School Name: David D. Oughton Elementary School
Location: 1511 - 34th Street S. E., Calgary

Region: SOUTH
Jurisdiction: Calgary Board of Education
DISTRICT No. 19

Grades: ECS to 6

School Code: 308
Facility Code: 1523

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

School Capacity: 450

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	1952	1	948.3	Foundation: concrete Floors: concrete in corridors, wood sleepers in classrooms; Walls: concrete block Roof: Wood beams and wood roof deck	Fire protection: 40 mm. hose & valve system in cabinets tied to building service Water supply: 100 mm. Service from street Heating: Hot water radiators, 1970 cast iron boiler Ventilation: 4 rooftop units with intake, mixing, reheat coils and supply fans.	
Additions/ Expansions	1955	1	1281.6	Foundation: concrete ; Floors: concrete in corridors, wood sleepers in classrooms; Walls: Wood frame, stucco cladding Roof: Wood beams and wood roof deck		
	1971	1	994.0	Foundation: concrete Floors: concrete Walls: concrete block, stucco cladding Roof: Open web steel joists with steel deck		
			2,323.9			

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)						

List of Reports/ Supplementary Information	Asbestos report by Environmental Health Professionals for Calgary Board of Education - January 27, 1998 Roof Plan showing roof replacement dates

	Evaluation Components	Summary Assessment	Estim. Cost
1	**Site Conditions**	Site slopes toward the building at the north and west sides. Regrading is necessary to divert runoff water around the building. Settlement of paved surfaces and the building indicate underlying soil movement or settlement. Paved playground surfaces are cracked and uneven - require new paving. Baseball diamonds require regrading and new grass/gravel surfacing. Parking lots require regrading and paving	$156,100
2	**Building Exterior**	Deflection of the southeast corner of the gymnasium roof and settlement of the gym relative to the surrounding grade indicate differential settlement of the building. Extensive stucco cracking and paint peeling indicates water exfiltration and poor drainage detailing. Roof membranes of 1952 and 1955 wings are beyond 20-year lifetime and need replacement, including sloping of surface to roof drains. Exterior doors and windows require replacement.	$487,500
3	**Building Interior**	Floors in the 1952 and 1955 wings slope away from the central corridor, and the gymnasium floor shows differential settlement. Further structural investigations are required. Vinyl tiles and carpet are worn and should be replaced throughout with new vinyl tiles. Acoustic ceiling tiles are smoke-stained from a fire in the building, and should be replaced throughout. Wall finishes require patching of cracks and repainting. Classroom doors do not provide adequate fire separations, and corridor doors do not meet code requirements for hardware. These should be replaced. Washroom finishes are cracked and worn, and should be replaced, together with new stalls.	$438,270
4	**Mechanical Systems**	Air systems on 1952 and 1955 wings should be upgraded. Boiler system is old. Current control technology should be incorporated.	$301,000
5	**Electrical Systems**	New panels, main service, branch circuit wiring and lighting need to be installed to provide new life cycle and meet users needs. Additional exit signs and connection to emergency power will be provided to meet code.Energy efficiency performance will be improved with new lighting and LED exit signs.	$207,500
6	**Portable Buildings**	None	$0
7	**Space Adequacy:**		
	7.1 Classrooms	Deficiency: 143.9m2	
	7.2 Science Rooms/Labs	Deficiency: 3.9m2	
	7.3 Ancillary Areas	Deficiency: 81.7m2	
	7.4 Gymnasium	Surplus: 6.7m2	
	7.5 Library/Resource Areas	Surplus: 53.3m2	
	7.6 Administration/Staff Areas	Surplus: 75m2	
	7.7 CTS Areas		
	7.8 Other Non-Instructional Areas (incl. gross-up)	Deficiency: 21.9m2	
	Overall School Conditions & Estim. Costs		$1,590,370

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	**General Site Conditions**			
1.1.1	Overall site size.	5	Total site area is 34,607.97 sq. m. (3.46 Ha.), including the building, school, playground and athletic field. This is adequate.	
1.1.2	Outdoor athletic areas.	3	Paved surface for tetherball and basketball has differential settlement, causing a cracked, uneven asphalt playing surface - regrade and reinstall; -10,400 Baseball diamond has worn, leaving depressions at baselines - regrade, install new gravel and sod;-4000 Backstop supports show deterioration - replace. 2000	$16,400
1.1.3	Outdoor playground areas, including condition of equipment and base.	3	Creative playground equipment is worn, in both timber frames and moving metal parts. Preserved wood timbers create a hazard of toxic slivers. Replace with new unit.	$60,000
1.1.4	Site landscaping.	4	Primarily grass, with shrubs along the east building wall.	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	3	Perimeter fences sagging and bowing in some locations; Flag pole is rusting.	$12,200
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	3	School is built in a depression in the site, which generally slopes from north to south. Water thus drains toward the north and west sides, and there is evidence of ponding at or near the building on both of these sides. Regrade site to divert runoff around the building.	$12,000
1.1.7	Evidence of sub-soil problems.	F. I.	Settlement of both paved surfaces and building indicates underlying soil movement or settlement, particularly at the west and north sides. The concrete landing at the south gym entry once had two steps up, but is now flush with grade.	
1.1.8	Safety and security concerns due to site conditions.			
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	Pedestrian access from 34th Street S.E. has good visibility. Vehicle access from east and south is clearly visible.	
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	3	Parking access drives are asphalt - ramps are too steep on both the east and south sides - cars can slide into traffic when the ramps are slippery in winter. Provide drainage control from parking lot (costs included in 1.3.3 below)	See 1.3.5
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	No on-site bus drop-off or street lay-by. Drop-off occurs on 34th Street SE, which is not a busy street.	
1.2.4	Fire vehicle access.	F. I.	One street. Provision of better access to the west side should be investigated.	
1.2.5	Signage.	4	Adequate	
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	24 stalls total in one lot 18 plug-ins No marked and paved handicapped stall	
1.3.2	Layout and safety of parking lots.	4	Perimeter parking with 2 access drives.	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	3	Gravel parking lot. Ponding in ruts of parking lot; some water drains down entry drives, leading to ice-build-up in winter. Provide asphalt paving and catch basin with drain to storm sewer.	$26,000
1.3.4	Layout and safety of sidewalks.	3	Southeast sidewalk is too steep; it slopes down to a set of stairs and ices in winter, creating a dangerous condition. Regrade and resurface.	$4,500
1.3.5	Surfacing and drainage of sidewalks (note type of material).	3	All sidewalks concrete; south entry apron patched with asphalt. Front (east) sidewalk ices because runoff from the lawn drains directly onto it. Regrade to provide drainage swale and widen sidewalk, provide new stairs and *ramp with guard rails.	$25,000
1.3.6	Curb cuts and ramps for barrier free access.	3	There is no wheelchair-accessible sidewalk - both the east (main) and south walks have steps at the bottom. *Ramp included in 1.3.5 above	Included in 1.3.5
Other				
	Overall Site Conditions & Estimated Costs	3		**$156,100**

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).	F. I.	1955	Sinking of the concrete landing at the south gymnasium entry indicates differential settlement - the building is sinking relative to the surrounding grade.	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	F. I.	1971	North side of 1971 addition has zig-zag cracking at mortar joints of concrete blocks, indicating differential settlement.	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	F. I.	1955	Deflection of the southeast corner of the gymnasium roof and settlement of the concrete landing at the south gym entry indicate differential settlement. Twisting of roof beam at the north end of the southern 1955 addition may indicate eccentric loading.	
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***		**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).	2	1952 1955 1971	Tar & gravel BUR installed 1975 - replace Tar & gravel BUR installed 1975 (classrooms) and 1970 (gymnasium) - replace Tar & gravel BUR replaced 1988 Roof plan attached showing replacement dates of all sections. Extensive ponding - several areas are lower than drains. Flashings failing in some areas, and tar is cracked. Openings at mechanical equipment above corridor of 1971 addition do not have adequate curbs.	$140,000
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	4		Some deterioration of chimneys	
2.2.3	Control of ice and snow falling from roof.	N/A		Flat roofs	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	N/A		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).	3	1952 & 1955 1971	Stucco at base of walls cracked and spalling on north and west sides, indicating water penetration. Patch and repaint. Peeling paint on concrete block walls - west wall of south wing of original building and north wall of 1971 addition. Clean and repaint.	$30,000
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	3		Peeling paint at several areas of fascia - repaint Some loose wood soffit boards on east side.	$3,500
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	1952 & 1971	Peeling paint on concrete block walls indicates moisture exfiltration and poor drainage of rainwater. Costs of patching shown in 2.3.1 above. (If leaks and drainage problems are not fixed, exterior finishes will continue to deteriorate, resulting in an expense of $80,000 to replace all stucco.)	
2.3.4	Interface of roof drainage and ground drainage systems.	3	1952 & 1955	Paving has pulled away from foundation wall 50 to 100 mm. at south and west sides, allowing water penetration. Cost shown here is for patching. Full repaving costs shown in 1.1.2 above)	$2,000
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	FI	1955	Gymnasium walls have cracks in mortar joints between concrete blocks and at columns.	
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	All	Typical exterior doors are wood. Extensive paint peeling; weather seals require replacement. South door has water penetration in wind-blown rain and spring melt. Replace all exterior doors.	$15,000
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	All	Some closers replaced. All other hardware original - worn condition. Provide new hardware with new with doors.	$6,000
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	3	All	Original hardware - worn condition. Provide new hardware with new with doors.	$4,200
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	All	Majority original - single glazing in wood frames with single-pane exterior storm windows. Most are painted shut. Exterior sill is not sloped for drainage. Peeling paint on exterior and between windows indicates condensation and poor drainage. Some wood has deteriorated due to water penetration between outer and inner windows. Replace all windows.	$286,800
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	All	Original Security screens on the north, west and south sides. Provide new hardware with new with windows (cost included in 2.4.4).	
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).				
Other					
	Overall Bldg Exterior Condition & Estim Costs				$487,500

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	1952 & 1955	Some cracking in plaster above corridor doors into classrooms.	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	F. I.	1952 & 1955	Southeast and northeast wing show some settlement of the classrooms away from the central corridor - floor slopes away toward the windows - althought the floor tiles are not cracked. Gymnasium floor also shows differential settlement - not level. Washroom floors have extensive cracks.	
Other					
3.2	**Materials and Finishes**		**Bldg. Section**	**Description/Condition**	
3.2.1	Floor materials and finishes.	3	1952 & 1955 1971	Southeast and northeast wings - vinyl tiles worn - replace.14,700 Gymnasium floor - sheet linoleum. This is worn and unsuitable - a sprung wood floor would be better.-100,800 Music room has asbestos in lino flooring2900 Classes and library - carpet is worn and stained, with mold near exterior wall. Replace with vinyl tile, with 4 m. x 4 m. area carpet. 6660	$126,060
3.2.2	Wall materials and finishes.	3	1952 1971	Corridor and classroom walls plaster - minor patching and repainting required.-5000,11,200 Gymnasium walls wood wainscot to 2.5 m., plaster above; plaster extensively patched but not repainted. Classroom walls painted concrete block - Good condition.	$16,120
3.2.3	Ceiling materials and finishes.	3	All	Typically acoustic tile. Water staining at gym entry. Smoke staining of ceiling tiles from a fire, particularly in the 1971 addition. Replace.	$96,690

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.	3	All	Typical wood hollow core; metal applied rated doors at fire separations. Hardware is original - worn condition. Handles are round - no lever handles for handicapped access.	$30,000
3.2.5	Millwork	3	All	Millwork is original - wood cabinets with p-lam countertops. Worn and battered. Replace tops, refinish cabinets.-20,000 Not coordinated or designed to fit room, especially in the 1971 addition. Install new book cases throughout.-25,000	$45,000
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	3	All	Typically original wood-framed blackboards in classes. Refinish. Some old porcelain sinks remain.	$10,000
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	3	All	Climbing bars and badminton/volleyball net sockets installed. No fixed basketball hoops. Install 2 movable and 4 fixed hoops No equipment storage.	$30,000
3.2.8	Washroom materials and finishes.	3	All	Floors uneven, lino flooring cracking. Level surface and install new lino.-4400 Walls have cracking paint. Patch and refinish-4000 Mosaic tile urinal bases worn. Replace-2000 Original stall partitions battered, counters worn. Replace-19,000	$29,400
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.		1952 1955 1971	Combustible - concrete block walls, wood beams and wood roof deck. Combustible - wood-frame walls, wood roof beams and wood deck Non-combustible - concrete block walls with open web steel joists and steel deck. Non-sprinklered.	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	4	All	45-minute doors at fire walls between original and 1955 additions; rating stckers missing on doors to 1971 addition.	
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	4	1952 & 1955 1971	Corridors typically wood frame with plaster finish. Fire separations typically concrete block. Concrete block walls	
3.3.4	Exiting distances and access to exits.	F. I.		Further study required.	
3.3.5	Barrier-free access.	3	All	The main and southeast entry sidewalks have stairs; only the northeast is barrier-free. Boys' washroom has no accessible stalls; girls' has a wide stall, but a deep drain at the door makes access difficult. Provide accessible stalls in both. No grab bars, step up to urinal, counters too low for handicapped use. No lever door handles. Install these fixtures.	$15,000
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	F. I.	All	January 1998 asbestos report prepared by Environmental Health Professionals for Calgary Board of Education. Asbestos present in plenum of 1971 addition (fire protection of steel roof beams), in music room flooring and in pipe wrapping. Classroom baseboards may have exposed lead paint.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	3	1971	Open class areas in the 1971 addition are noisy - spillover noise affects adjacent classes. Provide partitions between class areas.	$40,000
Other					
	Overall Bldg Interior Condition & Estimated Costs				$438,270

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 swales to run-off to streets.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4		Building has exterior hose bibbs only.	
4.1.3	Outside storage tanks.			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 at north end.	
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	4		Fire protection consists of 40 mm hose and valve system in cabinets tied to building service.	
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	4		Hand extinguishers located throughout.	
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).			Not applicable.	
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 runs in chase below slab to boiler room. 50 mm meter and service to building.	
4.3.2	Water treatment system(s).	4		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 hot water heater gas fired. New in 1997 capacity 32,000 BTUH input, 22 gallon storage.	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	4		Sewage lift station provided in boiler room for fixtures provided under latest addition.	
Other					
4.4	**Heating Systems**		**Bldg. Section**	**Description/Condition**	
4.4.1	Heating capacity and reliability (including backup capacity).	3		Existing boiler consists of a cast iron modular boiler (10 sections) total 1,250,000 BTUH. Boiler Hydrotherm installed in 1970. Limited back-up and reliability due to age.	$150,000
4.4.2	Heating controls (including use of current energy management technology.	3		Heating control on boilers consists of packaged boiler indoor/outdoor sensor to step fire boiler modules.	See 4.4.1
4.4.3	Fresh air for combustion and condition of the combustion chimney.	4		Combustion air duct is 500 x 500 in size (considered adequate) Chimney is of masonry design.	
4.4.4	Treatment of water used in heating systems.	4		Regular program in place and kept current.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4		In place and functioning.	
4.4.6	Heating air filtration systems and filters.	4		All air systems have 50 mm filters in place.	
4.4.7	Heating humidification systems and components.	4		No humidification in place, however, swamp coolers are used for Spring/Summer and early Fall to achieve cooling and humidification. No humidity during winter.	

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		Piping and ductwork in good shape generally. Piping for original 1970 areas could be expected to experience failures due to age.	
4.4.9	Heating piping, valve and/or duct insulation.	3		Piping is generally insulated, however noted to be missing in several locations.	$10,000
4.4.10	Heat exchangers.			Not applicable.	
4.4.11	Heating mixing boxes, dampers and linkages.			Not applicable.	
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	3		Temperature control is old and gives rise to hot/cold complaints in many areas.	See 4.7.1
4.4.13	Zone/unit heaters and controls.	3		All units are old, but currently performing adequately.	See 4.4.1
Other					
4.5	**Ventilation Systems**		**Bldg. Section**	**Description/Condition**	
4.5.1	Air handling units capacity and condition.	3	Total of 6	Air systems are installed one for gym (2460 L/s), 3 for old 1970 wings (6000 L/s Total). All units consist of intakes, mixing sections, hot water reheat coils and supply fans. Gym unit is only indoors. All outdoor units have swamp coolers. Units are old except two units on 1978 wing which were upgraded in 1980's.	$136,000
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	4		Based on unit capacity and assuming minimum 25% outside air CFM/student at 25 students/classroom would be in the order of 12 to 15 CFM.	
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	4		Air is distributed to all areas. Air distribution is poor within classrooms on the 1970 wings. Air change rate would be in the 6 air changes in the 1970 wings to as high as 10 AC in 1978 wing.	
4.5.4	Exhaust systems capacity and condition.	4		Exhaust for washrooms is adequate.	
4.5.5	Separation of out flow from air intakes.	4		Separation of exhausts and intakes is good.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	2		Gym kitchen has no exhaust.	$5,000
Other		2		Two large exhaust fans were installed to be used for summer ventilation in conjunction with air supply systems. Units are run most of the time causing building negative conditions, control to be updated and incorporated for summer operation only.	See 4.7.1

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		Ventilation controls are operated manually as to start/stop functions, dampers and coils are pneumatic, systems operate on mixed air and discharge sensor. Outside air dampers have no minimum position and close on lower temperatures negating ventilation needs at winter conditions.	See 4.7.1
4.5.8	Air filtration systems and filters.	4		All systems have 50 mm fiberglass filters.	
4.5.9	Humidification system and components.			No humidity systems except for swamp coolers during summer.	
4.5.10	Heat exchangers.			Not applicable.	
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	4		Distribution in good shape as currently installed.	
Other		F.I.		Currently ceiling spaces are used for return air. Spaces have combustible construction. I.E. Wood joists. This is not allowed undercurrent codes.	
4.6	**Cooling Systems**		**Bldg. Section**	**Description/Condition**	
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).			Not applicable.	
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)			Not applicable.	
4.6.3	Cooling system controls (including use of current energy management technology).			Not applicable.	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).			Not applicable.	
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		Building controls are pneumatic, no energy management systems, getting old, poor control of air systems as to maintaining minimum outside air, no automatic control of summer ventilation fans. Major alarms are tied to off-site monitoring.	
	Overall Mech Systems Condition & Estim. Costs	3		Needs work on controls, ventilation systems and heating plant upgrade.	$301,000
				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).	2		Existing service is 400 amps, 3 phase, 4 wire, 120/208 and fed overhead to single conductors. Existing system to be replaced and upgraded to allow for underground installation.	$15,000
5.1.2	Site and building exterior lighting (i.e., safety concerns).	3		Existing system has some upgrades and needs parking lot lighting and additional building perimeter lighting.	$4,000
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).	**4**			
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	**4**			
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	**2**		Existing exits are at the end of their life cycle, are not connected onto emergency power and do not meet 1997 code.	$6,000
Other					
5.3	**Power Supply and Distribution**		Bldg. Section	Description/Condition	
5.3.1	Power service surge protection.	2	1952	None in place.	$1,500
5.3.2	Panels and wireways capacity and condition.	3	1952	Existing are obsolete, have no spare capacity, and need replacement. New panels will allow for new life cycle and provide required circuits for computer, convenience, as well as future.	$7,500
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	N/A	1952		
5.3.4	General wiring devices and methods.	3	1952	Additional outlets are required for computer, convenience, as well as future.	$5,000
5.3.5	Motor controls.	3	1952	Existing motor control is obsolete and needs replacement.	$3,500
Other		3	1952	New control and wiring will be installed to meet mechanical upgrades.	$3,500

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.3	**Power Supply and Distribution**		**Bldng. Section**	**Description/Condition**	
5.3.1	Power service surge protection.	2	1955	None in place.	$1,500
5.3.2	Panels and wireways capacity and condition.	3	1955	Existing are obsolete, have no spare capacity, and need replacement. New panels will allow for new life cycle and provide required circuits for computer, convenience, as well as future.	$7,500
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	N/A	1955		
5.3.4	General wiring devices and methods.	3	1955	Additional outlets are required for computer, convenience, as well as future.	$7,000
5.3.5	Motor controls.	3	1955	Existing motor control is obsolete and needs replacement.	$3,500
Other		F1	1955	New control and wiring will be installed to meet mechanical upgrades.	$3,500
5.3	**Power Supply and Distribution**		**Bldng. Section**	**Description/Condition**	
5.3.1	Power service surge protection.	2	1971	None in place.	$1,500
5.3.2	Panels and wireways capacity and condition.	3	1971	Existing are obsolete, have no spare capacity, and need replacement. New panels will allow for new life cycle and provide required circuits for computer, convenience, as well as future.	$4,000
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	N/A	1971		
5.3.4	General wiring devices and methods.	3	1971	Additional outlets are required for computer, convenience, as well as future.	$4,500
5.3.5	Motor controls.	3	1971	Existing motor control is obsolete and needs replacement.	$3,500
Other		F1	1971	New control and wiring will be installed to meet mechanical upgrades.	$3,500

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.4	**Lighting Systems**		Bldg. Section	Description/Condition	
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3	1952	Existing lighting consists of surface and pendant mounted blade fluorescent fixtures in classrooms and corridors. Lighting levels are 15 - 20 fc in corridors and 30 - 35 fc in classrooms. Existing system is past life cycle and needs replacement. New fluorescent fixtures c/w T-8 lamps and electronic ballasts will be installed.	$25,000
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	3	1952	Ballasts may contain PCB's. Cost estimate for safe removal.	$3,500
5.4.3	Implementation of energy efficiency measures and recommendations.	F1	1952		Refer to Items 5.4.1 and 5.3.2
Other					
5.4	**Lighting Systems**		**Bldg. Section**	**Description/Condition**	
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3	**1955**	Existing lighting consists of surface and pendant mounted blade fluorescent fixtures in classrooms and corridors. Lighting levels are 15 - 20 fc in corridors and 30 - 35 fc in classrooms. Existing system is past life cycle and needs replacement. New fluorescent fixtures c/w T-8 lamps and electronic ballasts will be installed.	$32,000
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	3	**1955**	Ballasts may contain PCB's. Cost estimate for safe removal.	$3,500
5.4.3	Implementation of energy efficiency measures and recommendations.	F1	**1955**		Refer to Items 5.4.1 and 5.3.2
5.4	**Lighting Systems**		**Bldg. Section**	Description/Condition	
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3	**1970**	Existing lighting consists of surface and pendant mounted blade fluorescent fixtures in classrooms and corridors. Lighting levels are 15 - 20 fc in corridors and 30 - 35 fc in classrooms. Existing system is past life cycle and needs replacement. New fluorescent fixtures c/w T-8 lamps and electronic ballasts will be installed.	$18,000
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	3	**1970**	Ballasts may contain PCB's. Cost estimate for safe removal.	$3,000
5.4.3	Implementation of energy efficiency measures and recommendations.	F1	**1970**		Refer to Items 5.4.1 and 5.3.2

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).	4			
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	3		Some additional speakers and upgrade to amplifier are required.	$3,500
5.5.3	Network cabling (if available, should be category 5 or better).	4			
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).	4			
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	3		Additional outlets are required throughout to meet computer power needs.	$15,000
Other		3		There is no local area network installed. New cabling is required to meet CBE standards of 2 - 4 cable drops for classroom and teaching areas.	$18,000
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		3	Existing system is obsolete, past life cycle, and needs major electrical upgrade.	$207,500
				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	13	68.9	896.1	13	80	1040	-143.9	
7.2	Science Rooms/Labs	1	91.1	91.1	1	95	95	-3.9	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	4	74.5	298.3	4	95	380	-81.7	
7.4	Gymnasium (incl. gym storage)	1	337.9 76 8.9 13 8.9 35	479.7	1	473	473	6.7	
7.5	Library/Resource Areas	1	202.6 26.7	229.3	1		176	53.3	
7.6	Administration/Staff, Physical Education, Storage Areas			342			267	75	
7.7	CTS Areas								
	7.7.1 Business Education								
	7.7.2 Home Economics								
	7.7.3 Industrial Arts								
	7.7.4 Other CTS Programs								
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			653.9			675.8	-21.9	
	Overall Space Adequacy Assessment			2990.4			3106.8	-116.4	

Evaluation Component/ Sub-Component	Additional Notes and Comments