## Facility Condition Assessment Summary Report

*This report provides a summary of the Facility Condition Index (FCI) value of a school facility and select major building systems. The FCI calculation represents the cost of needed repairs divided by the replacement value. The FCI is a numerical value of condition and helps to identify the need for renewal or replacement of specific parts of the facility. The FCI is particularly useful when comparing similar facilities within the same portfolio.*

## Olney High School

| | | | |
|---|---|---|---|
| Governance | CHARTER | Report Type | High |
| Address | 100 W. Duncannon Ave.<br>Philadelphia, Pa 19120 | Enrollment | 1818 |
| | | Grade Range | '09-12' |
| Phone/Fax | 215-456-3014 / 215-456-3064 | Admissions Category | Neighborhood |
| Website | Www.Aspirapa.Org/Schools/Olney-Charter/ | Turnaround Model | Renaissance Charter |

## Building/System FCI Tiers

**Facility Condition Index (FCI) = Cost of Assessed Deficiencies / Replacement Value**

| < 15% | 15 to 25% | 25 to 45% | 45 to 60% | > 60% |
|---|---|---|---|---|
| **Buildings** | | | | |
| Minimal Current Capital Funding Required | Refurbish Systems in building | Replace Systems in building. | Building should be considered for major renovation. | Building should be considered for closing/replacement. |
| **Systems** | | | | |
| Perform routine maintenance on system | System requires minor repairs | System should be studied to determine repair vs. replacement. | System is nearing end of its life expectancy and should be considered for replacement | System should be replaced as part of the Capital Program |

## Building and Grounds

| | FCI | Repair Costs | Replacement Cost |
|---|---|---|---|
| **Overall** | **37.73%** | **$65,630,045** | **$173,951,916** |
| Building | 37.13 % | $62,705,508 | $168,884,158 |
| Grounds | 57.71 % | $2,924,537 | $5,067,758 |

## Major Building Systems

| Building System | System FCI | Repair Costs | Replacement Cost |
|---|---|---|---|
| **Roof** (Shows physical condition of roof) | 89.59 % | $1,863,511 | $2,080,100 |
| **Exterior Walls** (Shows condition of the structural condition of the exterior facade) | 01.13 % | $161,447 | $14,350,392 |
| **Windows** (Shows functionality of exterior windows) | 29.06 % | $2,656,495 | $9,141,731 |
| **Exterior Doors** (Shows condition of exterior doors) | 107.91 % | $415,796 | $385,335 |
| **Interior Doors** (Classroom doors) | 114.58 % | $1,431,176 | $1,249,016 |
| **Interior Walls** (Paint and Finishes) | 11.76 % | $366,669 | $3,118,564 |
| **Plumbing Fixtures** | 00.00 % | $0 | $4,491,141 |
| **Boilers** | 00.00 % | $0 | $6,201,894 |
| **Chillers/Cooling Towers** | 69.19 % | $5,626,151 | $8,131,889 |
| **Radiators/Unit Ventilators/HVAC** | 73.30 % | $10,467,750 | $14,280,633 |
| **Heating/Cooling Controls** | 136.47 % | $6,119,992 | $4,484,498 |
| **Electrical Service and Distribution** | 98.53 % | $3,174,773 | $3,222,195 |
| **Lighting** | 41.98 % | $4,835,912 | $11,520,176 |
| **Communications and Security** (Cameras, Pa System and Fire Alarm) | 14.31 % | $617,600 | $4,315,083 |

*Please note that some FCIs may be over 100% because there are times when replacing a building system requires that other building systems be upgraded to complete the installation. A FCI of 0.0% represents that there are no current deficiencies with the associated system.*

School District of Philadelphia

# S705001;Olney HS

Final

## Site Assessment Report

February 1, 2017

PARSONS

# Table of Contents

## Site Executive Summary

The organization of this report, as displayed in the Table of Contents, follows the structure of the associated eCOMET database. The overall node for each school campus begins with the letter "S", which indicates the "Site" label. Each Site is comprised of separate "Building" and "Grounds" nodes; their asset names begin with the letters "B" and "G" respectively. Information rolls up to the Site node from the Building and Grounds nodes. This Site report combines facility information with subsections for the Buildings And Grounds nodes.

The basis for the evaluation of condition is the functional systems and elements of a building and grounds organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are typically developed for similar building types and functions. Evaluation of systems and their elements takes into account their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) is an industry-standard measurement calculated as the ratio of the repair costs to correct a facility's deficiencies to the facility's Current Replacement Value. Condition Index (CI) for a system is calculated as the sum of a the deficiencies divided by the sum of a system's Replacement Value (both values include soft-cost) expressed as a percentage ranging from 0% 100%.

| | |
|---|---|
| Gross Area (SF): | 332,185 |
| Year Built: | 1931 |
| Last Renovation: | |
| Replacement Value: | $173,951,916 |
| Repair Cost: | $65,630,045.14 |
| Total FCI: | 37.73 % |
| Total RSLI: | 54.87 % |

**Description:**

Facility Assessment

August 2015

School District of Philadelphia

Olney Charter High School (ASPIRA)

100 W Duncannon Ave

Philadelphia, PA 19120

332,185 SF / 2,300 Students / LN 07

GENERAL

The Olney High School identified as B705001 is located on the western most section of the Olney campus that includes the high school

and the Olney Sports Complex. The school is currently identified as The Olney Charter High School and is operated by ASPIRA Corporation. This school is a historic high school building generally identified in the Olney neighborhood of Philadelphia. This school was reported to have been designed by Irwin T. Catharine and built in 1929-1930 as a granite based brick building with Late Gothic Revival-style featuring Gothic arched opening and limestone details. This school was added to the National Register of Historic Places in 1986.

Currently shaped like an asymmetrical U, the southern and eastern sections were built in 1968. The industrial design of the rectangle-shaped, concrete- and steel-framed building includes brick facades with a concrete foundation. The main building has five stories and a full basement and two additions. One addition is the vocational building consisting of one floor. The second addition is a combination gym classroom building on the south west section of the site connected to the main building.

The main entrance faces the Northern exterior facing East Duncannon Avenue. This School serves students in grades 9 to 12. This school consists of a total gross square footage of 332,185 GSF.

This school has several classrooms, a library, kitchen and student commons, Gym, Auditorium and cafeteria, with supporting administrative spaces. The information for this report was collected during a site visit on August 19, 2015.

Mr. Joe Boyd, Building Engineer, and Mr. Andrew Green, Engineer, accompanied the assessment team on a tour of the school and provided detailed information on the building systems and maintenance history. Mr. Thomas Darden, Chief Operations Officer with ASPIRA, also shared information about the school.

Architectural / Structural Systems

The foundations of this school are concrete and granite and sound with no issues that surfaced during the time of the inspection. There are no recommendations for the foundations required at this time.

The exterior brick surfaces are generally in fair to good condition for their age. In some locations, bricks have cracked or spalled and should be replaced. The repointing of deteriorated mortar joints is also recommended, using mortar of a similar color and consistency as the original. Following the detailed examination of the brick and repair of mortar construction joints, the entire building should be pressure washed to remove stains and embedded pollutants. If moisture is found to be penetrating the masonry facade, the application of a spray sealant to the suspected exterior masonry surface is recommended.

There is evidence of water infiltration through the basement foundations wall. Excavation and waterproofing system upgrades are recommended. Improve the slope of the grade away from the foundation prior to restoring the landscaping system.

The exterior windows are a mix of the original industrial metal framed single pane applications for the modified shop classrooms and industrial rooms and aluminum framed applications in the classrooms and administrative areas. Some of the windows are operable while others no longer function. The exterior windows have exceeded the expected life cycle for this type of application. It is recommended that the exterior window system be replaced with units that retain their dimensions and profiles, but that incorporate updated energy-efficient features. Note: Several windows show evidence of fire arms activity in the local neighborhood. As indicated in the photos the integrity of the windows is driving the replacements for these specific conditions.

There several exterior overhead doors in the converted vocational building. These applications are metal applications with metal frames. The doors are in fair condition but are aging at a faster rate than expected based on traffic and condition. The overhead exterior door system is recommended for upgrade.

The exterior doors are metal applications with metal frames. The exterior door system for this school is a very high traffic system. The doors are in fair condition but are aging at a faster rate than expected based on traffic and condition. The exterior door system, store front and service doors are recommended for upgrade. Special Note: The bricked over exterior doors to the new gym are included in this estimate.

There are a number of roof sections and different roof elevations ranging from the main roof to the mechanical roof. Parapet heights, coping materials, and the height of the flashing also varies in different sections. The main roof is a built up application that was installed in the early 1990'S. The other built up roofs have not conclusive installation dates and have been seal coated several times to extend the life cycle of the application. Considering the age and condition of the roofing systems, universal upgrades are recommended. Remove and replace all roof sections.

Special consideration for those that may be physically challenged was a main not factor in the last re-construction effort for this school. The exterior ADA ramp in the parking area on the southern exterior of the school is the only option the physically challenged

has to enter the school. The path of travel is not very clear from that entrance of the school and from the access points. The interior path of travel is partially supported by two elevators, Interior access ramps, some door hardware, hand rails and guard rails. However, the building has received limited upgrades and does not fully support a path of travel for those that may be physically challenged. Included in this report are modification that allow for considerations to enhance the upgrades required to support the physically challenged.

The present floor plan arrangement has the elevator lobbies opening up into the existing hall corridors. IBC 2000 states that elevators opening into a fire resistant corridor shall be provided with an elevator lobby at each floor containing such a corridor. The lobby should completely separate the elevators from the corridor with rated partitions. Elevator lobbies need to have at least one means of egress and contain smoke detectors. This deficiency recommends the construction of fire resistant barrier with automatically closing fire doors to be installed between the elevator lobbies and the corridors to provide the required separation and protection.

This building has adequate exit pathways and no egress obstructions were noted during our building walk through. However the corridor doors on all floors are not fire rated and should be upgraded. Install new fire rated flush wood doors on all floor corridors. If the recommended lever hardware and room signage has not been implemented then these features should be incorporated into the work scope.

A large portion of the interior corridor, exit stair doors are not code compliant. Several doors are typically metal in metal frames with transom lites or sidelights, glass glazing. The older doors are generally in good condition considering the age of the application. To restore the door finishes, universal upgrades are required for the older door applications. Remove and replace original door systems with new code compliant fire rated door system. As indicated in the photos several doors have been removed from the frames. In these cases additional effort may be required to provide compliant closers and fire alarm assist.

This schools science labs have been upgraded from the original construction with interior service desk with sink and demonstration areas. The wall mounted storage cabinets and cabinets with sinks for student use appear to be the original woodwork and millwork. The system is showing signs of age and lack of maintenance such as broken sink fixtures missing cabinet doors and damaged shelves. This deficiency provides a budgetary consideration for the universal upgrade of the science teaching labs to include new counter tops, sink, cabinets, shelves and fixtures required to support a conducive level of education.

There are several movable partitions that remain in classrooms. These wall systems are no longer used and in most cases cannot be used due to damage or wall modifications to support classroom needs. This deficiency provides a budgetary consideration to remove and replace the wall systems with universal removal of the existing movable partitions and upgrades to a permeate wall systems.

Interior doors are typically wood in wood frames with transom lites, sidelights, wired glass glazing. Other interior doors include wooden glass pane doors with original wooden pane frames, hollow metal in hollow metal frames. Doors are generally in good condition considering the age of the application. Universal upgrades are required for the interior door systems it is recommended that the interior doors system be removed and replaced with a new modern metal framed hollow metal door system with consideration for ADA compliance. Special Note: The double door systems leading to the auditorium are elevated on wooden stairs and the door swing exceeds the stair elevation creating a pinch hazard. The modification to the auditorium door systems are recommended to include stair modifications to correct this issue.

There are sections of this school that have interior paths of travel issues that are related to classroom security and storage issues. Care should be taken to review each door that is blocked by cabinets or for security issues to ensure if necessary exit paths are open and free.

The restroom partitions are a mix of marble, plastic and wooden finishes. The marble finish partitions are in good condition however, the plastic and wooden restroom partitions are in fair condition considering the age and high traffic use. The wooden and plastic partitions are recommended for universal removal and replacement.

There are several tack boards in the hallways for student displays. The systems are damaged and beyond the expected service life for this application. Remove and replace tack boards is recommended.

The classroom chalk boards are original to the buildings construction. This system is damaged and beyond its expected life, universal upgrades are warranted. Remove and upgrade chalkboards to new marker board systems.

There is no directional signage and room signage is a custom design in places and scarce or painted with no consistency in others. Accessibility signage criteria have been established for the physically challenged. These include mounting heights, contrast and finish, raised and Braille characters and pictograms, and character proportions and heights. It is recommended that compliant signage be installed throughout the building.

Current requirements for stairs indicate that they have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread/riser angle). Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future efforts should include comprehensive stair railing removal and replacement upgrades.

The lobby and most the lower floors of this school has a combined marble and painted wall finish while remaining sections of the school consist of a painted CMU or interior brick finish. While using similar materials, the interior finishes vary significantly between the older and newer sections of the school. Portions of the southern vocational wing were updated in 2000. The main Gym, some classrooms, and office space, most of its corridor floors are concrete or vinyl tile, with painted masonry block walls or marble walls in the older sections and sealed unpainted concrete masonry unit (CMU) in the newer sections. The majority of the finishes are in fair condition. However, there are several minor areas of wall damage that ranges from serious to minor. Although the school is on a cyclical program of renewal and each painted surface is renewed at years end this system is at the point in which repairs are necessary. Remove damaged wall finishes and repair areas then apply primer and paint finish.

The tile wall finishes appear to have been replaced in the early 1990's and are in fair condition. The finish is expected to require upgrade within the next ten years based on the high traffic use in this school. This deficiency provides a budgetary consideration for universal upgrades to the wall tile finish.

The floor finish for this school is a combination of carpet in the administrative area, tile in the kitchen and service line areas, wooden classrooms with concrete hallways and stirs finishes and a vinyl tile finish. These interior floor finishes are in good condition considering the age of the applications and there were no issues that surfaced during the time of the inspection therefore no projects or recommendations are required at this time. However, the vinyl tile finish is a 9 x 9 application and is suspect to contain asbestos. This finish is recommended for upgrade to a new 12 x 12 vinyl tile application.

The classrooms and auditorium in this school have a wooden floor finish that appears to be from original construction. The system is showing signs of age such as the effects of sanding and refinishing with yearly cleaning and waxing with some repairs. The floor finish is in fair condition however, the finish is beyond its expected life cycle. It is recommended that the wooden floor finish be removed and replaced with an in kind finish.

The main GYM floor finish is beyond its expected life cycle for this application. Recent repairs have eliminated the trip hazards however, there are areas that remain that warrant replacement. The floor is recommended for universal upgrade.

The ceiling finish is a mix of 12 x 12 ceiling grid, painted and 2 x 4 Acoustical tile finish. Ceilings have been repaired in several areas and is in good condition considering the age of the application and the current condition of the school. The ceiling finish is expected to require upgrades to support the recommended efforts in this report prior to re-opening. This deficiency provides a budgetary consideration for removal and replacement of the current ceiling finish to a new acoustical tile finish. Considering the recommended mechanical and electrical upgrades this effort should be completed as part of an overall renewal program for the school. No work should be considered until after the recommended exterior efforts are complete.

The boys and girls Gyms are no longer the main areas as this school had a new Gym addition constructed within the past twenty years. This new Gym is in very good condition with modern backstops and sports safety barriers. However the old Gyms are still used as either a student common area or practice court. The interior backboards and support equipment is beyond its service life. Damaged boards are recommended for removal and replacement.

The school stage has a stage curtain assembly that appears to be from the original construction. Modern applications are typically fire -proof applications with adjustable tracks and electric support for operation. The curtains are torn in a few section and the track is not functioning properly, overall the system is in poor condition. It is recommended that the curtain and track system be upgraded to a new system. Special care should be considered in regards to modern fire proofing for the new installation.

The fixed seating for this school is from the original construction. The systems are in fair condition considering the age and usage. This project provides a budgetary consideration for universal upgrades for the fixed seating and furnishing of this school. Ensure that ADA requirements are followed with the new seating layout.

MECHANICAL SYSTEMS

PLUMBING- Plumbing fixtures are standard china commercial quality with wall mounted lavatories, urinals and water closets. Most lavatories have dual wheel handle faucets and urinals and water closets have manual flush valves with lever operators. Custodial closets have cast iron service sinks or mop basins. There are some stainless steel counter top sinks and integral lab equipment sinks in

science classrooms. New water coolers with integral refrigeration are currently being installed at existing locations. Three 2008 Lochinvar gas water heaters are located in the basement mechanical room. Each heater is connected to a one hundred fifty gallon vertical storage tank and has a circulating pump. An Armstrong duplex domestic water booster pump system with 7-1/2 hp pumps and a water softener system are located in the mechanical room. There is a mezzanine level above the main mechanical room and two subbasement levels below the mechanical room, each with a duplex sump pump. One system has one operating pump and neither pump operates on the other system. Both sump pump systems should be replaced to correct an ongoing ground water problem in the lower subbasement. A six inch sewer line passing through the upper subbasement leading to the parking area backs up several times a year and flows into the plumbing fixtures in a toilet room on the mezzanine level. This line should be repaired or replaced to permanently correct this problem.

Water piping has been replaced since the original installation with copper, but may contain lead solder based on age. Sanitary, waste, vent and rainwater piping is original installation hub and spigot cast iron, with some hubless cast iron where additions or damage has occurred. Water service includes a four inch backflow preventer in the mechanical room and is connected at W. Ashdale St. Gas service is a six inch line into the mechanical room connected at N. Mascher St., and was installed last year. Gas piping is welded black steel. Kitchen waste is piped through a grease trap below the slab with a metal access cover.

The water heaters should be serviceable up to fifteen more years. Domestic water piping should be replaced based on age and normal service life. Plumbing fixtures should be serviceable twenty five more years. Cast iron sanitary and waste piping should be inspected for damage and repaired as required. Both sump pumps should be scheduled for replacement within the next five years.

HVAC-The building is heated by steam and hot water generated by three HB Smith cast iron sectional steam boilers. The boilers are model 650 Mills gas and oil fired one hundred seventy five hp each installed in 2008. The boilers were originally oil fired but converted to gas/oil last year. Each unit has a Powerflame burner and control panel with separate oil pump and is connected to a common factory fabricated vent system routed to an existing chimney. There is twenty five thousand gallon underground oil storage tank in the parking area, condition and age unknown. A duplex fuel oil pump system installed last year in the mechanical room provides circulation. The 1970 building addition is heated by a hot water system provided by two Armstrong steam to water shell and tube heat exchangers installed on the mezzanine above the mechanical room, and two Armstrong 7-1/2 hp end suction base mounted pumps. The shutoff valves and the steam control valve at the heat exchanger are seized in the open position, so there is no water temperature control. A duplex pump cast iron condensate return system and a Skidmore boiler feed unit with four pumps serves the boilers. An automatic chemical feed system is located in the mechanical room.

The original building has exposed steam radiators with control valves and traps which are mostly not operational. There are indoor and roof mounted heating and ventilating units with heating coils in the gymnasiums, library, cafeteria and both garage and addition area classrooms with ducted air distribution. Steam and hot water radiation units are located at entrances, toilet rooms, and other areas requiring heat. Five original house fan systems are inoperable. Two are in basement mechanical rooms and serve halves of the building classroom areas. Three other units serve the auditorium and other building areas.

There is no central air conditioning. The building has window air conditioners for all classrooms and two ductless split systems for IT rooms with the condensing units mounted on the exterior wall. A small DX split system serves the computer lab. Two abandoned air cooled condensing units on the addition roof were connected to two horizontal units serving the cafeteria and meeting room areas. A vertical air cooled package air conditioner in a closet serves another computer room. The fifth floor is unoccupied but has science classrooms, served by a DX split system with air ducted to each space. The kitchen has a total of four hoods. One is a double wall makeup air hood, two are heat removal only and one is for steam removal above the dishwasher. There is one hood exhaust fan connected to all the hoods on a mezzanine slab above the kitchen area. Two roof mounted units with heating coils provide make up air. Two hoods have Ansul fire suppression systems interlocked with gas solenoid valves. The boiler room has combustion air louvers with motorized dampers for combustion air, partially ducted to the floor level, and a wall propeller fan. Approximately six centrifugal roof ventilators provide toilet and locker room exhaust for the addition. The original building has no mechanical toilet exhaust. The main electrical room has an inline exhaust fan for ventilation.

Large heating water piping, steam and condensate return is insulated welded black steel, with smaller steel piping having threaded fittings. Smaller hot water piping is rigid copper. Fuel oil piping is black steel with screwed fittings.

There is no central control system. There are old pneumatic control components for heating and ventilating units and some radiators. There are two simplex control air compressors in the mechanical room. Reportedly the air piping system leaks. Boilers are individually controlled by the burner control panels.

The boilers installed in 2008 should be serviceable twenty five more years. The unit ventilators and hot water system were installed in 2006 and have an anticipated service life of fifteen more years. New central station air handling units should be installed for the cafeteria, auditorium and gymnasiums. The steam radiators and piping are original and should be replaced with a new system. The

steam piping reportedly experiences leaks at operating pressures above five psig.

FIRE PROTECTION- There are dry standpipes with fire hose connections in some stairwells. There is an automatic sprinkler system only in the unused classrooms at the garage area, with a six inch fire protection water service in the end classroom connected at Front St.

ELECTRICAL SYSTEMS

Electrical Service--The building is served by a 4.16 kV underground service from PECO Energy Company on N. Mascher Street to a medium voltage (MV) switch in a transformer vault on the south side of the building. The service is primary metered. The MV switch feeds two 120/240V, 1 phase, 2 wire oil-filled transformers that supply an 800A, 120/240V, 2 phase, 5 wire switchboard with 800A main circuit breaker and two distribution sections in the Main Electrical Room. The MV switch in the transformer vault also supplies 4.16 kV service to a 300 kVA, 4.16 kV-208/120V, 3 phase, 4 wire dry type transformer in the Main Electrical Room that feeds a 1200A, 208/120V, 3 phase switchboard. It was reported by the Building Engineer that these switchboards do not have adequate capacity to serve the current building load, resulting in nuisance tripping of circuit breakers. Both the 120/240V and 208/120V switchboards have exceeded the end of their useful life and need to be replaced. There are also several other safety switches in NEMA 1 enclosures that are fed from these switchboards, which should be removed and their loads fed from new switchboards.

Consideration should be given to replacing the existing service equipment and providing load interrupter switches to feed two unit load center substations, one rated 480/277V to serve mechanical loads and central air condition equipment, and one rated 208/120V to replace the existing 120/240V and 208/120V switchboards.

The 120/240V and 208/120V switchboards feed panelboards located in the Boiler Room and on each floor. Most of these panelboards have reached the end of their useful life and need to be replaced. There is a 225A, 120/240V, 2 phase, 5 wire knife blade panelboard with exposed bus in the Boiler Room. Panelboards on the floors are recessed in corridor walls, typically at each stairway and in the east and west corridors. There are approximately 38 panelboards and their feeder conductors that need to be replaced.

Receptacles-- Most classrooms are typically supplied with only two or three duplex receptacles and are not adequate. Some of these "older" receptacles are 2-wire non-grounding type and need to be replaced with 3-wire grounding type. Only a few classrooms had surface metal raceway provided for additional receptacles; most classrooms still need additional receptacles. An allowance for providing 90 classrooms with surface metal raceway and additional receptacles, and for replacement of approximately 180 receptacles with 3-wire grounding type is included in this report.

The receptacles in the kitchen are not ground-fault circuit-interrupting (GFCI) type and need to be replaced with GFCI type to comply with NFPA 70, National Electrical Code (NEC) Article 210.8.

Lighting--The fixture types in corridors vary by floor. There are 2x4 surface mounted modular fluorescent fixtures with acrylic prismatic lenses in the Basement and Floor 5. The Basement fixtures have T8 lamps and Floor 5 fixtures have T12 lamps. The corridors on Floors 1 through 4 are generally 2x4 recessed parabolic troffers with T8 lamps that are in good condition. However, there are some areas in the corridors that still have lensed fixtures that have T12 lamps and need to be replaced. Many of the modular fluorescent fixtures in the Basement and parabolic troffers on Floor 1 are damaged or have missing lenses and need to be maintained.

Fixture types in classrooms vary widely. Most classrooms in the Basement are 4 foot, 2 lamp T12 industrial fluorescent fixtures. Most of the classrooms on Floors 1 through 5 have stem mounted fluorescent wraparound fixtures with acrylic lenses and T12 lamps; few classrooms have 2x4 lay-in grid fluorescent fixtures or surface mounted modular fluorescent fixtures with T12 lamps in rooms. Most classrooms have two switches for lighting control. There are only a few classrooms that had lighting upgrades, typically in science and computer classrooms. In general, approximately 147 classrooms (approximately 127,400 SF) need to have lighting fixtures and switches replaced.

An allowance is included in this report for 95,000 SF of lighting upgrades in staff areas, offices, cafeteria, serving, kitchen, locker rooms, toilet rooms, and other similar spaces.

The main entrance vestibule, corridor and auditorium are illuminated with period style incandescent fixtures. Surface mounted fixtures are located above and below the balcony and pendant mounted fixtures above the house floor. There are several fixtures that need to be maintained and re-lamped. It is recommended that fixtures be re-lamped with LED lamps to reduce energy consumption and maintenance costs.

There are also wall mounted cylinder fixtures on the back and side walls of the auditorium that serve as emergency lighting. The stage has three (3) rows of theatrical lighting fixtures and incandescent worklights with R-lamps.

The gymnasiums in the Basement of the main building are illuminated with pendant mounted metal halide industrial style lighting fixtures. There are also incandescent fixtures that provide emergency lighting in the gyms. The school reports that there have been several maintenance issues with the lighting fixtures in the gyms. The (28) metal halide fixtures in these gyms should be replaced to preclude continuing maintenance issues.

The gymnasium in the southwest Basement (identified as Element 3), is illuminated with (28) 4 foot surface mounted, 4 lamp fluorescent fixtures with T5 lamps and (8) pendant mounted metal halide fixtures. Several of the fluorescent fixtures are not illuminated; maintenance and lamp replacement is needed.

There are fluorescent strip fixtures with T12 lamps in the locker rooms in southwest Basement, several of them that are not illuminated. The shower rooms have incandescent ceiling mounted fixtures that are not suitable for damp/wet locations. All of the fixtures in the locker and shower rooms need to be replaced with energy efficient fixtures suitable for their application.

The kitchen is illuminated with 8 foot, 4 lamp lensed wraparound fixtures with T12 lamps and need to be replaced.

The Boiler Room has 4 foot industrial fluorescent fixtures with T8 lamps and is adequately illuminated. The Main Electrical Room has 4 foot industrial fluorescent fixtures with T12 lamps and need to be replaced.

The loading dock is illuminated with ceiling mounted incandescent fixtures that are not suitable for the application. All exterior fixtures at the loading dock should be replaced with vapor-tight LED lighting fixtures.

Wall mounted lighting fixtures are located on the exterior of the building at exit discharges.

Fire Alarm System-- The fire alarm system control panel (FACP) is a Siemens Model MXL addressable type that is located in the Main Electrical Room. Remote annunciator panels are located at the Main Entrance, in the Main Office and in the Building Engineer's office. The system includes manual pull stations, audio/visual notification appliances and smoke detectors in elevator lobbies and machine room and Main Electric Room.

Audible and visual notification appliances are provided in corridors, restrooms, auditorium, gymnasiums, library, cafeteria and kitchen. Notification appliances need to be provided in all classrooms. Heat detectors need to be provided in elevator machine rooms. The FACP should be replaced with fire alarm system upgrade.

Telephone/LAN—Telephones and hard wired data outlets are provided in classrooms. The telephone system is VoIP. Wireless access points are provided in classrooms, corridors, auditorium, gymnasiums, library and cafeteria for Wi-Fi service throughout the entire school. The Main IT Server is located in Room 205. Some classrooms also have wall data hubs.

Public Address/Paging/Sound Systems-- The paging system is accessed through the telephone system. The amplifiers for the paging system are located in Main IT Server Room 205. Each classroom has a ceiling or wall mounted paging speaker that also serves for class changes. There are also paging speakers in corridor ceilings. The obsolete speakers have been abandoned in place in both classrooms and corridors. This system is estimated to have 10 years of useful life remaining. A portable sound system is used in the auditorium and gymnasium.

Clock and Program System--There is a clock system that is reported to be operational and in good condition with an estimated remaining useful life of 10 years. Clocks are provided in all classrooms and all other common areas. The paging system is used for program changes.

Television System-- There is a television system in this school. Classrooms are provided with coax TV outlets; many of the rooms have televisions. Several of the classrooms have a smart board.

Video Surveillance and Security Systems-- Interior video surveillance cameras provide coverage of all corridors, classrooms, auditorium, gymnasiums, cafeteria, stairwells and exit vestibules. Cameras are typically located at the intersection of corridors. Exterior cameras are building mounted and provide coverage of the site and entrances. There are a total of 408 surveillance cameras, including 38 exterior cameras that are monitored on 11 monitors in Camera Room 121. The video surveillance cameras have been installed since 2011 and are in good condition, with 11 years of useful life remaining.

Magnetic door contacts are provided on exterior and stairwell doors. There is also an Aiphone intercom system at the Main Entrance to the school.

Emergency Power System--There is an Onan 45 kW/56.3 kVA, 208/120V, 3 phase 4 wire standby generator with natural gas fuel

supply located in the Sub-Basement Boiler Room. The generator had 520 hours of operation when this assessment was conducted.

This generator supplies an Emergency Lighting Panelboard via an Onan 225A, 208/120V, 3 phase, 4 wire Automatic Transfer Switch (ATS). The generator serves only emergency egress and exit lighting loads. The generator, ATS and Emergency Lighting Panelboard have reached the end of their useful life and should be replaced. The generator should be sized to include adding the two elevators and for a fire pump, if required.

Emergency Lighting System / Exit Lighting-- Egress lighting fixtures and exit signs are supplied with emergency power from the standby generator. There are several locations where exit signs are missing in corridors or not visible from both ends of the corridor. Also, there are many exit signs that are not illuminated and require maintenance or replacement. Allowance is included in this report for the addition of ten (10) exit signs and maintenance/replacement of (15) exit signs.

Lightning Protection System –The building has a lightning protection system and it is in good condition.

Conveying Systems--There are two electric traction passenger elevators that serve all floors and one freight elevator that serves from the loading dock to the kitchen. The Building Engineer reports that the passenger elevators are at the end of their lives and need to be replaced. The freight elevator has been out of service for about 15 years, being locked-out and tagged out by the State. The passenger elevators are by Amtech Reliable with 25 HP motor generator and 20 HP DC motor. Elevator controllers are mechanical relay and contactor type. Both passenger elevators need to updated and modernized.

GROUNDS

The parking area has ADA parking with approved curb cuts for access to the sidewalks that lead to the service entrance facing the southern exterior. There is also covered parking under the constructed gym and additional parking near the old vocational school. However, the parking lots are in poor condition, the harsh environmental conditions associated with snow removal have taken its toll on the asphalt surface. Also, there is no marked path of ingress to the main entrance. This project provides a budgetary consideration for a parking lot renewal program that includes all aspects of the current ADA legislation. Universal upgrades are recommended.

The sidewalk system is original to the buildings construction. There are a several areas of cracking concrete but no tripping hazards. The sidewalk system is expected to expire in the near future. Removal of the entire system is recommended. Universal upgrades are required and should include all aspects of current ADA legislation.

The trash dumpster is located in the parking lot open to the students and to the public. The exterior services are not protected. Upgrades to protect the exterior services and trash area are necessary for the safety of the students and the general public. Construction of a secure lockable dumpster area is recommended.

The exterior retaining wall located at the most southern corner of the site is showing signs of age and deterioration associated with weather conditions such as freezing and thawing. As indicated in the photo this issue starts at the roof and the obvious crack extends down the exterior wall to sidewalks. This wall is in fair condition and upgrades are recommended. The wall is recommended for point and tuck work as well as joint recovery and cleaning.

The exterior site stairs for this schools site has several levels to traverse with several landings. The railing system is a single system down the center of each set of stairs. Current requirements for stairs indicate that they have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread/riser angle). Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future efforts should include comprehensive stair railing removal and replacement upgrades.

Site Lighting-- Site lighting is provided by metal halide lighting fixtures mounted at the top of the roof and by wall pack fixtures on the exterior of the building. There are no pole mounted fixtures on the site. The parking area under the gymnasium is illuminated with wall mounted metal halide fixtures protected by wire cages. All fixtures appear to be in good condition and have an estimated 10 years of useful life remaining.

Site video surveillance system-- There are 38 exterior cameras that provide full coverage of the entrances, loading dock, parking lots and site.

RECOMMENDATIONS

- Upgrade Gym Floor
- Exterior Overhead Doors Replacement
- Fixed Seating Replacement
- Remove and replace stage curtain
- Remove and replace or install basketball backstop and hoop
- Remove and replace suspended acoustic ceilings
- Remove VAT and replace with VCT
- Remove and replace wall tile
- Repair and repaint all interior walls
- Replace inadequate or install proper stair railing
- Replace missing or damaged signage
- Replace blackboards with marker boards
- Remove and replace tackboards
- Remove and replace damage toilet partitions
- Remove and replace interior doors
- Remove non-rated interior glass panels and replace with studs, gypsum board, paint
- Remove folding wood partitions; replace with metal studs and gypsum board painted
- Remodel existing classroom for lab use
- Install fire rated walls and door where required
- Build fire resistant elevator lobby to comply with fire separation requirements
- Remove and Replace Built Up Roof
- Remove and replace exterior doors
- Remove and replace aluminum windows
- Apply waterproofing on existing foundation walls
- Repair cracks in masonry - replace missing mortar and repoint
- Site Replace or install exterior guardrails
- Add landscape irrigation system to small area
- Repair exterior brick retaining wall
- Build secure trash dumpster enclosure
- Remove and replace concrete sidewalk or paving
- Remove and replace parking lot
- Remove the existing window air conditioning units and install a total of 830 tons of air-cooled chillers on the roof with chilled water distribution piping, pumps, chemical treatment and controls located in a mechanical room on the basement level.
- Install complete NFPA wet pipe automatic sprinkler system and standpipes. If required provide fire pump and jockey pump with controller.
- Provide a new central station air handling unit for the auditorium with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.
- Provide a new central station air handling unit for the cafeteria with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect  to hot and chilled water systems.

- Install new direct digital control system and building automation system with software, remote computer control capability and graphics package.
- Inspect old cast iron sanitary piping including camera observation and replace damaged sections.
- Install (2) one ton ductless DX split systems to cool elevator equipment penthouses. Locate condensing unit on adjacent roof. Include refrigerant line set and drain line.
- Replace domestic hot and cold water piping including valves, fittings, hangars and insulation.

- Provide a four pipe fan coil system with roof mounted outside air system ducted to each fan coil unit. Provide a fan coil unit for each classroom and separate area. Include new heat exchanger and pumps for hot water, piping, control valves and controls, to replace steam heating system.
- Provide a new central station air handling unit for the gymnasiums with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

- Repair/replace (4) four inch rising stem gate valves at hot water heat exchanger on mechanical room mezzanine.
- Repair/replace four inch steam control valve at hot water heat exchanger on mechanical room mezzanine.
- Replace two duplex sump pumps at two mechanical room subbasement areas.
- Provide mechanical toilet exhaust system for the original building.
- Replace the electrical service entrance and distribution equipment in the transformer vault and Main Electrical as follows:
    1. Remove the incoming 4.16 kV service switch, MV oil switches and two 333 kVA, 4.16 kV-120/240V, 1 phase oil-filled transformers in the transformer volt. Replace equipment with line and load interrupter switches and a 480/277V load

center unit substation to serve mechanical equipment and central air conditioning equipment.
2. Remove 800A busway system from transformer vault to 120/240V switchboard in the Main Electrical Room.
3. Replace the 800A, 120/240V switchboard, 300 kVA 4.16 kV-208/120V dry type transformer and 1200A, 208/120A switchboard with a load center unit substation fed from load interrupter switch in the transformer vault.
4. Remove several safety switches in the Main Electrical Room and re-feed from 208/120V load center substation.

- Replace a total of 38 lighting and appliance type panelboards on all floors that have reached the end of their useful life. Panelboard replacement includes feeder conductors.
- Add surface raceway system with additional duplex receptacles in 90 classrooms, and replace approximately 180 non-grounding type duplex receptacles with 3-wire grounding type.
- Replace 15 duplex receptacles in the kitchen with ground-fault circuit-interrupting type to comply with NFPA 70, National Electrical Code (NEC) Article 210.8.
- Maintain/repair approximately (35) fluorescent fixtures in the Basement and Floor 1 corridors that are damaged.
- Replace lighting fixtures and wiring in 147 classrooms, totaling approximately 127,400 SF.
- Provide an allowance for replacement of lighting system in staff areas, offices, cafeteria, serving, kitchen, locker rooms, toilet rooms, and other similar spaces (approximately 95,000 SF).
- Maintain and re-lamp incandescent lighting fixtures in the main entrance vestibule, corridor and auditorium with dimmable LED lamps to reduce energy consumption and maintenance cost and to significantly increase lamp life. Approximately 50 fixtures, 18 of them pendant.
- Replace a total of (28) metal halide lighting fixtures in the two smaller gymnasiums in the main building.
- Maintain/repair/re-lamp 28 fluorescent lighting fixtures in the southwest gymnasium.
- Replace all incandescent lighting fixtures in the loading dock with vapor-tight LED lighting fixtures.
- Replace fire alarm system control panel. Provide notification appliances in all classrooms and rooms with multiple occupants that do not have appliances. Provide heat detectors in elevator machine room for elevator recall operation.
- Replace the standby generator and provide an ATS for standby power system, sized to include adding the two elevators and a fire pump, if required. It is estimated a 400 kW generator would be required.
- Provide an allowance for the addition of ten (10) exit signs and maintenance/replacement of (15) exit signs.
- Provide upgrade and modernization of elevator cabs, controls and machine rooms for both passenger elevators.
- Repair freight elevator to restore to service.

**Attributes:**

**General Attributes:**

| | | | |
|---|---|---|---|
| Active: | Open | Bldg Lot Tm: | Lot 2 / Tm 1 |
| Status: | Accepted by SDP | Team: | Tm 1 |
| Site ID: | S705001 | | |

## Site Condition Summary

The Table below shows the CI and FCI for each major system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

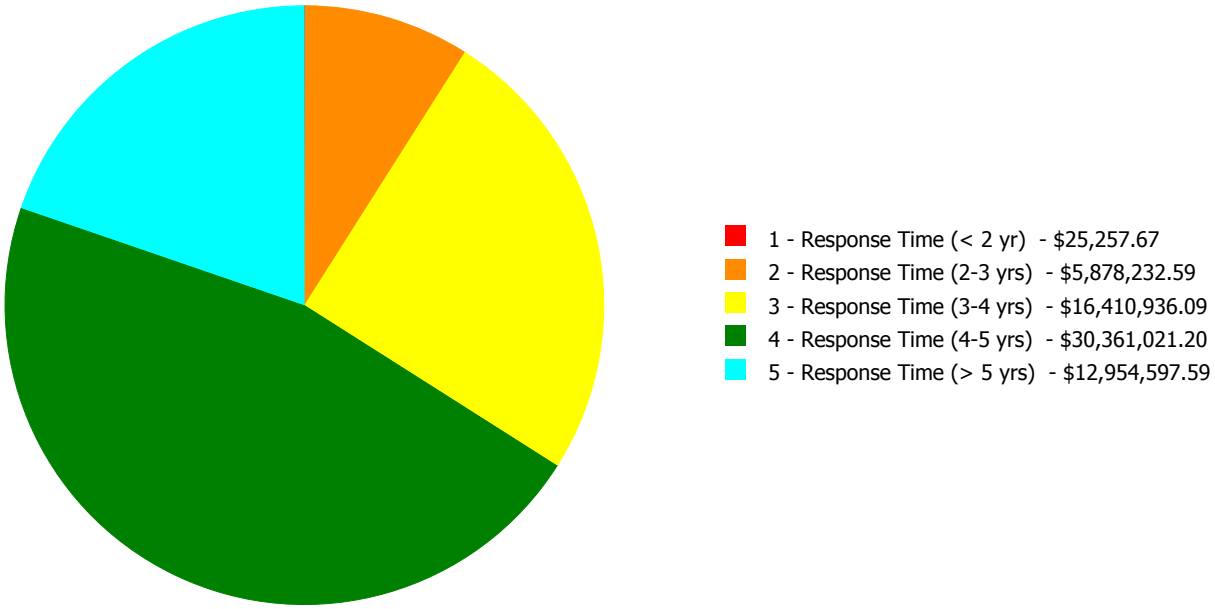
### Current Investment Requirement and Condition by Uniformat Classification

| UNIFORMAT Classification | RSLI% | FCI % | Current Repair |
|---|---|---|---|
| A10 - Foundations | 16.00 % | 45.71 % | $4,929,803.22 |
| A20 - Basement Construction | 16.00 % | 0.00 % | $0.00 |
| B10 - Superstructure | 16.00 % | 0.00 % | $0.00 |
| B20 - Exterior Enclosure | 24.30 % | 13.54 % | $3,233,737.84 |
| B30 - Roofing | 59.97 % | 89.59 % | $1,863,510.60 |
| C10 - Interior Construction | 19.36 % | 44.31 % | $4,078,497.83 |
| C20 - Stairs | 21.96 % | 60.36 % | $314,787.76 |
| C30 - Interior Finishes | 58.06 % | 47.01 % | $7,760,251.48 |
| D10 - Conveying | 105.71 % | 143.08 % | $608,381.84 |
| D20 - Plumbing | 75.07 % | 49.36 % | $3,184,055.45 |
| D30 - HVAC | 104.31 % | 60.19 % | $22,243,175.55 |
| D40 - Fire Protection | 105.71 % | 173.65 % | $4,649,271.51 |
| D50 - Electrical | 96.84 % | 47.18 % | $9,212,748.96 |
| E10 - Equipment | 34.29 % | 0.57 % | $30,273.46 |
| E20 - Furnishings | 30.00 % | 84.38 % | $597,012.40 |
| G20 - Site Improvements | 43.59 % | 77.77 % | $2,924,537.24 |
| G40 - Site Electrical Utilities | 40.00 % | 0.00 % | $0.00 |
| **Totals:** | **54.87 %** | **37.73 %** | **$65,630,045.14** |

### Condition Deficiency Priority

| Facility Name | Gross Area (S.F.) | FCI % | 1 - Response Time (< 2 yr) | 2 - Response Time (2-3 yrs) | 3 - Response Time (3-4 yrs) | 4 - Response Time (4-5 yrs) | 5 - Response Time (> 5 yrs) |
|---|---|---|---|---|---|---|---|
| B705001;Olney HS | 332,185 | 37.13 | $25,257.67 | $5,878,232.59 | $16,153,929.02 | $27,724,623.75 | $12,923,464.87 |
| G705001;Grounds | 300,500 | 57.71 | $0.00 | $0.00 | $257,007.07 | $2,636,397.45 | $31,132.72 |
| **Total:** | | **37.73** | **$25,257.67** | **$5,878,232.59** | **$16,410,936.09** | **$30,361,021.20** | **$12,954,597.59** |

### Deficiencies By Priority



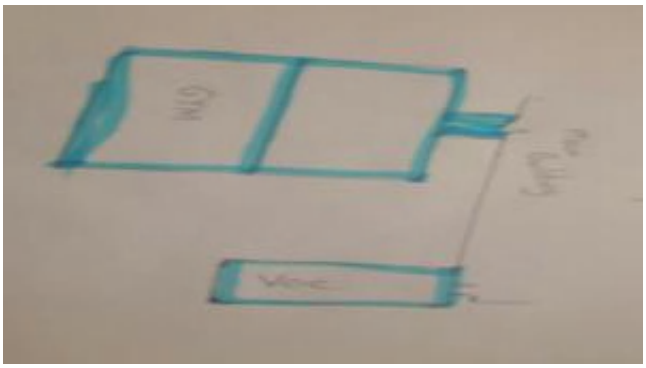

**Budget Estimate Total: $65,630,045.14**

## Executive Summary

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) FCI is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor). Condition Index (CI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired).

| | |
|---|---|
| Function: | High School |
| Gross Area (SF): | 332,185 |
| Year Built: | 1931 |
| Last Renovation: | |
| Replacement Value: | $168,884,158 |
| Repair Cost: | $62,705,507.90 |
| Total FCI: | 37.13 % |
| Total RSLI: | 55.23 % |



**Description:**

**Attributes:**

**General Attributes:**

| | | | |
|---|---|---|---|
| Active: | Open | Bldg ID: | B705001 |
| Sewage Ejector: | No | Status: | Accepted by SDP |
| Site ID: | S705001 | | |

## Condition Summary

The Table below shows the CI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

| UNIFORMAT Classification | RSLI % | FCI % | Current Repair Cost |
|---|---|---|---|
| A10 - Foundations | 16.00 % | 45.71 % | $4,929,803.22 |
| A20 - Basement Construction | 16.00 % | 0.00 % | $0.00 |
| B10 - Superstructure | 16.00 % | 0.00 % | $0.00 |
| B20 - Exterior Enclosure | 24.30 % | 13.54 % | $3,233,737.84 |
| B30 - Roofing | 59.97 % | 89.59 % | $1,863,510.60 |
| C10 - Interior Construction | 19.36 % | 44.31 % | $4,078,497.83 |
| C20 - Stairs | 21.96 % | 60.36 % | $314,787.76 |
| C30 - Interior Finishes | 58.06 % | 47.01 % | $7,760,251.48 |
| D10 - Conveying | 105.71 % | 143.08 % | $608,381.84 |
| D20 - Plumbing | 75.07 % | 49.36 % | $3,184,055.45 |
| D30 - HVAC | 104.31 % | 60.19 % | $22,243,175.55 |
| D40 - Fire Protection | 105.71 % | 173.65 % | $4,649,271.51 |
| D50 - Electrical | 96.84 % | 47.18 % | $9,212,748.96 |
| E10 - Equipment | 34.29 % | 0.57 % | $30,273.46 |
| E20 - Furnishings | 30.00 % | 84.38 % | $597,012.40 |
| **Totals:** | **55.23 %** | **37.13 %** | **$62,705,507.90** |

## Condition Detail

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II classification. The columns in the System Listing table below represent the following:

1. System Code: A code that identifies the system.
2. System Description: A brief description of a system present in the building.
3. Unit Price $: The unit price of the system.
4. UoM: The unit of measure for of the system.
5. Qty: The quantity for the system
6. Life: anticipated service life for thesystem based on Building Owners and Managers Association (BOMA) recommendations.
7. Year Installed: The date of system installation.
8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
10. CI: The Condition Index of the system.
11. FCI: The Facility Condition Index of the system.
12. RSL: Remaining Service Life.
13. eCR: eCOMET Condition Rating (not used).
14. Deficiency $: The financial investment to repair/replace system.

## System Listing

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

Additionally, a condition rating (eCR) based on the following guidelines is provided as observed at the time of the assessment.

- Excellent (E) - No noticeable distress or damage. The entire system is free from observable defect.
- Very Good (VG) - Overall no serviceability reduction for the entire system. No degradation of critical components and minor distress and defect noticeable for some but not non critical components within the system.
- Good (G) - Slight or no serviceability reduction for the entire system. There may be noticeable defects for some non critical components and slight noticeable degradation of the critical components.
- Fair (F) - Overall serviceability is degraded but adequate. There may be moderate deterioration for very few of the critical components and few of the non critical components may have severe degradation.
- Marginal (MA) - Overall serviceability and reliability loss. Most if not all of the non critical components suffer from severe degradation and a few of the critical component may have severe degradation.
- Moderate (MO) - Overall a significant serviceability loss. Most if not all the components have severe degradation with the reminder of the component showing visible distress.
- Very Poor (VP) - Overall the system is barely functional. All of the components are severely degraded.
- Non-Functional (NF) - Overall the system does not function with all the components having no serviceability and suffer from severe degradation.

| System Code | System Description | Unit Price $ | UoM | Qty | Life | Year Installed | Calc Next Renewal Year | Next Renewal Year | RSLI% | FCI% | RSL | eCR | Deficiency $ | Replacement Value $ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A1010 | Standard Foundations | $27.30 | S.F. | 332,185 | 100 | 1931 | 2031 | | 16.00 % | 54.36 % | 16 | | $4,929,803.22 | $9,068,651 |
| A1030 | Slab on Grade | $5.17 | S.F. | 332,185 | 100 | 1931 | 2031 | | 16.00 % | 0.00 % | 16 | | | $1,717,396 |
| A2010 | Basement Excavation | $4.36 | S.F. | 332,185 | 100 | 1931 | 2031 | | 16.00 % | 0.00 % | 16 | | | $1,448,327 |
| A2020 | Basement Walls | $9.91 | S.F. | 332,185 | 100 | 1931 | 2031 | | 16.00 % | 0.00 % | 16 | | | $3,291,953 |
| B1010 | Floor Construction | $85.34 | S.F. | 332,185 | 100 | 1931 | 2031 | | 16.00 % | 0.00 % | 16 | | | $28,348,668 |
| B1020 | Roof Construction | $14.39 | S.F. | 55,000 | 100 | 1931 | 2031 | | 16.00 % | 0.00 % | 16 | | | $791,450 |
| B2010 | Exterior Walls | $43.20 | S.F. | 332,185 | 100 | 1931 | 2031 | | 16.00 % | 1.13 % | 16 | | $161,447.36 | $14,350,392 |
| B2020 | Exterior Windows | $27.52 | S.F. | 332,185 | 40 | 1990 | 2030 | | 37.50 % | 29.06 % | 15 | | $2,656,494.57 | $9,141,731 |
| B2030 | Exterior Doors | $1.16 | S.F. | 332,185 | 25 | 1995 | 2020 | | 20.00 % | 107.91 % | 5 | | $415,795.91 | $385,335 |
| B3010105 | Built-Up | $37.76 | S.F. | 55,000 | 20 | 1990 | 2010 | 2027 | 60.00 % | 89.73 % | 12 | | $1,863,510.60 | $2,076,800 |
| B3020 | Roof Openings | $0.06 | S.F. | 55,000 | 30 | 1990 | 2020 | 2027 | 40.00 % | 0.00 % | 12 | | | $3,300 |
| C1010 | Partitions | $21.05 | S.F. | 332,185 | 100 | 1931 | 2031 | | 16.00 % | 35.09 % | 16 | | $2,453,724.96 | $6,992,494 |
| C1020 | Interior Doors | $3.76 | S.F. | 332,185 | 40 | 1931 | 1971 | 2027 | 30.00 % | 114.58 % | 12 | | $1,431,176.13 | $1,249,016 |
| C1030 | Fittings | $2.90 | S.F. | 332,185 | 40 | 1931 | 1971 | 2027 | 30.00 % | 20.10 % | 12 | | $193,596.74 | $963,337 |
| C2010 | Stair Construction | $1.18 | S.F. | 332,185 | 100 | 1931 | 2031 | | 16.00 % | 80.31 % | 16 | | $314,787.76 | $391,978 |
| C2020 | Stair Finishes | $0.39 | S.F. | 332,185 | 30 | 1931 | 1961 | 2027 | 40.00 % | 0.00 % | 12 | | | $129,552 |
| C3010230 | Paint & Covering | $13.21 | S.F. | 212,185 | 10 | 1931 | 1941 | 2027 | 120.00 % | 12.08 % | 12 | | $338,693.85 | $2,802,964 |
| C3010232 | Wall Tile | $2.63 | S.F. | 120,000 | 30 | 1931 | 1961 | 2027 | 40.00 % | 8.86 % | 12 | | $27,975.45 | $315,600 |

# Site Assessment Report - B705001;Olney HS

| System Code | System Description | Unit Price $ | UoM | Qty | Life | Year Installed | Calc Next Renewal Year | Next Renewal Year | RSLI% | FCI% | RSL | eCR | Deficiency $ | Replacement Value $ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C3020412 | Terrazzo & Tile | $75.52 | S.F. | 20,000 | 50 | 1931 | 1981 | 2027 | 24.00 % | 0.00 % | 12 | | | $1,510,400 |
| C3020413 | Vinyl Flooring | $9.68 | S.F. | 40,000 | 20 | 1931 | 1951 | 2027 | 60.00 % | 78.34 % | 12 | | $303,333.36 | $387,200 |
| C3020414 | Wood Flooring | $22.27 | S.F. | 200,000 | 25 | 1931 | 1956 | 2027 | 48.00 % | 135.48 % | 12 | | $6,034,478.70 | $4,454,000 |
| C3020415 | Concrete Floor Finishes | $0.97 | S.F. | 72,185 | 50 | 1931 | 1981 | 2027 | 24.00 % | 0.00 % | 12 | | | $70,019 |
| C3030 | Ceiling Finishes | $20.97 | S.F. | 332,185 | 25 | 1931 | 1956 | 2027 | 48.00 % | 15.16 % | 12 | | $1,055,770.12 | $6,965,919 |
| D1010 | Elevators and Lifts | $1.28 | S.F. | 332,185 | 35 | 1931 | 1966 | 2052 | 105.71 % | 143.08 % | 37 | | $608,381.84 | $425,197 |
| D2010 | Plumbing Fixtures | $13.52 | S.F. | 332,185 | 35 | 2005 | 2040 | | 71.43 % | 0.00 % | 25 | | | $4,491,141 |
| D2020 | Domestic Water Distribution | $1.68 | S.F. | 332,185 | 25 | | | 2042 | 108.00 % | 298.01 % | 27 | | $1,663,115.00 | $558,071 |
| D2030 | Sanitary Waste | $2.32 | S.F. | 332,185 | 30 | | | 2047 | 106.67 % | 197.35 % | 32 | | $1,520,940.45 | $770,669 |
| D2040 | Rain Water Drainage | $1.90 | S.F. | 332,185 | 30 | 1931 | 1961 | 2025 | 33.33 % | 0.00 % | 10 | | | $631,152 |
| D3020 | Heat Generating Systems | $18.67 | S.F. | 332,185 | 35 | 2008 | 2043 | | 80.00 % | 0.00 % | 28 | | | $6,201,894 |
| D3030 | Cooling Generating Systems | $24.48 | S.F. | 332,185 | 30 | | | 2047 | 106.67 % | 69.19 % | 32 | | $5,626,150.51 | $8,131,889 |
| D3040 | Distribution Systems | $42.99 | S.F. | 332,185 | 25 | | | 2042 | 108.00 % | 73.30 % | 27 | | $10,467,749.76 | $14,280,633 |
| D3050 | Terminal & Package Units | $11.60 | S.F. | 332,185 | 20 | | | 2027 | 60.00 % | 0.76 % | 12 | | $29,282.82 | $3,853,346 |
| D3060 | Controls & Instrumentation | $13.50 | S.F. | 332,185 | 20 | | | 2047 | 160.00 % | 136.47 % | 32 | | $6,119,992.46 | $4,484,498 |
| D4010 | Sprinklers | $7.05 | S.F. | 332,185 | 35 | | | 2052 | 105.71 % | 198.53 % | 37 | | $4,649,271.51 | $2,341,904 |
| D4020 | Standpipes | $1.01 | S.F. | 332,185 | 35 | | | 2052 | 105.71 % | 0.00 % | 37 | | | $335,507 |
| D5010 | Electrical Service/Distribution | $9.70 | S.F. | 332,185 | 30 | 1931 | 1961 | 2047 | 106.67 % | 98.53 % | 32 | | $3,174,772.54 | $3,222,195 |
| D5020 | Lighting and Branch Wiring | $34.68 | S.F. | 332,185 | 20 | 1931 | 1951 | 2035 | 100.00 % | 41.98 % | 20 | | $4,835,912.48 | $11,520,176 |
| D5030 | Communications and Security | $12.99 | S.F. | 332,185 | 15 | 1931 | 1946 | 2027 | 80.00 % | 14.31 % | 12 | | $617,599.56 | $4,315,083 |
| D5090 | Other Electrical Systems | $1.41 | S.F. | 332,185 | 30 | 1931 | 1961 | 2047 | 106.67 % | 124.78 % | 32 | | $584,464.38 | $468,381 |
| E1020 | Institutional Equipment | $4.82 | S.F. | 332,185 | 35 | 1931 | 1966 | 2027 | 34.29 % | 1.89 % | 12 | | $30,273.46 | $1,601,132 |
| E1090 | Other Equipment | $11.10 | S.F. | 332,185 | 35 | 1931 | 1966 | 2027 | 34.29 % | 0.00 % | 12 | | | $3,687,254 |
| E2010 | Fixed Furnishings | $2.13 | S.F. | 332,185 | 40 | 1931 | 1971 | 2027 | 30.00 % | 84.38 % | 12 | | $597,012.40 | $707,554 |
| | | | | | | | | **Total** | **55.23 %** | **37.13 %** | | | **$62,705,507.90** | **$168,884,158** |

## System Notes

The facility description in the site executive summary contains an overview of each system. The notes listed below provide additional information on select systems found within the facility.

**System:** C3010 - Wall Finishes — This system contains no images

**Note:** Painted Surface 62%
Marble / Brick 38%

**System:** C3020 - Floor Finishes — This system contains no images

**Note:** Terrazzo and Tile 6%
vinyl 12%
Wood 60%
Concrete 22%

**System:** D5010 - Electrical Service/Distribution — This system contains no images

**Note:** There is one (1) 300 kVA, 4.16 kV-208/120V, 3 phase service transformer and two (2) 333 kVA, 4.16 kV-120/240V, 1 phase service transformers.

## Renewal Schedule

eCOMET forecasts future Capital Renewal funding needed to address expiring systems based on the Next Renewal year found in the Cost Models. A 3% annual inflation factor is applied to the costs for systems expiring in future years. The table below reflects recommended Capital Renewal funding needs over the next 10 years. Note: Cells with a zero value indicate systems for which renewal is not scheduled in that year.

*Inflation Rate: 3%*

| System | Current Deficiencies | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total:** | **$62,705,508** | **$0** | **$0** | **$0** | **$0** | **$491,379** | **$0** | **$0** | **$0** | **$0** | **$933,037** | **$64,129,924** |
| *** A - Substructure** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| *** A10 - Foundations** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A1010 - Standard Foundations** | $4,929,803 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$4,929,803** |
| **A1030 - Slab on Grade** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| *** A20 - Basement Construction** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A2010 - Basement Excavation** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A2020 - Basement Walls** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B - Shell** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B10 - Superstructure** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B1010 - Floor Construction** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B1020 - Roof Construction** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B20 - Exterior Enclosure** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B2010 - Exterior Walls** | $161,447 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$161,447** |
| **B2020 - Exterior Windows** | $2,656,495 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$2,656,495** |
| **B2030 - Exterior Doors** | $415,796 | $0 | $0 | $0 | $0 | $491,379 | $0 | $0 | $0 | $0 | $0 | **$907,175** |
| **B30 - Roofing** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B3010 - Roof Coverings** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B3010105 - Built-Up** | $1,863,511 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$1,863,511** |
| **B3020 - Roof Openings** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C - Interiors** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C10 - Interior Construction** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C1010 - Partitions** | $2,453,725 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$2,453,725** |
| **C1020 - Interior Doors** | $1,431,176 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$1,431,176** |
| **C1030 - Fittings** | $193,597 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$193,597** |
| **C20 - Stairs** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |

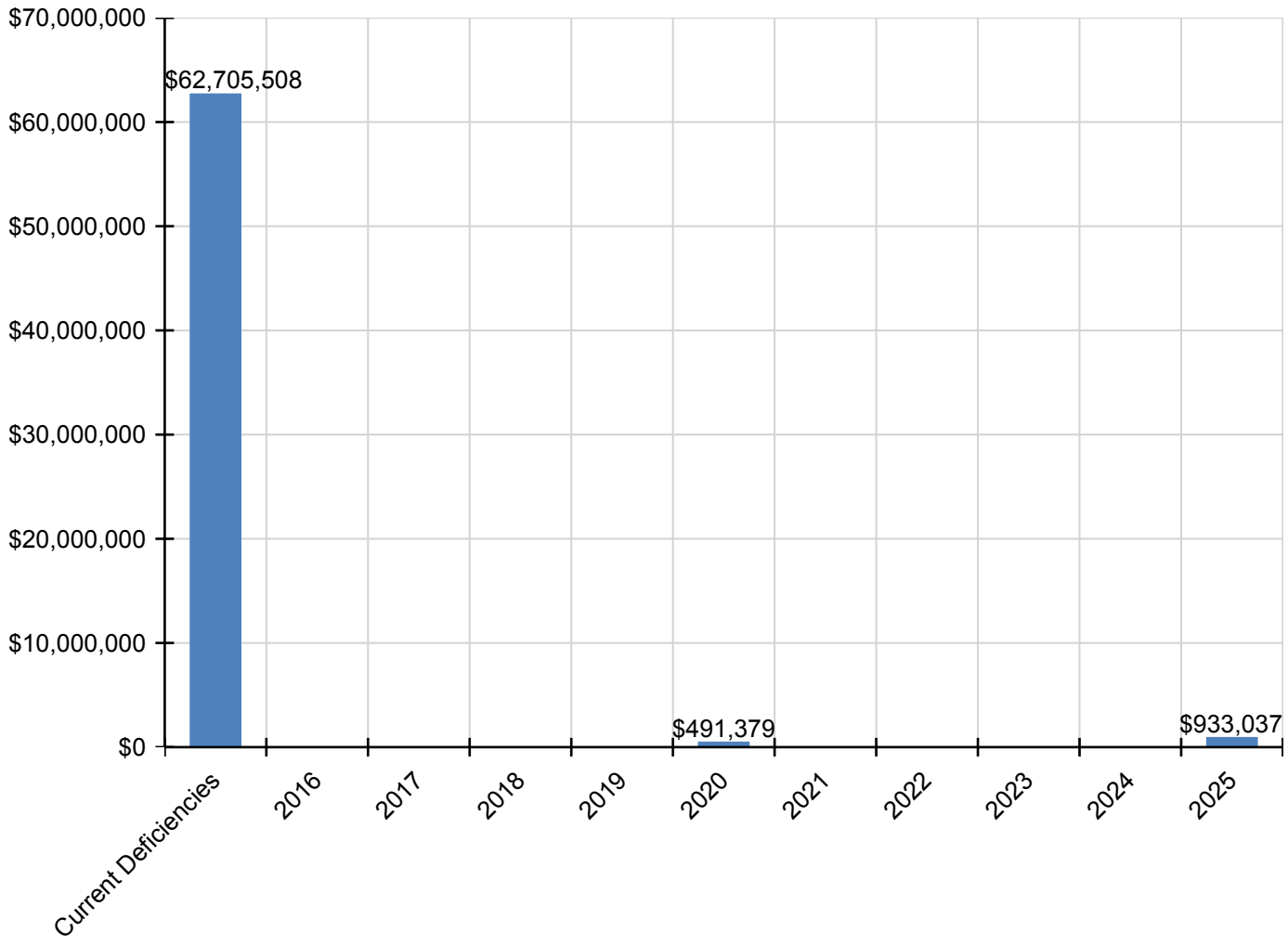
| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C2010 - Stair Construction** | $314,788 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$314,788** |
| **C2020 - Stair Finishes** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C30 - Interior Finishes** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C3010 - Wall Finishes** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C3010230 - Paint & Covering** | $338,694 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$338,694** |
| **C3010232 - Wall Tile** | $27,975 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$27,975** |
| **C3020 - Floor Finishes** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C3020412 - Terrazzo & Tile** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C3020413 - Vinyl Flooring** | $303,333 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$303,333** |
| **C3020414 - Wood Flooring** | $6,034,479 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$6,034,479** |
| **C3020415 - Concrete Floor Finishes** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C3030 - Ceiling Finishes** | $1,055,770 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$1,055,770** |
| **D - Services** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D10 - Conveying** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D1010 - Elevators and Lifts** | $608,382 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$608,382** |
| **D20 - Plumbing** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D2010 - Plumbing Fixtures** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D2020 - Domestic Water Distribution** | $1,663,115 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$1,663,115** |
| **D2030 - Sanitary Waste** | $1,520,940 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$1,520,940** |
| **D2040 - Rain Water Drainage** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $933,037 | **$933,037** |
| **D30 - HVAC** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D3020 - Heat Generating Systems** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D3030 - Cooling Generating Systems** | $5,626,151 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$5,626,151** |
| **D3040 - Distribution Systems** | $10,467,750 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$10,467,750** |
| **D3050 - Terminal & Package Units** | $29,283 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$29,283** |
| **D3060 - Controls & Instrumentation** | $6,119,992 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$6,119,992** |
| **D40 - Fire Protection** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D4010 - Sprinklers** | $4,649,272 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$4,649,272** |
| **D4020 - Standpipes** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D50 - Electrical** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D5010 - Electrical Service/Distribution** | $3,174,773 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$3,174,773** |
| **D5020 - Lighting and Branch Wiring** | $4,835,912 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$4,835,912** |
| **D5030 - Communications and Security** | $617,600 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$617,600** |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **D5090 - Other Electrical Systems** | $584,464 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$584,464** |
| **E - Equipment & Furnishings** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **E10 - Equipment** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **E1020 - Institutional Equipment** | $30,273 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$30,273** |
| **E1090 - Other Equipment** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **E20 - Furnishings** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **E2010 - Fixed Furnishings** | $597,012 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$597,012** |

** Indicates non-renewable system*

## Forecasted Sustainment Requirement

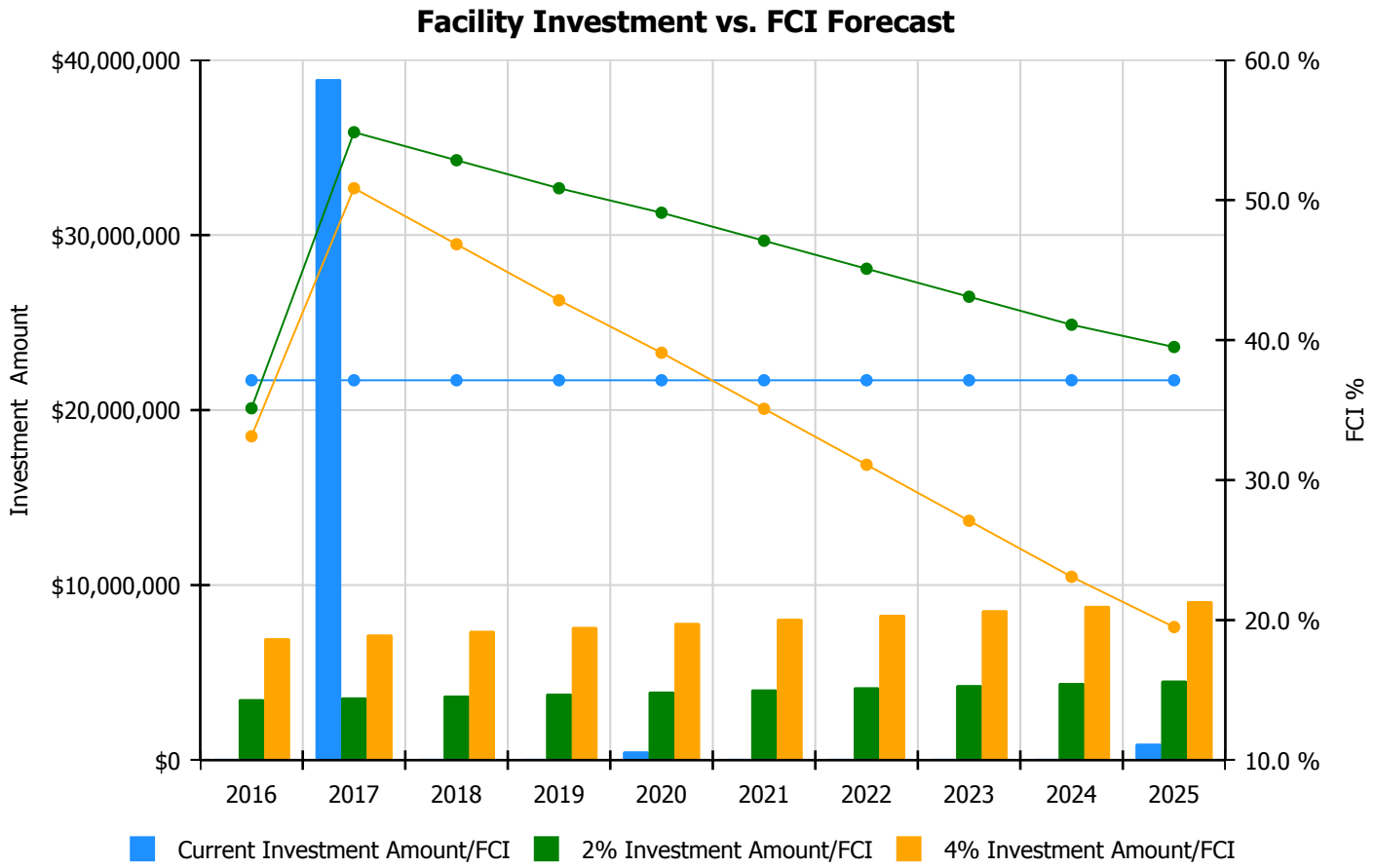
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



## 10 Year FCI Forecast by Investment Scenario

The chart below illustrates the effect of various investment levels on the building FCI for the next 10 years. The levels of investment shown below include:

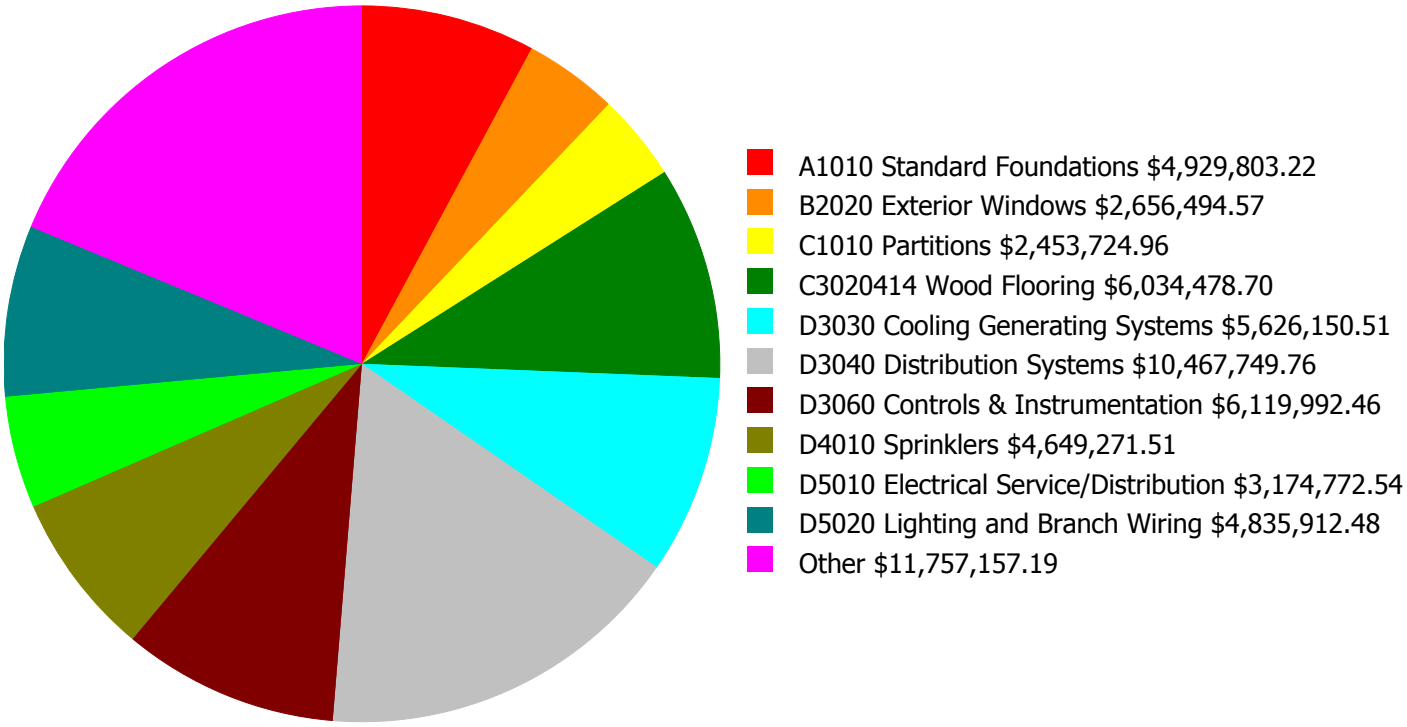
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value of the building, escalated for inflation




| Year | Investment Amount Current FCI - 37.13% | 2% Investment | | 4% Investment | |
|---|---|---|---|---|---|
| | | Amount | FCI | Amount | FCI |
| 2016 | $0 | $3,479,014.00 | 35.13 % | $6,958,027.00 | 33.13 % |
| 2017 | $38,904,423 | $3,583,384.00 | 54.84 % | $7,166,768.00 | 50.84 % |
| 2018 | $0 | $3,690,886.00 | 52.84 % | $7,381,771.00 | 46.84 % |
| 2019 | $0 | $3,801,612.00 | 50.84 % | $7,603,224.00 | 42.84 % |
| 2020 | $491,379 | $3,915,661.00 | 49.09 % | $7,831,321.00 | 39.09 % |
| 2021 | $0 | $4,033,130.00 | 47.09 % | $8,066,261.00 | 35.09 % |
| 2022 | $0 | $4,154,124.00 | 45.09 % | $8,308,248.00 | 31.09 % |
| 2023 | $0 | $4,278,748.00 | 43.09 % | $8,557,496.00 | 27.09 % |
| 2024 | $0 | $4,407,110.00 | 41.09 % | $8,814,221.00 | 23.09 % |
| 2025 | $933,037 | $4,539,324.00 | 39.51 % | $9,078,647.00 | 19.51 % |
| **Total:** | **$40,328,839** | **$39,882,993.00** | | **$79,765,984.00** | |

## Deficiency Summary by System

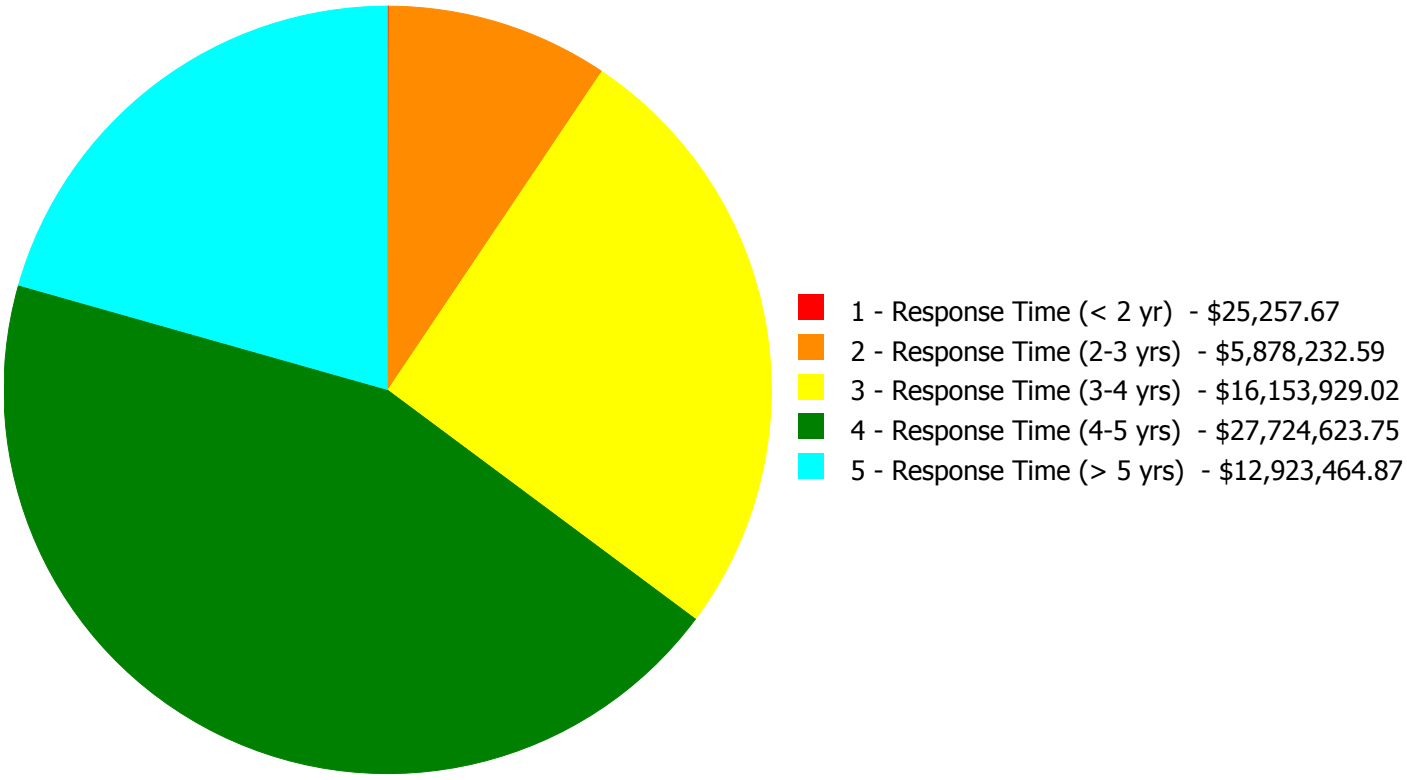
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.




**Budget Estimate Total: $62,705,507.90**

## Deficiency Summary by Priority

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:




**Budget Estimate Total: $62,705,507.90**

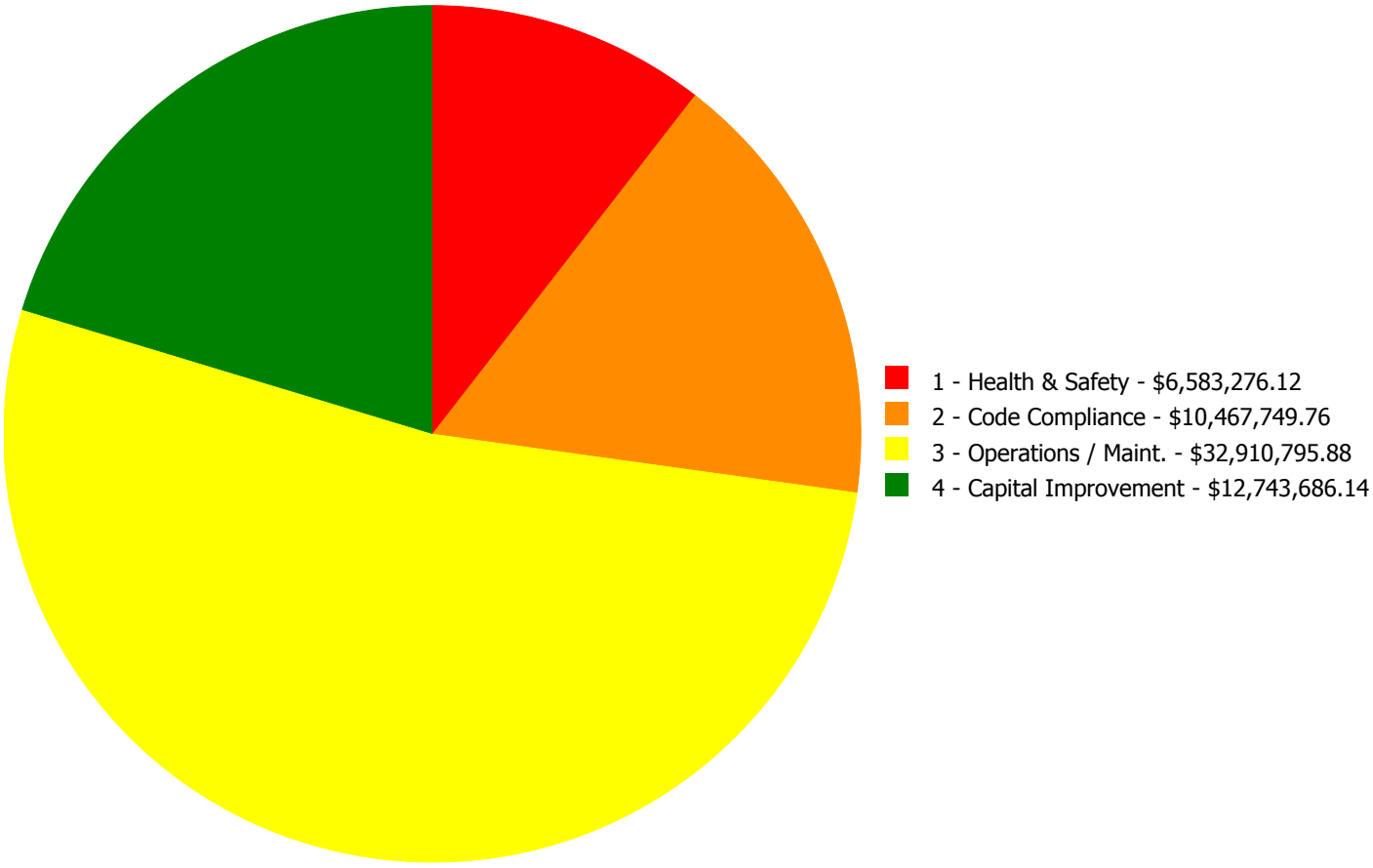
## Deficiency By Priority Investment Table

The table below shows the current investment cost grouped by deficiency priority and building system.

| System Code | System Description | 1 - Response Time (< 2 yr) | 2 - Response Time (2-3 yrs) | 3 - Response Time (3-4 yrs) | 4 - Response Time (4-5 yrs) | 5 - Response Time (> 5 yrs) | Total |
|---|---|---|---|---|---|---|---|
| A1010 | Standard Foundations | $0.00 | $4,929,803.22 | $0.00 | $0.00 | $0.00 | $4,929,803.22 |
| B2010 | Exterior Walls | $0.00 | $0.00 | $0.00 | $161,447.36 | $0.00 | $161,447.36 |
| B2020 | Exterior Windows | $0.00 | $0.00 | $0.00 | $2,656,494.57 | $0.00 | $2,656,494.57 |
| B2030 | Exterior Doors | $0.00 | $0.00 | $0.00 | $415,795.91 | $0.00 | $415,795.91 |
| B3010105 | Built-Up | $0.00 | $0.00 | $1,863,510.60 | $0.00 | $0.00 | $1,863,510.60 |
| C1010 | Partitions | $0.00 | $355,103.75 | $334,875.79 | $1,763,745.42 | $0.00 | $2,453,724.96 |
| C1020 | Interior Doors | $0.00 | $0.00 | $0.00 | $1,431,176.13 | $0.00 | $1,431,176.13 |
| C1030 | Fittings | $0.00 | $0.00 | $108,364.99 | $69,377.24 | $15,854.51 | $193,596.74 |
| C2010 | Stair Construction | $0.00 | $314,787.76 | $0.00 | $0.00 | $0.00 | $314,787.76 |
| C3010230 | Paint & Covering | $0.00 | $0.00 | $0.00 | $338,693.85 | $0.00 | $338,693.85 |
| C3010232 | Wall Tile | $0.00 | $0.00 | $0.00 | $27,975.45 | $0.00 | $27,975.45 |
| C3020413 | Vinyl Flooring | $0.00 | $0.00 | $303,333.36 | $0.00 | $0.00 | $303,333.36 |
| C3020414 | Wood Flooring | $0.00 | $0.00 | $204,064.50 | $5,830,414.20 | $0.00 | $6,034,478.70 |
| C3030 | Ceiling Finishes | $0.00 | $0.00 | $1,055,770.12 | $0.00 | $0.00 | $1,055,770.12 |
| D1010 | Elevators and Lifts | $0.00 | $212,028.90 | $396,352.94 | $0.00 | $0.00 | $608,381.84 |
| D2020 | Domestic Water Distribution | $25,257.67 | $0.00 | $1,637,857.33 | $0.00 | $0.00 | $1,663,115.00 |
| D2030 | Sanitary Waste | $0.00 | $61,371.91 | $1,459,568.54 | $0.00 | $0.00 | $1,520,940.45 |
| D3030 | Cooling Generating Systems | $0.00 | $0.00 | $0.00 | $0.00 | $5,626,150.51 | $5,626,150.51 |
| D3040 | Distribution Systems | $0.00 | $0.00 | $0.00 | $8,478,169.25 | $1,989,580.51 | $10,467,749.76 |
| D3050 | Terminal & Package Units | $0.00 | $0.00 | $0.00 | $0.00 | $29,282.82 | $29,282.82 |
| D3060 | Controls & Instrumentation | $0.00 | $0.00 | $0.00 | $6,119,992.46 | $0.00 | $6,119,992.46 |
| D4010 | Sprinklers | $0.00 | $0.00 | $0.00 | $0.00 | $4,649,271.51 | $4,649,271.51 |
| D5010 | Electrical Service/Distribution | $0.00 | $0.00 | $3,174,772.54 | $0.00 | $0.00 | $3,174,772.54 |
| D5020 | Lighting and Branch Wiring | $0.00 | $5,137.05 | $4,413,394.37 | $375,472.82 | $41,908.24 | $4,835,912.48 |
| D5030 | Communications and Security | $0.00 | $0.00 | $617,599.56 | $0.00 | $0.00 | $617,599.56 |
| D5090 | Other Electrical Systems | $0.00 | $0.00 | $584,464.38 | $0.00 | $0.00 | $584,464.38 |
| E1020 | Institutional Equipment | $0.00 | $0.00 | $0.00 | $0.00 | $30,273.46 | $30,273.46 |
| E2010 | Fixed Furnishings | $0.00 | $0.00 | $0.00 | $55,869.09 | $541,143.31 | $597,012.40 |
| | **Total:** | $25,257.67 | $5,878,232.59 | $16,153,929.02 | $27,724,623.75 | $12,923,464.87 | $62,705,507.90 |

## Deficiency Summary by Category

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:




**Budget Estimate Total: $62,705,507.90**

## Deficiency Details by Priority

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

### Priority 1 - Response Time (< 2 yr):

**System: D2020 - Domestic Water Distribution**

**Location:** mechanical room
**Distress:** Damaged
**Category:** 3 - Operations / Maint.
**Priority:** 1 - Response Time (< 2 yr)
**Correction:** Replace valves
**Qty:** 4.00
**Unit of Measure:** Ea.
**Estimate:** $20,206.14
**Assessor Name:** System
**Date Created:** 10/22/2015

**Notes:** Repair/replace (4) four inch rising stem gate valves at hot water heat exchanger on mechanical room mezzanine.

**System: D2020 - Domestic Water Distribution**

**Location:** mechanical room
**Distress:** Damaged
**Category:** 3 - Operations / Maint.
**Priority:** 1 - Response Time (< 2 yr)
**Correction:** Replace valves
**Qty:** 1.00
**Unit of Measure:** Ea.
**Estimate:** $5,051.53
**Assessor Name:** System
**Date Created:** 10/22/2015

**Notes:** Repair/replace four inch steam valve at hot water heat exchanger on mechanical room mezzanine.

## Priority 2 - Response Time (2-3 yrs):

**System: A1010 - Standard Foundations**

**Location:** Basement

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Apply waterproofing on existing foundation walls - SF of foundation wall - add for sump and discharge piping

**Qty:** 200.00

**Unit of Measure:** S.F.

**Estimate:** $4,929,803.22

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** There is evidence of water infiltration through the basement foundations wall. Excavation and waterproofing system upgrades are recommended. Improve the slope of the grade away from the foundation prior to restoring the landscaping system.

**System: C1010 - Partitions**


**Location:** Elevator

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Build fire resistant elevator lobby to comply with fire separation requirements - each floor

**Qty:** 10.00

**Unit of Measure:** Ea.

**Estimate:** $355,103.75

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The present floor plan arrangement has the elevator lobbies opening up into the existing hall corridors. IBC 2000 states that elevators opening into a fire resistant corridor shall be provided with an elevator lobby at each floor containing such a corridor. The lobby should completely separate the elevators from the corridor with rated partitions. Elevator lobbies need to have at least one means of egress and contain smoke detectors. This deficiency recommends the construction of fire resistant barrier with automatically closing fire doors to be installed between the elevator lobbies and the corridors to provide the required separation and protection.

**System: C2010 - Stair Construction**

**Location:** Stairs

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Replace inadequate or install proper stair railing - select appropriate material

**Qty:** 2,000.00

**Unit of Measure:** L.F.

**Estimate:** $314,787.76

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** Current requirements for stairs indicate that they have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread/riser angle). Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future efforts should include comprehensive stair railing removal and replacement upgrades.

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**System: D1010 - Elevators and Lifts**

**Location:** Loading Dock to Kitchen

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Replace elevator components to restore to service - zero unneeded work items from the estimate - insert the number of stops for hall items

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** $212,028.90

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Repair freight elevator to restore to service.

---

**System: D2030 - Sanitary Waste**

**Location:** mechanical room

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Replace sanitary sewage ejector pit and pumps. (48" dia.)

**Qty:** 2.00

**Unit of Measure:** Ea.

**Estimate:** $61,371.91

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Replace two duplex sump pumps at two mechanical room subbasement areas.

**System: D5020 - Lighting and Branch Wiring**

**Location:** Kitchen

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Replace Wiring Device

**Qty:** 15.00

**Unit of Measure:** Ea.

**Estimate:** $5,137.05

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Replace 15 duplex receptacles in the kitchen with ground-fault circuit-interrupting type to comply with NFPA 70, National Electrical Code (NEC) Article 210.8.

## Priority 3 - Response Time (3-4 yrs):

**System: B3010105 - Built-Up**

**Location:** Roof

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Remove and Replace Built Up Roof

**Qty:** 55,000.00

**Unit of Measure:** S.F.

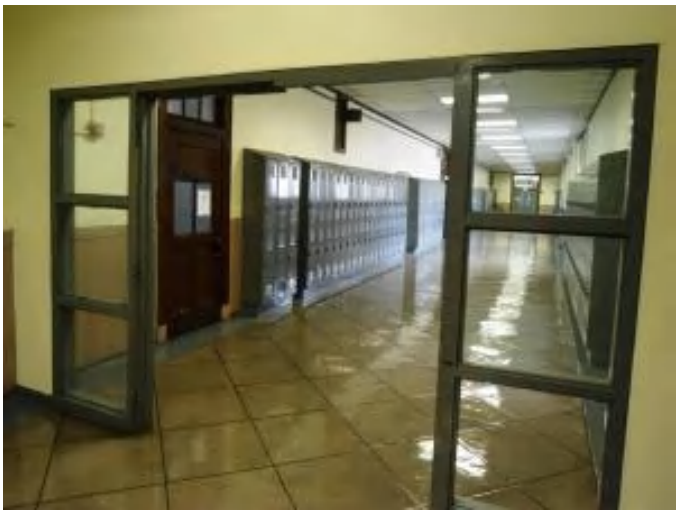
**Estimate:** $1,863,510.60

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** There are a number of roof sections and different roof elevations ranging from the main roof to the mechanical roof. Parapet heights, coping materials, and the height of the flashing also varies in different sections. The main roof is a built up application that was installed in the early 1990'S. The other built up roofs have not conclusive installation dates and have been seal coated several times to extend the life cycle of the application. Considering the age and condition of the roofing systems, universal upgrades are recommended. Remove and replace all roof sections.

**System: C1010 - Partitions**



**Location:** Corridor Doors

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Install fire rated walls and door where required - insert number of doors

**Qty:** 30.00

**Unit of Measure:** S.F.

**Estimate:** $143,230.32

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** A large portion of the interior corridor, exit stair doors are not code compliant. Several doors are typically metal in metal frames with transom lites or sidelights, glass glazing. The older doors are generally in good condition considering the age of the application. To restore the door finishes, universal upgrades are required for the older door applications. Remove and replace original door systems with new code compliant fire rated door system. As indicated in the photos several doors have been removed from the frames. In these cases additional effort may be required to provide compliant closers and fire alarm assist.

---

**System: C1010 - Partitions**

**Location:** Classrooms

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Remove folding wood partitions; replace with metal studs and gypsum board painted

**Qty:** 5,000.00

**Unit of Measure:** S.F.

**Estimate:** $111,397.49

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** There are several movable partitions that remain in classrooms. These wall systems are no longer used and in most cases cannot be used due to damage or wall modifications to support classroom needs. This deficiency provides a budgetary consideration to remove and replace the wall systems with universal removal of the existing movable partitions and upgrades to a permeate wall systems.

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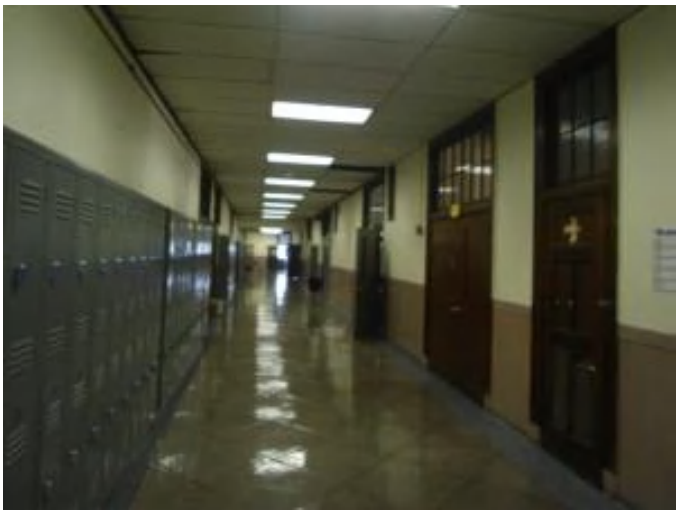
**System: C1010 - Partitions**



**Location:** Classroom Doors

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Remove non-rated interior glass panels and replace with studs, gypsum board, paint (E) wall

**Qty:** 3,000.00

**Unit of Measure:** S.F.

**Estimate:** $80,247.98

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** There are several transom lites and sidelights constructed into hallway wall systems. It is recommended that the lites and sidelights be removed and replaced with a fire rated wall construction. The deficiency provides a budgetary consideration to correct the hallway, transoms, lites and sidelights.

---

**System: C1030 - Fittings**


**Location:** Building Wide

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace missing or damaged signage - insert the number of rooms

**Qty:** 400.00

**Unit of Measure:** Ea.

**Estimate:** $108,364.99

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** There is no directional signage and room signage is a custom design in places and scarce or painted with no consistency in others. Accessibility signage criteria have been established for the physically challenged. These include mounting heights, contrast and finish, raised and Braille characters and pictograms, and character proportions and heights. It is recommended that compliant signage be installed throughout the building.

---

**System: C3020413 - Vinyl Flooring**

**Location:** Classrooms

**Distress:** Health Hazard / Risk

**Category:** 1 - Health & Safety

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Remove VAT and replace with VCT - SF of area

**Qty:** 20,000.00

**Unit of Measure:** S.F.

**Estimate:** $303,333.36

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The floor finish for this school is a combination of carpet in the administrative area, tile in the kitchen and service line areas, wooden classrooms with concrete hallways and stirs finishes and a vinyl tile finish. These interior floor finishes are in good condition considering the age of the applications and there were no issues that surfaced during the time of the inspection therefore no projects or recommendations are required at this time. However, the vinyl tile finish is a 9 x 9 application and is suspect to contain asbestos. This finish is recommended for upgrade to a new 12 x 12 vinyl tile application.

**System: C3020414 - Wood Flooring**


**Location:** Main Gym

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Remove and replace wood flooring

**Qty:** 7,000.00

**Unit of Measure:** S.F.

**Estimate:** $204,064.50

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** The main GYM floor finish is beyond its expected life cycle for this application. Recent repairs have eliminated the trip hazards however, there are areas that remain that warrant replacement. The floor is recommended for universal upgrade.

**System: C3030 - Ceiling Finishes**

**Location:** Building Wide

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Remove and replace suspended acoustic ceilings - lighting not included

**Qty:** 70,000.00

**Unit of Measure:** S.F.

**Estimate:** $1,055,770.12

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The ceiling finish is a mix of 12 x 12 ceiling grid, painted and 2 x 4 Acoustical tile finish. Ceilings have been repaired in several areas and is in good condition considering the age of the application and the current condition of the school. The ceiling finish is expected to require upgrades to support the recommended efforts in this report prior to re-opening. This deficiency provides a budgetary consideration for removal and replacement of the current ceiling finish to a new acoustical tile finish. Considering the recommended mechanical and electrical upgrades this effort should be completed as part of an overall renewal program for the school. No work should be considered until after the recommended exterior efforts are complete.

**System: D1010 - Elevators and Lifts**

**Location:** Elevator Machine Rooms

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Upgrade elevator cab and machinery - based on 3 stops, change the stops if required

**Qty:** 2.00

**Unit of Measure:** Ea.

**Estimate:** $396,352.94

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Provide upgrade and modernization of elevator cabs, controls and machine rooms for both passenger elevators.

**System: D2020 - Domestic Water Distribution**

**Location:** entire building

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace domestic water piping (350 KSF)

**Qty:** 332,185.00

**Unit of Measure:** S.F.

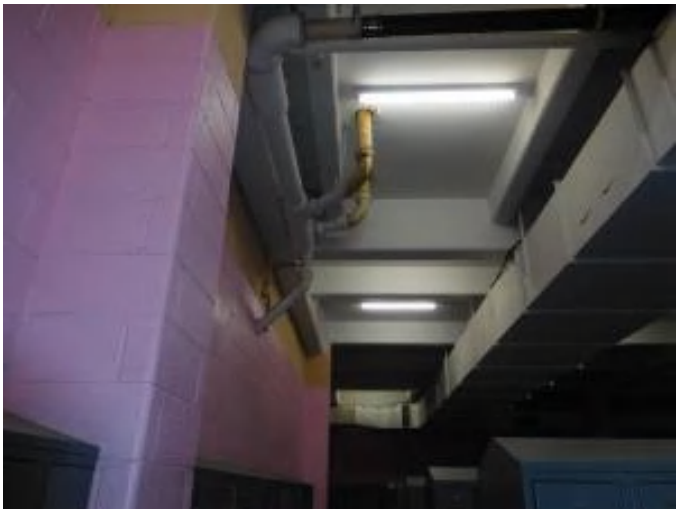
**Estimate:** $1,637,857.33

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Replace domestic hot and cold water piping including valves, fittings, hangars and insulation.

**System: D2030 - Sanitary Waste**



**Location:** entire building

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Inspect sanitary waste piping and replace damaged sections. (+300KSF)

**Qty:** 332,185.00

**Unit of Measure:** S.F.

**Estimate:** $1,459,568.54

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Inspect old cast iron sanitary piping including camera observation and replace damaged sections.

**System: D5010 - Electrical Service/Distribution**

**Location:** Transformer Vault and Main Electrical Room

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace Electrical Distribution System (U)

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** $1,946,224.62

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Replace the electrical service entrance and distribution equipment in the transformer vault and Main Electrical as follows:
1) Remove the incoming 4.16 kV service switch, MV oil switches and two 333 kVA, 4.16 kV-120/240V, 1 phase oil-filled transformers in the transformer volt. Replace equipment with line and load interrupter switches and a 480/277V load center unit substation to serve mechanical equipment and central air conditioning equipment.
2) Remove 800A busway system from transformer vault to 120/240V switchboard in the Main Electrical Room.
3) Replace the 800A, 120/240V switchboard, 300 kVA 4.16 kV-208/120V dry type transformer and 1200A, 208/120A switchboard with a load center unit substation fed from load interrupter switch in the transformer vault.
4) Remove several safety switches in the Main Electrical Room and re-feed from 208/120V load center substation.

**System: D5010 - Electrical Service/Distribution**

**Location:** Building wide

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace Panelboard

**Qty:** 38.00

**Unit of Measure:** Ea.

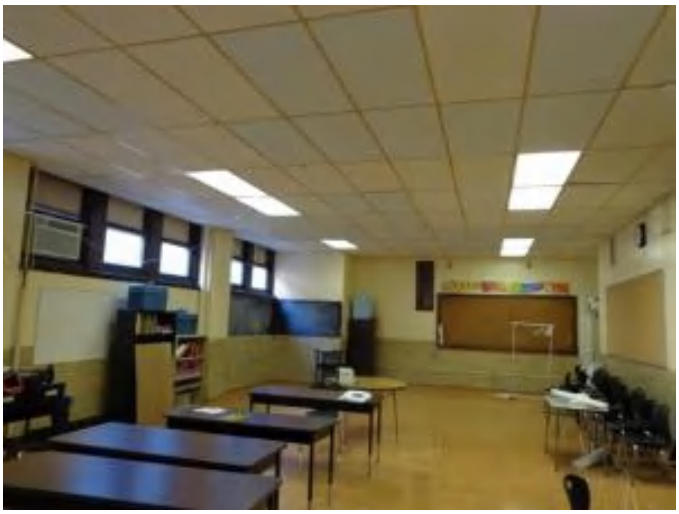
**Estimate:** $1,228,547.92

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Replace a total of 38 lighting and appliance type panelboards on all floors that have reached the end of their useful life. Panelboard replacement includes feeder conductors.

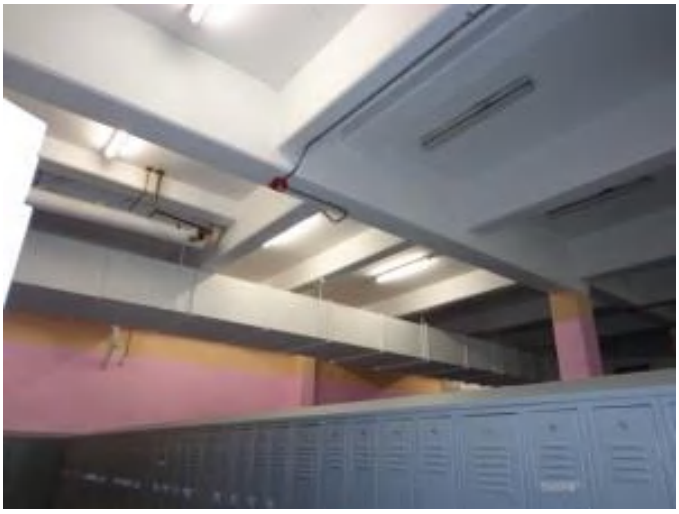
**System: D5020 - Lighting and Branch Wiring**



**Location:** Classrooms
**Distress:** Beyond Service Life
**Category:** 3 - Operations / Maint.
**Priority:** 3 - Response Time (3-4 yrs)
**Correction:** Replace Lighting Fixtures (SF)
**Qty:** 127,400.00
**Unit of Measure:** S.F.
**Estimate:** $2,647,437.56
**Assessor Name:** System
**Date Created:** 10/21/2015

**Notes:** Replace lighting fixtures and wiring in 147 classrooms, totaling approximately 127,400 SF.

**System: D5020 - Lighting and Branch Wiring**



**Location:** Various rooms
**Distress:** Beyond Service Life
**Category:** 3 - Operations / Maint.
**Priority:** 3 - Response Time (3-4 yrs)
**Correction:** Replace Lighting Fixtures (SF)
**Qty:** 0.00
**Unit of Measure:** S.F.
**Estimate:** $1,632,242.93
**Assessor Name:** System
**Date Created:** 10/21/2015

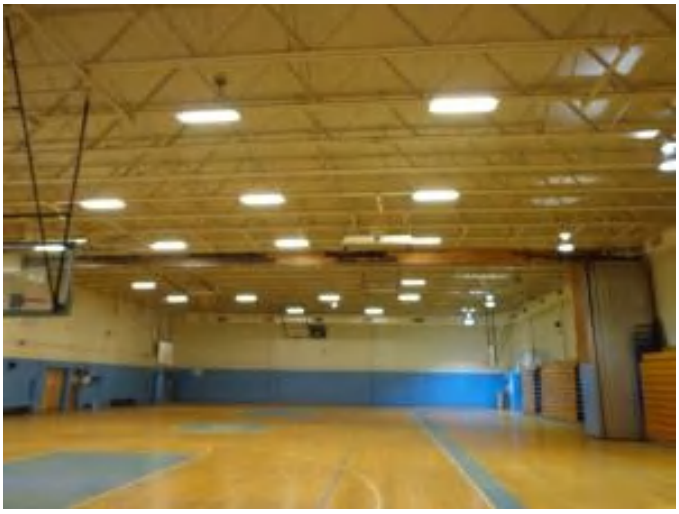
**Notes:** Provide an allowance for replacement of lighting system in staff areas, offices, cafeteria, serving, kitchen, locker rooms, toilet rooms, and other similar spaces (approximately 95,000 SF).

**System: D5020 - Lighting and Branch Wiring**

**Location:** Gymnasiums - Main building
**Distress:** Beyond Service Life
**Category:** 3 - Operations / Maint.
**Priority:** 3 - Response Time (3-4 yrs)
**Correction:** Replace lighting fixtures
**Qty:** 28.00
**Unit of Measure:** Ea.
**Estimate:** $106,195.12
**Assessor Name:** System
**Date Created:** 10/21/2015

**Notes:** Replace a total of (28) metal halide lighting fixtures in the two smaller gymnasiums in the main building.

**System: D5020 - Lighting and Branch Wiring**



**Location:** Southwest Gymnasium
**Distress:** Maintenance Required
**Category:** 3 - Operations / Maint.
**Priority:** 3 - Response Time (3-4 yrs)
**Correction:** Maintain Lighting Fixtures
**Qty:** 28.00
**Unit of Measure:** Ea.
**Estimate:** $20,597.21
**Assessor Name:** System
**Date Created:** 10/21/2015

**Notes:** Maintain/repair/re-lamp 28 fluorescent lighting fixtures in the southwest gymnasium.

**System: D5020 - Lighting and Branch Wiring**

**Location:** Loading dock

**Distress:** Energy Efficiency

**Category:** 4 - Capital Improvement

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace lighting fixtures

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** $6,921.55

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Replace all incandescent lighting fixtures in the loading dock with vapor-tight LED lighting fixtures.

**System: D5030 - Communications and Security**

**Location:** Building wide

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace fire alarm system

**Qty:** 332,185.00

**Unit of Measure:** S.F.

**Estimate:** $617,599.56

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Replace fire alarm system control panel. Provide notification appliances in all classrooms and rooms with multiple occupants that do not have appliances. Provide heat detectors in elevator machine room for elevator recall operation.

**System: D5090 - Other Electrical Systems**

**Location:** Sub-Basement Boiler Room

**Distress:** Inadequate

**Category:** 4 - Capital Improvement

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace standby generator system

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** $556,918.15

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Replace the standby generator and provide an ATS for standby power system, sized to include adding the two elevators and a fire pump, if required. It is estimated a 400 kW generator would be required.

**System: D5090 - Other Electrical Systems**

**Location:** Building wide

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace Emergency/Exit Lighting

**Qty:** 25.00

**Unit of Measure:** Ea.

**Estimate:** $27,546.23

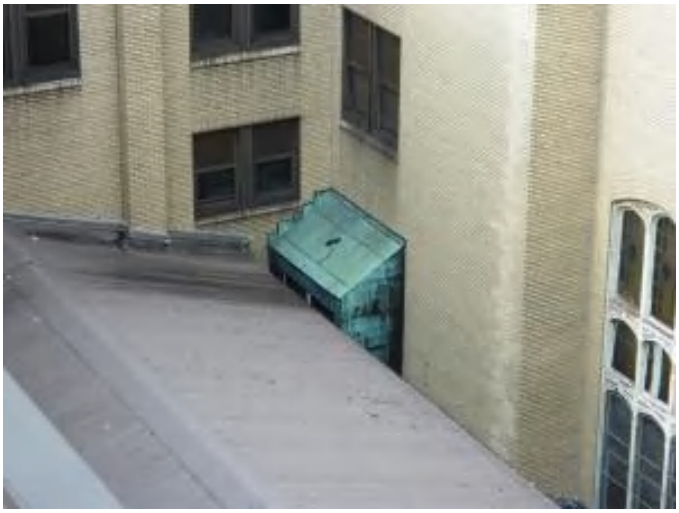
**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Provide an allowance for the addition of ten (10) exit signs and maintenance/replacement of (15) exit signs.

## Priority 4 - Response Time (4-5 yrs):

**System: B2010 - Exterior Walls**



**Location:** Exterior Elevation

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Repair cracks in masonry - replace missing mortar and repoint - SF of wall area

**Qty:** 5,000.00

**Unit of Measure:** S.F.

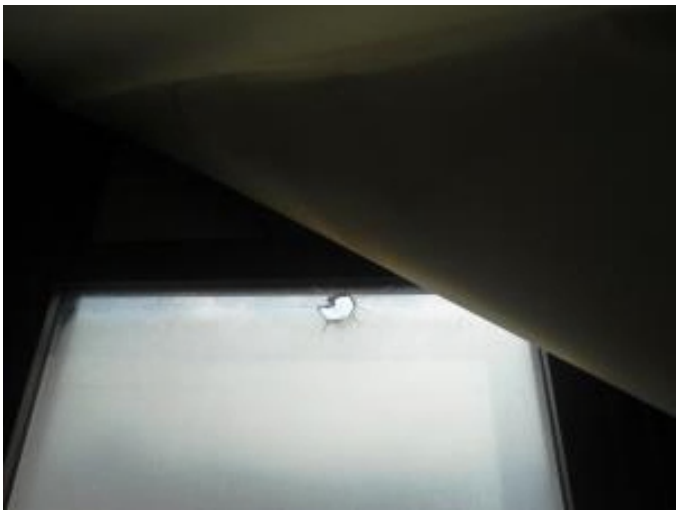
**Estimate:** $161,447.36

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The exterior brick surfaces are generally in fair to good condition for their age. In some locations, bricks have cracked or spalled and should be replaced. The repointing of deteriorated mortar joints is also recommended, using mortar of a similar color and consistency as the original. Following the detailed examination of the brick and repair of mortar construction joints, the entire building should be pressure washed to remove stains and embedded pollutants. If moisture is found to be penetrating the masonry facade, the application of a spray sealant to the suspected exterior masonry surface is recommended.

**System: B2020 - Exterior Windows**



**Location:** Exterior Elevation

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace aluminum windows - pick the appropriate size and style and insert the number of units

**Qty:** 400.00

**Unit of Measure:** Ea.

**Estimate:** $2,656,494.57

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The exterior windows are a mix of the original industrial metal framed single pane applications for the modified shop classrooms and industrial rooms and aluminum framed applications in the classrooms and administrative areas. Some of the windows are operable while others no longer function. The exterior windows have exceeded the expected life cycle for this type of application. It is recommended that the exterior window system be replaced with units that retain their dimensions and profiles, but that incorporate updated energy-efficient features. Note: Several windows show evidence of fire arms activity in the local neighborhood. As indicated in the photos the integrity of the windows is driving the replacements for these specific conditions.

**System: B2030 - Exterior Doors**

**Location:** Exterior Elevation

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace exterior doors - per leaf

**Qty:** 40.00

**Unit of Measure:** Ea.

**Estimate:** $364,292.83

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The exterior doors are metal applications with metal frames. The exterior door system for this school is a very high traffic system. The doors are in fair condition but are aging at a faster rate than expected based on traffic and condition. The exterior door system, store front and service doors are recommended for upgrade. Special Note: The bricked over exterior doors to the new gym are included in this estimate.

**System: B2030 - Exterior Doors**

**Location:** Exterior Elevation

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace overhead door - pick the closest type and size and add for the operator if required

**Qty:** 8.00

**Unit of Measure:** Ea.

**Estimate:** $51,503.08

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** There several exterior overhead doors in the converted vocational building. These applications are metal applications with metal frames. The doors are in fair condition but are aging at a faster rate than expected based on traffic and condition. The overhead exterior door system is recommended for upgrade.

---

**System: C1010 - Partitions**

**Location:** Science Labs

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remodel existing classroom for lab use - approx 900 GSF - with chemical storage room, 15 tables + instructors table

**Qty:** 5.00

**Unit of Measure:** Ea.

**Estimate:** $1,763,745.42

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** This schools science labs have been upgraded from the original construction with interior service desk with sink and demonstration areas. The wall mounted storage cabinets and cabinets with sinks for student use appear to be the original woodwork and millwork. The system is showing signs of age and lack of maintenance such as broken sink fixtures missing cabinet doors and damaged shelves. This deficiency provides a budgetary consideration for the universal upgrade of the science teaching labs to include new counter tops, sink, cabinets, shelves and fixtures required to support a conducive level of education.

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**System: C1020 - Interior Doors**

**Location:** Classroom Doors

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace interior doors - wood doors with hollow metal frames - per leaf

**Qty:** 300.00

**Unit of Measure:** Ea.

**Estimate:** $1,431,176.13

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** Interior doors are typically wood in wood frames with transom lites, sidelights, wired glass glazing. Other interior doors include wooden glass pane doors with original wooden pane frames, hollow metal in hollow metal frames. Doors are generally in good condition considering the age of the application. Universal upgrades are required for the interior door systems it is recommended that the interior doors system be removed and replaced with a new modern metal framed hollow metal door system with consideration for ADA compliance. Special Note: The double door systems leading to the auditorium are elevated on wooden stairs and the door swing exceeds the stair elevation creating a pinch hazard. The modification to the auditorium door systems are recommended to include stair modifications to correct this issue.

**System: C1030 - Fittings**


**Location:** Classrooms

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Replace blackboards with marker boards - pick the appropriate size and insert the quantities

**Qty:** 80.00

**Unit of Measure:** Ea.

**Estimate:** $55,058.57

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The classroom chalk boards are original to the buildings construction. This system is damaged and beyond its expected life, universal upgrades are warranted. Remove and upgrade chalkboards to new marker board systems.

**System: C1030 - Fittings**

**Location:** Restroom

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace damaged toilet paritions - handicap units

**Qty:** 10.00

**Unit of Measure:** Ea.

**Estimate:** $14,318.67

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:**

**System: C3010230 - Paint & Covering**

**Location:** Building Wide

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Repair and repaint all interior walls - SF of wall surface

**Qty:** 50,000.00

**Unit of Measure:** S.F.

**Estimate:** $338,693.85

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** While using similar materials, the interior finishes vary significantly between the older and newer sections of the school. Portions of the southern vocational wing were updated in 2000. The main Gym, some classrooms, and office space, most of its corridor floors are concrete or vinyl tile, with painted masonry block walls or marble walls in the older sections and sealed unpainted concrete masonry unit (CMU) in the newer sections. The majority of the finishes are in fair condition. However, there are several minor areas of wall damage that ranges from serious to minor. Although the school is on a cyclical program of renewal and each painted surface is renewed at years end this system is at the point in which repairs are necessary. Remove damaged wall finishes and repair areas then apply primer and paint finish.

**System: C3010232 - Wall Tile**

**Location:** Advance Living Room

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace wall tile

**Qty:** 800.00

**Unit of Measure:** S.F.

**Estimate:** $27,975.45

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The tile wall finishes appear to have been replaced in the early 1990's and are in fair condition. The finish is expected to require upgrade within the next ten years based on the high traffic use in this school. This deficiency provides a budgetary consideration for universal upgrades to the wall tile finish.

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**System: C3020414 - Wood Flooring**


**Location:** Building Wide

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace wood flooring

**Qty:** 200,000.00

**Unit of Measure:** S.F.

**Estimate:** $5,830,414.20

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The classrooms and auditorium in this school have a wooden floor finish that appears to be from original construction. The system is showing signs of age such as the effects of sanding and refinishing with yearly cleaning and waxing with some repairs. The floor finish is in fair condition however, the finish is beyond its expected life cycle. It is recommended that the wooden floor finish be removed and replaced with an in kind finish.

---

**System: D3040 - Distribution Systems**

**Location:** entire building

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Provide classroom FC units and dedicated OA ventilation system. (20 clsrms)

**Qty:** 100.00

**Unit of Measure:** C

**Estimate:** $8,306,098.83

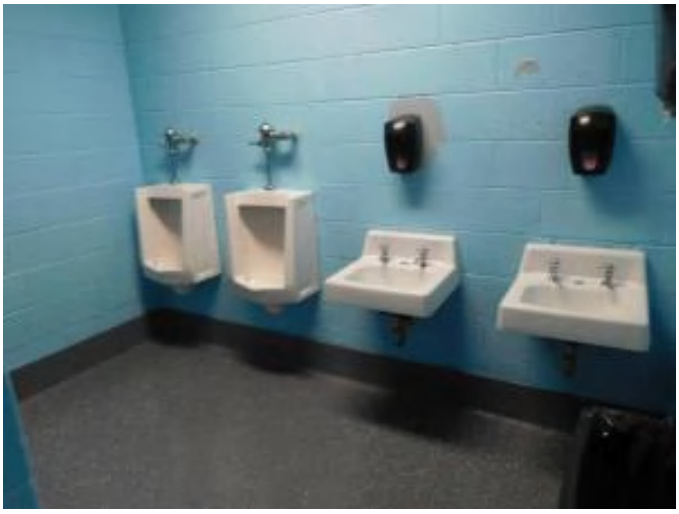
**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Provide a four pipe fan coil system with roof mounted outside air system ducted to each fan coil unit. Provide a fan coil unit for each classroom and separate area. Include new heat exchanger and pumps for hot water, piping, control valves and controls, to replace steam heating system.

---

**System: D3040 - Distribution Systems**



**Location:** toilet rooms original building

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Provide inline centrifugal fan and wall outlet louver for restroom exhaust (4 plbg fixtures)

**Qty:** 10.00

**Unit of Measure:** Ea.

**Estimate:** $172,070.42

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Provide mechanical toilet exhaust system for the original building.

---

**System: D3060 - Controls & Instrumentation**

**Location:** entire building

**Distress:** Inadequate

**Category:** 4 - Capital Improvement

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Replace pneumatic controls with DDC (350KSF)

**Qty:** 332,185.00

**Unit of Measure:** S.F.

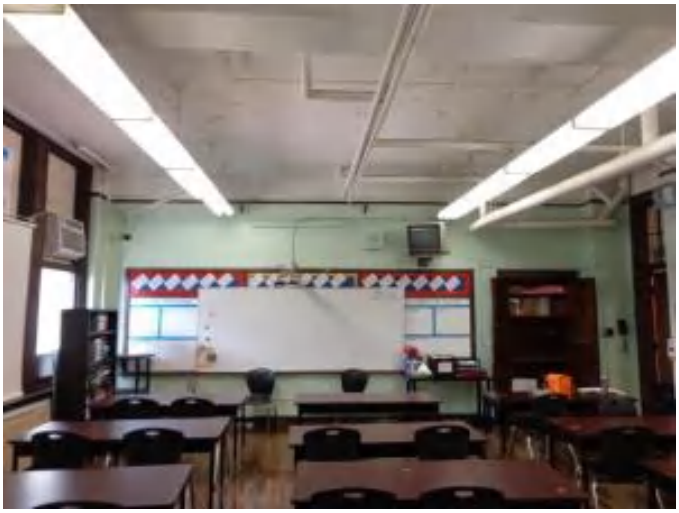
**Estimate:** $6,119,992.46

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Install new direct digital control system and building automation system with software, remote computer control capability and graphics package.

**System: D5020 - Lighting and Branch Wiring**



**Location:** Classrooms

**Distress:** Inadequate

**Category:** 4 - Capital Improvement

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Provide surface raceway system and wiring devices

**Qty:** 2,700.00

**Unit of Measure:** L.F.

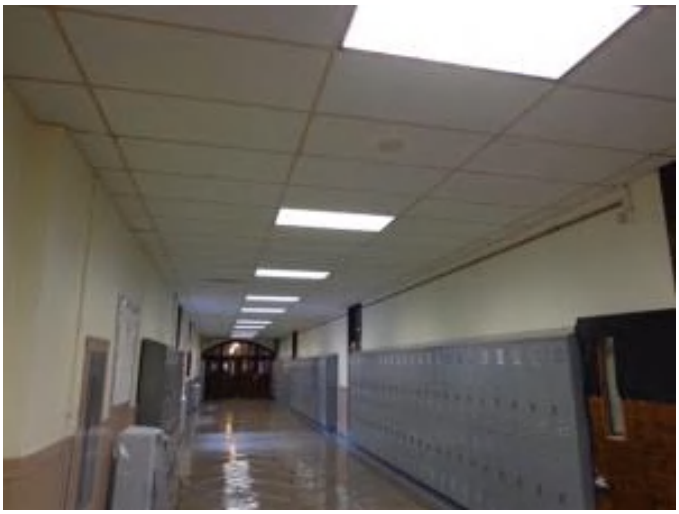
**Estimate:** $362,512.41

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Add surface raceway system with additional duplex receptacles in 90 classrooms, and replace approximately 180 non-grounding type duplex receptacles with 3-wire grounding type.

**System: D5020 - Lighting and Branch Wiring**



**Location:** Basement and Floor 1 corridors

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Maintain Lighting Fixtures

**Qty:** 35.00

**Unit of Measure:** Ea.

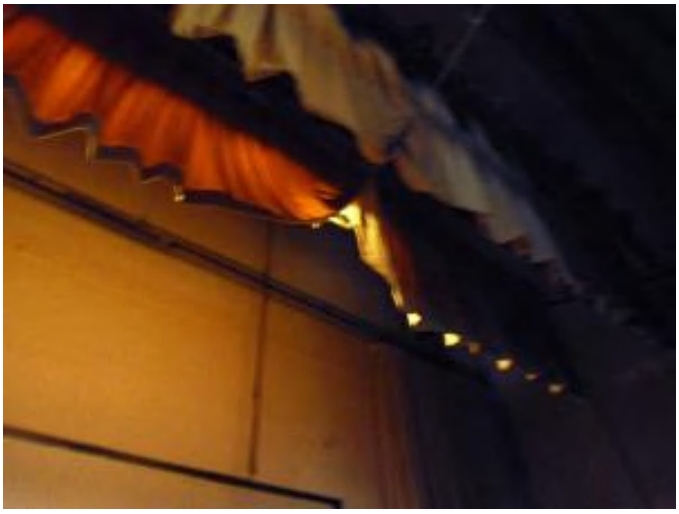
**Estimate:** $12,960.41

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Maintain/repair approximately (35) fluorescent fixtures in the Basement and Floor 1 corridors that are damaged.

**System: E2010 - Fixed Furnishings**



**Location:** Stage

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace stage curtain - insert the LF of track and SF of curtain

**Qty:** 55.00

**Unit of Measure:** Ea.

**Estimate:** $55,869.09

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The school stage has a stage curtain assembly that appears to be from the original construction. Modern applications are typically fire-proof applications with adjustable tracks and electric support for operation. The curtains are torn in a few section and the track is not functioning properly, overall the system is in poor condition. It is recommended that the curtain and track system be upgraded to a new system. Special care should be considered in regards to modern fire proofing for the new installation.

## Priority 5 - Response Time (> 5 yrs):

**System: C1030 - Fittings**

**Location:** Hallways Classrooms

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Remove and replace tackboards - select size

**Qty:** 20.00

**Unit of Measure:** Ea.

**Estimate:** $15,854.51

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** There are several tack boards in the hallways for student displays. The systems are damaged and beyond the expected service life for this application. Remove and replace tack boards is recommended.

---

**System: D3030 - Cooling Generating Systems**

**Location:** roof, mechanical room

**Distress:** Inadequate

**Category:** 4 - Capital Improvement

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Install chilled water system with distribution piping and pumps. (+350KSF)

**Qty:** 332,185.00

**Unit of Measure:** S.F.

**Estimate:** $5,626,150.51

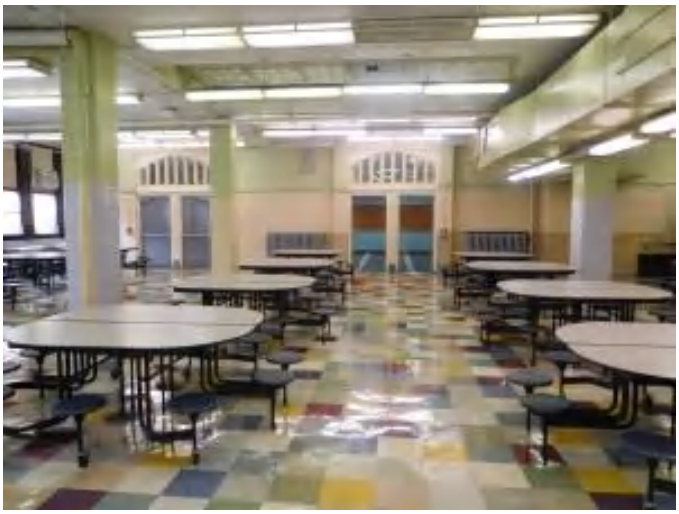
**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Remove the existing window air conditioning units and install a total of 820 tons of air-cooled chillers on the roof with chilled water distribution piping, pumps, chemical treatment and controls located in a mechanical room on the basement level.

---

**System: D3040 - Distribution Systems**



**Location:** cafeteria

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Install HVAC unit for Cafeteria (850 students).

**Qty:** 2,300.00

**Unit of Measure:** Pr.

**Estimate:** $1,075,346.70

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Provide a new central station air handling unit for the cafeteria with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

---

**System: D3040 - Distribution Systems**

**Location:** auditorium

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Install HVAC unit for Cafeteria (850 students).

**Qty:** 1,296.00

**Unit of Measure:** Pr.

**Estimate:** $605,932.77

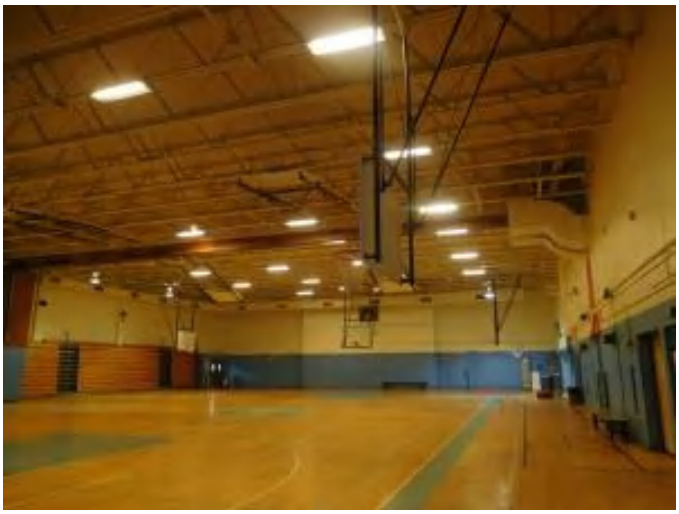
**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Provide a new central station air handling unit for the auditorium with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

---

**System: D3040 - Distribution Systems**



**Location:** gymnasiums

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Install HVAC unit for Gymnasium (single station).

**Qty:** 6,000.00

**Unit of Measure:** Ea.

**Estimate:** $308,301.04

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Provide a new central station air handling unit for the gymnasiums with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

---

**System: D3050 - Terminal & Package Units**

This deficiency has no image.

**Location:** roof elevator rooms

**Distress:** Inadequate

**Category:** 4 - Capital Improvement

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Install ductless split system for equipment room

**Qty:** 2.00

**Unit of Measure:** Ea.

**Estimate:** $29,282.82

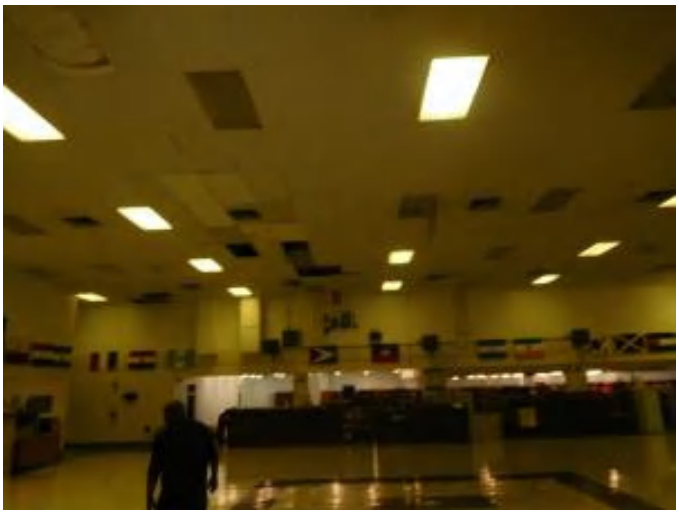
**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Install (2) one ton ductless DX split systems to cool elevator equipment penthouses. Locate condensing unit on adjacent roof. Include refrigerant line set and drain line.

---

**System: D4010 - Sprinklers**



**Location:** entire building

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Install a fire protection sprinkler system

**Qty:** 325,000.00

**Unit of Measure:** S.F.

**Estimate:** $4,649,271.51

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Install complete NFPA wet pipe automatic sprinkler system and standpipes. If required provide fire pump and jockey pump with controller.

**System: D5020 - Lighting and Branch Wiring**

**Location:** Main Entrance, Corridors, Auditorium

**Distress:** Energy Efficiency

**Category:** 4 - Capital Improvement

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Maintain Lighting Fixtures

**Qty:** 50.00

**Unit of Measure:** Ea.

**Estimate:** $41,908.24

**Assessor Name:** System

**Date Created:** 10/21/2015

**Notes:** Maintain and re-lamp incandescent lighting fixtures in the main entrance vestibule, corridor and auditorium with dimmable LED lamps to reduce energy consumption and maintenance cost and to significantly increase lamp life. Approximately 50 fixtures, 18 of them pendant.

**System: E1020 - Institutional Equipment**

**Location:** Gym

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Remove and replace or install basketball backstop and hoop - pick the appropriate style of backstop

**Qty:** 4.00

**Unit of Measure:** Ea.

**Estimate:** $30,273.46

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The boys and girls Gyms are no longer the main areas as this school had a new Gym addition constructed within the past ten years. This new Gym is in like new condition with modern backstops and sports safety barriers. However the old Gyms are still used as either a student common area or practice court. The interior backboards and support equipment is beyond its service life. Damaged boards are recommended for removal and replacement.

**System: E2010 - Fixed Furnishings**

**Location:** Auditorium

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Replace auditorium seating - add tablet arms if required. Veneer seating is an option.

**Qty:** 600.00

**Unit of Measure:** Ea.

**Estimate:** $541,143.31

**Assessor Name:** System

**Date Created:** 10/20/2015

**Notes:** The fixed seating for this school is from the original construction. The systems are in fair condition considering the age and usage. This project provides a budgetary consideration for universal upgrades for the fixed seating and furnishing of this school. Ensure that ADA requirements are followed with the new seating layout.

## Equipment Inventory

The following table represents the inventory details of the inventory found in the building, which fall under the following subsystems:

| Subsystem | Inventory | Qty | UoM | Location | Manufacturer | Model Number | Serial Number | Barcode | Life | Install Date | Next Renewal | Raw Cost | Inventory Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D1010 Elevators and Lifts | Traction geared elevators, freight, 8000 lb, 5 floors, 50 FPM class'B' | 1.00 | Ea. | Loading Dock | NA | NA | | | 30 | | | $234,780.00 | $258,258.00 |
| D1010 Elevators and Lifts | Traction geared elevators, passenger, 3500 lb, 5 floors, 200 FPM | 2.00 | Ea. | Elevator Machine Rooms | Amtech Reliable | NA | NA | | 30 | | | $181,650.00 | $399,630.00 |
| D2020 Domestic Water Distribution | Pump, pressure booster system, 3 HP pump, includes diaphragm tank, control and pressure switch | 1.00 | Ea. | mechanical room | armstrong | | | | 25 | 2005 | 2030 | $9,861.00 | $10,847.10 |
| D3020 Heat Generating Systems | Boiler, gas/oil combination, cast iron, steam, gross output, 1360 MBH, includes burners, controls and insulated jacket, packaged | 1.00 | Ea. | mechanical room | hb smith | mills 650 | | | 35 | 2008 | 2043 | $33,286.60 | $36,615.26 |
| D3020 Heat Generating Systems | Boiler, gas/oil combination, cast iron, steam, gross output, 1360 MBH, includes burners, controls and insulated jacket, packaged | 1.00 | Ea. | mechanical room | hb smith | mills 650 | | | 35 | 2008 | 2043 | $33,286.60 | $36,615.26 |
| D5010 Electrical Service/Distribution | Panelboard, 4 wire w/conductor & conduit, NQOD, 120/208 V, 400 A, 1 stories, 25' horizontal | 1.00 | Ea. | Boiler Room | Siemens | Type P2 | | | 30 | 2006 | 2036 | $12,109.50 | $13,320.45 |
| D5010 Electrical Service/Distribution | Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 1200 A | 1.00 | Ea. | Main Electrical Room | NA | NA | | | 30 | | | $27,696.60 | $30,466.26 |
| D5010 Electrical Service/Distribution | Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 800 A | 1.00 | Ea. | Main Electrical Room | Industrial Electric Products | Type CDP | | | 30 | | | $21,766.05 | $23,942.66 |
| D5010 Electrical Service/Distribution | Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 800 A | 3.00 | Ea. | Main Electrical Room | NA | NA | | | 30 | | | $21,766.05 | $71,827.97 |
| D5010 Electrical Service/Distribution | Transformer, dry-type, 3 phase 5 kV primary 277/480 volt secondary, 300 kVA | 1.00 | Ea. | Main Electrical Room | B-K Electrical Products | NA | | | 30 | | | $43,221.60 | $47,543.76 |
| D5010 Electrical Service/Distribution | Transformer, liquid-filled, 5 kV or 15 kV primary, 277/480 V secondary, 3 phase, 500 kVA, pad mounted | 2.00 | Ea. | Transformer Vault | Precision Transformer | | 22250-010001 | | 30 | | | $33,534.00 | $73,774.80 |
| | | | | | | | | | | | | **Total:** | **$1,002,841.52** |

## Executive Summary

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) FCI is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor). Condition Index (CI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired).

| | |
|---|---|
| Function: | |
| Gross Area (SF): | 300,500 |
| Year Built: | 1931 |
| Last Renovation: | |
| Replacement Value: | $5,067,758 |
| Repair Cost: | $2,924,537.24 |
| Total FCI: | 57.71 % |
| Total RSLI: | 42.66 % |

**Description:**

**Attributes:**

**General Attributes:**

| | | | |
|---|---|---|---|
| Bldg ID: | S705001 | Site ID: | S705001 |

## Condition Summary

The Table below shows the CI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

| UNIFORMAT Classification | RSLI % | FCI % | Current Repair Cost |
|---|---|---|---|
| G20 - Site Improvements | 43.59 % | 77.77 % | $2,924,537.24 |
| G40 - Site Electrical Utilities | 40.00 % | 0.00 % | $0.00 |
| **Totals:** | **42.66 %** | **57.71 %** | **$2,924,537.24** |

## Condition Detail

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II classification. The columns in the System Listing table below represent the following:

1. System Code: A code that identifies the system.
2. System Description: A brief description of a system present in the building.
3. Unit Price $: The unit price of the system.
4. UoM: The unit of measure for of the system.
5. Qty: The quantity for the system
6. Life: anticipated service life for thesystem based on Building Owners and Managers Association (BOMA) recommendations.
7. Year Installed: The date of system installation.
8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
10. CI: The Condition Index of the system.
11. FCI: The Facility Condition Index of the system.
12. RSL: Remaining Service Life.
13. eCR: eCOMET Condition Rating (not used).
14. Deficiency $: The financial investment to repair/replace system.

## System Listing

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

Additionally, a condition rating (eCR) based on the following guidelines is provided as observed at the time of the assessment.

- Excellent (E) - No noticeable distress or damage. The entire system is free from observable defect.
- Very Good (VG) - Overall no serviceability reduction for the entire system. No degradation of critical components and minor distress and defect noticeable for some but not non critical components within the system.
- Good (G) - Slight or no serviceability reduction for the entire system. There may be noticeable defects for some non critical components and slight noticeable degradation of the critical components.
- Fair (F) - Overall serviceability is degraded but adequate. There may be moderate deterioration for very few of the critical components and few of the non critical components may have severe degradation.
- Marginal (MA) - Overall serviceability and reliability loss. Most if not all of the non critical components suffer from severe degradation and a few of the critical component may have severe degradation.
- Moderate (MO) - Overall a significant serviceability loss. Most if not all the components have severe degradation with the reminder of the component showing visible distress.
- Very Poor (VP) - Overall the system is barely functional. All of the components are severely degraded.
- Non-Functional (NF) - Overall the system does not function with all the components having no serviceability and suffer from severe degradation.

| System Code | System Description | Unit Price $ | UoM | Qty | Life | Year Installed | Calc Next Renewal Year | Next Renewal Year | RSLI% | FCI% | RSL | eCR | Deficiency $ | Replacement Value $ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G2010 | Roadways | $11.52 | S.F. | 10,000 | 30 | 1990 | 2020 | 2027 | 40.00 % | 0.00 % | 12 | | | $115,200 |
| G2020 | Parking Lots | $7.65 | S.F. | 63,500 | 30 | 1990 | 2020 | 2027 | 40.00 % | 174.66 % | 12 | | $848,454.35 | $485,775 |
| G2030 | Pedestrian Paving | $11.52 | S.F. | 123,200 | 40 | 1980 | 2020 | 2027 | 30.00 % | 124.65 % | 12 | | $1,769,090.58 | $1,419,264 |
| G2040 | Site Development | $4.36 | S.F. | 300,500 | 25 | 1980 | 2005 | 2027 | 48.00 % | 21.06 % | 12 | | $275,859.59 | $1,310,180 |
| G2050 | Landscaping & Irrigation | $3.78 | S.F. | 113,800 | 15 | 1931 | 1946 | 2027 | 80.00 % | 7.24 % | 12 | | $31,132.72 | $430,164 |
| G4020 | Site Lighting | $3.58 | S.F. | 300,500 | 30 | | | 2027 | 40.00 % | 0.00 % | 12 | | | $1,075,790 |
| G4030 | Site Communications & Security | $0.77 | S.F. | 300,500 | 30 | | | 2027 | 40.00 % | 0.00 % | 12 | | | $231,385 |
| | | | | | | | | **Total** | **42.66 %** | **57.71 %** | | | **$2,924,537.24** | **$5,067,758** |

## System Notes

The facility description in the site executive summary contains an overview of each system. The notes listed below provide additional information on select systems found within the facility.

No data found for this asset

## Renewal Schedule

eCOMET forecasts future Capital Renewal funding needed to address expiring systems based on the Next Renewal year found in the Cost Models. A 3% annual inflation factor is applied to the costs for systems expiring in future years. The table below reflects recommended Capital Renewal funding needs over the next 10 years. Note: Cells with a zero value indicate systems for which renewal is not scheduled in that year.

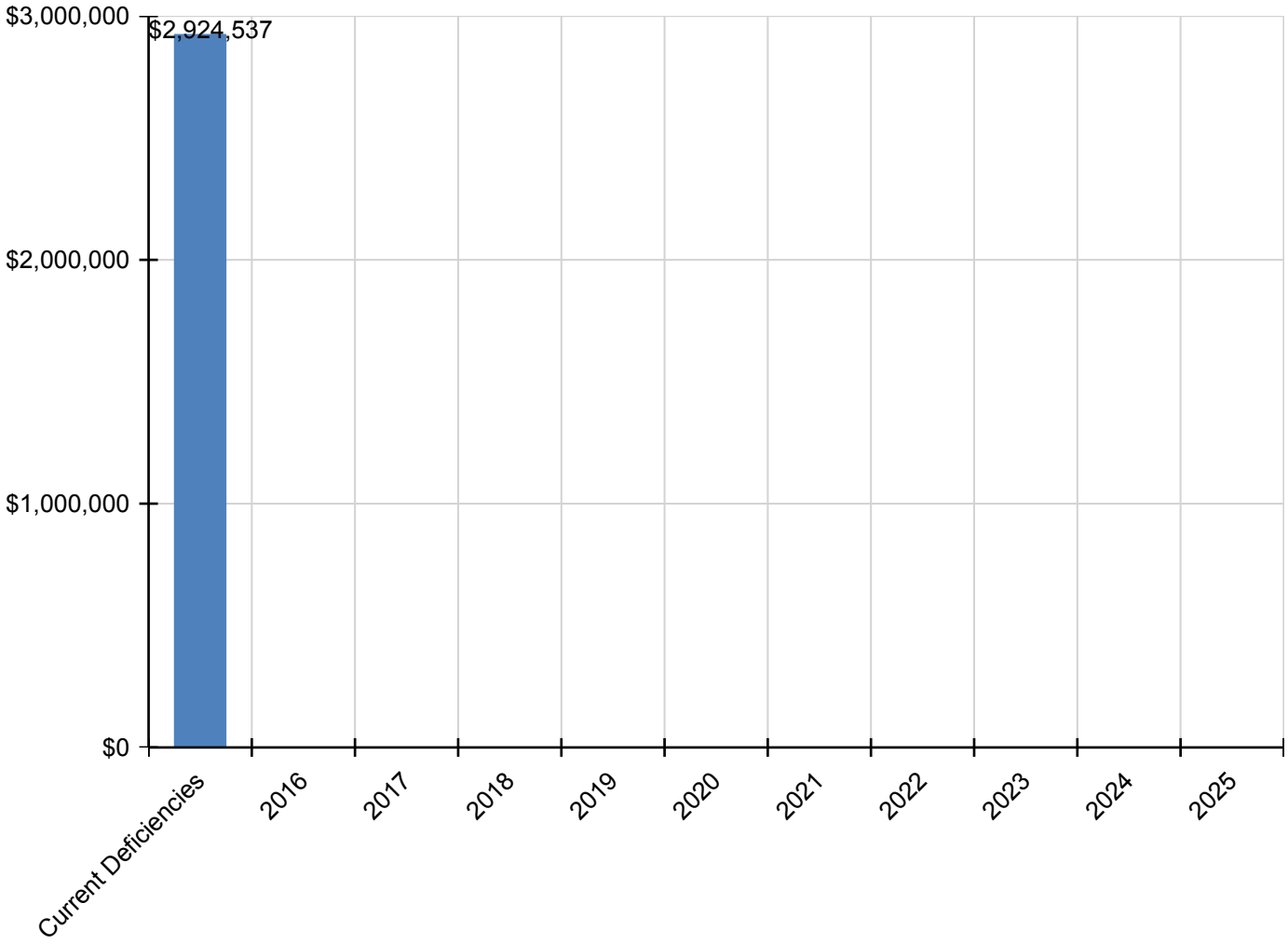
*Inflation Rate: 3%*

| System | Current Deficiencies | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total:** | **$2,924,537** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$2,924,537** |
| **G - Building Sitework** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **G20 - Site Improvements** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **G2010 - Roadways** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **G2020 - Parking Lots** | $848,454 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$848,454** |
| **G2030 - Pedestrian Paving** | $1,769,091 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$1,769,091** |
| **G2040 - Site Development** | $275,860 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$275,860** |
| **G2050 - Landscaping & Irrigation** | $31,133 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$31,133** |
| **G40 - Site Electrical Utilities** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **G4020 - Site Lighting** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **G4030 - Site Communications & Security** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |

** Indicates non-renewable system*

## Forecasted Sustainment Requirement

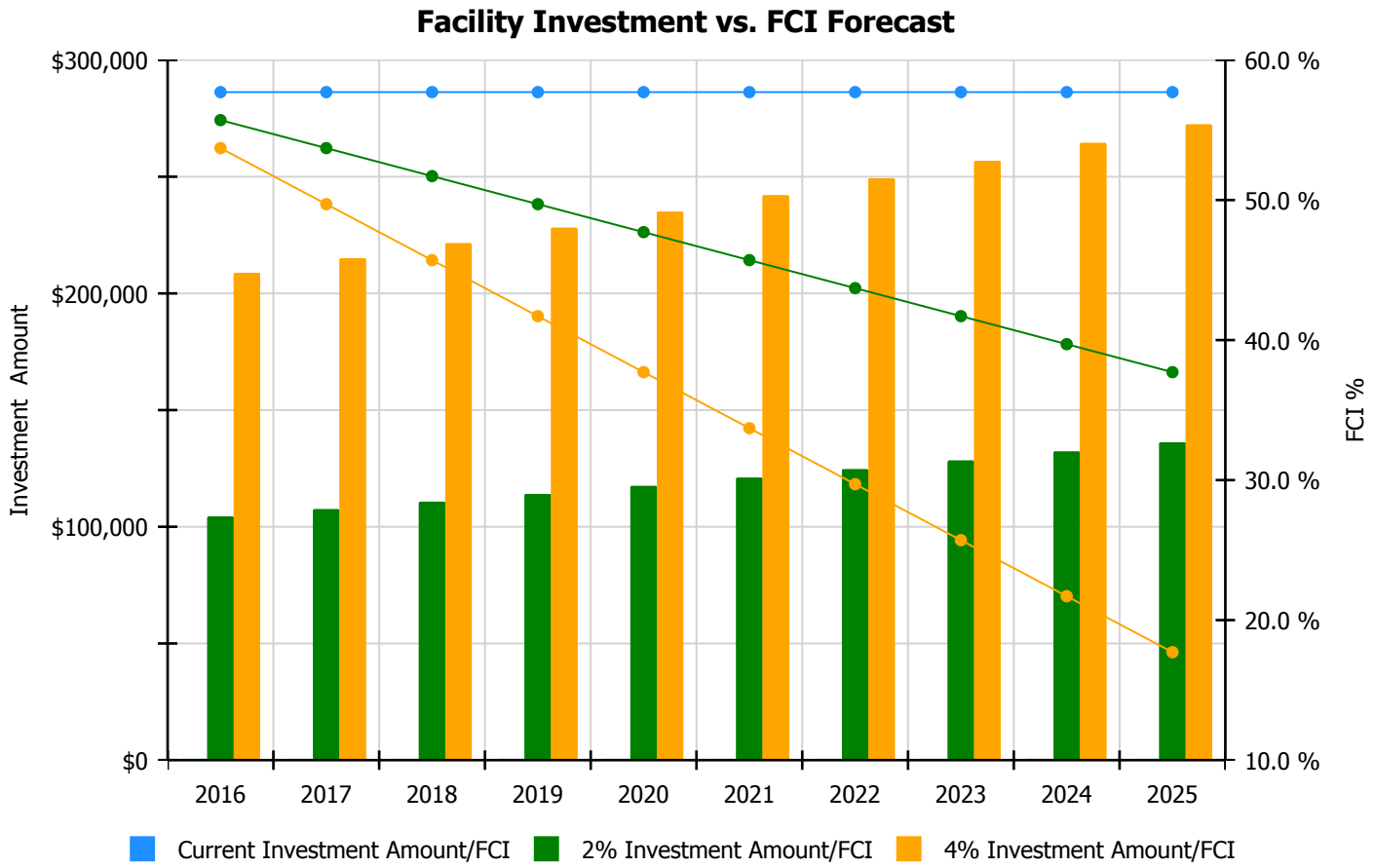
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



## 10 Year FCI Forecast by Investment Scenario

The chart below illustrates the effect of various investment levels on the building FCI for the next 10 years. The levels of investment shown below include:

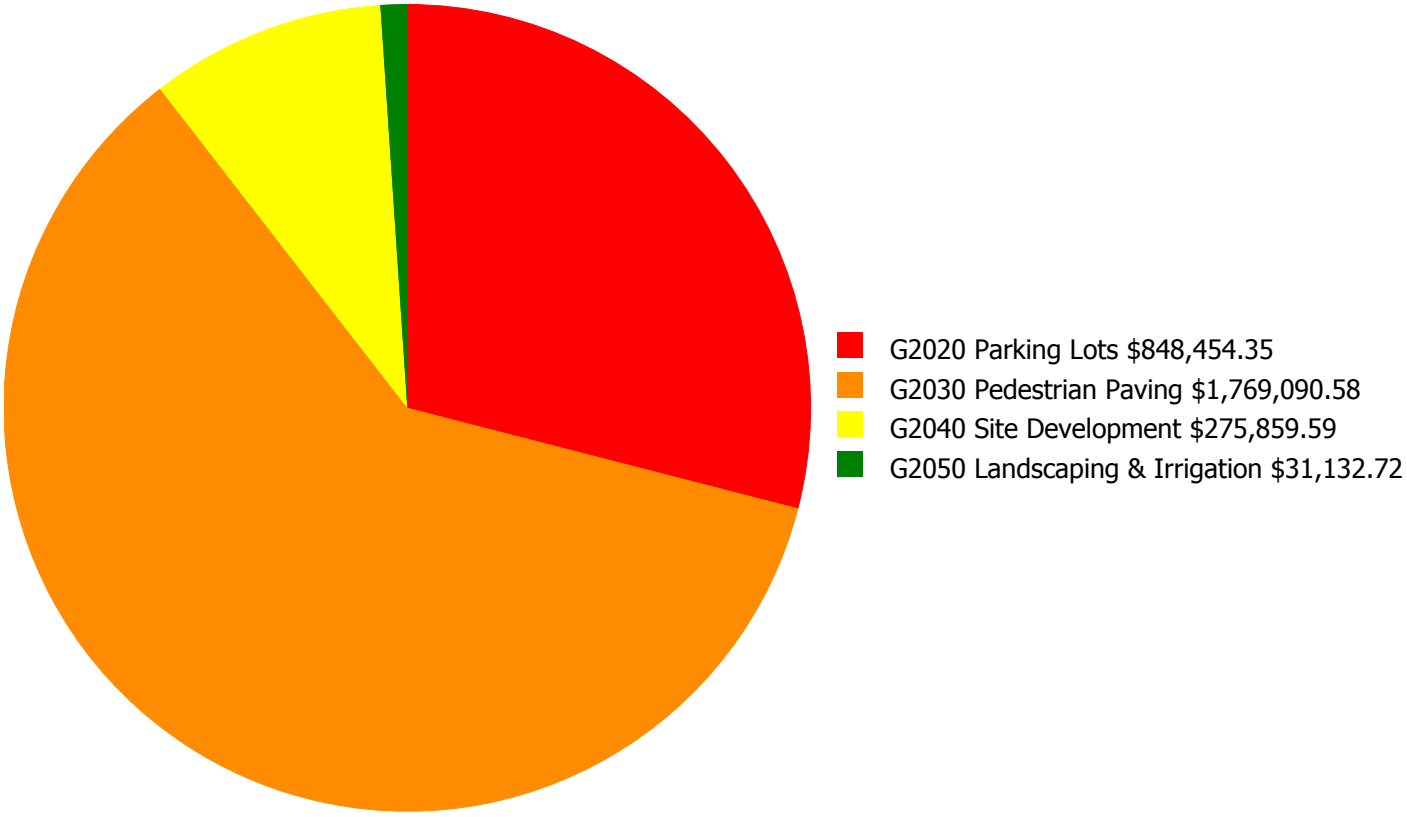
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value of the building, escalated for inflation




| Year | Investment Amount Current FCI - 57.71% | 2% Investment | | 4% Investment | |
|---|---|---|---|---|---|
| | | Amount | FCI | Amount | FCI |
| 2016 | $0 | $104,396.00 | 55.71 % | $208,792.00 | 53.71 % |
| 2017 | $0 | $107,528.00 | 53.71 % | $215,055.00 | 49.71 % |
| 2018 | $0 | $110,754.00 | 51.71 % | $221,507.00 | 45.71 % |
| 2019 | $0 | $114,076.00 | 49.71 % | $228,152.00 | 41.71 % |
| 2020 | $0 | $117,498.00 | 47.71 % | $234,997.00 | 37.71 % |
| 2021 | $0 | $121,023.00 | 45.71 % | $242,047.00 | 33.71 % |
| 2022 | $0 | $124,654.00 | 43.71 % | $249,308.00 | 29.71 % |
| 2023 | $0 | $128,394.00 | 41.71 % | $256,787.00 | 25.71 % |
| 2024 | $0 | $132,245.00 | 39.71 % | $264,491.00 | 21.71 % |
| 2025 | $0 | $136,213.00 | 37.71 % | $272,426.00 | 17.71 % |
| **Total:** | **$0** | **$1,196,781.00** | | **$2,393,562.00** | |

## Deficiency Summary by System

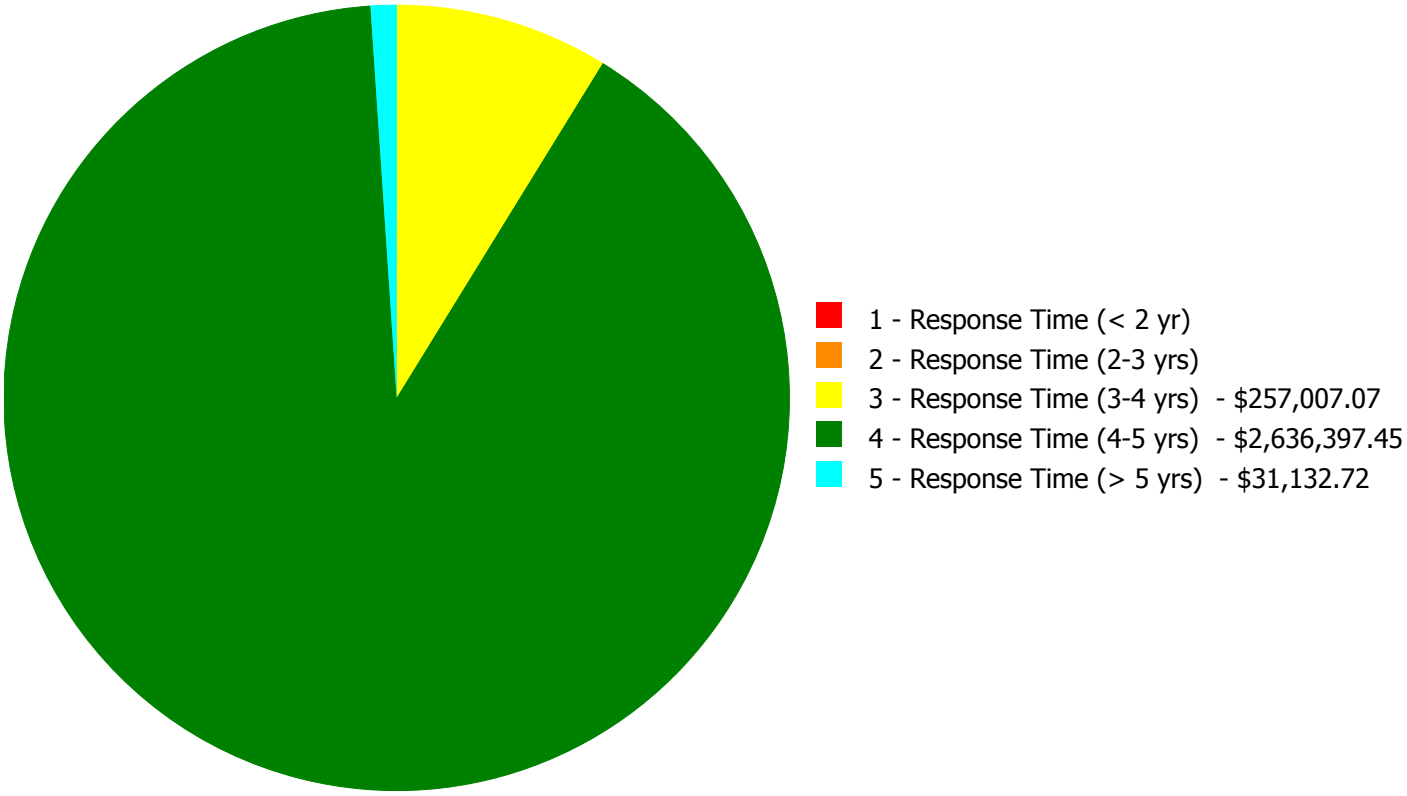
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.




**Budget Estimate Total: $2,924,537.24**

## Deficiency Summary by Priority

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:




**Budget Estimate Total: $2,924,537.24**

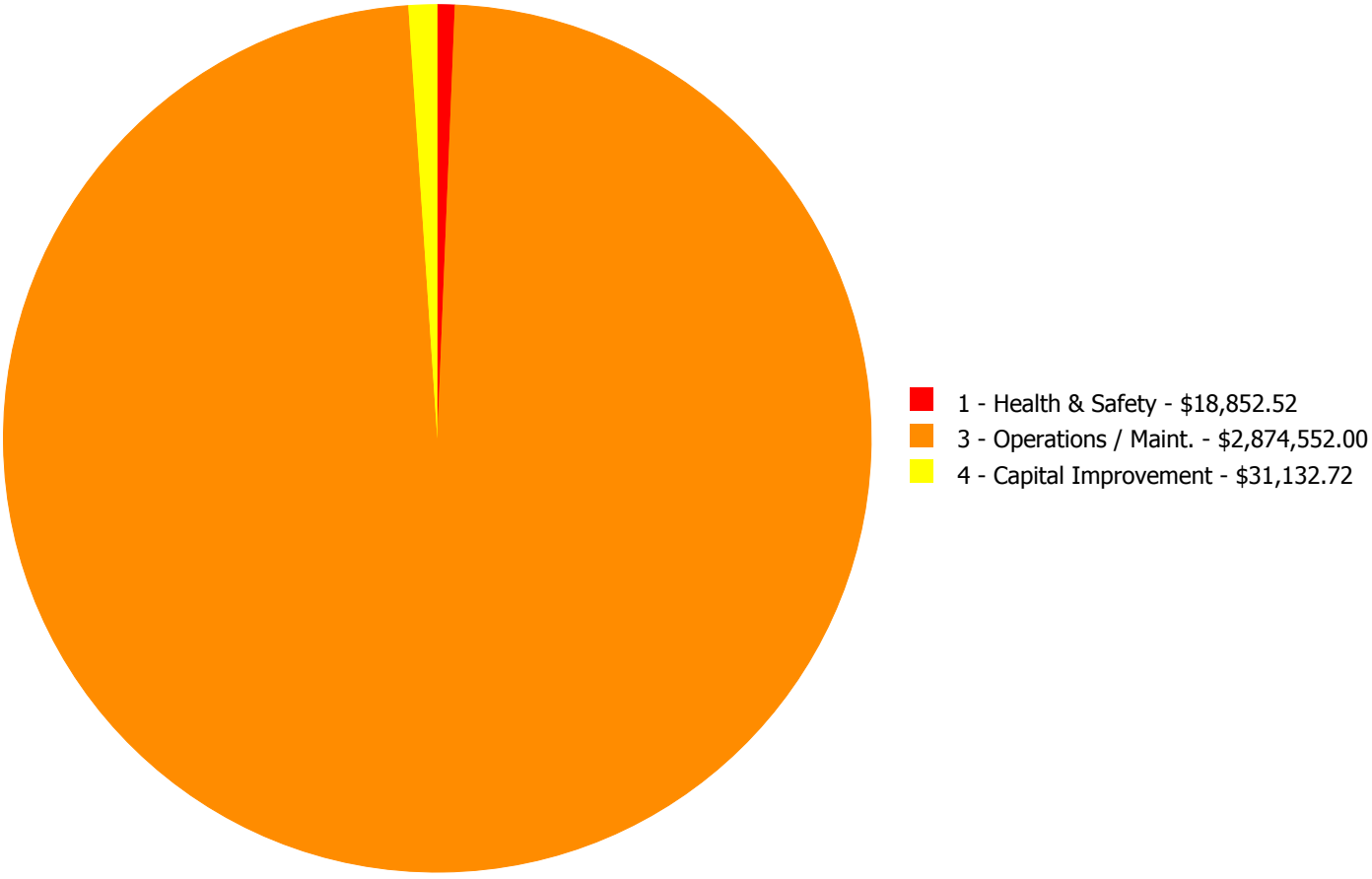
## Deficiency By Priority Investment Table

The table below shows the current investment cost grouped by deficiency priority and building system.

| System Code | System Description | 1 - Response Time (< 2 yr) | 2 - Response Time (2-3 yrs) | 3 - Response Time (3-4 yrs) | 4 - Response Time (4-5 yrs) | 5 - Response Time (> 5 yrs) | Total |
|---|---|---|---|---|---|---|---|
| G2020 | Parking Lots | $0.00 | $0.00 | $0.00 | $848,454.35 | $0.00 | $848,454.35 |
| G2030 | Pedestrian Paving | $0.00 | $0.00 | $0.00 | $1,769,090.58 | $0.00 | $1,769,090.58 |
| G2040 | Site Development | $0.00 | $0.00 | $257,007.07 | $18,852.52 | $0.00 | $275,859.59 |
| G2050 | Landscaping & Irrigation | $0.00 | $0.00 | $0.00 | $0.00 | $31,132.72 | $31,132.72 |
| | **Total:** | $0.00 | $0.00 | $257,007.07 | $2,636,397.45 | $31,132.72 | $2,924,537.24 |

## Deficiency Summary by Category

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:




**Budget Estimate Total: $2,924,537.24**

## Deficiency Details by Priority

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

### Priority 3 - Response Time (3-4 yrs):

**System: G2040 - Site Development**

**Location:** Stairs Site

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace or install exterior guardrails

**Qty:** 800.00

**Unit of Measure:** L.F.

**Estimate:** $153,882.04

**Assessor Name:** Ben Nixon

**Date Created:** 10/21/2015

**Notes:** The exterior site stairs for this schools site has several levels to traverse with several landings. The railing system is a single system down the center of each set of stairs. Current requirements for stairs indicate that they have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread/riser angle). Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future efforts should include comprehensive stair railing removal and replacement upgrades.

**System: G2040 - Site Development**


**Location:** Site

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Repair exterior brick retaining wall - per LF of wall - up to 4' tall

**Qty:** 200.00

**Unit of Measure:** L.F.

**Estimate:** $103,125.03

**Assessor Name:** Ben Nixon

**Date Created:** 10/21/2015

**Notes:** The exterior retaining wall located at the most southern corner of the site is showing signs of age and deterioration associated with weather conditions such as freezing and thawing. As indicated in the photo this issue starts at the roof and the obvious crack extends down the exterior wall to sidewalks. This wall is in fair condition and upgrades are recommended. The wall is recommended for point and tuck work as well as joint recovery and cleaning.

## Priority 4 - Response Time (4-5 yrs):

**System: G2020 - Parking Lots**

**Location:** Parking Lot

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace AC paving parking lot

**Qty:** 60,000.00

**Unit of Measure:** S.F.

**Estimate:** $848,454.35

**Assessor Name:** Ben Nixon

**Date Created:** 10/20/2015

**Notes:** The parking area has ADA parking with approved curb cuts for access to the sidewalks that lead to the service entrance facing the southern exterior. There is also covered parking under the constructed gym and additional parking near the old vocational school. However, the parking lots are in poor condition, the harsh environmental conditions associated with snow removal have taken its toll on the asphalt surface. Also, there is no marked path of ingress to the main entrance. This project provides a budgetary consideration for a parking lot renewal program that includes all aspects of the current ADA legislation. Universal upgrades are recommended.

---

**System: G2030 - Pedestrian Paving**

**Location:** Site

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace concrete sidewalk or concrete paving - 4" concrete thickness

**Qty:** 123,000.00

**Unit of Measure:** S.F.

**Estimate:** $1,769,090.58

**Assessor Name:** Ben Nixon

**Date Created:** 10/20/2015

**Notes:** The sidewalk system is original to the buildings construction. There are a several areas of cracking concrete but no tripping hazards. The sidewalk system is expected to expire in the near future. Removal of the entire system is recommended. Universal upgrades are required and should include all aspects of current ADA legislation.

---

**System: G2040 - Site Development**

**Location:** Site

**Distress:** Health Hazard / Risk

**Category:** 1 - Health & Safety

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Build secure trash dumpster enclosure

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** $18,852.52

**Assessor Name:** Ben Nixon

**Date Created:** 10/20/2015

**Notes:** The trash dumpster is located in the parking lot open to the students and to the public. The exterior services are not protected. Upgrades to protect the exterior services and trash area is necessary for the safety of the students and the general public. Construction of a secure lockable dumpster area is recommended.

## Priority 5 - Response Time (> 5 yrs):

**System: G2050 - Landscaping & Irrigation**

**Location:** Site

**Distress:** Inadequate

**Category:** 4 - Capital Improvement

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Add landscape irrigation system to small area - insert SF of area and LF of pipe run to get to the area for pavement removal and restoration

**Qty:** 3,000.00

**Unit of Measure:** S.F.

**Estimate:** $31,132.72

**Assessor Name:** Tom Moe

**Date Created:** 10/21/2015

**Notes:** The landscaping is in good condition and well maintained but with no irrigation system. The landscaping is generally located near the parking / play area of the site with limited turf sections around the general exterior of the school. This deficiency provides a budgetary consideration for the installation of an irrigation system for this site.

## Equipment Inventory

The following table represents the inventory details of the inventory found in the building, which fall under the following subsystems:

No data found for this asset

## Glossary

| | |
|---|---|
| ABMA | American Boiler Manufacturers Association http://www.abma.com/ |
| ACEEE | American Council for an Energy-Efficient Economy |
| ACGIH | American Council of Governmental and Industrial Hygienists |
| AEE | Association of Energy Engineers |
| AFD | Adjustable Frequency Drive |
| AFTC | After Tax Cash Flow |
| AGA | American Gas Association |
| AHU | Air Handling Unit |
| Amp | Ampere |
| ANSI | American National Standards Institute |
| ARI | Air Conditioning and Refrigeration Institute |
| ASD | Adjustable Speed Drive |
| ASHRAE | American Society of Heating Refrigerating and Air-Conditioning Engineers Inc. |
| ASME | American Society of Mechanical Engineers |
| Assessment | Visual survey of a facility to determine its condition. It involves looking at the age of systems reviewing information from local sources and visual evidence of potential problems to assign a condition rating. It does not include destructive testing of materials or testing of systems or equipment for functionality. |
| ATS | After Tax Savings |
| AW | Annual worth |
| BACNET | Building Automation Control Network |
| BAS | Building Automation System |
| BCR | Benefit Cost Ratio |
| BEP | Business Energy Professional (AEE) |
| BF | Ballast Factor |
| BHP | Boiler Horsepower (boilers) |
| BHP | Brake Horsepower (motors) |
| BLCC | Building Life Cycle Cost analysis program (FEMP) |
| BOCA | Building Officials and Code Administrators |
| BTCF | Before Tax Cash Flow |

| | |
|---|---|
| BTS | Before Tax Savings |
| Btu | British thermal unit |
| Building Addition | An area space or component of a building added to a building after the original building's year built date. |
| CAA | Clean Air Act |
| CAAA-90 | Clean Air Act Amendments of 1990 |
| CABO | Council of American Building Officials |
| CAC | Conventional Air Conditioning |
| CADDET | Center for the Analysis and Dissemination of Demonstrated Energy Technologies |
| Calculated Next Renewal | The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system. |
| Capital Renewal | Capital renewal is condition work (excluding suitability and energy audit work) that includes the replacement of building systems or elements (as they become obsolete or beyond their useful life) not normally included in an annual operating budget. Calculated next renewal The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system. Next renewal The assessor adjusted expected useful life of a system or element based on on-site inspection. |
| CDD | Cooling Degree Days |
| CDGP | Certified Distributed Generation Professional |
| CEC | California Energy Commission |
| CEM | Certified Energy Manager |
| CEP | Certified Energy Procurement Professional |
| CFC | Chlorofluorocarbon |
| CFD | Cash Flow Diagram |
| CFL | Compact Fluorescent Light |
| CFM cfm | Cubic Feet per Minute |
| CHP | Combined Heat and Power (a.k.a. cogeneration) |
| CHW | Chilled Water |
| Condition | Condition refers to the state of physical fitness or readiness of a facility system or system element for its intended use. |
| COP | Coefficient of Performance |
| Cp | Heat Capacity of Material |
| CPUC | California Public Utility Commission |
| CRI | Color Rendering Index |
| CRT | Cathode Ray Tube VDT HMI |

| | |
|---|---|
| CTC | Competitive Transition Charge |
| Cu | Coefficient of Utilization |
| Current Replacement Value (CRV) | CRV represents the hypothetical total cost of rebuilding or replacing an existing facility in current dollars to its optimal condition (excluding auxiliary facilities) under current codes and construction standards. |
| Cv | Value Coefficient |
| CWS | Chilled Water System |
| D d | Distance (usually feet) |
| DB | Dry Bulb |
| DCV | Demand Control Ventilation |
| DD | Degree Day |
| DDB | Double Declining Balance |
| DDC | Direct Digital Controls |
| Deferred maintenance | Deferred maintenance is condition work (excluding suitability and energy audit needs) deferred on a planned or unplanned basis to a future budget cycle or postponed until funds are available. |
| Deficiency | A deficiency is a repair item that is damaged missing inadequate or insufficient for an intended purpose. |
| Delta | Difference |
| Delta P | Pressure Difference |
| Delta T | Temperature Difference |
| DG | Distributed Generation |
| DOE | Department of Energy |
| DP | Dew Point |
| DR | Demand Response |
| DX | Direct Expansion Air Conditioner |
| EA | Energy Audit |
| EBITDA | Earnings before Interest Taxes Depreciation and Amortization |
| ECI | Energy Cost Index |
| ECM | Energy Conservation Measure |
| ECO | Energy Conservation Opportunity |
| ECPA | Energy Conservation and Production Act |
| ECR | Energy Conservation Recommendation |
| ECS | Energy Control System |

| | |
|---|---|
| EER | Energy Efficiency Ratio |
| EERE | Energy Efficiency and Renewable Energy division of US DOE |
| EIA | Energy Information Agency |
| EIS | Energy Information System |
| EMCS | Energy Management Computer System |
| EMO | Energy Management Opportunity |
| EMP | Energy Management Project |
| EMR | Energy Management Recommendation |
| EMS | Energy Management System |
| Energy Utilization Index (EUI) | EUI is the measure of total energy consumed in the cooling or heating of a building in a period expressed as British thermal unit (BTU) per (cooled or heated) gross square foot. |
| EO | Executive Order |
| EPA | Environmental Protection Agency |
| EPACT | Energy Policy Act of 1992 |
| EPCA | Energy Production and Conservation Act of 1975 |
| EPRI | Electric Power Research Institute |
| EREN | Efficiency and Renewable Energy (Division of USDOE) |
| ERV | Energy Recovery Ventilator |
| ESCO | Energy Service Company |
| ESPC | Energy Savings Performance Contract |
| EUI | Energy Use Index |
| EWG | Exempt Wholesale Generators |
| Extended Facility Condition Index (EFCI) | EFCI is calculated as the condition needs for the current year plus facility system renewal needs going out to a set time in the future divided by Current Replacement Value. |
| f | Frequency |
| F | Fahrenheit |
| Facility | A facility refers to site(s) building(s) or building addition(s) or combinations thereof that provide a particular service. |
| Facility Condition Assessment (FCA) | FCA is a process for evaluating the condition of buildings and facilities for programming and budgetary purposes through an on site inspection and evaluation process. |
| Facility Condition Index (FCI) | FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's deficiencies to the Current Replacement Value of the facilities. The higher the FCI the poorer the condition of a facility. After an FCI is established for all buildings within a portfolio a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities. |

| | |
|---|---|
| FC | Footcandle |
| FCA | Fuel Cost Adjustment |
| FEMIA | Federal Energy Management Improvement Act of 1988 |
| FEMP | Federal Energy Management Program |
| FERC | Federal Energy Regulatory Commission |
| FESR | Fuel Energy Savings Ratio |
| FLA | Full Load Amps |
| FLF | Facility Load Factor (usually monthly) |
| FLRPM | Full Load Revolutions per Minute |
| FMS | Facility Management System |
| FPM fpm | Feet per Minute (velocity) |
| FSEC | Florida Solar Energy Center |
| Ft | Foot |
| GPM gpm | Gallons per Minute |
| GRI | Gas Research Institute |
| Gross Square Feet (GSF) | The size of the enclosed floor space of a building in square feet measured to the outside face of the enclosing wall. |
| GUI | Graphical User Interface |
| H h | Enthalpy Btu/lb |
| HCFC | Hydrochlorofluorocarbons |
| HDD | Heating Degree days |
| HFC | Hydrofluorocarbons |
| HHV | Higher Heating Value |
| HID | High Intensity Discharge (lamp) |
| HMI | Human Machine Interface |
| HMMI | Human Man Machine Interface |
| HO | High Output (lamp) |
| HP Hp hp | Horsepower |
| HPS | High Pressure Sodium (lamp) |
| HR | Humidity Ratio |
| Hr hr | Hour |

| | |
|---|---|
| HRU | Heat Recovery Unit |
| HVAC | Heating Ventilation and Air-Conditioning |
| Hz | Hertz |
| I | Intensity (lumen output of lamp) |
| I i | Interest rate or Discount rate |
| IAQ | Indoor Air Quality |
| ICA | International Cogeneration Alliance |
| ICBO | International Conference of Buildings Officials |
| ICC | International Code Council |
| ICP | Institutional Conservation Program |
| IECC | International Energy Conservation Code |
| IEEE | Institute of Electrical and Electronic Engineers |
| IESNA | Illuminating Engineering Society of North America |
| Install year | The year a building or system was built or the most recent major renovation date (where a minimum of 70 of the system?s Current Replacement Value (CRV) was replaced). |
| IRP | Integrated Resource Planning |
| IRR | Internal Rate of Return |
| ISO | Independent System Operator |
| ITA | Independent Tariff Administrator |
| k | Kilo multiple of thousands in SI system |
| K | Kelvins (color temperature of lamp) |
| K k | Thermal Conductivity of Material |
| KVA | Kilovolt Ampere |
| KVAR | Kilovolt Ampere Reactive |
| kW | kiloWatt |
| kWh | kiloWatt hour |
| L | Length (usually feet) |
| LCC | Life Cycle Costing |
| LDC | Local Distribution Company |
| LEED | Leadership in Energy and Environmental Design |
| LEED EB | LEED for Existing Buildings |

| | |
|---|---|
| LEED NC | LEED for new construction |
| LF | Load Factor |
| LHV | Lower Heating Value |
| Life cycle | The period of time that a building or site system or element can be expected to adequately serve its intended function. |
| LPS | Low Pressure Sodium (lamp) |
| Lu | Lumen Output of a Lamp or Fixture |
| M | Mega multiple of millions in SI system |
| M&V | Measurement and Verification |
| MACRS | Modified Accelerated Cost Recovery System |
| MARR | Minimum Attractive Rate of Return |
| Mbtu | Thousand Btu |
| MCF | Thousand Cubic Feet (usually of gas) |
| MEC | Model Energy Code |
| Mm | Multiple of Thousands in I/P System |
| MMBtu | Million Btu |
| MMCS | Maintenance Management Computer System |
| MMI | Man Machine Interface |
| MMS | Maintenance Management System |
| MSE 2000 | Management System for Energy 2000 (ANSI Georgia Tech Univ) |
| MW | MegaWatt |
| MWH MWh | MegaWatt hour |
| NAAQS | National Ambient Air Quality Standards |
| NAESCO | National Association of Energy Service Companies |
| NAIMA | North American Insulation Manufacturers Association |
| NEA | National Energy Act of 1978 |
| NECPA | National Energy Conservation Policy Act |
| NEMA | National Electrical Manufacturer's Association |
| NERC | North American Electric Reliability Council |
| Next Renewal | The Next Renewal date is an override of the 'Calculated Next Renewal' date and is based upon the assessor?s visual inspection. |

| | |
|---|---|
| NFPA | National Fire Protection Association |
| NGPA | National Gas Policy Act of 1978 |
| NLRPM | No Load Revolutions per Minute (speed) |
| Nn | Equipment or Project lifetime in economic analysis |
| NOPR | Notice of Proposed Rule Making from FERC |
| NOx | Nitrogen Oxide Compounds |
| NPV | Net present value in economic analysis |
| NREL | National Renewable Energy Laboratory |
| NUG | Non-Utility Generator |
| O&M | Operation and Maintenance |
| OA | Outside Air |
| ODP | Ozone Depletion Potential |
| OPAC | Off-Peak Air Conditioning |
| P | Present value in economic analysis |
| PBR | Performance Based Rates |
| PEA | Preliminary Energy Audit |
| PF | Power Factor |
| PID | Proportional plus integral plus derivative (control system) |
| PM | Portfolio Manager in Energy Star rating system |
| PM | Preventive Maintenance |
| PoolCo | Power Pool Company or Organization |
| POU | Point of Use |
| PQ | Power Quality |
| PSC | Public Service Commission |
| PSIA psia | Pounds per square inch absolute (pressure) |
| PSIG psig | Pounds per square inch gauge (pressure) |
| PUC | Public Utility Commission |
| PUHCA | Public Utilities Holding Company Act of 1935 |
| PURPA | Public Utilities Regulatory Policies of 1978 |
| PV | Photovotaic system |

| | |
|---|---|
| PV | Present Value |
| PW | Present Worth |
| PX | Power Exchange |
| q | Rate of heat flow in Btu per hour |
| Q | Heat load due to conduction using degree days |
| QF | Qualifying Facility |
| R | Electrical resistance |
| R | Thermal Resistance |
| RC | Remote controller |
| RCR | Room Cavity Ratio |
| RCRA | Resource Conservation and Recovery Act |
| Remaining Service Life (RSL) | RSL is the number of years service remaining for a system or equipment item. It is automatically calculated based on the difference between the current year and the 'Calculated Next Renewal' date or the 'Next Renewal' date whichever one is the later date. |
| Remaining Service Life Index (RSLI) | RSLI is defined as a percentage ratio of the remaining service life of a system. It usually ranges from 0 to 100 |
| REMR | Repair Evaluation Maintenance Rehabilitation (REMR) is a scale used to objectively rank systems based on their condition |
| Renewal Schedule | A timeline that provides the items that need repair the year in which the repair is needed and the estimated price of the renewal. |
| RH | Relative Humidity |
| RLA | Running Load Amps |
| RMS | Root Mean Square |
| RO | Reverse Osmosis |
| ROI | Return on Investment |
| RPM | Revolutions Per Minute |
| RTG | Regional Transmission Group |
| RTO | Regional Transmission Organization |
| RTP | Real Time Pricing |
| SBCCI | Southern Building Code Congress International |
| SC | Scheduling Coordinator |
| SC | Shading Coefficient |
| SCADA | Supervisory Control and Data Acquisition Systems |

| | |
|---|---|
| SEER | Seasonal Energy Efficiency Ratio |
| SHR | Sensible Heat Ratio |
| Site | The grounds and utilities roadways landscaping fencing and other typical land improvements needed to support the facility. |
| Soft Cost | An expense item that is not considered direct construction cost. Soft cost includes architectural engineering financing legal fees and other pre-and-post construction expenses. |
| SOx | Sulfur Oxide Compounds |
| SP | Static Pressure |
| SP SPB | Simple Payback |
| SPP | Simple Payback Period |
| SPP | Small Power Producers |
| STR | Stack Temperature Rise |
| SV | Specific Volume |
| System | System refers to building and related site work elements as described by ASTM Uniformat II Classification for Building Elements (E1557-97) a format for classifying major facility elements common to most buildings. Elements usually perform a given function regardless of the design specification construction method or materials used. See also Uniformat II. |
| T | Temperature |
| T | Tubular (lamps) |
| TAA | Technical Assistance Audit |
| TCP/IP | Transmission Control Protocol/Internet Protocol |
| TES | Thermal Energy Storage |
| THD | Total Harmonic Distortion |
| TOD | Time of Day |
| TOU | Time of Use |
| TQM | Total Quality Management |
| TransCo | Transmission Company |
| U | Thermal Conductance |
| UDC | Utility Distribution Company |
| UL | Underwriters Laboratories |
| UNIFORMAT II | The ASTM UNIFORMAT II Classification for Building Elements (E1557-97) a format for classifying major facility components common to most buildings. |
| USGBC | US Green Building Council |
| v | Specific Volume |

| | |
|---|---|
| V | Volts Voltage |
| V | Volume |
| VAV | Variable Air Volume |
| VDT | Video Display Terminal |
| VFD | Variable Frequency Drive |
| VHO | Very High Output |
| VSD | Variable Speed Drive |
| W | Watts |
| W | Width |
| WB | Wet bulb |
| WH Wh | Watt Hours |
| Year built | The year that a building or addition was originally built based on substantial completion or occupancy. |
| Z | Electrical Impedance |

School District of Philadelphia

# S702001;Olney Field

Final

## Site Assessment Report

February 1, 2017


PARSONS

# Table of Contents

## Site Executive Summary

The organization of this report, as displayed in the Table of Contents, follows the structure of the associated eCOMET database. The overall node for each school campus begins with the letter "S", which indicates the "Site" label. Each Site is comprised of separate "Building" and "Grounds" nodes; their asset names begin with the letters "B" and "G" respectively. Information rolls up to the Site node from the Building and Grounds nodes. This Site report combines facility information with subsections for the Buildings And Grounds nodes.

The basis for the evaluation of condition is the functional systems and elements of a building and grounds organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are typically developed for similar building types and functions. Evaluation of systems and their elements takes into account their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) is an industry-standard measurement calculated as the ratio of the repair costs to correct a facility's deficiencies to the facility's Current Replacement Value. Condition Index (CI) for a system is calculated as the sum of a the deficiencies divided by the sum of a system's Replacement Value (both values include soft-cost) expressed as a percentage ranging from 0% 100%.

| | |
|---|---|
| Gross Area (SF): | 5,580 |
| Year Built: | 1968 |
| Last Renovation: | |
| Replacement Value: | $9,763,792 |
| Repair Cost: | $6,527,959.37 |
| Total FCI: | 66.86 % |
| Total RSLI: | 44.24 % |

**Description:**

Facility Assessment
August 2015

School District of Philadelphia
Olney Field House
NE Corner N. Front and Ruscomb Streets
Philadelphia, PA 19120

5,580 SF / LN 07

FIELD HOUSE

The information for this report was collected during a site visit on August 20, 2015.

Mr. Joe Boyd, Building Engineer, and Mr. Andrew Green, Engineer, accompanied the assessment team on a tour of the field house and site and provided information on the building systems and maintenance history.

The Olney Field House Building is located across the street west of the Olney High School main campus on the Olney Field. Shaped like a rectangle, the structure was reported to have been constructed in 1968. The industrial design of the CMU, concrete- and steel-framed building includes painted brick facades with a concrete foundation. There are aluminum single pane windows facing the interior courtyard/baseball/football field. This structure has a basement and has two stories. This building has a listed area of 5,580 gross square feet.

This facility was reported to have been abandoned for a few years prior to the new school occupying this field house. The following recommendations are designed to support an overall effort and should be completed as part of a renovation consideration as selecting single issues to complete will not suffice in the overall failures of the finishes both exterior and interior.

The painted exterior brick walls and concrete walls for the foundation are in good condition. There were no issues that surfaced during the time of the inspection therefore no recommendations are required at this time.

The exterior windows are the original 1968 industrial metal framed single pane applications. Some of the windows are operable while others no longer function. The exterior windows have exceeded the expected life cycle for this type of application. It is recommended that the exterior window system be replaced with units that retain their dimensions and profiles, but that incorporate updated energy-efficient features.

There are three exterior doors one facing the East and entrance gate and two facing west towards the fields. The doors are metal applications with wooden or metal frames. The exterior door system for this field house is a very high traffic system. The doors are in poor condition. These doors are out of service and need immediate attention. Other doors are aging at a faster rate than expected based on traffic and condition. The exterior door system is recommended for upgrade. Special consideration to enhance the first step concrete pads to prevent pinch points and prevent injury to doors opening into walkways is also expected to be included in this effort.

This Field House has a built up roof with an estimated installation date of 1985. The roofing system is not expected to outlast the ten-year scope of this analysis. Future budget modeling should include provisions for the replacement of the failing roofing systems.

The second floor unisex restroom has been abandoned for a few years and has failed. The fixtures, finishes and amities are beyond repair. The system has failed. A new unisex restroom with compliant ADA fixture should be installed and should include all aspects of the current ADA standards for the physically challenged, ADA 4.23 is recommended. This Deficiency provides a budgetary consideration for a universal upgrade and is expected to be completed as part of a renovation effort.

Interior doors are typically wood in wood frames. Other interior doors include original wooden frames or hollow metal in hollow metal frames. Doors have failed and some have been removed with only the frames remaining. Universal upgrades are required for the interior door systems, it is recommended that the interior doors system be removed and replaced with a new modern metal framed wooden door system with consideration for ADA compliance.

There are several major areas of wall damage that ranges from serious to failure. This facility has been abandoned for a time period before it was re-entered into service. The wall finishes have failed and major repairs are required before a cyclical program of renewal is established. Remove damaged wall finishes and repair areas then apply primer and paint finish.

The vinyl floor finish in most of the second floor is in very poor condition. The original flooring is a 9x9 vinyl tile finish. This finish is suspect to contain asbestos and is recommended for upgrade. Remove and replace with a 12x12 vinyl tile application.

The wooden floor finish in the press box and hallway has served this field house from the first day of school. The systems maintenance has not been a priority and is in critical condition. Considering the age and current condition of the wooden floor finish, removal and replacement is recommended.

The ceiling finish is a mix of 12 x 12 ceiling grid, painted and 2 x 4 Acoustical tile finish. Ceilings have failed in several areas and is in poor condition. The ceiling finish is expected to require upgrades to support the recommended efforts in this report. This deficiency provides a budgetary consideration for removal and replacement of the current ceiling finish to

a new acoustical tile finish. Considering the recommended mechanical and electrical upgrades this effort should be completed as part of an overall renewal program for the school. No work should be considered until after the recommended exterior efforts are complete.

The Olney Field House has a single scoreboard that appears to be from the original construction. This system no longer functions and the command board has been destroyed from the failing roof system leaking onto the equipment. This deficiency provides a budgetary consideration for the removal and replacement of roof mounted scoreboard.

MECHANICAL SYSTEMS

PLUMBING-Plumbing fixtures are standard china residential quality with wall and pedestal mounted lavatories and tank type water closets. Lavatories have dual wheel handle faucets. There are double compartment porcelain kitchen sinks and bath tubs in the upper level former residential areas. Water coolers are stainless steel. Locker areas have gang and stall type showers.

Hot water is provided by a forty gallon electric AO Smith water heater in the mechanical room.

Sanitary, waste and vent piping is hub and spigot cast iron. Domestic hot and cold water is rigid copper piping, some of which in the mechanical room is not insulated. Incoming water service could not be verified and no backflow preventer was observed.

The plumbing fixtures and piping systems are from the original 1968 installation. All fixtures and supply piping are beyond service life and should be replaced. The water heater is newer and should remain serviceable more than ten more years. The cast iron piping should be inspected and repaired or replaced as required.

HVAC- The building has steam heating from a Weil McLain Series 1 model 588 oil fired sectional cast iron boiler in the basement mechanical room. The boiler was installed in 2009 and is thirty two hp. Spaces have exposed steam radiators and horizontal steam unit heaters in locker areas. The oil tank is indoors in the mechanical room and is approximately two hundred fifty gallons. A cast iron condensate receiver and pump serves the boiler. A factory fabricated gas vent system is connected to the boiler and is routed to a roof cap.

The boiler should be serviceable for up to thirty years. The steam radiators, condensate system and piping have exceeded the anticipated service life and should be replaced.

FIRE PROTECTION- There is no fire protection system.

ELECTRICAL SYSTEMS

Electrical Service--The building is served by a 120/240V, 1 phase, 3 wire overhead service drop from a PECO Energy Company overhead utility line along N. Front Street to a 100A ITE service entrance rated safety switch located in the Basement of the field house. The main switch feeds a 60A Square D plug-in fusible panelboard, unmarked safety switches, and safety switches for water heater and scoreboard. All of this equipment has exceeded its useful life and needs to be replaced with a 120/240V, 1 phase, 3 wire service entrance panelboard with adequate branch circuit capacity to feed all of the existing loads.

Receptacles-- All wiring devices appear to be original and have exceeded their useful life and need to be replaced.

Lighting-- Fixtures in the Basement and office area on the Second Floor are surface mounted 4 foot, wraparound or modular fluorescent type with T12 lamps. Incandescent lampholders are provided in the kitchen/laundry room, restrooms and locker rooms on the First Floor. All lighting fixtures have exceeded their useful life and need to be replaced with energy efficient fluorescent fixtures. Vapor-tight fixtures should be provided in the locker rooms.

The exterior of the building has a total of four (4) halogen floodlights that are located on the north, south and east sides of the building. These fixtures should be replaced with LED type floodlights to reduce energy consumption and maintenance costs.

Fire Alarm System-- There is no fire alarm system for this building. A manual fire alarm system is recommended.

Emergency Lighting / Exit Lighting--There is no emergency egress or exit lighting standby generator for the field house. There is also no emergency egress lighting fixtures or battery emergency lighting units. Incandescent exit signs are provided at exit doors, but have exceeded their useful life, and some are not illuminated. Additional directional exit signs also need to be provided in the locker room area.

Telephone System-- There is an overhead telephone service drop from the utility pole on N. Front Street to the building for telephones located in the offices on the Second Floor. The demarcation point is located in the Basement adjacent to the electrical service entrance.

RECOMMENDATIONS

- Replace exterior windows
- Replace scoreboard
- Replace exterior doors
- Replace failing roof
- Second floor unisex restroom renovation
- Remove and replace interior doors
- Repair and Repaint interior
- Remove and replace vinyl tile floor finish
- Remove and replace wooden floor finish
- Remove and replace ceiling finish
- Provide a four pipe fan coil system with roof mounted outside air system ducted to each fan coil unit. Provide a fan coil unit for each office, locker room and separate area. Include new heat exchanger and pump for hot water, piping, control valves and controls, to replace steam heating system.
- Provide a fifteen ton air cooled package chiller on grade with pumps, piping and controls. Connect to new fan coil units.
- Inspect fuel oil storage tanks for condition and damage.
- Install NFPA wet pipe automatic sprinkler system in entire building, including fire service, piping and sprinkler heads.
- Inspect old cast iron sanitary piping including camera observation and replace damaged sections.
- Replace domestic hot and cold water pipe, fittings, valves, hangers and insulation.
- Replace old plumbing fixtures, including water closets, lavatories, service sinks, tubs, showers and water coolers. Include fittings and trim.
- Install new direct digital control system and building automation system with remote computer control capability and graphics package.
- Provide new three inch domestic water service with backflow preventer.
- Provide new mechanical exhaust system for toilet rooms and locker rooms. Include fans, grills, ductwork and exterior wall louvers.
- Remove all service entrance equipment and safety switches and replace with a new service entrance rated panelboard.
- Replace all wiring devices, including convenience duplex receptacles and light switches, and associated branch circuit wiring throughout the field house.
- Replace all interior lighting fixtures with either fluorescent or LED fixtures.
- Replace all four (4) exterior building mounted floodlighting fixtures with LED floodlights.
- Provide manual fire alarm system with fire alarm control panel, manual pull stations and audible/visual notification appliances.
- Provide emergency egress lighting with battery type emergency lighting units in the stairways, corridors and locker rooms. Provide exit signs with battery backup.

STANDS

The Football field stands are located on the southern section of the overall sports complex site. The concrete stands are built into a small hillside and provide a good overall view of the entire complex. The stands have been abandoned for some time. The gated doors are rusted closed, the concrete stairs and seating has broken down and the elements have destroyed the overall finish including the railing and guard railing to the point that safety is an issue. Also the main exit gated doors to the street side have been welded shut.

This seating stands facility is unique in its usage to the school system. This section of the school is abandoned and has had no preventative maintenance or measures to mitigate damage that results from these conditions. Considering the overall effort to recover such an area this deficiency is a combination of the coordinated requirements for a renovation to include all aspects of HVAC, Electrical, Fire Life Safety, Health and ADA. Note: This effort also includes budgetary consideration for Asbestos, Lead Paint and a major Abatement program.

RECOMMENDATIONS

- Renovate stands

Olney Sports Complex Grounds

The Grounds for the Olney Sports Complex consist of two baseball diamonds, one football field and track and field areas such as a track and sand pits. This complex was abandoned when the school was closed and is now being used by the new school. The following recommendations are expected to provide a new complex eliminating issues such as debris and hazards associated with abandoned areas. Please note that the Stands and the Field House are separate but connected in this effort.

This Olney sports complex school grounds has a perimeter fence surrounding the baseball / playground / football areas. The fence has several areas of repairs and the mounting post are damaged in several areas, overall the fence is in fair condition. This fence system is recommended to be removed and replaced with a new system within the next five to ten years.

The baseball fields have been abandoned prior to the new school opening. These fields have overgrown and several areas that present hazards such as holes and backstop issues exist. This entire field is recommended for universal renovation efforts. This deficiency provides a budgetary consideration to upgrade the baseball field to current standards.

The football field have been abandoned prior to the new school opening. These fields have overgrown and several areas that present hazards such as holes and debris issues exist. This entire field is recommended for universal renovation efforts. This deficiency provides a budgetary consideration to upgrade the football field to current standards.

The track that surround the football field has overgrown and sections are missing. This area requires immediate attention prior to any usage due to the debris and holes that are hazards for Track and Field activities. This deficiency provides a budgetary consideration to upgrade the Track and Field areas for the Olney sports complex.

RECOMMENDATIONS

- Remove and replace fence
- Baseball field renovation
- Football field renovation
- Field and Track renovation
- Site fence upgrade

**Attributes:**

| **General Attributes:** | | | |
|---|---|---|---|
| Active: | Open | Bldg Lot Tm: | Lot 2 / Tm 1 |
| Status: | Accepted by SDP | Team: | Tm 1 |
| Site ID: | S702001 | | |

## Site Condition Summary

The Table below shows the CI and FCI for each major system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

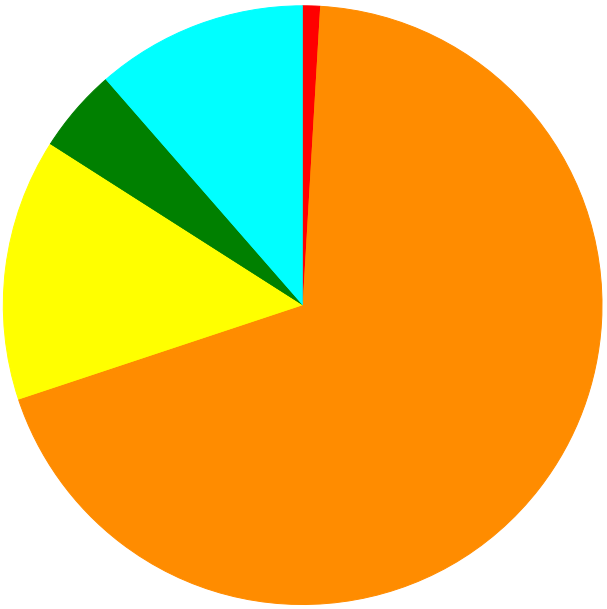
### Current Investment Requirement and Condition by Uniformat Classification

| UNIFORMAT Classification | RSLI% | FCI % | Current Repair |
|---|---|---|---|
| A10 - Foundations | 23.83 % | 0.00 % | $0.00 |
| A20 - Basement Construction | 25.63 % | 0.00 % | $0.00 |
| B10 - Superstructure | 23.37 % | 109.74 % | $1,829,992.50 |
| B20 - Exterior Enclosure | 24.45 % | 12.09 % | $267,691.96 |
| B30 - Roofing | 52.15 % | 17.57 % | $60,987.63 |
| C10 - Interior Construction | 37.19 % | 227.31 % | $107,560.68 |
| C20 - Stairs | 30.00 % | 0.00 % | $0.00 |
| C30 - Interior Finishes | 29.53 % | 88.75 % | $207,311.66 |
| D20 - Plumbing | 106.68 % | 157.40 % | $214,308.67 |
| D30 - HVAC | 107.41 % | 196.04 % | $725,590.90 |
| D40 - Fire Protection | 88.71 % | 137.82 % | $79,824.39 |
| D50 - Electrical | 106.45 % | 42.35 % | $194,531.16 |
| E10 - Equipment | 20.00 % | 9.33 % | $21,959.87 |
| G20 - Site Improvements | 55.22 % | 89.43 % | $2,818,199.95 |
| G40 - Site Electrical Utilities | 111.11 % | 0.00 % | $0.00 |
| **Totals:** | **44.24 %** | **66.86 %** | **$6,527,959.37** |

### Condition Deficiency Priority

| Facility Name | Gross Area (S.F.) | FCI % | 1 - Response Time (< 2 yr) | 2 - Response Time (2-3 yrs) | 3 - Response Time (3-4 yrs) | 4 - Response Time (4-5 yrs) | 5 - Response Time (> 5 yrs) |
|---|---|---|---|---|---|---|---|
| B702901;Olney Fieldhouse | 5,580 | 69.06 | $60,987.63 | $342,194.30 | $434,901.16 | $296,349.40 | $745,334.43 |
| B702902;Olney Stands | 11,200 | 47.53 | $0.00 | $1,829,992.50 | $0.00 | $0.00 | $0.00 |
| G702001;Grounds | 335,500 | 88.30 | $0.00 | $2,329,841.01 | $488,358.94 | $0.00 | $0.00 |
| **Total:** | | **66.86** | **$60,987.63** | **$4,502,027.81** | **$923,260.10** | **$296,349.40** | **$745,334.43** |

### Deficiencies By Priority



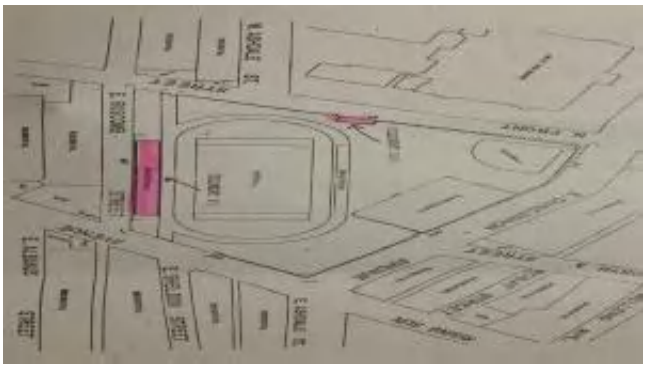

**Budget Estimate Total: $6,527,959.37**

## Executive Summary

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) FCI is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor). Condition Index (CI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired).

| | |
|---|---|
| Function: | Fieldhouse |
| Gross Area (SF): | 5,580 |
| Year Built: | 1968 |
| Last Renovation: | |
| Replacement Value: | $2,722,056 |
| Repair Cost: | $1,879,766.92 |
| Total FCI: | 69.06 % |
| Total RSLI: | 60.29 % |



**Description:**

Estimated year of construction - verify

**Attributes:**

**General Attributes:**

| | | | |
|---|---|---|---|
| Active: | Open | Bldg ID: | B702901 |
| Sewage Ejector: | No | Status: | Accepted by SDP |
| Site ID: | S702001 | | |

## Condition Summary

The Table below shows the CI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

| UNIFORMAT Classification | RSLI % | FCI % | Current Repair Cost |
|---|---|---|---|
| A10 - Foundations | 53.00 % | 0.00 % | $0.00 |
| A20 - Basement Construction | 53.00 % | 0.00 % | $0.00 |
| B10 - Superstructure | 53.00 % | 0.00 % | $0.00 |
| B20 - Exterior Enclosure | 48.28 % | 37.40 % | $267,691.96 |
| B30 - Roofing | 24.12 % | 80.30 % | $60,987.63 |
| C10 - Interior Construction | 37.19 % | 227.31 % | $107,560.68 |
| C30 - Interior Finishes | 29.53 % | 88.75 % | $207,311.66 |
| D20 - Plumbing | 106.68 % | 157.40 % | $214,308.67 |
| D30 - HVAC | 107.41 % | 196.04 % | $725,590.90 |
| D40 - Fire Protection | 88.71 % | 137.82 % | $79,824.39 |
| D50 - Electrical | 101.65 % | 95.64 % | $194,531.16 |
| E10 - Equipment | 20.00 % | 9.33 % | $21,959.87 |
| **Totals:** | **60.29 %** | **69.06 %** | **$1,879,766.92** |

## Condition Detail

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II classification. The columns in the System Listing table below represent the following:

1. System Code: A code that identifies the system.
2. System Description: A brief description of a system present in the building.
3. Unit Price $: The unit price of the system.
4. UoM: The unit of measure for of the system.
5. Qty: The quantity for the system
6. Life: anticipated service life for thesystem based on Building Owners and Managers Association (BOMA) recommendations.
7. Year Installed: The date of system installation.
8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
10. CI: The Condition Index of the system.
11. FCI: The Facility Condition Index of the system.
12. RSL: Remaining Service Life.
13. eCR: eCOMET Condition Rating (not used).
14. Deficiency $: The financial investment to repair/replace system.

## System Listing

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

Additionally, a condition rating (eCR) based on the following guidelines is provided as observed at the time of the assessment.

- Excellent (E) - No noticeable distress or damage. The entire system is free from observable defect.
- Very Good (VG) - Overall no serviceability reduction for the entire system. No degradation of critical components and minor distress and defect noticeable for some but not non critical components within the system.
- Good (G) - Slight or no serviceability reduction for the entire system. There may be noticeable defects for some non critical components and slight noticeable degradation of the critical components.
- Fair (F) - Overall serviceability is degraded but adequate. There may be moderate deterioration for very few of the critical components and few of the non critical components may have severe degradation.
- Marginal (MA) - Overall serviceability and reliability loss. Most if not all of the non critical components suffer from severe degradation and a few of the critical component may have severe degradation.
- Moderate (MO) - Overall a significant serviceability loss. Most if not all the components have severe degradation with the reminder of the component showing visible distress.
- Very Poor (VP) - Overall the system is barely functional. All of the components are severely degraded.
- Non-Functional (NF) - Overall the system does not function with all the components having no serviceability and suffer from severe degradation.

# Site Assessment Report - B702901;Olney Fieldhouse

| System Code | System Description | Unit Price $ | UoM | Qty | Life | Year Installed | Calc Next Renewal Year | Next Renewal Year | RSLI% | FCI% | RSL | eCR | Deficiency $ | Replacement Value $ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A1010 | Standard Foundations | $5.42 | S.F. | 5,580 | 100 | 1968 | 2068 | | 53.00 % | 0.00 % | 53 | | | $30,244 |
| A1030 | Slab on Grade | $17.93 | S.F. | 5,580 | 100 | 1968 | 2068 | | 53.00 % | 0.00 % | 53 | | | $100,049 |
| A2010 | Basement Excavation | $0.62 | S.F. | 5,580 | 100 | 1968 | 2068 | | 53.00 % | 0.00 % | 53 | | | $3,460 |
| A2020 | Basement Walls | $8.99 | S.F. | 5,580 | 100 | 1968 | 2068 | | 53.00 % | 0.00 % | 53 | | | $50,164 |
| B1010 | Floor Construction | $64.58 | S.F. | 5,580 | 100 | 1968 | 2068 | | 53.00 % | 0.00 % | 53 | | | $360,356 |
| B1020 | Roof Construction | $56.76 | S.F. | 1,800 | 100 | 1968 | 2068 | | 53.00 % | 0.00 % | 53 | | | $102,168 |
| B2010 | Exterior Walls | $112.94 | S.F. | 5,580 | 100 | 1968 | 2068 | | 53.00 % | 0.00 % | 53 | | | $630,205 |
| B2020 | Exterior Windows | $13.27 | S.F. | 5,580 | 40 | 1968 | 2008 | 2020 | 12.50 % | 324.62 % | 5 | | $240,370.00 | $74,047 |
| B2030 | Exterior Doors | $2.07 | S.F. | 5,580 | 25 | 1968 | 1993 | 2020 | 20.00 % | 236.53 % | 5 | | $27,321.96 | $11,551 |
| B3010105 | Built-Up | $37.76 | S.F. | 1,800 | 20 | 1985 | 2005 | 2020 | 25.00 % | 89.73 % | 5 | | $60,987.63 | $67,968 |
| B3020 | Roof Openings | $1.43 | S.F. | 5,580 | 30 | 1985 | 2015 | 2020 | 16.67 % | 0.00 % | 5 | | | $7,979 |
| C1010 | Partitions | $5.17 | S.F. | 5,580 | 100 | 1968 | 2068 | | 53.00 % | 243.77 % | 53 | | $70,325.97 | $28,849 |
| C1020 | Interior Doors | $3.31 | S.F. | 5,580 | 40 | 1968 | 2008 | 2020 | 12.50 % | 201.60 % | 5 | | $37,234.71 | $18,470 |
| C3010230 | Paint & Covering | $12.84 | S.F. | 5,580 | 10 | 1968 | 1978 | 2020 | 50.00 % | 119.57 % | 5 | | $85,670.76 | $71,647 |
| C3020413 | Vinyl Flooring | $9.68 | S.F. | 2,000 | 20 | 1968 | 1988 | 2020 | 25.00 % | 156.68 % | 5 | | $30,333.34 | $19,360 |
| C3020414 | Wood Flooring | $22.27 | S.F. | 1,580 | 25 | 1968 | 1993 | 2020 | 20.00 % | 130.90 % | 5 | | $46,060.27 | $35,187 |
| C3020415 | Concrete Floor Finishes | $0.97 | S.F. | 2,000 | 50 | 1968 | 2018 | 2020 | 10.00 % | 0.00 % | 5 | | | $1,940 |
| C3030 | Ceiling Finishes | $18.90 | S.F. | 5,580 | 25 | 1968 | 1993 | 2020 | 20.00 % | 42.90 % | 5 | | $45,247.29 | $105,462 |
| D2010 | Plumbing Fixtures | $14.10 | S.F. | 5,580 | 35 | 1968 | 2003 | 2052 | 105.71 % | 158.05 % | 37 | | $124,351.88 | $78,678 |
| D2020 | Domestic Water Distribution | $6.64 | S.F. | 5,580 | 25 | 1968 | 1993 | 2042 | 108.00 % | 168.91 % | 27 | | $62,582.72 | $37,051 |
| D2030 | Sanitary Waste | $3.66 | S.F. | 5,580 | 25 | 1968 | 1993 | 2042 | 108.00 % | 134.04 % | 27 | | $27,374.07 | $20,423 |
| D3020 | Heat Generating Systems | $4.94 | S.F. | 5,580 | 35 | 2009 | 2044 | | 82.86 % | 0.00 % | 29 | | | $27,565 |
| D3030 | Cooling Generating Systems | $7.51 | S.F. | 0 | 0 | | | | 0.00 % | 0.00 % | | | | $0 |
| D3040 | Distribution Systems | $18.78 | S.F. | 5,580 | 25 | 1968 | 1993 | 2042 | 108.00 % | 84.32 % | 27 | | $88,356.72 | $104,792 |
| D3050 | Terminal & Package Units | $29.11 | S.F. | 5,580 | 20 | | | 2037 | 110.00 % | 318.61 % | 22 | | $517,531.56 | $162,434 |
| D3060 | Controls & Instrumentation | $13.50 | S.F. | 5,580 | 20 | 1968 | 1988 | 2037 | 110.00 % | 158.90 % | 22 | | $119,702.62 | $75,330 |
| D4010 | Sprinklers | $8.71 | S.F. | 5,580 | 35 | | | 2052 | 105.71 % | 164.24 % | 37 | | $79,824.39 | $48,602 |
| D4020 | Standpipes | $1.67 | S.F. | 5,580 | 0 | | | | 0.00 % | 0.00 % | | | | $9,319 |
| D5010 | Electrical Service/Distribution | $3.91 | S.F. | 5,580 | 30 | 1968 | 1998 | 2047 | 106.67 % | 84.98 % | 32 | | $18,539.99 | $21,818 |
| D5020 | Lighting and Branch Wiring | $23.92 | S.F. | 5,580 | 20 | 1968 | 1988 | 2037 | 110.00 % | 76.35 % | 22 | | $101,907.15 | $133,474 |
| D5030 | Communications and Security | $6.72 | S.F. | 5,580 | 15 | 1968 | 1983 | 2025 | 66.67 % | 157.38 % | 10 | | $59,015.42 | $37,498 |
| D5090 | Other Electrical Systems | $1.90 | S.F. | 5,580 | 20 | 1968 | 1988 | 2037 | 110.00 % | 142.13 % | 22 | | $15,068.60 | $10,602 |
| E1020 | Institutional Equipment | $42.18 | S.F. | 5,580 | 25 | 1968 | 1993 | 2020 | 20.00 % | 9.33 % | 5 | | $21,959.87 | $235,364 |
| | | | | | | | | **Total** | **60.29 %** | **69.06 %** | | | **$1,879,766.92** | **$2,722,056** |

## System Notes

The facility description in the site executive summary contains an overview of each system. The notes listed below provide additional information on select systems found within the facility.

**System:** C3010 - Wall Finishes — This system contains no images

**Note:** Painted wall finish 100%

**System:** C3020 - Floor Finishes — This system contains no images

**Note:** Vinyl 35%
Wood 30%
Concrete 35%

**System:** D5010 - Electrical Service/Distribution — This system contains no images

**Note:** There are no secondary transformers.
There are no inventory items to record.

## Renewal Schedule

eCOMET forecasts future Capital Renewal funding needed to address expiring systems based on the Next Renewal year found in the Cost Models. A 3% annual inflation factor is applied to the costs for systems expiring in future years. The table below reflects recommended Capital Renewal funding needs over the next 10 years. Note: Cells with a zero value indicate systems for which renewal is not scheduled in that year.

*Inflation Rate: 3%*

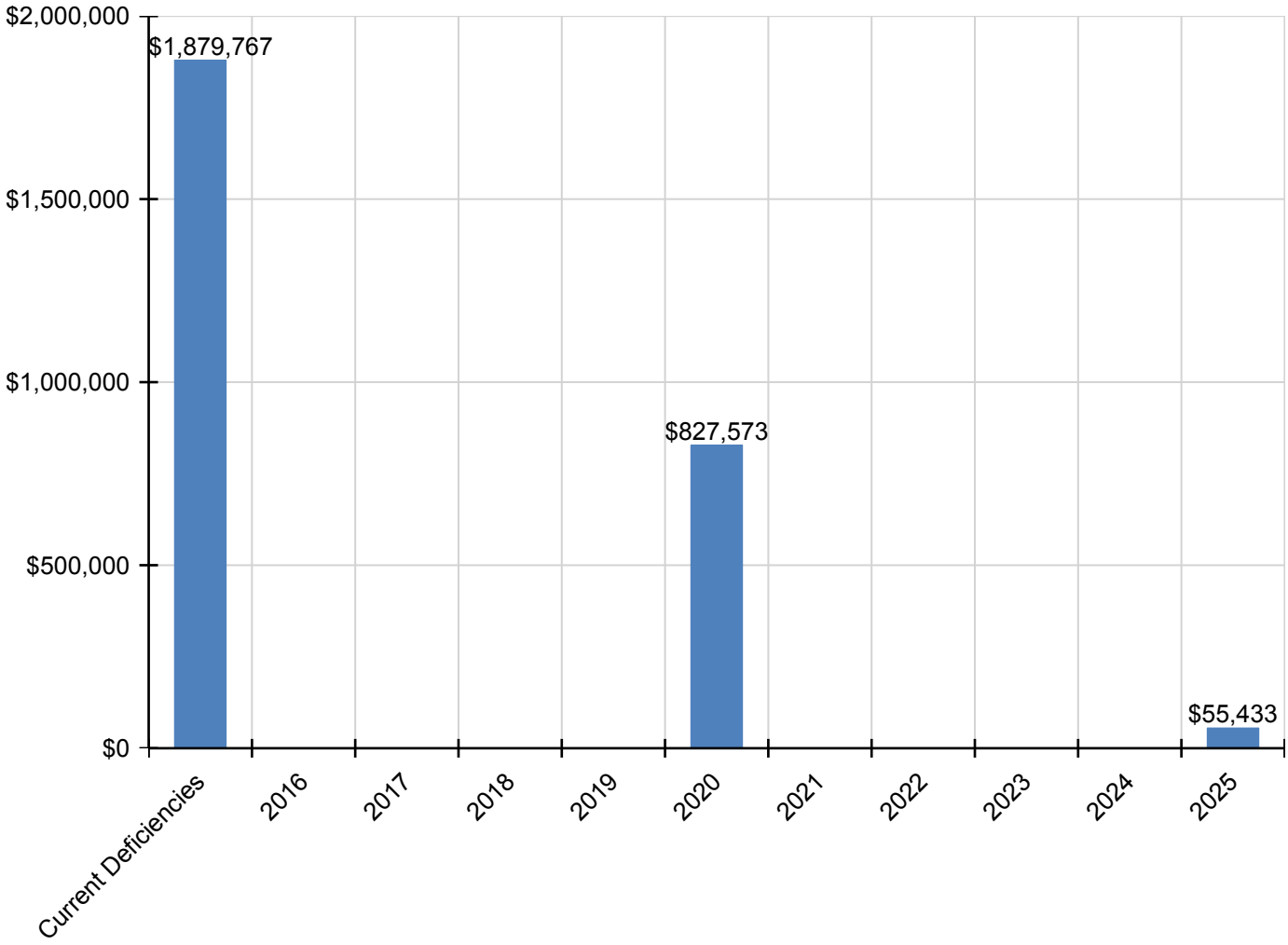
| System | Current Deficiencies | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total:** | **$1,879,767** | **$0** | **$0** | **$0** | **$0** | **$827,573** | **$0** | **$0** | **$0** | **$0** | **$55,433** | **$2,762,773** |
| *** A - Substructure** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| *** A10 - Foundations** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A1010 - Standard Foundations** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A1030 - Slab on Grade** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| *** A20 - Basement Construction** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A2010 - Basement Excavation** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A2020 - Basement Walls** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B - Shell** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B10 - Superstructure** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B1010 - Floor Construction** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B1020 - Roof Construction** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B20 - Exterior Enclosure** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B2010 - Exterior Walls** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B2020 - Exterior Windows** | $240,370 | $0 | $0 | $0 | $0 | $94,424 | $0 | $0 | $0 | $0 | $0 | **$334,794** |
| **B2030 - Exterior Doors** | $27,322 | $0 | $0 | $0 | $0 | $14,730 | $0 | $0 | $0 | $0 | $0 | **$42,052** |
| **B30 - Roofing** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B3010 - Roof Coverings** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B3010105 - Built-Up** | $60,988 | $0 | $0 | $0 | $0 | $86,673 | $0 | $0 | $0 | $0 | $0 | **$147,661** |
| **B3020 - Roof Openings** | $0 | $0 | $0 | $0 | $0 | $10,175 | $0 | $0 | $0 | $0 | $0 | **$10,175** |
| **C - Interiors** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C10 - Interior Construction** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C1010 - Partitions** | $70,326 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$70,326** |
| **C1020 - Interior Doors** | $37,235 | $0 | $0 | $0 | $0 | $23,553 | $0 | $0 | $0 | $0 | $0 | **$60,788** |
| **C30 - Interior Finishes** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C3010 - Wall Finishes** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C3010230 - Paint & Covering** | $85,671 | $0 | $0 | $0 | $0 | $91,365 | $0 | $0 | $0 | $0 | $0 | **$177,035** |
| **C3020 - Floor Finishes** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C3020413 - Vinyl Flooring** | $30,333 | $0 | $0 | $0 | $0 | $24,688 | $0 | $0 | $0 | $0 | $0 | **$55,021** |
| **C3020414 - Wood Flooring** | $46,060 | $0 | $0 | $0 | $0 | $44,870 | $0 | $0 | $0 | $0 | $0 | **$90,930** |
| **C3020415 - Concrete Floor Finishes** | $0 | $0 | $0 | $0 | $0 | $2,474 | $0 | $0 | $0 | $0 | $0 | **$2,474** |
| **C3030 - Ceiling Finishes** | $45,247 | $0 | $0 | $0 | $0 | $134,485 | $0 | $0 | $0 | $0 | $0 | **$179,732** |
| **D - Services** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D20 - Plumbing** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D2010 - Plumbing Fixtures** | $124,352 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$124,352** |
| **D2020 - Domestic Water Distribution** | $62,583 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$62,583** |
| **D2030 - Sanitary Waste** | $27,374 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$27,374** |
| **D30 - HVAC** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D3020 - Heat Generating Systems** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D3030 - Cooling Generating Systems** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D3040 - Distribution Systems** | $88,357 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$88,357** |
| **D3050 - Terminal & Package Units** | $517,532 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$517,532** |
| **D3060 - Controls & Instrumentation** | $119,703 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$119,703** |
| **D40 - Fire Protection** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D4010 - Sprinklers** | $79,824 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$79,824** |
| **D4020 - Standpipes** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D50 - Electrical** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D5010 - Electrical Service/Distribution** | $18,540 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$18,540** |
| **D5020 - Lighting and Branch Wiring** | $101,907 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$101,907** |
| **D5030 - Communications and Security** | $59,015 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $55,433 | **$114,448** |
| **D5090 - Other Electrical Systems** | $15,069 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$15,069** |
| **E - Equipment & Furnishings** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **E10 - Equipment** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **E1020 - Institutional Equipment** | $21,960 | $0 | $0 | $0 | $0 | $300,137 | $0 | $0 | $0 | $0 | $0 | **$322,097** |

** Indicates non-renewable system*

## Forecasted Sustainment Requirement

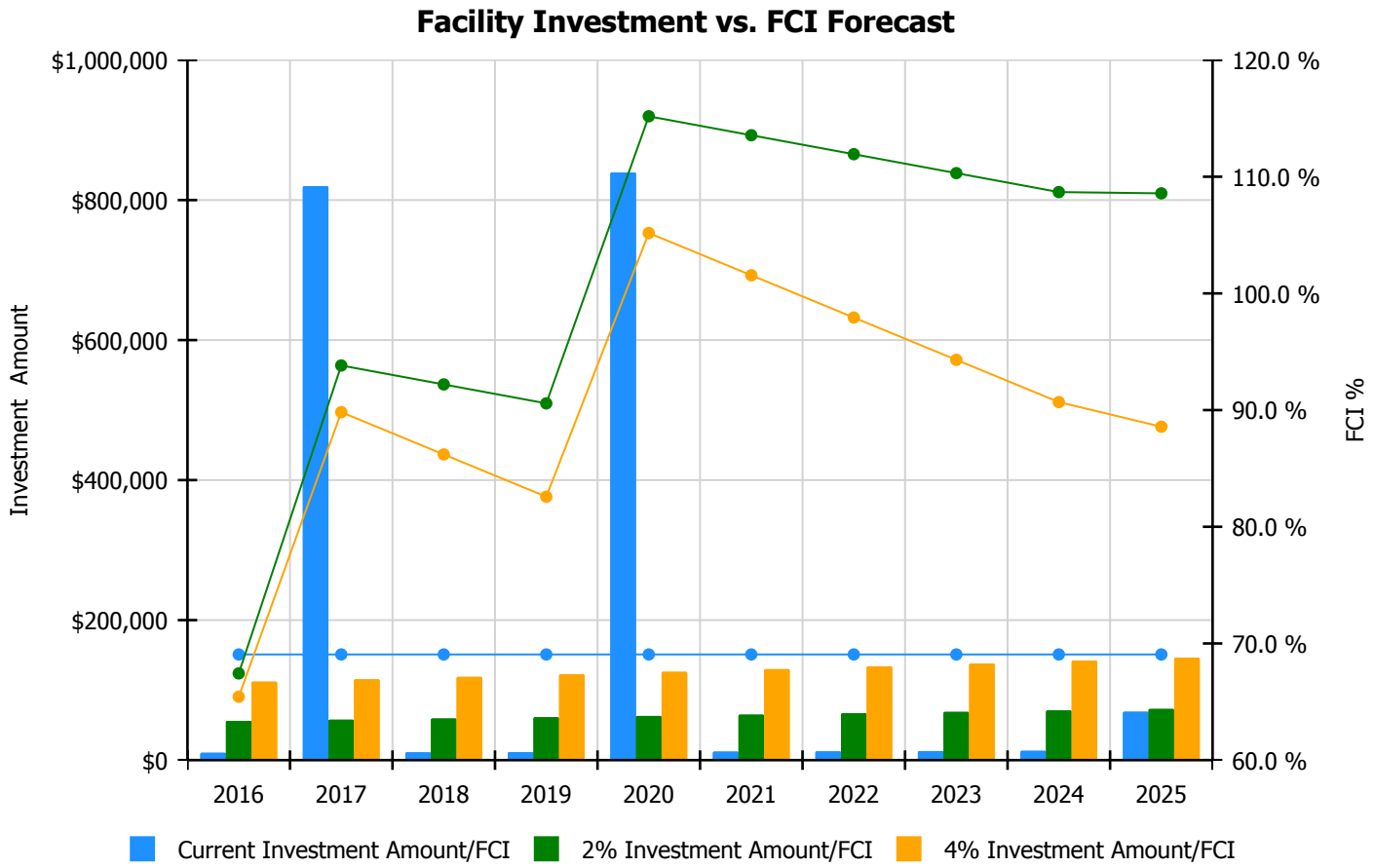
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



## 10 Year FCI Forecast by Investment Scenario

The chart below illustrates the effect of various investment levels on the building FCI for the next 10 years. The levels of investment shown below include:

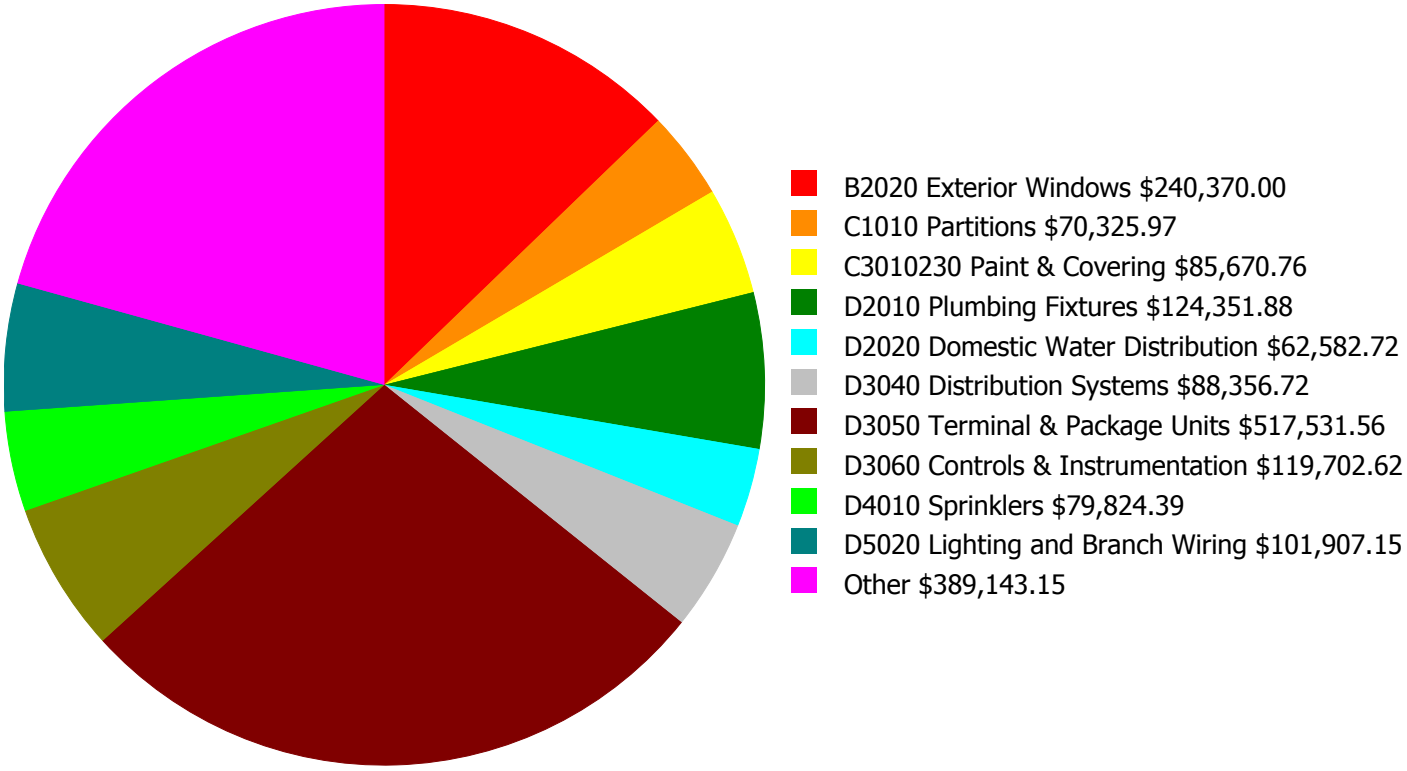
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value of the building, escalated for inflation




| Year | Investment Amount Current FCI - 69.06% | 2% Investment | | 4% Investment | |
|---|---|---|---|---|---|
| | | Amount | FCI | Amount | FCI |
| 2016 | $10,558 | $56,074.00 | 67.43 % | $112,149.00 | 65.43 % |
| 2017 | $819,836 | $57,757.00 | 93.82 % | $115,513.00 | 89.82 % |
| 2018 | $11,200 | $59,489.00 | 92.20 % | $118,979.00 | 86.20 % |
| 2019 | $11,536 | $61,274.00 | 90.58 % | $122,548.00 | 82.58 % |
| 2020 | $839,456 | $63,112.00 | 115.18 % | $126,224.00 | 105.18 % |
| 2021 | $12,239 | $65,006.00 | 113.55 % | $130,011.00 | 101.55 % |
| 2022 | $12,606 | $66,956.00 | 111.93 % | $133,911.00 | 97.93 % |
| 2023 | $12,984 | $68,964.00 | 110.31 % | $137,929.00 | 94.31 % |
| 2024 | $13,374 | $71,033.00 | 108.68 % | $142,067.00 | 90.68 % |
| 2025 | $69,208 | $73,164.00 | 108.58 % | $146,329.00 | 88.58 % |
| **Total:** | **$1,812,997** | **$642,829.00** | | **$1,285,660.00** | |

## Deficiency Summary by System

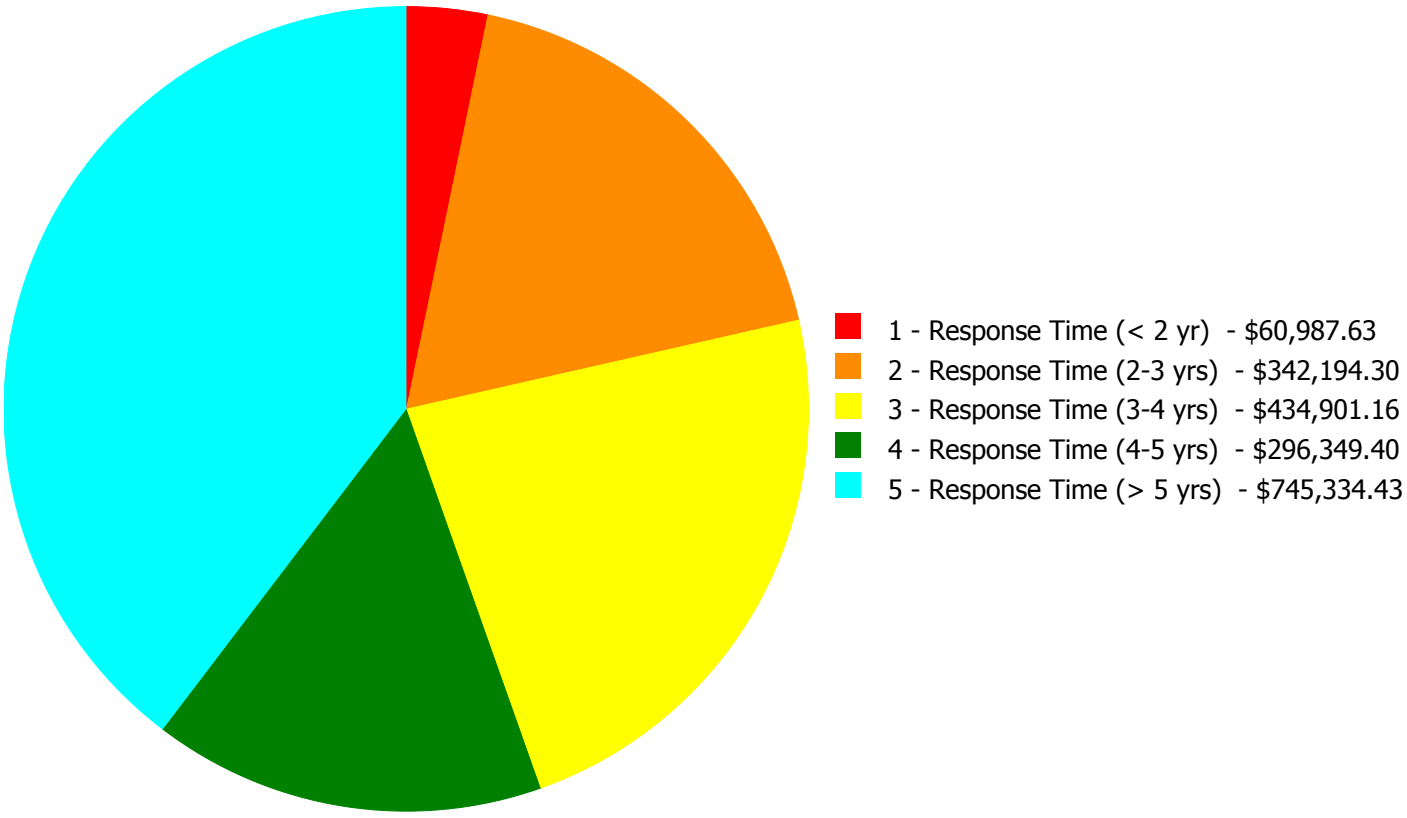
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.




**Budget Estimate Total: $1,879,766.92**

## Deficiency Summary by Priority

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:




**Budget Estimate Total: $1,879,766.92**

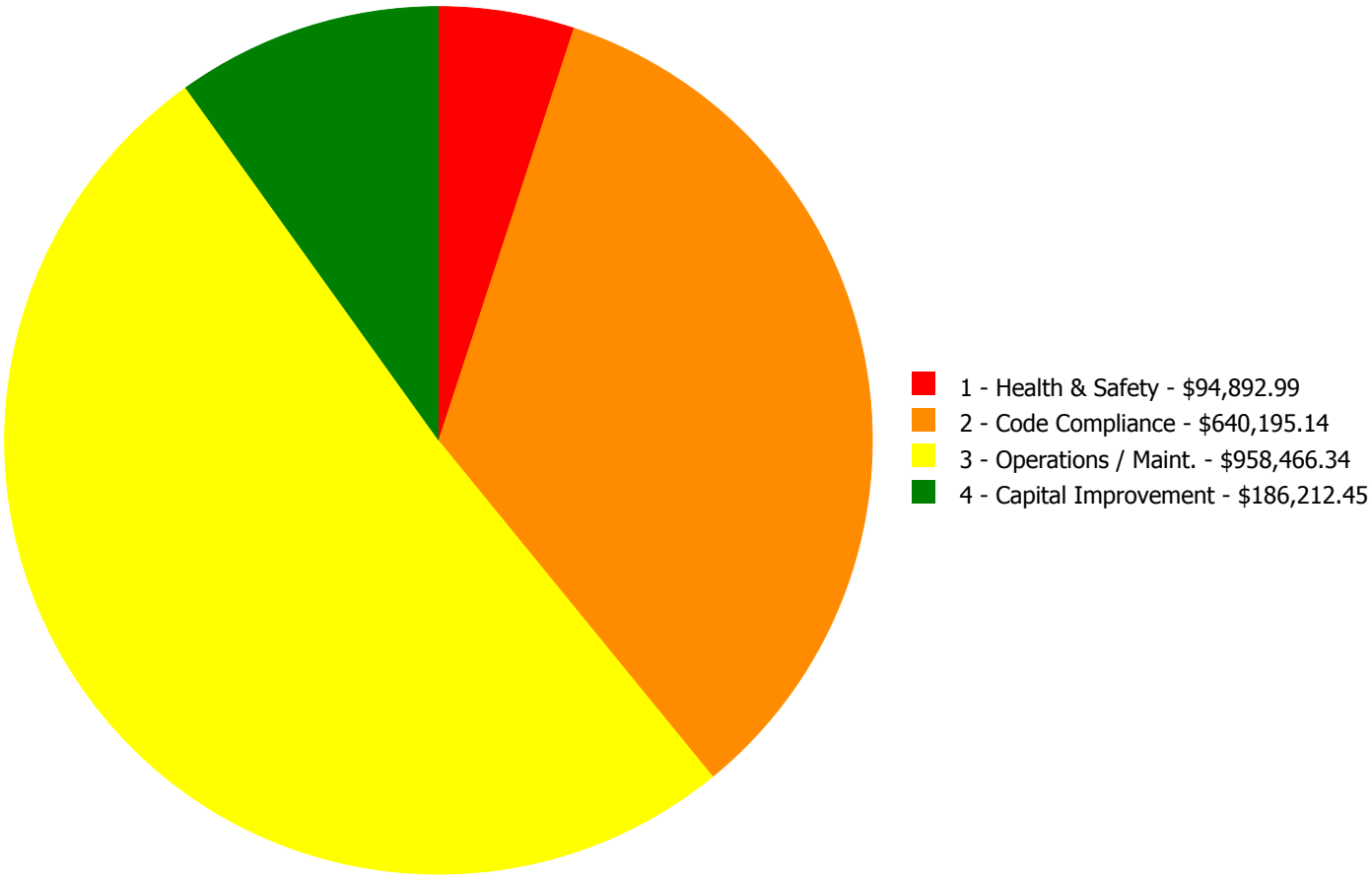
## Deficiency By Priority Investment Table

The table below shows the current investment cost grouped by deficiency priority and building system.

| System Code | System Description | 1 - Response Time (< 2 yr) | 2 - Response Time (2-3 yrs) | 3 - Response Time (3-4 yrs) | 4 - Response Time (4-5 yrs) | 5 - Response Time (> 5 yrs) | Total |
|---|---|---|---|---|---|---|---|
| B2020 | Exterior Windows | $0.00 | $0.00 | $240,370.00 | $0.00 | $0.00 | $240,370.00 |
| B2030 | Exterior Doors | $0.00 | $27,321.96 | $0.00 | $0.00 | $0.00 | $27,321.96 |
| B3010105 | Built-Up | $60,987.63 | $0.00 | $0.00 | $0.00 | $0.00 | $60,987.63 |
| C1010 | Partitions | $0.00 | $70,325.97 | $0.00 | $0.00 | $0.00 | $70,325.97 |
| C1020 | Interior Doors | $0.00 | $37,234.71 | $0.00 | $0.00 | $0.00 | $37,234.71 |
| C3010230 | Paint & Covering | $0.00 | $85,670.76 | $0.00 | $0.00 | $0.00 | $85,670.76 |
| C3020413 | Vinyl Flooring | $0.00 | $30,333.34 | $0.00 | $0.00 | $0.00 | $30,333.34 |
| C3020414 | Wood Flooring | $0.00 | $46,060.27 | $0.00 | $0.00 | $0.00 | $46,060.27 |
| C3030 | Ceiling Finishes | $0.00 | $45,247.29 | $0.00 | $0.00 | $0.00 | $45,247.29 |
| D2010 | Plumbing Fixtures | $0.00 | $0.00 | $0.00 | $124,351.88 | $0.00 | $124,351.88 |
| D2020 | Domestic Water Distribution | $0.00 | $0.00 | $0.00 | $34,306.86 | $28,275.86 | $62,582.72 |
| D2030 | Sanitary Waste | $0.00 | $0.00 | $0.00 | $27,374.07 | $0.00 | $27,374.07 |
| D3040 | Distribution Systems | $0.00 | $0.00 | $0.00 | $88,356.72 | $0.00 | $88,356.72 |
| D3050 | Terminal & Package Units | $0.00 | $0.00 | $0.00 | $0.00 | $517,531.56 | $517,531.56 |
| D3060 | Controls & Instrumentation | $0.00 | $0.00 | $0.00 | $0.00 | $119,702.62 | $119,702.62 |
| D4010 | Sprinklers | $0.00 | $0.00 | $0.00 | $0.00 | $79,824.39 | $79,824.39 |
| D5010 | Electrical Service/Distribution | $0.00 | $0.00 | $18,539.99 | $0.00 | $0.00 | $18,539.99 |
| D5020 | Lighting and Branch Wiring | $0.00 | $0.00 | $101,907.15 | $0.00 | $0.00 | $101,907.15 |
| D5030 | Communications and Security | $0.00 | $0.00 | $59,015.42 | $0.00 | $0.00 | $59,015.42 |
| D5090 | Other Electrical Systems | $0.00 | $0.00 | $15,068.60 | $0.00 | $0.00 | $15,068.60 |
| E1020 | Institutional Equipment | $0.00 | $0.00 | $0.00 | $21,959.87 | $0.00 | $21,959.87 |
| | **Total:** | $60,987.63 | $342,194.30 | $434,901.16 | $296,349.40 | $745,334.43 | $1,879,766.92 |

## Deficiency Summary by Category

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:




**Budget Estimate Total: $1,879,766.92**

## Deficiency Details by Priority

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

### Priority 1 - Response Time (< 2 yr):

**System: B3010105 - Built-Up**

**Location:** Roof

**Distress:** Failing

**Category:** 3 - Operations / Maint.

**Priority:** 1 - Response Time (< 2 yr)

**Correction:** Remove and Replace Built Up Roof

**Qty:** 1,800.00

**Unit of Measure:** S.F.

**Estimate:** $60,987.63

**Assessor Name:** Craig Anding

**Date Created:** 10/21/2015

**Notes:** This Field House has a built up roof with an estimated installation date of 1985. The roofing system is not expected to outlast the ten-year scope of this analysis. Future budget modeling should include provisions for the replacement of the failing roofing systems.

## Priority 2 - Response Time (2-3 yrs):

**System: B2030 - Exterior Doors**

**Location:** Exterior Elevation

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Remove and replace exterior doors - per leaf

**Qty:** 3.00

**Unit of Measure:** Ea.

**Estimate:** $27,321.96

**Assessor Name:** Craig Anding

**Date Created:** 10/21/2015

**Notes:** There are three exterior doors one facing the East and entrance gate and two facing west towards the fields. The doors are metal applications with wooden or metal frames. The exterior door system for this field house is a very high traffic system. The doors are in poor condition. These doors are out of service and need immediate attention. Other doors are aging at a faster rate than expected based on traffic and condition. The exterior door system is recommended for upgrade. Special consideration to enhance the first step concrete pads to prevent pinch points and prevent injury to doors opening into walkways is also expected to be included in this effort.

---

**System: C1010 - Partitions**

**Location:** Second Floor Restroom

**Distress:** Failing

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Build new single restroom to meet code requirements

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** $70,325.97

**Assessor Name:** Craig Anding

**Date Created:** 10/21/2015

**Notes:** The second floor unisex restroom has been abandoned for a few years and has failed. The fixtures, finishes and amities are beyond repair. The system has failed. A new unisex restroom with compliant ADA fixture should be installed and should include all aspects of the current ADA standards for the physically challenged, ADA 4.23 is recommended. This Deficiency provides a budgetary consideration for a universal upgrade and is expected to be completed as part of a renovation effort.

---

**System: C1020 - Interior Doors**

**Location:** Building Wide

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Remove and replace interior doors - wood doors with wood frame - per leaf

**Qty:** 8.00

**Unit of Measure:** Ea.

**Estimate:** $37,234.71

**Assessor Name:** Craig Anding

**Date Created:** 10/21/2015

**Notes:** Interior doors are typically wood in wood frames. Other interior doors include original wooden frames or hollow metal in hollow metal frames. Doors have failed and some have been removed with only the frames remaining. Universal upgrades are required for the interior door systems, it is recommended that the interior doors system be removed and replaced with a new modern metal framed wooden door system with consideration for ADA compliance.

---

**System: C3010230 - Paint & Covering**

**Location:** Building Wide

**Distress:** Failing

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Repair substrate and repaint interior walls - SF of wall surface

**Qty:** 10,000.00

**Unit of Measure:** S.F.

**Estimate:** $85,670.76

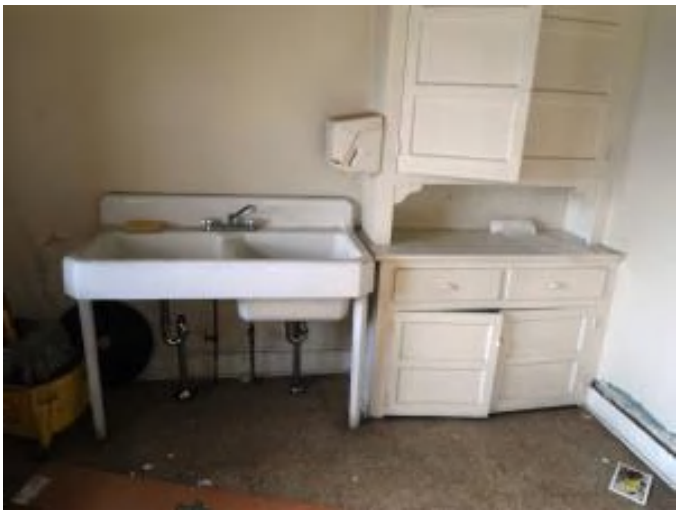
**Assessor Name:** Craig Anding

**Date Created:** 10/21/2015

**Notes:** There are several major areas of wall damage that ranges from serious to failure. This facility has been abandoned for a time period before it was re-entered into service. The wall finishes have failed and major repairs are required before a cyclical program of renewal is established. Remove damaged wall finishes and repair areas then apply primer and paint finish.

---

**System: C3020413 - Vinyl Flooring**



**Location:** Building Wide

**Distress:** Failing

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Remove VAT and replace with VCT - SF of area

**Qty:** 2,000.00

**Unit of Measure:** S.F.

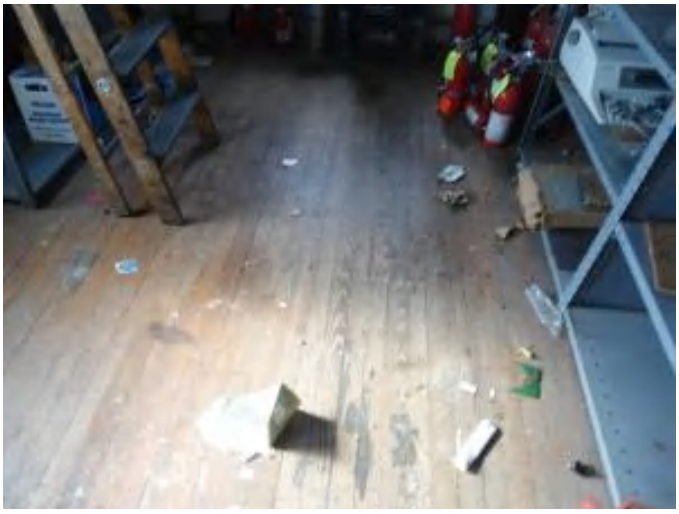
**Estimate:** $30,333.34

**Assessor Name:** Craig Anding

**Date Created:** 10/21/2015

**Notes:** The vinyl floor finish in most of the second floor is in very poor condition. The original flooring is a 9x9 vinyl tile finish. This finish is suspect to contain asbestos and is recommended for upgrade. Remove and replace with a 12x12 vinyl tile application.

**System: C3020414 - Wood Flooring**



**Location:** Building Wide

**Distress:** Failing

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Remove and replace wood flooring

**Qty:** 1,580.00

**Unit of Measure:** S.F.

**Estimate:** $46,060.27

**Assessor Name:** Craig Anding

**Date Created:** 10/21/2015

**Notes:** The wooden floor finish in the press box and hallway has served this field house from the first day of school. The systems maintenance has not been a priority and is in critical condition. Considering the age and current condition of the wooden floor finish, removal and replacement is recommended.

**System: C3030 - Ceiling Finishes**

**Location:** Building Wide

**Distress:** Failing

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Remove and replace suspended acoustic ceilings - lighting not included

**Qty:** 3,000.00

**Unit of Measure:** S.F.

**Estimate:** $45,247.29

**Assessor Name:** Craig Anding

**Date Created:** 10/21/2015

**Notes:** The ceiling finish is a mix of 12 x 12 ceiling grid, painted and 2 x 4 Acoustical tile finish. Ceilings have failed in several areas and is in poor condition. The ceiling finish is expected to require upgrades to support the recommended efforts in this report. This deficiency provides a budgetary consideration for removal and replacement of the current ceiling finish to a new acoustical tile finish. Considering the recommended mechanical and electrical upgrades this effort should be completed as part of an overall renewal program for the school. No work should be considered until after the recommended exterior efforts are complete.

## Priority 3 - Response Time (3-4 yrs):

**System: B2020 - Exterior Windows**

**Location:** Exterior Elevation

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Remove and replace aluminum windows - pick the appropriate size and style and insert the number of units

**Qty:** 40.00

**Unit of Measure:** Ea.

**Estimate:** $240,370.00

**Assessor Name:** Craig Anding

**Date Created:** 10/21/2015

**Notes:** The exterior windows are the original 1968 industrial metal framed single pane applications. Some of the windows are operable while others no longer function. The exterior windows have exceeded the expected life cycle for this type of application. It is recommended that the exterior window system be replaced with units that retain their dimensions and profiles, but that incorporate updated energy-efficient features.

---

**System: D5010 - Electrical Service/Distribution**

**Location:** Basement

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace Electrical Distribution System (U)

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** $18,539.99

**Assessor Name:** Craig Anding

**Date Created:** 10/04/2015

**Notes:** Remove all service entrance equipment and safety switches and replace with a new service entrance rated panelboard.

---

**System: D5020 - Lighting and Branch Wiring**

**Location:** Building wide

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace Lighting Fixtures (SF)

**Qty:** 5,580.00

**Unit of Measure:** S.F.

**Estimate:** $54,761.16

**Assessor Name:** Craig Anding

**Date Created:** 10/04/2015

**Notes:** Replace all interior lighting fixtures with either fluorescent or LED fixtures.

**System: D5020 - Lighting and Branch Wiring**

**Location:** Building wide

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Replace Wiring Devices (SF) - surface mounted conduit and boxes

**Qty:** 5,580.00

**Unit of Measure:** S.F.

**Estimate:** $39,651.58

**Assessor Name:** Craig Anding

**Date Created:** 10/04/2015

**Notes:** Replace all wiring devices, including convenience duplex receptacles and light switches, and associated branch circuit wiring throughout the field house.

**System: D5020 - Lighting and Branch Wiring**

**Location:** Exterior Building
**Distress:** Energy Efficiency
**Category:** 4 - Capital Improvement
**Priority:** 3 - Response Time (3-4 yrs)
**Correction:** Replace lighting fixtures
**Qty:** 4.00
**Unit of Measure:** Ea.
**Estimate:** $7,494.41
**Assessor Name:** Craig Anding
**Date Created:** 10/04/2015

**Notes:** Replace all four (4) exterior building mounted floodlighting fixtures with LED floodlights.

**System: D5030 - Communications and Security**

This deficiency has no image.

**Location:** Building wide
**Distress:** Inadequate
**Category:** 4 - Capital Improvement
**Priority:** 3 - Response Time (3-4 yrs)
**Correction:** Provide manual fire alarm system
**Qty:** 1.00
**Unit of Measure:** LS
**Estimate:** $59,015.42
**Assessor Name:** Craig Anding
**Date Created:** 10/05/2015

**Notes:** Provide manual fire alarm system with fire alarm control panel, manual pull stations and audible/visual notification appliances.

**System: D5090 - Other Electrical Systems**

**Location:** Building wide

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Add Emergency/Exit Lighting

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** $15,068.60

**Assessor Name:** Craig Anding

**Date Created:** 10/04/2015

**Notes:** Provide emergency egress lighting with battery type emergency lighting units in the stairways, corridors and locker rooms. Provide exit signs with battery backup.

## Priority 4 - Response Time (4-5 yrs):

**System: D2010 - Plumbing Fixtures**

**Location:** toilet rooms

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace or replace water closet - quantify additional units

**Qty:** 8.00

**Unit of Measure:** Ea.

**Estimate:** $60,195.41

**Assessor Name:** Craig Anding

**Date Created:** 10/15/2015

**Notes:** Replace old plumbing fixtures, including water closets, lavatories, service sinks, tubs, showers and water coolers. Include fittings and trim.

---

**System: D2010 - Plumbing Fixtures**

**Location:** toilet rooms

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace or replace lavatory - quantify accessible if required

**Qty:** 8.00

**Unit of Measure:** Ea.

**Estimate:** $30,986.32

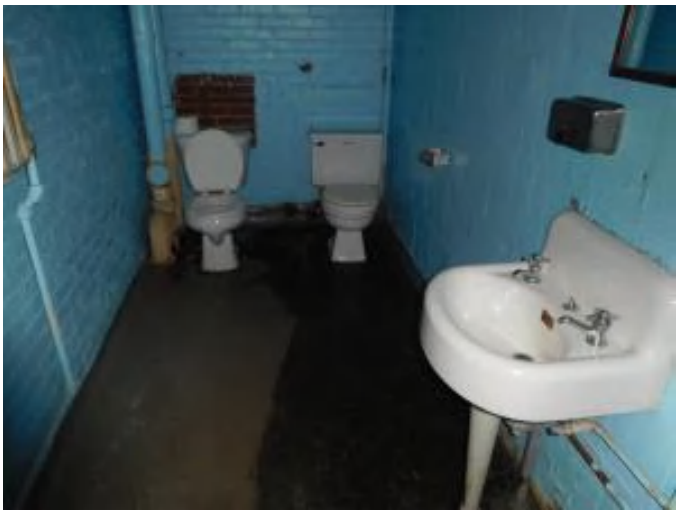
**Assessor Name:** Craig Anding

**Date Created:** 10/15/2015

**Notes:** Replace old plumbing fixtures, including water closets, lavatories, service sinks, tubs, showers and water coolers. Include fittings and trim.

---

**System: D2010 - Plumbing Fixtures**



**Location:** toilet rooms

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Replace shower valve and shower head including disruption and replacement of finishes

**Qty:** 8.00

**Unit of Measure:** Ea.

**Estimate:** $18,011.77

**Assessor Name:** Craig Anding

**Date Created:** 10/05/2015

**Notes:** Replace old plumbing fixtures, including water closets, lavatories, service sinks, tubs, showers and water coolers. Include fittings and trim.

---

**System: D2010 - Plumbing Fixtures**

**Location:** toilet rooms

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and Replace Water Fountains - without ADA new recessed alcove

**Qty:** 2.00

**Unit of Measure:** Ea.

**Estimate:** $15,158.38

**Assessor Name:** Craig Anding

**Date Created:** 10/15/2015

**Notes:** Replace old plumbing fixtures, including water closets, lavatories, service sinks, tubs, showers and water coolers. Include fittings and trim.

---

**System: D2020 - Domestic Water Distribution**

**Location:** mechanical room

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Provide 3" reduced pressure back flow preventer

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** $34,306.86

**Assessor Name:** Craig Anding

**Date Created:** 10/05/2015

**Notes:** Provide new three inch domestic water service with backflow preventer.

**System: D2030 - Sanitary Waste**

**Location:** entire building

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Inspect sanitary waste piping and replace damaged sections. (+50KSF)

**Qty:** 5,580.00

**Unit of Measure:** S.F.

**Estimate:** $27,374.07

**Assessor Name:** Craig Anding

**Date Created:** 10/05/2015

**Notes:** Inspect old cast iron sanitary piping including camera observation and replace damaged sections.

**System: D3040 - Distribution Systems**

**Location:** locker rooms, toilet rooms

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Provide inline centrifugal fan and wall outlet louver for restroom exhaust (8 plbg fixtures)

**Qty:** 2.00

**Unit of Measure:** Ea.

**Estimate:** $53,942.64

**Assessor Name:** Craig Anding

**Date Created:** 10/05/2015

**Notes:** Provide new mechanical exhaust system for toilet rooms and locker rooms. Include fans, grills, ductwork and exterior wall louvers.

**System: D3040 - Distribution Systems**

**Location:** locker rooms, toilet rooms

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Provide inline centrifugal fan and wall outlet louver for restroom exhaust (4 plbg fixtures)

**Qty:** 2.00

**Unit of Measure:** Ea.

**Estimate:** $34,414.08

**Assessor Name:** Craig Anding

**Date Created:** 10/05/2015

**Notes:** Provide new mechanical exhaust system for toilet rooms and locker rooms. Include fans, grills, ductwork and exterior wall louvers.

**System: E1020 - Institutional Equipment**


**Location:** Roof

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 4 - Response Time (4-5 yrs)

**Correction:** Remove and replace or install new scoreboard - pick the appropriate scoreboard

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** $21,959.87

**Assessor Name:** Craig Anding

**Date Created:** 10/21/2015

**Notes:** The Olney Field House has a single scoreboard that appears to be from the original construction. This system no longer functions and the command board has been destroyed from the failing roof system leaking onto the equipment. This deficiency provides a budgetary consideration for the removal and replacement of roof mounted scoreboard.

## Priority 5 - Response Time (> 5 yrs):

**System: D2020 - Domestic Water Distribution**

**Location:** entire building
**Distress:** Beyond Service Life
**Category:** 3 - Operations / Maint.
**Priority:** 5 - Response Time (> 5 yrs)
**Correction:** Replace domestic water piping (75 KSF)
**Qty:** 5,580.00
**Unit of Measure:** S.F.
**Estimate:** $28,275.86
**Assessor Name:** Craig Anding
**Date Created:** 10/05/2015

**Notes:** Replace domestic hot and cold water pipe, fittings, valves, hangers and insulation

**System: D3050 - Terminal & Package Units**

**Location:** entire building
**Distress:** Building / MEP Codes
**Category:** 2 - Code Compliance
**Priority:** 5 - Response Time (> 5 yrs)
**Correction:** Install HP RTU for Classroom (30 students).
**Qty:** 4.00
**Unit of Measure:** C
**Estimate:** $517,531.56
**Assessor Name:** Craig Anding
**Date Created:** 10/15/2015

**Notes:** Provide four new five ton rooftop heat pump units with ductwork, controls, air distribution devices and electrical connections.

**System: D3060 - Controls & Instrumentation**

**Location:** entire building

**Distress:** Inadequate

**Category:** 4 - Capital Improvement

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Replace pneumatic controls with DDC (75KSF)

**Qty:** 5,580.00

**Unit of Measure:** S.F.

**Estimate:** $119,702.62

**Assessor Name:** Craig Anding

**Date Created:** 10/05/2015

**Notes:** Install new direct digital control system and building automation system with remote computer control capability and graphics package.

**System: D4010 - Sprinklers**

**Location:** entire building

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Install a fire protection sprinkler system

**Qty:** 5,580.00

**Unit of Measure:** S.F.

**Estimate:** $79,824.39

**Assessor Name:** Craig Anding

**Date Created:** 10/05/2015

**Notes:** Install NFPA wet pipe automatic sprinkler system in entire building, including fire service, piping and sprinkler heads.

## Equipment Inventory

The following table represents the inventory details of the inventory found in the building, which fall under the following subsystems:

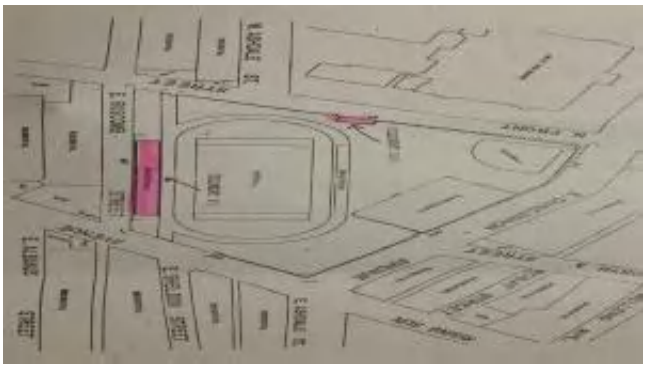
| Subsystem | Inventory | Qty | UoM | Location | Manufacturer | Model Number | Serial Number | Barcode | Life | Install Date | Next Renewal | Raw Cost | Inventory Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D3020 Heat Generating Systems | Boiler, oil fired, flame retention burner, cast iron, steam, gross output, 1084 MBH, includes standard controls and insulated flush jacket, packaged | 1.00 | Ea. | mechanical room | weil mclain | series 1 model 588 | | | 35 | 2009 | 2044 | $21,558.10 | $23,713.91 |
| | | | | | | | | | | | | **Total:** | **$23,713.91** |

## Executive Summary

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) FCI is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor). Condition Index (CI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired).

| | |
|---|---|
| Function: | Fieldhouse |
| Gross Area (SF): | 11,200 |
| Year Built: | 1968 |
| Last Renovation: | |
| Replacement Value: | $3,850,224 |
| Repair Cost: | $1,829,992.50 |
| Total FCI: | 47.53 % |
| Total RSLI: | 23.22 % |



**Description:**

Estimated year of construction - verify

**Attributes:**

**General Attributes:**

| | | | |
|---|---|---|---|
| Active: | Open | Bldg ID: | B702902 |
| Sewage Ejector: | No | Status: | Accepted by SDP |
| Site ID: | S702001 | | |

## Condition Summary

The Table below shows the CI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

| UNIFORMAT Classification | RSLI % | FCI % | Current Repair Cost |
|---|---|---|---|
| A10 - Foundations | 12.00 % | 0.00 % | $0.00 |
| A20 - Basement Construction | 12.00 % | 0.00 % | $0.00 |
| B10 - Superstructure | 12.00 % | 151.87 % | $1,829,992.50 |
| B20 - Exterior Enclosure | 13.07 % | 0.00 % | $0.00 |
| B30 - Roofing | 60.00 % | 0.00 % | $0.00 |
| C20 - Stairs | 30.00 % | 0.00 % | $0.00 |
| D50 - Electrical | 110.26 % | 0.00 % | $0.00 |
| **Totals:** | **23.22 %** | **47.53 %** | **$1,829,992.50** |

## Condition Detail

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II classification. The columns in the System Listing table below represent the following:

1. System Code: A code that identifies the system.
2. System Description: A brief description of a system present in the building.
3. Unit Price $: The unit price of the system.
4. UoM: The unit of measure for of the system.
5. Qty: The quantity for the system
6. Life: anticipated service life for thesystem based on Building Owners and Managers Association (BOMA) recommendations.
7. Year Installed: The date of system installation.
8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
10. CI: The Condition Index of the system.
11. FCI: The Facility Condition Index of the system.
12. RSL: Remaining Service Life.
13. eCR: eCOMET Condition Rating (not used).
14. Deficiency $: The financial investment to repair/replace system.

## System Listing

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

Additionally, a condition rating (eCR) based on the following guidelines is provided as observed at the time of the assessment.

- Excellent (E) - No noticeable distress or damage. The entire system is free from observable defect.
- Very Good (VG) - Overall no serviceability reduction for the entire system. No degradation of critical components and minor distress and defect noticeable for some but not non critical components within the system.
- Good (G) - Slight or no serviceability reduction for the entire system. There may be noticeable defects for some non critical components and slight noticeable degradation of the critical components.
- Fair (F) - Overall serviceability is degraded but adequate. There may be moderate deterioration for very few of the critical components and few of the non critical components may have severe degradation.
- Marginal (MA) - Overall serviceability and reliability loss. Most if not all of the non critical components suffer from severe degradation and a few of the critical component may have severe degradation.
- Moderate (MO) - Overall a significant serviceability loss. Most if not all the components have severe degradation with the reminder of the component showing visible distress.
- Very Poor (VP) - Overall the system is barely functional. All of the components are severely degraded.
- Non-Functional (NF) - Overall the system does not function with all the components having no serviceability and suffer from severe degradation.

| System Code | System Description | Unit Price $ | UoM | Qty | Life | Year Installed | Calc Next Renewal Year | Next Renewal Year | RSLI% | FCI% | RSL | eCR | Deficiency $ | Replacement Value $ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A1010 | Standard Foundations | $10.75 | S.F. | 11,200 | 100 | 1968 | 2068 | 2027 | 12.00 % | 0.00 % | 12 | | | $120,400 |
| A1030 | Slab on Grade | $17.93 | S.F. | 11,200 | 100 | 1968 | 2068 | 2027 | 12.00 % | 0.00 % | 12 | | | $200,816 |
| A2010 | Basement Excavation | $0.62 | S.F. | 11,200 | 100 | 1968 | 2068 | 2027 | 12.00 % | 0.00 % | 12 | | | $6,944 |
| A2020 | Basement Walls | $8.99 | S.F. | 11,200 | 100 | 1968 | 2068 | 2027 | 12.00 % | 0.00 % | 12 | | | $100,688 |
| B1010 | Floor Construction | $107.59 | S.F. | 11,200 | 100 | 1968 | 2068 | 2027 | 12.00 % | 151.87 % | 12 | | $1,829,992.50 | $1,205,008 |
| B2010 | Exterior Walls | $125.87 | S.F. | 11,200 | 100 | 1968 | 2068 | 2027 | 12.00 % | 0.00 % | 12 | | | $1,409,744 |
| B2030 | Exterior Doors | $7.92 | S.F. | 11,200 | 40 | 1968 | 2008 | 2027 | 30.00 % | 0.00 % | 12 | | | $88,704 |
| B3010120 | Single Ply Membrane | $24.21 | S.F. | 11,200 | 20 | 1968 | 1988 | 2027 | 60.00 % | 0.00 % | 12 | | | $271,152 |
| C2010 | Stair Construction | $17.04 | S.F. | 11,200 | 40 | 1968 | 2008 | 2027 | 30.00 % | 0.00 % | 12 | | | $190,848 |
| D5010 | Electrical Service/Distribution | $2.42 | S.F. | 11,200 | 30 | 1968 | 1998 | 2047 | 106.67 % | 0.00 % | 32 | | | $27,104 |
| D5020 | Lighting and Branch Wiring | $15.03 | S.F. | 11,200 | 20 | 1968 | 1988 | 2037 | 110.00 % | 0.00 % | 22 | | | $168,336 |
| D5030 | Communications and Security | $4.20 | S.F. | 11,200 | 15 | 1968 | 1983 | 2032 | 113.33 % | 0.00 % | 17 | | | $47,040 |
| D5090 | Other Electrical Systems | $1.20 | S.F. | 11,200 | 20 | 1968 | 1988 | 2037 | 110.00 % | 0.00 % | 22 | | | $13,440 |
| | | | | | | | | **Total** | **23.22 %** | **47.53 %** | | | **$1,829,992.50** | **$3,850,224** |

## System Notes

The facility description in the site executive summary contains an overview of each system. The notes listed below provide additional information on select systems found within the facility.

**System:** B2030 - Exterior Doors — This system contains no images

**Note:** Metal gate

**System:** B3010120 - Single Ply Membrane — This system contains no images

**Note:** Concrete stands waterproof membrane

## Renewal Schedule

eCOMET forecasts future Capital Renewal funding needed to address expiring systems based on the Next Renewal year found in the Cost Models. A 3% annual inflation factor is applied to the costs for systems expiring in future years. The table below reflects recommended Capital Renewal funding needs over the next 10 years. Note: Cells with a zero value indicate systems for which renewal is not scheduled in that year.

# Site Assessment Report - B702902;Olney Stands

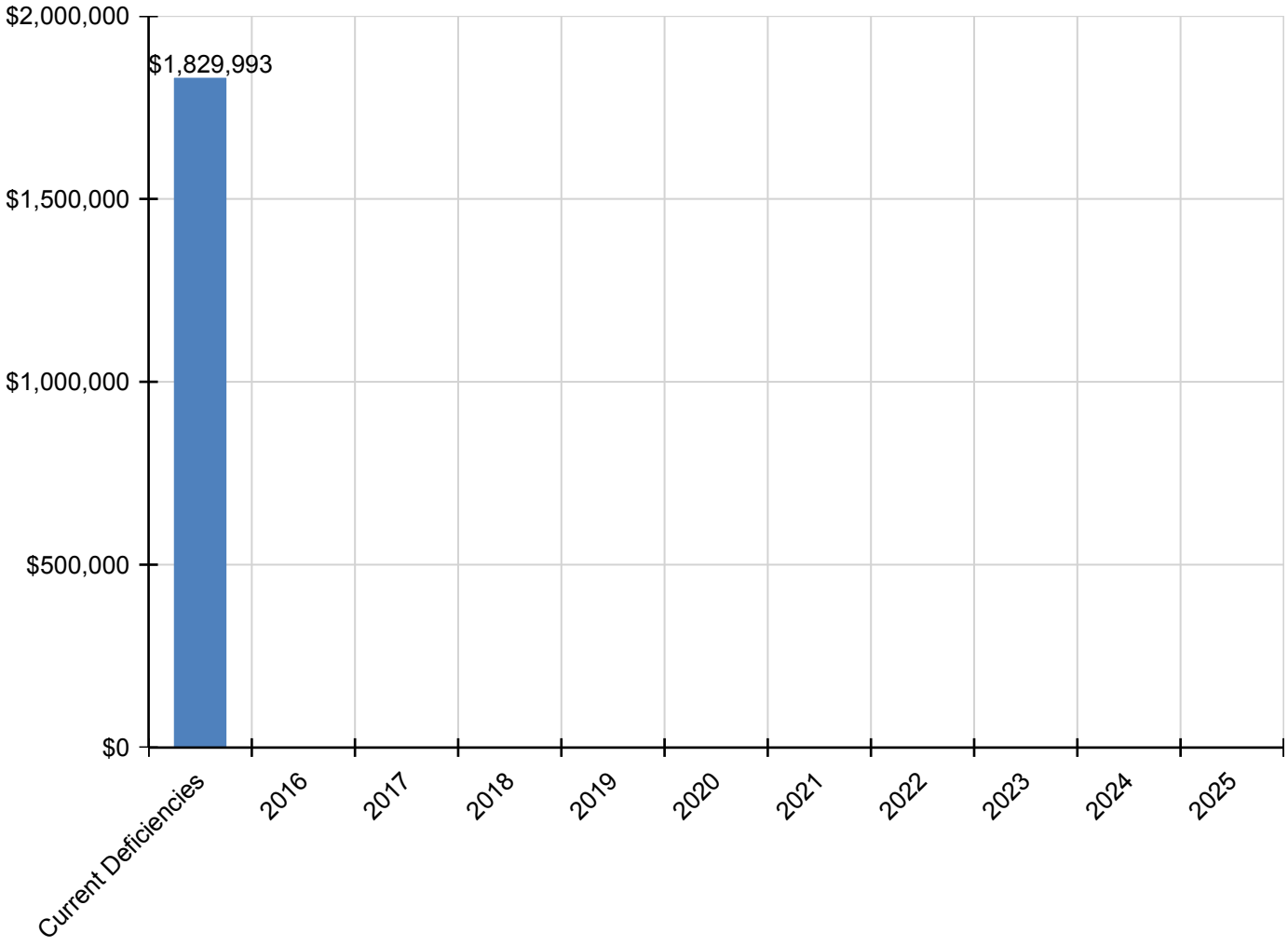
*Inflation Rate: 3%*

| System | Current Deficiencies | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total:** | **$1,829,993** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$1,829,993** |
| *** A - Substructure** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A10 - Foundations** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A1010 - Standard Foundations** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A1030 - Slab on Grade** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A20 - Basement Construction** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A2010 - Basement Excavation** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **A2020 - Basement Walls** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B - Shell** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B10 - Superstructure** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B1010 - Floor Construction** | $1,829,993 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$1,829,993** |
| **B20 - Exterior Enclosure** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B2010 - Exterior Walls** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B2030 - Exterior Doors** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B30 - Roofing** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B3010 - Roof Coverings** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **B3010120 - Single Ply Membrane** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C - Interiors** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C20 - Stairs** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **C2010 - Stair Construction** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D - Services** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D50 - Electrical** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D5010 - Electrical Service/Distribution** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D5020 - Lighting and Branch Wiring** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D5030 - Communications and Security** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **D5090 - Other Electrical Systems** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |

** Indicates non-renewable system*

## Forecasted Sustainment Requirement

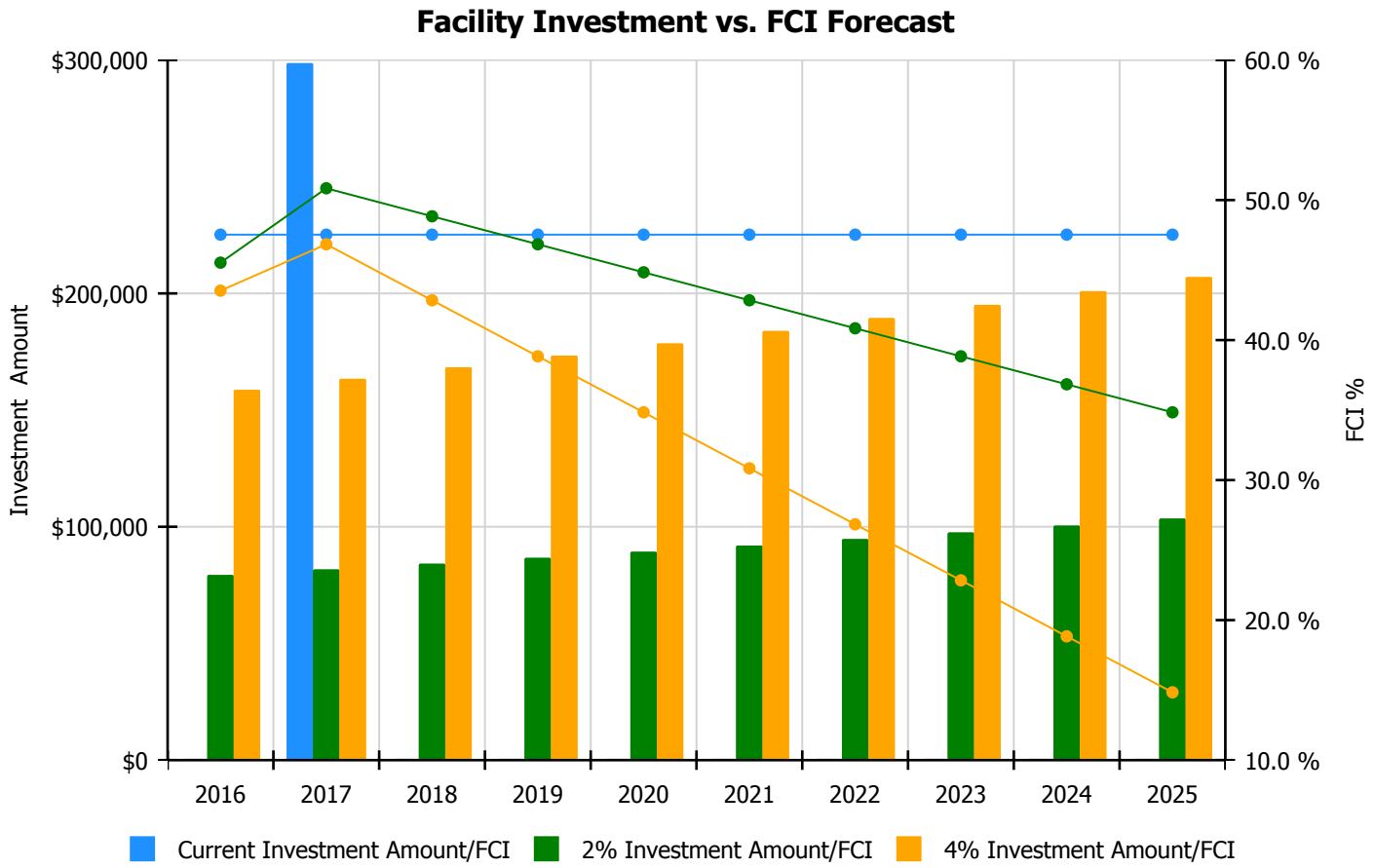
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



## 10 Year FCI Forecast by Investment Scenario

The chart below illustrates the effect of various investment levels on the building FCI for the next 10 years. The levels of investment shown below include:

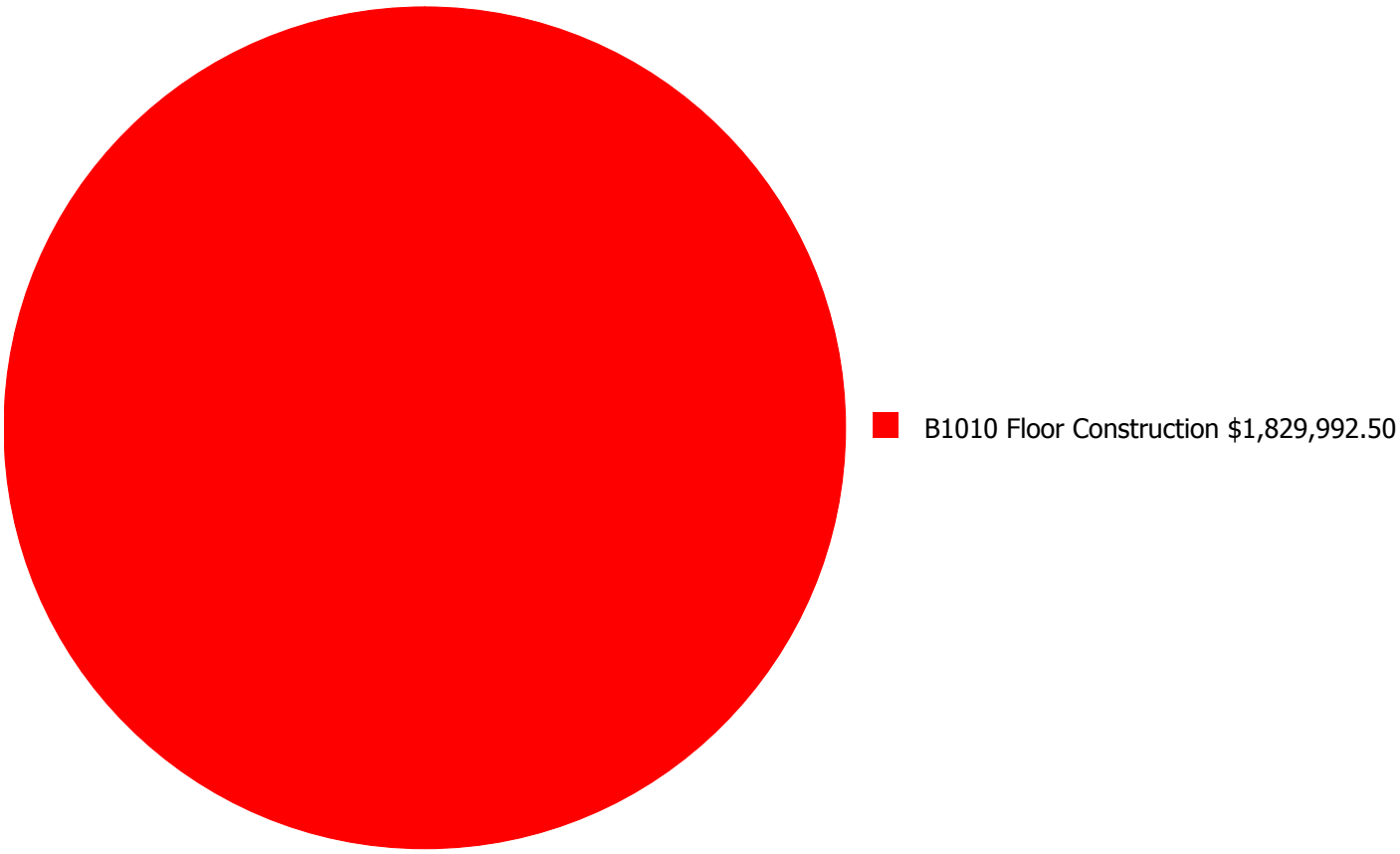
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value of the building, escalated for inflation




| Year | Investment Amount Current FCI - 47.53% | 2% Investment | | 4% Investment | |
|---|---|---|---|---|---|
| | | Amount | FCI | Amount | FCI |
| 2016 | $0 | $79,315.00 | 45.53 % | $158,629.00 | 43.53 % |
| 2017 | $298,656 | $81,694.00 | 50.84 % | $163,388.00 | 46.84 % |
| 2018 | $0 | $84,145.00 | 48.84 % | $168,290.00 | 42.84 % |
| 2019 | $0 | $86,669.00 | 46.84 % | $173,338.00 | 38.84 % |
| 2020 | $0 | $89,269.00 | 44.84 % | $178,539.00 | 34.84 % |
| 2021 | $0 | $91,947.00 | 42.84 % | $183,895.00 | 30.84 % |
| 2022 | $0 | $94,706.00 | 40.84 % | $189,412.00 | 26.84 % |
| 2023 | $0 | $97,547.00 | 38.84 % | $195,094.00 | 22.84 % |
| 2024 | $0 | $100,473.00 | 36.84 % | $200,947.00 | 18.84 % |
| 2025 | $0 | $103,488.00 | 34.84 % | $206,975.00 | 14.84 % |
| **Total:** | **$298,656** | **$909,253.00** | | **$1,818,507.00** | |

## Deficiency Summary by System

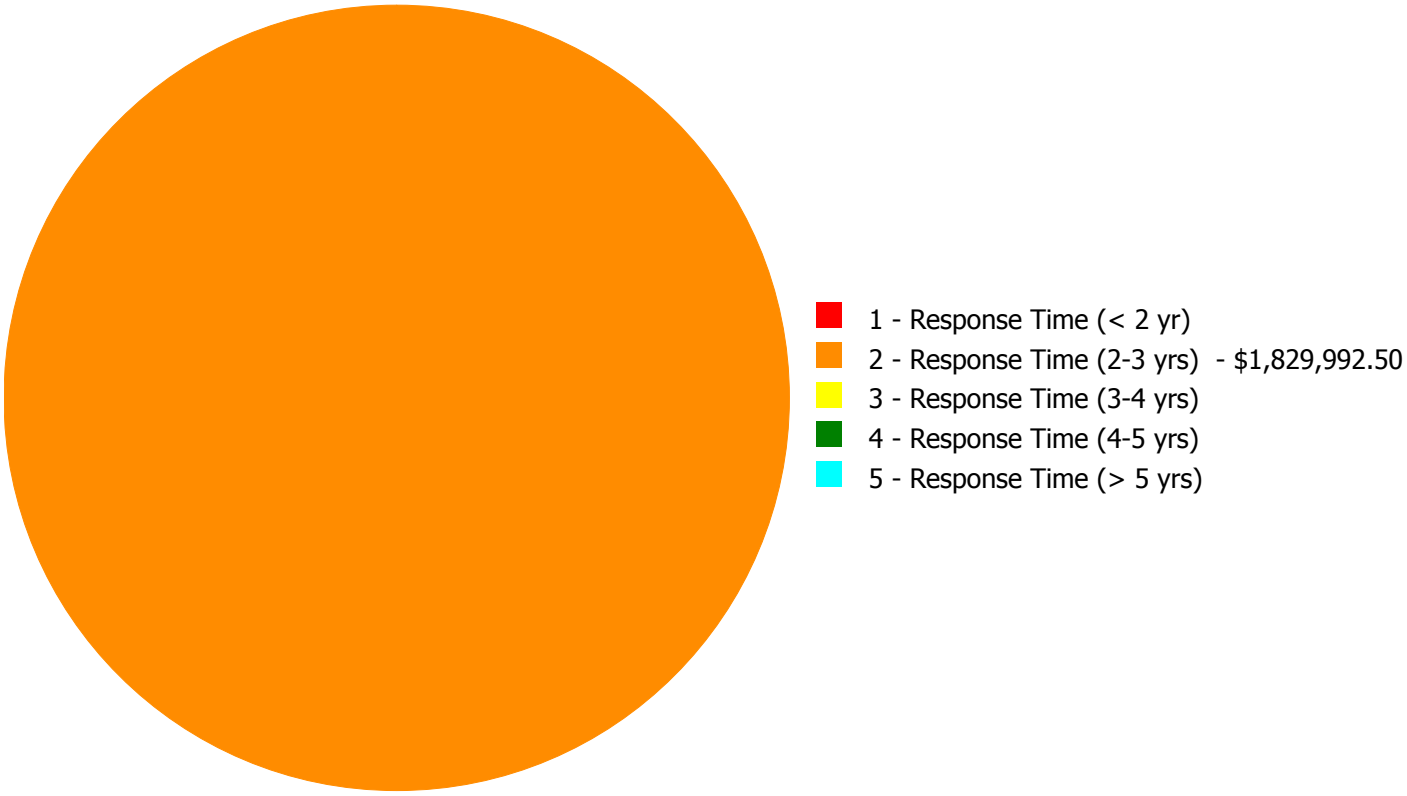
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.




**Budget Estimate Total: $1,829,992.50**

## Deficiency Summary by Priority

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:




**Budget Estimate Total: $1,829,992.50**

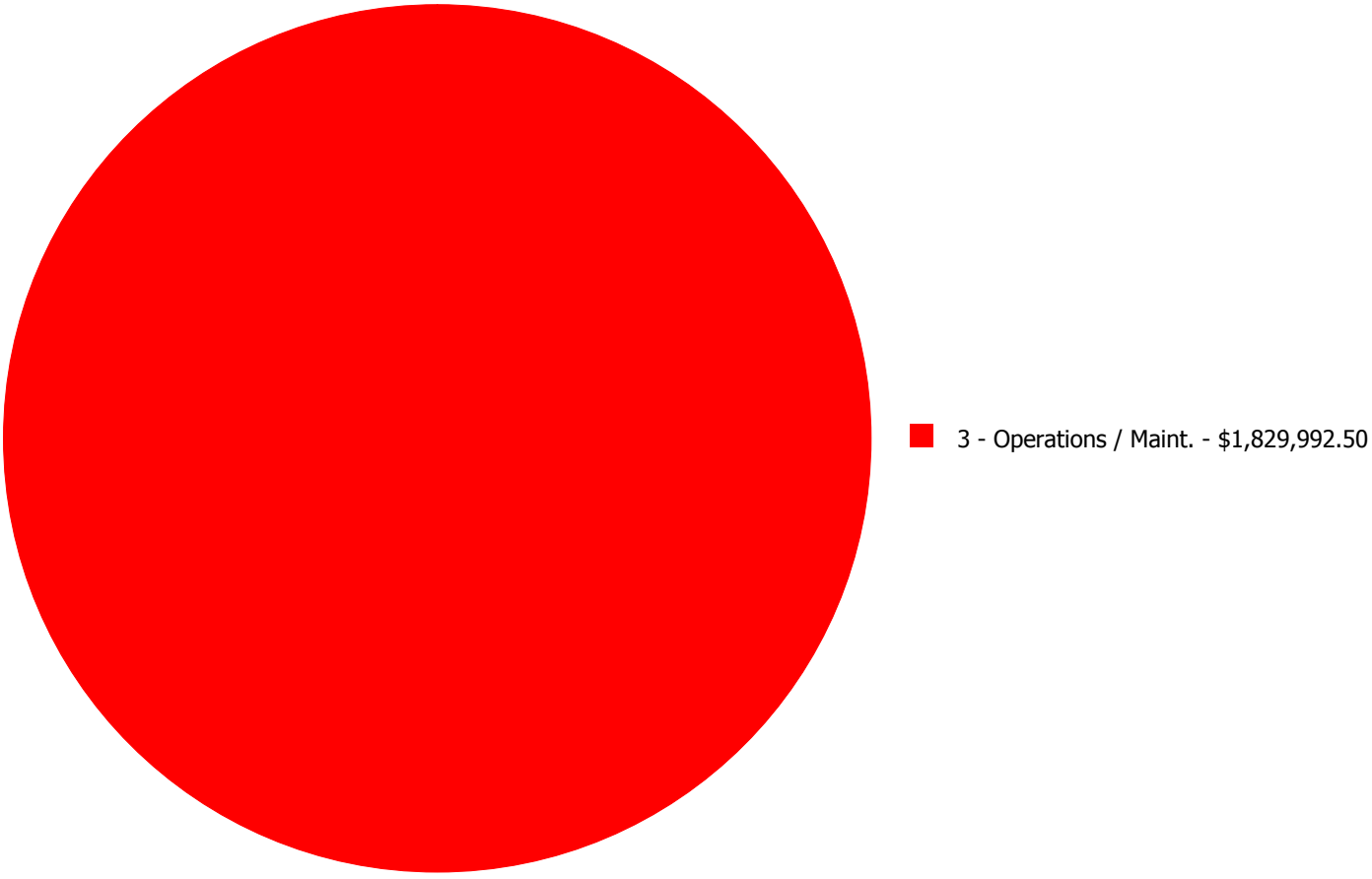
## Deficiency By Priority Investment Table

The table below shows the current investment cost grouped by deficiency priority and building system.

| System Code | System Description | 1 - Response Time (< 2 yr) | 2 - Response Time (2-3 yrs) | 3 - Response Time (3-4 yrs) | 4 - Response Time (4-5 yrs) | 5 - Response Time (> 5 yrs) | Total |
|---|---|---|---|---|---|---|---|
| B1010 | Floor Construction | $0.00 | $1,829,992.50 | $0.00 | $0.00 | $0.00 | $1,829,992.50 |
| | **Total:** | $0.00 | $1,829,992.50 | $0.00 | $0.00 | $0.00 | $1,829,992.50 |

## Deficiency Summary by Category

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:




**Budget Estimate Total: $1,829,992.50**

## Deficiency Details by Priority

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

### Priority 2 - Response Time (2-3 yrs):

**System: B1010 - Floor Construction**

**Location:** Stands

**Distress:** Failing

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Rehabilitate abandoned portion of building - all systems

**Qty:** 3,000.00

**Unit of Measure:** S.F.

**Estimate:** $1,829,992.50

**Assessor Name:** Gerald Petric

**Date Created:** 10/21/2015

**Notes:** This seating stands facility is unique in its usage to the school system. This section of the school is abandoned and has had no preventative maintenance or measures to mitigate damage that results from these conditions. Considering the overall effort to recover such an area this deficiency is a combination of the coordinated requirements for a renovation to include all aspects of HVAC, Electrical, Fire Life Safety, Health and ADA. Note: This effort also includes budgetary consideration for Asbestos, Lead Paint and a major Abatement program.

## Equipment Inventory

The following table represents the inventory details of the inventory found in the building, which fall under the following subsystems:

No data found for this asset

## Executive Summary

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) FCI is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor). Condition Index (CI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired).

| | |
|---|---|
| Function: | |
| Gross Area (SF): | 335,500 |
| Year Built: | 1968 |
| Last Renovation: | |
| Replacement Value: | $3,191,512 |
| Repair Cost: | $2,818,199.95 |
| Total FCI: | 88.30 % |
| Total RSLI: | 55.93 % |

**Description:**

**Attributes:**

**General Attributes:**

| | | | |
|---|---|---|---|
| Bldg ID: | S702001 | Site ID: | S702001 |

## Condition Summary

The Table below shows the CI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

| UNIFORMAT Classification | RSLI % | FCI % | Current Repair Cost |
|---|---|---|---|
| G20 - Site Improvements | 55.22 % | 89.43 % | $2,818,199.95 |
| G40 - Site Electrical Utilities | 111.11 % | 0.00 % | $0.00 |
| **Totals:** | **55.93 %** | **88.30 %** | **$2,818,199.95** |

## Condition Detail

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II classification. The columns in the System Listing table below represent the following:

1. System Code: A code that identifies the system.
2. System Description: A brief description of a system present in the building.
3. Unit Price $: The unit price of the system.
4. UoM: The unit of measure for of the system.
5. Qty: The quantity for the system
6. Life: anticipated service life for thesystem based on Building Owners and Managers Association (BOMA) recommendations.
7. Year Installed: The date of system installation.
8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
10. CI: The Condition Index of the system.
11. FCI: The Facility Condition Index of the system.
12. RSL: Remaining Service Life.
13. eCR: eCOMET Condition Rating (not used).
14. Deficiency $: The financial investment to repair/replace system.

## System Listing

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

Additionally, a condition rating (eCR) based on the following guidelines is provided as observed at the time of the assessment.

- Excellent (E) - No noticeable distress or damage. The entire system is free from observable defect.
- Very Good (VG) - Overall no serviceability reduction for the entire system. No degradation of critical components and minor distress and defect noticeable for some but not non critical components within the system.
- Good (G) - Slight or no serviceability reduction for the entire system. There may be noticeable defects for some non critical components and slight noticeable degradation of the critical components.
- Fair (F) - Overall serviceability is degraded but adequate. There may be moderate deterioration for very few of the critical components and few of the non critical components may have severe degradation.
- Marginal (MA) - Overall serviceability and reliability loss. Most if not all of the non critical components suffer from severe degradation and a few of the critical component may have severe degradation.
- Moderate (MO) - Overall a significant serviceability loss. Most if not all the components have severe degradation with the reminder of the component showing visible distress.
- Very Poor (VP) - Overall the system is barely functional. All of the components are severely degraded.
- Non-Functional (NF) - Overall the system does not function with all the components having no serviceability and suffer from severe degradation.

| System Code | System Description | Unit Price $ | UoM | Qty | Life | Year Installed | Calc Next Renewal Year | Next Renewal Year | RSLI% | FCI% | RSL | eCR | Deficiency $ | Replacement Value $ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G2030 | Pedestrian Paving | $11.52 | S.F. | 54,300 | 40 | 1968 | 2008 | 2027 | 30.00 % | 0.00 % | 12 | | | $625,536 |
| G2040 | Site Development | $4.36 | S.F. | 335,500 | 25 | 1968 | 1993 | 2027 | 48.00 % | 192.66 % | 12 | | $2,818,199.95 | $1,462,780 |
| G2050 | Landscaping & Irrigation | $3.78 | S.F. | 281,200 | 15 | 1968 | 1983 | 2027 | 80.00 % | 0.00 % | 12 | | | $1,062,936 |
| G4020 | Site Lighting | $0.08 | S.F. | 335,500 | 20 | 1968 | 1988 | 2037 | 110.00 % | 0.00 % | 22 | | | $26,840 |
| G4030 | Site Communications & Security | $0.04 | S.F. | 335,500 | 15 | 1968 | 1983 | 2032 | 113.33 % | 0.00 % | 17 | | | $13,420 |
| | | | | | | | | **Total** | **55.93 %** | **88.30 %** | | | **$2,818,199.95** | **$3,191,512** |

## System Notes

The facility description in the site executive summary contains an overview of each system. The notes listed below provide additional information on select systems found within the facility.

No data found for this asset

## Renewal Schedule

eCOMET forecasts future Capital Renewal funding needed to address expiring systems based on the Next Renewal year found in the Cost Models. A 3% annual inflation factor is applied to the costs for systems expiring in future years. The table below reflects recommended Capital Renewal funding needs over the next 10 years. Note: Cells with a zero value indicate systems for which renewal is not scheduled in that year.

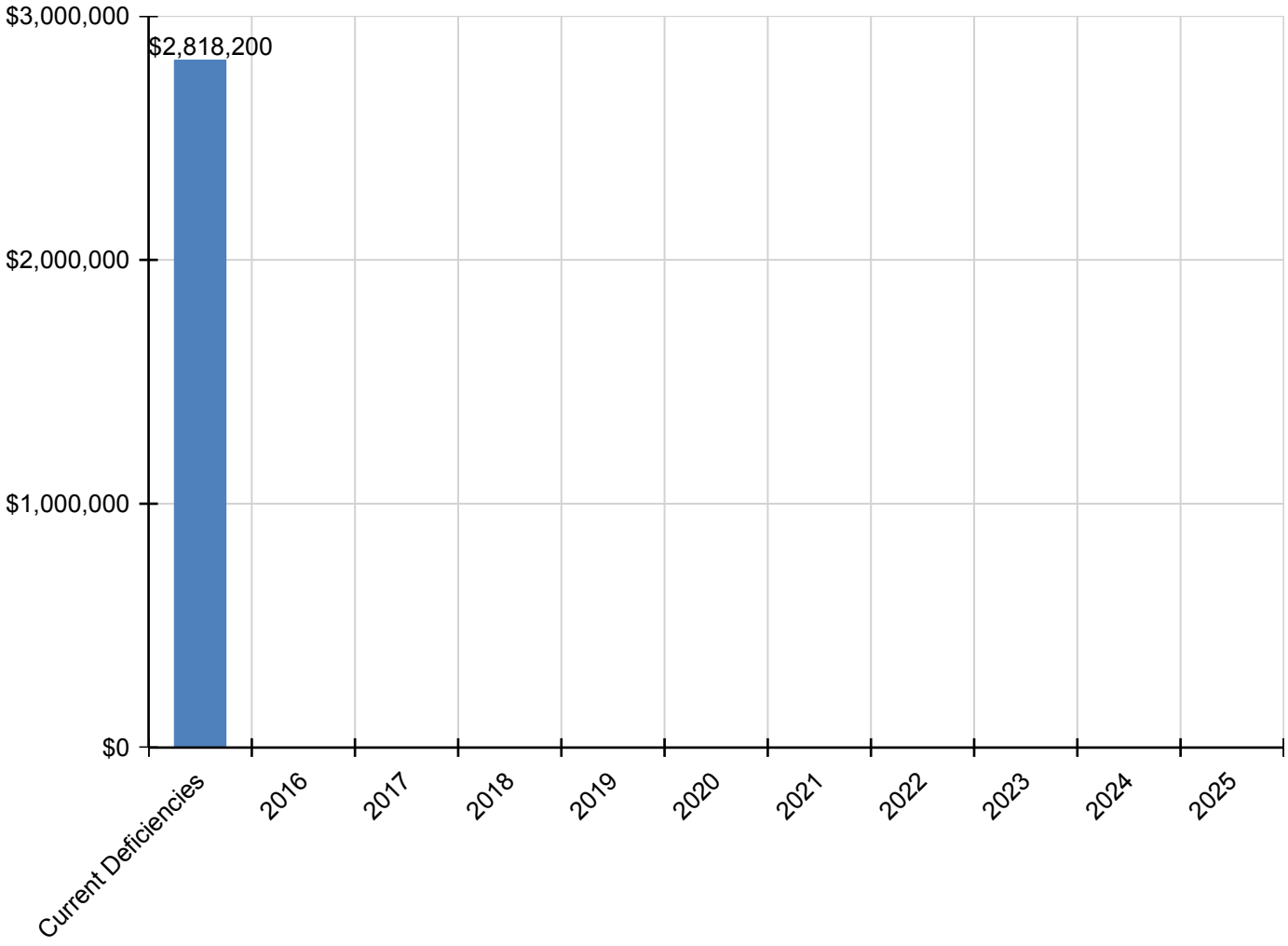
*Inflation Rate: 3%*

| System | Current Deficiencies | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total:** | **$2,818,200** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$2,818,200** |
| **G - Building Sitework** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **G20 - Site Improvements** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **G2030 - Pedestrian Paving** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **G2040 - Site Development** | $2,818,200 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$2,818,200** |
| **G2050 - Landscaping & Irrigation** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **G40 - Site Electrical Utilities** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **G4020 - Site Lighting** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |
| **G4030 - Site Communications & Security** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | **$0** |

** Indicates non-renewable system*

## Forecasted Sustainment Requirement

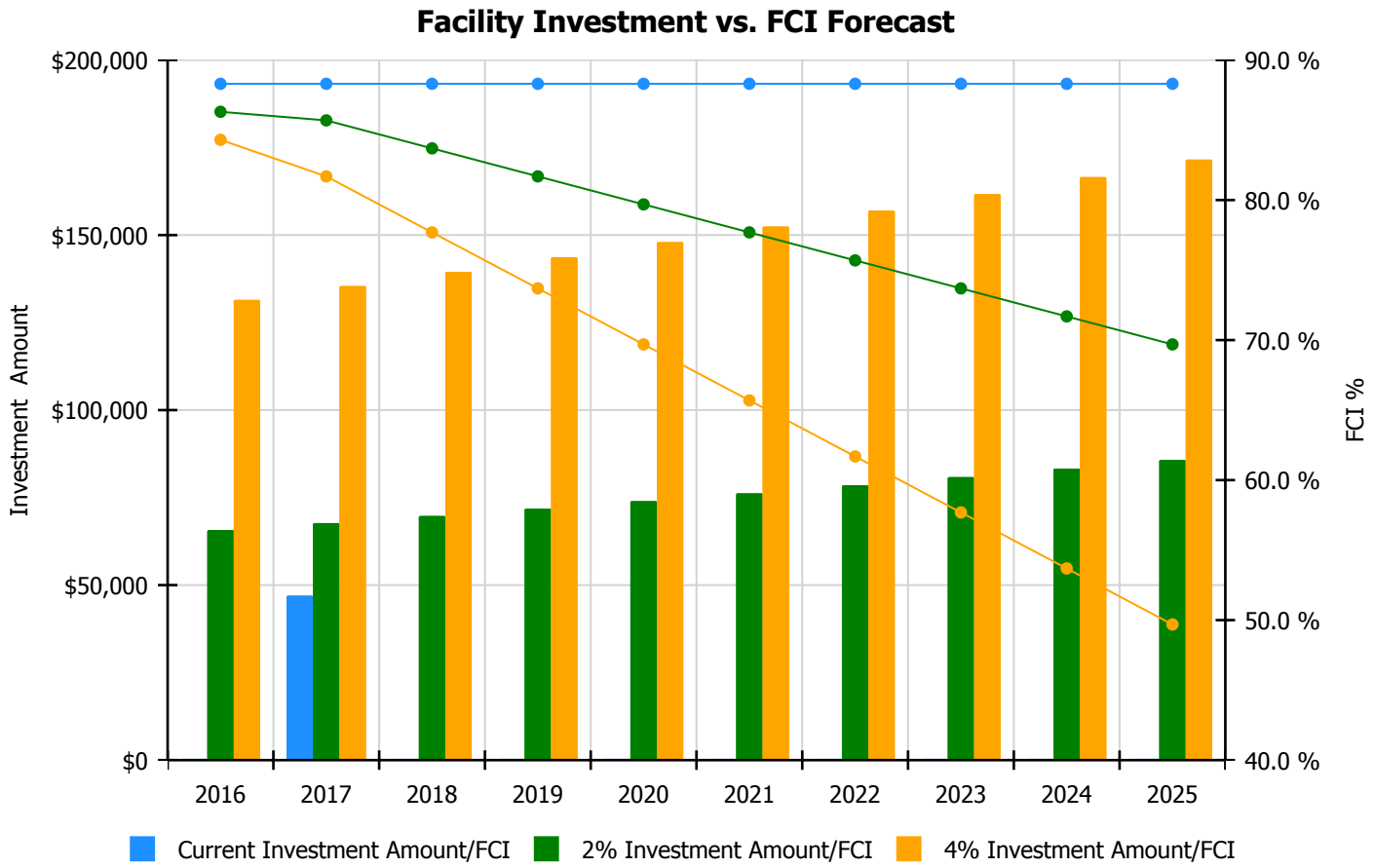
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



## 10 Year FCI Forecast by Investment Scenario

The chart below illustrates the effect of various investment levels on the building FCI for the next 10 years. The levels of investment shown below include:

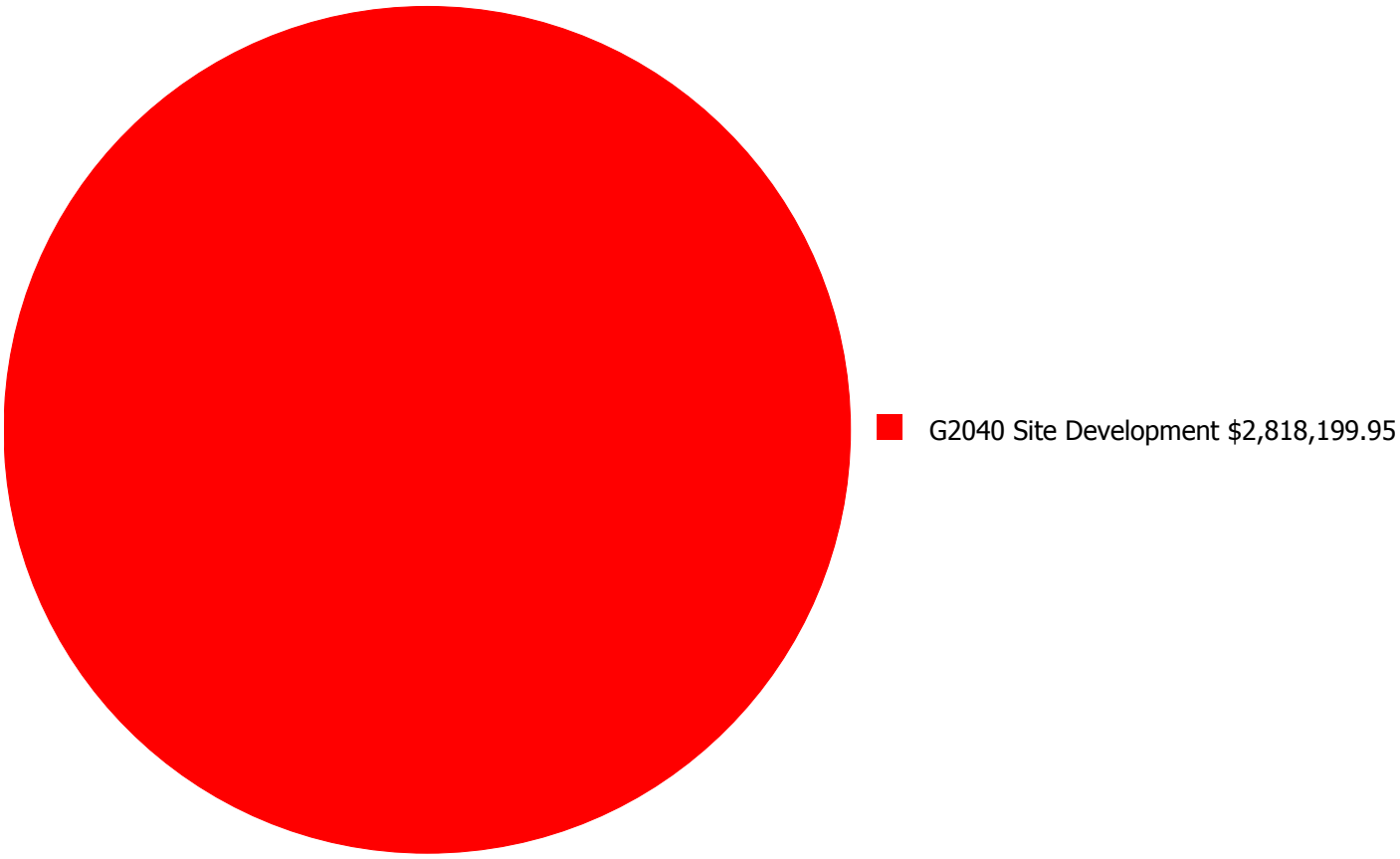
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value of the building, escalated for inflation




| Year | Investment Amount Current FCI - 88.3% | 2% Investment | | 4% Investment | |
|---|---|---|---|---|---|
| | | Amount | FCI | Amount | FCI |
| 2016 | $0 | $65,745.00 | 86.30 % | $131,490.00 | 84.30 % |
| 2017 | $46,983 | $67,718.00 | 85.69 % | $135,435.00 | 81.69 % |
| 2018 | $0 | $69,749.00 | 83.69 % | $139,498.00 | 77.69 % |
| 2019 | $0 | $71,841.00 | 81.69 % | $143,683.00 | 73.69 % |
| 2020 | $0 | $73,997.00 | 79.69 % | $147,993.00 | 69.69 % |
| 2021 | $0 | $76,217.00 | 77.69 % | $152,433.00 | 65.69 % |
| 2022 | $0 | $78,503.00 | 75.69 % | $157,006.00 | 61.69 % |
| 2023 | $0 | $80,858.00 | 73.69 % | $161,716.00 | 57.69 % |
| 2024 | $0 | $83,284.00 | 71.69 % | $166,568.00 | 53.69 % |
| 2025 | $0 | $85,783.00 | 69.69 % | $171,565.00 | 49.69 % |
| **Total:** | **$46,983** | **$753,695.00** | | **$1,507,387.00** | |

## Deficiency Summary by System

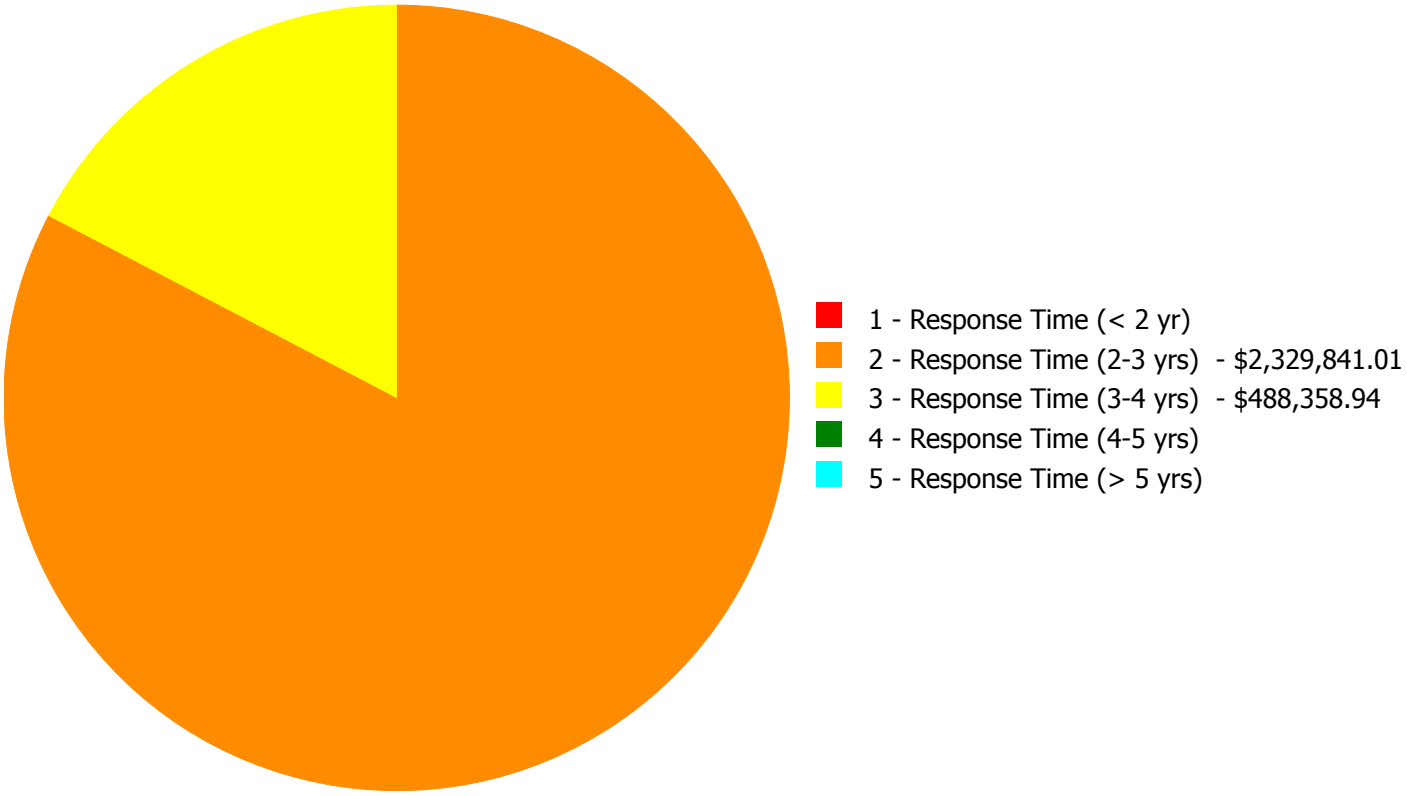
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.




**Budget Estimate Total: $2,818,199.95**

## Deficiency Summary by Priority

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:




**Budget Estimate Total: $2,818,199.95**

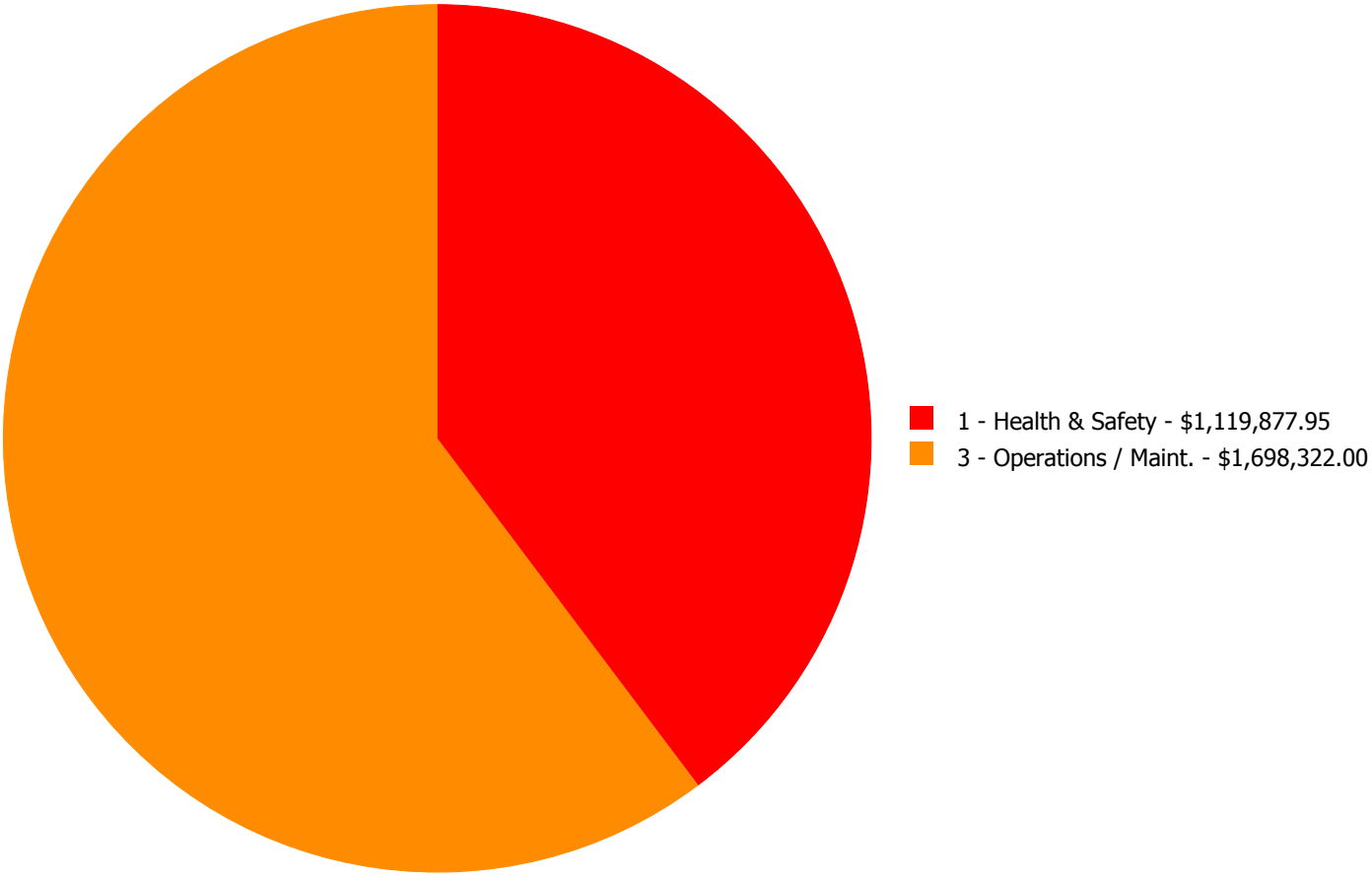
## Deficiency By Priority Investment Table

The table below shows the current investment cost grouped by deficiency priority and building system.

| System Code | System Description | 1 - Response Time (< 2 yr) | 2 - Response Time (2-3 yrs) | 3 - Response Time (3-4 yrs) | 4 - Response Time (4-5 yrs) | 5 - Response Time (> 5 yrs) | Total |
|---|---|---|---|---|---|---|---|
| G2040 | Site Development | $0.00 | $2,329,841.01 | $488,358.94 | $0.00 | $0.00 | $2,818,199.95 |
| | **Total:** | $0.00 | $2,329,841.01 | $488,358.94 | $0.00 | $0.00 | $2,818,199.95 |

## Deficiency Summary by Category

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:




**Budget Estimate Total: $2,818,199.95**

## Deficiency Details by Priority

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

### Priority 2 - Response Time (2-3 yrs):

**System: G2040 - Site Development**

**Location:** Site
**Distress:** Security Issue
**Category:** 1 - Health & Safety
**Priority:** 2 - Response Time (2-3 yrs)
**Correction:** Replace chain link fence - 8' high
**Qty:** 10,000.00
**Unit of Measure:** L.F.
**Estimate:** $1,119,877.95
**Assessor Name:** Craig Anding
**Date Created:** 10/21/2015

**Notes:** This Olney sports complex school grounds has a perimeter fence surrounding the baseball / playground / football areas. The fence has several areas of repairs and the mounting post are damaged in several areas, overall the fence is in fair condition. This fence system is recommended to be removed and replaced with a new system within the next five to ten years.

---

**System: G2040 - Site Development**

**Location:** Site
**Distress:** Damaged
**Category:** 3 - Operations / Maint.
**Priority:** 2 - Response Time (2-3 yrs)
**Correction:** Refurbish football field - based on approximate 90,000 SF grass field
**Qty:** 90,000.00
**Unit of Measure:** S.F.
**Estimate:** $1,046,654.30
**Assessor Name:** Ben Nixon
**Date Created:** 10/21/2015

**Notes:** The football field have been abandoned prior to the new school opening. These fields have overgrown and several areas that present hazards such as holes and debris issues exist. This entire field is recommended for universal renovation efforts. This deficiency provides a budgetary consideration to upgrade the football field to current standards.

---

**System: G2040 - Site Development**

**Location:** Site

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 2 - Response Time (2-3 yrs)

**Correction:** Refurbish running track - replace AC paving with asphalt latex rubber system

**Qty:** 8,000.00

**Unit of Measure:** S.F.

**Estimate:** $163,308.76

**Assessor Name:** Ben Nixon

**Date Created:** 10/21/2015

**Notes:** The track that surround the football field has overgrown and sections are missing. This area requires immediate attention prior to any usage due to the debris and holes that are hazards for Track and Field activities. This deficiency provides a budgetary consideration to upgrade the Track and Field areas for the Olney sports complex.

## Priority 3 - Response Time (3-4 yrs):

**System: G2040 - Site Development**

**Location:** SIte

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 3 - Response Time (3-4 yrs)

**Correction:** Refurbish baseball or softball field - baseball based on 36,600 SF - change quantity to 25,000 for softball field

**Qty:** 36,600.00

**Unit of Measure:** S.F.

**Estimate:** $488,358.94

**Assessor Name:** Ben Nixon

**Date Created:** 10/21/2015

**Notes:** The baseball fields have been abandoned prior to the new school opening. These fields have overgrown and several areas that present hazards such as holes and backstop issues exist. This entire field is recommended for universal renovation efforts. This deficiency provides a budgetary consideration to upgrade the baseball field to current standards.

## Equipment Inventory

The following table represents the inventory details of the inventory found in the building, which fall under the following subsystems:

No data found for this asset

## Glossary

| | |
|---|---|
| ABMA | American Boiler Manufacturers Association http://www.abma.com/ |
| ACEEE | American Council for an Energy-Efficient Economy |
| ACGIH | American Council of Governmental and Industrial Hygienists |
| AEE | Association of Energy Engineers |
| AFD | Adjustable Frequency Drive |
| AFTC | After Tax Cash Flow |
| AGA | American Gas Association |
| AHU | Air Handling Unit |
| Amp | Ampere |
| ANSI | American National Standards Institute |
| ARI | Air Conditioning and Refrigeration Institute |
| ASD | Adjustable Speed Drive |
| ASHRAE | American Society of Heating Refrigerating and Air-Conditioning Engineers Inc. |
| ASME | American Society of Mechanical Engineers |
| Assessment | Visual survey of a facility to determine its condition. It involves looking at the age of systems reviewing information from local sources and visual evidence of potential problems to assign a condition rating. It does not include destructive testing of materials or testing of systems or equipment for functionality. |
| ATS | After Tax Savings |
| AW | Annual worth |
| BACNET | Building Automation Control Network |
| BAS | Building Automation System |
| BCR | Benefit Cost Ratio |
| BEP | Business Energy Professional (AEE) |
| BF | Ballast Factor |
| BHP | Boiler Horsepower (boilers) |
| BHP | Brake Horsepower (motors) |
| BLCC | Building Life Cycle Cost analysis program (FEMP) |
| BOCA | Building Officials and Code Administrators |
| BTCF | Before Tax Cash Flow |

| | |
|---|---|
| BTS | Before Tax Savings |
| Btu | British thermal unit |
| Building Addition | An area space or component of a building added to a building after the original building's year built date. |
| CAA | Clean Air Act |
| CAAA-90 | Clean Air Act Amendments of 1990 |
| CABO | Council of American Building Officials |
| CAC | Conventional Air Conditioning |
| CADDET | Center for the Analysis and Dissemination of Demonstrated Energy Technologies |
| Calculated Next Renewal | The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system. |
| Capital Renewal | Capital renewal is condition work (excluding suitability and energy audit work) that includes the replacement of building systems or elements (as they become obsolete or beyond their useful life) not normally included in an annual operating budget. Calculated next renewal The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system. Next renewal The assessor adjusted expected useful life of a system or element based on on-site inspection. |
| CDD | Cooling Degree Days |
| CDGP | Certified Distributed Generation Professional |
| CEC | California Energy Commission |
| CEM | Certified Energy Manager |
| CEP | Certified Energy Procurement Professional |
| CFC | Chlorofluorocarbon |
| CFD | Cash Flow Diagram |
| CFL | Compact Fluorescent Light |
| CFM cfm | Cubic Feet per Minute |
| CHP | Combined Heat and Power (a.k.a. cogeneration) |
| CHW | Chilled Water |
| Condition | Condition refers to the state of physical fitness or readiness of a facility system or system element for its intended use. |
| COP | Coefficient of Performance |
| Cp | Heat Capacity of Material |
| CPUC | California Public Utility Commission |
| CRI | Color Rendering Index |
| CRT | Cathode Ray Tube VDT HMI |

| | |
|---|---|
| CTC | Competitive Transition Charge |
| Cu | Coefficient of Utilization |
| Current Replacement Value (CRV) | CRV represents the hypothetical total cost of rebuilding or replacing an existing facility in current dollars to its optimal condition (excluding auxiliary facilities) under current codes and construction standards. |
| Cv | Value Coefficient |
| CWS | Chilled Water System |
| D d | Distance (usually feet) |
| DB | Dry Bulb |
| DCV | Demand Control Ventilation |
| DD | Degree Day |
| DDB | Double Declining Balance |
| DDC | Direct Digital Controls |
| Deferred maintenance | Deferred maintenance is condition work (excluding suitability and energy audit needs) deferred on a planned or unplanned basis to a future budget cycle or postponed until funds are available. |
| Deficiency | A deficiency is a repair item that is damaged missing inadequate or insufficient for an intended purpose. |
| Delta | Difference |
| Delta P | Pressure Difference |
| Delta T | Temperature Difference |
| DG | Distributed Generation |
| DOE | Department of Energy |
| DP | Dew Point |
| DR | Demand Response |
| DX | Direct Expansion Air Conditioner |
| EA | Energy Audit |
| EBITDA | Earnings before Interest Taxes Depreciation and Amortization |
| ECI | Energy Cost Index |
| ECM | Energy Conservation Measure |
| ECO | Energy Conservation Opportunity |
| ECPA | Energy Conservation and Production Act |
| ECR | Energy Conservation Recommendation |
| ECS | Energy Control System |

| | |
|---|---|
| EER | Energy Efficiency Ratio |
| EERE | Energy Efficiency and Renewable Energy division of US DOE |
| EIA | Energy Information Agency |
| EIS | Energy Information System |
| EMCS | Energy Management Computer System |
| EMO | Energy Management Opportunity |
| EMP | Energy Management Project |
| EMR | Energy Management Recommendation |
| EMS | Energy Management System |
| Energy Utilization Index (EUI) | EUI is the measure of total energy consumed in the cooling or heating of a building in a period expressed as British thermal unit (BTU) per (cooled or heated) gross square foot. |
| EO | Executive Order |
| EPA | Environmental Protection Agency |
| EPACT | Energy Policy Act of 1992 |
| EPCA | Energy Production and Conservation Act of 1975 |
| EPRI | Electric Power Research Institute |
| EREN | Efficiency and Renewable Energy (Division of USDOE) |
| ERV | Energy Recovery Ventilator |
| ESCO | Energy Service Company |
| ESPC | Energy Savings Performance Contract |
| EUI | Energy Use Index |
| EWG | Exempt Wholesale Generators |
| Extended Facility Condition Index (EFCI) | EFCI is calculated as the condition needs for the current year plus facility system renewal needs going out to a set time in the future divided by Current Replacement Value. |
| f | Frequency |
| F | Fahrenheit |
| Facility | A facility refers to site(s) building(s) or building addition(s) or combinations thereof that provide a particular service. |
| Facility Condition Assessment (FCA) | FCA is a process for evaluating the condition of buildings and facilities for programming and budgetary purposes through an on site inspection and evaluation process. |
| Facility Condition Index (FCI) | FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's deficiencies to the Current Replacement Value of the facilities. The higher the FCI the poorer the condition of a facility. After an FCI is established for all buildings within a portfolio a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities. |

| | |
|---|---|
| FC | Footcandle |
| FCA | Fuel Cost Adjustment |
| FEMIA | Federal Energy Management Improvement Act of 1988 |
| FEMP | Federal Energy Management Program |
| FERC | Federal Energy Regulatory Commission |
| FESR | Fuel Energy Savings Ratio |
| FLA | Full Load Amps |
| FLF | Facility Load Factor (usually monthly) |
| FLRPM | Full Load Revolutions per Minute |
| FMS | Facility Management System |
| FPM fpm | Feet per Minute (velocity) |
| FSEC | Florida Solar Energy Center |
| Ft | Foot |
| GPM gpm | Gallons per Minute |
| GRI | Gas Research Institute |
| Gross Square Feet (GSF) | The size of the enclosed floor space of a building in square feet measured to the outside face of the enclosing wall. |
| GUI | Graphical User Interface |
| H h | Enthalpy Btu/lb |
| HCFC | Hydrochlorofluorocarbons |
| HDD | Heating Degree days |
| HFC | Hydrofluorocarbons |
| HHV | Higher Heating Value |
| HID | High Intensity Discharge (lamp) |
| HMI | Human Machine Interface |
| HMMI | Human Man Machine Interface |
| HO | High Output (lamp) |
| HP Hp hp | Horsepower |
| HPS | High Pressure Sodium (lamp) |
| HR | Humidity Ratio |
| Hr hr | Hour |

| | |
|---|---|
| HRU | Heat Recovery Unit |
| HVAC | Heating Ventilation and Air-Conditioning |
| Hz | Hertz |
| I | Intensity (lumen output of lamp) |
| I i | Interest rate or Discount rate |
| IAQ | Indoor Air Quality |
| ICA | International Cogeneration Alliance |
| ICBO | International Conference of Buildings Officials |
| ICC | International Code Council |
| ICP | Institutional Conservation Program |
| IECC | International Energy Conservation Code |
| IEEE | Institute of Electrical and Electronic Engineers |
| IESNA | Illuminating Engineering Society of North America |
| Install year | The year a building or system was built or the most recent major renovation date (where a minimum of 70 of the system?s Current Replacement Value (CRV) was replaced). |
| IRP | Integrated Resource Planning |
| IRR | Internal Rate of Return |
| ISO | Independent System Operator |
| ITA | Independent Tariff Administrator |
| k | Kilo multiple of thousands in SI system |
| K | Kelvins (color temperature of lamp) |
| K k | Thermal Conductivity of Material |
| KVA | Kilovolt Ampere |
| KVAR | Kilovolt Ampere Reactive |
| kW | kiloWatt |
| kWh | kiloWatt hour |
| L | Length (usually feet) |
| LCC | Life Cycle Costing |
| LDC | Local Distribution Company |
| LEED | Leadership in Energy and Environmental Design |
| LEED EB | LEED for Existing Buildings |

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|---|---|
| LEED NC | LEED for new construction |
| LF | Load Factor |
| LHV | Lower Heating Value |
| Life cycle | The period of time that a building or site system or element can be expected to adequately serve its intended function. |
| LPS | Low Pressure Sodium (lamp) |
| Lu | Lumen Output of a Lamp or Fixture |
| M | Mega multiple of millions in SI system |
| M&V | Measurement and Verification |
| MACRS | Modified Accelerated Cost Recovery System |
| MARR | Minimum Attractive Rate of Return |
| Mbtu | Thousand Btu |
| MCF | Thousand Cubic Feet (usually of gas) |
| MEC | Model Energy Code |
| Mm | Multiple of Thousands in I/P System |
| MMBtu | Million Btu |
| MMCS | Maintenance Management Computer System |
| MMI | Man Machine Interface |
| MMS | Maintenance Management System |
| MSE 2000 | Management System for Energy 2000 (ANSI Georgia Tech Univ) |
| MW | MegaWatt |
| MWH MWh | MegaWatt hour |
| NAAQS | National Ambient Air Quality Standards |
| NAESCO | National Association of Energy Service Companies |
| NAIMA | North American Insulation Manufacturers Association |
| NEA | National Energy Act of 1978 |
| NECPA | National Energy Conservation Policy Act |
| NEMA | National Electrical Manufacturer's Association |
| NERC | North American Electric Reliability Council |
| Next Renewal | The Next Renewal date is an override of the 'Calculated Next Renewal' date and is based upon the assessor?s visual inspection. |

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|---|---|
| NFPA | National Fire Protection Association |
| NGPA | National Gas Policy Act of 1978 |
| NLRPM | No Load Revolutions per Minute (speed) |
| Nn | Equipment or Project lifetime in economic analysis |
| NOPR | Notice of Proposed Rule Making from FERC |
| NOx | Nitrogen Oxide Compounds |
| NPV | Net present value in economic analysis |
| NREL | National Renewable Energy Laboratory |
| NUG | Non-Utility Generator |
| O&M | Operation and Maintenance |
| OA | Outside Air |
| ODP | Ozone Depletion Potential |
| OPAC | Off-Peak Air Conditioning |
| P | Present value in economic analysis |
| PBR | Performance Based Rates |
| PEA | Preliminary Energy Audit |
| PF | Power Factor |
| PID | Proportional plus integral plus derivative (control system) |
| PM | Portfolio Manager in Energy Star rating system |
| PM | Preventive Maintenance |
| PoolCo | Power Pool Company or Organization |
| POU | Point of Use |
| PQ | Power Quality |
| PSC | Public Service Commission |
| PSIA psia | Pounds per square inch absolute (pressure) |
| PSIG psig | Pounds per square inch gauge (pressure) |
| PUC | Public Utility Commission |
| PUHCA | Public Utilities Holding Company Act of 1935 |
| PURPA | Public Utilities Regulatory Policies of 1978 |
| PV | Photovotaic system |

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|---|---|
| PV | Present Value |
| PW | Present Worth |
| PX | Power Exchange |
| q | Rate of heat flow in Btu per hour |
| Q | Heat load due to conduction using degree days |
| QF | Qualifying Facility |
| R | Electrical resistance |
| R | Thermal Resistance |
| RC | Remote controller |
| RCR | Room Cavity Ratio |
| RCRA | Resource Conservation and Recovery Act |
| Remaining Service Life (RSL) | RSL is the number of years service remaining for a system or equipment item. It is automatically calculated based on the difference between the current year and the 'Calculated Next Renewal' date or the 'Next Renewal' date whichever one is the later date. |
| Remaining Service Life Index (RSLI) | RSLI is defined as a percentage ratio of the remaining service life of a system. It usually ranges from 0 to 100 |
| REMR | Repair Evaluation Maintenance Rehabilitation (REMR) is a scale used to objectively rank systems based on their condition |
| Renewal Schedule | A timeline that provides the items that need repair the year in which the repair is needed and the estimated price of the renewal. |
| RH | Relative Humidity |
| RLA | Running Load Amps |
| RMS | Root Mean Square |
| RO | Reverse Osmosis |
| ROI | Return on Investment |
| RPM | Revolutions Per Minute |
| RTG | Regional Transmission Group |
| RTO | Regional Transmission Organization |
| RTP | Real Time Pricing |
| SBCCI | Southern Building Code Congress International |
| SC | Scheduling Coordinator |
| SC | Shading Coefficient |
| SCADA | Supervisory Control and Data Acquisition Systems |

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|---|---|
| SEER | Seasonal Energy Efficiency Ratio |
| SHR | Sensible Heat Ratio |
| Site | The grounds and utilities roadways landscaping fencing and other typical land improvements needed to support the facility. |
| Soft Cost | An expense item that is not considered direct construction cost. Soft cost includes architectural engineering financing legal fees and other pre-and-post construction expenses. |
| SOx | Sulfur Oxide Compounds |
| SP | Static Pressure |
| SP SPB | Simple Payback |
| SPP | Simple Payback Period |
| SPP | Small Power Producers |
| STR | Stack Temperature Rise |
| SV | Specific Volume |
| System | System refers to building and related site work elements as described by ASTM Uniformat II Classification for Building Elements (E1557-97) a format for classifying major facility elements common to most buildings. Elements usually perform a given function regardless of the design specification construction method or materials used. See also Uniformat II. |
| T | Temperature |
| T | Tubular (lamps) |
| TAA | Technical Assistance Audit |
| TCP/IP | Transmission Control Protocol/Internet Protocol |
| TES | Thermal Energy Storage |
| THD | Total Harmonic Distortion |
| TOD | Time of Day |
| TOU | Time of Use |
| TQM | Total Quality Management |
| TransCo | Transmission Company |
| U | Thermal Conductance |
| UDC | Utility Distribution Company |
| UL | Underwriters Laboratories |
| UNIFORMAT II | The ASTM UNIFORMAT II Classification for Building Elements (E1557-97) a format for classifying major facility components common to most buildings. |
| USGBC | US Green Building Council |
| v | Specific Volume |

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|---|---|
| V | Volts Voltage |
| V | Volume |
| VAV | Variable Air Volume |
| VDT | Video Display Terminal |
| VFD | Variable Frequency Drive |
| VHO | Very High Output |
| VSD | Variable Speed Drive |
| W | Watts |
| W | Width |
| WB | Wet bulb |
| WH Wh | Watt Hours |
| Year built | The year that a building or addition was originally built based on substantial completion or occupancy. |
| Z | Electrical Impedance |