Epsilon
ASSOCIATES INC.

August 12, 2011

Mr. Geoffrey Lewis
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Subject: The Residences at 399 Congress Street, South Boston
Notice of Project Change

Dear Mr. Lewis:

On behalf of Madison Seaport Holdings, LLC ("Madison"), and pursuant to Article 80A-6 of the Boston Zoning Code, I am pleased to send you the enclosed 65 copies of a Notice of Project Change ("NPC") for The Residences at 399 Congress Street in South Boston's Seaport District.

On July 31, 2006, Madison filed a joint Project Notification Form/Environmental Notification Form with the BRA and the Massachusetts Executive Office of Energy and Environmental Affairs for a proposed 24-story, approximately 532,000 square-foot, 502-room hotel to be built on a 0.7-acre site at 399 Congress Street. On March 8, 2007, the BRA Board issued a Scoping Determination Waiving Further Review concerning the project.

Madison now seeks to change the principal project use to multi-family residential. The physical dimensions of the proposed residential building will be similar to but somewhat smaller than the previous proposal. The proposed building will be 22 stories high, contain approximately 377,000 square feet of gross floor area, and include a total of 388 studio, 1-bedroom, 2-bedroom, and extended-stay units.

In keeping with the planning goals of the Innovation District, the proposed new project will not only add much needed rental units, but will also incorporate an innovative *Extended Stay and Collaboration Center*. These units, on the second floor of the building, will provide a novel type of work/live facility to accommodate the unique needs of biotech, software, and other technology sector

PRINCIPALS
Theodore A Barten, PE
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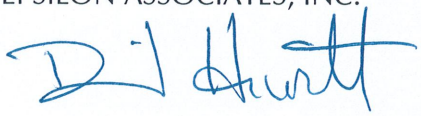
employees assigned to longer-term collaborative projects or training-related stints in Boston.

Because the apartment building will be reduced in size from and have fewer beds than the previously proposed hotel, the intensity of use at the project site will decrease and the new project will result in fewer overall environmental impacts. The proposed new use is also consistent with the underlying zoning for the site. Therefore, Madison submits that issuance of a revised Adequacy Determination for the NPC Project is appropriate.

If you have any questions concerning the NPC, please call me at (978) 461-6215. On behalf of Madison and the other members of the project team, we look forward to working with you on this new project, which we believe will be a great addition to the city's Innovation District.

Sincerely,

EPSILON ASSOCIATES, INC.



David Hewett, LEED AP
Senior Consultant

Cc: Denis Dowdle, Madison Seaport Holdings, Inc.
Donald Wiest, Brennan, Dain, Le Ray, Wiest, Torpy & Garner, P.C.

The Residences at
399 Congress Street

Notice of Project Change

Submitted to:
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Submitted by:
Madison Seaport Holdings, LLC.
20 Park Plaza
Boston, MA 02116

Prepared by:
Epsilon Associates, Inc.
ADD Inc.
Group One Partners, Inc.
Brennan, Dain, Le Ray, Wiest, Torpy & Garner, P.C.
Vanasse Hangen Brustlin, Inc.
Nitsch Engineering

August 12, 2011

Epsilon
ASSOCIATES INC.

NOTICE OF PROJECT CHANGE
FOR
THE RESIDENCES AT
399 CONGRESS STREET
SOUTH BOSTON

Submitted to:

Boston Redevelopment Authority
One City Hall Square
Boston, MA 02111

Submitted By:

Madison Seaport Holdings, LLC.
20 Park Plaza
Boston, MA 02116

Prepared By:
Epsilon Associates, Inc.
ADD Inc.
Group One Partners, Inc.
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Nitsch Engineering

August 12, 2011

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Section 1.0

Introduction

1.0 INTRODUCTION

Madison Seaport Holdings, LLC (the "**Proponent**") submits this Notice of Project Change ("**NPC**") to the Boston Redevelopment Authority (the "**BRA**") pursuant to Section 80A-6 of the Boston Zoning Code (the "**Code**"). The proposed revised project (the "**NPC Project**") will consist of a 22-story, 388-unit apartment building containing approximately 12,895 square feet of supporting ground-floor lobby, retail, and innovation/retail space; a second-floor "Innovation Extended Stay and Collaboration Center", consisting of 28 small extended-stay units with 1,540 square feet of space of shared gathering areas, work zones, conference areas, and business amenities; and approximately 12,600 square feet of shared-use amenity space, consisting of a fitness room, media room, and a game and lounge area on the 21st floor. Apartments on floors 3 through 20 will include a mix of studio, 1-, and 2-bedroom units, with the overall mix weighted towards smaller units consistent with the focus of the City of Boston's Innovation District concept for the area. Parking for 144 vehicles (including 17 stacker spaces) will be provided in a 3-level underground garage. Because the NPC Project's impacts are lower across the board than those of the Previously Approved Project (as defined below), no further review pursuant to the Article 80B Large Project Review process should be required.

On July 31, 2006, the Proponent filed a joint Project Notification Form/Environmental Notification Form (the "**PNF/ENF**") with the BRA and the Massachusetts Executive Office of Energy and Environmental Affairs for a proposed 24-story, 535,000 square-foot, 502-room hotel to be built on a 0.7-acre site adjacent to Congress Street (the "Site") in South Boston's Seaport District (the "**Previously Approved Project**"). The PNF/ENF was noticed in the *Boston Herald* on August 2, 2006. A Public Scoping Session was held on September 7, 2006. On March 8, 2007, the BRA Board approved the Previously Approved Project by issuing a Scoping Determination Waiving Further Review.

The Proponent now seeks to revise the project (the proposed redevelopment of the Site, independent of use, is the "**Project**") to the limited extent described in this Article 80A-6 Notice of Project Change submission. The proposed changes to the Project will allow the City to meet several critical goals simultaneously. New rental housing is urgently needed within Boston, and residential uses are allowed within the zoning subdistrict containing the Site. Accordingly, the Proponent plans to change the Project use from a hotel to apartments incorporating substantial "innovation" space as well as a small ground-floor retail component. The overall impacts of the NPC Project will not increase, but will rather decrease significantly, with the change from the Previously Approved Project to the NPC Project. Because the overall size, massing, and height of the NPC Project building will be less than those of the Previously Approved Project, and because the NPC Project will contain fewer units and total beds than the Previously Approved Project, the change will reduce the intensity of use at the Site substantially.

Hence, consistent with the finding required for approval of a project change pursuant to Article 80A-6, no factor "significantly increases those impacts of the Proposed Project . . . that are within the scope of the required review [so as to] warrant resubmission of the PNF." The Proponent therefore submits that issuance of a revised Adequacy Determination for the NPC Project is appropriate.

1.1 The NPC Project Will Advance Important Planning and Economic Development Goals

The Seaport area has been identified as capable of accommodating millions of square feet of new construction devoted to residential uses – and such uses are in fact *required* to be constructed within the district containing the Project Site. As discussed in detail below, Boston needs additional rental housing. Studies indicate that the surging demand for housing in central urban areas like the Seaport District will only increase in coming years, making the immediate production of significant new supply critical. The NPC Project is financeable at a time when work for the building trades is in short supply. It offers the prospect of hundreds of near-term construction jobs. Hence, the NPC Project will result in a wide range of planning and economic development benefits.

Boston's Need for Additional Multifamily Housing

Boston's residents are primarily renters. Sixty-three percent of the city's housing units are renter-occupied. Despite the strong demand for rental housing, Boston's total number of rental units has declined by almost 14,000 in the past 10 years, in part due to the number of condominium conversions throughout the decade. In 2000, there were 162,302 renter occupied units; by 2010, this number had decreased to 148,929.

At the same time that the city's stock of rental units has been diminishing, Boston's population has been growing – and, as a sign of the city's continued economic vitality, it continues to grow. According to the US Census, Boston's population increased by approximately 36,000 between 2000 and 2009. In that 10-year period, Boston created approximately 11,000 new housing units. With an average of 2.4 people per household, however, Boston would have needed over 15,000 new residential units to house these new residents, without regard to demand.. The NPC Project will contribute significantly to meeting this need.

A number of current social trends and economic factors are expected to combine to further drive up the demand for rental properties in Boston in the near future. These include the following:

♦ Urban living has a renewed appeal today. According to the Wall Street Journal, Boston's population grew faster than did that of its suburbs in 2009.[1]

♦ In 2009, the Wall Street Journal listed Boston among the top ten cities likely to attract recent college graduates - a key demographic the City is hoping to lure to the Innovation District.

♦ Mortgages underwriting standards are tightening, and minimum down payments are increasing, making obtaining mortgage financing more challenging.

♦ Due to perceived economic uncertainty, some of the city residents who *can* qualify for a mortgage under today's enhanced requirements favor renting.

♦ Market demand in Boston has exceeded rental housing production. The *Greater Boston Housing Report Card 2010* observes that, given its historically low vacancy rates and resulting high rents, "the rental market in Greater Boston is quite different from the rental market everywhere else." [2] The authors of this authoritative study caution that "increased demand for housing will result in higher . . . rents *if new supply does not come on line to meet it*. But . . . housing production has remained at anemic levels over the past year. Unless production picks up speed significantly, the increased rents . . . that ensue could well dissuade potential new residents from moving to Massachusetts" [3]

Consistency of the NPC Project with Area Planning

The Seaport District contains much undeveloped land, and thus is one of the few areas in Boston where the large-scale production of new residential units is possible. The Seaport Public Realm Plan, like the PDA Master Plan for the adjacent Fort Point Channel/100 Acres area, recognizes the need for residential uses in the area to be expanded dramatically. Housing is therefore not only an *allowed* use pursuant to the underlying zoning for the Site, but the extensive development of new housing is in fact *mandated* by the planning for the area. Both plans call for 30 percent of all new development within the Innovation District area to consist of housing. Currently, however, only 12 percent of the new development square footage in the Seaport is devoted to residential uses. The approval of the NPC Project will help further this critical planning goal.

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1 http://blogs.wsj.com/economics/2010/06/22/suburb-population-growth-slows/
2 *Id.*, p. 37.
3 *Id.*, pp. 18-19.

The BRA's planning for the Innovation District likewise calls for housing, and seeks to "build flexible housing options to work for flexible lifestyles." As described on the Innovation District's website,[4] one of the strategies for development of the District is to "work closely with design professionals and developers to produce a palette of new housing options to fit the range of lifestyles and needs of the innovation workforce." The proposed studio, 1-bedroom, and 2-bedroom apartments will help meet the need for housing that appeals to young entrepreneurs. The Innovation Extended Stay units on the second floor of the building will provide a novel type of work/live facility for accommodating the unique needs of biotech, software, or other technology sector employees assigned to collaborative project- or training-related stints in Boston. At the same time, the proposed dedicated innovation/retail space on the ground floor, Innovation Collaboration Center on the 2nd floor, and shared-use amenity space on the top floor will help bring these entrepreneurs together to create a vibrant work/live community.

In summary, the NPC Project is aligned with both market conditions and planning principles. The NPC Project can be financed in today's capital markets, and its construction will substantially further the planning and economic development goals for the District.

1.2 The NPC Project Complies Fully with the Article 80A-6 NPC Criteria

Code Section 80A-6 sets out seven factors for the BRA Director to consider when making a determination whether a project change is likely to result in increased impacts, and thus requires further study through the Article 80B Large Project Review process. As detailed below, none of the enumerated factors requires resubmission of the PNF/ENF or other continued review.

The change will not increase the proposed project's size or intensity of use.

The proposed NPC Project is smaller than the Previously Approved Project. The proposed NPC Project structure will be only slightly shorter than the Previously Approved Project (by approximately four feet), but its total square footage will be reduced substantially: by approximately 61,000 square feet. The intensity of use at the Site will also diminish greatly. The proposed hotel was to have 502 beds, while the proposed apartment building will have 388 units (specifically, the NPC Project will include 90 studios, 234 1-bedroom, 36 2-bedroom apartments, and 28 extended-stay units for a total of 424 beds). This reduction in the number of beds will significantly lessen the Project's traffic impacts and its water and sewer demand.

The change will not generate additional or greater impacts of the type that may be examined by the applicable review.

As documented in this NPC submission, the impacts of the NPC Project will be less than those of the Previously Approved Project for all categories monitored through Article 80B review. Impacts related to the intensity of use, such as water, sewer, and traffic, as well as architecturally-related impacts, such as wind and shadow, will be less.

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[4] http://www.innovationdistrict.org/about-2/the-strategy/.

The change will not increase traffic impacts or the number of parking spaces proposed.

The proposed NPC Project will have fewer parking spaces and will generate less traffic than the Previously Approved Project.

Parking spaces will be reduced from a total of 168 spaces (150 spaces plus an additional 18 valet spaces) proposed for the hotel to a total of 144 (127 spaces plus 17 stacker spaces) for the apartment building.

Traffic will be reduced, both in terms of total average daily trips and peak hour volumes. The total number of daily trips will decrease by nearly half, from 1,558 for the Previously Approved Project to 936 for the NPC Project. The AM peak hour vehicle trip generation will decrease from 107 for the approved hotel to 46 under the current proposal; the evening peak will decrease from 113 to 56 vehicle trips.

There is no change in the expected commencement or completion date of the project or the schedule of work for the project.

Like many of the stalled Boston projects recently revived through the Notice of Project Change process, the Previously Approved Project was not able to obtain financing during the recent downturn. As revised, however, the overall construction schedule for the NPC Project will be comparable to that proposed for the Previously Approved Project. Construction is expected to commence in late 2011 and be completed in late 2013.

The project site has not changed.

The NPC Project, like the Previously Approved Project, is proposed for the 399 Congress Street Site.

The proposed project change does not require additional zoning relief.

The NPC Project requires no additional zoning relief compared to the Previously Approved Project. The proposed new use of the Project is allowed by the underlying zoning.

Changes in the surrounding area have been minimal, and consistent with expectations.

Extensive development has been planned for the Seaport / Fort Point Channel area for many years, only a portion of which of this development has gotten underway since the approval of the Previously Approved Project. One Marina Park Drive at Fan Pier is the most recent construction in the immediate area of the Site. The Seaport Square development, which will eventually occupy the area surrounding the Site on the opposite side of Congress Street, was approved by the BRA in 2010, but has not yet begun construction.

In conclusion, the NPC Project will result in no increased environmental impacts that require further study through the Article 80B Large Project Review process. Hence, no factor "significantly increases those impacts of the Proposed Project . . . that are within the scope of the required review [so as to] warrant resubmission of the PNF," consistent with the finding required for approval of a project change pursuant to Article 80A-6.

Section 2.0

NPC Project Description and Comparison to Previously Approved Project

2.0 NPC PROJECT DESCRIPTION AND COMPARISON TO PREVIOUSLY APPROVED PROJECT

This section describes the NPC Project in detail and compares it to the Previously Approved Project. As this Section details, the proposed NPC Project will be significantly smaller in size than the Previously Approved Project.

For a discussion of the NPC Project's architecture and urban design, please see Section 5.0.

2.1 NPC Project Dimensions

The NPC Project will consist of a 22-story, 388-unit apartment building containing approximately 12,895 square feet of supporting ground-floor lobby, retail, and innovation/retail space, an approximately 1,540 square-foot Innovation Extended Stay and Collaboration Center, and approximately 12,600 square feet of shared use amenity space. Parking for 144 vehicles (including 17 stacker spaces) will be provided in a 3-level underground garage.

Having a footprint of approximately 21,136 square feet, the NPC Project will occupy most of the 30,435 square-foot, oval-shaped parcel. The remainder of the parcel will be hardscaped and landscaped. The height of the building determined per Code Article 2A, *i.e.*, measured to the top of the roof beams of the 21st floor (which is the highest occupied level), will be approximately 231 feet. The mechanical penthouse and exhaust will add 21 feet, bringing the total height of the structure above grade to approximately 252 feet. The building will have a total internal area, including below-grade parking, of approximately 471,308 square feet. Its gross square footage determined per Article 2A will be approximately 377,239 square feet.

The ground level of the NPC Project will include approximately 12,895 square feet of lobby, innovation, and retail space.

The second floor will comprise the Innovation Extended Stay and Collaboration Center. This includes 28 work/live extended stay units (approximately 14,300 square feet); approximately 1,540 square feet of shared gathering area, including structured networking receptions, state of the art "plug and play" work zones, conference areas, and a full array of business amenities; and an approximately 2,680 square-foot management office.

Floors 3 through 20 will contain residential units, for a total residential gross square footage of approximately 333,612 square feet. The 21st floor will contain approximately 12,584 square feet of shared-use amenity space, including a fitness room, media room, dining space, kitchen/café, lounge area, and bar area, as well as a green roof and an outdoor patio (approximately 12,198 square feet not including the green roof).

Table 2-1 summarizes the proposed NPC Project's dimensions.

Table 2-1 NPC Project Dimensions

Floor	Description	Square Footage	Gross Square Footage*	Height (feet)	Studios	1- bedroom	2-bedroom	Total
-3	Parking	23,230	0	(below-grade)				
-2	Parking	23,230	0	(below-grade)				
-1	Parking	23,230	0	(below-grade)				
1	Lobby / retail, Innovation/Retail	16,111	12,895	20.00				
2	Management Office, Innovation Business Center, and Extended Stay Units	19,002	18,534	10.33	28 Extended Stay Units			
3-20	Residential Units	19,002	18,534	10.33 per floor	5 per floor (90 total)	13 per floor (234 total)	2 per floor (36 total)	20 per floor (360 total)
x	Transfer		0	5.00				
21	Amenity	12,584	12,198	13.00	Fitness, Media, Conference, Kitchen Café, Lounge, Game/Bar Area, Outdoor Patio, and Green Roof (GSF does not include the outdoor patio or green roof.)			
22	Mechanical	11,885	0	18.00				
x	Breach + Exhaust		0	3				
	Total	**471,308**	**377,239**	**252.27 (231' per Art. 2A)**	**113**	**245**	**38**	**396**

* Defined per Boston Zoning Code Article 2A

2.2 NPC Project Dimensions Compared to Previously Approved Project

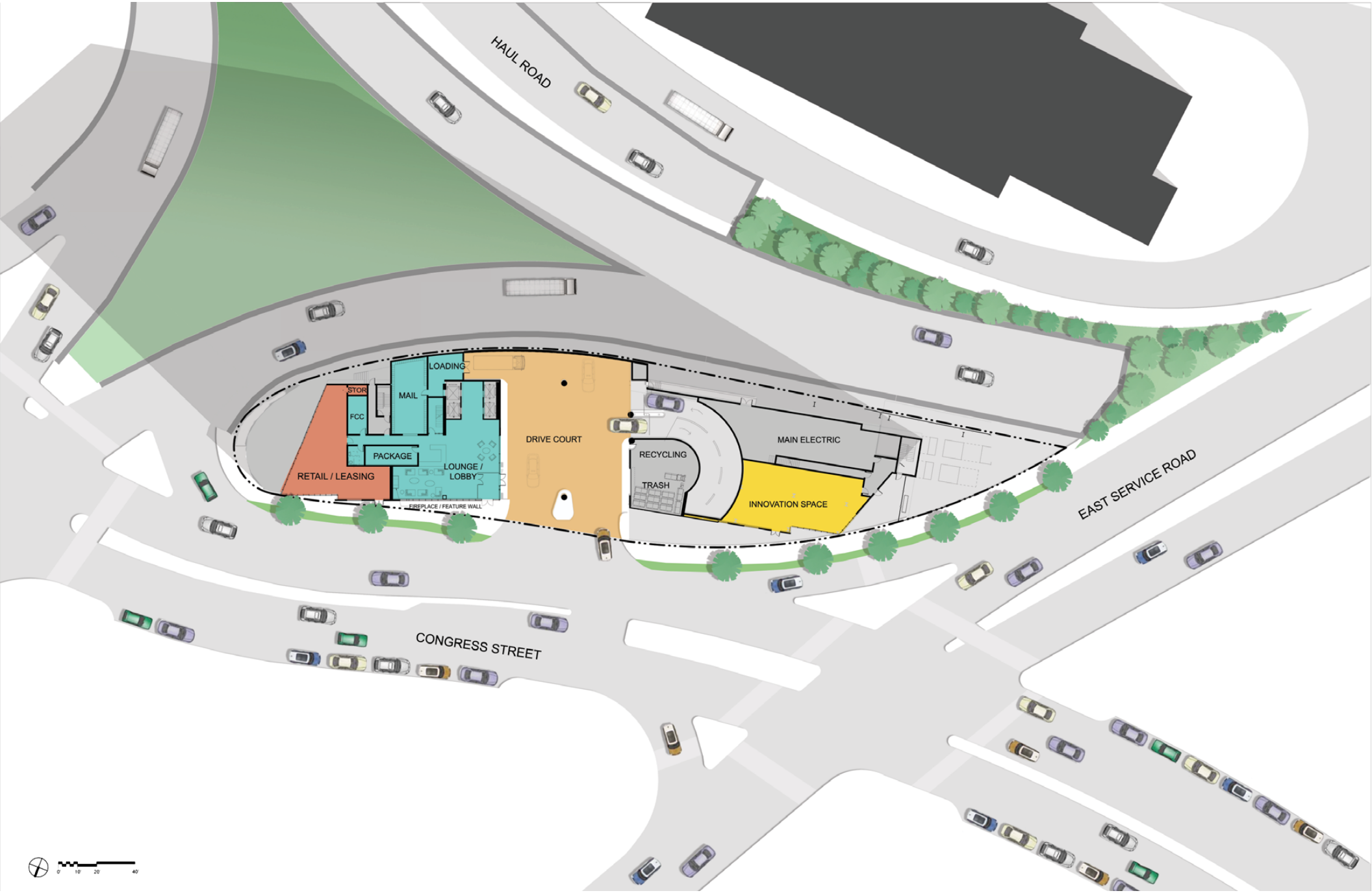
The proposed NPC Project will be significantly smaller in size than the Previously Approved Project. Table 2-2 compares the dimensions of the two projects:

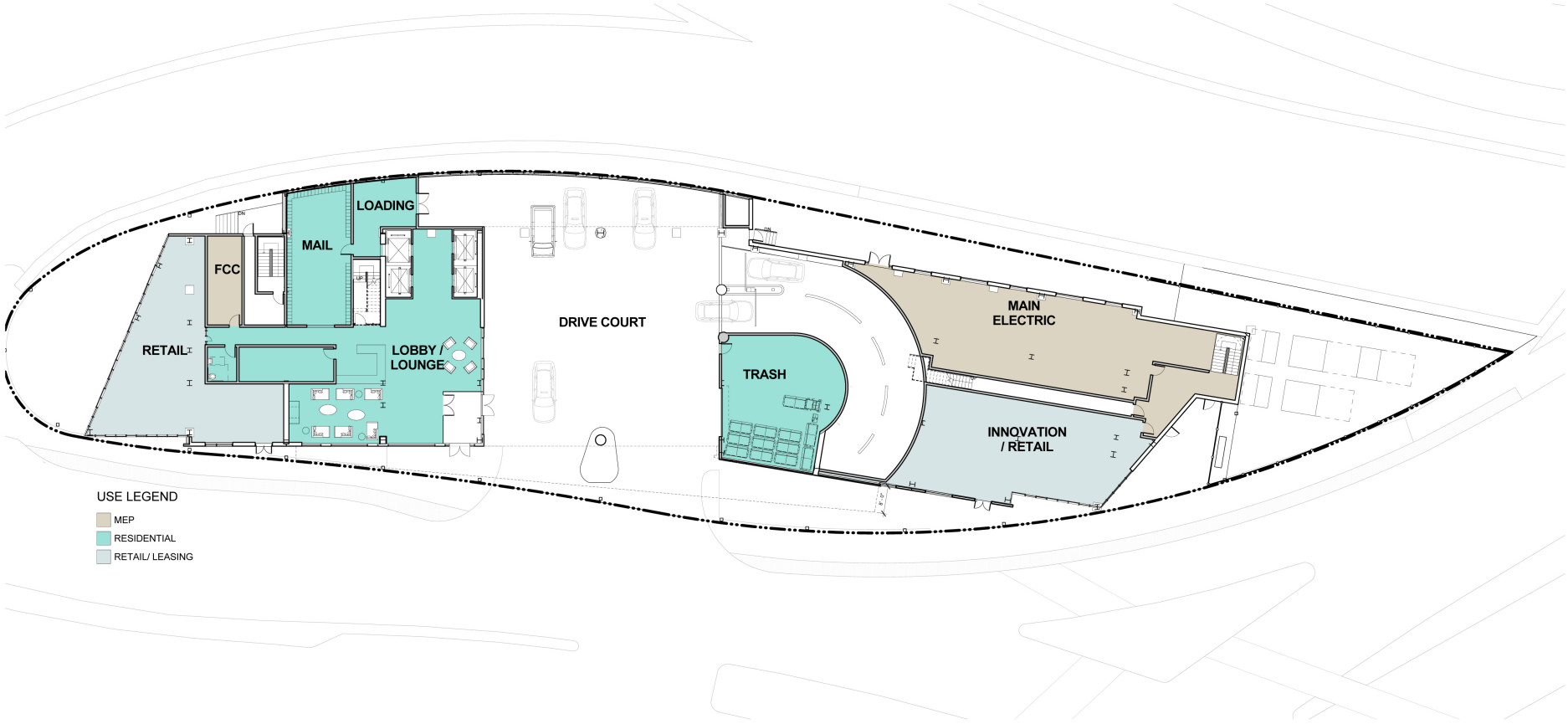
Table 2-2 Size Comparison Between NPC Project and Previously Approved Project

Dimension	Previously Approved Project	NPC Project	Change
Site Area	0.7-ac (30,435 sf)	0.7-ac (30,435 sf)	0
Total Square Footage	532,489 sf	471,308 sf	-61,181 sf
Gross Floor Area per Article 2A	443,814 sf	377,239 sf	-66,575 gsf
Floor Area Ratio (FAR) per Article 2A	14.6	12.4	-2.2
Number of Floors	24 (including six levels of above-ground parking)	22 (not including three levels of underground parking)	-2
Zoning Height (to top of roof beam of highest occupied floor)	240.5′	231′	-9.5′
Total Height (including mechanical penthouse)	256 feet	252	-4′
Number of Units	502 Rooms	388 units (424 beds)	-78 beds
Number of Parking Spaces	168 (150 + 18 Valet spaces)	144 (127 + 17 stackers)	-24

Figures 2-1 through 2-8 show the NPC Project's location, floor plans, and elevations.


NORTHERN AVENUE
SEAPORT BOULEVARD
CONGRESS STREET
SUMMER STREET
EAST SERVICE ROAD
Project Site
SUMMER STREET
D STREET


HAUL ROAD
LOADING
STOR
MAIL
FCC
PACKAGE
RETAIL / LEASING
LOUNGE / LOBBY
FIREPLACE / FEATURE WALL
DRIVE COURT
RECYCLING
TRASH
MAIN ELECTRIC
INNOVATION SPACE
EAST SERVICE ROAD
CONGRESS STREET
0' 10' 20' 40'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MAIL
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RETAIL
LOBBY / LOUNGE
DRIVE COURT
TRASH
MAIN ELECTRIC
INNOVATION / RETAIL
USE LEGEND
MEP
RESIDENTIAL
RETAIL/ LEASING


MANAGEMENT/LEASING
2680 SF
UNIT 216
550 SF
INNOVATION
BUSINESS
CENTER
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UNIT 217
320 SF
UNIT 218
330 SF
UNIT 219
470 SF
UNIT 220
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340 SF
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UNIT 210
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UNIT 227
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UNIT 228
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UNIT 230
360 SF
UNIT 206
360 SF
UNIT 205
270 SF
UNIT 204
350 SF
UNIT 203
360 SF
UNIT 202
350 SF
UNIT 201
360 SF
UNIT 232
340 SF
UNIT 231
350 SF

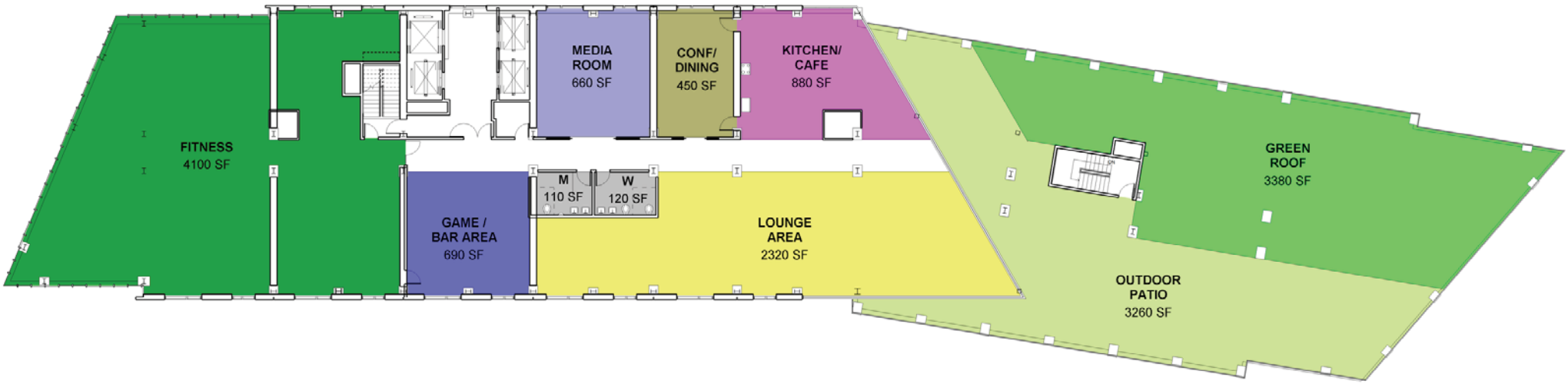
Madison Properties
EPSILON ASSOCIATES INC.
ADD Inc Group One Partners, Incorporated

399 CONGRESS STREET

BOSTON, MA

Figure 2-5 Floors 3-20

Project Description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4100 SF
MEDIA
ROOM
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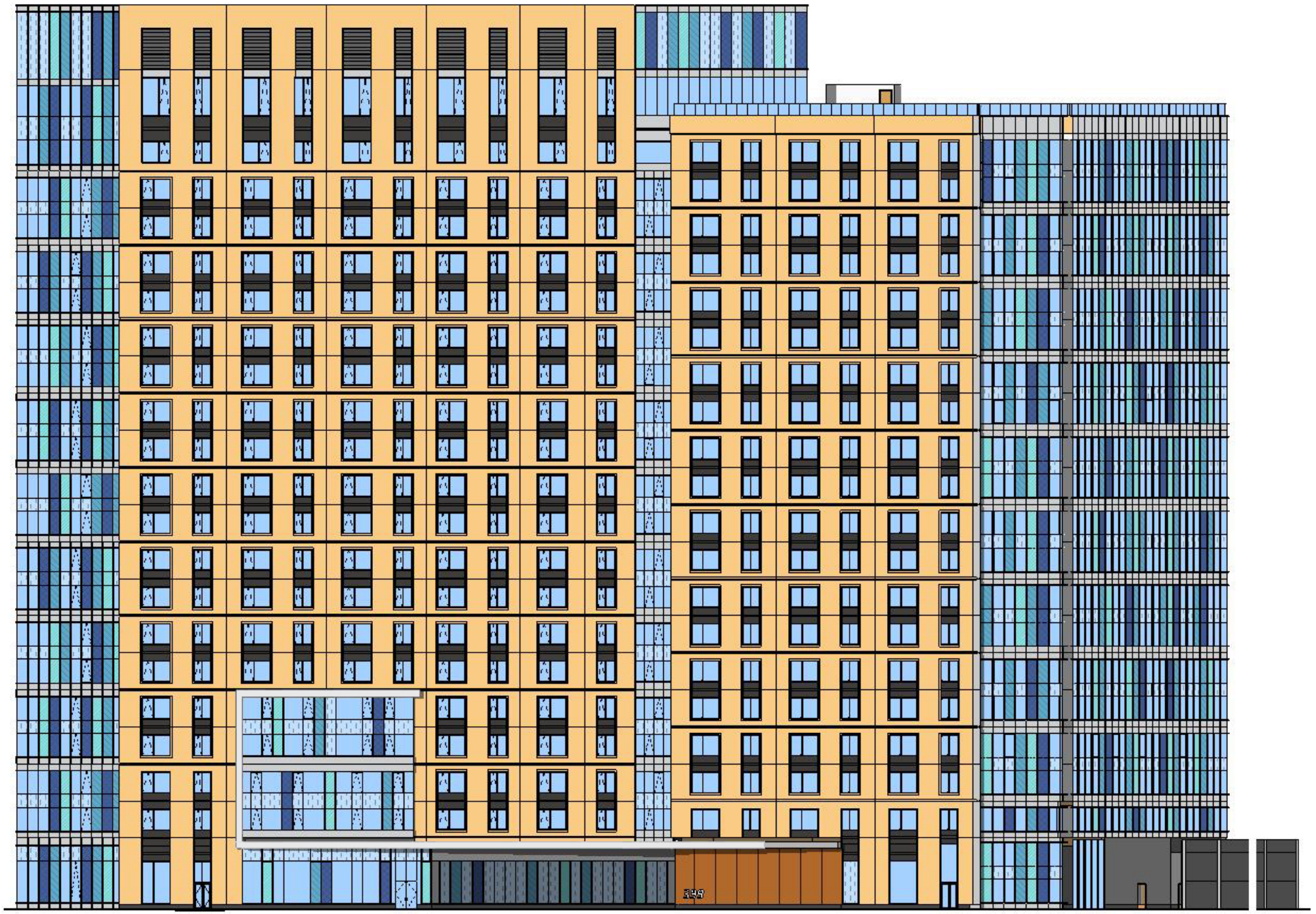
CONF/
DINING
450 SF
KITCHEN/
CAFE
880 SF
GREEN
ROOF
3380 SF
M
110 SF
W
120 SF
GAME /
BAR AREA
690 SF
LOUNGE
AREA
2320 SF
OUTDOOR
PATIO
3260 SF



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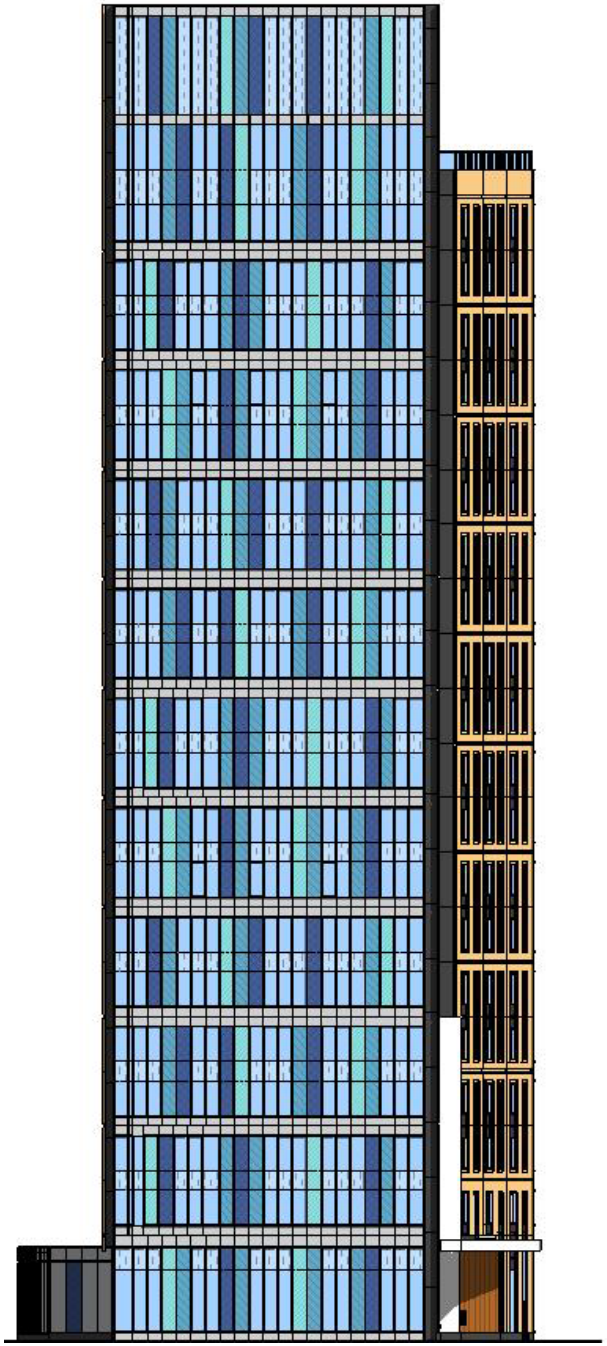
EPSILON ASSOCIATES INC.
ADD Inc Group One Partners, Incorporated

399 CONGRESS STREET

BOSTON, MA

Figure 2-7 North Elevation



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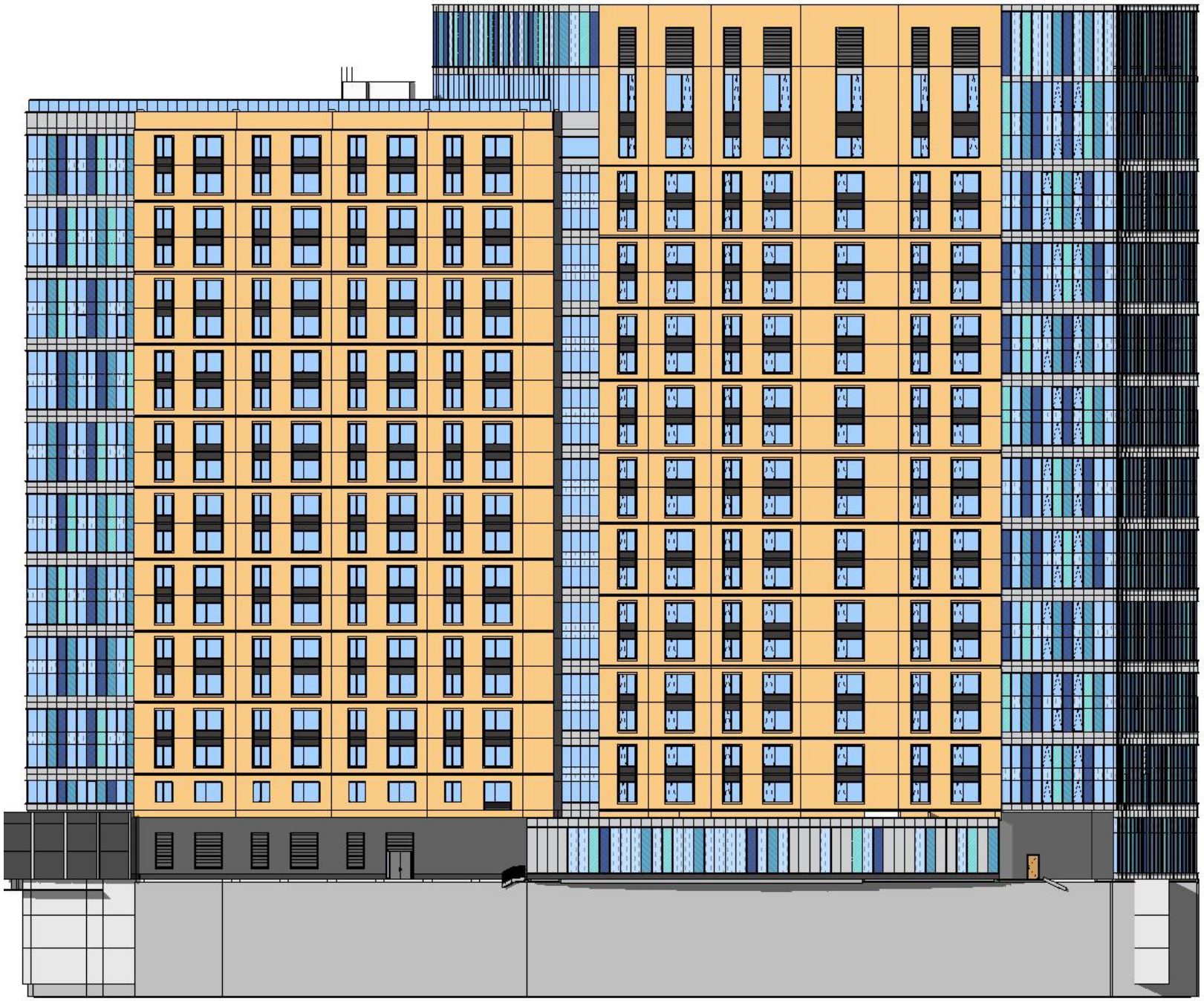
EPSILON ASSOCIATES INC.
ADD Inc Group One Partners, Incorporated

399 CONGRESS STREET

BOSTON, MA

Figure 2-8 East Elevation

Project Description



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399 CONGRESS STREET

BOSTON, MA

Figure 2-9 South Elevation

Section 3.0

Transportation

3.0 TRANSPORTATION

This section provides an evaluation and summary of the transportation elements of the NPC Project, including a comparison between the transportation impacts of the Previously Approved Project and the reduced impacts of the current proposal. It includes an analysis of estimated trip generation characteristics for the NPC Project and qualitatively describes anticipated parking conditions, loading and service activities, pedestrian/bicycle amenities, and other important transportation mitigation and improvement actions that will be provided in connection with the NPC Project. The purposes of these analyses are to:

- Describe the transportation-related characteristics of the NPC Project;
- Quantify the transportation impacts that will be generated by the NPC Project and compare those impacts to those of the Previously Approved Project;
- Develop a set of mitigation strategies and traffic improvement measures that will help to lessen the transportation effects of the proposed NPC Project; and
- Demonstrate that these transportation mitigation efforts will exceed the requirements of the BRA and the BTD and will serve as exceptional public benefits as they relate to transportation issues.

3.1 Project Change Description

The Previously Approved Project included 502 rooms, comprising a mix of both extended-stay and standard hotel rooms. The NPC Project proposes 360 residential units with approximately 1,700 square feet of supporting ground-floor retail and 28 extended-stay rooms with 1,540 square feet of supporting space for an innovation business center.

The Project's access and egress will continue to be provided by a single driveway on Congress Street. The location and operational functionality of the driveway is consistent with the Previously Approved Project. The current proposal has 24 fewer parking spaces (144 including stackers) compared to the Approved 2006 proposal (168 including valet spaces).

3.2 Trip Generation

Trip generation for the proposed NPC Project was developed using the Institute of Transportation Engineers ("**ITE**") trip rates. The ITE land use codes used included those for high-rise apartments (LUC 222), hotel (LUC 310) and shopping center (LUC 820). ITE Trip Generation for Hotel was used to calculate the trips related to the 28 extended-stay rooms in conjunction with the Innovation Business Space associated with these rooms. The resulting unadjusted trips, not accounting for other modes of transportation, are summarized in Table 3-1. Person trips were calculated using the National Household

Travel Survey vehicle occupancy rates of 1.2 persons per vehicle for residential and 1.8 persons per vehicle for retail. The person trip results are also provided in Table 3-1.

Table 3-1 Person Trip Generation Summary

	ITE Trip Generation*	Person Trips
Morning Peak Hour		
In	40	49
Out	90	109
Total	130	158
Evening Peak Hour		
In	93	115
Out	66	83
Total	159	198
Weekday Daily		
In	988	1,220
Out	988	1,220
Total	1,976	2,440

*Unadjusted vehicle trips

Since the South Boston Seaport District is a predominantly mixed-use, transit-oriented and pedestrian-friendly area, not all trips made to the Site will be vehicle trips. The mode split presented in Table 3-2 is from BTD's Zone 13 guidelines and reflects the commuting trends in the Seaport District.

Table 3-2 Peak Hour Mode Split

Mode (percent)	Residential	Retail
Automobile	34%	52%
Transit	24%	15%
Walk/Bike/Other	42%	33%
Total	100%	100%

Source: BTD Zone 13

These mode shares were applied to the trip generation results in order to obtain vehicle trips, transit trips, and pedestrian trips. The auto mode split includes all vehicle-based trips including taxis. Vehicle, transit and pedestrian trips are shown in Table 3-3 below.

Table 3-3 Trip Generation Summary

	Transit Trips	Pedestrian Trips	Vehicle Trips
Morning Peak Hour			
In	11	20	14
Out	27	47	32
Total	38	67	46
Evening Peak Hour			
In	27	47	33
Out	19	34	23
Total	46	81	56
Weekday Daily			
In	228	414	468
Out	228	414	468
Total	**456**	**828**	**936**

As shown in Table 3-3, the proposed NPC Project is expected to generate approximately 46 new vehicle trips (14 in, 32 out) during the weekday morning peak hour, and 56 new vehicle trips (33 in, 23 out) during the weekday evening peak hour.

3.2.1 Trip Generation Comparison

As mentioned previously, the development program proposed in connection with this NPC represents a change from hotel to residential, extended-stay rooms, and retail. As a result, the trip generation associated with the NPC Project is anticipated to be measurably lower than that of the Previously Approved Project, as shown in **Table 3-4**.

Table 3-4 Vehicle Trip Generation Comparison

	Previously Approved Project	NPC Project	Trip Generation Comparison
Morning Peak Hour			
In	65	14	(-51)
Out	42	32	(-10)
Total	107	46	(-61)
Evening Peak Hour			
In	60	33	(-27)
Out	53	23	(-30)
Total	113	56	(-57)

Table 3-4 Vehicle Trip Generation Comparison (Continued)

	Previously Approved Project	NPC Project	Trip Generation Comparison
Weekday Daily			
In	779	468	(-311)
Out	779	468	(-311)
Total	1,558	936	(-622)

As shown in Table 3-4, the proposed NPC Project is expected to generate 61 fewer trips during the weekday morning peak hour and 57 fewer vehicle trips during the weekday evening peak hour than the Previously Approved Project. For both the morning and evening peak hours, the NPC Project is expected to generate less than half the total trips that were projected to be generated by the Previously Approved Project.

3.3 Traffic Impact Assessment

The transportation study that was prepared and submitted in support of the Previously Approved Project conducted a comprehensive and thorough analysis of the transportation impacts as required by both the BRA/Article 80 and the MEPA development review and approval processes. That study assessed the transportation impacts of the Previously Approved Project and laid out a comprehensive package of transportation mitigation and improvement actions to lessen its transportation impacts and provide improvements to the future transportation infrastructure.

As shown in Table 3-4, the traffic impacts of the NPC Project are distinctly lower than those of the Previously Approved Project, which were studied in detail. Further, access to the current proposed NPC Project is identical to those of the approved Previously Approved Project. The NPC Project's garage ramps and loading facility will remain located along Congress Street. Consequently, the impact analysis that was prepared and submitted in connection with the review and approval of the Previously Approved Project continues to provide an accurate summary of transportation impacts that can be expected with the future construction of the proposed NPC Project.

The Proponent will continue to honor the wide array of transportation mitigation and improvement actions that were committed to under the previous review and approval process. These improvement actions are described in detail below.

3.4 Parking

The Previously Approved Project included 150 off-street structured parking spaces (plus 18 valet spaces) in four levels of aboveground parking. This parking was assumed to be valet parking for hotel patrons. The NPC Project includes a total of 144 spaces composed of 127 self-park spaces and an additional 17 stackers. This supply of 0.36 spaces per unit is consistent with the BTD's recommended guidelines.

Additional parking is also available within the immediate vicinity of the Site, including various Massport and private surface parking lots and at the Seaport Hotel. Future development in the South Boston Seaport District is expected to replace existing parking with additional structured parking available for public use. The NPC Project's parking supply complements the shared-parking strategy for the entire area. The NPC Project will also comply with the requirements of the South Boston Parking freeze.

3.5 Loading and Service Management

Service and loading activities for the development will be accommodated within the building. Access to the main loading entrance is via the driveway located on Congress Street.

The majority of goods and services delivered to the NPC Project Site will arrive by single-panel trucks or smaller delivery vehicles such as vans. The loading docks have been designed to accommodate 35-foot vehicles (SU-35) without encroaching onto walks and drives. Occasionally, larger vehicles may visit the Site. The dock staff will actively manage these occasions. In no case will service and loading vehicles be allowed to park on Congress Street.

3.6 NPC Project Improvements

The Proponent has developed a transportation improvement and enhancement plan to help alleviate transportation impacts generated by the proposed NPC Project and provide transportation infrastructure enhancements to the surrounding area. This transportation improvement plan includes the following elements:

- Intersection safety improvements;
- Parking management strategies;
- Transportation demand management enhancements;
- Pedestrian access and open space improvements; and
- Construction management actions.

Table 3-5 lists the individual transportation improvement elements that are proposed and the purpose and benefit of that action.

Table 3-5 399 Congress Street Transportation Improvements and Enhancements

Improvement Element	Description	Purpose/Benefit
Congress Street westbound pocket left-turn lane.	Design new intersection geometry and traffic control at the intersection of Congress Street/East Service Road/Ramp D/Ramp I to include provision of a pocket left-turn lane into the Site.	Will provide for improved wayfinding into the site. Will reduce unnecessary traffic circulation on other Seaport District streets.
On-Site Parking	Provide 144 parking spaces	Provide parking on-site at a rate of 0.36 spaces per residential unit.
Transportation Demand Management Actions	Provide a wide array of TDM programs and amenities that seek to encourage the use of transit as a regular means of commuting.	Will encourage shift in mode share from auto to transit by retail employees.
Bicycle Parking	Provide bicycle racks on-site as part of the NPC Project	Will encourage shift in mode share from auto to bicycle.
Prepare Transportation Access Plan Agreement	Prepare and submit detailed TAPA to the BTD.	Will formalize the improvement plan and schedule for implementation.
Prepare Construction Management Plan	Prepare and submit detailed Construction Management Plan.	Will minimize construction impacts.

3.7 Proactive Site Management

The NPC Project is located on Congress Street, between Ramp I/C and Ramp D/F leading to the Massachusetts Turnpike/Interstate 90. A critical component of the NPC Project will be to actively manage the ground floor level to ensure that vehicles are efficiently managed within the entry area. The Proponent will manage the vehicle entry such that vehicle back-ups will not occur along Congress Street adjacent to the Site. Only residents will be provided with on-site parking. All retail customers and employees will be required to park in other nearby public parking facilities or utilize public transportation.

3.7.1 Congress Street Pocket Left-Turn Lane

The Proponent is planning to modify the Congress Street westbound approach toward East Service Road to include a short pocket left-turn lane into the Site driveway within the existing roadway median. The planned pocket left-turn lane into the Site from Congress Street will result in a net decrease in peak hour traffic volumes along other streets in the Seaport District, particularly along B Street and Seaport Boulevard, by allowing a direct entry point into the NPC Project.

Key features of how this amenity would operate include the following:

♦ The lane can reasonably have a length of about 80 feet, which could accommodate up to four automobiles.

♦ This action would allow for an important and convenient vehicle movement into the Site.

♦ Because the opposing movement (Congress Street eastbound) generally operates under a constant "green" flow, there is not a reasonable opportunity to operate the lane under stop sign control.

♦ Observation of traffic operations conditions at the Congress Street/East Service Road/Ramp D/Ramp I intersection indicates that the lane could be run as a protected movement if the opposing Congress Street eastbound phase were split with the westbound phase, allowing for a short (and actuated) protected phase for this movement.

♦ Future planning and design of this improvement will require careful coordination and review with both the BTD and the Massachusetts Highway Department.

3.7.2 Transportation Demand Management

Travel demand management strategies for the South Boston Seaport District must be coordinated in order to provide efficiently for the transportation needs of area employees, as well as residents, while not unnecessarily duplicating services. Such cooperation is critical to the success of all of the developments planned for this area. As it evolves, TDM strategies must be flexible enough to meet the changing needs of the growing district.

The Proponent's TDM strategies include the following:

♦ On-site Employee Transportation Coordinator;

♦ Transportation Management Association Membership;

♦ Marketing information including MBTA and water transportation;

♦ Ridematching;

♦ Vanpool programs;

♦ Preferential parking for carpool/vanpools;

♦ On-site transit pass sales;

♦ Guaranteed Ride Home Program;

- Secure, indoor bicycle storage;
- Parking pricing discounts for carpools and vanpools;
- Flextime & Staggered work hours (when feasible);
- Compressed work weeks (when feasible);
- Telecommuting (when feasible); and
- Showers for bicyclists.

Within the Boston metropolitan area, Transportation Management Associations ("**TMAs**") have been an effective way to increase employee ride-sharing and transit use. TMAs, which are private non-profit organizations formed by employers, or groups of employers, provide a wide variety of TDM elements to members' employees. These services include ridematching for car and vanpools, vanpool coordination services, guaranteed ride home services, and alternative transportation marketing. By making these services readily available, tenants of the area will be more likely to implement elements of the TDM program.

The Proponent will join the Seaport District TMA to provide these TDM programs and to coordinate with the neighboring buildings and tenants in the area.

Finally, the proponent is exploring the potential to house a carsharing service, such as ZipCar, in the facility.

Section 4.0

Environmental Component

4.0 ENVIRONMENTAL COMPONENT

This section compares the expected impacts of the NPC Project to those of the Previously Approved Project. As discussed in Section 2, because the overall size of the building has been reduced substantially, its environmental impacts are expected to decrease proportionately. In particular, because the NPC Project will contain fewer units/beds than were proposed for the Previously Approved Project, its impacts related to the intensity of use will generally decrease.

4.1 Wind

A wind tunnel study of pedestrian level winds ("**PLW**") around the Site will be performed in the coming months by Rowan Williams Davies & Irwin, Inc. ("**RWDI**"), an internationally recognized leader in wind impact analyses. Based upon a preliminary review of the proposed NPC Project's design, RWDI believes that PLW impacts will be similar to those of the Previously Approved Project.

The Proponent is committed to minimizing any adverse wind impacts to pedestrians that the proposed NPC Project might cause. The wind tunnel study will estimate potential PLWs in the vicinity of the proposed NPC Project and compare them to the BRA wind speed criteria. Particular attention will be paid to the heavy pedestrian use areas along Congress Street. Should the analysis indicate that uncomfortable wind impacts are likely to result from the NPC Project, the Proponent will take steps to mitigate those conditions to the extent practicable through such measures as modifying the architecture, installing canopies, wind screens, and landscaping. The results of the wind study will be submitted to the BRA when they become available.

4.2 Shadows

Because the footprint of the redesigned NPC Project building will sit within that of the original proposal, and the structure will be slightly shorter overall, the shadow impacts of the new design will be no greater than those of the Previously Approved Project. Nor have there been any new buildings constructed in the immediate vicinity of the NPC Project since 2006 that would be impacted.

A shadow analysis was conducted to assess the NPC Project's impacts for the hours of 9:00 am, 12:00 noon, and 3:00 pm during the spring equinox (March 21) summer solstice (June 21), autumnal equinox (September 21), and the winter solstice (December 21). Impacts at 6:00 pm during the summer and autumn were also examined. Adjustments were made in the computer software to adjust for Daylight Savings Time. The study used the applicable Altitude and Azimuth data for Boston presented in Appendix B of the BRA's 2006 *Development Review Guidelines*. Figures depicting the expected shadow impacts are presented in Figures 4-1 through 4-14.

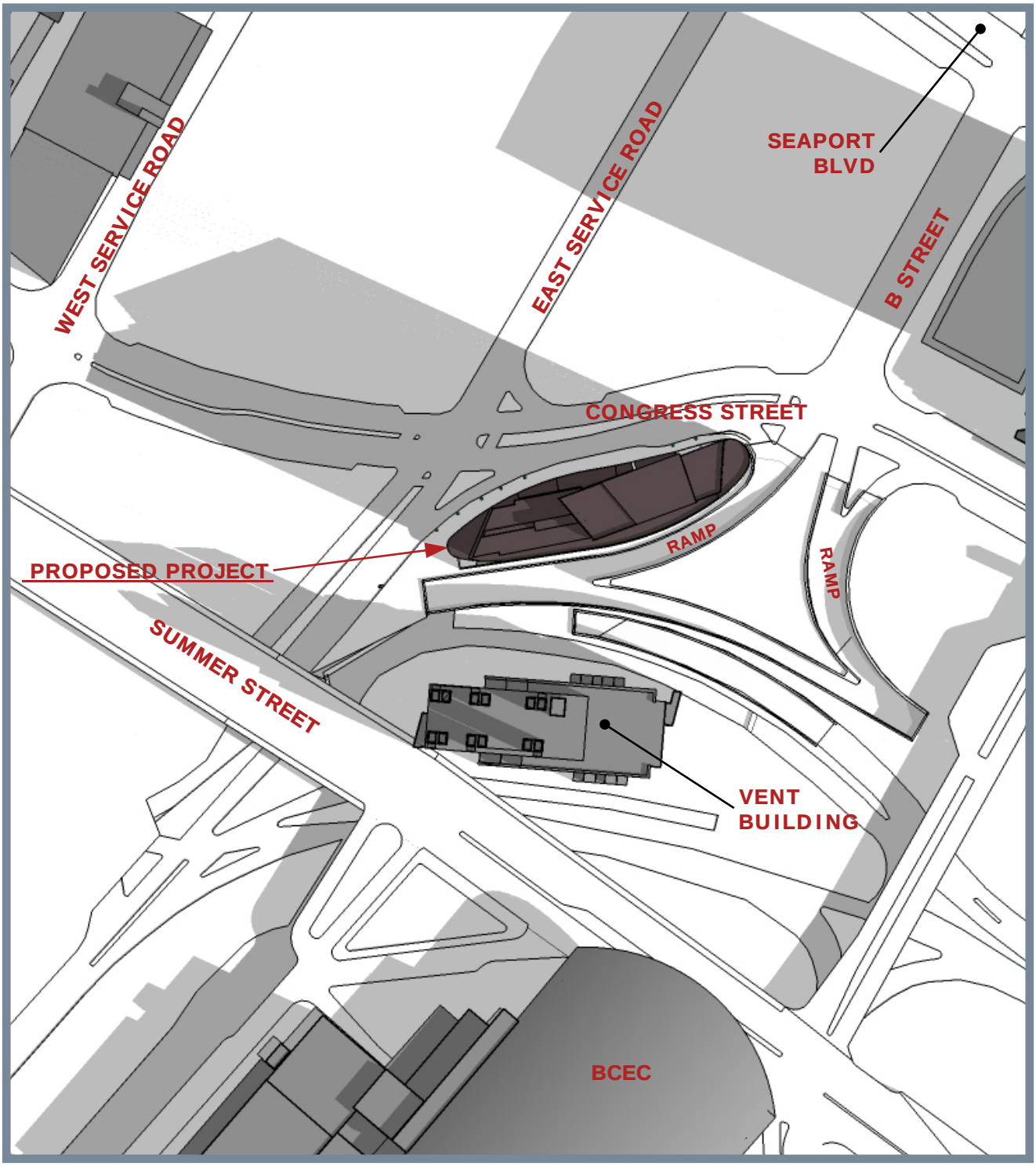

Figure 4-1
Proposed Condition at 9:00 am, March 20th*

*Shadows reflect Daylight Savings Time, when applicable.

N

March 20, 2011

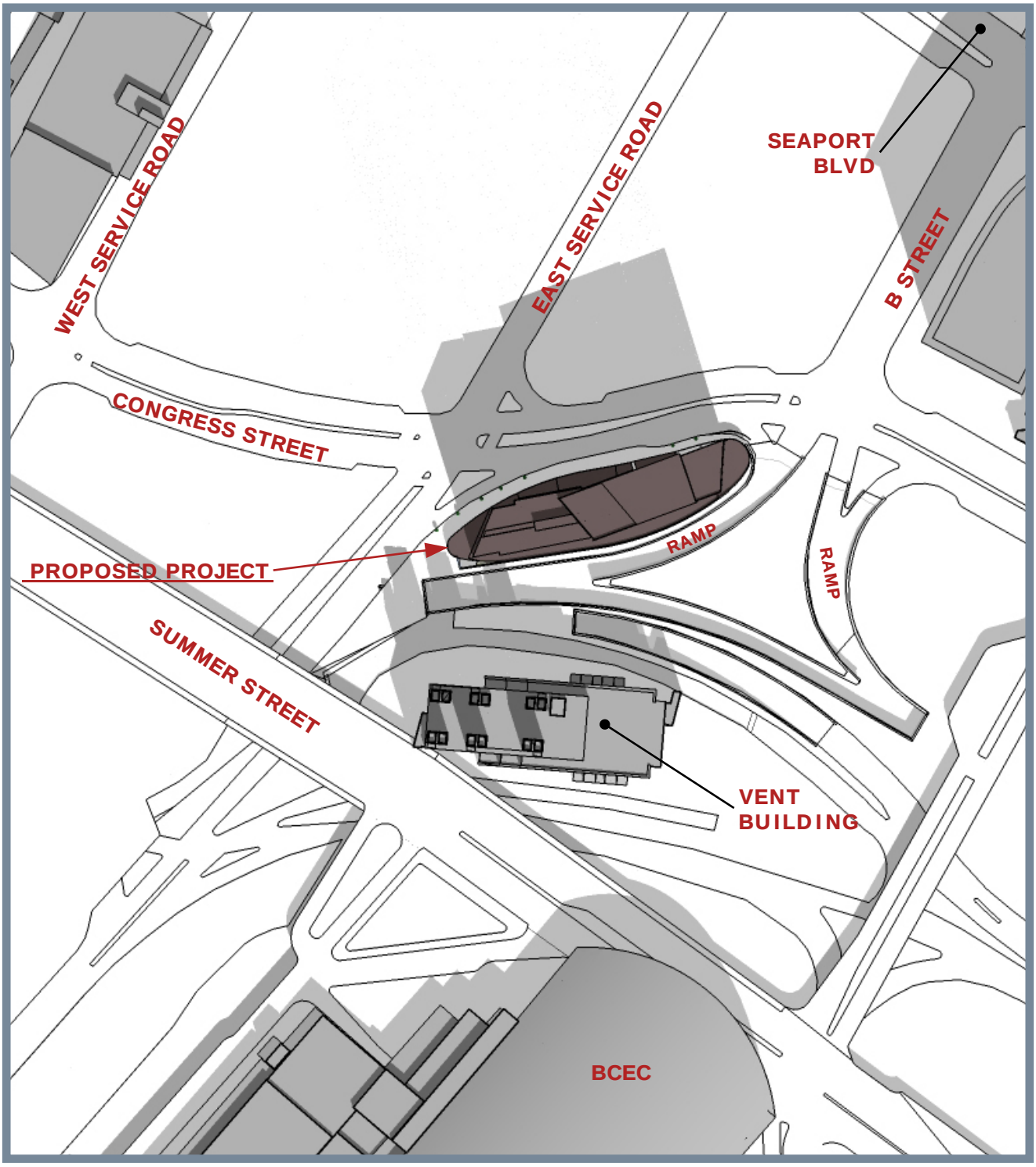

Figure 4-2
Proposed Condition at 12:00 pm, March 20th*

*Shadows reflect Daylight Savings Time, when applicable.

N

March 20, 2011

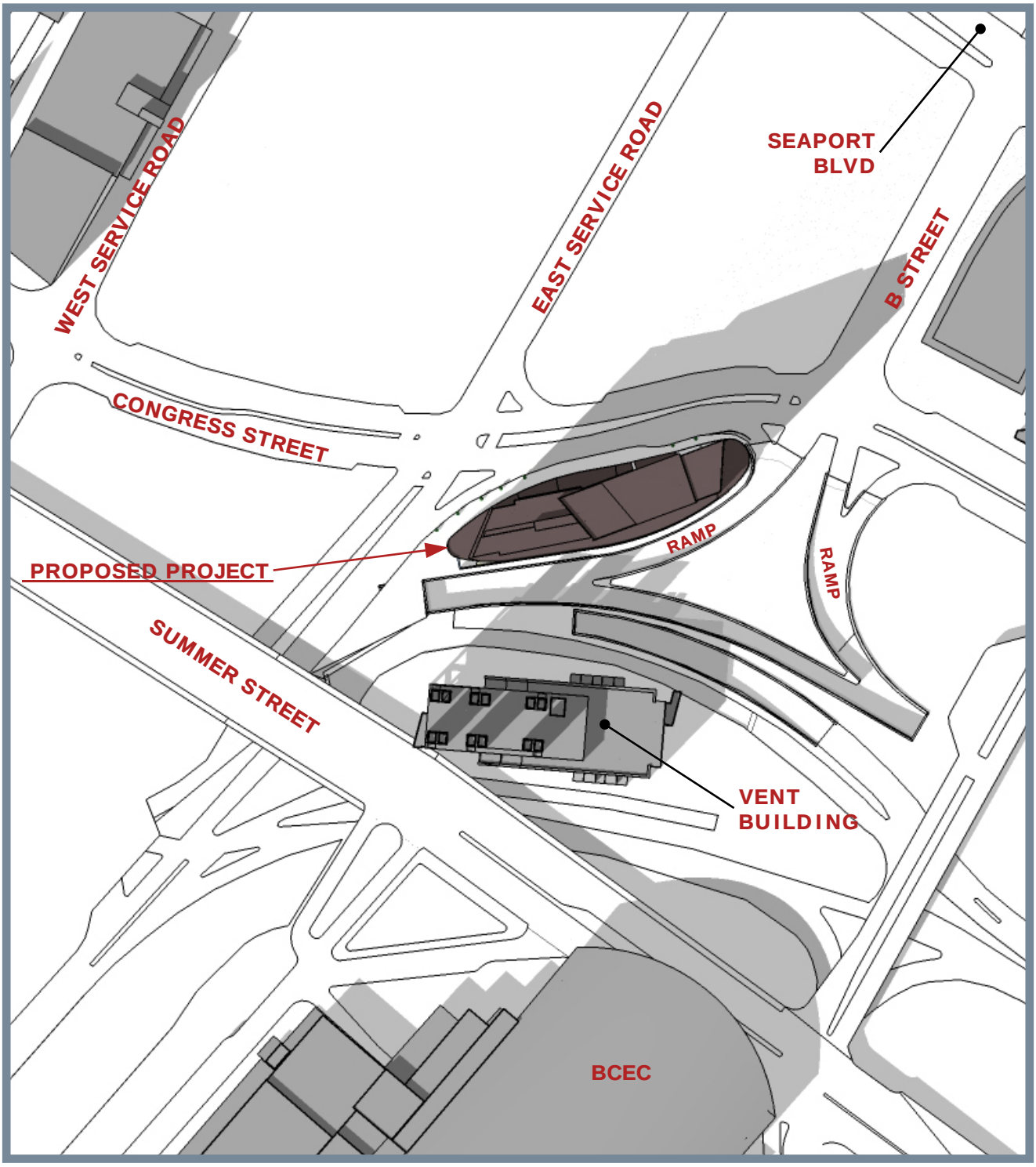

Figure 4-3
Proposed Condition at 3:00 pm, March 20th*

*Shadows reflect Daylight Savings Time, when applicable.

N

March 20, 2011

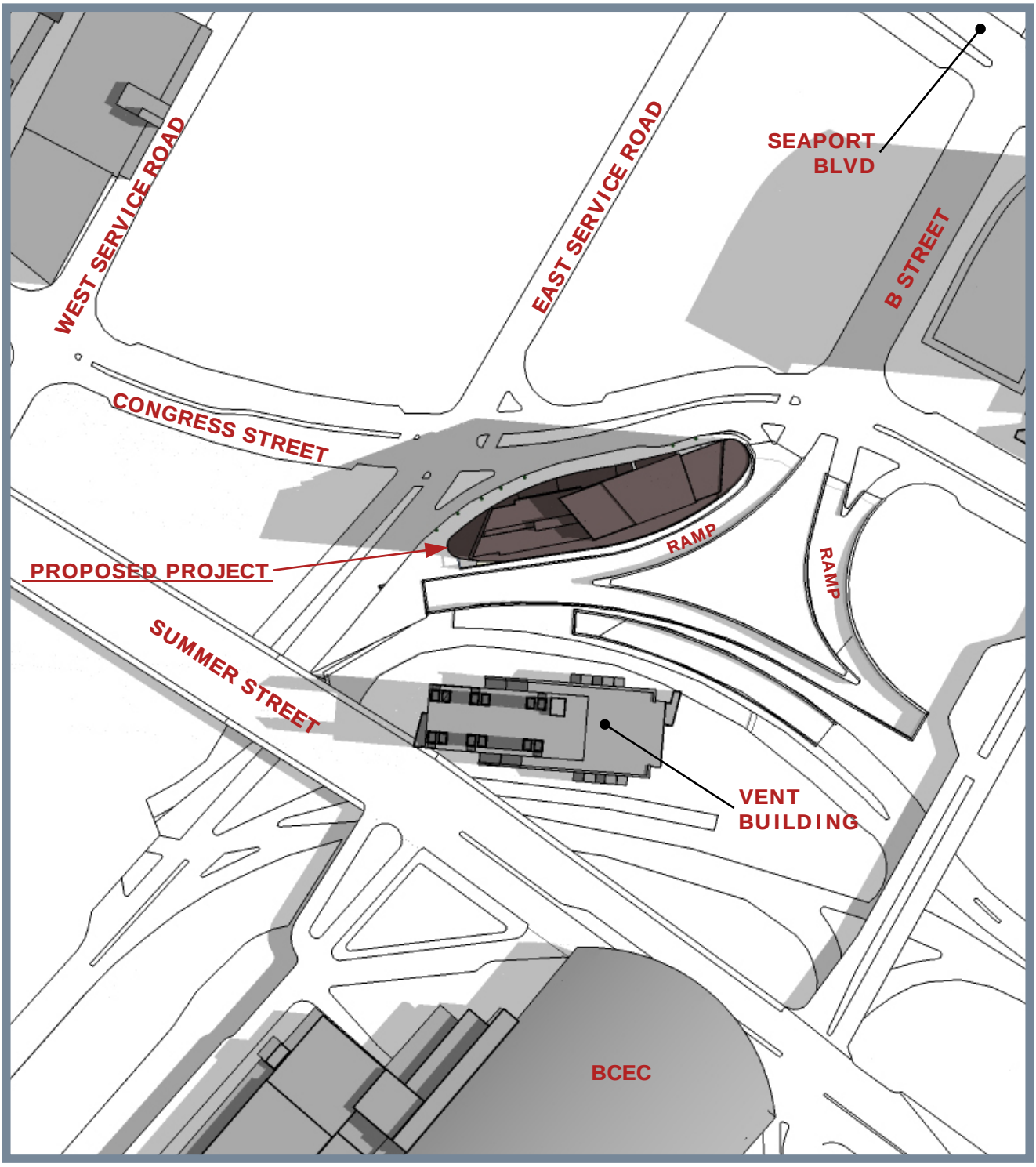

Figure 4-4
Proposed Condition at 9:00 am, June 21st*

*Shadows reflect Daylight Savings Time, when applicable.

N

March 20, 2011

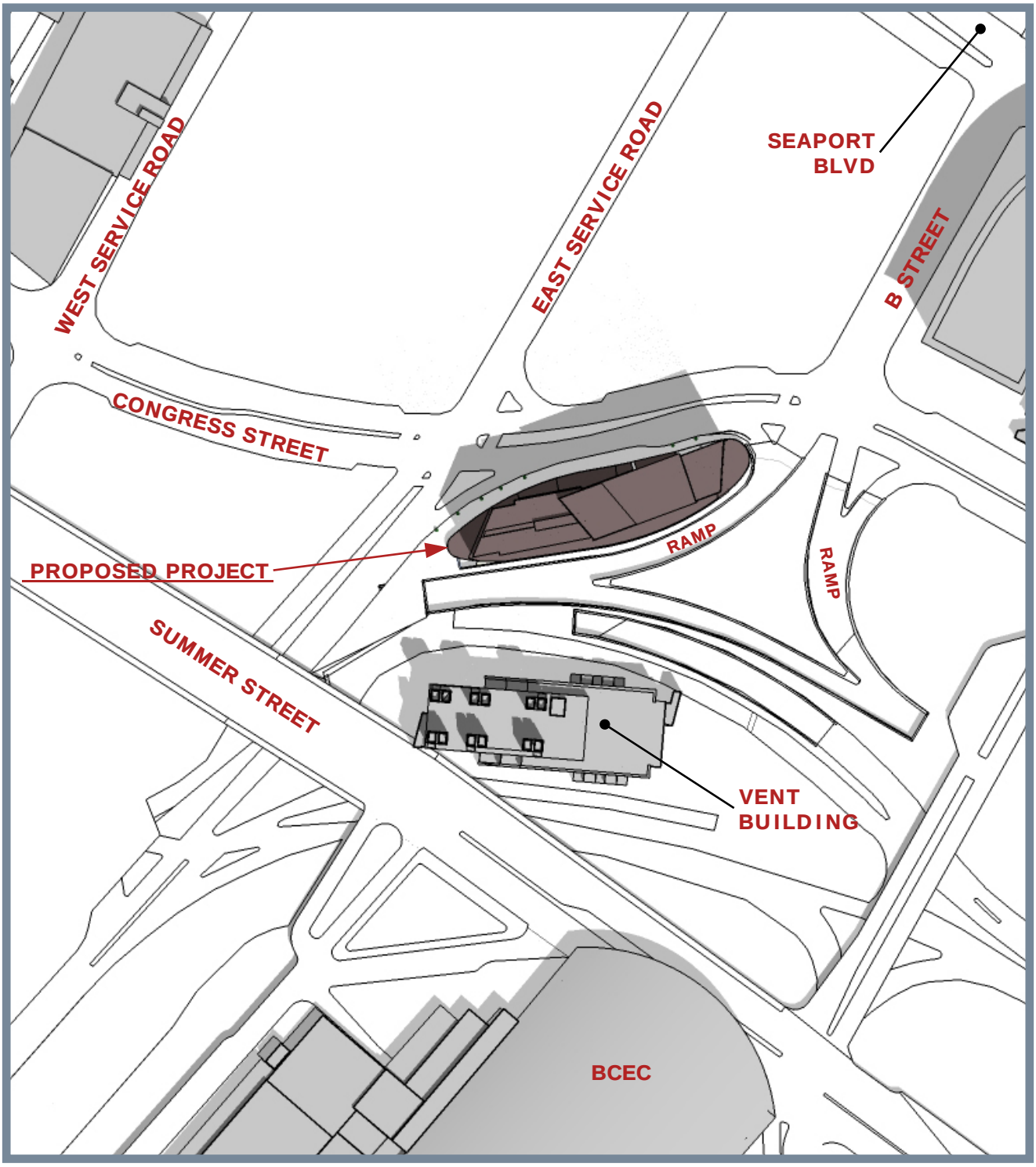

Figure 4-5
Proposed Condition at 12:00 pm, June 21st*

*Shadows reflect Daylight Savings Time, when applicable.

N

March 20, 2011

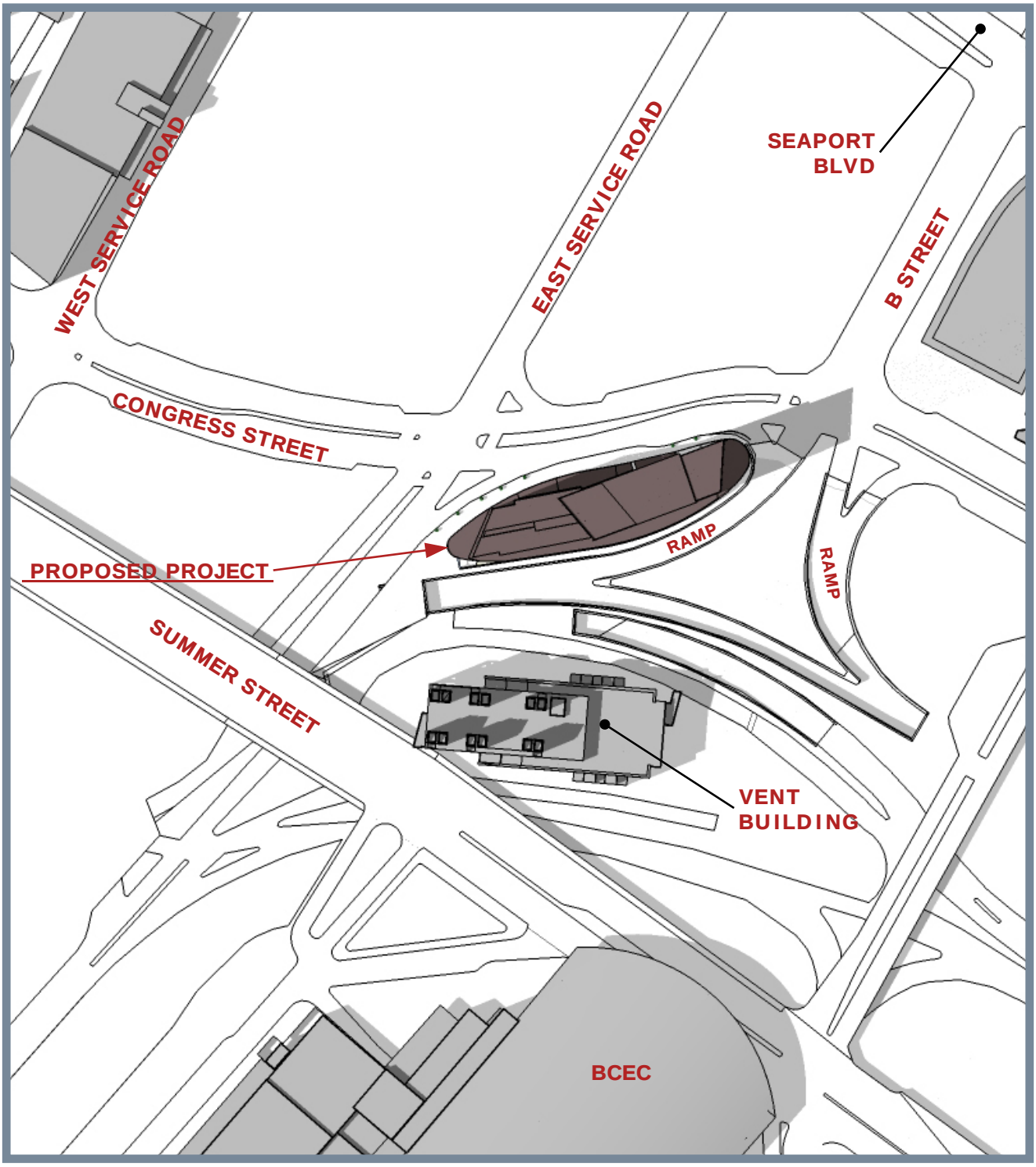

Figure 4-6
Proposed Condition at 3:00 pm, June 21st*

*Shadows reflect Daylight Savings Time, when applicable.

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March 20, 2011

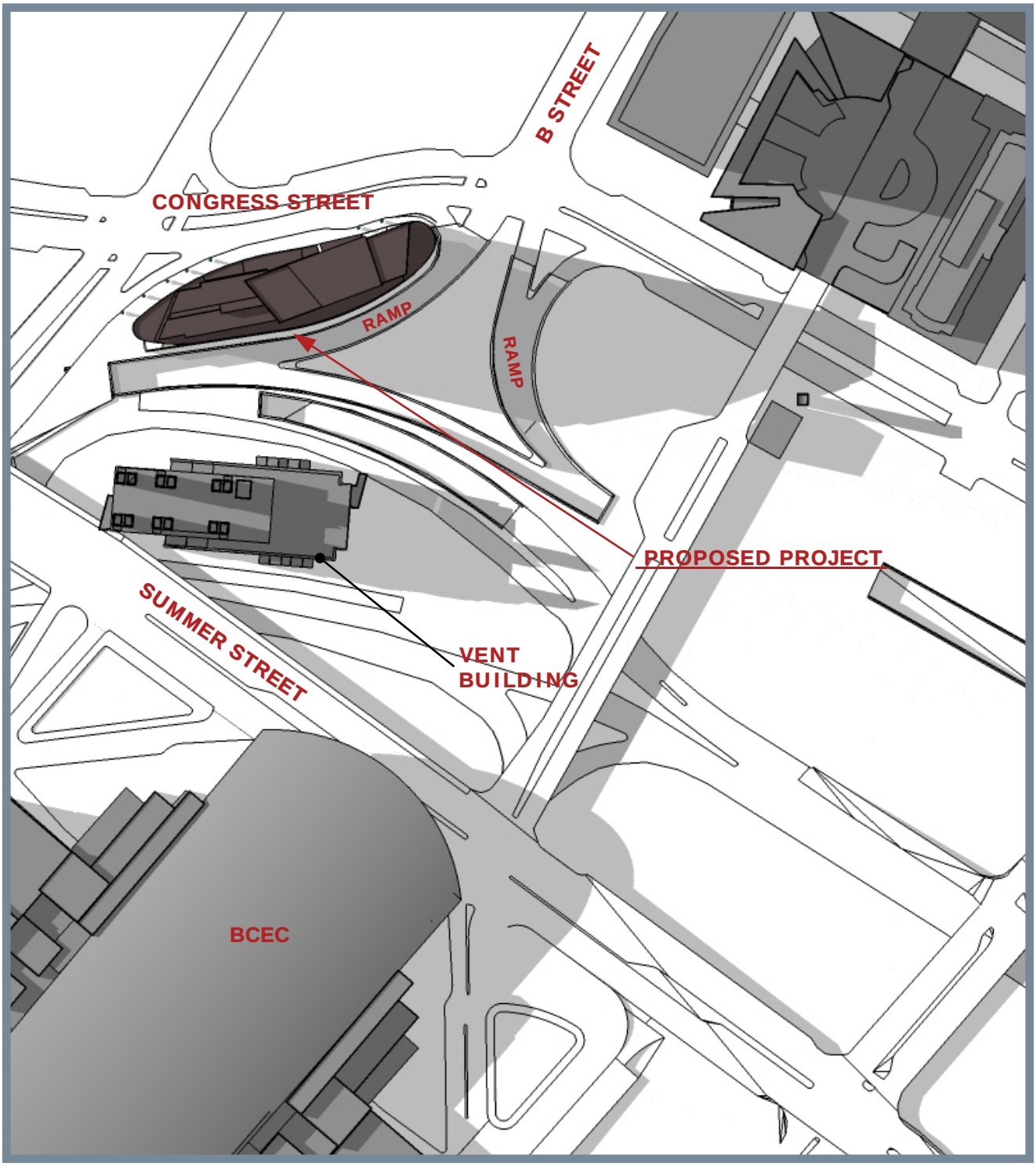

Figure 4-7
Proposed Condition at 6:00 pm, June 21st*

*Shadows reflect Daylight Savings Time, when applicable.

N

March 20, 2011

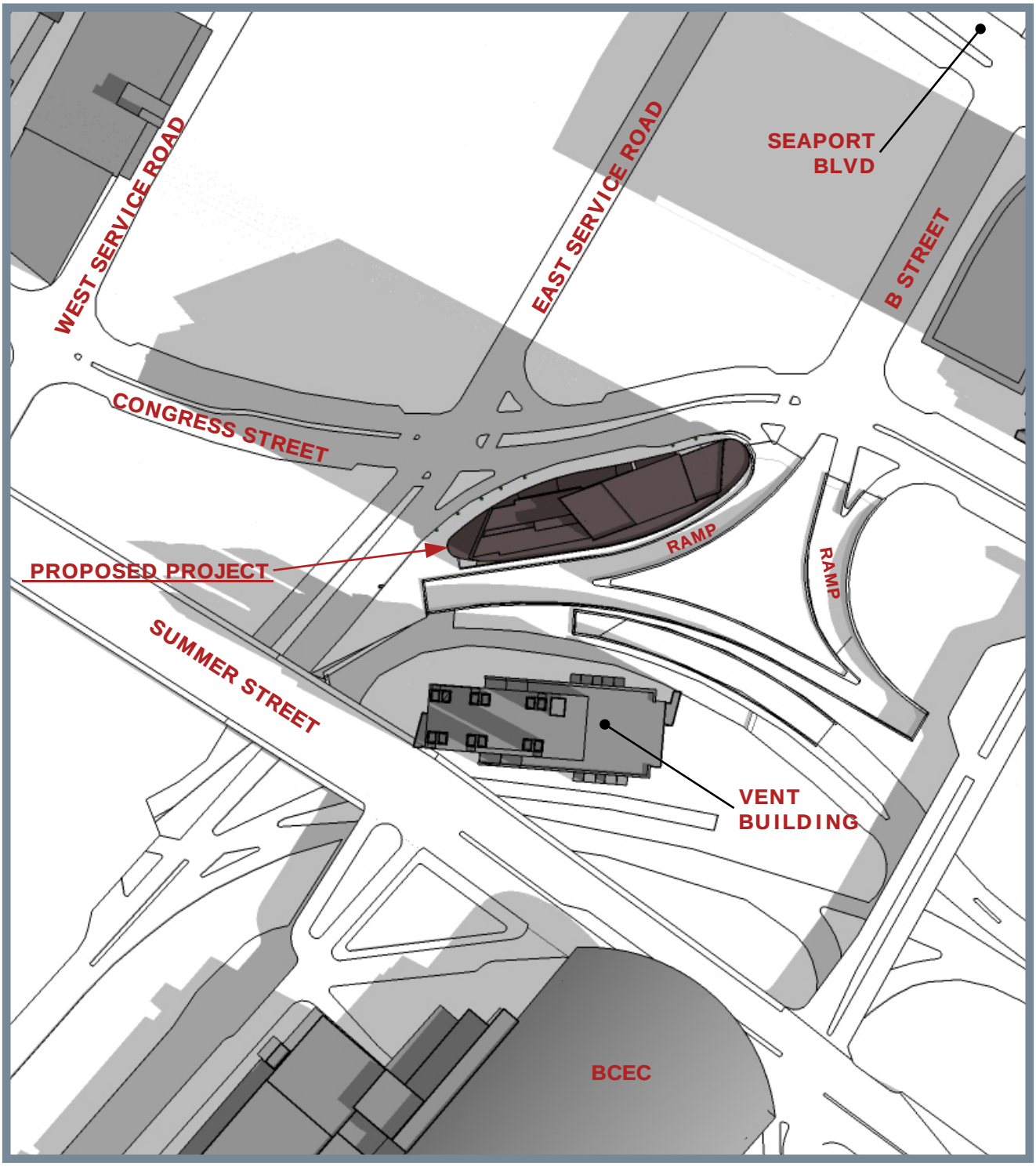

Figure 4-8
Proposed Condition at 9:00 am, September 23rd*

*Shadows reflect Daylight Savings Time, when applicable.

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March 20, 2011

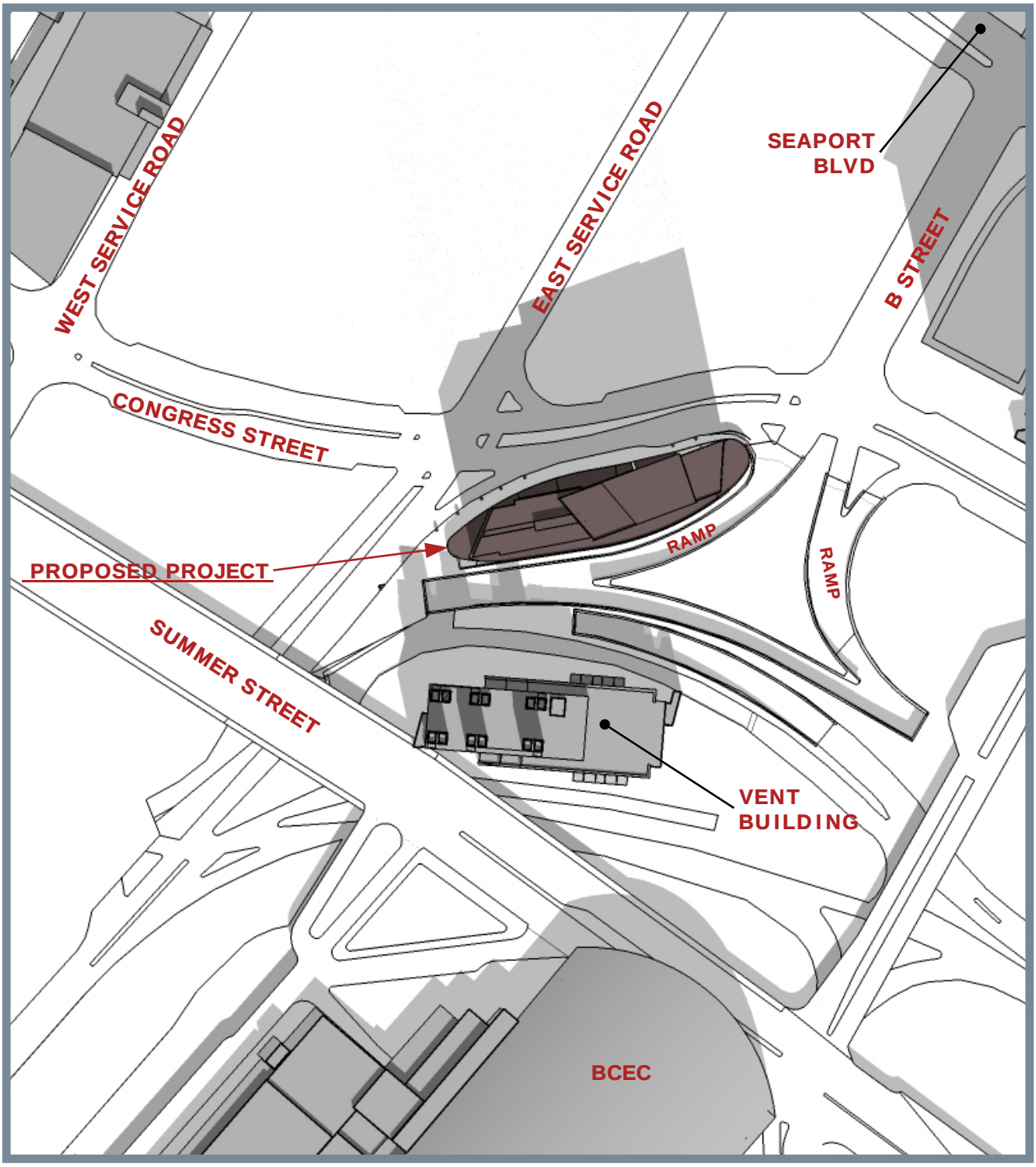

Figure 4-9
Proposed Condition at 12:00 pm, September 23rd*

*Shadows reflect Daylight Savings Time, when applicable.

N

March 20, 2011

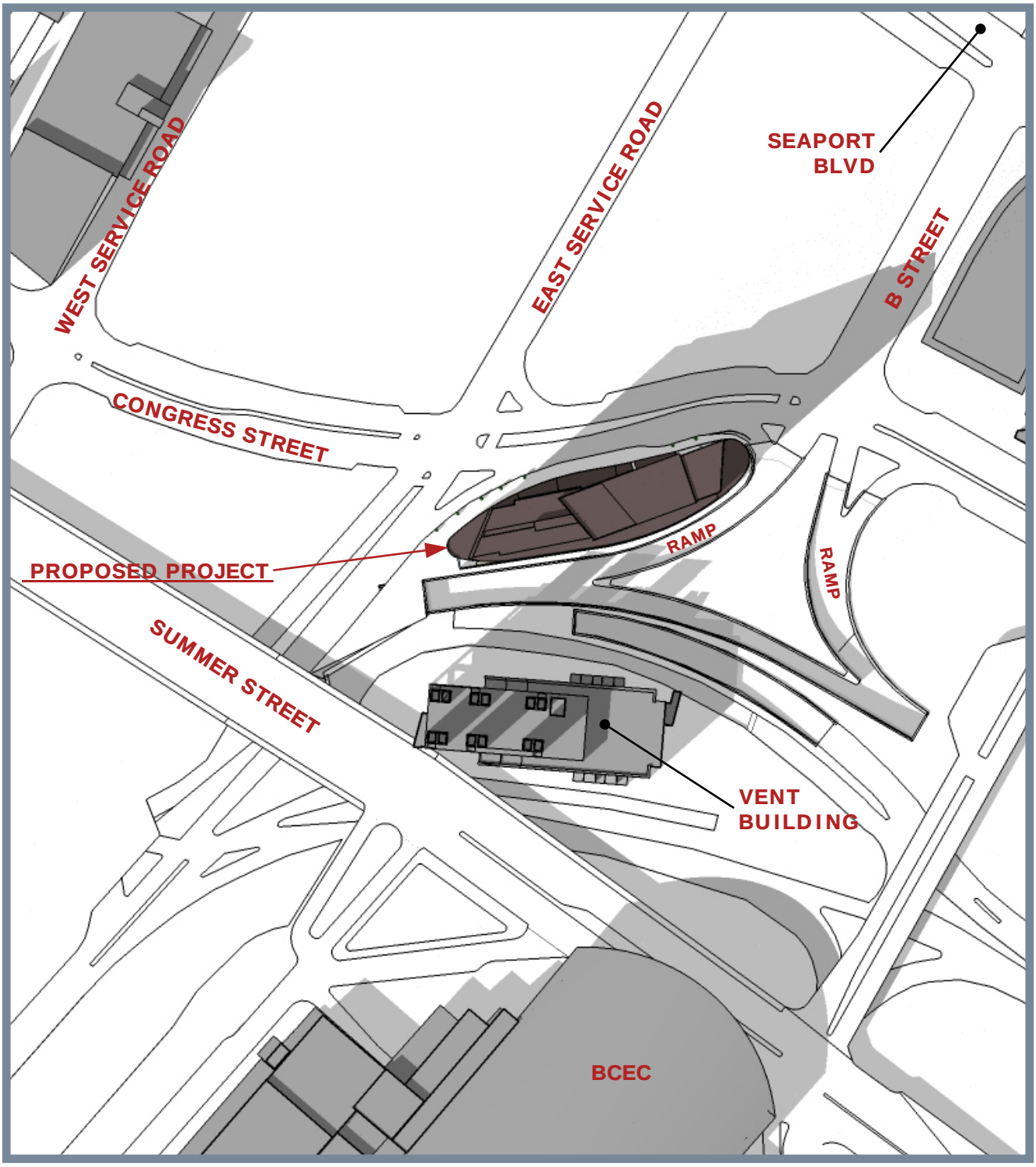

Figure 4-10
Proposed Condition at 3:00 pm, September 23rd*

*Shadows reflect Daylight Savings Time, when applicable.

N

March 20, 2011

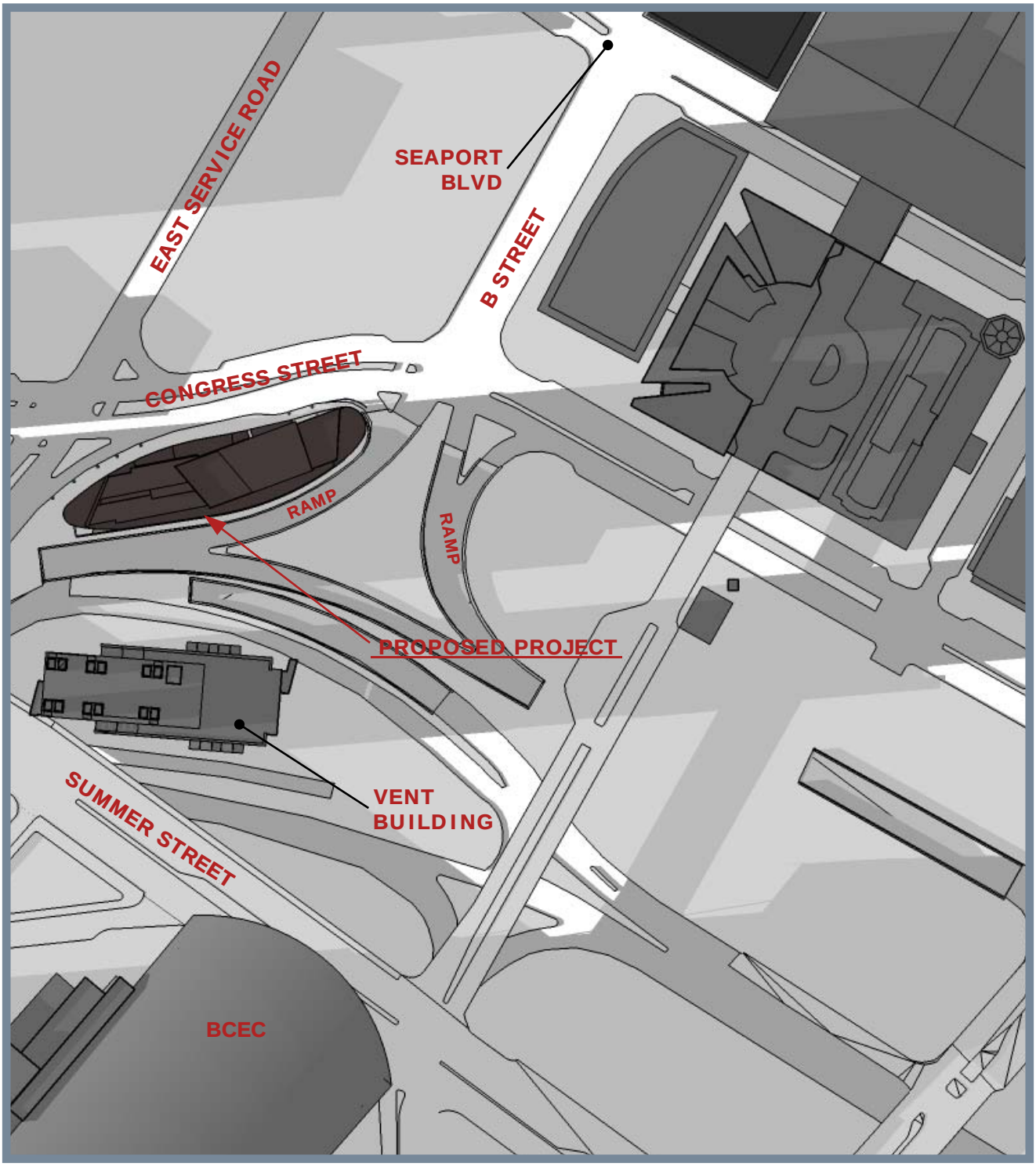

Figure 4-11
Proposed Condition at 6:00 pm, September 23rd*

*Shadows reflect Daylight Savings Time, when applicable.

N

March 20, 2011

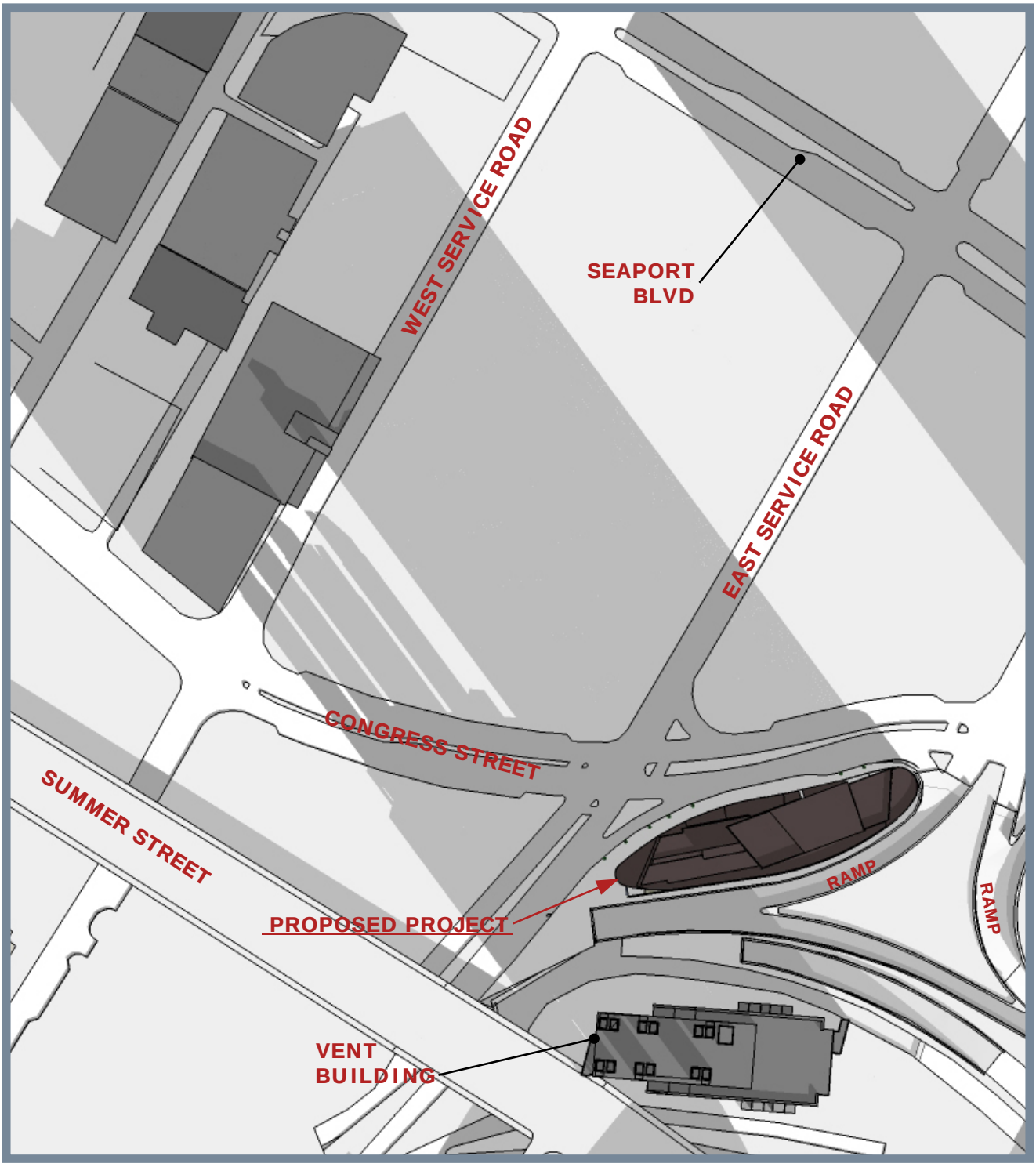

Figure 4-12
Proposed Condition at 9:00 am, December 22nd*

*Shadows reflect Daylight Savings Time, when applicable.

N

March 20, 2011

399 Congress Apartments
Seaport District
Boston, MA

ADD Inc ARCHITECTURE + DESIGN

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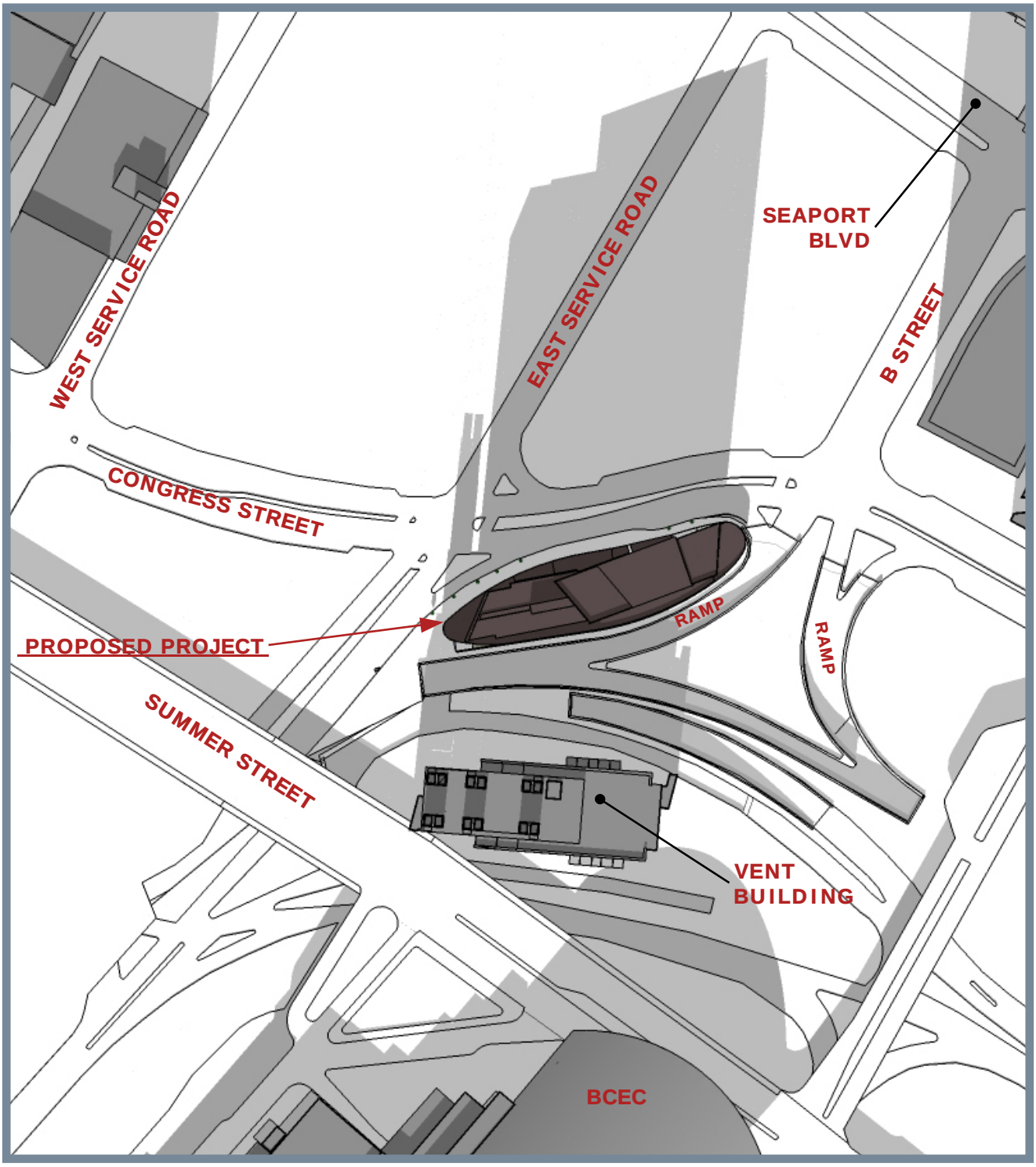

Figure 4-13
Proposed Condition at 12:00 pm, December 22nd*

*Shadows reflect Daylight Savings Time, when applicable.

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March 20, 2011

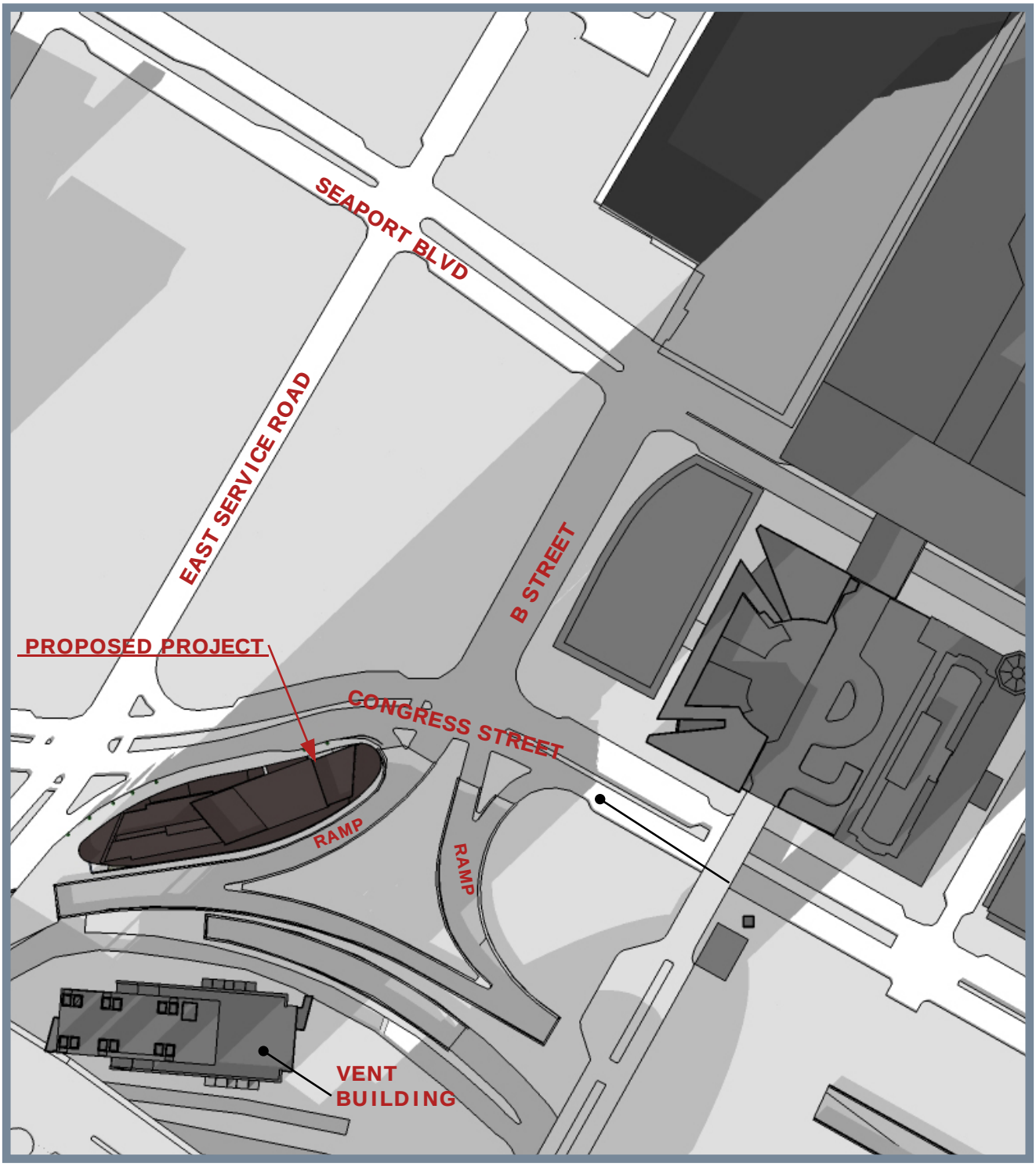

Figure 4-14
Proposed Condition at 3:00 pm, December 22nd*

*Shadows reflect Daylight Savings Time, when applicable.

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March 20, 2011

The proposed NPC Project will not cause substantial impacts to the surrounding area. Summertime impacts will be minor, generally affecting only small areas of the streets immediately surrounding the NPC Project. Spring and fall shadow impacts are also minor, mostly affecting Congress Street, particularly the section between the East Service Road and B Street, and to a lesser extent the parking lot and vacant parcels opposite the NPC Project immediately north of Congress Street. Shadows will extend to the World Trade Center West Building in the late fall afternoons. Shadows are longest in the winter and will have a more moderate impact, extending farther and reaching the developed blocks along Boston Wharf Road and Stillings Street in the morning, the public space Harborwalk, Commonwealth Pier 5, and greater areas of the World Trade Center in the afternoons. These new shadows will be fleeting, however, and given the time of year are not expected to significantly adversely affect the use and enjoyment of these resources.

4.3 Daylight

Because the footprint and height of the proposed NPC Project will be slightly reduced from those of the Previously Approved Project, the NPC Project is expected to have no greater daylight obstruction impacts. The PNF for the Previously Approved Project described the daylight analysis that was done using the BRA's Daylight Analysis ("**BRADA**") program. The BRADA analysis found that, while the Previously Approved Project would increase daylight obstruction compared to the existing vacant lot, the expected daylight obstruction was not expected to be significant because of the building's narrow shape, setbacks, and terraces. Impacts were well within the range of those of other nearby buildings in the Seaport District. The NPC Project has similar dimensions, and daylight obstruction impacts are expected to be comparable to those of the Previously Approved Project.

4.4 Solar Glare

The NPC Project will not employ reflective glass and therefore s not expected to cause any significant solar glare impacts on the surrounding buildings, pedestrian areas, or roadways. Should there be a design change toward using more reflective glass, a solar glare analysis will be undertaken to evaluate whether this glazing will have any negative impacts on surrounding areas.

4.5 Air Quality

Any of the proposed NPC Project's mechanical equipment that represents a stationary source of air pollution will not be changed significantly from what was proposed for the Previously Approved Project. The NPC Project is expected to retain a single 800-kilowatt emergency generator and three heating/hot water boilers. All sources are expected to vent exhaust at ten feet above the rooftop. Emissions from the NPC Project therefore are not expected to change significantly from those of the Previously Approved Project.

The NPC Project is expected to generate approximately 622 fewer vehicle trips per day than the Previously Approved Project. This amounts to a decrease in the Project's ADT of approximately 40 percent. Thus, the traffic-related air quality impacts of the NPC Project are also expected to be approximately 40 percent lower than those of the Previously Approved Project.

The proposed parking for the NPC Project will be shifted from an above-ground garage on floors 2-5 proposed for the Previously Approved Project to a three-level underground garage for the NPC Project. The underground garage will have automatic venting for carbon monoxide ("**CO**") for safety. The vents are expected to be at grade and will exhaust out the rear (*i.e.*, south side) of the building in the area above the I-90 entrance ramp in an area inaccessible to pedestrians. Further, due to the interim advances in motor vehicle technology, CO impacts are no longer considered significant with respect to National Ambient Air Quality Standards ("**NAAQS**"). It is extremely unlikely that any emissions exiting the rear of the building would be at a level to approach NAAQS.

4.6 Water Quality/Stormwater Management

The NPC Project will employ the same type of stormwater drainage system that was proposed and approved by the Boston Water & Sewer Commission ("**BWSC**") for the Previously Approved Project. Runoff from the building will be directed into the ground for detention and infiltration and stormwater runoff from the adjoining walkways and the uncovered portion of the service entrance will continue to flow to the drainage system in Congress Street. The building's closed drainage system, which will discharge to an underground detention/infiltration system, will have an outlet to the BWSC Congress Street system.

4.7 Noise

The proposed NPC Project is not expected to result in any significant changes to community noise levels from those associated with the Previously Approved Project, especially at noise-sensitive locations, which are a significant distance from the Site.

The mechanical equipment proposed for the NPC Project will generally be similar to that proposed for the Previously Approved Project in terms of type, size, and location. The only notable change is related to the parking facility, which was proposed to be four aboveground levels (2 through 5) for the Previously Approved Project, but which will be below-ground for the NPC Project. The underground garage will have automatic venting for CO as a safety precaution. Monitors will control exhaust fans, causing them to operate automatically when CO levels increase to preset limits. The vents will be at grade, exhausting out the rear of the building. Because the building backs up to an on-ramp to the interstate, and is not accessible to the public, noise impacts will not be an issue here.

4.8 Solid and Hazardous Waste

The proposed NPC Project will generate municipal solid waste in amounts typical for a residential building. The NPC Project will provide recycling areas to serve the entire building for paper, corrugated cardboard, glass, plastics, and metals. A commercial waste hauler will remove recyclables and solid wastes from the NPC Project. The NPC Project is not expected to generate any significant amounts of hazardous wastes other than typical household materials. All waste will be handled and disposed of in accordance with applicable local, state, and federal regulations.

The NPC Project will implement a construction waste management plan as a means to ensure that a minimal amount of waste debris is disposed of in a landfill. A NPC Project goal is to recycle and/or salvage at least 75 percent of the construction waste.

4.9 Geotechnical and Groundwater Conditions

The proposed NPC Project includes a 3-level underground parking garage which is a better urban design than the previously approved above-grade parking structure. Approximately 35 feet of general excavation will be required to accommodate the garage's construction. The soil to be excavated, consisting of fill, organic, marine sand, and marine clay deposits, will be removed with conventional large excavators. The excavation will terminate in the upper portion of the marine clay deposit.

A temporary excavation support system will be installed around the entire site perimeter to retain adjacent soil, protect adjacent structures, streets, and utilities, and provide for proper groundwater control. The NPC Project will employ the appropriate method of achieving temporary excavation support and groundwater control, which is by means of a continuously interlocking steel sheet pile cofferdam, advanced into the underlying impermeable clay deposit.

Given the composition of the fill material, pre-excavation of obstructions along the proposed sheet pile cofferdam alignment will be conducted prior to sheet pile installation. Pre-excavation of obstructions will minimize vibrations related to the installation of the sheeting and limit the potential for sheet pile interlock misalignment which could compromise the effectiveness of the groundwater cut-off. Ground vibrations during sheeting installation are expected to be minimal. The steel sheetpile cofferdam will be supported by internal bracing as tiebacks are not considered feasible. Excavation will be conducted in-the-dry, with minimal dewatering required.

Maintaining the groundwater level in the existing fill at pre-construction levels beyond the site limits will be required to prevent adverse effects on surrounding building structures (primarily those structures supported on untreated timber pile foundations), utilities, streets, and sidewalks. Temporary construction dewatering is expected to be minimal due to the presence of the sheet pile cut-off wall.

Foundation support of the building will consist of a cast-in-place, reinforced concrete mat bearing on the stiff marine clay deposit. Since the lowest level slab will be constructed below the existing groundwater level, both the perimeter foundation walls and mat foundation will be fully waterproofed. No foundation drainage systems or permanent dewatering systems will be installed.

The construction of the below-grade garage levels may result in some minor adjacent ground movements; however, construction methods and procedures will be implemented to control movements to within generally acceptable limits.

Adjacent structures and utilities are anticipated to be supported on spread footings, mats, piles or caissons that bear on or in the marine clay or glacial till deposits. These structures may undergo minor movements as a result of ground movements associated with the below-grade construction. However, the ground movement resulting from the excavation process is not expected to produce any structural distress within adjacent structures.

Section 5.0

Urban Design Component

5.0 URBAN DESIGN COMPONENT

This section describes the urban design features of the NPC Project. All figures are included at the end of the section. The height, massing, and materials of the NPC Project relate closely to those of the Previously Approved Project, revised to meet program needs and to be feasible in a new construction cost and building code environment.

5.1 Site Location and Current / Future Conditions

The Site is centrally located within the emerging Seaport/Innovation district. In the future, the surrounding parking lots will be filled with bustling, mixed-use development that varies between high, mid, and low rise elements.

Currently the Site conditions are the following:

- To the east is the entrance to the I-93 tunnels, the elevated street of World Trade Center Avenue, the Silver Line T station, and Massport's Core Block beyond;

- To the south is the Central Artery vent stack building, the elevated portion of Summer Street, and the Boston Convention Center;

- To the west are parking lots and the Fort Point Channel arts and restaurant district; and

- To the north are the Boston harbor, the ICA, the Seaport Office and Hotel, and the World Trade Convention Center area beyond.

5.2 Massing in Response to the Street Pattern and Views

Most of the Seaport District streets run east to west - New and Old Northern Avenue, and Summer Street – or north to south – A, B, and D Streets, for example. As a result of the Central Artery construction, Congress Street curves around the vent building and tunnel ramps, creating a lozenge-shaped parcel diagonal to the surrounding street grain.

The NPC Project seeks to capitalize on the idiosyncrasy of its Site's shape and orientation in several ways:

- To break up the long length of the Site into two shifted volumes along the curve;

- To chamfer the east and west ends to lock the NPC Project into the north-south street grid and accentuate views of the building's narrow ends from as far away as the Congress and A Street intersection and the Silver Line station; and

- To maximize and share upper floor views toward downtown with an entire floor of communal residential amenities and a large green roof deck on the top occupied floor of the building.

5.3 Innovation District Principles and the Program Model

The definition of "innovative housing" is still evolving. The NPC Project will include various such features, as highlighted here:

♦ an innovative type of limited stay residential work / live setting on the second floor of the building. Integrated into the long-term residences, these units will feel like and function as part of the neighborhood in an appealing, modern residential complex. They will also enjoy a setting that is both structured for their needs and designed to generate interaction and collaboration. The floor will be programmed in a way to allow for impromptu meetings and social interaction through shared gathering areas, structured networking receptions, state of the art "plug and play" work zones, conference areas, and a full array of business amenities.

♦ The well-appointed living units will be designed to be flexible to the needs of the users and complement the innovative amenities in the adjoining areas. Each unit will have the full range of residential features (i.e., kitchenette, bathroom, laundry bedroom and work area) for comfortable living.

♦ This unique and forward-thinking program is perfectly situated in the heart of Boston's Innovation District, and is designed to meet a need specific to the global companies that will increasingly be housed there. To serve this distinct business niche, the proposed 399 Congress Street Extended Stay and Collaboration Center will incorporate the following features:

Common Lounge and Networking Center Features

- Plug-in work stations
- iPod docking station
- Videoconferencing area
- Private meeting area
- Bi-weekly evening social networking parties hosted by Manager.
- Daily display of all current residents indicating their company affiliation
- (voluntary participation)
- iPad / iPod app to allow residents to email/text each other
- Full service business center with overnight shipping capabilities, fax, limited
- IT services and standard business services.

Full-Time, On-Site Manager with the following duties:

- Set up approved accounts with Innovation District and Kendall Square
- companies to streamline rental process
- Stay in constant contact with demand generators in the District (e.g., Vertex, Thomson)
- Visit the major Innovation District companies monthly
- Join the Mass. Biotech Council
- Join the Mass. Tech Collaborative
- Create and maintain image for the Center
- Manage social media imaging (Twitter, Facebook)
- Represent Center at Seaport TMA meetings
- Represent Center at Ft. Point Business Group meetings
- Host quarterly catered open house for District companies.
- Create database of in-District workers with job titles who are willing to be associated with the Collaboration Center (ala LinkedIn) (*e.g.*, AEW, Fidelity, other financial services/venture capital firms, area law firms)
- Host periodic seminars about current trends and innovations

- **"Inno-Units"** – the design of the basic housing module has been designed along the lines of contemporary European housing models to accommodate a more open, flexible, and modern life style while at the same time being more space-efficient;
- **High percentage of smaller unit types** – Over ninety percent of the units in the NPC Project are studios and 1-bedrooms to address a shortage of housing options for creative economy workers, entrepreneurs, post-grads, and active seniors;
- **New ways to form communities** – the 21st floor is devoted to social spaces that allow residents to connect and network, building a vertical neighborhood;
- **Sustainable design** – the NPC Project has many sustainable features including the use of energy recovery units, a climate-appropriate building façade, underground parking, water conserving fixtures, and green roofs.

5.4 Building Design

Concept: "Magnetic Ends"

The building concept is derived from the Site attributes and emphasizes the unique qualities of long views toward the narrow ends of the building. The longer sides of the building are conceived as simple precast concrete planes with two story punched window openings, while the ends are two-story curtain walls with metal panel inserts that have a dynamic composition.

Color Palette: Warm center, bright ends

The precast concrete color palette is reminiscent of the warm brick tones of the Fort Point District without being as light in tone as the Fan Pier office building or the Vent Stack building. The ends have complementary pale blue and green metal panels, to blend in with the glass tones while adding a "spark" to signal the Innovation District.

The Base

The ground floor departs from the orthogonal shapes of the upper floors, capturing the curve of the property lines and meeting the sidewalk. Its single-story scale matches the height of the base at the Seaport Office tower across Congress Street to the northeast, and its top is a green roof. At the building lobby entrance, the metal panel base element folds up and allows the tallest building mass to come to the ground. Colored glass accents at the lobby and innovation space carry the color theme through, and dark stone creates background walls for signage.

Floor Plans

- Ground Floor: contains the building lobby, a convenience store, innovation space/retail, vehicular entrance court, parking ramp, and ground floor M/EP and back-of-house functions.

- Second Floor Extended Stay Innovation Center: 28 work/live extended stay units with shared gathering areas, structured networking receptions, state of the art "plug and play" work zones, conference areas and a full array of business amenities.

- Typical Residential Floors 3 through 20: four elevators serving 20 units per floor.

- Community Space, Floor 21: a cybercafé, kitchen, private dining, game room, media screening room, bar, lounge, fitness center and bathrooms, as well as an outdoor roof deck that includes a kitchen/bar, seating, a sun patio, and a green roof.

- Parking Floors P1 through P3 – Underground parking

5.5 Building Elevations and Perspectives

The building elevations and perspectives illustrate the "magnetic ends" concept and the way the more solid, precast concrete center portion of the NPC Project serves as a calm backdrop to the angular, glass ends. A partial elevation at greater detail has also been included to describe the material qualities of the building design.

The renderings show the NPC Project at different times of the day and from several vantage points. Two views show the building in its current condition, surrounded by parking lots, while another view shows the future, when Seaport Square and other master planned areas are completed.


Visible from BCEC
Great views to downtown
Great views to harbor
In the growing Innovation District

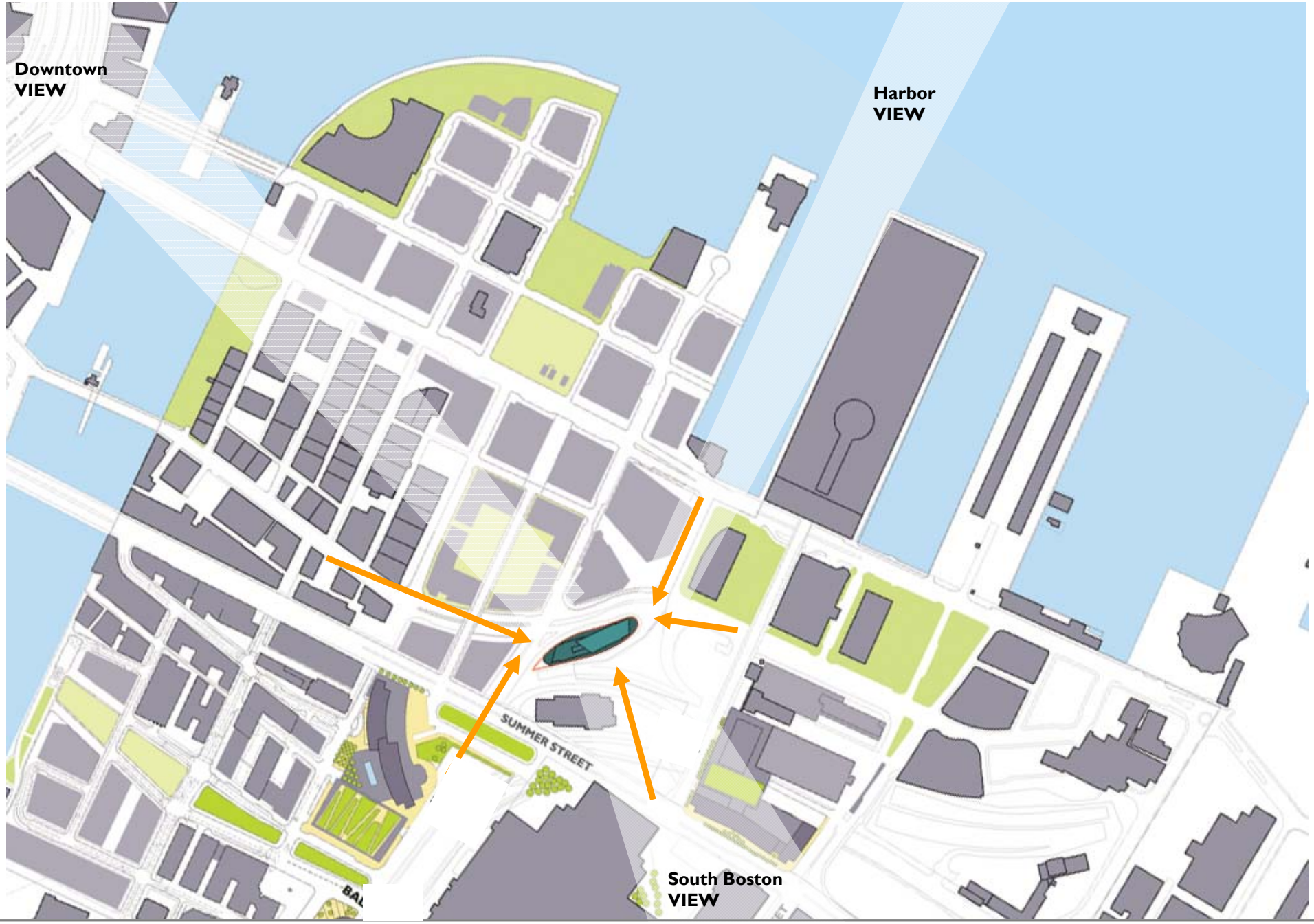
Looking East

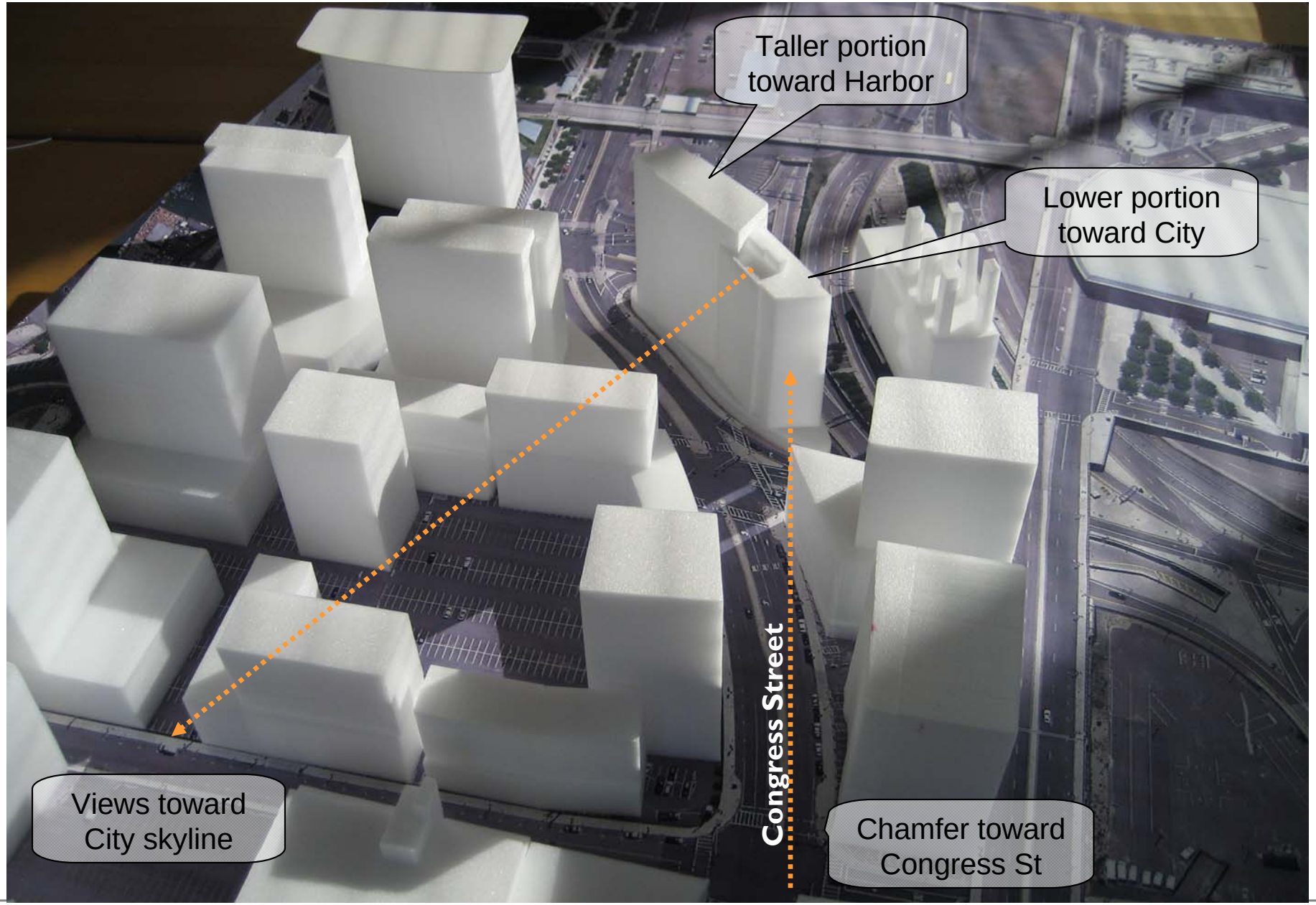
Looking South

Looking West

Looking North


SUMMER STREET


Downtown
VIEW
Harbor
VIEW
SUMMER STREET
South Boston
VIEW


Taller portion
toward Harbor
Lower portion
toward City
Congress Street
Views toward
City skyline
Chamfer toward
Congress St

Innovation Housing : CORE PRINCIPLES

Notes from BRA meeting January 27, 2011

Innovative Design

- Micro scale – 'inno' units
- Macro scale – creative building & site planning, use of materials

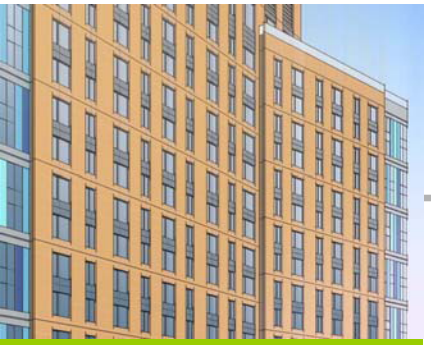
Fosters New Communities

- Communal spaces, indoor & outdoor
- Entrepreneurial
- Live/work

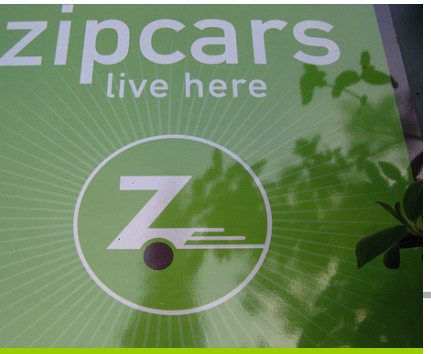
Sustainable Design

- Reduced energy use
- Reduced water use, stormwater recharge
- Green materials and construction practices
- Fewer cars

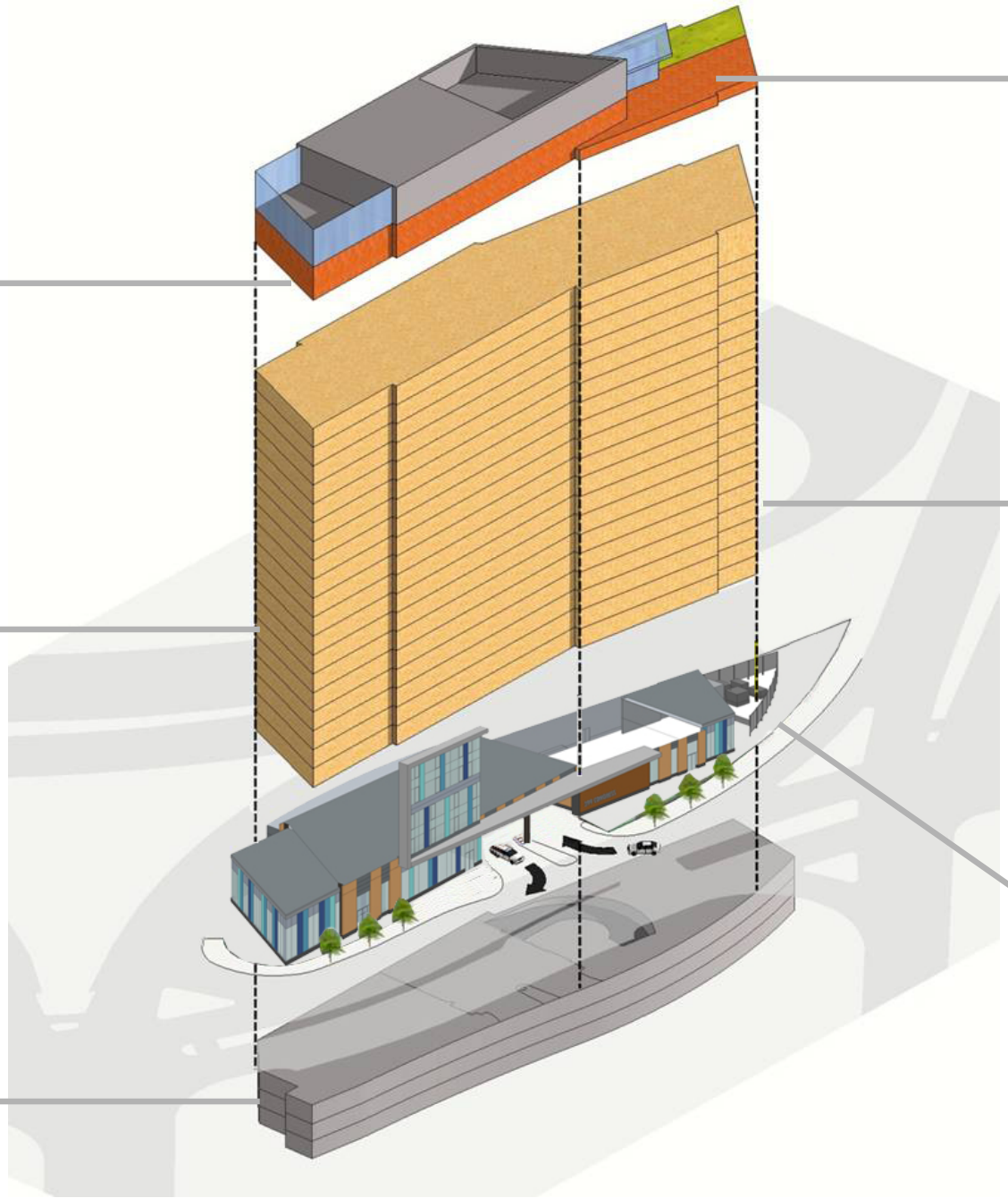
20th Floor Social Network



Climate Appropriate Skin



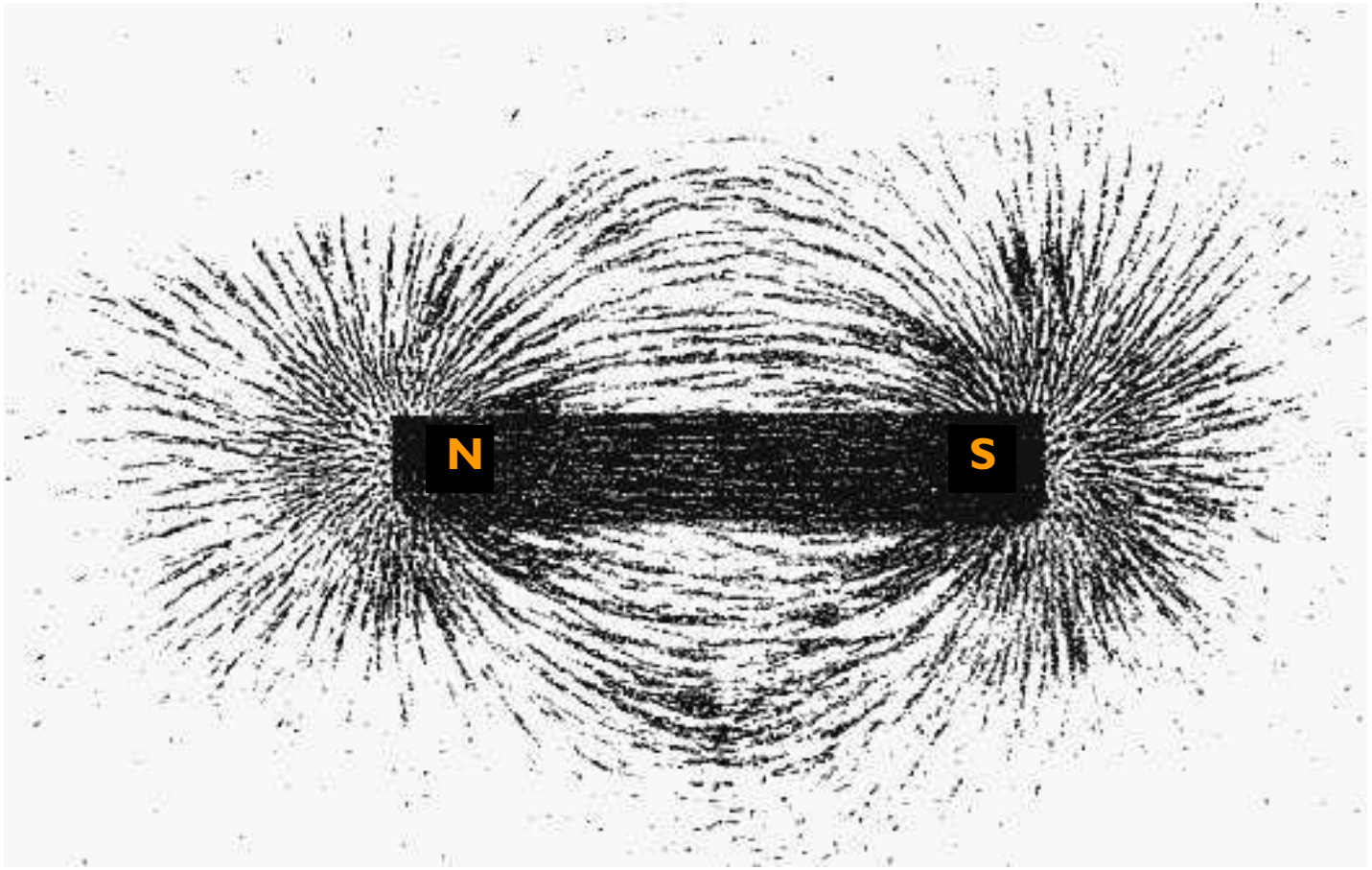
Concealed Parking



Community Green Roof

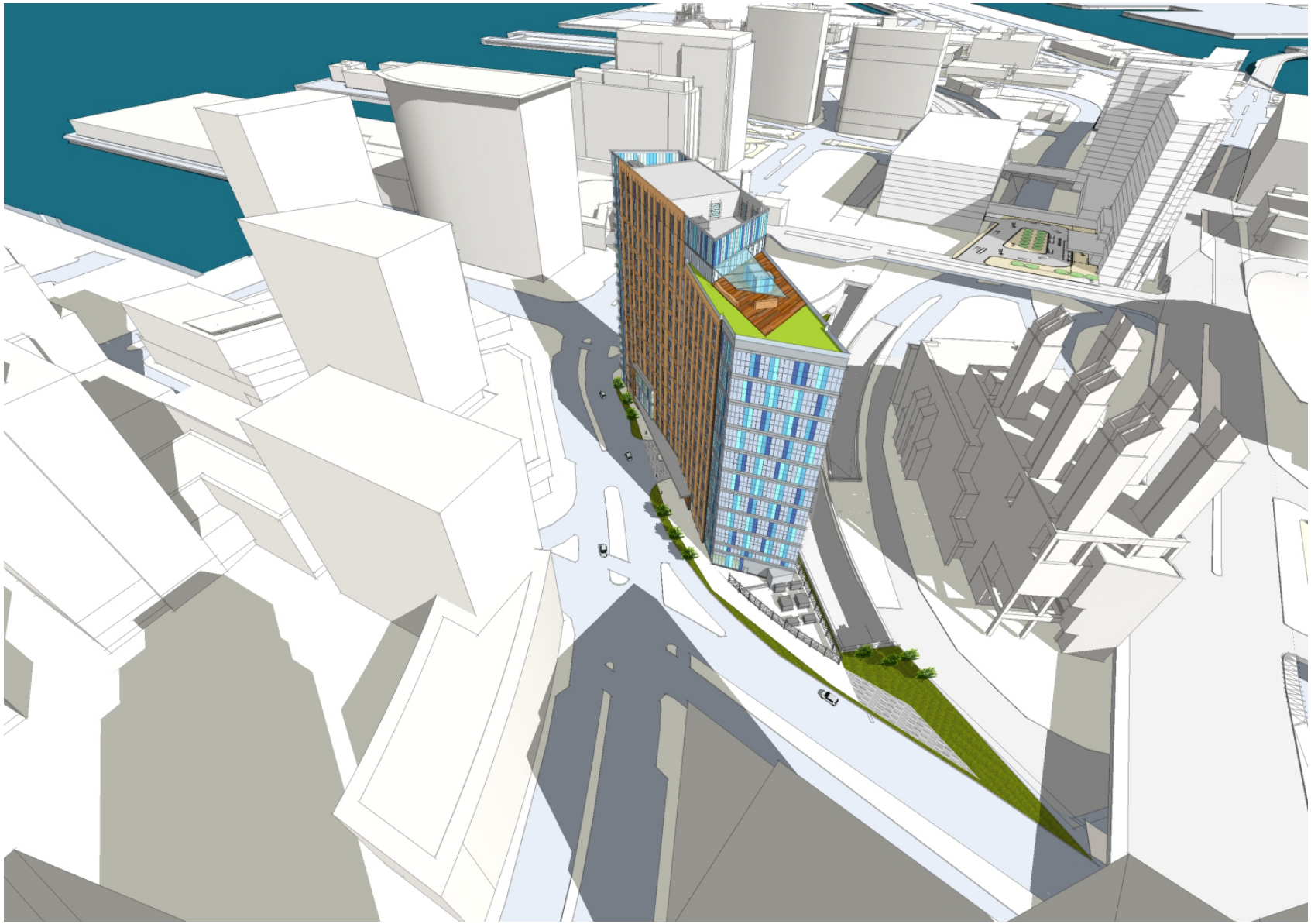
'Inno' Units – 90% Studio/1 BR

Ground Floor Innovation Use



Iron Shavings at Magnet Poles

From the Franklin Institute Resources for Science Learning




399 CONGRESS

Section 6.0

Sustainable Design

6.0 SUSTAINABLE DEVELOPMENT

The NPC Project will comply with the requirements of Article 37 of the Boston Zoning Code to achieve "LEED Certifiable" status. The Project team will use the U.S. Green Building Council's ("**USGBC**") Leadership in Energy and Environmental Design ("**LEED**") Rating System as a model for incorporating sustainable design features into the NPC Project. A LEED NC 2009 checklist is provided to identify the green design goals for this NPC Project. For each credit identified as a "yes" on the checklist, a credit narrative has been provided describing the measures to be implemented to achieve the credit (to the extent that they are defined at the current stage of design).

The LEED for New Construction v3.0 rating system offers a total of 110 possible points. The NPC Project has the goal of achieving enough points for the "certified" level, which requires achieving a minimum of 40 points. At this time, the NPC Project plans to achieve 45 points, while 32 points are still being studied. A revised draft of the LEED checklist and narrative will be provided when the design progresses further.

The NPC Project will be designed to meet the new Massachusetts "Stretch Energy Code", which Boston adopted in November of 2010. The Stretch Energy Code is an enhanced version of the 2009 IECC that places greater emphasis on performance testing and prescriptive requirements. It was designed to be approximately 20 percent more efficient than the state's baseline energy code, the 2009 IECC. The code gives provides for multiple options to reduce energy use through increased insulation, more efficient HVAC systems, and other measures.

6.1 Sustainable Sites

Sustainable Sites, Prerequisite 1, Construction Activity Pollution Prevention: The NPC Project will implement a full erosion and sedimentation control program. This program includes a Storm Water Pollution Prevention Plan that describes how to protect the existing storm water collection system during construction.

Sustainable Sites, Credit 1.0, Site Selection: The NPC Project meets all the criteria for site selection. The Site is not prime farmland, it was previously developed, does not have any endangered species habitat, is not within 100 feet of a wetland, and is not a public park.

Sustainable Sites, Credit 2.0, Development Density & Community Connectivity: The NPC Project is in a dense urban site located in Boston's Seaport District. The Site is bordered by Congress Street and the East Service Road. The NPC Project's compliance path is Option 2, Community Connectivity. Within a 0.50-mile radius from the building's main entrance there are residential zones. There are also at least ten basic services with pedestrian access inside the 0.50-mile radius. These basic services include banks, places of worship, convenience groceries, day cares, cleaners, fire station, library, hospital & dental offices, parks, pharmacies, post office, restaurants, supermarkets, and fitness centers.

Sustainable Sites, Credit 4.1, Alternative Transportation - Public Transportation Access: The Site is located within 0.50-mile radius of public transportation. The subway stations within this 0.50-mile radius include South Station, Courthouse Station, and World Trade Center Station. The proximity of the NPC Project to public transportation helps to prevent pollution from automobile usage and thus fulfills the LEED credit requirements.

Sustainable Sites, Credit 4.2, Alternative Transportation - Bicycle Storage & Changing Rooms: The NPC Project is a mixed-use residential building. The NPC Project will provide covered and secure bicycle storage for a minimum of 15 percent of the residential occupants. Also, since the NPC Project is a mixed-use residential building, it must provide bike storage for a minimum of 5 percent of the non-residential building users and showers for 0.5 percent of the non-residential Full Time Equivalent Occupants. The NPC Project will meet the Boston Transportation Department's residential bicycle storage requirements with at least one bicycle storage per three dwelling units and a bike rack at the public entrance serving at least nine units. The BTD's non-residential bicycle storage requirements are at least one bicycle storage per ten automobile spaces or one per 10,000 square feet of retail, whichever is greater.

Sustainable Sites, Credit 4.3, Alternative Transportation - Low-Emission & Fuel-Efficient Vehicles: The NPC Project will provide preferred parking spaces for low-emitting and fuel-efficient vehicles for 5 percent of the total parking capacity. The low-e and fuel efficient vehicles must have a minimum green score of 40 from the ACEEE Annual Rating Guide or be a ZEV (zero emissions vehicle).

Sustainable Sites, Credit 4.4, Alternative Transportation - Parking Capacity: The NPC Project has sized its parking capacity to not exceed the minimum local zoning requirements. The NPC Project will have 144 spaces (0.36 spaces per unit) which is consistent with the Boston Transportation Department's parking guidelines. The designed parking infrastructure will be able to accommodate shared vehicle usage such as carpool drop-off areas, and designated parking for vanpools and/or car-share services.

Sustainable Sites, Credit 6.1, Stormwater Management - Quantity Control: The NPC Project will meet the criteria for stormwater quantity control. The existing imperviousness of the Site is greater than 50 percent, and the NPC Project is planning to decrease the stormwater run-off by 25 percent from the 2-year 24-hour design storm.

Sustainable Sites, Credit 7.1, Heat Island Effect - Non-Roof: The NPC Project has placed all of the on-site parking spaces under the building and/or underground, thereby exceeding the minimum requirements of placing 50 percent of the spaces under cover (defined as underground, under deck, under roof, or under a building).

Sustainable Sites, Credit 7.2, Heat Island Effect - Roof: This NPC Project will meet the credit requirements by having a cool roof with an SRI value of at least 78.

6.2 Water Efficiency

Water Efficiency, Prerequisite 1, Water Use Reduction: The NPC Project will reduce potable water usage by at least 20 percent by using low-flow water closets, low-flow showers, low-flow lavatories, and low-flow kitchen sinks.

Water Efficiency, Credit 3, Water Use Reduction: The NPC Project will aim to reduce potable water usage by at least 30 percent by using low-flow water closets, low-flow showers, low-flow lavatories, and low-flow kitchen sinks.

6.3 Energy and Atmosphere

Energy and Atmosphere, Prerequisite 1, Fundamental Commissioning of the Building Energy Systems: Building systems will be commissioned in accordance with the USGBC LEED requirements. The commissioning services provided will include the Owner's Project Requirements ("**OPR**") and Basis of Design ("**BOD**") documents, development of a commissioning plan, incorporation of a commissioning specification section into the construction documents and verification through startup observation and functional testing that the installed systems are operating in accordance with the OPR, BOD, and construction documents. These protocols will apply to the following commissioned systems: HVAC, lighting controls, and domestic hot water systems.

Energy and Atmosphere, Prerequisite 2, Minimum Energy Performance: The NPC Project will be designed to achieve at least a 10 percent improvement from the baseline case of ASHRAE 90.1-2007 Energy Standard as per the newest version of LEED 2009.

Energy and Atmosphere, Prerequisite 3, Fundamental Refrigerant Management: The NPC Project will specify equipment and systems with no chlorofluorocarbon-based refrigerants.

Energy and Atmosphere, Credit 1, Optimize Energy Performance: The NPC Project will be designed with the goal of exceeding the ASHRAE 90.1-2007 Energy Standard by 14 percent. The feasibility of meeting this goal will be demonstrated with a whole building energy model.

6.4 Materials and Resources

Materials and Resources, Prerequisite 1, Storage and Collection of Recyclables: The NPC Project will provide recycling areas that serve the entire building for paper, corrugated cardboard, glass, plastics, and metals.

Materials and Resources, Credit 2, Construction Waste Management: The NPC Project will implement a Construction Waste Management Plan as a means to ensure that a minimal amount of waste debris is disposed of in a landfill. The NPC Project goal will be to recycle and/or salvage at least 75 percent of the construction waste.

Materials and Resources, Credit 4.1, Recycled Content:

The NPC Project will specify materials and products with recycled content. For credit compliance, the goal will be to specify materials with recycled content such that the sum of postconsumer recycled content plus 1/2 of the pre-consumer content constitutes at least 10 percent, based on cost, of the total value of the materials in the NPC Project.

Materials and Resources, Credit 5, Regional Materials: The NPC Project will specify materials and products that are extracted and manufactured within 500 miles of the Site. For credit compliance, the goal will be to specify regional materials that comprise at least 10 percent, based on cost, of the total value of the materials in the NPC Project.

6.5 Indoor Environmental Quality

Indoor Environmental Quality, Prerequisite 1, Minimum IAQ Performance : The NPC Project will be designed to comply with the ASHRAE 62.1-2007 Ventilation Standard as per the newest version of LEED 2009.

Indoor Environmental Quality, Prerequisite 2, Environmental Tobacco Smoke ("ETS") Control: As a residential project, in order to comply with this Prerequisite, the NPC Project will implement one of the following options:

1. It will be written into the apartment rental leases that smoking is prohibited in all areas of the building including adjacent outdoor spaces; or

2. The NPC Project will implement the following measures per the USGBC:

- Prohibit smoking in all common areas of the building.
- Locate any exterior designated smoking areas, including balconies where smoking is permitted, at least 25 feet from entries, outdoor air intakes and operable windows opening to common areas.
- Prohibit on-property smoking within 25 feet of entries, outdoor air intakes and operable windows. Provide signage to allow smoking in designated areas, prohibit smoking in designated areas or prohibit smoking on the entire property.
- Weather-strip all exterior doors and operable windows in the residential units to minimize leakage from outdoors.
- Minimize uncontrolled pathways for ETS transfer between individual residential units by sealing penetrations in walls, ceilings and floors in the residential units and by sealing vertical chases adjacent to the units.

- Weather-strip all doors in the residential units leading to common hallways to minimize air leakage into the hallways.

- Demonstrate acceptable sealing of residential units by a blower door test conducted in accordance with ANSI/ ASTM-E779-03, Standard Test Method for Determining Air Leakage Rate By Fan Pressurization.

- Use the progressive sampling methodology defined in Chapter 4 (Compliance Through Quality Construction) of the Residential Manual for Compliance with California's 2001 Energy Efficiency Standards (http://www.energy.ca.gov/title24/residential_manual). Residential units must demonstrate less than 1.25 square inches leakage area per 100 square feet of enclosure area (*i.e.,* sum of all wall, ceiling and floor areas).

Indoor Environmental Quality, Credit 3.1, Construction IAQ Management Plan –During Construction: The NPC Project will implement a Construction Indoor Air Quality Management Plan per the USGBC requirements in order to improve the indoor air quality during construction.

Indoor Environmental Quality, Credit 4.1, Low-Emitting Materials – Adhesives & Sealants: The NPC Project will specify adhesives and sealants that comply with the South Coast Air Quality Management District ("**SCAQMD**") Rule #1168 and Green Seal Standard. The VOC limits stated in these standards will not be exceeded for all of the adhesives and sealants used on the interior of the building envelope.

Indoor Environmental Quality, Credit 4.2, Low-Emitting Materials – Paints &Coatings: The NPC Project will specify that all paints and coatings applied inside the building envelope will comply with the Green Seal Standard GS-11 for paints and primers; Green Seal Standard GS-03 for anti-corrosive paints; and the SCAQMD Rule #1113 for wood finishes, stains, and sealers.

Indoor Environmental Quality, Credit 4.3, Low-Emitting Materials – Flooring Systems: The NPC Project will specify that all flooring systems must comply with the appropriate standard for carpet, carpet cushion, carpet adhesive, hard surface flooring, floor sealers, stains and finishes, and tile setting adhesives and grout.

Indoor Environmental Quality, Credit 4.4, Low-Emitting Materials – Composite Wood & Agrifiber Products: The NPC Project will not specify composite wood and agrifiber products inside the building envelope that contain urea-formaldehyde resins.

Indoor Environmental Quality, Credit 5.0, Indoor Chemical & Pollutant Source Control: To comply with the credit requirements, the NPC Project will use floor mats to prevent outside materials from being carried into the building, and each of these mats will be cleaned on a regular basis. Also, all spaces where hazardous chemicals are stored will be provided with ventilation, and the room will be negatively pressurized in order to prevent any odors from leaking out. A MERV 13 filter will be used on all mechanical equipment to properly filter ventilation after construction and prior to occupancy.

Indoor Environmental Quality, Credit 6.1, Controllability of Systems - Lighting: The NPC Project will provide individual lighting controls for 90 percent of the building occupants as well as lighting controls for all shared multi-occupant spaces.

Indoor Environmental Quality, Credit 6.2, Controllability of Systems – Thermal Comfort: The NPC Project will provide individual thermal comfort controls for at least 50 percent of the building occupants as well as thermal comfort controls for all shared multi-occupant spaces.

Indoor Environmental Quality, Credit 8.2, Daylight & Views - Views for 90 percent of Spaces: The NPC Project will be designed such that building occupants in 90 percent of the regularly occupied areas will have a direct line of sight to the outdoors.

6.6 Innovation in Design

Innovation in Design, Credit 1.1, Sustainable Sites 4.1 Exemplary Performance – Public Transportation Access: This NPC Project is in a dense urban fabric that has access to several subway stops, commuter rail lines, and bus stops. Following option 2 of the exemplary performance, the NPC Project is located proximate to two subway stops/commuter rail lines and for bus stops. The MBTA's frequency of service is at least 200 transit rides per day.

Innovation in Design, Credit 1.2, Energy Star Appliances: The NPC Project will achieve this ID credit by specifying energy-efficient equipment and appliances, as qualified by the EPA's ENERGYSTAR Program (www.energystar.gov).

Innovation in Design, Credit 1.3, Sustainable Sites 7.1 Exemplary Performance – 100 percent Covered Parking: The NPC Project achieves exemplary performance by having 100 percent of the parking spaces under cover.

Innovation in Design, Credit 2.0, LEED Accredited Professional: The NPC Project has at least one LEED AP involved in the NPC Project design and development.

6.7 Regional Priority Credits

The following are the Regional Priority Credits for the zip code 02210:

- Sustainable Sites Credit 3: Brownfield Redevelopment
- Sustainable Sites Credit 6.1: Stormwater Design- Quantity Control
- Sustainable Sites Credit 7.1: Heat Island Effect- Non-roof
- Sustainable Sites Credit 7.2: Heat Island Effect- Roof
- Energy and Atmosphere Credit 2: On-Site Renewable Energy, 1 percent
- Materials and Resources Credit 1.1: Building Reuse - Maintain Existing Walls, Floors and Roof, 75 percent.

LEED 2009 for New Construction and Major Renovations

Project Checklist

399 Congress, Boston, MA 02210

02.03.2011

Sustainable Sites — Possible Points: 26

Y	?	N			
Y			Prereq 1	Construction Activity Pollution Prevention	
1			Credit 1	Site Selection	1
5			Credit 2	Development Density and Community Connectivity	5
	1		Credit 3	Brownfield Redevelopment	1
6			Credit 4.1	Alternative Transportation—Public Transportation Access	6
1			Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
3			Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
2			Credit 4.4	Alternative Transportation—Parking Capacity	2
	1		Credit 5.1	Site Development—Protect or Restore Habitat	1
	1		Credit 5.2	Site Development—Maximize Open Space	1
1			Credit 6.1	Stormwater Design—Quantity Control	1
	1		Credit 6.2	Stormwater Design—Quality Control	1
1			Credit 7.1	Heat Island Effect—Non-roof	1
1			Credit 7.2	Heat Island Effect—Roof	1
		1	Credit 8	Light Pollution Reduction	1

Water Efficiency — Possible Points: 10

Y			Prereq 1	Water Use Reduction—20% Reduction	
	4		Credit 1	Water Efficient Landscaping	2 to 4
		2	Credit 2	Innovative Wastewater Technologies	2
2	2		Credit 3	Water Use Reduction	2 to 4

Energy and Atmosphere — Possible Points: 35

Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
2	3	14	Credit 1	Optimize Energy Performance	1 to 19
		7	Credit 2	On-Site Renewable Energy	1 to 7
	2		Credit 3	Enhanced Commissioning	2
	2		Credit 4	Enhanced Refrigerant Management	2
	3		Credit 5	Measurement and Verification	3
	2		Credit 6	Green Power	2

Materials and Resources — Possible Points: 14

Y			Prereq 1	Storage and Collection of Recyclables	
		3	Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
		1	Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
2			Credit 2	Construction Waste Management	1 to 2
		2	Credit 3	Materials Reuse	1 to 2

Materials and Resources, Continued

Y	?	N			
1	1		Credit 4	Recycled Content	1 to 2
1	1		Credit 5	Regional Materials	1 to 2
	1		Credit 6	Rapidly Renewable Materials	1
	1		Credit 7	Certified Wood	1

Indoor Environmental Quality — Possible Points: 15

Y			Prereq 1	Minimum Indoor Air Quality Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
		1	Credit 1	Outdoor Air Delivery Monitoring	1
		1	Credit 2	Increased Ventilation	1
1			Credit 3.1	Construction IAQ Management Plan—During Construction	1
	1		Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
1			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
1			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
1			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
1			Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
1			Credit 5	Indoor Chemical and Pollutant Source Control	1
1			Credit 6.1	Controllability of Systems—Lighting	1
1			Credit 6.2	Controllability of Systems—Thermal Comfort	1
	1		Credit 7.1	Thermal Comfort—Design	1
		1	Credit 7.2	Thermal Comfort—Verification	1
	1		Credit 8.1	Daylight and Views—Daylight	1
1			Credit 8.2	Daylight and Views—Views	1

Innovation and Design Process — Possible Points: 6

1			Credit 1.1	Innovation in Design: Exemplary Performance SS4.1	1
1			Credit 1.2	Innovation in Design: Energy Star Appliances	1
1			Credit 1.3	Innovation in Design: Exemplary Performance SS7.1	1
	1		Credit 1.4	Innovation in Design: Specific Title	1
	1		Credit 1.5	Innovation in Design: Specific Title	1
1			Credit 2	LEED Accredited Professional	1

Regional Priority Credits — Possible Points: 4

1			Credit 1.1	Regional Priority: SS7.1	1
1			Credit 1.2	Regional Priority: SS7.2	1
1			Credit 1.3	Regional Priority: SS6.1	1
	1		Credit 1.4	Regional Priority: SS3	1

45	32	33	**Total**		Possible Points: 110

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

Section 7.0

Infrastructure Systems

7.0 INFRASTRUCTURE SYSTEMS

There is adequate water and drainage capacity in the area for the NPC Project. The proponent will coordinate with the BWSC on the design of the proposed water, drainage, and sewer connections, including the short extension necessary to reach the NPC Project Site. All appropriate permits and approvals will be acquired prior to construction.

7.1 Sewage Generation

The NPC Project is expected to generate 47,285 gallons per day of sewage. The Previously Approved Project was projected to generate 59,693 gpd. This reduction of 12,408 gpd represents a 21 percent decrease in this impact category.

The NPC Project's sewage generation rates were estimated using the Massachusetts State Division of Water Pollution Control's Sewer System Extension and Connection Permit Program (314 CMR 7.0). This reference lists typical generation values for the sources listed in Table 7-1.

Table 7-1 Estimated Sewage Generation

Use	Area (g.s.f.)	units	Sewage Generation Rate	Total g.p.d.
Extended Stay/ Studios/One-Bedroom	-	352 rooms	110 gpd/room	38,720
Two Bedrooms	-	72 total rooms	110 gpd/room	7920
Lobby Retail	12,895	-	50 gpd/1,000 sf	645
Total				**47,285**

The NPC Project will not require a DEP Sewer Connection Permit as did the Previously Approved Project. A Department of Environmental Protection ("**DEP**") Sewer Compliance Certification Form BRP WP 73 will be filed for the NPC Project because the anticipated effluent discharge rate is greater than 15,000 gpd but less than or equal to 50,000 gpd.

7.2 Proposed Sewage Connection

The sewer and drainage system that services the NPC Project Site and surrounding area is owned and operated by the BWSC. Figure 7-1 shows the nearby sewer lines.

The nearest sewer mains are located approximately 300 feet to the west of the Site, at the intersection of Congress Street and Boston Wharf Road (West Service Road) and 300 feet to the northeast, within B Street. Based upon discussions with BWSC during the review of the Previously Approved Project, the proponent expects that the NPC Project will connect to the 10-inch combined sewer main on the southern side of Congress Street, as that was the BWSC's preference.

The NPC Project's sewage and stormwater flows from the NPC Project will be kept separate per BWSC requirements.

A DEP Sewer Compliance Certification Form BRP WP 72 is anticipated as the proposed sewer extension is less than 1,000 ft. in length.

7.3 Proposed Stormwater Connection

The existing Storm Drain system in Congress Street consists of catch basins and a 30-inch concrete drainpipe that flows easterly towards B Street. The existing drain system in B Street is a 36-inch drain that flows northerly towards the Boston Harbor, where it discharges through SDO202. Stormwater runoff from the Site currently infiltrates on-site or flows from the site and is collected in the adjacent BWSC catch basins. Under proposed conditions the entire parcel will generally be covered by the proposed building. The existing drainage pattern will be maintained to the greatest extent possible, as runoff from the building will be directed into the ground for detention and infiltration and stormwater runoff from the adjoining walkways and the uncovered portion of the service entrance will continue to flow to the drainage system in Congress Street. The building's closed drainage system, which will discharge to an underground detention/infiltration system, will have an outlet to the Congress Street system. The location of new service connections for the overflow shall be coordinated with Boston Water and Sewer Commission. This is the same connection that was proposed and approved in 2006.

To ensure the quality of local water bodies, permanent "Don't Dump: Drains to Boston Harbor" signs will be provided on any new catch basins to be installed and at any existing catch basins in the immediate vicinity of the NPC Project that do not already feature this notice.

Because BWSC's system ultimately discharges to the waters of the Boston Harbor, the stormwater management design will also remove Total Suspended Solids from the storm flows before connecting to the BWSC storm drain system. Mitigation measures that will be incorporated in the NPC Project design include catch basins with sediment sumps and

oil/grease traps, and the implementation of an Operations and Maintenance Plan for the Stormwater System. The design objective for the proposed Stormwater Management System is to meet the Massachusetts Stormwater Management Standards to the greatest extent possible.

7.4 Proposed Water Supply System

As shown on Figure 7-2, there are BWSC water mains within Congress Street adjacent to the NPC Project Site. Two 16-inch water lines run in and under the center of Congress Street, on the north side of the Site. The southernmost 16-inch waterline, closest to the NPC Project, is part of the BWSC low-pressure water system, while the 16-inch northernmost waterline is part of the high-pressure water system.

Hydrant tests in the vicinity of the Site, presented in Table 7-2, indicate the capacity of the water supply service lines in the vicinity of the NPC Project.

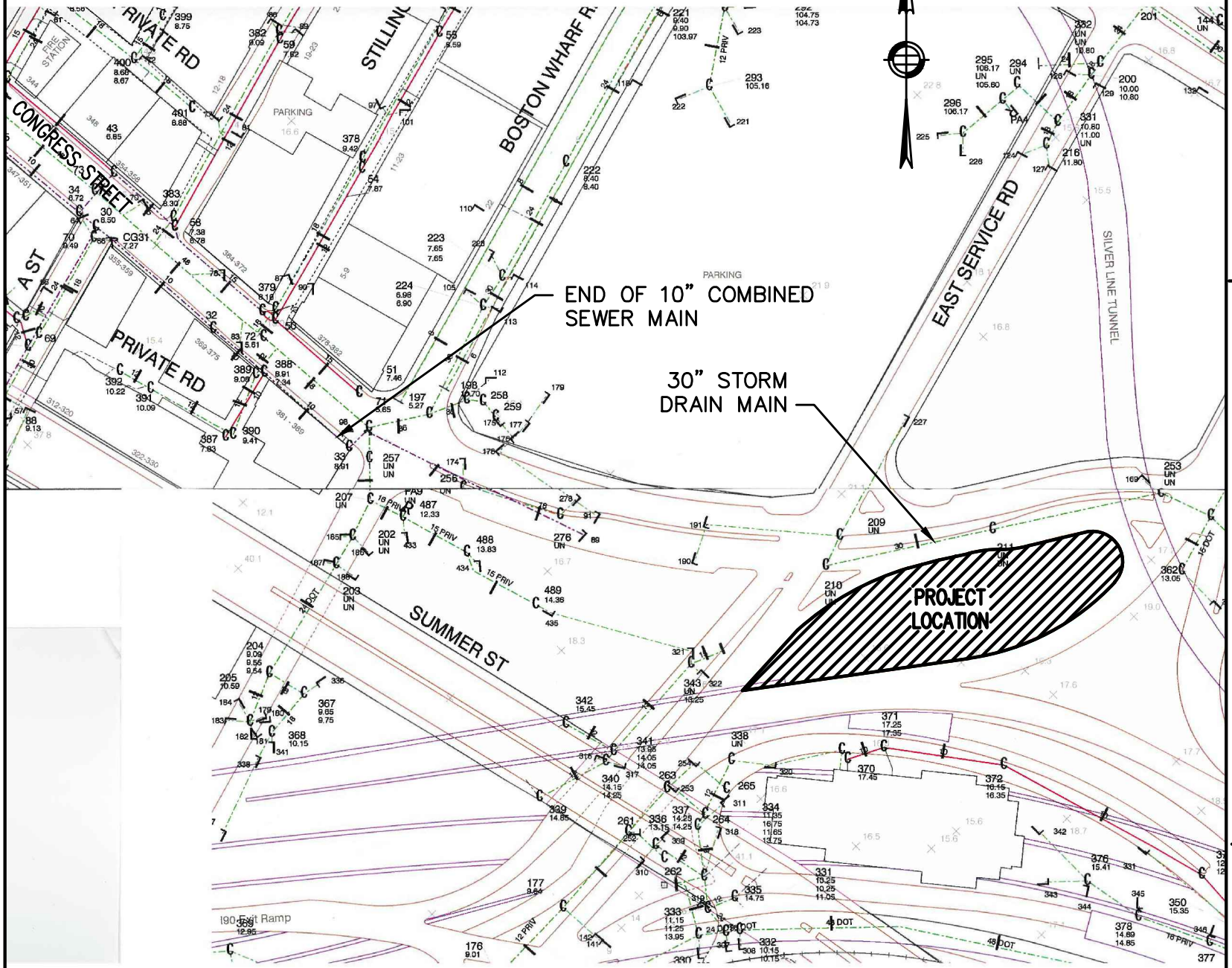
Updated hydrant flow data was provided by the Boston Water and Sewer Commission for tests conducted by BWSC on March 11, 2011. The hydrant flow test results can be found in Table 7-2. There appears be adequate capacity within the vicinity of the NPC Project.

Table 7-2 Existing Hydrant Flow Data

Static Hydrant	Flow Hydrant	Static Pressure	Residual Pressure	Total Flow	Flow at 20 psi	Flow at 10 psi
H668	H667	70 psi	66 psi	1,876 gpm	7,338 gpm	8,097 gpm
H125	H163	106 psi	98 psi	2,350 gpm	8,473 gpm	8,991 gpm

The NPC Project's water demand is estimated at 110 percent of the sewage generation to account for loss. Average potable water demand for the NPC Project is estimated at 52,000 gpd. The decrease in comparison to the Previously Approved Project, which had an estimated water demand of 65,662 gpd, represents a 21 percent reduction.

Proposed connections are expected to be to the low pressure system for domestic water and the high pressure system for fire protection, as was the case for the 2006 hotel proposal. The NPC Project will connect to any system adjacent to the Site as recommended by the BWSC.



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PREPARED FOR:
EPSILON ASSOCIATES
MAYNARD, MA

PROJECT #	8407
FILE:	FIGURES.DWG
SCALE:	NOT TO SCALE
DATE:	03/28/2011
PROJECT MGR:	JMS
SURVEYOR:	
DRAFTED BY:	DMK
CHECKED BY:	JMS

SHEET:

Fig. 7.1

1 OF 1 REV.

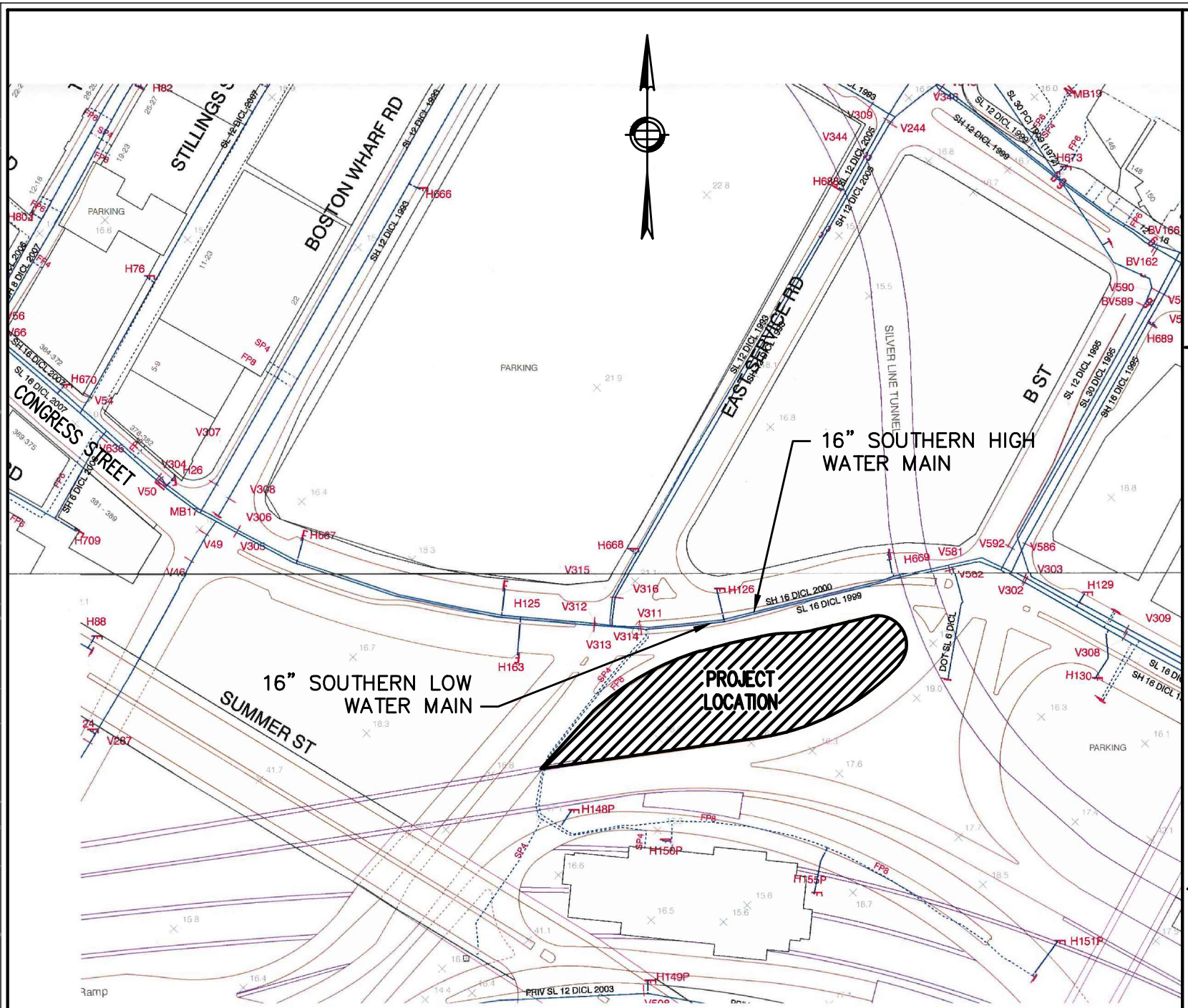

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Fig. 7.2

1 OF 1 REV.

Section 8.0

Historic Resources

8.0 HISTORIC RESOURCES

Overall, there will be no significant increase in impacts to historic resources resulting from the NPC Project change. No historic or archaeological resources are located within the NPC Project Site itself. As described in the 2006 PNF for the Previously Approved Project, however, the Site is in the vicinity of several historic resources that are listed in the State and National Registers of Historic Places and/or included in the *Inventory of Historic and Archaeological Assets of the Commonwealth*. The only change to nearby historic resources compared to those listed in the 2006 PNF/ENF is that the Fort Point Channel has been designated as a Landmark District. The Boston Landmarks Commission's ("**BLC**") vote to designate the area was confirmed by Mayor Thomas M. Menino and approved by a vote of City Council on January 28, 2009. The Site is not included within the district, the eastern limit of which is formed by the West Service Road and Boston Wharf Road.

Because approval of the NPC Project requires state agency permits, it is subject to review by the Massachusetts Historic Commission in compliance with M.G.L. Ch 9, Sections 26-27C. On April 29, 2011, the Proponent submitted a letter to the MHC describing the proposed changes to the NPC Project's architecture (see Section 5.0) and seeking their input. The MHC has not responded to that letter. The MHC was also sent a copy of the PNF/ENF for the Previously Approved Project and also did not comment on it.

As discussed in Section 4.2, shadow impacts to the Fort Point Channel area are expected to be minor and restricted to the early morning hours of winter. Pedestrian Level Wind impacts will be evaluated using a wind tunnel model by RWDI. The results will be shared with the BRA, BLC, and the MHC. Given the distance, however, between the proposed NPC Project and the nearest historic structure, no adverse wind impacts to historic resources are anticipated.