School Name: Ian Bazalgette Junior High School
Location: 3909 - 26th Avenue S.E.,

Region: South
Jurisdiction: Calgary Board of Education
District No. 19

Grades: 7 to 9

School Code: 613
Facility Code: 1600

Superindendent: Dr. Donna Michaels
Contact Person: Leanne Soligo
Telephone: (403) 214-1123

School Capacity: 760

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	1960	2	4,910.50	Floors: concrete slab; Walls: concrete foundation; concrete main and upper level columns with concrete block/brick clad exterior walls and concrete block corridor walls Roof: open web steel joists with steel deck. Gymnasium: glu-lam timber arched roof with wood deck; Concrete block exterior walls		
Additions/ Expansions	1978	1	443.5	Concrete columns with timber beams supporting the sloped roof.		Library

Evaluator's Name: Doug Campbell
& Company: Carruthers & Associates Architects Inc.

Upgrading/ Modernization (identify whether minor or major)						
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)	N/A					

List of Reports/ Supplementary Information	Roof plan showing roof replacement dates of all wings Asbestos report ofOct. 28, 1997 prepared by Environmental Health Professionals for the Calgary Board of Education.

	Evaluation Components	Summary Assessment	Estim. Cost
1	**Site Conditions**	Playground and soccer field need regrading and sodding of worn portions. Regrading is needed at the nortwest to divert water to an existing catch basin, and walks need levelling. An "environmental study" area is not maintained and has become a fire hazard. It should be cleared and resurfaced	$35,000
2	**Building Exterior**	Cracking in columns in the east wall of the east wing indicates racking of the structure. Investigation needed. Gymnasium and 1978 wing require new roofing. Exterior doors are worn out. The windows are failing and the glazing system is outdated and inadequate. New units are recommended. Fascias, soffits and other exterior trim needs refinishing.	$464,000
3	**Building Interior**	Classroom and corridor walls and ceilings need refinishing. Corridor doors should be replaced to meet fire code requirements. Lockers and classroom millwork have had a hard life here. Lockers should be replaced and cabinets need new tops and refinishing.	$546,000
4	**Mechanical Systems**	Existing Systems are old and unit ventilators are old and boilers should be replaced. The Existing 1960's shop wing has very poor heating and ventilation. New control technology is to be incorporated.	$498,000
5	**Electrical Systems**	Provide new electrical systems, main distribution, subdistribution, lighting, fire alarm, etc. The existing systems throughout are in very poor condition and need replacement. Energy efficiency performance will be improved with new lighting and LED exit signs.	$408,500
6	**Portable Buildings**	N/A	
7	**Space Adequacy:**		
	7.1 Classrooms	Deficiency: 83.5	
	7.2 Science Rooms/Labs	Deficiency:34.8	
	7.3 Ancillary Areas	Surplus: 167.7	
	7.4 Gymnasium	Surplus: 218	
	7.5 Library/Resource Areas	Surplus: 210.1	
	7.6 Administration/Staff Areas	Surplus: 25.4	
	7.7 CTS Areas	Deficiency:282.2	
	7.8 Other Non-Instructional Areas (incl. gross-up)	Deficiency:288.3	
	Overall School Conditions & Estim. Costs		$1,951,500

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	**General Site Conditions**			
1.1.1	Overall site size.	4	Site is 54821.36 sq. m. (5.48 ha. = 13.55 ac.) including the Bazalgette and Valley View schools, two parking lots and common play fields. They also have access to an adjoining city park with a baseball diamond. The school board property by itself is not large enough, but the schoolyard together with the city park provide adequate space.	
1.1.2	Outdoor athletic areas.	3	The playground and soccer field are worn and uneven. Regrade and sod . There is no outdoor basketball court.	$12,000
1.1.3	Outdoor playground areas, including condition of equipment and base.	N/A		
1.1.4	Site landscaping.	2	Primarily grass, with some shrubs in the front yard. A fenced natural area on the west side with a pond and prairie vegetation is not maintained and has become unkempt and a fire hazard. Refer to photo #46.	$8,000
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4	Perimeter chain link fencing and the flagpole are in good condition. There are no bicycle stands.	
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	3	The site slopes toward the building on the north side. An existing catch basin is too high and ineffective. West and south sides are flat and require slight regrading to ensure proper drainage.	$6,000
1.1.7	Evidence of sub-soil problems.	N/A		
1.1.8	Safety and security concerns due to site conditions.	3	Grade at the front entry walk has subsided, leaving the first step too high. Regrade and repave.3000 Southeast exterior stair (from link corridor) has no railing. Refer to photo #49.4000 Building form has hidden alcoves that provide a haven for vandals.	$7,000
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.2	**Access/Drop-Off Areas/Roadways/Bus Lanes**			
1.2.1	Vehicular and pedestrian access points (i.e., size, number, visibility, safety).	4	Two pedestrian walks and two driveways, all clearly visible	
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	4	Asphalt parking lot access to the east, gravel drive to the west	
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	None - bus drop-off occurs on 26th Avenue S.E.	
1.2.4	Fire vehicle access.	4	One street, with access also by drives on the east and west sides.	
1.2.5	Signage.	3	Visitors' parking sign would be useful.	$2,000
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.3	**Parking Lots and Sidewalks**			
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	4	50 stalls total. No handicapped stalls designated.	
1.3.2	Layout and safety of parking lots.	4	OK	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	4	Asphalt, with surface drainage only.	
1.3.4	Layout and safety of sidewalks.	4	Layout is straightforward. Surface is cracked .	
1.3.5	Surfacing and drainage of sidewalks (note type of material).	4	Primary sidewalk - concrete with asphalt topping Gymnasium sidewalk - concrete.	
1.3.6	Curb cuts and ramps for barrier free access.		None	
Other				
	Overall Site Conditions & Estimated Costs			$35,000

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		Foundation is generally stable. Minor cracks in the foundation wall on all sides.	
		3	1960	Gymnasium: north wall - cracks in concrete foundation below concrete block columns at junction with brick infill. Patch	$5,000
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	F. I.	1960	East wing: East wall - concrete columns have horizontal and some vertical stress cracks at and above the second floor level, indicating racking or movement of the structure at this level. North wall - horizontal cracks in the brick wall, and mortar joints failing at steel angle ledger supporting brick cladding of upper floor Prominent crack through the foundation wall and brick cladding - south wall of Industrial Arts room. Step-cracks in concrete block wall joining the 1960 east wing with the 1978 east corridor (see 2.3.5 below)	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4		OK	
Other					

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
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 or Roof 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).	4		Roofing age summary report attached. East, south and centre wings: Tar & gravel BUR - replaced 1984	
		2	1960 1978	Ceiling stains in NE and NW classrooms of east wing, Home Economics room and boys' locker room indicate roof leaks. Repair.-5,000 Gymnasium - top quarter is BUR, lower portions are asphalt shingle - replaced 1987 Water staining of the gymnasium ceiling acoustic tiles indicates that the roof is leaking.65,000 Original T & G BUR - due for replacement.25,000	$95,000
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	4		OK	
2.2.3	Control of ice and snow falling from roof.	4		N/A - flat roofs	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	4		None	
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, effluorescence, water stains).	4	1960	East wall: some glazed brick have broken or spalled surfaces. South wall of the east wing: bricks in the upper part of the wall have water staining; some at the top west corner have failing mortar and loose brick, indicating failure of flashings, and water penetration of the wall system. Brick cladding has no weep holes.	
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	3	1960	Parging is spalling from foundation wall in several places on the east and west walls of the original building. Repair	$4,000
		2	1960	Plywood and metal fascias have peeling paint. Refinish.-25,000 Gymnasium: Galvanized steel cladding of exterior glu-lam roof beams has peeling paint; west concrete block wall stained by bird droppings. See photo #55 Refinish.- 20,000	$45,000
		2	1978	Plywood fascia panels of the library are warping, leaving open gaps between, and paint is peeling extensively. Refer to photos #26 and 42.	$15,000
2.3.3	Building envelope (i.e., evidence of air infiltration/ exfiltration through the exterior wall or ice build up on wall, eaves, canopy).	3	1960	Caulking around windows is hardened and cracked. Weather seal has been lost.	$15,000
2.3.4	Interface of roof drainage and ground drainage systems.	2		Gymnasium eaves trough missing on the west side.Refer to photo # 56.	$15,000
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	F. I.	1960	East wing: cracking plaster near the columns of all four exterior walls indicates differential settlement. East and south wings: plaster deteriorations and water staining at the sides and sills of most windows indicates failure of exterior caulking and water penetration of the wall system around the window frames. Link between 1982 renovation area and 1978 east corridor - separation of concrete column from concrete block infill wall (see 2.1.2 above.	
Other					

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).	3	1960 & 1978	Typical exterior doors are wood in aluminum frames. Weather strippings are gone from most, and the doors are peeling and chipped from heavy use.	$70,000
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	1960 & 1978	Mostly original hardware - worn. Replacement cost included in 2,4,1 above.	
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	3	1960 & 1978	Approximately 50% of exit hardware is original and in worn condition. Replacement cost included in 2.4.1 above.	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	1960	Typical windows are double-pane sealed units in aluminum frames. Almost all windows in the original wing have water stains and deteriorating plaster at the jambs and sills, indicating water penetratiopn of the wall system. Many windows have condensation between window panes, indicating sealed unit failure. East wing: several windows of the upper NE classroom are covered with plywood - extensive peeling paint.	$200,000
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3		Hinges are loose, and rubber weather seals are mostly missing, leaving a metal-to-metal contact. Some handles are broken off, and the windows have been screwed shut. Replacement cost included in 2.4.4 above.	
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4			
Other					
	Overall Bldg Exterior Condition & Estimated Costs				$464,000

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		Horizontal cracks in the plaster of the corridor walls indicates differential settlement. Home Economics room - minor separation of the concrete block infill from the concrete column - north wall.	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4		Vestibule floor between 1978 link and 1960 south wing has obvious settlement of the floor, with cracked tiles.	
			1960	East wing of original 1960 building has 3 cracks in the tiles across the corridor floors. Concrete Industrial Arts shop has several cracks.	
Other					
3.2	**Materials and Finishes**		**Bldg. Section**	**Description/Condition**	
3.2.1	Floor materials and finishes.	4		Corridors: vinyl floor tile Classrooms: Vinyl floor tiles Library carpet - good condition	
		3		Music room has carpet - worn and stained. Replace.	$6,000
3.2.2	Wall materials and finishes.	3	1960	Corridor walls: painted plaster on concrete block Classroom partitions: Painted plaster Plaster finish is chipped and gouged in several classrooms by constant use and vandalism. At several corners plaster is worn away at the base, exposing the wire mesh backing.	$10,000
			1978	Painted concrete block	
3.2.3	Ceiling materials and finishes.	2		Corridors: acoustic ceiling tiles - several missing or loose. Classrooms: acoustic ceiling tiles - some stained or broken. 1960 central wing and 1978 link: suspended T-bar ceilings.	$20,000
		3	1960	Gymnasium - extensive water damage of acoustic ceiling tiles - see photos #14, 18 and 20. Replace all.	$25,000

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.2	**Materials and Finishes (cont'd)**		**Bldg. Section**	**Description/Condition**	
3.2.4	Interior doors and hardware.	4		Classrooms: Wood doors in wood frames.	
		3		Corridor and vestibule doors are wood in aluminum frames. Doors do not have exit bars, latches or magnetic hold-open devices. They have flip-down props with rubber feet. During site visit all vestibule doors were held open by these. Replace doors, frames and hardware to meet fire code.	$50,000
3.2.5	Millwork	3	1960	Original millwork - wood cabinets with painted wood tops - worn condition. Replace tops and refinish cabinets.	$130,000
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	3		Classes have original greenboards in wood frames - worn condition. Replace.	$80,000
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	3		Lockers are dented and bent from long use. Replace.	$140,000
3.2.8	Washroom materials and finishes.	4	1960	Locker Rooms: Mosaic tile floors, painted concrete block walls, painted plaster ceilings. Washrooms: mosaic tile floors, ceramic tile walls to 2 m., painted plaster above, Painted plaster ceiling. Upper floor boys' washroom has a prominent crack in the floor and water stains, cracks and peeling paint in the ceiling. This appears to be a result of a roof leak, but a patch in the roofing indicates that the problem has been fixed.	
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	1960 1978	Classroom wings: non-combustible (concrete floors, concrete block/brick walls, open-web steel joists & steel deck roof) Gymnasium: combustible (wood glu-lam beam roof with wood deck, concrete block walls). Non-combustible: Concrete block walls, open web steel joists & steel deck roof. In Music Room intermediate floor of practice rooms is exposed wood. Non-sprinklered.	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	2		Vestibules do not meet code requirements. They have wood doors with no latches or magnetic holders, and unwired glass in side panels. Replacement costs included in 2.4.1 above.	
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	4			
3.3.4	Exiting distances and access to exits.	F. I.			
3.3.5	Barrier-free access.	3		None. All entry sidewalks have stairs. The ground floor is all on one level but there is no elevator to the upper floor. Washrooms have no handicapped-accessible stalls and doors have round knobs rather than levers.	$45,000
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	F. I.		Report attached. Asbestos is present in floor tiles, pipe insulation and some ceiling textures. No reports are available on other toxic materials, but the age of the building indicates that the original woodwork may have lead paint.	

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	3		Poor sound insulation in ductwork between classes. This is particularly a problem in the Music Room, where noise from the neighbouring Industrial Arts shop is loud and intrusive. Industrial Arts shop is crowded and poorly organized, with not enough room around power tools.	$40,000
Other					
	Overall Bldg Interior Condition & Estim Costs				$546,000

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.1	**Mechanical Site Services**				
4.1.1	Site drainage systems (i.e., surface and underground systems, catch basins).	4		Site drainage consists of grading to catch basins and swales to tie to street services.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4		Building has exterior hose bibbs.	
4.1.3	Outside storage tanks.	N/A		Not applicable.	
Other					
4.2	**Fire Suppression Systems**		**Bldg. Section**	**Description/Condition**	
4.2.1	Fire hydrants and siamese connections.	4		Street hydrant is located in front of school.	
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	N/A			
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	4		Hand extinguishers located throughout, no other form of fire protection is provided.	
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).	N/A			
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).	4	All Sections	100 mm service from street service with 50 mm meter.	
4.3.2	Water treatment system(s).	N/A		Not applicable.	
4.3.3	Pumps and valves (including backflow prevention valves).	5		Backflow protection on all services recently completed.	
4.3.4	Piping and fittings.	4		All piping on domestic is copper and is in good shape for age of facility.	
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	4		Fixtures are adequate, require on going maintenance as necessary.	
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	4		One self contained heater in 1960 boiler room, 324,000 BTUH with 70 Gallon storage installed in 1993.	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	4		Storm and sanitary tie to municipal systems.	
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		Original 1960 school was provided with two (2) low pressure steam boilers of 150 HP capacity each. Units were York Shipley fire tube, serial numbers 50-6817 & 50-6820. Units are at their expected life span and are experiencing tube failures.	$250,000
4.4.2	Heating controls (including use of current energy management technology.	3		Controls are generally pneumatic with no current technology for controls employed.	See 4.4.1
4.4.3	Fresh air for combustion and condition of the combustion chimney.	4		Combustion air and stacks are in place and good condition. Some minor corrosion noted on stacks above roof.	
4.4.4	Treatment of water used in heating systems.	4		Treatment systems are current.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4		In place and satisfactory.	
4.4.6	Heating air filtration systems and filters.	4		Unit ventilation have filters in place.	
4.4.7	Heating humidification systems and components.	3		Main air system has sprayed dehumidifier operational only during summer.	See 4.5.1.

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		Heating distribution on hot water side is generally in good shape.	
		3		Steam distribution, specifically running to Industrial arts wing is failing as it runs below grade.	$40,000
4.4.9	Heating piping, valve and/or duct insulation.	4		Piping and duct insulation is in place and generally acceptable.	
4.4.10	Heat exchangers.	3		Heat exchanger in original boiler room for hot water heating should be replaced along with boilers.	See 4.4.1
4.4.11	Heating mixing boxes, dampers and linkages.	2		Existing unit ventilators in Industrial Arts wing should be replaced.	See 4.4.1 & 4.5.1
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	3		User comfort generally good in areas where hot water heating installed poor in Industrial Arts wing.	See 4.4.1 & 4.5.1
4.4.13	Zone/unit heaters and controls.	4		Generally units are satisfactory.	
Other					
4.5	**Ventilation Systems**		**Bldg. Section**	**Description/Condition**	

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.5.1	Air handling units capacity and condition.	3		Original 1960 classroom air handling unit consists of supply and return fans, mixed air with free cooling, steam heating coil and sprayed humidifier. Humidifier used only during summer. System is in good shape, however is 40 years old and in need of upgrade as to air balance, mixing to incorporate minimum fresh air and new coils and humidifier. Capacity of system approximately 10,800 L/s.	$75,000
		4		The gymnasium of the 1960 school has a separate air system consisting of supply fan, steam coil and mixed air with full free cooling capability. Area relief was by means of gravity relief openings.	
		3		The library has a separate roof mounted cooling unit with mechanical cooling as will a free cooling on air side. Unit was installed in 1978 and is at the end of its expected life span. Consideration to be given to its replacement.	$35,000
		5		The general office area and the Counseling offices have new gas fired heat/cool rooftop units installed (1-4 ton and 1-3 ton unit) in 1999.	
		2		The Industrial arts wing utilizes unit ventilators in some classrooms and a small air handling system in another portion. Basic systems are inadequate for usage. Some rooms used by students have no air at all. The wood working shop has a separate make-up air system and associated exhaust which are acceptable but need better control and interlocking with exhaust fans.	$95,000
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	3		Outside air per occupant at warmer weather would be good in most areas except for industrial Arts wing. Fine tuning and ensuring minimum outside air positions are maintained is required.	See 4.5.1
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	4		Air distribution is good except for Industrial Arts wing. Original design would indicate six to eight air changes. Rebalancing required.	See 4.5.1
4.5.4	Exhaust systems capacity and condition.	4		Exhaust systems as currently installed appear satisfactory.	
4.5	**Ventilation Systems (cont'd)**		**Bldg. Section**	**Description/Condition**	

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
	Note: Only complete the following items if there are separate ventilation and heating systems.				
4.5.5	Separation of out flow from air intakes.	4		Separation is satisfactory.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e.. Kitchen, labs, CTS areas).	4		Industrial Arts wing has proper wood working exhaust and welding hood exhaust.	
		2		School kitchen is poorly ventilated.	$3,000
Other					
4.5.7	Ventilation controls (including use of current energy management technology).	3		Ventilation systems controls are pneumatic based, are old and accuracy of control is suspect.	See 4.7.1
4.5.8	Air filtration systems and filters.	4		All systems contain 25 or 50 mm fiberglass filters.	
4.5.9	Humidification system and components.	N/A		Not applicable.	
4.5	**Ventilation Systems (cont'd)**		**Bldg. Section**	**Description/Condition**	

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
	Note: Only complete the following items if there are separate ventilation and heating systems.				
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	4		Generally distribution is in good shape.	
Other					
4.6	**Cooling Systems**		**Bldg. Section**	**Description/Condition**	
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	N/A		Cooling unit provided for library and offices.	See 4.5.1
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	N/A		Not applicable.	
4.6.3	Cooling system controls (including use of current energy management technology).	N/A		Not applicable.	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	N/A		Not applicable.	
Other		N/A		Not applicable.	
4.7	**Building Control Systems**		**Bldg. Section**	**Description/Condition**	
4.7.1	Building wide/system wide control systems and/or energy management systems.			Building control systems are all pneumatic, original installation (old), do not use current technology and require calibration or replacement.	

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
	Overall Mech Systems Condition & Estim. Costs	3		The school has good base systems in some areas and poor systems in Industrial arts wing. Systems are old and replacement is warranted in some areas along with upgrades and incorporation of current control technology.	$498,000
				Evaluator: Dale Way, Hemisphere Engineering	

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.1	**Site Services**				
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	3		Existing service is fed underground to 600 amp, 3 phase, 4 wire disconnect feeding original main switch. Existing distribution is obsolete and needs replacement.	$20,000
5.1.2	Site and building exterior lighting (i.e., safety concerns).	3		Existing exterior lights minimal, new required to be added at entranceways and parking lot.	$4,500
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	4			
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).	2		Existing system is a Simplex 2000 hardwired. System is obsolete, new strobes and additional bells, duct detectors, etc. are required.	$58,000
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	2		Existing system is base building, obsolete, and does not meet 1997 code.	$20,000
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	2		Exit signs are base building, incandescent, and do not meet 1997 code. New LED signs are required and to be connected onto emergency power.	$10,000
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.	2	1960	None in place.	$1,500
5.3.2	Panels and wireways capacity and condition.	3	1960	Most of the panels are full and obsolete. Install new panels throughout to provide required circuits for computer, existing, convenience, and future throughout.	$40,000
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	N/A	1960		
5.3.4	General wiring devices and methods.	3	1960	Existing installation is in poor condition. Several new outlets are required to meet classroom and corridor needs.	$25,000
5.3.5	Motor controls.	3	1960	Existing starters are near the end of their life and obsolete. Provide new MCC and replace all starters.	$7,500
Other		3/F.I.	1960	Provide additional control and wiring to meet mechanical upgrade.	$10,000

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.		1978		
5.3.2	Panels and wireways capacity and condition.	3	1978	Most of the panels are full and obsolete. Install new panels throughout to provide required circuits for computer, existing, convenience, and future throughout.	$6,000
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	N/A	1978		
5.3.4	General wiring devices and methods.	3	1978	Existing installation is in poor condition. Several new outlets are required to meet classroom and corridor needs.	$4,000

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.4	**Lighting Systems**		**Bldg. Section**	**Description/Condition**	
5.3.5	Motor controls.	3	1978	Existing starters are near the end of their life and obsolete. Provide new MCC and replace all starters.	$2,500
Other		3/F.I.	1978	Provide additional control and wiring to meet mechanical upgrade.	$4,000
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	2	1960	Existing lighting consists of surface mounted fluorescent fixtures c/w T-12 lamps and core and coil ballasts. Light levels from 30 - 60 FC. Lighting levels in gym range from 20 - 25 foot candles. All fixtures are near end of their life cycle. Ballasts are failing, replacement of lens ongoing and lighting levels are low and uneven. Replace with new recessed, framed FL. c/w T-8 lamps and electronic ballasts. Gym fixture to be retrofitted with T-8 lamps and electronic ballasts.	$120,000
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	2	1960	Existing ballasts are at the end of their life cycle and may contain PCB's.	$8,000
5.4.3	Implementation of energy efficiency measures and recommendations.	F.I.	1960	None in place presently.	Cost identified under 5.4.1 and 5.2.3
Other					
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3	1978	Existing lighting consists of surface mounted fluorescent fixtures c/w T-12 lamps and core and coil ballasts. Light levels from 30 - 60 FC. Lighting levels in gym range from 20 - 25 foot candles. All fixtures are near end of their life cycle. Ballasts are failing, replacement of lens ongoing and lighting levels are low and uneven. Replace with new recessed, framed FL c/w T-8 lamps and electronic ballasts. Gym fixture to be retrofitted with T-8 lamps and electronic ballasts.	$10,000
5.4	**Lighting Systems**		**Bldg. Section**	**Description/Condition**	

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	N/A	1978		
5.4.3	Implementation of energy efficiency measures and recommendations.	3/F.I.	1978	None in place presently.	Cost identified under 5.4.1 and 5.2.3
Other					
5.5	**Network and Communication Systems**		**Bldg. Section**	**Description/Condition**	
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	4			
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	3		Additional speakers are required and amplifier upgrade.	$8,500
5.5.3	Network cabling (if available, should be category 5 or better).	3		Not all cabling is Category 5.	$3,000
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	4			
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	3		Existing closet does not meet CBE and BICSI standards.	$5,000
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	3		Existing system does not provide circuits for existing and future needs. Provide new wiring and outlets for existing and new computer requirements.	$21,000
Other		3		Existing system requires additional drops in teaching areas and all cabling upgraded to provide 2 - 4 cable drops.	$20,000

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).	N/A			
5.6.2	Intrusion alarms (if applicable).	4			
5.6.3	Master clock system (if applicable).	4			
Other					
5.7	**Elevators/Disabled Lifts (If applicable)**				
5.7.1	Elevator/lift size, access and operating features (i.e., sensing devices, buttons, phones, detectors).				
5.7.2	Condition of elevators/lifts.				
5.7.3	Lighting and ventilation of elevators/lifts	N/A			
Other					
	Overall Elect Systems Condition & Estim Costs			Existing electrical system is very poor, obsolete, and needs major upgrade.	$408,500
				Evaluator: Gary Mctighe, Stebnicki, Robertson & Associates	

Section 7	Space Adequacy	This Facility			Equiv. New Facility			Surplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	19	75.6	1436.5	19	80	1520	-83.5	
7.2	Science Rooms/Labs	3	108.4	325.2	3	120	360	-34.8	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	5		697.7	2,3	130,90	530	167.7	
7.4	Gymnasium (incl. gym storage)	1		873	1		655	218	
7.5	Library/Resource Areas	1		492.1	1		282	210.1	
7.6	Administration/Staff, Physical Education, Storage Areas			825.4			841	25.4	
7.7	CTS Areas								
	7.7.1 Business Education				2	115	230	-230	
	7.7.2 Home Economics	2		243.1	2		260	-16.9	
	7.7.3 Industrial Arts	1		244.7	1		280	-35.3	
	7.7.4 Other CTS Programs								
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			1561.7			1850.3	-288.3	
	Overall Space Adequacy Assessment			6699.4			6808.3	-67.6	Net Capacity=630, Design instructional Area=4117 Reported Area=5354

Evaluation Component/ Sub-Component	Additional Notes and Comments