

School Name:	Jack James High School	School Code:	9856			
Location:	5105 - 8th Ave. SE	Facility Code:	1659			
Region:	South	Superintendent:	Dr. Donna Michaels			
Jurisdiction:	Calgary	Contact Person:	Leanne Soligo			
		Telephone:	214-1121			
Grades:	9-12	School Capacity:	910			
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	1980	2	10118.26	Slab on grade with post tensioned second floor. OWSJ, flat and sloped roofs, brick exterior.	Two hot water boilers with central and packaged ventilators	
Additions/ Expansions	1956	1	83.5	Wood frame with sloped roof and wood siding	Down flow gas fired furnace.	
	Total		10201.76			
					Evaluator's Name:	Bob Passmore, M.A.A.A.
					& Company:	Building Science Specialists Ltd.

Upgrading/ Modernization (identify whether minor or major)	1985	1	247.8	Upgrade finishes in drama room and business education		
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)	1956	1	83.50	Portable - wood frame, see above.	See above	
List of Reports/ Supplementary Information	CBE Facility Abestos Database, February 23, 1999					

	Evaluation Components	Summary Assessment	Estim. Cost
1	Site Conditions	- no expenditures necessary at this time	\$0
2	Building Exterior	- recaulk joints between windows and brick	\$15,000
3	Building Interior	- replace carpet in classrooms, office and library - repaint throughout CTS wing - provide new millwork in horticulture - repair fireproofing in CTS and mechanical room - provide new partitions in washrooms	\$207,250
4	Mechanical Systems	- provide new fire extinguishers - provide additional or replace existing backflow preventors - install new hot water heater and circulator - provide additional maintenance to boilers & provide gauges for expansion tanks - provide ventilation relief air - provide air balancing - install fume hood and exhaust fan in science room - upgrade ventilation in Building Maintenance shop. - replace CO sytem in automotive repair - provide air filters to air intake for horticulture - connect exhaust ductwork in building maintenance shop - Install HVAC for administration office	\$89,500
5	Electrical Systems	- remove floor mount plug in building services - add four panels in variuos shops - add additional receptacles in horticulture - provide additional fixtures in various areas	\$25,300
6	Portable Buildings	- repaint exterior - provide exit signs connected to emergency battery packs - provide T-8 fixtures	\$8,000

	Evaluation Components	Summary Assessment		Estim. Cost
7	Space Adequacy:			
	7.1 Classrooms	- Deficient	-857.6	
	7.2 Science Rooms/Labs	- Deficient	-411.8	
	7.3 Ancillary Areas		-341	
	7.4 Gymnasium	- Deficient	-275.2	
	7.5 Library/Resource Areas	- Deficient	-69.6	
	7.6 Administration/Staff Areas	- Deficient	-218.4	
	7.7 CTS Areas	- Slightly excessive	1016	
	7.8 Other Non-Instructional Areas (incl. gross-up)	- Slightly excessive	1394.4	
	Overall School Conditions & Estim. Costs		236.8	\$345,050

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	General Site Conditions			
1.1.1	Overall site size.	4	3.02 hectares	
1.1.2	Outdoor athletic areas.	N/A	Adjacent ball diamonds and soccer pitches are Parks and Recreation property	
1.1.3	Outdoor playground areas, including condition of equipment and base.	4	Mainly landscaped benches and seating to SE with three basketball hoops.	
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	Perimeter chain link fence to west, against ball diamonds. Open to south playing fields and east to 52 street. North face is open to 8th Avenue.	
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).	4	One driveway access at NW corner which provide drive aisle and fire access. Parking along west side of lot and north along avenue. Turn around at front door.	
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	4	Parking areas and driveway are paved to north and west of site.	
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	There is a bus pull off for city transit buses between main and student entry on north side, city streets	
1.2.4	Fire vehicle access.	4	Access from NW entry, along west side to south and onto gravel at south end. Access to east side from north parking lot is over grass.	
1.2.5	Signage.	4	Wall mounted sign on north elevation at main entry. One pole mounted sign on avenue to north of building.	
	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	46 stalls, along west side, 40 along north avenue, five of which are designated visitor stalls. There are designated handicapped stalls & handicapped access to school from parking lot.	
1.3.2	Layout and safety of parking lots.	4	No problems noted.	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	4	Asphalt is sloped to area drains.	
1.3.4	Layout and safety of sidewalks.	4	Two sidewalks from 8th avenue cross north parking lot, speed bumps in parking area	
1.3.5	Surfacing and drainage of sidewalks (note type of material).	4	Sidewalks are concrete, sloped away from building. Cracking noted at front entry	
1.3.6	Curb cuts and ramps for barrier free access.	4	Entries are handicapped accessible.	
	Other			
	Overall Site Conditions & Estimated Costs			\$0

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).	FI	1980	Upper floor slab is post-tensioned. Cable anchors should be reviewed for water penetration.	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	FI	1980	Cracking in brick face at main entry, cosmetology and art room is noted. The cause should be identified and rectified.	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4	1980	No evidence of problems	
	Other				
2.2	Roofing and Skylights <i>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.</i>		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	1980	No report available, roof appears to be inverted membrane, covered in snow at time of inspection	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	FI	1980	Not reviewed	
2.2.3	Control of ice and snow falling from roof.	5	1980	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	1980	Horticulture area is covered in sloped plexiglas glazing and has experienced leaks.	
	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).	4	1980	No problems noted, but refer to 2.1.2 above	
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	4	1980	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).	FI	1980	Air infiltration noted at expansion joint in horticulture.	
2.3.4	Interface of roof drainage and ground drainage systems.	4	1980	Roof drains internally into storm system	
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	4	1980	See 2.3.3 above, further review required.	
	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).	4	1980	Doors and hardware are original to building. Paint on doors is peeling, Repaint is included in 2.3.1.	
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	1980	No evidence of problems, hardware appears to be original.	
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	4	1980	Hardware functions as required	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	1980	Windows are sealed units in aluminum frames, no problems noted. Cauling between windows and brick surrounds requires replacement.	\$15,000
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	1980	No problems noted.	
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4	1980	No problems noted.	
	Other				
Overall Bldg Exterior Condition & Estim Costs					\$15,000

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	1980	Walls are mainly painted concrete block, no problems noted. Demountable partitions in office areas.	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4	1980	No serious problems noted	
Other		FI	1980	Floor slab at horticulture is not level on each side of expansion joint. This becomes a trip hazard.	
3.2 Materials and Finishes			Bldg. Section	Description/Condition	
3.2.1	Floor materials and finishes.	3	1980	Floors are painted concrete in the shops, VT in corridors. VT in many classrooms, carpet in others, in library and office area. Entry vestibules and washrooms are ceramic tile. Carpet needs to be replaced in office, library and classrooms	\$61,000
3.2.2	Wall materials and finishes.	3	1980	Walls are painted concrete block, with demountable partitions in office areas Walls in all shops require painting.	\$30,000
3.2.3	Ceiling materials and finishes.	4	1980	Ceilings are suspended T-bar, except for shops which are exposed structure	
3.2.4	Interior doors and hardware.	4	1980	Doors are wood throughout, except for metal doors at fire separations. All appear to be original,. No problems noted.	
3.2.5	Millwork	4	1980	Millwork is original, no problems noted.	
		3	1980	Potting counters and class room area millwork is falling apart. Materials used are inappropriate for the environment. Provide new millwork	\$53,000
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	3	1980	All tackboards and chalkboards are original - adequate. Replace with white boards.	\$49,250
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	4	1980	Gymnasium has fold out climbing wall.	
3.2.8	Washroom materials and finishes.	3	1980	Sinks are wall hung, in good condition, partitions are original and require replacement..	\$9,000
Other					

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
			<u>Bldg. Section</u>	<u>Description/Condition</u>	
3.3	Health and Safety Concerns --- <i>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.</i>				
3.3.1	Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.	4	1980	Combination of combustible and non-combustible construction, Academic wing is sprinklered, shop wing is not sprinklered	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	4	1980	2 hour fire separations exist between class wings and core.	
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	3	1980	Walls are mainly concrete block in the core, Doors in separations are on hold open devices, Steel structure in shops is protected with cellulose fireproofing, many areas are worn or chipped off. Same is true in mechanical room on roof. Repairs to fireproofing required.	\$5,000
3.3.4	Exiting distances and access to exits.	4	1980	Appear to be adequate.	
3.3.5	Barrier-free access.	5	1980	Facility is accessible, at front entry and north east door. An elevator between floors is provided as are handicapped accessible washrooms.	
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	4	1980	CBE Facility Asbestos database indicates the presence of asbestos in elbows on heating pipes.. 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)	FI	1980	Welding booths are made of asbestos panel material. Panels have been damaged. Alternative booth material should be explored and the existing booths replaced.	
Other					
Overall Bldg Interior Condition & Estim Costs					\$207,250

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).	4	1980	Parking lots on the north and west have catch basins that drain to city storm sewers.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4	1980	The north side has a non-freeze wall hydrant.	
4.1.3	Outside storage tanks.	4	1980	Oxygen and acetylene for the welding shop are stored in small separate shed. They are manifolded and piped to the shop. A large propane tank is located to the south west of the building.	
Other					
4.2 Fire Suppression Systems			Bldg. Section	Description/Condition	
4.2.1	Fire hydrants and siamese connections.	4	1980	Fire hydrants are located on the northeast and southwest of the building. Sprinkler and standpipe system siamese connections are provided on the north east wall of the building.	
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	4	1980	The academic portion of the building is totally sprinklered. The shops wing is not sprinklered. All parts of the building have hose and standpipe protection.	
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	3	1980	The fire hose cabinets have ABC dry chemical extinguishers. The shops all have hand dry chemical or carbon dioxide. extinguishers. Many extinguishers are too small and should be replaced.	\$800
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).	4	1980	The acetylene/oxygen storage shed has no automatic protection. The science labs have hand extinguishers.	
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.3	Water Supply and Plumbing Systems		Bldg. Section	<u>Description/Condition</u>	
4.3.1	Domestic water supply (i.e., pressure, volume, quality - note whether municipal or well supply).	4	1980	Water service is from city mains with separate 6" iron domestic and 8" fire service lines. Pressure and quality is good.	
4.3.2	Water treatment system(s).	N/A		None	
4.3.3	Pumps and valves (including backflow prevention valves).	3	1980	Backflow protection is provided on the domestic and fire water services. The domestic capacity has been severely reduced by the use of small backflow protected lines. The required valving has been provided. Replace or add extra backflow protected lines.	\$4,000
4.3.4	Piping and fittings.	5	1980	Water piping is insulated copper tubing with soldered joints.	
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	4	1980	Water closets are flush valve type. Urinals are flush tank stall type. Lavatories are wall hung. Sinks in various rooms are ctp. stainless steel. Janitors rooms have laundry tubs or slop sinks. Condition is good.	
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	3	1980	A large capacity gas fired water heater is provided c/w an insulated vertical storage tank. An in-line circulator and a recirculating pump are provided. Operation is normal. The water heater and circulator will require major work or replacement.	\$10,000
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	5	1980	Sanitary and storm drains are connected to city mains. Piping is cast iron. A small sump c/w a submersible pump is installed.	
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	1980	Hot water heating is provided in all parts of the school. Twin Cleaver Brookes gas fired water tube boilers with an output of 4,400 MBH each are installed. Three base mounted circulators are used. Maintenance on the boilers has been high. Additional maintenance on the boilers and the circulators will be required.	\$18,000
4.4.2	Heating controls (including use of current energy management technology).	4	1980	Heating system controls are pneumatic. A control compressor c/w a dryer is provided.	
4.4.3	Fresh air for combustion and condition of the combustion chimney.	3	1980	Combustion air is an insulated duct from a wall louver. No ventilation relief is provided. Separate metal stacks are used.	\$1,000
4.4.4	Treatment of water used in heating systems.	5	1980	The heating water piping has a chemical pot feeder piped across the mains.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	5	1980	Both boilers have low water level cutoffs and pressure relief valves.	
4.4.6	Heating air filtration systems and filters.	N/A		Not applicable	
4.4.7	Heating humidification systems and components.	N/A		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).	5	1980	Piping is black iron supply and return, with pumps on the supply main. Terminals are wall fin convectors, fan cabinet heaters, unit heaters, open elements and heating coils.	
4.4.9	Heating piping, valve and/or duct insulation.	5	1980	Duct and pipe insulation is fiberglass. Exterior insulation is canvas covered.	
4.4.10	Heat exchangers.	N/A		None	
4.4.11	Heating mixing boxes, dampers and linkages.	N/A		None	
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	3	1980	Heating in the academic areas is from T'stat controlled VAV terminals. A problem was reported with heat buildup in many areas. This may be a problem with air flow volumes and balancing. See 4.5.3. Vestibules are heated by fan cabinet heaters.	
		4	1980	The shops are heated by horizontal or vertical unit heaters.	
4.4.13	Zone/unit heaters and controls.	5	1980	Unit heaters and fan cabinet heaters have space t'stats that cycle the motors	
Other	Expansion Tanks	2	1980	Four standard expansion tanks are suspended at the ceiling. They do not have gauge glasses. Provide gauge glasses.	\$1,200

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	1980	A large central built-up VAV ventilation/cooling unit with a vane axial return/exhaust fan air is used for ventilating all areas except the shops. Space thermostats control terminal boxes to maintain set temperatures. The system condition is good. Capacity may be a problem. See 4.5.3	
		4	1980	The shops generally have their own packaged ventilation unit with heating coil, filter section, air supply and return/exhaust ductwork. Condition of the units is good.	
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	4	1980	Actual outside air quantities are not known but are probably about 10 cfm/person in the non-shop areas. The shop units are mainly make-up air units and can provide up to 100% fresh air.	
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	3	1980	Non-shop areas - The VAV distribution system is installed with VAV terminals supply and return from all rooms. Air changes are estimated to be about 15 to 20 minutes. Many areas report a problem with overheating and lack of air flow. Design capacities should be checked. Balancing and controls may be the problem	\$10,000
		5	1980	Shops - Most shops have a dedicated packaged heat/vent. unit suspended at the ceiling. with distribution supply and return ductwork. Each has a large fresh air intake with motorized mixing dampers.	
4.5.4	Exhaust systems capacity and condition.	4	1980	Academic area -Large washrooms are exhausted by central exhaust fans. Condition is good.	
4.5.5	Separation of out flow from air intakes.	5	1980	Separation of intake and exhaust on the central unit is good. The shops units intake is generally well separated from the exhaust fans and discharges.	

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
	4.5 Ventilation Systems		Bldg. Section	Description/Condition	
	4.5.6 Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	3	1980	Academic section - The kitchen has hoods with exhausts over the range and dishwasher. The science labs. and graphic arts have fume hoods. Condition is good. The science classroom does not have a fume hood and exhaust fan and requires them.	\$2,500
		3	1980	Shops - Dedicated exhaust fans and systems are provided for each of the shops. Capacity and condition in most areas is good. Excessive noise with the exhaust systems were reported in many shops. The building maintenance area require better ventilation.	\$2,000
		1	1980	Automotive Repair - The carbon monoxide system is not usable and needs replacing. An interlock with the ventilation unit is required. The ventilation unit could not be started and requires maintenance.	\$10,000
		3	1980	Horticulture - Several large wall mounted propeller fans with wall intake louvers are used A problem was reported with sawdust from the home being built outside by construction services. This may be temporary. Provide filters on the intake louvers.	\$3,000
		2	1980	Building maintenance - The exhaust ductwork is non functional and should be replaced. Small engine shop - The exhaust ductwork is not suitable and should be replaced. Building maintenance - Exhaust duct is to be connected properly.	\$7,000
	Other				

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.5	Ventilation Systems (cont'd)		Bldg. Section	<u>Description/Condition</u>	
	<i>Note: Only complete the following items if there are separate ventilation and heating systems.</i>				
4.5.7	Ventilation controls (including use of current energy management technology).	5	1980	The central system uses a pneumatic control system and works automatically with motorized mixing dampers on the return/exhaust/fresh air ducts. Controls are manually set and adjusted with the use of sensors and temperature readouts.	
4.5.8	Air filtration systems and filters.	5	1980	All ventilation units are provided with filter sections with replaceable media.	
4.5.9	Humidification system and components.	5	1980	The central system has a humidifier section with a return air humidity sensor and adjustable controller.	
4.5.10	Heat exchangers.	N/A		None	
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	3	1980	See 4.5.3	
Other					

Section 4	Mechanical Systems	Rating	Bldg. Section	Comments/Concerns	Estim. Cost
4.6	Cooling Systems				
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	4	1980	The central ventilation system uses a direct expansion cooling system with chilled water and an interior cooling tower. The Trane Centra Vac refrigeration unit was under repair and was shut down. Capacity was judged to be adequate. The cooling tower will need major maintenance.	\$20,000
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	3	1980	The cooling distribution was reported to cause rooms to be hot or cold. See 4.5.11 for balancing. See 4.5.3 for costing.	
4.6.3	Cooling system controls (including use of current energy management technology).	4	1980	Room T'stats control VAV terminal boxes to provide cooling in the rooms. Night and weekend shut down are provided in the academic section.	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	N/A		None	
Other					
4.7	Building Control Systems				
4.7.1	Building wide/system wide control systems and/or energy management systems.	4	1980	None provided.	
Overall Mech Systems Condition & Estim. Costs					\$89,500

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.1	Site Services		Bldg. Section	Bldg. Section	
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	5	1980	Electrical service is underground at 3 phase 347/600v to a 1200 ampere main switch in a separate electrical room. A switchboard is used to distribute power. A transformer in the room supplies 3 phase 120/208v power. Demand was 220 kva.	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	5	1980	Pole mounted HID fixtures are used on the parking lots. Wall mounted HiID fixtures are installed on all walls not next to the parking lots.	
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	5	1980	Duplex plug-ins (24) are provided on the west side parking lot. They are on temperature and time control.	
Other	Floor plug-ins	1	1980	Building services has floor duplex receptacles that are in poor condition that should be replaced and/or relocated.	\$800
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	1980	A zoned fire alarm system is installed throughout the building. A fire control panel is installed in the electrical room. A graphic annunciator with lights in each zone is located in the main lobby. Stairways are not smoke zones as currently required.	
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	5	1980	The emergency lighting is provided by the regular lighting fixtures that are on the emergency panelboard that is supplied by emergency generator power.	
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	5	1980	Illuminated exit signs are provided at all floor and building exits. The signs are wired through circuits on the emergency panel.	
Other					

Section 5	Electrical Systems	Rating	Bldg. Section	Comments/Concerns	Estim. Cost
5.3	Power Supply and Distribution				
5.3.1	Power service surge protection.	5	1980	Only the recently installed central computer hub has surge protection.	
5.3.2	Panels and wireways capacity and condition.	3	1980	Panelboards in the academic area have extra spaces in most locations. The shop panelboards are generally full and many examples of incorrect location of circuiting and overloaded circuits were pointed out. Install 4 new panels in various shops and recircuit existing equipment and add new circuits.	\$12,000
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	5	1980	A diesel engine driven generator is located in a second floor room. An adequate fuel storage tank is provided c/w a transfer system. Capacity and condition of the emergency generator is good.	
5.3.4	General wiring devices and methods.	3	1980	Receptacles are grounded type. Devices are in good condition. Wiring methods are current. Receptacles are required in horticulture classroom.	\$500
5.3.5	Motor controls.	5	1980	Large motors are have magnetic starters. Small motors are provided with thermal switches.	
	Other				
5.4	Lighting Systems				
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3	1980	Poor color rendition sodium lights are used in most areas. Some shops and the gymnasium have old and new fixtures with better color rendition. Most academic areas use indirect sodium lighting.. They are slow to start and many rooms have low light levels at the blackboards. Some classrooms, service areas, stairways, washrooms, shop classrooms, horticulture, etc. use standard fluor. fixtures. Corridors use recessed sodium and wall mounted fluor. fixtures. Light levels are as follows: Graphic arts - 432 lux, business ed. - 592 lux, offices - 38 lux, stairs - 108 lux, welding shop - 862 lux, welding c.r. - 432 lux, small engines - 432 lux, disability prep. - 646 lux, science labs - 432 lux, stores - 754 lux, classrooms - 432 lux, kitchen - 432 lux, food studies - 54 to 323 lux, gym. - 430 lux, day care - 269 lux, library - 592 lux. Light levels low. Add fixtures in day care, food studies, classrooms, small engines, etc.	\$12,000
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	4	1980	Fluorescent fixtures are not expected to have ballasts with PCBs.	
5.4.3	Implementation of energy efficiency measures and recommendations.	4	1980	The building was built with energy saving sodium fixtures.	
	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	1980	The telephone service is into the electrical room. The system has adequate capacity and reliability.	
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	5	1980	A public address with good speaker coverage with a large control console in the general office is provided. A telephone intercom system is installed throughout the building.	
5.5.3	Network cabling (if available, should be category 5 or better).	5	1980	A new central computer system with internet connection was recently installed. Outlets are provided throughout the building.	
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	5	1980	Cabling is in metal conduit and is concealed in all finished areas.	
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	5	1980	The telephone system distribution is from the electrical room. The computer hub is in a locked storage room.	
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	5	1980	The computer hub is on dedicated electrical circuits. Other computers are on general circuits. A computer lab. Is provided.	
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).			None	
5.6.2	Intrusion alarms (if applicable).	5	1980	A security system is installed with motion detectors and a central station connection for unoccupied hours.	
5.6.3	Master clock system (if applicable).	5	1980	A master clock system is installed. All clocks are not on the system.	
Other	Program co-ordinator	5	1980	The building has a controller that automatically sounds the call bells.	
5.7	Elevators/Disabled Lifts (If applicable)				
5.7.1	Elevator/lift size, access and operating features (i.e., sensing devices, buttons, phones, detectors).	5	1980	A standard hydraulic elevator with keyed access is provided.	
5.7.2	Condition of elevators/lifts.	5	1980	The elevator has limited use and is in good condition.	
5.7.3	Lighting and ventilation of elevators/lifts.	5	1980	Lighting of the elevator cab. Is good.	
Other					
Overall Elect. Systems Condition & Estim Costs					\$25,300

Section 6	Portable Buildings	Rating	Comments/Concerns	Estim. Cost
	<i>Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.</i>		One free standing portable at SW corner of school, not shown in summary.	
6.1.1	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).	4	Wood frame, no problems noted.	
6.1.2	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).	F1	Not reviewed	
6.1.3	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).	3	Wood siding, needs painting	\$5,000
6.1.4	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).	4	Original, but serviceable	
6.1.5	Interior finishes (i.e., floors, walls, ceiling).	4	Newer paint, no problems noted	
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).	4	Original but functional	
6.1.7	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)	4	Original but functional	
6.1.8	Heating system.	4	The portable has a down flow gas fired furnace with wall mounted supply plenum.	
6.1.9	Ventilation system.	4	Fresh air is mixed with the return air and supplied through the supply plenum.	
6.1.10	Electrical, communication and data network systems.	4	The portable has the telephone intercom system, computer system outlet, P.A. system and call bell connected to the main school.	
6.1.11	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).	3	The fire alarm system is connected to the main school system. There are no exit signs. Provide exit signs connected to the emergency battery packs. Replace fluorescents with T-8 lamp equipped fixtures.	\$3,000
6.1.12	Barrier-free access.	4	Accessible by ramp at one doorway	
	Overall Portable Bldgs Condition & Estim Costs			\$8,000

Section 7	Space Adequacy	This Facility			Equiv. New Facility			Surplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	13		902.4	22	80	1760	-857.6	
			64.0						
			78.1						
			55.6						
			67.6						
			83.8						
			81.1						
7.2	Science Rooms/Labs	2		188.2	5	120	600	-411.8	
			93.6						
			94.6						
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	1	100	279.0	2	130	620	-341.0	
		1	179		4	90			
7.4	Gymnasium (incl. gym storage)	1		874.8			1150	-275.2	
			744.7			1050			
			87.3						
			42.8			100			
7.5	Library/Resource Areas	1	375.4	375.4			445	-69.6	
7.6	Administration/Staff, Physical Education, Storage Areas			695.6			914	-218.4	
	Sub-Total			3315.4			5489	-2173.6	

Section 7	Space Adequacy	No.	Size	Total Area	No.	Size	Total Area	Deficiency	Comments/Concerns
7.7	CTS Areas								
	7.7.1 Business Education	4		272.0	3	115	345	-73.0	
			103.7						
			93.5						
			54.3						
			20.5						
	7.7.2 Home Economics	4		554.9			420	134.9	
			137.4		1st	160			
			95.8		2nd	100			
			264.6		3rd	160			
			57.1						
	7.7.3 Industrial Arts - see below							0.0	
	7.7.4 Other CTS Programs	11		2334.1			1380	954.1	
	Welding		227.0		1st	300			
	Small engine & classroom		136.2						
	Building Services		313.7						
	Construction Services		184.0						
	Building Maintenance		93.8						
	Cosmetology		143.9						
	Daycare		211.3						
	Life Skills		121.8						
	Horticulture		303.7						
	Automotive		308.2		2nd	510			
	Autobody		290.5		3rd	570			
	CTS Areas - Sub -total			3161.0			2145	1016.0	
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			3725.4			2331	1394.4	
	Overall Space Adequacy Assessment	36		10201.8	42.0		9965.0	236.8	

Evaluation Component/ Sub-Component	Additional Notes and Comments

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