

**Building Information - Tipp City Exempted Village (45617) - Broadway Elementary**

Program Type	Classroom Facilities Assistance Program (CFAP) - Regular
Setting	Small City
Assessment Name	Broadway Elementary with EEA & 2015 Costs
Assessment Date (on-site; non-EEA)	2015-03-31
Kitchen Type	Full Kitchen
Cost Set:	2015
Building Name	Broadway Elementary
Building IRN	3707
Building Address	223 West Broadway
Building City	Tipp City
Building Zipcode	45371
Building Phone	937-667-6216
Acreage	5.50
Current Grades:	2-3
Teaching Stations	33
Number of Floors	2
Student Capacity	451
Current Enrollment	375
Enrollment Date	2015-02-04
Enrollment Date is the date in which the current enrollment was taken.	
Number of Classrooms	29
Historical Register	<b>NO</b>
Building's Principal	Mr. Galen Gingerich
Building Type	Elementary

[Next Page](#)

North elevation photo:



East elevation photo:



South elevation photo:



West elevation photo:



**GENERAL DESCRIPTION**

**72,039** Total Existing Square Footage  
**1951,1967** Building Dates  
**2-3** Grades  
**375** Current Enrollment  
**33** Teaching Stations  
**5.50** Site Acreage

Broadway Elementary, which is not on the National Register of Historic Buildings, and originally constructed in 1951, is a two-story, 72,039 square foot brick school building located in a small town residential setting. One addition has been added to the building since its 1951 Original Construction. The 1967 Addition consists of 24,119 square feet of the overall square footage and is a two-story, brick extension of the 1951 Original Construction. The existing facility features a conventionally partitioned design and does not utilize modular buildings. The structure of the overall facility contains multi-wythe type exterior wall construction, consisting of brick and concrete masonry units with no air space or wall cavity insulation. Interior wall construction consists of concrete masonry units, glazed block, or masonry framed partitions with plaster. The floor system of the main level and second floor consists of poured-in-place concrete. The roof structure is open web steel joists and metal deck. The roofing system of the overall facility is a built-up asphalt roof membrane, installed in 1992-1993. The ventilation system of the building is inadequate 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 a separate Student Dining area with 1,500 SF, Primary Gymnasium with 10,300 SF, and Auxiliary Gymnasium with 2,900 SF. The electrical system for the facility is inadequate. The facility is equipped with a non-compliant security system. The building has a non-compliant manual 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 an approximately 5.5 acre site shared with the Tipp City (TC) Enrichment Program Building and adjacent to residential properties. The playground area of Broadway Elementary School is fenced for security and also services the Tipp City Enrichment Program Building. Another small fenced exterior area is located on the south elevation of the facility, which contains outdoor seating and greenery. Access onto the site is unrestricted. Site circulation is poor. There is no dedicated space for school buses to load and unload on the site. Parking for staff, visitors, and community events is inadequate. Broadway Elementary School is connected to the Tippecanoe Central (TC) Enrichment Program Building, which is being used for Pre-K classes and student enrichment programs.

There is a structural issue along the north side exterior wall and south side exterior wall of the academic wing of the 1951 Original Construction. The walls are connected to each other via steel bracing to secure in place.

[Previous Page](#)

[Next Page](#)

**Building Construction Information - Tipp City Exempted Village (45617) - Broadway Elementary (3707)**

<b>Name</b>	<b>Year</b>	<b>Handicapped Access</b>	<b>Floors</b>	<b>Square Feet</b>	<b>Non OSDM Addition</b>
Original Construction	1951	no	2	47,920	no
Addition	1967	no	2	24,119	no

[Previous Page](#)

[Next Page](#)

**Building Component Information - Tipp City Exempted Village (45617) - Broadway Elementary (3707)**

Addition	Auditorium Fixed Seating	Corridors	Agricultural Education Lab	Primary Gymnasium	Media Center	Vocational Space	Student Dining	Kitchen	Natatorium	Indoor Tracks	Adult Education	Board Offices	Outside Agencies	Auxiliary Gymnasium
Original Construction (1951)		6875		10300			1500	800						
Addition (1967)		4000			2300									2900
Total	0	10,875	0	10,300	2,300	0	1,500	800	0	0	0	0	0	2,900

**Master Planning Considerations**

The Primary Gymnasium space contains a fixed seating area of approximately 500 seats (approximately 3,100 sf). The site is bounded on all sides by city streets. Therefore, future additions to the facility would have to occur within the existing footprint of the site. Based on current OSDM guidelines, the site, which houses two school buildings, is undersized by approximately 8.5 acres for Broadway Elementary School alone. Room for expansion is available to the east and west, but this will only further constrict an already undersized site. There is approximately 8,000 sf available to the east of the Gymnasium area for a single-story expansion and 16,000 sf for a two-story expansion. By expanding to the west, playground space will be sacrificed. Based on the student capacity of the facility, which is approximately 450 Students, and the current OSDM guidelines for playground design, the maximum size recommendation for the playground area is 33,750 sf. Currently, the playground contains approximately 83,500 sf. There is approximately 35,000 sf of space available to the west/northwest of the existing facility for a single-story expansion and 70,000 sf of space for a two-story expansion. These square footage estimates do not take into full account potential constraints due to local jurisdiction, easements, and/or right of way. Estimates are based on site size, existing setbacks of the facility, and general available square footage.

[Previous Page](#)

[Next Page](#)

# Existing CT Programs for Assessment

[Next Page](#)

[Previous Page](#)

Program Type	Program Name	Related Space	Square Feet
No Records Found			

## Legend:

Not in current design manual

In current design manual but missing from assessment

Building Summary - Broadway Elementary (3707)

<b>District:</b> Tipp City Exempted Village				<b>County:</b> Miami		<b>Area:</b> West Central Ohio (2)					
<b>Name:</b> Broadway Elementary				<b>Contact:</b> Mr. Galen Gingerich							
<b>Address:</b> 223 West Broadway Tipp City, OH 45371				<b>Phone:</b> 937-667-6216							
<b>Bldg. IRN:</b> 3707				<b>Date Prepared:</b> 2015-03-31		<b>By:</b> Paul W. Garland					
				<b>Date Revised:</b> 2015-03-31		<b>By:</b> Paul Brown					
Current Grades	2-3	Acreage:	5.50	<b>CEFPI Appraisal Summary</b>							
Proposed Grades	N/A	Teaching Stations:	33								
Current Enrollment	375	Classrooms:	29								
Projected Enrollment	N/A										
Addition	Date	HA	Number of Floors	Current Square Feet	<b>Section</b>	<b>Points Possible</b>	<b>Points Earned</b>	<b>Percentage</b>	<b>Rating</b>	<b>Category</b>	
<u>Original Construction</u>	1951	no	2	47,920	1.0 <u>The School Site</u>	100	41	41%		Poor	
<u>Addition</u>	1967	no	2	24,119	2.0 <u>Structural and Mechanical Features</u>	200	70	35%		Poor	
<b>Total</b>				<b>72,039</b>	3.0 <u>Plant Maintainability</u>	100	54	54%		Borderline	
					4.0 <u>Building Safety and Security</u>	200	144	72%		Satisfactory	
					5.0 <u>Educational Adequacy</u>	200	110	55%		Borderline	
					6.0 <u>Environment for Education</u>	200	102	51%		Borderline	
					<u>LEED Observations</u>	—	—	—		—	
					<u>Commentary</u>	—	—	—		—	
					<b>Total</b>	<b>1000</b>	<b>521</b>	<b>52%</b>		<b>Borderline</b>	
*HA = Handicapped Access											
*Rating =1 Satisfactory											
=2 Needs Repair											
=3 Needs Replacement											
*Const P/S = Present/Scheduled Construction											
<b>FACILITY ASSESSMENT</b>				<b>Enhanced Environmental Hazards Assessment Cost Estimates</b>							
Cost Set: 2015											
				Rating	Dollar Assessment						
A.	<u>Heating System</u>			3	\$2,457,970.68			C=Under Contract			
B.	<u>Roofing</u>			3	\$1,400,999.60						
C.	<u>Ventilation / Air Conditioning</u>			1	\$0.00			Renovation Cost Factor			
D.	<u>Electrical Systems</u>			3	\$1,169,192.97			Cost to Renovate (Cost Factor applied)			
E.	<u>Plumbing and Fixtures</u>			3	\$856,148.00						
F.	<u>Windows</u>			3	\$492,257.50			The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.			
G.	<u>Structure: Foundation</u>			2	\$1,181.25						
H.	<u>Structure: Walls and Chimneys</u>			3	\$686,617.00						
I.	<u>Structure: Floors and Roofs</u>			1	\$0.00						
J.	<u>General Finishes</u>			3	\$2,098,920.40						
K.	<u>Interior Lighting</u>			3	\$360,195.00						
L.	<u>Security Systems</u>			3	\$205,311.15						
M.	<u>Emergency/Egress Lighting</u>			3	\$72,039.00						
N.	<u>Fire Alarm</u>			3	\$108,058.50						
O.	<u>Handicapped Access</u>			3	\$900,087.80						
P.	<u>Site Condition</u>			3	\$709,128.50						
Q.	<u>Sewage System</u>			2	\$4,500.00						
R.	<u>Water Supply</u>			1	\$0.00						
S.	<u>Exterior Doors</u>			3	\$70,000.00						
T.	<u>Hazardous Material</u>			3	\$329,783.90						
U.	<u>Life Safety</u>			3	\$292,746.80						
V.	<u>Loose Furnishings</u>			3	\$288,156.00						
W.	<u>Technology</u>			3	\$733,357.02						
X.	<u>Construction Contingency / Non-Construction Cost</u>			1	\$3,233,753.57						
<b>Total</b>					<b>\$16,470,404.64</b>						

[Previous Page](#)

Original Construction (1951) Summary

<b>District:</b> Tipp City Exempted Village				<b>County:</b> Miami		<b>Area:</b> West Central Ohio (2)	
<b>Name:</b> Broadway Elementary				<b>Contact:</b> Mr. Galen Gingerich			
<b>Address:</b> 223 West Broadway Tipp City, OH 45371				<b>Phone:</b> 937-667-6216			
<b>Bldg. IRN:</b> 3707				<b>Date Prepared:</b> 2015-03-31		<b>By:</b> Paul W. Garland	
				<b>Date Revised:</b> 2015-03-31		<b>By:</b> Paul Brown	
Current Grades		2-3	Acreage:		5.50		
Proposed Grades		N/A	Teaching Stations:		33		
Current Enrollment		375	Classrooms:		29		
Projected Enrollment		N/A					
<b>Addition</b>		<b>Date</b>	<b>HA</b>	<b>Number of Floors</b>	<b>Current Square Feet</b>		
<b>Original Construction</b>		1951	no	2	47,920		
<b>Addition</b>		1967	no	2	24,119		
<b>Total</b>					72,039		
		*HA	=	Handicapped Access			
		*Rating	=	1 Satisfactory			
			=	2 Needs Repair			
			=	3 Needs Replacement			
		*Const P/S	=	Present/Scheduled Construction			
<b>CEFPI Appraisal Summary</b>							
		<b>Section</b>		<b>Points Possible</b>	<b>Points Earned</b>	<b>Percentage</b>	<b>Rating Category</b>
		<u>Cover Sheet</u>		—	—	—	—
		1.0 <u>The School Site</u>		100	41	41%	Poor
		2.0 <u>Structural and Mechanical Features</u>		200	70	35%	Poor
		3.0 <u>Plant Maintainability</u>		100	54	54%	Borderline
		4.0 <u>Building Safety and Security</u>		200	144	72%	Satisfactory
		5.0 <u>Educational Adequacy</u>		200	110	55%	Borderline
		6.0 <u>Environment for Education</u>		200	102	51%	Borderline
		<u>LEED Observations</u>		—	—	—	—
		<u>Commentary</u>		—	—	—	—
		<b>Total</b>		1000	521	52%	Borderline
<b>Enhanced Environmental Hazards Assessment Cost Estimates</b>							
<b>FACILITY ASSESSMENT</b>				<b>Rating</b>	<b>Dollar</b>		
Cost Set: 2015					Assessment	C	
A.	<u>Heating System</u>			3	\$1,635,030.40	C=Under Contract	
B.	<u>Roofing</u>			3	\$946,600.00		
C.	<u>Ventilation / Air Conditioning</u>			1	\$0.00	Renovation Cost Factor	
D.	<u>Electrical Systems</u>			3	\$777,741.60	Cost to Renovate (Cost Factor applied)	
E.	<u>Plumbing and Fixtures</u>			3	\$567,215.00	\$11,598,360.43	
F.	<u>Windows</u>			3	\$425,265.00	The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.	
G.	<u>Structure: Foundation</u>			2	\$0.00		
H.	<u>Structure: Walls and Chimneys</u>			3	\$649,060.50		
I.	<u>Structure: Floors and Roofs</u>			1	\$0.00		
J.	<u>General Finishes</u>			3	\$1,568,501.00		
K.	<u>Interior Lighting</u>			3	\$239,600.00		
L.	<u>Security Systems</u>			3	\$136,572.00		
M.	<u>Emergency/Egress Lighting</u>			3	\$47,920.00		
N.	<u>Fire Alarm</u>			3	\$71,880.00		
O.	<u>Handicapped Access</u>			3	\$590,124.00		
P.	<u>Site Condition</u>			3	\$481,908.80		
Q.	<u>Sewage System</u>			2	\$4,500.00		
R.	<u>Water Supply</u>			1	\$0.00		
S.	<u>Exterior Doors</u>			3	\$46,000.00		
T.	<u>Hazardous Material</u>			3	\$257,252.00		
U.	<u>Life Safety</u>			3	\$203,024.00		
V.	<u>Loose Furnishings</u>			3	\$191,680.00		
W.	<u>Technology</u>			3	\$487,825.60		
X.	<u>Construction Contingency / Non-Construction Cost</u>			1	\$2,278,785.07		
<b>Total</b>					\$11,606,484.97		



Addition (1967) Summary

<b>District:</b> Tipp City Exempted Village				<b>County:</b> Miami		<b>Area:</b> West Central Ohio (2)				
<b>Name:</b> Broadway Elementary				<b>Contact:</b> Mr. Galen Gingerich						
<b>Address:</b> 223 West Broadway Tipp City, OH 45371				<b>Phone:</b> 937-667-6216						
<b>Bldg. IRN:</b> 3707				<b>Date Prepared:</b> 2015-03-31		<b>By:</b> Paul W. Garland				
				<b>Date Revised:</b> 2015-03-31		<b>By:</b> Paul Brown				
Current Grades	2-3	Acreage:	5.50	<b>CEFPI Appraisal Summary</b>						
Proposed Grades	N/A	Teaching Stations:	33							
Current Enrollment	375	Classrooms:	29							
Projected Enrollment	N/A									
<b>Addition</b>	<b>Date</b>	<b>HA</b>	<b>Number of Floors</b>	<b>Current Square Feet</b>	<b>Section</b>	<b>Points Possible</b>	<b>Points Earned</b>	<b>Percentage</b>	<b>Rating</b>	<b>Category</b>
<u>Original Construction</u>	1951	no	2	47,920	1.0 <u>The School Site</u>	100	41	41%		Poor
<u>Addition</u>	1967	no	2	24,119	2.0 <u>Structural and Mechanical Features</u>	200	70	35%		Poor
<b>Total</b>				<b>72,039</b>	3.0 <u>Plant Maintainability</u>	100	54	54%		Borderline
					4.0 <u>Building Safety and Security</u>	200	144	72%		Satisfactory
					5.0 <u>Educational Adequacy</u>	200	110	55%		Borderline
					6.0 <u>Environment for Education</u>	200	102	51%		Borderline
					<u>LEED Observations</u>	—	—	—		—
					<u>Commentary</u>	—	—	—		—
					<b>Total</b>	<b>1000</b>	<b>521</b>	<b>52%</b>		<b>Borderline</b>
				<b>Enhanced Environmental Hazards Assessment Cost Estimates</b>						
<b>FACILITY ASSESSMENT</b>				<b>Rating</b>	<b>Dollar</b>					
Cost Set: 2015					Assessment					
A.	<u>Heating System</u>			3	\$822,940.28	C=Under Contract				
B.	<u>Roofing</u>			3	\$454,399.60					
C.	<u>Ventilation / Air Conditioning</u>			1	\$0.00	Renovation Cost Factor				
D.	<u>Electrical Systems</u>			3	\$391,451.37	Cost to Renovate (Cost Factor applied)				
E.	<u>Plumbing and Fixtures</u>			3	\$288,933.00					
F.	<u>Windows</u>			3	\$66,992.50	The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.				
G.	<u>Structure: Foundation</u>			2	\$1,181.25					
H.	<u>Structure: Walls and Chimneys</u>			3	\$37,556.50					
I.	<u>Structure: Floors and Roofs</u>			1	\$0.00					
J.	<u>General Finishes</u>			3	\$530,419.40					
K.	<u>Interior Lighting</u>			3	\$120,595.00					
L.	<u>Security Systems</u>			3	\$68,739.15					
M.	<u>Emergency/Egress Lighting</u>			3	\$24,119.00					
N.	<u>Fire Alarm</u>			3	\$36,178.50					
O.	<u>Handicapped Access</u>			3	\$309,963.80					
P.	<u>Site Condition</u>			3	\$227,219.70					
Q.	<u>Sewage System</u>			2	\$0.00					
R.	<u>Water Supply</u>			1	\$0.00					
S.	<u>Exterior Doors</u>			3	\$24,000.00					
T.	<u>Hazardous Material</u>			3	\$72,531.90					
U.	<u>Life Safety</u>			3	\$89,722.80					
V.	<u>Loose Furnishings</u>			3	\$96,476.00					
W.	<u>Technology</u>			3	\$245,531.42					
X.	<u>Construction Contingency / Non-Construction Cost</u>			1	\$954,968.50					
<b>Total</b>					<b>\$4,863,919.67</b>					

A. Heating System

**Description:** The existing system for the overall facility is a gas fired steam boiler, installed in 1951 and 1995, and is in fair condition. The boiler plant, which services Broadway Elementary School, is located in a separate Maintenance Building behind the school, and tunnels related to this system are located beneath the shared parking lot between Broadway Elementary School and the Tipp City (TC) Enrichment Program Building. The Maintenance Building structure was not assessed during the Physical Assessment. 2-pipe vs. 4-pipe designations are not applicable in this facility, as no central air conditioning is provided. The two gas-fired steam boilers, manufactured by Weil McLain, were installed in 1995 and are in fair condition, and one gas fired boiler (used only as backup), manufactured by Kewanee, was installed in 1951 and is in poor condition. Steam is distributed to terminal units consisting of unit ventilators, cabinet heaters, unit heaters and fin tubes. The terminal equipment was installed in 1951 and 1967 and is in 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 pneumatic type system temperature controls were installed in 1951 and 1967 and are in fair 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 equipped with a moderate quantity of louvered interior doors to facilitate Corridor utilization as return air plenums. (Louvered doors are replaced in Item J - General Finishes and Item O - Handicapped Access, if applicable.) 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 in safe but inefficient working order, and long term life expectancy of the existing system is not anticipated. The structure is not equipped with central air conditioning. The site does not contain underground fuel tanks.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide new overall heating, ventilating, and air conditioning system to achieve compliance with Ohio Building Code and Ohio School Design Manual standards. Convert to a ducted system to facilitate efficient exchange of conditioned air. Provide new DDC type temperature controls to meet Ohio Building Code and Ohio School Design Manual standards. Provide architectural soffits to accommodate the installation of ductwork. Refer to Item T - Hazardous Material, for information regarding the abatement of boiler system hazardous materials in the Maintenance Building.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,920 ft <sup>2</sup>	Addition (1967) 24,119 ft <sup>2</sup>	Sum	Comments
HVAC System Replacement:	\$26.12	sq.ft.		Required	Required	\$1,881,658.68	(includes demo of existing system and reconfiguration of piping layout and new controls, air conditioning)
Convert To Ducted System	\$8.00	sq.ft.		Required	Required	\$576,312.00	(includes costs for vert. & horz. chases, cut openings, soffits, etc. Must be used in addition to HVAC System Replacement if the existing HVAC system is non-ducted)
<b>Sum:</b>			<b>\$2,457,970.68</b>	<b>\$1,635,030.40</b>	<b>\$822,940.28</b>		



Existing Steam Boilers



Typical Unit Ventilator

[Back to Assessment Summary](#)

B. Roofing

**Description:** The roofing system of the overall facility is a built-up asphalt roof membrane, was replaced from 1992-1993, and is in poor condition. There are District reports of current leaking. Signs of past leaking were observed during the physical assessment. Access to the roof was gained by an access door in poor condition. Fall safety protection cages are not required, and are not provided. There were no observations of standing water on the roof. Metal cap flashings with built-up asphalt roof membrane adhered up and over the metal cap flashings are in poor condition. Roof storm drainage is addressed through a system of roof drains, which are improperly located, and in good condition. The roof is not equipped with overflow roof drains, though they are needed on this building. All roof penetrations are in poor condition and should be replaced.

**Rating:** 3 Needs Replacement

**Recommendations:** The roofing system over the overall facility requires replacement to meet Ohio School Design Manual guidelines for age of system and due to condition. Remove all existing roof insulation. Provide a minimum of 4" new polyiso rigid roof insulation over the overall facility. The flashings and copings for the overall facility require replacement due to condition. Due to existing conditions, additional roof drains are required as well as emergency overflow drains. Replace the existing roof access door. Costs associated with this replacement will be included in the scope for exterior door replacement in Item S - Exterior Doors. Provide new roof access ladders. Remove all existing roof membrane, insulation, metal copings, and metal soffit systems at the small one-story appendage to the 1951 Original Construction. Replace with a new roofing system, minimum 4" new polyiso roof insulation, metal soffit, and metal copings. Remove all existing roof membrane, insulation, metal copings, and metal soffit systems at the roof overhang at the rear entry of the 1967 Addition. Replace with a new roofing system, minimum 4" new polyiso roof insulation, metal soffit, and metal copings. Due to the deteriorating concrete overhang, provide wood blocking to secure new metal copings and transitions.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,920 ft²	Addition (1967) 24,119 ft²	Sum	Comments
Built-up Asphalt:	\$13.20	sq.ft. (Qty)		47,920 Required	24,119 Required	\$950,914.80	
Repair/replace cap flashing and coping:	\$18.40	ln.ft.		1,055 Required	570 Required	\$29,900.00	
Remove/replace existing roof Drains and Sump:	\$1,200.00	each		12 Required	4 Required	\$19,200.00	
Overflow Roof Drains and Piping:	\$2,500.00	each		17 Required	6 Required	\$57,500.00	
Roof Insulation:	\$3.20	sq.ft. (Qty)		47,920 Required	24,119 Required	\$230,524.80	(non-tapered insulation for use in areas without drainage problems)
Roof Insulation:	\$4.70	sq.ft. (Qty)		10,000 Required	4,800 Required	\$69,560.00	(tapered insulation for limited area use to correct ponding)
Roof Access, Ladder & Fall Protection Cage:	\$3,850.00	each		2 Required		\$7,700.00	(provide when no roof access currently exists)
<b>Other:</b> Add New Roof Drains	\$3,000.00	each		5 Required	2 Required	\$21,000.00	Install additional new roof drains and piping.
<b>Other:</b> Repair Concrete Overhang	\$3,000.00	lump sum		Required		\$3,000.00	Repair the concrete overhang at the North Entrance in the 1951 Original Construction.
<b>Other:</b> Replace Flashing and Counterflashing	\$30.00	ln.ft.		390 Required		\$11,700.00	Remove and replace all through wall flashing and counterflashing at roof/vertical wall transition points.
<b>Sum:</b>			\$1,400,999.60	\$946,600.00	\$454,399.60		



1951 Original Construction Roof



Typical Roof Drain

[Back to Assessment Summary](#)

C. Ventilation / Air Conditioning

**Description:** The overall facility is not equipped with a central air conditioning system. Window units are provided in the Office, Library, and Clinic locations. A mobile air conditioning unit is provided in the Technology Room. The ventilation system in the overall facility consists of unit ventilators, installed in 1951 and 1967 and in fair condition, providing fresh air to Classrooms, and air handlers, installed in 1951 and 1967 and in fair condition, providing fresh air to other miscellaneous spaces such as Gymnasiums, the Student Dining area, and Media Center spaces. Relief air venting is provided by ceiling plenums exhausted by roof ventilation fans. The ventilation system does not meet the Ohio Building Code 15 CFM per occupant fresh air requirement. The overall system is not compliant with Ohio Building Code and Ohio School Design Manual requirements. Dust collection systems are not required in this facility. The Art program is equipped with a kiln, and existing kiln ventilation is adequate, and in good condition. General building exhaust systems for Restrooms Storage Rooms, Art Rooms, and Custodial Closets are adequately placed, and in fair condition.

**Rating:** 1 Satisfactory

**Recommendations:** (The above rating of "1 Satisfactory" has been provided because the following items are discussed in other sections. This section would receive a "3 Needs Replacement" if associated costs appeared in the table below.) Provide an air conditioning system to meet with Ohio Building Code and Ohio School Design Manual requirements. Pricing is included in Item A - Heating System.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
Sum:			\$0.00	\$0.00	\$0.00		



Typical Window A/C Unit



Portable A/C Unit

[Back to Assessment Summary](#)

D. Electrical Systems

**Description:** The electrical system provided to the 1951 Original Construction is a 120/208V, 800A, 3 phase and 4 wire system replaced in 1986, and is in good condition, located in the Mechanical Systems Building adjacent to the school. This electric service also serves the electrical distribution in the Tippecanoe Central (TC) Enrichment Program Building. The electrical system provided to the 1967 Addition is a 120/208V, 400A, 3 phase and 4 wire system replaced in 2001, and is in good condition. The system in the 1967 Addition is a separate metered electrical service. Power is provided to the school by two district owned, pad-mounted transformers located outside the building and in good condition. The panel system, installed in the 1951 Original Construction, is in poor condition, and cannot be expanded to add additional capacity. The panel system, installed in the 1967 Addition, is in poor condition, and cannot be expanded to add additional capacity. The Classrooms are not equipped with adequate electrical outlets. The typical Classroom contains 5 general purpose outlets, 3 dedicated outlets for each Classroom computer, and 0 dedicated outlets for each Classroom television. Some Classrooms are equipped with as many as 5 general purpose outlets, while others are equipped with as few as 3 general purpose outlets. There are not any spaces that have no electrical outlets. The Corridors are equipped with adequate electrical outlets for servicing. Adequate GFI protected exterior outlets are not provided around the perimeter of the building. The facility is not equipped with an emergency generator. Adequate lightning protection safeguards are not provided. Stage lighting power system including control panel, breakers, and dimmers is not provided and does not meet OSDM requirements. The overall electrical system does not meet Ohio School Design Manual requirements in supporting the current needs of the school, and will be inadequate to meet the facility's future needs.

**Rating:** 3 Needs Replacement

**Recommendations:** The entire electrical system requires replacement to meet Ohio School Design Manual guidelines for overall capacity, due to condition and age, and lack of OSDM-required features.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
System Replacement:	\$16.23	sq.ft.		Required	Required	\$1,169,192.97	(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)
<b>Sum:</b>			\$1,169,192.97	\$777,741.60	\$391,451.37		



Main Electric Distribution



Addition Electrical Distribution

[Back to Assessment Summary](#)



E. Plumbing and Fixtures

**Description:** The service entrance is not equipped with a reduced pressure back flow preventer. A water treatment system is not provided. The domestic water supply piping in the overall facility is galvanized, was installed in 1951 and 1967, is original to each addition, and is in fair condition. The waste piping in the overall facility is cast iron, was installed in 1951 and 1967, is original to each addition, and is in fair condition. The facility is equipped with (10 qty) 5 gallon electric water heaters, in fair condition that serve Classroom sinks. The facility is also equipped with 1 gas water heater in good condition and 1 separate storage tank in fair condition, that serves the 1951 Original Construction. The school contains 4 Large Group Restrooms for boys, 4 Large Group Restrooms for girls, 1 Locker Room Restroom for boys, 1 Locker Room Restroom for girls, and 2 Restrooms for staff. Boys' Large Group Restrooms contain 0 ADA and 5 non-ADA wall mounted flush valve toilets and 8 non-ADA floor mounted flush valve toilets, 0 ADA and 11 non-ADA wall mounted flush valve urinals and 0 ADA and 11 non-ADA floor mounted flush valve urinals, as well as 0 ADA and 13 non-ADA wall mounted lavatories. Girls' Large Group Restrooms contain 0 ADA 9 non-ADA wall mounted flush valve toilets and 0 ADA and 11 non-ADA floor mounted flush valve toilets, as well as 0 ADA and 13 non-ADA wall mounted lavatories. Boys' Locker Room Restrooms contain 0 ADA and 1 non-ADA floor mounted flush valve toilets, 0 ADA and 4 non-ADA floor mounted flush valve urinals and 0 ADA and 2 non-ADA wall mounted lavatories. Girls' Locker Room Restrooms contain 0 ADA and 3 non-ADA floor mounted flush valve toilets, as well as 0 ADA and 2 non-ADA wall mounted lavatories. Staff Restrooms contain 0 ADA and 2 non-ADA floor mounted flush valve toilets, as well as 0 ADA and 2 non-ADA wall mounted lavatories. Condition of fixtures is fair. The facility is equipped with 6 non-ADA electric water coolers, in fair condition. The 27 Elementary Classrooms are equipped with 27 non-ADA sink mounted type drinking fountains, in fair condition. The Special Education Classroom is not equipped with the required Restroom facilities. The Kitchen is equipped with the required Restroom, and fixtures are in fair condition. The Heath Clinic is equipped with the required Restroom, and fixtures are in fair condition. Kindergarten / Pre-K Classrooms are equipped with Restroom facilities, and fixtures are in fair condition. Kitchen fixtures consist of 1 double compartment sink, 1 triple compartment sink, 1 dishwasher, and 1 disposal, which are in good condition. The Kitchen is equipped with an unsatisfactory floor mounted grease interceptor. The Kitchen is provided with the required 140 degree hot water supply via a 90 gallon, gas fired type water heater, which is in good condition. The school does not meet the OBC requirements for fixtures. Relative to LEED requirements, the school is not equipped with low flow type fixtures. Per OBC and OSDM requirements this facility should be equipped with 29 toilets, 6 urinals, 18 lavatories, 27 Classroom sink mounted drinking fountains, and 9 electric water coolers. Observations revealed that the school is currently equipped with 43 toilets, 26 urinals, 36 lavatories, 27 Classroom sink mounted drinking fountains, and 6 electric water coolers. ADA requirements are not met for fixtures and drinking fountains (see Item O). Custodial Closets are properly located and provided with required service sinks or floor drain sinks, which are in fair condition. Science Classroom / Lab utility sinks, gas connections, compressed air connections, and safety shower / eyewash are not provided, but are not required due to existing grade configuration. Due to existing grade configuration, no Biology or Chemistry Classroom acid waste systems are required. Adequate exterior wall hydrants are not provided.

**Rating:** 3 Needs Replacement

**Recommendations:** Due to age, condition, LEED, and OSFC requirements, provide a total of 43 toilets, 26 urinals, 36 lavatories, 27 Classroom sink mounted drinking fountains, and 9 electric water coolers. Fixture totals are coordinated between Item E - Plumbing and Fixtures and Item O - Handicapped Access. Within Item E - Plumbing and Fixtures, provide 31 new toilets / 24 new lavatories / 21 new urinals / 4 new electric water coolers / 27 new lavatory mounted type drinking fountains. See Item O - Handicapped Access, for the remainder of fixture replacements and additions related to ADA requirements. Provide new water heater, circulation pump, and piping to eliminate under the counter electric water heaters. Provide new mop sinks due to age and condition. Replace galvanized water supply piping in the overall facility with copper piping. Replace sanitary waste piping in the overall facility due to age. Provide new grease interceptor due to age and condition. Provide reduced pressure back flow preventer. Provide exterior wall hydrants.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
Back Flow Preventer:	\$5,000.00	unit		47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
				0 Required	1 Required	\$5,000.00	
Domestic Supply Piping:	\$3.50	sq.ft.		Required	Required	\$252,136.50	(remove / replace)
Sanitary Waste Piping:	\$3.50	sq.ft.		Required	Required	\$252,136.50	(remove / replace)
Domestic Water Heater:	\$5,100.00	per unit		1 Required	0 Required	\$5,100.00	(remove / replace)
Toilet:	\$3,800.00	unit		24 Required	7 Required	\$117,800.00	(new)
Urinal:	\$3,800.00	unit		12 Required	9 Required	\$79,800.00	(new)
Sink:	\$2,500.00	unit		17 Required	7 Required	\$60,000.00	(new)
Electric water cooler:	\$3,000.00	unit		2 Required	2 Required	\$12,000.00	(double ADA)
<b>Other:</b> Classroom Sink with Bubbler	\$1,525.00	each		15 Required	12 Required	\$41,175.00	Provide Classroom sink.
<b>Other:</b> Kitchen Grease Interceptor	\$6,000.00	each		1 Required		\$6,000.00	Provide Kitchen Grease Interceptor.
<b>Other:</b> Mop sink	\$4,350.00	each		2 Required	2 Required	\$17,400.00	Provide new mop sinks.
<b>Other:</b> Wall Hydrants	\$1,900.00	each		2 Required	2 Required	\$7,600.00	Provide exterior Wall Hydrants.
<b>Sum:</b>			\$856,148.00	\$567,215.00	\$288,933.00		



Typical Drinking Fountain



Under the Counter Water Heater

[Back to Assessment Summary](#)

F. Windows

**Description:** The overall facility is equipped with aluminum windows with single glazed type window system, and are in poor condition. The window system features operable windows throughout the building, and operable windows are equipped with opening limiters in poor condition. No insect screens are present. Window system seals are in poor condition, with moderate air and water infiltration being experienced. Window system hardware is in poor condition. The window system features no blinds. This facility is not equipped with any curtain wall systems. This facility does not feature any glass block windows. The window system does feature painted steel sunshades in the rear of the building, which are in poor condition. The exterior doors in the overall facility are aluminum and steel with sidelights and transoms with single pane glazing, in poor condition. Exterior door vision panels are also single pane. The school does not contain skylights. The school does not contain clerestories. Interior glass is not OSDM-compliant due to not being safety glazing. 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. Costs associated with the replacement of window transoms and sidelights at exterior doors of the overall facility are included within the replacement of the exterior storefront systems. Replace transoms over interior doors and all other non-compliant interior glazing with 1/4" tempered glass. Exterior door vision panel replacement is addressed in the replacement of exterior doors in Item S - Exterior Doors. Scrape/sand sunshades and repaint.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,920 ft²	Addition (1967) 24,119 ft²	Sum	Comments
Insulated Glass/Panels:	\$60.00	sq.ft. (Qty)		6,521 Required	604 Required	\$427,500.00	(includes blinds)
Curtain Wall/Storefront System:	\$65.00	sq.ft. (Qty)		460 Required	445 Required	\$58,825.00	(remove and replace)
<b>Other:</b> Replace Interior Door Transom Glazing	\$21.50	sq.ft. (Qty)		150 Required	85 Required	\$5,052.50	Remove and replace non-compliant interior door transom glazing with 1/4" tempered glass.
<b>Other:</b> Scrape and Paint Steel Sun Shades	\$4.00	sq.ft. (Qty)		220 Required		\$880.00	Scrape and paint the exterior steel sunshades on the north side of the 1951 Original Construction.
<b>Sum:</b>			\$492,257.50	\$425,265.00	\$66,992.50		



1951 Original Construction Windows



1967 Addition Windows

[Back to Assessment Summary](#)



G. Structure: Foundation

**Description:** The overall facility is equipped with concrete foundation walls on concrete spread footings, which displayed no locations of significant differential settlement, cracking, or leaking, and are in good condition. Areas of minor cracking and spalling were observed through the 1951 Original Construction. 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:** 2 Needs Repair

**Recommendations:** Repair areas of cracking and spalling where present in the 1951 Original Construction.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
<b>Other:</b> Tuckpointing	\$5.25	sq.ft. (Qty)		0 Required	225 Required	\$1,181.25	Tuckpoint masonry where deteriorated at foundation wall.
<b>Sum:</b>			\$1,181.25	\$0.00	\$1,181.25		



Masonry Foundation



Concrete Foundation

[Back to Assessment Summary](#)

## H. Structure: Walls and Chimneys

**Description:** The overall facility features a brick veneer on load bearing masonry wall system, which displayed locations of deterioration, and is in fair condition. The exterior masonry appears to have no control joints. Control joints are not provided at lintel locations, at doors and windows, building corners, and wall offsets. The school does not contain expansion joints. There is indication of exterior masonry cracking and separation, and it has been recommended that control joints be added throughout the facility to mediate this movement. Exterior walls in the overall facility are inadequately insulated. Brick veneer masonry walls are not cavity walls. Weep holes and vents are not provided or required. The exterior masonry has not been cleaned and sealed in recent years, and shows evidence of mortar deterioration. Architectural exterior accent materials consist of concrete panels and sills, which are in fair condition. The exterior walls contain openings and louvers for the unit ventilators within the building. With the addition of a new HVAC system, these unit ventilators will be removed. Therefore, the openings for these unit ventilators will need to be filled in with materials matching adjacent materials. The Facilities Director informed us that a portion of the 1951 Original Construction (Classroom wing) has been reinforced from front to back of the building above the second floor ceiling because the walls are moving away from the building. This will need structural engineering investigation and possible complete replacement. Interior wall construction consists of concrete masonry units, glazed block, or masonry framed partitions with plaster. Each construction type is in fair condition. Interior masonry walls appear to have no control joints. Interior soffits are of plaster type construction, and are in fair condition. The window sills are marble, glazed block, or painted steel, and are in good condition. The exterior lintels are precast steel members that are rusting and in fair condition. Chimneys are in good condition. Canopies over entrances are concrete type construction, and are in fair condition. Exterior soffits are of plaster type construction, and are in fair condition. The school is not equipped with a loading dock.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide tuckpointing in all areas of mortar deterioration as required through the overall facility. Provide masonry cleaning and sealing through the overall facility. Sawcut and caulk new appropriately spaced control joints in existing masonry through the overall facility. Prep and paint exposed steel lintels through the overall facility. Exterior wall insulation deficiencies are addressed in Item J - General Finishes. Provide brick, insulation and CMU back up infill at locations where unit ventilator louvers are being removed. Removal and reconstruction of the exterior walls that are currently being braced together is necessary. Overall extent of replacement should be determined by a structural engineer. Interior and exterior soffits need to be repainted. The associated cost of repainting exterior soffits can be found below. The associated cost of repainting interior soffits is included in Item J - General Finishes, under the full replacement of finishes and casework.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,920 ft <sup>2</sup>	Addition (1967) 24,119 ft <sup>2</sup>	Sum	Comments
Tuckpointing:	\$5.25	sq.ft. (Qty)		3,500 Required		\$18,375.00	(wall surface)
Exterior Masonry Cleaning:	\$1.50	sq.ft. (Qty)		16,783 Required	10,781 Required	\$41,346.00	(wall surface)
Exterior Masonry Sealing:	\$1.00	sq.ft. (Qty)		16,783 Required	10,781 Required	\$27,564.00	(wall surface)
Exterior Caulking:	\$5.50	ln.ft.		3,200 Required	1,400 Required	\$25,300.00	(removing and replacing)
Lintel Replacement:	\$250.00	ln.ft.		48 Required		\$12,000.00	(total removal and replacement including pinning and shoring)
Install Control Joints	\$60.00	ln.ft.		675 Required		\$40,500.00	
<b>Other:</b> Masonry Infill	\$32.00	sq.ft. (Qty)		69 Required	72 Required	\$4,512.00	Provide brick, insulation and CMU back up infill at locations where unit ventilator louvers are being removed.
<b>Other:</b> Prep and Paint Exterior Soffits	\$6.00	sq.ft. (Qty)		250 Required	100 Required	\$2,100.00	Sand and prep any damaged paint surfaces on exterior soffits and repaint.
<b>Other:</b> Repair Concrete Column	\$10,000.00	allowance		Required		\$10,000.00	Repair concrete column crack.
<b>Other:</b> Replace Exterior Walls	\$500,000.00	allowance		Required		\$500,000.00	Removal and reconstruction of the exterior walls that are currently being braced together is necessary. Overall extent of replacement should be determined by a structural engineer.
<b>Other:</b> Scrape and Paint Lintels	\$8.00	leaf		615 Required		\$4,920.00	Scrape and paint exterior steel lintels.
<b>Sum:</b>			\$686,617.00	\$649,060.50	\$37,556.50		



1951 Original Construction Classroom Wing Wall Bracing



Cracking due to Insufficient Control Joints

[Back to Assessment Summary](#)

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 good condition. There is no crawl space. The floor construction of the second floor of the overall facility is cast-in-place concrete type construction, and is in good condition. Ceiling to structural deck spaces are insufficient to accommodate HVAC, electrical, and plumbing scopes of work in required renovations. Sufficient space can be provided by lowering the ceiling height. The roof construction of the overall facility is metal deck over steel joists type construction, and is in good condition. Removal and reconstruction of the exterior walls that are currently being braced together is necessary. Overall extent of replacement should be determined by a structural engineer. Refer to Item H - Structure: Walls and Chimneys, for costs associated with this potential scope of work.

**Rating:** 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
Sum:			\$0.00	\$0.00	\$0.00		



Metal Roof Deck over Stage



Concrete Overhang at North Entry

[Back to Assessment Summary](#)

## J. General Finishes

**Description:** The overall facility features conventionally partitioned Classrooms with carpet over VAT type flooring, acoustical lay in type ceilings, as well as CMU type wall finishes, and they are in poor condition. The overall facility has Corridors with VAT type flooring, acoustical lay in type ceilings, as well as CMU and glazed concrete masonry units type wall finishes, and they are in poor condition. The overall facility has Restrooms with quarry tile type flooring, acoustical lay in type ceilings, as well as glazed concrete masonry units type wall finishes, and they are 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. Casework provided in a typical Classroom ranges from 12 to 34 feet. Classrooms are not provided adequate chalkboards, markerboards, and tackboards, which are in poor condition. Lockers located in the Corridors are adequately provided, and are in poor condition. The Art program is equipped with a kiln in fair condition. The facility is equipped with wood louvered and non-louvered interior doors. Interior Classroom doors of the 1951 Original Construction are primarily recessed, without proper ADA hardware or clearances, and in poor condition. Interior Classroom doors of the 1967 Addition are primarily flush mounted, without proper ADA hardware or clearances, and in poor condition. The facility features two Gymnasium spaces. The Gymnasium located in the 1951 Original Construction has rubberized "Tartan" type flooring, hard plaster type ceilings, as well as CMU type wall finishes, and they are in poor condition. There are no bleachers, but fixed concrete stands are provided, which feature wooden seats in poor condition. Gymnasium basketball backboards are fixed type, and are in fair condition. The Auxiliary Gymnasium located in the 1967 Addition has rubberized "Tartan" type flooring, hard plaster type ceilings, as well as CMU type wall finishes, and they are in poor condition. Gymnasium basketball backboards are both fixed and manually operated type, and are in fair condition. The Media Center, located in the 1951 Original Construction, has carpet type flooring, acoustical lay in type ceilings, as well as CMU type wall finishes, and they are in poor condition. The Student Dining area, located in the 1967 Addition, has VAT type flooring, hard plaster type ceilings, as well as masonry and plaster type wall finishes, and they are in poor condition. OSDM-required fixed equipment for the Stage areas is inadequately provided, and in fair condition. Existing Gymnasium, Auxiliary Gymnasium, Student Dining, Media Center, and Music spaces (Stage areas of the 1951 Gymnasium and the 1967 Auxiliary Gymnasium) are not 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 1951, is in fair condition. The Kitchen hood is in poor condition, and is not equipped with the required UL 300 compliant wet chemical fire suppression system. The required 6" overhang on all three exposed sides of the cooking equipment is not provided by the hood. Kitchen hood exhaust ductwork is not of proper construction, material, insulation, or installed as required by the OSDM and OBCMC. A walk-in cooler and freezer are located within the Kitchen spaces, and are in poor condition.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide complete replacement of finishes and casework due to installation of systems outlined in Items (A / C / D / E / I / K / L / M / N / T / U / W). Funding for replacement of interior doors is provided in Item O - Handicapped Access, including doors here noted as being in poor condition. Replace toilet partitions as required throughout the overall facility, due to condition. Replace the Toilet Room accessories throughout the overall facility, due to condition. Replace all Kitchen equipment and the Kitchen hood due to age and condition. Replace the kiln for the Art program due to condition. Replace synthetic gymnasium flooring in both Gymnasiums. Refer to Item T - Hazardous Material, for further information regarding synthetic Gymnasium flooring. Replace basketball backboards due to condition. Fur out interior walls with metals studs and add insulation and abuse resistant GWB. Replace original wood seats in the 1951 Gymnasium with new seating. Provide sound attenuation acoustical surface treatments in the Primary Gymnasium, Auxiliary Gymnasium, Student Dining Area, Media Center, and Music spaces (Stage areas of the 1951 Gymnasium or the 1967 Auxiliary Gymnasium). In order to comply with OSDM required fixed Stage equipment, provide a projection screen for the 1951 Gymnasium Stage area and stair railings for the 1967 Auxiliary Gymnasium Stage area. Costs associated with the addition of Stage railings are provided in Item U - Life Safety. Replacement costs have also been provided in the table below in coordination with the abatement of materials in Item T - Hazardous Material.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
Complete Replacement of Finishes and Casework (Elementary):	\$15.90	sq.ft.		Required	Required	\$1,145,420.10	(elementary, per building area, with removal of existing)
Toilet Partitions:	\$1,000.00	per stall		37 Required	13 Required	\$50,000.00	(removing and replacing)
Toilet Accessory Replacement	\$0.20	sq.ft.		Required	Required	\$14,407.80	(per building area)
Resilient Wood/Synthetic Flooring	\$12.85	sq.ft. (Qty)		4,100 Required	1,550 Required	\$72,602.50	(tear-out and replace per area)
Basketball Backboard Replacement	\$3,200.00	each		6 Required		\$19,200.00	(non-electric)
Art Program Kiln:	\$2,750.00	each			1 Required	\$2,750.00	
Additional Wall Insulation	\$6.00	sq.ft. (Qty)		16,783 Required	10,781 Required	\$165,384.00	(includes the furring out of the existing walls, insulation and abuse resistant GWB)
Acoustical Plaster Replacement	\$12.00	sq.ft. (Qty)			200 Required	\$2,400.00	(Hazardous Material Replacement Cost - See T.)
Hard Plaster Replacement	\$9.00	sq.ft. (Qty)		10,000 Required		\$90,000.00	(Hazardous Material Replacement Cost - See T.)
Walk-in Coolers/Freezers:	\$29,818.00	per unit		2 Required		\$59,636.00	
Kitchen Exhaust Hood:	\$56,000.00	per unit		1 Required		\$56,000.00	(includes fans, exhaust & ductwork)
Total Kitchen Equipment Replacement:	\$190.00	sq.ft. (Qty)		1,110 Required		\$210,900.00	(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)
<b>Other:</b> Acoustic Wall Panels	\$3.00	sq.ft. (Qty)		3,160 Required	2,250 Required	\$16,230.00	Provide sound attenuation acoustical surface treatments in the Primary Gymnasium, Auxiliary Gymnasium, Student Dining, Media Center, and Music spaces.
<b>Other:</b> Operable Partitions	\$100.00	sq.ft. (Qty)			220 Required	\$22,000.00	Provide operable partition square footage to replace the retractable wall material removed in Item T - Hazardous Material.
<b>Other:</b> Projection Screen	\$5,050.00	each		1 Required		\$5,050.00	Due to the current configuration of the Stage, provide a heavy duty, electric operated, 200 S.F. projection screen.
<b>Other:</b> Replace Fixed Seating	\$275.00	each		540 Required		\$148,500.00	Replace original wood seats in 1951 Original Construction Gymnasium with new seating.
<b>Other:</b> Stage Curtain	\$10.60	sq.ft. (Qty)			1,000 Required	\$10,600.00	Provide stage curtain square footage to replace the stage curtain material removed in Item T - Hazardous Material.
<b>Other:</b> Strip, Sand, and Refinish Wood Stage Floor	\$3.50	sq.ft. (Qty)		2,240 Required		\$7,840.00	Strip, sand and refinish the wood Stage floor in the 1951 Original Construction.
<b>Sum:</b>			\$2,098,920.40	\$1,568,501.00	\$530,419.40		



Typical Corridor Finishes



1951 Gymnasium Finishes

[Back to Assessment Summary](#)



K. Interior Lighting

**Description:** The typical Classrooms in the overall facility are equipped with T-8 1x4 pendant and minimal T-12 pendant fluorescent fixtures with single level switching. Classroom fixtures are in poor condition, providing an average illumination of 55 FC, thus complying with the 50 FC recommended by the OSDM. The typical Corridors in the overall facility are equipped with T-8 2x4 acrylic lensed fluorescent fixtures with single level switching. Corridor fixtures are in poor condition, providing an average illumination of 15 FC, which is less than the 20 FC recommended by the OSDM. The Primary Gymnasium spaces are equipped with T-8 2x8 pendant mount fluorescent fixtures type lighting, in good condition, providing an average illumination of 45 FC, which is less than the 50 (ES / MS) or 60 (HS) FC recommended by the OSDM. The Media Center is equipped with 1x4 pendant T-12 fluorescent fixture type lighting in poor condition, providing an average illumination of 42 FC, which is less than the 50 FC recommended by the OSDM. The Student Dining spaces are equipped with 1x4 pendant T-8 fluorescent fixture type lighting with single level switching. Student Dining fixtures are in poor condition, providing an average illumination of 40 FC, which is less than the 50 FC recommended by the OSDM. The Kitchen spaces are equipped with 2x4 lay-in T-12 fluorescent fixture type lighting with single level switching. Kitchen fixtures are in poor condition, providing an average illumination of 50 FC, which is less than the 75-80 FC recommended by the OSDM. The Service Areas in the overall facility are equipped with 1x4 pendants T12 fluorescent and pendants incandescent fixtures type lighting in poor condition. The typical Administrative spaces in the overall facility are equipped with 2x4 lay-in T-8 fluorescent fixture type lighting in poor condition, providing inadequate illumination based on OSDM requirements. The overall lighting systems of the facility are not compliant with Ohio School Design Manual requirements due to age and condition, inadequate lighting levels, lack of multi-level switching, and the utilization of T-12 fluorescent and incandescent fixtures.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide complete replacement of the lighting system due to condition, lighting levels, utilization of T-12 fixtures, and the lack of multilevel switching.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
Complete Building Lighting Replacement	\$5.00	sq.ft.		Required	Required	\$360,195.00	Includes demo of existing fixtures
<b>Sum:</b>			\$360,195.00	\$239,600.00	\$120,595.00		



Student Dining Lighting Fixtures



Kitchen Lighting Fixture

[Back to Assessment Summary](#)

L. Security Systems

**Description:** The overall facility contains an CCTV type security system in poor condition. Motion detectors are not provided in main entries, central gathering areas, offices, main Corridors, and spaces where 6 or more computers are located. Exterior doors are not equipped with door contacts. An automatic visitor control system is not provided. Compliant color CCTV cameras are provided at main entry areas but are not provided parking lots, central gathering areas, and main Corridors. CCTV is monitored in Administrative Area LCD monitor. A compliant computer controlled access control system integrating alarms and video signals, with appropriate UPS backup, is not provided. The system is not equipped with card / biometric readers. The security system is not adequately provided throughout, and the system is not compliant with Ohio School Design Manual guidelines. The playground is fenced on the north, west, and south elevations against street traffic. The only exposed area is the northeast portion of the playground area, adjacent to a large paved area and Maintenance Building. For optimal safety, this area should also be fenced against potential vehicular and pedestrian traffic. Another small fenced exterior area is located on the south elevation of the facility, which contains outdoor seating and greenery. The exterior site lighting system is equipped with surface mounted HID metal halide entry lights in poor condition. Pedestrian walkways are not illuminated. Parking and bus pick-up / drop off areas are illuminated by pole mounted HID metal halide fixtures in good condition. The exterior site lighting system provides inadequate illumination due to condition and sparse placement of fixtures.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide complete replacement of the security system to meet Ohio School Design Manual guidelines. Replace perimeter fencing within this scope of work due to condition. Provide complete replacement of exterior site lighting system to meet Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
Security System:	\$1.85	sq.ft.		Required	Required	\$133,272.15	(complete, area of building)
Exterior Site Lighting:	\$1.00	sq.ft.		Required	Required	\$72,039.00	(complete, area of building)
Sum:			\$205,311.15	\$136,572.00	\$68,739.15		



Site Lighting Fixture



Exterior Security Camera

[Back to Assessment Summary](#)



### M. Emergency/Egress Lighting

**Description:** The overall facility is equipped with an emergency egress lighting system consisting of non compliant green lettered, metal construction, incandescent, and non illuminated exit signs and the system is in poor condition. The facility is inadequately equipped with emergency egress floodlighting, and the system is in poor condition. The system is provided with appropriate battery backup. The system is not 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 new emergency / egress lighting system to meet Ohio School Design Manual and Ohio Building Code guidelines.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
Emergency/Egress Lighting	\$1.00	sq.ft.		47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
				Required	Required	\$72,039.00	(complete, area of building)
<b>Sum:</b>			\$72,039.00	\$47,920.00	\$24,119.00		



Incandescent Exit Sign



Emergency Egress Lighting Fixture

[Back to Assessment Summary](#)

N. Fire Alarm

**Description:** The overall facility is equipped with a Honeywell Fire-Lite MS-5UD type fire alarm system, installed in 2000, and in good condition, consisting of manual pull stations and horn and strobe indicating devices. The system is not automatic and is monitored by a third party. The system is not equipped with sufficient audible horns / strobe indicating devices, and smoke detectors. The system is not equipped with any flow switches, tamper switches and heat sensors. The system thus will not support future fire suppression systems. The system also supports fire alarm devices in the Tippecanoe Central (TC) Enrichment Program Building. The system is not fully compliant with Ohio Building Code, NFPA, and Ohio School Design Manual requirements.

**Rating:** 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
Fire Alarm System:	\$1.50	sq.ft.		Required	Required	\$108,058.50	(complete new system, including removal of existing)
Sum:			\$108,058.50	\$71,880.00	\$36,178.50		



Fire Alarm Panel



Fire Alarm Device

[Back to Assessment Summary](#)

O. Handicapped Access

**Description:** At the site, there is not 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 due to on street parking and an elevated main entrance. The exterior entrances are not ADA accessible due to the lack of automatic door openers and the presence of hardware that is non-compliant with ADA requirements. Access from the parking / drop-off area to the building entries is compromised by steps or steep ramps. Adequate handicap parking is not provided. Exterior doors are not equipped with ADA hardware. Building entrances should be equipped with two ADA power assist doors, and none are provided. Playground layout and equipment are not compliant to meet ADA required guidelines. On the interior of the building, space allowances and reach ranges are mostly compliant. There is an accessible route through the first floor of the building, but without an elevator, the second floor cannot be reached. Ground and floor surfaces are compliant due to a ramp between the 1951 Original Construction and 1967 Addition. Ramps and stairs do not meet all ADA requirements, and are insufficient due to age and condition. Elevation changes within the overall facility are facilitated by four non-compliant stairwells in poor condition and one non-compliant ramp lift in fair condition. This multistory building does not have a compliant elevator that accesses every floor. Access to both Stages is not facilitated by a Corridor at Stage level, chair lift, or ramp. Interior doors are not recessed, are provided adequate clearances, and are not provided with ADA-compliant hardware. 11 ADA-compliant toilets are required, and 0 are currently provided. 11 ADA-compliant Restroom lavatories are required, and 0 are currently provided. 4 ADA-compliant urinals are required, and 0 are currently provided. 1 ADA-compliant shower is required, and 0 are currently provided. 3 ADA-compliant electric water coolers are required, and 0 are currently provided. Toilet partitions are metal, and do provide appropriate ADA clearances. ADA-compliant accessories are not adequately provided and mounted. Mirrors do not meet ADA requirements for mounting heights. No Science Classroom considerations require evaluation. Health Clinic and Special Education Restrooms are not compliant with ADA requirements due to size and lack of ADA compliant accessories. ADA signage is not provided on both the interior and the exterior of the building.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide ADA-compliant signage, power assist door openers, an elevator, electric water coolers, toilets, sinks, urinals, toilet partitions, toilet accessories, doors and frames, and door hardware in the overall facility to facilitate the school's meeting of ADA requirements. Parking issues are addressed in Item P - Site Condition. Provide an ADA compliant ramp at the main entry to access the building. Provide exterior ramps around the overall facility in order to comply with ADAAG regulations for public entrances. In the 1951 Original Construction, provide one lift for handicapped access to the lower level Locker Rooms and Classroom area, as well as the Stage level due to space restrictions. In the 1967 Addition, provide ramp access to the Auxiliary Gym Stage area. Replace the existing ramp connecting the 1967 Addition to the 1951 Original Construction due to condition. Refer to Item U - Life Safety for costs associated with interior stair and ramp handrails. Refer to Item P - Site Condition, for costs associated with exterior stair and guardrail replacement.

Item	Cost	Unit	Whole Building	Original Construction (1951) 47,920 ft <sup>2</sup>	Addition (1967) 24,119 ft <sup>2</sup>	Sum	Comments
Signage:	\$0.20	sq.ft.		Required	Required	\$14,407.80	(per building area)
Ramps:	\$40.00	sq.ft. (Qty)		495 Required	460 Required	\$38,200.00	(per ramp/interior-exterior complete)
Lifts:	\$15,000.00	unit		1 Required		\$15,000.00	(complete)
Elevators:	\$42,000.00	each			2 Required	\$84,000.00	(per stop, \$84,000 minimum)
Electric Water Coolers:	\$3,000.00	unit		3 Required	2 Required	\$15,000.00	(new double ADA)
Toilet/Urinals/Sinks:	\$3,800.00	unit		22 Required	7 Required	\$110,200.00	(new ADA)
ADA Assist Door & Frame:	\$7,500.00	unit		2 Required		\$15,000.00	(openers, electrical, patching, etc)
Replace Doors:	\$5,000.00	leaf		77 Required	33 Required	\$550,000.00	(rework narrow opening to provide 3070 wood door, HM frame, door/light, includes hardware)
Remount Restroom Mirrors to Handicapped Height:	\$285.00	per restroom		4 Required	4 Required	\$2,280.00	
Provide ADA Shower:	\$3,000.00	each		1 Required		\$3,000.00	(includes fixtures, walls, floor drain, and supply line of an existing locker room)
Provide Toilet Accessories:	\$1,000.00	per restroom		4 Required	4 Required	\$8,000.00	
<b>Other: Enlarge Restrooms to Accommodate ADA</b>	\$15,000.00	each		3 Required		\$45,000.00	Enlarge Restrooms to accommodate ADA.
<b>Sum:</b>			\$900,087.80	\$590,124.00	\$309,963.80		



Typical Classroom Door Handle



Existing Water Fountains

[Back to Assessment Summary](#)

P. Site Condition

Description:

The 5.5 acre, relatively flat site is located in a small town residential setting with sparse tree and shrub type landscaping. The site is shared with the school building for the Tippecanoe Central Enrichment Program. Outbuildings include a Maintenance Building. There are no apparent problems with erosion or ponding. The site is bordered by moderately traveled city streets. Multiple entrances onto the site impede proper separation of bus and other vehicular traffic, and one way bus traffic is not provided. There is a curbside bus loading and unloading zone in front of the school, which is not separated from other vehicular traffic. Staff and visitor parking is facilitated by a single asphalt parking lot in the rear of the building in poor condition. The lot, containing 43 parking places, is shared with the Tipp City Enrichment Program Building, and does not provide adequate parking for staff members, visitors, and the disabled for both facilities. The site and parking lot drainage design, consisting of sheet drainage, does not provide adequate evacuation of storm water, and some ponding in the parking lot was observed. Concrete curbs in fair condition are not located as required. Concrete sidewalks are properly sloped, are located to provide a logical flow of pedestrian traffic, and are in good condition. Trash pick-up and service drive pavement is not heavy duty and is in fair condition, and is equipped with a concrete pad area for dumpsters, which is in good condition. Both entrances into the building are achieved by a single step. The playground equipment is primarily constructed of metal, and is in poor condition. Playground equipment is placed to provide compliant fall zones, and on a non-compliant wood fiber mulch of insufficient depth, hard surface with a basketball court, dropshot, funnel ball being provided on an asphalt surface. The site and playground area is not equipped with any tables or benches. The playground is partially fenced in. The small fenced exterior area on the south elevation of the facility, which contains outdoor seating and greenery, is fully enclosed. The athletic facilities are comprised of a small football field, which is in good condition. Site features are suitable for outdoor instruction. The site is bounded on all sides by city streets. Therefore, future additions to the facility would have to occur within the existing footprint of the site. Based on current OSDM guidelines, the site, which houses two school buildings, is undersized by approximately 8.5 acres for Broadway Elementary School alone. Room for expansion is available to the east and west, but this will only further constrict an already undersized site. There is an area of approximately 8,000 sf available to the east of the Gymnasium area for a single-story expansion and 16,000 sf for a two-story expansion. By expanding to the west, playground space will be sacrificed. Based on the student capacity of the facility, which is approximately 450 Students, and the current OSDM guidelines for playground design, the maximum size recommendation for the playground area is 33,750 sf. Currently, the playground contains approximately 83,500 sf. There is an area of approximately 35,000 sf of space available to the west/northwest of the existing facility for a single-story expansion and 70,000 sf of space for a two-story expansion. These square footage estimates do not take into full account potential constraints due to local jurisdiction, easements, and/or right of way. Estimates are based on site size, existing setbacks of the facility, and general available square footage.

Rating:

3 Needs Replacement

Recommendations:

Provide additional parking spaces to meet OSDM guidelines, including adequate provisions for the disabled. Provide catch basins and storm drainage in the parking lot area. Provide a bus lane for student drop off at the front of the building. Develop a parent drop off area separate from the bus drop off area. Provide new playground equipment, hard surface play area and soft surface play area. Provide exterior tables and benches adjacent to the playground. Funding for the replacement of site fencing is provided in Item L - Security Systems. Install trench drains at 1967 Addition exit doors that are below finish grade and connect to storm line. Replace all non-compliant exterior guardrails and railings. Provide guardrails for the proposed ramps referenced in Item O - Handicapped Access. Replace existing guardrail systems throughout the site due to condition and non-compliance with OBC standards.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
Playground Equipment:	\$1.50	sq.ft. (Qty)		47,920 Required	24,119 ft <sup>2</sup> Required	\$99,999.00	(up to \$100,000, per sq.ft. of school)
Removal of existing Playground Equipment:	\$2,000.00	lump sum		Required	Required	\$4,000.00	
New Asphalt Paving (light duty):	\$25.80	sq. yard		6,656 Required	3,344 Required	\$258,000.00	
Additional Parking Spaces Required for Elementary	\$121.00	per student		188 Required	94 Required	\$34,122.00	(\$1,100 per parking space; 0.11 space per elementary student. Parking space includes parking lot drive space.)
Bus Drop-Off for Elementary	\$110.00	per student		335 Required	165 Required	\$55,000.00	(Number of students should be rounded up to the nearest 100. \$5500 per bus; 40 students per bus; 80% of elementary school students riding)
Exterior Hand / Guard Rails:	\$43.00	ln.ft.		682 Required	561 Required	\$53,449.00	
Provide Soft Surface Playground Material:	\$30.00	sq. yard		400 Required	200 Required	\$18,000.00	
Provide Exterior Parking Lot Catch Basin:	\$2,500.00	each		5 Required		\$12,500.00	
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 <b>one</b> addition should have this item)
Sitework Allowance for Unforeseen Circumstances for buildings between 0 SF and 100,000 SF	\$1.50	sq.ft.		Required	Required	\$108,058.50	Include this one <b>or</b> the next. (Each addition should have this item)
<b>Other:</b> Handicapped Parking Spaces	\$1,000.00	each		1 Required		\$1,000.00	Provide designated ADA parking spaces.
<b>Other:</b> Trench Drains	\$3,000.00	each			5 Required	\$15,000.00	Install trench drains at the 1967 Addition exit doors that are below finish grade and connect to the storm line.
<b>Sum:</b>			\$709,128.50	\$481,908.80	\$227,219.70		



Cracking Asphalt



Handicap Parking Spaces

[Back to Assessment Summary](#)

Q. Sewage System

Description: The sanitary sewer system is tied in to the municipal system and is in fair condition. No significant system deficiencies were reported by the school district or noted during the physical assessment. The Kitchen is provided with a floor mounted grease interceptor.

Rating: 2 Needs Repair

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

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
Sewage Main:	\$45.00	in.ft.		47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
Sum:			\$4,500.00	\$4,500.00	\$0.00		(include excavation and backfilling)



Exterior Clean Out



Kitchen Floor Drain

[Back to Assessment Summary](#)

R. Water Supply

**Description:** The domestic water supply system is tied in to the municipal system, features 3" service and 3" water meter, and is in fair condition. The District was not able to provide water supply flow test data. The existing domestic water service appears to meet the facility's current needs. The facility is not equipped with an automated fire suppression system, and the existing water supply will not provide adequate support for a future system. The domestic water service is not equipped with a water booster pump, and none is required. The system provides does provide adequate pressure but not adequate capacity for the future needs of the school.

**Rating:** 1 Satisfactory

**Recommendations:** Provide a new city water supply line of adequate capacity to support the existing needs of the facility, as well as a future automated fire suppression system. Refer to Item U - Life Safety, for costs associated with this scope of work.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
Sum:			\$0.00	\$0.00	\$0.00		



Water Tank



Water Supply

[Back to Assessment Summary](#)



S. Exterior Doors

**Description:** Typical exterior doors in the overall facility are aluminum and hollow metal type construction, installed on aluminum and hollow metal frames, and in poor condition. Typical exterior doors feature single glazed uninsulated vision panels, and inappropriate hardware. Entrance doors in the overall facility are aluminum and hollow metal type construction, installed on aluminum and hollow metal frames, and in poor condition. Typical exterior doors feature single glazed uninsulated vision panels, and inappropriate hardware. The facility is equipped with one roof access door, which is in poor condition. There are no overhead doors in the facility.

**Rating:** 3 Needs Replacement

**Recommendations:** Replace all exterior doors, vision glass, and transom glass to comply with Ohio Building Code, ADA, and Ohio School Design Manual guidelines. Refer to Item F - Windows, for further information regarding costs associated with transom glass. Due to the replacement of exterior doors, costs associated with vision panel replacement will be included in the funding for new door systems. Replace existing roof access doors.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
Door Leaf/Frame and Hardware:	\$2,000.00	per leaf		23 Required	12 Required	\$70,000.00	(includes removal of existing)
<b>Sum:</b>			\$70,000.00	\$46,000.00	\$24,000.00		



Main Entry



Roof Access Door

[Back to Assessment Summary](#)

T. Hazardous Material

**Description:** The School District provided the AHERA three year reinspection reports, prepared by Westech Environmental Solutions and dated July 29, 2013, documenting known and assumed locations of asbestos and other hazardous materials. Vinyl asbestos floor tile and mastic, carpet mastic, ceiling tile, drywall and joint compound, window panel fillers, sound dampening materials (plaster), fire doors, pipe insulation, sink undercoating, window glazing compound, window and door caulking, chalkboard, bulletin board and dry-erase board mastic, cove base mastic, tartan flooring, containing hazardous materials are located in the overall facility in poor condition. These materials were described in the report to be in friable and non-friable condition moderate damage. There are no underground storage tanks on the site. Due to the construction date, there is a potential for lead based paint. Fluorescent lighting will require special disposal. As is discussed in Item A - Heating System, the boiler plant is located in a separate Maintenance Building behind the school, and tunnels related to this system are located beneath the shared parking lot between Broadway Elementary School and the TC Enrichment Program Building. All costs associated with the abatement of hazardous materials in the Maintenance Building boiler system will be addressed in Master Planning.

**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. Remove universal waste lamps replaced under Item K, per the attached Environmental Hazards Assessment. Provide for the testing of paint that has the potential of being lead-based. Provide for disposal of fluorescent lighting. Gymnasium tartan flooring must be evaluated by an Environmental Consultant for hazardous material.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
<i>Environmental Hazards Form</i>				<i>EHA Form</i>	<i>EHA Form</i>	—	
Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups	\$1.00	per unit		5,000 Required	0 Required	\$5,000.00	
Special Engineering Fees for LBP Mock-Ups	\$1.00	per unit		5,000 Required	0 Required	\$5,000.00	
Fluorescent Lamps & Ballasts Recycling/Incineration	\$0.10	sq.ft. (Qty)		47,920 Required	24,119 Required	\$7,203.90	
Pipe Insulation Removal	\$10.00	in.ft.		960 Required	1,600 Required	\$25,600.00	
Pipe Fitting Insulation Removal	\$20.00	each		280 Required	0 Required	\$5,600.00	
Pipe Insulation Removal (Crawlspace/Tunnel)	\$12.00	in.ft.		3,000 Required	0 Required	\$36,000.00	
Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	\$30.00	each		280 Required	0 Required	\$8,400.00	
Pipe Insulation Removal (Hidden in Walls/Ceilings)	\$15.00	in.ft.		960 Required	500 Required	\$21,900.00	
Dismantling of Boiler/Furnace/Incinerator	\$2,000.00	each		3 Required	0 Required	\$6,000.00	
Flexible Duct Connection Removal	\$100.00	each		5 Required	0 Required	\$500.00	
Acoustical Plaster Removal	\$7.00	sq.ft. (Qty)		0 Required	200 Required	\$1,400.00	See J
Fire Door Removal	\$100.00	each		85 Required	40 Required	\$12,500.00	See S
Non-ACM Ceiling/Wall Removal (for access)	\$2.00	sq.ft. (Qty)		5,800 Required	2,000 Required	\$15,600.00	See J
Window Component (Compound, Tape, or Caulk) - Reno & Demo	\$300.00	each		99 Required	20 Required	\$35,700.00	
Window Component (Compound, Tape, or Caulk) - Reno Only	\$300.00	each		99 Required	20 Required	\$35,700.00	
Resilient Flooring Removal, Including Mastic	\$3.00	sq.ft. (Qty)		19,420 Required	0 Required	\$58,260.00	See J
Carpet Mastic Removal	\$2.00	sq.ft. (Qty)		3,600 Required	8,200 Required	\$23,600.00	
Carpet Removal (over RFC)	\$1.00	sq.ft. (Qty)		1,300 Required	0 Required	\$1,300.00	See J
Sink Undercoating Removal	\$100.00	each		12 Required	13 Required	\$2,500.00	
<b>Other:</b> EHA ACM Other	\$1.00	per unit			300 Required	\$300.00	Cove Base Mastic Removal
<b>Other:</b> EHA ACM Other	\$1.00	per unit		4,000 Required		\$4,000.00	Insulated Window Panel Removal
<b>Other:</b> EHA ACM Other	\$1.00	per unit			220 Required	\$220.00	Retractable Wall Removal
<b>Other:</b> EHA ACM Other	\$1.00	per unit			1,000 Required	\$1,000.00	Stage Curtain Removal
<b>Other:</b> EHA ACM Other	\$1.00	per unit			3,000 Required	\$3,000.00	Visual Display Board Mastic Removal
<b>Other:</b> EHA ACM Other	\$1.00	per unit		4,000 Required		\$4,000.00	Visual Display Board Mastic Removal
<b>Other:</b> EHA ACM Other	\$1.00	per unit			3,000 Required	\$3,000.00	Window/Door Caulking Removal
<b>Other:</b> EHA ACM Other	\$1.00	per unit		1,500 Required		\$1,500.00	Window/Door Caulking Removal
<b>Other:</b> EHA Other Hazard	\$1.00	per unit		5,000 Required		\$5,000.00	XRF testing for lead-based paint is recommended for compliance with EPS's RRP Program
<b>Sum:</b>			\$329,783.90	\$257,252.00	\$72,531.90		



ACT Floor Tile



Fluorescent Lighting

[Back to Assessment Summary](#)

U. Life Safety

**Description:** The overall facility is not equipped with a compliant automated fire suppression system. Exit Corridors are situated such that dead-end Corridors are not present. The facility features 3 interior stair towers, which are not protected by a two hour fire enclosure. Guardrails do not meet the 4" ball test and are constructed in a ladder effect, and do not extend past the top and bottom stair risers as required by the Ohio Building Code. The Kitchen hood is in poor condition, and is not equipped with the required UL 300 compliant wet chemical fire suppression system. The required 6" overhang of the cooking equipment is not provided by the hood. Kitchen hood exhaust ductwork is not of proper construction, material, insulation or installed as required by the OSDM and OBCMC. The cooking equipment is not interlocked to shut down in the event of discharge of the fire suppression system. Fire extinguishers are 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 - Electrical Systems. Provide new handrails to meet the requirements of the Ohio Building Code. Funding for Kitchen hood UL 300 compliant wet chemical fire suppression systems and interlock systems is included in the Kitchen exhaust hood (1) replacement funding in Item J - General Finishes. Provide additional fire extinguishers to comply with OBC. In order to comply with OSDM required fixed Stage equipment, provide stair railings for the 1967 Auxiliary Gymnasium Stage area. Provide a railing system for the interior ramp between the 1951 Original Construction and the 1967 Addition.

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
Sprinkler / Fire Suppression System:	\$3.20	sq.ft. (Qty)		47,920 Required	24,119 Required	\$230,524.80	(includes increase of service piping, if required)
Interior Stairwell Closure:	\$5,000.00	per level		2 Required	1 Required	\$15,000.00	(includes associated doors, door frames and hardware)
Water Main	\$40.00	in.ft.		500 Required		\$20,000.00	(new)
Handrails:	\$5,000.00	level		3 Required	1 Required	\$20,000.00	
Provide Fire Extinguisher and Wall Cabinet:	\$585.00	each		8 Required	2 Required	\$5,850.00	(includes preparation of wall to receive recessed cabinet)
<b>Other:</b> Provide Railings	\$49.00	in.ft.			10 Required	\$490.00	Provide railings for the 1967 Auxiliary Gymnasium Stage stairs.
<b>Other:</b> Provide Ramp Railings	\$49.00	in.ft.			18 Required	\$882.00	Provide railings for the ramp between the 1951 Original Construction and 1967 Addition.
<b>Sum:</b>			\$292,746.80	\$203,024.00	\$89,722.80		



Fire Extinguisher Cabinet



Typical Stairwell

[Back to Assessment Summary](#)

## 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, and wastebaskets. The facility's furniture and loose equipment were evaluated in item 6.17 in the CEFPI section of this report, and on a scale of 1 to 10 the overall facility received a rating of 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 (1951)	Addition (1967)	Sum	Comments
				47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
CEFPI Rating 4 to 5	\$4.00	sq.ft.		Required	Required	\$288,156.00	
<b>Sum:</b>			\$288,156.00	\$191,680.00	\$96,476.00		



Teacher Desk



Student Desk

[Back to Assessment Summary](#)

W. Technology

**Description:** The typical Classroom is equipped with 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 typical Classroom is not equipped with the required four technology data ports for student use 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 poor condition. OSDM-compliant computer network infrastructure is not provided. The facility does not contain a media distribution center, and provides Computer Labs for use by students. The school does not contain an elevator.

**Rating:** 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	Original Construction (1951)	Addition (1967)	Sum	Comments
ES portion of building with total SF 69,361 to 100,000	\$10.18	sq.ft. (Qty)		47,920 ft <sup>2</sup>	24,119 ft <sup>2</sup>		
				47,920 Required	24,119 Required	\$733,357.02	
<b>Sum:</b>			\$733,357.02	\$487,825.60	\$245,531.42		



Data Main Distribution Rack



Computer Lab Data Switch

[Back to Assessment Summary](#)

X. Construction Contingency / Non-Construction Cost

<b>Renovation Costs (A-W)</b>		\$13,236,651.07
7.00%	Construction Contingency	\$926,565.57
<b>Subtotal</b>		\$14,163,216.64
16.29%	Non-Construction Costs	\$2,307,187.99
<b>Total Project</b>		<b>\$16,470,404.64</b>

Construction Contingency	\$926,565.57
Non-Construction Costs	\$2,307,187.99
<b>Total for X.</b>	<b>\$3,233,753.57</b>

<b>Non-Construction Costs Breakdown</b>		
Land Survey	0.03%	\$4,248.96
Soil Borings / Phase I Envir. Report	0.10%	\$14,163.22
Agency Approval Fees (Bldg. Code)	0.25%	\$35,408.04
Construction Testing	0.40%	\$56,652.87
Printing - Bid Documents	0.15%	\$21,244.82
Advertising for Bids	0.02%	\$2,832.64
Builder's Risk Insurance	0.12%	\$16,995.86
Design Professional's Compensation	7.50%	\$1,062,241.25
CM Compensation	6.00%	\$849,793.00
Commissioning	0.60%	\$84,979.30
Non-Construction Contingency (includes partnering and mediation services)	1.12%	\$158,628.03
<b>Total Non-Construction Costs</b>	<b>16.29%</b>	<b>\$2,307,187.99</b>

[Back to Assessment Summary](#)



School Facility Appraisal

**Name of Appraiser** Paul Brown **Date of Appraisal** 2015-03-31  
**Building Name** Broadway Elementary  
**Street Address** 223 West Broadway  
**City/Town, State, Zip Code** Tipp City, OH 45371  
**Telephone Number(s)** 937-667-6216  
**School District** Tipp City Exempted Village

**Setting:** Small City

Site-Acreage	5.50	Building Square Footage	72,039
Grades Housed	2-3	Student Capacity	451
Number of Teaching Stations	33	Number of Floors	2
Student Enrollment	375		
Dates of Construction	1951,1967		

**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

[Back to Assessment Summary](#)



# 1.0 The School Site

## School Facility Appraisal

		Points Allocated	Points
1.1	<b>Site is large enough</b> to meet educational needs as defined by state and local requirements	25	2
	<i>The Ohio School Facilities Commission Ohio School Design Manual requires the site to be 14 acres for Broadway Elementary School alone. The site has approximately 5.5 acres and features two school buildings.</i>		
1.2	<b>Site is easily accessible</b> and conveniently located for the present and future population	20	3
	<i>The site is accessible from small town roads that are suitable for buses, cars, and service vehicles. One entry point into the site is provided at the rear of the building, with no separation of car and bus traffic.</i>		
1.3	<b>Location</b> is removed from undesirable business, industry, traffic, and natural hazards	10	8
	<i>The small town site is surrounded by neighborhoods. The site is mostly removed from undesirable uses.</i>		
1.4	Site is <b>well landscaped and developed</b> to meet educational needs	10	7
	<i>All areas of the site are seeded. The lawn areas where mowing is required do not exceed a 3:1 slope. There are smaller deciduous trees and smaller, ornamental canopy trees for limited shade of the building and parking lots. There are no evergreen trees and shrubs that act as a wind screen for building and site. There is no visual screen of service areas and adjacent properties.</i>		
1.5	ES Well equipped <b>playgrounds are separated</b> from streets and parking areas	10	8
	MS Well equipped <b>athletic and intermural areas are separated</b> from streets and parking		
	HS Well equipped <b>athletic areas</b> are adequate with sufficient solid-surface parking		
	<i>There are 9 separate playground structures, a hard surface play area, and a half size football practice field (adjacent to the Tipp City (TC) Enrichment Program Building). The playgrounds are separated from parking areas.</i>		
1.6	<b>Topography</b> is varied enough to provide desirable appearance and without steep inclines	5	3
	<i>A level area is provided to accommodate buildings, perimeter walks, vehicular circulation, mechanical/service yard, parking areas, and physical education areas. There is a minimal slope across the site to allow for positive drainage to storm sewer outlets.</i>		
1.7	Site has stable, well drained <b>soil free of erosion</b>	5	3
	<i>There are no signs of erosion on site. Ponding was observed in the parking lot, and it has been recommended that catch basins be installed to alleviate this issue.</i>		
1.8	Site is suitable for <b>special instructional needs</b> , e.g., outdoor learning	5	4
	<i>There are no fixed benches or enclosed trash receptacles along walks to the main building entrance. There is sufficient seating adjacent to the school building and in the northwest corner of the property to accommodate outdoor learning.</i>		
1.9	<b>Pedestrian services</b> include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes	5	2
	<i>Walks vary between 5-10 feet wide around most of the building, and, if necessary, can serve as emergency vehicular access. Minor connecting walks are a minimum of 5 feet wide. All walks are sloped between 1% and 1:20. There is a walk connecting the school to the public street which has a sidewalk. Curb ramps are not provided at the bus and vehicular loading areas, and along the accessible route. All routes but one require one step up or down to gain access into the building.</i>		
1.10	ES/MS Sufficient <b>on-site, solid surface parking</b> for faculty and staff is provided	5	1
	HS Sufficient <b>on-site, solid surface parking</b> is provided for faculty, students, staff and community		

*Parking is required for a staff of 41, 8 visitors 15 other. There are 43 spaces provided. There is not sufficient solid surface parking provided for current staff, visitor or special event needs. Overflow parking is provided by parking along small town streets.*

---

**TOTAL - The School Site**

**100**

**41**

[Back to Assessment Summary](#)

## 2.0 Structural and Mechanical Features

### School Facility Appraisal

Structural		Points Allocated	Points
2.1	Structure meets all <b>barrier-free</b> requirements both externally and internally	15	0
<p><i>At the site, there is not 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. An accessible route is provided at the rear of the building where the parking is provided. The main entrance is not compliant. On the interior of the building, space allowances and reach ranges are mostly non-compliant. There is an accessible route that does not have protruding objects. Ground and floor surfaces are compliant. Ramps and stairs do not meet all ADA requirements. The building does not have an elevator. Interior doors and hardware are not compliant. Drinking fountains, water closets, urinals, showers and toilet partitions, mirrors and lavatories are provided, and are not compliant. Toilet rooms do not feature appropriate clearances. Handrails and grab bars that are ADA compliant are not fully provided. ADA compliant alarms and strobes are mostly provided. Signage is not ADA compliant. Fixed and built-in seating is compliant for the ages of the students. The assembly area is not accessible or compliant.</i></p>			
2.2	<b>Roofs</b> appear sound, have positive drainage, and are weather tight	15	3
<p><i>The roof over the facility is a built-up asphalt membrane system. The roof is in poor condition. Roof drains are in good condition but are improperly located. Additional roof drains and overflow roof drains are needed to supplement the existing drainage system. Metal cap flashing is in poor condition.</i></p>			
2.3	<b>Foundations</b> are strong and stable with no observable cracks	10	10
<p><i>The foundation appears to be in good condition.</i></p>			
2.4	<b>Exterior and interior walls</b> have sufficient expansion joints and are free of deterioration	10	3
<p><i>There are signs of deterioration in the masonry walls. The building does not appear to feature expansion joints, and control joints are insufficient in alleviating building stresses in the exterior masonry. Due to observations made during the physical assessment, it has been recommended to provide additional control joints throughout the 1951 Original Construction.</i></p>			
2.5	<b>Entrances and exits</b> are located so as to permit efficient student traffic flow	10	8
<p><i>The entrance is located near the vehicular loading area and the bus loading area. The school Office is near the main entrance.</i></p>			
2.6	<b>Building "envelope"</b> generally provides for energy conservation (see criteria)	10	3
<p><i>Windows feature single glazing. The roof is insulated but has been recommended to be replaced due to age and condition.</i></p>			
2.7	Structure is <b>free of friable asbestos</b> and <b>toxic materials</b>	10	0
<p><i>See asbestos report.</i></p>			
2.8	Interior walls permit sufficient <b>flexibility</b> for a variety of class sizes	10	2
<p><i>The interior walls are fixed masonry partition walls.</i></p>			
Mechanical/Electrical		Points Allocated	Points
2.9	<b>Adequate light sources</b> are well maintained, and properly placed and are not subject to overheating	15	3
<p><i>The lighting is inadequate and requires replacement, per OSDM standards.</i></p>			
2.10	<b>Internal water supply</b> is adequate with sufficient pressure to meet health and safety requirements	15	3
<p><i>The internal water supply is sufficient for the current needs of the school.</i></p>			

2.11	Each teaching/learning area has adequate convenient <b>wall outlets</b> , phone and computer cabling for technology applications <i>The teaching/learning areas do not have the required quantity of wall outlets, phone and computer cabling, per OSDM.</i>	15	3
2.12	<b>Electrical controls</b> are safely protected with <b>disconnect switches</b> easily accessible <i>Electrical controls will require replacement due to age and required new HVAC equipment.</i>	10	10
2.13	<b>Drinking fountains</b> are adequate in number and placement, and are properly maintained including provisions for the disabled <i>The drinking fountains are in good working condition and are adequately placed.</i>	10	7
2.14	Number and size of <b>restrooms meet requirements</b> <i>The number and size of Restrooms do not meet OSDM or ADA requirements.</i>	10	5
2.15	<b>Drainage systems</b> are properly maintained and meet requirements <i>It has been recommended to replace the galvanized water supply piping in the overall facility with copper piping and to replace sanitary waste piping in the overall facility due to age.</i>	10	4
2.16	<b>Fire alarms, smoke detectors, and sprinkler systems</b> are properly maintained and meet requirements <i>The fire alarm system does not meet the requirements of either OBC or OSDM. A sprinkler system does not exist.</i>	10	1
2.17	<b>Intercommunication system</b> consists of a central unit that allows dependable <b>two-way communication</b> between the office and instructional areas <i>An intercommunication system per OSDM does not exist.</i>	10	3
2.18	<b>Exterior water supply</b> is sufficient and available for normal usage <i>Adequate exterior wall hydrants are not provided.</i>	5	2
<b>TOTAL - Structural and Mechanical Features</b>		<b>200</b>	<b>70</b>

[Back to Assessment Summary](#)

### 3.0 Plant Maintainability

School Facility Appraisal

	Points Allocated	Points
<p>3.1 <b>Windows, doors, and walls</b> are of material and finish requiring minimum maintenance</p> <p><i>Windows, doors, and walls require minimum maintenance when in good condition. Currently these elements are in poor condition, requiring extensive maintenance. Windows are single glazing in aluminum and steel curtain walls. Exterior doors and frames are aluminum or painted hollow metal. Interior doors are wood on steel frames. Doors are both louvered and non-louvered. Exterior walls are brick and stone. Interior walls are CMU and glazed masonry.</i></p>	15	7
<p>3.2 <b>Floor surfaces</b> throughout the building require minimum care</p> <p><i>Vinyl asbestos tile floors throughout the overall facility require extensive maintenance. Quarry tile floors in the Kitchen require minimum maintenance. Floors in the Classrooms are carpet or asbestos tiles. Floors in the Corridors are asbestos tiles. Floors in the Toilet Rooms are quarry tile. Floors in the Student Dining area are asbestos tiles. Floors in the Kitchen are quarry tile. Floors in the Gymnasium are wood. Floors in the Stairway are porcelain tile.</i></p>	15	7
<p>3.3 <b>Ceilings and walls</b> throughout the building, including service areas, are easily cleaned and resistant to stain</p> <p><i>Ceilings are suspended acoustical lay-in ceiling tile that are difficult to maintain and do not resist staining. Walls are CMU and glazed masonry and are easy to maintain.</i></p>	10	7
<p>3.4 <b>Built-in equipment</b> is designed and constructed for ease of maintenance</p> <p><i>Casework is easy to maintain. Casework is wood with plastic laminate tops. Classrooms contain an average of 24 lineal foot of casework.</i></p>	10	6
<p>3.5 <b>Finishes and hardware</b>, with compatible keying system, are of durable quality</p> <p><i>Door hardware has a compatible keying system. Exterior door hardware is not ADA compliant. Interior door hardware is not ADA compliant.</i></p>	10	7
<p>3.6 <b>Restroom fixtures</b> are wall mounted and of quality finish</p> <p><i>Restroom fixtures are a mixture of floor and wall-mounted fixtures of quality finish. Fixtures are in fair condition but require replacement due to non-compliance with ADA requirements.</i></p>	10	3
<p>3.7 Adequate <b>custodial storage space</b> with water and drain is accessible throughout the building</p> <p><i>There are custodial spaces available in all areas of the building with water and drains.</i></p>	10	10
<p>3.8 Adequate <b>electrical outlets and power</b>, to permit routine cleaning, are available in every area</p> <p><i>A minimal quantity of outlets is available in most areas.</i></p>	10	4
<p>3.9 <b>Outdoor light fixtures, electrical outlets</b>, equipment, and other fixtures are accessible for repair and replacement</p> <p><i>Outdoor light fixtures are accessible. Outdoor outlets for maintenance do not exist.</i></p>	10	3
<b>TOTAL - Plant Maintainability</b>	<b>100</b>	<b>54</b>

[Back to Assessment Summary](#)

## 4.0 Building Safety and Security

### School Facility Appraisal

---

Site Safety	Points Allocated	Points
<p>4.1            <b>Student loading areas</b> are segregated from other vehicular traffic and pedestrian walkways</p> <p><i>Student loading areas are shared by buses and vehicular traffic, which occur on the small town sidewalks adjacent to street. There are no on site student loading areas.</i></p>	15	0
<p>4.2            <b>Walkways</b>, both on and offsite, are available for safety of pedestrians</p> <p><i>There are sidewalks provided in the public right-of-way, along the main road. Sidewalks on site are available for the safety of pedestrian traffic. See also 1.9.</i></p>	10	10
<p>4.3            <b>Access streets</b> have sufficient signals and signs to permit safe entrance to and exit from school area</p> <p><i>There are both signage and signals provided at the access street.</i></p>	5	5
<p>4.4            <b>Vehicular entrances and exits</b> permit safe traffic flow</p> <p><i>See 1.2.</i></p>	5	1
<p>4.5    ES        <b>Playground equipment</b> is free from hazard</p> <p>MS        Location and types of <b>intramural equipment</b> are free from hazard</p> <p>HS        <b>Athletic field equipment</b> is properly located and is free from hazard</p> <p><i>Playground equipment is located inside of a partially fenced enclosure, is properly located, and free from hazard. The playground is fenced on the north, west, and south elevations against street traffic. The only exposed area is the northeast portion of the playground area, adjacent to a large paved area and Maintenance Building. For optimal safety, this area should also be fenced against potential vehicular and pedestrian traffic. Another small fenced exterior area is located on the south elevation of the facility, which contains outdoor seating and greenery. Although the area is fully enclosed, it has been recommended to replace the fencing due to its present condition.</i></p>	5	3

---

Building Safety	Points Allocated	Points
<p>4.6            <b>The heating unit(s)</b> is located away from student occupied areas</p> <p><i>Unit ventilators are located in the Classroom areas and air handlers are located in a Mechanical Room away from student occupied areas.</i></p>	20	10
<p>4.7            Multi-story buildings have at least <b>two stairways</b> for student egress</p> <p><i>Multi-story buildings have at least 2 non-enclosed Stairways that are not ADA and OBC compliant.</i></p>	15	15
<p>4.8            <b>Exterior doors</b> open outward and are equipped with panic hardware</p> <p><i>Exterior doors open outward, and are equipped with functional panic hardware that is not fully ADA compliant.</i></p>	10	8
<p>4.9            <b>Emergency lighting</b> is provided throughout the entire building with exit signs on separate electrical circuits</p> <p><i>Exit and emergency lighting is minimal, not adequate for coverage required by OBC. Separate circuits for exit lights appear to exist.</i></p>	10	6
<p>4.10          <b>Classroom doors</b> are recessed and open outward</p>	10	8

Some Classroom doors are recessed, while others are not recessed. They do not provide appropriate door clearances, as required by ADA standards. The doors protrude into the corridor by more than 8".

4.11 **Building security systems** are provided to assure uninterrupted operation of the educational program 10 5

*CCTV coverage is adequate, however, minimal motion sensors only are in use. The systems do not comply with OSDM.*

4.12 **Flooring** (including ramps and stairways) is maintained in a non-slip condition 5 3

*See 3.2 for a list of floor finishes. Flooring is mostly maintained in a non-slip condition.*

4.13 **Stair risers** (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16 5 5

*Stair risers do not exceed the 7" permitted by the OBC. Stair risers are of an open design.*

4.14 **Glass** is properly located and protected with wire or safety material to prevent accidental student injury 5 5

*Glass panels throughout the overall facility are not tempered glass or safety glass as required by the OBC.*

4.15 **Fixed Projections** in the traffic areas do not extend more than eight inches from the corridor wall 5 5

*Fixed projections do extend more than 8" from the Corridor walls.*

4.16 **Traffic areas** terminate at an exit or a stairway leading to an egress 5 5

*Traffic areas terminate at an exit or Corridor leading to an exit.*

---

**Emergency Safety**

Points Allocated

Points

4.17 Adequate **fire safety equipment** is properly located 15 8

*The travel distance from any location to a 20# type ABC fire extinguisher is not 50 feet or less, in the Corridors. The travel distance from any location to a 10# type ABC fire extinguisher is not 30 feet or less.*

4.18 There are at least **two independent exits** from any point in the building 15 12

*There are no dead-end Corridors in the building. There are at least two exits to the outside, provided by Corridors. Classrooms have door or window egress, as recommended in the Life Safety Code.*

4.19 **Fire-resistant materials** are used throughout the structure 15 15

*The structure is a brick and concrete masonry unit load bearing wall. Finishes comply with OBC requirements. Building materials are mostly fire resistant.*

4.20 Automatic and manual **emergency alarm system** with a distinctive sound and flashing light is provided 15 15

*A manual fire alarm system is installed. The quantity of devices does not comply with the OBC. The system is not monitored off-site.*

---

**TOTAL - Building Safety and Security**

**200**

**144**

[Back to Assessment Summary](#)

## 5.0 Educational Adequacy

### School Facility Appraisal

Academic Learning Space		Points Allocated	Points
5.1	<b>Size of academic learning areas</b> meets desirable standards <i>The typical Classroom is 780 SF. The OSDM recommends 900 SF.</i>	25	15
5.2	<b>Classroom space</b> permits arrangements for small group activity <i>The Classrooms are not large enough to permit adequate arrangements for small group activities. Common space is not readily adaptable to arrangement of small group activities.</i>	15	8
5.3	<b>Location of academic learning areas</b> is near related educational activities and away from disruptive noise <i>Academic Areas are arranged so that children of the same age are grouped together. The Media Center is centrally located to the Academic Areas. The 1951 Gymnasium and Student Dining Areas are located away from the academic core. There is an auxiliary Gymnasium located within the academic core of the 1967 Addition.</i>	10	7
5.4	<b>Personal space</b> in the classroom away from group instruction allows privacy time for individual students <i>There is no space for individual instruction located within the Classrooms.</i>	10	2
5.5	<b>Storage for student materials</b> is adequate <i>There are lockers in the Corridors, adjacent to the Academic Areas. There are areas for student storage in the Classrooms.</i>	10	7
5.6	<b>Storage for teacher materials</b> is adequate <i>There are horizontal files, vertical files, and bookshelves for the teachers. There is no Storage Room for teachers in the Classrooms. The OSDM recommends 50-200 SF.</i>	10	7
Special Learning Space		Points Allocated	Points
5.7	<b>Size of special learning area(s)</b> meets standards <i>The Special Learning Area Classroom totals of 1,000 SF. The OSDM recommends 900 SF.</i>	15	15
5.8	<b>Design of specialized learning area(s)</b> is compatible with instructional need <i>There is no self-contained Classroom provided. There are no support spaces provided for the Specialized Learning Areas.</i>	10	2
5.9	<b>Library/Resource/Media Center</b> provides appropriate and attractive space <i>The Media Center is 2,300 SF. The OSDM recommends a minimum of 1,800 square feet. Overall, the Media Center is generally outdated in regard to its finishes. Loose furnishings, such as the tables and chairs located centrally within the space, are in good condition and are visually stimulating. Painted hand prints are located on the wall, which is an appropriate form of decoration for the age of students. Color schemes are generally muted throughout the Media Center, and lighting levels are inadequate.</i>	10	6
5.10	<b>Gymnasium (or covered P.E. area)</b> adequately serves physical education instruction	5	5



The Primary Gymnasium floor is approximately 4,600 SF. Including both the Fixed Seating Area and Stage Area, the square footage of the Primary Gymnasium is 10,300 SF. The OSDM recommends a minimum of 3,500. The building also has an auxiliary Gymnasium which is approximately 2,070 SF and features an 830 SF Stage.

5.11 ES **Pre-kindergarten and kindergarten space** is appropriate for age of students and nature of instruction 10 0

MS/HS **Science** program is provided sufficient space and equipment

*The school is designated for 2nd and 3rd grades. There are no pre-kindergarten or kindergarten children occupying this school.*

5.12 **Music Program** is provided adequate sound treated space 5 0

*There is no dedicated Classroom for the Music program. They utilize the Stage in the main Gymnasium or Stage in the Auxiliary Gymnasium.*

5.13 **Space for art** is appropriate for special instruction, supplies, and equipment 5 2

*The Art Room is 780 SF. The OSDM recommends 1,200 SF.*

---

**School Facility Appraisal** Points Allocated      Points

5.14 **Space for technology education** permits use of state-of-the-art equipment 5 3

*There is one Computer Lab located in the facility, which measures approximately 780 SF. The OSDM recommends 1,000 SF.*

5.15 Space for **small groups and remedial instruction** is provided adjacent to classrooms 5 2

*There is no space for small group or remedial instruction provided.*

5.16 **Storage for student and teacher material** is adequate 5 2

*There is no Storage Room for teachers or student storage in the Classrooms. Corridor lockers are adequate for students.*

---

**Support Space** Points Allocated      Points

5.17 **Teacher's lounge and work areas** reflect teachers as professionals 10 5

*The Teacher's Lounge Area is 200 SF. The OSDM recommends a minimum of 300 SF.*

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

*The Student Dining Area is approximately 1,500 SF. The OSDM recommends a minimum of 3,000 SF. The space is unattractive in its underwhelming daylighting, muted color scheme, and outdated finishes. The Kitchen is approximately 800 SF. The OSDM recommends that the Kitchen be approximately 1,579 SF based on the facility's student capacity.*

5.19 **Administrative offices** provided are consistent in appearance and function with the maturity of the students served 5 4

*The Offices are mostly satisfactory for the age of the students being served.*

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

*The Counselor's Office is 144 SF. The OSDM requires 120 SF with an additional 100 SF for Storage and 200 SF for Conference. It is located somewhat near the Reception Area and the Secretarial Area.*

5.21 **Clinic** is near administrative offices and is equipped to meet requirements 5 4

*The Clinic is 240 sf. The OSDM recommends a minimum of 300 SF.*

5.22	<b>Suitable reception space</b> is available for students, teachers, and visitors <i>The Reception Area measures approximately 64 SF. The OSDM recommends a minimum of 200 SF.</i>	5	2
5.23	<b>Administrative personnel</b> are provided <b>sufficient work space and privacy</b> <i>There is about 476 SF provided for the principal, assistant principal, secretary, Conference Room, Storage, Copy Room, in-school suspension, and Toilet Room. The OSDM recommends around 2,250 SF.</i>	5	2
<b>TOTAL - Educational Adequacy</b>		<b>200</b>	<b>110</b>

[Back to Assessment Summary](#)

## 6.0 Environment for Education

### School Facility Appraisal

Exterior Environment		Points Allocated	Points
6.1	Overall <b>design is aesthetically pleasing</b> to age of students <i>The building is a traditional design, with non-classical detailing. The building is constructed with concrete and brick. The design is not aesthetically pleasing to Elementary School students. Fenestration, utilizing large Classroom windows in the 1951 Original Construction and tall strip windows in the 1967 Addition, is repetitive and uninteresting. Stone accent panels were added to break up the brick and glass elevation.</i>	15	10
6.2	Site and building are <b>well landscaped</b> <i>See 1.4.</i>	10	5
6.3	<b>Exterior noise and poor environment</b> do not disrupt learning <i>External noise is a minimum disruption to this facility in its small town setting. See 1.3 for a listing of surrounding site usage.</i>	10	7
6.4	<b>Entrances and walkways</b> are <b>sheltered</b> from sun and inclement weather <i>The main building entrance is sheltered. Exits are mostly sheltered.</i>	10	8
6.5	<b>Building materials</b> provide attractive color and texture <i>The exterior surface of the building is one color and style of brick with anodized aluminum windows and stone accent panels. The combination of color and materials is not attractive.</i>	5	3
Interior Environment		Points Allocated	Points
6.6	<b>Color schemes, building materials, and decor</b> provide an impetus to learning <i>The color palette is comprised mostly of achromatic hues. There are warm base colors on the walls. Lockers include the school color for the finish however the color used is beige. Carpeting is multicolor and dark. Back walls and side walls of the Stage are painted a dark color. Plastic laminate on counter tops and work surfaces do not have a pattern. The facility color schemes and decor mostly do not provide an impetus to learning.</i>	20	10
6.7	<b>Year around comfortable temperature and humidity</b> are provided throughout the building <i>The building is not equipped with a central air conditioning system.</i>	15	0
6.8	<b>Ventilating system</b> provides adequate quiet circulation of clean air and meets 15cfm VBC requirement <i>The ventilation system does not provide adequate outside air to the building.</i>	15	5
6.9	<b>Lighting system</b> provides proper intensity, diffusion, and distribution of illumination <i>The lighting system does not provide adequate illumination, per OSDM.</i>	15	5
6.10	<b>Drinking fountains and restroom facilities</b> are conveniently located <i>The drinking fountains are well placed, however the Restrooms are not in the most convenient locations.</i>	15	10
6.11	<b>Communication among students</b> is enhanced by commons area(s) for socialization	10	8

There are areas for students to gather in the Student Dining Area, Gymnasium, and Auxiliary Gymnasium. There is a gathering area at the entrance to the school.

6.12	<b>Traffic flow</b> is aided by appropriate foyers and corridors	10	4
	<i>The Foyers and Corridors are sufficiently wide and provide a mostly ADA accessible route on the first floor only. There is no ADA access to the second floor.</i>		
6.13	<b>Areas for students to interact</b> are suitable to the age group	10	8
	<i>Areas for students to interact are suitable for the age group.</i>		
6.14	<b>Large group areas are designed</b> for effective management of students	10	8
	<i>Large group areas are effectively designed for management of students.</i>		
6.15	<b>Acoustical treatment</b> of ceilings, walls, and floors provides effective sound control	10	2
	<i>Classrooms primarily feature carpet over VAT floors, suspended acoustical ceilings, and CMU and glazed block walls. Sound control in the Classrooms, Corridors, and most spaces is ineffective.</i>		
6.16	<b>Window design</b> contributes to a pleasant environment	10	5
	<i>Windows are aluminum design with single glazing. Views to the exterior are generally good.</i>		
6.17	<b>Furniture and equipment</b> provide a pleasing atmosphere	10	4
	<i>There are tables, desks, and chairs provided for the students in the Classrooms, as recommended by the OSDM but not totally compliant or adequately provided. There is a desk, vertical files, chair, and bookshelves provided for teachers that somewhat meet OSDM requirements. There are high density stall chairs and folding cafeteria tables provided that somewhat meet OSDM requirements. All furniture is not ADA compliant.</i>		
<b>TOTAL - Environment for Education</b>		<b>200</b>	<b>102</b>

[Back to Assessment Summary](#)

# LEED Observation Notes

<b>School District:</b>	Tipp City Exempted Village
<b>County:</b>	Miami
<b>School District IRN:</b>	45617
<b>Building:</b>	Broadway Elementary
<b>Building IRN:</b>	3707

---

## 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)

The small town nature of the site will make it difficult to achieve these credits (2, 4.1, 4.2, 7.1 & 9).

---

## Water Efficiency

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

(source: LEED Reference Guide, 2001:65)

All plumbing fixtures should be replaced with water-conserving fixtures, such as dual-flush water closets and pint-flush urinals. Tank type water closets could be fed via water collected through a rain harvesting system to further reduce potable water usage.

---

## 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)

To improve on the energy stewardship by the school district, a ground geo-exchange loop with vertical boreholes that serves new geothermal heat pumps or a hybrid system would offer additional savings to the district. To assist the district in optimizing its new building automation system, enhanced commissioning by a certified Commissioning Authority has a potential to provide the district a fully functional building control system upon completion of a construction project.

---

## 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)

Materials & Resources credits could gain large amounts of points if building is reused, renovated or added to.

---

## 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)

Outdoor airflow delivery monitoring should be provided to assure building personnel that adequate outdoor ventilation air is supplied to all spaces while the building is occupied, indoor pollutants appears to be minimal in the building, however, additional exhaust systems in the copy room, and building entry pollutant collection mats will assist with removing or controlling the intrusion of pollutants inside the building.

---

## 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)

Innovation & Design process credits could be obtained by providing higher values of regional materials, recycled content or water conservation.

---

**Justification for Allocation of Points**

Building Name and Level: **Broadway Elementary**

**2-3**

**Building features that clearly exceed criteria:**

1. The Auxiliary Gymnasium and associated Stage exceed the OSDM recommended size.
- 2.
- 3.
- 4.
- 5.
- 6.

**Building features that are non-existent or very inadequate:**

1. Classroom window systems are not thermally broken, do not feature insulated glazing or integral blinds, are in poor condition, and are very inadequate.
2. The facility does not contain a compliant ADA elevator.
3. The floor finish throughout the facility is primarily VAT in very poor condition.
4. The facility does not contain an automated fire suppression system or a security system.
5. The exterior walls on the north and south sides of the Classroom wing are exhibiting extensive structural issues in the 1951 Original Construction.
6. The Student Dining space is undersized per OSDM guidelines.

[Back to Assessment Summary](#)

# Environmental Hazards Assessment Cost Estimates

<b>Owner:</b>	Tipp City Exempted Village
<b>Facility:</b>	Broadway Elementary
<b>Date of Initial Assessment:</b>	Mar 31, 2015
<b>Date of Assessment Update:</b>	Mar 31, 2015
<b>Cost Set:</b>	2015

<b>District IRN:</b>	45617
<b>Building IRN:</b>	3707
<b>Firm:</b>	Resource International, Inc.

**Scope remains unchanged after cost updates.**

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates	
		Renovation	Demolition
1951 Original Construction	47,920	\$264,772.00	\$254,472.00
1967 Addition	24,119	\$65,011.90	\$65,011.90
<b>Total</b>	<b>72,039</b>	<b>\$329,783.90</b>	<b>\$319,483.90</b>
Total with Regional Cost Factor (99.93%)	—	\$329,553.05	\$319,260.26
Regional Total with Soft Costs & Contingency	—	\$410,063.85	\$397,256.50



**Environmental Hazards - Tipp City Exempted Village (45617) - Broadway Elementary (3707) - Original Construction**

**Owner:** Tipp City Exempted Village **Bldg. IRN:** 3707  
**Facility:** Broadway Elementary **BuildingAdd:** Original Construction  
**Date On-Site:** 2014-03-31 **Consultant Name:** PSI

A. Asbestos Containing Material (ACM)		AFM=Asbestos Free Material		
ACM Found	Status	Quantity	Unit Cost	Estimated Cost
1. Boiler/Furnace Insulation Removal	Not Present	0	\$10.00	\$0.00
2. Breeching Insulation Removal	Not Present	0	\$10.00	\$0.00
3. Tank Insulation Removal	Not Present	0	\$8.00	\$0.00
4. Duct Insulation Removal	Not Present	0	\$8.00	\$0.00
5. Pipe Insulation Removal	Assumed Asbestos-Containing Material	960	\$10.00	\$9,600.00
6. Pipe Fitting Insulation Removal	Assumed Asbestos-Containing Material	280	\$20.00	\$5,600.00
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Assumed Asbestos-Containing Material	3000	\$12.00	\$36,000.00
8. Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Assumed Asbestos-Containing Material	280	\$30.00	\$8,400.00
9. Pipe Insulation Removal (Hidden in Walls/Ceilings)	Assumed Asbestos-Containing Material	960	\$15.00	\$14,400.00
10. Dismantling of Boiler/Furnace/Incinerator	Assumed Asbestos-Containing Material	3	\$2,000.00	\$6,000.00
11. Flexible Duct Connection Removal	Assumed Asbestos-Containing Material	5	\$100.00	\$500.00
12. Acoustical Plaster Removal	Not Present	0	\$7.00	\$0.00
13. Fireproofing Removal	Not Present	0	\$25.00	\$0.00
14. Hard Plaster Removal	Reported / Assumed Asbestos-Free Material	0	\$7.00	\$0.00
15. Gypsum Board Removal	Reported / Assumed Asbestos-Free Material	0	\$6.00	\$0.00
16. Acoustical Panel/Tile Ceiling Removal	Reported / Assumed Asbestos-Free Material	0	\$3.00	\$0.00
17. Laboratory Table/Counter Top Removal	Not Present	0	\$100.00	\$0.00
18. Cement Board Removal	Not Present	0	\$5.00	\$0.00
19. Electric Cord Insulation Removal	Not Present	0	\$1.00	\$0.00
20. Light (Reflector) Fixture Removal	Not Present	0	\$50.00	\$0.00
21. Sheet Flooring with Friable Backer Removal	Reported / Assumed Asbestos-Free Material	0	\$4.00	\$0.00
22. Fire Door Removal	Assumed Asbestos-Containing Material	85	\$100.00	\$8,500.00
23. Door and Window Panel Removal	Not Present	0	\$100.00	\$0.00
24. Decontamination of Crawlspace/Chase/Tunnel	Not Present	0	\$3.00	\$0.00
25. Soil Removal	Not Present	0	\$150.00	\$0.00
26. Non-ACM Ceiling/Wall Removal (for access)	Assumed Asbestos-Containing Material	5800	\$2.00	\$11,600.00
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo	Reported Asbestos-Containing Material	99	\$300.00	\$29,700.00
28. Window Component (Compound, Tape, or Caulk) - Reno Only	Reported Asbestos-Containing Material	99	\$300.00	\$29,700.00
29. Resilient Flooring Removal, Including Mastic	Assumed Asbestos-Containing Material	19420	\$3.00	\$58,260.00
30. Carpet Mastic Removal	Assumed Asbestos-Containing Material	3600	\$2.00	\$7,200.00
31. Carpet Removal (over RFC)	Assumed Asbestos-Containing Material	1300	\$1.00	\$1,300.00
32. Acoustical Tile Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$3.00	\$0.00
33. Sink Undercoating Removal	Assumed Asbestos-Containing Material	12	\$100.00	\$1,200.00
34. Roofing Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	\$0.00
35. Cove Base Mastic Removal	Reported / Assumed Asbestos-Free Material	lump sum		\$0.00
36. Window/Door Caulking Removal	Assumed Asbestos-Containing Material	lump sum		\$1,500.00
37. Visual Display Board Mastic Removal	Assumed Asbestos-Containing Material	lump sum		\$4,000.00
38. Insulated Window Panel Removal	Assumed Asbestos-Containing Material	lump sum		\$4,000.00
39. NEW Other ACM	Not Present	lump sum		\$0.00
40. NEW Other ACM	Not Present	lump sum		\$0.00
41. NEW Other ACM	Not Present	lump sum		\$0.00
42. (Sum of Lines 1-41)	<b>Total Asb. Hazard Abatement Cost for Renovation Work</b>			\$237,460.00
43. (Sum of Lines 1-34, 36-41)	<b>Total Asb. Hazard Abatement Cost for Demolition Work</b>			\$237,460.00

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

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

D. Fluorescent Lamps & Ballasts Recycling/Incineration				<input type="checkbox"/> Not Applicable
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost	
1. 47920	47920	\$0.10	\$4,792.00	

E. Other Environmental Hazards/Remarks			<input type="checkbox"/> None Reported
Description	Cost Estimate		
1. See Bulk Sample Record Numbers 1-6 and 11	\$0.00		
2. XRF testing for lead-based paint is recommended for compliance with EPS's RRP Program	\$5,000.00		
3. Boilers are housed in a separate building located approximately 65 feet north of Broadway elementary school. The room three boilers and one hot water tank wrapped in asbestos and approximately 36 by 20 feet. The room has fiber glass pipe fittings and pipe insulation. The tunnels are approximate 3 ft. by 3ft. and total a length of 1100 ft. and 3300 sqft. The tunnel s runs under the original construction of Broadway elementary and The Enrichment Program. Contamination of the crawlspace from damaged asbestos was not witnessed. Damaged asbestos could be present in areas not examined during the survey.	\$0.00		
4. (Sum of Lines 1-3)	<b>Total Cost for Other Environmental Hazards - Renovation</b>		\$5,000.00
5. (Sum of Lines 1-3)	<b>Total Cost for Other Environmental Hazards - Demolition</b>		\$5,000.00

F. Environmental Hazards Assessment Cost Estimate Summaries		
1. A42, B1, C3, D1, and E4	<b>Total Cost for Env. Hazards Work - Renovation</b>	\$257,252.00
2. A43, B1, D1, and E5	<b>Total Cost for Env. Hazards Work - Demolition</b>	\$247,252.00

\* 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.

**Environmental Hazards - Tipp City Exempted Village (45617) - Broadway Elementary (3707) - Addition**

**Owner:** Tipp City Exempted Village      **Bldg. IRN:** 3707  
**Facility:** Broadway Elementary      **BuildingAdd:** Addition  
**Date On-Site:** 2014-03-31      **Consultant Name:** PSI

A. Asbestos Containing Material (ACM)		AFM=Asbestos Free Material	
ACM Found	Status	Quantity	Unit Cost Estimated Cost
1. Boiler/Furnace Insulation Removal	Not Present	0	\$10.00 \$0.00
2. Breeching Insulation Removal	Not Present	0	\$10.00 \$0.00
3. Tank Insulation Removal	Not Present	0	\$8.00 \$0.00
4. Duct Insulation Removal	Not Present	0	\$8.00 \$0.00
5. Pipe Insulation Removal	Assumed Asbestos-Containing Material	1600	\$10.00 \$16,000.00
6. Pipe Fitting Insulation Removal	Reported / Assumed Asbestos-Free Material	0	\$20.00 \$0.00
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$12.00 \$0.00
8. Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$30.00 \$0.00
9. Pipe Insulation Removal (Hidden in Walls/Ceilings)	Assumed Asbestos-Containing Material	500	\$15.00 \$7,500.00
10. Dismantling of Boiler/Furnace/Incinerator	Not Present	0	\$2,000.00 \$0.00
11. Flexible Duct Connection Removal	Not Present	0	\$100.00 \$0.00
12. Acoustical Plaster Removal	Assumed Asbestos-Containing Material	200	\$7.00 \$1,400.00
13. Fireproofing Removal	Not Present	0	\$25.00 \$0.00
14. Hard Plaster Removal	Reported / Assumed Asbestos-Free Material	0	\$7.00 \$0.00
15. Gypsum Board Removal	Not Present	0	\$6.00 \$0.00
16. Acoustical Panel/Tile Ceiling Removal	Reported / Assumed Asbestos-Free Material	0	\$3.00 \$0.00
17. Laboratory Table/Counter Top Removal	Not Present	0	\$100.00 \$0.00
18. Cement Board Removal	Not Present	0	\$5.00 \$0.00
19. Electric Cord Insulation Removal	Not Present	0	\$1.00 \$0.00
20. Light (Reflector) Fixture Removal	Not Present	0	\$50.00 \$0.00
21. Sheet Flooring with Friable Backer Removal	Reported / Assumed Asbestos-Free Material	0	\$4.00 \$0.00
22. Fire Door Removal	Assumed Asbestos-Containing Material	40	\$100.00 \$4,000.00
23. Door and Window Panel Removal	Not Present	0	\$100.00 \$0.00
24. Decontamination of Crawlspace/Chase/Tunnel	Not Present	0	\$3.00 \$0.00
25. Soil Removal	Not Present	0	\$150.00 \$0.00
26. Non-ACM Ceiling/Wall Removal (for access)	Assumed Asbestos-Containing Material	2000	\$2.00 \$4,000.00
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo	Reported Asbestos-Containing Material	20	\$300.00 \$6,000.00
28. Window Component (Compound, Tape, or Caulk) - Reno Only	Reported Asbestos-Containing Material	20	\$300.00 \$6,000.00
29. Resilient Flooring Removal, Including Mastic	Reported / Assumed Asbestos-Free Material	0	\$3.00 \$0.00
30. Carpet Mastic Removal	Reported Asbestos-Containing Material	8200	\$2.00 \$16,400.00
31. Carpet Removal (over RFC)	Not Present	0	\$1.00 \$0.00
32. Acoustical Tile Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$3.00 \$0.00
33. Sink Undercoating Removal	Assumed Asbestos-Containing Material	13	\$100.00 \$1,300.00
34. Roofing Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00 \$0.00
35. Cove Base Mastic Removal	Assumed Asbestos-Containing Material	lump sum	\$300.00
36. Stage Curtain Removal	Assumed Asbestos-Containing Material	lump sum	\$1,000.00
37. Window/Door Caulking Removal	Reported Asbestos-Containing Material	lump sum	\$3,000.00
38. Visual Display Board Mastic Removal	Assumed Asbestos-Containing Material	lump sum	\$3,000.00
39. Retractable Wall Removal	Assumed Asbestos-Containing Material	lump sum	\$220.00
40. Terrazzo Flooring	Reported / Assumed Asbestos-Free Material	lump sum	\$0.00
41. Gym Flooring	Reported Asbestos-Containing Material	lump sum	\$0.00
42. NEW Other ACM	Not Present	lump sum	\$0.00
43. NEW Other ACM	Not Present	lump sum	\$0.00
44. (Sum of Lines 1-43)	<b>Total Asb. Hazard Abatement Cost for Renovation Work</b>		\$70,120.00
45. (Sum of Lines 1-34, 36-43)	<b>Total Asb. Hazard Abatement Cost for Demolition Work</b>		\$69,820.00

B. Removal Of Underground Storage Tanks <input checked="" type="checkbox"/> None Reported					
Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1. (Sum of Lines 1-0)	<b>Total Cost For Removal Of Underground Storage Tanks</b>				\$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)	<b>Total Cost for Lead-Based Paint Mock-Ups</b> \$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. 24119	24119	\$0.10	\$2,411.90

E. Other Environmental Hazards/Remarks <input type="checkbox"/> None Reported	
Description	Cost Estimate
1. See Bulk Sample Records 7-11	\$0.00
2. Costs for lead-based paint mock-ups are included in assessment for 1951	\$0.00
3. NEW Other Hazards	\$0.00
4. (Sum of Lines 1-3)	<b>Total Cost for Other Environmental Hazards - Renovation</b> \$0.00
5. (Sum of Lines 1-3)	<b>Total Cost for Other Environmental Hazards - Demolition</b> \$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries		
1. A44, B1, C3, D1, and E4	<b>Total Cost for Env. Hazards Work - Renovation</b>	\$72,531.90
2. A45, B1, D1, and E5	<b>Total Cost for Env. Hazards Work - Demolition</b>	\$72,231.90

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

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

