	School Name:	H.D. Cartwright Jr. High				School Code:	9660
	Location:	5500 Dalhart Rd. NW				Facility Code:	1638
	Region:	South				Superindendent:	Dr. Donna Michaels
	Jurisdiction:	Calgary				Contact Person:	Leanne Soligo
						Telephone:	214-1121
	Grades:	7-9				School Capacity:	465

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	1971	2	4303.50	Block walls with brick, block or stucco exterior, flat roof on OWSJ and metal deck	Twin hot water boilers with central ventilation	
Additions/ Expansions	1995	1	249.10	As above	Heated from central boilers with rooftop ventilation unit.	
	Total		4552.60			

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

Upgrading/ Modernization (identify whether minor or major)	1995 1998/9			Handicapped elevator added and minor room renovations to second floor. Office renovated with carpet and new millwork.		
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)	2000	1		Two wood frame free standing portables have been placed in the NW corner of the site.	Gas fired downdraft furnaces.	Two free standing portables have been added, one is used for wrestling practice. Used as overflow space. Not included in area summary.
List of Reports/ Supplementary Information	CBE Facility Asbestos Database, February 23, 2000					

	Evaluation Components	Summary Assessment		Estim. Cost
1	**Site Conditions**	- Resurface parking lot - provide two new approach walks and stairs		$40,000
2	**Building Exterior**	- recaulk expanison joint+D4s, repaint soffits - cash allowance for repairs to architectural finishes for removal of boilers.		$26,000
3	**Building Interior**	- replace toilet partitions - refinish stage floor - repair fire separations		$44,450
4	**Mechanical Systems**	- relocate siamese connection - provide larger fire extinguisher to boiler room - replace hot water heater and tank - replace boilers and pumps - replace controls compressor and control valves - provide ventilation relief air - provide maintenance to heat exchanger system, replace exhaust systems parts - repair himidifiers - air balance in adminstration - replace condensing unit		$115,150
5	**Electrical Systems**	- install additional exterior lighting in parking lot - install new battery packs and additional heads - upgrade lights to T-8's. - add ventilation to computer hub		$119,000
6	**Portable Buildings**	- NA		
7	**Space Adequacy:**			
	7.1 Classrooms	- Deficient	-95	
	7.2 Science Rooms/Labs	- Deficient	-64.5	
	7.3 Ancillary Areas	- Slightly exccessive	101.1	
	7.4 Gymnasium	- Deficient	-104	
	7.5 Library/Resource Areas	- Slightly exccessive	75.5	
	7.6 Administration/Staff Areas	- Deficient	-161.6	
	7.7 CTS Areas	- Slightly excessive	147.2	
	7.8 Other Non-Instructional Areas (incl. gross-up)	- Slightly excessive	446.5	
	Overall School Conditions & Estim. Costs		345.2	$344,600

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	**General Site Condions**			
1.1.1	Overall site size.	4	1.47 hectares	
1.1.2	Outdoor athletic areas.	4	The school is situated adjacent to a community centre, with tennis courts and city baseball diamonds.	
1.1.3	Outdoor playground areas, including condition of equipment and base.	NA		
1.1.4	Site landscaping.	4	Mature	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4	Newer fence on the west side between the landscaping and walkway to NW entry. Fencing extends north along west side. Rest of site is open to community centre and city parks.	
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	4	Drainage away from building on all sides.	
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).	N/A	city streets	
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	3	Teacher/visitor parking to east is paved. Resurface parking lot.	$20,000
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	N/A	City streets	
1.2.4	Fire vehicle access.	4	City streets on three sides, fire access to north from parking lot.	
1.2.5	Signage.	4	Wall mounted sign on south elevation at main entry.	
Other				
1.3	**Parking Lots and Sidewalks**			
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	4	37 stalls, with a designated handicapped stall. Four stalls are on north side of school adjacent ot staff room.	
1.3.2	Layout and safety of parking lots.	4	To east of school, parking lot is contiguous with community centre. City parks are to east of parking.	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	4	Asphalt area is sloped to an area drain.	
1.3.4	Layout and safety of sidewalks.	3	Sidewalks from south side street approach the main entry, east end and another approaches the west end entry. A walk from the west approaches the NW entry. Stairs and concrete walks to south side entrirs should be replaced.	$20,000
1.3.5	Surfacing and drainage of sidewalks (note type of material).	4	Concrete, sloped away from building	
1.3.6	Curb cuts and ramps for barrier free access.	4	Handicapped access only from parking lot and to NW door. No curb cut at the NW sidewalk	
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).	4	1971 - 1995	No problems noted.	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	FI	1971 - 1995	Cracking noted in central stairwell south wall and at soffits in north stairwells. This should be investigated.	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4	1971 - 1995	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	1971 - 1995	No report available,	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	FI	1971 - 1995	Not inspected	
2.2.3	Control of ice and snow falling from roof.	4	1971 - 1995	Roofs slope to inside and drain internally.	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	4	1971 - 1995	Four, two into the library, two into classroom. 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).	3	1971 - 1995	Exterior walls are brick and concrete block (at CTS) and stucco above. Caulking in expansion joints need to be removed and replaced Stucco soffits should be painted.	$6,000
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	4	1971 - 1995	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).	4	1971 - 1995	No evidence of problems	
2.3.4	Interface of roof drainage and ground drainage systems.	4	1971 - 1995	Roof drains internally into storm system	
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	4	1971 - 1995	No evidence of problems	
Other		3	1971 - 1995	Cash allowance for repairs to architectural finishes for removal and replacement of boilers.	$20,000

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
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).	4	1971 - 1995	Doors and hardware are original to building. No problems noted.	
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	1971 - 1995	No evidence of problems, hardware appears to be original.	
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	4	1971 - 1995	Hardware functions as required	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	4	1971 - 1995	No problems noted.	
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	1971 - 1995	No problems noted.	
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4	1971 - 1995	No problems noted.	
Other					
	Overall Bldg Exterior Condition & Estim Costs				$26,000

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).	4	1971 - 1995	Corridor walls are concrete block, most walls throughout classes are concrete block, others are demountable partitions. No problems noted.	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4	1971 - 1995	Floors are concrete slabs throughout. No problems noted.	
Other					
3.2	**Materials and Finishes**		**Bldg. Section**	**Description/Condition**	
3.2.1	Floor materials and finishes.	3	1971 - 1995	Floors are vinyl tile in corridors. Classes are combination of VT and carpet. Office is redone in newer carpet and VT. Entry vestibules and washrooms are ceramic tile. Gymnasium and stage are hardwood. Stage floor to be refinished	$5,200
3.2.2	Wall materials and finishes.	4	1971 - 1995	Walls are painted concrete block or demountable partitions. Gymnasium and stage are hardwood. Music and drama rooms are carpeted. No problems noted.	
3.2.3	Ceiling materials and finishes.	4	1971 - 1995	Ceilings are suspended T-bar	
3.2.4	Interior doors and hardware.	4	1971 - 1995	Doors are wood throughout, except for metal doors at fire separations. All appear to be original, except in office which have been upgraded to metal in HM frames. Hardware is a mix of original and newer lever handle,.	
3.2	**Materials and Finishes (cont'd)**		**Bldg. Section**	**Description/Condition**	
3.2.5	Millwork	4	1971 - 1995	Millwork is original, except for office and staffroom which have been upgraded	
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	3	1971 - 1995	All tackboards and chalkboards are original - adequate, some newer tackboards. Replace all chalkboards with white boards.	$23,750
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	4	1971 - 1995	Gymnasium has fold out climbing wall. CTS is equipped with table saw and other bench mounted power equipment. There is also a darkroom.	
3.2.8	Washroom materials and finishes.	3	1971 - 1995	Sinks are wall hung, in good condition, partitions are original, and should be replaced.	$7,500
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.	4	1971 - 1995	Combination of combustible and non-combustible construction. Building is not sprinklered	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	3	1971 - 1995	2 hour fire separations Fire separations in boiler room are damaged and require repairs fire separation in storage room at top of stairs above stage is not complete, repairs required. Outdoor storage room is not properly separated from the rest of the building.	$8,000
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	4	1971 - 1995	Walls are mainly concrete block, doors are wood unless noted elsewhere. Hollow metal doors at stair wells.	
3.3.4	Exiting distances and access to exits.	4	1971 - 1995	Appear to be adequate.	
3.3.5	Barrier-free access.	4	1971 - 1995	Facility is accessible, to main floor only, at front entry Only one handicapped washroom available in the Infirmary. Handicapped elevator is in place	
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	4	1971 - 1995	CBE Facility Asbestos database indicates that all asbestos has been removed. Original fluorescent lights contain PCB ballasts. This must be a consideration as renovations are contemplated.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	4	1971 - 1995	No evidence of other problems	
Other					
	Overall Bldg Interior Condition & Estim Costs				$44,450

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	1972 - 1995	A catch basin is provided in the parking lot to the east. Catch basins are provided to the northeast and north. They are connected to city storm mains.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	5	1972 - 1995	non-freeze wall hydrants are provided on the west and south walls.	
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.	3	1972 - 1995	There is a siamese for the hose and standpipe system on the north side of the building. There is no hydrant. A hydrant is required or the siamese should be relocated to a side near a city hydrant to comply with the building code.	$6,000
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	4	1972 - 1995	A hose and standpipe system is installed with hose cabinets in the corridors. The cabinets have hoses on racks with adjustable nozzles.	
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	3	1972 - 1995	Type ABC dry chemical extinguishers are located in the hose cabinets, boiler room, ventilation equipment room, drama room, kitchen, industrial training and staff room. The boiler room requires a larger extinguisher.	$150
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).	4	1972 - 1995	The science and science preparation rooms have type ABC dry chemical extinguishers.	
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	1972 - 1995	A 4" iron water line c/w a master valve is brought into the boiler room. The meter has a valved bypass. Quality, quantity and pressure is good.	
4.3.2	Water treatment system(s).	NA		None	
4.3.3	Pumps and valves (including backflow prevention valves).	5	1972 - 1995	Backflow protection is provided on the domestic supply, fire line, the boiler feedwater line and glycol system fill line.	
4.3.4	Piping and fittings.	5	1972 - 1995	Water piping is copper tubing with soldered joints.	
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	4	1972 - 1995	Water closets are std, floor mtd. flush valve type. Urinals are stall type with flush tank. Lavs. are wall hung. Drinking fountains are I bubbler wall hung. Ctp. sinks are stainless steel. The shop has a semi circle type wash fountain. A shower is located in the phys. ed. office. Mop sinks are molded stone. Condition is good.	
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	3	1972 - 1995	A high capacity copper tube gas fired water heater is located in the boiler room. A storage tank and circulating pump are provided. A new recirculating pump is provided and operated by an aquastat. The system will require replacement.	$6,000
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	4	1972 - 1995	Storm and sanitary piping is cast iron and are connected to 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).	3	1972 - 1995	A hot water heating system is provided with twin packaged gas fired boilers. Output of each is 2,304 MBH. Twin floor mounted circulators are provided. System capacity is satisfactory. Pumps and boilers will require major maintenance or replacement.	$30,000
4.4.2	Heating controls (including use of current energy management technology.	3	1972 - 1995	The heating system uses pneumatic controls. A manual lead lag boiler switch is provided. Night setback is provided. Motorized valves are used on the heating terminals with space located t'stats. The control air supply system has a new compressor. The dryer is old and will require replacing	$3,000
4.4.3	Fresh air for combustion and condition of the combustion chimney.	3	1972 - 1995	A low mounted wall louver provides combustion air. It has a shield in front of it and very close to it. A ventilation relief as required by the gas code is blocked. Provide a well type shield and remove the blockage from the relief opening.	$1,000
4.4.4	Treatment of water used in heating systems.	4	1972 - 1995	A chemical pot feeder is provided piped across the supply and return mains.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4	1972 - 1995	A low water cutoff is provided on each boiler. Each boiler has a pressure relief valve.	
4.4.6	Heating air filtration systems and filters.	4	1972 - 1995	Originally much of the building was designed to use the ventilation system with reheat coils to heat the rooms. The music room uses a packaged ventilation unit with a heating coil to heat the room. The gym. and drama room use a similar arrangement. All units have replacable media filters.	
4.4.7	Heating humidification systems and components.	NA		None	

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).	4	1972 - 1995	A two pipe threaded and screwed steel pumped system is used to distribute water to all heating terminals. Wall fin convectors, reheat duct mounted coils and fan cabinet heaters are used in the building. A large horizontal unit heater is used in the boiler room. (Note: convectors were added to most of the rooms in this building.)	
4.4.9	Heating piping, valve and/or duct insulation.	4	1972 - 1995	Heating piping is canvas covered fiberglass. Duct insulation is fiberglass duct liner or canvas or foil covered external fiberglass.	
4.4.10	Heat exchangers.	3	1972 - 1995	A shell and tube heat exchanger is used with in-line circulators to transfer heat to the clycol mix used in the ventilation unit heating coils. Major maintenance will be required on the heat exchanger system.	$7,500
4.4.11	Heating mixing boxes, dampers and linkages.	4	1972 - 1995	Pneumatic motorized dampers are used on the ventilation unit mixing boxes.	
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	3	1972 - 1995	The general office area reported overcooling and overcooling problems. No other problem areas were noted. Some balancing is required.	$1,500
4.4.13	Zone/unit heaters and controls.	4	1972 - 1995	The unit heater and the fan cabinet heaters use space t'stats to cycle the fan motors.	
Other	Expansion tanks	4	1972 - 1995	The heating system uses twin suspended standard expansion tanks c/w gauge glasses. The glycol mix system uses two standard expansion tanks. One is horizontal, suspended and the second is vertical, mounted on the floor. Both have gauge glasses. The vertical tank is used to fill the system.	

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.	3	1972 - 1995	A central packaged ventilation unit with a heating coil and zone supply ducts is provided. A return fan was added. The fresh air intake was rerouted to a roof intake from a wall louver. There is no exhaust from this system. Reheat coils with control valves are used in the zone ducts operated by space	$30,000
				Some branch ducts appear to have fans at the window diffusers. A packaged ventilation unit with a heating coil in the boiler room is used for the gym. It has no return fan. The gym has roof relief hoods. This unit was modified and the mixing box is not used. A new packaged heating/cooling unit with heating/cooling coils and . No return or relief is provided. A packaged ventilation unit is used for the drama room. It is located in a closet off the drama room. The main ventilation unit now causes the building to pressurize and keeps exit doors open. Some engineering and redesign is required.	
				supplies the music room It has fresh air/return air mixing dampers.. A similar unit is located in a closet off the drama room. Neither unit has return fans. The central unit has had problems. It pressurizes the building and holds some doors open. Balancing, modifications and some major maintenance will be required.	
				A gas fired furnace located in the boiler room is no longer used.	
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	4	1972 - 1995	All ventilation units have adjustable fresh air intake volumes. CFM/person is not known.	
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	4	1972 - 1995	The central main unit uses ceiling mounted supply ductwork with supply grilles or diffusers. Return grilles to a ceiling space return plemun is used. The gym. unit has underfloor ducts with supply grilles and wall return grilles ducted back to the unit. The other two units use ducted ceiling supply diffusers and ducted return grilles. Air changes per hour is not known. Included in 4.5.1	
4.5.4	Exhaust systems capacity and condition.	3	1972 - 1995	Central roof exhausters are used for the washrooms. Wall exhausters are used for most fume hoods. All have good capacity and operate normally. Most will require major work.	$3,000
4.5.5	Separation of out flow from air intakes.	4	1972 - 1995	The main ventilation unit fresh air intake was changed from a wall louver air intake to a roof hood. The gym. unit relief is separated from the intake. The other units have no exhaust.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	4	1972 - 1995	A new dust collector system has been recently installed for the shop equipment. Fume hoods with dedicated exhaust fans are provided for the paint room, photography sink and another fume hood is provided in the shop.	
Other					

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).	3	1972 - 1995	The ventilation units all use pneumatic controls to operate mixing dampers and control valves. Some control valves are leaking and will require repairs or replacement.	$4,000
4.5.8	Air filtration systems and filters.	4	1972 - 1995	Each of the four ventilation units has a filter section with replacable media filters	
4.5.9	Humidification system and components.	3	1972 - 1995	Only the main ventilation unit has a humidifier spray coil humidifier controlled by a return air duct mounted humidistat c/w with a circulating pump. The drama room and music room units should have small humidifiers installed.	$3,000
4.5.10	Heat exchangers.	NA		see 4.4.10	
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	4	1972 - 1995	The distribution system is described under 4.5.3.	
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).	3	1972 - 1995	The main ventilation unit, drama room unit and the music room unit all have roof mounted condensing units. The main condensing unit is old and will require major work or replacement.	$20,000
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	4	1972 - 1995	See 4.5.3	
4.6.3	Cooling system controls (including use of current energy management technology).	4	1972 - 1995	The cooling sections of each unit use electric factory supplied controls. The space t'stats cycle the condensing units. No energy management is provided.	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	NA		none	
Other					
4.7	**Building Control Systems**		Bldg. Section	Description/Condition	
4.7.1	Building wide/system wide control systems and/or energy management systems.	4	1972 - 1995	The building control system is used to lower temperatures during unoccupied hours. No energy management system is provided.	
	Overall Mech Systems Condition & Estim. Costs				$115,150

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).	4	1972 - 1995	Electrical is brought underground from utility lines to a pad mounted transformer and to a switchboard in the boiler room. An 800 ampere main switch is provided at 3 phase, 120/208v. Condition and capacity is good. Maximum demand is at 470 va	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	3	1972 - 1995	The parking lot on the east relies on two small HID fixtures on the building. The north side has two HID fixtures. Small HID fixtures over the doors and under the canopies are used on the south and west sides. Additional parking lot lights are needed.	$4,000
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	4	1972 - 1995	Duplex plug-ins(15)are provided for in the parking lot. Condition is good.	
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).	4	1972 - 1995	A fire control panel with annunciator, battery back-up and trouble supervision is installed in the main entry vestibule. The system has the required devices deployed in all parts of the building. Duct detectors are installed. The system is tested annually.	
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	3	1972 - 1995	Battery pack type emergency lights are used throughout the building. Remote heads are installed in the gym., corridors, exits drama room, stage and stairways. Remote heads are recommended for the washrooms and library. Many battery packs are old and should be replaced.	$1,500
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	4	1972 - 1995	Illuminated exit signs are located at exits to stairs, building exits, gym. exits, and library exits. The exit signs are wired to the emergency 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.	4	1972 - 1995	Only the new computer hub has surge protection	
5.3.2	Panels and wireways capacity and condition.	4	1972 - 1995	Most panelboards have spare capacity. Wiring is run in conduit.	
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	NA		None	
5.3.4	General wiring devices and methods.	4	1972 - 1995	Receptacles are grounded type. Devices are in good condition.	
5.3.5	Motor controls.	4	1972 - 1995	The larger motors have 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	1972 - 1995	Most of the lighting in the building is fluorescent. Some incandescent fixtures are used in the boiler room, central ventilation unit room, staff room and small storage rooms. Light levels are as follows: boiler room - 108 lux, drama room - 538 lux, lunch servery - 484 lux, stage - 432 lux, library - 538 lux, typical corridor - 324 lux, boy's washroom - 216 lux, classrooms - 432 to 646 lux, science room - 324 lux, home economics - 646 lux, staff room - 324 lux, music room - 538 lux, shop - 432 lux, staff meeting room - 432 lux, administration - 538 lux, gymnasium - 432 lux, phys. ed. office - 646 lux, computer lab. - 646 lux. Condition and control is good. The boiler room lights should be upgraded. Included in 5.4.3.	
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	4	1972 - 1995	The light fixture ballasts are not expected to have PCBs. See 5.4.3.	
5.4.3	Implementation of energy efficiency measures and recommendations.	3		None. Fluorescent fixtures use 34 watt lamps. Replace all fluorescent fixtures with T-8 lamp equipped fixtures.	$112,000
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	1972 - 1995	The telephone service is in good condition and good capacity .	
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	5	1972 - 1995	A telephone intercom system is installed throughout the building. A public address system with controller in the administration area and speakers throughout the school is provided. A cable TV system is installed but not used.	
5.5.3	Network cabling (if available, should be category 5 or better).	5	1972 - 1995	A new computer system is installed with outlets throughout the school. It has internet access.	
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	5	1972 - 1995	Network cabling is installed in metal conduit and concealed in all areas.	
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	3	1972 - 1995	The telephone service and distribution and the computer hub and distribution are located in the copier room. This room is hot. Ventilation is inadequate and should be increased or a special cooling unit should be installed.	$1,500
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	5	1972 - 1995	The computer hub is on dedicated circuits. The computer lab. Is on dedicated circuits. Other rooms use general outlets.	
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	1972 - 1995	A security system with motion detectors is provided throughout the school. A central station connection is provided for unoccupied hours.	
5.6.3	Master clock system (if applicable).	NA		None installed.	
Other	Program co-ordinator	4	1972 - 1995	The program co-ordinator is located in the general office and automatically sounds the call bells	
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				$119,000

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			$0.00

Section 7	Space Adequacy	This Facility			Equiv. New Facility			Surplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	12		785	11	80	880	-95	
			69.0						
			70.3						
			66.3						
			60.6						
			40.0						
			61.6						
			72.4						
			67.5						
7.2	Science Rooms/Labs	3		295.5	3	120	360	-64.5	
	Science Room		127.0						
	Science Room		120.5						
	Science prep		48.0						
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	4		501.1			400	101.1	
	Ancillary		56.1		1	130			
	Ancillary		126.0		3	90			
	Music		207.4						
	Drama		111.6						
7.4	Gymnasium (incl. gym storage)	1		551.0			655	-104	
	Gymnasium		444.6			595			
	Stage		78.6						
	Storage		27.8			60			
7.5	Library/Resource Areas	1		305.5	1		230	75.5	
	Library		223.7						
	Resouce areas		81.8						
7.6	Administration/Staff, Physical Education, Storage Areas			421.4			583	-161.6	
	Administration/Staff		303.5			357			
	Physical Education		21.4			130			
	Storage		96.5			96			
	Sub-Total			2859.5			3108	-248.5	
7.7	7.7.1 Business Education				2	115	230	-230	
	7.7.2 Home Economics	1	127.9	127.9					
	7.7.3 Industrial Arts	1	180.8	180.8					
	7.7.4 Other CTS Programs	1	68.5	68.5					
Total	CTS Areas			377.2			230	147.2	
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			1646.5			1200	446.5	
	Overall Space Adequacy Assessment	19		4883.2	18		4538	345.2	

Evaluation Component/ Sub-Component	Additional Notes and Comments

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