EF EDUCATION FIRST

Expansion Project at North Point (EF III)

SPECIAL PERMIT / PUD APPLICATION
APPENDIX

15 May 2017
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TRANSPORTATION ENGINEERING  VHB
M/P ENGINEERING  AKF Group Inc. / TG Gallagher Inc.
ELECTRICAL ENGINEERING  e3i Engineers Inc. / EG Sawyer Co., Inc.
STRUCTURAL ENGINEERING  Simon Design Engineering, LLC
GEOTECHNICAL/GEOENVIRONMENTAL  McPhail Associates, LLC
ACOUSTICAL ENGINEERING  Acentech
SUSTAINABILITY CONSULTANT  The Green Engineer
WIND CONSULTANT  RWDI Consulting Engineers
SURVEYOR  DGT
PRECONSTRUCTION SERVICES  Skanska USA
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Project Description

Introduction

In accordance with the Massachusetts Environmental Policy Act ("MEPA") Massachusetts General Law ("MGL") Chapter 30, Section 61-62I and the regulations promulgated thereunder set forth at 301 CMR 11.00, the EFEKTA Group, Inc. ("EF", the "Proponent") respectfully submits this Final Environmental Impact Report ("FEIR") for the EF Education First Expansion Project at North Point, also commonly referred to as EFIII (the "Project").

The Project [EEA# 15293] includes the construction of a new approximately 300,000 square foot (SF) mixed-use building including related site improvements and public open space on an approximately 2.87-acre site located on North Point Boulevard in Cambridge, Massachusetts (the "Site", or "Project Site"). The Project is situated close to EF’s existing buildings at One Education Street and Two Education Circle, and will allow EF to expand its North American operations. The Project will complement the development of EF’s campus with the construction of new student residential, office, academic and public spaces.

As described below, the Project is being planned by EF in coordination with the Department of Conservation and Recreation (DCR) and the Division of Capital Asset Management & Maintenance (DCAMM) and will provide funding for environmental cleanup and the relocation and construction of a new, permanent DCR maintenance and operations facility to the north of the Project Site. The land conveyance to EF is expected to generate approximately $20.4 million in funds that will be used by DCR for environmental clean-up and the new maintenance and operations facility.

This chapter provides an overview of the Project and describes Project changes made since the filing of the Draft Environmental Impact Report ("DEIR"). It also provides updated conceptual Site layout, open space and landscape plans, provides additional details on the land transfer and regulatory compliance, updates Project-related public benefits, and describes community outreach and agency coordination conducted to date.

1.1 Project Updates

1.1.1 Summary of Project Changes Since DEIR Filing

The design of the Project has been advanced since the filing of the DEIR. The building siting optimizes the location of the public open space by putting planned recreational areas adjacent to the proposed multi-use path and network of
public streets and pedestrian connections. The proposed building will continue to serve as a back-drop for the Public Open Space, screening it from the Project Site driveway, DCR maintenance facility, highway ramps, railroad uses and Boston Sand & Gravel.

The building remains set back from North Point Boulevard to make the street level feel habitable and prevent a “canyon” effect; however, the footprint has been refined from that shown in the DEIR. The southern wing of the building has been pulled back and the building entrance has been realigned to create a stronger presence along North Point Boulevard. These refinements will strengthen the pedestrian realm and will increase the quality and visibility of the open space on Site.

The building retains a slightly irregular U shape intended to provide more natural light to building occupants, while also maximizing efficiency (an L-shaped building would be much less efficient and create a larger footprint).

The following section summarizes changes to the Project since the DEIR was filed on December 15, 2016. Refer to Figure 1.7 for the updated Project Site Plan.

› **Program Development:** Since the filing of the DEIR, the Proponent has continued researching the student housing market, both generally in the Boston area and specifically with Hult students. Based on this research, EF found that there is an increased interest in living spaces with cooking facilities and has shifted the program as described below. Additionally, the mix of academic and office uses has been adjusted to reflect the purchase of the 17 Monsignor O’Brien Highway building, which is discussed in detail in Section 1.3.2.

› Program changes since the DEIR are summarized below, and in Table 1-1:
  - Increase in building footprint (from 29,473 to 29,874 SF)
  - Decrease in student residential dormitory square footage (from 98,880 to 71,175 SF)
  - Increase in student apartment square footage (from 74,160 to 94,900 SF)
  - Decrease in general academic space (from 28,109 to 13,700 SF)
  - Increase in general office space (from 4,338 to 23,297 SF)
  - Decrease in student cafeteria / café uses (from 14,820 to 13,997 SF)
  - Reduction in structured parking spaces (from 130 to 115 Spaces)
  - Increase in building floors (from 11 to 12 stories)
### Table 1-1 Summary of Project Changes Since DEIR Filing

<table>
<thead>
<tr>
<th></th>
<th>DEIR Filing(^1)</th>
<th>FEIR Filing(^2)</th>
<th>Change(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Footprint</td>
<td>29,473 SF</td>
<td>29,874 SF</td>
<td>(401) SF</td>
</tr>
<tr>
<td>Residential Dormitories</td>
<td>98,880 SF(^4)</td>
<td>71,175 SF(^5)</td>
<td>(27,705) SF</td>
</tr>
<tr>
<td>Apartment Units</td>
<td>74,160 SF(^3)</td>
<td>94,900 SF(^5)</td>
<td>20,740 SF</td>
</tr>
<tr>
<td>General Academic Uses</td>
<td>28,109 SF</td>
<td>13,997 SF</td>
<td>(14,112) SF</td>
</tr>
<tr>
<td>General Office Uses</td>
<td>4,338 SF</td>
<td>23,297 SF</td>
<td>18,959 SF</td>
</tr>
<tr>
<td>Student Cafeteria / Cafe</td>
<td>14,820 SF</td>
<td>14,569 SF</td>
<td>(251) SF</td>
</tr>
<tr>
<td>Structured Parking</td>
<td>130 Spaces</td>
<td>115 Spaces</td>
<td>(15) Spaces</td>
</tr>
<tr>
<td>Building Floor(^2)</td>
<td>11 stories</td>
<td>12 Stories</td>
<td>1 Story</td>
</tr>
</tbody>
</table>

1. Floor areas and building height measurements are in accordance with the definition of Gross Floor Area in the Cambridge Zoning Ordinance.
2. The overall height of the building remains consistent with the DEIR program at 150’.
3. Assumes approximately 72 apartment style units containing 84 beds.
4. Assumes approximately 208 dormitory rooms containing 416 beds.
5. Assumes approximately 140 apartment units containing 228 beds.
6. Assumes approximately 141 dormitory rooms containing 272 beds.

» **Open Space**: Specifically, excluding the 20,000 SF easement to DCR, the use of which will be entirely within DCR's control, along with the building footprint, planned driveways and covered bicycle parking, the Project will provide greater than 60,000 SF of publicly accessible open space on the Project Site. Current plans show 70,095 SF, and are subject to change.\(^1\)

» **Open Space Programming**: EF has undertaken a transparent public process to gain insight to the open space preferences of the community. As described in Section 1.1.5, EF has incorporated the top community choices into the open space programing, including an outdoor fitness course, a yoga/tai chi patio, and a multi-use flex field that will support both planned and spontaneous active and passive recreational activities.

### 1.1.2 Building Program

The Project is situated close to EF's existing buildings at One Education Street and Two Education Circle, and will allow EF to expand its North American operations. The Project will allow EF to expand its services by creating a new twelve story mixed-use building of up to 300,000 SF on the 2.87-acre Project Site.

The Project will include up to approximately 23,964 SF of ground floor public uses that include a gym and fitness center (including an indoor rock climbing wall), public bike room, and a lobby/gathering space with fitness-related retail space, as well as a mix of uses throughout the upper floors, including up to approximately 166,075 SF

\(^1\) Open space is defined differently under various regulatory programs. For Chapter 91 purposes, "open space" includes driveways that are open to the public, and this definition of open space is used in this FEIR. As shown on Figure 4.5, site driveways represent 11,215 SF of the total amount of 70,095 of open space that is shown on the current plans.
of new student housing units (dormitories and apartments), 37,294 SF of general office and educational use, 14,569 SF of cafeteria/restaurant use and up to approximately 58,098 SF of above-grade structured parking spaces, as detailed in Table 1-2. To assess potential environmental impacts, conservative assumptions have been used in this FEIR to assess Project impacts that vary by use like traffic, water demand and wastewater generation. See Figures 1.8a–g – Floor Plans.

**Table 1-2 Program Table**

<table>
<thead>
<tr>
<th>Use/Element</th>
<th>Approx. Dimensions¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apartment Units²</td>
<td>94,900 SF</td>
</tr>
<tr>
<td>Residential Dormitories³</td>
<td>71,175 SF</td>
</tr>
<tr>
<td>Restaurant/Cafeteria⁴</td>
<td>14,569 SF</td>
</tr>
<tr>
<td>Office/Academic</td>
<td>37,294 SF</td>
</tr>
<tr>
<td>Ground Floor Uses⁵</td>
<td>23,964 SF</td>
</tr>
<tr>
<td>Off Street Loading Dock (zoning exclusion)</td>
<td>1,304 SF</td>
</tr>
<tr>
<td>Bike Room (zoning exclusion)</td>
<td>1,475 SF</td>
</tr>
<tr>
<td>Parking</td>
<td>58,098 SF / 115 Spaces</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300,000 SF</strong></td>
</tr>
</tbody>
</table>

¹ All areas are provided as gross floor area (GFA) as defined in Article 2 if the Cambridge Zoning Ordinance, which excludes accessory and support spaces, such as mechanical space, off-street loading and bicycle parking.

² Assumes approximately 140 apartment units containing 228 beds.

³ Assumes approximately 141 dormitory rooms containing 272 beds.

⁴ Assumes approximately 400 seats

⁵ Includes a gym and fitness center (including an indoor rock climbing wall), public bike room, and a lobby/gathering space with fitness related retail space, and circulation and support areas.

The Project will benefit the North Point Park and adjacent areas by activating a site currently closed to the public and by eliminating the gap on North Point Boulevard between the residential uses to the north, the office, education, and park uses to the south, and the future residential and open space uses to the east. The Project will also diminish the visual impact of the elevated roadway and highway ramps on surrounding residential uses in the North Point Area.

While not part of this Project, and as previously mentioned, a new DCR operations and maintenance facility will be relocated to the northwest immediately adjacent to the Project Site utilizing the $20.4 million purchase price paid by EF for the Project Site. Approximately 20,000 SF of the Project Site owned by EF will be made available for use by DCR as part of its new operations and maintenance facility through an easement.
1.1.3 Parking

Vehicle Parking

The design of the proposed parking garage in EFIII has progressed and the capacity of the garage is 115 spaces. EF considers the existing (in EFI and EFII) and proposed (in EFIII) parking a shared supply, and has conducted a parking demand analysis to demonstrate the projected parking demand based on existing and projected employee numbers and existing mode shares. Refer to Section 2.1.3 for a summary of the results of the parking demand analysis.

Bicycle Parking

The Project will also include short- and long-term bicycle parking storage areas to meet Cambridge’s bicycle parking requirements. Based on the current design, Cambridge zoning requires that up to a total of 264 long-term secured bike parking spaces and 55 short-term bike parking spaces be provided on the Project Site. See Figure 1.7 – Proposed Conditions Plan.

1.1.4 Building Design

The design team has been working closely with the City of Cambridge, and will continue to do so as the design of the Project evolves.

The Site is located in public parkland, so the building and surrounding landscaping have been designed to reflect that feeling of open space, and to provide a cohesive connection with the existing North Point Park and North Point Commons. The Project’s ground floor gym and café face those park spaces, and are designed to create active, public uses and to provide amenities that complement park usage.

The architecture is organized to express the building’s program, with glass facades that create an open feeling at the ground floor, serving to visually connect the indoor and outdoor public spaces and activities.

1.1.5 Open Space and Site Circulation

Open Space Plan

The Proponent is committing to improve and operate the entire Project Site as publicly accessible open space, excluding only the 20,000 SF easement to DCR, the use of which will be entirely within DCR’s control, along with the building footprint, and covered bicycle parking. A total of more than 60,000 SF of public open space (as defined for Chapter 91 purposes) will be provided. Current plans, which are subject to change, show a total of 70,095 SF of open space. The design and programming of such areas are described below. See Figures 1.10a-b.
Summary of Open Space Public Process

As committed to in the DEIR, EF has undertaken a transparent public process to gain insight to the open space preferences of the community. On February 2, 2017, a survey was emailed to EF’s neighbors and representatives from local stakeholder groups. The survey included a draft Site plan and invited community members to select their preference from a list of previously suggested outdoor recreational facilities. The recipients of the survey included, but were not limited to:

- Charles River Conservancy
- Charles River Watershed Association
- Charlestown Mothers Association
- Charlestown Waterfront Coalition
- East Cambridge Planning Team
- Esplanade Association
- New Charles River Basin Citizens Advisory Committee
- Regatta and Twenty/20 Residential Buildings
- Local and State Elected Officials

Between February 2nd and 16th, 2017, the survey received over 200 responses. Overwhelmingly, the most popular selection was an outdoor fitness course, followed by a yoga/tai chi patio, a 5v5 small soccer field, and a lawn. In an effort to incorporate these top four choices, the Proponent has combined the 5v5 small soccer field and lawn to create a multi-use flex field as described below. A full summary of the survey results can be found in Appendix J.

Open Space Programming

Based on the community input received during the survey process, EF is planning to use the open space on Site for a variety of recreational uses, creating a strong connection to the planned interior fitness facility on the ground floor. One of the main features will be an outdoor fitness course, with stations that create a circuit around the building. As shown in Figure 1.10a, stations will be installed near the planned multi-use path, which will invite runners, bikers and other users of the multi-use path who are traveling to and from North Point Park onto the Site through well-marked fitness course stations for an additional exercise challenge. Each equipment station will provide clear directions and adjustments to ensure that the facilities are accessible for users of all ages and abilities.

At the rear of the building the Project will provide a sports track that will accommodate active planned and spontaneous recreational activities like the 40-yard dash, exercise classes and specialty training.

In addition, EF plans to create a flex-field in the largest area of open space, closest to North Point Boulevard. The field will be large enough to accommodate a 5v5 soccer match, and field markers will be available for this use. When the field is not being used for soccer, it can accommodate planned and impromptu activities such as
yoga/Tai chi, Frisbee, and other lawn games. EF will provide a mechanism for the public to reserve the use of the field for community games and activities. This flex field will allow for a variety of activities, while also providing green space and opportunities for passive recreation.

Finally, as shown in Figure 1.10a, EF has also created a vegetated area in the western corner of the site, referred to as “West Park”, which will serve as a gateway to the site from the Gilmore Bridge. This space will include attractive seating areas, planted trees and bushes, and offer the public a quiet area for passive recreation. It will connect directly to the building’s Entry Plaza through on-site pedestrian paths.

In addition to the on-site open space described above, if acceptable to DCR, EF will enter into an agreement for the landscaping and maintenance of the approximately 30,000 SF parcel owned by DCR next to the Gilmore Bridge and Monsignor O’Brien Highway in order to convert this unused parcel into an attractive open space that may be used by local residents as well as EF students and employees as a further enhancement to the neighborhood. See Section 1.3.2 for additional information concerning this parcel.

The proposed open space improvements to be provided by the Project go far beyond the requirements of the Chapter 91 Regulations for the activation of Commonwealth Tidelands that require open space with pedestrian amenities. As described in Section 1.3.2, EF is agreeing to provide for the installation, operation, maintenance, and programming of extensive public realm improvements, including significant active recreational facilities, in perpetuity, and is also prepared to improve and maintain an additional 30,000 SF DCR parcel located off-site (the “DCR Adjacent Parcel”). The construction cost for all of these improvements has been estimated by Skanska, EF’s contractor, to be approximately $3 million dollars for the open space improvements proposed for the Project Site, and approximately an additional $1 million dollars for the landscaping of the 30,000 SF DCR Adjacent Parcel.

**Site Access and Connectivity**

The Project Site has convenient public transit access including three MBTA stations within one-half (0.5) mile: the MBTA’s Green Line stations at Lechmere and Science Park, and the MBTA Orange Line station at Community College, which facilitates opportunities to minimize vehicle trips and encourages alternative modes of travel.

The open space, pedestrian pathways and sidewalk connections to be provided as part of the Project will be designed to complete connections with the existing network of parks and pathways in the area, including creating the missing link between North Point Park and the new development on the northerly side of the Gilmore Bridge. The current Site plan has been designed to include the planned multi-use path, which will connect to the existing multi-use path along North Point Boulevard. EF is in close communication with the City of Cambridge about this path.

As noted by several stakeholders, past plans had called for a path along the north side of the Site that would connect the path along the Lynch Family Skate Park to the Brian Murphy Staircase. Most of this new path would fall outside the limits of the...
Project Site, so the Proponent cannot provide this particular connection (though the Site Plan has been designed to accommodate the path should it ever be constructed on nearby parcels). Furthermore, when walking around the site, the Proponent discovered that the most intuitive route from the Brian Murphy Staircase is in fact to continue around the Twenty/20 building and join the multi-use path along North Point Boulevard. This route proceeds through open plaza areas and broad streets, while a path on the north side of the Site would be in the shadow of the I-95 highway ramps and in close proximity to the DCR maintenance yard and MWRA pump station with little street visibility. Thus, the Proponent will focus on building the missing connection along North Point Boulevard.

**Gilmore Bridge Easement**

The Proponent has met with officials of the Massachusetts Department of Transportation (“MassDOT”) to discuss requirements for the maintenance and repair of the Gilmore Bridge as well as a potential future widening of the Gilmore Bridge to accommodate bicycle lanes and sidewalks. MassDOT currently holds two 10-foot-wide easements along the length of the Gilmore Bridge (one running underneath the Gilmore Bridge and an adjacent easement extending 10 feet from the “drip-line” of the Gilmore Bridge), as shown on Figure 1.6. The Proponent has agreed to grant MassDOT an additional 10-foot-wide easement for construction staging work related to bridge maintenance and for the potential future expansion of the bridge to accommodate additional bicycle lanes and/or sidewalk. The driveway for EFIII has been located along the Gilmore Bridge to avoid impacting areas actively used by the public when work is being done on the Bridge, and the portion of the driveway that is available for vehicles and bicycles may be narrowed during occurrences of construction related to the Gilmore Bridge.

1.1.6 **Anticipated Project Schedule**

EF is filing the FEIR in connection with its Chapter 91 Application, and plans to file the Cambridge Special Permit application shortly thereafter. Upon successful receipt of all permits, EF plans to acquire the land from the Commonwealth in the fall of 2017. At that time, EF will gain partial possession of the Site to break ground on the Project. DCR will retain partial possession of certain areas needed for continuous DCR operations during construction of the DCR replacement facility. EF expects delivery of full possession of the Site from DCR by early 2019, in order to complete construction by Spring 2019 and to begin occupancy of the building in Summer 2019. The first class of students is expected to move into the building in Summer 2019, making it critical to stay on schedule.
1.2 Regulatory Status

1.2.1 MEPA Review

The Project is subject to review pursuant to the Massachusetts Environmental Policy Act (MEPA) because the proposed development involves a land transfer from the Commonwealth, requires one or more state agency permits and exceeds review thresholds established under the MEPA implementing regulations (301 CMR 11.03). These thresholds are:

- 301 CMR 11.03 (1)(b)(3) Conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97; and
- 301 CMR 11.03 (3)(a)(5) Provided that a Chapter 91 License is required, new non-water dependent use or expansion of an existing non-water dependent structure, provided the use or structure occupies one or more acres of waterways or tidelands.

The Proponent also wishes to note that EF has been granted tax incentives by the Commonwealth for its job creation efforts through the Economic Development Incentive Program (EDIP), and this potential state action has been included in the list of Permits and Approvals in Section 1.2.5.

On December 1, 2014, the Proponent filed an Environmental Notification Form (ENF) with the MEPA Office. On January 23, 2015, the Secretary of Energy and Environmental Affairs (“EEA”) issued a Certificate on the ENF.

On December 15, 2016, the Proponent filed a Draft Environmental Impact Report (DEIR) with the MEPA Office. On January 27, 2017, the Secretary of Energy and Environmental Affairs (“EEA”) issued a Certificate on the DEIR that sets forth the scope for this Final Environmental Impact Report (FEIR). The FEIR has been prepared to address the scoping requirements set forth by the Secretary of EEA.

The replacement DCR maintenance and operations facility is a separate effort managed by DCR and DCAMM, who are responsible for its permitting.

1.2.2 Public Outreach

The Proponent has continued collaborating and providing project details since the filing and review of the DEIR. Meetings and consultation held between project team representatives and state agency representatives and/or project stakeholders since the filing of the DEIR include the following:

- 12/14/16 – East Cambridge Planning Team
- 1/9/17 – Regatta Riverview Condos
- 1/13/17 – DCR
- 1/13/17 – Esplanade Association
1.2.3 **Agency Coordination**

EF has continued to work closely with representatives of EEA, DCR and DCAMM in reaching agreement on the purchase of DCR property that is authorized by Chapter 265 of the Acts of 2014. Of utmost importance to EF throughout the negotiation process was the ability for DCR to maintain full functionality of its maintenance operations at North Point during the construction of its long-awaited permanent maintenance facility. EF has met with MassDOT, MEPA, DCR, DEP and the City of Cambridge to discuss this filing.
1.2.4 Land Transfer

Chapter 265 of the Acts of 2014

Chapter 265 of the Acts of 2014 is a special act that was adopted by the Massachusetts Legislature to authorize the sale to EF of a portion of the existing DCR maintenance and operation facility subject to certain conditions as described below. The statute authorizes DCAMM, acting in consultation with DCR and DOT, to determine what portion of the DCR facility is to be conveyed to EF and to make the conveyance to EF for a price at least equal to fair market value as determined by an independent appraisal. The statute allows DCAMM to sell the land to EF subject to the stated conditions, but does not require DCAMM to do so. A copy of Chapter 265 is attached to this FEIR as Appendix F.

The conditions set forth in Chapter 265, and EF’s compliance with these conditions, are described below:

Section 1:

- The exact location and boundaries of the portion of the DCR facility to be conveyed and the portion of the DCR facility to be public open space shall be determined by DCAMM, acting in consultation with DCR and DOT.

**Compliance:** The location and boundaries of the land to be conveyed is shown on Figure 1.6 and consists of 125,000 square feet of land. In an effort to activate the site for public use, EF has agreed that all of the land conveyed to EF that is not used for the EF building or for DCR purposes shall be open space.

- The purchase price for the land shall be equal to or greater than the full and fair market value of the interest as determined by an independent appraisal.

**Compliance:** An independent appraiser selected and hired by DCAMM has determined that the full and fair market value of the fee interest in the land to be conveyed to EF is $20.4 million, and EF has agreed to this purchase price. A summary of the appraisal is included as an appendix.

Section 2:

- As a condition of the conveyance, the Secretary of Energy and Environmental Affairs must determine that appropriate arrangements have been made for the replacement of the existing DCR operations and maintenance facility.

**Compliance:** This determination will be made by the Secretary following the completion of the MEPA process. The Secretary, DCAMM and EF will enter into an agreement that provides for the use of the $20.4 million purchase price and for the temporary and permanent easements being granted to DCR. The Secretary’s Determination will be documented in the Section 3 MOU described below.
Section 3: As further conditions of the conveyance:

- **DCAMM shall enter into an easement, deed restriction, covenant or other similar agreement enforceable by the City of Cambridge dedicating a portion of the land now comprising the DCR facility as public open space and authorizing such land to be included with the land to be conveyed to EF as a single development parcel under Cambridge zoning.**

**Compliance:** EF will enter into a Memorandum of Understanding (the “Section 3 MOU”) with DCAMM, DCR, and the Secretary of Energy and Environmental Affairs that constitutes a legally binding dedication of the public open space that will run with the land conveyed to EF and that specifically allows the City of Cambridge to enforce the dedication.

**The Section 3 MOU will include the following:**

(i) Require the Proponent to provide both a perpetual 20,000 SF easement for DCR’s maintenance facility as well as a temporary easement to facilitate construction of the new maintenance facility without an interruption in maintenance services;

(ii) Require that all portions of the Project Site not used for the building (including driveways, bicycle storage sheds and other ancillary uses) and not used by DCR in connection with the permanent maintenance facility, shall be permanently held and managed by the owner of EFIII, at its expense, for conservation and recreation purposes and used for public open space in accordance with plans approved by DEP;

(iii) Require, if acceptable to DCR, that the Proponent enter into an agreement for the landscaping and maintenance of the approximately 30,000 SF parcel owned by DCR next to the Gilmore Bridge and Monsignor O’Brien Highway in accordance with plans approved by DCR;

(iv) Provide that the entire purchase price will be utilized by the Commonwealth for environmental remediation and the construction of the maintenance facility; and

(v) Document and confirm compliance of the Project with the Commonwealth’s “no-net loss” policy through the aforementioned commitments.

The Proponent intends that the Section 3 MOU will also provide for enforcement of the public open space obligation to provide and maintain by the City of Cambridge in order to satisfy the legislative requirement for an agreement enforceable by the City dedicating a portion of the Project Site as public open space. Section 3 MOU will be executed by all parties prior to EF’s acquisition of the Project Site and will be recorded with the Middlesex South Registry of Deeds at the time the Project Site is conveyed to EF.
The land dedicated as open space shall be permanently held and managed for conservation and recreation purposes.

Compliance: Will be included in the Section 3 MOU.

EF shall negotiate a memorandum of understanding with DCR conveying land, providing funding or providing public recreational opportunities for conservation and recreation.

Compliance: Will be included in the Section 3 MOU.

Section 4:

The building constructed by EF must be initially used for office and educational purposes.

Compliance: As described in this FEIR, EF III will comply with this requirement.

Section 5:

The Inspector General must review and approve the appraisal, including the appraisal methodology utilized for the appraisal, and submit a report of its review and approval to DCAMM, the House and Senate Ways and Means Committees, and the Joint Committee on State Administration and Regulatory Oversight. EF shall pay the costs associated with the appraisal and any other cost incurred by the Commonwealth relating to the conveyance.

Compliance: The Inspector General has reviewed and approved the appraisal and submitted the required report. EF has paid for the appraisal and will pay the other costs incurred by the Commonwealth relating to the conveyance. A summary of the appraisal is included in Appendix F.

Article 97 Land Disposition Policy

Article 97 of Amendments to the Massachusetts Constitution requires special legislative action to approve any proposed disposition of or change in use of parklands. Specifically, Article 97 requires a two-thirds roll call vote of each of the Massachusetts House of Representatives and the Massachusetts Senate in order to dispose of or change the use of certain public lands taken or acquired for natural resources purposes.

While the Project Site is currently used as an operations and maintenance facility that is not open to the public, it is subject to Article 97 because all land under the custody and control of DCR is considered to be used for natural resource purposes. When Chapter 265 was adopted by the State Legislature, it was passed by both legislative branches by more than a two-thirds majority in a roll call vote.

In addition to the requirements of Article 97, the Executive Office of Energy and Environmental Affairs (“EEA”) has a long-standing administrative policy limiting the disposition of land subject to Article 97 to “exceptional circumstances.”
conditions governing a determination of “exceptional circumstances” as set forth in the DEIR Certificate, and the Project’s compliance with these conditions, are described below:

- The Proponent of the disposition must conduct an analysis of alternatives, commensurate with the type and size of the proposed disposition, that achieve the purpose of the disposition without the use of Article 97 land, such as the use of other land available within the appropriate market area.

The Project Site is the only land area within convenient walking distance of EFI and EFII to allow for the proposed expansion of EF’s business and educational programs as part of a campus setting. There is no privately owned land located on the southeast side of the Gilmore Bridge between the Monsignor O’Brien Highway and I-95 except for the Regatta condominiums and the buildings owned by EF. As described in Section 1.3.1, EF has been growing steadily at North Point (even during the “Great Recession” caused by the 2008 financial crisis) and EF’s strong desire is to continue growing in Massachusetts to the extent possible in a walkable campus environment at North Point.

EFIII has been designed to maximize EF’s growth potential while allowing DCR to meet its long term needs for a permanent operations and maintenance facility, complying with Cambridge zoning, and meeting the requirements of the Chapter 91 regulations. EF’s original proposal, as described in the ENF, was for a Project Site of 153,331 SF and a 367,000 SF building. The size of the Project Site, and therefore the size of the building, have been reduced to make more land available for the DCR permanent operations and maintenance facility. EF’s recent acquisition of 17 Monsignor O’Brien Highway will allow EF to locate approximately 250 additional workers at the North Point campus before full occupancy is reached at North Point, but does not change the need to maximize the size of EFIII for EF’s continued growth in Massachusetts.  

- The disposition of the subject parcel and its proposed use may not destroy or threaten a unique or significant resource (e.g., significant habitat, rare or unusual terrain, or areas of significant public recreation).

The Project Site does not contain any unique or significant resource.

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2 Under the express terms of the EEA Policy, the 17 Monsignor O’Brien Highway property is not a potential alternative for consideration in connection with the EFIII land disposition. The EEA Policy states that “the scope of alternatives extends to any sites that were available at the time the proponent of the Article 97 disposition first notified the controlling agency of the Article 97 land, and which can be reasonably obtained.” The 17 Monsignor O’Brien Highway property was not available at the time that EF first notified DCR of its interest in acquiring the Project Site, and did not become available until December, 2016 when Cambridge College, after refusing to waive its right to a lease renewal, allowed its renewal right to lapse. Nevertheless, EF wants to make clear that the acquisition of this small building does not diminish the need for EFIII and has included a discussion of the impact of EFIV as a potential alternative in Section 1.3.2 of this FEIR.
Real estate of equal or greater value and of significantly greater resource value is granted to the disposing agency.

In applying the "no net-loss" policy to EFIII, there are two unique aspects of the Project that are relevant to the analysis.

First, while EF is acquiring title to the 125,000 SF Project Site, all of the land outside the building footprint, and more than 75 percent of the space within the building on the ground floor, will continue to be legally dedicated to use for natural resource purposes (public recreation). The only portions of the Project Site that will not be required to be open to the public are the DCR Easement Area (which will still be used for park purposes) and less than 25 percent of the building ground floor (approximately 7,500 SF based on current plans) which will be used for elevators, building systems, a mail room, loading dock and garage ramps. EFIII is much different from a situation where 125,000 SF of DCR land is being sold for entirely private purposes, with the public forever being excluded. For the Project, EF will have control of 105,000 SF of land and more than 92.5% of the Project Site that is within EF's control will be open to the public.

Second, Chapter 265 contains special provisions concerning the application of the "no net-loss" policy to EFIII. Section 3 of Chapter 265 provides that "to ensure a no-net loss of lands for natural resource and public open space purposes" EF shall negotiate the Section 3 MOU "conveying land, providing funding or providing public recreational opportunities for conservation and recreation" and that "[i]n determining an appropriate contribution to the commonwealth to address the policy of no-net loss" DCR "shall take into account the value of any new public green space and park improvements funded and constructed by" EF.

As outlined in the Section 3 MOU described above and in connection with the conveyance of the 125,000 SF Project Site, EF is meeting the "no net-loss policy" with the following commitments:

1. An easement will be granted to DCR giving DCR the use of approximately 20,000 SF of the Project Site for its operations and maintenance facility. The easement area will remain in the care, custody and control of DCR and reduces the amount of land being removed from natural resource use by 20,000 SF;

2. EF is dedicating all of the land in the Project Site other than the building, driveway, and DCR easement as public open space (including public bike sheds) in an agreement that runs with the land and is enforceable by DCR, as well as EEA and the City of Cambridge. This land will remain entirely in natural resource use and should be treated as reducing the amount of land being removed from natural resource use by approximately 64,000 SF based on current plans;

3. EF is using most of the rest of the Project Site, approximately 34,500 additional SF based on current plans, for interior facilities of public accommodation, a sheltered building entrance and the driveway serving the building and bicycle sheds. All of these uses will be open to the public for recreational purposes;
4. The land which is being removed entirely from natural resource use in connection with the Project is currently estimated to be approximately 7,500 SF that will be used for private purposes on the building ground floor;

5. As part of the compensation for the removal of this land from natural resource use, EF will be providing funding in the amount of $20.4 million for environmental remediation and the construction of the permanent DCR operations and maintenance facility;

6. EF will also be providing public recreational improvements on the dedicated public open space within the Project Site, and the owner of EFIII will be obligated to manage and maintain these recreational facilities in perpetuity. EF designed the public recreational area in response to a community survey conducted in February 2017, and EF believes that these new uses will activate the Site significantly, fulfilling a missing link of parkland in the North Point Park area. EF believes that the funding for the permanent DCR operations and maintenance facility and the public recreational opportunities which will be created, operated and maintained by the Project are of equal or greater value, and of significantly greater resource value to DCR, than the land that is being removed from natural resource use. The Chapter 91 regulations for activation of Commonwealth Tidelands require open space with pedestrian amenities. The Project will go far beyond the Chapter 91 requirements by providing for the installation, operation, maintenance, and programming of extensive public realm improvements, including significant active recreational facilities, in perpetuity. The construction cost for these improvements is currently estimated to be approximately $3 million dollars, and the on-going maintenance costs to be paid by EF in perpetuity are estimated to be approximately $50,000 per year; and

7. If acceptable to DCR, EF will enter into an agreement for the landscaping and maintenance of the approximately 30,000 SF parcel owned by DCR next to the Gilmore Bridge and Monsignor O’Brien Highway in accordance with plans approved by DCR. The construction cost for these improvements is currently estimated to be approximately $1 million dollars, and the on-going maintenance costs, which will be paid by EF for a period of time to be agreed upon, are estimated to be approximately $20,000 per year.

The minimum necessary area of Article 97 should be included in the disposition and the existing resources continue to be protected to the maximum extent possible.

As described above, the Project Site’s land area and the Project’s floor area have been reduced in order to make more land available for the DCR permanent operations and maintenance facility. Any further reduction in the area of the Project Site will significantly diminish the amount of public open space which can be provided and result in a cramped site plan with the building located much closer to North Point Boulevard. If 10,000 SF of land was removed from the Project Site, the Project floor area would have to be reduced by 24,000 SF under Cambridge zoning regulations and the depth of the Site (from North Point Boulevard running toward the DCR Easement Area) would be reduced by more than 25 feet. The building is
currently located 29.5 feet from North Point Boulevard at its closest point and would have to be moved much closer to North Point Boulevard. Alternatively, another way of reducing the Project Site would be to move the building away from North Point Boulevard, and to move the bike sheds to the front of the building as shown on Figure 1.13.

With respect to existing resources, these will be protected and expanded. DCR’s existing resources (the temporary facility) will be upgraded and additional public recreational resources will be created and legally protected by EF.

- **The disposition serves an Article 97 purpose or another public purpose without detracting from the mission, plans, policies and mandates of EEA and its appropriate department or division.**

The disposition has been structured and the Project has been designed so that it serves the mission, plans, policies and mandates of EEA and DCR (i) by providing funding and sufficient land for the permanent DCR operations and maintenance facility and (ii) by creating active public recreational facilities that are not available in the North Point Park or elsewhere in the vicinity and that will be operated and maintained in perpetuity as part of EFIII for the benefit of the public.

- **The disposition is not contrary to the express wishes of the person(s) who donated or sold the parcel or interest to the Commonwealth.**

The Project Site consists of land acquired by the Metropolitan District Commission from the Museum of Science in 1973 and land acquired by eminent domain for the construction of the Central Artery/Tunnel (CA/T) Project. The proposed use is not contrary to any express wishes of the prior owners.

**Table 1-3 Summary of Compliance with EFIII Legislation and Article 97**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Compliance</th>
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</thead>
<tbody>
<tr>
<td><strong>EFIII Legislation</strong></td>
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<tr>
<td>As described in Section 1.2.4, the conditions set forth in Chapter 265 of the Acts of 2014, and EF’s compliance with these conditions, are summarized below.</td>
<td></td>
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<tr>
<td><strong>Section 1:</strong></td>
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<tr>
<td>› The exact location and boundaries of the portion of the DCR facility to be conveyed and the portion of the DCR facility to be public open space shall be determined by DCAMM, acting in consultation with DCR and DOT.</td>
<td>Compliance: The location and boundaries of the land to be conveyed is shown on Figure 1.6 and consists of 125,000 SF of land. In an effort to activate the Site for public use, EF has agreed that all of the land conveyed to EF that is not used for the EF building or for DCR purposes shall be open space.</td>
</tr>
<tr>
<td>› The purchase price for the land shall be equal to or greater than the full and fair market value of the interest as determined by an independent appraisal.</td>
<td>Compliance: An independent appraiser selected and hired by DCAMM has determined that the full and fair market value of the fee interest in the land to be conveyed to EF is $20.4 million, and EF has agreed to this purchase price. A summary of the appraisal is included in Appendix F.</td>
</tr>
</tbody>
</table>
## Condition 2:

- As a condition of the conveyance, the Secretary of Energy and Environmental Affairs must determine that appropriate arrangements have been made for the replacement of the existing DCR operations and maintenance facility.

  **Compliance:** The Secretary, DCAMM and EF will enter into an agreement that provides for the use of the $20.4 million purchase price and for the temporary and permanent easements being granted to DCR.

## Section 3:

- DCAMM shall enter into an easement, deed restriction, covenant or other similar agreement enforceable by the City of Cambridge dedicating a portion of the land comprising the DCR facility as public open space and authorizing such land to be included with the land to be conveyed to EF as a single development parcel under Cambridge zoning.

  **Compliance:** EF will enter into the Section 3 MOU with DCAMM, DCR, and the Secretary of Energy and Environmental Affairs that constitutes a legally binding dedication of the public open space that will run with the land conveyed to EF and that specifically allows the City of Cambridge to enforce the dedication. The Section 3 MOU is described in Section 1.2.4.

- The land dedicated as open space shall be permanently held and managed for conservation and recreation purposes.

  **Compliance:** Will be included in the Section 3 MOU. EF is committing to make extensive improvements to the open space that exceeds the requirements of Chapter 91 and will include significant active recreational facilities as described in Section 1.4.2.

- EF shall negotiate a memorandum of understanding with DCR conveying land, providing funding or providing public recreational opportunities for conservation and recreation.

  **Compliance:** All of EF's commitments under the No Net Loss policy, described below, will be included in the Section 3 MOU.

## Section 4:

- The building constructed by EF must be initially used for office and educational purposes.

  **Compliance:** As described in this FEIR, EF III will comply with this requirement.

## Section 5:

- The Inspector General must review and approve the appraisal, including the appraisal methodology utilized for the appraisal, and submit a report of its review and approval to DCAMM, the House and Senate Ways and Means Committees, and the Joint Committee on State Administration and Regulatory Oversight. EF shall pay the costs associated with the appraisal and any other cost incurred by the Commonwealth relating to the conveyance.

  **Compliance:** The Inspector General has reviewed and approved the appraisal and submitted the required report. EF has paid for the appraisal and will pay the other costs incurred by the Commonwealth relating to the conveyance. A summary of the appraisal is attached in Appendix F.

## Article 97 No Net Loss Policy

The Project is consistent with the EOEEA Article 97 Land Disposition Policy (the “EEA Policy”) goal of “no net loss” of Article 97 land by satisfying the following conditions defined in the Section 3 MOU:

- Provide that the entire purchase price will be utilized by the Commonwealth for environmental remediation and the construction of the maintenance facility, and

  **Compliance:** The Project will allocate the approximately $20.4 million land purchase price to DCR for environmental cleanup and the construction of a new permanent maintenance facility.
1.2.5 Anticipated Permits and Approvals

As listed below, the Project requires permits and approvals from state and local agencies.

Table 1-4 Anticipated Permits and Approvals

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>PERMIT/APPROVAL</th>
</tr>
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<tbody>
<tr>
<td><strong>Federal</strong></td>
<td></td>
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<tr>
<td>Environmental Protection Agency (EPA)</td>
<td>National Pollutant Discharge Elimination System (NPDES) Construction Activities</td>
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<tr>
<td></td>
<td>Permit</td>
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<td></td>
<td>Federal Aviation Administration (FAA)</td>
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<td><strong>Commonwealth of Massachusetts</strong></td>
<td></td>
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<tr>
<td>Department of Conservation and Recreation (DCR)/Department of Capital Asset Management and Maintenance (DCAMM)</td>
<td>Property Transfer</td>
</tr>
<tr>
<td>DCR</td>
<td>Construction Access Permit</td>
</tr>
</tbody>
</table>
1.3 **EF and Economic Development**

In the context of this project, it is important to also understand the value of EF’s economic development here in the Commonwealth.

1.3.1 **EF Growth at North Point**

When EF broke ground on EF I in 1997, the company served as a catalyst for economic development at North Point. Over the last 20 years, EF has invested significantly in public infrastructure improvements in the North Point neighborhood (parkland, roads, water/sewer infrastructure, and multi-use pathways). EF has
worked closely with the Commonwealth and the City of Cambridge to help develop the North Point neighborhood along the Charles River from a trash transfer facility, warehouses and a federal distillery building to a vibrant, beautiful location for residential buildings and an office and education campus.

In 2012, EF broke ground on Two Education Circle — an approximately 295,000 square foot, 10-story new North American Headquarters (EF II) on the banks of the Charles River. As the North American Headquarters, EF II now serves as EF’s primary base for its United States business units, and EF I is now used by the Hult International Business School.

Since pioneering at North Point, EF has created close to 1,200 permanent jobs in education, technology, research and sales, and plans to create at least 300 new jobs through the EFlII project. There are also significant spin off economic benefits, as EF estimates booking 15,000 flights in and out of Logan Airport for employees, not to mention the tens of thousands of students and visitors who come to EF in Massachusetts for education and tourism purposes. EF generates more than $4 million annually in State income tax revenue, as well as more than $3 million annually in local real estate property tax revenue, even though some of EF’s schools have non-profit status. The expansion of EF and its EF North Point Campus, through this project, will only enhance these economic investments and benefits.

As detailed in Section 1.3.2 below, EF has also recently acquired an additional approximately 25,000 SF building at North Point, which it plans to renovate and use as part of the Hult International Business School. Following completion of this renovation (which will not expand the gross floor area of the building) and the completion of construction of EFlII, EF has no further plans for expansion in the North Point area (whether through acquisition of land or buildings from either private parties or the Commonwealth) within at least the next five years.

1.3.2 17 Monsignor O’Brien Highway

Since the filing of the DEIR, EF has acquired the 17 Monsignor O’Brien Highway (EFIV) building, an approximately 24,000 SF building located at the corner of Museum Way and Monsignor O’Brien Highway, which is currently occupied by the Cambridge College School of Management (“Cambridge College”). EFIV is an existing four-story building containing approximately 24,000 square feet of gross floor area, which is currently being used by Cambridge College as a combination of classroom and education-related office space. EFIV has 22 surface parking spaces. The lot on which EFIV is located contains approximately 17,400 SF of land area.

EF has been interested in acquiring 17 O’Brien Highway for many years and has been in discussion with its owners regarding a potential acquisition at different points over the past 15 years. In December 2016, EF learned that Cambridge College would not be renewing its lease, and moved forward quickly to acquire the building on January 6, 2017. EF will use the EFIV building for the Hult International Business School academic uses that were previously to be located in EFlII. By adding EFIV to its campus and using it for the Hult International Business School, EF will be able to
use approximately 23,300 SF space in EFIII for an expansion of its business operations that was previously planned to occur within the existing EFII building. In the DEIR, this space in EFIII was planned primarily for classroom uses. The acquisition of EFIV will allow EF to accommodate more employees in the new EFIII building.

EF notified MEPA of this acquisition in February and provided the memorandum attached as Appendix I summarizing the minimal anticipated environmental impacts associated with the renovation and re-use of EFIV as classroom and administrative space for Hult. As outlined in Appendix I, this FEIR reflects any changes to the Project resulting from the acquisition of EFIV.

EFIV is subject to the same underlying zoning as EF’s existing buildings at North Point as well as the Project Site. However, due to the size of the lot and other characteristics, as well as the fact that EFIV was constructed prior to the existing zoning in Cambridge, it is considered a pre-existing nonconforming structure for purposes of the Cambridge Zoning Ordinance. Under current as-of-right zoning, a new building on the EFIV lot is limited to a height of 40 feet and a floor area of 17,400 SF. A larger building would be permitted with a special permit under applicable PUD zoning, but only for a development parcel of at least 100,000 SF which is far larger than the EFIV lot.

Major changes to EFIV or development of a new building on the property is not possible under the applicable zoning. As such, EF’s plans are to renovate the interior of the building and use it for generally the same purpose at it is currently used by Cambridge College. Specifically, EF will utilize EFIV as classroom and administrative space for the Hult International School of Business.

Environmental Impacts of EFIV Renovation.

EF does not anticipate any required state permits or agency action that would trigger MEPA review of the interior renovation of this approximately 24,000 square foot building. EFIV is subject to an existing Chapter 91 license (License No. 2476) included with Appendix I, and EF intends to fully comply with the applicable terms of this license. While EFIV has been used for many years by Cambridge College for classrooms, the existing license identifies the permitted use as offices. If deemed necessary by DEP, EF will seek a minor modification or amendment to this license to clarify that the building may be used for educational purposes in addition to office uses. (EFI was originally licensed as an office building, and the permitted use for EFI was subsequently revised by a minor modification to also allow educational uses.)

As outlined in Appendix I, the renovation and re-use of EFIV by EF for generally the same purpose as it is currently used by Cambridge College is anticipated to have minimal impacts in terms of transportation, infrastructure and greenhouse gas emissions.

DCR Adjacent Parcel.

EFIV is located adjacent to an approximately 30,000 SF parcel of land owned by DCR as shown on Figure 1.14a. The DCR Adjacent Parcel is encumbered by the elevated Green Line viaduct and easements related to the Gilmore Bridge. There is a billboard
located on the property, but it is otherwise unimproved and the Proponent understands that budget constraints have prevented DCR from landscaping and maintaining this property. EF has no current plans to acquire the DCR Adjacent Parcel given that this would require legislative action. Furthermore, even with the addition of the DCR Adjacent Parcel to the EFIV site, the combined parcel would only contain approximately 49,000 SF, which is still far below the minimum 100,000 SF Development Parcel required for any significant development under the applicable zoning (with no other adjacent land available).

Although it has no plans to acquire the DCR Adjacent Parcel, EF understands that there is a strong desire in the community, particularly among area residents, to see this parcel cleaned up and landscaped. If acceptable to DCR and as an additional Project benefit, EF would be willing to landscape the DCR Adjacent Parcel and to maintain it for a period to be determined. A potential landscaping design for the DCR Adjacent Parcel is shown on Figure 1.14b; the final plans would be subject to DCR approval. As envisioned, the parcel would be accessed from a portal entry on Monsignor O’Brien Highway under the MBTA viaduct. The construction cost for these improvements is currently estimated to be approximately $1 million dollars, and the on-going maintenance costs are estimated to be approximately $20,000 per year.

**Impacts of EFIV on Alternatives Analysis.**

Given the small size of EFIV and the lack of development potential, it will not significantly impact the alternatives analysis for the Project as presented in the DEIR and its impact on the Project itself is represented in the minimal Project changes presented in this FEIR. Specifically:

› The acquisition of EFIV will not permit EF to avoid the purchase of the Project Site from the Commonwealth for the construction of EFIII. As described above, major changes to EFIV or development of a new building on the property are not possible under the applicable zoning. EFIV is much smaller than the 300,000 SF that will be included in EFIII and is not capable of accommodating student residential uses without major changes that could negatively impact zoning compliance.

› Even if EF were to acquire the DCR Adjacent Parcel, as described above, the combined parcel would only contain approximately 49,000 SF, which is still far below the minimum 100,000 SF Development Parcel required for any significant development under the applicable zoning (with no other adjacent land available) or the 125,000 SF required for a building the size of EFIII.

› If EF opted to reduce the size of EFIII by approximately 24,000 SF (simply relocating uses to EFIV and reducing the size of EFIII), then the overall Project benefits would be significantly reduced and EF’s ability to continue additional growth and job creation at North Point would be curtailed. In particular, although the parcel to be acquired by EF from the Commonwealth would be reduced by approximately 10,000 SF no longer required for FAR purposes, there would be a corresponding reduction in the
purchase price paid to the Commonwealth of approximately $2 million as well as a reduction in public open space provided on the EF site (since the Building’s floorplate size is dictated by the residential use and would therefore be unlikely to change). It is EF’s understanding that this reduction in purchase price would likely make DCR’s construction of a new maintenance facility infeasible, which would negate the entire Project.

The acquisition of EFIV represents an increase in the total projected gross floor area of EF’s North Point campus of less than three (3) percent (together, EFI, EFII and the proposed EFIII contain approximately 836,000 square feet of gross floor area). As reflected in the updated EFIII program, the ability to relocate some of the classroom and administrative space originally planned for EFIII to EFIV will enable EF to accommodate an additional approximately 250 employees at its North Point campus as part of its expected future growth. In connection with the development of EFIII, the Proponent has committed to the Commonwealth that EF will be creating an additional 300 jobs at North Point. The EFIV acquisition was made to give EF control over the last remaining property at North Point that can be integrated into an easily walkable campus. With the acquisition of EFIV, EF is very pleased to have some additional “running room” for the continued expansion of its academic programs and business operations in Massachusetts.

1.3.3 Economic Development Incentives

Due to EF’s global presence, EF can expand anywhere in the world. In Spring 2016, when it became known that the EFIII Project would be one year behind its target opening of Fall 2018, EF’s owners began looking for expansion options outside of Massachusetts.

EF has a strong network of existing schools in California, which led EF to consider acquiring a 400,000 SF campus in San Jose. This acquisition would have replaced the need for a third building at North Point. EF’s executives held successful meetings with the City of San Jose and signed a Purchase and Sale Agreement.

However, after in-depth discussions with the Baker Administration, it was determined that the pursuit of job creation tax credits under the Economic Development Incentive Program (EDIP) would make the business plan for the EFIII Project to compare favorably with the San Jose opportunity and allow EF to continue to grow here in Massachusetts.

With plans to create at least 300 new permanent jobs, retain EF’s existing 1200 jobs, and invest more than 130 million dollars into the EF expansion at North Point, EF applied to EDIP in July 2016.

After completing the Massachusetts Office of Business Development’s EDIP application process and committing to the creation of at least 300 new jobs, EF was granted a $6 million tax credit incentive by the Economic Assistance Coordinating Council on March 22, 2017.
1.4 Summary of Key Findings and Project Benefits

The following sections summarize the key findings of analyses contained in the FEIR and benefits of the Project in the following categories:

› Permanent DCR Maintenance and Operations Facility;
› Open Space and Chapter 91 Public Tidelands Benefits
› Transportation;
› Sustainability/Climate Resiliency; and
› Reduced Greenhouse Gas Emissions.

1.4.1 Permanent DCR Maintenance and Operations Facility

As described in Section 1.2.4, the Project will provide $20.4 million for environmental clean-up and construction of a new DCR maintenance and operations facility. EF will also provide an additional 20,000 SF of the Project Site for use by DCR in connection with the maintenance facility through a permanent easement. See Figure 1.11.

1.4.2 Open Space and Chapter 91 Public Tidelands Benefits

The Project will result in a net improvement in the public interests in tidelands, replacing the current DCR Operations and Maintenance Facility which has public access restrictions, with a Site that is open to public access and recreation. Key benefits of the Project relative to tidelands are summarized below.

› The Project provides public benefits and is protective of the Public Trust rights inherent in filled Commonwealth tidelands by encouraging public access to filled tidelands presently closed to public access. Excluding the DCR Easement Area, more than 92.5% of the Project Site that is within EF’s control will be open to the public;
› The Project will provide a minimum of 75 percent of ground floor uses as facilities of public accommodation including a gym and fitness center, public bike room, and a lobby/gathering space with fitness related retail;
› A total of more than 60,000 SF of public open space (as defined for Chapter 91 purposes) will be provided. Current plans, which are subject to change, show a total of 70,095 SF of open space. The open space will be programmed to include active recreational uses, including an outdoor fitness course, outdoor yoga, a sports track and a flex field that can be used for soccer and other active and passive recreational opportunities;
› In addition to the on-site open space described above, if acceptable to DCR, EF will enter into an agreement for the landscaping and maintenance of the approximately 30,000 SF parcel owned by DCR next to the Gilmore Bridge and Monsignor O’Brien Highway in order to convert this unused parcel into an attractive open space that may be enjoyed by local residents as well as EF students and employees as a further enhancement to the neighborhood. The location of the DCR Adjacent Parcel and a potential landscaping design
are shown on Figures 1.14a and 1.14b. The construction cost for these improvements has been estimated by Skanska, EF’s contractor, to be approximately $1 million dollars. The annual maintenance cost is expected to be approximately $20,000 per year.

› The proposed open space improvements to be provided on the Project Site exceed the requirements of the Chapter 91 Regulations for the activation of Commonwealth Tidelands that require on-site open areas with pedestrian amenities. EF is agreeing to provide for the installation, operation, maintenance, and programming of extensive public realm improvements, including significant active recreational facilities, in perpetuity. The construction cost for these improvements has been estimated by Skanska, EF’s contractor, to be approximately $3 million dollars. The annual maintenance cost is expected to be approximately $50,000 per year.

› New pedestrian pathways and sidewalk connections will be designed to complete connections with the existing network of parks and pathways in the area, including creating the missing link of the multi-use path that will connect North Point Park and the new development and open space on the northerly side of the Gilmore Bridge; and

› The Project complies with the open space, building height and setback requirements established by the Chapter 91 regulations. No adverse impacts to tidelands are anticipated.

1.4.3 Transportation

Pedestrians – The Project will improve the pedestrian environment significantly through the development of the new pedestrian pathways and sidewalk connections and the creation of new open space.

Bicycle Accommodations and Parking – The Project will incorporate bicycle accommodations in compliance with the City of Cambridge guidelines to encourage cycling as a strong transportation mode.

Transportation Demand Management Program – The Project will implement a robust program of TDM strategies to take full advantage of its proximity to multiple mobility options and to reduce vehicles traveling to the Project Site.

1.4.4 Sustainability

Sustainable and high-performance building strategies are at the core of the design for the Project. The list below outlines many of those opportunities, which may shift as the building systems and design evolve through construction documents and into construction.

Transit-Oriented Development - The Project is located on a Site adjacent to the current EF buildings, in an area well served by existing infrastructure and transit. The Project Site has convenient public transit access including three MBTA stations within one-half (0.5) mile: The Green Line stations at Lechmere and Science Park, and
the MBTA Orange Line station at Community College. The Project Site is located adjacent to the route for the proposed multi-use bicycle and pedestrian path along North Point Boulevard that will connect North Point Park and the North Bank Bridge with East Cambridge, Somerville and other communities. Parking capacity will be below the zoning maximum, and bicycle usage will be encouraged through the inclusion of exterior bicycle racks, outdoor secure bicycle lockers and indoor bicycle storage, and shower/changing rooms.

**LEED Certification** – The Project is working to constructing a sustainable building that will be LEED Silver certifiable with points likely beyond LEED Silver in an effort to make improvements that create steps towards LEED Gold.

**Resource Conservation** –

- Water efficient landscape using strategies for irrigation efficiency and rainwater harvesting system.
- Indoor potable water consumption will be reduced through the selection of low-flow and high-efficiency plumbing fixtures that include low-flow lavatory faucets and shower heads.
- The Project will implement advanced water conservation techniques such as a rainwater harvesting system to use for landscape irrigation, high efficiency HVAC systems requiring low makeup water and water-saving water closets. These techniques will reduce the water demands by at least 20 percent over the baseline, and are currently estimated to reduce demand by 30-40 percent for the Project.
- High-efficiency HVAC equipment, daylight dimming controls, and high-performance building envelope design are anticipated to contribute substantially to energy savings. Together, these mitigation measures are expected to provide a 21.8 percent energy savings and 15.7 percent GHG emissions savings over the baseline condition.

**Renewable Energy** – The Proponent has investigated the feasibility of clean and renewable energy sources, including photovoltaic panels, wind turbines, steam, solar thermal and a cogeneration system. A feasibility review of these renewable energy sources has shown that CHP is the most likely source of renewable energy to possibly be implemented at the Site and, if installed, would provide far greater energy savings than other potential renewable energy sources. The Proponent is strongly committed to continuing to investigate the potential to reduce the payback period and incorporate CHP into the building. The building will be constructed “CHP ready” with the appropriate structural support and electrical connections to not preclude the installation of CHP system.

**Improved Wellness** – Through a variety of design strategies, the Project will promote health and wellness, assist in improving indoor air quality, and reduce the urban heat island effect.

- The Project will provide improved pedestrian facilities, a fitness center and bicycle accommodations to support healthy alternate modes of transport.
The public open space at the Project Site will include landscaped areas containing pedestrian walkways and a publicly accessible outdoor patio, as well as active recreational uses, including an outdoor fitness course, outdoor yoga, and a flex field that can be used for soccer and other active and passive recreational opportunities.

**Climate Resilience** – The building finish floor elevation will be designed above the predicted 2070 flooding elevation at +23.8 CCB, which is well above the FEMA 100- and 500-year flood elevations. The Project will integrate strategies that reduce vulnerability to future climate change impacts related to flooding, severe precipitation and extreme heat.

**Stormwater Management** –

- The Project will result in an approximately 42 percent reduction in impervious area through the creation of new, publicly accessible open space. (See Figure 1.12)
- The Project will implement Best Management Practices ("BMPs") to improve water quality, reduce runoff volumes, and reduce peak discharge rates of runoff in comparison to pre-development conditions.
- The Project’s BMPs will achieve a 65 percent reduction in total phosphorus (TP) load from the stormwater effluent.
- The stormwater management system will be designed to comply with the Massachusetts Department of Environmental Protection (DEP) Stormwater Management Policy and Standards as a redevelopment project as it will promote the infiltration of greater than 1-inch of runoff.

### 1.4.5 Reduced Greenhouse Gas Emissions

A Greenhouse Gas (GHG) assessment for the Project was prepared in accordance with the EEA MEPA Greenhouse Gas Policy and Protocol (the “Policy”). The Greenhouse Gas analysis evaluated the change in CO\(_2\) emissions from Project-related traffic and proposed building sources for the Build Condition with State Building Code (Base Code) and Build Condition with Stretch Code (Design with Improvements). For the Base Code Condition, the CO\(_2\) emissions from stationary sources are estimated to be 1,268.4 tons per year. This condition assumes that the Project has been constructed per the Massachusetts Building Code (8\(^{th}\) Edition, amended January 2017). With the building design and system improvements of the Project that are proposed (to meet the Stretch Code), the direct and indirect stationary source CO\(_2\) emissions for the Project are estimated to be reduced by approximately 199 tons per year (15.7 percent reduction). These improvements are consistent with the requirements of the Massachusetts Stretch Code.

Through the implementation of a comprehensive strategy including responsive mitigative design and operational commitments, the Project will achieve reductions in GHG consistent with the Policy that result in the following key benefits:
Exceeding compliance with the Stretch Code, such that the Project achieves a 21.8 percent overall reduction in annual energy use. Additionally, achieving an estimated overall 15.7 percent reduction in stationary source GHG emissions by reducing energy consumption and implementation of energy optimizing systems. The percent reductions are the difference between the Base Code and the mitigation measures developed as part of the Stretch Code. The Base Code represents the Massachusetts Building Code-compliant baseline (based on the Massachusetts Building Code 8th Edition (780 CMR 13.00) which has been amended to adopt and integrate ASHRAE 90.1-2013. The City of Cambridge has been designated a Green Community consistent with the Green Communities Act and, as a condition of this designation, adopted the Stretch Code and is based on the methodology as defined in ASHRAE 90.1-2013 Appendix G.

Achieving an overall two (2) percent reduction in mobile source GHG emissions by reducing single occupant vehicle trips and improving the regional transportation system. The two (2) percent reduction is the savings achieved by implementing the traffic mitigation measures as well as the TDM program.

Identifying measures specifically developed to achieve the targeted GHG emissions reductions while providing sufficient options in final design implementation for future users.

These measures provide environmental benefits ranging from the preservation of natural resources and water conservation to the diversion of construction waste from landfills and improved indoor environmental quality for building occupants.
EF Education First III
Cambridge, Massachusetts

PREPARED FOR

/Education First (EF)

PREPARED BY

vhb
99 High Street
Boston, MA 02110
617.728.7777

May 11, 2017

UNDER THE DIRECTION OF

Meghan Houdlette, P.E.
Massachusetts Registration No. 48991
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Introduction & Project Overview

On behalf of EFEKTA Group, Inc. (“EF”, the “Proponent”) VHB has conducted a Transportation Impact Study (TIS) for the proposed construction of a new approximately 300,000 SF mixed-use building in Cambridge, Massachusetts (242,600 SF when vehicle parking area is excluded). The TIS responds to the scope dated February 8, 2017 defined by the City of Cambridge Traffic, Parking and Transportation (TP&T) Department in response to VHB’s Request for Scoping dated December 27, 2016. A copy of the City’s scoping letter is included in the Appendix. The TIS has been prepared in conformance with the current City of Cambridge Guidelines for Transportation Impact Study required under the Article 19 Special Permit Project Review. This document is comprised of three components, as follows:

- Introduction and Project Overview, describing the framework in which the transportation component of this Project was evaluated;
- Transportation Impact Study, presenting the technical information and analysis results as required under the guidelines; and,
- Planning Board Special Permit Criteria, summarizing the evaluation of the proposed Project as defined under the guidelines.

The required TIS Summary Sheets and Planning Board Criteria Performance Summary are included. Supplementary data and analysis worksheets are provided in a Technical Appendix. Electronic files for Automatic Traffic Recorder (ATR) counts, Turning Movement Counts (TMC), and Synchro analyses are included on an accompanying CD.

Project Overview

The Project includes the construction of 300,000 SF of mixed-use, supported by approximately 110 parking spaces as described below and illustrated in the relevant figures.

- Figure A presents a site location map
- Figure B presents an aerial view of the neighborhood and its context
- Figure C presents the existing zoning district
Figure D presents the existing site plan
Figure E.1 presents the proposed building site plan
Figure E.2 presents the proposed loading and service area
Figure F.1-F.4 presents the proposed bicycle parking layouts
Figure G presents the TIS study area

As shown in Figures A and B, the Project site is located in the eastern portion of the City of Cambridge. The approximately 2.87-acre Project Site is bounded to the northwest by the John F. Gilmore Bridge; to the northeast by the overhead access ramps for the I-93/Route 1 interchange; to the southeast by an MWRA sewage pumping facility, and to the southwest by North Point Boulevard.

As shown in Figure D, the Project Site is currently used as a temporary DCR maintenance and operations facility. The DCR facility has been at this location since 1993, and the construction of a permanent facility is a long-maintained goal of DCR. The existing facility consists largely of impervious asphalt cover, on top of which are three temporary office trailers and four storage/garage sheds, all of which are rented by DCR from a private contractor. The Site contains approximately 47 designated parking spaces, and additional unmarked parking areas. It also contains a road salt enclosure. The Project Site has an existing curb cut on North Point Boulevard which is currently closed off for access. Vehicles access the Site from a roadway under the highway ramps that connects to the adjacent DCR maintenance parking area and access road. The Project Site currently consists of mostly impervious area.

The Project will be the third EF building in the East Cambridge location. The initial building, EFI, containing 159,000 SF of office and education use, was first occupied in 1996. EFII, which contains 230,000 SF of office and education use as well as ground floor restaurant, opened in October of 2014. Parking for these two existing buildings is provided above grade totaling 136 spaces and 122 spaces, respectively, resulting in a parking ratio of approximately 0.66 spaces per thousand square feet. EF also recently purchased the 17 Monsignor O’Brien Highway building, which was most recently used as educational space for Cambridge College. It will undergo interior renovations starting in fall 2017 and be open for use in fall 2018. This building is being referred to as EFIV.

The proposed EFIII building will most likely be used by Hult International Business School, which currently leases 94,947 SF in the EFI building. The proposed EFIII Project will contain 300,000 SF of additional development, inclusive of two levels of above grade parking. The Project consists of up to approximately 161,343 SF of student residential uses (500 beds), 22,754 SF of office, 28,429 SF of educational space (including a student cafeteria) and 12,042 SF of ground floor retail comprised of a fitness center. The parking garage is anticipated to contain approximately 110 spaces.
The approved MEPA Draft Environmental Impact Report (DEIR) analysis contemplated slightly more educational use and less student housing. EF is now planning to use the already functional classrooms in 17 Monsignor O’Brien Highway (EFIV) rather than constructing classroom space in EFiII as proposed in the DEIR. This will allow for 500 students to live on campus, resulting in less external trips and more internal walk trips within the campus. Table A summarizes the proposed building program by land use.

### Table A Total Proposed Development Program by Land Use

| Land Use                        | Square Footage
<table>
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<tr>
<td>Residential Dormitories/Apartments</td>
<td>161,343 SF^2</td>
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<tr>
<td>General Academic Uses/Cafeteria</td>
<td>28,429 SF</td>
</tr>
<tr>
<td>General Office Uses</td>
<td>22,754 SF</td>
</tr>
<tr>
<td>Ground Floor - Fitness Center</td>
<td>12,042 SF</td>
</tr>
<tr>
<td>Vehicle Parking/Loading/MEP</td>
<td>75,432 SF</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300,000 SF</strong></td>
</tr>
<tr>
<td>Vehicle Parking</td>
<td>110 spaces</td>
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</tbody>
</table>

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1 Floor areas and building height measurements are in accordance with the definition of Gross Floor Area in the Cambridge Zoning Ordinance.

2 Assumes approximately 278 units and 500 beds

The TIS study area for the proposed Project, as defined by the City of Cambridge, is shown in Figure G.
Figure A
Site Location Map

Source: 2001 MassGIS USGS Digital Raster Quadrangle, Boston, Massachusetts

EF Education First III TIS
Cambridge, Massachusetts
Figure B
Neighborhood Context

EF Education First III TIS
Cambridge, Massachusetts
Overlay District Details
Planned Unit Development (PUD) Districts
Cambridge, Massachusetts

Source: City of Cambridge

Figure C
Existing Zoning

EF Education First III TIS Cambridge, Massachusetts