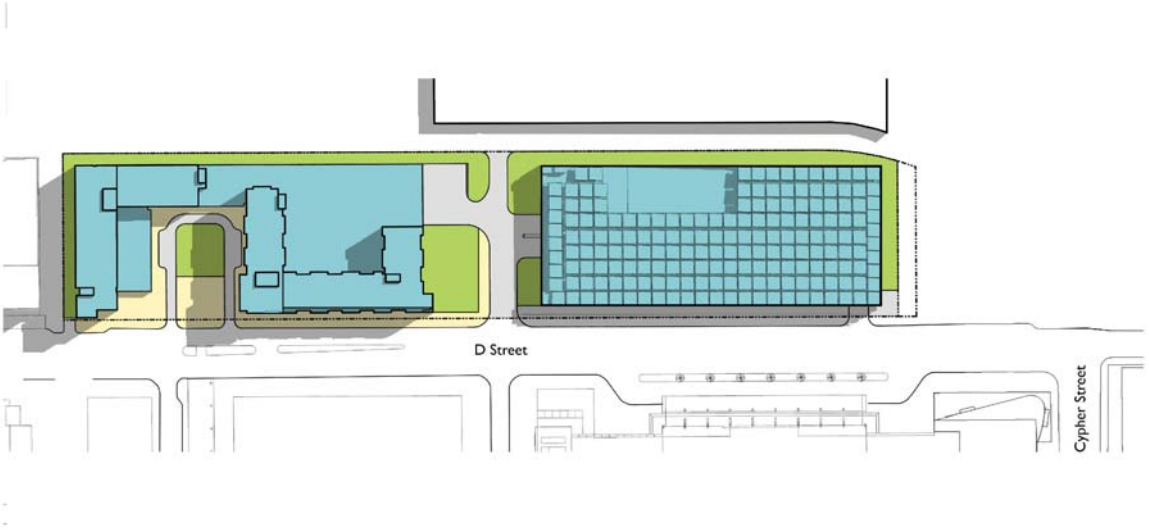
Notice of Project Change

D Street Development

formerly 371-401 D Street



Submitted to:

Boston Redevelopment Authority
One City Hall Square
Boston, Massachusetts 02201

Prepared by:

Epsilon Associates, Inc.
3 Clock Tower Place, Suite 250
Maynard, Massachusetts 01754

Submitted by:

Massachusetts Convention Center Authority
415 Summer Street
Boston, Massachusetts 02210

In Association with:

Goulston & Storrs
Vanasse Hangen Brustlin, Inc.
ADD Inc.

December 17, 2012

Epsilon
ASSOCIATES INC.

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General Information

This Notice of Project Change (NPC) is being filed with the Boston Redevelopment Authority (BRA) pursuant to Article 80A-6 of the Boston Zoning Code (the "Code") to notify the BRA of proposed changes to the previously approved project planned for the site located at 371-401 D Street in the South Boston neighborhood.

The previously approved project on the site was a residential project proposed by Cathartes/AEW 371-401 D Street, LLC ("Cathartes"). Intercontinental Fund IV 371-401 D Street, LLC ("Intercontinental") purchased the site in 2005 and proposed a smaller residential development. The Massachusetts Convention Center Authority (the "MCCA" or the "Proponent") purchased the site in October 2012 from Intercontinental. Figure 1 shows the location of the site.

The MCCA proposes the construction of two 250-key hotels that will share amenities on the ground floor, and an approximately 1,350-space BCEC replacement parking garage with ground floor retail (the "D Street Development" or the "Project").

The MCCA was authorized and directed by Chapter 152 of the Massachusetts Acts of 1997 to undertake the construction and operation of the Boston Convention and Exhibition Center (BCEC). The MCCA's mission is to generate significant regional economic activity by attracting conventions, tradeshows, and other events to its world-class facilities while maximizing the investment return for the residents and businesses in the Commonwealth of Massachusetts. The BCEC is an important component of the MCCA's mission and is, in and of itself a true public benefit for the City of Boston and the Commonwealth.

The BCEC, which held its first event in May 2004, is a dramatically designed, state-of-the-art convention and meetings facility. It offers 516,000 square feet of contiguous exhibition space, 160,000 square feet of meeting space, 80 meeting rooms, and a dramatic 40,000 square foot ballroom. In 2012, the BCEC hosted 121 events, welcomed 370,000 attendees, and generated demand for an estimated 324,588 hotel room nights. The BCEC ranks ninth in the nation in terms of its ability to attract and conduct convention business, yet it ranks only twenty-sixth in size. This speaks to the desirability of Boston as a convention destination and to the successful positioning and operation of the BCEC as a premier convention and meeting experience.

From November 2009 until mid-2011, the Authority engaged in a wide-ranging strategic planning process with the goal of elevating the BCEC into the "Top 5" of North American convention centers. A 27-person task force (a membership list is provided as Appendix A), the "Convention Partnership," appointed by legislative leaders, worked with MCCA staff and consultants to establish a framework for further study and action. The Convention Partnership issued the Convention Partnership Report in July of 2011, setting forth its findings and recommendations. A copy of the Convention Partnership Report can be found at www.t5boston.com.

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D Street Developement

Epsilon ASSOCIATES INC.

Figure 1
Aerial Locus Map

The Convention Partnership affirmed the success of the Authority in establishing Massachusetts as a leader in the convention industry and endorsed the expansion of the BCEC. The group found that the BCEC has become a powerful economic engine, creating jobs, generating hotel room nights and associated tax and economic benefits, and drawing events that create synergies with key sectors of the Massachusetts economy. The Convention Partnership identified insufficient hotel room supply as the biggest impediment to future success, and recommended that the hotel supply be addressed immediately. Other impediments to growth include the need for a second, larger ballroom at the BCEC, the need for expanded exhibit space, and the lack of amenities, such as restaurants and retail stores, in the area surrounding the BCEC.

The Project seeks to alleviate the hotel room supply constraints, as well as provide replacement parking adjacent to the BCEC to allow for the expansion of the BCEC facility on the land proposed for such an expansion in the original BCEC project plans from the late 1990s. The Project advances the MCCA's mission by increasing hotel room supply proximate to the BCEC facility and facilitating the BCEC Expansion.

Project History

On September 2, 1999, Cathartes submitted a Project Notification Form (PNF) to the BRA for a 650-unit residential development. On November 15, 1999, the BRA issued a Scoping Determination that required the preparation of a Draft Project Impact Report (DPIR). A DPIR prepared in accordance with the Scoping Determination was filed with the BRA on May 26, 2000. On June 30, 2000, a Development Plan to establish a Planned Development Area (PDA) was filed with the BRA. This was followed on August 25, 2000 with an NPC describing changes to the project, which included an increase in residential units from 650 to 715, and an increase in parking spaces from 761 to 778. The BRA Board voted on September 21, 2000 to approve the NPC project and authorized the submittal of the Development Plan to the Boston Zoning Commission. On October 20, 2000, the Boston Zoning Commission adopted, and the Mayor approved, the Development Plan for PDA No. 50 for the Residences at D Street Project, as amended. The PDA Plan allowed for 695 residential units, comprising 726,000 square feet, and parking for approximately 778 vehicles.

In 2005, the site was sold to Intercontinental. Intercontinental filed an NPC on June 5, 2006 describing the changes to the project, which included a reduction in the number of residential units to 585, comprising approximately 690,000 square feet, and a reduction in parking to 724 spaces. An Amended and Restated Development Plan for PDA No. 50 was submitted to the BRA on June 5, 2006. The BRA Board voted on September 7, 2006 to approve the NPC and the Amended and Restated Development Plan for PDA No. 50.

As mentioned above, the MCCA purchased the site in October 2012.

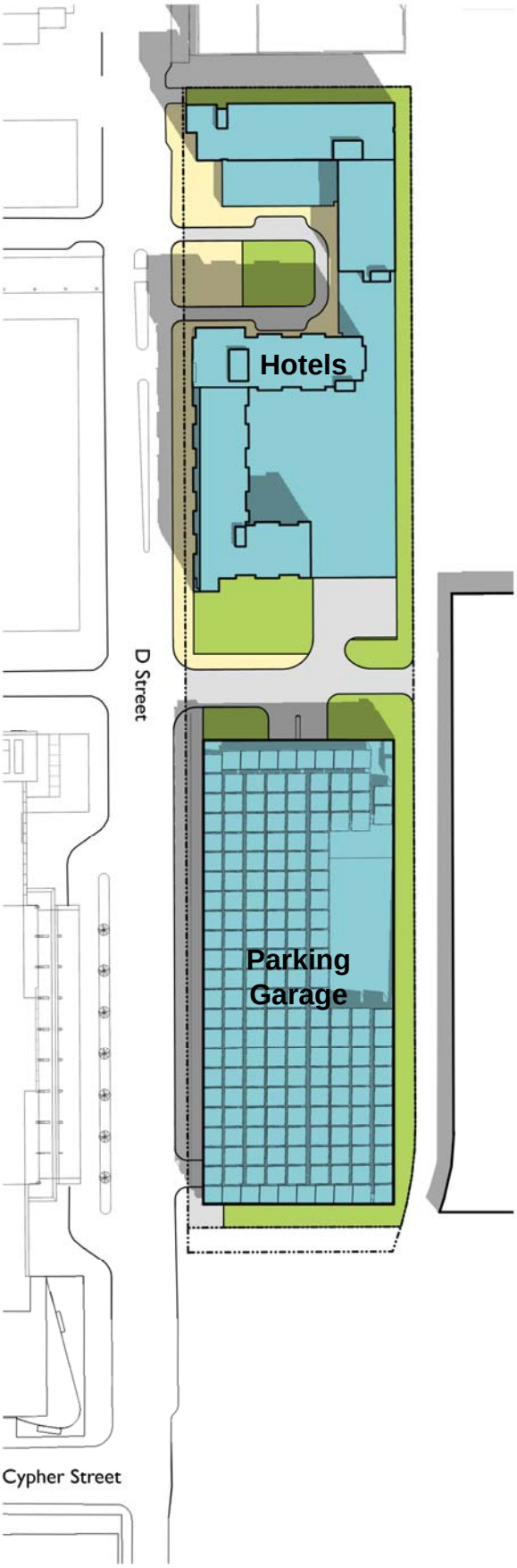
Project Description

The currently proposed Project totals approximately 337,300 square feet and includes an approximately 250-key limited service hotel, an approximately 250-key extended stay hotel, and approximately 26,300 square feet of ground floor retail in the parking garage. The parking garage includes approximately 1,350 parking spaces. The hotels are located on the north side of the site, and the garage is located on the south side of the site. Figure 2 includes a site plan. Figures 3 and 4 provide conceptual images of the Project. The parking garage is intended to replace the parking spaces that will be displaced by the BCEC Expansion on the site of the South Parking Lot, which includes 1,343 parking spaces, and to provide parking for the two proposed hotels. The parking garage is intended to provide replacement parking for the South Parking Lot and will be placed into services as spaces in the South Parking Lot are taken out of service prior to the construction of the BCEC Expansion. If additional land becomes available, the configuration of the garage and circulation may change.

The hotels are based on a model incorporating two mid-priced hotels sharing common program areas within a single podium. The limited service hotel is a model based on business travelers with short stays. This hotel model incorporates standard hotel rooms and includes amenities aimed at the business traveler, such as a business center, bar, and media pods. The common area is a multi-function space that transitions over the course of the day from breakfast area, to lounge to bar. The extended stay hotel is a model based on longer occupancies. The typical guestroom incorporates a small kitchen (studio concept). A full breakfast area is included and a common area is provided in lieu of a bar. Major conference and dining areas are absent.

Each hotel has its own entrance, but allows guests to flow between the public areas. Common amenities are intended to be accessed independently from each guestroom core and may include a pool, fitness area, meeting rooms and laundry room.

The proposed design for the mid-priced hotels and parking garage is referred to as the Permitting Base Design. The Permitting Base Design reflects the program defined by the MCCA and further captured in an RFP, discussed below. It is understood that the design may evolve during the design review process to reflect the evolution of an emerging urban design context on D Street. Under the Permitting Base Design, the hotels are accessed off of D Street. The arrival area is aligned with an entrance to the existing BCEC facility creating a proposed pedestrian connection. The service entrance is located to the south of the site, aligned with an existing vehicular connection with the BCEC, and is also proposed to provide access to the parking deck. The service yard is in the southeast corner of the site.



D Street Development

Figure 2
Site Plan

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

D Street Development

Figure 3

Perspective Looking East

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

D Street Development

Figure 4

Perspective from D Street Looking North

The Project assumes a number of leased/outparcel restaurant and retail venues will line the street frontage creating a more pedestrian friendly environment.

The hotels are the subject of a Request for Proposals (RFP) issued by the MCCA on November 15, 2012. Included in the RFP are a set of design guidelines that detail setback, height and massing expectations, entry and loading requirements, as well as acceptable building materials, among other things. The design guidelines for the hotels are attached in Appendix C. The MCCA is seeking a developer for the hotels, to which it would lease the land and construct the hotels, while the parking garage is anticipated to be developed by the MCCA itself. It is anticipated that a developer for the hotel portion of the Project will be chosen by May 2012.

Project Changes

Table 1 provides a breakdown of the differences between the previously approved projects on the site and the Project proposed by the MCCA. The changes include:

- Development of two hotels instead of residential units.
- A significant decrease in the density on the site.
- The height of the hotels and parking garage similar to or less than what was previously approved.
- Street-level retail within the proposed parking garage.
- An increase in the number of parking spaces. However, the parking spaces will replace the 1,343 parking spaces on the BCEC South Parking Lot, and will not be additional spaces to be used by the BCEC.

Table 1 Project Program

	Approximate Dimensions		
Program Use	**Cathartes Project**	**Intercontinental Project**	**Proposed Project**
Residential	715 units[1]	585 units	N/A
Hotel	N/A	N/A	500 rooms
Retail	N/A	N/A	26,300 sf
Parking	778 spaces	724 spaces	1,350 spaces
Tallest Height	150 feet	195 feet	140 feet
TOTAL GFA[2]	**726,000**	**690,000**	**377,300**

[1] Although 715 residential units were approved by the BRA Board, the Boston Zoning Commission vote authorized a total of up to 695 residential units.

[2] Total gross floor area does not include the square footage for parking.

Public Benefits

As mentioned above, the MCCA's mission is to generate significant regional economic activity by attracting conventions, tradeshows, and other events to its world-class facilities while maximizing the investment return for the residents and businesses in the Commonwealth of Massachusetts. The Project advances this mission to provide economic benefit to the state, as well as the City of Boston. An increased hotel room supply will improve the ability of the BCEC to hold simultaneous events with the Hynes Convention Center when both require hotel rooms for exhibitors and conventioneers. The replacement parking provided in the proposed parking garage will free up the expansion space on the South Parking Lot, allowing the BCEC to grow and attract more and larger events, furthering the MCCA's mission.

The Project will include numerous additional benefits to the neighborhood, the City of Boston, and the state including:

- An improved performance for the BCEC due to more hotel rooms within walking distance of the facility.
- Moving the BCEC towards being a "Top 5" convention center in North America which will elevate Boston's status for conventions and boost tourism in the city and state.
- New construction and permanent jobs.
- Increased revenue for the city and state related to increased economic activity from the BCEC.
- New hotel rooms will bring more people to the South Boston Waterfront, supporting its growing number of restaurants, shops and attractions.
- Improved streetscape along D Street.
- A decreased need for shuttle buses from the Back Bay hotels to the BCEC, which will have a positive impact during peak travel hours and on air quality.
- Improved stormwater runoff with the development of a currently vacant site used for storage.
- The proposed solar panel installation on the parking garage will contribute to the city and state's emphasis on increasing renewable energy production in the state.

Legal Information

Legal Judgments Adverse to the Proposed Project

There are no withstanding legal judgments adverse to the proposed Project.

History of Tax Arrears

The MCCA is tax exempt.

Site Control / Nature of Public Easements

The MCCA acquired the site pursuant to and Order of Taking dated September 20, 2012, recorded in the Suffolk County Registry of Deeds in Book 2012 at Page 354. The taking extinguished all property encumbrances.

Zoning

The Project site is subject to PDA No. 50 which describes the allowed dimensions, uses, etc. The Proponent will seek amendments to PDA No. 50 to accommodate the Project.

Regulatory Controls and Permits

Projects on land owned by the MCCA serving its mission are not subject to local land use regulation. The Proponent intends to work cooperatively with the City of Boston by voluntarily undergoing Article 80 Large Project Review and voluntarily seeking zoning and other permits and approvals. Table 2 presents a preliminary list of permits and approvals from state and federal governmental agencies that are presently expected to be required for the Project, and City of Boston approvals the MCCA intends to seek. The need for additional permits, approvals or other actions may become evident during Project design and development.

Table 2 List of Anticipated Permits and Approvals

AGENCY	APPROVAL
Local	
Boston Redevelopment Authority	Article 80 Large Project Review Zoning Approval – Planned Development Area
Boston Civic Design Commission	Advisory Review
Boston Water and Sewer Commission	Sewer, Stormwater and Construction Dewatering Approvals
Boston Air Pollution Control Commission	Parking Freeze Permit
Boston Public Improvement Commission/ Boston Department of Public Works	Approvals for work in and alterations to public ways; Curb Cut Permit

Table 2 List of Anticipated Permits and Approvals (Continued)

AGENCY	APPROVAL
Boston Transportation Department	Transportation Access Plan Agreement; Construction Management Plan
Boston Public Safety Commission, Committee on Licenses	Permit to erect and maintain parking garage; Flammable storage license
Boston Fire Department	Flammable storage and other approvals
State	
Department of Environmental Protection, Division of Water Pollution Control	Self-certification for sewer discharges
Department of Environmental Protection	Notification of Demolition and Construction; Air Plan Approval (if required)
Executive Office of Energy and Environmental Affairs	MEPA Review
Massachusetts Historic Commission	State Register Review
Massachusetts Water Resources Authority	Sewer Use Discharge Permit Temporary Construction Site Dewatering Permit (if required)
Federal	
Environmental Protection Agency	National Pollution Discharge Elimination System; General Construction Permit

Public Process

Convention Partnership

During an 18-month process starting in 2010, the 27-member (see Appendix A for a member list) Convention Partnership looked comprehensively at both the BCEC and the Hynes Convention Center—their histories, successes and challenges, market positions and opportunities, industry context and trends—all with an eye toward the future. In-depth analyses of many topics were completed, including the following:

- The MCCA's important role contributing to and supporting the Commonwealth's key economic sectors;
- The significant, direct economic benefits from events at the BCEC and Hynes: jobs, taxes and visitor spending;
- The state of the convention, meeting and tradeshow industry, projections for future growth;
- The facility size, services and amenities offered or proposed by competitive convention facilities;

- Competitive challenges faced by the MCCA as it seeks to increase the number of conventions, meetings and tradeshows in Boston;
- Various options for expanding the BCEC, together with the expanded business opportunities and economic benefits of these options;
- The costs and financing options of expanding the BCEC;
- The benefits from an additional headquarters hotel proximate to the BCEC;
- The need for mid-priced hotels proximate to the BCEC;
- Options for intervening to encourage development of additional hotel supply near the BCEC; and
- The unique strengths of the Hynes as a convention facility and its complementary role vis-à-vis the BCEC.

The Convention Partnership held its initial meeting in January of 2010 and met regularly through June of 2011. During the summer of 2010, the Partnership divided into three working groups—finance, hotels, and BCEC Expansion and urban context. Each working group met multiple times, examining topics critical to the future of the BCEC and the convention industry in Boston and the region.

The Convention Partnership was assisted by senior MCCA staff together with a team of leading industry experts. To broaden its reach, the Partnership also met with the MCCA's Customer Advisory Group and interested members of the public. In June of 2010, the Convention Partnership hosted a moderated discussion at which panelists debated the "tough questions" related to the MCCA's future, including the following topics:

- Past projections for facility and hotel performance;
- Public and private financing options;
- Supply and demand;
- Mobility and transportation;
- Financial performance and return on investment;
- Competition both regionally and nationally;
- City and state priorities/opportunity costs;
- Hotel inventory and development;

- Economic development and place making; and
- Technology's impact on future business.

In addition, the Convention Partnership prepared an inventory of other facilities in the Commonwealth that host conventions, conferences, tradeshows, concerts, theatrical exhibitions, expositions and athletic events to gain a complete understanding of the existing competitive landscape and the context for any proposed expansion. An interim report was completed and distributed by the Partnership in the fall of 2010.

From the end of 2010 through June of 2011, the Convention Partnership reviewed cost estimates, expansion benefits and financing options. Three scenarios for expanding the BCEC were developed, and a series of initial implementation steps and first year actions were defined.

The first months of 2011 were also spent synthesizing the Convention Partnership's research and analysis into a series of key findings and recommendations that formed the basis of their report. The final report released in July of 2011 marked the culmination of the Convention Partnership's efforts. The report provided 15 recommendations related to expansion elements, financing and other issues. The Project is consistent with the recommendations related to development as it will develop mid-priced hotels proximate to the BCEC, increase total hotel supply proximate to the BCEC, and allow for the development of the BCEC Expansion components on and adjacent to the South Parking Lot.

Design Advisory Committee

In 2012, the MCCA, with input from the City of Boston and the local elected officials, assembled a Design Advisory Committee (DAC) that will participate in the community process. To date, the DAC has convened six times to review and discuss various topics related to the BCEC Expansion, the urban design effort on D and Cypher Streets, and the proposed mid-priced hotels and parking on D Street. These topics have included in depth presentations on transportation and parking, land acquisition, mid-priced hotel design guidelines, and potential community open space. The DAC will continue to meet bi-monthly or as needed, and will act as a primary liaison to the South Boston and Fort Point neighborhoods through the permitting, design, and urban design efforts.

Additional Public Participation Processes

The MCCA has met with local and state agencies regarding the Project, as well as elected officials, community groups and other interested parties. The MCCA looks forward to continue to meet with the groups and individuals as the design and review process continues.

Schedule

Construction is expected to commence by the end of 2013 and to be complete by 2015. Construction of the garage is expected to commence in 2014.

Development Review Component

Transportation

The proposed Project is expected to generate less vehicular traffic than either of the previously-approved residential projects. A vehicle trip generation comparison is presented in Table 3, which indicates that the Project, compared to the previously approved NPC, would reduce peak hour trip generation by approximately 12 vehicle trips and 31 vehicle trips in the morning and evening, respectively.

Table 3 Vehicle Trip Comparison

	Previously Approved NPC June 15, 2006 (585 Residential Units)	Currently Proposed Project - 2012 (500 Hotel Rooms)	Change
Daily			
In	786	756	-30
Out	786	756	-30
Total	1,572	1,512	-60
AM Peak Hour			
In	20	63	43
Out	96	40	-56
Total	116	104	-12
PM Peak Hour			
In	94	58	-36
Out	46	51	5
Total	140	109	-31

Regardless of the reduced vehicle trip generation associated with the Project, a full transportation analysis was performed, including traffic operational analysis at 10 area intersections, to identify any adverse impacts that might result from the Project. The analysis, which is presented in full in Appendix B, indicates that there would be no significant adverse impacts associated with the Project.

Wind

The proposed building massing is similar to the previously approved project, but the heights have been modified. The northern hotel building will decrease in height from 17 stories to a maximum height of 13 stories. The south hotel building will be similar in height to the

previously approved project. The height of the parking garage will be similar to the heights of the previously approved buildings for the same location on the site, and will create a similarly consistent streetwall along D Street. Therefore, it is anticipated that the Project's impact on pedestrian level winds will be no greater than that of the previously approved project.

Shadow

As mentioned above, the massing of the Project is similar, except the heights have been modified. Due to the decrease in height of the northern hotel building and similar heights of the southern hotel building and parking garage, new shadows created by the Project are expected to be less than the previously approved project.

Daylight

As mentioned above, the massing of the Project is similar, except the heights have been modified. Due to the decrease in height of the northern hotel building and similar heights of the southern hotel building and parking garage, the daylight obstruction values for the site are expected to be less than the previously approved project.

Air Quality

The Project change results in a significantly smaller Project than what was previously approved. Due to the significant decrease in size, the extent of the heating, ventilation and air conditioning (HVAC) system is expected to be smaller than the previously approved project, and therefore the impact on air quality is expected to be less. In addition, the Project change results in fewer vehicle trips, decreasing the air quality impact on nearby intersections.

Noise

The Project change results in a significantly smaller Project than what was previously approved. Due to the significant decrease in size, the extent of the HVAC system is expected to be smaller than the previously approved project, and therefore the impact on noise is expected to be less. The Project will comply with the Massachusetts Department of Environmental Protection's Noise Policy and City of Boston Zoning District Noise Standards.

Solid Waste

The significant reduction in size of the Project will result in a decrease in anticipated solid waste. The hotels and retail spaces will include areas for recyclables, and recycling will be encouraged.

No hazardous wastes will be produced as a result of the changes.

Geotechnical/Groundwater

Foundation design studies have not yet been undertaken for the proposed Project. It is currently anticipated that only minimal excavation of the site will be required. The Proponent will ensure that there will be no negative impact to groundwater due to construction of the Project.

Construction Impacts

The Project will generate transportation, air quality and noise impacts typical of a construction site. A Construction Management Plan (CMP) for the Project will be prepared and submitted to the Boston Transportation Department for review and approval prior to issuance of a building permit. Truck routing and efforts to minimize the impacts on the surrounding area will be identified in the CMP. Measures will be implemented on-site and on construction equipment to minimize airborne dust from the site and air quality impacts associated with emissions from construction equipment. Measures, such as sound attenuation equipment and the timing of noise generating activities, will be implemented to minimize the noise impact on the surrounding area.

Construction methodologies that ensure public safety and protect nearby businesses will be employed. Techniques such as barricades, walkways, painted lines, and signage will be used as necessary. Construction management and scheduling—including plans for construction worker commuting and parking, routing plans and scheduling for trucking and deliveries, protection of existing utilities, maintenance of fire access, and control of noise and dust—will minimize impacts on the surrounding environment.

Sustainability

The MCCA released a Request for Proposals (RFP) for a developer to design, construct and operate the hotels on November 15, 2012. The RFP requires that the hotels be constructed to meet or exceed the Silver level of the Leadership in Energy and Environmental Design (LEED) rating system for New Construction, meeting the requirements of Article 37 of the Boston Zoning Code. As the design of the Project moves forward, the chosen developer will provide information regarding consistency with Article 37 to the BRA.

Urban Design

The Project site is currently an undeveloped parcel, and D Street adjacent to the site has little activity. The Project will create a new streetwall along D Street with active, street-level uses and an enhanced public realm including retail, outdoor cafes, street trees and site furnishings.

The design of the hotels seeks to enliven the area with new activity from the street-level retail, and a new urban face to D Street that both complements and knits together the existing fabric with the emerging urban form that is being developed throughout the South

Boston Waterfront. New open spaces will punctuate D Street and will relate to the architectural features and massing of the hotels and parking structure. New streets may be developed within and across the site to facilitate loading at the rear of the hotels and to create new connections between D Street and E Street.

Infrastructure

Due to the changes to the Project, the wastewater generation has decreased from approximately 91,300 gallons per day (gpd) to approximately 56,180 gpd, and water use has decreased from approximately 100,430 gpd to approximately 61,800 gpd. A sewer extension permit will be required for the new connection. The stormwater impacts are anticipated to be similar to the previously approved project.

Based on initial investigations, the existing utility infrastructure systems have adequate capacity for the new service connections. Coordination meetings with the various utility companies will be conducted as the design is finalized.

All improvements and connections to the Boston Water and Sewer Commission (BWSC) infrastructure will be reviewed by the BWSC as part of its Site Plan Review Process. This process includes a comprehensive design review of the proposed service connections, assessment of system demands and capacity, and establishment of water and sewer service accounts.

Historic Resources

There are no known extant historic or archaeological resources located within the Project site. Project impacts to historic resources will be similar to the previously approved project and be limited to nearby areas of new shadow on buildings in the "C Street" industrial area (MHC No. BOS.RU), which is included in the Inventory of Historic and Archaeological Assets of the Commonwealth.

Appendix A

Convention Partnership Members

A CONVENTION PARTNERSHIP MEMBERS

Mr. Paul Guzzi
President & CEO, Greater Boston Chamber of Commerce
Appointed by: Co-Chair

Mr. James E. Rooney
Executive Director, Massachusetts Convention Center Authority
Appointed by: Co-Chair

Mr. Fregory Bialecki
Secretary, Executive Office of Housing and Economic Development
Appointed by: Governor

The Honorable Sonia Chang-Diaz
Senate Chair, Committee on Tourism, Arts and Cultural Development
Appointed by: Senate President

Mr. David J. Colella
Chairman of the Board, Greater Boston Convention and Visitors Bureau
Vice President & Managing Director, The Colonnade Hotel
Appointed by: GBCVB

Mr. James Coyle
President, Boston Building Trades
Appointed by: Ex Officio

Mr. Richard A. Dimino
President & CEO, A Better City
Appointed by: Ex Officio

Mr. David Giblin
General Manager, Marriott Copley Place
Appointed by: GBCVB

Mr. Jay Gonzalez
Secretary, Executive Office for Administration and Finance
Appointed by: Governor
Represented by:
Mr. Scott Jordan
Deputy Secretary, Executive Office for Administration and Finance

The Honorable John A. Hart
Senator, First Suffolk District
Appointed by: Senate President

Ms. Colleen Keating
General Manager, Sheraton Boston Hotel
Appointed by: GBCVB

The Honorable John D. Keenan
House Chair, Committee on Tourism, Arts and Cultural Development
Appointed by: House Speaker

Mr. Thomas J. Kinton Jr.
CEO & Executive Director, Massachusetts Port Authority
Appointed by: Ex Officio
Succeeded by:
Mr. David S. Mackey
Interim CEO & Executive Director, Massachusetts Port Authority
Represented by:
Mr. Lowell Richards
Chief Development Officer, Massachusetts Port Authority

Councillor William Linehan
Boston City Councillor, District Two
Appointed by: Ex Officio

Convention Partnership Members (Continued)

Mr. Patrick Moscaritolo
President & CEO, Greater Boston Convention and Visitors Bureau
Appointed by: GBCVB

Dr. Rosabeth Moss Kanter
Arbuckle Professor of Business Administration, Harvard Business School
Appointed by: MCCA Board

Ms. Charlayne Murrell-Smith
Vice President Corporate Development & External Relations, Boston Children's Museum
Appointed by: MCCA Exec. Director

Mr. Joseph Nee
Chairman, South Boston Community Development Foundation
Appointed by: Ex Officio

Mr. David O'Shaughnessy
President, Seaport Hotel/World Trade Center
Appointed by: MCCA Exec. Director

Mr. John F. Palmieri
Director, Boston Redevelopment Authority
Appointed by: Mayor
Succeeded by:
Mr. Peter Meade
Director, Boston Redevelopment Authority
Represented by:
Mr. Kairos Shen
Director of Planning, Boston Redevelopment Authority

Mr. Paul J. Sacco
President and CEO, Massachusetts Lodging Association
Appointed by: Ex Officio

Mr. Darryl Settles
President, D'Ventures Limited, LLC
Appointed by: MCCA Board

Ms. Lisa Calise Signori
City of Boston
Appointed by: Mayor

Mr. Samuel R. Tyler
President, Boston Municipal Research Bureau
Appointed by: Ex Officio

The Honorable Brian P. Wallace
State Representative, Fourth Suffolk District
Appointed by: House Speaker
Succeeded by:
The Honorable Nick Collins
State Representative, Fourth Suffolk District

Mr. Michael J. Widmer
President, Massachusetts Taxpayers Foundation
Appointed by: Ex Officio

Mr. Darnell L. Williams
President & CEO, Urban League of Eastern Massachusetts
Appointed by: Ex Officio

Appendix B

Transportation

B TRANSPORTATION

B.1 Introduction

This appendix of the Notice of Project Change presents an evaluation and summary of the existing and future transportation conditions associated with the D Street Development (the Project). As mentioned in this NPC, the development of this site by a previous owner was approved previously as The Residences at 371-401 D Street project and approved by the BRA Board in September 2000 but the site has been purchased recently by the MCCA. Subsequently, a Notice of Project Change was filed in June of 2006, in which the program was reduced to a 585 unit condominium building. The development now proposed on the site includes two hotels, along with approximately 23,600 square feet (sf) of street-level retail and an approximately 1,350 space parking garage.

To understand what transportation impacts, positive or negative, would be expected as a result of the Project, the transportation analysis considers existing conditions and conditions in the future with, and without, the D Street Development. The following three scenarios are evaluated:

- Existing (2012) conditions
- Future (2017) No Build conditions (without the D Street Development)
- Future (2017) Build conditions (with the D Street Development)

The transportation analysis examines existing and future traffic operations, access, crash history, parking, pedestrian and bicycle conditions in the vicinity of the site and on study area roadway and intersections. Synchro 6 software was used to facilitate evaluation of traffic operations based on Highway Capacity Manual (HCM) methodologies.

B.2 Project Description

The Project site is located on the east side of D Street, across from the BCEC, south of Summer Street. The Project is described in detail above in the Project Description section of this NPC.

In brief, the D Street Development includes two, 250-key hotels along with approximately 23,600 sf of street-level retail. Although the retail space will be located in the garage foot-print, it is expected that it will support the hotel development, BCEC attendees, and the neighboring communities. The hotels will be supported by parking spaces in a garage providing approximately 1,350 parking spaces. It should be noted, however, that the parking garage will be replacement parking for the existing BCEC 1,343-space South Parking Lot, which will be displaced to facilitate construction of the BCEC Expansion.

The proposed site plan is shown in Figure B-1. The proposed site plan for the mid-priced hotels and parking garage is referred to as the Permitting Base Design. The Permitting Base Design reflects the program defined by the MCCA and it is understood that the design may evolve during the design review process to reflect the evolution of an emerging urban design context on D Street. Under the Permitting Base Design, the hotels are accessed off of D Street. The arrival area is aligned with an entrance to the existing BCEC facility creating a proposed pedestrian connection. The service entrance is located to the south of the site, aligned with an existing vehicular connection with the BCEC, and is also proposed to provide access to the parking deck. The service yard is in the southeast corner of the site.

The hotels are the subject of a Request for Proposals (RFP) issued by the MCCA on November 15, 2012. Included in the RFP are a set of design guidelines that detail, among other things, entry and loading requirements. There will be off-street drop-off and pick-up areas that will be actively managed to ensure that vehicles entering and exiting will not disrupt traffic operations on D Street. The drop-off/pick-up areas will also accommodate up to two large buses. Loading will occur off street in shared back-of-house areas.

B.3 Study Area

A study area for analysis was defined to include the key roadway segments and intersections upon which access for the site relies. The study area includes the following 10 intersections, as shown in Figure B-2:

1. a) D Street at Northern Avenue/Seaport Boulevard/Fish Pier

   b) D Street at Northern Avenue/Seaport Boulevard

2. D Street at Congress Street
3. Congress Street at B Street
4. Congress Street at East Service Road
5. D Street at Transit Way
6. D Street at I-90 on-ramps
7. Summer Street at D Street
8. Summer Street at World Trade Center Avenue/Convention Center Drive
9. D Street/Fargo Street
10. D Street/West First Street

D Street Development

Figure B-1
Site Plan

D Street Development

Figure B-2

Study Area Intersections

B.4 Existing Transportation Conditions

This section discusses the existing transportation conditions in the study area and in the vicinity of the site, including roadway geometry, traffic control, traffic volumes and operations, crash history, parking, transit availability, pedestrian and bicycle volumes and accommodations.

B.4.1 Roadway Conditions

The site is located on the east side of D Street, and enjoys excellent local and regional highway access due to its proximity to the I-90 South Boston Interchange. Direct ramp connections to I-90 West and East are located on D Street north of Summer Street. Ramps from I-90 West and East are located on Congress Street, along with on- and off-ramps connecting to I-93 North and South. Connections to Downtown Boston are provided by Seaport Boulevard, Congress Street and Summer Street. To the south of the site, D Street connects with Broadway and other local streets, although one-way "circuit breakers" in the D Street corridor discourage the use of the corridor by through traffic.

B.4.1.1 Existing Roadways

Seaport Boulevard is an east-west roadway from the Seaport District to Atlantic Avenue in the Financial District. Generally, there are two travel lanes in each direction, and metered parking is available on both sides of the street throughout portions of the corridor. There are sidewalks on both sides of Seaport Boulevard.

Congress Street also connects the Seaport District with Downtown Boston. Generally, there are two travel lanes in each direction, and metered parking is available on both sides of the street throughout portions of the corridor. There are sidewalks on both sides of Congress Street. To the east of West Service Road/Boston Wharf Road, the Congress Street cross-section is divided by a raised median, consistent with its function as a connection for several of the Interstate ramps, before the corridor terminates at D Street.

Summer Street runs east-west between Washington Street in Downtown Boston and East First Street in South Boston. Summer Street has two lanes in each direction. Parking is permitted on the north side of Summer Street west of D Street and prohibited on both sides east of D Street. Sidewalks are provided on both sides of the street.

East Service Road is an urban minor arterial and it runs north-south between Seaport Boulevard to the north (where it also connects with Northern Avenue), and at Congress Street to the south at the I-90 eastbound and I-93 northbound off-ramps. East Service Road is one-way northbound and has two travel lanes. Metered parking is permitted on both sides of the road, and sidewalks are provided on both sides.

B Street runs north-south between Seaport Boulevard to the north and Congress Street to the south, where the I-90 westbound off-ramp and I-93 on-ramp connect. B Street has two lanes in each direction, with sidewalks on both sides. Parking is restricted on both sides of the road.

D Street extends north-south between Seaport Boulevard/Northern Avenue to the north and through the South Boston neighborhood to Dorchester Avenue to the south. D Street is split into two one-way streets between Congress Street and Northern Avenue. This split creates a triangle-shaped park bounded by D Street on the east and west and Seaport Boulevard on the North. There are two travel lanes in each direction on D Street. Parking is provided on the east side of D Street between Summer Street and Congress Street and on portions between Summer Street and West First Street. There are sidewalks on both sides of D Street. There is a mid-block signalized intersection at Silver Line Way, where the Silver Line BRT transitions from below grade at WTC Station to at-grade operations at Silver Line Way Station.

World Trade Center Avenue is a two-way street on a viaduct running northbound from Summer Street and terminating at the WTC Pier. World Trade Center Avenue has one travel lane in each direction. Sidewalks are provided on both sides of the street. Parking is not permitted along World Trade Center Avenue. The intersection of World Center Avenue at Summer Street aligns with the main vehicular access to the BCEC and the Westin Hotel.

B.4.1.2 Traffic Volumes

A data collection program was conducted on June 25, 2012 to establish existing condition traffic networks. The data collection included weekday morning and evening peak period turning movement counts (TMCs) from 7:00 to 9:00 a.m. and from 4:00 to 6:00 p.m. at study area intersections, with the exception of D Street at Fargo Street and D Street at West First Street where November 2011 data were available from the 411 D Street Project Notification Form filed with the Boston Redevelopment Authority. TMC's included pedestrian and bicycle movements as well as traffic movements.

In addition, an automatic traffic recorder (ATR) count was conducted on D Street south of Summer Street in the vicinity of the site. Raw count data sheets are included in the Transportation Attachment at the end of this Appendix.

The weekday ATR count summary is presented in Table B-1. These data illustrate the daily variations of traffic demands and the directional flow of traffic in the vicinity of the site over the course of an average weekday.

Table B-1 Weekday Daily Traffic Summary D Street (South of Summer Street)

Hour Beginning	Southbound Volume	Northbound Volume	Total Both Directions	Peak Direction	Percent in Peak Direction
Midnight	48	24	72	SB	67%
1:00 a.m.	30	17	47	SB	64%
2:00 a.m.	22	17	39	SB	56%
3:00 a.m.	20	20	40	-	
4:00 a.m.	22	37	59	NB	63%
5:00 a.m.	75	75	150	-	
6:00 a.m.	131	138	269	NB	51%
7:00 a.m.	207	278	485	NB	57%
8:00 a.m.	200	292	492	NB	59%
9:00 a.m.	190	211	401	NB	53%
10:00 a.m.	166	178	344	NB	52%
11:00 a.m.	174	177	351	NB	50%
Noon	210	219	429	NB	51%
1:00 p.m.	212	222	434	NB	51%
2:00 p.m.	224	184	408	SB	55%
3:00 p.m.	285	180	465	SB	61%
4:00 p.m.	310	189	499	SB	62%
5:00 p.m.	380	291	671	SB	57%
6:00 p.m.	337	174	511	SB	66%
7:00 p.m.	173	150	323	SB	54%
8:00 p.m.	124	86	210	SB	59%
9:00 p.m.	107	79	186	SB	58%
10:00 p.m.	129	70	199	SB	65%
11:00 p.m.	88	57	145	SB	61%
Daily Total	**3,864**	**3,365**	**7,229**	**SB**	**53%**

Source: ATR count conducted on June 25, 2012.

As shown in Table B-1, on D Street south of Summer Street, the average weekly daily traffic (AWDT) is approximately 7,230 vehicles. The southbound volume is consistently greater than the northbound volume over the course of the day, with more traffic traveling southbound most hours. Morning and evening peak hours occur between 8:00-9:00 a.m. and 5:00-6:00 p.m., respectively.

B.4.1.3 Peak Hour Traffic Volumes

The counts at D Street at Fargo Street and D Street at West First Street were conducted for the 411 D Street Project in November 2011. The traffic volumes at these intersections were increased by one percent to account for background growth, and balanced with the 2012 counts at the adjacent intersection of D Street at Summer Street. The peak hours at study intersections were determined to be 8:00 - 9:00 a.m. and 5:00 - 6:00 p.m. for the morning and evening, respectively.

Existing Condition (2012) morning and evening peak hour traffic turning movement volumes at study intersections are shown in Figures B-3 and B-4, respectively. Intersection operational analysis for Existing Conditions is presented in Section B.7.

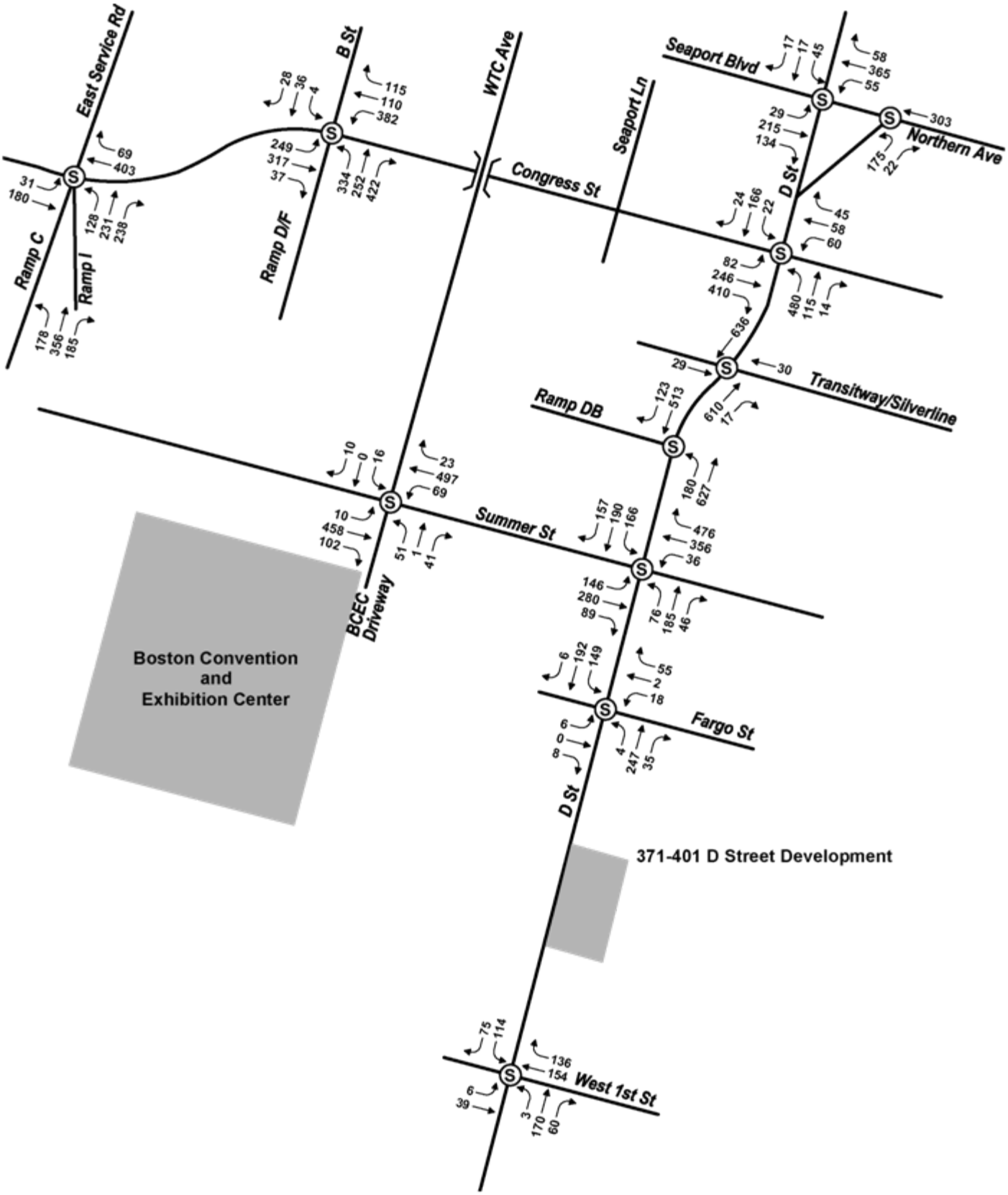
B.4.2 Crash History

Crash data for the study area intersections were obtained from the Massachusetts Highway Department database for the most recent three-year period available (2008-2010). A total of 38 accidents occurred at the 10 study area intersections over the three-year period. The calculated crash rate at each intersection is presented in Table B-2. The District 6 average crash rate is 0.77 crashes per million vehicles.

Table B-2 Vehicular Crash Summary (2008 – 2010)

Intersection		Total Crashes (3-year period)	Calculated Crash Rate
1	D Street at Seaport Boulevard	2	0.12
2	D Street at Congress Street	8	0.29
3	Congress Street at B Street	9	0.27
4	D Street at East Service Road	3	0.19
5	D Street at Silverline Way	0	0.00
6	D Street at I-90/I-93 On Ramps (Ramps DB)	2	0.08
7	Summer Street at D Street	7	0.22
8	Summer Street at WTC Avenue/Convention Center Drive	4	0.19
9	D Street/Fargo Street	0	0.00
10	D Street/West First Street	3	0.34

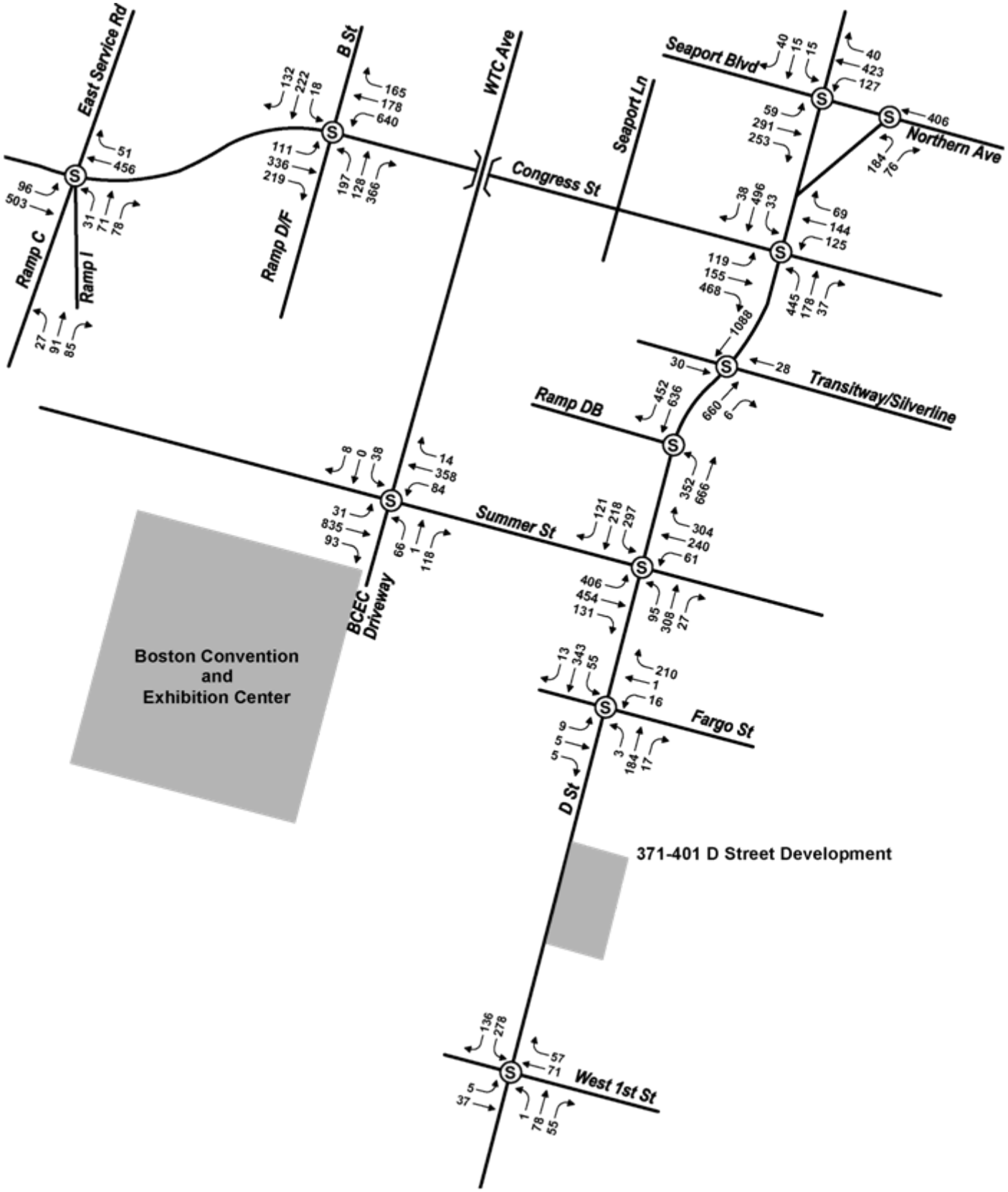
Analysis of the crash data by collision type, crash severity, time of day and pavement conditions is summarized in Table B-3.



D Street Development

Figure B-3

Existing (2012) Traffic Volumes - Morning Peak Hour (8:00 AM-9:00 AM)



D Street Development

Figure B-4

Existing (2012) Traffic Volumes - Evening Peak Hour (5:00 PM-6:00 PM)

Table A-3 Vehicular Crash Summary (2008 – 2012) Source: Mass. Highway Dept.

	Congress Street at:			D Street at:					Summer St at:	
	D St.	B St.	E. Service	Seaport	Silverline	Ramp DB	Fargo	West 1st	D St	WTC
Year										
2008	1	7	2	1	0	1	0	2	0	2
2009	5	1	0	1	0	0	0	1	3	0
2010	2	1	1	0	0	1	0	0	4	2
Total	8	9	3	2	0	2	0	3	7	4
Average	2.67	3.00	1.00	0.67	0.00	0.67	0.00	1.00	2.33	1.33
Collision Type										
Angle	2	0	1	0	0	0	0	1	2	1
Head-on	0	0	0	0	0	0	0	1	0	0
Rear-end	0	4	0	0	0	2	0	0	1	1
Rear-to-Rear	0	0	0	0	0	0	0	0	0	0
Sideswipe, opposite direction	0	0	0	0	0	0	0	0	0	0
Sideswipe, same direction	4	1	1	1	0	0	0	0	2	1
Single vehicle crash	1	3	0	0	0	0	0	1	0	0
Unknown	0	0	0	0	0	0	0	0	0	0
Not reported	1	1	1	1	0	0	0	0	2	1
Total	8	9	3	2	0	2	0	3	7	4
Crash Severity										
Fatal injury	0	0	0	0	0	0	0	0	0	0
Non-fatal injury	3	0	1	1	0	0	0	0	2	2
Property damage only	3	9	2	1	0	1	0	3	4	2
Not Reported	2	0	0	0	0	0	0	0	1	0
Unknown	0	0	0	0	0	1	0	0	0	0
Total	8	9	3	2	0	2	0	3	7	4
Time of Day										
Weekday, 7 AM - 9 AM	1	2	2	0	0	0	0	0	0	0
Weekday, 4 PM - 6 PM	1	1	0	1	0	0	0	0	2	1
Saturday, 11 AM - 2 PM	0	0	0	0	0	0	0	0	0	1
Weekday, other time	4	3	1	1	0	2	0	3	4	2
Weekend, other time	2	3	0	0	0	0	0	0	1	0
Total	8	9	3	2	0	2	0	3	7	4
Pavement Conditions										
Dry	4	6	2	2	0	2	0	2	4	3
Wet	3	2	1	0	0	0	0	1	0	0
Snow	0	1	0	0	0	0	0	0	0	0
Ice	0	0	0	0	0	0	0	0	0	0
Sand, mud, dirt, oil, gravel	0	0	0	0	0	0	0	0	0	0
Water (standing, moving)	0	0	0	0	0	0	0	0	0	0
Slush	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	1	0
Unknown	0	0	0	0	0	0	0	0	0	0
Not reported	1	0	0	0	0	0	0	0	2	1
Total	8	9	3	2	0	2	0	3	7	4
Total Non-motorist (Bike, Ped)	0	0	0	0	0	0	0	0	0	0

Key observations on the crash history include the following:

- All the intersections fall below the District 6 average crash rate of 0.77 crashes per million vehicles entering.
- The average annual crash rate was approximately 12 accidents per year.
- Nearly 66 % of all crashes reported at study area intersections during the three years resulted in property damage only (no personal injury, not reported, or unknown).
- There were no fatal crashes at the study intersections in the past three years of reported data.
- Nearly 76 % of all crashes reported occurred on dry roads or were unreported.

B.4.3 Parking

Parking demand and supply in the study area are influenced largely by activity at the BCEC. As shown in Figure B-5, both the South Parking Lot (1,343 spaces) and the North Lot (330 spaces) at BCEC are located within about a ¼-mile of the site on D Street. These parking lots are not available for public use outside of BCEC events. The 440 space Westin Hotel garage is also within ¼-mile of the site.

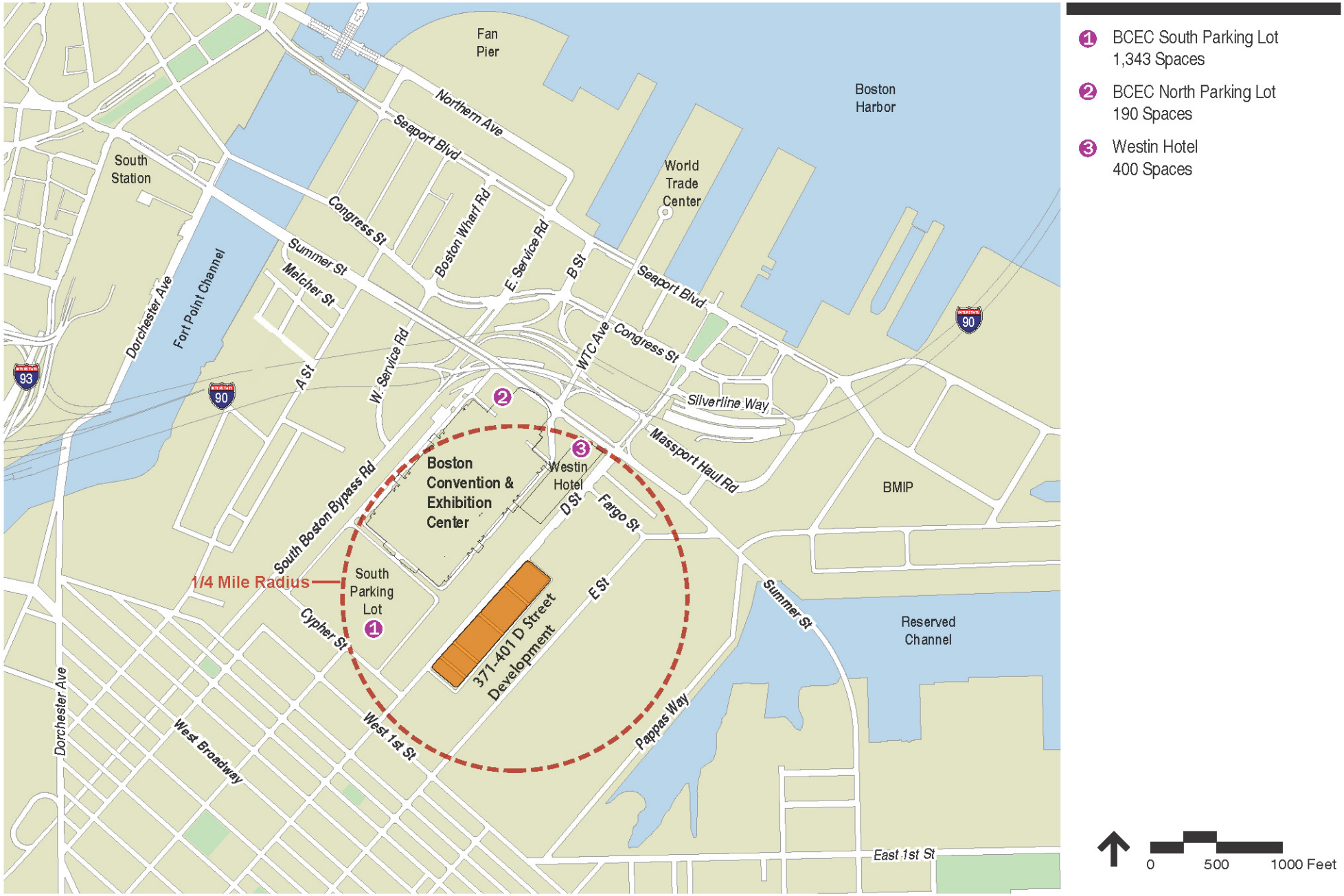
An inventory of on-street parking in the vicinity of the site on D Street is shown in Figure B-6. On-street parking on D Street comprises a mixture of two-hour metered and resident permit parking.

B.4.4 Pedestrian Environment

The pedestrian environment in the South Boston Seaport District has been designed to accommodate large numbers of people walking between significant activity centers, including the BCEC, the World Trade Center, the Harborwalk waterfront pedestrian realm, the Silver Line stations and future major developments. The Project relies upon the D Street corridor to connect with the Seaport District to the north, and the South Boston neighborhood to the south.

All other signalized intersections in the study area operate with concurrent pedestrian phases, with the exception of Summer Street/World Trade Center Avenue, I-90 Ramp/D Street and Northern Avenue/D Street, which have exclusive pedestrian phases.

Figure B-7 presents an inventory of existing sidewalks along D Street and their minimum widths (shown in feet), as well as marked crosswalks in the area. Sidewalks in the study area along D Street vary in width from five feet to as much as 25 feet. There are three mid-block crosswalks on D Street along the frontage of the site, one of which is signalized.



D Street Development

VHB Vanasse Hangen Brustlin, Inc.

Figure B-5

Existing Parking Lots

D Street Development

Figure B-6
On-Street Parking

D Street Development

Figure B-7
Sidewalk and Crosswalk Inventory

Pedestrian activities were observed and recorded at each of the study area intersections during morning and evening peak hours. Pedestrian volumes by direction at study intersections are presented in Figures B-8 and B-9 for the morning and evening peak hour, respectively.

B.4.5 Bicycle Facilities

Although travel lanes are fairly wide, currently there are no existing on-street bicycle accommodations in the D Street corridor south of Summer Street. A bicycle rack is located adjacent to the southbound bus stop opposite the site. The nearest Hubway Bicycle Share Station is located on Summer Street close to the BCEC front entrance at North Lobby which provides 19 shared bicycles for public use.

B.4.6 Public Transportation

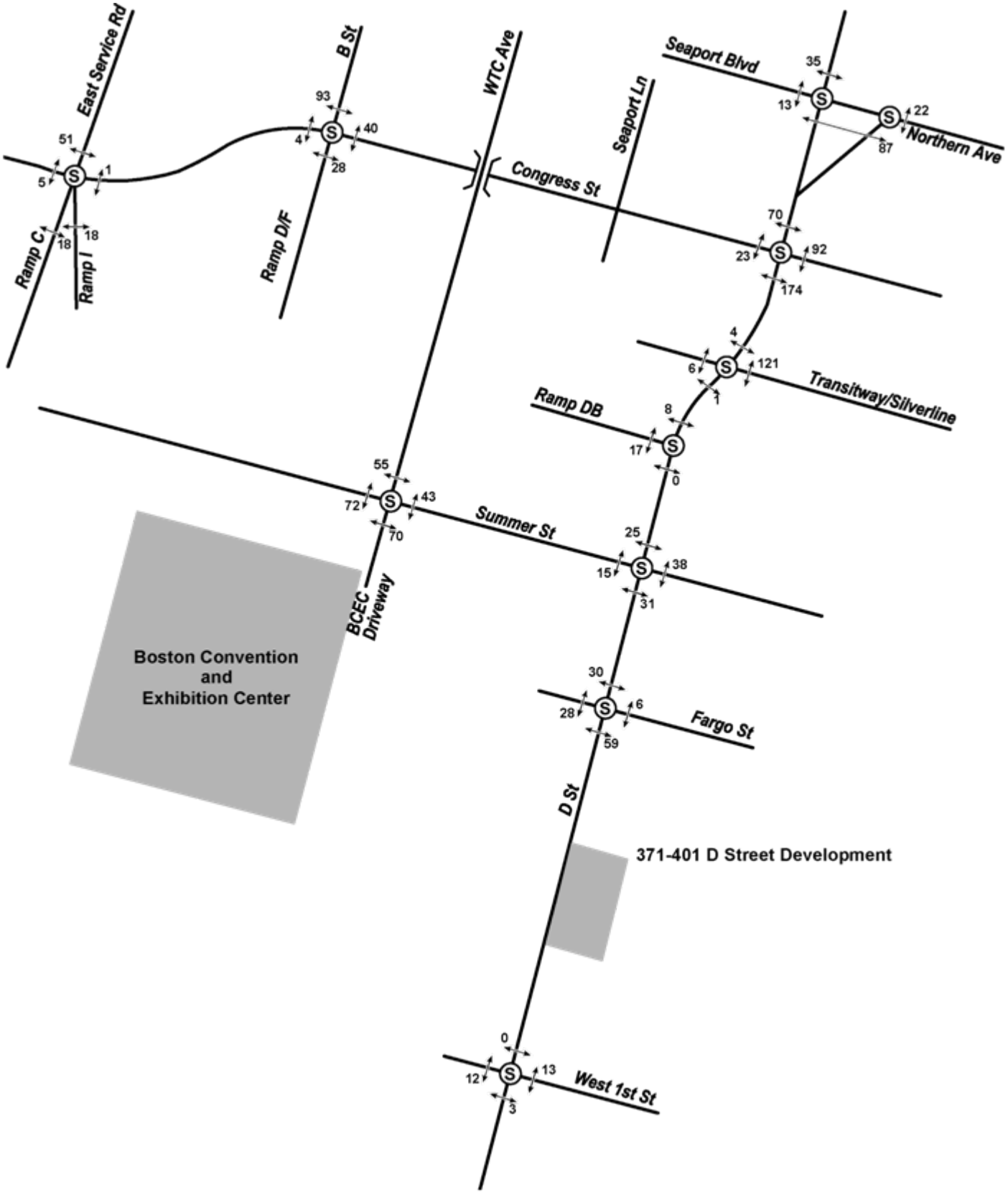
The South Boston Seaport District is well served by MBTA Silver Line and local bus routes (see Figure B-10). Although there are bus stops with shelters on both sides of D Street in the vicinity of the site, currently there is no MBTA service on D Street. MBTA bus Routes 4 and 7 are accessible at Summer Street, ¼ mile for the site, and Silver Line stations at WTC and Silver Line Way are located within ½ mile from the site.

B.5 Future No Build Traffic Projections

To evaluate future roadway operations, traffic volumes in the study area were projected to the year 2017 to reflect a five-year planning horizon. The 2017 No-Build Condition considers study area traffic conditions if the Project is not built. The 2017 No-Build traffic volumes include existing traffic, new traffic attributable to general background growth, and traffic generated by specific planned/approved developments in the area.

The 2017 No Build Condition traffic volumes were developed using information from projects located in the South Boston Seaport District. Specifically, traffic generated by the Seaport Square project and the 411 D Street project were added, albeit that the former project may not be fully built out during this timeframe. Although a background growth rate of up to approximately 0.5 percent reflects recent trends, a 1.5 percent per year background growth rate was applied so as to also account for other projects expected to be completed in the five-year timeframe. Other background projects include the following:

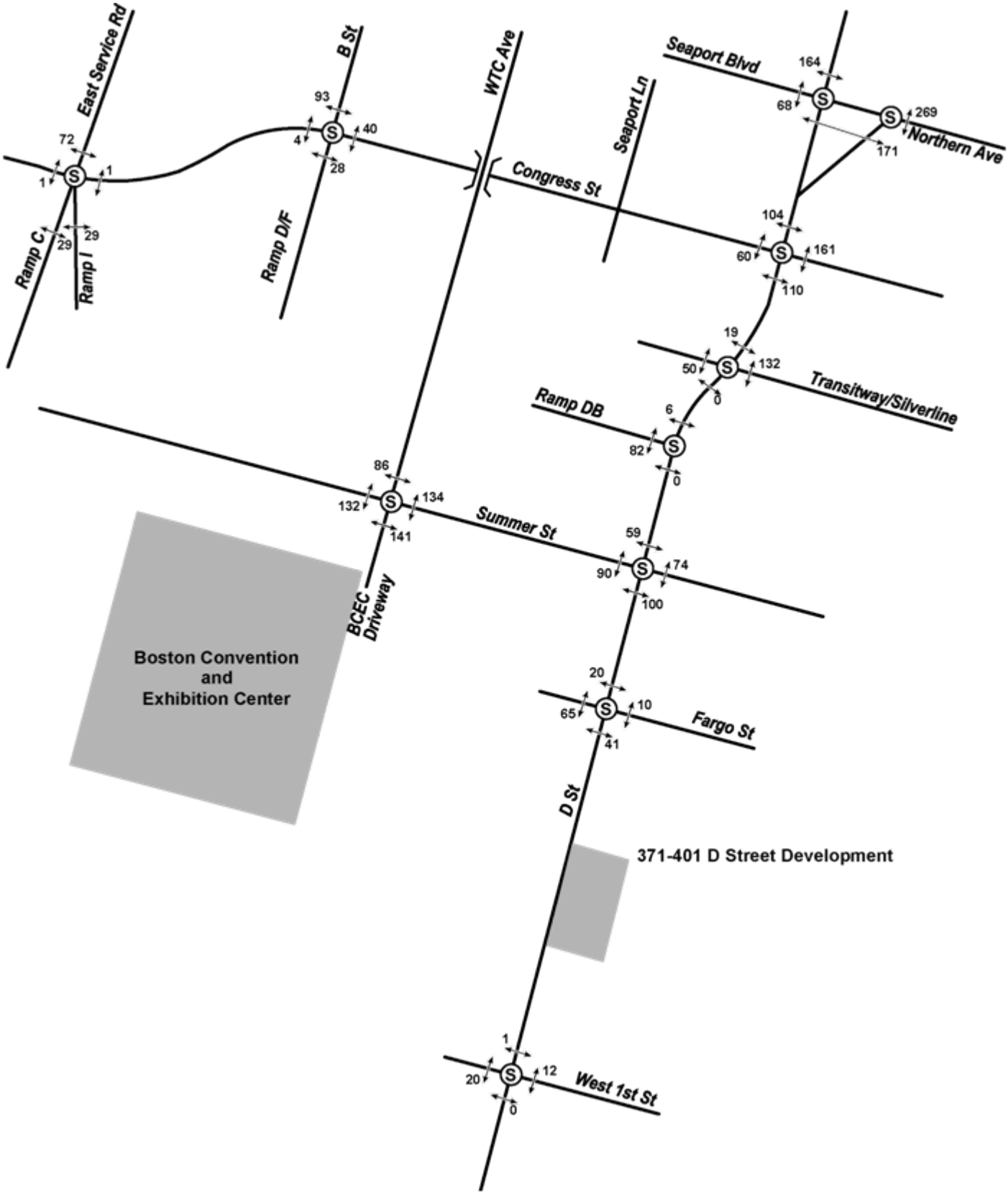
- 399 Congress Street Residential
- Congress Street Hotel
- Boston Cargo Terminal
- Waterside Place/Core Block (phase 1)



D Street Development

Figure B-8

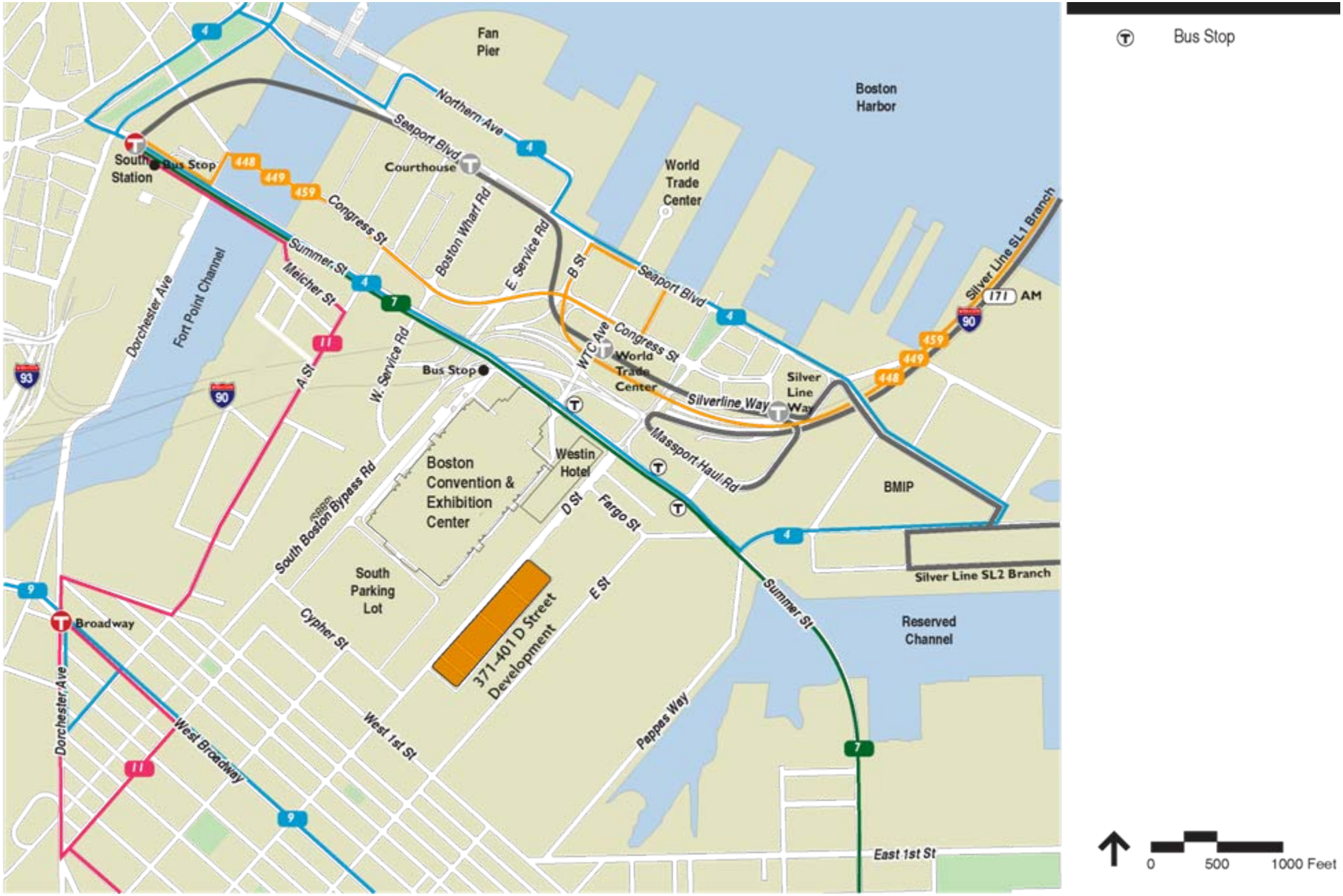
Existing (2012) Pedestrian Volumes - Morning Peak Hour (8:00 AM-9:00 AM)



D Street Development

Figure B-9

Existing (2012) Pedestrian Volumes - Evening Peak Hour (5:00 PM-6:00 PM)



D Street Development

- Fan Pier
- Pier 4
- 368 Congress Street
- 49-63 Melcher Street
- 316 Summer Street
- 319 A Street

The resulting 2017 No-Build morning and evening peak hour traffic volumes are presented in Figures B-11 and B-12, respectively.

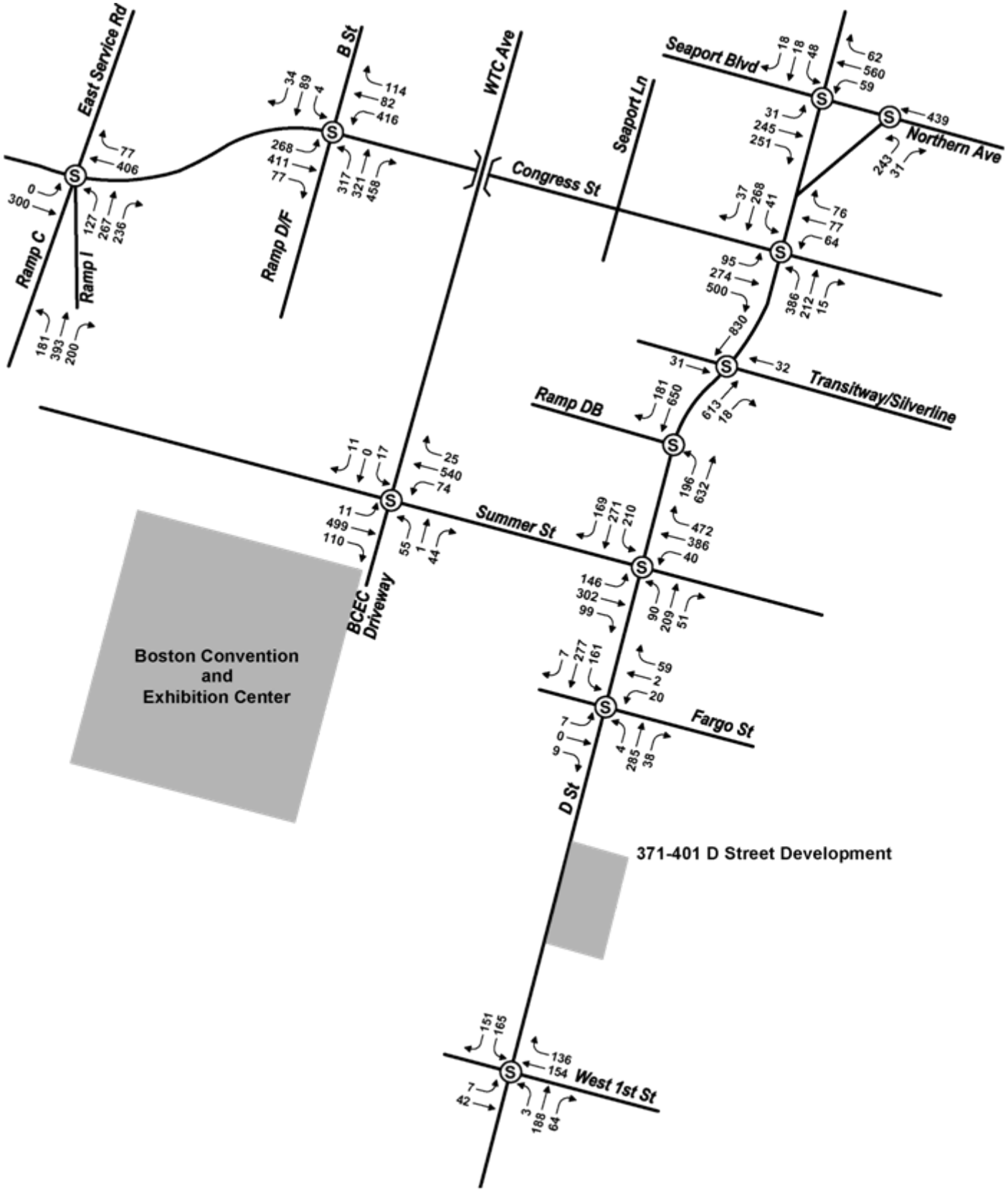
B.6 Future 2017 Build Condition Traffic Projections

The 2017 Build Condition traffic volumes for the study area intersections were determined by estimating site-generated traffic volumes and distributing and assigning these volumes to study area roadways. The site-generated volumes were then added to the 2017 No-Build traffic volumes to create the Build volume networks.

B.6.1 Project-Generated Trips

The Project is currently proposed to include a standard stay and an extended stay hotel. The Institute of Transportation Engineers (ITE) trip rates for extended-stay/suites hotels are slightly lower than standard hotels because they provide amenities such as kitchens that reduce the need to travel off premises for meals. They also typically do not have a significant amount of function space, restaurant space, and other full-service hotel amenities, further reducing the number of trips generated. However, since the Project contains regular hotel rooms and extended-stay rooms, the trip generation estimate for the Project was determined using the trip rates for a Standard Hotel (Land Use Code 310), presenting a more conservative analysis than if the closest available use to long-stay (All Suites Hotel, LUC 311) was used. It should be noted that the Project also includes some retail space on the ground floor. The ITE trip rate for Hotel (LUC 310) incorporates some hotel-related retail services, which adequately accounts for the level of trip generation expected for the ancillary, non-destination retail space.

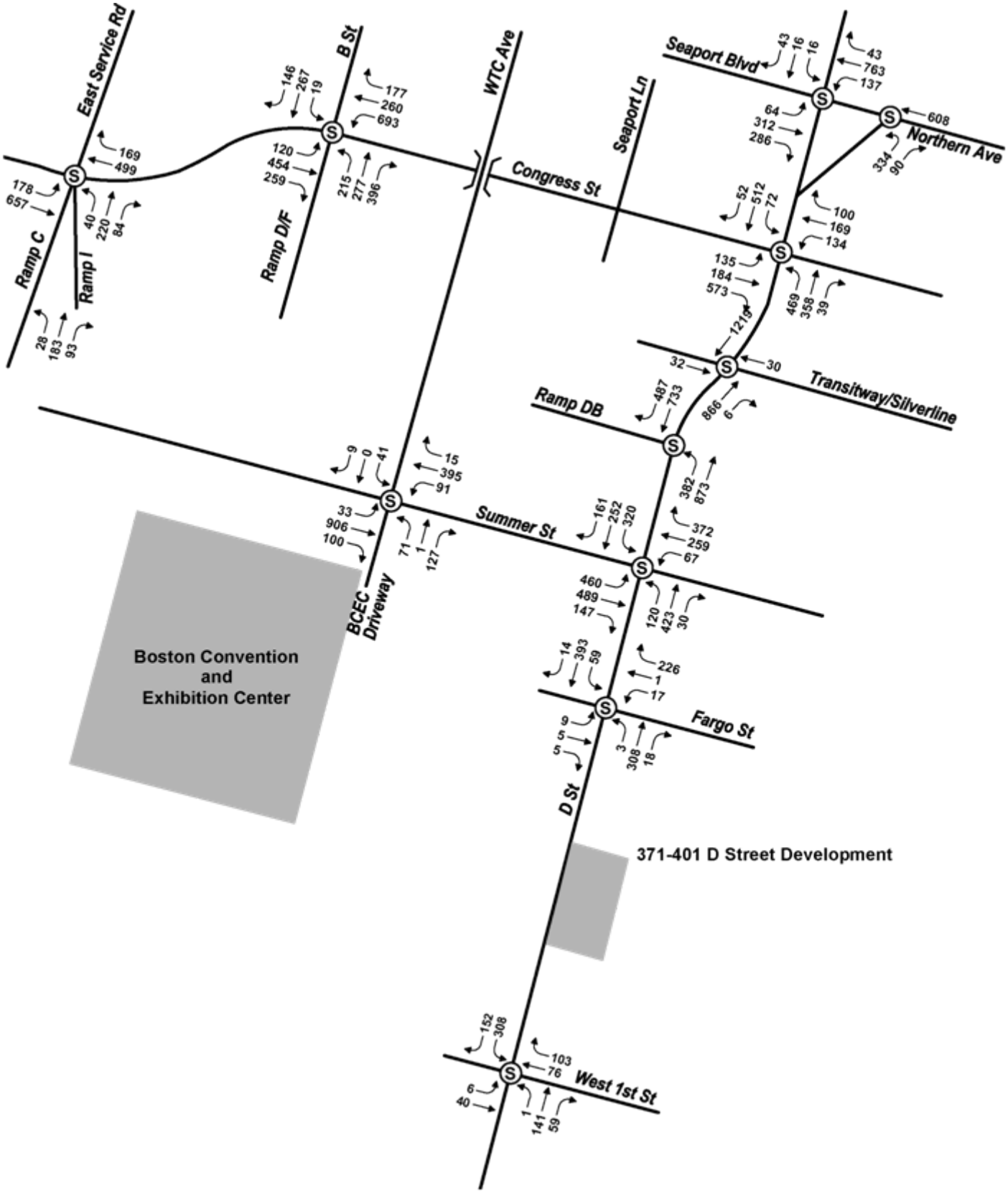
ITE trip generation rates generally are based on trip rates derived from surveys of similar hotels in auto-oriented, suburban locations. As the number of person trips is a more accurate representation of expected activity generated by the Project, a standard average vehicle occupancy (AVO) of 1.2 persons per vehicle was applied to the ITE trip rates to determine person-trips. The resulting Project-generated person trips are presented in Table B-4.



D Street Development

Figure B-11

No-Build (2017) Traffic Volumes - Morning Peak Hour (8:00 AM-9:00 AM)



D Street Development

Figure B-12

No-Build (2017) Traffic Volumes - Evening Peak Hour (5:00 PM-6:00 PM)

Table B-4 Person Trip Generation Summary

	ITE Trip Generation	AVO	Person Trips
Weekday Daily			
In	2,043	1.2	2,452
Out	2,043	1.2	2,452
Total	4,086	1.2	4,903
Morning Peak Hour			
In	171	1.2	205
Out	109	1.2	131
Total	280	1.2	336
Evening Peak Hour			
In	156	1.2	188
Out	139	1.2	166
Total	295	1.2	354

Source: Institute of Transportation Engineers *Trip Generation 8th Edition*

The South Boston Seaport District is a mixed-use urban environment with high levels of pedestrian amenities and high quality transit service and the mode split between automobile, transit and pedestrians reflects this environment. The mode split presented in Table B-5 is based on other approved hotel projects in the area.

Table B-5 Mode Split

Mode	Daily		Morning Peak Hour		Evening Peak Hour	
	In	Out	In	Out	In	Out
Automobile	37%	37%	37%	37%	37%	37%
Transit	22%	22%	20%	15%	15%	19%
Walk/Bike/Other	41%	41%	43%	48%	48%	44%
Total	100%	100%	100%	100%	100%	100%

These mode shares were applied to the person trip generation results to obtain vehicle trips, transit trips and pedestrian trips, as presented in Table B-6. The auto mode split includes all vehicle-based trips including taxis and has been re-adjusted by an average vehicle occupancy of 1.2.

Table B-6 Project Trip Generation by Mode

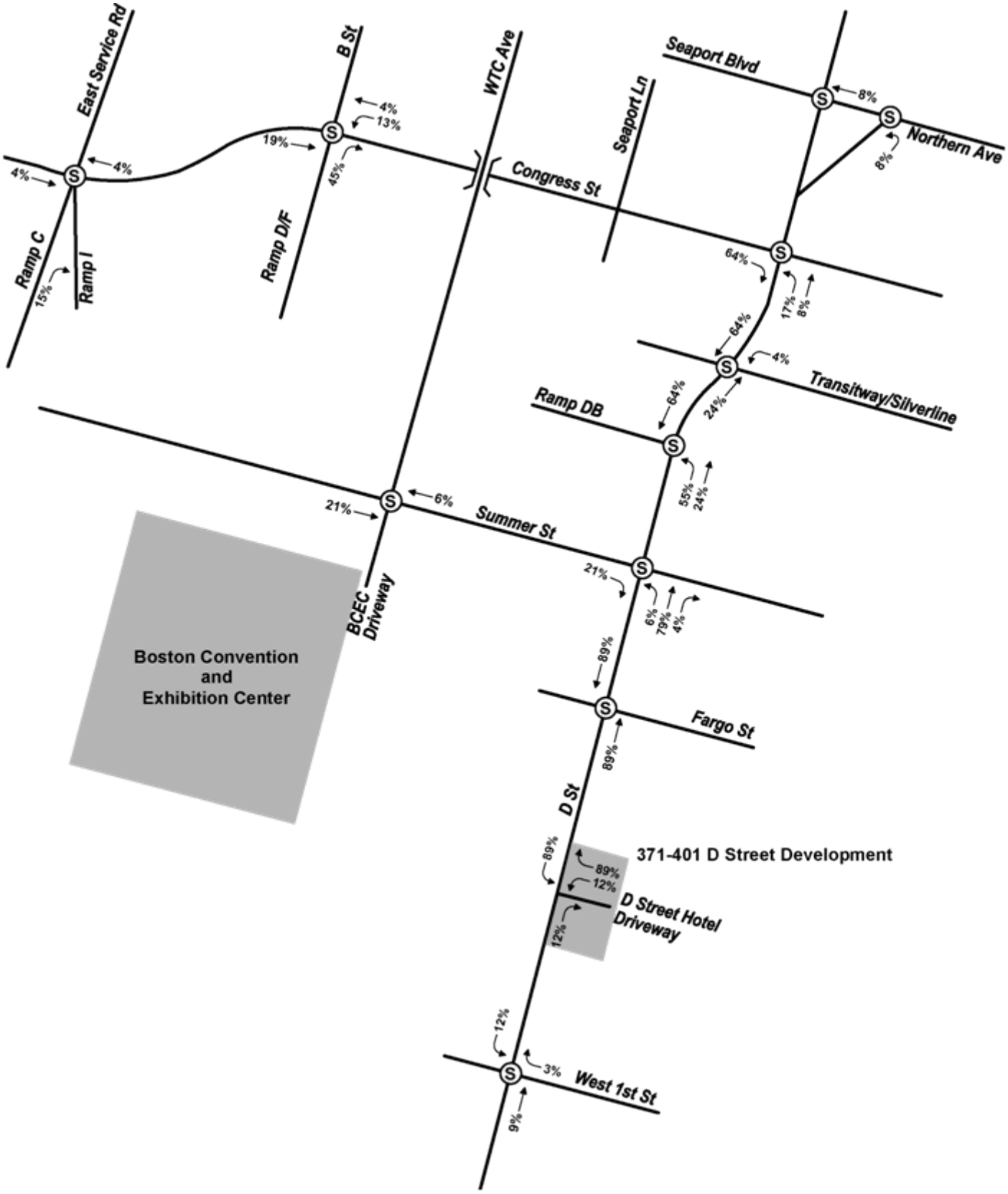
	Vehicle-Person Trips	VOR	Vehicle Trips	Transit Trips	Pedestrian Trips
Weekday Daily					
In	907	1.2	756	539	1,005
Out	907	1.2	756	539	1,005
Total	1,814	1.2	1,512	1,079	2,010
Morning Peak Hour					
In	76	1.2	63	41	88
Out	48	1.2	40	20	63
Total	124	1.2	104	61	151
Evening Peak Hour					
In	69	1.2	58	28	90
Out	62	1.2	51	32	73
Total	131	1.2	109	60	163

As shown in Table B-6, the Project is expected to generate approximately 104 new vehicle trips (63 in, 40 out) during the weekday morning peak hour, and 109 new vehicle trips (58 in, 51 out) during the weekday evening peak hour.

It should be noted that, because the hotels will primarily support BCEC events, the number of vehicle trips for events will be reduced accordingly, as event attendees staying in the D Street Development hotels will walk to the BCEC rather than take taxis or shuttles from remote hotels in Back Bay and Downtown.

B.6.2 Project Vehicle Trip Distribution and Assignment

Due to its proximity to the BCEC and Downtown Boston, the Project is expected to generate traffic patterns that are substantially different than typical commuter traffic patterns in the area. A review of transportation studies for other hotels in the Seaport District was performed to determine appropriate trip distribution patterns. Table B-7 summarizes the expected distribution of Project vehicle trips. The distribution and assignment of Project trips to the study area roadway network is presented in Figure B-13, which shows that a significant portion of Project trips are expected to use the I-90 and I-93 ramps to access the Project site.



D Street Development

Figure B-13
D Street Hotel Trip Distribution

Table B-7 Trip Distribution

Origin/Destination	Route
Logan Airport/Ted Williams Tunnel	45%
I-90 to/from West	10%
I-93 to/from North	15%
I-93 to/from South	10%
Downtown/Storrow Drive/Local	20%
Total	**100%**

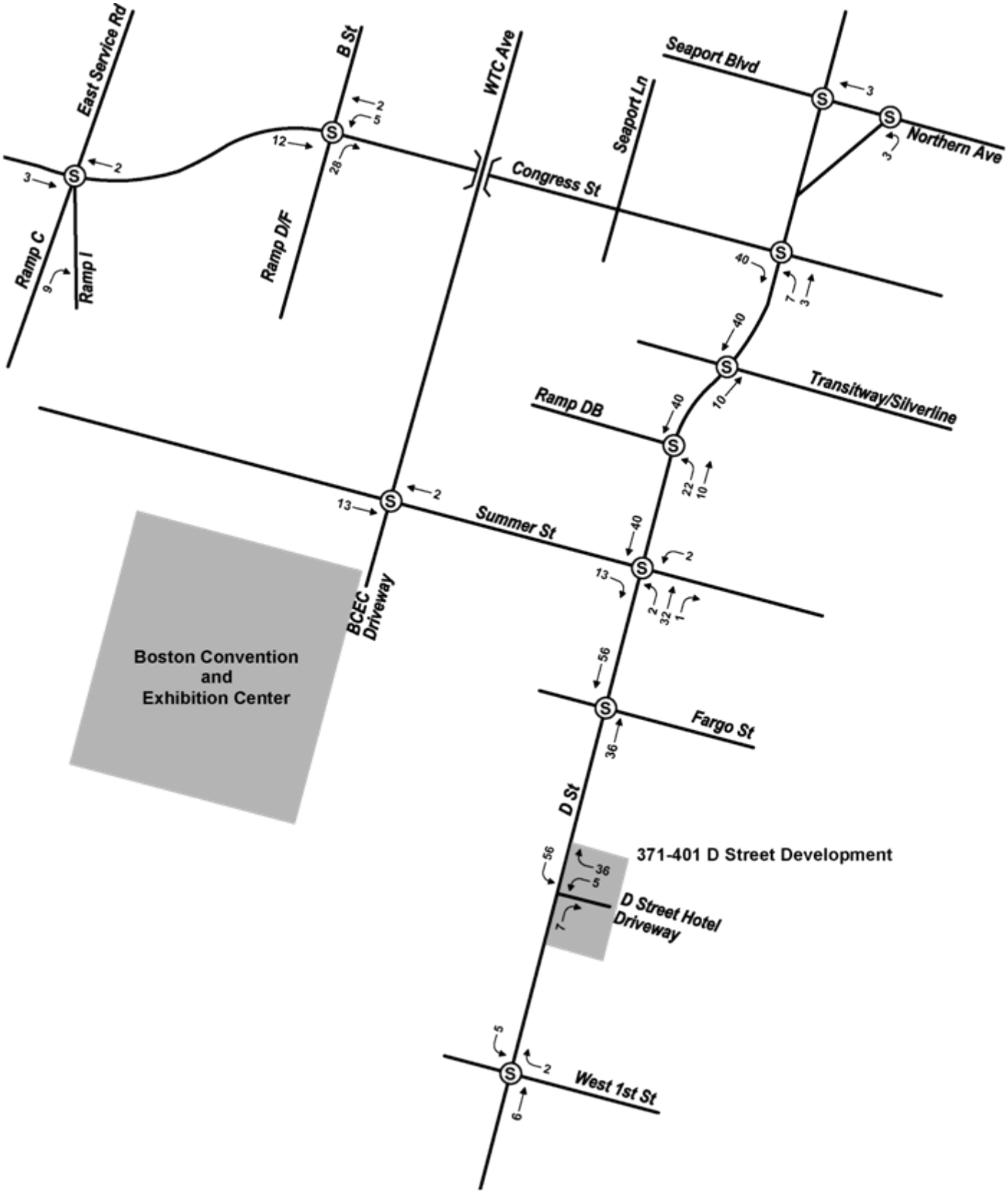
As shown, the majority of trips will utilize the interstate ramps that are in close proximity to the site.

B.6.3 Build Traffic Volumes

The site-generated traffic volumes were assigned to the study area roadways according to the trip distribution and travel patterns presented in Table B-7 for the morning and evening peak hours. The Project trips are shown graphically in Figures B-14 and B-15. Site-generated traffic was then combined with the 2017 No Build traffic volumes to develop the 2017 Build traffic volumes. The resulting 2017 Build Condition morning and evening peak hour traffic volumes are presented in Figures B-16 and B-17.

B.7 Traffic Operations Analysis

Level of Service (LOS) is the term used to denote the different operating conditions that occur on a given roadway or intersection under various volume loads. It is a qualitative measure of the effect of roadway/intersection geometry, speed, travel delay, freedom to maneuver, and safety. Level of service provides an index to the operational qualities of a roadway or intersection. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. Highway Capacity Manual (HCM) evaluation criteria are different for signalized and un-signalized intersections. Synchro 6 software was used to model LOS operations at the study area intersections. Table B-8 presents the LOS delay threshold criteria as defined in the HCM.

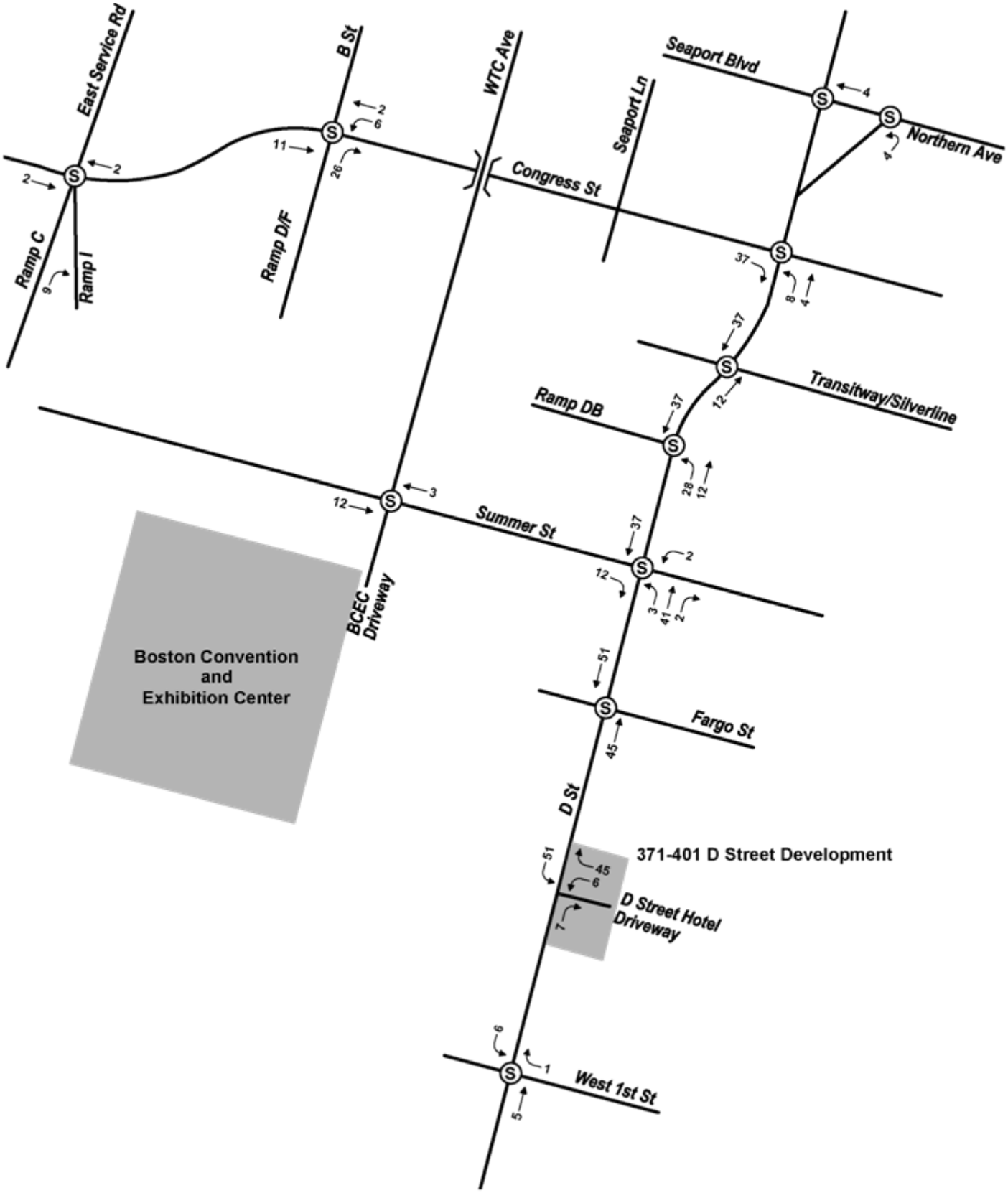


D Street Development

VHB Vanasse Hangen Brustlin, Inc.

Figure B-14

Project Generated Trips - Morning Peak Hour (8:00 AM-9:00 AM)

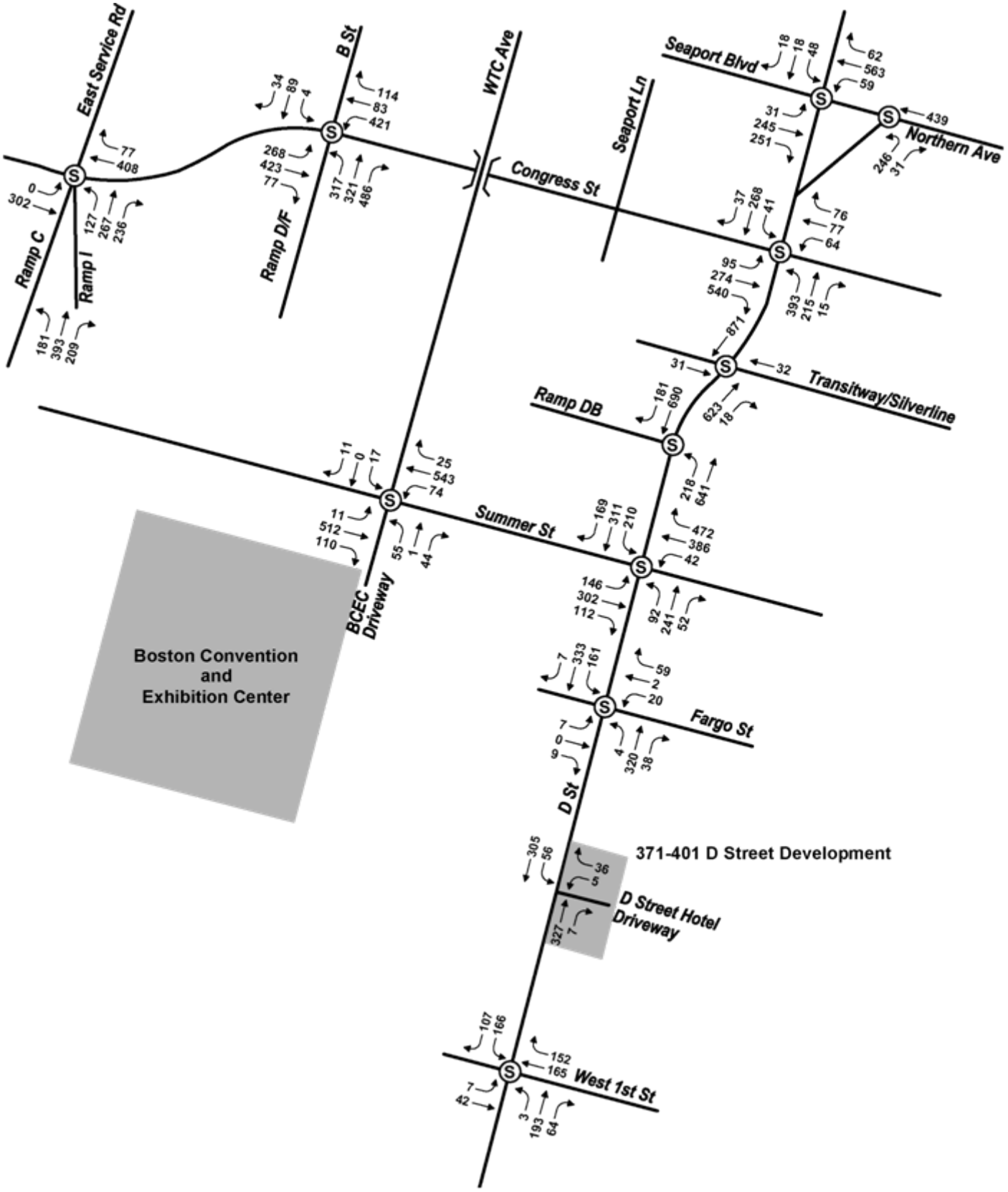


D Street Development

VHB Vanasse Hangen Brustlin, Inc.

Figure B-15

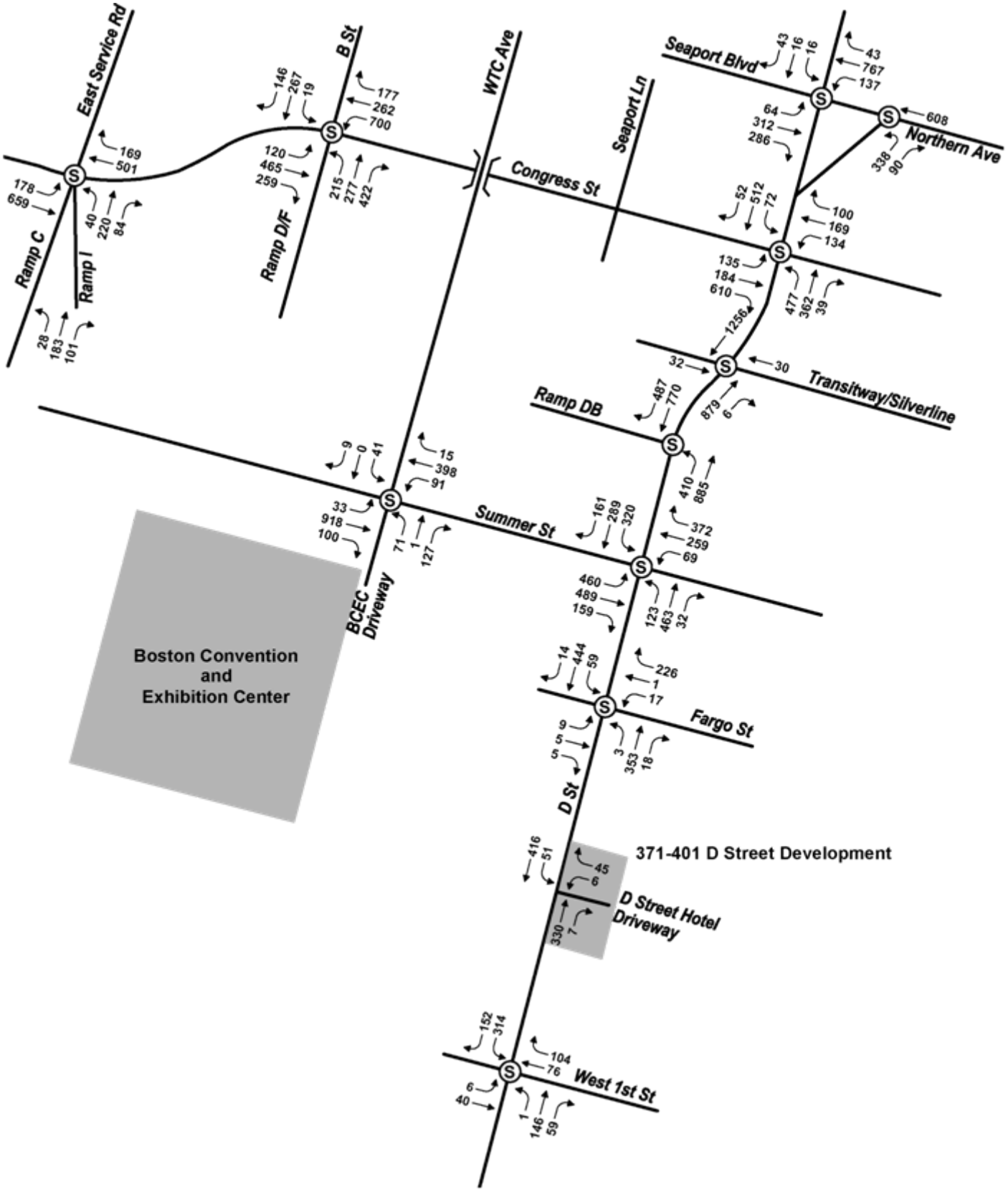
Project Generated Trips - Evening Peak Hour (5:00 PM-6:00 PM)



D Street Development

Figure B-16

Build (2017) Traffic Volumes - Morning Peak Hour (8:00 AM-9:00 AM)



D Street Development

Figure B-17

Build (2017) Traffic Volumes - Evening Peak Hour (5:00 PM-6:00 PM)

Table B-8 Level of Service Criteria

Level of Service	Signalized Intersection Control Delay (sec/veh)	Un-signalized Intersection Control Delay (sec/veh)
LOS A	≤10	≤ 10
LOS B	>10 to 20	> 10 to 15
LOS C	>20 to 35	> 15 to 25
LOS D	>35 to 55	> 25 to 35
LOS E	>55 to 80	> 35 to 50
LOS F	> 80	> 50

Source: 2000 HCM

Tables B-9 and B-10 present the results of the Existing, No Build and Build operational analysis for signalized intersections for the morning and evening peak hours, respectively. The results include LOS grade, average delay and volume/capacity ratios for individual approaches, and for the overall intersection. Complete Synchro analysis worksheets are included in the Transportation Attachment at the end of this Appendix.

Table B-9 Signalized Intersection Capacity Analysis Summary – Morning Peak Hour

		2012 Existing Condition			2017 No-Build Condition			2017 Build Condition		
Location	Approach	LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]
1(a).	**Intersection**	**B**	**11.6**	**0.40**	**A**	**10.0**	**0.54**	**A**	**10.0**	**0.54**
Northern Avenue/ Seaport	Eastbound	A	9.7	0.37	B	11.6	0.54	B	11.6	0.54
Boulevard/ D Street/Fish	Westbound	A	8.6	0.41	A	4.3	0.52	A	4.3	0.53
Pier	Southbound	D	36.7	0.39	D	44.1	0.57	D	44.1	0.57
1(b).	**Intersection**	**C**	**22.6**	**0.35**	**D**	**38.5**	**0.49**	**D**	**39.7**	**0.49**
Northern Avenue/ Seaport	Eastbound	A	1.2	0.16	A	1.3	0.18	A	1.3	0.18
Boulevard/D Street	Westbound	B	16.3	0.28	B	18.1	0.41	B	18.1	0.41
	Northbound Left	E	65.9	0.83	F	>80.0	>1.0	F	>80.0	>1.0
	Northbound Right	D	41.4	0.12	D	41.7	0.16	D	42.0	0.16
2.	**Intersection**	**D**	**42.7**	**0.66**	**D**	**54.7**	**0.75**	**E**	**55.9**	**0.76**
Congress Street/D Street	Eastbound	C	33.4	0.61	D	35.3	0.67	D	36.0	0.70
	Eastbound Right	E	79.7	0.26	F	>80.0	0.35	F	>80.0	0.38
	Westbound	D	42.3	0.43	D	43.4	0.53	D	43.4	0.53
	Northbound Left	D	36.6	0.84	C	29.9	0.70	C	29.6	0.71
	Northbound Thru/Right	C	24.3	0.47	D	45.9	0.85	D	46.5	0.86
	Southbound	D	42.3	0.63	E	60.9	0.89	E	62.2	0.89

Table B-9 Signalized Intersection Capacity Analysis Summary – Morning Peak Hour (Continued)

Location	Approach	2012 Existing Condition			2017 No-Build Condition			2017 Build Condition		
		LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]
3.	**Intersection**	**D**	**54.6**	**0.75**	**E**	**69.6**	**0.82**	**E**	**71.7**	**0.82**
Congress Street/B Street/	Eastbound Left/Thru	E	72.5	0.99	F	>80.0	>1.0	F	>80.0	>1.0
Ramp D/Ramp F	Eastbound Right	D	51.2	0.03	D	38.2	0.10	D	37.8	0.11
	Westbound Left	D	42.6	0.57	D	46.4	0.63	D	46.6	0.63
	Westbound	D	44.1	0.51	D	45.0	0.55	D	45.2	0.56
	Northbound Left	F	>80.0	>1.0	F	>80.0	1.00	F	>80.0	1.00
	Northbound Thru	C	25.2	0.42	C	24.8	0.50	C	24.8	0.50
	Northbound Right	C	23.8	0.29	C	22.7	0.32	C	22.9	0.33
	Southbound Thru	C	31.4	0.18	C	34.4	0.35	C	34.4	0.35
	Southbound Right	E	67.8	0.03	E	68.2	0.03	E	68.1	0.03
4.	**Intersection**	**E**	**69.2**	**0.70**	**F**	**81.5**	**0.73**	**F**	**>80.0**	**0.73**
Congress Street/ East	Eastbound	C	25.9	0.20	C	26.0	0.33	C	26.0	0.33
Service Road/ Ramp	Westbound Thru	C	27.8	0.36	C	28.4	0.36	C	28.2	0.36
C/Ramp I	Westbound Right	D	42.2	0.07	D	42.2	0.08	D	41.8	0.08
	Northbound Left/Thru	C	34.9	0.57	D	35.8	0.62	D	35.8	0.62
	Northbound Right	D	52.8	0.84	D	51.4	0.82	D	51.4	0.82
	Northeast	F	>80.0	>1.0	F	>80.0	>1.0	F	>80.0	>1.0
5.	**Intersection**	**A**	**9.6**	**0.32**	**A**	**9.4**	**0.39**	**A**	**9.2**	**0.41**
D Street/Silverline Way	Eastbound	D	46.6	0.41	D	43.7	0.35	D	43.7	0.35
	Westbound	D	47.5	0.46	D	44.5	0.40	D	44.5	0.40
	Northbound	B	11.9	0.31	B	12.9	0.33	B	12.6	0.33
	Southbound	A	3.6	0.29	A	3.8	0.39	A	4.0	0.41
6.	**Intersection**	**A**	**9.1**	**0.43**	**A**	**9.4**	**0.52**	**B**	**10.2**	**0.56**
D Street/Ramp DB	Northbound Left	D	43.1	0.63	D	42.0	0.65	D	42.6	0.69
	Northbound Thru	A	0.8	0.27	A	0.8	0.28	A	0.9	0.28
	Southbound Thru/Right	A	7.6	0.36	A	8.1	0.48	A	8.9	0.51
7.	**Intersection**	**C**	**23.4**	**0.58**	**C**	**26.3**	**0.71**	**C**	**28.9**	**0.76**
Summer Street/D Street	**Eastbound Left**	**C**	**23.3**	**0.39**	**C**	**26.1**	**0.43**	**C**	**26.9**	**0.45**
	Eastbound Thru/Right	**B**	**16.4**	**0.26**	**B**	**18.9**	**0.30**	**C**	**20.0**	**0.32**
	Westbound Left/Thru	**C**	**33.2**	**0.65**	**D**	**41.4**	**0.78**	**D**	**47.6**	**0.84**
	Westbound Right	**A**	**8.9**	**0.59**	**A**	**9.9**	**0.60**	**B**	**10.7**	**0.61**
	Northbound Left	**D**	**39.4**	**0.40**	**C**	**34.5**	**0.44**	**C**	**33.8**	**0.42**
	Northbound Thru/Right	**D**	**41.5**	**0.59**	**D**	**36.9**	**0.62**	**D**	**38.0**	**0.66**
	Southbound Left	**C**	**28.8**	**0.64**	**D**	**35.5**	**0.81**	**D**	**40.3**	**0.86**
	Southbound	**C**	**21.2**	**0.54**	**C**	**23.5**	**0.78**	**C**	**26.1**	**0.82**

Table B-9 Signalized Intersection Capacity Analysis Summary – Morning Peak Hour (Continued)

Location	Approach	2012 Existing Condition			2017 No-Build Condition			2017 Build Condition		
		LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]
8.	**Intersection**	**B**	**13.6**	**0.42**	**B**	**14.4**	**0.46**	**B**	**14.6**	**0.46**
Summer Street/World	Eastbound Left	A	0.4	0.03	A	0.7	0.04	A	0.9	0.04
Trade Center Avenue	Eastbound Thru/Right	A	7.2	0.45	A	8.1	0.49	A	8.4	0.50
	Westbound Left	A	9.7	0.21	B	10.4	0.24	B	10.6	0.24
	Westbound Thru/Right	B	14.1	0.46	B	15.2	0.50	B	15.3	0.50
	Northbound Left	D	43.0	0.42	D	43.3	0.45	D	43.3	0.45
	Northbound Thru/Right	D	40.7	0.04	D	40.7	0.04	D	40.7	0.04
	Southbound Left	D	41.5	0.18	D	41.6	0.19	D	41.6	0.19
	Southbound Thru/Right	D	40.5	0.01	D	40.5	0.01	D	40.5	0.01
9.	**Intersection**	**A**	**8.7**	**0.31**	**A**	**8.2**	**0.38**	**A**	**7.8**	**0.41**
D Street/Fargo Street	Eastbound Left/Thru	D	38.7	0.07	D	38.7	0.08	D	38.8	0.08
	Eastbound Right	C	25.6	0.01	C	25.5	0.01	C	25.6	0.01
	Westbound Left/Thru	D	42.4	0.39	D	43.1	0.44	D	42.5	0.41
	Westbound Right	D	38.6	0.07	D	38.6	0.08	D	38.7	0.08
	Northbound	A	1.2	0.16	A	1.2	0.18	A	1.6	0.20
	Southbound	A	4.4	0.33	A	4.2	0.42	A	4.2	0.47
10.	**Intersection**	**C**	**32.8**	**0.44**	**D**	**35.9**	**0.52**	**D**	**37.7**	**0.53**
D Street/West First Street	Eastbound Left	C	24.0	0.03	C	22.1	0.03	C	22.1	0.03
	Eastbound Thru	C	22.1	0.12	C	20.2	0.12	C	20.2	0.12
	Westbound Thru	D	40.4	0.58	D	38.8	0.58	D	38.9	0.58
	Westbound Right	C	21.9	0.10	B	18.3	0.12	B	18.0	0.12
	Northbound Left/Thru	C	25.1	0.36	C	33.3	0.50	C	34.5	0.52
	Northbound Right	C	21.1	0.06	C	26.1	0.06	C	26.6	0.06
	Southbound Left	E	55.1	0.69	E	59.3	0.78	E	61.4	0.77
	Southbound Right	D	35.2	0.07	D	35.6	0.10	D	44.8	0.10

[1] Level of Service.
[2] Average delay to all vehicles entering intersection, expressed in seconds per vehicle.
[3] Volume-to-capacity ratio.

Table B-10 Signalized Intersection Capacity Analysis Summary – Evening Peak Hour

Location	Approach	2012 Existing Condition			2017 No-Build Condition			2017 Build Condition		
		LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]
1(a).	**Intersection**	**B**	**15.8**	**0.49**	**B**	**15.0**	**0.66**	**B**	**15.0**	**0.66**
Northern Avenue/ Seaport Boulevard/ D Street/Fish Pier	Eastbound	C	22.0	0.52	C	25.4	0.67	C	25.4	0.67
	Westbound	A	6.0	0.43	A	5.4	0.67	A	5.5	0.67
	Southbound	D	44.7	0.38	D	45.6	0.45	D	45.6	0.45
1(b).	**Intersection**	**D**	**46.3**	**0.38**	**F**	**>80.0**	**0. 64**	**F**	**>80.0**	**0.65**
Northern Avenue/ Seaport Boulevard/D Street	Eastbound	A	1.2	0.17	A	1.9	0.18	A	1.9	0.18
	Westbound	B	10.9	0.26	B	13.4	0.41	B	13.4	0.41
	Northbound Left	F	>80.0	>1.0	F	>80.0	>1.0	F	>80.0	>1.0
	Northbound Right	D	49.5	0.58	D	54.8	0.69	D	54.8	0.69
2.	**Intersection**	**D**	**51.9**	**0.79**	**F**	**>80.0**	**>1.0**	**F**	**>80.0**	**>1.0**
Congress Street/D Street	Eastbound	D	43.9	0.64	D	51.9	0.80	D	52.0	0.81
	Eastbound Right	F	>80.0	0.26	F	>80.0	0.37	F	>80.0	0.41
	Westbound	E	59.8	0.88	F	>80.0	>1.0	F	>80.0	>1.0
	Northbound Left	C	30.9	0.75	C	24.9	0.70	C	24.6	0.71
	Northbound Thru/Right	D	41.1	0.81	F	>80.0	>1.0	F	>80.0	>1.0
	Southbound	D	37.4	0.87	E	55.3	0.96	E	55.1	0.96
3.	**Intersection**	**E**	**57.3**	**0.76**	**E**	**60.6**	**0.87**	**E**	**60.7**	**0.87**
Congress Street/B Street/ Ramp D/Ramp F	Eastbound Left/Thru	D	39.8	0.78	D	48.7	0.94	D	52.1	0.96
	Eastbound Right	E	62.5	0.17	D	40.1	0.21	D	36.6	0.22
	Westbound Left	C	30.7	0.68	D	42.9	0.85	D	44.2	0.86
	Westbound	C	27.4	0.64	D	35.2	0.82	D	36.1	0.83
	Northbound Left	F	>80.0	>1.0	F	>80.0	>1.0	F	>80.0	>1.0
	Northbound Thru	C	27.0	0.29	C	29.4	0.59	C	29.2	0.58
	Northbound Right	C	26.9	0.28	C	25.7	0.31	C	25.8	0.33
	Southbound Thru	E	68.4	0.59	E	65.5	0.62	E	65.2	0.61
	Southbound Right	F	>80.0	0.10	F	>80.0	0.11	F	>80.0	0.11
4.	**Intersection**	**C**	**22.0**	**0.39**	**C**	**26.0**	**0.62**	**C**	**26.2**	**0.62**
Congress Street/ East Service Road/ Ramp C/Ramp I	Eastbound Left	B	17.5	0.27	C	29.0	0.60	C	29.5	0.60
	Eastbound Thru	B	17.2	0.33	C	21.5	0.47	C	21.7	0.48
	Westbound Thru	B	12.8	0.27	B	14.2	0.33	B	14.4	0.34
	Westbound Right	B	14.0	0.05	B	16.6	0.18	B	16.6	0.18
	Northbound Left/Thru	D	39.6	0.29	D	41.6	0.63	D	41.6	0.63
	Northbound Right	D	41.4	0.51	D	39.4	0.47	D	39.4	0.47
	Northeast	D	39.5	0.55	D	39.2	0.66	D	39.2	0.67
5.	**Intersection**	**A**	**7.3**	**0.41**	**A**	**8.4**	**0.46**	**A**	**8.1**	**0.47**
D Street/Silverline Way	Eastbound	D	47.5	0.46	D	44.5	0.40	D	44.5	0.40
	Westbound	D	46.6	0.41	D	43.7	0.35	D	43.7	0.35
	Northbound	B	10.8	0.28	B	12.4	0.37	B	11.9	0.38
	Southbound	A	2.5	0.40	A	3.2	0.46	A	3.2	0.48
6.	**Intersection**	**B**	**14.5**	**0.68**	**B**	**14.3**	**0.76**	**B**	**17.8**	**0.80**
D Street/Ramp DB	Northbound Left	D	49.4	0.91	D	43.6	0.97	E	60.4	>1.0
	Northbound Thru	A	0.3	0.27	A	0.4	0.36	A	0.4	0.36
	Southbound Thru/Right	B	11.5	0.58	B	15.2	0.66	B	16.0	0.69

Table B-10 Signalized Intersection Capacity Analysis Summary – Evening Peak Hour (Continued)

Location	Approach	2012 Existing Condition			2017 No-Build Condition			2017 Build Condition		
		LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]
7.							**>1.0**			**>1.0**
Summer Street/D Street	**Intersection**	**D**	**42.5**	**0.97**	**E**	**71.4**	>1.0	**E**	**72.4**	>1.0
	Eastbound Left	F	>80.0	>1.0	F	>80.0	0.63	F	>80.0	0.64
	Eastbound Thru/Right	B	15.6	0.52	C	20.7	>1.0	C	20.8	>1.0
	Westbound Left/Thru	D	45.2	0.86dl	E	65.4	dl	E	64.5	dl
	Westbound Right	B	17.8	0.48	C	22.7	0.62	C	22.2	0.61
	Northbound Left	D	36.2	0.41	D	39.1	0.43	D	42.6	0.45
	Northbound Thru/Right	D	42.1	0.71	D	49.3	0.82	E	63.2	0.91
	Southbound Left	C	28.8	0.76	C	30.3	0.83	C	32.9	0.86
	Southbound	C	21.9	0.72	C	20.6	0.80	C	22.5	0.83
8.	**Intersection**	**C**	**20.5**	**0.61**	**C**	**21.0**	**0.67**	**C**	**21.1**	**0.68**
Summer Street/World Trade Center Avenue	Eastbound Left	B	12.1	0.07	B	12.0	0.07	B	11.9	0.07
	Eastbound Thru/Right	C	20.3	0.69	C	21.7	0.75	C	21.9	0.76
	Westbound Left	A	7.4	0.37	A	8.2	0.44	A	8.4	0.45
	Westbound Thru/Right	B	12.3	0.27	B	11.3	0.30	B	11.3	0.30
	Northbound Left	D	39.9	0.40	D	39.8	0.42	D	39.8	0.42
	Northbound Thru/Right	D	37.8	0.09	D	37.5	0.10	D	37.5	0.10
	Southbound Left	D	41.0	0.48	D	41.8	0.52	D	41.8	0.52
	Southbound Thru/Right	D	37.3	0.01	D	36.9	0.01	D	36.9	0.01
9.	**Intersection**	**B**	**18.8**	**0.27**	**B**	**17.1**	**0.32**	**B**	**16.9**	**0.35**
D Street/Fargo Street	Eastbound Left/Thru	D	37.1	0.14	D	36.8	0.14	D	36.8	0.14
	Eastbound Right	C	24.4	0.01	C	24.1	0.01	C	24.1	0.01
	Westbound Left/Thru	D	37.3	0.16	D	37.0	0.16	D	36.9	0.15
	Westbound Right	D	37.9	0.24	D	37.8	0.26	D	37.8	0.26
	Northbound	A	0.6	0.13	A	0.7	0.22	A	1.1	0.24
	Southbound	B	14.4	0.31	B	15.4	0.37	B	16.3	0.41
10.	**Intersection**	**D**	**43.8**	**0.54**	**E**	**56.1**	**0.76**	**E**	**61.8**	**0.78**
D Street/West First Street	Eastbound Left	D	35.5	0.04	D	35.6	0.05	D	35.6	0.05
	Eastbound Thru	C	33.3	0.17	C	33.5	0.18	C	33.5	0.18
	Westbound Thru	D	47.1	0.54	D	48.5	0.58	D	48.5	0.58
	Westbound Right	B	17.9	0.05	B	19.1	0.09	C	20.2	0.09
	Northbound Left/Thru	C	27.6	0.51	D	45.7	0.89	D	43.1	0.88
	Northbound Right	C	20.6	0.07	B	19.9	0.09	B	18.8	0.09
	Southbound Left	D	40.8	0.65	D	51.0	0.75	E	60.1	0.82
	Southbound Right	F	>80.0	0.13	F	>80.0	0.14	F	>80.0	0.15

[1] Level of Service.
[2] Average delay to all vehicles entering intersection, expressed in seconds per vehicle.
[3] Volume-to-capacity ratio.

LOS D or better is considered to be acceptable in an urban area, while LOS E or F are failing grades. As shown in the LOS tables, several study area intersections are expected to degrade as a result of the background growth and the Seaport Square project and other projects under the 2017 No-Build Condition. During the morning peak hour, the intersection of Congress Street and B Street is expected to degrade from LOS D to LOS E, and the intersection of Congress Street/East Service Road/Ramp is expected to degrade from LOS E to LOS F under the 2017 No-Build Condition. During the evening peak hour, the intersections of Northern Avenue/D Street and Congress Street/D Street are expected to degrade from LOS D to LOS F, and the intersections of Summer Street and D Street and D Street and West First Street are expected to degrade from LOS D to LOS E under the 2017 No-Build Condition.

Comparing Build conditions with No-Build conditions, there are no degradations in overall LOS grades, with the exception of Congress Street at D Street in the morning peak hour which is expected to degrade from LOS D to LOS E. This degradation, however, is caused by a very limited increase in average delay of just over one second. Therefore, the Project is not projected to result in any significant changes in traffic operations, and is not expected to cause any adverse traffic impacts.

B.7.1 Site Driveway

The proposed site driveway on D Street will be un-signalized, and its operational analysis is summarized in Table B-11. Unlike signalized intersection analysis, there is no overall level of service, and LOS grades are reported for turning movements only. Again, Synchro analysis worksheets are included in the Transportation Attachment at the end of this Appendix.

Table B-11 Proposed Site Driveway Analysis: 2017 Build Condition

Location	Approach	AM Peak Hour			PM Peak Hour		
		LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]
D Street/ Site Driveway (un-signalized)	Westbound	B	11.6	0.08	C	16.2	0.15
	Northbound	A	0.0	0.21	A	0.0	0.38
	Southbound	A	3.2	0.13	A	2.6	0.21

[1] Level of Service.
[2] Average delay to all vehicles entering intersection, expressed in seconds per vehicle.
[3] Volume-to-capacity ratio.

As shown, the proposed site driveway on D Street is expected to operate at good levels of service, with no significant impact to D Street traffic operations. Vehicles exiting the site onto D Street are projected to experience LOS B or C during the peak hours.

B.8 Pedestrians

The Project is expected to generate significant pedestrian traffic between the hotels and the BCEC. The site layout will be designed to anticipate this activity, and the pedestrian environment will be afforded significant emphasis as the design of the BCEC Expansion is progressed, recognizing the importance of the changing pedestrian environment. In particular, enhancement of the existing crosswalks on D Street will be examined and designed to ensure safe and convenient crossing accommodations.

B.9 Parking

As discussed previously, the hotels will be supported by parking spaces in a garage providing approximately 1,350 parking spaces. The parking garage, however, will be replacement parking for the existing BCEC 1,343-space South Parking Lot, which will be displaced to facilitate construction of the BCEC Expansion. Therefore, while BCEC trips will be diverted to the D Street garage form the existing South Parking Lot, other than the hotel vehicle trips projected in the analysis, there will be no overall change in trip generation as a result of the garage itself.

B.10 Transportation Demand Management

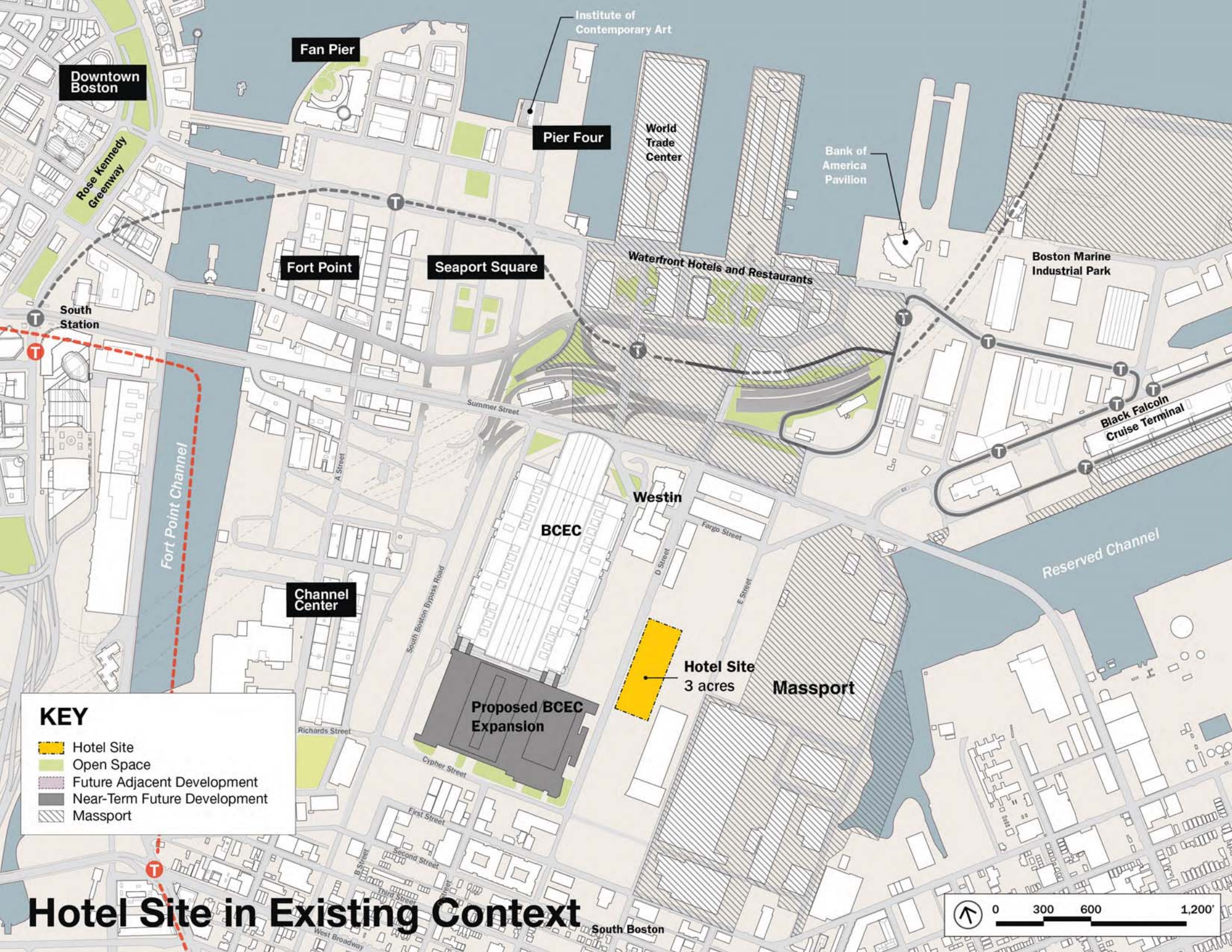
When the operators for the hotels are identified, MCCA will work with those operators to implement Travel Demand Management (TDM) strategies for the Project that will be fully coordinated with the expanded TDM Plan for the BCEC Expansion. TDM plans will build upon the successful practices already implemented for the existing BCEC in coordination with the Westin Hotel.

Transportation Technical Appendix

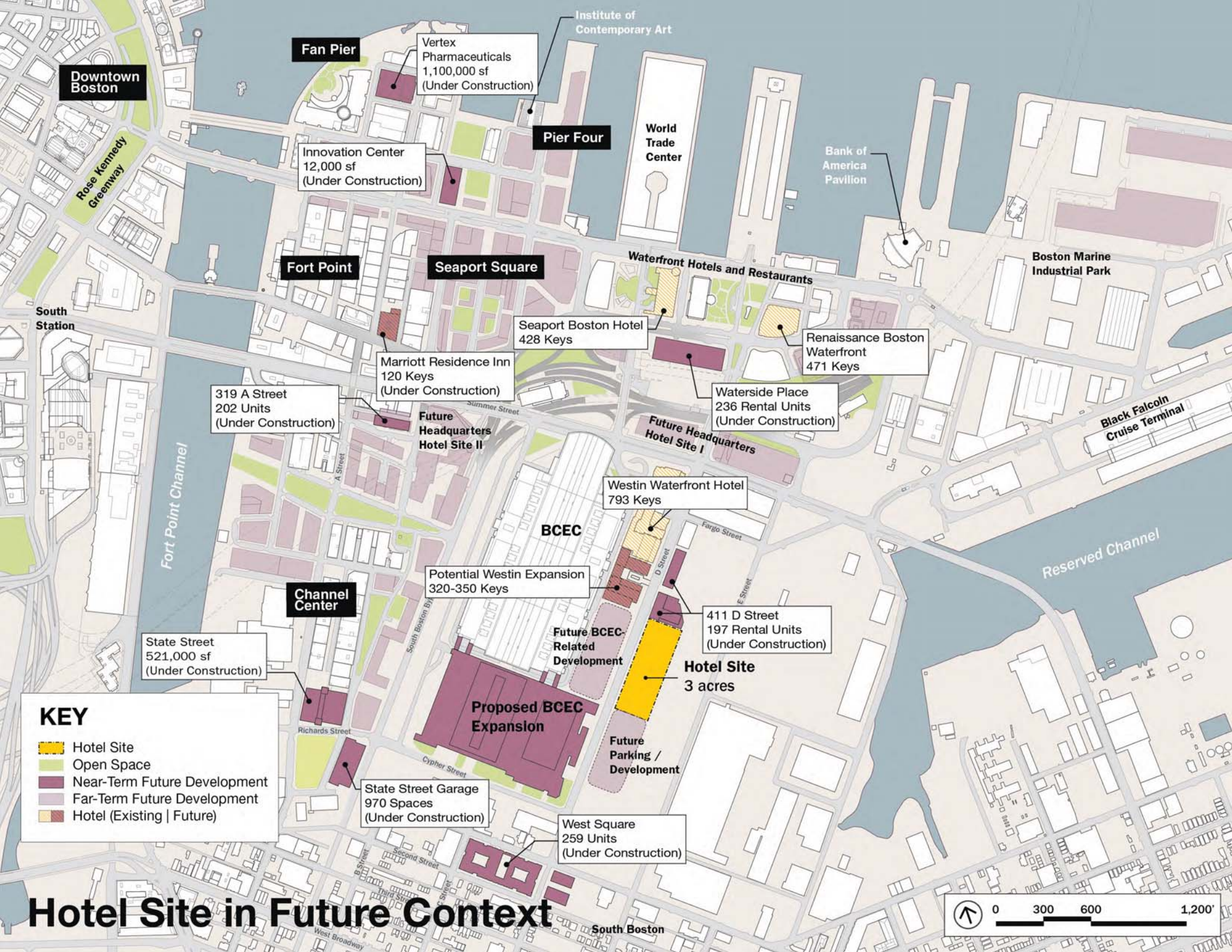
Available Upon Request

Appendix C

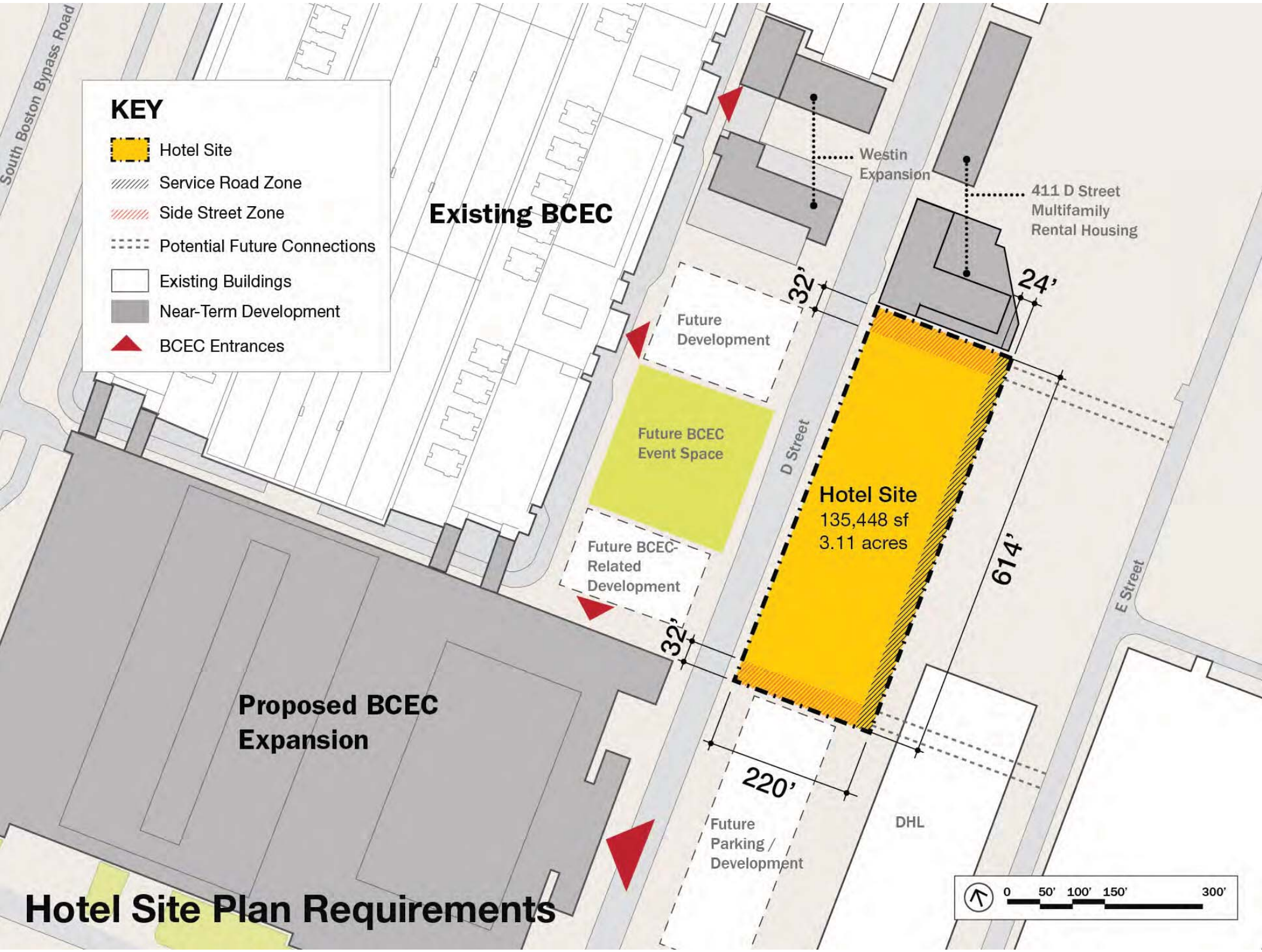
RFP Design Guidelines



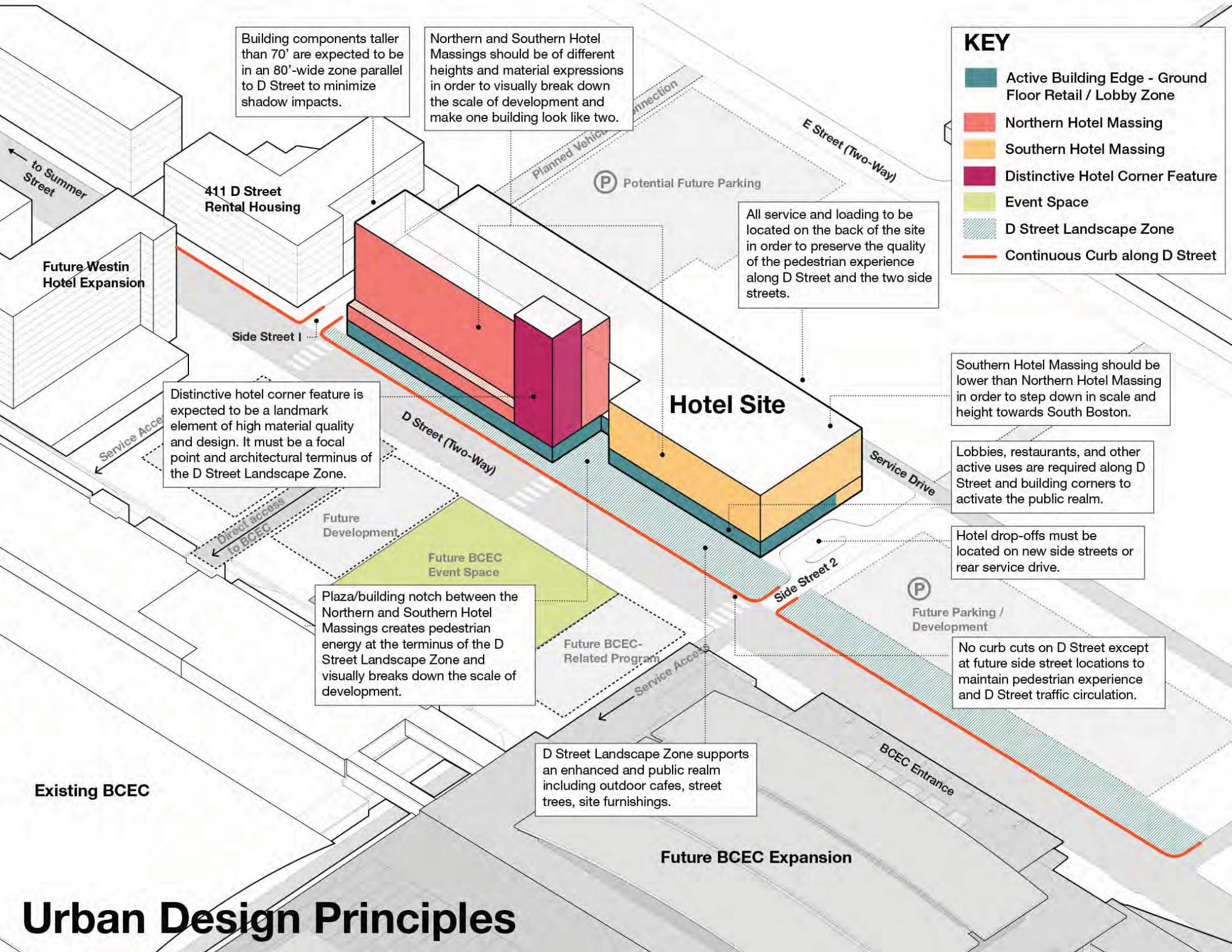
Hotel Site in Existing Context



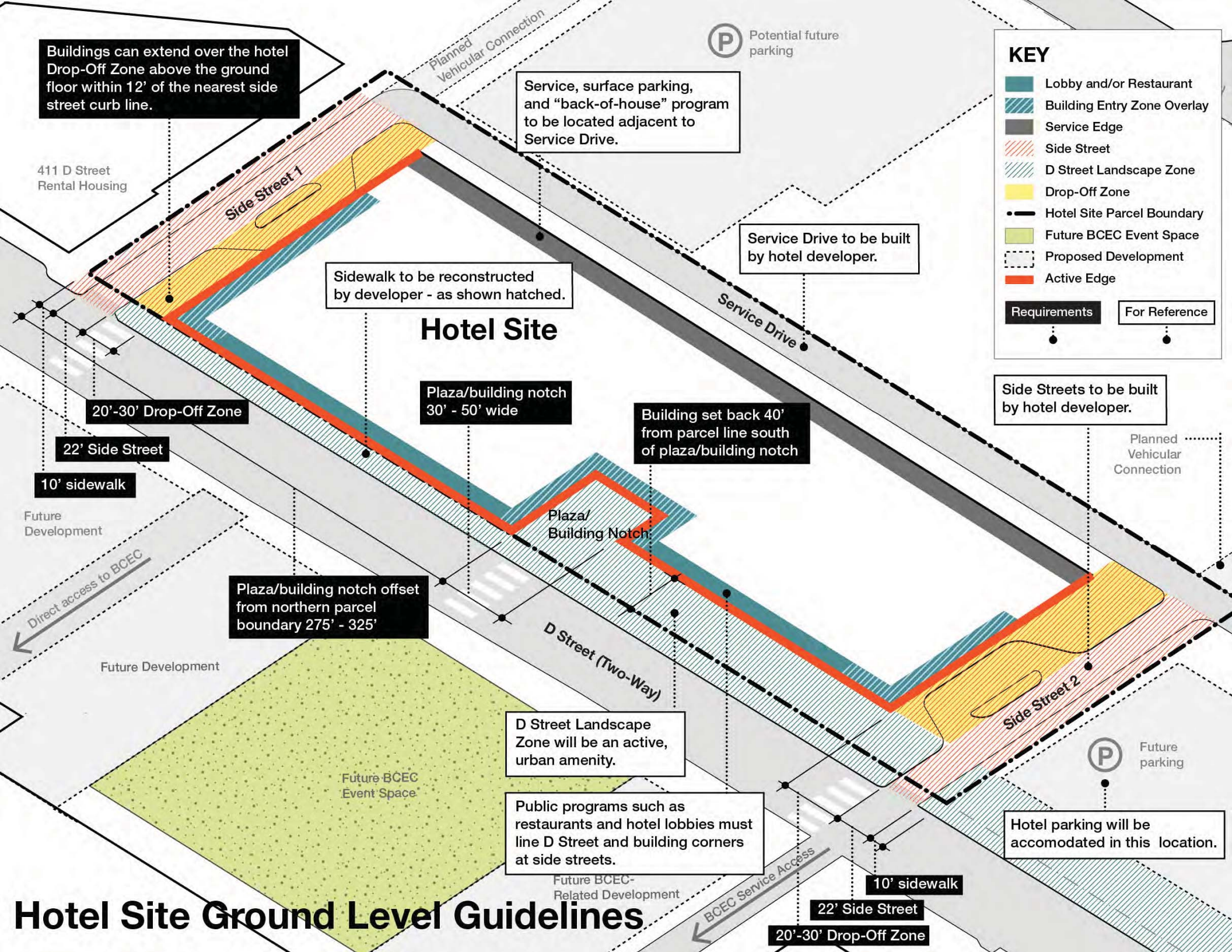
Hotel Site in Future Context



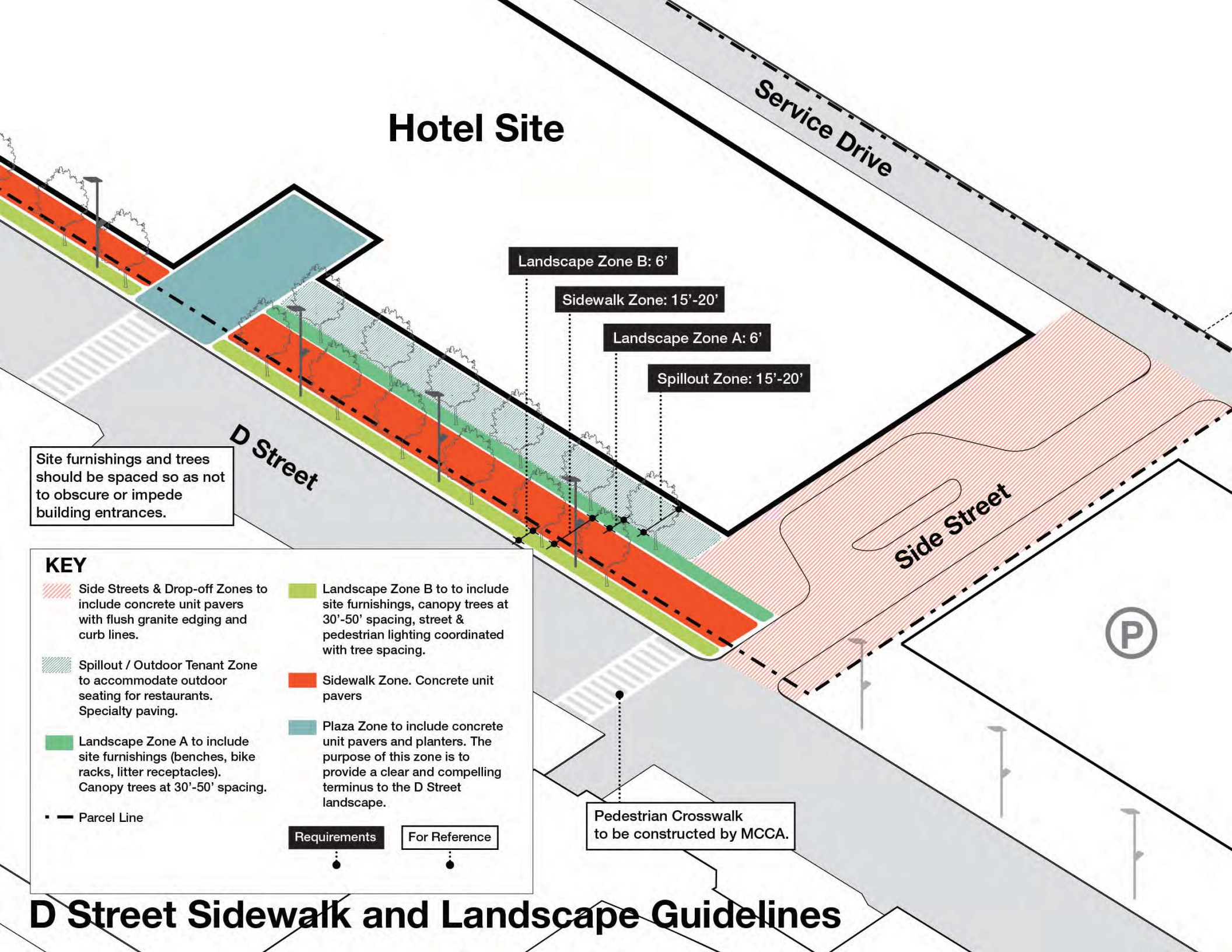
Hotel Site Plan Requirements



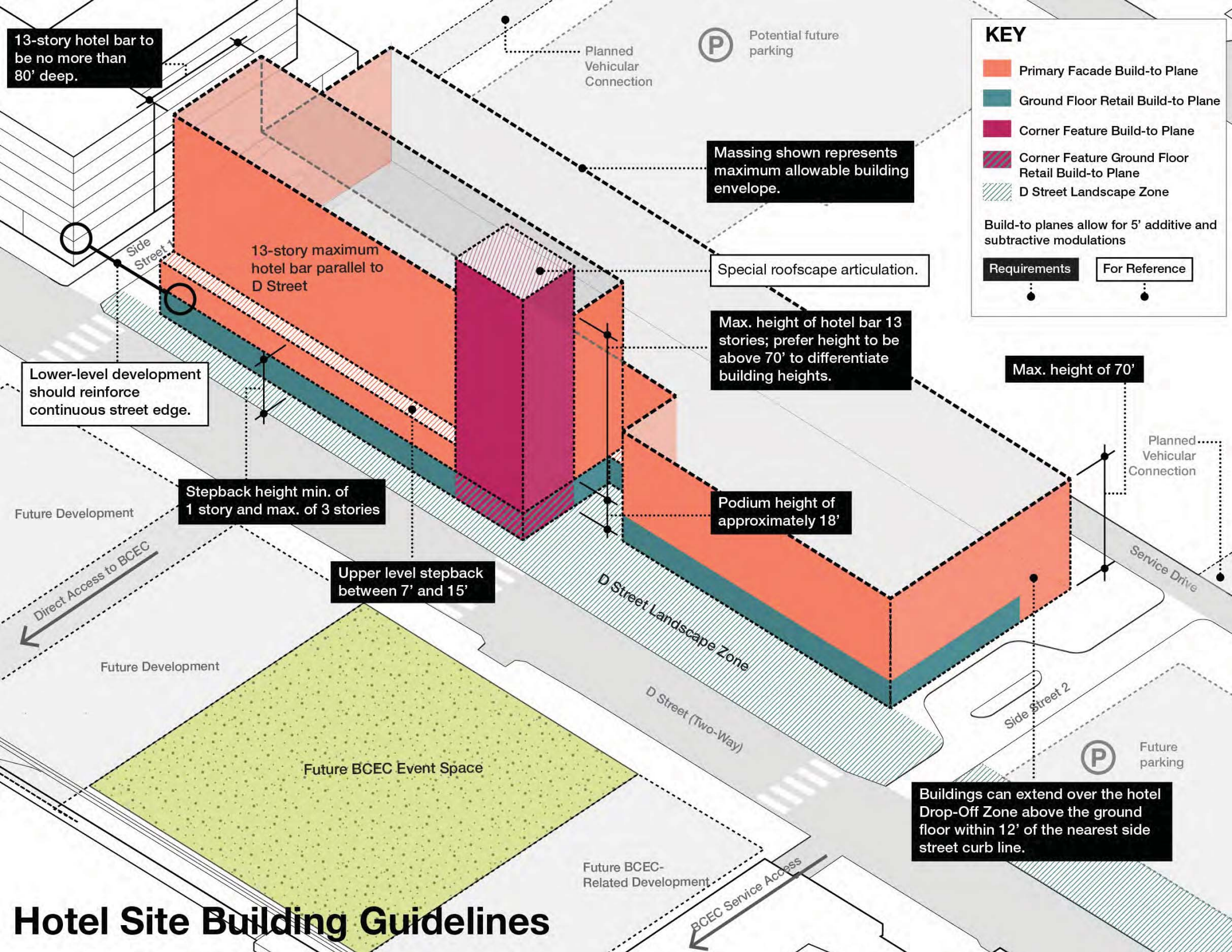
Urban Design Principles



Hotel Site Ground Level Guidelines



D Street Sidewalk and Landscape Guidelines



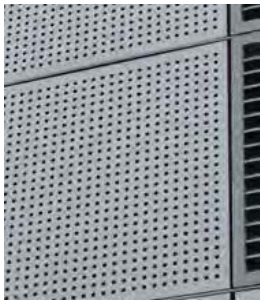
Hotel Site Building Guidelines

Architectural Material Guidelines

Primary Facade Material Palette

- Primary facade materials should be high-qulity, durable, and climate-appropriate for a New England coastal environment. The images below represent a range of materials that meet these requirements.
- Primary facade treatment will differ between the Northern and Southern Hotel Massings.
- To enhance exterior architecture and the guest room environment, a concealed 4 pipe fan coil unit mechanical system for guestrooms is preferred, as opposed to a "through wall" type system. An alternative to a 4 pipe system may be proposed provided the Proposer describes all differences and benefits, including appearance (exterior facade and room interior) and the guest room experience.


Masonry Rainscreen


Metal Panel Rainscreen


Wood Cladding Rainscreen


Cast Stone Rainscreen


Metal Panel Rainscreen


Masonry Rainscreen


Terracotta Rainscreen


Cast Stone Rainscreen

Ground Floor Retail Material Palette

Ground floor retail facades should form a continuous edge along D Street and building corners at side streets, and must be composed of at least 75% glazing. A robust base material of stone is advised below 18” for weatherability in winter.


Storefront Glazing


Storefront Glazing


Storefront Glazing


Storefront Glazing

Corner Feature Material Palette

Corner feature materials and architectural design to be at a greater level of detail and quality than the primary facades. This could include a greater percentage of glass and additional detail elements such as sun-shading or architectural roof features.


Curtain Wall Glazing


Feature Detail [Sunscreen]

Rear facade materials above 70’ should match the primary facade materials. Rear facade materials below 70’ may be less detailed but similar to the primary facade.

Prohibited materials on all facades include EIFS, fiber cement panels, large fields of precast, GFRC panels, or high-pressure laminate panels.