Section 3.0 **Exhibits**

Revised Master Plan – Exhibit A

Revised Conceptual Retail Plan – Exhibit B

Public Notification Panel Locations - Exhibit C

Proposed 220' Parcel Identification Cambridge - Exhibit G

Revised Open Space Plan – Exhibit H

Revised Phasing – Exhibit I

Revised 40-scale Roadway Network Schematic Plans (5 sheets) (reduced to 11x17") – Exhibit J

Existing Conditions Plans (5 sheets) (reduced to 11x17") – Exhibit K

VHB Memorandum to TPTD re: Phasing and Trip Generation – Exhibit L

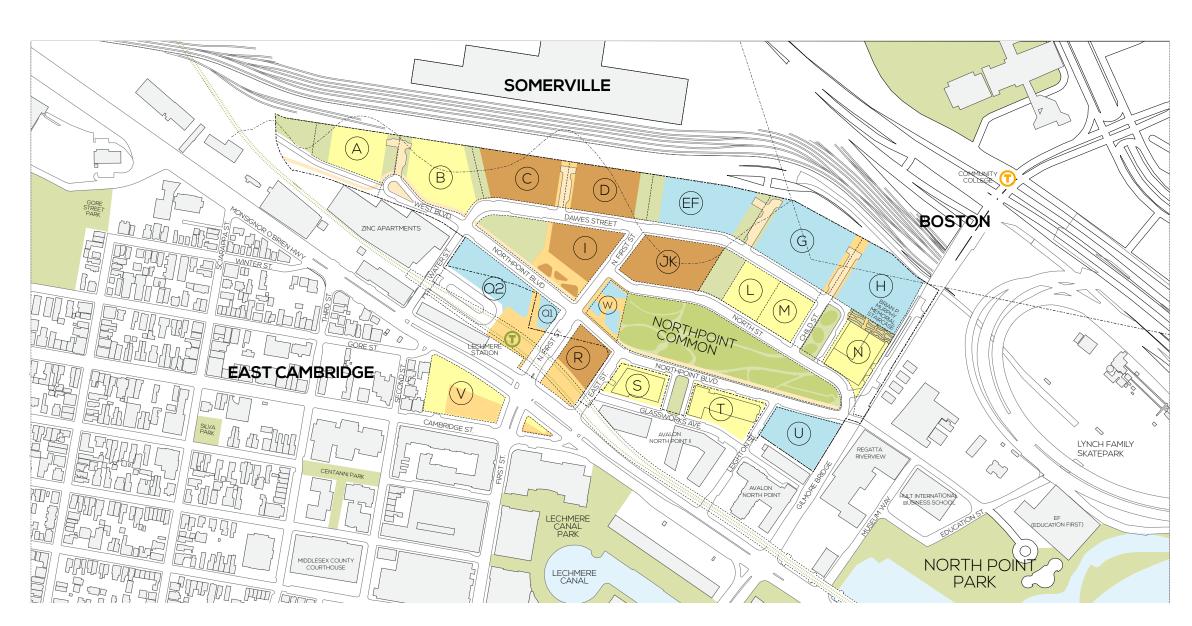
VHB Memorandum to TPTD re: Internal Roadway Layout Revisions – Exhibit M

ECPT Letter of Support – Exhibit N

Appendix

Appendix I: Revised Statistical Summary of the Approved Master Plan Full-size Revised 40-scale Roadway Network Schematic Plans (5 sheets) (CDD, DPW, TPTD, Water Department copies)

Full-size Existing Conditions Plans (5 sheets) (CDD, DPW, TPTD, Water Department copies)



LEGEND

Residential

Commercial

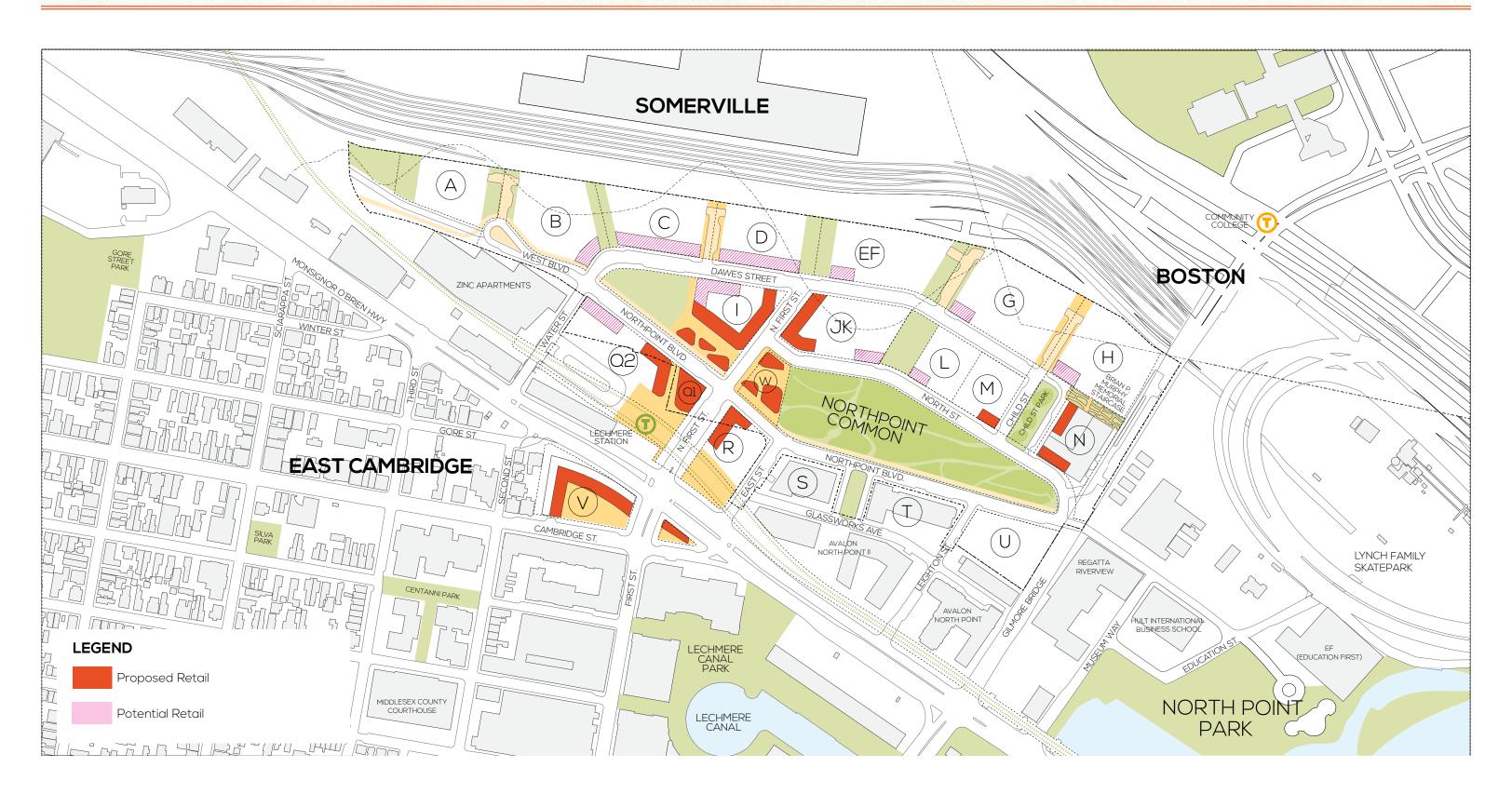
Residential, Commercial or Mixed-Use

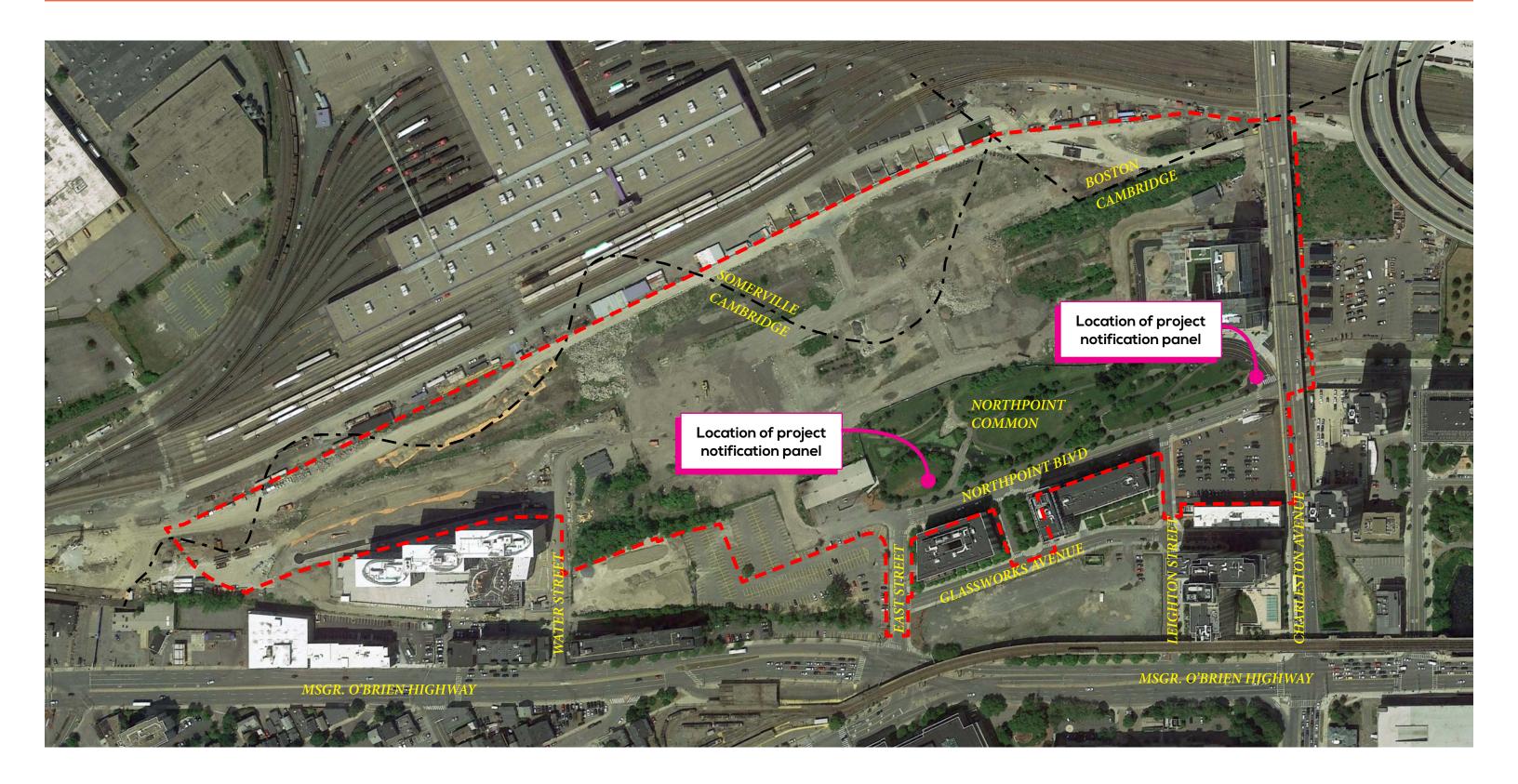
Table 1: GFA by Block

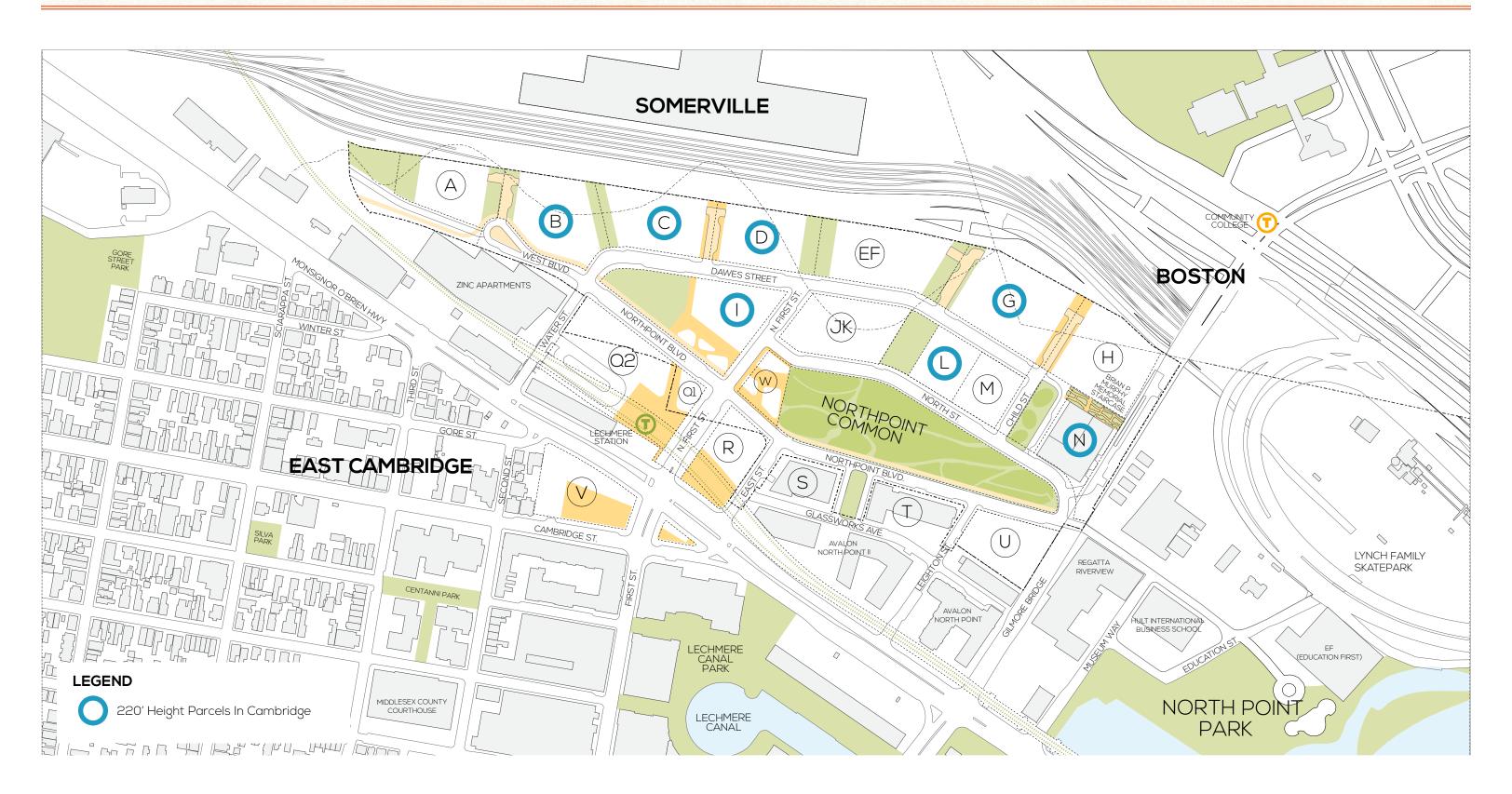
	GFA	USE								
Α	175,000 gsf	RESIDENTIAL								
В	373,000 gsf	RESIDENTIAL								
С	348,000 gsf	MIXED-USE								
D	340,000 gsf	MIXED-USE								
EF	400,000 gsf	COMMERCIAL								
G	410,000 gsf	COMMERCIAL								
Н	345,000 gsf	COMMERCIAL								
ı	390,000 gsf	MIXED-USE								
JK	370,000 gsf	MIXED-USE								
L	286,000 gsf	RESIDENTIAL								
М	208,400 gsf	RESIDENTIAL								
N	394,000 gsf	RESIDENTIAL								
Ql	14,000 gsf	COMMERCIAL								
Q2	151,062 gsf	COMMERCIAL								
R	148,945 gsf	MIXED-USE								
S	112,398 gsf	RESIDENTIAL								
Т	242,194 gsf	RESIDENTIAL								
U	320,000 gsf	COMMERCIAL								
V	199,855 gsf	RESIDENTIAL								
W	18,000 gsf	COMMERCIAL								
	5,245,854 gsf									

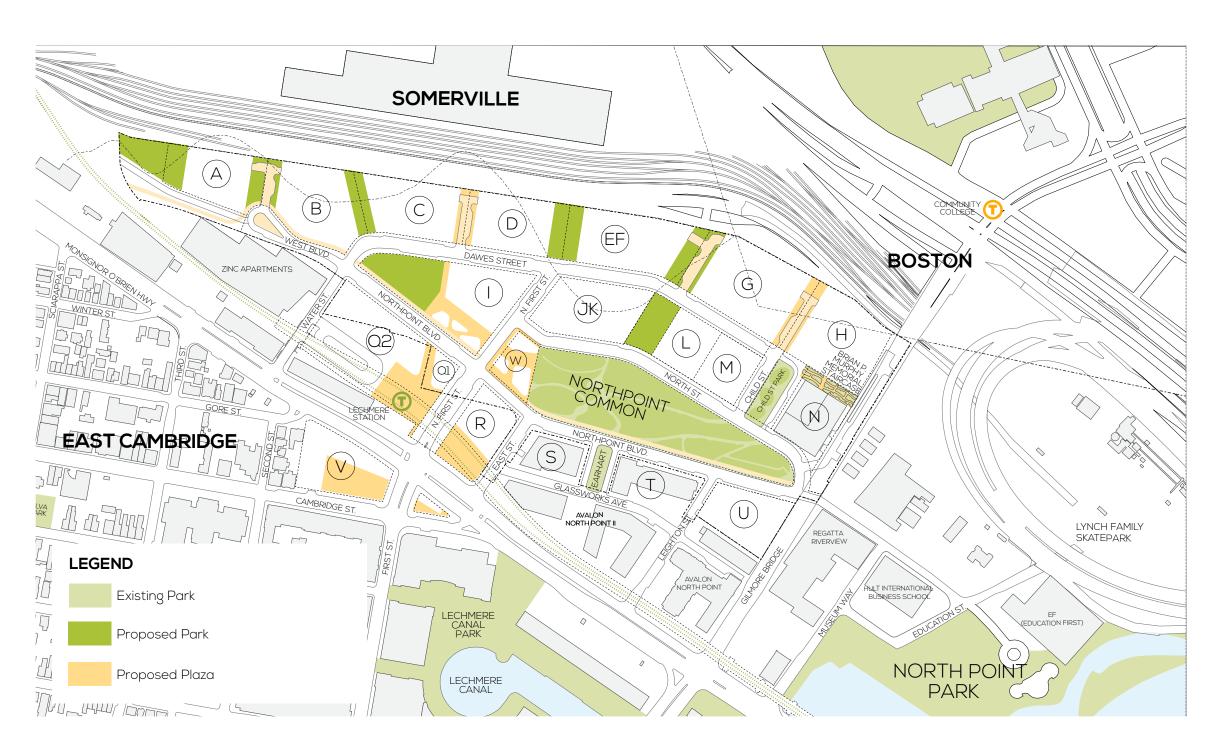
Table 2: Special Permit Approved GFA (Entire Master Plan)

Maximum Total:	5,245,854 gsf
Minimum Residential:	3,060,792 gsf
Maximum Non Residential:	2,185,062 gsf



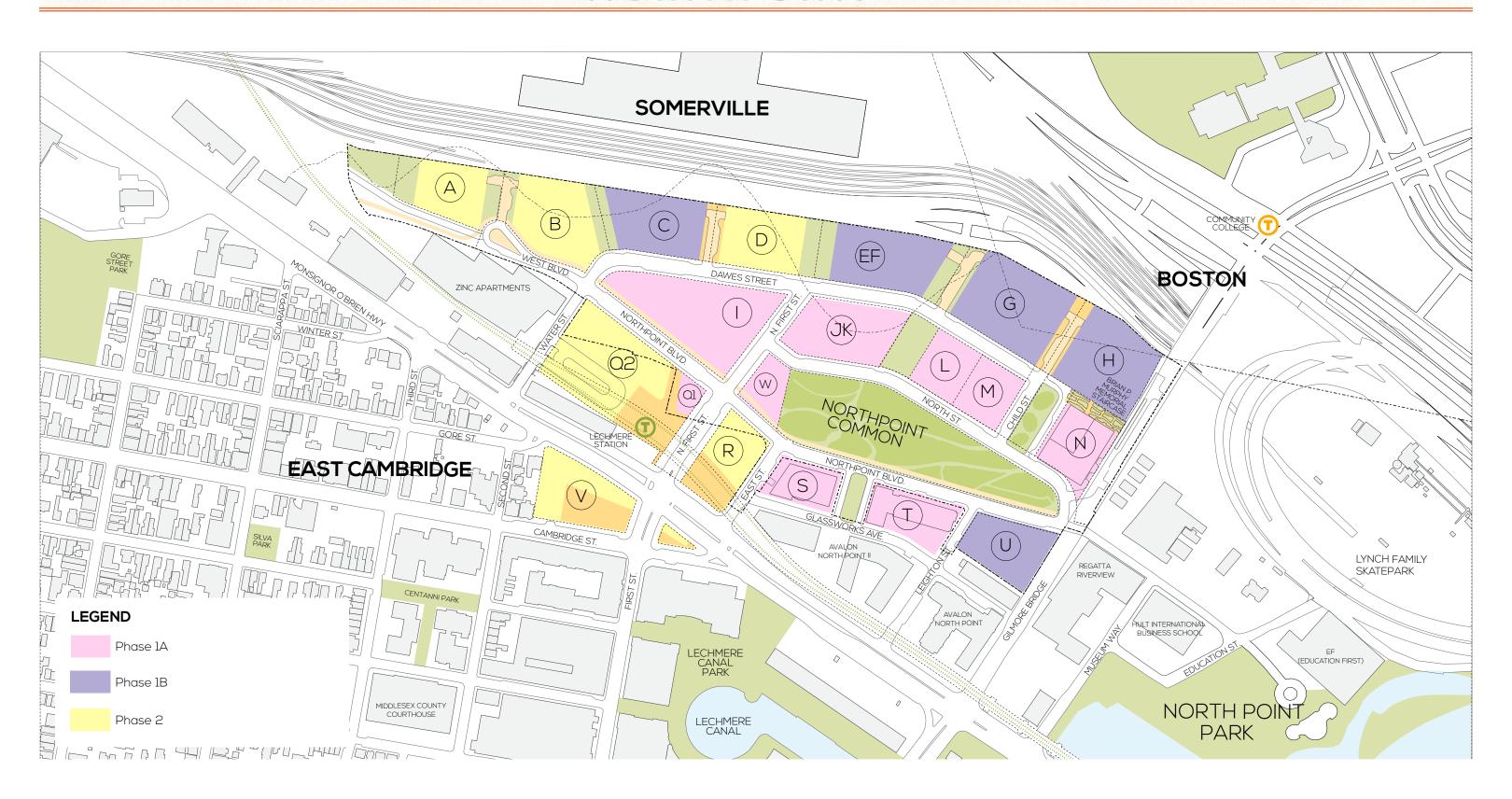




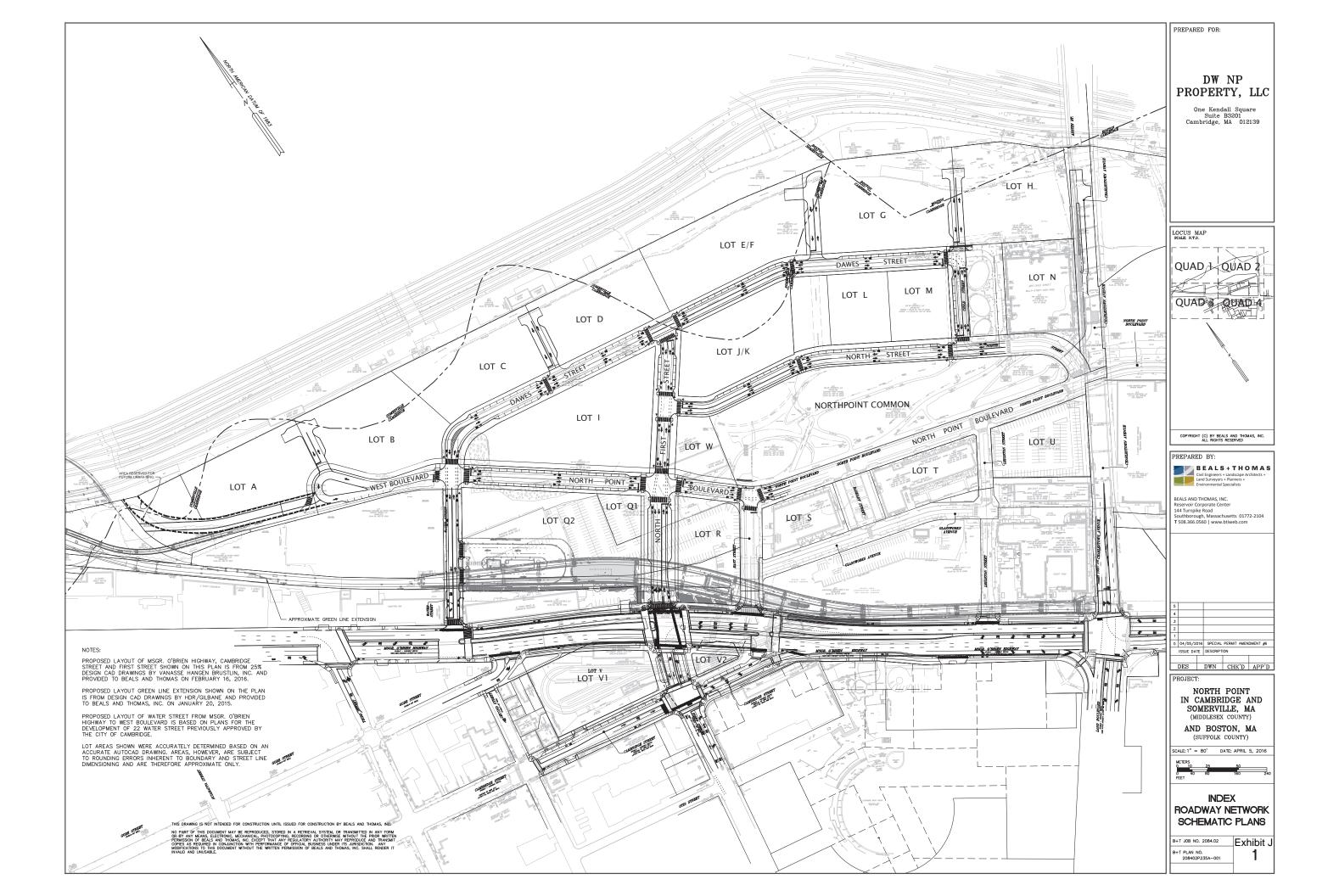


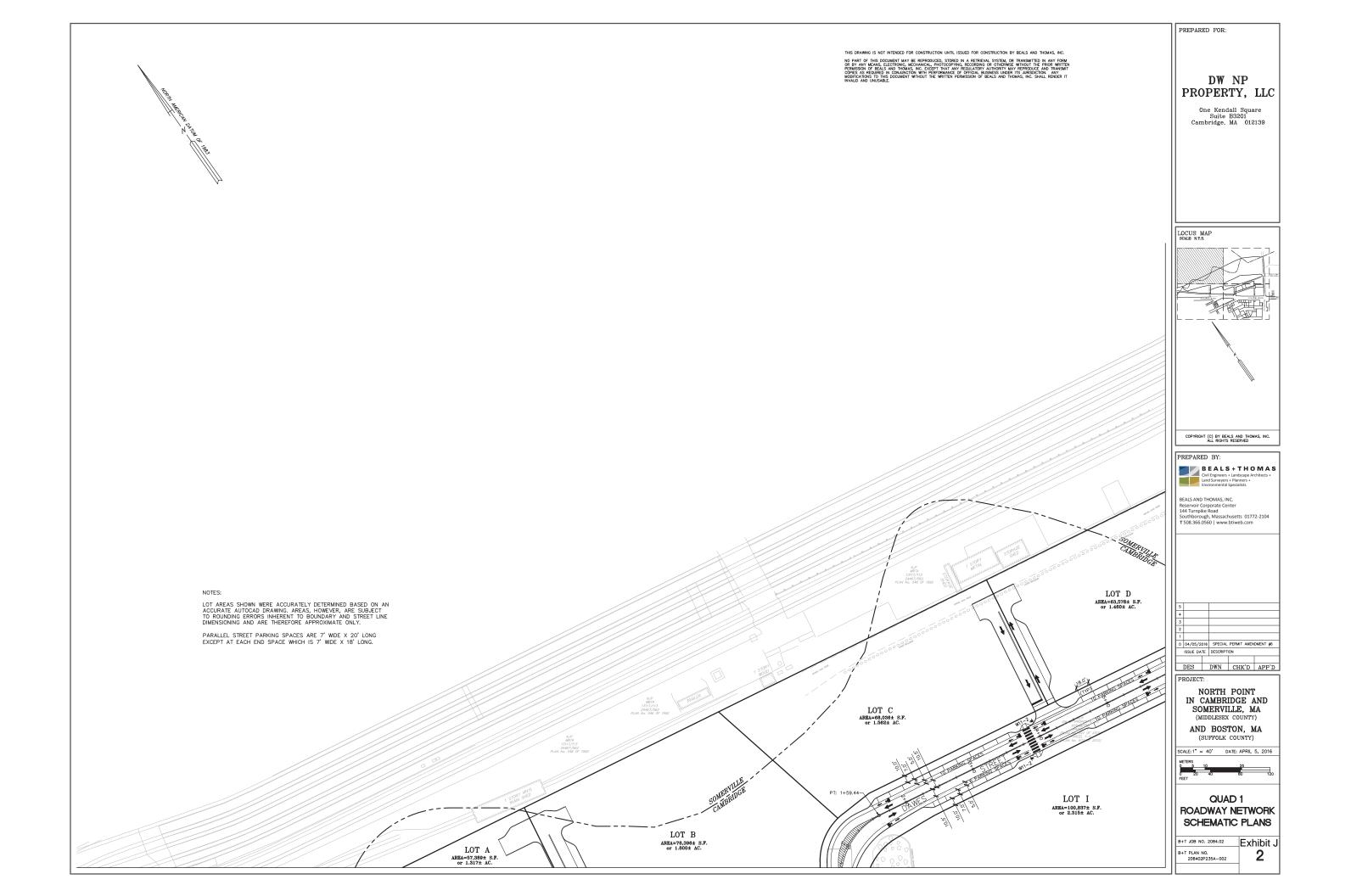
<u>Table 1:</u> Open Space Summary - March 2016

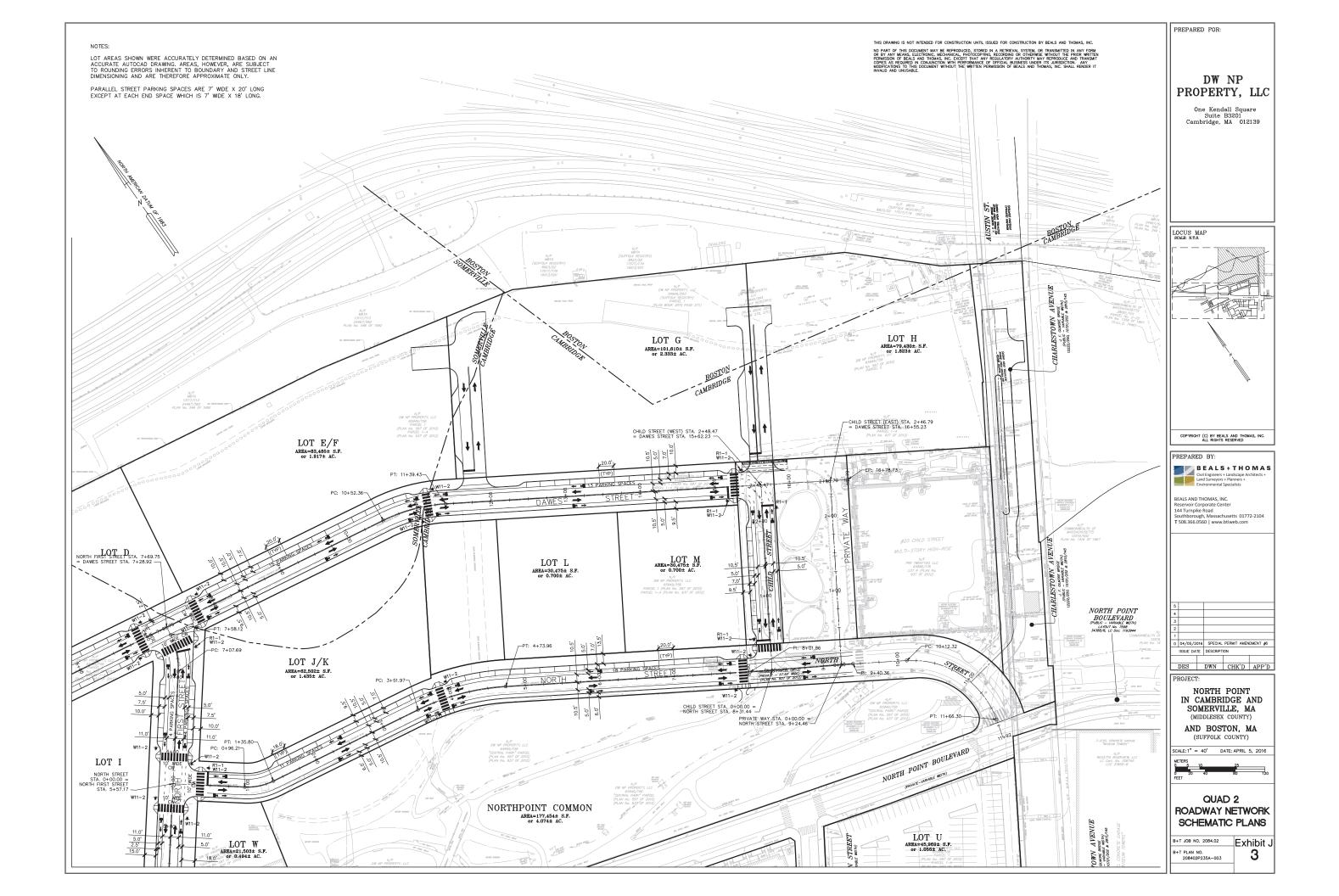
	Acres	SF
Approved Open Space	11.00	479,160
Completed Open Spaces Northpoint Common Earhart Park Child St. Park Brian P. Murphy Memorial Stair	4.36 0.19 0.40 0.18	190,000 8,100 17,500 7,750
Total Completed Open Space	5.13	223,463
Proposed Open Space	5.87	255,697

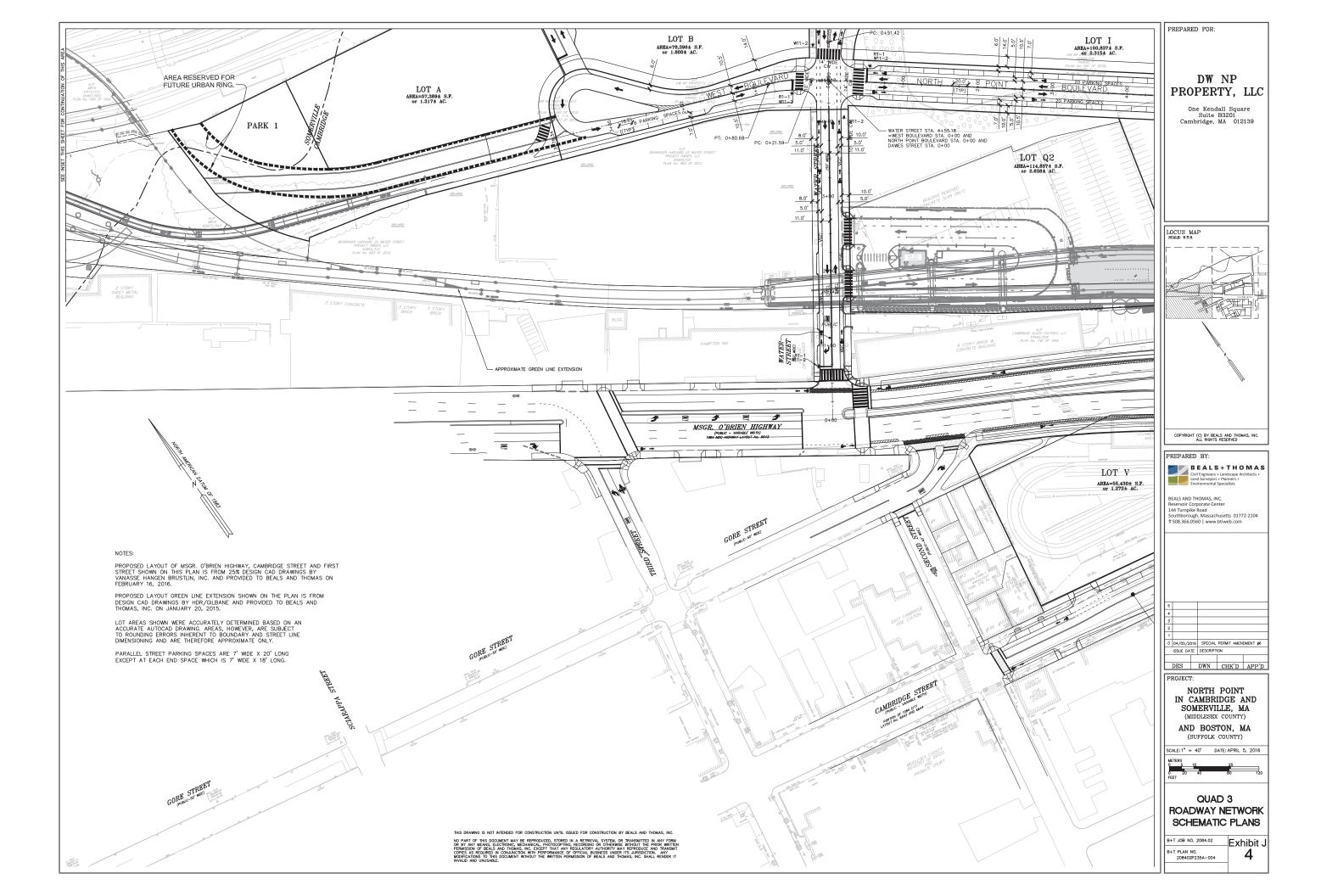


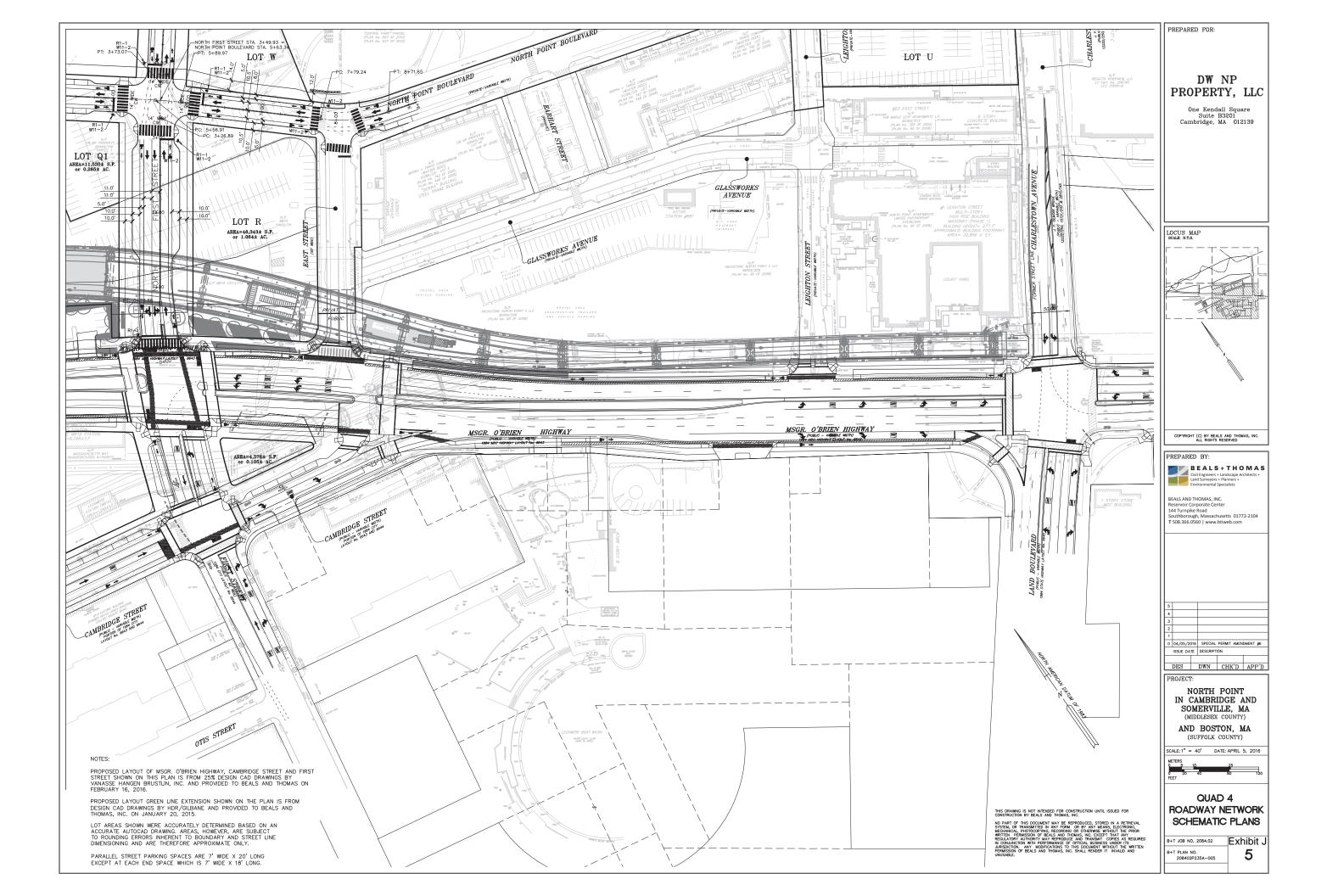
April 7, 2016











NOTES

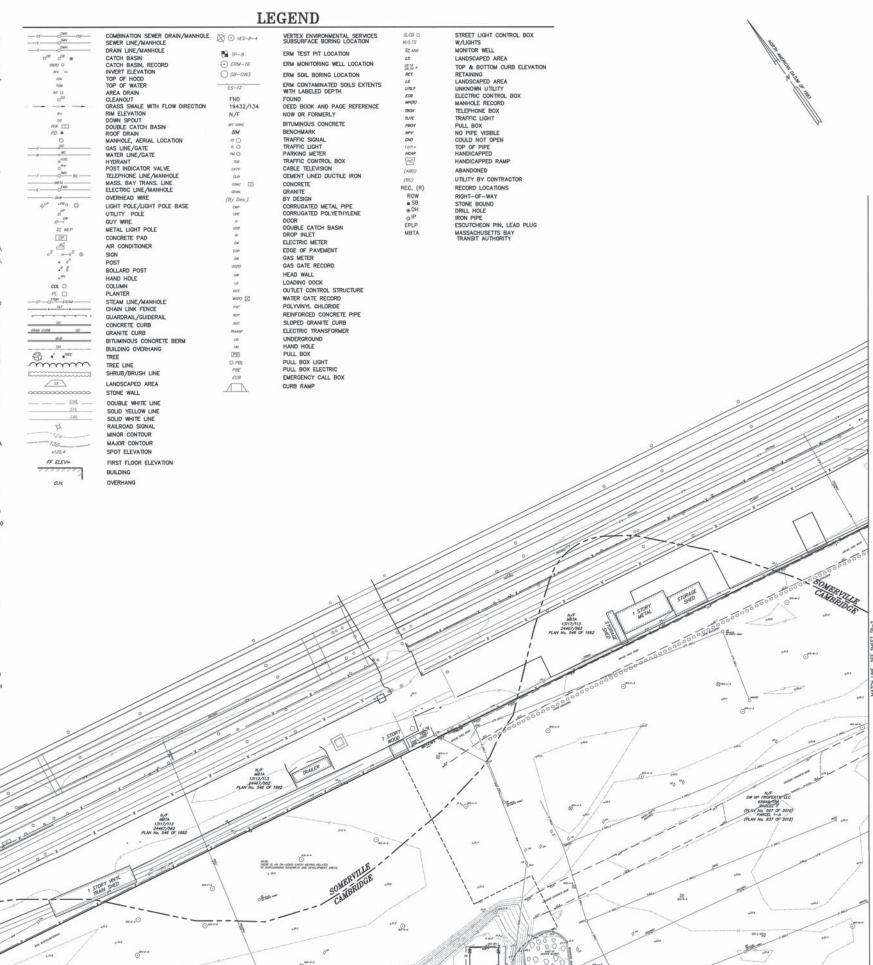
- 1) THIS PLAN WAS PREPARED FROM THE FOLLOWING SOURCES:
- A) AN ACTUAL SURVEY MADE ON THE GROUND USING A ZEISS ELTA TOTAL STATION ON OR BETWEEN SEPTEMBER 2007 AND JANUARY 5, 2016.
- B) DETAIL AND UTILITIES IN GLASSWORKS AVENUE, LEICHTON STREET, #23 EAST STREET (MAPILE LEAF BUILDING), AND #1 LEIGHTON STREET (ARCHSTONE HIGH RISE BUILDING) WAS PERFORMED BY BEALS AND THOMAS, INC, AND SHOWN ON A PLAN ENTITLED "AS-BUILT PLAN, ARCHSTONE—SMITH PHASE 1, IN CAMBRIDGE, MA..." DATED FEBRUARY 29, 2008, REVISED APRIL 2, 2008.
- C) DETAIL FOR PARCEL Q & R TAKEN FROM A PLAN BY GUNTHER ENGINEERING, A DIMSION OF DIGITAL GEOGRAPHIC TECHNOLOGIES, INC. ENTITLED "NORTH POINT, MBTA PARCELS Q & R, ALTA/ACSM LAND TITLE SURVEY IN CAMBRIDGE, MASSACHUSETTS..."
- D) DETAIL FOR THE MAIN SITE TAKEN FROM A PLAN BY GINTHER ENGINEERING, A DIVISION OF DIGITAL GEOGRAPHIC TECHNOLOGIS, INC. ENTITLED "NORTH POINT, PERIMETER PLAN, AND DETAIL PLANS, ALTA/ACSM LAND TITLE SURVEY IN BOSTON, CAMBRIDGE, AND SOMERVILLE, MASSACHUSETTS..." DATED LAST REVISED AUGUST 4, 2010.
- E) DETAIL FOR THE CENTRAL PARK PARCEL TAKEN FROM A PLAN BY QUNTHER ENGINEERING, A DIVISION OF DIGITAL GEOGRAPHIC TECHNOLOGIS, INC. ENTITLED "NORTHPOINT-"CENTRAL PARK" PARCEL, SUBDIVISION PLAN OF LAND IN BOSTON, CAMBRIDGE, AND SOMERVILLE, MASSACHUSETTS.." DATED AUGUST 16, 2010; SAID PLANS RECORDED AT MIDDLESEX COUNTY REGISTRY OF DEEDS, SOUTHERN DISTRICT, AS PLAN No. 597 0F 2010.
- F) DETAIL FOR SIERRA AND TANGO CONDOMINIUM PARCELS TAKEN FROM A PLAN BY GUNTHER ENGINEERING, A DIVISION OF DIGITAL GEOGRAPHIC TECHNOLOGIS, INC. ENTITLED "NORTHPOINT-PARCEL SYT. CONDOMINIUM SITE PLAN OF SIERRA + TANGO CONDOMINIUM IN CAMBRIDGE, MA... PREPARED BY GUNTHER ENGINEERING, DATED JANUARY 10, 2005, REVISED FEBRUARY 12, 2006, RECORDED AT MIDDLESEX COUNTY RECISITY OF DEEDS, SOUTHERN DISTRICT, AS PLAN No. 449 OF 2008.
- G) UNDERGROUND UTILITIES FOR GLASSWORKS AVENUE, LEIGHTON STREET, EAST STREET, AND NORTH-POINT BOULEVARD WERE COMPILED FROM AUTOCAD DRAWINGS AND A PLAN BY WELCH ASSOCIATES LAND SURVEYORS, INC. ENTITLED "UTILITY AS-BUILT, NORTH POINT DEVELOPMENT, CAMBRIDGE, MASSACHUSETTS..." DATED DECEMBER 6, 2007, LAST REVISED DECEMBER 22, 2008 (3 SHEETS).
- H) UNDERGROUND UTILITIES FOR GLASSWORKS AVENUE, LEIGHTON STREET, EAST STREET, AND NORTHPOINT BOULEVARD WERE COMPILED FROM A PLAN SET BY PARSONS BRINKERHOFF QUADE & DOUGLAS, INC. ENTILED "NORTH POINT PHASE 1A SITE DEVELOPMENT, DATE: MAY 2005, LAST REVISED
- I) CAMBRIDGE STREET, FIRST STREET, AND A PORTION OF SECOND STREET AS-BUILT INFORMATION PROVIDED BY THE CITY OF CAMBRIDGE DPW IN AN AUTOCAD DRAWING ENTIFIED "CAMBRIDGESTREETSTIEPLAN.DWG". (PROVIDER AND DATE OF SURVEY UNKNOWN.)
- J) TOPOGRAPHY AND DETAIL TAKEN FROM AN AERIAL PHOTOGRAMMETRIC SURVEY PERFORMED BY PHOTOGRAMMETRIC TECHNOLOGY, INC. COMPILED FROM AERIAL PHOTOGRAMMETRY FLOWN NOVEMBER 13, 2010.
- K) MISCELLANEOUS UTILITY INFORMATION IS TAKEN FROM AN AUTOCAD DRAWING BY PARSONS BRINKERHOFF USED TO GENERATE EXISTING CONDITIONS INFORMATION ENTITLED "PB-NORTHPOINT-BASE.DWG".
- M) UTILITY INFORMATION IN MSGR. O'BRIEN HIGHWAY IS TAKEN FROM A PLAN ENTILED "NORTHERN TRAFFIC ARTERY, SHEET 2 OF 10 SHEETS, RECORD CONSTRUCTION PLAN, DATED JANUARY 20, 1928.
- N) UTILITY INFORMATION IN MSGR. O'BRIEN HIGHWAY AND WATER STREET IS TAKEN FROM A PLAN ENTITLED "EXISTING CONDINONS PLAN, 22 WATER STREET CONDOMINUMS..." PREPARED BY SYMMES, MAINI & MCKEE ASSOCIATES, DATED IN PROGRESS NOVEMBER 18, 2010.
- O JULILY INFORMATION IN MSGR. O'BRIEN HIGHWAY IS TAKEN PROBLEM TO THE COMMONWEALTH OF MASSACHISTIS, PLAN OF ROAD IN THE CITY OF CAMBRIDGE, ALTERED AND LAID OUT ON BEHALF OF THE METROPOLITAN DISTRICT COMMISSION." LAVOUT No. 6843 (6 SHEETS) DATED JUNE 6, 1984, RECORDED AT MIDDLESEX COUNTY REGISTRY OF DEEDS, SOUTHERN DISTRICT, AS PLAN No. 705 OF 1984; AND A PLAN ENTITLED "THE COMMONWEALTH OF MASSACHISTIS, PLAN OF ROAD IN THE CITY OF CAMBRIDGE, ALTERED AND LAID OUT AS A CITY HIGHWAY BY THE DEPARTMENT OF PUBLIC WORKS..." LAVOUT No. 6844 (5 SHEETS) DATED JUNE 6, 1984, RECORDED AT MIDDLESEX COUNTY REGISTRY OF DEEDS, SOUTHERN DISTRICT, AS PLAN No. 629 OF 1984.
- P) WATER UTILITY INFORMATION TAKEN FROM A PLAN ENTITLED "BOSTON AND MAINE CORPORATION, SCALE: 1"=200', DATE: JAN. 1994, (COMPILED FROM EXISTING PLANS)".

- Q) WATER UTILITY INFORMATION TAKEN FROM A PLAN ENTITLED "SCHEMATIC SITE PLAN, SEWER USAGE STUDY, SOMERVILLE & EAST CAMBRIDGE, MASS..." PREPARED BY HAYDEN/WEGMAN CONSULTING ENGINEERS, DATED JUNE, 1985.
- R) WATER, SEWER, DRAIN, AND GAS UTILITY INFORMATION TAKEN FROM A PLAN ENTITLED "PARCEL NO. 3/PIGGYBACK YARD AREA, PLAN OF LAND, BOSTON, CAMBRIDGE, AND SOMEWILLE, MASS..." PREPARED BY QUINTER ENGINEERING, INC., DATED AUGUST 25, 1989, (6 SNEETS).
- 5) APPROXIMATE LIMITS OF CONTAMINATED SOILS TAKEN FROM PLAN ENTITLED, "AREA DRAINAGE STUDY, DELINEATION OF SEPARATE PHASE PETROLEUM RINS 3-11533 AND 3-12277" FIGURE 1-8. PREPARED BY MALCOLM PIRNIE, DATED FEBBUARY, 2011.
- T) SOIL BORINGS (SB-#), TEST PITS (TP-#) AND MONITORING WELLS (ERM-#) TAKEN FROM PLAN ENTITLED, "OIL/WATER SEPARATOR AREA" PERPARED BY ERM FOR THE BAM RAILYARD, FIGURE NO. 6, DATED 11/19/1998. SEE LEGEND.
- U) FOUNDATION AS-BUILT FOR LOT N BUILDING WAS PERFORMED BY BEALS AND THOMAS, INC ON NOVEMBER 8, 2013 AND NOVEMBER 21, 2013.
- V) AREA FOR TEMPORARY TRANSFORMERS AND SWITCH EQUIPMENT LOCATED UDER THE BRIDGE ADJACENT TO LOT N WAS FIELD SURVEYED BY BEALS AND THOMAS, INC. ON NOVEMBER 9, 2013.
- W) SWALE AND PLUNGE POOL AS-BUILT WAS PERFORMED BY BEALS AND THOMAS, INC ON NOVEMBER 13, 2013.
- X) SOIL BORINGS VES-P2-1 THRU VES-P2-7 AND TEST PITS 1
 THRU 5 WERE INSTALLED BY VERTEX DURING NOVEMBER 2013,
 PHASE II AND ARE LOCATED ON PARCEL 2. THESE WERE
 FIELD LOCATED BY BEALS AND THOMAS, INC ON DECEMBER 3,
 2013.
- Y) AS—BUILT UTILITIES FOR LOT N AND SURROUNDING AREAS WERE TAKEN FROM A PLAN ENTITLED "UTILITY AS—BUILT DRAWNG, NORTH-POINT IN CAMBRIDGE AMESSACHUSETTS..." PREPARED BY JOHN MORIARTY & ASSOCIATES, INC., PREPARED FOR J. DERENZO COMPANY, SOLAIE: 1"=30', DATED NOVEMBER 13, 2014, LAST REVISED MAY 27, 2015.
- Z) HISTORIC WATER LINES ON MBTA PROPERTY LOCATED WITHIN THE FORMER SHORT STREET, AND FORMER NORTH STREET WERE TAKEN FROM CITY OF CAMBRIDGE HISTORIC ASSESSOR MAPS.
- MAPS.

 WINDERGROUND FACILITIES, STRUCTURES AND UTILITIES SHOWN ARE FROM OBSERVED SUBFACE NDICATIONS, SUBSURFACE NDICATIONS, SUBSURFACE NDICATIONS, AND COMPILED FROM AVAILABLE RECORD PLANS OF UTILITY COMPANIES AND PUBLIC ACENCIES AND ARE APPROXIMATE ONLY. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES AND FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES AND FURTHER DOES NOT THE EXACT LOCATION AS NIDICATED ON THIS PLAN.

 BEFORE CONSTRUCTION CALL "DIG SAFE" 1–888–344–7233.
- 3) ALL ELEVATIONS REFER TO THE CITY OF CAMBRIDGE DATUM.
- DECENS SOUTHERN DISTRICT, AS PLAN NO. 39 OF ZOLO.

 SOMEFRULE CAMERIDES CITY BOUNDARY LINE ESTABLISHED
 BY BEALS AND THOMAS, INC. BY DIGITIZING HISTORIC EDGE
 OF MILLERS RIVER AS SHOWN ON A PLAN ENTITLE "Nos. 530
 & 531, APPROVED BY HARBOR AND LAND COMMISSION",
 DATED MAY 6, 1880, RECORDED IN SUFFLIX COUNTY AS
 PLAN BOOK 1505 PAGE 640; AND CALCULATING A BEST—FIT
 CENTERLINE OF THE HISTORIC RIVER. THE END OF THE
 CENTERLINE WAS ADJUSTED TO HOLD 250.00' FROM THE
 ANGLE POINT IN THE BOSTON CAMERIDGE CITY LINE AS
 DESCRIBED IN CHAPTER 312 OF THE ACTS OF 1910.
- 6) THE PARCEL SHOWN IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN), AS SHOWN ON "FLOOD INSURANCE RATE MAP, MIDDLESEX COUNTY, MASSACHUSETTS (ALL JURISDICTIONS) PANEL 577 OF 656", MAP NUMBER 25017C0577E, EFFECTIVE DATE JUNE 4, 2010.
- THE LAND SHOWN HEREON, INCLUDING THE PRIVATE WAYS EAST STREET, GLASSWORKS AVENUE, LEICHTON STREET, NORTHHOMEN BOULEVARD, NORTH STREET AND CHILD STREET IS SUBJECT TO RIGHTS AND EASEMENTS DESCRIBED IN AN EASEMENT DOCUMENT GRANTED TO VERZION NEW ENGLAND, INC. RECORDED IN DEED BOOK 49883 PAGE 423.
- 8) THE PRIVATE WAYS EAST STREET, GLASSWORKS AVENUE, LEIGHTON STREET, NORTH-POINT BOULEVARD AND NORTH STREET ARE SUBJECT TO RICHTS AND EASEMENTS DESCRIBED IN AN EASEMENT SOLUMENT GRANTED TO NISTAR GAS COMPANY RECORDED IN DEED BOOK 49883 PAGE 437 AND IN AN EASEMENT DOCUMENT GRANTED TO COMMASS OF MASSACHUSETTS I, INC. RECORDED IN DEED BOOK 49883 PAGE 457



PREPARED FOR

DW NP PROPERTY, LLC

One Kendall Square Suite B3201 Cambridge, MA 02139



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

BEALS+THOMAS

Land Surveyors + Planners +

REALS AND THOMAS INC Reservoir Corporate (144 Turnpike Road

ISSUE DATE DESCRIPTION DES DWN CHK'D APP'D

PROJECT

NORTHPOINT ROADWAY AND INFRASTRUCTURE IN CAMBRIDGE AND SOMERVILLE, MA AND BOSTON, MA

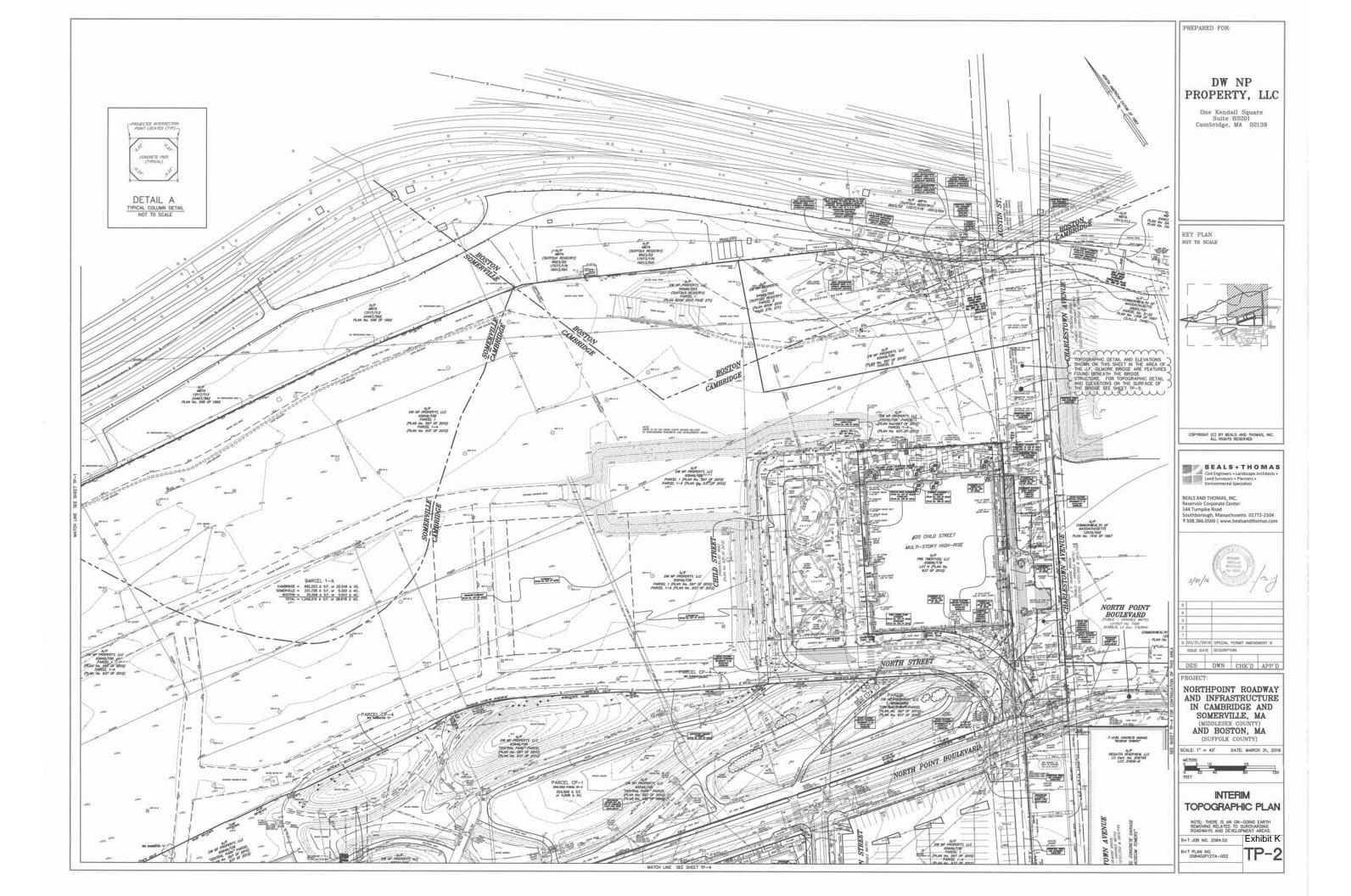
(SUFFOLK COUNTY)

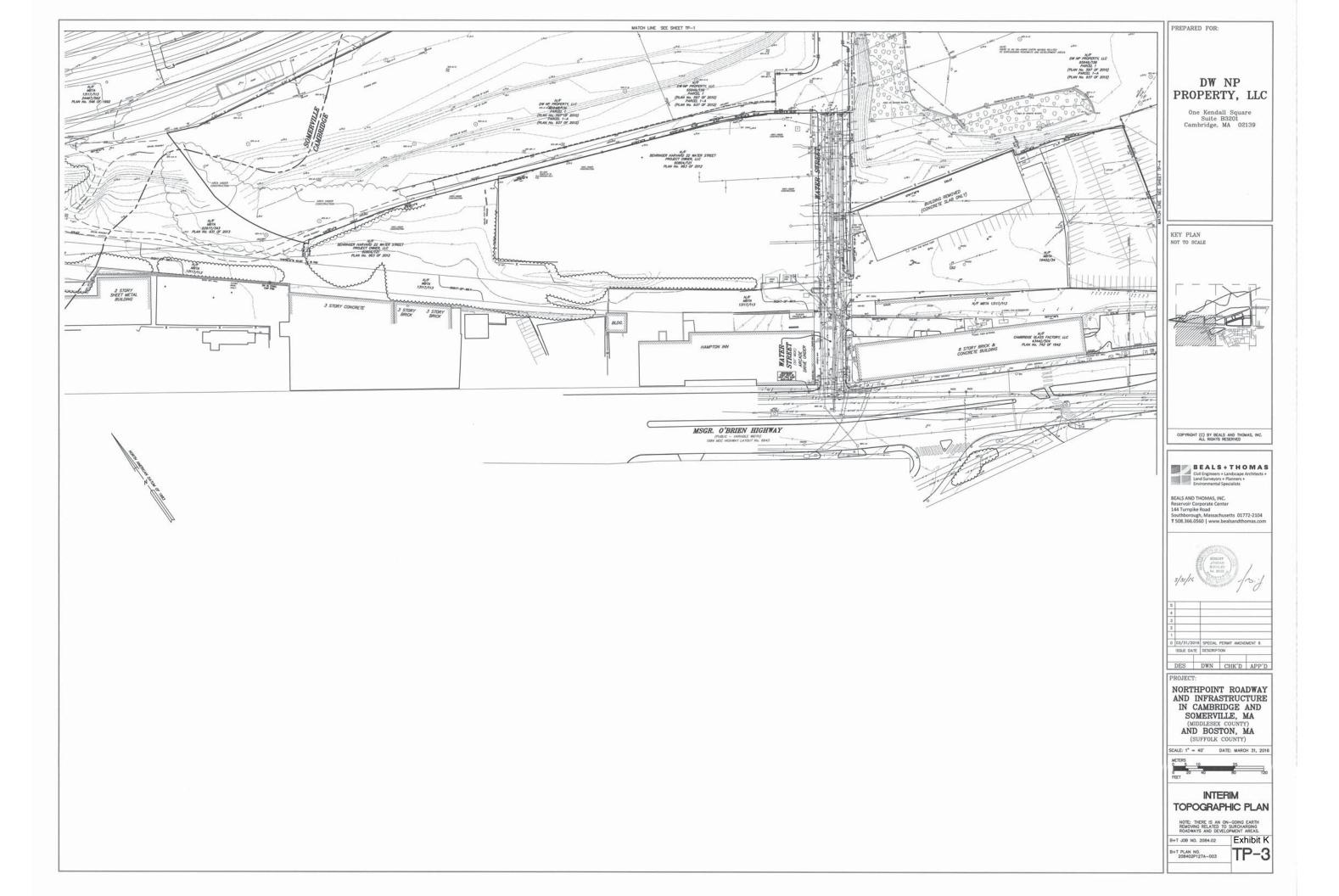


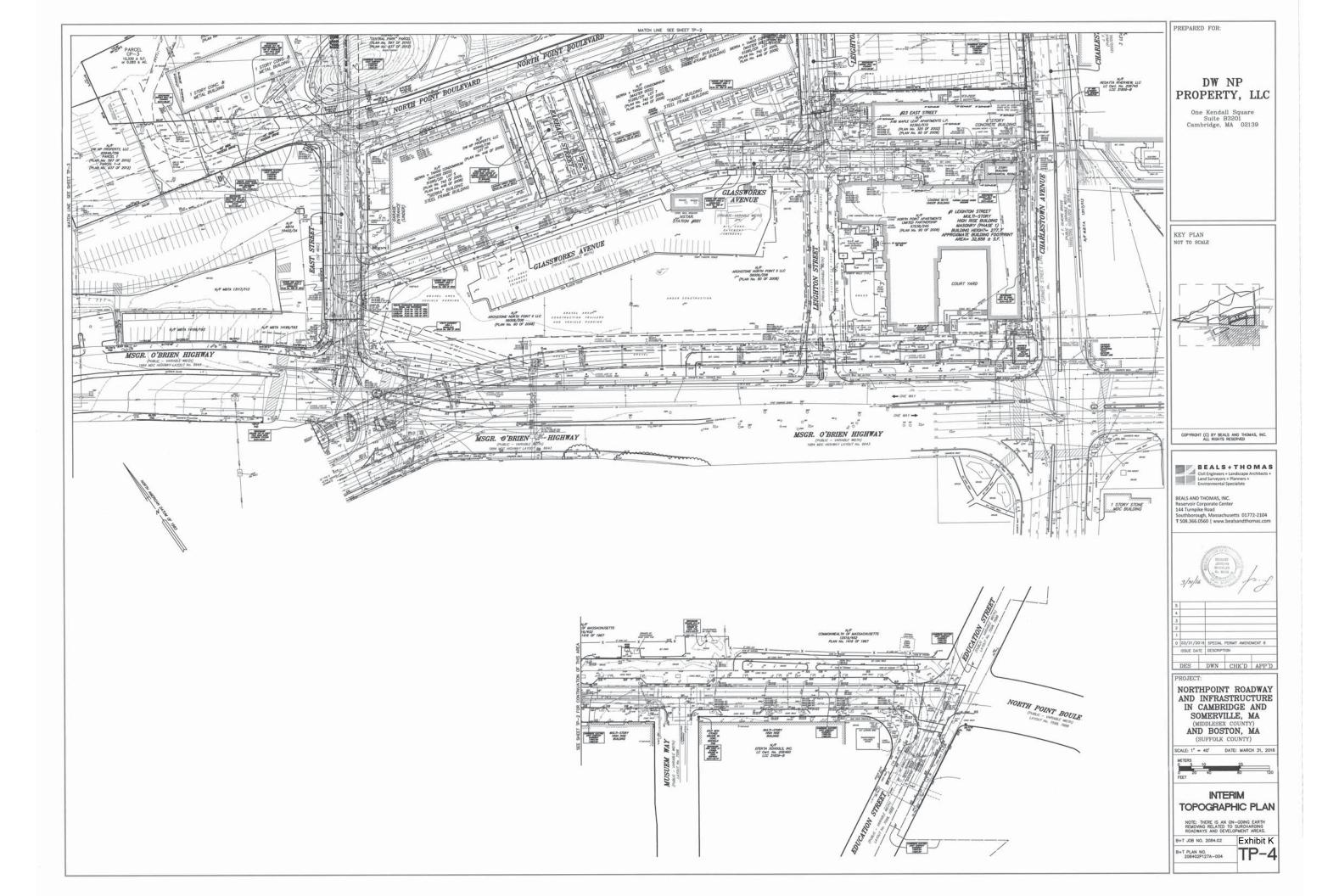
CALE: 1" = 40' DATE: MARCH 31, 2016

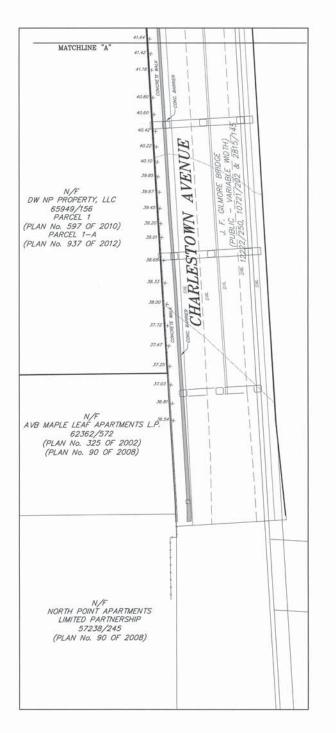
TOPOGRAPHIC PLAN

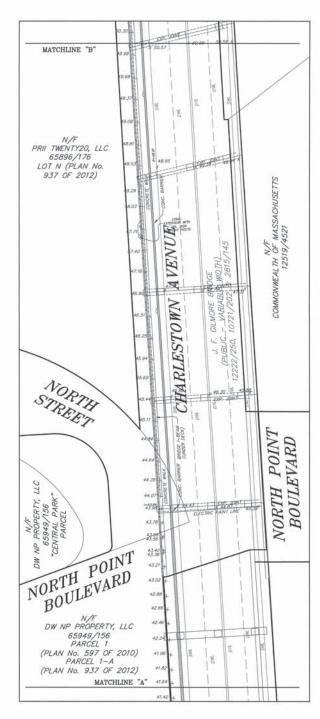
Exhibit K B+T JOB NO. 2084.02 TP-1 B+T PLAN NO. 208402P127A-001

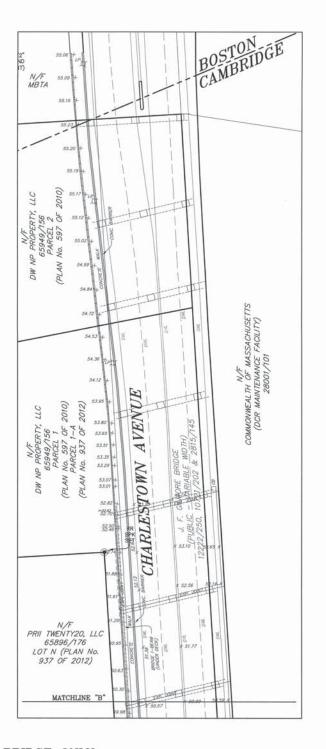












CHARLESTOWN AVENUE (GILMORE BRIDGE) DETAIL AND SPOT GRADES ON ELEVATED BRIDGE ONLY (DETAIL BENEATH BRIDGE NOT SHOWN)

PREPARED FOR

DW NP PROPERTY, LLC

> One Kendall Square Suite B3201 Cambridge, MA 02139

KEY PLAN
NOT TO SCALE

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BEALS+THOMAS
Civil Engineers + Landscape Architects +
Land Surveyors + Planners +
Crivinomental Soecialists



NORTHPOINT ROADWAY
AND INFRASTRUCTURE
IN CAMBRIDGE AND
SOMERVILLE, MA
(MIDDLESEX COUNTY)
AND BOSTON, MA
(SUFFOLK COUNTY)

SCALE: 1" = 20' DATE: MARCH 31, 2

METERS
5 10 15
0 10 20 40

INTERIM TOPOGRAPHIC PLAN

NOTE: THERE IS AN ON-GOING EARTH REMOVING RELATED TO SURCHARGING

Exhibit L



To: Joseph E. Barr, Director Cambridge Traffic, Parking and Transportation Department Date: April 6, 2016

Memorandum

Project #: 13369.00

From: Susan Sloan-Rossiter, Principal

Meghan Houdlette, P.E.

VHB

Re: NorthPoint Trip Generation - 2016 Parcel Phasing Comparison

Analysis

Summary of Study and Findings

DW NP Property, LLC (DivcoWest), is submitting a Request for a Major Amendment to the Special Permit for the NorthPoint project. This filing is being submitted in accordance with the City of Cambridge, Massachusetts Zoning Ordinance (the "Zoning Ordinance") and the Notice of Decision Amendment to Planned Unit Development (Case No. PB#179 Amendment #3) filed with the City Clerk's Office on November 16, 2012; as amended by Notice of Decision (Case No. PB#179 Amendment #4) and filed with the City Clerk's office on February 13, 2015 and by Notice of Decision (Case No. PB 179 Amendment #5) filed with the City Clerk's Office on July 30, 2015 (together, the "Special Permit").

Since acquiring the property in August, 2015, DivcoWest has been considering ways in which the existing Master Plan can be improved in order to strengthen the public realm features of NorthPoint and accelerate the development schedule. The current Master Plan (as amended in 2015) provides for the construction of approximately 5.2 million square feet (3,060,792 sf of residential space, 2,185,062 sf of commercial space, and eleven (11) acres of open space). The proposed changes included in the amendment application do <u>not</u> include any requests to modify the approved 5.2 million square feet and do <u>not</u> include any requests to modify the breakdown of the approved square footage between residential and commercial uses.

DivcoWest retained VHB to prepare a traffic generation analysis showing the implication of the Major Amendment proposed changes. This memo contains a trip generation analysis comparing the trip generation of the proposed revised Master Plan to the Phase IA, Phase 1B and Full Build trip generation thresholds for the peak hours established in the certified NorthPoint TIS (2002).

The total gross square footage (GSF) of the Master Plan will not change. Additionally, the amount of Residential, Commercial, and Retail GSF will remain as approved in the Special Permit. The traffic volume resulting from the proposed amendments will not exceed the original trip generation thresholds for the peak hours established in the certified NorthPoint TIS (2002).

The specific Major Amendment modifications to the parcel phasing include the following:

- Move Parcel JK and I into Phase 1A
- o Include new Parcel W and Parcel Q1 in Phase 1A
- o Include a temporary commercial use on Parcel H in Phase 1A
- o Move Parcel U to Phase 1B
- Move Parcel H to Phase IB

This memorandum contains a trip generation analysis comparing the trip generation of the proposed parcel phasing, to the Phase IA, Phase 1B and Full Build trip generation thresholds for the peak hours established in the certified

NorthPoint TIS (2002). This memo also contains a comparison of the proposed parcel phasing to the 2015 Master Plan Update program. Note that the Phase 1B condition is cumulative and includes all buildings to be constructed through the end of Phase 1B, including all Phase 1A buildings. The trip generation analysis undertaken in this memorandum demonstrates that the trip generation for the proposed parcel phasing is less than the trip generation thresholds for the peak hours established in the certified NorthPoint TIS, as shown in Table 1. The trip generation analysis in this memorandum utilizes the same assumptions that were used in the trip generation analysis approved by the City for Special Permit Amendment #4 (the "2014 Master Plan Update") and utilized for Special Permit Amendment #5 (the "2015 Master Plan Update").

The vehicle trip generation analysis for the amendment proposed parcel phasing in comparison to the certified TIS and the 2015 Master Plan Update for Daily, AM peak hour and PM peak hour conditions in the Full Build, Phase 1 A and Phase 1B are shown in Table 1. Compared to the certified TIS baseline, on which the NorthPoint traffic mitigation plan is based, the vehicle trips generated for the proposed parcel phasing are less than the certified TIS threshold trips in all of the Full Build, Phase 1A and Phase 1B conditions.

Compared to the TIS, the 2016 Parcel Phasing vehicle trip generation is lower for the Phase 1A, Phase 1B and Full Build Daily, AM peak hour and PM peak hour. The proposed phasing vehicle trip generation is higher in Phase 1A and Phase 1B in comparison to the 2015 Master Plan Update, reflecting the acceleration of the development schedule but still lower than the TIS projections.

Table 1 - Comparison of TIS, 2015 M aster Plan Update, and 2016 M ajor Amendment Vehicle Trip Generation*

		<u>TIS</u>		2015	Master Plan I	<u>Jpdate</u>	2016 Major Amendment				
	Daily	Morning Peak	Evening Peak	Daily	Morning Peak	Evening Peak	Daily	Morning Peak	Evening Peak		
	Total	Total	Total	Total	Total	Total	Total	Total	Total		
Phase 1A	5,430	720	760	3,979	405	422	5,188	450	542		
Phase 1B	10,400	1,260	1,405	9,698	992	1,089	10,224	1,122	1,222		
Full Build	16,015	1,695	1,840	15,992	1,429	1,754	15,980	1,436	1,750		

^{*}The Phase 1B condition is cumulative and includes all buildings to be constructed through the end of Phase 1B, including all Phase 1A buildings. The Full Build condition includes all buildings to be constructed as part of the NorthPoint project.

Trip Generation Analysis Methodology

Table 2 compares the NorthPoint development program studied as part of the certified TIS to the original NorthPoint Master Plan, the 2015 Master Plan Update and the 2016 Master Plan program. The overall NorthPoint Master Plan development program size and land-use allocation does not change from the original NorthPoint approved development program under this Major Amendment request. The 2016 Master Plan program allocation of residential

and commercial square footage is also consistent with the 2012 Master Plan. Note that the development program analyzed in the TIS was approximately 294,146 gsf larger (264,208 gsf of residential program and 29,938 gsf of commercial program) than the current NorthPoint development program. The residential square footage has been reduced while adding additional units at a smaller square footage/unit ratio. The total amount and allocation of development program square footage between residential and commercial uses does not change from the originally approved NorthPoint Master Plan.

Table 2 - NorthPoint Program Comparison

Full Build Program	TIS (GSF)	Original NorthPoint Master Plan	2015 Master Plan Program (GSF)	2016 Master Plan Program(GSF)
Residential	3,325,000	3,060,792	3,077,254	3,060,792
Commercial	2,215,000	<u>2,185,062</u>	<u>2,168,600</u>	<u>2,185,062</u>
Total	5,540,000	5,245,854	5,245,854	5,245,854

The development program assumed for the trip generation analysis of the proposed parcel phasing program is shown in Table 3, in comparison to the development program in the 2015 Master Plan Update and certified TIS. The development program for the proposed parcel phasing program reflects Parcels JK and Parcel EF as lab buildings.

Table 3 - TIS, 2015 M aster Plan Update, and Proposed Parcel Phasing Program Comparison

Full Build Program	TIS (GSF)	2015 Master Plan Update (GSF)	2016 Parcel Phasing (GSF)
Office	1,500,000	1,142,081	1,060,000
Lab	640,000	576,519	725,000
Ancillary Retail	75,000	175,000	175,000
Retail	-	75,000	75,000
Grocery	-	50,000	50,000
Hotel	90,000 (90 keys)	150,000 (150 keys)	100,062 (100 keys)
<u>Residential</u>	3,235,000 (2,790 units)	3,077,254 (3,211 units)	3,060,792 (3,177 units)
Total	5,540,000	5,245,854	5,245,854

In order to confirm that the trip generation for the proposed parcel phasing is less than or equal to the initial trip generation calculated for Phase 1A, Phase 1B and the Full Build program in the certified TIS, a trip generation analysis was conducted for comparison purposes. Note that the same technical assumptions for the transportation analysis used for the 2014 Master Plan Update and the 2015 Master Plan Update, are used in this comparative trip generation analysis.

The ITE Land Use Codes from the Trip Generation 9th Edition assumed for the potential revised development program trip generation analysis are summarized in Table 4.

Table 4 - ITE Land Use Codes*

Land Use	ITE LUC	Methodology				
Office	710	Fitted Curve Equation				
Lab	760	Fitted Curve Equation				
Ancillary Retail	820	Average Rate				
Retail	820	Average Rate				
Grocery	850	Average Rate				
Hotel	310	Average Rate				
Residential	220	Fitted Curve Equation				

^{*} VHB Trip Generation Analysis and Shared Parking Study, March 24, 2014

Table 5 - Mode Shares

Land Use	Auto	Source
Office/Lab	40%	Certified NorthPoint TIS
Residential	32%	Kendall Square K2 City Study
Supermarket	50%	Transportation Research Board (TRB) Paper*
Hotel	30%	Hotel PTDM Reports and Traffic Studies
Ancillary Retail	10%	Certified NorthPoint TIS
General Retail	31%	Kendall Square K2 City Study

^{*} Food Shopping in the Urban Environment: Parking Supply, Destination Choice and Mode Choice (TRB 2011 Annual Meeting, Maley and Weinberger – Appendix Exhibit B), VHB Trip Generation Analysis and Shared Parking Study, March 24, 2014



Table 6 presents the TIS, 2015 Master Plan Update and Proposed Parcel Phasing Plan by square footage and land-use type used in the trip generation analysis for each development phase.

Table 6 - TIS, 2015 M aster Plan Update and Proposed Parcel Phasing Program Square Footage Comparison

<u>TIS</u>					2015 Master Plan Update						2016 Parcel Phasing							
	Residential	Office	Lab	Retail	Hotel	Total	Residential	Office	Lab	Retail	Hotel	Total	Residential	Office	Lab	Retail	Hotel	Total
Phase 1A	480,000	1,063,000	-	-	-	1,543,000	1,224,992	320,000	-	25,000	-	1,569,992	1,580,992	30,000	350,000	104,000	0	2,070,992
Phase 1B	1,211,000	621,000	-	-	-	1,832,000	680,000	433,481	576,519	105,000	150,000	1,945,000	348,000	1,000,000	375,000	70,000	0	1,808,000
Phase 2	1,544,000	-	456,000	75,000	90,000	2,165,000	1,172,262	388,600	-	170,000	-	1,730,862	1,131,800	30,000	0	126,000	100,062	1,366,862
Total	3,235,000	1,684,000	456,000	75,000	90,000	5,540,000	3,077,254	1,142,081	576,519	300,000	150,000	5,245,854	3,060,792	1,060,000	725,000	300,000	100,062	5,245,854

Table 7 presents the additional delineation of the Inbound and Outbound trip movements for each development phase, for comparison purposes. The original benefit of the NorthPoint mixed-use development program having a balance of inbound and outbound trips has maintained.

Table 7 – TIS, 2015 M aster Plan Update and Proposed Parcel Phasing Program Trip Generation (Inbound and Outbound) Comparison

	<u>TIS</u>						2015 Master Plan Update						2016 Parcel Phasing								
	Daily	N	lorning Pe	ak	Evening Peak		k	Daily	ily Morning Peak			Evening Peak		Daily	y Morning Peak		ak	Evening Peak		:	
	Total	In	Out	Total	In	Out	Total	Total	In	Out	Total	In	Out	Total	Total	In	Out	Total	In	Out	Total
Phase 1A	5,430	555	165	720	190	570	760	3,979	214	191	405	189	233	422	5,188	214	236	450	245	297	542
Phase 1B	10,400	840	420	1,260	450	955	1,405	9,698	631	361	992	396	693	1,089	10,224	755	366	1,122	403	819	1,222
Full Build	16,015	945	750	1,695	735	1,105	1,840	15,992	863	566	1,429	704	1,050	1,754	15,980	873	563	1,436	697	1,054	1,750

Exhibit M



To: Joseph Barr. Director
Adam Shulman, Sr. Planner
City of Cambridge
Traffic, Parking & Transportation

Date: April 6, 2016

Project #: 13369.00

From: Susan Sloan-Rossiter, Principal

Ellen Donohoe, PE

Re: NorthPoint Internal Roadway Layout – Master Plan Revisions

DW NP Property, LLC (DivcoWest) acquired the NorthPoint property in August 2015. For the past several months, the new ownership team has been evaluating the approved development proposal, considering ways in which the existing Master Plan can be improved in order to strengthen the public realm features of NorthPoint and the development program can be accelerated. Some of the improvements have been through minor adjustments and re-alignments of internal roadways with the intention to improve the overall public realm experience and safety for pedestrians and bicyclists. The modified internal roadway layout improves the connectivity of the roadway network for vehicles, pedestrians and cyclists.

DivcoWest requested VHB to conduct a traffic assessment of the internal roadway modifications prepared by the project team civil engineer Beals & Thomas. The 40 scale internal roadway plan to be submitted as part of a major amendment to the current Master Plan Special Permit, maintains City of Cambridge and Somerville roadway design standards. Note that most of the roadway configurations are generally maintained from the current Master Plan except for the following modifications:

- Shifting of NorthPoint Blvd to align with the West Boulevard/Water Street intersection,
- Minor re-alignment of North First Street between NorthPoint Blvd and Dawes Street,
- Minor easterly shift of West Blvd turnaround adjacent to Parcel A,
- Minor re-alignment of the multi-use path to account for NorthPoint Boulevard shift
- Elimination of the one block street segment (Baldwin Street) between Parcel JK and Parcel L.

Traffic Operational Assessment of Proposed Roadway Modifications

VHB considers each of these modifications to be improvements to the current Master Plan internal roadway network for the following reasons:

 NorthPoint Boulevard shift north creates a perpendicular 4 legged intersections versus two off-set Tintersections on Water Street providing improved vehicle, pedestrian and bicycle crossings.

- Continuation of the multi-use path along the north side of NorthPoint Blvd provides direct single movement crossings at North First Street and Water Street and does not require multiple crossings.
- Increased segment length of North First Street by approx. 80 feet, between O'Brien Hwy and NorthPoint Blvd, provides more queue and curb space.
- Increased segment length of Water Street by approx. 100 feet, between Lechmere Station Intersection and NorthPoint Blvd, provides more queue and curb space.
- Increased segment length of Water Street improves bus visibility at Lechmere Station driveway.
- North First Street straight alignment reduces possible sight line impacts at intersections and driveways.
- Relocation of West Blvd turnaround adjacent to Parcel A reduces paved area.
- Elimination of the one block roadway segment between Parcels JK and L should not result in traffic deficiencies or poor operations.
- The proposed street modifications result in a reduction of 940 If of paved street equating to a reduction of over 1 acre of impervious surface (46,170 sf).

Traffic Operation Analysis of Roadway Elimination

As part of the Planning Board Decision, PB#179 Amendment #3, procedures for modifications of the Master Plan are described in Section 12, with modifications to "streets" being included in Section 12b. As stated "The elimination of any street segment shown on the Master Plan shall only be permitted as a Major Amendment to the Permit with the exception of streets which are *one block in length*, which may be relocated or eliminated if specifically approved by the Planning Board as part of the final design approval after having been reviewed and approved by City staff."

At the request of DivcoWest, VHB conducted an analysis of traffic operations on the internal NorthPoint roadways to determine if the one block street segment between Parcel JK and Parcel L could be removed from the roadway network. Peak Hour traffic volumes provided in the NorthPoint Traffic Impact Study (TIS) were used as the baseline for this analysis. In addition the following assumptions were made:

- All traffic currently on North Street would be relocated to Dawes Street as a worst-case scenario;
- Pedestrian volumes would total approximately 100 crossings per hour; and
- Each intersection approach would consist of one shared lane.

The internal roadway traffic analysis investigated the morning and evening peak hour roadway volumes. The primary intersections at each end of Dawes Street (to the east and west) will be most impacted by this change. For this reason the following intersections were studied:

Dawes Street at North First Street

Dawes Street at North Park

Redistributed volumes for the morning and evening peak periods are shown in the attached Figure 1.

Level of Service

Synchro 8 software was used to model unsignalized level of service (LOS) operations at the study area intersections. LOS is a qualitative measure of control delay at an intersection providing an index to the operational qualities of a roadway or intersection. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. LOS D is typically considered acceptable. Table 1 below presents the level of service delay threshold criteria for unsignalized intersections as defined in the 2010 Highway Capacity Manual (HCM).

Table 1: Level of Service (LOS) Criteria

LOS	Unsignalized Intersection (seconds/vehicle)	
LOS A	≤ 10	
LOS B	> 10-15	
LOS C	> 15-25	
LOS D	> 25-35	
LOS E	> 35-50	
LOS F	> 50	

Source: 2010 HCM

The resulting LOS for the resulting redistributed traffic is shown in Table 2.

Table 2: Level of Service Summary – Full Build With Removal of Roadway

				95th Queue
	V/C ¹	Delay ²	LOS ³	(feet)
AM Peak Hour				
Dawes Street EB T/R	0.17	0.0	-	0
Dawes Street WB L/T	0.13	5.6	Α	11
North First Street NB L/R	0.49	19.8	С	66
Dawes Street EB L/R	0.64	24.7	С	109
North Park NB L/T	0.17	6.5	Α	16
North Park SB T/R	0.02	0.0	-	0
PM Peak Hour				
Dawes Street EB T/R	0.09	0.0	-	0
Dawes Street WB L/T	0.26	6.3	Α	26
North First Street NB L/R	0.48	24.4	С	62
Dawes Street EB L/R	0.54	18.9	С	80
North Park NB L/T	0.17	8.1	Α	16
North Park SB T/R	0.10	0.0	-	0

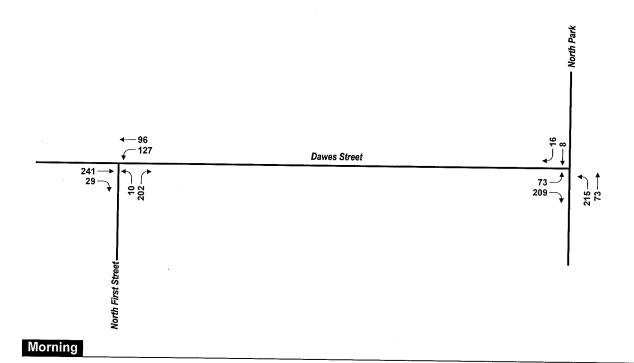
¹V/C –Volume-to-capacity ratio

NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound

The results indicate a LOS C or better on all intersection approaches at both intersections which is considered acceptable operations. This assumes that a STOP condition is only required on the minor street approaches. The major street (Dawes Street) would remain operating with free-flow traffic operations. With the current volumes the intersections do not meet warrants for an all-way stop condition. In summary, based on the traffic analysis described above, removing the roadway between Parcel JK and Parcel L should not result in a degraded level of traffic operations at nearby intersections.

²Delay – Control delay per vehicle, expressed in seconds per vehicle

³LOS - Level-of-Service



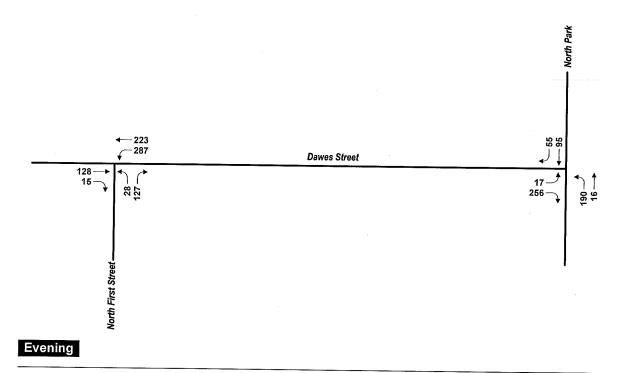






Figure 1
Full Build Redistributed Traffic Volumes
North Point

Exhibit N



A Neighborhood Organization for the Betterment of East Cambridge

February 7, 2016

Dear Planning Board,

At our January 27, 2016 ECPT meeting, representatives from Divco presented to the neighborhood their proposed changes to the current Northpoint Special Permit. The ECPT membership discussed the changes after the presentation and unanimously voted to send a letter in support of the straightening of streets, new and aligned open spaces and change of location of two of the approved 200 foot buildings as presented to the ECPT at the January 27th meeting.

We look forward to continuing to hear from Divco as they continue to move forward to implement the Northpoint Special Permit.

Sincerely,

Peter Crawley
President, ECPT

Cambridge, Massachusetts

Appendix I: Revised Statistical Summary of the Approved Master Plan

I. Project as a Whole

A. Three City Summary

a. Parcel Area	Total Area in Acres (Square Feet):	45.37 acres (1,976,501 square feet)
b. Floor Area	FAR at North Point:	2.66
	FAR at Lechmere	2.5
	Total GFA	5,245,854 square feet
c. Non- Residential	Maximum FAR	1.10
	Approved GFA	2,185,062 square feet for all non-
		residential uses
	Retail GFA:	300,000 square feet at North Point
		Amount TBD at Lechmere
d. Residential	Maximum FAR:	1.55
	GFA:	3,060,792 square feet
e. Open Space	Minimum Public, Green Area	
	or Permeable Open Space	392,000 square feet
	Provided:	
	Other/Common Open Space in	TBD
	Square feet:	
f. Parking Spaces	Maximum Permitted:	3,807 spaces
		+300 replacement MBTA spaces
	Maximum non-residential:	See Special Permit
	Minimum residential:	0.5-1.0 spaces/unit for each building
		Average of 0.75/unit for the entire
		project at full build-out
g. Dwelling Units	Proposed Number:	3,177 units