Building Information - Shaker Heights City (44750) - Woodbury Elementary School

Program Type	Classroom Facilities Assistance Program (CFAP) - Regular
Setting	Urban
Assessment Name	Woodbury ES Assessment - Shaker Heights CSD - CFAP update (11-2-21)
Assessment Date (on-site; non-EEA)	2015-02-12
Kitchen Type	Full Kitchen
Cost Set:	2016
Building Name	Woodbury Elementary School
Building IRN	41939
Building Address	15400 S Woodland Rd
Building City	Shaker Heights
Building Zipcode	44120
Building Phone	(216) 295-4150
Acreage	22.00
Current Grades:	5-6
Teaching Stations	65
Number of Floors	3
Student Capacity	1194
Current Enrollment	812
Enrollment Date	2014-04-24

Enrollment Date is the date in which the current enrollment was taken.

Number of Classrooms	44
Historical Register	**NO**
Building's Principal	Randy Yates
Building Type	Elementary

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Building Pictures - Shaker Heights City(44750) - Woodbury Elementary School(41939)

North elevation photo:

East elevation photo:

South elevation photo:

West elevation photo:

GENERAL DESCRIPTION

147,499 Total Existing Square Footage
1917,1917,1926,1927,1957,1969,1969 Building Dates
5-6 Grades
812 Current Enrollment
65 Teaching Stations
22.00 Site Acreage

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 Assessement Cost	Cost/sf.
A	Heating System	$5,409,881.30	$36.68
B	Roofing	$1,110,569.04	$7.53
C	Ventilation / Air Conditioning	$0.00	$0.00
D	Electrical Systems	$2,796,085.44	$18.96
E	Plumbing and Fixtures	$1,371,958.44	$9.30
F	Windows	$7,957.97	$0.05
G	Structure: Foundation	$133,286.30	$0.90
H	Structure: Walls and Chimneys	$507,230.51	$3.44
I	Structure: Floors and Roofs	$58,942.00	$0.40
J	General Finishes	$3,792,057.35	$25.71
K	Interior Lighting	$840,744.30	$5.70
L	Security Systems	$453,116.93	$3.07
M	Emergency / Egress Lighting	$158,229.55	$1.07
N	Fire Alarm	$237,344.33	$1.61
O	Handicapped Access	$638,112.83	$4.33
P	Site Condition	$598,738.30	$4.06
Q	Sewage Systems	$36,036.00	$0.24
R	Water Supply	$36,220.00	$0.25
S	Exterior Doors	$29,568.00	$0.20
T	Hazardous Material	$1,093,375.10	$7.41
U	Life Safety	$820,907.81	$5.57
V	Loose Furnishings	$755,932.38	$5.13
W	Technology	$1,558,819.42	$10.57
X	Construction Contingency / Non-Construction Cost	$5,451,579.99	$36.96
	ESCALATED OFCC GUIDELINE BUDGET (2021) - OME	**$27,896,693.29**	**$189.13**
	OFCC 2021 COST GUIDELINES BUDGET	$24,666,966.35	
	VARIANCE	$3,229,726.94	
	VARIANCE %	13.09%	
	UNIT PRICE CONCERNS		
	Total	$1,474,806.96	
	REV OFCC GUIDELINE UNIT PRICE BUDGET - OME	**$29,371,500.25**	**$199.13**
	OFCC 2021 COST GUIDELINES BUDGET	**$24,666,966.35**	
	VARIANCE	**$4,704,533.90**	
	VARIANCE %	**19.07%**	

LOCALLY FUNDED INITIATIVES

Total	$2,943,911.78	
REV OFCC GUIDELINE UNIT PRICE BUDGET - OME	**$32,315,412.03**	**$219.09**
OFCC 2021 COST GUIDELINES BUDGET	**$24,666,966.35**	
VARIANCE	**$7,648,445.68**	
VARIANCE %	**31.01%**	

2022 Costs	$32,315,412.03
2023 Costs with 3.5% inflation	$33,446,451.45
2024 Costs with 3.5% inflation	$34,617,077.25
2025 Costs with 3.5% inflation	$35,828,674.96
2026 Costs with 3.5% inflation	$37,082,678.58

The school is situated in a neighborhood of Shaker Heights. The 22 acre site is surrounded by residences. The floors are framed with a combination of poured structural concrete and concrete pan joists. The original 1918 building and all subsequent additions are clad with reddish brown brick and punctuated with regularly spaced rectangular window openings having stone keystones and sills. The recently replaced windows reflect the original divided lights and have in interior wood finish with white painted frames on the exterior. Entrances to the building incorporate elements such as stone columns 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 heating system for the main building and classroom areas consists of three Burnham steam boilers with 3475 MBH capacity installed 1995. The boilers appear to be in satisfactory condition for their age. There is a tube and shell steam to hot water heat exchanger in the mechanical room with two heating water building pumps that serve the unit ventilators and air handling units. The pumps are in poor condition. The boilers and air handling units are controlled with DDC controls and the rest of the controls are pneumatic and in fair to poor condition due to the equipment age. Generally, all the equipment has been well maintained. Each ventilator has an outside air grilled at the exterior wall or outside air is ducted from the attic to an interior ventilator. Overall, the ventilators and the air handling units do not provide the required outside air delivery to meet OBC mechanical code. The DDC controls were added two years ago under an energy performance contract. The staff indicates the controls do not always work and they turn off the boilers on mild temperature days to avoid over heating the school. 1969 Addition: The pool, locker rooms, band room, community room, and gym near the pool are served by three steam boilers: two Smith Cast Iron Boilers at 1,200 MBH each and one Weil-McLain boiler at 1690 MBH (estimated - no model number marked). There is a tube and shell steam to hot water heat exchanger providing heating water for the unit ventilators in this area. The air handling units are steam heat. The 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 main domestic water supply system is mostly copper and is tied to the city system. There are parts of the system that are still galvanized. There is no backflow preventer in the building, but there is a pressure reducing valve on the 4'' incoming water service. The system provides adequate pressure and capacity for the facility's needs, except when the pool is filling. The facility is not equipped with an automatic fire suppression system, and the existing water supply system will not provide adequate support for the future system.

No Significant Findings

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Building Construction Information - Shaker Heights City (44750) - Woodbury Elementary School (41939)

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition	Built Under ELPP
Auditorium	1917	yes	2	2,799	yes	no
Original Building	1917	yes	3	59,632	no	no
Mechancial Room	1926	yes	1	6,535	no	no
E & W Academic Wings	1927	no	2	45,184	no	no
Gymnasium	1957	yes	1	22,315	no	no
Locker Room Addition	1969	yes	1	3,195	no	no
Natatorium	1969	yes	1	7,839	yes	no

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Building Component Information - Shaker Heights City (44750) - Woodbury Elementary School (41939)

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
Auditorium (1917)	2799													
Original Building (1917)		10357			3468									
Mechancial Room (1926)														
E & W Academic Wings (1927)		12654					4705	2917						
Gymnasium (1957)		3280		7190										
Locker Room Addition (1969)														
Natatorium (1969)		1573							7839					
Total	2,799	27,864	0	7,190	3,468	0	4,705	2,917	7,839	0	0	0	0	0
Master Planning Considerations														

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Existing CT Programs for Assessment

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Program Type	Program Name	Related Space	Square Feet
No Records Found			

Legend:

Not in current design manual

In current design manual but missing from assessment

Building Summary - Woodbury Elementary School (41939)

District: Shaker Heights City
Name: Woodbury Elementary School
Address: 15400 S Woodland Rd
Shaker Heights,OH 44120
Bldg. IRN: 41939

County: Cuyahoga **Area:** Northeastern Ohio (8)
Contact: Randy Yates
Phone: (216) 295-4150
Date Prepared: 2015-02-12 **By:** Kelton Waller
Date Revised: 2021-11-03 **By:** Bill Prenosil

Current Grades	5-6	Acreage:	22.00
Proposed Grades	N/A	Teaching Stations:	65
Current Enrollment	812	Classrooms:	44
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Auditorium	1917	yes	2	2,799
Original Building	1917	yes	3	59,632
Mechancial Room	1926	yes	1	6,535
E & W Academic Wings	1927	no	2	45,184
Gymnasium	1957	yes	1	22,315
Natatorium	1969	yes	1	7,839
Locker Room Addition	1969	yes	1	3,195
Total				**147,499**

*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
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	138	69%	Borderline
3.0 Plant Maintainability	100	85	85%	Satisfactory
4.0 Building Safety and Security	200	172	86%	Satisfactory
5.0 Educational Adequacy	200	132	66%	Borderline
6.0 Environment for Education	200	138	69%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	756	76%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	102.31%
Cost to Renovate (Cost Factor applied)	$25,236,773.27

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

FACILITY ASSESSMENT Cost Set: 2016	Rating	Dollar Assessment	C
A. Heating System	3	$4,520,507.68	-
B. Roofing	3	$1,002,642.70	-
C. Ventilation / Air Conditioning	1	$0.00	-
D. Electrical Systems	3	$2,393,908.77	-
E. Plumbing and Fixtures	3	$1,196,620.50	-
F. Windows	2	$6,790.00	-
G. Structure: Foundation	1	$128,000.00	-
H. Structure: Walls and Chimneys	2	$434,742.85	-
I. Structure: Floors and Roofs	2	$54,000.00	-
J. General Finishes	3	$3,497,195.90	-
K. Interior Lighting	3	$737,495.00	-
L. Security Systems	1	$420,372.15	-
M. Emergency/Egress Lighting	3	$147,499.00	-
N. Fire Alarm	3	$221,248.50	-
O. Handicapped Access	3	$549,699.80	-
P. Site Condition	3	$544,154.10	-
Q. Sewage System	3	$29,250.00	-
R. Water Supply	3	$32,500.00	-
S. Exterior Doors	2	$24,000.00	-
T. Hazardous Material	1	$1,093,375.10	-
U. Life Safety	3	$705,713.30	-
V. Loose Furnishings	3	$737,495.00	-
W. Technology	3	$1,346,712.24	-
X. Construction Contingency / Non-Construction Cost	1	$4,843,043.76	-
Total		$24,666,966.35	

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Auditorium (1917) Summary

District: Shaker Heights City
Name: Woodbury Elementary School
Address: 15400 S Woodland Rd
Shaker Heights,OH 44120
Bldg. IRN: 41939

County: Cuyahoga **Area:** Northeastern Ohio (8)
Contact: Randy Yates
Phone: (216) 295-4150
Date Prepared: 2015-02-12 **By:** Kelton Waller
Date Revised: 2021-11-03 **By:** Bill Prenosil

Current Grades	5-6	Acreage:	22.00
Proposed Grades	N/A	Teaching Stations:	65
Current Enrollment	812	Classrooms:	44
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Auditorium	**1917**	**yes**	**2**	**2,799**
Original Building	1917	yes	3	59,632
Mechancial Room	1926	yes	1	6,535
E & W Academic Wings	1927	no	2	45,184
Gymnasium	1957	yes	1	22,315
Natatorium	1969	yes	1	7,839
Locker Room Addition	1969	yes	1	3,195
Total				**147,499**

*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
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	138	69%	Borderline
3.0 Plant Maintainability	100	85	85%	Satisfactory
4.0 Building Safety and Security	200	172	86%	Satisfactory
5.0 Educational Adequacy	200	132	66%	Borderline
6.0 Environment for Education	200	138	69%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	756	76%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	102.31%
Cost to Renovate (Cost Factor applied)	$409,118.67

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

FACILITY ASSESSMENT Cost Set: 2016		Rating	Dollar Assessment	C
A.	Heating System	3	$73,109.88	-
B.	Roofing	3	$26,400.00	-
C.	Ventilation / Air Conditioning	1	$0.00	-
D.	Electrical Systems	3	$45,427.77	-
E.	Plumbing and Fixtures	3	$36,593.00	-
F.	**Windows**	**2**	**$0.00**	-
G.	Structure: Foundation	1	$10,000.00	-
H.	Structure: Walls and Chimneys	2	$6,350.00	-
I.	**Structure: Floors and Roofs**	**2**	**$0.00**	-
J.	General Finishes	3	$31,428.00	-
K.	Interior Lighting	3	$13,995.00	-
L.	Security Systems	1	$7,977.15	-
M.	Emergency/Egress Lighting	3	$2,799.00	-
N.	Fire Alarm	3	$4,198.50	-
O.	Handicapped Access	3	$1,959.80	-
P.	**Site Condition**	**3**	**$0.00**	-
Q.	**Sewage System**	**3**	**$0.00**	-
R.	**Water Supply**	**3**	**$0.00**	-
S.	**Exterior Doors**	**2**	**$0.00**	-
T.	Hazardous Material	1	$6,179.90	-
U.	Life Safety	3	$40,956.80	-
V.	Loose Furnishings	3	$13,995.00	-
W.	**Technology**	**3**	**$0.00**	-
X.	Construction Contingency / Non-Construction Cost	1	$78,511.61	-
Total			$399,881.41	

Original Building (1917) Summary

District:	Shaker Heights City	**County:**	Cuyahoga **Area:** Northeastern Ohio (8)
Name:	Woodbury Elementary School	**Contact:**	Randy Yates
Address:	15400 S Woodland Rd	**Phone:**	(216) 295-4150
	Shaker Heights,OH 44120	**Date Prepared:**	2015-02-12 **By:** Kelton Waller
Bldg. IRN:	41939	**Date Revised:**	2021-11-03 **By:** Bill Prenosil

Current Grades	5-6	Acreage:	22.00
Proposed Grades	N/A	Teaching Stations:	65
Current Enrollment	812	Classrooms:	44
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Auditorium	1917	yes	2	2,799
Original Building	**1917**	**yes**	**3**	**59,632**
Mechancial Room	1926	yes	1	6,535
E & W Academic Wings	1927	no	2	45,184
Gymnasium	1957	yes	1	22,315
Natatorium	1969	yes	1	7,839
Locker Room Addition	1969	yes	1	3,195
Total				**147,499**

*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
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	138	69%	Borderline
3.0 Plant Maintainability	100	85	85%	Satisfactory
4.0 Building Safety and Security	200	172	86%	Satisfactory
5.0 Educational Adequacy	200	132	66%	Borderline
6.0 Environment for Education	200	138	69%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	756	76%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	102.31%
Cost to Renovate (Cost Factor applied)	$10,443,748.39

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

FACILITY ASSESSMENT Cost Set: 2016	Rating	Dollar Assessment	C
A. Heating System	3	$2,034,643.84	-
B. Roofing	3	$660,302.60	-
C. Ventilation / Air Conditioning	1	$0.00	-
D. Electrical Systems	3	$967,827.36	-
E. Plumbing and Fixtures	3	$466,924.00	-
F. Windows	2	$2,190.00	-
G. Structure: Foundation	1	$86,600.00	-
H. Structure: Walls and Chimneys	2	$27,822.00	-
I. Structure: Floors and Roofs	**2**	**$0.00**	-
J. General Finishes	3	$1,142,748.80	-
K. Interior Lighting	3	$298,160.00	-
L. Security Systems	1	$169,951.20	-
M. Emergency/Egress Lighting	3	$59,632.00	-
N. Fire Alarm	3	$89,448.00	-
O. Handicapped Access	3	$228,326.40	-
P. Site Condition	3	$544,154.10	-
Q. Sewage System	3	$13,500.00	-
R. Water Supply	3	$20,500.00	-
S. Exterior Doors	2	$10,000.00	-
T. Hazardous Material	1	$166,663.20	-
U. Life Safety	3	$329,412.90	-
V. Loose Furnishings	3	$298,160.00	-
W. Technology	3	$586,778.88	-
X. Construction Contingency / Non-Construction Cost	1	$2,004,199.58	-
Total		$10,207,944.86	

Mechancial Room (1926) Summary

District: Shaker Heights City
Name: Woodbury Elementary School
Address: 15400 S Woodland Rd
Shaker Heights,OH 44120
Bldg. IRN: 41939

County: Cuyahoga **Area:** Northeastern Ohio (8)
Contact: Randy Yates
Phone: (216) 295-4150
Date Prepared: 2015-02-12 **By:** Kelton Waller
Date Revised: 2021-11-03 **By:** Bill Prenosil

Current Grades	5-6	Acreage:	22.00
Proposed Grades	N/A	Teaching Stations:	65
Current Enrollment	812	Classrooms:	44
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Auditorium	1917	yes	2	2,799
Original Building	1917	yes	3	59,632
Mechancial Room	**1926**	**yes**	**1**	**6,535**
E & W Academic Wings	1927	no	2	45,184
Gymnasium	1957	yes	1	22,315
Natatorium	1969	yes	1	7,839
Locker Room Addition	1969	yes	1	3,195
Total				**147,499**

*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
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	138	69%	Borderline
3.0 Plant Maintainability	100	85	85%	Satisfactory
4.0 Building Safety and Security	200	172	86%	Satisfactory
5.0 Educational Adequacy	200	132	66%	Borderline
6.0 Environment for Education	200	138	69%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	756	76%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	102.31%
Cost to Renovate (Cost Factor applied)	$2,141,052.40

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

FACILITY ASSESSMENT Cost Set: 2016		Rating	Dollar Assessment	C
A.	**Heating System**	**3**	**$0.00**	-
B.	Roofing	3	$45,946.40	-
C.	Ventilation / Air Conditioning	1	$0.00	-
D.	Electrical Systems	3	$106,063.05	-
E.	Plumbing and Fixtures	3	$37,872.50	-
F.	**Windows**	**2**	**$0.00**	-
G.	Structure: Foundation	1	$17,600.00	-
H.	Structure: Walls and Chimneys	2	$47,356.15	-
I.	Structure: Floors and Roofs	2	$54,000.00	-
J.	General Finishes	3	$1,140,106.50	-
K.	Interior Lighting	3	$32,675.00	-
L.	Security Systems	1	$18,624.75	-
M.	Emergency/Egress Lighting	3	$6,535.00	-
N.	Fire Alarm	3	$9,802.50	-
O.	Handicapped Access	3	$10,307.00	-
P.	**Site Condition**	**3**	**$0.00**	-
Q.	Sewage System	3	$2,250.00	-
R.	**Water Supply**	**3**	**$0.00**	-
S.	Exterior Doors	2	$6,000.00	-
T.	Hazardous Material	1	$28,803.50	-
U.	Life Safety	3	$20,912.00	-
V.	Loose Furnishings	3	$32,675.00	-
W.	Technology	3	$64,304.40	-
X.	Construction Contingency / Non-Construction Cost	1	$410,877.03	-
Total			$2,092,710.78	

E & W Academic Wings (1927) Summary

District: Shaker Heights City
Name: Woodbury Elementary School
Address: 15400 S Woodland Rd
Shaker Heights,OH 44120
Bldg. IRN: 41939

County: Cuyahoga **Area:** Northeastern Ohio (8)
Contact: Randy Yates
Phone: (216) 295-4150
Date Prepared: 2015-02-12 **By:** Kelton Waller
Date Revised: 2021-11-03 **By:** Bill Prenosil

Current Grades	5-6	Acreage:	22.00
Proposed Grades	N/A	Teaching Stations:	65
Current Enrollment	812	Classrooms:	44
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Auditorium	1917	yes	2	2,799
Original Building	1917	yes	3	59,632
Mechancial Room	1926	yes	1	6,535
E & W Academic Wings	**1927**	**no**	**2**	**45,184**
Gymnasium	1957	yes	1	22,315
Natatorium	1969	yes	1	7,839
Locker Room Addition	1969	yes	1	3,195
Total				**147,499**

*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
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	138	69%	Borderline
3.0 Plant Maintainability	100	85	85%	Satisfactory
4.0 Building Safety and Security	200	172	86%	Satisfactory
5.0 Educational Adequacy	200	132	66%	Borderline
6.0 Environment for Education	200	138	69%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	756	76%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	102.31%
Cost to Renovate (Cost Factor applied)	$7,675,397.45

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

	FACILITY ASSESSMENT Cost Set: 2016	Rating	Dollar Assessment	C
A.	Heating System	3	$1,541,678.08	-
B.	Roofing	3	$32,492.50	-
C.	Ventilation / Air Conditioning	1	$0.00	-
D.	Electrical Systems	3	$733,336.32	-
E.	Plumbing and Fixtures	3	$370,288.00	-
F.	Windows	2	$4,600.00	-
G.	Structure: Foundation	1	$13,800.00	-
H.	Structure: Walls and Chimneys	2	$104,382.20	-
I.	**Structure: Floors and Roofs**	**2**	**$0.00**	-
J.	General Finishes	3	$720,825.60	-
K.	Interior Lighting	3	$225,920.00	-
L.	Security Systems	1	$128,774.40	-
M.	Emergency/Egress Lighting	3	$45,184.00	-
N.	Fire Alarm	3	$67,776.00	-
O.	Handicapped Access	3	$286,836.80	-
P.	**Site Condition**	**3**	**$0.00**	-
Q.	**Sewage System**	**3**	**$0.00**	-
R.	**Water Supply**	**3**	**$0.00**	-
S.	Exterior Doors	2	$8,000.00	-
T.	Hazardous Material	1	$867,018.40	-
U.	Life Safety	3	$207,714.80	-
V.	Loose Furnishings	3	$225,920.00	-
W.	Technology	3	$444,610.56	-
X.	Construction Contingency / Non-Construction Cost	1	$1,472,941.30	-
Total			$7,502,098.96	

Gymnasium (1957) Summary

District: Shaker Heights City
Name: Woodbury Elementary School
Address: 15400 S Woodland Rd
Shaker Heights,OH 44120
Bldg. IRN: 41939

County: Cuyahoga **Area:** Northeastern Ohio (8)
Contact: Randy Yates
Phone: (216) 295-4150
Date Prepared: 2015-02-12 **By:** Kelton Waller
Date Revised: 2021-11-03 **By:** Bill Prenosil

Current Grades	5-6	Acreage:	22.00
Proposed Grades	N/A	Teaching Stations:	65
Current Enrollment	812	Classrooms:	44
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Auditorium	1917	yes	2	2,799
Original Building	1917	yes	3	59,632
Mechancial Room	1926	yes	1	6,535
E & W Academic Wings	1927	no	2	45,184
Gymnasium	**1957**	**yes**	**1**	**22,315**
Natatorium	1969	yes	1	7,839
Locker Room Addition	1969	yes	1	3,195
Total				**147,499**

*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
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	138	69%	Borderline
3.0 Plant Maintainability	100	85	85%	Satisfactory
4.0 Building Safety and Security	200	172	86%	Satisfactory
5.0 Educational Adequacy	200	132	66%	Borderline
6.0 Environment for Education	200	138	69%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	756	76%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	102.31%
Cost to Renovate (Cost Factor applied)	$2,957,450.88

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

	FACILITY ASSESSMENT Cost Set: 2016	Rating	Dollar Assessment	C
A.	Heating System	3	$582,867.80	-
B.	Roofing	3	$58,482.80	-
C.	Ventilation / Air Conditioning	1	$0.00	-
D.	Electrical Systems	3	$362,172.45	-
E.	Plumbing and Fixtures	3	$174,205.00	-
F.	**Windows**	**2**	**$0.00**	-
G.	Structure: Foundation	1	$0.00	-
H.	Structure: Walls and Chimneys	2	$109,925.00	-
I.	**Structure: Floors and Roofs**	**2**	**$0.00**	-
J.	General Finishes	3	$372,808.50	-
K.	Interior Lighting	3	$111,575.00	-
L.	Security Systems	1	$63,597.75	-
M.	Emergency/Egress Lighting	3	$22,315.00	-
N.	Fire Alarm	3	$33,472.50	-
O.	Handicapped Access	3	$11,563.00	-
P.	**Site Condition**	**3**	**$0.00**	-
Q.	**Sewage System**	**3**	**$0.00**	-
R.	**Water Supply**	**3**	**$0.00**	-
S.	**Exterior Doors**	**2**	**$0.00**	-
T.	Hazardous Material	1	$17,581.50	-
U.	Life Safety	3	$71,408.00	-
V.	Loose Furnishings	3	$111,575.00	-
W.	Technology	3	$219,579.60	-
X.	Construction Contingency / Non-Construction Cost	1	$567,547.36	-
Total			$2,890,676.26	

Natatorium (1969) Summary

District: Shaker Heights City
Name: Woodbury Elementary School
Address: 15400 S Woodland Rd
Shaker Heights,OH 44120
Bldg. IRN: 41939

County: Cuyahoga **Area:** Northeastern Ohio (8)
Contact: Randy Yates
Phone: (216) 295-4150
Date Prepared: 2015-02-12 **By:** Kelton Waller
Date Revised: 2021-11-03 **By:** Bill Prenosil

Current Grades	5-6	Acreage:	22.00
Proposed Grades	N/A	Teaching Stations:	65
Current Enrollment	812	Classrooms:	44
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Auditorium	1917	yes	2	2,799
Original Building	1917	yes	3	59,632
Mechancial Room	1926	yes	1	6,535
E & W Academic Wings	1927	no	2	45,184
Gymnasium	1957	yes	1	22,315
Natatorium	**1969**	**yes**	**1**	**7,839**
Locker Room Addition	1969	yes	1	3,195
Total				**147,499**

*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
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	138	69%	Borderline
3.0 Plant Maintainability	100	85	85%	Satisfactory
4.0 Building Safety and Security	200	172	86%	Satisfactory
5.0 Educational Adequacy	200	132	66%	Borderline
6.0 Environment for Education	200	138	69%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	756	76%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract

Renovation Cost Factor	102.31%
Cost to Renovate (Cost Factor applied)	$987,370.84

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

FACILITY ASSESSMENT Cost Set: 2016		Rating	Dollar Assessment	C
A.	Heating System	3	$204,754.68	-
B.	Roofing	3	$114,344.40	-
C.	Ventilation / Air Conditioning	1	$0.00	-
D.	Electrical Systems	3	$127,226.97	-
E.	Plumbing and Fixtures	3	$82,373.00	-
F.	**Windows**	**2**	**$0.00**	-
G.	Structure: Foundation	1	$0.00	-
H.	Structure: Walls and Chimneys	2	$34,610.00	-
I.	**Structure: Floors and Roofs**	**2**	**$0.00**	-
J.	General Finishes	3	$31,278.00	-
K.	Interior Lighting	3	$39,195.00	-
L.	Security Systems	1	$22,341.15	-
M.	Emergency/Egress Lighting	3	$7,839.00	-
N.	Fire Alarm	3	$11,758.50	-
O.	Handicapped Access	3	$2,967.80	-
P.	**Site Condition**	**3**	**$0.00**	-
Q.	Sewage System	3	$13,500.00	-
R.	Water Supply	3	$12,000.00	-
S.	**Exterior Doors**	**2**	**$0.00**	-
T.	Hazardous Material	1	$7,128.60	-
U.	Life Safety	3	$25,084.80	-
V.	Loose Furnishings	3	$39,195.00	-
W.	**Technology**	**3**	**$0.00**	-
X.	Construction Contingency / Non-Construction Cost	1	$189,480.65	-
Total			$965,077.55	

Locker Room Addition (1969) Summary

District: Shaker Heights City
Name: Woodbury Elementary School
Address: 15400 S Woodland Rd
Shaker Heights,OH 44120
Bldg. IRN: 41939

County: Cuyahoga **Area:** Northeastern Ohio (8)
Contact: Randy Yates
Phone: (216) 295-4150
Date Prepared: 2015-02-12 **By:** Kelton Waller
Date Revised: 2021-11-03 **By:** Bill Prenosil

Current Grades	5-6	Acreage:	22.00
Proposed Grades	N/A	Teaching Stations:	65
Current Enrollment	812	Classrooms:	44
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Auditorium	1917	yes	2	2,799
Original Building	1917	yes	3	59,632
Mechancial Room	1926	yes	1	6,535
E & W Academic Wings	1927	no	2	45,184
Gymnasium	1957	yes	1	22,315
Natatorium	1969	yes	1	7,839
Locker Room Addition	**1969**	**yes**	**1**	**3,195**
Total				**147,499**

*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
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	138	69%	Borderline
3.0 Plant Maintainability	100	85	85%	Satisfactory
4.0 Building Safety and Security	200	172	86%	Satisfactory
5.0 Educational Adequacy	200	132	66%	Borderline
6.0 Environment for Education	200	138	69%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	756	76%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	102.31%
Cost to Renovate (Cost Factor applied)	$622,634.65

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

FACILITY ASSESSMENT Cost Set: 2016		Rating	Dollar Assessment	C
A.	Heating System	3	$83,453.40	-
B.	Roofing	3	$64,674.00	-
C.	Ventilation / Air Conditioning	1	$0.00	-
D.	Electrical Systems	3	$51,854.85	-
E.	Plumbing and Fixtures	3	$28,365.00	-
F.	**Windows**	**2**	**$0.00**	-
G.	Structure: Foundation	1	$0.00	-
H.	Structure: Walls and Chimneys	2	$104,297.50	-
I.	**Structure: Floors and Roofs**	**2**	**$0.00**	-
J.	General Finishes	3	$58,000.50	-
K.	Interior Lighting	3	$15,975.00	-
L.	Security Systems	1	$9,105.75	-
M.	Emergency/Egress Lighting	3	$3,195.00	-
N.	Fire Alarm	3	$4,792.50	-
O.	Handicapped Access	3	$7,739.00	-
P.	**Site Condition**	**3**	**$0.00**	-
Q.	**Sewage System**	**3**	**$0.00**	-
R.	**Water Supply**	**3**	**$0.00**	-
S.	**Exterior Doors**	**2**	**$0.00**	-
T.	Hazardous Material	1	$0.00	-
U.	Life Safety	3	$10,224.00	-
V.	Loose Furnishings	3	$15,975.00	-
W.	Technology	3	$31,438.80	-
X.	Construction Contingency / Non-Construction Cost	1	$119,486.23	-
Total			$608,576.53	

A. Heating System

Description: The existing system for the main building and classroom areas consists of three Burnham steam boilers with 3475 MBH capacity installed 1995. The boilers appear to be in satisfactory condition for their age. There is a tube and shell steam to hot water heat exchanger in the mechanical room with two heating water building pumps that serve the unit ventilators and air handling units. The pumps are in poor condition. The boilers and air handling units are controlled with DDC controls and the rest of the controls are pneumatic and in fair to poor condition due to the equipment age. Generally, all the equipment has been well maintained. Each ventilator has an outside air grilled at the exterior wall or outside air is ducted from the attic to an interior ventilator. Overall, the ventilators and the air handling units do not provide the required outside air delivery to meet OBC mechanical code. The DDC controls were added two years ago under an energy performance contract. The staff indicates the controls do not always work and they turn off the boilers on mild temperature days to avoid over heating the school. 1969 Addition: The pool, locker rooms, band room, community room, and gym near the pool are served by three steam boilers: two Smith Cast Iron Boilers at 1,200 MBH each and one Weil-McLain boiler at 1690 MBH (estimated - no model number marked). There is a tube and shell steam to hot water heat exchanger providing heating water for the unit ventilators in this area. The air handling units are steam heat. The 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	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
HVAC System Replacement:	$26.12	sq.ft. (of entire building addition)		Required	Required		Required	Required	Required	Required	$3,681,979.68	(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				$838,528.00	(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:			$4,520,507.68	$73,109.88	$2,034,643.84	$0.00	$1,541,678.08	$582,867.80	$83,453.40	$204,754.68		

Main Mechanical Rm Steam boilers

Unit ventilator

Back to Assessment Summary

B. Roofing

Description: Pitched roofs are the primary roof style over the building perimeter. Water from sloped roofs is collected in metal lined box gutters and metal downspouts. These water collection provisions appear to be original to the building and have exceeded their service life. These roofs are covered with slate shingles. Most flat roofs are covered with built-up systems with a white or reflective coating on top. Overflow drains were not observed. Patches were observed in the built-up roof as well as deterioration of the coating and asphalt between the layers. Parapets around the perimeter of the roof are covered with metal coping. Corrosion was observed on the coping. The gymnasium and natatorium are covered by a membrane roof. A few patches were observed in these areas. Twenty-four skylights are present in the ballasted roof over the locker rooms. Another 22 are located on the built-up roof over the music rooms. The roof is accessed via a manually operated hatch.

Rating: 3 Needs Replacement

Recommendations: Provide a new asphalt built-up roof to replace roofing which has expired expected service life. Provide new metal coping at roof parapets. 1-27-16 UPDATE: REPLACE SLATE ROOF WITH ASPHALT SHINGLES ON ORIGINAL 1917 ORIGINAL BUILDING AND 1927 ADDITION. REPLACE BATT INSULATION ON SLOPED ROOFS ON 1917 ORIGINAL BUILDING AND 1927 ADDITION. PROVIDE FOR DECK REPLACEMENT ON SLOPED ROOF AREAS OF 1917 ORIGINAL BUILDING AND 1927 ADDITIONS. REPLACE ROOF REPLACEMENT ON LOW SLOPE ROOF AREAS ON 1917 AUDITORIUM, 1926 ADITION, 1957 ADDITION AND 1969 NATATORIUM. PROVIDE OVERFLOW DRAINS AND PIPING ON 1926 ADDITION, 1927 ADDITION, 1957 ADDITION AND 1969 ADDITION. 11-2-21 Update: Remove recently completed (2018) work: Remove scope designated for shingle replacement due to slate replacement/repair; built-up roof replacement; adjusted roof replacement scope to match district's roof study/plan.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Asphalt Shingle with Ventilated Nail Base	$8.20	sq.ft. (Qty)			1,262 Required		1,075 Required				$19,163.40	
Built-up Asphalt:	$13.20	sq.ft. (Qty)		2,000 Required	41,000 Required	3,102 Required		2,617 Required	3,195 Required	8,181 Required	$793,254.00	
Repair/replace cap flashing and coping:	$18.40	ln.ft.			400 Required						$7,360.00	
Gutters/Downspouts	$13.10	ln.ft.			240 Required		400 Required				$8,384.00	
Overflow Roof Drains and Piping:	$2,500.00	each			6 Required	2 Required	2 Required	7 Required	9 Required		$65,000.00	
Roof Insulation:	$3.20	sq.ft. (Qty)			21,086 Required			2,012 Required		1,986 Required	$80,268.80	(non-tapered insulation for use in areas without drainage problems)
Other: Batt Insulation	$1.25	sq.ft. (Qty)			12,620 Required		10,750 Required				$29,212.50	Batt Insulation on Sloped Roof Areas
Sum:			$1,002,642.70	$26,400.00	$660,302.60	$45,946.40	$32,492.50	$58,482.80	$64,674.00	$114,344.40		

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C. Ventilation / Air Conditioning

Description: There is no central air conditioning for this building. The office area is cooled by window mounted air conditioners. The two computer labs, music room and staff area are served by air handling units with DX coils or rooftop units. The ventilation system does not meet the OBC fresh air requirement. The overall system is not compliant with Ohio School Design Manual requirements. The air handling unit serving the pool is very old and recirculates most of the air, with very little outside air. Pool areas require more outside air for proper ventilation and moisture control. The general building exhaust systems located in the restrooms are dated and in poor 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	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		

Band AHU

RTU

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D. Electrical Systems

Description: The electrical system in the overall facility is 480V, 3 phase, 3 wire system, 600 amps. The system was installed in 1959 and 1971 and is in poor condition with no extra capacity on the main panel.. The main service is provided by a transformer in an interior vault in the building. The transformer is owned by the utility. The electrical system is beyond the normal equipment life. 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	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
System Replacement:	$16.23	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	$2,393,908.77	(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:			$2,393,908.77	$45,427.77	$967,827.36	$106,063.05	$733,336.32	$362,172.45	$51,854.85	$127,226.97		

Main Electrical Switch Gear

Distribution Panel

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E. Plumbing and Fixtures

Description: The 4'' domestic water supply piping in the original building was galvanized piping and was replaced several years ago with copper. Since then, there have been no water pressure isses in the building unless the pool is filling. There is a 3'' line serving the pool area that is extended from the 4'' line. The pressure reducing valve on 4'' water line was replaced a year ago. There is no back flow preventer on this water line. 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 AO Smith water heater with storage tank provides the domestic hot water for the main building. There is a mixture of galvanized piping and copper water piping in the building in fair condition. There are no electronic sensor faucets and flush valves in the building. All of the toilets are floor mounted. The plumbing fixtures are generally in good condition. The school contains 6 restrooms for boys, 6 restrooms for girls, and 2 restrooms for the staff. The number of fixtures is greater than the OSDM minimum, which is 24 for a school of this size. The first floor has 1 boys ADA restroom and 2 girls restrooms. There are 24 LAVs, 3 ADA LAVs, 28 toilets, 13 urinals and 1 ADA urinals. The manual faucets are in fair to poor condition and showing age. There are 4 electric water coolers and 3 drinking fountains in the school in generally good condition. There is an Ansul suppression system in the kitchen. There is a grease trap above the floor at the three compartment sink.

Rating: 3 Needs Replacement

Recommendations: Replace all of the galvanized piping in the facility. Provide low flow fixtures with low flow faucets and flush valves with sensors, to meet OSFC requirements. Replace boys and girls restroom LAV's with Two Station Modular Lavatory. 01-27-16 UPDATE: PROVIDE FOR REPLACEMENT OF SANITARY WASTE PIPING IN 1917 ORIGINAL BUILDING, 1926 ADDITION, 1927 ADDITION, 1957 ADDITION, 1969 ADDITION AND 1969 NATATORIUM. PROVIDE FOR ADDITIONAL ELECTRIC WATER COOLERS. PROVIDE FOR NEW ELECTRIC WATER COOLERS IN 1917 ORIGINAL BUILDING, 1926 ADDITION, 1927 ADDITION, 1957 ADDITION AND 1969 ADDITION .

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Back Flow Preventer:	$5,000.00	unit		1 Required						1 Required	$10,000.00	
Domestic Supply Piping:	$3.50	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	$516,246.50	(remove / replace)
Sanitary Waste Piping:	$3.50	sq.ft. (of entire building addition)		Required	Required		Required	Required	Required	Required	$493,374.00	(remove / replace)
Toilet:	$1,500.00	unit		4 Required			16 Required	4 Required		4 Required	$42,000.00	(remove / replace) See Item O
Sink:	$1,500.00	unit		4 Required			9 Required	4 Required		7 Required	$36,000.00	(remove / replace)
Electric water cooler:	$3,000.00	unit			8 Required	5 Required	3 Required	2 Required	2 Required		$60,000.00	(double ADA)
Two Station Modular Lavatory	$3,000.00	unit			8 Required		2 Required			2 Required	$36,000.00	(remove / replace)
Other: Lavatory	$1,500.00	each			1 Required		1 Required				$3,000.00	For faculty restrooms
Sum:			$1,196,620.50	$36,593.00	$466,924.00	$37,872.50	$370,288.00	$174,205.00	$28,365.00	$82,373.00		

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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 galss panes. The windows, however, are not equipped with integral blinds.

Rating: 2 Needs Repair

Recommendations: No work is recommended at this time. 01-27-16 UPDATE: PROVIDE FOR INSECT SCREENS ON 1917 ORIGINAL BUILDING AND 1927 ADDITION. REPLACE TRANSOM ON EXTERIOR DOOR ON 1917 ORIGINAL BUILDING AND 1927 ADDITION.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Other: Insect Screens	$110.00	per unit			6 Required		14 Required				$2,200.00	Insect Screens
Other: Transom	$85.00	sq.ft. (Qty)			18 Required		36 Required				$4,590.00	Transom on Exterior Entry Door
Sum:			$6,790.00	$0.00	$2,190.00	$0.00	$4,600.00	$0.00	$0.00	$0.00		

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G. Structure: Foundation

Description: Visible portions of the buildings foundation reveal concrete piers and poured foundation retaining walls. Some moisture was observed on the floor of the mechanical room which sits below the rest the building.

Rating: 1 Satisfactory

Recommendations: While major deficiencies to the foundation were not observed, a sump pump should be provided to prevent future breaches of water into the building. 01-27-16 UPDATE: PROVIDE BUDGET TO DEMOLISH EXISTING COAL ROOM AT 1917 ORIGINAL BUILDING. REBUILD END STAIR TOWER ON EACH WINGS ON 1927 ADDITION. 01-27-16 UPDATE: PROVIDE WATERPROOFING MEMBRANE AND DRAINAGE TILE SYSTEM FOR basement FOUNDATION WALLS AT 1917 ORIGINAL BUILDING 1926 ADDITION AND 1927 ADDITION. REMOVE AND REPLACE DAMAGED CONCRETE SLAB AT STUDENT DINING IN 1927 ADDITION. CUT CONTROL JOINTS IN TERAZZO FLOORING IN 1917 ORIGINAL BUILDING AND 1927 ADDITION. REPLACE WINDOW WELL SLAB AT LOWER ELEVATION AND INSTALL DRAINAGE, DUE TO EXCAVATION FOR FOUNDATION WALL WATERPROOFING. 11-2-21- Update: Remove waterproofing & drain tile & stairwell re-construction scope performed in 2020.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	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	ln.ft.				200 Required					$3,600.00	(include excavation and backfill)
Other: CMU Foundation Wall	$21.00	sq.ft. (Qty)			1,200 Required						$25,200.00	New CMU Foundation Wall @ Existing Coal Room
Other: Concrete Floor Repair	$6.00	sq.ft. (Qty)			600 Required		1,300 Required				$11,400.00	Repair concrete floor in student dining
Other: Control Joints	$60.00	ln.ft.			100 Required		100 Required				$12,000.00	Control Joint in Terrazzo Flooring
Other: Demolish Coal Room	$100.00	per unit			518 Required						$51,800.00	Excavate, remove concrete lid on coal room, back fill with structural fill and compact. Patch asphalt
Other: Sump Pit & Pump	$10,000.00	lump sum		Required							$10,000.00	Provide pumps as needed in basement areas to prevent future water breaches.
Sum:			$128,000.00	$10,000.00	$86,600.00	$17,600.00	$13,800.00	$0.00	$0.00	$0.00		

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H. Structure: Walls and Chimneys

Description: Structural walls are built of masonry. Evidence of moisture penetration was observed in the form of efflorescence in the mechanical room. The stacks from the mechanical room run through a common brick-clad chimney which displays signs of mortar washout.

Rating: 2 Needs Repair

Recommendations: Remedy for the moisture observed in this section to be addressed by measures recommended under Section P, Site Condition. 01-27-16 UPDATE: REPLACE SANDSTONE CORNICE ON 1926 ADDITION, 1927 ADDITION AND 1969 ADDITION. ADD WEEPS ABOVE WINDOW LINTELS ON ORIGINAL 1917 BUILDING, 1926 ADDITION, 1927 ADDITION AND 1969 ADDITION. RECAULK WINDOWS AND DOORS IN 1917 ORIGINAL BUILDING, 1926 ADDITION, 1927 ADDITION AND 1969 ADDITION. REPLACE BRICK VENEER ON 1917 ORIGINAL BUILDING, 1926 ADDITION, 1927 ADDITION, 1957 ADDITION AND 1969 ADDITION. PROVIDE FOR TUCKPOINTNG ON 1917 ORIGINAL BUILDING, 1926 ADDITION, 1927 ADDITION, 1957 ADDITION, AND 1969 ADDITION. PROVIDE FOR SANDSTONE REPLACEMENT ON 1926 ADDITION, 1927 ADDITION AND 1969 ADDITION. REPLACE STEEL LINTELS ON 1926 ADDITION AND 1927 ADDITION. SCRAPE AND PAINT STEEL LINTELS ON 1957 ADDITION. INSTALL CONTROL JOINTS IN 1969 ADDITION. PROVIDE FOR INTERIOR CMU TUCKPOINTING AT 1957 ADDITION AND 1969 ADDITION. REPLACE CAULK AT CORRIDOR PILASTER IN 1957 ADDITION. PROVIDE BRICK INFILL OF UNIT VENTILATOR OUTSIDE ARE GRILLS ON 1917 ORIGINAL BUILDING AND 1927 ADDITION. PROVIDE FOR CLEANING AND SEALING EXTERIOR MASONRY ON 1927 ORIGINAL BUILDING, 1926 ADDITION, 1927 ADDITION, 1957 ADDITION AND 1969 ADDITION. 11-2-21 Update: Removed scope undertaken in 2019 including limited tuckpointing, cleaning & sealing & some brick replacement.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Tuckpointing:	$5.25	sq.ft. (Qty)		1,000 Required	1,740 Required	2,115 Required	5,400 Required	720 Required	380 Required	100 Required	$60,138.75	(wall surface)
Exterior Caulking:	$5.50	ln.ft.		200 Required	1,529 Required	1,300 Required	1,550 Required		315 Required	100 Required	$27,467.00	(removing and replacing)
Replace Brick Veneer System:	$35.00	sq.ft. (Qty)			140 Required	55 Required	205 Required		350 Required	100 Required	$29,750.00	(total removal and replacement including pinning and shoring)
Lintel Replacement:	$250.00	ln.ft.				100 Required	220 Required				$80,000.00	(total removal and replacement including pinning and shoring)
Coping Replacement Stone and Masonry:	$100.00	ln.ft.				6 Required	6 Required		6 Required	2 Required	$2,000.00	(remove and replace)
Install Control Joints	$60.00	ln.ft.							30 Required		$1,800.00	
Other: Ad Additional Weeps	$35.85	per unit			150 Required	44 Required	132 Required		200 Required	100 Required	$22,442.10	Provide Weeps above windows
Other: Interior Caulk	$5.50	ln.ft.						150 Required			$825.00	Pilaster Caulking
Other: Interior CMU Tuckpointing	$525.00	sq.ft. (Qty)						200 Required	150 Required	50 Required	$210,000.00	Interior CMU Tuckpointing
Other: Scrape and Paint Steel Lintels	$4.00	ln.ft.						80 Required			$320.00	Scrape and Paint Steel Lintels
Sum:			$434,742.85	$6,350.00	$27,822.00	$47,356.15	$104,382.20	$109,925.00	$104,297.50	$34,610.00		

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I. Structure: Floors and Roofs

Description: Floor structure consists principally of concrete pan joists and poured structural concrete. From the mechanical room, some deterioration was observed. Exposed reinforcing bars were visible underneath the auxiliary gym. Cracking was also observed in the corridor. Most roofs are framed with concrete deck. The gymnasium roof is tectum deck between purlins resting on steel clearspan piers. Previously infilled skylights were observed over the gym.

Rating: 2 Needs Repair

Recommendations: Provide reinforcement to floors where the structure is deteriorating and reinforcing bars are exposed. 01-27-16 UPDATE: REBUILD CONCRETE MANHOLE AT 1926 ADDITION.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Other: Concrete Floor Slab Repair	$50,000.00	lump sum				Required					$50,000.00	The stability of these areas is threatened in their current condition.
Other: Manhole	$4,000.00	allowance				Required					$4,000.00	Rebuild Concrete Manhole
Sum:			$54,000.00	$0.00	$0.00	$54,000.00	$0.00	$0.00	$0.00	$0.00		

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J. General Finishes

Description: Ceramic and VCT floors are provided throughout the building. Corridor walls are painted plaster of painted and exposed brick. Ceilings in common areas are direct applied acoustic tiles as well as suspended acoustic systems. Most finishes are original to the building and have exceeded their expected service life. The kitchen is not in use as meals are prepared off-site and delivered. A wood sports floor is provided in the gymnasium. The wood is sitting flat and flush and does not interfere with activity or safety. Physical education has provided a variety of equipment for physical activity. The bleachers perform without any reported difficulty. The art program is provided with a kiln that is in working order.

Rating: 3 Needs Replacement

Recommendations: Provide new finishes and casework throughout the building. 01-27-16 UPDATE: PROVIDE FOR PLASTER BUILD BACK ON ACM PLASTER WALLS REMOVED IN 1926 ADDITION UNDER ITEM T. DRYWALL REPLACEMENT FOR REMOVAL OF EXISTING DRYWALL TO ACCESS ACM BEHIND WALLS IN 1917 ORIGINAL BUILDING, 1926 ADDITION, 1957 ADDITION, 1969 ADDITION AND 1969 NATATORIUM. PROVIDE FOR REPLACEMENT OF DROP CEILING IN 1969 NATATORIUM. REPLACE BASKETBALL BACKBOARDS IN 1917 ORIGINAL BUILDING. PROVIDE FOR ACOUSTICAL TREATMENT AT GYMNASIUM AND STUDENT DINING.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Paint:	$2.00	sq.ft. (of entire building addition)		Required						Required	$21,276.00	(partial finish - floor area/prep and installation)
Acoustic Ceiling:	$2.90	sq.ft. (Qty)		3,690 Required						4,000 Required	$22,301.00	(partial finish - drop in/standard 2 x 4 ceiling tile per area)
Vinyl Enhanced Tile (VET):	$4.10	sq.ft. (Qty)		3,690 Required							$15,129.00	(tear out and replace per area; to be used in lieu of VCT)
Complete Replacement of Finishes and Casework (Elementary):	$15.90	sq.ft. (of entire building addition)			Required	Required	Required	Required	Required		$2,176,089.90	(elementary, per building area, with removal of existing)
Basketball Backboard Replacement	$6,500.00	each			6 Required						$39,000.00	(electric)
Hard Plaster Replacement	$9.00	sq.ft. (Qty)				113,000 Required					$1,017,000.00	(Hazardous Material Replacement Cost - See T.)
Gypsum Board Replacement	$4.00	sq.ft. (Qty)			400 Required	4,800 Required	600 Required	4,500 Required	1,800 Required	1,000 Required	$52,400.00	(Hazardous Material Replacement Cost - See T.)
Door and Window Panel Replacement	$200.00	each			470 Required						$94,000.00	(Hazardous Material Replacement Cost - See T.)
Other: Acoustical Treatment	$30,000.00	allowance			Required						$30,000.00	Acoustical Treatment for Student Dining
Other: Acoustical Treatment	$30,000.00	allowance			Required						$30,000.00	Acoustical Treatment for Gymnasium
Sum:			$3,497,195.90	$31,428.00	$1,142,748.80	$1,140,106.50	$720,825.60	$372,808.50	$58,000.50	$31,278.00		

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K. Interior Lighting

Description: The florescent lighting is a mixture of recessed with acrylic lense, surface mounted with acrylic lense, surface mounted with acrylic wrap around lense and pendent mounted with acrylic lense. The gym fixtures are high bay forescent fixtures. In 2012, the ballast and lamps have been upgraded to electronic energy efficient ballast and T8 lamps. Classroom lighting level is 32 FC, a Science Room lighting level is 24 FC, the Corridor lighting level is 16 FC, the Gym is 64 FC and the Art Room 61 FC. The classrooms have dual level lighting controls. (One row of lights per switch.) There are no dimming controls in the building. The cafeteria lights are controlled through electronic controls.

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	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Complete Building Lighting Replacement	$5.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	$737,495.00	Includes demo of existing fixtures
Sum:			$737,495.00	$13,995.00	$298,160.00	$32,675.00	$225,920.00	$111,575.00	$15,975.00	$39,195.00		

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L. Security Systems

Description: The security system consists of 1 exterior mounted camera located at the building entrance. . There is 1 interior camera on the inside of the entrance door. There are 6 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 cameras report to computer screens located in the Security 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 not compliant with OSFC design manual guidelines.

Rating: 1 Satisfactory

Recommendations: Provide new security system to meet OSFC design manual guidelines and upgrade the exterior lighting.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Security System:	$1.85	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	$272,873.15	(complete, area of building)
Exterior Site Lighting:	$1.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	$147,499.00	(complete, area of building)
Sum:			$420,372.15	$7,977.15	$169,951.20	$18,624.75	$128,774.40	$63,597.75	$9,105.75	$22,341.15		

Camera at entrance

Front Entrance door

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M. Emergency/Egress Lighting

Description: The overall facility is equipped with emergency egress lighting system consisting of a LED exit signs and some emergency lighting on a panel served by the emergency generator. There are also exit signs and emergency egress lights with battery pack serving those areas not covered by the emergency generator. 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	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Emergency/Egress Lighting:	$1.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	$147,499.00	(complete, area of building)
Sum:			$147,499.00	$2,799.00	$59,632.00	$6,535.00	$45,184.00	$22,315.00	$3,195.00	$7,839.00		

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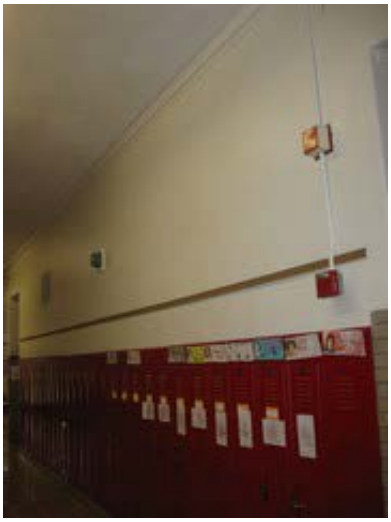
N. Fire Alarm

Description: The Honeywell fire alarm 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. The FA remote panel is located by the back door. 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 - Uprading the ventilation and air conditioning. At that time, the devices would be replaced and added to with addressable devices.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Fire Alarm System:	$1.50	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	$221,248.50	(complete new system, including removal of existing)
Sum:			$221,248.50	$4,198.50	$89,448.00	$9,802.50	$67,776.00	$33,472.50	$4,792.50	$11,758.50		



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O. Handicapped Access

Description: An elevator is provided which allows access to all but the west academic wing. 90% of the building is accessible with the use of the elevator and the ramp. Adequate clearance for maneuverability is provided at classroom doors in the original building. Adequate clearance is not provided in the east and west additions. ADA lever hardware is provided at most doors around the building. High contrast signage with braille is not provided. Wheelchair accessible drinking fountains and provided as well. Toilets have grab bars, but the adequate clearances are not provided in the stalls.

Rating: 3 Needs Replacement

Recommendations: Provided lever hardware as needed to establish accessibility at all doors. Provide another elevator in the west wing to establish accessibility to the entire school. 01-27-16 UPDATE: PROVIDE FOR TOILET PARTITIONS AND ACCESSORIES IN 1917 ORIGINAL BUILDING. REPLACE ELECTRIC WATER COOLERS IN 1917 ORIGINAL BUILDING, 1926 ADDITION, 1927 ADDITION, 1957 ADDITION AND 1969 ADDITION. INCREASE QUANTITY OF ADA HARDWARE REPLACEMENT. REWORK INTERIOR DOOR OPENINGS IN 1917 ORIGINAL BUILDING AND 1927 ADDITION TO MEET ADA. INCREASE NUMBER OF STOPS FOR ELEVATOR TO 4.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Handicapped Hardware:	$350.00	set		4 Required	136 Required		60 Required	10 Required	10 Required	4 Required	$78,400.00	(includes installation / hardware only)
Signage:	$0.20	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	$29,499.80	(per building area)
Elevators:	$42,000.00	each					4 Required				$168,000.00	(per stop, $84,000 minimum)
Electric Water Coolers:	$1,800.00	unit			8 Required	5 Required	3 Required	2 Required	2 Required		$36,000.00	(replacement double ADA)
Toilet/Urinals/Sinks:	$1,500.00	unit			6 Required						$9,000.00	(replacement ADA)
Toilet Partitions:	$1,000.00	stall			20 Required						$20,000.00	(ADA - grab bars, accessories included)
Replace Doors:	$5,000.00	leaf			20 Required		0 Required				$100,000.00	(rework opening and corridor wall to accommodate ADA standards when door opening is set back from edge of corridor and cannot accommodate a wheelchair.)
Remount Restroom Mirrors to Handicapped Height:	$285.00	per restroom			40 Required		40 Required				$22,800.00	
Provide Toilet Accessories:	$1,000.00	per restroom			14 Required						$14,000.00	
Other: Rework wall to provide ADA clearance	$3,000.00	unit					24 Required				$72,000.00	Door in the east and west academic wings don't allow for easy wheelchair access.
Sum:			$549,699.80	$1,959.80	$228,326.40	$10,307.00	$286,836.80	$11,563.00	$7,739.00	$2,967.80		

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P. Site Condition

Description: The site is in good condition overall. Paved surfaces are sloped to drain without remarkable cracks. No physical barriers were observed to separate car drop-off form bus drop-off. Soft surface areas were observed to without excess ponding or erosion. Only small areas of missing grass were observed. Play areas and equipment were observed to be in good condition and free from hazard. Only 74 of the 200 recommended OSDM spaces are provided. A concrete paved dumpster pad is located in the southeast corner of the parking lot.

Rating: 3 Needs Replacement

Recommendations: Provide a physical means of separating. Provide 166 additional parking spaces per OSDM guidelines. 01-27-16 UPDATE: PROVIDE FOR ADDITIONAL ASPHALT PARKING SPACES. REPLACE CONCRETE ASPHALT SIDEWALKS AT 1917 ORIGINAL BUILDING. PROVIDE FOR BUS LOOP OFF SOUTH WOODLANDS RD. PROVIDE FOR CONCRETE DUMPSTER PAD. REPLACE STAIRS, RAMPS, SIDEWALKS AND LANDSCAPING AT 1917 ORIGINAL BUILDING, DUE TO EXCAVATION FOR WATERPROOFING OF FOUNDATION WALLS. 11-2-21 Update: Remove concrete stair reconstruction done in 2020; remove partial landscaping replacement.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
New Asphalt Paving (heavy duty):	$27.80	sq. yard			2,222 Required						$61,771.60	
Additional Parking Spaces Required for Elementary	$121.00	per student			700 Required						$84,700.00	($1,100 per parking space; 0.11 space per elementary student. Parking space includes parking lot drive space.)
Bus Drop-Off for High	$68.75	per student			450 Required						$30,937.50	(**Number of students should be rounded up to the nearest 100.** $5500 per bus; 40 students per bus; 50% of high school students riding)
Concrete Sidewalk:	$4.69	sq.ft. (Qty)			500 Required						$2,345.00	(5 inch exterior slab)
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 100,000 SF or larger	$150,000.00	allowance			Required						$150,000.00	Include this one **or** the previous. (Applies for whole building, so only **one** addition should have this item)
Other: Parking Spaces	$3,000.00	per unit			54 Required						$162,000.00	Additional Asphalt Parking Spaces
Sum:			$544,154.10	$0.00	$544,154.10	$0.00	$0.00	$0.00	$0.00	$0.00		

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Q. Sewage System

Description: The sanitary sewer system drains to the city sewer system. The piping is cast iron and is in poor condition. Due to the age of the system, the piping system is starting to fail and should be replaced. There is a storm sump pump in the mechanical room of the original building and in the mechanical room near the pool. Pumps have been replaced at both locations. The staff indicated the system by the pool clogs occasionally.

Rating: 3 Needs Replacement

Recommendations: Replace the sewer system due to age.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Sewage Main:	$45.00	ln.ft.			300 Required	50 Required				300 Required	$29,250.00	(include excavation and backfilling)
Sum:			$29,250.00	$0.00	$13,500.00	$2,250.00	$0.00	$0.00	$0.00	$13,500.00		

Storm water sump pump

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R. Water Supply

Description: The main domestic water supply system is mostly copper and is tied to the city system. There are parts of the system that are still galvanized. There is no backflow preventer in the building, but there is a pressure reducing valve on the 4'' incoming water service. The system provides adequate pressure and capacity for the facility's needs, except when the pool is filling. The facility is not equipped with an automatic fire suppression system, and the existing water supply system will not provide adequate support for the future system.

Rating: 3 Needs Replacement

Recommendations: Replace water main to meet the sprinkler requirements and install a backflow preventer. 01-27-16 UPDATE: PROVIDE FOR BACKFLOW PREVENTOR.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Domestic Water Main	$40.00	ln.ft.			300 Required					300 Required	$24,000.00	(new)
Other: Backflow Preventer	$8,500.00	per unit			1 Required						$8,500.00	Backflow Preventer
Sum:			$32,500.00	$0.00	$20,500.00	$0.00	$0.00	$0.00	$0.00	$12,000.00		

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S. Exterior Doors

Description: Exterior doors were replaced as a part of the window replacement less than 10 years ago. Door are insulated and have either 1/2 glazed vision panel or are flush.

Rating: 2 Needs Repair

Recommendations: No work is recommended at this time. 01-27-16 UPDATE: REPLACE DOORS IN 1917 ORIGINAL BUILDING, 1926 ADDITION AND 1927 ADDITION.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Door Leaf/Frame and Hardware:	$2,000.00	per leaf			5 Required	3 Required	4 Required				$24,000.00	(includes removal of existing)
Sum:			$24,000.00	$0.00	$10,000.00	$6,000.00	$8,000.00	$0.00	$0.00	$0.00		

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T. Hazardous Material

Description: Environmental assessment data not available at time of report.

Rating: 1 Satisfactory

Recommendations: No work is recommended at this time.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Environmental Hazards Form				EEHA Form	EEHA Form	EEHA Form	EEHA Form	EEHA Form		EEHA Form	—	
Breeching Insulation Removal	$10.00	sq.ft. (Qty)		0 Required	0 Required	350 Required	0 Required	0 Required		0 Required	$3,500.00	
Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups	$1.00	per unit		0 Required	5,000 Required	0 Required	0 Required	0 Required		0 Required	$5,000.00	
Special Engineering Fees for LBP Mock-Ups	$1.00	per unit		0 Required	5,000 Required	0 Required	0 Required	0 Required		0 Required	$5,000.00	
Fluorescent Lamps & Ballasts Recycling/Incineration	$0.10	sq.ft. (Qty)		2,799 Required	59,632 Required	6,535 Required	45,184 Required	22,315 Required		12,786 Required	$14,925.10	
Pipe Fitting Insulation Removal	$20.00	each		0 Required	0 Required	0 Required	0 Required	100 Required		0 Required	$2,000.00	
Pipe Insulation Removal (Hidden in Walls/Ceilings)	$15.00	ln.ft.		100 Required	1,200 Required	150 Required	900 Required	450 Required		250 Required	$45,750.00	
Acoustical Plaster Removal	$7.00	sq.ft. (Qty)		0 Required	0 Required	3,000 Required	0 Required	0 Required		0 Required	$21,000.00	See J
Hard Plaster Removal	$7.00	sq.ft. (Qty)		0 Required	0 Required	0 Required	113,000 Required	0 Required		0 Required	$791,000.00	See J
Acoustical Panel/Tile Ceiling Removal	$3.00	sq.ft. (Qty)		1,200 Required	14,000 Required	0 Required	9,700 Required	0 Required		0 Required	$74,700.00	See J
Laboratory Table/Counter Top Removal	$100.00	each		0 Required	14 Required	0 Required	0 Required	0 Required		0 Required	$1,400.00	See J
Fire Door Removal	$100.00	each		0 Required	2 Required	2 Required	4 Required	0 Required		1 Required	$900.00	See S
Non-ACM Ceiling/Wall Removal (for access)	$2.00	sq.ft. (Qty)		400 Required	4,800 Required	600 Required	4,500 Required	1,800 Required		1,000 Required	$26,200.00	See J
Resilient Flooring Removal, Including Mastic	$3.00	sq.ft. (Qty)		0 Required	23,000 Required	0 Required	6,500 Required	1,000 Required		0 Required	$91,500.00	See J
Carpet Removal (over RFC)	$1.00	sq.ft. (Qty)		0 Required	4,000 Required	0 Required	0 Required	0 Required		0 Required	$4,000.00	See J
Sink Undercoating Removal	$100.00	each		0 Required	15 Required	0 Required	0 Required	0 Required		0 Required	$1,500.00	
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:			$1,093,375.10	$6,179.90	$166,663.20	$28,803.50	$867,018.40	$17,581.50	$0.00	$7,128.60		

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U. Life Safety

Description: The building does not have an automated fire suppression system. The facility is equipped with an emergency generator, but the generator serves the Administration Building and a small portion of this building. Railings throughout the building are typically 36'' above the stairs. The existing kitchen hood is equipped with an ansul system based on current cooking requirements requirements.

Rating: 3 Needs Replacement

Recommendations: Provide the following throughout the building: - Automated fire suppression system - Emergency generator - Handrails and guardrails at all egress stairs. - Provide latches at all doors serving as fire barriers. 01-27-16 UPDATE: PROVIDE PRE-ACTION FIRE SUPPRESSION SYSTEM IN ATTIC SPACE OF 1917 ORIGINAL BUILDING AND 1927 ADDITION. DELETE ADDING EMERGENCY GENERATOR SINCE EMERGENCY GENERATOR S INCLUDED IN ITEM D. PROVIDE FOR NEW WATER SERVICE AND BACKFLOW PREVENTER.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
Sprinkler / Fire Suppression System:	$3.20	sq.ft. (Qty)		2,799 Required	59,632 Required	6,535 Required	45,184 Required	22,315 Required	3,195 Required	7,839 Required	$471,996.80	(includes increase of service piping, if required)
Water Main	$40.00	ln.ft.			300 Required						$12,000.00	(new)
Handrails:	$5,000.00	level		6 Required			4 Required				$50,000.00	
Other: Attic Sprinklers	$3.50	sq.ft. (Qty)			11,883 Required		10,036 Required				$76,716.50	Pre-Action Fire Suppression System for Attic Space
Other: Backflow Preventer	$85,000.00	per unit			1 Required						$85,000.00	Backflow Preventer
Other: Hardware for latching egress door	$500.00	leaf		4 Required			16 Required				$10,000.00	Doors protecting means of egress should latch.
Sum:			$705,713.30	$40,956.80	$329,412.90	$20,912.00	$207,714.80	$71,408.00	$10,224.00	$25,084.80		

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V. Loose Furnishings

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

Rating: 3 Needs Replacement

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	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
CEFPI Rating 0 to 3	$5.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	Required	Required	$737,495.00	
Sum:			$737,495.00	$13,995.00	$298,160.00	$32,675.00	$225,920.00	$111,575.00	$15,975.00	$39,195.00		

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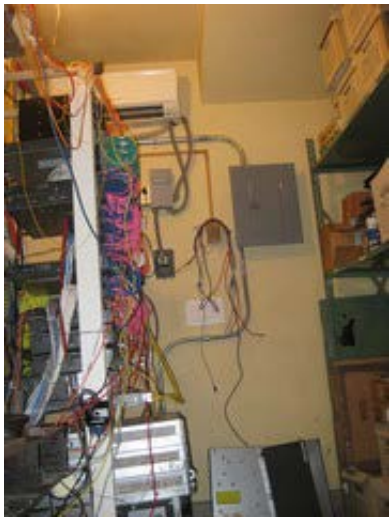
W. Technology

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. Specialized electrical /sound requirements for auditorium are adequately provided. The facility has 2 computer labs for use by the students.

Rating: 3 Needs Replacement

Recommendations: The technology systems to meet OSDM requirements however, the system will need to be replaced with the replacement of the HVAC and Fire Suppression System. Provide a centralized clock system.

Item	Cost	Unit	Whole Building	Auditorium (1917) 2,799 ft²	Original Building (1917) 59,632 ft²	Mechancial Room (1926) 6,535 ft²	E & W Academic Wings (1927) 45,184 ft²	Gymnasium (1957) 22,315 ft²	Locker Room Addition (1969) 3,195 ft²	Natatorium (1969) 7,839 ft²	Sum	Comments
ES portion of building with total SF > 100,000	$9.84	sq.ft. (Qty)			59,632 Required	6,535 Required	45,184 Required	22,315 Required	3,195 Required		$1,346,712.24	
Sum:			$1,346,712.24	$0.00	$586,778.88	$64,304.40	$444,610.56	$219,579.60	$31,438.80	$0.00		



Data closet

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X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		$19,823,922.59
7.00%	Construction Contingency	$1,387,674.58
Subtotal		$21,211,597.17
16.29%	Non-Construction Costs	$3,455,369.18
Total Project		**$24,666,966.35**

Construction Contingency	$1,387,674.58
Non-Construction Costs	$3,455,369.18
Total for X.	**$4,843,043.76**

Non-Construction Costs Breakdown		
Land Survey	0.03%	$6,363.48
Soil Borings / Phase I Envir. Report	0.10%	$21,211.60
Agency Approval Fees (Bldg. Code)	0.25%	$53,028.99
Construction Testing	0.40%	$84,846.39
Printing - Bid Documents	0.15%	$31,817.40
Advertising for Bids	0.02%	$4,242.32
Builder's Risk Insurance	0.12%	$25,453.92
Design Professional's Compensation	7.50%	$1,590,869.79
CM Compensation	6.00%	$1,272,695.83
Commissioning	0.60%	$127,269.58
Non-Construction Contingency (includes partnering and mediation services)	1.12%	$237,569.89
Total Non-Construction Costs	**16.29%**	**$3,455,369.18**

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Name of Appraiser	Bill Prenosil	**Date of Appraisal**	2015-02-12
Building Name	Woodbury Elementary School		
Street Address	15400 S Woodland Rd		
City/Town, State, Zip Code	Shaker Heights, OH 44120		
Telephone Number(s)	(216) 295-4150		
School District	Shaker Heights City		

Setting:	Urban		
Site-Acreage	22.00	Building Square Footage	147,499
Grades Housed	5-6	Student Capacity	1,194
Number of Teaching Stations	65	Number of Floors	3
Student Enrollment	812		
Dates of Construction	1917,1917,1926,1927,1957,1969,1969		

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

Type of Construction	**Exterior Surfacing**	**Floor Construction**
☑ Load bearing masonry	☑ Brick	☐ Wood Joists
☐ Steel frame	☐ Stucco	☐ Steel Joists
☐ Concrete frame	☐ Metal	☐ Slab on grade
☑ Wood	☐ Wood	☑ Structural slab
☐ Steel Joists	☐ Stone	

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

1.0 The School Site	Points Allocated	Points
1.1 **Site is large enough** to meet educational needs as defined by state and local requirements	25	*19*
The site, though 22 acres, is shared with another elementary school as well as the district administration office. Sufficient space for this school's acitivites are provided.		
1.2 **Site is easily accessible** and conveniently located for the present and future population	20	*20*
The school's location is prudent to the established neighborhoods it serves in Shaker Heights.		
1.3 **Location** is removed from undesirable business, industry, traffic, and natural hazards	10	*10*
Undesirable elements were not observed.		
1.4 Site is **well landscaped and developed** to meet educational needs	10	*10*
Some sitting provisions and plenty of safe play areas are available to the students.		
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	10	*10*
Play areas have adequate buffers and protection from vehicular circulation.		
1.6 **Topography** is varied enough to provide desirable appearance and without steep inclines	5	*4*
The site gently slopes away from the building.		
1.7 Site has stable, well drained **soil free of erosion**	5	*5*
The site is well drained and erosion was not observed.		
1.8 Site is suitable for **special instructional needs**, e.g., outdoor learning	5	*3*
Only some seating provisions were observed.		
1.9 **Pedestrian services** include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes	5	*5*
Safe, easily accessible pedestrian provisions were observed leading to and throughout the site.		
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	5	*5*
All staff appear to have proper on-site parking.		
TOTAL - 1.0 The School Site	100	*91*

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Suitability Appraisal of **2.0 Structural and Mechanical Features** for Woodbury 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	*6*
Access to the west wing is not available to users of wheelchairs.		
2.2 **Roofs** appear sound, have positive drainage, and are weather tight	15	*12*
Roofs, in general, do perform well. Some repairs were observed as well as some minor ponding.		
2.3 **Foundations** are strong and stable with no observable cracks	10	*7*
Cracks were not observed, but water has breached the foundation.		
2.4 **Exterior and interior walls** have sufficient expansion joints and are free of deterioration	10	*2*
Wall cracks were not observed. However, control joints are not provided.		
2.5 **Entrances and exits** are located so as to permit efficient student traffic flow	10	*10*
Building portals are provided in sufficient numbers and appropriate locations to maximize traffic flow.		
2.6 **Building ''envelope''** generally provides for energy conservation (see criteria)	10	*7*
The masonry walls are not insulated. However, windows installed less than 10 years ago are insulating units.		
2.7 Structure is **free of friable asbestos** and **toxic materials**	10	*5*
Potential ACM were identified by maintenance personnel in the boiler room.		
2.8 Interior walls permit sufficient **flexibility** for a variety of class sizes	10	*2*
All interior partitions are permanent in this school.		
Mechanical/Electrical	Points Allocated	Points
2.9 **Adequate light sources** are well maintained, and properly placed and are not subject to overheating	15	*8*
Only some of the areas have adequate light sources, and the lighting is maintained and not subject to overheating. Some of the fixtures are very old.		
2.10 **Internal water supply** is adequate with sufficient pressure to meet health and safety requirements	15	*15*
The internal water supply has sufficient pressure.		
2.11 Each teaching/learning area has adequate convenient **wall outlets**, phone and computer cabling for technology applications	15	*11*
There are not enough wall outlets to support the computer/technology equipment in all areas of the building.		
2.12 **Electrical controls** are safely protected with **disconnect switches** easily accessible	10	*8*
Disconnect switches are easily accessible and there are no provisions for the disabled.		
2.13 **Drinking fountains** are adequate in number and placement, and are properly maintained including provisions for the disabled	10	*10*
Drinking fountains are well maintained and there are provisions for the disabled.		
2.14 Number and size of **restrooms meet requirements**	10	*8*
Number of fixtures exceeds OSDM recommended minimum quantity and number of restrooms is adequate. Restrooms are not ADA accessible, and therefore not large enough for wheelchair access.		
2.15 **Drainage systems** are properly maintained and meet requirements	10	*10*
The drainage systems were reported to be in good condition.		

2.16 **Fire alarms, smoke detectors, and sprinkler systems** are properly maintained and meet requirements	10	*4*
There is no sprinkler system and the fire alarm system is not up to date and does not meet NFPA and OSFC requirements.		
2.17 **Intercommunication system** consists of a central unit that allows dependable **two-way communication** between the office and instructional areas	10	*10*
The phone in each classroom provides the two way communication to the office.		
2.18 **Exterior water supply** is sufficient and available for normal usage	5	*3*
There are only a few hose bibs for the exterior of the building, which is not adequate.		
TOTAL - 2.0 Structural and Mechanical Features	200	*138*

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

3.0 Plant Maintainability	Points Allocated	Points
3.1 **Windows, doors, and walls** are of material and finish requiring minimum maintenance	15	*15*
Window, door, and wall materials continue to perform with relatively low maintenance after years of use.		
3.2 **Floor surfaces** throughout the building require minimum care	15	*15*
Wood, ceramic, and VCT floor surfaces have performed well after years of use with only basic routine maintenance.		
3.3 **Ceilings and walls** throughout the building, including service areas, are easily cleaned and resistant to stain	10	*6*
While the ceilings are not usually in the way of abuse, the suspended acoustic ceiling direct applied tiles are easily stained.		
3.4 **Built-in equipment** is designed and constructed for ease of maintenance	10	*8*
Shelving and other built-in items continue to perform though some signs of wear do appear.		
3.5 **Finishes and hardware**, with compatible keying system, are of durable quality	10	*9*
The finish of the hardware continues to hold its appearance. Only a minimal number of keys are required to operate all doors in the building.		
3.6 **Restroom fixtures** are wall mounted and of quality finish	10	*2*
Restroom fixtures throughout the building are floor mounted.		
3.7 Adequate **custodial storage space** with water and drain is accessible throughout the building	10	*10*
A sufficient number of conveniently located custodial spaces is provided. There are mop sinks and adequate storage for cleaning materials.		
3.8 Adequate **electrical outlets and power**, to permit routine cleaning, are available in every area	10	*10*
Adequate electrical outlets for housekeeping are provded.		
3.9 **Outdoor light fixtures, electrical outlets**, equipment, and other fixtures are accessible for repair and replacement	10	*10*
The site is sufficiently illuminated at night. Outlets for outdoor maintenance are provided.		
TOTAL - 3.0 Plant Maintainability	100	*85*

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Suitability Appraisal of **4.0 Building Safety and Security** for Woodbury 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	15	*15*
Off-street student embarking and disembarking areas are provided.		
4.2 **Walkways**, both on and offsite, are available for safety of pedestrians	10	*10*
Safe pedestrian provisions are observed on the site.		
4.3 **Access streets** have sufficient signals and signs to permit safe entrance to and exit from school area	5	*2*
Signs are provided. Signals are not.		
4.4 **Vehicular entrances and exits** permit safe traffic flow	5	*5*
Vehicles appear to be able to access and leave the site safely.		
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	5	*5*
Playground hazards were not observed.		
Building Safety	Points Allocated	Points
4.6 **The heating unit(s)** is located away from student occupied areas	20	*20*
Mechanical units are located in the basement, away from learning areas.		
4.7 Multi-story buildings have at least **two stairways** for student egress	15	*15*
Stairs are provided for egress from all levels of the building.		
4.8 **Exterior doors** open outward and are equipped with panic hardware	10	*10*
Panic hardware is provided on all egress doors.		
4.9 **Emergency lighting** is provided throughout the entire building with exit signs on separate electrical circuits	10	*7*
Emergency lighting is provided throughout, however it is unknown if the exit signs are on separate electrical circuits. Based on the age of the building, it is not likely.		
4.10 **Classroom doors** are recessed and open outward	10	*7*
The doors are recessed about 2 feet. They open in the direction of egress.		
4.11 **Building security systems** are provided to assure uninterrupted operation of the educational program	10	*1*
Back-up systems are not provided.		
4.12 **Flooring** (including ramps and stairways) is maintained in a non-slip condition	5	*5*
Walking surfaces are safe. Non-skid surfaces are used with all vertical circulation.		
4.13 **Stair risers** (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16	5	*3*
The stair risers do exceed 6 1/2".		
4.14 **Glass** is properly located and protected with wire or safety material to prevent accidental student injury	5	*2*
Wire exists online in doors at stairs and separating wings. Neither wire, nor safety ratings were observed at other interior glass panels.		
4.15 **Fixed Projections** in the traffic areas do not extend more than eight inches from the corridor wall	5	*5*
Corridors are free from fixed projections exceeding 8".		

4.16 **Traffic areas** terminate at an exit or a stairway leading to an egress	5	*5*
All corridors terminate at a door or egress stair.		
Emergency Safety	Points Allocated	Points
4.17 Adequate **fire safety equipment** is properly located	15	*15*
Fire extinguishers are located near exits as necessary.		
4.18 There are at least **two independent exits** from any point in the building	15	*15*
All points in the building have at least 2 exits.		
4.19 **Fire-resistant materials** are used throughout the structure	15	*12*
Materials are non-combustible and are used except in the gymnasium where wood veneer is present.		
4.20 Automatic and manual **emergency alarm system** with a distinctive sound and flashing light is provided	15	*13*
The emergency fire alarm system provides adequate coverage for the facility.		
TOTAL - 4.0 Building Safety and Security	200	*172*

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Suitability Appraisal of **5.0 Educational Adequacy** for Woodbury 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	25	*14*
The typical classroom is less than 700 square feet. This is significantly less than OSDM recommendations.		
5.2 **Classroom space** permits arrangements for small group activity	15	*7*
The space doesn't allow for varying arrangements.		
5.3 **Location of academic learning areas** is near related educational activities and away from disruptive noise	10	*10*
Disruptive activities were not observed.		
5.4 **Personal space** in the classroom away from group instruction allows privacy time for individual students	10	*4*
The size of the classrooms does offer privacy for individual students.		
5.5 **Storage for student materials** is adequate	10	*10*
Lockers are provided for students.		
5.6 **Storage for teacher materials** is adequate	10	*3*
Teacher storage is inconsistently provided throughout the building.		
Special Learning Space	Points Allocated	Points
5.7 **Size of special learning area(s)** meets standards	15	*6*
These areas are similarly sized from 700-800 square feet.		
5.8 **Design of specialized learning area(s)** is compatible with instructional need	10	*4*
The design of the room does not relate specifically to the function.		
5.9 **Library**/**Resource**/**Media Center** provides appropriate and attractive space	10	*9*
The newly remodeled media center has accent lighting, soft colors and updated finishes.		
5.10 **Gymnasium (or covered P.E. area)** adequately serves physical education instruction	5	*5*
Two gymnasiums are provided for physical education.		
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	10	*10*
Kindergarten is not provided at this elementary school.		
5.12 **Music Program** is provided adequate sound treated space	5	*2*
The music room does not meet OSDM size requirements. Sufficient space is not provided either.		
5.13 **Space for art** is appropriate for special instruction, supplies, and equipment	5	*5*
There are three rooms provided for art education.		
School Facility Appraisal	Points Allocated	Points
5.14 **Space for technology education** permits use of state-of-the-art equipment	5	*3*
A computer room is provided. However, the space is undersized and desks are densely packed together.		
5.15 Space for **small groups and remedial instruction** is provided adjacent to classrooms	5	*2*

Several smaller rooms are available for this purpose. However, most are not sufficiently proximate to the classroom areas.

5.16 **Storage for student and teacher material** is adequate	5	*3*
Lockers are provided for students, but storage provisions for teachers is inconsistently provided.		

Support Space	Points Allocated	Points
5.17 **Teacher's lounge and work areas** reflect teachers as professionals	10	*4*
The space is inadequate for the number of teachers served.		
5.18 **Cafeteria/Kitchen** is attractive with sufficient space for seating/dining, delivery, storage, and food preparation	10	*10*
The cafeteria has its own colors scheme that has more visual interest than other parts of the building.		
5.19 **Administrative offices** provided are consistent in appearance and function with the maturity of the students served	5	*3*
The offices serve their function well, but do not relate specifically to the age of the students.		
5.20 **Counselor's office** insures privacy and sufficient storage	5	*5*
Counselor's office is adequate size for meeting with students and providing storage.		
5.21 **Clinic** is near administrative offices and is equipped to meet requirements	5	*5*
Clinic is in same corridor as main office and meets requirements.		
5.22 **Suitable reception space** is available for students, teachers, and visitors	5	*3*
Waiting area is insufficient for visitors to the office.		
5.23 **Administrative personnel** are provided **sufficient work space and privacy**	5	*5*
Administrators have private offices.		
TOTAL - 5.0 Educational Adequacy	200	*132*

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Suitability Appraisal of **6.0 Environment for Education** for Woodbury 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	15	*7*
The Georgian brick with white fenestration does not relate specifically to the age of the students.		
6.2 Site and building are **well landscaped**	10	*10*
Flower beds are mulched and large green space areas encompass the North, West, and East portions of the site.		
6.3 **Exterior noise and poor environment** do not disrupt learning	10	*10*
Noise and other elements do not disrupt the educational environment.		
6.4 **Entrances and walkways** are **sheltered** from sun and inclement weather	10	*0*
Shelter is not provided at any entrances.		
6.5 **Building materials** provide attractive color and texture	5	*5*
The Georgian brownish red brick cladding with white fenestration provides attractive contrast on the building's exterior.		
Interior Environment	Points Allocated	Points
6.6 **Color schemes, building materials, and decor** provide an impetus to learning	20	*17*
The brightly colored lockers bring a needed accent to the otherwise white and neutral corridors. The cafeteria and media center have more visual interest than the rest of the school.		
6.7 **Year around comfortable temperature and humidity** are provided throughout the building	15	*5*
Adjusting temperature consistently throughout the building is not easily managed.		
6.8 **Ventilating system** provides adequate quiet circulation of clean air and meets 15cfm VBC requirement	15	*5*
The ventilation system does not provide adequate ventilation and does not meet the requirements.		
6.9 **Lighting system** provides proper intensity, diffusion, and distribution of illumination	15	*7*
The lighting levels are inconsistent where several areas meet or exceed requirements, and other areas of similar use do not meet the requirements.		
6.10 **Drinking fountains and restroom facilities** are conveniently located	15	*15*
Restrooms and drinking fountains are conveniently located.		
6.11 **Communication among students** is enhanced by commons area(s) for socialization	10	*10*
The cafeteria provides opportunity for socialization.		
6.12 **Traffic flow** is aided by appropriate foyers and corridors	10	*10*
Corridors throughout the building efficiently move traffic.		
6.13 **Areas for students to interact** are suitable to the age group	10	*10*
Play areas provide age appropriate interaction opportunity.		
6.14 **Large group areas are designed** for effective management of students	10	*6*
Large numbers of students leaving the auditorium or gymnasium have only one way to reach the rest of the building.		
6.15 **Acoustical treatment** of ceilings, walls, and floors provides effective sound control	10	*3*
Acoustic treatment is provided consistently on ceilings, but only minimally to non-existent on walls and floors.		

6.16 **Window design** contributes to a pleasant environment	10	*10*
Windows allow for high levels of natural light.		
6.17 **Furniture and equipment** provide a pleasing atmosphere	10	*8*
Furniture is adequate, but older and does not contribute greatly to a pleasing atmosphere.		
TOTAL - 6.0 Environment for Education	200	*138*

LEED Observation Notes

School District:	Shaker Heights City
County:	Cuyahoga
School District IRN:	44750
Building:	Woodbury Elementary School
Building IRN:	41939

Sustainable Sites

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

(source: LEED Reference Guide, 2001:9)

Water Efficiency

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

(source: LEED Reference Guide, 2001:65)

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

Energy & Atmosphere

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

(source: LEED Reference Guide, 2001:93)

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

Material & Resources

The steps related to process building materials, such as extraction, processing and transportation are not environmentally natural, as they pollute the air, water and use natural resources. Construction and demolition wastes account for 40% of the solid waste stream in the US. Reusing existing documents is one of the best strategies to reduce solid wastes volumes and prevents then 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: **Woodbury Elementary School**

5-6

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 physical segregation between bus and car student drop-off/pick-up areas.
2.
3.
4.
5.
6.

Back to Assessment Summary

Environmental Hazards Assessment Cost Estimates

Owner:	Shaker Heights City
Facility:	Woodbury Elementary School
Date of Initial Assessment:	Feb 12, 2015
Date of Assessment Update:	Nov 3, 2021
Cost Set:	2016

District IRN:	44750
Building IRN:	41939
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
1917 Auditorium	2,799	$11,179.90	$6,179.90
1917 Original Building	59,632	$161,663.20	$151,663.20
1926 Mechancial Room	6,535	$28,803.50	$28,803.50
1927 E & W Academic Wings	45,184	$867,018.40	$867,018.40
1957 Gymnasium	22,315	$17,581.50	$17,581.50
1969 Locker Room Addition	3,195	$0.00	$0.00
1969 Natatorium	7,839	$7,128.60	$7,128.60
Total	147,499	$1,093,375.10	$1,078,375.10
Total with Regional Cost Factor (102.31%)	—	$1,118,632.06	$1,103,285.56
Regional Total with Soft Costs & Contingency	—	$1,391,917.23	$1,372,821.54

Environmental Hazards(Enhanced) - Shaker Heights City (44750) - Woodbury Elementary School (41939) - Auditorium

Owner:	Shaker Heights City	**Bldg. IRN:**	41939
Facility:	Woodbury Elementary School	**BuildingAdd:**	Auditorium
Date On-Site:	2015-02-12	**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	100	$15.00	$1,500.00
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 / Assumed Asbestos-Free Material	0	$7.00	$0.00
15.	Gypsum Board Removal	Not Present	0	$6.00	$0.00
16.	Acoustical Panel/Tile Ceiling Removal	Reported Asbestos-Containing Material	1200	$3.00	$3,600.00
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	Not Present	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)	Assumed Asbestos-Containing Material	400	$2.00	$800.00
27.	Window Component (Compound, Tape, or Caulk) - Reno & Demo	Not Present	0	$300.00	$0.00
28.	Window Component (Compound, Tape, or Caulk) - Reno Only	Not Present	0	$300.00	$0.00
29.	Resilient Flooring Removal, Including Mastic	Not Present	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**			$5,900.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$5,900.00

B. Removal Of Underground Storage Tanks — ☑ 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 — ☐ 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 — ☐ Not Applicable

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	2799	2799	$0.10	$279.90

E. Other Environmental Hazards/Remarks — ☐ None Reported

	Description		Cost Estimate
1.	Costs for lead-based paint mock-ups are included in assessment for 1917 (Original Building).		$0.00
2.	See Bulk Sample Record Nos. 8 & 11 for sampling results in this addition.		$0.00
3.	(Sum of Lines 1-2)	**Total Cost for Other Environmental Hazards - Renovation**	$0.00
4.	(Sum of Lines 1-2)	**Total Cost for Other Environmental Hazards - Demolition**	$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E3	**Total Cost for Env. Hazards Work - Renovation**	$6,179.90
2.	A36, B1, D1, and E4	**Total Cost for Env. Hazards Work - Demolition**	$6,179.90

* 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) - Woodbury Elementary School (41939) - Original Building

Owner:	Shaker Heights City	**Bldg. IRN:**	41939
Facility:	Woodbury Elementary School	**BuildingAdd:**	Original Building
Date On-Site:	2015-02-12	**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	1200	$15.00	$18,000.00
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 / Assumed Asbestos-Free Material	0	$7.00	$0.00
15.	Gypsum Board Removal	Reported / Assumed Asbestos-Free Material	0	$6.00	$0.00
16.	Acoustical Panel/Tile Ceiling Removal	Reported Asbestos-Containing Material	14000	$3.00	$42,000.00
17.	Laboratory Table/Counter Top Removal	Assumed Asbestos-Containing Material	14	$100.00	$1,400.00
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	2	$100.00	$200.00
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	4800	$2.00	$9,600.00
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	23000	$3.00	$69,000.00
30.	Carpet Mastic Removal	Reported / Assumed Asbestos-Free Material	0	$2.00	$0.00
31.	Carpet Removal (over RFC)	Assumed Asbestos-Containing Material	4000	$1.00	$4,000.00
32.	Acoustical Tile Mastic Removal	Reported / Assumed Asbestos-Free Material	0	$3.00	$0.00
33.	Sink Undercoating Removal	Assumed Asbestos-Containing Material	15	$100.00	$1,500.00
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**			$145,700.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$145,700.00

B. Removal Of Underground Storage Tanks — ☑ 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 — ☐ 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 — ☐ Not Applicable

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	59632	59632	$0.10	$5,963.20

E. Other Environmental Hazards/Remarks — ☐ None Reported

	Description		Cost Estimate
1.	See Bulk Sample Record Nos. 1, 2, 6, 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.	A35, B1, C3, D1, and E3	**Total Cost for Env. Hazards Work - Renovation**	$166,663.20
2.	A36, B1, D1, and E4	**Total Cost for Env. Hazards Work - Demolition**	$151,663.20

* 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"×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) - Woodbury Elementary School (41939) - Mechancial Room

Owner:	Shaker Heights City	**Bldg. IRN:**	41939
Facility:	Woodbury Elementary School	**BuildingAdd:**	Mechancial Room
Date On-Site:	2015-02-12	**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	Assumed Asbestos-Containing Material	350	$10.00	$3,500.00
3.	Tank Insulation Removal	Reported / Assumed Asbestos-Free Material	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	150	$15.00	$2,250.00
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	Assumed Asbestos-Containing Material	3000	$7.00	$21,000.00
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	Not Present	0	$6.00	$0.00
16.	Acoustical Panel/Tile Ceiling Removal	Not Present	0	$3.00	$0.00
17.	Laboratory Table/Counter Top Removal	Not Present	0	$100.00	$0.00
18.	Cement Board Removal	Not Present	0	$5.00	$0.00
19.	Electric Cord Insulation Removal	Not Present	0	$1.00	$0.00
20.	Light (Reflector) Fixture Removal	Not Present	0	$50.00	$0.00
21.	Sheet Flooring with Friable Backer Removal	Not Present	0	$4.00	$0.00
22.	Fire Door Removal	Assumed Asbestos-Containing Material	2	$100.00	$200.00
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	600	$2.00	$1,200.00
27.	Window Component (Compound, Tape, or Caulk) - Reno & Demo	Reported / Assumed Asbestos-Free Material	0	$300.00	$0.00
28.	Window Component (Compound, Tape, or Caulk) - Reno Only	Reported / Assumed Asbestos-Free Material	0	$300.00	$0.00
29.	Resilient Flooring Removal, Including Mastic	Not Present	0	$3.00	$0.00
30.	Carpet Mastic Removal	Not Present	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**			$28,150.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$28,150.00

B. Removal Of Underground Storage Tanks — ☑ 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 — ☐ 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 — ☐ Not Applicable

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	6535	6535	$0.10	$653.50

E. Other Environmental Hazards/Remarks — ☐ None Reported

	Description		Cost Estimate
1.	Costs for lead-based paint mock-ups are included in assessment for 1917 (Original Building).		$0.00
2.	Line Item No. 12 refers to assumed asbestos-containing textured finish ceiling in Gymnasium.		$0.00
3.	(Sum of Lines 1-2)	**Total Cost for Other Environmental Hazards - Renovation**	$0.00
4.	(Sum of Lines 1-2)	**Total Cost for Other Environmental Hazards - Demolition**	$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E3	**Total Cost for Env. Hazards Work - Renovation**	$28,803.50
2.	A36, B1, D1, and E4	**Total Cost for Env. Hazards Work - Demolition**	$28,803.50

* 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) - Woodbury Elementary School (41939) - E & W Academic Wings

Owner:	Shaker Heights City	**Bldg. IRN:**	41939
Facility:	Woodbury Elementary School	**BuildingAdd:**	E & W Academic Wings
Date On-Site:	2015-02-12	**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)	Reported / Assumed Asbestos-Free Material	0	$12.00	$0.00
8.	Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Reported / Assumed Asbestos-Free Material	0	$30.00	$0.00
9.	Pipe Insulation Removal (Hidden in Walls/Ceilings)	Assumed Asbestos-Containing Material	900	$15.00	$13,500.00
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	113000	$7.00	$791,000.00
15.	Gypsum Board Removal	Not Present	0	$6.00	$0.00
16.	Acoustical Panel/Tile Ceiling Removal	Reported Asbestos-Containing Material	9700	$3.00	$29,100.00
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	4	$100.00	$400.00
23.	Door and Window Panel Removal	Not Present	0	$100.00	$0.00
24.	Decontamination of Crawlspace/Chase/Tunnel	Reported / Assumed Asbestos-Free Material	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	4500	$2.00	$9,000.00
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	6500	$3.00	$19,500.00
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	Reported / Assumed Asbestos-Free Material	0	$3.00	$0.00
33.	Sink Undercoating Removal	Not Present	0	$100.00	$0.00
34.	Roofing Removal	Reported / Assumed Asbestos-Free Material	0	$2.00	$0.00
35.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Renovation Work**			$862,500.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$862,500.00

B. Removal Of Underground Storage Tanks — ☑ 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 — ☐ 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 — ☐ Not Applicable

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	45184	45184	$0.10	$4,518.40

E. Other Environmental Hazards/Remarks — ☐ None Reported

	Description	Cost Estimate
1.	Costs for lead-based paint mock-ups are included in assessment for 1917 (Original Building).	$0.00
2.	See Bulk Sample Record Nos. 3, 4, 5, 7, 8, 12, & 13 for sampling results in this addition.	$0.00
3.	There are some sampling issues associated with materials described on Bulk Sample Record No. 13 that require attention; refer to this Bulk Sample Record for additional information.	$0.00
4.	(Sum of Lines 1-3) **Total Cost for Other Environmental Hazards - Renovation**	$0.00
5.	(Sum of Lines 1-3) **Total Cost for Other Environmental Hazards - Demolition**	$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E4	**Total Cost for Env. Hazards Work - Renovation**	$867,018.40
2.	A36, B1, D1, and E5	**Total Cost for Env. Hazards Work - Demolition**	$867,018.40

* 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) - Woodbury Elementary School (41939) - Gymnasium

Owner:	Shaker Heights City	**Bldg. IRN:**	41939
Facility:	Woodbury Elementary School	**BuildingAdd:**	Gymnasium
Date On-Site:	2015-02-12	**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	Assumed Asbestos-Containing Material	100	$20.00	$2,000.00
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 / Assumed Asbestos-Free Material	0	$7.00	$0.00
15.	Gypsum Board Removal	Reported / Assumed Asbestos-Free Material	0	$6.00	$0.00
16.	Acoustical Panel/Tile Ceiling Removal	Reported / Assumed Asbestos-Free Material	0	$3.00	$0.00
17.	Laboratory Table/Counter Top Removal	Not Present	0	$100.00	$0.00
18.	Cement Board Removal	Not Present	0	$5.00	$0.00
19.	Electric Cord Insulation Removal	Not Present	0	$1.00	$0.00
20.	Light (Reflector) Fixture Removal	Not Present	0	$50.00	$0.00
21.	Sheet Flooring with Friable Backer Removal	Not Present	0	$4.00	$0.00
22.	Fire Door Removal	Not Present	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)	Assumed Asbestos-Containing Material	1800	$2.00	$3,600.00
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	Assumed Asbestos-Containing Material	1000	$3.00	$3,000.00
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**			$15,350.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$15,350.00

B. Removal Of Underground Storage Tanks ☑ 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 ☐ 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 ☐ Not Applicable

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	22315	22315	$0.10	$2,231.50

E. Other Environmental Hazards/Remarks ☐ None Reported

	Description		Cost Estimate
1.	Costs for lead-based paint mock-ups are included in assessment for 1917 (Original Building).		$0.00
2.	See Bulk Sample Record Nos. 10 & 14 for sampling results in this addition.		$0.00
3.	(Sum of Lines 1-2)	**Total Cost for Other Environmental Hazards - Renovation**	$0.00
4.	(Sum of Lines 1-2)	**Total Cost for Other Environmental Hazards - Demolition**	$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E3	**Total Cost for Env. Hazards Work - Renovation**	$17,581.50
2.	A36, B1, D1, and E4	**Total Cost for Env. Hazards Work - Demolition**	$17,581.50

* 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) - Woodbury Elementary School (41939) - Natatorium

Owner:	Shaker Heights City	**Bldg. IRN:**	41939
Facility:	Woodbury Elementary School	**BuildingAdd:**	Natatorium
Date On-Site:	2015-02-12	**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	250	$15.00	$3,750.00
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	Not Present	0	$7.00	$0.00
15.	Gypsum Board Removal	Not Present	0	$6.00	$0.00
16.	Acoustical Panel/Tile Ceiling Removal	Reported / Assumed Asbestos-Free Material	0	$3.00	$0.00
17.	Laboratory Table/Counter Top Removal	Not Present	0	$100.00	$0.00
18.	Cement Board Removal	Not Present	0	$5.00	$0.00
19.	Electric Cord Insulation Removal	Not Present	0	$1.00	$0.00
20.	Light (Reflector) Fixture Removal	Not Present	0	$50.00	$0.00
21.	Sheet Flooring with Friable Backer Removal	Not Present	0	$4.00	$0.00
22.	Fire Door Removal	Assumed Asbestos-Containing Material	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	1000	$2.00	$2,000.00
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	Not Present	0	$3.00	$0.00
30.	Carpet Mastic Removal	Not Present	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**			$5,850.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$5,850.00

B. Removal Of Underground Storage Tanks — ☑ 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 — ☐ 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 — ☐ Not Applicable

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	7839	12786	$0.10	$1,278.60

E. Other Environmental Hazards/Remarks — ☐ None Reported

	Description		Cost Estimate
1.	Costs for lead-based paint mock-ups are included in assessment for 1917 (Original Building).		$0.00
2.	See Bulk Sample Record No. 15 for sampling results in this addition.		$0.00
3.	(Sum of Lines 1-2)	**Total Cost for Other Environmental Hazards - Renovation**	$0.00
4.	(Sum of Lines 1-2)	**Total Cost for Other Environmental Hazards - Demolition**	$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E3	**Total Cost for Env. Hazards Work - Renovation**	$7,128.60
2.	A36, B1, D1, and E4	**Total Cost for Env. Hazards Work - Demolition**	$7,128.60

* 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.