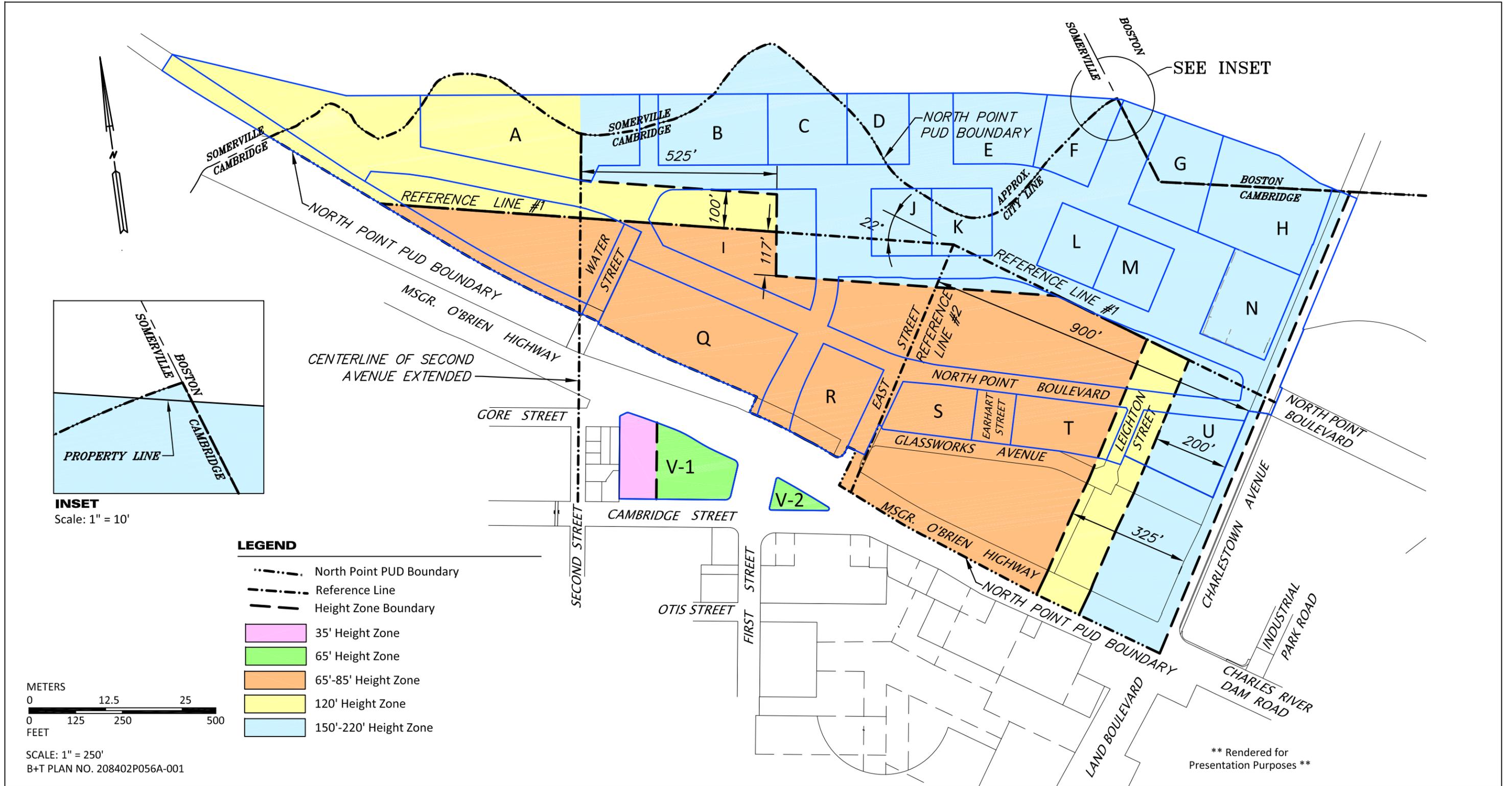
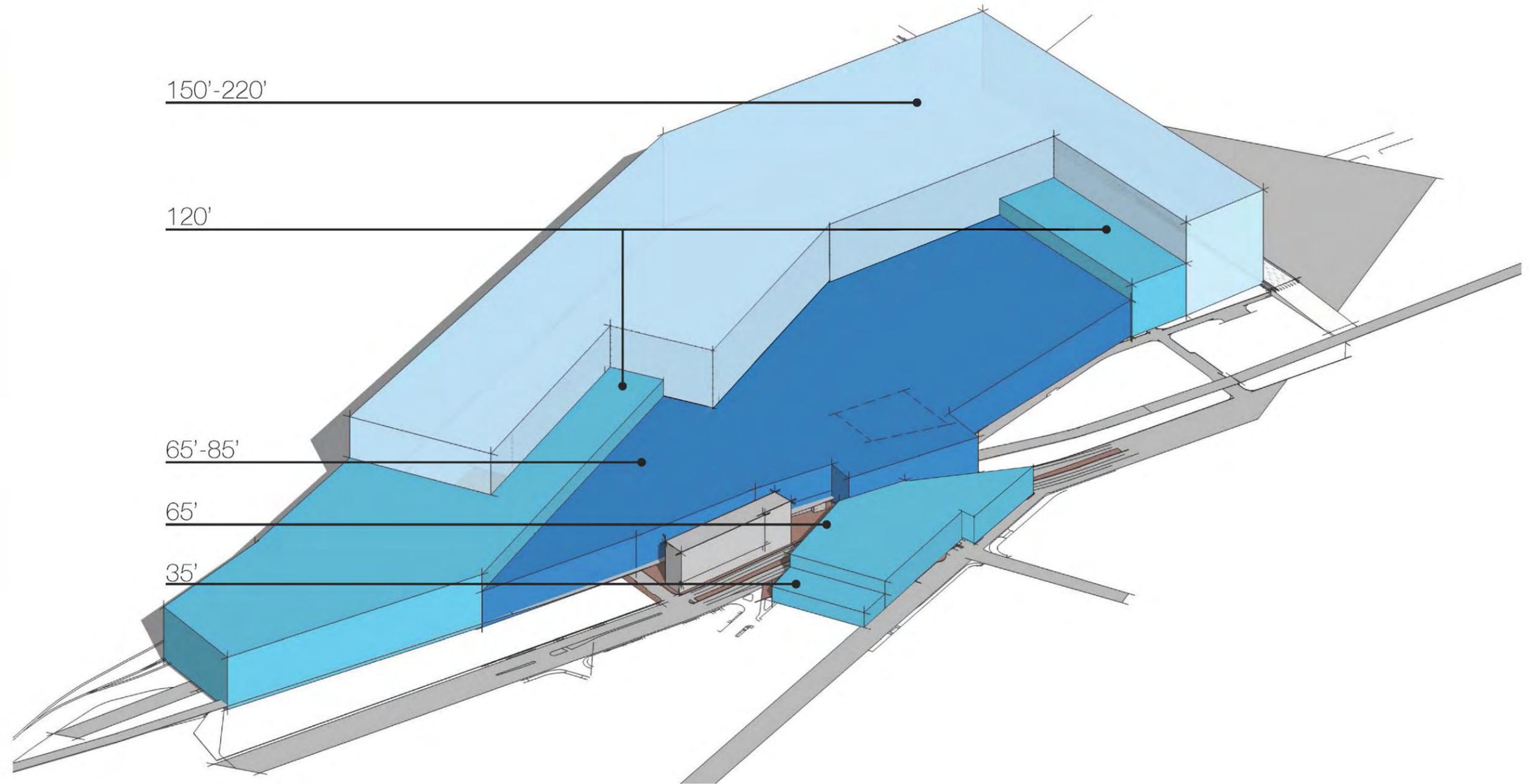


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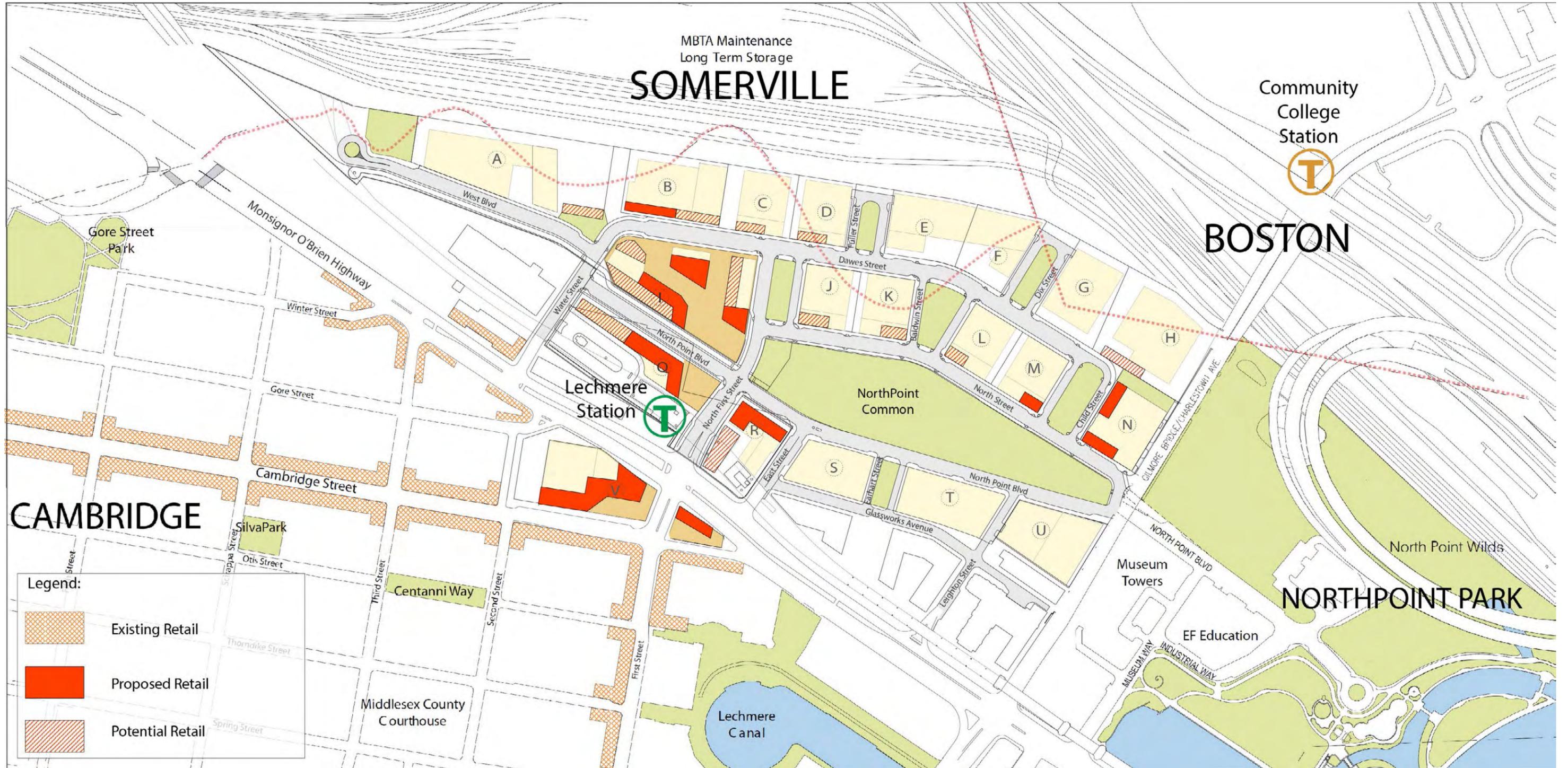
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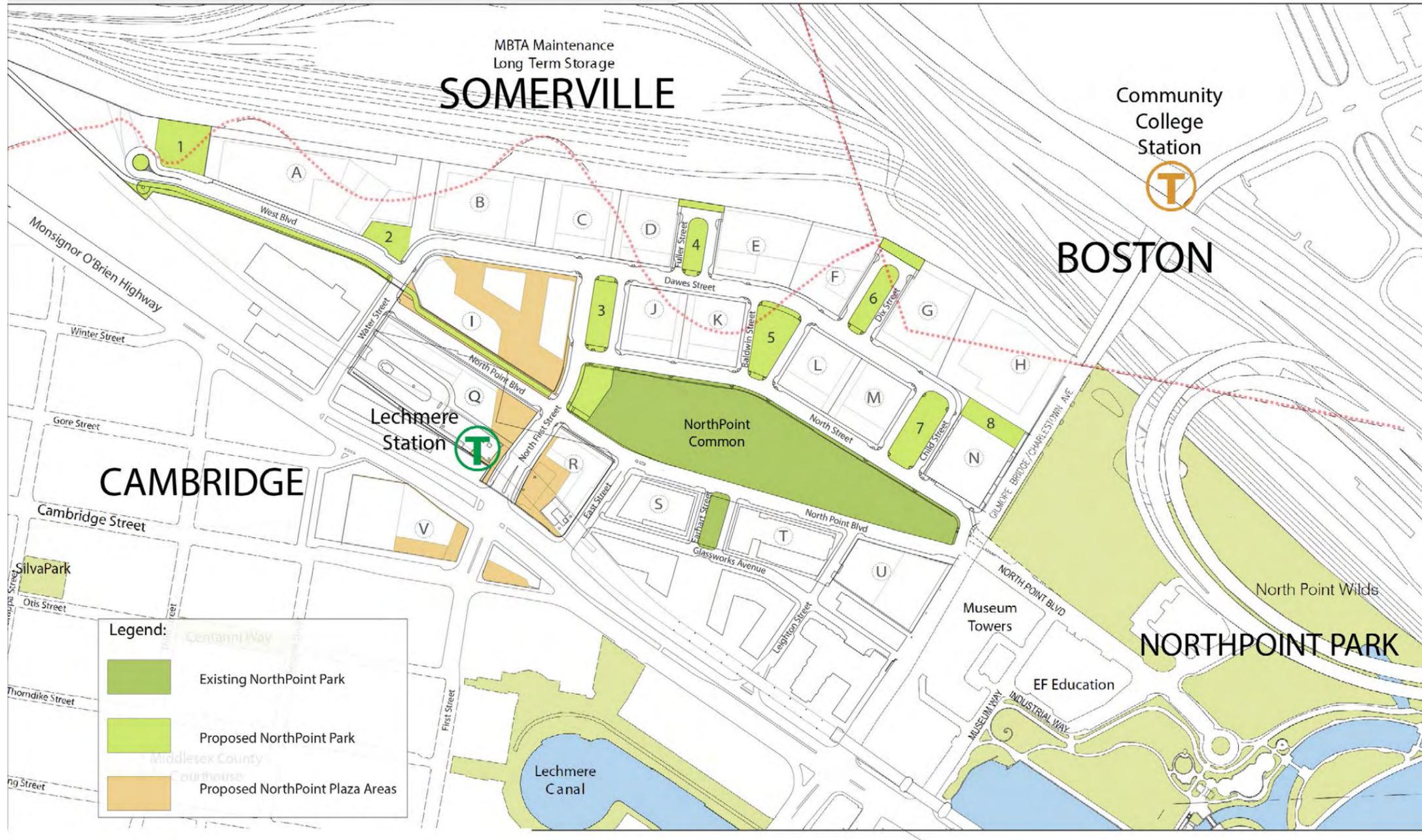


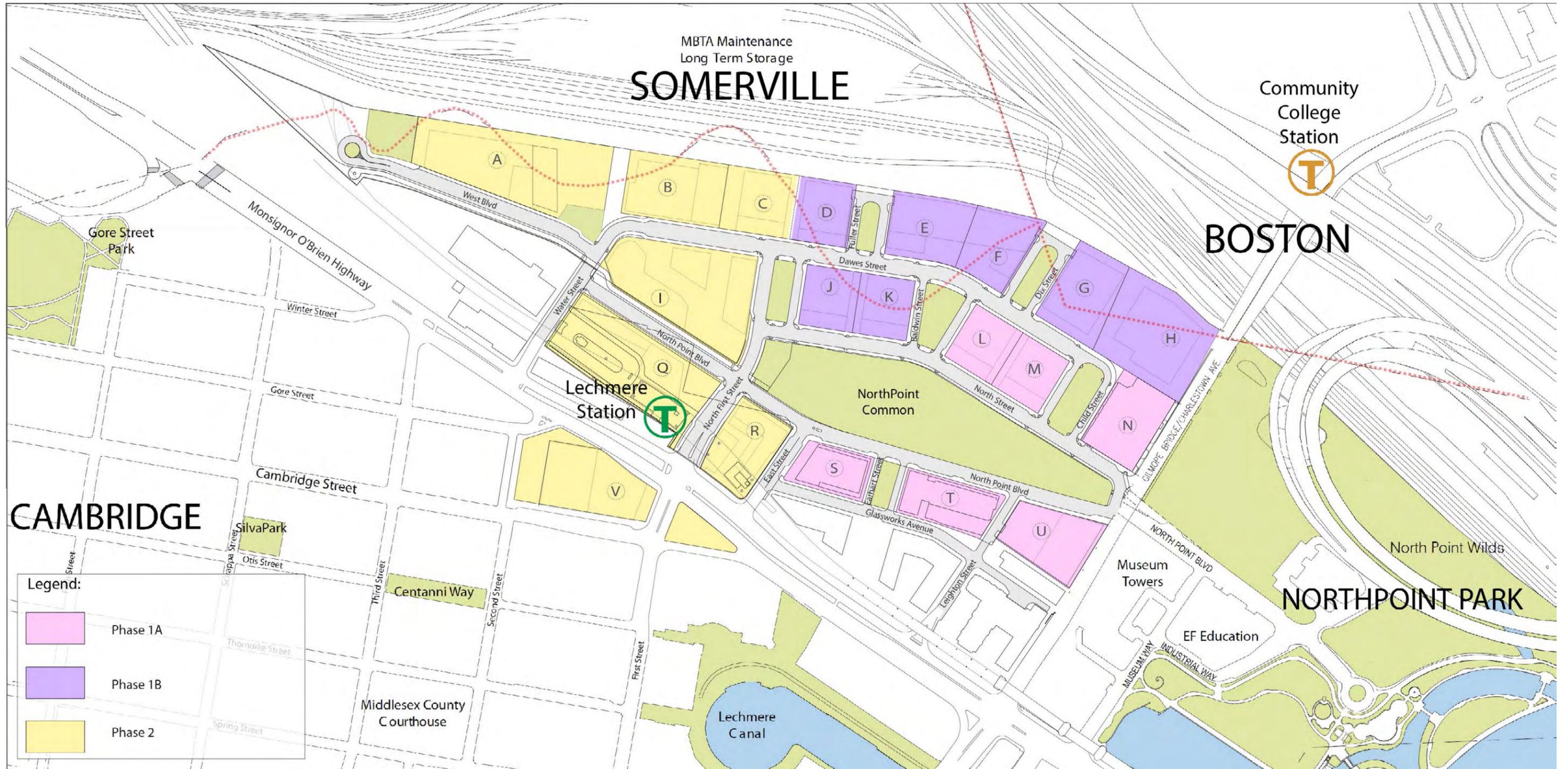
Table I:
Open Space Summary - September 2012

	Acres	SF
NorthPoint Common	4.91	214,000
Parks		
Earhart Park	0.19	8,100
West Street Bike Path	0.46	20,000
NP Boulevard Bike Path	0.32	14,000
#1	0.34	15,000
#2	0.23	10,000
#3	0.30	13,000
#4	0.23	10,000
#5	0.44	19,000
#6	0.34	14,750
#7	0.40	17,500
#8	0.18	7,750
Subtotal Parks	3.42	149,100
Plaza Spaces		
Parcel I	1.15	50,000
Parcel Q	0.37	16,000
Parcel V	0.46	20,000
Parcel R	0.46	20,000
Subtotal Plaza	2.43	106,000
Other Parcel Open Space (Location TBD)	0.23	10,000
Total Open Space	11.00	479,100

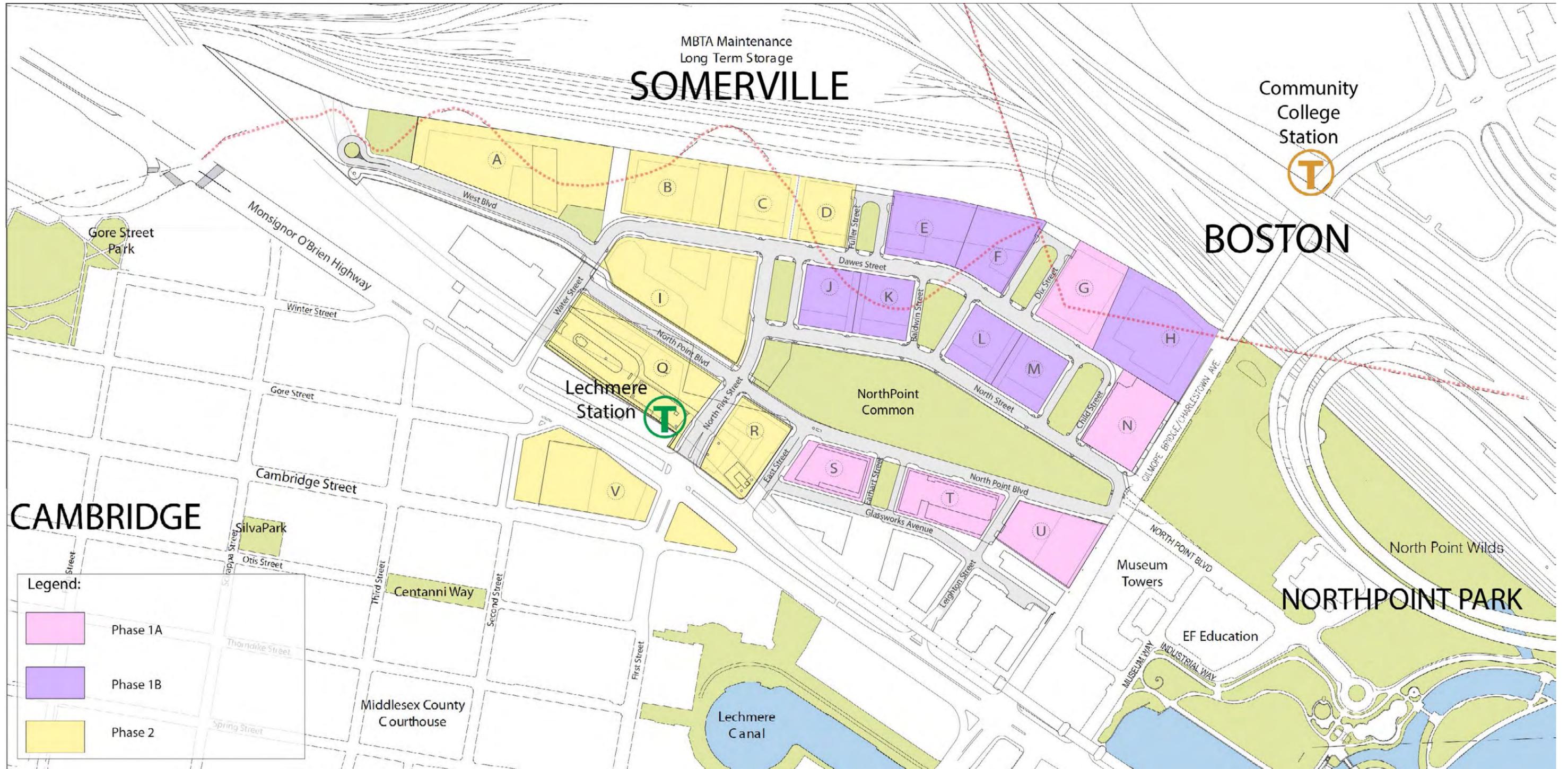
Notes

- A variation of 10% of square footage for each open space is permitted.

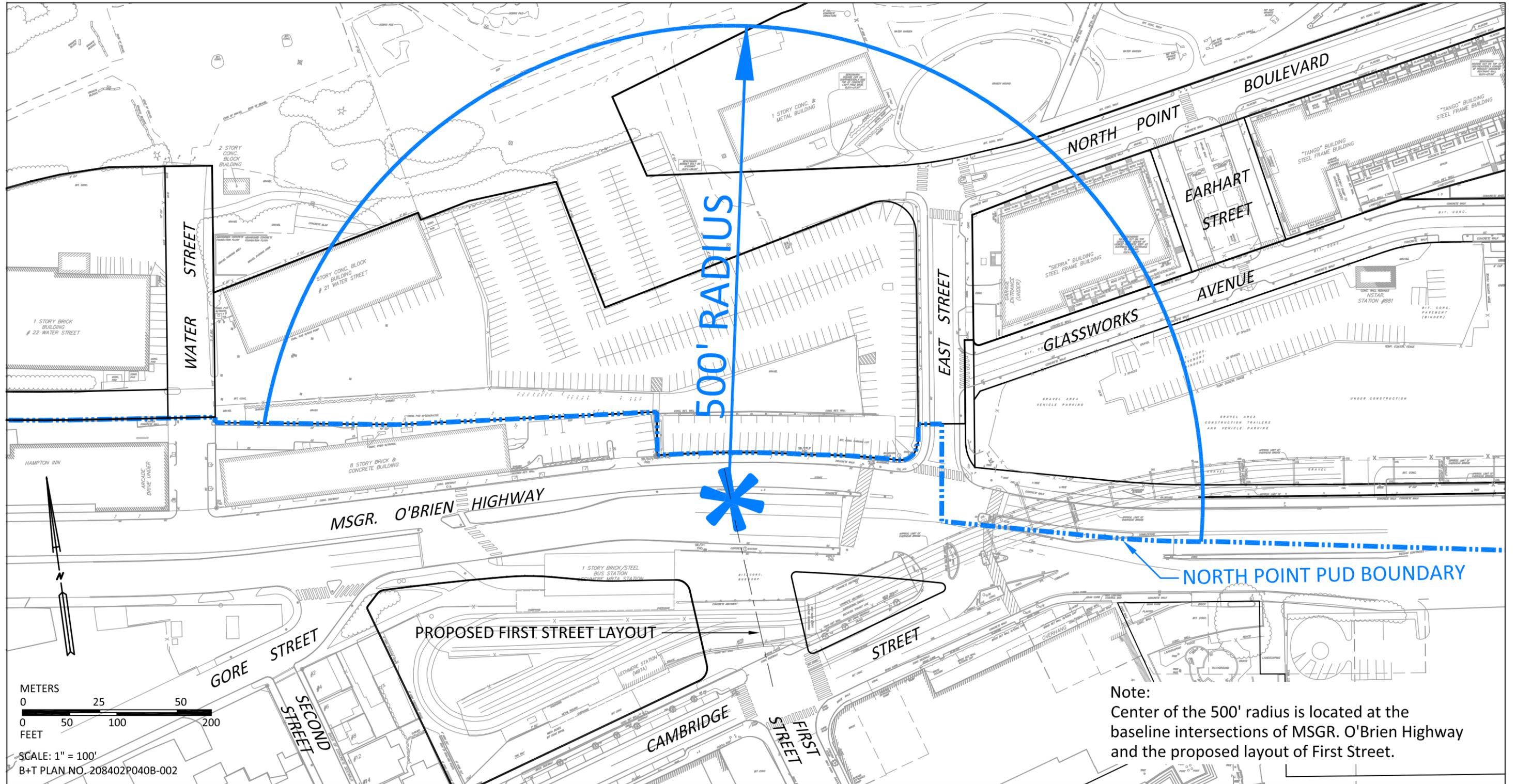
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Vanasse Hangen Brustlin, Inc.

99 High Street
10th Floor
Boston, MA 02110-2354
617 728-7777
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Memorandum

To: Susan E. Clippinger, Director
Traffic Parking and
Transportation Department
City of Cambridge

Date: September 7, 2012

Project No.: 11554

From: Susan Sloan-Rossiter, LEED AP
Meghan Miller, P.E. LEED AP
Vanasse Hangen Brustlin, Inc.

Re: North Point Revised Master Plan
Consistency with Certified North Point
Transportation Impact Study (TIS)

The transportation analysis described in this memo has been conducted to demonstrate that the North Point Application for Amendments to PUD Development Plan and Project Review Special Permit (Case No. PB #179) is consistent with the findings of the certified North Point Transportation Impact Study (TIS). The purpose of these amendments are to establish a Revised Master Plan which is consistent with the intent of the original Special Permit and recently approved amendments to the Zoning Ordinance approved by the City Council on July 30, 2012.

The revisions to the Master Plan will not change the approved development square footage, the ratio of residential and commercial uses, or the approved traffic mitigation requirements. Further, the Revised Master Plan is not requesting any changes to the development program or internal roadway network that would result in changes to the travel patterns or modes of access to North Point. As discussed below, the revisions to the Master Plan do not change the findings of the North Point Transportation Impact Study (TIS) certified by the City of Cambridge Traffic and Parking Department dated November 14, 2002.

Table 1 shows a comparison of the original North Point Development program studied as part of the TIS to the Revised Master Plan by phases. As shown, the allocation of commercial and residential square footage by phase is very consistent for the cumulative Phase 1A and Phase 1B as well as for the cumulative full build program. Note that the development program studied in the TIS was approximately 294,000 sf larger than the current development program, including 239,000 sf of additional residential program and 55,000 sf of commercial program as part of the transportation analysis. Therefore, the comparison is conservative.

Table 1 - North Point Program Comparison

Phase 1A	TIS (GSF)	Revised Master Plan (GSF)
Residential	480,000	748,592
Commercial	1,063,000	765,000
<u>Mixed Use</u>	<u>0</u>	<u>0</u>
Total	1,543,000	1,513,592

Phase 1B	TIS (GSF)	Revised Master Plan (GSF)
Residential	1,211,000	1,005,000
Commercial	621,000	840,000
<u>Mixed Use</u>	<u>0</u>	<u>0</u>
Total	1,832,000	1,845,000

Cumulative Phase 1A & 1B	TIS (GSF)	Revised Master Plan (GSF)
Residential	1,691,000	1,753,592
Commercial	1,684,000	1,605,000
<u>Mixed Use</u>	<u>0</u>	<u>0</u>
Total	3,375,000	3,358,592

Phase 2	TIS (GSF)	Revised Master Plan (GSF)
Residential	1,634,000	1,332,262
Commercial	531,000	555,000
<u>Mixed Use</u>	<u>0</u>	<u>0</u>
Total	2,165,000	1,887,262

Full Build Program (Cumulative)	TIS (GSF)	Revised Master Plan (GSF)
Residential	3,325,000	3,085,854
Commercial	2,215,000	2,160,000
<u>Mixed Use</u>	<u>0</u>	<u>0</u>
Total	5,540,000	5,245,854

Table 2 shows a comparison of the original Master Plan land-use type by parcel for Phase 1A, Phase 1B and Phase 2, to the Revised Master Plan. As shown, the allocation of parcels and their square footage is very consistent and never larger for the cumulative Phase 1A, Phase 1B and Phase 2 programs.

Table 2 – Phasing Comparison

	Original Master Plan				Revised Master Plan			
	<u>Building</u>	<u>GSF</u>	<u>Residential</u>	<u>Commercial</u>	<u>Building</u>	<u>GSF</u>	<u>Residential</u>	<u>Commercial</u>
Phase 1A	S	111,000	111,000		S	112,398	112,398	
	T	245,000	245,000		T	242,194	242,194	
	U	270,000			G	445,000		445,000
	L	263,000	123,000	140,000	U	320,000		320,000
	M	315,000			N	394,000	394,000	
	N	338,000						338,000
		1,542,000	479,000	1,063,000		1,513,592	748,592	765,000
Phase 1B	D	176,000	176,000		L	280,000	280,000	
	E	157,000	157,000		M	205,000	205,000	
	F	342,000	342,000		E	300,000		300,000
	G	370,000		370,000	F	240,000		240,000
	H	258,000		258,000	H	300,000		300,000
	J	265,000	265,000		J	280,000	280,000	
	K	264,000	264,000		K	240,000	240,000	
		1,832,000	1,204,000	628,000		1,845,000	1,005,000	840,000
Cumulative Phase 1A & 1B		3,374,000	1,683,000	1,691,000		3,358,592	1,753,592	1,605,000
Phase 2	A	191,000	191,000		A	360,407	360,407	
	B	334,000	334,000		B	120,000		120,000
	C	357,000	357,000		C	245,000	245,000	
	I	280,000	280,000		D	245,000	245,000	
	Q	288,000	138,000	150,000	I	440,000	160,000	280,000
	R	270,000		270,000	Q	155,000		155,000
	O/P	260,000	145,000	115,000	R	140,000	140,000	
	V	180,000	180,000		V	181,855	181,855	
		2,160,000	1,625,000	535,000		1,887,262	1,332,262	555,000
Total		5,534,000	3,308,000	2,226,000		5,245,854	3,085,854	2,160,000

In order to confirm that the trip generation for the Revised Master Plan is less than or equal to the initial trip generation calculated for the TIS, a trip generation analysis was conducted for comparison purposes. The same ITE Land Use Codes, fitted equations and Vehicle Occupancy Rates (VOR) that were included in the TIS analysis were also utilized in this calculation. Using the approved mode share percentages shown in Table 3 for the North Point TIS for the Revised Master Plan Phase 1A, Phase 1B and Full Build program, the daily, morning peak hour and evening peak hour vehicle trip generation was developed. A comparison of the TIS and Revised Master Plan Vehicle Trip generation is shown in Table 4. Daily, morning and evening peak hour vehicle trips generated for the Revised Master Plan are less than generated for the development program studied as part of the TIS.

Table 3 – North Point TIS Mode Shares

	North Point TIS							
	Phase 1A & 1B				Full Build			
	<u>Drive</u>	<u>Transit</u>	<u>Walk</u>	<u>Bike</u>	<u>Drive</u>	<u>Transit</u>	<u>Walk</u>	<u>Bike</u>
Office/Lab	50%	33%	15%	2%	40%	43%	15%	2%
Residential	52%	23%	20%	5%	52%	23%	20%	5%
Hotel	--	--	--	--	75%	20%	4%	1%
Retail	--	--	--	--	10%	15%	73%	2%

Table 4 – Comparison of TIS and Revised Master Plan Vehicle Trip Generation

	Total Vehicle-Trips						
	<u>Daily</u>	<u>AM</u>			<u>PM</u>		
		<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
Phase 1A							
TIS	5,429	557	164	721	192	569	761
Revised Master Plan	5,234	442	197	639	207	452	659
Phase 1B							
TIS	10,398	841	422	1,263	447	957	1,404
Revised Master Plan	10,360	812	431	1,243	450	923	1,373
Full Build							
TIS	16,013	944	751	1,695	736	1,105	1,841
Revised Master Plan	15,411	900	704	1,604	704	1,057	1,761

It should be noted that the TIS was undertaken in 2002 and was based on 1990 Journey-to-Work census data, which are not reflective of current mode shares more commonly found in Cambridge, particularly in Kendall Square. Recent studies, including Parking and Transportation Demand Management (PTDM) monitoring reports and the planning study recently completed for Kendall Square have noted a substantial shift in current commuting and travel behavior in the City of Cambridge. As shown in Table 5, recent study recommendations for the Kendall Square area are for significantly less vehicle commuting by Cambridge residents than assumed in the North Point TIS. Again, the analysis/comparison is conservative in this regard.

Table 5 – TDM Mitigated Mode Share Comparison

	Total Vehicle-Trips										
	North Point TIS								Kendall Square Study		
	Phase 1A & 1B				Full Build				Drive	Transit	Walk/Bike
	Drive	Transit	Walk	Bike	Drive	Transit	Walk	Bike	Drive	Transit	Walk/Bike
Office/Lab	50%	33%	15%	2%	40%	43%	15%	2%	41%	42%	17%
Residential	52%	23%	20%	5%	52%	23%	20%	5%	32%	30%	38%
Hotel	--	--	--	--	75%	20%	4%	1%	75%	20%	5%
Retail	--	--	--	--	10%	15%	73%	2%	31%	30%	39%

In addition to vehicle trip generation, VHB analyzed the trip distribution assumptions used in the certified North Point TIS. The North Point TIS used the 1990 U.S. Census Journey-to-Work data for the City of Cambridge modified per direction of the Traffic Parking and Transportation Department (TP&TD). Table 5 shows a comparison of the North Point area vehicle trip distribution used in the TIS from the 1990 census data to several more recent data sources including the 2000 U.S. Census Journey-to-Work and PTDM monitoring data provided by the City of Cambridge. Table 5 shows that the trip distribution used in the certified North Point TIS is very consistent with more recent data sources and it can be assumed that the vehicle trip distribution generated from the Revised Master Plan will be similar.

Table 6 - Comparison of North Point Area Vehicle-Trip Distribution

Street/Roadway	Direction	NP TIS 1990	2000	F-15	F2 2010
		j-t-w (%) ¹	j-t-w (%) ²	PTDM (%) ³	PTDM (%) ⁴
Route 28 (O'Brien Highway)	To/From the North	24	23	24	28
Route 28 (O'Brien Highway)	To/From the South	29	30	33	40
Charlestown Avenue (Gilmore Bridge)	To/From the East	9	8	9	4
Cambridge Street, First Street or Land Boulevard	To/From the West	38	39	34	28
Total	All Directions	100 percent	100 percent	100 percent	100 percent

1 1990 U.S. Census Journey-to-Work data for the City of Cambridge and City review and comment.
 2 2000 U.S. Census Journey-to-Work data for the City of Cambridge.
 3 PTDM data (by Town) provided by the City of Cambridge. Compiled by VHB.
 4 PTDM data (by Town) provided by the City of Cambridge. Compiled by VHB.

The North Point TIS certified by the TP&TD accurately reflects the transportation impacts of the Revised North Point Master Plan because the following comparison metrics are very consistent:

- 1) Total square footage of the development program,
- 2) Phase IA, Phase IB and Phase 2 parcel development program,
- 3) Total square footage of commercial and residential land-uses,

- 4) Phase 1A, Phase 1B and Phase 2 vehicle trip generation,
- 5) Vehicle trip distribution

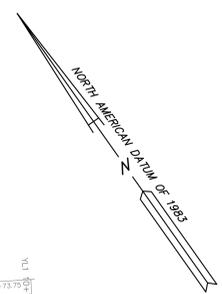
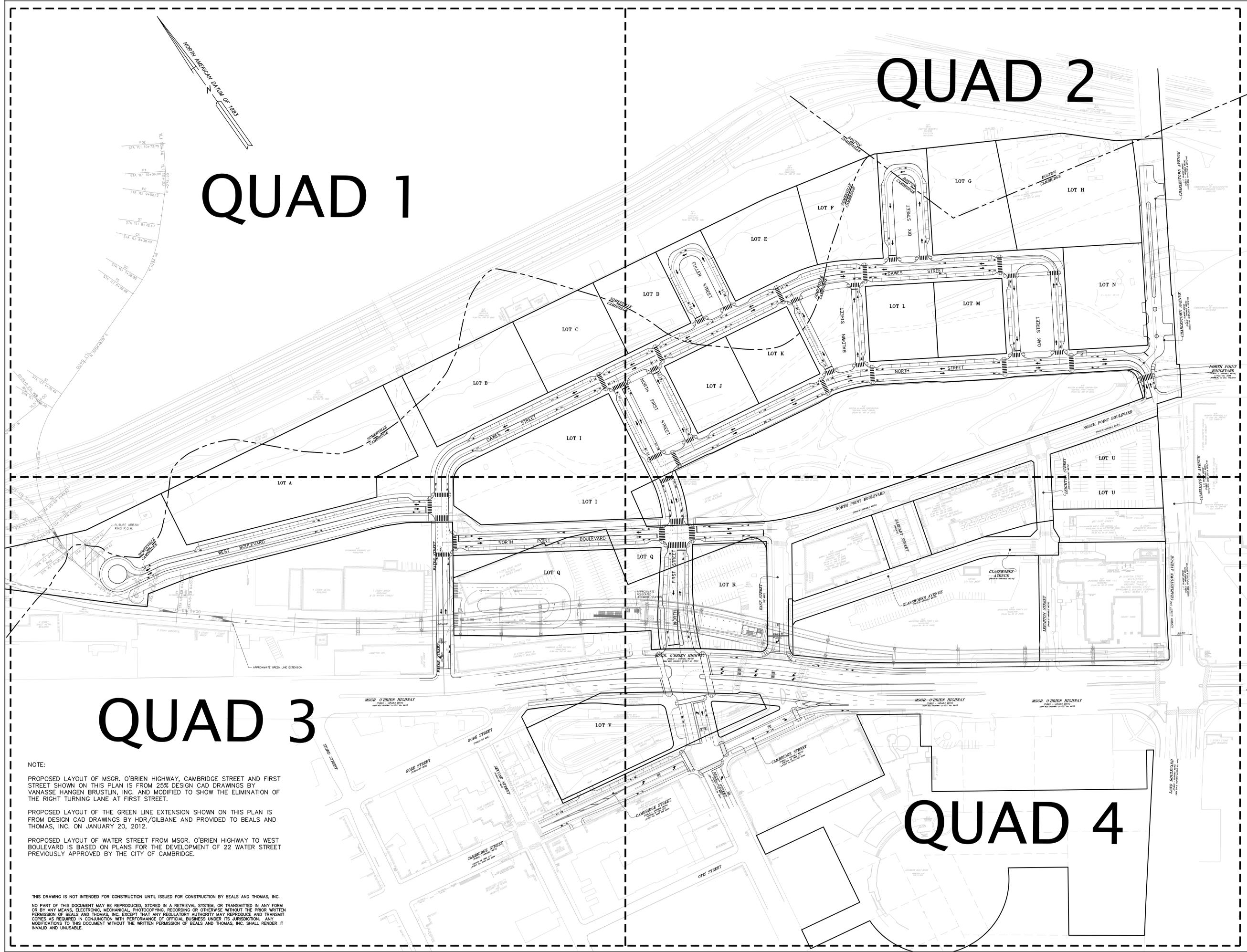
Because of these program, phasing, and traffic analysis consistencies, the exceedence findings of the Planning Board Criteria will not change. Appendix II: Traffic and Transportation Mitigation Requirements, Appendix III: Traffic Monitoring Provisions of the Original Special Permit, and the approved PTDM Plan (02/21/03), have been committed to by the Proponent to address any adverse transportation related impacts based on the Planning Board Criteria.

QUAD 1

QUAD 2

QUAD 3

QUAD 4

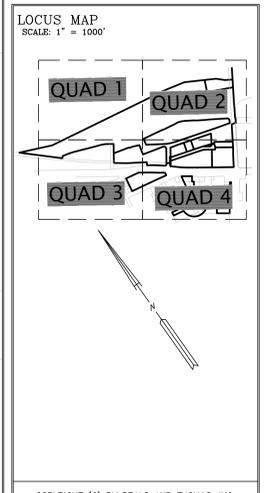


POE	STA 11 104+73.75
PT	STA 11 10+06.88
CS	STA 11 9+52.12
ST	STA 11 8+78.40
OS	STA 11 8+38.40
DC	STA 11 7+38.86
IS	STA 11 7+18.86

NOTE:
 PROPOSED LAYOUT OF MSGR. O'BRIEN HIGHWAY, CAMBRIDGE STREET AND FIRST STREET SHOWN ON THIS PLAN IS FROM 25% DESIGN CAD DRAWINGS BY VANASSE HANGEN BRUSTLIN, INC. AND MODIFIED TO SHOW THE ELIMINATION OF THE RIGHT TURNING LANE AT FIRST STREET.
 PROPOSED LAYOUT OF THE GREEN LINE EXTENSION SHOWN ON THIS PLAN IS FROM DESIGN CAD DRAWINGS BY HDR/GILBANE AND PROVIDED TO BEALS AND THOMAS, INC. ON JANUARY 20, 2012.
 PROPOSED LAYOUT OF WATER STREET FROM MSGR. O'BRIEN HIGHWAY TO WEST BOULEVARD IS BASED ON PLANS FOR THE DEVELOPMENT OF 22 WATER STREET PREVIOUSLY APPROVED BY THE CITY OF CAMBRIDGE.

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**CJUF III
 NORTHPOINT
 LLC**
 One Congress Street
 10th. Floor, Suite 101
 Boston, Ma 02114



PREPARED BY:
BEALS + THOMAS
 Civil Engineers + Landscape Architects +
 Land Surveyors + Planners +
 Environmental Specialists

BEALS AND THOMAS, INC.
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 144 Turnpike Road
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1	09/07/2012 SPECIAL PERMIT SUBMISSION		
0	08/03/2012 FOR PRE-SP SUBMISSION REVIEW		
	ISSUE DATE DESCRIPTION		
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PROJECT:
**NORTH POINT
 IN CAMBRIDGE AND
 SOMERVILLE, MA
 (MIDDLESEX COUNTY)
 AND BOSTON, MA
 (SUFFOLK COUNTY)**

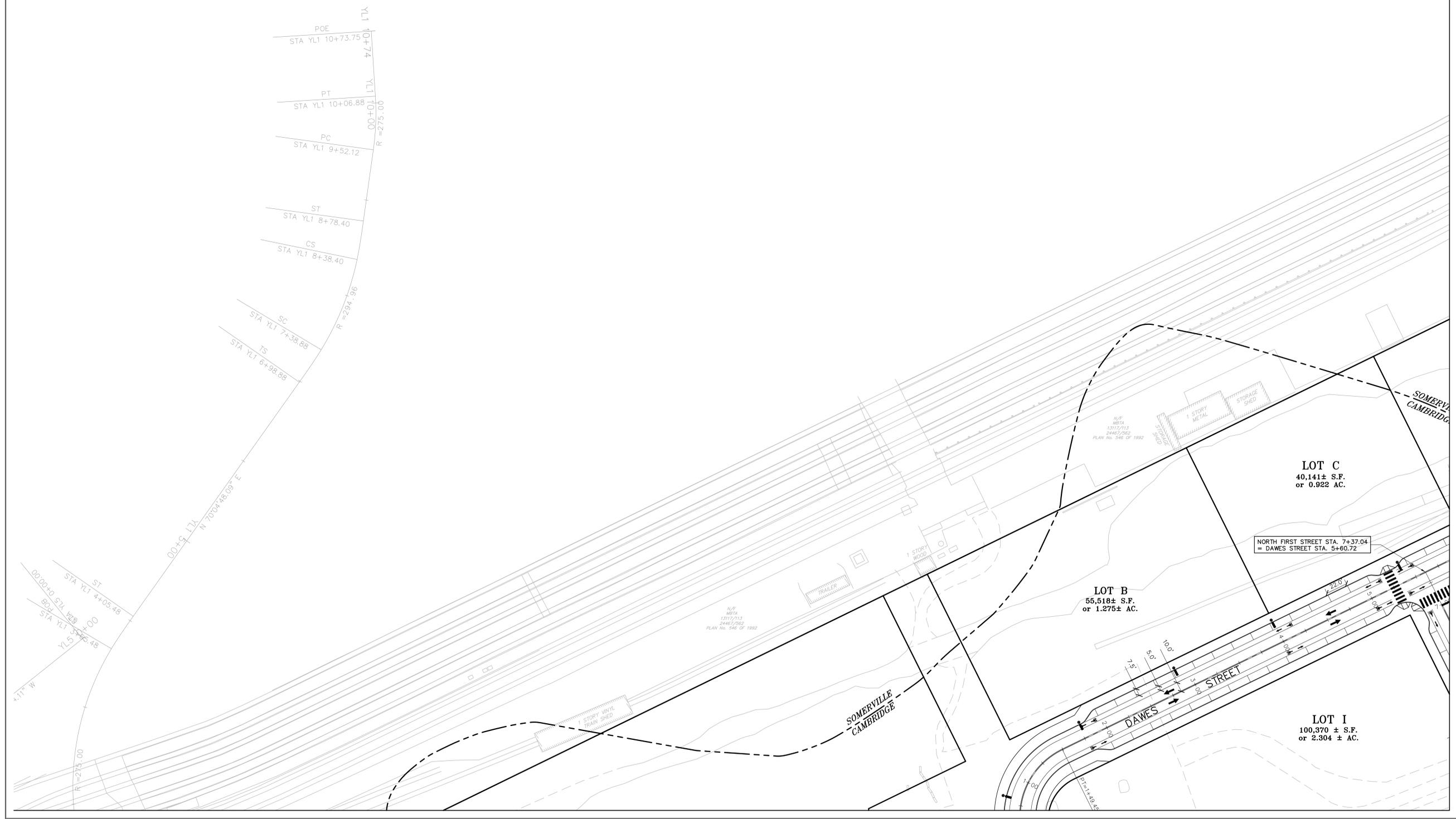
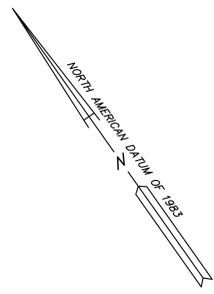
SCALE: 1" = 80' DATE: AUGUST 3, 2012

**INDEX PLAN AND
 OVERALL STREET
 LAYOUT PLAN**

B+T JOB NO. 2084.02
 B+T PLAN NO.
 208402P0498-001

1

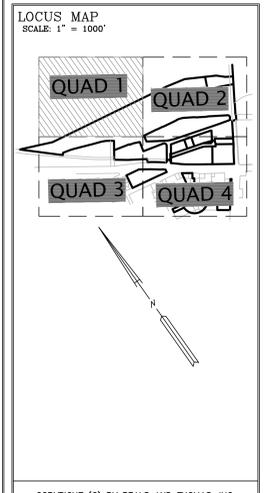
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ISSUE DATE	DESCRIPTION		
DES	DWN	CHK'D	APP'D

PROJECT:

**NORTH POINT
IN CAMBRIDGE AND
SOMERVILLE, MA
(MIDDLESEX COUNTY)
AND BOSTON, MA
(SUFFOLK COUNTY)**

SCALE: 1" = 40' DATE: AUGUST 3, 2012

**QUAD 1
STREET LAYOUT AND
GEOMETRY PLAN**

B+T JOB NO. 2084.02

B+T PLAN NO.
208402P0498-002

2

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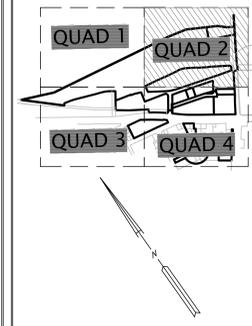


PREPARED FOR:

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LOCUS MAP
 SCALE: 1" = 1000'



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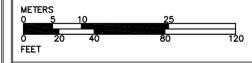
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	ISSUE DATE	DESCRIPTION		
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PROJECT:
**NORTH POINT
 IN CAMBRIDGE AND
 SOMERVILLE, MA
 (MIDDLESEX COUNTY)
 AND BOSTON, MA
 (SUFFOLK COUNTY)**

SCALE: 1" = 40' DATE: AUGUST 3, 2012



**QUAD 2
 STREET LAYOUT AND
 GEOMETRY PLAN**

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