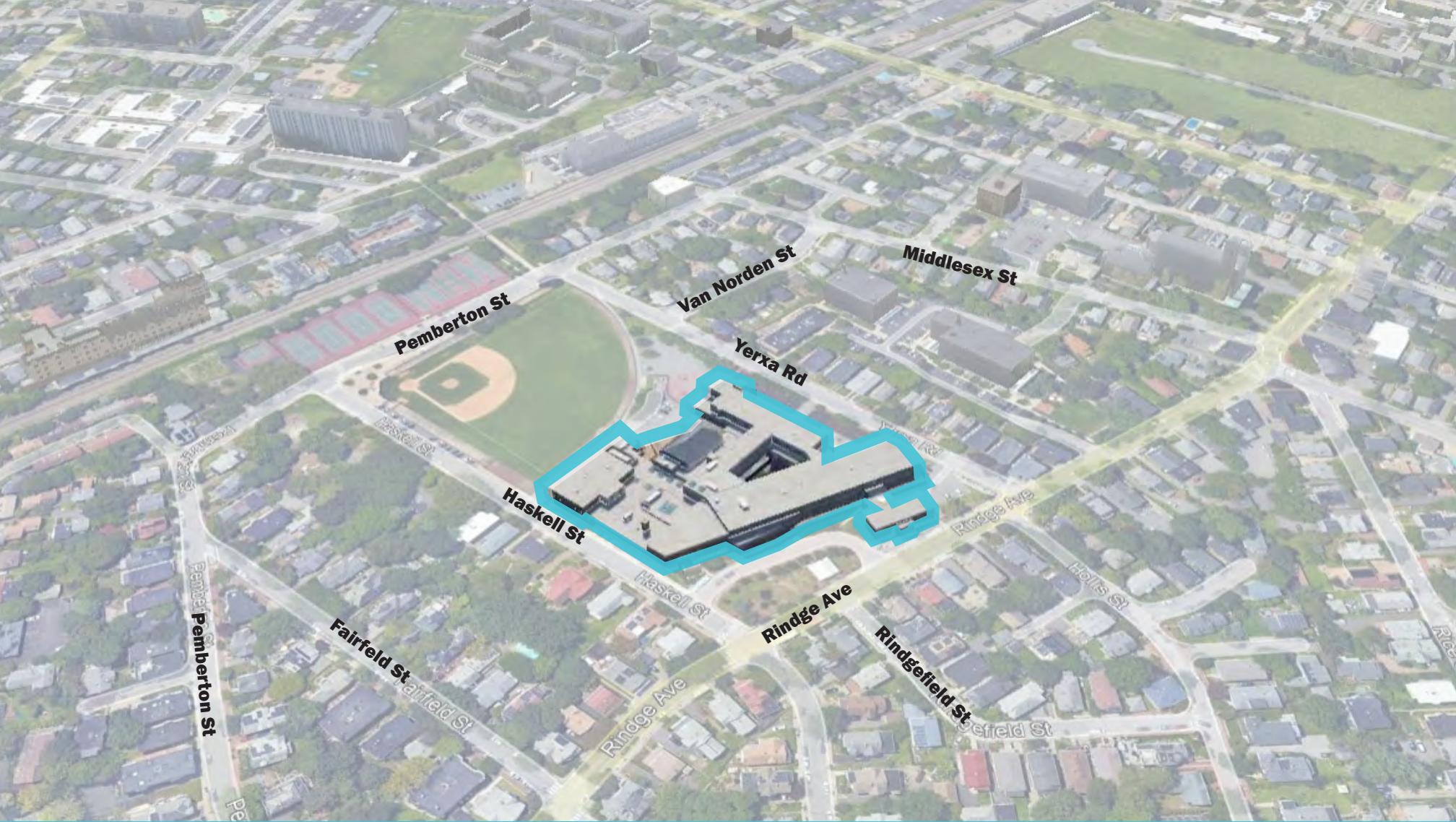




PEABODY SCHOOL

70 Rindge Avenue
Cambridge, MA 02140

Facilities Condition Assessment : October 14, 2022

Capacity Analysis
Master Plan

Facilities Condition Assessment, Capacity Analysis and Master Plan for CPS



CITY OF CAMBRIDGE
City Hall, 795 Massachusetts Avenue
Cambridge, MA 02139

DLR GROUP
33 E 33rd Street, Suite 401
New York, NY 10016

7.10 | PEABODY SCHOOL BUILDING APPENDIX

Historical Summary

The Peabody School is located at 70 Rindge Avenue in Cambridge, MA. Founded in 1889, the school was named after Reverend Andrew P. Peabody, an accomplished Massachusetts scholar. Prior to moving to its current location, the school was housed in two different buildings. The first was a three-story school from 1889-1962, and the second one, built after the first structure was razed, housed the school from 1963-2003. It was in 2003 that the Peabody School was moved to its current building, which had previously been heavily renovated including some additions in 2001.

The Peabody School currently serves students in grades Junior Kindergarten through 5th. The building also houses the Rindge Avenue Upper School, established in 2013, which brings together students from both the Baldwin School and the Peabody School for grades 6-8. In addition to this, Peabody is also home to a preschool program part of the Department of Human Service Programs for children 2.9-5 years of age.



Peabody School, Cambridge, Linnean St. 1961. Digital Commonwealth



Peabody and Rindge Avenue Upper School, Cambridge Public Schools

FCA FORMS - SCORING BREAKDOWN

The Facilities Condition Assessment was performed by the architectural team and consultants to assess the current physical conditions of the building and the building systems. Each assessor utilized checklists and the assessment criteria and rating scale below to maintain consistency across all fields.The Conditions criteria grades the overall quality of the building and systems, and the *Priority* criteria sets the time frame for addressing the issues noted. The two numbers were used together to rate the different areas of the facilities. To complete the analysis, each school was given an overall condition and priority score. These were calculated by combining and weighing all individual assessments based on the District’s priorities. Detailed reports for this school individually can be seen in the following pages.

ASSESSMENT CRITERIA				
CONDITION		PRIORITY		
Excellent	A	No visible defects, new or near new condition, may still be under warranty if applicable	Currently Critical (Immediate	1 Requiring immediate action including a cited safety hazard and ares of accelerated deteriorating, returning a building component to normal operation.
Good	B	Good condition, but no longer new, may be slightly defective or deteriorated, but is overall functional	Potentially Critical	2 Requiring action in the next year including components experiencing intermittent operations, potential life safety issues, and rapid deterioration, returning a building component to normal operation.
Adequate	C	Moderately deteriorated or defective, but has not exceeded useful life	Necessary - Not Yet Critical	3 Requiring appropriate attention to preclude predictable deterioration, potential downtime, additional damage, and higher cost to remediation if deferred further
Marginal	D	Defective or deteriorated in need of replacement; exceeded useful life	Recommended	4 Representing a sensible improvement to the existing conditions (not required for the most basic function of the facility; however, will improve overall usability and/or reduce long-term maintenance costs).
Poor	E	Critically damaged or in need of immediate repair; well past useful life	Does Not Meet Current Code but “Grandfathered”	5 No action required at this time, but should substantial work be undertaken correction would be required

2.1 FCA SCORE SUMMARY

ARCHITECTURAL - EXTERIOR	CONDITION	PRIORITY
<ul style="list-style-type: none">◦ A scope of masonry cleaning and repointing should be undertaken in areas of deteriorated mortar.◦ Preparation, priming and repainting efforts are recommended at the steel lintels where paint is peeling.◦ Install rodent-proof mesh or alternative cladding along base of North Elevation, extending below grade to address issues related to rodents burrowing/nesting in this area.◦ A scope of masonry cleaning and repointing should be undertaken within the glazed block facades. Remove any existing vegetative growth from masonry facades should be part of this work.◦ A scope of masonry cleaning and repointing should be undertaken at precast sills and brick masonry conditions.◦ Preparation and patching of the spalled concrete foundation and façade areas is recommended. Coat any exposed reinforcing steel with a corrosion inhibiting coating prior to performing the concrete repair.◦ Replacement of missing or deficient curtain wall snap covers and cracked glass is recommended. Replacement of damaged or missing insect screens can be performed if desired.◦ Some of the surface rusting observed at the hollow metal doors and frames may be due to use of deicing salts during the winter months. Reduction in use of these materials against these metal assemblies should reduce potential for further damage. Preparation, priming and repainting of these doors and frames is advised.◦ At the hollow metal window assemblies in the Southwest Stairwell, replacement of all perimeter sealants is recommended, as well as preparation, priming and repainting of the window frames.◦ All façade sealants are recommended for replacement, including those within the masonry facades and at the perimeter of fenestrations.◦ Replace existing roof with new roof assembly including Code Compliant insulation and means of secondary drainage within 5 years, based on age of roof◦ The roofing is generally in fair to good condition. Built-up roofing systems have a long life expectancy and isolated repairs are recommended to address any active water leakage issues.◦ Prepare to replace roof within 5-10 years, based on age of roof◦ The existing metal-framed skylights should be reglazed. Unit skylights are 20 years old, are reaching the end of their expected service life and should be replaced.	B	3
ARCHITECTURAL - INTERIOR	CONDITION	PRIORITY
<ul style="list-style-type: none">◦ Typical classroom: ACT ceiling, VCT floors, and GYP wall, all in good condition◦ Millwork is in a decent condition◦ Typical doors are good	B	3-5

STRUCTURAL SYSTEM	CONDITION	PRIORITY
<ul style="list-style-type: none">General Construction (Roof, Floor, Foundations)Evaulate hanging steel structure at OT/PT roomExterior walls: Repair/patch concrete, Repair caulking at veneer joints.Investigate exposed structural steel at stair roof framingInvestigate water intrusion at Cafeteria skylightRepair cracks at floor finish across corridor.Repair exterior concrete approach slabPatch cracks at gymnasium exterior masonry backup walls.Lateral force resisting system - GeneralProvide support for bricks at missing steel relieving angle.	B	5
	C	3
		4
		5
	D	2
FOOD SERVICE	CONDITION	PRIORITY
<ul style="list-style-type: none">Replace fire suppression systemRepair or replace walk--in freezerProvide updated serving line equipment	C	3
CONVEYING SYSTEM	CONDITION	PRIORITY
<ul style="list-style-type: none">Scrape and clean all hall and car sills of debris.Repair leaking oil line in machine room – Replace any victaulic seals and fittings as needed.Replace worn hall door pickup rollers.Recommend building cleaning staff cease pushing water and/or floor cleaning agents into the hoistway. Evidence of water or cleaning supply corrosion present inside the hall door sills and hall door equipment below the landing(s).An unknown solution is also being used on the cab interior finishes that is leaving a residue on the stainless steel and button surfaces. Cleaning agents should never be used or sprayed on elevator buttons, as this may cause corrosion and malfunction to the button electronics.	B	4
BUILDING SYSTEMS	CONDITION	PRIORITY
<ul style="list-style-type: none">Replace water heater, replace sewage ejector, replace H&V units including condensing units – 10+ years past service life, replace some lighting fixtures, upgrade lighting controls with energy code compliant system	C-D	3-4
<ul style="list-style-type: none">Replace chiller – currently out of commission and in poor condition, Replace classroom fan coil units – no condensate collection or pipe insulation.	E	1-2
Note: "5" not counted in priority average.		B- 3

PORTFOLIO-LEVEL FINDINGS AND DEFICIENCIES

Site

Existing Condition

The Peabody School is surrounded by a residential area and spans the entirety of an oversized block. The front of the school is located on the north side of the site, the building is recessed from the sidewalk making space for a large driveway and drop-off zone hardscaped with brick pavers connecting Rindge Avenue and Haskell Street, and a semi-fenced in green space on the northeast corner of the site. At the time of visit, a tent was set up in this area. The main entrance is recessed further from the driveway and is covered. The north side is in good condition. Rounding the corner to the east side of the site, there is a loading door above grade, a staircase leading into the boiler room, and an area for trash, all fenced in but not secure (no gate). The rest of this side bordering the school has a small green space between the sidewalk and the building, and three additional egress doors are located on this side.

An asphalt-paved driveway from Haskell Street separates the building from a full-size baseball field and leads to a small parking lot with X spaces. Located on this side are additional entrances/egress for the school, both a couple steps above grade and with both stairs and ramps to a small courtyard preceding the doors. In between these two spaces is the entrance and courtyard to the Gately Building, located six steps below grade and equipped with both stairs and a ramp. All stairs and ramps on this side are concrete-paved and the courtyard spaces are hardscaped with brick pavers. All areas previously mentioned are in good condition. Following this is an additional fenced play area paved with asphalt, with an undersized baseball diamond and additional play spaces painted on the ground. This area is in fair condition, with noticeable cracks on the asphalt.

The west side of the site has a large secured fenced playground for older kids, the area for the play structures is paved with modular rubber flooring and the remaining space is covered with asphalt. Three classrooms open directly into this area. Outside of the fenced area is a large walkway leading to a side egress door. Following this space is an additional large secured fenced playground for preschool play, like the other playground, this area has rubber flooring for the play structures and concrete for the rest of the space, with painted motifs and seating. The playgrounds are in fair to good condition. The O’Neill Branch of the Cambridge Public library is on the northwest corner of the site, as well as an additional parking lot with 10 spaces designated for the school. The additional spaces are for library patrons.

In addition to surrounding spaces, there is also an interior courtyard. The space is six steps below grade and can be accessed from the library via stairs, or from the C Wing of the building via ramp. The courtyard is hardscaped with brick pavers and features a series of planters, walkways, and sitting areas. The courtyard is in good condition.



Front of school with bike parking, North



Fenced playground, West

Architectural - Exterior

Existing Condition

The building exterior of the Peabody School and Rindge Avenue Upper Schools comprises primarily brick masonry veneer with limestone and precast concrete windowsills, glazed block veneer, aluminum windows, curtain wall and storefront. The roofs are surfaced with tar and gravel and ballasted built up roofing assemblies. Portions of the school were constructed in 1961, with additions to the building constructed in 2001. A branch of the Cambridge Public Library and the Gately Youth Center are also housed in the building.

The masonry façade is in good condition overall with isolated areas in need of repair. The fenestrations are in good condition and the roofs are in good to fair condition.

Masonry:

The masonry façade comprises brick veneer with precast concrete windowsills and accent walls of glazed block veneer. The brick masonry is in good condition overall, however some repair work is needed to address deteriorated mortar observed between the glazed block which occurs mostly at façade areas above the roof. Some isolated moss growth was observed along the throughwall flashing below the glazed block at the North Elevation. (Ref: Photos AE-17-19)

Isolated cracked and spalled mortar was observed at the older portion of the building where steel lintels were observed within the facade. (Ref: Photo AE-11) Deteriorated mortar and some displaced brick was noted at the top of the chimney located at the Northwest corner of the building. (Ref: Photo AE-12) Isolated cracked and spalled mortar exists at mortar joints between the precast sill components. (Ref: Photo AE-14) and isolated cracking and spalling of the limestone sills was observed at the older portion of the building. (Ref: Photo AE-16)

Control joint sealants within the façade have reached the end of their expected service life and have failed in many locations. (Ref: Photo AE-10, 15, 22). Peeling paint at lintels is visible throughout the façade. (Ref: Photo AE-20)

Other Façade Claddings:

Isolated cracking, spalling and exposed steel rebar was noted at the foundation walls of the older portion of the building. (Ref: Photos 23-25) Some exposed concrete has been painted, with some peeling paint in these areas. (Ref: Photo AE-26) Above the roof, facades around the Youth Center have been clad in stucco and the roof penthouse and dormers are clad in metal panels. (Ref: Photos AE-27, 28) There are exposed steel beams at the top of the Southwest Stairwell, which likely contribute to thermal bridging through the façade. (Ref: Photo AE-33)



AE-A: Representative façade at Addition



AE-B: East façade at older portion of building

Architectural - Exterior

Existing Condition

Fenestrations:

The fenestrations comprise thermally broken aluminum window, storefront and curtain wall assemblies, with isolated locations of hollow metal window and door units. Some aluminum framed hung and awning windows were observed at the older portions of the building. The fenestrations appear to be in good condition overall, with isolated areas in need of repair. Perimeter sealants around most of these assemblies have reached the end of their service life. (Ref: Photos AE-39)

Isolated conditions in need of repair or replacement include missing or improperly secured curtain wall pressure bar snap covers (Ref: Photo AE-29-30) and broken glass lites. (Ref: Photo AE-32) A few areas were noted where sealants were applied over the base of the curtain wall snap covers where drainage is supposed to occur by design. It is unclear if these sealants have resulted in curtain wall drainage issues. (Ref: Photo AE-31)

Hollow metal window assemblies are installed at the Southwest Stairwell by Door 19. The perimeter sealants around these units have failed and the frames are rusting, resulting in interior water leakage issues in this space. (Ref: Photos AE-34-36) Exterior hollow-metal framed doors exhibit surface rusting and peeling paint on the base of these frames at most locations. (Ref: Photos AE-27-28) Some damaged insect screens were also noted. (Ref: Photo AE-40)

Roofing:

The roofing assembly on the older portion of the building appears to be an original tar and gravel built up roofing system, while the roof of the Addition is surfaced with a multi-ply built-up roof with stone ballast. An asphalt shingled roof is present over the Youth Center. (Ref: Photos 42-54) The roofs are in fair to good condition overall. The extent of insulation (if any) or presence of other existing roofing systems below the current roofing assemblies is unknown. Access to the roof is achieved by a roof hatch which opens within the Penthouse. The hatch consists of a hole in the penthouse floor with a metal cover and the hatch itself is located less than 2-feet from the penthouse doors, posing an awkward and unsafe means for roof access. (Ref: Photo AE-41) Wall mounted exterior ladders provide access to the other roof levels.

Roof drainage occurs via internal roof drains throughout most of the roof, with aluminum gutters and downspouts installed at the shingled roofs. Multiple metal-framed and unit skylights exist on the roof, with reported water leakage below one of the skylights at the Cafeteria. The skylights are in need of repair or replacement, with Tape and layers of sealants visible over most of the unit skylights and plastic sheeting applied over some unit skylights. Condensation was observed between the panes of the unit skylight, indicative of a failed thermal seal. (Ref: Photos AE-47-49) At the shingled roof, some buckled shingles were noted at a few locations. (Ref: Photo AE-53)



AE-C: Representative masonry façade and aluminum window assembly above the roof



AE-D: Representative roof condition at intersection of buildings from different eras of construction

Architectural - Exterior

Existing Condition

Reported Envelope Issues:
While on site, discussions were held with facilities personnel to identify any building exterior-related issues that may exist. Those present were shown portions of the North Elevation where rodents are able to burrow below the building’s floor and façade, which has been an on-going issue. (Ref: Photo AE-21). Additional reported issues include roof leaks at the base of a metal-framed skylight in the Cafeteria and within the Hallway outside the Girl’s Bathroom. (Ref: Photos AE-55-56) Leakage issues also reported within the Southwest Stairwell around the metal framed windows. (Ref: Photos AE-34-36)

Recommendations

Masonry:
A scope of masonry cleaning and repointing should be undertaken in areas of deteriorated mortar within the glazed block facades, at precast sills and brick masonry conditions. Remove any existing vegetative growth from masonry facades should be part of this work.

All façade sealants are recommended for replacement, including those within the masonry facades and at the perimeter of fenestrations. Preparation, priming and repainting efforts are recommended at the steel lintels where paint is peeling.

Preparation and patching of the spalled concrete foundation and façade areas is recommended. Coat any exposed reinforcing steel with a corrosion inhibiting coating prior to performing the concrete repair.
Install rodent-proof mesh or alternative cladding along base of North Elevation, extending below grade to address issues related to rodents burrowing/nesting in this area.

Fenestrations:
Replacement of missing or deficient curtain wall snap covers and cracked glass is recommended. Replacement of damaged or missing insect screens can be performed if desired.

Some of the surface rusting observed at the hollow metal doors and frames may be due to use of deicing salts during the winter months. Reduction in use of these materials against these metal assemblies should reduce potential for further damage. Preparation, priming and repainting of these doors and frames is advised.

At the hollow metal window assemblies in the Southwest Stairwell, replacement of all perimeter sealants is recommended, as well as preparation, priming and repainting of the window frames.

Roofing:
The existing metal-framed skylights should be reglazed. Unit skylights are 20 years old, are reaching the end of their expected service life and should be replaced.

The roofing is generally in fair to good condition. Built-up roofing systems have a long life expectancy and isolated repairs are recommended to address any active water leakage issues.

Review buckled asphalt shingles to determine source of the issue and address as applicable.

Architectural - Interior

Existing Condition

The interior condition of the Peabody School is characterized in zones; the original building and the building addition. Overall, the building is well maintained and has worn well. The original main circulation areas are of durable materials and walls and floors have worn well; while the addition corridors, while newer, are more damaged since the gypsum has many more surface scars. The casework in the addition is still in functional condition, while much of the original building casework is damaged and broken. Between these two wings, however, the building still balances out to be in better than average condition.

The shared use space such as gym and library are in good condition and appear to have had some upgrades over time. The cafeteria, however, is one of the area’s most in need of repair with immediate attention needed to roof leaks and associated water damage. The toilet rooms, which are predominantly multi-user, appear to be ADA compliant and have had some upgrades; they are in good condition.

Ceilings:
The majority of the ceilings are acoustical tile ceilings (ACT) with the remainder being a combination of ACT and gypsum or fully gypsum board ceilings. Typically, they are in good condition. There are a few notable exceptions: the gypsum ceilings in service/ storage areas are somewhat more worn and in moderate condition; the exposed structure in the gym and music rooms are in moderate condition with minor repairs needed and the ceiling in the cafeteria is in poor condition with evidence of active leaks and ongoing damage.

Walls:
Gypsum is the predominant wall material and falls into two categories. Typical classroom walls are in good condition with selected damage (likely from tape on walls) and some wear on the upper walls in the addition corridors; the gypsum walls in storage and service areas are in adequate condition and are not was well maintained as the teaching spaces. The corridors are in good condition in both wings with plastic laminate panels protecting the base of the addition walls and durable structural glazed facing tile/ ceramic tile on the original corridor and stair walls. Walls in the gym, locker rooms and kitchen areas are CMU in good to adequate condition. The auditorium brick has worn well and is in good shape. One music room in the gym wing stands out as the only room with walls in marginal condition showing visible defects.



First Floor Classroom



Typical Second Floor Classroom

Architectural - Interior

Existing Condition

Floors:
The media center and adjacent spaces have linoleum floors in new condition while the exposed concrete floors and back of house rooms have VCT floors in adequate condition. Otherwise, the tile floors, terrazzo floors, wood gym floor and the remainder of the VCT floors are in good condition. The music room is the only room where floors are marginal at best.

Windows:
This section addresses the conditions of the exterior windows from the interior view. All windows are aluminum appear in good condition from the inside. No evidence of leaks was apparent. There is a limited number of interior windows which are typically hollow metal frames. They are in good condition.

Doors:
Typical doors are wood doors in hollow metal frames. They are in good condition except in service spaces where they are in moderate condition. Selected doors were hollow metal and are also in good condition in the public spaces such as corridors and stairs while they are in moderate condition in the service areas.

FFE:
The furniture, fixtures and equipment are fairly consistent throughout the school with the majority of it being in the adequate condition. The media center FF&E is in good condition and was possibly replaced at the same time as the flooring replacement.

Millwork:
The condition of the millwork was fairly consistent throughout the building. The original building casework was in moderate (leaning towards marginal) condition with many doors missing or broken and damaged veneer and hardware. The casework in the addition was in moderate (leaning towards good) condition. It showed some signs of wear and some broken hardware.

Plumbing:
Plumbing throughout was in good condition with the toilet rooms fixtures being in somewhat better condition than the classroom fixtures. Some of the rest room fixtures appear to be more recent replacements; they and are covered in more depth by MEP analysis.



Typical Classroom Second Floor at Original Building



Cafeteria (leaks at skylight)

Architectural - Interior

Recommendations

Limited repairs such as grout point up and wall prep/ painting would extend the life of the gypsum wall surfaces and wall tile. Millwork repairs could possibly be done in-place with new laminates, replacement doors and hardware and upgraded edge-banding. It may require replacement of all doors and hardware however; back boxes could generally remain. Again, this could be done as an isolated scope. A very small number of critical repairs are noted, and these should be addressed immediately due to active leaking. The rest of the work is listed as Priority 4, which would happen later in the overall maintenance program.



Media Center

Theater

Existing Condition

The theatrical equipment systems at the Peabody School are in good to fair condition.

Fixed audience seating is in fair condition with several seats showing damage. The stage rigging consists of pipe battens and track for stage drapery connected to directly structure. Hand winch operated linesets provide support for stage lighting fixtures. Support is by wire rope or chain. Hand winches appear to be in good condition.

A makeshift pinrail of PVC pipe has been installed stage right to operate and support moveable linesets.

The stage drapes, track, and other hardware are in good condition showing some minor signs of wear.

The theatrical lighting consists of a robust quantity of incandescent spot and wash fixtures – typically ellipsoidal spotlights, Fresnel fixtures, and PAR cans.

The front of house lighting position has been supplemented with an additional lighting pipe with temporary cables run through the proscenium arch to provide power. Lighting circuits are powered by a dimmer rack off stage left. Control is via a recent model lighting control console in excellent condition.

Recommendations

Audience Seating:
Audience seating should be replaced with new seats. Seating layout should be reviewed and modified to modern standards and to meet all current code requirements including ADA.

Theatrical Rigging:
Fixed connections to structure should be inspected by a ETCP Certified rigging professional. Components not rated for overhead suspension or not appropriate for this application should be replaced. Some components may be reused.

Front of house lighting positions in the auditorium should be similarly inspected. This position should be modified to accommodate additional fixtures needed, if possible.

Hand-winch suspended battens (lighting) should be replaced with industry standard motorized package hoists.



Auditorium Seating with Inoperable Return



Existing Hand Winches and Makeshift Pinrail

Theater

The makeshift pinrail should be removed at once. If a pinrail is required, an engineered, steel pipe replacement should be installed.

Stage Drapery:
Stage Draperies should be more thoroughly inspected. Current flame-retardant status of draperies should be confirmed. If material is inherently flame retardant (IFR), the drapes are likely within their usable life span. If not, they should be retreated (per manufacturer’s recommended schedule) or replaced with new IFR drapes.

All drapery tracks and hardware should be inspected and replaced or maintained as needed.

Theatrical Lighting:
This system should be upgraded. The dimmer rack should be replaced with theatrical lighting relay panels and fixtures upgraded to LED spot, wash, and strip lights. Existing power infrastructure is likely to be able to be reused. Low-voltage control wiring (category cable) must be added to serve each lighting position.

This upgrade is not significantly time-sensitive but some replacement incandescent lamps for theatrical fixtures, specifically PAR lamps, are no longer manufactured.

The lighting control console does not need to be replaced.



Existing Rigging



New Lighting Console



Additional Lighting Pipe at Front of House; Temporary Cable at Left



Existing Dimmer Rack

Structural System

Existing Condition

General
The Peabody Elementary School was originally constructed in 1956. There was an addition built in 1965, which was demolished to make space for a 1995 addition/renovation. Existing structural drawings were available for the 1965 addition. Existing structural drawings were not available for the original 1956 building or the 1995 addition/renovation. The original 1956 structure appears to consist of cast-in-place one-way concrete rib slab construction, concrete beams, and concrete columns, in addition to steel roof deck, steel joists, steel beams, concrete-encased steel beams, and steel columns. The 1995 addition appears to consist of concrete slab on form deck, steel roof deck, steel joists, steel beams, and steel columns. The building structure (original and addition) generally appears to be in satisfactory condition.

Existing Structural Systems and Observations
Roof construction in the original 1956 building consists of two types of construction. At the two-story classroom wing, cast-in-place one-way concrete rib slabs span to cast-in-place concrete beams, which are supported by cast-in-place concrete columns. At the single-story auditorium, cafeteria, and gymnasium spaces, steel roof deck spans to steel joists and steel beams, which span to steel columns. The 1995 addition consists of steel roof deck spanning to steel joists, which are supported by steel beams and steel columns. Roof construction appears to be performing satisfactorily; there is no evidence of structural distress that would indicate significantly overstressed, deteriorated, or failed structural members.

Floor construction in the original 1956 building consists of cast-in-place one-way concrete rib slabs spanning to cast-in-place concrete beams, which are supported by cast-in-place concrete columns. The 1995 addition consists of concrete slab on form deck spanning to steel joists, which are supported by steel beams and steel columns. Floor construction appears to be performing satisfactorily; there is no evidence of structural distress that would indicate significantly overstressed, deteriorated, or failed structural members.

Foundations are assumed to be conventional shallow footings. Continuous perimeter concrete foundation walls and footings support the exterior wall construction, and cast-in-place concrete spread footings support concrete and steel columns. No subsurface soils information or geotechnical studies/reports were available.



Photo ST-1: Concrete spalling at perimeter foundation wall



Image description.

Structural System

Existing Condition

Exterior wall construction consists of a brick masonry veneer with cold formed metal stud framed backup walls or non-bearing, unreinforced CMU backup walls. Interior walls are a combination of non-bearing CMU construction and cold form metal framing partitions. The exterior brick masonry walls generally appear to be in satisfactory condition.

The lateral force resisting system is not clearly defined for either of the principal directions of the building. The structure does not appear to meet current wind and seismic load requirements (strength and detailing). At the 1956 original building, frame action between the concrete beams and columns provides a level of lateral force resistance (by default); however, the construction of these frames does not meet current code requirements. At the 1995 addition, it is assumed that braced frames provide lateral force resistance, but this could not be confirmed from existing structural drawings or from observations during the site visit.

Recommendations

Structural conditions were reviewed at the site (to the extent possible) on September 2, 2022. No exploratory demolition or structural materials testing was performed in conjunction with this study. While the building structure was observed to generally be in satisfactory condition, specific structural or structurally related conditions that may require further investigation and/or remediation in the future are listed below.

The original building does not meet the current seismic code requirements. Lateral force resistance and seismic hazards, including unreinforced masonry wall issues, would need to be addressed in conjunction with a future major renovation of the building. Further investigation is required to determine the adequacy of the 1995 addition lateral force resisting system.

Cracks and spalls were observed at the top of the concrete foundation wall at several locations around the perimeter of the building. Refer to Photo ST-1. These are not a major structural concern. It is recommended that these locations be repaired and patched to prevent further deterioration from future freeze/thaw cycles.

Open joints in exterior wall accent elements were observed around the perimeter of the building. Refer to Photo ST-2. These are not an immediate structural concern. It is recommended that these open joints be re-caulked to avoid water infiltration, which could potentially lead to future cracking and/or loosening of veneer elements.

Structural System

Existing Condition



Photo ST-5: Deterioration of concrete approach slab

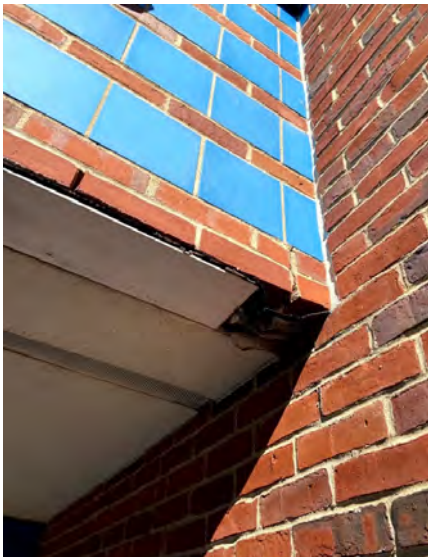


Photo ST-3: Brick veneer unsupported by steel lintel



Photo ST-7: Crack at floor finish in 1995 addition corridor



Photo ST-6: Water damage at cafeteria skylight

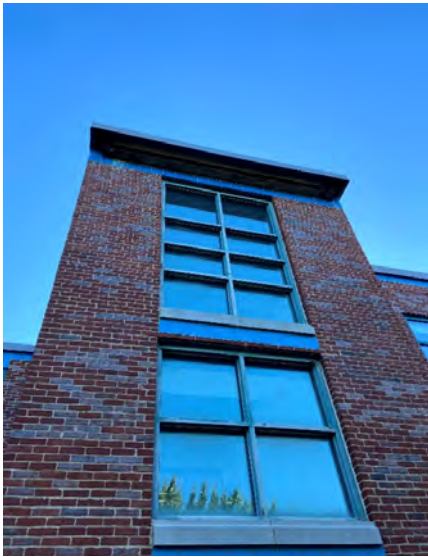


Photo ST-4: Structural steel extends beyond architectural finishes



Photo ST-8: Hanging steel structure at OT/PT room

Structural System

Where the exterior overhang intersects the exterior wall of Music Room B161, there is a segment of the brick veneer wall that is unsupported by the steel lintel. Refer to Photo ST-3. It is recommended that the condition be investigated further to verify that there are no loose bricks, which could present a falling hazard. The condition should be repaired to provide support for the full length of the brick veneer.

At the roof level of the stair at the 1995 addition, the steel framing protrudes beyond the architectural exterior wall finish and is exposed to the elements. Refer to Photo ST-4. This does not present a structural concern. It is recommended that steel finish be investigated to confirm that it is galvanized. If it is not galvanized, it is recommended that the steel framing be cleaned and painted with a zinc-rich paint to prevent future rusting and deterioration.

At the exterior approach slab outside the kindergarten classrooms in the 1995 addition, the concrete has deteriorated. Refer to Photo ST-5. This is not a structural concern, but it may present a tripping hazard. It is recommended that the concrete be repaired.

At the corner of the cafeteria skylight, there is evidence of a roof leak at the water-damaged ceiling finishes. Refer to ST-6. It is recommended that leaks be investigated further and repaired during a future roofing replacement.

In the 1995 addition, a crack extends through the floor finishes across the corridor and runs through Grade 8 Classroom B229. Refer to ST-7. It appears that the floor finishes were not detailed to accommodate movement at an expansion joint. This is not a structural concern, but it may present a tripping hazard at the corridor. It is recommended that the floor finish be repaired.

In the 1995 addition at the OT/PT room, a steel structure was observed hanging from the second floor framing above. Refer to ST-8. Structural floor framing was obscured by ceiling finishes and was not confirmed. No signage was seen to indicate maximum loads. Design documents were not available for the structure, and the hanging steel structure was not seen on the existing architectural reflected ceiling plans. There is no evidence of structural distress that would indicate significantly overstressed, deteriorated, or failed structural members. It is recommended that the condition be evaluated further to confirm that the second floor framing above has sufficient capacity.

At the gymnasium, cracks were observed within the exterior masonry backup walls. These do not appear to be an immediate structural concern. It is recommended that cracks be patched in conjunction with a future renovation.

Structural System

Comments on Renovations, Alterations, Repairs, and Additions
Renovations, alterations, repairs, and additions to existing buildings in Massachusetts are governed by the provisions of the Massachusetts State Building Code (MSBC – 9th Edition) and the Massachusetts Existing Building Code (MEBC), which defines three compliance methods for the repair, alteration, change of occupancy, addition, or relocation of an existing building. The method of compliance is chosen by the Design Team (based on the project scope and cost considerations) and cannot be combined with other methods. The Work Area Compliance Method (IEBC Chapters 4 through 12) is the most common compliance method chosen.

The design and construction of any proposed addition(s) to the existing building would be conducted in accordance with the Code for new construction. Generally speaking, additions should be structurally separated from the existing, adjacent construction by an expansion (seismic) joint to avoid an increase in gravity loads or lateral loads to existing structural elements.

Where proposed alterations to existing structural elements carrying gravity loads result in a stress increase of over 5%, the affected element will need to be reinforced or replaced to comply with the Code for new construction. Alterations to existing structural elements resisting lateral loads (i.e., braced frames and concrete moment frames) which result in an increase in the demand - capacity ratio of over 10% should be avoided; otherwise, a seismic evaluation and potential upgrade will be required. Structurally attached additions (horizontal or vertical) which result in an increase in demand-capacity ratio of over 10% would also trigger a seismic evaluation and potential seismic evaluation.

Mechanical System

Executive Summary

Fire Protection Systems
The existing building is provided with an automatic sprinkler system throughout the building and a manual-wet standpipe system located in egress stairwells.

The sprinkler and standpipe system piping consists of black steel pipe. The system was installed in 1995 and appears to be in fair condition with some visible signs of corrosion. This pipe has an expected service life of 75 years.

Mechanical Systems
The existing building is provided with a centralized hot water gas-powered boiler heating system, centralized chilled water chiller cooling system, (10) air handling units for distribution ventilation, perimeter fin tube and unit ventilator heating, ceiling mounted fan coil units, cabinet and propeller unit heaters, general exhaust fans, and a DDC control system. The building has a 2-pipe chilled/hot water changeover system.

Plumbing Systems
The existing building is provided with conventional plumbing systems which include a domestic water distribution system, sanitary waste and vent system, storm water system and a natural gas system.

The plumbing piping systems have an expected service life of 50-100 years. The existing plumbing systems were installed in 1995 and appears to be in fair condition with some visible signs of corrosion.

Electrical Systems
The existing electrical distribution, lighting, fire alarm, and IT systems are partially original to the 1995 building, approximately 27 years old, and have had only minor modifications to support program changes.

This equipment is past its useful life.

Mechanical System

Heating System

Existing Condition
The heating source for the building consists of (2) gas powered H.B. Smith Co. Inc. Boilers. They were installed in 2000 and are in okay condition. The burners for the boilers were also replaced in 2000. The recommended service life is 35 years for the boilers and 21 for the burners. The hot water is distributed throughout the building with (3) base mounted pumps. The pumps seem to be in okay condition. The motors on the pump were replaced in 2012. One of the pumps is exposed with the insulation ripped out in poor condition. The pumps were installed in 2001 and have a service life of 20 years.

Unit ventilators and fin tube provide the heating in the classrooms via hot water. The unit ventilators are interfaced with Johnson Controls (JCI) Metasys system. The JCI system is connected to the Cambridge Schools campus BAS network via JCI Facility Explorer. Corrosion is present on the unit ventilators and are in poor condition. Thermostats are situated in classrooms, connected to the JCI system. The unit ventilators were installed in 1999-2000. Recommended service life is 20 years.

Recommendations
Boilers: Replace boilers in the next 10-15 years. Burners should be replaced as they are past their service life.

Hot Water Pumps: Pumps should be replaced within the next 5 years. They are at the end of their service life.

Unit Ventilators: Replace as they are internally damaged from water corrosion and physical wear.



M-1: Exposed Pump Condition



M-2: Unit Ventilator Interior Conditions

Mechanical System

Cooling System

Existing Condition
The building is run on a 2-pipe hot water/chilled water system. The chiller was installed during the 1995 renovation and is in poor condition. The chiller is in the process of being replaced and is completely down. The whole building is retrofitted with portable air conditioners until the new chiller is installed.

Recommendations
The current chiller is in poor condition and does not function. Replacing the chiller is necessary. The exterior piping should also be replaced by the chiller as it is considerably weathered and damaged. The unit ventilators need to be replaced immediately as there is no condensate collection causing condensate to drip into the unit ventilators and fin tube. They are on year 22 of their 20 year service life.



M-3: Portable AC



M-4: Chiller Piping Conditions

Mechanical System

Ventilating and Air Conditioning System

Existing Condition
Ventilation for the building is provided primarily through (10) McQuay Air Handler Units. All units utilize hot water coils for heated conditioning only. Two of the units supply the gymnasium, one supplies the auditorium, and the others serve the rest of the building. Six of the air handlers are located on the roof, two are in the mechanical penthouse, and one is on the 2nd floor. All units show signs of wear. Seven of the units were installed in the 1995 renovation, and the other two were installed after the renovation. The air handlers are interfaced with DDC on the JCI Metasys network. The recommended service life for these units are 15 years.

All exterior classrooms are fitted with unit ventilators and thermostats, both on the JCI Metasys network. The typical perimeter classrooms are ventilated solely by the unit ventilators in the room and exhausted out. The heating is split between perimeter fin tube and unit ventilators. Cooling is done through the unit ventilators as well. Interior rooms are conditioned and ventilated by the air handling units through diffusers and ceiling mounted fan coil units. Some interior rooms are supplied ventilation through transfer ducts. The fan coil units are from the 1995 renovation and show signs of wear and corrosion, possibly from a lack of condensate collection. Water damage is apparent near fan coil units suggesting this issue.

The diffusers, ductwork, and grilles are in good condition. The only area that could use improvement are the diffusers in the gymnasium which have physical damage.

RFS talked to a member of facilities, and they mentioned how the ladder up to the roof is dangerous and should be replaced. With the amount of equipment on the roof, this poses concerns to how often regular and preventative maintenance is done to the equipment.

Recommendations
The air handlers are in okay condition but are 5 years past their service life and should be replaced within the next couple years. The gymnasium diffusers should be repaired or replaced to ensure proper airflow. The ladder up to the roof should be fixed to ensure proper maintenance is being done on the rooftop equipment.



M-5: Water Damage by FCU



M-6: Gymnasium Diffuser Condition

Mechanical System

Building Automation System

Existing Condition
The whole building was upgraded onto the JCI Metasys network during the 1995 renovation. Controls are tied to the boilers, unit ventilators, chiller, and air handlers to provide local controls to the rooms via thermostats. They control fan speed in the unit ventilator to which the hot water/chilled water serves the rooms accordingly. All information is tied to the Cambridge BAS network via JCI Facility Explorer.

Recommendations
Most of the Cambridge School system BAS network resides on a more modern Tridium Niagara platform and ultimately a plan should be developed to transition to this newer platform as the older Metasys system is no longer supported and reaching the end of its expected median service life of 20-years. Control system upgrades should include a complete system of DDC controllers, sensors, actuators, and head-end graphics.



M-7: JCI Controls

Electrical System

Power Distribution

Existing Condition
The electrical service is an 2000A, 480/277VAC, 3-phase, 4-wire, underground service, located in the electrical room at the lower level of the school. The Square D Switchboard main service is floor mounted; this panel is from the 1995 upgrade.

Numerous electrical equipment (panels) were observed during a walk-through of the building. It has been observed that the locations of panel boards are poorly designed, as they are situated in corridors and general areas where students frequent. Panel boards are in fair/poor condition given their age, and there were no signs of maintenance being performed on them since 1995.

Emergency Electrical Distribution
A 317.5Kva diesel generator is provided with standby and life safety transfer switches. The generator resides in its own rated room and appears to be a code complaint installation.

The generator and emergency power system appear to be code compliant and in fair to good condition.

Recommendations
It is generally accepted that the life of an electrical system is thirty (30) years. Beyond that point, it becomes increasingly difficult to cost effectively maintain the system. Wire insulation and equipment failure becomes more common as the system ages, with an increase in outage longevity due to the design of the system and the availability of replacement parts. Often new systems need to be installed to bypass the old system without the benefit of a comprehensive plan designed for the needs of the building. With the aged electrical devices, the devices may not operate under faulty conditions.

The main electrical distribution provides 1,413 kW with an area of 145,835 square feet or 9.6W/SF. New highly efficient mechanical designs generally require 19- 24W/ SF. The main service would be required to be upgraded complete for a large-scale mechanical upgrade.

The electrical code now requires Arc Fault Protection labeling for the safety of the electrical staff. It is recommended that an Arc Fault/Coordination study be performed, and associated labeling be provided to meet today's electrical code. Arc fault reduction is now a code requirement for electrical services 800A and larger to reduce the available Arc Fault, this is not available on the existing equipment.



E-1: Main Electrical Service (Entrance)



E-2: Existing ~1995

Electrical System

Due to the age of the existing electrical distribution system, it is recommended that the existing systems be provided with a full range of electrical preventive maintenance, to include:

- Panelboards and switchgear:
- Inspection and cleaning
 - Ground resistance test
 - Thermal imaging
 - Insulation resistance testing
- Cables:
- Inspection
 - Verify tightness of bolted connections
 - Insulation resistance testing
 - Circuit Breakers
 - Inspection and cleaning
 - Measure contact resistance
 - Thermographic Survey
 - Operate circuit breaker to verify smooth operation
 - Verify tightness of bolted connections
 - Verify trip operation of circuit breaker by primary current injection
 - Verify setting required by coordination study
 - Verify operation of any auxiliary function (i.e. remote trip and close)

Due to the age of the existing electrical distribution system, it is recommended that the existing systems be scanned with an infrared camera to identify any loose or weak electrical connections. The generator should be tested, and a testing regime should be established.

The electrical system should be replaced completely with the next renovation or large-scale mechanical upgrade.

Electrical System

Lighting & Devices

Existing Condition
The majority of the lighting installed in the 1995 building renovation was fluorescent lighting. LED lighting has recently been added throughout the building, including the gym. Lighting control is accomplished with time clock control and occupancy sensors in most spaces.

LED lighting fixtures save energy and have reduced maintenance costs as compared to fluorescent fixtures.

A spot check of wiring devices indicated varying conditions. Light switches and receptacles were generally in poor to fair condition, while many were older and showing wear. Lack of a sufficient quantity of receptacles was noted. In the cafeteria, ground fault circuit breakers were not provided as required by the latest electrical code. Tamper resistance receptacles are also required in Preschools and elementary education facilities.

Recommendations
Emergency lighting should be reviewed and provide additional fixtures in areas that lack sufficient levels of emergency lighting (stairways). Exit lighting should be upgraded to cover all means of egress corridors and exit doors, where required. A complete generator preventative maintenance should be performed.



E-3: Classroom Lighting



E-4: Corridor Lighting

Electrical System

Fire Alarm

Existing Condition
The existing Fire Control System Fire Alarm System has been upgraded from the 1995 renovation and appears in good condition. The system is in good operating condition. There is an additional annunciator at the main entrance. Also at the main entrance is a Knox Box and Beacon.

The International Building Code (IBC) requires that a speaker type system be provided in an education occupancy (K-12). This system is compliant and does meet today's code requirements.

Smoke detectors are present in most emergency egress paths. Heat detectors were also noted in utility closets, kitchens, and mechanical spaces. The devices appear to be in fair working order.

Pull stations were observed at most exits and at entrance points to level change.

CO detection was not noted in classrooms or areas adjacent to carbon monoxide producing equipment.

Horns/lights are installed in corridors and some common spaces to provide alarm notification to occupants. The devices appear in fair/poor working order with white strobe lenses in several areas, and not clear as required by code.

Recommendations
Provide all required testing and detailed review for a code compliant installation. Install carbon monoxide devices in alarms devices in every classroom where carbon emitting devices are located. Verify all devices are provided as required by 527 CMR, NFPA 72, 780 CMR, and the Mass Fire Alarm code (Missing pull stations, smoke detection not code compliant etc.)



E-5: Existing Fire Alarm Device

Plumbing System

Domestic Water System

Existing Condition
Water Service Entrance: The water service room 183 on the east side of the complex is provided with a 4” domestic water service and a 3” Neptune water meter and 3” strainer. A second water service is provided in the crawlspace in the north-west corner of the complex. The 4” water service is provided with a 3” Neptune water meter with remote read and a 3” strainer. The second water service appeared to be closed when observed so it is unknown if the service is redundant or closed for maintenance.

Domestic Water Quality: Cambridge water supply has been known to contain hard water containing minerals below the Maximum Contaminant Level by the Cambridge Water Department. It is suspected that faster than normal corrosion of domestic systems is caused by scale build of from the water being supplied to the building.

Domestic Water Heater: Domestic hot water is generated from a simplex gas fired boiler and two remote 115 gallon storage tanks. The boiler is manufactured by Raypack Model H3-0330 and has an input rating of 334,000 BTU/HR. The storage tanks are manufactured by Rheem Model ST120A and have a date of manufacture of 09/2006. The outlet temperature of the hot water system is 115-degrees. The hot water system is fully circulated back to the heaters with the use of a Taco Model 0010-BF3 cartridge circulator. The hot water system is not provided with a thermostatic mixing valve or an expansion tank. The heater and storage tank were installed in 11/20/2006 and are in fair condition. The expected service life for the water heaters is 20 years.

The kitchen is served with a supplemental electric water heater. The RUUD heater has 38 gallons of integral storage and is rated at 4,500 watts. The heater was manufactured 03/2010 and is in fair condition. The expected service life for the water heaters is 20 years.

System Piping: The piping serving the domestic water system includes soldered copper with brass ball valves. The piping system appears to be in fair condition and showing signs of corrosion. The expected service life for copper pipe is 80 years.

Non-Potable Piping: Some of the plumbing fixtures have stickers above them stating “NOTICE NON-POTABLE WATER NOT FOR DRINKING OR COOKING USE” The existing science classrooms appear to be served from the potable hot and cold water systems. Further investigation is necessary to determine if there are no plumbing fixtures requiring non-potable water connected to the potable system.

The 4” domestic cold water main in the crawl space below level has failed and is constantly leaking.



PL-1: Domestic Main Failure in Crawl Space



PL-2: Non-Potable Notice

Plumbing System

Recommendations
Provide adequate hot water to the domestic plumbing fixtures located within the building. The Massachusetts Plumbing Code, 248 CMR, defines hot water at a temperature of at least 120-degrees.

Provide a water quality report for the building to determine the characteristics of the domestic water. Provide water softening equipment on domestic water supply to the building to slow the degradation of existing domestic systems if required.

Replace corroded pipe, valves, and fittings as required.

Verify all lab sinks are provided with a dedicated non-domestic water source. Provided dedicated non-domestic water heaters if required if hot water is required at the lab sinks.

Plumbing System

Domestic Plumbing Fixtures

Existing Condition
The domestic plumbing fixtures located within the building include wall mounted 1.6 gpf or 1.28 gpf water closets with manual flush valves, wall mounted urinals with manual flush valves, wall mount china lavatories with push button manual metering faucets, stainless-steel wall mount handwashing sinks with push button manual metering faucets, stainless-steel wall mount drinking fountains, and stainless-steel classroom sinks with manual faucets. ADA compliant plumbing fixtures appear to be provided where required.

Science classrooms are provided with lab sinks which include epoxy basins and manual faucets. Some faucets are cold water only with vacuum breakers. Others are hot and cold water with no integral vacuum breaker. Emergency shower and eyewashes with integral Leonard mixing valves are provided. It is assumed the lab sinks are provided with domestic water.

The domestic plumbing fixtures in general appear to be in good condition. The domestic plumbing fixtures have an expected service life of 30-40 years.

Recommendations
Public lavatories shall be provided with thermostatic mixing valves to limit the outlet temperature to a maximum of 110-degrees. Insulation kits shall be provided at all ADA lavatories at the supplies, stops, p-trap and tailpiece.

Replace plumbing fixtures and floor drains which are heavily corroded and exceeded their useful service life.



PL-3: Classroom sink

Plumbing System

Sanitary Waste and Vent System

Existing Condition
The building is provided with a sanitary waste and vent system which collects sanitary sewage from the domestic plumbing fixtures located throughout the building. The recessed mechanical room 183 plumbing fixtures are served by underground sanitary piping draining to a duplex sewage ejector pit below the floor. The sewage ejector discharges to the gravity sanitary piping at the ceiling of the mechanical room.

The building is provided with multiple sanitary sewers which connect to the municipal sanitary sewer.

The pot sink in the kitchen is provided with a recessed 50 gpm grease interceptor. The outlet of the interceptor is piped to the sanitary waste piping.

The waste stream from the science classrooms sinks in C Wing are piped to individual acid neutralizing tanks located at each fixture. The science classroom sinks in B and D wing are provided with acid resistant pipe, that are served by two separate chip tanks located in the crawlspace below level 1.

The art classroom sinks are provided with solids interceptors at each fixture.

The sanitary waste and vent system 4” and larger consists of cast iron pipe. The expected service life for cast iron pipe is 80-100 years. Smaller waste and vent pipe is typically copper.

Recommendations
Replace existing corroded piping as required. Perform all required service on the pH neutralization chip tanks to assure system is discharging a neutral waste stream.

Verify all lab sinks within the building are provided with pH neutralizing chip tanks as required by the Massachusetts Plumbing Code.

Coordinate the need to provide an exterior grease interceptor with the Cambridge Sewer Department. Assure interior grease interceptor is properly maintained.

Plumbing System

Storm System

Existing Condition
The building is provided with a storm system which collects rainwater from the roof drains located on all flat sections of roof. The piping is installed down through the building and discharges to the municipal storm sewer by gravity.

The storm system consists of cast iron pipe. The piping appears to be in good condition. The expected service life for cast iron pipe is 80-100 years.

Recommendations
No immediate action required.

Natural Gas System

Existing Condition
The building is provided with a natural gas system. The service entrance is located on the east side of the building. Natural gas serves the mechanical boilers, domestic water heater, science classrooms and kitchen equipment. The natural gas piping is black steel and appears to be in good condition.

The expected service life of black steel pipe is 75 years.

Recommendations
The existing gas isolation valves located in each of the science classrooms are in a surface mounted cabinet with a hinged door. The Massachusetts Plumbing Code requires the gas valves to be readily accessible which would prevent the use of the cabinet door.



PL-4: Gas Valve Cabinet

Fire/Life Safety

Sprinkler System

Existing Condition
The existing building is provided throughout with an automatic sprinkler system. A 6” dedicated fire service enters the ground level water service room 183 on the east side of the complex and is provided with a 6” double check backflow preventer and a 4” CSC wet alarm check valve. The system serves two sprinkler zones which includes Building A and the gym on one zone and the boiler room on the other zone.

A second fire service entrance is in the crawlspace on the north-west corner of the complex and is provided with a 6” double check valve assembly. The line is then piped up one floor beneath Stair 1 where the 4” CSC wet alarm check valve is provided. This system serves sprinklers in Building B and Building D.

Sprinkler coverage in several areas of the building appeared to be inadequate based on current code requirements. The skylight in the cafeteria should have sprinkler coverage within 3’ from the peak. Sprinkler heads on the second floor of C wing appeared to be obstructed by the pendant lighting.

The observed sprinkler system piping is black steel with grooved fittings and appeared to be in good condition The expected service life of black steel pipe is 75 years.

Recommendations
It is recommended the existing sprinkler system be maintained in conformance with the requirements of NFPA 25, Inspection, Testing and Maintenance of Water-Based Fire Protection Systems.

Verify sprinkler coverage is code compliant and sprinkler discharge patterns are not obstructed by pendant mounted fixtures.

Replace corroded sections of pipe and fittings as required.



FP-1: Failing Fittings

Code

Existing Condition

The Peabody Elementary School is an existing 145,835 ft2 two-story Cambridge public school.

- Occupancy Classification
- Use Group E (School)

Construction Type

Based on the field observations the building appears to be primarily a steel and concrete structure, classified as Type I or II construction. Although it is also connected to the Gately Shelter which appears to have a wood-framed roof and would potentially be classified as Type III. All new construction must be non-combustible except where permitted by IBC Section 603: Combustible Material in Types I and II Construction.

Vertical Openings

All existing vertical openings in the work area connecting two or more floors must be enclosed with 1 hour rated construction and approved opening protectives unless the openings meet one of the exceptions in IEBC 803.2.1.

Since the building is only two stories, and fully sprinklered, no fire ratings are required for existing stairs or two-story floor openings (IEBC 712.1.9 & 712.1.12).

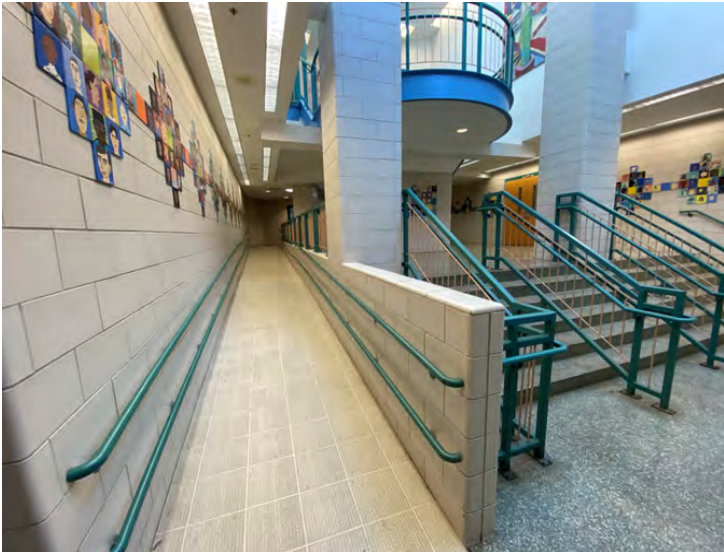
Interior Finishes

The existing interior finish of walls and ceilings in the work area and in all exits and corridors serving the work area must comply with the code requirements for new construction (IEBC 803.4).

Walls & Ceilings (IBC Table 803.11)

Use Group:	E (Sprinklered)
Exit Enclosures	Class B
Exit Access Corridors	Class C
Rooms & Enclosed Spaces	Class C

Existing interior finishes in both buildings typically consist of painted gypsum wallboard, tile, or masonry which meets these requirements.



Existing Two-Story Opening



Typical Egress Stair

Code

Existing Condition

Means of Egress

Means of egress conforming to the requirements of the building code under which the building was constructed are considered compliant means of egress if, in the opinion of the code official, they do not constitute a distinct hazard to life (IEBC 805.1). This section allows the existing means of egress stairs, doors, etc. to remain unless they are considered hazardous.

There are four primary egress stairs serving the second floor and multiple exterior egress doors from the first floor. No hazardous egress conditions were noted during the site visit. Illuminated exit signs and emergency lighting appear to be provided throughout.

Fire Protection Systems

The building appears to be fully sprinklered and is protected by a relatively modern fire alarm system (although it does not appear to be a voice/alarm system), standpipe system, and fire extinguishers. Existing previously approved fire alarm systems are permitted to remain if the building undergoes a Level 1 or Level 2 alteration (IEBC 804.4.1). A Level 3 alteration would require the fire alarm system to comply with the code requirements for new construction, which would require a voice-alarm system (IEBC 904.2).



Entrance



Drinking Fountain

Code

Existing Condition

Accessibility for Persons with Disabilities
The building has an accessible entrance, drinking fountain and toilet room. Therefore, if the cost of future renovations exceeds \$100,000 no additional accessibility improvements are required.

The Cambridge Assessor’s on-line database indicates the Baldwin Elementary School has an assessed value of \$36,152,000 and the Massachusetts Department of Revenue’s website indicates the assessment ratio for Cambridge is 0.92. Therefore, the 100% equalized assessed value is \$39,295,652 and 30% of this value is \$11,788,695. Full compliance with 521 CMR would be required if the aggregate cost of renovations in any three-year period exceed this amount. Although a detailed accessibility survey was not conducted, it appears that the building is generally compliant as would have been required when it underwent a significant renovation in 2001.



Toilet Room

Conveying System

Existing Condition

The Peabody School is serviced by one (1) dual jack holeless hydraulic passenger elevator. The elevator has a rated capacity of 3,000 lbs. and travels at a rated speed of 100 fpm. The entrances are 3’-6” wide by 7’-0” high, front and rear opening. The elevator services 4 landings – LL (rear), *1, UL (rear), and 2.

The elevator was installed in 2000 by Embree Elevator. The controls were manufactured by MCE and the hydraulic power unit and jack assemblies were manufactured by Canton Elevator.

- Maintenance Deficiencies:
- Scrape and clean all hall and car sills of debris.
 - Repair leaking oil line in machine room – Replace any victaulic seals and fittings as needed.
 - Replace worn hall door pickup rollers.
 - Recommend building cleaning staff cease pushing water and/or floor cleaning agents into the hoistway. Evidence of water or cleaning supply corrosion present inside the hall door sills and hall door equipment below the landing(s).
 - An unknown solution is also being used on the cab interior finishes that is leaving a residue on the stainless steel and button surfaces. Cleaning agents should never be used or sprayed on elevator buttons, as this may cause corrosion and malfunction to the button electronics.



Recommendations

We recommend budgeting for a modernization of the elevator within the next 5-7 years. As part of the modernization, we recommend the scope include replacement of the controls, power unit, signal fixtures, machine room and hoistway wiring, car door equipment, including door panels, and car enclosure and finishes.

Budget: \$120,000 - \$150,000 (Budget estimates are based on commencement of work in 2023)





Door Hardware

Existing Condition

Site survey showed the majority of doors are in good shape. All exterior and corridor doors look to meet egress requirements. Survey also included Youth Center doors, these doors are in slightly worse condition than the rest of the school. Exterior doors are beginning to show slight deterioration.



Food Service

Executive Summary

The Peabody school is an average kitchen serving a medium sized population of students at the preschool through 5th grade levels. The finishes and kitchen equipment appear to be newer and constructed within the last 20 years. This kitchen was observed to be properly sized and functioning at a higher level than other schools within the district, but would still benefit from some equipment upgrades to improve its current operation. Updates to cooking, storage and serving equipment would allow the foodservice operations team some flexibility to adapt and more efficiently serve the district’s needs.

Improving cooking and serving equipment will modernize the program allowing it to more easily meet the demands of health code regulations as well as improve the appeal of the food offerings. Modernizing workstations, preparation and cooking equipment will allow the kitchen staff to focus on food production resulting in a more efficient operation. Overall, the program is well run and the staff are highly trained and dedicated. However, they lack the full complement of tools needed to truly operate at a higher level of service.

Kitchen and Servery

General Overview
The Peabody School Foodservice program currently serves a population of approximately 310 students from Pre-K through the fifth grade. The kitchen is mostly intact with minor modifications and equipment upgrades done over the years. Major infrastructure items such as the cooking equipment, serving line and work tables have not been updated in a significant amount of time. While the equipment in this school is newer and in better shape than some of the other schools, the program would still benefit greatly on updates and upgrades. Overall, the kitchen staff does a great job of maintaining and keeping the kitchen very clean. However, due to the date of the equipment and materials they do show some signs of wear and tear.

The kitchen walls and storage areas are finished in a durable painted CMU block and have held up very well over the years. While the kitchen walls are in great shape overall, this does present some cleanability issues in specific areas like the cook line due to the exposed utilities. Ceilings are a smooth and washable drop-in tile in fair condition that meet the modern health code. The flooring material in the kitchen is quarry tile and is also in fair condition. The quarry tile is provided with the required coved based where the floor meets the walls for proper cleanability. The walk-in freezer is located across the hall from the kitchen and the flooring material used in that area is a VCT tile that is not acceptable kitchen applications. This material is slippery when wet and does not have the availability to be coved where the floor meets the walls and that condition is present in this kitchen.



FS-1: Galvanized legs on work tables is a dated construction method. The galvanized steel chips and rusts and requires frequent painting to maintain. Stainless steel tables should be replaced with all stainless steel construction manufactured to meet NSF standards.

Material is slippery when wet and does not have the availability to be coved where the floor meets the walls and that condition is present in this kitchen.

The walk-in freezer shows signs of age and potential installation flaws that are resulting in damage to the refrigerated compartment. As indicated above, there’s no coved based flooring material at the exterior of the walk-in to meet health code regulations for proper cleaning methods. The entry door to the walk-in is not self-closing which is best practice to prevent the door from staying open for long periods of time sacrificing the integrity of product stored within the freezer. There’s a large gap between the ceiling tiles and walk-in freezer closure panels. This results in a health code violation as no visible gaps are acceptable in commercial kitchens. Wall and ceiling penetrations of this walk-in freezer are not properly sealed and warm-air is entering the space. This is evident as there is major ice build up at the evaporator coil and all sprinkler heads. This ice build-up presents damage to the walk-in cooler box, associated utilities and a potential injury risk for staff.

All preparation tables within the kitchen have stainless steel tops which is appropriate and acceptable with modern day food code. The legs of these tables are older and composed of galvanized steel. The galvanized steel chips and rusts over time and requires unnecessary maintenance of painting the table legs. This school has all Traulsen reach-in refrigerators and freezers which appear to be in good working order holding proper temperatures and do not require update.

While the CMU walls are durable and have held up very well over the years, the cookline has a lot of exposed utilities ran surface mounted to building walls. This situation presents a cleanability issue. In new construction walls with numerous utilities are furred out to conceal utility runs and finished in a smooth washable surface for proper cleanability. The exhaust hood is newer than other locations in the district, but there is exposed horizontal fire suppression piping installed within the cavity. Efficient design limits fire protection to vertical drops preventing grease build-up and better cleanability. The existing material used for fire suppression is iron piping and modern standards are stainless steel or chrome. Along the cookline at the braising pan location there is no floor trough. In new construction a floor trough with a non-slip grate is recommended in these areas for proper drainage and containment of the braising pan operation.

The serving line for this kitchen is more up to date than other schools in the district but could still benefit from some equipment updates. There is hot holding capability however they lack refrigerated holding along the line for cold food offerings to be held at safe and proper temperatures for serving. Sneeze guards on these counters



FS-2: Gaps in kitchens are not acceptable by health code. The ceiling track and/or the stainless closure should be provided to prevent large gaps within commercial kitchens per health code. Large gaps within kitchen spaces allow vermin and or insects entry points to food zones.

are outdated and no longer in compliance with current NSF regulations. This facility has no means of mechanical ware washing which requires all cooking utensils to be manually washed by the staff. While it's a small operation, this does require a lot of time and dedicated staff to keep up with this operation. Modern day ware washing equipment allows staff to properly clean and sanitize cooking equipment and utensils at a higher level within a matter of minutes. This facilities operation could be improved by the addition of a mechanical ware washer.

The following specific issues will reference codes and standards. For the purposes of this report when the health code is referenced, we are citing requirements of the Federal Food Code, 2017 addition, published by the FDA as well as the Merged Massachusetts Food Code 2013 addition.

We will also reference the National Sanitation Foundation (NSF). This is an independent governing body that develops standards for foodservice equipment and facility design. All equipment, in commercial kitchens must be built in accordance to NSF standards as a requirement of the food codes.



FS-3: Braising pans in efficient designs are provided with floor troughs with non-slip grating for proper cleaning and containment of the units' operation. The tangent draw-off valve is currently piped to a floor sink which presents several issues to the buildings plumbing system. The purpose of the tangent draw-off valve is to be able to prevent grease and other unwanted product from entering to entering the building drainage system.



FS-4: Exposed utilities along the cook line building wall present cleanability issues and potential violations of the health code if not properly cleaned. Utilities should be provided within a furred-out wall in these circumstances for proper cleanability.

FCA FORMS - PEABODY

Peabody School			Architectural				
EXTERIOR							
Room # on Site:							
Area	Part	Type	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Exterior	Façade	Brick Masonry		B	4	AE-10-16	A scope of masonry cleaning and repointing should be undertaken in areas of deteriorated mortar.
							Preparation, priming and repainting efforts are recommended at the steel lintels where paint is peeling.
							Install rodent-proof mesh or alternative cladding along base of North Elevation, extending below grade to address issues related to rodents burrowing/nesting in this area.
Exterior	Façade	Glazed Block		D	2	AE-17-20	A scope of masonry cleaning and repointing should be undertaken within the glazed block facades. Remove any existing vegetative growth from masonry facades should be part of this work.
Exterior	Façade	Concrete / Precast		B	3	AE-13-16, 23-26	A scope of masonry cleaning and repointing should be undertaken at precast sills and brick masonry conditions.
							Preparation and patching of the spalled concrete foundation and façade areas is recommended. Coat any exposed reinforcing steel with a corrosion inhibiting coating prior to performing the concrete repair.
Exterior	Façade	Stucco		B	4	AE-27	
Exterior	Façade	Storefront / Curtain Wall		B	4	AE-29-32	Replacement of missing or deficient curtain wall snap covers and cracked glass is recommended. Replacement of damaged or missing insect screens can be performed if desired.
Exterior	Façade	Window		B	4	AE-9, 40	
Exterior	Façade	Hollow Metal Doors, Windows		C	3	AE-34-36, 37-38	Some of the surface rusting observed at the hollow metal doors and frames may be due to use of deicing salts during the winter months. Reduction in use of these materials against these metal assemblies should reduce potential for further damage. Preparation, priming and repainting of these doors and frames is advised.
		Sealants		D	2		At the hollow metal window assemblies in the Southwest Stairwell, replacement of all perimeter sealants is recommended, as well as preparation, priming and repainting of the window frames.
Exterior	Façade	Tar and Gravel		E	1	AE-22, 28, 39	All façade sealants are recommended for replacement, including those within the masonry facades and at the perimeter of fenestrations.
Exterior	Roofing	Built Up Multi-Ply Roof		B	3	AE-41-51	Replace existing roof with new roof assembly including Code Compliant insulation and means of secondary drainage within 5 years, based on age of roof
Exterior	Roofing	Shingle Roofing		B	4	AE-41-51	The roofing is generally in fair to good condition. Built-up roofing systems have a long life expectancy and isolated repairs are recommended to address any active water leakage issues.
Exterior	Roofing	Skylights		B	3	AE-52-54	Prepare to replace roof within 5-10 years, based on age of roof
Exterior	Roofing			D	2	AE-43-44, 47-49, 55	The existing metal-framed skylights should be reglazed. Unit skylights are 20 years old, are reaching the end of their expected service life and should be replaced.
					3B		

Room Schedule, PEABODY

RM NAME	RM #	AREA	CEILING MATERIAL	CEILING CONDITION	CEILING PRIORITY	WALL MATERIAL	WALL CONDITION	WALL PRIORITY	FLOOR MATERIAL	FLOOR CONDITION	FLOOR PRIORITY	WINDOWS MATERIAL	WINDOWS CONDITION	WINDOWS PRIORITY	DOORS MATERIAL	DOORS CONDITION	DOORS PRIORITY	FFE CONDITION	FFE PRIORITY	MILLWORK CONDITION	MILLWORK PRIORITY	PLUMBING CONDITION	PLUMBING PRIORITY
STAIR	1	289 SF	GYP	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
STAIR	2	305 SF	GYP	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
STAIR	4	183 SF	GYP	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
LOBBY	A1	1330 SF	ACT	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
CORRIDOR	A1A	1553 SF	ACT	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CORRIDOR	A1B	1466 SF	ACT	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GENERAL ADMINISTRATION	A101	873 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
STORAGE	A101S	39 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
BATHROOM	A101T	42 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
PRINCIPAL	A102	191 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
ASSISTANT PRINCIPAL	A103	168 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
FAMILY LIAISON	A104	75 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
WORK ROOM	A105	139 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	C	3	N/A	N/A
CONFERENCE	A106	239 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
SOCIAL WORKER	A107	235 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
NURSE	A108	309 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	C	3	C/B	3
BATHROOM	A108A	40 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
INTERN OFFICE	A109	195 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	C	3	N/A	N/A
SCHOOL PSYCHOLOGIST	A110	169 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
STORAGE ROOM	A111	125 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
LITERACY COACH	A112	187 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
ELECTRICAL ROOM	A113	45 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
TRANSFORMER	A114	48 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
TRANSFORMER	A114A	42 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
CLASSROOM - 1ST	A115	954 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A
CLASSROOM - 1ST	A116	961 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
BOYS BATHROOM	A117	276 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
IDF	A118	46 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
GIRLS BATHROOM	A119	316 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
CLASSROOM - 4TH	A120	962 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
CLASSROOM	A121	939 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
CLASSROOM	A122	973 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
ELECTRICAL ROOM	A123	30 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
CLASSROOM	A124	912 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
CLASSROOM - 2ND	A125	947 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
CLASSROOM - 2ND	A126	963 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A
MEDIA CENTER	A127	2466 SF	ACT/GYP	C	3	GYP	B	4	UN	A	4	AL	B	4	WD	B	4	B	4	C	4	N/A	N/A
WORK ROOM	A127A	167 SF	ACT/GYP	C	3	GYP	B	4	UN	A	4	N/A	N/A	N/A	WD	B	4	B	4	N/A	N/A	N/A	N/A
OFFICE	A127B	96 SF	ACT/GYP	C	3	GYP	B	4	UN	A	4	N/A	N/A	N/A	WD	B	4	B	4	N/A	N/A	N/A	N/A
MDF	A127C	105 SF	ACT/GYP	C	3	GYP	B	4	UN	A	4	N/A	N/A	N/A	WD	B	4	B	4	N/A	N/A	N/A	N/A
READING ROOM	A127D	480 SF	ACT/GYP	C	3	GYP	B	4	UN	A	4	AL	B	4	WD	B	4	B	4	N/A	N/A	N/A	N/A
CORRIDOR	B1	3693 SF	ACT	B	4	GYP/PLAM	B	4	VCT	B	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DATA	B1A	18 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
VESTIBULE	B1G	205 SF	ACT	B	4	GYP/PLAM	B	4	VCT	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
BATHROOM	B1T	73 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
KITCHEN	B115B	178 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A
GIRLS BATHROOM	B143	200 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
BOYS BATHROOM	B144	218 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
CLASSROOM	B145	284 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A
WORK ROOM	B146	300 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	C	3	N/A	N/A
ELECTRICAL ROOM	B147	46 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
TRANSFORMER	B148	32 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
CLASSROOM	B149	268 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A
FACULTY DINING	B150	390 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	C	3	C/B	3
BATHROOM	B150T	73 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
OT/SPED	B151	265 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	C	3	N/A	N/A
CLASSROOM	B152	267 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A
SPECIAL EDUCATION	B153	261 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	C	3	N/A	N/A
OT/PT	B154	562 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	C	3	C/B	3
CLASSROOM - SPECIAL START	B155	1062 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A
STORAGE	B155A	76 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
BATHROOM	B155T	75 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
CLASSROOM - SPECIAL START	B156	1074 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A
STORAGE	B156A	76 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
BATHROOM	B156T	75 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
CLASSROOM - KINDERGARTEN	B157	1176 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
STORAGE	B157A	45 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
BATHROOM	B157T	75 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3

CLASSROOM - KINDERGARTEN	B158	1192 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
STORAGE	B158A	45 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
BATHROOM	B158T	75 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
CLASSROOM - KINDERGARTEN	B159	1139 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
STORAGE	B159A	52 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
BATHROOM	B159T	78 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
CLASSROOM - PRÉ KINDERGARTEN	B160	1133 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
STORAGE	B160A	52 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
BATHROOM	B160T	78 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
MUSIC	B161	493 SF	EXP	B	4	GYP	B	4	CONC	C	3	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
LIBRARY	B162	365 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
JANITOR	B170	43 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
CORRIDOR	C1	3067 SF	ACT	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VESTIBULE	C1A	723 SF	ACT	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
CORRIDOR	C1A	218 SF	ACT	B	4	SGFT/TILE	B	4	NSLP VCT	B	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ELECTRICAL	C1B	14 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
CORRIDOR	C1C	398 SF	ACT	B	4	SGFT/TILE	B	4	TERRZ	B	4	AL	B	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CORRIDOR	C1D	100 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
CORRIDOR	C1E	217 SF	ACT	B	4	CMU	B	4	TILE	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
STORAGE	C1S	249 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
AUDITORIUM	C128	3845 SF	ACT/GYP	C	3	BRICK	B	4	VCT	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	C	3	N/A	N/A
TICKET BOOTH	C128A	51 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
CONTROL ROOM	C128B	96 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
GREEN ROOM	C128C	408 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	C	3	N/A	N/A
CAFETERIA	C131	4079 SF	ACT/GYP	D	2	GYP	B	4	VCT	B	4	N/A	N/A	N/A	HM	B	4	C	4	N/A	N/A	N/A	N/A
IDF	C131A	26 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
PRESCHOOL	C132	1167 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	C	3	C/B	3
STORAGE	C132A	111 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
PRESCHOOL	C133	873 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	C	3	C/B	3
STORAGE	C133A	137 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
OFFICE	C133B	170 SF	GYP	B	4	CMU	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
BATHROOM	C133T	87 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
GYMNASIUM	C134	6647 SF	EXP	C	4	CMU/GYP	C	4	WD	B	4	N/A	N/A	N/A	HM/WD	B	4	C	4	N/A	N/A	N/A	N/A
BATHROOM	C134T	74 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
BOYS LOCKER ROOM	C135	230 SF	GYP	B	4	CMU	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
REFRIDGERATOR	C135	98 SF	ACT	B	4	CMU	B	4	TILE	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
ELECTRICAL ROOM	C135A	63 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
STORAGE	C135B	203 SF	GYP	B	4	CMU	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
GIRLS LOCKER ROOM	C136	216 SF	GYP	B	4	CMU	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
STORAGE	C136A	192 SF	GYP	B	4	CMU	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
BATHROOM	C137	56 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
BATHROOM	C138	56 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
EVEN-START ADULTS/COMPUTER ROOM	C139	383 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	C	3	N/A	N/A
COMMUNITY OFFICE	C140	196 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
MULTI-PURPOSE ROOM	C141	395 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
FAMILY CENTER	C142	239 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	C	3	N/A	N/A
OFFICE	C142A	146 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
MUSIC STORAGE	C171	708 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
MUSIC	C172	556 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
KITCHEN	C173	939 SF	ACT	B	4	CMU	B	4	TILE	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
OFFICE	C173A	68 SF	GYP	B	4	CMU	B	4	TILE	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
OFFICE	C173B	120 SF	GYP	B	4	CMU	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
BATHROOM	C176	61 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	C/B	3
FOOD STORAGE	C177	151 SF	ACT	B	4	CMU	B	4	TILE	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
MUSIC	C178	653 SF	ACT	D	3	GYP/CMU	D	3	VCT	D	3	N/A	N/A	N/A	WD	D	3	N/A	N/A	N/A	N/A	N/A	N/A
STORAGE	C178A	60 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
STORAGE	C179	72 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A
STAIR	1	294 SF	GYP	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
STAIR	2	317 SF	GYP	B	4	SGFT/TILE	B	4	TERRZ	B	4	AL	B	4	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
STAIR	3	276 SF	GYP	B	4	TERRZ	B	4	TERRZ	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
STAIR	4	146 SF	GYP	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
CORRIDOR	A2	519 SF	ACT	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	HM	B	4	N/A	N/A	N/A	N/A	N/A	N/A
CORRIDOR	A2	3684 SF	ACT	B	4	SGFT/TILE	B	4	TERRZ	B	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CLASSROOM - HEALTH	A201	533 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
CLASSROOM - HEALTH	A201A	571 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A
VESTIBULE	A201B	36 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	N/A	N/A
CLASSROOM	A202	939 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
CLASSROOM	A203	952 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
VESTIBULE	A204	171 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	N/A	N/A
CONFERENCE	A204A	327 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C/B	3
SMALL GROUP	A204B	225 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A
SMALL GROUP	A204C	221 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A
SCIENCE - 7TH	A205	955 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	N/A	N/A

GIRLS BATHROOM	A206	296 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	AL	B	4	WD	B	4	C	4	N/A	N/A	N/A	C/B	3	
IDF	A207	18 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	N/A	HM	C	4	N/A	N/A	N/A	N/A	N/A	N/A	
BOYS BATHROOM	A208	288 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	AL	B	4	WD	B	4	C	4	N/A	N/A	N/A	C/B	3	
BATHROOM	A209	74 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	C/B	3	
SCIENCE- 6TH	A210	985 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	C/B	3	
PREP ROOM	A210A	220 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
CLASSROOM - 6TH	A211	926 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	C/B	3	
CLASSROOM - 6TH	A212	927 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	C/B	3	
CLASSROOM - 6TH	A213	990 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
JANITOR CLOSET	A213C	39 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	HM	C	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CLASSROOM	A214	939 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	C/B	3	
UPPER SCHOOL OFFICE	A215	316 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	C	N/A	N/A	
OFFICE	A215A	161 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
OFFICE	A215B	161 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
CONFERENCE	A215C	337 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	C/B	3	
ART	A216	939 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	C/B	3	
BOYS BATHROOM	A217	288 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	C	3	N/A	N/A	N/A	C/B	3	
JANITOR CLOSET	A217A	39 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	N/A	HM	C	4	N/A	N/A	N/A	N/A	N/A	N/A	
GIRLS BATHROOM	A218	317 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	C	3	N/A	N/A	N/A	C/B	3	
ART	A219	753 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	HM	B	4	C	3	C	3	C	C/B	3	
VESTIBULE	A219	115 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	C	N/A	N/A	
OFFICE	A219A	104 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
OFFICE	A219B	132 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
OFFICE	A219C	125 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	C	N/A	N/A	
MECHANICAL	A240	440 SF	EXP	C	2	CMU/GYP	C	2	CONC	C	2	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
BOOK STORAGE	A241	62 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	C	N/A	N/A	
KITCHEN	A241A	94 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	C	N/A	N/A	
CORRIDOR	B2	3229 SF	ACT	B	4	GYP/PLAM	B	4	VCT	B	4	AL	B	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CORRIDOR	B2A	280 SF	ACT	B	4	GYP/PLAM	B	4	NSLP VCT	B	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WORK ROOM	B220	436 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
LEARNING ASSISTANT	B221	254 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
FACULTY DINING	B222	223 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
OFFICE	B222A	159 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
VESTIBULE	B222B	37 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	C	N/A	N/A	
BATHROOM	B222T	65 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	C/B	3	
ELECTRICAL ROOM	B223	20 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	N/A	HM	C	4	N/A	N/A	N/A	N/A	N/A	N/A	
BOY BATHROOM	B224	199 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	C/B	3
CUSTODIAN	B224A	47 SF	GYP	C	4	GYP	C	4	VCT	C	4	N/A	N/A	N/A	N/A	HM	C	4	N/A	N/A	N/A	N/A	N/A	N/A	
GIRLS BATHROOM	B225	203 SF	ACT/GYP	B	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	B	4	N/A	N/A	N/A	N/A	N/A	C/B	3	
CLASSROOM - 7TH	B226	896 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
SMALL ROOM	B226A	97 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	C	N/A	N/A	
CLASSROOM - 7TH	B227	911 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
CLASSROOM - 7TH	B228	923 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
SMALL ROOM	B228A	97 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	C	N/A	N/A	
CLASSROOM - 8TH	B229	924 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
CLASSROOM - 8TH	B230	925 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
SMALL ROOM	B230A	97 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	C	N/A	N/A	
CLASSROOM - 8TH	B231	905 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
SCIENCE	B232	1101 SF	ACT	B	4	GYP	B	4	VCT	B	4	AL	B	4	WD	B	4	C	3	C	3	C	N/A	N/A	
PREP ROOM	B232A	122 SF	ACT	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	B	4	C	3	C	3	C	N/A	N/A	

Peabody Elementary School		Structural			
Structural or Structurally-Related Item	Condition (A-E)	Priority (1-5)	Photos	Notes	
Roof Construction - General	B	5		Limited Work	
Floor Construction - General	B	5		Limited Work.	
Foundations - General	B	5		Limited Work.	
Lateral force resisting system - General	C	5		Building does not meet the current seismic code. Unreinforced masonry wall issues would need to be addressed in conjunction with a future major renovation.	
Exterior walls - General	C	4	ST-1, ST-2	It is recommended that concrete foundation cracking and spalling be repaired/patched to prevent further deterioration. It is recommended that open joints in brick and granite veneer elements be recaulked to avoid water infiltration. Monitor brick veneer for potential future repointing and steel lintel repair/replacement.	
Unsupported bricks at veneer at intersection of overhang and exterior wall of Music Room B161	D	2	ST-3	It is recommended that condition be investigated further to confirm no loose bricks, which could pose falling hazard. It is recommended that support be provided for the	
Exterior exposed structural steel at stair roof framing	C	4	ST-4	Confirm galvanized finish. If no galvanized finish, it is recommended that steel be cleaned and coated with zinc-rich paint to prevent future rusting.	
Deteriorated exterior approach slab	C	4	ST-5	Located outside the kindergarten classrooms in the 1995 addition This is not a structural concern, but it could pose as a tripping hazard. It is recommended that the concrete be repaired.	
Water/moisture intrusion at Cafeteria skylight	C	4	ST-6	Water/moisture damage appears to indicate failed roofing at skylight curb. Further investigation is recommended.	
Cracks at floor finish across corridor and extending through Grade 8 Classroom B229.	C	4	ST-7	Evidence that floor finishes were not detailed to accommodate movement at an expansion joint. This is not a structural concern, but it could pose as a tripping hazard at the corridor. It is recommended that the floor finish be repaired.	
Hanging steel structure at OT/PT room	C	3	ST-8	Documentation for the design of the hanging structure, including evaluations of the existing structure, was not available. There is no evidence of structural distress that would indicate significantly overstressed or failed structural members. It is recommended that the condition be evaluated further to confirm that the second floor framing above has sufficient capacity for the additional loading requirements.	
Cracks at gymnasium exterior masonry backup walls	C	4		These do not appear to be an immediate structural concern. It is recommended that cracks be patched in conjunction with a future renovation.	

Peabody School			Foodservice				
Kitchen							
Room # on Plan:			Room Use on Plan:				
Room # on Site:			Room Use on Site:				
Area	Part	Type	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Kitchen	Finishes	Ceilings, Walls & Floors		D	4		
Kitchen	Refrigerated Storage	Walk-ins and Reach-ins		C	4		
Kitchen	Food Preparation Equipment	Work Tables, Prep Tables, Prep Equipment		C	3		
Kitchen	Cooking Equipment	Hoods, Ovens, Ranges, Kettles, Braising Pans, Steamers, etc.		C	3		
Kitchen	Serving Equipment	Serving Counters, Heated and Refrigerated Holding & Support		C	3		
			Overall	C	3		Comments:

- Replace fire suppression system
- Repair or replace walk=-in freezer
- Provide updated serving line equipment

Peabody School			Plumbing				
Domestic Water System							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Water Service	183 and Stair 1	P1.01		C	4		
Water Heater	183	P1.02		C	3		
Domestic Water Piping	Building Wide	P1.03		C	1	PL-1, PL-2	The 4" Domestic main within the crawl space has failed and is constantly leaking. Domestic water pipe fittings throughout the bulding indicate general corrosion at various pipe fittings at fixtures and equipment due to the municipal water. Fittings should be replaced as required.
Domestic Plumbing Fixtures							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Water Closets	Building Wide	P2.01		B	4		
Lavatories	Building Wide	P2.02		B	4		
Urinals	Building Wide	P2.03		B	3		
Service Sinks	Building Wide	P2.04		B	3		
Classroom Sinks	Building Wide	P2.05		B	3	PL-3	
Kitchenettes	Building Wide	P2.06		B	3		
Floor Drains	Building Wide	P2.07		B	3		
Drinking Fountains	Building Wide	P2.08		B	3		
Sanitary Waste and Vent System							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Piping - Above Grade	Building Wide	P3.01		B	3		
Piping - Below Grade	Building Wide	P3.02		B	3		
Sewage Ejector	183	P3.03		C	3		

Storm Water System							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Piping - Above Grade	Building Wide	P4.01		B	3		
Piping - Below Grade	Building Wide	P4.02		B	3		
Roof Drains	Building Wide	P4.03		B	4		
Natural Gas							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Gas Service	Site	P5.01		B	4		
Gas Piping	Building Wide	P5.02		B	4	PL-4	

Peabody School			Fire Protection				
Sprinkler System							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Fire Service	183 and Stair 1	FP1.01		B	4		
Piping	Building Wide	FP1.02		C	3	FP-1	
Sprinkler Heads	Building Wide	FP1.03		B	4		
Standpipe System							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Hose Valves	N/A	N/A	N/A	N/A	N/A		
Piping	N/A	N/A	N/A	N/A	N/A		
Xxxxxx							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
AHU-1	Roof	FP3.01					

Peabody School			Mechanical				
Heating							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Boilers	Mech Room	M1.01	None	A	4		The boilers were installed in 2000 and have a service life of 35 years. Replace within the next 10-15 years.
Pumps	Mech Room	M1.02	3	C	3	M-1	The pumps were installed in 2001 and have a service life of 21 years. They are in okay conditions but should be replaced in the next 3-5 years. One pump has torn insulation and is exposed. See M-1 for condition.
Piping	Building Wide	M1.03	TBD	B-C	3		Pipes are in good condition. Some corrosion seen in piping directly connected to units. These pipes should be inspected.
Cabinet Unit Heaters	Building Wide	M1.04	All	C-D	3		Installation occurred in 2000 with a service life of 20 years. They show signs of physical damage and should be replaced within the next 3-5 years.
Fin Tube Radiation	Building Wide	M1.05	All	C-D	3		Installation occurred in 2000 with a service life of 20 years. They show signs of physical damage and should be replaced within the next 3-5 years.
Unit Ventilator s	Building Wide	M1.06	All	D	2	M-2	These were installed in 2000 and have a service life of 20 years. There are signs of corrosion within the units and condensate collection issues. Should be replaed withing the next year.
Cooling							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Chiller	Roof	M2.01	1	D-E	2		Chiller is currently out of commission and should be replaced. It was installed in 1995 and is in poor condition.
Piping	Roof	M2.02	All	D	2	M-4	Exterior pipes show signs of damage and should be replaced with the new chiller

Ventilation							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Air Handling Unit, HV-1	Roof	M3.01	1	D	3		Installed in 1995 and show signs of wear. With a service life of 15 years, this unit is 10+ years past its service life and should be replaced within the next 3-5 years.
Air Handling Unit, HV-2	Roof	M3.02	1	D	3		Installed in 1995 and show signs of wear. With a service life of 15 years, this unit is 10+ years past its service life and should be replaced within the next 3-5 years.
Air Handling Unit, HV-3	Penthouse	M3.03	1	C	4		Installed in 1995 and show signs of wear. With a service life of 15 years, this unit is 10+ years past its service life and should be replaced within the next 3-5 years.
Air Handling Unit, HV-4	Penthouse	M3.04	1	C	4		Installed in 1995 and show signs of wear. With a service life of 15 years, this unit is 10+ years past its service life and should be replaced within the next 3-5 years.
Air Handling Unit, ACU1	Roof	M3.05	1	D	3		Installed in 1995 and show signs of wear. With a service life of 15 years, this unit is 10+ years past its service life and should be replaced within the next 3-5 years.
Air Handling Unit, ACU2	2nd Floor	M3.06	1	C	4		Installed in 1995 and show signs of wear. With a service life of 15 years, this unit is 10+ years past its service life and should be replaced within the next 3-5 years.
Air Handling Unit, ACU3	Roof	M3.07	1	D	3		Installed in 1995 and show signs of wear. With a service life of 15 years, this unit is 10+ years past its service life and should be replaced within the next 3-5 years.
Air Handling Unit, ACU4	Roof	M3.08	1	D	3		Installed in 1995 and show signs of wear. With a service life of 15 years, this unit is 10+ years past its service life and should be replaced within the next 3-5 years.
Air Handling Unit, ACU5	Roof	M3.09	1	D	3		Installed in 1995 and show signs of wear. With a service life of 15 years, this unit is 10+ years past its service life and should be replaced within the next 3-5 years.
Air Handling Unit, ACU6	Roof	M3.10	1	D	3		Installed in 1995 and show signs of wear. With a service life of 15 years, this unit is 10+ years past its service life and should be replaced within the next 3-5 years.
Fan Coil Units	Building Wide	M3.11	All	D	2	M-5	All fan coil units should be replaced as they show signs of corrosion and water damage by the units. This is most likely a condensate issue, due to a lack of a condensation system.
Ductwork	Building Wide	M3.12	TBD	A-B	4	M-6	Ductwork, diffusers, and grilles are in good condition, most likely all replaced during the 2000 renovation. The only area of improvement is replacing the gymnasium diffusers as they are all damaged.
Building Automation System							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
System Controls	Mech Room	M4.01	None	B	4	M-7	The control system is tied to the entire building via the JCI Metasys network. This communicated to the Cambridge BAS network via JCI Facility Explorer. Should be upgraded in the next 10-15 years.

Peabody School			Electrical				
Power Distribution Systems							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Main Electric Service	Lower level	E1.01	Main Electric Room	B	4	See Report	Service equipment is ~ 22 years old and in good condition.
Main and General Distribution	All Electrical Distribution	E1.02	Electrical Distribution	B	4	See Report	Distribution/Feeders & branch circuits are in good condition.
Coordination/Arc Fault Study	All Electrical Distribution	E1.03	Electrical Distribution	C+	5	See Report	Provide Arc Fault labels
Electrical Devices	All Electrical Distribution	E1.04	Electrical	C+	2	See Report	Provide electrical maintenance on all equipment.
		E1.05	All	B	4	See Report	Provide tamper resistant outlets.
Emergency Power	Main Electric Room	E1.06	N/A	B	4	See Report	Apears in Good Condition.
Emergency	Main	E1.07	N/A	B	1	See Report	Provide full system test and full test of all emergency egress paths.
Lighting Systems							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Lighting	Building Wide	E1.08	Building Wide	B	4	See Report	Provide energy code compliant lighting in all areas. Many of the corridors, common spaces, classrooms were recently upgraded.
Lighting	Building	E1.09	Building Wide	D	3 & 5	—	Provide energy code compliant lighting controls.
Fire Alarm							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Fire Alarm	Mechanical Room	E1.10	Building Wide	B	4 & 5	See Report	Provide complete testing of existing fire alarm system and detailed review of devices. The fire alarm system is a horn type system and a speaker type fire alarm system is required for this occupancy type.
CO Detection	Classrooms	E1.11	Building Wide	B	5	See Report	CO detection is required for Group E Class Rooms.

Peabody & Raus Building Assessment			Doors				
Entire School Door Assessment							
Room # on Plan:		N/A	Room Use on Plan:		All of Peabody & Raus		
Room # on Site:			Room Use on Site:				
Area	Part	Type	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes:
Interior	Doors	Admin	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Admin Office
Interior	Doors	Auditorium	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Auditorium
Interior	Doors	Bathroom	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Bathroom 1 Bathroom 2 Bathroom 3
Interior	Doors	Corridor	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Corridor 1
Interior	Doors	Exterior	Survey only for site typcals, quantities and locations not recorded	C	3	See Links	Exterior 1
Interior	Doors	Exterior	Survey only for site typcals, quantities and locations not recorded	C	4	See Links	Exterior 2
Interior	Doors	Exterior	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Exterior 3
Interior	Doors	Exterior	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Exterior 4
Interior	Doors	Exterior 5 (Gym	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Exterior 5 (Gym)
Interior	Doors	Exterior	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Exterior 6
Interior	Doors	Gym	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Gym 1 Gym 1 (youth center) Gym 2 (youth center)
Interior	Doors	IDF	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	IDF
Interior	Doors	Janitor	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Janitor 1 Janitor 2
Interior	Doors	Locker	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Locker rooms
Interior	Doors	Main Entry	Survey only for site typcals, quantities and locations not recorded	C	4	See Links	Main Entry
Interior	Doors	Office / Classroom	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Office / Classroom 1 Office/ Classroom 2
Interior	Doors	Passage	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Passage
Interior	Doors	Side Entry Vestibule	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Side Entry Vestibule
Interior	Doors	Stair 1	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Stair 1
Interior	Doors	Stair 2	Survey only for site typcals, quantities and locations not recorded	B	4	See Links	Stair 2

This page intentionally left blank.

EAQ FORMS - SCORING BREAKDOWN

The Educational Adequacy Assessment looked at how existing spaces in each school support specific educational criteria and needs as identifies by our research. Each assessor utilized checklists and the assessment criteria and rating scale below to maintain consistency across all fields. All line items were then averaged for the Educational Adequacy Quotient. Detailed reports for this school individually can be seen in the following pages.

ASSESSMENT CRITERIA	
4	Functions excellently
3	Functions well/good enough condition to support educational needs
2	Exists; baseline functionality; doesn't support educational needs
1	Exists; does not function/needs to be replaced
0	Does not exist, but is needed
N/A	Not Applicable; not required

2.1 EDUCATIONAL ADEQUACY FORMS - PEABODY

Metric	Description	Score	Comments
SITE: Size, Location, Access, Cultural Context		Consider overall school for this category	
Site Size	Site is 10-15 acres in size; Adequate space for playgrounds & fields	3	Some parking; some play. Adjacent fields used by school, not part of property
Location	Distance to students, near pollution/noise, appropriate to community	4	
Access	Parent/Bus drop-off & pick-up; space for queuing, separation of cars, bus & peds, ADA; access for community to recreation & events	3.5	Has drop-off loop; Entrances at grade. No parking for staff except at side of field (parking lot is for library)
Identity & Cultural Context	The campus has a positive identity & represents the mission/values of the school community & surrounding community.	3.5	Nice spaces w/courtyard. Sprawling building w/many doors seen from streets. around block; Blue color is at front entrance canopy is dated. Nice front fence & trees.

SECURITY: Site & Building			
Consider overall school for this category			
Building Entry and Sequence	Are there appropriate sightlines from the building entry to parking? Can you get from parking/bus to the door protected from elements?	4	Front office faces street/drive lane. Cover at front door.
Building Security	Secure Vestibule for building entry; internal zones of security	3	no vestibule; there are cross corridor doors- need to confirm if they lock appropriately
Site Security	Safe or Secure Perimeter: Minimal entry points with good visibility & lighting.	3.5	Multiple entry points
Wayfinding	Building organization is easily understood; students, parents & visitors can find their way	3	Long corridors & multiple wings
Community Connections	Campus provides for community use & interaction; Campus supports after hours use in a secure way.	4	Public wing that has a central space; is separate from academic wing.

LEARNING AREAS			
Consider overall school for this category			
Differentiated Learning	Overall compliment of classrooms provide areas for different learning modalities	3.5	The basic classrooms are repetitive, but there are a reasonable number of 1/2 classrooms or small group rooms, but they are down a hall, not incorporated into a learning community.
Inquiry Based Learning	Learning area has access to space for project based learning	3.5	The classrooms have sinks and they are HC accessible; in pretty good shape.
Large Group Instruction	Area(s) exist for combined classes to gather collectively	2	Only in public spaces like library or cafeteria; no combined classrooms
Distance Learning	Space dedicated for distance learning for individuals or small groups of students; learning labs for distance interventions (infrastructure with computers/technology/display	3	
Independent Study	Areas available for students to study independently	2.5	better at larger classrooms at 1st, but most don't have anyplace specific- areas created w/furniture if they exist; 2nd floor wing has rooms between classrooms w/views to corridor
Small Group Instruction	"Pull-out" spaces available for individual instruction for special needs students	3.5	Small group rooms along one or two corridors; not mixed in w/classrooms except at 2nd floor far wing used by MS
Self-Contained Classrooms	Space exists for special needs students within an independent classroom	3.5	Special Start
All School Gathering Area	Spaces exist for campus wide meeting/activities	4	Gym; auditorium
Break-Out Areas	Common spaces for students to collaborate and work in small group of 10 or less. Should be assessed on passive supervision, display, infrastructure, and spatial acoustics	1	no break-out areas- corridors are long & straight w/o areas for kids to work
Presentation Areas	Space exists for student, teacher & guest presentations for various size groups	3	space in auditorium, library & maybe cafeteria
	Space exists for learning and instruction in appropriate outdoor environments. Should be assessed on passive supervision, display, infrastructure, and spatial acoustics		Blue courtyard, but other outdoor areas restricted to classrooms on all 3 levels

Metric	Description	Score	Comments
EDUCATIONAL EQ		Consider overall school for this category	
Student Centered Sustainable Design™			
Stimulating Architecture	The school environment is welcoming and inspiring. The occupants are engaged.	3.5	public space w/ceramic art made by students; bright and airy
Safe & Healthy	The school has good sight lines and connections between spaces & to places of vulnerability (stairs/restrooms) to support sense of community & create a safe environment.	3	Pretty good sight lines, but lots of corners w/"donut" plan
Views & Connections	Views provided from classrooms/core learning spaces to outdoors, corridors, or other learning spaces	3	Good views to outside; sidelights provide views to corridors; no views or connections between classrooms except some shared bathrooms
Daylighting	Windows/Skylights: daylighting provided with solar shades or overhangs where appropriate	3	Lots of daylight at 2nd floor; less at 1st floor (fewer windows); blinds are solid - would benefit from mesh shades and/or exterior sun shades on some facades.
Lighting	Sufficiency (quantity/quality) & differentiation (provides choice/change)	2.5	direct/indirect; good coverage.
Acoustics	Space should have appropriate sound absorpition materials to allow for conversation to be heard. Walls designed to minimize sound transfer	3.5	
Thermal Comfort/Air Quality	Spaces are not too hot or too cold; not too much heat gain from sun. The air is "fresh" w/o noticeable odors/staleness/mustiness (Ventilation)	2	Need to confirm functionality of systems w/engineers & surveys From Survey: AC is broken, and heat blows cold air. Too cold in summer, too hot in winter. No ability to control temperature; even with portable units it is inconsistent. I have AC but no heat. Either freezing or to hot. Office has no functioning windows, and can't open door (across from gym). Lots of dust.
Universal Design	Are spaces designed to meet the needs of all people, including those with physical or SEB challenges or cultural differences.	3.5	long corridors may be a challenge; but doors/spaces are ADA accessible
Display of Work	Is there adequate areas for student work to be displayed both inside and outside learning spaces	3	did not see any 3D cases for display of work
Movement & Exploration	Does the space allow for the different learning modalities to happen dynamically	3	Rooms are large enough, so dependent on furniture
Adaptability & Flexible Space	How much can the space (walls) change shape or allow change in use by opening or combine with other spaces.	0	No moveable walls

Furniture			
Design	Ergonomic needs of students are met; furniture is appropriately sized for age group, per DLR furniture sizing guide	2	Some interesting furniture options in ES, but mostly limited choices, especially for MA.
Flexibility	Furniture easily moved to allow for classroom reconfiguration	3	some rooms have variety of tables, but many do not
Variety of Seating Types	Combination of formal and soft seating available within the space. Is their choice in seating.	1.5	Some rooms have soft seating brought in by teacher.
Movement	Furniture design allows for individual student movement which increases attention	1.5	Elementary has chairs that flex, but MS does not.

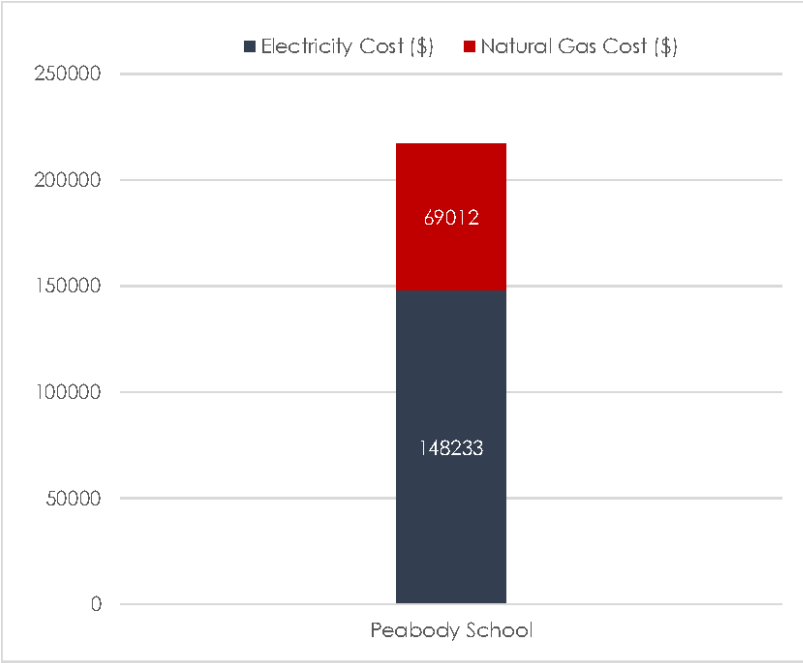
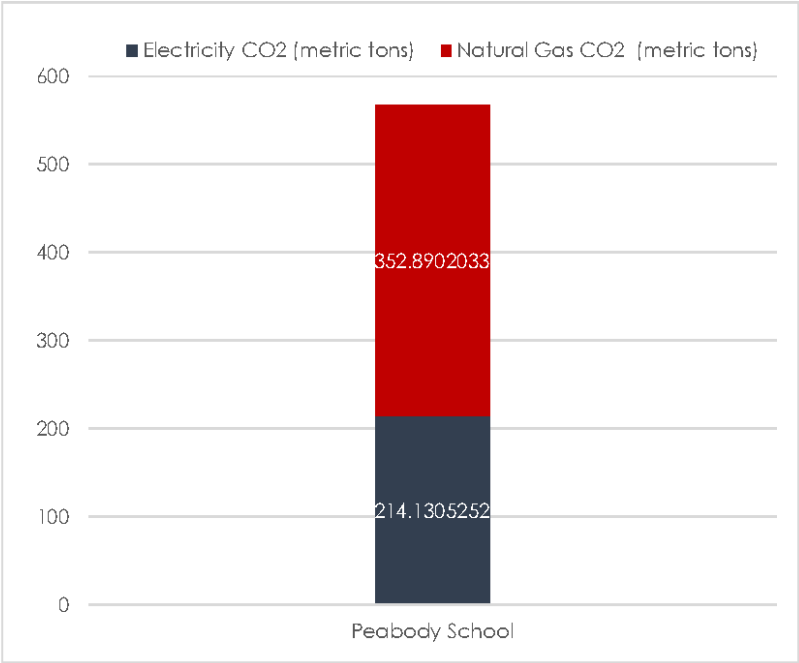
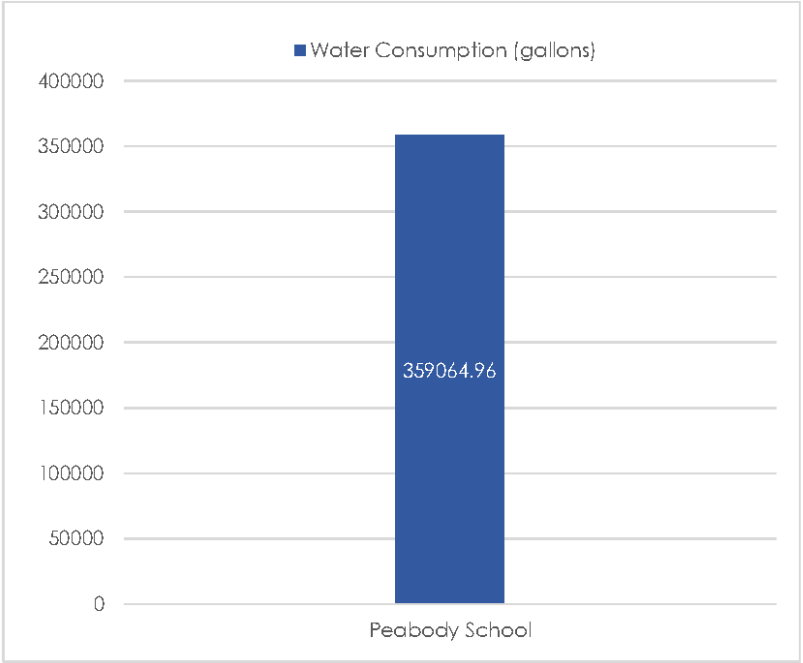
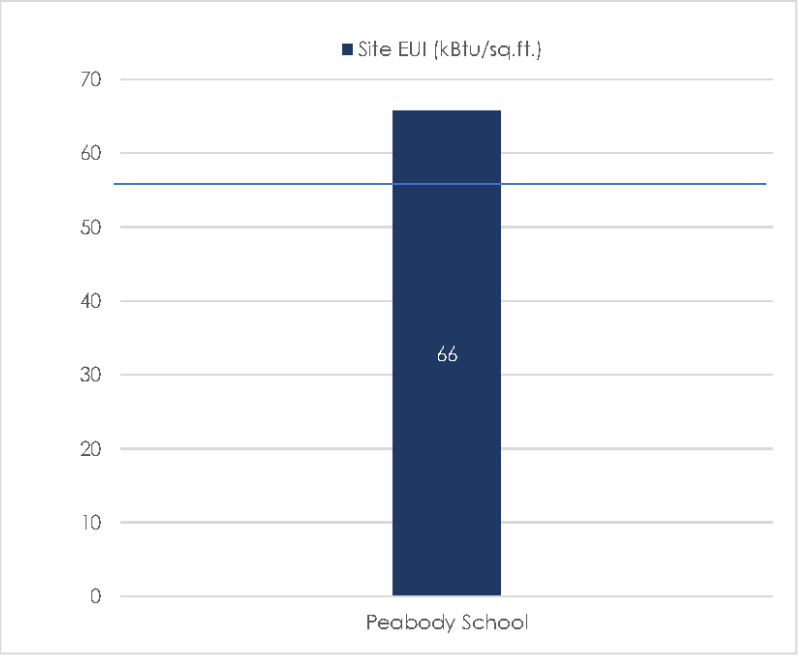
Metric	Description	Score	Comments
INSTRUCTIONAL SPACES			
Classrooms- regular instructional spaces (average for all spaces)			
Size	Physical square footage of rooms as compared to standards	4	Almost all regular classrooms are adequate size
Appropriate Support Spaces	Resources Classrooms; Small Group Rooms, etc. nearby	3	Most are not embedded in learning spaces, but some are in MS
Storage for Materials	Space for student material storage including books, work projects, backpacks, coats, Storage for teacher personal materials, classroom supplies	3.5	Good amount of storage; lockers in hall for MS
Technology, power & data	Access to technology in the classroom; sufficient access to power & data to support flexible, student centered learning	3	Limited power because of so much shelving and storage
Sink &/or equipment	Provided in rooms, if needed	4	
Writeable Surfaces & Tack Surfaces	Availability and quantity sufficient to use	2.5	limited because of windows and storage; could use more portables or make storage doors into writeable/tack
Accessibility & Location	Degree to which classrooms are accessible (ADA) & appropriately located in relation to each other & other functions	3.5	Only negative is long corridors that make pars feel disconnected
Classrooms - Specialty spaces: SPED			
Size	Physical square footage of rooms as compared to standards	4	
Appropriate Support Spaces	Testing & Conf. Rooms; Life-Skills; Sensory or Decompression Rooms, etc. as required	3.5	
Storage for Materials	Space for student material storage including books, work projects, backpacks, coats, Storage for teacher personal materials, classroom supplies	3.5	
Technology, power & data	Access to technology in the classroom; sufficient access to power & data to support flexible, student centered learning	3	
Sink &/or equipment	Provided in rooms, if needed	4	
Writeable Surfaces & Tack Surfaces	Availability and quantity sufficient to use	2.5	limited because of windows and storage; could use more portables or make storage doors into writeable/tack
Accessibility & Location	Degree to which classrooms are accessible (ADA) & appropriately located in relation to each other & other functions	3	

Metric	Description	Score	Comments
Classrooms - Specialty spaces: Science, Applied Learning (Maker Spaces), CTE			
Size	Physical square footage of rooms as compared to standards	3	too small
Appropriate Support Spaces	Prep Rooms, Chemical Storage; Equipment Storage; Recording, etc. Public Entrance or Waiting as appropriate to program	3.5	
Storage for Materials	Space for student material storage including books, work projects, backpacks, coats, Storage for teacher personal materials, classroom supplies	3.5	
Technology, power & data	Access to technology in the classroom; sufficient access to power & data to support flexible, student centered learning	3.5	power at counters
Sink &/or equipment	Provided in rooms, if needed	3	Could use more sinks
Writeable Surfaces & Tack Surfaces	Availability and quantity sufficient to use	2	
Accessibility & Location	Degree to which classrooms are accessible (ADA) & appropriately located in relation to each other & other functions	4	
Classrooms - Specialty spaces: Visual & Performing Arts & Fitness/Health			
Size	Physical square footage of rooms as compared to standards	2	Some rooms really small
Appropriate Support Spaces	Kiln Room; Practice Rooms; Instrument &/or Music Storage; Equipment Storage	2	There are some storage rooms but not enough for two separate schools.
Storage for Materials	Space for student material storage including books, work projects, backpacks, Storage for teacher personal materials, classroom supplies	3	
Technology, power & data	Access to technology in the classroom; sufficient access to power & data to support flexible, student centered learning	3	
Sink &/or equipment	Provided in rooms, if needed	2	No sinks in music rooms
Writeable Surfaces & Tack Surfaces	Availability and quantity sufficient to use	2.5	
Accessibility & Location	Degree to which classrooms are accessible (ADA) & appropriately located in relation to each other & other functions	2.5	ES art room at 2nd floor (not sure where MS art is taught); ES music room in wing with Kinder/PS & by cafeteria in very small space; MS music near auditorium

Metric	Description	Score	Comments
PUBLIC & SUPPORT SPACES			
Public Spaces: Media Center, Cafeteria, Gymnasium, Auditorium & Stage			
Accessibility & Location	Degree to which spaces are accessible (ADA) & appropriately located in relation to each other & other functions	4	
IEQ - average for all	Daylight, Views, Thermal Comfort, Air Quality (Ventilation)	3	cafeteria has no views
Lighting - average for all	Sufficiency (quantity/quality) & differentiation (provides choice/change) for intended uses	2	
Acoustics & Privacy - average for all	Do spaces have proper acoustics for intended use & afford ability to achieve visual & auditory privacy when needed.	2.5	Acoustics ok in library, cafeteria; but lack of materials in gym
Technology, power & data - average for all	Sufficient technology, power & data for intended uses (i.e. public address system in gym; adequate audio-visual for presentations & performances, etc.)	2.5	
Display of Student Work, Awards, Notices, etc.	Is there adequate areas for display and communication (cases, screens, interactive dashboards, etc.) in appropriate places to be seen	3	adequate in corridors; no 3D; Digital display at front entry
Storage for equipment - average for all	Space for the storage of specialized equipment to meet student needs	2	Former storage rooms now used for teaching
Media Center	Exists/Adequacy: size & configuration	3.5	
Cafeteria	Exists/Adequacy: size & configuration; Adequate kitchen & Servery	2	
Gymnasium	Exists/Adequacy: size & configuration	4	
Auditorium &/or Stage	Exists/Adequacy: size & configuration	4	

Administrative & Health Offices			
Accessibility & Location	Degree to which spaces are accessible (ADA) & appropriately located in relation to each other & other functions	2.5	MS main office is hidden and not connected to public space
IEQ - average for all	Daylight, Views, Thermal Comfort, Air Quality (Ventilation)	3	Good daylight and views
Lighting - average for all	Sufficiency (quantity/quality) & differentiation (provides choice/change)	2.5	? Dimming/choice? Color?
Acoustics & Privacy - average for all	Do spaces have proper acoustics for conversations & afford ability to achieve visual & auditory privacy when needed.	3.5	
Mail, Copy & Storage	Appropriate for number of staff; record storage & supply storage	2.5	
Reception & Welcome Area	Appropriate for the space & size of school; welcoming; appropriate furniture; appropriate acoustics	3	MS small; ES main office good size
Admin Offices	Number appropriate for the number of students and configuration the school; indicate how many exist	3.5	
Health Office	Size & configuration appropriate for the number of students and configuration the school; secure meds; privacy & acoustics (HIPPA), etc.	1.5	No separate room for HIPPA
Conference Room (s)	Number appropriate for the number of students and configuration the school; indicate how many exist	1	Found 1 for MS

Metric	Description	Score	Comments
Student & Staff Support			
Accessibility & Location	Degree to which spaces are accessible (ADA) & appropriately located in relation to each other & other functions	3	
IEQ - average for all	Daylight, Views, Thermal Comfort, Air Quality (Ventilation)	3	
Lighting - average for all	Sufficiency (quantity/quality) & differentiation (provides choice/change)	2.5	Dimming/choice? Color?
Acoustics & Privacy - average for all	Do spaces have proper acoustics for conversations & afford ability to achieve visual & auditory privacy when needed.	3.5	
Storage for equipment - average for all	Space for the storage of specialized equipment to meet student needs	2.5	
Counseling, Guidance Offices &/or Career Ctr	Exists/Adequacy: size & configuration	3.5	
OT/PT & Speech	Exists/Adequacy: size, configuration (sink, swing, mats, equipment, storage)	3	Needs more storage
Conference Rms	Exists/Adequacy: size & configuration	2	See notes above; there are some other rooms which may be small testing or conference
Toilet Rooms	Availability throughout school	3.5	could use more unisex toilets & staff toilets throughout
Storage	Book Storage; General Storage; Supply Storage	3	
Teacher Lounge; Health & Lactation Rooms	Exists/Adequacy: size & configuration; with kitchenette	0	Did not see a "lounge" separate from teacher work
Teacher Workrooms & Planning	Exists/Adequacy: size & configuration; Copy & print locations; collaboration & focus	2.5	One on each floor



SURVEY RESPONSE DATA - PEABODY



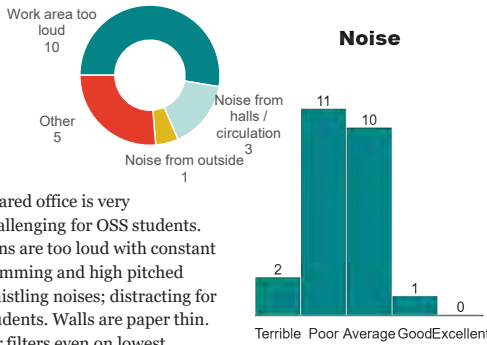
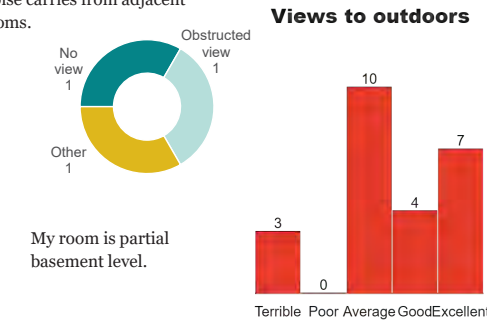
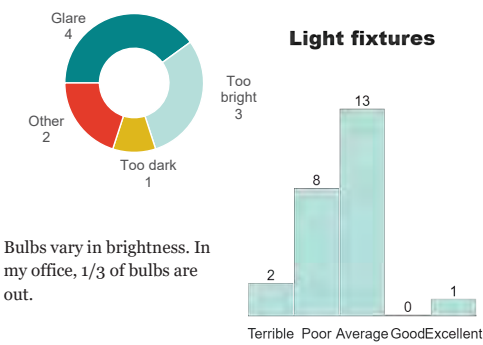
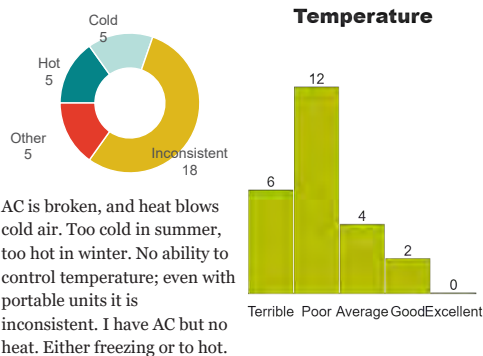
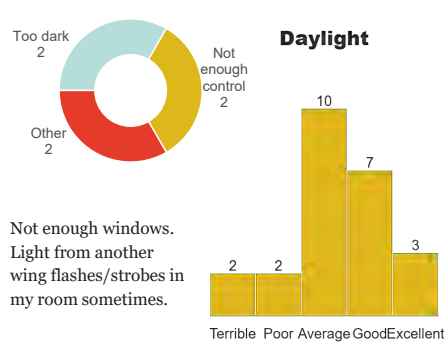
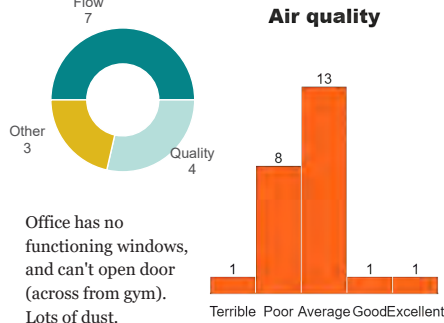
Peabody Building



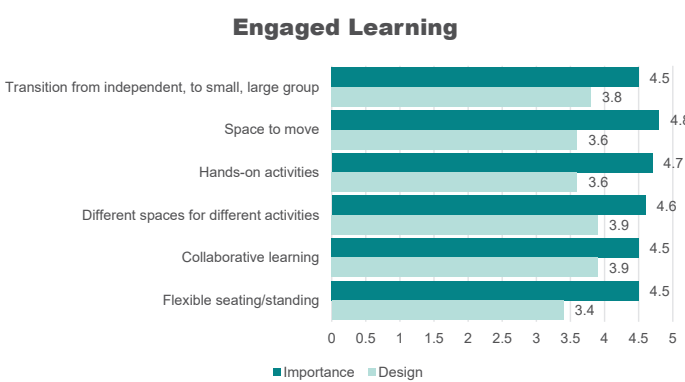
Peabody
Rindge
Peabody Pre-K
Afterschool/Community



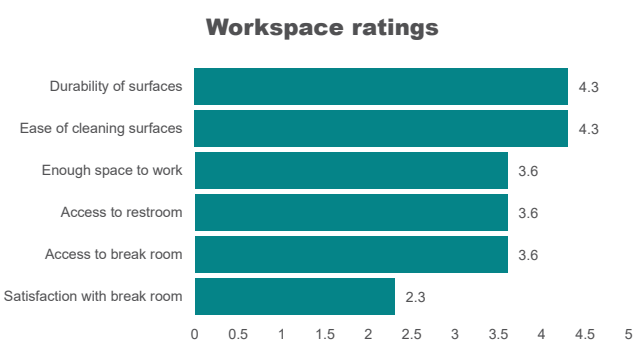
Peabody: IEQ



Peabody: Working + Learning



Averages here are determined from a scale of 1 (*Not at all Important*) to 5 (*Extremely Important*). Teachers view all options as important to engaged, active learning. The design of their classrooms could most be improved to provide space for movement, to support hands-on activities, and flexible sitting/standing options.



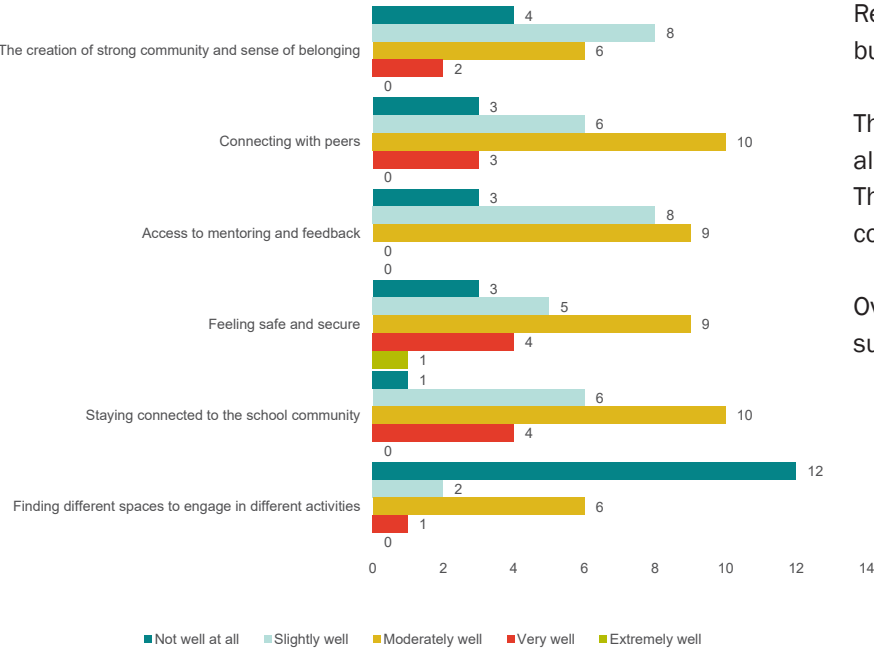
3 administrative, kitchen, custodial, or maintenance respondents evaluated their workspaces on a scale of 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Satisfaction with the break room received the lowest average. Durability and ease of cleaning surfaces received the highest averages.



Peabody: Community



The school's overall design supports...



Respondents were asked to consider how the overall design of their building supported staff and students and a sense of community.

The biggest area for improvement was having a building design that allowed users to find different spaces to engage in different activities. This was followed by a design that would help in the creation of a strong community and sense of belonging.

Overall, respondents felt most positively about their building design supporting feelings of safety and security.

3.2 PLAN DIAGRAMS

Building plans redacted at the request of Cambridge Public Schools.

Building plans redacted at the request of Cambridge Public Schools.

Building plans redacted at the request of Cambridge Public Schools.

3.3 SCHOOL IMAGES

Interior



Auditorium



Gym



Art room



Library



Cafeteria



Courtyard



Main stairs/ramp



Music room



Crack in walls



Water damage at skylight

Exterior



AE-1: North Elevation at Main Entrance



AE-2: West Elevation



AE-3: South Elevation



AE-4: Partial South Elevation



AE-5: Partial West Elevation



AE-6: Partial South Elevation



AE-9: Representative brick veneer, precast bands and aluminum windows



AE-10: Representative brick masonry at older portion of building. Note some failed control joint sealants.



AE-7: East Elevation



AE-8: Courtyard Elevations



AE-11: Typical isolated deteriorated mortar at steel lintel



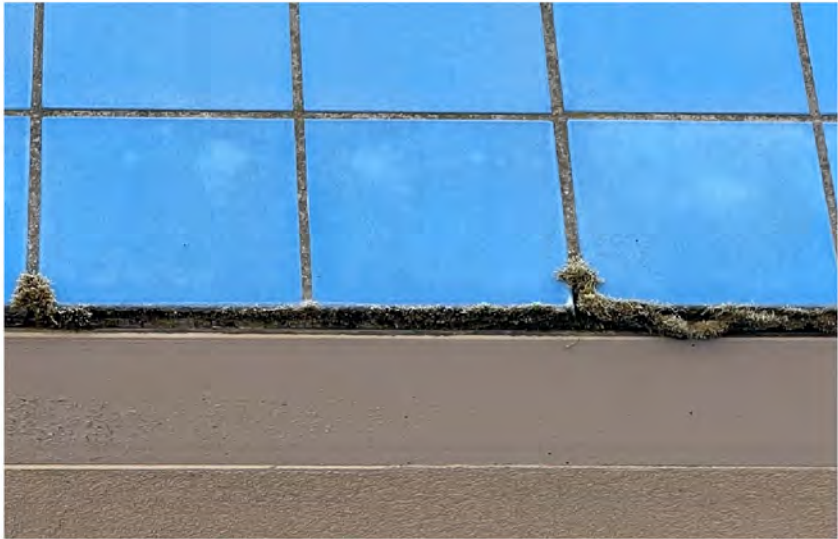
AE-12: Deteriorated mortar, displaced brick at chimney



AE-13: Typical precast sill with aluminum windows above



AE-14: Isolated cracked, spalled mortar between precast sills



AE-17: Typical moss growth along base of glazed block façade at relieving angle / throughwall flashing



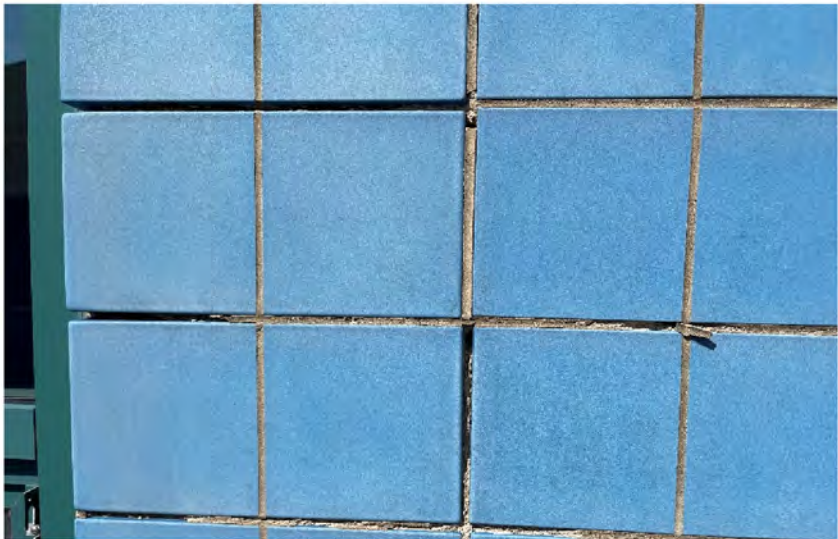
AE-18: Damaged glazed block at base of facade on Southeast corner



AE-15: Typical failed sealant at joint between precast sills



AE-16: Representative cracked and spalled limestone sill at older portion of building



AE-19: Typical failed mortar joints between glazed block, observed in multiple façade areas above the roof.



AE-20: Typical peeling paint at relieving angle



AE-21: Base of North Elevation where there is a cavity below the façade / building and rodents reportedly burrow and nest.



AE-22: Control joint at intersection of older building and addition, failed sealant at this joint.



AE-25: Representative cracking and isolated spalling, exposed rebar at foundation wall of older portion of building, noted along East Elevation.



AE-26: Typical peeling paint at concrete facade



AE-23: Isolated exposed rebar at foundation of older portion of building near building entrance.



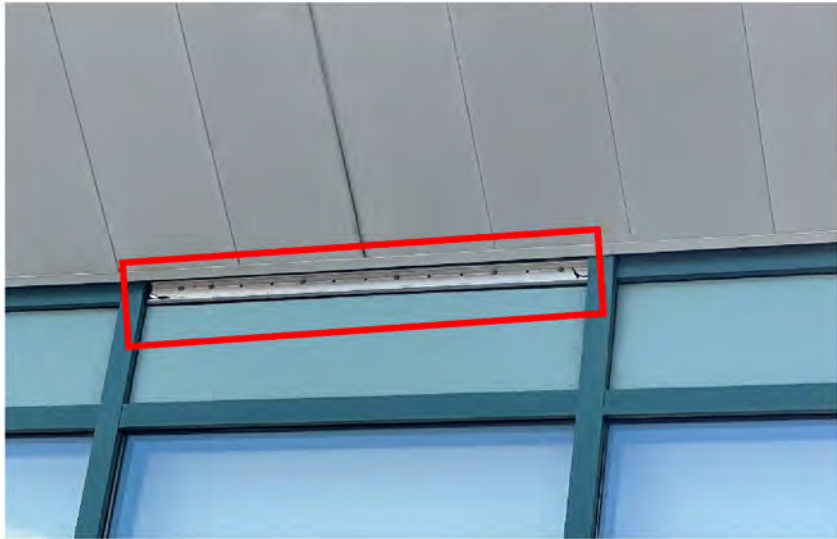
AE-24: Representative cracked and spalled concrete.



AE-27: Representative stucco façade above roof



AE-28: Typical louver installed in mechanical penthouse, note multiple perimeter sealant colors around louver due to repairs made over time.



AE-29: Typical curtain wall assembly missing snap cover at North Elevation.



AE-30: Typical curtain wall snap cover that is not fully engaged to pressure plate at curtain wall located at East Elevation of West Wing



AE-33: Exposed steel beams on West Elevation



AE-34: Typical failed sealant joint between precast sill and hollow metal window assembly at Southwest Stairwell. Note rusting of metal frame.



AE-31: Typical curtain wall where sealant has been applied over base of snap covers where drainage from curtain wall occurs



AE-32: Cracked glass within curtain wall on West Elevation at curved facade



AE-35: Typical rusting of hollow metal window assemblies at Southwest Stairwell above Door 19.



AE-36: Interior of Southwest stairwell where staining evident of water leakage was observed around hollow metal window assemblies.



AE-37: Typical rusting at exterior base of metal framed door, typical in most locations.



AE-38: Typical rusting at interior base of metal framed door, typical in most locations.



AE-39: Typical failed sealant at perimeter of fenestration



AE-40: Representative damaged insect screen



AE-41: Roof access within penthouse. Penthouse door is very close to hole in floor from access hatch. Very awkward and not safe.



AE-42: Representative view of roofing at West side of building



AE-43: General view of roof at center of West wing, typical metal framed skylights.



AE-44: General view at center of roof, typical unit skylights.



AE-45: View of low roof at Southeast corner of building



AE-46: View of roof along North end of building



AE-49: Typical metal framed skylight with evidence of interior leakage. Note black tape applied over framing, sealants applied around glass.



AE-50: Typical MEP unit on curb.



AE-47: Typical damaged unit skylight, covered with black plastic and duct tape



AE-48: Typical unit skylight where thermal seal has failed, allowing condensation between panes of skylight



AE-51: Typical pitch pocket with pourable sealer.



AE-52: Typical asphalt shingled roof and dormer assemblies.



AE-53: Typical asphalt shingles buckling, noted in a few locations. Source of buckling is unknown.



AE-54: Representative aluminum gutter along base of shingled roof.



AE-55: Interior damage at leak below metal framed skylight in Cafeteria.



AE-56: Water damaged ceiling tile at leak location outside of Girl's Bathroom.

OPINION OF PROBABLE REPAIR COST

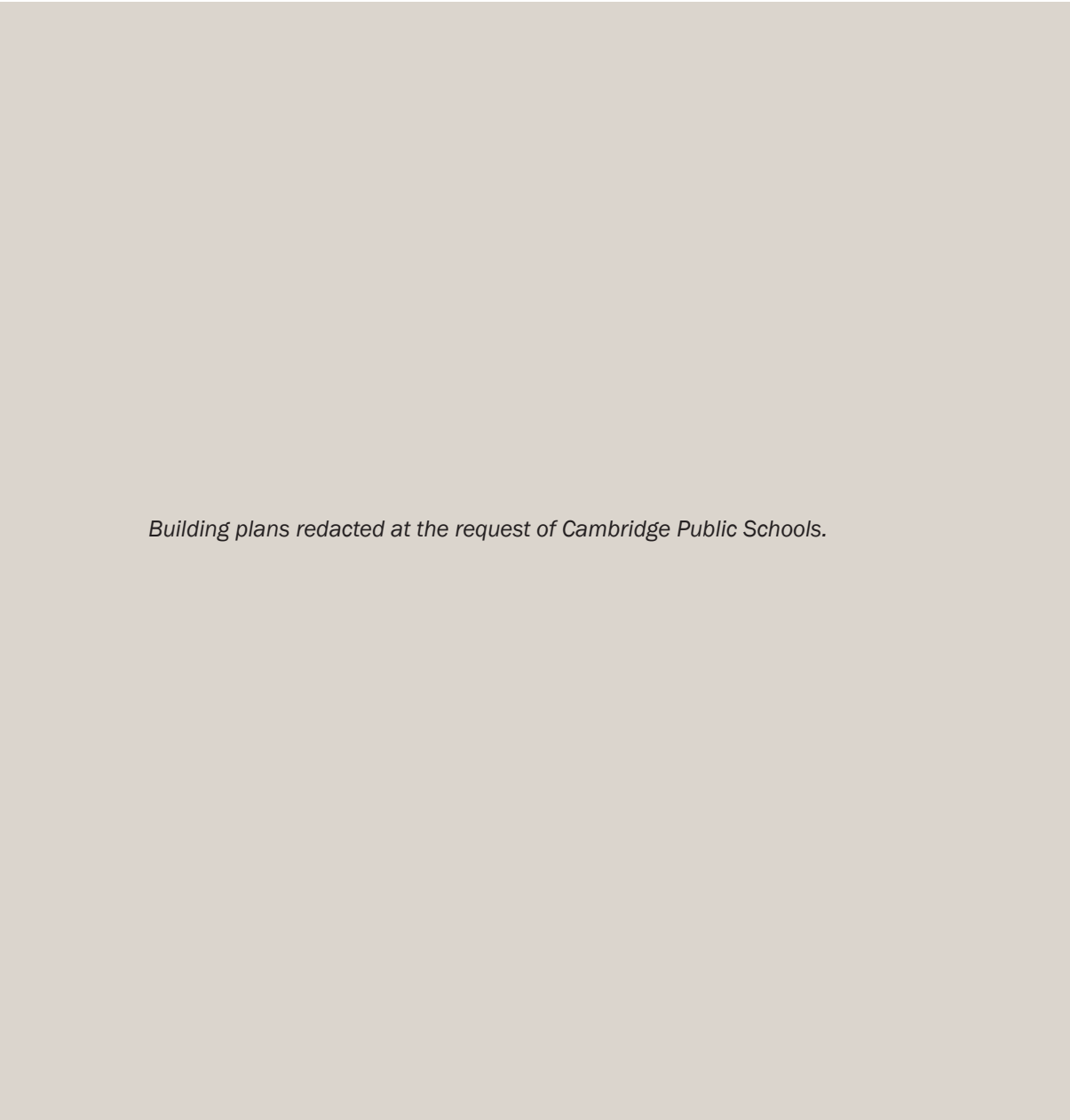
Rough Order of Magnitude Estimates

The rough order of magnitude cost estimation included in this phase is based on aspects of the building in need of repair or at the end of useful life to meet code, it does not necessarily include any intervention with the purpose of improving education or carbon/sustainability goals. This is used to identify from a cost perspective which location has the highest facility improvement need and then be used to compare to a replacement/new build cost.

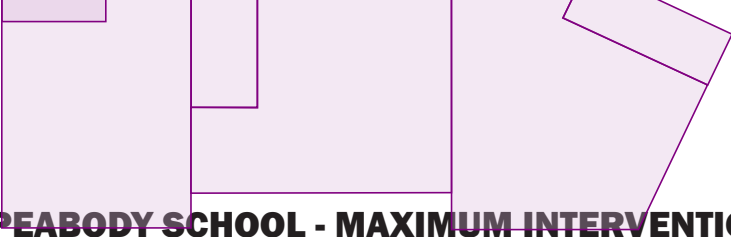
	Peabody			
Gross Floor Area:	145,835			
No. of Students:	319			
Assessed Value:	\$36,152,000			
	Total Project Cost (\$)	Total Construction Cost (\$)	Total Project Cost (\$/GSF)	Total Project Cost (\$/Student)
ARCHITECTURAL - EXTERIOR (EXTERIOR WALLS)	\$ 3,947,546	\$ 2,990,565	\$ 27	\$ 12,375
ARCHITECTURAL - EXTERIOR (ROOFING)	\$ 11,465,470	\$ 8,685,962	\$ 79	\$ 35,942
ARCHITECTURAL - INTERIOR	\$ 1,964,677	\$ 1,488,392	\$ 13	\$ 6,159
ARCHITECTURAL - DOOR HARDWARE	\$ 78,102	\$ 59,168	\$ 1	\$ 245
ARCHITECTURAL - EQUIPMENT & FURNISHINGS	\$ 485,106	\$ 367,504	\$ 3	\$ 1,521
STRUCTURAL SYSTEM	\$ 6,536,797	\$ 4,952,119	\$ 45	\$ 20,492
FOOD SERVICE	\$ 202,895	\$ 153,709	\$ 1	\$ 636
CONVEYING SYSTEM	\$ 48,511	\$ 36,750	\$ 0	\$ 152
BUILDING SYSTEMS - PLUMBING	\$ 2,304,251	\$ 1,745,645	\$ 16	\$ 7,223
BUILDING SYSTEMS - HVAC	\$ 9,823,387	\$ 7,441,960	\$ 67	\$ 30,794
BUILDING SYSTEMS - FIRE PROTECTION	\$ 551,808	\$ 418,036	\$ 4	\$ 1,730
BUILDING SYSTEMS - ELECTRICAL	\$ 5,760,628	\$ 4,364,112	\$ 40	\$ 18,058
DEMOLITION & SPECIAL CONSTRUCTION	\$ 3,026,185	\$ 2,292,565	\$ 21	\$ 9,486
SITWORK	\$ 16,139,655	\$ 12,227,012	\$ 111	\$ 50,595
TOTAL	\$ 62,335,019	\$ 47,223,500	\$ 427	\$ 195,408

SITE/BUILDING INTERVENTION EXPLORATIONS

PEABODY SCHOOL - MAXIMUM INTERVENTION (RECOMMENDED SIM.)



- Rebuild public wing to accommodate a small gym, community space, reworked dining space, music area, and separate preschool.
- Create a separate lobby for Upper School in new addition.
- Rework main office partitions.
- Create larger resource and K-5 art space in academic wing.
- Create small addition to accommodate additional Junior Kindergarten classrooms.

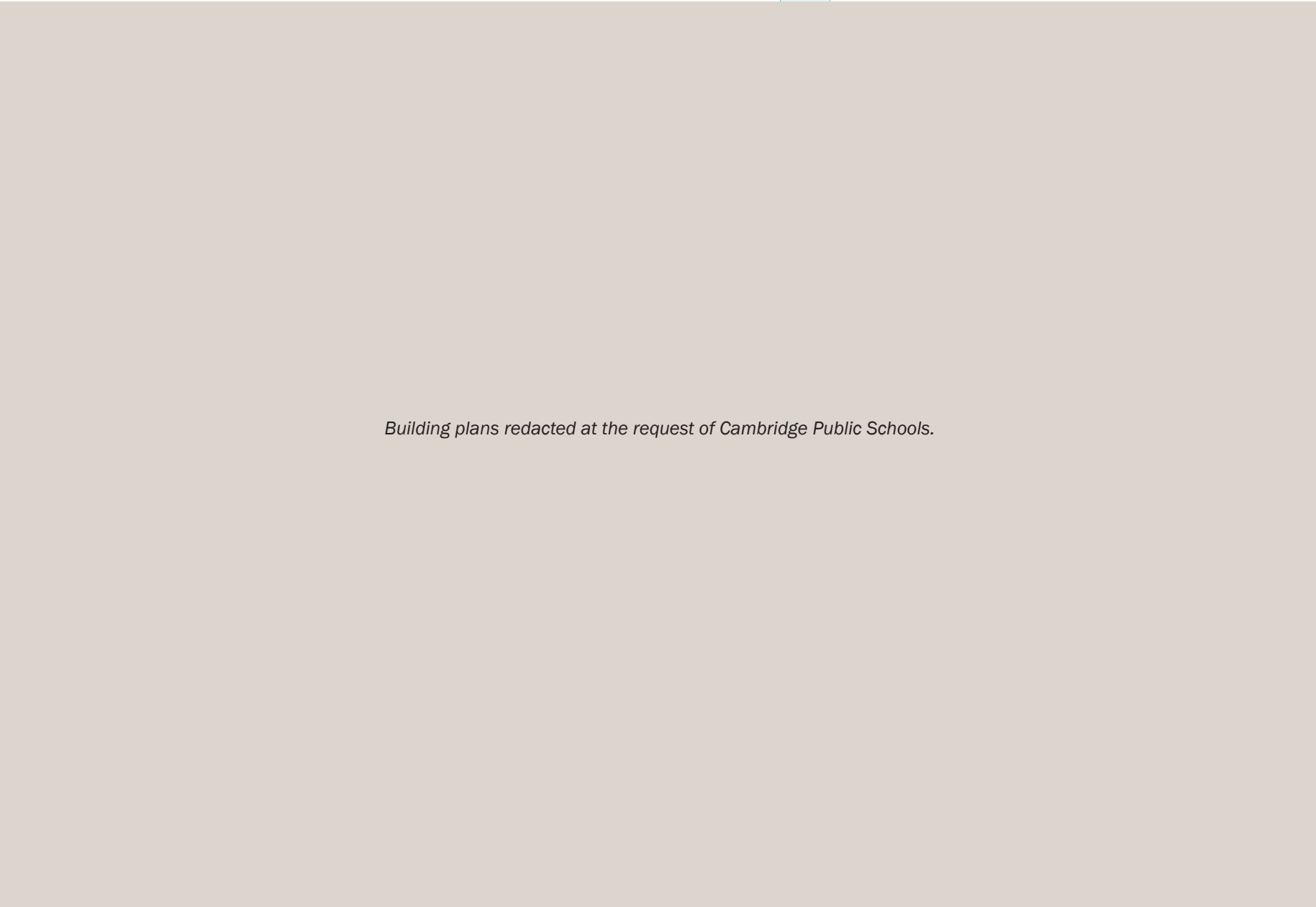


PEABODY SCHOOL - MAXIMUM INTERVENTION (RECOMMENDED SIM.)



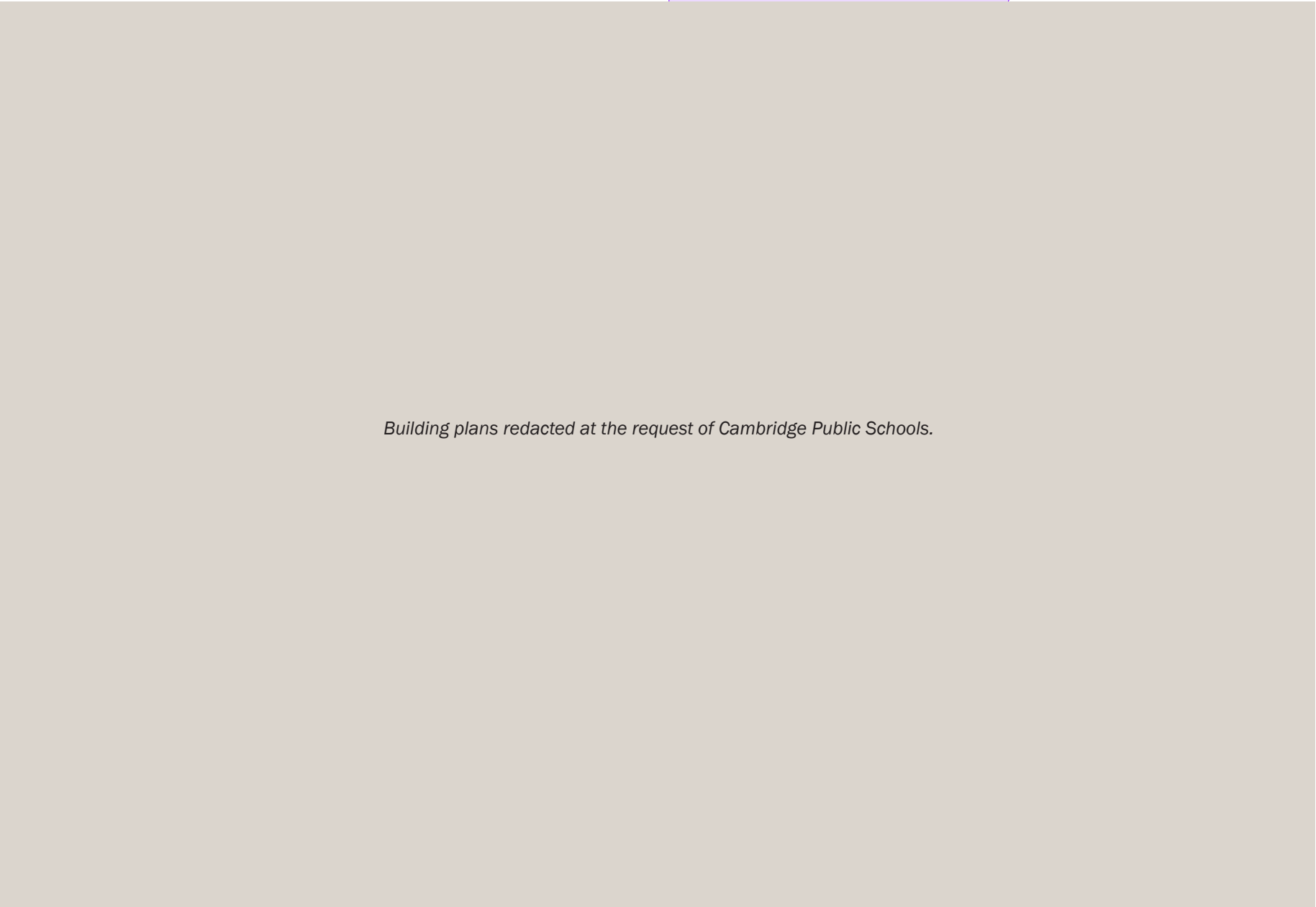
- Create secure vestibule between existing academic wing and gym/auditorium addition to separate the elementary school (first floor) and upper school (second floor).
- New full gym in addition with locker and PE/ Fitness areas directly connected.
- New auditorium and visual/performing arts space in second floor of addition.
- Separate Upper School second floor lobby and admin space.
- Create secure vestibule between existing academic wing and gym/auditorium addition.
- Rework classroom/office space to create more resource and breakout spaces dispersed throughout the academic wing.
- Create 6-8th grade project/tech room.
- Reconfigure 8th grade lab space.

PEABODY SCHOOL - DISCARDED OPTIONS



Building plans redacted at the request of Cambridge Public Schools.

PEABODY SCHOOL - DISCARDED OPTIONS



Building plans redacted at the request of Cambridge Public Schools.