



## NEC Institutional Master Plan/Draft Project Impact Report

## Boston, Massachusetts

Prepared for **New England Conservatory** 

290 Huntington Avenue

Boston, Massachusetts 02115

Prepared by **VHB/Vanasse Hangen Brustlin, Inc.** 

99 High Street, 10th Floor

Boston, Massachusetts 02110

In association with Colliers International

Ann Beha Architects

Gensler

Howard/Stein-Hudson Associates, Inc.

Nitsch Engineering Epsilon Associates, Inc.

Brennan, Dain, Le Ray, Wiest, Torpy & Garner, P.C.

Haley and Aldrich AltieriSeborWieber LLC

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# Institutional Master Plan

1

## Introduction/Mission and Core Values

#### 1.1 Introduction

New England Conservatory is pleased to submit this Institutional Master Plan (IMP) pursuant to Article 80D of the Boston Zoning Code (BZC). The IMP is responsive to the Scoping Determination dated March 12, 2012 (see Appendix A), that was issued by the Boston Redevelopment Authority (BRA) as part of the review of the Institutional Master Plan Notification Form/Project Notification Form (IMPNF/PNF) that was filed by NEC in January 2012. This IMP will support NEC for a term of ten years (2012 to 2022).

Located in the Fenway area of Boston on a single block encompassed by Huntington Avenue, Gainsborough Street, St. Botolph Street, and Massachusetts Avenue, NEC educates outstanding musicians from around the world on its current campus which includes four buildings. The NEC IMP includes descriptions of the existing facilities, projected future growth and space needs, long-range urban design guidelines, and master plan projects that are proposed to be developed during the term of the IMP. The boundary of the existing NEC campus is shown in **Figure 1-1**.

This NEC IMP includes two Phases: Phase I – Student Life and Performance Center Project (the SLPC Project) and Phase II – Learning Center Project (the LC Project). These project components are shown in **Figure 1-2**. The NEC site includes four parcels as shown in **Figure 1-1**. Once completed, the SLPC Project (Phase I) will provide approximately 135,000 gross square feet of new space for NEC, and the LC Project (Phase II) will provide approximately 65,000 gsf of new space.

The IMP includes the following chapters:

- 1.0 Introduction/Mission and Core Values
- 2.0 Existing Property and Uses
- 3.0 Campus Demographics and Employment/Student Housing Plan
- 4.0 IMP Projects
- 5.0 Planning and Urban Design Framework
- 6.0 Transportation, Parking, and Circulation





- 7.0 Environmental Sustainability
- 8.0 Infrastructure
- 9.0 Historic Resources
- 10.0 Community Benefits

This chapter includes a description of NEC, a discussion of its mission and key objectives, and a summary of proposed IMP projects.

A Draft Project Impact Report (DPIR) is also being filed simultaneously with this IMP for the Student Life and Performance Center Project and the Learning Center Project to satisfy the requirements of the BRA's Scoping Determination on the PNF and to fulfill the requirements of Article 80 Large Project Review.

#### 1.2 History of New England Conservatory

Recognized nationally and internationally as a leader among music schools, New England Conservatory offers rigorous training to approximately 782 undergraduate, graduate, and doctoral music students from around the world in an intimate, nurturing community. Its College faculty of 240 boasts internationally esteemed artist-teachers and scholars. Its alumni go on to fill orchestra chairs, concert hall stages, jazz clubs, recording studios, and arts management positions worldwide. Nearly half of the Boston Symphony Orchestra is composed of NEC trained musicians and faculty. The great majority of NEC-trained musicians devote at least some of their professional lives to teaching, sharing their knowledge and skills with children, young people, and adults.

The oldest independent school of music in the United States, NEC was founded in 1867 by Eben Tourjee at a time when post-Civil War society was demanding American-centric musical culture. The Conservatory's curriculum is remarkable for its wide range of styles and traditions. On the college level, it features undergraduate and graduate-level training in classical, jazz, Contemporary Improvisation, world and early music. Through its Preparatory School and School of Continuing Education, it provides training and performance opportunities for approximately 1,725 children, pre-college students, adults, and seniors. Through its Community Performances and Partnerships projects, NEC offers young musicians the opportunity to engage with community-based audiences in schools, hospitals, community centers and nursing homes, bringing pleasure to new young listeners, the elderly, and other underserved audiences, and enlarging the universe for classical music and many other genres. In 2010/2011, the CPP operated 348 programs and 115 partnerships with schools, senior centers, community centers, hospitals, libraries, museums, and historic landmarks. Over 245 students participated in this endeavor, reaching in a single year 13,700 people, including 7,600 school children and 6,100 public/adult audience members. The majority of these programs and partnerships

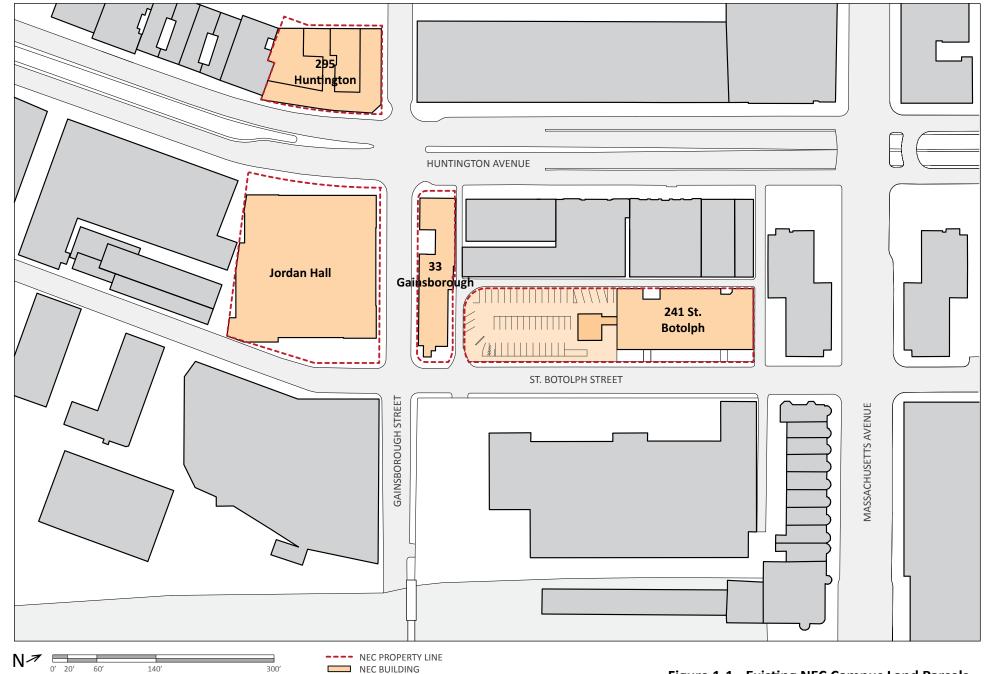
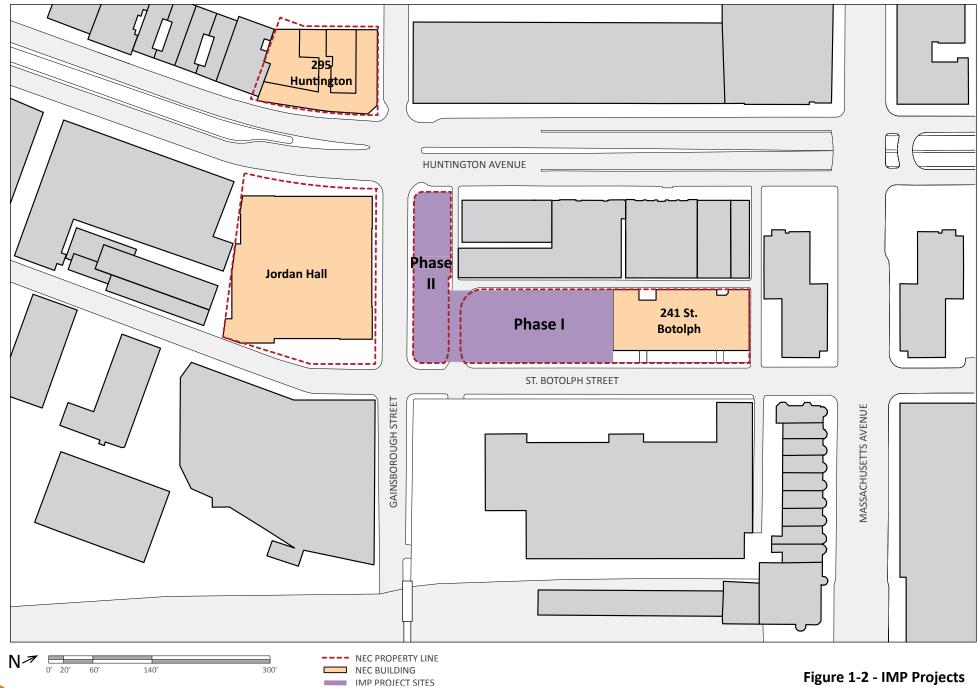




Figure 1-1 - Existing NEC Campus Land Parcels





Phases I & II



take place in the City of Boston with Boston-based schools and non-profit organizations.

NEC presents more than 900 free concerts each year, many of them held in its world-renowned Jordan Hall, a National Historic Landmark famous for its superb acoustics and beautifully restored interior. These programs range from solo recitals to chamber music to orchestral programs to jazz, Contemporary Improvisation, and opera scenes. Every year, NEC's Opera Studies department also presents two fully staged opera productions at the Cutler Majestic Theatre and Paramount Theatre in Boston.

NEC is co-founder and educational partner of *From the Top*, a weekly radio program that celebrates outstanding young classical musicians from the entire country. With its broadcast home in Jordan Hall, the show is now carried by National Public Radio and is heard on 250 stations throughout the United States. Among other partnerships, NEC is also a founding partner of Project STEP, Boston Children's Chorus, String Training and Education Program, which for more than 25 years has provided rigorous pre-professional music preparation for minority children.

#### 1.3 New England Conservatory Mission and Core Values

#### 1.3.1 Mission Statement

New England Conservatory educates and trains musicians of all ages from around the world, drawing on the talent and deep reservoir of experience of its distinguished faculty. NEC is dedicated to inculcating the highest standards of excellence and nurturing individual artistic sensibility and creative growth. Understanding that music is one of the transcendent expressions of human civilization, NEC aspires to ensure it a central place in contemporary society.

#### 1.3.2 Core Values

We believe that the study of music builds human capacity, elevates the soul, and prepares students for lives that enhance the public good.

We believe our students must have a supportive and collegial learning environment that maximizes the individual attention they receive from their teachers, and allows them to explore and develop their unique artistic personalities. We believe in the critical importance of mutual support among faculty that encourages the highest standards of excellence and accommodates innovation, individual teaching philosophies, and a broad range of disciplines.

We believe that we have a responsibility to reinforce and expand the position of music in society by educating the next generation of music leaders, incubating new work, and sharing our sublime art with the widest possible audience.

We believe that sharing the gifts of our students, faculty, and graduates with the broader Boston community is an essential part of NEC's core mission. The Community Partnerships Program outlined herein is the manifestation of NEC's commitment to enriching the cultural life of all Bostonians.

#### 1.4 Major Programs and Initiatives

Over the past century, New England Conservatory has engaged students from around the world in their renowned musical education. As the school's curriculum has developed, so has the need to provide modern and up to date facilities, albeit without any enlargement of the student enrollment. The following sections describe the programs available to undergraduate, graduate, preparatory, and continuing education students, the strategic plan the Conservatory intends to follow over the next decade, along with the institutional master plan.

#### 1.4.1 College Programs

#### **Undergraduate and/or Graduate Majors or Concentrations**

- All orchestral instruments and guitar
- Choral Conducting
- Piano and Collaborative Piano
- Orchestras, wind ensembles, chamber music
- Jazz and Contemporary Improvisation
- Voice and Opera
- Composition
- Historical Performance
- Music History and Theory
- Music-in-Education
- Vocal Pedagogy



#### **Preparatory School programs**

- Individual lessons, large and small ensembles, and classes for pre-college students beginning at age 3,
- Certificate offerings for students who follow specified curricula, and
- Large ensemble programs that allow many steps of progression by age and playing ability.

#### **Continuing Education programs**

- Certificate offerings in many areas of performance and scholarship, particularly large and small ensemble programs,
- Professional Development Courses for Teachers,
- Summer Institutes that offer concentrated topic studies,
- Distance learning options, and
- Courses for music appreciators.

#### **Performances**

- Over 900 free concerts a year, open to the public,
- ➤ Wide variety of musical styles—classical, jazz, contemporary improvisation, world—so everyone can find something they like,
- Performers include students, artist faculty, alumni, friends, and ensembles such as the NEC Philharmonia, Symphony, Chamber Orchestra, Wind Ensemble, Contemporary Ensemble, necshivaree, Ensembles-in-Residence,
- Two fully staged operas a year at modest ticket prices, with student/senior discounts,
- Outstanding venues including Jordan Hall, a National Historic Landmark and widely considered one of the great acoustical spaces in the world.

#### **Community Engagement**

- Community Performances and Partnerships, through which NEC (as of 2010-11) operates 348 programs and 115 partnerships with schools, senior centers, community centers, hospitals, libraries, museums and other historic landmarks. Over 245 students participate in this endeavor, reaching in a single year 13,700 people, including 7,600 school children and 6,100 public/adult audience members.
- The Abreu Fellows Program at New England Conservatory. Inaugurated in 2009, this program has the goal of training 50 gifted post-graduate musicians, passionate for their art and social justice, who will go out and create/develop music education programs in the US modeled after Venezuela's El Sistema. In this way, NEC can make its strongest possible contribution to a burgeoning movement that has as its goal the social development of at-risk children through music.



An appealing partner, Jordan Hall, is the preferred venue for many Boston-based arts organizations including celebrity Series, Boston Cantata Series, Boston Children's Chorus.

#### 1.4.2 The Strategic Plan

The goal of New England Conservatory's Strategic Plan is to build and solidify NEC's position as one of the preeminent music schools of the world. Comprising the College, the Preparatory School, and School of Continuing Education, NEC offers musicians elite training in a nurturing, student-centric, and intimate environment. Through their work in the studio, the classroom, and quite importantly, throughout the community and guided by distinguished faculty, students develop their artistry, their leadership, and communication skills so they can take their music out into the world for their own and society's enrichment.

This Strategic Plan was launched by President Tony Woodcock, who felt that it should emanate from and belong to the entire institution rather than be the vision of a single person or small group of Trustees. It is, therefore, the product of a Conservatory-wide planning process that involved more than 200 individuals from all of NEC's constituencies.

Almost every element of the Conservatory came under review, but the planners were adamant that NEC's core ideals remain inviolate. These are: Conservatory's student-centric focus, the need to preserve the intimate size of the College student body and one-on-one studio experience, the open access and enrollment of Preparatory and Continuing Education, and the hands-on, interactive nature of the community programs.

Five Strategic Priorities are described in the Strategic Plan; these are:

**Scholarship and Financial Aid.** The College and Preparatory discount rates should be increased steadily over time.

Distinctive Faculty and Programs. NEC must attract and retain the best College and Preparatory/Continuing Education faculty throughout the classical performance, composition, jazz, and Contemporary Improvisation studios, and the liberal arts, history and theory classrooms. Following on recent program enhancement in strings, chamber music, and orchestra, NEC is also working to develop the opera and voice programs and other departments. Further, it will initiate a thorough study of its graduate curriculum.

NEC will work to expand programs in both the Preparatory School and School of Continuing Education, also targeting the shortage of space that has constrained growth. Such expansion should increase the institution's community reach and



impact, allowing it to enhance the role of our "citizen-artists" — who view and engage with the world around them through an artistic lens, and who often use the arts to respond to social issues. Such expansion will also aid the institution in generating more revenue.

A recently introduced program is Entrepreneurial Musicianship to equip College students with the additional skills they need to pursue a career and to engage with the multiplicity of communities and audiences they will encounter as professionals. NEC is also working to further develop and enhance its community engagement and strategic partnerships, including:

- Community Performances and Partnerships
- > The Abreu Fellows Program at New England Conservatory

**Student-Centric Campus Redevelopment**. NEC will design, restore, and build facilities to improve the student experience, to become more competitive with its peer institutions, to operate with greater environmental efficiency, and to enhance the life of its surrounding communities. The priorities are a new dormitory, library, and performance spaces, including a street level café and music club. The Conservatory will also increase annual investment in facilities maintenance. The Proposed Projects continue the facilities enhancement that has already begun with a \$20 million deferred maintenance project implemented in 2010 to safeguard NEC's most significant buildings for the next 50 years.

**Technology**. Under the Plan, NEC will build its technological capacities including educational and customer service tools, and curriculum and distance learning capabilities.

**New Revenue.** The Conservatory will study and implement new methods to generate additional income.

Executing the new Strategic Plan is projected to require substantial new investment. NEC has incorporated the cost of all projects into financial scenarios created for the next seven years. Some projects will be executed immediately; others will be phased in over several years. For the Plan to be sustainable, NEC will need to conduct a new capital campaign, with initial gifts being applied to Campus Redevelopment and particularly the new dormitory. The timing of this campaign is contingent upon the national economy, but NEC's position is not if, but when.

The last capital campaign, which concluded highly successfully in June 2008 with \$115 million raised, created many essential foundations for development work, and fundamentally repositioned NEC in the philanthropic community.

With its Strategic Plan, NEC envisions this virtuous loop: With even stronger departments and programs, much improved facilities and technological capacity,



more competitive tuition discounts, and even broader and deeper roots within our area communities, the finest students and faculty will be attracted to NEC, which in turn will continue to strengthen all departments and programs, enhance the compelling case for contributed funds, and open up new possibilities for additional revenue streams, which in turn will fuel the strengthening of all key aspects of the Conservatory. This loop cements NEC's position as one of the preeminent music schools in the world and an invaluable asset to Boston.

#### 1.4.3 The Institutional Master Plan

Through an intensive exploratory process that involved all constituencies within the NEC community, including boards, administration, faculty, students, and alumni, the Conservatory has determined that it must enlarge and improve its campus facilities. This is necessary <u>not</u> because NEC intends to increase its enrollment. Indeed, one of our core values is the preservation of a small student body and the one-on-one studio teaching that it makes possible. Rather, campus enhancement will allow the school to better fulfill its student-centric mission and allow NEC to share its gifts more effectively with the surrounding community. The Proposed Projects will provide students with the practice and performance spaces, the residence and student life facilities, and the updated library and technology facilities that are all necessary for educating the world-class musicians of the future. The Proposed Projects will also allow NEC to maintain competitiveness with peer institutions, many of which have undertaken extensive renovation and new construction in recent years. Finally, the Proposed Projects will offer the public, including the many audiences who attend concerts and residents in the surrounding communities, a more attractive, inviting, and convenient venue for listening, studying, and enjoying music.

It is important to note that the plan to enhance the NEC Campus does not entail expansion beyond the existing campus boundaries. All of the improvements proposed in NEC's IMP will be built on NEC's existing land.

It should also be noted that the increase in dormitory accommodations specified in the plan will allow NEC to house all of its first and second year students on campus, which has the doubly virtuous effect of creating a more tightly knit student body and also easing the burden on the housing market in the residential neighborhoods surrounding the NEC campus.

#### 1.5 Summary of Benefits

The development of the IMP Projects will generate numerous public benefits for the surrounding neighborhood and the City of Boston as a whole, both during construction and on an ongoing basis upon its completion. Details of the benefits



provided by the IMP Projects are presented in **Chapter 10**, **Community Benefits**, of this IMP, while a summary of these benefits are presented below:

#### 1.5.1 Financial Benefits

Development of the Proposed Projects will result in significant financial benefits to the City of Boston and its residents, including:

- ➤ Approximately \$275,000 in housing linkage contributions;
- Approximately \$54,000 in jobs linkage contributions;
- ➤ The creation of approximately 10 new full-time jobs at NEC upon completion of both Phase 1 and Phase 2 Projects; and,
- ➤ The creation of over 250 construction jobs in connection with the Proposed Projects.

#### 1.5.2 Urban Design Benefits

The development of the IMP Projects will enhance the public sides of the proposed buildings along Huntington Avenue, St. Botolph Street, and Gainsborough Street. The Proponent proposes to undertake significant streetscape improvements to the pedestrian realm. These improvements, which will be provided on a phased basis as each of the IMP Projects is undertaken, will include the following (subject to applicable City of Boston approval):

- If feasible, new street trees on public streets adjacent to the Proposed Project sites;
- New street furniture, lighting, and other amenities on public streets adjacent to the Proposed Project sites;
- Installation of public bicycle storage racks in close proximity to the building entrances, in addition to interior on-site protected bicycle storage for building residents, as outlined in **Chapter 6**, **Transportation**, **Parking**, **and Circulation** of this IMP;
- A new pedestrian raised crosswalk between Jordan Hall and the proposed Learning Center Project building entrance; and,
- ➤ A small outdoor plaza at the corner of Gainsborough Street and St. Botolph Street with plantings and seats.

#### 1.6 Term of IMP

The NEC IMP will result in an IMP for a term of ten years (2012-2022).

2

## **Existing Property and Uses**

#### 2.1 Existing Campus Description

NEC currently owns and operates four (4) buildings, totaling approximately 346,500 gross square feet (GSF). All of these buildings are located on the NEC campus in Boston (see **Figure 2-1**, and **Table 2-1**).

The centerpiece of the NEC campus is the building located at 290 Huntington Avenue, which contains Jordan Hall. Jordan Hall is internationally known and is sought after by world-class performers for its nearly perfect acoustics and exceptionally high quality design. The building was designed by the eminent Boston architectural firm of Wheelwright and Haven and completed in 1903. It remains the focus and centerpiece of the NEC campus, with the Hall at its core, surrounded by other performance spaces (Brown Hall, Williams Hall, and the Keller Room) as well as administrative offices, 75 practice rooms, teaching studios, and the Firestone Library (recordings). The approximately 150,000 sf building was designed in a Renaissance-Revival style and has three stories plus a basement. While the address is 290 Huntington Avenue, its primary access is through its entrance on Gainsborough Street. The building is a National Historic Landmark. NEC has recently completed a \$22 million restoration of the exteriors of all its buildings, including Jordan Hall, and has always been a dedicated steward of its treasured cultural resources.

The only other building on the NEC campus that was purpose-built for NEC is the residence hall and library building located at 33 Gainsborough Street. The residence hall was designed for NEC by the firm of Kilham, Hopkins, Greeley & Brodie Architects and completed in 1959. The approximately 57,000 sf building has eight stories plus a basement, providing single and double occupancy rooms for up to 163 undergraduate and graduate students. It also houses Bistro 33 (a student dining facility), the Spaulding Library (books and scores), as well as 11 practice rooms in the basement. Its main entrance is opposite Jordan Hall on Gainsborough Street. This building has currently outlived its useful life and is in poor condition. Extraordinary dimensional constraints and inefficient building systems make renovation of the existing building to suit NEC's long-range needs impossible. Emergency repairs were made to this building in 2009-2010 to avoid serious structural and systems damage to the building, as part of the campus restoration project cited above.



NEC's other Campus buildings are adaptive re-uses of historic institutional buildings that were acquired over time to house NEC's educational and cultural programs. The St. Botolph Building, 241 St. Botolph Street, was completed in 1884 for the Cotting School, with additions in 1926. This building was purchased by NEC in 1990. Designed in a Federal Revival style, the approximately 65,500 sf building has four stories (the lowest is a raised basement). It houses administrative offices for the Preparatory School, Continuing Education School, and other NEC departmental offices. Pierce Hall and other spaces used for public performances and teaching are also located here. An adjacent two-story pavilion structure houses the NEC facilities department and maintenance shop. The 295 Huntington Avenue building, Annex Building, is located on the north side of Huntington Avenue, directly across from Jordan Hall. The building was purchased by the Conservatory in the 1970's and renovated in the 1980's. With four stories plus a basement, the building has approximately 74,000 sf of space, a portion of which is used for additional NEC administrative offices, with the remaining space leased to non-NEC commercial and professional tenants. While architecturally ornate on the exterior, both 241 St. Botolph Street and 295 Huntington Avenue are both utilitarian structures that have recently undergone extensive exterior restorations and modest interior renovations.

Table 2-1 Existing Campus Buildings

Building Name	Address	Current Use	Year Built	Floor Area (GSF)	Condition
Jordan Hall	290 Huntington Avenue	Performance, Classrooms, Offices, Firestone Music Library	1903	150,000	Good
Residence Hall and Library	33 Gainsborough Street	Residence Hall, Cafeteria, Spaulding Print Library	1959	57,000	Poor
St. Botolph Building	241 St. Botolph Street	Classrooms, Performance, Offices	1903	65,500	Fair
Annex Building TOTAL	295 Huntington Avenue	Offices, Retail	1886	74,000 <b>346,500</b>	Fair







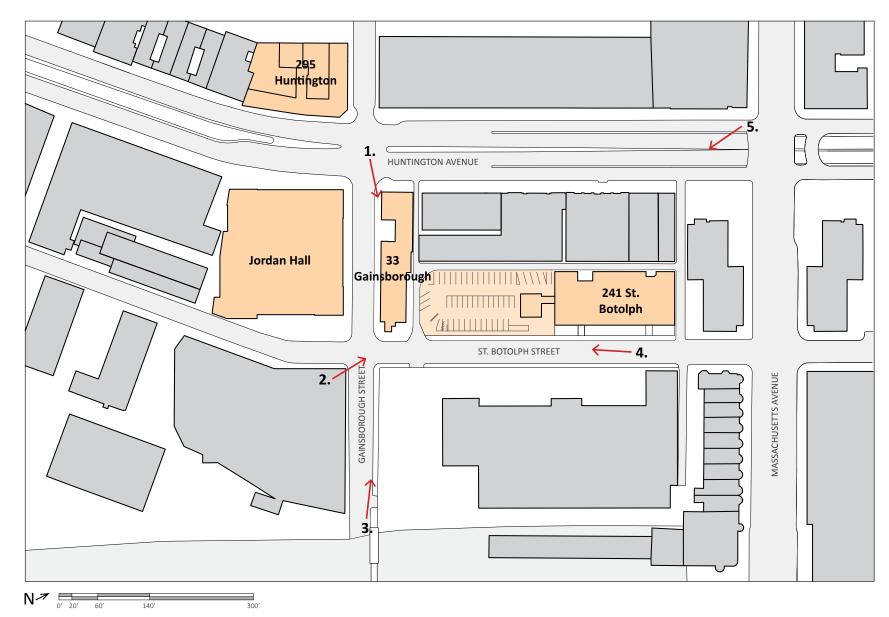






Figure 2-1 - Existing NEC Campus



3.

## Campus Demographics and Employment/Student Housing Plan

#### 3.1 Campus Demographics and Employment

#### 3.1.1 Student Population

As described previously, New England Conservatory provides educational opportunities to a variety of students. The Preparatory School begins classes for students as young as age three and continues through high school. Both majors and concentrations are available in multiple forms to both undergraduate and graduate students, while the continuing education program provides certificate options to those not interested in full degrees, or who need extra preparation before enrolling in the College. The Preparatory School currently enrolls 1,159 students, including those enrolled in NEC at the Walnut Hill School. An additional 213 students are enrolled in the Continuing Education Program. There are currently approximately 782 undergraduate and graduate College students from 46 states and 39 countries.

#### 3.1.2 Student Resident Locations

The single existing NEC Residence Hall is located at 33 Gainsborough Street directly across from Jordan Hall. This Residence Hall provides 163 beds to students. It provides undergraduate and graduate students with single and double occupancy rooms in approximately 57,000 sf of space. This building also houses Bistro 33 (an obsolete student dining facility), the Spaulding Library, as well as 11 practice rooms in its basement.

#### 3.1.3 Employment

New England Conservatory has 443 full and part-time faculty and 133 staff at the College, Preparatory School and Continuing Education. NEC faculty and alumni make up almost half of the Boston Symphony Orchestra as well as serving as



members of other symphony orchestras, opera companies, chamber ensembles, and jazz ensembles. They also teach and serve as arts administrators.

#### 3.2 Employment and Workforce Development

NEC participates in several workforce development initiatives both within the conservatory, as well as throughout the Greater Boston area. These initiatives have been designed to inform the local community about any employment opportunities at NEC, to interest youths in music, and to provide training to NEC faculty and staff to encourage their own career advancement.

#### 3.2.1 Construction Employment

The construction of the IMP Projects and associated renovations to the existing 33 Gainsborough Street building during the interim will contribute directly to the economy by providing numerous employment opportunities. It is estimated that approximately 100-150 tradespersons will be employed at peak construction periods. A Boston Residents Construction Employment Plan will comply with the Boston Jobs Policy.

#### 3.2.2 Permanent Employment

Based on its projected employment growth, NEC estimates that this development will create approximately ten (10) new facility employee jobs.

NEC currently employs approximately 576 people, of which 260 are full time and 316 are part time. NEC is also a major employer of Boston residents.

#### 3.2.3 Projected Student Enrollment

No material increase in full-time student enrollment is projected during the term of the IMP. NEC holds as one of its core values the preservation of its intimate and nurturing student body of approximately 782 undergraduate and graduate students. Maintaining current enrollment levels is central to NEC's strategic planning because it allows for the one-on-one studio instruction between student and teacher that is the foundation of conservatory training. An enhanced student life center and residence hall will also allow NEC to house all of its first and second year students on campus, thereby creating greater social cohesiveness and freeing up off-campus housing to community residents.



#### 3.3 Student Housing Plan

NEC provides students with a sense of community by providing on-campus housing. On-campus housing promotes friendships as well as encourages personal growth and development. This section outlines the Student Housing Plan as required by Article 80D of the Boston Zoning Code.

#### 3.3.1 On-Campus Students

There are currently 163 beds located in 33 Gainsborough Street at the only existing campus housing facility for both undergraduate and graduate students. Of those 163 students, approximately 130 are full-time undergraduates while the remaining 30 are graduate students and residence life assistants (RA). NEC requires a full-time RA on each floor of the dormitory.

#### 3.3.2 Housing Units

The single Residence Hall at 33 Gainsborough Street for the 2011/2012 academic year contains 12 Single Rooms, 61 Double Rooms, 11 Deluxe Singles and 1 Graduate Suite. The floors are broken down by the following: 2<sup>nd</sup> Floor: all male freshmen, 3<sup>rd</sup> Floor: all male, 4<sup>th</sup> Floor: Co-ed by room, 5<sup>th</sup> Floor: Co-ed by room, over 21 years old, 6<sup>th</sup> Floor: All Female, 7<sup>th</sup> Floor: All Female.

#### 3.3.3 Housing Requirements

All first year students are required to live on-campus, unless married, over 21, or living with a parent or legal guardian at their permanent address in the Boston area. It is anticipated that NEC will require all first and second year undergraduate students to reside in the dormitory

#### 3.3.4 Housing Process

Since there is only one on-campus dormitory, all first year students must live there and the remaining units are given out based on an as requested basis, first come first serve. Beyond first year students, NEC has historically filled its dormitory through a number of second year students requesting housing and international graduate



students who are unfamiliar with the Boston area and desire on-campus housing. NEC has been able to accommodate 1,005 of these requests in the past few years.

#### 3.3.5 Short/Long-Term Plans

As described in this IMP, NEC plans to increase the number of dormitory accommodations on campus which will allow NEC to house all of its first and second year students on campus, which has the doubly virtuous effect of creating a more tightly knit student body and also easing the burden on the housing market in the residential neighborhoods surrounding the NEC campus. The SLPC will provide housing for a total of approximately 252 students on its campus.

#### 3.3.6 Neighborhood Impacts

There are currently 619 graduate and undergraduate students living off-campus. NEC provides students with a guide page on their website that offers information for students that are searching for off-campus housing and links to helpful resources.

As mentioned in the previous paragraph, the increase in on-campus housing will ease the burden on the rental market in the surrounding neighborhoods and those neighborhoods adjacent to the NEC campus in particular.

# **IMP Projects**

### 4.1 Introduction

NEC plans to build two new campus facilities with related site improvements and connections to existing NEC buildings during the 10 year term of its Institutional Master Plan in two distinct phases. Implementation of the IMP Projects will enable NEC to continue its tradition of world-class musical education and performance that it has been providing in the City of Boston for the past 145 years. The Projects will also greatly enhance NEC's campus appearance and improve the surrounding pedestrian environment. The location of NEC's IMP Projects is depicted in **Figure 4-1**.

## 4.2 Project Location and Current Uses

The IMP Projects are located in the Fenway area of Boston on a single block that is bounded by Huntington Avenue, Gainsborough Street, St. Botolph Street, and Massachusetts Avenue. The two IMP Project sites are currently owned and actively used by NEC for its existing educational programs. The Phase I – Student Life and Performance Center Project (the SLPC Project) site is occupied by an existing surface parking lot with approximately 53 spaces and a small two story annex building currently used as a maintenance shed. The Phase II – Learning Center Project (the LC Project) site is currently occupied by an approximately 57,000 square-foot building across from Jordan Hall, and contains dormitory rooms for 163 students, the NEC print library, and the student dining hall called "Bistro 33". This building is functionally obsolete and does not meet the current or future needs of NEC's educational and student life programs.

# 4.3 Detailed Project Description

Once completed, the SLPC Project (Phase I) will provide approximately 135,000 gross square feet of new space for NEC, and the LC Project (Phase II) will provide approximately 65,000 gsf of new space. As mentioned previously, the Proposed Project site locations are illustrated in **Figure 4-1**.

In addition to the development of the IMP Projects, NEC will continue to make capital expenditures on various projects (the "Ongoing Projects") to maintain and improve its existing facilities regularly and from time to time for the duration of the IMP. The Ongoing Projects may include (but are not limited to): repair and maintenance-related projects and activities, minor additions to or removal of minor portions of existing facilities, additions to or removal of on-campus parking spaces, improvements to existing building finishes, infrastructure, and systems, and/or change of uses of portions of existing buildings on the NEC campus to accommodate on-campus relocation of various functions related to NEC's ongoing operations and the development of the Proposed Projects. Any such Ongoing Projects are deemed to be consistent with this Institutional Master Plan for the duration of the term of the IMP.

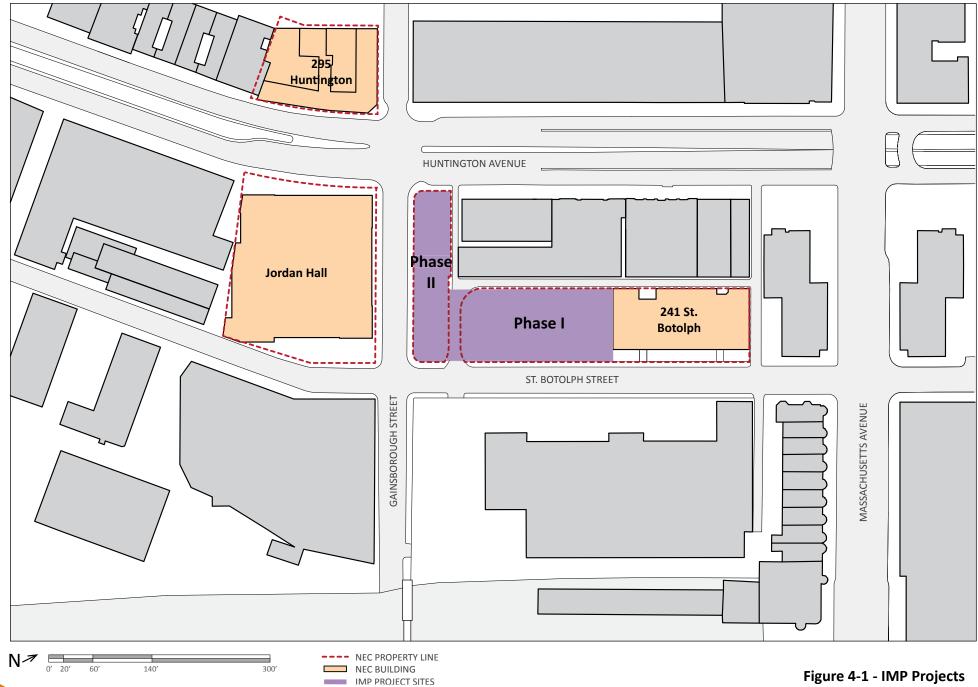
### 4.3.1 Phase I – Student Life and Performance Center Project

Phase I of the IMP will include construction of the SLPC and limited interim renovations to the 33 Gainsborough Street building and the Firestone Library. As currently planned, the SLPC is programmed to include the following uses:

- Approximately 252-bed student residence with common living amenities
- Dining commons with a performance stage
- Student common areas on all levels
- Library resource center housing collections and collaboration study spaces
- Three rehearsal and performance spaces, including a 200-seat Black Box Theater, Orchestra Rehearsal Room, and a Large Ensemble/Recording Room.

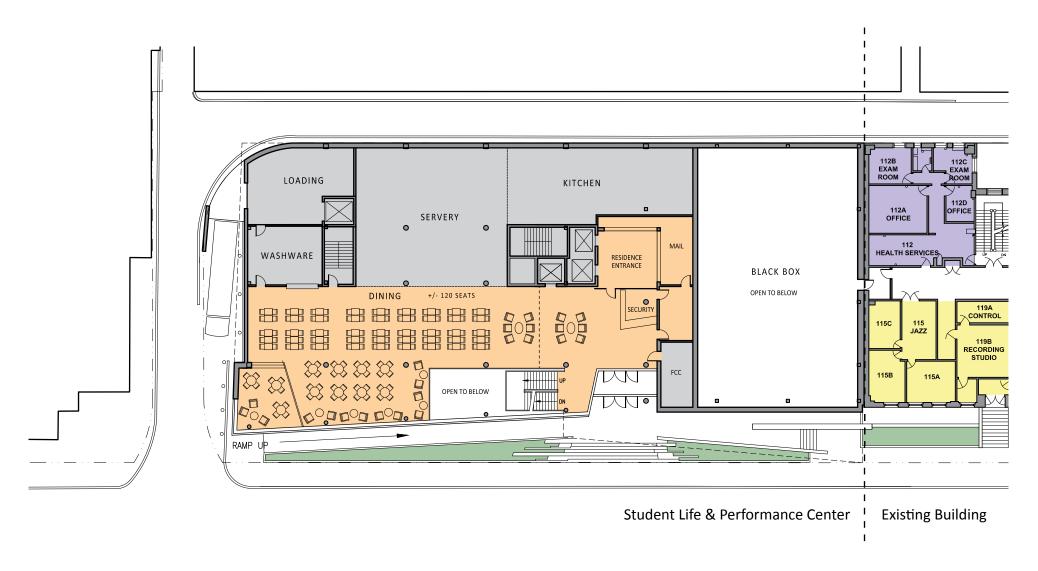
The SLPC will house approximately 252 students, and together with the library and dining commons, will become an exciting new campus center for students, faculty, staff, and visitors as shown in **Figure 4-2** through **Figure 4-6**. The Center's three modestly-scaled new performance spaces – a 200-seat Black Box theater, orchestra rehearsal room, and ensemble/recording room - will be used by students for performances and rehearsals, as well as for public performances. The adjacent dining areas will also serve dual functions as breakout and reception areas for evening and other performance events, in addition to providing modern, affordable dining options to NEC students, faculty and staff, and to members of the public. It is anticipated that community access to these spaces will strengthen NEC's partnerships with the Fenway community organizations and public schools.

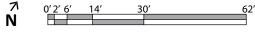
After completion of the SLPC, existing spaces in 33 Gainsborough Street and the Firestone Library will be temporarily vacated for renovations. These renovations, which will not constitute a Substantial Rehabilitation as defined in Article 80 of the



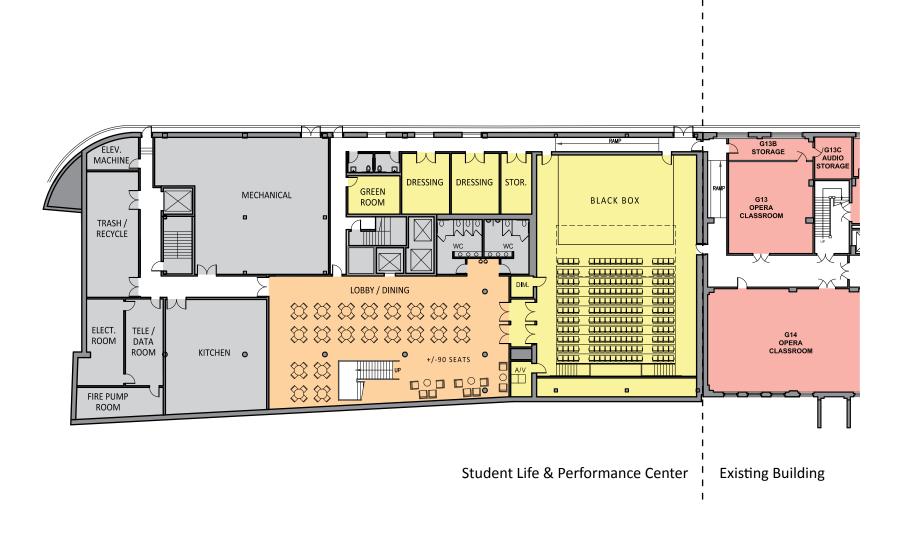


Phases I & II





**Figure 4-2 - First Floor Plan**Phase I - Student Life & Performance Center Project



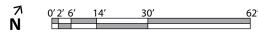




Figure 4-3 - Ground Floor Plan

Phase I - Student Life & Performance Center Project

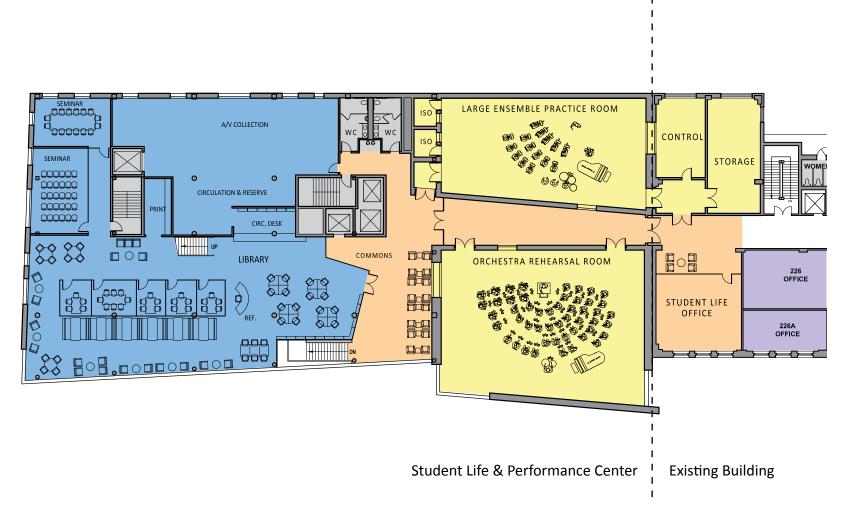
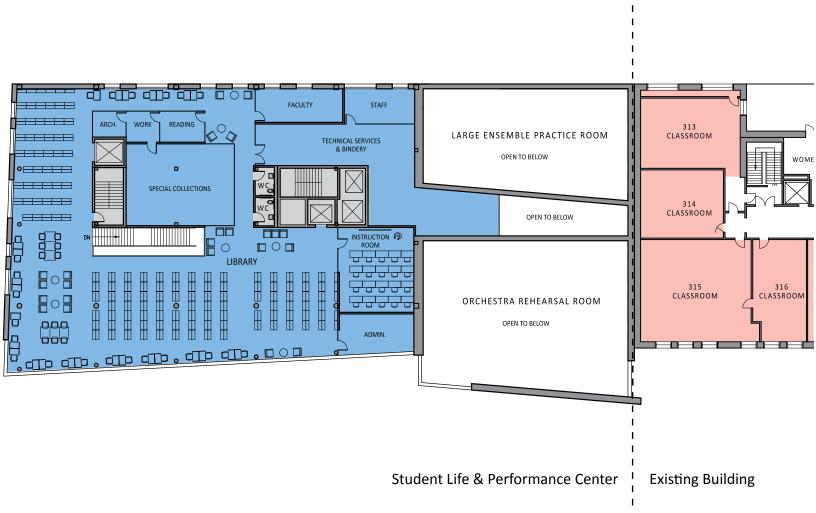




Figure 4-4 - Second Floor Plan
Phase I - Student Life & Performance Center Project



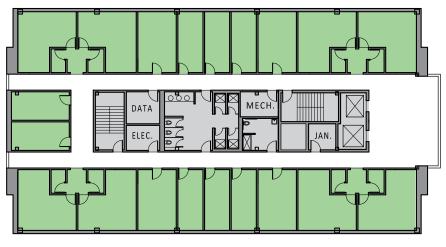


**Figure 4-5 - Third Floor Plan**Phase I - Student Life & Performance Center Project

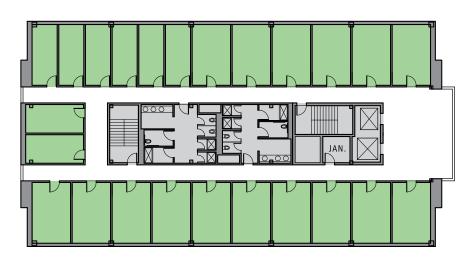


STUDY ELEC. JAN. LOUNGE

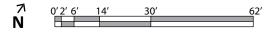
Tenth Floor



Fourth & Fifth Floors



Ninth Floor



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Figure 4-6 - Residence Floor Plans

Phase I - Student Life & Performance Center Project



Boston Zoning Code, will involve the conversion of most of the existing dormitory rooms into practice rooms and faculty studios. The existing library and cafeteria will be retrofitted for other interim academic purposes. The objective of these interim renovations to the existing 33 Gainsborough Street building is to provide a near-term solution to the significant need for additional practice facilities and faculty studios before the Phase II LC Project is constructed. These interim renovations will be modest in nature and are intended to extend the useful life of the existing building by a limited number of years. All interim uses within the 33 Gainsborough Street building will continue to be Educational uses associated with NEC, and no third-party occupancy of the building is contemplated during this interim period.

### 4.3.2 Phase II - Learning Center Project

The future removal of the 33 Gainsborough Street building will allow for the future construction of the proposed LC Project – a new 7-story, approximately 65,000 square-foot facility devoted primarily to student learning and practice spaces. As currently planned, this facility will include academic spaces, practice spaces for students, faculty studios, various student services and administrative functions – including without limitation Admissions, Financial Aid, Continuing Education, and Preparatory School offices, expansion of the library resource center, a public coffeehouse opening onto Huntington Avenue, and other student commons spaces that connect this building to the adjacent Student Life and Performance Center. These Project components are illustrated in **Figure 4-7** through **Figure 4-11**.

Connecting the Learning Center to the SLPC Project will be a student commons "spine," which will also connect the Learning Center and Student Life and Performance Center with the 241 St. Botolph building, making it possible for students, faculty, and visitors to travel inside from Gainsborough Street to within a half a block of Massachusetts Avenue during inclement weather. These connections are shown in the building sections in **Figure 4-12** through **Figure 4-15**.

This two-level connector will cross over Public Alley #822 at the second and third levels of the connected buildings and will maintain full and unimpeded access to Public Alley #822 for loading and service functions, fire and police access, and all other functions for which Public Alley #822 is currently used. A discontinuance will be sought from the City of Boston Public Improvements Commission (PIC) to enable this connector to be constructed.

#### 4.3.3 Connections to Existing Campus

The IMP Projects are currently designed to connect the two new buildings to the existing NEC academic and administration building at 241 St. Botolph Street,



allowing internal circulation between new student commons spaces, performance spaces, academic and practice rooms, and administrative and support spaces. This type of connectivity and campus continuity has never existed on the NEC campus, and the creation of this sense of connectedness and community was a central premise of the NEC campus master plan. A new raised crosswalk will also connect the entrance of Jordan Hall with the Phase II - LC Project, which will be constructed and maintained by NEC. Among the major goals of the IMP is to improve the entire NEC campus experience by joining buildings together to foster one distinct, unified, and welcoming campus. Along Gainsborough Street and St. Botolph Street, the pedestrian environment will be enhanced and softened with the addition of new street trees and sidewalk plantings to encourage slower vehicle speeds and provide safe zones for pedestrians crossing the street. At the corner of St. Botolph and Gainsborough Streets, a small open/green space will be created as NEC's campus green, a sunny outdoor gathering place for the NEC community and a place where small outdoor public performances will be possible at appropriate times during the year.

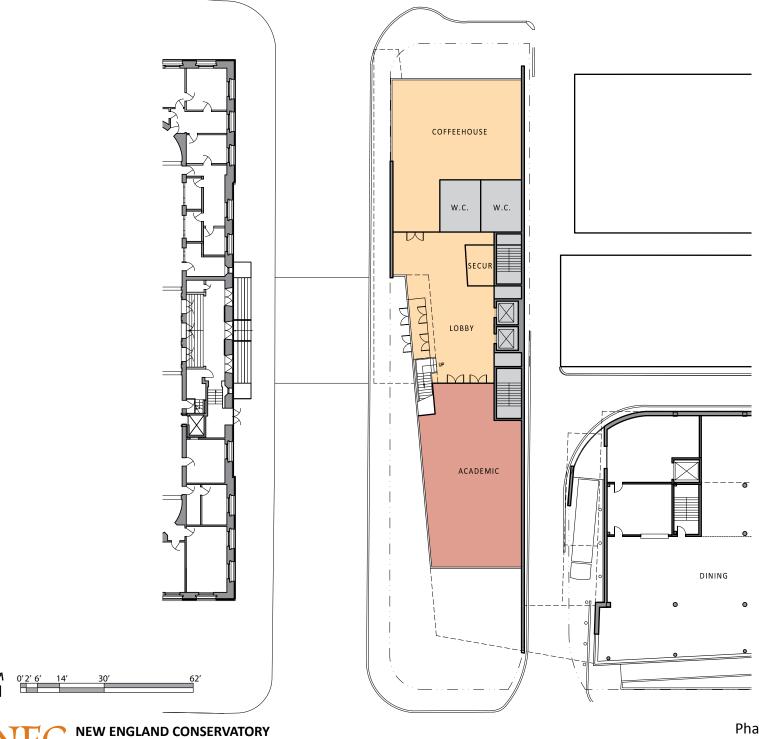
### 4.3.4 Building Design and Massing

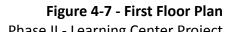
As described in more detail in **Chapter 5**, **Planning and Urban Design Framework**, the IMP Projects have been designed to unify NEC's campus and enhance the public's view of the school and its broad range of activities. The two proposed buildings are designed to enhance connectivity between the two historic NEC buildings, Jordan Hall and 241 St. Botolph Street, while capturing the essence of the school as an evolving and dynamic institution. Building elevations depicting the continuity and architectural unity of the two proposed buildings are shown in **Figure 4-16** through **Figure 4-19**.

The SLPC and LC Projects will have building heights of 134 feet and 110 feet, respectively. The existing and proposed building heights for the area are depicted in **Figure 4-20** and **Figure 4-21**, respectively. As shown, the immediate surrounding buildings have heights ranging from 30 to 85 feet; however the nearby Symphony Towers and Northeastern residence hall developments have heights that exceed 150 feet. The SLPC and LC Projects will not overpower the smaller-scale neighboring buildings, and will be significantly lower than the Symphony Towers buildings and the approved Northeastern residence hall on St. Botolph Street extension.

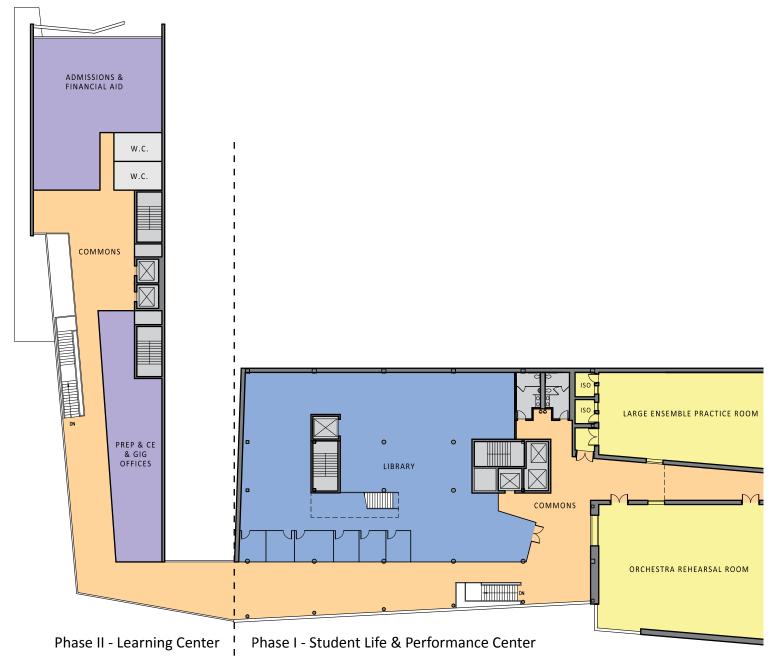
#### 4.3.5 Pedestrian Circulation

The IMP's approach to pedestrian circulation to and within the NEC campus is informed by the three primary gateways into the NEC campus: from Huntington Avenue, from Massachusetts Avenue, and from the MBTA Orange Line station exit onto Gainsborough Street. Because the NEC campus is easily accessible from these





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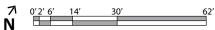
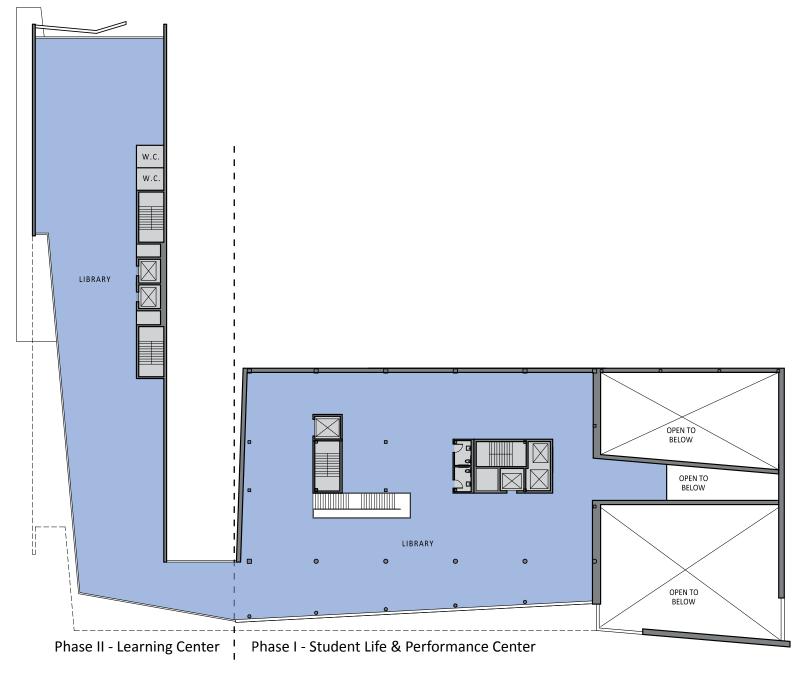


Figure 4-8 - Second Floor Plan Phase II - Learning Center Project



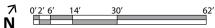


Figure 4-9 - Third Floor Plan Phase II - Learning Center Project







Figure 4-10 - Fourth & Fifth Floor Plans
Phase II - Learning Center Project



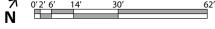


Figure 4-11 - Sixth & Seventh Floor Plans
Phase II - Learning Center Project

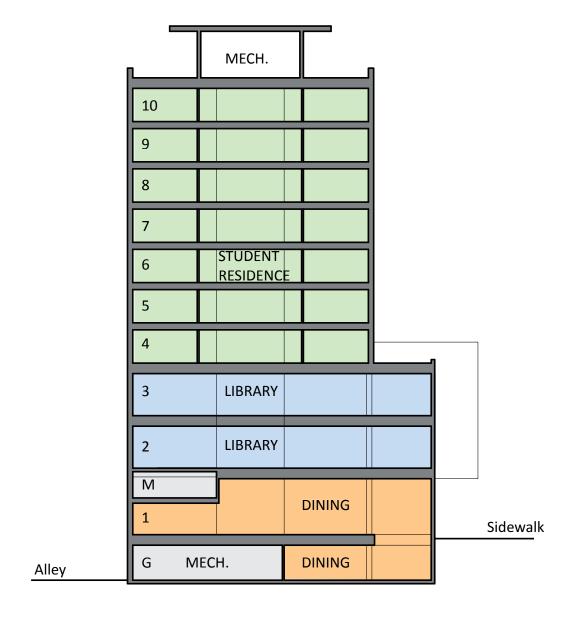




Figure 4-12 - North-South Section

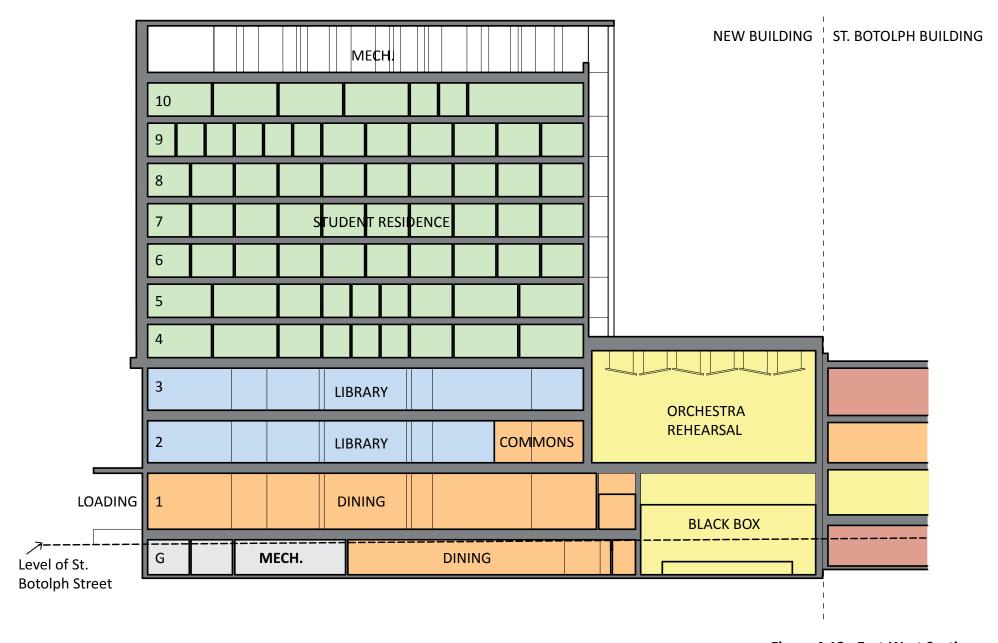




Figure 4-13 - East-West Section

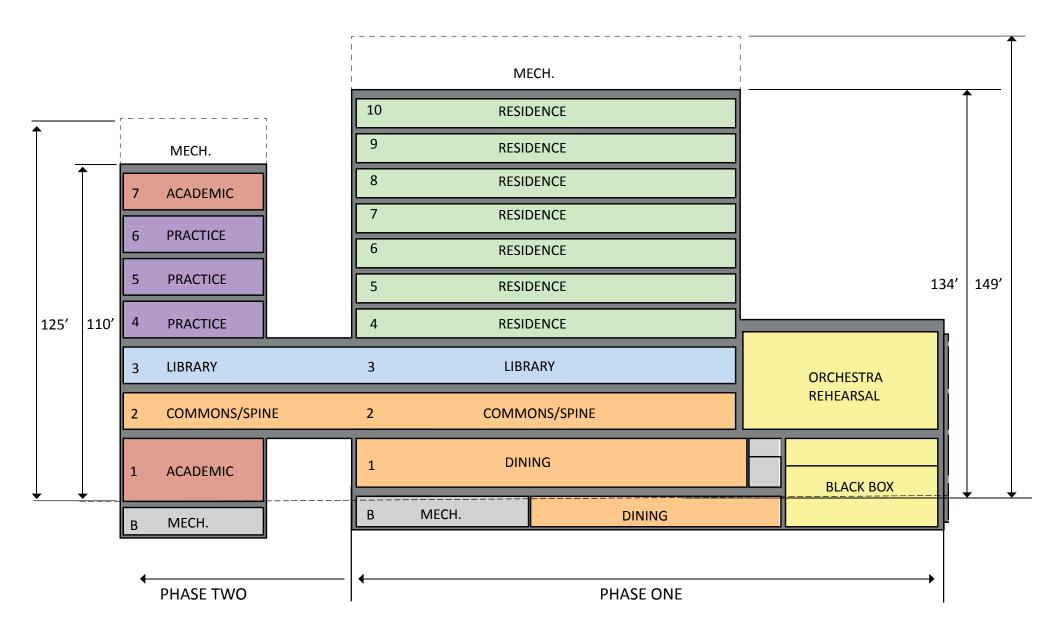
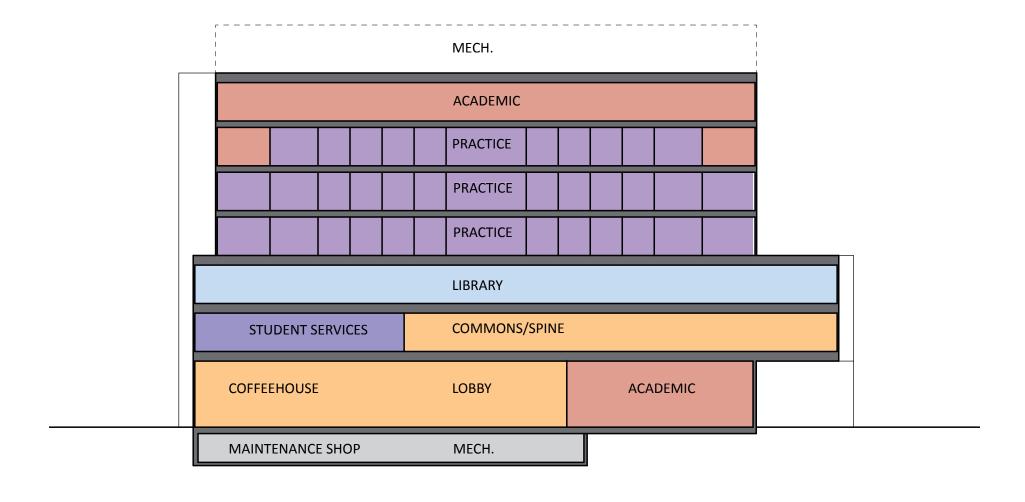




Figure 4-14 - East-West Section







#### SECTION THROUGH ST. BOTOLPH STREET LOOKING NORTH



#### SECTION THROUGH GAINSBOROUGH STREET LOOKING EAST

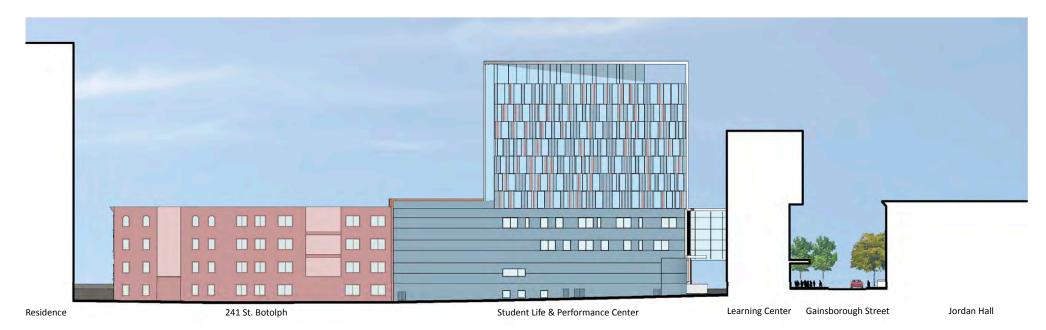
Figure 4-16 - South & West Elevations



Phases I & II



#### SECTION THROUGH HUNTINGTON AVENUE LOOKING SOUTH



#### SECTION THROUGH ALLEY LOOKING SOUTH

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Figure 4-17 - North Elevations

Phases I & II



#### **SECTION LOOKING WEST**



#### SECTION THROUGH ALLEY LOOKING WEST

Figure 4-18 - East Elevations

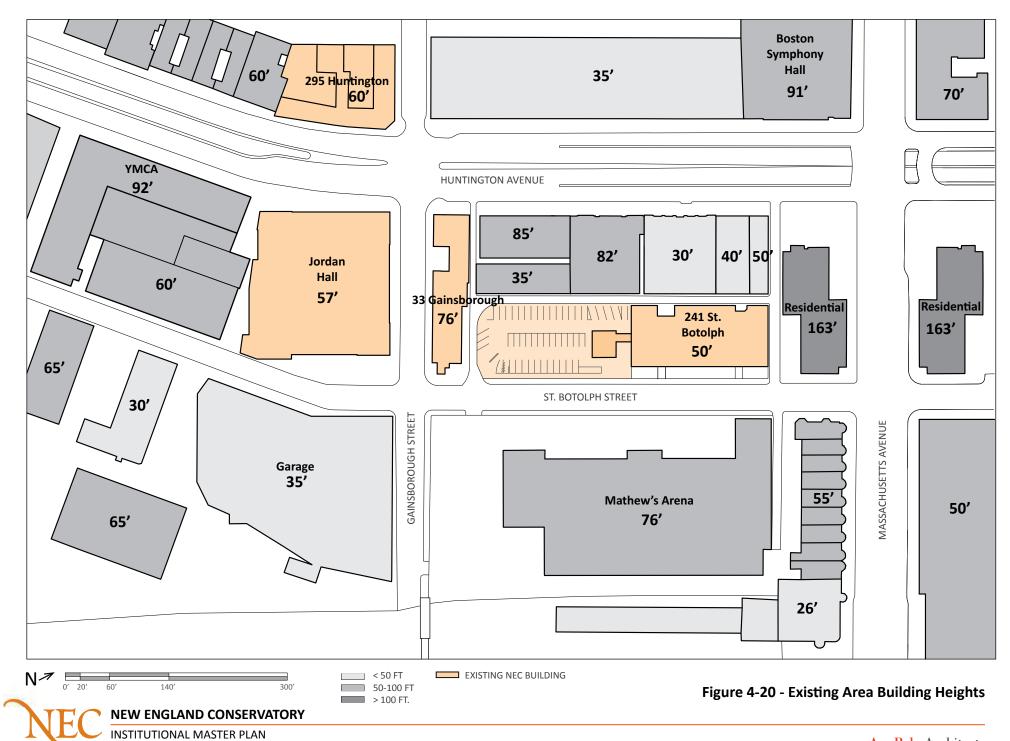
Phases I & II

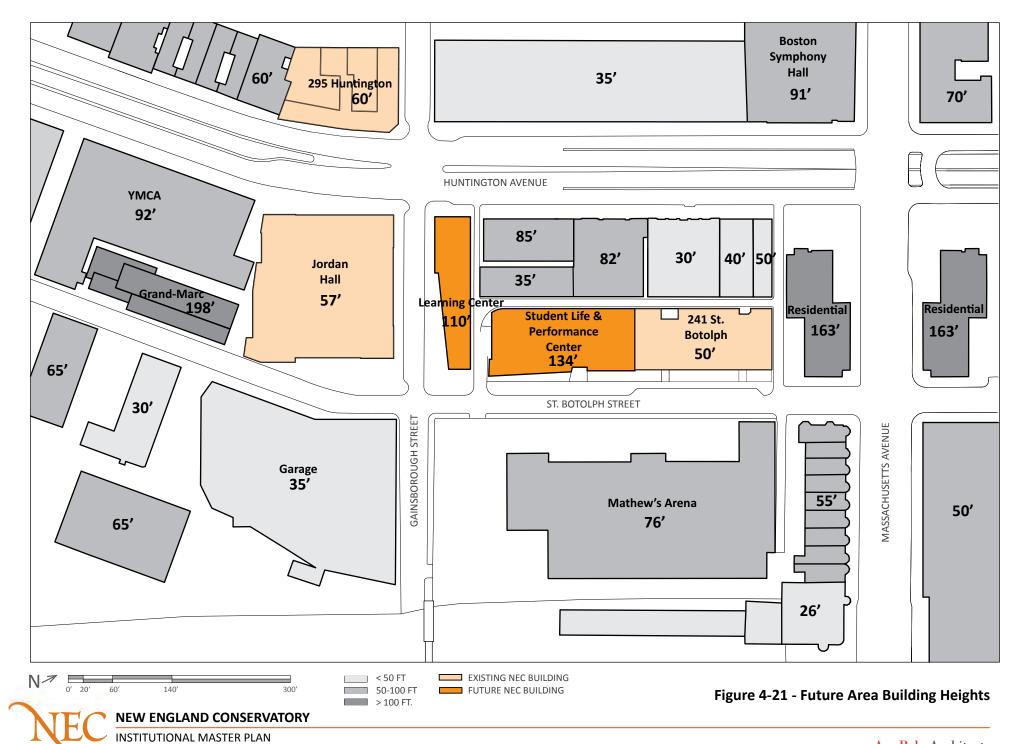


**SECTION LOOKING WEST** 



Figure 4-19 - Site Section







three major axes of travel, it is essential to consider the NEC campus in a broader context and incorporate pedestrian-oriented streetscape improvements that respond to each of these three gateways into the NEC campus. The construction of the IMP Projects presents opportunities to dramatically improve the pedestrian experience in this corner of the city, and to lay the groundwork for drawing on the resources and interest of NEC's neighbor, Northeastern University, to help turn these stretches of St. Botolph and Gainsborough Streets into first-class pedestrian environments that serve both campus populations and the general public.

# 4.4 Legal and Financial Information

This section describes the current legal status of NEC and the proposed development properties, including tax information, site control/easements, zoning, and other information required by the BRA.

# 4.4.1 Legal Judgments or Actions Pending

The Proponent is not aware of any legal judgments or pending legal actions relating to the Proposed Projects.

# 4.4.2 History of Tax Arrears on Property Owned in Boston by the Proponent

The Proponent owns no real estate in Boston for which real estate tax payments are in arrears.

# 4.4.3 Project Site/Site Control/Easements

The Proponent has control over the entire Campus and currently utilizes the area for its academic purposes. The Campus is comprised of approximately 2.5 acres of contiguous parcels of land, as shown in **Figure 4-22**.

NEC owns its entire Campus in fee. Based on the completed survey of the Campus completed by Harry R. Feldman, Inc. dated August 18, 2010, there are no public easements into, through, or surrounding the Campus, with the exception of a BWSC sewer easement running through the site of the existing NEC residence hall located at 33 Gainsborough Street. None of these rights will affect the development of the IMP Projects.



# 4.5 Regulatory Controls and Permits

This IMP will be in effect for a ten-year period commencing upon its approval in accordance with Section 80D-3 of the Code. Pursuant to Code Section 80D-11, Institutional Master Plan Review: Effect on Applicability of Other Zoning Requirements, "[a]ny use or structure that has received a Certification of Consistency, pursuant to Section 80D-10, and that has received, if applicable, a Certification of Compliance under Large Project Review, pursuant to Section 80B-6, shall be deemed to be in compliance with the use, dimensional, parking and loading requirements of the underlying zoning (including special purpose overlay districts established pursuant to Section 3-1A), notwithstanding any provision of the underlying zoning to the contrary and without the requirement of further Zoning Relief." Accordingly, the approval of this IMP will establish the zoning controls within the Institutional Master Plan Area.

For purposes of this filing and the IMP Projects' review process, the Gross Floor Area of all projects are included in our analyses and calculations. Excluded from our analyses are approximately 3,000 square feet that will be partially renovated within the existing NEC building located at 241 St. Botolph Street concurrently with the construction of the SLPC Project, as well as approximately 4,500 square feet that will be partially renovated in the basement of the existing Jordan Hall upon completion of the SLPC Project.

The gross floor area of the existing NEC buildings that are not the subject of the Proposed Projects will not be materially affected by the Proposed Projects, and the existing Educational and Cultural uses housed in these buildings will not change as a result of the Proposed Projects.

None of the existing NEC buildings will be substantially rehabilitated in connection with the Proposed Projects. The existing 33 Gainsborough Street buildings of approximately 57,000 square feet will be demolished to make way for the new LC Project.

# 4.5.1 Existing Uses and Structures

Existing uses and structures are described in detail in Chapter 2. Further information concerning existing conditions at the NEC campus, including parking and loading facilities, is provided throughout this document.

The IMP Projects' sites are located within an Institutional Subdistrict as shown on Boston Zoning Map 1Q titled "Fenway Neighborhood District." An Institutional Subdistrict is an institutional use district, as provided in Article 66 of the Boston Zoning Code (the "Zoning Code"). The IMP Projects' sites are also located within the



Groundwater Conservation Overlay District as established by Article 32 of the Zoning Code, as amended, and the Restricted Parking Overlay District, as established pursuant to Section 3-1A.c of the Zoning Code. Within the Institutional Subdistrict, Educational and Cultural uses such as those currently existing at the NEC campus are permitted as-of-right (See Table B to Article 66 of the Zoning Code).

The property located at 295 Huntington Avenue, which is owned by NEC and which is being included within the proposed NEC IMP Area, is located in the Huntington Avenue NS-2 Subdistrict and the Neighborhood Design, Groundwater Conservation, and Restricted Parking Overlay Districts.

The underlying zoning for the sites of the IMP Projects is supplied by Article 66 of the Zoning Code. Applicable use requirements are set forth in Table B to Article 66, and dimensional requirements are set forth in Table D. Table D provides for a maximum floor area ratio ("FAR") of 8.0 and a maximum building height of 90 feet. With exceptions that are not pertinent here, no other dimensional regulations apply to an as-of-right institutional project at the NEC campus.

The parking and off-street loading requirements of the underlying zoning for the IMP Project Sites are set forth in Tables F and G, respectively, to Article 66 of the Zoning Code.

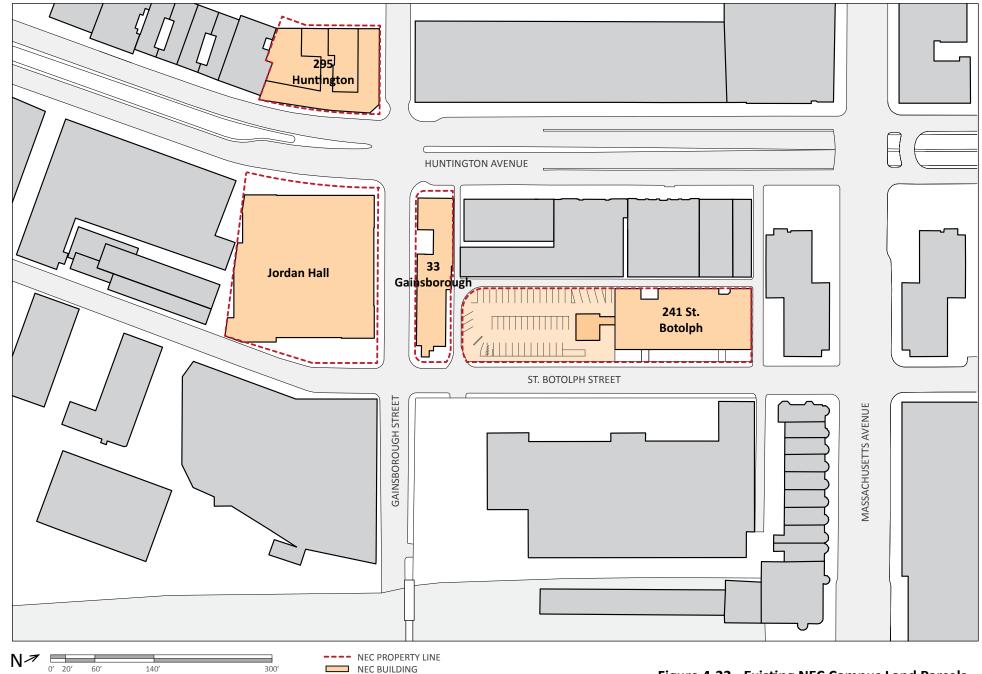




Figure 4-22 - Existing NEC Campus Land Parcels



# 4.5.2 Future Zoning Controls

Upon approval of this IMP, the NEC Campus will be designated as an Institutional Master Plan Area ("IMP") pursuant to the provisions of Section 3-1A.a and Section 80D of the Zoning Code, in order to allow for a more flexible zoning approach that also recognizes that development on the IMP Project's sites will occur over a period of years. The IMP mechanism additionally provides an appropriate degree of oversight for the multiple phases of development planned for the Campus.

#### **Allowed Uses**

All uses and subuses at the NEC campus as described in this IMP are deemed to be approved uses. In general, Educational and Cultural uses and uses related thereto, including Service and Parking uses, will be allowed uses within the IMP area. To accommodate the potential for third-party food service providers, Restaurant uses, including take-out, will be allowed on the basement, first floor, and second floor of the Proposed Projects.

The approval of this IMP does not waive, but rather expressly acknowledges and approves, all current uses at the NEC campus, including preexisting nonconforming uses. In addition, and without limitation, all existing uses in the 295 Huntington Avenue building, which include Office, Retail, Restaurant with take-out, and other similar uses, shall be deemed to be allowed uses under this IMP.

#### **Dimensional Regulations**

The exclusive dimensional regulations that will govern the NEC campus following adoption of this IMP are as follows:

**Floor Area Ratio.** Consistent with the underlying zoning for the sites of the Proposed Projects, the allowed FAR for the NEC campus will be 8.0.

**Maximum Height**. The allowed building height, as defined in the Zoning Code, for the NEC campus will be 150 feet.

#### **Parking**

The Campus is proposed to contain approximately 20 parking spaces, as detailed further in **Chapter 6**, **Transportation**, **Parking**, and **Circulation**.

# 4.6 Estimated Linkage Payments

The Proposed Student Life and Performance Center Project (the SLPC Project) will be a Development Impact Project. Under Section 80B-7 of the Zoning Code, such a



project is one that (i) requires zoning relief; (ii) will devote more than 100,000 sf to a Development Impact Use; and (iii) involves the creation or substantial rehabilitation of more than 100,000 sf of gross floor area. The Proposed SLPC Project meets all three criteria and thus the Proponent will enter into a Development Impact Project Agreement with the BRA as part of the Article 80 Large Project Review process.

The Proposed SLPC Project is estimated to generate housing exaction payments totaling approximately \$275,000.

The Proposed SLPC Project is estimated to generate jobs exaction payments totaling approximately \$54,000.

# 4.7 Project Schedule

The SPLC Project will commence as early as late 2012 and construction will take place for approximately 20 months. The expected duration of construction period for Phase II is approximately 16 months.

5

# Planning and Urban Design Framework

## 5.1 Introduction

New England Conservatory of Music was founded in 1867 and is the oldest independent school of music in the United States. NEC offers undergraduate and graduate degree programs, a continuing education program for adult students, and a preparatory program for students aged 3 through 18. NEC's Jordan Hall is an internationally-known music venue, offering the public premiere performances by students, faculty, and guest performers. NEC's mission notes the broader role of music in today's society:

"NEC has a responsibility to reinforce and expand the position of music in society by educating the next generation of music leaders, incubating new work, and sharing our sublime art with the widest possible audience."

In connection with its Institutional Master Plan, the Conservatory proposes to construct two new buildings to be completed in two separate phases. Phase I, the Student Life and Performance Center Project (the SLPC Project), will provide a student residence with dining, student commons, a library, and performance spaces. Phase II, the Learning Center Project (the LC Project), will provide additional student commons and library spaces, as well as classrooms, faculty offices, administrative offices, practice rooms, and a student coffeehouse open to the public.

The IMP Projects will create a vibrant new setting for enhanced student learning and academic life, strengthening NEC's sense of community and outreach. The transparency of their design will invite the public to engage in the broad range of activities and programs that NEC offers. The three modestly-scaled new performance spaces created in Phase I will broaden the range of the Conservatory's public programming and provide additional opportunities for community use of the NEC campus facilities. The design strategy for the site of the two new buildings will be expanded to the entire NEC campus on the south side of Huntington Avenue, with the goal of connecting its buildings and outdoor spaces as one very distinct and welcoming place, an urban amenity for both the NEC community and for the public.



## 5.2 Urban Context

New England Conservatory of Music's campus is located in the East Fenway District of Boston, occupying approximately 2.5 acres of land with frontage on Huntington Avenue, Gainsborough Street, and St. Botolph Street. Its immediate neighbors are: to the north, the Huntington Theater and several commercial and residential properties; to the east, Symphony Towers, a residential property; to the south, Northeastern University; and, to the west, Northeastern University and the YMCA.

The campus is currently comprised of four buildings: Jordan Hall, NEC's landmark building (circa 1903), providing performance spaces, offices, classrooms, audio library and practice rooms; the Residence Hall (circa 1959) providing student rooms, a cafeteria, and the print library; the 241 St. Botolph Street building (circa 1884 with additions in 1926) providing classrooms, performance spaces, offices, and maintenance facilities; and 295 Huntington Avenue, NEC's only building on the north side of Huntington Avenue, providing additional administrative offices and leased office and retail space.

Phase I – the SLPC Project – will be constructed on the site of NEC's current parking lot and annex maintenance building between the existing Student Residence and 241 St. Botolph Street. The current Student Residence on Gainsborough Street will be removed to make way for Phase II of the IMP, the LC Project.

# 5.3 Building Program

The Student Life and Performance Center (Phase I) will provide approximately 135,000 gross square feet of new space for NEC, and the Learning Center (Phase II) will provide approximately 65,000 gross square feet of new space.

The SLPC Project will house approximately 252 students, and together with the integrated library and dining commons, will become an exciting new campus center for students, faculty, staff, and visitors, as shown previously in **Figure 3-2** through **Figure 3-6**. The Center's three modestly scaled new performance spaces – a 200 seat Black Box theater, orchestra rehearsal room, and ensemble/recording room - will be used by students for performances and rehearsals, as well as for public performances. The adjacent dining areas will also serve dual functions as breakout and reception areas for evening and other performance events, in addition to providing modern, affordable dining options to NEC students, faculty and staff, and to members of the public.

The Learning Center will include a student coffeehouse, additional commons and library space, as well as offices for student organizations and administrative



departments on the lower floors. The upper floors will include classrooms, faculty studios, computer labs, and student practice rooms.

Connecting the Learning Center to the SLPC Project will be a student commons "spine," which will also connect the Learning Center and Student Life and Performance Center with the 241 St. Botolph building making it possible for students, faculty, and visitors to travel inside from Gainsborough Street to within a half a block of Massachusetts Avenue.

# 5.4 Urban Design Concept

The over-arching urban design concepts for the IMP are two-fold: to unify and strengthen the sense of place on NEC's campus, and to engage the public by heightening NEC's public presence and accessibility – both visually and physically. This will be accomplished by creating a new visual and physical permeability of the new buildings and in turn of the broad range of the activities NEC offers. It will also be accomplished by connecting the campus through the unifying effect of a shared landscaping and building treatment along the streets that run by and through it – Huntington Avenue, Gainsborough Street, and St. Botolph Street.

The two historic buildings on the campus – Jordan Hall and 241 St. Botolph– will remain as bookends of the campus, their heritage and fabric preserved and accentuated by the two new contemporary buildings between them. The first of these new buildings, the Student Life and Performance Center, will be placed on the site of NEC's current surface parking lot and maintenance shed, filling and healing a gap in the building frontage of the St. Botolph Street block. The second of the buildings, the Learning Center, will replace NEC's outdated dormitory building, spanning and activating the length of Gainsborough Street from Huntington Avenue to St. Botolph Street. Both buildings will have transparent bases at the street level, with extensive glazing at their base, inviting passers-by to share the excitement of the day-to-day life of NEC, and offering the NEC community a stronger connection with the city life around it. Together the new buildings will enliven the neighborhood and make it a more welcoming and safer place to live, work, and visit.

NEC's campus is a student-intensive one, with significant foot traffic between buildings as classes and programs take place in all buildings throughout the day and evening. This traffic will increase after the completion of the new buildings, as campus activities will be spread among more buildings. Outside of the new buildings, the sidewalks will be widened and enhanced with outdoor seating areas, landscape and hardscape accents, and new signage. Inside, the new spine will offer additional connectivity between the two new buildings and 241 St. Botolph Street.

Visible from Massachusetts Avenue and from Gainsborough Street will be the projecting second floor Orchestra Rehearsal Room with its glazed sides, acting as a



guiding beacon to what will be a major new campus entrance at the Student Life and Performance Center. There will also be a striking new vista of Jordan Hall from St. Botolph Street that doesn't currently exist because of the massing of the existing Residence Hall building. This will be made possible by the design of the southwest corner of the Learning Center building, whose recessed and chamfered corner will offer pedestrians and drivers moving west on St. Botolph Street a longer-distance appreciation of the proportion and craft of NEC's National Historic Landmark building.

The Student Life & Performance Center building on St. Botolph Street, rises above the buildings along Huntington Avenue, giving NEC a new presence on Boston's skyline. The distinctive design of the top of the building, wrapping the mechanical penthouse and anchoring the residential tower, highlights the building from a distance. The building's glazed east facade provides glimpses into the residential lounges on each floor, and illuminated at night, will give the neighborhood a new dynamism.

On Huntington Avenue, the new Learning Center building will replace the closed masonry library structure and offer a new public face for NEC. It will reinforce and strengthen NEC's importance as a cultural icon along the Avenue of the Arts, announcing NEC to passers-by, whether walking, driving, or commuting on the Green Line. The proposed coffeehouse, a new NEC community venue for student performances, will be placed on the Huntington Avenue end of the Learning Center building. With full-height glazing, it will light up the street corner with activity at the sidewalk level in stark but welcome contrast to the closed, opaque corner currently created by the Firestone Library. The design of the Learning Center building also leverages the bend in Huntington Avenue, providing an exciting new visual moment in a streetscape of largely opaque masonry buildings to vehicular and pedestrian traffic traveling east on Huntington Avenue.

From the corner of Huntington Avenue and Massachusetts Avenue at the BSO, the upper floors of the Student Life and Performance building will be clearly visible, reinforcing NEC's presence in the neighborhood. With a multi-windowed north façade, the building will offer an exciting new focus from the BSO corner in an otherwise dark vista southward over the Huntington Theater. Shared student living rooms on the residential floors with wide expanses of glazing will be placed on the east side of these uppers floors, to capture views out over Boston from the inside but also to ensure a lighted and active east façade that will be visible from the surrounding major thoroughfares.

Two new fully accessible portals from the street to the interior of the campus will be created, one to the Learning Center on Gainsborough Street and one to the Student Life and Performance Center on St. Botolph Street. These glazed and light-filled lobby spaces will clearly define the interior building way-finding, through their legible planning and staircases easily visible from outside. They will link the interiors



of the new buildings to the streetscape through transparency and activity, and bring natural light deep into the floor plates of each building. The entrance and lobby of the Learning Center will be placed directly across from and on axis with the Jordan Hall entrance and lobby, clearly linking the two buildings across Gainsborough Street. The entrance and lobby of the Student Life Center will be placed at the western end of the building, at a point which is equidistant to all parts of the NEC campus on the south side of Huntington Avenue. The south façade of the building will be angled, to provide a clear and graceful approach to the entrance, made even more welcoming with a gentle access ramp, planting areas, and south-facing seating steps.

# 5.5 Massing

The Student Life and Performance Center will have ten stories plus a lower ground floor at its base and a mechanical penthouse floor at its top. The first three floors will form a podium element for the new building. They will align vertically at their eastern end with the face of the adjacent 241 St. Botolph building, and share the same cornice line as the historic 241 building. Aligning the new building with the 241 building has been a strategic site planning priority; the new building will be set back 12′ from the back of sidewalk and property line to increase the outdoor pedestrian zone and allow a green buffer between the building and the street. This setback area will become part of the NEC campus' public realm, and will be dedicated to pedestrian circulation and enjoyment, especially in light of its southerly exposure.

The lower three floors of the Student Life and Performance Center will house spaces shared by the entire NEC community – the dining and social commons, library, and performance spaces. The second floor orchestra rehearsal room will cantilever in front of these floors to the NEC property line, announcing the entrance to the building and providing glimpses of its interior to those passing by outside. High level windows at the ground floor will provide passers-by a view of the black box theater. The upper residential floors of the Student Life and Performance Project will be set back from the lower three floors to reduce or eliminate visual, wind, daylight, and shadow impacts on the public realm.

The Learning Center will have seven stories plus a single underground basement. The cornice line of the first three floors aligns with that of the historic Jordan Hall Building directly across Gainsborough Street. The building is connected to the Student Life and Performance Center by a two-level crossing, whose roof wraps around both buildings connecting them with a continuous horizontal line to create a unified architectural composition that will define the next century of NEC's presence in the East Fenway.

The new buildings will respect and reflect the proportions of both the historic Jordan Hall building and the 241 St. Botolph building, reinforcing the urban scale of the



surrounding neighborhood at street level and bringing a new visual unity to the NEC campus and to the city block that these new compositions occupy.

### 5.6 Character and Materials

The character of the IMP Projectsis distinctly and purposely contemporary, emblematic of the forward-looking mission of NEC as a world-class music conservatory. The transparency of the new buildings, especially at their base, serves as a complement to the heavy masonry construction of their neighbors, highlighting the early 20th century craft of the nearby historic structures, while setting the new NEC buildings apart and creating a distinctive streetscape identity for NEC.

The new buildings are treated similarly in terms of exterior materials and the rhythm of their fenestration. The lower three floors of the buildings facing the three public thoroughfares – Huntington Avenue, Gainsborough Street, and St. Botolph Street - are clad with a full-height low-E curtain-wall system, taking advantage of their southern and western exposures to offer light-filled interiors and clear views both inward and outward. The cadence of these windows and their horizontal proportion are based on that of the window openings and intermediate brick spandrel panels of NEC's 241 St. Botolph Street building next door, further unifying new and existing structures. A counterpoint to the horizontality of the shared cornice line along St. Botolph Street is the cantilevered Orchestra Performance Room. Projecting in front of the building plane shared by the new and existing buildings, this is glazed on both sides and clad on its street-facing façade with a pleated panel system, reminiscent of a proscenium curtain.

The floors above use a different architectural expression to distinguish themselves from the podium floors, with a combination of opaque and translucent materials, and unitized windows with low-E coated glazing. This expression is unlike that of any other building in the immediate neighborhood. The different window sizes and their rhythms respond to the variety of functions behind them, whether dormitory room, practice room, classroom, or faculty studio. The mechanical penthouse on the top of the Student Life and Performance Center is wrapped top and sides with a combination of opaque and translucent materials, both enclosing mechanical equipment and offering a unique design treatment visible from the surrounding neighborhood. Wide expanses of glazing on the east façade of the upper-level residential floors signal the shared student living spaces on each floor that offer long-distance views eastward over Back Bay and downtown Boston.



# 5.7 Site Access and Vehicular Circulation

Public transportation access to and from the NEC campus is excellent. The MBTA Green Line 'E' train runs along Huntington Avenue on the north side of the campus, with stops at Massachusetts Avenue/Symphony and also at Northeastern University. The MBTA Orange Line runs along the NEC campus' south side with access from both Massachusetts Avenue and from Gainsborough Street. In addition there is MBTA bus service along Massachusetts Avenue, and commuter rail service at nearby Ruggles Station.

Pedestrian traffic in the area is heavy due to both NEC and Northeastern University students, swelling even more when there is a musical event at NEC or a sports event at Northeastern University. A major goal of the IMP is to make the neighborhood safer and more commodious for pedestrians while not adversely impacting vehicular traffic. Dedicated vehicular drop-off areas are proposed in front of the NEC buildings on both St. Botolph Street and Gainsborough Street. To increase pedestrian safety along Gainsborough Street, which is a highly traveled pedestrian crossing between Jordan Hall and the existing NEC buildings, NEC is proposing to install and maintain a raised crossing directly in front of the front entrance to Jordan Hall as a means of prioritizing pedestrian flow over vehicular traffic on this modestly-traveled stretch of Gainsborough Street.

Vehicular service to the IMP Projects will continue to occur "behind the scenes" from the public alleys adjacent to the Proposed Project sites as it does currently, with no impact on the servicing of the other buildings on Huntington Avenue that share these alleys. A dedicated off-street loading bay is provided in the SLPC Project, and an interior connection at the basement level through the SLPC Project to the existing 241 St. Botolph Street building will allow both buildings to be serviced for deliveries and trash removal via the newly created off-street loading bay.

# 5.7.1 Key Gateways

The NEC campus is fortunate to have strong pedestrian, vehicular, and mass transit connections to the rest of Boston. Its three main gateways help create a more accessible and legible campus for students, visitors, and patrons.

The first gateway, at the corner of Huntington Avenue and Gainsborough Street, is established by the classically designed Jordan Hall building on one side. On the other is the new Learning Center building, a very contemporary building whose transparency creates at this corner a new entrance beacon for the campus. The glazed south end of the new Learning Center building creates another corner beacon, signifying a second gateway at the corner of Gainsborough Street and St. Botolph Street, as it connects to the Orange Line. Walking along St. Botolph Street from



Massachusetts Avenue, the new green edge of planting in front of the 241 St. Botolph building leads the eye to the orchestra rehearsal room that extends out towards the sidewalk which, with its large windows, allowing pedestrians glimpses of the activities inside. Together these landscape and architectural elements create the third gateway into the NEC campus, further contributing to the NEC campus' sense of place within the urban fabric of the neighborhood.

### 5.7.2 Botolph & Gainsborough Street Intersection

NEC will work closely with its neighbor, Northeastern University, during Northeastern's upcoming IMP process to ensure that the planning and implementation of improvements to the intersection of St. Botolph and Gainsborough Streets. This long-neglected intersection will ultimately become an important gateway for both NEC's new campus buildings and Northeastern's future developments on the YMCA site, the Gainsborough Garage site, and possibly the site of Matthews Arena. Today, a limited number of pedestrians employ the rear exit from the Massachusetts Avenue Orange Line station, but this number is expected to increase modestly due to the construction of the new NEC buildings, and significantly following the construction of new Northeastern University projects on the YMCA site and the parcels south of St. Botolph Street.

As currently envisioned, this intersection will be reconstructed as part of NEC's proposed streetscape improvements program in a manner consistent with typical City of Boston streetscape standards. Over time, as Northwestern develops the parcels south of St. Botolph Street, the intersection may receive further upgrades and may be further pedestrianized to accommodate the increased volume of pedestrian traffic that is expected to follow these developments by Northeastern.

# 5.8 Open Space, Pedestrian Ways, and Amenities

The two IMP Projects and their associated site improvements provide the opportunity to strengthen the sense of campus at NEC and to create unified, distinct, and welcoming new setting for one of Boston's most important cultural institutions. Whether coming to a performance at NEC or simply passing through the neighborhood, the public at large will benefit from this new urban setting.

Sidewalks along the interior edges of the NEC campus will be widened, making them more generous and welcoming with seating and planted areas. Selected onstreet parking spaces will be re-purposed as additional planted and pedestrian zones, interspersed with safe vehicular drop-off areas to improve area-wide traffic flow during peak times for performance drop-off and pick-up.



The first floors of the LC Project will be accessible at grade, and the Student Life and Performance Center accessible via a shallow ADA-compliant ramp as well as with wide south-facing steps that double as a sunny outdoor seating area. By setting back from the sidewalk, the south façade of the Learning Center, a small south-facing 'outdoor room' will be created at the corner of Gainsborough Street and St. Botolph Street. With plantings and seats, this will create a new campus crossroads and a new meeting place for students and visitors to the NEC campus.

As part of the overall streetscape improvement strategy, the existing areaways in front of 241 St. Botolph Street may be partially infilled and planted, providing a new green building edge for St. Botolph Street. New trees will line the NEC sides of both Gainsborough Street and St. Botolph Street, shading sidewalks and softening street edges. These new street trees, along with the new planting areas in front of the new NEC buildings, will improve storm water drainage and help reduce the ambient heat otherwise created by paved surfaces. The proposed streetscape strategy will be implemented in partnership with Northeastern University, whose upcoming Institutional Master Planning process will necessarily include the re-envisioning of this corner of the Northeastern campus as a result of the new Grandmarc residence hall's development.

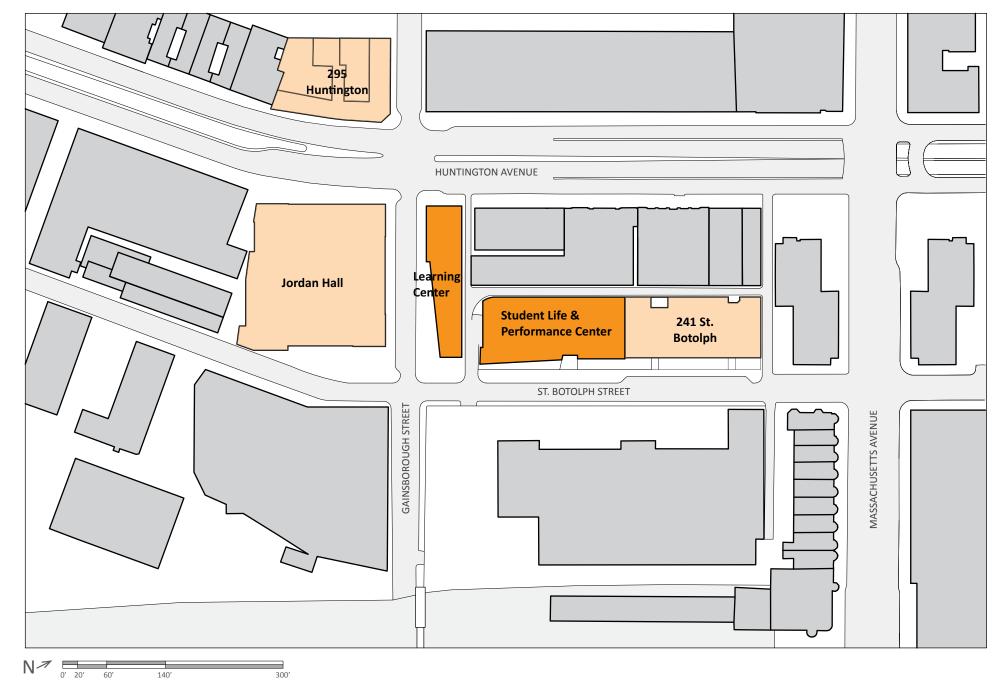




Figure 5-1 - Proposed Site Plan

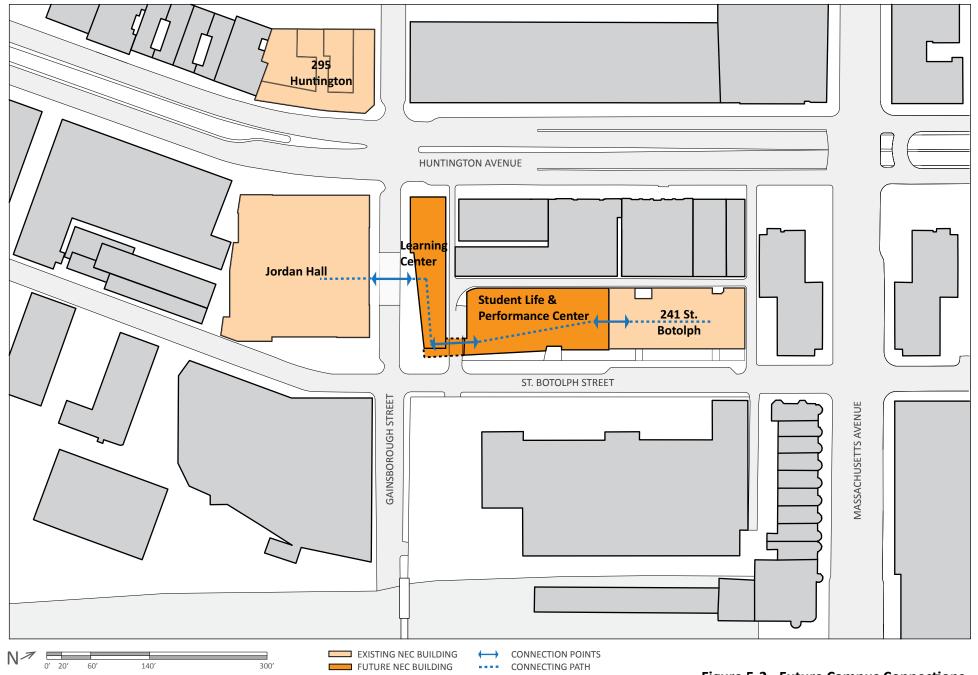




Figure 5-2 - Future Campus Connections
Phases I & II





**Figure 5-3 - View from Massachusetts Avenue**Phase I - Student Life & Performance Center Project





Figure 5-4 - View from Gainsborough Street
Phase I - Student Life & Performance Center Project





Figure 5-5 - View from Symphony Hall



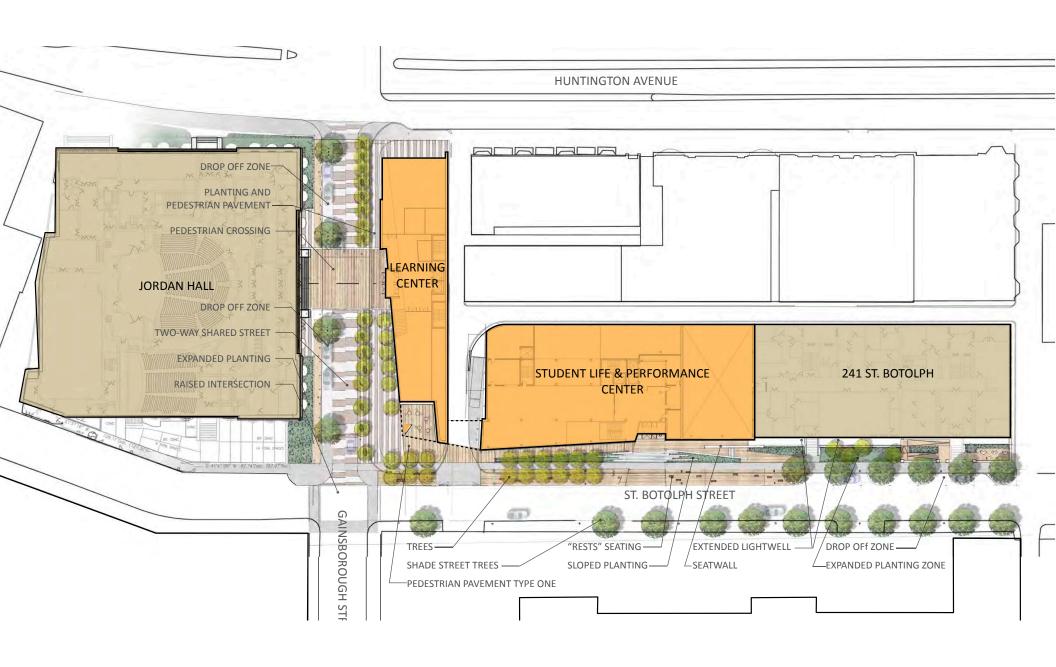


Figure 5-6 - View from Symphony Hall



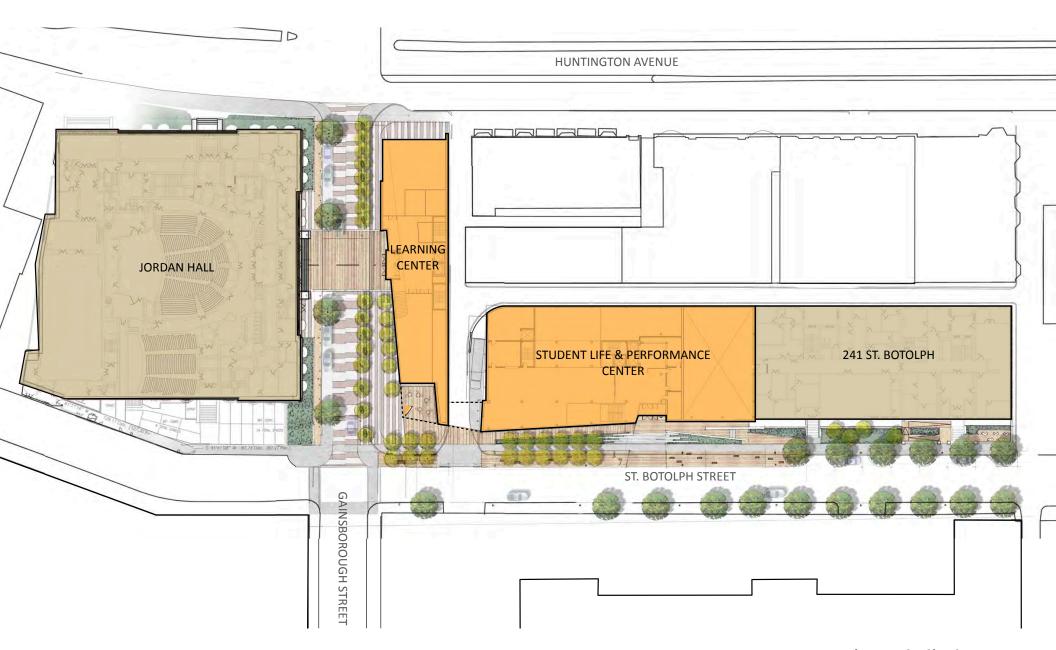


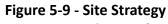
Figure 5-7 - View from Huntington Avenue Phase II - Learning Center





Phases I & II





Phases I & II

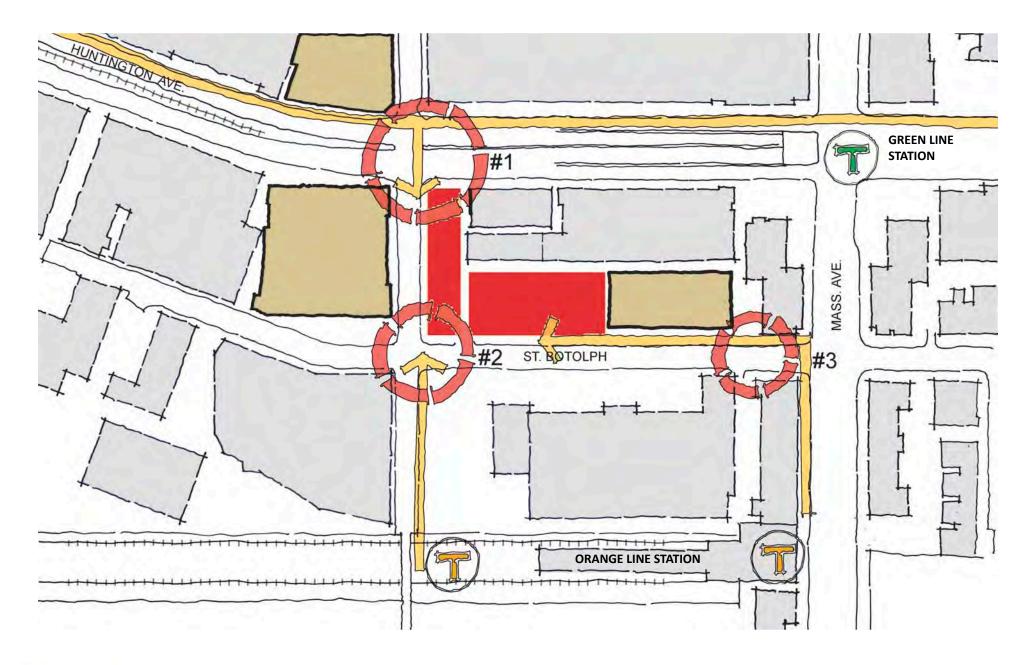


Figure 5-10 - Key Gateways to Site







**Figure 5-11 - View from Gainsborough Street**Phase I - Student Life & Performance Center Project





Figure 5-12 - View from Gainsborough Street





Figure 5-13 - View from Huntington Avenue
Phase II - Learning Center Project

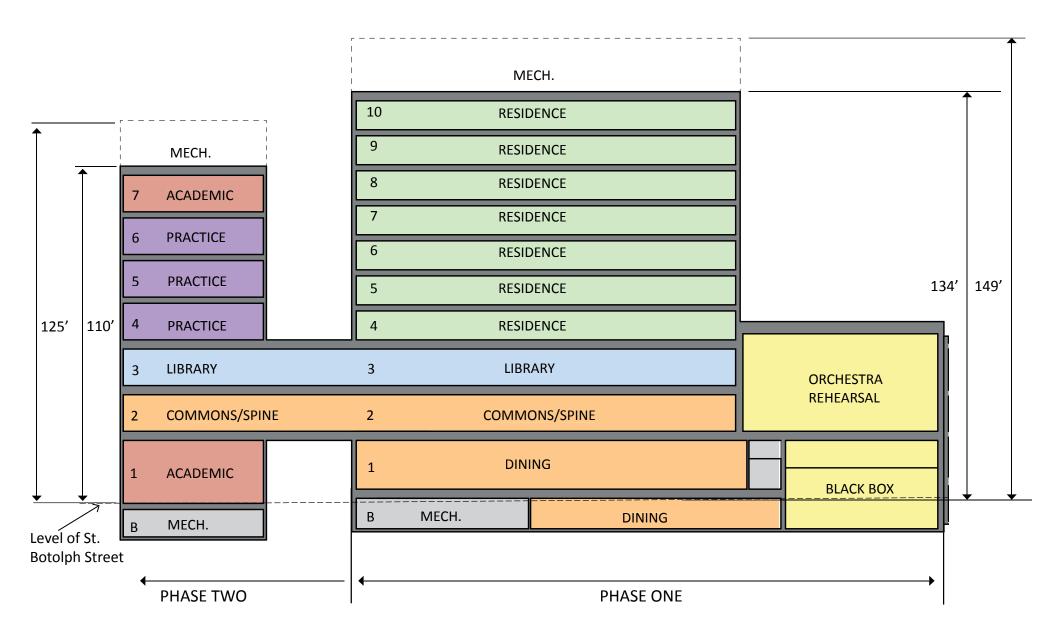




Figure 5-14 - East-West Section

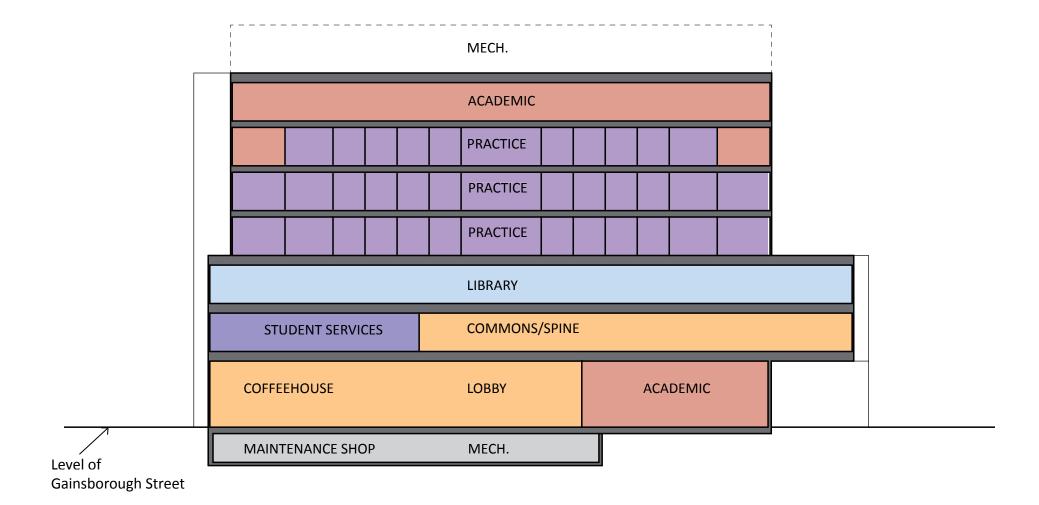




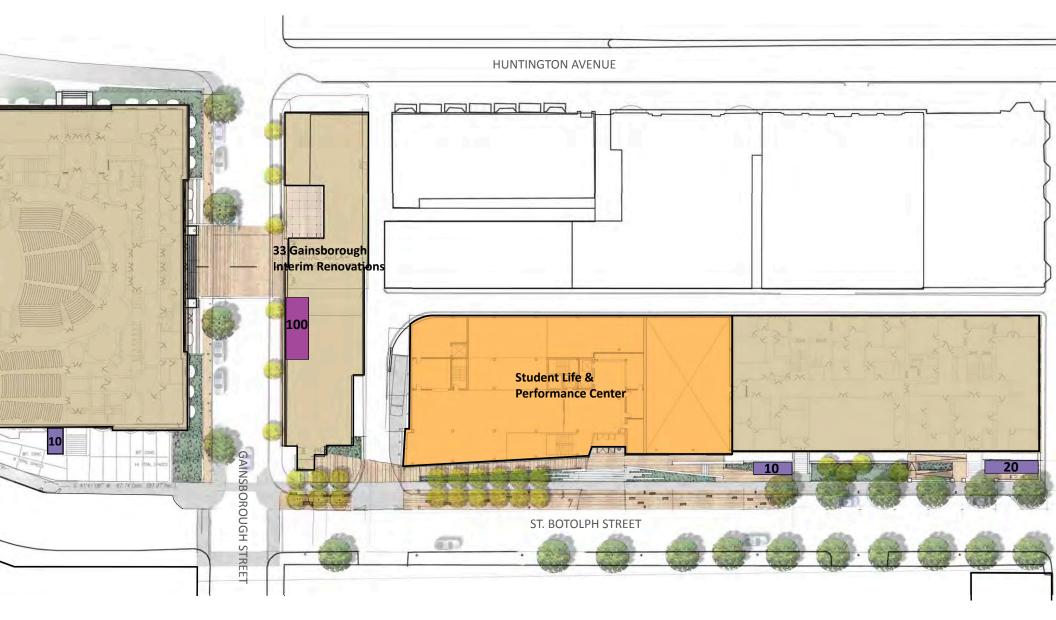
Figure 5-15 - North-South Section

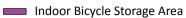




Figure 5-16 - Cross-Section at Performance Spaces

Lower Level - Third Floor



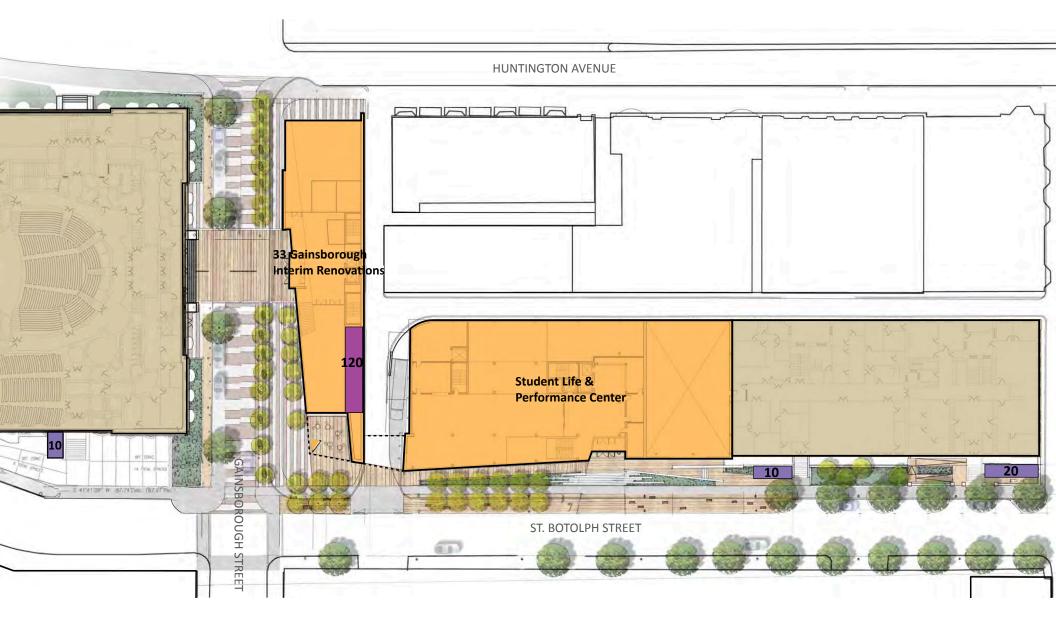


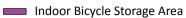
Outdoor Bicycle Storage Area



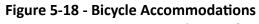
Figure 5-17 - Bicycle Accommodations

Phase I - Student Life & Performance Center Project





Outdoor Bicycle Storage Area



Phases I & II

# Transportation, Parking, and Circulation

#### 6.1 Introduction

A detailed transportation analysis for the NEC campus is provided in **Chapter 5** of the New England Conservatory Institutional Master Plan Notification Form/Project Notification Form (NEC IMPNF/PNF) that was submitted in January 2012. The Transportation analysis conforms to the BTD "Transportation Access Plan Guidelines". The study includes an inventory of Existing Conditions which includes a survey and compilation of existing transportation conditions within the study area including transportation characteristics of the NEC campus. The analysis in the NEC IMPNF/PNF addresses the transportation impacts associated with both Phase I and Phase II Projects of the IMP.

It is assumes that the IMP projects will not generate any additional traffic; therefore, it is not expected to generate new peak hour vehicle trips. Overall, the IMP projects will have no negative impacts on area roadways during weekday peak hours.

This chapter specifically addresses transportation and parking issues raised within the Scoping Determination that was issued by the Boston Redevelopment Authority (BRA) after their review of the Institutional Master Plan Notification Form/Project Notification Form (IMPNF/PNF) dated March 12, 2012. This chapter also specifically addresses the issues raised by the Boston Transportation Department (BTD) as part of their review of the IMPNF/PNF and as delineated in their comment letter dated February 10, 2012.

## 6.2 Parking Summary

No new parking will be provided as part of the IMP projects. NEC is exploring a number of options for replacing the 53 spaces that will be lost from the St. Botolph Street lot when the Student Life and Performance Center is constructed. These include potential arrangements with operators/owners of local area garages and/or a reduction in the provision of parking opportunities for NEC affiliates. The existing 20-space NEC Jordan Hall lot will remain in operation in order to provide a small



number of on-campus parking spaces for essential functions and to support critical loading and servicing requirements for Jordan Hall.

It is essential that NEC continues to provide these 20 spaces in the Jordan Hall Lot since these are the only parking spaces on campus today and there would be no way to service Jordan Hall. It is important to note the proposed small outdoor plaza that will be created at the corner of Gainsborough Street and St. Botolph Street will provide an improved public realm at this intersection. The BTD has asked that NEC explore the potential to install two dual charge stations that would provide charging for four vehicles in the 20 space lot. NEC will consider this request and explore the viability of this type of installation.

#### 6.3 Public Transportation

Students, staff, faculty and visitors are expected to continue to use the MBTA E Branch on the Green Line, the Orange Line, the Commuter Rail and several available MBTA Bus Lines that service the area. The IMP Projects are expected to have a slight reduction of transit trips in the area since more housing on campus will be available to students. The number of transit trips to and from the NEC campus is expected to decline slightly.

#### 6.4 Pedestrian Access

An important design feature of the IMP projects is to physically join the two new buildings to the existing building at 241 St. Botolph Street, allowing internal circulation between new gathering places, performance space, academic and practice rooms and administrative and support space. New internal connections will reduce the external pedestrian trips between these uses during inclement weather, although a new park at the corner of St. Botolph and Gainsborough Street will be designated as the NEC campus green and attract students outdoors during pleasant weather.

Another important design initiative is the enhancement of the heavily used pedestrian connection across Gainsborough Street between Jordan Hall and 33 Gainsborough Street, as shown previously **Figure 5-8**, Site Improvements. The IMP proposes to enhance the pedestrian crossing directly between Jordan Hall doors and 33 Gainsborough Street doors with a raised crosswalk of contrasting pavement material to encourage slower driving speeds and highlight the pedestrian crossing.

The primary entrance for the new Student Life and Performance Center will be located on St. Botolph Street and will be accessed via a ramp and wide south-facing steps. Existing sidewalks will be widened to provide outdoor seating and planting areas.



As the streetscape plans for Gainsborough Street and St. Botolph evolve, NEC will meet and coordinate with Boston Transportation Department and Public Improvement Commission staff. Tree cover and sustainable storm water management practices are discussed in **Chapter 8, Infrastructure**. A final plan will be documented in a Transportation Access Plan agreement (TAPA) to be filed with the City.

#### 6.5 Bicycle Environment

Bicycles are often locked to parking meters and fences in the Gainsborough Street and St. Botolph Street areas of the campus. The IMP Projects and associated streetscape improvements will provide extensive new accommodations for oncampus bicycle parking and storage.

Three areas along St. Botolph Street, as shown previously in **Figures 5-17 and 5-18**, will be designated for outdoor bicycle parking, including two areas in front of the 241 St. Botolph Street building and an area adjacent to Jordan Hall. An indoor bicycle storage room will be incorporated into the existing 33 Gainsborough Street building in the interim condition for use by NEC students. A significant indoor bicycle parking facility will be provided in the new Learning Center (Phase II) project to ensure a permanent, secure indoor bicycle storage facility that will benefit all members of the NEC community. A final plan will be documented in a Transportation Access Plan agreement (TAPA) to be filed with the City.

## 6.6 Loading and Service

The Student Life and Performance Center to be constructed in Phase I will provide a new dedicated loading dock that will service all general loading, including trash and recycling pick-up, for the entire NEC campus. Jordan Hall will continue to receive event specific deliveries and trash and recycling pick-up through the main loading dock at the rear of the building on St. Botolph Street as is current practice.

Based on standard truck trip generation rates<sup>1</sup>, total delivery activity on the NEC campus upon the completion of Phase II, is expected to be approximately nine (9) deliveries per day. The level of delivery activity is not expected to increase materially over current conditions, because no major new generators of deliveries are being constructed as part of the IMP.

The loading dock proposed as part of the new Student Life and Performance Center will be able to service a single unit box truck of up to 36 feet in length (SU-36). NEC will instruct all vendors to use this size vehicle or smaller for deliveries to the

<sup>1</sup> NCHRP Synthesis 298, Truck Trip Generation Data, Transportation Research Board, Washington DC, 2001.



campus. The loading dock is located adjacent to Public Alley 822 and is accessed by backing-in from St. Botolph Street as shown in **Figure 6-1**. Deliveries will be accepted on the first level of the building with elevator access to storage and distribution center on the lower level. From the lower level, access to the alley for hand deliveries to a receiving door at both the existing 33 Gainsborough building and the future new Learning Center will be provided. Trash and recycling from either the existing of the future NEC buildings across the alley will also be moved to the new Student Life and Performance Center for pick-up.

#### 6.7 Student Move-In/Move-Out Plan

The typical fall move-in takes place over a 2-day period in late August or early September. To help alleviate congestion on neighborhood streets and process students efficiently, first year students are typically required to move in on a Saturday starting at 9:00 AM. Student Ambassadors help unload cars to expedite the process. There are currently only 163 students that move in and out of the existing Residence Hall; therefore move-in/move-out activity has a negligible impact on neighborhood traffic. Upperclassmen move in the following day.

Due to the increase in student campus housing, NEC will work with the Boston Transportation Department to bag parking meters and reserve space at key locations to assist with traffic movement on move-in/move-out days in the future. Neighborhood residents will be made aware of fall move-in by written and verbal communication. Move-in/move-out will be restricted to certain times of day, depending on day-of-week. Campus security details will be on duty and the front of the buildings will be kept clear for move-in/move-out operations. A final plan will be documented in a Transportation Access Plan agreement (TAPA) to be filed with the BTD.

## 6.8 Pick-Up/Drop-Off Procedures

An important part of NEC's educational programming involves the Saturday preparatory school activities that draw young musicians from all over Greater Boston to NEC. While many of these students arrive on foot or by public transportation due to NEC's well-served central location, due to the age of many students, vehicular drop-off and pick-up by parents will continue to be a significant mode of travel for NEC's weekend preparatory student body. The Proposed Projects' development will help to alleviate traffic conditions related to preparatory school pick-up and drop off in a number of ways:

Addition of dedicated weekend pick-up/drop-off areas where existing parking metered spaces will be dedicated to pick-up/drop-off at certain hours on weekends (especially Saturdays);

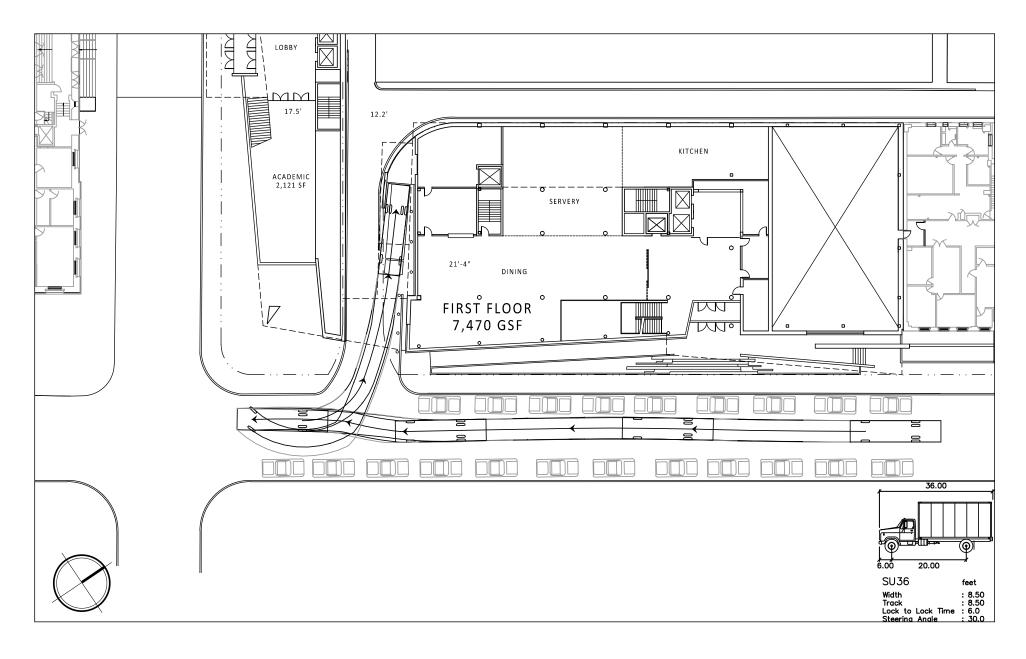


Figure 6-1 - Loading Docks





- Addition of active NEC management of pick-up/drop-off activities with uniformed personnel stationed at key pick-up/drop-off points during peak periods;
- The creation of major new common spaces where parents can remain on-campus during student lessons and performances will help to reduce the number of vehicle trips to and from campus. Rather than driving directly to and from NEC, parents will be able to park remotely in one of the many parking facilities with significant vacancy on weekends, walk with their child to NEC, and remain on campus at the proposed campus lounge, dining facility, or coffeehouse during their child's lessons and/or performance. These amenities will not only help to reduce vehicular traffic to and from NEC on weekends, they will also help to add vitality and life to the surrounding streets by inviting preparatory student parents to remain on campus during these periods;
- By reducing the number of on-campus parking spaces in connection with the IMP's development, NEC will provide fewer opportunities for preparatory parents to park on campus and will thus offer less of an incentive to drive to campus in the first place.

#### 6.9 Build Traffic Impacts

As described in the NEC IMPNF/PNF, the Build volumes are assumed to be the same as No-Build traffic forecasts; the IMP Projects will not cause any noticeable increase in peak hour vehicle trips.

## 6.10 Transportation Demand Management

NEC offers a variety of Transportation Demand Management (TDM) measures to help reduce single occupant autos commuting to its campus. The Phase I project will house an increasing proportion of the student body on the main campus, combined with a continued no parking policy for students either on- or off-campus. Other TDM efforts include:

- Incentives for MBTA use, including on-site pass sales, participation in the MBTA's student semester pass program, pre-tax purchase of MBTA passes for employees, and posting of MBTA maps and schedules at different locations on the campus.
- Designation of a Transportation Coordinator, responsible for providing public transit, ridesharing and other transit information to students, employees and faculty.



- ➤ For off-campus students, operation of a Commuter Referral Office in the Student Services Office, providing commuting students information on bus and train schedules and carpool information.
- Prohibition of on-campus parking for all dorm residents.
- ➤ Alternative working hours during summer months i.e. a four-day work week Monday through Thursday, every other week. This reduces transit and parking demand.
- Membership in the Fenway Alliance, an institutional consortium in the area that cooperates on transportation and parking issues.
- Ridesharing program with periodic incentives to encourage carpooling by commuter students, faculty, and staff.
- ➤ Cooperation with City agencies each August on a Move-In plan that coordinates student moving with the September 1 peak day for moving in and out of surrounding rental apartments.

NEC is committed to working with BTD to continually update and add to TDM programs through the campus transportation coordinator. Specific commitments with respect to the Proposed Projects will be documented in a Transportation Access Plan agreement (TAPA) to be filed with BTD.

# 6.11 Construction Impacts and Mitigation

A Construction Management Plan (CMP) will be submitted to the BTD for review and approval prior to issuance of the Building Permit. Construction management and scheduling will minimize impacts on the surrounding environment. The CMP will define truck routes that will help minimize impact of trucks on neighborhood streets. It will address sidewalk and street occupancy requirements necessary for the construction of building, roadway, and utility connections. It will also address construction worker commuting and parking, protection of existing utilities, and control of noise and dust.

7

# **Environmental Sustainability**

# 7.1 Introduction

New England Conservatory (NEC) is committed to the principles of sustainable development and aims to incorporate a wide array of sustainable initiatives into the IMP Projects. The concept of environmental sustainability refers to the planned use of resources with the goal of providing for future generations while maintaining the quality of life today. Essential to the implementation of this goal at NEC is the promotion of conservation of resources, energy efficiency, waste reduction and recycling, pollution prevention, increased reliance on renewable resources, and other measures consistent with sustainable living. Working in conjunction with the development of the IMP Projects, NEC's sustainability program requires a forward-looking multi-disciplinary approach that addresses both immediate and long-term issues, incorporating sustainability as the standard of living for New England Conservatory's community.

# 7.2 Existing Sustainability Measures

NEC values sustainability and environmental stewardship. The Building Operations Department takes into consideration the economic costs and benefits as well as the environmental costs and benefits associated with any sustainable strategy prior to its implementation.

NEC plans to measure its success through the framework of the LEED® rating system, using indicators such as reduced energy consumption, improved storm water management, reduction in water usage, improved indoor air quality, and use of sustainable materials where possible to evaluate performance.



# 7.2.1 Campus-Wide Initiatives

# Recycling

NEC makes use of a co-mingled stream recycle program. The core concept of recycling is energy conservation via reuse of old materials. NEC's recycling program results in not only less pollution throughout the region, but also a more sustainable campus.

New England Conservatory Recycling Program has three objectives:

- 1. Preserve the environment.
- 2. Reduce the cost of waste disposal.
- 3. Keep the program simple and convenient to maintain.

NEC's co-mingled stream recycling program has grown immensely since its inception in 2009. In December 2009, NEC was recycling 7 percent of its total generated refuse. As of October 2011, NEC is recycling 55 percent of its refuse. New England Conservatory's dining facility composts all food waste from the kitchen area, greatly decreasing waste.

#### Other Initiatives

NEC also reduces its environmental impact by purchasing key materials for day-to-day operations that contain recycled content. Twenty-five percent of the office supplies purchased by NEC contain recycled material. Also, public copiers located throughout campus use 30 percent post-consumer recycled paper.

NEC also reduces its consumption of new materials by reusing existing furniture stock. The Master Inventory List was created and is stored on the NEC shared drive. It shows items in storage and in individual departments (such as file folders, task chairs, filing cabinets, calculators, etc.). The list shows location and who to contact for the items. The list will decrease the number of items in storage, free up storage space and encourage the reuse of items that are still in working condition to reduce the volume of materials disposed of annually.

# 7.2.2 Alternative Transportation

NEC encourages transit use by all members of its community by selling MBTA passes on campus through a pre-tax employee payment program. NEC also offers a semester pass program that allows students to purchase MBTA passes at a discount.



Students who make use of this program are able to purchase MBTA monthly passes at an 11 percent discount to the prevailing rate.

### 7.2.3 Campus Events

NEC's Earth Day celebration (April 20<sup>th</sup> and 21<sup>st</sup>) includes information on ecofriendly purchasing, green cleaning, sustainable eating practices, wildlife conservation, and more.

Bistro 33 adds events and prizes in the dining hall for NEC student exhibiting sustainable eating practices (bring your own mug, use of silverware instead of plastic, etc.).

# 7.3 Future Goals: Sustainability Programs and Plans

In addition to the above mentioned initiatives already in place, NEC is exploring future sustainability initiatives, including the following activities:

- Collecting data to produce energy-related carbon footprint report.
- Incorporating green building practices into renovations and new building projects.
- Decreasing energy and waste usage through efficiency projects and conservation education.
- Expanding outreach to educate and involve more employees, students, and community members in environmental initiatives.
- Engaging students living on campus by enhancing outreach and continuing to lead conservation-themed competitions in the residence hall.
- ➤ Incorporating environmental preferences into contracts and purchasing.

### 7.3.1 Sustainability Committee

The Sustainability Committee serves as an advisory body to the President regarding actions and practices that promote sustainability, with a strong focus on student, faculty, and staff involvement. There are currently eight committee members and one coordinator.

The Sustainability Coordinator, Jennifer M. Kelemen, LEED G.A., is a graduate from Wentworth Institute of Technology. Jennifer obtained her Bachelors of Science in Architecture and joined NEC in 2009 with a keen interest in sustainability. She



obtained her LEED accreditation in January 2011 and leads NEC in becoming a more sustainable campus.

The NEC Sustainability Committee's mantra is P.E.A.R:

- ➤ Plan to reduce consumption
- ➤ <u>E</u>ducate others by consuming less
- Adopt energy saving products and service
- **R**educe, reuse, recycle

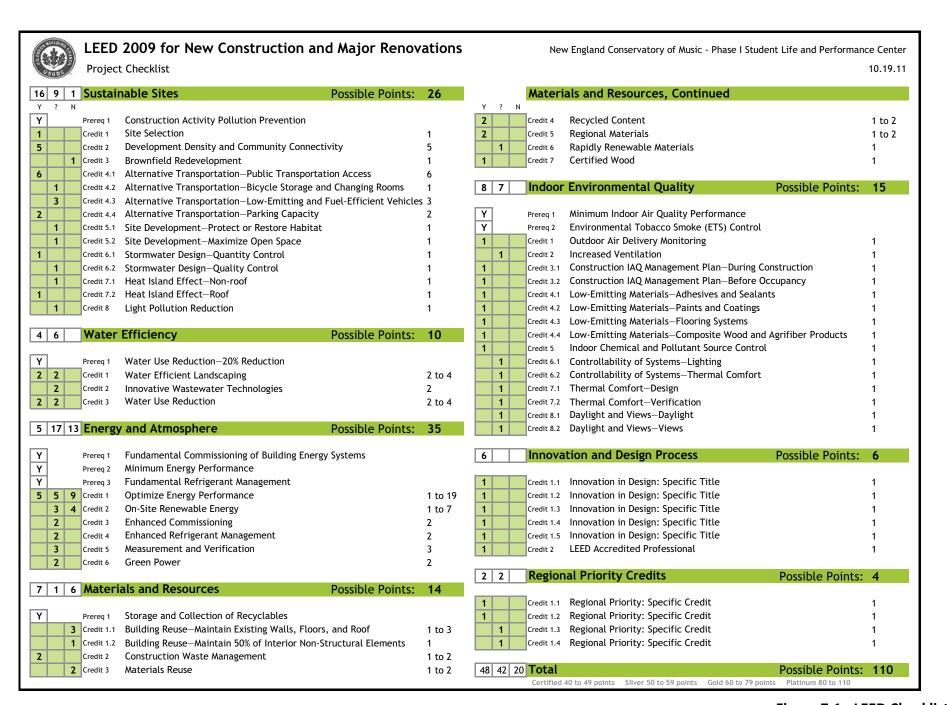
### 7.4 Future Sustainable Practices

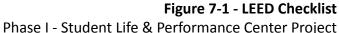
The IMP Projects subject to Large Project Review under Article 80 of the City's Zoning Code must comply with Article 37 of the Zoning Code, which establishes certain standards related to sustainable development. NEC is committed to incorporating numerous sustainable design elements into the Proposed Projects. The IMP Projects will respond to environmental concerns, reduce energy consumption, reduce water use, and increase recycling, along with incorporating other environmentally sustainable features and practices described below and in the IMP Projects' Article 37 filing, submitted under separate cover.

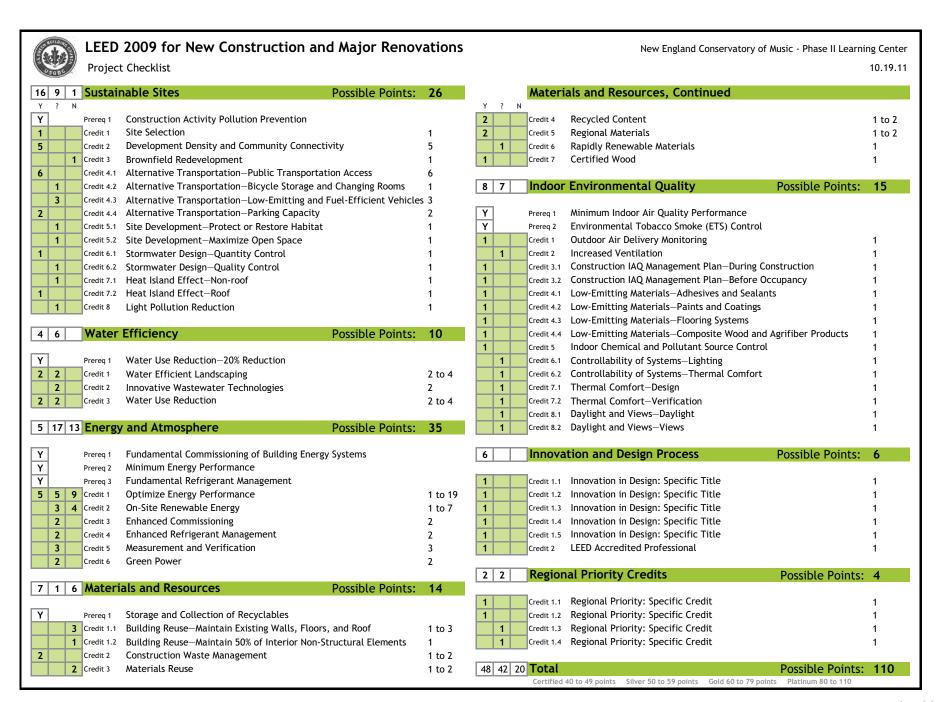
LEED 2009 for New Construction Checklists have been included in this IMP as **Figure 7-1** and **Figure 7-2**, respectively, for each of the IMP Projects. The LEED checklists have computed an initial summary of the green building points that each project is pursuing as defined by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) building rating system.

The IMP Projects will receive building permits after July 2011, and therefore will be subject to the City's new "Stretch Code." Therefore, the energy and atmosphere performance analysis and criteria have integrated the Stretch Code's requirements (i.e., to achieve 20 percent greater energy efficiency than baselines described in national standard ASHRAE 90.1 – 2007).

NEC has engaged Thomas Hotaling, AIA, Principal of Ann Beha Architects and Kenneth Fisher of Gensler to optimize the sustainable design strategies for each of the IMP Projects.











# 7.4.4 - Discord - Classical Street - Discord - October -

### 7.4.1 Phase 1 – Student Life and Performance Center

The design of the mixed-use Student Life and Performance Center for New England Conservatory will incorporate sustainable design strategies that are fully integrated with the overall design priorities of the project. A thoughtful sustainability agenda will reduce operating expenses and improve user satisfaction while controlling capital costs. As design of this project progresses, strategies will be evaluated through a life cycle cost analysis (lca), so that informed decisions can be made at appropriate milestones in the process.

The LEED Rating System as developed by the United States Green Building Council (USGBC) has become an industry understood metric for sustainable design, this project will utilize the LEED 2009 for New Construction and Major Renovations program as a tool for focusing and monitoring this agenda. A preliminary LEED 2009 NC checklist is included (see **Figure 7-1**) outlining the areas seen as potential for advancement. Based on this analysis of likely targets and potential targets, this project can easily meet a standard of LEED Certifiable with the ability to achieve higher levels certification with moderate cost premiums to the project. Again, this project will follow a thoughtful process where investment in good design leads to an effective sustainable outcome.

The following outline organizes areas of focus and is meant to assist in the establishment of criteria that will serve to inform the design process going forward.

# **Building Site Design**

- Site Selection as this project looks to develop a site that previously served as an at grade parking lot, the building does not create a negative environmental impact to the site.
- Development Density and Community Connectivity as an urban building that supports educational and cultural uses, this project is extremely positive in channeling site-appropriate development into this community.
- ➤ Alternative Transportation this project is well served by public transportation including rail, subway and bus lines. In addition, alternative modes of transportation will be encouraged through the reduction of on-site parking and through the provision of bicycle parking associated with the use of showers for the cyclists.
- > Stormwater Design the project will incorporate stormwater management and groundwater recharge systems that will both reduce the quantity of and improve the quality of stormwater discharged into the municipal storm sewer system.



➤ Heat Island Effect – for non roof surfaces, the design will select paving material with a high solar reflective index (sri) that exceeds 29; for roof surfaces, if vegetated roofs are not employed, light colored roofing technologies such as TPO will be specified.

# **Building Water Utilization / Conservation**

- ➤ Water Efficient Landscape for the vegetated areas developed at grade, the material selected will be drought resistant and will not require permanent irrigation (temporary irrigation over the first year may be required to establish the material)
- Water Use Reduction high efficiency low flow fixtures will be employed throughout the facility. Particular focus will be on the residential fixtures and the food service fixtures employed in the plumbing design. The selection for these fixtures can be made from the catalog of major suppliers. NEC will explore implementing waterless urinals and eliminating plastic trays in the dining hall.

# **Building Envelope**

- ➤ A high performance building envelope will be developed to support the thermal performance of the building, save energy, and allow for the downsizing of the mechanical equipment.
- ➤ NEC will consider incorporating the LEED Pilot Credit 55: Bird Collision Deterrence which intends to reduce bird injury and mortality from in-flight collisions with buildings. NEC would need to comply with one of the Building Façade options, one of the Interior Lighting options, one of the Exterior Lighting options, and the Post-Construction Monitoring Plan requirements as described in the LEED Pilot Credit Library.

### **Building Mechanical Systems**

- ➤ A high efficiency heating and cooling strategy will form the basis for the project's system design, based on hydronic thermal delivery, along with energy efficient vfd drives for fans and pumps, energy recovery systems and water side economizers.
- ➤ All mechanical equipment will be selected to incorporate zero use of chlorofluorocarbon based refrigerants.



# Lighting

- Day lighting strategies through the appropriate use of external shading devices and internal glare control methods (light shelves, transmitting shades, etc.) will be evaluated.
- High efficiency lighting fixtures will be selected from standard manufacturers; lighting will be controlled through the use of occupancy sensors and the building management system (bms).

# **Design Material Resources**

- ➤ The construction process will target 95% efficiency for the construction waste management program.
- All standard building materials will incorporate the highest levels of recycled content practicable; this will follow standard specifications and can be sourced through major suppliers; target materials will include steel, concrete, drywall, acoustical ceiling.
- Specifications will target regional suppliers and manufacturers to reduce embodied energy of building materials; this will be based on standard specifications sourced through major suppliers.

# **Indoor Environmental Quality**

- The design will meet or exceed code requirements for quality and quantity of ventilation air.
- The contractor will follow an indoor air quality management plan during construction and a planned 'flushing' period will be scheduled for the building prior to occupancy.
- Low VOC emitting building products will be specified and sourced from through major suppliers; target materials will include paints, sealants, flooring systems (including resilient flooring and carpet) and composite wood / fiber products.

# **Building Commissioning / Monitoring and Verification**

- A commissioning agent shall be employed through the construction process to ensure that the project's energy-related systems are installed and operate to meet the original basis of design as established by design engineer.
- > The project will explore the incorporation of a building management system that facilitates measurement and verification of the design performance through the life of the building so that the initial capital investment is fully realized.



# 7.4.2 Phase 2 – Learning Center

The design of the Learning Center for New England Conservatory will incorporate sustainable design strategies similar to those integrated into the Student Life and Performance Center Project (Phase I). A preliminary LEED 2009 NC checklist for Phase II is also included (see **Figure 7-2**) outlining the areas seen as potential for advancement. Based on this analysis of likely targets and potential targets, this project can easily meet a standard of 'LEED Certifiable 'with the ability to achieve higher levels certification with modest cost premiums to the project. Again, this project will follow a thoughtful process where investment in good design leads to an effective sustainable outcome.

The following outline organizes areas of focus and is meant to assist in the establishment of criteria that will serve to inform the design process going forward.

# **Building Site Design**

- ➤ Site Selection as this project looks to develop a site that previously supported another building, the new building does not create a negative environmental impact to the site.
- ➤ Development Density and Community Connectivity as an urban building that supports educational and cultural uses, this project is extremely positive in channeling site appropriate development into this community.
- Alternative Transportation this project is well served by public transportation including rail, subway and bus lines. In addition, alternative modes of transportation will be encouraged through the reduction of on-site parking and through the provision of secure indoor bicycle parking and storage.
- Stormwater Design the project will incorporate stormwater management and groundwater recharge systems that will both reduce the quantity of and improve the quality of stormwater discharged into the municipal storm sewer system.
- ➤ Heat Island Effect for non roof surfaces, the design will select paving material with a high solar reflective index (sri) that exceeds 29; for roof surfaces, if vegetated roofs are not employed, light colored roofing technologies such as TPO will be specified.

# **Building Water Utilization / Conservation**

Water Efficient Landscape - for the vegetated areas developed at grade, the material selected will be drought resistant and will not require permanent irrigation (temporary irrigation over the first year may be required to establish the material).



➤ Water Use Reduction – high efficiency low flow fixtures will be employed throughout the facility's restrooms and pantries. The selection for these fixtures can be made from the catalog of major suppliers.

# **Building Envelope**

- ➤ A high performance building envelope will be developed to support the thermal performance of the building, save energy, and allow for the downsizing of the mechanical equipment.
- ➤ NEC will consider incorporating the LEED Pilot Credit 55: Bird Collision Deterrence which intends to reduce bird injury and mortality from in-flight collisions with buildings. NEC would need to comply with one of the Building Façade options, one of the Interior Lighting options, one of the Exterior Lighting options, and the Post-Construction Monitoring Plan requirements as described in the LEED Pilot Credit Library.

# **Building Mechanical Systems**

- ➤ A high efficiency heating and cooling strategy will form the basis for the project's system design, based on hydronic thermal delivery, along with energy efficient vfd drives for fans and pumps, energy recovery systems and water side economizers.
- All mechanical equipment will be selected to incorporate zero use of chlorofluorocarbon based refrigerants

# Lighting

- > Day lighting strategies through the appropriate use of external shading devices and internal glare control methods (light shelves, transmitting shades, etc.) will be evaluated
- ➤ High efficiency lighting fixtures will be selected from standard manufacturers; lighting will be controlled through the use of occupancy sensors and the building management system (bms)

# **Design Material Resources**

- ➤ The construction process will target 95% efficiency for the construction waste management program
- ➤ All standard building materials will incorporate the highest levels of recycled content; this will follow standard specifications and can be sourced through



major suppliers; target materials will include steel, concrete, drywall, acoustical ceiling.

Specifications will target regional suppliers and manufacturers to reduce embodied energy of building materials; this will be based on standard specifications sourced through major suppliers.

# **Indoor Environmental Quality**

- > The design will meet or exceed code requirements for quality and quantity of ventilation air
- The contractor will follow an indoor air quality management plan during construction and a planned 'flushing' period will be scheduled for the building prior to occupancy.
- ➤ Low VOC emitting building products will be specified and sourced from through major suppliers; target materials will include paints, sealants, flooring systems (including resilient flooring and carpet) and composite wood / fiber products

# **Building Commissioning / Monitoring and Verification**

- A commissioning agent shall be employed through the construction process to ensure that the energy related systems are installed and operate to meet the original basis of design as established by design engineer.
- > The project will explore the incorporation of a building management system that facilitates measurement and verification of the design performance through the life of the building so that the initial capital investment is fully realized.



# 7.5 Energy Use

### 7.5.1 Phase I – Student Life and Performance Center Project

The following types of energy resources will likely be required in connection with NEC's Phase I:

- Chilled Water
- Heating Hot Water
- Air Systems
- ➤ Humidity Control
- Exhaust
- Domestic Hot Water Heating
- Domestic Water Booster Pump
- ➤ Fire Protection Fire Pump
- Electrical

Natural gas is expected to provide the energy to meet the IMP Projects' heating, hot water and domestic hot water demands with an annual gas consumption estimated at 285,000 therms, with a peak demand of 92 therms/hr in January. The buildings' heating energy will be generated on-site by high efficiency gas-fired boilers and domestic water heaters. Natural gas demands and availability will be coordinated with National Grid. Currently, chilled water is expected to be generated on-site.

#### **Natural Gas**

Natural gas will be utilized by new hot water boilers to generate heating hot water and domestic water. Gas will also be utilized for cooking in the kitchen. The gas service will be extended from the existing utility gas main in the street (Huntington Avenue). Natural gas demands and availability will be coordinated with National Grid.

Natural gas is expected to provide the energy to meet the IMP Projects' heating hot water, domestic hot water, and cooking demands with an annual gas consumption estimated at 285,000 therms, and a peak demand of 92 therms/hr in January. The building's heating energy will be generated on-site by high efficiency gas-fired boilers and domestic water heaters. The condensate from the condensing boilers will



be neutralized prior to being sent to drains which feed to Huntington Avenue's sewer system.

### Water-Cooled Chillers and Cooling Tower

The estimated cooling load for the proposed building is 450 tons. Chilled water will be produced by two 225-ton water-cooled chillers located in the basement mechanical room. Chilled water distribution will utilize primary and secondary pumping. Three primary pumps will be provided. One primary pump will be a backup. The two secondary pumps will have primary/standby operation and will be fitted with variable frequency drives for variable volume operation. Space will be reserved for the addition of a third chiller and additional pumps to meet demand for potential future expansion of this central system to serve demand from the existing 241 St. Botolph Street buildings, which does not have a central chilled water plant.

Different types of water-cooled chillers will be considered. These include variable speed chillers, variable flow chillers, heat recovery chillers, and frictionless chillers. Variable speed chillers and frictionless chillers both have very high performance efficiencies. Variable flow chillers reduce the system pump energy, and heat recovery chillers can provide a pre-heat source for the large domestic hot water demand.

Heat rejection will be accomplished with either two cooling towers or a single two-cell cooling tower located on the roof. Each cell will have the capability of operating independently when the second cell is out of service. Three condenser water pumps will be provided. One pump will be a backup. Space will be reserved for the future addition of a third cooling tower cell and an additional condenser water pump to meet demand for future expansion of this central system to serve demand from the existing 241 St. Botolph Street buildings, which does not have a central chilled water plant.

The secondary chilled water distribution will utilize 2-way control valves. A differential pressure sensor will control the secondary pump speed and a differential pressure bypass will maintain pump speed above 25%.

#### Water-Side Economizer

A water-side economizer (WSE) will utilize cold condenser water during the heating season to generate chilled water for the winter cooling loads. This will avoid the need to provide air-side economizers (ASE) that would require very large ducts and shafts to permit cooling with 100% outside air. The WSE system will include a plate and frame heat exchanger piped in parallel with the chillers, and two-position isolation control valves on the condenser water and chilled water connections. Head



pressure control will be required for the chillers to allow a smooth transition when going from WSE operation to chiller operation.

Heating

#### General

The heating demand for the building is estimated at 3,500 MBH. Domestic hot water heating equipment will likely be independent of the heating hot water equipment so that the condensing boilers can maintain operation at lower temperatures.

#### **Hot Water Boilers**

Heating hot water will be generated by a minimum of two high-efficiency, gas-fired, hot water boilers. The boilers will be direct-vented. The direct vents will terminate at the building sidewall in lieu of non-direct vent systems that would require a chimney terminating at the roof.

Each boiler will have a dedicated primary pump. Secondary pumps in a primary/standby arrangement will distribute hot water to terminal heating equipment. The secondary pumps will be fitted with variable frequency drives for variable volume operation.

Air Systems

#### Outside Air Treatment (ERV - 1 and 2)

The 7,600 CFM outside air pretreatment systems will condition outside air through utilization of a desiccant wheel for energy recovery. Energy will be transferred with the building relief air, and possibly toilet exhaust air, to the incoming outside air to provide precooling in summer and preheating in the winter. One OA unit will serve the floors below level 4 and another, mounted on the roof, will serve floors 4 through 10 of the residential tower.

The unit serving the residential tower will include heating and cooling coils in order to temper ventilation air

The unit serving the lower floors will be located on the fourth floor. Treated outside air will be ducted directly to each air handling unit. Relief air from each air system will be ducted to the OA unit exhaust inlet. Automatic dampers on the outside air supply and relief air ducts will be fitted with integral air flow measuring stations to maintain the required ventilation rated and building pressurization.

#### Black Box (AC-3), Ensemble (AC-4), Orchestra (AC-5)

Each of the performance spaces will be served with a dedicated air handling unit. The units will be single zone type with variable volume control. Multiple supply fan array systems will be considered in order to reduce sound power levels generated by the units. Ducts mains serving these spaces will have large cross-sectional areas in



order to maintain duct air velocities lower than 750 FPM. Nearer to the outlets and inlets, duct velocities will be reduced to 450 FPM. The supply and return ducts will require sound attenuators and all supply and return ductwork will be acoustically lined. AC-3 will provide 7,600 CFM, AC-4 will provide 4,000 CFM, and AC-5 will provide 6,000.

### Dining (AC-2)

The 12,000 CFM air system serving the dining areas and other miscellaneous area on the lower level and first floors will be variable volume reheat type.

#### Library (AC-1)

The 25,000 CFM air system serving the library areas and other miscellaneous areas on the lower second and third floors will be variable volume reheat type. A 10,000 CFM air handling unit will serve special collections areas.

### **Special Collections (AC-1A)**

The 15,000 CFM air system serving the library areas and other miscellaneous areas on the lower second and third floors will be constant volume reheat type. Carbon filters will be utilized to provide gas phase filtration for this space.

#### Air-side Economizer (ASE)

The energy code requires that an economizer be provided for the climate zone including Boston for systems exceeding 135,000 BTUH cooling capacity. Both air-side and water-side economizers are permitted. If a water-side economizer is not used, ASE's will be required for each air handling unit exceeding 135,000 BTUH. The ASE requires use of 100% outside air to provide "free" cooling when outside air temperatures are favorable. For this building the water side economizer is preferred over the ASE so that sizes of outside air and relief air ducts can be minimized.

# **Humidity Control**

- 1. Humidifiers will be provided for all performance and instrument storage spaces to maintain relative humidity levels above 30%.
- 2. All building spaces will utilize dehumidification capabilities of air system cooling coils to maintain the relative humidity below 55%.
- The system serving the library archive space will be provided with a humidifier and humidity controls to maintain a constant relative humidity throughout the year.



### **Exhaust**

#### Toilet

Where permitted by the local codes, toilet exhaust will be processed through the energy recovery units to pretreat incoming outside air.

#### Kitchen

The kitchen hood exhaust system will require ductwork to be routed in a rated enclosure to the termination point. Typical installations include fire-rated duct wrap to minimize clearance requirements. The exhaust fans will be fitted with variable frequency drives to reduce exhaust fan energy use and make-up air during low demand periods.

#### General

Exhaust fans will likely be required for all mechanical rooms, electric rooms, janitor's closets, and trash rooms.

# **Domestic Hot Water Heating**

#### General

The domestic hot water (DHW) heating can be accomplished either by tie-in to the heating hot water system, utilizing an independent gas-fired heater, or utilizing a steam-fired semi-instantaneous unit fed from the St. Botolph building steam boiler(s). The kitchen will require a higher water temperature in order to meet health codes. In order not to penalize the entire DHW system with higher energy use to maintain the higher temperature, separate DHW systems will be considered so that the DHW system serving lavatories and showers can be maintained at a lower temperature.

#### Gas-fired

Gas-fired instantaneous water heaters will be provided for both the kitchen DWH system and the toilet DWH system. Condensing-type heaters can achieve efficiencies above 90% and can utilize direct vents through the sidewall of the building.

### **Domestic Water Booster Pump**

A domestic water booster pump will be required to supply domestic water to adequate pressure on all floors.

### Fire Protection – Fire Pump

A fire pump will be required in order to provide adequate pressure for the building sprinkler systems.



#### **Electrical Service**

#### Service

Pending confirmation by the electric utility, NStar Electric, the underground high voltage primary service will originate from an existing utility manhole in St. Botolph Street and will continue to the utility transformer/network protector vault located in inside the building at Lower Level. Primary service conductors will be installed in duct bank. The utility vault is to be partially located below sidewalk and be accessible from street level via hatch or grating. Utility requires vault to house dual redundant transformers and network protectors. Approximate vault size to be  $20' \times 40' \times 12'$ H. Refer to electrical drawings for additional utility vault construction requirements. Electrical service secondary duct bank and service conductors will be installed between the utility vault and main electric room located at Lower Level and terminate at the main distribution board (MDB).

#### Distribution

Main distribution board (MDB) will be 3000 A/480V utilizing molded case type distribution circuit breakers with solid state LSI trip functions for 400AF devices and larger to serve lighting and power panels, automatic transfer switches and elevators. Main circuit breaker will be 3000 ampere, stationary construction. Utility metering is included for the main switchboard and fire pump.

#### **Sub-Distribution**

Lighting and power panels will be located at each level in dedicated electrical rooms. Dry transformers are included in each electrical room to step down distribution voltage to 208/120 volts for receptacle panels and small appliance loads. Theatrical type lighting and power receptacles will be fed from separate K-13 rated transformer and distribution board(s). Audio Visual loads will be fed from separate K-13 shielded isolation transformer and isolated ground panel board(s).

#### **Emergency and Standby Distribution**

A diesel generator is planned to power emergency (life safety) and standby (non-life safety) loads. The generator and sub-base fuel storage tank may be located at the Mechanical Penthouse or the existing St. Botolph Building roof in a sound-attenuated outdoor enclosure. Secondary fuel storage tank will be located at Lower Level with leak detection, controller and dual-pump system. The emergency power will serve life safety loads including: smoke control, lighting, security, communications and fire pump. The standby power will serve non-life safety loads including: non-simultaneous elevators, heating, pumps, and essential air handlers for freeze protection and minimal air conditioning.

Emergency and standby power transfer switches and distribution equipment will be located in dedicated electrical rooms and include feeders protected with minimum 1-hour fire rating per Massachusetts Electrical Code. Branch Circuit Transfer System will be provided for emergency lighting in Theatrical type spaces.



#### Lighting

Lighting for all public areas, non-public areas, building exterior, and site will be as specified by the Lighting Designer.

Architectural lighting control system will be provided for all public areas including automated schedule based controls, occupancy controls, day lighting dimming controls, site lighting relay type controls. Local occupancy controls will be used throughout the residence type spaces. Appropriate fixture cutoffs will be specified to minimize light pollution and impacts to adjacent structures.

# 7.5.2 Phase II - Learning Center Project

The following types of energy resources will likely be required in connection with NEC's Phase II:

- Chilled Water
- Heating Hot Water
- Air Systems
- Exhaust
- Perimeter Radiation
- Domestic Hot Water Heating
- Domestic Water Booster Pump
- Fire Protection Fire Pump
- > Electrical

Natural gas is expected to provide the energy to meet the new project's heating, hot water and domestic hot water demands with an annual gas consumption estimated at 93,000 therms, with a peak demand of 45 therms/hr in January. The building's heating energy will be generated on-site by high efficiency gas-fired boilers and domestic water heaters. Natural gas demands and availability will be coordinated with National Grid. Currently, chilled water is expected to be generated on-site.

**Natural Gas** 

Natural gas will be utilized by hot water boilers in Phase 1 to generate heating hot water and domestic water. The gas service will be extended in Phase 1 from the existing utility gas main in the street (Huntington Avenue). Natural gas demands and availability will be coordinated with National Grid.



Natural gas is expected to provide the energy to meet the new project's heating hot water and domestic hot water demands with an annual gas consumption estimated at 93,000 therms, and a peak demand of 45 therms/hr in January. The building's heating energy will be generated on-site by high efficiency gas-fired boilers and domestic water heaters. The condensate from the condensing boilers will be neutralized prior to being sent to drains which feed to Huntington Avenue's sewer system.

# Cooling

### Water-Cooled Chillers and Cooling Tower

The estimated cooling load for the Phase II building is 225 tons. The location of the Phase II cooling tower is likely to be on the roof of the Phase II building, but the possibility of expanding the cooling tower system on the roof of the Phase I project will also be explored as an alternative.

The secondary condenser or chilled water distribution will utilize 2-way control valves.

# Heating

The heating demand for the building is estimated at 1,200 MBH. Domestic hot water heating equipment will be independent of the heating hot water equipment so that the condensing boilers can maintain operation at lower temperatures.

The boiler plant for the Phase II project is anticipated to be located in the mechanical penthouse area of the building, but an alternative involving the addition of a third hot water boiler to the boiler plant installed during Phase I will also be explored. The new boiler will be a high-efficiency, gas-fired, hot water boiler. The boiler will be direct-vented with sidewall or overhead vent termination.

A new primary pump shall be provided for the new boiler and a new secondary pump will be added to supplement the existing secondary pumps. The secondary pump will be fitted with variable frequency drives for variable volume operation.

# Air Systems

#### First and Second Floors (AC-6)

A variable air volume system with hot water reheat coils will provide heating, cooling and ventilation for the first and second floor. Spaces will be zoned with individual VAV terminal boxes. The unit will be sized at approximately 24,000 CFM.



#### Library (AC-7)

The air system serving the library on the third floor will be variable volume reheat type. The unit will be sized at approximately 12,000 CFM.

#### 7th Floor and Circulation for Floor 4, 5, and 6 (AC-8)

The air system serving the 7th floor classrooms and the circulation spaces on floor 4, 5 and 6 will be variable volume reheat type. The unit will be sized at approximately 18,000 CFM.

#### **Outside Air Treatment (ERV-3)**

The 5,000 CFM outside air pretreatment system will condition outside through utilization of a desiccant wheel for energy recovery. Energy will be transferred with the building relief air, and possibly toilet exhaust air, to the incoming outside air to provide precooling in summer and preheating in the winter. The OA unit will serve floors 4 through 7.

#### **Exhaust**

#### **Toilet**

Where permitted by the local codes, toilet exhaust will be processed through the energy recovery units to pretreat incoming outside air.

#### General

Exhaust fans will likely be required for all mechanical rooms, electric rooms, janitor's closets, and trash rooms.

# Domestic Hot Water Heating

#### General

The domestic hot water (DHW) heating will be accomplished by tie-in to the heating hot water system, utilizing an independent gas-fired heater. The proposed coffeehouse will require a higher water temperature in order to meet health codes. In order not to penalize the entire DHW system with higher energy use to maintain the higher temperature, separate DHW systems will be considered so that the DHW system serving lavatories and showers can be maintained at a lower temperature.

#### Gas-fired

Gas-fired instantaneous water heaters will be provided for both the kitchen DWH system and the toilet DWH system. Condensing-type heaters can achieve efficiencies above 90% and can utilize direct vents through the sidewall of the building.



### **Domestic Water Booster Pump**

A domestic water booster pump will be required to supply domestic water to adequate pressure on all floors.

# Fire Protection - Fire Pump

A fire pump will be required in order to provide adequate pressure for the building sprinkler systems.

## **Electrical Service**

Pending confirmation by the electric utility, NStar Electric, the underground high voltage primary service will originate from an existing utility manhole in St. Botolph Street and will continue to the utility transformer/network protector vault located in inside the building at Lower Level. Primary service conductors will be installed in ductbank. Utility Vault to be partially located below sidewalk and be accessible from street level via hatch or grating. Utility requires vault to house dual redundant transformers and network protectors. Approximate vault size to be 20'x40'x12'H. Refer to electrical drawings for additional utility vault construction requirements. Electrical service secondary ductbank and service conductors will be installed between utility vault and main electric room located at Lower Level and terminate at the main distribution board (MDB).

#### Distribution

Main distribution board (MDB) will be 1500 A/480V utilizing molded case type distribution circuit breakers with solid state LSI trip functions for 400AF devices and larger to serve lighting and power panels, automatic transfer switches and elevators. Main circuit breaker will be 1500 ampere, stationary construction. Utility metering is included for the main switchboard and fire pump.

#### **Sub-Distribution**

Lighting and power panels will be located at each level in dedicated electrical rooms. Dry transformers are included in each electrical room to step down distribution voltage to 208/120 volts for receptacle panels and small appliance loads. Audio Visual loads will be fed from separate K-13 shielded isolation transformer and isolated ground panel board(s).

#### **Emergency and Standby Distribution**

The generator installed as part of Phase I project is currently anticipated to power emergency (life safety) and standby (non-life safety) loads in Phase II building. The emergency power will serve life safety loads including: emergency lighting, security, communications and fire pump. The standby power will serve non-life safety loads including: non-simultaneous elevators. Separate 4-pole automatic transfer switches



will be installed inside of Phase II building one for emergency life safety loads and one for standby non-life safety loads. Designated distribution circuit breakers and empty conduits will be installed as part of Phase I project in order to facilitate Phase II emergency power installation.

Emergency and standby power transfer switches and distribution equipment will be located in dedicated electrical rooms and include feeders protected with minimum 1-hour fire rating per Massachusetts Electrical Code.

#### Fire Alarm, Voice Evacuation, and Smoke Detector System

An addressable fire alarm, voice evacuation, and smoke detection system is planned including a central addressable control panel for monitoring and control of smoke detecting devices, manual alarm systems, audible and visual alarm systems, door release, and fan shutdown systems. Included: A digital alarm communication to a remote central station or campus security server via dedicated telephone line or fiber optic network. Phase I and Phase II fire alarm systems will be interconnected with 2-way communication for status notification of each system.

#### Lighting

Lighting for all public areas, non-public areas, building exterior, and site will be as specified by the Lighting Designer.

Architectural lighting control system will be provided for all public areas including automated schedule based controls, occupancy controls, day lighting dimming controls, site lighting relay type controls. Local occupancy controls will be used throughout the practice room spaces.

# Infrastructure

# 8.1 Introduction

This chapter describes the infrastructure systems that serve the NEC campus in the Fenway area of Boston. The following utilities are evaluated: wastewater, water, and stormwater management.

A detailed description of the proposed IMP Project's infrastructure requirements is included in the Institutional Master Plan Notification Form/Project Notification Form, filed in January 2012.

The previous **Chapter 7**, **Environmental Sustainability** of this report outlines NEC's sustainable design initiatives which include water conservation and energy-saving measures.

## 8.2 Sewer Infrastructure

#### 8.2.1 Wastewater Generation

The IMP Projects' sewage generation rates were estimated using the Massachusetts Division of Water Pollution Control Sewer System Extension and Connection Permit Program section 314 CMR 7.00, and the proposed building program. 314 CMR 7.00 lists typical generation values for the sources listed in **Table 8-1** for the IMP Projects. Typical generation values are generally conservative values for estimating the sewage flows from new construction. 314 CMR 7.00 sewage generation values are used to evaluate new sewage flows or the increase in flows to existing connections. **Table 8-1** describes the increased sewage generation in gallons per day (gpd) for each phase of the IMP Projects.



Table 8-1 Proposed Projects Sewage Generation

Use	Size	Rate	Total	
Phase I: Existing Generation: Student Life and Performance	e Center Project			
No Existing Connection	-	-	0 gpd	
Phase IA: Existing Generation: Interim Renovation Project				
Dormitory	163 Beds	110 gpd per bed	17,930 gpd	
Library	10,000 SF	75 gpd per 1,000 SF	750 gpd	
Cafeteria	105 Seats	35 gpd per seat	3,675 gpd	
Phase I and Phase IA Existing: Total Existing Generation Do and Performance Center Project and the Interim Renovation			22,355 gpd	
Phase I: Proposed Generation: Student Life and Performand	ce Center Project			
Dormitory	252 Beds	110 gpd per bed	27,720 gpd	
Dining Commons	210 Seats	35 gpd per seat	7,350 gpd	
Library	26,318 SF	75 gpd per 1,000 SF	1,974 gpd	
Black Box Theater	198 Seats	3 gpd per seat	594 gpd	
Rehearsal Space/Recording Room	13,509 SF	75 gpd per 1,000 SF	1,013 gpd	
Phase IA: Proposed Generation: Interim Renovation Project	t			
Practice Rooms/Faculty Studios/Facilities Department/Academic Use	56,507 SF	75 gpd per 1,000 SF	4,238 gpd	
Phase I and Phase IA Proposed: Total Proposed Sewage G Student Life and Performance Center Project and the Interir		ct	42,889 gpd	
Phase I and Phase IA Summary: The difference in sewage of Phase I and Phase IA program and the Total Proposed Phase Increase in sewage generation due to the proposed Phase I [42,899 gpd (proposed) - 22,355 gpd (existing)]	se I and Phase IA p	programs equal the total	20,534 gpd	
Phase II: Existing Generation: Learning Center Project - Existing Generation: Improvements from Phase IA Interim Renovation Project	56,507 SF	75 gpd per 1,000 SF	4,238 gpd	
Phase II: Proposed Generation: Learning Center Project				
Practice Rooms/Faculty Studios/Facilities Department/Academic Use	58,383 SF	75 gpd per 1,000 SF	4,379 gpd	
Coffeehouse	60 Seats	35 gpd per seat	2,100 gpd	
Phase II Proposed: Total Proposed Sewage Generation Due to Learning Center Project				
Phase II Summary: The difference in sewage generation be Total Proposed Phase II program equals the total increase in Phase II improvements [6,479 gpd (proposed) – 4,238 gpd (proposed	n sewage generatio		2,241 gpd	
Total Expansion of Flows due to Proposed Projects: Phase	I, Phase IA and Pha	ase II:	22,775 gpd	



### 8.2.2 Sewage Capacity and Impacts

The IMP Projects' impact to the existing BWSC systems in the adjacent streets were analyzed. The existing sewer and combined sewer systems capacity calculations are presented in **Table 8-2**.

Table 8-2 Sewer Hydraulic Capacity Analysis

Manhole (BWSC Number)	Distance (feet)	Invert Elevation (up)	Invert Elevation (down)	Slope (%)	Diameter (inches)	Manning's Number	Flow Capacity (cfs)	Flow Capacity (MGD)
Gainsborough St. – 90"x92" Combined Sewer	2500	1	0	0.04	90	0.013	153.57	99.26
Gainsborough St. – 15" Combined Sewer	160	6.19	6.02	0.11	15	0.013	2.11	1.36
Public Alley 821 12" Sewer	55	3.16	3.00	0.29	12	0.013	1.92	1.24

Votes:

- 1. Information taken from BWSC Sewer System Map no. 211.
- 2. Flow Calculations based on Manning Equation
- 3. All pipes assumed to be vitrified clay, to be conservative

The existing adjacent roadway sewer systems in Gainsborough Street and Public Alley 822 were analyzed for impacts due to the potential building service connections as part of the Proposed Project.

Results shown in **Table 8-2** indicate the minimum hydraulic capacity of the 90"x92" Boston Main Interceptor combined sewer main within Gainsborough Street near the Proposed Project is 153.57 million gallons per day (MGD) or 99.26 cubic feet per second (cfs). Based on an average daily flow estimate for the Proposed Project of 22,775 gpd or 0. 23 MGD and with a factor of safety of 10 (total estimate = 0.023 MGD x 10 = 0.23 MGD), capacity problems are not expected within the Boston main Interceptor system.

Results shown in **Table 8-2** indicate the minimum hydraulic capacity of the 15-inch combined sewer main within Gainsborough Street near the Proposed Project is 1.36 MGD or 2.11 cfs. Based on an average daily flow estimate for the Proposed Projects of 22,775 gpd or 0. 23 MGD and with a factor of safety of 10 (total estimate = 0.023 MGD x 10 = 0.23 MGD), capacity problems are not expected within the 15-inch combined sewer main in Gainsborough Street.

Results shown in **Table 8-2** indicate the minimum hydraulic capacity of the 12-inch sanitary sewer main within Public Alley 821 near the Proposed Project is 1.92 MGD or 1.24 cfs. Based on an average daily flow estimate for the Proposed Projects of



22,775 gpd or 0. 23 MGD and with a factor of safety of 10 (total estimate = 0.023 MGD x 10 = 0.23 MGD), capacity problems are not expected within the 12-inch sanitary sewer system in Public Alley 821.

# **Proposed Conditions**

Sanitary sewage generated by the IMP Projects will be discharged to the adjacent BWSC sanitary or combined sewer systems. It is anticipated that the Phase I building will discharge sanitary sewage to the 12-inch sanitary sewer main in Public Alley 281. The renovations associated with the Phase IA project will maintain the existing sewer connection for the 33 Gainsborough building and will not require modifications. As part of the demolition of the existing 33 Gainsborough Street building in Phase II, the existing sewer connections to the BWSC systems will be disconnected in compliance with BWSC requirements. The proposed Phase II building will discharge sanitary sewage to one of the adjacent dedicated sanitary or combined sewer mains in the adjacent streets and will be reviewed and approved by the BWSC engineering staff as part of the design process and the BWSC Site Plan Approval process for the Proposed Projects. NEC is anticipated to maintain the existing 12-inch BWSC sewer main that that crosses the site from Public Alley 821 and under the proposed building to connect to the Boston Main Interceptor in Gainsborough Street. NEC will work closely with the BWSC to design the new building so that there are no negative impacts to the existing BWSC 12-inch sanitary sewer main and will provide upgrades to the service as deemed necessary.

NEC will coordinate with the BWSC on the design and capacity of the proposed connections to the sewer system. In addition, the Proponent will submit a General Service Application and site plan for review as the project progresses. The SLPC Project and Interim Renovation Project will generate new wastewater flow exceeding 15,000 gallons per day but less than 50,000 gpd, which will require completion of a Department of Environmental Protection Compliance Certification BRP WP 73, Sanitary and Industrial Connections Greater than 15,000 gpd but less than or equal to 50,000 gpd. The LC Project will not exceed new sewage generation of 15,000 gallons per day and will require only BWSC approval.

All improvements and connections to BWSC infrastructure will be reviewed as part of the BWSC's site plan review process for the Proposed Projects. This process includes a comprehensive design review of the proposed service connections, an assessment of project demands and system capacity, and the establishment of service accounts.



### 8.3 Solid & Hazardous Waste

NEC has completed a Phase I Environmental Site Assessment for the Student Life & Performance Center project site, and no Reportable Conditions were identified. During construction of both of the IMP Projects, all excavated materials, demolition waste, and construction debris will be handled in accordance with applicable local, state, and federal laws and regulations.

# 8.4 Water Use

### 8.4.1 Water Consumption

The IMP Projects' water demand estimate for domestic services is based on the IMP Projects' estimated sewage generation. A conservative factor of 1.1 (10%) is applied to the estimated average daily wastewater generation calculated with 314 CMR 7.00 values to account for consumption, system losses and other usages to estimate an average daily water demand. The total estimated water demand due to the Phase I and Phase IA projects (the SLPC project, and the Interim Renovation Project) is approximately 47,178 gpd (based on a total sewage generation of 42,889 gpd) of domestic water. The LC project will require approximately 7,127 gpd of domestic water (based on the completed building sewage generation of 6,479 gpd). The water for the Proposed Projects will be supplied by the BWSC system.

All efforts to reduce water consumption will be made. Aeration fixtures and appliances will be chosen for water conservation qualities. In public areas, sensor operated faucets and toilets will be installed.

All new water services will be installed in accordance with the latest Local, State, and Federal codes and standards. Backflow preventers will be installed at both domestic and fire protection service connections. New meters will be installed with Meter Transmitter Units (MTU's) as part of the Boston Water and Sewer Commission's Automatic Meter Reading (AMR) system.

# **Proposed Projects**

The domestic and fire protection water service connections required by the IMP Projects will meet the applicable City and State codes and standards, including cross-connection backflow prevention. Compliance with the standards for the domestic water system service connection will be reviewed as part of BWSC's Site Plan Review Process. This review includes, but is not limited to, sizing of domestic water and fire protection services, calculation of meter sizing, backflow prevention design, and



location of hydrants and siamese connections that conform to BWSC and Boston Fire Department requirements.

# **Proposed Impacts**

Water capacity problems are not anticipated within this system as a result of the Proposed Projects' construction.

### 8.5 Stormwater

### 8.5.1 IMP Projects

Stormwater runoff generated from the roofs of the IMP Projects' buildings, landscaped and paved areas will be collected, treated, and conveyed through a closed drainage system to a groundwater recharge system that will overflow to the BWSC storm system in the adjacent streets in large storm events. Stormwater runoff collected from the roof of the proposed SLPC project and the LC project will be routed through groundwater recharge systems with the capacity of collecting, storing and recharging one-inch of stormwater as required by Article 32 before overflowing to an adjacent BWSC storm drainage system. The IMP Projects are expected to slightly decrease the amount of impervious area at the sites compared to the existing conditions in both Phase I and Phase II.

The combination of the decrease in impervious areas on site and the roof runoff recharge will help to promote groundwater recharge on site and reduce peak rates of runoff from the site. Any required site closed drainage systems will be designed so there will be no increase in the peak rate of stormwater discharge from the IMP Projects in the developed condition compared to the existing condition.

All improvements and connections to BWSC infrastructure will be reviewed as part of the Commission's site plan review process. This process includes a comprehensive design review of the proposed service connections, assessment of project demands and system capacity, and compliance with the Groundwater Conservation Overlay District as described in the City of Boston Zoning Code Article 32.

# 8.5.2 Groundwater Conservation Overlay District

The IMP Project sites are located within the City of Boston's Groundwater Conservation Overlay District (GCOD) and therefore the projects are required to infiltrate at least one-inch of stormwater runoff from impervious areas into the

ground to meet Article 32 of the Boston Zoning Code. **Table 8-3** below, indicates the anticipated volume of runoff required for recharge for each phase of the Proposed Projects. The stormwater management systems for both of the proposed buildings will include groundwater recharge systems. It is anticipated that the stormwater recharge systems will work to passively infiltrate site runoff into the ground with a gravity recharge system or with a combination of storage tanks in the building and pumps. Conceptual design for each phases recharge systems are found in **Figure 8-1**.

As mentioned above, the IMP Projects will decrease the amount of impervious area on the site, which will also increase groundwater recharge and aid to raise the water table. The Proponent will work closely with the City of Boston and the Boston Groundwater Trust to reduce water table impacts during and after construction of the IMP Projects.

Table 8-3
GCOD Recharge Volume Calculations

Phase	Impervious Site Area (square feet)	1" Runoff Recharge Depth (feet)	Total Recharge Volume (cubic feet)	Total Recharge Volume (gallons)
Phase 1	19,905±	0.0833	1,659	12,407±
Phase 2	11,316±	0.0833	943	7,054±

Note: As the site design progresses, this Impervious Site Area value may be reduced to account for proposed pervious areas, which will naturally recharge runoff and are not counted in the GCOD recharge area calculations.

# 8.5.3 Water Quality Impact

The IMP Projects will not affect the water quality of nearby water bodies. Erosion and sediment control measures will be implemented during construction to minimize the transport of site soils to off-site areas and BWSC storm drain systems. During construction, existing catch basins will be protected with filter fabric, hay bales and/or crushed stone, to provide for sediment removal from runoff. These controls will be inspected and maintained throughout the construction phase until all areas of disturbance have been stabilized through the placement of pavement, structure, or vegetative cover.

All necessary dewatering will be conducted in accordance with applicable MWRA and BWSC discharge permits. Once construction is complete, the IMP Projects will each be in compliance with all local and state stormwater management policies. See below for additional information.



# 8.5.4 DEP Stormwater Management Policy Standards

In March 1997, the Department of Environmental Protection DEP adopted a new Stormwater Management Policy to address non-point source pollution. In 1997, the Massachusetts DEP published the Massachusetts Stormwater Handbook as guidance on the Stormwater Policy, which was revised in February 2008. The Policy prescribes specific stormwater management standards for development projects, including urban pollutant removal criteria for projects that may impact environmental resource areas. Compliance is achieved through the implementation of Best Management Practices (BMPs) in the stormwater management design. The Policy is administered locally pursuant to MGL Ch. 131, s. 40.

A brief explanation of each Policy Standard and the system compliance is provided below:

<u>Standard #1:</u> No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

Compliance: The proposed design will comply with this Standard. No new untreated stormwater will be directly discharged to, nor will erosion be caused to wetlands or waters of the Commonwealth as a result of stormwater discharges related to the Proposed Projects.

<u>Standard #2:</u> Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.

Compliance: The proposed design will comply with this Standard. The existing discharge rate will be met or decreased as a result of the improvements associated with the Proposed Projects.

<u>Standard #3:</u> Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable. The annual recharge from the post development site should approximate the annual recharge from the pre-development or existing site conditions, based on soil types.

Compliance: The Proposed Projects will meet and exceed this standard. The Projects will comply with the Boston Redevelopment Authority's Groundwater Overlay Conservation District requirement to recharge one-inch of stormwater over the entire impervious area of the Proposed Project sites.

<u>Standard #4:</u> For new development, stormwater management systems must be designed to remove 80% of the average annual load (post-development conditions) of Total Suspended

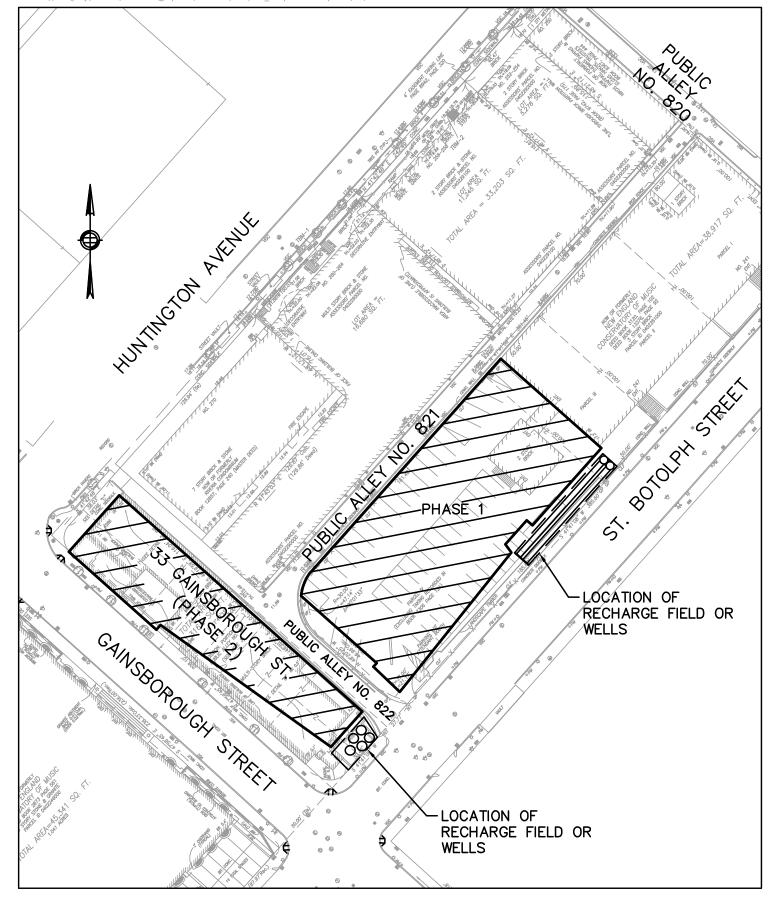


Figure 8-1 - Conceptual Recharge Locations



Solids (TSS). It is presumed that this standard is met when: Suitable nonstructural practices for source control and pollution prevention are implemented; Stormwater management best management practices (BMPs) are sized to capture the prescribed runoff volume; and Stormwater management BMPs are maintained as designed.

Compliance: The proposed designs will comply with this standard. Within the Proposed Projects' limit of work, there will be mostly roof, landscaping, and pedestrian areas. Any paved areas that would contribute unwanted sediments or pollutants to the existing storm drain system will be collected by deep sump, hooded catch basins and conveyed through water quality units before discharging into the BWSC system.

Standard #5: For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If, through source control and/or pollution prevention, all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L.c. 21, §§ 26-53 and the regulations promulgated there under at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.

Compliance: The proposed designs will comply with this standard. The Proposed Projects are not associated with Higher Potential Pollutant Loads (per the Policy, Volume I, page 1-6). The Proposed Projects comply with this standard.

<u>Standard #6:</u> Stormwater discharge to critical areas must utilize certain stormwater management BMPs approved for critical areas. Critical areas are Outstanding Resource Waters (ORWs), shellfish beds, swimming beaches, cold-water fisheries and recharge areas for public water supplies.

Compliance: The proposed designs will comply with this Standard. The Proposed Projects will not discharge untreated stormwater to a sensitive area or any other area.

<u>Standard #7:</u> A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural stormwater best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.



Compliance: The Proposed Projects are both redevelopments and their designs will comply with this Standard. The Proposed Projects comply with the Stormwater Management Standards as applicable to the redevelopment.

<u>Standard #8:</u> Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.

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

<u>Standard 9:</u> A Long-Term Operation and Maintenance (O&M) Plan shall be developed and implemented to ensure that stormwater management systems function as designed.

Compliance: The Proposed Projects will comply with this standard. An O&M Plan including long-term BMP operation requirements will be prepared for the Proposed Projects and will assure proper maintenance and functioning of the stormwater management system.

<u>Standard 10:</u> All illicit discharges to the stormwater management system are prohibited.

Compliance: The Proposed Projects will comply with this standard. There will be no illicit connections associated with the Proposed Projects.

# **Historic Resources**

## 9.1 Historic Resources

This section identifies and describes the existing buildings on the IMP Project sites, the individual historic resources and districts in the vicinity of the IMP Project sites, and describes the potential impacts that the IMP Projects may have on these resources.

### 9.1.1 Buildings on the IMP Project Site

#### Cotting School for Handicapped Children, 241-247 St. Botolph Street

Originally constructed in 1904, the building at 241-247 St. Botolph Street is significant as the home of the first school for handicapped children in the United States. Founded in 1894, the Industrial School for Crippled and Deformed Children, as it was then named, was established entirely through donations and charitable fund raising. Dr. Edward H. Bradford and Dr. Augustus Thorndike, two orthopedic surgeons at Boston's Children's Hospital concerned that children with physical disabilities were not receiving an education in the public schools, lead the charge in founding the first private, free day school for children with physical disabilities in the country.

The school was originally housed in Saint Andrews Hall on Chambers Street in the old West End neighborhood. Later, the school rented a rowhouse at 6 Turner Street in order to provide housing for boarding students. As the school continued to grow in enrollment and expand in curriculum, a new purpose-built building was constructed on St. Botolph Street. Consisting of only the easternmost nine bays of the current building, the original structure was designed by the notable Boston architecture firm of Peabody and Stearns in the Renaissance Revival style. The original 1904 structure featured a symmetrical façade consisting of nine bays with a recessed center entrance. Finished in brick and limestone, the three story structure rises from a raised basement level to a scrolled bracket and dentil cornice. The basement level, first floor, quoins and window trim are finished in a yellow brick, whereas the second and third floors are finished in a red brick. Window sills and lintels, the recessed entrance surround and the second floor base are executed in limestone. Located between the second and third floors are limestone plaques dated



1894 and 1904 commemorating the founding date of the school and the building's construction date.

The school developed a curriculum that included educational studies, industrial

trades, exercise, nutrition, fresh air, natural light and medical treatment. In 1912, a single story glass pavilion was constructed immediately adjacent (west) of the original 1904 structure. The hip roofed, single story structure housed a class room space that provided an abundance of natural light and fresh air. In 1926, the original 1904 building was enlarged significantly with an additional 12 bays added to the west elevation. The 1926 addition, also designed by the Peabody and Stearns firm, is remarkably similar to the original 1904 building in its architectural detailing and use of materials. Similar to the original building, the addition is finished in yellow and red brick with limestone detailing and features an identical recessed entrance with a limestone surround exactly like the original entrance. The addition also displays two limestone plaques located between the second and third floors, commemorating the school's 1894 founding date and the date of the 1926 addition.

The 1926 addition housed a new high school, expanded industrial training areas, a modern kitchen and a new assembly hall. The additional also allowed for an expanded medical department which had grown to include several doctors, nurses and physiotherapists.

As part of the construction of the 1926 addition, the single story pavilion on the west side of the original building was modified and relocated further to the west, set on a raised foundation and attached to the new portion of the building. As part of the relocation, several of its original window openings were filled in with brick.

Over the years the school's name changed several times to reflect the evolving societal attitudes toward disabilities. Later names included shortening the original name to the Industrial School for Crippled Children, and in 1974 to the Cotting School for Handicapped Children. In 1984, the school merged with the Krebs School in Lexington. Following the merger the school relocated to the Krebs School site in Lexington and the building at 241-247 St. Botolph Street was sold to NEC. Today, the former Cotting School for Handicapped Children continues to operate as the Cotting School.

The Cotting School building is included in the Massachusetts Historical Commission's Inventory of Historic and Archaeological Assets of the Commonwealth (the Inventory) and was recommended eligible for inclusion in the National Register of Historic Places by the Boston Landmarks Commission. Recently, NEC completed a full exterior rehabilitation of the building including extensive masonry repairs and the replacement of severely deteriorated windows with new historically appropriate windows. The Boston Preservation Alliance



awarded NEC a 2010 Preservation Achievement Award for their sensitive rehabilitation of the building.

#### 33 Gainsborough Street

The eight story building at 33 Gainsborough Street was constructed by NEC in 1960. The 57,000 square foot building extends from the corner of Gainsborough Street and St. Botolph Street to the corner of Gainsborough Street and Huntington Avenue. The building continues to serve its original function as a residential dormitory and library, with the NEC print library housed in a two story wing at the northern end of the building. The building also houses a student dining facility and practice rooms in the basement level.

Designed in the Modernist style by the Boston architectural firm of Kilham, Hopkins, Greeley & Brodie, the building has a long rectangular plan and features a strong vertical expression comprised of brick, cast stone and concrete. Elevator shafts and stairwells define the north and south ends of the building and the long east and west elevations each feature large grids of fixed and awning style sash with clear and spandrel glass set in aluminum frames. The library wing is linked to the eight story, residential main block via a glazed connector. The entrance is located at the northern end of the building, along the Gainsborough Street sidewalk, at the base of the northern stairwell and elevator shaft.

The building is attributed to James Cleveland Hopkins Jr. (1914-1998), who served as a partner in the Kilham, Hopkins, Greeley & Brodie architecture firm. The firm was established by Hopkins' father, James C. Hopkins Sr. (1873-1938) and Walter Kilham (1868-1948), first as Kilham & Hopkins, and later known as Kilham, Hopkins & Greeley from 1925-1949, then as Kilham, Hopkins, Greeley & Brodie from 1950-1970 with the addition of Walter S. Brodie as a partner. The firm was responsible for many early-to-mid 20th century buildings in Massachusetts, including the Massachusetts College of Pharmacy, Kerr Hall in the Fenway and the Faneuil Branch of the Boston Public Library in Brighton. The firm is also credited for the designs of many municipal buildings including city and town halls, libraries and schools in Waltham, Tewksbury, Westborough, Hanover and Winchester, to name a few.

The younger Hopkins graduated from Harvard University in 1938, where he also received a masters degree in architecture in 1941. In addition to NEC's 33 Gainsborough Street building, Hopkins is credited for the designs of other school buildings and libraries, including buildings at Milton Academy and the Woods Hole Oceanographic Institution. Hopkins continued to practice architecture after the firm closed in 1970; he died in 1998.

The building at 33 Gainsborough Street is not included in MHC's Inventory and is not listed in the State or National Register of Historic Places.

# 9.1.2 Historic Resources in the Proposed Project's Vicinity

Within the vicinity of the IMP Project sites are several historic properties and historic districts, including properties listed in the State and National Registers, designated National Historic Landmarks, and local landmark districts and properties. Among these properties is NEC's Jordan Hall at 290 Huntington Avenue. Constructed in 1903 in the Renaissance Revival style, Jordan Hall was designed by the eminent Boston architectural firm of Wheelwright and Haven. The building is a designated National Historic Landmark and is the primary focus and centerpiece of the NEC campus.

**Table 9-1** contains a complete listing of State and National Register-listed properties located within a quarter mile radius of the Proposed Project Site. The locations of these properties are identified on **Figure 9-1**.

Table 9-1 State and National-Register Listed Resources within a Quarter-Mile Radius of the Project Site

Мар	Name	Address	Designation
1.	New England Conservatory of Music – Jordan Hall	290 Huntington Ave.	National Register, National Historic Landmark
2.	Boston YMCA Building	312-320 Huntington Ave.	National Register
3.	The Riviera	270 Huntington Ave.	National Register
4.	Street Clock	333 Massachusetts Ave.	Local Landmark
5.	Symphony Hall	249 Huntington Ave. and 301 Massachusetts Ave.	National Register, National Historic Landmark
6.	Horticultural Hall	247 Huntington Ave. and 300 Massachusetts Ave.	National Register
7.	Christian Science Center Complex	200-210 and 250 Massachusetts Ave., 177 and 235 Huntington Ave. and 101 Belvidere St.	Local Landmark
8.	Students House	96 The Fenway	National Register
A.	St. Botolph Street District	Harcourt St., Penn Central Railroad, alley north of Massachusetts Ave. and alley east Huntington Ave.	Local Historic District
B.	South End District	Bounded by Penn Central Railroad Camden St., Harrison Ave. and East Berkeley and Tremont St.	Local Landmark District, National Register Historic District
C.	Fenway – Boylston Street	Boylston, Westland and Hemenway St.	National Register Historic District

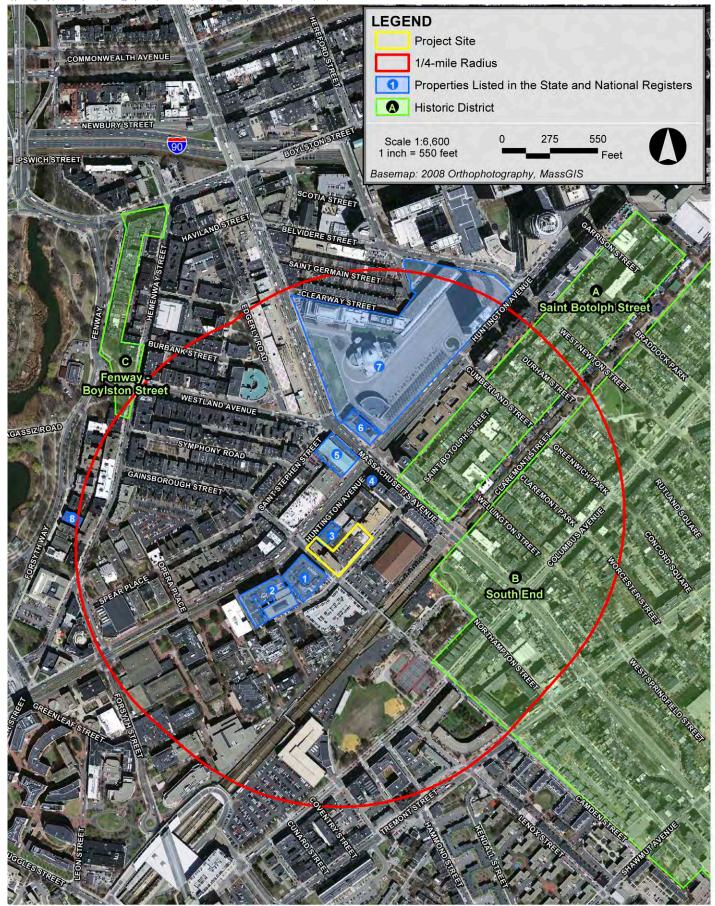


Figure 9-1 - Historic Resources



# 9.1.3 Archaeological Resources

The IMP Project sites consist of previously developed urban parcels. Due to previous development activities and disturbances, it is not anticipated that the sites contain significant archaeological resources

\_\_\_\_\_

# 9.1.4 Impacts to Historic Resources

#### Removal of the Former Cotting School 1912 Pavilion Structure

The Proposed Projects includes the removal of the annex structure currently attached to the side of NEC's 241-247 St. Botolph Street building. As discussed above, the pavilion was constructed in 1912 and was originally located adjacent to the 1904 Cotting School building. To accommodate the construction of the Cotting School's 1926 addition, the single story pavilion was relocated to the west, set on a raised foundation and attached to the new addition. When the pavilion was relocated several of its original window openings were filled in with brick, thereby further compromising its architectural integrity.

The pavilion structure is mentioned on the MHC Inventory form for the Cotting School for Handicapped Children (BOS.7587). The 1926 relocation, and associated modifications including its placement on a raised foundation and infilling of windows, have compromised the structure's integrity. The annex is currently used as NEC's maintenance shop and storage facility.

#### **Demolition of 33 Gainsborough Street**

While the building located at 33 Gainsborough Street is notable as a representative example of mid-century Modernist architecture, it is not believed to have particular historic or architectural significance. The building's architect, James Cleveland Hopkins Jr. (1914-1998), and his associated firm of Kilham, Hopkins, Greeley & Brodie, were responsible for the designs of many early-to-mid 20th century municipal and institutional buildings in Massachusetts. However, neither he nor his firm appears to have played a significant role in the development of the Modernist movement.

The building is not included in the MHC Inventory and has not been identified among significant examples of mid century Modern architecture in the City of Boston.

#### **Design and Visual Impacts**

As discussed in greater detail in **Chapter 3**, **Planning and Urban Design Framework**, the urban design concept for the Proposed Projects is two-fold: to unify



and strengthen the sense of place on NEC's campus, and to engage the public by heightening their perception of NEC. This will be accomplished by creating a new visual permeability of its buildings and in turn of the broad range of the activities they offer and by connecting the campus through the unifying effect of building treatment along the streets that run by and through it – Huntington Avenue, Gainsborough Street, and St. Botolph Street.

NEC's two historic buildings, Jordan Hall and 241 St. Botolph Street, each of which have recently undergone substantial rehabilitation and preservation work, will remain and serve important roles as bookends of the NEC campus; complimented by the new construction to be built between them.

The first three floors of the Student Life and Performance Center will form a base for the new building and will align vertically at its eastern end with the face of the adjacent 241 St. Botolph Street building. In addition, the cornice line of the base of the new building will align with the cornice of the existing 241 St. Botolph Street building. Likewise, the cornice line of the first three floors of the new Learning Center will align with that of the Jordan Hall Building across Gainsborough Street.

The prominence of Jordan Hall will be enhanced by creating a new vista of the building from St. Botolph Street that does not exist today due to the existing 33 Gainsborough Street building's occupancy of the corner of Gainsborough and St. Botolph Streets. This view will be made possible by the design of the southwest elevation of the Learning Center building, whose recessed and chamfered corner will offer pedestrians and drivers moving west on St. Botolph Street a longer-distance appreciation of the proportion and craft of NEC's National Historic Landmark building.

The streetscape along Huntington Avenue will also be enlivened with the removal of the existing closed masonry library wall of the 33 Gainsborough Street building. Replacing the existing blank wall with a glass-enclosed public coffeehouse and NEC performance venue will provide an opportunity for a new and welcoming public face for NEC and reinforce and strengthen NEC's important role as a cultural institution on the portion of Huntington Avenue known as the Avenue of the Arts.

While respectful of the existing historic buildings, the character of the new buildings will be distinctly and purposely contemporary, emblematic of the forward-looking mission of NEC as a world-class music conservatory. The transparency of the new buildings will be in contrast, yet complimentary, to the heavy masonry of Jordan Hall and 241 St. Botolph Street; highlighting the early 20th century craft of the historic buildings.

#### **Shadow Impacts**

As discussed in greater detail earlier in this chapter, the IMP Projects will result in some new shadow. Given that the site of the proposed new Student Life and

Performance Center is generally comprised of an existing surface parking lot, some new shadow will be inevitable. For example, because the west elevation of NEC's 241 St. Botolph Street building faces the parking lot some new shadow will be cast on that side elevation. Generally however, new shadow will be cast on Huntington Avenue and St. Botolph Street and their sidewalks.

Typical of a densely built urban area, some new shadow will also be cast on the rooftops of adjacent buildings to the west, north, and east of the new buildings. For example, during two of the time periods studied there will be some additional morning shadow cast on the rooftop of the Riviera Building, 270 Huntington Avenue. Similarly, during three of the time periods studied, there will be some additional afternoon shadow cast on the rooftop of NEC's own 241 St. Botolph Street building.

All new shadows will be limited to isolated areas and last a short duration and will not have any material impact on the integrity of the historic resources in the area. At no time during any of the time periods studied will there be new shadow cast on NEC's Jordan Hall building.

# 9.1.5 Status of Project Review with Historical Agencies

#### **Massachusetts Historical Commission**

The Proposed Projects may require state financial assistance and/or approvals, thereby triggering review by the Massachusetts Historical Commission (MHC) in accordance with Massachusetts General Laws Chapter 9, ss 26-27C as amended by Chapter 254 of the Acts of 1988 (950 CMR 71.00). NEC will be filing a MHC Project Notification Form (PNF) to formally notify the MHC of the Proposed Projects and to initiate the MHC consultation process.

For many years the MHC has held a Preservation Restriction on the Jordan Hall building. As a result, any interior or exterior work done to the building was and remains subject to review and approval by MHC. Through the on-going review process, NEC has developed a firm understanding of the MHC review process and the agency's requirements and expectations. The Proponent is committed to working with the MHC, and other interested parties including the Boston Landmarks Commission and Boston Preservation Alliance, as part of the MHC consultative review process.

#### **Boston Landmarks Commission**

Because the 1912 Cotting School annex, currently attached to west side of 241-247 St. Botolph Street, is greater than 50 years old, its proposed removal is subject to review by the Boston Landmarks Commission (BLC) in accordance with Article 85 of the Boston Zoning Code. Likewise, the building at 33 Gainsborough Street is also greater than 50 years old and therefore is also subject to Article 85 review by the BLC. An



Article 85 application for the demolition of the two buildings will be submitted to the BLC at the appropriate time. NEC is committed to working collaboratively with the BLC and the community throughout the Article 85 review process.



10

# **Community Benefits**

# 10.1 Community Benefits

#### 10.1.1 Introduction

The development of the IMP Projects will result in numerous public benefits for the surrounding community and the City of Boston as a whole. NEC has long been an outstanding partner with numerous Boston Public Schools and local non-profit social services organizations in providing free access to classical music education, performance, and inspiration. The development of the Proposed Projects will strengthen NEC's commitment to the city of its founding and the many organizations that benefit from NEC's community partnerships programs. The project's new performance spaces will provide performance opportunities for the public and local performance organizations; the project will result in a new neighborhood library for residents and area public schools; the project will create a new dining hall, open for neighborhood and public use. An outline of the various public benefits that will result from the IMP Projects' development is provided in this section.

#### 10.1.2 Existing Community Engagement

NEC takes part in several partnerships with community groups as described in the following section:

- Community Performances and Partnerships, through which NEC (as of 2010-11) operates 348 programs and 115 partnerships with schools, senior centers, community centers, hospitals, libraries, museums and other historic landmarks. Over 245 students participate in this endeavor, reaching in a single year 13,700 people, including 7,600 school children and 6,100 public/adult audience members.
- ➤ The Abreu Fellows Program at New England Conservatory. Inaugurated in 2009, this program has the goal of training 50 gifted post-graduate musicians, passionate for their art and social justice, who will go out and create/develop music education programs in the US modeled after Venezuela's El Sistema. In



this way, NEC can make its strongest possible contribution to a burgeoning movement that has as its goal the social development of at-risk children through music.

An appealing partner, Jordan Hall, is the preferred venue for many Boston-based arts organizations including celebrity Series, Boston Cantata Series, Boston Children's Chorus.

# 10.1.3 Estimated Linkage Payments

The Proposed Student Life and Performance Center Project (the SLPC Project) will be a Development Impact Project. Under Section 80B-7 of the Zoning Code, such a project is one that (i) requires zoning relief; (ii) will devote more than 100,000 sf to a Development Impact Use; and (iii) involves the creation or substantial rehabilitation of more than 100,000 sf of gross floor area. The Proposed SLPC Project meets all three criteria and thus the Proponent will enter into a Development Impact Project Agreement with the BRA as part of the Article 80 Large Project Review process.

The Proposed SLPC Project is estimated to generate housing exaction payments totaling approximately \$275,000.

The Proposed SLPC Project is estimated to generate jobs exaction payments totaling approximately \$54,000.

### 10.1.4 Estimated Annual Property Taxes

NEC currently has a Payment in Lieu of Taxes (PILOT) agreement in place with the City of Boston. NEC anticipates executing an amendment to its PILOT agreement in relationship to these Projects in Phase I and Phase II.

NEC currently owns the property located at 295 Huntington Avenue, which is partially used for commercial purposes such as ground-floor retail uses not affiliated with NEC. NEC pays customary real estate taxes in connection with those portions of the 295 Huntington Avenue used for commercial purposes.

NEC has already made its first PILOT payment pursuant to the formula established by the City of Boston Assessing Department and NEC will continue to work with the City of Boston Assessing Department on an appropriate PILOT schedule as the Proposed Projects are developed.



### 10.1.5 Construction Employment

The construction of the IMP Projects and associated renovations to the existing 33 Gainsborough Street building during the interim will contribute directly to the economy by providing numerous employment opportunities. It is estimated that approximately 100-150 tradespersons will be employed at peak construction periods. A Boston Residents Construction Employment Plan will comply with the Boston Jobs Policy.

# 10.1.6 Permanent Employment

Based on its projected employment growth, NEC estimates that this development will create approximately ten (10) new facility employee jobs.

NEC currently employs approximately 576 people, of which 260 are full time and 316 are part time. NEC is also a major employer of Boston residents.

# 10.1.7 Projected Student Enrollment

No material increase in full-time student enrollment is projected during the term of the IMP. NEC holds as one of its core values the preservation of its intimate and nurturing student body of approximately 782 undergraduate and graduate students. Maintaining current enrollment levels is central to NEC's strategic planning because it allows for the one-on-one studio instruction between student and teacher that is the foundation of conservatory training. An enhanced student life center and residence hall will also allow NEC to house all of its first and second year students on campus, thereby creating greater social cohesiveness and freeing up off-campus housing to community residents.

#### 10.1.8 Urban Design and Streetscape Benefits

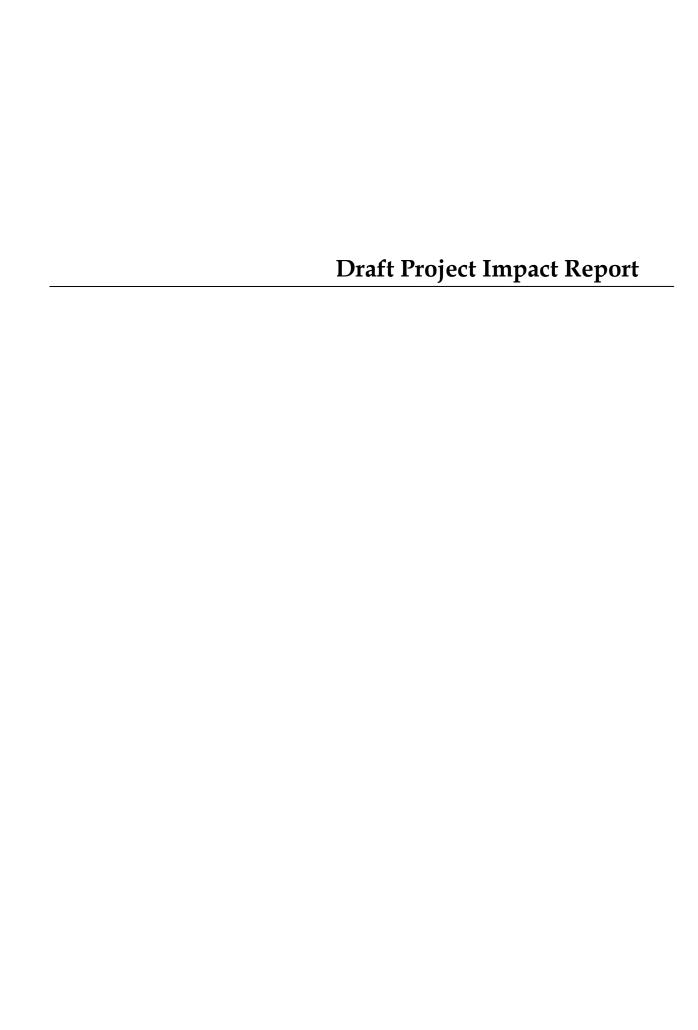
The development of the IMP Projects will enhance the public sides of the proposed buildings along Huntington Avenue, St. Botolph Street, and Gainsborough Street. The Proponent proposes to undertake significant streetscape improvements to the pedestrian realm. As described in more detail in **Chapter 5**, **Planning and Urban Design Framework**, these improvements, which will be provided on a phased basis as each of the IMP Projects is undertaken, will include the following (subject to applicable City of Boston approval):

➤ If feasible, new street trees on public streets adjacent to the IMP Project sites;



#### INSTITUTIONAL MASTER PLAN

- New street furniture, lighting, and other amenities on public streets adjacent to the IMP Project sites;
- ➤ Installation of public bicycle storage racks in close proximity to the building entrances, in addition to on-site protected bicycle storage for building residents, as outlined in **Chapter 6**, **Transportation**, **Parking and Circulation** of this IMP;
- ➤ A new pedestrian raised stone paved crosswalk between Jordan Hall and the proposed Learning Center Project (the LC Project) building entrance; and,
- ➤ A small 'outdoor room' at the corner of Gainsborough Street and St. Botolph Street with plantings and seats.



1

# **General Information**

### 1.1 Introduction

New England Conservatory is pleased to submit this Draft Project Impact Report (DPIR) pursuant to Article 80D of the Boston Zoning Code (BZC). The DPIR is responsive to the Scoping Determination dated March 12, 2012 (see Appendix A), that was issued by the Boston Redevelopment Authority (BRA) as part of the review of the Institutional Master Plan Notification Form/Project Notification Form (IMPNF/PNF that was filed by NEC in January 2012.

The IMPNF/PNF that was filed in January included a very comprehensive package of analyses, studies and narrative describing NEC's mission and objectives, their Master Plan including a detailed description of proposed projects, and the anticipated impacts of those projects, sustainable initiatives, and existing and future community benefits that NEC contributes to the vitality of the City of Boston and beyond. In their Scoping Determination on the PNF, the BRA has requested that some additional information be provided relative to their continued review of the Student Life and Performance Center Project and the Learning Center Project. This document specifically addresses those comments. The Institutional Master Plan (IMP), which is attach to this DPIR, provides a very detailed and complete description of those aspects of the project that would have otherwise been duplicative in both the IMP and the DPIR.

The DPIR includes the following chapters:

- 1.0 General Information
- 2.0 Project Description
- 3.0 Transportation
- 4.0 Environmental Protection
- 5.0 Urban Design
- 6.0 Environmental Sustainability
- 7.0 Historic Resources

As mentioned previously, an Institutional Master Plan (IMP) is also being filed simultaneously with this DPIR to satisfy the requirements of the BRA's Scoping Determination on the IMPNF/PNF and to fulfill the requirements of Article 80 Large



Project Review. The IMP and DPIR have been combined into a single, bound document for simplicity and ease of reference.

# 1.1.1 Development Team

The Proponent has assembled a development team of experts familiar with the City's substantive requirements and approval process.

# **Proponent**

New England Conservatory 290 Huntington Avenue Boston, MA 02115

Telephone: (617) 585-1211 Fax: (617) 585-1211

Anthony Woodcock, President

Edward Lesser, Senior Vice President, Finance & Operations

Michael Ryan, Director of Operations

### Owner's Representative

Colliers International 160 Federal Street Boston, MA 02110

Telephone: (617) 330-8151 Fax: (617) 330-8127

Yanni Tsipis, Senior Vice President

### **Project Architect**

Ann Beha Architects 33 Kingston Street Boston, MA 02111

Telephone: (617) 338-3000 Fax: (617) 482-9097

> Ann M. Beha, FAIA, Principal Thomas M. Hotaling, AIA, Principal Steven Gerrard, AIA, Senior Associate

Chin Chin Yao, Designer

# **Associated Architect**

Gensler

One Beacon Street, 3rd Floor

Boston, MA 02108

Telephone: (617) 619-5700 Fax: (617) 619-5701

Kenneth Fisher, AIA, Principal

Alexander Fernandez, AIA, Senior Associate

#### **Preconstruction Services Provider**

Tishman Construction Corporation

84 State Street Boston, MA 02109

Telephone: (617) 723-2050

Tom Erickson

# **Legal Counsel**

Brennan, Dain, Le Ray, Wiest, Torpy, Garner

129 South Street Boston, MA 02111

Telephone: (617) 542-4874 Fax: (617) 542-4808

Donald W. Wiest

# **Transportation Consultant**

Howard/Stein-Hudson Associates, Inc.

38 Chauncy Street, 9th Floor

Boston, MA 02111

Telephone: (617) 482-7080 Fax: (617) 482-7417

Guy D. Busa, Principal

Elizabeth Peart, Senior Transportation Engineer

### **Environmental Consultant**

Vanasse Hangen Brustlin, Inc. 99 High Street, 10th Floor Boston, MA 02110-2354 Telephone: (617) 728-7777 Fax:

(617) 728-7782

Sean M. Manning, PE, Principal Meghan Miller, PE, Project Engineer Elizabeth Orlando, Project Engineer

# **Civil Engineering**

Nitsch Engineering

186 Lincoln Street, Suite 200

Boston, MA 02111

Telephone: (617) 338-0063 Fax: (617) 338-6472

> John Schmid, PE, Senior Project Manager Deborah Katzman, PE, Senior Project Engineer

#### **Historical Consultant**

**Epsilon Associates** 

3 Clock Tower Place, Suite 250

Maynard, MA 01754

Telephone: (978) 897-7100 Fax: (978) 897-0099

Douglas J. Kelleher

# Mechanical/Electrical/Plumbing Consultant

Altieri Sebor Wieber, LLC

31 Knight Street Norwalk, CT 06851

Telephone: (203) 866-5538 Fax: (203) 866-5243

> Michael Freliech, PE, Principal Mariusz Zakrzewski, EIT, LEED AP



#### Geotechnical Consultant/Licensed Site Professional

Haley & Aldrich, Inc. 465 Medford Street, Suite 2200

Boston, MA 02129

Telephone: (617) 886-7400 Fax: (617) 886-7600

Steven Kraemer, P.E., D.GE, Senior Vice President

#### Wind Consultant

**RWDI** 

Fax:

650 Woodlawn Road West

Guelph, Ontario, Canada N1K 1B8 Telephone: +1 (519) 823-1311

+1 (519) 823-1316

# 1.2 Legal and Financial Information

This section describes the current legal status of NEC and the proposed development properties, including tax information, site control/easements, zoning, and other information required by the BRA.

# 1.2.1 Legal Judgments or Actions Pending

The Proponent is not aware of any legal judgments or pending legal actions relating to the Proposed Projects.

# 1.2.2 History of Tax Arrears on Property Owned in Boston by the Proponent

The Proponent owns no real estate in Boston for which real estate tax payments are in arrears.

## 1.2.3 Project Site/Site Control/Easements

The Proponent has control over the entire Campus and currently utilizes the area for its academic purposes. The Campus is comprised of approximately 2.5 acres of contiguous parcels of land, as shown in **Figure 1-1**.

NEC owns its entire Campus in fee. Based on the completed survey of the Campus completed by Harry R. Feldman, Inc. dated August 18, 2010, there are no public easements into, through, or surrounding the Campus, with the exception of a BWSC sewer easement running through the site of the existing NEC residence hall located at 33 Gainsborough Street. None of these rights will affect the development of the Proposed Project.

# 1.3 Regulatory Controls and Permits

For purposes of this filing and the Proposed Projects' review process, the Gross Floor Area of all projects are included in our analyses and calculations. Excluded from our analyses are approximately 3,000 square feet that will be partially renovated within the existing NEC building located at 241 St. Botolph Street concurrently with the construction of the SLPC Project, as well as approximately 4,500 square feet that will be partially renovated in the basement of the existing Jordan Hall upon completion of the SLPC Project.

The gross floor area of the existing NEC buildings to remain will not be materially affected by the Proposed Projects, and the existing Educational and Cultural uses housed in these buildings will not change as a result of the Proposed Projects.

None of the existing NEC buildings will be substantially rehabilitated in connection with the Proposed Projects. The existing 33 Gainsborough Street buildings of approximately 57,000 square feet will be demolished to make way for the new LC Project.

## 1.3.1 Existing Uses and Structures

The Proposed Projects' sites are located within an Institutional Subdistrict, which is an institutional use district as defined in Article 66 of the Boston Zoning Code (the "Zoning Code"), as shown on Boston Zoning Map 1Q titled "Fenway Neighborhood District." The Projects' sites are also located within the Groundwater Conservation Overlay District as established by Article 32 of the Zoning Code, as amended, and the Restricted Parking Overlay District, as established pursuant to Section 3-1A.c of the Zoning Code. Within the Institutional Subdistrict, the existing Educational and Cultural uses are permitted as-of-right (See Table B to Article 66 of the Zoning Code).

The property located at 295 Huntington Avenue, which is owned by NEC and which is being included within the proposed NEC IMP Area, is located in the Huntington Avenue NS-2 Subdistrict and the Neighborhood Design Overlay District.

The Proposed Projects' sites are currently governed by the use requirements set forth in Table B to Article 66 of the Zoning Code, and the dimensional requirements set

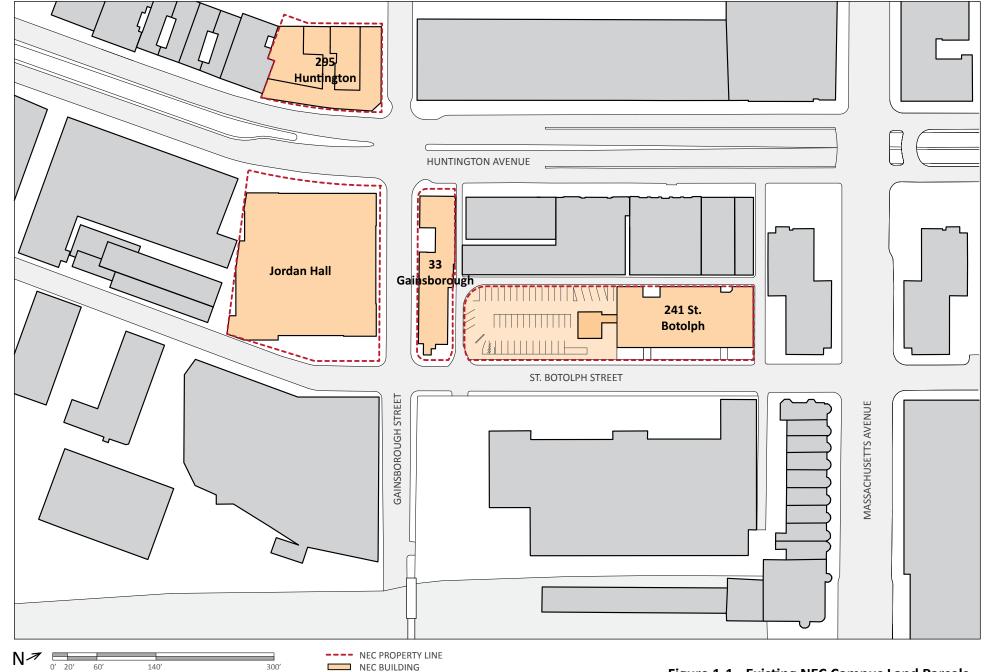




Figure 1-1 - Existing NEC Campus Land Parcels



forth in Table D to Article 66 of the Zoning Code; such dimensional requirements include a maximum floor area ratio ("FAR") of 8.0 and a maximum building height of 90 feet.

The existing parking and off-street loading requirements for the Project Sites are set forth in Article 66 of the Zoning Code.

# 1.3.2 Future Zoning Controls

Upon approval of this IMP, the NEC Campus will be designated as an Institutional Master Plan Area ("IMP") pursuant to the provisions of Section 3-1A.a and Section 80D of the Zoning Code, in order to allow for a more flexible zoning approach that also recognizes that development on the IMP Project's sites will occur over a period of years. The IMP mechanism additionally provides an appropriate degree of oversight for the multiple phases of development planned for the Campus.

#### **Allowed Uses**

All uses and subuses at the NEC campus as described in this IMP are deemed to be approved uses. In general, Educational and Cultural uses and uses related thereto, including Service and Parking uses, will be allowed uses within the IMP area. To accommodate the potential for third-party food service providers, Restaurant uses, including take-out, will be allowed on the basement, first floor, and second floor of the Proposed Projects.

The approval of this IMP does not waive, but rather expressly acknowledges and approves, all current uses at the NEC campus, including preexisting nonconforming uses. In addition, and without limitation, all existing uses in the 295 Huntington Avenue building, which include Office, Retail, Restaurant with take-out, and other similar uses, shall be deemed to be allowed uses under this IMP.

#### **Dimensional Regulations**

The exclusive dimensional regulations that will govern the NEC campus following adoption of this IMP are as follows:

**Floor Area Ratio.** Consistent with the underlying zoning for the sites of the Proposed Projects, the allowed FAR for the NEC campus will be 8.0.

**Maximum Height**. The allowed building height, as defined in the Zoning Code, for the NEC campus will be 150 feet.

#### **Parking**

The Campus is proposed to contain approximately 20 parking spaces, as detailed further in **Chapter 6**, **Transportation**, **Parking**, and **Circulation**.

# 1.3.3 Anticipated Permits

New England Conservatory anticipates seeking the following federal, state and/or local permits and taking the following actions in relation to the Proposed Projects' development (See **Table 1-1**).

Table 1-1 Anticipated Permits and Approvals

Agency Name	Permit or Action
Federal Government	
US Environmental Protection Agency	NPDES Notice of Intent
Federal Aviation Administration	Determination of No Hazard to Air Navigation
Commonwealth of Massachusetts	
Massachusetts Department of Environmental Protection	Sewer Connection Permit; Air Quality Plan approval; Construction Notice; Asbestos Removal Notice
Massachusetts Water Resources Authority	Temporary Construction Dewatering Permit; Sewer Use Discharge Permit
Massachusetts Historical Commission	Determination of "No Adverse Effect"
City of Boston	
Boston Redevelopment Authority	Article 80 Large Project Review; IMP Plan Review
Boston Civic Design Commission	Schematic Design Review
Boston Inspectional Service Department	Creation of Consolidated Lots; Demolition Permit; Foundation and Building Permit; Certificate of Occupancy
Boston Landmarks Commission	Article 85 Demolition Delay
Boston Transportation Department	Transportation Access Plan Agreement; Construction Management Plan
Boston Water and Sewer Commission	Site Plan Approval; Water and Sewer Connection Permits; Construction Dewatering Permit
Boston Fire Department	Site Access Plan; Flammable Materials License(s) and other permits
Boston Zoning Commission	IMP Plan Approval; IMP Area Designation
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Boston Public Health Commission	Asbestos Removal Notice

The table above sets forth a preliminary list of permits and approvals from federal, state and local governmental agencies, which are presently expected to be required



for the Proposed Projects, based on project information currently available. It is possible that not all of these permits or actions will be required, or that additional permits or actions may be needed.

# 1.3.4 Applicability of MEPA

The Proposed Projects are not subject to MEPA review. Although the Proponent may seek tax-exempt bond financing through MassDevelopment or another public or quasi-public source, which constitutes financial assistance that establishes MEPA jurisdiction, the Proposed Projects are not anticipated to exceed any applicable MEPA review thresholds.

2

# **Project Description**

### 2.1 Overview

In January 2012, New England Conservatory filed a comprehensive Institutional Master Plan Notification Form/Project Notification Form (IMPNF/PNF) for its Phase I Student Life and Performance Center Project (the SLPC Project) and Phase II Learning Center Project (the LC Project). An updated and detailed project description is presented in the NEC Institutional Master Plan in **Chapter 4, IMP Projects**, which is attached to this DPIR.

# 2.1.1 Campus Security

In their Scoping Determination for the DPIR, the BRA requested additional information regarding Security measures to be put in place on campus in connection with the future construction of the Student Life and Performance Center Project. A more detailed description of future security actions to be put in place by NEC is addressed in the following section.

NEC currently employs a full-time security staff (provided by a third-party security firm) that maintains a presence on the NEC campus 24/7/365. The development of the Proposed Projects will further enhance security on the NEC campus by improving the quality of and level of activity on the public ways and alleys surrounding the NEC campus. The new NEC facilities are expected to have 24-hour on-site staffing, and the introduction of well-lit and transparent ground-floor amenities such as the new dining hall, coffee shop, student commons area, and the main entrance lobbies to the new facilities will significantly improve both perceived and actual security along Gainsborough and St. Botolph Streets. Furthermore, the addition of the Proposed Projects will dramatically increase after-hours foot traffic and the presence of surveillance systems along Gainsborough and St. Botolph Streets, which will both tend to deter criminal activity and increase personal security in the area around the new facilities.



### 2.1.2 Inventory of Nearby Development Projects

In response to a comment in the BRA Scoping Determination letter for the DPIR, an inventory of surrounding proposed projects is provided. There are five projects in the surrounding area that are completed or undergoing Article 80 review and are described as follows.

# GrandMarc at Northeastern University

This project, located at 360 Huntington Avenue will include a new dormitory with 720 beds to serve Northeastern students.

Wentworth Institute of Technology

Wentworth's Institutional Master Plan (IMPNF/PNF) includes several new projects for the ten-year period between 2010 and 2020. The IMPNF/PNF was approved in December 2010. The project include a 7,000 sf expansion to the campus center, an increase of 63,000 sf for academic and administration uses, a new student residence building with 305 beds, and a new soccer field.

Exeter Residence/888 Boylston Street

These two new mixed-use buildings are part of the Prudential Center Redevelopment Project. The Exeter Residences, located on Exeter Street opposite Blagden Street, will be a 30-story residential building with 188 new units. This building is currently under construction. 888 Boylston Street will be a 19-story building with about 360,000 sf of office space and 40,000 sf of retail space.

350 Boylston Street

This new mixed-use project will replace four existing buildings on the corner of Boylston Street and Arlington Street. The projects consists of 220,000 sf, including eight floors of office space, 15,000 sf of retail and restaurant space, and a 6,000 sf fitness center/spa.

Christian Science Plaza Master Plan

This plan includes two new buildings along Belvidere Street and one near the corner of Huntington Avenue/ Massachusetts Avenue. The new buildings will provide a mix of residential, hotel, and office space, totaling to an estimated 950,000 sf. While the plan was approved by the Boston Redevelopment Authority in August 2011, the



development timeline and exact use and design of the buildings will not be determined until developers for each parcel are chosen in the future.



3

# **Transportation**

#### 3.1 Overview

A detailed transportation analysis for the NEC campus is provided in **Chapter 5**, **Transportation Component** of the New England Conservatory Institutional Master Plan Notification Form/Project Notification Form (NEC IMPNF/PNF) that was submitted in January 2012. The Transportation analysis conforms to the BTD "Transportation Access Plan Guidelines". The study includes an inventory of Existing Conditions which includes a survey and compilation of existing transportation conditions within the study area including transportation characteristics of the NEC campus. The analysis in the NEC IMPNF/PNF addresses the transportation impacts associated with both the Phase I Project and Phase II Project as well.

The Institutional Master Plan (attached) includes an update to the Transportation Component based on the Draft Project Impact Report comments from the BRA specifically regarding the Move-In/Move-Out Plan and is found in Section 6.7.

## **Environmental Protection**

#### 4.1 Introduction

A detailed Environmental Protection Component chapter is provided in the NEC IMPNF/PNF. This chapter responds to and addresses the specific questions and comments raised in the BRA's Scoping Determination letters related to the Wind Analysis, Daylight Analysis and Solid and Hazardous Waste. **Chapter 6**, **Environmental Sustainability** of this DPIR outlines NEC's sustainable design initiatives which include water conservation and energy-saving measures.

#### 4.2 Wind Analysis

The NEC IMPNF/PNF provides a section that analyzes the pedestrian wind conditions around the Proposed Projects when added to the existing surroundings. This is found in section 6.2 of **Chapter 6**, **Environmental Protection Component** of the IMPNF/PNF. The analysis indicates that suitable wind conditions are predicted at the two main entrances to the proposed development, as they are sheltered by the buildings and protected by several positive wind control design features from prevailing winds. The wind conditions at the two main entrances will be comfortable for standing and will be between approximately >12 and <15 miles per hour (Applicable to the hourly mean wind speed exceeded 1 percent of the time). This is based upon the following wind comfort criteria as described in more detail below.

#### 4.2.1 Wind Comfort Criteria

The Boston Redevelopment Authority (BRA) has adopted two standards for assessing the relative wind comfort of pedestrians. First, the BRA wind design guidance criterion states that an effective gust velocity (hourly mean wind speed plus 1.5 times the root-mean-square wind speed) of 31 mph should not be exceeded more than one (1) percent of the time.

The second set of criteria used by the BRA to determine the acceptability of specific locations is based on the work of Melbourne<sup>1</sup>. This set of criteria is used to determine the relative level of pedestrian wind comfort for activities such as sitting, standing, or walking. The criteria are expressed in terms of benchmarks for the 1-hour mean wind speed exceeded 1% of the time (i.e., the 99-percentile mean wind speed) as shown in **Table 4-1**.

Table 4-1 BRA Mean Wind Criteria\*

Melbourne Category	Description	Criteria*
Comfortable for Sitting	Recommended for outdoor cafes and amenities that promote sitting.	≤12 miles per hour
2. Comfortable for Standing	Appropriate at major building entrances, bus stops or other areas where people may want to linger but not necessarily sit for extended periods of time.	>12 and <u>&lt;</u> 15 miles per hour
3. Comfortable for Walking	Appropriate from sidewalks, plazas, parks where people are more likely to be active and receptive to some wind activity.	>15 and <19 miles per hour
4. Uncomfortable for Walking	Considered a nuisance for some activities, but can be acceptable, depending upon the season and use of an area.	>19 and <27 miles per hour
5. Dangerous	Wind speeds can adversely affect a pedestrian's balance and footing.	> 27 miles per hour

Source: Boston Redevelopment Authority

Discussion of anticipated wind patterns includes reference is be made to two general wind flows. Tall buildings tend to intercept the stronger winds at higher elevations and redirect them to ground level. Such a "Downwashing Flow" is the main cause for wind accelerations around large buildings at pedestrian-level. When two buildings are situated side by side, wind flow tends to accelerate through the gap between the buildings due to a channeling effect. If these buildings/wind combinations occur for prevailing winds, there is an increased potential for even higher wind speeds.

Applicable to the hourly mean wind speed exceeded 1 percent of the time.

<sup>▼</sup> 

Melbourne, W.H. (1978), "Criteria for Environmental Wind Conditions", Journal of Industrial Aerodynamics, vol. 3, pp. 241-249.



Generally, wind conditions comfortable for walking are appropriate for sidewalks and lower wind speeds comfortable for standing are desired for main building entrances. Typically the summer and fall winds in Boston tend to be more comfortable than the annual winds while the winter and spring winds are less comfortable than the annual winds.

#### 4.3 Daylight Analysis

#### 4.3.1 Methodology

A daylight analysis for the Proposed Projects was performed utilizing the Boston Redevelopment Authority Daylighting Analysis (BRADA) computer program.<sup>2</sup> Using BRADA, a silhouette view of the building is taken at ground level from the middle of the adjacent city streets or pedestrian ways centered on each of the proposed buildings that abut a public way. The façade of the building facing the viewpoint, including heights, setbacks, corners and other features, is plotted onto a base map using lateral and elevation angles. The two-dimensional base map generated by BRADA represents a figure of the building in the "sky dome" from each respective viewpoint that is studied.

The BRADA program calculates the percentage of daylight that will be obstructed on a scale of 0 percent to 100 percent. BRADA calculates this obstruction value based on the width of view, the distance between the viewpoint and the building and the massing and setbacks incorporated into the design of the building. The lower the number, the lower the percentage of obstruction of daylight from any given viewpoint.

The BRA requires that the daylight analysis study the existing and build conditions. Potential daylight impacts were analyzed from three viewpoints around the project sites. The SLPC project impacts were analyzed from Huntington Avenue and Gainsborough Street. Both the SLPC and LC projects were analyzed from St. Botolph Street.

#### 4.3.2 Analysis Summary

The results of the daylight analysis have been updated from the IMPNF/PNF. Specifically, the Daylight analysis figure for St. Botolph Street was updated and is located in **Figure 4-1** through **Figure 4-3** and **Table 4-2** below.



Method developed by Harvey Bryan and Susan Stuebing, computer program developed by Ronald Fergle, Massachusetts Institute of Technology, Cambridge, MA, September 1985.

Table 4-2
Daylight Analysis Results

Viewpoint	Existing	Proposed Project
Huntington Avenue	30.1%	70.2%
Gainsborough Street	62.4%	74.9%
St. Botolph Street	34.8%	60.6%

Source: Vanasse Hangen Brustlin, Inc.

Existing daylight obstructions range from 30.1% on Huntington Avenue directly in front of the existing print library building to 62.4% on Gainsborough Street. The existing site of the SLPC project is a surface parking lot that does not create any daylight obstructions. The adjacent buildings on St. Botolph Street cause 34.8% obstruction to daylight along the street. Development of the Proposed Projects will result in just above seventy percent obstruction of daylight on both Huntington Avenue (limited to the area immediately in front of the proposed LC project) and Gainsborough Street, and just above sixty percent on St. Botolph Street.

#### 4.4 Solid and Hazardous Waste

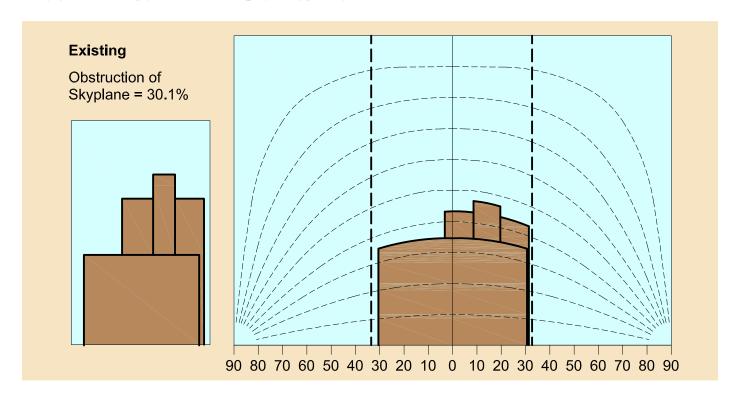
#### 4.4.1 Site Contaminants

NEC has completed a Phase I Environmental Site Assessment for the Student Life & Performance Center project site, and no Reportable Conditions were identified. During construction of both of the Proposed Projects, all excavated materials, demolition waste, and construction debris will be handled in accordance with applicable local, state, and federal laws and regulations.

#### 4.4.2 Solid Waste Generation/Disposal/Recycling

NEC is sensitive to minimizing the amount of solid waste it generates, both during the construction of these Proposed Projects and in connection with the operation of the projects and the NEC campus. Below are highlights of the programs adopted by NEC that aim to accomplish this goal.

NEC currently maintains a comprehensive recycling program, which provides space and containers campus-wide for the recycling of glass, paper, and plastic for all academic and administrative facilities, including the dining hall operations. NEC proactively educates its students, faculty, and staff about the importance of a strong recycling program. NEC's current proactive recycling initiative and trash removal



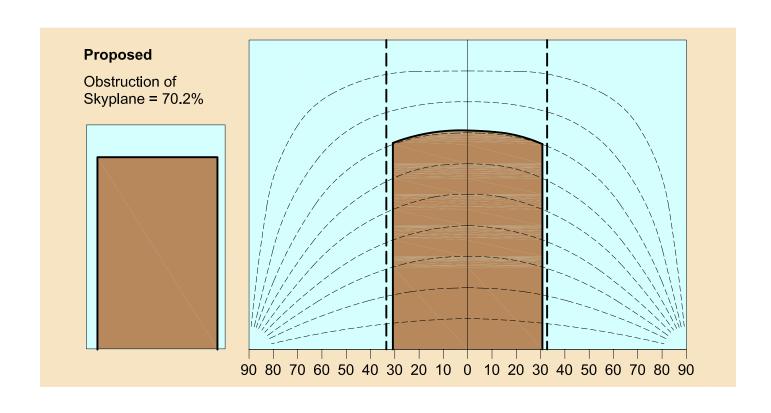
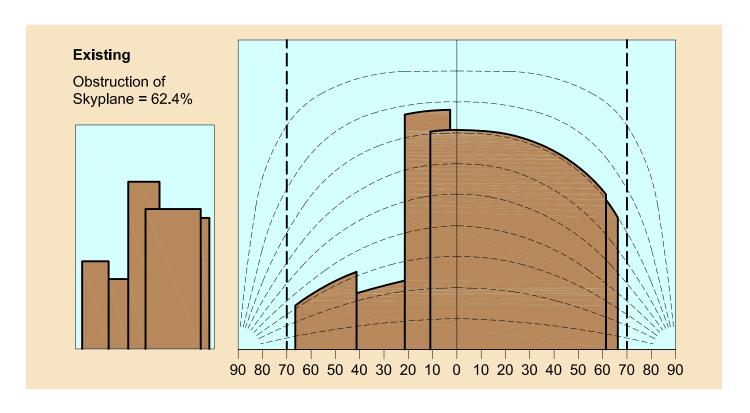




Figure 4-1 - Daylight Analysis Huntington Avenue



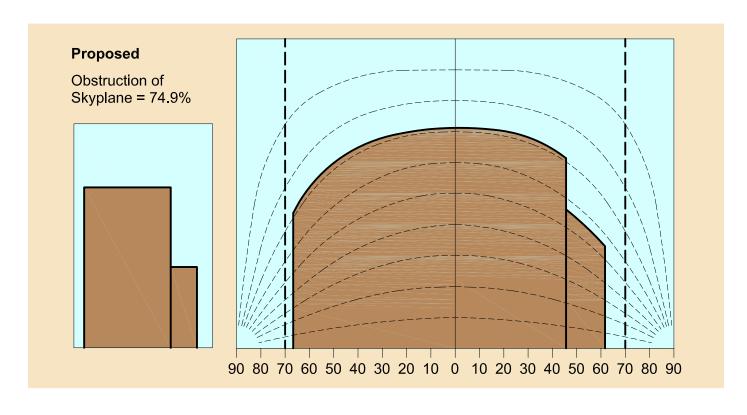
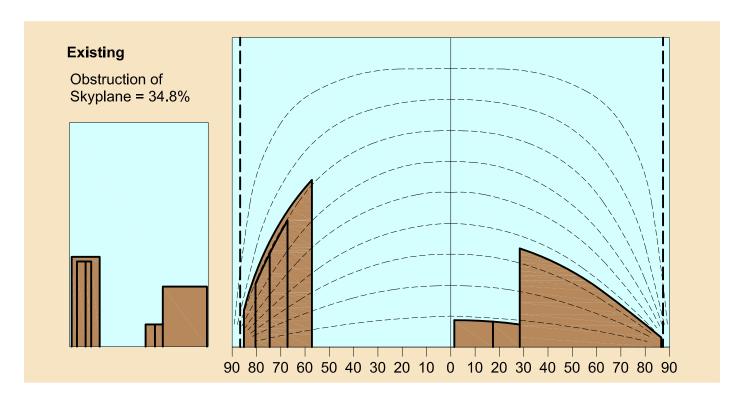




Figure 4-2 - Daylight Analysis Gainsborough Street



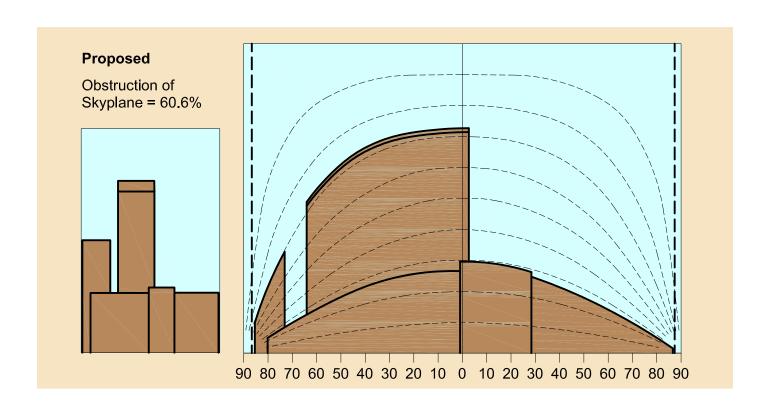




Figure 4-3 - Daylight Analysis Botolph Street



procedures will be incorporated within the new Proposed Projects once they are built and occupied by NEC. Activities at these new facilities will generate solid waste typical of an academic setting, including waste paper, cardboard, glass and plastic bottles, and other similar materials. Most of these waste materials will be recycled and the remainder will be compacted in accordance with all applicable laws and regulations. A more detailed description of NEC's trash removal and recycling program is described in **Chapter 7**, **Environmental Sustainability**.

With regard to construction, the School is considering the use of building materials and purchase of supplies that are nontoxic, made from recycled materials, and made with low embodied energy for all new projects. Recyclable and recycled materials may be incorporated into the design and construction of the Proposed Projects as much as is reasonably feasible. It will be necessary to verify that recycled materials will be technically acceptable and comparable in quality and cost to the non-recyclable equivalents.

#### 4.4.3 Hazardous Waste Generation/Disposal

Management of hazardous waste is highly regulated for the safety of the public, the environment, and the community. NEC has an existing hazardous waste collection program (e.g. janitorial uses) that will be utilized to handle and dispose of all such wastes in accordance with applicable laws and regulations. Currently, it is not expected that new types of hazardous waste would be generated by these new academic, performance, and student life facilities.



# 5

## **Urban Design**

#### 5.1 Overview

In January 2012, New England Conservatory filed a comprehensive Institutional Master Plan Notification Form/Project Notification Form (IMPNF/PNF) for its Phase I Student Life and Performance Center Project (the SLPC Project) and Phase II Learning Center Project (the LC Project). The IMPNF/PNF provides a detailed description of the Urban Design Component which is also presented in the attached Institutional Master Plan in **Chapter 5**, **Planning and Urban Design Framework**. NEC will continue to participate in the ongoing design review with the BRA Urban Design Department and will consult with the Boston Landmarks Commission on any current and future plans for signage and lighting.



6

## **Environmental Sustainability**

#### 6.1 Overview

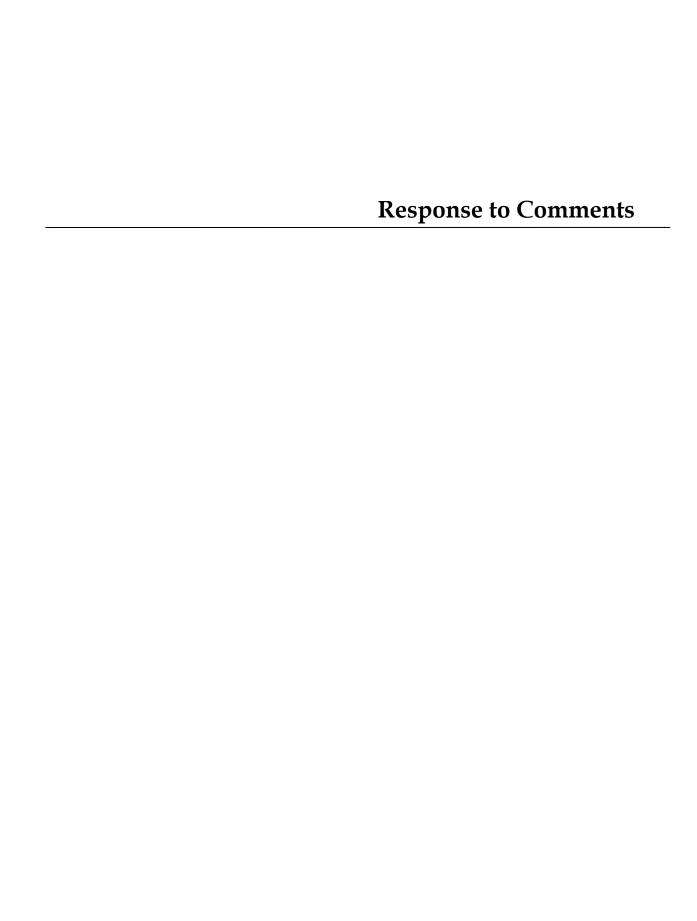
In January 2012, New England Conservatory filed a comprehensive Institutional Master Plan Notification Form/Project Notification Form (IMPNF/PNF) for its Phase I Student Life and Performance Center Project (the SLPC Project) and Phase II Learning Center Project (the LC Project). The IMPNF/PNF provides a detailed description of the Environmental Sustainability and the Institutional Master Plan in **Chapter 7, Environmental Sustainability** which specifically addresses the issues commented on in the BRA's Comment Letter for the Draft Project Impact Report including Performance Monitoring, Environmental Engagement, and Bird Collision Deterrence.

7

## **Historic Resources**

#### 7.1 Overview

In January 2012, New England Conservatory filed a comprehensive Institutional Master Plan Notification Form/Project Notification Form (IMPNF/PNF) for its Phase I Student Life and Performance Center Project (the SLPC Project) and Phase II Learning Center Project (the LC Project). The IMPNF/PNF provides a detailed description of Historic Resources which is also presented in the attached Institutional Master Plan in Chapter 9, Historic Resources.



#### **RESPONSE TO COMMENTS**

This section specifically addresses the individual comments within each comment letter received during the BRA comment period for the New England Conservatory IMPNF/PNF. Each comment is numbered and summarized to correspond with the comment numbers assigned.

#### **BRA Scoping Determination**

- 1. Boston Redevelopment Authority Scoping Determination for the Proposed New England Conservatory Institutional Master Plan and Proposed Residence Hall and Student Life Center, March 12, 2012.
  - a. New England Conservartory IMP
  - b. Student Life and Performance Center DPIR

#### Comments from the City Public Agencies

- 2. Boston Water and Sewer Commission, February 14, 2012;
- 3. Boston Groundwater Trust, January 24, 2012;
- 4. Boston Fire Department (B.F.D.), January 12, 2012;
- 5. Boston Transportation Department (B.T.D.), February 10, 2012;
- 6. Office of Katie Pedersen, Environmental Review, February 15, 2012;
- 7. Office David Grissino, Senior Architect/Urban Designer, March 5, 2012;

#### Comments from the Public

- 8. New England Conservatory Task Force;
- 9. The Fenway Alliance, February 14, 2012;
- 10. The Boston Preservation Alliance, February 13, 2012;
- 11. The Fenway Community Development Corporation, February 16, 2012;
- 12. Gainsborough Neighborhood Association, February 17, 2012;
- 13. Mr. Todd Fielder, 84 Gainsborough Street, February 17, 2012;



### Boston Redevelopment Authority

Boston's Planning & Economic Development Office

Thomas M. Menino, Mayor Clarence J. Jones, Chairman Peter Meode, Director

One City Hall Square Boston, MA 02201-1007 Tel 617-722-4300 Fax 617-248-1937

March 12, 2012

Yanni Tsipis Senior Vice President, Colliers International 160 Federal Street Boston, MA 02110

Re:

Scoping Determination for the proposed New England Conservatory Institutional Master

Plan and proposed Residence Hall and Student Life Center

Dear Mr. Tsipis:

Please find enclosed the Scoping Determination for the proposed New England Conservatory Institutional Master Plan and proposed Residence Hall and Student Life Center. The Scoping Determination describes information required by the Boston Redevelopment Authority in response to the Institutional Master Plan Notification Form/Project Notification Form, which was submitted under Article 80D and Article 80B of the Boston Zoning Code on January 6, 2012. Additional information may be required during the course of the review of the proposals.

If you have any questions regarding the Scoping Determination or the review process, please contact me at (617) 918-4438.

Sincerely,

Senior Project Manager/Planner

cc:

Peter Meade, BRA Brenda McKenzie, BRA Linda Kowalcky, BRA

#### **BOSTON REDEVELOPMENT AUTHORITY**

#### **SCOPING DETERMINATION**

#### **FOR**

#### **NEW ENGLAND CONSERVATORY**

# INSTITUTIONAL MASTER PLAN AND STUDENT LIFE AND PERFORMANCE CENTER

#### **PREAMBLE**

On January 6, 2012 the New England Conservatory ("NEC") submitted to the BRA an Institutional Master Plan Notification Form ("IMPNF") seeking approval of a 10-year Institutional Master Plan that includes two Proposed Institutional Projects: a new ten-story, 135,000 square foot Student Life and Performance Center ("SLPC") containing approximately 250 new student beds, a music library, performance spaces, and a new dining facility and campus center; and a new seven-story, 65,000 square foot Learning Center with new practice facilities, administrative offices, an NEC visitor center, and ground-floor public amenities. The former project will be built on the site of a parking lot owned by NEC and adjacent to 241 St. Botolph Street; the latter will, in a later phase, replace the existing complex at 33 Gainsborough Street.

The SLPC project ("Proposed Project") is also described in a Project Notification Form ("PNF") submitted pursuant to Article 80B as part of the same IMPNF/PNF document.

The BRA will review the proposed IMP ("NEC IMP") pursuant to section Article 80D of the Boston Zoning Code ("Code"). As part of the BRA's Article 80 review, NEC is required to prepare and submit to the BRA a proposed IMP pursuant to Section 80D. The document must set forth in sufficient detail the characteristics and planning framework of the institution to allow the BRA to make a determination about the merits of the proposed IMP. The proposed IMP shall contain the information necessary to meet the specifications of Article 80 as well as any additional information requested below.

Copies of the IMPNF/PNF were made available to the public in both electric and hard copy format. A public meeting was held on January 17, 2012 and a scoping session was held on January 18, 2012 with public agencies at which the proposed IMP and Proposed Project.

Based on review of the IMPNF and related comments, as well as the scoping session and public meeting, the BRA hereby issues its written Scoping Determination ("Scope") pursuant to Sections 80D-5.3 and 80B-5.3 of the Code. NEC is requested to respond to the specific elements outlined in this Scope. Comments from public agencies and the public, found in Appendixes 1 and 2, respectively, are incorporated as a part of this Scope. Written comments constitute an integral part of the Scope and should be responded to in the IMP, the DPIR, or in another appropriate manner over the course of the review process. At other points during the

public review of the IMP and DPIR, the BRA and other public agencies may require additional information to assist in the review.

At other points during the public review, the BRA and other City agencies may require additional information to assist in the review of the Proposed IMP and/or Proposed Projects.

To facilitate the preparation and review of the two documents referenced above, the Scope contains two discrete sections, one setting forth the submission requirements for the IMP, and another setting forth the submission requirements for the DPIR. When appropriate, information requested in one section may be provided in the submission that responds to the other section.

In addition to the specific submission requirements outlined in the sections below, the following general issues should be noted:

- The City of Boston views its academic institutions as important economic and cultural
  assets and as valuable partners in a wide range of public policy priorities. However,
  while the benefits of Boston's academic institutions are felt across the city and even
  regionally, nationally, and globally, the negative impacts are generally limited to the
  immediate neighborhood. This dictates that both the BRA and academic institutions
  work to carefully balance the goals of vibrant institutions and healthy neighborhoods.
- It is the City's policy to encourage colleges and universities to expand their on-campus housing facilities for their students so that there is a decreasing use of private housing market resources in Boston neighborhoods by students. The BRA recognizes that NEC is proposing a new dormitory and looks forward to working with the institution as plans are developed further.
- The NEC Task Force has submitted a comment letter, included in Appendix 2, that merits particular attention among the public comment letters.

#### **SUBMISSION REQUIREMENTS**

#### **FOR THE**

#### **NEW ENGLAND CONSERVATORY IMP**

The Scope requests information required by the BRA for its review of the proposed IMP in connection with the following:

- 1. Approval of the NEC IMP pursuant to Article 80D and other applicable sections of the Boston Zoning Code.
- 2. Recommendation to the Zoning Commission for approval of the NEC IMP.

The NEC IMP should be documented in a report of appropriate dimensions and in presentation materials which support the review and discussion of the IMP at public meetings. Thirty-five (35) hard copies of the full report should be submitted to the BRA, in addition to an electronic version in .pdf format. An additional twenty-five (25) hard copies of the document should be available for distribution to the NEC Task Force, community groups, and other interested parties in support of the public review process. The IMP should include a copy of this Scoping Determination. The IMP should include the following elements.

#### 1. MISSION AND OBJECTIVES

- Mission and Objectives. Define NEC's mission and objectives and describe how the development contemplated or proposed in the IMP advances the stated mission and objectives.
- Major Programs and Initiatives. Describe major academic programs or initiatives that will drive academic and physical planning in the future. Included in the description should be current and future trends that are impacting NEC and shaping program objectives.

#### 2. EXISTING PROPERTY AND USES

The IMP should present maps, tables, narratives, and site plans clearly providing the following information:

- **Owned and Leased Properties.** Provide an inventory of land, buildings, and other structures in the City of Boston owned or leased by NEC as of the date of submission of the IMP, with the following information for each property.
  - Illustrative site plans showing the footprints of each building and structure, together with roads, sidewalks, parking, and other significant improvements.
  - Land and building uses.

1.a.2.1

- Building gross square footage and, when appropriate, number of dormitory beds or parking spaces.
- Building height in stories and, approximately, in feet, including mechanical penthouses.
- Tenure (owned or leased by NEC).

#### 3. CAMPUS DEMOGRAPHICS AND EMPLOYMENT

- **Student Population.** The IMP should present past trends and future projections of the size and other characteristics of NEC's student body. This information may be integrated with the Student Housing Plan, described below, if desired.
- **Employment.** Provide information NEC's current employee population, disaggregated by faculty/staff, full-time/part-time, contract employees, Boston residents/non-residents, as well as projected employment over the term of the IMP.
  - **Employment and Workforce Development.** The BRA looks forward to working with NEC to support the City's employment and workforce development goals. The IMP will provide an opportunity for further discussion of measures to enhance educational opportunities for Boston residents and prepare Boston residents and students for employment.

#### 4. PROPOSED FUTURE PROJECTS

- Article 80D Requirements. Pursuant to Article 80D, the IMP should provide the following information for each Proposed Project:
  - Site location and approximate building footprint.
  - Uses (specifying the principal subuses of each land area, building, or structure, such as classroom, laboratory, parking facility).
  - Square feet of gross floor area.
  - Square feet of gross floor area eliminated from existing buildings through demolition of existing facilities.
  - Floor area ratio.
  - Building height in stories and feet, including mechanical penthouses.
  - Parking areas or facilities to be provided in connection with Proposed Projects;
  - Any applicable urban renewal plans, land disposition agreements, or the like.
  - Current zoning of site.
  - Total project cost estimates.
  - Estimated development impact payments.
  - Approximate timetable for development of proposed institutional project, with the estimated month and year of construction start and construction completion for each.

#### 5. PLANNING AND URBAN DESIGN FRAMEWORK

The BRA welcomes NEC's proposed improvements to the public realm, both in the form of architecture and streetscape improvements. Beyond the proposed improvements, it should be noted that the intersection of Gainsborough Street and St. Botolph Street has great potential to act as a gateway to NEC, Northeastern University, and the Avenue of the Arts, with the potential for very different conditions for pedestrians and vehicles alike. A written and graphic description should be submitted which outlines the relationship of this area to the other streetscape elements proposed in connection with the two IMP projects. NEC should anticipate engaging in discussions with the Boston Redevelopment Authority and Boston Transportation Department regarding future planning for this area.

1.a.3.3

Additional comments from the BRA's Urban Design staff are included in Appendix 1 and are incorporated herein by reference and made a part hereof.

#### 6. STUDENT HOUSING PLAN

Article 80D mandates that institutions submit a Student Housing Plan as part of the IMP. The IMP should address both the requirements set forth in Article 80D, which are reproduced below, and the additional requirements set forth in this section.

- Article 80 Student Housing Plan Requirements. Pursuant to Article 80D, the IMP should address the following:
  - The number of full-time undergraduate and graduate students living in housing facilities owned or operated by the Institution, including a breakdown by type of degree of program (undergraduate or graduate) and type of housing facility (dormitory, apartment, or cooperative housing facility).
  - The number of housing units owned or operated by the Institution, by type of housing facility (dormitory, apartment or cooperative housing facility).
  - Any housing requirements or restrictions the Institution places on its students (e.g. eligibility for on-campus housing, requirement to live on campus).
  - The process by which the Institution directs its students to housing facilities.
  - The Institution's short-term and long-term plans for housing its undergraduate and graduate students on-campus and off-campus.
  - Impacts of the Institution's student housing demand on housing supply and rental market rates in the surrounding neighborhoods, including those neighborhoods adjacent to the Institution's campus and other neighborhoods where the Institution's students are concentrated.

#### 7. TRANSPORTATION, PARKING, AND CIRCULATION

NEC should continue to work closely with the Boston Transportation Department ("BTD") on the items listed below as well as on all the issues outlined in BTD's comment letter, which is included in Appendix 1 and incorporated herein by reference and made a part hereof.

- Move-In/Move-Out Traffic Management Procedures. Describe NEC's current procedures for managing traffic and parking impact generated by students moving into and out of dormitories, and any proposed changes to those procedures. This information may be consolidated with the Move-In/Move-Out Plan required as part of the DPIR.
- Pick-Up and Drop-Off. A number of commenters have made reference to the volume of vehicles associated with the Prepatory School programs. The IMP should provide additional analysis of these impacts and propose strategies for minimizing those impacts in the future, including management of the proposed drop-off zones.
- Jordan Hall Parking. The BRA acknowledges that NEC is proposing the removal of a significant number of parking spaces and retaining only a modest number for its on-campus stock. However, NEC should continue to work with the BRA and BTD to examine strategies in the short term or longer term to remove those spaces as well as part of a broader effort to transform the Gainsborough Street/St. Botolph Street intersection into a high-quality urban space that serves the adjacent institutions and the public at large.

New England Conservatory Scoping Determination

**Bicycle Facilities.** Provide more detail on proposed bicycle facilities, including proposed bicycle parking for campus residents and commuters, and the availability of showers and changing areas on campus for students or employees who commute by bicycle.

#### 8. ENVIRONMENTAL SUSTAINABILITY

1.a.8.1

The City of Boston expects a high level of commitment to principles of sustainable development from all developers and institutions. NEC will be expected to work with the BRA, the City of Boston Environment Department, and other entities as determined by the BRA to set and meet ambitious environmental sustainability goals in both the IMP and in the design of the Proposed Projects. The IMP should present as much information as possible on the topics below, with the understanding that not all of them may be relevant at the current time.

- Existing Sustainability Measures. Document and describe NEC's existing sustainability measures at the building and campus-wide level, including but not limited to energy, stormwater, solid waste, transportation, and infrastructure and utilities. Explain the administrative structure for making decisions about and promoting innovation in the area of building a sustainable campus. Describe any formal goals or principles that NEC has adopted in the area of sustainability.
- Potential Future Sustainability Programs and Plans. Discuss additional sustainability initiatives that could be adopted in conjunction with this IMP or in the future.
- 1.a.8.3

  Green Building. New campus buildings should achieve a superior level of performance in the areas of materials and resources (recycled content, construction waste management, local/regional materials), energy (energy performance, renewable energy), water management (water efficiency, stormwater management, graywater and stormwater recycling, etc.), indoor environmental quality, and other standard performance areas of high-performance or "green" buildings. Whenever possible, buildings should achieve a high level of certification through LEED or another appropriate system.
- 1.a.8.4 Energy Use. Future campus development should consider the impact of new buildings on the existing heating and cooling infrastructure. Reducing the current energy use of existing buildings should be addressed prior to expanding or building new power plants. Planning should consider the possible benefits of localized heating and cooling systems within a section of the campus or within an individual building, allowing for alternative energy sources to be easily explored.
- Water Use. Future campus development should incorporate water use, conservation, and rainwater harvesting strategies at a campus level. New construction allows opportunities for storage systems to be installed for use by the new and adjacent buildings. Collected water can be used for flushing, HVAC make-up water, and irrigation.
- 1.a.8.6

  Stormwater Retention/Treatment/Reuse and Groundwater Recharge. NEC's development should go beyond the minimum requirements related to stormwater runoff. In particular, the new developments proposed as part of this IMP should set a goal of reducing stormwater discharge from the sites into the storm sewers, not simply avoiding any additional runoff. Individual building design, site design, and street-level interventions should all maximize the opportunities for stormwater retention, treatment, and reuse, as well as groundwater recharge, through innovative approaches. To the extent possible, the systems put in place should strive to work with the natural hydrology of the area.
- **Solid Waste.** Campus master planning should set the goal of reducing the level of solid waste generation in both the construction and operation of buildings.

- **Landscape and Natural Features.** A well-considered program of landscape design can not only create a high-quality aesthetic realm but can also enhance regional biodiversity, help mitigate air pollution, reduce heating and air conditioning costs and associated energy consumption, reduce water consumption, and reduce stormwater runoff and water pollution. Sustainability should be a primary consideration in landscape design.
- Performance Standards and Indicators. Over the long term, NEC should commit not only to broad sustainability principles, but also to specific performance standards and a system of indicators and metrics to track performance.

#### 9. COMMUNITY BENEFITS PLAN

• **Future Community Benefits.** The BRA looks forward to working with NEC, the NEC Task Force, and NEC's neighbors to explore appropriate community benefits to be associated with the NEC IMP.

#### 10. OTHER

- Public Notice. NEC will be responsible for preparing and publishing in one or more newspapers of general circulation in the City of Boston a Public Notice of the submission of the IMP to the BRA as required by Section 80A-2. This Notice shall be published within five (5) days after the receipt of the IMP by the BRA. In accordance with Article 80, public comments on the IMP shall be transmitted to the BRA within sixty (60) days of the publication of this notice. A sample form of the Public Notice is attached as Appendix 3. Following publication of the Public Notice, NEC shall submit to the BRA a copy of the published Notice together with the date of publication.
- PILOT Payments. Describe NEC's current Payment-In-Lieu-Of-Taxes (PILOT) program and proposed future payments.

#### **SUBMISSION REQUIREMENTS**

#### **FOR**

#### **NEW ENGLAND CONSERVATORY**

## STUDENT LIFE AND PERFORMANCE CENTER DRAFT PROJECT IMPACT REPORT

The Scope requests information required by the BRA for its review of the Proposed Project in connection with the following:

1. Certification of Compliance and approval of the Proposed Project pursuant to Article 80, Section 80B of the Code.

Subsequent to the end of the thirty (30) day public comment period on the DPIR, the BRA will issue a Preliminary Adequacy Determination ("PAD") that indicates the additional steps necessary for NEC to satisfy the requirements of the Scoping Determination and all applicable sections of Article 80 of the Code. If the BRA finds that the DPIR adequately describes the Proposed Project's impacts and, if appropriate, proposes satisfactory measures to mitigate, limit or minimize such impacts, the PAD will announce such a determination and that the requirements for the filling and review of a Final Project impact Report ("FPIR") are waived pursuant to Section 80B-5.4(c)(iv) of the Code. Sections 80B-6 and 80D-10 require the Director of the BRA to issue a Certification of Compliance and a Certification of Consistency, respectively, before the Commissioner of Inspectional Services can issue any building permit for the Proposed Project.

In addition to full-size scale drawings, thirty-five (35) hard copies of the full bound report should be submitted to the BRA, in addition to an electronic version in .pdf format. An additional twenty-five (25) hard copies of the document should be available for distribution to the NEC Task Force, community groups, and other interested parties in support of the public review process. The report should contain all submission materials reduced to size 8-1/2"x11", except where otherwise specified, and should be printed on both sides of the page. A copy of this Scoping Determination must be included in the report submitted for review.

The DPIR shall include the following elements:

#### 1. GENERAL INFORMATION

- Applicant/Proponent Information. Pursuant to Article 80B, the DPIR should provide the following information:
  - Development Team
    - o Names of developer(s), including description of development entity(ies), attorney, project consultants and architects.



- Business address, telephone number, fax number and e-mail, where available, for each.
- Designated contact for each.

#### Legal Information

- Legal judgments or actions pending concerning the Proposed Project
- o History of tax arrears on property owned in Boston by Applicant.
- Evidence of site control over project area, including current ownership and purchase options of all parcels in the Proposed Project, all restrictive covenants and contractual restrictions affecting the Proponent's right or ability to accomplish the Proposed Project, and the nature of the agreements for securing parcels not owned by the Applicant.
- Nature and extent of any and all public easements into, through, or surrounding the site.
- 1.b.1.2
- **Disclosure of Beneficial Interests.** Disclosure of Beneficial Interests in the Proposed Project must be provided pursuant to Section 80B-8 of the Boston Zoning Code.
- 1.b.1.3
- **Regulatory Controls and Permits.** The DPIR shall include an up-to-date listing of all anticipated permits or approvals required from other municipal, state or federal agencies, including a proposed application schedule. A statement on the applicability of the Massachusetts Environmental Policy Act ("MEPA") should be provided. If the Proposed Project is subject to MEPA, all required documentation should be provided to the BRA, including but not limited to, copies of the Environmental Notification Form, decisions of the Secretary of Environmental Affairs, and the proposed schedule for coordination with BRA procedure.

#### 2. PROJECT DESCRIPTION

- 1.b.2.1
- **Project Site.** The DPIR shall include a complete description of the Project Site including, at minimum, square footage of the site, a map indicating the boundaries, a legal description including metes and bounds, existing site conditions, and the surrounding development context, i.e. a description of the surrounding environment including the height, other dimensions, use, and other relevant characteristics of existing nearby buildings, as well as an inventory of surrounding proposed projects. Only projects that have completed or are currently undergoing Article 80 review should be included and should be included as proposed in their filings at the Boston Redevelopment Authority. The Project Site, as defined in the DPIR, must be utilized for each Project Description and for any calculations or comparisons.
- 1.b.2.2
- **Project Description.** The DPIR shall contain a full description of the Proposed Project and any alternative(s) and their elements, including size, physical characteristics, FAR (utilizing the definition for calculation as provided for in the Boston Zoning Code), and proposed uses, including any uses planned or considered for all elements of the project during the summer months.

#### 3. TRANSPORTATION COMPONENT

The DPIR should respond to all the issues outlined in BTD's comment letter, which is included in Appendix 1 and incorporated herein by reference and made a part hereof. The DPIR should also respond to the specific request below:

- Move-In/Move-Out Plan. The DPIR should describe the plan to limit the impact of a large number of residents moving into and out of the Proposed Project within the span of a few days on both building residents and neighbors. The Move-In/Move-Out Plan shall address, at a minimum, the following:
  - A description of the procedures used at NEC's existing dormitories to ensure orderly move-in and move-out with a minimum of disruption to the neighborhood, and the planned procedures for the Proposed Project. This should address, among other things, vehicular access and parking, use of loading docks, and handling of garbage.
  - A statement of the peak move-in/move-out periods and an estimate of the number of move-ins/move-outs per day and over the course of the period as a whole, based on data from NEC's existing dormitories.
  - A description and explanation of the adequacy of the Proposed Project's design features relevant to move-in and move-out capacity, in particular those features related to vehicular access, loading docks, elevator capacity, etc.

#### 4. ENVIRONMENTAL PROTECTION COMPONENT

1.b.4.1 The IMPNF/PNF contains extensive information on the standard Article 80B environmental protection analysis. The DPIR should respond to any additional requests for information contained in the comments from the BRA's Urban Design staff and from Katie Pedersen, Senior Project Manager/Environmental Review. Both of these comment letters are included in Appendix 1 and are incorporated herein by reference and made a part hereof.

#### 5. URBAN DESIGN COMPONENT

The BRA Urban Design comments are included in Appendix 1 and are incorporated herein by reference and made a part hereof. The DPIR should also respond to the specific request below:

• Signage and Lighting. As part of the ongoing design review, NEC shall provide the proposed design of any signage and lighting anticipated for the exterior of the building. NEC will be required to perform design review with the BRA Urban Design Department and consult with the Boston Landmarks Commission on any current and future plans for signage and lighting. Building lighting should both highlight the key features of the building façades and enhance security in the vicinity of the building without excessively lighting the area.

#### 6. ENVIRONMENTAL SUSTAINABILITY

The City of Boston expects a high level of commitment to principles of sustainable development from all developers and institutions. NEC's campus expansion provides exciting opportunities

for innovation and excellence not only in individual buildings, but across the campus as a whole. NEC will be expected to work with the BRA, the City of Boston Environment Department, and other entities as determined by the BRA to set and meet ambitious environmental sustainability goals in both the IMP and in the Proposed Project.

The written comments from Katie Pedersen, Senior Project Manager/Environmental Review are included in Appendix 1 are incorporated herein by reference and made a part hereof. In addition, the DPIR and/or IMP should provide more detail on NEC's planned or potential efforts in the following areas:

- **Performance Monitoring.** Periodic audits of energy consumption, waste streams, carbon footprint, and other impacts.
- **Environmental Engagement.** Further improvements in environmental performance can come through deeper engagement with the campus community.
- **Bird Collision Deterrence.** Investigate the possibility of incorporating the new LEED pilot credit (55:SS, Bird-Collision Deterrence) into the project design.

#### 7. HISTORIC RESOURCES COMPONENT

1.b.7.1 The DPIR should summarize any historic resources that will be affected by the Proposed Project, the position of public agencies on those resources (including any necessary regulatory process), and present a plan to minimize the adverse impact of the Proposed Project.

#### 8. SECURITY

1.b.8.1 The DPIR should describe any particular security concerns in the vicinity of the Proposed Project and MBTA station and measures to be taken that will enhance security in the vicinity of the Proposed Project, including building lighting, cameras, and building security presence.

#### 9. OTHER

1.b.9.1 NEC will be responsible for preparing and publishing in one or more newspapers of general circulation in the City of Boston a Public Notice of the submission of the DPIR to the BRA as required by Section 80A-2. This Notice shall be published within five (5) days after the receipt of the DPIR by the BRA. In accordance with Article 80, public comments on the DPIR shall be transmitted to the BRA within forty-five (45) days of the publication of this notice. A sample form of the Public Notice is attached as Appendix 3. Following publication of the Public Notice, NEC shall submit to the BRA a copy of the published Notice together with the date of publication.



#### Boston Water and Sewer Commission



980 Harrison Avenue Boston, MA 02119-2540 617-989-7000

February 14 2012

Mr. Gerald Autler Senior Project Manager Boston Redevelopment Authority One City Hall Square Boston, MA 02201-1007

Re: New England Conservatory of Music

Institutional Master Plan Notification Form / Project Notification Form

Dear Mr. Autler:

The Boston Water and Sewer Commission (Commission) has reviewed the Institutional Master Plan Notification Form / Project Notification Form for the Institutional Master Plan and Project Notification Form (IMPNF / PNF) for the New England Conservatory of Music. This letter provides the Commission's comments on the IMPNF / PNF.

The proposed project is located on two adjacent parcels presently occupied by a surface parking lot, a small two-story pavilion building and at 33 Gainsborough Street which serves as New England Conservatory's residence hall and library. The site is in the Fenway area of Boston and is encompassed by Huntington Avenue, Gainsborough Street, Saint Botolph Street, and Massachusetts Avenue.

The proposed project includes the construction of two new buildings in two phases. The first phase will include the construction of a 252-bed student residence hall, dining commons with performance stage, library resource area and three rehearsal and performance spaces and limited interim renovations to the 33 Gainsborough Street building and the library. In the future, the building at 33 Gainsborough Street will be removed and a new 7-story, approximately 65,000 square-foot facility for student learning and practice will be constructed. The new building will also have administrative functions and a public coffeehouse. A two level connector will cross over Public Alley #822 will connect the new building with the building at 241 Saint Botolph Street.

For water service, the site is served by a 10-inch low service main on Saint Botolph Street, an eight inch low service main on Gainsborough Street, a 16-inch low service main on Huntington and an eight inch high service main on Public Alley 882.

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For sanitary service, the project site is served by a 12-inch sanitary sewer in Public Alley 821 which discharges to a 90-inch x 92-inch combined sewer on Gainsbourough Street, an 18-inch x 24-inch sanitary sewer on Saint Botolph Street, and a 15-inch combined sewer on Gainsborough Street.

For storm drain service, the project site is served by a 20-inch storm drain in Public Alley 821 which flows to a 33-inch x 33-inch storm drain in Gainsborough Street.

The ENF states that the proposed project will use approximately 47,178 gallons per day (gpd) of water and generate approximately 42,889 gpd of wastewater.

The Commission has the following comments regarding the IMPNF / PNF:

#### General

- 1.
- Prior to demolition of any buildings, all water, sewer and storm drain connections to the buildings must be cut and capped at the main pipe in accordance with the Commission's requirements. The proponent must then complete a Termination Verification Approval Form for a Demolition Permit, available from the Commission and submit the completed form to the City of Boston's Inspectional Services Department before a demolition permit will be issued.
- 2.1.2
- 2. Any new or relocated water mains, sewers and storm drains must be designed and constructed at New England Conservatory's expense. They must be designed and constructed in conformance with the Commission's design standards, Water Distribution System and Sewer Use Regulations, and Requirements for Site Plans. To assure compliance with the Commission's requirements, the proponent must submit a site plan and a General Service Application for individual projects as they are proposed to the Commission's Engineering Customer Service Department for review and approval when the design of the new water and wastewater systems and the proposed service connections to those systems are 50 percent complete. The site plan should include the locations of new, relocated and existing water mains, sewers and drains which serve the site, proposed service connections as well as water meter locations.
- 2.1.3
- 3. The Department of Environmental Protection, in cooperation with the Massachusetts Water Resources Authority and its member communities, are implementing a coordinated approach to flow control in the MWRA regional wastewater system, particularly the removal of extraneous clean water (e.g., infiltration/inflow (I/I)) in the system. In this regard, DEP has been routinely requiring proponents proposing to add significant new wastewater flow to assist in the I/I reduction effort to ensure that the additional wastewater flows are offset by the removal of I/I. Currently, DEP is typically using a minimum 4:1 ratio for I/I removal to new wastewater flow added. The



Commission supports the DEP/MWRA policy, and will require the proponent to develop a consistent inflow reduction plan. The 4:1 requirement should be addressed at least 90 days prior to activation of water service and will be based on the estimated sewage generation provided on the project site plan.

- 4. For any proposed masonry repair and cleaning the proponent will be required to obtain from the Boston Air Pollution Control Commission a permit for Abrasive Blasting or Chemical Cleaning. In accordance with this permit New England Conservatory will be required to provide a detailed description as to how chemical mist and run-off will be contained and either treated before discharge to the sewer or drainage system or collected and disposed of lawfully off site. A copy of the description and any related site plans must be provided to the Commission's Engineering Customer Service Department for review before masonry repair and cleaning commences. The proponent is advised that the Commission may impose additional conditions and requirements before permitting the discharge of the treated wash water to enter the sewer or drainage system.
- As stated in the IMPNF / PNF, the project site is located within Boston's Groundwater Conservation Overlay District (GCOD). The district is intended to promote the restoration of groundwater and reduce the impact of surface runoff. New England Conservatory has stated they will include provisions for retaining stormwater and directing the stormwater to the groundwater table for recharge.

#### Water

- New England Conservatory stated the project will explore opportunities for implementing water conservation measures in addition to those required by the State Plumbing Code. In particular, New England Conservatory should consider outdoor landscaping which requires minimal use of water to maintain. If New England Conservatory plans to install in-ground sprinkler systems, the Commission recommends that timers, soil moisture indicators and rainfall sensors be installed. The use of sensor-operated faucets and toilets in common areas of buildings should be considered.
- 2.2.2 New England Conservatory is required to obtain a Hydrant Permit for use of any hydrant during the construction phase of this project. The water used from the hydrant must be metered. New England Conservatory should contact the Commission's Operations Division for information on and to obtain a Hydrant Permit.
- As stated in the IMPNF / PNF, the Commission is utilizing a Fixed Radio Meter Reading System to obtain water meter readings. For new water meters, the Commission will provide a Meter Transmitter Unit (MTU) and connect the device to the meter. For information regarding the installation of MTUs, New England Conservatory should contact the Commission's Meter Department.



#### Sewage / Drainage

2.3.1

A Total Maximum Daily Load (TMDL) for Nutrients has been established for the Lower Charles River Watershed by the Massachusetts Department of Environmental Protection (MassDEP). In order to achieve the reductions in Phosphorus loading required by the TMDL, phosphorus concentrations in the lower Charles River from Boston must be reduced by 64%. To accomplish the necessary reductions in phosphorus, the Commission is requiring developers in the lower Charles River watershed to infiltrate stormwater discharging from impervious areas in compliance with MassDEP. New England Conservatory will be required to submit with the site plan a phosphorus reduction plan for the proposed development. The proponent must fully investigate methods for retaining stormwater on-site before the Commission will consider a request to discharge stormwater to the Commission's system. Under no circumstances will stormwater be allowed to discharge to a sanitary sewer.

In conjunction with the Site Plan and the General Service Application the New England Conservatory will be required to submit a Stormwater Pollution Prevention Plan. The plan must:

- Adentifies best management practices for controlling erosion and for preventing the discharge of sediment and contaminated groundwater or stormwater runoff to the Commission's drainage system when the construction is underway.
- Includes a site map which shows, at a minimum, existing drainage patterns and areas
  used for storage or treatment of contaminated soils, groundwater or stormwater, and
  the location of major control or treatment structures to be utilized during
  construction.
- Provides a stormwater management plan in compliance with the DEP standards mentioned above. The plan should include a description of the measures to control pollutants after construction is completed.
- 2. 2.3.2
- The Commission requests that New England Conservatory install a permanent casting stating: "Don't Dump: Drains to Charles River" next to any catch basin installed. New England Conservatory may contact the Commission's Operations Division for information regarding the purchase of the castings.
- 2.3.3
- Any cafeteria or food service facility built as part of this project, will require grease traps in accordance with the Commission's Sewer use Regulations. The proponent is advised to consult with the Commission's Operations Department with regards to grease traps.



2.3.4

The Commission requires that existing stormwater and sanitary sewer service connections, which are to be re-used by the proposed project, be dye tested to confirm they are connected to the appropriate system.

Thank you for the opportunity to comment on this project.

Yours truly,

John P. Sullivan, P.E. Chief Engineer

JPS/cj

c:

A. Woodcock, New England Conservatory

E. Besser, New England Conservatory

Y. Tsipis, Colliers International

S. Manning, VHB

A. Beha, Ann Beha Architects

K. Pedersen, BRA

M. Zlody, BED

P. Larocque, BWSC

# Boston Groundwater Trust

229 Berkeley St, Fourth Floor, Boston, MA 02116 617.859.8439 voice – 617.266.8750 fax www.bostongroundwater.org

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#### **Executive Director**

Elliott Laffer

January 24, 2012

Mr. Gerald Autler, Senior Project Manager Boston Redevelopment Authority One City Hall Square Boston, MA 02201-1007

Subject: New England Conservatory

Dear Mr. Autler:

Thank you for the opportunity to comment on the Institutional Master Plan Notification Form/Project Notification Form for the New England Conservatory. The Boston Groundwater trust was established by the Boston City Council to monitor groundwater levels in sections of Boston where the integrity of building foundations is threatened by low groundwater levels and to make recommendations for solving the problem. Therefore, my comments are restricted to groundwater related issues.

I am pleased with the proponent's recognition, stated in the IMPNF/PNF and restated in both the scoping session and in a meeting with Trust staff, that the project is in the Groundwater Conservation Overlay District and that they will comply with all GCOD requirements. As stated in the document, there are several historically important structures in the immediate vicinity of the projects contemplated in the document that are wood piling supported and therefore vulnerable to a drop in groundwater level. Notably, the proponent's own Jordan Hall is one of those wood piling supported structures.

3.1

As discussed during the scoping session, the GCOD requirements include, in addition to the recharge committed in the IMPNF/PNF, a mandate that the project show, in a submission stamped by a Massachusetts registered professional engineer, that the project is designed so that it cannot cause a reduction in groundwater levels on site or on adjoining sites. Because this project, under the Institutional Master Plan process, will not be reviewed by the Board of Appeals, this certification should be submitted prior to zoning approval. In this context, I am pleased with the proponent's statement in the scoping session that there will be no underdrains in either of the building projects contemplated in the document.

3.2

I am also pleased with the verbal commitment from the proponent to install an additional groundwater monitoring well along St. Botolph Street at a location to be mutually agreed upon with the Trust to help assure that groundwater levels are being maintained. Because of the highly sensitive historic buildings in the immediate vicinity, the project should have a groundwater monitoring protocol in place prior to construction and should report readings shortly after they are taken to the Authority and to the Trust. In the event that groundwater levels drop below agreed levels during construction, there should be provisions in place to halt construction and dewatering until the cause is found and remedied.

I look forward to continuing to work with the proponent and the Authority to assure that this project can have only positive impacts on groundwater levels in the Fenway.

Very truly yours,

Elliott Laffer

Executive Director

Cc: Kathleen Pedersen, BRA

Maura Zlody, BED

## Boston

Gerald Autler Senior Project Manager Boston Redevelopment Authority One City Hall Square Boston, MA 02201-1007

January 12, 2012

Dear Mr. Autler:

Regarding the Project Notification Form for the New England Conservatory project submitted to the BRA in January 2012, the Boston Fire Department requires the following issues addressed by a qualified individual.

- 4.1 1. Emergency vehicle site access to the new buildings as well as existing buildings that might be affected.
- 4.2 2. Impact on availability and accessibility of hydrant locations for new buildings as well as for any existing buildings that might be impacted.
- 4.3 3. Impact on availability and accessibility to siamese connection locations for new buildings as well as for any existing buildings that might be impacted.
- 4.4 4. Impact that a transformer vault fire or explosion will have on the fire safety of the building. Particularly as it relates to the location of the vault.
- 5. Need for Boston Fire Department permit requirements as outlined in the Boston Fire Prevention Code, the Massachusetts Fire Prevention Regulations (527 CMR), and the Massachusetts Fire Prevention Laws (MGL CH148).
- 4.6 For projects involving air-supported structures, it is critical that the impact of the design has on fire safety relative to the interaction of the area underneath the structure to the structure as well as to the interaction of the structure to the area underneath the structure.

These items should be analyzed for all phases of the construction as well as the final design stage. This project will need permits from the Boston Fire Department as well as the Inspectional Services Department.

Respectfully,

Bart J. Shea

Acting Fire Marshal

Cc: Paul Donga, FPE, Plans Unit, BFD





BOSTON TRANSPORTATION DEPARTMENT

ONE CITY HALL PLAZA/ROOM 721 BOSTON, MASSACHUSETTS 02201 (617) 635-4680/FAX (617) 635-4295

February 10, 2012

Gerald Autler, Senior Project Manger Boston Redevelopment Authority Boston City Hall, 9<sup>th</sup> Floor Boston, MA 02201

RE: New England Conservatory (NEC) Institutional Master Plan Notification Form / Project Notification Form (IMPNF/PNF)

Dear Mr. Autler:

Thank you for the opportunity to comment on the New England Conservatory (NEC) Institutional Master Plan Notification Form/ Project Notification Form (IMPNF/PNF) dated January 9, 2012. The Project Notification Form is initiating a review of the following proposed the New England Conservatory (NEC) Institutional Master Plan.

Colliers International is proposing two new institutional projects passed in over a ten- year period to include:

- A 10-story residential, replacing an existing surface lot, approximately 135,000 square foot building, with approximately 250 student beds, library, performance space, dining facility and campus center. Will be built on St. Botolph Street during Phase 1 from 2012-2015, as the "Student Life & Performance Center."
- A seven- story new "Learning Center," 65,000 square foot academic & administration building with practice facilities, office space, and visitor center. To be complete in Phase II by 2017, and replace an existing building at 33 Gainsborough St.

Net increases in the proportion of students living on-campus will increase to 31 percent – decreasing the number of students commuting to/from the campus. Additionally, a small increase of 10 employees is anticipated as support/maintenance staff.

The following are the Boston Transportation Department's (BTD) comments on the combined impacts of all the components of the project. The proponent needs to address these comments and concerns when preparing future submissions as part of the Article 80 process as well as the Transportation Access Plan Agreement. Please note that upon BTD's final review and approval, a Transportation Access Plan Agreement codifying the transportation agreements and mitigation reached with BTD needs to be executed.

5.1





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#### Traffic

The traffic impact study in the project area is bounded by a primary vehicular access by the major arterials of Massachusetts Avenue and Huntington Avenue to the north and west, southwest respectively. Local access is obtained via Gainsborough Street and St. Botolph Street. The project area also includes public alleys #822, 820 and 821. Additionally, four intersections operating at LOS of C or better were included in the study area: Huntington/Mass Ave., Huntington/Gainsborough, Mss. Ave. / St. Botolph, and St. Botolph/ Gainsborough. Left hand turn issues (Gainsborough to Huntington LOS E) that arise during peak hours are address. The proponent indicated build out volumes are assumed to be the same as no new traffic to campus should cause any noticeable increasing in peak hour vehicle trips. Any increase in public foot traffic to campus performance centers will take place outside of peak travel times.

BTD would like to thank the proponent for considering traffic flow changes based on several anticipated area projects.

#### **Parking**

The proponent has access to 1,431 public off-street parking spaces at 7 different facilities within a 1/4 radius of NEC; as well as 19 public spaces at 6 nearby surface lot). Metered parking, four bus stops and three MBTA stops (two rapid and one commuter line) are also located within the radius area of NEC. As the area is well served the proponent is not adding any additional parking.

Boston's Climate Action Plan recommends an overall reduction in emissions of carbon dioxide and other GHG of 25 percent by 2020. In supporting this policy BTD requires proponents to install parking for clean-fuel and non-motorized vehicle parking. Due to the fact the proponent will have 20 spaces remaining in their parking facilities BTD requests that at least 4 spaces or (two dual charging stations) be re-allocated with electric car charging capabilities.

Bike parking and facilities will also be required to meet City of Boston's new bicycle parking guidelines that calls for one space for 15% of the planned institutional population or 0.5 parking spaces per 1,000 square feet of development with no fewer than four secure covered spaces per building. BTD would like to thank the proponent for accounting for this in the PNF and looks forward to reviewing the site plan which details the bicycle parking facilities planned for areas in front of 241 St. Botolph Street, Jordan Hall and indoor solutions to be added to the new Learning Center.

#### **Pedestrian Circulation**

The new building designs will physically join the existing building at 241 St. Botolph Street, allowing for internal circulations between gathering places and new performance and administrative spaces. However, greater on-campus accommodations will increase the foot traffic in the area. Area site improvements along St. Botolph and improved pedestrian crossings along Gainsborough Street where high counts of pedestrian activity take place will improve safety and encourage slower driving speeds. The proponent has noted the project will create a more pleasant continuous pedestrian path along the front of the buildings, and proposed to remove metered parking spaces along St. Botolph and designate pick-up/dropoff zones. The proponent has also indicated further collaborations with BTD with streetscape plans for both streets evolve and are finalized. Tree cover and sustainable storm water management practices should also be followed as well. Please refer to the City of Boston Complete Streets guidelines (www.bostoncompletestreets.org) to ensure that these improvements are consistent with current policies. A review of the detailed design with respect to the new guidelines will take place as part of the TAPA process.

BOSTON TRANSPORTATION DEPARTMENT

### 5.4 Transportation Demand Management

BTD thanks the proponent for the described TDM measures listed in the PNF, and requests transportation information located in the area (Hubway, ZipCar, parking availability, MBTA/bus times) to be made available online, and accessible in a hand-held format for mobile devices for visitors and residents on campus. Real-time transit information should also be considered in screens and in communal spaces located in residential and meeting areas within the new buildings.

#### Service and Loading

The proponent's delivery locations will remain the same- with a total of 9 daily deliveries. NEC has listed an instruction of all vendors to use a 36-foot (SU-36) single unit truck for delivery's to campus to be able to accommodate the turning radius from St. Botolph to the loading dock off the public alley along Gainsborough St. We commend the proponents for providing new off-street facilities for service & loading activity as part of BTD's effort to reduce traffic congestion caused by off-street truck maneuvering and loading.

#### Site Plan

The proponent needs to submit an engineered site plan within the context of the surrounding roadways at 1:20 scale depicting:

- Vehicular Access and Circulation
- Parking Layout and Circulation
- Pedestrian Access and Circulation
- Bicycle Access and Circulation
- Area Shuttle/Van Pool Pickup and Drop-off
- Parking Spaces for Car Sharing services
- Service and Loading\*
- Roadways and Sidewalks
- Building Layout
- Bicycle Parking Locations and Types (covered, indoor, bike share, etc)
- Transit Stops and Connections
- Electric Vehicle Charging Stations

## 5.6 Construction Management Plan

As the projects in the IMPNF advance, Colliers International and the other proponents will be required to develop and submit a detailed Construction Management Plan (CMP) to BTD for review and approval. The CMP will address TDM measures for construction workers, proposed street occupancies, equipment stating, sidewalk relocations and hours of construction work. BTD will work with the proponent to review and finalize operations for the CMP.

The issues raised above should be addressed in the TAPA to be provided for the projects in the PNF. BTD looks forward to working collaboratively with Colliers International and the community in review of these projects and to address any outstanding concerns in the permitting process.

Sincerely,

Rachel Szakmary

Transportation Planner

Boston Transportation Department Policy and Planning Division

Cc: Vineet Gupta, Director of Policy and Planning John DeBenedictis, Director of Engineering

<sup>\*</sup> Trash compactors/dumpsters need to be depicted as well.

#### **BRA MEMORANDUM**

TO:

Gerald Autler

FROM:

Katie Pedersen

DATE:

February 15, 2012

RE:

New England Conservatory

Boston, Massachusetts

Comments on the Institutional Master Plan Notification Form/ Project Notification Form

I have reviewed the Institutional Master Plan Notification Form/Plan Notification Form (PNF) dated January 2012 and submit the following comments for the Environmental Protection Component. The New England Conservatory ("NEC" or the "Proponent") is proposing construction of the Student Life and Performance Center (the "SLPC Project"), Interim renovation of the existing 57,000 +/- square foot residence hall and library buildings concurrent with the SLPC Project (the "Interim Renovation Project") and the Learning Center Project (the "LC Project") (together, the "IMP Project" or the "Proposed Projects").

#### Wind

6.1

The qualitative pedestrian level wind study indicated that generally the Proposed Projects will have minimal to no impacts on pedestrian level wind conditions. Accordingly, no dangerous, unacceptable winds or winds exceeding the Boston Redevelopment Authority's guideline criterion are anticipated be created by the Proposed Projects. The Proponent has indicated that "suitable" wind conditions are predicted at the two main entrances to the Proposed Projects development site, stating that they are sheltered by the buildings and protected from prevailing winds, by several positive wind control design features. However, it is not clear what "suitable" wind conditions are and accordingly, the Proponent shall be required to provide a comprehensive explanation.

The Proponent has stated that wind conditions are anticipated to be comfortable for walking or better on sidewalks on the sidewalks immediately in the vicinity of the Proposed Projects development site- a condition which also exists under No-Build (existing) conditions.

The Proponent shall be required to include mitigation measures, such as an expansion of the canopy, if the Proposed Projects design includes the bridge-link, so as to reduce the potential adverse wind conditions that are anticipated.

#### Shadow

The results of the shadow impact analysis include net new shadow from the Proposed Projects as well as existing shadow. The shadow impact study area included the entire area to be encompassed by the maximum shadow expected to be produced by the Proposed Projects. The build condition(s) shall include all buildings under construction and any proposed buildings anticipated to be completed prior to the completion of the Proposed Projects. Shadows from all existing buildings within the shadow impact study area are shown.

The Proponent has stated that particular attention was given to existing or proposed public open spaces and pedestrian areas, including, but not limited to, the existing sidewalks and pedestrian walkways within, adjacent to, and in the vicinity of the Proposed Projects. Results indicate that there shadows cast by the Proposed Projects buildings will primarily affect the roofs of the rear ell of the Huntington Theater and buildings along Huntington Avenue, the Proposed Projects' buildings. Shadows are also anticipated to fall on adjacent alleys and on the middle of Huntington Avenue and St. Botolph Street.

In general Particular attention shall be given to existing or proposed public open spaces and pedestrian areas, including, but not limited to, the existing sidewalks and pedestrian walkways within, adjacent to, and in the vicinity of the Proposed Projects and the existing and proposed plazas, historic resources and other open space areas within the vicinity of the Proposed Projects.

#### Daylight

(Please refer to Urban Design comments)

#### Solar Glare

The Proponent has stated that the Proposed Projects are not expected to incorporate the use of reflective building materials and will a system of opaque and translucent materials as well as non-reflective windows. The Proponent has further stated that the proposed landscaping strategy, which includes new plantings in front of the Proposed Projects building (in front of the more heavily glazed façade on the lower levels, a glazing buffer will be creates, in particular shading the south-facing glazing. Consequently, the Proponent does not anticipate the creation of either an adverse solar glare impact or a solar heat buildup in nearby buildings.

#### Air Quality

The Proponent provided a description of the existing and projected future air quality in the vicinity of the Proposed Projects and evaluated ambient levels to determine if the Proposed Projects conforms to the National Ambient Air Quality Standards (NAAQS).

A future air quality (carbon monoxide) analysis evaluated intersections where the level of service (LOS) was expected to deteriorate to D and the Proposed Projects caused a 10 percent increase in traffic or where the level of service is E or F and the Proposed Project contribute to a reduction in LOS. The study analyzed the existing conditions, future No-Build and future Build conditions.

The Proponent has demonstrated that no violations of air quality standards were predicted from the traffic generated by the Proposed Projects.

#### **Noise**

The Proponent has demonstrated that noise generated by the Proposed Projects' mechanical equipment and Proposed Project related traffic was predicted to comply with the Interior Design Noise Levels (not to exceed day-night average sound level of 45 decibels) established by U.S. Department of Housing and Urban Development, as well as applicable City, State and Federal noise criteria.

The Proponent demonstrated conformance with the inclusion of the results of noise analysis, which established the existing noise levels at the Proposed Projects site and vicinity, in addition to calculating the future noise levels after the Proposed Projects completion.

#### Solid and Hazardous Waste

The Proponent shall provide a list of any known or potential contaminants on the Proposed Projects site, and if applicable, a description of remediation measures to ensure their safe removal and disposal, pursuant to the M.G.L., Chapter 21E and the Massachusetts Contingency Plan.

Any potential hazardous wastes to be generated by each of the Proposed Projects sites must be identified. In addition, potential waste generation must be estimated and plans for disposal indicated and measures to promote reduction of waste generation and to promote recycling in compliance with the City's recycling program described.

#### Geotechnical Impacts

A description and analysis of the existing sub-soil conditions, including the potential for ground movement and settlement during excavation and potential impact on adjacent buildings and utility lines has been provided. This analysis also includes a description of the foundation construction methodology, the amount and method of excavation.

Mitigation measures to minimize and avoid damage to adjacent buildings and infrastructure have been described.

#### Groundwater

The Proposed Projects are located in the Groundwater Conservation Overlay District ("GCOD"). The Proponent stated in the IMPNF/PNF that there are historically important structures in the immediate vicinity of the Proposed Projects that are on supported by wood pilings and therefore vulnerable to a drop in groundwater level, particularly the Proponent's own Jordan Hall.

6.4 The Proponent has stated and shall be required to ensure that groundwater levels will not drop below the agreed levels during construction. However, if this does occur, the Proponent shall have provisions in place that halt construction and dewatering until the cause is found and remedied.

#### Sustainable Design/Green Buildings

The purpose of Article 37 of the Boston Zoning Code is to ensure that major buildings projects are planned, designed, constructed and managed to minimize adverse environmental impacts; to conserve natural resources; to promote sustainable development; and to enhance the quality of life in Boston. Any proposed project subject to the provisions of Article 37 shall be (at a minimum) LEED Certifiable (U.S. Green Buildings Council) under the most appropriate LEED rating system. Proponents are encouraged to integrate sustainable building practices at the pre-design phase. Proposed projects which are subject to comply with Section 80B of the Boston Zoning Code, Large Project Review, shall be subject to the requirements of Article 37.

Any project subject to Article 37 shall contact the NSTAR Account Sales Executive in the pre-design stage and utilize either the Comprehensive Design or Advanced Building Programs. The Proposed Projects shall target at least a 25% combined electric and gas savings over the current Massachusetts Building Code. The Comprehensive Design Program is for commercial buildings over 100,000 sf. The program is designed to incorporate an integrated approach to building design that may offer higher custom incentives based on the interactive building model required for the program. The Advanced Building program targets commercial building between 10,000 and 100,000 sf based on a prescriptive set of requirements with no modeling required and an incentive of \$1.50 a sf.

The LEED Checklist for the Proposed Project has been included in the Institutional Master Plan Notification Form/Plan Notification Form and has indicated that the Proposed Project is striving to attain 48 points using the LEED 2009 for New Construction and Major Renovations Project Checklist. In addition, the Proponent has included a comprehensive narrative describing how each of the proposed credits will be attained.

The Proponent has demonstrated its commitment to sustainability with the appointment of Jennifer M Kelemenm, as Sustainability Coordinator, the implementation of the comingled recycle program, the focus on buying materials that contain recycled materials,

promoting the use of public transportation, as well as continuing to look at potential additional sustainable practices and goals. Accordingly, the Proponent is asked to consideration of the following: waterless urinals, elimination of plastic trays in the dining halls, as they require the use of a large quantity of water to clean and sanitize, expansion of locally grown food and composting as well as potential researching innovative strategies to address the students energy consumption and thus increase awareness to environmental concerns. The Proponent has demonstrated that the Proposed Project has meet the requirements of Article 37 to date and will be subsequently required to submit a Final Article 37 Submission, which includes the most up to date LEED Checklist with appropriate supporting documentation and by certification from a LEED Accredited

Professional.

#### **MEMORANDUM**

TO:

Gerald Autler, Project Manager

FROM:

David Grissino, Senior Architect/Urban Designer

DATE:

March 5, 2012

SUBJECT:

New England Conservatory IMPNF/PNF

**Scoping Comments** 

#### **URBAN DESIGN COMPONENT**

#### Background

Although small in comparison to other nearby institutions along the Avenue of the Arts, the impact of the New England Conservatory is felt strongly throughout the City of Boston and the region. With a world-class performance venue at Jordan Hall and a faculty that is among the most highly regarded in the field, the Conservatory attracts some of the best and brightest young musicians year after year. What is truly remarkable is that is has continued to operate at such a high level without the creation of new facilities in nearly 50 years.

The Institutional Master Plan Notification Form/Project Notification Form (IMPNF/PNF), submitted on January 6, 2012, described two projects which will have transformative impact on the Conservatory and its small campus located around the intersection of Huntington Avenue and Gainsborough Street. The proposed IMP projects include the Student Life and Performance Center, a 135,000sf performance center and residence hall, and a 65,000sf Learning Center on the site currently occupied by 33 Gainsborough Street. The two projects will be phased, beginning with the construction of the Student Life and Performance Center. The Learning Center's anticipated date of construction has not yet been determined. A series of public realm improvements are associated with the projects in the immediate area around the buildings.

#### Urban Design

The project information provided in the IMPNF/PNF and at public meetings described a number of urban design concepts relating to the current site and its proposed future condition. Elements such as gateways at key intersections, massing and relationships to existing context, and view corridors have been represented in the teams' submission and in various presentations. Additional information, as described below, is required to fully understand the impacts of the proposed projects and their ability to make positive contributions to the urban design of the surrounding neighborhood.

Due to the geometry of the Huntington Avenue corridor, the site for the Learning Center will have high visibility from long distances to the west, providing an opportunity to create a strong and memorable identity for NEC. A ground level perspective view should

be submitted from a point on the south side of Huntington Avenue at Northeastern University's Krentzman Quadrangle looking northeast. Two views from this vantage point should be provided which describe the Phase 1 condition and the Phase 2 condition.

- 7.1.2.1
- 7.1.2.2
- 7.1.2.3

7.1.4

- The view in Figure 4-4 of the IMPNF/PNF should be augmented to include the massing and general exterior appearance of the approved *GrandMarc at Northeastern* project. An additional view should also be submitted from this same vantage point which shows the Phase 2 condition. In relation to this view corridor study, narrative and/or other graphic means should be included which describe how the image and identity of NEC's proposal relates to the *GrandMarc* project.
- 7.1.3 The gateway concepts presented by NEC at public meetings are straightforward and logical. Narrative and graphics should be submitted which describe them in detail. At the Student Life and Performance Center, the projection of the Orchestra/Rehearsal space beyond the plane of the existing and proposed adjacent exterior walls will create a dramatic and memorable visual statement along St. Botolph Street at both the Massachusetts Avenue and Gainsborough gateways. In the near term, however, the important and widely used Huntington Avenue/Gainsborough gateway will be challenged by the existing building's blank walls and disconnection from the street.
  - and redesigned following the opening of the new facility in Phase 1. Although the building is anticipated to be demolished at some unknown point in the future, this repurposing of the existing building provides a chance to improve the building's relationship to the public realm. Consideration should be given to improvements which can have great impact on this critical gateway to the campus without adding unreasonable cost to the renovations. A discussion should be provided of opportunities to activate this gateway through ground floor uses and physical modifications which can make the activities and talents of the NEC students more visible to the broader community. The IMP should contain narrative and graphics which discuss this campus gateway's configuration and character until the Phase 2 construction begins.

The IMPNF/PNF suggests that the interior of 33 Gainsborough will be reprogrammed

7.1.5 To enable a complete understanding of the urban design and architectural implications of the proposed projects, a physical campus model should be developed at an appropriate scale and extent, as determined through coordination with BRA staff.

#### Public Realm

7.2.1 The proposed Phase 1 and Phase 2 projects will create a greatly improved public realm and streetscape in comparison with conditions today. The amount of landscape material, specialty surface treatments, and musically-themed street furniture and furnishings should make this a unique area and help reinforce NEC's identity. Some additional information will be needed to fully assess the elements proposed in the IMPNF/PNF.

- 7.2.2 Due to the change in grade along the building's length and the elevation of the ground floor relative to the sidewalk, a series of ramps, stairs, and landscaped surfaces are proposed at the Student Life and Performance Center. To better understand the impact of the design on the pedestrian experience, three cross sections should be provided extending from the mid-point of the building's width through the westbound travel lane of St. Botolph Street. These sections should be taken at the Black Box Theater, Main Entry, and Dining area and should include the lower 5 floors of the building.
- 7.2.3 A more highly developed landscape plan should be submitted which describes these public realm elements in more detail, as well as defining specifically which components will be constructed as part of Phase 1. An additional developed landscape plan should be provided which describes the interim condition along St. Botolph Street and Gainsborough Street during the time that the Student Life and Performance Center is complete and the existing 33 Gainsborough building remains. Understanding the streetscape, sidewalk, and crosswalk configuration in this area is very important due to the relocation of all students to the new facility and the greatly increased pedestrian traffic between Jordan Hall and the new building entry located midway along St. Botolph Street.
  - While much attention has been given to St. Botolph Street east of Gainsborough Street, no significant enhancements have been proposed to the area west of Gainsborough Street at the existing Jordan Hall building. While it is understood that there are building servicing needs at this location, further consideration should be given to the physical design and relocation surface parking and other non-service related uses in this area.
- The intersection of Gainsborough Street and St. Botolph Street has great potential to act as a gateway to NEC, Northeastern University, and the Avenue of the Arts. A written and graphic description should be submitted which outlines the relationship of this area to the other streetscape elements proposed in connection with the two IMP projects. NEC should anticipate engaging in discussions with the Boston Redevelopment Authority and Boston Transportation Department regarding this area.

#### **Building Design**

The overall massing and variety of cladding systems as presented in the IMPNF/PNF seems appropriate to break down the scale of the project and establish connections between the interior functions and the public realm. As the design review process continues forward, more detailed discussions will be required regarding the material and details of the exterior cladding at the Orchestra/Rehearsal space.

A detailed enlarged elevation should be submitted which provides information regarding the loading and service area associated with the Phase 1 Student Life and Performance Center. A perspective view should be generated from a point on the St. Botolph sidewalk at the curb cut associated with the loading area.

#### Additional Requirements

7.4.1

Throughout the project review process, a series of plans, elevations, perspectives, and other graphic materials were presented at public meetings and discussions with BRA staff. In addition to the above required submissions, other graphics should be submitted if they support or enhance the description of various urban design issues. A campus-wide signage plan should also be developed which addresses the identity and wayfinding strategies associated with the extensive proposed enhancements to the public realm.



Mr. Gerald Autler, Senior Project Manager Boston Redevelopment Authority One City Hall Plaza Boston MA 02201

#### Dear Gerald:

The following comments reflect a consensus of the undersigned members of the New England Conservatory (NEC) Task Force. The letter includes our responses to the Institutional Master Plan Notification Form/ Project Notification Form (IMPNF/PNF) as well as some related suggestions and concerns. (Some Task Force members have chosen to send separate comments or to not participate in this letter.)

Our comments address both of the proposed building projects: the Student Life and Performance Center (Phase 1) and the later Learning Center project (Phase 2).

## **Project Overview Comments**

Overall, the Task Force recognize that NEC is one of the cultural treasures of the neighborhood. We appreciate the Conservatory's rich history and its contributions to the world of music. We are grateful that NEC shares so generously with the community in offering concerts and recitals. And in the context of the Master Plan, we are also pleased that its plans do not call for expanding the school's footprint or increasing its enrollment.

As for the proposed buildings themselves, the response from the Task Force (and from many of our neighborhood constituents) is overwhelmingly positive. In fact, it's not an overstatement to say that the responses to the architectural design are enthusiastic! The proposed buildings are, simply, beautiful. They are in scale with the surroundings and with the existing historic buildings in this very dense and constricted urban neighborhood. The overall massing and site planning work.

Some of the details, such as the interior student commons "spine," are especially clever and innovative. We are also happy with the

ideas for improving the "pedestrian realm" and attention to pedestrian safety for both students and concertgoers.

## **Other Concerns**

While both the Task Force and the neighborhood organizations are generally enthusiastic about the project, there are a number of details, issues, and concerns—many not directly related to the buildings themselves—that we would like NEC and the project participants to address.

#### **Environmental Issues**

- Birds. As so many predominantly glass buildings have been proposed for this and nearby neighborhoods, there are concerns about bird-safe standards. Many major cities located along important migratory flyways have already established such standards. We would like more information on this aspect as it relates to LEED standards, and ask the architects to investigate the possibility of incorporating the new LEED pilot credit (55:SS, Bird-Collision Deterrence) into the project design.
- Trees. The health of neighborhood street trees has become a serious problem throughout the East Fenway. Many young trees have been allowed to die; a number of tree pits, especially along streets such as Huntington Ave, have simply been paved over. There is little maintenance for new trees; the city's philosophy seems to be that it is easier to replace than to maintain, which of course means that few young trees ever survive to maturity and sustainability.

How can this be addressed? Perhaps one answer is to include stormwater recycling systems for tree pits as part of the landscaping plans in this project.

## Streetscape and Traffic/ Urban Context

 Traffic. The traffic studies in the PNF do not address future changes that may occur when the Symphony Streetscape project is finally carried out. One proposal in that project is to allow a left turn onto Huntington Ave from Mass Ave, which would reduce the through traffic on Saint Botolph Street. Until that change is implemented, however, heavy traffic, congestion, and pedestrian safety on St. Botolph are serious concerns, especially with the Northeastern dorm proposed for the next block. The raised pedestrian crossings are a partial solution; NEC, Northeastern, and the BTD should work together to address this situation.

- Parking. Since the new building will occupy the current NEC main parking lot, Fenway Civic Association specifically requests that NEC arrange parking compensation or discounts with other nearby parking facilities for faculty. Other parking-related ideas include removing the small and crowded parking lot next to Jordan Hall in order to provide more student space and in general improve the overall streetscape on Saint Botolph St. (or, alternatively, to improve the lot's appearance with a restored iron fence and a more attractive surface.)
- Questions have also been raised about the exact number and location of bicycle parking spaces available. We support designs and plans that maximize available bike parking for on- and off-campus students as well as visitors to NEC.
- Urban context. The NEC's new buildings will become part of a quickly changing urban context along Saint Botolph St. Although the neighborhood welcomes new dorms, we are wary about the prospect of an unhealthy concentration of students in a very small street. We hope that campus security will deal appropriately with the new circumstances.
- In addition, it is important that NEC, Northeastern, and the YMCA meet regularly to coordinate plans during the upcoming demolition and construction periods.

Despite these few comments and concerns, we are pleased to have had a chance to be part of this exciting new addition to our neighborhood and look forward to its completion.

Sincerely,
Marie Fukuda Randy Kreie
Steve Rubin Barbara Brooks Simons
John Tobin



Gerald Autler, Senior Project Manager/Planner Boston Redevelopment Authority One City Hall Square Boston, Massachusetts 02201 February 14, 2012

Dear Gerald,

On behalf of the 22 members of the Fenway Alliance, I am submitting this letter of enthusiastic support for the proposed New England Conservatory of Music (NEC)'s Institutional Master Plan and the two large projects associated with it.

On March 20, 2012, the Fenway community expects to receive state-wide Cultural District Designation from the Massachusetts Cultural Council. We are proud to state that Mayor Menino designated this area of Boston "The Fenway Cultural District" and Huntington Avenue "The Avenue of the Arts" in 1998. At the Fenway Alliance, we believe NEC's proposed new buildings which include: 1) a new ten-story Residence Hall & Student Life Center; and 2) a new seven-story Academic & Administration building—built on the site of an existing NEC residence hall--and encompassing a visitor center with ground floor public amenities designed to showcase the talent of the NEC community--will support Fenway residents and enliven this uniquely culturally-rich area of Boston.

We applaud NEC's responsiveness to Fenway residents in its decision to house more of its students on campus, and believe that an NEC Visitor Center with an emphasis on music will add vibrancy and community spirit to the Avenue of the Arts and the Fenway Cultural District, as a whole. We are delighted that the National Historic Landmark Jordan Hall building which recently underwent a \$14 million restoration will be protected and preserved as part of the NEC Institutional Master Plan. We would expect nothing less from NEC as its history of stewardship of Jordan Hall has been impeccable.

The Alliance also supports NEC's desire to provide a vitally needed new academic and student life facility, and respects its decision to do so without growing enrollment. We believe that NEC's physical setting and design quality should reflect its well-earned reputation for musical and academic excellence. We also support NEC's goal to provide a physical sense of community to its students, and appreciate its civic responsibility to the Fenway community and new Fenway Cultural District in providing streetscape improvements and pedestrian amenities as part of this plan.

As you know, the New England Conservatory of Music along with Jordan Hall is one of the jewels of the Boston's, soon to be Commonwealth-designated, Fenway Cultural District! On behalf of the Fenway Alliance, I urge you to approve this well-conceived civic and student-minded Institutional Master Plan.

Sincerely,

Kelly Brilliant, Executive Director The Fenway Alliance, Inc.

## **BOSTON PRESERVATION**

February 13, 2012

Peter Roth

Susan Park

Boston Redevelopment Authority

Boston City Hall, Floor 9

Boston, MA 02210

Mr. Gerald Autler

Rita Walsh

Drew Leff

Dear Mr. Autler:

Roger Tackeff

Kay Flynn

Jean Abouhamad

W. Lewis Barlow IV FAIA

William G. Barry AIA

Richard Bertman FAIA

Frances Duffly

Minxie Fannin

Gill Fishman

Leigh Freudenheim

10.1

Alden Gifford

Peter Goedecke

Carl Jay

Susie Kim

Mimi Love

Dara Obbard

Tim Pattison

Diana Pisciotta

Jonathan Seward

Catharine Sullivan

Robert Thomas

Richard Wills AIA

Andrew Zelermyer

odrafi de graduset Sarah D. Kelly

of the public of the

Old City Half 45 School Street Boston, MA 02108 617.367.2458 The Boston Preservation Alliance has reviewed the Institutional Master Plan Notification Form/Project Notification Form (IMPNF/PNF) for the New England Conservatory (NEC) and attended the public meeting on

January 17, 2012. The IMPNF/PNF offers a sound plan for achieving a balance between institutional growth and preservation, which the Alliance

broadly supports.

Significance and Stewardship of Buildings Proposed for Retention

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NEC's campus contains three buildings of historic significance that are proposed for retention as part of the IMPNF/PNF.

Jordan Hall, a National Historic Landmark and pending Boston Landmark, is a building of exceptional architectural value and that is world-renowned for its acoustical excellence. 241 St. Botolph Street is a Federal Revival Style building that contributes positively to the St. Botolph Street streetscape and is significant for its association with the Cotting School, the first school for handicapped children in the Unites States. 295 Huntington Avenue, located on the opposite side of Huntington Avenue,

is not directly impacted by, and therefore is not addressed in, the IMPNF/PNF but is a building of a design quality that warrants preservation in NEC's long-range planning.

The Alliance strongly supports the retention and incorporation of these buildings into NEC's planning as it improves and expands its facilities.

Proposed Demolition

The Alliance does not oppose the demolition of two buildings on the campus, the small, two-story pavilion building attached to 241 St. Botolph Street (1912) and a residence hall at 33 Gainsborough Street (1959).

The pavilion building has been altered over time and has housed back-office and ancillary uses. It is located within a parking lot and awkwardly connected to 241 St. Botolph Street. It therefore detracts from the continuity of the streetscape and the overall composition of the campus.

#### **BOSTON PRESERVATION**

Mr. Gerald Autler February 13, 2012 Page 2

Its size would make it extremely difficult to bring up to code should it be retained and restored and there is no logical place to which the building could be effectively relocated and reintegrated into the complex. For these reasons, relative to the three other large and significant historic buildings on the campus, and in light of NEC's programmatic objectives, the Alliance does not believe it is preferable for NEC to preserve, restore, and repurpose the pavilion building.

The dormitory building at 33 Gainsborough Street does not appear to be a particularly unique or unusual Modern building in Boston or the region. The Alliance does not, therefore, believe it is of a design quality or historic significance that warrants preservation in light of NEC's desire for an upgraded facility that would house a new student dormitory, common space, library, and rehearsal and performance space that will help the institution to retain its position as a preeminent institution for musical training and performance.

#### New Construction Relative to Historic Buildings

The Alliance believes that the way in which the new buildings are integrated into their context is critically important. Overall, the IMPNF/PNF demonstrates a thoughtful approach to the interrelationship between buildings on the campus and pedestrian connections between them. We commend the architect for setting back the tower portion of the building substantially along St. Botolph Street so as to create the perception of consistency in scale with adjacent and nearby historic buildings.

Based upon the renderings in the report, the Alliance believes that the design of the lower portion of the new Student Life and Performance Center would benefit from further refinement in order to more successfully relate to the building at 241 St. Botolph Street. Specifically, the portion of the building that contains the orchestra rehearsal room juts out from the street wall at an angle at the second and third stories. It is unclear in figure 4-2 what the treatment of the building will be where this part of the building meets 241 St. Botolph Street. The choice of materials and detailing will be critically important at the intersection of this new building and 241 St. Botolph Street. The incongruity of the height of this portion of the building relative to the existing building also makes for an awkward transition between the two buildings when viewed from Massachusetts Avenue. For this reason, we request revisiting the design of this portion of the building to improve its relationship to 241 St. Botolph Street.

Old City Hall 45 School Street Boston, MA 02108 617.367.2458

#### **BOSTON PRESERVATION**

10.3

Mr. Gerald Autler February 13, 2012 Page 3

#### **Shadow Impacts**

due to the proposed new construction, but acknowledges that there will be new shadow cast on nearby historic buildings, including the façade of 241 St. Botolph Street. The September 21 shadow impact analysis appears to show some shadow on the building at 3 pm and the December 21 shadow analysis seems to show the entire front façade of the building in shadow at that time. Additional shadows have the tendency to contribute to deterioration of building facades. We therefore recommend that a preventative maintenance program be developed in order to ameliorate deleterious effects of shadows on 241 St. Botolph Street.

The IMPNF/PNF states that no net new shadow will fall on Jordan Hall

#### Photographic Documentation

No photographs of the pavilion building are contained in the IMPNF/PNF and there are very few photos of 33 Gainsborough Street in the document. Photographic documentation of both of these buildings should be conducted as partial mitigation for their demolition.

Thank you for your consideration of our comments.

Sincerely,

Sarah D. Keliv **Executive Director** 

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70 Burbank Street Boston, MA02115 617-267-4637 www.fenwavcdc.org

February 16, 2012

Gerald Autler **Boston Redevelopment Authority** One City Hall Square Boston, MA 02201

RE: Comments on New England Conservatory IMPNF/PNF

Dear Gerald:

We submit this letter on behalf of the Fenway Community Development Corporation (Fenway CDC), a 38-year-old, community-based organization that builds and preserves affordable housing and promotes projects that engage our full community in enhancing the neighborhood's diversity and vitality. We reviewed the New England Conservatory Institutional Master Plan Notification Form (IMPNF) against our vision for the neighborhood as a smart-growth-oriented community that welcomes the broadest spectrum of residents.

We write in support of New England Conservatory's Institutional Master Plan (IMP) with the following considerations:

#### **Sufficient and Varied Housing Supply:**

We are glad to see that the New England Conservatory project will produce Linkage money for housing and employment. We want to stress the importance that the Linkage money stays in the Fenway neighborhood. The Fenway lost over 170 affordable housing units last spring at Burbank Apartments, and our affordable housing percentage has decreased from nearly 19 percent to 16 percent in the last three years. By ensuring that the Linkage money from this project is used in the Fenway neighborhood, we can begin to reverse this trend and improve housing, economic, and educational opportunities for 11.1 low-income residents in the area. We request to see the exact numbers for each type of Linkage payment broken down by phase, with the calculations, for reference.

1 http://www.fenwaycdc.org/programs/urban-village

We would also like to commend New England Conservatory's effort to preserve neighborhood housing by creating new dormitory space without increasing student enrollment. When institutions do not provide enough dormitory space, students are forced to find housing in the surrounding residential areas, which increases rents and drives permanent residents out. We are glad to see that New England Conservatory has made a commitment to provide their fair share of housing in the neighborhood, and hope other institutions follow this lead.

#### Pedestrian Experience:

We appreciate that pedestrian safety and comfort are a priority in this project. The proposed raised sidewalk in front of Jordan Hall will improve the walkability of the neighborhood, slow vehicular traffic, and improve pedestrian access to this historic hall. However, we would like to see more details on the drop-off and pick-up area in front of Jordan Hall to ensure that vehicular and pedestrian traffic are effectively managed.

Overall, the project will provide a significant improvement to the pedestrian experience along St. Botolph Street and Gainsborough. The proposed Student Life and Performance Center, located where a surface parking lot currently exists, will create a consistent street frontage and increase pedestrian activity. The proposed outdoor plaza at Gainsborough and St. Botolph will activate a street corner that currently has little pedestrian life, and will serve as a gathering place for New England Conservatory Students and Fenway residents alike.

## Transportation and Circulation:

We are glad to see the progressive push away from vehicular traffic towards alternative modes of transportation in this project, and we respect the decision not to increase the number of parking spaces on the site, especially given the ample access to public transit in this area. However, we would like to see a definitive plan to ensure that the project will not have a negative impact on vehicular traffic and parking in the neighborhood. New England Conservatory should monitor the parking situation in the neighborhood after the project is complete. If parking issues arise, the institution should find ways to replace some of the parking spaces lost, by leasing off-site parking spaces and facilitating employee and students' public transit usage.

We are also concerned about the narrow alleyways proposed within the project site. We would like to see circulation and turning radius studies to ensure that they are fully functional. It is important that delivery trucks are able to easily access the alleyways, and are not forced onto main roads, which would cause traffic problems.

#### **Community Benefits:**

11.3.1

New England Conservatory has been a valuable community partner in the Fenway with its various partnership programs and numerous free concerts for the neighborhood. It is

- important that NEC is continuing this commitment to the community by ensuring that the proposed dining facility, library, and performance spaces will be available for public use. This will not only foster interaction between the Fenway community and the New England Conservatory community, but will also provide Fenway residents with access to important output a resources. We ask that New England Conservatory create an outreach
- important cultural resources. We ask that New England Conservatory create an outreach strategy to ensure that residents know about the community resources on campus.

#### A Healthy Business Community and Jobs for Residents:

We would like to encourage New England Conservatory to utilize the Fenway CDC's "Walk to Work" program to connect local Fenway residents with the jobs created by this project. Our employment specialist is Kris Anderson (Kanderson@fenwaycdc.org, 617-267-4637 x29), and we request that NEC post jobs through Walk to Work and other local employment programs. We also encourage NEC to require their contractor to employ both Boston residents and minority contractors.

#### **Construction Mitigation Efforts:**

The construction of this project will undoubtedly have a significant impact on the surrounding neighborhood, especially in terms of noise, circulation, dust, and air quality. We want to ensure that New England Conservatory takes the appropriate measures to mitigate these potential negative impacts. We expect New England Conservatory to compile a detailed construction management plan, and to include community input during the creation of the plan. Once construction begins, we would like to see reliable communication with the community, including notification of construction progress, schedules, changes, or delays.

Overall, New England Conservatory has proposed a project that will benefit the neighborhood. We appreciate that NEC conducted outreach to various community groups before filing for their project, though we would like to have seen more community input in the design of the proposal. We hope New England Conservatory will follow through on our requests as listed above.

Sincerely,

Dharmena Downey

Fenway CDC Executive Director

Manuel Delgado

Fenway CDC, Urban Village Committee

cc: Steve Wolf, Fenway CDC Board President; Senator William Brownsberger; Senator Sonia Chang-Diaz; Representative Gloria Fox; Representative Byron Rushing; City Councilor Mike Ross; City Councilor Tito Jackson

From:

Grazherz@aol.com

To:

Autler, Gerald;

CC:

Subject:

**NEC** dorm plans

Date:

Friday, February 17, 2012 2:03:03 PM

Attachments:

Dear Mr. Autler,

It is with the very greatest pleasure indeed that I write on behalf of the Board of Directors of the Gainsborough Neighborhood Association, a group which represents the interests of the 350 condominium unit owners on Gainsborough Street, to inform you of how totally pleased we are with the plans for the proposed dorm which were shared with us recently by NEC. We are delighted to see such a new and welcome openness and imaginative use of existing space. That NEC's plans are made with absolutely no increase in the size of the institutional footprint, as well as a firm promise of not increasing the number of students is a most welcome plus to the proposed plans. We endorse these plans fully and happily and wish for a speedy and successful implementation.

We remain grateful in the extreme for your allowing us this opportunity to offer such unusually favorable comment on educational/institutional expansion.

Thank you for your consideration.

With all best regards I remain,

Sincerely,

Jeffrey D. Brody, President Gainsborough Neighborhood Association 295 Huntington Ave. Suite 307 Boston, MA 02115

84 Gainsborough St. #306 Boston, MA 02115 February 17, 2012

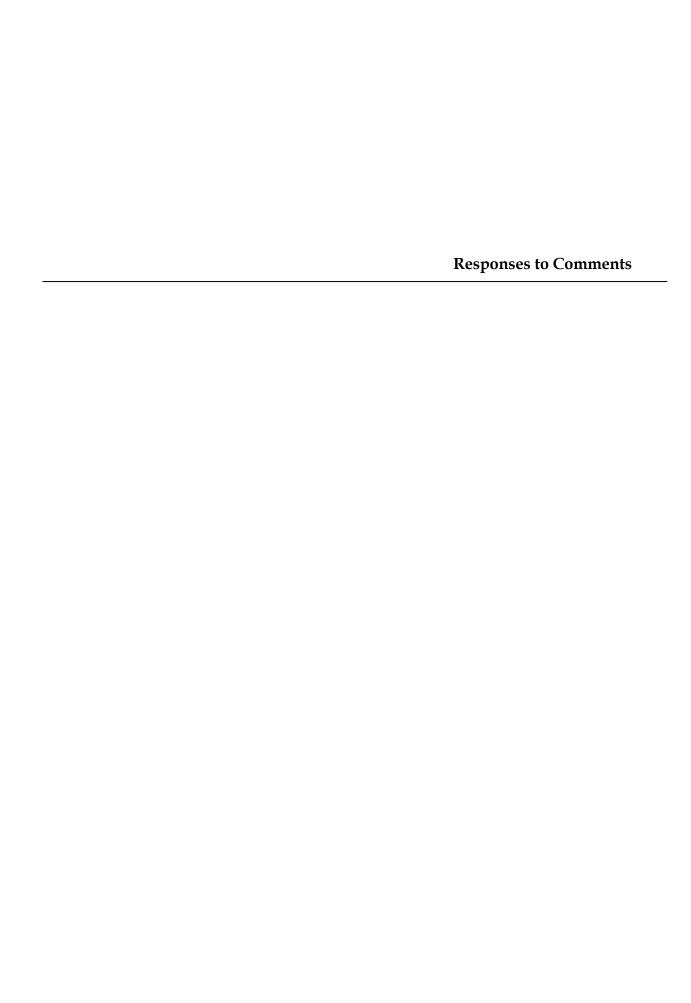
Dear BRA Board Members,

I am a resident and property owner in the East Fenway and live close to New England Conservatory. I have reviewed New England Conservatory's IMPNF and PNF. Overall, I feel that the proposed project meets the Conservatory's needs without negative impacts on its neighbors. However, I have two concerns with the current proposal that should be addressed before it is approved.

- I am concerned with the loss of on-street, metered parking on St. Botolph St. and Gainsborough St. that are part of the proposed design. The East Fenway area has already experienced large losses of onstreet, metered parking from the re-design of Huntington Ave. and the addition of bike lanes on Massachusetts Ave. These losses have put more pressure on the remaining parking. Additional losses will cause negative impacts for local residents, their visitors, and local businesses. The current project proposes to create a raised cross walk and Jordan Hall drop off zone on Gainsborough St. The proposal also shows the removal on on-street, metered parking in front of the Student Life and Performance Center on St. Botolph St. The raised crosswalk to Jordan Hall on Gainsborough St. is a good idea. Moving parking to the Jordan Hall side of Gainsborough St poses no problems. A small drop off zone (several cars) should be created and the majority of the Gainsborough St should remain on-street metered parking. The removal of a large section of on-street parking on St. Botolph St. causes me the greatest concern. All on-street metered parking on St. Botolph St. should be restored when construction is completed. Parking should not be removed from St. Botolph St. or converted to a drop off zone.
- I am pleased the that new building will incorporate groundwater recharge systems due to its location in the Groundwater Conversation Overlay District. However, the plan does not adequately address dewatering during building construction. De-watering should not be used during the construction process. If de-watering is required for any reason, groundwater levels should be monitored and re-charge systems should be used to maintain groundwater levels above the average level reported of 7 ft BCB.

Sincerely,

Todd Fielder



Number	Letter	Comment Summary	Response
1.a.1.1	BRA - IMP	Mission and Objectives	A summary of NEC's Mission and Objectives is presented in <i>Chapter</i> 1, <i>Introduction, Mission and Core Values</i> of the IMP.
1.a.1.2	BRA - IMP	Major Programs and Initiatives	A summary of NEC's Major Programs and Initiatives is presented in Chapter 1 Introduction, Mission and Core Values of the IMP.
1.a.2.1	BRA - IMP	Owned and Leased Properties - map, tables, narrative and site plans	NEC's IMP provides a summary of the Owned Properties in <i>Chapter 2, Existing Property and Uses</i> . Table 2-1 provides a summary of Existing Campus Buildings while Figure 2-1 illustrates the existing campus.
1.a.3.1	BRA - IMP	Student Population	NEC's student population is presented in <i>Chapter 3, Campus Demographics and Employment/Student Housing Plan</i> in Section 3.1.1 of the IMP.
1.a.3.2	BRA - IMP	Employment	NEC's employment is presented in <i>Chapter 3, Campus Demographics</i> and <i>Employment/Student Housing Plan</i> in section 3.1.3 of the IMP.
1.a.3.3	BRA - IMP	Employment and Workforce Development	NEC's employment and workforce development is presented in <i>Chapter 3, Campus Demographics and Employment/Student Housing Plan</i> in Section 3.2 of the IMP.
1.a.4.1	BRA - IMP	Article 80D Requirements - Proposed Future Projects Description	NEC's Proposed Future Projects Description is presented in <i>Chapter 4, IMP Projects</i> of the IMP.
1.a.5.1	BRA - IMP	Gainsborough Street and St. Botolph Street Intersection	NEC's IMP describes the gateway of Gainsborough Street and St. Botolph Street intersection in <i>Chapter 5, Planning and Urban Design Framework</i> in Section 5.7.2.
1.a.6.1	BRA - IMP	Article 80 Student Housing Plan Requirements	NEC's IMP presents the Student Housing Plan in <i>Chapter 3, Campus Demographics and Employment/Student Housing Plan</i> in Section 3.3.
1.a.7.1	BRA - IMP	Move-In/Move-Out Traffic Management Procedures	NEC's IMP presents the Move-In/Move-Out Traffic Management Procedures in <i>Chapter 6, Transportation, Parking, and Circulation</i> in Section 6.7.
1.a.7.2	BRA - IMP	Pick-Up and Drop-Off at Preparatory School	NEC's IMP presents the Pick-up/Drop-off procedures in <i>Chapter 6, Transportation, Parking, and Circulation</i> in Section 6.8.
1.a.7.3	BRA - IMP	Jordan Hall Parking	NEC's IMP discusses Jordan Hall Parking in <i>Chapter 6, Transportation, Parking and Circulation</i> in Section 6.2.

Number	Letter	Comment Summary	Response
1.a.7.4	BRA - IMP	Bicycle Facilities	Bicycle Facilities are described in Section 6.5 of the IMP. <i>Chapter 6, Transportation, Parking and Circulation</i> also presents Figure 6-2 which illustrates the bicycle parking locations.
1.a.8.1	BRA - IMP	Existing Sustainability Measures	Existing Sustainability Measures at NEC are presented in <i>Chapter 7, Environmental Sustainability</i> of the IMP in Section 7.2.
1.a.8.2	BRA - IMP	Potential Future Sustainability Programs and Plans	Potential Future Sustainability Measures at NEC are presented in <i>Chapter 7, Environmental Sustainability</i> of the IMP in Section 7.3.
1.a.8.3	BRA - IMP	Green Building - high LEED certification level	LEED certification for the NEC projects is provided in <i>Chapter 7, Environmental Sustainability</i> of the IMP.
1.a.8.4	BRA - IMP	Energy Use	Energy use for the IMP Projects is presented in <i>Chapter 7, Environmental Sustainability</i> in Section 7.5
1.a.8.5	BRA - IMP	Water Use	Water use for the IMP Projects is presented in <i>Chapter 8, Infrastructure</i> in Section 8.4.
1.a.8.6	BRA - IMP	Stormwater Retention/Treatment/Reuse and Groundwater Recharge	Stormwater Retention/Treatment/Reuse and Groundwater Recharge are presented in <i>Chapter 8, Infrastructure</i> of the IMP.
1.a.8.7	BRA - IMP	Solid Waste	Solid Waste is presented in <i>Chapter 8, Infrastructure</i> of the IMP.
1.a.8.8	BRA - IMP	Landscape and Natural Features	Comment Noted.
1.a.8.9	BRA - IMP	Performance Standards and Indicators	As described in the IMP <i>Chapter 7, Environmental Sustainability</i> , NEC will conduct Building Commissioning/Monitoring and Verification under Future Sustainable Practices.
1.a.9.1	BRA - IMP	Future Community Benefits	Future NEC Community Benefits are presented in <i>Chapter 10, Community Benefits</i> of the IMP.
1.a.10.1	BRA - IMP	Public Notice	Comment Noted. Thank you.
1.a.10.2	BRA - IMP	PILOT Payments	A summary of the NEC PILOT Payments are presented in <i>Chapter 10, Community Benefits</i> of the IMP in Section 10.1.4.
1.b.1.1	BRA - DPIR	Applicant/Proponent Information	A summary of NEC's Applicant/Proponent Information is presented in <i>Chapter 1, General Information</i> of the DPIR.
1.b.1.2	BRA - DPIR	Disclosure of Beneficial Interests	A summary of NEC's Disclosure of Beneficial Interests is presented in <i>Chapter 1, General Information</i> of the DPIR.
1.b.1.3	BRA - DPIR	Regulatory Controls and Permits	A summary of NEC's Regulatory Controls and Permits is presented in <i>Chapter 1, General Information</i> of the DPIR.

Number	Letter	Comment Summary	Response
1.b.2.1	BRA - DPIR	Project Site Description	A summary of NEC's Project Site is presented in <i>Chapter 4, IMP Projects</i> in the IMP. An inventory of surrounding proposed projects is provided in <i>Chapter 2, Project Description</i> of the DPIR in Section 2.1.2.
1.b.2.2	BRA - DPIR	Project Description	A summary of NEC's IMP Projects is presented in <i>Chapter 4, IMP Projects</i> in the IMP.
1.b.3.1	BRA - DPIR	Move-In/Move-Out Plan	NEC's IMP presents the Move-In/Move-Out Traffic Management Procedures in <i>Chapter 6, Transportation, Parking, and Circulation</i> in Section 6.7.
1.b.4.1	BRA - DPIR	Environmental Protection Component	NEC's DPIR provides responses to comments related to the Environmental Protection Component in <i>Chapter 4, Environmental Protection</i> . A more in depth discussion is included in the IMP in <i>Chapter 8, Infrastructure</i> .
1.b.5.1	BRA - DPIR	Signage and Lighting	NEC will provide a signage and lighting plan for the exterior of the buildings as the project moves forward and will perform design review with the BRA Urban Design Department.
1.b.6.1	BRA - DPIR	Sustainability - Performance Monitoring	Potential Future Sustainability Measures in Performance Monitoring at NEC are presented in <i>Chapter 7, Environmental Sustainability</i> of the IMP in Section 7.3.
1.b.6.2	BRA - DPIR	Sustainability - Environmental Engagement	Potential Future Sustainability Measures in Environmental Engagement at NEC are presented in <i>Chapter 7, Environmental Sustainability</i> of the IMP in Section 7.3.
1.b.6.3	BRA - DPIR	Sustainability - Bird Collision Deterrence	NEC's IMP discusses the potential to work towards a LEED Pilot Credit 55:Bird Collision Deterrence in <i>Chapter 7, Environmental Sustainability</i> .
1.b.7.1	BRA - DPIR	Historic Resources	A summary of Historic Resources is presented in <i>Chapter 9, Historic Resources</i> of the IMP.
1.b.8.1	BRA - DPIR	Security Concerns	Campus Security is described in Section 2.1.1, Chapter 2, Project Description of the DPIR.
1.b.9.1	BRA - DPIR	Public Notice	Comment Noted. Thank you.
2.1.1	BWSC	Cut & Cap Drain Connections & Complete Termination Verification Approval Form	Prior to demolition of any buildings, all water, sewer and storm drain connections to the buildings will be cut and capped at the main pipe.  NEC will complete a Termination Verification Approval Form for a Demolition Permit to be submitted to the City of Boston's Inspectional Services Department.

Number	Letter	Comment Summary	Response
2.1.2	BWSC	New or Relocated Water Mains, Sewers & Storm Drains - Designed & Constructed at NEC's Expense	Comment noted. Information will be presented in the Site Plan Approval package.
2.1.3	BWSC	Develop Inflow Reduction Plan	Comment noted. The proponent will work with BWSC to develop a plan to address this comment. The program developed with BWSC will be presented to DEP in conjunction with the DEP Sewer Connection permit application.
2.1.4	BWSC	Masonry Repair and Cleaning	Comment noted. The proponent will obtain a permit for Abrasive Blasting or Chemical Cleaning from the Boston Air Pollution Control Commission if there is any masonry repair or cleaning.
2.1.5	BWSC	Groundwater Conservation Overlay District	Comment noted. NEC will include provisions for retaining stormwater and direct the stormwater to the groundwater table for recharge.
2.2.1	BWSC	Water Conservation Measures in Outdoor Landscaping	NEC is committed to sustainable practices including a proactive program to conserve water. Please refer to <i>Chapter 7,</i> for a discussion of water conservation measures.
2.2.2	BWSC	Hydrant Permit	Comment noted. NEC will work with the Commission's Operations Division to obtain a Hydrant permit for use of any hydrant during the construction phase of this project.
2.2.3	BWSC	Fixed Radio Meter Reading	Comment noted.
2.3.1	BWSC	Phosphorus Reduction Plan	NEC will submit a Stormwater Pollution Prevention Plan in conjunction with the Site Plan and the General Service Application. NEC will develop a phosphorus reduction plan as part of the site plan.
2.3.2	BWSC	"Don't Dump: Drains to Charles River" at Catch Basins Installed	Castings will be provided. Information will be presented in the Site Plan Approval package.
2.3.3	BWSC	Food Services Require Grease Traps	Comment noted. Information will be presented in the Site Plan Approval package.
2.3.4	BWSC	Existing Stormwater and Sanitary Sewer Services - Dye Testing	Existing stormwater and sanitary sewer service connections which are to be re-used by the proposed project, will be dye-tested to confirm they are connected to the appropriate system.
3.1	Groundwater Trust	Stamped Submission - Project Cannot Cause a Reduction in Groundwater Levels On Site or Adjoining Sites	Prior to zoning approval, NEC will submit documentation that indicates that the projects will not cause a reduction in groundwater levels on site or on adjoining sites.

Number	Letter	Comment Summary	Response
3.2	Groundwater Trust	Install Additional Groundwater Monitoring Along St. Botolph Street	NEC will install an additional groundwater monitoring well along St. Botolph Street at a location to be mutually agreed upon with the Trust to ensure that groundwater levels are being maintained.
4.1	B.F.D.	Emergency Vehicle Site Access	Please refer to <i>Chapter 6, Transportation, Parking and Circulation</i> of the IMP for a discussion of transportation analyses that were studied in connection with the projects.
4.2	B.F.D.	Impact on Availability and Accessibility of Hydrant Locations	Hydrant locations will be coordinated with the design of the fire connection to the proposed building. Proposed hydrant locations will be presented to BWSC and BFD for review and approval.
4.3	B.F.D.	Impact on Availability and Accessibility of Siamese Connection Locations	Hydrant locations will be coordinated with the design of the fire connection to the proposed building. Proposed hydrant locations will be presented to BWSC and BFD for review and approval.
4.4	B.F.D.	Impact of a Transformer Vault Fire or Explosion	Transformer rooms and associated fire protection systems will be designed to minimize any impacts due to fires and/or explosions.
4.5	B.F.D.	Need for Boston Fire Department Permits	NEC will seek a Flammables Storage License as applicable.
4.6	B.F.D.	Impact of Air-Supported Structures on Fire Safety	Not Applicable.
5.1	B.T.D.	Transportation Access Plan Agreement Executed	NEC will prepare a Transportation Access Plan Agreement (TAPA) for these projects which will codify the transportation agreements and mitigation reached with BTD.
5.2.1	B.T.D.	Clean-Fuel and Non-Motorized Vehicle Parking Requirements	NEC's IMP discusses clean-fuel and non-motorized vehicle parking in <i>Chapter 6, Transportation, Parking and Circulation</i> in Section 6.2.
5.2.2	B.T.D.	Bicycle Parking Facilities on Site Plan	NEC's IMP discusses bicycle parking in <i>Chapter 6, Transportation, Parking and Circulation</i> in Section 6.2 and illustrates these locations in Figures 5-18 and 5-19.
5.3.1	B.T.D.	Collaboration with B.T.D. with Streetscape Plans	NEC will collaborate with BTD regarding the streetscape plans for St. Botolph Street and Gainsborough Street.
5.3.2	B.T.D.	Tree Cover and Sustainable Stormwater Management Practices	Comment noted.
5.4	B.T.D.	Online Information Provided for TDM Measures	Comment noted.

Number	Letter	Comment Summary	Response
5.5	B.T.D.	Engineered Site Plan	NEC will develop and submit an engineered site plan in connection with the forthcoming submission of a Transportation Access Plan Agreement (TAPA) to the BTD.
5.6	B.T.D.	Construction Management Plan	NEC will develop and submit a detailed Construction Management Plan (CMP) to BTD for review and approval.
5.7	B.T.D.	Transportation Access Plan Agreement Executed	NEC will prepare a Transportation Access Plan Agreement (TAPA) for these projects which will codify the transportation agreements and mitigation reached with BTD.
6.1	Katie Pedersen	Comprehensive Explanation of "Suitable" Wind Conditions	NEC's DPIR provides an explanation of Suitable Wind Conditions in Chapter 4, Environmental Protection in Section 4.2.
6.2	Katie Pedersen	Mitigation Measures for Adverse Wind Conditions	NEC will mitigate adverse wind conditions as design work progresses.
6.3	Katie Pedersen	Potential Hazardous Waste Estimated and Disposal Plans/Reductions	NEC's DPIR provides an explanation of Potential Hazardous Waste Estimates and Disposal Plans in <i>Chapter 4, Environmental Protection</i> in Section 4.4.
6.4	Katie Pedersen	Groundwater Level Monitoring	NEC will install an additional groundwater monitoring well along St. Botolph Street at a location to be mutually agreed upon with the Trust.
6.5	Katie Pedersen	Additional Sustainable Design Actions	NEC will consider the following sustainable measures: waterless urinals, elimination of plastic trays, expansion of locally grown food and composting as well as potential researching innovative strategies to address the students energy consumption.
7.1.1	David Grissino	Phase 1 & Phase 2 Ground Level Perspectives of Learning Center from a Point on the South Side of Huntington Avenue at Northeastern University's	Figure 5-7 in the NEC IMP presents a Ground Level Perspective of the Learning Center, please note, the Phase I of the Project is not visible from this vantage point.
7.1.2.1	David Grissino	Include the Approved GrandMarc at Northeastern Project in Figure 4-4	Figure 4-4 from the IMPNF/PNF has been included and now includes the GrandMarc in the IMP as Figure 5-4.
7.1.2.2	David Grissino	Additional Figure from Same Vantage Point of Figure 4-4 should be included for Phase 2 Condition	Phase I and Phase II of the project are shown in Figure 5-5 in  Chapter 5, Planning and Urban Design Framework of the IMP.
7.1.2.3	David Grissino	Describe and Identify how NEC's Proposal Relates to the GrandMarc Project	NEC's IMP explains how the Projects relate to the surrounding neighborhood in <i>Chapter 5, Planning and Urban Design Framework</i> in Section 5.5.

Number	Letter	Comment Summary	Response
7.1.3	David Grissino	Include a Narrative & Graphics Describing Gateway Concepts in Detail	NEC's IMP presents a narrative of the Gateways in <i>Chapter 5, Planning and Urban Design Framework</i> in Section 5.7.1. Figure 5-10 illustrates these key gateways.
7.1.4	David Grissino	Opportunities to Activate "Gateway" to Campus - Narrative & Graphics	NEC's IMP presents a narrative of the Gateways in <i>Chapter 5, Planning and Urban Design Framework</i> in Section 5.7.1. Figure 5-10 illustrates these key gateways.
7.1.5	David Grissino	Physical Campus Model Developed	This model was presented at BCDC on March 6, 2012.
7.2.1	David Grissino	Landscape Materials and Street Furniture - Additional Information Needed	Phasing strategy subject to ongoing design review with the BRA as the project progresses.
7.2.2	David Grissino	Additional Cross Sections Needed for SLPC	NEC's IMP provides three additional cross-sections that extend from the mid-point of the building's width through the westbound travel lane of St. Botolph Street in Figures 5-14 through 5-16.
7.2.3	David Grissino	Additional Highly Developed Landscape Plans Needed for Phase 1 and Interim Phase	Phasing strategy subject to ongoing design review with the BRA as the project progresses.
7.2.4	David Grissino	Further Consideration For Physical Design and Parking Relocation West of Gainsborough Street at Existing Jordan Hall Building	Revised landscape strategy shown in Figures 5-8 and 5-9 subject to ongoing BRA design review.
7.2.5	David Grissino	Relationship of IMP Projects to Northeastern University and Avenue of the Arts - Written and Graphic Description, and Engage in Discussions with BRA and BTD	NEC's IMP discusses the intersection of Gainsborough Street and St. Botolph Street in <i>Chapter 5, Planning and Urban Design Framework</i> in Section 5.7.2.
7.3.1	David Grissino		As the design review process moves forward, more detailed discussions will take place regarding the material and details of the exterior cladding at the Orchestra/Rehearsal space.
7.4.1	David Grissino	Graphics Should be Submitted Supporting or Enhancing the Description of Various Urban Design Issues	Comment noted.
7.4.2	David Grissino	Campus-Wide Signage Plan Needed	NEC will develop and provide a campus-wide signage plan as the projects progress.
8.1.1	Task Force	Bird-Safe Standards	NEC's IMP discusses the potential to work towards a LEED Pilot Credit 55: Bird Collision Deterrence in <i>Chapter 7, Environmental Sustainability</i> .
8.1.2	Task Force	Tree Health and Maintenance	NEC will consider stormwater recycling systems for tree pits as part of the landscaping plans for the projects.

Number	Letter	Comment Summary	Response
8.2.1	Task Force	Saint Botolph Street Traffic and Pedestrian Safety - NEC Should Work Together with Northeastern and BTD to Remedy	NEC will work with Northeastern and BTD to address pedestrian safety on St. Botolph Street. NEC has a representative on NEU's Task Force for their current IMP review.
8.2.2	Task Force	Parking - Need to Arrange Parking Compensation or Discounts for Faculty	NEC's IMP discusses Parking in <i>Chapter 6, Transportation, Parking and Circulation</i> in Section 6.2.
8.2.3	Task Force	Number and Location of Bicycle Parking Spaces	Bicycle Facilities are described in Section 6.5 of the IMP. <i>Chapter 6, Transportation, Parking and Circulation</i> also references Figures 5-17 and 5-18 which illustrates the bicycle parking locations.
8.3	Task Force	Unhealthy Concentration of Students on a Small Street - Security Prepared	Campus Security is described in Section 2.1.1, Chapter 2, Project Description of the DPIR.
8.4	Task Force	Demolition and Construction Coordinated with Surrounding Institutions	NEC will coordinate with surrounding Institutions during the upcoming demolition and construction periods.
9.0	Fenway Alliance	Letter of support	Thank you for your support.
10.1	Boston Preservation	Retention and Incorporation of Three Buildings of Historical Significance on Campus in NEC's Planning	Comment noted.
10.2	Boston Preservation	Revisit the Design of the Lower Portion of the SLPC Building to Improve Relationship with 241 St. Botolph Street	Comment noted.
10.3	Boston Preservation	Preventative Maintenance Program for 241 St. Botolph Street to Ameliorate Deleterious Effects of Shadows	A preventative maintenance program will be developed by NEC to ameliorate deleterious effects of shadows on 241 St. Botolph Street.
10.4	Boston Preservation	Photographic Documentation of the Pavilion Building and 33 Gainsborough Street Should be Conducted Before Demolition	Photographic documentation of the Pavilion Building and 33 Gainsborough Street will be conducted prior to their demolition.
11.1	Fenway CDC	Linkage Payments Broken Down By Phase with Calculations	Linkage Payments are presented in Section 10.1.3, Chapter 10, Community Benefits of the IMP.
11.2	Fenway CDC	More Detail on Drop-Off and Pick-Up in Front of Jordan Hall	NEC's IMP presents the Pick-up/Drop-off procedures in <i>Chapter 6, Transportation, Parking, and Circulation</i> in Section 6.8.

Number	Letter	Comment Summary	Response
11.3.1	Fenway CDC	Definitive Plan to Ensure No Negative Impact on Vehicular Traffic or Parking in the Neighborhood - Including Monitoring After Construction	NEC is committed to implementing a parking plan that accommodates its long-term parking needs. NEC's IMP discusses this specific issue in <i>Chapter 6, Transportation, Parking and Circulation</i> in Section 6.2.
11.3.2	Fenway CDC	Circulation and Turning Radius Studies for Delivery Vehicles	NEC's IMP illustrates the loading dock maneuvers in Figure 6-1.
11.4.1	Fenway CDC	Public Use of Proposed Dining Facilities, Library, and Performance Spaces	NEC's Performance Spaces will provide the Fenway and Boston area community with 3 new additional / improved performance spaces. In addition, NEC will continue to allow the local community access to their library and dining hall.
11.4.2	Fenway CDC	Create and Outreach Strategy to Ensure Residents Know of Community Resources on Campus	NEC lists all its events on its website, and many of these events are also carried on the Fenway Alliance website. NEC prints and distributes its concert guide throughout the neighborhood and publishes its events in the Fenway News and the Boston Globe.
11.5	Fenway CDC	Utilize the Fenway CDC Program - "Walk to Work"	Comment noted. Thank you.
11.6	Fenway CDC	Construction Management Plan In Place and Communication Continued During Construction	NEC will develop and submit a detailed Construction Management Plan (CMP) to BTD for review and approval.
12.0	Gainsborough Neighborhood Association	Letter of support	Thank you for your support.
13.1	Todd Fielder	Maintain On-Street, Metered Parking for Neighborhood Residents	NEC will continue to work with BTD to assess the need to balance pedestrian access improvements and area on-street parking needs.
13.2	Todd Fielder	Address De-watering During Construction - Monitoring and Recharging Groundwater if Needed	It is unclear if de-watering will be required during construction of the IMP Projects. NEC will coordinate these future efforts through its General Contractor.

