



**Wentworth Institute of Technology
Multipurpose Academic Building (MpA Building)
Boston, Massachusetts**

Institutional Master Plan Notification Form

January 13, 2017

for the

**Amendment of the
Wentworth Institute of Technology, Inc.
2010-2020 Institutional Master Plan**

submitted to the
Boston Planning & Development Agency

submitted by
Trustees of Wentworth Institute of Technology

prepared by
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in association with
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Chapter 1

INTRODUCTION

CHAPTER 1: INTRODUCTION

1.1 EXECUTIVE SUMMARY

Pursuant to Section 80D-9 of the Boston Zoning Code (the “Code”), Wentworth Institute of Technology, Inc. (“Wentworth”) submits this Institutional Master Plan Notification Form (“IMP NF”) to the Boston Planning and Development Agency (“BPDA”) to commence the process for amending the approved Wentworth Institutional Master Plan 2010-2020 (“Wentworth IMP” or “IMP”) to include the construction and operation of a new Multi-Purpose Academic Building on its campus (the “Project”). The Project is an outgrowth and modification of a project previously described in the Wentworth IMP and, therefore, requires an amendment to the Wentworth IMP pursuant to Section 80D-9 of the Code (the “Amendment”). No other changes to the Wentworth IMP are requested at this time.

The Wentworth IMP was approved by the Boston Redevelopment Authority (“BRA,” now “BDPA”) on December 14, 2010, by the Boston Zoning Commission on January 19, 2011 and by Mayor Thomas M. Menino on January 20, 2011. The Wentworth IMP has a term of ten (10) years and included five projects that were anticipated to be undertaken during the current term. Those five projects are:

- (1) the Flanagan Campus Center at Beatty Hall;
- (2) the 18,000 sf academic addition to the Ira Allen Building at 540 Parker Street;
- (3) The Student Apartments @ 525 Huntington Avenue;
- (4) a proposed new soccer field above 330 surface parking spaces (“New Sweeney Field”); and
- (5) a new 45,000 sf academic facility to be located on the Campus Quadrangle (the “Quad”) at the site of Willson Hall.

Wentworth has completed the first three of these projects. The Flanagan Campus Center represents a significant expansion of space to draw students onto campus for cultural and social activities including a fully renovated café space, a modern fitness center, and an improved library updated to serve today’s students’ needs including private group study spaces, worktop areas designed with plenty of room for laptops as well as traditional study materials, and also comfortable sitting pods for quiet - but not isolated - study. The Ira Allen Building addition provides state-of-the-art teaching labs, collaboration spaces, and offices to support Wentworth's cutting edge curriculum in engineering and technology. The Student Apartments @ 525 opened in fall 2014 and provides 305 beds for Wentworth students styled as fully amenitized apartments aimed at retaining upper class students who might

otherwise look to move off-campus in search of full-service apartments. These additions to Wentworth's campus have played an integral role in Wentworth's transformation into a residential campus. Inclusive of these projects, since 2000, Wentworth has added just over 1,000 beds on its campus. This student housing, along with the other on-campus amenities, is strategically and carefully designed to not only provide Wentworth students with on-campus housing, but also to provide Wentworth students with the full suite of living and learning amenities required and desired for today's college (and graduate) students.

The fourth IMP project, New Sweeney Field, was to be completed in conjunction with a "Potential Future Project" described in the IMP, which envisioned the development of a commercial research and development/office project on the 3.03-acre site of the Sweeney Athletic Field at 500 Huntington Avenue ("500 Huntington Project"). The IMP noted that, if pursued, the approval process for the 500 Huntington Project would be initiated and reviewed through either an amendment to the IMP or through a Planned Development Area (PDA) designation.

In 2013, Wentworth proceeded with plans for the 500 Huntington Project pursuant to a PDA designation. The PDA was approved by the BRA as Planned Development Area No. 93 on September 12, 2013, and approves the development of up to 640,000 sf of floor area with a mix of uses, including College or University uses (to be added, when developed, to the Wentworth IMP), Office, Restaurant, Cultural, Retail/Commercial, Parking, Research and Development, Day Care, and Laboratory Space. Wentworth was the proposed anchor of the 500 Huntington Project and would occupy 94,000 square feet of space, of which Wentworth planned to use 78,400 square feet for the Center for Interdisciplinary Innovation with a major focus on research and education in the area of applied research and product development.

From 2013 through 2015, Wentworth pursued the advancement of the 500 Huntington Project with a broker, and selected a development partner. Subsequent negotiations did not result in advancement of that project, which is currently on hold until such time as market conditions produce a suitable development partner.

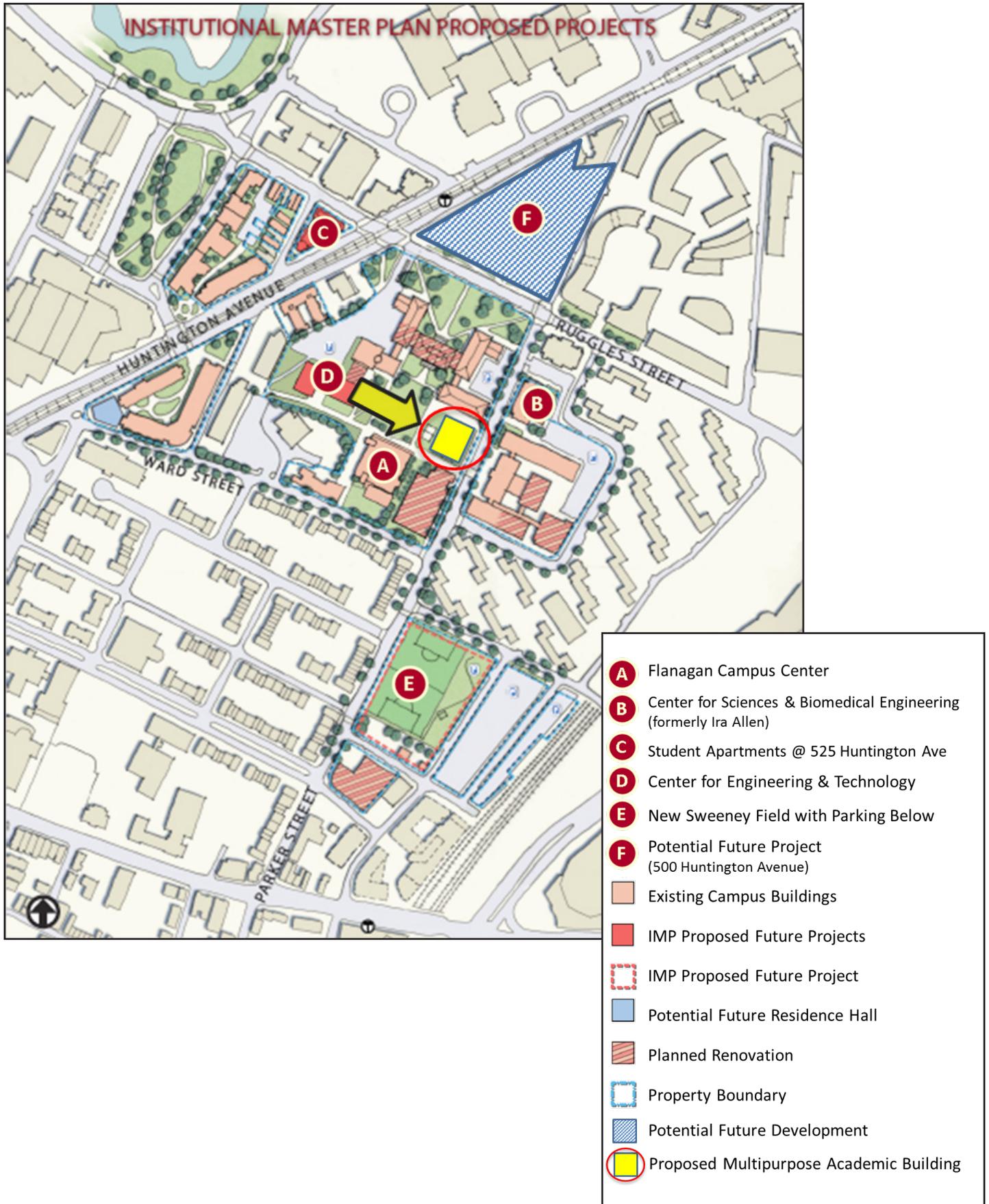
New Sweeney Field, the new soccer field on a single level deck above 330 surface spaces that would replace the existing Sweeney Field (site of the 500 Huntington Project), was advanced through the BRA Article 80 process. The BRA issued a Scoping Determination on February 2, 2015 waiving further review of the New Sweeney Field Project. Because New Sweeney Field is only made necessary by the advancement of the 500 Huntington Project, it will be constructed to replace Sweeney Field when the 500 Huntington Project moves forward.

1.2 THE NEED FOR AN IMP AMENDMENT

The Project described herein is an outgrowth and modification of the fifth proposed project in the Wentworth IMP. The Project enlarges and relocates the project identified in the IMP as the 45,000 square foot Center for Engineering and Technology (to be located on and adjacent to Willson Hall) with an approximately 69,000 gross square foot academic building in the area currently occupied by three outdoor tennis courts located between Watson Hall and Nelson Recreation Center/Tansey Gymnasium on Parker Street.

The Project will be known as the Wentworth Multipurpose Academic Building (the “MpA Building”), and is subject to Article 80B Large Project Review, which has been commenced concurrently with the filing of this IMPNF. A Letter of Intent for the MpA Building Project, dated December 15, 2016, was filed with the BPDA as required under the Executive Order entitled, “An Order Relative to the Provision of Mitigation by Development Projects in Boston.”

The Project is a response to the next evolution in the collegiate study of several engineering disciplines that requires modern academic space for Wentworth’s existing students. Wentworth’s curriculum is transitioning from a focus on engineering technology to engineering and innovation in such areas as biological engineering. This transition requires new and different teaching and learning spaces with configurations that promote collaboration and interdisciplinary approaches to solving the technical challenges of our day. In order to meet the needs of its students and faculty, Wentworth developed a plan to locate the MpA Building in an area of campus that is currently undeveloped in order to maintain the academic space in Kingman and Willson Halls, preserve approximately 80 on-site parking spaces, and to consolidate a number of engineering programs into a single building. The Project represents a net increase of approximately 24,000 gross square feet of academic space over the previously described Center for Engineering and Technology (the “IMP Project”). Though modest and without material impacts in comparison to the prior IMP Project, the increase in gross floor area and the change in location of the MpA building requires an amendment to the IMP. Figure 1-1, Institutional Master Plan Projects, shows the location of the various projects described in the Wentworth IMP. The arrow in the center of Figure 1-1 points to the location of the proposed Project, which is to replace the Center for Engineering & Technology project previously proposed at location D. Figure 1-2 provides an oblique view of the Project Site.





Chapter 2

WENTWORTH INSTITUTE OF TECHNOLOGY MISSION AND GOALS

CHAPTER 2: WENTWORTH INSTITUTE OF TECHNOLOGY MISSION AND GOALS

2.1 MISSION AND OBJECTIVES

Wentworth is a nationally recognized private coeducational institution of higher education that offers cooperative baccalaureate programs, master's degrees, and certificate programs in the disciplines of computer science, architecture, design, engineering, management, and engineering technology. Founded in 1904, through a bequest from Arioeh Wentworth, a Boston merchant, Wentworth opened its doors in 1911.

For more than 100 years, Wentworth has been proud to call the Mission Hill and Fenway neighborhoods in the city of Boston its home. Just as Boston has grown and changed over that time, Wentworth has evolved from a technical school into a higher education institution granting both undergraduate and graduate degrees.

Wentworth has graduated approximately 52,000 students who have assumed leadership roles in the professions, industry, education, and government. Wentworth graduates and cooperative education work ("co-op") students are sought after for their demonstrated abilities to quickly become productive members in the workplace, for their technical problem-solving skills, and for their educational preparation to adapt to changing technologies.

For many schools, classroom-based curricula form the core of the learning program. At Wentworth, academics serve as a foundation intended to build upon other learning opportunities, such as labs and co-op experiences. Honoring the tradition of out-of-classroom learning, all undergraduate students are required to spend a minimum of two semesters in a co-op program, regardless of the college or their major. This multifaceted academic approach stems from Wentworth's commitment to the tenets of EPIC Learning (Externally Collaborative, Project-based, Interdisciplinary Culture).

Wentworth maintains that quality teaching is its most important function and that scholarly and applied research enhances teaching. Wentworth's programs are practical and rigorous, designed to achieve a unity of theory and practice through a "hands-on" approach. Communication skills, team building, and analytical thinking are central to the educational process. The programs are supported by full and part-time faculty who are active in their disciplines. They are able to bring their professional experience into the classroom and laboratory, and provide needed direction and discipline for the development of technical skills, and motivate and counsel for confidence building. The faculty and students are supported by laboratories, a library, a learning center, and the full array of student services expected at a private institution of higher education.

2.2 PROGRAMS

Wentworth's programs are developed and regularly updated through input and advice from practicing professionals who serve as members of the Industrial Professional Advisory Committees (the "IPAC"). Through the IPAC, corporate/academic communication is maintained to assist the faculty with the development of a technological education that is responsive to the needs of and the latest trends in industry.

Wentworth offers seventeen career-oriented majors within four colleges: the College of Architecture, Design & Construction Management; the College of Engineering and Technology; the College of Arts and Sciences; and the College of Professional and Continuing Education. For a list of Departments and Degrees awarded, see Table 2-1, Wentworth Colleges and Departments.

Table 2-1: Wentworth Colleges and Departments

College of Architecture, Design & Construction Management	College of Arts and Sciences	College of Engineering and Technology
<ul style="list-style-type: none"> • Architecture • Construction Management • Industrial Design • Interior Design 	<ul style="list-style-type: none"> • Applied Mathematics • Business Management • Humanities and Social Sciences • Sciences 	<ul style="list-style-type: none"> • Biological Engineering • Biomedical Engineering • Civil Engineering and Technology • Computer Science and Computer Networking • Electrical Engineering and Technology • Interdisciplinary Engineering • Mechanical Engineering and Technology

Wentworth offers the following undergraduate Majors, Minors, and Masters Programs as shown in Table 2-2, Wentworth Degree Programs:

Table 2-2: Wentworth Degree Programs

Undergraduate Majors	Undergraduate Minors	Masters Programs
<ul style="list-style-type: none"> • Applied Mathematics • Architecture • Biological Engineering • Biomedical Engineering • Building Construction Management (CPCE) • Business Management • Civil Engineering • Computer Engineering • Computer Information Systems • Computer Science • Computer Networking • Construction Management • Electromechanical Engineering • Electrical Engineering • Engineering - Interdisciplinary • Facility Planning and Management • Industrial Design • Interior Design • Mechanical Engineering • Project Management (CPCE) • Project Management (online) (CPCE) 	<ul style="list-style-type: none"> • Aerospace Engineering • Applied Mathematics • Bioinformatics • Biology • Business Management • Chemistry • Civil Engineering • Computer Networking • Computer Science • Construction Management • Industrial Design • Manufacturing • COF Minor in Performing Arts • Media, Culture and Communications Studies • Physics 	<ul style="list-style-type: none"> • Applied Computer Science (online) • Architecture • Civil Engineering • Construction Management • Construction Management (online) • Facility Management • Facility Management (online) • Technology Management (online)

In addition to its bachelor's and master's programs, Wentworth offers the following Associate Degrees:

- Architectural Technology (CPCE)
- Building Construction Management (CPCE)

Degree candidates in all of the bachelor's programs are required to spend at least two semesters away from campus on cooperative education work experiences. Upon successful completion of these programs, students are awarded a Bachelor of Science degree in their respective disciplines. Wentworth also offers a Masters in Architecture through its full time

day program, and a Masters in Construction Management, Applied Computer Science, and Facilities Management through the evening and weekend program. In addition, Wentworth offers four online Masters programs in Construction Management, Facilities Management, Technology Management, and Applied Computer Science.

Wentworth's College of Professional and Continuing Education (CPCE) serves the diverse needs of the growing adult learner population with part-time courses offered at night, on weekends and online. The College offers approximately 30 technology-focused associate, bachelor, and graduate degree programs as well as professional certificates, workforce training and development courses.

2.3 ENROLLMENT

Throughout its long institutional history, Wentworth has maintained a strong commitment to providing a healthy balance between enrollment and classroom size. As a small private college, Wentworth offers the personal attention from faculty and administration that is prized at such institutions of higher learning. Wentworth relies on tuition, room and board for approximately 97 percent of its revenue, and is therefore extremely focused on the quality of the students' academic experience. As shown below, in recent years Wentworth has seen a modest decrease in enrollment. Actual enrollment numbers fluctuate and are difficult to predict from year to year, as acceptance letters are often received by the Institute within two weeks of the start of the Fall Semester. See Table 2-3 for an accounting of actual enrollment numbers for full time undergraduate students from the past three years.

Table 2-3: Full Time-Undergraduate Students

Full-Time Undergraduate Students	Fall 2014 Actual	Fall 2015 Actual	Fall 2016 Actual
Total Full-Time Undergraduates*	3,867	3,902	3,855
Full-Time Undergraduates Forecast	3,841	3,820	3,732
# of Students Above (Below) Forecast	+ 26	+ 82	+ 123
% Above (Below) Forecast	.67%	2%	3%
*As reported to the City of Boston in the University Accountability Ordinance			

In past years, Wentworth has worked diligently to improve its retention rate. Thus, although Wentworth has historically and consistently been accurate in its enrollment projections, increased retention can, as shown above, contribute to an increase in overall enrollment and can sometimes thwart enrollment projections. Based on the recent trend in increased retention, Wentworth now builds this factor into its future modeling. The following Table 2-4 shows Wentworth's projections for the next three years – those that remain in the 2010-2020 IMP.

Table 2-4: Projected Full-Time Undergraduate Enrollment Through The Expiration Of The 2010-2020 IMP*

Fall	Total Full-Time Undergraduate Enrollment	Forecasted New Student Class Size
2017	3,747	1,100
2018	3,698	1,150
2019	3,715	1,150
<i>*Forecast data as of Fall 2016</i>		

2.4 STUDENT HOUSING

Wentworth has consistently been in the top 5 of major universities and colleges in the Boston area relative to percentage of undergraduate resident students housed on campus*. As detailed in the Executive Summary set forth in Section 1.1, Wentworth has committed itself to transforming into a residential campus. In addition to adding over 1000 beds since 2001 to its residential housing stock and supplying amenities to create on campus opportunities for living and learning, Wentworth actively promotes on campus living by requiring Freshmen and Sophomores to live on campus and publishing the advantages of on-campus living.

Table 2-5: Students Housed On Campus

Year (Fall)	Full-Time Undergraduate Enrollment	Students Seeking Housing in Boston	Number Housed On Campus	Number Housed In Private Market Housing
2014-15	3,867	2521	2013	508
2015-16	3,902	2548	2026	522
2016-17	3,855	2589	2066	523

**Based on data from the City of Boston's Student Housing Trends Report.*

2.5 MPA BUILDING IMPACTS TO ENROLLMENT AND HOUSING

In concert with the ongoing diversification of its engineering programs, Wentworth has identified a need to provide a single function building to support its students and faculty. In order to remain competitive in these disciplines, Wentworth requires new state-of-the-art labs, classroom, and student collaborative work spaces. As the engineering programs evolve to mirror 21st century occupations, the MpA Building will best meet the requirements of these evolving disciplines and programs. In particular, the more open physical layout of the MpA Building's learning and collaboration spaces, including the first floor gathering and presentation spaces, will be able to physically accommodate mixed project teams – of, for example, architecture, civil engineering, structural engineering, and construction management students – to work together in an interdisciplinary manner much the way they

will after graduation. Wentworth's current, generally compact, classroom setup, with disciplines spread among multiple buildings, does not foster the type of interdisciplinary collaboration the MpA Building will provide. In addition, the new, larger lab spaces in the MpA Building, including wet labs, will provide current students in the engineering disciplines with the opportunity to expand their learning and experience beyond the curriculum that Wentworth is able to offer today in its smaller and more traditional academic buildings. With a modest increase of six faculty members and two technicians to be phased over time, the addition of the MpA Building is not expected to increase enrollment, or the need for additional student housing.

Chapter 3

PROPOSED INSTITUTIONAL PROJECTS

CHAPTER 3: PROPOSED INSTITUTIONAL PROJECT

3.1 DESCRIPTION OF THE PROPOSED PROJECT

The MpA Building Project will include up to 69,000 gross square feet of laboratories, collaborative learning and group study space, offices, and support/storage space. The key dimensions of the Project, including building height, square footage, location, and proposed uses are provided in Table 3-1 below. Zoning and permitting controls will be governed by the Wentworth IMP, as amended, and the provisions of Article 80D of the Code.

Table 3-1: Proposed Project – MpA Building

Location:	555 Parker Street, Boston, MA
Site Size:	0.8 acres (34,268 square feet)
Existing Use:	Three outdoor tennis courts within perimeter fencing
Proposed Use:	Laboratories, collaborative learning and group study space, offices, and support/storage space
Proposed Height:	64 feet
Proposed Gross Floor Area:	69,000 square feet
Proposed FAR:	2.0
Zoning Districts:	Wentworth Institute of Technology Institutional Subdistrict of the Mission Hill Neighborhood District; Groundwater Conservation Overlay District; and Wentworth’s Institutional Master Plan Area

At approximately 64 feet in height and approximately 69,000 gross square feet, the MpA Building will contain laboratories, collaborative learning and group study spaces, offices, and support/storage space on floors two through four, and a first-floor maker space, manufacturing, and gathering and demonstration space intended to invite the campus population to experience first-hand presentations showcasing Wentworth’s engineering capabilities and teachings. The MpA Building will accommodate Wentworth’s transition from providing engineering technology programs to engineering and innovation programs, such as a new biological engineering program. As previously described in Chapter 2 of this IMPNF, this transition requires new and different teaching and learning spaces and configurations that will promote more collaboration and interdisciplinary approaches to the curriculum, and also

requires larger laboratory space, in particular, to accommodate more state-of-the-art equipment and technology. The Project, which is a response to the evolution of engineering education at Wentworth, is intended to meet the needs of the existing student body and is not driven by, or expected to result in, a measurable increase in enrollment.

The MpA Building will also provide for efficiencies and flexibility in the remaining buildings on the campus as some existing departments relocate to the MpA Building. The departments and/or uses currently under consideration for the MpA Building include:

- Biological Engineering;
- Civil Engineering;
- Biology and Chemistry;
- Biomedical Engineering;
- Mechanical Engineering with High End Manufacturing;
- Shared academic space;
- Accelerate and EPIC programs with maker, collaboration, and ideation space;
and
- Student and faculty presentation space.

Because the Project will not result in additional enrollment, no additional off-street parking will be constructed to support the Project. Parking needs will continue to be managed through campus-wide parking management programs. The combination of adequate parking facilities, on-campus housing, and an aggressive Transportation Demand Program ensures the continued control and management of the parking supply. The modest increase in staff, phased over the course of several years, of up to six faculty positions and two technicians will not create an increase in the demand for parking.

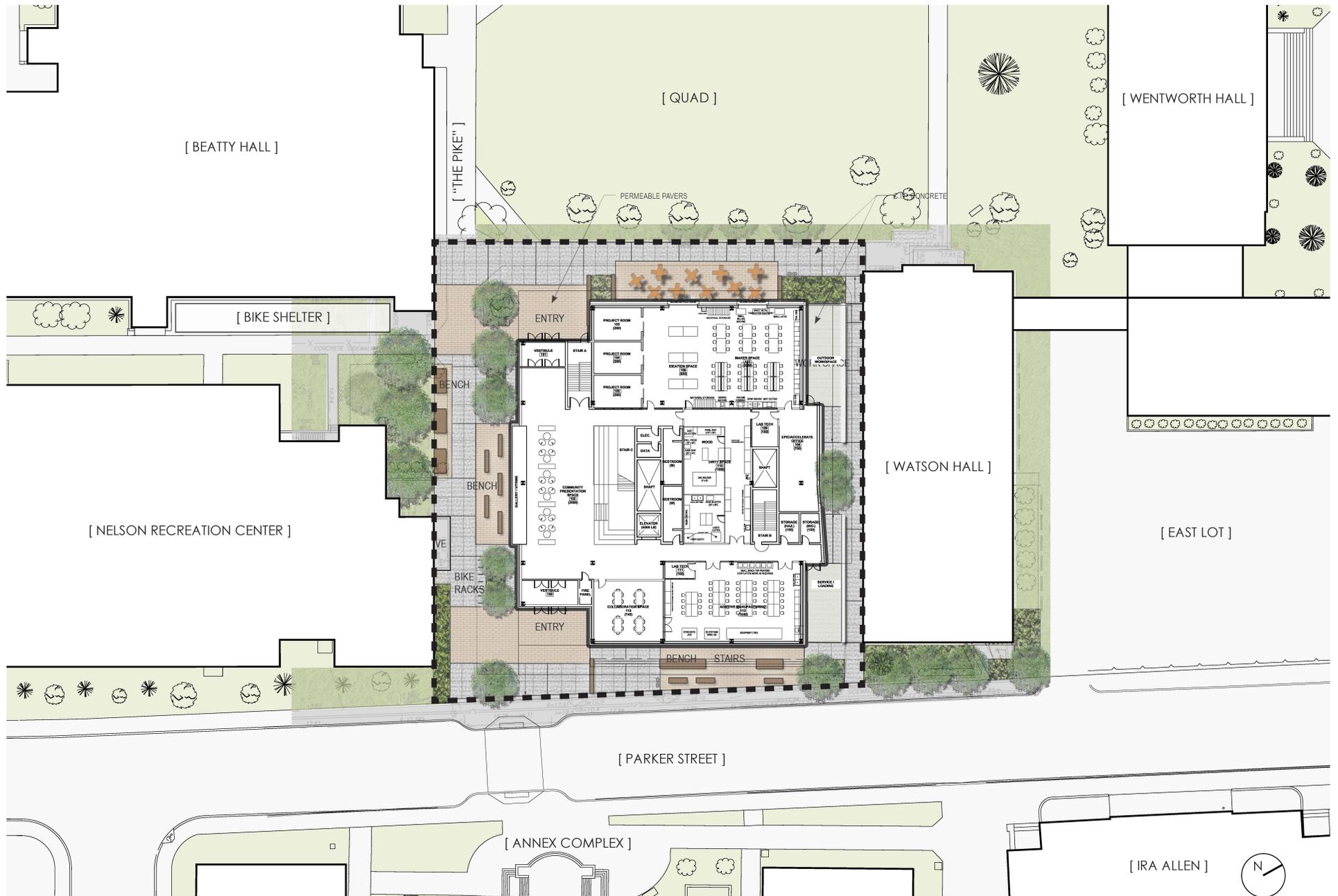
A set of Project plans, illustrations, and site plans have been prepared by Leers Weinzapfel Associates, the Project architect, and are attached hereto as Figures 3-2 through 3-9. The Project plans consist of a site plan showing the location of the MpA Building, floor plans, and elevations. A detailed discussion of the Project and its impacts can be found in the Expanded Project Notification Form filed concurrently with this IMPNF under Article 80B of the Code (Large Project Review).

3.2 REQUESTED IMP AMENDMENT REVIEW

Wentworth respectfully requests that the BPDA, upon review of this IMPNF, issue a Limited Scope of Review for Certain Institutional Master Plan Amendments under Section 80D-5.3(d) of the Code. Under that section, if a proposed amendment to an approved IMP is limited to the addition of one or more Proposed Institutional Projects and does not involve renewal of the IMP, the scope of review is limited to an examination of the impacts of the Proposed Institutional Projects, taking into consideration the cumulative impacts of such projects when added to the existing uses and to the other projects already described in the approved IMP. Because this IMPNF does not request renewal of the Wentworth IMP and is limited to the modification of one project previously described in the approved Wentworth IMP, Wentworth respectfully requests a limited scope of review consistent with Section 80D-5.3(d) of the Code. As noted above, a detailed discussion of the Project and its impacts can be found in the Expanded Project Notification Form filed concurrently with this IMPNF under Article 80B of the Code (Large Project Review).

3.3 ARTICLE 32 COMPLIANCE

The Project is located within the Groundwater Conservation Overlay District (“GCOD”) and, therefore, consistent with BPDA’s IMP Policy, the Project will comply with the standards and requirements set forth in Article 32 of the Code. Wentworth will obtain a written determination from the Boston Water and Sewer Commission (“BWSC”) that the Project meets the standards and requirements of Article 32, as well as a stamped certification from a Massachusetts registered engineer showing that the requirements of Section 32-6 of the Code are met.





Boston, Massachusetts

Figure 3-2
Parker Street Crossing Approach
Source: Leers Weinzapfel Associates, 2016



Boston, Massachusetts

Figure 3-3
Quad/Pike Approach
Source: Leers Weinzapfel Associates, 2016

