

# Conservatory Lab Charter School

395 Columbia Road, Boston, MA 02125



Application for Article 80 Small Project Review  
August 31, 2017

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## 1. Executive Summary

### Proposed Project Summary Information

Proponent	Conservatory Lab Charter School Foundation, Inc.
Site Address	395-409 Columbia Road, Dorchester
Parcel ID	1502976000; 1502975000
Zoning District	Dorchester Neighborhood, 2F-6000
Project Square Footage	Approximately 43,500
Estimated Project Cost	\$25 million

The Conservatory Lab Charter School (Conservatory Lab) has secured the purchase rights and plans to construct a new school building at 395-409 Columbia Road in Uphams Corner in Dorchester. This site would become the permanent location for its Elementary and Upper School (approximately 275 students in grades 3-8). The current location of the Upper School is at 2120 Dorchester Avenue in leased space. Conservatory Lab currently owns and operates its Primary School (grades K-2) at 131-133 Hancock Street in Dorchester, less than a half mile from the proposed Upper School site. The Proposed Project will include demolition of existing structures and the construction of an approximately 43,500 square-foot school three story building. The project schedule targets construction completion in time for school occupancy in August of 2019. Key milestones to achieve that objective are as follows:

File permitting submissions for Article 80	August 31, 2017
Acquire Property, Receive Building Permit and Commence Construction	April, 2018
Complete Construction and Commence Building Occupancy	July, 2017

Total Project Cost budget is approximately \$25 million, including land acquisition, construction cost, and soft costs. Financing for the project will come from a combination of tax-exempt bond debt, junior taxable loan and capital campaign equity.

## 2. Proponent Information

Conservatory Lab Charter School (CLCS) is a tuition free Commonwealth charter school whose mission is to empower a diverse range of children as scholars, artists, and leaders through a unique and rigorous academic

and music education. CLCS enriches the larger community through performance, service, and collaboration. As a laboratory school, CLCS develops and disseminates innovative educational approaches that will positively impact children in other schools and programs.

At the core of Conservatory Lab’s pioneering curriculum is the hybrid of two proven and exemplary programs: El Sistema and Expeditionary Learning. Both programs emphasize the experience of breaking through barriers in the pursuit of excellence – creating a culture and habit of perseverance. Taken together, these two programs motivate and nurture its students to become dedicated scholars, compassionate leaders, and skilled musicians.

Founded in 1999 by Rhoda Bernard, Lyle Davidson, Larry Scripp, and Mary Street, Conservatory Lab Charter School opened its doors with a mission to shape lives through a music-rich education. The School promised to “provide an opportunity for inner city school children to achieve the highest standards of academic achievement in the context of continuous and comprehensive study of music.” At the heart of Conservatory Lab’s unique mission lies the belief that every child has the ability to strive for and achieve excellence, to contribute to the broader community, and to learn to experience and express music deeply. Sixteen years later, the school has evolved into a pioneer Boston public charter school with an innovative model and curriculum that schools across the nation seek to learn from and replicate.

Over the next decade, the school’s academic and music programs underwent a dramatic shift that resulted in a surge in students’ academic performance, creative output, and musical skills. In 2009, Conservatory Lab became an Expeditionary Learning School and, through intensive professional development and coaching, began to develop new interdisciplinary curriculum designs and child-centered instructional practices that engage students in experiential and inquiry-based learning and stimulates deep and complex thinking across content areas.

The following year, Conservatory Lab extended the length of the school day and became the first elementary school in the United States to fully integrate the El Sistema music program. Founded in 1975 in Venezuela, El Sistema was designed to effect social change and nurture promising futures for underserved communities through intensive, ensemble-based music education. El Sistema at Conservatory Lab believes that the pursuit of musical excellence teaches students to strive for quality in *all* areas of their lives. The orchestra serves as a model society that emphasizes cooperation and collaboration over competition. The El Sistema program provides two hours of daily music instruction by talented and professionally trained resident artists, Conservatory Lab’s students’ musical skills have risen to astonishing levels of precision and musical complexity. Conservatory Lab’s orchestras and ensembles are in high demand to perform masterworks alongside

professional ensembles at large iconic venues, as well as to perform at high profile cultural events and activities throughout Boston.

The combination of Expeditionary Learning and El Sistema has been a dynamic force in the development of Conservatory Lab. Both programs foster the development of a growth mindset and share an emphasis on inquiry-based, goal-oriented learning, as well as engaging students through creative expression and intentional collaborations with peers and adult experts. The model works. Since 2009, Conservatory Lab's students' academic performances on state standardized tests steadily increased until the School earned the highest Level One ranking in 2012.

In response to the success of its model, the Massachusetts Department of Elementary and Secondary Education approved an increase in Conservatory Lab's enrollment in March 2013. Over the past three years, the School has grown from a student body of 169, to 444 students in two locations in Dorchester – its Primary School at 131-133 Hancock Street which serves K1, K2, 1<sup>st</sup> and 2<sup>nd</sup> Grade students and its Elementary and Upper School at 2120 Dorchester Avenue which serves 3<sup>rd</sup> through 8<sup>th</sup> grade students.

This rapid growth has enabled Conservatory Lab to offer an equitable educational opportunity to a larger and more diverse urban population, all lottery-chosen, and to expand the impact of Conservatory Lab's innovative model. In addition, doubling the number of classes at each grade level has enhanced opportunities for collaboration amongst our faculty, and enabled the addition of a middle school, offering elementary students a bridge to continue their music education.

Conservatory Lab's new site at 395 Columbia Road would replace its location at 2120 Dorchester Avenue (which is leased space) and serve as a permanent home for its Elementary and Upper School (grades 3-8). The site at 395 Columbia Road is appealing largely due to its proximity to Conservatory Lab's other permanent site at 131-133 Hancock Street (less than half a mile away). Over 30% of Conservatory Lab's students live in the Dorchester neighborhood.

Further information can be found about Conservatory Lab Charter School at its website,

[www.conservatorylab.org](http://www.conservatorylab.org) .

**3. Development Team**

Proponent: Conservatory Lab Charter School Foundation, Inc.  
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#### **4. Project Site and Zoning**

The project site consists of two parcels of land totaling approximately 1.27-acres at 395-409 Columbia Road in the Dorchester neighborhood of Boston. The site is bounded by the Uphams Corner Health Center to the north, Columbia Road to the west, residential properties and the Quincy Stanley playground to the east, and Quincy Street to the south. The site is currently occupied by single story light industrial buildings and paved parking lot and equipment storage. The site is currently occupied by Chapman Waterproofing Company and is owned by Packard Family Realty LLC. The Proposed Project will complement the rich mix of uses along the Columbia Road corridor and serve as a vibrant cultural anchor at the corner of Columbia and Quincy Streets.

Current Zoning

The Project Site is located in the Dorchester Neighborhood District and the Two-Family Residential Zoning Subdistrict, with no overlay Districts. The table below describes the dimensional zoning requirements for the sub-district.

**Dorchester Neighborhood District – 2F-6,000**

Educational Use – Elementary/Secondary	Conditional
Educational Use - Kindergarten	Conditional
Max FAR	0.4
Max Building Height	2.5 stories, 35 feet
Minimum Lot Size	6,000 per building
Minimum Usable Open Space (SF per dwelling unit)	None
Minimum Lot Width	50
Minimum Lot Frontage	50
Minimum Front Yard	15
Minimum Side Yard	10
Minimum Rear Yard	30
Maximum Rear Yard	25
Parking (educational use)	.7/1000 square feet

The following is a brief summary of the zoning relief that will be necessary for the project to proceed, the full details of which are included in the ISD Zoning Refusal Set which was submitted on August 30, 2017, and is attached here as an appendix.

Parking and Loading

The project is required to provide a minimum of 31 spaces per Section 65-47. The project proposes 43 spaces and a dedicated vehicular drop-off path for buses and cars.

The project does not propose a loading bay and therefore will require a variance from the required number of loading bay (one, per Table G).



Dimensional Requirements

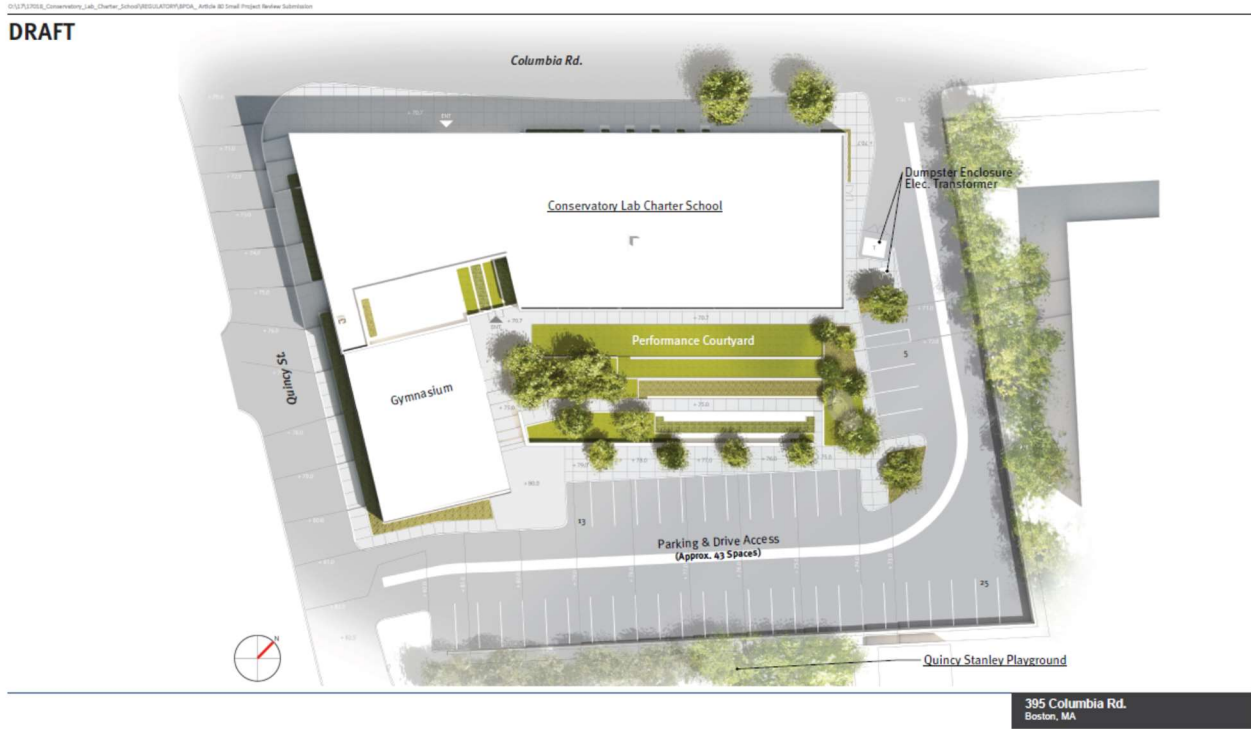
The project will not comply with the minimum front and side yard, maximum stories (3 versus 2.5) and height (42 feet versus 35 feet) under the Zoning Code, as further described on the Zoning Summary sheet in the appendix. The design team assumes Columbia Road to be the front yard of both parcels to be combined. Accordingly, variances from those provisions will be required for the project to proceed.

Uses

The project will be used for educational purposes, which are conditionally permitted per Table A, as classified under Educational – Elementary or Secondary. The project will request a permit for Conditional Uses to the Board of Appeals.

**5. Project Design**

Conservatory Lab’s Proposed Project will enable this high-performing charter school to provide greater space and enhanced amenities for its students and staff, including an outdoor courtyard and acoustically-tuned music ensemble spaces. As noted above, the school will serve approximately 275 students in grades 3-8. In round numbers, the school will embody 43,500 gross square feet (GSF) of new construction over 3 floors. **Figure 1** below is the Proposed Site Plan for the Project. More detailed site and building plans and renderings can be found in the appendices.



**FIGURE 1**

### Existing Site Conditions

The Proposed Project to be located at 395 Columbia Road in Boston occupies approximately 1.27 acres of land. Existing site conditions and context photographs of the surrounding neighborhood can be found in the appendices for reference.

The site is currently owned and occupied by Chapman Waterproofing Company and is organized around a 1 story L-shaped structure that fronts on both Columbia and Quincy Street with the balance of the site as surface parking and perimeter tree plantings along the Southeast bounded edges. The existing industrial structures on the site will be demolished to provide space for the proposed building and adjacent site uses.

### Design Goals and Context

The primary design goal for the Proposed Project is to create a learning environment that generates a vibrant physical and cultural link between the school and surrounding Uphams Corner community. The school's mission to fuse music with learning is further supported by other locally well-known cultural assets like the Strand Theater, within a half mile from the Proposed Project.

A core driver of the buildings positioning on the site is to allow for a clear understanding of the distinction of internal programmatic spaces and their arrangement on the site. The building design contains a 3-story bar of academic space that stretches along Columbia Rd., paired with a 2-3 story volume of assembly and performance space that holds the corner of Columbia and Quincy and is further distributed up Quincy St. The two prominent bars form the basis of the L-shaped form allowing for the intersection to function as a dual entrance condition both from Columbia Rd. and from internal points within the site.

As part of the overall site development, the Proposed Project will feature an outdoor performance courtyard designed to directly engage the full orchestra ensemble space just inside the building. The outdoor courtyard is setback behind the building as a buffer from the public right-of-way and is oriented South to receive ample natural light throughout the day. The courtyard is envisioned to be a pedestrian-friendly space, emphasized through the use of permeable hardscape materials, native landscape plantings, and site furnishings.

The design of the Proposed Project considers the perception of the building from the surrounding community to be of prime importance. Each perspective (as shown in the renderings found in the attached appendices) is considered in an effort to best integrate the new development with the existing urban fabric. The new facility is

designed with a three-story classroom wing oriented parallel to Columbia Rd., occupied by general administration at the ground floor, the elementary grades on level two and the middle school on the upper floor. While separated by floors, both elementary and middle school grades will have access to the school's common resource spaces – which include a centralized dining commons, gymnasium, media library, visual arts studio, and a collection of small, medium and large ensemble spaces. The dining commons is envisioned as a large double-height multipurpose space. In addition to meal service on a daily basis the space will also hold informal music performances and practice rehearsals throughout the year.

The larger shared spaces like the dining commons, gymnasium and large ensemble are all located at the ground floor to activate the streetscape and emphasize the buildings dual nature functionality as both a school and a community resource. Locating such spaces at the pedestrian level also allows for universal accessibility both during school hours and the potential for use by the community on nights and weekends. This organization further facilitates the ability for the remainder of the academic spaces at the upper floors to be closed off during night and weekend events.

The main entrance lobby at the ground floor acts as the central circulation node of a dual access condition from two remote points within the site. The Northern entry, positioned along Columbia Rd. will serve as the buildings more visible public entrance. The Southern entry will primarily facilitate on-site pick-up and drop-off operations at morning and afternoon times, as well as general access to a from the performance courtyard.

On the interior, the two-story “Learning Stair” will foster a sense of school community in providing immediate access to the dining commons and second-story balcony, as well as elevated views out to Columbia Rd. The Learning Stair is also envisioned as a space for informal study and stadium seating for performances and other large gatherings.

### Height and Massing

The Proposed Project is predominantly aligned along the North (Columbia Rd.) and West (Quincy St.) edges of the site, while the performance courtyard and vehicular drive/off-street parking line the South and East portions.

The main building entry is a two-story space framed by the intersection of the performance and academic opposing wings, respectively. The classroom wing, oriented parallel to Columbia Rd., will be developed as a

three-story volume to maximize the capacity of the building's footprint for the required program; complement the heights of adjacent residential and commercial buildings; and address varying grade elevations. These three floors delineate the elementary and middle school grades within the building, both of which are atop a series of general administration and other large assembly spaces at the ground floor.

The gymnasium volume is designed as a double-height space and is carefully positioned along Quincy St. to take advantage of the rise in elevation grade change from the Northwest corner of the site upward along Quincy. This allows for perceptible height mitigation while keeping the gymnasium in a location that's publicly visible and accessible for potential after hours use by the community.

### Character and Materials

The character of the school will be both welcoming and inclusive, achieved through the use of transparency and activity at the ground level.

The exterior is articulated with a combination of modular brick veneer and single-skin metal cladding to breakdown the massing and create a modern look and feel. A series of warmer earth toned brick colors with a few darker accents create a rich tapestry of color and texture along the façades, complemented by bronze colored metal cladding at the primary entry points and larger assembly spaces. Large classroom windows will characterize the majority of the building elevations, allowing for a high degree of transparency in the envelope. We envision the artistic use of materials to highlight the school's unique education model while creating exterior focal points that help breakdown the massing and provide a degree of visual interest that complements the surrounding urban fabric.

## **6. Transportation Management**

A transportation study and management plan was completed by VHB to evaluate and summarize existing and future transportation infrastructure and operations that are expected relative to the development of the Conservatory Lab Charter School at 395 Columbia Road. Objectives of the Proposed Project relative to transportation management is to minimize vehicle trips to the site during rush hour; have all vehicles queuing on site; provide adequate parking for staff and visitors; and improve and encourage overall safety on and around the site.

Key elements of the transportation management plan that achieve these objectives include dual curb cuts for efficient access through the site at Columbia and Quincy Roads; on-site queuing for all busses and student pick-up and drop-offs; adequate parking for all staff vehicles and visitors; and morning drop-off occurring after peak morning traffic.

The full transportation study can be found in the Appendices and includes an analysis of the following:

- › Vehicle traffic on study area roadways and intersections;
- › Parking conditions;
- › Loading and service activities;
- › Pedestrian activities;
- › Public transportation services; and
- › Accident history.

The site circulation infrastructure has been designed to carry school buses and passenger vehicles into the school campus in a one-way direction from Columbia Road to Quincy Street during peak drop-off/pick-up time periods. This internal drive lane will serve as both internal access/circulation and parent/school bus drop-off/pick-up. Approximately 43 parking spaces will be provided on-site for visitors and faculty/staff. The study estimates that about 60% of a staff of 55 will drive, taking up 33 spaces, leaving the remaining 10 spaces for visitor parking. Figure 2 below depicts the proposed site plan for the Project and the capacity of the internal driveway to accommodate up to 9 busses and 17 passenger cars in two dedicated drop-off lanes.



Figure 2

The School's main egress on Quincy Street will be stop-controlled and all vehicular activities will be accommodated internal to the Site. Both driveways will be constructed with ADA accessible pedestrian amenities in order to safely manage pedestrian traffic in conjunction with vehicular movements. On-site pedestrian amenities include sidewalks surrounding the school buildings and crosswalks to safely guide students between the drop-off/pick-up area and the school sidewalk.

The Project will generate approximately 66 entering and 48 exiting vehicle trips during the weekday morning peak hour (7:00 AM – 8:00 AM) and approximately 44 entering and 62 exiting vehicle trips during the weekday evening peak hour (4:15 PM – 5:15 PM). Morning arrival is expected to begin about 30 minutes before the start of the school day around 9:15 am. School buses will unload students along the drive aisle closest to the school. Parents will drop-off their children along the outside drive aisle. The School will maintain an active faculty/staff presence in the drop-off area during both the drop-off and pick-up periods to ensure student safety and streamline loading/unloading.

Project trips were estimated using existing school data for the upcoming 2017-2018 school year and applying these characteristics to the proposed Project. Current student and staff travel patterns were used to determine the number of students taking busses, walking and biking, or being dropped-off/picked-up by a passenger vehicle. The table below identifies the mode shares for students and faculty.

**Mode Shares**

	<b>Students (Grades 3-6)</b>	<b>Students (Grades 7 &amp; 8)</b>	<b>Faculty/Staff</b>
Vehicle	20%	10%	60%
<u>MBTA Bus</u>	<u>5%</u>	<u>80%</u>	<u>35%</u>
Walk/Bike	5%	10%	5%
School Bus	70%	-	-
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: Current CLCS Students and Faculty transportation conditions.

The Institute of Transportation Engineer’s (ITE) Trip Generation manual was utilized to determine and quantify expected trip making attributable to the Proposed Project. However, the resulting trip estimates from the current student population and their origins provides a more accurate and localized trip generation.

Vehicle trips, broken down by parent drop-off/pick-up, school bus, and faculty/staff, were calculated using the total volume of students and faculty/staff and applying the mode share found at the existing CLCS school. A vehicle occupancy rate (VOR) of 1.2 students/parent vehicle and 1.0 employee/ vehicle was then applied.

CLCS anticipates that at least 10% of the student population, or approximately 28 students, will participate in after school activities. After school activities typically last at least 90 minutes after dismissal and are therefore not included in the evening peak hour volumes. All of these students are required to be picked-up by their parents.

Though faculty/staff typically arrive and depart off-peak, to be conservative, it was assumed that half would arrive during the morning peak hour and depart during the evening peak hour.

Estimated Project-generated vehicle trips for are shown in the table below.

**Table 5 Estimated Project Generated Trips**

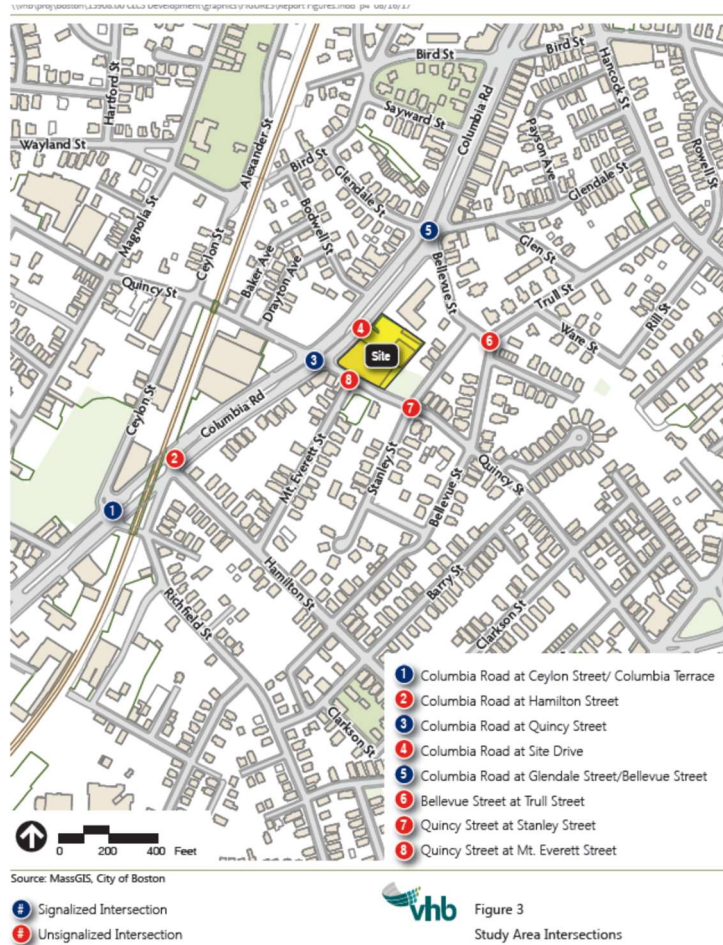
	Morning Peak Hour			Evening Peak hour		
	Student	Faculty	Total	Student	Faculty	Total
<b>Arriving</b>						
School Bus	10	0	10	10	0	10
<u>Vehicle Trip</u>	<u>38</u>	<u>17</u>	<u>55</u>	<u>34</u>	<u>0</u>	<u>34</u>
Total Entering	48	17	65	44	0	44
<b>Departing</b>						
School Bus	10	0	10	10	0	10
<u>Vehicle Trip</u>	<u>38</u>	<u>0</u>	<u>38</u>	<u>34</u>	<u>17</u>	<u>51</u>
Total Exiting	48	0	48	44	17	61

The Proposed Project will generate 112 new vehicle trips (65 entering, 48 exiting) during the morning peak hour and 105 new vehicle trips (44 entering, 61 exiting) during the evening peak hour. The majority of the trips are parents that will be traveling to CLCS to drop-off and pick-up their children.

Project trips were distributed through the study area intersections based on the local trip distribution. Instead of using regional mode shares, trip assignments for the vehicles traveling to the site were determined using the 2017-2018 CLCS Upper School’s student enrolment and the facility/staff population residences. This unique data set allows for the development of highly localized and accurate trip distributions for the proposed school.

The transportation management plan studied the intersections as shown in figure 3 below and determined that the study intersections will continue to operate at the same levels of service when the school opens as under future No-Build conditions, with the exception of Columbia Road at Quincy Street. During the evening peak hour, the overall intersection LOS is estimated to change from LOS D to LOS E, although this decrease is due to only a nine second increase in delay. While the morning peak hour operates at an LOS F under both no-build and build conditions, the Project does increase the overall intersection delay by 25 seconds during the morning arrival period. The increases in delay, for both peak hours, is due to an increase in Quincy Street WB traffic exiting the Project site and limited green time allocated to this movement. To mitigate the Project impacts on the Columbia Road/Quincy Street intersection, signal retiming and rephrasing alternatives were explored. During the morning peak hour, intersection operations could be reduced by up to 17 seconds with minor timing readjustments, while modifying signal phasing could decrease overall intersection delay by approximately 53 seconds. CLCS will work with the BTD to explore the potential to implement these signalization timing and phasing modifications.





The Proponent is also committed to providing and enhancing a wide array of Transportation Demand Management (TDM) measures offered to faculty and staff as a means to reduce vehicle trips to the site and encourage the use of sustainable transportation modes.

## 7. Community Benefits

Conservatory Lab believes that the project will be a benefit to the immediate neighborhood, the Dorchester community, and the City of Boston as a whole. Specific benefits include:

- Increasing educational opportunities for students in the neighborhood – even though there is a lottery system for admission, historically enrollment at Public Charter Schools favors surrounding neighborhood over time.
- An enhancement of an urban environment by replacing obsolete industrial use with state of the art intuitional building on the site.
- The creation of approximately 196 full time equivalent prevailing wage construction jobs.

- Bringing approximately 55 permanent jobs on site after completion of construction.
- Conservatory Lab is willing to partner with and make the facility available to community groups, including but not limited to the use of the gym and cafeteria for community meetings and events and classrooms available for meetings or night classes.
- The Proposed Project and its use would contribute to the Uphams Corner arts district in many ways. The school would use the Strand Theatre and collaborate with arts organizations in the neighborhood. The El Sistema program could potentially be expanded within the community.
- Support for the Quincy Stanley Playground and Ceylon Park: Conservatory Lab would be pleased to partner with Boston Parks Department for creative programming of the park and contribution toward ongoing maintenance.