

HANCOCK ASSOCIATES

Surveyors | Engineers | Scientists

#25504

May 23, 2022

Peabody Planning Board
Peabody City Hall
24 Lowell Street
Peabody, Massachusetts 01960

Re: Site Plan Review – 67 Pulaski and 0 Margin Street, Peabody MA

Dear Planning Board Members,

On behalf of Pioneer Charter School of Science II (Applicant), Hancock Associates submits this request for Site Plan Approval for the construction of an Elementary and Middle School for grades K -8. There will be no more than 594 students and 85 staff and personnel on-site. The mission of Pioneer Charter School of Science (PCSS) is to prepare educationally under-resourced students for today's competitive world. PCSS will help students to develop the academic and social skills necessary to become successful professionals and exemplary members of their community. The proposed building will be approximately 66,000 sf.

The existing site is the location of the existing Onion Town Grill and Sports Bar and the Babiarz Farm. The site is located in Danvers and Peabody. It abuts Water Street (Danvers), Margin Street (Peabody), Residential homes (all in Peabody) on Dobbs Street, Pulaski Street, and South Liberty Street. The project area consists of two (2) lots: Lot 1 is 2.09 ± acres and Lot 2 is 1.72± acres.

Associated site development will include construction of vehicular and pedestrian access, landscaping, and utility services. This site will be greatly improved by the proposed project.

Project Phasing:

Permitting Fall 2022

Bid Documents Fall 2022

Begin Construction Winter 2022/2023

Opening Fall 2023

If there is a delay, finishes of the Gym and Cafeteria by December 2023

Traffic:

A complete traffic study is being prepared by The Engineering Corporation (TEC) and will be submitted. Here is the summary of the study:

The proposed Pioneer Charter School of Sciences is anticipated to generated 902 vehicle trips on a typical school day with 401 vehicle trips (243 entering and 158 exiting) during the school arrival period (coinciding with the weekday morning peak commuter period), 266 vehicle trips (133 entering and 133 exiting) during the school dismissal period, and 235 vehicle trips (75 entering and 160 exiting) during the weekday evening peak commuter period. The school's main student and staff draw will be from the Peabody, Danvers, Saugus, and Lynn with minimal draw from other surrounding communities. The school will provide bus service to students and is expected to bus approximately 400 students within 8 buses, servicing Peabody, Danvers, Saugus, Salem (for minimal student population), and Lynn. The use of these busses, as well as a high sibling rate (25%) at the school, will greatly reduce the traffic impact off-site.

The school is ideally situated between Pulaski Street (South Liberty Street in Danvers) and Water Street (Margin Street in Peabody) to allow for a vehicle dispersing effect for parents and staff to enter and exit the site from multiple directions. The location is also situated between two interchanges along Route 128 which will also allow for parents and staff to split the traffic flow and lower the chance of major impacts at any one key intersection both north and south of the project. The traffic generated by the school is expected to result in a moderate impact at two signalized intersections within the study area; including, the intersection of Water Street / Endicott Street in Danvers and the intersection of Andover Street / Endicott Street / Central Street /

Pulaski Street in Peabody. The impacts at each of these locations can be fully mitigated to a condition comparable to the No-Build condition with minor traffic signal timing and/or phasing adjustments. The Applicant will commit to complete these adjustments post-occupancy in coordination with both municipalities. The school's traffic also has a more minimal impact at the unsignalized intersection of Margin Street / Gardner Street in Peabody. This intersection already experiences significant traffic challenges, specifically along the Gardner Street approach. Although the intersection does operate in a deficient manor, the Project is only expected to increase traffic at the intersection by approximately 1 new vehicle per minute or less on average generally equating to an increase in overall traffic by 4% during the school arrival period, 2.5% during the school dismissal period, and 2% during the weekday evening peak period.

Impacts to Abutting Properties:

This site and the neighborhood will be greatly improved by the proposed project. The project is proposing landscaping buffers to the abutter's properties and along Pulaski and Margin Streets. There will be an increase in landscaped areas and plantings to protect the existing bordering vegetative wetlands.

Utilities:

All utilities will be connected to the City of Peabody existing systems. A Sewer Pump Chamber and Valve Pit are proposed. This flow will be controlled to pump at off-peak times so as not to increase any of the peak flows at the existing pump station near Bishop Fenwick.

The water, gas, drainage, and power will also be connected to the City of Peabody municipal services. Water flow tests will be required to ensure proper flow pressure. This will be coordinated through the Water Department.

Stormwater Management:

The developed site will introduce stormwater management techniques into the overall system for the purpose of reducing sediment transport and eliminating runoff that contributes to existing flooding conditions. In addition to the site improvements referenced above, the applicant will construct an on-site stormwater management system to attenuate peak flows from the building and paved areas. As part of the stormwater improvements, the applicant is proposing to collect and treat stormwater runoff from the project site by three subsurface systems of chambers. Five (5) drainage areas have been modeled to represent the proposed conditions, please refer to the Stormwater Management Report (under separate cover).

The following table compares the peak rates of runoff under the existing and proposed conditions:

Discharge Point		2-Year Storm (3.2" Rainfall Depth)		10-Year Storm (4.6" Rainfall Depth)		100-Year Storm (6.6" Rainfall Depth)	
		Existing	Proposed	Existing	Proposed	Existing	Proposed
1	Peak Rate (cfs)	3.7	0.6	6.3	2.6	10.2	4.7
	Volume (cf)	11,684	2,320	20,324	5,367	33,369	10,362
2	Peak Rate (cfs)	0.7	0.0	2.0	0.1	4.1	2.1
	Volume (cf)	2,820	127	6,500	807	12,938	3,672
3	Peak Rate (cfs)	1.2	0.0	2.0	0.0	3.1	0.0
	Volume (cf)	4,442	0	7,614	0	12,274	0

cfs - Cubic Feet per Second

Environmental Mitigation:

There are two (2) associated wetlands which casts buffer zones onto this property.

Within the City of Peabody's jurisdiction there are degraded areas within the 100' buffer zones. These areas will be greatly improved by the removal of a wooden shed and compacted soils and the installation of permeable pavers, vegetation, trees, and shrubs.

Within the Town of Danvers, the current site does not mitigate run off well and has flooding issues. There is little protection from the abutting vegetative wetlands. The existing restaurant was built within the 35', 50' and 100' buffer zone to vegetative wetlands. The proposed project will remove this restaurant and its associated parking, storage drums, and utilities which will greatly improve these buffer zones and provide vegetative buffer zones to the wetlands.

Municipal Services:

We have provided a Fire Truck Access Exhibit Plan which demonstrates access ability to all four (4) sides of the proposed school. Three sides have direct fire truck access. The rear of the building will require less than 250' of hose access.

We are very excited for this project, and we hope the City of Peabody is also excited.
Thank you for your consideration in this matter.

Regards,

Hancock Associates on behalf of Pioneer Charter School of Science II

A handwritten signature in black ink, appearing to read 'Deborah L. Colbert', with a stylized flourish at the end.

Deborah L. Colbert, PE
Senior Project Manager

Attachments:

Application Fee

List of Abutters

Architectural Plans prepared by Mangel DeStefano Architects, Inc.

Permit Site Plan Set prepared by Hancock Associates

Stormwater Report prepared by Hancock Associates