School Name:	Fleetwoo	d Bawde	n School		School Code:	6438
Location:	1222 - 9t	h Avenue	e South, Lethbri	dge	Facility Code:	1684
Region:	South				Superintendent:	Mal Clewes
Jurisdiction:	Lethbrida	e Schoo	District No 51		Contact Person:	Gus Vander Linden
					Telephone:	(403) 382-2162
	5001 0					005
Grades:	ECS to 6				School Capacity:	625
Duilding Costion	Year of	No. of			Description of Mechanical Systems (incl.	
Building Section Original Building	Compl. 1951	Floors 2	(Sq.M.) 2326.12	cladding) Concrete foundation basement	major upgrades) Municipal water and sewer service.	Comments/Notes Gymnasium concrete foundation, brick
				is 2 ply SBS membrane installed in 1998.	Fire hoses and standpipe system, hand extinguishers, under ground irrigation on front lawn. 2 cast iron steam boilers supply fin tube radiant heater and glycol heat exchanger. Roof top AHU provides ventilation to classrooms. Asbestos insulation observed on steam piping.	walls, wood gym floor & joists.
Additions/ Expansions	1970 Total	1	3519.05 5845.17	Concrete foundation, floor slab, masonry walls with brick, steel beams, steel roof joists, metal deck, tar and gravel roofing.	Municipal water and sewer service. Fire hoses and standpipe system, hand extinguishers. 2 cast iron HW boilers supply fin tube radiant heaters and ventilation units. 2 AHU's equipped with DX cooling supply ventilation to classrooms. 1 AHU serves gym and music room.	
					Evaluator's Name:	Doug Wong / Brenda Moses
					& Company:	J.A. Matthew Architect Ltd.

Upgrading/ Modernization (identify whether minor or major)	1994	1	2156	1970 addition modernization							
	1994	2		Ventilation upgrading	Ventilation added to 1951 section.						
	1991	1		Ventilation upgrading	Capacity increased in one of the 1970 air handling units.						
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)											
List of Reports/	Structura	l needs a	ssessment rep	ort. MPE engineering Ltd. Nov 98							
Supplementary Information	Mechanio Electrical Assessm	Structural needs assessment report. MPE engineering Ltd. Nov 98 Mechanical needs assessment report. MPE engineering Ltd. Nov 98 Electrical needs assessment report. MPE engineering Ltd. Nov 98 Assessment of asbestos report. Occutech Services. Oct 93 Eleetwood Bawden School Gymnasium Wall Masonry Crack. Reid Crowther & Partners Ltd. Sept. 92									

Evaluation Components	Summary Assessment	Estim. Cos
1 Site Conditions	Site conditions are good. Perimeter of school is asphalt paved. Fields are landscaped with adequate sports facilities. There is adequate on site staff parking. Minor low spot in south play area.	\$12,000
2 Building Exterior	Exterior finishes are generally in good condition. 1970 addition requires re-roofing. Corridor link windows require replacement. Concrete window sills at west lower windows in 1951 wing require replacement.	\$211,00
Building Interior	1951 Original wing requires major upgrading to floors, walls, and ceilings. No H/C access to classroom floors. No H/C washroom. 1970 wing was upgraded in 1994 and is generally in good condition.	\$430,00
4 Mechanical Systems	Water and sewer service require replacement. Steam distribution piping and fin tube heaters require replacement. General plumbing fixture upgrade required throughout. Washroom exhaust in 1951 section require upgrade. AHU controls require upgrading.	\$633,00
Electrical Systems	Upgrades to the main service, fire alarm, emergency lighting, and public address system are required. All other systems are satisfactory.	\$412,00
⁶ Portable Buildings		\$0
/ Space Adequacy:		
7.1 Classrooms	There are 2 classrooms less than the School Building Area Guidelines, for a 110.1 m2 deficit.	
7.2 Science Rooms/Labs	There are 2 smaller classrooms for a 82.4 m2 deficit.	
7.3 Ancillary Areas	There are 4 additional ancillary classrooms (including 2 stage areas), for a 346.4 m2 surplus.	
7.4 Gymnasium	The two gymnasia are substantially smaller than the guidelines, for a 150 m2 deficit.	
7.5 Library/Resource Areas	There is one library and 3 resource rooms, for a 159.9 m2 surplus.	
7.6 Administration/Staff Areas	These areas are smaller than the guidelines, for a 164 m2 deficit.	
7.7 CTS Areas		
7.8 Other Non-Instructional Areas (incl. gross-up)	These areas are larger than the guidelines, for a 606.37 m2 surplus.	
Overall School Conditions & Estim. Costs		\$1,698,0

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	General Site Condions			
1.1.1	Overall site size.	4	The site appears adequate for school facilities.	
1.1.2	Outdoor athletic areas.	4	Athletic areas appear adequate with softball diamonds and soccer fields. The field is jointly shared with the City of Lethbridge.	
1.1.3	Outdoor playground areas, including condition of equipment and base.	4	Playground area was upgraded in 1997.	
1.1.4	Site landscaping.	4	Site is completely landscaped and appears to be in good condition.	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4	School field is completely fenced.	
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	3	Drainage appears to adequately slope away from the building. The east lane is 1 - 1.5 m higher than the adjacent athletic field and some drainage to the field occurs. There is ponding at the south entrance of the 1951 building and is to be corrected.	\$2,000
1.1.7	Evidence of sub-soil problems.	FI	Some continuous movement of exterior concrete slabs has been reported. Additional structural assessment in this area should be conducted.	
1.1.8	Safety and security concerns due to site conditions.	4	Appears to be acceptable.	
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.2	Access/Drop-Off Areas/Roadways/Bus Lanes			
1.2.1	Vehicular and pedestrian access points (i.e., size, number, visibility, safety).	4	Access and egress points around the building appears to be acceptable.	
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	4	Asphalt paved parking lot is located on site at the southwest corner of the building. There is paved access to the south side of the school.	
1.2.3	Bus lanes/drop-off areas (note whether on-site or off- site).		Bus drop is at the front of the building at the street sidewalk. There does not appear to be any unsafe conditions.	
1.2.4	Fire vehicle access.	4	The sides and rear of the building are asphalt paved allowing fire vehicle access to all sides of the school.	
1.2.5	Signage.	4	Wall mounted signage adjacent to the front entry. Finish is worn.	
Other				

ection 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.3	Parking Lots and Sidewalks			
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	4	Paved parking lot is adequate for present staffing (40 stalls). There is also 3 visitor and 1 H/C stall on site. Overflow visitor parking is on street parallel parking at 2 sides of the school.	
1.3.2	Layout and safety of parking lots.	4	Parking area appears to be acceptable, located on the opposite side of the school the play areas.	
	Surfacing and drainage of parking lots (note whether asphalt or gravel).	4	Asphalt parking area drains to catch basin. Adjacent asphalt areas drain to fields.	
1.3.4	Layout and safety of sidewalks.	FI	There is some sidewalk slab movement reported at the front and west side of the school.	
	Surfacing and drainage of sidewalks (note type of material).	3	Drainage appears to be acceptable, although there are gaps between the building and hard surfacing areas in some locations. Gaps are to be filled and sealed.	\$2,000
1.3.6	Curb cuts and ramps for barrier free access.	2	There is no barrier free access to the building. An exterior ramp to the entrance floor is required. Related work to entrance in 2.4.1	\$6,000
Other		2	A rainwater leader discharges into a brick planter at the front entrance, that drains into perimeter sidewalk and landing. This planter is to be removed, rain water leaders redirected away form the building.	\$2,000
	Overall Site Conditions & Estimated Costs			\$12,000

Section 2	Building Exterior	Rating		Comments/Concerns	Estim. Cost
2.1	Overall Structure		Bldg. Section	Description/Condition	
2.1.1	I Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains).		All	Floor structures appear to be acceptable. A structural assessment was not conducted at this time. Minor cracks telegraphing through the flooring where the addition meets the original building was noted.	
		FI	All	Gym flooring structural assessment required. Some shrinkage of gym flooring observed. See 2.1.2	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	FI		Gymnasium wall has severe cracking at the west side of the north wall. A complete structural assessment was not conducted at this time, and should be repaired. An assessment of this item was done by Reid Crowther & Partners Ltd. Report attached.	
		4	1970	The wall structure appears to be acceptable some minor cracks were noted. A structural assessment was not conducted at this time.	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4	All	The roof structure appears to be acceptable. No visible signs of distress was observed. A structural assessment was not conducted at this time.	
Other					

Section 2 Building Exterior Rating Comments/Concerns Estim. Cost 2.2 Roofing and Skylights Bldg. Identify the availability of an up-to-date inspection Section report or roofing program. Note if roof sections are or Roof of different ages and/or in varying states of repair. Section Description/Condition/Age 2.2.1 Based on the inspection report (and to the extent 2 Roofing was replaced with a 2 ply SBS roofing membrane in a 1998 and is in good \$175.000 1951 possible, direct observation), assess and rate roof condition. conditions and estimate costs for required improvements (i.e., covering materials, membrane, insulation, other components). 1970 Existing tar and gravel roofing is reaching its life expectancy. There are gaps between the roof flashing and roof membrane. A large ponding area is described on the central east side of the roof. 2.2.2 Roof accessories (i.e., ladders, stairs, hatches, masts, 4 1951 Upgraded in 1998 modernization. exhaust hoods, chimneys, gutters, downspouts, splashpads). Requires replacement with roof upgrading. Cost included in 2.2.1. 3 1970 2.2.3 Control of ice and snow falling from roof. 4 All Appears to be acceptable. 2.2.4 Skylights (i.e., signs of distress, leaks, ice build-up, N/A condensation, deteriorated materials/seals). Other

Section 2 Building Exterior Rating Comments/Concerns Estim. Cost 2.3 Exterior Walls/Building Envelope Bldg. Section **Description/Condition** Some cracking of note has been noted in several areas of the original building. An 2.3.1 Exterior wall finishes (i.e., signs of deterioration, cracks, FI 1951 brick spalling, effluorescence, water stains). assessment of this item was done by Reid Crowther & Partners Ltd. Report attached. Cost included in 2.1.2 Minor wall cracks were noted, but appears to be superficial. 4 1970 2.3.2 Fascias, soffits, parapets (i.e., signs of looseness, 4 1951 Components were upgraded in 1994 modernization. stains, rust, peeling paint). 3 1970 Components will be required to be replaced in re-roofing work. Cost included in 2.2.1. 2.3.3 Building envelope (i.e., evidence of air infiltration/ 3 1951 Minimum wall insulation, no vapour barrier assumed. Exposed concrete foundation \$10,000 exfiltration through the exterior wall or ice build up on walls should be strapped, insulated, and finished with gyp bd. wall, eaves, canopy). This wing appears to be acceptable. 4 1970 2.3.4 Interface of roof drainage and ground drainage 3 \$2,000 All Rainwater leaders are to be extended from present locations. systems. 2.3.5 Inside faces of exterior walls (i.e., signs of cracks, water 4 All Appears to be acceptable. stains, dust spots). Other 2.4 Exterior Doors and Windows Bldg. Section Description/Condition \$10,000 2.4.1 Doors (i.e., signs of deterioration, rusting metal, glass 2 Front entrance vestibule was previously extended and reduces the landing depth of 1951 cracks, peeling paint, damaged seals, sealed unit the exterior stairs. A new entrance should be incorporated with ramp access. failure). Related work to ramp in 1.3.6.

Section 2	Building Exterior	Rating		Comments/Concerns	Estim. Cost
		3	All	Exterior exit doors should be replaced with new hardware.	\$6,000
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	All	Hardware on exit doors is well used and requires replacement. Cost included in 2.4.1.	
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	3	All	See 2.4.1	
	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	4	All	Windows were replaced with aluminum slider units in previous upgrade, except as noted below.	
		3	1951 / 1975	Corridor link wood windows and doors require replacement.	\$8,000
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	All	See 2.4.4	
	Building envelope (i.e., signs of heavy condensation on doors or windows).	4	All	Appears to be acceptable.	
Other					
	Overall Bldg Exterior Condition & Estim Costs				\$211,000

Section 3	Building Interior - Overall Conditions	Rating		Comments/Concerns	Estim. Cost
3.1	Interior Structure		Bldg.		
			Section	Description/Condition	
3.1.1	Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).	FI	1951	Interior wall between gym and kitchen is severely cracked. An assessment of this item was done by Reid Crowther & Partners Ltd. Report attached. See 2.1.2.	
			All	Some walls in a few locations have minor cracks due to some previous movement.	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	FI	All	There are visible signs of floor heaving and settlement telegraphing through existing flooring. A structural assessment report should be prepared.	
Other					
3.2	Materials and Finishes		Bldg.		
			Section	Description/Condition	
3.2.1	Floor materials and finishes.	3	1951	Most classrooms require to be repainted, and kitchen, storage, stairwells, corridors, doors, and frames. Flooring was upgraded in 1994 modernization.	\$60,000
3.2.2	Wall materials and finishes.	3	1951	Most classrooms require to be repainted, and kitchen, storage, stairwells, corridors,	\$30,000
		-		doors, and frames.	¥ ,
			1970	Walls were upgraded in 1994 modernization.	
3.2.3	Ceiling materials and finishes.	2	1957	Ceilings are in poor condition. Clerestory ceilings with inverted truss system over 1/2 of each upper floor classroom and 1/2 flat ceiling. Ventilation upgrade has exposed ductwork, Grilles and diffusers. New t-bar ceiling required.	\$20,000
			1970	Ceilings were upgraded in 1994 modernization.	
3.2	Materials and Finishes (cont'd)		Bldg. Section	Description/Condition	
324	Interior doors and hardware.	3	1951	1951 Wing - Doors and frames require refinishing (approx. 30 doors). See 3.2.2.	

Section 3	Building Interior - Overall Conditions	Rating		Comments/Concerns	Estim. Cost
				Tire rated labelled, however these were approved with the 1986 Fire Code upgrade.	
3.2.5	Millwork	2	1951	1951 Wing - Original millwork is inadequate for current classroom requirements. Storage millwork in need. 1970 wing - millwork was upgraded in 1994 modernization.	\$150,000
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	3	1951	1951 Wing - Old chalkboards exist in classrooms. Replace with whiteboards. 1970 Wing - upgraded in 1994 modernization.	\$25,000
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	4	All	Gym equipment appears to be in good condition.	
3.2.8	Washroom materials and finishes.	4	All	Washroom finishes are in fair condition. Painting included in 3.2.2, for 1951 wing.	
		2	1951 1951	Gym perimeter radiation covers at floor level and is continually damaged. This system should be raised to 3m above floor elevation. See 4.4.1. Gym flooring is well used and should be refinished, including stage area.	\$20,000
Other			1970	Gym flooring shows signs of shrinkage. Structural assessment included in report - see 2.1.1 refinish flooring.	
3.3	Health and Safety Concerns Intent is to identify renovations considered necessary to meet applicable codes, primarily due to safety concerns. Basis of evaluation should be an up-to-date inspection report from the authority having jurisdiction together with direct observations as appropriate. Evaluator should note if in his opinion a comprehensive code evaluation is required.		Bldg. <u>Section</u>	Description/Condition	
3.3.1	Building construction type - combustible or non- combustible, sprinklered or non-sprinklered.	4	All	Non combustible construction, facing 3 streets, upsprinklered.	

Section 3	Building Interior - Overall Conditions	Rating		Comments/Concerns	Estim. Cost
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	4	All	Appears to be acceptable.	
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	4	All	Appears to be acceptable.	
3.3.4	Exiting distances and access to exits.	4	All	Appears to be acceptable.	
3.3.5	Barrier-free access.	2	All	There is no barrier free access to the entrance floor (see 1.3.6) Automatic door openers are required. H/C lifts required. Provide interior ramps and floor elevation	\$125,000
3.3.6	Availability of hazardous materials audit (i.e., evidence	4		changes. Stair handrails and guards do not meet current code requirements. Floor area requires that 2 H/C washrooms are required. An asbestos assessment report was prepared in 1993.	
3.3.7	of safety concerns with respect to asbestos, PCB's, chemicals). Other health and safety concerns (i.e., evidence of	N/A			
Other	excessive noise conditions, air quality problems)				
	Overall Bldg Interior Condition & Estim Costs				\$430,000

School Facility Evaluation Project

Part IV - Additional Notes and Comments

Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
Mechanical Site Services				
Site drainage systems (i.e., surface and underground systems, catch basins).	4			
Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4		Under ground irrigation in good condition.	
Outside storage tanks.	N/A			
Fire Suppression Systems		Bldg.		
		Section	Description/Condition	
Fire hydrants and siamese connections.	4		Siamese connection	
Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	2		not have the capacity to supply the existing fire supression system. 1970 wing - Insufficient cabinets to meet current code requirments. These were approved	\$33,000
		1970	Insufficient cabinets to meet code requirements.	
Hand extinguishers, blankets and showers (i.e., in CTS areas).	4		Hand extinguishers distributed throughout.	
Other special situations (e.g., flammable storage areas, science labs, CTS areas).	N/A			
	Mechanical Site Services Site drainage systems (i.e., surface and underground systems, catch basins). Exterior plumbing systems (i.e., irrigation systems, hose bibs). Outside storage tanks. Fire Suppression Systems Fire hydrants and siamese connections. Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems). Hand extinguishers, blankets and showers (i.e., in CTS areas). Other special situations (e.g., flammable storage areas, science labs, CTS areas).	Mechanical Site Services Site drainage systems (i.e., surface and underground systems, catch basins). Exterior plumbing systems (i.e., irrigation systems, hose bibs). Outside storage tanks. N/A Fire Suppression Systems Fire hydrants and siamese connections. Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems). Hand extinguishers, blankets and showers (i.e., in CTS areas). Other special situations (e.g., flammable storage areas, science labs, CTS areas).	Mechanical Site Services Image: Systems (i.e., surface and underground systems, catch basins). Site drainage systems (i.e., surface and underground systems, catch basins). 4 Exterior plumbing systems (i.e., irrigation systems, hose bibs). 4 Outside storage tanks. N/A Fire Suppression Systems 8 Fire hydrants and siamese connections. 4 Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems). 2 1951 Hand extinguishers, blankets and showers (i.e., in CTS areas). 4 1970 Other special situations (e.g., flammable storage areas, science labs, CTS areas). N/A 1	Mechanical Site Services

School Facility Evaluation Project

Part IV - Additional Notes and Comments

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.3	Water Supply and Plumbing Systems		Bldg.		
4.3.1	Domestic water supply (i.e., pressure, volume, quality - note whether municipal or well supply).	2	<u>Section</u> 1951	Description/Condition	\$15,000
			1970	100mm ductile iron municipal service in poor condition.	
4.3.2	Water treatment system(s).	N/A			
4.3.3	Pumps and valves (including backflow prevention valves).	1	1951	No backflow prevention. Cost included in 4.3.4.	
			1970	Backflow prevention required on fire line.	
4.3.4	Piping and fittings.	1	1951	Galvanized steel in fair condition. Cast iron pipe is buried in slab and is suspect due to age.	\$30,000
			1970	Copper in good condition. Cast iron sewer in good condition.	
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	2	1951	Fixtures require replacement.	\$50,000
			1970	Most fixtures require replacement.	
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	3	1951	1951 - "JetGlas" HW heater 46000 BTU / hr 55 gal 46 gal / hr recovery recirculation system required. At end of service life. 1970 - "Rheem" hydronic HW boiler 167000 BTU / hr 140 gal / hr recovery 100 Gal storage vessel, At end of service life. Recirculation system good condition. Cost included in 4.3.4.	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	2	1951	Recent inspection showed sewer in poor condition.	\$15,000
			1970	Sewer in good condition.	
Other					

Section 4 Mechanical Systems Rating Comments/Concerns Estim. Cost 4.4 Heating Systems Bldg. Section **Description/Condition** 4.4.1 Heating capacity and reliability (including backup 2 2 cast iron steam boilers installed in 1989 1.2 million BTU each. Retrofit steam 1951 \$210,000 capacity). boilers to HW boilers. 2 cast iron HW boilers, original and are in good condition. 1970 4.4.2 Heating controls (including use of current energy 2 1951 "Danfoss" control valves. Cost included in 4.4.1. management technology. Pneumatic controls, duplex compressor, upgrade required. Cost included in 4.4.1. 1970 4.4.3 Fresh air for combustion and condition of the 4 1951 Acceptable combustion chimney. "Eskimo trap" required, otherwise acceptable. 1970 4.4.4 Treatment of water used in heating systems. 1951 Treated by district. 4 Treated by district. 1970 4.4.5 Low water cutoff/pressure relief valves and failure Pressure alarm. 4 1951 alarms (i.e., hot water heating). 1970 low temp alarm. 4.4.6 Heating air filtration systems and filters. 4 1951 N/A 1970 Maintained and in good condition. 4.4.7 Heating humidification systems and components. N/A

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.4	Heating Systems (cont'd)		Bldg.		
4.4.8	Heating distribution systems (i.e., piping, ductwork) and associated components (i.e., diffusers, radiators).	2	<u>Section</u> 1951	<u>Description/Condition</u> Original steam piping, Fin tube radiant heaters and steam traps in poor condition, replace with hot water distribution. Cost included in 4.4.1.	
		3	1970	Original piping and fin tube radiant heaters in fair condition, pump requires replacement. Cost included in 4.4.1.	
4.4.9	Heating piping, valve and/or duct insulation.	2		Asbestos insulation, fair condition remove for HW upgrades, Cost included in 4.4.1.	
		4	1970	Good condition	
4.4.10	Heat exchangers.		1951	Steam to glycol exchanger in good condition.	-
			1970	Reheat coils in good condition.	-
4.4.11	Heating mixing boxes, dampers and linkages.	N/A			
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	2	1951	Steam fin tube radiant heaters in gym and hallway. Cost included in 4.4.1.	
			1970	HW fin tube radiant heater in gym and hallway	-
4.4.13	Zone/unit heaters and controls.	3	1970	Ceiling installed forced flow at entrances in fair condition. Cost included in 4.4.1.	
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.5	Ventilation Systems		Bldg.		
4.5.1	Air handling units capacity and condition.	3	Section 1951	Description/Condition Constant volume AHU installed in 1992 in good condition.	\$175,000
	G 1 2	Ũ	1001		φ170,000
			1070		
			1970	3-AHU's serve building section, in fair condition. Replace all three complete with air conditioning.	
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	4		Acceptable	
			1970		
4.5.3	Air distribution system (if possible, reference number of	4	1951	Ventilation ducted to each classroom.	
	air changes/hour).	•	1001		
			1970	Ventilation ducted into classrooms.	
4.5.4	Exhaust systems capacity and condition.	2	1951	Washroom exhaust require upgrade.	\$15,000
			1970	Washroom exhaust acceptable	
4.5.5	Separation of out flow from air intakes.	4		Acceptable	
4.5.6	Special/dedicated ventilation and/or exhaust systems	4	4054		#00.000
	(i.e., kitchen, labs, CTS areas).	1	1951	Gym exhaust requires upgrade and make up air.	\$30,000
		0	4070		¢40.000
		3	1970	AHU serves gym, in fair condition	\$10,000
Other					
Ourier					

Section 4 Mechanical Systems Rating Comments/Concerns Estim. Cost 4.5 Ventilation Systems (cont'd) Bldg. Section Description/Condition Note: Only complete the following items if there are separate ventilation and heating systems. 4.5.7 Ventilation controls (including use of current energy AHU equipped with DDC control upgrade as described in 4.7.1 2 1951 management technology). 1970 Pneumatic control requires upgrade. 4.5.8 Air filtration systems and filters. 4 Maintained 4.5.9 Humidification system and components. N/A 4.5.10 Heat exchangers. Glycol reheat coil in good condition. 4 1951 1970 Glycol recently upgraded except AHU. Ductwork in good condition. Cost included in 4.5.1. 4.5.11 Ventilation distribution system and components (i.e., 3 1951 ductwork, diffusers, mixing boxes, dampers, linkages). 1970 Some mixing boxes and damper require upgrade. Other

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School Facility Evaluation Project

Part IV - Additional Notes and Comments

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.6	Cooling Systems		Bldg.		
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	3	<u>Section</u> 1951	Description/Condition Cost included in 4.5.1.	
			1970	DX cooling in both AHU's in fair condition.	-
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	3	1970	See 4.5.11. Cost included in 4.5.1.	
4.6.3	Cooling system controls (including use of current energy management technology).	2	1970	Pneumatic control requires upgrade. Cost included in 4.7.1.	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	N/A			
Other					
4.7	Building Control Systems		Bldg.		
4.7.1	Building wide/system wide control systems and/or energy management systems.	2	<u>Section</u> 1951	Description/Condition DDC control on AHU. Provide DDC control.	\$50,000
			1970	No DDC control, provide DDC control. DDC control warantied due to extensive mechanical upgrades and due to district 51 policy.	
	Overall Mech Systems Condition & Estim. Costs				\$633,000

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.1	Site Services			If mechanical changes are necessary service will be undersized	
	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	2	1970	Main disconnect 400 amp 600/347 3 dia 4w. CDP1 347/600 has spare capacity. CDP2 120/208 and at full capacity feed from 600/120/208 step-down transformer 150 KVA.	\$25,000
			1951	CDP in 1951 wing 120/208 200 amp amalgamated and antiquated with no spare parts available upgrade services to serve mechanical upgrade requirements.	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	3		Existing lighting does not provide sufficient coverage creating a security problem Additional lights are required.	\$20,000
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	4		Capacity is adequate for the current staff requirements. Outlets are in good condition. Plug-ins are time controlled.	
Other					
5.2	Life Safety Systems		Bldg. Section		
	Fire and smoke alarm systems (i.e., safety concerns, up to-date technology, regularly tested).	3		Edwards 2280 2 panels 16 zones 2 spares. 1951 wing with no strobes. 1970 wing has bell strobe combination. Door hold open devices exist throughout the school. Fire alarm system is old technology, good coverage.	\$38,000
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	3	1951 / 1970	Additional DC heads and packs. No DC heads in bathrooms. Additional DC heads and packs adequate coverage. Recommended make use of emergency generator to add fixture to the emergency system. A new generator was installed in 1999. Cost included in 5.2.1.	
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	3	1951 / 1970	Some signage exist change to AC exits off emergency generator. Exit lighting has adequate coverage through out school. Recommend neon type for all exits. Cost included in 5.2.1.	
Other					

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.3	Power Supply and Distribution		Bldg.		
			Section	Description/Condition	
5.3.1	Power service surge protection.	N/A			
5.3.2	Panels and wireways capacity and condition.	3		Panels are at 95% - 100% capacity. Wire ways are also at full capacity. Some	\$129,000
				panels also have no locking capability. Upgrade electrical system not covered in	
				1994 upgrade.	
5.3.3	Emergency generator capacity and condition and/or	5		Kohler generator installed in 1999; 120/240 1 dia 15kw diesel and works	
	UPS (if applicable).			adequately with spare capacity.	
5.3.4	General wiring devices and methods.	3	1951	1951 wing - 2 general outlets per room. One dedicated computer outlet. General	
	3 • • • • • • • • • • • • • • • • • • •	Ŭ	1001	devices are becoming antiquated and better coverage is required. Cost included in	
				5.3.2.	
		4	1970	1970 wing - Has adequate general outlet coverage. LV switching exists.	
5.0.5	Mater controls		4054		
5.3.5	Motor controls.	4	1951	1951 wing - Starters are in good condition upgraded during mechanical renovation.	
		3	1970	1970 wing - Starters are in good condition but becoming antiquated. Manual motor	
		-		starter switches should be used instead of general outlets. Cost included in 5.3.2.	
				Č. Staring and the star star star star star star star star	
Other					

Section 5	Electrical Systems	Rating		Comments/Concerns				
5.4	Lighting Systems		Bldg. Section	Description/Condition				
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3		Staff room 821 lux Gym 212 lux				
				Corridor 122 lux - 233 lux Storage room 327 lux Classroom and corridor lighting is antiquated, replace with T8 lamps and ballast. see 5.4.3. Corridor lighting is at low levels. Gym lighting is poor. Stage lighting incandescent. storage room incandescent.				
			1970	Corridor 20 lux				
				Library 830 lux Office 1080 lux Light levels are satisfactory. Lighting in 1970 addition is in adequate condition energy efficient measures should be implemented. Cost included in 5.4.3.				
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	3	1951 / 1970	See 5.4.3				
5.4.3	Implementation of energy efficiency measures and recommendations.	3	1970	Replace existing lighting with T8 lamps electronic ballast's. F-34 watt saver lamps. Motion detector for turning lights on and off during occupied and unoccupied periods.	\$150,000			
Other								

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.5	Network and Communication Systems		Bldg.		
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	3	T	Description/Condition Felephone system is a Trillium talk to 616 system and is working adequately. The system is antiquated	\$50,000
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	3	с	The public address system is a Dukane control Rack and station mes250 in poor condition in the 1951 building. The system is obsolete technology but is in working condition. Upgrade with telephone system. Cost included in 5.5.1.	
5.5.3	Network cabling (if available, should be category 5 or better).	4	Ν	Network cabling is category 5.	
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	4		Classrooms and computer labs all have networking cable in conduit, wire ways, open wiring in ceiling spaces.	
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	4		Communication closets is located in the librarians room with ample capacity for expansion. Exhaust fan with thermostat control exists, no cooling.	
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	4		Classrooms have dedicated circuits. Computer stations in labs have dedicated circuits. Hubs and switches are dedicated. Cisco 2600 catalyst 1900 system.	
Other					

Section 5	Electrical Systems	Rating		Comments/Concerns			
5.6	Miscellaneous Systems		Bldg.				
5.0.4	Cite and building compalitance contain (if an live bla)	N1/A	Section	Description/Condition			
5.6.1	Site and building surveillance system (if applicable).	N/A					
5.6.2	Intrusion alarms (if applicable).	4		Magnum alert 100 series security panel which works adequately with good			
				coverage. It is connected to lighting system, no interior lights, exit, etc., when			
				system is armed. When armed, all systems come back on.			
563	Master clock system (if applicable).	N/A					
5.0.5		IN/A					
Other							
57	Elevators/Disabled Lifts (If applicable)						
	Elevator/lift size, access and operating features (i.e.,	N/A					
	sensing devices, buttons, phones, detectors).	1.07.1					
5.7.2	Condition of elevators/lifts.	N/A					
5.7.3	Lighting and ventilation of elevators/lifts.	N/A					
Other							
Other							
	Overall Elect Systems Condition & Estim Conta				\$412,000		
	Overall Elect. Systems Condition & Estim Costs						

Section 6	Portable Buildings	Rating	Comments/Concerns	Estim. Cost
	Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.	N/A		
	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).	N/A		
	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).	N/A		
	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).	N/A		
	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).	N/A		
6.1.5	Interior finishes (i.e., floors, walls, ceiling).	N/A		
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).	N/A		
	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)	N/A		
6.1.8	Heating system.	N/A		
6.1.9	Ventilation system.	N/A		
6.1.10	Electrical, communication and data network systems.	N/A		
	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).	N/A		
6.1.12	Barrier-free access.	N/A		
	Overall Portable Bldgs Condition & Estim Costs			\$0

0	Space Adequacy	This Facility			Ec	quiv. Nev	w Facility	Surplus/	0
Section 7		No.	Size	Total Area	No.	Size	Total Area	Deficiency	Comments/Concerns
7.1	Classrooms	16		1329.9	18	80	1,440	-110.10	
7.2	Science Rooms/Labs	2		202.6	3	95	285	-82.40	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	9		876.4	5		530	346.40	including 2 stage areas
7.4	Gymnasium (incl. gym storage)	2		477	1		627	-150.00	including gym storage
7.5	Library/Resource Areas	1		439.9	1		280	159.90	including 3 resource rooms
7.6	Administration/Staff, Physical Education, Storage Areas			509			673	-164.00	
	CTS Areas 7.7.1 Business Education								
	7.7.2 Home Economics								
	7.7.3 Industrial Arts								
	7.7.4 Other CTS Programs								
	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			2010.37			1,404	606.20	
	Overall Space Adequacy Assessment	30		5845	28		5,239	606.00	

Evaluation Component/ Sub-Component	Additional Notes and Comments