

Building Information - Cuyahoga Falls City (43836) - Richardson Elementary

Program Type	Classroom Facilities Assistance Program (CFAP) - Regular
Setting	Suburban
Assessment Name	Richardson_ES_June_2009_Jan_2015_EEA_June_2018_Desktop_Update
Assessment Date (on-site; non-EEA)	2015-01-06
Kitchen Type	Full Kitchen
Cost Set:	2018
Building Name	Richardson Elementary
Building IRN	31476
Building Address	2226 23rd Street
Building City	Cuyahoga Falls
Building Zipcode	44223
Building Phone	(330) 920-3630
Acreage	10.00
Current Grades:	K-5
Teaching Stations	16
Number of Floors	1
Student Capacity	387
Current Enrollment	397
Enrollment Date	2009-04-14
Enrollment Date is the date in which the current enrollment was taken.	
Number of Classrooms	13
Historical Register	NO
Building's Principal	Ms. Julie Petruna
Building Type	Elementary

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North elevation photo:



East elevation photo:



South elevation photo:



West elevation photo:



GENERAL DESCRIPTION

48,411 Total Existing Square Footage
1951,1978 Building Dates
K-5 Grades
397 Current Enrollment
16 Teaching Stations
10.00 Site Acreage

William H. Richardson Elementary School, which is not on the National Register of Historic Buildings, and originally constructed in 1952, is a one story, 48,411 square foot brick and corrugated metal panel school building located in a suburban residential and commercial setting. The existing facility features a conventionally partitioned design, and does not utilize modular buildings. The structure of the overall facility contains a brick veneer and corrugated metal panels on a masonry bearing wall type exterior wall construction, with painted concrete masonry units, glazed block, and wood framed partitions with gypsum board type wall construction in the interior. The base floor system of the overall facility consists of concrete slab-on-grade type construction. A pipe chase crawl space is located along the perimeter of the overall facility with above floor structure of cast-in-place reinforced concrete with concrete topping type construction. The floor system of the Mechanical Mezzanines adjacent to the Stage is cast-in-place reinforced concrete with concrete topping type construction. There are no intermediate floors in this single story structure. The roof structure of the overall facility, except over the Gymnasium and Stage, is metal form deck on steel joist type construction. The roof structure of the Gymnasium and Stage is tectum deck on steel truss type construction. The roofing system of the overall facility is an asphalt built-up roof with gravel wear coat roof that was installed in 1999. The ventilation system of the building is adequate to meet the needs of the users. The Classrooms are undersized in terms of the current standards established by the State of Ohio. Physical Education and Student Dining spaces consist of one Gymnasium and separate Student Dining. The electrical system for the facility is inadequate. The facility is equipped with a non-compliant security system. The building has a non-compliant automatic and manual fire alarm system. The facility is not equipped with an automated fire suppression system. The building contains asbestos and other hazardous materials. The overall building is not compliant with ADA accessibility requirements. The school is located on a 7.9 acre site adjacent to residential and commercial properties. The property, playgrounds, and play areas are partially fenced for security. Access onto the site is unrestricted. Site circulation is fair. There is no dedicated space for school buses to load and unload on the site. Parking for staff, visitors and community events is adequate.

No Significant Findings

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Building Construction Information - Cuyahoga Falls City (43836) - Richardson Elementary (31476)

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition	Built Under ELPP
Original Construction	1951	no	1	47,569	no	no
Student Dining Addition	1978	no	1	842	no	no

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Building Component Information - Cuyahoga Falls City (43836) - Richardson Elementary (31476)

Addition	Auditorium Fixed Seating	Corridors	Agricultural Education Lab	Primary Gymnasium	Media Center	Vocational Space	Student Dining	Kitchen	Natatorium	Indoor Tracks	Adult Education	Board Offices	Outside Agencies	Auxiliary Gymnasium
Original Construction (1951)		7430		4174	1351		1067	416						
Student Dining Addition (1978)							788							
Total	0	7,430	0	4,174	1,351	0	1,855	416	0	0	0	0	0	0
Master Planning Considerations <div> <p>There is an area for expansion of approximately 22,000 SF located to the west of the building. Expansion would require relocation of some of the parking as well as the Playground. There is a grocery store located directly across the street to the East.</p> </div>														

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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

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Original Construction (1951) Summary

District: Cuyahoga Falls City				County: Summit		Area: Northeastern Ohio (8)	
Name: Richardson Elementary				Contact: Ms. Julie Petruna			
Address: 2226 23rd Street Cuyahoga Falls, OH 44223				Phone: (330) 920-3630			
Bldg. IRN: 31476				Date Prepared: 2015-01-06		By: Bernie Merritt	
				Date Revised: 2018-07-06		By: Jeff Tuckerman	

Current Grades	K-5	Acreage:	10.00	Suitability Appraisal Summary						
Proposed Grades	N/A	Teaching Stations:	16							
Current Enrollment	397	Classrooms:	13							
Projected Enrollment	N/A									
Addition	Date	HA	Number of Floors	Current Square Feet	Section	Points Possible	Points Earned	Percentage	Rating	Category
Original Construction	1951	no	1	47,569	<u>Cover Sheet</u>	—	—	—	—	—
<u>Student Dining Addition</u>	1978	no	1	842	<u>1.0 The School Site</u>	100	70	70%	Satisfactory	
Total				48,411	<u>2.0 Structural and Mechanical Features</u>	200	99	50%	Borderline	
					<u>3.0 Plant Maintainability</u>	100	57	57%	Borderline	
					<u>4.0 Building Safety and Security</u>	200	112	56%	Borderline	
					<u>5.0 Educational Adequacy</u>	200	120	60%	Borderline	
					<u>6.0 Environment for Education</u>	200	123	62%	Borderline	
					<u>LEED Observations</u>	—	—	—	—	
					<u>Commentary</u>	—	—	—	—	
					Total	1000	581	58%	Borderline	

*HA	=	Handicapped Access
*Rating	=1	Satisfactory
	=2	Needs Repair
	=3	Needs Replacement
*Const P/S	=	Present/Scheduled Construction

FACILITY ASSESSMENT			Dollar
Cost Set: 2018			Assessment
	Rating		
A. <u>Heating System</u>	3	\$1,623,054.28	-
B. <u>Roofing</u>	3	\$883,269.60	-
C. <u>Ventilation / Air Conditioning</u>	2	\$5,000.00	-
D. <u>Electrical Systems</u>	3	\$772,044.87	-
E. <u>Plumbing and Fixtures</u>	3	\$486,683.00	-
F. <u>Windows</u>	3	\$666,900.00	-
G. <u>Structure: Foundation</u>	2	\$51,540.00	-
H. <u>Structure: Walls and Chimneys</u>	2	\$302,639.00	-
I. <u>Structure: Floors and Roofs</u>	2	\$2,100.00	-
J. <u>General Finishes</u>	3	\$1,656,495.90	-
K. <u>Interior Lighting</u>	3	\$237,845.00	-
L. <u>Security Systems</u>	3	\$195,571.65	-
M. <u>Emergency/Egress Lighting</u>	3	\$47,569.00	-
N. <u>Fire Alarm</u>	3	\$83,245.75	-
O. <u>Handicapped Access</u>	2	\$212,675.00	-
P. <u>Site Condition</u>	2	\$391,322.90	-
Q. <u>Sewage System</u>	1	\$0.00	-
R. <u>Water Supply</u>	1	\$0.00	-
S. <u>Exterior Doors</u>	2	\$4,000.00	-
T. <u>Hazardous Material</u>	3	\$114,256.90	-
U. <u>Life Safety</u>	3	\$171,083.30	-
V. <u>Loose Furnishings</u>	3	\$237,845.00	-
W. <u>Technology</u>	3	\$626,959.42	-
X. <u>Construction Contingency / Non-Construction Cost</u>	-	\$2,143,050.49	-
Total		\$10,915,151.06	

Enhanced Environmental Hazards Assessment Cost Estimates	
C=Under Contract	
Renovation Cost Factor	103.60%
Cost to Renovate (Cost Factor applied)	\$11,308,096.49
<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>	

Student Dining Addition (1978) Summary

District: Cuyahoga Falls City				County: Summit		Area: Northeastern Ohio (8)	
Name: Richardson Elementary				Contact: Ms. Julie Petruna			
Address: 2226 23rd Street Cuyahoga Falls, OH 44223				Phone: (330) 920-3630			
Bldg. IRN: 31476				Date Prepared: 2015-01-06		By: Bernie Merritt	
				Date Revised: 2018-07-06		By: Jeff Tuckerman	

Current Grades	K-5	Acreage:	10.00	Suitability Appraisal Summary			
Proposed Grades	N/A	Teaching Stations:	16				
Current Enrollment	397	Classrooms:	13				
Projected Enrollment	N/A						

Section	Points Possible	Points Earned	Percentage	Rating	Category
<u>Cover Sheet</u>	—	—	—	—	—
<u>1.0 The School Site</u>	100	70	70%	Satisfactory	
<u>2.0 Structural and Mechanical Features</u>	200	99	50%	Borderline	
<u>3.0 Plant Maintainability</u>	100	57	57%	Borderline	
<u>4.0 Building Safety and Security</u>	200	112	56%	Borderline	
<u>5.0 Educational Adequacy</u>	200	120	60%	Borderline	
<u>6.0 Environment for Education</u>	200	123	62%	Borderline	
<u>LEED Observations</u>	—	—	—	—	—
<u>Commentary</u>	—	—	—	—	—
Total	1000	581	58%	Borderline	

Enhanced Environmental Hazards Assessment Cost Estimates			

FACILITY ASSESSMENT			
Cost Set: 2018		Rating	Dollar Assessment
A. <u>Heating System</u>		3	\$28,729.04
B. <u>Roofing</u>		3	\$15,492.80
C. <u>Ventilation / Air Conditioning</u>		2	\$0.00
D. <u>Electrical Systems</u>		3	\$13,665.66
E. <u>Plumbing and Fixtures</u>		3	\$5,894.00
F. <u>Windows</u>		3	\$7,350.00
G. <u>Structure: Foundation</u>		2	\$280.00
H. <u>Structure: Walls and Chimneys</u>		2	\$12,771.00
I. <u>Structure: Floors and Roofs</u>		2	\$1,560.00
J. <u>General Finishes</u>		3	\$18,147.80
K. <u>Interior Lighting</u>		3	\$4,210.00
L. <u>Security Systems</u>		3	\$2,399.70
M. <u>Emergency/Egress Lighting</u>		3	\$842.00
N. <u>Fire Alarm</u>		3	\$1,473.50
O. <u>Handicapped Access</u>		2	\$0.00
P. <u>Site Condition</u>		2	\$6,453.80
Q. <u>Sewage System</u>		1	\$0.00
R. <u>Water Supply</u>		1	\$0.00
S. <u>Exterior Doors</u>		2	\$0.00
T. <u>Hazardous Material</u>		3	\$1,234.20
U. <u>Life Safety</u>		3	\$2,694.40
V. <u>Loose Furnishings</u>		3	\$4,210.00
W. <u>Technology</u>		3	\$11,097.56
X. <u>Construction Contingency / Non-Construction Cost</u>		-	\$33,837.30
Total			\$172,342.76

C=Under Contract		
Renovation Cost Factor		103.60%
Cost to Renovate (Cost Factor applied)		\$178,547.10
The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.		

A. Heating System

Description:

The existing system for the 1951 Original Construction is a natural gas fired steam boiler type system, installed in 1951, and is in fair condition. The system in the 1978 Addition is an extension of that found in the 1951 Original Construction. 2-pipe vs. 4-pipe designations are not applicable in this facility, as no central air conditioning is provided. The two (2) three-pass boilers, manufactured by Burnham Industrial, were installed in 2002 and are in good to fair condition. Steam is distributed to terminal units consisting of cabinet heaters, unit heaters, radiators / fin tubes, unit ventilators, air handlers. The terminal equipment is original to each addition and is in fair to poor condition. The system does not comply with the 15 CFM per person fresh air requirements of the Ohio Building Code mechanical code and Ohio School Design Manual. The pneumatic type system temperature controls are original to each addition, with upgrades in 1999, and are in fair condition. The system does not feature individual temperature controls in all spaces required by the OSDM. The overall system does not feature any central energy recovery systems. The facility is not equipped with louvered interior doors to facilitate Corridor utilization as return air plenums. The existing system in the Gymnasium is ducted, but the ductwork cannot be integrated into a possible future system due to arrangement, air volume, and routing of existing ductwork. The existing system in the remainder of the overall facility is not ducted, and floor to structural deck heights will accommodate the installation of properly sized ductwork for a future Ohio School Design Manual approved system. The overall heating system is evaluated as not being in safe and efficient working order, and long term life expectancy of the existing system is not anticipated. The structure is not equipped with a central air conditioning system. The site does not contain underground fuel tanks.

Rating:

3 Needs Replacement

Recommendations:

Provide new overall heating, ventilating, and air conditioning system to achieve compliance with Ohio Building Code and Ohio School Design Manual standards. Convert the overall facility, except for the Gymnasium, to a ducted system to facilitate efficient exchange of conditioned air. Replace existing ductwork in the Gymnasium to facilitate efficient exchange of conditioned air with pricing included in conversion to ducted system replacement.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
HVAC System Replacement:	\$26.12	sq.ft. (of entire building addition)		Required	Required	\$1,264,495.32	(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	\$387,288.00	(includes costs for vert. & horz. chases, cut openings, soffits, etc. Must be used in addition to HVAC System Replacement if the existing HVAC system is non-ducted)
Sum:			\$1,651,783.32	\$1,623,054.28	\$28,729.04		



Natural Gas Fired Steam Boilers



Steam Unit Heater

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B. Roofing

Description: The roof over the overall facility is an asphalt built-up roof with gravel wear coat system that was installed in 1999, and is in fair condition. There are no District reports of current leaking. Signs of past leaking were observed during the physical assessment. Access to the lower roof was gained by a roof access door that is in fair to poor condition. Access to the upper roof over the Gymnasium and Stage was gained by a roof access hatch that is in poor condition and interior access ladder that is in good condition. Fall safety protection cages are not required, and are not provided. There were observations of standing water on the roof. Metal cap flashings are in good condition. Roof storm drainage is addressed through a system of roof drains and through-wall scuppers. Roof drains are properly located, and in good to fair condition. Through-wall scuppers are improperly located over the exits, and in fair condition. The roof is equipped with overflow roof drains over the Gymnasium and Stage, though they are not required on the remainder of the building. No problems requiring attention were encountered with any roof penetrations. There are not any covered walkways attached to this structure.

Rating: 3 Needs Replacement

Recommendations: The roof over the overall facility requires replacement to meet Ohio School Design Manual guidelines due to condition. The roof access door and roof access hatch requires replacement due to condition. Relocate two through-wall scuppers which are improperly located over the exits.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
Built-up Asphalt:	\$13.20	sq.ft. (Qty)		47,569 Required	842 Required	\$639,025.20	
Roof Insulation:	\$3.20	sq.ft. (Qty)		47,569 Required	842 Required	\$154,915.20	(non-tapered insulation for use in areas without drainage problems)
Roof Access Hatch:	\$2,000.00	each		1 Required		\$2,000.00	(remove and replace)
Other: Additional Roof Tear-Off	\$2.00	sq.ft. (Qty)		47,569 Required	842 Required	\$96,822.00	Multiple roofs exist requiring additional budget for tear-off.
Other: Replace Roof Access Door	\$1,000.00	each		1 Required		\$1,000.00	Replace 3'x7' HM roof access door and frame
Other: Roof Overflow Scuppers	\$2,500.00	each		2 Required		\$5,000.00	Relocate improperly located through-wall scuppers
Sum:			\$898,762.40	\$883,269.60	\$15,492.80		



Typical Roof On the Overall Facility



Roof Access Door

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C. Ventilation / Air Conditioning

Description: The overall facility is not equipped with a central air conditioning system. Window units are provided in the Computer Lab, Teacher's Lounge, several Classrooms, Administrative Offices, Principal's Office, and Teacher Office locations. The ventilation system in the overall facility consists of unit ventilators, is original to each addition and in fair to poor condition, providing fresh air to Classrooms, and unit ventilators and air handlers, is original to each addition and in fair to poor condition, providing fresh air to other miscellaneous spaces such as the Gymnasium, Student Dining, and Media Center. Relief air venting is provided by unit ventilators, air handlers, and central relief fans. The ventilation system does not meet the Ohio Building Code 15 CFM per occupant fresh air requirement. The overall system is not compliant with Ohio Building Code and Ohio School Design Manual requirements. Dust collection systems are not required in this facility. Exhaust systems for Restrooms, Storage Rooms, Custodial Closets, Maintenance Workrooms, Kitchen Dry Food Storage, Locker Rooms, P.E. Workroom & Storage, and Art Rooms are inadequately placed, and in poor condition. The Art Program is equipped with a kiln, and no existing kiln ventilation system is provided. 06-22-18 Assessment Update: General building exhaust is included in Item A and should not be included in this line item.

Rating: 2 Needs Repair

Recommendations: Provide an air conditioning system to meet with Ohio Building Code and Ohio School Design Manual requirements. Pricing included in Item A. Replace the existing general building exhaust system. Provide the existing Art Program the required kiln ventilation system. 06-22-18 Assessment Update: Delete general building exhaust.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Student Dining Addition (1978)	Sum	Comments
				47,569 ft²	842 ft²		
Kiln Exhaust System:	\$5,000.00	each		1 Required		\$5,000.00	
Sum:			\$5,000.00	\$5,000.00	\$0.00		



Unit Ventilator



Gymnasium Air Handler Unit

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D. Electrical Systems

Description: The electrical system provided to the 1951 Original Construction is a 120/208 volts, 400 amp, 3 phase and 4 wire system installed in 1951, and is in fair to poor condition. The system in the 1978 Addition is an extension of that found in the 1951 Original Construction. Power is provided to the school by a single City of Cuyahoga Falls owned, pad-mounted transformer located at the Mechanical side entrance to the building, and in fair condition. The panel system, installed in 1951, is in fair condition, and cannot be expanded to add additional capacity. The Classrooms are not equipped with adequate electrical outlets. The typical Classroom contains four (4) general purpose outlets, zero (0) dedicated outlets for each Classroom computer, and zero (0) dedicated outlets for each Classroom television. Some Classrooms are equipped with as many as six (6) general purpose outlets, while others are equipped with as few as three (3) general purpose outlets. There are not any spaces that have no electrical outlets. The Corridors are not equipped with adequate electrical outlets for servicing. Adequate GFI protected exterior outlets are not provided around the perimeter of the building. The facility is not equipped with an emergency generator. Adequate lightning protection safeguards are not provided. Stage lighting power system including control panel, breakers, and dimmers is inadequately provided, in fair to poor condition and does not meet OSDM requirements. The overall electrical system does not meet Ohio School Design Manual 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 and Classroom capacity due to age, condition, lack of OSDM-required features, and to accommodate the addition of an air conditioning system. Provide new transformer due to age and condition, with funding to be coordinated with the utility company. Provide an emergency generator, with funding included in the electrical system replacement. Provide adequate lightning protection safeguards in the overall facility, including associated grounding system, with funding included in the electrical system replacement. Provide control panel, dimmers, and breakers to support the Stage lighting system, with funding included in the electrical system replacement.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft ²	Student Dining Addition (1978) 842 ft ²	Sum	Comments
System Replacement:	\$16.23	sq.ft. (of entire building addition)		Required	Required	\$785,710.53	(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:			\$785,710.53	\$772,044.87	\$13,665.66		



Main Electrical Distribution Panel



Pad Mounted Transformer

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E. Plumbing and Fixtures

Description:

The service entrance is not equipped with a reduced pressure backflow preventer. A water treatment system is provided for the steam boilers only, and is in good condition. The domestic water supply piping in the overall facility is galvanized and copper, is original to each addition, and is in fair condition. The waste piping in the overall facility is cast iron and galvanized, is original to each addition, and is in fair condition. The facility is equipped with four separate water heaters. Two are 40 gallon electric water heaters, installed in 1992, and in poor condition. The third is a 30 gallon electric water heater, installed in 1992, and in poor condition. The fourth is a 15 gallon electric water heater, installed in 2005, and in good condition. The facility is also equipped with one (1) A.O. Smith natural gas domestic water boiler, installed in 1993, in fair to poor condition, with one (1) separate 150 gallon storage tank, installed in 1969, and in poor condition. The overall facility contains 3 Large Group Restrooms for boys, 3 Large Group Restrooms for girls, 1 Locker Room Restroom for boys, 1 Locker Room Restroom for girls, 0 Locker Room Restrooms for staff, 0 Kitchen Restrooms, 1 Health Clinic Restroom, 4 Restrooms associated with Kindergarten / Pre-K Classrooms / Specialty Classrooms, and 3 Restrooms for staff. Boys' Large Group Restrooms contain 2 ADA and 9 non-ADA floor mounted (7 flush valve / 4 infra-red) toilets, 18 non-ADA floor mounted (12 central flush / 6 infra-red) urinals, as well as 2 ADA and 4 non-ADA wall mounted lavatories. Girls' Large Group Restrooms contain 2 ADA and 19 non-ADA floor mounted flush valve toilets, as well as 2 ADA and 4 non-ADA wall mounted lavatories. Boys' Locker Room Restroom contains 1 non-ADA floor mounted flush valve toilet, 1 non-ADA floor mounted flush valve urinal, 1 non-ADA wall mounted lavatory, as well as 6 non-ADA showers. Girls' Locker Room Restroom contains 1 non-ADA floor mounted flush valve toilet, 1 non-ADA wall mounted lavatory, as well as 5 non-ADA showers. Staff Restrooms contain 3 non-ADA floor mounted flush valve toilets, as well as 3 non-ADA wall mounted lavatories. Condition of fixtures is fair to poor. The facility is equipped with 1 non-ADA drinking fountains, as well as 6 ADA electric water coolers, in fair to poor condition. Elementary Classrooms are not equipped with required lavatory mounted type drinking fountains. Special Education Classroom is not equipped with the required Restroom facilities. Kitchen is not equipped with the required Restroom facilities. Health Clinic is equipped with the required Restroom which contains 1 non-ADA wall mounted flush valve toilet, as well as 1 non-ADA wall mounted lavatory, and fixtures are in fair to poor condition. Kindergarten / Pre-K Classrooms are equipped with Restroom facilities which contain 4 non-ADA floor mounted flush valve toilets, as well as 4 non-ADA wall mounted lavatories, and fixtures are in fair to poor condition. Kitchen fixtures consist of one (1) triple-compartment sink and one (1) dishwashing unit with built-in Hatco water heater, which are in fair condition. The Kitchen is not equipped with a grease interceptor. The Kitchen is not provided the required 140 degree hot water supply. The school meets the OBC requirements for fixtures. Per OBC and OSDM requirements this facility should be equipped with 18 toilets, 9 urinals, 18 lavatories, and 4 electric water coolers, and at present it is equipped with 42 toilets, 19 urinals, 13 lavatories, and 6 electric water coolers. ADA requirements are not met for fixtures and drinking fountains (see Item O). Custodial Closets are properly located and are adequately provided with required service sink or floor drain sink, which is in fair to poor condition. CONTINUED

Rating:

3 Needs Replacement

Recommendations:

Replace galvanized water supply piping in the overall facility with copper piping due to age and condition. Replace sanitary waste piping in the overall facility due to age and condition. To facilitate the school's compliance with OBC and OSFC requirements, provide 18 lavatory mounted type drinking fountains. Due to age, condition, and OSFC standards, replace 42 faucets and valves, 13 lavatories, 19 urinals, and 4 electric water coolers. See Item O for replacement of fixtures related to ADA requirements. See Item J for provisions on Kitchen related equipment. Provide the service entrance with a reduced pressure back flow preventer. Replace all domestic hot water heaters, except for the 15 gallon water heater, due to age and condition. Replace 150 gallon domestic hot water storage tank due to age and condition. Provide the Kitchen with a grease trap interceptor. Provide the Kitchen with a water booster heater. Provide 2 additional exterior wall hydrants. Replace the existing Custodial Closet service sinks due to age and condition.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
Back Flow Preventer:	\$5,000.00	unit		1 Required		\$5,000.00	
Domestic Supply Piping:	\$3.50	sq.ft. (of entire building addition)		Required	Required	\$169,438.50	(remove / replace)
Sanitary Waste Piping:	\$3.50	sq.ft. (of entire building addition)		Required	Required	\$169,438.50	(remove / replace)
Domestic Water Heater:	\$5,100.00	per unit		4 Required		\$20,400.00	(remove / replace)
Urinal:	\$1,500.00	unit		19 Required		\$28,500.00	(remove / replace)
Sink:	\$1,500.00	unit		13 Required		\$19,500.00	(remove / replace)
Electric water cooler:	\$3,000.00	unit		4 Required		\$12,000.00	(double ADA)
Replace faucets and flush valves	\$500.00	per unit		42 Required		\$21,000.00	(average cost to remove/replace)
Other: Domestic Hot Water Storage Tank	\$3,500.00	per unit		1 Required		\$3,500.00	Replace 150 gallon domestic hot water storage tank due to age and condition.
Other: Exterior Wall Hydrants	\$1,400.00	per unit		3 Required		\$4,200.00	Provide 2 additional exterior wall hydrants.
Other: Kitchen Grease Trap	\$5,000.00	per unit		1 Required		\$5,000.00	Provide the Kitchen with a grease trap interceptor.
Other: Kitchen Water Heater	\$5,100.00	per unit		1 Required		\$5,100.00	Provide the Kitchen with a water booster heater.
Other: Lavatory Mounted Type Drinking Fountain	\$1,500.00	per unit		18 Required		\$27,000.00	To facilitate the school's compliance with OBC and OSFC requirements, provide 18 lavatory mounted type drinking fountains.
Other: Service Sink	\$500.00	per unit		5 Required		\$2,500.00	Replace the existing Custodial Closet service sinks due to age and condition.
Sum:			\$492,577.00	\$486,683.00	\$5,894.00		



Electric Domestic Water Heater



Central Flush Floor Mounted Urinals

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F. Windows

Description: The overall facility is equipped with thermally broken aluminum frame windows with double glazed insulated glazing and insulated panel type window system, which was installed in 1982, and is in fair to poor condition. The Gymnasium window openings are equipped with thermally broken aluminum frames with translucent insulating fiberglass panels, which were installed in 1982, and are in fair condition. Window system seals are in fair condition, with minimal air and water infiltration being experienced. Window system hardware is in fair condition. The insulating glazing panel seals have failed in numerous window openings. The window system features surface mounted shades, which are in fair condition. The window system is partially equipped with insect screens on operable windows, which are in good to fair condition. This facility is not equipped with any curtain wall systems. This facility does not feature any glass block windows. The exterior doors in the overall facility are equipped with thermally broken aluminum frame sidelights and transoms with double glazed insulated glazing, in good condition. The school does not contain skylights. Window security grilles are not provided for ground floor windows. There is no Greenhouse associated with this school. 06-22-18 Assessment Update: Due to the activities in the gymnasium and to ensure safety, the gymnasium windows should be translucent panel system in lieu of glass.

Rating: 3 Needs Replacement

Recommendations: Provide a new insulated window system with integral blinds to meet with Ohio School Design Manual requirements. Replace single pane vision panels in exterior doors of the overall facility with approved insulating safety glass. 06-22-18 Assessment Update: Due to the activities in the gymnasium and to ensure safety, the gymnasium windows should be translucent panel system in lieu of glass.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
Insulated Glass/Panels:	\$65.00	sq.ft. (Qty)		7,810 Required	110 Required	\$514,800.00	(includes blinds)
Translucent Panels:	\$125.00	sq.ft. (Qty)		1,250 Required		\$156,250.00	(remove and replace)
Other: Replace Exterior Door Vision Panels	\$200.00	each		15 Required	1 Required	\$3,200.00	Replace single pane vision panels in exterior doors of the overall facility with approved insulating safety glass.
Sum:			\$674,250.00	\$666,900.00	\$7,350.00		



Typical Classroom Windows with Broken Glazing Seals



Window Openings at the 1951 Original Construction Gymnasium

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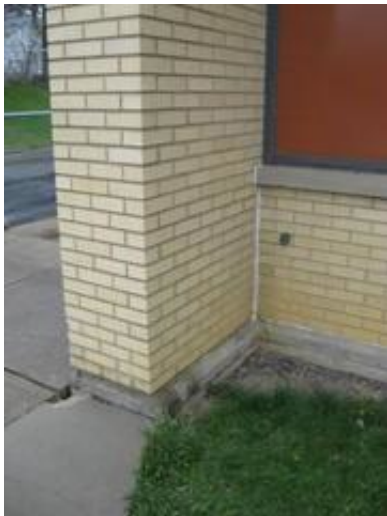
G. Structure: Foundation

Description: The overall facility is equipped with concrete foundation walls on concrete footings, which displayed no locations of significant differential settlement. Areas of minor cracking and spalling were observed. The District reports that there has been past leaking through foundation walls in the utility tunnels and basement walls. No grading or site drainage deficiencies were noted around the perimeter of the structure that are contributing or could contribute to foundation / wall structural deterioration

Rating: 2 Needs Repair

Recommendations: Repair minor cracks and spalled areas on exposed concrete foundations through the overall facility. Address leakage issues in the utility tunnel and basement walls.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
Other: Address Foundation Leaking Issues	\$50.00	sq.ft. (Qty)		860 Required		\$43,000.00	Address leakage issues in the utility tunnel and basement walls.
Other: Repair Cracked and Spalled Foundation	\$28.00	sq.ft. (Qty)		305 Required	10 Required	\$8,820.00	Repair minor cracks and spalled areas on exposed concrete foundations through the overall facility.
Sum:			\$51,820.00	\$51,540.00	\$280.00		



Typical Condition of Exposed Concrete Foundation Wall at Sidewalk and Grade



Typical Condition of Exposed Concrete Foundation Wall at Grade

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H. Structure: Walls and Chimneys

Description: The overall facility has a brick veneer and corrugated metal panels on a masonry bearing wall system, which displayed locations of deterioration, and is in fair condition. The exterior masonry appears to have inappropriately spaced and inadequately caulked control joints in poor condition. Control joints are not provided at lintel locations at doors and windows. The school does contain expansion joints, and are in fair condition. The exterior masonry has not been cleaned and sealed in recent years, and shows evidence of mortar deterioration and locations of staining. There are no architectural accent materials. Interior walls are painted concrete masonry units, glazed block, and wood framed partitions with gypsum board and are in good to fair condition. Interior masonry appears to have adequately spaced and inadequately caulked control joints in fair condition. Some cracking was observed in interior masonry walls. The window sills are stone, and are in fair condition. The exterior lintels are steel, and are rusting / in good to fair condition. There are no chimneys. Canopies over entrances are wood and shingle type construction, and are in fair condition. Exterior soffits are plaster type construction, and are in fair condition. A loading dock has not been provided to facilitate unloading of trucks and receipt of product / supplies / food stuffs. 06-22-18 Assessment Update: The budget for canopies replacement is insufficient for the work necessary to demolish and install new canopies.

Rating: 2 Needs Repair

Recommendations: Provide tuckpointing in all areas of mortar deterioration as required through the overall facility. Provide masonry cleaning, sealing and caulking as required through the overall facility. Sawcut and caulk new appropriately spaced control joints in existing masonry through the overall facility. Recaulk existing control joints. Recaulk existing exterior expansion joints. Prep and paint exposed steel lintels through the overall facility. Repoint stone window sills through the overall facility. Replace existing wood and shingle canopies at building entries. Repair and paint exterior plaster soffits. Provide masonry repairs as required through the overall facility. Provide masonry infill for existing unit ventilator openings in exterior walls. Recaulk interior control joints as required through the overall facility. Repair interior masonry walls as required through the overall facility. 06-22-18 Assessment Update: Provide budget to demolish existing canopies, excavate and install footers, structural steel framing.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
Tuckpointing:	\$5.25	sq.ft. (Qty)		3,280 Required	136 Required	\$17,934.00	(wall surface)
Exterior Masonry Cleaning:	\$1.50	sq.ft. (Qty)		15,730 Required	680 Required	\$24,615.00	(wall surface)
Exterior Masonry Sealing:	\$1.00	sq.ft. (Qty)		15,730 Required	680 Required	\$16,410.00	(wall surface)
Exterior Caulking:	\$5.50	ln.ft.		4,575 Required	144 Required	\$25,954.50	(removing and replacing)
Install Control Joints	\$60.00	ln.ft.		640 Required	56 Required	\$41,760.00	
Other: Masonry Infill	\$25.00	sq.ft. (Qty)		153 Required	2 Required	\$3,875.00	Provide masonry infill for existing unit ventilator openings in exterior walls.
Other: Masonry Repairs	\$25.00	sq.ft. (Qty)		2,460 Required	102 Required	\$64,050.00	Provide masonry repairs as required through the overall facility.
Other: New Canopies	\$35,000.00	lump sum		Required		\$35,000.00	Demolish existing wood framed canopies, install new canopies.
Other: Prep and Paint Steel Lintels	\$8.00	sq.ft. (Qty)		1,063 Required	24 Required	\$8,696.00	Prep and paint exposed steel lintels through the overall facility.
Other: Recaulk Exterior Expansion Joints	\$8.50	ln.ft.		200 Required	50 Required	\$2,125.00	Recaulk exterior expansion joints.
Other: Recaulk Interior Control Joints	\$5.50	ln.ft.		500 Required	56 Required	\$3,058.00	Recaulk interior control joints as required through the overall facility.
Other: Repair and Paint Exterior Plaster Soffits	\$8.00	sq.ft. (Qty)		3,910 Required		\$31,280.00	Repair and paint exterior plaster soffits.
Other: Repair Interior Masonry	\$25.00	sq.ft. (Qty)		1,200 Required	100 Required	\$32,500.00	Repair interior masonry as required through the overall facility.
Other: Repoint Stone Window Sills	\$7.50	ln.ft.		1,063 Required	24 Required	\$8,152.50	Repoint stone window sills through the overall facility.
Sum:			\$315,410.00	\$302,639.00	\$12,771.00		



Area of Exterior Masonry Wall Requiring Repairs



Typical Condition of Exterior Plaster Soffit Over Classroom Windows

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I. Structure: Floors and Roofs

Description: The floor construction of the base floor of the overall facility is concrete slab-on-grade type construction, and is in fair condition, due to cracks in the Corridors and Student Dining. A pipe chase crawl space is located along the perimeter of the overall facility with above floor structure of cast-in-place reinforced concrete with concrete topping type construction. The floor construction of the Mechanical Mezzanine on either side of the Stage is cast-in-place reinforced concrete with concrete topping type construction, and is in good condition. There are no intermediate floors in this single story structure. Ceiling to structural deck spaces are sufficient to accommodate HVAC, electrical, and plumbing scopes of work in required renovations. The roof construction of the overall facility, except over the Gymnasium and Stage, is metal form deck on steel joist type construction, and is in good condition. The roof construction of the Gymnasium and Stage is tectum deck on steel truss type construction, and is in good condition.

Rating: 2 Needs Repair

Recommendations: Repair cracks in the Corridor and Student Dining concrete slab.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Student Dining Addition (1978)	Sum	Comments
				47,569 ft²	842 ft²		
Other: Floor Crack Repair and Refinish	\$60.00	ln.ft.		35 Required	26 Required	\$3,660.00	Repair crack in slab and refinish.
Sum:			\$3,660.00	\$2,100.00	\$1,560.00		



Typical Roof Structure Over the Gymnasium



Crack In Floor Slab-On-Grade of Student Dining

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J. General Finishes

Description:	<p>The overall facility features conventionally partitioned Classrooms with VAT, VCT and carpet flooring, plaster ceilings, as well as painted block wall finishes, and they are in fair to poor condition. The overall facility has Corridors with terrazzo flooring, acoustical tile ceilings, as well as glazed block and gypsum board wall finishes, and they are in fair condition. The 1951 Original Construction has Restrooms with terrazzo flooring, plaster ceilings, as well as glazed block wall finishes, and they are in poor condition. Toilet partitions are metal, marble and wood, and are in poor condition. Classroom casework in the overall facility is wood type construction with wood tops, is adequately provided, and in poor condition. The typical Classroom contains 26 lineal feet of casework, and Classroom casework provided ranges from 20 to 28 feet. Classrooms are provided with adequate chalkboards, markerboards, and tackboards, which are in fair condition. The lockers, located in the Corridors, are adequately provided, and in fair condition. The Art program is equipped with a kiln in fair condition, and existing kiln ventilation is inadequate. The facility is equipped with wood non-louvered interior doors that are partially recessed without proper ADA hardware and clearances, and in fair condition. The Gymnasium spaces have wood flooring, tectum ceilings, as well as painted block and wood panel wall finishes, and they are in fair to poor condition. Wood Gymnasium flooring has been well maintained, will accommodate no future sandings and refinishings, and is rated at an advanced stage of its product lifecycle. Gymnasium telescoping stands are wood type construction in poor condition. Gymnasium basketball backboards are manually operated type, and are in poor condition. The Media Center has carpet flooring, plaster ceilings, as well as painted block wall finishes, and they are in good to fair condition. Student Dining, located in the 1951 Original Construction and 1978 Addition, has terrazzo flooring, acoustical tile ceilings, as well as painted block wall finishes, and they are in fair condition. OSDM-required fixed equipment for Stage is inadequately provided, and in poor condition. The existing Kitchen is full service, is undersized based on current enrollment, and the existing Kitchen equipment, installed in 1951, is in poor condition. The Kitchen hood is in poor condition, and is not equipped with the required UL 300 compliant wet chemical fire suppression system. The required 6" overhang on all three exposed sides of the cooking equipment is not provided by the hood. Kitchen hood exhaust ductwork is not of proper construction material and/or installed as required by the OSDM and OBMC. Reach-in coolers and freezers are located within the Student Dining, and are in fair condition. 06-22-18 Assessment Update: Floor infill, patch, floor tile repair and wall tile repair will be required following removal of floor mounted urinals. Stage curtain is old and worn and should be replaced. Wood stage flooring is worn same age as gymnasium floor and should be replaced.</p>
Rating:	3 Needs Replacement
Recommendations:	<p>Provide complete replacement of finishes and casework due to installation of systems outlined in Items A, C, D, E, I, K, L, M, N, T, U, and due to condition. Provide for the replacement of interior doors due to condition. Other doors are funded in Item O due to opening expansion. Provide for the replacement of Kitchen equipment due to age and condition. Provide for the replacement of the Kitchen exhaust hood due to age and condition. Provide for the replacement of toilet partitions due to condition. Provide for the replacement of toilet accessories due to condition. Provide for the replacement of Gymnasium seating due to condition. Provide for the replacement of the Gymnasium wood floor due to product life cycle. Provide for the replacement of Gymnasium basketball goals due to condition. Provide for the replacement of the Art Program kiln due to condition. Provide for the replacement of hard plaster due to work in Item T. Provide for replacement of interior wood partition walls to meet OSDM and OBC requirements. 10-02-14 Update: Exterior walls are 8" block with 4" clay fired brick and no air cavity or insulation. Provide insulation of exterior walls to meet LEED energy requirements. 06-22-18 Assessment Update: Provide budget for floor infill, patch, floor tile repair and wall tile repair for removal of floor mounted urinals. Replace stage curtain. Replace wood stage flooring.</p>

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
Complete Replacement of Finishes and Casework (Elementary):	\$15.90	sq.ft. (of entire building addition)		Required	Required	\$769,734.90	(elementary, per building area, with removal of existing)
Toilet Partitions:	\$1,000.00	per stall		35 Required		\$35,000.00	(removing and replacing)
Toilet Accessory Replacement	\$0.20	sq.ft. (of entire building addition)		Required		\$9,513.80	(per building area)
Door, Frame, and Hardware:	\$1,300.00	each		54 Required		\$70,200.00	(non-ADA)
Basketball Backboard Replacement	\$3,200.00	each		2 Required		\$6,400.00	(non-electric)
Basketball Backboard Replacement	\$6,500.00	each		4 Required		\$26,000.00	(electric)
Bleacher Replacement	\$110.00	per seat		397 Required		\$43,670.00	(based on current enrollment)
Art Program Kiln:	\$2,750.00	each		1 Required		\$2,750.00	
Remove Demountable Partitions / Install New GWB Partitions:	\$9.00	sq.ft. (Qty)		1,728 Required		\$15,552.00	(includes the demolition of the demountable partition, new partition with 5/8" abuse board, 10' high walls braced to structure above and the use of existing electric and data runs; unit price is based on floor area)
Hard Plaster Replacement	\$9.00	sq.ft. (Qty)		4,262 Required		\$38,358.00	(Hazardous Material Replacement Cost - See T.)
Kitchen Exhaust Hood:	\$56,000.00	per unit		1 Required		\$56,000.00	(includes fans, exhaust & ductwork)
Total Kitchen Equipment Replacement:	\$190.00	sq.ft. (Qty)		1,390 Required		\$264,100.00	(square footage based upon only existing area of food preparation, serving, kitchen storage areas and walk-ins. Includes demolition and removal of existing kitchen equipment)
Other: Floor Repair	\$3,000.00	lump sum		Required		\$3,000.00	Floor infill, floor and wall repair following removal of floor mounted urinals.
Other: Gymnasium Wood Floors	\$30.00	sq.ft. (Qty)		4,174 Required		\$125,220.00	Provide for the replacement of the Gymnasium wood floor due to product life cycle.
Other: Insulation for Exterior Walls	\$7.00	sq.ft. (Qty)		15,730 Required	680 Required	\$114,870.00	Furring of exterior walls to meet LEED energy requirements (includes furring, insulation and abuse resistant GWB up to roof deck)
Other: Stage Curtain	\$75,000.00	lump sum		Required		\$75,000.00	Replace stage curtain
Other: Wood Flooring	\$12.85	per leaf		1,500 Required		\$19,275.00	Replace stage wood floor
Sum:			\$1,674,643.70	\$1,656,495.90	\$18,147.80		



Typical Corridor Finishes



Typical Classroom Markerboard

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K. Interior Lighting

Description:

The typical Classrooms in the overall facility are equipped with T-8 1x4 surface mount fluorescent fixtures with single level switching. Classroom fixtures are in fair condition, providing an average illumination of 60 FC, thus complying with the 50 FC recommended by the OSDM. The typical Corridors in the overall facility are equipped with T-8 2x4 lay-in direct fluorescent fixtures with single level switching. Corridor fixtures are in good to fair condition, providing an average illumination of 22 FC, thus complying with the 20 FC recommended by the OSDM. The Gymnasium spaces are equipped with pendant metal halide type lighting, in fair to poor condition, providing an average illumination of 33 FC, which is less than the 50 FC recommended by the OSDM. The Media Center is equipped with T-8 1x4 surface mount fluorescent fixture type lighting in fair condition, providing an average illumination of 63 FC, thus complying with the 50 FC recommended by the OSDM. The Student Dining spaces are equipped with T-8 2x4 lay-in direct fluorescent fixture type lighting with single level switching. Student Dining fixtures are in fair condition, providing an average illumination of 44 FC, which is less than the 50 FC recommended by the OSDM. The Kitchen spaces are equipped with T-8 1x4 surface mount fluorescent fixture type lighting with single level switching. Kitchen fixtures are in fair to poor condition, providing an average illumination of 53 FC, which is less than the 75-80 FC recommended by the OSDM. The Service Areas in the overall facility are equipped with T-8 1x4 suspended and surface mount fluorescent fixture type lighting in fair condition, providing inadequate illumination. The typical Administrative spaces in the overall facility are equipped with T-8 1x4 surface mount fluorescent fixture type lighting in fair condition, providing adequate illumination based on OSDM requirements. The overall lighting systems of the facility are not compliant with Ohio School Design Manual requirements due to age, condition, inadequate lighting levels, lack of multi-level switching, and the utilization of incandescent fixtures.

Rating:

3 Needs Replacement

Recommendations:

Provide complete replacement of lighting system due to age, condition, inadequate lighting levels, lack of multilevel switching, the utilization of incandescent fixtures, and installation of systems outlined in Items A, C, J, and U.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Student Dining Addition (1978)	Sum	Comments
Complete Building Lighting Replacement	\$5.00	sq.ft. (of entire building addition)		47,569 ft ² Required	842 ft ² Required	\$242,055.00	Includes demo of existing fixtures
Sum:			\$242,055.00	\$237,845.00	\$4,210.00		



Gymnasium Pendant Metal Halide Light Fixtures



Corridor Fluorescent Light Fixtures

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L. Security Systems

Description: The overall facility contains a Honeywell motion sensor and door contact type security system in fair condition. Motion detectors are inadequately provided in main entries, central gathering areas, offices, main Corridors, and spaces where 6 or more computers are located. Exterior doors are inadequately equipped with door contacts. An automatic visitor control system is not provided. Compliant color CCTV cameras are not provided at main entry areas, parking lots, central gathering areas, and main Corridors. A compliant computer controlled access control system integrating alarms and video signals, with appropriate UPS backup, is not provided. The system is not equipped with card / biometric readers. The security system is inadequately provided throughout, and the system is not fully compliant with Ohio School Design Manual guidelines. Existing playground fencing is not fully compliant with Ohio School Design Manual guidelines. The exterior site lighting system is equipped with surface mounted HID high pressure sodium / mercury vapor entry lights in fair condition. Pedestrian walkways are not illuminated. Parking and bus pick-up / drop off areas are not illuminated. The exterior site lighting system provides inadequate coverage. 06-22-18 Assessment Update: The main office is interior to the building and the main entry does not provide for adequate security. Modifications are required to achieve a secure main entrance into the building.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of security system to meet Ohio School Design Manual guidelines. Provide complete replacement of exterior site lighting system to meet Ohio School Design Manual guidelines. Provide additional playground fencing to meet Ohio School Design Manual guidelines, funding included in complete replacement of security system. 06-22-18 Assessment Update: Provide for modifications on existing main entrance to provide for a security vestibule.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
Security System:	\$1.85	sq.ft. (of entire building addition)		Required	Required	\$89,560.35	(complete, area of building)
Exterior Site Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	Required	\$48,411.00	(complete, area of building)
Other: Security Vestibule	\$60,000.00	lump sum		Required		\$60,000.00	Modify main entrance to provide for security vestibule.
Sum:			\$197,971.35	\$195,571.65	\$2,399.70		



Security System Motion Detection Device



Surface Mounted HID High Pressure Sodium Light Fixture

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M. Emergency/Egress Lighting

Description: The overall facility is equipped with an emergency egress lighting system consisting of non compliant plastic construction exit signs, as well as OSDM compliant red lettered, cast aluminum construction, and LED illuminated exit signs and the system is in fair condition. The facility is not adequately equipped with emergency egress floodlighting, and the system is in fair condition. The system is not provided with appropriate battery backup and emergency generator on separate circuits. The system is inadequately provided throughout, and does not meet Ohio School Design Manual and Ohio Building Code requirements.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of emergency / egress lighting system to meet Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Student Dining Addition (1978)	Sum	Comments
				47,569 ft²	842 ft²		
Emergency/Egress Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	Required	\$48,411.00	(complete, area of building)
Sum:			\$48,411.00	\$47,569.00	\$842.00		



Compliant Illuminated Exit Sign



Emergency Egress Light Fixture

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N. Fire Alarm

Description: The overall facility is equipped with an addressable Gamewell Flex 610 fire alarm system, installed in 1999, and in good to fair condition, consisting of manual pull stations, smoke detectors, and horn and strobe indicating devices. The system is automatic and is monitored by a third party. The system is not equipped with sufficient flow switches, tamper switches, and heat sensors. The system is not equipped with any flow switches, tamper switches, or heat sensors. The system thus will not support future fire suppression systems. The system is not adequately provided throughout, and does not have additional zone capabilities. The system is not compliant with Ohio Building Code, NFPA, and Ohio School Design Manual requirements.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of fire alarm system to meet OBC, NFPA, and Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
Fire Alarm System:	\$1.75	sq.ft. (of entire building addition)		Required	Required	\$84,719.25	(complete new system, including removal of existing)
Sum:			\$84,719.25	\$83,245.75	\$1,473.50		



Fire Alarm System Horn and Strobe Indicating Device



Fire Alarm System Smoke Detection Device

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O. Handicapped Access

Description:

At the site, there is an accessible route provided from the public right-of-way, the accessible parking areas, and from the passenger unloading zone to the main entrance of the school. There is an accessible route connecting all or most areas of the site. The exterior entrances are ADA accessible. Access from the parking / drop-off area to the building entries is not compromised by steps or steep ramps. Adequate handicap parking is provided. Exterior doors are equipped with ADA hardware. The main entry is not equipped with an ADA power assist door. Playground layout and equipment are mostly compliant. On the interior of the building, space allowances and reach ranges are not compliant. There is an accessible route through the building which does include protruding objects. Ground and floor surfaces are compliant. Steps do not meet all ADA requirements, and are insufficient due to handrails and space allowances at entries to steps. Elevation changes within the overall facility are facilitated by non-compliant steps at the stage in fair condition. Access to the Stage is not facilitated by a chair lift or ramp. The Music Room has a fixed wood tiered platform that is not facilitated by a chair lift or ramp. Interior doors of the overall facility are fully recessed, are not provided adequate clearances, and are not provided with ADA-compliant hardware. 17 ADA-compliant toilets are required, and 5 are currently provided. 17 ADA-compliant lavatories are required, and 5 are currently provided. 4 ADA-compliant urinals are required, and 4 are currently provided. No ADA-compliant showers are required for this grade level, and none are currently provided. Two ADA-compliant electric water coolers are required, and five are currently provided. Toilet partitions in the 1951 Original Construction are a combination of metal, steel framed marble, and wood, which do not provide appropriate ADA clearances except in the Student Group Restrooms adjacent to Student Dining, the Staff Restrooms in the East wing and the Boy's Group Restroom in the East wing. ADA-compliant accessories are not adequately provided and mounted. Mirrors do meet ADA requirements for mounting heights. Sink base casework in the Classrooms do not meet ADA clearances. One Health Clinic, 2 Locker Rooms, and four Kindergarten Restrooms are not compliant with ADA requirements due to lack of ADA clearances and ADA compliant accessories. Kitchen and Special Education Restrooms are not provided. ADA signage is provided on both the interior and the exterior of the building.

Rating:

2 Needs Repair

Recommendations:

Provide an ADA-compliant power assist door opener, 2 chair lifts for the Stage and Music Room, 2 toilets, 2 sinks, 4 toilet partitions, 4 toilet accessories, 27 doors and frames in the overall facility to facilitate the school's meeting of ADA requirements. Add new ADA compliant handrails at steps to the Stage. Enlarge and reconfigure Toilet Rooms for 1 Health Clinic, 1 Staff, 2 Locker Rooms and 4 Kindergarten Classrooms, including 8 toilets, 8 sinks and 8 sets of ADA accessories. Reconfigure 2 Girl's Large Restrooms and 1 Boy's Large Restroom that have steel framed marble partitions for ADA clearances and access. Add 2 new single ADA Toilet Rooms for the Kitchen and Special Education Classroom, including 2 toilets, 2 sinks, and 2 sets of ADA accessories. Remount 4 mirrors for ADA compliance. Toilet partitions issues are corrected in Item J. ADA compliant sink base casework in the Classrooms are corrected in Item J. For interior doors that are not being replaced under this Item, door hardware to be replaced with funding provided in Item J. 10-02-14 Update: Change handicapped restroom conversion allowance from \$10,000 for each restroom to \$16,761.00 for each restroom. Revise Allowance of \$10,000 to \$25,707.00 for converting space to handicapped accessible Family Restroom.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
Lifts:	\$15,000.00	unit		2 Required		\$30,000.00	(complete)
Toilet/Urinals/Sinks:	\$1,500.00	unit		4 Required		\$6,000.00	(replacement ADA)
Toilet Partitions:	\$1,000.00	stall		4 Required		\$4,000.00	(ADA - grab bars, accessories included)
ADA Assist Door & Frame:	\$7,500.00	unit		1 Required		\$7,500.00	(openers, electrical, patching, etc)
Remount Restroom Mirrors to Handicapped Height:	\$285.00	per restroom		4 Required		\$1,140.00	
Provide Toilet Accessories:	\$1,000.00	per restroom		4 Required		\$4,000.00	
Other: Add Accessible Family Restroom	\$25,707.00	each		1 Required		\$25,707.00	Add Family Rest Room to meet ADA requirements (includes fixtures, walls, door and hardware, floor drain, and supply lines from nearby existing Restroom).
Other: Add Handrails	\$20.00	in.ft.		12 Required		\$240.00	Add/Replace ADA Compliant handrails at the steps to the Stage.
Other: Enlarge existing Restroom to meet ADA requirements	\$16,761.00	each		8 Required	0 Required	\$134,088.00	Enlarge existing Restroom to meet ADA requirements
Sum:			\$212,675.00	\$212,675.00	\$0.00		



Typical Classroom Entry



Group Boy's Restroom

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P. Site Condition

Description:

The 7.9 acre slightly sloped site is located in a suburban residential and commercial setting with moderate tree and shrub type landscaping. There are no outbuildings. There are apparent problems with ponding near the baseball field and the sidewalk to the northeast of the building. Ponding is caused by improper grading. The site is bordered by moderately traveled city streets. A single entrance onto the site impedes proper separation of bus and other vehicular traffic, and one way bus traffic is not provided. A bus loop is provided for student loading and unloading. Staff and visitor parking is facilitated by multiple asphalt parking lots in fair to poor condition, containing 52 parking places, which provides adequate parking for staff members, visitors, and the disabled. The site and parking lot drainage design, consisting of sheet drainage and catch basins, provides adequate evacuation of storm water, and no problems with parking lot ponding were observed. Concrete and asphalt curbs in fair condition are appropriately placed. Concrete sidewalks are properly sloped, are located to provide a logical flow of pedestrian traffic, and are in fair condition. Trash pick-up and service drive pavement is heavy duty and is in fair to poor condition, and is equipped with a concrete pad area for dumpsters, which is in good condition. There are no exterior stairs and handrails associated with this facility. Site fencing is partially provided at the property lines to the north and south. There is a retaining wall at the north property line and it is in good condition. There is a small garden wall at the center drive island in front of the school, which is in poor condition. The playground equipment is primarily constructed of coated steel and high density plastic, is in good to fair condition, placed to provide compliant fall zones, and on a compliant mulch soft surface of sufficient depth, with a basketball court being provided on an asphalt surface. The playground area is not equipped with sufficient tables and benches. The athletic facilities are comprised of 2 baseball fields, and are in fair condition. Site features are suitable for outdoor instruction, though no related equipment has been provided to facilitate doing so. There is an area for expansion of approximately 22,000 SF located to the west of the building. Expansion would require relocation of some of the parking as well as the Playground. There is a grocery store located directly across the street to the East.

Rating:

2 Needs Repair

Recommendations:

Provide for the replacement of the asphalt wear layer due to condition. Replace concrete sidewalks as required due to condition. Provide for soil stabilization at the baseball infield to prevent future ponding and erosion. Provide for the replacement of the center drive island retaining wall due to condition. Provide site contingency allowances for unforeseen conditions.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Student Dining Addition (1978)	Sum	Comments
Replace Existing Asphalt Paving (heavy duty):	\$30.60	sq. yard		47,569 ft ²	842 ft ²		
Concrete Sidewalk:	\$4.69	sq.ft. (Qty)		1,700 Required			
Stabilize soil erosion:	\$2.50	sq.ft. (Qty)		980 Required	20 Required		
Base Sitework Allowance for Unforeseen Circumstances	\$50,000.00	allowance		Required			
Sitework Allowance for Unforeseen Circumstances for buildings between 0 SF and 100,000 SF	\$1.50	sq.ft. (of entire building addition)		Required	Required		
Other: Retaining Wall Replacement	\$10.00	sq.ft. (Qty)		728 Required			
Sum:			\$397,776.70	\$391,322.90	\$6,453.80		



Playground Equipment



Retaining Wall Condition

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Q. Sewage System

Description: The sanitary sewer system is tied in to the city system, and is in fair condition. No significant system deficiencies were reported by the school district or noted during the physical assessment.

Rating: 1 Satisfactory

Recommendations: Existing conditions require no renovation or replacement at the present time.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Student Dining Addition (1978)	Sum	Comments
				47,569 ft ²	842 ft ²		
Sum:			\$0.00	\$0.00	\$0.00		



Sanitary Waste Piping



Sanitary Waste Piping

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R. Water Supply

Description: The domestic water supply system is tied in to the city system, features 6" service and 4" water meter, and is in fair condition. The District was not able to provide water supply flow test data. The existing domestic water service appears to meet the facility's current needs. The facility is not equipped with an automated fire suppression system, and the existing water supply will not provide adequate support for a future system. The domestic water service is not equipped with a water booster pump, and none is required. The system does not provide adequate pressure and capacity for the future needs of the school.

Rating: 1 Satisfactory

Recommendations: Provide a new city water supply line of adequate capacity to support the existing needs of the facility, as well as a future automated fire suppression system. Funding provided in Item U.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Student Dining Addition (1978)	Sum	Comments
				47,569 ft ²	842 ft ²		
Sum:			\$0.00	\$0.00	\$0.00		



Incoming Domestic Water Service Line



Incoming Domestic Water Service Meter

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S. Exterior Doors

Description: Typical exterior doors in the overall facility are FRP and hollow metal type construction, installed on aluminum and hollow metal frames. The FRP doors and aluminum frames are in good condition. The hollow metal doors and frames are in fair condition. Typical exterior doors feature no vision panels and single glazed tempered vision panels. Entrance doors in the overall facility are FRP type construction, installed on aluminum frames, and in good condition. Entrance doors feature single glazed tempered glass vision panels. There are no overhead doors in the facility.

Rating: 2 Needs Repair

Recommendations: Replace all exterior hollow metal doors and frames due to condition. Replacement of single glazed door vision panels is addressed in Item.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Student Dining Addition (1978)	Sum	Comments
				47,569 ft²	842 ft²		
Door Leaf/Frame and Hardware:	\$2,000.00	per leaf		2 Required		\$4,000.00	(includes removal of existing)
Sum:			\$4,000.00	\$4,000.00	\$0.00		



Main Building Entry to the 1951 Original Construction



Hollow Metal Doors at the Service Entry

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T. Hazardous Material

Description: The School District did not provide an AHERA three year reinspection report, or other documents regarding hazardous materials. An Enhanced Environmental Hazards Assessment (EEHA) will need to be conducted in order to establish abatement budgets. Vinyl asbestos floor tile and mastic and hard plaster containing hazardous materials are located in the overall facility in fair condition. These materials were open to observation and found to be in non-friable condition with light damage. There are no underground storage tanks on the site. Due to the construction date, there is a potential for lead based paint. Fluorescent lighting will require special disposal.

Rating: 3 Needs Replacement

Recommendations: Remove all hazardous materials, inclusive of asbestos-containing materials in the overall facility, as noted in the attached Environmental Hazards Assessment. Provide for the testing of paint that has the potential of being lead-based. Provide for disposal of fluorescent lighting.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
<i>Environmental Hazards Form</i>				EEHA Form	EEHA Form	—	
Boiler/Furnace Insulation Removal	\$10.00	sq.ft. (Qty)		450 Required	0 Required	\$4,500.00	
Breaching Insulation Removal	\$10.00	sq.ft. (Qty)		150 Required	0 Required	\$1,500.00	
Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups	\$1.00	per unit		5,000 Required	0 Required	\$5,000.00	
Special Engineering Fees for LBP Mock-Ups	\$1.00	per unit		5,000 Required	0 Required	\$5,000.00	
Fluorescent Lamps & Ballasts Recycling/Incineration	\$0.10	sq.ft. (Qty)		47,569 Required	842 Required	\$4,841.10	
Pipe Insulation Removal	\$10.00	ln.ft.		200 Required	0 Required	\$2,000.00	
Pipe Insulation Removal (Hidden in Walls/Ceilings)	\$15.00	ln.ft.		1,000 Required	50 Required	\$15,750.00	
Flexible Duct Connection Removal	\$100.00	each		7 Required	0 Required	\$700.00	
Fire Door Removal	\$100.00	each		1 Required	0 Required	\$100.00	See S
Non-ACM Ceiling/Wall Removal (for access)	\$2.00	sq.ft. (Qty)		4,000 Required	200 Required	\$8,400.00	See J
Resilient Flooring Removal, Including Mastic	\$3.00	sq.ft. (Qty)		19,500 Required	0 Required	\$58,500.00	See J
Carpet Removal (over RFC)	\$1.00	sq.ft. (Qty)		6,200 Required	0 Required	\$6,200.00	See J
Other: EHA Other Hazard	\$1.00	per unit		3,000 Required		\$3,000.00	XRF testing for lead-based paint is recommended for compliance with EPA's RRP Program.
Sum:			\$115,491.10	\$114,256.90	\$1,234.20		



VAT in Office



VAT in Classrooms

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U. Life Safety

Description:

The overall facility is not equipped with an automated fire suppression system. Exit corridors are situated such that dead-end corridors are not present. Stair towers and guardrails are not present in this single story structure. The facility does not have any exterior stairways from intermediate floors. Handrails at the Stage and Mechanical Basement stairs do not extend past the top and bottom stair risers as required by the Ohio Building Code. Guardrails at the Mechanical Mezzanines are constructed in a ladder effect and do not meet the 4" ball test. The Kitchen hood is in poor condition, and is not equipped with the required UL 300 compliant wet chemical fire suppression system. The required 6" overhang of the cooking equipment is not provided by the hood. Kitchen hood exhaust ductwork is not of proper construction, material, and insulation and was not installed as required by the OSDM and OBCMC. The cooking equipment is not interlocked to shut down in the event of discharge of the fire suppression system. Fire extinguishers are provided in sufficient quantity. Existing fire extinguishers are inadequately spaced. The facility is not equipped with an emergency generator. The existing water supply is provided by a tie-in to the city system, and is insufficient to meet the future fire suppression needs of the school. Rooms with a capacity greater than 50 occupants are not equipped with adequate egress. 06-22-18 Assessment Update: Water meter not required new water line service for fire suppression system. Backflow preventer required for new fire line service for fire suppression system. Handrails at stage stairs required.

Rating:

3 Needs Replacement

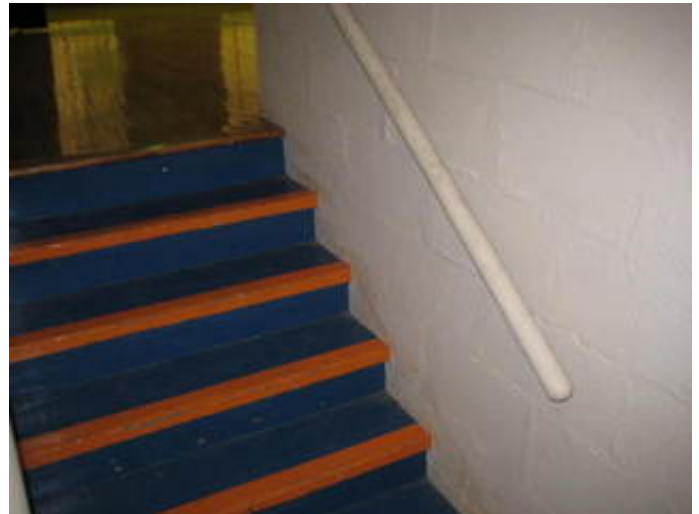
Recommendations:

Provide new automated fire suppression system to meet Ohio School Design Manual guidelines. Provide increased water service of a capacity sufficient to support the fire suppression system, with funding included in fire suppression funding. Provide new emergency generator, with funding provided via complete replacement of electrical system in Item D. Provide new handrails to meet the requirements of the Ohio Building Code. Provide new guardrails to meet the requirements of the Ohio Building Code. Provide the new Kitchen hood with a UL 300 compliant wet chemical fire suppression system, with funding provided in Item J. Provide the interlock to de-energize cooking equipment upon discharge of the Kitchen hood fire suppression system, with funding provided in Item J. 10-02-14 Update: Existing 3" water service not sufficient to support sprinkler system. Provide new water service for fire protection. Water meter will need to be increased in size to meet fire protection flow requirements. Replace water meter. 06-22-18 Assessment Update: Delete water meter. Add a backflow preventer to support new fire line service for fire suppression system. Provide handrails at stage stairs.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,569 ft²	Student Dining Addition (1978) 842 ft²	Sum	Comments
Sprinkler / Fire Suppression System:	\$3.20	sq.ft. (Qty)		47,569 Required	842 Required	\$154,915.20	(includes increase of service piping, if required)
Water Main	\$40.00	ln.ft.		200 Required		\$8,000.00	(new)
Handrails:	\$5,000.00	level		1 Required		\$5,000.00	
Other: Backflow Preventer	\$5,000.00	lump sum		Required		\$5,000.00	Provide for backflow preventer for new water line for fire suppression service
Other: Handrails / Guardrails	\$34.50	ln.ft.		25 Required		\$862.50	Provide new guardrails to meet the requirements of the Ohio Building Code.
Sum:			\$173,777.70	\$171,083.30	\$2,694.40		



Mechanical Room Handrail



Stage Handrail

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V. Loose Furnishings

Description: The typical Classroom furniture is mismatched, and in generally fair to poor condition, consisting of student desks & chairs, teacher desks & chairs, desk height file cabinets, reading tables, computer workstations, bookcases, and wastebaskets. The facility's furniture and loose equipment were evaluated in item 6.17 in the CEFPI section of this report, and on a scale of 1 to 10 the overall facility received a rating of 3 due to observed conditions, and due to the fact that it lacks some of the Design Manual required elements.

Rating: 3 Needs Replacement

Recommendations: Provide for replacement of outdated or inadequate furnishings.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Student Dining Addition (1978)	Sum	Comments
				47,569 ft ²	842 ft ²		
CEFPI Rating 0 to 3	\$5.00	sq.ft. (of entire building addition)		Required	Required	\$242,055.00	
Sum:			\$242,055.00	\$237,845.00	\$4,210.00		



Typical Teacher Desk



Typical Student Desks

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W. Technology

Description:

The typical Classroom is equipped with one of the required four technology data ports for student use, one data port for teacher use, one voice port with a digitally based phone system, one cable port and monitor, and a 2-way PA system that can be initiated only by the Main Office to meet Ohio School Design Manual requirements. Three Classrooms have an Infrared Classroom Amplification Technology system, and two have a wireless microphone amplification system. Two Classrooms have smart boards and wall mounted projection units. The typical Classroom is not equipped with three of the required four technology data ports for student use and a 2-way PA system that can be initiated by either party to meet Ohio School Design Manual requirements. The facility is equipped with an outdated centralized clock system that is only used to run the school bell system. Specialized electrical / sound system requirements of Gymnasium, Stage, Student Dining, and Music spaces are inadequately provided, and in poor condition. OSDM-compliant computer network infrastructure is not provided. The facility does not contain a Media Distribution Center, and does not provide Computer Labs for use by students.

Rating:

3 Needs Replacement

Recommendations:

Provide complete replacement of technology systems to meet Ohio School Design Manual requirements.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Student Dining Addition (1978)	Sum	Comments
ES portion of building with total SF < 50,000	\$13.18	sq.ft. (Qty)		47,569 ft ²	842 ft ²		
				47,569 Required	842 Required	\$638,056.98	
Sum:			\$638,056.98	\$626,959.42	\$11,097.56		



Outdated Centralized Clock System



Infrared Classroom Amplification Technology System

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X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		\$8,910,606.03
7.00%	Construction Contingency	\$623,742.42
Subtotal		\$9,534,348.45
16.29%	Non-Construction Costs	\$1,553,145.36
Total Project		\$11,087,493.81

Construction Contingency	\$623,742.42
Non-Construction Costs	\$1,553,145.36
Total for X.	\$2,176,887.78

Non-Construction Costs Breakdown		
Land Survey	0.03%	\$2,860.30
Soil Borings / Phase I Envir. Report	0.10%	\$9,534.35
Agency Approval Fees (Bldg. Code)	0.25%	\$23,835.87
Construction Testing	0.40%	\$38,137.39
Printing - Bid Documents	0.15%	\$14,301.52
Advertising for Bids	0.02%	\$1,906.87
Builder's Risk Insurance	0.12%	\$11,441.22
Design Professional's Compensation	7.50%	\$715,076.13
CM Compensation	6.00%	\$572,060.91
Commissioning	0.60%	\$57,206.09
Non-Construction Contingency (includes partnering and mediation services)	1.12%	\$106,784.70
Total Non-Construction Costs	16.29%	\$1,553,145.36

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Name of Appraiser	Jeff Tuckerman	Date of Appraisal	2015-01-06
Building Name	Richardson Elementary		
Street Address	2226 23rd Street		
City/Town, State, Zip Code	Cuyahoga Falls, OH 44223		
Telephone Number(s)	(330) 920-3630		
School District	Cuyahoga Falls City		

Setting: Suburban

Site-Acreage	10.00	Building Square Footage	48,411
Grades Housed	K-5	Student Capacity	387
Number of Teaching Stations	16	Number of Floors	1
Student Enrollment	397		
Dates of Construction	1951,1978		

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

Type of Construction

☒ Load bearing masonry
☐ Steel frame
☐ Concrete frame
☐ Wood
☒ Steel Joists

Exterior Surfacing

☒ Brick
☐ Stucco
☒ Metal
☐ Wood
☐ Stone

Floor Construction

☐ Wood Joists
☐ Steel Joists
☒ Slab on grade
☒ Structural slab

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Suitability Appraisal of 1.0 The School Site for Richardson_ES_June_2009_Jan_2015_EEA_June_2018_Desktop_Update

1.0 The School Site	Points Allocated	Points
1.1 Site is large enough to meet educational needs as defined by state and local requirements <i>The site is 7.9 acres compared to 14 acres recommended by the OSDM.</i>	25	15
1.2 Site is easily accessible and conveniently located for the present and future population <i>The School is centrally located within the School District, and is easily accessible.</i>	20	16
1.3 Location is removed from undesirable business, industry, traffic, and natural hazards <i>The site is adjacent to residential / commercial uses, which are not suitable for educational instruction.</i>	10	6
1.4 Site is well landscaped and developed to meet educational needs <i>The site is moderately landscaped with mature shade trees, ornamental trees, and shrubs which define the property and emphasize the building entrance. Most of the lawn areas where mowing is required do not exceed 3:1 slope.</i>	10	8
1.5 ES Well equipped playgrounds are separated from streets and parking areas MS Well equipped athletic and intermural areas are separated from streets and parking HS Well equipped athletic areas are adequate with sufficient solid-surface parking <i>Playground areas consist of coated steel and high density plastic type play equipment, which is in good to fair condition, and is located on wood fiber mulch which is an approved soft surface material. Play equipment is ADA accessible, and includes an accessible route to equipment. Site fencing is not provided to contain students within the play area.</i>	10	7
1.6 Topography is varied enough to provide desirable appearance and without steep inclines <i>The site is gently sloped to provide positive drainage across the site. A flat area is provided to accommodate buildings, perimeter walks, vehicular circulation, parking areas, outdoor play areas, and physical education spaces, and is desirable.</i>	5	4
1.7 Site has stable, well drained soil free of erosion <i>Soils appear to be stable, but show signs of ponding water, and no signs of erosion were observed.</i>	5	3
1.8 Site is suitable for special instructional needs , e.g., outdoor learning <i>The site has been developed to accommodate outdoor learning, though no related equipment has been provided to facilitate doing so.</i>	5	3
1.9 Pedestrian services include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes <i>Sidewalks are adequately provided to accommodate safe pedestrian circulation including designated crosswalks, curb cuts, and correct slopes.</i>	5	4
1.10 ES/MS Sufficient on-site, solid surface parking for faculty and staff is provided HS Sufficient on-site, solid surface parking is provided for faculty, students, staff and community <i>Adequate parking is provided for faculty, staff, and community parking, and is located on asphalt pavement in fair to poor condition.</i>	5	4
TOTAL - 1.0 The School Site	100	70

Suitability Appraisal of 2.0 Structural and Mechanical Features for Richardson_ES_June_2009_Jan_2015_EEA_June_2018_Desktop_Update

2.0 Structural and Mechanical Features	Points Allocated	Points
Structural		
2.1 Structure meets all barrier-free requirements both externally and internally <i>Entire building is not ADA-compliant.</i>	15	9
2.2 Roofs appear sound, have positive drainage, and are weather tight <i>The roofs over the entire building require replacement.</i>	15	8
2.3 Foundations are strong and stable with no observable cracks <i>Foundations are in fair condition with some observable hair line cracks and spalled areas. The District reports that there has been leakage through foundation walls in the past.</i>	10	8
2.4 Exterior and interior walls have sufficient expansion joints and are free of deterioration <i>Exterior and interior walls are in fair condition. The exterior masonry appears to have inappropriately spaced and inadequately caulked control joints in poor condition. Some cracking was observed in the interior walls.</i>	10	8
2.5 Entrances and exits are located so as to permit efficient student traffic flow <i>Exits are properly located to allow safe egress from the building.</i>	10	8
2.6 Building "envelope" generally provides for energy conservation (see criteria) <i>Building envelope meets minimum energy conservation requirements.</i>	10	8
2.7 Structure is free of friable asbestos and toxic materials <i>The building is assumed to contain asbestos and other hazardous materials.</i>	10	4
2.8 Interior walls permit sufficient flexibility for a variety of class sizes <i>Interior walls throughout the facility are fixed walls and are not flexible.</i>	10	6
Mechanical/Electrical	Points Allocated	Points
2.9 Adequate light sources are well maintained, and properly placed and are not subject to overheating <i>Light sources are improperly placed and provide inadequate lighting in some areas. Fixtures are poorly maintained in some areas. Light fixtures do not appear to be subject to overheating.</i>	15	4
2.10 Internal water supply is adequate with sufficient pressure to meet health and safety requirements <i>Internal water supply will not support a future fire suppression system, but appears to be adequate for current requirements.</i>	15	6
2.11 Each teaching/learning area has adequate convenient wall outlets , phone and computer cabling for technology applications <i>Classrooms have an inadequate number of outlets and data jacks for technology applications.</i>	15	4
2.12 Electrical controls are safely protected with disconnect switches easily accessible <i>Disconnect switches are not adequately provided to allow for safe servicing of equipment.</i>	10	2
2.13 Drinking fountains are adequate in number and placement, and are properly maintained including provisions for the disabled <i>Drinking fountains are adequate in number and placement, and meet ADA requirements. Drinking fountains are not properly maintained.</i>	10	8
2.14 Number and size of restrooms meet requirements <i>The number and size of Restrooms meet requirements.</i>	10	6
2.15 Drainage systems are properly maintained and meet requirements	10	2

Drainage systems for the overall facility, consisting of sanitary waste piping, are cast iron, were installed in 1951, exhibit some signs of leaking and are in fair condition.

2.16 **Fire alarms, smoke detectors, and sprinkler systems** are properly maintained and meet requirements 10 2

The fire alarm system does not meet requirements. Smoke detectors are adequately provided. The facility is not sprinkled.

2.17 **Intercommunication system** consists of a central unit that allows dependable **two-way communication** between the office and instructional areas 10 4

The central intercommunication system provides unreliable two-way communication between the Administration area and all teaching areas, can only be initiated by the Main Office, and is outdated. Equipment such as speakers, are in fair condition. Telephone system is used as an alternate method of communication with the office.

2.18 **Exterior water supply** is sufficient and available for normal usage 5 2

Exterior wall hydrants are inadequately provided around the exterior of the facility.

TOTAL - 2.0 Structural and Mechanical Features 200 99

Suitability Appraisal of 3.0 Plant Maintainability for Richardson_ES_June_2009_Jan_2015_EEA_June_2018_Desktop_Update

3.0 Plant Maintainability	Points Allocated	Points
3.1 Windows, doors, and walls are of material and finish requiring minimum maintenance <i>Exterior materials for exterior walls require minimum maintenance. Materials and finishes for doors and windows require some maintenance.</i>	15	12
3.2 Floor surfaces throughout the building require minimum care <i>Flooring throughout the facility consists of VCT, VAT, wood, terrazzo, sealed concrete, and carpet, which is somewhat well maintained throughout the facility.</i>	15	12
3.3 Ceilings and walls throughout the building, including service areas, are easily cleaned and resistant to stain <i>Acoustical tile and plaster ceilings are not easily cleaned or resistant to stain. Glazed and painted block is easily cleaned and resistant to stain.</i>	10	7
3.4 Built-in equipment is designed and constructed for ease of maintenance <i>Casework is wood type construction that is original to the building, and is in poor condition.</i>	10	4
3.5 Finishes and hardware , with compatible keying system, are of durable quality <i>Door hardware varies throughout the facility, does not meet ADA requirements, and keying systems are worn.</i>	10	6
3.6 Restroom fixtures are wall mounted and of quality finish <i>Fixtures are floor and wall mounted and are of fair to poor quality.</i>	10	2
3.7 Adequate custodial storage space with water and drain is accessible throughout the building <i>Custodial storage space is adequately located throughout the facility, including provisions for water and drains.</i>	10	8
3.8 Adequate electrical outlets and power , to permit routine cleaning, are available in every area <i>Electrical outlets are inadequately provided in Corridors and do not allow for convenient routine cleaning.</i>	10	2
3.9 Outdoor light fixtures, electrical outlets , equipment, and other fixtures are accessible for repair and replacement <i>Outdoor light fixtures are inadequately provided, but are accessible for repair and replacement. Electrical outlets are inadequately provided around the exterior of the facility.</i>	10	4
TOTAL - 3.0 Plant Maintainability	100	57

Suitability Appraisal of 4.0 Building Safety and Security for Richardson_ES_June_2009_Jan_2015_EEA_June_2018_Desktop_Update

4.0 Building Safety and Security	Points Allocated	Points
Site Safety		
4.1 Student loading areas are segregated from other vehicular traffic and pedestrian walkways <i>Student loading is not separated from other vehicular traffic.</i>	15	9
4.2 Walkways , both on and offsite, are available for safety of pedestrians <i>Walkways are adequately provided both on and off-site for pedestrian safety.</i>	10	8
4.3 Access streets have sufficient signals and signs to permit safe entrance to and exit from school area <i>School signs and signals are located as required on adjacent access streets.</i>	5	4
4.4 Vehicular entrances and exits permit safe traffic flow <i>Buses and other vehicular traffic use the same entrance and exit points to the site, which does not provide safe vehicular traffic flow.</i>	5	2
4.5 ES Playground equipment is free from hazard MS Location and types of intramural equipment are free from hazard HS Athletic field equipment is properly located and is free from hazard <i>Playground equipment consists of plastic coated steel and high density plastic type equipment in good to fair condition, appears to be free from hazard, and is located on an approved soft surface material to a sufficient depth.</i>	5	4
Building Safety	Points Allocated	Points
4.6 The heating unit(s) is located away from student occupied areas <i>Heating boilers are located in rooms that are not accessible by students. Unit ventilators and radiators / fin tubes are located in the Classrooms and other learning areas.</i>	20	10
4.7 Multi-story buildings have at least two stairways for student egress <i>The overall facility is one story without stairways.</i>	15	15
4.8 Exterior doors open outward and are equipped with panic hardware <i>Exterior doors open in the direction of travel and are equipped with panic hardware.</i>	10	8
4.9 Emergency lighting is provided throughout the entire building with exit signs on separate electrical circuits <i>Exit signs are on separate circuits and are inadequately provided. The facility is not adequately equipped with emergency egress light fixtures. The facility is not equipped with an emergency generator.</i>	10	2
4.10 Classroom doors are recessed and open outward <i>Classroom doors are fully-recessed from the Corridor and open outward without proper ADA clearances.</i>	10	6
4.11 Building security systems are provided to assure uninterrupted operation of the educational program <i>Security systems are inadequately provided and are in fair condition.</i>	10	2
4.12 Flooring (including ramps and stairways) is maintained in a non-slip condition <i>VCT, VAT, Sealed Concrete, Terrazzo, Carpet, and Ceramic Tile flooring have been well maintained throughout the facility.</i>	5	4
4.13 Stair risers (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16 <i>The overall facility is one story without stairways. Stair treads and risers at the steps of the Stage are properly designed and meet requirements.</i>	5	4
4.14 Glass is properly located and protected with wire or safety material to prevent accidental student injury <i>Glass at door vision panels are provided with wire mesh for safety.</i>	5	4

4.15 Fixed Projections in the traffic areas do not extend more than eight inches from the corridor wall	5	4
<i>Drinking fountains and electric water coolers are recessed and extend more than eight inches from the Corridor wall, but do not impede traffic flow in the Corridors.</i>		
4.16 Traffic areas terminate at an exit or a stairway leading to an egress	5	5
<i>Exits are properly located to allow safe egress from the building.</i>		
Emergency Safety	Points Allocated	Points
4.17 Adequate fire safety equipment is properly located	15	2
<i>The facility is not sprinkled. Fire alarm devices are not provided adequately. Fire extinguishers are adequately provided.</i>		
4.18 There are at least two independent exits from any point in the building	15	8
<i>There are no dead-end Corridors in the building.</i>		
4.19 Fire-resistant materials are used throughout the structure	15	9
<i>The structure is a masonry load bearing system. Interior walls are masonry and framed partitions with gypsum wall board.</i>		
4.20 Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided	15	2
<i>The fire alarm is equipped with automatic actuation devices but is not provided with adequate visual indicating devices.</i>		
TOTAL - 4.0 Building Safety and Security	200	112

Suitability Appraisal of 5.0 Educational Adequacy for Richardson_ES_June_2009_Jan_2015_EEA_June_2018_Desktop_Update

5.0 Educational Adequacy	Points Allocated	Points
Academic Learning Space		
5.1 Size of academic learning areas meets desirable standards <i>The average Classroom is 682 SF compared to 900 SF required by the OSDM.</i>	25	15
5.2 Classroom space permits arrangements for small group activity <i>Undersized Classrooms do not allow sufficient space for effective small group activities.</i>	15	9
5.3 Location of academic learning areas is near related educational activities and away from disruptive noise <i>The Gymnasium is properly isolated from the academic learning areas to reduce distractions. The Music Room is located adjacent to academic learning areas, which can be distracting.</i>	10	6
5.4 Personal space in the classroom away from group instruction allows privacy time for individual students <i>Undersized Classrooms do not permit privacy time for individual students.</i>	10	4
5.5 Storage for student materials is adequate <i>Lockers, located in the Corridor, are adequately provided for student storage.</i>	10	8
5.6 Storage for teacher materials is adequate <i>Casework is adequately provided for storage of teacher materials.</i>	10	8
Special Learning Space	Points Allocated	Points
5.7 Size of special learning area(s) meets standards <i>The Special Education Classroom is 704 SF compared to 900 SF recommended in the OSDM.</i>	15	9
5.8 Design of specialized learning area(s) is compatible with instructional need <i>Special Education spaces are not adequately provided to meet instructional needs.</i>	10	6
5.9 Library/Resource/Media Center provides appropriate and attractive space <i>The Media Center is 1,351 SF compared to 1,390 SF recommended in the OSDM. The Media Center is an attractive space, including natural light and sufficient book storage space.</i>	10	8
5.10 Gymnasium (or covered P.E. area) adequately serves physical education instruction <i>The Gymnasium is 4,174 SF compared to 3,500-5,000 SF recommended in the OSDM.</i>	5	4
5.11 ES Pre-kindergarten and kindergarten space is appropriate for age of students and nature of instruction MS/HS Science program is provided sufficient space and equipment <i>Kindergarten spaces are undersized, and do not provide adequate instruction space.</i>	10	6
5.12 Music Program is provided adequate sound treated space <i>The Music Room is 927 SF compared to 1,800-3,000 recommended in the OSDM. Music instruction is provided in a standard Classroom without any sound treatment.</i>	5	2
5.13 Space for art is appropriate for special instruction, supplies, and equipment <i>The Art Room is 682 SF compared to 1,200 SF recommended in the OSDM. The Art Room is undersized and does not provide sufficient space for storage of supplies and equipment.</i>	5	2
School Facility Appraisal	Points Allocated	Points
5.14 Space for technology education permits use of state-of-the-art equipment	5	0

The facility is not provided with Computer Labs for student use.

5.15 Space for **small groups and remedial instruction** is provided adjacent to classrooms 5 3

No spaces have been provided adjacent to Classrooms for small groups or remedial instruction.

5.16 **Storage for student and teacher material** is adequate 5 4

Lockers have been adequately provided for storage of student materials. Casework has been adequately provided for storage of teacher materials.

Support Space Points Allocated Points

5.17 **Teacher's lounge and work areas** reflect teachers as professionals 10 7

The Teacher's Lounge is 499 SF compared to 450-900 SF, for 8-24 staff, recommended in the OSDM.

5.18 **Cafeteria/Kitchen** is attractive with sufficient space for seating/dining, delivery, storage, and food preparation 10 6

The Student Dining space is 1,855 SF compared to 3,000 SF recommended in the OSDM. The Kitchen space is 416 SF compared to 1,390 SF recommended in the OSDM. The Student Dining space has limited seating capacity, and is somewhat attractive.

5.19 **Administrative offices** provided are consistent in appearance and function with the maturity of the students served 5 2

Administrative Offices are not adequately provided for Elementary School students.

5.20 **Counselor's office** insures privacy and sufficient storage 5 4

The Counselor's Office is 662 SF compared to 120 SF, plus 100 SF for Storage and 200 SF for Conference, recommended in the OSDM.

5.21 **Clinic** is near administrative offices and is equipped to meet requirements 5 3

The Clinic is 343 SF compared to 370 SF recommended in the OSDM. The Clinic is not located within the Administrative Offices and lacks required equipment.

5.22 **Suitable reception space** is available for students, teachers, and visitors 5 3

Reception space consists of approximately 172 SF compared to 200-400 SF recommended by the OSDM.

5.23 **Administrative personnel** are provided **sufficient work space and privacy** 5 1

The Administrative area consists of approximately 679 SF for the principal, assistant principal, secretary, Conference Room, Storage, Copy Room, and Restroom, compared to 2,600 SF recommended by the OSDM.

TOTAL - 5.0 Educational Adequacy 200 120

Suitability Appraisal of 6.0 Environment for Education for Richardson_ES_June_2009_Jan_2015_EEA_June_2018_Desktop_Update

6.0 Environment for Education	Points Allocated	Points
Exterior Environment		
6.1 Overall design is aesthetically pleasing to age of students	15	12
<i>The building is a conventional design with standard detailing, which is aesthetically acceptable.</i>		
6.2 Site and building are well landscaped	10	8
<i>The site is moderately landscaped with mature shade trees, ornamental trees, and shrubs which define the property and emphasize the building entrance. Most of the lawn areas where mowing is required do not exceed 3:1 slope.</i>		
6.3 Exterior noise and poor environment do not disrupt learning	10	6
<i>The site is adjacent to residential / commercial uses, which are not suitable for educational instruction.</i>		
6.4 Entrances and walkways are sheltered from sun and inclement weather	10	6
<i>The main entrance to the School is partially sheltered.</i>		
6.5 Building materials provide attractive color and texture	5	4
<i>Exterior building materials consist of brick, which provides an acceptable color and texture.</i>		
Interior Environment		
6.6 Color schemes, building materials, and decor provide an impetus to learning	20	16
<i>The color palette is comprised of neutral hues with accent color of more saturated hues. School colors are reflected in the athletic areas. The use of repeated colors and materials give the building some unity and a sense of consistency, which enhances the learning environment.</i>		
6.7 Year around comfortable temperature and humidity are provided throughout the building	15	2
<i>The facility is not air conditioned to provide year-round temperature and humidity control.</i>		
6.8 Ventilating system provides adequate quiet circulation of clean air and meets 15cfm VBC requirement	15	6
<i>The ventilating systems do not provide an adequate quantity of ventilation air to the spaces. Ventilation systems introduce minimal noise into the teaching and learning areas.</i>		
6.9 Lighting system provides proper intensity, diffusion, and distribution of illumination	15	4
<i>The lighting system does not provide proper intensity in some areas. Location of lighting fixtures provides uneven distribution of illumination. Diffusion of illumination is adequately provided by the light fixture lenses in some areas.</i>		
6.10 Drinking fountains and restroom facilities are conveniently located	15	12
<i>Drinking fountains and Restroom facilities are conveniently located.</i>		
6.11 Communication among students is enhanced by commons area(s) for socialization	10	8
<i>There are areas for students to gather in the Student Dining and Gymnasium, as well as gathering areas in the outdoor play areas.</i>		
6.12 Traffic flow is aided by appropriate foyers and corridors	10	8
<i>Corridors and Foyers are adequately designed for efficient traffic flow.</i>		
6.13 Areas for students to interact are suitable to the age group	10	8
<i>There are areas for students to gather in the Student Dining and Gymnasium, as well as gathering areas in the outdoor play areas.</i>		
6.14 Large group areas are designed for effective management of students	10	8
<i>The Gymnasium and Student Dining is adequately designed to manage large groups of students.</i>		
6.15 Acoustical treatment of ceilings, walls, and floors provides effective sound control	10	4

Limited consideration has been given to acoustical treatment of Classrooms and Corridors. No acoustical treatment has been provided in the Music Room.

6.16 Window design contributes to a pleasant environment	10	8
<i>The windows are well designed and contribute to a pleasant environment.</i>		
6.17 Furniture and equipment provide a pleasing atmosphere	10	3
<i>Classroom furniture is mismatched and in fair to poor condition.</i>		
<hr/>		
TOTAL - 6.0 Environment for Education	200	123

LEED Observation Notes

School District:	Cuyahoga Falls City
County:	Summit
School District IRN:	43836
Building:	Richardson Elementary
Building IRN:	31476

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)

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)

Material & Resources

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

(source: LEED Reference Guide, 2001:167)

Indoor Environmental Quality

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

(source: LEED Reference Guide, 2001:215)

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

Building Name and Level: **Richardson Elementary**

K-5

Building features that clearly exceed criteria:

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

Building features that are non-existent or very inadequate:

1. The building does not meet ADA requirements.
2. The building does not contain a fire suppression system.
3. The building is reported to contain asbestos and other hazardous materials.
4. The Administration Area is undersized.
5. The Kitchen and Student Dining are undersized.
6. Classrooms and Kindergarten Classrooms are undersized.

[Back to Assessment Summary](#)

Environmental Hazards Assessment Cost Estimates

Owner:	Cuyahoga Falls City
Facility:	Richardson Elementary
Date of Initial Assessment:	Jan 6, 2015
Date of Assessment Update:	Jul 6, 2018
Cost Set:	2018

District IRN:	43836
Building IRN:	31476
Firm:	Hammond Construction

Scope remains unchanged after cost updates.

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates	
		Renovation	Demolition
1951 Original Construction	47,569	\$114,256.90	\$101,256.90
1978 Student Dining Addition	842	\$1,234.20	\$1,234.20
Total	48,411	\$115,491.10	\$102,491.10
Total with Regional Cost Factor (103.60%)	—	\$119,648.78	\$106,180.78
Regional Total with Soft Costs & Contingency	—	\$148,879.34	\$132,121.06

Environmental Hazards(Enhanced) - Cuyahoga Falls City (43836) - Richardson Elementary (31476) - Original Construction

Owner: Cuyahoga Falls City Bldg. IRN: 31476
 Facility: Richardson Elementary BuildingAdd: Original Construction
 Date On-Site: 2015-01-06 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	Assumed Asbestos-Containing Material	450	\$10.00	\$4,500.00	
2. Breeching Insulation Removal	Assumed Asbestos-Containing Material	150	\$10.00	\$1,500.00	
3. Tank Insulation Removal	Not Present	0	\$8.00	\$0.00	
4. Duct Insulation Removal	Not Present	0	\$8.00	\$0.00	
5. Pipe Insulation Removal	Assumed Asbestos-Containing Material	200	\$10.00	\$2,000.00	
6. Pipe Fitting Insulation Removal	Not Present	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	1000	\$15.00	\$15,000.00	
10. Dismantling of Boiler/Furnace/Incinerator	Reported / Assumed Asbestos-Free Material	0	\$2,000.00	\$0.00	
11. Flexible Duct Connection Removal	Assumed Asbestos-Containing Material	7	\$100.00	\$700.00	
12. Acoustical Plaster Removal	Reported / Assumed Asbestos-Free Material	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 / 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	4000	\$2.00	\$8,000.00	
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo	Reported / Assumed Asbestos-Free Material	0	\$300.00	\$0.00	
28. Window Component (Compound, Tape, or Caulk) - Reno Only	Reported / Assumed Asbestos-Free Material	0	\$300.00	\$0.00	
29. Resilient Flooring Removal, Including Mastic	Reported Asbestos-Containing Material	19500	\$3.00	\$58,500.00	
30. Carpet Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	\$0.00	
31. Carpet Removal (over RFC)	Assumed Asbestos-Containing Material	6200	\$1.00	\$6,200.00	
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			\$96,500.00	
36. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demolition Work			\$96,500.00	

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

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

D. Fluorescent Lamps & Ballasts Recycling/Incineration				<input type="checkbox"/> Not Applicable
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost	
1. 47569	47569	\$0.10	\$4,756.90	

E. Other Environmental Hazards/Remarks			<input type="checkbox"/> None Reported
Description	Cost Estimate		
1. See Bulk Sample Record Nos. 1 through 6 for sampling results in this addition.			\$0.00
2. XRF testing for lead-based paint is recommended for compliance with EPA's RRP Program.			\$3,000.00
3. (Sum of Lines 1-2)	Total Cost for Other Environmental Hazards - Renovation		\$3,000.00
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	\$114,256.90
2. A36, B1, D1, and E4	Total Cost for Env. Hazards Work - Demolition	\$101,256.90

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

- Unless reported otherwise by the District, materials installed after 1980 are assumed to be asbestos-free.
- Unless reported otherwise by the District, small quantities (less than 1,000 square feet) of the following materials are assumed to be asbestos free: hard plaster, acoustical plaster and gypsum board systems; acoustical panels and tiles; fireproofing; 12"x12" floor tile and mastic.
- 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) - Cuyahoga Falls City (43836) - Richardson Elementary (31476) - Student Dining Addition

Owner: Cuyahoga Falls City Bldg. IRN: 31476
 Facility: Richardson Elementary BuildingAdd: Student Dining Addition
 Date On-Site: 2015-01-06 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	Not Present	0	\$10.00	\$0.00
6. Pipe Fitting Insulation Removal	Not Present	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	50	\$15.00	\$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	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	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	200	\$2.00	\$400.00
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			\$1,150.00
36. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demolition Work			\$1,150.00

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

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

D. Fluorescent Lamps & Ballasts Recycling/Incineration				<input type="checkbox"/> Not Applicable
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost	
1. 842	842	\$0.10	\$84.20	

E. Other Environmental Hazards/Remarks		<input type="checkbox"/> None Reported
Description	Cost Estimate	
1. Costs for lead-based paint mock-ups are included in assessment for 1951 (Original Construction).	\$0.00	
2. See Bulk Sample Record Nos. 1 & 3 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	\$1,234.20
2. A36, B1, D1, and E4	Total Cost for Env. Hazards Work - Demolition	\$1,234.20

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

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

