### Building Information - Shaker Heights City (44750) - Lomond Elem

Program Type Classroom Facilities Assistance Program (CFAP) - Regular

Setting Urban

Assessment Name Lomond ES Assessment- Shaker Heights CSD - CFAP Update (11-2-21)

Assessment Date (on-site; non-EEA) 2015-02-17

Kitchen Type Full Kitchen

Cost Set: 2016

Building Name Lomond Elem

Building IRN 21279

Building Address 17917 Lomond Blvd
Building City Shaker Heights

Building Zipcode 44122

Building Phone (216) 295-4050

Acreage 8.75
Current Grades: K-4
Teaching Stations 24
Number of Floors 3
Student Capacity 504
Current Enrollment 452

Enrollment Date 2014-05-02

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

Number of Classrooms 26
Historical Register NO

Building's Principal Carina Freeman
Building Type Elementary

Next Page

#### Building Pictures - Shaker Heights City(44750) - Lomond Elem(21279)





East elevation photo: #

South elevation photo:







#### **GENERAL DESCRIPTION**

63,023 Total Existing Square Footage

1928,1954,1971 Building Dates

K-4 Grades

452 Current Enrollment

24 Teaching Stations

8.75 Site Acreage

The 63,023 sq.ft. school is situated in a neighborhood of Shaker Heights. The 8.8 acre site is surrounded by residences. The original 1928 building and the 1954 addition are clad with reddish brown brick and punctuated with regularly spaced rectangular window openings. The recently replaced windows reflect the original divided lights and have in interior wood finish with white painted frames on the exterior. Main entrances are framed by classical post and lintel stone design features. Original sloped roof portions of the building are covered with slate. Most flat roof areas are covered with built-up systems that have been subsequently coated with a liquid applied reflective material.

No Significant Findings

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### PROBABLE INFLATION COST SUMMARY FOR SUMMER 2022

The building assessment costs in this report are based on OFCC Assessment Cost Guidelines 2021. Based on current market conditions, the following cost projections have been made for Summer 2022 construction. Cost years beyond 2022 have been calculated with a 3.5% inflation rate.

Facili	ty Cost Assessment Adjusted for Inflation through Summer	Estimated 2022	
	2022	Assessement Cost	Cost/sf.
Α	Heating System	\$2,573,829.07	\$40.84
В	Roofing	\$368,873.63	\$5.85
С	Ventilation / Air Conditioning	\$0.00	\$0.00
D	Electrical Systems	\$1,194,704.32	\$18.96
E	Plumbing and Fixtures	\$626,766.03	\$9.95
F	Windows	\$3,812.35	\$0.06
G	Structure: Foundation	\$0.00	\$0.00
Н	Structure: Walls and Chimneys	\$71,000.00	\$1.13
I	Structure: Floors and Roofs	\$0.00	\$0.00
J	General Finishes	\$1,204,181.43	\$19.11
K	Interior Lighting	\$376,631.10	\$5.98
L	Security Systems	\$205,896.14	\$3.27
M	Emergency / Egress Lighting	\$67,607.92	\$1.07
N	Fire Alarm	\$101,411.88	\$1.61
0	Handicapped Access	\$460,459.89	\$7.31
Р	Site Condition	\$359,260.96	\$5.70
Q	Sewage Systems	\$0.00	\$0.00
R	Water Supply	\$22,360.00	\$0.35
S	Exterior Doors	\$24,640.00	\$0.39
Т	Hazardous Material	\$101,012.30	\$1.60
U	Life Safety	\$405,284.78	\$6.43
V	Loose Furnishings	\$258,394.30	\$4.10
W	Technology	\$839,644.40	\$13.32
х	Construction Contingency / Non-Construction Cost	\$2,241,751.45	\$35.57
	ESCALATED OFCC GUIDELINE BUDGET (2021) - OME	\$11,507,521.95	\$182.59

**OFCC 2021 COST GUIDELINES BUDGET** 

\$10,062,567.66 \$1,444,954.29

VARIANCE % 14.36%

### **UNIT PRICE CONCERNS**

Total \$809,284.41

REV OFCC GUIDELINE UNIT PRICE BUDGET - OME \$12,316,806.36 \$195.43

**VARIANCE** 

**OFCC 2021 COST GUIDELINES BUDGET** \$10,062,567.66

VARIANCE \$2,254,238.70
VARIANCE % 22.40%

## **LOCALLY FUNDED INITIATIVES**

Total	\$4,935,484.18	
<b>REV OFCC GUIDELINE UNIT PRICE BUDGET - OME</b>	\$17,252,290.54	\$273.75
OFCC 2021 COST GUIDELINES BUDGET	\$10,062,567.66	
VARIANCE	\$7,189,722.88	
VARIANCE %	71.45%	
2022 Costs	\$17,252,290.54	
2023 Costs with 3.5% inflation	\$17,856,120.71	
2024 Costs with 3.5% inflation	\$18,481,084.93	
2025 Costs with 3.5% inflation	\$19,127,922.91	
2026 Costs with 3.5% inflation	\$19,797,400.21	

### Building Construction Information - Shaker Heights City (44750) - Lomond Elem (21279)

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition	Built Under ELPP
Original Building	1928	no	3	53,519	no	no
Classrooms	1954	no	2	4,818	no	no
Infill	1971	no	2	4,686	no	no

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### Building Component Information - Shaker Heights City (44750) - Lomond Elem (21279)

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 Building (1928)		8913		4658	1490		2995	149						
Classrooms (1954)		481												
Infill (1971)														
		- ,	0	4,658	1,490	0	2,995	149	0	0	0	0	0	0
Infill (1971) Total Master Planning			0	4,658	1,490	0	2,995	149	0	0	0	0	0	0

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# Existing CT Programs for Assessment

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Program Type Program Name Related Space Square Feet
No Records Found

#### Legend:

Not in current design manual

In current design manual but missing from assessment

### Building Summary - Lomond Elem (21279)

District	Ob alvan I I ala	l-4- C	Ni				1					- N Obi - (0)			
District: Name:	Shaker Heig Lomond Ele		ιτy						nty: Cuyahog tact: Carina F		rea	: Northeastern Ohio (8)			
	17917 Lomo		الما				"	on Pho							
Address:	Shaker Heig			20				-	ne: (216) 295 Prepared: 2015-02-			Kelton Waller			
Dida IDN	-	ш5,С	JN 4412	.2					Revised: 2021-11-		y:	Bill Prenosil			
Bldg. IRN:			14.4	1				_			y:	biii Prenosii			
Current Gra			K-4	Acreage			8.7	5	Suitability Appraisal	Summary					
Proposed C			N/A	Teachin		ions:	24		Sect	ion		Points Possible P	ointe Earno	d Doroontago	Pating Catagory
Current En			452	Classro	oms:		26		Cover Sheet	1011		Politis Possible P	OIIIIS Earlie	a reiceillage	nating Category
Projected E		1	N/A	( = 1				_	1.0 The School Site			100	86	86%	Satisfactory
Addition	Date	_	Numb	er of Floo	ors C	Jurrent S	quare Fe	et	2.0 Structural and Me	ochonical I	E00		138	69%	Borderline
Original Bu		_		3	_				3.0 Plant Maintainab		ea	100	66	66%	Borderline
Classrooms		+		2	_				4.0 Building Safety a		.,	200	142	71%	Satisfactory
<u>Infill</u>	1971	no		2					5.0 Educational Aded		<u>y</u>	200	144	71%	
Total	+114	<u>.</u>	I P .				63,0	J23	6.0 Environment for I			200	144	72% 71%	Satisfactory Satisfactory
	*HA	-		ped Acce	ess				LEED Observations	Luucalion		200	142 —	/ 170	Salisiaciory
	*Rating	-	atisfacto	•					Commentary			_	_	_	_
		-	leeds R						Total			1000	718	72%	Satisfactory
	+0 + 0/0	_		eplaceme						ontal Haza	rdo	Assessment Cost Estima		1270	Salisiaciory
_	*Const P/S	_		Scheduled	d Cons	struction			Ellianced Environme	eniai naza	ius	ASSESSMENT COST ESTIMA	<u>lles</u>		
F.	ACILITY ASS Cost Set				Rating	Δ.	Dolla	ır	C=Under Contract						
A. Heat	ting System	201	<u> </u>		3		50,344.7								
B. Roof					3		22,716.5	$\overline{}$	Renovation Cost Fac			H B			102.31%
	tilation / Air C	ondit	ionina		1	ΨΟ	\$0.0		Cost to Renovate (Co			olled) d the Renovate/Replace ra	atio are only	provided when	\$10,295,012.97
	trical System		ioning		3	\$1.0	22,863.2	-	requested from a Ma		an	и те пеночате/періасе та	allo are orliy	orovided wrieri	uns summary is
	nbing and Fix				3		44,859.0	-							
F. Wind		turce	<u>-</u>		2	<u> </u>	\$3,260.0	-							
	cture: Founda	ation			1		\$0.0	+							
	cture: Walls a		himnev	9	2	\$	71,000.0	-							
	cture: Floors			_	_ <del>_</del>	<b>*</b>	\$0.00	-							
	eral Finishes				3	\$1.1	21,865.7	-							
	rior Lighting				3		30,115.0	-							
	urity Systems				3		79,615.5	-							
	ergency/Egres		htina		3	<u> </u>	63,023.0	-							
	Alarm				3	<del>                                     </del>	94,534.5	+							
	dicapped Acc	ess			2		83,704.6	-							
	Condition				3	<u> </u>	33,771.5	-							
	age System				1		\$0.00	-							
	er Supply				3	\$	20,500.0	-							
	rior Doors				2		20,000.0	-							
	ardous Mater	ial				<u> </u>	01,012.3	+							
U. Life					3		46,238.6	-							
	se Furnishing	S			2	<u> </u>	52,092.0	-							
W. Tech		_			3	<b>+</b>	25,394.7	-							
X. Cons	struction Con -Construction				1		75,656.6	-							
Total						\$10,0	62,567.6	6							

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### Original Building (1928) Summary

Distr	ict:	Shaker	Height	s Cit	у				Co	County: Cuyahoga Area: Northeastern Ohio (8)
Name	e:	Lomond	l Elem						Co	Contact: Carina Freeman
Addr	ess:	17917 L	.omon	d Blv	d				Ph	Phone: (216) 295-4050
		Shaker	Height	s,OF	1 44122	2			Da	Date Prepared: 2015-02-17 By: Kelton Waller
Bldg.	. IRN:	21279							Da	Date Revised: 2021-11-03 By: Bill Prenosil
Curre	nt Gra	ades			K-4	Acreage:			8.75	Suitability Appraisal Summary
Propo	sed G	Grades			N/A	Teaching	Statio	ons:	24	
Curre	nt Enr	rollment			452	Classroor	ns:		26	Section Points Possible Points Earned Percentage Rating Categ
<u> </u>		nrollmer			N/A					Cover Sheet — — — — —
<u>Additi</u>	_		_		Numb	er of Floor	<u>rs C</u>	urrent S	Square Feet	et 1.0 The School Site 100 86 86% Satisfac
		uilding		<u>no</u>		3				
	rooms	<u>S</u>	+	no		2				818         3.0 Plant Maintainability         100         66         66%         Border           686         4.0 Building Safety and Security         200         142         71%         Satisfac
Infill			1971	no		2			4,686	123 5.0 Educational Adequacy 200 144 72% Satisfaction
<u>Total</u>		*HA	1.	الما	ndioan	ped Acces	<u> </u>		<u>53,023</u>	6.0 Environment for Education 200 142 71% Satisfact
		*Rating	=	_	naicap <sub>i</sub> tisfacto	•	ە -			LEED Observations — — — —
		nauiig		_	eds Re	•				Commentary — — — —
			_	_		placemen	t			Total 1000 718 72% Satisfac
		*Const		+		cheduled		truction		Enhanced Environmental Hazards Assessment Cost Estimates
	F	ACILITY		_			00		Dollar	,
			Set: 2			R	ating	As	sessment	t C C=Under Contract
<u>简</u> A.	Heat	ting Syste	<u>em</u>				3	\$1,8	26,068.28	Renovation Cost Factor 102.3
<u>[a</u> B.							3	\$2	70,408.40	Cost to Renovate (Cost Factor applied) \$8,892,815
🋅 C.	_	ilation / A	Air Cor	nditio	ning		1		\$0.00 -	<del> </del>
D.	_	trical Sys	_				3	<u> </u>	68,613.37	
<u>@</u> E.	_	nbing and	d Fixtu	<u>res</u>			3		10,133.00	
<u>6</u> F.	_						2		\$2,180.00	
<u>6</u> G.	_	cture: Fo					1		\$0.00 -	<del>   </del>
<u>(a)</u> H.	_	cture: Wa				<u> </u>	1	\$	51,000.00	
<u>6</u> 1.	_	eral Finis		iu no	<u>JOIS</u>		3	ΦΩ.	\$0.00 - 67,552.10 -	
<u>□</u> 5.	_	ior Lighti					3	<u> </u>	82,595.00	<del>   </del>
L.	_	urity Syst					3		52,529.15	
<u>™</u> M.	_	rgency/E		Liah	tina		3		53,519.00	+-
<u>□</u> N.	_	Alarm					3		80,278.50	<del>   </del>
<u>6</u> 0.	_	dicapped	Acces	<u>ss</u>			2		63,703.80	
<u>a</u> P.	_	Conditio		_			3		19,515.50	
<b>Z</b> Q.	Sewa	age Syst	<u>em</u>				1		\$0.00	<del> </del>
🛅 R.	Wate	er Supply	<u></u>				3	\$	20,500.00	-
<u>🛅</u> S.	Exte	rior Door	<u>'S</u>				2	\$	18,000.00 -	
<b>Z</b> T.	Haza	ardous M	laterial				1	\$	70,511.90 -	
🛅 U.	_	<u>Safety</u>					3		98,273.30	
<b>Ø</b> V.	_	se Furnis	<u>hings</u>				2		14,076.00	<del>   </del>
M.	_	nology					3		16,003.69	
<b>X</b> .		struction -Constru			<u>cy /</u>		1		06,569.08	
Total								\$8,6	92,030.07	7

### Classrooms (1954) Summary

District:	Shake	r Heial	nts C	Citv				Co	unty:	Cuyahoga	Area	a: Northeastern Ohio (8)			
Name:	Lomon	_		,					ntact:	Carina Freema					
Address				lvd					one:	(216) 295-405					
			-	)H 4412	2				te Prepared:	( -,	By:	Kelton Waller			
Bldg. IRI		_	, -						te Revised:		By:	Bill Prenosil			
Current G	Grades			K-4	Acreage:			8.75	Suitability Ap	opraisal Summ	ary				
Proposed	Grades			N/A	Teaching S	Stations		24		•					
Current E	nrollmen	t		452	Classroom	ıs:		26		Section		Points Possible	Points Earne	d Percentage I	Rating Category
Projected	l Enrollme	ent		N/A					Cover Sheet	<u>t</u>		_	_	_	_
Addition		<u>Date</u>	<u>HA</u>	Numbe	er of Floors	Curre	nt Squar	e Feet	1.0 The Sch			100	86	86%	Satisfactory
Original E	Building	1928	no		3					al and Mechani	cal Fea	tures 200	138	69%	Borderline
Classroo	ms	1954	no		2				3.0 Plant Ma			100	66	66%	Borderline
<u>Infill</u>		1971	no		2					Safety and Sec	curity	200	142	71%	Satisfactory
<u>Total</u>								63,023		nal Adequacy		200	144	72%	Satisfactory
	*HA	-	_		ped Access	3				nent for Educat	<u>tion</u>	200	142	71%	Satisfactory
	*Ratin	ັ ⊢	_	atisfacto					LEED Obser			_	_	_	_
		-	-	eeds Re					Commentary	L		_			_
			-		eplacement				Total			1000	718	72%	Satisfactory
					Scheduled C	Construc			Ennanced E	<u>nvironmentai F</u>	iazaros	Assessment Cost Estim	<u>ates</u>		
	FACILIT	Y ASS st Set:			D.	ating	1	Dollar mont C	C=Under Co	ntract					
🖺 A. He	ating Sys		2010	0	110	3	\$164,39								
	ofing	<u>sterri</u>				3		62.50 -	Renovation (			P. D.			102.31%
	ntilation /	Air Co	nditi	ionina		1		60.00 -		ovate (Cost Fac		blied) d the Renovate/Replace	ratio are only i	provided when t	\$749,183.96
	ectrical Sy			·······································		3	\$78,19			om a Master Pl		Tine Henovale/Hepiace	ratio are only p	orovided when the	no summary is
	umbing ar		•			3	\$34,72								
	ndows					2		30.00 -							
	ructure: F	ounda	tion			1	(	- 00.08							
H. Str	ructure: V	Valls ar	nd C	himneys	<u>s</u>	2	\$20,00	00.00 -							
🛅 I. Str	ructure: F	loors a	ınd F	Roofs		1		- 00.08							
	eneral Fin	<u>ishes</u>				3	\$78,20	06.20 -							
🎽 K. Inte	erior Ligh	ting				3	\$24,09	- 00.00							
L. Se	curity Sys	stems				3	\$13,73	31.30 -							
	nergency/	/Egres	s Lig	hting		3	\$4,8	18.00 -							
	e Alarm					3		27.00 -							
	ındicappe		ess			2	\$15,56								
	e Conditi					3		27.00 -							
	wage Sys					1		- 00.00							
	ater Supp					3		- 00.00							
	terior Dod	_				2		00.00 -							
	zardous	wateria	<u>aı</u>			1	\$19,58	_							
	e Safety	iobina-				2	\$32,97		-						
	ose Furni						\$19,2								
	chnology instruction		ingo	ncv /		1	\$55,45 \$143,77	_	-						
	n-Constr					1	φ143,/	1.50 -							
Total							\$732,26	8.56							

### Infill (1971) Summary

Distr	rict:	Shake	r Heigh	nts C	ity				С	Coun	nty:	Cuyahoga	Area	a: N	Northeastern Ohio (8)			
Nam	e:	Lomon	nd Elen	n					c	Conta	act:	Carina Freem	an					
Addı	ress:	17917	Lomor	nd Bl	vd				P	hon	ne:	(216) 295-40	50					
		Shake	r Heigh	hts,O	H 4412	2			D	ate	Prepared:	2015-02-17	By:	K	Kelton Waller			
Bldg	. IRN	l: 21279							D	Date	Revised:	2021-11-03	Ву:	В	Bill Prenosil			
Curre	ent Gr	rades			K-4	Acreage:			8.75	S	Suitability Ap	praisal Sumn	nary					
Propo	osed (	Grades			N/A	Teaching	Statio	ns:	24									
Curre	ent En	nrollmen	t		452	Classroo	ms:		26			Section			Points Possible F	Points Earne	d Percentage	Rating Category
Proje	cted B	Enrollme	ent		N/A						Cover Sheet				_	_	_	_
Addit			<u>Date</u>	HA	Numbe	er of Floor	s Cu	rrent S	quare Fee		.0 The Scho				100	86	86%	Satisfactory
<u>Origi</u>	nal Bu	uilding	1928	-		3						l and Mechar	ical Fea	ature		138	69%	Borderline
	sroom	<u>18</u>	1954	-		2					.0 Plant Ma				100	66	66%	Borderline
Infill			1971	no		2			4,68	86 4	.0 Building S	Safety and Se	curity		200	142	71%	Satisfactory
<u>Total</u>									<u>63,02</u>			nal Adequacy			200	144	72%	Satisfactory
		*HA	=	_	·	ped Acce	SS					nent for Educa	ttion		200	142	71%	Satisfactory
		*Ratin	ັ ⊢	_	atisfacto	•					EED Obser	•			_	_	_	_
			-	_	eds Re	•					Commentary				1000	718	700/	— Catiofostani
		+0		_		eplacemer				_	otal	vironmontal	Jozordo	o A o	ssessment Cost Estima		72%	Satisfactory
						Scheduled	Const	ruction	D. II.		IIIIaiiceu Ei	iviroriirieritai	<u>nazaius</u>	5 AS	SSESSITIETT COST ESTITIO	1185		
	-	FACILIT Co:	Y ASS st Set:				Rating	As	Dollar sessment	CC	=Under Cor	ntract						
<u>6</u> A.	Hea	ating Sys			-		3		59.886.32	I-L								
<u>™</u> В.	_	ofing					3		42,345.60	HR	lenovation C	Cost Factor vate (Cost Fa	otor opr	nline	d)			102.31% \$653,013.05
C.		ntilation /	Air Co	onditi	oning		1		\$0.00	-					u) ne Renovate/Replace r	atio are only i	provided when t	
ŭ D.		ctrical Sy					3	\$	76,053.78			m a Master F				, /		
ĭŏ E.	Plur	mbing a	ınd Fix	kture	<u>s</u>		3		\$0.00	-								
<mark></mark> F.	Win	ndows					2		\$0.00	-								
<u>Ğ</u> G	. Stru	ucture: F	ounda	tion			1		\$0.00	-								
🛅 H.	Stru	ucture: \	Walls	and (	Chimne	eys	2		\$0.00	-								
🛅 I.	Stru	ucture: F	loors a	and R	<u>Roofs</u>		1		\$0.00	-								
🋅 J.	Gen	neral Fin	<u>ishes</u>				3	\$	76,107.40	-								
<sup>™</sup> K.	_	rior Ligh					3		23,430.00	-								
L.	_	curity Sys					3	-	13,355.10	+								
M	_	ergency/	/Egres	s Ligl	hting		3		\$4,686.00	-								
<u>□</u> N.	_	Alarm					3		\$7,029.00	-								
<u></u> 0	_	ndicappe		<u>ess</u>			2		\$4,437.20	+								
<u>6</u> P.	_	Condition					3		\$7,029.00	-								
<b></b> Q	_	vage Sys					1		\$0.00	-								
<ul><li>☐ R.</li><li>☐ S.</li></ul>	_	ter Supp					2		\$0.00	+								
□ 5. T.	_	erior Do zardous		al			1	Φ.	<b>\$0.00</b> 10,918.60	-								
<u>✓</u> 1.		Safety	ivialeffa	<u>al</u>			3		14,995.20	-								
<b>☑</b> V.	_	se Furni	ishinas				2		18,744.00	-								
M W	_	hnology	omigs				3		53,935.86	-								
<b>X</b>	Con	nstruction n-Constr					1		25,315.97	_								
Total		i-Constr	uctiON	<u>UUSI</u>				фс	38,269.03	Н								
าบเสเ								фр	JO,209.U3	$\perp$								

#### A. Heating System

Description:

The existing system for the building consists of two Weil-McLain steam boilers at 2080 MBH Each, they are approximately ten years old. The boilers appear to be in good condition. There is one boiler that has been abandoned in place. Building is heated with steam heat to unit ventilators, fin tube or radiators. There are unit ventilators located on the inside of the classrooms with outside air ducted to each from the attic area. These classrooms have fin tube or radiators located on the exterior wall. There are two central ventilation fans; each provide outside air for half of the building. The fans are not longer operational. The boilers and air handling units are controlled with DDC controls and the rest of the controls are pneumatic and in fair to poor condition due to the equipment age. Generally, all the equipment has been well maintained. Overall, the ventilators and the air handling units in the building do not provide the required outside air delivery to meet OBC mechanical code. The DDC controls were added two years ago under an energy performance contract. The staff indicates they generally try to leave the controls enabled for the equipment. The boilers are manually turned off during the mild temperatures. The steam system does not provide a capacity for simultaneous heating and cooling operation which is not compliant with the OSDM requirements. The staff indicated that the site does not contain underground fuel tanks.

Rating: 3 Needs Replacement

Recommendations:

Provide a new overall heating ventilating and air conditioning system to achieve compliance with OBC and OSDM standards. Convert to ducted system to facilitate efficient exchange of conditioned air. Provide new DDC temperature controls with the new system. The new ducted system will likely require architectural soffits to accommodate the installation of the ductwork.

Item	Cost	Unit	Whole	Original Building	Classrooms	Infill (1971)	Sum	Comments
			Building	(1928)	(1954)	4,686 ft <sup>2</sup>		
				53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>			
HVAC System	\$26.12	sq.ft. (of entire		Required	Required	Required	\$1,646,160.76	(includes demo of existing system and reconfiguration of piping
Replacement:		building						layout and new controls, air conditioning)
		addition)						
Convert To	\$8.00	sq.ft. (of entire		Required	Required	Required	\$504,184.00	(includes costs for vert. & horz. chases, cut openings, soffits,
Ducted System		building						etc. Must be used in addition to HVAC System Replacement if
		addition)						the existing HVAC system is non-ducted)
Sum:			\$2,150,344.76	\$1,826,068.28	\$164,390.16	\$159,886.32		





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#### B. Roofing

Description:

Low sloped roof areas are covered with built-up roof with a granular top sheet. Some stained ceiling tiles were observed on the top floor. Metal copings are present around the perimeter. Drainage is facilitated by curb type inlets along the north edge of the roof. Drainage for the largest areas of this roof is supported by only 2 of these drains. The granules have worn off in several areas around the roof. Indications of ponding were observed at many areas of the low-sloped roof. Some parts of the roof are remote from the roof draings. Efflorescence from leakage was observed near the north wall of the gymnasium. Areas of pitched roof are covered by original slate shingles. Water fall is collected by metal gutters at concealed areas, metal lined box gutters at areas visible from grade, and metal downspouts. Water collection features appear to be original to the 1926 building and are past their service life.

Rating: 3 Needs Replacement

Recommendations:

Provide a new built-up roof with adequate slope to ensure unimpeded drainage of the roof. Provide adequate overflow drains drains for evacuation of water from the roof. Provide new downspouts to replace the original water collection items. 01-27-16 UPDATE: REPLACE SLATE ROOF WITH ASPHALT SHINGLES ON ORIGINAL 1928 ORIGINAL BUILDING AND 1954 ADDITION. REPLACE BATT INSULATION ON SLOPED ROOFS ON 1928 ORIGINAL BUILDING AND 1954 ADDITION. PROVIDE FOR DECK REPLACEMENT ON SLOPED ROOF AREAS OF 1928 ORIGINAL BUILDING AND 1954 ADDITIONS. REPLACE GUTTERS AND DOWNSPOUTS ON SLOPED ROOF AREAS OF 1928 ORIGINAL BUILDING AND 1954 ADDITIONS. PROVIDE FOR TAPERED INSULATION TO CORRECT WATER PONDING ON LOW SLOPE ROOFS AREA OF 1928 ORIGINAL BUILDING AND 1954 ADDITION. PROVIDE BUDGET FOR REPAIRS TO SAGGING SLOPED ROOF TRUSSES ON 1928 ORIGINAL BUILDING. REPAIR LIGHTENING PROTECTION CABLE. 11-2-21 Update: Remove scope completed in 2019 & 2021. Slate repairs; adjust remaining replacement areas to match district's study/plan.

ltem	Cost U		Building	Original Building (1928) 53,519 ft <sup>2</sup>	Classrooms (1954) 4,818 ft <sup>2</sup>	Infill (1971) 4,686 ft <sup>2</sup>	Sum	Comments
Deck Replacement:	\$5.25sc	q.ft. Qty)		2,600 Required	630 Required		\$16,957.50	(wood or metal, including insulation)
Built-up Asphalt:	\$13.20sc	q.ft. Qty)		11,152 Required		2,640 Required	\$182,054.40	
Gutters/Downspouts	\$13.10ln	ı.ft.		1,300 Required	300 Required		\$20,960.00	)
Overflow Roof Drains and Piping:	\$2,500.00ea	ach		4 Required			\$10,000.00	)
Roof Insulation:	\$3.20sc	q.ft. Qty)		10,960 Required		2,343 Required	1 ' '	(non-tapered insulation for use in areas without drainage problems)
Roof Insulation:	\$4.70sc	q.ft. Qty)		1,000 Required	500 Required	·	\$7,050.00	(tapered insulation for limited area use to correct ponding)
Other: Batt Insulation	\$1.25sc	q.ft. Qty)		26,000 Required	300 Required		\$32,875.00	Batt Insulation on Sloped Roof Areas
Other: Repair Lightening Protection Cables	\$5.00ln	ı.ft.		50 Required			\$250.00	Repair Lightening Protection Cables
Other: Repair Roof Trusses	\$10,000.00al	llowance		Required			\$10,000.00	Repair Sagging Roof Trusses.
Sum:			\$322,716.50	\$270,408.40	\$9,962.50	\$42,345.60		





Evidence of ponding taking place several feet from point of drainage.

Worn away top ply granules are collecting around this roof drain.

### C. Ventilation / Air Conditioning

Description:

The Office and Clinic area have window air conditioners. The teachers lounge and server room have Mitubishi wall mounted air conditioners with an outside air cooled condensing units. The Art Room and the Computer Lab are cooled with rooftop units. There is no air conditioning in the classrooms. The ventilation system in the building generally does not meet the OBC fresh air requirements. The overall system is not compliant with Ohio School Design Manual requirements. The general building exhaust systems located in the restrooms are functional and in satisfactory

condition.

1 Satisfactory Rating:

Provide an air conditioning system to meet OBC and OSDM requirements. Pricing included in Item A. Recommendations:

ltem	CostUr	itWhole Building	Original Building (1928)	Classrooms (1954)	Infill (1971)	Sum	Comments
			53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Sum:		\$0.00	\$0.00	\$0.00	\$0.00		





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#### D. Electrical Systems

Description:

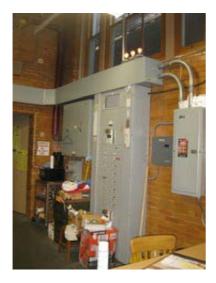
The main power enters the building underground to a locked transformer vault. The transformers are owned by the utility. The service described is leaving the transformer vault to serve the building. The electrical gear has been upgraded approximately 8 years ago with the main service of 208V, 3 phase, 4 wire, 800 amps. The main disconnect has been configured with a lock out function to allow the system to be served by a portable generator, with permenant lugs located outside that are tied to the main gear to back up the building. The lock out system is a manual transfer of power. A DDC power recording device was installed 2 years ago to track the power used. The panel boards fed by the new gear are much older and could be 30-40 years old. Additional outlets have been added to the classrooms, but the classrooms are still not equipped with adequate electrical outlets. Adequate GFI protected exterior outlets are not provided around the perimeter of the building. There is no lightning protection. The overall electrical system does not meet OSDM requirements in supporting the current needs of the school and will be inadequate to meet the facility's future needs.

Rating: 3 Needs Replacement

Recommendations:

The electrical system down stream of the main electrical gear requires replacement to meet Ohio School Design Manual guidelines for overall capacity due to poor condition and age of the panel boards.

Item	Cost	I		Original Building (1928)		Infill (1971) 4.686 ft <sup>2</sup>	Sum	Comments
				0 ( )	(1934) 4,818 ft <sup>2</sup>	4,000 11-		
System	\$16.23	sq.ft. (of entire		Required	Required	Required	\$1,022,863.29	(Includes demo of existing system. Includes generator for life safety
Replacement:		building				"		systems. Does not include telephone or data or equipment) (Use
		addition)						items below ONLY when the entire system is NOT being replaced)
Sum:			\$1,022,863.29	\$868,613.37	\$78,196.14	\$76,053.78		





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Description:

#### E. Plumbing and Fixtures

The 4" domestic water supply piping is galvanized piping at the building entrance and throughout most of the building. There is a pressure reducing valve on the water service line but there is no backflow preventer. The pressure reducing valve appears to be in poor condition. There were no water pressure issues indicated by the staff. The galvanized piping continues to present periodic challenges for the staffs with leaks. A water treatment system is not required for the domestic water system. There is a small water softener for the boiler water make-up. Approximtely 2007, Prestige 200 MBH water heater with storage tank with a recirculation pump provides the domestic hot water for the building. The water heater appears to be in good condition. One men's and one women's staff toilet has been upgraded with new fixtures and electronic sensor faucets. The rest of the building has no electronic sensor faucets and flush valves. All of the toilets are floor mounted. The plumbing fixtures are generally in good to fair condition. The school contains 4 restrooms for boys, 4 restrooms for girls, and 7 restrooms for the staff. There are 23 LAVs, 42 toilets, 2 ADA toilets, 15 urinals. There are 4 classroom sinks in good condition, but the faucets are in fair to poor condition. The LAVs have manual faucets in fair to poor condition and showing age. There are 8 drinking fountains in the school in generally good condition. There is no kitchen in this school.

Rating: 3 Needs Replacement

Recommendations:

Provide all of the faucets and flush valves with sensors and low flow fixtures to meet OSFC requirements. Replace the galvanized piping and classroom sink faucets. 01-27-16 UPDATE: INSTALL A MIXING VALVE ON THE DOMESTIC WATER HEATER. REPLACE SANITARY WASTE PIPING IN 1928 ORIGINAL BUILDING AND 1954 ADDITION.

Item	Cost	Unit	Whole	Original Building	Classrooms	Infill	Sum	Comments
			Building	(1928)	(1954)	(1971)		
				53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Back Flow Preventer:	\$5,000.00	unit		1 Required			\$5,000.00	
Domestic Supply Piping:		sq.ft. (of entire building addition)		Required	Required		\$204,179.50	(remove / replace)
Sanitary Waste Piping:		sq.ft. (of entire building addition)		Required	Required		\$204,179.50	(remove / replace)
Toilet:	\$1,500.00	unit		42 Required			\$63,000.00	(remove / replace) See Item O
Urinal:	\$1,500.00	unit		15 Required			\$22,500.00	(remove / replace)
Sink:	\$1,500.00	unit		23 Required			\$34,500.00	(remove / replace)
Replace faucets and flush valves	\$500.00	per unit		4 Required			\$2,000.00	(average cost to remove/replace)
Other: Add frostproof hose bibbs on exterior of building.	\$1,000.00	each		3 Required	1 Required			Cost includes fixture and 100 ft of piping
Other: Domestic Hot Water Mixing	\$5,500.00	per unit		1 Required			\$5,500.00	Provide Mixing Valve on Domestic
Valve								Water Supply
Sum:			\$544,859.00	\$510,133.00	\$34,726.00	\$0.00		





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### F. Windows

New double paned windows with interior wood sashes, white aluminum exterior cladding, and false muntins were installed less than 10 years. The windows are performing well. Not integral blinds are provided. Description:

2 Needs Repair Rating:

No work is recommended at this time. 01-27-16 UPDATE: REPLACE TRANSOM OVER EXTERIOR DOOR ON 1928 ORIGINAL BUILDING AND 1954 ADDITION. REPLACE INSECT SCREEN ON 1928 ORIGINAL BUILDING. Recommendations:

Item	Cost	Unit	Whole Building	Original Building (1928)	Classrooms (1954)	Infill (1971)	Sum	Comments
				53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Other: Provide New Insect Screens	\$110.00	per unit		10 Required			\$1,100.00	Provide New Insect Screens
Other: Transom	\$60.00	sq.ft. (Qty)	)	18 Required	18 Required		\$2,160.00	Replace Transom on Main Entry Door
Sum:			\$3,260.00	\$2,180.00	\$1,080.00	\$0.00		





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#### G. Structure: Foundation

Description: Masonry foundation walls and piers were observed in the mechanical areas. Efflorescence and other indications of water breach were observed

in these areas.

Rating: 1 Satisfactory

Recommendations: Provide sump pumps as necessary to evacuate ground water from areas adjacent to the basement mechanical spaces. 01-27-16 UPDATE:

PROVIDE BUDGET TO DEMOLISH EXISTING COAL ROOM AT 1928 ORIGINAL BUILDING. INSTALL VAPOR BARRIER AND MUD SLAB IN CRAWLSPACE OF 1928 ORIGINAL BUILDING. PROVIDE WATERPROOFING MEMBRANE AND DRAINAGE TILE SYSTEM FOR

FOUNDATION WALLS AT 1928 ORIGINAL BUILDING AND 1954 ADDITION. PROVIDE WATERPROOFING MEMBRANE AT CRAWLSPACE WALLS IN 1928 ORIGINAL BUILDING AND 1954 ADDITION. DELETE SUMP PUMP AT 1971 ADDITION. 11-2-21 Update: Remove all work

completed in 2020.

ltem	Cost	Unit	Whole Building	Original Building (1928	Classrooms (1954)	Infill (1971)	Sum	Comments
				53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00		





Efflorescence was observed on this tunnel wall

Moisture was observed on the floor near this tunnel wall

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#### H. Structure: Walls and Chimneys

Description: Load bearing masonry walls are present throughout the building. m Exterior load bearing walls are brick clad. Some damaged mortar joints were

observed. However, the mortar joints has been repaired. Cracking related to movement was observed on the interior wall of the gymnasium. A large stack on the roof has been braced by structural steel straps. The straps are corroding and the corrosion is has stained the roof and

flashings.

Rating: 2 Needs Repair

Recommendations: Provide expansion joints around the interior masonry walls as necessary to alleviate stress induced cracks. Clean and seal the masonry at the

mechanical stacks to minimize water penetration through the brick veneer. 01-27-16 UPDATE: REPLACE SANDSTONE CORNICE ON 1928 ORIGINAL BUILDING. REPLACE CAULK AROUND WINDOWS AND DOORS IN 1928 ORIGINAL BUILDING. ADD WEEPS ABOVE WINDOW LINTELS ON ORIGINAL 1928 BUILDING AND 1954 ADDITION. REBUILD AREA WELL MASONRY WALLS IN 1928 ORIGINAL BUILDING. PROVIDE TUCKPOINTING ON 1928 ORIGINAL BUILDING. PROVIDE FOR REPLACEMENT OF SANDSTONE CORNICE. CAULK JOINTS IN SANDSTONE. PROVIDE FOR EXTERIOR MASONRY CLEANING AND SEALING ON 1928 ORIGINAL BUILDING, 1954 ADDITION AND 1971 ADDITION. REPLACE CRAWLSPACE VENTS WITH LOUVERED VENTS WITH VERMIM PROOF SCREENS. 11-2-21 Update: Remove all

work completed in 2019 & 2020; cleaning & sealing, tuckpointing, masonry repair & caulking.

Item	Cost	Unit Whole Building	Original Building (1928)	Classrooms (1954)	Infill (1971)	Sum	Comments
			53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Coping Replacement Stone and Masonry:	\$100.00	n.ft.	510 Required	200 Required		\$71,000.00	(remove and replace)
Sum:		\$71,000.00	\$51,000.00	\$20,000.00	\$0.00		



A crack leads from the upper left corner of this door



Steel straps are corroding and stack stability could be compromised.

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### I. Structure: Floors and Roofs

Floors throughout the building consist of concrete pan joists or poured concrete structural slab. Pitched roof areas are supported by wood deck on wood rafters. Structure for the low sloped areas of the roof was not observable. No structural deficiencies were observed with the roof or floor structures. Description:

1 Satisfactory Rating:

Recommendations: No work is recommended at this time.

Item	Cost	Unit	Whole Building	Original Building (1928	Classrooms (1954)	Infill (1971)	Sum	Comments
			_	53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00		





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#### J. General Finishes

Description:

Corridor floors are lain with a tan ceramic tile. Walls are plaster with approximately 6' high brick wainscot. Classrooms floors are primarily carpet over original wood floors. Ceilings throughout the building are 12" acoustic tiles. Suspended acoustic tile ceilings were observed in teacher specific areas. Food preparation are not used as the meals are premade and delivered from off-site. A variety of gymnasium equipment for various kinds of physical activity was observed. Newer toilet partitions were installed as a part of ADA upgrades in the rest rooms. The kiln is in a separate room and no deficiencies were reported.

3 Needs Replacement Rating:

Recommendations:

Most of the finish items in the building have been in place longer than their anticipated service life. 01-27-16 UPDATE: DRYWALL REPLACEMENT FOR REMOVAL OF EXISTING DRYWALL TO ACCESS ACM BEHIND WALLS IN 1928 ORIGINAL BUILDING, 1954 ADDITION AND 1971 ADDITION NOTED UNDER ITEM T. PROVIDE FOR REPLACEMENT OF BASKETBALL BACKBOARDS. PROVIDE FOR

ACOUSTICAL TREATMENT IN STUDENT

Item	Cost	Unit	Whole	Original Building	Classrooms	Infill (1971)	Sum	Comments
			Building	(1928)	(1954)	4,686 ft <sup>2</sup>		
				53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>			
Complete Replacement of Finishes	\$15.90	sq.ft. (of entire		Required	Required	Required	\$1,002,065.70	(elementary, per building area,
and Casework (Elementary):		building addition)						with removal of existing)
Basketball Backboard Replacement	\$6,500.00	each		6 Required			\$39,000.00	(electric)
Gypsum Board Replacement	\$4.00	sq.ft. (Qty)		4,400 Required	400 Required	400	\$20,800.00	(Hazardous Material
						Required		Replacement Cost - See T.)
Other: Acoustical Treatment	\$30,000.00	allowance		Required			\$30,000.00	Acoustical Treatment for
								Gymnasium
Other: Acoustical Treatment	\$30,000.00	allowance		Required			\$30,000.00	Acoustical Treatment for Student
								Dining
Sum:			\$1,121,865.70	\$967,552.10	\$78,206.20	\$76,107.40		





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#### K. Interior Lighting

Description:

The florescent lighting is a mixture of recessed with acrylic lense, surface mounted with acrylic wrap around lense and pendent mounted with acrylic lense. The gym fixtures are high bay forescent fixtures. In 2012, the ballast and lamps have been upgraded to electronic energy efficient ballast and T8 lamps. The lighting is in good condition. Classroom lighting level is 24 FC, the Corridor lighting level is 22 FC, the Gym is 67 FC, Art room is 58 FC and the Auditorium is 81 FC. The classrooms have dual level lighting controls. (One row of lights per switch.) There are no dimming controls in the building except for the stage area in the Auditorium. Most of the light fixtures are in good condition.

3 Needs Replacement Rating:

Provide complete replacement of lighting system due to the installation of ducted HVAC systems and fire suppression systems. 01-27-16 Recommendations:

UPDATE: PROVIDE THEATRICAL LIGHTING FOR STUDENT DINING STAGE.

Item	Cost	Unit	Whole	Original Building	Classrooms	Infill (1971)	Sum	Comments
			Building	(1928)	(1954)	4,686 ft <sup>2</sup>		
			_	53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>			
Complete Building Lighting	\$5.00	sq.ft. (of entire building		Required	Required	Required	\$315,115.00	Includes demo of existing fixtures
Replacement		addition)						
Other: Theatrical Lighting	\$15,000.00	unit		1 Required			\$15,000.00	Theatrical Lighting Upgrade to
Upgrade								Student Dining Stage.
Sum:			\$330,115.00	\$282,595.00	\$24,090.00	\$23,430.00		_





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#### L. Security Systems

Description:

The security system consists of 15 exterior mounted cameras located around the building and near the building entrances. There is 1 interior camera on the inside of the entrance door. There are 3 key card entry doors. The front door is monitored with 2 way communication and a buzzer

camera on the inside of the entrance door. There are 3 key card entry doors. The front door is monitored with 2 way communication and a buzzer for visitors. It is also one of the key card entrance doors. The cameras report to computer screens located in the office. DVRs record locally the feedback from the cameras. There is no remote monitoring of the video system. The interior hallways have motion sensors tied to the security system. The exterior lighting consists of building mounted lighting and provides coverage for the building entrances. There are a few parking lot pole mounted lights for site lighting that provide additional lighting coverage. The exterior lighting is adequate. The system is compliant with

OSFC design manual guidelines.

Rating: 3 Needs Replacement

Recommendations: The security system meets the requirements, however the system will requirement replacement due to the HVAC and fire suppression

replacement. 01-27-16 UPGRADE: PROVIDE FOR EXTERIOR LIGHTING FOR 1928 ORIGINAL BUILDING, 1954 ADDITION AND 1971

ADDITION.

Item	Cost	Unit	Whole Building	Original Building (1928)	Classrooms (1954)	Infill (1971)	Sum	Comments
				53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Security System:	\$1.85	sq.ft. (of entire building addition)		Required	Required	Required	\$116,592.55	(complete, area of building)
Exterior Site Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	Required	Required	\$63,023.00	(complete, area of building)
Sum:		-	\$179,615.55	\$152,529.15	\$13,731.30	\$13,355.10		





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### M. Emergency/Egress Lighting

The overall facility is equipped with emergency egress lighting system consisting of a LED exit signs and emergency lighting with battery packs. The system is not adequately provided throughout, and but it is not compliant with OSFC design manual guidelines. Description:

3 Needs Replacement Rating:

Provde a complete replacement of emergency egress lighting due to installation of systems outlined in J, K, and U. Recommendations:

Item	Cost	Unit	Whole Building	Comments				
				53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Emergency/Egress Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	Required	Required	\$63,023.00	(complete, area of building)
Sum:			\$63,023.00	\$53,519.00	\$4,818.00	\$4,686.00		





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### N. Fire Alarm

Description:

The Radionics fire alarm control panel was replaced 2 years ago. The system has horns, strobes and pull stations, however, the coverage in insufficient for the horns and strobes to meet currect requirements. The system provides adequate coverage for the facility with required smoke detectors and duct detectors. The system appears to be non-addressable. This system is remotely monitored. The fire alarm system is not fully compliant with NFPA and OSFC standards. It is not likely that the current system would accommodate the addition of a fire suppression system.

3 Needs Replacement Rating:

Recommendations: Replacement of the system will be required when the work in C - Upgrading the ventilation and air conditioning. At that time, the devices would be

replaced and added to with addressable devices.

Item	Cost Unit	Whole	Original Building	Classrooms	Infill	Sum	Comments
		Building	(1928)	(1954)	(1971)		
			53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Fire Alarm	\$1.50sq.ft. (of entire building		Required	Required	Required	\$94,534.5	0(complete new system, including removal of
System:	addition)						existing)
Sum:		\$94,534.50	\$80,278.50	\$7,227.00	\$7,029.00		





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#### O. Handicapped Access

The building is not equipped with an elevator or lifts for vertical wheelchair travel. ADA compliant door hardware, signage, drinking fountains and maneuverability are also absent from the building. Newly installed rest room stalls with grab bars as well as full height mirrors are provided. Description:

Rating: 2 Needs Repair

The following should be provided to ensure accessibility throughout the building. - Elevator for 1st and 2nd levels - High contrast braille embossed Recommendations:

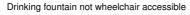
signage - Lever style door operators - Wheelchair lift at the stage - Wheelchair accessible drinking fountains - wheelchair accessible toilet fixtures and stalls - ADA assist at main entrance and playground access door. 01-27-16 UPDATE: REVISE NUMBER OF STOPS FOR ELEVATOR TO 3

IN 1928 ORIGINAL BUILDING. PROVIDE POWER ASSIST DOOR OPERATOR FOR 1954 ADDITION. REWORK INTERIOR DOOR

OPENINGS IN 1928 ORIGINAL BUILDING AND 1954 ADDITION TO MEET ADA.

Item	Cost	Unit	Whole	Original	Classrooms	Infill	Sum	Comments
			Building	Building (1928)	(1954)	(1971)		
				53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Handicapped	\$350.00	set		120 Required	6 Required	10	\$47,600.00	(includes installation / hardware only)
Hardware:						Required		
Signage:	\$0.20	sq.ft. (of entire		Required	Required	Required	\$12,604.60	(per building area)
		building						
		addition)						
Lifts:	\$15,000.00	Dunit		1 Required			\$15,000.00	(complete)
Elevators:	\$42,000.00	each		3 Required			\$126,000.00	(per stop, \$84,000 minimum)
Toilet/Urinals/Sinks:	\$1,500.00	unit		4 Required			\$6,000.00	(replacement ADA)
Toilet Partitions:	\$1,000.00	stall		4 Required			\$4,000.00	(ADA - grab bars, accessories included)
ADA Assist Door &	\$7,500.00	unit		2 Required	1 Required		\$22,500.00	(openers, electrical, patching, etc)
Frame:								
Replace Doors:	\$5,000.00	leaf		29 Required	1 Required		\$150,000.00	(rework opening and corridor wall to accommodate ADA
								standards when door opening is set back from edge of
								corridor and cannot accommodate a wheelchair.)
Sum:			\$383,704.60	\$363,703.80	\$15,563.60	\$4,437.20		·







Door hardware is not ADA compliant

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#### P. Site Condition

The site performs well overall. Recent model playground equipment was observed for recreation of the students. Asphalt paved parking lots and playgrounds show some cracking, but no major damage, tripping or driving hazards were observed. Separate areas for bus and vehicular drop-off Description:

were not observed. A suitable concrete dumpster pad was not observed.

3 Needs Replacement Rating:

Provide paved areas which separate bus drop-off from vehicular drop-off. 01-27-16 UPDATE: PROVIDE FOR ADDITIONAL PARKING SPACES. STABILIZE HILLSIDE AND REPLACE STAIRS AND HANDRAILS @ MAIN ENTRANCE OF 1928 ORIGINAL BUILDING. REPLACE STAIRS, Recommendations:

RAMPS, SIDEWALKS AND LANDSCAPING AT 1928 ORIGINAL BUILDING, DUE TO EXCAVATION FOR WATERPROOFING OF FOUNDATION WALLS. REPLACE SIDEWALKS AT 1928 ORIGINAL BUILDING. REPAINT HANDRAILS AT 1928 ORIGINAL BUILDING. PROVIDE FOR SOFT SURFACE PLAYGROUND AND HANDICAP SWING. 11-2-21 Update: Remove work completed in 2020: Concrete stair

replacement and partial sidewalk replacement.

Item	Cost	Unit	Whole	Original	Classrooms	Infill	Sum	Comments
item	0031	OTINE		Building (1928)		(1971)	Ouiii	Comments
					4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Bus Drop-Off for Elementary	\$110.00	per student		500 Required	7,01011	-	\$55,000,00	(Number of students should be rounded up to
Lac Brop on ior Elementary	ψσ.σσ	l stadont		ooo i toqaii oa				the nearest 100. \$5500 per bus; 40 students per
								bus; 80% of elementary school students riding)
Concrete Sidewalk:	\$4.69	sq.ft. (Qty)		300 Required				(5 inch exterior slab)
Stabilize soil erosion:	\$2.50	sq.ft. (Qty)		200 Required			\$500.00	(includes stripping and re-grading)
Exterior Hand / Guard Rails:	\$43.00	ln.ft.		210 Required			\$9,030.00	
Provide Soft Surface Playground	\$30.00	sq. yard		800 Required			\$24,000.00	
Material:								
Provide Concrete Dumpster Pad:	\$2,400.00	each		1 Required			\$2,400.00	(for two dumpsters)
Base Sitework Allowance for	\$50,000.00	allowance		Required				Include this and one of the next two. (Applies for
Unforeseen Circumstances								whole building, so only <b>one</b> addition should have
							-	this item)
Sitework Allowance for Unforeseen		sq.ft. (of entire		Required	Required	Required		Include this one or the next. (Each addition
Circumstances for buildings		building						should have this item)
between 0 SF and 100,000 SF		addition)						
Other: Concrete Replacement	\$24.00	sq.ft. (Qty)		1,000 Required				Replace Concrete steps and walks due to
								excavation required for waterproofing basement
Other II Francisco	<b>#</b> 000 00			4.0				walls.
Other: Handicapped Playground	\$900.00	unit		1 Required			\$900.00	Handicapped Playground Swing
Swing	<b>#0.000.00</b>		+	04.0			A70 000 00	D. 'I f . I'' I I I I
Other: Parking Spaces	\$3,000.00	per unit		24 Required	47.007.00			Provide for additional parking spaces
Sum:			\$333,771.50	\$319,515.50	\$7,227.00	\$7,029.00		





No physical provisions are there to separate bus from vehicular drop-off.

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### Q. Sewage System

Description: The sanitary sewer system drains to the city sewer system. Most of the sewer system is original. There are no issues with this system.

Rating: 1 Satisfactory

Recommendations: No recommendations at this time.

Item	Cost	Unit	Whole Building	Original Building (1928)	Classrooms (1954)	Infill (1971)	Sum	Comments
				53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00		

#### R. Water Supply

Description:

The 4" domestic water supply piping is galvainzed piping at the pressure reducing valve and the mains and distribution piping through the building. There is no back flow preventer on the water main. There is a check valve on the boiler make-up water. The water piping in the building has been changed to copper where the restrooms have been renovated. The corrosion on the pressure reducting valve indicates it may be close to the end of its useful life. The system provides adequate pressure and capacity for the facility's needs. There is no automatic fire suppression system in the building. The existing water supply system will not provide adequate support for a future fire suppression system.

3 Needs Replacement Rating:

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

PREVENTOR.

Item	Cost U	nit Whole Building	Original Building (1928)	Classrooms (1954)	Infill (1971)	Sum	Comments
			53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Domestic Water Main	\$40.00ln	.ft.	300 Required			\$12,000.00	(new)
Other: Backflow Preventer	\$8,500.00u	nit	1 Required			\$8,500.00	Install New Backflow Preventer
Sum:		\$20.500.00	\$20.500.00	\$0.00	\$0.00		



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### S. Exterior Doors

Exterior doors were replaced as a part of the window replacement less than 10 years ago. The doors are hollow metal white 1/2 glazed, fully glazed and flush doors. The glazed doors have vision panels with false muntins similarly to the windows. Description:

2 Needs Repair Rating:

No work is recommended at this time. 01-27-16 UPDATE: REPLACE EXTERIOR DOORS ON 1928 ORIGINAL BUILDING AND 1954 ADDITION. Recommendations:

Item	Cost	Unit	Whole Building	Original Building (1928)	Classrooms (1954)	Infill (1971)	Sum	Comments
			_	53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
Door Leaf/Frame and Hardware:	\$2,000.00	per leaf		9 Required	1 Required		\$20,000.00	(includes removal of existing)
Sum:			\$20,000.00	\$18,000.00	\$2,000.00	\$0.00		





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### T. Hazardous Material

Description: Environmental data not available at time of assessment.

Rating: 1 Satisfactory

Recommendations: No work is recommended at this time.

ltem	Cost		Building	Original Building (1928) 53,519 ft²	(1954) 4,818 ft²	4,686 ft²	Sum	Comments
Environmental Hazards Form				EEHA Form	EEHA Form	EEHA Form	_	
Breeching Insulation Removal	\$10.00	sq.ft. (Qty)		400 Required	0 Required	0 Required	\$4,000.00	
Tank Insulation Removal	\$8.00	sq.ft. (Qty)		120 Required	0 Required	0 Required	\$960.00	
Duct Insulation Removal	\$8.00	sq.ft. (Qty)		1,300 Required	0 Required	0 Required	\$10,400.00	
Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups		per unit		5,000 Required	0 Required	0 Required	\$5,000.00	
Special Engineering Fees for LBP Mock-Ups	\$1.00	per unit		5,000 Required	0 Required	0 Required	\$5,000.00	
Fluorescent Lamps & Ballasts Recycling/Incineration	\$0.10	sq.ft. (Qty)		53,519 Required	4,818 Required	4,686 Required	\$6,302.30	
Pipe Insulation Removal	\$10.00	ln.ft.		630 Required	0 Required	0 Required	\$6,300.00	
Pipe Fitting Insulation Removal	\$20.00	each		20 Required	0 Required	0 Required	\$400.00	
Pipe Insulation Removal (Hidden in Walls/Ceilings)	\$15.00	ln.ft.		1,100 Required	100 Required	100 Required	\$19,500.00	
Dismantling of Boiler/Furnace/Incinerator	\$2,000.00	each		1 Required	0 Required	0 Required	\$2,000.00	
Flexible Duct Connection Removal	\$100.00	each		4 Required	0 Required	0 Required	\$400.00	
Fire Door Removal	\$100.00	each		2 Required	0 Required	0 Required	\$200.00	See S
Non-ACM Ceiling/Wall Removal (for access)	\$2.00	sq.ft. (Qty)		4,400 Required	400 Required	400 Required	\$10,400.00	See J
Resilient Flooring Removal, Including Mastic	\$3.00	sq.ft. (Qty)		0 Required	4,200 Required	2,300 Required	\$19,500.00	See J
Carpet Removal (over RFC)	\$1.00	sq.ft. (Qty)		0 Required	4,200 Required	1,150 Required	\$5,350.00	See J
Sink Undercoating Removal	\$100.00	each		2 Required	0 Required	1 Required	\$300.00	
Other: EHA Other Hazard	\$1.00	unit		5,000 Required			' '	XRF testing for lead-based paint is recommended for compliance with EPA's RRP Program.
Sum:			\$101,012.30	\$70,511.90	\$19,581.80	\$10,918.60		

#### U. Life Safety

The building is not equipped with an automatic fire suppression system. No provision for preventing the vertical spread of fire through the stairways was observed. The facility is NOT equipped with an emergency generator. Description:

Rating: 3 Needs Replacement

Provide and automatic fire suppression system. Provide increase water service of a capacity sufficient to support the fire suppression system, Recommendations:

funding included in Water Service section R for new water service for fire suppression. Provide an emergency generator to meet the needs for this building. Provide a fire rated enclosure around the stairs to prevent vertical fire spread. Provide a means of fire stopping at the borrowed lights in the 2nd floor. 01-27-16 UPDATE: REPLACE STAIR TOWER HANDRAILS IN 1928 ORIGINAL BUILDING. PROVIDE FOR PRE-ACTION

FIRE SUPPRESSION SYSTEM IN ATTIC SPACE OF 1928 ORIGINAL BUILDING AND 1954 ADDITION.

Item	Cost	Unit	Whole	Original Building	Classrooms	Infill (1971)	Sum	Comments
			Building	(1928)	(1954)	4,686 ft <sup>2</sup>		
			_	53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>			
Sprinkler / Fire Suppression System:	\$3.20	sq.ft.		53,519 Required	4,818 Required	4,686	\$201,673.60	(includes increase of service piping, if
		(Qty)				Required		required)
Interior Stairwell Closure:	\$5,000.00	per leve		6 Required			\$30,000.00	(includes associated doors, door frames
								and hardware)
Handrails:	\$5,000.00	level		6 Required			\$30,000.00	
Other: Attic Sprinklers	\$3.50	sq.ft.		14,575 Required	5,015 Required		\$68,565.00	Pre-Action Fire Suppression System for
·		(Qty)						Attic Space
Other: Provide fire rated glass at	\$16,000.00	lump		Required			\$16,000.00	Needed to prevent vertical fire spread.
borrowed lights in floor		sum						
Sum:			\$346,238.60	\$298,273.30	\$32,970.10	\$14,995.20		





This stair will foster vertical fire spread.

Glass block block in the floor may foster vertical fire spread

### V. Loose Furnishings

The design of the furniture is dated, but the items continue to perform most of the time. Maintenance personnel indicate the repairs are needed on an ongoing basis. Description:

2 Needs Repair Rating:

Items should be replaced as they fall into disrepair. 01-27-16 UPDATE: REVISE CEFPI RATING FROM 6 TO 0-5. Recommendations:

Item	Cost	Unit	Whole Building	Original Building (1928	Classrooms (1954)	Infill (1971)	Sum	Comments
				53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
CEFPI Rating 4 to 5	\$4.00	sq.ft. (of entire building addition)		Required	Required	Required	\$252,092.00	
Sum:		,	\$252 092 00	\$214.076.00	\$19 272 00	\$18 744 00		

#### W. Technology

Description:

The typical classroom is equipped with 2 data ports total (1 data, 1 VOIP, CAT 5 wire). Each classroom has a dedicated wireless access point (CAT 6E wire). Each classroom has phone capable of calling the office. The phone is used system is used by the office to contact the classrooms. There is a projector and audio system in every classroom. The coax cable system in every classroom is not being replaced as it fails, as it is rarely used. Fiber is used to connect the data closets and there are 5 data closets in the High School. All data closets have color coded wires based on the service district wide. The school has a PA system, and the PA system can be used in each classroom to contact the office, however this system is not used. This system meets the OSDM requirements. The facility is not equipped with a centralized clock system. The facility has 1 computer lab for use by the students.

Rating: 3 Needs Replacement

The technology systems meet OSDM requirements however, will require replacement due to the HVAC and fire suppression replacement. Recommendations:

Item	Cost	Unit	Whole Building	Original Building (1928)	Classrooms (1954)	Infill (1971)	Sum	Comments
				53,519 ft <sup>2</sup>	4,818 ft <sup>2</sup>	4,686 ft <sup>2</sup>		
ES portion of building with total SF 50,000 to 69,360	\$11.51	sq.ft. (Qty)		53,519 Required	4,818 Required	4,686 Required	\$725,394.73	
Sum:			\$725.394.73	\$616.003.69	\$55.455.18	\$53.935.86		





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# X. Construction Contingency / Non-Construction Cost

Renovat	ion Costs (A-W)	\$8,086,911.03
7.00%	Construction Contingency	\$566,083.77
Subtotal		\$8,652,994.80
16.29%	Non-Construction Costs	\$1,409,572.85
Total Pro	pject	\$10,062,567.66

Total for X.	\$1,975,656.63
Non-Construction Costs	\$1,409,572.85
Construction Contingency	\$566,083.77

Non-Construction Costs Breakdown		
Land Survey	0.03%	\$2,595.90
Soil Borings / Phase I Envir. Report	0.10%	\$8,652.99
Agency Approval Fees (Bldg. Code)	0.25%	\$21,632.49
Construction Testing	0.40%	\$34,611.98
Printing - Bid Documents	0.15%	\$12,979.49
Advertising for Bids	0.02%	\$1,730.60
Builder's Risk Insurance	0.12%	\$10,383.59
Design Professional's Compensation	7.50%	\$648,974.61
CM Compensation	6.00%	\$519,179.69
Commissioning	0.60%	\$51,917.97
Non-Construction Contingency (includes partnering and mediation services)	1.12%	\$96,913.54
Total Non-Construction Costs	16.29%	\$1,409,572.85

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### School Facility Appraisal - Shaker Heights City

Name of Appraiser	Bill Prenosil		ļ	Date of Appraisal	20	)15-02-17			
<b>Building Name</b>	Lomond Elem								
Street Address	17917 Lomond Blvd								
City/Town, State, Zip Code	Shaker Heights, OH 44122								
Telephone Number(s)	(216) 295-4050								
School District	Shaker Heights C	Shaker Heights City							
Setting:	Urban								
Site-Acreage	8.75		Building S	Square Footage		63,023			
Grades Housed	K-4		Student C	Capacity		504			
Number of Teaching Stations	24		Number of Floors			3			
Student Enrollment	452								
Dates of Construction	1928,195	4,1971							
Energy Sources:	☐ Fuel Oil	<b>G</b> as	I	Electric		l <sub>Solar</sub>			
Air Conditioning:	☐ Roof Top	☐ Windows	Units	☐ Central		Room Units			
Heating:	☐ Central	☐ Roof Top	1	☐ Individual Unit		Forced Air			
	☐ Hot Water	Steam							
Type of Construction	Exterior Surfa	cing		Floor Construction	1				
Load bearing masonry	<b>Brick</b>			☐ Wood Joists					
☐ Steel frame	☐ Stucco			☐ Steel Joists					
☐ Concrete frame	☐ Metal			☐ Slab on grade					
Wood	□ Wood			Structural slab					
☐ Steel Joists	☐ Stone								

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

1.0 The School Site	Points Allocated	Points
1.1 Site is large enough to meet educational needs as defined by state and local requirements	25	18
The site is less than 10 acres whereas the OSDM recommends a 15 acre site for a school of this enrollment.		
1.2 Site is easily accessible and conveniently located for the present and future population	20	20
The site is adjacent to 3 different streets, all of which are easily reached by the community.		
1.3 <b>Location</b> is removed from undesirable business, industry, traffic, and natural hazards	10	10
Undesirable elements were not observed on or near the site.		
1.4 Site is well landscaped and developed to meet educational needs	10	8
Green space and plantings are located to the south, east and west of the building. Ample outdoor provisions w	were observed.	
1.5 ES Well equipped <b>playgrounds are separated</b> from streets and parking areas 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	10	10
Play areas are adequately separated from vehicular areas.		
1.6 <b>Topography</b> is varied enough to provide desirable appearance and without steep inclines	5	5
The building is slightly elevated for stability without prohibitively steep inclines.		
1.7 Site has stable, well drained soil free of erosion	5	4
Erosive conditions were not observed. However, inconsistent grass coverage was observed.		
1.8 Site is suitable for <b>special instructional needs</b> , e.g., outdoor learning	5	1
Provisions for outdoor learning were not observed.		
1.9 <b>Pedestrian services</b> include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes	5	5
Provisions for pedestrian safety were observed.		
1.10 ES/MS Sufficient <b>on-site, solid surface parking</b> for faculty and staff is provided HS Sufficient <b>on-site, solid surface parking</b> is provided for faculty, students, staff and community	5	5
Sufficient parking is provided for staff.		
TOTAL - 1.0 The School Site	100	86

Suitability Appraisal of 2.0 Structural and Mechanical Features for Lomond ES Assessment- Shaker Heights CSD - CFAP Update (11-2-21)

.0 Structural and Mechanical Features	Points Allocated	Points
Structural		
2.1 Structure meets all barrier-free requirements both externally and internally	15	2
The only wheelchair provision observed is a ramp at the northwest entrance. The building lacks an elevator, lifts, high contrast braille embossed ardware.	d signage, or le	ever door
2.2 Roofs appear sound, have positive drainage, and are weather tight	15	6
The roof lacks adequate slope and numbers of drains to perform effectively.		
2.3 <b>Foundations</b> are strong and stable with no observable cracks	10	8
Only minor cracks were observed in the foundation.		
2.4 Exterior and interior walls have sufficient expansion joints and are free of deterioration	10	4
Expansion joints were observed only where building additions meet existing construction. Diagonal cracks over door openings were observed.		
2.5 Entrances and exits are located so as to permit efficient student traffic flow	10	10
There major points of egress are provided at the first floor corridor.		
2.6 <b>Building</b> "envelope" generally provides for energy conservation (see criteria)	10	6
The walls are not insulated. However, new windows are double paned. Blown insulation was observed under the pitched roof.		
2.7 Structure is free of friable asbestos and toxic materials	10	10
Environmental data not available at time of assessment.		
2.8 Interior walls permit sufficient <b>flexibility</b> for a variety of class sizes	10	9
There is a divider net/partition in the gymnasium. The art and music rooms are separated by a movable partition.		
Mechanical/Electrical	Points Allocated	Points
2.9 Adequate light sources are well maintained, and properly placed and are not subject to overheating	15	14
The majority of the classroom areas have adequate light source and the lighting is maintained and not subject to overheating.		
2.10 Internal water supply is adequate with sufficient pressure to meet health and safety requirements	15	15
The internal water supply has sufficient pressure.		
2.11 Each teaching/learning area has adequate convenient wall outlets, phone and computer cabling for technology applications	15	5
There are barely enough wall outlets to support the computer/technology equipment.		
2.12 Electrical controls are safely protected with disconnect switches easily accessible	10	7
Disconnect switches are easily accessible and there are no provisions for the disabled.		
2.13 <b>Drinking fountains</b> are adequate in number and placement, and are properly maintained including provisions for the disabled	10	10
Drinking fountains are well maintained but there are limited provisions for the disabled.		
2.14 Number and size of restrooms meet requirements	10	8
Number of fixtures exceeds OSDM requirements and number of restrooms is adequate. Size of restrooms does not provide enough space for w	vheelchair acce	essibility.
2.15 <b>Drainage systems</b> are properly maintained and meet requirements	10	9

TOTAL - 2.0 Structural and Mechanical Features	200	138
There are only a few hose bibs for the exterior of the building, which is not adequate.		
2.18 Exterior water supply is sufficient and available for normal usage	5	3
A telephone in each classroom is used for communication to the office.		
2.17 Intercommunication system consists of a central unit that allows dependable two-way communication between the office and instructional areas	10	10
There is no sprinkler system and the fire alarm system does not meet NFPA and OSFC requirements		
2.16 Fire alarms, smoke detectors, and sprinkler systems are properly maintained and meet requirements	10	2
The drainage systems were reported to be in good condition but the age of the system will eventually effect it.		

Suitability Appraisal of 3.0 Plant Maintainability for Lomond ES Assessment- Shaker Heights CSD - CFAP Update (11-2-21)

3.0 Plant Maintainability	Points Allocated	Points
3.1 Windows, doors, and walls are of material and finish requiring minimum maintenance	15	15
Newly replaced windows and doors of materials which should perform well for decades to come with minimal mainten	ance.	
3.2 Floor surfaces throughout the building require minimum care	15	11
Original ceramic tiles in the corridor require finishing annually. Carpet in the classrooms requires regular vacuuming, or	cleaning etc.	
3.3 Ceilings and walls throughout the building, including service areas, are easily cleaned and resistant to stain	10	5
12" acoustic ceiling tiles are easily stained but tend not to be soiled unless there is a leak.		
3.4 Built-in equipment is designed and constructed for ease of maintenance	10	8
Hardwood cabinets and shelves have performed well and should continue to do so.		
3.5 Finishes and hardware, with compatible keying system, are of durable quality	10	7
Finish of the hardware varies throughout the school. A minimum number of keys provides school wide access.		
3.6 Restroom fixtures are wall mounted and of quality finish	10	4
The water closets are floor mounted and in fair condition.		
3.7 Adequate custodial storage space with water and drain is accessible throughout the building	10	5
The custodial storage space is limited, but there is access to water and drain on each floor.		
3.8 Adequate electrical outlets and power, to permit routine cleaning, are available in every area	10	5
Outlets are not adequate to facilitate routine cleaning with ease.		
3.9 Outdoor light fixtures, electrical outlets, equipment, and other fixtures are accessible for repair and replacement	10	6
Most of the light fixtures are accessible, but there are limited number of electrical outlets.		
TOTAL - 3.0 Plant Maintainability	100	66

Suitability Appraisal of 4.0 Building Safety and Security for Lomond ES Assessment- Shaker Heights CSD - CFAP Update (11-2-21)

4.0 Building Safety and Security	Points Allocated	Points
Site Safety		
4.1 Student loading areas are segregated from other vehicular traffic and pedestrian walkways	15	5
No physical barrier between these areas was observed.		
4.2 Walkways, both on and offsite, are available for safety of pedestrians	10	8
Paved walks are provided to and around the site.		
4.3 Access streets have sufficient signals and signs to permit safe entrance to and exit from school area	5	2
Signs are provided but signals are not present.		
4.4 Vehicular entrances and exits permit safe traffic flow	5	5
Cars enter and exit the parking lot via a low traffic volume street.		
4.5 ES Playground equipment is free from hazard MS Location and types of intramural equipment are free from hazard HS Athletic field equipment is properly located and is free from hazard	5	5
Playground hazards were not observed.		
Building Safety	Points Allocated	Points
4.6 The heating unit(s) is located away from student occupied areas	20	3
Steam radiators are located in the corridors and near exterior doors, very accessible to students.		
4.7 Multi-story buildings have at least <b>two stairways</b> for student egress	15	15
3 stairways are provided for egress.		
4.8 Exterior doors open outward and are equipped with panic hardware	10	10
Exterior doors open in the direction of egress and are provided panic hardware.		
4.9 Emergency lighting is provided throughout the entire building with exit signs on separate electrical circuits	10	5
The emergency lighting appears to be adequate coverage. It is likely that the emergency lighting is not on a se	parate circuit.	
4.10 Classroom doors are recessed and open outward	10	10
Classroom doors are recessed and do not interfere with the egress path.		
4.11 Building security systems are provided to assure uninterrupted operation of the educational program	10	10
The building security system is adequate and meets OSFC requirements.		
4.12 Flooring (including ramps and stairways) is maintained in a non-slip condition	5	5
Stairs are provided non-skid surfacing.		
4.13 Stair risers (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16	5	3
Stair risers are greater than 6 1/2" but do not exceed 16 consecutively.		
4.14 Glass is properly located and protected with wire or safety material to prevent accidental student injury	5	2
Wired glass was observed only at stairs. No safety provisions exist for door ways with glass.		
4.15 Fixed Projections in the traffic areas do not extend more than eight inches from the corridor wall	5	5
Projections in the corridor are less than 8".		

4.16 Traffic areas terminate at an exit or a stairway leading to an egress	5	5
A means of egress is provided at the ends of all corridors.		
Emergency Safety	Points Allocated	Points
4.17 Adequate fire safety equipment is properly located	15	15
Fire extinguishers were observed at or near exits.		
4.18 There are at least two independent exits from any point in the building	15	15
All areas of the building have 2 means of egress.		
4.19 Fire-resistant materials are used throughout the structure	15	9
The building is of concrete and masonry construction. The pitched roof construction is wood.		
4.20 Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided	15	5
The fire alarm system does not provide adequate coverage for the facility.		
TOTAL - 4.0 Building Safety and Security	200	142

Suitability Appraisal of 5.0 Educational Adequacy for Lomond ES Assessment- Shaker Heights CSD - CFAP Update (11-2-21)

5.0 Educational Adequacy	Points Allocated	Points
Academic Leavning Space		
Academic Learning Space	25	15
5.1 Size of academic learning areas meets desirable standards	23	15
Academic classrooms average a little over 700 sq. ft. This is less than the OSDM recommended 900 sq. ft.	15	0
5.2 <b>Classroom space</b> permits arrangements for small group activity	15	9
Most classrooms are not large enough to for different group configurations.		40
5.3 <b>Location of academic learning areas</b> is near related educational activities and away from disruptive noise	10	10
Disruptive noise was not observed near the academic areas.		
5.4 <b>Personal space</b> in the classroom away from group instruction allows privacy time for individual students	10	4
Most classrooms are not large enough to accommodate privacy for individual students or small groups.		
5.5 Storage for student materials is adequate	10	9
Lockers are provided in the corridor in addition to coat hooks in some rooms.		
5.6 Storage for teacher materials is adequate	10	5
Teacher storage is provided inconsistently throughout the facility.		
Special Learning Space	Points Allocated	Points
5.7 Size of special learning area(s) meets standards	15	12
3 classrooms are provided for special needs.		
5.8 Design of specialized learning area(s) is compatible with instructional need	10	4
The design of these areas does not specifically relate to the instructional need.		
5.9 Library/Resource/Media Center provides appropriate and attractive space	10	10
Media center space is not visually engaging. There is no use of color or contrast.		
5.10 Gymnasium (or covered P.E. area) adequately serves physical education instruction	5	5
A gymnasium is provided.		
5.11 ES <b>Pre-kindergarten and kindergarten space</b> is appropriate for age of students and nature of instruction MS/HS <b>Science</b> program is provided sufficient space and equipment	10	9
The kindergarten space is approximately 1100 sq. ft. The design is not specific to the nature of instruction.		
5.12 Music Program is provided adequate sound treated space	5	2
Music room has less than 700 sq. ft. and lacks adequate storage.		
5.13 Space for art is appropriate for special instruction, supplies, and equipment	5	2
The art room has less than 800 sq. ft. and lacks storage space.		
School Facility Appraisal	Points Allocated	Points
5.14 Space for technology education permits use of state-of-the-art equipment	5	5
The computer room is more than 1000 sq. ft.		
5.15 Space for <b>small groups and remedial instruction</b> is provided adjacent to classrooms	5	1

Several sets of chairs and tables were observed in the corridors as rooms for small groups and individual instruction are not provided.

# 5.16 Storage for student and teacher material is adequate

5 *3* 

Students are provided lockers and coat hooks. Storage for teacher materials is inadequate.

Support Space       Points Allocated       Points         5.17 Teacher's lounge and work areas reflect teachers as professionals       10       8         The teachers lounge and work areas are adequate as support spaces.         5.18 Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage, and food preparation       10       10         Food is delivered daily. Dining areas are sufficient for the student body.         5.19 Administrative offices provided are consistent in appearance and function with the maturity of the students served       5       4         Administrative areas do not relate specifically to the age of the students.       5       5         Counselor's office insures privacy and sufficient storage       5       5         Counselors private office is 120 sq. ft.       5       5         5.21 Clinic is near administrative offices and is equipped to meet requirements.       5       5         5.22 Suitable reception space is available for students, teachers, and visitors       5       2         Space for only 2 chairs is in the office.       5       5         5.23 Administrative personnel are provided sufficient work space and privacy       5       5         The principal has a private office which exceeds the OSDM recommended size.       5       5	TOTAL - 5.0 Educational Adequacy	200	144
5.17 Teacher's lounge and work areas reflect teachers as professionals  The teachers lounge and work areas are adequate as support spaces.  5.18 Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage, and food preparation  10  Food is delivered daily. Dining areas are sufficient for the student body.  5.19 Administrative offices provided are consistent in appearance and function with the maturity of the students served  Administrative areas do not relate specifically to the age of the students.  5.20 Counselor's office insures privacy and sufficient storage  5.21 Clinic is near administrative offices and is equipped to meet requirements.  5.22 Suitable reception space is available for students, teachers, and visitors  5.22 Space for only 2 chairs is in the office.	The principal has a private office which exceeds the OSDM recommended size.		
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5.17 Teacher's lounge and work areas reflect teachers as professionals  The teachers lounge and work areas are adequate as support spaces.  5.18 Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage, and food preparation  Food is delivered daily. Dining areas are sufficient for the student body.  5.19 Administrative offices provided are consistent in appearance and function with the maturity of the students served  Administrative areas do not relate specifically to the age of the students.  5.20 Counselor's office insures privacy and sufficient storage  Counselor's private office is 120 sq. ft.  5.21 Clinic is near administrative offices and is equipped to meet requirements.	Space for only 2 chairs is in the office.		
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5.17 <b>Teacher's lounge and work areas</b> reflect teachers as professionals  The teachers lounge and work areas are adequate as support spaces.  5.18 <b>Cafeteria/Kitchen</b> is attractive with sufficient space for seating/dining, delivery, storage, and food preparation  10  10  Food is delivered daily. Dining areas are sufficient for the student body.  5.19 <b>Administrative offices</b> provided are consistent in appearance and function with the maturity of the students served  Administrative areas do not relate specifically to the age of the students.	Counselors private office is 120 sq. ft.		
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5.17 <b>Teacher's lounge and work areas</b> reflect teachers as professionals  The teachers lounge and work areas are adequate as support spaces.  5.18 <b>Cafeteria/Kitchen</b> is attractive with sufficient space for seating/dining, delivery, storage, and food preparation  10  10  10  Food is delivered daily. Dining areas are sufficient for the student body.	Administrative areas do not relate specifically to the age of the students.		
5.17 <b>Teacher's lounge and work areas</b> reflect teachers as professionals  The teachers lounge and work areas are adequate as support spaces.  5.18 <b>Cafeteria/Kitchen</b> is attractive with sufficient space for seating/dining, delivery, storage, and food preparation  10  10	5.19 Administrative offices provided are consistent in appearance and function with the maturity of the students served	5	4
5.17 <b>Teacher's lounge and work areas</b> reflect teachers as professionals  The teachers lounge and work areas are adequate as support spaces.	Food is delivered daily. Dining areas are sufficient for the student body.		
5.17 <b>Teacher's lounge and work areas</b> reflect teachers as professionals 10 8	5.18 Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage, and food preparation	10	10
	The teachers lounge and work areas are adequate as support spaces.		
Support Space   Points Allocated   Points	5.17 Teacher's lounge and work areas reflect teachers as professionals	10	8
	Support Space	Points Allocated	Points

Suitability Appraisal of 6.0 Environment for Education for Lomond ES Assessment- Shaker Heights CSD - CFAP Update (11-2-21)

6.0 Environment for Education	Points Allocated	Points
Exterior Environment		
6.1 Overall design is aesthetically pleasing to age of students	15	5
The traditional Georgian exterior does not relate specifically to this age group.		
6.2 Site and building are well landscaped	10	10
Green space and plantings are provided on 3 sides of the building. Shade is provided by mature trees.		
6.3 Exterior noise and poor environment do not disrupt learning	10	10
Disruptive elements were not observed.		
6.4 Entrances and walkways are sheltered from sun and inclement weather	10	3
Exterior shelter is not provided at the walk ways. Only a few feet of shelter are available at some entrances	3.	
6.5 <b>Building materials</b> provide attractive color and texture	5	4
The white aluminum clad windows provide an attractive contrast to the brownish red brick.		
Interior Environment	Points Allocated	Points
6.6 Color schemes, building materials, and decor provide an impetus to learning	20	17
The use of primarily colored lockers provides a contrast against the off white and neutral backdrop of the o	ther materials.	
6.7 Year around comfortable temperature and humidity are provided throughout the building	15	5
Most of the areas of the building are not air conditioned.		
6.8 Ventilating system provides adequate quiet circulation of clean air and meets 15cfm VBC requirement	15	5
The ventilation system does not meet the outside air requirements.		
6.9 Lighting system provides proper intensity, diffusion, and distribution of illumination	15	12
Many of the areas of the building meet the the required lighting level, but some do not.		
6.10 Drinking fountains and restroom facilities are conveniently located	15	13
2 are available on both floors.		
6.11 Communication among students is enhanced by commons area(s) for socialization	10	10
A cafeteria is provided for student socialization.		
6.12 Traffic flow is aided by appropriate foyers and corridors	10	10
Traffic moved efficiently through the corridors.		
6.13 Areas for students to interact are suitable to the age group	10	7
The cafeteria is available for interaction, but not specific to the age group.		
6.14 Large group areas are designed for effective management of students	10	9
There are 3 ways in and out of the cafeteria. The gymnasium has 5 ways out, 3 in to the building interior.		
6.15 Acoustical treatment of ceilings, walls, and floors provides effective sound control	10	4
Acoustic treatment throughout the building is primarily on the ceiling. Most classrooms doe have carpet, ho	wever.	
6.16 Window design contributes to a pleasant environment	10	10

Newly replaced windows with false muntins are attractively designed and allow for high levels of natural light.

TOTAL - 6.0 Environment for Education	200	142
The design is dated, but the items continue to perform.		
6.17 Furniture and equipment provide a pleasing atmosphere	10	8

# LEED Observation Notes

School District: Shaker Heights City

County:CuyahogaSchool District IRN:44750Building:Lomond ElemBuilding IRN:21279

#### Sustainable Sites

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

(source: LEED Reference Guide, 2001:9)

#### Water Efficiency

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

(source: LEED Reference Guide, 2001:65)

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

#### **Energy & Atmosphere**

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

(source: LEED Reference Guide, 2001:93)

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

#### Material & Resources

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

(source: LEED Reference Guide, 2001:167)

## Indoor Environmental Quality

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

(source: LEED Reference Guide, 2001:215)

the replacement of the HVAC system will increase the IEQ to meet the requirements.

#### **Innovation & Design Process**

This category is aimed at recognizing projects that implemented innovative building features and sustainable building knowledge, and whose strategy or measure results exceeded those which are required by the LEED Rating System. Expertise in sustainable design is the key element of the innovative design and construction process.

(source: LEED Reference Guide, 2001:271)

Building	g features that clearly exceed criteria:
1.	
2.	
3.	
4.	
5.	
6.	
Building	features that are non-existent or very inadequate:
1.	An inconsistently strewn combination of loose fiber and batt insulation was observed on the attic floor. Much of it has been matted against the floor or displaced. It is no longer providing as thermal barrier. New insulation should be provided throughout the attic. i
2.	
3.	
4.	
5.	
6.	

**Back to Assessment Summary** 

Justification for Allocation of Points - Shaker Heights City

K-4

Lomond Elem

Building Name and Level:

# Environmental Hazards Assessment Cost Estimates

Owner:	Shaker Heights City
Facility:	Lomond Elem
Date of Initial Assessment:	Feb 17, 2015
Date of Assessment Update:	Nov 3, 2021
Cost Set:	2016

District IRN:	44750
<b>Building IRN:</b>	21279
Firm:	Ohio Facilities Construction Commission

# Scope remains unchanged after cost updates.

Duilding Addition	Addition Avec (of)	Total of Environmental Hazards Assessment Cost Estimates			
Building Addition	Addition Area (SI)	Renovation	Demolition		
1928 Original Building	53,519	\$70,511.90	\$55,511.90		
1954 Classrooms	4,818	\$19,581.80	\$19,581.80		
1971 Infill	4,686	\$10,918.60	\$10,918.60		
Total	63,023	\$101,012.30	\$86,012.30		
Total with Regional Cost Factor (102.31%)	_	\$103,345.68	\$87,999.18		
Regional Total with Soft Costs & Contingency	_	\$128,593.34	\$109,497.65		

## Environmental Hazards(Enhanced) - Shaker Heights City (44750) - Lomond Elem (21279) - Original Building

Owner: Shaker Heights City Bldg. IRN: 21279

 Facility:
 Lomond Elem
 BuildingAdd:
 Original Building

 Date On-Site:
 2015-02-17
 Consultant Name:
 Gandee & Associates, Inc.

A. Asbestos Containing Material (ACM)  AFM=Asbestos					
ACM Found	Status	Quantity	Unit Cost	Estimated Cost	
Boiler/Furnace Insulation Removal	Not Present	0	\$10.00		
Breeching Insulation Removal	Assumed Asbestos-Containing Material	400	\$10.00	\$4,000.00	
Tank Insulation Removal	Assumed Asbestos-Containing Material	120	\$8.00	\$960.00	
Duct Insulation Removal	Assumed Asbestos-Containing Material	1300	\$8.00	\$10,400.00	
Pipe Insulation Removal	Assumed Asbestos-Containing Material	630	\$10.00	\$6,300.00	
Pipe Fitting Insulation Removal	Assumed Asbestos-Containing Material	20	\$20.00	\$400.00	
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Reported / Assumed Asbestos-Free Material	0	\$12.00	\$0.00	
Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Reported / Assumed Asbestos-Free Material	0	\$30.00	\$0.00	
Pipe Insulation Removal (Hidden in Walls/Ceilings)	Assumed Asbestos-Containing Material	1100	\$15.00		
10. Dismantling of Boiler/Furnace/Incinerator	Assumed Asbestos-Containing Material	1	\$2,000.00	\$2,000.00	
11. Flexible Duct Connection Removal	Assumed Asbestos-Containing Material	4	\$100.00		
12. Acoustical Plaster Removal	Not Present	0	\$7.00		
13. Fireproofing Removal	Not Present	0	\$25.00		
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		
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		
20. Light (Reflector) Fixture Removal	Not Present	0	\$50.00		
21. Sheet Flooring with Friable Backer Removal	Not Present	0	\$4.00		
22. Fire Door Removal	Assumed Asbestos-Containing Material	2	\$100.00	\$200.00	
23. Door and Window Panel Removal	Not Present	0	\$100.00	\$0.00	
24. Decontamination of Crawlspace/Chase/Tunnel	Not Present	0	\$3.00	\$0.00	
25. Soil Removal	Not Present	0	\$150.00	\$0.00	
26. Non-ACM Ceiling/Wall Removal (for access)	Assumed Asbestos-Containing Material	4400	\$2.00	\$8,800.00	
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo	Reported / Assumed Asbestos-Free Material	0	\$300.00		
28. Window Component (Compound, Tape, or Caulk) - Reno Only	Reported / Assumed Asbestos-Free Material	0	\$300.00		
29. Resilient Flooring Removal, Including Mastic	Not Present	0	\$3.00	\$0.00	
30. Carpet Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00		
31. Carpet Removal (over RFC)	Not Present	0	\$1.00		
32. Acoustical Tile Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$3.00		
33. Sink Undercoating Removal	Assumed Asbestos-Containing Material	2	\$100.00		
34. Roofing Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	\$0.00	
35. (Sum of Lines 1-34) Total Asb. Hazard Abatement Cost for Renovation Work				\$50,160.00	
36. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demo	ition Work		\$50,160.00	

B. Removal Of Underground Storage Tanks					
Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1. (Sum of Lines 1-0)			Total Cost For Removal Of Underground S	torage Tanks	\$0.00

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

D. Fluorescent Lamps & Ballasts Recycling/Incineration						
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost			
1. 53519	53519	\$0.10	\$5,351.90			

E.	. Other Environmental Hazards/Remarks					
Г	Description					
1.	See Bulk Sample Record Nos. 1, 5, 8, & 9 for sampling results in this addition.	\$0.00				
2.	XRF testing for lead-based paint is recommended for compliance with EPA's RRP Program.					
3.						
4.		\$0.00				
5.	(Sum of Lines 1-4) Total Cost for Other Environmental Hazards - Renovation					
6.	(Sum of Lines 1-4) Total Cost for Other Environmental Hazards - Demolition	\$0.00				

F. Environmental Hazards Assessment Cost Estimate Summaries					
<ol> <li>A35, B1, C3, D1, and E5</li> </ol>	Total Cost for Env. Hazards Work - Renovation	\$70,511.90			
2. A36, B1, D1, and E6	Total Cost for Env. Hazards Work - Demolition	\$55,511.90			

 $<sup>{}^{\</sup>star}\, {\sf INSPECTION}\, {\sf ASSUMPTIONS}\, {\sf for}\, {\sf Reported/Assumed}\, {\sf Asbestos\text{-}Free}\, {\sf Materials}\, ({\sf Rep/Asm}\, {\sf AFM});$ 

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

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

## Environmental Hazards(Enhanced) - Shaker Heights City (44750) - Lomond Elem (21279) - Classrooms

Owner: Shaker Heights City Bldg. IRN: 21279

Facility: Lomond Elem BuildingAdd: Classrooms

Date On-Site:2015-02-17Consultant Name:Gandee & Associates, Inc.

A. Asbestos Containing Material (ACM)			AFM=Asbe	stos Free Materia
ACM Found	Status	Quantity	Unit Cost	Estimated Cost
Boiler/Furnace Insulation Removal	Not Present	0	\$10.00	\$0.00
Breeching Insulation Removal	Not Present	0	\$10.00	\$0.00
Tank Insulation Removal	Not Present	0	\$8.00	\$0.00
Duct Insulation Removal	Not Present	0	\$8.00	\$0.00
Pipe Insulation Removal	Reported / Assumed Asbestos-Free Material	0	\$10.00	\$0.00
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
Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$30.00	\$0.00
Pipe Insulation Removal (Hidden in Walls/Ceilings)	Assumed Asbestos-Containing Material	100	\$15.00	\$1,500.00
10. Dismantling of Boiler/Furnace/Incinerator	Not Present	0	\$2,000.00	\$0.00
11. Flexible Duct Connection Removal	Not Present	0	\$100.00	
12. Acoustical Plaster Removal	Not Present	0	\$7.00	\$0.00
13. Fireproofing Removal	Not Present	0	\$25.00	
14. Hard Plaster Removal	Reported / Assumed Asbestos-Free Material	0	\$7.00	
15. Gypsum Board Removal	Not Present	0	\$6.00	
16. Acoustical Panel/Tile Ceiling Removal	Reported / Assumed Asbestos-Free Material	0	\$3.00	
17. Laboratory Table/Counter Top Removal	Not Present	0	\$100.00	
18. Cement Board Removal	Not Present	0	\$5.00	\$0.00
19. Electric Cord Insulation Removal	Not Present	0	\$1.00	
20. Light (Reflector) Fixture Removal	Not Present	0	\$50.00	
21. Sheet Flooring with Friable Backer Removal	Not Present	0	\$4.00	\$0.00
22. Fire Door Removal	Not Present	0	\$100.00	\$0.00
23. Door and Window Panel Removal	Not Present	0	\$100.00	
24. Decontamination of Crawlspace/Chase/Tunnel	Not Present	0	\$3.00	
25. Soil Removal	Not Present	0	\$150.00	\$0.00
26. Non-ACM Ceiling/Wall Removal (for access)	Assumed Asbestos-Containing Material	400	\$2.00	
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo	Reported / Assumed Asbestos-Free Material	0	\$300.00	\$0.00
28. Window Component (Compound, Tape, or Caulk) - Reno Only	Reported / Assumed Asbestos-Free Material	0	\$300.00	
29. Resilient Flooring Removal, Including Mastic	Assumed Asbestos-Containing Material	4200	\$3.00	
30. Carpet Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	
31. Carpet Removal (over RFC)	Assumed Asbestos-Containing Material	4200	\$1.00	\$4,200.00
32. Acoustical Tile Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$3.00	\$0.00
33. Sink Undercoating Removal	Not Present	0	\$100.00	\$0.00
34. Roofing Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	\$0.00
35. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Renovation	n Work		\$19,100.00
36. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demolitio	n Work		\$19,100.00

B. Removal Of Underground Storage Tanks					
Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1. (Sum of Lines 1-0)			Total Cost For Removal Of Underground S	torage Tanks	\$0.00

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

Б	D. Fluorescent Lamps & Ballasts Recycling/Incineration							
	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost				
1	. 4818	4818	\$0.10	\$481.80				

E	E. Other Environmental Hazards/Remarks			
	Description	Cost Estimate		
1.	. Costs for lead-based paint mock-ups are included in assessment for 1928 (Original Building).	\$0.00		
2.	. See Bulk Sample Record Nos. 2, 3, 4, & 8 for sampling results in this addition.	\$0.00		
3.	. (Sum of Lines 1-2) Total Cost for Other Environmental Hazards - Renovation	\$0.00		
4.	. (Sum of Lines 1-2) Total Cost for Other Environmental Hazards - Demolition	\$0.00		

Environmental Hazards Assessment Cost Estimate Summaries				
1. A35, B1, C3, D1, and E3	Total Cost for Env. Hazards Work - Renovation	\$19,581.80		
2. A36, B1, D1, and E4	Total Cost for Env. Hazards Work - Demolition	\$19,581.80		

 $<sup>^{\</sup>star} \ \mathsf{INSPECTION} \ \mathsf{ASSUMPTIONS} \ \mathsf{for} \ \mathsf{Reported/Assumed} \ \mathsf{Asbestos\text{-}Free} \ \mathsf{Materials} \ \mathsf{(Rep/Asm} \ \mathsf{AFM)} :$ 

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

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

## Environmental Hazards(Enhanced) - Shaker Heights City (44750) - Lomond Elem (21279) - Infill

 Owner:
 Shaker Heights City
 Bldg. IRN:
 21279

 Facility:
 Lomond Elem
 BuildingAdd:
 Infill

Date On-Site: 2015-02-17 Consultant Name: Gandee & Associates, Inc.

A. Asbestos Containing Material (ACM)  AFM=Asbestos Fr				
ACM Found	Status	Quantity	Unit Cost	Estimated Cost
Boiler/Furnace Insulation Removal	Not Present	0	\$10.00	\$0.00
Breeching Insulation Removal	Not Present	0	\$10.00	\$0.00
Tank Insulation Removal	Not Present	0	\$8.00	\$0.00
Duct Insulation Removal	Not Present	0	\$8.00	\$0.00
5. Pipe Insulation Removal	Reported / Assumed Asbestos-Free Material	0	\$10.00	\$0.00
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
Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$30.00	\$0.00
Pipe Insulation Removal (Hidden in Walls/Ceilings)	Assumed Asbestos-Containing Material	100	\$15.00	\$1,500.00
10. Dismantling of Boiler/Furnace/Incinerator	Not Present	0	\$2,000.00	\$0.00
11. Flexible Duct Connection Removal	Not Present	0	\$100.00	\$0.00
12. Acoustical Plaster Removal	Not Present	0	\$7.00	\$0.00
13. Fireproofing Removal	Not Present	0	\$25.00	
14. Hard Plaster Removal	Reported / Assumed Asbestos-Free Material	0	\$7.00	\$0.00
15. Gypsum Board Removal	Not Present	0	\$6.00	
16. Acoustical Panel/Tile Ceiling Removal	Reported / Assumed Asbestos-Free Material	0	\$3.00	
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	
20. Light (Reflector) Fixture Removal	Not Present	0	\$50.00	
21. Sheet Flooring with Friable Backer Removal	Not Present	0	\$4.00	\$0.00
22. Fire Door Removal	Not Present	0	\$100.00	\$0.00
23. Door and Window Panel Removal	Not Present	0	\$100.00	
24. Decontamination of Crawlspace/Chase/Tunnel	Not Present	0	\$3.00	
25. Soil Removal	Not Present	0	\$150.00	\$0.00
26. Non-ACM Ceiling/Wall Removal (for access)	Assumed Asbestos-Containing Material	400	\$2.00	
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo	Not Present	0	\$300.00	\$0.00
28. Window Component (Compound, Tape, or Caulk) - Reno Only	Not Present	0	\$300.00	
29. Resilient Flooring Removal, Including Mastic	Reported Asbestos-Containing Material	2300	\$3.00	
30. Carpet Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	
31. Carpet Removal (over RFC)	Assumed Asbestos-Containing Material	1150	\$1.00	\$1,150.00
32. Acoustical Tile Mastic Removal	Not Present	0	\$3.00	\$0.00
33. Sink Undercoating Removal	Assumed Asbestos-Containing Material	1	\$100.00	\$100.00
34. Roofing Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	
35. (Sum of Lines 1-34)	5. (Sum of Lines 1-34) Total Asb. Hazard Abatement Cost for Renovation Work			\$10,450.00
36. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demoli	ion Work		\$10,450.00

B. Removal Of Underground Storage	B. Removal Of Underground Storage Tanks					
Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost	
1. (Sum of Lines 1-0)	Total Cost For Removal Of Underground Storage Tanks			\$0.00		

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

D. Fluorescent Lamps & Ballasts Recyclin		☐ Not Applicable	
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1. 4686	4686	\$0.10	\$468.60

E. Other Environmental Hazards/Remarks					
	Description				
1	. Costs for lead-based paint mock-ups are included in assessment for 1928 (Original Building).				
2	. See Bulk Sample Record Nos. 6 & 7 for sampling results in this addition.				
3	. (Sum of Lines 1-2) Total Cost for Other Environmental Hazards - Renovation				
4	. (Sum of Lines 1-2)	Total Cost for Other Environmental Hazards - Demolition	\$0.00 \$0.00		

F	F. Environmental Hazards Assessment Cost Estimate Summaries				
1	. A35, B1, C3, D1, and E3	Total Cost for Env. Hazards Work - Renovation	\$10,918.60		
2	. A36, B1, D1, and E4	Total Cost for Env. Hazards Work - Demolition	\$10,918.60		

 $<sup>^{\</sup>star} \ \text{INSPECTION ASSUMPTIONS for Reported/Assumed Asbestos-Free Materials (Rep/Asm AFM):}$ 

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