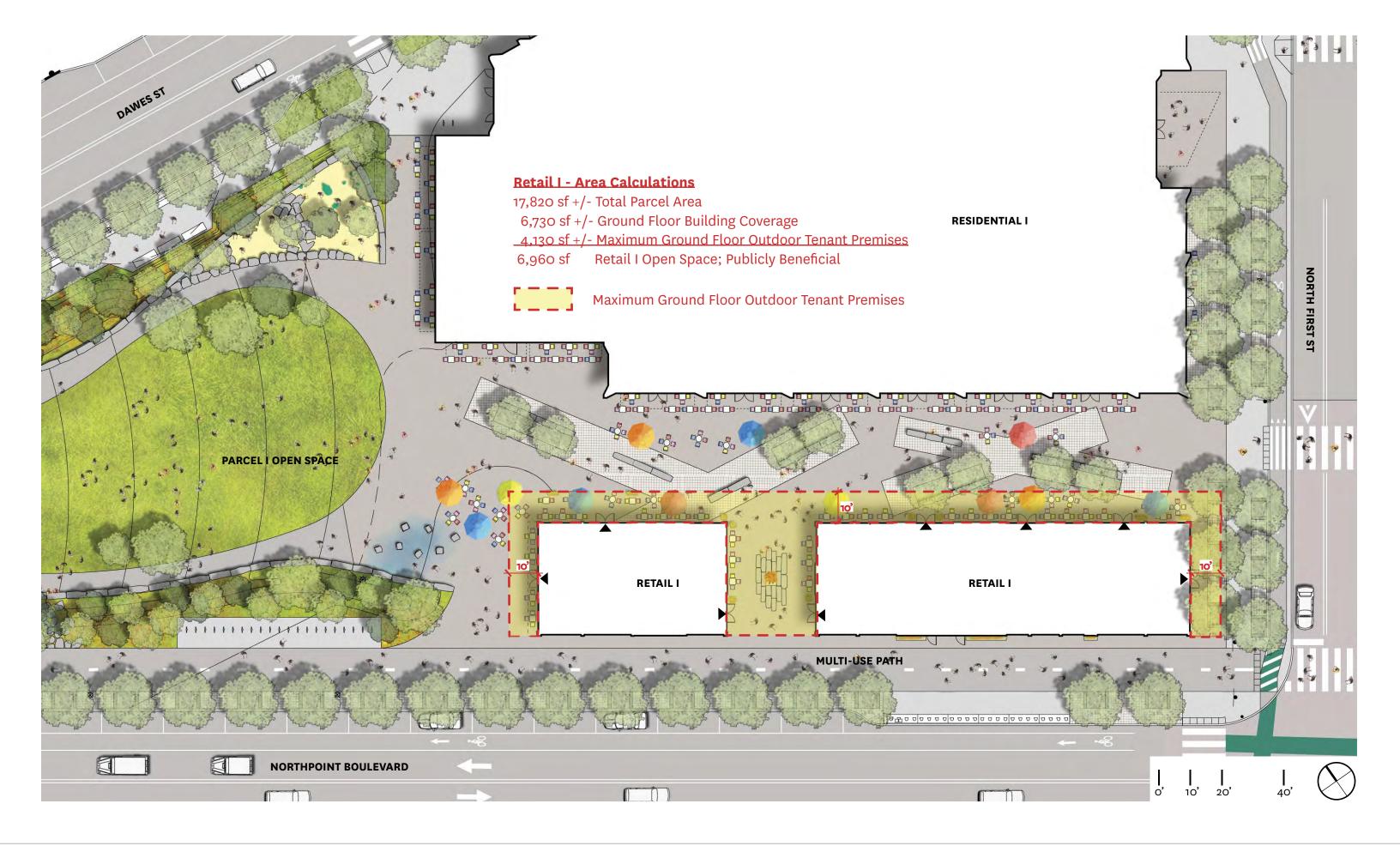


Outdoor reading nook & book share

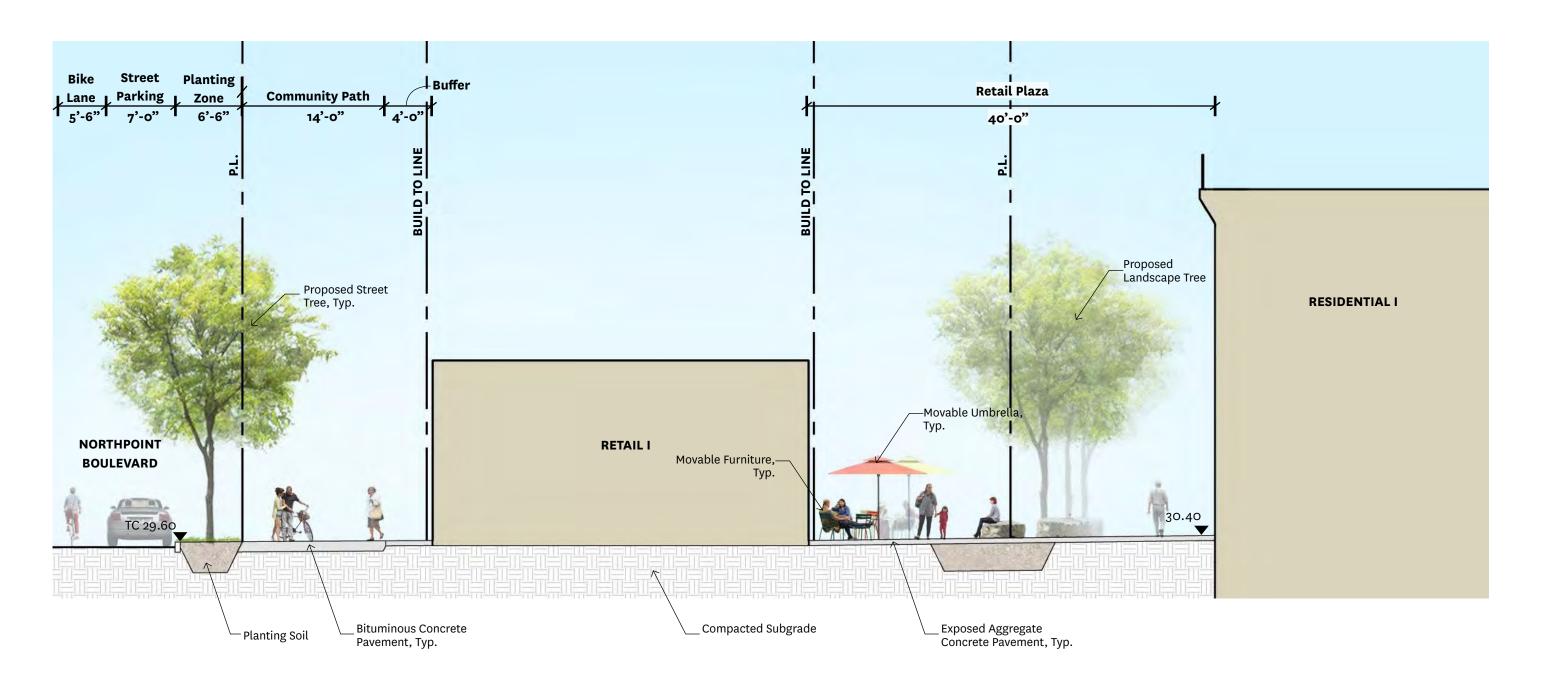


Outdoor games and activities















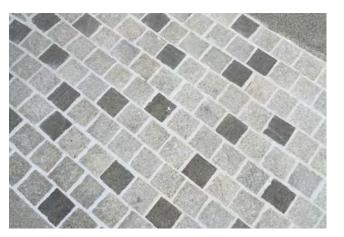
Rendered image is intended for landscape and plaza design review. As a result of the proposed landscape density, views of the building design may be obscured.





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.





Stone Setts Pavement



Exposed Aggregate Concrete Pavement



Decomposed Granite Pavement



Concrete Pavement



Reclaimed Granite Block Seatwalls



Planter, Clustered



Planter, Linear



Bike Rack



Trash Receptacle



Bench



Backless Bench



Movable Tables and Chairs



Movable Umbrella





Platanus x acerifolia
London Plane Tree "Bloodgood"



Acer x freemanii 'Autumn Blaze' Freeman Maple



Gleditsia triacanthos var. inermis Honey Locust "Skyline"



Gymnocladus dioicus 'Espresso' Espresso Coffee Tree

All street trees are included in the City of Cambridge recommended species list.

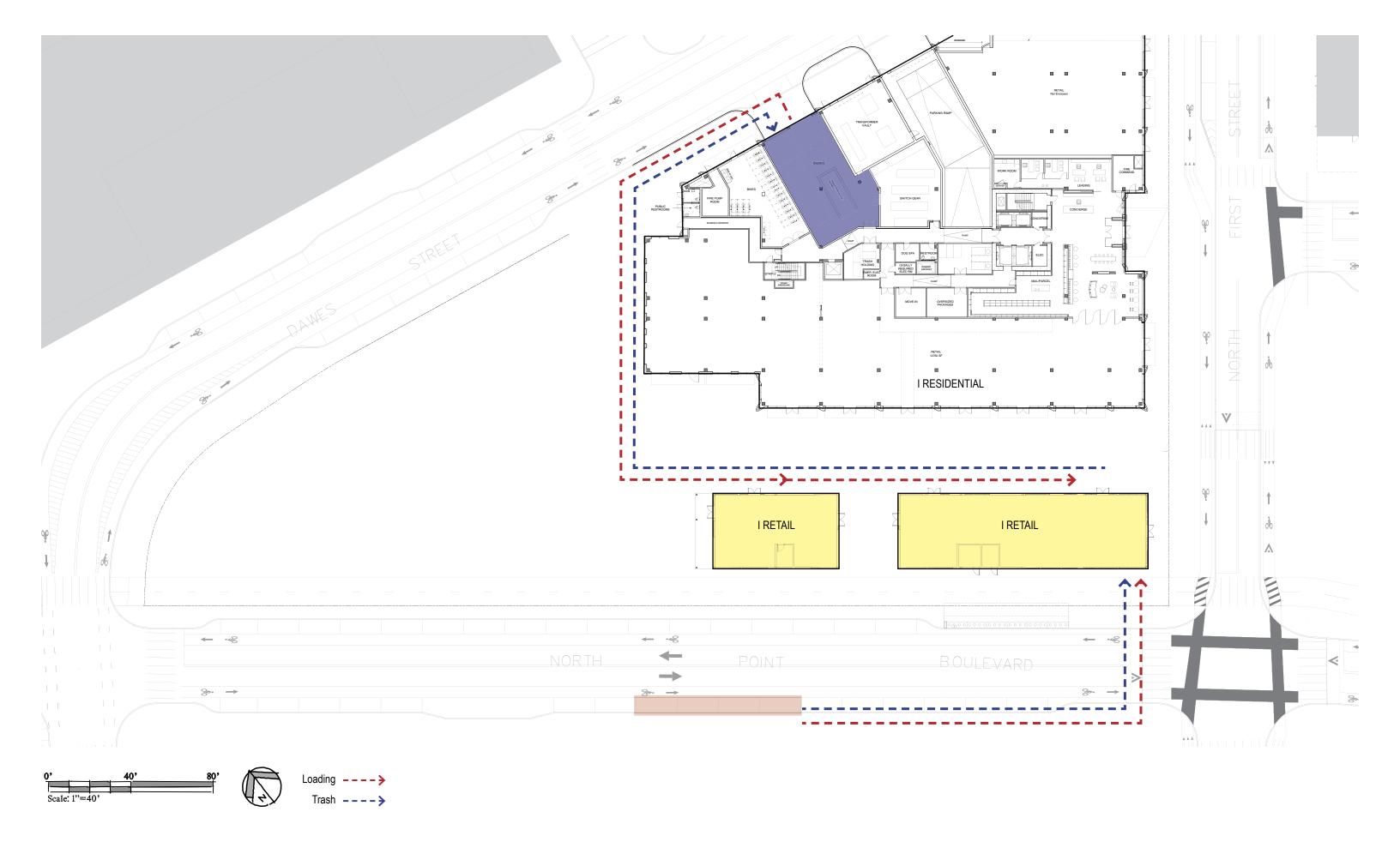


Quercus bicolor Swamp White Oak



Styphnolobium japonicum Scholar Tree

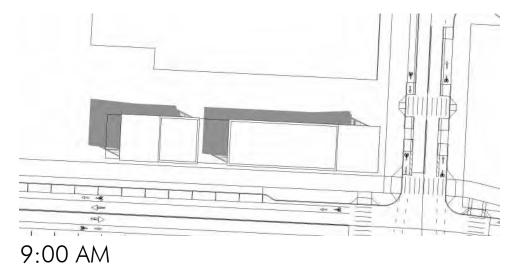


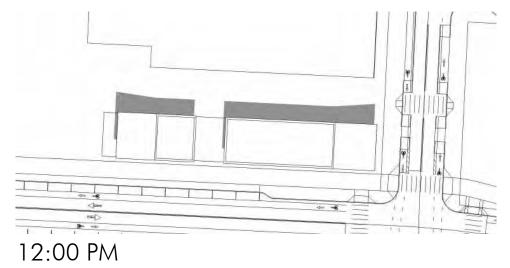


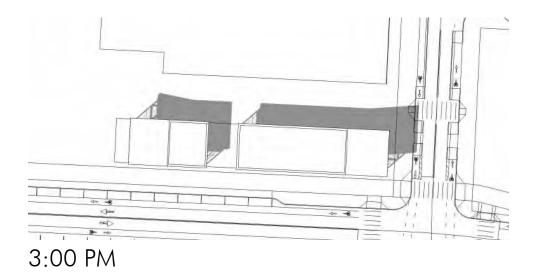


GENERAL NOTES:

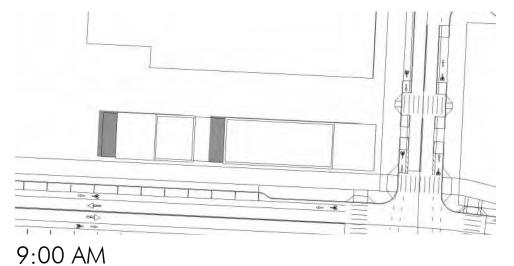
- Refinement to the shadow studies account for transparency of glass and ability for light to transmit through the building.
- Building scale allows for there to always be a "sunny side" of the plaza from 9am to 3pm in three out of the four seasons.

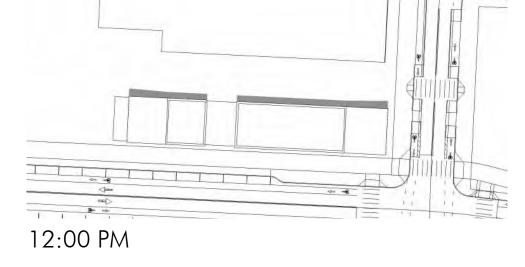


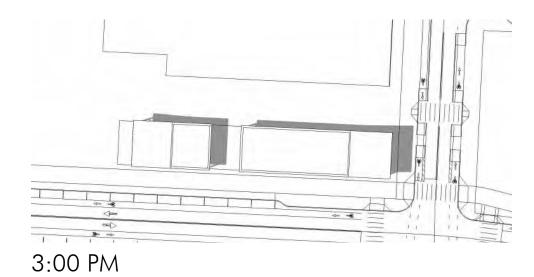




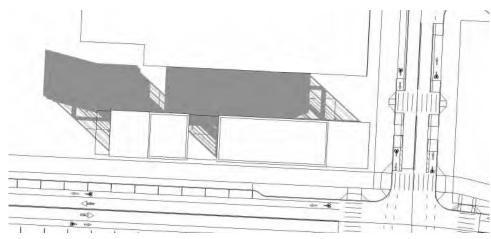
SHADOW STUDY: MARCH 21ST & SEPTEMBER 21ST

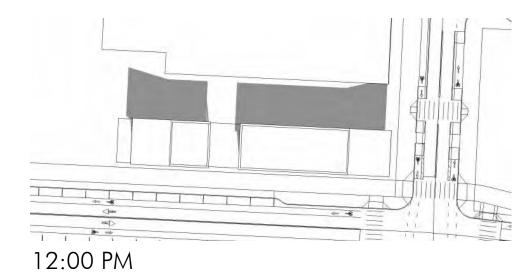


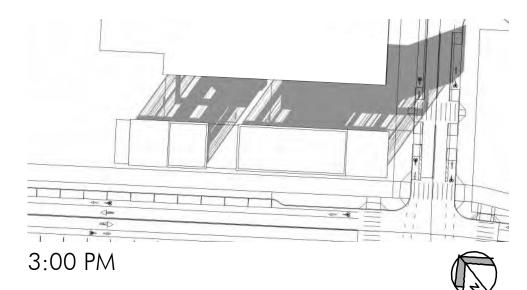




SHADOW STUDY: JUNE 21ST







9:00 AM SHADOW STUDY: DECEMBER 21ST







Ap⁺iŰk, χ 17

a⁺k Ecΰpse, AIA, LEED AP gg1 Hampshi⁺e St⁺eet Camb⁺id e, A g1!"

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MassDEP Noise Regulation

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Cambridge Noise Control Ordinance

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Table of Zoning District Noise Standards (maximum octave band sound pressure levels).

Octave Band center Frequency Measurement	Residential Area		Residentia Industrial	l in	Commercial Area	Industry Area
(Hz)	Daytime	Other	Daytime	Other	Anytime	Anytime
31.5	76	68	79	72	79	83
63	75	67	78	71	78	82
125	69	61	73	65	73	77
250	62	52	68	57	68	73
500	56	46	62	51	62	67
1,000	50	40	56	45	56	61
2,000	45	33	51	39	51	57
4,000	40	28	47	34	47	53
8,000	38	26	44	32	44	50
Single Number						
Equivalent (dB(A))	60 dBA	50 dBA	65 dBA	55 dBA	65 dBA	70 dBA

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CAMBRIDGE CROSSING - Parcel I Retail Acoustical Study

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a†k EcŰpse, AIA &' †thp' i(t Pa†ceŰ

Noise at Nearby Receptors

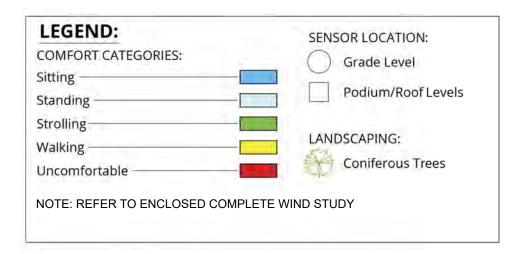
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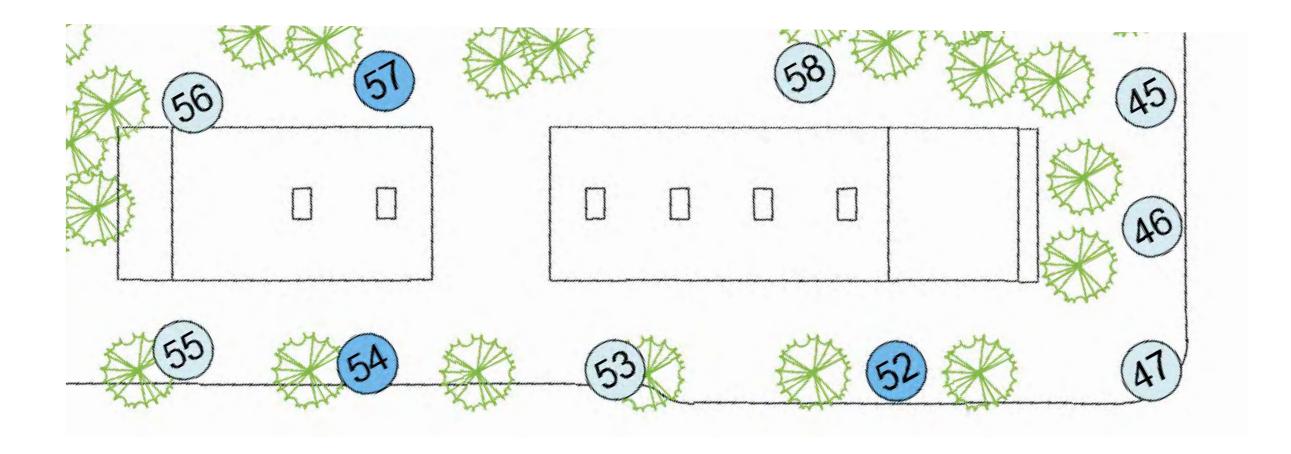
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Trinotty of Faulkes









LEED v4 for BD+C: Core and Shell

Project Checklist

Y ? N

	-			
1		Credit	Integrative Process	1

19	0	1	Loca	Location and Transportation					
X	Х	X	Credit	LEED for Neighborhood Development Location	20				
2			Credit	Sensitive Land Protection	2				
3			Credit	High Priority Site	3				
6			Credit	Surrounding Density and Diverse Uses	6				
6			Credit	Access to Quality Transit	6				
1			Credit	Bicycle Facilities	1				
1			Credit	Reduced Parking Footprint	1				
		1	Credit	Green Vehicles	1				

4	4	3	Sust	tainable Sites	11
Υ			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
		2	Credit	Site Development - Protect or Restore Habitat	2
	1		Credit	Open Space	1
	2	1	Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
	1		Credit	Light Pollution Reduction	1
1			Credit	Tenant Design and Construction Guidelines	1

5	0	6	Wate	Water Efficiency					
Υ			Prereq	Outdoor Water Use Reduction	Required				
Υ			Prereq	Indoor Water Use Reduction	Required				
Y			Prereq	Building-Level Water Metering	Required				
1		1	Credit	Outdoor Water Use Reduction	2				
3		3	Credit	Indoor Water Use Reduction	6				
		2	Credit	Cooling Tower Water Use	2				
1			Credit	Water Metering	1				

8	0	25	Ene	rgy and Atmosphere	33
Υ			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Υ			Prereq	Fundamental Refrigerant Management	Required
5		1	Credit	Enhanced Commissioning	6
		18	Credit	Optimize Energy Performance	18
1			Credit	Advanced Energy Metering	1
		2	Credit	Demand Response	2
		3	Credit	Renewable Energy Production	3
		1	Credit	Enhanced Refrigerant Management	1
2			Credit	Green Power and Carbon Offsets	2

7	0	7	Mate	erials and Resources	14
Υ			Prereq	Storage and Collection of Recyclables	Required
Υ			Prereq	Construction and Demolition Waste Management Planning	Required
3		3	Credit	Building Life-Cycle Impact Reduction	6
1		1	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
		2	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1		1	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2

5	0	5	Indoor Environmental Quality	10
Υ			Prereq Minimum Indoor Air Quality Performance	Required
Υ	Y		Prereq Environmental Tobacco Smoke Control	Required
2			Credit Enhanced Indoor Air Quality Strategies	2
1		2	Credit Low-Emitting Materials	3
1			Credit Construction Indoor Air Quality Management Plan	1
		3	Credit Daylight	3
1			Credit Quality Views	1

4	0	2	Innovation	6
3		2	Credit Innovation	5
1			Credit LEED Accredited Professional	1

2	1	1	Regional Priority	4
1			Credit Regional Priority: High Priority Site	1
	1		Credit Regional Priority: Rainwater management (2 pt threshold)	1
		1	Credit Regional Priority: Optimize Energy (8 pt threshold)	1
1			Credit Regional Priority:Building Life Cycle Impact Reduction	1

55	5	50 TOTALS	Possible Points:	110

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 8







Sustainable Design Consulting

Cambridge Crossing Parcel I Retail

Transitioning to Net Zero

The small core and shell retail project located on Parcel I at Cambridge Crossing presents a challenge for achieving net-zero energy. The proposed design reflects new construction being built to the best of currently available technology and efficiency given market and program restraints. The design team continues to evaluate opportunities to reduce energy consumption and greenhouse gas emissions.

The team has brainstormed pathways for potential emissions reductions, including analyzing various building envelope properties, lighting and HVAC systems, future greening of the grid, and what it would take to fully electrify the buildings.

Additional energy savings are likely to be seen in advancement of building controls and active personalization of the interior environment. New technologies have the opportunity to be tested and incorporated as tenant turnover happens over the life of the building bringing spaces up to the most current integrated systems.

The biggest reduction-potential in energy consumption and greenhouse gas emissions for a core and shell retail building will likely be in the glazing, lighting and HVAC performance. In this case, the team predicts a significant reduction in building emissions is possible. Fit out program and technology is determined by the tenant that occupies the space.

The team discussed where it sees energy supply and decarbonization in the future, particularly with improvements from the grid electricity sources. The makeup of the Massachusetts energy grid is anticipated to shift more towards renewable energy sources in the coming decades. Thus, the electricity component consumed by the project under the current design could see an improvement in emissions factors over the years, and a correlating reduction the overall emissions from operation of the building.

The project mechanical equipment has the ability to be transitioned to all-electric systems in the future.





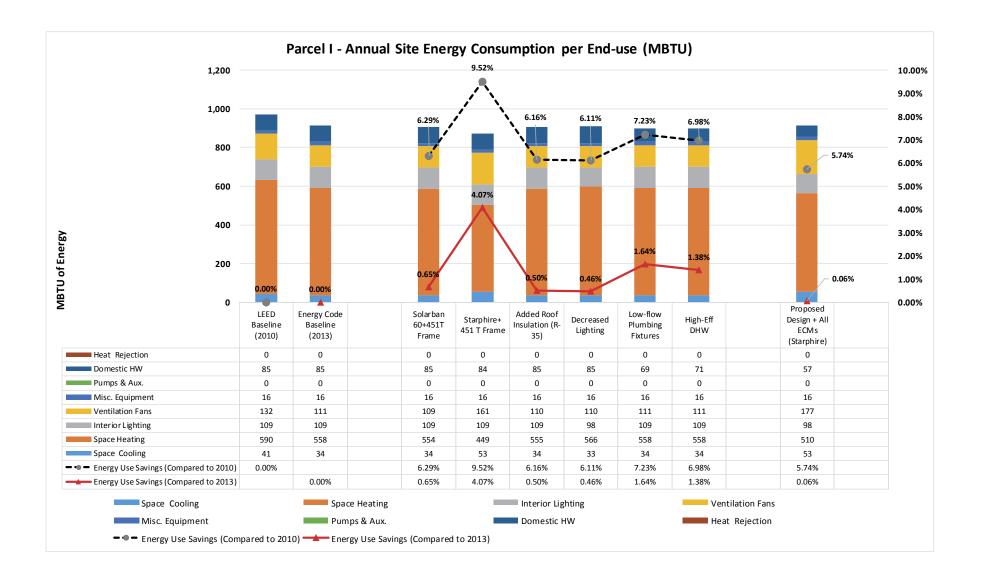


Energy Simulation Results

The following table summarizes the annual energy consumption as compared to the LEED and Energy Code Baseline models.

	Interior	Misc.	Space	Ventilation	Exterior	Space	Domestic	Total Site	Site Energy	Savings (%)
	Lighting	Equipment	Cooling	Fans	Lighting	Heating	HW	Energy	Compared	to Baseline
	kWh	kWh	kWh	kWh	kWh	Therms	Therms	MBTU	LEED	MA Code
LEED Baseline	32,067	4,702	11,990	38,552	1,555	5,900	847	1,046	ASHRAE	ASHRAE
Code Baseline	32,067	4,702	10,001	32,450	1,555	5,582	847	986	2010	2013
Proposed Design	28,860	4,702	15,606	51,975	1,555	5,102	573	986	5.7%	0.1%

LEED Baseline: Baseline model following the requirements of ASHRAE 90.1-2010, Appendix G, for LEED v4; 40% window-to-wall ratio Code Baseline: Baseline model following the requirements of ASHRAE 90.1-2013, Appendix G, for MA Energy Code; 34% window-to-wall ratio Proposed Design (42% WWR): Schematic Design, considering Starphire clear glass wlong will all ptoposed ECMs.



Energy Efficiency Measures

Proposed Basis of Design: The following ECMs are included in the base building design.

- Increased roof insulation
- Increased wall insulation (only for LEED)
- Reduced interior lighting power density
- Low-flow plumbing fixtures
- High-efficiency DHW
- High-efficiency Roof Top Units

Additional ECMs will be analyzed.

- Increased roof insulation: R-40 Continuous
- Increase wall insulation: R-21 batt and R-10 continuous
- Increase the cooling efficiency of RTUs.
- Variable Volume RTUs

Conclusion:

As shown in the energy savings table and graph, the proposed design uses less energy as compared to ASHRAE 90.1-2013 Baseline, and therefore, it meets the requirements of Massachusetts Energy Code. This is a preliminary energy analysis and we will investigate implementation of several other energy conservation measures to increase the overall annual energy and energy cost savings.







Northpoint Parcel I | Energy Modeling Report Energy Code Analyses

The purpose of this energy study is to investigate the project's compliance with the Massachusetts Energy Code requirements, and to evaluate the impacts of several envelope options and energy conservation measures on the building overall energy use. The minimum requirements of ASHRAE 90.1-2010 and 2013 versions as well as the proposed design assumptions are listed in the Energy Modeling Assumption table.

This energy analysis indicates that the project currently complies with the requirements of the Massachusetts Energy Code. This report summarizes the Energy Conservation Measures (ECMs) currently included in the proposed design as well as the recommended EEMs that can be incorporated for increased energy and energy cost savings.

Methodology

The DOE II based energy simulation program, eQuest 3.65, has been used in this analysis to generate the estimated annual energy savings associated with each proposed improvement options. The building geometry is based on the Schematic Design drawings. The windows are customized in the energy models to reflect the exact proposed dimensions and positions. The calculated window-to-wall ratio is 42% as compared to the maximum allowed in the Baseline Code which is 40% for LEED and 34% for the MA Energy Code, which will be used for the building permit application. Please note that the proposed estimated energy performance are not predictions of actual energy consumptions or costs for the proposed design after construction. The actual energy use will differ from these estimates due to the variations in occupancy patterns and schedules, weather conditions, and building operation and maintenance, but the energy modeling results should serve as an accurate comparison tool.

The following energy models were generated:

- LEED Baseline ASHRAE 90.1-2010: Following the Appendix G Performance Rating Method, the envelope, HVAC, lighting and service water heating systems are modified to meet the minimum requirements of 2010 version. This model is used as the baseline for LEED application.
- Energy Code Baseline ASHRAE 90.1-2013: Following the Appendix G Performance Rating Method, the envelope, HVAC, lighting and service water heating systems are modified to meet the minimum requirements of 2013 version. This model is used as the baseline for MA Energy Code analysis. Since the building is smaller than 100,000 SF, compliance with the Stretch Energy Code isn't required.
- Proposed Options: Represents the Basis of Design which has been used in this study. Also, several envelope alternatives and ECMs were evaluated:

Energy Simulation Assumptions

Parcel I Energy Modeling Inputs - Baseline Requirements & Proposed Assumptions

	0	LEED V4	MA Energy Code	Proposed Design &
	Components	ASHRAE 90.1-2010	ASHRAE 90.1-2013	ECMs (Energy Conservation Measures)
obe	Metal Framing Curtainwall	U-value 0.45; SHGC-0.4	U-value 0.42; SHGC-0.4	ECM1a:Trifab 451T; Low-E Double Pane Glass (SB 60); U-0.29; SHGC-0.39; VT: 70%; Overall (incl. frame): U-0.40; SHGC-0.34 ECM1b: Starphire in Retail (U-0.47, SHGC-0.78, VT:81%)
Envelope	Window-To-Wall Ratio	As Proposed Design or 40 %	As Proposed Design or 34 % Restaurant (Quick Service)	42%
	Roof	R-20 c.i.; U-value of 0.048	R-30 c.i.; U-value of 0.032	ECM2: R-35 c.i.; U-value of 0.028
	Exterior Walls (steel-framed)	R-13 + R-7.5 c.i.; U-0.064	R-13 + R-10 c.i.; U-0.055	R-13 + R-10 c.i.; U-0.055
	Occupancy	Restaurant: 435 SF/person 95 SF/person	Restaurant: 435 SF/person 95 SF/person	Restaurant: 435 SF/person 95 SF/person
S	Interior Lighting	Fast food/ cafeteria: 0.90 W/SF	Fast food/ cafeteria: 0.90 W/SF	ECM3: 0.81 W/SF (Overall 10% Reduction from ASHRAE 2013)
Interior Loads	Process Load	From LEED v4 Appendix 3: Broiler - 16 kBtu/sf Convention Oven - 18 kBtu/sf Fryer - 1.05 kW Griddle - 400 W/sf Misc. load: 0.5 W/Sf	From LEED v4 Appendix 3: Broiler - 16 kBtu/sf Convention Oven - 18 kBtu/sf Fryer - 1.05 kW Griddle - 400 W/sf Misc. load: 0.5 W/Sf	From LEED v4 Appendix 3: Broiler - 16 kBtu/sf Convention Oven - 18 kBtu/sf Fryer - 1.05 kW Griddle - 400 W/sf Misc. load: 0.5 W/Sf
	Elevator Load	N/A	N/A	N/A
ļ	Elevator Load	IN/A	N/A	N/A
DHW	Low-Flow Hot Water Fixtures	LEED v4 Baseline	LEED v4 Baseline	ECM4: At least 30% reduction from LEED v4 Baseline.
	Gas-fired Water Heater	Gas Storage; Efficiency: 80%	Gas Storage; Efficiency: 80%	ECM5: Efficiency: 95%
Ę	Cooling System Type	Single Zone Sys.; DX Cooling	Single Zone Sys.; DX Cooling	RTUs; Multi-zone; DX Cooling
Cooling System	Cooling Tower Fan Control & Power	N/A	N/A	N/A
S Si	Chiller Type & EFF	N/A	N/A	N/A
olir	Condenser Water Supply & ΔT	N/A	N/A	N/A
රි	Chilled Water Supply & ΔT	N/A	N/A	N/A
ma	Heating System Type & Efficiency	Gas Furnace if Proposed design uses gas for space heating. 80%	Gas furnace whether proposed case uses gas or electricity for space heating.	Gas Furnace; 80% EFF
'System	HW Boilers	N/A	N/A	N/A
HW S	HW Pump Control	N/A	N/A	N/A
Í	HW Supply Temperature	N/A	N/A	N/A
	Hot Water ΔT	N/A	N/A	N/A
		1.4	.4	.4
),C	Ventilation (Building)	Single Zone Systems; Meets ASHRAE 62.1	Single Zone Systems; Meets ASHRAE 62.1	Through RTUs; Meets ASHRAE 62.1
Air-Side HVAC	Space Heating/ Cooling	Single Zone; Constant Volume; DX Cooling; Gas-fired Furnace Heating	Single Zone; Constant Volume; DX Cooling; Gas-fired Furnace Heating	Constant Volume Roof Top Units; DX Cooling; Gas Furnace;
Air-Si	System Efficiency	Cooling: 11 EER; 13 SEER	Cooling: 12.7 IEER; 14 SEER	Cooling: 14 EER Heating: 80% efficient furnace
	Supply Fan Control	Constant Volume	Constant Volume	Constant Volume

Note 1 The Baseline Model is consistent with ASHRAE 90.1-2010 for LEED v4 and ASHRAE 90.1-2013 for new MA Energy Code.

Note 2 The utility rates are consistent with the EIA average rates for MA through Feb-17 - Electricity: \$0.1541/ kWh; Gas: \$0.992/ therm





Page	Section	Requirements	Compliance	Check
	13.73 Use Regulations	Any use permitted in Article 16 but subject only to the requirements and limitations of this section 13.70.	Potential Uses: Retail, Eating and Drinking Establishments with and without Liquor, Consumer Service Establishments	√
	13.73.1 Special Provisions Related to Permitted Retail Uses	Individual cannot exceed 10,000 gross square feet; no off street parking, Planning Board may approve 1 space per 2,000 sf gross floor area	No Proposed Uses over 10,000sf	✓
	13.74.1 Allowed FAR	Allowed FAR = 2.4	Proposed GSF = 6,770; Proposed FAR = 0.40	√
	13.74.4 Other Dimensional Requirements	No specified minimum lot size, width, or yards	N/A	
	13.74.31 Portions of Buildings Limited to Sixty-five Feet	Buildings within 50 feet of public open space, max height = 65 feet	Proposed Building Height = 22'-6"	✓
	13.76 Parking and Loading, see Article 6.83 Loading Facility Category C	First Bay Required at 10,000gsf	N/A	√
	13.76 Parking and Loading	Bike Parking: Retail - Long Term .1 per 1,000sf, Short Term .6 per 1,000sf / Restaurant - Long Term .2 per 1,000sf, Short Term .6 per 1,000sf	Proposed Bike Parking: Short Term = 5, Long Term = 1	✓
	13.76 Parking and Loading	No accessory parking required	Proposed Parking = none	√

Zoning Map: NP/PUD6 according to Northpoint Business, Office, and Residential District. See Article 13 for PUD-6 Regulations



Page	Section	Guideline Description	Compliance	Check
ΰk	3.9 Parcel I Retail	Activate NorthPoint Common	Retail uses and transparent facades activate the public realm. Parcel I Retail and Parcel I Residential form an active, intimate retail plaza between buildings.	V
ŰŔ	3.9 Parcel I Retail	Establish human scale and balance the scale of ad%cent buildings	One story buildings with horizontal breaks in facades establish human scale	√
ŰŔ	3.9 Parcel I Retail	Enhance East-West Connectivity between NorthPoint Common and Water Street Park	A continuous open space retail plaza enhances East-West Connectivity	√
ŰŔ	3.9 Parcel I Retail	Have a visual presence from First Street and Water Street Park	Change in roof height on First Street and overhangs with transparent facades create a visual presence from First Street and Parcel I Open Space	√
ŰŔ	3.9 Parcel I Retail	Maintain North-South connections from Northpoint Boulevard to the Retail Plaza	An open air break in the building plus transparent facades maintain North-South connections	✓
ŰŔ	3.9 Parcel I Retail	Follow MultiUse Path guidelines	Setbacks and entries follow Multi-Use Path guidelines	√
ŰŔ	3.9 Parcel I Retail	Create transparency to enable views through retail buildings	Transparent facades and a shallow footprint enable views through retail buildings	√
ŰŔ	3.9 Parcel I Retail	Engage Water Street Park and Retail Plaza with as much ground floor retail frontage as possible	Retail frontage on all sides engages Parcel I Open Space and Retail Plaza	√
ŰŔ	3.9 Parcel I Retail	Create restaurant seating at second floor terraces (encouraged)	Buildings are one story and do not contain second floor terraces	√
ŰŔ	3.9 Parcel I Retail	Use the orientation and exposure to sun and minimize shadows on parks and surrounding buildings	Buildings are one story to maximize exposure to sun and minimize shadows on parks and surrounding buildings	√





Page	Section	Guideline Description	Compliance	Check
39	3.1 Open spaces	All open spaces will be open to the public and designed to encourage public use. Open spaces including NorthPoint Common will be designed to support, enhance, and balance the commercial and residential development at NorthPoint.	The Retail I Plaza is open to the public and designed to encourage public use. The plaza supports the surrounding retail uses in the pavilions and on the ground floor of residential Building I.	√
39	3.1 Open spaces	The provision of open spaces of diverse size and use is encouraged to enhance the public environment at NorthPoint. All open spaces at NorthPoint shall be designed to be public in nature, creating an open environment that the public can easily identify that is welcoming for everyone's use.	The Plaza is one of the most urban spaces at the center of Cambridge Crossing. It is highly visible, with an open civic character, a robust paved surface, canopy trees to provide shade and a combination of fixed and moveable furniture.	√
39	3.1 Open spaces	The provision of an interconnected series of open spaces is encouraged to provide connections both to neighborhoods and within NorthPoint so as to promote pedestrian movement.	The Plaza provides a central pedestrian connection between the Common and First Street to the east, Park I to the west and the Community Path to the south.	√
39	3.1 Open spaces	Open spaces shall be visible and accessible from public streets.	Direct sightlines and multiple points of access are provided from First Street, NorthPoint Boulevard and adjacent open spaces.	✓
39	3.1.1 Open space programming	Plaza: Cafes, Retail, Markets, Public Events, Seating, Water Features, Gathering, People Watching.	The Plaza and the Common will accommodate retail spaces, sitting and gathering areas for larger formal and informal events for a variety of users.	√
42	3.1.3 Plazas	The Retail Square will be the heart of NorthPoint, and should be designed to become a vibrant public gathering place, where open space, retail activities, and public events come together. The Retail Square is the point at which the First Street corridor and the east-west open space spine and Community Path cross each other, and clear pedestrian connections and lines of sight should be encouraged to facilitate pedestrian movement between the two. The retail Pavilions should be configured to promote activation of the public plaza and park spaces through restaurant and cafe terraces, and activity areas. Tree and built shade structures are encouraged to create a strong green connection, and a comfortable microclimate during the summer months. Great care should be taken in the design of plazas and paths to minimize the potential for unsafe conflicts between vehicles, pedestrians and cyclists.	The Retail Plaza is a vibrant gathering place, with accessible connections from all sides. The design encourages free pedestrian flow from the streets to the plaza with strong connections to the Common and the First Street corridor. The retail pavilions and the plaza promote active public use through their flexible design and shade provided by architectural canopies, trees and moveable shade structures.	
52	3.2.3 NorthPoint Boulevard	Street trees will be planted on both sides of the street where possible, and the design of the Community Path should be handled as a part of the street and sidewalk section of NorthPoint Boulevard, and should meet the standards required for buffers and signage.	The Retail Building, landcape elements and signage are 4' from the edge of the Community Path, providing the required buffer.	√





SIGNAGE CRITERIA

See building elevations for extent of allowable signage. All tenant signage is subject to review and approval by the City of Cambridge.

GUIDING PRINCIPLES

These criteria provide guidelines for the design of tenant signage to ensure high standards of design quality that enhances the Northpoint neighborhood and conveys the Tenant's identity. Tenants are encouraged to use high quality materials and lighting in creative ways that enliven the streetscape. Individual brand identity, colors, and logos are encouraged. All tenant designs must be submitted for review by DivcoWest, their retail master plan architect, and the base building architect, in conformance with applicable requirements.

PREFERRED SIGNAGE TYPES AND AREAS



Wall Signs: 1 sf per linear foot of tenant frontage, 60 sf maximum. 20 feet maximum height above grade, provided it is below the sill line of the second floor windows or the lowest point of the roof, whichever is less.



Awning Signs: Graphics are encouraged on tenant installed canopies. All graphics must comply with City of Cambridge area requirements.



Projecting Signs: 6 sf maximum area per side; 1 sign allowed per ground floor establishment; 1 sign allowed at a public building entrance not serving a ground floor establishment.



Window Graphics are considered Wall Signs per Cambridge Zoning Ordinance.

SIGNAGE ILLUMINATION Preferred:



Preferred: Halo-illumination: individual reverse channel letters with lighting concealed inside the letter, casting light behind the letter against an opaque sign panel of wall surface.

NOTE: All tenant signage is subject to review and approval by the City of Cambridge.



Preferred: Exterior gooseneck-type lighting of individual lettering. Continuous strip lighting is not allowed.



Preferred: Internally illuminated individual transluscent letters with opaque sides. Lighting to be mounted inside each individual letter. See Zoning Article 7 for additional requirements.

INTRODUCTION

Tenant design guidelines are intended to encourage a high level of design and placemaking for the neighborhood and maximize visibility and identity for tenants. All tenant designs must be submitted for review by DivcoWest, their retail master plan architect, and the base building architect, in conformance with applicable requirements.

STOREFRONT AND SURROUND

Tenants are encouraged to design and construct a creative storefront and surround in accordance with their individual brand identity. The specific limits of design work will be indicated in each tenant's Lease.

AWNINGS

Awnings and canopies are strongly encouraged by all tenants to provide character and variety to the streetscape, increase indentity of retailers, and cover pedestrians from inclement weather.

DISPLAY ZONE

The first six feet of a retail tenant's space shall be a display zone with creative displays that showcase their brand identity. Merchandising racks and fixtures are not permitted within the display zone. Lighting that highlights the displays shall be provided within the zone. Lighting shall be on a timeclock and must be illuminated during hours determined by the landlord.





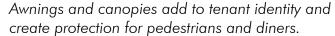
Storefront and surround materials should be high quality, low maintenance, and durable. Storefronts should maximize the amount of clear glazing and display space. Storefront glazing should have a minimum 6" high durable/impact resistant base. Recessed entries are encouraged.



Awnings should not extend below 9'-0" above the sidewalk and should project a minimum of 3'-0" and a maximum of 5'-0" from the building face. Tenant identity color and graphics are encouraged. Awning material may be fabric, metal or glass. Awnings should not have vertical sides.









A display zone showcases tenant's identity and enlivens the streetscape.



Well-designed and detailed storefronts and surrounds are encouraged.

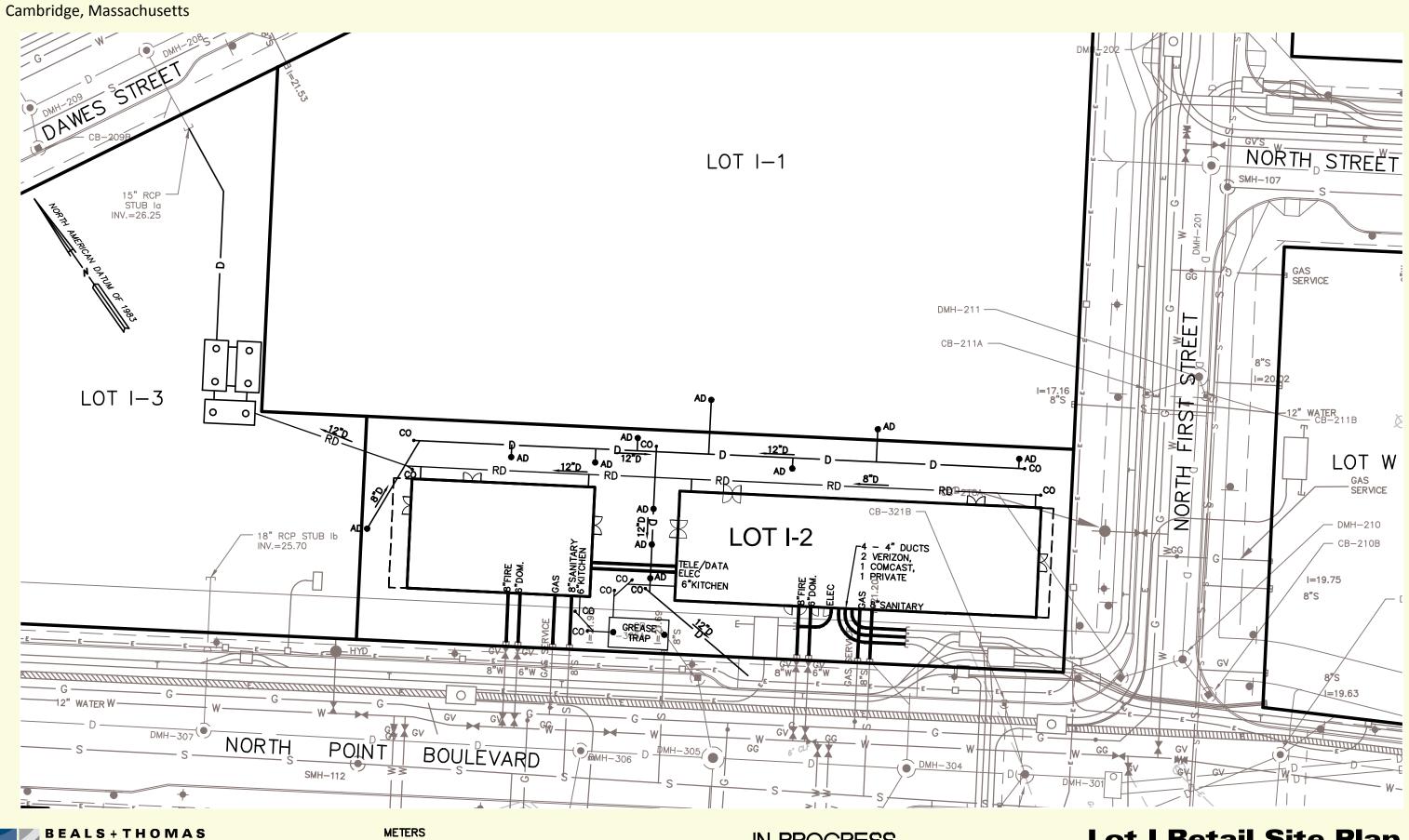
NOTE: All tenant signage is subject to review and approval by the City of Cambridge.



Tenants in multi-story buildings must incorporate ventilation louvers into their storefront design.



NorthPoint

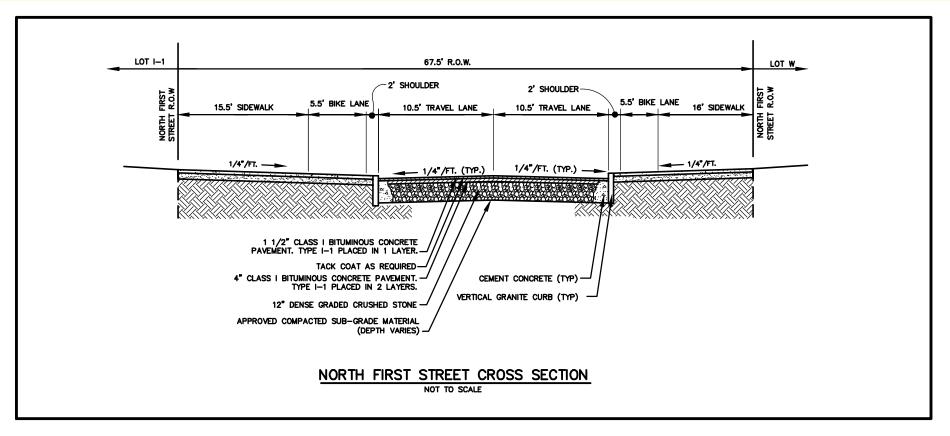


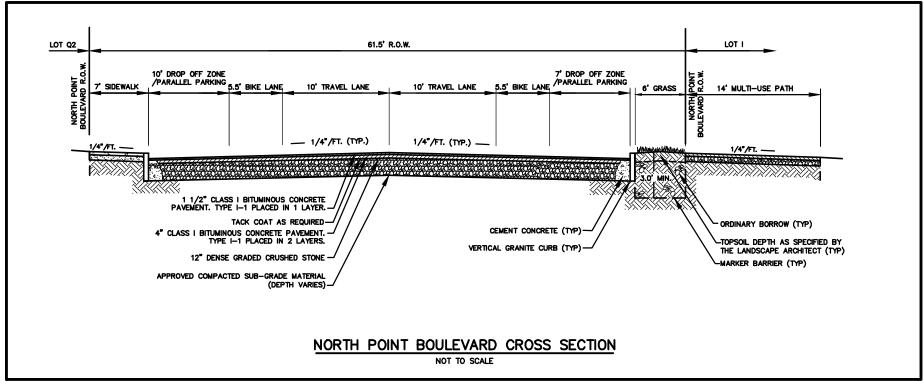
Civil Engineers + Landscape Architects + Land Surveyors + Planners +

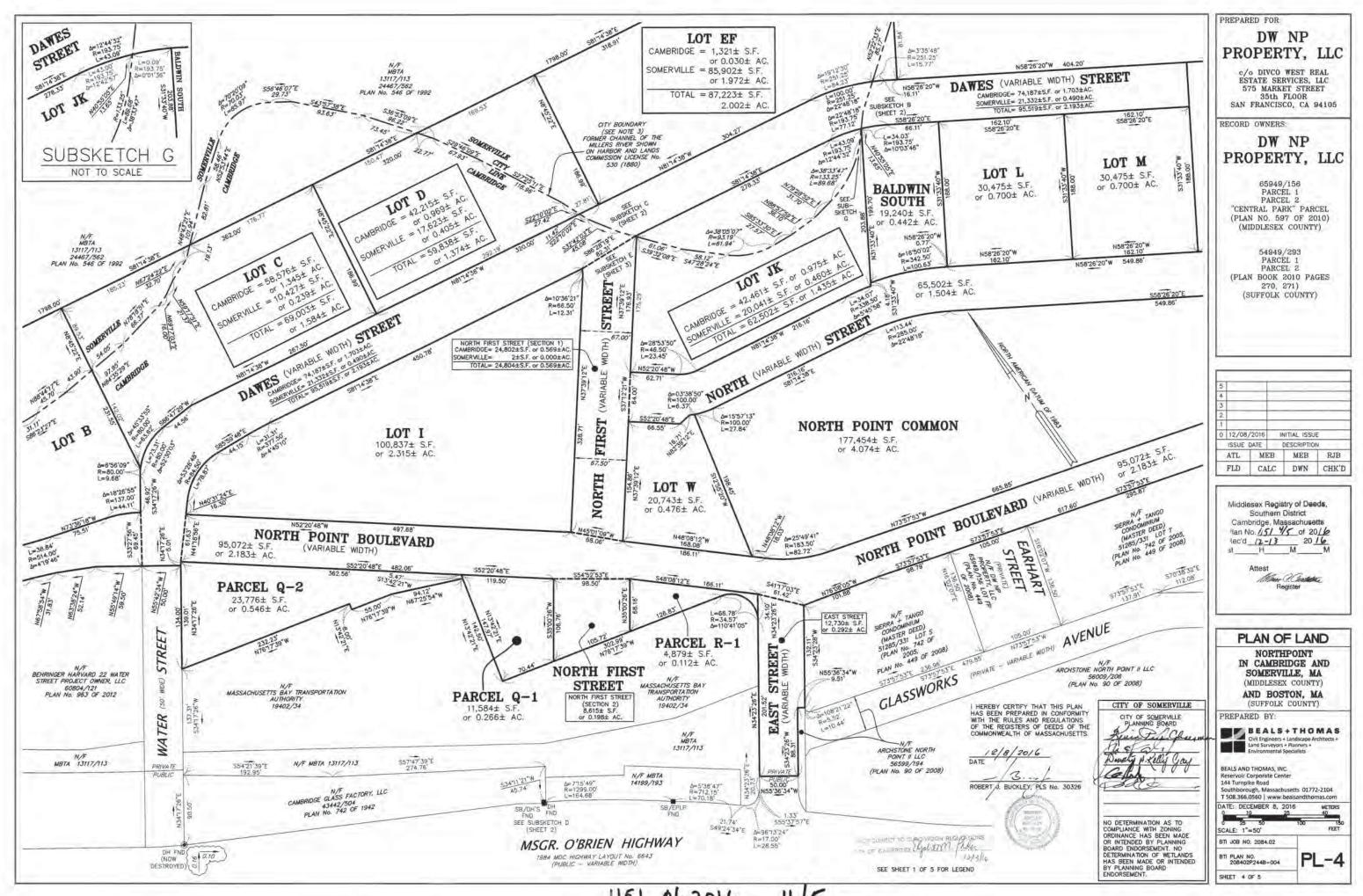
FEET

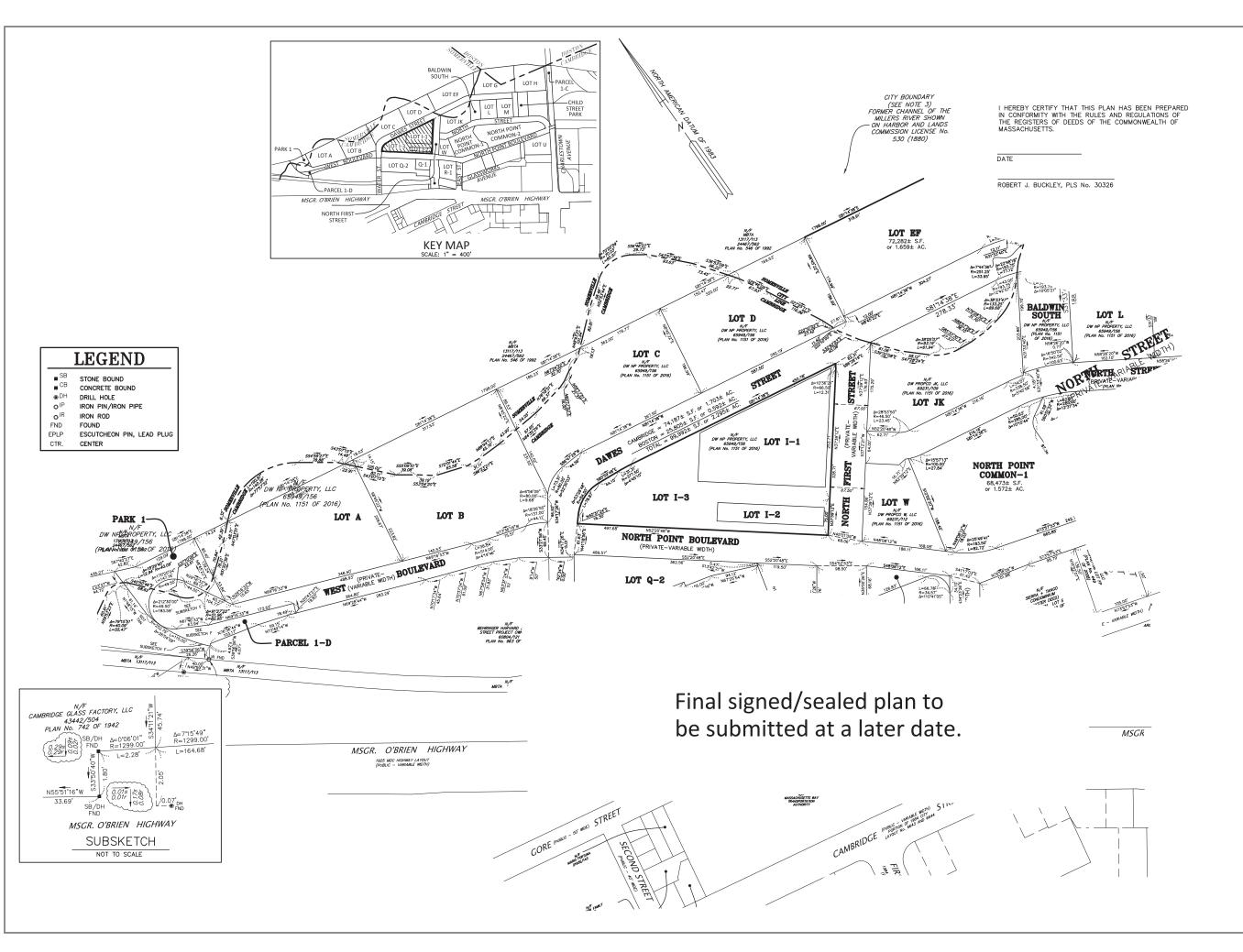
IN PROGRESS 2/15/18

Lot I Retail Site Plan









PREPARED FOR:

DW NP PROPERTY, LLC

c/o DIVCO WEST REAL ESTATE INVESTMENTS 200 STATE STREET 12th FLOOR BOSTON, MA 02109

RECORD OWNERS:

DW NP PROPERTY, LLC

65949/156 LOT I PLAN No. 1151 OF 2016

	4						
	3						
	2						
	1	xx/xx/	/2018	REVISE ABUTTERS AND LOT I			
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	ATL ME		EB	MEB	RJB		
			LC	DWN	CHK'D		

IN PROGRESS 2/26/2018



CAMBRIDGE CROSSING

CAMBRIDGE, MA

(MIDDLESEX COUNTY) PREPARED BY:



Southborough, Massachusetts 01772-2104 T 508.366.0560 | www.bealsandthomas.con

DATE: DECEMBER 21, 2016

BTI JOB NO. 2084.02

SHEET 1 OF 1

