

Building Information - Willoughby-Eastlake City SD (45104) - Edison Elem

Program Type	Expedited Local Partnership Program (ELPP)
Setting	Suburban
Assessment Name	Edison E_2010_TCI
Assessment Date	2010-03-16
Cost Set:	2010
Building Name	Edison Elem
Building IRN	9985
Building Address	5288 Karen Isle Dr
Building City	Willoughby
Building Zipcode	44094
Building Phone	440/954-3555
Acreage	17.88
Current Grades	K-5
Teaching Stations	29
Number of Floors	1
Student Capacity	600
Current Enrollment	636
Enrollment Date	2010-04-01
Enrollment Date is the date in which the current enrollment was taken.	
Number of Classrooms	24
Historical Register	NO
Building's Principal	Mr. Brian Patrick
Building Type	Elementary

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North elevation photo:



East elevation photo:



South elevation photo:



West elevation photo:



GENERAL DESCRIPTION

44,771 Total Existing Square Footage
1962 Building Dates
K-5 Grades
636 Current Enrollment
29 Teaching Stations
17.88 Site Acreage

Edison Elementary, which is not on the National Register of Historic Buildings, and originally constructed in 1962, is a 1 story, 44,771 square foot brick school building located in a suburban residential setting. The existing facility features a conventionally partitioned design, and does utilize modular buildings. The modular unit is 4,020 square feet with electrical service. Water, gas, and sanitary services are not provided. The unit is in fair condition. The structure of the overall facility contains steel frame with brick veneer on masonry back up exterior wall construction, with masonry wall construction in the interior. The floor system consists of is slab on grade. The roof structure is bar joist with metal deck. The roofing system of the overall facility is standing seam metal, installed in 1987. The ventilation system of the building is inadequate to meet the needs of the users. The Classrooms are within size tolerances in terms of the current standards established by the State of Ohio. Physical Education and Student Dining spaces consist of one Gymnasium and separate Student Dining. The electrical system for the facility is inadequate. The facility is equipped with a non-compliant security system. The building has a compliant automatic fire alarm system. The facility is not equipped with an automated fire suppression system. The building is reported to contain asbestos and other hazardous materials. The overall building is not compliant with ADA accessibility requirements. The school is located on a 17.88 acre site adjacent to residential properties. The property, playgrounds, and play areas athletic facilities are not fenced for security. Access onto the site is unrestricted. Site circulation is good. There is dedicated space for school buses to load and unload on the site. Parking for staff, visitors and community events is adequate.

The building has thermal bridging at the wall to roof connection. The roof system structure has thermal bridging that appears to cause condensation within the classrooms. Cracks appear in the walls due to building settlement. Portions of the roof structure are rusting due to condensation.

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Building Construction Information - Willoughby-Eastlake City SD (45104) - Edison Elem (9985)

Name	Year	Handicapped Access	Floors	Square Feet
1962 Original	1962	no	1	44,771

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Building Component Information - Willoughby-Eastlake City SD (45104) - Edison Elem (9985)

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
1962 Original (1962)		6925		2049	1148		2047	648						
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 - Edison Elem (9985)

District: Willoughby-Eastlake City SD				County: Lake		Area: Northeastern Ohio (8)	
Name: Edison Elem				Contact: Mr. Brian Patrick			
Address: 5288 Karen Isle Dr Willoughby, OH 44094				Phone: 440/954-3555			
Bldg. IRN: 9985				Date Prepared: 2010-03-16		By: Karen L Walker	
				Date Revised: 2010-06-23		By: Karen L Walker	
Current Grades		K-5	Acreage:		17.88		
Proposed Grades		N/A	Teaching Stations:		29		
Current Enrollment		636	Classrooms:		24		
Projected Enrollment		N/A					
Addition		Date	HA	Number of Floors	Current Square Feet		
1962 Original		1962	no	1	44,771		
Total				44,771			
*HA		=	Handicapped Access				
*Rating		=	1 Satisfactory				
		=	2 Needs Repair				
		=	3 Needs Replacement				
*Const P/S		=	Present/Scheduled Construction				
FACILITY ASSESSMENT Cost Set: 2010				Rating	Dollar Assessment		
A. Heating System				3	\$1,455,057.50 -		
B. Roofing				3	\$623,364.02 -		
C. Ventilation / Air Conditioning				1	\$5,000.00 -		
D. Electrical Systems				3	\$775,433.72 -		
E. Plumbing and Fixtures				3	\$631,997.00 -		
F. Windows				3	\$379,480.68 -		
G. Structure: Foundation				1	\$500.00 -		
H. Structure: Walls and Chimneys				2	\$72,765.00 -		
I. Structure: Floors and Roofs				1	\$0.00 -		
J. General Finishes				3	\$759,850.80 -		
K. Interior Lighting				3	\$223,855.00 -		
L. Security Systems				3	\$123,120.25 -		
M. Emergency/Egress Lighting				3	\$44,771.00 -		
N. Fire Alarm				3	\$67,156.50 -		
O. Handicapped Access				2	\$73,542.10 -		
P. Site Condition				2	\$205,102.60 -		
Q. Sewage System				3	\$22,500.00 -		
R. Water Supply				3	\$60,000.00 -		
S. Exterior Doors				3	\$38,000.00 -		
T. Hazardous Material				3	\$114,005.00 -		
U. Life Safety				3	\$151,415.75 -		
V. Loose Furnishings				2	\$89,542.00 -		
W. Technology				3	\$478,154.28 -		
X. Construction Contingency / Non-Construction Cost				-	\$1,562,223.19 -		
Total					\$7,956,836.39		
CEFPI Appraisal Summary							
Section		Points Possible	Points Earned	Percentage	Rating	Category	
Cover Sheet							
1.0 The School Site		100	93	93%	Excellent		
2.0 Structural and Mechanical Features		200	124	62%	Borderline		
3.0 Plant Maintainability		100	64	64%	Borderline		
4.0 Building Safety and Security		200	158	79%	Satisfactory		
5.0 Educational Adequacy		200	121	61%	Borderline		
6.0 Environment for Education		200	144	72%	Satisfactory		
LEED Observations							
Commentary							
Total		1000	704	70%	Satisfactory		
Enhanced Environmental Hazards Assessment Cost Estimates							
C=Under Contract							
Renovation Cost Factor							
Cost to Renovate (Cost Factor applied)							
104.16%							
\$8,287,840.78							
<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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1962 Original (1962) Summary

District: Willoughby-Eastlake City SD Name: Edison Elem Address: 5288 Karen Isle Dr Willoughby, OH 44094 Bldg. IRN: 9985				County: Lake Area: Northeastern Ohio (8) Contact: Mr. Brian Patrick Phone: 440/954-3555 Date Prepared: 2010-03-16 By: Karen L Walker Date Revised: 2010-06-23 By: Karen L Walker																																																																								
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A. Heating System

Description: The existing heating system for the overall facility is composed of two major hot water boilers centrally located in the main mechanical room which were installed in 1962. The units are in good condition. The heating system in the overall facility is part of the Original Construction and is a 2-pipe system supplying hot. With very limited capacity for simultaneous heating and cooling operation, this system is not compliant with the OSDM requirements for basic system type. The forced draft hot water boilers, manufactured by Peerless were installed in 1962 and are in decent condition. Heating hot water is distributed to terminal units consisting of unit ventilators, cabinet heaters, unit heaters, and fin tubes. The terminal equipment was installed in 1962 and is in fair condition. The system does not comply with the 15 CFM per person fresh air requirements of the Ohio Building Code mechanical code and Ohio School Design Manual. The non DDC type system temperature controls were installed in 1962 and are in working condition. The system does feature individual heating temperature controls in all spaces required by the OSDM. The overall system does not feature any central energy recovery systems. The facility is equipped with louvered interior doors in storage and utility rooms to facilitate Corridor utilization as return air plenums while the classrooms have a return air systems. The existing system is not ducted, and floor to structural deck heights will not accommodate the installation of properly sized ductwork for a future Ohio School Design Manual approved system. The overall heating system is evaluated as being not in safe and efficient working order, though long term life expectancy of the existing system is anticipated. The structure is not equipped with central air conditioning. The site does not contain underground fuel tanks that are currently in use.

Rating: 3 Needs Replacement

Recommendations: Provide new overall heating, ventilating, and air conditioning system to achieve compliance with Ohio Building Code and Ohio School Design Manual standards. Convert to ducted system to facilitate efficient exchange of conditioned air.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
HVAC System Replacement:	\$25.00	sq.ft.		44,771 ft ² Required	\$1,119,275.00	(includes demo of existing system and reconfiguration of piping layout and new controls, air conditioning)
Convert To Ducted System Replacement	\$7.50	sq.ft.		Required	\$335,782.50	(includes cost for vert. & horz. chases, cut openings, soffits, etc. Must be used in addition to HVAC System Replacement if the existing HVAC system is non-ducted)
Sum:			\$1,455,057.50	\$1,455,057.50		



Gas Fire Hot Water Boilers



Typical Room Unit Ventilator

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B. Roofing

Description: The roof over the overall facility is a standing seam metal system that was installed in 1987, and is in fair condition. District reports current leaking. Roof currently leaks in one classroom, and was recently repaired in a second classroom. Signs of past leaking or condensation due to thermal bridging were observed throughout the facility during the physical assessment. Insulation is provided but is not sufficient to provide compliance. Access to the roof was gained by portable ladder. Fall safety protection cages are not required, and are not provided. Standing water was not observed on the roof. Most metal cap flashings are in fair condition, and the cap flashings around the courtyards are in poor condition. Roof storm drainage is addressed through a system of gutters and downspouts, which are properly located, and in poor condition. Overflow roof drains are not required. Roof flashing at the chimney is in need of replacement. No other problems requiring attention were encountered with other roof penetrations. Covered walkways are attached to this structure. A covered walkway constructed of wood structure with shingle roofing connects the school building with the modular classrooms. It appears to be constructed within the past five years and is in good condition.

Rating: 3 Needs Replacement

Recommendations: The roof over the overall facility requires replacement to meet Ohio School Design Manual guidelines due to insufficient insulation and thermal bridging. A membrane roofing system is recommended to replace the existing standing seam metal system. The flashing and / or coping require replacement with the roofing system. Due to existing conditions gutters and downspouts require replacement with the roofing system.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Deck Replacement:	\$5.25	sq.ft. (Qty)		45,026 Required	\$236,386.50	(wood or metal, including insulation)
Membrane (all types):	\$8.27	sq.ft. (Qty)		45,026 Required	\$372,365.02	(unless under 10,000 sq.ft.)
Gutters/Downspouts	\$12.50	ln.ft.		1,169 Required	\$14,612.50	
Sum:			\$623,364.02	\$623,364.02		



Metal roofing seam



Metal roof flashings

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C. Ventilation / Air Conditioning

Description: The overall facility is not equipped with a central air conditioning system. Window units are provided in miscellaneous locations such as offices, library, and media center. The ventilation system in the overall facility consists of unit ventilators and ducted air handlers installed initially in 1962 and are in fair condition, providing fresh air to classrooms and other miscellaneous spaces such as Gymnasiums, Student Dining, Media Center etc.). Relief air venting is provided by relief fans and roof vents. The ventilation system does not meet the Ohio Building Code 15 CFM per occupant fresh air requirement. The overall system is not compliant with Ohio Building Code and Ohio School Design Manual requirements. Dust collection systems are not required in this facility and no system is provided. The Art program is non-existent. Exhaust systems for Restrooms, Locker Rooms, Kitchen, Gymnasiums, Storage Rooms, Custodial Closets and Career Tech specialized areas are adequately placed, and in working condition.

Rating: 1 Satisfactory

Recommendations: Provide an air conditioning system to meet with Ohio Building Code and Ohio School Design Manual requirements. Pricing included in Item A. Provide kiln exhaust system for kiln listed in item J.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Kiln Exhaust System:	\$5,000.00	each		1 Required	\$5,000.00	
Sum:			\$5,000.00	\$5,000.00		



Typical Window Air Conditioner Unit



Roof Mounted Exhaust Fans

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D. Electrical Systems

Description: The electrical system provided to the overall facility is a 400 amp 120/208 volt, 3 phase, 4 wire original system from the year 1962, and is in good condition. Power is provided to the school by a pole mounted utility owned transformer, located at the rear of the school near the property line. Sight condition of the transformer looks to be satisfactory. The main distribution panel cannot be expanded to add additional capacity that would be required by the OSDM air conditioning requirements. The Classrooms are not equipped with adequate electrical outlets per OSFC recommendations. The typical Classroom contains usually 2 general purpose outlets also used for Classroom computers, and television. There are some spaces that have no electrical outlets such as storage areas and some toilet rooms. There are some Corridors that are not equipped with adequate electrical outlets for electrical servicing. Adequate GFI protected exterior outlets are not provided around the perimeter of the building. The facility is not equipped with an emergency generator. There is a 100 amp emergency panel LP-EM which feeds items such as exit lights and the Fire Alarm panel. The emergency panel is fed directly from the double lugged main disconnect switch and is in good condition. Adequate building lightning protection safeguards are not provided. The overall electrical system does not meet Ohio School Design Manual requirements, and will be inadequate to meet the facility's future needs.

Rating: 3 Needs Replacement

Recommendations: The entire electrical system requires replacement to meet Ohio School Design Manual guidelines for overall capacity due to lack of OSDM - required features and to accommodate the addition of an air conditioning system.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
System Replacement:	\$17.32	sq.ft.		Required	\$775,433.72	(Includes demo of existing system. Includes generator for life safety systems. Does not include telephone or data cable or equipment) (Use items below ONLY when the entire system is NOT being replaced)
Sum:			\$775,433.72	\$775,433.72		



Main Electrical Switch & Distribution Panel



Pole Mounted Transformer

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E. Plumbing and Fixtures

Description: This school has 22 wall hung water closets, 13 wall hung urinals, 20 lavatories, 0 wash fountains, 4 wall hung electric water coolers, 26 lab sinks, 0 shower heads, and 3 mop sinks. Most of the plumbing fixtures are in fair condition, but ADA requirements are not met. A 3 inch reduced principle backflow preventer is required. The building has a 3 inch domestic water supply line. There is one 100 gallon gas fired hot water heater that provides domestic hot water for the entire building, which needs to be replaced. Domestic water piping is copper and appears to be in good condition. Sanitary drainage and vent piping is cast iron that appears to be in good condition.

Rating: 3 Needs Replacement

Recommendations: Provide all new plumbing fixtures, faucets and flush valves to replace the existing because of ADA requirements and condition of old plumbing fixtures. Provide grease trap for kitchen and provide new wall hydrants on exterior building wall. Refer to item O for the additional fixture replacements. Replace existing domestic water heater with new high efficient gas fired water heater. The recommendation for domestic water piping is in section R. The recommendation for sanitary drainage piping is in section Q.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Back Flow Preventer:	\$5,000.00	unit		1 Required	\$5,000.00	
Domestic Supply Piping:	\$3.50	sq.ft.		Required	\$156,698.50	(remove / replace)
Sanitary Waste Piping:	\$3.50	sq.ft.		Required	\$156,698.50	(remove / replace)
Domestic Water Heater:	\$5,100.00	per unit		1 Required	\$5,100.00	(remove / replace)
Toilet:	\$3,800.00	unit		22 Required	\$83,600.00	(new)
Urinal:	\$3,800.00	unit		13 Required	\$49,400.00	(new)
Sink:	\$2,500.00	unit		46 Required	\$115,000.00	(new)
Electric water cooler:	\$3,000.00	unit		4 Required	\$12,000.00	(double ADA)
Replace faucets and flush valves	\$500.00	per unit		81 Required	\$40,500.00	(average cost to remove/replace)
Other: Exterior Wall Hydrants	\$2,000.00	each		1 Required	\$2,000.00	Provide wall hydrant on exterior
Other: Kitchen Grease Trap	\$6,000.00	each		1 Required	\$6,000.00	provide grease trap for kitchen
Sum:			\$631,997.00	\$631,997.00		



Toilet room fixtures



Toilet room fixtures

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F. Windows

Description: The overall facility is equipped with non-thermally broken aluminum windows with a single glazed type window system, which was installed in 1962, and is generally in fair condition. Aluminum sills are in fair condition. Window system seals are in moderate condition, with moderate air and water infiltration being experienced. Window system hardware is in moderate condition. The window system features surface mounted shades which are in poor condition. The window system is partially equipped with insect screens on operable windows, which are in poor condition. Steel frame and aluminum frame storefront systems are found in the overall facility, in fair to poor condition. This facility does not feature any glass block windows. The exterior doors in the overall facility are equipped with non-thermally broken aluminum and steel sidelights and transoms with single glazing in fair to poor condition. Glazing panels are a combination of tempered, non-tempered, and wired glass, with porcelain coated spandrel panels. The school does contain (4) acrylic bubble type skylights that are in poor condition. 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 for the overall facility. Replace storefront window systems and, skylights in the overall facility to meet with Ohio School Design Manual requirements.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Insulated Glass/Panels:	\$57.10	sq.ft. (Qty)		4,459 Required	\$254,608.90	(includes blinds)
Skylights:	\$125.00	sq.ft. (Qty)		64 Required	\$8,000.00	(remove and replace)
Curtain Wall/Storefront System:	\$64.18	sq.ft. (Qty)		1,821 Required	\$116,871.78	(remove and replace)
Sum:			\$379,480.68	\$379,480.68		



Typical aluminum window system.



Typical hollow metal storefront system.

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G. Structure: Foundation

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

Rating: 1 Satisfactory

Recommendations: Replace one missing downpipe drainage boot. Existing conditions require no other renovation or replacement at the present time.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Other: New Downpipe Drainage Boot	\$500.00	per unit		1 Required	\$500.00	Replace missing downpipe drainage boot.
Sum:			\$500.00	\$500.00		



Typical foundation condition.

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H. Structure: Walls and Chimneys

Description: The overall facility has a brick veneer on a masonry bearing wall and steel frame system, which displayed locations of deterioration along the base of the wall, and is in fair condition. Control joints are provided at lintel locations at doors and windows. The school appears to contain insufficient expansion joints, but additional joints are not needed due to no indication of exterior masonry cracking or separation. The exterior masonry has not been cleaned and sealed in recent years, and shows evidence of brick deterioration where insufficient weep holes are provided, especially on the north and south elevations. Architectural exterior accent materials consist of porcelain ceramic panels over recessed entries which are in fair condition. Interior walls are concrete masonry units and glazed block and are in fair condition. Interior masonry appears to have no caulked control joints in. Soffits are in fair condition. The window sills are an element of the aluminum window system, and are in fair condition. The exterior lintels are concealed, and are assumed to be steel and in fair condition. Chimneys are in poor condition, with ample spalling brick. Canopies over entrances are porcelain-enamel panel type construction, and are in fair condition.

Rating: 2 Needs Repair

Recommendations: Replace spalling brick and install weep vents and flashing in various locations. Provide masonry cleaning and sealing as required through the overall facility.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Exterior Masonry Cleaning:	\$1.50	sq.ft. (Qty)		9,632 Required	\$14,448.00	(wall surface)
Exterior Masonry Sealing:	\$1.00	sq.ft. (Qty)		9,632 Required	\$9,632.00	(wall surface)
Replace Brick Veneer System:	\$35.00	sq.ft. (Qty)		1,391 Required	\$48,685.00	(total removal and replacement including pinning and shoring)
Sum:			\$72,765.00	\$72,765.00		



Chimney with damaged brick



Damaged brick with insufficient weep holes

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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 construction, and is in good condition. There is no crawl space. There are no intermediate floors in this single story structure. Ceiling to structural deck spaces are insufficient to accommodate HVAC, electrical, and plumbing scopes of work in required renovations. The ceiling system is at 8 feet above finish floor. The roof system is approximately 2 feet above the ceiling level. The roof construction of the overall facility is steel with metal deck construction, and is in fair to poor condition. Some locations are rusting due to roof system conditions, but do not appear to be structurally deficient.

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Sum:			\$0.00	\$0.00		



Roof structure



Roof structure

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J. General Finishes

Description: The overall facility features conventionally partitioned Classrooms with vinyl tile and carpet flooring in poor condition, lay in acoustical tile ceilings in poor condition, as well as painted block wall finishes in fair condition. The overall facility has Corridors with terazzo flooring in good condition, lay in acoustical tile ceilings in poor condition, as well as glazed block wall finishes in good condition. The overall facility has Restrooms with terazzo flooring in fair condition, lay in acoustical tile ceilings in poor condition, as well as glazed block wall finishes in fair condition. Toilet partitions are metal, and are in poor 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 four lineal feet of casework, and Classroom casework provided ranges from zero to four feet. Classrooms are provided adequate chalkboards, markerboards, and tackboards, which are in fair condition. The Classroom storage cubbies, located in the Corridors, are adequately provided, and in poor condition. The Art program is not equipped with a kiln or room. The facility is equipped with wood non-louvered interior doors that are flush mounted without proper ADA hardware and clearances, and in fair to poor condition. The Gymnasium space has vinyl tile flooring, exposed roof system ceilings, as well as painted masonry wall finishes, and they are in poor condition. The Media Center, has carpet flooring, lay in acoustical tile ceilings, as well as painted block wall finishes, and they are in poor condition. Student Dining, has vinyl tile flooring, exposed roof system ceilings, as well as painted block wall finishes, and they are in fair condition. The facility does not have a stage. The existing Kitchen is satellite from Willoughby Middle School facility, is undersized based on current enrollment, and the existing Kitchen equipment, installed in before 2000, is in poor condition. The Kitchen does not have a hood. The kitchen does not have walk-in coolers /freezer.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of finishes and casework due to installation of systems outlined in Items A, C, D, E, K, M, N, T, and U. Provide funding for replacement of interior doors in item O. Provide complete replacement of kitchen equipment. Provide Art Room Kiln. Replace toilet partitions and accessories due to condition. Rework toilet room walls per item O.

Item	Cost	Unit	Whole Building	1962 Original (1962) 44,771 ft ²	Sum	Comments
Complete Replacement of Finishes and Casework (Elementary):	\$14.60	sq.ft.		Required	\$653,656.60	(elementary, per building area, with removal of existing)
Toilet Partitions:	\$1,000.00	per stall		14 Required	\$14,000.00	(removing and replacing)
Toilet Accessory Replacement	\$0.20	sq.ft.		Required	\$8,954.20	(per building area)
Basketball Backboard Replacement	\$3,200.00	each		2 Required	\$6,400.00	(non-electric)
Art Program Kiln:	\$2,500.00	each		1 Required	\$2,500.00	
Total Warming Kitchen Replacement	\$112.50	sq.ft. (Qty)		648 Required	\$72,900.00	(square footage based upon only existing area of food preparation, serving, kitchen storage areas and walk-ins. Includes demolition and removal of existing kitchen equipment)
Other: Rework Non-ADA Toilet Room Walls	\$10.00	sq.ft. (Qty)		144 Required	\$1,440.00	Rework walls to provide ADA clearance in toilet rooms
Sum:			\$759,850.80	\$759,850.80		



Corridor



Typical Classroom

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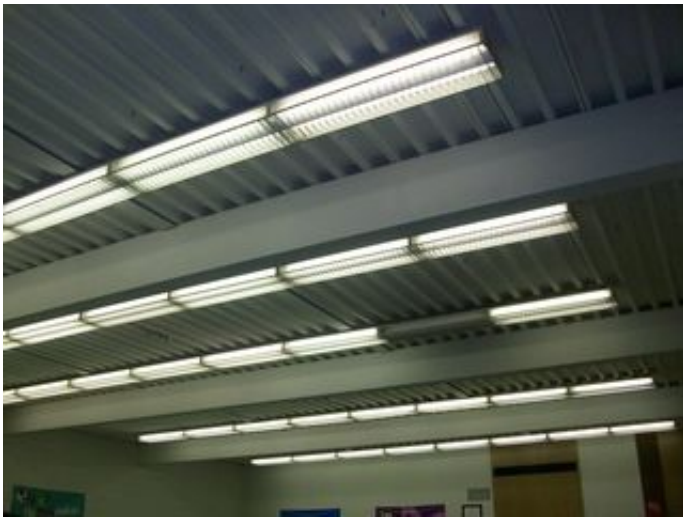
K. Interior Lighting

Description: The typical Classrooms in the overall facility are equipped with T-8 1'X8' surface mounted style fluorescent fixtures with single level switching. Classroom fixtures are in good condition, providing an average illumination of 50 to 55 FC; complying with the 50 FC recommended by the OSDM. The typical Corridors in the overall facility are equipped with T-8, 1'X8' surface mounted fluorescent fixtures with single level switching. Corridor fixtures are in good condition, providing an average illumination of 20 to 25 FC; complying with the 20 FC recommended by the OSDM. The Multi Purpose / Cafeteria area is equipped with surface mounted fluorescent type lighting as well and in fair condition, providing an average illumination of 55 FC; complying with the 50 FC recommended by the OSDM. The Library is equipped with T-8, 1'X8' surface mounted fluorescent type lighting in good condition, providing an average illumination of 50 to 55 FC; complying with the 50 FC recommended by the OSDM. The Kitchen space is equipped with T-8 1'X8' surface mounted fluorescent type lighting fixtures with single level switching. Kitchen fixtures are in good condition, providing an average illumination of 65 FC, which is less than the 75-80 FC recommended by the OSDM. The Service Areas in the overall facility are equipped with surface mounted incandescent or 1'X4'T-8 fluorescent type lighting in good condition. The typical Administrative spaces in the overall facility are equipped with 1'X8' surface fluorescent fixtures and 1'X4' surface mounted T-8 fluorescent 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 age, condition of the lighting fixtures and installation of a fire protection system.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of lighting system due to age, condition of lighting fixtures and installation of a fire protection system.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft²		
Complete Building Lighting Replacement	\$5.00	sq.ft.		Required	\$223,855.00	Includes demo of existing fixtures
Sum:			\$223,855.00	\$223,855.00		



Typical Classroom Lighting



Variation Of Lighting Fixture

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L. Security Systems

Description: The overall facility contains a security system including head-end equipment, security buzzer and cameras in main entries, central gathering areas and main corridors. The security system is not adequately provided throughout, and is not fully compliant with Ohio School Design Manual guidelines regarding security lighting through-out the site. The exterior building lighting system is equipped with HID mounted wall-pack type lights in fair condition at exit areas only. The outdoor instructional areas are illuminated with incandescent post lighting in average condition. Parking and bus pick-up / drop off areas are illuminated with pole mounted HID fixtures in fair condition. The exterior site lighting system provides inadequate coverage per the OSDM guidelines.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of security system to meet Ohio School Design Manual guidelines. Provide complete replacement of exterior site lighting system to meet Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Security System:	\$1.75	sq.ft.		Required	\$78,349.25	(complete, area of building)
Exterior Site Lighting:	\$1.00	sq.ft.		Required	\$44,771.00	building
Sum:			\$123,120.25	\$123,120.25		



Security Buzzer



Main Entrance Security CCTV Camera

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M. Emergency/Egress Lighting

Description: The overall facility is equipped with an emergency egress lighting system consisting of exit lighting fed from the emergency panel and emergency lighting. There are some stand alone emergency floodlight units in several areas of the entire facility. The exterior egress doors have HID type wall-pack fixtures, but are not provided with emergency lighting heads. Most of the system is in poor condition and in need of repair and / or additional emergency lighting equipment. The emergency egress lighting units that are provided with appropriate battery backup but, no written battery replacement schedule was available. The system is not adequately provided throughout, and does not meet Ohio School Design Manual and Ohio Building Code requirements in all cases.

Rating: 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Emergency/Egress Lighting:	\$1.00	sq.ft.		Required	\$44,771.00	(complete, area of building)
Sum:			\$44,771.00	\$44,771.00		



Typical Exit Sign



Emergency Lights

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N. Fire Alarm

Description: The overall facility is equipped with a zoned Fire Alarm system. Due to the age of this system it cannot handle the requirements of the Ohio School Design Manual. Devices are not located in areas that are required by code and the system installed is not an addressable type and therefore will not meet the Ohio School Design Manual and Ohio Building Code requirements.

Rating: 3 Needs Replacement

Recommendations: Recommend providing a complete new Fire Alarm System to meet the Ohio School Design Manual and the Ohio Building Code.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Fire Alarm System:	\$1.50	sq.ft.		Required	\$67,156.50	(complete new system, including removal of existing)
Sum:			\$67,156.50	\$67,156.50		



Main Fire Alarm Panel



Typical Fire Alarm Devices

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O. Handicapped Access

Description: An accessible route is provided from the public right-of-way, the accessible parking areas, and from the passenger unloading zone to the main entrance of the school and connecting most areas of the site. The exterior entrances are ADA accessible. Access from the parking / drop-off area to the building entries is not compromised by steps or steep ramps. Adequate handicap parking is not provided. Exterior doors are equipped with ADA hardware. The main entry is not equipped with an ADA power assist door. Playground layout and equipping are mostly compliant. On the interior of the building, space allowances and reach ranges are mostly compliant. There is an accessible route through the building. Student coat racks protrude into the corridors. Ground and floor surfaces are compliant. Special provisions for floor level changes in this single story structure are not required. No Stage is provided. Interior courtyards are not accessible due to stoops. Interior doors are not recessed, are provided adequate clearances, and are not provided with ADA-compliant hardware. Toilet partitions are metal, and most do not provide adequate clearance. ADA compliant accessories are not adequately provided and mounted. Electric water coolers are compliant. Mirrors do not meet ADA requirements for mounting heights. ADA signage is not provided on either the interior or the exterior of the building.

Rating: 2 Needs Repair

Recommendations: Provide ADA-compliant signage and a power assist door opener at the main entry. At group toilets where required, provide compliant toilet partitions and accessories. Provide compliant accessories at all private toilets. Remount all mirrors to compliant height. At the private toilets, rework walls to provide adequate clearances. Costs for reworked walls are covered in Item J. Replacement of plumbing fixtures is covered in Item E. Accessibility at courtyards and parking issues are corrected in Item P. Replace all non-compliant door hardware and rework door openings to provide adequate clearances where required. Replace doors noted in item J.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Signage:	\$0.10	sq.ft.		Required	\$4,477.10	(per building area)
Toilet Partitions:	\$1,000.00	stall		4 Required	\$4,000.00	(ADA - grab bars, accessories included)
ADA Assist Door & Frame:	\$7,500.00	unit		1 Required	\$7,500.00	(openers, electrical, patching, etc)
Replace Doors:	\$1,100.00	leaf		50 Required	\$55,000.00	(standard 3070 wood door, HM frame-classroom door/light, includes hardware)
Remount Restroom Mirrors to Handicapped Height:	\$285.00	per restroom		9 Required	\$2,565.00	
Sum:			\$73,542.10	\$73,542.10		



Accessible parking



Compliant toilet stall

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P. Site Condition

Description: The 17.88 acre relatively flat site is located in a suburban residential setting with generous tree, shrub and flower type landscaping. Evidence of ponding was observed in lawn areas beneath tall trees. Evidence of erosion was observed on the sloped lawn west of the facility. A small storage shed and a modular classroom are located on site. The site is bordered by lightly and moderately traveled city streets. There is a single vehicular entry to the site. A one-way bus loop which is separated from other vehicular traffic is provided in front of the school for student loading and unloading. Parking is facilitated by multiple asphalt parking lots containing 97 parking places, which provides adequate parking for staff and visitors. The front lots are in good condition; the back lot is in poor condition. Adequate designated parking for the disabled is not provided. The unpaved portions of the site are drained via sheet drainage and storm sewers near the building; the site is drained through natural streams and swales near the edges of the property and in the wooded areas. Some evidence of ponding and erosion was observed. The parking lot drainage design consists of sheet drainage and storm sewers and provides adequate evacuation of storm water. Evidence of ponding was observed at the back parking lot. Concrete curbs in fair to poor condition are appropriately placed. Trash pick-up and service drive pavement is not heavy duty. The concrete pad for dumpsters is in poor condition. The school is not equipped with a loading dock. Concrete sidewalks are properly sloped, are located to provide a logical flow of pedestrian traffic, and are in fair condition. The concrete area at the front entry is in poor condition. Play areas are adequately separated from vehicular traffic. Playground equipment is in fair condition and is placed to provide compliant fall zones on a compliant soft surface of sufficient depth. Athletic facilities are comprised of two basketball courts on asphalt surfaces in poor condition and one kickball field in fair condition. An outdoor seating area and two courtyards within the building are suitable for outdoor instruction. Extensive wooded areas are located on the west and northeast portions of the site and on the property south of the site. Paths connect the play areas with the residential neighborhoods to the north and west of the site. Sidewalks along the entry drive connect to the residential street to the east of the site. The site is mostly flat. There is sufficient space on the site for a future addition to the building.

Rating: 2 Needs Repair

Recommendations: Provide new wearing course on back parking lot and both basketball courts. Replace concrete dumpster pad. Replace concrete sidewalks where required and concrete surfaces at both courtyards; include ramps for handicap access at courtyards. Replace curbs at play areas and drives where required. Stabilize soil erosion west of playground. Designate three additional accessible parking spaces. Costs for ADA signage are covered in item O.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
Asphalt Paving / New Wearing Course:	\$18.65	sq. yard		44,771 ft ²		
Concrete Curb:	\$17.87	ln.ft.		2,944 Required	\$54,905.60	(includes minor crack repair in less than 5% of paved area)
Concrete Sidewalk:	\$4.69	sq.ft. (Qty)		4,400 Required	\$20,636.00	(new) (5 inch exterior slab)
Stabilize soil erosion:	\$2.50	sq.ft. (Qty)		1,500 Required	\$3,750.00	(includes stripping and re-grading)
Provide Concrete Dumpster Pad:	\$2,400.00	each		1 Required	\$2,400.00	(for two dumpsters)
Base Sitework Allowance for Unforeseen Circumstances	\$50,000.00	allowance		Required	\$50,000.00	Include this and one of the next two. (Applies for whole building, so only one addition should have this item)
Sitework Allowance for Unforeseen Circumstances for buildings between 0 SF and 100,000 SF	\$1.50	sq.ft.		Required	\$67,156.50	Include this one or the next. (Each addition should have this item)
Sum:			\$205,102.60	\$205,102.60		



Parking lot in poor condition



Bus loop

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Q. Sewage System

Description: The sanitary drainage system is connected into the city sewage system. The sanitary drainage piping is below slab inside of walls and is not visible. The sanitary drainage is working.

Rating: 3 Needs Replacement

Recommendations: The sanitary drainage system is 48 years old. Recommend replacing with new sanitary and vent piping

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Sewage Main:	\$45.00	in.ft.		500 Required	\$22,500.00	(include excavation and backfilling)
Sum:			\$22,500.00	\$22,500.00		



Sanitary Piping



Sanitary Piping

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R. Water Supply

Description: The domestic water is supplied from the city site water main. a reduced pressure backflow preventer is required to meet the plumbing code requirement. The District was not able to provide water supply flow test data. The existing domestic water service does meet the facility's current needs. The domestic water service is not equipped with a water booster pump and none is required. A pressure reducing station reduces the incoming pressure to design facility pressure.

Rating: 3 Needs Replacement

Recommendations: The existing domestic water piping is 48 years old. Recommend replacing with new domestic water piping from the city site main. Backflow preventer provided in item E.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Domestic Water Main	\$40.00	n.ft.		1,500 Required	\$60,000.00	(new)
Sum:			\$60,000.00	\$60,000.00		



Domestic Water Piping



Domestic Water Piping

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S. Exterior Doors

Description: Typical exterior doors in the overall facility are a combination of aluminum and hollow metal construction, installed on aluminum and hollow metal frames, and are in fair to poor condition. Typical exterior doors feature single glazed non-insulated glazing with a combination of wired glass, tempered glass, and non-tempered vision panels. One pair of exterior doors has been recently replaced with insulated aluminum doors with insulated tempered glazing that are in good condition. Entrance doors in the overall facility are aluminum construction on aluminum frames, and in poor condition. Typical entry doors feature single glazed non-insulated glazing with a combination of tempered glass, and non-tempered vision panels. There are no overhead doors in the facility.

Rating: 3 Needs Replacement

Recommendations: Replace exterior doors to comply with Ohio Building Code, ADA, and Ohio School Design Manual guidelines and due to poor condition.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Door Leaf/Frame and Hardware:	\$2,000.00	per leaf		19 Required	\$38,000.00	(includes removal of existing)
Sum:			\$38,000.00	\$38,000.00		



Typical aluminum entry doors.



Typical hollow metal entry doors.

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T. Hazardous Material

Description: The School District provided the AHERA three year reinspection reports, prepared by CTG Environmental LLC, and dated 2006, documenting known and assumed locations of asbestos and other hazardous materials. The district did not provide documentation of any abatement projects since that time. Vinyl asbestos floor tile and mastic, pipe insulation, and pipe fittings containing hazardous materials are located in the overall facility in fair condition. These materials were described in the report and open to observation and found to be in friable and non-friable condition moderate to light damage. There are no underground fuel oil storage tanks on the site. Due to the construction date, there is a potential for lead based paint. Fluorescent lighting will require special disposal.

Rating: 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
<i>Environmental Hazards Form</i>				EHA Form		
Pipe Insulation Removal	\$10.00	ln.ft.		800 Required	\$8,000.00	
Pipe Fitting Insulation Removal	\$20.00	each		100 Required	\$2,000.00	
Cement Board Removal	\$5.00	sq.ft. (Qty)		557 Required	\$2,785.00	
Resilient Flooring Removal, Including Mastic	\$3.00	sq.ft. (Qty)		33,740 Required	\$101,220.00	See J
Sum:			\$114,005.00	\$114,005.00		



Pipe fittings and insulation



9x9 Vinyl tile

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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. Guardrails are not required in this facility. The Kitchen does not contain equipment which requires a hood. The cooking equipment is not interlocked to shut down in the event of discharge of the fire suppression system. Fire extinguishers are not provided in sufficient quantity. Existing fire extinguishers are inadequately spaced. The facility is not equipped with an emergency generator. The existing water supply is provided by a tie-in to the municipal 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.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
Sprinkler / Fire Suppression System:	\$3.25	sq.ft. (Qty)		44,771 Required	\$145,505.75	(includes increase of service piping, if required)
Provide Fire Extinguisher and Wall Cabinet:	\$585.00	each		6 Required	\$3,510.00	(includes preparation of wall to receive recessed cabinet)
Replace Fire Extinguisher:	\$400.00	each		6 Required	\$2,400.00	
Sum:			\$151,415.75	\$151,415.75		



Ceiling without fire suppression



Corridor with fire extinguisher cabinet

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V. Loose Furnishings

Description: The typical Classroom furniture is mismatched, and in generally fair condition, consisting of student desks & chairs, teacher desks & chairs, desk height file cabinets, reading tables, computer workstations, bookcases, wastebaskets, and others. 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 7 due to observed conditions, and due to the fact that it lacks some of the Design Manual required elements.

Rating: 2 Needs Repair

Recommendations: Provide for replacement of outdated or inadequate furniture.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
CEFPI Rating	7	\$2.00/sq.ft.		Required	\$89,542.00	
Sum:			\$89,542.00	\$89,542.00		



Classroom furniture



Teacher workstation

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W. Technology

Description: The typical Classroom is equipped with one data port / but not one voice port for teacher use with a digitally based phone system to meet Ohio School Design Manual requirements. The typical Classroom is not equipped with the required four technology data ports for teacher and student use and a 2-way PA system that can be initiated by either party to meet Ohio School Design Manual requirements. The facility is equipped with a centralized clock system. The Sound System provides devices for all required spaces but due to the age the infrastructure is inadequately provided for each space of this facility. The facility does not contain a media distribution center for use by most students.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of technology systems to meet Ohio School Design Manual requirements for this facility.

Item	Cost	Unit	Whole Building	1962 Original (1962)	Sum	Comments
				44,771 ft ²		
ES portion of building with total SF < 50,000	\$10.68	sq.ft. (Qty)		44,771 Required	\$478,154.28	
Sum:			\$478,154.28	\$478,154.28		



Technology Main Frame

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X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		\$6,394,613.20
7.00%	Construction Contingency	\$447,622.92
Subtotal		\$6,842,236.12
16.29%	Non-Construction Costs	\$1,114,600.26
Total Project		\$7,956,836.39

Construction Contingency	\$447,622.92
Non-Construction Costs	\$1,114,600.26
Total for X.	\$1,562,223.19

Non-Construction Costs Breakdown		
Land Survey	0.03%	\$2,052.67
Soil Borings / Phase I Envir. Report	0.10%	\$6,842.24
Agency Approval Fees (Bldg. Code)	0.15%	\$10,263.35
Construction Testing	0.25%	\$17,105.59
Printing - Bid Documents	0.27%	\$18,474.04
Advertising for Bids	0.03%	\$2,052.67
Builder's Risk Insurance	0.11%	\$7,526.46
Design Professional's Compensation	7.50%	\$513,167.71
CM Compensation	6.00%	\$410,534.17
Commissioning	0.42%	\$28,737.39
Maintenance Plan Advisor	0.11%	\$7,526.46
Non-Construction Contingency (includes partnering and mediation services)	1.32%	\$90,317.52
Total Non-Construction Costs	16.29%	\$1,114,600.26

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School Facility Appraisal

Name of Appraiser Karen L Walker **Date of Appraisal** 2010-03-16
Building Name Edison Elem
Street Address 5288 Karen Isle Dr
City/Town, State, Zip Code Willoughby, OH 44094
Telephone Number(s) 440/954-3555
School District Willoughby-Eastlake City SD

Setting: Suburban

Site-Acreage	17.88	Building Square Footage	44,771
Grades Housed	K-5	Student Capacity	600
Number of Teaching Stations	29	Number of Floors	1
Student Enrollment	636		
Dates of Construction	1962		

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		25	25
	<i>The 17.88 acre site is large enough to meet educational needs as defined by state of 16.38 acres.</i>			
1.2	Site is easily accessible and conveniently located for the present and future population		20	20
	<i>The site is easily and safely accessible by both vehicular and pedestrian traffic. The site is located at the heart of the residential neighborhood it serves.</i>			
1.3	Location is removed from undesirable business, industry, traffic, and natural hazards		10	10
	<i>The site is removed from undesirable business, industry, traffic and natural hazards. A buffer of dense woods insulates the site from traffic noise and hazard.</i>			
1.4	Site is well landscaped and developed to meet educational needs		10	10
	<i>The site is well landscaped and developed to meet educational needs. The main entry is landscaped with hedges, ornamental trees and flowers. An outdoor classroom and two landscaped courtyards are available for outdoor instruction; playgrounds are large and well appointed; large wooded and lawn areas provide pleasant views in all directions.</i>			
1.5	ES Well equipped playgrounds are separated from streets and parking areas		10	7
	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>Large, well equipped playgrounds are located far from the street and bus drop-off. Some parking is located adjacent to one of the playgrounds.</i>			
1.6	Topography is varied enough to provide desirable appearance and without steep inclines		5	5
	<i>Topography is varied enough to provide desirable appearance without steep inclines. A gentle slope behind the playgrounds and several small hills provide pleasant relief to an otherwise flat site.</i>			
1.7	Site has stable, well drained soil free of erosion		5	2
	<i>Some evidence of ponding was observed near the wooded areas. Evidence of erosion was observed on a portion of the sloped area behind the playgrounds.</i>			
1.8	Site is suitable for special instructional needs , e.g., outdoor learning		5	5
	<i>An outdoor classroom and two landscaped courtyards provide opportunities for outdoor learning.</i>			
1.9	Pedestrian services include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes		5	4
	<i>Adequate properly sloped sidewalks connect most areas of the site. Curb cuts and crosswalks are provided at the entry drive and bus lane.</i>			
1.10	ES/MS Sufficient on-site, solid surface parking for faculty and staff is provided		5	5
	HS Sufficient on-site, solid surface parking is provided for faculty, students, staff and community			
	<i>Sufficient on-site, solid surface parking for faculty and staff is provided.</i>			
TOTAL - The School Site			100	93

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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>The building is barrier free externally, but does not have sufficient access for toilet rooms.</i>	15	8
2.2 Roofs appear sound, have positive drainage, and are weather tight <i>The roofs are reported to leak.</i>	15	8
2.3 Foundations are strong and stable with no observable cracks <i>The foundations appear to be stable.</i>	10	9
2.4 Exterior and interior walls have sufficient expansion joints and are free of deterioration <i>The exterior walls have sufficient joints, but the interior does not.</i>	10	5
2.5 Entrances and exits are located so as to permit efficient student traffic flow <i>Traffic flow through the facility is well maintained.</i>	10	8
2.6 Building "envelope" generally provides for energy conservation (see criteria) <i>The building envelop has thermal bridging. Exterior wall temperatures varied 20 degrees near roof line.</i>	10	2
2.7 Structure is free of friable asbestos and toxic materials <i>The building is reported to contain asbestos.</i>	10	2
2.8 Interior walls permit sufficient flexibility for a variety of class sizes <i>The classrooms are within design manual tolerances for grades 1-5.</i>	10	7

Mechanical/Electrical	Points Allocated	Points
2.9 Adequate light sources are well maintained, and properly placed and are not subject to overheating <i>Most areas are maintained and properly placed while other area lighting needs repair or replaced due to being incandescent type. No lighting was noticed as being subject to overheating</i>	15	6
2.10 Internal water supply is adequate with sufficient pressure to meet health and safety requirements <i>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.</i>	15	15
2.11 Each teaching/learning area has adequate convenient wall outlets , phone and computer cabling for technology applications <i>Some up-dating has occurred in Technology for the teaching / learning areas. Still more up-dating is needed regarding outlets, phones and computer cabling.</i>	15	9

2.12	Electrical controls are safely protected with disconnect switches easily accessible	10	6
	<i>The electrical controls noticed are safely protected with disconnect switches or over current protection devices and was easily accessible but, due to the age of the equipment it does not meet the requirements of the OSDM.</i>		
2.13	Drinking fountains are adequate in number and placement, and are properly maintained including provisions for the disabled	10	10
	<i>Electric water coolers do not meet ADA requirements.</i>		
2.14	Number and size of restrooms meet requirements	10	8
	<i>The quantity of restrooms provided is adequate for the population served.</i>		
2.15	Drainage systems are properly maintained and meet requirements	10	10
	<i>The waste piping in the overall facility is cast iron, was installed in 1962. Replace sanitary waste piping in the overall facility due to the age of drainage piping.</i>		
2.16	Fire alarms, smoke detectors, and sprinkler systems are properly maintained and meet requirements	10	2
	<i>No sprinkler system installed. The Fire Alarm system is maintained, but needs replacement and spare capacity per the OSDM requirements</i>		
2.17	Intercommunication system consists of a central unit that allows dependable two-way communication between the office and instructional areas	10	4
	<i>Intercommunication system consists of a central unit via telephones that allow two-way communication between the Office and certain areas but, also needs replacement per the OSDM requirements.</i>		
2.18	Exterior water supply is sufficient and available for normal usage	5	5
	<i>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.</i>		
TOTAL - Structural and Mechanical Features		200	124

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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>The building envelop consists of materials that require minimal care.</i>	15	12
3.2	Floor surfaces throughout the building require minimum care <i>The terrazzo and vinyl tile require minimal care.</i>	15	12
3.3	Ceilings and walls throughout the building, including service areas, are easily cleaned and resistant to stain <i>All classrooms have ceiling tiles with stains. Classroom wall finishes show wear.</i>	10	5
3.4	Built-in equipment is designed and constructed for ease of maintenance <i>Built-in equipment is worn and in poor condition.</i>	10	5
3.5	Finishes and hardware , with compatible keying system, are of durable quality <i>The building is on the district's master keying system, but in fair to poor condition.</i>	10	5
3.6	Restroom fixtures are wall mounted and of quality finish <i>The restroom fixtures are in poor condition.</i>	10	5
3.7	Adequate custodial storage space with water and drain is accessible throughout the building <i>Storage for custodial equipment is sufficient.</i>	10	8
3.8	Adequate electrical outlets and power , to permit routine cleaning, are available in every area <i>Electrical outlets and power for routine cleaning is not available in most areas due to that fact that very few outlets are provided in such areas as classrooms and none in other areas such as small toilet rooms or storage areas.</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 maintained and accessible for repair and / or replacement, but exterior electrical outlets are non-existent in many cases as required by the Ohio School Design Manual.</i>	10	6
TOTAL - Plant Maintainability		100	64

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4.0 Building Safety and Security

School Facility Appraisal

Site Safety	Points Allocated	Points
4.1 Student loading areas are segregated from other vehicular traffic and pedestrian walkways <i>Student loading areas are segregated from other vehicular traffic and pedestrian walkways. A dedicated bus loop is provided with appropriate curb cuts and crosswalks.</i>	15	15
4.2 Walkways , both on and offsite, are available for safety of pedestrians <i>Adequate walkways are provided for pedestrian safety. On site walkways connect to sidewalks on the adjacent street.</i>	10	10
4.3 Access streets have sufficient signals and signs to permit safe entrance to and exit from school area <i>Access streets have sufficient signals and signs to permit safe entrance to and exit from school area.</i>	5	5
4.4 Vehicular entrances and exits permit safe traffic flow <i>Busses and cars share a single access driveway. Traffic flow may be congested during peak hours.</i>	5	2
4.5 ES Playground equipment is free from hazard MS Location and types of intramural equipment are free from hazard HS Athletic field equipment is properly located and is free from hazard <i>Playground equipment is free from hazard.</i>	5	5

Building Safety	Points Allocated	Points
4.6 The heating unit(s) is located away from student occupied areas <i>The heating unit is located away from student occupied areas.</i>	20	20
4.7 Multi-story buildings have at least two stairways for student egress <i>This single story building does not require stairways.</i>	15	15
4.8 Exterior doors open outward and are equipped with panic hardware <i>Exterior doors open outward and are equipped with panic hardware.</i>	10	10
4.9 Emergency lighting is provided throughout the entire building with exit signs on separate electrical circuits <i>Emergency lighting and exit signs are provided throughout the entire building. Exits signs have battery backup but are not on a separate electrical circuit.</i>	10	5
4.10 Classroom doors are recessed and open outward <i>Classroom doors open outward but are not recessed.</i>	10	5
4.11 Building security systems are provided to assure uninterrupted operation of the educational program	10	10

Building security systems are provided to assure uninterrupted operation of the educational program.

4.12	Flooring (including ramps and stairways) is maintained in a non-slip condition <i>Flooring is maintained in a non-slip condition.</i>	5	5
4.13	Stair risers (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16 <i>This single story building does not have stairways.</i>	5	5
4.14	Glass is properly located and protected with wire or safety material to prevent accidental student injury <i>Most glass provided is not safety glass.</i>	5	1
4.15	Fixed Projections in the traffic areas do not extend more than eight inches from the corridor wall <i>Fixed projections extend more than eight inches from the corridor wall.</i>	5	0
4.16	Traffic areas terminate at an exit or a stairway leading to an egress <i>All traffic areas terminate at an exit.</i>	5	5

Emergency Safety	Points Allocated	Points	
4.17	Adequate fire safety equipment is properly located <i>Some fire safety equipment is provided, however it is not adequately distributed throughout the facility.</i>	15	5
4.18	There are at least two independent exits from any point in the building <i>There are at least two independent exits from any point in the building.</i>	15	15
4.19	Fire-resistant materials are used throughout the structure <i>Most materials used in the structure are fire resistant.</i>	15	12
4.20	Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided <i>Automatic and manual emergency alarm system with a distinctive sound is provided. Alarms are not equipped with strobe lights.</i>	15	8
TOTAL - Building Safety and Security		200	158

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5.0 Educational Adequacy

School Facility Appraisal

Academic Learning Space		Points Allocated	Points
5.1	<p>Size of academic learning areas meets desirable standards</p> <p><i>The classrooms are within the design manual tolerances.</i></p>	25	20
5.2	<p>Classroom space permits arrangements for small group activity</p> <p><i>Space allows for small group activity.</i></p>	15	13
5.3	<p>Location of academic learning areas is near related educational activities and away from disruptive noise</p> <p><i>Some classrooms are adjacent to Student Dining and the Gymnasium. Acoustical separation is insufficient.</i></p>	10	4
5.4	<p>Personal space in the classroom away from group instruction allows privacy time for individual students</p> <p><i>The classrooms allow space for individual consultation.</i></p>	10	8
5.5	<p>Storage for student materials is adequate</p> <p><i>Student material storage is an insufficient system of hooks with shelf.</i></p>	10	4
5.6	<p>Storage for teacher materials is adequate</p> <p><i>Teacher material storage is insufficient, with inadequate casework.</i></p>	10	4

Special Learning Space		Points Allocated	Points
5.7	<p>Size of special learning area(s) meets standards</p> <p><i>Classrooms are within design manual tolerances.</i></p>	15	12
5.8	<p>Design of specialized learning area(s) is compatible with instructional need</p> <p><i>Specialized learning areas are adapted from regular classrooms and storage closets.</i></p>	10	5
5.9	<p>Library/Resource/Media Center provides appropriate and attractive space</p> <p><i>The Media Center is centralized to the building with abundant daylight.</i></p>	10	8
5.10	<p>Gymnasium (or covered P.E. area) adequately serves physical education instruction</p> <p><i>The Gymnasium is undersized by 1500 square feet and not well equipped.</i></p>	5	2
5.11	<p>ES Pre-kindergarten and kindergarten space is appropriate for age of students and nature of instruction</p> <p>MS/HS Science program is provided sufficient space and equipment</p> <p><i>Kindergarten rooms are adapted from standard classrooms and below design manual standards.</i></p>	10	5

5.12	Music Program is provided adequate sound treated space <i>The Music room is an adapted classroom without acoustical treatments.</i>	5	2
5.13	Space for art is appropriate for special instruction, supplies, and equipment <i>Art is not provided in a specific room. Art storage is insufficient.</i>	5	0

School Facility Appraisal

		Points Allocated	Points
5.14	Space for technology education permits use of state-of-the-art equipment <i>Space for technology education permits use of state-of-the-art equipment.</i>	5	4
5.15	Space for small groups and remedial instruction is provided adjacent to classrooms <i>Remedial instruction occurs within corridors and storage closets.</i>	5	3
5.16	Storage for student and teacher material is adequate <i>Material storage is inadequate.</i>	5	2

Support Space

		Points Allocated	Points
5.17	Teacher's lounge and work areas reflect teachers as professionals <i>The lounge reflects the teachers as professionals, but work areas lack sufficient storage of materials.</i>	10	5
5.18	Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage, and food preparation <i>The cafeteria is sufficient in size, but the decor is dated.</i>	10	5
5.19	Administrative offices provided are consistent in appearance and function with the maturity of the students served <i>Administrative offices are inconsistent in appearance and dated.</i>	5	3
5.20	Counselor's office insures privacy and sufficient storage <i>Counselor's office insures privacy and sufficient storage.</i>	5	4
5.21	Clinic is near administrative offices and is equipped to meet requirements <i>The clinic is within the administrative suite, but is not well equipped.</i>	5	2
5.22	Suitable reception space is available for students, teachers, and visitors <i>The reception space is marginal.</i>	5	3
5.23	Administrative personnel are provided sufficient work space and privacy <i>Administration areas do not have sufficient privacy.</i>	5	3

TOTAL - Educational Adequacy

200

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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 reflects contemporary 1960s design aesthetics. The building is enhanced by decorative artwork.</i>	15	10
6.2	Site and building are well landscaped <i>The site is well landscaped.</i>	10	9
6.3	Exterior noise and poor environment do not disrupt learning <i>Exterior noise does not disrupt learning.</i>	10	9
6.4	Entrances and walkways are sheltered from sun and inclement weather <i>Entrances are covered from the weather. The front entry walk has a large canopy to protect the students from the elements, and the walkways are not covered.</i>	10	8
6.5	Building materials provide attractive color and texture <i>Building materials are attractive masonry in color and texture.</i>	5	5
Interior Environment		Points Allocated	Points
6.6	Color schemes, building materials, and decor provide an impetus to learning <i>Interior colors are dated, but not unpleasant.</i>	20	14
6.7	Year around comfortable temperature and humidity are provided throughout the building <i>Year around comfortable temperature and humidity are not provided throughout the building. There is no air conditioning.</i>	15	7
6.8	Ventilating system provides adequate quiet circulation of clean air and meets 15cfm VBC requirement <i>The building does not meet air exchange requirements.</i>	15	5
6.9	Lighting system provides proper intensity, diffusion, and distribution of illumination <i>Lighting is inadequate.</i>	15	13
6.10	Drinking fountains and restroom facilities are conveniently located <i>Drinking fountains and restroom facilities are conveniently located</i>	15	12
6.11	Communication among students is enhanced by commons area(s) for socialization <i>Some common areas are available for socialization</i>	10	9
6.12	Traffic flow is aided by appropriate foyers and corridors	10	7

Traffic flow adequate, though wayfinding is through common use rooms.

6.13	Areas for students to interact are suitable to the age group <i>Student interaction happens at appropriate locations.</i>	10	8
6.14	Large group areas are designed for effective management of students <i>The Gymnasium and Student Dining are effective for student management.</i>	10	8
6.15	Acoustical treatment of ceilings, walls, and floors provides effective sound control <i>Acoustical treatment is ineffecient. Sound mitigation was noted.</i>	10	4
6.16	Window design contributes to a pleasant environment <i>All classrooms have abundant daylight.</i>	10	9
6.17	Furniture and equipment provide a pleasing atmosphere <i>Furniture and equipment provide a pleasing atmosphere. Furniture is mismatched, but well maintained.</i>	10	7
<hr/> TOTAL - Environment for Education		200	144

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LEED Observation Notes

School District: Willoughby-Eastlake City SD
County: Lake
School District IRN: 45104
Building: Edison Elem
Building IRN: 9985

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)

Construction activity pollution prevention can be successfully managed on this site. The site is not known to contain hazardous materials. The building is known to contain hazardous materials. The site is not prime agricultural farmland, is not within a flood plain, is not a habitat for an endangered species, is not within or near a wetland, and is not near a previously undeveloped body of water. The site is not within a community having a density of more than 60,000 square feet per acre. The site is not located on a previously developed site within 1/2 mile of a residential area with density of more than 10 units per acre. The site is not located within 1/2 mile of 10 basic services. The site does not have pedestrian access between the school and basic services. The site is not a brownfield. The site is not located within 1/4 mile of a bus stop or 1/2 mile of a rail station. School busses have a dedicated lane on site. The site has sufficient bicycle storage but lacks changing facilities. The site does not have dedicated parking facilities for fuel efficient or low emitting vehicles. The site exceeds current OSDM parking requirements. The site has sufficient area to restore 50% to a natural state. The site has more than 20% vegetative space. Portions of the site are naturally drained. The hard surfaces of the site do not meet the high albedo reflectance requirement to mitigate the heat island effect. The roof material meets the high albedo reflectance requirement to mitigate the heat island effect. Minor light pollution is created from parking lot fixtures. The site has sufficient area to create a master plan with stormwater management, open space, parking capacity and heat island non-roof. The property is used by the community during or after hours.

characters remaining in Sustainable Sites.

Water Efficiency

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

(source: LEED Reference Guide, 2001:65)

The building plumbing fixtures are not water conserving models. A baseline water consumption report is required for water efficiency LEED credits. The site does not irrigate. Recommendations in items E, Q and R enhance water use reduction targets.

characters remaining in Water Efficiency.

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)

An energy audit or fundamental commissioning of the system is required for a baseline for any energy optimization measures. The system does not appear to contain equipment with CFCs or HCFCs. The building does not comply with current ASHRAE envelop standards. Thermal bridging is present. The system does not comply with current energy consumption requirements. Renewable energy appliances are not present on the site. The property does have sufficient area for wind turbines. The building does have sufficient roof area for solar panels. The building does not have a measurement and verification plan in place. The building does not purchase green power.

characters remaining in Energy & Atmosphere.

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)

The building does have an area for the collection of recyclables, not including yard waste. The building shell is viable for renovation. The interior partitions are viable for renovation. The classrooms are within OSDM tolerances. No comments relating to recycled content, regional products, rapidly renewable materials, or certified wood are included.

characters remaining in Material & Resources.

Indoor Environmental Quality

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

(source: LEED Reference Guide, 2001:215)

The building does not meet the ASHRAE standards for indoor air quality. Smoking is not permitted on site. The building has does not have adequate acoustical separation of spaces. Outdoor air monitoring is not provided. Fresh air intake is through operable windows. The building ventilation is inadequate. Refer to items A and C for additional information. Indoor chemical and pollution is not controlled. Individual controls for thermal comfort and lighting levels are not provided. The building does not meet ASHRAE standards for thermal comfort levels. The building does not have a thermal comfort verification plan in place. The building does have sufficient daylight, but was not measured to verify the 35 foot candle LEED requirement classrooms and other occupied spaces.

characters remaining in Indoor Environmental Quality.

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)

The school is within the region CGB271 Urban-Rural which capitalizes on credits pertaining to site storm water management quality and quantity, wastewater innovation, renewable energy, construction waste management, and rapidly renewable materials.

characters remaining in Innovation & Design Process.

Justification for Allocation of Points

Building Name and Level: **Edison Elem**

K-5

Building features that clearly exceed criteria:

1. The building utilizes borrowed light windows to bring daylight into the corridors.
2. The site has an outdoor learning area with benches.
3. The site has pleasant landscaping with whimsical art features at the main entry.
4. The site is in a quiet residential neighborhood with abundant trees on the property.
5. The building has two courtyards for additional outdoor learning.
6. The main entry is very welcoming and secure.

Building features that are non-existent or very inadequate:

1. The building is reported to contain asbestos tiles.
2. The building envelop has thermal bridging.
3. The main classroom corridors are not directly connected. Transition between wings is through Student Dining, Gymnasium, Media Center, or Office.
4. The building is not air conditioned.
5. The Gymnasium is undersized by 1500 square feet and acoustically insufficient.
6. The overall facility is acoustically insufficient.

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Environmental Hazards Assessment Cost Estimates

Owner:	Willoughby-Eastlake City SD
Facility:	Edison Elem
Date of Initial Assessment:	Mar 16, 2010
Date of Assessment Update:	Jun 23, 2010
Cost Set:	2010

District IRN:	45104
Building IRN:	9985
Firm:	The Collaborative, Inc.

Scope remains unchanged after cost updates.

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates	
		Renovation	Demolition
1962 1962 Original	44,771	\$114,005.00	\$12,785.00
Total	44,771	\$114,005.00	\$12,785.00
Total with Regional Cost Factor (104.16%)	<	\$118,747.61	\$13,316.86
Regional Total with Soft Costs & Contingency	<	\$147,758.00	\$16,570.20

Building Summary - Edison Elem (9985)

District: Willoughby-Eastlake City SD				County: Lake		Area: Northeastern Ohio (8)	
Name: Edison Elem				Contact: Mr. Brian Patrick			
Address: 5288 Karen Isle Dr Willoughby, OH 44094				Phone: 440/954-3555			
Bldg. IRN: 9985				Date Prepared: 2010-03-16		By: Karen L Walker	
				Date Revised: 2010-06-23		By: Karen L Walker	
Current Grades		K-5	Acreage:		17.88		
Proposed Grades		N/A	Teaching Stations:		29		
Current Enrollment		636	Classrooms:		24		
Projected Enrollment		N/A					
Addition		Date	HA	Number of Floors	Current Square Feet		
1962 Original		1962	no	1	44,771		
Total				44,771			
*HA		=	Handicapped Access				
*Rating		=1	Satisfactory				
		=2	Needs Repair				
		=3	Needs Replacement				
*Const P/S		=	Present/Scheduled Construction				
FACILITY ASSESSMENT Cost Set: 2010				Rating	Dollar Assessment		
A. Heating System				3	\$1,455,057.50		
B. Roofing				3	\$623,364.02		
C. Ventilation / Air Conditioning				1	\$5,000.00		
D. Electrical Systems				3	\$775,433.72		
E. Plumbing and Fixtures				3	\$631,997.00		
F. Windows				3	\$379,480.68		
G. Structure: Foundation				1	\$500.00		
H. Structure: Walls and Chimneys				2	\$72,765.00		
I. Structure: Floors and Roofs				1	\$0.00		
J. General Finishes				3	\$759,850.80		
K. Interior Lighting				3	\$223,855.00		
L. Security Systems				3	\$123,120.25		
M. Emergency/Egress Lighting				3	\$44,771.00		
N. Fire Alarm				3	\$67,156.50		
O. Handicapped Access				2	\$73,542.10		
P. Site Condition				2	\$205,102.60		
Q. Sewage System				3	\$22,500.00		
R. Water Supply				3	\$60,000.00		
S. Exterior Doors				3	\$38,000.00		
T. Hazardous Material				3	\$114,005.00		
U. Life Safety				3	\$151,415.75		
V. Loose Furnishings				2	\$89,542.00		
W. Technology				3	\$478,154.28		
X. Construction Contingency / Non-Construction Cost				-	\$1,562,223.19		
Total					\$7,956,836.39		
CEFPI Appraisal Summary							
Section		Points Possible	Points Earned	Percentage	Rating	Category	
<u>Cover Sheet</u>							
1.0 The School Site		100	93	93%	Excellent		
2.0 Structural and Mechanical Features		200	124	62%	Borderline		
3.0 Plant Maintainability		100	64	64%	Borderline		
4.0 Building Safety and Security		200	158	79%	Satisfactory		
5.0 Educational Adequacy		200	121	61%	Borderline		
6.0 Environment for Education		200	144	72%	Satisfactory		
<u>LEED Observations</u>							
<u>Commentary</u>							
Total		1000	704	70%	Satisfactory		
Enhanced Environmental Hazards Assessment Cost Estimates							
C=Under Contract							
Renovation Cost Factor				104.16%			
Cost to Renovate (Cost Factor applied)				\$8,287,840.78			
<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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Environmental Hazards - Willoughby-Eastlake City SD (45104) - Edison Elem (9985) - 1962 Original

Owner: Willoughby-Eastlake City SD
Facility: Edison Elem
Date:

Bldg. IRN: 9985
BuildingAdd: 1962 Original
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	Reported Asbestos-Containing Material	800	\$10.00	\$8,000.00
6. Pipe Fitting Insulation Removal	Reported Asbestos-Containing Material	100	\$20.00	\$2,000.00
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$12.00	\$0.00
8. Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$30.00	\$0.00
9. Pipe Insulation Removal (Hidden in Walls/Ceilings)	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	\$15.00	\$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	Assumed Asbestos-Containing Material	557	\$5.00	\$2,785.00
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	Reported Asbestos-Containing Material	33740	\$3.00	\$101,220.00
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			\$114,005.00
36. (Sum of Lines 1-27)	Total Asb. Hazard Abatement Cost for Demolition Work			\$12,785.00

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. 44771	0	\$0.10	\$0.00

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	\$114,005.00
2. A36, B1, D1, and E2	Total Cost for Env. Hazards Work - Demolition	\$12,785.00

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

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

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