

41 WESTLAND AVENUE

EXPANDED PROJECT NOTIFICATION FORM

March 11, 2011



Submitted By:
Colliers International

On Behalf of:
Catamount Westland LLC



March 11, 2011

By Hand Delivery

Mr. John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Plaza, 9th floor
Boston, MA 02201

Re: 41 Westland Avenue, Boston

Dear Director Palmieri:

On behalf of our client, Catamount Westland LLC (“Catamount”), we are pleased to submit herewith this expanded Project Notification Form (PNF) in connection with the project known as 41 Westland Avenue (the “Proposed Project”) in the East Fenway community. This submission is being made in accordance with Article 80B (Large Project Review) of the Boston Zoning Code.

The Proposed Project is intended to create innovative and highly sought-after contemporary housing prototypes in the East Fenway community, as well as increase the number, quality, and character of homeownership opportunities in the East Fenway. The Proposed Project is not anticipated to have any significant impacts on the surrounding area since it is only increasing the existing building area by approximately 10%, and is reducing the intensity of the use on the site from commercial parking garage to residential homeownership.

On behalf of the entire development team, we look forward to working with you, BRA staff, the City of Boston, and the community at large in furtherance of this innovative adaptation of the existing parking garage so as to increase the number of owner-occupied homes in the East Fenway community.

Thank you in advance for your consideration.

Yours very truly,

A handwritten signature in black ink, appearing to read "Yanni K. Tsipis", written over a horizontal line.

Yanni K. Tsipis
Senior Vice President

YKT/as

cc: Mr. Christopher Kaneb – Catamount Westland, LLC
Mr. Donald Wiest – Brennan, Dain, LeRay, Wiest, Torpy & Garner

PUBLIC NOTICE

The Boston Redevelopment Authority ("BRA"), pursuant to Section 80A-2 and 80B-5 of the Boston Zoning Code, hereby gives notice that an expanded Project Notification Form (the "PNF") was submitted to the BRA on March 11, 2011 by Catamount Westland LLC. The PNF details the proposed construction of a project that would be located at 41 Westland Avenue (the "Project") in the Fenway district of Boston.

The Project will involve the renovation of the Symphony Garage into approximately 48 residential dwelling units and 31 on-site parking spaces. The Project contains approximately 67,000 square feet of gross floor area, consisting of approximately 61,000 gross square feet of renovated space and approximately 6,000 square feet of new construction. The BRA, in the Scoping Determination for the Project, may waive further review, pursuant to Section 80B-5.3(d) or Section 80B-5.4(c)(iv), if the BRA finds that the PNF adequately describes the Project's impacts.

Approval is requested of the BRA pursuant to Article 80B of the Boston Zoning Code for the Project.

The PNF may be reviewed in the office of the Secretary of the BRA, Room 910, Boston City Hall, Boston, MA 02201, between 9:00 AM and 5:00 PM, Monday through Friday, except legal holidays. Public comments on the Project should be submitted in writing to John Fitzgerald, Project Manager, One City Hall Square, Boston, MA 02201, or John.Fitzgerald.BRA@cityofboston.gov within 30 days of the date of the BRA's receipt of the PNF, meaning no later than April 11, 2011.

BOSTON REDEVELOPMENT AUTHORITY
Brian Golden, Executive Director / Secretary

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I - PROJECT SUMMARY

1.0 – PROJECT SUMMARY

41 Westland Avenue (the “Proposed Project”) is an environmentally sustainable seven-story residential condominium project that is being proposed as a conversion of the existing Symphony Garage facility in the East Fenway neighborhood. The Proposed Project includes approximately 48 dwelling units and will provide entry-level homeownership opportunities in a dynamic, diverse, and culturally rich neighborhood. The innovative floorplans and housing types contemplated as part of the Proposed Project are consistent with Mayor Menino’s and the BRA’s initiative to attract and retain Innovation Economy professionals to Boston.

1.1 – Project Program

The Project program is summarized in the following table:

<i>Project Use:</i>	Residential Condominiums
<i>Project Gross Floor Area:</i>	67,000 +/-
<i>Above-Grade Stories:</i>	Seven (7) Occupied Floors
<i>Below-Grade Stories:</i>	None (partial basement housing mechanical equipment only)
<i>Number of Dwelling Units:</i>	48 – Loft-style units
<i>Project Height:</i>	89'+/-
<i>Parking Spaces:</i>	31+/- on-site

1.2 – Project Team

The Project team is summarized in the following table:

<i>Project Name:</i>	41 Westland Avenue/Symphony Garage Redevelopment
<i>Location:</i>	41 Westland Avenue, Boston, MA 02115
<i>Owner/Proponent:</i>	Catamount Westland LLC Westland Avenue Boston, MA 02115 (617) 660-7400 Christopher P. Kaneb
<i>Development Consultant:</i>	Colliers International 160 Federal Street Boston, MA 02110 (617) 330-8151 Yanni K. Tshipis
<i>Architects:</i>	Dolezal Architecture + Interior Design (Designer) 46 Waltham Street #312 Boston, MA 02118 (617) 542-4422 Douglas Dolezal

	Symmes Maini & McKee Associates (Executive Architect) 1000 Massachusetts Avenue Cambridge, MA 02138 (617) 547-5400 Gregory Downes
<i>Construction Management:</i>	Tishman Construction 84 State Street Boston, MA 02109 (617) 723-2050
<i>Legal Counsel:</i>	Brennan, Dain, Le Ray, Wiest, Torpy & Garner 129 South Street Boston, MA 02111 (617) 542-4874 Donald Wiest
<i>Transportation Consultant:</i>	Howard/Stein-Hudson Associates, Inc. 38 Chauncy Street Boston, MA 02111 (617) 482-7080 Guy Busa
<i>Structural Engineer:</i>	Symmes Maini & McKee Associates 1000 Massachusetts Avenue Cambridge, MA 02138 (617) 547-5400
<i>Civil Engineer:</i>	Symmes Maini & McKee Associates 1000 Massachusetts Avenue Cambridge, MA 02138 (617) 547-5400 Brian Lawlor
<i>Geotechnical Engineer:</i>	Haley & Aldrich 465 Medford Street Boston, MA 02129 (617) 886-7400 Steve Kraemer
<i>MEP Engineer:</i>	Symmes Maini & McKee Associates 1000 Massachusetts Avenue Cambridge, MA 02138 (617) 547-5400

1.3 – Public Benefits

The Proposed Project is located in the East Fenway community, a vibrant and diverse neighborhood first developed in the 1890s. As a former resident of the East Fenway neighborhood, the Project Proponent is committed to giving back to the community in which he has chosen to locate his business and make a substantial investment to create new housing. As a result of this commitment the Proposed Project will deliver a range of public benefits to the East



Fenway community and the City of Boston as a whole. These benefits include the following:

- Transformation of an existing commercial parking structure into an active and vibrant residential community and enhancement of the pedestrian experience along Burbank Street and Westland Avenue;
- Creation of approximately 48 moderately priced homeownership units;
- Approximately 125 construction jobs over the course of the Project's construction;
- Creation of affordable housing opportunities in compliance with the Mayor's 2006 Executive Order and its 2007 amendment;
- Streetscape improvements to Burbank Street and Westland Avenue;
- Contribution to the improvement of the greenspace located at New Edgerly Road and Westland Avenue (Higginson Park), gateway to the East Fenway;
- Support of the Fenway artist community through purchase and placement of local artwork in the residential common areas of the Proposed Project;
- On-site recharge of stormwater, benefitting groundwater conditions in the vicinity of the Project Site; and
- Enhance the city of Boston's tax base by creating new taxable residential property in lieu of the current commercial parking structure.

In addition to these commitments to public benefits to be delivered in connection with the Proposed Project's development, the Proponent has engaged in an extensive community outreach program in advance of this filing in an effort to ensure that the Proposed Project's abutters, community neighbors, and elected officials have had an opportunity to review and comment on the Project even before it is submitted to the BRA to begin the formal community process.

1.4 Legal Status

The Proponent is not aware of any legal judgments in effect or legal actions pending that are adverse to the Proposed Project.

The Proponent does not have a history of tax arrears on any property owned within the City of Boston.

The Proponent has owned the Project Site since June of 2007. There is no mortgage on this property.

II - PROJECT DESCRIPTION

2.0 – PROJECT DESCRIPTION

The proposed 41 Westland Avenue project is an environmentally sustainable homeownership project located in the East Fenway neighborhood containing approximately 48 residential units. The Proposed Project will transform an existing commercial parking structure into a residential development that responds directly to the recognized need for entry-level homeownership opportunities for younger Bostonians, first-time homebuyers, and longtime neighborhood residents seeking an opportunity to live in an innovative, modern building within the Fenway community. The Proposed Project directly reflects the objectives of Mayor Menino’s “Leading the Way II” housing creation initiative in an area with one of the lowest homeownership rates of any neighborhood in the city.

2.1 – Project Site

The Proposed Project is located at 41-43 Westland Avenue in the East Fenway neighborhood, a 68,500 square-foot, 6-story commercial parking garage located on approximately 12,488+/- square feet of land (the “Symphony Garage” or the “Project Site”). The Symphony Garage was originally constructed in 1919 of cast-in-place concrete, and is clad in a decorative brick and cast-stone façade that will be restored and reinforced in connection with the Proposed Project’s construction. The Project Site is bounded to the east by the Westland Avenue Garage, a 6-story commercial parking structure with a Whole Foods market on the ground floor with a street address at 35 Westland Avenue, to the south by Westland Avenue, a public way, to the southwest by a four-story residential apartment building with a street address of 45 Westland Avenue, to the northwest by a vacant parcel located at 44 Burbank Street owned by the Proponent, and to the north by Burbank Street, a public way.

The Project Proponent has owned the Project Site since June of 2007.

The Proposed Project’s location is shown in Figure 2-1.

2.2 – Proposed Development

The Proposed Project contains approximately 67,000 square feet of gross floor area (as defined in the Boston Zoning Code) on seven floors. The lower six floors of the Proposed Project will involve the renovation of the existing Symphony Garage and the re-purposing of this existing structure from commercial parking to residential uses and accessory residential parking. The top floor of the Proposed Project will consist of a newly constructed 6,500+/- square foot rooftop addition containing additional dwelling units. The residential rooftop addition will be set well back from the parapet of the existing building, and will occupy only about half of the floorplate of the existing structure. In terms of square footage, the rooftop addition will comprise less than 10% of the existing Gross Floor Area of the Symphony Garage.

The construction cost of the Proposed Project is approximately \$15 million.

The Proposed Project’s 48 residential dwelling units generally consist of loft-style homes that are configured to provide a flexible and sustainable living arrangement that makes maximum use of the existing building’s 12-foot floor-to-floor heights and large window openings. This type of residential product will provide a desirable alternative to traditional new-construction dwelling units that have much lower ceiling heights and less access to natural light. Large, operable windows and the restored historic brick façade of the Symphony Garage will contribute to the architectural quality and interest of the block.

The Proposed Project’s development program is summarized in the following table 2-1:

Table 2-1: PROPOSED PROJECT PROGRAM

Floor	Exist Use	Existing Area (GSF)	Existing Use to Remain	New Use	Existing Use to Change	New GFA	TOTAL GFA	Dwelling Units
7		0	0	Residential	0	6,500	6,500	4
6	Park	11,410	0	Residential	11,410	0	11,410	9
5	Park	11,410	0	Residential	11,410	0	11,410	9
4	Park	11,410	0	Residential	11,410	0	11,410	9
3	Park	11,410	0	Residential	11,410	0	11,410	9
2	Park	11,410	0	Residential	11,410	0	11,410	8
1	Park / Retail	11,410	8,200	Lobby	3,210	0	11,410	0

2.3 - Design Concept

The Proposed Project will involve the rehabilitation of the existing brick and concrete Symphony Garage structure and the construction of a modest residential rooftop addition that will be clad in glass and complementary metal panel materials. Existing windows will be replaced and existing brick and cast-stone façade will be re-pointed, cleaned, and restored where needed. The ground floor of the Symphony Garage on Burbank Street and Westland Avenue will be restored and upgraded to reflect the structure’s new residential use. Existing garage entrances will be retained to serve the Proposed Project’s ground-floor parking area, but a new residential entrance will be created on Westland Avenue and all exterior doors, windows, hardware, façade materials, and sidewalk materials will be restored and upgraded to provide an attractive, modern streetscape image for the Proposed Project on both Burbank Street and Westland Avenue.

Figures depicting the Proposed Project’s design are included as Section IX of this filing.

2.4 – Parking

The Proposed Project will provide 31 off-street, on-site parking spaces, a ratio of approximately 0.65 parking spaces per dwelling unit, consistent with BTD guidelines. The Proposed Project’s parking will be provided on the ground floor of the existing garage, similar to the Symphony Garage’s current use. Exterior garage doors will be closed at all times and will open automatically through the use of transponders issued to unit owners only when an owner’s vehicle is entering or exiting; the existing garage doors will also be replaced with new and more attractive models. In these regards, the exterior appearance of the Symphony Garage will be significantly improved over existing conditions, due to the garage’s current use as a public parking facility that hosts hundreds of cars daily.

The parking for the previously-approved 44 Burbank Street project, which was slated to be located in the Symphony Garage on a long-term leased basis will instead be located in the adjacent Westland Avenue Garage. The owner of the Westland Avenue Garage has agreed to make available sufficient parking to fulfill the parking requirements of the previously-approved 44 Burbank Street project.

2.5 – Zoning District



2.5.1 - Underlying Zoning

The Project Site is located at 41-43 Westland Avenue in the Fenway Neighborhood District and consists of approximately 12,488+/- square feet of land area. The Project Site is located in the Westland Avenue Neighborhood Shopping Subdistrict (NS-1), and falls within the Groundwater Conservation and the East Fens Neighborhood Design Overlay Districts. The use, dimensional, design, and other attributes of the Project Site's zoning context are described in and subject to the provisions of Article 66 of the Boston Zoning Code (the "Code"), the Fenway Neighborhood District Article.

The Proponent will seek relief from the Boston Board of Appeal concerning certain provisions of the Code. Such relief will provide for the transformation of the existing commercial parking structure into homeownership use and the creation of an enhanced number of affordable and market-rate homeownership units at the Project Site.

2.5.2 –Article 80 (Large Project Review)

The Project Site is located within the Fenway Neighborhood District, and the Proposed Project seeks to establish or change the use of more than 50,000 square feet of Gross Floor Area. Therefore, pursuant to Section 80B-2.2(c) of the Code, the Proposed Project is subject to Large Project Review.

2.5.3 - Groundwater Conservation Overlay District (GCOD)

The Project Site is located within the Groundwater Conservation Overlay District, (GCOD), established by Article 32 of the Code. The Proponent will comply with the provisions of Article 32 and is committed to protecting the groundwater resources at the Project Site by directly recharging groundwater with runoff from the Proposed Project's roof.

It should be noted that, although within the GCOD, the Project Site is located on the historic "Gravelly Point," a broad peninsula of land that pre-dated European settlement. Due to its existing grade and historic geologic stability, this area required comparatively less filling as part of the Back Bay/Fenway reclamation project. The Proposed Project does not involve the construction of any new basement spaces or significant excavation beyond that required for the construction of elevator pits.

2.5.4 –Article 37 (Green Building)

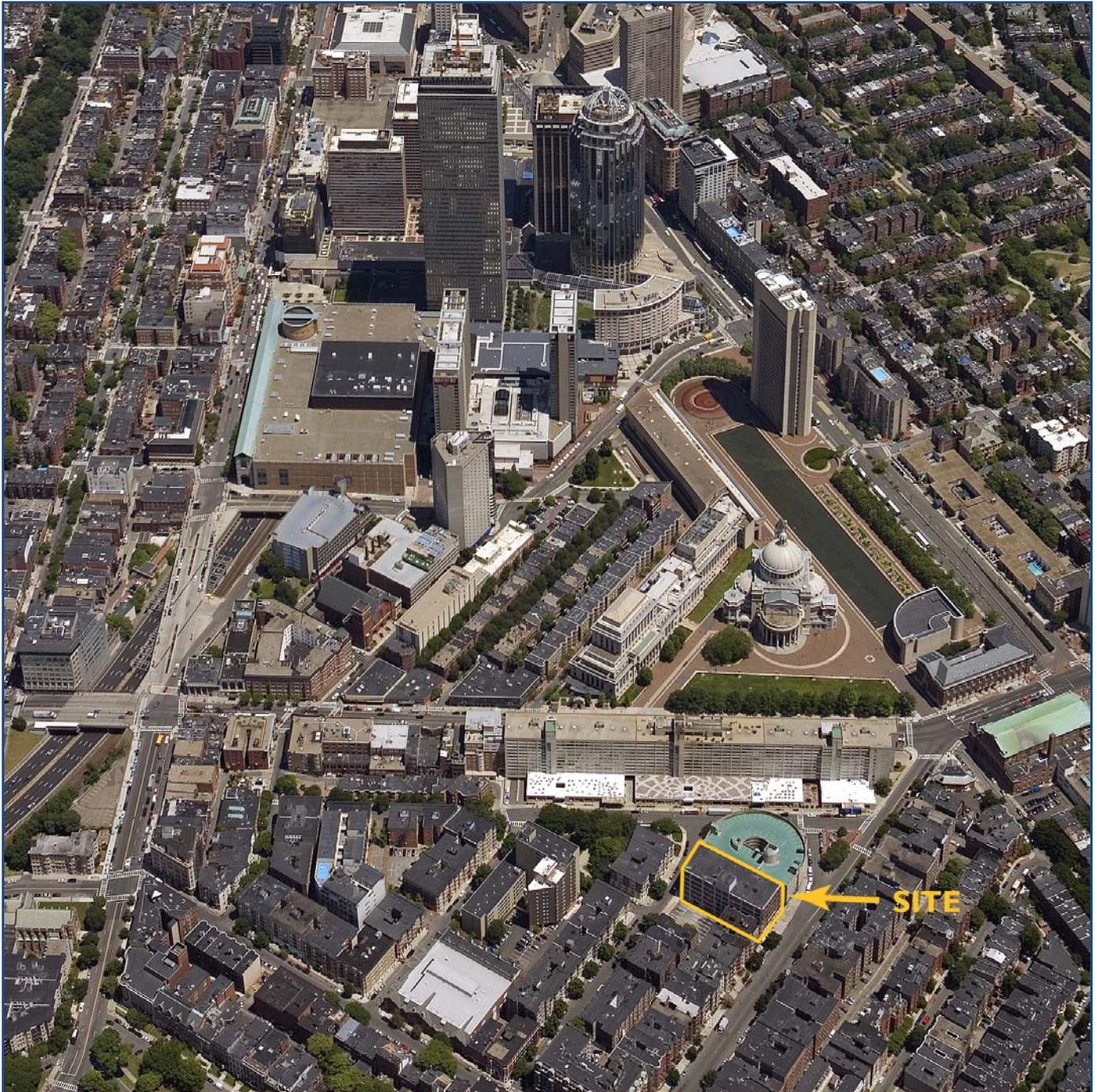
The Proposed Project is subject to Large Project Review under Article 80B of the Code due to its size (change of use is greater than 50,000 square feet), and thus triggers the provisions of Code Article 37 (Green Buildings). The Proponent is committed to promoting environmental sustainability in the built environment and believes that this approach will benefit both the Project's future residents and the City of Boston as a whole. The Proposed Project's approach to LEED certification and to Article 37 compliance is detailed in Section 7 of the PNF.

The table on the following page outlines the specific zoning relief that is likely to be required in connection with the Project's construction.

Table 2-2: ZONING SUMMARY

Table 2-2: ZONING SUMMARY											
Lot Information											
Lot Area: 12,488 sf											
Zoning District:	Fenway Neighborhood District (East Fenway)										
Zoning Subdistricts	NS – Neighborhood Shopping Subdistrict										
Overlay Districts:	<ul style="list-style-type: none"> • Restricted Parking Overlay District • Groundwater Conservation Overlay District 										
Dimensional Regulations											
	Lot Area	FAR	Height (feet)	Open Space	Front Yard	Side Yard	Rear Yard	Parking (0.75)/du	Loading Bays	Skyplane Setback	Article 37 Compliance
Required	None	4.0	75'	3,600sf	None	None	N/A	36	1	15	Yes
Provided	12,488	5.35	89'	TBD	6' – 10'	None	N/A	31	None	23	Yes
Zoning Relief Required											
Variances:	<ol style="list-style-type: none"> 1. FAR (Section 66-9: 5.4 vs 4.0) 2. HEIGHT (Section 66-9: 89' vs. 75') 3. PARKING (Section 66-42/Table F: 31 on-site spaces vs. 36 required) 4. USEABLE OPEN SPACE (Section 66-15) 										
Conditional Use Permits:	<ol style="list-style-type: none"> 1. GCOD (Section 32-5: Substantial Rehabilitation of > 50,000 GSF) 2. ACCESSORY PARKING 										

Figure 2-1: Project Site Location



III – TRANSPORTATION ANALYSIS

3.0 – Transportation

3.1 – Introduction

This section describes the transportation-related components of the redevelopment of 41 Westland Avenue. The Project Site is located in the Fenway neighborhood of Boston. The existing site comprises a 6-story commercial parking garage with approximately 182 currently active parking spaces (though the garage is licensed for up to 300). The Proposed Project includes the redevelopment of the site into a 7-story building with up to 48 residential condominiums and up to 31 parking spaces within a street level garage. Parking will be for residential use only.

Vehicular access to the garage will be provided via a one-way entrance driveway on Westland Avenue and egress will be provided on Burbank Street via a one-way exit driveway.

3.2 – Methodology

The transportation analysis for the Proposed Project was prepared in accordance with the Boston Transportation Department's (BTD) *Transportation Access Plan Guidelines* (2001). Although BTD has not issued a formal transportation scope, this report adheres to the general format requested by BTD.

The analysis is summarized in the following sections:

- An inventory of existing transportation conditions, including roadway capacities, parking, transit, pedestrian and bicycle circulation, loading, and site conditions.
- Future transportation conditions and assessment of potential traffic impacts associated with the development and other neighboring projects. Long-term impacts are evaluated for the year 2015, based on a 5-year horizon from the 2010 base year. Expected roadway, parking, transit, pedestrian, and loading capacities and deficiencies are identified. This section includes the following scenarios:
 - The No-Build Scenario (2015) includes general background growth and additional vehicular traffic associated with specific proposed or planned developments and roadway changes in the vicinity of the site; and
 - The Build Scenario (2015) includes specific travel demand forecasts for the Project.
- Evaluation of short-term traffic impacts associated with construction activities.

3.3 – Study Area

The study area is generally bounded by Hemenway Street to the west, Burbank Street to the north, Massachusetts Avenue to the east, and Westland Avenue to the south. The study area for which a detailed transportation analysis was performed is depicted in **Figure 3-1** and includes the following intersections:

- Massachusetts Avenue/Westland Avenue/St. Stephen Street/Christian Science Center Driveway (signalized);

- Westland Avenue/Hemenway Street (signalized);
- Burbank Street/Hemenway Street/Alley (unsignalized);
- Burbank Street/Edgerly Road (unsignalized); and
- Westland Avenue/Site Driveway (unsignalized).

Figure 3-1: Study Area Intersections



 Not to scale.

3.4 – Existing Conditions

Existing transportation conditions include study area roadway geometry, intersection traffic control, peak-hour vehicular volumes, parking supply, transit availability, pedestrian and bicycle conditions, and loading and service conditions.

3.4.1 – Roadway Conditions

The study area includes the following roadways, which are categorized according to the Massachusetts Department of Transportation (MassDOT) Office of Transportation Planning functional classifications:

Massachusetts Avenue is an urban principal arterial running in a north-south direction in the study area. Massachusetts Avenue is located approximately 500 feet to the east of the site. The roadway generally consists of 2 vehicular travel lanes in each direction. An additional outside lane in each direction accommodates on-street metered parking, commercial loading areas, valet parking, and MBTA bus stops. Concrete sidewalks are provided along both sides of the roadway. The roadway is in fair condition, with some areas of patching and occasional potholes and other wear. Pavement markings are visible but fading in various locations.

Westland Avenue is an urban minor arterial running in an east-west direction to the south of the site and serves as the primary access roadway for the Project. The roadway is approximately 55 feet in width and consists of 1 travel lane in each direction, with on-street parking along each side of the roadway. A 13-foot sidewalk is provided on both sides of the roadway.

St. Stephen Street is a local roadway running in a northeast-southwest direction with its eastern terminus at Massachusetts Avenue. The roadway is approximately 33 feet in width and consists of 1 travel lane in the south-westbound direction with on-street parking along each side of the roadway. An 8-foot sidewalk is provided on both sides of the roadway.

Hemenway Street is local roadway running in a north-south direction to the west of the site. North of Westland Avenue, Hemenway Street is one-way northbound with one travel lane. South of Westland Avenue, Hemenway Street consists of one travel lane in each direction. Hemenway Street is approximately 35 feet wide, with parking on both sides of the roadway. Sidewalks are provided on both sides of the roadway, with a 9-foot sidewalk to the west and a 13-foot sidewalk to the east.

Burbank Street is an urban minor arterial running in an east-west direction to the north of the site. The roadway is approximately 25 feet in width and consists of 1 travel lane in the eastbound direction with on-street parking along each side of the roadway. Sidewalks are provided on both sides of the roadway, with an 8-foot sidewalk to the north and a 13-foot sidewalk to the south.

Edgerly Road is a local roadway running in a north-south direction to the east of the site. The roadway is approximately 36 feet in width and consists of 1 travel lane in each direction, with on-street parking along each side of the roadway. A 7-foot sidewalk is provided on both sides of the roadway.

3.4.2 – Intersection Conditions

The following descriptions of the study area intersections include lane geometry, pedestrian

facilities, and intersection traffic control.

Massachusetts Avenue/Westland Avenue/St. Stephen Street/Christian Science Center Driveway is a 5-leg, signalized intersection with 4 approaches. All approaches operate under traffic signal control with the exception of the Christian Science Center driveway. The Christian Science Center driveway southbound approach has limited traffic throughout the day and operates under stop control. This approach was not analyzed as part of the operations analysis due to the fact that the approach is not operated by the signal. The Massachusetts Avenue northbound approach consists of a shared left-turn/through lane and a shared through/right-turn lane. The Massachusetts Avenue southbound approach consists of a shared left-turn/through lane and a shared through/right-turn lane. The Westland Avenue eastbound approach consists of a right-turn lane. St. Stephen Street is one-way south-westbound away from the intersection.

Parking is allowed on both sides of Massachusetts Avenue north of the intersection, and on both sides of St. Stephen Street. Parking is also allowed on the south side of Westland Avenue. Parking is prohibited to the south of the intersection on Massachusetts Avenue.

Westland Avenue/Hemenway Street is a 4-leg signalized intersection with 3 approaches. The Hemenway Street northbound approach consists of a shared left-turn/through/right-turn lane. The Westland Avenue eastbound approach consists of a shared left-turn/through lane and a right-turn lane. The Westland Avenue westbound approach consists of a shared left-turn/through/right-turn lane. Westland Avenue is one-way northbound to the north of the intersection.

On-street parking is allowed on both sides of Hemenway Street and Westland Avenue, east of Hemenway Street, in the vicinity of the intersection. Parking is not allowed to the west of the intersection.

Burbank Street/Hemenway Street is a 4-leg unsignalized intersection with 2 approaches. The Hemenway Street northbound approach consists of a shared left-turn/through/right turn lane. The eastbound approach is a service alley and consists of a left-turn/through lane and functions under stop control. The service alley is offset north of Burbank Street approximately 50 feet. Burbank Street is one-way eastbound away from the intersection.

On-street parking is provided along both sides of Hemenway Street and Burbank Street in the vicinity of the intersection.

Burbank Street/Edgerly Road is an unsignalized intersection with 3 approaches. The Burbank Street eastbound approach consists of a shared left-turn/right-turn lane and operates under stop control. The Edgerly Road northbound and southbound approaches each consist of one uncontrolled through lane.

On-street parking is allowed on Burbank Street, to the north of the intersection, and on both sides of Edgerly Road in the vicinity of the intersection.

Westland Avenue/Site Driveway is an unsignalized intersection with 3 approaches. The Westland Avenue eastbound approach consists of a shared left-turn/through lane. The Westland Avenue westbound approach consists of a shared through/right-turn lane. The Site Driveway

southbound approach is stop controlled and consists of a shared left-turn/right-turn lane.

On-street parking is allowed on both sides of Westland Avenue in the vicinity of the intersection.

3.4.3 – Traffic Conditions

Traffic volume counts were collected as part of the traffic study to develop a 2010 base traffic network for the study area, representing existing weekday morning and evening peak-period conditions.

Turning movement counts were conducted at four of the study area intersections on Tuesday, September 22, 2010, during the weekday morning (7:00-9:00 a.m.) and evening (4:00-6:00 p.m.) peak periods—the most critical time periods. Traffic volumes were observed while local schools and universities were in session and with an evening Red Sox game played at nearby Fenway Park in order to provide a conservative, or “worst case”, baseline for existing traffic conditions. Count data for the Massachusetts Avenue/Westland Avenue/St. Stephen Street intersection was obtained from a previous traffic count conducted on Tuesday, June 8, 2010. From the intersection data, the design hours were determined to be 8:00-9:00 a.m. and 5:00-6:00 p.m. Turning movement counts for the morning and evening peak hours are depicted in **Figure 3-2** and **Figure 3-3**. The availability of on-street parking located throughout the site resulted in volume differences between study area intersections; however, due to the small differences in volumes throughout the network, volume balancing was not necessary since it would not significantly alter the capacity analysis.

Figure 3-2: Existing Conditions (2010) a.m. Peak-hour Turning Movement Volumes (8:00–9:00 a.m.)

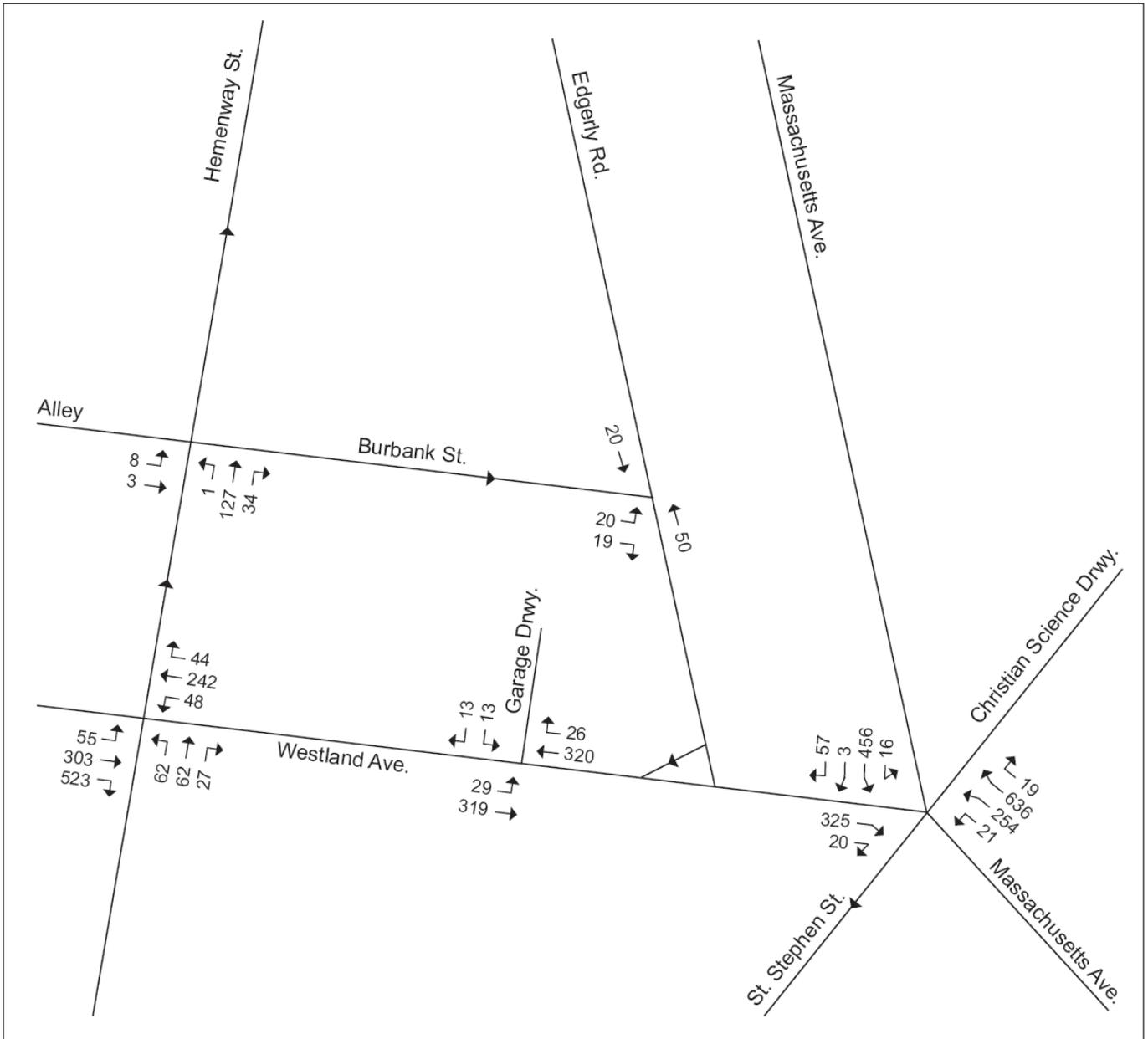
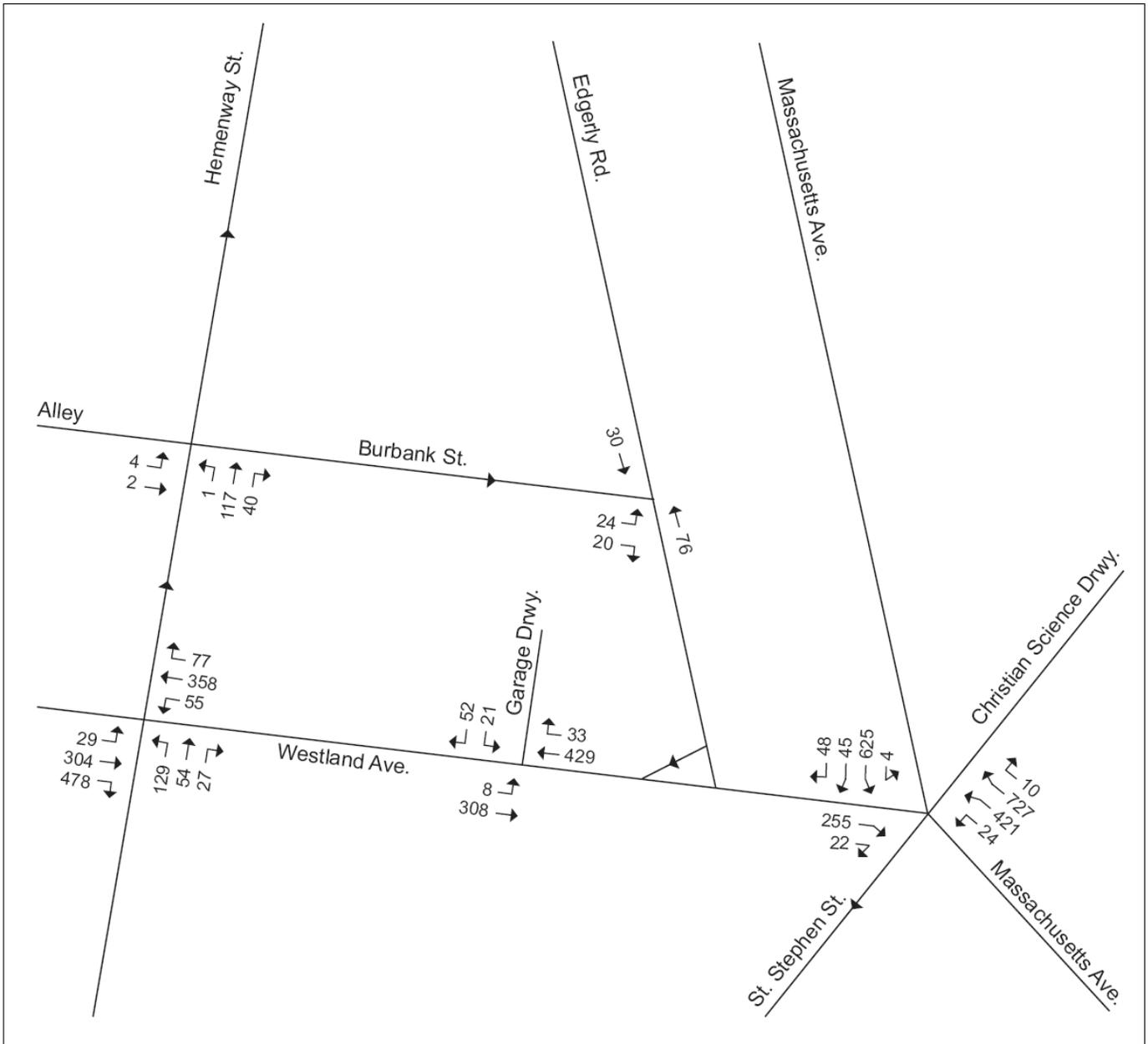


Figure 3-3: Existing Conditions (2010) p.m. Peak-hour Turning Movement Volumes (5:00–6:00 p.m.)



Not to scale.

3.4.4 – Existing Traffic Operations

The study team conducted an intersection Level of Service (LOS) analysis to evaluate the level of congestion and to measure delay at each intersection location. All signalized and unsignalized levels of service were analyzed using Synchro 6, developed by Trafficware. Synchro 6 evaluates the effects closely-spaced intersections may have on each other, based on the traffic operational analysis methodology of the Transportation Research Board’s 2000 *Highway Capacity Manual* (HCM). HCM methods determine the LOS, delay (in seconds), volume-to-capacity (v/c) ratio, and 95th percentile queue length (in feet), based on geometry and available traffic data for each intersection. Field observations were performed to establish intersection geometry (i.e., number of turning lanes, lane length, and lane width). Signal timing and phasing used in this analysis were obtained from BTM and through field observations conducted by the study team.

LOS designations, derived from the HCM, are based on average delay per vehicle for all vehicles entering an intersection (see **Table 3-1**). LOS A indicates the most favorable condition, with minimum traffic delay, while LOS F represents the worst (unacceptable) condition, with significant traffic delay. LOS D or better is typically considered acceptable in an urban area.

Table 3-1: INTERSECTION LEVEL OF SERVICE CRITERIA		
Level of Service	Average Stopped Delay (seconds/vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Source: *Highway Capacity Manual*, Transportation Research Board, 2000.

The **v/c ratio** is a measure of congestion at an intersection approach. A v/c ratio of 1 or greater indicates that the intersection approach exceeds capacity.

The **95th percentile queue length** represents the farthest extent of the vehicle queue (to the last stopped vehicle) upstream from the stop line during 95% of all signal cycles. The 95th percentile queue will not be seen during each cycle. To convert the 95th percentile queue length from feet to vehicles, divide by 25. Thus, a 95th percentile queue length of 250 feet would be 10 vehicles. The queue would be this long only 5% of the time. These queues would not be seen during off-peak hours.

To evaluate existing intersection operations, the study team calibrated the level of service analysis based on field observations of actual queues and delays. Uncalibrated, the analysis can show exaggerated queues and delays. **Table 3-2** and **Table 3-3** summarize the existing morning and evening intersection LOS, delay, v/c ratio, and 95th percentile queue length analysis results for the Proposed Project’s study area. Detailed Synchro reports have been provided under separate cover.

Table 3-2: EXISTING CONDITIONS (2010) LEVEL OF SERVICE - A.M. PEAK HOUR

Intersection	LOS	Delay (sec./veh.)	v/c Ratio	95 th Percentile Queue (ft.)
Signalized Intersections				
Massachusetts Avenue/Westland Avenue/St. Stephen Street	C	21.6	—	—
Westland EB right	D	35.0	0.75	327
Massachusetts NB hard left/left	B	14.2	0.36	159
Massachusetts NB thru/right	A	8.1	0.60	258
Massachusetts SB left/thru thru/right	C	33.3	0.72	231
Westland Avenue/Hemenway Street	B	16.5	—	—
Westland EB left/thru	C	23.9	0.74	281
Westland EB right	A	3.7	0.44	141
Westland WB left/thru/right	C	22.7	0.70	266
Hemenway NB left/thru/right	C	23.7	0.50	134
Unsignalized Intersections				
Burbank Street/Hemenway Street				
Alley EB left/thru	A	9.9	0.04	3
Hemenway NB left/thru/right	A	0.0	0.00	0
Burbank Street/Edgerly Road				
Burbank EB left/right	A	9.0	0.06	5
Edgerly NB thru	A	0.0	0.04	0
Edgerly SB thru	A	0.0	0.02	0
Westland Avenue/Site Driveway				
Westland EB left/thru	A	1.0	0.03	2
Westland WB thru/right	A	0.0	0.22	0
Driveway SB left/right	B	14.2	0.11	9

= 95th percentile volume exceeds capacity. Queue may be longer. Queue shown is maximum after two cycles.

Table 3-3: EXISTING CONDITIONS (2010) LEVEL OF SERVICE - P.M. PEAK HOUR

Intersection	LOS	Delay (sec./veh.)	v/c Ratio	95 th Percentile Queue (ft.)
Signalized Intersections				
Massachusetts Avenue/Westland Avenue/St. Stephen Street	C	27.5	—	—
Westland EB right	D	54.1	0.88	#339
Massachusetts NB hard left/left	B	17.5	0.57	286
Massachusetts NB thru/right	A	9.7	0.67	329
Massachusetts SB left/thru thru/right	D	41.5	0.87	#352
Westland Avenue/Hemenway Street	B	14.1	—	—
Westland EB left/thru	B	10.2	0.49	154
Westland EB right	A	1.1	0.45	0
Westland WB left/thru/right	C	24.0	0.83	#342
Hemenway NB left/thru/right	C	28.4	0.67	121
Unsignalized Intersections				
Burbank Street/Hemenway Street				
Alley EB left/thru	A	9.9	0.03	2
Hemenway NB left/thru/right	A	0.2	0.00	0
Burbank Street/Edgerly Road				
Burbank EB left/right	A	9.2	0.08	6
Edgerly NB thru	A	0.0	0.05	0
Edgerly SB thru	A	0.0	0.02	0
Westland Avenue/Site Driveway				
Westland EB left/thru	A	0.4	0.01	1
Westland WB thru/right	A	0.0	0.30	0
Driveway SB left/right	B	14.5	0.20	19

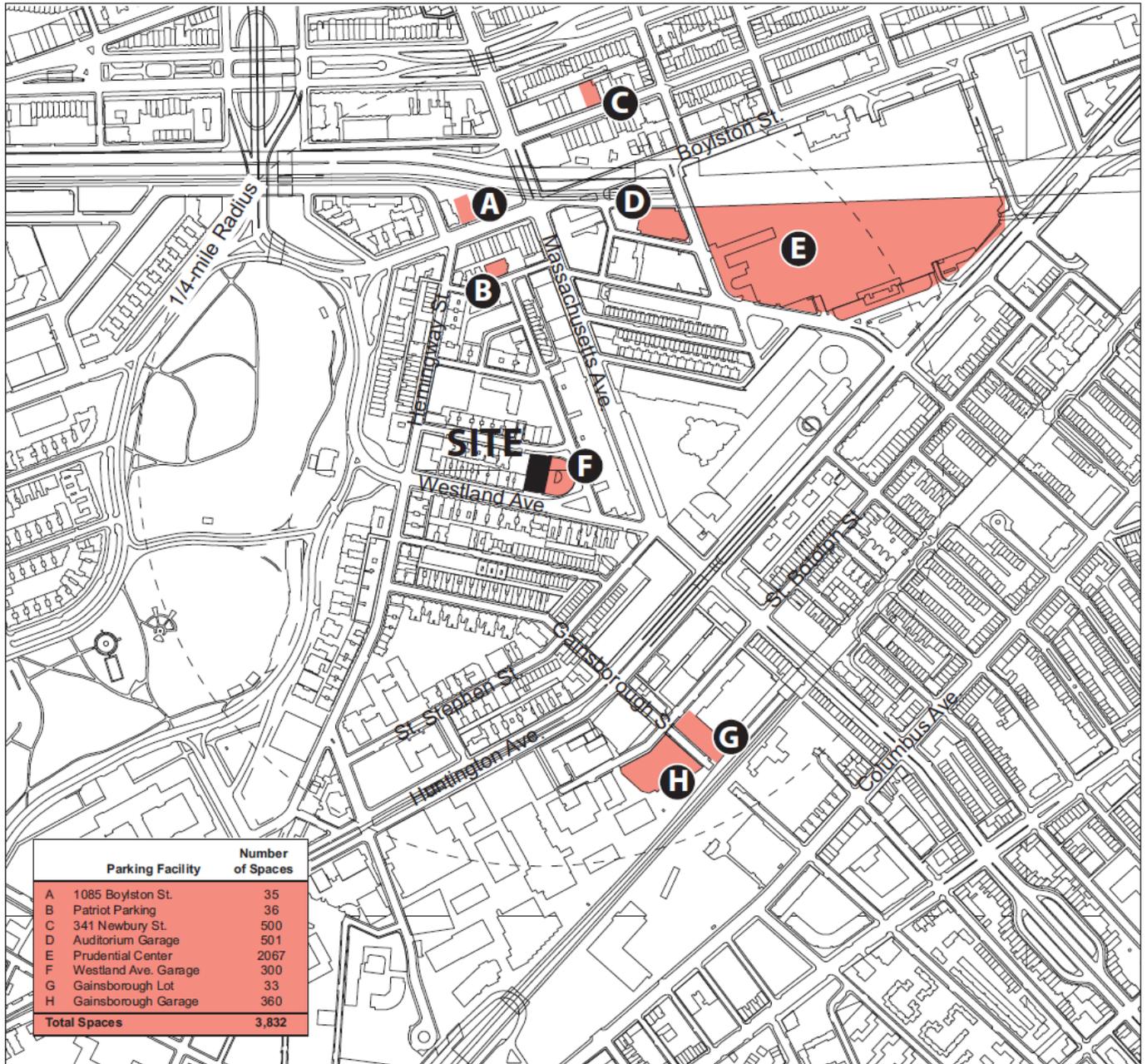
= 95th percentile volume exceeds capacity. Queue may be longer. Queue shown is maximum after two cycles.

Under existing conditions, all study area intersections operate at overall acceptable levels of service in both the a.m. and p.m. peak hours. In addition, all peak-hour intersection approaches operate at acceptable levels of service.

3.4.5 – Existing Parking Conditions

The existing garage currently provides 182 active parking spaces for commercial use, which are available on an hourly and monthly basis. Of the 182 active spaces, 7 are currently leased to the shared car service Zipcar. In addition, there are 8 parking lots and garages within a quarter-mile of the Project site providing approximately 3,832 public parking spaces (see **Figure 4**). One of these facilities, the Westland Avenue Garage, is a large public self-park garage located directly east of the Project site and contains approximately 300 parking spaces.

Figure 3-4: Off-Street Parking Facilities



On-street parking is provided along roadways throughout the study area. On-Street parking areas in the vicinity of the Project Site are mapped in **Figure 3-5**. The majority of on-street parking adjacent to the site is residential and 2-hour parking.

Figure 3-5: On-Street Parking



Not to scale.

- | | |
|---|--|
|  No Parking |  Commercial Parking
9 AM – 9 PM EX SUN |
|  Fenway/Kenmore Resident |  Commercial Parking
8 AM – 6 PM EX SAT & SUN |
|  2-hr. Parking
8 AM – 6 PM MON-FRI |  Commercial Parking
7 AM – 7 PM EX SUN |
|  2-hr. Parking
8 AM – 6 PM MON-FRI / 6 PM – 8 AM RESIDENT |  15-minute Parking |
|  1-hr. Parking
10 AM – 10 PM MON-FRI |  Handicapped |

3.4.6 – Existing Public Transportation

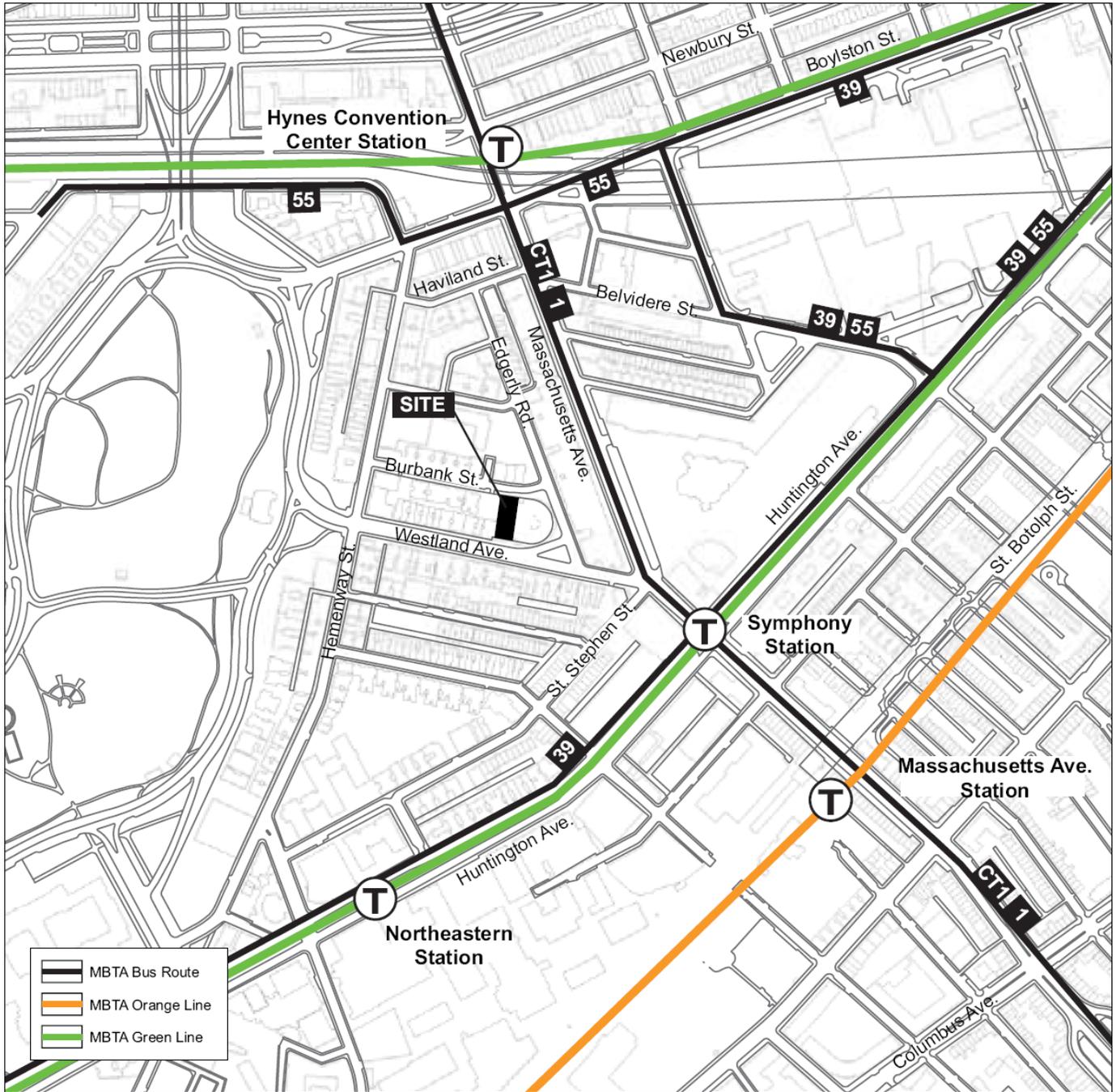
The Proposed Project is located within convenient walking distance to a variety of public transit services provided by the Massachusetts Bay Transportation Authority (MBTA). Public transportation within the study area are presented in **Figure 3-6** and summarized in **Table 3-4**.

Table 3-4: PUBLIC TRANSPORTATION IN STUDY AREA		
Train/Bus Route	Origin—Destination	Rush-hour Headway (mins)
Rapid Transit		
Green Line E Branch	Lechmere Station – Heath Street Station	6
Orange Line	Forest Hills Station – Oak Grove Station	6
Bus Service		
1	Harvard/Holyoke Gate – Dudley Station	8
39	Forest Hills Station – Back Bay Station	6
55	Jersey & Queensbury – Copley Square or Park & Tremont Street via Ipswich Street	16/30
CT1	Central Square Cambridge – BU Medical Center via M.I.T.	20

The Proposed Project is located within a quarter mile of the Symphony Station where passengers can access the E Branch of the MBTA Green Line, which connects Heath Street in Jamaica Plain with downtown Boston and East Cambridge. The E Branch of the Green Line runs approximately every 6 minutes during rush hour on weekdays and every 7-10 minutes on weekend peak periods. Also within a quarter mile is the Massachusetts Avenue station, where passengers can access the Orange Line which connects Forest Hills Station in Jamaica Plain with Oak Grove Station in Malden via downtown Boston. The Orange Line runs approximately every 6 minutes during rush hour and every 8-13 minutes during weekend peak periods.

MBTA bus routes 1 and CT1 operate along Massachusetts Avenue in the project area and can be accessed at stops located at the intersection of Massachusetts Avenue and Westland Avenue approximately 0.1 mile from the Proposed Project. Routes 1 and CT1 provide riders with connections to Cambridge, the South End and Dudley Station in Roxbury, a major local bus hub and southern terminal for the Silver Line Bus Rapid Transit service. Also located in proximity to the Proposed Project site, MBTA bus route 39 runs along Huntington Avenue, providing local connections between Forest Hills station in Jamaica Plain and Back Bay Station in downtown Boston. MBTA bus route 55 runs along Boylston Street near the project area and provides service between the Fenway neighborhood and downtown Boston via the Back Bay.

Figure 3-6: Public Transportation in the Study Area



 Not to scale.

3.4.7 – Pedestrians and Bicycles

Pedestrian activity in and around the Project Site is generally heavy due to its proximity to the Back Bay Fens, public transportation, neighborhood retail uses (e.g., Whole Foods), and office buildings. The two signalized intersections located within the study area (Massachusetts Avenue/Westland Avenue/St. Stephen Street and Westland Avenue/Hemenway Street) experience fairly heavy pedestrian traffic, especially in the evening peak hour. At the unsignalized intersections around the site, pedestrian activity is generally light. Crosswalks and handicapped-accessible ramps are provided at all study area intersections.

Bicycle activity around the Project Site is generally heavy on Massachusetts Avenue, and moderate on local roadways including Westland Avenue and Hemenway Street. Bicycle volumes are light on Burbank Street and Edgerly Road.

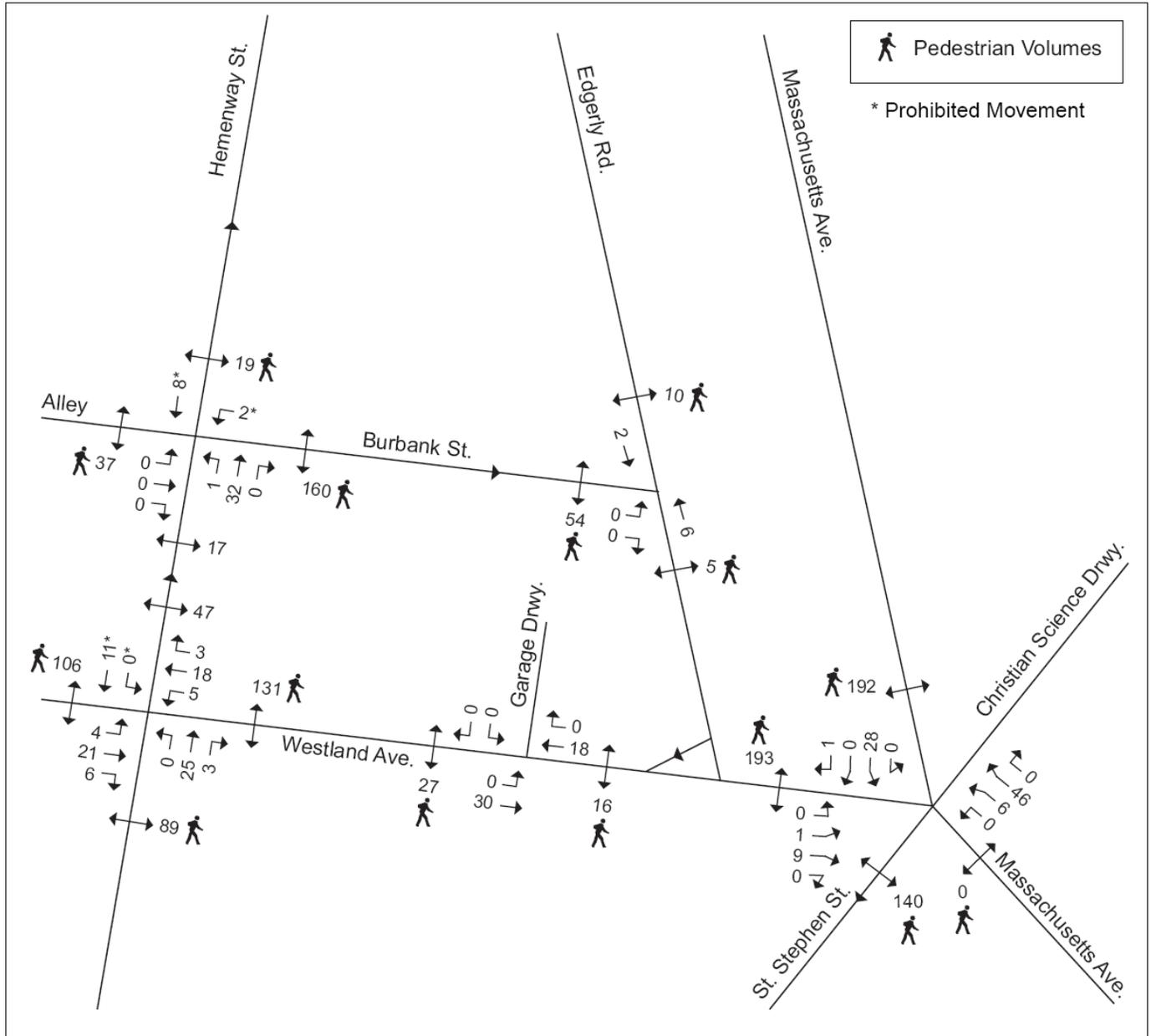
Numerous recreational and bicycle paths are located near the Project Site. The Paul Dudley White Bicycle Path, which runs along the Charles River from downtown Boston to Watertown Square, can be accessed from Massachusetts Avenue a little more than half a mile from the site, as well as bicycle paths that parallel the Muddy River from the Fenway to Jamaica Plain. A bicycle path along Melnea Cass Boulevard can be accessed from the Lallement Bicycle Path in the vicinity of Ruggles Station on the Orange Line. The Pierre Lallement Southwest Corridor Bicycle Path, which runs adjacent to the Orange Line from Back Bay Station to Forest Hills Station, crosses Massachusetts Avenue less than one-quarter mile from the Project Site.

In addition, many of the local roads around the Project Site such as Westland Avenue, Hemenway Street and St. Stephen Street are designated for beginner or intermediate level cyclists according to the *Boston Bikes Map 2010-11*, published by the City of Boston. Outside of the immediate project area, cyclists have to travel on roads designated for advanced cyclists, such as Massachusetts Avenue, Huntington Avenue, and Boylston Street, to access bicycle paths.

No bicycle racks are currently provided at the Project Site.

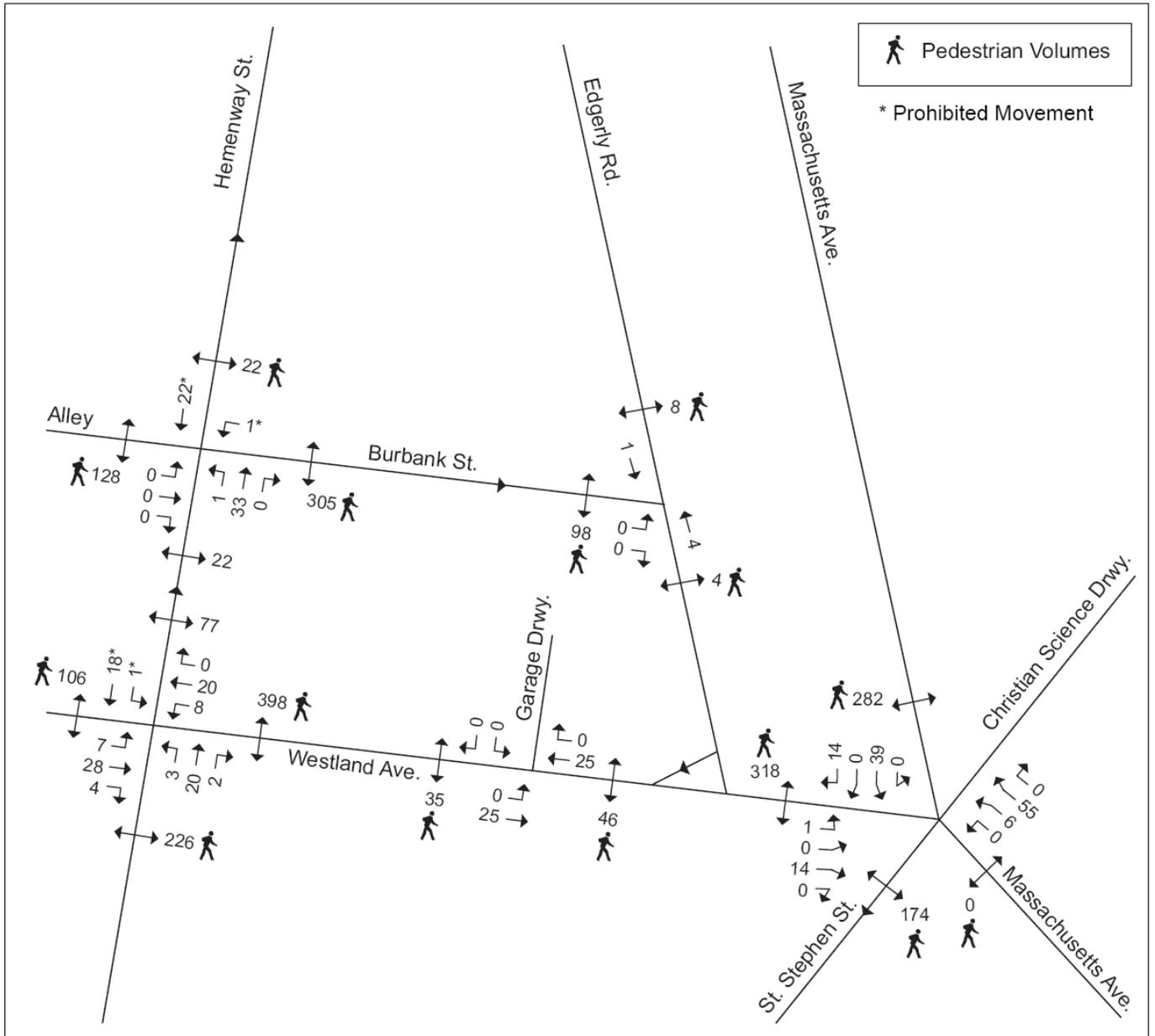
Existing peak-hour pedestrian and bicycle volumes are shown in **Figure 3-7** and **Figure 3-8**.

Figure 3-7: Existing Conditions (2010) a.m. Peak-hour Pedestrian and Bicycle Volumes



Not to scale.

Figure 3-8: Existing Conditions (2010) p.m. Peak-hour Pedestrian and Bicycle Volumes



Not to scale.

3.4.8 – Loading and Service

The existing site consists of commercial parking only and no loading occurs on-site.

3.5 – Evaluation of Long-term Impacts

This section presents a description and evaluation of the 2015 No-Build and Build Conditions.

3.5.1 – No-Build Scenario

3.5.1.1 – Background Traffic Growth Rate

No-Build traffic conditions are independent of the Proposed Project's development and include all existing traffic and any new traffic resulting from both background growth and any identified development projects in the area. The No-Build Condition is used to evaluate the cumulative impacts of the anticipated future traffic increases, while providing a baseline of comparison for the proposed Project.

Two procedures are used to determine background traffic growth. The first is to apply a general growth rate to account for changes in demographics, auto usage, and ownership. To develop the background growth rate, the study team compared existing volumes with historic count data. Comparison of these data indicates that traffic volumes have remained relatively unchanged in recent years. However, to provide a conservative estimate of future traffic growth, the study team assumed a background growth rate of 1.0% per year.

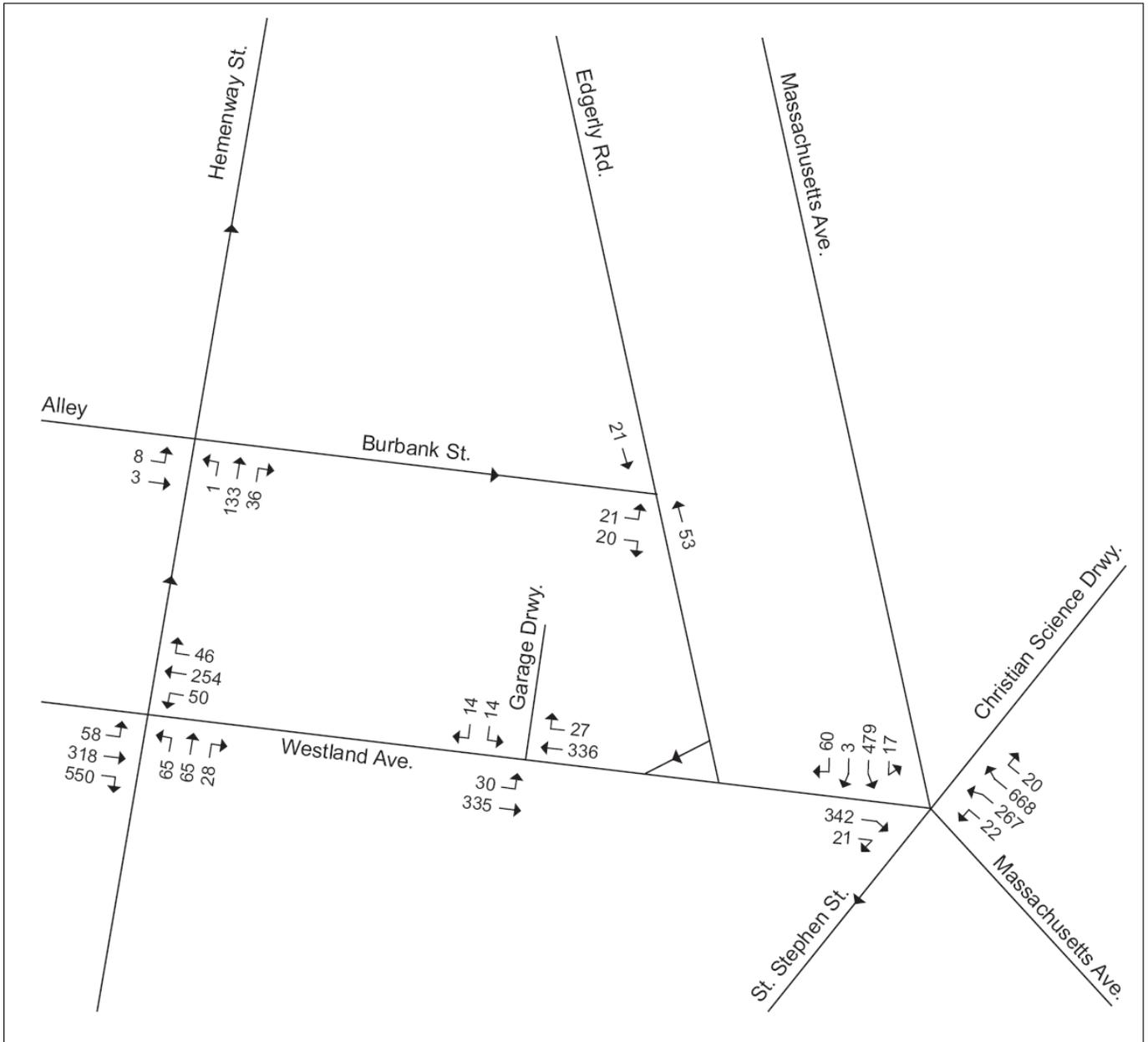
The second procedure is to estimate traffic generated by planned major developments and anticipated roadway changes. The study team identified one development in the immediate area of the site:

44 Burbank Street will provide 45 residential ownership units. The 44 Burbank Street residential project is owned by the Proponent and would redevelop an existing commercial surface parking lot located directly adjacent to the Proposed Project site on Burbank Street. Vehicular growth for the project is provided for in the background growth rate.

3.5.1.2 – No-Build (2015) Traffic Operations

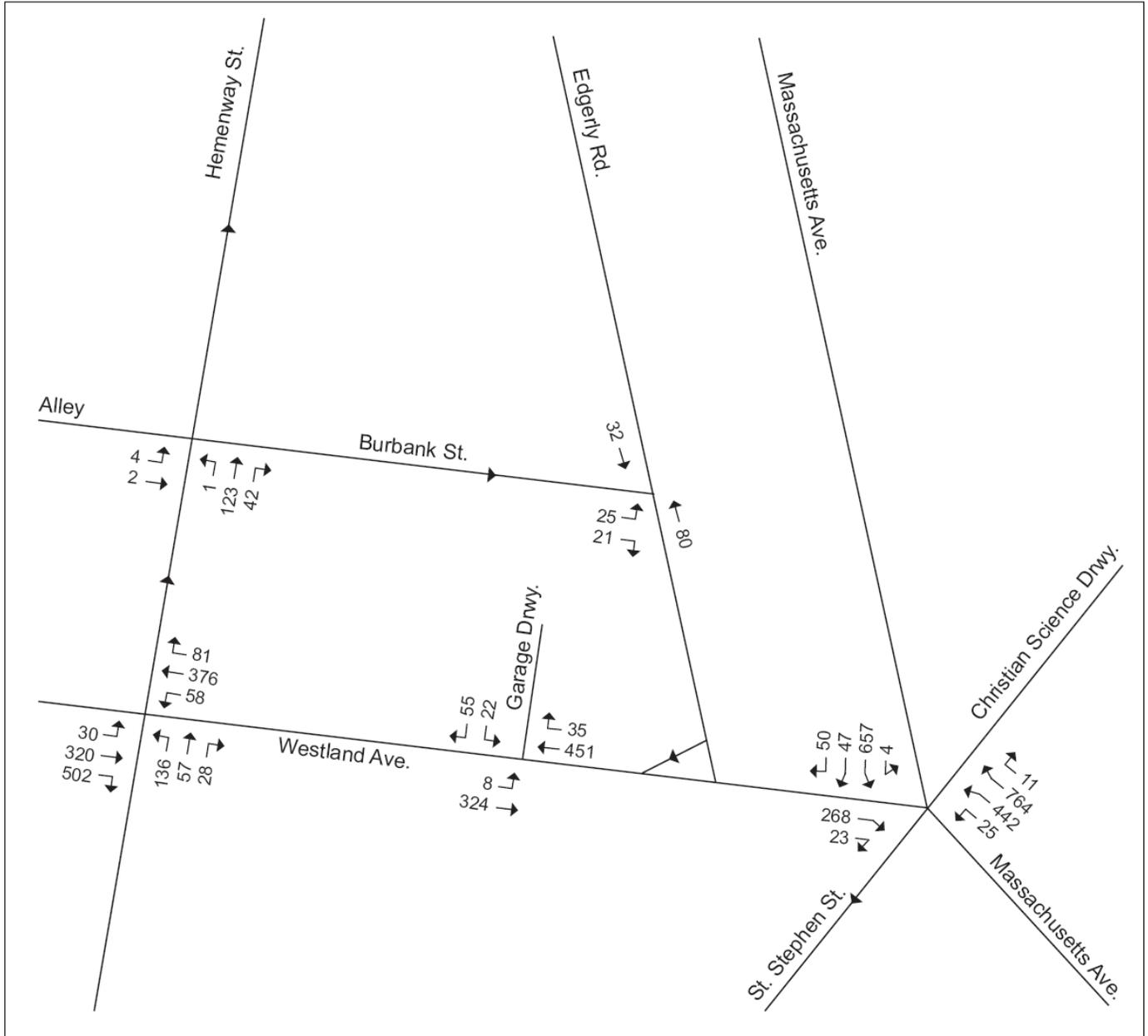
The 2015 No-Build morning and evening peak-hour traffic volumes, accounting for the background growth rate, are presented in **Figure 3-9** and **Figure 3-10**. LOS analysis conducted using the methodology described for Existing Conditions is presented in **Table 3-5** and **Table 3-6**.

Figure 3-9: No-Build Conditions (2015) a.m. Peak-hour Turning Movement Volumes



Not to scale.

Figure 3-10: No-Build Conditions (2015) p.m. Peak-hour Turning Movement Volumes



Not to scale.

Table 3-5: NO-BUILD CONDITIONS (2015) LEVEL OF SERVICE - A.M. PEAK HOUR

Intersection	LOS	Delay (sec./veh.)	v/c Ratio	95 th Percentile Queue (ft.)
Signalized Intersections				
Massachusetts Avenue/Westland Avenue/St. Stephen Street	C	23.0	—	—
Westland EB right	D	37.8	0.79	#375
Massachusetts NB hard left/left	B	14.4	0.38	168
Massachusetts NB thru/right	A	8.7	0.63	285
Massachusetts SB left/thru thru/right	D	35.4	0.77	248
Westland Avenue/Hemenway Street	B	17.7	—	—
Westland EB left/thru	C	25.4	0.76	301
Westland EB right	A	3.8	0.46	154
Westland WB left/thru/right	C	25.5	0.75	291
Hemenway NB left/thru/right	C	24.7	0.52	140
Unsignalized Intersections				
Burbank Street/Hemenway Street				
Alley EB left/thru	A	9.9	0.04	3
Hemenway NB left/thru/right	A	0.2	0.00	0
Burbank Street/Edgerly Road				
Burbank EB left/right	A	9.1	0.07	5
Edgerly NB thru	A	0.0	0.04	0
Edgerly SB thru	A	0.0	0.02	0
Westland Avenue/Site Driveway				
Westland EB left/thru	A	1.1	0.03	2
Westland WB thru/right	A	0.0	0.23	0
Driveway SB left/right	B	14.8	0.12	11

= 95th percentile volume exceeds capacity. Queue may be longer. Queue shown is maximum after two cycles. Shading indicates worsening of LOS from Existing Conditions.

Table 3-6: NO-BUILD CONDITIONS (2015) LEVEL OF SERVICE - P.M. PEAK HOUR

Intersection	LOS	Delay (sec./veh.)	v/c Ratio	95 th Percentile Queue (ft.)
Signalized Intersections				
Massachusetts Avenue/Westland Avenue/St. Stephen Street	C	30.4	—	—
Westland EB right	E	61.6	0.92	#361
Massachusetts NB hard left/left	B	18.2	0.60	305
Massachusetts NB thru/right	B	10.7	0.70	369
Massachusetts SB left/thru thru/right	D	46.1	0.91	#381
Westland Avenue/Hemenway Street	B	18.9	—	—
Westland EB left/thru	B	11.4	0.53	175
Westland EB right	A	1.2	0.47	0
Westland WB left/thru/right	D	37.5	0.93	#397
Hemenway NB left/thru/right	C	28.2	0.67	126
Unsignalized Intersections				
Burbank Street/Hemenway Street				
Alley EB left/thru	A	9.9	0.03	2
Hemenway NB left/thru/right	A	0.0	0.00	0
Burbank Street/Edgerly Road				
Burbank EB left/right	A	9.3	0.08	7
Edgerly NB thru	A	0.0	0.06	0
Edgerly SB thru	A	0.0	0.03	0
Westland Avenue/Site Driveway				
Westland EB left/thru	A	0.4	0.01	1
Westland WB thru/right	A	0.0	0.32	0
Driveway SB left/right	C	15.2	0.22	21

= 95th percentile volume exceeds capacity. Queue may be longer. Queue shown is maximum after two cycles. Shading indicates worsening of LOS from Existing Conditions.

Under No-Build Conditions, all signalized intersections continue to operate at overall acceptable levels of service (LOS D or better) in both the morning and evening peak hours. All signalized and unsignalized intersection approaches operate at acceptable levels of service, with the exception of the Westland Avenue eastbound right-turn approach, which operates at LOS E in the evening peak hour. The decrease in level of service is attributed to an increase from Existing Conditions of less than 7 seconds of delay at the intersection approach.

3.5.1.3 – No-Build (2015) Bicycle Improvements

The City of Boston has committed to adding designated bicycle accommodations on Massachusetts Avenue in the vicinity of the Proposed Project.

3.6 – Build Scenario (2015)

The Proposed Project consists of the redevelopment of 41 Westland Avenue, an existing 182-space commercial parking garage in the Fenway neighborhood of Boston. The redevelopment program includes the renovation of the existing 6-story garage and the addition of a small rooftop residential addition, to create up to 48 residential condominiums and garage parking remaining on the street level. The garage will be for residential use only and up to 31 parking spaces will be provided. The proposed site plan is shown in **Figure 3-11**.

3.6.1 - Site Access and Circulation

Vehicular access to the Proposed Project’s garage will be provided via a one-way entrance driveway on Westland Avenue and egress will be provided on Burbank Street via a one-way exit driveway.

3.6.2 – Trip Generation

Trip generation data for the proposed 48 residential condominiums was derived from data contained in the Institute of Transportation Engineers’ publication (ITE) *Trip Generation* (8th Edition) for land use code (LUC) 230 – Residential Condominium/Townhouse.

Land Use Code 230 – Residential Condominium/Townhouse. Residential condominiums/ townhouses are defined as ownership units that have at least one other owned unit in the same building structure. Both condominiums and townhouses are included in this land use. Calculation of the number of trips uses ITE’s average rate.

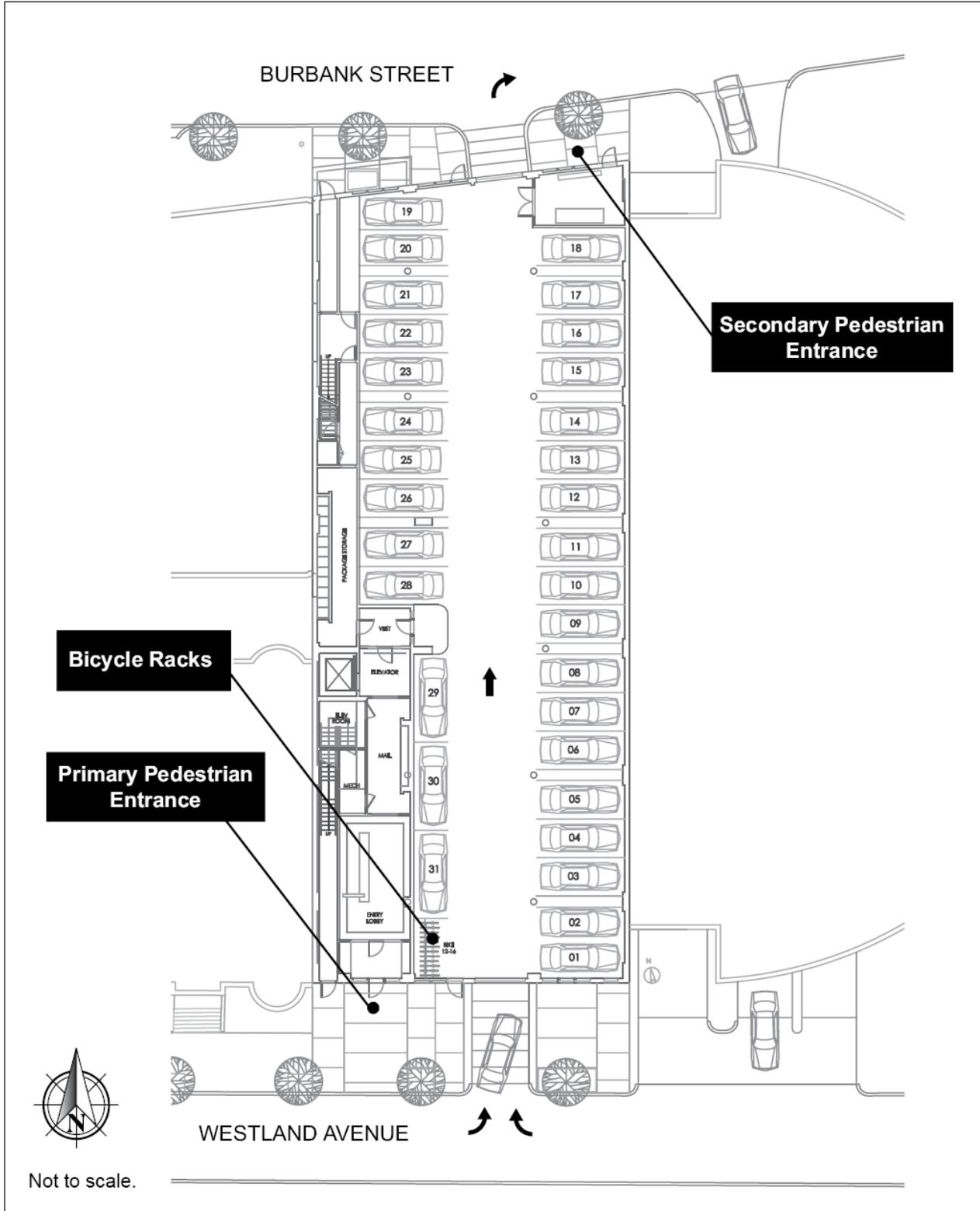
The unadjusted vehicle trips yielded by the ITE methodology were then converted into person trips using *2001 National Household Travel Survey* data. Person trips were then reclassified as transit trips, pedestrian and bicycle trips, and vehicle trips using mode split data derived from BTD data for Area 4, a BTD designated zone that encompasses the Proposed Project site. Mode split data and local vehicle occupancy rates are summarized in **Table 3-7**. Vehicle person trips were converted to vehicle trips using local vehicle occupancy rates from 2000 Census data for this Census Tract (104.01).

Table 3-7: MODE SPLIT					
Period/Direction		Transit Share ¹	Walk/Bicycle Share ¹	Auto Share ¹	Local Vehicle Occupancy Rate ²
Daily	In	19%	57%	24%	1.1
	Out	19%	57%	24%	
a.m. Peak	In	22%	59%	19%	1.1
	Out	15%	64%	21%	
p.m. Peak	In	15%	64%	21%	1.1
	Out	22%	59%	19%	

¹ BTD mode share data, Area 4, for home-work trips (residential).

² Local vehicle occupancy rates are based on 2000 Census data, Tract 104.01.

Figure 3-11: Ground Floor Site Plan



Based on the land use trip rates and mode split assumptions, **Table 3-8** summarizes the resulting adjusted project-generated vehicle trips.

Table 3-8: VEHICLE TRIP GENERATION		
Period/Direction		Vehicle Trips
Daily	In	36
	Out	36
	Total	72
a.m. Peak Hour	In	1
	Out	4
	Total	5
p.m. Peak Hour	In	4
	Out	2
	Total	6

Source: ITE *Trip Generation*, 8th Edition. Land Use Code 230 – Residential Condominium/Townhouse for 48 units.

As shown, the Proposed Project will generate 72 vehicle trips per day (36 trips in and 36 trips out). In the a.m. peak hour, the Proposed Project will generate only 5 (1 entering and 4 exiting) vehicle trips; in the p.m. peak hour, it will generate 6 (4 entering and 2 exiting) vehicle trips. It should be noted that not all of these trips will be new trips; the Proposed Project will replace the existing 182 space commercial parking garage, which generates trips on the adjacent roadway network that predominantly occur during the commuter peak periods.

The net new vehicle trips (proposed trips minus existing trips) are shown in **Table 3-9** below. The existing morning and evening peak hour vehicle trips in and out of the existing garage were counted on September 22, 2010.

Table 3-9: NET NEW VEHICLE TRIP GENERATION				
Period/Direction		Existing Use (182 Space Commercial Parking Garage) ¹	Proposed Use (48 Residential Condominium Units)	Net New Vehicle Trips
Daily	In	533	36	(497)
	Out	550	36	(514)
	Total	1,083	72	(1011)
a.m. Peak Hour	In	55	1	(54)
	Out	26	4	(22)
	Total	81	5	(76)
p.m. Peak Hour	In	41	4	(37)
	Out	73	2	(71)
	Total	114	6	(108)

1. Based on peak period garage counts collected by the study team on September 22, 2010. Daily trips were estimated using area garage data; peak hour trips assumed to be 18% of daily vehicle trips.

As shown in **Table 3-9**, the Proposed Project will result in a substantial decrease in vehicle trips when compared to the existing use. However, in order to provide a conservative analysis, no credit was taken for vehicle trips associated with the existing commercial parking garage in the

intersection capacity analysis. These trips would either no longer occur on the adjacent roadway network or would be re-directed to the other area parking garages.

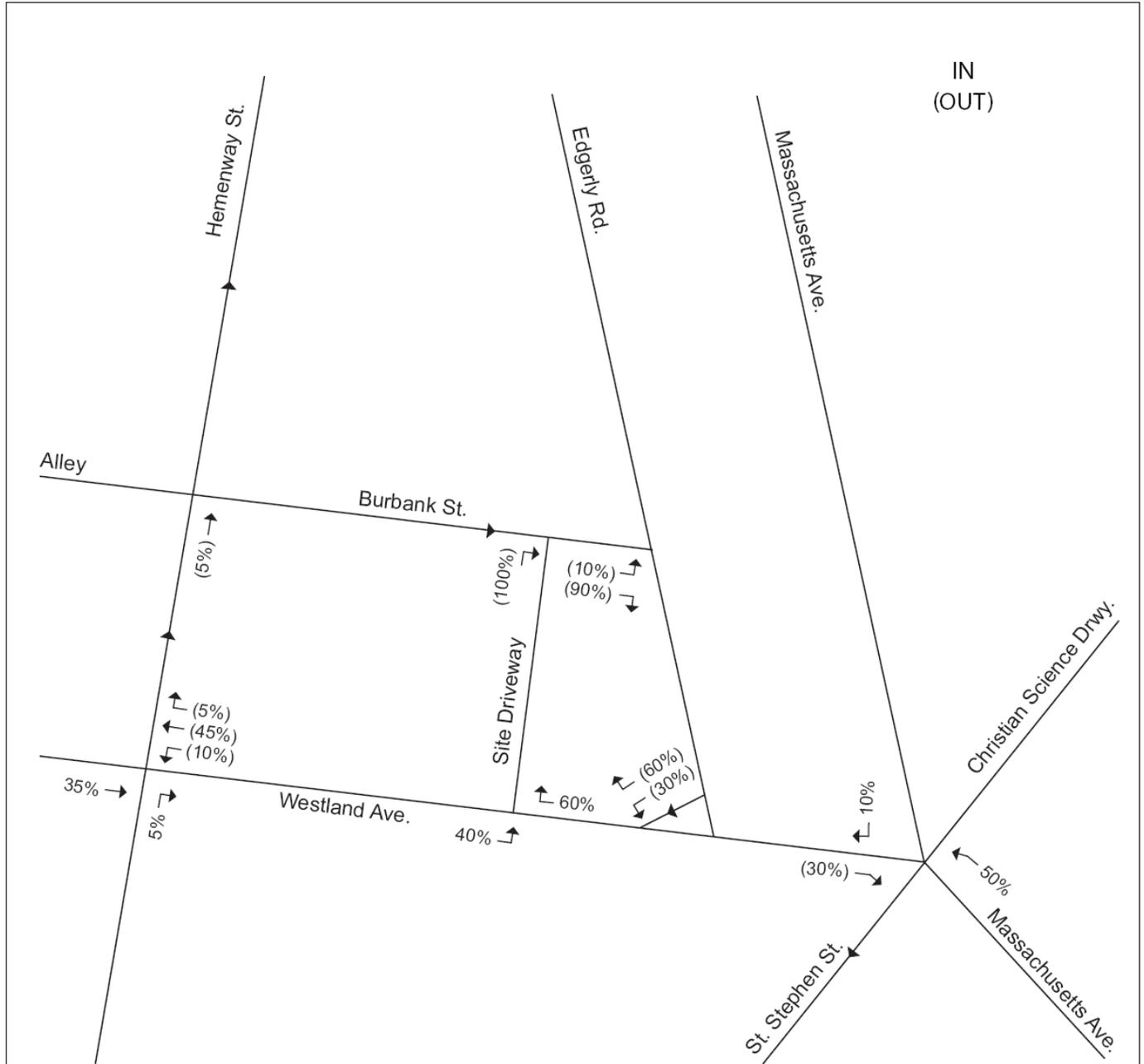
3.6.3 – Trip Distribution

Vehicular trip distribution for the Proposed Project was based on existing traffic volume patterns. This vehicular distribution is shown in **Figure 3-12**.

3.6.4 – Build (2015) Traffic Operations

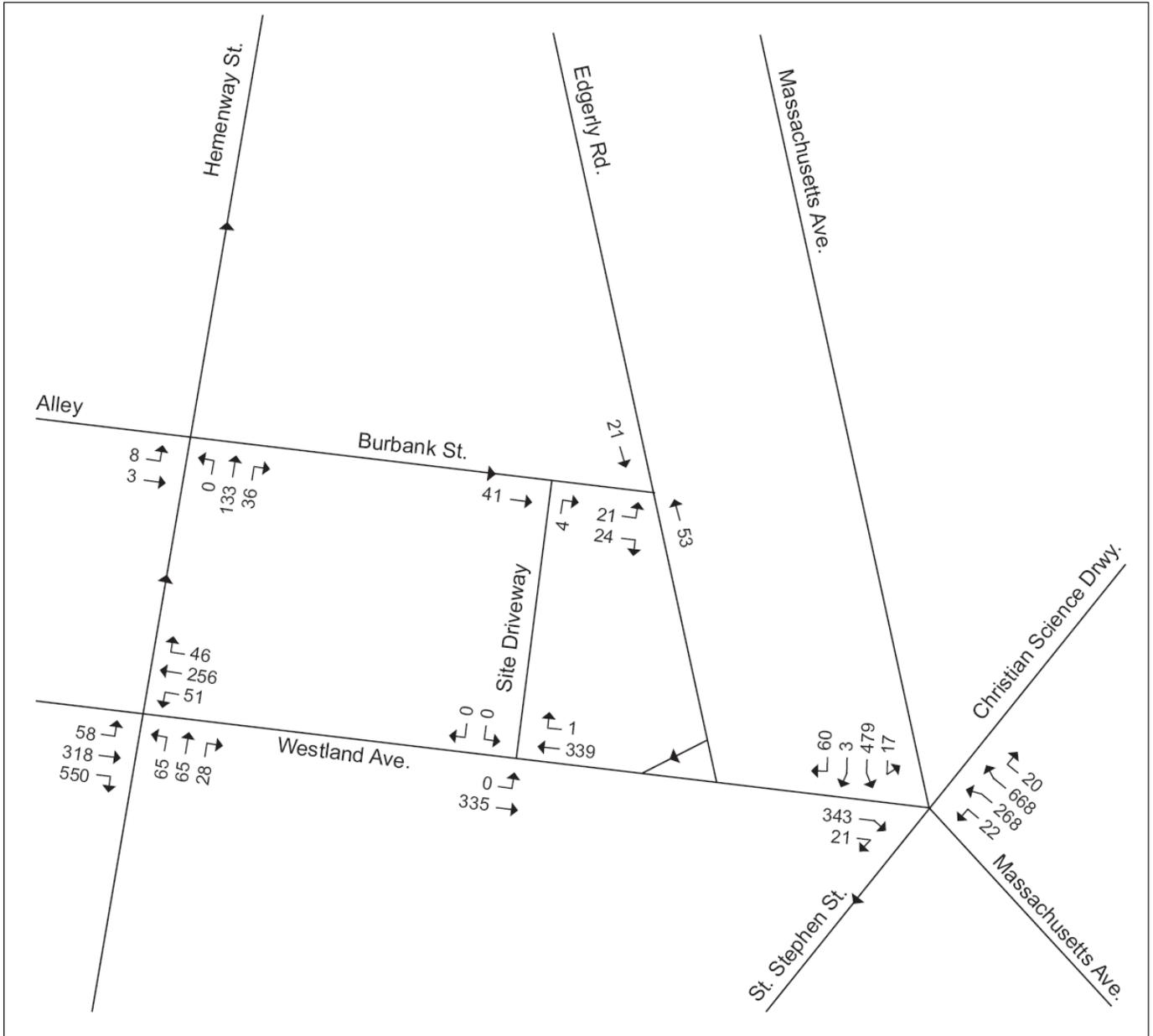
The 2015 Build morning and evening peak-hour traffic volumes, accounting for the background growth rate, development by others, and Project-generated trips, are presented in **Figure 3-13** and **Figure 3-14**. LOS analysis conducted using the methodology described for Existing Conditions is presented in **Table 3-10** and **Table 3-11**.

Figure 3-12: Vehicular Trip Distribution



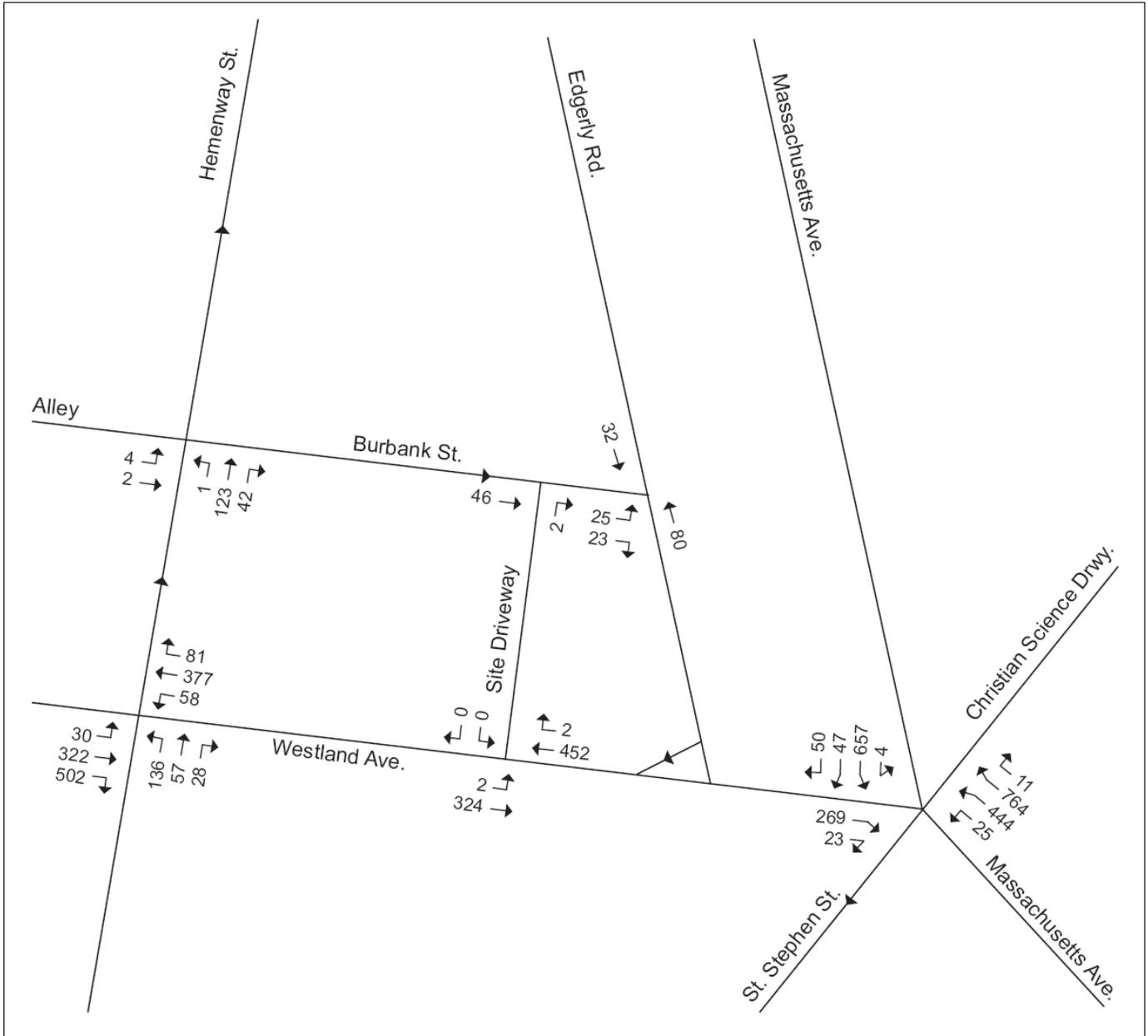
Not to scale.

Figure 3-13: Build Conditions (2015) a.m. Peak-hour Turning Movement Volumes



Not to scale.

Figure 3-14: Build Conditions (2015) p.m. Peak-hour Turning Movement Volumes



Not to scale.

Table 3-10: BUILD CONDITIONS (2015) LEVEL OF SERVICE - A.M. PEAK HOUR

Intersection	LOS	Delay (sec./veh.)	v/c Ratio	95 th Percentile Queue (ft.)
Signalized Intersections				
Massachusetts Avenue/Westland Avenue/St. Stephen Street	C	23.0	—	—
Westland EB right	D	38.0	0.79	#376
Massachusetts NB hard left/left	B	14.5	0.38	169
Massachusetts NB thru/right	A	8.7	0.63	285
Massachusetts SB left/thru thru/right	D	35.4	0.77	248
Westland Avenue/Hemenway Street	B	17.9	—	—
Westland EB left/thru	C	25.4	0.76	302
Westland EB right	A	3.8	0.46	154
Westland WB left/thru/right	C	26.0	0.76	295
Hemenway NB left/thru/right	C	24.8	0.52	140
Unsignalized Intersections				
Burbank Street/Hemenway Street				
Alley EB left/thru	A	9.9	0.04	3
Hemenway NB left/thru/right	A	0.0	0.00	0
Burbank Street/Edgerly Road				
Burbank EB left/right	A	9.1	0.07	6
Edgerly NB thru	A	0.0	0.04	0
Edgerly SB thru	A	0.0	0.02	0
Westland Avenue/Site Driveway				
Westland EB left/thru	A	0.0	0.00	0
Westland WB thru/right	A	0.0	0.22	0
Burbank Street/Site Driveway				
Burbank EB thru	A	0.0	0.03	0
Site Driveway NB right	A	8.5	0.00	0

= 95th percentile volume exceeds capacity. Queue may be longer. Queue shown is maximum after two cycles. Shading indicates worsening of LOS from No-Build Conditions.

Table 3-11: BUILD CONDITIONS (2015) LEVEL OF SERVICE - P.M. PEAK HOUR

Intersection	LOS	Delay (sec./veh.)	v/c Ratio	95 th Percentile Queue (ft.)
Signalized Intersections				
Massachusetts Avenue/Westland Avenue/St. Stephen Street	C	30.5	—	—
Westland EB right	E	62.2	0.93	#364
Massachusetts NB hard left/left	B	18.3	0.60	309
Massachusetts NB thru/right	B	10.7	0.70	369
Massachusetts SB left/thru thru/right	D	46.1	0.91	#381
Westland Avenue/Hemenway Street	B	19.4	—	—
Westland EB left/thru	B	11.5	0.53	177
Westland EB right	A	1.2	0.47	0
Westland WB left/thru/right	D	38.8	0.94	#399
Hemenway NB left/thru/right	C	28.2	0.67	126
Unsignalized Intersections				
Burbank Street/Hemenway Street Alley EB left/thru	A	9.9	0.03	2
Hemenway NB left/thru/right	A	0.0	0.00	0
Burbank Street/Edgerly Road				
Burbank EB left/right	A	9.3	0.08	7
Edgerly NB thru	A	0.0	0.06	0
Edgerly SB thru	A	0.0	0.03	0
Westland Avenue/Site Driveway				
Westland EB left/thru	A	0.1	0.00	0
Westland WB thru/right	A	0.0	0.29	0
Burbank Street/Site Driveway				
Burbank EB thru	A	0.0	0.03	0
Site Driveway NB right	A	8.5	0.00	0

= 95th percentile volume exceeds capacity. Queue may be longer. Queue shown is maximum after two cycles. Shading indicates worsening of LOS from No-Build Conditions.

Due to the low volume of traffic generated by the Proposed Project, no changes are expected in LOS from No-Build Conditions to Build Conditions. All signalized intersections operate at overall acceptable levels of service (LOS D or better). In addition, all signalized and unsignalized intersection approaches operate at acceptable levels of service, with the exception of the Westland Avenue eastbound right-turn which continues to operate at LOS E in the p.m. peak hour.

3.6.5 – Parking Supply/Demand

The Proposed Project is located in the Fenway neighborhood of Boston. BTM has set parking space guidelines throughout the City to establish the amount of parking supply provided with new developments.

The 41 Westland Avenue redevelopment will provide 31 ground-level garage parking stalls to serve the new residential uses at 0.65 spaces per unit. The proposed parking supply

is slightly lower than the BTD recommended guidelines for residential parking for the area (0.75 spaces per unit).

3.6.6 – Public Transportation

The Proposed Project is expected to add a total of 64 transit trips per day. These 64 trips will be spread throughout the day and include trips between the site and the various public transit services in the area. Some people on the site may make several trips in and out over the course of the day. Of these daily trips, 4 trips (3 boarding and 1 alighting) will occur during the morning peak hour and 5 trips (2 boarding and 3 alighting) during the evening peak hour. These additional trips will easily be accommodated by the existing transit system.

Project-generated transit trips are summarized in **Table 3-12**.

Period/Direction		Transit Trips
Daily	In	32
	Out	32
	Total	64
a.m. Peak Hour	In	1
	Out	3
	Total	4
p.m. Peak Hour	In	3
	Out	2
	Total	5

Source: ITE *Trip Generation*, 8th Edition. Land Use Code 230.

3.6.7 – Bicycle Accommodations

Secure bicycle storage will be made available to residents within the Proposed Project’s garage. Per BTD Guidelines, the Proposed Project would need to provide provisions for secure bicycle storage for a minimum of 16 bicycles (1 for every 3 dwelling units). The Proponent will work with BTD to identify the best solution for bicycle accommodations for the Proposed Project as part of the Transportation Access Plan Agreement (TAPA) process.

3.6.8 – Pedestrians and Bicycles

The Proposed Project is estimated to generate a total of 192 pedestrian/bicycle trips per day, as well as 64 pedestrian trips going to and from rapid transit and bus lines. Walk trips, like transit trips, will occur throughout the day. The Proposed Project will generate a total of 16 new pedestrian trips in the morning peak hour and 19 new pedestrian trips in the evening peak hour, plus 4 and 5 transit trips, respectively.

Project-generated pedestrian/bicycle trips are summarized in **Table 3-13**.

Period/Direction		Walk/Bike Trips
Daily	In	96
	Out	96

	Total	192
a.m. Peak Hour	In	3
	Out	13
	Total	16
p.m. Peak Hour	In	13
	Out	6
	Total	19

Source: ITE *Trip Generation*, 8th Edition. Land Use Code 230.

3.6.9 – Loading and Service

All recycling, trash, and loading activities associated with the Proposed Project will occur on-street. Trash and recyclables will be collected and stored in a dedicated room within the building and wheeled out to street for regular pick-up.

There is no loading dock proposed as the residential use does not generate a significant need for large deliveries. Move-ins/move-outs will not take place with great frequency and will be coordinated with building management. Where possible, building management will schedule move-ins/move-outs during off-peak hours. Move-ins/move-outs requiring large vehicles (e.g. moving truck) would be required to obtain an on-street occupancy permit from BTM. Loading and service activities associated with the Proposed Project will be limited in nature and will not adversely affect the surrounding community.

3.4 – Transportation Mitigation Measures

The Proposed Project will have a negligible impact on area roadways, as summarized in **Table 3-10** and **Table 3-11** above, due to its proximity to downtown and transit oriented and residential nature. In addition, the Proposed Project will result in a substantial decrease in vehicle trips when compared to the existing commercial parking garage. Therefore, no traffic mitigation is warranted on the street network adjacent to the Project Site.

3.4.1 – Transportation Demand Management

The Project Site is well served by transit and bus lines, which will serve a significant portion of the resident work and leisure trips. The Proponent is committed to implementing Transportation Demand Management (TDM) measures to encourage use of alternate modes of transportation for resident and visitor trips in order to reduce roadway congestion, parking demand, and vehicle emissions.

The Proponent is prepared to take advantage of good transit access in marketing the Proposed Project to future unit owners and to work with them to implement the following demand management measures to encourage the use of public transportation, ridesharing, bicycling, and walking. TDM measures may include, but are not limited to, the following:

- *Transportation Coordinator.* On-site management will provide transit information (schedules, maps, fare information) for residents and visitors. This transportation coordinator will oversee site transportation issues, including parking, service, and loading. The transportation coordinator will work with residents as they move in to raise awareness of public transportation alternatives.

- *Tenant and Resident Orientation Package.* This informational package will provide all new residents with information about available transportation demand management programs and public transportation options, including route schedules, maps, and fare information.
- *Web Site.* Design of the Proposed Project's website will include public transportation information for residents, visitors, and for marketing to prospective tenants.
- *Bicycles.* Management will provide secure bicycle storage for residents at a minimum of 1 bicycle space for every 3 residential dwelling units.
- *Car-sharing Service.* The Proponent will evaluate the feasibility of providing a shared car service.

3.4.2 – Evaluation of Short-term Construction Impacts

A Construction Management Plan ("CMP") will be filed with BTM in accordance with the City's requirements. The CMP will discuss measures for minimizing negative impacts associated with trucking activity, construction staging, and construction worker parking.

Construction activities will be accommodated within the current site boundaries, where possible.

Details of the overall construction schedule, working hours, number of construction workers, worker transportation and parking, number of construction vehicles, and routes will be addressed in detail in the CMP.

To minimize transportation impacts during the construction period, the following mitigation measures will be incorporated into the CMP:

- Transit use and car-pooling will be encouraged for construction workers;
- Secure spaces will be provided on-site for workers' supplies and tools, so that they do not have to be brought to the site each day; and
- The development team will designate an individual as primary contact to work with appropriate public review agencies and surrounding businesses and communities. The liaison will ensure coordination with other development projects and will be able to provide construction information as required. The role of the liaison is to enable the construction period to run as smoothly as possible by serving as the point of contact for resolution of any issues that may arise.

IV – ENVIRONMENTAL ANALYSIS

4.0 – ENVIRONMENTAL IMPACTS ANALYSIS

This section of the PNF presents an analysis of the expected environmental impacts caused by the Proposed Project. It includes discussions of architecturally related impacts such as wind, shadow, and daylight obstruction. It discusses air quality impacts from the Proposed Project's systems and any impacts or benefits associated with the change in vehicular traffic volume associated with the Project Site's shift in use from a commercial parking facility to a residential condominium community. Noise impacts from the Proposed Project's mechanical equipment are discussed. Geotechnical conditions, including potential impacts to groundwater, are discussed. The Proposed Project's potential impacts related to solid and hazardous wastes are discussed. Finally, this section includes a discussion of the Proposed Project's construction-period impacts, including topics such as noise, dust, and traffic. In all cases, mitigation measures intended to offset the Proposed Project's impacts are proposed where appropriate and necessary.

In general, because the Proposed Project is primarily a straightforward rehabilitation and restoration of the existing Symphony Garage structure with a less intensive use, the Proposed Project's environmental impacts are minimal and will require minimal mitigation. In some cases, the Proposed Project will actually improve existing conditions due to the significant decrease in the number of vehicular trips associated with the Proposed Project's change of use from parking to residential.

4.1 – Wind

The Proposed Project involves the renovation of the existing Symphony Garage structure. No new streetwall construction is proposed, and no construction is proposed that would tend to increase the downwash of wind along either of the public ways that bound the Project Site to the north and south. The proposed one-story residential rooftop addition will be set back between 10 and 30 feet from the existing public way streetwall parapets of the Symphony Garage structure and will not cause any increase in wind conditions in the vicinity of the Project Site.

As a result of the Proposed Project's focus on rehabilitation of the existing structure and minimal new construction, no wind tunnel analysis was conducted because no wind impacts will result from the construction of the Proposed Project. Wind conditions in the vicinity of the Proposed Project are expected to be similar in the "Build" and "No-build" (existing) conditions.

4.2 – Shadow

4.2.1 – Introduction and Methodology

The Proposed Project is located in a dense, urban-scale neighborhood characterized by widely varying building heights and massing. Recognizing the importance of natural daylight in maintaining and enhancing the quality of the streetscape, the Project Proponent has conducted a detailed shadow analysis to assess the Proposed Project's shadow impacts within its dense urban context.

Shadow studies were conducted for the following dates and times, consistent with BRA Development Review guidelines and customary practice:

- March 21 (spring equinox): 9:00AM, 12:00PM, 3:00PM
- June 21 (summer solstice): 9:00AM, 12:00PM, 3:00PM, 6:00PM

- September 21 (fall equinox): 9:00AM, 12:00PM, 3:00PM
- December 21 (winter solstice): 9:00AM, 12:00PM, 3:00PM

The analysis focused in particular on major pedestrian areas, as well as the sidewalks, plazas and public open space in the vicinity of the Project Site, including Symphony Community Park and Harry Ellis Dickson Park. The shadow analysis presents existing shadow as well as net new shadow from the Proposed Project to illustrate the incremental impact of the Proposed Project. For the purposes of clarity, net new shadow is shown in red while existing shadow is shown in dark gray. Results of the shadow impact study are discussed in the following sections, and are supported by Figures 4.2-1 through 4.2-14.

The only net new shadow impacts caused by the Proposed Project are associated with the proposed residential rooftop addition and associated mechanical screening/elevator penthouse. Because the Proposed Project consists primarily of an existing building to be rehabilitated and re-purposes, the overall shadow impact of the Proposed Project is minimal. It should also be noted that the existing very significant elevator penthouse (which sits above two vehicle elevators) will be removed as part of the Proposed Project to make way for the proposed residential rooftop addition.

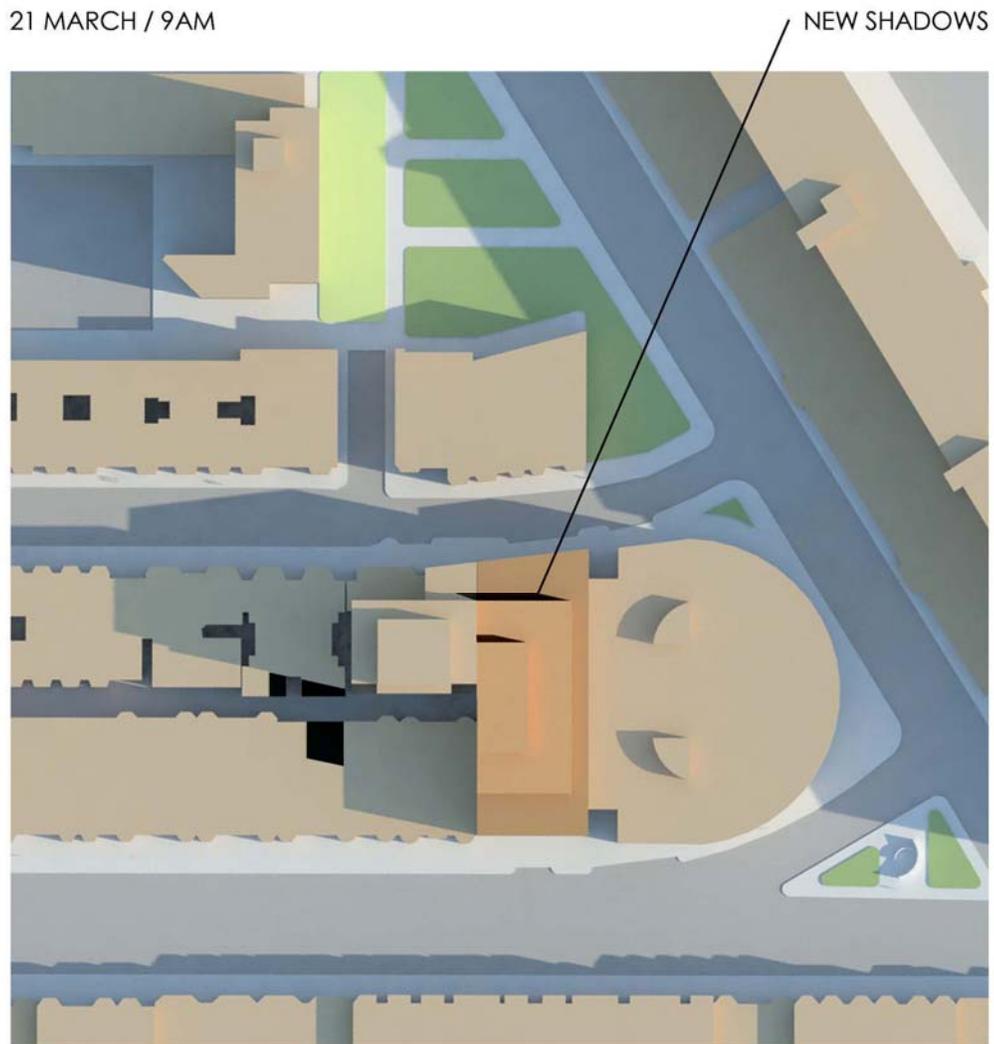
Overall, the Proposed Project will have no significant net new shadow impact on the East Fenway neighborhood through the course of the year.

4.2.2 – Conclusions

The Proposed Project will not cast any material new shadow on surrounding public ways or open spaces. In fact, at the prescribed dates and times studied as part of this filing, it was found that no net new shadows will be cast by the Proposed Project on any public ways. Because the Proposed Project is primarily a rehabilitation of an existing building, new shadow caused by the modest single-story residential rooftop addition will be *de minimus* and will have no impact whatsoever on the public's use and enjoyment of the surrounding public sidewalks and public open spaces.

The shadow studies conducted for the Proposed Project are included on the following pages.

Figure 4.2-1 – March 21, 9:00 am



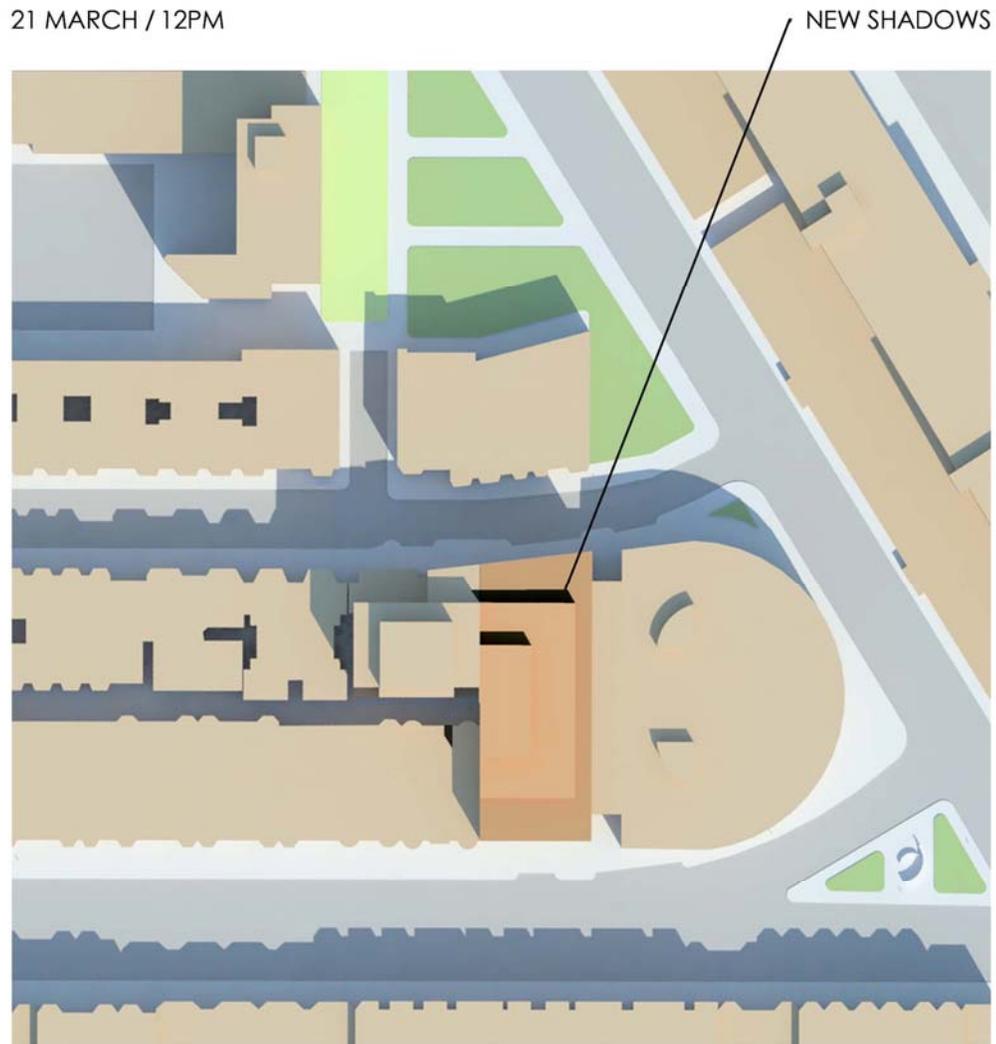
SMMA
STRATEGIC MANAGEMENT & ANALYTICS

PROPOSED: SUN / SHADOW ANALYSIS

DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY

Figure 4.2-2 – March 21, 12:00 pm



SMMA
SUSTAINABLE MASSACHUSETTS ARCHITECTS

PROPOSED: SUN / SHADOW ANALYSIS

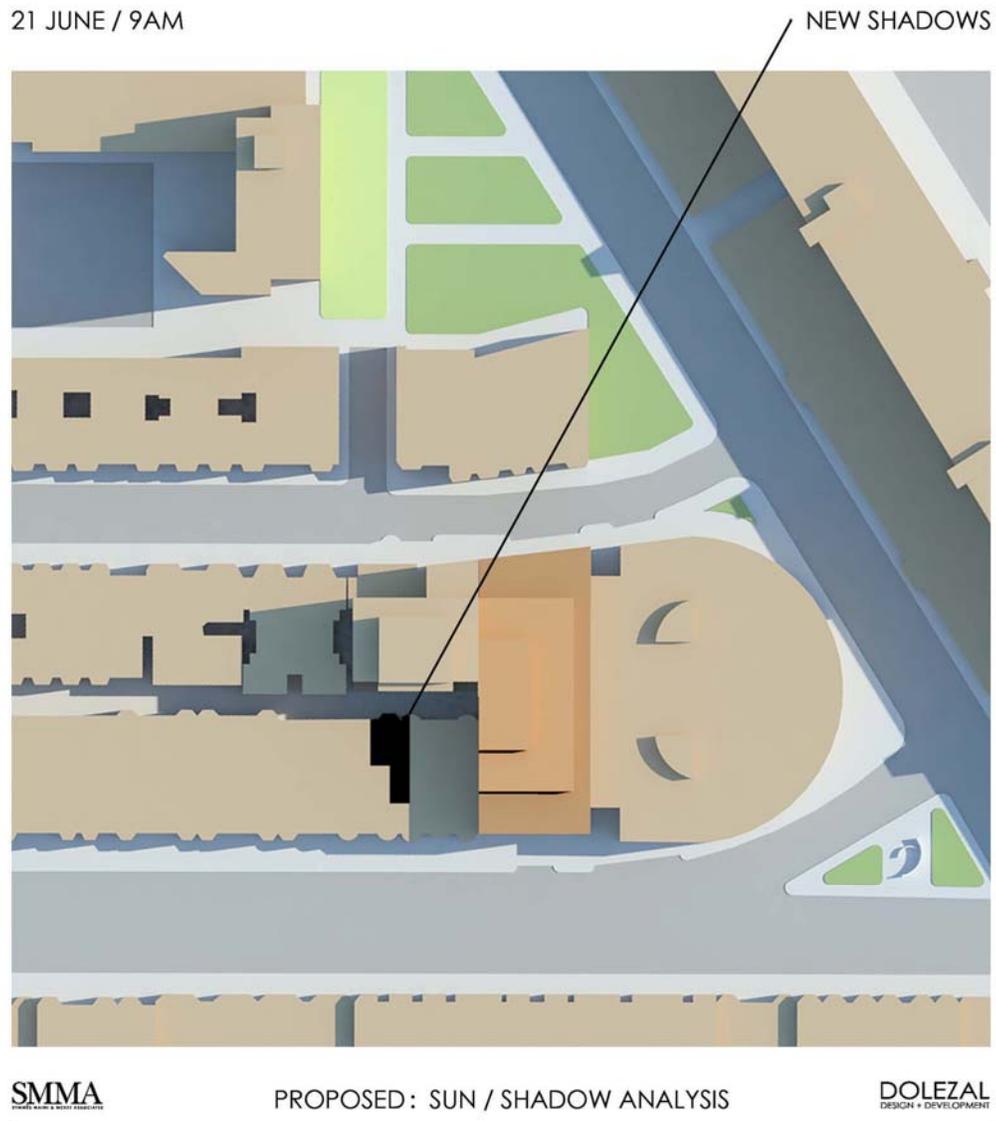
DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY

Figure 4.2-3 – March 21, 3:00 pm

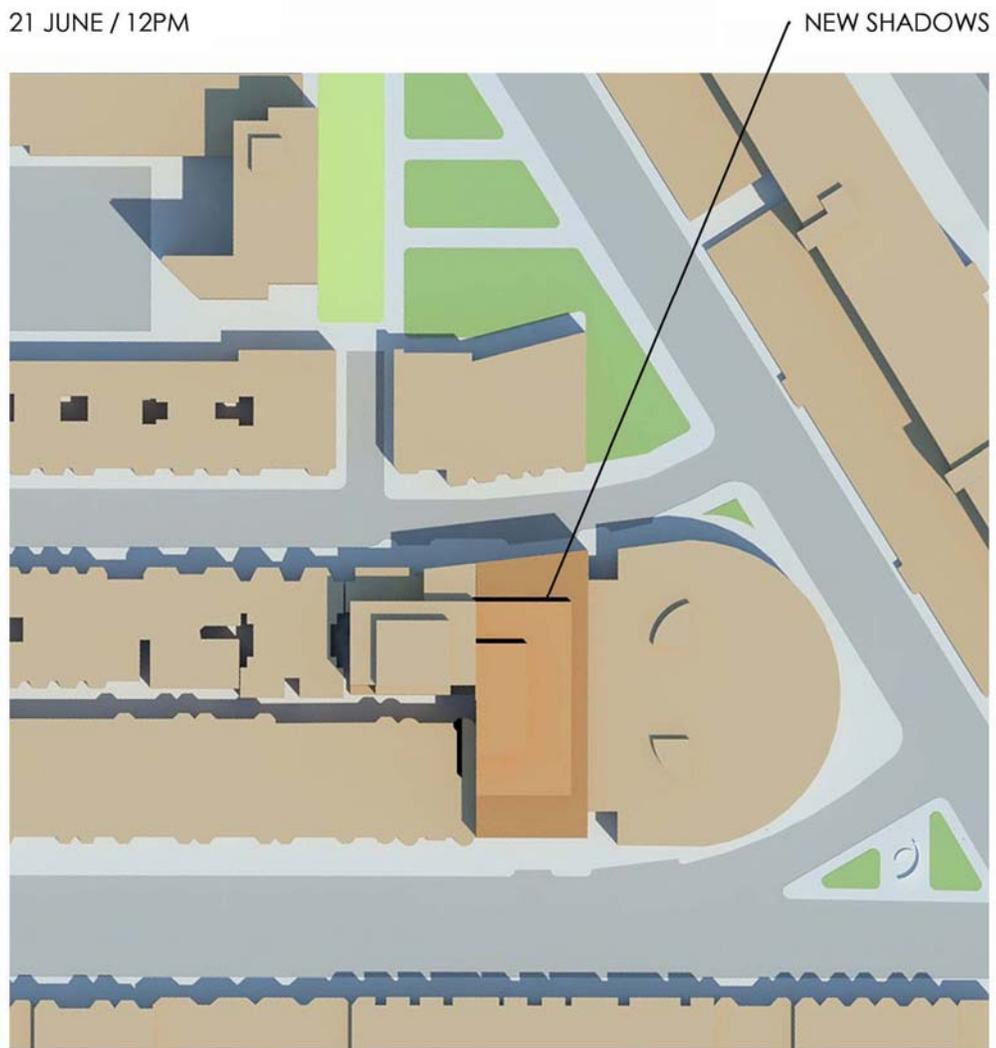


Figure 4.2-4 – June 21, 9:00 am



41 WESTLAND AVENUE, FENWAY

Figure 4.2-5 – June 21, 12:00 pm



SMMA
STRATEGIC MASSING & MASSING ANALYSIS

PROPOSED: SUN / SHADOW ANALYSIS

DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY

Figure 4.2-6 – June 21, 3:00 pm

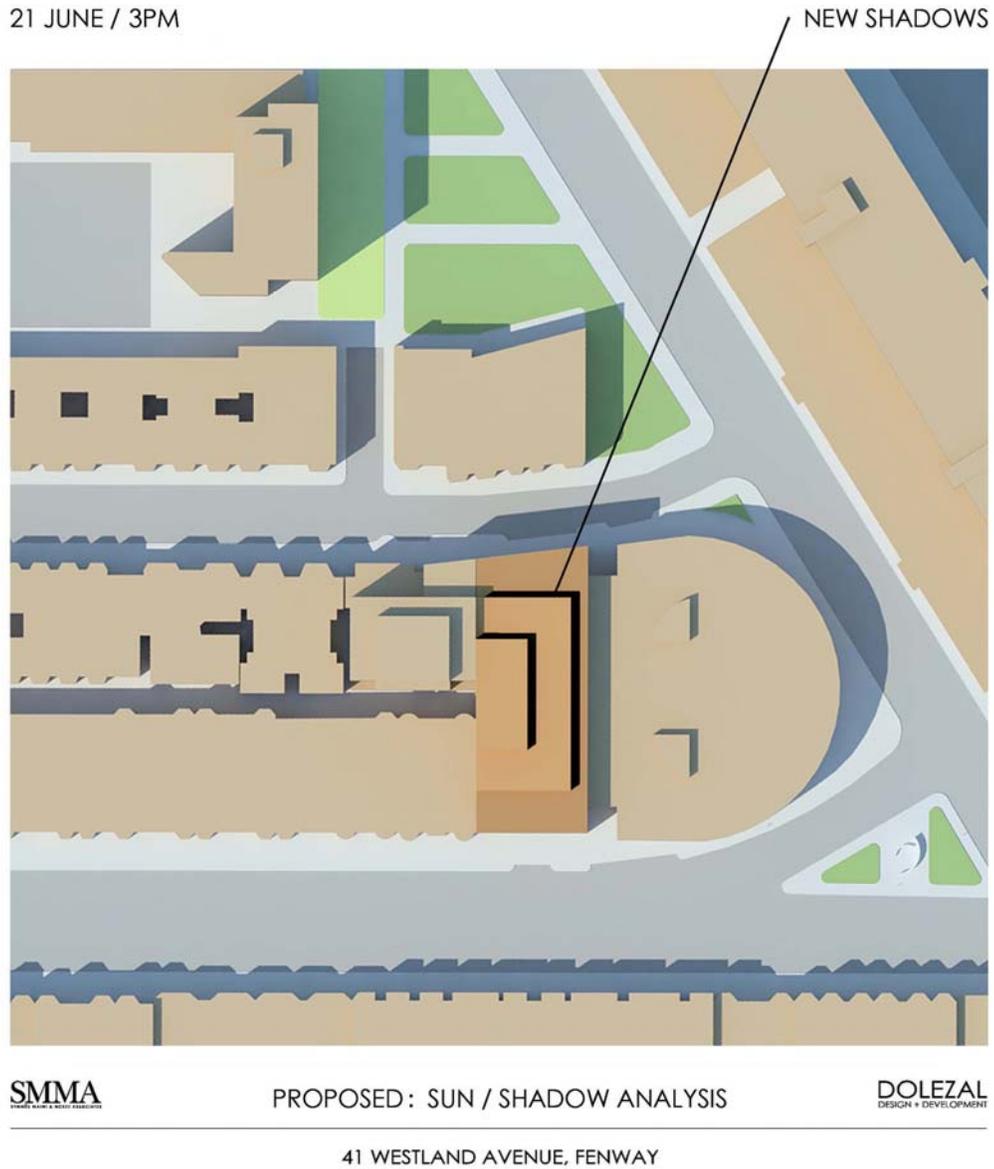
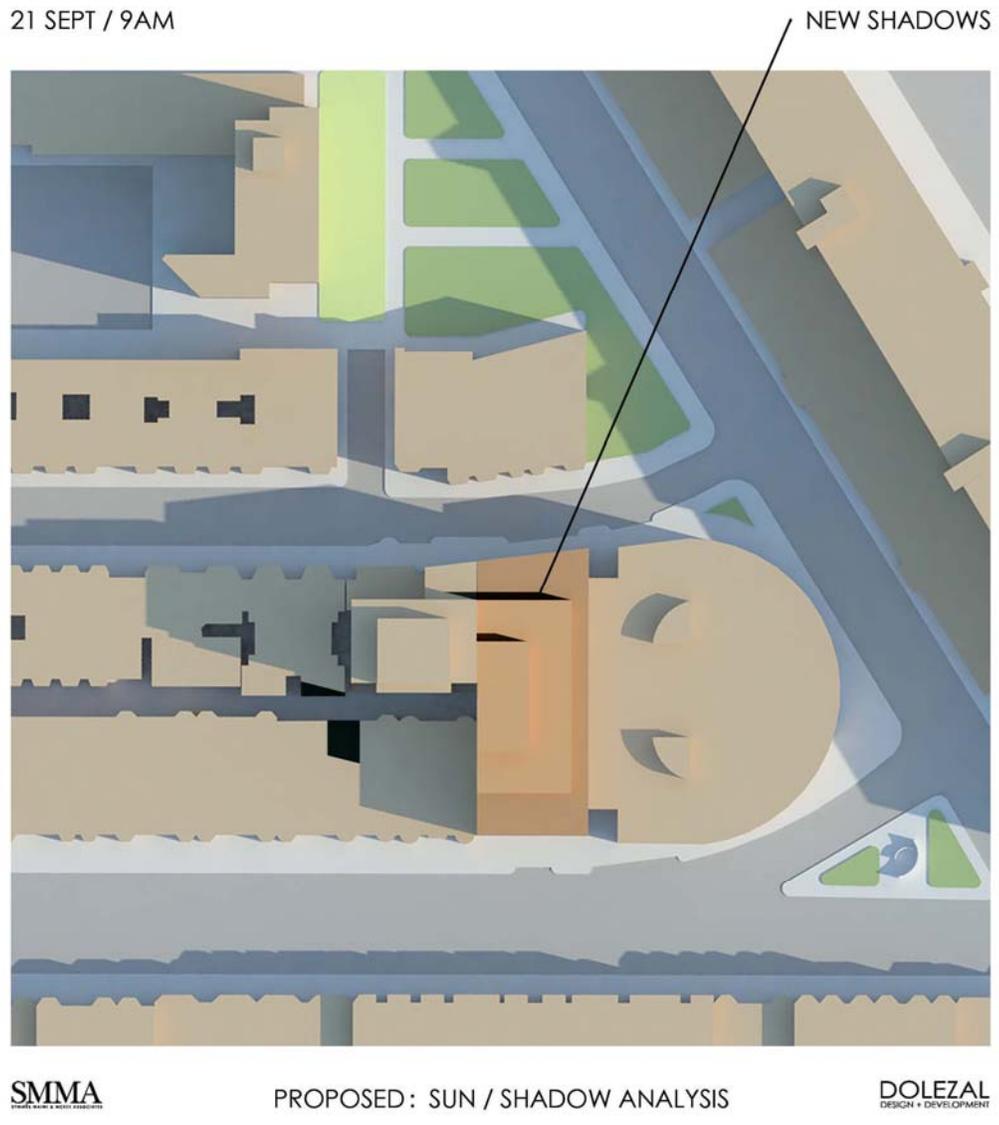


Figure 4.2-7 – June 21, 6:00 pm

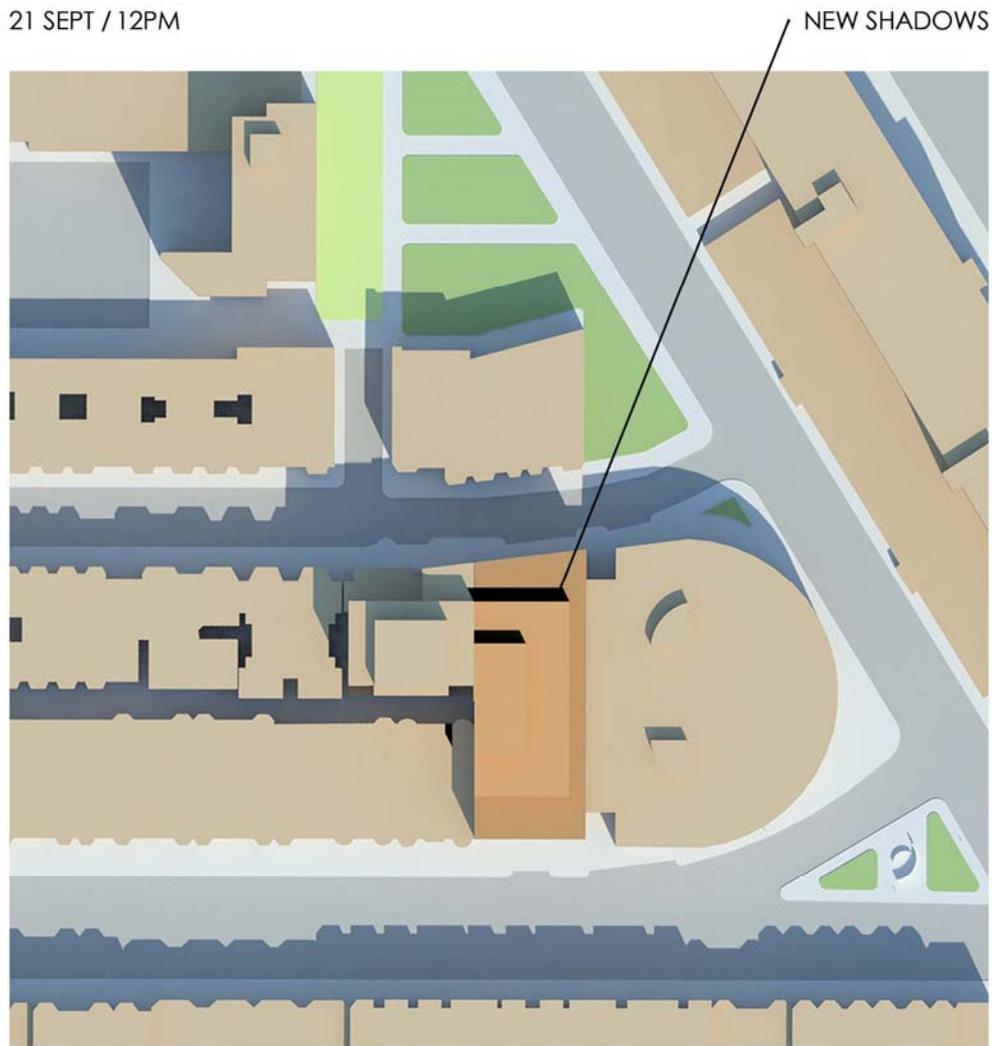


Figure 4.2-8 – September 21, 9:00 am



41 WESTLAND AVENUE, FENWAY

Figure 4.2-9 – September 21, 12:00 pm



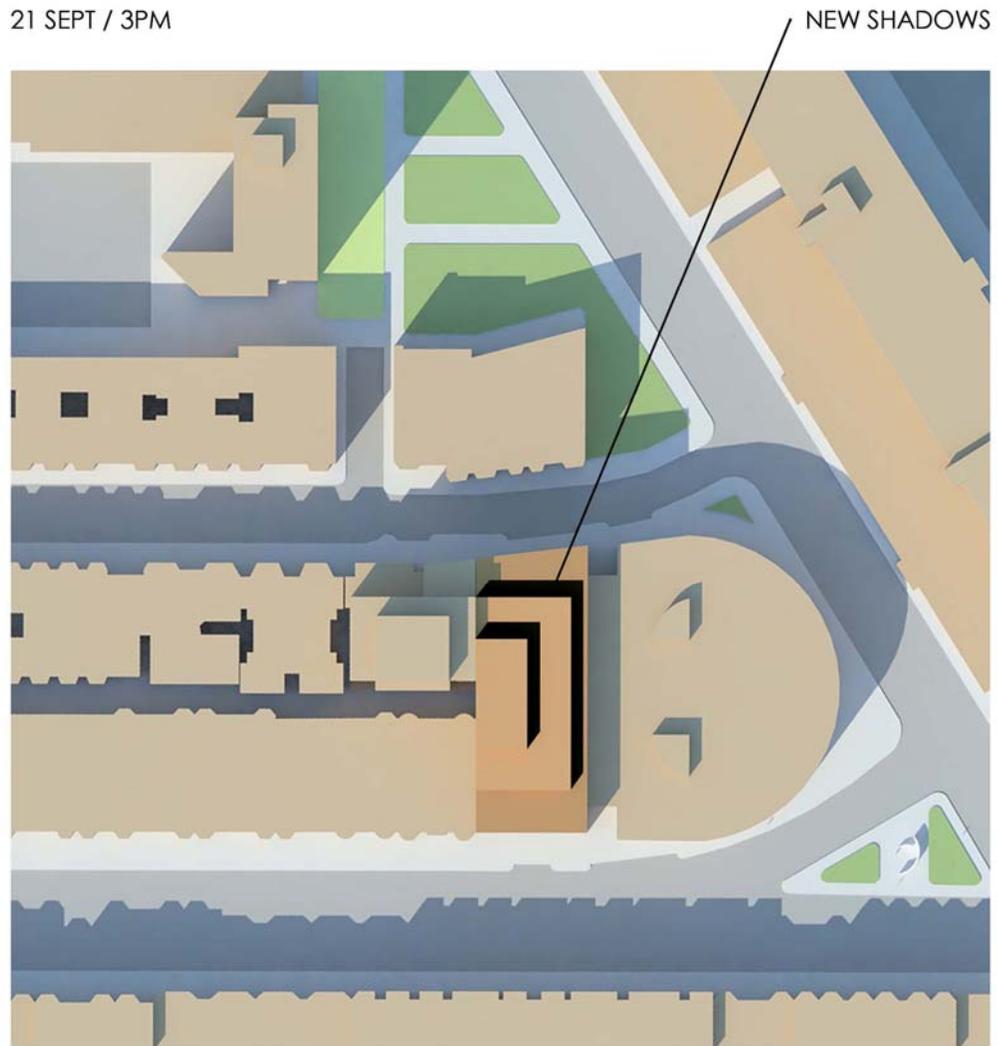
SMMA

PROPOSED: SUN / SHADOW ANALYSIS

DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY

Figure 4.2-10 – September 21, 3:00 pm



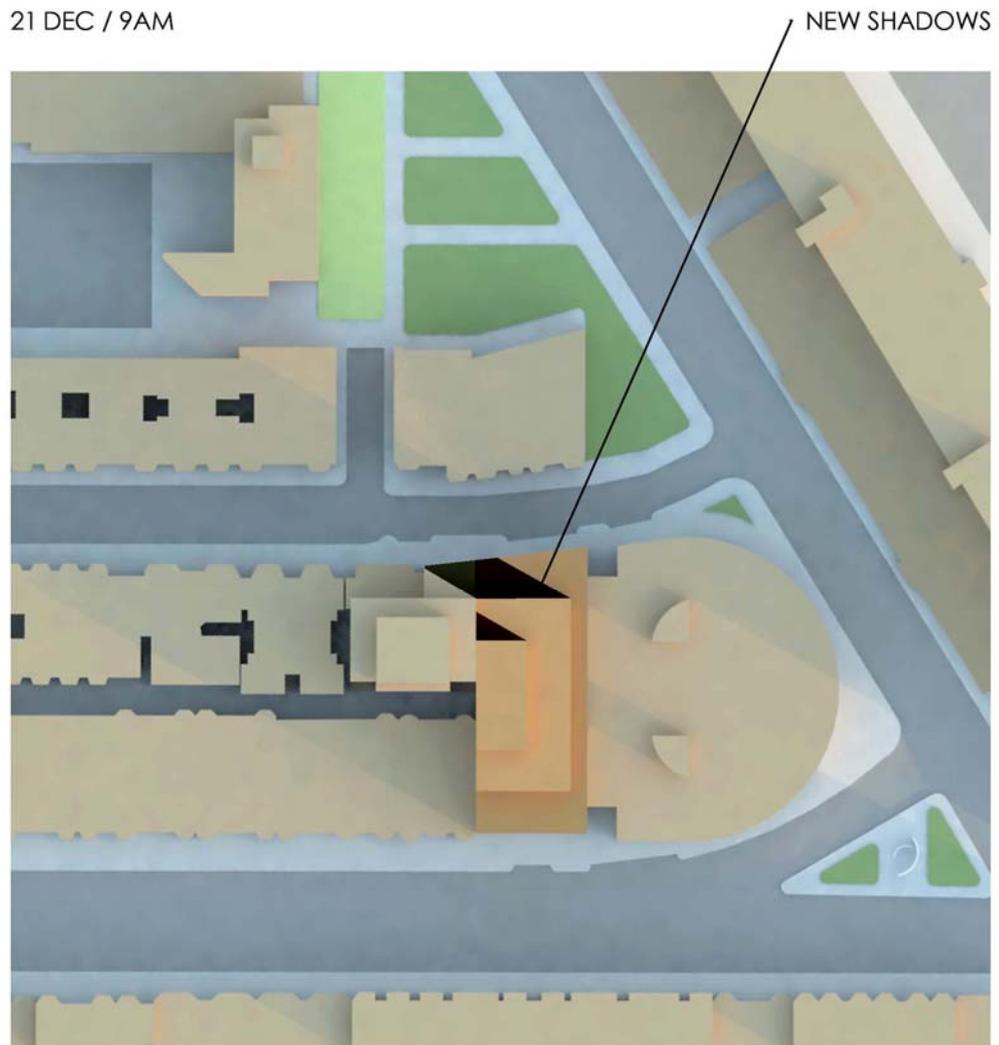
SMMA

PROPOSED: SUN / SHADOW ANALYSIS

DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY

Figure 4.2-12 – December 21, 9:00 am



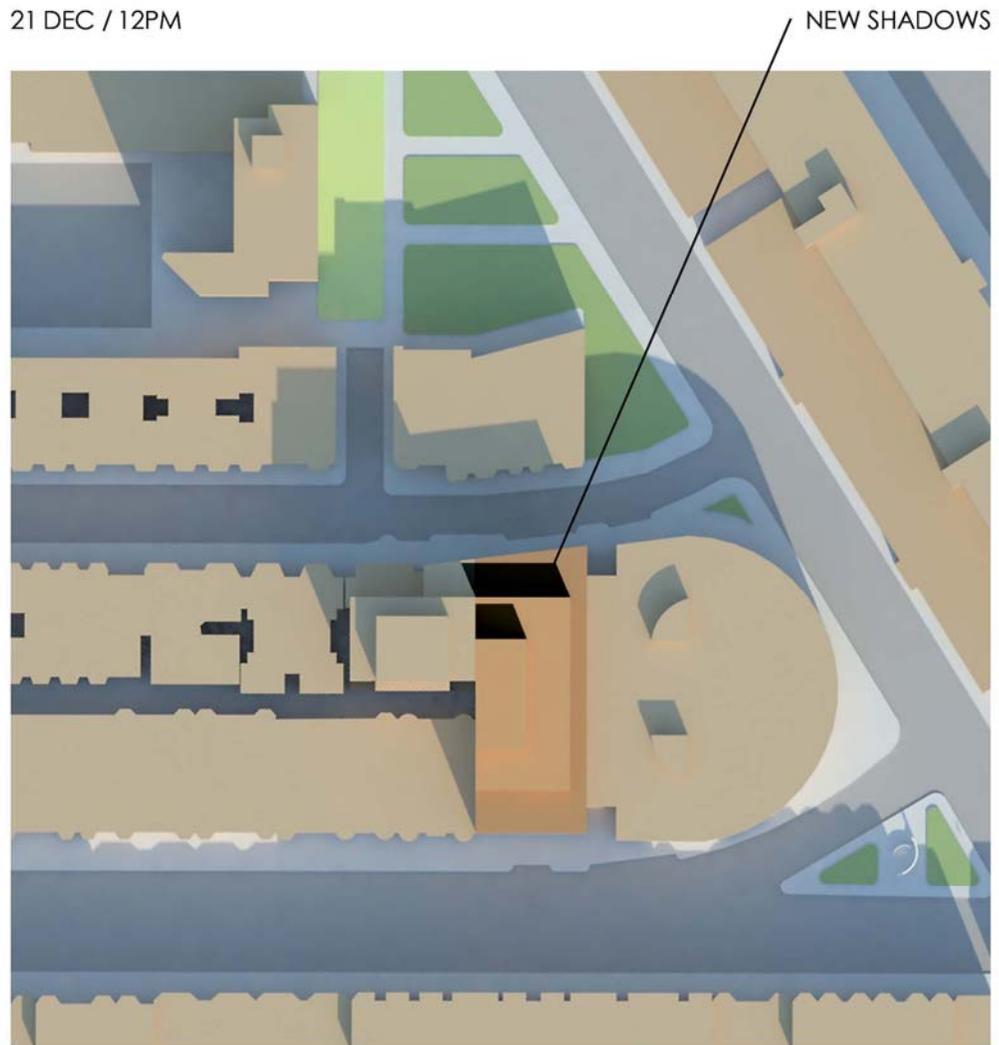
SMMA

PROPOSED : SUN / SHADOW ANALYSIS

DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY

Figure 4.2-13 – December 21, 12:00 pm



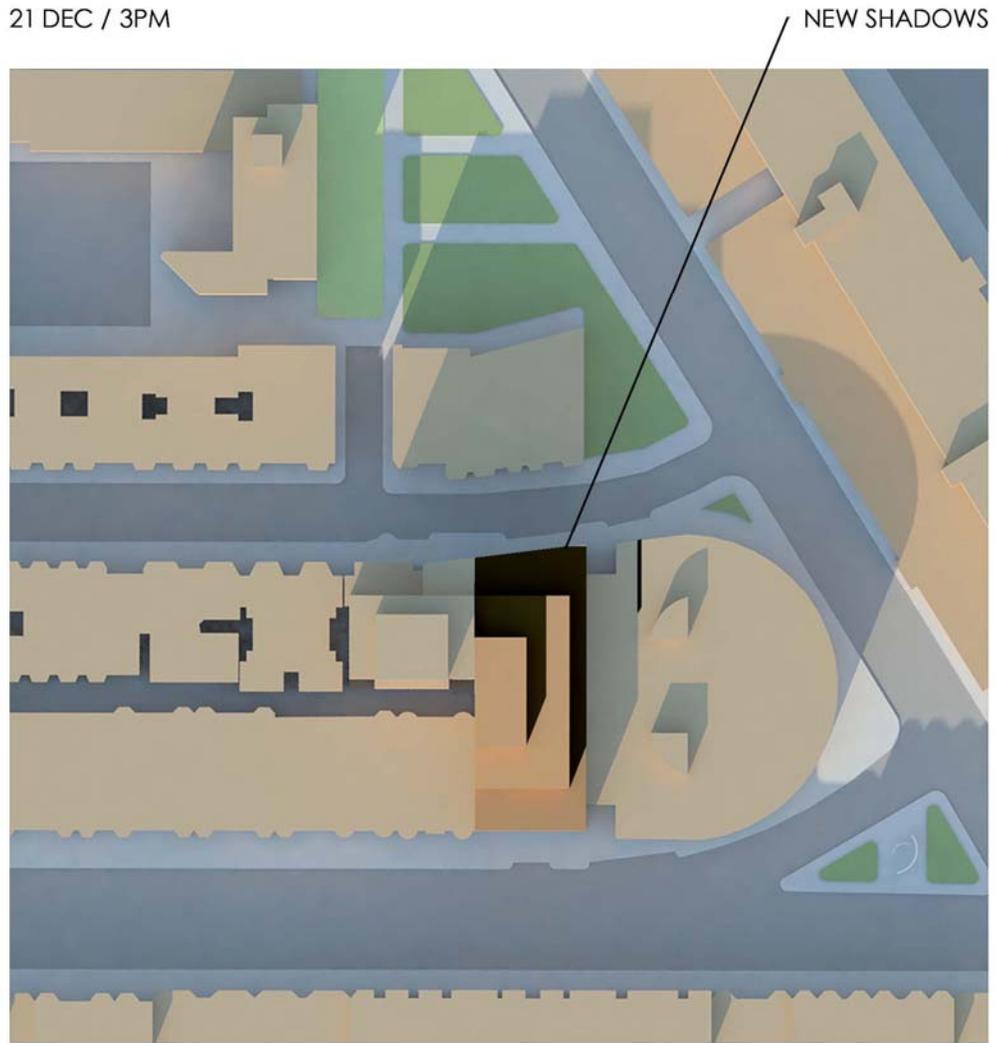
SMMA

PROPOSED : SUN / SHADOW ANALYSIS

DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY

Figure 4.2-14 – December 21, 3:00 pm



SMMA
STRATEGIC MANAGEMENT & DESIGN ASSOCIATES

PROPOSED: SUN / SHADOW ANALYSIS

DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY

4.3 – Daylight

4.3.1 – Introduction

The purpose of the daylight analysis is to estimate the extent to which a proposed project will affect the amount of daylight reaching the streets and the sidewalks in the immediate vicinity of the project site. The daylight analysis for the Proposed Project considers the existing and proposed conditions.

4.3.2 – Daylight Analysis and Conclusions

Because the Proposed Project consists primarily of a rehabilitation of an existing structure, the Proponent's daylight analysis first evaluated whether the proposed rooftop residential addition would be visible from public ways in the immediate vicinity of the Proposed Project. If the proposed rooftop addition is not visible from immediately surrounding public ways, it necessarily will not have any impact on daylight levels on these public ways since the amount of daylight reaching a certain point in space is directly related to the amount of visible and unobstructed skydome at the subject location.

4.3.3 – Conclusions

Due to the height of the existing Symphony Garage's streetwall on both Burbank Street and Westland Avenue (approximately 79 feet) and due to the extent of the proposed rooftop addition's setback from the existing streetwall parapet, the Proponent found that the proposed rooftop addition would generally not be visible from surrounding public ways in the immediate vicinity of the Project Site. As a result, the Proposed Project's construction is not anticipated to have any impact on visible skydome along the public ways adjacent to the Project Site and therefore, no impact on the available daylight on these adjacent public ways.

4.4 – Solar Glare

Because the Proposed Project consists primarily of the rehabilitation of an existing structure, the Proposed Project is not anticipated to create any solar glare impacts to the surrounding area. Existing windows will be replaced with in-kind areas of glazing, and the proposed residential rooftop addition will be set sufficiently far back from the existing parapet to avoid any solar glare impacts on surrounding public ways.

4.5 – Air Quality

4.5.1 – Introduction

A qualitative air quality analysis was conducted to determine the impact of pollutant emissions from combustion and mobile source emissions generated by the Proposed Project. This analysis is divided into three distinct components, as follows:

- *Mesoscale* Analysis: An aggregate analysis of whether and to what extent the Proposed Project could increase the amount of ozone precursors (VOC and NO_x emissions) in

the vicinity of the Project Site due to vehicle traffic caused by the Proposed Project.

- *Microscale Analysis*: An analysis of the potential air quality impacts of carbon monoxide (CO) caused by traffic generated by the Proposed Project in the vicinity of the Project Site.
- *Stationary Source Analysis*: An analysis of air quality impacts in the vicinity of the Project Site associated with the Proposed Project's mechanical systems.

4.5.2 – Analysis

4.5.2.1 – Mesoscale and Microscale Analysis

Both the mesoscale and microscale air quality analysis results depend on the incremental volume of vehicular traffic caused by a proposed project over existing conditions. Only if a proposed project is expected to generate materially greater volumes of vehicular traffic than exists in the “no-build” condition is a material impact on air quality possible as a result of increased vehicle emissions. Typically, a microscale analysis is required for projects that have the potential to cause deterioration in Level of Service (LOS) to “D” or lower, and which causes an increase in traffic of 10 percent or more. A microscale analysis is also required for intersections, which currently experience a LOS of “E” or “F” at which the project will cause an increase in traffic.

In the case of the Proposed Project, the number of daily vehicle trips is estimated to be reduced from nearly 1,100 (associated with the existing commercial parking garage use) to fewer than 100 (associated with the proposed residential condominium use). The Proposed Project will therefore result in a significant increase in air quality in the vicinity of the site due to the over 90% decrease in vehicular emissions that will result from the elimination of commercial parking uses from the Project Site. The Proposed Project will not cause the LOS of any area intersections to deteriorate to “D” or lower, and the Proposed Project will not increase traffic at any area intersections that currently experience a LOS of “E” or “F.” As a result, no microscale analysis is required.

The Proposed Project will have a net beneficial impact on air quality in the vicinity of the Project Site by dramatically reducing daily vehicular trips to and from the Project Site.

4.5.2.2 – Stationary Source Analysis

The stationary source analysis of air quality impacts involves an evaluation of the point-source mechanical equipment that is being installed as part of the Proposed Project's construction. The Proposed Project will involve the installation of customary residential-type mechanical equipment, consistent with surrounding residential uses and of smaller size than similar equipment currently serving larger residential buildings in the immediate vicinity of the Project Site, including the Morville House and Church Park apartments.

Table 4-1 outlines the potential stationary sources of air quality impacts:

Table 4-1: STATIONARY SOURCE SUMMARY			
Noise Source	Quantity	Location	Size/Capacity
Garage Exhaust Fans	6	Basement/First Floor	14,000 CFM total 2,400CFM/1 HP each
Residential Hot Water Boilers	2	Roof – 89’ Elevation	750 MBH
Emergency Generator Set	1	Basement	150 kW

A more detailed description of this mechanical equipment and its impacts on air quality in the vicinity of the Project Site is provided below:

Parking Garage Ventilation

A single-level parking area with approximately 31 parking spaces will be retained on a portion of the existing Symphony Garage’s ground floor. Carbon monoxide monitors will be installed within this parking area to ensure that levels of CO in the parking area do not exceed applicable standards and will be used to control ventilation when necessary. It is anticipated that most of the required garage ventilation will occur naturally through the normal operation of the garage entry and exit doors to accommodate access needs of Proposed Project residents. In cases where CO levels rise above applicable limits in the parking area, a mechanical ventilation system of small exhaust fans will be automatically activated by the CO sensor system. This system will exhaust parking area air and introduce fresh air into the parking area.

In the current condition, the Symphony Garage is exhausted through the use of operable windows and natural ventilation provided by keeping the garage doors open most of the time. Total emissions created by the existing commercial parking use is estimated to be over 10 times the levels of emissions that will be created by the Proposed Project due to the significant reduction in the number of on-site parking spaces and the over 90% reduction in the number of vehicular trips generated by the Proposed Project site as its use shifts from general commercial parking use to residential use.

Heating Equipment

The Proposed Project is anticipated to include two modular, high-efficiency hot water heating boilers. All boiler units will be natural gas-fired and located in a mechanical area on the roof of the building. The two units are expected to be exhausted through a single common stack.

These high-efficiency boilers are customary for this type of residential use and are not anticipated to cause any impact to air quality in the surrounding area. The heating equipment proposed for the Proposed Project is of smaller size, much more modern vintage, and much higher efficiency than most of the boiler equipment in use on similar-sized and larger residential buildings in the vicinity of the Proposed Project site, including the Morville House and Church Park Apartments.

Emergency Generator

The Proposed Project is anticipated to include one 150-kilowatt emergency generator to be installed in the existing basement of the Symphony Garage. This power supply

will provide life safety and standby emergency power to the building in case of emergency. Typically, the generator will operate for approximately one hour each month for testing and general maintenance. The Massachusetts Department of Environmental Protection's Environmental Results Program (ERP) regulation applies to new emergency generators greater than 37 kW. Since the proposed emergency generator's maximum rating capacity is greater than the ERP limit of 37 kW, it will be subject to the new ERP program. Per the ERP, the generator owner will limit operation of the generator to less than 300 hours per year (out of a total of 8,760 hours/yr) and submit a certification form to DEP within 60 days of installation.

4.5.3 – Conclusions

The Proposed Project will not have an adverse effect on ambient air quality in the surrounding community.

In relation to traffic-generated air pollution, the Proposed Project will have a net beneficial impact on air quality in the vicinity of the Project Site by dramatically reducing daily vehicular trips to and from the Project Site. The Proposed Project will reduce daily vehicular trips to and from the Project Site by approximately 93% from existing conditions.

With respect to stationary source emissions, the Proposed Project's mechanical equipment is smaller than the mechanical equipment associated with other, larger existing buildings in the Project Site vicinity, and much of the Proposed Project's mechanical equipment (i.e. emergency generator, and garage exhaust) will be used only sporadically on an as-needed basis. The Proposed Project's hot water heating system, which will operate more regularly to provide heat and hot water for residents, is highly typical of similar residential applications, and will meet or exceed all applicable local, state, and federal standards for fossil fuel emissions.

4.6 – Water Quality/Stormwater Management

This section discusses stormwater runoff quantity and quality. The Proposed Project is not expected to have any adverse effects on stormwater conditions and will in fact improve existing conditions.

4.6.1 – Stormwater Quantity and Quality

Because the Project Site is already fully one hundred percent developed with impervious surfaces, the Proposed Project will not increase the amount of impervious surface and consequently will not lead to an increase in runoff. Peak stormwater run-off rates for the 2-, 10-, 25-, and 100-year storm events after construction will not exceed existing peak rates. The Proposed Project will incorporate storm water Best Management Practices (BMPs) recommended by the Department of Environmental Protection (DEP) to reduce Total Suspended Solids (TSS) from the storm flow and improve water quality before connecting to the Boston Water and Sewer Commission (BWSC) system. Mitigation measures to be incorporated include catch basins with hoods and deep sumps, groundwater recharge, and the implementation of an Operations and Maintenance Plan.

4.6.2 – DEP’s Stormwater Management Policy Standards

The design objective for the Proposed Project’s stormwater management system is to meet the DEP’s Storm Water Management Policy Standards to the greatest extent possible. These standards have been specifically addressed in the project design in the following manner:

Standard #1: No new untreated storm water will discharge into, or cause erosion to wetlands or waters.

Compliance: The Proposed Project will comply with this Standard. There will be no new untreated storm water discharge. The existing parking areas will be converted to buildings. Stormwater will be collected from the building roof and infiltrated into the groundwater, with an overflow to the BWSC system.

Standard #2: Post-development peak discharge rates do not exceed pre-development rates on the site either at the point of discharge or down-gradient of the property boundary for the 2- and 10-year 24-hour design storms. The project’s storm water design will not increase flooding impacts offsite for the 100-year design storm.

Compliance: The Proposed Project will not increase peak discharge rates for all storm events. The Proposed Project will not increase impervious areas on site, and will therefore not increase peak discharge rates.

Standard #3: The annual groundwater recharge for the post-development site must approximate the annual recharge from existing site conditions, based on soil type.

Compliance: The current amount of groundwater recharge is negligible given that the site is within a highly urbanized area and completely covered by buildings and pavement. In addition, stormwater runoff from the existing site flows entirely into the BWSC system. The proposed stormwater recharge system will provide a substantial increase in groundwater recharge over existing conditions and comply with the City of Boston Zoning Code Article 32 requirements. This represents a major public benefit from the Proposed Project’s development in light of groundwater concerns in the vicinity of the Project Site.

Standard #4: For new development, the proposed storm water management system must achieve an 80 percent removal rate for the site’s average annual load of TSS.

Compliance: To the extent practical, the Proposed Project’s storm water management system will remove 80 percent of the post-development site’s average annual TSS load. With the exception of garage entrances, the Proposed Project does not include any vehicular pavement areas.

Standard #5: If the site contains an area with Higher Potential Pollutant Loads (as prescribed by the Policy), BMPs must be used to prevent the recharge of untreated stormwater.

Compliance: The Proposed Project is not associated with Higher Potential Pollutant Loads

(per the Policy, Volume I, page 1-8). The Proposed Project fully complies with this standard.

Standard #6: If the site contains areas of Sensitive Resources (as prescribed by the Policy), such as rare/endangered wildlife habitats, ACECs, etc., a larger volume of runoff from the “first flush” must be treated (1 inch of runoff from impervious area vs. the standard ½ inch).

Compliance: The Proposed Project will not discharge untreated stormwater to any sensitive areas. The Proposed Project fully complies with this standard.

Standard #7: Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.

Compliance: The Proposed Project will meet or exceed all standards.

Standard #8: Erosion and sediment controls must be designed into the project to minimize adverse environmental effects.

Compliance: The Proposed Project will fully comply with this standard. Sedimentation and erosion controls will be incorporated as part of the design of the Proposed Project and employed during construction.

Standard #9: A long-term BMP operation and maintenance plan is required to ensure proper maintenance and functioning of the SWM system.

Compliance: An Operations and Maintenance Plan including long-term BMP operation requirements will be prepared and will ensure proper maintenance and functioning of the system. The Operations and Maintenance Plan will be implemented for this facility in order to ensure that this facility adequately provides preventative maintenance to minimize damage to the drainage infrastructure and makes necessary repairs accordingly during and after construction. A typical maintenance schedule is described in the sections below. In addition, “Don’t Dump – Drains to Charles River” plaques will be installed at all catch basin locations to ensure public awareness of the environmental impact of inappropriate use of the catch basins.

Standard #10: All illicit discharges to the stormwater management system are prohibited.

Compliance: No illicit discharges, including wastewater, process wastes, toxic pollutants and hazardous substances will be introduced into the stormwater management system. An Illicit Discharge Compliance Statement will be filed with the Boston Conservation Commission prior to receiving a Certificate of Compliance for the Proposed Project.

4.6.3 – Maintenance Programs During Construction

A comprehensive stormwater quality management program will be undertaken during construction to protect the water quality of stormwater runoff. Among the measures to be implemented are the following:

1. Site inspections shall be performed weekly by a Professional Engineer during the construction of the site improvements in order to observe the construction progress, erosion control devices, and the storm water runoff conditions. The Professional Engineer shall recommend corrective measures to the Project Superintendent when warranted. A field report of the Project Engineer's finding will be kept.
2. Efforts to control erosion and sediment shall be made by the following: compaction of disturbed earth on slopes; placement and maintenance of hay bales and silt fence as directed by the Engineer and construction documents (including around new and existing drainage structures); and earth stock piling at proper locations and in a manner to minimize erosion.
3. The contractor shall make every effort to sequence and complete the construction of drainage facilities to ensure that uncontrolled runoff is kept to a minimum.
4. Stormwater infiltration trenches should be inspected weekly and after large storm events (more than 0.5-inches of rainfall in 24-hour period). Maintenance is required when the sediment average depth exceeds 3 inches. When maintenance is required, remove sediment by jetting system.
5. A Professional Engineer shall conduct an inspection of the storm water management system upon completion of its installation.
6. Records shall be kept by a Professional Engineer and shall be available for inspection by the Boston Water and Sewer Commission.

4.6.4 – Maintenance Programs Following Construction

The Proponent will continue to monitor and take measures to protect the water quality of stormwater runoff following the completion of construction. The Proposed Project site will consist almost entirely of building roof area. The DEP considers stormwater runoff from building roofs to be clean. Therefore, maintenance of the building stormwater systems for stormwater quality is not required.

4.7 – Flood Hazard Zone/Wetlands

According to the Flood Insurance Rate Map (FIRM) for the City of Boston, Suffolk County (Community Panel Number 2502860077G, September 25, 2009), the Project Site is located within Zone C, an area with minimal flooding. Due to its highly developed urban location, there are no wetland resource areas on or near the Project Site.

4.8 – Noise

4.8.1 Introduction

The Proponent has performed a qualitative noise impact analysis for the Proposed Project to ensure that the Proposed Project's construction will not cause disruptive noise impacts on the

surrounding residential neighborhood. Based on the nature of the proposed building systems, the extent of rooftop enclosure that is proposed, and the small size of the Proposed Project’s mechanical equipment, the Proponent has determined that predicted noise levels from Proposed Project’s mechanical equipment will be below the most stringent City of Boston Noise Zoning requirements for nighttime and daytime residential zones, and well below existing measured baseline noise levels in the area.

4.8.2 – Potential Sources – Existing

The area immediately surrounding the Project Site is primarily residential in nature, with the exception of the adjacent Westland Avenue parking facility and Whole Foods supermarket. In general, existing ambient noise levels are caused by the following sources:

- Vehicular traffic on surrounding streets;
- Vehicular traffic associated with the existing Symphony Garage and Westland Avenue Garage entries and exits;
- Truck/delivery traffic associated with the Whole Foods market;
- Mechanical equipment located on the rooftops of several large residential buildings in the area, including the Morville House and the Church Park Apartments.

4.8.2 – Potential Sources – Proposed

A summary of potential sources of noise caused by the Proposed Project is presented in the following table 4-2. In general, these sources are consistent with the types of noise sources associated with surrounding multifamily residential buildings; in all cases, equipment sizing is smaller than equipment serving the nearby Morville House and Church Park residential communities.

Table 4-2: POTENTIAL NOISE SOURCES

Noise Source	Quantity	Location	Size/Capacity
Garage Exhaust Fans	6	Ground	14,000 CFM Total 2,400 CFM/1 HP per unit
Stairwell Pressurization Fans	2	Roof – 89’ Elevation	4,500 CFM/3 HP per unit
Elevator Vestibule Pressurization Fan	1	Roof – 89’ Elevation	450 CFM/0.5 HP per unit
Cooling Tower - Single Cell	1	Roof – 89’ Elevation	130 Tons/15 HP
Emergency Generator Set	1	Basement	150 kW

4.8.3 – Conclusions

The Proposed Project will not introduce significant outdoor mechanical equipment noise into the surrounding community. As a practical matter, The Proposed Project’s mechanical equipment is smaller than the mechanical equipment associated with other, larger existing buildings in the Project Site vicinity, and much of the Proposed Project’s mechanical equipment (i.e. stairwell pressurization, emergency generator, and garage exhaust) will be used only sporadically on an as-needed basis. The Proposed Project’s single cooling tower will be fully enclosed with a sound-attenuating screening assembly on all four sides, open only to above to facilitate airflow. The cooling tower is not anticipated to have any adverse effect on noise levels in the surrounding area. Furthermore, because the Proposed Project contemplates the reduction in average daily traffic to and from the Project Site by 93%, the Proposed Project will have a beneficial impact

on noise levels caused by existing vehicular traffic generated by the existing commercial parking use on the Proposed Project site.

4.9 – Solid and Hazardous Wastes

4.9.1 – Solid Waste

4.9.1.1 – Solid Waste Handling During Construction

The Proponent will take an active role with regard to the processing and recycling of construction and building demolition waste. The disposal contract will include specific requirements that will ensure that construction procedures allow for the necessary segregation, reprocessing reuse and recycling of materials. For those materials that cannot be recycled, solid waste will be transported in covered trucks to an approved solid waste facility, per DEP's Regulations for Solid Waste Facilities, 310 CMR 16.00. This requirement will be specified in the disposal contract. Construction will be conducted so that materials that may be recycled are segregated from those materials not recyclable to enable disposal at an approved solid waste facility.

4.9.1.2 – Solid Waste From Operations

The Proposed Project will generate solid waste typical of multifamily residential buildings, which will be disposed of off-site by a licensed contractor. The Proponent will provide adequate areas and facilities on the ground floor of the Proposed Project for residential recycling, which is expected to include glass, plastic, paper, cardboard, and cans as a single-stream recycling program to be arranged by the Proponent and maintained by the Proposed Project's long-term property management firm.

4.9.2 – Hazardous Materials

The Proponent has conducted an ASTM Phase I Environmental Site Assessment and other subsurface investigations to assess the Proposed Project site for the potential presence of oil and/or hazardous materials. Due to the historic presence of several underground petroleum storage tanks on the Proposed Project site, numerous soil borings/monitoring wells were installed and soil/groundwater samples were taken to investigate for the presence of contamination at the Proposed Project site. Based on the results on the investigations, various remedial measures were successfully implemented to address contaminants that were found. In addition, based on a risk characterization, a condition of No Significant Risk to health was determined to exist at the Proposed Project site. A Response Action Outcome Statement (site closure) was submitted to the Massachusetts Department of Environmental Protection in January of 2010.

4.10 – Geotechnical and Groundwater Conditions

This section describes site subsurface soil and groundwater conditions, planned below-grade construction activities, and mitigation measures for protection of adjacent structures and maintaining groundwater levels in the Proposed Project's vicinity during foundation and below-grade construction. In general, no geotechnical impacts are anticipated as a result of the Proposed Project's construction, because the Proposed Project consists primarily of the rehabilitation and change of use of an existing building, with only minimal new construction proposed as part of the Proposed Project. No new basement construction is contemplated.

4.10.1 – Site Conditions

The Project Site is currently occupied by the six-story Symphony Garage, a concrete-frame commercial parking structure that rests on belled caissons. The Project Site is abutted by Westland Avenue to the south, an existing 6-story concrete garage constructed in the 1970s to the east (the Westland Avenue Garage), a 4-story residential building at 45 Westland Avenue to the southwest, a vacant lot owned by the Proponent to the northwest, and Burbank Street to the north.

The ground floor slab of the existing Symphony Garage is flat, with grades ranging from approximately Elevation 18.3 to Elevation 18.7, Boston City Base Datum (BCB).

Information on the existing site and abutting buildings is listed In Table 4-3 below:

Table 4-3: EXISTING/ABUTTING SITE CONDITIONS		
Building/Site	Foundation	Other Information
41-43 Westland Ave	Concrete caissons in hard-packed gravel (~15' depth)	Existing commercial parking garage to be rehabilitated
35 Westland Ave (Westland Ave Garage)	Unknown	6-story commercial parking structure w/ground floor retail
45 Westland Avenue	Wood piles (assumed)	One-level basement
38 – 46 Burbank St	N/A	Vacant lot owned by the Proponent

Other buildings in the vicinity of the Project Site are supported on a variety of foundation systems. Municipal utilities are present beneath surrounding streets and sidewalks. Because no significant below-grade construction is planned in connection with the Proposed Project, no adverse impacts to any neighboring foundations or utility corridors are anticipated.

4.10.2 – Subsurface Soil and Bedrock Conditions

Based on available subsurface data, the general site subsurface profile is listed below in Table 4-4, in order of increasing depth below ground surface:

Table 4-4: SUBSURFACE CONDITIONS	
Generalized Subsurface Strata	Approximate Elevation (BCB)
Miscellaneous Fill	16.5' – 5'
Sand/Hard Packed Gravel	Starting at 5'
Bedrock	---

4.10.3 – Groundwater

Groundwater levels, monitored since 2005 in several observation wells installed in the vicinity of the Project Site by the Boston Groundwater Trust, have ranged from El. 2 to El. 6 (BCB). Groundwater levels in the vicinity of the site are periodically monitored by the Boston Groundwater Trust, in observation wells typically located in the public sidewalks. Observed levels near the Project Site are somewhat below those that would be considered “naturally-occurring.” Groundwater levels in the area could be influenced by leakage into and out of sewers, storm drains and other below-grade structures, as well as environmental factors such as precipitation, season, and temperature.

4.10.4 – Proposed Construction

The Proposed Project contemplated the rehabilitation of the existing Symphony Garage and its conversion to residential use. The Proposed Project also contemplates the construction of a one-story residential rooftop addition on a portion of the existing Symphony Garage roof. The dead loads associated with the proposed rooftop addition will be borne by the existing deep foundation system of the existing garage, and it is not anticipated that any supplemental gravity load-bearing system will need to be installed. In the event that any such system is necessary to accommodate incremental gravity loads, this system will consist of drilled mini-piles that have minimal or no impacts on geotechnical conditions beneath the Project Site. Incremental lateral loads will be accommodated through the addition of shear bracing within the vertical structure of the existing garage; the additional vertical loads imparted by these lateral load-bearing elements can be accommodated with the existing caisson foundation system. As a result, the Proposed Project is anticipated to result in little or no subsurface construction, and is therefore not anticipated to cause any geotechnical impacts to the surrounding area requiring mitigation.

4.10.5 – Groundwater Conservation Overlay District

The Proposed Project is located in the Groundwater Conservation Overlay District (GCOD), established by Article 32 of the Code. The Proposed Project will be constructed in full compliance with the provisions of Article 32 and will not adversely impact groundwater levels. The following measures are being taken in connection with the Proposed Project to avoid adverse impacts on groundwater levels:

- The Proposed Project will have no new basement or significant below-grade construction (other than the centrally-located elevator pit). No portion of the structure (other than existing foundation elements and the existing basement) is expected to extend below El. 7, Boston City Base;
- No significant removal of groundwater by dewatering during construction is anticipated;
- The Proposed Project will incorporate a groundwater recharge system that will significantly increase the volume of stormwater reaching the groundwater table compared to the existing volume of infiltration. Currently all stormwater flows into a double catch basin at the rear of the site, which likely connects to the drain system in Burbank Street. The inclusion of this groundwater recharge system as part of the Proposed Project will help to improve groundwater conditions in the vicinity of the Project Site.

The Project Proponent is committed to working closely with the Boston Groundwater Trust, the Boston Environment Department, and the Boston Water and Sewer Commission (BWSC) to ensure that the Proposed Project does not negatively impact groundwater levels in and around the Project Site, and that the Proposed Project incorporates appropriate measures to improve groundwater conditions in and around the Project Site.

4.11 – Construction Impacts and Management Plan

This section discusses the Proposed Project's construction sequence and the mitigation measures that will be taken to minimize construction related impacts and disturbance to the surrounding areas during construction of the Proposed Project.

4.11.1 – Construction Program

The first steps in construction at the Project Site will be the installation of the site security fence and the cutting and capping of any existing utilities serving the existing Symphony Garage. New construction will begin with the abatement of any hazardous materials in the existing building, followed by the removal of the existing elevators, windows, and interior systems. Interior structural work, floor openings/infills work, and basement restoration work will be completed before new construction is put in place.

The proposed rooftop addition will be framed in steel and enclosed concurrently with the replacement of the existing building's exterior windows and façade restoration. Interior systems installation will take place once the rooftop addition is framed and enclosed and the Proposed Project's new windows have been installed. Streetscape improvements and landscaping will be completed at the end of the Proposed Project's construction sequence to ensure that these improvements are not damaged by construction activities.

All construction activities will be phased and staged so as to minimize impacts to vehicular traffic and pedestrian flow surrounding the Project Site. This commitment will be facilitated by the availability of the currently vacant lot located at 38 – 46 Burbank Street, which is owned by the Proponent and is the location of an already-approved development project that is likely to be constructed after the completion of the Proposed Project.

4.11.2 – Construction Schedule

Complete renovation of the existing garage structure and construction of the proposed rooftop addition should take approximately 12-14 months. The restoration of the existing Symphony Garage's exterior and the replacement of the existing windows will be an early construction package, so much of the interior work can occur in an enclosed and sound-attenuated environment to reduce construction noise impacts on the surrounding area. Recognizing the primarily residential nature of the surrounding community, construction is expected to occur between the hours of 7:00 AM and 6:00 PM on weekdays, pursuant to City of Boston regulations regarding permissible working hours. Furthermore, a construction impacts hotline will be arranged to ensure that residents can immediately report any violations of this policy for the comfort and security of the Proposed Project's neighbors.

4.11.3 – Signage

Appropriate signage will be placed along the site perimeter of the site to direct pedestrians and to direct truck traffic and deliveries. BTM requires all major construction sites to comply with the Public Awareness Campaign. Project signage (BTM-CWS signs) will be required of the Construction Manager for each specific site and shall contain the following:

- Official address of the site
- The Owner and the intended use of the Project
- The Construction Manager's corporate name
- The telephone number of the Construction Manager's on-site office
- A statement that "Comments on Construction Impacts Welcome"
- BTM Construction Office telephone number

The BTM-CWS signs will be installed at the start of construction at locations chosen by the BTM Construction staff, and will be maintained throughout the entire construction period. The BTM-

CWS signs will not be removed until the Certificate of Occupancy is received and all site work, including roadway and sidewalk reconstructions, is complete.

4.11.4 – Perimeter Protection/Public Safety

An 8-foot high screened chain link fence with permanent posts around the entire perimeter of the Project Site will be constructed to secure the construction site. Temporary covered public walkways will be separated from vehicular traffic by either existing curbs or construction barriers. Secure fencing and barricades will be used to isolate construction areas from pedestrian traffic around the Project Site. In addition, sidewalk areas and walkways near construction activities will be well-marked, protected for overhead exposures, and lighted to protect pedestrians and ensure their safety. Construction access gates will be installed at locations indicated on the logistics plan for truck access and egress to and from the Project Site, with primary access to and from Westland Avenue. Police details will be provided as necessary to facilitate traffic flow and ensure public safety.

4.11.5 – Construction Waste

The Proposed Project's contractor and its subcontractors will take an active role with regard to the reprocessing and recycling of construction waste in keeping with the Proposed Project's overall commitment to environmental sustainability.

Most construction debris is generated from packaging and when raw materials are cut or sized. The Proponent will encourage the construction contractor to take steps such as saving large scraps for use in other projects, returning durable packaging to suppliers, and source separating and recycling smaller scraps and non-durable packaging. The Proponent will also coordinate with the Boston Materials Resource Center and direct materials to them where possible to reduce the amount of surplus building material that is sent to landfills.

For those materials which cannot be recycled, solid waste will be transported in covered trucks to an approved solid waste facility, per the Department of Environmental Protection (DEP) Regulation for Solid Waste Facilities, 310 CMR 16.00. This requirement will be specified in the Contract Documents.

4.11.6 – Construction Traffic

4.11.6.1 – Worker Parking

The numbers of on-site workers required during the construction period will vary, with an estimated work force ranging from approximately 15 workers during a typical day during the demolition/cleanout period to as many as 40 workers during the peak of construction. Because the construction workers will arrive and depart during off-peak traffic periods (typically 7:00AM – 6:00PM), they are not expected to significantly affect traffic conditions in the Project area.

Personnel will generally arrive at the job site either by public transportation or by personal vehicles. Workers will be encouraged to carpool whenever possible. A subsidy for MBTA passes will be considered for full-time employees. Subcontractors will also be instructed to encourage their employees to use public transportation. Tradespeople will be permitted to store tools in locked job boxes on site, as another means to encourage public transit use.

The Proposed Project's compliance with the Boston Resident Jobs Policy will ensure that much of

the on-site workforce will commute from city neighborhoods with good access to public transportation.

4.11.6.2 – Truck Routes and Volumes

Truck traffic will vary throughout the construction period, depending on the specific construction activity that is occurring. Construction truck access to and from the Project Site for delivery of supplies, materials, and removal of waste required for the Project will be limited to the truck routes established in cooperation with the construction trades and the Boston Transportation Department in advance of the start of construction.

4.11.6.3 – Off-site Staging

The following measures will be taken regarding off-site staging to minimize impacts to the surrounding neighborhood:

- At no time will City streets be used for crane placement, staging of trucks, and/or off-loading of trucks without permit application and issuance.
- Any truck unable to immediately access the jobsite upon arrival will be directed to off-site areas not on a public way.
- During the superstructure phase, concrete trucks will be radio dispatched. Rebar and accessories will be managed within the staging area that the superstructure concrete subcontractor will be required to provide.
- For local materials, including masonry and interior finishes, drywall, etc., local vendors will supply material with their own staging plan controlled by scheduled deliveries. Deliveries will be stopped for any subcontractor that does not comply with time dispatch by the site Superintendent.
- Large equipment and out of state deliveries such as windows will be managed through assignment to yards in Everett, Chelsea, Somerville, or other similar location.
- All concrete trucks will be radio dispatched and controlled to avoid standing.

4.11.7 – Dust Control

To reduce emission of fugitive dust and minimize impacts on the local environment in the vicinity of the project site, the Proposed Project's contractor will adhere to a number of strictly enforced mitigation measures, including the following:

- Wetting agents will be used regularly to control and suppress dust that may come from construction materials & demolition debris.
- All trucks for transportation of construction debris will be fully covered and their wheels cleaned before exiting the site
- All construction debris will be placed in onsite dumpsters for prompt removal. They will be covered prior to removal.
- Temporary charcoal construction filters will be placed in front of at all abutting mechanical intakes to maintain current fresh air levels of mechanical intake.

- Construction practices will be monitored to ensure that unnecessary transfers and mechanical disturbances of loose materials are minimized and that any emissions of dust are minimized.
- Streets and sidewalks will be cleaned regularly to minimize debris and dust accumulations. Street cleaning shall be provided by mechanical street sweeper on a full time basis, from the time the first truck arrives until after the last truck leaves, during the excavation phase and at least one week there after. Sweeping limits shall encompass the entire truck route along which spoilage may be left.

4.11.8 – Odor Control

Methods that will be used by the Proposed Project's contractor to control nuisance odor emissions associated with the limited amount of earthwork contemplated include:

- Improving site drainage in order to minimize standing water from remaining in excavated areas
- Covering stockpiles of excavated material with polyethylene sheeting and securing it with sandbags or an equivalent method to prevent the cover from being dislodged by the wind
- Reducing the amount of time that excavated material is exposed to the open atmosphere
- Maintaining the construction site in a state free of trash, garbage, and debris

Methods that will be used by the Proposed Project's contractor to control nuisance odors associated with diesel emissions from construction equipment include:

- Maintain an "idle free" work zone of fossil fuel trucks and equipment by providing supplemental electrical hoisting and pumping equipment along with "just-in-time" delivery methods. On-site idling will be limited to 5 minutes.
- Locating combustion engines away from sensitive receptors such as fresh air intakes, air conditioners, and windows. The location of these sensitive receptors will be reflected on the logistics plan of the project CMP.
- Use of Low Sulfur Diesel for trucks hauling materials from the site.

4.11.9 – Noise Control

Every reasonable effort will be made to minimize the noise impact of construction activities. Mitigation measures to be undertaken will include:

- Instituting a proactive program to ensure compliance with the City of Boston noise Limitation Policy.
- Work hours shall include any time necessary to perform equipment warm-up and no warm-up period shall occur before the City of Boston's customary 7:00 am starting time
- Using appropriate mufflers on all equipment and on-going maintenance of intake and exhaust mufflers
- Muffling enclosures on continuously running equipment, such as air compressors and welding generators
- Mandating that certain equipment is equipped with appropriate sound attenuation devices.
- Using less noisy specific construction operations and techniques where feasible

- Selecting the quietest of alternative items of equipment (e.g., electric instead of diesel-powered equipment, hydraulic tools instead of pneumatic impact tools)
- Scheduling equipment operations to keep average noise levels low, synchronize noisiest operations with times of highest ambient noise levels, and to maintain relatively uniform noise levels
- Turning off idling equipment
- Installation of a site barricade
- Scheduling equipment operations to keep average levels low, to synchronize noisiest operations with times of highest ambient levels, and to maintain relatively uniform noise levels.
- Posting a 24-hour construction noise hotline prominently on site signage and providing such information to residents located in close proximity to the Project.

4.11.10 – Vibration

All means and methods for performing work at the Proposed Project site will be evaluated to minimize potential vibration impacts on the adjacent properties and other nearby buildings. The Proposed Project does not include any driven or vibrated piles as it primarily involves a rehabilitation of an existing structure. Vertical load bearing elements, if any are required, will be drilled rather than driven or vibrated so as to minimize any vibration. Acceptable vibration criteria will be established prior to construction, and vibration will be monitored during construction to ensure compliance with the agreed-upon standard. Proximate buildings will be surveyed prior to commencement of construction and vibration-sensitive components will be identified and monitored during construction.

4.11.11 – Site Dewatering

Site dewatering is expected to be minimal as the Proposed Project does not involve any material excavation, with the exception of two small elevator pits. Any such dewatering will be appropriately permitted through the Boston Water and Sewer Commission. Groundwater levels surrounding the site will be monitored during the construction process.

4.11.12 – Rodent Control

The City of Boston has strict ordinances in place related to rodent control measures. The city enforces the requirements established under the Massachusetts State Sanitary Code, Chapter 11, and 105 Section 108.6. Policy Number 87-4 established that the extermination of rodents shall be required for the issuance of permits for demolition, excavation, foundation, and basement rehabilitation. The Proposed Project's contractor will develop and implement a rodent control program for the Proposed Project prior to construction start, and coordinate this program with the Project Site abutters.

4.11.13 – Utilities

Connections to existing utility services will be coordinated with the appropriate utility provider as well as with the Boston Water and Sewer Commission. Dig Safe will be contacted by the Proposed Project's contractor or its appropriate subcontractors prior to any street opening work.

4.11.14 – Snow Removal

The Proposed Project's contractor will remove snow from all public areas affected by their work. This will be done daily and continuously, as necessary, to ensure that all streets and sidewalks are clear of snow and ice. Under no condition will the removed snow be disposed of on public property.

4.11.15 – Cleaning

Streets and sidewalks will be cleaned daily by hand and/or by Pelican or similar street sweeping machines, if necessary. This requirement will be in effect from the start of trucking for excavation through the completion of the foundations work and then as required during the work until the Proposed Project's completion. Hauling routes will be monitored in the vicinity of the Project Site to ensure that the Proposed Project's street cleaning program appropriately covers all impacted routes of travel.

4.11.16 – Coordination

In order to minimize the potential traffic and parking impacts of ongoing and proposed construction, The Proposed Project's construction manager will coordinate its construction impact mitigation program with other projects in the vicinity of the project site and will work cooperatively with BTM to coordinate the Proposed Project's Construction Management Plan with the CMPs of such other projects.

V - URBAN DESIGN

5.0 – URBAN DESIGN

5.1 – Site Context

The Project Site is a 12,488 square foot parcel located at 41-43 Westland Avenue, near the end of the block at Edgerly Road in the East Fenway neighborhood. The Project Site is defined to the east by the Westland Avenue Garage, to the south by Westland Avenue, to the west by a four-story residential apartment building and a vacant parking lot owned by the Proponent, and to the north by Burbank Street. The Project Site runs through the Burbank Street/Westland Avenue block and has similar brick and cast-stone facades on each public street face. The exposed portions of the east and west façade express the existing building's concrete frame and brick infill panels, and a single bay of existing window openings occurs near the center of each of these side elevations.

Urbanistically, the Westland Avenue and Burbank Street blocks are characterized by a nearly continuous street-wall of masonry residential buildings dating from the late 1800's to the early 1900's. The urban block is further defined at each end by larger building masses, typical of the East Fenway neighborhood. To the west at Hemenway Street, a large eight-story residential building (the historic Hotel Westland, circa 1907) anchors the corner at Burbank Street as well as Westland Avenue. To the east, the seventy-nine foot tall Symphony Garage and the Westland Garage (containing the "Whole Foods" market) anchor the opposite end of the block. Just further east is the Church Park apartments, an eleven-story building that separates the East Fenway neighborhood from Massachusetts Avenue.

Architecturally, the Westland Avenue and Burbank Street building fabric is generally uniform in scale and materials. While the style and character of each building may vary, each structure nevertheless creates a uniform street edge and cornice line, except at the ends of the block. The majority of the street offers a positive, pedestrian friendly experience characteristic of the Fenway area.

5.2 – Urban Design Rationale & Materiality

During the 1800's, Burbank Street (then called Astor Street) once extended and connected to Massachusetts Avenue, as did the other adjacent roads, including Norway Street and Westland Avenue. The parcel that currently contains the Westland Avenue Garage and the southern end of the Church Park apartments once held facilities for the Boston Storage Companies. This building was a massive, seven-story brick structure that extended almost to Massachusetts Avenue. In the 1960s, a reconfiguration of the area took pace pursuant to the Fenway Urban Renewal Plan. At that time, several of the neighboring streets were disconnected from Massachusetts Avenue, and the storage facility was demolished along with other adjacent structures. Since the residential structures to the west were preserved, this had the positive effect of creating an East Fenway district that is more defined, enclosed, and private – suitable for the predominately residential neighborhood. Today, the neighborhood continues to thrive with a mix of high-density housing, retail services, and public parks. Interestingly, the Symphony Garage - though generally inconsistent with the overwhelmingly residential nature of uses in the East Fenway area, was not taken or demolished by the BRA as part of the Urban Renewal program.

The massing and design for the proposed 41 Westland Avenue project is consistent with the type of moderately-scaled high-quality streetscape environment that typifies the East Fenway community. The existing garage will be fully rehabilitated and converted to residential

use and a modest rooftop addition will be added to increase the number of homeownership units in the area and create a more contemporary interpretation of the existing garage's somewhat muscular exterior appearance. Existing windows will be replaced, and the existing building's masonry exterior will be restored. New windows (some consisting of fire-rated glass to achieve required exterior wall ratings) will also be created along the eastern and western elevations where appropriate and allowed under the 8th Edition of the Massachusetts State Building Code in order to provide additional natural light to the dwelling units within the Proposed Project.

Along the street front, the existing ground floor elevations of the Symphony Garage will be restored and reconfigured to better suit the proposed residential use of the site. On Westland Avenue, the existing garage entrance will be reduced in size to reflect the much lower volume of vehicular traffic anticipated to occur in the future condition, and the westerly office storefront will be converted to a residential lobby providing access for residents to the building's elevator core, mailroom, and other resident spaces. The storefront currently serving the easterly ground floor office space will be converted to a solid panel and punched window system that will provide visual screening for the continued ground-floor garage use. On Burbank Street, the existing garage entrance will be reduced in size to reflect the reduced volume of vehicular traffic occurring at the Proposed Project site as a result of the existing structure's conversion from commercial parking to residential use. The existing ground floor materials will be restored and certain historic artifacts such as the cast-iron wheel guards will be retained and incorporated into the new ground floor treatment.

New sidewalks and streetscape accoutrements will be installed along Westland Avenue and Burbank Street as part of the Proposed Project's construction, in order to further enhance the pedestrian environment in front of the Proposed Project's street frontage.

A one-story rooftop addition framed in light-gauge steel will be added to the top of the existing structure and will provide four additional condominium units. This new structure will be set back between 10 and 30 feet from the existing parapet edge of the Symphony Garage in order to minimize its visual effect and to provide outdoor space for these rooftop homes. The rooftop addition will be clad in a matte-finish metal panel system that will complement the rich brick and cast-stone façade of the existing structure. The difference in materiality is intentional; the Proposed Project architect prefers to complement existing historic building fabric with modern and differentiable materials, rather than mimic historic materials with new construction that seeks to blend in with its context.

A partially enclosed but fully screened mechanical level will be constructed atop a portion of the proposed residential rooftop addition; this area will also be clad in a similar metal panel system and screened where appropriate with a perforated metal screen system that will reflect the same general quality of finish and exterior appearance as the solid enclosure. This mechanical level will house the Proposed Project's elevator machine room, boilers, cooling tower, and various other mechanical equipment needed to serve the Proposed Project's residential units. None of this equipment will be visible from the surrounding streets.

5.3 – Public Realm Improvements

The Proposed Project is located in an existing 6-story commercial parking garage, one of the few such non-residential structures in the East Fenway neighborhood. The Project Site's current use – a commercial parking garage – detracts from the quality of the residential and

streetscape environments on Westland Avenue and Burbank Street and is generally inconsistent with the predominantly residential land uses that surround the Project Site.

The Proposed Project will reduce the size of the unsightly existing commercial parking entrances/exits on both Westland Avenue and Burbank Street, and will create a more continuous and high-quality street wall. It will be composed of high quality materials, and its massing – with a set-back rooftop addition – will respect the importance of sunlight and skyplane setbacks. The Proposed Project will improve and beautify the public realm in the vicinity of the Project Site by regularizing and improving the sidewalk and curb line in front of the existing garage and adding new street trees, all subject to approval of applicable City of Boston agencies. Furthermore, the Proponent is committed to helping to maintain the East Fenway community's existing public open spaces, and will make a contribution to the enhancement and maintenance of the Harry Ellis Dickson Park located at the confluence of Westland Avenue and Edgerly Road, gateway to the East Fenway neighborhood.

VI - INFRASTRUCTURE

6.0 – INFRASTRUCTURE ANALYSIS

In its scoping determination for the PNF, the BRA typically requires an infrastructure analysis addressing a proposed project’s impact on the capacity and adequacy of the existing water, sewage, and drainage utility systems. The following sections describe the capacity of the existing utility infrastructure surrounding the Project Site and demonstrate that these systems contain sufficient capacity to service the Proposed Project.

6.1 – Sewer and Drainage Systems

6.1.1 – Existing Conditions

The existing sewer and drainage systems that serve the site and surrounding area are owned and operated by the BWSC. The Project Site has frontage on both Burbank Street and Westland Avenue and will utilize infrastructure in both streets. The Proposed Project will connect to Burbank Street for sanitary sewer and Westland Avenue for drainage.

Westland Avenue

Westland Avenue includes a 24-inch x 30-inch sewer main that flows in a west to east direction that eventually connects to a 30-inch x 39-inch combined sewer in St. Stephen Street.

Westland Avenue includes two separate drainage systems consisting of a 12-inch drain line on the north side of the street and a 15-inch drain line on the south side of the street. Both drainage systems flow in an east to west direction and eventually connect to the drainage system located at the intersection of Westland Avenue and Hemenway Street.

Burbank Street

Burbank Street includes a 30-inch x 36-inch sewer line that flows in an east to west direction and eventually connects to the 30-inch x 36 inch sewer in Hemenway Street. It also includes a 15-inch drain line that flows in an east to west direction and eventually connects to the same drainage system at the Westland Avenue/Hemenway Street intersection.

6.1.2 – Sanitary Sewerage Generation

The Proposed Project will generate approximately 7,150 gallons per day (gpd) based on sewage generation rates listed in the Massachusetts State Environmental Code (Title V) 310 CMR 15.203. The current sewer generation at the site is minimal due to its current use as a parking garage.

A summary of the sewerage generation for the Proposed Project is provided in Table 6-1.

Table 6-1 – SANITARY SEWERAGE GENERATION				
Use	Units	Total Number of Bedrooms	Sewer Generation Rate	Total GPD
Residential	1BR = 31 2BR = 17 Total = 48	65	110 gpd/bedroom	7,150 gpd

6.1.3 – Sanitary Sewer System Capacity Analysis

As noted above, the Proposed Project will connect to the existing 24 x 30-inch sewer in Burbank Street. The Proposed Project will generate at peak conditions less than 15 gpm of sanitary sewer that will not represent a significant burden on the capacity of the existing sewage system.

6.1.4 – Sewer and Storm Water Mitigation

The Proposed Project is located in the Groundwater Conservation Overlay District (GCOD), established by Article 32 of the Boston Zoning Code. Compliance with the provisions of Article 32 will ensure that the Proposed Project will have no negative impact on groundwater levels in the immediate vicinity of the site and will represent a significant reduction in stormwater discharge to the BWSC drainage network.

The groundwater recharge system will consist of a series of modular molded plastic infiltration chambers located below the existing garage entrance on Westland Avenue. The system will provide capacity to store and recharge a volume of stormwater equivalent to one inch of stormwater over the entire lot area in accordance with Article 32 requirements for substantial rehabilitation projects.

In addition to the benefits of the infiltration system, the Proposed Project will implement multiple measures to mitigate impacts on groundwater as well as reduce sanitary sewer generation as outlined below:

- The Proposed Project will have no significant below-grade construction so construction dewatering will be minimal or entirely unnecessary.
- The Proposed Project will minimize sewage generation through the use of low-flow fixtures and sustainable design strategies consistent with the requirements of Article 37.

6.1.5 – System Connections

The Proponent will coordinate with the BWSC on the final design of the proposed drainage and sewer connections, including the Article 32 recharge system. All appropriate permits and approvals will be obtained prior to construction. Connections will be designed and constructed to minimize any impacts on the surrounding neighborhood and businesses.

Construction will be phased and properly scheduled to minimize street openings in both Burbank Street and Westland Avenue. All work within the public right of way will be coordinated with the BWSC and Boston DPW prior to construction.

6.2 – Water Distribution System

6.2.1 – Existing Conditions

The water distribution systems in Westland Avenue and Burbank Street are owned and operated by the BWSC. There are two parallel 12-inch water mains located in Burbank Street and a single 12-inch water main in Westland Avenue.

Record plans indicate that the existing garage is currently served by a 1-1/2" domestic service from Burbank Street. The Proposed Project will connect to the existing water mains in Burbank Street as discussed later in this section.

6.2.2 – Anticipated Water Demand

The anticipated water demand for the Proposed Project is estimated at 110% of the proposed sewer generation. Based on this estimate the average potable water demand for the Proposed Project is approximately 7,865 gallons per day.

6.2.3 - Water Service Connections

The Proposed Project will connect to the existing water distribution mains in Burbank Street. Based on previous discussions with the BWSC for the adjacent, previously approved 44 Burbank Street project, the Proposed Project will include separate connections to each of the water mains in Burbank Street.

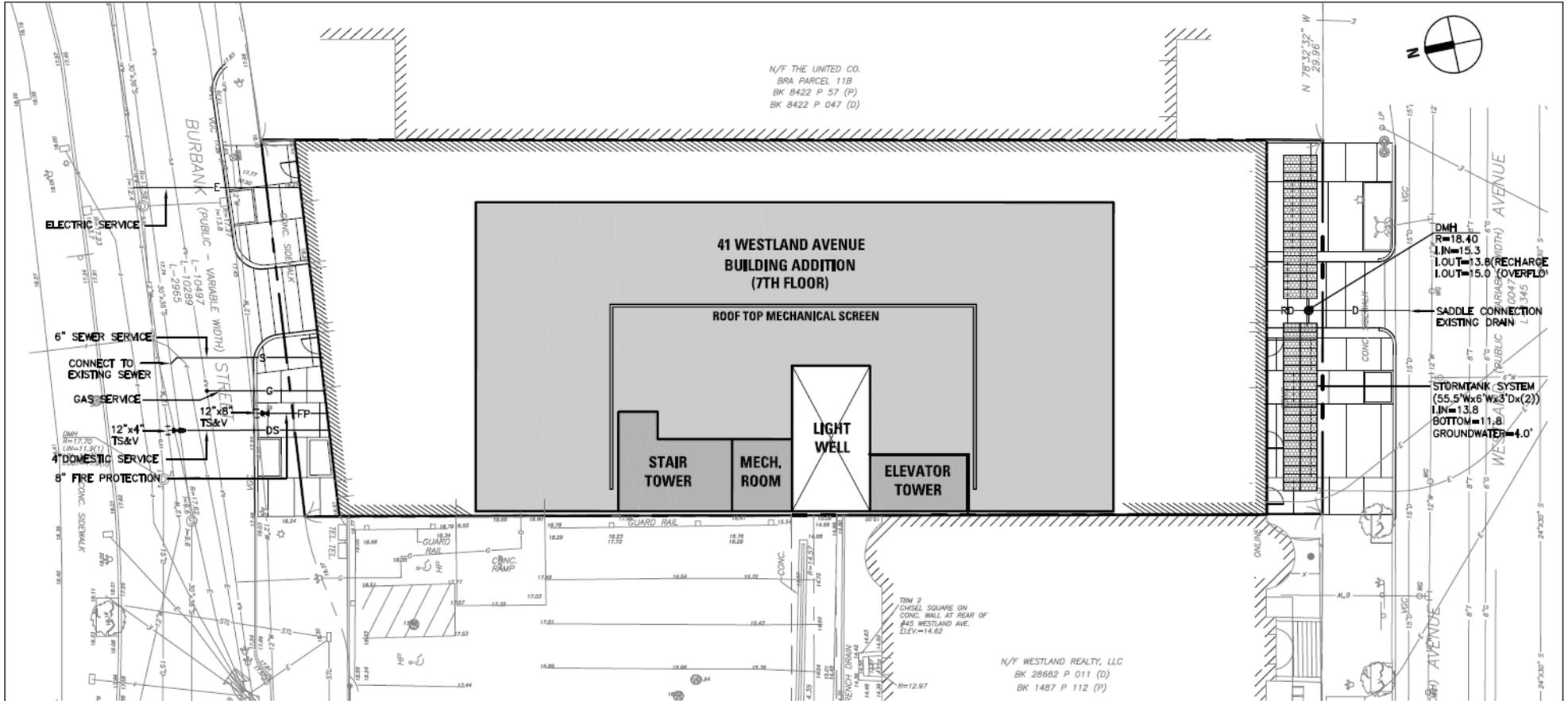
The new 4-inch domestic service will connect to the 12-inch main located on the south side of Burbank Street. The 8-inch fire protection service will connect to the 12-inch main located on the north side. Detail and confirmation of the anticipated connections will be discussed with the BWSC prior to construction.

All existing water connections to the Symphony Garage will be cut and capped at the main as required by the BWSC. Sufficient service capacity to meet all of the anticipated water demands of the building exist in these two mains.

6.3 – Additional Utility Connections

Sufficient utility infrastructure for electric, telephone, cable and gas services exist in both Westland Avenue and Burbank Street. The Proposed Project is currently planning to utilize utility infrastructure within Burbank Street and will coordinate with each respective utility provider accordingly.

Figure 6.1 – Proposed Utility Infrastructure & Groundwater Recharge System



VII - SUSTAINABILITY

7.0 – SUSTAINABILITY

Recognizing the importance of sustainability in the built environment as a means of addressing the issue of global climate change, the Proponent is committed to advancing the City of Boston's green building agenda. Enacted by Mayor Menino in early 2007, Article 37 of the Boston Zoning Code requires all new development projects that are subject to Article 80B Large Project Review to incorporate sustainable development principles consistent with LEED certification. Because the Proposed Project is subject to Article 80B Large Project Review, the Proposed Project is subject to Article 37 review and compliance.

The Proposed Project is expected to achieve a minimum rating of Certified under the LEED-New Construction rating system established and administered by the United States Green Building Council (USGBC). A LEED registrar has been retained to manage the Project's Integrated Design Process, a guiding principle of sustainable design and construction, and administer the LEED registration process with the USGBC.

A preliminary LEED-NC version 3.0 checklist is included below, and is being submitted separately to the BRA for review pursuant to Code Section 37-5.

In addition to incorporating sustainable development principles that reflect the specific requirements of the LEED rating system, the Proposed Project also incorporates several other sustainable design elements for which no LEED credit can be claimed but that nonetheless enhance the long-term sustainability of the Project by promoting a sustainable lifestyle for its residents. These design elements include:

- Ample covered, secure bicycle storage located in the adjacent parking garage, exceeding the levels required to satisfy LEED-NC credit SS-4.2.
- An enlarged service room located within the Project's ground floor that is designed to accommodate both traditional rubbish containers and multiple recycling containers so that waste streams can be easily separated on-site.
- Creation of a WalkBoston map providing concise information to residents about the proximity of key destinations; this map will be provided to all new residents and distributed periodically by the Proposed Project's property manager.
- Inclusion of a common space in the Proposed Project accessible to all of the dwelling units, and roof terraces large enough to accommodate rooftop gardens that are accessible to the penthouse dwelling units.

These design elements demonstrate the Proponent's belief that sustainability in the built environment transcends the LEED rating system and also requires development projects to be designed to help their long-term occupants adopt environmentally sustainable lifestyles and consumer behavior.

LEED-NC v3.0 Preliminary Project Checklist

Catamount Westland LLC--Westland/Symphony Garage Residential Renovation

41 Westland Ave, Boston

Preliminary Review Only - Subject to Change

Yes ? No

13 8 5			Sustainable Sites	26 Points
Y			Prereq 1 Construction Activity Pollution Prevention	Required
1			Credit 1 Site Selection	1
5			Credit 2 Development Density & 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 & 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
2 2 6			Water Efficiency	10 Points
Y			Prereq 1 Water Use Reduction, 20% Reduction	Required
		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
5 18 12			Energy & Atmosphere	35 Points
Y			Prereq 1 Fundamental Commissioning of the Building Energy Systems	Required
Y			Prereq 2 Minimum Energy Performance	Required
Y			Prereq 3 Fundamental Refrigerant Management	Required
1	18		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 & Verification	3
		2	Credit 6 Green Power	2
9 2 3			Materials & Resources	14 Points
Y			Prereq 1 Storage & Collection of Recyclables	Required
3			Credit 1.1 Building Reuse, Maintain Existing Walls, Floors & 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
2			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
10 1 4			Indoor Environmental Quality	15 Points
Y			Prereq 1 Minimum IAQ Performance	Required
Y			Prereq 2 Environmental Tobacco Smoke (ETS) Control	Required
		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 & Sealants	1
1			Credit 4.2 Low-Emitting Materials, Paints & Coatings	1
1			Credit 4.3 Low-Emitting Materials, Flooring Systems	1
1			Credit 4.4 Low-Emitting Materials, Composite Wood & Agrifiber Products	1
1			Credit 5 Indoor Chemical & 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 & Views , Daylight 75% of Spaces	1
		1	Credit 8.2 Daylight & Views , Views for 90% of Spaces	1

2	4		Innovation & Design Process	6 Points
1			Credit 1.1 95% Construction Waste Management	1
	1		Credit 1.2 Innovation in Design	1
	1		Credit 1.3 Innovation in Design	1
	1		Credit 1.4 Innovation in Design	1
	1		Credit 1.5 Innovation in Design	1
1			Credit 2 LEED® Accredited Professional	1

1	2	1	Regional Priority	4 Points
	1		Credit 1.1 Regional Priority: SSc6.1	1
		1	Credit 1.2 Regional Priority: SSc 7.1	1
	1		Credit 1.3 Regional Priority: SSc 7.2	1
1			Credit 1.4 Regional Priority: MR c1.1 75%	1

42	37	31	Project Totals (pre-certification estimates)	110 Points
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Yes ? No **Certified** 40-49 points **Silver** 50-59 points **Gold** 60-79 points **Platinum** 80-110 points

VIII – HISTORIC RESOURCES

8.0 – HISTORIC AND ARCHAEOLOGICAL RESOURCES

8.1 – Historic Resources

8.1.1 Buildings on the Project Site

Symphony Garage, 41-43 Westland Avenue

Occupying a through-block site between Westland Avenue and Burbank Street in the East Fenway neighborhood of the City of Boston, the Symphony Garage is an early example of multi-story elevated commercial parking structures in the City of Boston.

Constructed in 1919, the Symphony Garage building was designed by Boston architect Frederick A. Norcross, then with offices at 46 Cornhill, for Ellis L. Snider, a Boston landowner/builder and frequent client of Norcross'. The simply ornamented structure was constructed with a reinforced concrete frame with turned-down perimeter beams on the two party-wall elevations and upturned perimeter beams on the public way elevations. All elevations have brick infill panels and punched windows of various sizes. The Westland Avenue and Burbank Street elevations are clad in a decorative brick facade that exhibits simple ornamental brick detailing customary for the era of construction. The ground floor of the Symphony Garage is clad in decorative cast-stone panels. The windows on the Westland Avenue and Burbank Street elevations are modern aluminum storefront types dating to approximately 1990.

Frederick A. Norcross was an exceptionally prolific local architect in the early decades of the twentieth century, having designed dozens of buildings in and around the City of Boston, including many in the Fenway neighborhood. Norcross, a native of Brighton, practiced from ca. 1890 until his death in 1929.

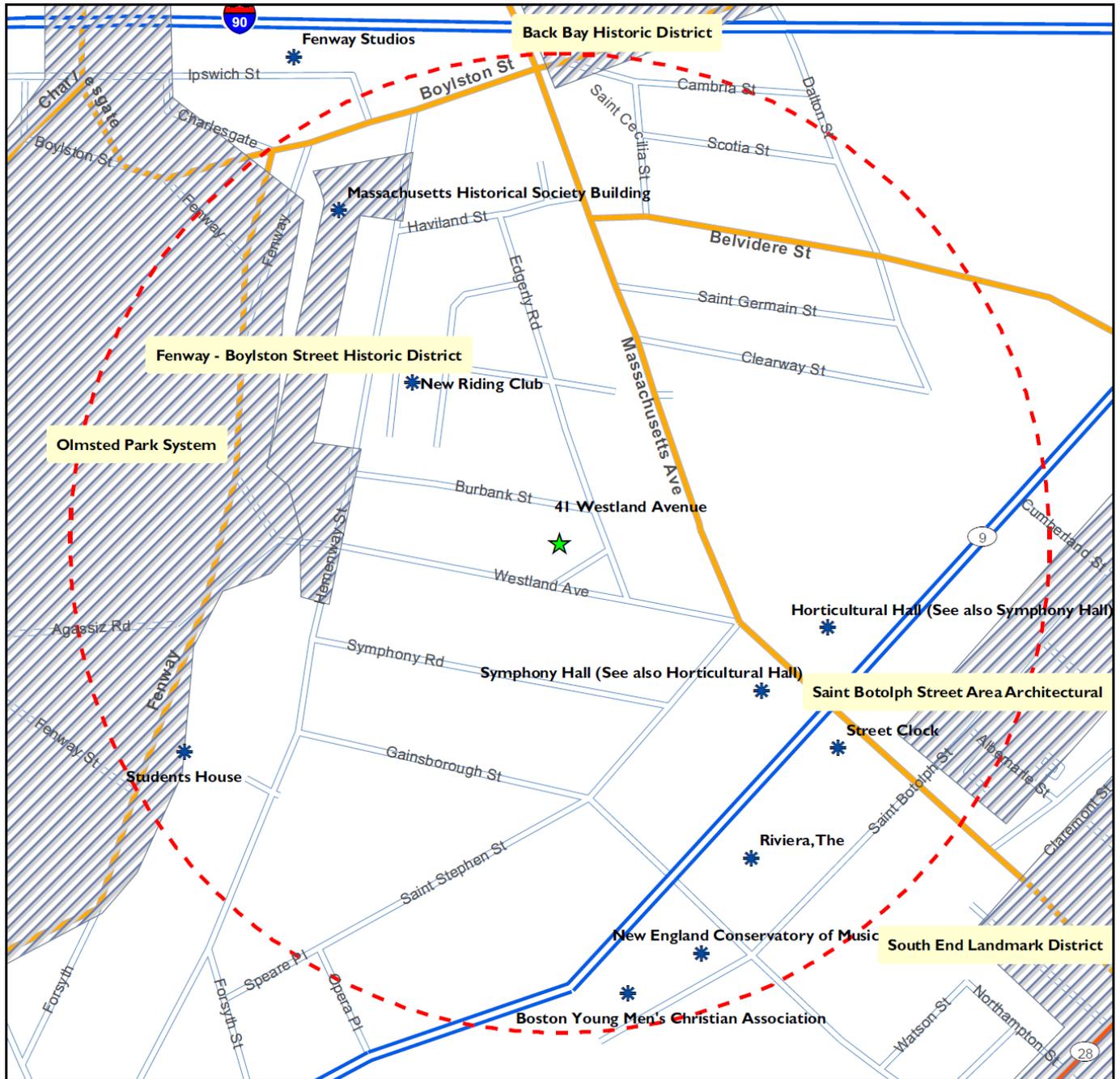
A review of the Boston Landmarks Commission's 1984 survey of the Fenway neighborhood found that an inventory form was not prepared for the existing building.

8.1.2 – Historic Resources in the Proposed Project Vicinity

Table 8-1: STATE AND NATIONAL REGISTER RESOURCES	
Historic Resource	Address
Boston Young Men's Christian Association	312-320 Huntington Avenue
New England Conservatory of Music	290 Huntington Avenue
The New Riding Club	52 Hemenway Street
Students House	96 The Fenway
Symphony Hall	301 Massachusetts Avenue
Horticultural Hall	300 Massachusetts Avenue
The Riviera	270 Huntington Avenue
Massachusetts Historical Society Building	1154 Boylston Street

Street Clock (BLC Local Landmark)	333 Massachusetts Avenue
Back Bay Fens (Olmstead Park System)	Roughly bounded by The Fenway, Park Drive, Brookline Avenue Charlesgate East, Charlesgate West, and Beacon Street
Fenway-Boylston Street Historic District	Roughly bounded by The Fenway, Boylston and Hemenway Streets, and Westland Avenue
Back Bay Historic District	Roughly bounded by the Charles River, Arlington, Providence, Boylston and Newbury Streets, and Charlesgate East
St. Botolph Architectural Conservation District (BLC Local HD)	Roughly bounded by Albemarle, Harcourt, and St. Botolph Streets, and Southwest Corridor Park

Figure 8-1 – Historical Resources Map



Legend
 ★ Project Site
 [Dashed Red Line] Radius at 1/4 mile

★ Historic Sites
 [Hatched Box] Historic Districts
 MHC

Source: Selected data from USGS, NPS, and EBI.

8.2 – Archaeological Resources

The Project Site consists of a previously developed urban parcel. Due to previous development activities and disturbances, it is not anticipated that the Project Site contains significant archaeological resources.

8.3 – Impacts to Historic Resources

The Proposed Project will not create any adverse impact on any City of Boston Landmarks or Landmark Districts, Massachusetts Historic Register Districts, National Historic Register Districts, or resources listed on the National Register of Historic Places.

The Proposed Project's small residential rooftop addition will not cause any visual, environmental, shadow, or other impacts to nearby historic resources.

8.4 – Status of Project Review with Historical Agencies

8.4.1 – Massachusetts Historical Commission

The Proposed Project will not require state licenses, permits and/or approvals and therefore does not trigger MEPA review or review by the Massachusetts Historical Commission pursuant to Massachusetts General Laws Chapter 9, §26-27C, as amended by Chapter 254 of the Acts of 1988 (950 CMR 71.00).

8.4.2 – Boston Landmarks Commission

The Proposed Project is not located in a Neighborhood Design Overlay District; as a result the Project is not subject to design review by the staff of the Boston Landmarks Commission. Because the structure of the existing Symphony Garage is being retained in its entirety, the Proposed Project does not require review under Article 85, the City of Boston's Demolition Delay statute.

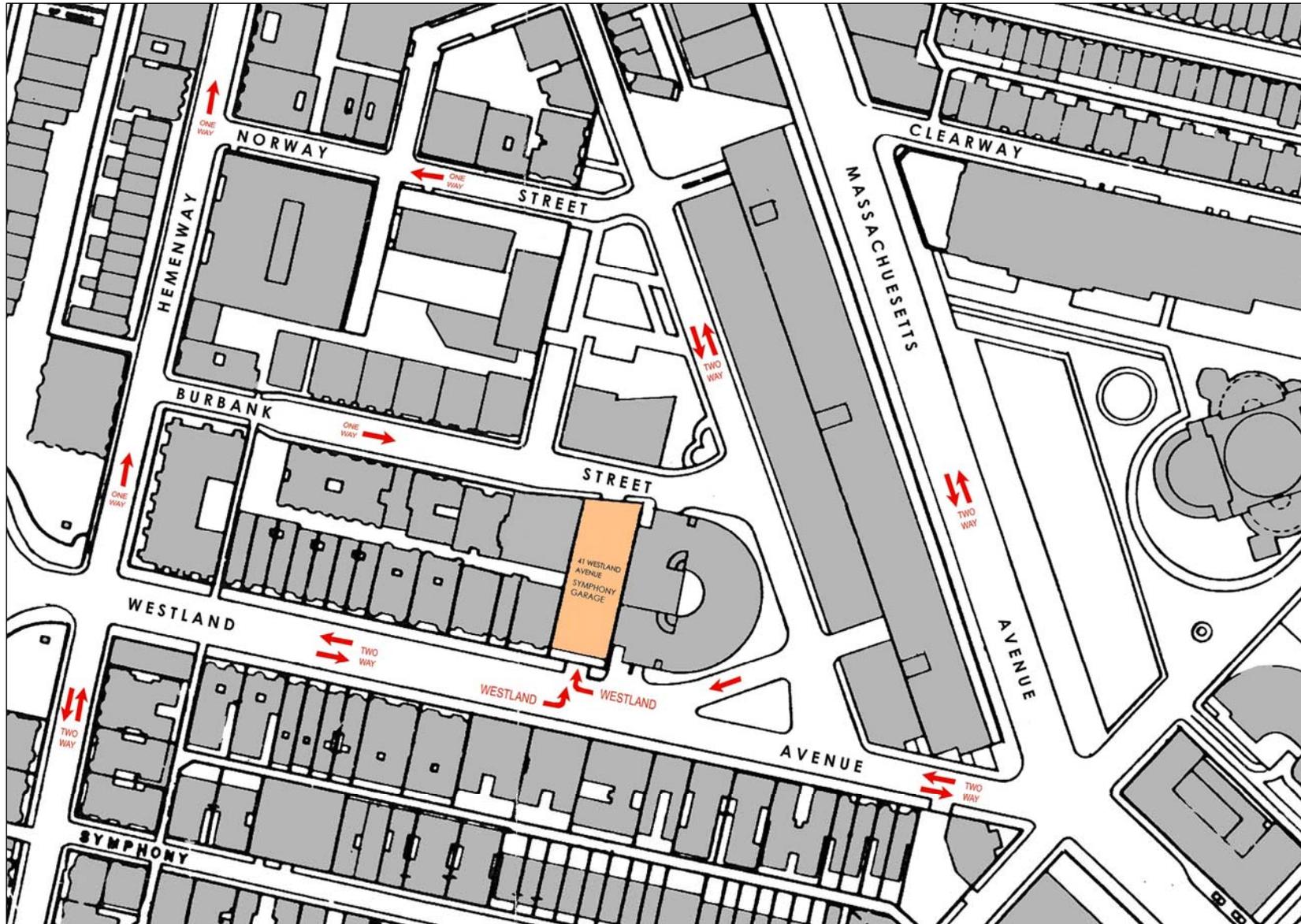
IX - EXHIBITS



Site Context Images – Westland Avenue Facade



Site Context Images – Burbank Street Facade



Site Context Plan



Proposed Site Plan



SMMA
STRUCTURAL MECHANICAL MARINE ARCHITECTS

PROPOSED ELEVATION: SOUTH

DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY



SMMA
STRUCTURAL METALS MASSACHUSETTS ASSOCIATION

PROPOSED ELEVATION: NORTH

DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY

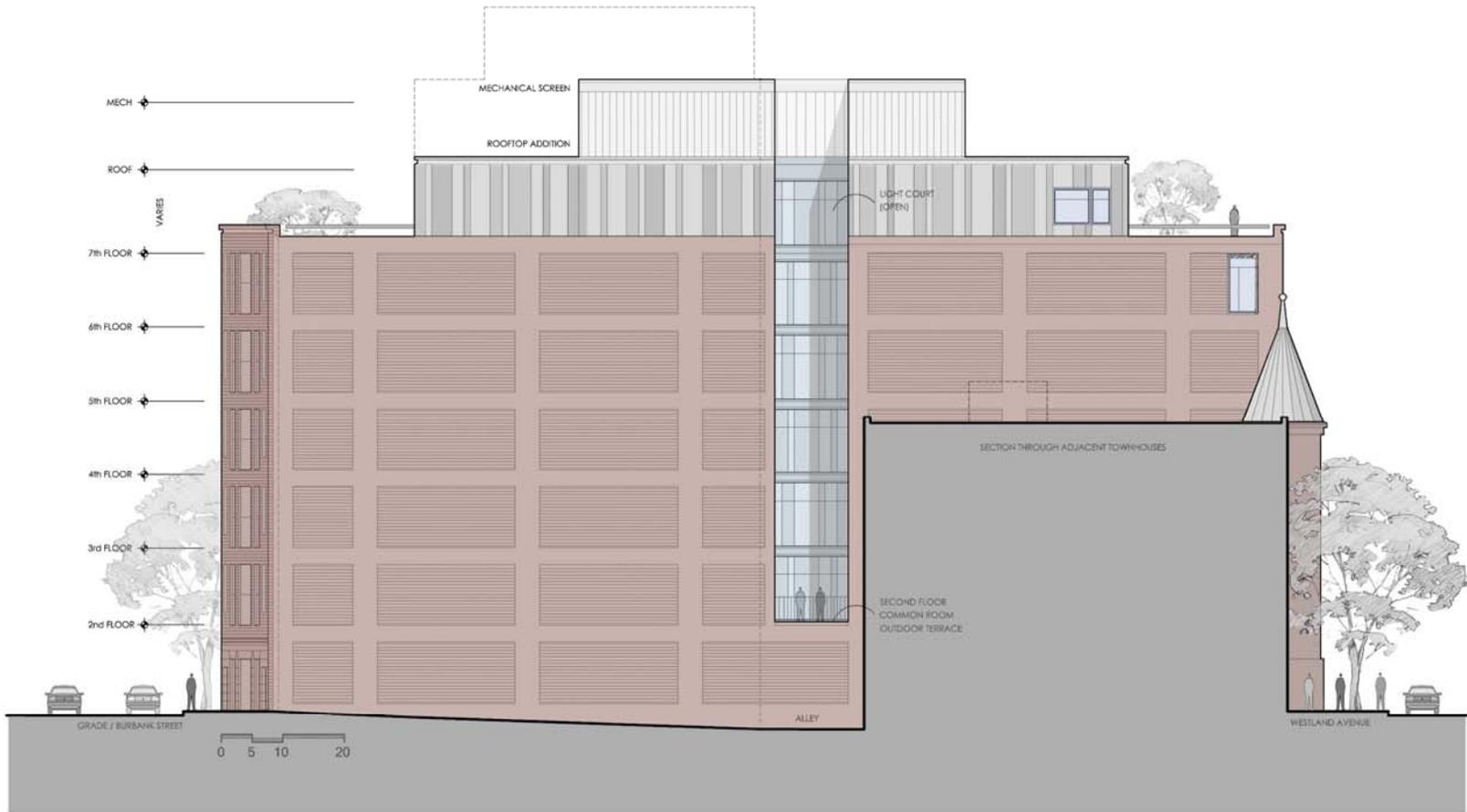


SMMA

PROPOSED ELEVATION: EAST

DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY

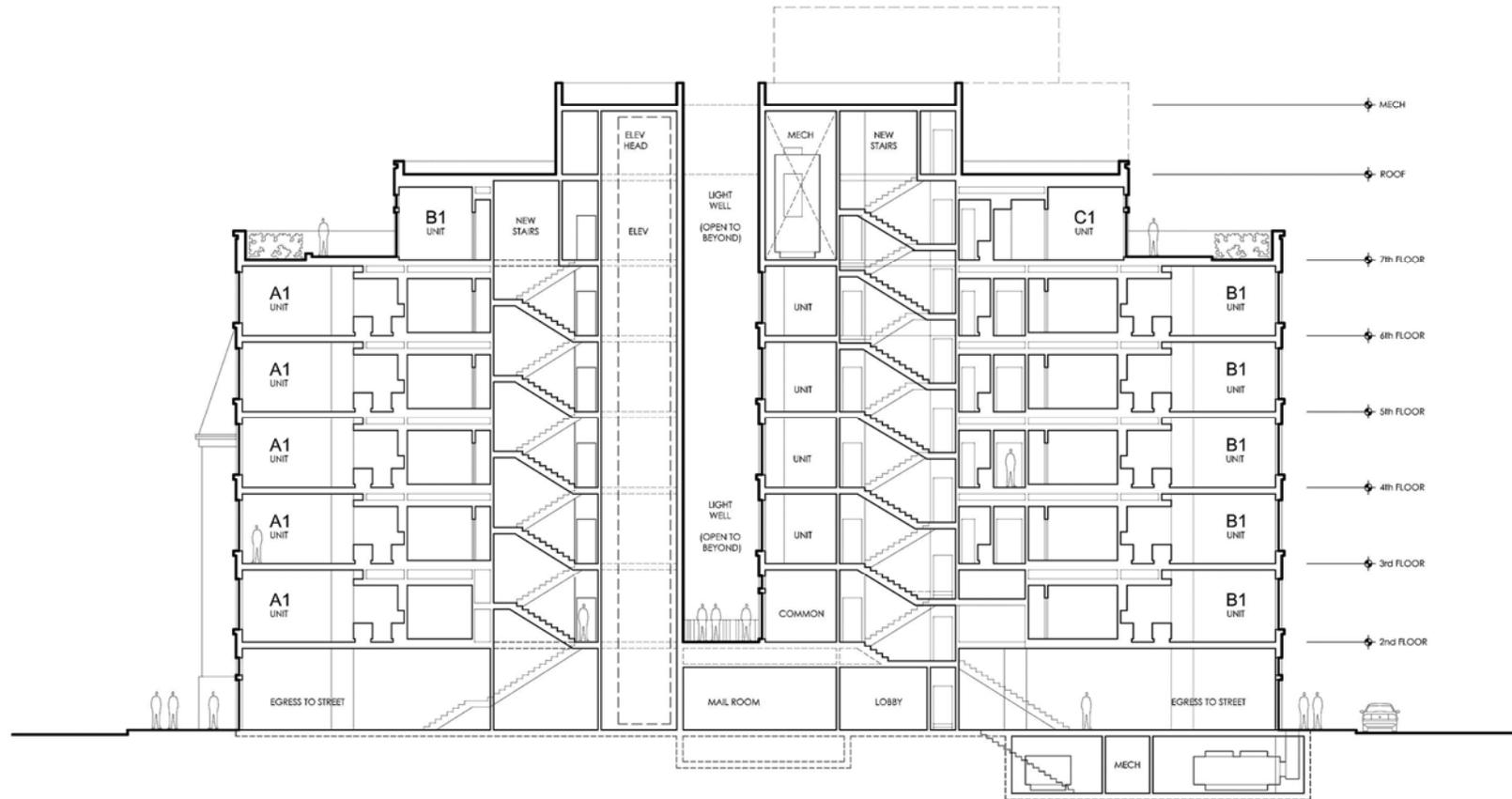


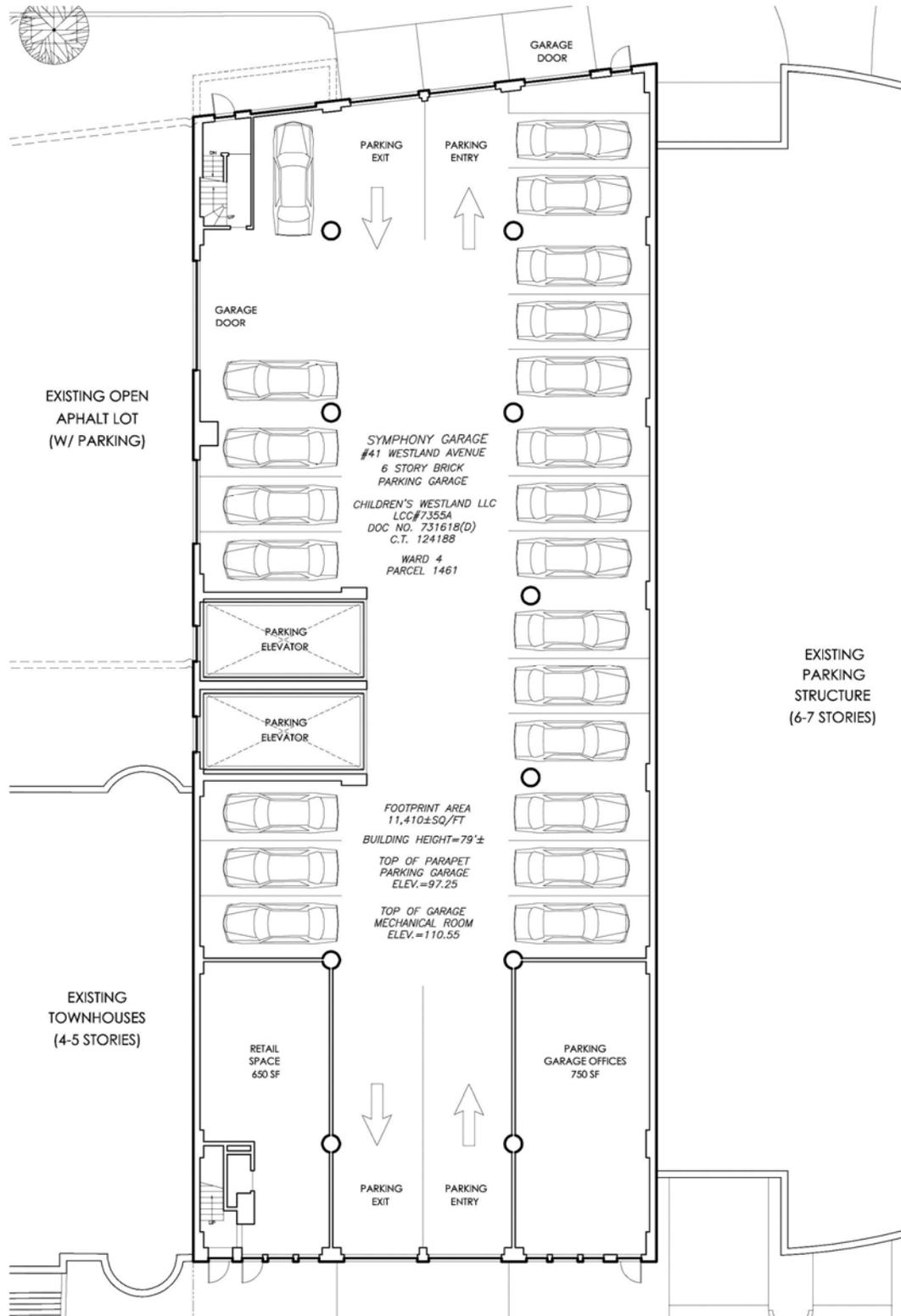
SMMA
SOUTH METRO MAIN & WEST ASSOCIATES

PROPOSED ELEVATION: WEST

DOLEZAL
DESIGN + DEVELOPMENT

41 WESTLAND AVENUE, FENWAY



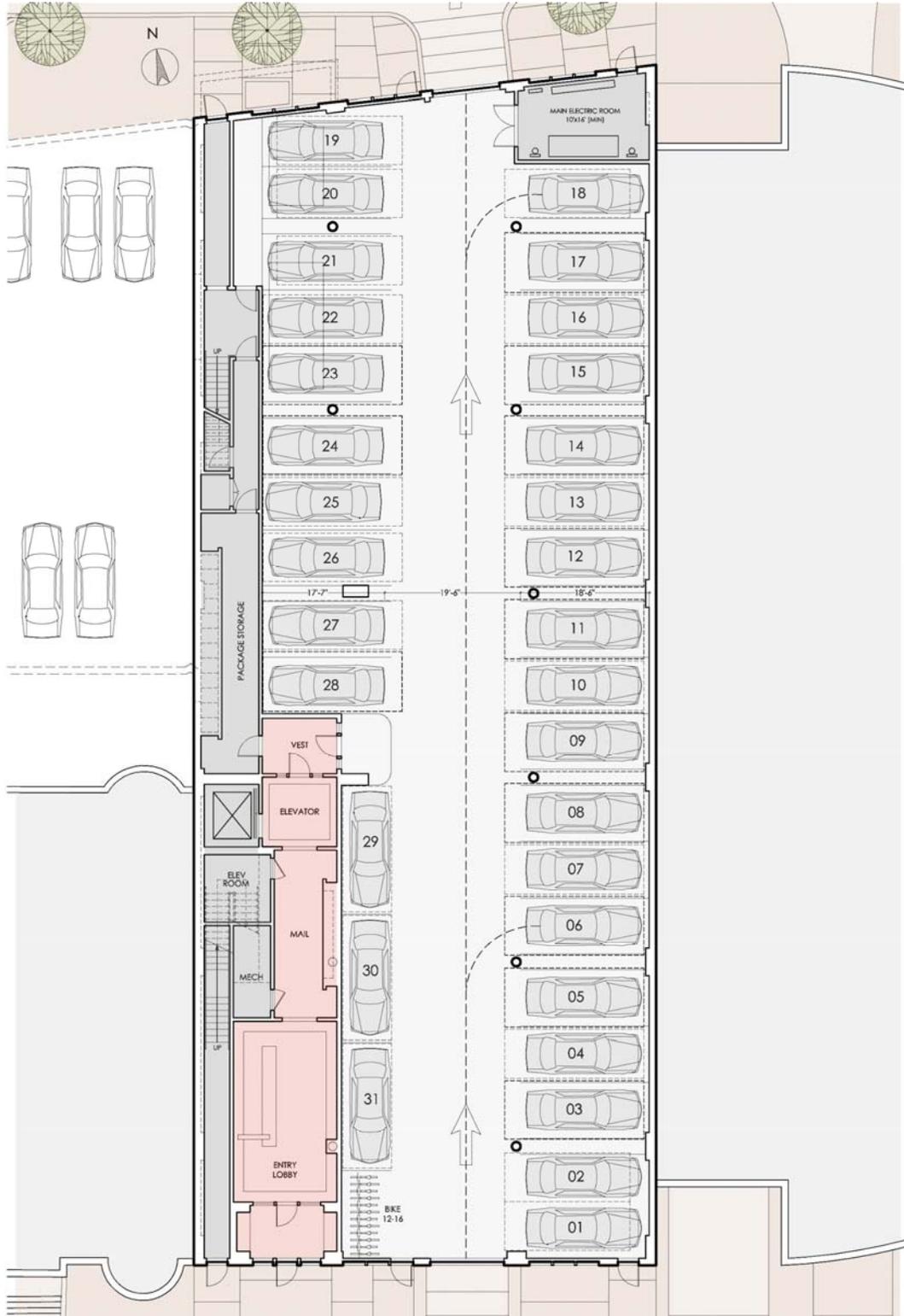


DOLEZAL
DESIGN + DEVELOPMENT

EXISTING PLAN: FIRST FLOOR

41 WESTLAND AVENUE, FENWAY

SMMA
STRUCTURAL MECHANICAL
ARCHITECTURAL

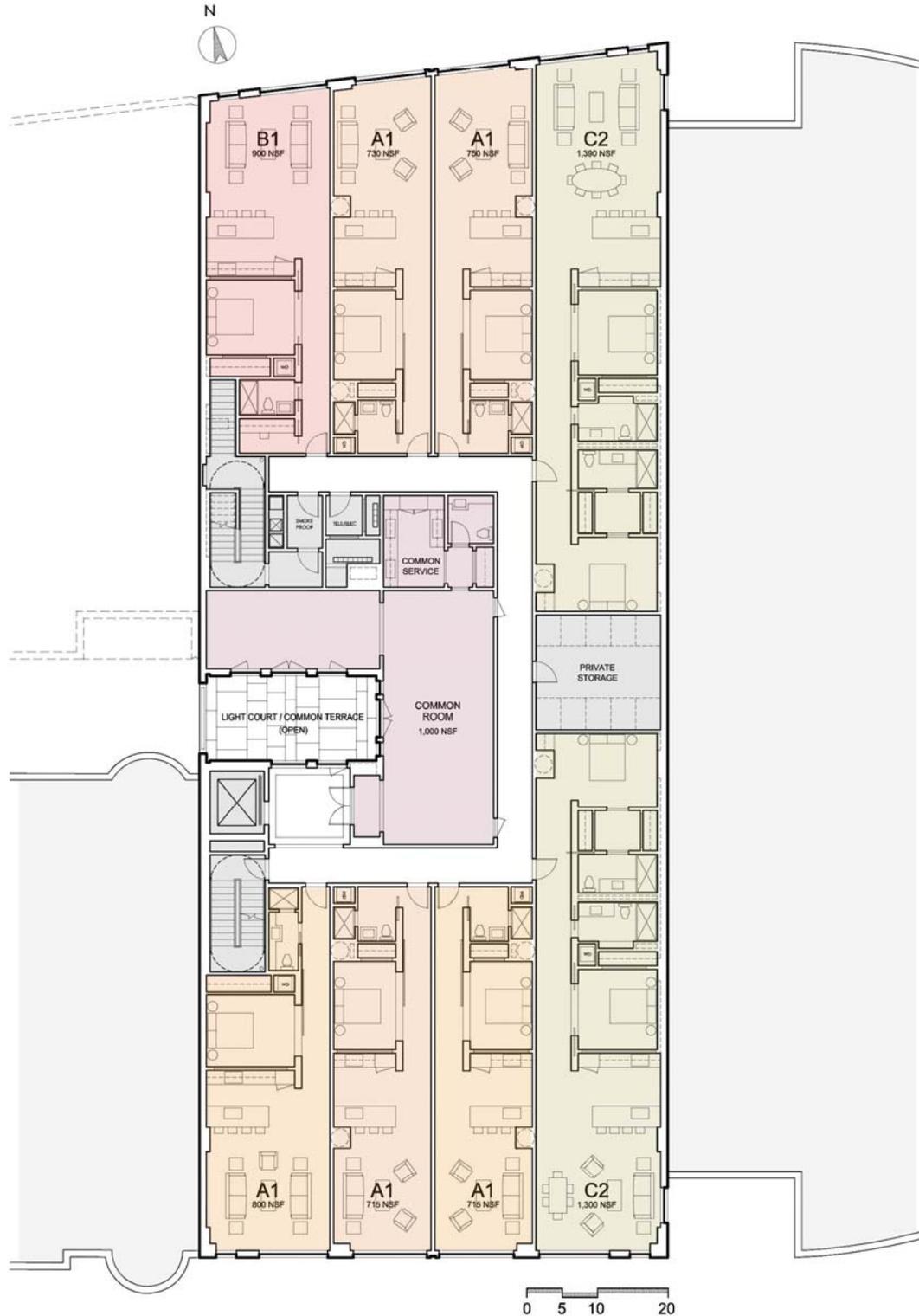


DOLEZAL
DESIGN + DEVELOPMENT

PROPOSED PLAN: GROUND FLOOR

41 WESTLAND AVENUE, FENWAY

SMMA
SOUTH METROPOLITAN ARCHITECTURE



DOLEZAL
DESIGN + DEVELOPMENT

PROPOSED PLAN: SECOND FLOOR

41 WESTLAND AVENUE, FENWAY

SMMA
SOUTH METROPOLITAN ARCHITECTURE

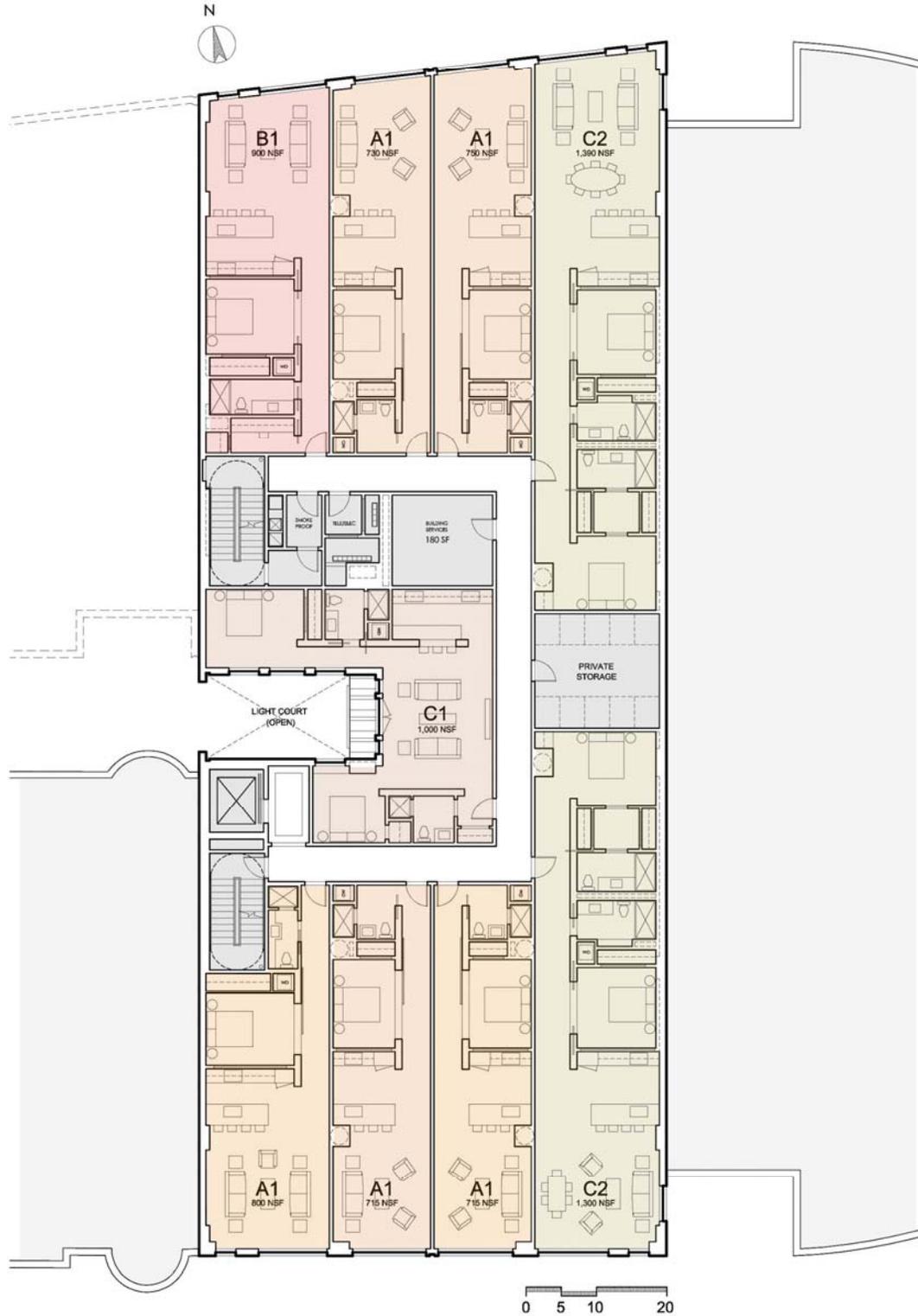


DOLEZAL
DESIGN + DEVELOPMENT

PROPOSED PLAN: THIRD FLOOR

41 WESTLAND AVENUE, FENWAY

SMMA
SOUTH METROPOLITAN ARCHITECTURAL ASSOCIATION

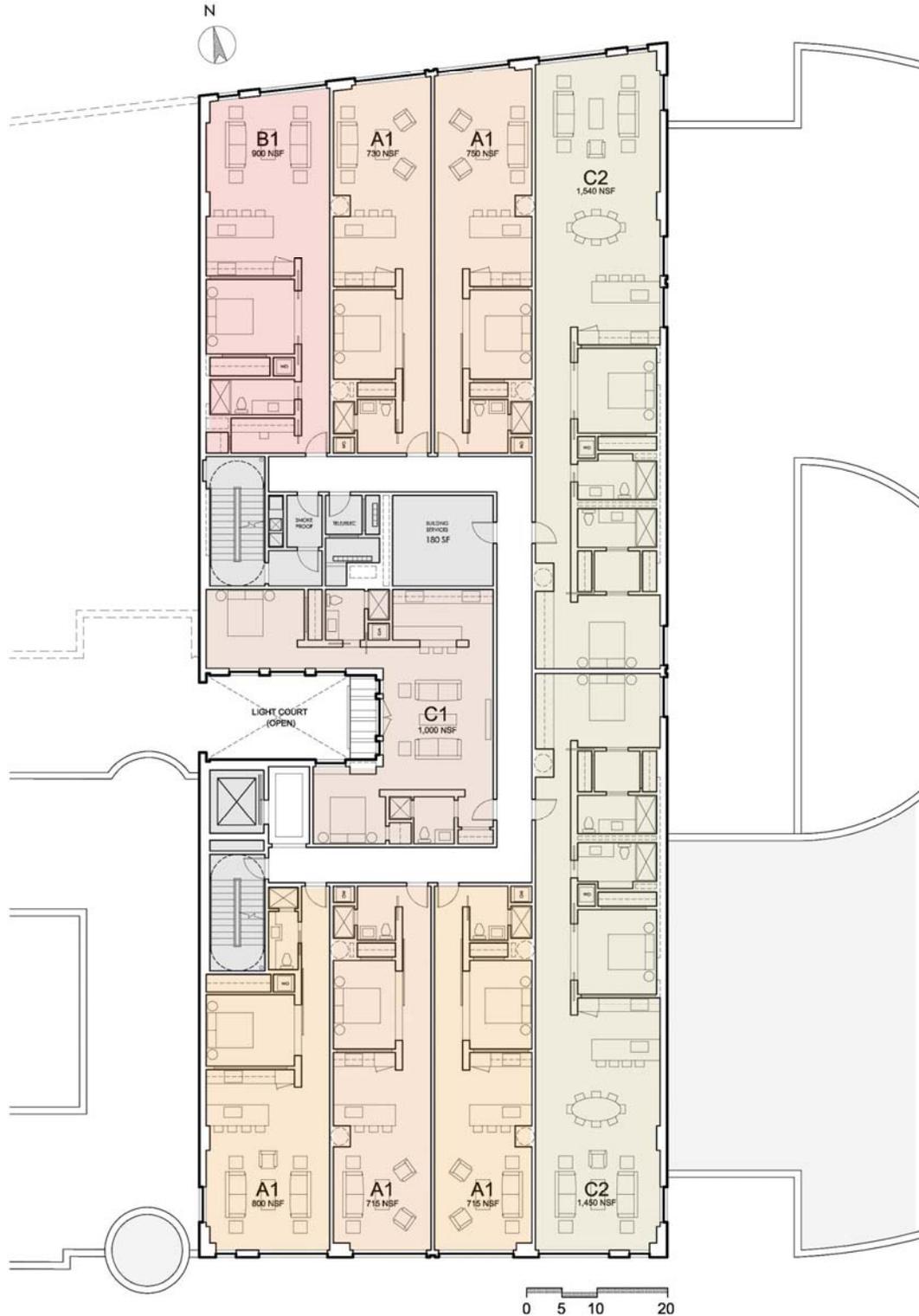


DOLEZAL
DESIGN + DEVELOPMENT

PROPOSED PLAN: FOURTH FLOOR

41 WESTLAND AVENUE, FENWAY

SMMA
SOUTH METROPOLITAN ARCHITECTS

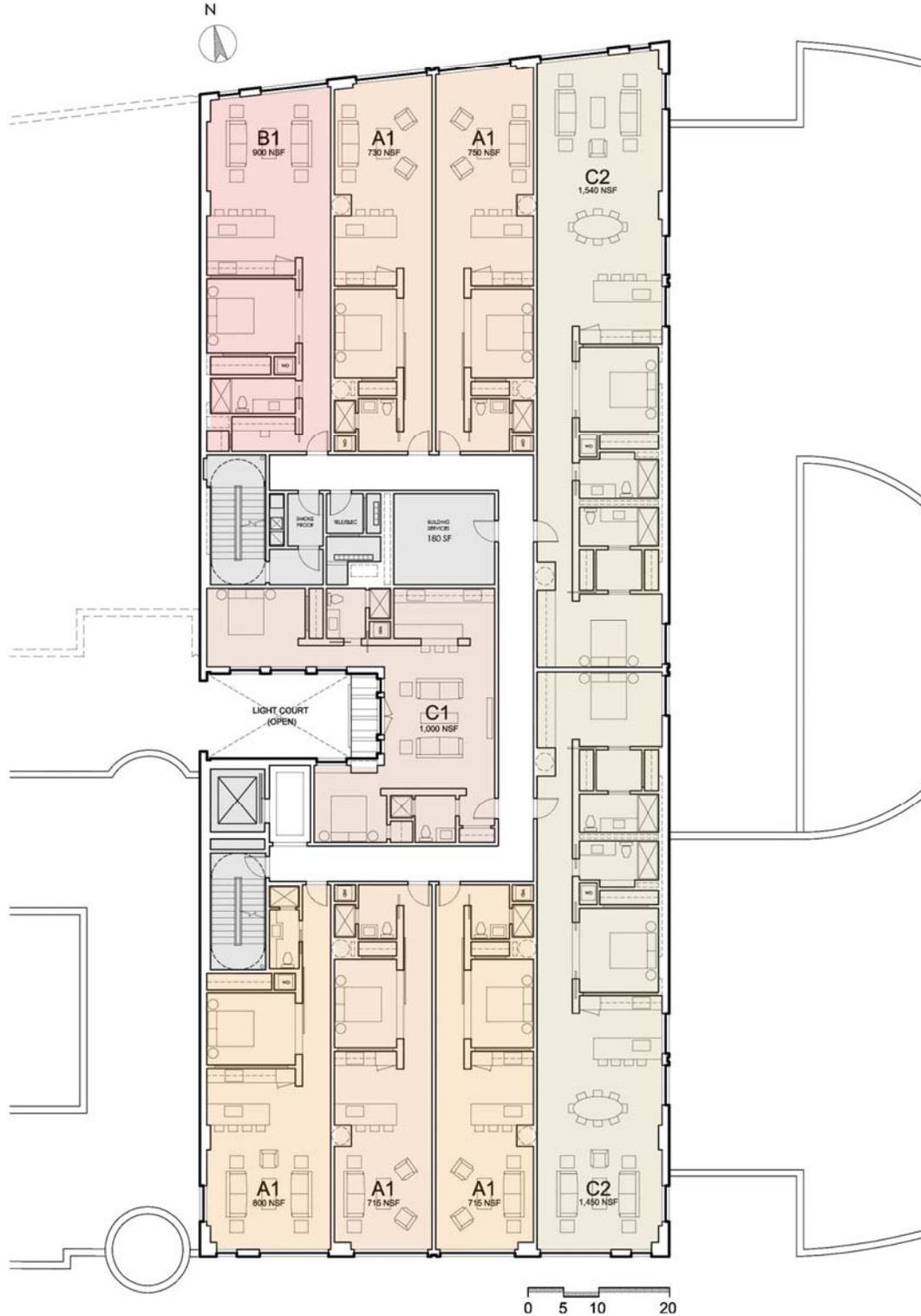


DOLEZAL
DESIGN + DEVELOPMENT

PROPOSED PLAN: FIFTH FLOOR

41 WESTLAND AVENUE, FENWAY

SMMA
SOUTH METROPOLITAN ARCHITECTURAL ASSOCIATION

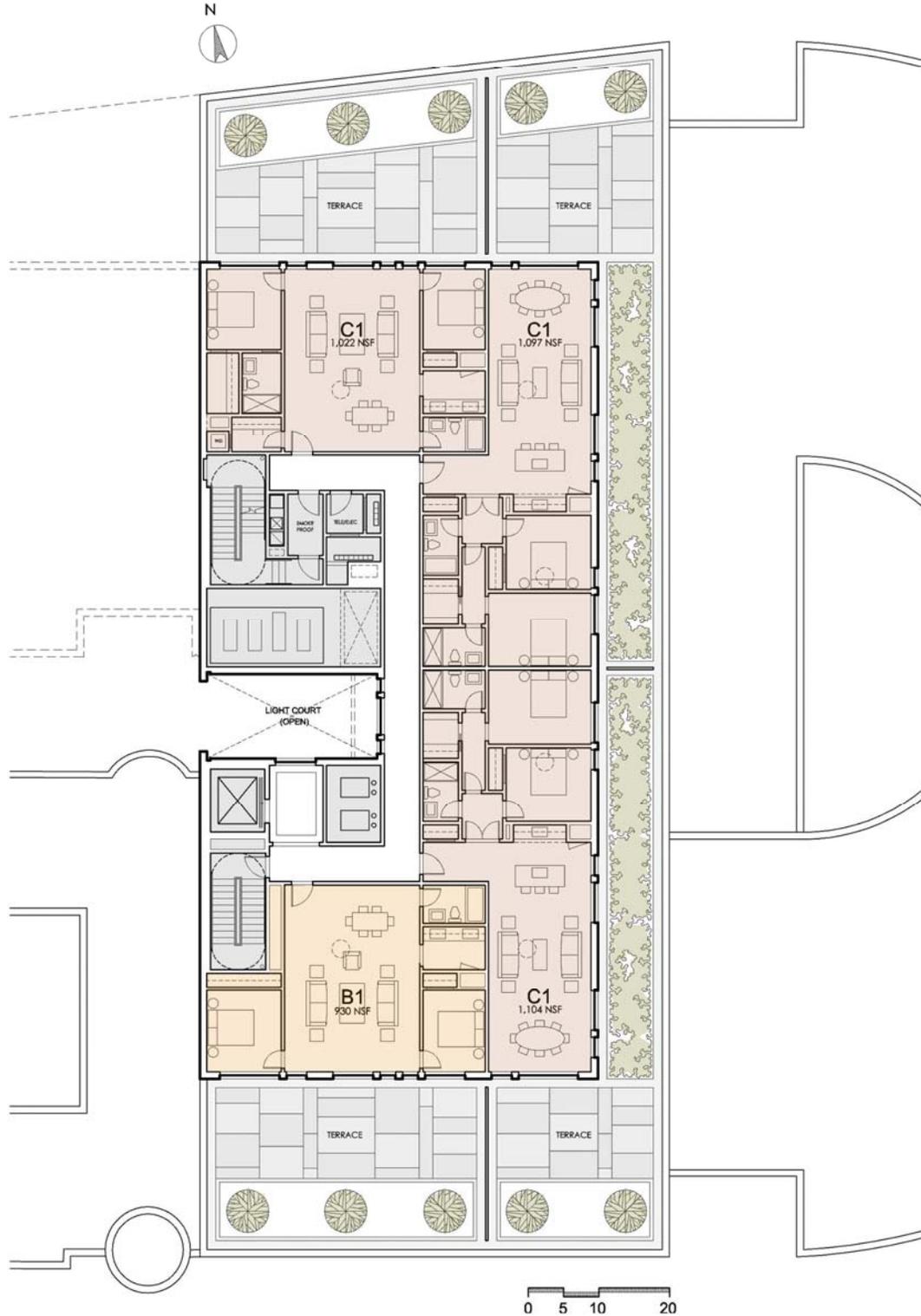


DOLEZAL
DESIGN + DEVELOPMENT

PROPOSED PLAN: SIXTH FLOOR

41 WESTLAND AVENUE, FENWAY

SMMA
SOUTH METROPOLITAN ARCHITECTURAL ASSOCIATION

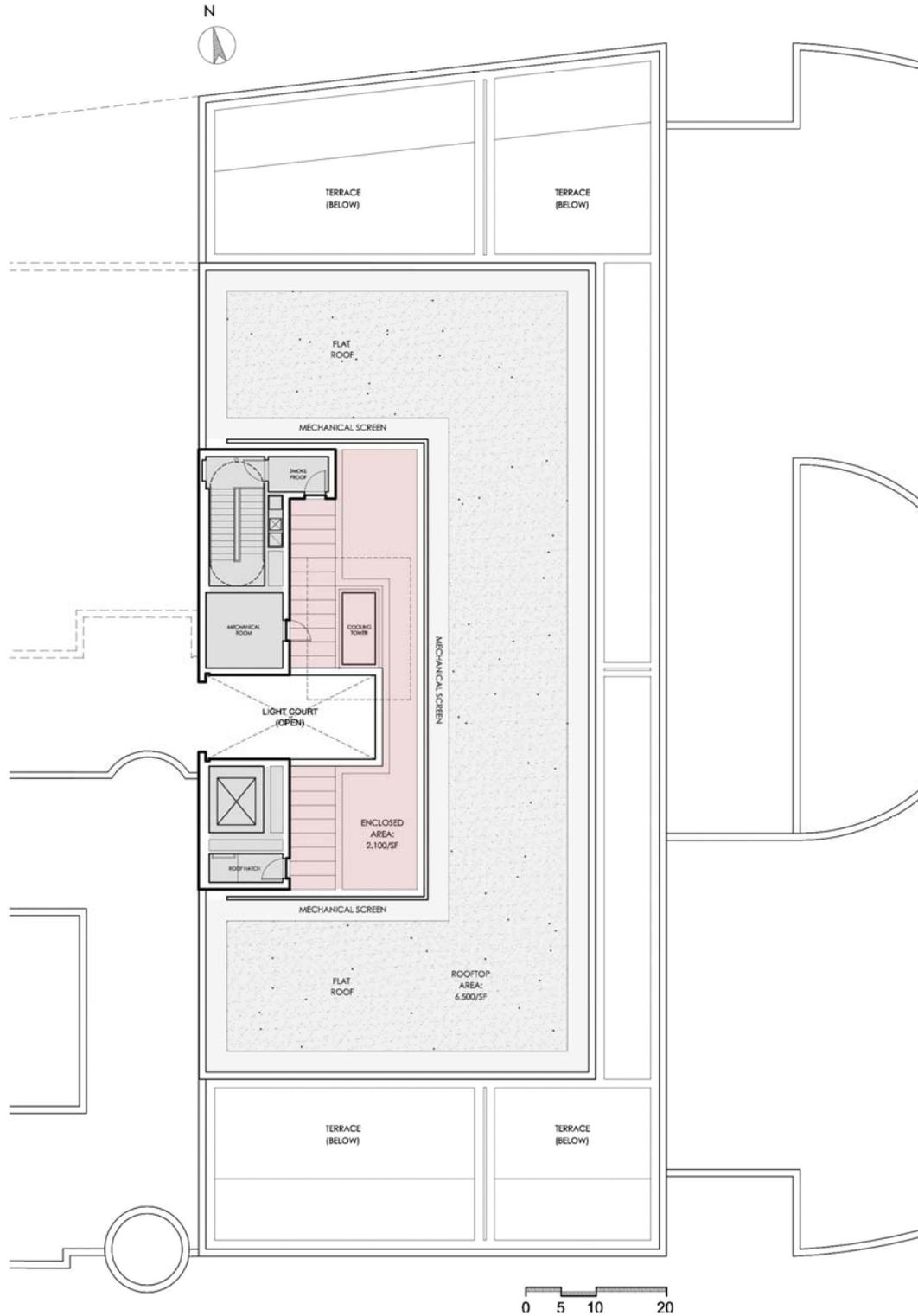


DOLEZAL
DESIGN + DEVELOPMENT

PROPOSED PLAN: SEVENTH FLOOR ADDITION

41 WESTLAND AVENUE, FENWAY

SMMA
SOUTH METROPOLITAN ARCHITECTS



DOLEZAL
DESIGN + DEVELOPMENT

PROPOSED PLAN: ROOFTOP

41 WESTLAND AVENUE, FENWAY

SMMA
SOUTH METROPOLITAN ARCHITECTURE

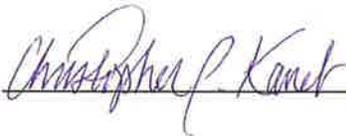
X - CERTIFICATION

Project Certification

This Expanded PNF has been submitted to the BRA, as required by Article 80 of the Zoning Code, on the 11th day of March, 2011.

Proponent

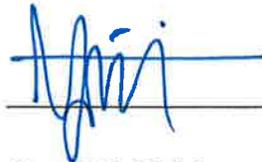
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 3.11.2011

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