	School Name:	Hawkwood Elementary				School Code:	9273
	Location:	650 Hawkwood Blvd. NW				Facility Code:	1670
	Region:	South				Superintendent:	Dr. Donna Michaels
	Jurisdiction:	Calgary				Contact Person:	Leanne Soligo
						Telephone:	214-1121
	Grades:	K-6				School Capacity:	725

Building Section	Year of Compl.	No. of Floors	Gross Bldg Area (Sq.M.)	Type of Construction (i.e., structure, roof, cladding)	Description of Mechanical Systems (incl. major upgrades)	Comments/Notes
Original Building	1992	1	2640.00	Steel frame building with brick and stucco exterior, sloped and flat roofs on OWSJ and steel deck.	Twin boilers and heat pumps	
Additions/ Expansions	1994	1	2206.00	As above	As above	
	Total	1	4846.70			

						Evaluator's Name:	Bob Passmore, M.A.A.A.
						& Company:	Building Science Specialists Ltd.

Upgrading/ Modernization (identify whether minor or major)							
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)							
List of Reports/ Supplementary Information	CBE Facility Asbestos Database, February 23, 1999						

School Facility Evaluation Project

Part I - Facility Profile and Summary

	Evaluation Components	Summary Assessment		Estim. Cost
1	**Site Conditions**	- rework some landscaping to provide better water movement away from north end of school - provide better concrete walkways from playing fields.		$40,000
2	**Building Exterior**	no work contemplated at this time.		$0
3	**Building Interior**	- paint classrooms and corridors - repair fire separation		$31,500
4	**Mechanical Systems**	- investigate strong sewer smell in Boys Washroom, Room 142 - air balancing required in administration - provide dedicated exhaust to pottery kiln in storage room of Art Room, Room 228.		$5,000
5	**Electrical Systems**	- upgrade to fixtures with T-8 lamps		$102,000
6	**Portable Buildings**	- NA		$0
7	**Space Adequacy:**			
	7.1 Classrooms	- Slightly excessive	96.34	
	7.2 Science Rooms/Labs	- Deficient	-184.94	
	7.3 Ancillary Areas		-349.9	
	7.4 Gymnasium	- Deficient	-85.1	
	7.5 Library/Resource Areas	- Deficient	-73.9	
	7.6 Administration/Staff Areas	- Deficient	-375.1	
	7.7 CTS Areas			
	7.8 Other Non-Instructional Areas (incl. gross-up)	- Slightly excessive	38.3	
	Overall School Conditions & Estim. Costs		-934.3	$178,500

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	**General Site Condions**			
1.1.1	Overall site size.	5	6.3 hectares	
1.1.2	Outdoor athletic areas.	5	Two small soccer pitches and one large, community ball diamond to north.	
1.1.3	Outdoor playground areas, including condition of equipment and base.	5	New creative play area, to east on gravel. Three tetherball poles and two basketball hoops on pavement.	
1.1.4	Site landscaping.	5	New	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4	Perimeter chain link fence to west and east of site. North is open to community playing fields and south faces the street. Playground is separated by chain link fence from road to south.	
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	3	Site slopes from north to school, better drainage away from school should be considered.	$30,000
1.1.7	Evidence of sub-soil problems.	4	None noted.	
1.1.8	Safety and security concerns due to site conditions.	4	None noted.	

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	Sidewalk approaches main entry and one sidewalk approaches east end of school. No problems noted.	
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	4	Teacher/visitor parking to west is paved.	
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	There is a drop off at the front entry and lop route through the parking lot.	
1.2.4	Fire vehicle access.	FI	Fire access is through the parking lot onto grassed area. Will this carried load of fire vehicles?	
1.2.5	Signage.	5	Wall mounted sign near main entry on south elevation.	
Other				
1.3	**Parking Lots and Sidewalks**			
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	5	37 stalls, with one designated handicapped stall.	
1.3.2	Layout and safety of parking lots.	5	On opposite side of school from play areas.	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	5	Asphalt parking lot is sloped to an area drain.	
1.3.4	Layout and safety of sidewalks.	3	Sidewalks from south-side street approach the main entry (SE corner) and east end. Other walkways are city sidewalks. Walkways from playing fields to school should be upgraded and concreted.	$10,000
1.3.5	Surfacing and drainage of sidewalks (note type of material).	4	Concrete, slope away from building. Cracking noted at walk and east entry.	
1.3.6	Curb cuts and ramps for barrier free access.	5	Curb cut in city sidewalk, with same in concrete pad at front entry.	
Other				
	Overall Site Conditions & Estimated Costs			$40,000

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.1	**Overall Structure**		**Bldg. Section**	**Description/Condition**	
2.1.1	Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains).	5	1992 - 1994	No problems noted.	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	5	1992 - 1994	No evidence of problems	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	5	1992 - 1994	No evidence of problems	
Other					
2.2	**Roofing and Skylights** ***Identify the availability of an up-to-date inspection report or roofing program. Note if roof sections are of different ages and/or in varying states of repair.***		**Bldg. Section**	**Description/Condition/Age**	
2.2.1	Based on the inspection report (and to the extent possible, direct observation), assess and rate roof conditions and estimate costs for required improvements (i.e., covering materials, membrane, insulation, other components).	FI	1992 - 1994	No report available, not reviewed	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	FI	1992 - 1994	Not reviewed.	
2.2.3	Control of ice and snow falling from roof.	5	1992 - 1994	Roofs slope to inside and drain internally.	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	5	1992 - 1994	No problems noted.	
Other					

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.3	**Exterior Walls/Building Envelope**		**Bldg. Section**	**Description/Condition**	
2.3.1	Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, efflorescence, water stains).	5	1992 - 1994	Brick exterior, no problems noted with efflorescence, or cracking. Minor cracking of parging due to movement of sidewalk adjacent to building.	
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	5	1992 - 1994	New, prefinished metal, no problems noted.	
2.3.3	Building envelope (i.e., evidence of air infiltration/ exfiltration through the exterior wall or ice build up on wall, eaves, canopy).	5	1992 - 1994	No evidence of problems	
2.3.4	Interface of roof drainage and ground drainage systems.	5	1992 - 1994	Roof drains internally into storm system	
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	4	1992 - 1994	Some evidence of differential settlement between exterior walls and interior partitions. Patch and paint as part of 3.1.1.	
Other					
2.4	**Exterior Doors and Windows**		**Bldg. Section**	**Description/Condition**	
2.4.1	Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	5	1992 - 1994	New, insulated metal, no problems noted.	
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	5	1992 - 1994	No evidence of problems, hardware is original.	
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	5	1992 - 1994	Hardware functions as required	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	5	1992 - 1994		
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	1992 - 1994	No problems noted.	
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4	1992 - 1994	No problems noted.	
Other					
	Overall Bldg Exterior Condition & Estim Costs				$0

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).	3	1992 - 1994	Walls except for gymnasium are gypsum board on steel studs. Some settlement cracking has occurred. Patch walls and repaint corridors and classrooms	$30,500
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	5	1992 - 1994	Floors are concrete slab on grade, no problems noted.	.
Other					
3.2	**Materials and Finishes**		**Bldg. Section**	**Description/Condition**	
3.2.1	Floor materials and finishes.	5	1992 - 1994	Floors are vinyl tile in corridors, classrooms a combination of VT and carpet, depending on use. Washroom (gang) are ceramic tile. Individual WC's are VT.	
3.2.2	Wall materials and finishes.	5	1992 - 1994	Walls are painted gypsum board (see 3.1.1 above). Gang washrooms have ceramic tile to 6 feet. Gym walls are painted concrete block.	
3.2.3	Ceiling materials and finishes.	5	1992 - 1994	Ceilings are suspended T-bar and gypsum board bulkheads. No problems noted.	
3.2.4	Interior doors and hardware.	5	1992 - 1994	Doors are wood, with WWM glass, in hollow metal frames with large side lites into classrooms. Doors between wings and to vestibules are hollow metal in metal frames.	
3.2.5	Millwork	5	1992 - 1994	Is original and adequate.	
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	5	1992 - 1994	All tackboards and whiteboards are original - adequate.	
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	5	1992 - 1994	Gymnasium has fold out climbing wall.	
3.2.8	Washroom materials and finishes.	4	1992 - 1994	Lavatories are wall hung. Partitions are in good condition Walls and floors are ceramic tile, except for individual WC's which are painted gypsum board and VT.	
Other					

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
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. Section**	**Description/Condition**	
3.3.1	Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.	5	1992 - 1994	Building is sprinklered throughout. It is built of combustible and non-combustible construction.	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	3	1992 - 1994	2 hour fire separations exist between class wings and core. Fire separations between Telephone Room and Electrical room require repairs.	$1,000
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	5	1992 - 1994	Fire separations are adequate.	
3.3.4	Exiting distances and access to exits.	5	1992 - 1994	Appear to be adequate.	
3.3.5	Barrier-free access.	5	1992 - 1994	Facility is fully accessible. Exterior access is at the main entry. There are handicapped accessible washrooms and also change rooms complete with showers at the gymnasium..	
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	5	1992 - 1994	CBE Faciltiy Asbestos database indicates no asbestos is present. No other hazardous materials are noted.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	FI	1992 - 1994	Ventilation in the gym appears to cause dust and debris to settle on mechanical ducting which is shaken loose by activity in the gym below. This already being investigated. This may be a health hazard.	
Other					
	Overall Bldg Interior Condition & Estim Costs				$31,500

Section 4	**Mechanical Systems**	Rating		Comments/Concerns	Estim. Cost
4.1	**Mechanical Site Services**		Bldg. Section	Description/Condition	
4.1.1	Site drainage systems (i.e., surface and underground systems, catch basins).	5	1992 - 1994	The parking lot on the west side has a catch basin. A dry well is on the playground to the northwest. A catchbasin is on the hard surfaced play area on the northeast. The south has catchbasins in the grass area. They are connected to city storm mains.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	5	1992 - 1994	Non freeze wall hydrants are located on all sides of the building.	
4.1.3	Outside storage tanks.	NA		None	
Other					
4.2	**Fire Suppression Systems**		Bldg. Section	Description/Condition	
4.2.1	Fire hydrants and siamese connections.	5	1992 - 1994	A siamese for the sprinkler system is located near the main entrance. A fire hydrant is located south of the main entrance.	
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	5	1992 - 1994	The building is fully sprinklered. Both wet pipe and dry type systems are installed.	
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	5	1992 - 1994	Type ABC dry chemical extinguishers are installed in recessed glass fronted cabinets in the corridors, gym, staff room, library and some classrooms. The mechanical room, staff room and water meter room have wall hung extinguishers.	
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).	5	1992 - 1994	A storage room off of classroom(science ?) has a fire blanket.	
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.3	**Water Supply and Plumbing Systems**		Bldg. Section	Description/Condition	
4.3.1	Domestic water supply (i.e., pressure, volume, quality - note whether municipal or well supply).	5	1992 - 1994	An 8" iron water supply from city mains is run into a dedicated service room. It has a master valve. Pressure, capacity and quality is good.	
4.3.2	Water treatment system(s).	5	1992 - 1994	A softener is used on the steam boiler water supply for humidification.	
4.3.3	Pumps and valves (including backflow prevention valves).	5	1992 - 1994	Backflow protection is provided on the domestic water, fire line, boiler feedwater lines and fluid cooler feedwater line.	
4.3.4	Piping and fittings.	1	1992 - 1994	Domestic water lines are copper tubing with soldered joints. Feedwater lines are steel threaded and screwed. A severe smell problem is occurring in the boy's washroom near the library. This may be a piping break. It must be investigated.	$1,500
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	5	1992 - 1994	Water closets are elongated, floor mounted with flush valves. Urinals are stall type with timed control flush valves. Lavatories are wall hung. Drinking fountains are I bubbler wall hung. Countertop sinks are stainless steel. Mop sinks are molded stone. All are in good condition.	
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	5	1992 - 1994	A large gas fired tank type water heater is installed in the boiler room. A small in-line recirculating pump is provided.	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	5	1992 - 1994	Sanitary and storm piping is mechanical joint cast iron. They are connected to the city mains.	
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 capacity).	5	1992 - 1994	The building uses a heat pump heating/cooling system in all parts of the building. Twin gas fired packaged boilers with an output of 1570 MBH each is used to provide heat to heat pump coils and to the glycol mix in the vent. unit heating coils. Twin base mounted circulators for each of the heating water and heat pump/cooling tower water are installed.	
4.4.2	Heating controls (including use of current energy management technology.	5	1992 - 1994	A sophisticated electronic control system is used to control the heating/cooling equipment supplying the heat pump and ventilation systems. Space t'stats operate the heat pumps to provide heating or cooling.	
4.4.3	Fresh air for combustion and condition of the combustion chimney.	5	1992 - 1994	An insulated combustion air duct from a wall louver drops into a shallow sheet metal well. A ventilation relief air opening is provided c/w a backdraft damper.	
4.4.4	Treatment of water used in heating systems.	5	1992 - 1994	Both the heating and glycol mix loops have chemical pot feeders across the supply and return mains. Micro filters are provided on both systems. The steam boiler supplying the humidifiers has softened water and uses a chemical injection system.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	5	1992 - 1994	Both hot water boilers have low water cutoffs and pressure relief valves. The relief valves are discharged to a recycling feedwater system. The steam boiler has a feedwater controller and low water cutoff and pressure relief valve.	
4.4.6	Heating air filtration systems and filters.	5	1992 - 1994	See 4.5.8	
4.4.7	Heating humidification systems and components.	5	1992 - 1994	See 4.5.9	

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.4	**Heating Systems (cont'd)**		Bldg. Section	Description/Condition	
4.4.8	Heating distribution systems (i.e., piping, ductwork) and associated components (i.e., diffusers, radiators).	5	1992 - 1994	Hot water heating piping is welded steel and has supply and return lines to the heating coils, unit heater and vestibule fan cabinet heaters.	
4.4.9	Heating piping, valve and/or duct insulation.	5	1992 - 1994	Heating piping is insulated with canvas covered fiberglass. Duct insulation is coated duct liner or external canvas covered blanket fiberglass.	
4.4.10	Heat exchangers.	5	1992 - 1994	A shell and tube heat exchanger is used to transfer heat to the glycol mix in the heating coil systems. It is insulated with canvas covered fiberglass. In-line circulators(2) pump water to each ventilation unit heating coil.	
4.4.11	Heating mixing boxes, dampers and linkages.	NA	1992 - 1994	None.	
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	3	1992 - 1994	Heating distribution is good in all areas. Problems with heating or cooling were reported in the administration area. Over heating and over cooling periodically are reported. The air balancing in this area should be checked.	$1,000
4.4.13	Zone/unit heaters and controls.	5	1992 - 1994	The unit heater in the boiler room has its fan cycled by a space t'stat. Heat pumps have space t'stats that can call for heating or cooling. The fan cabinet heaters are cycled by t'stats in the return air stream.	
Other	Expansion tanks	5	1992 - 1994	The heating and glycol mix systems use diaphragm type expansion tanks suspended at the ceiling.	

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.5	**Ventilation Systems**		Bldg. Section	Description/Condition	
4.5.1	Air handling units capacity and condition.	5	1992 - 1994	Two packaged air handling units with filter sections, heating coils and steam spray humidifiers are installed in the mechanical room. The central large ventilation unit and the smaller gymnasium unit both use only fresh air.	
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	5	1992 - 1994	Actual CFM/occupant of fresh air is not known. The main unit and the gymnasium unit deliver 100% fresh air. Relief openings do not appear to be provided.	
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	5	1992 - 1994	Heating terminals are heat pumps that mix return air from the ceiling plenum with tempered fresh air discharged near them by the central ventilation unit. The gymnasium heat pumps receive tempered fresh air directly into the return air stream from the gymnasium vent. unit.	
		5	1992 - 1994	Supply air from both units is delivered to the rooms by ceiling diffusers or grilles. Return air for the central system is returned by ceiling grilles and a return air plenum. Fresh air changes/hour based on an air delivery of 15,300 cfm is about 3 in the main building. The gym unit delivers at 1430 cfm or about 1 fresh air change per hour.	
4.5.4	Exhaust systems capacity and condition.	5	1992 - 1994	Washrooms are exhausted by central exhaust fans. Capacity and condition is satisfactory.	
4.5.5	Separation of out flow from air intakes.	5	1992 - 1994	The ventilation unit fresh air intake is well separated from the exhaust fans..	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	3	1992 - 1994	A kiln is installed in a storage room without exhaust. The kiln requires a hood with exhaust fan and a source of make-up air.	$2,500
Other	Circulating pumps	5	1992 - 1994	Each ventilation unit has an in-line circulator that supplies the heating coil through a mixing valve controlled by a discharge air t'stat.	

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 management technology).	5	1992 - 1994	The heating/cooling systems are controlled by an electronic energy management system that can minimize the use of the boilers and the fluid cooler.	
4.5.8	Air filtration systems and filters.	5	1992 - 1994	The ventilation units used to supply air to the heat pumps have filter sections with replacable media filters. Each heat pump has replaceable media filters.	
4.5.9	Humidification system and components.	5	1992 - 1994	The ventilation units used to supply air to the heat pumps have steam humidifiers supplied by the steam boiler. The humidifiers have motorized control valves controlled by duct mounted humidistat. The boiler operates automatically to maintain a set pressure.	
4.5.10	Heat exchangers.	5	1992 - 1994	See 4.4.10	
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	5	1992 - 1994	Supply air is delivered using a supply branch ductwork with heat pumps to zones or rooms. Fresh air is tempered by the main and gym. ventilation units and is delivered to the heat pumps serving each area. Ceiling supply air diffusers on the branch supply ducts are installed. Ceiling return grilles allow return air into the ceiling return plenum. Gym system return air is ducted to the heat pumps.	
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.6	**Cooling Systems**		Bldg. Section	Description/Condition	
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	5	1992 - 1994	Each heat pump is operated to by the space heating/cooling t'stat. and delivers hot or cool air as required. A large mechanical room storage tank operates as a heat sink to supply heat or store heat. An air cooled fluid cooler is used to reject excess heat from the system. The hot water boilers can add heat if required.	
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	5	1992 - 1994	The heat pumps operate as individual heating/cooling units and supply air through ducts to ceiling grilles or diffusers in the rooms or zones. The heat pumps are controlled by space t'stats.	
4.6.3	Cooling system controls (including use of current energy management technology).	5	1992 - 1994	The heat pumps operate as individual DX cooling units when cooling is required. They reject heat to the piping loop and the heat sink. The temperature of the heat pump liquid loop is automatically controlled to control and limit the operation of components such as the boilers or cooling tower.	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	NA	1992 - 1994	None	
Other	Heat pump circulators	5	1992 - 1994	Two base mounted pumps are used to pump water to the cooling tower and storage tank (heat sink).	
4.7	**Building Control Systems**		Bldg. Section	Description/Condition	
4.7.1	Building wide/system wide control systems and/or energy management systems.	5	1992 - 1994	The building is furnished with an electronic computer operated heating/cooling energy management system. The control system operates to minimize adding heat or providing mechanical cooling. The building temperature is automatically dropped during unoccupied hours. The amount of outside air is cut back when the building is not used. A remote central station monitors the building during unoccupied hours.	
	Overall Mech Systems Condition & Estim. Costs				$5,000

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.1	**Site Services**		Bldg. Section	Description/Condition	
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	5	1992 - 1994	Electric service is run underground to a pad mounted transformer on the southwest side. Secondary service is underground to a switchboard in a dedicated electrical room. The main breaker is rated at 2000 amperes, 3 ph. 120/208v Demand reading is at 320 va.	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	5	1992 - 1994	All sides of the building except the east side have HID fixtures. The east side has canopy mounted fixtures. The parking lot has pole mounted HIDs.	
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	5	1992 - 1994	The parking lot has 18 duplex plug-ins. Two spaces do not have plug-ins.	
Other					
5.2	**Life Safety Systems**		Bldg. Section	Description/Condition	
5.2.1	Fire and smoke alarm systems (i.e., safety concerns, up-to-date technology, regularly tested).	5	1992 - 1994	A fire control panel with 24 zones is mounted in the main entry vestibule. It has battery backup and system and sprinkler system supervision. The CBE tests the system annually.	
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	5	1992 - 1994	Emergency light battery packs are located to service remote and attached heads in all parts of the school. Coverage is good.	
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	5	1992 - 1994	Exit signs are located at all building exits. Directional exit signs are also provided. The signs are connected to the battery packs.	
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.	5	1992 - 1994	Only the computer network has surge protection.	
5.3.2	Panels and wireways capacity and condition.	5	1992 - 1994	Wiring is run in conduit. Panelboards generally have spaces.	
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	NA	1992 - 1994	None	
5.3.4	General wiring devices and methods.	5	1992 - 1994	Receptacles are grounded type. All devices are in good condition.	
5.3.5	Motor controls.	5	1992 - 1994	Large motors are protected by magnetic starters. Small motors have thermal switches.	
Other					
5.4	**Lighting Systems**		Bldg. Section	Description/Condition	
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3	1992 - 1994	Most of the building uses fluorescent fixtures. Pot lights have mini-fluorescent lamps. The gymnasium uses suspended HIDs. Light levels were recorded as follows: mechanical room - 216 lux, electrical room - 216 lux, administration - 646 lux, staff room - 538 lux, typical corridor - 324 lux, girls washroom - 162 to 270 lux, small office - 1076 lux, storage room - 592 lux, typical classrooms(new addition) - 970 lux, classrooms(original building) - 378 to 592 lux, library - 646 to 754 lux, library office - 538 lux, gymnasium - 324 lux, stage - 646 lux, See 5.4.3.	
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	5	1992 - 1994	There is no problem with PCBs in the ballasts. See 5.4.3.	
5.4.3	Implementation of energy efficiency measures and recommendations.	3	1992 - 1994	Large motors are protected by magnetic starters. Small motors have thermal switches. Replace all fluorescent fixtures with T-8 lamp equipped fixtures.	$102,000
Other					

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.5	**Network and Communication Systems**		Bldg. Section	Description/Condition	
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	5	1992 - 1994	The telephone service is in a separate room off the electrical room. There is excess capacity and condition is good.	
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	5	1992 - 1994	A telephone intercom system is installed throughout the building. A public address system with controller in the general office is installed with speakers in all areas. A cable TV system is also installed. It is not used.	
5.5.3	Network cabling (if available, should be category 5 or better).	5	1992 - 1994	A computer system with internet access is installed with outlets throughout the school. Two computer hubs are provided located in storage rooms.	
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	5	1992 - 1994	All cabling is run in conduit. Cabling is concealed in all finished areas.	
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	5	1992 - 1994	A ceiling grille for exhaust/supply(?) are installed in the telephone and computer hub rooms.	
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	5	1992 - 1994	Dedicated circuits for the computer hubs are provided. Computer banks in all areas are on general circuits.	
Other					

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.6	**Miscellaneous Systems**		Bldg. Section	Description/Condition	
5.6.1	Site and building surveillance system (if applicable).	NA		None	
5.6.2	Intrusion alarms (if applicable).	4	1992 - 1994	A security system with motion detectors is installed throughout the building. A central station connection is provided for unoccupied hours.	
5.6.3	Master clock system (if applicable).	NA		None	
Other	Program co-ordinator	5	1992 - 1994	A program co-ordinator controller is located in the general office to automatically sound the call devices.	
5.7	**Elevators/Disabled Lifts (If applicable)**		Bldg. Section	Description/Condition	
5.7.1	Elevator/lift size, access and operating features (i.e., sensing devices, buttons, phones, detectors).	NA		None	
5.7.2	Condition of elevators/lifts.	NA		Not applicable	
5.7.3	Lighting and ventilation of elevators/lifts.	NA		Not applicable.	
Other					
	Overall Elect. Systems Condition & Estim Costs				$102,000

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**	**None**	
6.1.1	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).	**N/A**	**None**	
6.1.2	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).	**N/A**	**None**	
6.1.3	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).	**N/A**	**None**	
6.1.4	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).	**N/A**	**None**	
6.1.5	Interior finishes (i.e., floors, walls, ceiling).	**N/A**	**None**	
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).	**N/A**	**None**	
6.1.7	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)	**N/A**	**None**	
6.1.8	Heating system.	**N/A**	**None**	
6.1.9	Ventilation system.	**N/A**	**None**	
6.1.10	Electrical, communication and data network systems.	**N/A**	**None**	
6.1.11	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).	**N/A**	**None**	
6.1.12	Barrier-free access.	**N/A**	**None**	
	Overall Portable Bldgs Condition & Estim Costs			$0

Section 7	Space Adequacy	This Facility			Equiv. New Facility			Sirplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	23		1856.3	22	80.0	1760.0	96.3	
7.2	Science Rooms/Labs	1	100.1	100.1	3	95.0	285.0	-184.9	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	2		180.1	2 3	130 90	530.0	-349.9	
	Art		98.5						
	Music		81.6						
7.4	Gymnasium (incl. gym storage)	1		541.9	1		627.0	-85.1	
	Gymnasium		451.0			570.0			
	Stage		55.5						
	Storage		35.4			57.0			
7.5	Library/Resource Areas	1	246.1	246.1	1		320.0	-73.9	
7.6	Administration/Staff, Physical Education, Storage Areas			309.9			685.0	-375.1	
	Administration/Staff		183.1			562.0			
	Storage		126.8			123.0			
	Sub-Total			3234.4			4207.0	-972.6	
7.7	CTS Areas								
	7.7.1 Business Education								
	7.7.2 Home Economics								
	7.7.3 Industrial Arts								
	7.7.4 Other CTS Programs								
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			1612.3			1574.0	38.3	
	Overall Space Adequacy Assessment	26		4846.7	30		5781.0	-934.3	

Evaluation Component/ Sub-Component	Additional Notes and Comments

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