

Building Information - Shaker Heights City (44750) - Mercer Elem

Program Type	Classroom Facilities Assistance Program (CFAP) - Regular
Setting	Urban
Assessment Name	Mercer ES Assessment - Shaker Heights CSD - CFAP Update (11-2-21)
Assessment Date (on-site; non-EEA)	2015-02-17
Kitchen Type	Full Kitchen
Cost Set:	2016
Building Name	Mercer Elem
Building IRN	24307
Building Address	23325 Wimbledon Rd
Building City	Shaker Heights
Building Zipcode	44122
Building Phone	(216) 295-4070
Acreage	8.95
Current Grades:	K-4
Teaching Stations	30
Number of Floors	3
Student Capacity	615
Current Enrollment	340
Enrollment Date	2014-05-01
Enrollment Date is the date in which the current enrollment was taken.	
Number of Classrooms	24
Historical Register	NO
Building's Principal	J. Lindsay Florence
Building Type	Elementary

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Building Pictures - Shaker Heights City(44750) - Mercer Elem(24307)

North elevation photo:



East elevation photo:



South elevation photo:



West elevation photo:



GENERAL DESCRIPTION

76,818 Total Existing Square Footage

1952,1957 Building Dates

K-4 Grades

340 Current Enrollment

30 Teaching Stations

8.95 Site Acreage

The 76,818 sf school is situated in a neighborhood of Shaker Heights. The 8.95 acre site is surrounded by residences. The floors are framed with a combination of poured structural concrete and concrete pan joists. The original Georgian style 1952 building and 1957 addition are clad with reddish brown brick and punctuated with regularly spaced rectangular window openings with some having stone keystones and sills. The recently replaced windows reflect the original divided lights and have in interior wood finish with white painted frames on the exterior. Entrances to the building incorporate elements such as stone columns flanking entry and an arched transom over the door. The main entrance is flanked by stone columns and pilasters supporting a decorative stone lintel. Original sloped roof portions of the building are covered with slate. Most flat roof areas are covered with built-up systems that have been subsequently coated with a liquid applied reflective material. The boilers and air handling units are controlled with DDC controls and the rest of the controls are pneumatic and in fair to poor condition due to the equipment age. Generally, all the equipment has been well maintained. Overall, the ventilators and the air handling units in the building do not provide the required outside air delivery to meet OBC mechanical code. The DDC controls were added two years ago under an energy performance contract. The steam system does not provide a capacity for simultaneous heating and cooling operation which is not compliant with the OSDM requirements. The staff indicated that the site does not contain underground fuel tanks. Additional outlets have been added to the classrooms, but the classrooms are still not equipped with adequate electrical outlets. Adequate GFI protected exterior outlets are not provided around the perimeter of the building. There is no lightning protection. The overall electrical system does not meet OSDM requirements in supporting the current needs of the school and will be inadequate to meet the facility's future needs. The 4" domestic water supply is galvanized piping throughout most of the building. There is no backflow preventer on the incoming water service and no pressure reducing valve. The system provides adequate pressure and capacity for the facility's needs. There is no automatic fire suppression system in the building. The existing water supply system will not provide adequate support for a future fire suppression system.

No Significant Findings

PROBABLE INFLATION COST SUMMARY FOR SUMMER 2022

The building assessment costs in this report are based on OFCC Assessment Cost Guidelines 2021. Based on current market conditions, the following cost projections have been made for Summer 2022 construction. Cost years beyond 2022 have been calculated with a 3.5% inflation rate.

Facility Cost Assessment Adjusted for Inflation through Summer 2022		Estimated 2022 Assesment Cost	Cost/sf.
A	Heating System	\$3,137,210.25	\$40.84
B	Roofing	\$235,648.55	\$3.07
C	Ventilation / Air Conditioning	\$0.00	\$0.00
D	Electrical Systems	\$1,456,211.17	\$18.96
E	Plumbing and Fixtures	\$865,261.26	\$11.26
F	Windows	\$916.96	\$0.01
G	Structure: Foundation	\$731,465.43	\$9.52
H	Structure: Walls and Chimneys	\$148,353.33	\$1.93
I	Structure: Floors and Roofs	\$3,383.52	\$0.04
J	General Finishes	\$1,473,627.68	\$19.18
K	Interior Lighting	\$455,262.60	\$5.93
L	Security Systems	\$123,667.38	\$1.61
M	Emergency / Egress Lighting	\$82,406.51	\$1.07
N	Fire Alarm	\$123,608.76	\$1.61
O	Handicapped Access	\$569,099.91	\$7.41
P	Site Condition	\$455,243.90	\$5.93
Q	Sewage Systems	\$0.00	\$0.00
R	Water Supply	\$1,000.00	\$0.01
S	Exterior Doors	\$17,248.00	\$0.22
T	Hazardous Material	\$182,656.80	\$2.38
U	Life Safety	\$402,722.26	\$5.24
V	Loose Furnishings	\$393,692.25	\$5.13
W	Technology	\$905,173.38	\$11.78
X	Construction Contingency / Non-Construction Cost	\$2,848,454.18	\$37.08
ESCALATED OFCC GUIDELINE BUDGET (2021) - OME		\$14,612,314.08	\$190.22

OFCC 2021 COST GUIDELINES BUDGET

\$12,807,315.87

VARIANCE

\$1,804,998.21

VARIANCE %

14.09%

UNIT PRICE CONCERNS

Total

\$1,471,400.12

REV OFCC GUIDELINE UNIT PRICE BUDGET - OME

\$16,083,714.20

\$209.37

OFCC 2021 COST GUIDELINES BUDGET

\$12,807,315.87

VARIANCE

\$3,276,398.33

VARIANCE %

25.58%

LOCALLY FUNDED INITIATIVES

Total	\$6,443,683.01	
REV OFCC GUIDELINE UNIT PRICE BUDGET - OME	\$22,527,397.21	\$293.26
OFCC 2021 COST GUIDELINES BUDGET	\$12,807,315.87	
VARIANCE	\$9,720,081.34	
VARIANCE %	75.89%	

2022 Costs	\$22,527,397.21
2023 Costs with 3.5% inflation	\$23,315,856.11
2024 Costs with 3.5% inflation	\$24,131,911.08
2025 Costs with 3.5% inflation	\$24,976,527.96
2026 Costs with 3.5% inflation	\$25,850,706.44

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Building Construction Information - Shaker Heights City (44750) - Mercer Elem (24307)

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition	Built Under ELPP
Original Building	1952	yes	3	70,613	no	no
SW Classrooms	1957	yes	3	6,205	no	no

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Building Component Information - Shaker Heights City (44750) - Mercer Elem (24307)

Addition	Auditorium Fixed Seating	Corridors	Agricultural Education Lab	Primary Gymnasium	Media Center	Vocational Space	Student Dining	Kitchen	Natatorium	Indoor Tracks	Adult Education	Board Offices	Outside Agencies	Auxiliary Gymnasium
Original Building (1952)		13625		5504	1945		3322	319						
SW Classrooms (1957)		220												
Total	0	13,845	0	5,504	1,945	0	3,322	319	0	0	0	0	0	0
Master Planning Considerations		With an enrollment of 340 students, the student body could be accommodated by a facility of 43,750 sf. This building has 77,135 sf.												

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Existing CT Programs for Assessment

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Program Type	Program Name	Related Space	Square Feet
No Records Found			

Legend:

Not in current design manual

In current design manual but missing from assessment

Building Summary - Mercer Elem (24307)

District: Shaker Heights City				County: Cuyahoga		Area: Northeastern Ohio (8)	
Name: Mercer Elem				Contact: J. Lindsay Florence			
Address: 23325 Wimbledon Rd Shaker Heights, OH 44122				Phone: (216) 295-4070			
Bldg. IRN: 24307				Date Prepared: 2015-02-17		By: Kelton Waller	
				Date Revised: 2021-11-03		By: Bill Prenosil	
Current Grades		K-4	Acreage:		8.95		
Proposed Grades		N/A	Teaching Stations:		30		
Current Enrollment		340	Classrooms:		24		
Projected Enrollment		N/A					
Addition		Date	HA	Number of Floors	Current Square Feet		
<u>Original Building</u>		1952	yes	3	70,613		
<u>SW Classrooms</u>		1957	yes	3	6,205		
Total					76,818		
		*HA	=	Handicapped Access			
		*Rating	=1	Satisfactory			
			=2	Needs Repair			
			=3	Needs Replacement			
		*Const P/S	=	Present/Scheduled Construction			
FACILITY ASSESSMENT Cost Set: 2016				Rating	Dollar	Assessment	
A. <u>Heating System</u>				3	\$2,621,030.16	-	
B. <u>Roofing</u>				3	\$204,720.20	-	
C. <u>Ventilation / Air Conditioning</u>				1	\$0.00	-	
D. <u>Electrical Systems</u>				3	\$1,246,756.14	-	
E. <u>Plumbing and Fixtures</u>				3	\$751,726.00	-	
F. <u>Windows</u>				2	\$880.00	-	
G. <u>Structure: Foundation</u>				2	\$652,820.00	-	
H. <u>Structure: Walls and Chimneys</u>				2	\$146,856.15	-	
I. <u>Structure: Floors and Roofs</u>				2	\$3,360.00	-	
J. <u>General Finishes</u>				3	\$1,372,169.80	-	
K. <u>Interior Lighting</u>				3	\$399,090.00	-	
L. <u>Security Systems</u>				2	\$103,704.30	-	
M. <u>Emergency/Egress Lighting</u>				3	\$76,818.00	-	
N. <u>Fire Alarm</u>				3	\$115,227.00	-	
O. <u>Handicapped Access</u>				2	\$458,698.60	-	
P. <u>Site Condition</u>				2	\$432,305.00	-	
Q. <u>Sewage System</u>				1	\$0.00	-	
R. <u>Water Supply</u>				1	\$1,000.00	-	
S. <u>Exterior Doors</u>				2	\$14,000.00	-	
T. <u>Hazardous Material</u>				1	\$182,656.80	-	
U. <u>Life Safety</u>				3	\$342,847.60	-	
V. <u>Loose Furnishings</u>				3	\$384,090.00	-	
W. <u>Technology</u>				3	\$782,007.24	-	
X. <u>Construction Contingency / Non-Construction Cost</u>				1	\$2,514,552.88	-	
Total					\$12,807,315.87		
Suitability Appraisal Summary							
				Section	Points Possible	Points Earned	Percentage Rating Category
				<u>Cover Sheet</u>	—	—	—
				<u>1.0 The School Site</u>	100	90	90% Excellent
				<u>2.0 Structural and Mechanical Features</u>	200	132	66% Borderline
				<u>3.0 Plant Maintainability</u>	100	85	85% Satisfactory
				<u>4.0 Building Safety and Security</u>	200	144	72% Satisfactory
				<u>5.0 Educational Adequacy</u>	200	143	72% Satisfactory
				<u>6.0 Environment for Education</u>	200	139	70% Satisfactory
				<u>LEED Observations</u>	—	—	—
				<u>Commentary</u>	—	—	—
				Total	1000	733	73% Satisfactory
Enhanced Environmental Hazards Assessment Cost Estimates							
C=Under Contract							
Renovation Cost Factor							
Cost to Renovate (Cost Factor applied)							
102.31%							
\$13,103,164.86							
<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>							

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Original Building (1952) Summary

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SW Classrooms (1957) Summary

District: Shaker Heights City				County: Cuyahoga		Area: Northeastern Ohio (8)																																																																																																																																																																															
Name: Mercer Elem				Contact: J. Lindsay Florence																																																																																																																																																																																	
Address: 23325 Wimbledon Rd Shaker Heights, OH 44122				Phone: (216) 295-4070																																																																																																																																																																																	
Bldg. IRN: 24307				Date Prepared: 2015-02-17		By: Kelton Waller																																																																																																																																																																															
				Date Revised: 2021-11-03		By: Bill Prenosil																																																																																																																																																																															
Current Grades		K-4	Acreage:		8.95																																																																																																																																																																																
Proposed Grades		N/A	Teaching Stations:		30																																																																																																																																																																																
Current Enrollment		340	Classrooms:		24																																																																																																																																																																																
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Facility Assessment

A. Heating System

Description: The existing system for the building consists of two 1995, Burham steam boilers at 2821MBH gross out put each. The boilers appear to be in fair to good condition for nearly being 20 years old. Building is heated with steam heat to unit ventilators, fin tube or radiators. There are unit ventilators located on the inside of the classrooms with outside air ducted to each from the attic area. These classrooms have fin tube or radiators located on the exterior wall. There are air handling units with steam heat for the Boys Gym, Girls Gym, and Auditorium. The boilers and air handling units are controlled with DDC controls and the rest of the controls are pneumatic and in fair to poor condition due to the equipment age. Generally, all the equipment has been well maintained. Overall, the ventilators and the air handling units in the building do not provide the required outside air delivery to meet OBC mechanical code. The DDC controls were added two years ago under an energy performance contract. The steam system does not provide a capacity for simultaneous heating and cooling operation which is not compliant with the OSDM requirements. The staff indicated that the site does not contain underground fuel tanks.

Rating: 3 Needs Replacement

Recommendations: Provide a new overall heating ventilating and air conditioning system to achieve compliance with OBC and OSDM standards. Convert to ducted system to facilitate efficient exchange of conditioned air. Provide new DDC temperature controls with the new system. The new ducted system will likely require architectural soffits to accommodate the installation of the ductwork.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
HVAC System Replacement:	\$26.12	sq.ft. (of entire building addition)		70,613 ft ² Required	6,205 ft ² Required	\$2,006,486.16	(includes demo of existing system and reconfiguration of piping layout and new controls, air conditioning)
Convert To Ducted System	\$8.00	sq.ft. (of entire building addition)		Required	Required	\$614,544.00	(includes costs for vert. & horz. chases, cut openings, soffits, etc. Must be used in addition to HVAC System Replacement if the existing HVAC system is non-ducted)
Sum:			\$2,621,030.16	\$2,409,315.56	\$211,714.60		



[Back to Assessment Summary](#)

Facility Assessment

B. Roofing

Description: Low sloped roof areas are covered with built-up roof with a reflective coating on top. These roofs have only 2 drains over the gymnasium and 3 drains over the cafeteria. This roof has passed its expected service life. Roof drains with broken or missing strainers were observed as well. Ponding water was observed. These areas are edged with a parapet wall capped with stone copings. The copings have an asphalt seal over the seams which is failing in some areas. The pitched areas of the roof are covered with original slate shingles and drain into metal lined box gutters and gutters which empty to the low slope roof below. The roof is accessed via a ladder and hatch.

Rating: 3 Needs Replacement

Recommendations: Provide new built-up roof, overflow drains, coping and tapered insulation at the low-sloped roof areas of the building. New gutters and downspouts should be provided at pitched roof areas as well. 01-27-16 UPDATE: REPLACE SLATE ROOF WITH ASPHALT SHINGLES AND DECK REPLACEMENTS ON SLOPED ROOF AREA OF 1952 ORIGINAL BUILDING. PROVIDE BATT INSULATION ON SLOPED ROOF AREAS OF 1952 ORIGINAL BUILDING AND 1957 ADDITION. 11-2-21 Update: Remove scope completed in 2017 & 2021: Slate replacement/repairs and built-up roof replacement.

Item	Cost	Unit	Whole Building	Original Building (1952) 70,613 ft²	SW Classrooms (1957) 6,205 ft²	Sum	Comments
Deck Replacement:	\$5.25	sq.ft. (Qty)		2,490 Required		\$13,072.50	(wood or metal, including insulation)
Repair/replace cap flashing and coping:	\$18.40	n.ft.		800 Required	125 Required	\$17,020.00	
Overflow Roof Drains and Piping:	\$2,500.00	each		11 Required	1 Required	\$30,000.00	
Roof Insulation:	\$4.70	sq.ft. (Qty)		18,475 Required	2,266 Required	\$97,482.70	(tapered insulation for limited area use to correct ponding)
Correct Ponding Water on Roof by Remove/Replace Existing Ponding Area:	\$12.50	sq.ft. (Qty)		1,250 Required		\$15,625.00	(provide tapered insulation for limited area use to correct ponding)
Other: Batt Insulation	\$1.25	sq.ft. (Qty)		24,990 Required	226 Required	\$31,520.00	Batt Insulation for Sloped Roof Arreas
Sum:			\$204,720.20	\$188,987.50	\$15,732.70		



[Back to Assessment Summary](#)

Facility Assessment

C. Ventilation / Air Conditioning

Description: There is a 5 ton Rooftop unit, 2011, serving the office area and a wall AC unit with an outdoor air cooled condensing unit serving the Data Closet. The computer room has two, Mitubishi wall air conditioning units with air cooled condensing units. There is no other air conditioning in the school. The air conditioning equipment is in good condition. There is no air conditioning in the classrooms. The ventilation system in the building generally does not meet the OBC fresh air requirements. The overall system is not compliant with Ohio School Design Manual requirements. The general building exhaust systems located in the restrooms are functional and in satisfactory condition.

Rating: 1 Satisfactory

Recommendations: Provide an air conditioning system to meet OBC and OSDM requirements. Pricing included in Item A.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
				70,613 ft ²	6,205 ft ²		
Sum:			\$0.00	\$0.00	\$0.00		



[Back to Assessment Summary](#)

Facility Assessment

D. Electrical Systems

Description: The main power enters the building underground to a locked transformer vault. The transformers are owned by the utility. The service described is leaving the transformer vault to serve the building. There are three electric service mains with separate disconnects for this building: #1: 240V, 3 phase, 100 amps, #2: 120/240V, 1 phase, amperage capacity estimated 200 amps, #3: 120/240V, 1 phase, amperage capacity estimated 200 amps. This 1952 electrical gear is beyond its usable life and should be replaced. Three new switches has been recently added to manually transfer power to a portable generator. There are permanent lugs located outside that are tied to the main gear to back up the building. Three DDC power recording devices were installed 2 years ago to track the power used. The electrical system in the building has not been updated since the original construction date and should be replaced. Additional outlets have been added to the classrooms, but the classrooms are still not equipped with adequate electrical outlets. Adequate GFI protected exterior outlets are not provided around the perimeter of the building. There is no lightning protection. The overall electrical system does not meet OSDM requirements in supporting the current needs of the school and will be inadequate to meet the facility's future needs.

Rating: 3 Needs Replacement

Recommendations: The electrical system down stream of the main electrical gear requires replacement to meet Ohio School Design Manual guidelines for overall capacity due to poor condition and age.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
System Replacement:	\$16.23	sq.ft. (of entire building addition)		70,613 ft ²	6,205 ft ²	\$1,246,756.14	(Includes demo of existing system. Includes generator for life safety systems. Does not include telephone or data or equipment) (Use items below ONLY when the entire system is NOT being replaced)
Sum:			\$1,246,756.14	\$1,146,048.99	\$100,707.15		



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Facility Assessment

E. Plumbing and Fixtures

Description: The 4" domestic water supply piping in the original building is galvanized piping at the building entrance. The much of the water piping in the building is still galvanized and replaced for failure. There have been no major renovations for the plumbing piping. There is no pressure reducing valve and backflow preventer on the water service line. There were no water pressure issues indicated by the staff. A water treatment system is not required for the domestic water system. There is a small water softener for the boiler water make-up. A 2003, AO Smith 190 MBH water heater with storage tank provides the domestic hot water for the main building. There are no electronic sensor faucets and flush valves in the building. All of the toilets and urinals are floor mounted. The plumbing fixtures are generally in fair condition and showing age. The school contains 5 restrooms for boys, 5 restrooms for girls, and 7 restrooms for the staff. There are 27 LAVs, 12 ADA LAVs, 39 toilets, 9 ADA toilets, 17 urinals. There are 7 classroom sinks in good condition but the faucets are in fair condition. The LAVs have manual faucets in fair to poor condition and showing age. There are 4 electric water coolers and 1 drinking fountain in generally good condition. There is no kitchen in this school.

Rating: 3 Needs Replacement

Recommendations: Provide low flow fixtures with of the faucets and flush valves with sensors to meet OSFC requirements. A Three Station Modular Lavatory will replace the Lavatories in each of the boys and girls restrooms. The boys restrooms will require major renovation due to the floor mounted urinals. Replace galvanized piping throughout building. Replace 01-27-16 UPDATE: REPLACE SANITARY WASTE PIPING ON 1952 ORIGINAL BUILDING AND 1957 ADDITION. PROVIDE FOR LAVATORY MOUNTED DRINKING FOUNTAINS IN 1952 ORIGINAL BUILDING AND 1957 ADDITION.

Item	Cost	Unit	Whole Building	Original Building (1952) 70,613 ft²	SW Classrooms (1957) 6,205 ft²	Sum	Comments
Back Flow Preventer:	\$5,000.00	unit		1 Required		\$5,000.00	
Domestic Supply Piping:	\$3.50	sq.ft. (of entire building addition)		Required	Required	\$268,863.00	(remove / replace)
Sanitary Waste Piping:	\$3.50	sq.ft. (of entire building addition)		Required	Required	\$268,863.00	(remove / replace)
Toilet:	\$1,500.00	unit		40 Required	8 Required	\$72,000.00	(remove / replace) See Item O
Urinal:	\$1,500.00	unit		14 Required	3 Required	\$25,500.00	(remove / replace)
Sink:	\$1,500.00	unit		7 Required		\$10,500.00	(remove / replace)
Electric water cooler:	\$3,000.00	unit		4 Required	1 Required	\$15,000.00	(double ADA)
Replace faucets and flush valves	\$500.00	per unit		7 Required		\$3,500.00	(average cost to remove/replace)
Three Station Modular Lavatory	\$4,000.00	unit		10 Required		\$40,000.00	(remove / replace)
Other: Add frostproof hose bibbs on exterior of building.	\$1,000.00	each		4 Required	1 Required	\$5,000.00	The cost includes the fixture and 100 ft of piping.
Other: Drinking Fountain	\$2,200.00	per unit		7 Required	3 Required	\$22,000.00	Lavatory Mounted Drinking Fountains
Other: Lavatory	\$1,500.00	unit		5 Required	2 Required	\$10,500.00	Lavatory replacement for Faculty
Other: Pressure Reducing Valve	\$5,000.00	per unit		1 Required		\$5,000.00	Pressure reducing valve required by code.
Sum:			\$751,726.00	\$678,191.00	\$73,535.00		



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Facility Assessment

F. Windows

Description: All windows throughout the building have been replaced within the last 10 years. The units are double paned with white painted aluminum frames on the exterior and an interior wood finish. False muntins are between the glass panes. The windows, however, are not equipped with integral blinds.

Rating: 2 Needs Repair

Recommendations: No work is recommended at this time. 01-27-16 UPDATE: REPLACE INSECT SCREENS ON WINDOWS IN 1952 ORIGINAL BUILDING. INSTALL VAPOR BARRIER AND MUD SLAB IN basement OF 1952 ORIGINAL BUILDING. PROVIDE WATERPROOFING MEMBRANE AND FOR CRAWLSPACE AT 196 ORIGINAL BUILDING AND 1958 ADDITION.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
				70,613 ft ²	6,205 ft ²		
Other: Insect Screens	\$110.00	per unit		8 Required		\$880.00	Insect Screens
Sum:			\$880.00	\$880.00	\$0.00		



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Facility Assessment

G. Structure: Foundation

Description: Cracked piers were observed in the mechanical room. Steel reinforcing has been provided for reinforcement. Water was observed on some areas of the mechanical room floor. Cracks were also observed in some CMU foundation walls.

Rating: 2 Needs Repair

Recommendations: Provide sump pumps as necessary to redirect water in the ground. 01-27-16 UPDATE: INSTALL VAPOR BARRIER AND MUD SLAB IN BASEMENT OF 1952 ORIGINAL BUILDING. PROVIDE WATERPROOFING MEMBRANE AND DRAINAGE TILE SYSTEM FOR BASEMENT AND CRAWLSPACE AT 1952 ORIGINAL BUILDING AND 1957 ADDITION. 11-2-21 Update: Remove scope completed in 2020: Partial waterproofing and drain tile.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
Waterproofing Membrane:	\$7.00	sq.ft. (Qty)		79,620 Required	700 Required	\$562,240.00	(include excavation and backfill)
Drainage Tile Systems / Foundation Drainage:	\$18.00	ln.ft.		810 Required	100 Required	\$16,380.00	(include excavation and backfill)
Other: Mud Slab	\$8.00	sq.ft. (Qty)		7,400 Required		\$59,200.00	Vapor Barrier and Mud Slab in Basement
Other: Sump Well, Sump Pump & Piping	\$15,000.00	lump sum		Required		\$15,000.00	Standing ground water needs to be eliminated.
Sum:			\$652,820.00	\$646,120.00	\$6,700.00		



Water is breaching the foundation at the lowest levels.



Vertical cracks were observed in this foundation pier.

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Facility Assessment

H. Structure: Walls and Chimneys

Description: Load bearing brick clad walls are used around the building exterior. Major cracking was not observed. Brick clad mechanical stacks were observed on the exterior of the building as well. Tuck pointing and sealing of previous masonry damage was observed at various points around the building exterior. Surface level spalling was observed on the lower part of the exterior walls around the building perimeter.

Rating: 2 Needs Repair

Recommendations: Provide masonry cleaning and sealer over spalled areas to stabilize the masonry in these conditions. 01-27-16 UPDATE: REPLACE SANDSTONE CORNICE ON 1952 ORIGINAL BUILDING AND 1957 ADDITION. ADD WEEPS AT LINTELS ABOVE WINDOWS IN 1952 ORIGINAL BUILDING AND 1957 ADDITION. REPLACE CAULK AROUND WINDOWS AND DOORS IN 1952 ORIGINAL BUILDING AND 1957 ADDITION. PROVIDE FOR CLEANING AND SEALING OF EXTERIOR MASONRY ON 1957 ADDITION. REBUILD WALLS SURROUNDING STORAGE ROOM B17 IN 1952 ORIGINAL BUILDING. REPLACE SPALLING FACE BRICK ON 1952 ORIGINAL BUILDING. PROVIDE CLEANING AND SEALING OF EXTERIOR MASONRY ON 1957 ADDITION. INSTALL CONTROL JOINTS ON 1952 ORIGINAL BUILDING. PROVIDE FOR TUCKPOINTING ON 1952 ORIGINAL BUILDING. 11-2-21 Update: Remove scope completed in 2019 & 2020: cleaning & sealing, tuckpointing; partial masonry infill & caulking.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
				70,613 ft ²	6,205 ft ²		
Exterior Caulking:	\$5.50	n.ft.		590 Required	73 Required	\$3,646.50	(removing and replacing)
Replace Brick Veneer System:	\$35.00	sq.ft. (Qty)		600 Required		\$21,000.00	(total removal and replacement including pinning and shoring)
Coping Replacement Stone and Masonry:	\$100.00	n.ft.		800 Required	100 Required	\$90,000.00	(remove and replace)
Install Control Joints	\$60.00	n.ft.		400 Required		\$24,000.00	
Other: Add additional weeps	\$35.85	per unit		202 Required	27 Required	\$8,209.65	Provide Weeps above windows
Sum:			\$146,856.15	\$135,486.70	\$11,369.45		



Surface damage to the face of this brick.



Surface damage to the face of this brick

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Facility Assessment

I. Structure: Floors and Roofs

Description: Elevated floors are framed by a combination of concrete pan joists and poured structural slabs. Degradation was not observed with these floor structures. Pitched roof areas are framed with wood rafters. Structure floor low sloped areas of the roof are not observable.

Rating: 2 Needs Repair

Recommendations: No work is recommended at this time. 01-27-16 UPDATE: REPAIR SPALLING CONCRETE PAN JOIST ON 1952 ORIGINAL BUILDING.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
				70,613 ft ²	6,205 ft ²		
Other: Concrete Repairs	\$42.00	sq.ft. (Qty)		80 Required		\$3,360.00	Repair Spalling Concrete Deck.
Sum:			\$3,360.00	\$3,360.00	\$0.00		



Concrete pan joists observed from crawl space



Concrete pan joists observed from mechanical room

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Facility Assessment

J. General Finishes

Description: Finishes in the corridor consist of VCT floors, plaster walls with glazed tile wainscot and 12" acoustic ceiling tiles. Most classrooms have carpeted floors, plaster walls and 12" acoustic tile ceilings. The art room is provided a working kiln. Toilet partitions are past their expected service life. Student meals are prepped off-site and brought hot to the school. Food service equipment is not in use here. Physical education equipment was observed to be in good condition.

Rating: 3 Needs Replacement

Recommendations: Most finishes and casework observed are past their expected service life and should be replaced. 01-27-16 UPDATE: DRYWALL REPLACEMENT FOR REMOVAL OF EXISTING DRYWALL TO ACCESS ACM BEHIND WALLS IN 1952 ORIGINAL BUILDING AND 1957 ADDITION NOTED UNDER ITEM T. PROVIDE ACOUSTICAL TREATMENT TO GYMNASIUM AND STUDENT DINING IN 1952 ORIGINAL BUILDING.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
Complete Replacement of Finishes and Casework (Elementary):	\$15.90	sq.ft. (of entire building addition)		70,613 ft ² Required	6,205 ft ² Required	\$1,221,406.20	(elementary, per building area, with removal of existing)
Toilet Partitions:	\$1,000.00	per stall		51 Required		\$51,000.00	(removing and replacing)
Toilet Accessory Replacement	\$0.20	sq.ft. (of entire building addition)		Required	Required	\$15,363.60	(per building area)
Gypsum Board Replacement	\$4.00	sq.ft. (Qty)		5,600 Required	500 Required	\$24,400.00	(Hazardous Material Replacement Cost - See T.)
Other: Acoustical Treatment	\$30,000.00	allowance		Required		\$30,000.00	Acoustical Treatment in Gymnasium
Other: Acoustical Treatment	\$30,000.00	allowance		Required		\$30,000.00	Acoustical Treatment in Student Dining
Sum:			\$1,372,169.80	\$1,270,269.30	\$101,900.50		



Finishes in a typical corridor



Finishes in a typical room

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Facility Assessment

K. Interior Lighting

Description: The florescent lighting is a mixture of recessed with acrylic lense, surface mounted with acrylic wrap around lense and pendent mounted with acrylic lense. The gym fixtures are high bay forescent fixtures. In 2012, the ballast and lamps have been upgraded to electronic energy efficient ballast and T8 lamps. The lighting is in good condition. Classroom lighting level is 24 FC, the Corridor lighting level is 34 FC, the Gym is 60 FC, Library lighting level is 54 FC and the Art is 24 FC. The classrooms have dual level lighting controls. (One row of lights per switch.) There are no dimming controls in the building.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of lighting system due to the installation of ducted HVAC systems and fire suppression systems. 01-27-16
 UPDATE: PROVIDE THEATRICAL LIGHTING @ STUDENT DINING STAGE IN 1952 ORIGINAL BUILDING.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
Complete Building Lighting Replacement	\$5.00	sq.ft. (of entire building addition)		70,613 ft ²	6,205 ft ²	\$384,090.00	Includes demo of existing fixtures
Other: Theatrical Lighting Upgrade	\$15,000.00	unit		1 Required		\$15,000.00	Theatrical Lighting @ Student Dining Stage
Sum:			\$399,090.00	\$368,065.00	\$31,025.00		



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Facility Assessment

L. Security Systems

Description: The security system consists of 2 exterior mounted camera located at the building entrance. There are no interior cameras. There are 3 key card entry doors. The front door and one other door are monitored with 2 way communication and a buzzer for visitors. They also one of the key card entrance doors. The cameras report to computer screens located in the office. DVRs record locally the feedback from the cameras. There is no remote monitoring of the video system. The interior hallways have motion sensors tied to the security system. The exterior lighting consists of building mounted lighting and provides minimal coverage for the building entrances. There are a few parking lot pole mounted lights for site lighting that provide additional lighting coverage. The system is compliant with OSFC design manual guidelines.

Rating: 2 Needs Repair

Recommendations: Add security cameras on the interior of the building and upgrade the exterior lighting.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
Partial Security System Upgrade:	\$1.35	sq.ft. (of entire building addition)		70,613 ft ²	6,205 ft ²		
				Required	Required	\$103,704.30	(complete, area of building)
Sum:			\$103,704.30	\$95,327.55	\$8,376.75		



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Facility Assessment

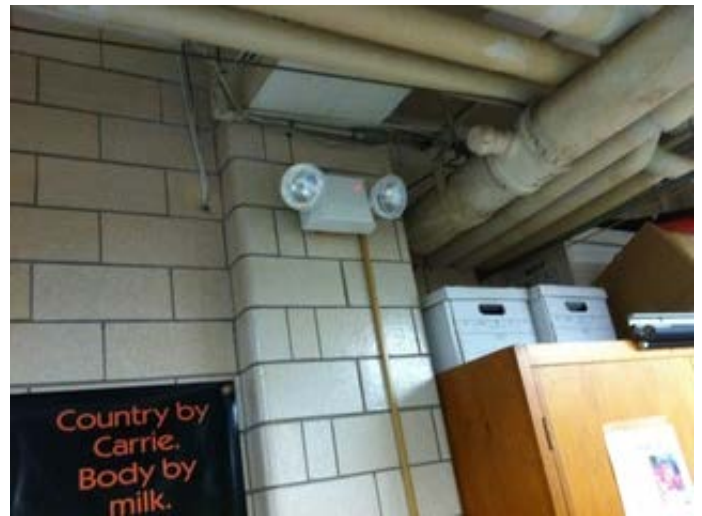
M. Emergency/Egress Lighting

Description: The overall facility is equipped with emergency egress lighting system consisting of a LED exit signs and emergency lighting with battery packs. The system is adequately provided throughout, and is compliant with OSFC design manual guidelines.

Rating: 3 Needs Replacement

Recommendations: Provide a complete replacement of emergency egress lighting due to installation of systems outlined in J, K, and U.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
Emergency/Egress Lighting	\$1.00	sq.ft. (of entire building addition)		70,613 ft ²	6,205 ft ²	\$76,818.00	(complete, area of building)
Sum:			\$76,818.00	\$70,613.00	\$6,205.00		



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Facility Assessment

N. Fire Alarm

Description: The Honeywell fire alarm control panel and system consists of horns, strobes and pull stations, however, the coverage is insufficient for the horns and strobes to meet current requirements. The system provides adequate coverage for the facility with required smoke detectors and duct detectors. The system appears to be non-addressable. This system is remotely monitored. The fire alarm system is not fully compliant with NFPA and OSFC standards. The current system would accommodate the addition of a fire suppression system.

Rating: 3 Needs Replacement

Recommendations: Replacement of the system will be required when the work in C - Upgrading the ventilation and air conditioning. At that time, the devices would be replaced and added to with addressable devices.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
Fire Alarm System:	\$1.50	sq. ft. (of entire building addition)		70,613 ft ²	6,205 ft ²		
Sum:			\$115,227.00	\$105,919.50	\$9,307.50	\$115,227.00	(complete new system, including removal of existing)



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Facility Assessment

O. Handicapped Access

Description: An elevator is provided for wheelchair access throughout the building. Ramps are provided at changes in floor level. The ramp to the stage is steeper than 1:12 ADA level hardware is not provided and. High contrast braille signage is not provided either. At least one ADA compliant water cooler was observed. The rest room in the library has sufficient maneuverability clearance, but the door is 30" wide.

Rating: 2 Needs Repair

Recommendations: Provided ADA compliant signage and door hardware throughout the building. Replace the ramp at the stage with a 1:12 or less steep ramp. Provide a new ADA compliant water cooler. Widen door opening to the restroom in the library. Provide a new ramp to replace the temporary wood ramp at the main entrance. 01-27-16 UPDATE: PROVIDE FOR TOILET PARTITIONS, AND TOILET ROOM ACCESSORIES IN 1952 ORIGINAL BUILDING AND 1957 ADDITION. REWORK DOOR OPENINGS IN 1952 ORIGINAL BUILDING ADDITION TO PROVIDE ADA COMPLIANCE. REPLACE INTERIOR DOORS IN 1952 ORIGINAL BUILDING AND 1957 ADDITION. 01-27-16 UPDATE: PROVIDE FOR INSULATED PIPE WRAP PROTECTIONS ON PLUMBING PIPING UNDER LAVATORIES.

Item	Cost	Unit	Whole Building	Original Building (1952) 70,613 ft²	SW Classrooms (1957) 6,205 ft²	Sum	Comments
Handicapped Hardware:	\$350.00	set		100 Required	6 Required	\$37,100.00	(includes installation / hardware only)
Signage:	\$0.20	sq.ft. (of entire building addition)		Required	Required	\$15,363.60	(per building area)
Ramps:	\$40.00	sq.ft. (Qty)		200 Required		\$8,000.00	(per ramp/interior-exterior complete)
Electric Water Coolers:	\$3,000.00	unit		1 Required		\$3,000.00	(new double ADA)
Toilet Partitions:	\$1,000.00	stall		8 Required	3 Required	\$11,000.00	(ADA - grab bars, accessories included)
Replace Doors:	\$1,300.00	leaf		115 Required	42 Required	\$204,100.00	(standard 3070 wood door, HM frame, door/light, includes hardware)
Replace Doors:	\$5,000.00	leaf		3 Required		\$15,000.00	(rework narrow opening to provide 3070 wood door, HM frame, door/light, includes hardware)
Replace Doors:	\$5,000.00	leaf		29 Required		\$145,000.00	(rework opening and corridor wall to accommodate ADA standards when door opening is set back from edge of corridor and cannot accommodate a wheelchair.)
Remount Restroom Mirrors to Handicapped Height:	\$285.00	per restroom		1 Required		\$285.00	
Provide Toilet Accessories:	\$1,000.00	per restroom		8 Required	11 Required	\$19,000.00	
Other: Pipe Wrap	\$50.00	per unit		10 Required	7 Required	\$850.00	"P" Trap Pipe Protection
Sum:			\$458,698.60	\$386,407.60	\$72,291.00		



This ramp is steeper than 1:12



Door hardware is not ADA compliant

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Facility Assessment

P. Site Condition

Description: The site in aggregate is in good condition. Limited areas of damaged concrete walks with ponding water were observed. Asphalt paving has worn sealing, but cracks were not remarkable. Grass growth is not consistent. The playground was observed to have newer model play equipment which was observed to be free of hazards. No means of physically separating bus drop-off from other student drop-off was observed. No concrete pad is provided for the dumpster.

Rating: 2 Needs Repair

Recommendations: Provide ramp and rails at the main entrance. Replace damaged areas of concrete walks where water is ponding. Provide concrete pad for the dumpster. Add an off-street drop of area to adequately separate bus and non-bus circulation. A ramp should be provided under Section O. Handicapped Access. 01-27-16 UPDATE: PROVIDE FOR SOFT SURFACE PLAYGROUND AND SWING. REPLACE CONCRETE SIDEWALKS AT 1952 ORIGINAL BUILDING AND 1957 ADDITION. REMOVE EXISTING STONE SLAB AND REPLACE WITH FROST SLAB AT 1952 ORIGINAL BUILDING. REPLACE RETAINING WALL AT 1957 ADDITION. REPLACE STAIRS, RAMPS, SIDEWALKS AND LANDSCAPING AT 1952 ORIGINAL BUILDING AND 1957 ADDITION DUE TO EXCAVATION FOR WATERPROOFING OF FOUNDATION WALLS.

Item	Cost	Unit	Whole Building	Original Building (1952) 70,613 ft ²	SW Classrooms (1957) 6,205 ft ²	Sum	Comments
Bus Drop-Off for Elementary	\$110.00	per student		560 Required		\$61,600.00	Number of students should be rounded up to the nearest 100. \$5500 per bus; 40 students per bus; 80% of elementary school students riding)
Concrete Sidewalk:	\$4.69	sq.ft. (Qty)		1,000 Required	600 Required	\$7,504.00	(5 inch exterior slab)
Exterior Hand / Guard Rails:	\$43.00	in.ft.		10 Required		\$430.00	
Provide Soft Surface Playground Material:	\$30.00	sq. yard		800 Required		\$24,000.00	
Provide Concrete Dumpster Pad:	\$2,400.00	each		1 Required		\$2,400.00	(for two dumpsters)
Base Sitework Allowance for Unforeseen Circumstances	\$50,000.00	allowance		Required		\$50,000.00	Include this and one of the next two. (Applies for whole building, so only one addition should have this item)
Sitework Allowance for Unforeseen Circumstances for buildings between 0 SF and 100,000 SF	\$1.50	sq.ft. (of entire building addition)		Required	Required	\$115,227.00	Include this one or the next. (Each addition should have this item)
Other: Concrete Replacement	\$24.00	sq.ft. (Qty)		5,000 Required	500 Required	\$132,000.00	Replace Concrete steps and walks due to excavation required for waterproofing basement walls.
Other: Frost Slabs	\$52.00	sq.ft. (Qty)		72 Required		\$3,744.00	Remove existing stone slab and replace with frost slab.
Other: Handicapped Playground Swing	\$900.00	per unit		1 Required		\$900.00	Handicapped Playground Swing
Other: Landscaping	\$1,000.00	allowance		Required	Required	\$2,000.00	Landscaping due to excavation of perimeter wall excavation for waterproofing.
Other: Retaining Wall	\$65.00	sq.ft. (Qty)			500 Required	\$32,500.00	Replace Retaining Wall aster excavation for foundation water proofing.
Sum:			\$432,305.00	\$374,683.50	\$57,621.50		



This temporary ramp should be replaced with concrete and rails



Standing water is present over this area of concrete walk.

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Facility Assessment

Q. Sewage System

Description: The sanitary sewer system drains to the city sewer system. There are no issues with this system.

Rating: 1 Satisfactory

Recommendations: No recommendations at this time.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
				70,613 ft ²	6,205 ft ²		
Sum:			\$0.00	\$0.00	\$0.00		

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Facility Assessment

R. Water Supply

Description: The 4" domestic water supply is galvanized piping throughout most of the building. There is no backflow preventer on the incoming water service and no pressure reducing valve. The system provides adequate pressure and capacity for the facility's needs. There is no automatic fire suppression system in the building. The existing water supply system will not provide adequate support for a future fire suppression system.

Rating: 1 Satisfactory

Recommendations: Replace water main to meet the sprinkler requirements and install a backflow preventer. 01-27-16 UPDATE: PROVIDE FOR BACKFLOW PREVENTOR. PROVIDE FOR PRESSURE REDUCING VALVE. 11-2-21 Update: Remove all scope, completed in 2018.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
				70,613 ft²	6,205 ft²		
Water Quality Test	\$500.00	allowance		Required	Required	\$1,000.00	(includes 2 tests)
Sum:			\$1,000.00	\$500.00	\$500.00		



water pipe

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Facility Assessment

S. Exterior Doors

Description: White insulated exterior doors were replaced when new windows were provided less than 10 years ago. Most doors are 1/2 glazed or flush.

Rating: 2 Needs Repair

Recommendations: No work is recommended at this time. 01-27-16 UPDATE: REPLACE DOORS ON 1952 ORIGINAL BUILDING AND 1957 ADDITION.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
				70,613 ft ²	6,205 ft ²		
Door Leaf/Frame and Hardware	\$2,000.00	per leaf		6 Required	1 Required	\$14,000.00	(includes removal of existing)
Sum:			\$14,000.00	\$12,000.00	\$2,000.00		



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Facility Assessment

T. Hazardous Material

Description: Environmental data not available at time of assessment.

Rating: 1 Satisfactory

Recommendations: No work is recommended at this time.

Item	Cost	Unit	Whole Building	Original Building (1952) 70,613 ft²	SW Classrooms (1957) 6,205 ft²	Sum	Comments
<i>Environmental Hazards Form</i>				EEHA Form	EEHA Form	—	
Tank Insulation Removal	\$8.00	sq.ft. (Qty)		125 Required	0 Required	\$1,000.00	
Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups	\$1.00	per unit		5,000 Required	0 Required	\$5,000.00	
Special Engineering Fees for LBP Mock-Ups	\$1.00	per unit		5,000 Required	0 Required	\$5,000.00	
Fluorescent Lamps & Ballasts Recycling/Incineration	\$0.10	sq.ft. (Qty)		70,613 Required	6,205 Required	\$7,681.80	
Pipe Insulation Removal	\$10.00	in.ft.		3,000 Required	0 Required	\$30,000.00	
Pipe Insulation Removal (Crawlspace/Tunnel)	\$12.00	in.ft.		1,000 Required	0 Required	\$12,000.00	
Pipe Insulation Removal (Hidden in Walls/Ceilings)	\$15.00	in.ft.		1,400 Required	125 Required	\$22,875.00	
Dismantling of Boiler/Furnace/Incinerator	\$2,000.00	each		2 Required	0 Required	\$4,000.00	
Fire Door Removal	\$100.00	each		6 Required	0 Required	\$600.00	See S
Non-ACM Ceiling/Wall Removal (for access)	\$2.00	sq.ft. (Qty)		5,600 Required	500 Required	\$12,200.00	See J
Resilient Flooring Removal, Including Mastic	\$3.00	sq.ft. (Qty)		22,500 Required	0 Required	\$67,500.00	See J
Carpet Mastic Removal	\$2.00	sq.ft. (Qty)		2,400 Required	0 Required	\$4,800.00	
Carpet Removal (over RFC)	\$1.00	sq.ft. (Qty)		5,000 Required	0 Required	\$5,000.00	See J
Other: EHA Other Hazard	\$1.00	per unit		5,000 Required		\$5,000.00	XRF testing for lead-based paint is recommended for compliance with EPA's RRP Program.
Sum:			\$182,656.80	\$179,161.30	\$3,495.50		

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Facility Assessment

U. Life Safety

Description: The building does not have an automatic fire suppression system. Stairways are not enclosed to prevent vertical spread of fire.

Rating: 3 Needs Replacement

Recommendations: Provide an automatic fire suppression system throughout the building. Add enclosures at stairs to prevent the vertical spread of fire. 01-27-16
 UPDATE: PROVIDE FOR PRE-ACTION FIRE SUPPRESSION SYSTEM IN ATTIC SPACE OF 1952 ORIGINAL BUILDING.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
Sprinkler / Fire Suppression System:	\$3.20	sq.ft. (Qty)		70,613 Required	6,205 Required	\$245,817.60	(includes increase of service piping, if required)
Interior Stairwell Closure:	\$5,000.00	per level		5 Required		\$25,000.00	(includes associated doors, door frames and hardware)
Other: Attic Sprinklers	\$3.50	sq.ft. (Qty)		14,580 Required		\$51,030.00	Pre-Action Fire Suppression System for Attic Space
Other: Recess doors	\$21,000.00	lump sum		Required		\$21,000.00	Egress path should be free of door swings.
Sum:			\$342,847.60	\$322,991.60	\$19,856.00		



This stair will foster vertical fire spread.



Doors open in to the corridor by up to 36".

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Facility Assessment

V. Loose Furnishings

Description: The design of the furniture is dated, but the items are still performing well in general.

Rating: 3 Needs Replacement

Recommendations: Furniture times should be replaced as they fall into disrepair. 01-27-16 UPDATE: REVISE CEFPI RATING FROM 6 TO 0-5.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
CEFPI Rating 0 to 3	\$5.00	sq.ft. (of entire building addition)		70,613 ft ²	6,205 ft ²		
Sum:			\$384,090.00	\$353,065.00	\$31,025.00	\$384,090.00	



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Facility Assessment

W. Technology

Description: The typical classroom is equipped with 2 data ports total (1 data, 1 VOIP, CAT 5 wire). Each classroom has a dedicated wireless access point (CAT 6E wire). Each classroom has phone capable of calling the office. The phone is used system is used by the office to contact the classrooms. There is a projector and audio system in every classroom. The coax cable system in every classroom is not being replaced as it fails, as it is rarely used. Fiber is used to connect the data closets and there are 5 data closets in the High School. All data closets have color coded wires based on the service district wide. The school has a PA system, and the PA system can be used in each classroom to contact the office, however this system is not used. This system meets the OSDM requirements. The facility is not equipped with a centralized clock system. The facility has 1 computer lab for use by the students.

Rating: 3 Needs Replacement

Recommendations: The technology systems to meet OSDM requirements however this system will need to be replaced when the HVAC and Fire Suppression systems are replaced.

Item	Cost	Unit	Whole Building	Original Building (1952)	SW Classrooms (1957)	Sum	Comments
ES portion of building with total SF 69,361 to 100,000	\$10.18	sq.ft. (Qty)		70,613 ft ²	6,205 ft ²		
				70,613 Required	6,205 Required	\$782,007.24	
Sum:			\$782,007.24	\$718,840.34	\$63,166.90		



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X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		\$10,292,762.99
7.00%	Construction Contingency	\$720,493.41
Subtotal		\$11,013,256.40
16.29%	Non-Construction Costs	\$1,794,059.47
Total Project		\$12,807,315.87

Construction Contingency	\$720,493.41
Non-Construction Costs	\$1,794,059.47
Total for X.	\$2,514,552.88

Non-Construction Costs Breakdown		
Land Survey	0.03%	\$3,303.98
Soil Borings / Phase I Envir. Report	0.10%	\$11,013.26
Agency Approval Fees (Bldg. Code)	0.25%	\$27,533.14
Construction Testing	0.40%	\$44,053.03
Printing - Bid Documents	0.15%	\$16,519.88
Advertising for Bids	0.02%	\$2,202.65
Builder's Risk Insurance	0.12%	\$13,215.91
Design Professional's Compensation	7.50%	\$825,994.23
CM Compensation	6.00%	\$660,795.38
Commissioning	0.60%	\$66,079.54
Non-Construction Contingency (includes partnering and mediation services)	1.12%	\$123,348.47
Total Non-Construction Costs	16.29%	\$1,794,059.47

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School Facility Appraisal - Shaker Heights City

Name of Appraiser Bill Prenosil **Date of Appraisal** 2015-02-17
Building Name Mercer Elem
Street Address 23325 Wimbledon Rd
City/Town, State, Zip Code Shaker Heights, OH 44122
Telephone Number(s) (216) 295-4070
School District Shaker Heights City

Setting: Urban

Site-Acreage	8.95	Building Square Footage	76,818
Grades Housed	K-4	Student Capacity	615
Number of Teaching Stations	30	Number of Floors	3
Student Enrollment	340		
Dates of Construction	1952,1957		

Energy Sources: Fuel Oil Gas Electric Solar
Air Conditioning: Roof Top Windows Units Central Room Units
Heating: Central Roof Top Individual Unit Forced Air
 Hot Water Steam

Type of Construction
 Load bearing masonry
 Steel frame
 Concrete frame
 Wood
 Steel Joists

Exterior Surfacing
 Brick
 Stucco
 Metal
 Wood
 Stone

Floor Construction
 Wood Joists
 Steel Joists
 Slab on grade
 Structural slab

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Suitability Appraisal of 1.0 The School Site for Mercer ES Assessment - Shaker Heights CSD - CFAP Update (11-2-21)

1.0 The School Site	Points Allocated	Points
1.1 Site is large enough to meet educational needs as defined by state and local requirements <i>The site is 8.95 acres. Though it's a few acres short of OSDM recommendations, it is adequate to meet educational needs.</i>	25	22
1.2 Site is easily accessible and conveniently located for the present and future population <i>The site borders 3 streets in the neighborhood and is easily accessed by families in the vicinity.</i>	20	20
1.3 Location is removed from undesirable business, industry, traffic, and natural hazards <i>Undesirable elements were not observed.</i>	10	10
1.4 Site is well landscaped and developed to meet educational needs <i>Sufficient hard and soft surface areas are provided.</i>	10	8
1.5 ES Well equipped playgrounds are separated from streets and parking areas MS Well equipped athletic and intermural areas are separated from streets and parking HS Well equipped athletic areas are adequate with sufficient solid-surface parking <i>Soft surface play areas with play equipment are provided. Hard surfaced areas striped for games are provided aswell.</i>	10	10
1.6 Topography is varied enough to provide desirable appearance and without steep inclines <i>The school is elevated for visibility. Slopes are gentle enough for walking.</i>	5	5
1.7 Site has stable, well drained soil free of erosion <i>Some ponding was observed and erosion was not.</i>	5	3
1.8 Site is suitable for special instructional needs , e.g., outdoor learning <i>Little to no provisions for outdoor learning were observed.</i>	5	2
1.9 Pedestrian services include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes <i>Adequate pedestrian provisions were observed.</i>	5	5
1.10 ES/MS Sufficient on-site, solid surface parking for faculty and staff is provided HS Sufficient on-site, solid surface parking is provided for faculty, students, staff and community <i>Adequate staff parking is provided.</i>	5	5
TOTAL - 1.0 The School Site	100	90

Suitability Appraisal of 2.0 Structural and Mechanical Features for Mercer ES Assessment - Shaker Heights CSD - CFAP Update (11-2-21)

2.0 Structural and Mechanical Features	Points Allocated	Points
Structural		
2.1 Structure meets all barrier-free requirements both externally and internally <i>An elevator is provided. However, several parts of the building like the music room and some rest rooms are accessible via stairs only. Lever hardware is needed as well.</i>	15	5
2.2 Roofs appear sound, have positive drainage, and are weather tight <i>Ponding was observed on low sloped areas of the roof.</i>	15	8
2.3 Foundations are strong and stable with no observable cracks <i>Cracking foundation piers were observed. Steel bracing has been added.</i>	10	6
2.4 Exterior and interior walls have sufficient expansion joints and are free of deterioration <i>Expansion joints were not observed in the walls.</i>	10	4
2.5 Entrances and exits are located so as to permit efficient student traffic flow <i>Building portals permit efficient student flow.</i>	10	8
2.6 Building "envelope" generally provides for energy conservation (see criteria) <i>No insulation is provided in the walls. However newer windows are double glazed and new doors are insulated.</i>	10	5
2.7 Structure is free of friable asbestos and toxic materials <i>Environmental reports on available during assessment.</i>	10	10
2.8 Interior walls permit sufficient flexibility for a variety of class sizes <i>Provisions for flexible classroom sizes were not observed. All walls are permanent.</i>	10	2
Mechanical/Electrical		
2.9 Adequate light sources are well maintained, and properly placed and are not subject to overheating <i>The majority of the areas have adequate light sources, and the lighting is maintained and not subject to overheating.</i>	15	13
2.10 Internal water supply is adequate with sufficient pressure to meet health and safety requirements <i>The internal water supply has sufficient pressure.</i>	15	15
2.11 Each teaching/learning area has adequate convenient wall outlets , phone and computer cabling for technology applications <i>There are not enough wall outlets to support the computer/technology equipment.</i>	15	5
2.12 Electrical controls are safely protected with disconnect switches easily accessible <i>Disconnect switches are easily accessible and there are no provisions for the disabled.</i>	10	7
2.13 Drinking fountains are adequate in number and placement, and are properly maintained including provisions for the disabled <i>Drinking fountains are well maintained and there are provisions for the disabled.</i>	10	10
2.14 Number and size of restrooms meet requirements <i>Number of fixtures more than doubles OSDM recommendations and number of restrooms is sufficient. Size of restrooms do not allow for ADA stalls or aisle clearance/turn-around.</i>	10	8
2.15 Drainage systems are properly maintained and meet requirements	10	10

<i>The drainage systems were reported to be in good condition.</i>		
2.16 Fire alarms, smoke detectors, and sprinkler systems are properly maintained and meet requirements	10	3
<i>There is no sprinkler system but the fire alarm system is not up to date and does not meet NFPA and OSFC requirements.</i>		
2.17 Intercommunication system consists of a central unit that allows dependable two-way communication between the office and instructional areas	10	10
<i>The phone in each classroom provides the two way communication to the office.</i>		
2.18 Exterior water supply is sufficient and available for normal usage	5	3
<i>There are only a few hose bibs for the exterior of the building, which is not adequate.</i>		
<hr/>		
TOTAL - 2.0 Structural and Mechanical Features	200	132

Suitability Appraisal of **3.0 Plant Maintainability** for Mercer ES Assessment - Shaker Heights CSD - CFAP Update (11-2-21)

3.0 Plant Maintainability	Points Allocated	Points
<p>3.1 Windows, doors, and walls are of material and finish requiring minimum maintenance</p> <p><i>These items consist materials that have performed well for decades and should continue to do so.</i></p>	15	15
<p>3.2 Floor surfaces throughout the building require minimum care</p> <p><i>VCT tile will continue to perform with minimal care.</i></p>	15	15
<p>3.3 Ceilings and walls throughout the building, including service areas, are easily cleaned and resistant to stain</p> <p><i>The direct applied acoustic tiles used through most of the building will stain easily.</i></p>	10	10
<p>3.4 Built-in equipment is designed and constructed for ease of maintenance</p> <p><i>Hardwood cabinets require little maintenance.</i></p>	10	10
<p>3.5 Finishes and hardware, with compatible keying system, are of durable quality</p> <p><i>Condition of the hardware finish varies throughout the building. A minimal number of keys accesses all doors.</i></p>	10	10
<p>3.6 Restroom fixtures are wall mounted and of quality finish</p> <p><i>Sinks are mounted to the wall. However, toilets and urinals are floor mounted.</i></p>	10	4
<p>3.7 Adequate custodial storage space with water and drain is accessible throughout the building</p> <p><i>Custodial closets with mop sings and storage room are provided around the building with adequate frequency.</i></p>	10	10
<p>3.8 Adequate electrical outlets and power, to permit routine cleaning, are available in every area</p> <p><i>Maintenance personnel state that more outlets are needed in the corridor.</i></p>	10	4
<p>3.9 Outdoor light fixtures, electrical outlets, equipment, and other fixtures are accessible for repair and replacement</p> <p><i>Not all fixtures and equipment are easily accessible.</i></p>	10	7
TOTAL - 3.0 Plant Maintainability	100	85

Suitability Appraisal of 4.0 Building Safety and Security for Mercer ES Assessment - Shaker Heights CSD - CFAP Update (11-2-21)

4.0 Building Safety and Security	Points Allocated	Points
Site Safety		
4.1 Student loading areas are segregated from other vehicular traffic and pedestrian walkways <i>No physical barriers to different vehicular circulation were observed.</i>	15	5
4.2 Walkways , both on and offsite, are available for safety of pedestrians <i>Ample sidewalks are provided.</i>	10	10
4.3 Access streets have sufficient signals and signs to permit safe entrance to and exit from school area <i>Signs are provided but signals are not present.</i>	5	2
4.4 Vehicular entrances and exits permit safe traffic flow <i>The parking lot has 2 points of access to the street.</i>	5	4
4.5 ES Playground equipment is free from hazard MS Location and types of intramural equipment are free from hazard HS Athletic field equipment is properly located and is free from hazard <i>Hazards were not observed with the playground equipment.</i>	5	5
Building Safety		
4.6 The heating unit(s) is located away from student occupied areas <i>Heating units are located in student occupied areas.</i>	20	10
4.7 Multi-story buildings have at least two stairways for student egress <i>This building has 2 stairways located at the far ends of the building, at the end of each corridor.</i>	15	15
4.8 Exterior doors open outward and are equipped with panic hardware <i>Exterior doors open outward and have panic hardware.</i>	10	10
4.9 Emergency lighting is provided throughout the entire building with exit signs on separate electrical circuits <i>There is adequate coverage of emergency lighting. It is likely that the emergency lighting is not on a separate circuit.</i>	10	5
4.10 Classroom doors are recessed and open outward <i>All classroom doors open out ward, but a few are not recessed.</i>	10	6
4.11 Building security systems are provided to assure uninterrupted operation of the educational program <i>The building security system is adequate to provide uninterrupted operation.</i>	10	8
4.12 Flooring (including ramps and stairways) is maintained in a non-slip condition <i>Non-skid surfaces are provided on stairs and ramps.</i>	5	5
4.13 Stair risers (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16 <i>One stairway was observed to have 18 risers in one flight.</i>	5	2
4.14 Glass is properly located and protected with wire or safety material to prevent accidental student injury <i>Wired glass was observed only at certain doors at the stair.</i>	5	0
4.15 Fixed Projections in the traffic areas do not extend more than eight inches from the corridor wall <i>No fixed projects of this size were observed.</i>	5	5

4.16 Traffic areas terminate at an exit or a stairway leading to an egress	5	5
<i>All corridors terminate at a point of egress.</i>		
Emergency Safety	Points Allocated	Points
4.17 Adequate fire safety equipment is properly located	15	12
<i>Fire extinguishers are located proximate to each of the exits.</i>		
4.18 There are at least two independent exits from any point in the building	15	15
<i>There are 4 independent and widely available exits on first floor, with 3 existing on second floor.</i>		
4.19 Fire-resistant materials are used throughout the structure	15	15
<i>Walls are comprised on masonry units and slabs are structural concrete.</i>		
4.20 Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided	15	5
<i>The emergency fire alarm system is not up to date and does not provides adequate coverage for the facility.</i>		
<hr/>		
TOTAL - 4.0 Building Safety and Security	200	144

Suitability Appraisal of 5.0 Educational Adequacy for Mercer ES Assessment - Shaker Heights CSD - CFAP Update (11-2-21)

5.0 Educational Adequacy	Points Allocated	Points
Academic Learning Space		
5.1 Size of academic learning areas meets desirable standards <i>Classroom size averages between 770 and 850 sq. ft. This is below the OSDM recommendation.</i>	25	20
5.2 Classroom space permits arrangements for small group activity <i>Some of the larger rooms can accommodate varying arrangements.</i>	15	12
5.3 Location of academic learning areas is near related educational activities and away from disruptive noise <i>Sources of disruptive noise were not observed.</i>	10	10
5.4 Personal space in the classroom away from group instruction allows privacy time for individual students <i>Some of the larger rooms can accommodate space for privacy.</i>	10	7
5.5 Storage for student materials is adequate <i>Students are provided a hook for their materials. No lockers or cubbies are present.</i>	10	2
5.6 Storage for teacher materials is adequate <i>Teacher storage is inconsistently provided around the building.</i>	10	3
Special Learning Space		
5.7 Size of special learning area(s) meets standards <i>Room sizes do not meet programmatic requirements.</i>	15	8
5.8 Design of specialized learning area(s) is compatible with instructional need <i>The design of these rooms does not relate specifically to the function.</i>	10	4
5.9 Library/Resource/Media Center provides appropriate and attractive space <i>The media center has 1900 sf of space and uses color to create visual interest in the space.</i>	10	9
5.10 Gymnasium (or covered P.E. area) adequately serves physical education instruction <i>The gymnasium meets the needs for physical education.</i>	5	5
5.11 ES Pre-kindergarten and kindergarten space is appropriate for age of students and nature of instruction MS/HS Science program is provided sufficient space and equipment <i>Kindergarten spaces are less than 900 sq. ft.</i>	10	7
5.12 Music Program is provided adequate sound treated space <i>The music room is less than 700 sq. ft. and has inadequate room for storage of music and instruments.</i>	5	1
5.13 Space for art is appropriate for special instruction, supplies, and equipment <i>Storage space is inadequate. The kiln is remotely located in the mechanical spaces.</i>	5	2
School Facility Appraisal		
5.14 Space for technology education permits use of state-of-the-art equipment <i>Computer lab is adequately sized and can handle future upgrades in technology. A multimedia/meeting space of ample size exists in the basement as well.</i>	5	5
5.15 Space for small groups and remedial instruction is provided adjacent to classrooms	5	2

Several tables and chairs were observed in the corridor due to a lack of space for small group and individual instruction.

5.16 **Storage for student and teacher material** is adequate 5 5
No lockers or cubbies are provided for students. Storage for teacher materials is inconsistent.

Support Space

Points Allocated Points

5.17 **Teacher's lounge and work areas** reflect teachers as professionals 10 10
The lounge exceeds OSDM requirements and has a small kitchenette.

5.18 **Cafeteria/Kitchen** is attractive with sufficient space for seating/dining, delivery, storage, and food preparation 10 10
Food is prepared off site and delivered. Space for dining is more than adequate.

5.19 **Administrative offices** provided are consistent in appearance and function with the maturity of the students served 5 3
Design of the administrative areas does not relate to the school's age group.

5.20 **Counselor's office** insures privacy and sufficient storage 5 5
Counselor's office provides sufficient size and privacy.

5.21 **Clinic** is near administrative offices and is equipped to meet requirements 5 5
The clinic is adjacent to the main administrative offices.

5.22 **Suitable reception space** is available for students, teachers, and visitors 5 3
Seating for 4 is available in the reception area.

5.23 **Administrative personnel** are provided **sufficient work space and privacy** 5 5
Principal's office is provided adequate space, storage, etc.

TOTAL - 5.0 Educational Adequacy 200 143

Suitability Appraisal of 6.0 Environment for Education for Mercer ES Assessment - Shaker Heights CSD - CFAP Update (11-2-21)

6.0 Environment for Education	Points Allocated	Points
Exterior Environment		
6.1 Overall design is aesthetically pleasing to age of students <i>The design of the exterior does not relate specifically to this age group.</i>	15	7
6.2 Site and building are well landscaped <i>Green space and plantings surround the building on most sides.</i>	10	10
6.3 Exterior noise and poor environment do not disrupt learning <i>Disruptive elements were not observed in the surrounding residential area.</i>	10	10
6.4 Entrances and walkways are sheltered from sun and inclement weather <i>The only exterior shelter is an approximately 2 feet of coverage at the main entrance</i>	10	2
6.5 Building materials provide attractive color and texture <i>The range or brownish red brick punctuated by white windows creates a nice contrast.</i>	5	4
Interior Environment		
6.6 Color schemes, building materials, and decor provide an impetus to learning <i>Interior surfaces consist primarily of tan brick and floor tile and white whites. The library design incorporates visually stimulating color.</i>	20	20
6.7 Year around comfortable temperature and humidity are provided throughout the building <i>Consistent temperatures are difficult to maintain building wide due to the varying age of components of the HVAC system.</i>	15	8
6.8 Ventilating system provides adequate quiet circulation of clean air and meets 15cfm VBC requirement <i>The ventilation system is not adequate and does not meet the fresh air requirements.</i>	15	6
6.9 Lighting system provides proper intensity, diffusion, and distribution of illumination <i>The lighting for many classrooms does not meet the minimum illumination requirements. Only a few areas in the building meet the illumination requirements.</i>	15	5
6.10 Drinking fountains and restroom facilities are conveniently located <i>Restrooms and drinking fountains are located in each of the two corridors on all 3 floors.</i>	15	15
6.11 Communication among students is enhanced by commons area(s) for socialization <i>A cafeteria and outdoor areas are provided for student socialization.</i>	10	8
6.12 Traffic flow is aided by appropriate foyers and corridors <i>The only means of travel between north and south corridors in the basement is through the gymnasium.</i>	10	5
6.13 Areas for students to interact are suitable to the age group <i>Cafeteria and play areas are mostly appropriate to the age of the students. The cafeteria resembles an auditorium more than a dining area.</i>	10	6
6.14 Large group areas are designed for effective management of students <i>The gymnasium separates the north and south wings, which have no means of travel between them.</i>	10	6
6.15 Acoustical treatment of ceilings, walls, and floors provides effective sound control <i>Most spaces, including classrooms and corridors, are treated only on the ceiling. Wall and floor surfaces are hard.</i>	10	7
6.16 Window design contributes to a pleasant environment	10	10

The windows allow for pleasing levels of natural light into the building.

6.17 **Furniture and equipment** provide a pleasing atmosphere

10

10

Design of the furniture is dated, but the items continue to perform well.

TOTAL - 6.0 Environment for Education

200

139

LEED Observation Notes

School District:	Shaker Heights City
County:	Cuyahoga
School District IRN:	44750
Building:	Mercer Elem
Building IRN:	24307

Sustainable Sites

Construction process can have a harmful effect on local ecology, especially when buildings are built on productive agricultural, wildlife or open areas. Several measures can be taken however to prevent the impact on undeveloped lands or to improve previously contaminated sites. Appropriate location reduces the need for private transportation and helps to prevent an increase in air pollution. Developing buildings in urban areas and on brownfield sites instead of greenfield locations has economical and environmental benefits. Controlling stormwater runoff and erosion can prevent the worsening of water quality in receiving bodies of water and the impact on aquatic life. Once the building is constructed, it's important to decrease heat island effects and reduce the light pollution on the site.

(source: LEED Reference Guide, 2001:9)

Water Efficiency

In the US ca. 340 billion gallons of fresh water are withdrawn daily from surface sources, 65% of which is discharged later after use. Water is also withdrawn from underground aquifers. The excessive usage of water results in the current water deficit, estimated at 3,700 billion gallons. Water efficiency measures in commercial buildings can reduce water usage by at least 30%. Low-flow fixtures, sensors or using non-potable water for landscape irrigation, toilet flushing and building systems are just some of available strategies. Not only do they result in environmental savings, but also bring about financial benefits, related to lower water use fees, lower sewage volumes to treat and energy use reductions.

(source: LEED Reference Guide, 2001:65)

Most of the fixtures are original construction and are not low flow fixtures. Replacement of the fixtures will meet this requirement. The use of non-potable water for toilet flushing would be possible, but costly in this existing building.

Energy & Atmosphere

Buildings in the US account for more than 30% of the total energy use and for approximately 60% of electricity. 75% of energy is derived from the burning of fossil fuels, which releases CO₂ into the Atmosphere and contributes to global warming. Moreover, coal fired electric utilities release nitrogen oxides and sulfur dioxide, where the former contribute to smog and the latter to acid rain. Other types of energy production are not less harmful. Burning of natural gas produces nitrogen oxides and greenhouse gases as well, nuclear power creates nuclear wastes, while hydroelectric generating plants disrupt natural water flows. Luckily there are several practices that can reduce energy consumption and are environmentally and economically beneficial. Not only will they reduce the air pollution and mitigate global warming thanks to being less dependent on power plants, but also they will reduce operational costs and will quickly pay back. In order to make the most of those practices, it's important to adopt a holistic approach to the building's energy load and integrate different energy saving strategies.

(source: LEED Reference Guide, 2001:93)

There is some flat roof area where photovoltaic solar collector panels for possible on-site electrical generation. Replacement of the HVAC system would increase the efficiency, but ultimately use more energy when the outside air ventilation is increased to meet the code requirements

Material & Resources

The steps related to process building materials, such as extraction, processing and transportation are not environmentally natural, as they pollute the air, water and use natural resources. Construction and demolition wastes account for 40% of the solid waste stream in the US. Reusing existing documents is one of the best strategies to reduce solid wastes volumes and prevents them from ending up at landfills. It also reduces habitat disturbance and minimizes the need for the surrounding infrastructure. While using new materials one should take into account different material sources. Salvaged materials provide savings on material costs, recycled content material minimizes waste products and local materials reduce the environmental impact of transportation. Finally, using rapidly renewable materials and certified wood decreases the consumption of natural resources. Recycling and reusing construction waste is another strategy to be taken into consideration in sustainable design.

(source: LEED Reference Guide, 2001:167)

Indoor Environmental Quality

As we spend a big majority of our time indoors, the emphasis should be put on optimal indoor environmental quality strategies while (re)designing a building. Otherwise, a poor IEQ will have adverse effects on occupants' health, productivity and quality of life. IEQ strategies such as ventilation effectiveness and control of contaminants or a building flush-out prior to occupancy can reduce potential liability, increase the market value of the building but can also result in a significantly higher productivity (16%). Other strategies involve automatic sensors and controls, introducing fresh air to the building or providing lots of daylighting views.

(source: LEED Reference Guide, 2001:215)

The replacement of the HVAC system will increase the IEQ to meet the requirements.

Innovation & Design Process

This category is aimed at recognizing projects that implemented innovative building features and sustainable building knowledge, and whose strategy or measure results exceeded those which are required by the LEED Rating System. Expertise in sustainable design is the key element of the innovative design and construction process.

(source: LEED Reference Guide, 2001:271)

Justification for Allocation of Points - Shaker Heights City

Building Name and Level: **Mercer Elem**

K-4

Building features that clearly exceed criteria:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Building features that are non-existent or very inadequate:

1. Circulation in the first floor of this building is confounded by the inability to move from the north wing to the south wing without going through gymnasium. This results in extra travel time and disruptions to the physical education program.
2. There is no means of physically separating bus drop-off from that of other vehicles. On-site dedicated drop-off areas should be provided.
- 3.
- 4.
- 5.
- 6.

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Environmental Hazards Assessment Cost Estimates

Owner:	Shaker Heights City
Facility:	Mercer Elem
Date of Initial Assessment:	Feb 17, 2015
Date of Assessment Update:	Nov 3, 2021
Cost Set:	2016

District IRN:	44750
Building IRN:	24307
Firm:	Ohio Facilities Construction Commission

Scope remains unchanged after cost updates.

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates	
		Renovation	Demolition
1952 Original Building	70,613	\$179,161.30	\$164,161.30
1957 SW Classrooms	6,205	\$3,495.50	\$3,495.50
Total	76,818	\$182,656.80	\$167,656.80
Total with Regional Cost Factor (102.31%)	—	\$186,876.17	\$171,529.67
Regional Total with Soft Costs & Contingency	—	\$232,530.58	\$213,434.89

Environmental Hazards(Enhanced) - Shaker Heights City (44750) - Mercer Elem (24307) - Original Building

Owner: Shaker Heights City **Bldg. IRN:** 24307
Facility: Mercer Elem **BuildingAdd:** Original Building
Date On-Site: 2015-02-17 **Consultant Name:** Gandee & Associates, Inc.

A. Asbestos Containing Material (ACM)		AFM=Asbestos Free Material		
ACM Found	Status	Quantity	Unit Cost	Estimated Cost
1. Boiler/Furnace Insulation Removal	Not Present	0	\$10.00	\$0.00
2. Breeching Insulation Removal	Not Present	0	\$10.00	\$0.00
3. Tank Insulation Removal	Assumed Asbestos-Containing Material	125	\$8.00	\$1,000.00
4. Duct Insulation Removal	Not Present	0	\$8.00	\$0.00
5. Pipe Insulation Removal	Assumed Asbestos-Containing Material	3000	\$10.00	\$30,000.00
6. Pipe Fitting Insulation Removal	Not Present	0	\$20.00	\$0.00
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Assumed Asbestos-Containing Material	1000	\$12.00	\$12,000.00
8. Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$30.00	\$0.00
9. Pipe Insulation Removal (Hidden in Walls/Ceilings)	Assumed Asbestos-Containing Material	1400	\$15.00	\$21,000.00
10. Dismantling of Boiler/Furnace/Incinerator	Assumed Asbestos-Containing Material	2	\$2,000.00	\$4,000.00
11. Flexible Duct Connection Removal	Not Present	0	\$100.00	\$0.00
12. Acoustical Plaster Removal	Not Present	0	\$7.00	\$0.00
13. Fireproofing Removal	Not Present	0	\$25.00	\$0.00
14. Hard Plaster Removal	Reported / Assumed Asbestos-Free Material	0	\$7.00	\$0.00
15. Gypsum Board Removal	Reported / Assumed Asbestos-Free Material	0	\$6.00	\$0.00
16. Acoustical Panel/Tile Ceiling Removal	Reported / Assumed Asbestos-Free Material	0	\$3.00	\$0.00
17. Laboratory Table/Counter Top Removal	Not Present	0	\$100.00	\$0.00
18. Cement Board Removal	Not Present	0	\$5.00	\$0.00
19. Electric Cord Insulation Removal	Not Present	0	\$1.00	\$0.00
20. Light (Reflector) Fixture Removal	Not Present	0	\$50.00	\$0.00
21. Sheet Flooring with Friable Backer Removal	Not Present	0	\$4.00	\$0.00
22. Fire Door Removal	Assumed Asbestos-Containing Material	6	\$100.00	\$600.00
23. Door and Window Panel Removal	Not Present	0	\$100.00	\$0.00
24. Decontamination of Crawlspace/Chase/Tunnel	Not Present	0	\$3.00	\$0.00
25. Soil Removal	Not Present	0	\$150.00	\$0.00
26. Non-ACM Ceiling/Wall Removal (for access)	Assumed Asbestos-Containing Material	5600	\$2.00	\$11,200.00
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo	Reported / Assumed Asbestos-Free Material	0	\$300.00	\$0.00
28. Window Component (Compound, Tape, or Caulk) - Reno Only	Reported / Assumed Asbestos-Free Material	0	\$300.00	\$0.00
29. Resilient Flooring Removal, Including Mastic	Reported Asbestos-Containing Material	22500	\$3.00	\$67,500.00
30. Carpet Mastic Removal	Reported Asbestos-Containing Material	2400	\$2.00	\$4,800.00
31. Carpet Removal (over RFC)	Assumed Asbestos-Containing Material	5000	\$1.00	\$5,000.00
32. Acoustical Tile Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$3.00	\$0.00
33. Sink Undercoating Removal	Not Present	0	\$100.00	\$0.00
34. Roofing Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	\$0.00
35. NEW Other ACM	Not Present		lump sum	\$0.00
36. NEW Other ACM	Not Present		lump sum	\$0.00
37. (Sum of Lines 1-36)	Total Asb. Hazard Abatement Cost for Renovation Work			\$157,100.00
38. (Sum of Lines 1-36)	Total Asb. Hazard Abatement Cost for Demolition Work			\$157,100.00

B. Removal Of Underground Storage Tanks <input checked="" type="checkbox"/> None Reported					
Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1. (Sum of Lines 1-0)					Total Cost For Removal Of Underground Storage Tanks
					\$0.00

C. Lead-Based Paint (LBP) - Renovation Only <input type="checkbox"/> Addition Constructed after 1980	
1. Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups	\$5,000.00
2. Special Engineering Fees for LBP Mock-Ups	\$5,000.00
3. (Sum of Lines 1-2)	Total Cost for Lead-Based Paint Mock-Ups
	\$10,000.00

D. Fluorescent Lamps & Ballasts Recycling/Incineration <input type="checkbox"/> Not Applicable			
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1. 70613	70613	\$0.10	\$7,061.30

E. Other Environmental Hazards/Remarks <input type="checkbox"/> None Reported		Cost Estimate
Description		
1.	Costs for lead-based paint mock-ups are included in assessment for 1952 (Original Building).	\$0.00
2.	See Bulk Sample Record Nos. 1 through 6 for sampling results in this addition.	\$0.00
3.	XRF testing for lead-based paint is recommended for compliance with EPA's RRP Program.	\$5,000.00
4.	There are some sampling issues associated with materials described on Bulk Sample Record No. 3 that require attention; refer to this Bulk Sample Record for additional information.	\$0.00
5. (Sum of Lines 1-4)	Total Cost for Other Environmental Hazards - Renovation	\$5,000.00
6. (Sum of Lines 1-4)	Total Cost for Other Environmental Hazards - Demolition	\$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries		
1. A37, B1, C3, D1, and E5	Total Cost for Env. Hazards Work - Renovation	\$179,161.30
2. A38, B1, D1, and E6	Total Cost for Env. Hazards Work - Demolition	\$164,161.30

* INSPECTION ASSUMPTIONS for Reported/Assumed Asbestos-Free Materials (Rep/Asm AFM):

- a. Unless reported otherwise by the District, materials installed after 1980 are assumed to be asbestos-free.
- b. Unless reported otherwise by the District, small quantities (less than 1,000 square feet) of the following materials are assumed to be asbestos free: hard plaster, acoustical plaster and gypsum board systems; acoustical panels and tiles; fireproofing; 12"x12" floor tile and mastic.
- c. Unless reported otherwise by the District, all roofing materials are assumed to be asbestos-free.

THESE MATERIALS SHOULD BE PROPERLY SAMPLED AND ANALYZED FOR ASBESTOS PRIOR TO DISTURBING THEM.

