

Building Information - Worthington City (45138) - Liberty Elementary

Program Type	Assessment Only
Setting	Suburban
Assessment Name	Liberty Elementary
Assessment Date (on-site; non-EEA)	2015-09-24
Kitchen Type	Full Kitchen
Cost Set:	2015
Building Name	Liberty Elementary
Building IRN	86454
Building Address	8081 Saddle Run Rd
Building City	Powell
Building Zipcode	43065
Building Phone	(614) 450-5200
Acreage	12.50
Current Grades:	K-6
Teaching Stations	34
Number of Floors	1
Student Capacity	612
Current Enrollment	513
Enrollment Date	2015-09-14
Enrollment Date is the date in which the current enrollment was taken.	
Number of Classrooms	28
Historical Register	NO
Building's Principal	Susan Drake
Building Type	Elementary

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North elevation photo:



East elevation photo:



South elevation photo:



West elevation photo:



GENERAL DESCRIPTION

54,714 Total Existing Square Footage
1981 Building Dates
K-6 Grades
513 Current Enrollment
34 Teaching Stations
12.50 Site Acreage

Liberty Elementary School, which is not on the National Register of Historic Buildings, and originally constructed in 1981, is a single story, 54,714 square foot brick school building located in a suburban residential setting. The existing facility features a conventionally partitioned Open Concept design, and does not utilize modular buildings. The structure of the overall facility contains brick veneer on load-bearing masonry type exterior wall construction, with brick, painted CMU, metal partition type wall construction in the interior. The floor system consists of concrete slab on grade. The roof structure is metal purlin on rigid frame type construction. The roofing system of the overall facility is standing seam metal, installed in 1981 and ballasted EPDM installed in 2007. 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 Multipurpose space, 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 fire alarm system. The facility is not equipped with an automated fire suppression system. The building does not contain asbestos. The overall building is not compliant with ADA accessibility requirements. The school is located on a 12.5 acre site (25 acres total shared with Sutter Park Preschool) adjacent to residential properties. The property and playgrounds, play areas, and athletic facilities are partially fenced for security. Access onto the site is unrestricted. Site circulation is fair. There is 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 - Worthington City (45138) - Liberty Elementary (86454)

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition
Original Construction	1981	yes	1	54,714	no

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Building Component Information - Worthington City (45138) - Liberty Elementary (86454)

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 (1981)		6605		4307	2702		2034	1539						
Total	0	6,605	0	4,307	2,702	0	2,034	1,539	0	0	0	0	0	0
Master Planning Considerations														

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Existing CT Programs for Assessment

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
Program Type	Program Name	Related Space	Square Feet
No Records Found			

Legend:

Not in current design manual

In current design manual but missing from assessment

Building Summary - Liberty Elementary (86454)

District: Worthington City				County: Franklin		Area: Central Ohio (0)	
Name: Liberty Elementary				Contact: Susan Drake			
Address: 8081 Saddle Run Rd Powell,OH 43065				Phone: (614) 450-5200			
Bldg. IRN: 86454				Date Prepared: 2015-09-24		By: Brian Rubenstein	
				Date Revised: 2015-12-23		By: Holly Grambort	
Current Grades		K-6	Acreage:		12.50	CEFPI Appraisal Summary	
Proposed Grades		N/A	Teaching Stations:		34		
Current Enrollment		513	Classrooms:		28		
Projected Enrollment		N/A					
Addition		Date	HA	Number of Floors	Current Square Feet	Section	
<u>Original Construction</u>		1981	yes	1	54,714	Points Possible	
Total					54,714	Points Earned	
		*HA	=	Handicapped Access		Percentage	
		*Rating	=1	Satisfactory		Rating	
			=2	Needs Repair		Category	
			=3	Needs Replacement			
		*Const P/S	=	Present/Scheduled Construction			
FACILITY ASSESSMENT Cost Set: 2015				Rating	Dollar Assessment		
	A. <u>Heating System</u>			1	\$0.00		
	B. <u>Roofing</u>			3	\$917,636.40		
	C. <u>Ventilation / Air Conditioning</u>			2	\$405,000.00		
	D. <u>Electrical Systems</u>			3	\$888,008.22		
	E. <u>Plumbing and Fixtures</u>			3	\$97,400.00		
	F. <u>Windows</u>			3	\$90,000.00		
	G. <u>Structure: Foundation</u>			2	\$45,350.00		
	H. <u>Structure: Walls and Chimneys</u>			2	\$93,800.00		
	I. <u>Structure: Floors and Roofs</u>			1	\$0.00		
	J. <u>General Finishes</u>			3	\$1,943,658.60		
	K. <u>Interior Lighting</u>			3	\$273,570.00		
	L. <u>Security Systems</u>			3	\$155,934.90		
	M. <u>Emergency/Egress Lighting</u>			3	\$54,714.00		
	N. <u>Fire Alarm</u>			3	\$82,071.00		
	O. <u>Handicapped Access</u>			3	\$146,572.80		
	P. <u>Site Condition</u>			2	\$277,742.00		
	Q. <u>Sewage System</u>			1	\$0.00		
	R. <u>Water Supply</u>			1	\$0.00		
	S. <u>Exterior Doors</u>			2	\$4,500.00		
	T. <u>Hazardous Material</u>			2	\$5,471.40		
	U. <u>Life Safety</u>			3	\$177,584.80		
	V. <u>Loose Furnishings</u>			3	\$218,856.00		
	W. <u>Technology</u>			3	\$629,758.14		
-	X. <u>Construction Contingency / Non-Construction Cost</u>			-	\$1,589,833.11		
Total					\$8,097,461.37		
						Total	
						1000	634
						63%	Borderline
<u>Enhanced Environmental Hazards Assessment Cost Estimates</u>							
						C=Under Contract	
						Renovation Cost Factor	
						100.00%	
						Cost to Renovate (Cost Factor applied)	
						\$8,097,461.37	
<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>							

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Original Construction (1981) Summary

District: Worthington City				County: Franklin		Area: Central Ohio (0)	
Name: Liberty Elementary				Contact: Susan Drake			
Address: 8081 Saddle Run Rd Powell, OH 43065				Phone: (614) 450-5200			
Bldg. IRN: 86454				Date Prepared: 2015-09-24		By: Brian Rubenstein	
				Date Revised: 2015-12-23		By: Holly Grambort	

Current Grades	K-6	Acreage:	12.50	CEFPI Appraisal Summary			
Proposed Grades	N/A	Teaching Stations:	34				
Current Enrollment	513	Classrooms:	28				
Projected Enrollment	N/A						

Section	Points Possible	Points Earned	Percentage	Rating	Category
Cover Sheet	—	—	—	—	—
1.0 <u>The School Site</u>	100	66	66%	Borderline	
2.0 <u>Structural and Mechanical Features</u>	200	125	63%	Borderline	
3.0 <u>Plant Maintainability</u>	100	63	63%	Borderline	
4.0 <u>Building Safety and Security</u>	200	143	72%	Satisfactory	
5.0 <u>Educational Adequacy</u>	200	115	58%	Borderline	
6.0 <u>Environment for Education</u>	200	122	61%	Borderline	
<u>LEED Observations</u>	—	—	—	—	—
<u>Commentary</u>	—	—	—	—	—
Total	1000	634	63%	Borderline	

Enhanced Environmental Hazards Assessment Cost Estimates			
C=Under Contract			
Renovation Cost Factor			
Cost to Renovate (Cost Factor applied)			
The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.			

FACILITY ASSESSMENT		Rating	Dollar Assessment
Cost Set: 2015			
A. <u>Heating System</u>	1	\$0.00	-
B. <u>Roofing</u>	3	\$917,636.40	-
C. <u>Ventilation / Air Conditioning</u>	2	\$405,000.00	-
D. <u>Electrical Systems</u>	3	\$888,008.22	-
E. <u>Plumbing and Fixtures</u>	3	\$97,400.00	-
F. <u>Windows</u>	3	\$90,000.00	-
G. <u>Structure: Foundation</u>	2	\$45,350.00	-
H. <u>Structure: Walls and Chimneys</u>	2	\$93,800.00	-
I. <u>Structure: Floors and Roofs</u>	1	\$0.00	-
J. <u>General Finishes</u>	3	\$1,943,658.60	-
K. <u>Interior Lighting</u>	3	\$273,570.00	-
L. <u>Security Systems</u>	3	\$155,934.90	-
M. <u>Emergency/Egress Lighting</u>	3	\$54,714.00	-
N. <u>Fire Alarm</u>	3	\$82,071.00	-
O. <u>Handicapped Access</u>	3	\$146,572.80	-
P. <u>Site Condition</u>	2	\$277,742.00	-
Q. <u>Sewage System</u>	1	\$0.00	-
R. <u>Water Supply</u>	1	\$0.00	-
S. <u>Exterior Doors</u>	2	\$4,500.00	-
T. <u>Hazardous Material</u>	2	\$5,471.40	-
U. <u>Life Safety</u>	3	\$177,584.80	-
V. <u>Loose Furnishings</u>	3	\$218,856.00	-
W. <u>Technology</u>	3	\$629,758.14	-
X. <u>Construction Contingency / Non-Construction Cost</u>	-	\$1,589,833.11	-
Total		\$8,097,461.37	

A. Heating System

Description:

The existing system for the overall facility is a gas fired heating hot water system, installed in 1981, and is in fair condition. The heating and chilled water system in the overall facility is a 4-pipe system, with a capacity for simultaneous heating and cooling operation, which is compliant with the OSDM requirements for basic system type. The 2 gas fired boilers, manufactured by RBI, were installed in 2006 and are in good condition. Heating water is distributed to terminal units consisting of cabinet heaters, unit heaters, and air handlers. The terminal equipment was installed in 1994 and is in poor to fair condition. The system does comply with the 15 CFM per person fresh air requirements of the Ohio Building Code mechanical code and Ohio School Design Manual. The DDC type system temperature controls were installed in 1995 and are in good condition. The system does 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 is ducted, though lack of need for HVAC system replacement at this time negates any need to evaluate the potential integration of existing ductwork into a new system. The overall heating system is evaluated as being in safe and efficient working order, and long term life expectancy of the existing system is not anticipated. The structure is equipped with central air conditioning. The site does not contain underground fuel tanks.

Rating:

1 Satisfactory

Recommendations:

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

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft ²		
Sum:			\$0.00	\$0.00		



Gas Fired Boiler



Air Handler

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B. Roofing

Description:

The roof over the overall facility is a standing seam metal system that was installed in 1981 and is in poor condition. The roof over the gymnasium is a ballasted EPDM system that was installed in 2007 and is in fair condition. There are District reports of current leaking and signs of past leaking were observed during the physical assessment. Water spots were observed on ceiling tiles in many locations throughout the building. Access to the roof was gained by access hatch in fair condition and a ladder in poor condition. Fall safety protection cages are not required and have not been provided. There were no observations of standing water on the roof. Metal cap flashings are in poor condition. Roof storm drainage is addressed through a system of gutters and downspouts, which are properly located, and in fair to poor condition. The roof is not equipped with overflow roof drains. Roof penetration deficiencies observed requiring attention include areas that have been repeatedly caulked and taped over many years of minor repairs. There is a covered walkway attached to this structure at the front of the building. It is constructed of standing seam metal roofing on post and beam metal framing and is in poor condition. A roofing report provided by the district summarizes the facility roofing as: "The roof system installed on the Liberty Elementary School consists of a combination of EPDM over the gymnasium, and standing seam metal on the two lower roof sections. The gymnasium roof consists of ballasted EPDM over EPS insulation and a steel deck. This section has internal roof drains. The gymnasium roof has recently been replaced due to the wind storm damage from Hurricane Ike. The ballasted EPDM should provide a satisfactory service life through 2023. The standing seam metal roof is in fair condition. Upon inspection several open end laps were observed. Repairs have been attempted at these areas with caulking to EPDM seam tape. The open end laps should be properly repaired with butyl tape. With annual inspections and preventative maintenance the metal roof areas should provide a satisfactory service life through 2014."

Rating:

3 Needs Replacement

Recommendations:

The roof over the overall facility requires replacement to meet Ohio School Design Manual guidelines due to condition and age of system and projected lifecycle.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft ²		
Membrane (all types):	\$8.70	sq.ft. (Qty)		4,307 Required	\$37,470.90	(unless under 10,000 sq.ft.)
Standing Metal Seam:	\$16.50	sq.ft. (Qty)		50,407 Required	\$831,715.50	
Repair/replace cap flashing and coping:	\$18.40	in.ft.		1,150 Required	\$21,160.00	
Gutters/Downspouts	\$13.10	in.ft.		900 Required	\$11,790.00	
Other: Roof Ladder	\$500.00	unit		1 Required	\$500.00	Roof access ladder
Other: Walkway Canopy	\$15,000.00	allowance		Required	\$15,000.00	Replace walkway canopy.
Sum:			\$917,636.40	\$917,636.40		



Ballasted Roof at Gymnasium



Typical Metal Roof

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C. Ventilation / Air Conditioning

Description: The overall facility is equipped with a chilled water type central air conditioning system, which is in good condition. A chiller produces chilled water and pumps distribute chilled water to terminal units. The equipment is in good condition. The ventilation system in the overall facility consists of air handlers, installed in 1994 and in poor condition, providing fresh air to Classrooms, and air handlers, installed in 1994 and in poor condition, providing fresh air to other miscellaneous spaces such as Gymnasiums, Student Dining, and Media Center. Relief air venting is provided by ceiling plenums. The ventilation system does 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. The Art program is equipped with a kiln, and existing kiln ventilation is inadequate. General building exhaust systems for Restrooms are adequately placed, and in fair condition.

Rating: 2 Needs Repair

Recommendations: Replace the existing roof mounted air handlers due to existing condition. Replace the existing kiln exhaust system with new.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft²		
Kiln Exhaust System:	\$5,000.00	each		1 Required	\$5,000.00	
Other: Rooftop Unit Replacement	\$400,000.00	lump sum		Required	\$400,000.00	Includes cost to replace the existing roof mounted air handlers.
Sum:			\$405,000.00	\$405,000.00		



Air Cooled Condenser



Air Handler

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D. Electrical Systems

Description: The electrical system provided to the overall facility is a 480/277-volt, 3-phase, 4-wire, 800-amp system installed in 1980, and is in good condition. Power is provided to the school by a single utility owned, pad-mounted transformer located in exterior fenced-in area, and in good condition. The panel system, installed in 1980, is in good condition, and can be expanded to add additional capacity. The Classrooms are not equipped with adequate electrical outlets. The typical Classroom contains 16 general purpose outlets, 2 dedicated outlets for each Classroom computer, and 4 dedicated outlets for each Classroom television. Some Classrooms are equipped with as many as 18 general purpose outlets, while others are equipped with as few as 16 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 equipped with a suitable emergency generator. Adequate lightning protection safeguards are not provided. Stage lighting power system including control panel, breakers, and dimmers is inadequately provided, in good condition and does not meet OSDM requirements. The overall electrical system meets does not meet Ohio School Design Manual requirements in supporting the current needs of the school, and will be adequate 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 Classroom capacity, due to condition and age, and lack of OSDM-required features.

Item	Cost	Unit	Whole Building	Original Construction (1981) 54,714 ft²	Sum	Comments
System Replacement:	\$16.23	sq.ft. (of entire building addition)		Required	\$888,008.22	(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:			\$888,008.22	\$888,008.22		



Main Electrical Switchgear



Electrical Panels

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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 not provided. The domestic water supply piping in the overall facility is copper, was installed in 1981, and is in good condition. The waste piping in the overall facility is cast iron and PVC, was installed in 1981, and is in good condition. The facility is equipped with (2) 100-gallon gas water heaters in good condition. The school contains 3 Large Group Restrooms for boys, 3 Large Group Restrooms for girls, 3 Restrooms associated with specialty Classrooms, and 4 Restrooms for staff. Boys' Large Group Restrooms contain 0 ADA and 6 non-ADA wall mounted flush valve toilets, 5 ADA and 7 non-ADA wall mounted flush valve urinals, as well as 1 ADA and 6 non-ADA wall mounted lavatories. Girls' Large Group Restrooms contain 0 ADA and 14 non-ADA wall mounted flush valve toilets, as well as 3 ADA and 4 non-ADA wall mounted lavatories. Staff Restrooms contain 1 ADA and 6 non-ADA wall mounted flush valve toilets, 1 ADA and 1 non-ADA wall mounted urinals, as well as 1 ADA and 4 non-ADA wall mounted lavatories. Condition of fixtures is fair. The facility is equipped with 0 ADA and 0 non-ADA drinking fountains, as well as 1 ADA and 3 non-ADA electric water coolers, in fair condition. The 20 Elementary Classrooms are equipped with 17 ADA and 0 non-ADA sink mounted type drinking fountains, in fair condition. Special Education Classroom is not equipped with the required Restroom facilities. Kitchen is equipped with the required Restroom, and fixtures are in good/fair condition. Heath Clinic is equipped with the required Restroom, and fixtures are in fair condition. Kindergarten Classrooms are equipped with Restroom facilities, and fixtures are in poor condition. Kitchen fixtures consist of 1 hand sink and 1 triple-compartment sink, which are in good condition. The Kitchen is equipped with a satisfactory grease interceptor. The Kitchen is provided the required 140 degree hot water supply via a mixing valve, which is in good condition. Adequate exterior wall hydrants are provided.

Rating: 3 Needs Replacement

Recommendations: Provide reduced pressure backflow preventer. To facilitate the school's compliance with OBC and OSFC fixture requirements, provide 3 new toilets / 15 new lavatories / 0 new urinals / 14 new electric water coolers / new lavatory mounted type drinking fountains. Due to age, condition, LEED, and OSFC requirements, provide 3 new toilets / 15 new lavatories / 0 new urinals / 14 new electric water coolers / new lavatory mounted type drinking fountains. See Item O for replacement of fixtures related to ADA requirements. Provide / Replace required sink mounted type drinking fountains in Elementary Classroom spaces.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft²		
Back Flow Preventer:	\$5,000.00	unit		1 Required	\$5,000.00	
Toilet:	\$3,800.00	unit		3 Required	\$11,400.00	(new)
Sink:	\$2,500.00	unit		15 Required	\$37,500.00	(new)
Electric water cooler:	\$3,000.00	unit		14 Required	\$42,000.00	(double ADA)
Other: Lavatory Mounted Type Drinking Fountain	\$500.00	per unit		3 Required	\$1,500.00	(new)
Sum:			\$97,400.00	\$97,400.00		



Water Heater



Restroom

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F. Windows

Description: The overall facility is equipped with aluminum frame windows with single glazed type window system, which was installed in 1981, and is in poor condition. The window system features inoperable windows throughout the building. Window system seals are in poor condition, with frequent air and water infiltration being experienced. Window system hardware is in fair condition. The window system features integral blinds, which are in 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 aluminum sidelights and transoms with single pane glazing, in fair condition. Exterior door vision panels are tempered, single pane. The school does not contain skylights. The school does not contain any clerestories. Interior glass is OSDM-compliant. Window security grilles are not provided for ground floor windows. There is not a Greenhouse associated with this school.

Rating: 3 Needs Replacement

Recommendations: Provide a new insulated window system with integral blinds to meet with Ohio School Design Manual requirements. Exterior door vision panel replacement is addressed in Item S in exterior door replacement scope.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft²		
Insulated Glass/Panels:	\$60.00	sq.ft. (Qty)		1,500 Required	\$90,000.00	(includes blinds)
Sum:			\$90,000.00	\$90,000.00		



Typical Windows



Typical Windows

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G. Structure: Foundation

Description: The overall facility is equipped with concrete masonry unit foundation walls on concrete footings, which displayed minor locations of significant differential settlement, cracking, or leaking, and are in fair to poor condition. Areas of minor cracking and spalling were observed through the overall facility. The District reports that there has been a significant amount of leaking during major rain events. One source attributed this to groundwater issues dating back to the original construction of the building over what was considered swampland. No grading or site drainage deficiencies were noted around the perimeter of the structure that are contributing or could contribute to foundation or wall structural deterioration.

Rating: 2 Needs Repair

Recommendations: Provide sprayed on membrane waterproofing system in through the overall facility. Provide drainage tile system at the perimeter of the overall facility. Repair areas of cracking and spalling through the overall facility.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft²		
Waterproofing Spray Applied:	\$6.00	sq.ft. (Qty)		4,200 Required	\$25,200.00	(include excavation and backfill)
Drainage Tile Systems / Foundation Drainage:	\$18.00	ln.ft.		1,050 Required	\$18,900.00	(include excavation and backfill)
Other: Repair Hairline Cracks and Spalling	\$50.00	ln.ft.		25 Required	\$1,250.00	Repair cracking and spalling.
Sum:			\$45,350.00	\$45,350.00		

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H. Structure: Walls and Chimneys

Description: The overall facility has a brick veneer on load bearing masonry wall system, which displayed locations of deterioration, and is in fair to poor condition. Several areas of cracking and settlement were observed, particularly associated with the gymnasium mezzanine. The exterior masonry appears to have appropriately spaced, but inadequately caulked control joints in poor condition. Control joints are provided at lintel locations, at doors and windows, building corners, and wall offsets. The school does have sufficient expansion joints, and they are in poor condition. Exterior walls in the overall facility are inadequately insulated. Brick veneer masonry walls are cavity walls. Weep holes are provided in sufficient quantity (at 24"-48" on center) at the base of masonry cavity walls, and are in fair to poor condition. Weep holes are not rope type weeps. Vents are not provided. The exterior masonry has not been cleaned and sealed in recent years, shows evidence of mortar deterioration, and has locations of efflorescence, mold, and graffiti. Architectural exterior accent material consists of metal panels, which are in fair to poor condition with dents and areas of finish deterioration being observed. Exterior building fenestration in the overall facility represents 7% of the exterior surfaces. Interior Corridor and demising walls are concrete masonry units, do not project full height from floor to bottom of deck, and are in fair condition. Interior masonry appears to have adequately spaced and caulked control joints in fair condition. Interior soffits are of gypsum board on metal framing type construction, and in fair condition. The window sills are brick, and are in fair condition. The exterior lintels are precast masonry, and are in fair condition. There are no chimneys. Canopies over entrances are steel type construction, and are in poor condition. Exterior soffits are of metal deck type construction, and in poor condition. The school is provided with an uncovered, concrete conventional loading dock to facilitate the receipt of product, supplies, and foodstuffs, 300 square feet in size. The dock itself is in fair condition, and is equipped with bumper pads in fair condition.

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. Recaulk existing control joints. Repair or replace corrugated metal accent panels. Costs to replace entrance canopy are addressed in Item B.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft²		
Tuckpointing:	\$5.25	sq.ft. (Qty)		3,000 Required	\$15,750.00	(wall surface)
Exterior Masonry Cleaning:	\$1.50	sq.ft. (Qty)		15,000 Required	\$22,500.00	(wall surface)
Exterior Masonry Sealing:	\$1.00	sq.ft. (Qty)		15,000 Required	\$15,000.00	(wall surface)
Exterior Caulking:	\$5.50	in.ft.		100 Required	\$550.00	(removing and replacing)
Other: Metal Panel Replacement	\$10.00	sq.ft. (Qty)		4,000 Required	\$40,000.00	Replace architectural accent metal panels.
Sum:			\$93,800.00	\$93,800.00		



Typical Wall to be Cleaned



Typical Joint to be Caulked

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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 to poor condition. There is no crawl space. The floor construction of the mezzanine in the gymnasium is metal form deck deck on steel joist type construction, and is in fair condition. 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 is metal purlin on rigid frame type construction, and is in fair condition. The roof construction of the gymnasium is steel deck on metal joist type construction, and is in fair condition.

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft²		
Sum:			\$0.00	\$0.00		



Typical Roof Structure



Typical Roof Structure

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J. General Finishes

Description:

The overall facility features conventionally partitioned Classrooms with vinyl and carpet tile type flooring, 2x4 ACT type ceilings, as well as demountable walls and painted CMU type wall finishes, and they are in poor condition. The overall facility has Corridors with vinyl type flooring, 2x4 ACT type ceilings, as well as brick and painted CMU type wall finishes, and they are in fair condition. The overall facility has Restrooms with concrete or terrazzo type flooring, gypsum type ceilings, as well as painted CMU type wall finishes, and they are in poor condition. Toilet partitions are plastic, and are in good condition. Classroom casework in the overall facility is wood type construction with plastic laminate tops, is inadequately provided, and in poor condition. The typical Classroom contains 9'-0" lineal feet of casework. Classrooms are provided adequate chalkboards, markerboards, tackboards which are in fair condition. The Classroom storage cubbies, located in the Classrooms, are adequately provided, and in poor condition. The Art program is equipped with a kiln in fair condition, and existing kiln ventilation is inadequate. The facility is equipped with wood louvered interior doors that are flush mounted with proper ADA hardware and clearances, and in fair condition. The Gymnasium space(s) have vinyl type flooring, open type ceilings, as well as painted CMU type wall finishes, and they are in poor condition. Gymnasium basketball backboards are fixed type, and are in good condition. The Media Center, located in the 1981 Addition, has carpet type flooring, 2x4 ACT type ceilings, as well as painted CMU and metal partitions type wall finishes, and they are in fair condition. Student Dining, located in the 1981 Addition, has vinyl type flooring, 2x4 ACT type ceilings, as well as painted CMU type wall finishes, and they are in poor condition. OSDM-required fixed equipment for Stage is inadequately provided, and in poor condition. Existing Gymnasium, Student Dining, Media Center, and Music spaces are inadequately provided with appropriate sound attenuation acoustical surface treatments. The existing Kitchen is full service, is undersized based on current enrollment, and the existing Kitchen equipment, installed in 1981, is in fair condition.

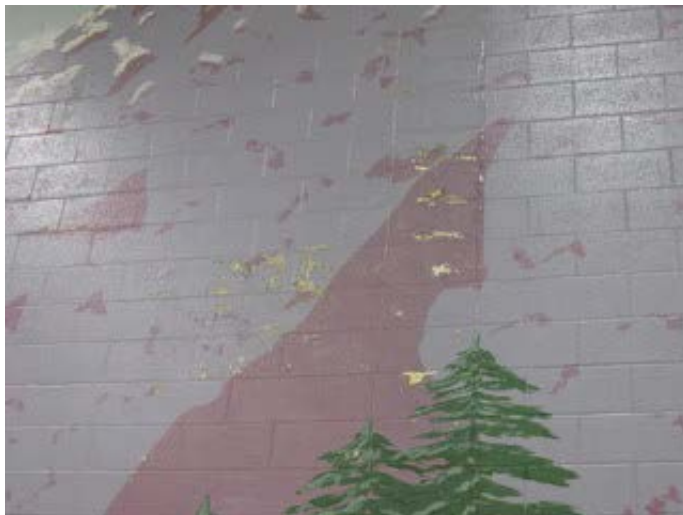
Rating:

3 Needs Replacement

Recommendations:

Provide complete replacement of finishes and casework due to condition and installation of systems outlined in Items (A / C / D / E / I / K / L / M / N / T / U / W).

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
Complete Replacement of Finishes and Casework (Elementary):	\$15.90	sq.ft. (of entire building addition)		54,714 ft ² Required	\$869,952.60	(elementary, per building area, with removal of existing)
Partition Open Space Classrooms:	\$8.00	sq.ft. (of entire building addition)		Required	\$437,712.00	(per building sq.ft., CMU in corridors and drywall partitions between classrooms)
Remove Demountable Partitions / Install New GWB Partitions:	\$9.00	sq.ft. (Qty)		1,700 Required	\$15,300.00	(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)
Additional Wall Insulation	\$6.00	sq.ft. (Qty)		54,714 Required	\$328,284.00	(includes the furring out of the existing walls, insulation and abuse resistant (GWB))
Total Kitchen Equipment Replacement:	\$190.00	sq.ft. (Qty)		1,539 Required	\$292,410.00	(square footage based upon only existing area of food preparation, serving, kitchen storage areas and walk-ins. Includes demolition and removal of existing kitchen equipment)
Sum:			\$1,943,658.60	\$1,943,658.60		



Gym wall



Cabinets

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K. Interior Lighting

Description:

The typical Classrooms in the overall facility are equipped with T-8 lay-in 2x4 fluorescent fixtures with single level switching. Classroom fixtures are in good condition, providing an average illumination of 27 FC, which is less than the 50 FC recommended by the OSDM. The typical Corridors in the overall facility are equipped with T-8 lay-in 2x4 fluorescent fixtures with dual level switching. Corridor fixtures are in good condition, providing an average illumination of 8 FC, which is less than the 20 FC recommended by the OSDM. The Primary Gymnasium spaces are equipped with pendant T-8 2x4 mount fluorescent fixture type lighting, in good condition, providing an average illumination of 47 FC, which is less than the 50 ES FC recommended by the OSDM. The Media Center is equipped with lay-in 2x4 T-8 fluorescent fixture type lighting in good condition, providing an average illumination of 30 FC, which is less than the 50 FC recommended by the OSDM. The Student Dining spaces are equipped with lay-in 2x4 T-8 fluorescent fixture type lighting with multi-level switching. Student Dining fixtures are in good condition, providing an average illumination of 25 FC, which is less than the 50 FC recommended by the OSDM. The Kitchen spaces are equipped with 1x4 surface mount T-8 fluorescent fixture type lighting with multi-level switching. Kitchen fixtures are in good condition, providing an average illumination of 74 FC, which is less than the 75-80 FC recommended by the OSDM. The Service Areas in the overall facility are equipped with 1x4 suspended T-8 fluorescent fixture type lighting in good condition. The typical Administrative spaces in the overall facility are equipped with lay-in 2x4 T-8 fluorescent fixture type lighting in good 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 inadequate lighting levels and lack of multi-level switching.

Rating:

3 Needs Replacement

Recommendations:

Provide complete replacement of lighting system due to lighting levels and lack of multi-level switching.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft²		
Complete Building Lighting Replacement	\$5.00	sq.ft. (of entire building addition)		Required	\$273,570.00	Includes demo of existing fixtures
Sum:			\$273,570.00	\$273,570.00		



Kitchen Lighting



Student Dining Lighting

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L. Security Systems

Description: The overall facility contains a Security Command motion detector, intrusion, and door contact type security system in good 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 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. CCTV is not monitored in Administrative Area. A compliant computer controlled access control system integrating alarms and video signals, with appropriate UPS backup, is not provided. The system is equipped with card readers. The security system is adequately provided throughout, and the system is not compliant with Ohio School Design Manual guidelines. The exterior site lighting system is equipped with wall mounted HID high pressure sodium entry lights in poor condition. Pedestrian walkways are illuminated with pole fixtures in fair condition. Parking and bus pick-up / drop off areas are illuminated by pole mounted high pressure sodium fixtures in poor condition. The exterior site lighting system provides inadequate illumination due to insufficient fixture capacity and sparse placement of fixtures.

Rating: 3 Needs Replacement

Recommendations: Provide a new security system and site lighting to meet OSDM requirements.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft²		
Security System:	\$1.85	sq.ft. (of entire building addition)		Required	\$101,220.90	(complete, area of building)
Exterior Site Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	\$54,714.00	(complete, area of building)
Sum:			\$155,934.90	\$155,934.90		



Exterior Raceway Pole Lighting



Security Camera

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M. Emergency/Egress Lighting

- Description:** The overall facility is equipped with an emergency egress lighting system consisting of non-compliant incandescent, plastic construction, as well as OSDM compliant red lettered, LED illuminated exit signs, and the system is in good condition. The facility is equipped with emergency egress floodlighting, and the system is in good condition. The system is provided with appropriate battery backup. The system is adequately 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 and Ohio Building Code guidelines and in conjunction with work in Item U.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
Emergency/Egress Lighting:	\$1.00	sq.ft. (of entire building addition)		54,714 ft ²		
				Required	\$54,714.00	(complete, area of building)
Sum:			\$54,714.00	\$54,714.00		



Exit Sign/Corridor Lighting



Exit Sign

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N. Fire Alarm

Description: The overall facility is equipped with a Simplex type fire alarm system, in good condition, consisting of manual pull stations, bells, and horn and strobe indicating devices. The system is automatic and is monitored by a third party. The system is equipped with sufficient audible horns and strobe indicating devices. The system is not equipped with sufficient flow switches, tamper switches, smoke detectors 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 new fire alarm system to meet OBC, NFPA, and Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft²		
Fire Alarm System:	\$1.50	sq.ft. (of entire building addition)		Required	\$82,071.00	(complete new system, including removal of existing)
Sum:			\$82,071.00	\$82,071.00		



Fire Alarm Horn Strobe



Fire Alarm Pull Station

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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 and drop-off area to the building entries is not compromised by steps or steep ramps. Adequate handicap parking is provided. Exterior doors are not equipped with ADA hardware. Building entrances should be equipped with one ADA power assist door, and one is provided, which is in fair condition. Playground layout and equipping 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. Ramps and stairs do not meet all ADA. Elevation changes within the overall facility are facilitated by 2 non-compliant stairwells in poor condition. Special provisions for floor level changes in this 1 story structure with mezzanine are not required. Special provisions for floor level changes in this single story structure are not required. Access to the Stage is not facilitated by a chair lift, ramp, other and is in poor condition. Interior doors are not recessed, are provided adequate clearances, and are provided with ADA-compliant hardware. Twelve (12) ADA-compliant toilets are required, and one is currently provided. Twelve (12) ADA-compliant Restroom lavatories are required, and five (5) are currently provided. Five (5) ADA-compliant urinals are required, and one is currently provided. Nine (9) ADA-compliant electric water coolers are required, and one is currently provided. Toilet partitions are plastic, and do not provide appropriate ADA clearances. ADA-compliant accessories are not adequately provided and mounted. Mirrors do not meet ADA requirements for mounting heights. Due to existing grade configuration, no Science Classroom considerations require evaluation. Health Clinic and Special Education Restrooms are not compliant with ADA requirements due to size of restroom. ADA signage is not provided on both the interior and the exterior of the building.

Rating:

3 Needs Replacement

Recommendations:

Provide ADA-compliant signage, ADA compliant door hardware, electric water coolers, toilets, sinks, urinals, toilet partitions, toilet accessories, re-mounted mirrors, in the overall facility to facilitate the school's meeting of ADA requirements.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
Handicapped Hardware:	\$350.00	set		54,714 ft ² 13 Required	\$4,550.00	(includes installation / hardware only)
Signage:	\$0.20	sq.ft. (of entire building addition)		Required	\$10,942.80	(per building area)
Lifts:	\$15,000.00	unit		1 Required	\$15,000.00	(complete)
Electric Water Coolers:	\$1,800.00	unit		8 Required	\$14,400.00	(replacement double ADA)
Electric Water Coolers:	\$3,000.00	unit		1 Required	\$3,000.00	(new double ADA)
Toilet/Urinals/Sinks:	\$3,800.00	unit		18 Required	\$68,400.00	(new ADA)
Toilet/Urinals/Sinks:	\$1,500.00	unit		8 Required	\$12,000.00	(replacement ADA)
Toilet Partitions:	\$1,000.00	stall		8 Required	\$8,000.00	(ADA - grab bars, accessories included)
Remount Restroom Mirrors to Handicapped Height:	\$285.00	per restroom		8 Required	\$2,280.00	
Provide Toilet Accessories:	\$1,000.00	per restroom		8 Required	\$8,000.00	
Sum:			\$146,572.80	\$146,572.80		



restroom

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P. Site Condition

Description:

The 12.5-acre flat site is located in a suburban residential setting with moderate tree and shrub type landscaping. The larger 25-acre site is shared with Sutter Park Pre-School. Outbuildings include a maintenance shed. There are no apparent problems with erosion or ponding, however, staff reported problems with water infiltration during heavy rain events. The site is bordered by lightly traveled city streets. There is a single entrance onto the site for vehicular traffic connected to a loop which is currently used for student loading and unloading from passenger vehicles only. The bus circulation is combined with Sutter Park Preschool and enters from the main Sutter Park entrance from Sutter Parkway. There is a curbside bus loading and unloading zone adjacent to the school, which is not separated from other vehicular traffic. Visitor parking is facilitated by 10 non-ADA spaces in an asphalt lot within the vehicle loop in fair condition. There are barriers in place to prevent through access from this parking area and loop to the main shared parking lot between the two schools. Staff parking is in the shared asphalt parking lot in fair condition, containing 108 and 6 ADA parking places, which provides adequate parking for staff members, and the disabled. While adequate ADA parking is provided along with an accessible route close to the main entrance, ADA parkers must be informed ahead of time to enter from Sutter Parkway and not Saddle Run. The site and parking lot drainage design, consisting of sheet drainage, provides adequate evacuation of storm water, and no problems with parking lot ponding were observed. Concrete curbs in fair condition are located in areas adjacent to the school only. 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 condition, and is equipped with a concrete pad area for dumpsters, which is in fair condition. Exterior steps and handrails occur in association with the loading dock, and are in fair condition. There is chain link fencing adjacent to the dock which separates mechanical and electrical equipment from the parking lot, and also at the south end of the playground area which separates it from vehicular traffic, and is in fair condition. The playground equipment is primarily constructed of coated steel and high density plastic, and is in good condition. Playground equipment is placed to provide compliant fall zones, and on a compliant wood fiber mulch of sufficient, with a basketball court and dropshot being provided on an asphalt surface in fair condition. The site is equipped with tables in poor condition. The athletic facilities are comprised of baseball/kickball and soccer fields, and are in fair condition. Site features are suitable for outdoor instruction.

Rating:

2 Needs Repair

Recommendations:

Provide regrading at perimeter of building to ensure ground is sloped away from building. This cost is assumed to be covered in Item G with the waterproofing and drain tile system scope of work. Provide new playground equipment to allow for more ADA-compliant play structures. Provide separate bus loop for student loading and unloading.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
Playground Equipment:	\$1.50	sq.ft. (Qty)		54,714 Required	\$82,071.00	(up to \$100,000, per sq.ft. of school)
Removal of existing Playground Equipment:	\$2,000.00	lump sum		Required	\$2,000.00	
Bus Drop-Off for Elementary	\$110.00	per student		560 Required	\$61,600.00	(Number of students should be rounded up to the nearest 100. \$5500 per bus; 40 students per bus; 80% of elementary school students riding)
Base Sitework Allowance for Unforeseen Circumstances	\$50,000.00	allowance		Required	\$50,000.00	Include this and one of the next two. (Applies for whole building, so only one addition should have this item)
Sitework Allowance for Unforeseen Circumstances for buildings between 0 SF and 100,000 SF	\$1.50	sq.ft. (of entire building addition)		Required	\$82,071.00	Include this one <u>or</u> the next. (Each addition should have this item)
Sum:			\$277,742.00	\$277,742.00		



Typical Play Areas



Typical Parking Area

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Q. Sewage System

Description: The sanitary sewer system is tied in to the city system, and is in good 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 (1981)	Sum	Comments
				54,714 ft ²		
Sum:			\$0.00	\$0.00		



Kitchen Sink Waste



Grease Interceptor

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R. Water Supply

- Description:** The domestic water supply system is tied in to the city system, features 3" service, and is in good 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. The system provides adequate pressure 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 (1981)	Sum	Comments
				54,714 ft ²		
Sum:			\$0.00	\$0.00		



Water Main

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S. Exterior Doors

Description: Typical exterior doors in the overall facility are hollow metal type construction, installed on hollow metal frames, and in fair condition. Typical exterior doors feature single-glazed, tempered glass vision panels, and appropriate hardware. Entrance doors in the overall facility are hollow metal type construction, installed on hollow metal frames, and in fair condition. Entrance doors feature single-glazed vision panels, transoms, sidelights, and appropriate hardware. The facility is not equipped with any roof access doors. There are no overhead doors in the facility.

Rating: 2 Needs Repair

Recommendations: Replace single-glazed vision panels in entrance doors.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft²		
Other: Replace Single Pane Vision Panels	\$30.00	sq.ft. (Qty)		150 Required	\$4,500.00	Replace single pane vision panels in entrance doors.
Sum:			\$4,500.00	\$4,500.00		



Main Entrance Doors



Secondary Entrance Doors

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T. Hazardous Material

Description: The Three-Year Reinspection Report provided by The School District contained no information for this school based on no asbestos-containing materials being reported in the previous inspection. The district did not provide documentation of any abatement projects since that time. There are no underground storage tanks reported on the site. Due to the construction date, there is no potential for lead based paint. Fluorescent lighting will require special disposal.

Rating: 2 Needs Repair

Recommendations: Provide for disposal of fluorescent lighting.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft²		
Environmental Hazards Form				EHA Form	—	
Fluorescent Lamps & Ballasts Recycling/Incineration	\$0.10	sq.ft. (Qty)		54,714 Required	\$5,471.40	
Sum:			\$5,471.40	\$5,471.40		

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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. The Kitchen hood is in fair condition, and is equipped with the required UL 300 compliant wet chemical fire suppression system. 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 adequately spaced. The facility is equipped with an emergency generator. The emergency generator is a natural gas fired type unit, and is located outside the building. The emergency generator is in fair condition, and does not provide adequate capacity for the future needs of the school. 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 equipped with adequate egress.

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, funding included in fire suppression funding. Provide new emergency generator, with funding provided via complete replacement of electrical system in Item D. Provide interlock to de-energize cooking equipment upon discharge of the Kitchen hood fire suppression system.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
Sprinkler / Fire Suppression System:	\$3.20	sq.ft. (Qty)		54,714 ft ² Required	\$175,084.80	(includes increase of service piping, if required)
Other: Interlock Cooking Equipment with Hood Suppression System	\$2,500.00	each		1 Required	\$2,500.00	Includes the installation of an interlock into the cooking equipment.
Sum:			\$177,584.80	\$177,584.80		



Kitchen Hood

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V. Loose Furnishings

Description: The typical Classroom furniture is mismatched, and in generally poor condition, consisting of student desks & chairs, teacher desks & chairs, desk height file cabinets, reading tables, computer workstations, bookcases, wastebaskets, other. 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 4 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 (1981)	Sum	Comments
CEFPI Rating 4 to 5	\$4.00	sq.ft. (of entire building addition)		54,714 ft ²		
Sum:			\$218,856.00	Required	\$218,856.00	



Classroom



Classroom

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W. Technology

Description: The typical Classroom is equipped with 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 by either party to meet Ohio School Design Manual requirements. The facility is equipped with a centralized clock system. Specialized electrical / sound system requirements of Gymnasium, Stage, Student Dining, and Music spaces are inadequately provided, and in good condition. OSDM-compliant computer network infrastructure is provided. The facility does contain a media distribution center, and provides Computer Labs for use by students.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of technology systems to meet Ohio School Design Manual requirements, and to sustain the capacity to keep pace with technological development.

Item	Cost	Unit	Whole Building	Original Construction (1981)	Sum	Comments
				54,714 ft ²		
ES portion of building with total SF 50,000 to 69,360	\$11.51	sq.ft. (Qty)		54,714 Required	\$629,758.14	
Sum:			\$629,758.14	\$629,758.14		



Classroom Smartboard/Projector



Television

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X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		\$6,507,628.26
7.00%	Construction Contingency	\$455,533.98
Subtotal		\$6,963,162.24
16.29%	Non-Construction Costs	\$1,134,299.13
Total Project		\$8,097,461.37

Construction Contingency	\$455,533.98
Non-Construction Costs	\$1,134,299.13
Total for X.	\$1,589,833.11

Non-Construction Costs Breakdown		
Land Survey	0.03%	\$2,088.95
Soil Borings / Phase I Envir. Report	0.10%	\$6,963.16
Agency Approval Fees (Bldg. Code)	0.25%	\$17,407.91
Construction Testing	0.40%	\$27,852.65
Printing - Bid Documents	0.15%	\$10,444.74
Advertising for Bids	0.02%	\$1,392.63
Builder's Risk Insurance	0.12%	\$8,355.79
Design Professional's Compensation	7.50%	\$522,237.17
CM Compensation	6.00%	\$417,789.73
Commissioning	0.60%	\$41,778.97
Non-Construction Contingency (includes partnering and mediation services)	1.12%	\$77,987.42
Total Non-Construction Costs	16.29%	\$1,134,299.13

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Name of Appraiser	Holly Grambort	Date of Appraisal	2015-09-24
Building Name	Liberty Elementary		
Street Address	8081 Saddle Run Rd		
City/Town, State, Zip Code	Powell, OH 43065		
Telephone Number(s)	(614) 450-5200		
School District	Worthington City		

Setting: Suburban

Site-Acreage	12.50	Building Square Footage	54,714
Grades Housed	K-6	Student Capacity	612
Number of Teaching Stations	34	Number of Floors	1
Student Enrollment	513		
Dates of Construction	1981		

Energy Sources: ☐ Fuel Oil ☒ Gas ☒ Electric ☐ Solar

Air Conditioning: ☒ Roof Top ☐ Windows Units ☒ Central ☐ Room Units

Heating: ☒ Central ☒ Roof Top ☐ Individual Unit ☐ Forced Air

☒ Hot Water ☐ Steam

Type of Construction

☐ Load bearing masonry

☐ Steel frame

☐ Concrete frame

☐ Wood

☐ Steel Joists

Exterior Surfacing

☐ Brick

☐ Stucco

☐ Metal

☐ Wood

☐ Stone

Floor Construction

☐ Wood Joists

☐ Steel Joists

☐ Slab on grade

☐ Structural slab

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1.0 The School Site

School Facility Appraisal

			Points Allocated	Points
1.1		Site is large enough to meet educational needs as defined by state and local requirements <i>The site, which is adjacent to Sutter Park Preschool, is 8 acres compared to 16 acres required by the OSDM.</i>	25	10
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 uses, which is suitable for educational instruction.</i>	10	8
1.4		Site is well landscaped and developed to meet educational needs <i>The site has limited landscaping, which does not enhance the property or emphasize the building entrance.</i>	10	6
1.5	ES	Well equipped playgrounds are separated from streets and parking areas	10	8
	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 metal and plastic composite type play equipment, which is in good condition, and is located on wood fiber mulch which is an approved soft surface material. Play equipment is not ADA accessible, and includes an accessible route to equipment. Fencing is provided to separate vehicular traffic from pedestrians.</i>		
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 and well drained, and no erosion was observed.</i>	5	4
1.8		Site is suitable for special instructional needs , e.g., outdoor learning <i>The site has not been developed to accommodate outdoor learning.</i>	5	2
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	5	4
	HS	Sufficient on-site, solid surface parking is provided for faculty, students, staff and community <i>Adequate parking is provided for faculty, staff, community and student parking, and is located on asphalt pavement in good condition.</i>		
TOTAL - The School Site			100	66

2.0 Structural and Mechanical Features

School Facility Appraisal

Structural		Points Allocated	Points
2.1	Structure meets all barrier-free requirements both externally and internally <i>Entire building meets all ADA requirements except, Restrooms, Stage access, signage.</i>	15	10
2.2	Roofs appear sound, have positive drainage, and are weather tight <i>The roofs over the entire building require replacement.</i>	15	4
2.3	Foundations are strong and stable with no observable cracks <i>Foundations are in good condition with no observable cracks.</i>	10	9
2.4	Exterior and interior walls have sufficient expansion joints and are free of deterioration <i>Exterior and interior walls are in fair condition, have sufficient control and expansion joints which are starting to show signs of deterioration.</i>	10	6
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 does not meet minimum energy requirements.</i>	10	5
2.7	Structure is free of friable asbestos and toxic materials <i>The building was constructed in 1981 and is reported to be free of asbestos.</i>	10	8
2.8	Interior walls permit sufficient flexibility for a variety of class sizes <i>Flexible partition walls have been provided between Classrooms and allow for a variety of class sizes.</i>	10	8
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 well maintained and not subject to overheating</i>	15	9
2.10	Internal water supply is adequate with sufficient pressure to meet health and safety requirements <i>The water pressure was measured at 80 PSI.</i>	15	14
2.11	Each teaching/learning area has adequate convenient wall outlets , phone and computer cabling for technology applications <i>There is an inadequate amount of receptacles and an adequate amount of computer cabling.</i>	15	9
2.12	Electrical controls are safely protected with disconnect switches easily accessible	10	5

Controls are safely protected and easily accessible.

2.13	Drinking fountains are adequate in number and placement, and are properly maintained including provisions for the disabled	10	4
	<i>ADA requirements are not met for fixtures and drinking fountains.</i>		
2.14	Number and size of restrooms meet requirements	10	4
	<i>The school does not meet the OBC requirements for fixtures.</i>		
2.15	Drainage systems are properly maintained and meet requirements	10	5
	<i>The gutters and downspouts are in poor condition and are properly located. The roof drains are adequate in number and placement. There are floor drain in the mechanical rooms.</i>		
2.16	Fire alarms, smoke detectors, and sprinkler systems are properly maintained and meet requirements	10	5
	<i>Fire Alarm is adequately placed, adequate smoke detectors are not installed.</i>		
2.17	Intercommunication system consists of a central unit that allows dependable two-way communication between the office and instructional areas	10	8
	<i>A dependable two way intercommunication system is installed.</i>		
2.18	Exterior water supply is sufficient and available for normal usage	5	4
	<i>Hose bibbs are provided on all sides of the building.</i>		
TOTAL - Structural and Mechanical Features		200	125

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3.0 Plant Maintainability

School Facility Appraisal

		Points Allocated	Points
3.1	Windows, doors, and walls are of material and finish requiring minimum maintenance <i>Exterior materials for walls require minimum maintenance. Materials and finishes for doors and windows require some maintenance.</i>	15	9
3.2	Floor surfaces throughout the building require minimum care <i>Flooring throughout the facility consists of VCT, rubber, sealed concrete, and carpet tile, which is well maintained throughout most of the facility.</i>	15	10
3.3	Ceilings and walls throughout the building, including service areas, are easily cleaned and resistant to stain <i>Acoustical tile ceilings are not easily cleaned or resistant to stain. Painted block is easily cleaned and resistant to stain.</i>	10	8
3.4	Built-in equipment is designed and constructed for ease of maintenance <i>Casework is wood type construction with plastic laminate tops, is well constructed and in good condition.</i>	10	4
3.5	Finishes and hardware , with compatible keying system, are of durable quality <i>Interior door hardware is consistent throughout the facility, and does not meet ADA requirements. The exterior doors require new ADA-compliant hardware.</i>	10	6
3.6	Restroom fixtures are wall mounted and of quality finish <i>Fixtures are mostly wall mounted and are of fair quality.</i>	10	8
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	7
3.8	Adequate electrical outlets and power , to permit routine cleaning, are available in every area <i>There is an inadequate amount of power outlets throughout the school.</i>	10	6
3.9	Outdoor light fixtures, electrical outlets , equipment, and other fixtures are accessible for repair and replacement <i>Outdoor light fixtures are easily maintainable, there is an inadequate amount of exterior light fixtures.</i>	10	5
TOTAL - Plant Maintainability		100	63

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4.0 Building Safety and Security

School Facility Appraisal

Site Safety		Points Allocated	Points
4.1	<p>Student loading areas are segregated from other vehicular traffic and pedestrian walkways</p> <p><i>Student loading is separated from vehicular traffic and pedestrian walkways.</i></p>	15	12
4.2	<p>Walkways, both on and offsite, are available for safety of pedestrians</p> <p><i>Walkways are adequately provided both on and off-site for pedestrian safety.</i></p>	10	8
4.3	<p>Access streets have sufficient signals and signs to permit safe entrance to and exit from school area</p> <p><i>School signs and signals are located as required on adjacent access streets.</i></p>	5	4
4.4	<p>Vehicular entrances and exits permit safe traffic flow</p> <p><i>Buses and other vehicular traffic use the same entrance and exit points to the site, which do not provide safe vehicular traffic flow.</i></p>	5	3
4.5	<p>ES Playground equipment is free from hazard</p> <p>MS Location and types of intramural equipment are free from hazard</p> <p>HS Athletic field equipment is properly located and is free from hazard</p> <p><i>Playground equipment consists of plastic coated steel and high density plastic type equipment in good condition, appears to be free from hazard, and is located on an approved soft surface material to a sufficient depth.</i></p>	5	4

Building Safety		Points Allocated	Points
4.6	<p>The heating unit(s) is located away from student occupied areas</p> <p><i>The heating units are not located in the classrooms.</i></p>	20	18
4.7	<p>Multi-story buildings have at least two stairways for student egress</p> <p><i>The overall facility is one story without stairways and an unoccupied storage mezzanine.</i></p>	15	12
4.8	<p>Exterior doors open outward and are equipped with panic hardware</p> <p><i>Exterior doors open in the direction of travel and are equipped with panic hardware.</i></p>	10	8
4.9	<p>Emergency lighting is provided throughout the entire building with exit signs on separate electrical circuits</p> <p><i>Emergency lighting is provided throughout with adequate battery backup.</i></p>	10	6
4.10	<p>Classroom doors are recessed and open outward</p> <p><i>Classroom doors are not recessed from the Corridor and open inward.</i></p>	10	4
4.11	<p>Building security systems are provided to assure uninterrupted operation of the educational program</p>	10	5

Building security system does not provide cameras in areas with 6 or more computers, corridors or gathering areas.

4.12	Flooring (including ramps and stairways) is maintained in a non-slip condition <i>Rubber and VCT 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.</i>	5	5
4.14	Glass is properly located and protected with wire or safety material to prevent accidental student injury <i>Glass at door transoms and sidelights is not tempered or provided with a wire mesh for safety. Interior doors with glass lights are provided with wire mesh.</i>	5	2
4.15	Fixed Projections in the traffic areas do not extend more than eight inches from the corridor wall <i>Water coolers extend more than eight inches from the Corridor wall, which impede traffic flow in the Corridors.</i>	5	2
4.16	Traffic areas terminate at an exit or a stairway leading to an egress <i>Exits are properly located to allow safe egress from the building. Due to multiple additions, circulation throughout the building is confusing. Entry and exit points to the building have been adequately provided. Corridor/building layout does not provide an efficient means of circulation throughout the building. There are no dead-end Corridors in the building.</i>	5	4

Emergency Safety

		Points Allocated	Points
4.17	Adequate fire safety equipment is properly located <i>Fire safety equipment is properly located.</i>	15	12
4.18	There are at least two independent exits from any point in the building <i>Multiple exits are provided from Corridors throughout the facility.</i>	15	12
4.19	Fire-resistant materials are used throughout the structure <i>The structure is a masonry load bearing system with steel joist and concrete deck. Interior walls are masonry.</i>	15	11
4.20	Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided <i>A manual fire alarm system is provided.</i>	15	7

TOTAL - Building Safety and Security

200

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5.0 Educational Adequacy

School Facility Appraisal

Academic Learning Space		Points Allocated	Points
5.1	Size of academic learning areas meets desirable standards <i>The average Classroom is 900 SF compared to 900 SF required by the OSDM.</i>	25	20
5.2	Classroom space permits arrangements for small group activity <i>Classrooms are large enough to allow effective small group activity spaces.</i>	15	11
5.3	Location of academic learning areas is near related educational activities and away from disruptive noise <i>The Gymnasium and Music program are properly isolated from the academic learning areas to reduce distractions.</i>	10	8
5.4	Personal space in the classroom away from group instruction allows privacy time for individual students <i>Classrooms are large enough to allow privacy time for individual students.</i>	10	8
5.5	Storage for student materials is adequate <i>Coat hooks and shelving, located in the Classroom, are inadequately provided for student storage.</i>	10	4
5.6	Storage for teacher materials is adequate <i>Miscellaneous wood and metal shelving units are inadequately provided for teacher storage.</i>	10	4

Special Learning Space		Points Allocated	Points
5.7	Size of special learning area(s) meets standards <i>The Special Education Classroom is 900 SF compared to 900 SF recommended in the OSDM.</i>	15	12
5.8	Design of specialized learning area(s) is compatible with instructional need <i>Special Education spaces are properly designed to meet instructional needs.</i>	10	6
5.9	Library/Resource/Media Center provides appropriate and attractive space <i>The Media Center is 2702 SF compared to 1836 SF recommended in the OSDM. (HS/MS/ES) The Media Center is an attractive space, including natural light and sufficient book storage space. The Media Center is not visually appealing and does not provide natural light.</i>	10	4
5.10	Gymnasium (or covered P.E. area) adequately serves physical education instruction <i>The Gymnasium is 4307 SF compared to 4,000 - 4,700 SF recommended in the OSDM. (ES)</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>Pre-K and Kindergarten spaces are undersized, and do not provide adequate instruction space.</i>	10	4

5.12	Music Program is provided adequate sound treated space	5	2
	<i>The Music Room is 1588 SF compared to 1,800-3,000 recommended in the OSDM. Music instruction is provided in a standard Classroom without any sound treatment.</i>		
5.13	Space for art is appropriate for special instruction, supplies, and equipment	5	4
	<i>The Art Room is 1516SF compared to 1,200 SF recommended in the OSDM. The Art Room is appropriately designed for instruction and includes sufficient space for storage of supplies and equipment.</i>		

School Facility Appraisal

		Points Allocated	Points
5.14	Space for technology education permits use of state-of-the-art equipment	5	0
	<i>The facility is not provided with Computer Labs for student use.</i>		
5.15	Space for small groups and remedial instruction is provided adjacent to classrooms	5	1
	<i>No spaces have been provided adjacent to Classrooms for small groups or remedial instruction.</i>		
5.16	Storage for student and teacher material is adequate	5	2
	<i>Storage for teachers and students has not been adequately provided throughout the facility.</i>		

Support Space

		Points Allocated	Points
5.17	Teacher's lounge and work areas reflect teachers as professionals	10	4
	<i>The Teacher's Lounge is 321 SF compared to 450-900 SF, for 8-24 staff, recommended in the OSDM. Limited work space is provided for preparation of teacher materials.</i>		
5.18	Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage, and food preparation	10	4
	<i>The Student Dining space is 2,034SF compared to 3,000 SF recommended in the OSDM. The Kitchen space is 1,539 SF compared to 2,142 SF recommended in the OSDM.</i>		
5.19	Administrative offices provided are consistent in appearance and function with the maturity of the students served	5	4
	<i>Administrative Offices are adequately provided for Elementary School students.</i>		
5.20	Counselor's office insures privacy and sufficient storage	5	1
	<i>The space provided for the Counselor does not insure privacy, and lacks sufficient storage space.</i>		
5.21	Clinic is near administrative offices and is equipped to meet requirements	5	3
	<i>The Clinic is located within the Administrative Offices and is provided with required equipment.</i>		
5.22	Suitable reception space is available for students, teachers, and visitors	5	3
	<i>There is a very small area for reception in the front office.</i>		
5.23	Administrative personnel are provided sufficient work space and privacy	5	2
	<i>Administrative offices are not adequate.</i>		

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6.0 Environment for Education

School Facility Appraisal

Exterior Environment		Points Allocated	Points
6.1	Overall design is aesthetically pleasing to age of students <i>The building is a modern design with minimal detailing consistent with similar facilities of the time of the original construction, which is dated and only marginally aesthetically pleasing.</i>	15	9
6.2	Site and building are well landscaped <i>The site has limited landscaping, which does not enhance the property or emphasize the building entrance.</i>	10	4
6.3	Exterior noise and poor environment do not disrupt learning <i>The site is adjacent to residential uses, and there are no undesirable features adjacent to the school site.</i>	10	8
6.4	Entrances and walkways are sheltered from sun and inclement weather <i>The main entrance to the School is completely sheltered. Other exits are not sheltered from sun and inclement weather.</i>	10	6
6.5	Building materials provide attractive color and texture <i>Exterior building materials consist of brick, painted concrete block, and formed metal at the fascia which do not provide an attractive color and texture. Interior building materials consist of painted block which does provide an marginally attractive color and texture.</i>	5	2
Interior Environment		Points Allocated	Points
6.6	Color schemes, building materials, and decor provide an impetus to learning <i>The color palette is comprised of achromatic hues. School colors are not reflected in the athletic areas. The use of repeated colors and materials gives the building some unity and a sense of consistency.</i>	20	12
6.7	Year around comfortable temperature and humidity are provided throughout the building <i>The building has a central air conditioning system.</i>	15	13
6.8	Ventilating system provides adequate quiet circulation of clean air and meets 15cfm VBC requirement <i>It does provide the minimum 15 CFM ventilation as required by the OBCMC.</i>	15	13
6.9	Lighting system provides proper intensity, diffusion, and distribution of illumination <i>Lighting system does not provided proper light levels throughout the building.</i>	15	8
6.10	Drinking fountains and restroom facilities are conveniently located <i>Drinking fountains and Restroom facilities are conveniently located.</i>	15	9
6.11	Communication among students is enhanced by commons area(s) for socialization <i>There are areas for students to gather in the Student Dining area, Gymnasium, as well as a small gathering area at the entrance to the school. Outdoor courtyards have not been provided to encourage socialization and communication among students.</i>	10	6

6.12	Traffic flow is aided by appropriate foyers and corridors <i>Corridors and Foyers are adequately designed for efficient traffic flow.</i>	10	8
6.13	Areas for students to interact are suitable to the age group <i>There are areas for students to gather in the Student Dining area, Gymnasium, as well as a small gathering area at the entrance to the school.</i>	10	6
6.14	Large group areas are designed for effective management of students <i>The Gymnasium is adequately designed to manage large groups of students.</i>	10	8
6.15	Acoustical treatment of ceilings, walls, and floors provides effective sound control <i>Limited consideration has been given to acoustical treatment of Classrooms and Corridors. No acoustical treatment has been provided in the Music Room.</i>	10	4
6.16	Window design contributes to a pleasant environment <i>The windows are not designed well, and do not contribute to a pleasant environment.</i>	10	2
6.17	Furniture and equipment provide a pleasing atmosphere <i>Classroom furniture is mismatched and in fair to poor condition.</i>	10	4
TOTAL - Environment for Education		200	122

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LEED Observation Notes

School District:	Worthington City
County:	Franklin
School District IRN:	45138
Building:	Liberty Elementary
Building IRN:	86454

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)

A major renovation to the school may be able to attain points in several site-related areas. Alternative Transportation points may be possible with the addition of parking areas designated for low-emission vehicles and car pools. Bike racks are provided and changing rooms could be added. Other transportation credits are unlikely to be achieved due to the schools relatively suburban location. A reduction in impervious paving, and use of alternative paving materials could aid in achieving Stormwater Design and Heat Island Effect Nonroof points. The majority of the school has a light colored, and therefore light-reflective, high-albedo roof material which could qualify for Heat Island Effect Roof points. Light Pollution Reduction could be achieved with updates to the site lighting.

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)

Installing more efficient fixtures, reducing or eliminating water usage for landscaping and playfields, and incorporating innovative wastewater technologies may all be opportunities to achieve points in this category.

Energy & Atmosphere

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

(source: LEED Reference Guide, 2001:93)

Replacement of the HVAC systems would be necessary to achieve many of the energy-related points in this category. Metering and commissioning should be included in those efforts. On-Site Renewable Energy credits may be attainable with wind or solar installations. Green Power credits may also be attainable.

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)

Depending on future programmatic needs, it may be possible to renovate the building in such a way as to achieve Building Reuse credits. Construction Waste Management credits should be considered, but may be difficult to achieve due to the schools small town setting. Due to the age of the school, it is unlikely that many materials could be salvaged for reuse. However, replacement interior finishes can be specified in order to be compliant with LEED guidelines, including products that would help achieve Recycled Content, Regional Materials, and Rapidly Renewable Materials, and/or Certified Wood credits.

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)

As noted in Energy & Atmosphere, replacement of the HVAC systems would be necessary to achieve several of these credits, including Outdoor Air Delivery Monitoring, Increased Ventilation, Controllability of Systems Thermal Comfort, both Thermal Comfort credits. The Low Emitting Materials credit could be achieved with proper specification of finishes and applications. Other credits in this category that could be realized are Controllability of Systems Lighting, both Daylight and Views, and Mold Prevention.

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)

For a major renovation project such as would be needed at the school, a LEED AP should be part of the A/E team and his or her inclusion would garner one ID point. The School as a Teaching Tool credit would be the next most easily achieved in this category. Instituting green cleaning strategies should also be considered.

Justification for Allocation of Points

Building Name and Level: **Liberty Elementary**

K-6

Building features that clearly exceed criteria:

1. The overall building is free of asbestos.
2. Physical education facilities provide adequate space and are well maintained.
3. The site does provide for adequate designated bus and vehicular loading/unloading zones.
- 4.
- 5.
- 6.

Building features that are non-existent or very inadequate:

1. No small group and remedial instruction spaces are provided.
2. Computer Labs are not provided for student use.
3. The facility has few windows and very little daylighting.
- 4.
- 5.
- 6.

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Environmental Hazards Assessment Cost Estimates

Owner:	Worthington City
Facility:	Liberty Elementary
Date of Initial Assessment:	Sep 24, 2015
Date of Assessment Update:	Dec 23, 2015
Cost Set:	2015

District IRN:	45138
Building IRN:	86454
Firm:	Van Auken Akins Architects

Scope remains unchanged after cost updates.

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates	
		Renovation	Demolition
1981 Original Construction	54,714	\$5,471.40	\$5,471.40
Total	54,714	\$5,471.40	\$5,471.40
Total with Regional Cost Factor (100.00%)	—	\$5,471.40	\$5,471.40
Regional Total with Soft Costs & Contingency	—	\$6,808.08	\$6,808.08

Environmental Hazards - Worthington City (45138) - Liberty Elementary (86454) - Original Construction

Owner: Worthington City

Bldg. IRN: 86454

Facility: Liberty Elementary

BuildingAdd: Original Construction

Date On-Site:

Consultant Name:

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)		Not Present	0	\$15.00	\$0.00
10. Dismantling of Boiler/Furnace/Incinerator		Not Present	0	\$2,000.00	\$0.00
11. Flexible Duct Connection Removal		Not Present	0	\$100.00	\$0.00
12. Acoustical Plaster Removal		Not Present	0	\$7.00	\$0.00
13. Fireproofing Removal		Not Present	0	\$25.00	\$0.00
14. Hard Plaster Removal		Not Present	0	\$7.00	\$0.00
15. Gypsum Board Removal		Not Present	0	\$6.00	\$0.00
16. Acoustical Panel/Tile Ceiling Removal		Not Present	0	\$3.00	\$0.00
17. Laboratory Table/Counter Top Removal		Not Present	0	\$100.00	\$0.00
18. Cement Board Removal		Not Present	0	\$5.00	\$0.00
19. Electric Cord Insulation Removal		Not Present	0	\$1.00	\$0.00
20. Light (Reflector) Fixture Removal		Not Present	0	\$50.00	\$0.00
21. Sheet Flooring with Friable Backer Removal		Not Present	0	\$4.00	\$0.00
22. Fire Door Removal		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)		Not Present	0	\$2.00	\$0.00
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo		Not Present	0	\$300.00	\$0.00
28. Window Component (Compound, Tape, or Caulk) - Reno Only		Not Present	0	\$300.00	\$0.00
29. Resilient Flooring Removal, Including Mastic		Not Present	0	\$3.00	\$0.00
30. Carpet Mastic Removal		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		Not Present	0	\$2.00	\$0.00
35. (Sum of Lines 1-34)		Total Asb. Hazard Abatement Cost for Renovation Work			\$0.00
36. (Sum of Lines 1-34)		Total Asb. Hazard Abatement Cost for Demolition Work			\$0.00

B. Removal Of Underground Storage Tanks					<input 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. 54714	54714		\$0.10	\$5,471.40

E. Other Environmental Hazards/Remarks			<input type="checkbox"/> None Reported
Description		Cost Estimate	
1. (Sum of Lines 1-0)	Total Cost for Other Environmental Hazards - Renovation		\$0.00
2. (Sum of Lines 1-0)	Total Cost for Other Environmental Hazards - Demolition		\$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries			
1. A35, B1, C3, D1, and E1	Total Cost for Env. Hazards Work - Renovation		\$5,471.40
2. A36, B1, D1, and E2	Total Cost for Env. Hazards Work - Demolition		\$5,471.40

* 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.

