

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

Program Type	Classroom Facilities Assistance Program (CFAP) - Regular
Setting	Urban
Assessment Name	Boulevard 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	Boulevard Elem
Building IRN	3244
Building Address	14900 Drexmore Rd
Building City	Shaker Heights
Building Zipcode	44120
Building Phone	(216) 295-4020
Acreage	5.10
Current Grades:	K-4
Teaching Stations	27
Number of Floors	3
Student Capacity	407
Current Enrollment	355
Enrollment Date	2014-04-30
Enrollment Date is the date in which the current enrollment was taken.	
Number of Classrooms	19
Historical Register	NO
Building's Principal	Coleen Longo
Building Type	Elementary

[Next Page](#)

Building Pictures - Shaker Heights City(44750) - Boulevard Elem(3244)

North elevation photo:



East elevation photo:



South elevation photo:



West elevation photo:



GENERAL DESCRIPTION

50,842 Total Existing Square Footage

1914,1925,1991 Building Dates

K-4 Grades

355 Current Enrollment

27 Teaching Stations

5.10 Site Acreage

The school is situated in a neighborhood of Shaker Heights. The 5.1 acre site is surrounded by residences. The floors are framed with poured concrete joists formed between clay blocks. Load bearing masonry walls sit atop masonry foundations. The original 1914 building and all subsequent additions are clad with reddish brown brick and punctuated with regularly spaced rectangular window openings having stone sills and heads resembling medieval turrets. 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 around the north entry and an arched transom over the door. 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 existing system for the building consists of two Weil-McLain steam boilers at 1690 MBH each installed about ±10 years ago (±2004). The boilers appear to be in satisfactory condition. The older part of the building is heated with steam by steam radiators. The newer section of the building is heated with heating water from a steam to hot water heat exchanger. There are two heating water building pumps that serve the unit ventilators. One pump was replaced last year, 2013 and the other pump is starting to show some corrosion due to age. The steam or two-pipe 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. 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 system provides adequate pressure and capacity for the facility's needs. There is an automatic fire suppression system for the Basement only, old storage area. This room is now a classroom. The alarm valve has annual inspection tags, but the staff indicates this system is not active. The existing water supply system may provide adequate support for a future fire suppression system but will have to be modified to meet current code requirements.

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	\$2,076,362.88	\$40.84
B	Roofing	\$324,422.49	\$6.38
C	Ventilation / Air Conditioning	\$0.00	\$0.00
D	Electrical Systems	\$963,793.49	\$18.96
E	Plumbing and Fixtures	\$452,663.69	\$8.90
F	Windows	\$44,481.60	\$0.87
G	Structure: Foundation	\$178,641.90	\$3.51
H	Structure: Walls and Chimneys	\$136,825.08	\$2.69
I	Structure: Floors and Roofs	\$7,830.00	\$0.15
J	General Finishes	\$1,483,499.26	\$29.18
K	Interior Lighting	\$289,799.40	\$5.70
L	Security Systems	\$166,100.81	\$3.27
M	Emergency / Egress Lighting	\$54,540.76	\$1.07
N	Fire Alarm	\$81,811.13	\$1.61
O	Handicapped Access	\$113,800.61	\$2.24
P	Site Condition	\$375,649.67	\$7.39
Q	Sewage Systems	\$0.00	\$0.00
R	Water Supply	\$22,360.00	\$0.44
S	Exterior Doors	\$36,960.00	\$0.73
T	Hazardous Material	\$747,134.20	\$14.70
U	Life Safety	\$283,379.31	\$5.57
V	Loose Furnishings	\$260,565.25	\$5.13
W	Technology	\$677,359.07	\$13.32
X	Construction Contingency / Non-Construction Cost	\$2,131,430.30	\$41.92
ESCALATED OFCC GUIDELINE BUDGET (2021) - OME		\$10,909,410.90	\$214.57
OFCC 2021 COST GUIDELINES BUDGET		\$9,638,549.87	
VARIANCE		\$1,270,861.03	
VARIANCE %			13.19%

UNIT PRICE CONCERNS

Total		\$710,512.44	
REV OFCC GUIDELINE UNIT PRICE BUDGET - OME	\$11,619,923.34	\$228.55	
OFCC 2021 COST GUIDELINES BUDGET	\$9,638,549.87		
VARIANCE	\$1,981,373.47		
VARIANCE %		20.56%	

LOCALLY FUNDED INITIATIVES

Total	\$4,653,192.01	
REV OFCC GUIDELINE UNIT PRICE BUDGET - OME	\$16,273,115.35	\$320.07
OFCC 2021 COST GUIDELINES BUDGET	\$9,638,549.87	
VARIANCE	\$6,634,565.48	
VARIANCE %	68.83%	

2022 Costs	\$16,273,115.35
2023 Costs with 3.5% inflation	\$16,842,674.39
2024 Costs with 3.5% inflation	\$17,432,167.99
2025 Costs with 3.5% inflation	\$18,042,293.87
2026 Costs with 3.5% inflation	\$18,673,774.16

[Previous Page](#)

[Next Page](#)

Building Construction Information - Shaker Heights City (44750) - Boulevard Elem (3244)

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition	Built Under ELPP
Original Building	1914	no	3	15,442	no	no
W & E Classroom Wings	1925	yes	3	21,169	no	no
South Classroom Wings	1991	yes	2	14,231	no	no

[Previous Page](#)

[Next Page](#)

Building Component Information - Shaker Heights City (44750) - Boulevard Elem (3244)

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 (1914)		3122			1955									
W & E Classroom Wings (1925)		884		2608			2639	418						
South Classroom Wings (1991)		2635												
Total	0	6,641	0	2,608	1,955	0	2,639	418	0	0	0	0	0	0
Master Planning Considerations														

[Previous Page](#)

[Next Page](#)

Existing CT Programs for Assessment

[Next Page](#)

[Previous Page](#)

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 - Boulevard Elem (3244)

District: Shaker Heights City				County: Cuyahoga		Area: Northeastern Ohio (8)	
Name: Boulevard Elem				Contact: Coleen Longo			
Address: 14900 Drexmore Rd Shaker Heights, OH 44120				Phone: (216) 295-4020			
Bldg. IRN: 3244				Date Prepared: 2015-02-17		By: Kelton Waller	
				Date Revised: 2021-11-03		By: Bill Prenosil	
Current Grades		K-4	Acreage:		5.10		
Proposed Grades		N/A	Teaching Stations:		27		
Current Enrollment		355	Classrooms:		19		
Projected Enrollment		N/A					
Addition		Date	HA	Number of Floors	Current Square Feet		
<u>Original Building</u>		1914	no	3	15,442		
<u>W & E Classroom Wings</u>		1925	yes	3	21,169		
<u>South Classroom Wings</u>		1991	yes	2	14,231		
Total					50,842		
*HA =		Handicapped Access					
*Rating =1		Satisfactory					
		=2 Needs Repair					
		=3 Needs Replacement					
*Const P/S =		Present/Scheduled Construction					
FACILITY ASSESSMENT				Rating	Dollar Assessment		
Cost Set: 2016							
A. <u>Heating System</u>				3	\$1,734,729.04		
B. <u>Roofing</u>				3	\$263,118.70		
C. <u>Ventilation / Air Conditioning</u>				1	\$0.00		
D. <u>Electrical Systems</u>				3	\$825,165.66		
E. <u>Plumbing and Fixtures</u>				2	\$392,677.00		
F. <u>Windows</u>				1	\$36,250.00		
G. <u>Structure: Foundation</u>				2	\$162,175.00		
H. <u>Structure: Walls and Chimneys</u>				2	\$130,001.30		
I. <u>Structure: Floors and Roofs</u>				2	\$7,200.00		
J. <u>General Finishes</u>				3	\$1,342,457.80		
K. <u>Interior Lighting</u>				3	\$254,210.00		
L. <u>Security Systems</u>				3	\$144,899.70		
M. <u>Emergency/Egress Lighting</u>				3	\$50,842.00		
N. <u>Fire Alarm</u>				3	\$76,263.00		
O. <u>Handicapped Access</u>				2	\$94,568.40		
P. <u>Site Condition</u>				2	\$352,620.60		
Q. <u>Sewage System</u>				1	\$0.00		
R. <u>Water Supply</u>				3	\$20,500.00		
S. <u>Exterior Doors</u>				1	\$30,000.00		
T. <u>Hazardous Material</u>				1	\$747,134.20		
U. <u>Life Safety</u>				3	\$241,929.90		
V. <u>Loose Furnishings</u>				2	\$254,210.00		
W. <u>Technology</u>				3	\$585,191.42		
X. <u>Construction Contingency / Non-Construction Cost</u>				1	\$1,892,406.15		
Total					\$9,638,549.87		
Suitability Appraisal Summary							
Section		Points Possible	Points Earned	Percentage	Rating	Category	
<u>Cover Sheet</u>		—	—	—	—	—	
<u>1.0 The School Site</u>		100	79	79%	Satisfactory		
<u>2.0 Structural and Mechanical Features</u>		200	137	69%	Borderline		
<u>3.0 Plant Maintainability</u>		100	90	90%	Excellent		
<u>4.0 Building Safety and Security</u>		200	169	85%	Satisfactory		
<u>5.0 Educational Adequacy</u>		200	131	66%	Borderline		
<u>6.0 Environment for Education</u>		200	140	70%	Satisfactory		
<u>LEED Observations</u>		—	—	—	—	—	
<u>Commentary</u>		—	—	—	—	—	
Total		1000	746	75%	Satisfactory		
<u>Enhanced Environmental Hazards Assessment Cost Estimates</u>							
<u>C=Under Contract</u>							
Renovation Cost Factor						102.31%	
Cost to Renovate (Cost Factor applied)						\$9,861,200.37	
<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>							

[Previous Page](#)

Original Building (1914) Summary

District: Shaker Heights City				County: Cuyahoga		Area: Northeastern Ohio (8)	
Name: Boulevard Elem				Contact: Coleen Longo			
Address: 14900 Drexmore Rd Shaker Heights, OH 44120				Phone: (216) 295-4020			
Bldg. IRN: 3244				Date Prepared: 2015-02-17		By: Kelton Waller	
				Date Revised: 2021-11-03		By: Bill Prenosil	
Current Grades		K-4	Acreage:		5.10		
Proposed Grades		N/A	Teaching Stations:		27		
Current Enrollment		355	Classrooms:		19		
Projected Enrollment		N/A					
Original Building		1914	no	3	15,442		
<u>W & E Classroom Wings</u>		1925	yes	3	21,169		
<u>South Classroom Wings</u>		1991	yes	2	14,231		
Total				50,842			
*HA		= Handicapped Access					
*Rating		=1 Satisfactory					
		=2 Needs Repair					
		=3 Needs Replacement					
*Const P/S		= Present/Scheduled Construction					
Suitability Appraisal Summary							
				Section	Points Possible	Points Earned	Percentage Rating Category
				<u>Cover Sheet</u>	—	—	—
				<u>1.0 The School Site</u>	100	79	79% Satisfactory
				<u>2.0 Structural and Mechanical Features</u>	200	137	69% Borderline
				<u>3.0 Plant Maintainability</u>	100	90	90% Excellent
				<u>4.0 Building Safety and Security</u>	200	169	85% Satisfactory
				<u>5.0 Educational Adequacy</u>	200	131	66% Borderline
				<u>6.0 Environment for Education</u>	200	140	70% Satisfactory
				<u>LEED Observations</u>	—	—	—
				<u>Commentary</u>	—	—	—
				Total	1000	746	75% Satisfactory
Enhanced Environmental Hazards Assessment Cost Estimates							
C=Under Contract							
FACILITY ASSESSMENT				Rating	Dollar	Assessment	
Cost Set: 2016							
A. <u>Heating System</u>				3	\$526,881.04	-	
B. <u>Roofing</u>				3	\$109,960.20	-	
C. <u>Ventilation / Air Conditioning</u>				1	\$0.00	-	
D. <u>Electrical Systems</u>				3	\$250,623.66	-	
E. <u>Plumbing and Fixtures</u>				2	\$182,494.00	-	
F. <u>Windows</u>				1	\$16,250.00	-	
G. <u>Structure: Foundation</u>				2	\$78,925.00	-	
H. <u>Structure: Walls and Chimneys</u>				2	\$46,749.40	-	
I. <u>Structure: Floors and Roofs</u>				2	\$0.00	-	
J. <u>General Finishes</u>				3	\$452,927.80	-	
K. <u>Interior Lighting</u>				3	\$77,210.00	-	
L. <u>Security Systems</u>				3	\$44,009.70	-	
M. <u>Emergency/Egress Lighting</u>				3	\$15,442.00	-	
N. <u>Fire Alarm</u>				3	\$23,163.00	-	
O. <u>Handicapped Access</u>				2	\$51,738.40	-	
P. <u>Site Condition</u>				2	\$230,450.60	-	
Q. <u>Sewage System</u>				1	\$0.00	-	
R. <u>Water Supply</u>				3	\$20,500.00	-	
S. <u>Exterior Doors</u>				1	\$12,000.00	-	
T. <u>Hazardous Material</u>				1	\$349,344.20	-	
U. <u>Life Safety</u>				3	\$85,442.40	-	
V. <u>Loose Furnishings</u>				2	\$77,210.00	-	
W. <u>Technology</u>				3	\$177,737.42	-	
X. <u>Construction Contingency / Non-Construction Cost</u>				1	\$691,147.56	-	
Total					\$3,520,206.38		
						Renovation Cost Factor	
						Cost to Renovate (Cost Factor applied)	
						102.31%	
						\$3,601,523.14	
<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>							

W & E Classroom Wings (1925) Summary

District: Shaker Heights City				County: Cuyahoga		Area: Northeastern Ohio (8)				
Name: Boulevard Elem				Contact: Coleen Longo						
Address: 14900 Drexmore Rd Shaker Heights, OH 44120				Phone: (216) 295-4020						
Bldg. IRN: 3244				Date Prepared: 2015-02-17		By: Kelton Waller				
				Date Revised: 2021-11-03		By: Bill Prenosil				
Current Grades		K-4	Acreage:		5.10					
Proposed Grades		N/A	Teaching Stations:		27					
Current Enrollment		355	Classrooms:		19					
Projected Enrollment		N/A								
Addition		Date	HA	Number of Floors	Current Square Feet					
<u>Original Building</u>		1914	no	3	15,442					
W & E Classroom Wings		1925	yes	3	21,169					
<u>South Classroom Wings</u>		1991	yes	2	14,231					
Total					50,842					
		*HA	=	Handicapped Access						
		*Rating	=1	Satisfactory						
			=2	Needs Repair						
			=3	Needs Replacement						
		*Const P/S	=	Present/Scheduled Construction						
Suitability Appraisal Summary										
Section						Points Possible	Points Earned	Percentage	Rating	Category
<u>Cover Sheet</u>						—	—	—	—	—
<u>1.0 The School Site</u>						100	79	79%	Satisfactory	
<u>2.0 Structural and Mechanical Features</u>						200	137	69%	Borderline	
<u>3.0 Plant Maintainability</u>						100	90	90%	Excellent	
<u>4.0 Building Safety and Security</u>						200	169	85%	Satisfactory	
<u>5.0 Educational Adequacy</u>						200	131	66%	Borderline	
<u>6.0 Environment for Education</u>						200	140	70%	Satisfactory	
<u>LEED Observations</u>						—	—	—	—	—
<u>Commentary</u>						—	—	—	—	—
Total						1000	746	75%	Satisfactory	
Enhanced Environmental Hazards Assessment Cost Estimates										
C=Under Contract										
FACILITY ASSESSMENT										
Cost Set: 2016				Rating	Dollar Assessment					
A.	<u>Heating System</u>	3	\$722,286.28							
B.	<u>Roofing</u>	3	\$114,860.40							
C.	<u>Ventilation / Air Conditioning</u>	1	\$0.00							
D.	<u>Electrical Systems</u>	3	\$343,572.87							
E.	<u>Plumbing and Fixtures</u>	2	\$175,183.00							
F.	<u>Windows</u>	1	\$20,000.00							
G.	<u>Structure: Foundation</u>	2	\$41,625.00							
H.	<u>Structure: Walls and Chimneys</u>	2	\$65,916.40							
I.	<u>Structure: Floors and Roofs</u>	2	\$0.00							
J.	<u>General Finishes</u>	3	\$660,507.10							
K.	<u>Interior Lighting</u>	3	\$105,845.00							
L.	<u>Security Systems</u>	3	\$60,331.65							
M.	<u>Emergency/Egress Lighting</u>	3	\$21,169.00							
N.	<u>Fire Alarm</u>	3	\$31,753.50							
O.	<u>Handicapped Access</u>	2	\$39,983.80							
P.	<u>Site Condition</u>	2	\$42,753.50							
Q.	<u>Sewage System</u>	1	\$0.00							
R.	<u>Water Supply</u>	3	\$0.00							
S.	<u>Exterior Doors</u>	1	\$6,000.00							
T.	<u>Hazardous Material</u>	1	\$396,366.90							
U.	<u>Life Safety</u>	3	\$93,784.30							
V.	<u>Loose Furnishings</u>	2	\$105,845.00							
W.	<u>Technology</u>	3	\$243,655.19							
X.	<u>Construction Contingency / Non-Construction Cost</u>	1	\$804,108.40							
Total					\$4,095,547.29					
Renovation Cost Factor						102.31%				
Cost to Renovate (Cost Factor applied)						\$4,190,154.43				
<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>										

South Classroom Wings (1991) Summary

District: Shaker Heights City				County: Cuyahoga		Area: Northeastern Ohio (8)				
Name: Boulevard Elem				Contact: Coleen Longo						
Address: 14900 Drexmore Rd Shaker Heights, OH 44120				Phone: (216) 295-4020						
Bldg. IRN: 3244				Date Prepared: 2015-02-17		By: Kelton Waller				
				Date Revised: 2021-11-03		By: Bill Prenosil				
Current Grades		K-4	Acreage:		5.10					
Proposed Grades		N/A	Teaching Stations:		27					
Current Enrollment		355	Classrooms:		19					
Projected Enrollment		N/A								
Addition		Date	HA	Number of Floors	Current Square Feet					
<u>Original Building</u>		1914	no	3	15,442					
<u>W & E Classroom Wings</u>		1925	yes	3	21,169					
South Classroom Wings		1991	yes	2	14,231					
Total					50,842					
		*HA	=	Handicapped Access						
		*Rating	=1	Satisfactory						
			=2	Needs Repair						
			=3	Needs Replacement						
		*Const P/S	=	Present/Scheduled Construction						
SUITABILITY APPRAISAL SUMMARY										
				Section		Points Possible	Points Earned	Percentage	Rating	Category
				<u>Cover Sheet</u>		—	—	—	—	—
				<u>1.0 The School Site</u>		100	79	79%	Satisfactory	
				<u>2.0 Structural and Mechanical Features</u>		200	137	69%	Borderline	
				<u>3.0 Plant Maintainability</u>		100	90	90%	Excellent	
				<u>4.0 Building Safety and Security</u>		200	169	85%	Satisfactory	
				<u>5.0 Educational Adequacy</u>		200	131	66%	Borderline	
				<u>6.0 Environment for Education</u>		200	140	70%	Satisfactory	
				<u>LEED Observations</u>		—	—	—	—	—
				<u>Commentary</u>		—	—	—	—	—
				Total		1000	746	75%	Satisfactory	
Enhanced Environmental Hazards Assessment Cost Estimates										
C=Under Contract										
				Renovation Cost Factor						102.31%
				Cost to Renovate (Cost Factor applied)						\$2,069,522.80
<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>										
				FACILITY ASSESSMENT						
				Cost Set: 2016						
				Rating		Dollar Assessment				
				3		\$485,561.72				
				3		\$38,298.10				
				1		\$0.00				
				3		\$230,969.13				
				2		\$35,000.00				
				1		\$0.00				
				2		\$41,625.00				
				2		\$17,335.50				
				2		\$7,200.00				
				3		\$229,022.90				
				3		\$71,155.00				
				3		\$40,558.35				
				3		\$14,231.00				
				3		\$21,346.50				
				2		\$2,846.20				
				2		\$79,416.50				
				1		\$0.00				
				3		\$0.00				
				1		\$12,000.00				
				1		\$1,423.10				
				3		\$62,703.20				
				2		\$71,155.00				
				3		\$163,798.81				
				1		\$397,150.20				
				Total		\$2,022,796.21				

Facility Assessment

A. Heating System

Description: The existing system for the building consists of two Weil-McLain steam boilers at 1690 MBH each installed about ±10 years ago (±2004). The boilers appear to be in satisfactory condition. The older part of the building is heated with steam by steam radiators. The newer section of the building is heated with heating water from a steam to hot water heat exchanger. There are two heating water building pumps that serve the unit ventilators. One pump was replaced last year, 2013 and the other pump is starting to show some corrosion due to age. The whole building ventilation fan is no longer functional. The fan room is used as a storage area. The gym is heated with steam unit ventilators and steam radiators. The office air handling unit (1989) has electronic control valves and is controlled along with the boilers by the DDC controls. 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. Each ventilator has an outside air grilled at the exterior wall. The age of the unit ventilator is unknown, however, the equipment in the building does 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 staff indicates they turn off the boilers on mild temperature days to avoid over heating the school, but generally they try to leave the controls enabled. The steam or two-pipe 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 (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
HVAC System Replacement:	\$26.12	sq.ft. (of entire building addition)		Required	Required	Required	\$1,327,993.04	(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	Required	\$406,736.00	(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:			\$1,734,729.04	\$526,881.04	\$722,286.28	\$485,561.72		



[Back to Assessment Summary](#)

Facility Assessment

B. Roofing

Description: Pitched roofs around the building's perimeter are covered with slate shingles. Box gutters with downspouts are present at the roof overhangs. The interior face of the pitched roof is vertical and clad with EIFS over plywood. The plywood is saturated with water in several areas, thus causing the EIFS adhesive to completely delaminate, resulting in a failure of this cladding. Built-up roofing is used over the low-slope areas. The built-up roof has passed its expected service life. A white reflective coating has been added to the top of this roofing system. Roof drains are provided in the low-sloped areas.

Rating: 3 Needs Replacement

Recommendations: At vertical surfaces around the interior low-slope roof, replace existing plywood and EIFS sheathing with new pressure treated plywood and membrane. Provide a new built-up roof as well as overflow drains. 01-10-16 Update: PROVIDE FOR ROOF REPLACEMENT ON 1925 W & E CLASSROOM WINGS. REPLACE GUTTERS ON ORIGINAL 1914 BUILDING, 1925 ADDITION AND 1991 ADDITION. REPLACE DORMER LOUVERS ON 1914 ORIGINAL BUILDING. PROVIDE FOR REPLACEMENT OF LOW SLOPE ROOF AREAS ON 1914 ORIGINAL BUILDING AND 1991 ADDITION. 01-27-16 UPDATE: REPLACE SLATE ROOF WITH ASPHALT ROOFING TO INCLUDE COPING AND FLASHING ON 1914 ORIGINAL BUILDING, 1925 ADDITION AND 1991 ADDITION. REPLACE DORMER LOUVERS ON 1914 ORIGINAL BUILDING. REPLACE GUTTERS AND DOWNSPOUTS ON 1914 ORIGINAL BUILDING, 1925 ADDITION AND 1991 ADDITION. REPLACE ROOF DRAINS AND STORM LEADERS ON LOW SLOPE ROOF AREAS ON 1914 ORIGINAL BUILDING, 1925 ADDITION AND 1991 ADDITION.

Item	Cost	Unit	Whole Building	Original Building (1914) 15,442 ft²	W & E Classroom Wings (1925) 21,169 ft²	South Classroom Wings (1991) 14,231 ft²	Sum	Comments
Asphalt Shingle:	\$3.00	sq.ft. (Qty)		7,125 Required	7,850 Required	360 Required	\$46,005.00	
Deck Replacement:	\$5.25	sq.ft. (Qty)		4,800 Required			\$25,200.00	(wood or metal, including insulation)
Membrane (all types):	\$8.70	sq.ft. (Qty)		4,842 Required	8,792 Required	1,941 Required	\$135,502.50	(unless under 10,000 sq.ft.)
Repair/replace cap flashing and coping:	\$18.40	n.ft.		180 Required	200 Required	146 Required	\$9,678.40	
Gutters/Downspouts	\$13.10	n.ft.		188 Required	50 Required	50 Required	\$3,772.80	
Remove/replace existing roof Drains and Sump:	\$1,200.00	each		6 Required	6 Required	4 Required	\$19,200.00	
Overflow Roof Drains and Piping:	\$2,500.00	each				4 Required	\$10,000.00	
Other: Dormer Louver Replacement	\$100.00	sq.ft. (Qty)		50 Required			\$5,000.00	Dormer Louver Replacemen
Other: Storm Leaders	\$18.25	n.ft.		180 Required	180 Required	120 Required	\$8,760.00	Provide for 4" PVC storm leaders to include insulation.
Sum:			\$263,118.70	\$109,960.20	\$114,860.40	\$38,298.10		



[Back to Assessment Summary](#)

Facility Assessment

C. Ventilation / Air Conditioning

Description: There is no central air conditioning for this building. The office is served by 1989 Air Handling units with hot water heat and Dx cooling. There are a few window air conditioning units for offices. 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 (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
Sum:			\$0.00	15,442 ft ²	21,169 ft ²	14,231 ft ²	\$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. The electrical system in the overall facility has two power feeds; one 3 phase and one single phase. The 3 phase electrical gear is 240V, 3 phase, 3 wire, 400 amp gear. The single phase gear is 240V, 1 phase, 400 amp. Each power feed has a DDC power recording device to track the power used. The electrical gear appears to be as least 15 years old in good condition. The panels boards appear to be older in fair to poor condition with no extra capacity on the main panel. 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 entire electrical system 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 (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
System Replacement:	\$16.23	sq.ft. (of entire building addition)		Required	Required	Required	\$825,165.66	(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:			\$825,165.66	\$250,623.66	\$343,572.87	\$230,969.13		



[Back to Assessment Summary](#)

E. Plumbing and Fixtures

Description: The 2" domestic water supply piping in the building is copper piping at the building entrance. The water piping in the building is estimated to be 50% galvanized and 50% copper. There is a backflow preventer and a pressure reducing valve on the water service line. This equipment appears to be in fair condition. 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 2009, 50 gal AO Smith 40 MBH gas water heater with storage tank (1970) provides the domestic hot water for the main building. The galvanized piping has been replaced with copper water piping in the building as renovations have been completed. In 2005, the plumbing fixtures were updated with wall hung toilets, ADA fixtures and double LAV units with electronic sensor faucets and flush valves. There are no electronic sensor faucets and flush valves in the building in the newer section of the building. All of the toilets are floor mounted. The plumbing fixtures are generally in good condition. The school contains 3 restrooms for boys, 3 restrooms for girls, and 2 restrooms for the staff. The first floor there is 1 boys ADA restroom. The second floor there is 1 boys ADA restroom and 2 girls ADA restrooms. There are 11 LAVs, 2 ADA LAVs, 2 Double wall unit ADA LAVs with sensor faucets, 15 toilets, 3 toilets with electronic flush valves, 2 ADA toilets, 2 ADA toilets with electronic flush valves, 4 urinals, and 2 ADA urinals with electronic flush valves. There are 8 classroom sinks. There are 7 electric water coolers and 2 ADA electric water coolers in the school in generally good condition. There is no kitchen in this school.

Rating: 2 Needs Repair

Recommendations: Replace all electronic faucet/flush valve fixture with low flow fixtures and sensor faucets and flush valves to meet OSFC requirements. Replace galvanized piping with copper piping. 01-27-16 UPDATE: REPLACE ELECTRIC WATER COOLERS IN 1914 ORIGINAL BUILDING. PROVIDE REPLACEMENT OF WATER COOLERS. PROVIDE FOR 2 NEW ADA COMPLAINT ELECTRIC WATER COOLER IN 1914 ORIGINAL BUILDING AND 2 IN 1991 ADDITION. REPLACE SANITARY WASTE PIPING IN 1914 ORIGINAL BUILDING AND 1925 ADDITION. PROVIDE MIXING VALVE ON DOMESTIC WATER HEATER FOR 10 NEW WATER CLOSETS,

Item	Cost	Unit	Whole Building	Original Building (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
Domestic Supply Piping:	\$3.50	sq.ft. (of entire building addition)		15,442 ft ²	21,169 ft ²	14,231 ft ²		
Sanitary Waste Piping:	\$3.50	sq.ft. (of entire building addition)		Required	Required		\$128,138.50	(remove / replace)
Toilet:	\$3,800.00	unit		2 Required	4 Required	4 Required	\$38,000.00	(new)
Toilet:	\$1,500.00	unit		15 Required			\$22,500.00	(remove / replace) See Item O
Urinal:	\$3,800.00	unit		1 Required	1 Required	1 Required	\$11,400.00	(new)
Urinal:	\$1,500.00	unit		4 Required			\$6,000.00	(remove / replace)
Electric water cooler:	\$3,000.00	unit		4 Required	2 Required	5 Required	\$33,000.00	(double ADA)
Two Station Modular Lavatory	\$3,000.00	unit		5 Required			\$15,000.00	(remove / replace)
Other: Domestic Hot Water Mixing Valve	\$5,500.00	per unit		1 Required			\$5,500.00	Provide Mixing Valve on Domestic Water Supply
Other: Add frostproof hose bibbs on exterior of building.	\$1,000.00	each		2 Required	2 Required	1 Required	\$5,000.00	Cost includes fixture and 100 ft of pipe.
Sum:			\$392,677.00	\$182,494.00	\$175,183.00	\$35,000.00		



[Back to Assessment Summary](#)

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: 1 Satisfactory

Recommendations: No work is recommended at this time. 01-27-16 UPDATE: REPLACE SIDE LIGHTS AND TRANSOM ON EXTERIOR DOOR OF 1914 ORIGINAL BUILDING.

Item	Cost	Unit	Whole Building	Original Building (1914) 15,442 ft ²	W & E Classroom Wings (1925) 21,169 ft ²	South Classroom Wings (1991) 14,231 ft ²	Sum	Comments
Door and Window Panel Replacement	\$200.00	each		60 Required	100 Required		\$32,000.00	(Hazardous Material Replacement Cost - See T.)
Other: Transom and Sidelights	\$85.00	sq.ft. (Qty)		50 Required			\$4,250.00	Transom and Sidelights
Sum:			\$36,250.00	\$16,250.00	\$20,000.00	\$0.00		



[Back to Assessment Summary](#)

Facility Assessment

G. Structure: Foundation

Description: Masonry foundation walls and poured concrete walls were observed in the building's foundation. Footings were not visible. Maintenance personnel indicate that water frequently breaches the foundation during rain fall.

Rating: 2 Needs Repair

Recommendations: Provisions for drainage should be provided around the buildings perimeter in order to direct ground water away from the buildings foundation. 01-27-16 UPDATE: REPAIR DAMAGED BASEMENT CONCRETE FLOOR IN 1914 ORIGINAL BUILDING. REMOVE WATERPROOFING MEMBRANE AND DRAINAGE TILE SYSTEM ON 1991 ADDITION (NO BASEMENT, SLAB ON GRADE). REMOVE HORIZONTAL STORM PIPING CATCH SYSTEM ATTACHED TO FACE OF BUILDING AND REESTABLISH TIE IN TO STORM PIPING. 11-2-21 Update: Remove scope performed in 2020; partial waterproofing membrane and drainage tile.

Item	Cost	Unit	Whole Building	Original Building (1914) 15,442 ft ²	W & E Classroom Wings (1925) 21,169 ft ²	South Classroom Wings (1991) 14,231 ft ²	Sum	Comments
Waterproofing Membrane:	\$7.00	sq.ft. (Qty)		2,000 Required			\$14,000.00	(include excavation and backfill)
Drainage Tile Systems / Foundation Drainage:	\$18.00	in.ft.		100 Required			\$1,800.00	(include excavation and backfill)
Other: Concrete Floor Repair	\$15.00	sq.ft. (Qty)		100 Required			\$1,500.00	Cut and patch concrete floor
Other: Excavation and Pavement Replacement	\$125.00	cubic yard		333 Required	333 Required	333 Required	\$124,875.00	As necessary to provide drain tile and waterproofing.
Other: Remove Horizontal Storm Piping	\$20,000.00	allowance		Required			\$20,000.00	Remove Horizontal Storm Piping and Tie Storm into Existing Underground Storm Piping.
Sum:			\$162,175.00	\$78,925.00	\$41,625.00	\$41,625.00		

[Back to Assessment Summary](#)

Facility Assessment

H. Structure: Walls and Chimneys

Description: Load bearing masonry walls were observed throughout the facility. Numerous instances of efflorescence were observed on the interior side of the gymnasium exterior walls. Approximately 1/2 dozen brick clad stacks were observed on the roof. Several areas of mortar repair were observed. However, the current condition of the stacks appears to be stable.

Rating: 2 Needs Repair

Recommendations: Masonry cleaning and sealing should be provided at all exterior walls around the gymnasium and the stacks. Masonry cleaning should occur on the interior surface of the gymnasium walls to eliminate efflorescence and visual inconsistencies. 01-27-16 UPDATE: REPLACE CAULK AT ORIGINAL 1914 BUILDING, 1925 ADDITION AND 1991 ADDITION. PROVIDE FOR EXTERIOR MASONRY CLEANING AND SEALING ON 1914 ORIGINAL BUILDING AND 1991 ADDITION. INFILL OPENINGS FOLLOWING REMOVAL OF UNIT VENTILATOR OUTSIDE ARE GRILLES IN 1925 ADDITION AND 1991 ADDITION. ADD WEEPS AT LINTELS ABOVE WINDOWS IN 1914 ORIGINAL BUILDING, 1925 ADDITION AND 1991 ADDITION. CAULK WINDOWS IN 1914 ORIGINAL BUILDING, 1925 ADDITION AND 1991 ADDITION. REBUILD AREA WELL MASONRY WALLS. 11-2-21 Update: Remove work performed in 2019: partial masonry infill; partial tuckpointing; cleaning & sealing.

Item	Cost	Unit	Whole Building	Original Building (1914) 15,442 ft²	W & E Classroom Wings (1925) 21,169 ft²	South Classroom Wings (1991) 14,231 ft²	Sum	Comments
Tuckpointing:	\$5.25	sq.ft. (Qty)		800 Required	800 Required		\$8,400.00	(wall surface)
Exterior Masonry Cleaning:	\$1.50	sq.ft. (Qty)		8,521 Required	10,400 Required	3,526 Required	\$33,670.50	(wall surface)
Exterior Masonry Sealing:	\$1.00	sq.ft. (Qty)		8,521 Required	5,200 Required	3,526 Required	\$17,247.00	(wall surface)
Exterior Caulking:	\$5.50	ln.ft.		261 Required	522 Required	261 Required	\$5,742.00	(removing and replacing)
Other: Add additional weeps	\$35.85	per unit		84 Required	124 Required	100 Required	\$11,041.80	Provide Weeps above windows
Other: Infill Unite Ventilator Grille Openings	\$35.00	sq.ft. (Qty)				100 Required	\$3,500.00	Infill Unite Ventilator Grille Openings
Other: Rebuild Area Well Masonry Walls	\$42.00	sq.ft. (Qty)		400 Required	800 Required		\$50,400.00	Rebuild Area Well Masonry Walls to include demolition, 8" CMU Block, Brick Veneer and Waterproofing and BackFill.
Sum:			\$130,001.30	\$46,749.40	\$65,916.40	\$17,335.50		



[Back to Assessment Summary](#)

Facility Assessment

I. Structure: Floors and Roofs

Description: The floor structure in the original building consists of clay block/concrete joist system. The roof deck is corrugated metal deck. Other structural components of the roof were not observable.

Rating: 2 Needs Repair

Recommendations: No deficiencies were observed with the floor or roof structures. 01-27-16 UPDATE: REPAIR SPALLING CONCRETE IN 1991 ADDITION..

Item	Cost	Unit	Whole Building	Original Building (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
Repair Soffits	\$24.00	sq.ft. (Qty)		15,442 ft ²	21,169 ft ²	14,231 ft ²		
Sum:			\$7,200.00	\$0.00	\$0.00	\$00 Required	\$7,200.00	



[Back to Assessment Summary](#)

Facility Assessment

J. General Finishes

Description: VCT floor were observed throughout common areas of the school. Many classrooms in the original building have original wood floors. New classrooms have VCT floors. In the original building corridor walls are finished with plaster walls with direct adhered acoustic tile. Corridors in the 1991 addition have glazed CMU wainscot with painted CMU above. Suspended acoustic tile ceilings are used in the 1991 addition. The finishes consist mostly of materials which continue to perform after extended periods of use. Painted brick walls were observed in the basement of the original building. Newer partitions were observed in restrooms throughout the building. Kitchen equipment is not used. Basketball assemblies and other fixed equipment are provided for physical education. Some of the practice basketball assemblies were observed to be crooked and damaged.

Rating: 3 Needs Replacement

Recommendations: Finishes in the original building and East and West wings have passed their expected service life and should be replaced. Provide new practice basket ball assemblies. 01-27-16 UPDATE: REPLACE PLASTER WALLS IN 1914 ORIGINAL BUILDING DUE TO REMOVAL OF ACM PLASTER UNDER ITEM T. DRYWALL REPLACEMENT FOR REMOVAL OF EXISTING DRYWALL TO ACCESS ACM BEHIND WALLS IN 1914 ORIGINAL BUILDING AND 1925 ADDITION NOTED UNDER ITEM T. REPLACE 9 BASKETBALL BACKBOARDS. PROVIDE FOR COMPLETE REPLACEMENT OF FURNISHINGS TO INCLUDE CASEWORK IN 1991 ADDITION. REPLACE KITCHEN EQUIPMENT. PROVIDE FOR 1 KILN IN 1991 ADDITION.

Item	Cost	Unit	Whole Building	Original Building (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
Complete Replacement of Finishes and Casework (Elementary):	\$15.90	sq.ft. (of entire building addition)		15,442 ft ² Required	21,169 ft ² Required	14,231 ft ² Required	\$808,387.80	(elementary, per building area, with removal of existing)
Basketball Backboard Replacement	\$6,500.00	each		4 Required	5 Required		\$58,500.00	(electric)
Art Program Kiln:	\$2,750.00	each				1 Required	\$2,750.00	
Hard Plaster Replacement	\$9.00	sq.ft. (Qty)		600 Required			\$5,400.00	(Hazardous Material Replacement Cost - See T.)
Gypsum Board Replacement	\$4.00	sq.ft. (Qty)		44,000 Required	53,000 Required		\$388,000.00	(Hazardous Material Replacement Cost - See T.)
Total Kitchen Equipment Replacement:	\$190.00	sq.ft. (Qty)			418 Required		\$79,420.00	(square footage based upon only existing area of food preparation, serving, kitchen storage areas and walk-ins. Includes demolition and removal of existing kitchen equipment)
Sum:			\$1,342,457.80	\$452,927.80	\$660,507.10	\$229,022.90		



[Back to Assessment Summary](#)

Facility Assessment

K. Interior Lighting

Description: The florescent lighting is a mixture of recessed with acrylic lense, surface mounted with acrylic 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. Newer Classroom lighting levels is 24 FC, Older classroom lighting level are 48 FC and 44 FC, the Corridor lighting level is 44 FC, the Gym is 25 FC and the Art Room is 55 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.

Item	Cost	Unit	Whole Building	Original Building (1914) 15,442 ft²	W & E Classroom Wings (1925) 21,169 ft²	South Classroom Wings (1991) 14,231 ft²	Sum	Comments
Complete Building Lighting Replacement	\$5.00	sq. ft. (of entire building addition)		Required	Required	Required	\$254,210.00	Includes demo of existing fixtures
Sum:			\$254,210.00	\$77,210.00	\$105,845.00	\$71,155.00		



[Back to Assessment Summary](#)

Facility Assessment

L. Security Systems

Description: The security system consists of 1 exterior mounted camera located at the building entrance. . There are 2 key card entry doors. The front door is monitored with 2 way communication and a buzzer for visitors. It is also one of the key card entrance doors. The camera report to computer screen 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 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: 3 Needs Replacement

Recommendations: Provide new security system to meet OSFC design manual guidelines and due to the installation of the HVAC and fire suppression systems. Upgrade the exterior lighting.

Item	Cost	Unit	Whole Building	Original Building (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
Security System:	\$1.85	sq.ft. (of entire building addition)		15,442 ft ²	21,169 ft ²	14,231 ft ²	\$94,057.70	(complete, area of building)
Exterior Site Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	Required	Required	\$50,842.00	(complete, area of building)
Sum:			\$144,899.70	\$44,009.70	\$60,331.65	\$40,558.35		



[Back to Assessment Summary](#)

Facility Assessment

M. Emergency/Egress Lighting

Description: The overall facility is equipped with emergency egress lighting system consisting of compact fluorescent and 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 (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
Emergency/Egress Lighting:	\$1.00	sq.ft. (of entire building addition)		15,442 ft ²	21,169 ft ²	14,231 ft ²	\$50,842.00	(complete, area of building)
Sum:			\$50,842.00	\$15,442.00	\$21,169.00	\$14,231.00		



[Back to Assessment Summary](#)

Facility Assessment

N. Fire Alarm

Description: The Notifier fire alarm control panel was updated recently, but date is unknown. The system has sufficient horns, strobes and pull stations. 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. It is not likely that 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 (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
Fire Alarm System:	\$1.50	sq.ft. (of entire building addition)		15,442 ft ²	21,169 ft ²	14,231 ft ²		
Sum:			\$76,263.00	\$23,163.00	\$31,753.50	\$21,346.50		(complete new system, including removal of existing)



[Back to Assessment Summary](#)

Facility Assessment

O. Handicapped Access

Description: An elevator is present to provide access to all 3 floors of the school. The doors in the older part of the building do not have lever operators. Interior way finding text is too small and lacks braille. Accessible restrooms are provided on at least 2 floors. Door operating assists are provided and some exterior doors. ADA compliant water fountains are provided as well. The coolers are in working order.

Rating: 2 Needs Repair

Recommendations: Replace turn knob door hardware with levers. Provide latches at egress stair doors. Provide high contrast signage and way finding with braille. A lift should be provided for access to the stage. 01-27-16 UPDATE: PROVIDE FOR HANDRAILS REPLACEMENT @ INTERIOR STAIRS IN 1914 ORIGINAL BUILDING AND 1925 ADDITION AND RAMP IN 1914 ORIGINAL BUILDING. RECESS 4 DOORS IN BASEMENT OF 1914 ORIGINAL BUILDING TO ACHIEVE ADEQUATE CLEARANCE. PROVIDE FOR RECESSED ADA WATER COOLERS IN 1914 ORIGINAL BUILDING. PROVIDE ADA DOOR OPENER ON 1914 ORIGINAL BUILDING EXTERIOR ENTRY DOOR AT RAMP.

Item	Cost	Unit	Whole Building	Original Building (1914) 15,442 ft ²	W & E Classroom Wings (1925) 21,169 ft ²	South Classroom Wings (1991) 14,231 ft ²	Sum	Comments
Handicapped Hardware:	\$350.00	set		31 Required	47 Required		\$27,300.00	(includes installation / hardware only)
Signage:	\$0.20	sq.ft. (of entire building addition)		Required	Required	Required	\$10,168.40	(per building area)
Lifts:	\$15,000.00	unit			1 Required		\$15,000.00	(complete)
Electric Water Coolers:	\$3,000.00	unit		2 Required			\$6,000.00	(new double ADA)
ADA Assist Door & Frame:	\$7,500.00	unit		1 Required			\$7,500.00	(openers, electrical, patching, etc)
Replace Doors:	\$5,000.00	leaf		4 Required			\$20,000.00	(rework opening and corridor wall to accommodate ADA standards when door opening is set back from edge of corridor and cannot accommodate a wheelchair.)
Other: Handrails	\$43.00	in.ft.		100 Required	100 Required		\$8,600.00	Provide Handrails @ Stairs
Sum:			\$94,568.40	\$51,738.40	\$39,983.80	\$2,846.20		



[Back to Assessment Summary](#)

Facility Assessment

P. Site Condition

Description: Only a nominal number of cracks were observed in the pavement. Slopes and paved areas do not consistently drain away from the building. Soft surface play areas consist of playground assemblies on mulched surfaces. Hard surfaces areas with painted markings are provided as well. No concrete pad is provided for the dumpster/recycling bin area.

Rating: 2 Needs Repair

Recommendations: Provide dedicated on-site bus drop-off. Provide concrete pad for dumpsters and recycling bins. 01-27-16 UPDATE: REPLACE HANDRAILS AT 1914 ORIGINAL BUILDING, 1925 ADDITION AND 1991 ADDITION. REPLACE STAIRS, RAMPS, SIDEWALKS AND LANDSCAPING AT 1914 ORIGINAL BUILDING, 1925 ADDITION AND 1991 ADDITION DUE TO EXCAVATION FOR WATERPROOFING OF FOUNDATION WALLS. REBUILD RETAINING WALL AT 914 ORIGINAL BUILDING. REBUILD WALK AND ADD STEPS AT NORTH ENTRANCE OF 1914 ORIGINAL BUILDING. PROVIDE FOR SOFT SURFACE PLAYGROUND SURFACE AND SWING. PROVIDE FOR ADDITIONAL PARKING SPACES. 11-2-21 Update: Remove partial work completed in 2020: Handrail replacement; concrete steps replacement; retaining wall.

Item	Cost	Unit	Whole Building	Original Building (1914) 15,442 ft²	W & E Classroom Wings (1925) 21,169 ft²	South Classroom Wings (1991) 14,231 ft²	Sum	Comments
Bus Drop-Off for Elementary	\$110.00	per student		200 Required	100 Required	100 Required	\$44,000.00	(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)		40 Required			\$187.60	(5 inch exterior slab)
Exterior Hand / Guard Rails:	\$43.00	ln.ft.		200 Required		90 Required	\$12,470.00	
Provide Soft Surface Playground Material:	\$30.00	sq. yard		800 Required			\$24,000.00	
Replace Concrete Steps:	\$32.00	sq.ft. (Qty)		100 Required			\$3,200.00	
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	Required	\$76,263.00	Include this one or the next. (Each addition should have this item)
Other: Concrete Replacement	\$24.00	sq.ft. (Qty)		2,500 Required		1,800 Required	\$103,200.00	Replace Concrete steps and walks due to excavation required for waterproofing basement walls.
Other: Handicapped Playground Swing	\$900.00	per unit		1 Required			\$900.00	Handicapped Playground Swing
Other: Parking Spaces	\$1,500.00	per unit		24 Required			\$36,000.00	Provide for additional parking spaces
Sum:			\$352,620.60	\$230,450.60	\$42,753.50	\$79,416.50		



[Back to Assessment Summary](#)

Facility Assessment

Q. Sewage System

Description: The sanitary sewer system drains to the city sewer system. Parts of this system have been replaced during renovations, however, some old piping remains. There are no issues with this system.

Rating: 1 Satisfactory

Recommendations: No recommendations at this time.

Item	Cost	Unit	Whole Building	Original Building (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
				15,442 ft ²	21,169 ft ²	14,231 ft ²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00		

[Back to Assessment Summary](#)

Facility Assessment

R. Water Supply

Description: The 4" domestic water supply piping in the original building is galvanized piping. The piping splits in the building to a 4" sprinkler system alarm valve, a 2" domestic water service and a 1.5" irrigation service. The irrigation and domestic water have parallel backflow preventers. The domestic water piping has a pressure reducing valve downstream of the backflow preventer. The system provides adequate pressure and capacity for the facility's needs. There is an automatic fire suppression system for the Basement only, old storage area. This room is now a classroom. The alarm valve has annual inspection tags, but the staff indicates this system is not active. The existing water supply system may provide adequate support for a future fire suppression system but will have to be modified to meet current code requirements.

Rating: 3 Needs Replacement

Recommendations: Renovate water main entrance to meet the sprinkler requirements. 01-27-16 UPDATE: PROVIDE FOR BACKFLOW PREVENTOR.

Item	Cost	Unit	Whole Building	Original Building (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
Domestic Water Main	\$40.00	n.ft.		15,442 ft ²	21,169 ft ²	14,231 ft ²		
Other: Backflow Preventer	\$8,500.00	unit		1 Required				
Sum:			\$20,500.00	\$20,500.00	\$0.00	\$0.00	\$12,000.00	(new)
							\$8,500.00	Install New Backflow Preventer



[Back to Assessment Summary](#)

Facility Assessment

S. Exterior Doors

Description: Most of the doors around the exterior have been replaced less 2004. They are white hollow metal painted insulated doors. The doors are 1/2 or fully glazed having false muntins in the vision panel.

Rating: 1 Satisfactory

Recommendations: No work is recommended at this time. 01-27-16 UPDATE: REPLACE EXTERIOR DOORS ON 1914 ORIGINAL BUILDING, 1925 ADDITION AND 1991 ADDITION.

Item	Cost	Unit	Whole Building	Original Building (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
Door Leaf/Frame and Hardware:	\$2,000.00	per leaf		15,442 ft ²	21,169 ft ²	14,231 ft ²		
				6 Required	3 Required	6 Required	\$30,000.00	(includes removal of existing)
Sum:			\$30,000.00	\$12,000.00	\$6,000.00	\$12,000.00		



[Back to Assessment Summary](#)

Facility Assessment

T. Hazardous Material

Description: Building maintenance personnel were not aware of any known hazardous material.

Rating: 1 Satisfactory

Recommendations: No work is recommended at this time.

Item	Cost	Unit	Whole Building	Original Building (1914) 15,442 ft²	W & E Classroom Wings (1925) 21,169 ft²	South Classroom Wings (1991) 14,231 ft²	Sum	Comments
<i>Environmental Hazards Form</i>				EEHA Form	EEHA Form	EEHA Form	—	
Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups	\$1.00	per unit		5,000 Required	0 Required	0 Required	\$5,000.00	
Special Engineering Fees for LBP Mock-Ups	\$1.00	per unit		5,000 Required	0 Required	0 Required	\$5,000.00	
Fluorescent Lamps & Ballasts Recycling/Incineration	\$0.10	sq.ft. (Qty)		15,442 Required	21,169 Required	14,231 Required	\$5,084.20	
Pipe Insulation Removal	\$10.00	in.ft.		0 Required	150 Required	0 Required	\$1,500.00	
Pipe Insulation Removal (Hidden in Walls/Ceilings)	\$15.00	in.ft.		300 Required	450 Required	0 Required	\$11,250.00	
Hard Plaster Removal	\$7.00	sq.ft. (Qty)		40,000 Required	53,000 Required	0 Required	\$651,000.00	See J
Acoustical Panel/Tile Ceiling Removal	\$3.00	sq.ft. (Qty)		4,300 Required	2,300 Required	0 Required	\$19,800.00	See J
Fire Door Removal	\$100.00	each		6 Required	1 Required	0 Required	\$700.00	See S
Non-ACM Ceiling/Wall Removal (for access)	\$2.00	sq.ft. (Qty)		4,000 Required	4,000 Required	0 Required	\$16,000.00	See J
Resilient Flooring Removal, Including Mastic	\$3.00	sq.ft. (Qty)		6,900 Required	0 Required	0 Required	\$20,700.00	See J
Carpet Mastic Removal	\$2.00	sq.ft. (Qty)		1,500 Required	0 Required	0 Required	\$3,000.00	
Carpet Removal (over RFC)	\$1.00	sq.ft. (Qty)		3,000 Required	0 Required	0 Required	\$3,000.00	See J
Sink Undercoating Removal	\$100.00	each		1 Required	0 Required	0 Required	\$100.00	
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:			\$747,134.20	\$349,344.20	\$396,366.90	\$1,423.10		

[Back to Assessment Summary](#)

Facility Assessment

U. Life Safety

Description: Some stair and ramp railings are well below 42" and fail the 4" sphere test. No sprinkler system is present. The glazing in most interior doors and sidelights is not rated for impact resistance. Stairs are enclosed but doors do not have latches.

Rating: 3 Needs Replacement

Recommendations: Provide a new automated fire suppression system to meet OSDM guidelines. Provide modification to the water service to support the fire suppression system, funding included in Water Service section R for new water service for fire suppression. Provide an emergency generator to meet the needs for this building. Provide door vision panels and sidelights under Section F. Windows. 01-27-16 UPDATE: DELETE EMERGENCY GENERATOR FROM 1914 ORIGINAL BUILDING (GENERATOR INCLUDED IN FULL ELECTRICAL SYSTEM REPLACEMENT UNDER ITEM D). PROVIDE FOR A NEW BACKFLOW PREVENTER. PROVIDE FOR PRE-ACTION FIRE SUPPRESSION SYSTEM IN ATTIC SPACE OF 1914 ORIGINAL BUILDING, 1925 ADDITION AND 1991 ADDITION.

Item	Cost	Unit	Whole Building	Original Building (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
Sprinkler / Fire Suppression System:	\$3.20	sq.ft. (Qty)		15,442 Required	21,169 Required	14,231 Required	\$162,694.40	(includes increase of service piping, if required)
Handrails:	\$5,000.00	level		2 Required			\$10,000.00	
Other: Attic Sprinklers	\$3.50	sq.ft. (Qty)		5,008 Required	7,441 Required	4,904 Required	\$60,735.50	Pre-Action Fire Suppression System for Attic Space
Other: Backflow Preventer	\$8,500.00	per unit		1 Required			\$8,500.00	Install New Backflow Preventer
Sum:			\$241,929.90	\$85,442.40	\$93,784.30	\$62,703.20		



[Back to Assessment Summary](#)

Facility Assessment

V. Loose Furnishings

Description: Most furnishings throughout the building are older, but performing and have been maintained in functional condition.

Rating: 2 Needs Repair

Recommendations: Provide new items as furniture currently be used is taken out of use. 01-27-16 UPDATE: REVISE CEFPI RATING FROM 6 TO 0-5.

Item	Cost	Unit	Whole Building	Original Building (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
CEFPI Rating 0 to 3	\$5.00	sq.ft. (of entire building addition)		15,442 ft ²	21,169 ft ²	14,231 ft ²		
				Required	Required	Required	\$254,210.00	
Sum:			\$254,210.00	\$77,210.00	\$105,845.00	\$71,155.00		



[Back to Assessment Summary](#)

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.

Rating: 3 Needs Replacement

Recommendations: The technology systems to meet OSDM requirements, however replace the system due to the HVAC/Fire suppression replacement.

Item	Cost	Unit	Whole Building	Original Building (1914)	W & E Classroom Wings (1925)	South Classroom Wings (1991)	Sum	Comments
ES portion of building with total SF 50,000 to 69,360	\$11.51	sq.ft. (Qty)		15,442 Required	21,169 Required	14,231 Required	\$585,191.42	
Sum:			\$585,191.42	\$177,737.42	\$243,655.19	\$163,798.81		



[Back to Assessment Summary](#)

X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		\$7,746,143.72
7.00%	Construction Contingency	\$542,230.06
Subtotal		\$8,288,373.78
16.29%	Non-Construction Costs	\$1,350,176.09
Total Project		\$9,638,549.87

Construction Contingency	\$542,230.06
Non-Construction Costs	\$1,350,176.09
Total for X.	\$1,892,406.15

Non-Construction Costs Breakdown		
Land Survey	0.03%	\$2,486.51
Soil Borings / Phase I Envir. Report	0.10%	\$8,288.37
Agency Approval Fees (Bldg. Code)	0.25%	\$20,720.93
Construction Testing	0.40%	\$33,153.50
Printing - Bid Documents	0.15%	\$12,432.56
Advertising for Bids	0.02%	\$1,657.67
Builder's Risk Insurance	0.12%	\$9,946.05
Design Professional's Compensation	7.50%	\$621,628.03
CM Compensation	6.00%	\$497,302.43
Commissioning	0.60%	\$49,730.24
Non-Construction Contingency (includes partnering and mediation services)	1.12%	\$92,829.79
Total Non-Construction Costs	16.29%	\$1,350,176.09

[Back to Assessment Summary](#)

School Facility Appraisal - Shaker Heights City

Name of Appraiser	Bill Prenosil	Date of Appraisal	2015-02-17
Building Name	Boulevard Elem		
Street Address	14900 Drexmore Rd		
City/Town, State, Zip Code	Shaker Heights, OH 44120		
Telephone Number(s)	(216) 295-4020		
School District	Shaker Heights City		

Setting:	Urban		
Site-Acreage	5.10	Building Square Footage	50,842
Grades Housed	K-4	Student Capacity	407
Number of Teaching Stations	27	Number of Floors	3
Student Enrollment	355		
Dates of Construction	1914,1925,1991		

Energy Sources:	<input type="checkbox"/> Fuel Oil	<input checked="" type="checkbox"/> Gas	<input checked="" type="checkbox"/> Electric	<input type="checkbox"/> Solar
Air Conditioning:	<input type="checkbox"/> Roof Top	<input checked="" type="checkbox"/> Windows Units	<input type="checkbox"/> Central	<input checked="" type="checkbox"/> Room Units
Heating:	<input type="checkbox"/> Central	<input type="checkbox"/> Roof Top	<input checked="" type="checkbox"/> Individual Unit	<input type="checkbox"/> Forced Air
	<input checked="" type="checkbox"/> Hot Water	<input checked="" type="checkbox"/> 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

[Back to Assessment Summary](#)

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

1.0 The School Site	Points Allocated	Points
<p>1.1 Site is large enough to meet educational needs as defined by state and local requirements</p> <p><i>The site is 5.1 acreage which is significantly below the OSDM 10 minimum.</i></p>	25	13
<p>1.2 Site is easily accessible and conveniently located for the present and future population</p> <p><i>The site is in residential neighborhood and fronts onto 3 different streets.</i></p>	20	20
<p>1.3 Location is removed from undesirable business, industry, traffic, and natural hazards</p> <p><i>The area is predominately residential. Disruptive activities were not observed.</i></p>	10	10
<p>1.4 Site is well landscaped and developed to meet educational needs</p> <p><i>The site is mostly greenscaped and slopes upward toward the building. Several trees, shrubs, and other plantings were observed.</i></p>	10	10
<p>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</p> <p><i>Soft surface areas were provided appropriately designed play assemblies. Hard surface areas are striped for games. Vehicular circulation was observed near the soft surface play area.</i></p>	10	6
<p>1.6 Topography is varied enough to provide desirable appearance and without steep inclines</p> <p><i>The site slopes gently upward toward the building. Steep inclines were not present.</i></p>	5	5
<p>1.7 Site has stable, well drained soil free of erosion</p> <p><i>Erosive conditions were not observed. Some ponding was observed in the green areas.</i></p>	5	3
<p>1.8 Site is suitable for special instructional needs, e.g., outdoor learning</p> <p><i>Some accommodations for outdoor learning were observed.</i></p>	5	4
<p>1.9 Pedestrian services include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes</p> <p><i>The site is pedestrian-friendly with plenty of accommodations provided.</i></p>	5	5
<p>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</p> <p><i>Several staff members must park on the street.</i></p>	5	3
TOTAL - 1.0 The School Site	100	79

Suitability Appraisal of 2.0 Structural and Mechanical Features for Boulevard 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	15	12
<i>Ramps were observed on the exterior of the building. An elevator is present to provide access to all 3 floors of the school. The doors in the older part of the building do not have lever operators. Interior way finding text is small and lacks braille. Accessible restrooms are provided on at least 2 floors. Door operating assists are provided and some exterior doors. ADA compliant water fountains are provided as well.</i>		
2.2 Roofs appear sound, have positive drainage, and are weather tight	15	11
<i>Some evidence of roof leakage was observed in the ceiling. EIFS on the vertical side of the pitched roofs has failed due to saturation of the plywood substrate.</i>		
2.3 Foundations are strong and stable with no observable cracks	10	7
<i>Evidence of water breaching the foundation was observed in the mechanical areas.</i>		
2.4 Exterior and interior walls have sufficient expansion joints and are free of deterioration	10	7
<i>Expansion joints were observed primarily where the building has been expanded. Repairs to masonry cracks were observed indicating previous movement.</i>		
2.5 Entrances and exits are located so as to permit efficient student traffic flow	10	10
<i>Entrances and exits are placed at terminal points of corridors and at large group areas.</i>		
2.6 Building "envelope" generally provides for energy conservation (see criteria)	10	4
<i>The walls in the '922 and 1925 are solid masonry and do not have insulation. Double pane windows are in use, however.</i>		
2.7 Structure is free of friable asbestos and toxic materials	10	10
<i>Building maintenance is not aware of any remaining hazardous materials.</i>		
2.8 Interior walls permit sufficient flexibility for a variety of class sizes	10	0
<i>Such provisions were not observed.</i>		
Mechanical/Electrical		
2.9 Adequate light sources are well maintained, and properly placed and are not subject to overheating	15	12
<i>The majority of the areas have adequate light sources, and the lighting is maintained and not subject to overheating.</i>		
2.10 Internal water supply is adequate with sufficient pressure to meet health and safety requirements	15	15
<i>The internal water supply has sufficient pressure.</i>		
2.11 Each teaching/learning area has adequate convenient wall outlets , phone and computer cabling for technology applications	15	4
<i>There are not enough wall outlets to support the computer/technology equipment.</i>		
2.12 Electrical controls are safely protected with disconnect switches easily accessible	10	7
<i>Disconnect switches are easily accessible and there are no provisions for the disabled.</i>		
2.13 Drinking fountains are adequate in number and placement, and are properly maintained including provisions for the disabled	10	5
<i>Drinking fountains are well maintained but there are no provisions for the disabled.</i>		
2.14 Number and size of restrooms meet requirements	10	10
<i>Number of fixtures exceeds OSDM recommendations. There are adequate number of restrooms and they are properly sized to meet ADA requirements.</i>		
2.15 Drainage systems are properly maintained and meet requirements	10	8

<i>The drainage systems were reported to be in good condition but they are old.</i>		
2.16 Fire alarms, smoke detectors, and sprinkler systems are properly maintained and meet requirements	10	2
<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	137

Suitability Appraisal of **3.0 Plant Maintainability** for Boulevard 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 components are constructed of materials which perform for an extended period time without frequent maintenance.</i></p>	15	15
<p>3.2 Floor surfaces throughout the building require minimum care</p> <p><i>VCT has not reached the end of its useful life. Wood floors continue to perform.</i></p>	15	13
<p>3.3 Ceilings and walls throughout the building, including service areas, are easily cleaned and resistant to stain</p> <p><i>Suspended acoustic tile and direct adhered acoustic tile are typically stain-free unless leaks occur.</i></p>	10	8
<p>3.4 Built-in equipment is designed and constructed for ease of maintenance</p> <p><i>Shelving, cabinets and other similar items continue to perform well without frequent maintenance.</i></p>	10	9
<p>3.5 Finishes and hardware, with compatible keying system, are of durable quality</p> <p><i>The condition of the hardware finishes vary throughout the building. All locks can be operated with less than 5 keys.</i></p>	10	7
<p>3.6 Restroom fixtures are wall mounted and of quality finish</p> <p><i>Recently rebuilt restrooms have wall mounted fixtures of porcelain finish.</i></p>	10	10
<p>3.7 Adequate custodial storage space with water and drain is accessible throughout the building</p> <p><i>The number and location of janitors closets with mop sinks is adequate for this building. More shelving for cleaning materials is needed.</i></p>	10	8
<p>3.8 Adequate electrical outlets and power, to permit routine cleaning, are available in every area</p> <p><i>Adequate outlets are provided.</i></p>	10	10
<p>3.9 Outdoor light fixtures, electrical outlets, equipment, and other fixtures are accessible for repair and replacement</p> <p><i>These provisions are adequately located and easily maintained.</i></p>	10	10
TOTAL - 3.0 Plant Maintainability	100	90

Suitability Appraisal of 4.0 Building Safety and Security for Boulevard 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 intermingling student loading and other vehicular traffic are not provided.</i>	15	11
4.2 Walkways , both on and offsite, are available for safety of pedestrians <i>Sidewalks, cross-walks, and curb cuts are provided for safe pedestrian access of the site.</i>	10	10
4.3 Access streets have sufficient signals and signs to permit safe entrance to and exit from school area <i>No signals are provided. Only signage is present.</i>	5	2
4.4 Vehicular entrances and exits permit safe traffic flow <i>The oval shape of the site creates awkward intersections with adjacent streets.</i>	5	3
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>Play assemblies meet current industry standard for play equipment.</i>	5	5
Building Safety		
4.6 The heating unit(s) is located away from student occupied areas <i>Mechanical equipment does not disrupt learning areas.</i>	20	20
4.7 Multi-story buildings have at least two stairways for student egress <i>Stairs are appropriate located where corridors terminate.</i>	15	15
4.8 Exterior doors open outward and are equipped with panic hardware <i>Exterior doors open outward and are equipped with panic hardware.</i>	10	10
4.9 Emergency lighting is provided throughout the entire building with exit signs on separate electrical circuits <i>Emergency lighting is provided throughout the entire building with exit signs on separate electrical circuits.</i>	10	10
4.10 Classroom doors are recessed and open outward <i>Classroom doors are recessed and open outward in the 1991 addition. A limited number of doors are recessed in the older portions of the building.</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 and meets OSFC requirements.</i>	10	10
4.12 Flooring (including ramps and stairways) is maintained in a non-slip condition <i>Non-slip surfaces are provided on the 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>Most stair risers exceed 6 1/2".</i>	5	2
4.14 Glass is properly located and protected with wire or safety material to prevent accidental student injury <i>Most glass in the building is not rated for safety. Wire is used only at the egress doors to the stairs.</i>	5	2
4.15 Fixed Projections in the traffic areas do not extend more than eight inches from the corridor wall <i>Drinking fountains project more than 8" into the corridor.</i>	5	3

4.16 Traffic areas terminate at an exit or a stairway leading to an egress <i>All traffic areas terminate at an exit or egress stair.</i>	5	5
Emergency Safety	Points Allocated	Points
4.17 Adequate fire safety equipment is properly located <i>Fire extinguishers are located en route to exits. Hoses at stand pipes have been removed however.</i>	15	10
4.18 There are at least two independent exits from any point in the building <i>All points in the building are served by a minimum of 2 exits.</i>	15	15
4.19 Fire-resistant materials are used throughout the structure <i>Non-combustible materials are used throughout the structure.</i>	15	15
4.20 Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided <i>Horn and strobe devices are located throughout the building but do not meet current requirements.</i>	15	10
TOTAL - 4.0 Building Safety and Security	200	169

Suitability Appraisal of 5.0 Educational Adequacy for Boulevard 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>Classrooms are less than 800 sq. ft. This falls below the OSDM recommended 900 sq. ft.</i>	25	22
5.2 Classroom space permits arrangements for small group activity <i>The size of the classroom does not yield a lot of opportunity for different seating arrangements.</i>	15	9
5.3 Location of academic learning areas is near related educational activities and away from disruptive noise <i>Location of academic learning areas is near related educational activities and away from disruptive noise.</i>	10	10
5.4 Personal space in the classroom away from group instruction allows privacy time for individual students <i>Most classrooms are not large enough to offer privacy.</i>	10	3
5.5 Storage for student materials is adequate <i>Student metal lockers are provided in the corridor.</i>	10	8
5.6 Storage for teacher materials is adequate <i>Storage for instructors personal effects is inconsistently provided throughout the building. Some use hooks on the wall or a small cabinet.</i>	10	3
Special Learning Space		
5.7 Size of special learning area(s) meets standards <i>The speech pathologist space is partly a rest room. Other spaces are below OSDM standards.</i>	15	6
5.8 Design of specialized learning area(s) is compatible with instructional need <i>Most of the specialized learning areas are rooms that have been repurposed and not designed for its current function.</i>	10	3
5.9 Library/Resource/Media Center provides appropriate and attractive space <i>The library is just under 2,000 sq. ft. Some color is used in its appearance. The environment does not appear specifically geared toward elementary school students.</i>	10	7
5.10 Gymnasium (or covered P.E. area) adequately serves physical education instruction <i>The gymnasium is nearly 2500 sq. ft. which is well below OSDM recommendations.</i>	5	3
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>The kindergarten room is over 1,100 sq. ft. which is over 90% of the OSDM recommendation. The furnishings are appropriately sized but the design is not age specific.</i>	10	8
5.12 Music Program is provided adequate sound treated space <i>The music room is less than 800 sq. ft. Acoustic treatment is provided, but storage is lacking.</i>	5	2
5.13 Space for art is appropriate for special instruction, supplies, and equipment <i>The Art room is 1,056 sq. ft. and is provided storage accommodations.</i>	5	5
School Facility Appraisal		
5.14 Space for technology education permits use of state-of-the-art equipment <i>The computer room is 672 sq. ft. which limits the number of students it can accommodate. Computers are provided in classrooms, however.</i>	5	5
5.15 Space for small groups and remedial instruction is provided adjacent to classrooms	5	1

Much of this activity takes place at tables in the corridor.

5.16 Storage for student and teacher material is adequate	5	2
<i>Students are provided lockers. Teacher storage is limited and provided inconsistently around the building.</i>		

Support Space

Points Allocated Points

5.17 Teacher's lounge and work areas reflect teachers as professionals	10	6
<i>There is a 336 sq. ft. room with and adjacent kitchenette. Adequate furniture is provided.</i>		
5.18 Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage, and food preparation	10	8
<i>Adequate space for dining is provided. Meals are prepared off-site and delivered.</i>		
5.19 Administrative offices provided are consistent in appearance and function with the maturity of the students served	5	3
<i>The design of this area is not particularly age specific.</i>		
5.20 Counselor's office insures privacy and sufficient storage	5	5
<i>Sufficient space for privacy and storage is provided for the counselor.</i>		
5.21 Clinic is near administrative offices and is equipped to meet requirements	5	5
<i>The clinic is adjacent to the office and can accommodate 2 students and has a dedicated rest room.</i>		
5.22 Suitable reception space is available for students, teachers, and visitors	5	2
<i>Visitors must wait in the corridor as no such space is provided in the administrative area.</i>		
5.23 Administrative personnel are provided sufficient work space and privacy	5	5
<i>Administrators are provided individual private offices.</i>		

TOTAL - 5.0 Educational Adequacy	200	131
---	-----	-----

Suitability Appraisal of 6.0 Environment for Education for Boulevard 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 building's design does not relate to elementary school students.</i>	15	4
6.2 Site and building are well landscaped <i>Well maintained landscaping was observed throughout the site.</i>	10	10
6.3 Exterior noise and poor environment do not disrupt learning <i>The school's environment is not impacted by disruptive elements.</i>	10	10
6.4 Entrances and walkways are sheltered from sun and inclement weather <i>The only outdoor shelter is a few of feet of overhang at the main entrance</i>	10	3
6.5 Building materials provide attractive color and texture <i>Older areas of the building offer little color or accent. However, glazed cmu in the 1991 addition offers a greater incorporation of color and contrast.</i>	5	3
Interior Environment		
6.6 Color schemes, building materials, and decor provide an impetus to learning <i>Only the 1991 addition provides a stimulating design for learning.</i>	20	12
6.7 Year around comfortable temperature and humidity are provided throughout the building <i>Managing the temperature with the old boiler is difficult.</i>	15	9
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 requirements.</i>	15	6
6.9 Lighting system provides proper intensity, diffusion, and distribution of illumination <i>The lighting system does not provide adequate lighting levels in most areas of the building.</i>	15	4
6.10 Drinking fountains and restroom facilities are conveniently located <i>These provisions are located appropriately for convenience throughout the building.</i>	15	15
6.11 Communication among students is enhanced by commons area(s) for socialization <i>The multi-purpose room accommodates this activity.</i>	10	10
6.12 Traffic flow is aided by appropriate foyers and corridors <i>Traffic moves smoothly through the corridors.</i>	10	10
6.13 Areas for students to interact are suitable to the age group <i>Age specific play areas and assemblies provide opportunity for students to interact.</i>	10	10
6.14 Large group areas are designed for effective management of students <i>The multi-purpose room and gymnasium have adequate portals for ingress and egress.</i>	10	10
6.15 Acoustical treatment of ceilings, walls, and floors provides effective sound control <i>Most common areas only have acoustic treatment on ceilings. Floor and wall surfaces in the corridor are reflective. Some classrooms have carpeted floor. The gym is well treated on both walls and ceilings.</i>	10	6

6.16 Window design contributes to a pleasant environment	10	10
<i>New windows provided pleasant levels of natural light.</i>		
6.17 Furniture and equipment provide a pleasing atmosphere	10	8
<i>The furniture is dated but still performing. Items should be replaced as they are taken out of service.</i>		
<hr/>		
TOTAL - 6.0 Environment for Education	200	140

LEED Observation Notes

School District:	Shaker Heights City
County:	Cuyahoga
School District IRN:	44750
Building:	Boulevard Elem
Building IRN:	3244

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)

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)

Replacement of the HVAC system would increase the efficiency, but ultimately more energy use when the outside air ventilation is increased to meet 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 prevent 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: **Boulevard 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. There is no dedicated bus drop-off on site. Nor is their dedicated circulation paths for trucks accessing dumpsters and recycling bins. Such vehicles must drive through the playground.
2. On vertical surfaces around the low slope roof over the 1991 wing, large areas of exterior sheathing have fallen away. This is likely due to moisture saturation of the plywood substrate to which they were adhered.
- 3.
- 4.
- 5.
- 6.

[Back to Assessment Summary](#)

Environmental Hazards Assessment Cost Estimates

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

District IRN:	44750
Building IRN:	3244
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
1914 Original Building	15,442	\$349,344.20	\$334,344.20
1925 W & E Classroom Wings	21,169	\$396,366.90	\$396,366.90
1991 South Classroom Wings	14,231	\$1,423.10	\$1,423.10
Total	50,842	\$747,134.20	\$732,134.20
Total with Regional Cost Factor (102.31%)	—	\$764,393.00	\$749,046.50
Regional Total with Soft Costs & Contingency	—	\$951,136.50	\$932,040.81

Environmental Hazards(Enhanced) - Shaker Heights City (44750) - Boulevard Elem (3244) - Original Building

Owner: Shaker Heights City **Bldg. IRN:** 3244
Facility: Boulevard 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	Not Present	0	\$8.00 \$0.00
4. Duct Insulation Removal	Not Present	0	\$8.00 \$0.00
5. Pipe Insulation Removal	Reported / Assumed Asbestos-Free Material	0	\$10.00 \$0.00
6. Pipe Fitting Insulation Removal	Reported / Assumed Asbestos-Free Material	0	\$20.00 \$0.00
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$12.00 \$0.00
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	300	\$15.00 \$4,500.00
10. Dismantling of Boiler/Furnace/Incinerator	Reported / Assumed Asbestos-Free Material	0	\$2,000.00 \$0.00
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 Asbestos-Containing Material	40000	\$7.00 \$280,000.00
15. Gypsum Board Removal	Reported / Assumed Asbestos-Free Material	0	\$6.00 \$0.00
16. Acoustical Panel/Tile Ceiling Removal	Reported Asbestos-Containing Material	4300	\$3.00 \$12,900.00
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	4000	\$2.00 \$8,000.00
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	6900	\$3.00 \$20,700.00
30. Carpet Mastic Removal	Reported Asbestos-Containing Material	1500	\$2.00 \$3,000.00
31. Carpet Removal (over RFC)	Assumed Asbestos-Containing Material	3000	\$1.00 \$3,000.00
32. Acoustical Tile Mastic Removal	Not Present	0	\$3.00 \$0.00
33. Sink Undercoating Removal	Assumed Asbestos-Containing Material	1	\$100.00 \$100.00
34. Roofing Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00 \$0.00
35. NEW Other ACM	Not Present	lump sum	\$0.00
36. (Sum of Lines 1-35)	Total Asb. Hazard Abatement Cost for Renovation Work		\$332,800.00
37. (Sum of Lines 1-35)	Total Asb. Hazard Abatement Cost for Demolition Work		\$332,800.00

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. 15442	15442	\$0.10	\$1,544.20

E. Other Environmental Hazards/Remarks <input type="checkbox"/> None Reported		
Description		Cost Estimate
1. See Bulk Sample Record Nos. 1, 2, 4, 6, 7, 8, 9, & 11 for sampling results in this addition.		\$0.00
2. XRF testing for lead-based paint is recommended for compliance with EPA's RRP Program.		\$5,000.00
3. (Sum of Lines 1-2)	Total Cost for Other Environmental Hazards - Renovation	\$5,000.00
4. (Sum of Lines 1-2)	Total Cost for Other Environmental Hazards - Demolition	\$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries		
1. A36, B1, C3, D1, and E3	Total Cost for Env. Hazards Work - Renovation	\$349,344.20
2. A37, B1, D1, and E4	Total Cost for Env. Hazards Work - Demolition	\$334,344.20

* 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.

Environmental Hazards(Enhanced) - Shaker Heights City (44750) - Boulevard Elem (3244) - W & E Classroom Wings

Owner:	Shaker Heights City	Bldg. IRN:	3244
Facility:	Boulevard Elem	BuildingAdd:	W & E Classroom Wings
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	Not Present	0	\$8.00	\$0.00
4. Duct Insulation Removal	Not Present	0	\$8.00	\$0.00
5. Pipe Insulation Removal	Assumed Asbestos-Containing Material	150	\$10.00	\$1,500.00
6. Pipe Fitting Insulation Removal	Reported / Assumed Asbestos-Free Material	0	\$20.00	\$0.00
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$12.00	\$0.00
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	450	\$15.00	\$6,750.00
10. Dismantling of Boiler/Furnace/Incinerator	Not Present	0	\$2,000.00	\$0.00
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 Asbestos-Containing Material	53000	\$7.00	\$371,000.00
15. Gypsum Board Removal	Reported / Assumed Asbestos-Free Material	0	\$6.00	\$0.00
16. Acoustical Panel/Tile Ceiling Removal	Reported Asbestos-Containing Material	2300	\$3.00	\$6,900.00
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	1	\$100.00	\$100.00
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	4000	\$2.00	\$8,000.00
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 / Assumed Asbestos-Free Material	0	\$3.00	\$0.00
30. Carpet Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	\$0.00
31. Carpet Removal (over RFC)	Not Present	0	\$1.00	\$0.00
32. Acoustical Tile Mastic Removal	Not Present	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. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Renovation Work			\$394,250.00
36. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demolition Work			\$394,250.00

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		\$0.00
2. Special Engineering Fees for LBP Mock-Ups		\$0.00
3. (Sum of Lines 1-2)	Total Cost for Lead-Based Paint Mock-Ups	\$0.00

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. 21169		\$0.10	\$2,116.90	

E. Other Environmental Hazards/Remarks <input type="checkbox"/> None Reported		
	Description	Cost Estimate
1.	Costs for lead-based paint mock-ups are included in assessment for 1914 (Original Building).	\$0.00
2.	See Bulk Sample Record Nos. 1, 3, 4, 5, 6, 10, & 11 for sampling results in this addition.	\$0.00
3.	(Sum of Lines 1-2)	Total Cost for Other Environmental Hazards - Renovation
4.	(Sum of Lines 1-2)	Total Cost for Other Environmental Hazards - Demolition

F. Environmental Hazards Assessment Cost Estimate Summaries		
1. A35, B1, C3, D1, and E3	Total Cost for Env. Hazards Work - Renovation	\$396,366.90
2. A36, B1, D1, and E4	Total Cost for Env. Hazards Work - Demolition	\$396,366.90

* 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"×12" 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.

Environmental Hazards(Enhanced) - Shaker Heights City (44750) - Boulevard Elem (3244) - South Classroom Wings

Environmental Hazards(Enhanced) - Shaker Heights City (44750) - Boulevard Elem (3244) - South Classroom Wings

Owner: Shaker Heights City **Bldg. IRN:** 3244
Facility: Boulevard Elem **BuildingAdd:** South Classroom Wings
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	Not Present	0	\$8.00	\$0.00
4.	Duct Insulation Removal	Not Present	0	\$8.00	\$0.00
5.	Pipe Insulation Removal	Reported / Assumed Asbestos-Free Material	0	\$10.00	\$0.00
6.	Pipe Fitting Insulation Removal	Reported / Assumed Asbestos-Free Material	0	\$20.00	\$0.00
7.	Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$12.00	\$0.00
8.	Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$30.00	\$0.00
9.	Pipe Insulation Removal (Hidden in Walls/Ceilings)	Reported / Assumed Asbestos-Free Material	0	\$15.00	\$0.00
10.	Dismantling of Boiler/Furnace/Incinerator	Not Present	0	\$2,000.00	\$0.00
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	Not Present	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	Reported / Assumed Asbestos-Free Material	0	\$100.00	\$0.00
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)	Not Present	0	\$2.00	\$0.00
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 / Assumed Asbestos-Free Material	0	\$3.00	\$0.00
30.	Carpet Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	\$0.00
31.	Carpet Removal (over RFC)	Not Present	0	\$1.00	\$0.00
32.	Acoustical Tile Mastic Removal	Not Present	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.	(Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Renovation Work			\$0.00
36.	(Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demolition Work			\$0.00

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 checked="" type="checkbox"/> Addition Constructed after 1980
1.	Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups	\$0.00
2.	Special Engineering Fees for LBP Mock-Ups	\$0.00
3.	(Sum of Lines 1-2)	Total Cost for Lead-Based Paint Mock-Ups

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.	14231	\$0.10	\$1,423.10	

E. Other Environmental Hazards/Remarks		<input type="checkbox"/> None Reported
Description	Cost Estimate	
1.	See Bulk Sample Record No. 11 for sampling results in this addition.	\$0.00
2.	(Sum of Lines 1-1)	Total Cost for Other Environmental Hazards - Renovation
3.	(Sum of Lines 1-1)	Total Cost for Other Environmental Hazards - Demolition

F. Environmental Hazards Assessment Cost Estimate Summaries		
1.	A35, B1, C3, D1, and E2	Total Cost for Env. Hazards Work - Renovation
2.	A36, B1, D1, and E3	Total Cost for Env. Hazards Work - Demolition

* 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"×12" 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.

