Richardson comments r1 a 1/17/2019

Ref: OFCC Assessment Cost Guidelines (ACG), 2108 - 19 pages

Ref OFCC Assessment Update Presentation, page 11 of 13, Richardson Summary Comparison, 2018 Ref: Richardson Assessment (RA), Desktop update, June 2018, 53 pages.

This Assessment provides the costs of changes to make the existing building functionally equivalent to a new building with new contents.

Concerning Items A to W Total = \$ 8,911,000

A. . Heating and air conditioning \$1,652,000, RA page 10

The existing classrooms have a 'unit ventilator' type heater below the windows. An internal damper allows the unit to draw a portion of the air from outdoors or indoors. Depending on which OFCC value is used, the minimum outside air (fresh air) intake should be somewhere between 1,200 and 1,700 cfm. The present value is about 10% of 1,000 cfm = 100 cfm. To accomplish the higher cfm, new heating equipment is required.

OPTION #1 - per the Richardson Assessment (RA), the OFCC solution is

HVAC replacement	\$ 28.1	2 x 48,000 sqft =	\$ 1,264,000
Convert to ducted system	\$8	x 48,000 sqft =	\$ 387,000
		Total	\$ 1,652,000
The conversion to ducted syste	em is the	e main reason that \$ 76	9,000 is
required in Item J, casework.			
The added electrical load due t	o highe	r cfm and due to air con	ditioning
is the main reason that \$ 786,0	000 is re	equired for Item D, elect	rical.
OPTION #2Install rooftop units for e	each cla	ssroom, per Bode. TD	A cost \$
OPTION #3 Install rooftop units for m	nultiple	rooms, per DeWitt. TD	A cost \$

B. Roofing \$899,000 RA page 11

The roof was installed in 1999 and is in fair condition./

It is not as good as a new roof. Therefore, per OFCC, replace \$899,000

D. Electrical system \$786,000, RA page `13

The present system has a 112 kva primary transformer. The load is about 83kw (88kva) Window air conditioners and added small fans and added desktop computers put a high load on some receptacle circuits. The 112kva system has some reserve capacity to add more receptacle circuits. If Item A, air conditioning is installed, replace the electrical system. Per OFCC replace entire system and main panels \$ 16.23 x 48,000 sqft = \$ 786,000.

F. Windows \$674,000 RA page 16

A significant number of dual pane windows have lost the seal and the internal glass is fogged due to moisture entering.

Classroom windows		\$ 65.00 x 7,920 sqft	=	\$ 515,000
Gym replace glass with translu	ucent	\$ 125.00 x 1,250sqft	: =	\$ 156,000
They are already fiberg	glass		Delete	\$156,000
K. Interior Lighting \$242,000) RA pa	age 23		
	Foot c	andles		
Per RA Classrooms	50	o.k.		
Corridors	22	o.k.		
Gym	33 say	ys replace because it sho	uld be 50.	
		However, OFCC 8600	-5 says elementa	ary gym needs 30 FC
Media center	63	o.k.		
Student dining	44 say	ys replace because it sho	uld be 50 FC	

Student dining	44 says replace because it should be 50 FC
	However, OFCC 8500-6 says it should be 40 FC.
Kitchen	53 says it should be 75-80.

However, OFCC 8600-6 says it should be 50 FC.

Says lighting is inadequate and should be replaced. However, per above data, the lighting is adequate.

Says lighting should be replaced due to Item J -General Finishes which is due to Item A, A/C				
\$ 5.00 x 48,000 sqft = \$242,000				
The amount of lighting equipment changes depends on Item #A				
If option #2 or Option #3 is selected. The amount of changes are less. \$				

J. Gene	eral Finishes, \$ 1,675,000, RA page 22	1						
	Basically, General Finishes includes							
	a) Finishes – floor treatments(tile or carpet), ceiling tiles, painting							
	b) Casework—bookcases, and other items that are attached to the building.							
	c) Kitchen equipment							
' Sign	ificant items:							
	Replace all finishes and casework	\$15.90 x 48,000 sq ft =	\$ 769,000					
	' Due to installation of new heating	and air conditioning, Item	Α.					
	' Due to new electric system, Item I	D, which is due to Item A						
	Plumbing Item E,							
	lights, Item K which is due to Item A.							
	security system, Item L							
	' removal of hazardous material. Ite	m T						
	Install qty=54 wider doors ADA		\$ 70,000					
	Replace basketball backboards		\$ 34,000					
	Replace bleachers	\$ 110 x 397 students=	\$ 44,000					
	Replace plaster	\$ 9 x 4262 sqft =	\$ 38,000					
	Kitchen exhaust hood		\$ 56,000					
	Replace all kitchen equipment	\$190 x 1390 sqft =	\$ 264,000					
	Replace gym floor	\$30 x4174 =	\$125,000					
	Insulate exterior walls. LEED	\$ 7 x 16,500sqft=	\$115,000					
	Stage curtain		\$ 75,000					

L. Security Systems \$ 198,000 RA page 24

Replace stage floor

Replace existing motion sensor system with cameras and door contacts

	\$ 1.8 x 48,000 sqft =	\$ 90,000
Provide exterior lighting	\$ 1.00 x 48,000 sqft =	\$ 48,000
Provide a security vestibule at main entrance		\$ 60,000

M. Emergency / Egress Lighting. \$48,000 RA page 25

The existing emergency lights do not have the features that would be installed in	in a new building.
Install new conduit and wire and new fixtures \$1 x 48,000 sqft =	\$ 48,000

\$ 12.85 x 1,500 = \$ 19,000

N. Fire Alarm \$85,000 RA page 26

The existing system was installed in year 1999. The Gamewell 610 system had three sizes. 126, 252, and 504 point. The present system does not have flow switches. This is because there are no sprinklers.

Install new system \$1.75 x 48,000 sqft = \$85,000 A new system is not required if sprinklers are not added, Item U

P. Site condition	\$ 398,000	RA page2	9	
Replace asphalt paving		\$30.6	x 8244 sq ft =	\$ 257,000
Fix sidewalk		\$ 4.69	x 1,700 =	\$ 8,000
Fix soil erosion				\$ 2,500
Unforseen contingenc	у			\$ 50,000
Unforseen contingency				\$ 73,000
Retaining wall	\$ 2	LO x 728 :	=	\$ 7,280

T. Hazardous material \$115,000 RA page 33

Remove VAT floor tile	\$ 3 x 19,500 sqft =	\$ 59 <i>,</i> 000
The existing tile is 'seal	ed' and not a risk.	

U. Life safety \$174,000 RA page 34

Sprinkler system

\$164,000 When this building was built, sprinklers were not required.

Factors include: non combustible construction, distance to exits

The main advantage of having sprinklers is that the damage to the building is reduced Sprinklers can be installed during the summer and not require swing space.

V. Loose Furnishings \$ 242,000 RA page 35

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All new furniture		\$ 5.00	x 48,400 =	\$ 242,000

W. Technology \$ 638,000 RA page 36

The description provided in the RA appears to be out of date compared to what is existing, The estimate appears to include: new computer network. Other items are not listed. Therefore, the scope is not clear. \$13.18 x 48,400 sqft = \$ 638,000