# Facility Condition Assessment

Clayville Elementary School | *October 2016*

Address: 3 George Washington Highway, Clayville, RI 02815

Report Generated: October 06, 2016

## Executive Summary

Clayville Elementary School, located at 3 George Washington Highway in Clayville, Rhode Island, was built in 1933. It comprises 33,153 gross square feet. Data in this report was collected in the spring/summer of 2016.

Clayville Elementary School has an enrollment of 142, serves grades PK - 5, and has 7 classrooms. The LEA reported capacity for Clayville Elementary School is 245 with a resulting utilization of 58.00%. For master planning efforts, a RIDE Model Program Standard was established based on the RIDE School Construction Regulations. Applying RIDE's Model Program Standard, a facility of this size could ideally support an enrollment of approximately 184 students.

The total current deficiencies for this campus, in 2016 construction cost dollars, are estimated at $2,490,608. For master planning purposes a five-year need was developed to provide an understanding of the current need as well as the projected needs in the near future. For Clayville Elementary School the five-year need is $5,107,893. The findings contained within this report resulted from an assessment of building systems. Assessments were performed by building professionals experienced in disciplines including: architecture, mechanical, plumbing, electrical, acoustics, hazardous material, and technology infrastructure.

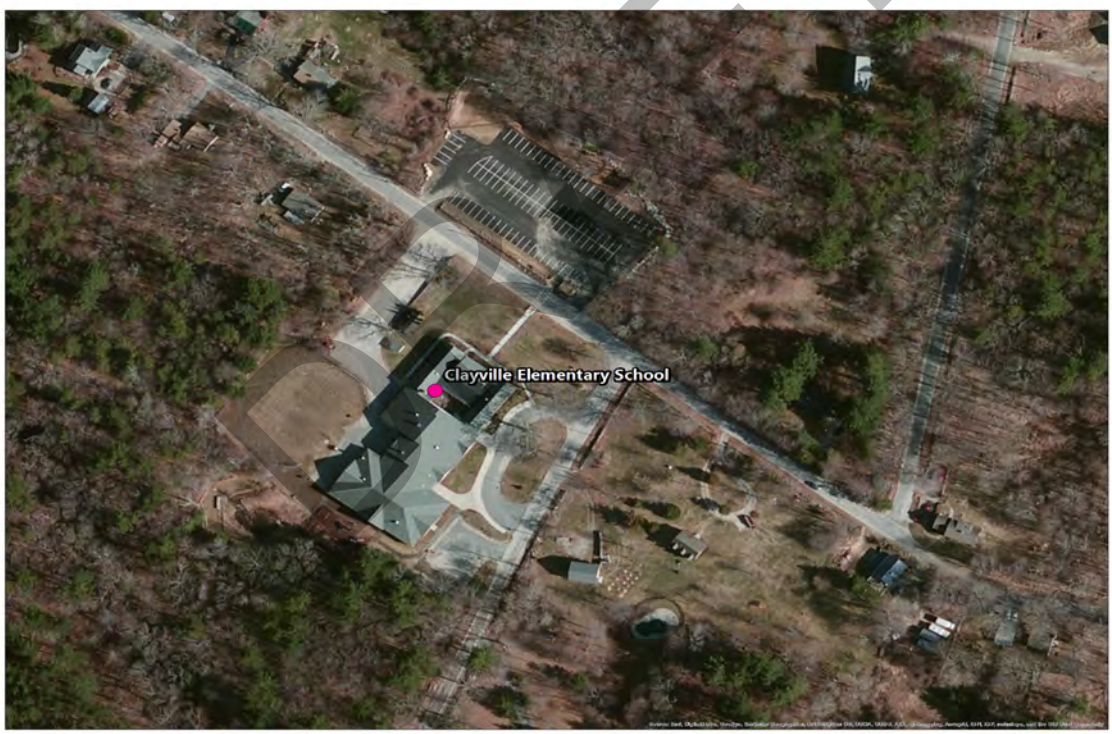



*Figure 1: Aerial view of Clayville Elementary School*

## Approach and Methodology

A facility condition assessment evaluates each building's overall condition. Two components of the facility condition assessment are combined to total the cost for facility need. The two components of the facility condition assessment are current deficiencies and life cycle forecast.

**Current Deficiencies:** Deficiencies are items in need of repair or replacement as a result of being broken, obsolete, or beyond useful life. The existing deficiencies that currently require correction are identified and assigned a priority. An example of a current deficiency might include a broken lighting fixture or an inoperable roof top air conditioning unit.

**Life Cycle Forecast:** Life cycle analysis evaluates the ages of a building's systems to forecast system replacement as it reaches the end of its serviceable life. An example of a life cycle system replacement is a roof with a 20-year life that has been in place for 15 years and may require replacement in five years.

All members of the survey team recorded existing conditions, identified problems and deficiencies, and documented corrective action and quantities. The team took digital photos at each school to better identify significant deficiencies.

### Discipline Specialists

All assessment teams produced current deficiencies that are associated with each school. The assessment for the school facilities at the Rhode Island Department of Education included several specialties:

**Facility Condition Assessment:** Architectural, mechanical, and electrical engineering professionals observed conditions via a visual observation that did not include intrusive measures, destructive investigations, or testing. Additionally, the assessment incorporated input provided by District Facilities and Maintenance staff was incorporated where applicable. The assessment team recorded existing conditions, identified problems and deficiencies, documented corrective action and quantities, and identified the priority of the repair in accordance with parameters defined during the planning phase.

**Technology:** Technology specialists visited the RIDE facilities and met with technology directors to observe and assess each facility's technology infrastructure. It included: network architecture, major infrastructure components, classroom instructional systems, and necessary building space and support for technology. The technology assessment took into account the desired technology outcome and best practices and processes to ensure the results can be attained effectively.

**Hazardous Materials:** Schools constructed prior to 1990 were assessed by specialist to identify the presence of hazardous materials. The team focused on identifying asbestos containing building materials (ACBMs), lead-based painted (LBP) areas, polychlorinated biphenyls (PCBs), and Chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. If sampling and analysis was required, these activities were recommended but not included in the scope of work.

**Traffic:** Traffic specialist performed an in-office review of aerial imagery of the traffic infrastructure around the facilities in accordance with section 1.05-7 in the Rhode Island School Construction Regulations. Also, onsite personnel conducted an initial evaluation from data collected during the facility condition assessment. Based on the information, deficiencies and corrective actions were identified. High problem areas were identified for consideration of more detailed site-specific study and analysis in the future.

**Acoustics:** Specialists assessed each school's acoustics, including architectural acoustic, mechanical system noise and vibration, and environmental noise. The assessment team evaluated room acoustics with particular attention to the intelligibility of speech in learning spaces, interior and exterior sound isolation, and mechanical systems noise and vibration control.

**Educational Space Analysis**: The evaluation of schools to ensure that that all spaces adequately support the districts educational program. Standards are established for each classroom type or instructional space. Each space is evaluated to determine if it meets those standards and create a listing of alterations that should be made to make the space a better environment for teaching and learning.

## System Summaries

The following tables summarize major building systems at Clayville Elementary School campus, identified by discipline and building.

**Site**

The site level systems for this campus includes:

| | |
|---|---|
| **Site** | Asphalt Parking Lot Pavement |
| | Asphalt Roadway Pavement |
| | Concrete Pedestrian Pavement |

**Building Envelope**

The exterior systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | Brick Exterior Wall |
| | Vinyl on Wood Frame Exterior Windows |
| | Storefront / Curtain Wall |
| | Steel Exterior Entrance Doors |
| **02 - Storage Shed:** | CMU Exterior Wall |
| | Steel Exterior Entrance Doors |

The roofing for the buildings at this campus consists of:

| | |
|---|---|
| **01 - Main Building:** | Composition Shingle Roofing |
| **02 - Storage Shed:** | Composition Shingle Roofing |

**Interior**

The interior systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | Foldable Interior Partition |
| | Steel Interior Doors |
| | Wood Interior Doors |
| | Interior Door Hardware |
| | Door Hardware |
| | Suspended Acoustical Grid System |
| | Suspended Acoustical Ceiling Tile |
| | Painted Ceilings |
| | Interior Wall Painting |
| | Concrete Flooring |
| | Ceramic Tile Flooring |
| | Quarry Tile Flooring |
| | Rubber Tile Flooring |
| | Vinyl Composition Tile Flooring |
| | Carpet |
| **02 - Storage Shed:** | Wood Ceilings |

| | |
|---|---|
| **02 - Storage Shed:** | Interior Wall Painting |
| | Concrete Flooring |

**Mechanical**

The mechanical systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | 400 MBH Cast Iron Water Boiler |
| | 112 GPM Water to Water Heat Exchanger |
| | Steam/Hot Water Heating Unit Vent |
| | 7 kW Electric Unit Heater |
| | 250 MBH Steam Unit Heater |
| | Finned Wall Radiator |
| | Electronic Heating System Controls |
| | 3 Ton Condensing Unit |
| | Window Units |
| | 1 HP or Smaller Pump |
| | 5 HP Pump |
| | 2-Pipe Steam Hydronic Distribution System |
| | 10,000 CFM Outdoor AHU |
| | Ductwork |
| | Roof Exhaust Fan |
| | Kitchen Exhaust Hoods |
| | Fire Sprinkler System |

**Plumbing**

The plumbing systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | Gas Piping System |
| | 40 Gallon Electric Water Heater |
| | Domestic Water Piping System |
| | Classroom Lavatories |
| | Lavatories |
| | Mop/Service Sinks |
| | Refrigerated Drinking Fountain |
| | Restroom Lavatories |
| | Toilets |
| | Urinals |
| | Sump Pump |
| | 275 Gallon Above Ground Fuel Oil Storage Tank |
| | 5,000 Gallon Above Ground Fuel Oil Storage Tank |

## Electrical

The electrical systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | 112.5 KVA Transformer |
| | Panelboard - 120/240 100A |
| | Panelboard - 120/240 125A |
| | Panelboard - 120/240 225A |
| | 400 Amp Distribution Panel |
| | 800 Amp Distribution Panel |
| | Light Fixtures |
| | Building Mounted Lighting Fixtures |
| | Canopy Mounted Lighting Fixtures |

## Facility Deficiency Priority Levels

Deficiencies were ranked according to five priority levels, with Priority 1 items being the most critical to address:

**Priority 1 – Mission Critical Concerns:** Deficiencies or conditions that may directly affect the school's ability to remain open or deliver the educational curriculum. These deficiencies typically relate to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency is a fire alarm system replacement.

**Priority 2 – Indirect Impact to Educational Mission:** Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing that could cause deterioration of integral building systems, and conditions affecting building envelopes, such as roof and window replacements.

**Priority 3 – Short-Term Conditions:** Deficiencies that are necessary to the school's mission but may not require immediate attention. These items should be considered necessary improvements required to maximize facility efficiency and usefulness. Examples of Priority 3 items include site improvements and plumbing deficiencies.

**Priority 4 – Long-Term Requirements:** Items or systems that may be considered improvements to the instructional environment. The improvements may be aesthetic or provide greater functionality. Examples include cabinets, finishes, paving, removal of abandoned equipment, and educational accommodations associated with special programs.

**Priority 5 – Enhancements:** Deficiencies aesthetic in nature or considered enhancements. Typical deficiencies in this priority include repainting, re-carpeting, improved signage, or other improvements to the facility environment.

The following chart summarizes this site's current deficiencies by building system and priority. The listing details current deficiencies including deferred maintenance, functional deficiencies, code compliance, capital renewal, hazardous materials and technology categories.

*Table 1: System by Priority*

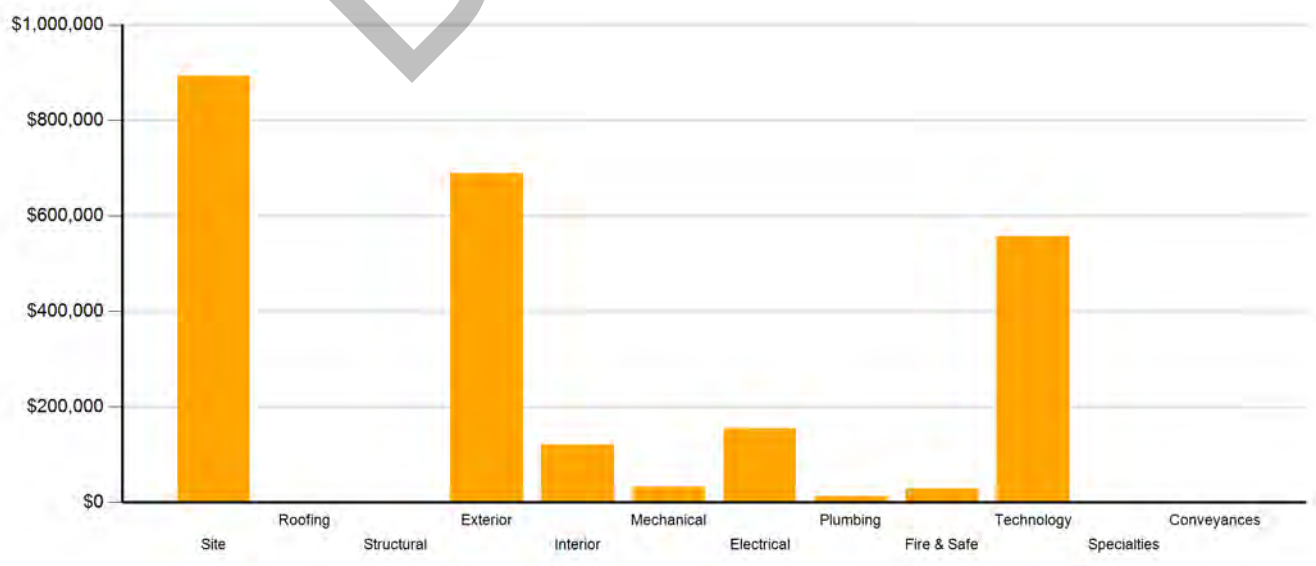
| | Priority | | | | | | |
|---|---|---|---|---|---|---|---|
| System | 1 | 2 | 3 | 4 | 5 | Total | % of Total |
| Site | - | - | $539,849 | $345,573 | $7,011 | $892,433 | 35.83 % |
| Roofing | - | $3,724 | - | - | - | $3,724 | 0.15 % |
| Structural | - | - | - | - | - | $0 | 0.00 % |
| Exterior | - | - | $2,163 | $686,456 | - | $688,618 | 27.65 % |
| Interior | - | - | $112,895 | $4,310 | $3,522 | $120,727 | 4.85 % |
| Mechanical | - | $32,557 | - | - | - | $32,557 | 1.31 % |
| Electrical | - | $76,749 | $49,297 | - | $28,129 | $154,176 | 6.19 % |
| Plumbing | - | - | $2,887 | - | $8,930 | $11,817 | 0.47 % |
| Fire and Life Safety | - | $28,968 | - | - | - | $28,968 | 1.16 % |
| Technology | - | - | $557,588 | - | - | $557,588 | 22.39 % |
| Conveyances | - | - | - | - | - | $0 | 0.00 % |
| Specialties | - | - | - | - | - | $0 | 0.00 % |
| **Total** | $0 | $141,998 | $1,264,679 | $1,036,338 | $47,593 | $2,490,608 | |

The building systems at the campus with the most need include:

| | | |
|---|---|---|
| Site | - | $892,433 |
| Exterior | - | $688,618 |
| Technology | - | $557,588 |

The table below represents the building systems and their percentages for overall campus need.

*Figure 2: System Deficiencies*



## Current Deficiencies by Category

The deficiencies have been further grouped according to the observed deficiency category and priority.

• **Acoustics** deficiencies relate to room acoustics, sound insolation, and mechanical systems and vibration control modeled after ANSI/ASA Standard S12.60-2010 and ASHRAE Handbook, Chapter 47 on Sound and Vibration Control.

• **Barrier to Accessibility** deficiencies relate to the Americans with Disabilities and Rhode Island Governors Commission on Disability. Additional items may be included other categories.

• **Capital renewal** items have reached or exceeded serviceable life and require replacement. These are current and do not include life cycle capital renewal forecasts. Also included are deficiency correcting planned work postponed beyond its regular life expectancy.

• **Code compliance** deficiencies relate to current codes. Many may fall under grandfather clauses, which allow buildings to continue operating under codes effective at the time of construction. However, there are instances where the level of renovation requires full compliance and are reflected in the master plan.

• **Educational adequacy** includes deficiencies identify how facilities align with the Basic Education Program and the RIDE School Construction Regulations.

• **Functional deficiencies** are deficiencies for a component or system that has failed before the end of its expected life or is not the right application, size or design.

• **Hazardous materials** include deficiencies for building systems or components containing potentially hazardous material. The team focused on identifying asbestos containing building materials (ACBMs), lead based painted (LBP) areas, polychlorinated biphenyls (PCBs), and Chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. With other scopes of work there may be other costs associated with hazardous materials.

• **Technology** deficiencies relate to network architecture, technology infrastructure, classroom systems, and support. Examples of technology deficiencies include: security cameras, secure electronic access, telephone handsets, and dedicate air conditioning for telecommunication rooms.

• **Traffic** site deficiencies relate to vehicle or pedestrian traffic, such as bus loops, crosswalks, and pavement markings.

The following chart and table represent the deficiency category by priority. This listing includes current deficiencies at all building systems.

*Table 2: Deficiency Category by Priority*

| | Priority | | | | | |
|---|---|---|---|---|---|---|
| **Category** | **1** | **2** | **3** | **4** | **5** | **Total** |
| **Acoustics** | - | - | $71,302 | - | - | $71,302 |
| **Barrier to Accessibility** | - | - | $279,267 | $4,310 | - | $283,577 |
| **Capital Renewal** | - | $141,998 | $51,460 | $316,899 | - | $510,358 |
| **Code Compliance** | - | - | - | - | - | $0 |
| **Educational Adequacy** | - | - | $33,199 | $715,130 | $46,459 | $794,788 |
| **Functional Deficiency** | - | - | - | - | - | $0 |
| **Hazardous Material** | - | - | - | - | - | $0 |
| **Technology** | - | - | $527,276 | - | - | $527,276 |
| **Traffic** | - | - | $302,174 | - | $1,133 | $303,308 |
| **Total** | $0 | $141,998 | $1,264,679 | $1,036,338 | $47,593 | $2,490,608 |



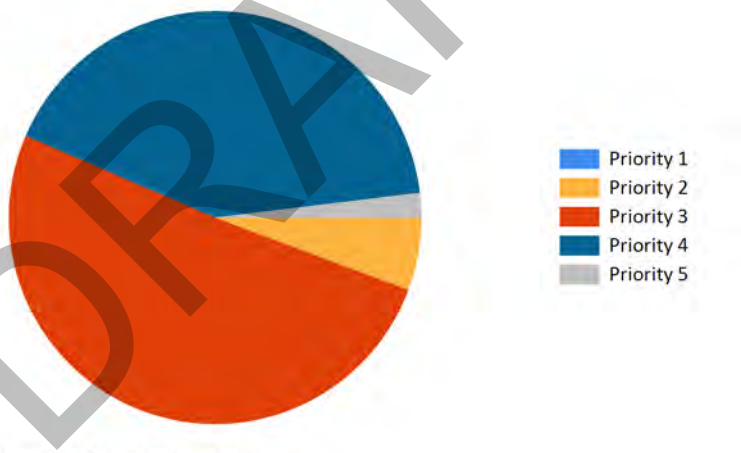



*Figure 3: Current deficiencies by priority*

## Life Cycle Capital Renewal Forecast

During the facility condition assessment, assessors inspected all major building systems. If an assessor identified a need for immediate replacement, a deficiency was created with the item's repair costs. The identified deficiency contributes to the particular facility's total current repair costs.

However, capital planning scenarios span multiple years, as opposed to being constrained to immediate repairs. Construction projects may begin several years after the initial facility condition assessment. Therefore, in addition to the current year repair costs, it is necessary to forecast the facility's future costs using a 10-year life cycle renewal forecast model.

Life cycle renewal is the projection of future building system costs based upon each individual system's expected serviceable life. Building systems and components age over time, eventually break down, reach the end of their useful lives, and may require replacement. While an item may be in good condition now, it might the end of it's life before a planned construction project occurs.

The following chart shows all current deficiencies and the subsequent 10-year life cycle capital renewal projections. The projections outline costs for major building systems in which a component is expected to reach the end of its useful life and require capital funding for replacement.

*Table 3: Capital Renewal Forecast*

| | | Life Cycle Capital Renewal Projections | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| System | Current Deficiencies | Year 1 2017 | Year 2 2018 | Year 3 2019 | Year 4 2020 | Year 5 2021 | Year 6 2022 | Year 7 2023 | Year 8 2024 | Year 9 2025 | Year 10 2026 | Total | $/GSF |
| Site | $892,433 | $0 | $0 | $0 | $0 | $140,135 | $0 | $0 | $108,454 | $0 | $0 | $248,589 | $7.50 |
| Roofing | $3,724 | $0 | $0 | $0 | $0 | $944,128 | $0 | $0 | $0 | $0 | $1,426 | $945,554 | $28.52 |
| Structural | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Exterior | $688,618 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $64,495 | $64,495 | $1.95 |
| Interior | $120,727 | $0 | $0 | $0 | $0 | $1,415,345 | $0 | $0 | $0 | $0 | $759,817 | $2,175,162 | $65.61 |
| Mechanical | $32,557 | $0 | $0 | $0 | $0 | $0 | $45,770 | $446,626 | $1,272,674 | $106,351 | $38,355 | $1,909,776 | $57.60 |
| Electrical | $154,176 | $0 | $0 | $5,799 | $0 | $0 | $8,271 | $196,693 | $0 | $0 | $0 | $210,763 | $6.36 |
| Plumbing | $11,817 | $0 | $0 | $0 | $0 | $0 | $167,365 | $0 | $23,188 | $0 | $7,081 | $197,634 | $5.96 |
| Fire and Life Safety | $28,968 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $96,761 | $96,761 | $2.92 |
| Technology | $557,588 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Conveyances | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Specialties | $0 | $0 | $0 | $0 | $0 | $111,878 | $0 | $0 | $0 | $0 | $0 | $111,878 | $3.37 |
| **Total** | **$2,490,608** | **$0** | **$0** | **$5,799** | **$0** | **$2,611,486** | **$221,406** | **$643,319** | **$1,404,316** | **$106,351** | **$967,935** | **$5,960,612** | **$179.79** |



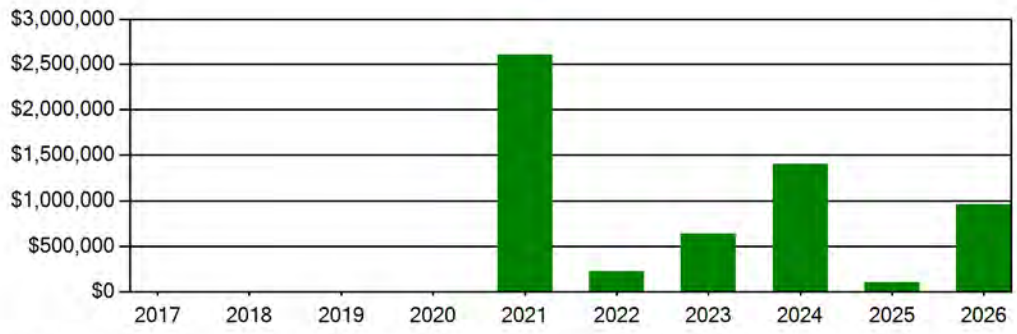



*Figure 4: Life Cycle Capital Renewal Forecast*

## Facility Condition Index (FCI)

The Facility Condition Index (FCI) is used throughout the facility condition assessment industry as a general indicator of a building's health. Since 1991, the facility management industry has used an index called the FCI to benchmark the relative condition of a group of schools. The National Association of College and University Business Officers has suggested for college planning that an FCI of less than 5 percent is good, an FCI between 5 and 10 percent is fair, and an FCI greater than 10 percent is poor. In K-12 public school planning, the gulf between 10 percent and 100 percent is just not stratified enough. Jacobs has used the following ranges to provide a little more gradation. FCI's less than 10 percent are considered good, 10 to 60 percent is fair, and anything greater than 60 percent is poor. Financial modeling has shown that over a 30-year period, schools that fall in the 65 percent or greater range are more cost-effective to replace than to repair. This is due to efficiency gains with more modern facilities and the value of the building at the end of the analysis period. It is important to note that the FCI at which a facility should be considered for replacement is typically debated and adjusted based on property owners/facility managers approach to facility management. Of course, FCI is not the only factor used to identify buildings that need renovation, replacement or even closure. Historical significance, enrollment trends, community sentiment, and the availability of capital are additional factors that are analyzed when making school facility decision.

The FCI is calculated by dividing the total repair cost, including site-related repairs, by the total replacement cost. Costs associated with new construction are not included in the FCI calculation. As a general rule, an FCI below 10% is considered good. An economic analysis generally suggests that FCIs greater than 65 percent represent the point where facilities should be considered for replacement. This value typically indicates the point where further expenditures on a building offer little return when compared to the potential cost of replacing that facility.

The replacement value represents the estimated cost of replacing the current building with another building of like size, based on today's estimated cost of construction in the Providence, Rhode Island area. The estimated replacement cost for this facility is $11,603,550. The total current cost for all deficiencies is $2,490,608.

The Clayville Elementary School facility has an overall FCI of 21.46%.

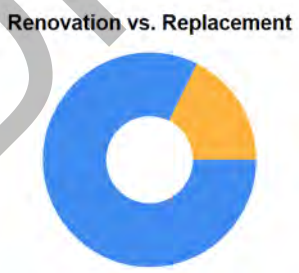



*Figure 5: Renovation vs Replacement*



## Five Year FCI

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. For planning purposes, the total five-year need at Clayville Elementary School is $5,107,893 (Life Cycle Yrs 1-5 plus the Current Deficiencies)

A five year FCI was calculated by dividing the five year need by the total replacement cost. The Clayville Elementary School facility has a five year FCI of 44.02% (Life Cycle Yrs 1-5 plus Current Deficiencies divided by the Total Replacement Cost).

## Summary of Findings

The table below summarizes the condition findings at Clayville Elementary School.

*Table 4: Facility Condition by Building*

| Number | Building Name | Gross Sq Ft | Built Date | Current Deficiencies | FCI | Total 5 Yr Need (Yr 1-5 + Current Defs) | 5-Year FCI |
|---|---|---|---|---|---|---|---|
| | Exterior Site | | | $1,062,729 | | $1,202,864 | |
| 01 | Main Building | 33,103 | 1933 | $1,427,879 | 12.32% | $3,905,029 | 33.70% |
| 02 | Storage Shed | 50 | 1999 | $0 | .00% | $0 | .00% |
| **Totals** | | **33,153** | | **$2,490,608** | **21.46%** | **$5,107,893** | **44.02%** |

The following pages provide a listing of all current deficiencies and 10 year life cycle need for the site and building and the associated costs, followed by photos taken during the assessment.

# Site Level Deficiencies

## Site

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Traffic Signage Is Required | Traffic | 6 | Ea. | 3 | $226,631 | 9311 |
| **Note:** Upgrade, install signs for school zone and crosswalk | | | | | | |
| Traffic Signage Is Required | Traffic | 2 | Ea. | 3 | $75,544 | 9312 |
| **Note:** Add flashing beacons to school zone speed limit signs | | | | | | |
| Backstops Require Replacement | Educational Adequacy | 1 | Ea. | 4 | $28,674 | 28580 |
| **Note:** Backstops Require Replacement | | | | | | |
| Exterior Basketball Goals are Required | Educational Adequacy | 1 | Ea. | 5 | $5,878 | 28801 |
| **Note:** Exterior Basketball Goals are Required | | | | | | |
| Paving Requires Restriping | Traffic | 20 | CAR | 5 | $1,133 | 9313 |
| **Note:** Mark parking spots in parking lot on west side of building | | | | | | |
| | **Sub Total for System** | **5** | **items** | | **$337,860** | |

## Exterior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Cafeteria does not meet standard size | Educational Adequacy | 1,026 | SF | 4 | $686,456 | 53365 |
| **Note:** Cafeteria does not meet required RI standard for space size. (Std=2250 sf, Current=1224 sf) | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$686,456** | |

## Electrical

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Pole Lighting Requires Replacement | Capital Renewal | 5 | Ea. | 3 | $38,414 | 10972 |
| | **Sub Total for System** | **1** | **items** | | **$38,414** | |
| | **Sub Total for School and Site Level** | **7** | **items** | | **$1,062,729** | |

# Building: 01 - Main Building

## Site

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Playground Impact Surface Does Not Meet ADA Guidelines For Accessible Play Surfaces | Barrier to Accessibility | 6,000 | SQFT | 3 | $237,674 | 8514 |
| **Note:** Play area requires impact resistance surface. | | | | | | |
| Site Drainage Requires Regrading | Capital Renewal | 20,000 | SF | 4 | $316,899 | 8516 |
| **Note:** There is excessive ponding at the foundation, parking lot and walkways. | | | | | | |
| | **Sub Total for System** | **2** | **items** | | **$554,573** | |

## Roofing

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Debris In Gutters Requires Removal | Capital Renewal | 500 | LF | 2 | $3,724 | 8515 |
| **Note:** Water is pouring down the face of the walls and not draining to downspouts. | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$3,724** | |

## Exterior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Exterior Metal Door Requires Repainting | Capital Renewal | 10 | Door | 3 | $2,163 | 8511 |
| | **Sub Total for System** | **1** | **items** | | **$2,163** | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Existing Door Hardware Is Not ADA Compliant | Barrier to Accessibility | 14 | Door | 3 | $41,593 | 8512 |
| **Location:** Basement | | | | | | |
| Room Is Excessively Reverberant (Install Fiberglass Wall Panel) | Acoustics | 1,200 | SF | 3 | $71,302 | 19685 |
| **Note:** Gym | | | | | | |
| The Handrails In The Stair Area Are Not ADA Compliant | Barrier to Accessibility | 32 | LF | 4 | $4,310 | 8513 |
| **Location:** Stairs to original section of building. | | | | | | |
| Room lacks appropriate sound control. | Educational Adequacy | 100 | SF | 5 | $3,522 | Rollup |
| | **Sub Total for System** | **4** | **items** | | **$120,727** | |

## Mechanical

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Cast Iron Water Boiler Requires Replacement | Capital Renewal | 1 | Ea. | 2 | $32,557 | 10971 |
| **Note:** Original boiler should be replaced. | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$32,557** | |

## Electrical

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Distribution Panel Requires Replacement | Capital Renewal | 1 | Ea. | 2 | $26,738 | 8517 |
| The Panelboard Requires Replacement | Capital Renewal | 5 | Ea. | 2 | $50,011 | 10970 |
| The Mounted Building Lighting Requires Replacement | Capital Renewal | 7 | Ea. | 3 | $10,884 | 10969 |
| Room Has Insufficient Electrical Outlets | Educational Adequacy | 56 | Ea. | 5 | $28,129 | Rollup |
| | **Sub Total for System** | **4** | **items** | | **$115,762** | |

## Plumbing

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Toilets Plumbing Fixtures Require Replacement | Educational Adequacy | 1 | Ea. | 3 | $2,887 | Rollup |
| Room lacks a drinking fountain. | Educational Adequacy | 8 | Ea. | 5 | $8,930 | Rollup |
| | **Sub Total for System** | **2** | **items** | | **$11,817** | |

## Fire and Life Safety

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Emergency Lighting System Requires Replacement | Capital Renewal | 33,103 | SF | 2 | $28,968 | 8510 |
| **Note:** Emergency lighting fixtures by doors are damaged. Some are hanging and others have water inside of the fixture. | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$28,968** | |

## Technology

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Room lacks Interactive White Board | Educational Adequacy | 10 | Ea. | 3 | $30,312 | Rollup |
| Technology: Campus network switching electronics are antiquated and/or do not meet standards. | Technology | 24 | Ea. | 3 | $11,884 | 18522 |
| **Note:** Refresh select network switches that have reached end-of-life. | | | | | | |
| Technology: Campus wireless infrastructure inadequate. | Technology | 12 | Ea. | 3 | $16,637 | 18523 |
| **Note:** Wireless Access Points do not support current 801.11AC standards, refresh and add Access Points. | | | | | | |
| Technology: Classroom AV/Multimedia systems are in need of improvements. | Technology | 8 | Ea. | 3 | $79,225 | 18527 |
| **Note:** Classroom AV/Multimedia systems support digital technologies but do not have the required cabling to use it, refresh. | | | | | | |
| Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life. | Technology | 1 | Ea. | 3 | $20,797 | 18529 |
| **Note:** Library AV/Multimedia system is nearing end-of-life, refresh. | | | | | | |
| Technology: Gymnasium sound system is nonexisitant, inadequate, or near end of useful life. | Technology | 1 | Ea. | 3 | $9,507 | 18525 |
| **Note:** Gymnasium lacks audio system, add audio system. | | | | | | |
| Technology: Instructional spaces do not have local sound reinforcement. | Technology | 11 | Ea. | 3 | $54,467 | 18532 |
| **Note:** Add sound reinforcement in instructional spaces. | | | | | | |
| Technology: Main Telecommunications Room ground system is inadequate or non-existent. | Technology | 1 | Ea. | 3 | $6,932 | 18519 |
| **Note:** MDF grounding system is inadequate, add grounding system. | | | | | | |
| Technology: Main Telecommunications Room needs M/E improvements. | Technology | 1 | Ea. | 3 | $30,502 | 18517 |
| **Note:** MDF in AV storage space, minor renovations required to bring to standard. | | | | | | |
| Technology: Main Telecommunications Room UPS does not meet standards, is inadequate, or non-existent. | Technology | 1 | Ea. | 3 | $9,408 | 18518 |
| **Note:** MDF equipment lacks adequate UPS unit, add UPS unit. | | | | | | |
| Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. | Technology | 15 | Ea. | 3 | $6,685 | 18521 |
| **Note:** Select cables do not meet industry standards (Category 5e) or better. Refresh selected cables. | | | | | | |
| Technology: Network cabling infrastructure is partially outdated and/or needs expansion. | Technology | 48 | Ea. | 3 | $21,391 | 18528 |
| **Note:** Classrooms have one (1) data drops, add four (4) drops per classroom. | | | | | | |
| Technology: PA/Bell/Clock system is inadequate and/or near end of useful life. | Technology | 33,103 | SF | 3 | $59,008 | 18530 |
| **Note:** PA/Bell/Clock system and antiquated, refresh. | | | | | | |
| Technology: Security cameras and recording system are inadequate and/or near end of useful life. | Technology | 25 | Ea. | 3 | $123,789 | 18531 |
| **Note:** Campus has video surveillance system with 8 analog cameras, and front door intercom, refresh and add 17 cameras. | | | | | | |
| Technology: Special Space AV/Multimedia system is inadequate. | Technology | 1 | Ea. | 3 | $56,448 | 18524 |
| **Note:** Multipurpose room need AV/Multimedia refresh/addition. | | | | | | |
| Technology: Telecommunications Room (large size room) needs dedicated cooling system improvements. | Technology | 1 | Ea. | 3 | $7,922 | 18520 |
| **Note:** MDF does not have independent AC, add unit. | | | | | | |
| Technology: Telephone handsets are inadequate and sparsely deployed throughout the campus. | Technology | 8 | Ea. | 3 | $12,676 | 18526 |
| **Note:** VoIP unified communication system installed in office, no handsets in classrooms. | | | | | | |
| | **Sub Total for System** | **17** | **items** | | **$557,588** | |
| | **Sub Total for Building 01 - Main Building** | **33** | **items** | | **$1,427,879** | |
| | **Total for Campus** | **40** | **items** | | **$2,490,608** | |

## Buildings with no reported deficiencies

02 - Storage Shed

# Clayville Elementary School - Life Cycle Summary Yrs 1-10

## Site Level Life Cycle Items

### Site

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Roadway Pavement | Asphalt | 30 | CAR | $99,256 | 5 |
| Pedestrian Pavement | Sidewalks - Concrete | 2,000 | SF | $40,879 | 5 |
| Playfield Areas | ES Playgrounds | 1 | Ea. | $44,588 | 8 |
| Fences and Gates | Fencing - Chain Link (8 Ft) | 950 | LF | $63,866 | 8 |
| | **Sub Total for System** | **4** | **items** | **$248,589** | |
| | **Sub Total for Building -** | **4** | **items** | **$248,589** | |

## Building: 01 - Main Building

### Roofing

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Steep Slope Roofing | Composition Shingle | 33,103 | SF | $944,128 | 5 |
| | **Sub Total for System** | **1** | **items** | **$944,128** | |

### Exterior

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Exterior Window Wall | Storefront / Curtain Wall (Bldg SF) | 800 | SF | $64,495 | 10 |
| | **Sub Total for System** | **1** | **items** | **$64,495** | |

### Interior

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Interior Operable Partitions | Foldable partition (Bldg SF) | 600 | SF Wall | $69,306 | 5 |
| Interior Swinging Doors | Wood | 29 | Door | $133,716 | 5 |
| Acoustical Suspended Ceilings | Ceilings - Acoustical Grid System | 27,293 | SF | $323,709 | 5 |
| Suspended Plaster and | Painted ceilings | 3,310 | SF | $13,846 | 5 |
| Wall Painting and Coating | Painting/Staining (Bldg SF) | 33,103 | SF | $218,723 | 5 |
| Flooring Treatment | Concrete Floor - Finished | 3,310 | SF | $43,097 | 5 |
| **Note:** | Basement and boiler room | | | | |
| Resilient Flooring | Vinyl Composition Tile Flooring | 27,288 | SF | $313,041 | 5 |
| Carpeting | Carpet | 400 | SF | $8,702 | 5 |
| Tile Flooring | Ceramic Tile | 250 | SF | $6,713 | 5 |
| Interior Swinging Doors | Steel | 8 | Door | $34,256 | 5 |
| Acoustical Suspended Ceilings | Ceilings - Acoustical Tiles | 27,293 | SF | $246,500 | 5 |
| Resilient Flooring | Rubber Tile Flooring | 200 | SF | $3,736 | 5 |
| **Note:** | Stairs | | | | |
| Interior Door Supplementary Components | Door Hardware | 78 | Door | $244,709 | 10 |
| Interior Swinging Doors | Wood | 14 | Door | $64,552 | 10 |
| Interior Swinging Doors | Wood | 41 | Door | $189,046 | 10 |
| Acoustical Suspended Ceilings | Exposed Tectum Ceilings | 2,500 | SF | $185,481 | 10 |
| **Note:** | Gym | | | | |
| Tile Flooring | Quarry Tile | 1,655 | SF | $75,366 | 10 |
| **Note:** | Kitchen | | | | |
| | **Sub Total for System** | **17** | **items** | **$2,174,499** | |

### Mechanical

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Facility Hydronic Distribution | Pump - 1HP or Less (Ea.) | 6 | Ea. | $45,770 | 6 |
| Decentralized Heating Equipment | Unit Heater Steam/HW (250 MBH) | 22 | Ea. | $74,500 | 7 |
| Decentralized Heating Equipment | Heating Unit Vent - Steam/Hot water | 22 | Ea. | $372,126 | 7 |
| Heat Generation | Heat Exchanger - Water to Water (112 GPM) | 1 | Ea. | $76,056 | 8 |
| Exhaust Air | Kitchen Exhaust Hoods | 2 | Ea. | $31,928 | 8 |
| HVAC Air Distribution | AHU 10,000 CFM Outdoor | 2 | Ea. | $570,418 | 8 |
| Heating System Supplementary Components | Controls - Electronic (Bldg.SF) | 33,103 | SF | $62,363 | 8 |
| Decentralized Cooling | Window Units | 5 | Ea. | $16,694 | 8 |
| Facility Hydronic Distribution | Pump - 5HP | 2 | Ea. | $19,060 | 8 |
| Decentralized Heating Equipment | Unit Heater Electric (7 KW) | 5 | Ea. | $9,502 | 8 |
| HVAC Air Distribution | Ductwork (Bldg.SF) | 33,103 | SF | $486,653 | 8 |

## Mechanical

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Decentralized Heating Equipment | Finned Wall Radiator - (Ea.) | 13 | Ea. | $21,777 | 9 |
| Decentralized Heating Equipment | Heating Unit Vent - Steam/Hot water | 5 | Ea. | $84,574 | 9 |
| Exhaust Air | Roof Exhaust Fan | 6 | Ea. | $31,225 | 10 |
| Decentralized Cooling | Condensing Unit (3 Ton) | 1 | Ea. | $7,130 | 10 |
| | **Sub Total for System** | **15** | **items** | **$1,909,775** | |

## Electrical

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Power Distribution | Panelboard - 120/240 100A | 1 | Ea. | $5,799 | 3 |
| Lighting Fixtures | Canopy Mounted Fixtures (Ea.) | 6 | Ea. | $8,271 | 6 |
| Lighting Fixtures | Light Fixtures (Bldg SF) | 33,103 | SF | $196,693 | 7 |
| Power Distribution | Panelboard - 120/240 125A | 5 | Ea. | $0 | 10 |
| | **Sub Total for System** | **4** | **items** | **$210,764** | |

## Plumbing

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Plumbing Fixtures | Refrigerated Drinking Fountain | 2 | Ea. | $14,755 | 6 |
| Plumbing Fixtures | Restroom Lavatories | 12 | Ea. | $38,172 | 6 |
| Plumbing Fixtures | Toilets | 13 | Ea. | $37,077 | 6 |
| Plumbing Fixtures | Urinal (Ea.) | 6 | Ea. | $7,974 | 6 |
| Plumbing Fixtures | Classroom Lavatories | 10 | Ea. | $27,190 | 6 |
| Plumbing Fixtures | Lavatories | 12 | Ea. | $38,172 | 6 |
| Plumbing Fixtures | Mop/Service Sinks | 1 | Ea. | $2,576 | 6 |
| Building Support Plumbing System Supplementary Components | Sump Pump | 1 | Ea. | $1,449 | 6 |
| Plumbing Fixtures | Mop/Service Sinks | 9 | Ea. | $23,188 | 8 |
| Domestic Water Equipment | Water Heater - Electric - 40 gallon | 2 | Ea. | $7,081 | 10 |
| | **Sub Total for System** | **10** | **items** | **$197,635** | |

## Fire and Life Safety

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Fire Detection and Alarm | Fire Alarm | 33,013 | SF | $96,761 | 10 |
| | **Sub Total for System** | **1** | **items** | **$96,761** | |

## Specialties

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Casework | Fixed Cabinetry | 10 | Room | $111,878 | 5 |
| | **Sub Total for System** | **1** | **items** | **$111,878** | |
| | **Sub Total for Building 01 - Main Building** | **50** | **items** | **$5,709,935** | |

# Building: 02 - Storage Shed

## Roofing

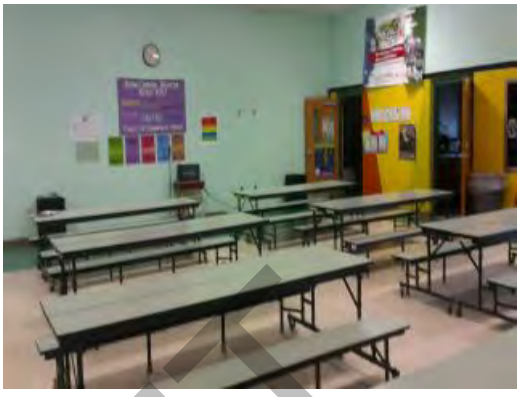
| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Steep Slope Roofing | Composition Shingle | 50 | SF | $1,426 | 10 |
| | **Sub Total for System** | **1** | **items** | **$1,426** | |

## Interior

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Specialty Suspended Ceilings | Ceiling - Wood | 50 | SF | $333 | 10 |
| Wall Painting and Coating | Painting/Staining (Bldg SF) | 50 | SF | $330 | 10 |
| | **Sub Total for System** | **2** | **items** | **$663** | |
| | **Sub Total for Building 02 - Storage Shed** | **3** | **items** | **$2,089** | |
| | **Total for: Clayville Elementary School** | **57** | **items** | **$5,960,613** | |

## Supporting Photos


Hallway Finishes


Cafeteria


Water Draining Down Wall Face


Elevation

Exterior Finishes

1975 Casework

Original 400A Distribution Panel

Ponding In Play Area

Ponding At East Side Of Building

Play Area

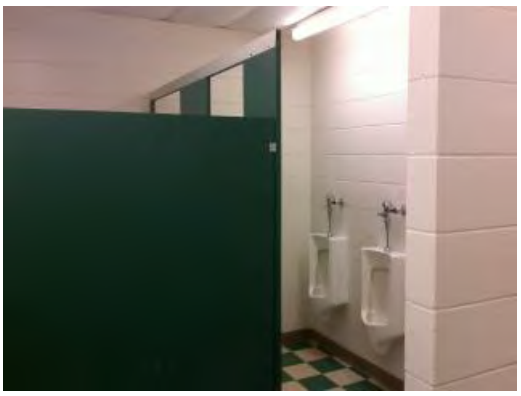

Gym


Library


Typical Classroom


Art Room


Cafeteria


Restroom Fixtures And Finishes


Faded Exterior Door Paint


Non-Compliant Handrails


Basement


Typical Gutter With Debris

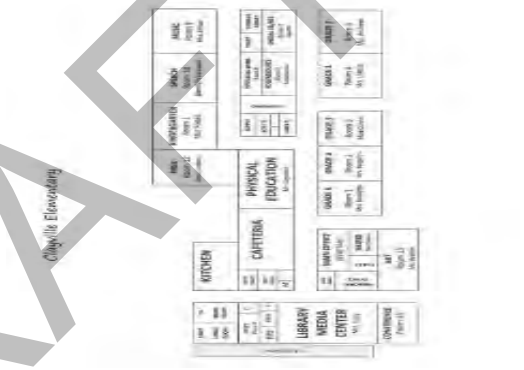

Library


Music Room

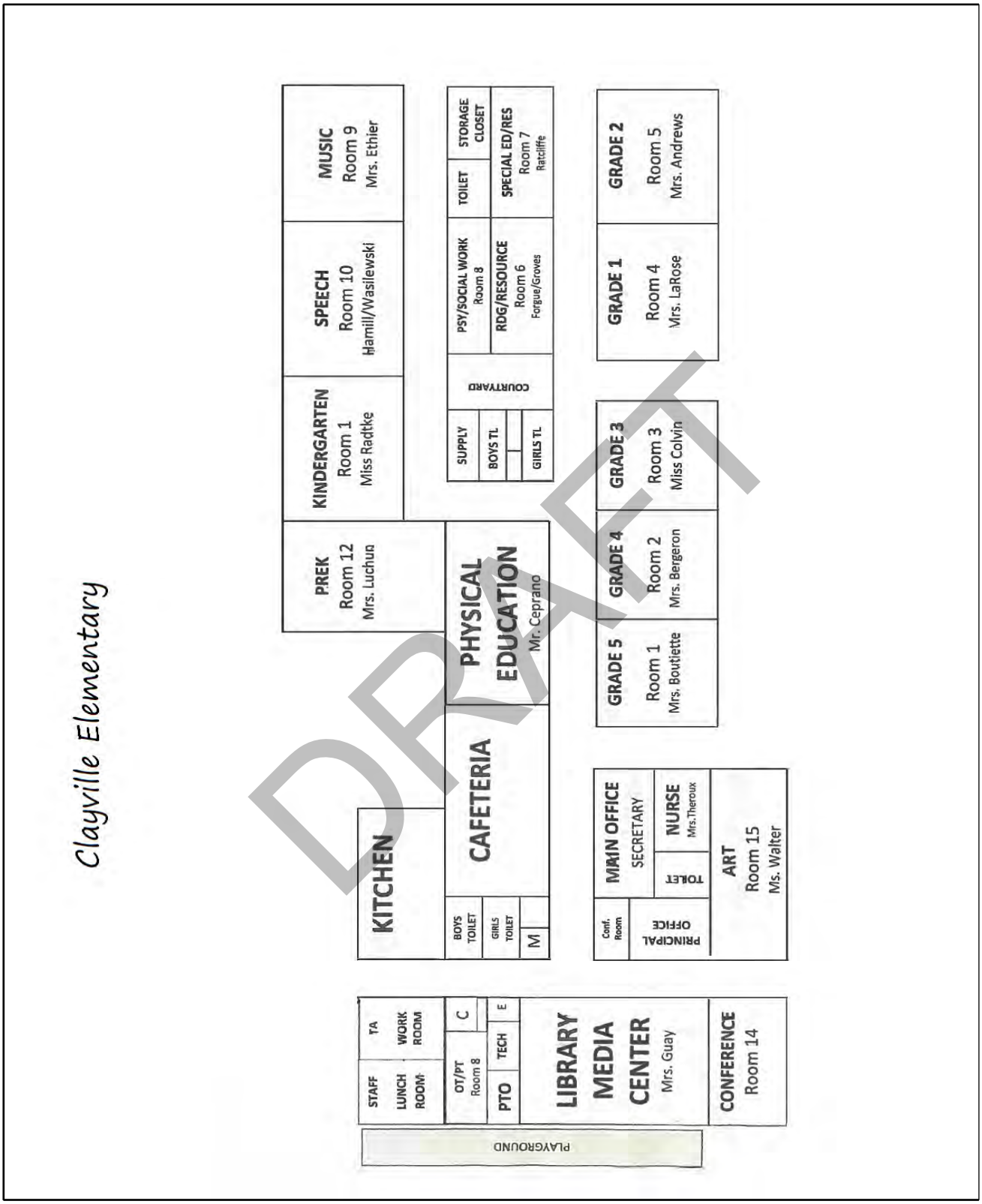
Exterior Finishes

1999 Casework

Site Aerial




Floor_Plan


Clayville Elementary
PREK
Room 12
Mrs. Luchun
KINDERGARTEN
Room 1
Miss Radtke
SPEECH
Room 10
Hamill/Wasilewski
MUSIC
Room 9
Mrs. Ethier
PHYSICAL EDUCATION
Mr. Ceprano
SUPPLY
BOYS TL
GIRLS TL
COURTYARD
PSY/SOCIAL WORK
Room 8
RDG/RESOURCE
Room 6
Forgue/Groves
TOILET
STORAGE CLOSET
SPECIAL ED/RES
Room 7
Ratcliffe
GRADE 1
Room 4
Mrs. LaRose
GRADE 2
Room 5
Mrs. Andrews
GRADE 3
Room 3
Miss Colvin
GRADE 4
Room 2
Mrs. Bergeron
GRADE 5
Room 1
Mrs. Boutiette
KITCHEN
CAFETERIA
BOYS TOILET
GIRLS TOILET
M
Conf. Room
PRINCIPAL OFFICE
MAIN OFFICE
SECRETARY
TOILET
NURSE
Mrs.Theroux
ART
Room 15
Ms. Walter
STAFF LUNCH ROOM
TA
WORK ROOM
OT/PT
Room 8
C
PTO
TECH
E
LIBRARY MEDIA CENTER
Mrs. Guay
CONFERENCE
Room 14
PLAYGROUND
DRAFT

Floor_Plan

# Facility Condition Assessment

Hope Elementary School | *October 2016*

Address: 391 North Road, Hope, RI 02831

Report Generated: October 06, 2016



## Executive Summary

Hope Elementary School, located at 391 North Road in Hope, Rhode Island, was built in 1929. It comprises 41,420 gross square feet. Data in this report was collected in the spring/summer of 2016.

Hope Elementary School has an enrollment of 209, serves grades KG - 5, and has 12 classrooms. The LEA reported capacity for Hope Elementary School is 365 with a resulting utilization of 57.00%. For master planning efforts, a RIDE Model Program Standard was established based on the RIDE School Construction Regulations. Applying RIDE's Model Program Standard, a facility of this size could ideally support an enrollment of approximately 230 students.

The total current deficiencies for this campus, in 2016 construction cost dollars, are estimated at $5,039,474. For master planning purposes a five-year need was developed to provide an understanding of the current need as well as the projected needs in the near future. For Hope Elementary School the five-year need is $7,398,700. The findings contained within this report resulted from an assessment of building systems. Assessments were performed by building professionals experienced in disciplines including: architecture, mechanical, plumbing, electrical, acoustics, hazardous material, and technology infrastructure.




*Figure 1: Aerial view of Hope Elementary School*

## Approach and Methodology

A facility condition assessment evaluates each building's overall condition. Two components of the facility condition assessment are combined to total the cost for facility need. The two components of the facility condition assessment are current deficiencies and life cycle forecast.

**Current Deficiencies:** Deficiencies are items in need of repair or replacement as a result of being broken, obsolete, or beyond useful life. The existing deficiencies that currently require correction are identified and assigned a priority. An example of a current deficiency might include a broken lighting fixture or an inoperable roof top air conditioning unit.

**Life Cycle Forecast:** Life cycle analysis evaluates the ages of a building's systems to forecast system replacement as it reaches the end of its serviceable life. An example of a life cycle system replacement is a roof with a 20-year life that has been in place for 15 years and may require replacement in five years.

All members of the survey team recorded existing conditions, identified problems and deficiencies, and documented corrective action and quantities. The team took digital photos at each school to better identify significant deficiencies.

### Discipline Specialists

All assessment teams produced current deficiencies that are associated with each school. The assessment for the school facilities at the Rhode Island Department of Education included several specialties:

**Facility Condition Assessment:** Architectural, mechanical, and electrical engineering professionals observed conditions via a visual observation that did not include intrusive measures, destructive investigations, or testing. Additionally, the assessment incorporated input provided by District Facilities and Maintenance staff was incorporated where applicable. The assessment team recorded existing conditions, identified problems and deficiencies, documented corrective action and quantities, and identified the priority of the repair in accordance with parameters defined during the planning phase.

**Technology:** Technology specialists visited the RIDE facilities and met with technology directors to observe and assess each facility's technology infrastructure. It included: network architecture, major infrastructure components, classroom instructional systems, and necessary building space and support for technology. The technology assessment took into account the desired technology outcome and best practices and processes to ensure the results can be attained effectively.

**Hazardous Materials:** Schools constructed prior to 1990 were assessed by specialist to identify the presence of hazardous materials. The team focused on identifying asbestos containing building materials (ACBMs), lead-based painted (LBP) areas, polychlorinated biphenyls (PCBs), and Chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. If sampling and analysis was required, these activities were recommended but not included in the scope of work.

**Traffic:** Traffic specialist performed an in-office review of aerial imagery of the traffic infrastructure around the facilities in accordance with section 1.05-7 in the Rhode Island School Construction Regulations. Also, onsite personnel conducted an initial evaluation from data collected during the facility condition assessment. Based on the information, deficiencies and corrective actions were identified. High problem areas were identified for consideration of more detailed site-specific study and analysis in the future.

**Acoustics:** Specialists assessed each school's acoustics, including architectural acoustic, mechanical system noise and vibration, and environmental noise. The assessment team evaluated room acoustics with particular attention to the intelligibility of speech in learning spaces, interior and exterior sound isolation, and mechanical systems noise and vibration control.

**Educational Space Analysis**: The evaluation of schools to ensure that that all spaces adequately support the districts educational program. Standards are established for each classroom type or instructional space. Each space is evaluated to determine if it meets those standards and create a listing of alterations that should be made to make the space a better environment for teaching and learning.

## System Summaries

The following tables summarize major building systems at Hope Elementary School campus, identified by discipline and building.

**Site**

The site level systems for this campus includes:

| | |
|---|---|
| **Site** | Asphalt Parking Lot Pavement |
| | Concrete Pedestrian Pavement |

**Building Envelope**

The exterior systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | Brick Exterior Wall |
| | Painted Exterior Wall |
| | Aluminum Exterior Windows |
| | Storefront / Curtain Wall |
| | Steel Exterior Entrance Doors |
| **02 - Shed:** | CMU Exterior Wall |
| | Wood Exterior Doors |

The roofing for the buildings at this campus consists of:

| | |
|---|---|
| **01 - Main Building:** | Composition Shingle Roofing |
| | Single Ply Roofing |
| **02 - Shed:** | Single Ply Roofing |

**Interior**

The interior systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | Wood Interior Doors |
| | Interior Door Hardware |
| | Suspended Acoustical Grid System |
| | Suspended Acoustical Ceiling Tile |
| | Painted Ceilings |
| | Interior Wall Painting |
| | Concrete Flooring |
| | Ceramic Tile Flooring |
| | Vinyl Composition Tile Flooring |
| | Carpet |
| **02 - Shed:** | Exposed Metal Structure Ceiling |
| | Interior Wall Painting |
| | Concrete Flooring |

## Mechanical

The mechanical systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | 1,275 MBH Cast Iron Steam Boiler |
| | 1,275 MBH Cast Iron Water Boiler |
| | 152 GPM Water to Water Heat Exchanger |
| | Steam/Hot Water Heating Unit Vent |
| | Radiant Water Heater |
| | Electronic Heating System Controls |
| | Window Units |
| | 1 HP or Smaller Pump |
| | 2-Pipe Steam Hydronic Distribution System |
| | 2,000 CFM Interior AHU |
| | Ductwork |
| | Roof Mounted Exhaust Fan |
| | Kitchen Exhaust Hoods |

## Plumbing

The plumbing systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | 100 Gallon Water Storage Tank |
| | Gas Piping System |
| | 40 Gallon Electric Water Heater |
| | Domestic Water Piping System |
| | Classroom Lavatories |
| | Mop/Service Sinks |
| | Non-Refrigerated Drinking Fountain |
| | Restroom Lavatories |
| | Toilets |
| | Urinals |
| | Sump Pump |
| | 2,000 Gallon Above Ground Fuel Oil Storage Tank |

## Electrical

The electrical systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | 75 KVA Transformer |
| | Panelboard - 120/208 100A |
| | Panelboard - 120/208 125A |
| | Panelboard - 120/208 225A |
| | Panelboard - 120/208 400A |
| | Building Mounted Lighting Fixtures |
| | Canopy Mounted Lighting Fixtures |
| | Light Fixtures |

## Facility Deficiency Priority Levels

Deficiencies were ranked according to five priority levels, with Priority 1 items being the most critical to address:

**Priority 1 – Mission Critical Concerns:** Deficiencies or conditions that may directly affect the school's ability to remain open or deliver the educational curriculum. These deficiencies typically relate to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency is a fire alarm system replacement.

**Priority 2 – Indirect Impact to Educational Mission:** Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing that could cause deterioration of integral building systems, and conditions affecting building envelopes, such as roof and window replacements.

**Priority 3 – Short-Term Conditions:** Deficiencies that are necessary to the school's mission but may not require immediate attention. These items should be considered necessary improvements required to maximize facility efficiency and usefulness. Examples of Priority 3 items include site improvements and plumbing deficiencies.

**Priority 4 – Long-Term Requirements:** Items or systems that may be considered improvements to the instructional environment. The improvements may be aesthetic or provide greater functionality. Examples include cabinets, finishes, paving, removal of abandoned equipment, and educational accommodations associated with special programs.

**Priority 5 – Enhancements:** Deficiencies aesthetic in nature or considered enhancements. Typical deficiencies in this priority include repainting, re-carpeting, improved signage, or other improvements to the facility environment.

The following chart summarizes this site's current deficiencies by building system and priority. The listing details current deficiencies including deferred maintenance, functional deficiencies, code compliance, capital renewal, hazardous materials and technology categories.

*Table 1: System by Priority*

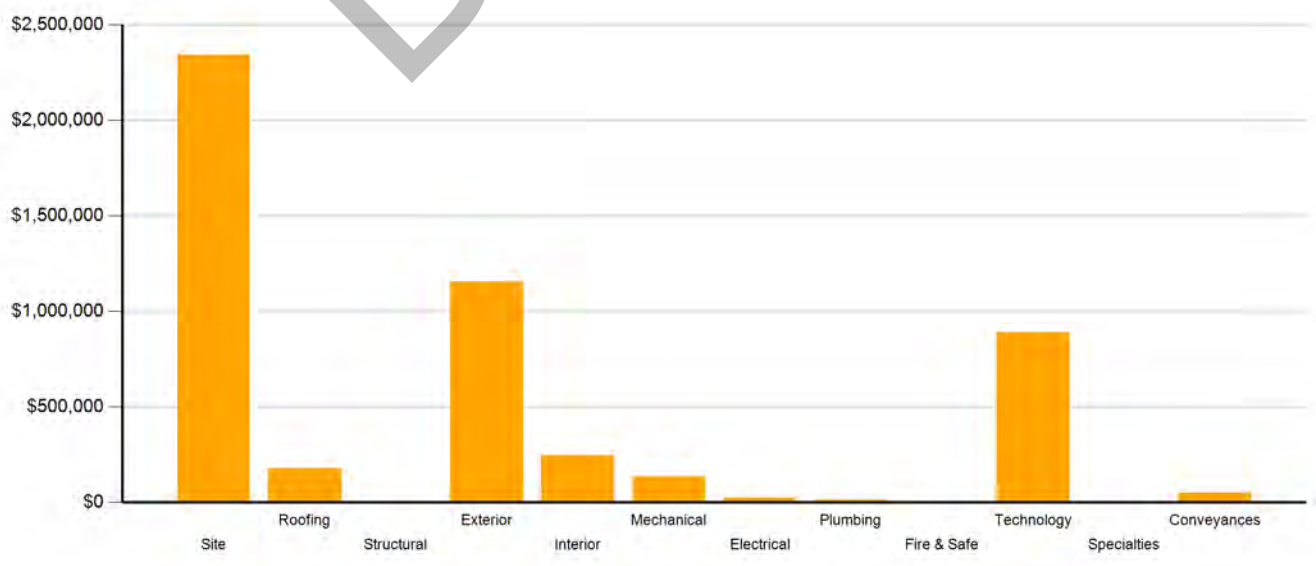
| | Priority | | | | | | |
|---|---|---|---|---|---|---|---|
| System | 1 | 2 | 3 | 4 | 5 | Total | % of Total |
| Site | $2,059,844 | - | $249,765 | $31,507 | $1,870 | $2,342,985 | 46.49 % |
| Roofing | $177,909 | - | - | - | - | $177,909 | 3.53 % |
| Structural | - | - | - | - | - | $0 | 0.00 % |
| Exterior | - | $178,926 | - | $976,954 | - | $1,155,880 | 22.94 % |
| Interior | - | - | $92,446 | $146,152 | $6,447 | $245,044 | 4.86 % |
| Mechanical | - | $133,890 | - | - | - | $133,890 | 2.66 % |
| Electrical | - | $10,505 | $8,085 | - | $6,028 | $24,618 | 0.49 % |
| Plumbing | - | - | $2,887 | - | $10,460 | $13,347 | 0.26 % |
| Fire and Life Safety | $608 | - | - | - | - | $608 | 0.01 % |
| Technology | - | - | $890,141 | - | - | $890,141 | 17.66 % |
| Conveyances | - | - | $51,496 | - | - | $51,496 | 1.02 % |
| Specialties | - | - | $3,557 | - | - | $3,557 | 0.07 % |
| **Total** | $2,238,360 | $323,321 | $1,298,376 | $1,154,612 | $24,804 | $5,039,474 | |

The building systems at the campus with the most need include:

| | | |
|---|---|---|
| Site | - | $2,342,985 |
| Exterior | - | $1,155,880 |
| Technology | - | $890,141 |

The table below represents the building systems and their percentages for overall campus need.

*Figure 2: System Deficiencies*



## Current Deficiencies by Category

The deficiencies have been further grouped according to the observed deficiency category and priority.

• **Acoustics** deficiencies relate to room acoustics, sound insolation, and mechanical systems and vibration control modeled after ANSI/ASA Standard S12.60-2010 and ASHRAE Handbook, Chapter 47 on Sound and Vibration Control.

• **Barrier to Accessibility** deficiencies relate to the Americans with Disabilities and Rhode Island Governors Commission on Disability. Additional items may be included other categories.

• **Capital renewal** items have reached or exceeded serviceable life and require replacement. These are current and do not include life cycle capital renewal forecasts. Also included are deficiency correcting planned work postponed beyond its regular life expectancy.

• **Code compliance** deficiencies relate to current codes. Many may fall under grandfather clauses, which allow buildings to continue operating under codes effective at the time of construction. However, there are instances where the level of renovation requires full compliance and are reflected in the master plan.

• **Educational adequacy** includes deficiencies identify how facilities align with the Basic Education Program and the RIDE School Construction Regulations.

• **Functional deficiencies** are deficiencies for a component or system that has failed before the end of its expected life or is not the right application, size or design.

• **Hazardous materials** include deficiencies for building systems or components containing potentially hazardous material. The team focused on identifying asbestos containing building materials (ACBMs), lead based painted (LBP) areas, polychlorinated biphenyls (PCBs), and Chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. With other scopes of work there may be other costs associated with hazardous materials.

• **Technology** deficiencies relate to network architecture, technology infrastructure, classroom systems, and support. Examples of technology deficiencies include: security cameras, secure electronic access, telephone handsets, and dedicate air conditioning for telecommunication rooms.

• **Traffic** site deficiencies relate to vehicle or pedestrian traffic, such as bus loops, crosswalks, and pavement markings.

The following chart and table represent the deficiency category by priority. This listing includes current deficiencies at all building systems.

*Table 2: Deficiency Category by Priority*

| | Priority | | | | | |
|---|---|---|---|---|---|---|
| **Category** | **1** | **2** | **3** | **4** | **5** | **Total** |
| **Acoustics** | - | - | $37,077 | - | - | $37,077 |
| **Barrier to Accessibility** | $2,059,844 | - | $209,819 | $50,054 | - | $2,319,717 |
| **Capital Renewal** | $178,516 | $323,321 | $78,981 | $25,550 | $2,925 | $609,294 |
| **Code Compliance** | - | - | - | - | - | $0 |
| **Educational Adequacy** | - | - | $45,849 | $1,038,624 | $20,010 | $1,104,482 |
| **Functional Deficiency** | - | - | - | $2,833 | - | $2,833 |
| **Hazardous Material** | - | - | $371 | $37,551 | - | $37,922 |
| **Technology** | - | - | $850,736 | - | - | $850,736 |
| **Traffic** | - | - | $75,544 | - | $1,870 | $77,413 |
| **Total** | $2,238,360 | $323,321 | $1,298,376 | $1,154,612 | $24,804 | $5,039,474 |



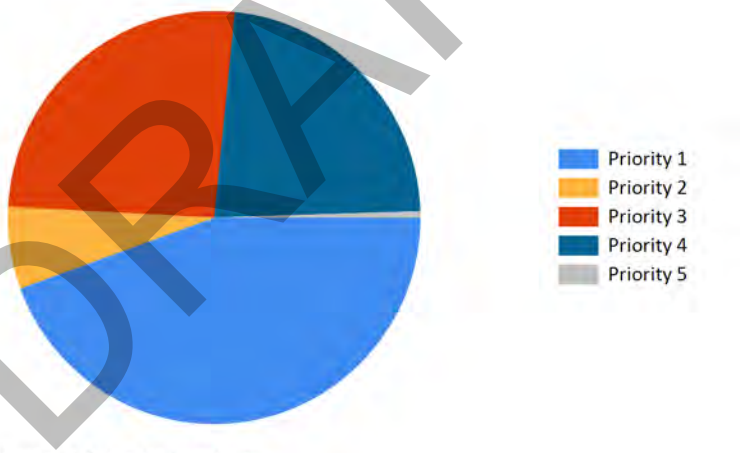



*Figure 3: Current deficiencies by priority*

## Life Cycle Capital Renewal Forecast

During the facility condition assessment, assessors inspected all major building systems. If an assessor identified a need for immediate replacement, a deficiency was created with the item's repair costs. The identified deficiency contributes to the particular facility's total current repair costs.

However, capital planning scenarios span multiple years, as opposed to being constrained to immediate repairs. Construction projects may begin several years after the initial facility condition assessment. Therefore, in addition to the current year repair costs, it is necessary to forecast the facility's future costs using a 10-year life cycle renewal forecast model.

Life cycle renewal is the projection of future building system costs based upon each individual system's expected serviceable life. Building systems and components age over time, eventually break down, reach the end of their useful lives, and may require replacement. While an item may be in good condition now, it might the end of it's life before a planned construction project occurs.

The following chart shows all current deficiencies and the subsequent 10-year life cycle capital renewal projections. The projections outline costs for major building systems in which a component is expected to reach the end of its useful life and require capital funding for replacement.

*Table 3: Capital Renewal Forecast*

| | | Life Cycle Capital Renewal Projections | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| System | Current Deficiencies | Year 1 2017 | Year 2 2018 | Year 3 2019 | Year 4 2020 | Year 5 2021 | Year 6 2022 | Year 7 2023 | Year 8 2024 | Year 9 2025 | Year 10 2026 | Total | $/GSF |
| Site | $2,342,985 | $0 | $0 | $0 | $0 | $243,325 | $0 | $0 | $0 | $0 | $7,735 | $251,060 | $6.06 |
| Roofing | $177,909 | $0 | $0 | $0 | $0 | $0 | $257 | $0 | $0 | $0 | $250,271 | $250,528 | $6.05 |
| Structural | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Exterior | $1,155,880 | $0 | $0 | $0 | $0 | $115,510 | $0 | $26,620 | $0 | $0 | $2,149,327 | $2,291,457 | $55.32 |
| Interior | $245,044 | $0 | $0 | $0 | $308,794 | $1,504,794 | $0 | $0 | $0 | $0 | $403,038 | $2,216,626 | $53.52 |
| Mechanical | $133,890 | $0 | $0 | $0 | $0 | $0 | $232,379 | $15,964 | $751,310 | $460,170 | $1,047,301 | $2,507,124 | $60.53 |
| Electrical | $24,618 | $0 | $0 | $0 | $0 | $0 | $11,076 | $0 | $358,291 | $0 | $0 | $369,367 | $8.92 |
| Plumbing | $13,347 | $0 | $0 | $0 | $51,100 | $1,449 | $158,600 | $0 | $73,479 | $0 | $32,489 | $317,117 | $7.66 |
| Fire and Life Safety | $608 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $136,980 | $0 | $136,980 | $3.31 |
| Technology | $890,141 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Conveyances | $51,496 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Specialties | $3,557 | $0 | $0 | $0 | $0 | $134,254 | $0 | $0 | $0 | $0 | $44,751 | $179,005 | $4.32 |
| **Total** | **$5,039,474** | **$0** | **$0** | **$0** | **$359,894** | **$1,999,332** | **$402,312** | **$42,584** | **$1,183,080** | **$597,150** | **$3,934,912** | **$8,519,264** | **$205.68** |



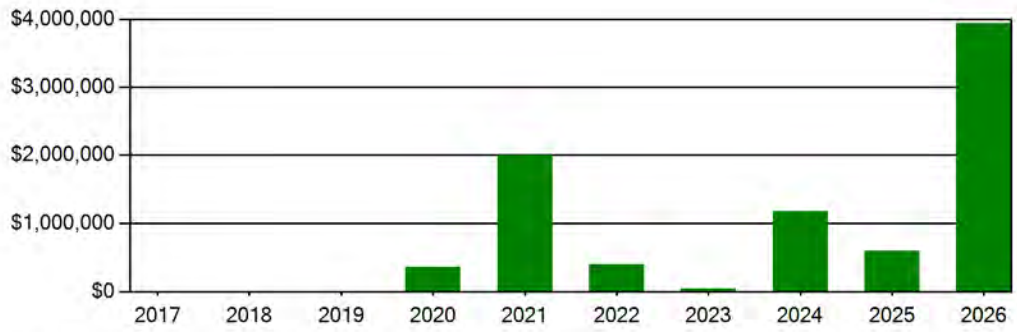



*Figure 4: Life Cycle Capital Renewal Forecast*

## Facility Condition Index (FCI)

The Facility Condition Index (FCI) is used throughout the facility condition assessment industry as a general indicator of a building's health. Since 1991, the facility management industry has used an index called the FCI to benchmark the relative condition of a group of schools. The National Association of College and University Business Officers has suggested for college planning that an FCI of less than 5 percent is good, an FCI between 5 and 10 percent is fair, and an FCI greater than 10 percent is poor. In K-12 public school planning, the gulf between 10 percent and 100 percent is just not stratified enough. Jacobs has used the following ranges to provide a little more gradation. FCI's less than 10 percent are considered good, 10 to 60 percent is fair, and anything greater than 60 percent is poor. Financial modeling has shown that over a 30-year period, schools that fall in the 65 percent or greater range are more cost-effective to replace than to repair. This is due to efficiency gains with more modern facilities and the value of the building at the end of the analysis period. It is important to note that the FCI at which a facility should be considered for replacement is typically debated and adjusted based on property owners/facility managers approach to facility management. Of course, FCI is not the only factor used to identify buildings that need renovation, replacement or even closure. Historical significance, enrollment trends, community sentiment, and the availability of capital are additional factors that are analyzed when making school facility decision.

The FCI is calculated by dividing the total repair cost, including site-related repairs, by the total replacement cost. Costs associated with new construction are not included in the FCI calculation. As a general rule, an FCI below 10% is considered good. An economic analysis generally suggests that FCIs greater than 65 percent represent the point where facilities should be considered for replacement. This value typically indicates the point where further expenditures on a building offer little return when compared to the potential cost of replacing that facility.

The replacement value represents the estimated cost of replacing the current building with another building of like size, based on today's estimated cost of construction in the Providence, Rhode Island area. The estimated replacement cost for this facility is $14,497,000. The total current cost for all deficiencies is $5,039,474.

The Hope Elementary School facility has an overall FCI of 34.76%.

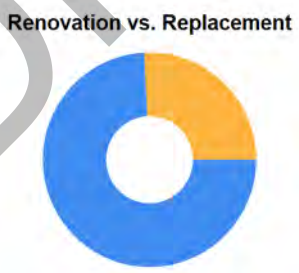



*Figure 5: Renovation vs Replacement*



## Five Year FCI

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. For planning purposes, the total five-year need at Hope Elementary School is $7,398,700 (Life Cycle Yrs 1-5 plus the Current Deficiencies)

A five year FCI was calculated by dividing the five year need by the total replacement cost. The Hope Elementary School facility has a five year FCI of 51.04% (Life Cycle Yrs 1-5 plus Current Deficiencies divided by the Total Replacement Cost).

## Summary of Findings

The table below summarizes the condition findings at Hope Elementary School.

*Table 4: Facility Condition by Building*

| Number | Building Name | Gross Sq Ft | Built Date | Current Deficiencies | FCI | Total 5 Yr Need (Yr 1-5 + Current Defs) | 5-Year FCI |
|---|---|---|---|---|---|---|---|
| | Exterior Site | | | $1,234,545 | | $1,477,870 | |
| 01 | Main Building | 41,400 | 1929 | $3,804,929 | 26.26% | $5,920,830 | 40.86% |
| 02 | Shed | 20 | 1975 | $0 | .00% | $0 | .00% |
| **Totals** | | **41,420** | | **$5,039,474** | **34.76%** | **$7,398,700** | **51.04%** |

The following pages provide a listing of all current deficiencies and 10 year life cycle need for the site and building and the associated costs, followed by photos taken during the assessment.

# Site Level Deficiencies

## Site

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Concrete Walks Require Replacement | Capital Renewal | 3,000 | SF | 3 | $60,906 | 8693 |
| The Playground Impact Surface Does Not Meet ADA Guidelines For Accessible Play Surfaces | Barrier to Accessibility | 3,000 | SQFT | 3 | $113,315 | 8705 |
| Traffic Signage Is Required | Traffic | 2 | Ea. | 3 | $75,544 | 9316 |
| **Note:** Add flashing beacons to school zone speed limit signs. | | | | | | |
| Backstops Require Replacement | Educational Adequacy | 1 | Ea. | 4 | $28,674 | 28579 |
| **Note:** Backstops Require Replacement | | | | | | |
| Play Area Requires ADA Access | Functional Deficiency | 1 | Ea. | 4 | $2,833 | 8707 |
| **Note:** Asphalt curb across front of play area, no ramp for ADA access. | | | | | | |
| Paving Requires Restriping | Traffic | 33 | CAR | 5 | $1,870 | 9317 |
| **Note:** Staff lot | | | | | | |
| | **Sub Total for System** | **6** | **items** | | **$283,141** | |

## Exterior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Cafeteria does not meet standard size | Educational Adequacy | 732 | SF | 4 | $489,752 | 53364 |
| **Note:** Cafeteria does not meet required RI standard for space size. (Std=2250 sf, Current=1518 sf) | | | | | | |
| Media Center does not meet size standard | Educational Adequacy | 690 | SF | 4 | $461,651 | 53282 |
| **Note:** Library/Media Center does not meet required RI standard for space size. (Std=2020 sf, Current=1330 sf) | | | | | | |
| | **Sub Total for System** | **2** | **items** | | **$951,403** | |
| | **Sub Total for School and Site Level** | **8** | **items** | | **$1,234,545** | |

# Building: 01 - Main Building

## Site

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Exterior Ramp Is Not ADA Compliant | Barrier to Accessibility | 100 | LF | 1 | $2,059,844 | 8704 |
| **Note:** Handrail does not have extension at top and bottom. Handrail is missing on one side, slope too steep, and landing is too small. | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$2,059,844** | |

## Roofing

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Shingle Roof Requires Replacement | Capital Renewal | 5,758 | SF | 1 | $177,909 | 8695 |
| **Note:** Shingles are damaged and missing. | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$177,909** | |

## Exterior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Aluminum Window Requires Replacement | Capital Renewal | 976 | SF | 2 | $178,926 | 8697 |
| **Note:** Single pane windows should be replaced. | | | | | | |
| The Exterior Requires Painting (Bldg SF) | Capital Renewal | 1,772 | SF | 4 | $25,550 | 10973 |
| | **Sub Total for System** | **2** | **items** | | **$204,477** | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Interior Doors Require Replacement | Capital Renewal | 2 | Door | 3 | $9,990 | 8699 |
| **Note:** Cafeteria doors are difficult to open. | | | | | | |
| Light Deterioration or Damage of 9x9 Asbestos Floor Tile is Present | Hazardous Material | 12 | SF | 3 | $371 | 17364 |
| **Note:** 9x9 Floor Tiles | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 24 | | | | | | |
| Room Is Excessively Reverberant (Install Fiberglass Wall Panel) | Acoustics | 600 | SF | 3 | $37,077 | 19702 |
| **Note:** Gym | | | | | | |
| The Access Is Not ADA Compliant And Requires A Doorway Access Power Assist Mechanism | Barrier to Accessibility | 1 | Door | 3 | $22,658 | 8702 |
| **Note:** Front door security buzzer is too high and needs to be relocated. | | | | | | |
| The Existing Toilet Stall Does Not Meet Minimum ADA Requirements | Barrier to Accessibility | 7 | Ea. | 3 | $22,349 | 8703 |
| **Location:** Original faculty ladies restroom, and all student restrooms on lower level | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 1 | Ea. | 4 | $309 | 17354 |
| **Note:** Metal Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:Basement, Room:Men's Bathroom 18 | | | | | | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 1 | Ea. | 4 | $309 | 17359 |
| **Note:** Metal Door | | | | | | |
| **Location:** School Building Interior, Floor:Basement, Room:East Stairs | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 1 | Ea. | 4 | $309 | 17361 |
| **Note:** Wood Door | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 23 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 1 | Ea. | 4 | $309 | 17367 |
| **Note:** Metal Door | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 22 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 2 | Ea. | 4 | $618 | 17368 |
| **Note:** Wood Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 21 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 1 | Ea. | 4 | $309 | 17372 |
| **Note:** Wood Door | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 33 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 1 | Ea. | 4 | $309 | 17374 |
| **Note:** Wood Door Trim | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 30 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 1 | Ea. | 4 | $309 | 17378 |
| **Note:** Wood Door | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 43 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 2 | Ea. | 4 | $618 | 17384 |
| **Note:** Metal Door | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:Main Entrance | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 28 | LF | 4 | $692 | 17360 |
| **Note:** Wood Window Sill | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 23 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 1 | LF | 4 | $25 | 17362 |
| **Note:** Wood Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 23 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 24 | LF | 4 | $593 | 17363 |
| **Note:** Wood Window Sill | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 24 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 28 | LF | 4 | $692 | 17366 |
| **Note:** Wood Window Sill | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 22 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 28 | LF | 4 | $692 | 17369 |
| **Note:** Wood Window Sill | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 31 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 20 | LF | 4 | $494 | 17370 |
| **Note:** Wood Trim | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 31 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 28 | LF | 4 | $692 | 17371 |
| **Note:** Wood Window Sill | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 33 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 16 | LF | 4 | $395 | 17373 |
| **Note:** Wood Window Sill | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 30 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 32 | LF | 4 | $791 | 17375 |
| **Note:** Wood Window Sill | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 37 | | | | | | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 20 | LF | 4 | $494 | 17376 |
| **Note:** Wood Trim | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 37 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 400 | LF | 4 | $9,887 | 17380 |
| **Note:** Wood Trim | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:1929 Section of High Wood Trim | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 20 | LF | 4 | $494 | 17382 |
| **Note:** Hand Rail | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:Room 54 Exit Door | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 20 | LF | 4 | $494 | 17383 |
| **Note:** Hand Rail | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:Room 52 Exit Door | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 100 | SF | 4 | $1,030 | 17352 |
| **Note:** Metal Ceiling Vent | | | | | | |
| **Location:** School Building Interior, Floor:Basement, Room:Gymnasium | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 200 | SF | 4 | $2,060 | 17355 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Interior, Floor:Basement, Room:Boys' Bathroom 12 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 310 | SF | 4 | $3,193 | 17356 |
| **Note:** Metal Stalls | | | | | | |
| **Location:** School Building Interior, Floor:Basement, Room:Boys' Bathroom 12 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 200 | SF | 4 | $2,060 | 17357 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Interior, Floor:Basement, Room:Kitchen/Pantry | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 100 | SF | 4 | $1,030 | 17358 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Interior, Floor:Basement, Room:East Stairs | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 10 | SF | 4 | $103 | 17365 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Main Entrance | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 100 | SF | 4 | $1,030 | 17377 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Library | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 100 | SF | 4 | $1,030 | 17379 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 44 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 300 | SF | 4 | $3,090 | 17381 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:Concrete Foundation | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 300 | SF | 4 | $3,090 | 17385 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:Concrete Foundation | | | | | | |
| Room Lighting Is Inadequate Or In Poor Condition. | Educational Adequacy | 1,518 | SF | 4 | $58,547 | Rollup |
| The Handrails In The Stair Area Are Not ADA Compliant | Barrier to Accessibility | 180 | LF | 4 | $50,054 | 8700 |
| Interior Doors Require Repainting | Capital Renewal | 40 | Door | 5 | $2,925 | 8698 |
| **Note:** Interior wood doors and door casings require sanding and staining. | | | | | | |
| Room lacks appropriate sound control. | Educational Adequacy | 100 | SF | 5 | $3,522 | Rollup |
| | **Sub Total for System** | **41** | **items** | | **$245,044** | |

## Mechanical

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Water Heat Exchanger Requires Replacement | Capital Renewal | 1 | Ea. | 2 | $133,890 | 8709 |
| | **Sub Total for System** | **1** | **items** | | **$133,890** | |

## Electrical

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Panelboard Requires Replacement | Capital Renewal | 2 | Ea. | 2 | $10,505 | 10974 |
| The Mounted Building Lighting Requires Replacement | Capital Renewal | 5 | Ea. | 3 | $8,085 | 8708 |
| **Location:** Facing playground, building side C, facing faculty parking, main entry | | | | | | |
| Room Has Insufficient Electrical Outlets | Educational Adequacy | 12 | Ea. | 5 | $6,028 | Rollup |
| | **Sub Total for System** | **3** | **items** | | **$24,618** | |

## Plumbing

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Toilets Plumbing Fixtures Require Replacement | Educational Adequacy | 1 | Ea. | 3 | $2,887 | Rollup |
| Room lacks a drinking fountain. | Educational Adequacy | 8 | Ea. | 5 | $8,930 | Rollup |
| The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed | Educational Adequacy | 1 | Ea. | 5 | $1,530 | Rollup |
| | **Sub Total for System** | **3** | **items** | | **$13,347** | |

## Fire and Life Safety

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Fire Alarm Horn/Strobe Requires Repair | Capital Renewal | 1 | Ea. | 1 | $608 | 8706 |
| **Location:** Facing playground | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$608** | |

## Technology

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Room lacks Interactive White Board | Educational Adequacy | 13 | Ea. | 3 | $39,405 | Rollup |
| Technology: Campus network switching electronics are antiquated and/or do not meet standards. | Technology | 48 | Ea. | 3 | $24,718 | 18506 |
| **Note:** Refresh select network switches that have reached end-of-life. | | | | | | |
| Technology: Campus wireless infrastructure inadequate. | Technology | 25 | Ea. | 3 | $36,047 | 18507 |
| **Note:** Wireless Access Points do not support current 801.11AC standards, refresh and add Access Points. | | | | | | |
| Technology: Classroom AV/Multimedia systems are in need of improvements. | Technology | 18 | Ea. | 3 | $185,386 | 18511 |
| **Note:** Classroom AV/Multimedia systems support digital technologies but do not have the required cabling to use it, refresh. | | | | | | |
| Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life. | Technology | 1 | Ea. | 3 | $21,628 | 18513 |
| **Note:** Library AV/Multimedia system is nearing end-of-life, refresh. | | | | | | |
| Technology: Gymnasium sound system is nonexisitant, inadequate, or near end of useful life. | Technology | 1 | Ea. | 3 | $9,887 | 18509 |
| **Note:** Gymnasium lacks audio system, add audio system. | | | | | | |
| Technology: Instructional spaces do not have local sound reinforcement. | Technology | 19 | Ea. | 3 | $97,843 | 18516 |
| **Note:** Add sound reinforcement in instructional spaces. | | | | | | |
| Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. | Technology | 1 | Ea. | 3 | $5,768 | 18504 |
| **Note:** IDF lack grounding system, add grounding system. | | | | | | |
| Technology: Intermediate Telecommunications Room needs M/E improvements. | Technology | 1 | Ea. | 3 | $26,366 | 18503 |
| **Note:** IDF is wall cabinet in custodial space, add secure cabinet. | | | | | | |
| Technology: Main Telecommunications Room ground system is inadequate or non-existent. | Technology | 1 | Ea. | 3 | $7,209 | 18501 |
| **Note:** MDF grounding system is inadequate, add grounding system. | | | | | | |
| Technology: Main Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. | Technology | 1 | Ea. | 3 | $46,140 | 18499 |
| **Note:** MDF in shared space with carpet flooring, renovate/rezone. | | | | | | |
| Technology: Main Telecommunications Room UPS does not meet standards, is inadequate, or non-existent. | Technology | 1 | Ea. | 3 | $9,784 | 18500 |
| **Note:** MDF equipment lacks adequate UPS unit, add UPS unit. | | | | | | |
| Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. | Technology | 24 | Ea. | 3 | $11,123 | 18505 |
| **Note:** Select cables do not meet industry standards (Category 5e) or better. Refresh selected cables. | | | | | | |
| Technology: Network cabling infrastructure is partially outdated and/or needs expansion. | Technology | 144 | Ea. | 3 | $66,739 | 18512 |
| **Note:** Classrooms have one (1) data drops, add four (4) drops per classroom. | | | | | | |
| Technology: PA/Bell/Clock system is inadequate and/or near end of useful life. | Technology | 41,400 | SF | 3 | $76,750 | 18514 |
| **Note:** PA/Bell/Clock system and antiquated, refresh. | | | | | | |
| Technology: Security cameras and recording system are inadequate and/or near end of useful life. | Technology | 25 | Ea. | 3 | $128,740 | 18515 |
| **Note:** Campus has video surveillance system with 8 analog cameras, and front door intercom, refresh and add 17 cameras. | | | | | | |
| Technology: Special Space AV/Multimedia system is inadequate. | Technology | 1 | Ea. | 3 | $58,706 | 18508 |
| **Note:** Multipurpose room needs AV/Multimedia refresh/addition. | | | | | | |
| Technology: Telecommunications Room (large size room) needs dedicated cooling system improvements. | Technology | 1 | Ea. | 3 | $8,239 | 18502 |
| **Note:** MDF does not have independent AC, add unit. | | | | | | |
| Technology: Telephone handsets are inadequate and sparsely deployed throughout the campus. | Technology | 18 | Ea. | 3 | $29,662 | 18510 |
| **Note:** VoIP unified communication system installed in office, no handsets in classrooms. | | | | | | |
| | **Sub Total for System** | **19** | **items** | | **$890,141** | |

## Conveyances

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Access Is Not ADA Compliant And Requires A Platform Lift | Barrier to Accessibility | 1 | Ea. | 3 | $51,496 | 8701 |
| **Note:** Main entrance is on the lower level with no ADA access to upper levels. | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$51,496** | |

## Specialties

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Room has insufficient writing area. | Educational Adequacy | 3 | Ea. | 3 | $3,557 | Rollup |
| | **Sub Total for System** | **1** | **items** | | **$3,557** | |
| | **Sub Total for Building 01 - Main Building** | **74** | **items** | | **$3,804,929** | |
| | **Total for Campus** | **82** | **items** | | **$5,039,474** | |

## Buildings with no reported deficiencies

02 - Shed

# Hope Elementary School - Life Cycle Summary Yrs 1-10

## Site Level Life Cycle Items

### Site

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Parking Lot Pavement | Asphalt | | 43 | CAR | $142,266 | 5 |
| Playfield Areas | ES Playgrounds | | 1 | Ea. | $44,588 | 5 |
| Fences and Gates | Fencing - Chain Link (8 Ft) | | 840 | LF | $56,471 | 5 |
| Parking Lot Lighting | Pole Mounted Fixtures (Ea.) | | 1 | Ea. | $7,735 | 10 |
| | | **Sub Total for System** | **4** | **items** | **$251,060** | |
| | | **Sub Total for Building -** | **4** | **items** | **$251,060** | |

## Building: 01 - Main Building

### Roofing

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Low-Slope Roofing | Single Ply | | 17,274 | SF | $221,702 | 10 |
| | | **Sub Total for System** | **1** | **items** | **$221,702** | |

### Exterior

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Exterior Entrance Doors | Steel - Insulated and Painted | | 18 | Door | $115,510 | 5 |
| Exterior Wall Veneer | Exterior Painting - Bldg SF basis | | 1,772 | SF | $23,585 | 7 |
| Exterior Wall Veneer | Brick - Bldg SF basis | | 41,400 | SF | $1,889,225 | 10 |
| | | **Sub Total for System** | **3** | **items** | **$2,028,320** | |

### Interior

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Wall Painting and Coating | Painting/Staining (Bldg SF) | | 41,400 | SF | $273,544 | 4 |
| Acoustical Suspended Ceilings | Ceilings - Acoustical Tiles | | 35,190 | SF | $317,823 | 5 |
| Acoustical Suspended Ceilings | Ceilings - Acoustical Grid System | | 35,190 | SF | $417,371 | 5 |
| Suspended Plaster and | Painted ceilings | | 6,210 | SF | $25,977 | 5 |
| Tile Flooring | Ceramic Tile | | 828 | SF | $22,235 | 5 |
| Resilient Flooring | Vinyl Composition Tile Flooring | | 30,635 | SF | $351,437 | 5 |
| Carpeting | Carpet | | 9,108 | SF | $198,155 | 5 |
| Interior Swinging Doors | Wood | | 52 | Door | $239,766 | 10 |
| Interior Door Supplementary Components | Door Hardware | | 52 | Door | $163,140 | 10 |
| | | **Sub Total for System** | **9** | **items** | **$2,009,447** | |

### Mechanical

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Decentralized Cooling | Window Units | | 5 | Ea. | $16,694 | 6 |
| HVAC Air Distribution | AHU 2,000 CFM Interior | | 5 | Ea. | $215,685 | 6 |
| Exhaust Air | Kitchen Exhaust Hoods | | 1 | Ea. | $15,964 | 7 |
| Facility Hydronic Distribution | Pump - 1HP or Less (Ea.) | | 9 | Ea. | $68,656 | 8 |
| Decentralized Heating Equipment | Heating Unit Vent - Steam/Hot water | | 27 | Ea. | $456,700 | 8 |
| Decentralized Heating Equipment | Radiant Heater - Radiator Water | | 37 | Ea. | $191,145 | 8 |
| Exhaust Air | Exhaust Fan - Roof Mounted (CFM) | | 13 | CFM | $34,809 | 8 |
| Heating System Supplementary Components | Controls - Electronic (Bldg.SF) | | 41,400 | SF | $77,994 | 9 |
| Decentralized Heating Equipment | Heating Unit Vent - Steam/Hot water | | 22 | Ea. | $372,126 | 9 |
| Facility Hydronic Distribution | 2-Pipe Steam System (Hot) | | 41,400 | SF | $319,119 | 10 |
| HVAC Air Distribution | Ductwork (Bldg.SF) | | 41,400 | SF | $608,628 | 10 |
| | | **Sub Total for System** | **11** | **items** | **$2,377,519** | |

### Electrical

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Lighting Fixtures | Canopy Mounted Fixtures (Ea.) | | 1 | Ea. | $1,379 | 6 |
| Power Distribution | Panelboard - 120/208 100A | | 2 | Ea. | $9,697 | 6 |
| Lighting Fixtures | Building Mounted Fixtures (Ea.) | | 4 | Ea. | $5,970 | 8 |
| Electrical Service | Transformer (75 KVA) | | 3 | Ea. | $31,561 | 8 |
| Power Distribution | Panelboard - 120/208 125A | | 2 | Ea. | $7,796 | 8 |
| Power Distribution | Panelboard - 120/208 225A | | 5 | Ea. | $28,996 | 8 |
| Power Distribution | Panelboard - 120/208 400A | | 1 | Ea. | $6,275 | 8 |

## Electrical

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Lighting Fixtures | Light Fixtures (Bldg SF) | | 41,400 | SF | $245,993 | 8 |
| | | **Sub Total for System** | **8** | **items** | **$337,667** | |

## Plumbing

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Plumbing Fixtures | Non-Refrigerated Drinking Fountain | | 5 | Ea. | $51,100 | 4 |
| Building Support Plumbing System Supplementary Components | Sump Pump | | 1 | Ea. | $1,449 | 5 |
| Plumbing Fixtures | Classroom Lavatories | | 24 | Ea. | $65,256 | 6 |
| Plumbing Fixtures | Toilets | | 29 | Ea. | $82,711 | 6 |
| Plumbing Fixtures | Urinal (Ea.) | | 8 | Ea. | $10,633 | 6 |
| Plumbing Fixtures | Restroom Lavatories | | 15 | Ea. | $47,715 | 8 |
| Plumbing Fixtures | Mop/Service Sinks | | 10 | Ea. | $25,764 | 8 |
| Fuel Storage Tanks | Above Ground Fuel Oil StorageTank ( 2,000 Gal) | | 1 | Ea. | $28,949 | 10 |
| Domestic Water Equipment | Water Heater - Electric - 40 gallon | | 1 | Ea. | $3,540 | 10 |
| | | **Sub Total for System** | **9** | **items** | **$317,116** | |

## Fire and Life Safety

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Fire Detection and Alarm | Fire Alarm | | 41,400 | SF | $121,343 | 9 |
| | | **Sub Total for System** | **1** | **items** | **$121,343** | |

## Specialties

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Casework | Fixed Cabinetry | | 12 | Room | $134,254 | 5 |
| Casework | Fixed Cabinetry | | 4 | Room | $44,751 | 10 |
| | | **Sub Total for System** | **2** | **items** | **$179,005** | |
| | | **Sub Total for Building 01 - Main Building** | **44** | **items** | **$7,592,119** | |

# Building: 02 - Shed

## Roofing

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Low-Slope Roofing | Single Ply | | 20 | SF | $257 | 6 |
| | | **Sub Total for System** | **1** | **items** | **$257** | |

## Exterior

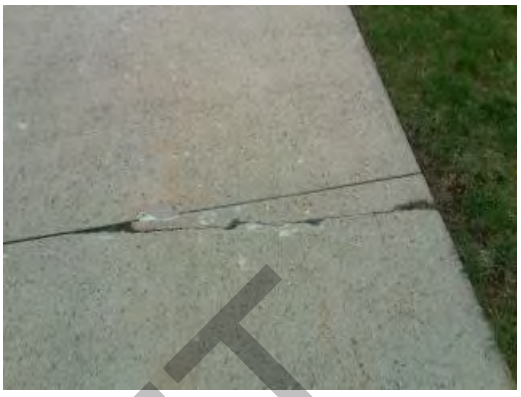
| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Exterior Entrance Doors | Wood | | 2 | Door | $16,647 | 10 |
| | | **Sub Total for System** | **1** | **items** | **$16,647** | |

## Interior

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Wall Painting and Coating | Painting/Staining (Bldg SF) | | 20 | SF | $132 | 10 |
| | | **Sub Total for System** | **1** | **items** | **$132** | |
| | | **Sub Total for Building 02 - Shed** | **3** | **items** | **$17,036** | |
| | | **Total for: Hope Elementary School** | **51** | **items** | **$7,860,215** | |

## Supporting Photos


Cracked Sidewalk


Cracked Sidewalk

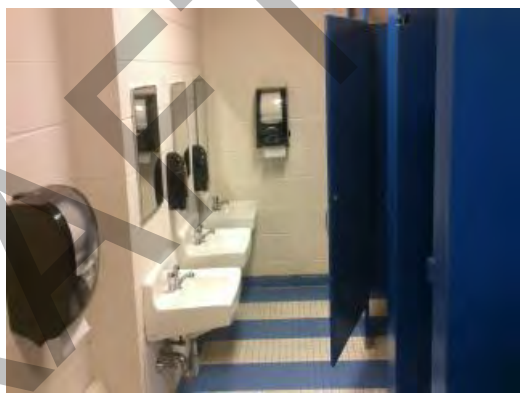

Site Aerial


West Elevation

Music Room


Plaque

Art Room



Restroom Fixtures And Finishes

Northwest Elevation

Gymnasium


Typical Classroom


Cafeteria


Computer Lab


Art Room

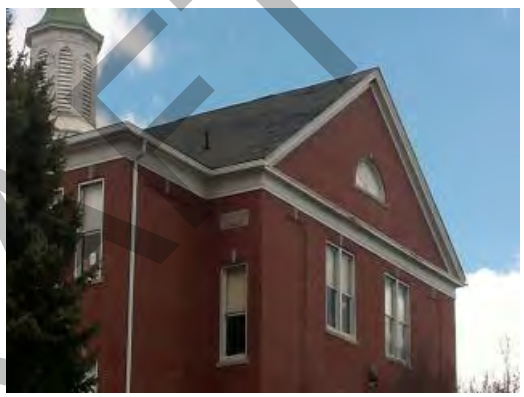

North Elevation

Site Signage

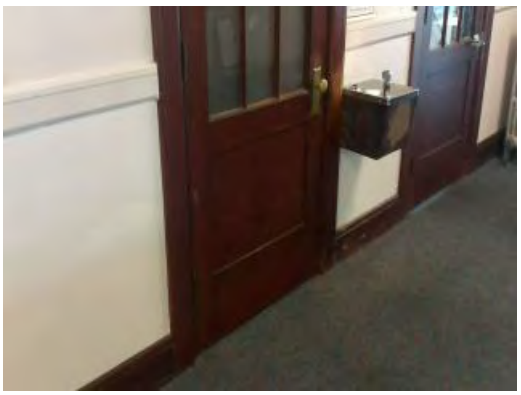

Shed


Library


West Elevation

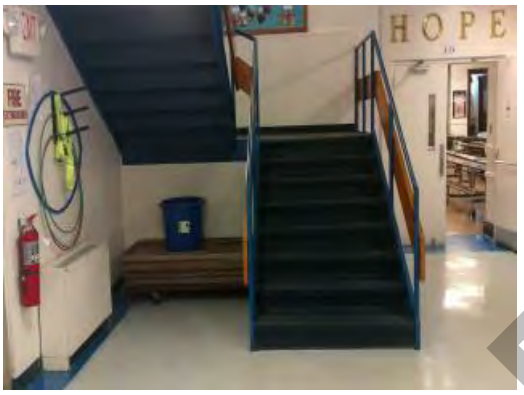

Aged Shingle Roof


Aged Shingle Roof


Interior Wood Door

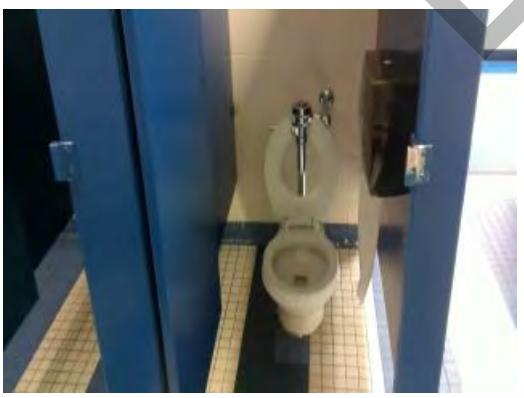
Cafeteria Doors

Non-Compliant Handrail




Stairwell At Main Entry

Security Buzzer



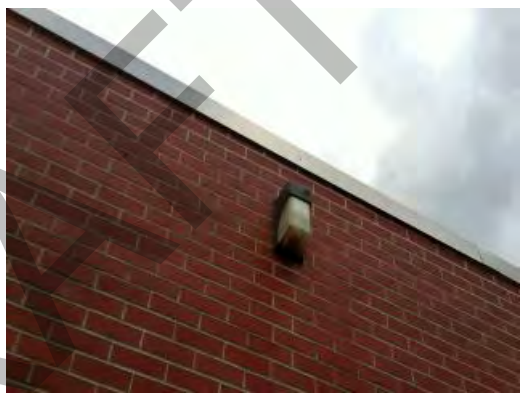
Typical Toilet Stall

Non-Compliant Ramp


Play Area


Damaged Horn Strobe


Play Area Curb


Damaged Light


Heat Exchanger

# Facility Condition Assessment

North Scituate Elementary School | *October 2016*

Address: 46 Institute Lane, North Scituate, RI 02857

Report Generated: October 06, 2016



## Executive Summary

North Scituate Elementary School, located at 46 Institute Lane in North Scituate, Rhode Island, was built in 1967. It comprises 40,585 gross square feet. Data in this report was collected in the spring/summer of 2016.

North Scituate Elementary School has an enrollment of 211, serves grades KG - 5, and has 13 classrooms. The LEA reported capacity for North Scituate Elementary School is 370 with a resulting utilization of 57.00%. For master planning efforts, a RIDE Model Program Standard was established based on the RIDE School Construction Regulations. Applying RIDE's Model Program Standard, a facility of this size could ideally support an enrollment of approximately 225 students.

The total current deficiencies for this campus, in 2016 construction cost dollars, are estimated at $2,640,581. For master planning purposes a five-year need was developed to provide an understanding of the current need as well as the projected needs in the near future. For North Scituate Elementary School the five-year need is $4,836,394. The findings contained within this report resulted from an assessment of building systems. Assessments were performed by building professionals experienced in disciplines including: architecture, mechanical, plumbing, electrical, acoustics, hazardous material, and technology infrastructure.




*Figure 1: Aerial view of North Scituate Elementary School*

## Approach and Methodology

A facility condition assessment evaluates each building's overall condition. Two components of the facility condition assessment are combined to total the cost for facility need. The two components of the facility condition assessment are current deficiencies and life cycle forecast.

**Current Deficiencies:** Deficiencies are items in need of repair or replacement as a result of being broken, obsolete, or beyond useful life. The existing deficiencies that currently require correction are identified and assigned a priority. An example of a current deficiency might include a broken lighting fixture or an inoperable roof top air conditioning unit.

**Life Cycle Forecast:** Life cycle analysis evaluates the ages of a building's systems to forecast system replacement as it reaches the end of its serviceable life. An example of a life cycle system replacement is a roof with a 20-year life that has been in place for 15 years and may require replacement in five years.

All members of the survey team recorded existing conditions, identified problems and deficiencies, and documented corrective action and quantities. The team took digital photos at each school to better identify significant deficiencies.

### Discipline Specialists

All assessment teams produced current deficiencies that are associated with each school. The assessment for the school facilities at the Rhode Island Department of Education included several specialties:

**Facility Condition Assessment:** Architectural, mechanical, and electrical engineering professionals observed conditions via a visual observation that did not include intrusive measures, destructive investigations, or testing. Additionally, the assessment incorporated input provided by District Facilities and Maintenance staff was incorporated where applicable. The assessment team recorded existing conditions, identified problems and deficiencies, documented corrective action and quantities, and identified the priority of the repair in accordance with parameters defined during the planning phase.

**Technology:** Technology specialists visited the RIDE facilities and met with technology directors to observe and assess each facility's technology infrastructure. It included: network architecture, major infrastructure components, classroom instructional systems, and necessary building space and support for technology. The technology assessment took into account the desired technology outcome and best practices and processes to ensure the results can be attained effectively.

**Hazardous Materials:** Schools constructed prior to 1990 were assessed by specialist to identify the presence of hazardous materials. The team focused on identifying asbestos containing building materials (ACBMs), lead-based painted (LBP) areas, polychlorinated biphenyls (PCBs), and Chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. If sampling and analysis was required, these activities were recommended but not included in the scope of work.

**Traffic:** Traffic specialist performed an in-office review of aerial imagery of the traffic infrastructure around the facilities in accordance with section 1.05-7 in the Rhode Island School Construction Regulations. Also, onsite personnel conducted an initial evaluation from data collected during the facility condition assessment. Based on the information, deficiencies and corrective actions were identified. High problem areas were identified for consideration of more detailed site-specific study and analysis in the future.

**Acoustics:** Specialists assessed each school's acoustics, including architectural acoustic, mechanical system noise and vibration, and environmental noise. The assessment team evaluated room acoustics with particular attention to the intelligibility of speech in learning spaces, interior and exterior sound isolation, and mechanical systems noise and vibration control.

**Educational Space Analysis**: The evaluation of schools to ensure that that all spaces adequately support the districts educational program. Standards are established for each classroom type or instructional space. Each space is evaluated to determine if it meets those standards and create a listing of alterations that should be made to make the space a better environment for teaching and learning.

## System Summaries

The following tables summarize major building systems at North Scituate Elementary School campus, identified by discipline and building.

**Site**

The site level systems for this campus includes:

| | |
|---|---|
| **Site** | Asphalt Parking Lot Pavement |
| | Asphalt Roadway Pavement |
| | Asphalt Pedestrian Pavement |
| | Concrete Pedestrian Pavement |

**Building Envelope**

The exterior systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | Brick Exterior Wall |
| | E.I.F.S. Exterior Wall |
| | Vinyl Siding Exterior Wall |
| | Aluminum Exterior Windows |
| | Storefront / Curtain Wall |
| | Steel Exterior Entrance Doors |
| **02 - Storage Shed:** | Wood Siding Exterior Wall |

The roofing for the buildings at this campus consists of:

| | |
|---|---|
| **01 - Main Building:** | Composition Shingle Roofing |
| | EPDM Roofing |
| **02 - Storage Shed:** | Composition Shingle Roofing |

**Interior**

The interior systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | Wood Interior Doors |
| | Interior Door Hardware |
| | Door Hardware |
| | Suspended Acoustical Grid System |
| | Suspended Acoustical Ceiling Tile |
| | Painted Ceilings |
| | Ceramic Tile Wall |
| | Wood Wall Paneling |
| | Interior Wall Painting |
| | Concrete Flooring |
| | Quarry Tile Flooring |
| | Ceramic Tile Flooring |
| | Vinyl Composition Tile Flooring |

| | |
|---|---|
| **01 - Main Building:** | Carpet |
| | Athletic/Sport Flooring |
| **02 - Storage Shed:** | Wood Ceilings |
| | Interior Wall Painting |
| | Wood Flooring |

**Mechanical**

The mechanical systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | 1,275 MBH Cast Iron Water Boiler |
| | 74 GPM Water to Water Heat Exchanger |
| | Steam/Hot Water Heating Unit Vent |
| | 250 MBH Steam Unit Heater |
| | Electronic Heating System Controls |
| | 1 Ton Ductless Split System |
| | 5 HP VFD |
| | 2-Pipe Hot Water Hydronic Distribution System |
| | 1 HP or Smaller Pump |
| | 5 HP Pump |
| | Ductwork |
| | 5 Ton DX Gas Roof Top Unit |
| | Small Roof Exhaust Fan |
| | Kitchen Exhaust Hoods |
| | Fire Sprinkler System |

**Plumbing**

The plumbing systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | 1,000 Gallon Water Storage Tank |
| | 80 Gallon Electric Water Heater |
| | Domestic Water Piping System |
| | Classroom Lavatories |
| | Mop/Service Sinks |
| | Non-Refrigerated Drinking Fountain |
| | Refrigerated Drinking Fountain |
| | Restroom Lavatories |
| | Showers |
| | Toilets |
| | Urinals |
| | Sump Pump |
| | 5,000 Gallon Underground Fuel Oil Storage Tank |

## Electrical

The electrical systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | 208/120v Switch |
| | 1,200 Amp Switchgear |
| | 225 KVA Transformer |
| | Panelboard - 120/208 100A |
| | Panelboard - 120/208 225A |
| | Building Mounted Lighting Fixtures |
| | Canopy Mounted Lighting Fixtures |
| | Light Fixtures |

## Facility Deficiency Priority Levels

Deficiencies were ranked according to five priority levels, with Priority 1 items being the most critical to address:

**Priority 1 – Mission Critical Concerns:** Deficiencies or conditions that may directly affect the school's ability to remain open or deliver the educational curriculum. These deficiencies typically relate to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency is a fire alarm system replacement.

**Priority 2 – Indirect Impact to Educational Mission:** Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing that could cause deterioration of integral building systems, and conditions affecting building envelopes, such as roof and window replacements.

**Priority 3 – Short-Term Conditions:** Deficiencies that are necessary to the school's mission but may not require immediate attention. These items should be considered necessary improvements required to maximize facility efficiency and usefulness. Examples of Priority 3 items include site improvements and plumbing deficiencies.

**Priority 4 – Long-Term Requirements:** Items or systems that may be considered improvements to the instructional environment. The improvements may be aesthetic or provide greater functionality. Examples include cabinets, finishes, paving, removal of abandoned equipment, and educational accommodations associated with special programs.

**Priority 5 – Enhancements:** Deficiencies aesthetic in nature or considered enhancements. Typical deficiencies in this priority include repainting, re-carpeting, improved signage, or other improvements to the facility environment.

The following chart summarizes this site's current deficiencies by building system and priority. The listing details current deficiencies including deferred maintenance, functional deficiencies, code compliance, capital renewal, hazardous materials and technology categories.

*Table 1: System by Priority*

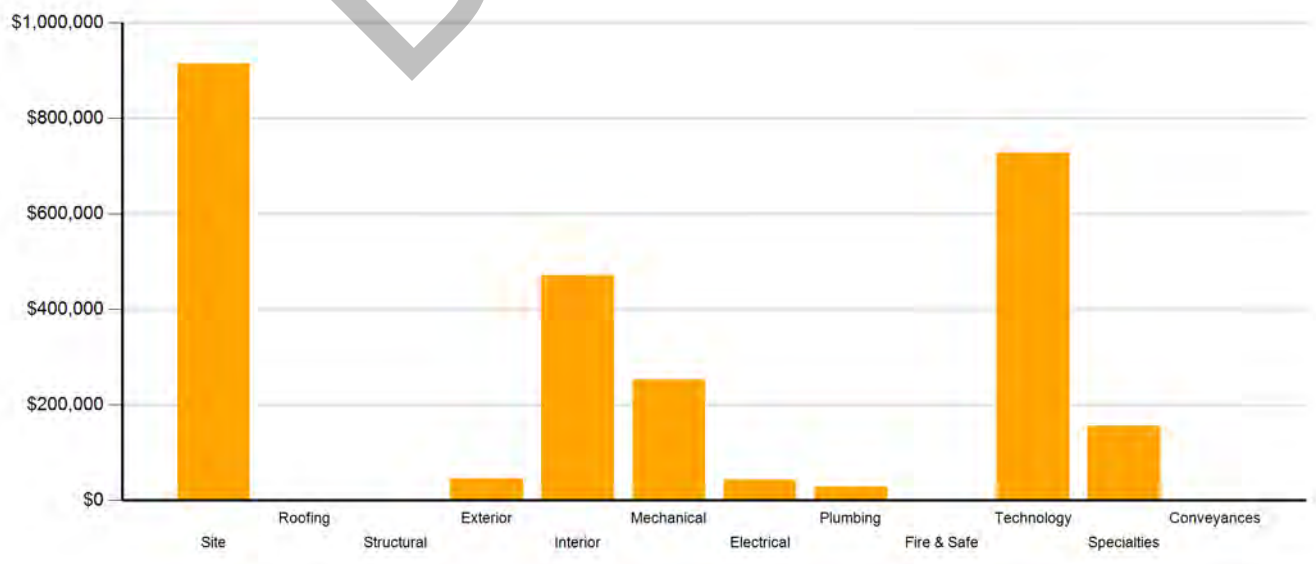
| | Priority | | | | | | |
|---|---|---|---|---|---|---|---|
| System | 1 | 2 | 3 | 4 | 5 | Total | % of Total |
| Site | - | $226,631 | $195,280 | $390,161 | $101,458 | $913,530 | 34.60 % |
| Roofing | - | - | $1,898 | - | - | $1,898 | 0.07 % |
| Structural | - | - | - | - | - | $0 | 0.00 % |
| Exterior | - | - | $8,488 | - | $38,180 | $46,668 | 1.77 % |
| Interior | - | $82,607 | $381,369 | - | $7,918 | $471,894 | 17.87 % |
| Mechanical | - | $252,089 | - | - | - | $252,089 | 9.55 % |
| Electrical | - | - | $2,965 | - | $39,914 | $42,879 | 1.62 % |
| Plumbing | - | - | $16,815 | - | $11,498 | $28,313 | 1.07 % |
| Fire and Life Safety | - | - | - | - | - | $0 | 0.00 % |
| Technology | - | - | $727,736 | - | - | $727,736 | 27.56 % |
| Conveyances | - | - | - | - | - | $0 | 0.00 % |
| Specialties | - | - | - | $155,574 | - | $155,574 | 5.89 % |
| **Total** | $0 | $561,327 | $1,334,551 | $545,735 | $198,968 | $2,640,581 | |

The building systems at the campus with the most need include:

| | | |
|---|---|---|
| Site | - | $913,530 |
| Technology | - | $727,736 |
| Interior | - | $472,744 |

The table below represents the building systems and their percentages for overall campus need.

*Figure 2: System Deficiencies*



## Current Deficiencies by Category

The deficiencies have been further grouped according to the observed deficiency category and priority.

• **Acoustics** deficiencies relate to room acoustics, sound insolation, and mechanical systems and vibration control modeled after ANSI/ASA Standard S12.60-2010 and ASHRAE Handbook, Chapter 47 on Sound and Vibration Control.

• **Barrier to Accessibility** deficiencies relate to the Americans with Disabilities and Rhode Island Governors Commission on Disability. Additional items may be included other categories.

• **Capital renewal** items have reached or exceeded serviceable life and require replacement. These are current and do not include life cycle capital renewal forecasts. Also included are deficiency correcting planned work postponed beyond its regular life expectancy.

• **Code compliance** deficiencies relate to current codes. Many may fall under grandfather clauses, which allow buildings to continue operating under codes effective at the time of construction. However, there are instances where the level of renovation requires full compliance and are reflected in the master plan.

• **Educational adequacy** includes deficiencies identify how facilities align with the Basic Education Program and the RIDE School Construction Regulations.

• **Functional deficiencies** are deficiencies for a component or system that has failed before the end of its expected life or is not the right application, size or design.

• **Hazardous materials** include deficiencies for building systems or components containing potentially hazardous material. The team focused on identifying asbestos containing building materials (ACBMs), lead based painted (LBP) areas, polychlorinated biphenyls (PCBs), and Chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. With other scopes of work there may be other costs associated with hazardous materials.

• **Technology** deficiencies relate to network architecture, technology infrastructure, classroom systems, and support. Examples of technology deficiencies include: security cameras, secure electronic access, telephone handsets, and dedicate air conditioning for telecommunication rooms.

• **Traffic** site deficiencies relate to vehicle or pedestrian traffic, such as bus loops, crosswalks, and pavement markings.

The following chart and table represent the deficiency category by priority. This listing includes current deficiencies at all building systems.

*Table 2: Deficiency Category by Priority*

| | Priority | | | | | |
|---|---|---|---|---|---|---|
| **Category** | **1** | **2** | **3** | **4** | **5** | **Total** |
| **Acoustics** | - | $252,089 | $33,995 | - | - | $286,084 |
| **Barrier to Accessibility** | - | - | $39,409 | - | $4,419 | $43,828 |
| **Capital Renewal** | - | $226,631 | $332,397 | $517,061 | $38,180 | $1,114,269 |
| **Code Compliance** | - | - | - | - | - | $0 |
| **Educational Adequacy** | - | - | $56,918 | $28,674 | $156,369 | $241,961 |
| **Functional Deficiency** | - | - | - | - | - | $0 |
| **Hazardous Material** | - | $82,607 | - | - | - | $82,607 |
| **Technology** | - | - | $676,552 | - | - | $676,552 |
| **Traffic** | - | - | $195,280 | - | - | $195,280 |
| **Total** | $0 | $561,327 | $1,334,551 | $545,735 | $198,968 | $2,640,581 |




*Figure 3: Current deficiencies by priority*

## Life Cycle Capital Renewal Forecast

During the facility condition assessment, assessors inspected all major building systems. If an assessor identified a need for immediate replacement, a deficiency was created with the item's repair costs. The identified deficiency contributes to the particular facility's total current repair costs.

However, capital planning scenarios span multiple years, as opposed to being constrained to immediate repairs. Construction projects may begin several years after the initial facility condition assessment. Therefore, in addition to the current year repair costs, it is necessary to forecast the facility's future costs using a 10-year life cycle renewal forecast model.

Life cycle renewal is the projection of future building system costs based upon each individual system's expected serviceable life. Building systems and components age over time, eventually break down, reach the end of their useful lives, and may require replacement. While an item may be in good condition now, it might the end of it's life before a planned construction project occurs.

The following chart shows all current deficiencies and the subsequent 10-year life cycle capital renewal projections. The projections outline costs for major building systems in which a component is expected to reach the end of its useful life and require capital funding for replacement.

*Table 3: Capital Renewal Forecast*

| | | Life Cycle Capital Renewal Projections | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| System | Current Deficiencies | Year 1 2017 | Year 2 2018 | Year 3 2019 | Year 4 2020 | Year 5 2021 | Year 6 2022 | Year 7 2023 | Year 8 2024 | Year 9 2025 | Year 10 2026 | Total | $/GSF |
| Site | $913,530 | $0 | $0 | $0 | $71,112 | $86,031 | $0 | $0 | $98,732 | $0 | $0 | $255,875 | $6.30 |
| Roofing | $1,898 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Structural | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Exterior | $46,668 | $0 | $0 | $0 | $237,437 | $375,253 | $4,231 | $8,355 | $0 | $0 | $1,499 | $626,775 | $15.44 |
| Interior | $471,894 | $0 | $0 | $0 | $87,417 | $654,046 | $17,587 | $360,571 | $291,367 | $0 | $601,808 | $2,012,796 | $49.59 |
| Mechanical | $252,089 | $0 | $0 | $0 | $0 | $269,738 | $179,354 | $0 | $212,403 | $0 | $427,612 | $1,089,107 | $26.84 |
| Electrical | $42,879 | $0 | $0 | $0 | $0 | $69,059 | $26,867 | $0 | $284,634 | $0 | $0 | $380,560 | $9.38 |
| Plumbing | $28,313 | $0 | $0 | $0 | $0 | $278,593 | $0 | $0 | $76,056 | $0 | $21,113 | $375,762 | $9.26 |
| Fire and Life Safety | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $118,808 | $0 | $118,808 | $2.93 |
| Technology | $727,736 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Conveyances | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Specialties | $155,574 | $0 | $0 | $0 | $0 | $67,127 | $0 | $0 | $0 | $0 | $0 | $67,127 | $1.65 |
| **Total** | **$2,640,581** | **$0** | **$0** | **$0** | **$395,966** | **$1,799,847** | **$228,039** | **$368,926** | **$963,192** | **$118,808** | **$1,052,032** | **$4,926,810** | **$121.39** |



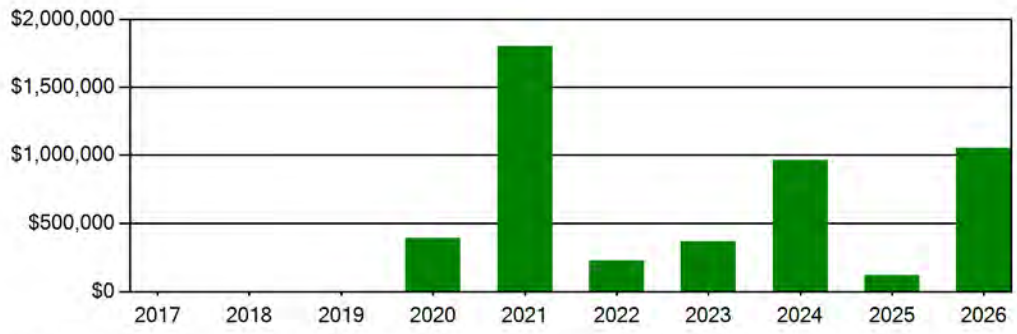



*Figure 4: Life Cycle Capital Renewal Forecast*

## Facility Condition Index (FCI)

The Facility Condition Index (FCI) is used throughout the facility condition assessment industry as a general indicator of a building's health. Since 1991, the facility management industry has used an index called the FCI to benchmark the relative condition of a group of schools. The National Association of College and University Business Officers has suggested for college planning that an FCI of less than 5 percent is good, an FCI between 5 and 10 percent is fair, and an FCI greater than 10 percent is poor. In K-12 public school planning, the gulf between 10 percent and 100 percent is just not stratified enough. Jacobs has used the following ranges to provide a little more gradation. FCI's less than 10 percent are considered good, 10 to 60 percent is fair, and anything greater than 60 percent is poor. Financial modeling has shown that over a 30-year period, schools that fall in the 65 percent or greater range are more cost-effective to replace than to repair. This is due to efficiency gains with more modern facilities and the value of the building at the end of the analysis period. It is important to note that the FCI at which a facility should be considered for replacement is typically debated and adjusted based on property owners/facility managers approach to facility management. Of course, FCI is not the only factor used to identify buildings that need renovation, replacement or even closure. Historical significance, enrollment trends, community sentiment, and the availability of capital are additional factors that are analyzed when making school facility decision.

The FCI is calculated by dividing the total repair cost, including site-related repairs, by the total replacement cost. Costs associated with new construction are not included in the FCI calculation. As a general rule, an FCI below 10% is considered good. An economic analysis generally suggests that FCIs greater than 65 percent represent the point where facilities should be considered for replacement. This value typically indicates the point where further expenditures on a building offer little return when compared to the potential cost of replacing that facility.

The replacement value represents the estimated cost of replacing the current building with another building of like size, based on today's estimated cost of construction in the Providence, Rhode Island area. The estimated replacement cost for this facility is $14,204,750. The total current cost for all deficiencies is $2,640,581.

The North Scituate Elementary School facility has an overall FCI of 18.59%.

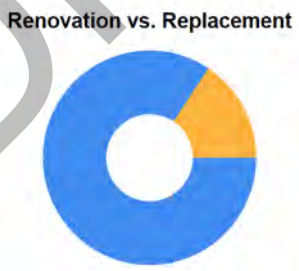



*Figure 5: Renovation vs Replacement*

## Five Year FCI

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. For planning purposes, the total five-year need at North Scituate Elementary School is $4,836,394 (Life Cycle Yrs 1-5 plus the Current Deficiencies)

A five year FCI was calculated by dividing the five year need by the total replacement cost. The North Scituate Elementary School facility has a five year FCI of 34.05% (Life Cycle Yrs 1-5 plus Current Deficiencies divided by the Total Replacement Cost).

## Summary of Findings

The table below summarizes the condition findings at North Scituate Elementary School.

*Table 4: Facility Condition by Building*

| Number | Building Name | Gross Sq Ft | Built Date | Current Deficiencies | FCI | Total 5 Yr Need (Yr 1-5 + Current Defs) | 5-Year FCI |
|---|---|---|---|---|---|---|---|
| | Exterior Site | | | $913,530 | | $1,070,673 | |
| 01 | Main Building | 40,535 | 1967 | $1,727,051 | 12.17% | $3,765,721 | 26.54% |
| 02 | Storage Shed | 50 | 1990 | $0 | .00% | $0 | .00% |
| **Totals** | | **40,585** | | **$2,640,581** | **18.59%** | **$4,836,394** | **34.05%** |

The following pages provide a listing of all current deficiencies and 10 year life cycle need for the site and building and the associated costs, followed by photos taken during the assessment.

# Site Level Deficiencies

## Site

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Playground Requires Impact Resistant Material | Capital Renewal | 6 | Ea. | 2 | $226,631 | 8448 |
| **Note:** Playground requires an appropriate impact surface. Playground currently has wood chips. | | | | | | |
| New Sidewalk Is Required | Traffic | 1,950 | SF | 3 | $44,193 | 9306 |
| **Note:** Install sidewalk from west edge of property to intersection with Greenville Rd | | | | | | |
| Traffic Signage Is Required | Traffic | 4 | Ea. | 3 | $151,087 | 9307 |
| **Note:** Update, install signs for school zone | | | | | | |
| Asphalt Paving Requires Replacement | Capital Renewal | 10 | CAR | 4 | $32,862 | 8446 |
| Asphalt Paving Requires Replacement | Capital Renewal | 100 | CAR | 4 | $328,624 | 8757 |
| **Note:** Parking and paved play areas | | | | | | |
| Backstops Require Replacement | Educational Adequacy | 1 | Ea. | 4 | $28,674 | 28582 |
| **Note:** Backstops Require Replacement | | | | | | |
| Exterior Basketball Goals are Required | Educational Adequacy | 1 | Ea. | 5 | $5,878 | 28802 |
| **Note:** Exterior Basketball Goals are Required | | | | | | |
| PE / Recess Playfield is Missing and is Needed | Educational Adequacy | 1 | Ea. | 5 | $95,580 | 28129 |
| **Note:** PE / Recess Playfield is Missing and is Needed | | | | | | |
| | **Sub Total for System** | **8** | **items** | | **$913,530** | |
| | **Sub Total for School and Site Level** | **8** | **items** | | **$913,530** | |

# Building: 01 - Main Building

## Roofing

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Metal Downspouts Require Installation or Replacement | Capital Renewal | 30 | LF | 3 | $1,898 | 8454 |
| **Location:** On low roof at the main entry | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$1,898** | |

## Exterior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Column Base Replacement | Capital Renewal | 50 | SF | 3 | $1,889 | 8459 |
| **Note:** Wood column surround at front entry is damaged and needs to be replaced. | | | | | | |
| Exterior Metal Door Requires Repainting | Capital Renewal | 32 | Door | 3 | $6,599 | 8453 |
| The Exterior Requires Painting | Capital Renewal | 5,000 | SF Wall | 5 | $27,340 | 8452 |
| **Note:** Wood storefront and roof fascia require painting. | | | | | | |
| The Exterior Soffit Requires Repair | Capital Renewal | 500 | SF | 5 | $10,841 | 8451 |
| **Note:** Soffits at play area exit door and original storefront windows are damaged, and need repaired. | | | | | | |
| | **Sub Total for System** | **4** | **items** | | **$46,668** | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 80 | Ea. | 2 | $22,663 | 17600 |
| **Note:** Wood Door | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:All Rooms | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 80 | Ea. | 2 | $22,663 | 17601 |
| **Note:** Wood Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:All Rooms | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 12 | Ea. | 2 | $3,399 | 17602 |
| **Note:** Metal Exit Door | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:Building Exterior | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - linear feet) | Hazardous Material | 360 | LF | 2 | $8,159 | 17599 |
| **Note:** Wood Casework - Base Cabinets | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:All Classrooms | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - linear feet) | Hazardous Material | 360 | LF | 2 | $8,159 | 17605 |
| **Note:** Wood Window Sill | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:All Classrooms | | | | | | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 960 | SF | 2 | $9,065 | 17603 |
| **Note:** Wood Roof Trim | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:Building Exterior | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 900 | SF | 2 | $8,499 | 17604 |
| **Note:** Wood Window Trim | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:Building Exterior | | | | | | |
| Existing Door Hardware Is Not ADA Compliant | Barrier to Accessibility | 10 | Door | 3 | $28,329 | 8456 |
| **Note:** Door hardware on the communicating doors in classrooms. | | | | | | |
| Room Is Excessively Reverberant (Install Fiberglass Wall Panel) | Acoustics | 600 | SF | 3 | $33,995 | 19715 |
| **Note:** Gym | | | | | | |
| The Vinyl Composition Tile Requires Replacement | Capital Renewal | 28,000 | SF | 3 | $319,046 | 8455 |
| **Note:** Seams in the VCT are lifting and separating. | | | | | | |
| Room Designation Signage Missing Or Not Accessible. | Barrier to Accessibility | 18 | Ea. | 5 | $4,419 | 8447 |
| Room lacks appropriate sound control. | Educational Adequacy | 100 | SF | 5 | $3,498 | Rollup |
| | **Sub Total for System** | **12** | **items** | | **$471,894** | |

## Mechanical

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Unit Ventilators Are Excessively Noisy | Acoustics | 40 | Ea. | 2 | $252,089 | 19714 |
| **Note:** All classrooms & hallways | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$252,089** | |

## Electrical

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Mounted Building Lighting Requires Replacement | Capital Renewal | 2 | Ea. | 3 | $2,965 | 8450 |
| **Location:** By playground | | | | | | |
| Room Has Insufficient Electrical Outlets | Educational Adequacy | 80 | Ea. | 5 | $39,914 | Rollup |
| | **Sub Total for System** | **2** | **items** | | **$42,879** | |

## Plumbing

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Restroom Is Not ADA Compliant | Barrier to Accessibility | 40 | SF | 3 | $11,080 | 8457 |
| **Location:** Faculty women's restroom | | | | | | |
| The Toilets Plumbing Fixtures Require Replacement | Educational Adequacy | 2 | Ea. | 3 | $5,735 | Rollup |
| Room lacks a drinking fountain. | Educational Adequacy | 9 | Ea. | 5 | $9,979 | Rollup |
| The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed | Educational Adequacy | 1 | Ea. | 5 | $1,520 | Rollup |
| | **Sub Total for System** | **4** | **items** | | **$28,313** | |

## Technology

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Room lacks Interactive White Board | Educational Adequacy | 17 | Ea. | 3 | $51,183 | Rollup |
| Technology: Campus network switching electronics are antiquated and/or do not meet standards. | Technology | 56 | Ea. | 3 | $26,440 | 18488 |
| **Note:** Refresh select network switches that have reached end-of-life. | | | | | | |
| Technology: Campus wireless infrastructure inadequate. | Technology | 20 | Ea. | 3 | $26,440 | 18489 |
| **Note:** Wireless Access Points do not support current 801.11AC standards, refresh and add Access Points. | | | | | | |
| Technology: Classroom AV/Multimedia systems are in need of improvements. | Technology | 15 | Ea. | 3 | $141,644 | 18493 |
| **Note:** Classroom AV/Multimedia systems support digital technologies but do not have the required cabling to use it, refresh. | | | | | | |
| Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life. | Technology | 1 | Ea. | 3 | $19,830 | 18495 |
| **Note:** Library AV/Multimedia system is nearing end-of-life, refresh. | | | | | | |
| Technology: Gymnasium sound system is nonexisitant, inadequate, or near end of useful life. | Technology | 1 | Ea. | 3 | $9,065 | 18491 |
| **Note:** Gymnasium lacks audio system, add audio system. | | | | | | |
| Technology: Instructional spaces do not have local sound reinforcement. | Technology | 16 | Ea. | 3 | $75,544 | 18498 |
| **Note:** Add sound reinforcement in instructional spaces. | | | | | | |
| Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. | Technology | 1 | Ea. | 3 | $5,288 | 18485 |
| **Note:** IDF lack grounding system, add grounding system. | | | | | | |
| Technology: Intermediate Telecommunications Room UPS does not meet standards, is inadequate, or non-existent. | Technology | 1 | Ea. | 3 | $4,721 | 18484 |
| **Note:** IDF does not have adequate UPS unit, add UPS unit. | | | | | | |
| Technology: Main Telecommunications Room ground system is inadequate or non-existent. | Technology | 1 | Ea. | 3 | $6,610 | 18482 |
| **Note:** MDF grounding system is inadequate, add grounding system. | | | | | | |

## Technology

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Technology: Main Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. | Technology | 1 | Ea. | 3 | $42,304 | 18480 |
| **Note:** MDF in utility room. Add two (2) walls and dedicate space. | | | | | | |
| Technology: Main Telecommunications Room UPS does not meet standards, is inadequate, or non-existent. | Technology | 1 | Ea. | 3 | $8,971 | 18481 |
| **Note:** MDF equipment lacks adequate UPS unit, add UPS unit. | | | | | | |
| Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. | Technology | 8 | Ea. | 3 | $3,399 | 18487 |
| **Note:** Select cables do not meet industry standards (Category 5e) or better. Refresh selected cables. | | | | | | |
| Technology: Network cabling infrastructure is partially outdated and/or needs expansion. | Technology | 72 | Ea. | 3 | $30,595 | 18494 |
| **Note:** Classrooms have one (1) data drops, add four (4) drops per classroom. | | | | | | |
| Technology: PA/Bell/Clock system is inadequate and/or near end of useful life. | Technology | 40,535 | SF | 3 | $68,899 | 18496 |
| **Note:** PA/Bell/Clock system and antiquated, refresh. | | | | | | |
| Technology: Security cameras and recording system are inadequate and/or near end of useful life. | Technology | 25 | Ea. | 3 | $118,037 | 18497 |
| **Note:** Campus has video surveillance system with 8 analog cameras, and front door intercom, refresh and add 17 cameras. | | | | | | |
| Technology: Special Space AV/Multimedia system is inadequate. | Technology | 1 | Ea. | 3 | $53,825 | 18490 |
| **Note:** Multipurpose room needs AV/Multimedia refresh/addition. | | | | | | |
| Technology: Telecommunications Room (large size room) needs dedicated cooling system improvements. | Technology | 1 | Ea. | 3 | $7,554 | 18483 |
| **Note:** MDF does not have independent AC, add unit. | | | | | | |
| Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements. | Technology | 1 | Ea. | 3 | $4,721 | 18486 |
| **Note:** IDF does not have independent AC, add AC unit. | | | | | | |
| Technology: Telephone handsets are inadequate and sparsely deployed throughout the campus. | Technology | 15 | Ea. | 3 | $22,663 | 18492 |
| **Note:** VoIP unified communication system installed in office, no handsets in classrooms. | | | | | | |
| | **Sub Total for System** | **20** | **items** | | **$727,736** | |

## Specialties

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Replace Cabinetry In Classes/Labs | Capital Renewal | 14 | Room | 4 | $155,574 | 8458 |
| **Location:** Classrooms | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$155,574** | |
| | **Sub Total for Building 01 - Main Building** | **45** | **items** | | **$1,727,051** | |
| | **Total for Campus** | **53** | **items** | | **$2,640,581** | |

## Buildings with no reported deficiencies

02 - Storage Shed

# North Scituate Elementary School - Life Cycle Summary Yrs 1-10

## Site Level Life Cycle Items

### Site

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Fences and Gates | Fencing - Chain Link (4 Ft) | | 1,100 | LF | $71,112 | 4 |
| Pedestrian Pavement | Sidewalks - Asphalt | | 500 | SF | $4,273 | 5 |
| Pedestrian Pavement | Sidewalks - Concrete | | 4,000 | SF | $81,758 | 5 |
| Playfield Areas | ES Playgrounds | | 1 | Ea. | $44,588 | 8 |
| Parking Lot Lighting | Pole Lighting | | 5 | Ea. | $38,674 | 8 |
| Parking Lot Lighting | Pole Mounted Fixtures (Ea.) | | 2 | Ea. | $15,470 | 8 |
| | | **Sub Total for System** | **6** | **items** | **$255,875** | |
| | | **Sub Total for Building -** | **6** | **items** | **$255,875** | |

## Building: 01 - Main Building

### Exterior

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Exterior Entrance Doors | Steel - Insulated and Painted | | 37 | Door | $237,437 | 4 |
| Exterior Wall Veneer | Vinyl siding - clapboard style | | 18,241 | SF | $146,537 | 5 |
| Exterior Window Wall | Storefront / Curtain Wall (Bldg SF) | | 2,837 | SF | $228,716 | 5 |
| Exterior Operating Windows | Aluminum - Windows per SF | | 25 | SF | $4,231 | 6 |
| Exterior Wall Veneer | E.I.F.S. - Bldg SF basis | | 405 | SF | $8,355 | 7 |
| | | **Sub Total for System** | **5** | **items** | **$625,276** | |

### Interior

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Wall Paneling | Wood Panel wall | | 8,107 | SF | $73,990 | 4 |
| Tile Flooring | Ceramic Tile | | 500 | SF | $13,427 | 4 |
| Wall Painting and Coating | Painting/Staining (Bldg SF) | | 32,023 | SF | $211,587 | 5 |
| Carpeting | Carpet | | 6,135 | SF | $133,474 | 5 |
| Resilient Flooring | Vinyl Composition Tile Flooring | | 3,000 | SF | $34,415 | 5 |
| Acoustical Suspended Ceilings | Ceilings - Acoustical Tiles | | 30,401 | SF | $274,570 | 5 |
| Suspended Plaster and | Painted ceilings | | 2,027 | SF | $8,479 | 6 |
| Tile Flooring | Quarry Tile | | 200 | SF | $9,108 | 6 |
| Acoustical Suspended Ceilings | Ceilings - Acoustical Grid System | | 30,401 | SF | $360,571 | 7 |
| Interior Door Supplementary Components | Door Hardware | | 90 | Door | $282,357 | 8 |
| Tile Wall Finish | Ceramic Tile wall | | 405 | SF | $9,010 | 8 |
| Acoustical Suspended Ceilings | Exposed Tectum Ceilings | | 8,107 | SF | $601,478 | 10 |
| **Note:** | Gym lobby and main office | | | | | |
| | | **Sub Total for System** | **12** | **items** | **$2,012,466** | |

### Mechanical

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Decentralized Heating Equipment | Heating Unit Vent - Steam/Hot water | | 12 | Ea. | $202,978 | 5 |
| Exhaust Air | Kitchen Exhaust Hoods | | 1 | Ea. | $15,964 | 5 |
| Decentralized Heating Equipment | Unit Heater Steam/HW (250 MBH) | | 15 | Ea. | $50,796 | 5 |
| HVAC Air Distribution | Ductwork (Bldg.SF) | | 12,200 | SF | $179,354 | 6 |
| Heat Generation | Heat Exchanger - Water to Water (74 GPM) | | 1 | Ea. | $24,794 | 8 |
| Facility Hydronic Distribution | Pump - 1HP or Less (Ea.) | | 3 | Ea. | $22,885 | 8 |
| Heat Generation | Boiler - Cast Iron - Water (1275 MBH) | | 2 | Ea. | $150,608 | 8 |
| Decentralized Cooling | Ductless Split System (1 Ton) | | 1 | Ea. | $14,116 | 8 |
| Facility Hydronic Distribution | 2-Pipe Water System (Hot) | | 40,535 | SF | $312,452 | 10 |
| Heating System Supplementary Components | Controls - Electronic (Bldg.SF) | | 40,535 | SF | $76,364 | 10 |
| HVAC Air Distribution | Roof Top Unit - DX Gas (5 Ton) | | 2 | Ea. | $38,796 | 10 |
| | | **Sub Total for System** | **11** | **items** | **$1,089,106** | |

### Electrical

| Uniformat Description | LC Type Description | | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|---|
| Electrical Service | Switchgear - Main Dist Panel (1200 Amps) | | 1 | Ea. | $69,059 | 5 |
| Lighting Fixtures | Building Mounted Fixtures (Ea.) | | 18 | Ea. | $26,867 | 6 |
| Lighting Fixtures | Light Fixtures (Bldg SF) | | 40,535 | SF | $240,853 | 8 |

## Electrical

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Power Distribution | Panelboard - 120/208 100A | 1 | Ea. | $4,849 | 8 |
| Power Distribution | Panelboard - 120/208 225A | 6 | Ea. | $34,796 | 8 |
| Lighting Fixtures | Canopy Mounted Fixtures (Ea.) | 3 | Ea. | $4,136 | 8 |
| | **Sub Total for System** | **6** | **items** | **$380,558** | |

## Plumbing

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Plumbing Fixtures | Classroom Lavatories | 18 | Ea. | $48,942 | 5 |
| Building Support Plumbing System Supplementary Components | Sump Pump | 1 | Ea. | $1,449 | 5 |
| Plumbing Fixtures | Toilets | 21 | Ea. | $59,894 | 5 |
| Plumbing Fixtures | Urinal (Ea.) | 13 | Ea. | $17,278 | 5 |
| Plumbing Fixtures | Restroom Lavatories | 22 | Ea. | $69,983 | 5 |
| Plumbing Fixtures | Non-Refrigerated Drinking Fountain | 4 | Ea. | $40,880 | 5 |
| Plumbing Fixtures | Refrigerated Drinking Fountain | 3 | Ea. | $22,132 | 5 |
| Plumbing Fixtures | Mop/Service Sinks | 7 | Ea. | $18,035 | 5 |
| Fuel Storage Tanks | Underground Fuel Oil StorageTank ( 5,000 Gal) | 1 | Ea. | $76,056 | 8 |
| Domestic Water Equipment | Water Heater - Electric - 80 gallon | 1 | Ea. | $5,655 | 10 |
| Plumbing Fixtures | Mop/Service Sinks | 6 | Ea. | $15,458 | 10 |
| | **Sub Total for System** | **11** | **items** | **$375,761** | |

## Fire and Life Safety

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Fire Detection and Alarm | Fire Alarm | 40,535 | SF | $118,808 | 9 |
| | **Sub Total for System** | **1** | **items** | **$118,808** | |

## Specialties

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Casework | Fixed Cabinetry | 6 | Room | $67,127 | 5 |
| | **Sub Total for System** | **1** | **items** | **$67,127** | |
| | **Sub Total for Building 01 - Main Building** | **47** | **items** | **$4,669,102** | |

# Building: 02 - Storage Shed

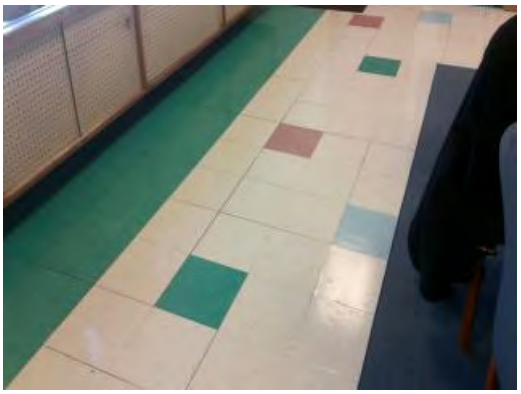
## Exterior

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Exterior Wall Veneer | Wood Siding - Bldg SF basis | 50 | SF | $1,499 | 10 |
| | **Sub Total for System** | **1** | **items** | **$1,499** | |

## Interior

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Wall Painting and Coating | Painting/Staining (Bldg SF) | 50 | SF | $330 | 10 |
| | **Sub Total for System** | **1** | **items** | **$330** | |
| | **Sub Total for Building 02 - Storage Shed** | **2** | **items** | **$1,829** | |
| | **Total for: North Scituate Elementary School** | **55** | **items** | **$4,926,806** | |

## Supporting Photos

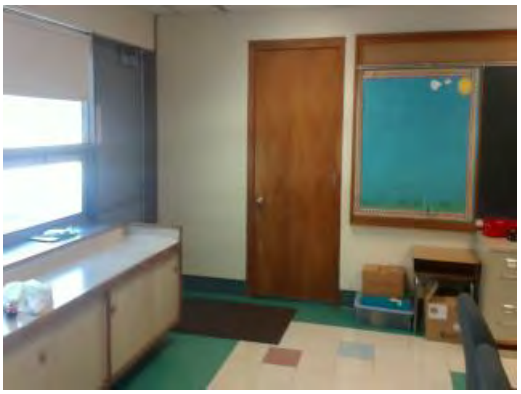

Separating VCT In Classrooms


Art Classroom


Non-Compliant Restroom


Damaged Downspout


Paved Play Area


Non-Compliant Door Hardware


Cafeteria


Typical Classroom


Library

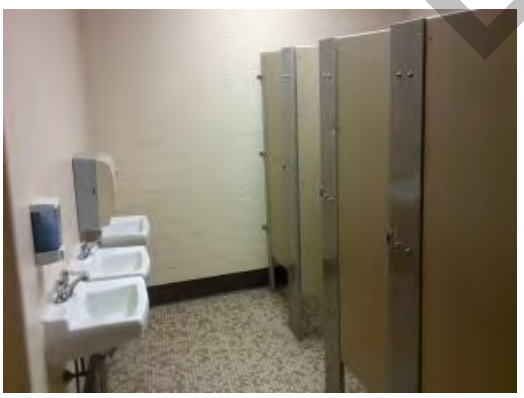
New Addition Plaque

Music Classroom

Aged Casework

Therapy Room


Original Building Plaque



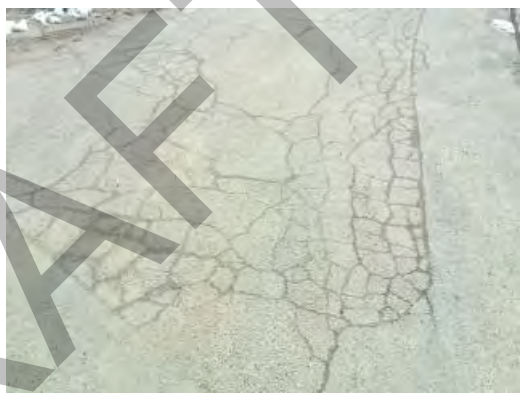
Restroom Fixtures And Finishes

Shed


Computer Lab


Exterior Finishes


Wood Column Base


Alligatored Asphalt


Faded Exterior Door Paint


Gymnasium


Library

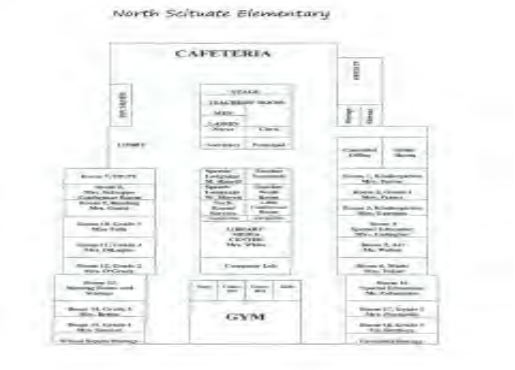

Lobby


Aged Wall Pack

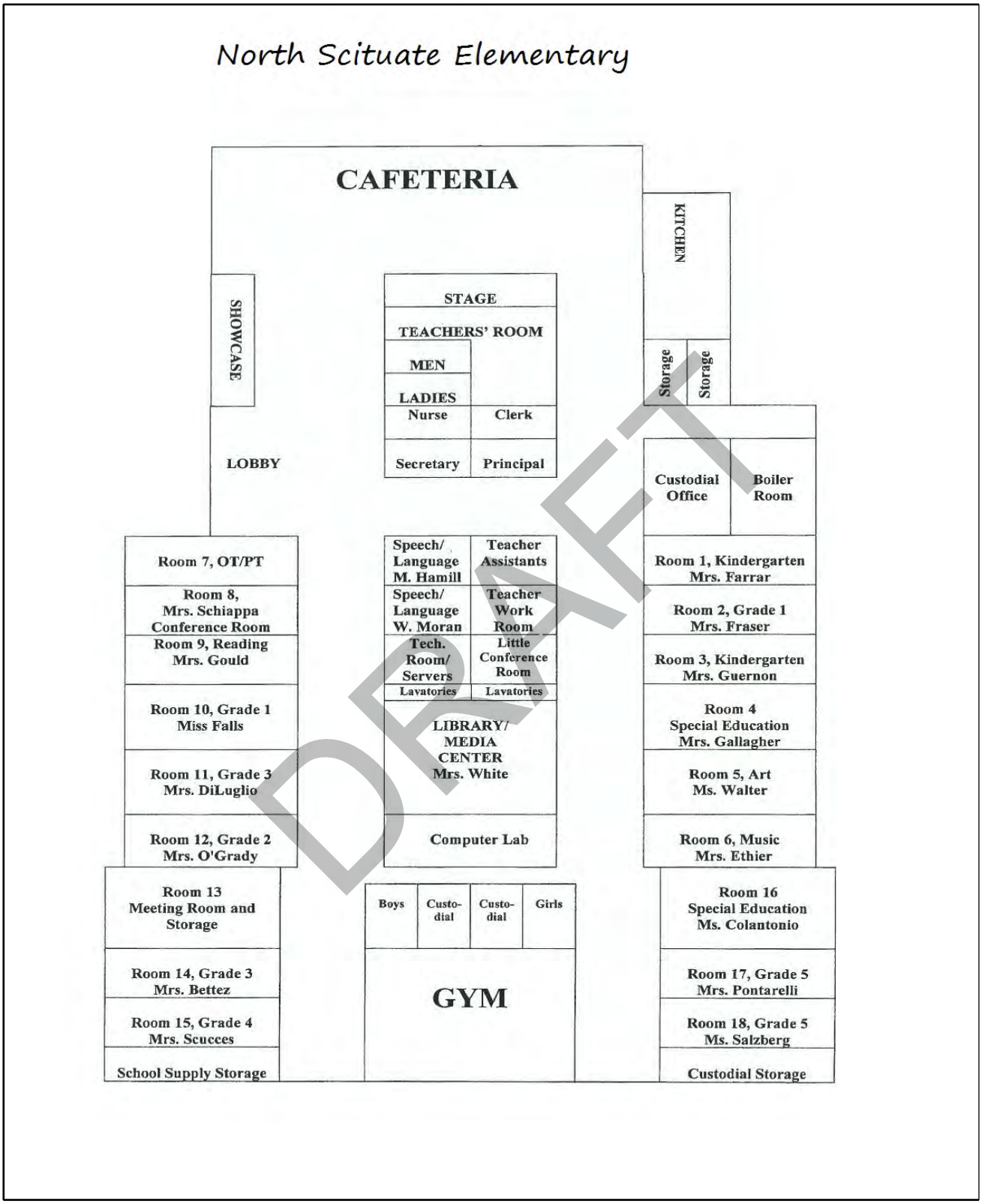

Damaged Soffit


Site Aerial


Elevation




Floor_Plan


North Scituate Elementary
CAFETERIA
KITCHEN
SHOWCASE
STAGE
TEACHERS' ROOM
MEN
LADIES
Nurse
Clerk
Secretary
Principal
Storage
Storage
LOBBY
Custodial Office
Boiler Room
Room 7, OT/PT
Room 8, Mrs. Schiappa Conference Room
Room 9, Reading Mrs. Gould
Room 10, Grade 1 Miss Falls
Room 11, Grade 3 Mrs. DiLuglio
Room 12, Grade 2 Mrs. O'Grady
Speech/ Language M. Hamill
Teacher Assistants
Speech/ Language W. Moran
Teacher Work Room
Tech. Room/ Servers
Little Conference Room
Lavatories
Lavatories
LIBRARY/ MEDIA CENTER Mrs. White
Computer Lab
Room 1, Kindergarten Mrs. Farrar
Room 2, Grade 1 Mrs. Fraser
Room 3, Kindergarten Mrs. Guernon
Room 4 Special Education Mrs. Gallagher
Room 5, Art Ms. Walter
Room 6, Music Mrs. Ethier
Room 13 Meeting Room and Storage
Room 14, Grade 3 Mrs. Bettez
Room 15, Grade 4 Mrs. Scucces
School Supply Storage
Boys
Custo-dial
Custo-dial
Girls
GYM
Room 16 Special Education Ms. Colantonio
Room 17, Grade 5 Mrs. Pontarelli
Room 18, Grade 5 Ms. Salzberg
Custodial Storage
DRAFT

Floor_Plan

# Facility Condition Assessment

Scituate Middle School & High School | *October 2016*

Address: 94 Trimtown Road, North Scituate, RI 02857

Report Generated: October 06, 2016



## Executive Summary

Scituate Middle School & High School, located at 94 Trimtown Road in North Scituate, Rhode Island, was built in 1956. It comprises 187,166 gross square feet. Data in this report was collected in the spring/summer of 2016.

Scituate Middle School & High School has an enrollment of 804, serves grades 6-12, and has 45 classrooms. The LEA reported capacity for Scituate Middle School & High School is 1075 with a resulting utilization of 75.00%. For master planning efforts, a RIDE Model Program Standard was established based on the RIDE School Construction Regulations. Applying RIDE's Model Program Standard, a facility of this size could ideally support an enrollment of approximately 931 students.

The total current deficiencies for this campus, in 2016 construction cost dollars, are estimated at $8,799,284. For master planning purposes a five-year need was developed to provide an understanding of the current need as well as the projected needs in the near future. For Scituate Middle School & High School the five-year need is $24,056,917. The findings contained within this report resulted from an assessment of building systems. Assessments were performed by building professionals experienced in disciplines including: architecture, mechanical, plumbing, electrical, acoustics, hazardous material, and technology infrastructure.


*Figure 1: Aerial view of Scituate Middle School & High School*

## Approach and Methodology

A facility condition assessment evaluates each building's overall condition. Two components of the facility condition assessment are combined to total the cost for facility need. The two components of the facility condition assessment are current deficiencies and life cycle forecast.

**Current Deficiencies:** Deficiencies are items in need of repair or replacement as a result of being broken, obsolete, or beyond useful life. The existing deficiencies that currently require correction are identified and assigned a priority. An example of a current deficiency might include a broken lighting fixture or an inoperable roof top air conditioning unit.

**Life Cycle Forecast:** Life cycle analysis evaluates the ages of a building's systems to forecast system replacement as it reaches the end of its serviceable life. An example of a life cycle system replacement is a roof with a 20-year life that has been in place for 15 years and may require replacement in five years.

All members of the survey team recorded existing conditions, identified problems and deficiencies, and documented corrective action and quantities. The team took digital photos at each school to better identify significant deficiencies.

### Discipline Specialists

All assessment teams produced current deficiencies that are associated with each school. The assessment for the school facilities at the Rhode Island Department of Education included several specialties:

**Facility Condition Assessment:** Architectural, mechanical, and electrical engineering professionals observed conditions via a visual observation that did not include intrusive measures, destructive investigations, or testing. Additionally, the assessment incorporated input provided by District Facilities and Maintenance staff was incorporated where applicable. The assessment team recorded existing conditions, identified problems and deficiencies, documented corrective action and quantities, and identified the priority of the repair in accordance with parameters defined during the planning phase.

**Technology:** Technology specialists visited the RIDE facilities and met with technology directors to observe and assess each facility's technology infrastructure. It included: network architecture, major infrastructure components, classroom instructional systems, and necessary building space and support for technology. The technology assessment took into account the desired technology outcome and best practices and processes to ensure the results can be attained effectively.

**Hazardous Materials:** Schools constructed prior to 1990 were assessed by specialist to identify the presence of hazardous materials. The team focused on identifying asbestos containing building materials (ACBMs), lead-based painted (LBP) areas, polychlorinated biphenyls (PCBs), and Chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. If sampling and analysis was required, these activities were recommended but not included in the scope of work.

**Traffic:** Traffic specialist performed an in-office review of aerial imagery of the traffic infrastructure around the facilities in accordance with section 1.05-7 in the Rhode Island School Construction Regulations. Also, onsite personnel conducted an initial evaluation from data collected during the facility condition assessment. Based on the information, deficiencies and corrective actions were identified. High problem areas were identified for consideration of more detailed site-specific study and analysis in the future.

**Acoustics:** Specialists assessed each school's acoustics, including architectural acoustic, mechanical system noise and vibration, and environmental noise. The assessment team evaluated room acoustics with particular attention to the intelligibility of speech in learning spaces, interior and exterior sound isolation, and mechanical systems noise and vibration control.

**Educational Space Analysis**: The evaluation of schools to ensure that that all spaces adequately support the districts educational program. Standards are established for each classroom type or instructional space. Each space is evaluated to determine if it meets those standards and create a listing of alterations that should be made to make the space a better environment for teaching and learning.

## System Summaries

The following tables summarize major building systems at Scituate Middle School & High School campus, identified by discipline and building.

### Site

The site level systems for this campus includes:

| | |
|---|---|
| **Site** | Asphalt Parking Lot Pavement |
| | Asphalt Roadway Pavement |
| | Concrete Pedestrian Pavement |

### Building Envelope

The exterior systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | Brick Exterior Wall |
| | CMU Exterior Wall |
| | Glass Block Exterior Wall |
| | Metal Panel Exterior Wall |
| | Stucco Exterior Wall |
| | Aluminum Exterior Windows |
| | Storefront / Curtain Wall |
| | Steel Exterior Entrance Doors |
| | Overhead Exterior Utility Doors |
| **02 - Storage:** | Metal Panel Exterior Wall |
| | Steel Exterior Entrance Doors |
| | Overhead Exterior Utility Doors |
| **03 - Public Works:** | Metal Panel Exterior Wall |
| | Steel Exterior Entrance Doors |
| | Overhead Exterior Utility Doors |
| **04 - Pump House:** | CMU Exterior Wall |
| | Steel Exterior Entrance Doors |



The roofing for the buildings at this campus consists of:

| | |
|---|---|
| **01 - Main Building:** | Single Ply Roofing |
| | Canopy Roofing |
| **02 - Storage:** | Metal Steep Slope Roofing |
| **03 - Public Works:** | Metal Steep Slope Roofing |
| **04 - Pump House:** | Composition Shingle Roofing |

### Interior

The interior systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | Foldable Interior Partition |
| | Steel Interior Doors |

| | |
|---|---|
| **01 - Main Building:** | Wood Interior Doors |
| | Overhead Interior Coiling Doors |
| | Interior Door Hardware |
| | Suspended Acoustical Grid System |
| | Suspended Acoustical Ceiling Tile |
| | Painted Ceilings |
| | Ceramic Tile Wall |
| | Wood Wall Paneling |
| | Brick/Stone Veneer |
| | Interior Wall Painting |
| | Concrete Flooring |
| | Ceramic Tile Flooring |
| | Wood Flooring |
| | Vinyl Composition Tile Flooring |
| | Rubber Tile Flooring |
| | Carpet |
| | Athletic/Sport Flooring |
| **03 - Public Works:** | Steel Interior Doors |
| | Interior Door Hardware |
| | Exposed Metal Structure Ceiling |
| | Suspended Acoustical Grid System |
| | Suspended Acoustical Ceiling Tile |
| | Interior Wall Painting |
| | Concrete Flooring |
| | Carpet |
| **04 - Pump House:** | Non-Painted Plaster/Gypsum Board Ceiling |
| | CMU Wall |
| | Concrete Flooring |



**Mechanical**

The mechanical systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | 400 MBH Cast Iron Steam Boiler |
| | 1,275 MBH Cast Iron Water Boiler |
| | Finned Wall Radiator |
| | Steam/Hot Water Heating Unit Vent |
| | 250 MBH Steam Unit Heater |
| | 400 MBH Steam Unit Heater |
| | Radiant Water Heater |
| | DDC Heating System Controls |
| | 1 Ton Ductless Split System |
| | Window Units |
| | 10,000 CFM Energy Recovery Unit |

| | |
|---|---|
| **01 - Main Building:** | 4,000 CFM Energy Recovery Unit |
| | 1 HP or Smaller Pump |
| | 5 HP Pump |
| | 2-Pipe Hot Water Hydronic Distribution System |
| | 2,000 CFM Interior AHU |
| | 2,000 CFM Outdoor AHU |
| | 10,000 CFM Outdoor AHU |
| | Ductwork |
| | Laboratory Fume Hood |
| | Large Roof Exhaust Fan |
| | Supply Fan |
| | Fire Sprinkler System |
| **03 - Public Works:** | 320 MBH Gas Unit Heater |
| | Roof Exhaust Fan |
| **04 - Pump House:** | 36 MBH Steam Unit Heater |
| | 75 HP Pump |

**Plumbing**

The plumbing systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | 250 Gallon Water Storage Tank |
| | 500 Gallon Water Storage Tank |
| | 2" Backflow Preventers |
| **03 - Public Works:** | Gas Piping System |
| **01 - Main Building:** | Domestic Water Piping System |
| | Classroom Lavatories |
| | Mop/Service Sinks |
| | Non-Refrigerated Drinking Fountain |
| | Refrigerated Drinking Fountain |
| | Restroom Lavatories |
| | Showers |
| | Toilets |
| | Urinals |
| | Sump Pump |
| | 10,000 Gallon Above Ground Fuel Oil Storage Tank |
| **04 - Pump House:** | 275 Gallon Above Ground Fuel Oil Storage Tank |

**Electrical**

The electrical systems for the buildings at this campus includes:

| | |
|---|---|
| **01 - Main Building:** | 100 kW Emergency Generator |
| | Automatic Transfer Switch |
| | 1,200 Amp Switchgear |

| | |
|---|---|
| **01 - Main Building:** | 112.5 KVA Transformer |
| | 500 KVA Transformer |
| | 800 Amp Distribution Panel |
| | Panelboard - 120/208 100A |
| | Panelboard - 120/208 125A |
| | Panelboard - 120/208 225A |
| | Panelboard - 120/208 400A |
| | Electrical Disconnect |
| | Building Mounted Lighting Fixtures |
| | Canopy Mounted Lighting Fixtures |
| | Light Fixtures |
| **02 - Storage:** | Panelboard - 120/208 225A |
| | Light Fixtures |
| **03 - Public Works:** | Panelboard - 120/208 225A |
| | Light Fixtures |
| **04 - Pump House:** | Electrical Disconnect |
| | Light Fixtures |

## Facility Deficiency Priority Levels

Deficiencies were ranked according to five priority levels, with Priority 1 items being the most critical to address:

**Priority 1 – Mission Critical Concerns:** Deficiencies or conditions that may directly affect the school's ability to remain open or deliver the educational curriculum. These deficiencies typically relate to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency is a fire alarm system replacement.

**Priority 2 – Indirect Impact to Educational Mission:** Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing that could cause deterioration of integral building systems, and conditions affecting building envelopes, such as roof and window replacements.

**Priority 3 – Short-Term Conditions:** Deficiencies that are necessary to the school's mission but may not require immediate attention. These items should be considered necessary improvements required to maximize facility efficiency and usefulness. Examples of Priority 3 items include site improvements and plumbing deficiencies.

**Priority 4 – Long-Term Requirements:** Items or systems that may be considered improvements to the instructional environment. The improvements may be aesthetic or provide greater functionality. Examples include cabinets, finishes, paving, removal of abandoned equipment, and educational accommodations associated with special programs.

**Priority 5 – Enhancements:** Deficiencies aesthetic in nature or considered enhancements. Typical deficiencies in this priority include repainting, re-carpeting, improved signage, or other improvements to the facility environment.

The following chart summarizes this site's current deficiencies by building system and priority. The listing details current deficiencies including deferred maintenance, functional deficiencies, code compliance, capital renewal, hazardous materials and technology categories.

*Table 1: System by Priority*

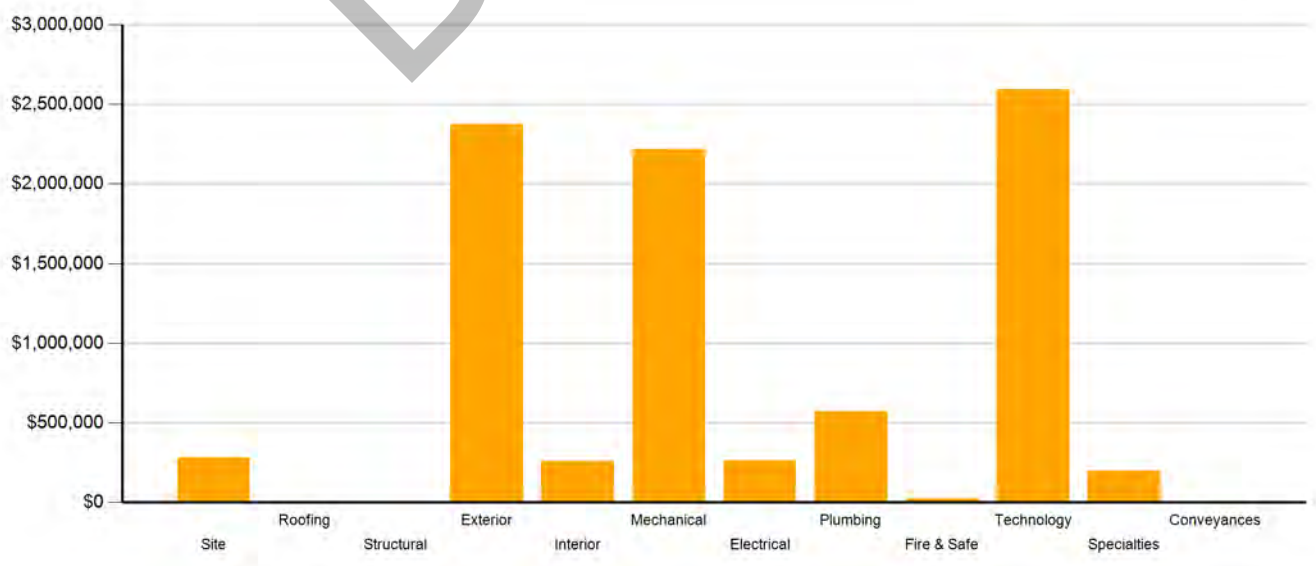
| | Priority | | | | | | |
|---|---|---|---|---|---|---|---|
| System | 1 | 2 | 3 | 4 | 5 | Total | % of Total |
| Site | - | - | $89,141 | $28,674 | $163,566 | $281,382 | 3.20 % |
| Roofing | - | - | - | $10,012 | - | $10,012 | 0.11 % |
| Structural | - | - | - | - | - | $0 | 0.00 % |
| Exterior | - | - | - | $2,365,261 | $9,982 | $2,375,243 | 26.99 % |
| Interior | - | $37,302 | $74,213 | $144,897 | $2,578 | $258,990 | 2.94 % |
| Mechanical | - | $648,419 | $1,314,927 | $254,292 | - | $2,217,638 | 25.20 % |
| Electrical | - | - | $143,898 | - | $120,554 | $264,452 | 3.01 % |
| Plumbing | - | - | $474,403 | $22,132 | $77,781 | $574,316 | 6.53 % |
| Fire and Life Safety | - | - | $23,957 | - | - | $23,957 | 0.27 % |
| Technology | - | - | $2,593,350 | - | - | $2,593,350 | 29.47 % |
| Conveyances | - | - | - | - | - | $0 | 0.00 % |
| Specialties | - | - | $4,742 | $147,596 | $47,606 | $199,944 | 2.27 % |
| **Total** | $0 | $685,721 | $4,718,630 | $2,972,865 | $422,068 | $8,799,284 | |

The building systems at the campus with the most need include:

| | | |
|---|---|---|
| Technology | - | $2,593,350 |
| Exterior | - | $2,375,243 |
| Mechanical | - | $2,217,638 |

The table below represents the building systems and their percentages for overall campus need.

*Figure 2: System Deficiencies*



## Current Deficiencies by Category

The deficiencies have been further grouped according to the observed deficiency category and priority.

• **Acoustics** deficiencies relate to room acoustics, sound insolation, and mechanical systems and vibration control modeled after ANSI/ASA Standard S12.60-2010 and ASHRAE Handbook, Chapter 47 on Sound and Vibration Control.

• **Barrier to Accessibility** deficiencies relate to the Americans with Disabilities and Rhode Island Governors Commission on Disability. Additional items may be included other categories.

• **Capital renewal** items have reached or exceeded serviceable life and require replacement. These are current and do not include life cycle capital renewal forecasts. Also included are deficiency correcting planned work postponed beyond its regular life expectancy.

• **Code compliance** deficiencies relate to current codes. Many may fall under grandfather clauses, which allow buildings to continue operating under codes effective at the time of construction. However, there are instances where the level of renovation requires full compliance and are reflected in the master plan.

• **Educational adequacy** includes deficiencies identify how facilities align with the Basic Education Program and the RIDE School Construction Regulations.

• **Functional deficiencies** are deficiencies for a component or system that has failed before the end of its expected life or is not the right application, size or design.

• **Hazardous materials** include deficiencies for building systems or components containing potentially hazardous material. The team focused on identifying asbestos containing building materials (ACBMs), lead based painted (LBP) areas, polychlorinated biphenyls (PCBs), and Chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. With other scopes of work there may be other costs associated with hazardous materials.

• **Technology** deficiencies relate to network architecture, technology infrastructure, classroom systems, and support. Examples of technology deficiencies include: security cameras, secure electronic access, telephone handsets, and dedicate air conditioning for telecommunication rooms.

• **Traffic** site deficiencies relate to vehicle or pedestrian traffic, such as bus loops, crosswalks, and pavement markings.

The following chart and table represent the deficiency category by priority. This listing includes current deficiencies at all building systems.

*Table 2: Deficiency Category by Priority*

| | Priority | | | | | |
|---|---|---|---|---|---|---|
| **Category** | **1** | **2** | **3** | **4** | **5** | **Total** |
| **Acoustics** | - | $475,871 | - | - | - | $475,871 |
| **Barrier to Accessibility** | - | - | $42,781 | - | - | $42,781 |
| **Capital Renewal** | - | $172,548 | $1,847,951 | $345,018 | $11,313 | $2,376,830 |
| **Code Compliance** | - | - | - | - | - | $0 |
| **Educational Adequacy** | - | - | $83,260 | $2,612,153 | $410,755 | $3,106,168 |
| **Functional Deficiency** | - | - | $85,563 | - | - | $85,563 |
| **Hazardous Material** | - | $37,302 | $31,145 | $15,694 | - | $84,141 |
| **Technology** | - | - | $2,538,789 | - | - | $2,538,789 |
| **Traffic** | - | - | $89,141 | - | - | $89,141 |
| **Total** | $0 | $685,721 | $4,718,630 | $2,972,865 | $422,068 | $8,799,284 |



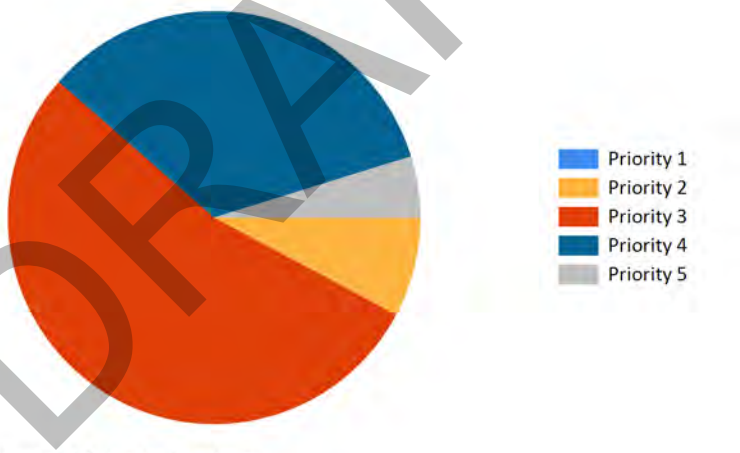



*Figure 3: Current deficiencies by priority*

## Life Cycle Capital Renewal Forecast

During the facility condition assessment, assessors inspected all major building systems. If an assessor identified a need for immediate replacement, a deficiency was created with the item's repair costs. The identified deficiency contributes to the particular facility's total current repair costs.

However, capital planning scenarios span multiple years, as opposed to being constrained to immediate repairs. Construction projects may begin several years after the initial facility condition assessment. Therefore, in addition to the current year repair costs, it is necessary to forecast the facility's future costs using a 10-year life cycle renewal forecast model.

Life cycle renewal is the projection of future building system costs based upon each individual system's expected serviceable life. Building systems and components age over time, eventually break down, reach the end of their useful lives, and may require replacement. While an item may be in good condition now, it might the end of it's life before a planned construction project occurs.

The following chart shows all current deficiencies and the subsequent 10-year life cycle capital renewal projections. The projections outline costs for major building systems in which a component is expected to reach the end of its useful life and require capital funding for replacement.

*Table 3: Capital Renewal Forecast*

| | | Life Cycle Capital Renewal Projections | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| System | Current Deficiencies | Year 1 2017 | Year 2 2018 | Year 3 2019 | Year 4 2020 | Year 5 2021 | Year 6 2022 | Year 7 2023 | Year 8 2024 | Year 9 2025 | Year 10 2026 | Total | $/GSF |
| Site | $281,382 | $0 | $0 | $0 | $0 | $1,552,632 | $0 | $0 | $0 | $0 | $330,852 | $1,883,484 | $10.06 |
| Roofing | $10,012 | $0 | $0 | $0 | $1,411,785 | $57,042 | $0 | $0 | $0 | $0 | $1,426 | $1,470,253 | $7.86 |
| Structural | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Exterior | $2,375,243 | $0 | $0 | $0 | $1,907,126 | $914,501 | $0 | $0 | $0 | $0 | $4,283,045 | $7,104,672 | $37.96 |
| Interior | $258,990 | $0 | $0 | $33,037 | $4,732,172 | $3,237,924 | $6,527 | $0 | $0 | $0 | $1,250,924 | $9,260,584 | $49.48 |
| Mechanical | $2,217,638 | $0 | $0 | $0 | $77,649 | $475,122 | $3,190,807 | $0 | $731,649 | $316,847 | $1,095,661 | $5,887,735 | $31.46 |
| Electrical | $264,452 | $0 | $0 | $0 | $138,117 | $0 | $0 | $0 | $1,242,392 | $0 | $213,494 | $1,594,003 | $8.52 |
| Plumbing | $574,316 | $0 | $0 | $0 | $0 | $163,638 | $295,507 | $0 | $67,880 | $0 | $0 | $527,025 | $2.82 |
| Fire and Life Safety | $23,957 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $548,437 | $0 | $548,437 | $2.93 |
| Technology | $2,593,350 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0.00 |
| Conveyances | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $285,209 | $285,209 | $1.52 |
| Specialties | $199,944 | $0 | $0 | $0 | $0 | $556,888 | $0 | $0 | $0 | $0 | $0 | $556,888 | $2.98 |
| **Total** | **$8,799,284** | **$0** | **$0** | **$33,037** | **$8,266,849** | **$6,957,747** | **$3,492,841** | **$0** | **$2,041,921** | **$865,284** | **$7,460,611** | **$29,118,290** | **$155.57** |



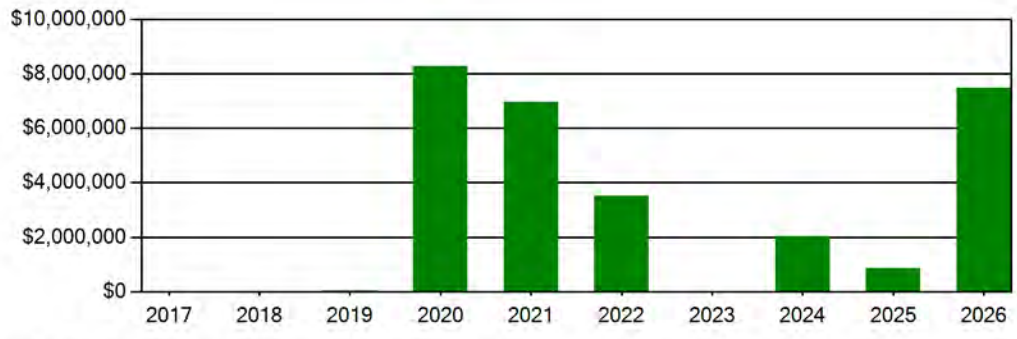



*Figure 4: Life Cycle Capital Renewal Forecast*

## Facility Condition Index (FCI)

The Facility Condition Index (FCI) is used throughout the facility condition assessment industry as a general indicator of a building's health. Since 1991, the facility management industry has used an index called the FCI to benchmark the relative condition of a group of schools. The National Association of College and University Business Officers has suggested for college planning that an FCI of less than 5 percent is good, an FCI between 5 and 10 percent is fair, and an FCI greater than 10 percent is poor. In K-12 public school planning, the gulf between 10 percent and 100 percent is just not stratified enough. Jacobs has used the following ranges to provide a little more gradation. FCI's less than 10 percent are considered good, 10 to 60 percent is fair, and anything greater than 60 percent is poor. Financial modeling has shown that over a 30-year period, schools that fall in the 65 percent or greater range are more cost-effective to replace than to repair. This is due to efficiency gains with more modern facilities and the value of the building at the end of the analysis period. It is important to note that the FCI at which a facility should be considered for replacement is typically debated and adjusted based on property owners/facility managers approach to facility management. Of course, FCI is not the only factor used to identify buildings that need renovation, replacement or even closure. Historical significance, enrollment trends, community sentiment, and the availability of capital are additional factors that are analyzed when making school facility decision.

The FCI is calculated by dividing the total repair cost, including site-related repairs, by the total replacement cost. Costs associated with new construction are not included in the FCI calculation. As a general rule, an FCI below 10% is considered good. An economic analysis generally suggests that FCIs greater than 65 percent represent the point where facilities should be considered for replacement. This value typically indicates the point where further expenditures on a building offer little return when compared to the potential cost of replacing that facility.

The replacement value represents the estimated cost of replacing the current building with another building of like size, based on today's estimated cost of construction in the Providence, Rhode Island area. The estimated replacement cost for this facility is $67,379,760. The total current cost for all deficiencies is $8,799,284.

The Scituate Middle School & High School facility has an overall FCI of 13.06%.

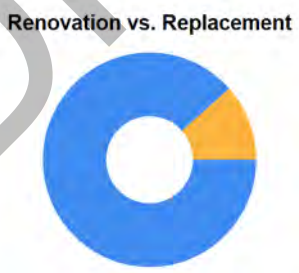



*Figure 5: Renovation vs Replacement*



## Five Year FCI

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. For planning purposes, the total five-year need at Scituate Middle School & High School is $24,056,917 (Life Cycle Yrs 1-5 plus the Current Deficiencies)

A five year FCI was calculated by dividing the five year need by the total replacement cost. The Scituate Middle School & High School facility has a five year FCI of 35.70% (Life Cycle Yrs 1-5 plus Current Deficiencies divided by the Total Replacement Cost).

## Summary of Findings

The table below summarizes the condition findings at Scituate Middle School & High School.

*Table 4: Facility Condition by Building*

| Number | Building Name | Gross Sq Ft | Built Date | Current Deficiencies | FCI | Total 5 Yr Need (Yr 1-5 + Current Defs) | 5-Year FCI |
|---|---|---|---|---|---|---|---|
| | Exterior Site | | | $2,646,642 | | $4,199,274 | |
| 01 | Main Building | 181,966 | 1956 | $6,152,641 | 9.39% | $19,824,605 | 30.26% |
| 02 | Storage | 150 | 2010 | $0 | .00% | $0 | .00% |
| 03 | Public Works | 5,000 | 2009 | $0 | .00% | $33,037 | 1.84% |
| 04 | Pump House | 50 | 1962 | $0 | .00% | $0 | .00% |
| **Totals** | | **187,166** | | **$8,799,284** | **13.06%** | **$24,056,917** | **35.70%** |

The following pages provide a listing of all current deficiencies and 10 year life cycle need for the site and building and the associated costs, followed by photos taken during the assessment.

# Site Level Deficiencies

## Site

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| New Sidewalk Is Required | Traffic | 600 | SF | 3 | $13,598 | 9291 |
| **Note:** Install sidewalks from parking lot to crosswalk at NW corner of school property (6' wide) | | | | | | |
| Traffic Signage Is Required | Traffic | 2 | Ea. | 3 | $75,544 | 9310 |
| **Note:** Add flashing beacons to school zone speed limit signs. | | | | | | |
| Backstops Require Replacement | Educational Adequacy | 1 | Ea. | 4 | $28,674 | 28581 |
| **Note:** Backstops Require Replacement | | | | | | |
| School has insufficient # of tennis courts. | Educational Adequacy | 1 | Ea. | 5 | $163,566 | 29042 |
| **Note:** School has insufficient # of tennis courts. | | | | | | |
| | **Sub Total for System** | **4** | **items** | | **$281,382** | |

## Exterior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Media Center does not meet size standard | Educational Adequacy | 3,437 | SF | 4 | $2,365,261 | 53283 |
| **Note:** Library/Media Center does not meet required RI standard for space size. (Std=5837.5 sf, Current=2400 sf) | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$2,365,261** | |
| | **Sub Total for School and Site Level** | **5** | **items** | | **$2,646,642** | |

# Building: 01 - Main Building

## Roofing

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Awning Or Canopy Roofing Decking Requires Repair | Capital Renewal | 1,000 | SF | 4 | $10,012 | 4546 |
| | **Sub Total for System** | **1** | **items** | | **$10,012** | |

## Exterior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Exterior Soffit Requires Repainting | Capital Renewal | 3,000 | SF | 5 | $9,982 | 4541 |
| **Location:** NE corner | | | | | | |
| | **Sub Total for System** | **1** | **items** | | **$9,982** | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 2 | Ea. | 2 | $570 | 17404 |
| **Note:** Painted Door | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 103 | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 2 | Ea. | 2 | $570 | 17405 |
| **Note:** Painted Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 103 | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 2 | Ea. | 2 | $570 | 17410 |
| **Note:** Painted Door | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 106 | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 2 | Ea. | 2 | $570 | 17411 |
| **Note:** Painted Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 106 | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 1 | Ea. | 2 | $285 | 17417 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Stairway 1 | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 4 | Ea. | 2 | $1,141 | 17424 |
| **Note:** Wood Door | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Main Lobby | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 7 | Ea. | 2 | $1,996 | 17425 |
| **Note:** Wood Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Main Lobby | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 2 | Ea. | 2 | $570 | 17427 |
| **Note:** Painted Door | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 218 | | | | | | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 2 | Ea. | 2 | $570 | 17428 |
| **Note:** Painted Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 218 | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 6 | Ea. | 2 | $1,711 | 17436 |
| **Note:** Wood Door | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Main Corridor | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 8 | Ea. | 2 | $2,282 | 17437 |
| **Note:** Painted Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Main Corridor | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 2 | Ea. | 2 | $570 | 17439 |
| **Note:** Wood Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Main Girls' Bathroom | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 12 | Ea. | 2 | $3,423 | 17442 |
| **Note:** Painted Door | | | | | | |
| **Location:** School Building Interior, Floor:D Wing, Room:Wood Shop | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 12 | Ea. | 2 | $3,423 | 17443 |
| **Note:** Painted Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:D Wing, Room:Wood Shop | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 4 | Ea. | 2 | $1,141 | 17444 |
| **Note:** Painted Door | | | | | | |
| **Location:** School Building Interior, Floor:D Wing, Room:Agricultural Classroom | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 4 | Ea. | 2 | $1,141 | 17445 |
| **Note:** Painted Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:D Wing, Room:Agricultural Classroom | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 3 | Ea. | 2 | $856 | 17447 |
| **Note:** Painted Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Cafeteria | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 2 | Ea. | 2 | $570 | 17452 |
| **Note:** Painted Door | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Gymnasium | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 2 | Ea. | 2 | $570 | 17453 |
| **Note:** Painted Door | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Gymnasium | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 2 | Ea. | 2 | $570 | 17454 |
| **Note:** Wood Door | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Old Stage | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 4 | Ea. | 2 | $1,141 | 17457 |
| **Note:** Painted Door | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 206 | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 4 | Ea. | 2 | $1,141 | 17458 |
| **Note:** Painted Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 206 | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 10 | Ea. | 2 | $2,852 | 17460 |
| **Note:** Metal Door | | | | | | |
| **Location:** School Building Interior, Floor:3, Room:Music Offices | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 10 | Ea. | 2 | $2,852 | 17461 |
| **Note:** Metal Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:3, Room:Music Offices | | | | | | |
| Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each) | Hazardous Material | 4 | Ea. | 2 | $1,141 | 17465 |
| **Note:** Painted Door | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:North Façade | | | | | | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - linear feet) | Hazardous Material | 14 | LF | 2 | $319 | 17407 |
| **Note:** Wood Casework - Full Cabinets | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classrooms 104, 105 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - linear feet) | Hazardous Material | 7 | LF | 2 | $160 | 17409 |
| **Note:** Wood Casework - Full Cabinets | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 106 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - linear feet) | Hazardous Material | 7 | LF | 2 | $160 | 17415 |
| **Note:** Wood Casework - Full Cabinets | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 109 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - linear feet) | Hazardous Material | 2 | LF | 2 | $46 | 17419 |
| **Note:** Painted Door | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Corridor 1 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - linear feet) | Hazardous Material | 4 | LF | 2 | $91 | 17420 |
| **Note:** Painted Door Frame | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Corridor 1 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - linear feet) | Hazardous Material | 40 | LF | 2 | $913 | 17435 |
| **Note:** Wood Handrails | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Stairway 2 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 21 | SF | 2 | $200 | 17403 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 103 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 42 | SF | 2 | $399 | 17406 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classrooms 104, 105 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 21 | SF | 2 | $200 | 17408 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 106 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 15 | SF | 2 | $143 | 17412 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 107 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 21 | SF | 2 | $200 | 17414 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 109 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 5 | SF | 2 | $48 | 17418 |
| **Note:** Painted Lockers | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Corridor 1 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 30 | SF | 2 | $285 | 17426 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 218 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 21 | SF | 2 | $200 | 17431 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Resource Room | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 20 | SF | 2 | $190 | 17438 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Main Boys' Bathroom | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 20 | SF | 2 | $190 | 17441 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Interior, Floor:D Wing, Room:Wood Shop | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 5 | SF | 2 | $48 | 17450 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 208 | | | | | | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet) | Hazardous Material | 50 | SF | 2 | $475 | 17469 |
| **Note:** Painted Door & Panels | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:North Façade | | | | | | |
| Wall/ceiling materials - large areas (> 10 sq. ft.) of damage & area in active use - children | Hazardous Material | 10 | SF | 2 | $95 | 17456 |
| **Note:** Damaged Skim Coat & Corners | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Choral Room 233 | | | | | | |
| Wall/ceiling materials - large areas (> 10 sq. ft.) of damage & area in active use - children | Hazardous Material | 75 | SF | 2 | $713 | 17462 |
| **Note:** Damaged Skim Coat & Corners | | | | | | |
| **Location:** School Building Interior, Floor:3, Room:Auditorium Stage | | | | | | |
| Caulking - significant areas of broken pieces &/or deteriorating caulk | Hazardous Material | 56 | LF | 3 | $1,065 | 17463 |
| **Note:** Window Caulk | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:North Façade | | | | | | |
| Caulking - significant areas of broken pieces &/or deteriorating caulk | Hazardous Material | 20 | LF | 3 | $380 | 17464 |
| **Note:** Wall Caulk | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:North Façade | | | | | | |
| Caulking - significant areas of broken pieces &/or deteriorating caulk | Hazardous Material | 200 | LF | 3 | $3,803 | 17466 |
| **Note:** Window Caulk | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:North Façade | | | | | | |
| Caulking - significant areas of broken pieces &/or deteriorating caulk | Hazardous Material | 24 | LF | 3 | $456 | 17468 |
| **Note:** Vent Caulk | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:North Façade | | | | | | |
| Caulking - significant areas of broken pieces &/or deteriorating caulk | Hazardous Material | 200 | LF | 3 | $3,803 | 17470 |
| **Note:** Window Caulk | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:East Façade - 1956 Wing | | | | | | |
| Caulking - significant areas of broken pieces &/or deteriorating caulk | Hazardous Material | 35 | LF | 3 | $665 | 17471 |
| **Note:** Window Caulk | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:East Façade - D Wing | | | | | | |
| Caulking - significant areas of broken pieces &/or deteriorating caulk | Hazardous Material | 50 | LF | 3 | $951 | 17472 |
| **Note:** Window Caulk | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:West Façade | | | | | | |
| Existing Door Hardware Is Not ADA Compliant | Barrier to Accessibility | 15 | Door | 3 | $42,781 | 4543 |
| **Note:** Lever handle is less than 34" above the floor in middle school classrooms 401-420. | | | | | | |
| **Location:** Middle school classrooms 401-420 | | | | | | |
| Light Deterioration or Damage of 9x9 Asbestos Floor Tile is Present | Hazardous Material | 240 | SF | 3 | $6,845 | 17400 |
| **Note:** 9x9 Floor Tiles | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Department Chairs Suite | | | | | | |
| Light Deterioration or Damage of 9x9 Asbestos Floor Tile is Present | Hazardous Material | 120 | SF | 3 | $3,423 | 17401 |
| **Note:** 9x9 Floor Tiles | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Custodial Area | | | | | | |
| Light Deterioration or Damage of 9x9 Asbestos Floor Tile is Present | Hazardous Material | 132 | SF | 3 | $3,765 | 17402 |
| **Note:** 9x9 Floor Tiles | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Book Room | | | | | | |
| Light Deterioration or Damage of 9x9 Asbestos Floor Tile is Present | Hazardous Material | 210 | SF | 3 | $5,989 | 17434 |
| **Note:** 9x9 Floor Tiles | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:AD Office | | | | | | |
| The Vinyl Composition Tile Requires Replacement | Capital Renewal | 25 | SF | 3 | $287 | 4545 |
| **Note:** Joint cover is lifted and flooring is damaged. | | | | | | |
| **Location:** Outside Room 209 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 2 | Ea. | 4 | $570 | 17390 |
| **Note:** Metal Door | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Cafeteria | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 1 | Ea. | 4 | $285 | 17392 |
| **Note:** Metal Door | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Kitchen and Attached Rooms | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 1 | Ea. | 4 | $285 | 17396 |
| **Note:** Metal Door | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Electrical Room | | | | | | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 1 | Ea. | 4 | $285 | 17397 |
| **Note:** Wood Door | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 404 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each) | Hazardous Material | 1 | Ea. | 4 | $285 | 17398 |
| **Note:** Metal Door | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:Kitchen Door | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 60 | LF | 4 | $1,369 | 17388 |
| **Note:** Hand Rail | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Cafeteria | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 12 | LF | 4 | $274 | 17394 |
| **Note:** Wood Casework - Base Cabinets | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 412 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 12 | LF | 4 | $274 | 17395 |
| **Note:** Wood Casework - Base Cabinets | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 411 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 20 | LF | 4 | $456 | 17399 |
| **Note:** Wood Trim | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:Kitchen Door | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 7 | LF | 4 | $160 | 17413 |
| **Note:** Wood Casework - Full Cabinets | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Classroom 108 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 40 | LF | 4 | $913 | 17416 |
| **Note:** Wood Mailboxes | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Stairway 1 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet) | Hazardous Material | 21 | LF | 4 | $479 | 17429 |
| **Note:** Wood Casework | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classrooms 217, 213, 214 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 10 | SF | 4 | $95 | 17386 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Main Office | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 300 | SF | 4 | $2,852 | 17387 |
| **Note:** Painted Wall | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Main Hall | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 250 | SF | 4 | $2,377 | 17389 |
| **Note:** Heater | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Cafeteria | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 10 | SF | 4 | $95 | 17391 |
| **Note:** Tiles | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:Cafeteria | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 4 | SF | 4 | $38 | 17421 |
| **Note:** Stair Tread | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:East End | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 20 | SF | 4 | $190 | 17422 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:1, Room:East End | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 8 | SF | 4 | $76 | 17423 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Assistant Principal's Office | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 15 | SF | 4 | $143 | 17430 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classrooms 217, 213, 214 | | | | | | |

## Interior

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 5 | SF | 4 | $48 | 17433 |
| **Note:** Radiator | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:AD Office | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 8 | SF | 4 | $76 | 17446 |
| **Note:** Radiator Cover | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Cafeteria | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 5 | SF | 4 | $48 | 17451 |
| **Note:** Painted Door | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Classroom 209 | | | | | | |
| Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet) | Hazardous Material | 400 | SF | 4 | $3,803 | 17467 |
| **Note:** Wood Suffit | | | | | | |
| **Location:** School Building Exterior, Floor:Exterior, Room:North Façade | | | | | | |
| Room Lighting Is Inadequate Or In Poor Condition. | Educational Adequacy | 3,350 | SF | 4 | $129,203 | Rollup |
| Wall/ceiling materials - area < 9 sq. ft. AND in children-accessible area | Hazardous Material | 2 | SF | 4 | $19 | 17432 |
| **Note:** GWB Damage | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Resource Room | | | | | | |
| Wall/ceiling materials - area < 9 sq. ft. AND in children-accessible area | Hazardous Material | 10 | SF | 4 | $95 | 17440 |
| **Note:** Damaged Skim Coat | | | | | | |
| **Location:** School Building Interior, Floor:1984 Wing, Room:Media Center & Offices | | | | | | |
| Wall/ceiling materials - area < 9 sq. ft. AND in children-accessible area | Hazardous Material | 2 | SF | 4 | $19 | 17448 |
| **Note:** GWB Damage | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Computer Room 256 | | | | | | |
| Wall/ceiling materials - area < 9 sq. ft. AND in children-accessible area | Hazardous Material | 2 | SF | 4 | $19 | 17449 |
| **Note:** GWB Damage | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Computer Room 258 | | | | | | |
| Wall/ceiling materials - area < 9 sq. ft. AND in children-accessible area | Hazardous Material | 5 | SF | 4 | $48 | 17455 |
| **Note:** Damaged Skim Coat | | | | | | |
| **Location:** School Building Interior, Floor:2, Room:Music Room 233 | | | | | | |
| Wall/ceiling materials - area < 9 sq. ft. AND in children-accessible area | Hazardous Material | 2 | SF | 4 | $19 | 17459 |
| **Note:** GWB Damage | | | | | | |
| **Location:** School Building Interior, Floor:3, Room:Classroom 309 | | | | | | |
| Classroom Door Requires Vision Panel | Educational Adequacy | 3 | Ea. | 5 | $1,247 | Rollup |
| Classroom Doors Lack Appropriate Signs | Capital Renewal | 7 | Ea. | 5 | $1,331 | 4540 |
| **Note:** Rooms 154, 401, 402, 404, 405, 411, 412 have no room number signs. | | | | | | |
| **Location:** Rooms 154, 401, 402, 404, 405, 411, 412 | | | | | | |
| | **Sub Total for System** | **91** | **items** | | **$258,990** | |

## Mechanical

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Air Handler HVAC Component Requires Replacement | Capital Renewal | 4 | Ea. | 2 | $172,548 | 4551 |
| **Note:** AHUs are aged, obsolete, and should be replaced. | | | | | | |
| Unit Ventilators Are Excessively Noisy | Acoustics | 50 | Ea. | 2 | $317,248 | 19723 |
| **Note:** All classrooms | | | | | | |
| Unit Ventilators Are Excessively Noisy | Acoustics | 25 | Ea. | 2 | $158,624 | 19724 |
| **Note:** All classrooms | | | | | | |
| Remove Abandoned Equipment | Capital Renewal | 1 | Ea. | 3 | $3,130 | 9284 |
| **Note:** Air compressor | | | | | | |
| The Fin Tube Water Radiant Heater Requires Replacement | Capital Renewal | 117 | Ea. | 3 | $195,990 | 4552 |
| **Note:** Fin tube radiation is outdated, deteriorating, and should be replaced. | | | | | | |
| The Mechanical / HVAC Piping / System Is Beyond Its Useful Life | Capital Renewal | 144,756 | SF | 3 | $1,115,807 | 4553 |
| **Note:** Hot water piping is original to 1956. Water is not treated and is highly corrosive. Damage can be seen at pumps. | | | | | | |
| Exhaust Fan Ventilation Requires Replacement | Capital Renewal | 2 | Ea. | 4 | $5,355 | 4542 |
| **Note:** Greenhouse supply fans. | | | | | | |
| Lab lacks an appropriate fume hood. | Educational Adequacy | 4 | Ea. | 4 | $89,015 | Rollup |
| Small HVAC Circulating Pump Requires Replacement | Capital Renewal | 3 | Ea. | 4 | $28,589 | 4549 |
| **Note:** Pump bodies are showing signs of corrosion and poor seals. According to the building manager the water quality is very poor. | | | | | | |
| Small HVAC Circulating Pump Requires Replacement | Capital Renewal | 6 | Ea. | 4 | $45,770 | 4557 |
| **Note:** Pump bodies are showing signs of corrosion and poor seals. According to the building manager the water quality is very poor. | | | | | | |

## Mechanical

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Chemistry Lab Fume Hood(s) Require Replacement | Capital Renewal | 3 | Ea. | 4 | $85,563 | 4539 |
| **Note:** Fume hoods are outdated, obsolete, and should be replaced. | | | | | | |
| | **Sub Total for System** | **11** | **items** | | **$2,217,638** | |

## Electrical

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| The Distribution Panel Requires Replacement | Capital Renewal | 2 | Ea. | 3 | $58,335 | 4554 |
| **Location:** Old electrical room | | | | | | |
| The Electrical Receptacles Are Inadequate And More are Needed | Functional Deficiency | 150 | Ea. | 3 | $85,563 | 4558 |
| **Note:** Inadequate receptacles throughout building. More are needed. | | | | | | |
| Room Has Insufficient Electrical Outlets | Educational Adequacy | 240 | Ea. | 5 | $120,554 | Rollup |
| | **Sub Total for System** | **3** | **items** | | **$264,452** | |

## Plumbing

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Sump Pump Requires Replacement | Capital Renewal | 2 | Ea. | 3 | $2,898 | 4550 |
| The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life | Capital Renewal | 50,000 | SF | 3 | $402,294 | 4548 |
| **Note:** Domestic hot water piping in high school appears to be original to the building. According to the building manager, water has high pH levels which can lead to premature failure. | | | | | | |
| Water Storage Tank Requires Replacement | Capital Renewal | 2 | Ea. | 3 | $69,211 | 4556 |
| **Note:** Tanks appear to be original to 1956 install and should be replaced. | | | | | | |
| The Refrigerated Water Cooler Requires Replacement | Capital Renewal | 3 | Ea. | 4 | $22,132 | 4547 |
| **Note:** Water fountains in the boy's locker room, girl's locker room, and hallway outside of auxiliary gym are non-functional. | | | | | | |
| Room lacks a drinking fountain. | Educational Adequacy | 8 | Ea. | 5 | $8,930 | Rollup |
| The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed | Educational Adequacy | 45 | Ea. | 5 | $68,851 | Rollup |
| | **Sub Total for System** | **6** | **items** | | **$574,316** | |

## Fire and Life Safety

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Room lacks shut-off valves for utilities. | Educational Adequacy | 8 | Ea. | 3 | $23,957 | Rollup |
| | **Sub Total for System** | **1** | **items** | | **$23,957** | |

## Technology

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Room lacks Interactive White Board | Educational Adequacy | 18 | Ea. | 3 | $54,561 | Rollup |
| Technology: Auditorium AV/Multimedia system is inadequate. | Technology | 1 | Room | 3 | $332,744 | 18462 |
| **Note:** Auditorium (large size) needs to be refreshed. | | | | | | |
| Technology: Campus network switching electronics are antiquated and/or do not meet standards. | Technology | 96 | Ea. | 3 | $45,633 | 18461 |
| **Note:** Refresh select network switches that have reached end-of-life. | | | | | | |
| Technology: Campus network switching electronics are antiquated and/or do not meet standards. | Technology | 176 | Ea. | 3 | $83,661 | 18474 |
| **Note:** Refresh select network switches that have reached end-of-life. | | | | | | |
| Technology: Campus wireless infrastructure inadequate. | Technology | 35 | Ea. | 3 | $46,584 | 18463 |
| **Note:** Wireless Access Points do not support current 801.11AC standards, refresh and add Access Points. | | | | | | |
| Technology: Campus wireless infrastructure inadequate. | Technology | 25 | Ea. | 3 | $33,274 | 18475 |
| **Note:** Wireless Access Points do not support current 801.11AC standards, refresh and add Access Points. | | | | | | |
| Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life. | Technology | 30 | Ea. | 3 | $598,939 | 18464 |
| **Note:** Classroom AV/Multimedia systems are antiquated, refresh. | | | | | | |
| Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life. | Technology | 1 | Ea. | 3 | $19,965 | 18466 |
| **Note:** Library AV/Multimedia system is nearing end-of-life, refresh. | | | | | | |
| Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life. | Technology | 20 | Ea. | 3 | $399,293 | 18476 |
| **Note:** Classroom AV/Multimedia systems are antiquated, refresh. | | | | | | |
| Technology: Instructional spaces do not have local sound reinforcement. | Technology | 31 | Ea. | 3 | $147,358 | 18468 |
| **Note:** Add sound reinforcement in instructional spaces. | | | | | | |
| Technology: Instructional spaces do not have local sound reinforcement. | Technology | 21 | Ea. | 3 | $99,823 | 18479 |
| **Note:** Add sound reinforcement in instructional spaces. | | | | | | |
| Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. | Technology | 2 | Ea. | 3 | $10,648 | 18458 |
| **Note:** IDFs lack grounding system, add grounding system. | | | | | | |
| Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. | Technology | 3 | Ea. | 3 | $15,972 | 18472 |
| **Note:** IDFs lack grounding system, add grounding system. | | | | | | |
| Technology: Intermediate Telecommunications Room is not dedicated and/or inadequate. | Technology | 1 | Ea. | 3 | $45,253 | 18455 |
| **Note:** IDF Nurse is in too small of a space and is used for storage, relocate/rezone. | | | | | | |
| Technology: Intermediate Telecommunications Room is not dedicated and/or inadequate. | Technology | 1 | Ea. | 3 | $45,253 | 18469 |
| **Note:** IDF located in "high voltage" area, relocate. | | | | | | |

## Technology

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. | Technology | 1 | Ea. | 3 | $37,648 | 18470 |
| **Note:** IDF 256 in shared space, dedicate. | | | | | | |
| Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. | Technology | 1 | Ea. | 3 | $37,648 | 18471 |
| **Note:** IDF in Main Office, relocate/dedicate. | | | | | | |
| Technology: Intermediate Telecommunications Room needs M/E improvements. | Technology | 1 | Ea. | 3 | $24,338 | 18454 |
| **Note:** Consolidate "IDF Campus Guard Station" into IDF. | | | | | | |
| Technology: Intermediate Telecommunications Room needs M/E improvements. | Technology | 1 | Ea. | 3 | $24,338 | 18456 |
| **Note:** IDF Storage is not dedicated, but low density. Add secure wall-mount cabinet. | | | | | | |
| Technology: Intermediate Telecommunications Room UPS does not meet standards, is inadequate, or non-existent. | Technology | 1 | Ea. | 3 | $4,753 | 18457 |
| **Note:** IDF does not have adequate UPS unit, add UPS unit. | | | | | | |
| Technology: Main Telecommunications Room ground system is inadequate or non-existent. | Technology | 1 | Ea. | 3 | $6,655 | 18453 |
| **Note:** MDF lacks grounding system, add grounding system. | | | | | | |
| Technology: Main Telecommunications Room needs M/E improvements. | Technology | 1 | Ea. | 3 | $29,281 | 18452 |
| **Note:** MDF could use minor renovations to bring to standard | | | | | | |
| Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. | Technology | 1 | Ea. | 3 | $428 | 18460 |
| **Note:** Select cables do not meet industry standards (Category 5e) or better. Refresh selected cables. | | | | | | |
| Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. | Technology | 40 | Ea. | 3 | $17,113 | 18473 |
| **Note:** Select cables do not meet industry standards (Category 5e) or better. Refresh selected cables. | | | | | | |
| Technology: Network cabling infrastructure is partially outdated and/or needs expansion. | Technology | 144 | Ea. | 3 | $61,605 | 18465 |
| **Note:** Classrooms have one (1) data drops, add four (4) drops per classroom. | | | | | | |
| Technology: Network cabling infrastructure is partially outdated and/or needs expansion. | Technology | 144 | Ea. | 3 | $61,605 | 18477 |
| **Note:** Classrooms have one (1) data drops, add four (4) drops per classroom. | | | | | | |
| Technology: Security cameras and recording system are inadequate and/or near end of useful life. | Technology | 48 | Ea. | 3 | $228,167 | 18467 |
| **Note:** Campus has video surveillance system with 12 analog cameras, and front door intercom, refresh and add 36 cameras. | | | | | | |
| Technology: Security cameras and recording system are inadequate and/or near end of useful life. | Technology | 16 | Ea. | 3 | $76,056 | 18478 |
| **Note:** Campus has video surveillance system with 8 analog cameras, and front door intercom, refresh and add 8 cameras (high school combined building). | | | | | | |
| Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements. | Technology | 1 | Ea. | 3 | $4,753 | 18459 |
| **Note:** IDF does not have independent AC, add AC unit. | | | | | | |
| | **Sub Total for System** | **29** | **items** | | **$2,593,350** | |

## Specialties

| Deficiency | Category | Qty | UoM | Priority | Repair Cost | ID |
|---|---|---|---|---|---|---|
| Room has insufficient writing area. | Educational Adequacy | 4 | Ea. | 3 | $4,742 | Rollup |
| The Metal Student Lockers Require Replacement | Capital Renewal | 300 | Ea. | 4 | $147,596 | 4555 |
| **Note:** Lockers are dented with broken doors. | | | | | | |
| **Location:** Locker rooms | | | | | | |
| Room lacks an appropriate refrigerator. | Educational Adequacy | 8 | Ea. | 5 | $47,606 | Rollup |
| | **Sub Total for System** | **3** | **items** | | **$199,944** | |
| | **Sub Total for Building 01 - Main Building** | **146** | **items** | | **$6,152,641** | |
| | **Total for Campus** | **151** | **items** | | **$8,799,284** | |

## Buildings with no reported deficiencies

02 - Storage

03 - Public Works

04 - Pump House

# Scituate Middle School & High School - Life Cycle Summary Yrs 1-10

## Site Level Life Cycle Items

### Site

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Fences and Gates | Fencing - Chain Link (8 Ft) | 1,200 | LF | $80,673 | 5 |
| Playfield Areas | HS Athletic Components | 1 | Ea. | $452,935 | 5 |
| **Note:** | Football field | | | | |
| Roadway Pavement | Asphalt | 58 | CAR | $191,894 | 5 |
| Parking Lot Pavement | Asphalt | 250 | CAR | $827,130 | 5 |
| Parking Lot Pavement | Asphalt | 100 | CAR | $330,852 | 10 |
| | **Sub Total for System** | **5** | **items** | **$1,883,485** | |
| | **Sub Total for Building -** | **5** | **items** | **$1,883,485** | |

## Building: 01 - Main Building

### Roofing

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Low-Slope Roofing | Single Ply | 110,000 | SF | $1,411,785 | 4 |
| Canopy Roofing | Canopies | 1,000 | SF | $57,042 | 5 |
| | **Sub Total for System** | **2** | **items** | **$1,468,827** | |

### Exterior

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Exterior Window Wall | Storefront / Curtain Wall (Bldg SF) | 23,656 | SF | $1,907,126 | 4 |
| Exterior Wall Veneer | Stucco - Bldg SF basis | 9,098 | SF | $304,391 | 5 |
| Exterior Wall Veneer | Metal Panel - Bldg SF basis | 1,820 | SF | $173,027 | 5 |
| Exterior Operating Windows | Aluminum - Windows per SF | 300 | SF | $50,767 | 5 |
| Exterior Entrance Doors | Steel - Insulated and Painted | 43 | Door | $275,940 | 5 |
| Exterior Utility Doors | Overhead | 3 | Door | $110,376 | 5 |
| Exterior Wall Veneer | Brick - Bldg SF basis | 72,786 | SF | $3,321,477 | 10 |
| Exterior Wall Veneer | CMU - Bldg SF Basis | 72,786 | SF | $961,568 | 10 |
| | **Sub Total for System** | **8** | **items** | **$7,104,671** | |

### Interior

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Acoustical Suspended Ceilings | Ceilings - Acoustical Grid System | 145,573 | SF | $1,726,569 | 4 |
| Acoustical Suspended Ceilings | Ceilings - Acoustical Tiles | 145,573 | SF | $1,314,760 | 4 |
| Resilient Flooring | Vinyl Composition Tile Flooring | 147,392 | SF | $1,690,843 | 4 |
| Interior Swinging Doors | Wood | 145 | Door | $668,578 | 5 |
| Interior Coiling Doors | Overhead | 4 | Door | $147,168 | 5 |
| Interior Door Supplementary Components | Door Hardware | 230 | Door | $721,579 | 5 |
| Suspended Plaster and | Painted ceilings | 36,393 | SF | $152,234 | 5 |
| Tile Wall Finish | Ceramic Tile wall | 500 | SF | $11,123 | 5 |
| Wall Paneling | Wood Panel wall | 9,098 | SF | $83,035 | 5 |
| Wall Painting and Coating | Painting/Staining (Bldg SF) | 135,975 | SF | $898,434 | 5 |
| Flooring Treatment | Concrete Floor - Finished | 18,197 | SF | $236,928 | 5 |
| Tile Flooring | Ceramic Tile | 1,821 | SF | $48,901 | 5 |
| Wood Flooring | Wood Flooring - All Types | 1,820 | SF | $60,386 | 5 |
| **Note:** | Stage and band room | | | | |
| Resilient Flooring | Rubber Tile Flooring | 9,098 | SF | $169,962 | 5 |
| **Note:** | Ramps and locker rooms | | | | |
| Carpeting | Carpet | 1,820 | SF | $39,596 | 5 |
| Stone Facing | Brick/Stone veneer | 36,393 | SF | $1,155,597 | 10 |
| Athletic Flooring | Athletic/Sport Flooring | 1,820 | SF | $62,290 | 10 |
| **Note:** | Auxiliary gym | | | | |
| | **Sub Total for System** | **17** | **items** | **$9,187,982** | |

### Mechanical

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Decentralized Cooling | Window Units | 5 | Ea. | $16,694 | 4 |
| Decentralized Heating Equipment | Unit Heater Steam/HW (250 MBH) | 18 | Ea. | $60,955 | 4 |
| **Note:** | Cabinet unit heater | | | | |

## Mechanical

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Air Distribution | Energy Recovery Unit (4,000 CFM) | 4 | Ea. | $94,667 | 5 |
| Air Distribution | Energy Recovery Unit (10,000 CFM) | 1 | Ea. | $35,075 | 5 |
| Decentralized Heating Equipment | Radiant Heater - Radiator Water | 5 | Ea. | $25,830 | 5 |
| Exhaust Air | Roof Exhaust Fan - Large | 20 | Ea. | $277,870 | 5 |
| Exhaust Air | Roof Exhaust Fan - Large | 3 | Ea. | $41,680 | 5 |
| HVAC Air Distribution | AHU 2,000 CFM Outdoor | 4 | Ea. | $230,487 | 6 |
| HVAC Air Distribution | AHU 10,000 CFM Outdoor | 1 | Ea. | $285,209 | 6 |
| HVAC Air Distribution | Ductwork (Bldg.SF) | 181,966 | SF | $2,675,111 | 6 |
| Decentralized Heating Equipment | Heating Unit Vent - Steam/Hot water | 41 | Ea. | $693,507 | 8 |
| Facility Hydronic Distribution | Pump - 1HP or Less (Ea.) | 5 | Ea. | $38,142 | 8 |
| Heat Generation | Boiler - Cast Iron - Water (1275 MBH) | 2 | Ea. | $150,608 | 9 |
| Decentralized Heating Equipment | Finned Wall Radiator - (Ea.) | 79 | Ea. | $132,335 | 9 |
| Decentralized Heating Equipment | Unit Heater Steam/HW (400 MBH) | 5 | Ea. | $32,257 | 9 |
| Heating System Supplementary Components | Controls - DDC (Bldg.SF) | 181,966 | SF | $1,095,661 | 10 |
| | **Sub Total for System** | **16** | **items** | **$5,886,088** | |

## Electrical

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Electrical Service | Switchgear - Main Dist Panel (1200 Amps) | 2 | Ea. | $138,117 | 4 |
| Power Distribution | Panelboard - 120/208 100A | 21 | Ea. | $101,820 | 8 |
| Lighting Fixtures | Canopy Mounted Fixtures (Ea.) | 12 | Ea. | $16,542 | 8 |
| Lighting Fixtures | Building Mounted Fixtures (Ea.) | 25 | Ea. | $37,315 | 8 |
| Wiring Devices | Electrical Disconnect | 3 | Ea. | $5,499 | 8 |
| Lighting Fixtures | Light Fixtures (Bldg SF) | 181,966 | SF | $1,081,216 | 8 |
| Power Distribution | Panelboard - 120/208 225A | 8 | Ea. | $46,394 | 10 |
| Power Distribution | Panelboard - 120/208 400A | 2 | Ea. | $12,549 | 10 |
| Power Distribution | Panelboard - 120/208 225A | 6 | Ea. | $34,796 | 10 |
| Packaged Generator Assemblies | Emergency Generator (100 KW) | 1 | Ea. | $104,577 | 10 |
| Transfer Switches | Automatic Transfer Switch (Amps) | 400 | Amps | $14,287 | 10 |
| | **Sub Total for System** | **11** | **items** | **$1,593,111** | |

## Plumbing

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Domestic Water Equipment | Backflow Preventers - 2 in. (Ea.) | 1 | Ea. | $3,921 | 5 |
| Plumbing Fixtures | Showers | 21 | Ea. | $159,717 | 5 |
| Plumbing Fixtures | Urinals | 18 | Ea. | $23,923 | 6 |
| Plumbing Fixtures | Toilets | 42 | Ea. | $119,788 | 6 |
| Plumbing Fixtures | Restroom Lavatories | 38 | Ea. | $120,879 | 6 |
| Plumbing Fixtures | Mop/Service Sinks | 12 | Ea. | $30,917 | 6 |
| Facility Potable-Water Storage Tanks | Water Storage Tank - 250 Gallon | 3 | Ea. | $67,880 | 8 |
| | **Sub Total for System** | **7** | **items** | **$527,025** | |

## Fire and Life Safety

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Fire Detection and Alarm | Fire Alarm | 181,966 | SF | $533,342 | 9 |
| | **Sub Total for System** | **1** | **items** | **$533,342** | |

## Conveyances

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Elevators | Hydraulic (Passenger Elev) | 1 | Ea. | $285,209 | 10 |
| | **Sub Total for System** | **1** | **items** | **$285,209** | |

## Specialties

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Casework | Lockers | 950 | Ea. | $467,386 | 5 |
| Casework | Fixed Cabinetry | 8 | Room | $89,502 | 5 |
| | **Sub Total for System** | **2** | **items** | **$556,889** | |
| | **Sub Total for Building 01 - Main Building** | **65** | **items** | **$27,143,144** | |

## Building: 02 - Storage

### Electrical

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Lighting Fixtures | Light Fixtures (Bldg SF) | 150 | SF | $891 | 10 |
| | **Sub Total for System** | **1** | **items** | **$891** | |

### Fire and Life Safety

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Fire Detection and Alarm | Fire Alarm | 150 | SF | $440 | 9 |
| | **Sub Total for System** | **1** | **items** | **$440** | |
| | **Sub Total for Building 02 - Storage** | **2** | **items** | **$1,331** | |

## Building: 03 - Public Works

### Interior

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Wall Painting and Coating | Painting/Staining (Bldg SF) | 5,000 | SF | $33,037 | 3 |
| Carpeting | Carpet | 300 | SF | $6,527 | 6 |
| Wall Painting and Coating | Painting/Staining (Bldg SF) | 5,000 | SF | $33,037 | 10 |
| | **Sub Total for System** | **3** | **items** | **$72,600** | |

### Fire and Life Safety

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Fire Detection and Alarm | Fire Alarm | 5,000 | SF | $14,655 | 9 |
| | **Sub Total for System** | **1** | **items** | **$14,655** | |
| | **Sub Total for Building 03 - Public Works** | **4** | **items** | **$87,255** | |

## Building: 04 - Pump House

### Roofing

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Steep Slope Roofing | Composition Shingle | 50 | SF | $1,426 | 10 |
| | **Sub Total for System** | **1** | **items** | **$1,426** | |

### Mechanical

| Uniformat Description | LC Type Description | Qty | UoM | Repair Cost | Remaining Life |
|---|---|---|---|---|---|
| Decentralized Heating Equipment | Unit Heater Steam/HW (36 MBH) | 1 | Ea. | $1,647 | 9 |
| | **Sub Total for System** | **1** | **items** | **$1,647** | |
| | **Sub Total for Building 04 - Pump House** | **2** | **items** | **$3,073** | |
| | **Total for: Scituate Middle School & High School** | **78** | **items** | **$29,118,287** | |

## Supporting Photos

Exterior Finishes

Science Classroom

Exterior Brick


Plaque


South Elevation


Typical Restroom Lavatories


Band Classroom

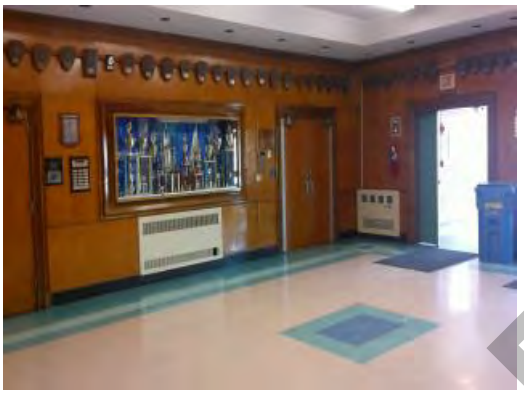

Site Aerial


Senior High Cafeteria


Main Gymnasium


Art Classroom


Typical Middle School Classroom


Lobby


Typical Senior High Classroom

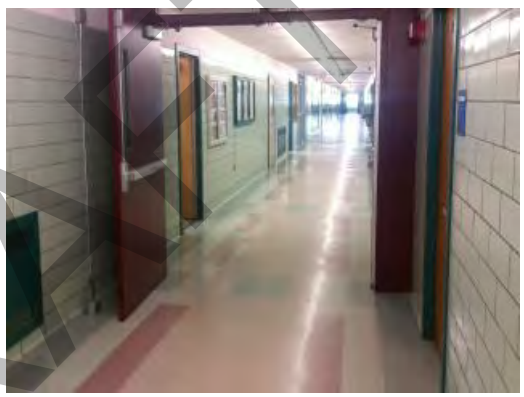

Middle School Cafeteria


Music Classroom


Greenhouse


Band Room


Library


Hallway Finishes


Northwest Elevation


Auditorium


Toilet Partitions


Art Room


Library


Auxiliary Gymnasium


East Elevation


Plaque

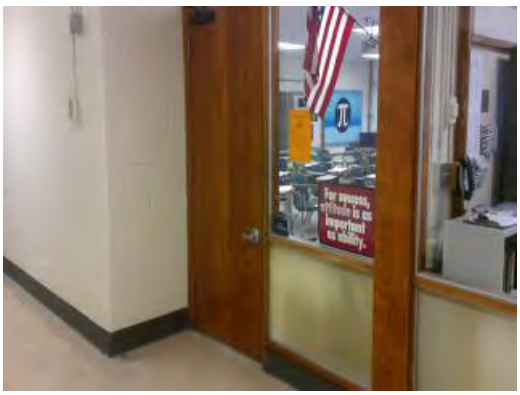

Lab Fume Hood Exhaust


Outdated Fume Hood


Greenhouse Fans

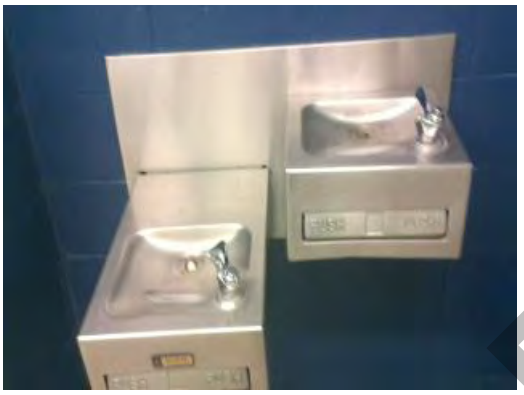

Worn Soffit Paint

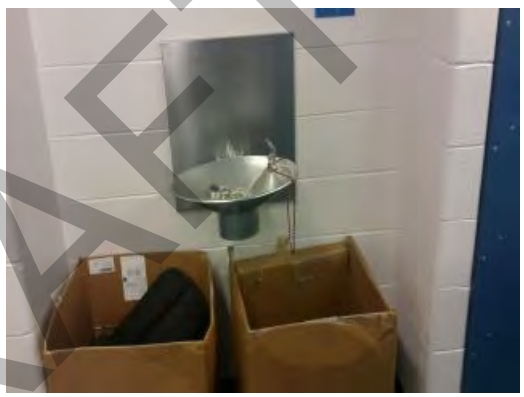

Lifted Joint Cover With Damaged VCT


Non-Compliant Door Hardware


Damaged Canopy Roof Edge


Damaged Canopy Roof Edge


Damaged Drinking Fountains


Non-Functional Drinking Fountain


Corroded Pumps

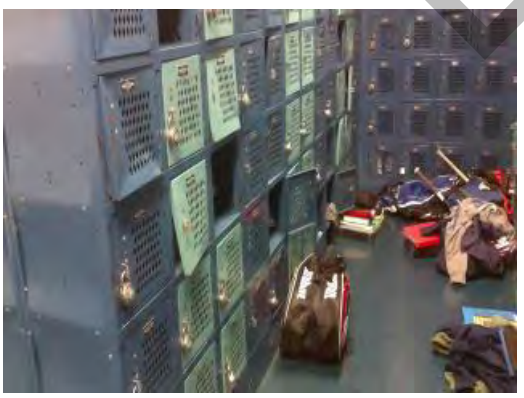

Non-Functional Drinking Fountain


Aged Air Handler


Corroded Pumps


Typical Deteriorating Radiant Heater


Typical Aged Radiant Heater


Damaged Lockers


Aged Distribution Panel

Building Exterior

Dented Lockers