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.

Washington High School

Governance	DISTRICT	Report Type	High
Address	10175 Bustleton Ave.	Enrollment	1335
	Philadelphia, Pa 19116	Grade Range	'09-12'
Phone/Fax	215-961-2001 / 215-961-2545	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Gwhs	Turnaround Model	N/A

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	**32.39%**	**$69,668,608**	**$215,079,791**
Building	33.18%	$61,058,451	$184,014,097
Grounds	15.10 %	$2,156,174	$14,278,161

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	06.00 %	$457,407	$7,617,137
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.63 %	$93,982	$14,947,200
Windows (Shows functionality of exterior windows)	00.67 %	$63,517	$9,521,920
Exterior Doors (Shows condition of exterior doors)	07.44 %	$29,863	$401,360
Interior Doors (Classroom doors)	60.89 %	$792,215	$1,300,960
Interior Walls (Paint and Finishes)	01.99 %	$91,043	$4,570,660
Plumbing Fixtures	61.30 %	$2,867,714	$4,677,920
Boilers	00.00 %	$0	$6,459,820
Chillers/Cooling Towers	89.98 %	$7,621,559	$8,470,080
Radiators/Unit Ventilators/HVAC	163.33 %	$24,294,597	$14,874,540
Heating/Cooling Controls	122.39 %	$5,716,725	$4,671,000
Electrical Service and Distribution	27.36 %	$918,292	$3,356,200
Lighting	34.29 %	$4,114,778	$11,999,280
Communications and Security (Cameras, Pa System and Fire Alarm)	16.83 %	$756,359	$4,494,540

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

S803001;Washington HS and Field

Final

Site Assessment Report

January 31, 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):	346,000
Year Built:	1963
Last Renovation:	
Replacement Value:	$215,079,791
Repair Cost:	$69,668,607.54
Total FCI:	32.39 %
Total RSLI:	66.79 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 4 / Tm 2
Status:	Accepted by SDP	Team:	Tm 2
Site ID:	S803001		

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	48.00 %	0.10 %	$12,242.88
A20 - Basement Construction	48.00 %	0.98 %	$53,284.73
B10 - Superstructure	48.00 %	0.95 %	$382,161.23
B20 - Exterior Enclosure	57.82 %	1.61 %	$447,869.88
B30 - Roofing	64.90 %	5.99 %	$457,407.17
C10 - Interior Construction	48.41 %	9.40 %	$929,628.94
C20 - Stairs	49.01 %	92.59 %	$1,006,674.29
C30 - Interior Finishes	58.43 %	27.79 %	$4,604,091.88
D10 - Conveying	45.71 %	0.00 %	$0.00
D20 - Plumbing	115.41 %	91.97 %	$6,736,493.44
D30 - HVAC	110.68 %	97.12 %	$38,699,082.24
D40 - Fire Protection	105.71 %	156.97 %	$4,782,253.54
D50 - Electrical	61.48 %	30.47 %	$6,651,226.82
E10 - Equipment	35.30 %	43.13 %	$2,723,364.73
E20 - Furnishings	12.50 %	2.73 %	$26,652.05
G20 - Site Improvements	61.56 %	21.56 %	$2,156,173.72
G40 - Site Electrical Utilities	43.33 %	0.00 %	$0.00
Totals:	**66.79 %**	**32.39 %**	**$69,668,607.54**

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)
B803001;Washington HS	346,000	33.18	$23,139,133.27	$14,269,806.23	$9,307,635.06	$124,546.23	$14,217,329.71
B803902;Washington Field - Fieldhouses, Stands, Football Field and Track	22,000	50.42	$3,306,980.77	$1,856,072.89	$590,341.89	$0.00	$464,947.32
B803903;Washington - grandstands	24,000	5.29	$235,640.45	$0.00	$0.00	$0.00	$0.00
G803001;Grounds	983,100	15.10	$0.00	$1,511,732.66	$644,441.06	$0.00	$0.00
Total:		**32.39**	**$26,681,754.49**	**$17,637,611.78**	**$10,542,418.01**	**$124,546.23**	**$14,682,277.03**

Deficiencies By Priority

- 1 - Response Time (< 2 yr) - $26,681,754.49
- 2 - Response Time (2-3 yrs) - $17,637,611.78
- 3 - Response Time (3-4 yrs) - $10,542,418.01
- 4 - Response Time (4-5 yrs) - $124,546.23
- 5 - Response Time (> 5 yrs) - $14,682,277.03

Budget Estimate Total: $69,668,607.54

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):	346,000
Year Built:	1963
Last Renovation:	
Replacement Value:	$184,014,097
Repair Cost:	$61,058,450.50
Total FCI:	33.18 %
Total RSLI:	67.77 %

Description:

Facility Condition Assessment

October 2015

School District of Philadelphia
George Washington High School
10175 Bustleton Avenue
Philadelphia, PA 19116

346,000 SF / 1,780 Students / LN 08

George Washington High School is located at 10175 Bustleton Avenue. The main entrance faces Bustleton Avenue. A second building called the Annex is located on this site, connected by an overhead bridge to the main building. This main building was constructed in 1963, has 346,000 total square feet, and is 1, 2 and 3 stories tall, with a partial basement. The two story Annex was constructed around 1970 and is included in the total square foot area of the high school. The football field, grandstands, fieldhouse, and track located to the north and adjacent to the main building, are covered under separate narratives.

The building is constructed of 5 connected wings: A, B, C, D and the Annex connected by an overhead corridor bridge. The auditorium/stage and the gymnasium are located in Wings A and D respectively and classrooms are located in Wings C and D. Two large vegetated courtyards are located inside the areas formed by Wings C and D, allowing light to penetrate into nearly all classrooms in the building, providing pleasant outdoor spaces for students to use when the weather permits. The Annex forms and open-ended

courtyard on the north. The loop road encircles the buildings and connects on both ends to Bustleton Avenue. Along the loop road there are 5 parking areas serving faculty, students, maintenance and visitors. Tony Gajowski, the Building Engineer accompanied the team during the building inspection.

The inspection team met with Principal Gene Jones at the time of field inspection. In particular, he indicated that the heat and air-conditioning in the auditorium was not working. Additionally, the air handler on the roof of the Annex was condemned and not working. The building gets very hot in spring and fall and needs central air-conditioning; there is not enough capacity in the electrical system to provide more window mounted air-conditioning units for classrooms, or more smart boards. Toilet rooms near stairways 4 and 8 have plumbing problems and do not drain well. The security camera system has an insufficient number of cameras; cameras for the interior courtyards and some other areas are not on the central system and not easily monitored. There is adequate parking for students and faculty but a walkway is needed on the south of the building to prevent faculty from cutting across the grass. Plumbing in the fieldhouse does not work well. Various projects were recently completed at the school; the elevator was replaced in 1996, new roof, windows, and vinyl flooring were installed in 2006, boilers were replaced in 2009, and the electrical substation was replaced in 2013.

ARCHITECTURAL/STRUCTURAL SYSTEMS

Foundations in the boiler room (basement) are constructed of concrete and block. Joints are in good condition with one area of major settlement cracks observed. When looking at the foundation support wall from the lowest level under the boilers, large cracks can be seen; this concrete foundation wall should be repaired soon. Also on this lowest basement level below the boiler level in an unused area of the basement, there is a leak through the outside wall through which water squirts like a small hose stream into the basement. A garbage can is kept in this area to catch the water; from there, it is piped over to a sump pump and pumped out of the basement. Apparently, this has been a constant leak for a long time; this is a bad condition that will eventually erode the foundation wall as it increases in volume. The exterior needs to be excavated (the courtyard area outside the building) and the leak needs to be repaired. The basement is an expansive space. It does not encompass the entire extent of the ground floor above and yet it is not fully utilized. Footings were not seen and their construction type or condition could not be ascertained.

Paint is peeling on some basement walls and ceilings are dirty and peeling. Some cleaning and repainting is required to improve the appearance. Some of the boiler condensate pipes have been leaking and were leaking at the time of inspection, causing rust stains to become embedded on floor slabs, adding to the dirty appearance of the slabs. The physical condition of the boiler room slabs is good, with very few cracks. Outside the boiler room, basement slabs in classroom areas are also in good condition without any major cracks or settlement. There is a trap door in the boiler room wall that views the crawlspace. This area was poorly lit, but what could be seen was not damaged, however the space felt very humid and steel pipes that were seen were very rusty. There have been projects in recent past to document and remove asbestos pipe wrap from this area; it is not known if it has been completely abated. Upper floor slabs in the main building are constructed of cast-in-place concrete with cast-in-place concrete beams. Columns, beams and floor deck above also appeared to be in good condition. The 2nd floor concrete slab in the Annex has many lumpy areas; these need to be leveled when the flooring in those spaces is replaced.

Roof construction is a complex system of flat, minimum overall slope areas. Since there are multiple roof levels, access to the entire roof requires re-entry and exit multiple times. The building is sprawling with over 200,000sf of roof creating two large square "O" shaped courtyards formed by the two square main classroom wings and other flat roof areas extending from the sides. Roof areas over one-story spaces (gym and auditorium) abut against brick walls of 2 and 3 story areas; there are also some brick penthouse and chimney structures. In general, water flows away to drains in low points in interior areas of the flat roofs. Parapets are less than 12" in height and do not need overflow protection as the roof should be designed to accommodate the weight of water that would be carried before overflowing the gravel stop. Roof structure over the gymnasium consists of a longspan steel joists with what appears to be a concrete plank deck on top. The structure over the auditorium could not be seen, but since the size of the span and open space is similar to that of the gym, it is thought that roof system might be similar. The roof structure over the band and chorus rooms, however is a concrete beam and deck system and has a much smaller span than the auditorium roof system. The roof structure over the Annex is also presumed to be a concrete structure with a minimally pitched concrete deck.

Exterior walls are constructed of brick and limestone or full height aluminum tube frame curtainwall system with glass and marble panel infill and limestone pilasters and beams. This system is generally in fair condition with scattered areas of joint failure, cracks, dirt stains, mainly between adjacent limestone panels or limestone and brick interfaces. Brick to brick joints are in good condition. . Walls have bands of windows primarily in groups of 4, 5, or 6 with marble panels below each window and limestone pilasters at column lines and between groups of windows. Windows in the Annex are stacked pairs with limestone panels under each window. Many limestone beam and column pieces are spalled and need to be repaired or replaced. Joints between adjacent limestone panels are losing caulking and need to be re-sealed with backer rod and caulk. Window frames need to be resealed along all limestone sills, jambs, and heads. Some univents located in brick walls need to be repointed to seal the gap between the frame and brick. Walls need to be power washed to remove years of dirt, grime, efflorescence and oxidized window frame aluminum that have washed down onto bricks. The section of wall underneath the overhead corridor connector between the Annex and Wing D is

cracking; that section of concrete visible to the exterior appears to be structural and should be repaired structurally to ensure a solid, weatherproof connection and support of the corridor above. Some brick pointing is required on Annex north and south walls as grout is cracked and possibly letting moisture into the stairways. The horizontal joint above and below the first floor and roof concrete bands (beam lines) need to be repointed to prevent moisture intrusion.

Exterior windows are said to have been replaced in 2006 with an aluminum tube frame system with insulated glazing units, hopper-style operable units, and granite panels in the bottom tube frame opening. Univent louvers, one for each classroom, are located in the granite panels. The replacement windows are in good condition and provide a reasonable barrier to heat gain and heat loss. Clear anodized window frames are getting dirty on the outside and the continuous window sealant that provides closure along the junction of the aluminum frame and limestone surface has dried out and no longer provides a good weatherseal. Upper floor windows do not have insect screens; ground floor windows have galvanized mesh security screens. The tube frame joint along the limestone needs to be recaulked on heads, jambs and sills. Each gymnasium (boys and girls) has a band of windows installed high above the floor, letting ample amounts of daylight into the spaces. A window wall with a varied geometric aluminum frame pattern opposite the auditorium entrance creates a bright and open feeling in the auditorium lobby. Exit stairways around the building have a narrow aluminum frame, glass and spandrel system above the doors. Like the window glazing in classrooms, all other glazing is insulating glass in clear anodized framing providing up to date closure against the weather.

Exterior doors at the main entrance consists of five pairs of hollow metal doors and frames with full height glass sidelights and transoms. Other exterior exit doors around the building are painted steel framed flush hollow metal units, with some doors having narrow lite vision panels protected with security screens. These door systems are in poor condition with dents, some rust, fading paint, old panic hardware, and lack weatherstripping. All hollow metal doors should be repainted if they are in good enough condition; weatherstripping and hardware should be replaced. Students enter mainly through the front entrance on Bustleton Avenue. The front entrance has an ADA accessible ramp system leading up and around the stairs into the front doors. There are other accessible entrances flush with grade including a curb cut, accessible to wheelchairs into the auditorium to the left of the main entrance and along the faculty parking lot on the right side of the building, although no signage was seen leading to any accessible entrance.

Roof covering on the main building flat roof is a fully adhered rolled asphalt sheet system with light gray surface granules that was installed in 2006. The membrane and flashing appear to be in good condition. There are no crickets to direct the water towards the drains, however drains appear to have very slight dished areas around them to aid in water flow into the roof drain. In some areas, water is not completely draining from roofing membrane as telegraphed by dirty areas forming larger circular areas around some roof drains. At some point in time, insulation needs to be built up under the roof membrane to provide better drainage out of these low spots; this does not appear to be an immediate or extensive problem. Roof openings include toilet room vents, ventilation exhaust and gravity vent ductwork, and roof drains. Brick rooftop structures, and ventilation fan structures are flashed with asphalt-backed metal flashing material. Gravel stops are less than a foot in height, also flashed with the asphalt backed metal membrane. Taller brick building walls have aluminum counterflashing attached to the brick, counter flashed, and sealed with caulking along the top edge; this caulking is in good condition but needs to be periodically inspected to provide an effective seal. Aluminum coping used on the tops of all parapet walls is also thought to be as old as the roof, 10 years old, and is in good condition. The roofing material appears to be in good condition and with regular flashing, reglet, and joint maintenance, it could continue to provide good performance. The roof over the Annex was not replaced with the main building roof and is in poor condition with membrane wrinkles, cracks, and leaks showing in the 2nd floor ceilings and concrete deck below. This roof system needs to be replaced.

Partitions in most of the building are constructed of block (concrete masonry units). Most walls in the building are in good condition with limited and isolated surface damage in corridors and corners. Most corridor partitions have recesses in which lockers are built into the walls; this cleans up the appearance of the corridors making them look less cluttered. Three large full height (20ft tall) folding partitions separate the one over sized gymnasium into four smaller sections allowing for 4 separate groups of students to have their gym classes at the same time. The partitions are operable but have surface damages which should be repaired. In the Annex, both stairways' walls have spalled, causing paint to peel. Moisture has intruded into the exterior wall cavity either from gaps in the exterior masonry or cracks in the roofing membrane.

Interior doors are mostly the original oak wood and wired glass doors mounted in steel frames. Some doors have the original knob hardware; others have level lock sets. Some of the original wood doors are damaged with gouges, scratches and broken glass frames. Wired glass as required in a fire rated door is used in most doors, except for doors that have non-wired replacement glass. Classroom and other corridor doors have closures as required in a fire rated partition. Double doors into spaces like the recreation room do not positively latch as required of a fire door. Although wood doors can be purchased as fire rated units, there were no visible labels on classroom doors to ascertain this. Since the building is not sprinklered, corridors are required to be one-hour fire rated. Interior basement doors and interior stairway doors are hollow metal doors in metal frames, some with narrow lite vision panels. Many of these steel doors and frames are rusted where coming in contact with floors, due to cleaning solutions corroding the frames. Metal doors are generally in poor condition throughout the building with paint scratches and dents. They are not ADA compliant, do not have ADA or proper locking hardware, and do not have fire rated labels where required. Most stairway doors do not positively latch (panic hardware was not operating) as required of fire rated doors, therefore cannot be considered an approved fire

rated installation. Music and practice rooms are located near the area behind backstage side of the auditorium. Classroom doors do not have security locking feature that allows for locking from inside classrooms. All steel stairway doors and some wood corridor doors need to be replaced with positively latching fire rated doors units, with UL approved hardware, closures, and approved fire rated glazing.

Interior fittings/hardware include black slate chalkboards with metal chalk trays or bulletin boards. White board material has been laminated to some of the black slate to provide a more up to date, new marking surface. Some classrooms have smartboards attached to the wall in front of the blackboard. Toilet partitions are all HDPE (high density polyethylene) plastic partitions with plastic doors. Toilet room accessories (toilet paper dispensers, soap, paper towel or dryers, grab bars, door latches) are the black plastic type, the same as those used in other schools in the District. In one or two locations, components are missing but most appeared to be fully functional. Missing and broken toilet room accessories should be replaced. Some toilet rooms have stalls that is considered minimally handicap accessible, with additional space and a sink inside the compartment. No fully ADA accessible toilet rooms were seen on the inspection. There should be at least one boy's and one girl's toilet room on each floor modified with the proper accessories at the correct heights and proper clearances, in order to be fully ADA compliant. Toilet partitions in the Annex are metal and are dented, scratched, damaged, and need to be replaced. Steel lockers line many corridors on each floor; they have the original factory painted finish. Many lockers have scratches, dents and chips; some lockers have been touched up but damages still show thru the attempted repair. Damaged lockers should be completely repainted. The library has a large book collection displayed in oak book cases; loose tables and chairs are provided for students to read and study.

Stair construction throughout the building consists of concrete filled steel treads with steel nosings, steel risers, and steel stringers with steel handrails (32" high), guards (36" or 42"high), and two horizontal steel balusters along stairways and 3 horizontal balusters at platforms. Since handrail and guard heights are not in compliance with today's codes, new handrail and guard systems are required for all stairs. Stairways had no visible rust or damages to treads and risers.

Wall finishes in most areas of the main building and wings are painted block, which appears to have been recently re-painted in many areas. Some corridors have murals painted on walls for variety and interest. Some classroom wall areas have minor chipping or damages where chairs come in contact with block walls or uni-vents paint is peeling from some exterior concrete columns. Toilet room walls in upper floor toilet rooms are painted block all in good condition; toilet room walls in the ground floor adjacent to the locker rooms have glazed block walls in good condition. The auditorium has an angled, painted block wall with painted plaster on the upper half; these walls are designed to deflect sound improve acoustics and minimize echo. Wood panels decorate the stage area. The queuing area outside the auditorium faces one of the interior courtyards. This space has full height light colored marble walls on the auditorium wall side of the space and full height glass curtain wall system on the courtyard side of the space. Generally the lobby and queueing area walls outside the auditorium are in good condition. The main cafeteria has painted block walls which is highly durable and in good condition. Freestanding painted concrete columns are chipped and scratched and in need of refinishing. Wall leaks were reported in Rooms 220 and 229; these could be coming in around the window air condition units or from leaks around the windows. North and south stairway walls in the Annex and Rooms 510/512 (among others) have spalling and water damage on interior wall surfaces and need to be repainted.

Floor finishes in the building are being upgraded to VCT (vinyl composition tile) replacing the original VAT (vinyl asbestos tile). VCT is now found in all corridors, most offices, culinary dining room, and the cafeteria. The VCT floor in the cafeteria has been ruined by the folding table/chair units that when set onto the floor have lost their rubber table foot guards; the steel pipe frame forming the table leg bears directly on the floor and punches through the VCT. VAT is still used in second and third floor classrooms in Wing B and in most classrooms in Wing C and D in ground and first floors. VAT is also in two culinary instruction rooms. In these spaces, students use ovens, cooktops, salad / food preparation counters with washing, cold boxes and freezers. A better floor material for this area would be quarry tile. VAT remaining as the floor finish is worn, dirty, cracked and broken in many places. VAT flooring should be tested for the presence of asbestos and if present the tiles should be removed using proper asbestos abatement procedures and replaced with 12"x12" VCT. The auditorium has a Pirelli rubber floor tile in aisles and other walking areas; VAT is used under the seating. The gymnasium, dance room, and auditorium stage have wood floors that are in good enough condition to be stripped, sanded, and refinished. Toilet rooms, stairways, boy's and girl's locker rooms, and mechanical rooms have sealed concrete that is dirty and in poor condition and should be refinished; the kitchen has painted concrete which is in poor condition and needs to be repainted. The lobby to the auditorium and the main front entry is finished in terrazzo, which has one crack, but otherwise is in good condition.

Ceiling finishes in all corridors and most classrooms, toilet rooms, stairways, and the kitchen consist mostly of painted concrete deck with surface mounted fluorescent lighting fixtures. The cafeteria, food serving area, auditorium / entrance lobby, and some classrooms have 12"x12" ceiling tiles, glued to the floor deck above have 1x4 fluorescent lighting fixtures suspended or surface mounted to the deck; these ceiling tiles are in poor condition and should be replaced. The auditorium has recessed HID or incandescent lighting in a plaster ceiling. The gymnasium has exposed structural joists and concrete deck ceilings have exposed painted concrete deck ceilings in good condition. Suspended 2x4 acoustical tile floor ceilings in the Annex second floor corridors are water damaged and need to be replaced.

Furnishings in the building include the original folding wood seating in the auditorium which is still in use. Nearly all of the 1576 seats appeared to be in good condition with minor scratches, worn areas, or adjustments needed on few (50) to improve their appearance. Some student lockers throughout the building need to be repainted. Loose tables and seating is used in the cafeteria need to have rubber feet installed to prevent damage to VCT floor tiles. The gymnasiums have wooden bleachers that were collapsed into the stow-away position and could not be inspected. From the look of the front riser sections, it is expected that they are in good condition. One of the science labs has new oak furniture with chemical resistant resin benchtops. The other labs in Wing B and the Annex have old furniture that needs to be replaced.

A 12,000 lb. capacity 4 stop elevator is present in this school, installed in 1996, providing access to all floors. It is equipped with some of the latest code required ADA features including large cab, chimes, braille, lowered floor button height in cab, and floor markings on door jambs.

There are two accessible entrances into the front of the building, located at the main and front/side auditorium doors facing Bustleton Avenue. There are other doors on the Faculty Parking lot side and the rear into the gym. Accessible Route signage is required to direct people to these entrances.

MECHANICAL SYSTEMS

Plumbing Fixtures – The building is equipped with wall hung urinals (flush valve type), wall hung water closets (flush valve type), and wall hung lavatories with wheel handle faucets, of which many of the original plumbing fixtures remain in service. The fixtures are part of the original building construction of 1963 and should be replaced. with water efficient fixtures. Some bathrooms were equipped with floor drains while others were not.

Within some areas of the school the drinking fountains have been upgraded from the original fixtures to high/low ADA compliant electric water coolers, however, there are many original drinking fountains that remain in use in the building. The ADA compliant fixtures appear to be roughly ten years old and do not need to be replaced at this time. The original drinking fountains should be replaced with ADA compliant fixtures. .. Drinking fountains are also located in the Cafeteria, and consists of high low ADA compliant fixtures. There are also recessed drinking fountains in the Gymnasium which are the original fixtures. Most of the fixtures are part of the original building construction of 1963 and should be replaced as they are nearing 53 years old and have surpassed their service life expectancy. The Annex is equipped with high low ADA compliant drinking fountains.

The lockers are equipped with gang showers and floor drains in the locker areas. Lavatories, water closets and urinals in the locker areas are the same types as the rest of the school.

Floor set mop/service sinks are original and are available throughout the building for use by the janitorial staff. Service sinks are typically throughout the buildings. The fixtures are part of the original building construction of 1963. The service sinks, shown signs of heavy use and need to be replaced. The Cafeteria's food prep/kitchen is equipped with one, three compartment stainless steel sink, three, two compartment sinks with wheel handle operated faucets and each of its sanitary connections is served by a grease trap located above the floor and is readily accessible. There are a total of four grease interceptors.. The kitchen is also equipped several hand sinks. The triple wash sinks and double compartment sinks show signs of normal usage. The grease interceptors show signs of minor corrosion. Chemicals are injected manually into the sanitizing basin. The two double compartment sinks in the culinary arts classroom are equipped with grease interceptors. There are no signs of corrosion on the units and both are accessible to be serviced. The units should not be replaced at this time. There is also a dishwasher, a hand sink and a food disposer in the class.

In the science laboratories the lab prep sinks are original and should be replaced. The gas turrets are not active as they have been shutoff at the branch distribution, however the water supply is active. The condition of the compressed air turrets was not confirmed. There are also combination emergency eye wash and showers in some lab classrooms. There is a basin receptor and floor drain at the emergency fixture as well.

Domestic Water Distribution – There are two, 6" water services which supply domestic water to the building. One service enters the building at stairway #4. The other 6" service enters the building in main boiler mechanical equipment room. Each service is equipped with a backflow preventer (RPZA – reduced pressure zone assembly) and a by pass assembly. It appears that the 6" domestic water service piping is mostly soldered copper. There is a water meter on each service.. The prior domestic water heating systems has been abandoned in place. There are four instantaneous type natural gas fired water heaters, Paloma model PH24MDN (minimum input 37,700 btuh, maximum 178,500 btuh) which serve the facilities restrooms with domestic hot water supply.The water heaters were installed in 2007 and should be replaced within the next 5 years. Currently there is one water heater which is out of service. All water heaters are located in the boiler mechanical equipment room. The hot water system is equipped with inline re-circulation pumps to serve each of the water heaters. There is also a set on domestic water house pumps, end suction, based mounted, manufactured by Aurora, 40 gpm, 40 feet head, model B7-9070-2The kitchen domestic water system is provide by a cast fired Hurst boiler, installed in

1998,, model 4VT-G-10-15. This unit should be replaced in another 5 – 7 years. A water softener was located in the boiler room for treating the boiler make up water system. The water softener system appears to have been installed in 2001, shows signs of wear and should be replaced.

Sanitary Waste - The sanitary waste piping system in the Main Building is extra heavy cast iron with lead and oakum seals and appears to be the original piping installed in the building. It is therefore recommended to inspect this piping and repair or replace sections as needed. The sanitary system leaves the building by a duplex sewage ejector, manufactured by Goulds, model WE1538H, 1.5 HP. Rain Water Drainage - The rain water drains from the roof are routed through mechanical chases in the building and connect to the underground site drainage system. There are no secondary drainage scuppers for the roof as there is no parapet present. Foundation drainage is handled by a sump pump in the lower section of the main boiler mechanical equipment room. A sump pump is also located in the main electrical room.

Energy Supply - Duplex fuel oil supply pumps provide the required fuel to the boilers when operating on fuel oil. There are two, 10,000 gallon, fuel storage tank is located below ground at the rear of the school in the drive aisle between the tennis courts and the building.. The fuel pumps and controls appear to have been replaced within the past ten years. An 8" natural gas service enters the building in a room adjacent to the main electrical service distribution room. The natural gas main is welded, black steel piping while the branches are threaded, black steel.

Heat Generating Systems – Low pressure steam is generated at 15 lbs/sq. in. or less by three 10,396 MBH (400 HP), Easco Boilers, Scotch Marine, horizontal fire tube, three pass wetback, model FST-400, steam boiler. The three steam boilers serve the heating needs for the building. According to the building engineer two boilers are used on the coldest days of the year to meet the heating demands. All boilers are equipped with dual fuel, natural gas and number 2 fuel oil Burner controls provide full modulation with electronic ignition and digital flame sensing and pressure atomization on oil. Burner oil pumps are driven by independent motors. The boilers were installed in 2001 and will not need to be replaced for 15 – 20 years. There is draft control on all of the boiler flues. Each boiler is equipped with a flue gas re-circulation system. Combustion air louvers serve the boiler room to provide combustion air for the boiler operation. The combustion air dampers/louvers are equipped with electric actuators. Burner oil pumps are driven by independent motors. The gas train serving each boiler appears to have code required venting of the regulators and dual solenoid valves with venting of the chamber between. The oil supply to the burner is equipped with dual solenoid valves and strainer/disposable media filter. A skid mounted, steam to heating water tube and bundle heat exchanger produces heating water for the equipment which serves the Annex. There are two end suction, based mounted, centrifugal, Bell & Gossett, 250 gpm, 68 feet head, 5 HP, 1800 rpm, pumps.

Cooling Generating Systems – There are a few area which have window air conditioning units, but predominantly the building does not have cooling systems. The Annex building is equipped with two 160 ton Mammoth, model CEH8-452-W635-MZ20 with hot water coils, however the cooling sections of the units have been condemned and are now longer is use.

Distribution Systems – The building steam distribution piping is black steel with welded fittings. The condensate piping is Schedule 80 black steel with threaded fittings. The Annex building heating water distribution piping is black steel, schedule 40 with welded fittings. The piping which has not been replaced as part of the boiler renovation in 2001, has been in use beyond its service life and will require more frequent attention from the maintenance staff to address pipe/valve failures as time passes, however, according to the building engineer there have not been significant problems with steam trap failures. Also, the heating water piping for the Annex has been in service for 46 years .The District should hire a qualified contractor to examine the steam and heating water distribution piping and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping beyond the mechanical room over the next 5 years.

The boiler feed water is collected by a boiler feedwater pad mounted system and is treated with a combination of chemicals by a water treatment controller. There are four condensate return receivers for the steam system as well, which pump back to the feedwater system. The condensate return piping is black steel with threaded joints. The boiler feedwater assembly is equipped with four pumps and a pump control panel which were installed as part of the boiler replacement in 2005. It is recommended that the District conduct a steam trap survey to determine the quantity and condition of all steam taps. The boiler feed tank, pumps and associated components are do not need to be replaced at this time and have approximately 20 -25 years of service life remaining.

The building uses unit ventilators with steam heating and cooling coils in the classrooms in the Main Building. Generally vertical unit ventilators are located at the building perimeter walls of the classrooms for the classroom with an exterior exposed wall Steam convection heat is also provided below the windows. The fan coil units are manufactured by Carrier and appear to have been recently installed within the past five years. . The classrooms are also provided with relief air transfer ducts which to the corridors where the air is then relieved through foul air relief risers located in the corridors. There relief risers terminate at the roof and provide a means of preventing over pressurization of the space from the outside air intakes of the unit ventilators. The Annex rooftop units serve the Annex classrooms with a ducted supply and plenum return air system with supply air registers and return air grilles.

The auditorium is served by heating and ventilating units with steam coils and outside air for ventilation. The units are located above the auditorium ceiling, near the entrance and are accessible through the service room and ladder at the entrance of the auditorium. The supply system consists of concentric round diffusers and return air grilles located on the side walls at the entrance doors of the auditorium. There is also a heating and ventilating unit suspended above the stage which serves the stage area with concentric round supply air diffusers. These units are part of the original building construction of 1963, are beyond their service life and should be replaced. It is recommended to replace these systems with a roof top mounted unit with an overhead supply air distribution system and return air ductwork and low return intake grilles.

The gymnasium is served by heating and ventilating units with steam coils and outside air for ventilation. There are two gyms. A total of eight H&V units and relief exhaust fans serve the two gyms. Another H&V unit serves the auxiliary gym. The H&V units are located in a mechanical mezzanine space. Also, there are two heating and ventilating units of which each one is dedicated to serving the boys' locker and girls' locker area. The units are located in a mechanical in a third floor mechanical room. The units supply air through round concentric diffusers with a low return air grille within the gym space for each unit. These units are part of the original building construction of 1957, are beyond their service life and should be replaced. It is recommended to replace these systems with a roof top mounted unit with an overhead supply air distribution system and return air ductwork and low return intake grilles which would be protected from damage.

The cafeteria is served by a heating and ventilating unit with steam coils, manufactured by Carrier which was installed in 2006. The kitchen is equipped with three kitchen hoods of which are served by a one gas fired make up air, horizontally suspended and manufactured by Rupp. Proper air flow pressurization and balancing should be performed for the seating area with respect to the kitchen to maintain the kitchen under negative pressurization. Steam convection heat is also provided below the windows in the kitchen prep area. The culinary arts class is also equipped with a roof mounted exhaust fan for the hood and a roof mounted make up air unit.

The boys and girls lockers are served by H&V units with steam coils and exhaust fans and wall mounted steam convection units. The systems are beyond their service life and should be replaced.

Terminal & Package Units - There are roof mounted exhaust fans which serve the restrooms. Entryways and stair landings/stairwells are served by recessed steam convection units. Hallways are served with recess convection units as well as convection below corridor windows. A horizontal suspended fan coil unit with a steam coil serves the loading dock maintenance area. The bathrooms are served by wall mounted steam convectors. The art kiln room is served with an exhaust fan. The science lab fume hoods are served with integral exhaust fans. There is an exhaust hood for the dishwasher in the culinary arts classroom.

Controls & Instrumentation - The original pneumatic systems still provide basic control functions. Pneumatic room thermostats drive the unit ventilators, the damper actuators and control valves. Wall mounted pneumatic thermostats on the corridor walls control the steam radiators. There are two Honeywell, duplex air compressor which generate control air for the temperature control system which are located in the boiler room. The air compressors each serve a vertical air storage tank. A common refrigerated air dryer serves the compressors. The maintenance staff reports temperature control is generally lacking throughout the facility. The building control temperature control is manual by operating the boilers or shutting them down. Potential problems with oil, moisture or dirt in the pneumatic copper tubing can be one source of problems. The small rubber gaskets and tubing connections at control devices can become brittle over time and fail to compound control problems. The pneumatic systems are beyond their service life and require too much attention from the maintenance staff. The original control valves, dampers and pneumatic actuators are over 65 years old and should be replaced. These controls should be converted to DDC.

A new building automation system (BAS) with modern DDC modules and communications network should be installed to serve the HVAC systems in this building to improve reliability and energy efficiency. An interface should be provided with the preferred system in use throughout the District.

Sprinklers - The school building is NOT covered by an automatic sprinkler system with the exception of the shops areas which is provided with a sprinkler system and an FDC connection. Installing a sprinkler system with quick response type heads should reduce insurance costs by providing protection for the property investment. A fire pump may be required depending on the available city water pressure. The kitchen hood exhaust systems are all equipped with an Ansul fire suppression system.

ELECTRICAL SYSTEMS

Site Electrical Service comes from medium voltage overhead lines on wooden poles along Ryan Street. The main service switchgear, located in the Main Electrical Room, receives power from an overhead pole via an underground raceway. The main service switchgear is rated at 1200A, 13200 VAC, 3 phase. It consists of an incoming section, a section for current and potential transformers, and outgoing branch feeder sections with two, 600A medium voltage load interrupter. Each medium voltage load interrupter feeds a unit substation (substation#1 and substation#2). A utility meter is installed in a separate enclosure adjacent to the switchgear assembly.

Substation 1 consists of a dry type transformer rated at 1000KVA, 4160V to 208/120V, 3PH, 4 wires, and a 3000A, 208/120V rated distribution switchboard. It is located in the Main Electrical Room in "A" section of the building and feeds both area A and area B including the main office, auditorium and all of the classrooms located in those areas. Substation#2 consists of one 600A medium voltage load interrupter, a dry type transformer rated at 1000KVA, 4160V to 208/120V, 3PH, 4 wires and a 3000A, 208/120V rated distribution switchboard located in "D" section of the building and feeds section C and section D including gymnasium, kitchen, dining, and all of the classrooms located in those areas. Existing medium voltage switchgear is also old and has been exceeded its useful life. Except for the transformer which has been upgraded two years ago, Substation# 1 assembly is old and exceeded its useful life. Substation #2 had been upgraded in 2013 and is in good condition. Observation also shows that the existing power system does not have enough capacity for present and future loads.

Power distribution is achieved through twenty power distribution panel boards. Power panel boards feed all electrical loads directly. They also feed lighting and receptacle panel boards that feed lights and receptacle future loads.

In general there are not enough receptacles installed in the class rooms, except in science rooms. Recommendation is to have a minimum of two receptacles on classroom walls but the current installations fall short of this recommendation. The computer room is lacking the requirements for a receptacle at every three feet on a wall or wire-mold power poles.

Lighting in Corridors is provided by fluorescent fixtures with T8 lamps and they are in good condition. Other areas such as classrooms, offices, cafeteria, kitchen, and mechanical/electrical rooms are provided by fluorescent fixtures with outdated T12 lamps. And these should be replaced. Auditorium illuminated with down lighting fixtures with 500W/120V optic bulb which is commonly used for studio and theater. Gymnasium is illuminated by pendent mounted metal halide high bay lighting fixtures. In general these lighting fixtures have high energy consumption and are difficult to re-lamp.

The Fire Alarm system is automated, addressable, and in compliance with minimum requirement of today's safety codes. The Smoke detection system consists of smoke detectors in ductwork and some area smoke detectors. There are also manual pull stations for fire notification. There are a sufficient number of horn/strobes installed in the library, corridors and offices.

The school telephone and data systems are new and working adequately. A main distribution frame (MDF) along whit a telephone PBX system (telephone within an enterprise that switches calls between enterprise users on local lines while allowing all users to share a certain number of external phone lines) located in room 304 servicing the communication system of the building. School also equipped with wifi system.

Separate PA system does not exist. School uses the telephone systems for public announcement. This system is working adequately.

Each classroom is provided by intercom telephone service. The system is permit paging and intercom communication between main office phone to classroom phones, and classroom to main office, classroom to classroom, and to office. Outside line access from a class room phone through the PBX is blocked. The system is interfaces with master clock system for class change signaling utilizing paging speakers. The system also equipped with a tone generator and input from program/clock controller.

Present clock system is not working. School is provided with time system controller consisting of combination of clock and speaker installed on the wall in each classrooms and a master time programmer. The clocks are not controlled properly with the central master controller. System is old and has exceeded its useful service life thus requiring replacement. The present bell system is working adequately.

Television System is not provided in the school.

School is provided with security intrusion and video surveillance system and is functioning. Our observation shows that the number of the security cameras is not enough for protecting the entire Corridors, Exterior building and other critical zones like kitchen and dining area. The school needs a complete video surveillance system with cameras located in critical areas, such as exit doors, corridors, and building exterior. The cameras should be controlled by a modern Closed Circuit Television (CCTV) system.

Emergency Power System is provided in the school. A 45 KW, 208/120V, 1PH, 3W diesel generator manufactured by "Onan" is installed in the boiler room for feeding emergency lighting and exit signs. The generator is old and outdated and should be replaced.

An Uninterruptible Power System (UPS) is provided for the servers in IT room.

Emergency lighting and exit signs are provided in corridors, library, auditorium, exit ways and all fed by the emergency backup generator. Exit signs appear to be old and should be replaced with new exit signs with battery.

There is no lightning protection system installed in the school. A Risk Assessment Study needs to be conducted to verify if lightning protection system is required to be provided for the school.

A 75 horsepower rated hydraulic type elevator is in operation at the school. The elevator appears to be working properly.

Present theater lighting and dimming system is accomplished with one row of the spot lights and other supplemental lighting fixtures controlled by a dimmer bank located in stage area. Theater lighting and controller are old far exceed their service life. In modern school auditorium, Stage requires front, upstage, high side, back lighting, scenery lighting and controllers by automatic dimmer bank controller. In addition to the stage lights, supplemental fluorescent lighting is also requires to be provided in stage area for lectures and testing. These supplemental lighting could be also turned off automatically by dimmer bank during the performance.

A new sound system including PA rack and speakers are provided in school auditorium and working properly.

Campus areas, parking areas, and building perimeters have lighting that is adequate for personnel safety and security of property. There are no lighting fixtures provided in the courtyard.

Site Video Surveillance system is not provided in the school.

Site Paging System is not provided in the school and not needed.

GROUNDS

Walkway paving in the front along Bustleton Avenue and in the interior courtyard is constructed of 4'x4' (nominal) concrete panels. Some are cracked and in need of replacement. Granite block and concrete exterior stairways in the front, sides and courtyards of the building have some cracked joints and need repointing or replacing. Handrails at exterior stairs are not sturdy nor compliant with today's building codes; they should be replaced with code compliant handrails. ADA accessible grade-level entrances are provided but require Accessible Route signage.

Of the are two internal courtyards formed by the building, one courtyard has landscaping and paving in need of maintenance to clean up overgrown vegetation. The other courtyard has predominantly asphalt paving, which needs to be replaced; the outside benches are in good condition. In the open courtyard between the Annex and the auditorium wing, concrete paving and stairs need to be repaired.

Chain link fencing is intermittent around the site. Much of the fencing is beginning to rust, lean over and become detached from supports. Replacement of damaged sections should be considered, however replacement of missing sections are necessary to provide complete closure. This includes providing gates at Bustleton Avenue and Northeast Avenue to close-off the site when the school is closed. However, before investing in additional fences and gates, the District should evaluate the effectiveness of this system and possibly consider other means of security, such as increase surveillance cameras and alarms.

RECOMMENDATIONS

- Repair leak in foundation wall below boilers
- Repair broken limestone panels (300 sf)
- Pointing between limestone panels on Wings A and B, and pointing on Annex between brick and concrete beams (2,000 ft)
- Recaulk perimeter of window frames set in limestone (10,000 lf)
- Powerwash brick and limestone building walls (100,000 sf)
- Patch structural connection between Annex and Wing D – repair steel beam bearing in concrete in Annex wall.
- Replace Annex roof (13,500 sf)
- Repaint damaged lockers located in hallways (1000 ft lockers x 5 ft h = 5,000 sf)
- Repaint peeling walls in boiler room (3,000 sf)
- Clean and reseal basement floor in mechanical rooms; clean and reseal concrete floors stairways, kitchen, and toilet rooms (20,000 sf)
- Repaint exterior doors and frames; also provide new exit hardware. (50 3x7)
- Replace damaged original wood interior doors in hallways with code compliant fire rated doors with fire rated vision panels (50)
- Provide security hardware for classrooms and offices, locking from inside classroom. (200)
- Repaint interior steel doors and frames; replace hardware with panic hardware for stairs and corridors (100) 3x7 doors
- Repair 3 folding room dividing partitions – patch surface (20 ft. tall) in gymnasium
- Repair and repaint cracked and damaged block walls and concrete columns throughout the building and cafeteria; patch and

repair spalling block walls in Annex (3,000 sf)
- Remove and replace stairway handrails and guards with code compliant systems (50x26 runs=1300 lf)
- Replace VAT floors in main building and Annex using proper asbestos abatement procedures if determined asbestos is present. (246,000sf)
- Replace damaged VCT floors in cafeteria, culinary classrooms, and Annex (14,000 sf)
- Replace 12"x12" glued-on ceiling tiles in cafeteria and recreation room; metal tiles in kitchen –with glued-on acoustical tile ceilings; damaged 2x4 acoustical tile ceilings in Annex. (23,000 sf)
- Replace science lab furniture (200 ft)
- Refinish/repair auditorium seats (50)
- Replace handrails on exterior stairs in courtyard (3 sets of 20 ft total length rails = 60 ft grand total length)

MECHANICAL

- Replace all lavatories in the building with lower flow fixtures, as the fixtures are original.
- Replace all water closets in the building with lower flow fixtures, as the fixtures are original.
- Replace all urinals in the building with lower flow fixtures, as the fixtures are original.
- Replace the wall hung drinking fountains and integral refrigerated coolers in the corridors and at the restrooms. These units are well beyond their service life and most are NOT accessible type.
- Replace service sinks (janitor sinks) in the building.
- Replace science lab sinks in the building.
- Add automatic sanitizing chemicals to the stainless steel sink in the cafeteria.
- Replace four instantaneous natural gas fired water heaters.
- Inspect and replace the original as needed the domestic water piping in the building
- Hire a qualified contractor to perform a detailed examination of the sanitary waste piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Conduct a steam trap survey to identify and replace failed traps passing live steam into the condensate piping system.
- Hire a qualified contractor to examine the steam and condensate piping in service for 53 years and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.
- Replace the steam convection.
- Replace rooftop units for Annex.
- Replace the existing unit ventilators throughout the building with new units designed to provide adequate ventilation per ASHRAE Std 62. The new units shall be equipped with hot water / chilled water coils and integral heat exchanger.
- Provide ventilation, heating and cooling for the Gymnasium and lockers by replacing the existing heating and ventilating unit.
- Provide ventilation, heating and cooling for the Cafeteria by removing the existing heating and ventilating unit and installing a new modular constant volume air handling unit with heating, cooling, distribution ductwork and registers.
- Provide ventilation, heating and cooling for the Auditorium by removing the existing heating and ventilating and installing a new modular constant volume air handling unit with heating and cooling.
- Replace the pneumatic controls for the HVAC systems with modern DDC modules, valves and actuators to improve reliability and energy efficiency.
- Provide a new building automation system (BAS) with communication interface to the preferred system in use throughout the District.
- Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property. A fire pump may be required depending on the available city water pressure.
- Install a new sprinkler system throughout the building

ELECTRICAL

- Upgrade existing service entrance by replacing the existing switchgear. Replacing existing substation#1 with a new Substation including 600A medium voltage disconnect switch, 1500KVA transformer and 4000A low voltage switchboard.
- Replace the old panel boards with new panels where required and add more panel boards for future. Provide arc flash label on the electrical equipment. Estimated 15 panel boards.
- Install minimum two receptacles in each wall of the classrooms in Annex building. Total 80 receptacles.
- Replace all the lighting fixtures in classrooms, offices, cafeteria, kitchen and electrical/mechanical rooms with new fluorescent lighting fixtures with T8 lamp. Replace gymnasium illuminates with LED high bay.
- Replaced existing video surveillance system with new video surveillance system including camera and Closed Circuit Television (CCTV) system. Cameras should install in the corridors, school entrance doors and on the walls around the building.
- Provide lightning protection studies to ascertain adequacy of existing systems.
- Provide new modern stage lighting with automatic dimmer bank controller in the Auditorium.
- Provide exterior lighting fixtures at exit doors in courtyard. Estimated 3 lighting fixtures.

- Replace master clock system with the new wireless clock system.
- Replaced existing exit sign with new battery pack exit signs. Estimated 40 exit signs.

GROUNDS

- Repair concrete treads/risers at misc. exterior stairs (23 treads, 8 ft long; 13 treads 30 ft long)
- Repair/Reconstruct retaining walls leaning and broken in Faculty Parking on south side of building (20 ft long x 5 ft. h.)
- Repave damaged sections of concrete walkway in courtyard and along Bustleton Ave (700 sf)
- Repave part of front drop off, asphalt walk in front of building, curbs, and asphalt courtyard (38,000 sf)
- Repair/replace sections of rusted and damaged chain link fence surrounding site (1,000 ft)
- Crackfill and seal Faculty parking lot, to south of building (24,000 sf)

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B803001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S803001		

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	48.00 %	0.11 %	$12,242.88
A20 - Basement Construction	48.00 %	0.00 %	$0.00
B10 - Superstructure	48.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	58.84 %	0.75 %	$187,362.18
B30 - Roofing	64.97 %	6.00 %	$457,407.17
C10 - Interior Construction	47.33 %	8.26 %	$792,215.37
C20 - Stairs	62.57 %	80.74 %	$438,591.69
C30 - Interior Finishes	59.76 %	27.74 %	$4,354,191.59
D10 - Conveying	45.71 %	0.00 %	$0.00
D20 - Plumbing	115.30 %	92.85 %	$6,239,183.78
D30 - HVAC	110.32 %	97.78 %	$37,632,881.39
D40 - Fire Protection	105.71 %	159.17 %	$4,438,922.82
D50 - Electrical	57.69 %	28.58 %	$5,812,596.81
E10 - Equipment	24.67 %	12.09 %	$666,202.77
E20 - Furnishings	12.50 %	3.62 %	$26,652.05
Totals:	**67.77 %**	**33.18 %**	**$61,058,450.50**

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	$27.30	S.F.	346,000	100	1963	2063		48.00 %	0.13 %	48		$12,242.88	$9,445,800
A1030	Slab on Grade	$5.17	S.F.	346,000	100	1963	2063		48.00 %	0.00 %	48			$1,788,820
A2010	Basement Excavation	$4.36	S.F.	346,000	100	1963	2063		48.00 %	0.00 %	48			$1,508,560
A2020	Basement Walls	$9.91	S.F.	346,000	100	1963	2063		48.00 %	0.00 %	48			$3,428,860
B1010	Floor Construction	$85.34	S.F.	346,000	100	1963	2063		48.00 %	0.00 %	48			$29,527,640
B1020	Roof Construction	$14.39	S.F.	346,000	100	1963	2063		48.00 %	0.00 %	48			$4,978,940
B2010	Exterior Walls	$43.20	S.F.	346,000	100	1963	2063		48.00 %	0.63 %	48		$93,982.21	$14,947,200
B2020	Exterior Windows	$27.52	S.F.	346,000	40	2006	2046		77.50 %	0.67 %	31		$63,517.20	$9,521,920
B2030	Exterior Doors	$1.16	S.F.	346,000	25	1963	1988	2020	20.00 %	7.44 %	5		$29,862.77	$401,360
B3010105	Built-Up	$37.76	S.F.	201,405	20	2006	2026	2028	65.00 %	6.01 %	13		$457,407.17	$7,605,053
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.06	S.F.	201,405	30	1963	1993	2028	43.33 %	0.00 %	13			$12,084
C1010	Partitions	$21.05	S.F.	346,000	100	1963	2063		48.00 %	0.00 %	48			$7,283,300
C1020	Interior Doors	$3.76	S.F.	346,000	40	1963	2003	2037	55.00 %	60.89 %	22		$792,215.37	$1,300,960
C1030	Fittings	$2.90	S.F.	346,000	40	1963	2003	2028	32.50 %	0.00 %	13			$1,003,400
C2010	Stair Construction	$1.18	S.F.	346,000	100	1963	2063		48.00 %	107.42 %	48		$438,591.69	$408,280

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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 $
C2020	Stair Finishes	$0.39	S.F.	346,000	30	1963	1993	2047	106.67 %	0.00 %	32			$134,940
C3010230	Paint & Covering	$13.21	S.F.	346,000	10	1963	1973	2020	50.00 %	1.99 %	5		$91,042.61	$4,570,660
C3010231	Vinyl Wall Covering	$0.97	S.F.		15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$2.63	S.F.		30				0.00 %	0.00 %				$0
C3020411	Carpet	$7.30	S.F.	2,000	10	1963	1973	2027	120.00 %	0.00 %	12			$14,600
C3020412	Terrazzo & Tile	$75.52	S.F.	6,000	50	1963	2013	2020	10.00 %	0.00 %	5			$453,120
C3020413	Vinyl Flooring	$9.68	S.F.	294,000	20	1963	1983	2037	110.00 %	137.01 %	22		$3,899,245.77	$2,845,920
C3020414	Wood Flooring	$22.27	S.F.	24,000	25	1963	1988	2020	20.00 %	0.00 %	5			$534,480
C3020415	Concrete Floor Finishes	$0.97	S.F.	20,000	50	1963	2013	2067	104.00 %	396.34 %	52		$76,890.67	$19,400
C3030	Ceiling Finishes	$20.97	S.F.	346,000	25	1963	1988	2028	52.00 %	3.96 %	13		$287,012.54	$7,255,620
D1010	Elevators and Lifts	$1.28	S.F.	346,000	35	1996	2031		45.71 %	0.00 %	16			$442,880
D2010	Plumbing Fixtures	$13.52	S.F.	346,000	35	1963	1998	2055	114.29 %	61.30 %	40		$2,867,713.89	$4,677,920
D2020	Domestic Water Distribution	$1.68	S.F.	346,000	25	1963	1988	2045	120.00 %	318.47 %	30		$1,851,200.23	$581,280
D2030	Sanitary Waste	$2.32	S.F.	346,000	30	1963	1993	2050	116.67 %	189.39 %	35		$1,520,269.66	$802,720
D2040	Rain Water Drainage	$1.90	S.F.	346,000	30	1963	1993	2050	116.67 %	0.00 %	35			$657,400
D3020	Heat Generating Systems	$18.67	S.F.	346,000	35	2001	2036	2036	60.00 %	0.00 %	21			$6,459,820
D3030	Cooling Generating Systems	$24.48	S.F.	346,000	30	1963	1993	2050	116.67 %	89.98 %	35		$7,621,559.41	$8,470,080
D3040	Distribution Systems	$42.99	S.F.	346,000	25	1963	1988	2045	120.00 %	163.33 %	30		$24,294,597.08	$14,874,540
D3050	Terminal & Package Units	$11.60	S.F.	346,000	20	1963	1983	2040	125.00 %	0.00 %	25			$4,013,600
D3060	Controls & Instrumentation	$13.50	S.F.	346,000	20	1963	1983	2040	125.00 %	122.39 %	25		$5,716,724.90	$4,671,000
D4010	Sprinklers	$7.05	S.F.	346,000	35			2052	105.71 %	181.98 %	37		$4,438,922.82	$2,439,300
D4020	Standpipes	$1.01	S.F.	346,000	35			2052	105.71 %	0.00 %	37			$349,460
D5010	Electrical Service/Distribution	$9.70	S.F.	346,000	30	1963	1993	2028	43.33 %	27.36 %	13		$918,291.77	$3,356,200
D5020	Lighting and Branch Wiring	$34.68	S.F.	346,000	20	1963	1983	2028	65.00 %	34.29 %	13		$4,114,778.38	$11,999,280
D5030	Communications and Security	$12.99	S.F.	346,000	15	1963	1978	2023	53.33 %	16.83 %	8		$756,359.34	$4,494,540
D5090	Other Electrical Systems	$1.41	S.F.	346,000	30	1963	1993	2020	16.67 %	4.75 %	5		$23,167.32	$487,860
E1020	Institutional Equipment	$4.82	S.F.	346,000	35	1963	1998	2032	48.57 %	39.95 %	17		$666,202.77	$1,667,720
E1090	Other Equipment	$11.10	S.F.	346,000	35	1963	1998	2020	14.29 %	0.00 %	5			$3,840,600
E2010	Fixed Furnishings	$2.13	S.F.	346,000	40	1963	2003	2020	12.50 %	3.62 %	5		$26,652.05	$736,980
								Total	**67.77 %**	**33.18 %**			**$61,058,450.50**	**$184,014,097**

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: paint 100%

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

Note:

Concrete (sealed)	20,000sf	6%
Wood -	24,000sf	7%
VCT -	50,000sf	14%
VAT -	244,000sf	70%
Terrazzo / ceramic tile	6,000sf	2%
Carpet -	2,000sf	1%

System: C3030 - Ceiling Finishes — This system contains no images

Note:

Acoustical tile (glued, suspended, or metal)	24,000	7%
Exposed structure painted (steel, concrete, plaster)	322,000	93%

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:	**$61,058,451**	**$0**	**$0**	**$0**	**$0**	**$14,059,173**	**$0**	**$0**	**$6,262,904**	**$0**	**$0**	**$81,380,527**
*** 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	$12,243	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$12,243**
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	$93,982	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$93,982**
B2020 - Exterior Windows	$63,517	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$63,517**
B2030 - Exterior Doors	$29,863	$0	$0	$0	$0	$511,815	$0	$0	$0	$0	$0	**$541,678**
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	$457,407	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$457,407**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

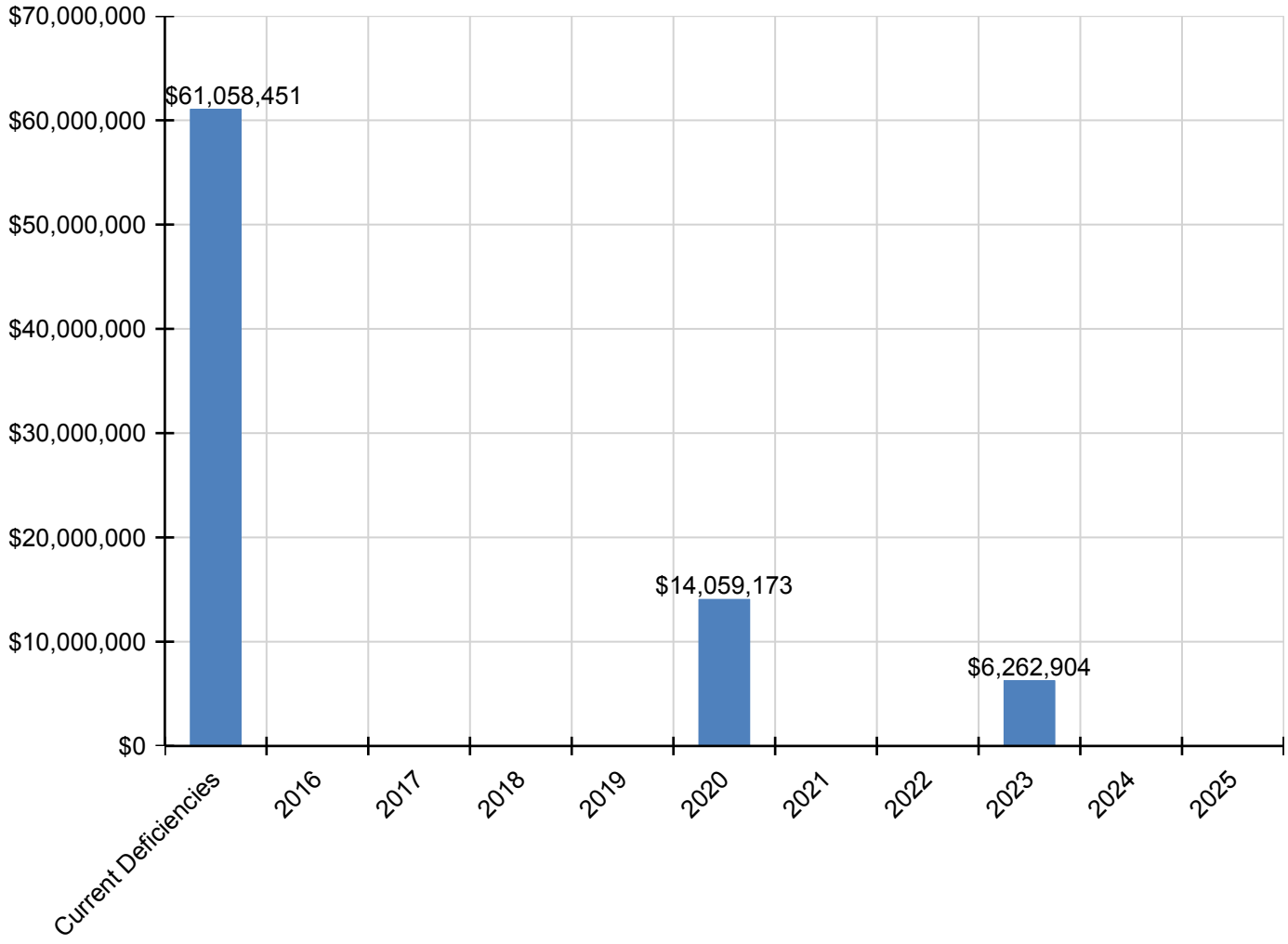
C1020 - Interior Doors	$792,215	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$792,215**
C1030 - Fittings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$438,592	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$438,592**
C2020 - Stair Finishes	$0	$0	$0	$0	$0	$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	$91,043	$0	$0	$0	$0	$5,828,512	$0	$0	$0	$0	$0	**$5,919,555**
C3010231 - Vinyl Wall Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$577,819	$0	$0	$0	$0	$0	**$577,819**
C3020413 - Vinyl Flooring	$3,899,246	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,899,246**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$681,570	$0	$0	$0	$0	$0	**$681,570**
C3020415 - Concrete Floor Finishes	$76,891	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$76,891**
C3030 - Ceiling Finishes	$287,013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$287,013**
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	$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	$2,867,714	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,867,714**
D2020 - Domestic Water Distribution	$1,851,200	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,851,200**
D2030 - Sanitary Waste	$1,520,270	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,520,270**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$7,621,559	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$7,621,559**
D3040 - Distribution Systems	$24,294,597	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$24,294,597**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$5,716,725	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$5,716,725**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$4,438,923	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,438,923**

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	$918,292	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$918,292**
D5020 - Lighting and Branch Wiring	$4,114,778	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,114,778**
D5030 - Communications and Security	$756,359	$0	$0	$0	$0	$0	$0	$0	$6,262,904	$0	$0	**$7,019,263**
D5090 - Other Electrical Systems	$23,167	$0	$0	$0	$0	$622,120	$0	$0	$0	$0	$0	**$645,287**
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	$666,203	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$666,203**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$4,897,539	$0	$0	$0	$0	$0	**$4,897,539**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$26,652	$0	$0	$0	$0	$939,798	$0	$0	$0	$0	$0	**$966,450**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

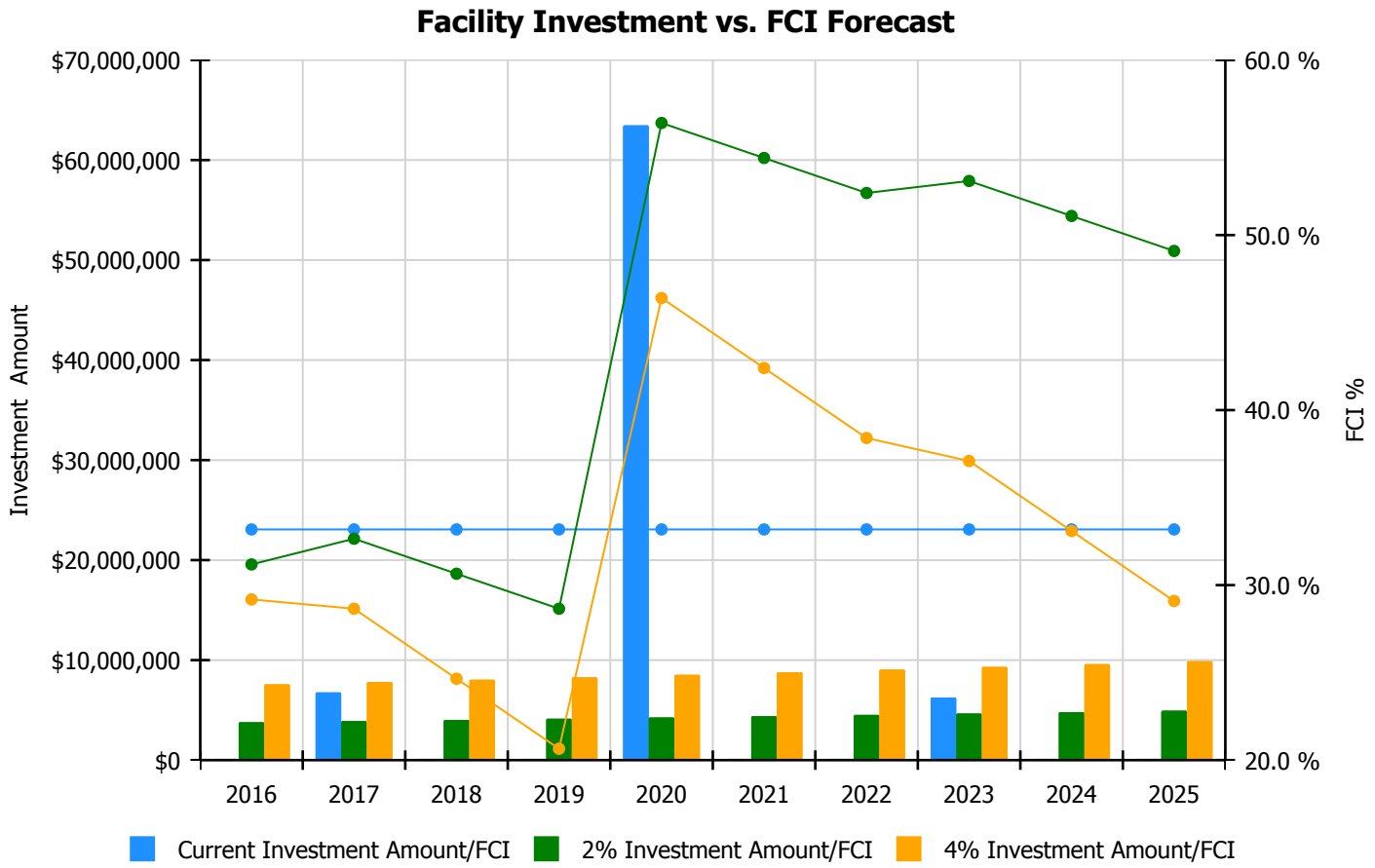
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

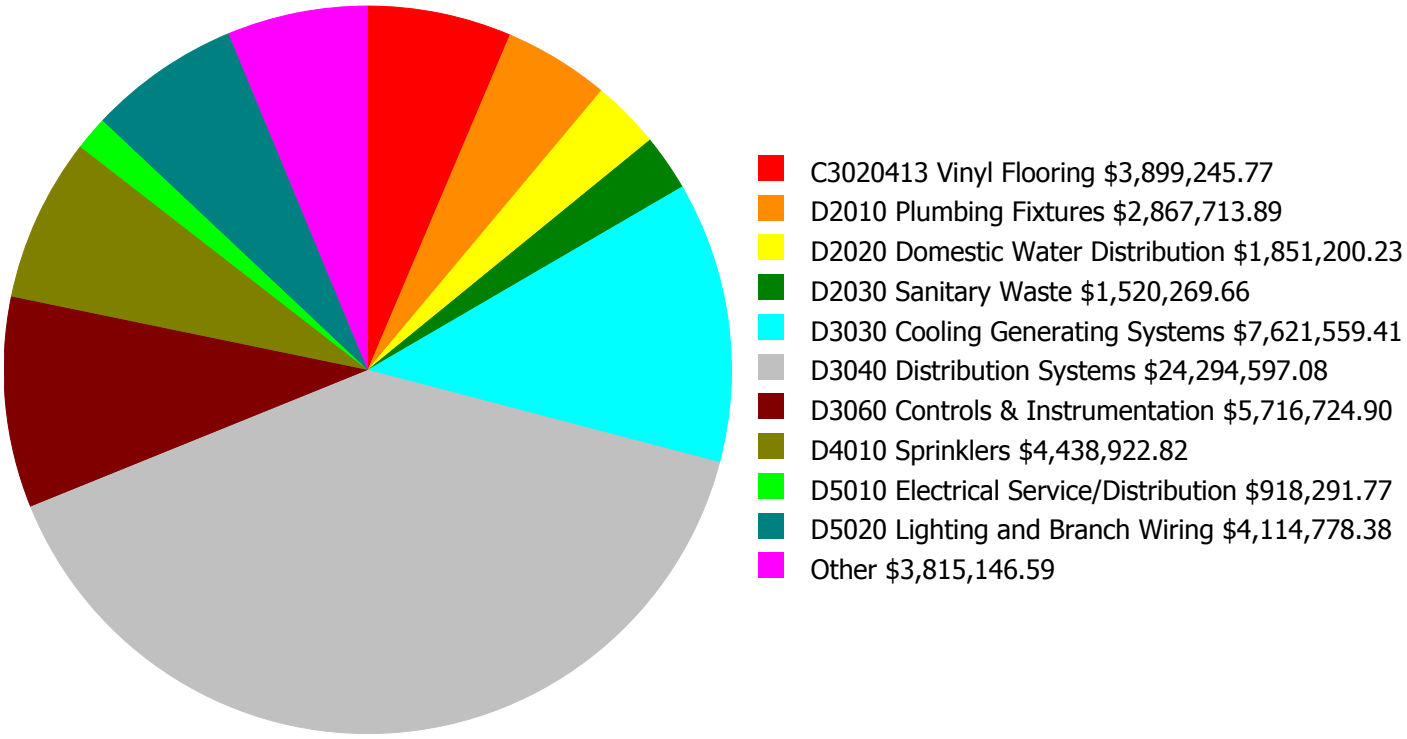
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 33.18%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$3,790,690.00	31.18 %	$7,581,381.00	29.18 %
2017	$6,772,767	$3,904,411.00	32.65 %	$7,808,822.00	28.65 %
2018	$0	$4,021,543.00	30.65 %	$8,043,087.00	24.65 %
2019	$0	$4,142,190.00	28.65 %	$8,284,379.00	20.65 %
2020	$63,471,368	$4,266,455.00	56.40 %	$8,532,911.00	46.40 %
2021	$0	$4,394,449.00	54.40 %	$8,788,898.00	42.40 %
2022	$0	$4,526,283.00	52.40 %	$9,052,565.00	38.40 %
2023	$6,262,904	$4,662,071.00	53.09 %	$9,324,142.00	37.09 %
2024	$0	$4,801,933.00	51.09 %	$9,603,866.00	33.09 %
2025	$0	$4,945,991.00	49.09 %	$9,891,982.00	29.09 %
Total:	**$76,507,039**	**$43,456,016.00**		**$86,912,033.00**	

Deficiency Summary by System

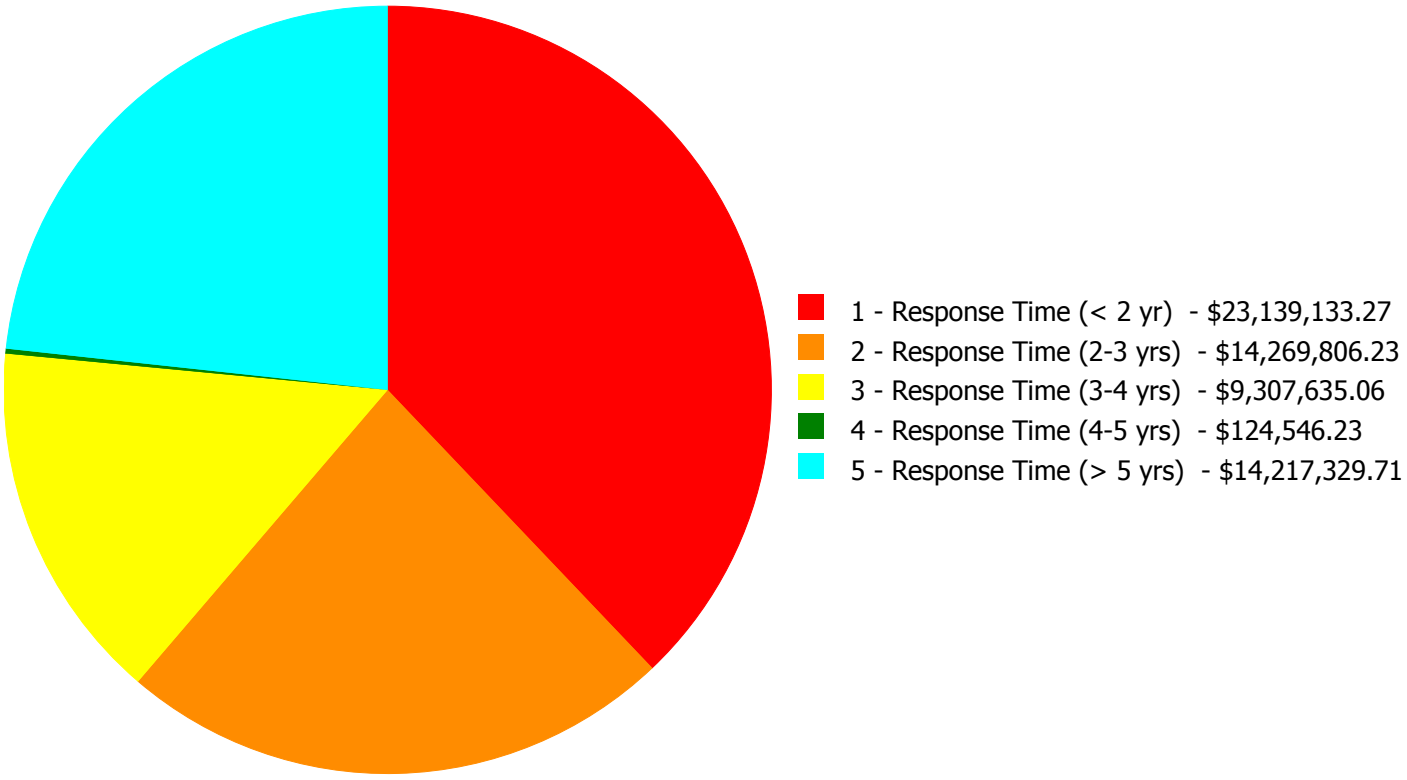
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $61,058,450.50

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: $61,058,450.50

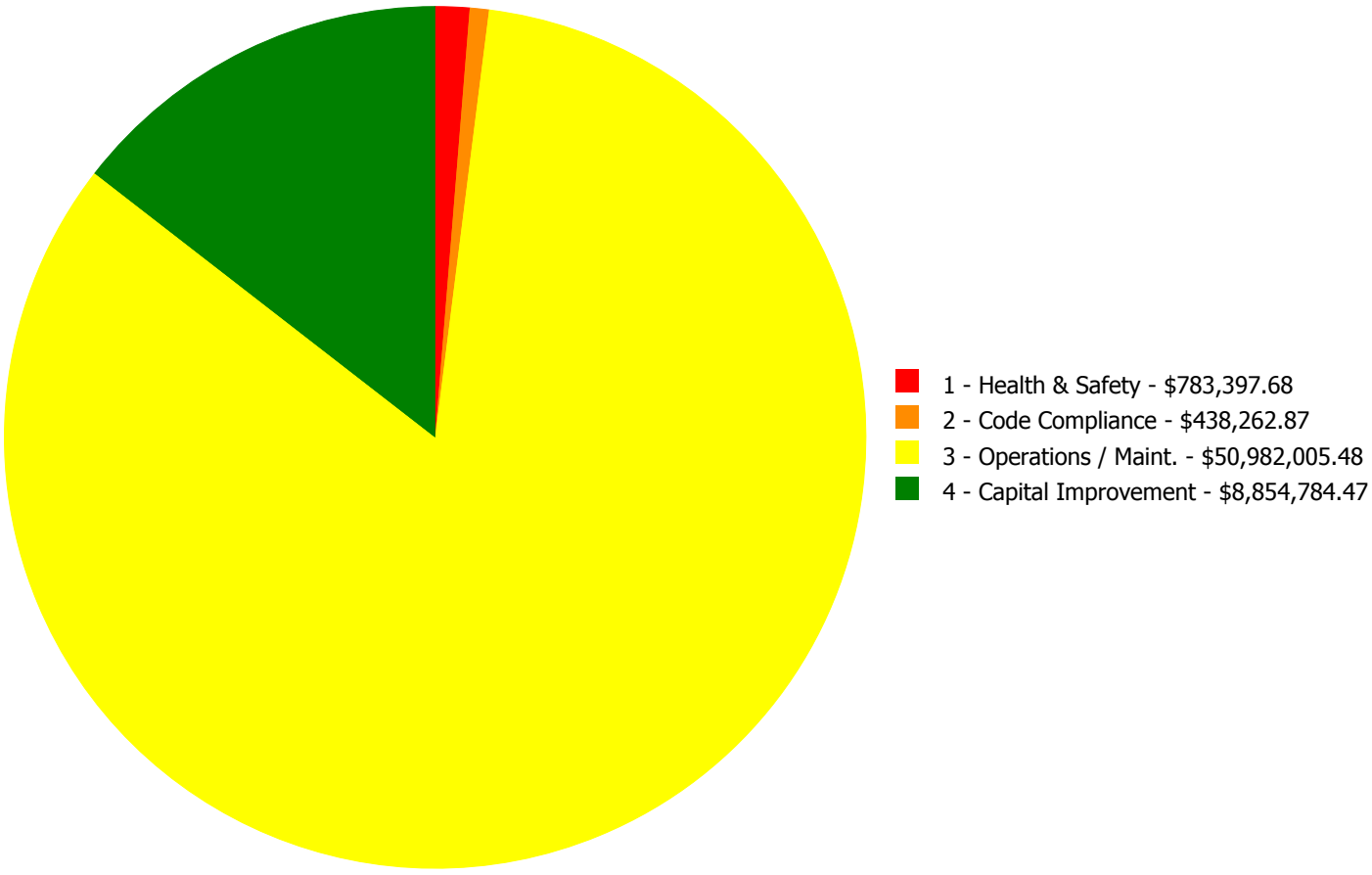
Deficiency By Priority Investment Table

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
A1010	Standard Foundations	$12,242.88	$0.00	$0.00	$0.00	$0.00	$12,242.88
B2010	Exterior Walls	$0.00	$93,982.21	$0.00	$0.00	$0.00	$93,982.21
B2020	Exterior Windows	$0.00	$63,517.20	$0.00	$0.00	$0.00	$63,517.20
B2030	Exterior Doors	$0.00	$29,862.77	$0.00	$0.00	$0.00	$29,862.77
B3010105	Built-Up	$457,407.17	$0.00	$0.00	$0.00	$0.00	$457,407.17
C1020	Interior Doors	$0.00	$792,215.37	$0.00	$0.00	$0.00	$792,215.37
C2010	Stair Construction	$438,262.87	$328.82	$0.00	$0.00	$0.00	$438,591.69
C3010230	Paint & Covering	$0.00	$91,042.61	$0.00	$0.00	$0.00	$91,042.61
C3020413	Vinyl Flooring	$0.00	$3,899,245.77	$0.00	$0.00	$0.00	$3,899,245.77
C3020415	Concrete Floor Finishes	$0.00	$76,890.67	$0.00	$0.00	$0.00	$76,890.67
C3030	Ceiling Finishes	$0.00	$287,012.54	$0.00	$0.00	$0.00	$287,012.54
D2010	Plumbing Fixtures	$0.00	$2,867,713.89	$0.00	$0.00	$0.00	$2,867,713.89
D2020	Domestic Water Distribution	$0.00	$0.00	$0.00	$97,894.18	$1,753,306.05	$1,851,200.23
D2030	Sanitary Waste	$0.00	$0.00	$1,520,269.66	$0.00	$0.00	$1,520,269.66
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$7,621,559.41	$7,621,559.41
D3040	Distribution Systems	$16,103,690.25	$0.00	$7,787,365.40	$0.00	$403,541.43	$24,294,597.08
D3060	Controls & Instrumentation	$0.00	$5,716,724.90	$0.00	$0.00	$0.00	$5,716,724.90
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$4,438,922.82	$4,438,922.82
D5010	Electrical Service/Distribution	$918,291.77	$0.00	$0.00	$0.00	$0.00	$918,291.77
D5020	Lighting and Branch Wiring	$4,114,778.38	$0.00	$0.00	$0.00	$0.00	$4,114,778.38
D5030	Communications and Security	$756,359.34	$0.00	$0.00	$0.00	$0.00	$756,359.34
D5090	Other Electrical Systems	$23,167.32	$0.00	$0.00	$0.00	$0.00	$23,167.32
E1020	Institutional Equipment	$314,933.29	$351,269.48	$0.00	$0.00	$0.00	$666,202.77
E2010	Fixed Furnishings	$0.00	$0.00	$0.00	$26,652.05	$0.00	$26,652.05
	Total:	$23,139,133.27	$14,269,806.23	$9,307,635.06	$124,546.23	$14,217,329.71	$61,058,450.50

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: $61,058,450.50

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: A1010 - Standard Foundations

Location: boiler room basement

Distress: Building Envelope Integrity

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

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: $12,242.88

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repair leak in foundation wall below boilers

System: B3010105 - Built-Up

Location: Annex roof

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Remove and Replace Built Up Roof

Qty: 13,500.00

Unit of Measure: S.F.

Estimate: $457,407.17

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Replace Annex roof (13,500sf)

System: C2010 - Stair Construction

Location: stairways

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

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

Qty: 1,300.00

Unit of Measure: L.F.

Estimate: $438,262.87

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Remove and replace stairway handrails and guards with code compliant systems (50x26runs=1300lf)

System: D3040 - Distribution Systems

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace the existing unit ventilators with new units designed to provide adequate ventilation per ASHRAE Std 62 - insert the SF of bldg. in the qty.

Qty: 310,296.00

Unit of Measure: S.F.

Estimate: $14,968,426.25

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace the existing unit ventilators throughout the building with new units designed to provide adequate ventilation per ASHRAE Std 62. The new units shall be equipped with hot water / chilled water coils and integral heat exchanger.

System: D3040 - Distribution Systems

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Conduct a steam trap survey and replace failed units.

Qty: 346,000.00

Unit of Measure: S.F.

Estimate: $1,135,264.00

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Conduct a steam trap survey to identify and replace failed traps passing live steam into the condensate piping system.

System: D5010 - Electrical Service/Distribution

Location: Electrical Room

Distress: Beyond Service Life

Category: 4 - Capital Improvement

Priority: 1 - Response Time (< 2 yr)

Correction: Replace Substation

Qty: 1.00

Unit of Measure: Ea.

Estimate: $488,711.00

Assessor Name: Craig Anding

Date Created: 12/29/2015

Notes: Upgrade existing service entrance by replacing the existing switchgear. Replacing existing substation#1 with a new Substation including 600A medium voltage disconnect switch, 1500KVA transformer and 4000A low voltage switchboard.

System: D5010 - Electrical Service/Distribution

Location: Entire Building

Distress: Beyond Service Life

Category: 4 - Capital Improvement

Priority: 1 - Response Time (< 2 yr)

Correction: Replace Electrical Distribution System (U)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $429,580.77

Assessor Name: Craig Anding

Date Created: 12/30/2015

Notes: Replace the old panel boards with new panels where required and add more panel boards for future. Provide arc flash label on the electrical equipment. Estimated 15 panel boards.

System: D5020 - Lighting and Branch Wiring

Location: Entre Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace Lighting Fixtures (SF)

Qty: 1.00

Unit of Measure: S.F.

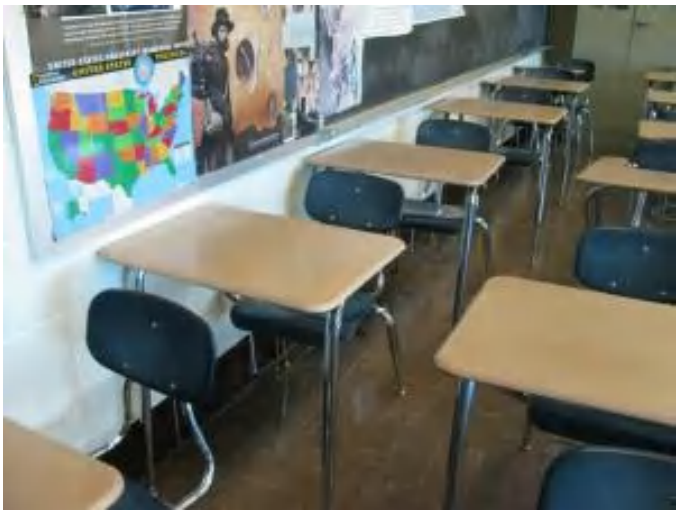
Estimate: $4,022,854.12

Assessor Name: Craig Anding

Date Created: 12/30/2015

Notes: Replace all the lighting fixtures in classrooms, offices, cafeteria, kitchen and electrical/mechanical rooms with new fluorescent lighting fixtures with T8 lamp. Replace gymnasium illuminates with LED high bay.

System: D5020 - Lighting and Branch Wiring



Location: Classrooms

Distress: Inadequate

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Add wiring device

Qty: 1.00

Unit of Measure: Ea.

Estimate: $52,046.92

Assessor Name: Craig Anding

Date Created: 12/30/2015

Notes: Install minimum two receptacles in each wall of the classrooms in Annex building. Total 80 receptacles.

System: D5020 - Lighting and Branch Wiring

Location: Entire Building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

Correction: Add Lighting Fixtures

Qty: 1.00

Unit of Measure: Ea.

Estimate: $31,266.73

Assessor Name: Craig Anding

Date Created: 12/30/2015

Notes: Replaced existing exit sign with new battery pack exit signs. Estimated 40 exit signs.

System: D5020 - Lighting and Branch Wiring

Location: Exterior Building
Distress: Security Issue
Category: 1 - Health & Safety
Priority: 1 - Response Time (< 2 yr)
Correction: Add Exterior Lighting
Qty: 1.00
Unit of Measure: Ea.
Estimate: $8,610.61
Assessor Name: Craig Anding
Date Created: 12/30/2015

Notes: Provide exterior lighting fixtures at exit doors in courtyard. Estimated 3 lighting fixtures.

System: D5030 - Communications and Security

Location: Entire Building
Distress: Security Issue
Category: 1 - Health & Safety
Priority: 1 - Response Time (< 2 yr)
Correction: Add/Replace Video Surveillance System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $674,465.72
Assessor Name: Craig Anding
Date Created: 12/30/2015

Notes: Replaced existing video surveillance system with new video surveillance system including camera and Closed Circuit Television (CCTV) system. Cameras should install in the corridors, school entrance doors and on the walls around the building.

System: D5030 - Communications and Security

Location: Entier Building
Distress: Inadequate
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Add/Replace Clock System or Components
Qty: 1.00
Unit of Measure: Ea.
Estimate: $81,893.62
Assessor Name: Craig Anding
Date Created: 12/30/2015

Notes: Replace master clock system with the new wireless clock system.

System: D5090 - Other Electrical Systems

Location: Roof
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 1 - Response Time (< 2 yr)
Correction: Repair Lightning Protection System
Qty: 1.00
Unit of Measure: Job
Estimate: $23,167.32
Assessor Name: Craig Anding
Date Created: 12/30/2015

Notes: Provide lightning protection studies to ascertain adequacy of existing systems.

System: E1020 - Institutional Equipment

Location: Auditorium

Distress: Beyond Service Life

Category: 4 - Capital Improvement

Priority: 1 - Response Time (< 2 yr)

Correction: Add/Replace Stage Theatrical Lighting System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $314,933.29

Assessor Name: Craig Anding

Date Created: 12/30/2015

Notes: Provide new modern stage lighting with automatic dimmer bank controller in the Auditorium.

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

System: B2010 - Exterior Walls

Location: exterior brick and limestone
Distress: Appearance
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Sooty and dirty walls - powerwash
Qty: 60,000.00
Unit of Measure: S.F.
Estimate: $65,624.11
Assessor Name: Craig Anding
Date Created: 02/02/2016

Notes: Powerwash brick and limestone building walls (100,000sf)

System: B2010 - Exterior Walls

Location: exterior walls
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Repair spalled concrete wall structure
Qty: 300.00
Unit of Measure: S.F.
Estimate: $17,014.86
Assessor Name: Craig Anding
Date Created: 02/02/2016

Notes: Repair broken limestone panels (300sf)

System: B2010 - Exterior Walls

Location: support for overhead corridor

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Repair spalled concrete wall structure

Qty: 200.00

Unit of Measure: S.F.

Estimate: $11,343.24

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Patch structural connection between Annex and Wing D – repair steel beam bearing in concrete in Annex wall.

System: B2020 - Exterior Windows

Location: windows

Distress: Building Envelope Integrity

Category: 3 - Operations / Maint.

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

Correction: Replacement of failing perimeter window sealant - per LF of sealant

Qty: 10,000.00

Unit of Measure: L.F.

Estimate: $63,517.20

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Recaulk perimeter of window frames set in limestone (10,000lf)

System: B2030 - Exterior Doors

Location: exterior doors

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Refinish and repaint exterior doors - per leaf

Qty: 50.00

Unit of Measure: Ea.

Estimate: $29,862.77

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repaint exterior doors and frames; also provide new exit hardware. (50 3x7)

System: C1020 - Interior Doors

Location: stairway doors

Distress: Building / MEP Codes

Category: 3 - Operations / Maint.

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

Correction: Remove and replace hollow metal frames and doors

Qty: 100.00

Unit of Measure: Ea.

Estimate: $507,798.71

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repaint interior steel doors and frames; replace hardware with panic hardware for stairs and corridors (100) 3x7 doors

System: C1020 - Interior Doors

Location: interior doors

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 50.00

Unit of Measure: Ea.

Estimate: $238,529.36

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Replace damaged original wood interior doors in hallways with code compliant fire rated doors with fire rated vision panels (50)

System: C1020 - Interior Doors

Location: corridor doors

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Provide security hardware for classroom and office doors

Qty: 200.00

Unit of Measure: Ea.

Estimate: $45,887.30

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Provide security hardware for classrooms and offices, locking from inside classroom. (200)

System: C2010 - Stair Construction

Location: exterior stair handrails

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Re-paint stairway handrails - per LF of handrail pipe

Qty: 60.00

Unit of Measure: L.F.

Estimate: $328.82

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Replace handrails on exterior stairs in courtyard (3 sets of 20ft total length rails = 60ft grand total length)

System: C3010230 - Paint & Covering

Location: corridors - lockers

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 4,000.00

Unit of Measure: S.F.

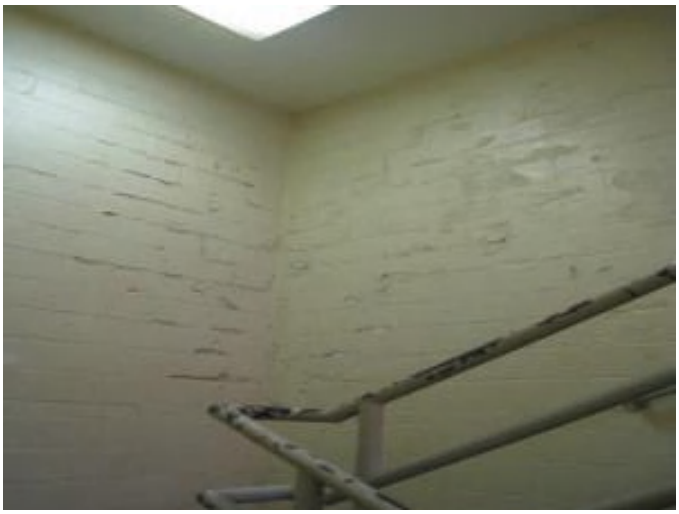
Estimate: $34,268.30

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repaint damaged lockers located in hallways (1000ft lockers x 5ft h = 5,000sf)

System: C3010230 - Paint & Covering



Location: interior block and concrete surfaces

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 3,000.00

Unit of Measure: S.F.

Estimate: $25,701.23

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repair and repaint cracked and damaged block walls and concrete columns throughout the building and cafeteria; patch and repair spalling block walls in Annex (3,000sf)

System: C3010230 - Paint & Covering

Location: mechanical rooms - basement

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Repair substrate and repaint interior concrete or CMU walls - SF of wall surface

Qty: 3,000.00

Unit of Measure: S.F.

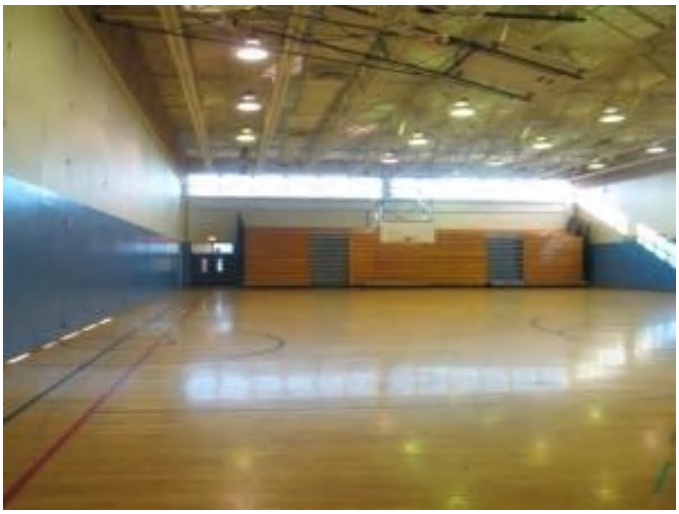
Estimate: $22,506.00

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repaint peeling walls in boiler room (3,000sf)

System: C3010230 - Paint & Covering



Location: gymnasium

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 1,000.00

Unit of Measure: S.F.

Estimate: $8,567.08

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repair 3 folding room dividing partitions – patch surface (20 ft. tall) in gymnasium

System: C3020413 - Vinyl Flooring

Location: classroom floors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 246,000.00

Unit of Measure: S.F.

Estimate: $3,731,000.33

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Replace VAT floors in main building and Annex using proper asbestos abatement procedures if determined asbestos is present. (246,000sf)

System: C3020413 - Vinyl Flooring

Location: cafeteria, classroms and annex

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace VCT

Qty: 14,000.00

Unit of Measure: S.F.

Estimate: $168,245.44

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Replace damaged VCT floors in cafeteria, culinary classrooms, and Annex (14,000sf)

System: C3020415 - Concrete Floor Finishes

Location: floors - mechanical rooms, stairways, toilet rooms

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Clean and reseal concrete floors

Qty: 20,000.00

Unit of Measure: S.F.

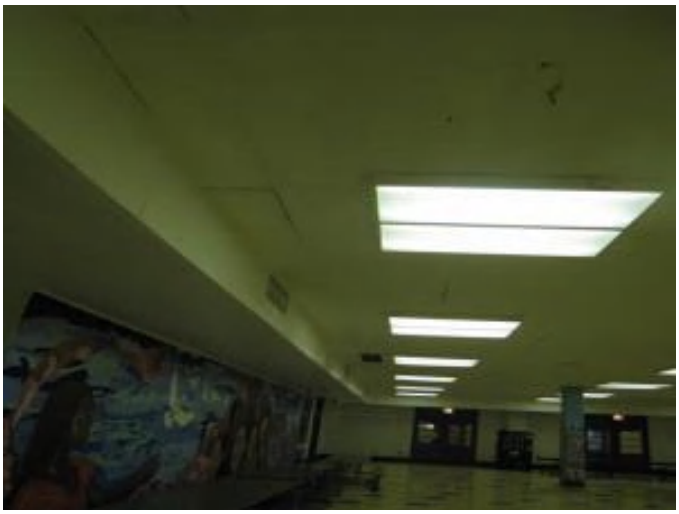
Estimate: $76,890.67

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Clean and reseal basement floor in mechanical rooms; clean and reseal concrete floors stairways, kitchen, and toilet rooms (20,000sf)

System: C3030 - Ceiling Finishes



Location: ceilings

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace glued on or mechanically attached acoustical ceiling tiles

Qty: 23,000.00

Unit of Measure: S.F.

Estimate: $287,012.54

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Replace 12”x12” glued-on ceiling tiles in cafeteria and recreation room; metal tiles in kitchen –with glued-on acoustical tile ceilings; 2x4 ceilings in the annex. (23,000sf)

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 180.00

Unit of Measure: Ea.

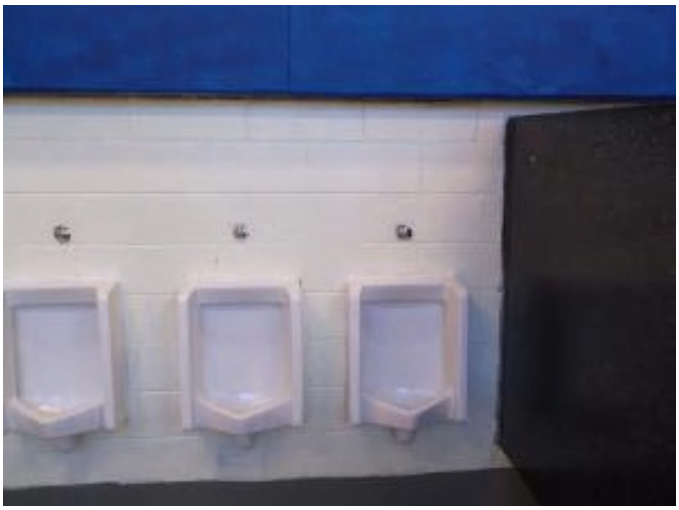
Estimate: $1,343,186.61

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace all water closets in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures



Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or replace stall or floor type urinal

Qty: 110.00

Unit of Measure: Ea.

Estimate: $573,366.09

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace all urinals in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 130.00

Unit of Measure: Ea.

Estimate: $495,431.64

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace all lavatories in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace water fountains to meet ADA - includes high and low fountains and new recessed alcove

Qty: 18.00

Unit of Measure: Ea.

Estimate: $282,472.14

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace the wall hung drinking fountains and integral refrigerated coolers in the corridors and at the restrooms. These units are well beyond their service life and most are NOT accessible type.

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 24.00

Unit of Measure: Ea.

Estimate: $91,464.30

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace science lab sinks in the building.

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace floor janitor or mop sink - insert the quantity

Qty: 12.00

Unit of Measure: Ea.

Estimate: $81,793.11

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace service sinks (janitor sinks) in the building.

System: D3060 - Controls & Instrumentation

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace pneumatic controls with DDC (350KSF)

Qty: 310,296.00

Unit of Measure: S.F.

Estimate: $5,716,724.90

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace the pneumatic controls for the HVAC systems with modern DDC modules, valves and actuators to improve reliability and energy efficiency. Provide a new building automation system (BAS) with communication interface to the preferred system in use throughout the District.

System: E1020 - Institutional Equipment

Location: lab cabinets

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace lab base cabinets and countertops - per LF - add sinks in plumbing fixtures if required

Qty: 200.00

Unit of Measure: L.F.

Estimate: $351,269.48

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Replace science lab furniture (200ft)

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

System: D2030 - Sanitary Waste

Location: Throughout the 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: 346,000.00

Unit of Measure: S.F.

Estimate: $1,520,269.66

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Hire a qualified contractor to perform a detailed examination of the sanitary waste piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.

System: D3040 - Distribution Systems

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Perform testing to identify and replace damaged steam and condensate piping.

Qty: 310,296.00

Unit of Measure: S.F.

Estimate: $2,935,515.78

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Hire a qualified contractor to examine the steam and condensate piping in service for 53 years and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.

System: D3040 - Distribution Systems

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Perform testing to identify and replace damaged steam and condensate piping.

Qty: 310,296.00

Unit of Measure: S.F.

Estimate: $2,935,515.78

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Hire a qualified contractor to examine the steam and condensate piping in service for 53 years and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.

System: D3040 - Distribution Systems

Location: Annex roof

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace indoor AHU, CV, DT (15T)

Qty: 60.00

Unit of Measure: TonAC

Estimate: $1,124,396.04

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace rooftop units for Annex.

System: D3040 - Distribution Systems

Location: Roof

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace HVAC unit for Auditorium (200 seat).

Qty: 200.00

Unit of Measure: Seat

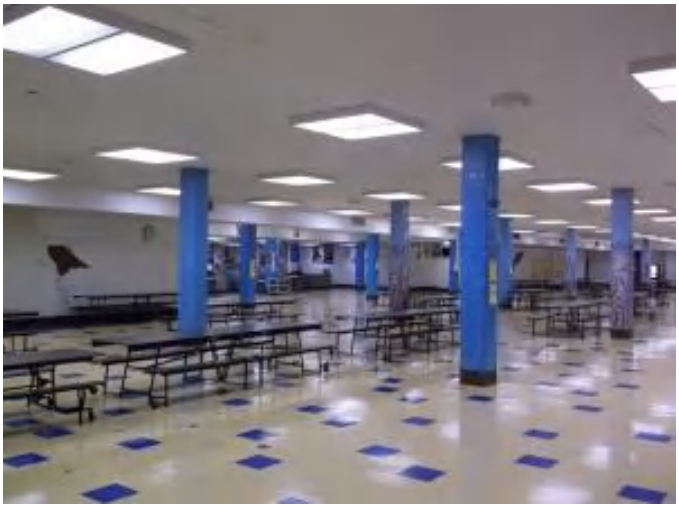
Estimate: $333,093.30

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Provide ventilation, heating and cooling for the Auditorium by removing the existing heating and ventilating and installing a new modular constant volume air handling unit with heating and cooling.

System: D3040 - Distribution Systems



Location: Roof

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace HVAC unit for Cafeteria (850)

Qty: 850.00

Unit of Measure: Student

Estimate: $231,369.13

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Provide ventilation, heating and cooling for the Cafeteria by removing the existing heating and ventilating unit and installing a new modular constant volume air handling unit with heating, cooling, distribution ductwork and registers.

System: D3040 - Distribution Systems

Location: Roof

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace HVAC unit for Gymnasium (single station)

Qty: 6,000.00

Unit of Measure: S.F.

Estimate: $227,475.37

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Provide ventilation, heating and cooling for the Gymnasium and lockers by replacing the existing heating and ventilating unit.

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

System: D2020 - Domestic Water Distribution

Location: Main boiler mechanical equipment room
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Replace instantaneous water heater
Qty: 4.00
Unit of Measure: Ea.
Estimate: $97,894.18
Assessor Name: Craig Anding
Date Created: 02/17/2016

Notes: Replace four instantaneous natural gas fired water heaters.

System: E2010 - Fixed Furnishings

Location: auditorium
Distress: Appearance
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Refinish auditorium seating
Qty: 50.00
Unit of Measure: Ea.
Estimate: $26,652.05
Assessor Name: Craig Anding
Date Created: 02/02/2016

Notes: Refinish/repair auditorium seats (50)

Priority 5 - Response Time (> 5 yrs):

System: D2020 - Domestic Water Distribution

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace domestic water piping (75 KSF)

Qty: 346,000.00

Unit of Measure: S.F.

Estimate: $1,753,306.05

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Inspect and replace the original as needed the domestic water piping in the building

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System: D3030 - Cooling Generating Systems

This deficiency has no image.

Location: Entire Building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 350,000.00

Unit of Measure: S.F.

Estimate: $7,621,559.41

Assessor Name: Craig Anding

Date Created: 01/18/2017

Notes: Provide a central chilled water air conditioning system to serve the entire building.

System: D3040 - Distribution Systems

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace finned tube radiation terminals (per 100 LF)

Qty: 1,000.00

Unit of Measure: L.F.

Estimate: $403,541.43

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace the steam convection

System: D4010 - Sprinklers

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Install a fire protection sprinkler system

Qty: 310,296.00

Unit of Measure: S.F.

Estimate: $4,438,922.82

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property. A fire pump may be required depending on the available city water pressure. Install a new sprinkler system throughout the building

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, cast iron, gas & oil, hot water, 13,500 MBH	3.00	Ea.	Main boiler mechanical equipment room	Easco	FST400			35			$381,037.50	$1,257,423.75
												Total:	**$1,257,423.75**

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:	Stands
Gross Area (SF):	22,000
Year Built:	1963
Last Renovation:	
Replacement Value:	$12,333,853
Repair Cost:	$6,218,342.87
Total FCI:	50.42 %
Total RSLI:	69.33 %

Description:

Facility Condition Assessment

October 2015

School District of Philadelphia
George Washington High School Fieldhouses, Stands, and Field
10175 Bustleton Avenue
Philadelphia, PA 19116

12,000sf - Home Fieldhouse and Stands; 10,000sf - Visitor Fieldhouse and Stands LN 08

George Washington High School Fieldhouses and Grandstands are located on the same property as the high school building but use the street address of 800 Selmar Avenue. The Football Fieldhouses were constructed at the same time as the original high school building in 1963 and remain in use today. The Home Fieldhouse building is 12,000sf and has men's and women's toilets and lockers, spectator toilet rooms, an announcement booth, and storage rooms. The Visitor Fieldhouse building is 10,000sf and has storage rooms and spectator men's and women's toilets. Both Fieldhouses have spectator bleachers built on top of the fieldhouse spaces below and are supported by the Fieldhouses, serving as the roofs over the Fieldhouses. The football field grounds manager led the inspection team through the buildings.

ARCHITECTURAL/STRUCTURAL SYSTEMS

Both fieldhouses are slab on grade construction. Foundations and footings could not be seen.

Floor slabs on grade in both Fieldhouses are in fair condition with no major cracking or spalling observed. There is a small announcement booth at the top of the Home Fieldhouse constructed of brick with a concrete slab; it is accessed from the top level of the stands, however it was locked at the time of inspection and its inside could not be inspected. There is no booth at the top of the Visitor Fieldhouse building.

There are no roofs over the Fieldhouses; the concrete base which forms the stands serves as the roof over the inside areas of the Fieldhouse. The announcement booth at the top of the home fieldhouse has a small roof which was not seen at the time of inspection. The stands are supported on concrete columns and beams. The Home Fieldhouse has 7 openings that allow spectators to walk under the stands to get to the restrooms. The Visitor Fieldhouse has 5 openings for passage to restrooms. At the outside corners of all openings in both fieldhouses, the descending concrete beams that form the tops of the passageways has undergone extensive deterioration. There is so much concrete loss that the reinforcing rods are exposed and gaps have opened along the edges of the wall-ceiling intersection where ceiling and wall beams are supposed to be tied together as a structural unit. The concrete deck forming the ceilings of the passageways is also spalling exposing reinforcing rods. When walking on the top of the deck (the floor of the grandstands above the fieldhouses), extensive concrete spalling and reinforcing rod exposure was also observed. A structural engineer should perform a detailed inspection of both fieldhouses to ascertain the structural stability of the buildings and to determine how to repair the spalling concrete. For the purpose of this study, cleaning of reinforcing rods and reapplying of a new concrete coatings will be estimated to provide a basis of repairs, however it is possible that both structures are beyond repair and are no longer safe.

Exterior walls that form the exterior ends of the Home and Visitor Fieldhouses are constructed brick. The walls are exposed on the back with doors into the storage and toilet room spaces; the descending stands form triangular brick sides; there is no wall on the front field side because the stands descend down to grade. There little cracking of brickwork, which is in good condition. Dirt stains are present on the end walls under the concrete beams. The outside of the announcement booth is painted brick, in good condition.

Exterior personnel doors on both Fieldhouses are 3x7 hollow metal doors and frames. They are damaged, have faded paint and many are rusted. All doors, frames, and hardware need to be replaced with rugged FRP doors that the District has started using for replacement doors. The Fieldhouses have painted steel roll-up doors for access into storage rooms. They are in fair condition and need to be repainted.

There are no windows in the Fieldhouses.

Roofing over the announcement booth was not seen. There is no roofing over any other section of these structures.

Interior partitions in both fieldhouses are constructed of concrete masonry units (block) in toilet rooms, storage rooms, and locker areas. Locker room interior walls are structurally sound and in good physical condition. Painted block walls need a new coat of paint.

Interior doors are hollow metal with steel frames. All frames are steel and are damaged, rusted and beyond repair. All doors and frames require replacement.

Fittings in the fieldhouses consist of toilet partitions, doors, and accessories. The original transite partition dividers that separate the toilet stalls still remain, but all fronts and doors were changed to HDPE (high density polyethylene) plastic partitions. Transite dividers should be tested for asbestos and if they are found to contain asbestos, they should be removed and replaced with HDPE dividers, matching the doors and fronts. Plastic and metal toilet room accessories are installed in all toilet rooms but components are missing or broken. Missing and broken components should be replaced. Football and baseball locker areas have painted plywood or particle board dividers between player's uniform storage areas in poor condition; new dividers are needed.

There are no stairs in either fieldhouse. The concrete base of the stands forms the seating risers and the stairways up the stands. Spectators walk up the stands on both sides of the passageway opening. There are railings protecting the openings, but the railings do not comply with present day building codes and should be replaced with code compliant railings.

Floor finishes throughout both buildings are exposed concrete and VAT (vinyl asbestos tile). Some toilet rooms have VAT, some have concrete. Most spaces are exposed concrete that is stained, dirty, and in need of refinishing with new sealer or paint. VAT is also dirty, stained and needs to be replaced. The announcement booth floor was not seen at the time of inspection.

Ceilings in both fieldhouses are mostly exposed concrete; ceilings are actually the bottom of the concrete sloped, stepped slab that supports bleacher seating. Where exposed in Fieldhouse spaces, concrete is spalling exposing reinforcing rods, like the spalling exposed beams and columns at each of the passageways, further demonstrating the extensive nature of the concrete

decomposition. Some rooms have painted ceilings, but the spalling concrete and rusting reinforcing rods show through. A new protective coating is required to prevent further concrete spalling.

Furnishings in the Fieldhouses consist of wooden bleacher seating, attached to the top of the stepped concrete surface. Wooden seating surfaces are constructed of what appears to be 5/4" x 6" planks bolted to steel supports, which are bolted to the concrete. Wood is aged, warped, and splintering. It is nearly impossible to sit on these surfaces without getting splinters. Pipe railings used at the ends of the aisles do not comply with today's codes with respect to guard railing height also; handrails are not provided in conjunction with the guards as is required by building codes today. New bleacher seating, handrails, and guards are required on visitor and home side grandstands.

MECHANICAL SYSTEMS

Plumbing Fixtures – The Home Stands and Away Stands are equipped with wall hung trough urinals, floor set water closets (flush valve type),gang showers (within the team rooms for the Home Stands) and wall hung lavatories with wheel handle faucets. Many of the original plumbing fixtures remain in service, however, these fixtures have reached the end of their service life and should be replaced. New fixtures will provide lower water consumption and provide savings on water heating costs. The bathrooms were equipped with floor drains. The majority of the gang shower areas are being used for storage.

At the building exterior there is a gang drinking fountain which is an original fixture and should be replaced. The replacement of all drinking fountains is recommended as the equipment is approximately 54 years old and beyond its service life.

Domestic Water Distribution – The water service is fed from the main building to the field houses. Domestic water services were not evaluated during the survey.

Sanitary Waste - Sanitary Waste - The sanitary waste piping system in the Home Stands and Away Stands is extra heavy cast iron with lead and oakum seals and appears to be the original piping installed in the building. It is therefore recommended to inspect this piping and repair or replace sections as needed. The sanitary system leaves the building by gravity flow.

Rain Water Drainage – For the Home Stands and the Away stands there is no roof as the stands are above the spaces.

Energy Supply – The boiler for the Home Stands is served by a 1000 gallon number 2 fuel oil tank contained in a sand bunker. The boiler for the Away Stands is served by a 550 gallon number 2 fuel oil tank contained in a sand bunker. .

Heat Generating Systems – Low pressure steam is generated at 15 lbs/sq. in. or less to serve the heating needs for the Home Stands building. Low pressure steam is generated at 15 lbs/sq. in. or less to serve the heating needs for the Away Stands facility. Steam is generated by one 1,356 MBH Weil McLain boiler, model series 588, with an oil burner for the Away Stands. The boiler is equipped with the manufacturer's burner. The boiler appears to be approximately 30 years in age and has most recently had its flue replaced. There is no draft control on the boiler flue. There are combustion air louvers that serve the boiler room to provide combustion air for the boiler operation. The Home Stands are served by a Weil McLain, model series 1094, 2,607 MBH with a Weil McLain a number 2 fuel oil burner, Gordon Piatt, model WR10-0-15. The boiler appears to be approximately 20 years of age and should not be replaced at this time as it have 15 years left of its service life.

Distribution Systems – For the Home Stands and Away Stands, the building steam distribution piping is black steel with welded fittings. The condensate piping is Schedule 80 black steel with threaded fittings. The piping has been in use beyond its service life and will require more frequent attention from the maintenance staff to address pipe/valve failures as time passes. The steam piping is not insulated. The District should hire a qualified contractor to examine the distribution piping and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 5 years.

Condensate return is collected by gravity into a condensate receiver. The condensate receiver then pumps the condensate via a duplex pump system to the boiler. In general the building engineer reports that there have been no steam trap problems, however, it is recommended that the District conduct a steam trap survey to determine the quantity and condition of all steam taps.

The Home Stands and Away Stands restrooms are heated by horizontal steam unit heater sand electric vertical unit heaters. The team rooms are heated by horizontal steam unit heater sand electric vertical unit heaters as well. The bathroom and team rooms are equipped with through the wall exhaust fans. The steam unit heaters, electric unit heaters and exhaust fans should be replaced as they have exceed their service life.

Terminal & Package Units - There are a few which have window air conditioning units but predominantly the building does not have

cooling systems.

Controls & Instrumentation - The original control systems are electric and still provide basic control functions. The electric systems are beyond their service life and should be replaced. These controls should be converted to DDC.

A new building automation system (BAS) with modern DDC modules and communications network should be installed to serve the HVAC systems in this building to improve reliability and energy efficiency. An interface should be provided with the preferred system in use throughout the District.

Sprinklers - The building is NOT covered by an automatic sprinkler system. Installing a sprinkler system with quick response type heads should reduce insurance costs by providing protection for the property investment. A fire pump may be required depending on the available city water pressure.

ELECTRICAL SYSTEMS

The service entrance to the facility consists of a 400A disconnect switch, a utility meter and power distribution panel is located in the boiler room. The service entrance is fed from an 112.5KVA, 4160V to 208/120V three phase, four wires utility transformer located in a storage room underneath the field bleacher. The power source of the transformer is undetermined at this time. The service entrance is aged and exceeded their useful life therefore a full replacement of this system is recommended. The associated panel boards for power distribution is old board which requiring replacement.

There is a mix of grounding type and non-grounding type receptacles in the building. The majority of the receptacles is old or damaged and should be replaced. Receptacles are not provided in some locker rooms.

Metal shade ceiling mounted lighting fixtures and 1x4 surface mounted fluorescent fixtures are used in boiler room, restrooms and locker rooms and other area of the building. Lighting fixtures are obsolete and lighting levels do not meet IES (Illuminating Engineering Society) recommended levels. They all need replacement.

The Fire Alarm System is not provided in the building. And not needed.

The existing telephone system is not in service. Further investigation required for troubleshooting and repair.

An Emergency lighting system and exit lighting is not provided in the in the building. It is in valuation of the safety code. Emergency light and exit signs should be provided in locker rooms and all egress ways.

Lightning Protection System is not provided and not needed.

Site Lighting System is adequate. There are enough exterior lighting fixtures provided on exterior wall for reasonable level of security around the building.

Site Video Surveillance system is not provided in this building and not required.

Public address system is provided for the football field. The PA rack is located in the field house. There are several loudspeakers installed around the field. Quality of the sound has not been estimated but it seems that the sound system is old and should be replaced.

GROUNDS SYSTEMS

The football field playing surface is natural grass, which is in poor condition. Areas of dead grass and dirt can be seen at almost every 10 yard line up the middle of the field. The playing surface is lumpy and uneven. Football goalposts need repainting. The track surrounding the field is overgrown with weeds to the point where it could be difficult to use this track for competitive running without the risk of runners tripping on the weedy uneven surface. There are concrete ramps up almost 3 feet from the ground level to the lowest level of the stands, but there is inadequate space for wheelchair parking in the walkway at the base of the stands, without blocking the circulation space across the front of the stands. Fences surrounding the field are rusting and in poor condition. Asphalt paving surrounding the stands is failing and needs to be completely replaced with new pavement.

RECOMMENDATIONS

Replace all exterior personnel doors and frames: 8, visitor side; 8 home side (16 3x7)

Repaint rollup doors, lintels, and steel jamb guards: 3, visitor side; 5 home side (13 8'w x 7'h)

Refinish all interior concrete floor slabs (18,000 sf)

Replace VAT with VCT (4,000 sf)

Repaint all interior walls (16,000 sf)

New interior doors and hardware (6 3x7)

Replace toilet partitions- estimated total count for all toilet rooms, both fieldhouses (not all toilet rooms were inspected): (20 toilets, 16 urinals, 20 lavatories)

Replace toilet room accessories – estimated (20 toilet paper, 10 soap, 10 paper towel, 10 waste cans)

Replace locker room dividers with lockers for football and baseball uniform storage and changing (60 lockers)

Replace all bleacher seating with fiberglass or aluminum seating; 15 rows 300 ft long on Visitor Stands, 18 rows 400 ft long on Home Stands (11,700 ft. of seating)

Replace all handrails/guards with code compliant systems along edge of seating, open passageways and bottom of grandstands (300 ft handrails/guards; 800 ft guards only at bottom and openings)

Repair concrete beams and columns at passageways through fieldhouses; 12 openings, 7ftx4 ft each (600 sf of concrete)

Resurface all concrete surfaces on top under seating, suitable for foot traffic (22,000 sf)

Resurface all concrete surfaces underneath where exposed as ceilings (3,000 sf)

MECHANICAL

- Replace all lavatories in the building with lower flow fixtures, as the fixtures are original.
- Replace all water closets in the building with lower flow fixtures, as the fixtures are original.
- Replace all urinals in the building with lower flow fixtures, as the fixtures are original.
- Replace the drinking fountains. These units are well beyond their service life and most are NOT accessible type.
- Hire a qualified contractor to perform a detailed examination of the sanitary waste piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Inspect and replace the original as needed the domestic water piping in the building.
- Conduct a steam trap survey to identify and replace failed traps passing live steam into the condensate piping system.
- Hire a qualified contractor to examine the steam and condensate piping in service for 85 years and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.
- Replace one 1,356 MBH Weil McLain boiler, model series 588 for the Away Stands.
- Replace the steam condensate return system.
- Replace exhaust fans.
- Replace the electric controls for the HVAC systems with modern DDC modules or electric, valves and actuators to improve reliability and energy efficiency.
- Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property. A fire pump may be required depending on the available city water pressure.
- Install a new sprinkler system throughout the building

ELECTRICAL

- Upgrade the existing electrical service with a new service. Replace the existing distribution panel board with new 800A, 120/208V, 3PH, 4 wire, and distribution panel.
- Replace the entire distribution system with new panels and their respective feeders. Estimated 5 panel boards.
- Replace existing receptacles with new 20A duplex receptacles throughout the building along with their respective race ways and wires. Provide receptacle where needed.

- Replace all existing lighting fixtures with new fluorescent fixtures with T-8 lamp throughout the buildings. Estimated 100 fixtures.
- Provide emergency battery pack lights in locker rooms and at the egress ways. Estimated 6 total.
- Provide wireless master clock system with 5 battery operated clock.
- Provide battery pack type exit signs in locker rooms and all egress ways. Estimated 6 exit signs.
- Replace the existing sound system with a new sound system including One 1000W power amplifier with digital processing/speaker protection, one mixer with inputs for three microphones and four additional sources (iPod, CD, MP#, etc.), one Desk Top Announcer's Microphone, one A/C Power Distributor, Portable equipment Rack, UV Resistant Speaker Cable and accessory Cables for iPod, MP3, CD Player, etc. Replace existing speakers with four sets of Weather Resistant, Full Range Loudspeakers with multi position mounting Brackets.

GROUNDS

- Repair/replant football field grass (100,000 sf)
- Provide new track around football field (30,000 sf)
- Repaint goalposts (100 sf)
- Repave asphalt walkways used for pedestrian access around the fieldhouses on field sides and back sides of Home and Visitor Fieldhouses (30,000 sf)
- Repaint chain link fencing surrounding track and field (5,000 sf)

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B803902
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S803001		

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	48.00 %	0.00 %	$0.00
A20 - Basement Construction	48.00 %	21.63 %	$53,284.73
B10 - Superstructure	48.00 %	12.55 %	$382,161.23
B20 - Exterior Enclosure	49.08 %	8.98 %	$260,507.70
B30 - Roofing	25.00 %	0.00 %	$0.00
C10 - Interior Construction	82.46 %	45.20 %	$137,413.57
C20 - Stairs	105.00 %	420.55 %	$568,082.60
C30 - Interior Finishes	34.53 %	28.52 %	$249,900.29
D20 - Plumbing	116.69 %	82.14 %	$497,309.66
D30 - HVAC	120.72 %	78.45 %	$1,066,200.85
D40 - Fire Protection	105.71 %	133.16 %	$343,330.72
D50 - Electrical	110.27 %	63.89 %	$602,989.56
E10 - Equipment	108.00 %	255.35 %	$2,057,161.96
E20 - Furnishings	12.50 %	0.00 %	$0.00
Totals:	**69.33 %**	**50.42 %**	**$6,218,342.87**

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	$6.33	S.F.	22,000	100	1963	2063		48.00 %	0.00 %	48			$139,260
A1030	Slab on Grade	$20.95	S.F.	22,000	100	1963	2063		48.00 %	0.00 %	48			$460,900
A2010	Basement Excavation	$0.70	S.F.	22,000	100	1963	2063		48.00 %	0.00 %	48			$15,400
A2020	Basement Walls	$10.50	S.F.	22,000	100	1963	2063		48.00 %	23.07 %	48		$53,284.73	$231,000
B1010	Floor Construction	$73.68	S.F.	22,000	100	1963	2063		48.00 %	23.58 %	48		$382,161.23	$1,620,960
B1020	Roof Construction	$64.76	S.F.	22,000	100	1963	2063		48.00 %	0.00 %	48			$1,424,720
B2010	Exterior Walls	$129.53	S.F.	22,000	100	1963	2063		48.00 %	0.00 %	48			$2,849,660
B2020	Exterior Windows	$9.10	S.F.		40				0.00 %	0.00 %				$0
B2030	Exterior Doors	$2.38	S.F.	22,000	25	1963	1988	2042	108.00 %	497.53 %	27		$260,507.70	$52,360
B3010105	Built-Up	$43.61	S.F.	300	20	1963	1983	2020	25.00 %	0.00 %	5			$13,083
B3010120	Single Ply Membrane	$44.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$62.63	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$44.73	S.F.		20				0.00 %	0.00 %				$0
B3020	Roof Openings	$1.65	S.F.		30				0.00 %	0.00 %				$0
C1010	Partitions	$6.04	S.F.	22,000	100	1963	2063		48.00 %	0.00 %	48			$132,880
C1020	Interior Doors	$1.22	S.F.	22,000	40	1963	2003	2057	105.00 %	113.52 %	42		$30,467.92	$26,840
C1030	Fittings	$6.56	S.F.	22,000	20	1963	1983	2037	110.00 %	74.10 %	22		$106,945.65	$144,320
C2010	Stair Construction	$6.14	S.F.	22,000	40	1963	2003	2057	105.00 %	420.55 %	42		$568,082.60	$135,080

Site Assessment Report - B803902;Washington Field - Fieldhouses, Stands, Football Field and Track

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 $
C3010230	Paint & Covering	$15.03	S.F.	22,000	10	1963	1973	2020	50.00 %	36.30 %	5		$120,032.02	$330,660
C3010231	Vinyl Wall Covering	$1.14	S.F.		15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$2.58	S.F.		30				0.00 %	0.00 %				$0
C3020411	Carpet	$8.54	S.F.		10				0.00 %	0.00 %				$0
C3020412	Terrazzo & Tile	$88.36	S.F.		50				0.00 %	0.00 %				$0
C3020413	Vinyl Flooring	$11.33	S.F.	3,000	20	1963	1983	2037	110.00 %	178.48 %	22		$60,666.67	$33,990
C3020414	Wood Flooring	$26.07	S.F.		25				0.00 %	0.00 %				$0
C3020415	Concrete Floor Finishes	$1.14	S.F.	22,000	50	1963	2013	2020	10.00 %	275.92 %	5		$69,201.60	$25,080
C3030	Ceiling Finishes	$22.11	S.F.	22,000	25	1963	1988	2020	20.00 %	0.00 %	5			$486,420
D2010	Plumbing Fixtures	$15.92	S.F.	22,000	35	1963	1998	2055	114.29 %	73.65 %	40		$257,955.16	$350,240
D2020	Domestic Water Distribution	$7.49	S.F.	22,000	25	1963	1988	2045	120.00 %	73.81 %	30		$121,616.60	$164,780
D2030	Sanitary Waste	$4.11	S.F.	22,000	25	1963	1988	2045	120.00 %	130.21 %	30		$117,737.90	$90,420
D3020	Heat Generating Systems	$5.58	S.F.	22,000	35	1963	1998	2055	114.29 %	200.03 %	40		$245,555.06	$122,760
D3030	Cooling Generating Systems	$8.48	S.F.		30				0.00 %	0.00 %				$0
D3040	Distribution Systems	$40.96	S.F.	22,000	25	1963	1988	2045	120.00 %	33.94 %	30		$305,795.58	$901,120
D3050	Terminal & Package Units	$13.11	S.F.		20				0.00 %	0.00 %				$0
D3060	Controls & Instrumentation	$15.24	S.F.	22,000	20	1963	1983	2040	125.00 %	153.56 %	25		$514,850.21	$335,280
D4010	Sprinklers	$9.84	S.F.	22,000	35			2052	105.71 %	158.60 %	37		$343,330.72	$216,480
D4020	Standpipes	$1.88	S.F.	22,000	35			2052	105.71 %	0.00 %	37			$41,360
D5010	Electrical Service/Distribution	$4.86	S.F.	22,000	30	1963	1993	2047	106.67 %	337.45 %	32		$360,806.26	$106,920
D5020	Lighting and Branch Wiring	$29.69	S.F.	22,000	20	1963	1983	2037	110.00 %	20.42 %	22		$133,352.97	$653,180
D5030	Communications and Security	$8.35	S.F.	22,000	15	1963	1978	2032	113.33 %	59.24 %	17		$108,830.33	$183,700
D5090	Other Electrical Systems	$0.56	S.F.		20				0.00 %	0.00 %				$0
E1020	Institutional Equipment	$43.11	S.F.		25				0.00 %	0.00 %				$0
E1090	Other Equipment	$36.62	S.F.	22,000	25	1963	1988	2042	108.00 %	255.35 %	27		$2,057,161.96	$805,640
E2010	Fixed Furnishings	$10.88	S.F.	22,000	40	1963	2003	2020	12.50 %	0.00 %	5			$239,360
								Total	**69.33 %**	**50.42 %**			**$6,218,342.87**	**$12,333,853**

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: paint 100%

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

Note: concrete 80%
VAT 20%

System: C3030 - Ceiling Finishes — This system contains no images

Note: exposed 95%
painted 5%

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:	**$6,218,343**	**$0**	**$0**	**$0**	**$0**	**$1,395,839**	**$0**	**$0**	**$0**	**$0**	**$0**	**$7,614,182**
*** 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	$53,285	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$53,285**
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	$382,161	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$382,161**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$260,508	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$260,508**
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	$0	$0	$0	$0	$0	$16,683	$0	$0	$0	$0	$0	**$16,683**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

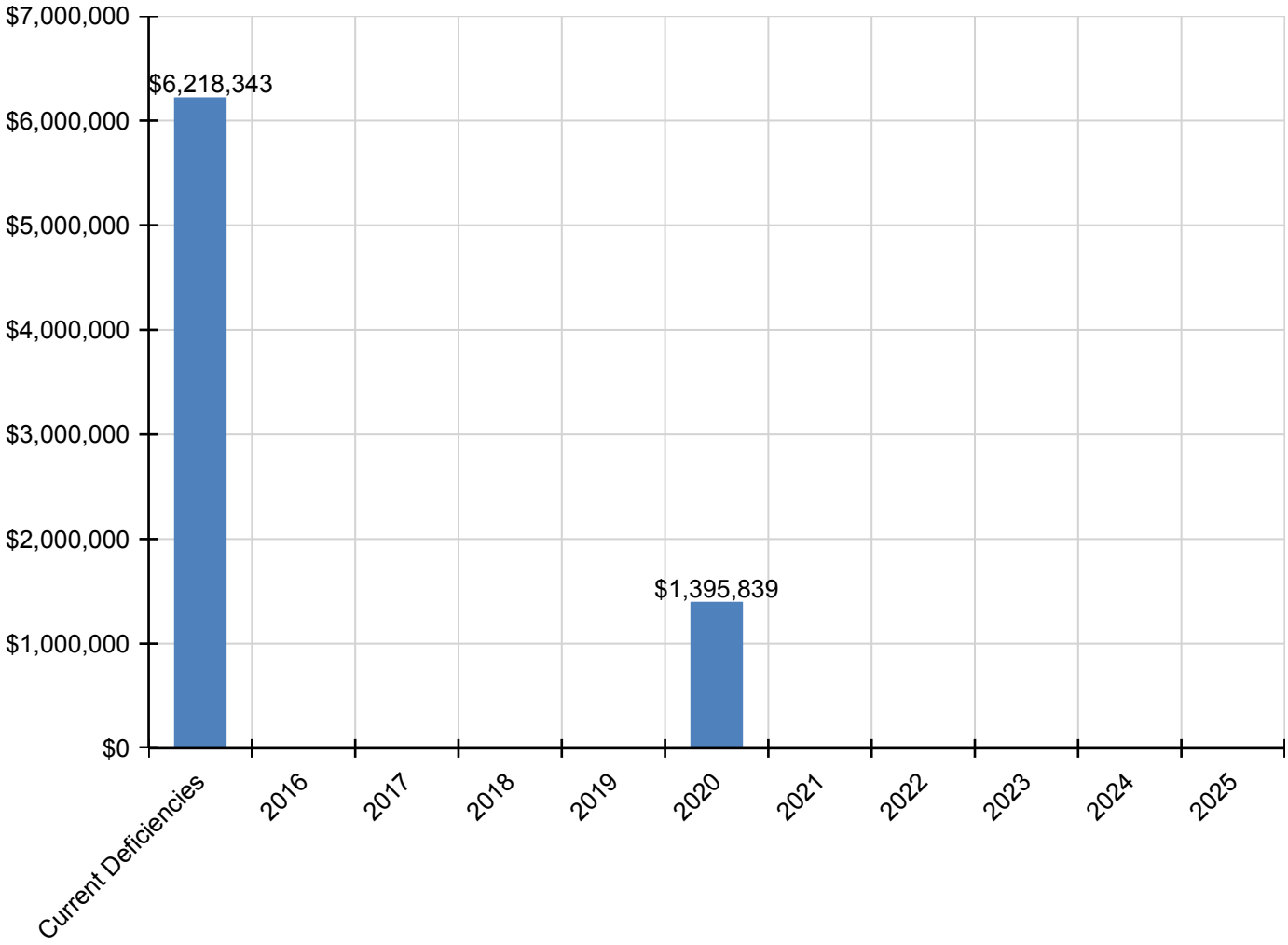
C1020 - Interior Doors	$30,468	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$30,468**
C1030 - Fittings	$106,946	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$106,946**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$568,083	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$568,083**
C30 - Interior Finishes	$0	$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	$120,032	$0	$0	$0	$0	$421,658	$0	$0	$0	$0	$0	**$541,690**
C3010231 - Vinyl Wall Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$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	$60,667	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$60,667**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$69,202	$0	$0	$0	$0	$31,982	$0	$0	$0	$0	$0	**$101,184**
C3030 - Ceiling Finishes	$0	$0	$0	$0	$0	$620,284	$0	$0	$0	$0	$0	**$620,284**
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	$257,955	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$257,955**
D2020 - Domestic Water Distribution	$121,617	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$121,617**
D2030 - Sanitary Waste	$117,738	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$117,738**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$245,555	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$245,555**
D3030 - Cooling Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3040 - Distribution Systems	$305,796	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$305,796**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$514,850	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$514,850**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$343,331	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$343,331**
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	$360,806	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$360,806**
D5020 - Lighting and Branch Wiring	$133,353	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$133,353**

D5030 - Communications and Security	$108,830	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$108,830**
D5090 - Other Electrical Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1090 - Other Equipment	$2,057,162	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,057,162**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$305,232	$0	$0	$0	$0	$0	**$305,232**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

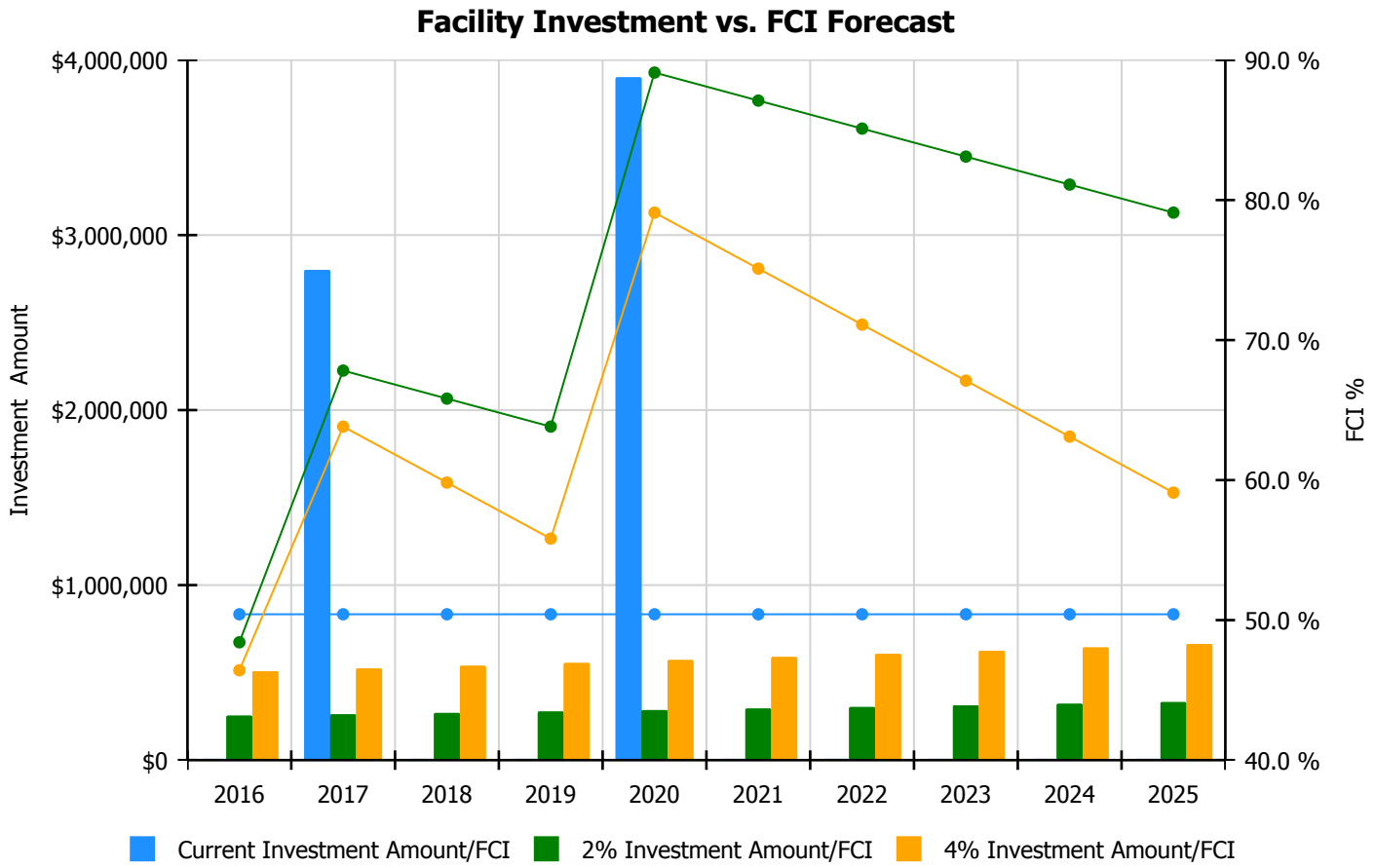
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

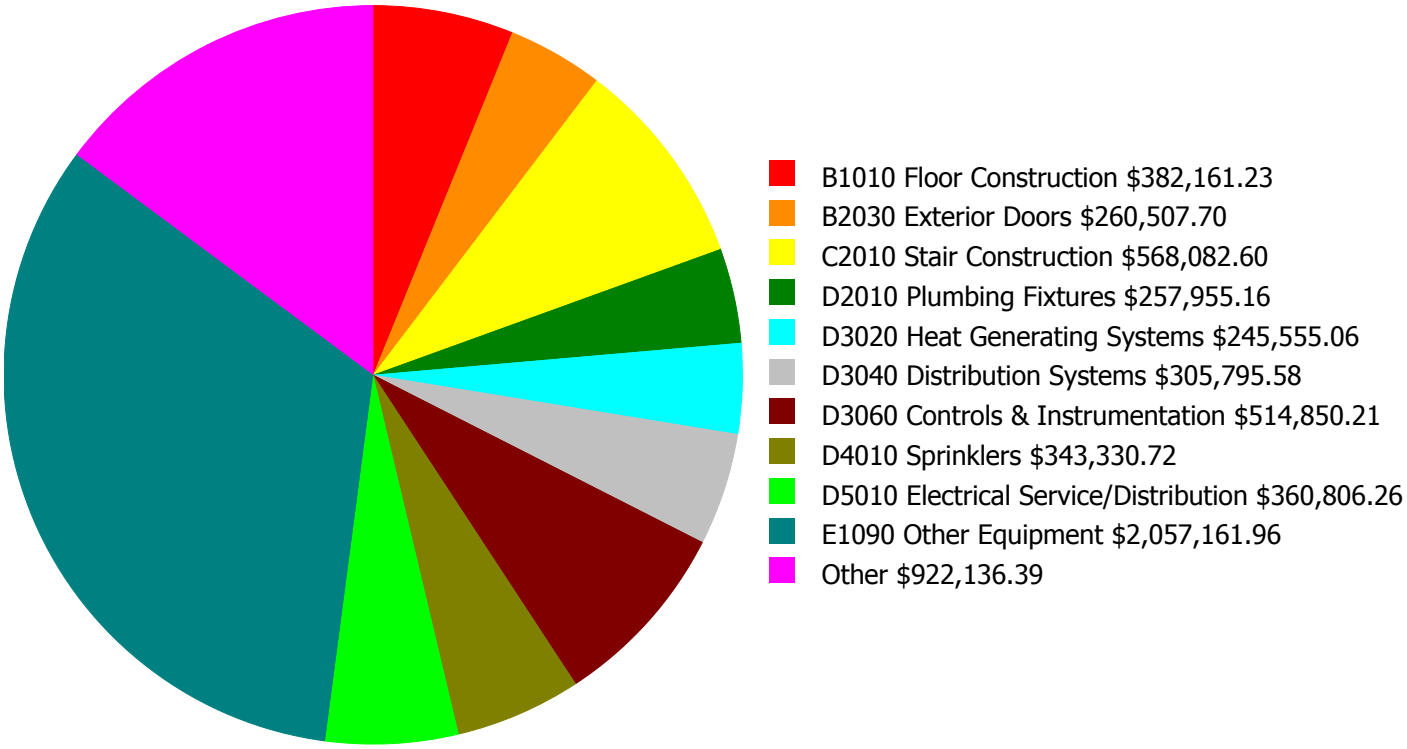
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 50.42%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$254,077.00	48.42 %	$508,155.00	46.42 %
2017	$2,800,624	$261,700.00	67.82 %	$523,399.00	63.82 %
2018	$0	$269,551.00	65.82 %	$539,101.00	59.82 %
2019	$0	$277,637.00	63.82 %	$555,274.00	55.82 %
2020	$3,901,100	$285,966.00	89.10 %	$571,933.00	79.10 %
2021	$0	$294,545.00	87.10 %	$589,091.00	75.10 %
2022	$0	$303,382.00	85.10 %	$606,763.00	71.10 %
2023	$0	$312,483.00	83.10 %	$624,966.00	67.10 %
2024	$0	$321,858.00	81.10 %	$643,715.00	63.10 %
2025	$0	$331,513.00	79.10 %	$663,027.00	59.10 %
Total:	**$6,701,724**	**$2,912,712.00**		**$5,825,424.00**	

Deficiency Summary by System

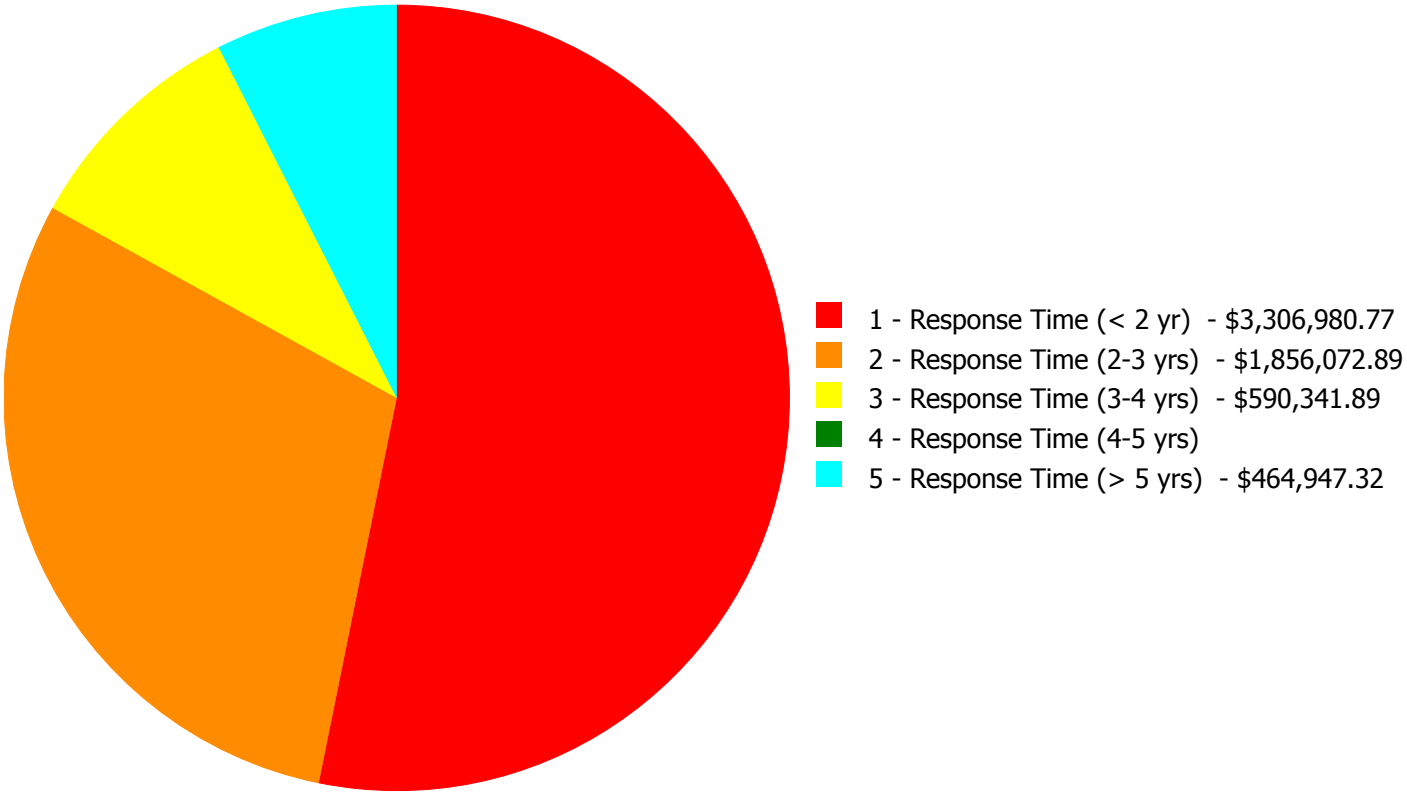
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $6,218,342.87

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: $6,218,342.87

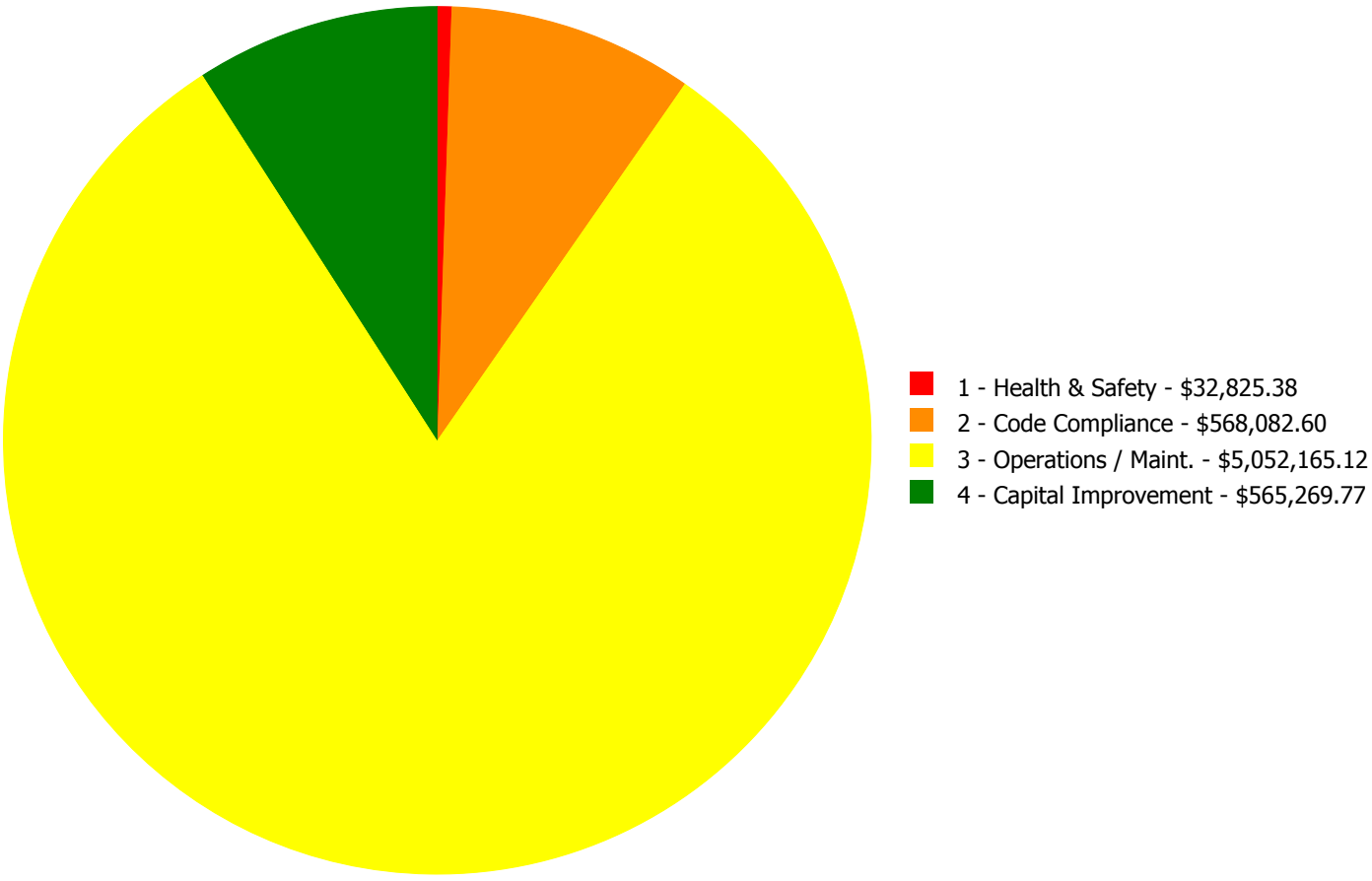
Deficiency By Priority Investment Table

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
A2020	Basement Walls	$0.00	$53,284.73	$0.00	$0.00	$0.00	$53,284.73
B1010	Floor Construction	$0.00	$382,161.23	$0.00	$0.00	$0.00	$382,161.23
B2030	Exterior Doors	$0.00	$260,507.70	$0.00	$0.00	$0.00	$260,507.70
C1020	Interior Doors	$0.00	$30,467.92	$0.00	$0.00	$0.00	$30,467.92
C1030	Fittings	$0.00	$106,945.65	$0.00	$0.00	$0.00	$106,945.65
C2010	Stair Construction	$568,082.60	$0.00	$0.00	$0.00	$0.00	$568,082.60
C3010230	Paint & Covering	$0.00	$120,032.02	$0.00	$0.00	$0.00	$120,032.02
C3020413	Vinyl Flooring	$0.00	$60,666.67	$0.00	$0.00	$0.00	$60,666.67
C3020415	Concrete Floor Finishes	$0.00	$69,201.60	$0.00	$0.00	$0.00	$69,201.60
D2010	Plumbing Fixtures	$0.00	$257,955.16	$0.00	$0.00	$0.00	$257,955.16
D2020	Domestic Water Distribution	$0.00	$0.00	$0.00	$0.00	$121,616.60	$121,616.60
D2030	Sanitary Waste	$0.00	$0.00	$117,737.90	$0.00	$0.00	$117,737.90
D3020	Heat Generating Systems	$0.00	$0.00	$245,555.06	$0.00	$0.00	$245,555.06
D3040	Distribution Systems	$78,746.65	$0.00	$227,048.93	$0.00	$0.00	$305,795.58
D3060	Controls & Instrumentation	$0.00	$514,850.21	$0.00	$0.00	$0.00	$514,850.21
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$343,330.72	$343,330.72
D5010	Electrical Service/Distribution	$360,806.26	$0.00	$0.00	$0.00	$0.00	$360,806.26
D5020	Lighting and Branch Wiring	$133,352.97	$0.00	$0.00	$0.00	$0.00	$133,352.97
D5030	Communications and Security	$108,830.33	$0.00	$0.00	$0.00	$0.00	$108,830.33
E1090	Other Equipment	$2,057,161.96	$0.00	$0.00	$0.00	$0.00	$2,057,161.96
	Total:	$3,306,980.77	$1,856,072.89	$590,341.89	$0.00	$464,947.32	$6,218,342.87

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: $6,218,342.87

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: C2010 - Stair Construction

Location: Fieldhouse stands

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

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

Qty: 1,100.00

Unit of Measure: L.F.

Estimate: $568,082.60

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Replace all handrails/guards with code compliant systems along edge of seating, open passageways and bottom of grandstands (300ft handrails/guards; 800ft guards only at bottom and openings)

System: D3040 - Distribution Systems

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Conduct a steam trap survey and replace failed units.

Qty: 24,000.00

Unit of Measure: S.F.

Estimate: $78,746.65

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Conduct a steam trap survey to identify and replace failed traps passing live steam into the condensate piping system.

System: D5010 - Electrical Service/Distribution

Location: Fieldhouse Boiler Room

Distress: Beyond Service Life

Category: 4 - Capital Improvement

Priority: 1 - Response Time (< 2 yr)

Correction: Add Electrical Switchgear and Distribution System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $247,584.62

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Upgrade the existing electrical service with a new service. Replace the existing distribution panel board with new 800A, 120/208V, 3PH, 4 wire, and distribution panel.

System: D5010 - Electrical Service/Distribution

Location: Fieldhouse Entire Building

Distress: Beyond Service Life

Category: 4 - Capital Improvement

Priority: 1 - Response Time (< 2 yr)

Correction: Replace Electrical Distribution System (U)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $113,221.64

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Replace the entire distribution system with new panels and new wiring/conduits. Estimated 5 panel boards.

System: D5020 - Lighting and Branch Wiring

Location: Fieldhouse Entire Building

Distress: Beyond Service Life

Category: 4 - Capital Improvement

Priority: 1 - Response Time (< 2 yr)

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

Qty: 1.00

Unit of Measure: S.F.

Estimate: $66,615.60

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Replace existing receptacles with new 20A duplex receptacles throughout the building along with their respective race ways and wires. Provide receptacle where needed.

System: D5020 - Lighting and Branch Wiring

Location: Fieldhouse Entire Building

Distress: Beyond Service Life

Category: 4 - Capital Improvement

Priority: 1 - Response Time (< 2 yr)

Correction: Replace lighting fixtures

Qty: 1.00

Unit of Measure: Ea.

Estimate: $33,911.99

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Replace all lighting fixtures with new fluorescent lighting fixtures with T-8 lamp throughout the buildings . Estimated 100 fixtures,

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System: D5020 - Lighting and Branch Wiring

Location: Fieldhouse Entire Building
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 1 - Response Time (< 2 yr)
Correction: Add Lighting Fixtures
Qty: 1.00
Unit of Measure: Ea.
Estimate: $18,151.59
Assessor Name: Craig Anding
Date Created: 01/13/2016

Notes: Provide battery pack type exit signs in locker rooms and all egress ways. Estimated 6 exit signs.

System: D5020 - Lighting and Branch Wiring

Location: Fieldhouse Entire Building
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 1 - Response Time (< 2 yr)
Correction: Add Lighting Fixtures
Qty: 1.00
Unit of Measure: Ea.
Estimate: $14,673.79
Assessor Name: Craig Anding
Date Created: 01/13/2016

Notes: Provide emergency battery pack lights in locker rooms and at the egress ways. Estimated 6 total.

System: D5030 - Communications and Security

Location: Fieldhouse and field

Distress: Beyond Service Life

Category: 4 - Capital Improvement

Priority: 1 - Response Time (< 2 yr)

Correction: Add/Replace Sound System

Qty: 1.00

Unit of Measure: LS

Estimate: $103,935.92

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Replace the existing sound system with a new sound system including One 1000W power amplifier with digital processing/speaker protection, one mixer with inputs for three microphones and four additional sources (iPod, CD, MP#, etc.), one Desk Top Announcer's Microphone, one A/C Power Distributer, Portable equipment Rack, UV Resistant Speaker Cable and accessory Cables for iPod, MP3, CD Player, etc.

System: D5030 - Communications and Security

Location: Fieldhouse Interior Building

Distress: Inadequate

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Add/Replace Clock System or Components

Qty: 1.00

Unit of Measure: Ea.

Estimate: $4,894.41

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Provide wireless master clock system with 5 battery operated clock.

System: E1090 - Other Equipment

Location: Fieldhouse Stands

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Remove wood bleacher plank seating and replace with aluminum plank seating - per seat - one seat for each 1.5'

Qty: 7,800.00

Unit of Measure: Seat

Estimate: $2,057,161.96

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Replace all bleacher seating with fiberglass or aluminum seating; 15 rows 300ft long on Visitor Stands, 18 rows 400ft long on Home Stands (11,700 ft. of seating - 7800 "seats")

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

System: A2020 - Basement Walls

Location: Fieldhouse concrete beams and columns

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Repair spalled concrete - pick the appropriate repair and insert the SF of wall area

Qty: 600.00

Unit of Measure: S.F.

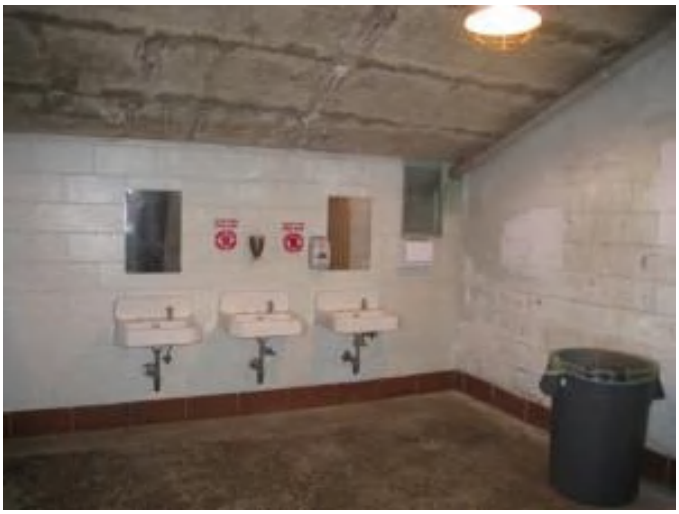
Estimate: $53,284.73

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Repair concrete beams and columns at passageways through fieldhouses; 12 openings, 7ftx4ft each (600sf of concrete)

System: B1010 - Floor Construction



Location: Fieldhouse stands - underside of concrete seating surface

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Repair rebar and epoxy grout exposed rebar on the underside of floors and floor beams

Qty: 3,000.00

Unit of Measure: S.F.

Estimate: $243,256.08

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Resurface all concrete surfaces underneath where exposed as ceilings (3,000sf)

System: B1010 - Floor Construction

Location: Fieldhouse stands - concrete surface

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Repair spalled concrete floor - pick the correct repair and insert the SF of floor area

Qty: 22,000.00

Unit of Measure: S.F.

Estimate: $138,905.15

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Resurface all concrete surfaces on top under seating, suitable for foot traffic (22,000sf)

System: B2030 - Exterior Doors

Location: Fieldhouse exterior

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace exterior doors - per leaf

Qty: 16.00

Unit of Measure: Ea.

Estimate: $145,717.13

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Replace all exterior personnel doors and frames: 8, visitor side; 8 home side (16 3x7)

System: B2030 - Exterior Doors

Location: Fieldhouse exterior

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 13.00

Unit of Measure: Ea.

Estimate: $114,790.57

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Repaint rollup doors, lintels, and steel jamb guards: 3, visitor side; 5 home side (13 8'w x 7'h)

System: C1020 - Interior Doors

Location: Fieldhouse interior doors

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace hollow metal frames and doors

Qty: 6.00

Unit of Measure: Ea.

Estimate: $30,467.92

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: New interior doors and hardware (6 3x7)

System: C1030 - Fittings

Location: Fieldhouse toilet rooms
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Remove and replace toilet partitions
Qty: 20.00
Unit of Measure: Ea.
Estimate: $51,328.09
Assessor Name: Craig Anding
Date Created: 02/03/2016

Notes: Replace toilet partitions- estimated total count for all toilet rooms, both fieldhouses (not all toilet rooms were inspected): (20 toilets, 16 urinals, 20 lavatories)

System: C1030 - Fittings

Location: Fieldhouse locker rooms
Distress: Failing
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Remove and replace lockers - select size
Qty: 60.00
Unit of Measure: Ea.
Estimate: $39,520.87
Assessor Name: Craig Anding
Date Created: 02/03/2016

Notes: Replace locker room dividers with lockers for football and baseball uniform storage and changing (60 lockers)

System: C1030 - Fittings

Location: Fieldhouse toilet rooms

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace toilet accessories - select accessories and quantity

Qty: 20.00

Unit of Measure: Ea.

Estimate: $16,096.69

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Replace toilet room accessories – estimated (20 toilet paper, 10 soap, 10 paper towel, 10 waste cans)

System: C3010230 - Paint & Covering

Location: Fieldhouse interior walls

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Repair substrate and repaint interior concrete or CMU walls - SF of wall surface

Qty: 16,000.00

Unit of Measure: S.F.

Estimate: $120,032.02

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Repaint all interior walls (16,000sf)

System: C3020413 - Vinyl Flooring

Location: Fieldhouse floors
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Remove VAT and replace with VCT - SF of area
Qty: 4,000.00
Unit of Measure: S.F.
Estimate: $60,666.67
Assessor Name: Craig Anding
Date Created: 02/03/2016

Notes: Replace VAT with VCT (4,000sf)

System: C3020415 - Concrete Floor Finishes

Location: Fieldhouse floors
Distress: Appearance
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Clean and reseal concrete floors
Qty: 18,000.00
Unit of Measure: S.F.
Estimate: $69,201.60
Assessor Name: Craig Anding
Date Created: 02/03/2016

Notes: Refinish all interior concrete floor slabs (18,000sf)

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 18.00

Unit of Measure: Ea.

Estimate: $134,318.66

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace all water closets in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 16.00

Unit of Measure: Ea.

Estimate: $60,976.20

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace all lavatories in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace water fountains to meet ADA - includes high and low fountains and new recessed alcove

Qty: 2.00

Unit of Measure: Ea.

Estimate: $31,385.79

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: 4. Replace the drinking fountains. These units are well beyond their service life and most are NOT accessible type.

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or replace stall or floor type urinal

Qty: 6.00

Unit of Measure: Ea.

Estimate: $31,274.51

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace all urinals in the building with lower flow fixtures, as the fixtures are original.

System: D3060 - Controls & Instrumentation

Location:	Throughout the building
Distress:	Beyond Service Life
Category:	3 - Operations / Maint.
Priority:	2 - Response Time (2-3 yrs)
Correction:	Replace pneumatic controls with DDC (75KSF)
Qty:	24,000.00
Unit of Measure:	S.F.
Estimate:	$514,850.21
Assessor Name:	Craig Anding
Date Created:	02/17/2016

Notes: Replace the electric controls for the HVAC systems with modern DDC modules or electric, valves and actuators to improve reliability and energy efficiency.

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

System: D2030 - Sanitary Waste

Location: Throughout the 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. (+50KSF)

Qty: 24,000.00

Unit of Measure: S.F.

Estimate: $117,737.90

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Hire a qualified contractor to perform a detailed examination of the sanitary waste piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.

System: D3020 - Heat Generating Systems

Location: Main boiler mechanical equipment room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace boiler, cast iron sectional (50 HP)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $245,555.06

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace one 1,356 MBH Weil McLain boiler, model series 588 for the Away Stands

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System: D3040 - Distribution Systems

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Perform testing to identify and replace damaged steam and condensate piping.

Qty: 24,000.00

Unit of Measure: S.F.

Estimate: $227,048.93

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Hire a qualified contractor to examine the steam and condensate piping in service for 85 years and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.

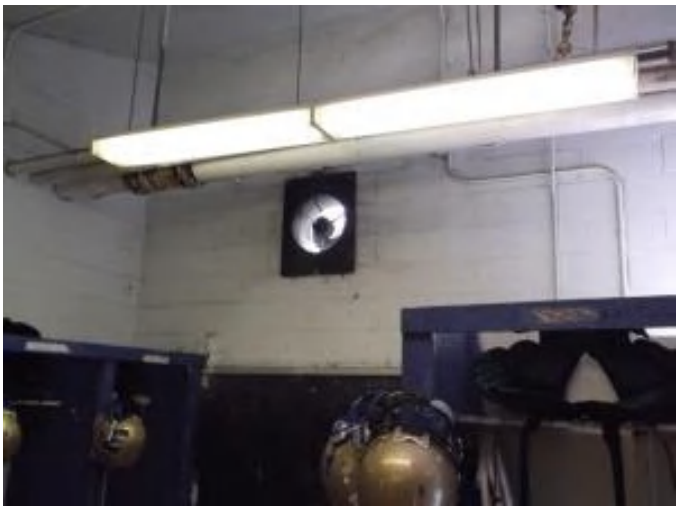
Priority 5 - Response Time (> 5 yrs):

System: D2020 - Domestic Water Distribution

Location: Throughout the building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 5 - Response Time (> 5 yrs)
Correction: Replace domestic water piping (75 KSF)
Qty: 24,000.00
Unit of Measure: S.F.
Estimate: $121,616.60
Assessor Name: Craig Anding
Date Created: 02/17/2016

Notes: Inspect and replace the original as needed the domestic water piping in the building.

System: D4010 - Sprinklers



Location: Throughout the building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 5 - Response Time (> 5 yrs)
Correction: Install a fire protection sprinkler system
Qty: 24,000.00
Unit of Measure: S.F.
Estimate: $343,330.72
Assessor Name: Craig Anding
Date Created: 02/17/2016

Notes: Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property. A fire pump may be required depending on the available city water pressure. Install a new sprinkler system throughout the building

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, cast iron, gas & oil, steam, 2700 MBH	2.00	Ea.	Main boiler mechanical equipment room	Weil McLain	Series 1094			35			$91,900.60	$202,181.32
D3020 Heat Generating Systems	Boiler, cast iron, gas & oil, steam, 2700 MBH	2.00	Ea.	Main boiler mechanical equipment room	Weil McLain	Series 588			35			$91,900.60	$202,181.32
												Total:	**$404,362.64**

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:	Stands
Gross Area (SF):	24,000
Year Built:	1963
Last Renovation:	
Replacement Value:	$4,453,680
Repair Cost:	$235,640.45
Total FCI:	5.29 %
Total RSLI:	53.36 %

Description:

Facility Condition Assessment

October 2015

School District of Philadelphia
George Washington High School Fieldhouses, Stands, and Field
10175 Bustleton Avenue
Philadelphia, PA 19116

12,000sf - Home Fieldhouse and Stands; 10,000sf - Visitor Fieldhouse and Stands LN 08

George Washington High School Fieldhouses and Grandstands are located on the same property as the high school building but use the street address of 800 Selmar Avenue. The Football Fieldhouses were constructed at the same time as the original high school building in 1963 and remain in use today. The Home Fieldhouse building is 12,000sf and has men's and women's toilets and lockers, spectator toilet rooms, an announcement booth, and storage rooms. The Visitor Fieldhouse building is 10,000sf and has storage rooms and spectator men's and women's toilets. Both Fieldhouses have spectator bleachers built on top of the fieldhouse spaces below and are supported by the Fieldhouses, serving as the roofs over the Fieldhouses. The football field grounds manager led the inspection team through the buildings.

ARCHITECTURAL/STRUCTURAL SYSTEMS

Both fieldhouses are slab on grade construction. Foundations and footings could not be seen.

Floor slabs on grade in both Fieldhouses are in fair condition with no major cracking or spalling observed. There is a small announcement booth at the top of the Home Fieldhouse constructed of brick with a concrete slab; it is accessed from the top level of the stands, however it was locked at the time of inspection and its inside could not be inspected. There is no booth at the top of the Visitor Fieldhouse building.

There are no roofs over the Fieldhouses; the concrete base which forms the stands serves as the roof over the inside areas of the Fieldhouse. The announcement booth at the top of the home fieldhouse has a small roof which was not seen at the time of inspection. The stands are supported on concrete columns and beams. The Home Fieldhouse has 7 openings that allow spectators to walk under the stands to get to the restrooms. The Visitor Fieldhouse has 5 openings for passage to restrooms. At the outside corners of all openings in both fieldhouses, the descending concrete beams that form the tops of the passageways has undergone extensive deterioration. There is so much concrete loss that the reinforcing rods are exposed and gaps have opened along the edges of the wall-ceiling intersection where ceiling and wall beams are supposed to be tied together as a structural unit. The concrete deck forming the ceilings of the passageways is also spalling exposing reinforcing rods. When walking on the top of the deck (the floor of the grandstands above the fieldhouses), extensive concrete spalling and reinforcing rod exposure was also observed. A structural engineer should perform a detailed inspection of both fieldhouses to ascertain the structural stability of the buildings and to determine how to repair the spalling concrete. For the purpose of this study, cleaning of reinforcing rods and reapplying of a new concrete coatings will be estimated to provide a basis of repairs, however it is possible that both structures are beyond repair and are no longer safe.

Exterior walls that form the exterior ends of the Home and Visitor Fieldhouses are constructed brick. The walls are exposed on the back with doors into the storage and toilet room spaces; the descending stands form triangular brick sides; there is no wall on the front field side because the stands descend down to grade. There little cracking of brickwork, which is in good condition. Dirt stains are present on the end walls under the concrete beams. The outside of the announcement booth is painted brick, in good condition.

Exterior personnel doors on both Fieldhouses are 3x7 hollow metal doors and frames. They are damaged, have faded paint and many are rusted. All doors, frames, and hardware need to be replaced with rugged FRP doors that the District has started using for replacement doors. The Fieldhouses have painted steel roll-up doors for access into storage rooms. They are in fair condition and need to be repainted.

There are no windows in the Fieldhouses.

Roofing over the announcement booth was not seen. There is no roofing over any other section of these structures.

Interior partitions in both fieldhouses are constructed of concrete masonry units (block) in toilet rooms, storage rooms, and locker areas. Locker room interior walls are structurally sound and in good physical condition. Painted block walls need a new coat of paint.

Interior doors are hollow metal with steel frames. All frames are steel and are damaged, rusted and beyond repair. All doors and frames require replacement.

Fittings in the fieldhouses consist of toilet partitions, doors, and accessories. The original transite partition dividers that separate the toilet stalls still remain, but all fronts and doors were changed to HDPE (high density polyethylene) plastic partitions. Transite dividers should be tested for asbestos and if they are found to contain asbestos, they should be removed and replaced with HDPE dividers, matching the doors and fronts. Plastic and metal toilet room accessories are installed in all toilet rooms but components are missing or broken. Missing and broken components should be replaced. Football and baseball locker areas have painted plywood or particle board dividers between player's uniform storage areas in poor condition; new dividers are needed.

There are no stairs in either fieldhouse. The concrete base of the stands forms the seating risers and the stairways up the stands. Spectators walk up the stands on both sides of the passageway opening. There are railings protecting the openings, but the railings do not comply with present day building codes and should be replaced with code compliant railings.

Floor finishes throughout both buildings are exposed concrete and VAT (vinyl asbestos tile). Some toilet rooms have VAT, some have concrete. Most spaces are exposed concrete that is stained, dirty, and in need of refinishing with new sealer or paint. VAT is also dirty, stained and needs to be replaced. The announcement booth floor was not seen at the time of inspection.

Ceilings in both fieldhouses are mostly exposed concrete; ceilings are actually the bottom of the concrete sloped, stepped slab that supports bleacher seating. Where exposed in Fieldhouse spaces, concrete is spalling exposing reinforcing rods, like the spalling exposed beams and columns at each of the passageways, further demonstrating the extensive nature of the concrete

decomposition. Some rooms have painted ceilings, but the spalling concrete and rusting reinforcing rods show through. A new protective coating is required to prevent further concrete spalling.

Furnishings in the Fieldhouses consist of wooden bleacher seating, attached to the top of the stepped concrete surface. Wooden seating surfaces are constructed of what appears to be 5/4" x 6" planks bolted to steel supports, which are bolted to the concrete. Wood is aged, warped, and splintering. It is nearly impossible to sit on these surfaces without getting splinters. Pipe railings used at the ends of the aisles do not comply with today's codes with respect to guard railing height also; handrails are not provided in conjunction with the guards as is required by building codes today. New bleacher seating, handrails, and guards are required on visitor and home side grandstands.

MECHANICAL SYSTEMS

NO MECHANICAL

ELECTRICAL SYSTEMS

NO ELECTRICAL

GROUNDS SYSTEMS

The football field playing surface is natural grass, which is in poor condition. Areas of dead grass and dirt can be seen at almost every 10 yard line up the middle of the field. The playing surface is lumpy and uneven. Football goalposts need repainting. The track surrounding the field is overgrown with weeds to the point where it could be difficult to use this track for competitive running without the risk of runners tripping on the weedy uneven surface. There are concrete ramps up almost 3 feet from the ground level to the lowest level of the stands, but there is inadequate space for wheelchair parking in the walkway at the base of the stands, without blocking the circulation space across the front of the stands. Fences surrounding the field are rusting and in poor condition. Asphalt paving surrounding the stands is failing and needs to be completely replaced with new pavement.

RECOMMENDATIONS

Replace all exterior personnel doors and frames: 8, visitor side; 8 home side (16 3x7)

Repaint rollup doors, lintels, and steel jamb guards: 3, visitor side; 5 home side (13 8'w x 7'h)

Refinish all interior concrete floor slabs (18,000 sf)

Replace VAT with VCT (4,000 sf)

Repaint all interior walls (16,000 sf)

New interior doors and hardware (6 3x7)

Replace toilet partitions- estimated total count for all toilet rooms, both fieldhouses (not all toilet rooms were inspected): (20 toilets, 16 urinals, 20 lavatories)

Replace toilet room accessories – estimated (20 toilet paper, 10 soap, 10 paper towel, 10 waste cans)

Replace locker room dividers with lockers for football and baseball uniform storage and changing (60 lockers)

Replace all bleacher seating with fiberglass or aluminum seating; 15 rows 300 ft long on Visitor Stands, 18 rows 400 ft long on Home Stands (11,700 ft. of seating)

Replace all handrails/guards with code compliant systems along edge of seating, open passageways and bottom of grandstands (300ft handrails/guards; 800ft guards only at bottom and openings)

Repair concrete beams and columns at passageways through fieldhouses; 12 openings, 7ftx4ft each(600 sf of concrete)

Resurface all concrete surfaces on top under seating, suitable for foot traffic (22,000 sf)

Resurface all concrete surfaces underneath where exposed as ceilings (3,000 sf)

GROUNDS

Repair/replant football field grass (100,000 sf)

Provide new track around football field (30,000 sf)

Repaint goalposts (100 sf)

Repave asphalt walkways used for pedestrian access around the fieldhouses on field sides and back sides of Home and Visitor Fieldhouses (30,000 sf)

Repaint chain link fencing surrounding track and field (5,000 sf)

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B803903
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S803001		

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	48.00 %	0.00 %	$0.00
A20 - Basement Construction	48.00 %	0.00 %	$0.00
B10 - Superstructure	48.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	0.00 %	0.00 %	$0.00
B30 - Roofing	0.00 %	0.00 %	$0.00
C20 - Stairs	12.50 %	0.00 %	$0.00
D50 - Electrical	118.61 %	43.35 %	$235,640.45
E20 - Furnishings	0.00 %	0.00 %	$0.00
Totals:	**53.36 %**	**5.29 %**	**$235,640.45**

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.	24,000	100	1963	2063		48.00 %	0.00 %	48			$258,000
A1030	Slab on Grade	$17.93	S.F.	24,000	100	1963	2063		48.00 %	0.00 %	48			$430,320
A2010	Basement Excavation	$0.62	S.F.	24,000	100	1963	2063		48.00 %	0.00 %	48			$14,880
A2020	Basement Walls	$8.99	S.F.	24,000	100	1963	2063		48.00 %	0.00 %	48			$215,760
B1010	Floor Construction	$107.59	S.F.	24,000	100	1963	2063		48.00 %	0.00 %	48			$2,582,160
B2010	Exterior Walls	$125.87	S.F.		100				0.00 %	0.00 %				$0
B2030	Exterior Doors	$7.92	S.F.		40				0.00 %	0.00 %				$0
B3010120	Single Ply Membrane	$24.21	S.F.		20				0.00 %	0.00 %				$0
C2010	Stair Construction	$17.04	S.F.	24,000	40	1963	2003	2020	12.50 %	0.00 %	5			$408,960
D5010	Electrical Service/Distribution	$2.42	S.F.	24,000	20	1963	1983	2047	160.00 %	154.31 %	32		$89,624.86	$58,080
D5020	Lighting and Branch Wiring	$14.83	S.F.	24,000	20	1963	1983	2037	110.00 %	38.23 %	22		$136,058.49	$355,920
D5030	Communications and Security	$4.20	S.F.	24,000	15	1963	1978	2032	113.33 %	9.88 %	17		$9,957.10	$100,800
D5090	Other Electrical Systems	$1.20	S.F.	24,000	20	1963	1983	2047	160.00 %	0.00 %	32			$28,800
E2010	Fixed Furnishings	$0.00	S.F.	24,000	40	1963	2003	2020	12.50 %	0.00 %	5			$0
								Total	**53.36 %**	**5.29 %**			**$235,640.45**	**$4,453,680**

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.

Site Assessment Report - B803903;Washington - grandstands

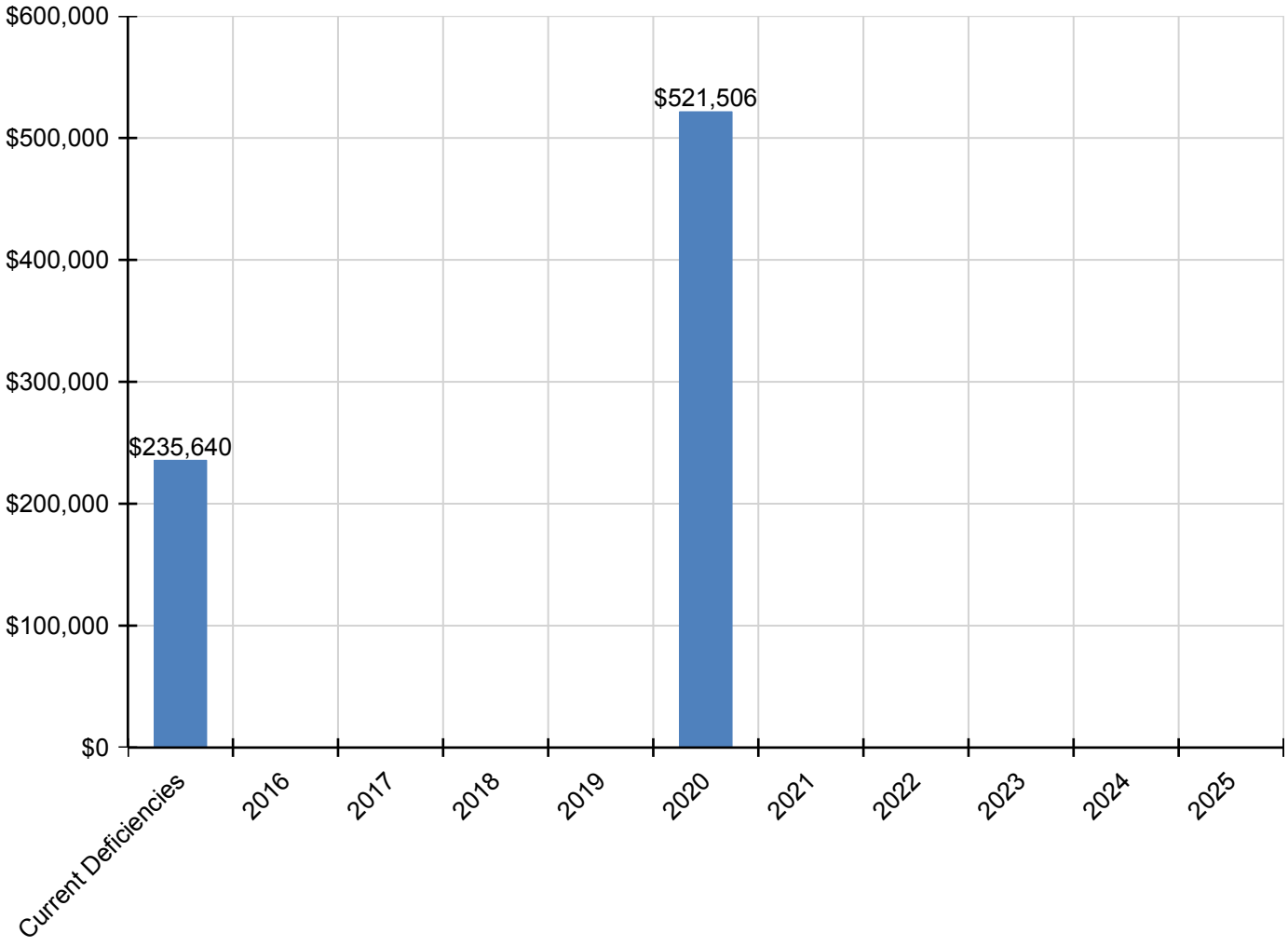
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$235,640**	**$0**	**$0**	**$0**	**$0**	**$521,506**	**$0**	**$0**	**$0**	**$0**	**$0**	**$757,147**
*** 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**
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	$521,506	$0	$0	$0	$0	$0	**$521,506**
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	$89,625	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$89,625**
D5020 - Lighting and Branch Wiring	$136,058	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$136,058**
D5030 - Communications and Security	$9,957	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$9,957**
D5090 - Other Electrical Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E - Equipment & Furnishings	$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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

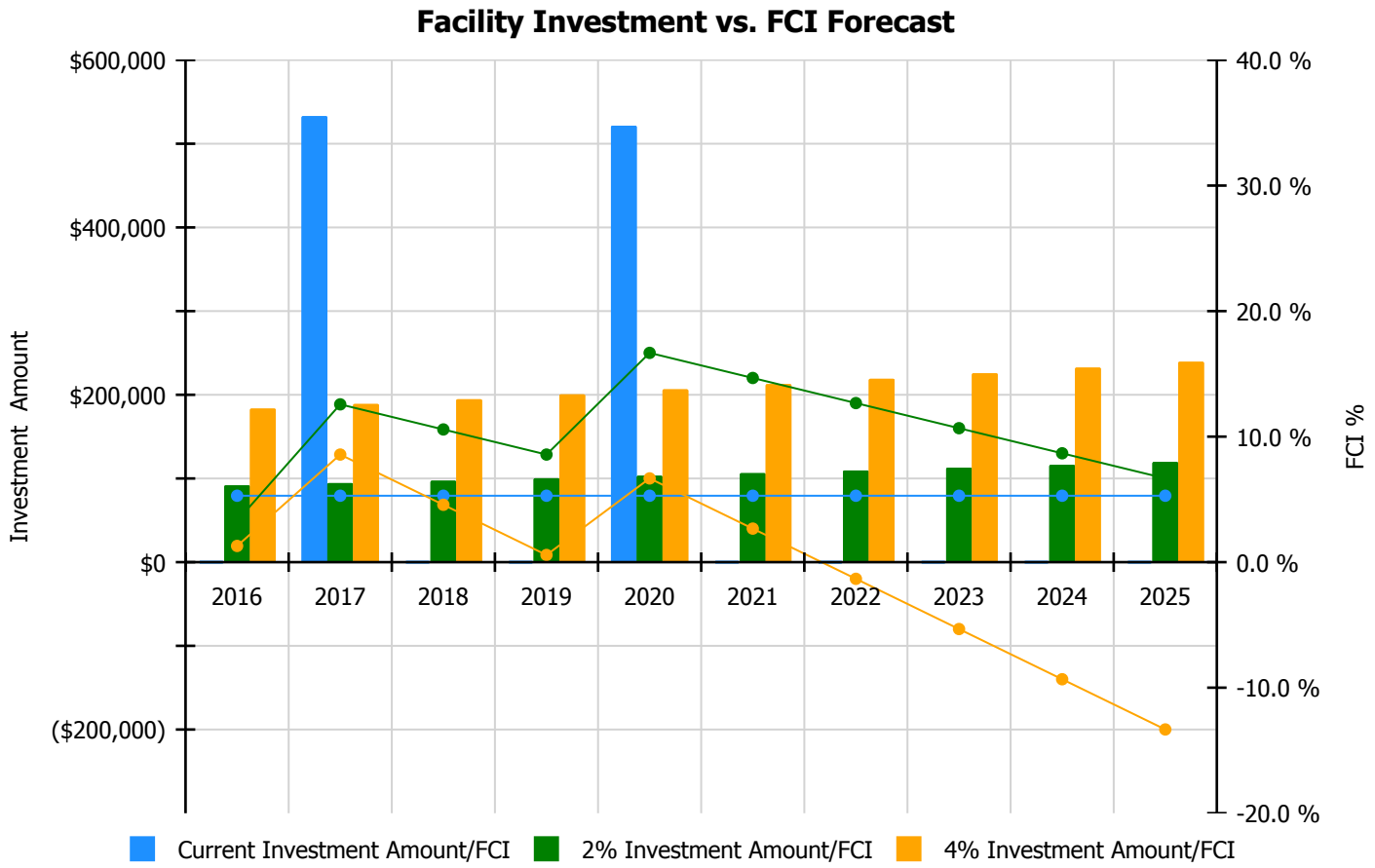
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

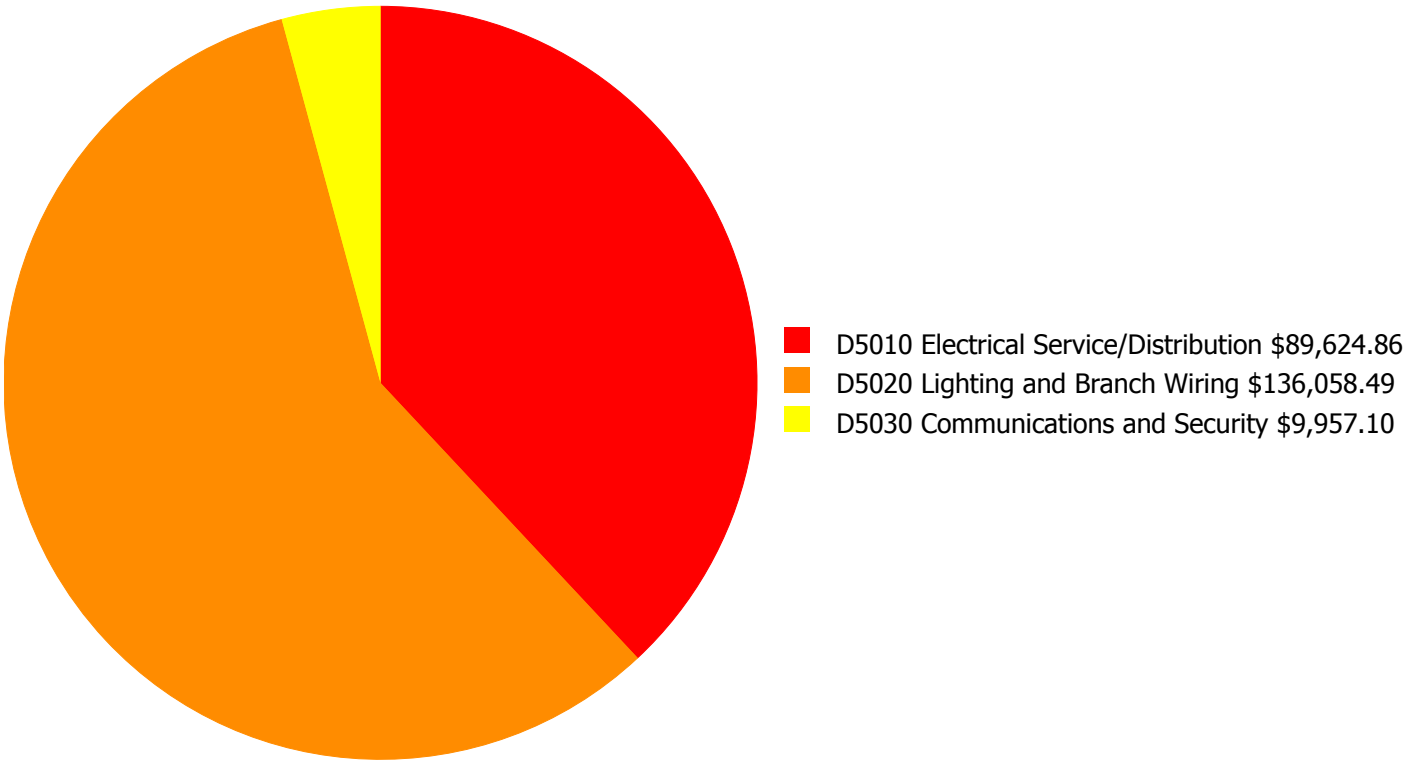
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 5.29%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$91,746.00	3.29 %	$183,492.00	1.29 %
2017	$532,988	$94,498.00	12.57 %	$188,996.00	8.57 %
2018	$0	$97,333.00	10.57 %	$194,666.00	4.57 %
2019	$0	$100,253.00	8.57 %	$200,506.00	0.57 %
2020	$521,506	$103,261.00	16.67 %	$206,521.00	6.67 %
2021	$0	$106,359.00	14.67 %	$212,717.00	2.67 %
2022	$0	$109,549.00	12.67 %	$219,099.00	-1.33 %
2023	$0	$112,836.00	10.67 %	$225,672.00	-5.33 %
2024	$0	$116,221.00	8.67 %	$232,442.00	-9.33 %
2025	$0	$119,707.00	6.67 %	$239,415.00	-13.33 %
Total:	**$1,054,494**	**$1,051,763.00**		**$2,103,526.00**	

Deficiency Summary by System

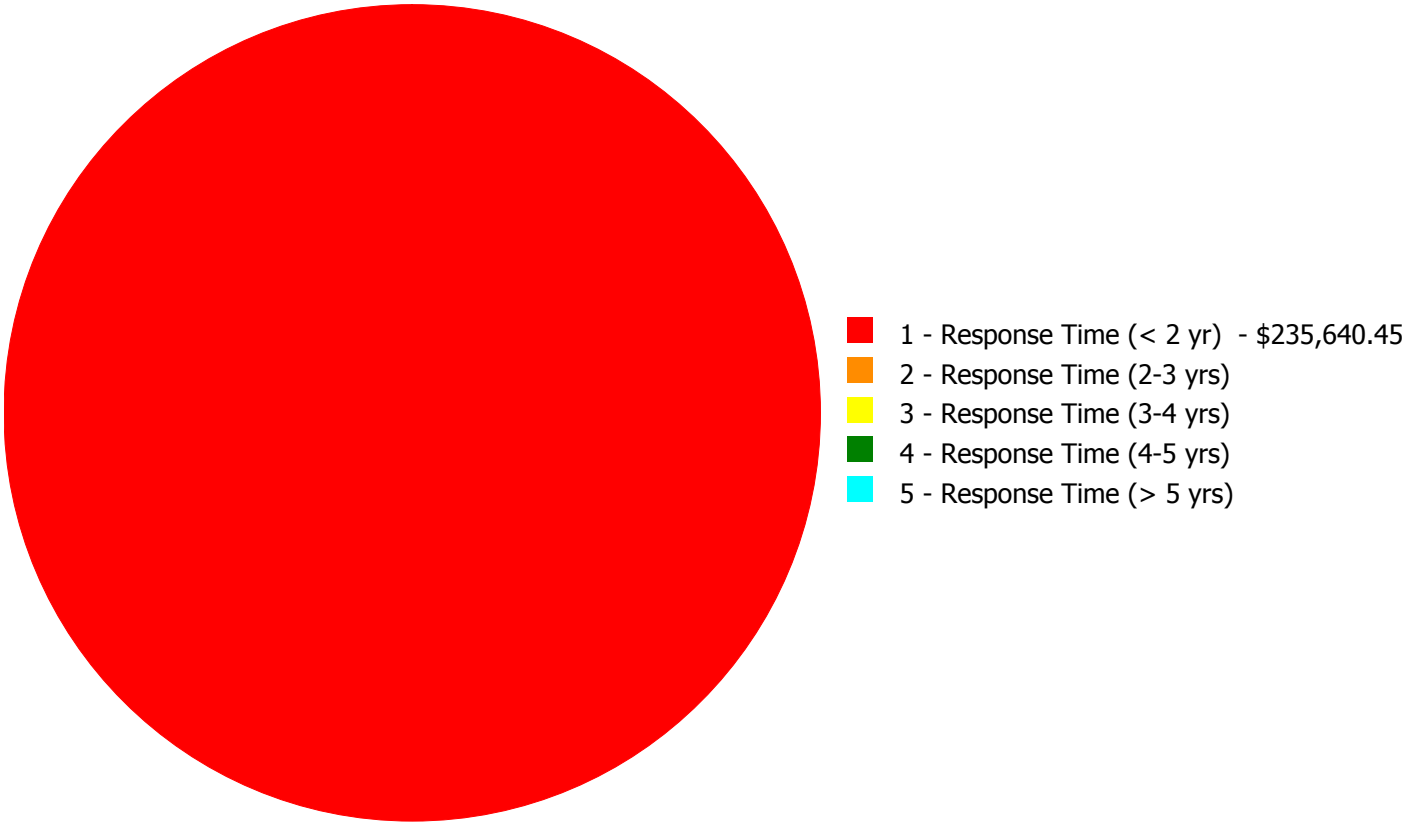
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $235,640.45

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: $235,640.45

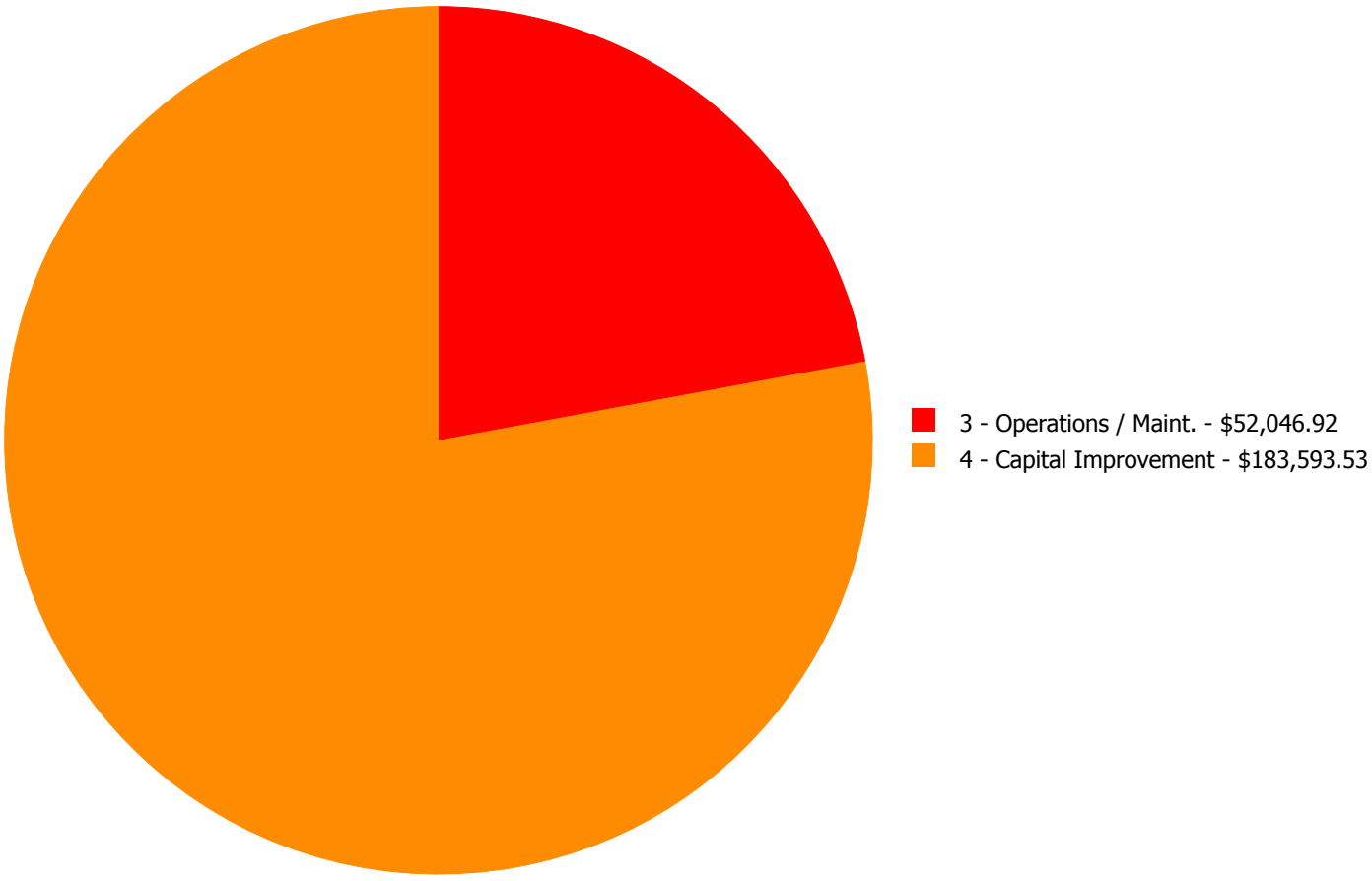
Deficiency By Priority Investment Table

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
D5010	Electrical Service/Distribution	$89,624.86	$0.00	$0.00	$0.00	$0.00	$89,624.86
D5020	Lighting and Branch Wiring	$136,058.49	$0.00	$0.00	$0.00	$0.00	$136,058.49
D5030	Communications and Security	$9,957.10	$0.00	$0.00	$0.00	$0.00	$9,957.10
	Total:	$235,640.45	$0.00	$0.00	$0.00	$0.00	$235,640.45

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:



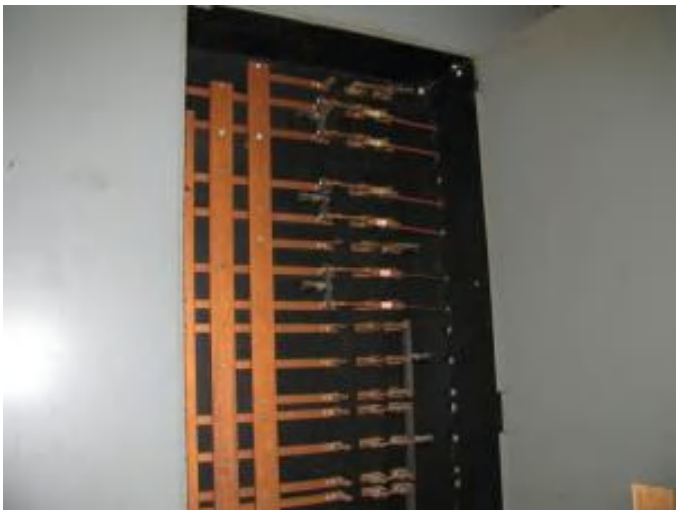
Budget Estimate Total: $235,640.45

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):

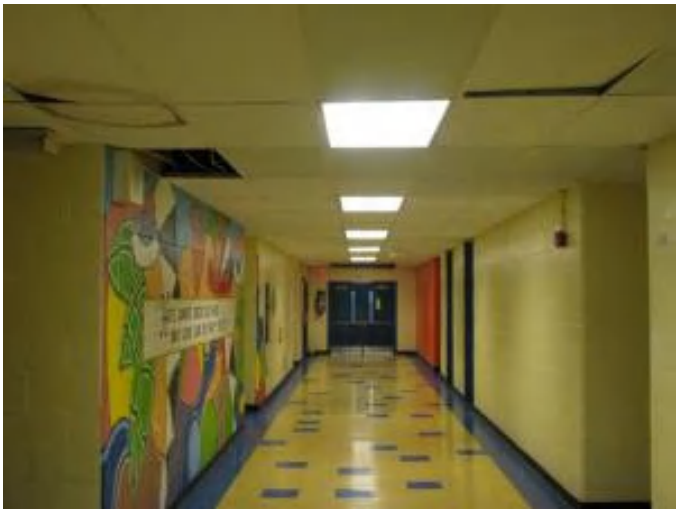
System: D5010 - Electrical Service/Distribution



Location: Interior Building
Distress: Beyond Service Life
Category: 4 - Capital Improvement
Priority: 1 - Response Time (< 2 yr)
Correction: Replace Electrical Distribution System (U)
Qty: 1.00
Unit of Measure: Ea.
Estimate: $89,624.86
Assessor Name: Steven Litman
Date Created: 12/30/2015

Notes: Upgrade existing distribution system by replacing new panel boards and new feeders. Provide arc flash label on all panel boards. Estimated 4 panels.

System: D5020 - Lighting and Branch Wiring



Location: Entire Building
Distress: Beyond Service Life
Category: 4 - Capital Improvement
Priority: 1 - Response Time (< 2 yr)
Correction: Replace lighting fixtures
Qty: 1.00
Unit of Measure: Ea.
Estimate: $84,011.57
Assessor Name: Steven Litman
Date Created: 01/13/2016

Notes: Replace existing lighting fixtures in the classrooms with new fluorescent lighting fixtures with T-8 lamps. Estimated 200 fixtures.

System: D5020 - Lighting and Branch Wiring

Location: Classrooms

Distress: Inadequate

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Add wiring device

Qty: 1.00

Unit of Measure: Ea.

Estimate: $52,046.92

Assessor Name: Tom Moe

Date Created: 12/30/2015

Notes: Install minimum two receptacles on each wall in class rooms. Estimated 80 receptacles.

System: D5030 - Communications and Security

Location: Annex Building

Distress: Beyond Service Life

Category: 4 - Capital Improvement

Priority: 1 - Response Time (< 2 yr)

Correction: Add/Replace Clock System or Components

Qty: 0.00

Unit of Measure: Ea.

Estimate: $9,957.10

Assessor Name: Steven Litman

Date Created: 01/13/2016

Notes: Replace all existing clocks with wireless battery type clocks. Estimated 20 clocks total.

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):	983,100
Year Built:	1963
Last Renovation:	
Replacement Value:	$14,278,161
Repair Cost:	$2,156,173.72
Total FCI:	15.10 %
Total RSLI:	56.10 %

Description:

Attributes:

General Attributes:

Bldg ID:	S803001	Site ID:	S803001

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	61.56 %	21.56 %	$2,156,173.72
G40 - Site Electrical Utilities	43.33 %	0.00 %	$0.00
Totals:	**56.10 %**	**15.10 %**	**$2,156,173.72**

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:

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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.
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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.		30				0.00 %	0.00 %				$0
G2020	Parking Lots	$7.65	S.F.	170,800	30	1963	1993	2028	43.33 %	0.00 %	13			$1,306,620
G2030	Pedestrian Paving	$11.52	S.F.	172,900	40	1963	2003	2037	55.00 %	36.78 %	22		$732,541.47	$1,991,808
G2040	Site Development	$4.36	S.F.	983,100	25	1963	1988	2029	56.00 %	33.21 %	14		$1,423,632.25	$4,286,316
G2050	Landscaping & Irrigation	$3.78	S.F.	639,400	15	1963	1978	2028	86.67 %	0.00 %	13			$2,416,932
G4020	Site Lighting	$3.58	S.F.	983,100	30	1963	1993	2028	43.33 %	0.00 %	13			$3,519,498
G4030	Site Communications & Security	$0.77	S.F.	983,100	30	1963	1993	2028	43.33 %	0.00 %	13			$756,987
								Total	**56.10 %**	**15.10 %**			**$2,156,173.72**	**$14,278,161**

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.

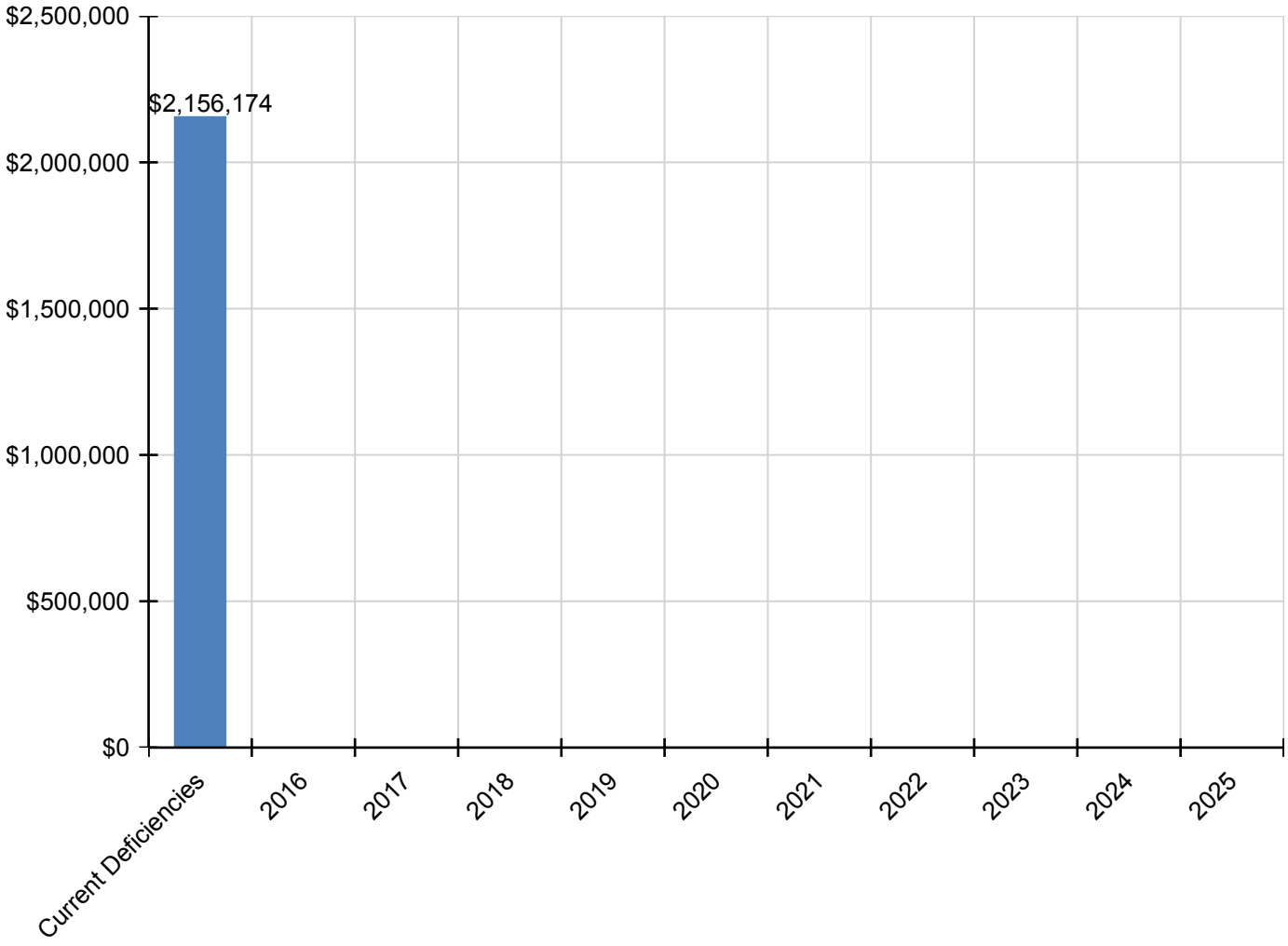
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$2,156,174**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$2,156,174**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2030 - Pedestrian Paving	$732,541	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$732,541**
G2040 - Site Development	$1,423,632	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,423,632**
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.

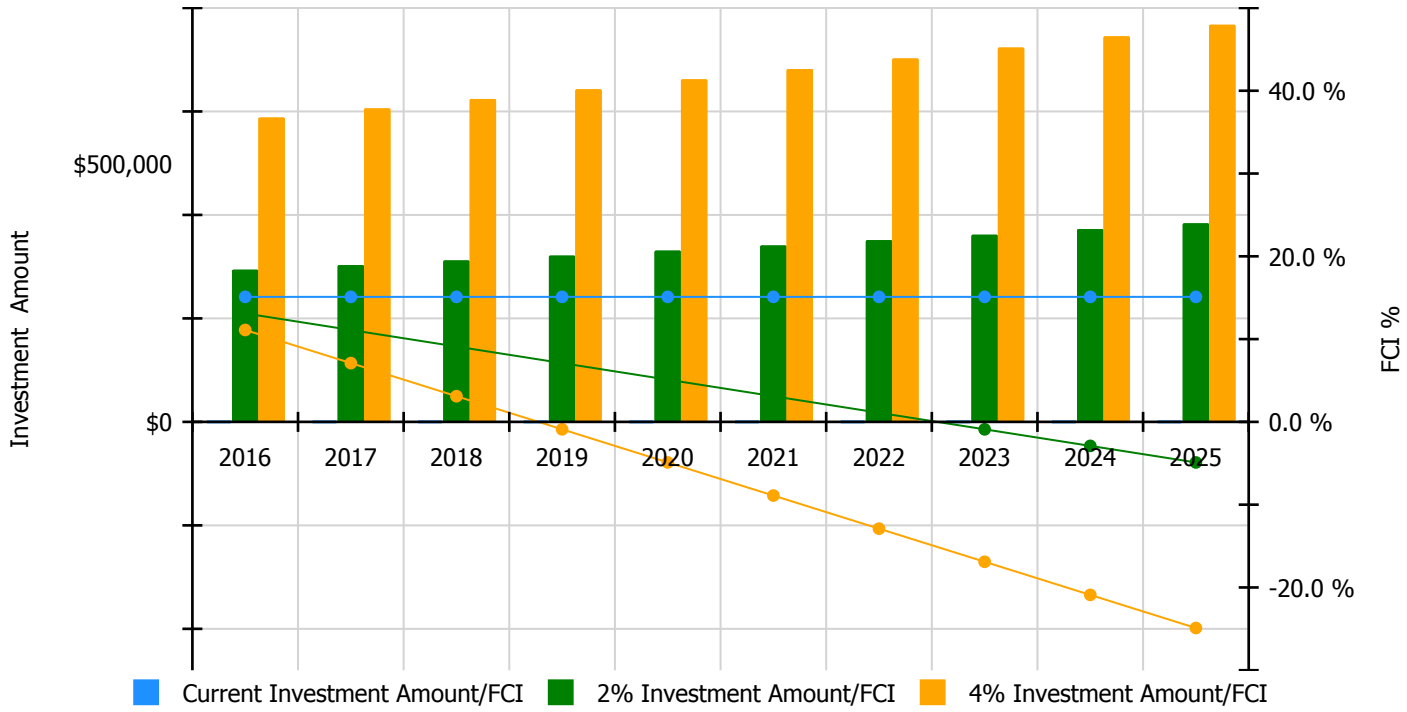


10 Year FCI Forecast by Investment Scenario

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

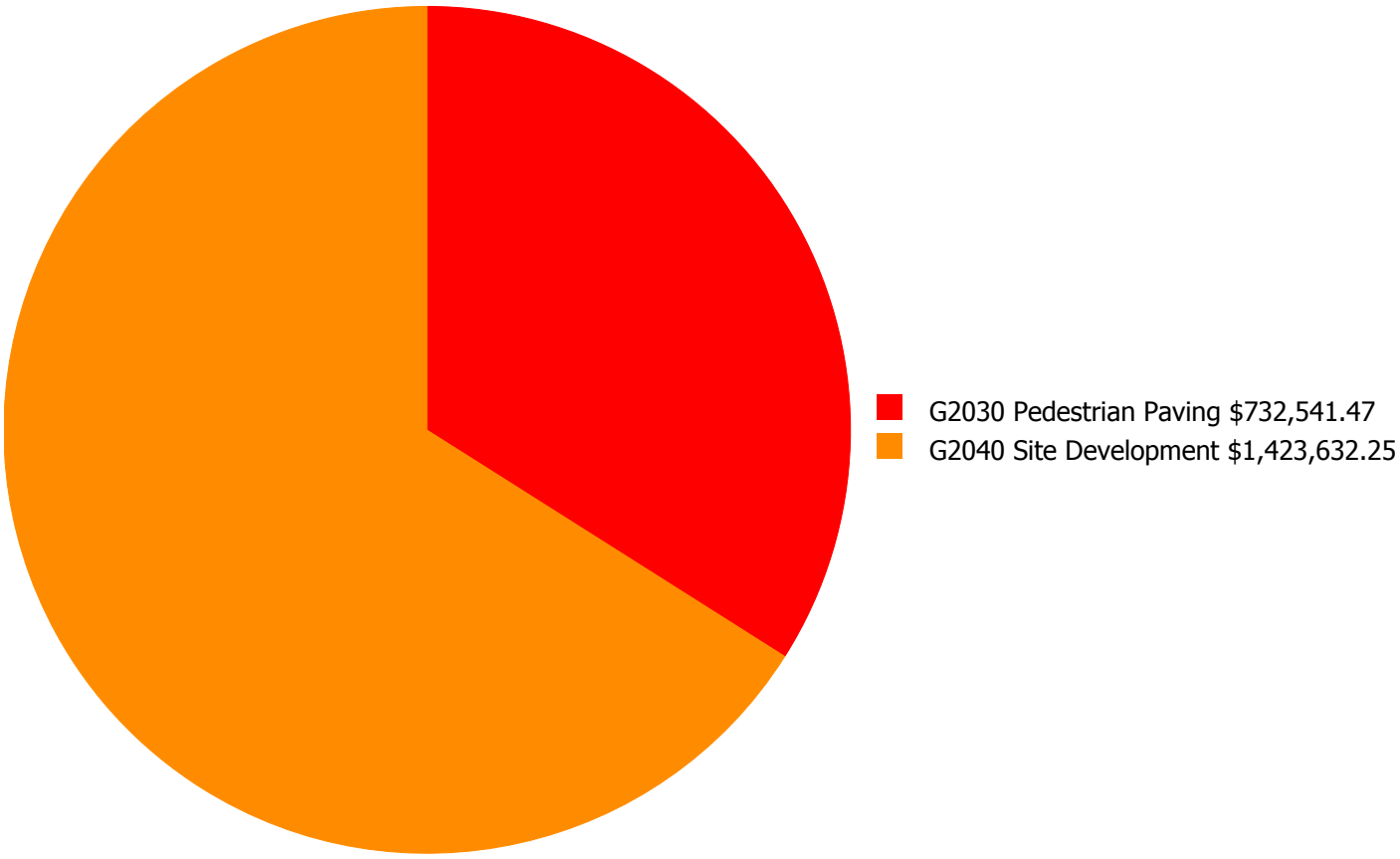
Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 15.1%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$294,130.00	13.10 %	$588,260.00	11.10 %
2017	$0	$302,954.00	11.10 %	$605,908.00	7.10 %
2018	$0	$312,043.00	9.10 %	$624,085.00	3.10 %
2019	$0	$321,404.00	7.10 %	$642,808.00	-0.90 %
2020	$0	$331,046.00	5.10 %	$662,092.00	-4.90 %
2021	$0	$340,977.00	3.10 %	$681,955.00	-8.90 %
2022	$0	$351,207.00	1.10 %	$702,413.00	-12.90 %
2023	$0	$361,743.00	-0.90 %	$723,486.00	-16.90 %
2024	$0	$372,595.00	-2.90 %	$745,190.00	-20.90 %
2025	$0	$383,773.00	-4.90 %	$767,546.00	-24.90 %
Total:	**$0**	**$3,371,872.00**		**$6,743,743.00**	

Deficiency Summary by System

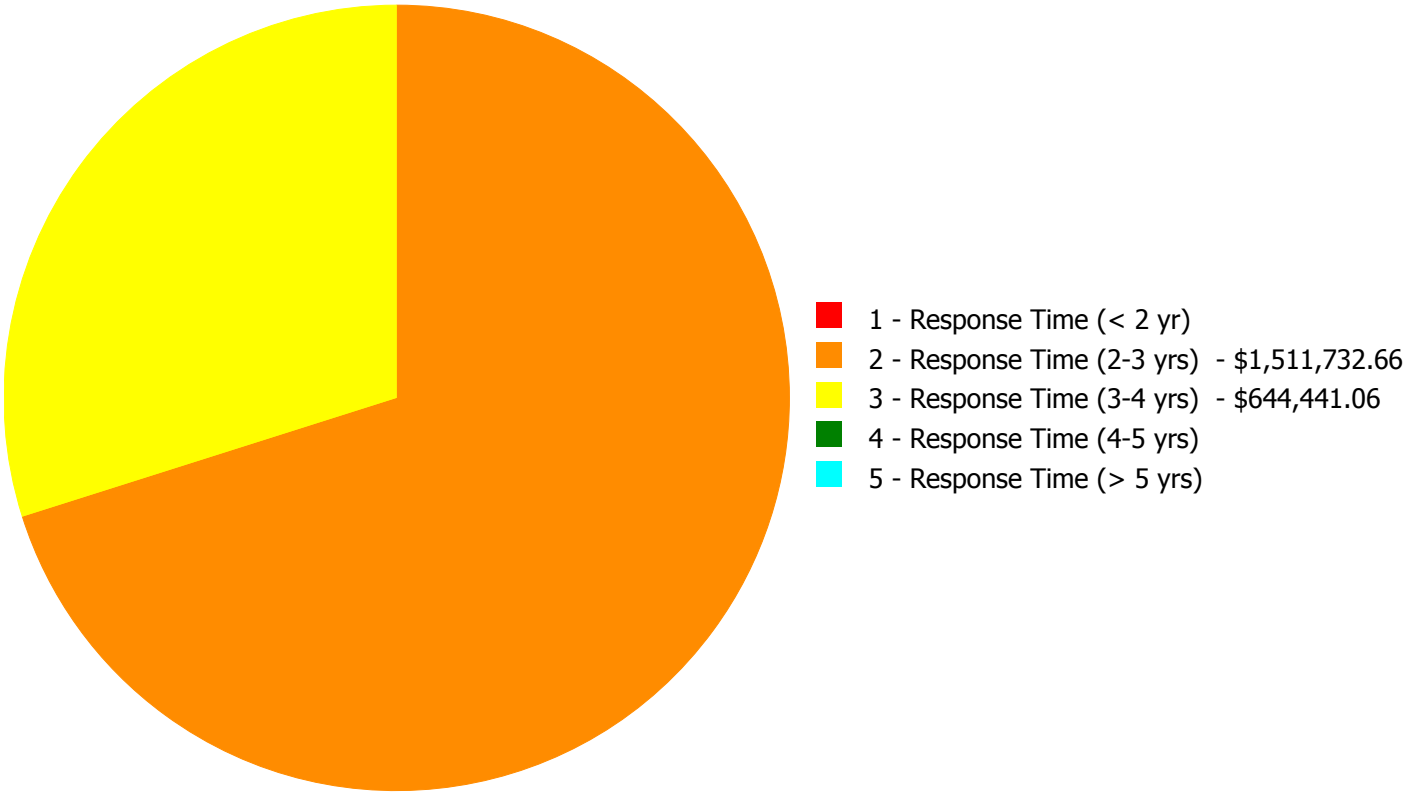
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $2,156,173.72

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: $2,156,173.72

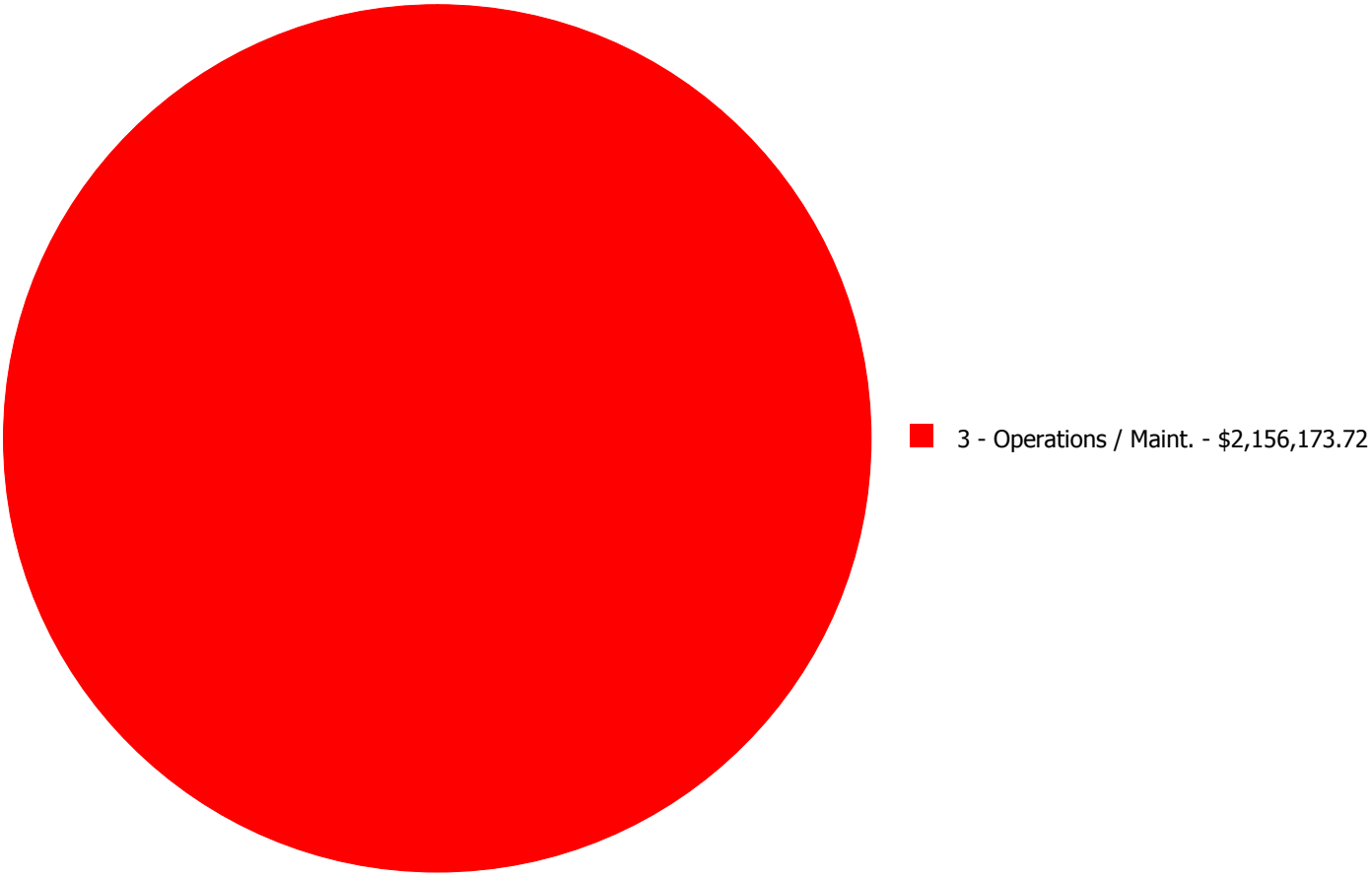
Deficiency By Priority Investment Table

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
G2030	Pedestrian Paving	$0.00	$88,100.41	$644,441.06	$0.00	$0.00	$732,541.47
G2040	Site Development	$0.00	$1,423,632.25	$0.00	$0.00	$0.00	$1,423,632.25
	Total:	$0.00	$1,511,732.66	$644,441.06	$0.00	$0.00	$2,156,173.72

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: $2,156,173.72

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: G2030 - Pedestrian Paving

Location: exterior stairs

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace exterior egress stairway - per flight

Qty: 2.00

Unit of Measure: Flight

Estimate: $67,964.41

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repair concrete treads/risers at misc. exterior stairs (23 treads, 8ft long; 13 treads 30ft long)

System: G2030 - Pedestrian Paving

Location: sidewalks

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 700.00

Unit of Measure: S.F.

Estimate: $10,068.00

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repave damaged sections of concrete walkway in courtyard and along Bustleton Ave (700sf)

System: G2030 - Pedestrian Paving

Location: sidewalks

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 700.00

Unit of Measure: S.F.

Estimate: $10,068.00

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repave damaged sections of concrete walkway in courtyard and along Bustleton Ave (700sf)

System: G2040 - Site Development

Location: Football field track

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: 30,000.00

Unit of Measure: S.F.

Estimate: $612,407.86

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Provide new track around football field (30,000sf)

System: G2040 - Site Development

Location: Football field

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Refurbish football field - based on approximate 90,000 SF grass field

Qty: 50,000.00

Unit of Measure: S.F.

Estimate: $581,475.12

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Repair/replant football field grass (50,000sf)

System: G2040 - Site Development

Location: site fence

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace chain link fence - 8' high

Qty: 1,000.00

Unit of Measure: L.F.

Estimate: $111,987.80

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repair/replace sections of rusted and damaged chain link fence surrounding site (1,000ft)

System: G2040 - Site Development

Location: Football field

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Paint steel picket fence - LF of fence 6' high

Qty: 1,300.00

Unit of Measure: L.F.

Estimate: $84,838.07

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Repaint chain link fencing surrounding track and field (5,000sf; 1300lf)

System: G2040 - Site Development

Location: faculty parking

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Repair concrete retaining wall in poor condition including rebar doweling - insert the SF of wall area

Qty: 100.00

Unit of Measure: S.F.

Estimate: $29,660.40

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repair/Reconstruct retaining walls leaning and broken in Faculty Parking on south side of building (20ft long x 5 ft. h.)

System: G2040 - Site Development

Location: Football field

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Paint steel picket fence - LF of fence 6' high

Qty: 50.00

Unit of Measure: L.F.

Estimate: $3,263.00

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Repaint goalposts (50sf)

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

System: G2030 - Pedestrian Paving

Location: walkways at front and in courtyard

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace AC paving

Qty: 38,000.00

Unit of Measure: S.F.

Estimate: $537,354.43

Assessor Name: Craig Anding

Date Created: 02/02/2016

Notes: Repave part of front drop off, asphalt walk in front of building, curb, and asphalt courtyard (38,000sf)

System: G2030 - Pedestrian Paving

Location: Fieldhouse asphalt paving

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Resurface AC pedestrian paving - grind and resurface

Qty: 30,000.00

Unit of Measure: S.F.

Estimate: $107,086.63

Assessor Name: Craig Anding

Date Created: 02/03/2016

Notes: Repave asphalt walkways used for pedestrian access around the fieldhouses on field sides and back sides of Home and Visitor Fieldhouses (30,000sf)

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