

School Facility Evaluation Project
Part III - Space Adequacy

School Name:	St. Patrick School			School Code:	8224	
Location:	Edmonton			Facility Code:	2028	
Region:	Central			Superintendent:	Dr. Dale Ripley	
Jurisdiction:	Edmonton Catholic Regional Division No. 40			Contact Person:	Mr. Garnet Mc Kee	
				Telephone:	(780) 453-4500	
Grades:	K-6			School Capacity:	565	
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	1945	1	377.2	frame construction with flat roof.	furnaces	leases reduce net capacity to 370
Additions/ Expansions	1951	1	166.40	frame construction with flat roof.	furnaces	
	1957	2	1056.40	frame construction with flat roof.	steam heating and unit ventilators	
	1961	2	691.20	frame construction with flat roof.	steam heating and unit ventilators	
	1972	2	2455.30	masonry construction with exterior brick cladding, flat roof.	steam heating and unit ventilators	
					Evaluator's Name:	Burgess Bredo
					& Company:	Burgess Bredo Architect Ltd.

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Upgrading/ Modernization (identify whether minor or major)	1981	2	920	Removal and replacement of spray ceilings containing asbestos.		
	1984		2239	Minor: roof replacement of 1945, 1951, 1957 and 1961 sections.		
	1992		Minor: replace windows and construct wall to divide classrooms.			
	1998		Minor: replace carpet in music room			
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)				No portables.		
List of Reports/ Supplementary Information	Fire Alarm System Annual Test: August 26, 1999 (Top Fire Safety) Tender Documents: Edmonton Catholic Schools Asbestos Repair 1981-82.					

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	Evaluation Components	Summary Assessment	Estim. Cost
1	Site Conditions	Re-grade and pave parking lot. Miscellaneous minor repairs.	\$23,100.00
2	Building Exterior	Replace roofing throughout. Replace windows in 1972 phase. Miscellaneous minor repairs.	\$217,500.00
3	Building Interior	Upgrade finishes in most areas of building. Replace doors, millwork in portions. Upgrade washroom finishes and toilet partitions. Building code and barrier free access upgrades.	\$450,300.00
4	Mechanical Systems	The mechanical system in the building is very old and well beyond expected life. The mechanical system should be replaced throughout the building in order to provide continued reliable service.	\$1,450,800.00
5	Electrical Systems	Electrical system in the building is very old and well beyond expected life. The electrical system should be replaced throughout the building in order to provide continued reliable service.	\$613,500.00
6	Portable Buildings	No portables.	N/A
7	Space Adequacy:		
	7.1 Classrooms	Deficient 157.9	-
	7.2 Science Rooms/Labs	Excessive +43.6	
	7.3 Ancillary Areas	Excessive +100.7	
	7.4 Gymnasium	Excessive +147.6	
	7.5 Library/Resource Areas	Deficient 62.3	-
	7.6 Administration/Staff Areas	Deficient 343.5	-
	7.7 CTS Areas	Deficient 102.0	-
	7.8 Other Non-Instructional Areas (incl. gross-up)	Excessive +581.8	
	Overall School Conditions & Estim. Costs	Deficient	+187 \$2,755,200.00

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Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	General Site Conditions			
1.1.1	Overall site size.	4	Adequate in size.	
1.1.2	Outdoor athletic areas.	4	Soccer and baseball fields. Basketball on asphalt paving.	
1.1.3	Outdoor playground areas, including condition of equipment and base.	4	Existing playground area with sand base to be replaced this summer by community group.	
1.1.4	Site landscaping.	3	Mature trees on north side of school and around playground. Lawn at front of school, native grasses in remainder. Re-seed worn areas around school.	\$500.00
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4	Chain link fencing and guard rails around site, bike stands and flag poles.	
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	4	Positive drainage around building.	
1.1.7	Evidence of sub-soil problems.	4	No problems evident.	
1.1.8	Safety and security concerns due to site conditions.	4	No problems evident.	
Other		N/A		
1.2	Access/Drop-Off Areas/Roadways/Bus Lanes			
1.2.1	Vehicular and pedestrian access points (i.e., size, number, visibility, safety).	4	Vehicles access site from 2 points on 95A Street on east side of school. Pedestrian access from City sidewalk on north, east and west sides of school.	

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Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	3	Short gravel driveways from 95A Street to staff parking. Asphalt paved service road along south side of school is barricaded. Asphalt cracking and breaking up in areas; repair.	\$2,000.00
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	Bus drop off area located off site on 96 Street on west end of school.	
1.2.4	Fire vehicle access.	4	Fire vehicles can access service road on south side of school from 96 Street.	
1.2.5	Signage.	4	Building signed. Parking signed. Fire lane signed.	
Other				

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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	20 energized stalls for staff, 4 for visitors.	
1.3.2	Layout and safety of parking lots.	4	Single loaded parking lot well separated from play areas.	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	3	Gravel surfacing prone to ponding and mud puddles. Re-grade and pave parking lot.	\$17,600.00
1.3.4	Layout and safety of sidewalks.	4	Sidewalks cross vehicular paths only at staff parking driveways. No concerns.	
1.3.5	Surfacing and drainage of sidewalks (note type of material).	3	Concrete sidewalks are well drained. Concrete pads at south entrances have settled; replace.	\$1,000.00
1.3.6	Curb cuts and ramps for barrier free access.	3	No curb cuts or ramps provided at main entrance. Cut curbs and provide ramp.	\$2,000.00
Other				
	Overall Site Conditions & Estimated Costs			\$23,100.00

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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	1945,51 1957,61 1972	Wood framed assembly over crawl space; no problems evident. Suspended floors are wood frame supported on steel beams and columns. Steel and metal deck suspended floors; no problems evident.	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	4	1945,51 1957,61 1972	Wood frame; no problems evident. Concrete block and hollow clay tiles. Concrete block wall; no problems evident.	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4	1945,51 1957,61 1972	Wood frame; no problems evident. Wood frame with steel beams and columns. Steel and metal deck assembly; no problems evident.	
Other					

Section 2	Building Exterior	Rating	Comments/Concerns	Estim. Cost
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</i>			
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).	3	<p>1945,51, 57,61 Conventional built-up roof replaced in 1984 with effective design service life to 2004. Reports of leaks and ponding. Replace membrane and improve drainage (1990 sq.m.).</p> <p>1972 Original built-up roof has lasted beyond effective design life with reports of leaks and ponding. Replace membrane and improve drainage (1640 sq.m.).</p> <p>No roofing inspection report available.</p>	\$195,000.00
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	4	All Roof accessed from ladder in mechanical room. No problems evident.	
2.2.3	Control of ice and snow falling from roof.	4	All No problems evident.	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	4	1957,61 Original skylights have been roofed over.	
Other				

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Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.3	Exterior Walls/Building Envelope				
2.3.1	Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, effluorescence, water stains).	3	1945,51 Balance	Painted stucco finishes with some cracking; repair and re-paint. Face brick and metal cladding.	\$2,000.00
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	4	1945,51 Balance	Galvanized iron fascias, natural finish, plywood soffits; no problems evident. Pre-finished metal flashings.	
2.3.3	Building envelope (i.e., evidence of air infiltration/exfiltration through the exterior wall or ice build up on wall, eaves, canopy).	4	All	Concrete block and wood frame walls with conventional BUR, as primary components of building envelope. No evidence of air infiltration or exfiltration.	
2.3.4	Interface of roof drainage and ground drainage systems.	4	All	Roof drains tied to City storm sewer.	
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	4	All	Minor cracking in concrete block and plaster but otherwise no concerns.	
Other					
2.4	Exterior Doors and Windows				
2.4.1	Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	4	All	Hollow metal doors with glazing set in pressed steel frames; no problems evident.	

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Section 2	Building Exterior	Rating	Comments/Concerns	Estim. Cost
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	1945,51 Closers and panics are very old and in some cases have been repaired using salvaged parts from other panics; replace. Balance No problems evident.	\$1,500.00
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	3	1945,51, 57,61 Panic devices worn with parts no longer available; replace. 1972 No problems evident.	\$11,000.00
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	1945,51, 57,61 New aluminum windows replaced original in 1991. Aluminum horizontal sliders, area of windows reduced. 1972 Original aluminum field glazed windows reported to be drafty; replace.	\$8,000.00
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	1972 Vent hardware removed from awning type vents; replace. Balance No problems evident with sliding lites.	Costed in 2.4.4
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4	All Aluminum windows and hollow metal/wood doors; no problems evident.	
Other				
	Overall Bldg Exterior Condition & Estim Costs			\$217,500.00

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Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.1	Interior Structure		Bldg. Section	Description/Condition	
3.1.1	Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).	3	1972 Balance	Concrete block; no problems evident. Some cracking in areas, otherwise no problems. Repair cracking at next re-painting.	Costed in 3.2.2
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4	All	Concrete slab on grade or wood frame over crawl space; no problems evident.	
Other					
3.2	Materials and Finishes				
3.2.1	Floor materials and finishes.	2	1972 Balance	Seamless flooring in stairs, locker rooms cracked and requires replacement. Gymnasium sprung hardwood flooring has to be sanded down and re-finished. Worn carpets in library and 2 classrooms require replacement, cracked vinyl tile with mismatched pattern in hallways should be replaced.	\$60,000.00
3.2.2	Wall materials and finishes.	3	1972 Balance	Painted concrete block partitions; due for re-painting. Plaster/gypsum board over wood frame; some cracking. Plywood wainscot painted in areas while clear finish with fire retardant coating; re-paint all partitions.	\$76,000.00
3.2.3	Ceiling materials and finishes.	3	1946,51 1957,61 1972	Acoustic tile in T-bar grid in classrooms, plaster in halls; introduce acoustic tile in halls to hide services. 12 x 12 acoustic tiles glued to plaster are falling in areas; replace with acoustic tile in T-bar grid. T-bar grid is discolored and damaged in areas, mismatched acoustic tile pattern; replace tiles and	\$86,000.00

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Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.2	Materials and Finishes (cont'd)				
3.2.4	Interior doors and hardware.		1946,51	Wood doors set in wood frames; doors frames and hardware damaged and worn, replace. Some doors are too narrow.	
		2	1957,61	Wood doors set in pressed steel frames; doors and hardware require replacement in most areas. Some doors are too narrow.	\$30,000.00
			1972	Wood and metal doors set in pressed steel frames; no problems evident.	
3.2.5	Millwork		1946,51	Painted millwork in poor condition and of insufficient quantities; replace.	
		3	1957,61	Painted wood in classrooms insufficient; add millwork.	\$24,000.00
			1972	Painted millwork in acceptable condition.	
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	3	All	Chalkboards have been replaced with whiteboards in approximately 50% of classrooms; replace balance. Tackboards and signage throughout school in good condition.	\$8,400.00
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	4	All	Climbing apparatus and basketball hoops in gym; good condition. Metal lockers throughout in good condition.	
3.2.8	Washroom materials and finishes.	3	1946,51, 57,61	Floors: cracked terrazzo; replace. Walls: gypsum board and ceramic tile; tile in poor condition; replace. Ceilings: painted gypsum board.	\$36,000.00
			1972	Floors: cracked cementitious; replace. Walls: painted concrete block. Ceilings: painted gypsum board.	
Other		3	1946,51 1957,61 1972	Wood toilet partitions in poor condition; replace. Terrazzo toilet partitions in poor condition; replace. Metal toilet partitions in poor condition; replace.	\$8,400.00
			All	Metal lockers in good condition. Acoustic treatment in gym in poor condition, replace.	

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
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</i>				
3.3.1	Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.	4	All	Combustible and non-combustible construction, non-sprinklered. Any major upgrading may require sprinklers.	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	3	1957	Two exit stairs open to lobby/corridors and only one exit through lobby permitted. Separate 2 stairs from floor area. Fire doors are wedged open; provide electromagnetic hold opens.	\$7,000.00
			1972	Fire doors with electromagnetic hold opens separate this phase from balance.	
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	3	1957	Lites in corridors are float glass in wood frames, replace with wired glass in PSF.	\$2,500.00
3.3.4	Exiting distances and access to exits.	2	1961	Dead end corridor created for lockers.	
			1972	Fire marshal has restricted use of 2 classrooms due to dead end corridor. Storage room opens on to exit stair. Revise layout to eliminate dead end corridor and relocate door to storage.	\$10,000.00
3.3.5	Barrier-free access.	3	All	Path of travel: elevator to second story and stair lift to drama classroom required. Doors and doorways: power assisted entrances required at main entrance, replace narrow doors (costed in 3.2.4). Washrooms: staff washroom on main floor requires minor work to conform to current standards. Provide BEA washroom on second floor	\$102,000.00
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	4	1957,61	Asbestos ceilings have been removed.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	4	All	No problems evident.	
Other					
	Overall Bldg Interior Condition & Estim Costs				\$450,300.00

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	All	Two catch basins to parking and tarmac. Surface drainage to field. No problems noted.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4	All	A few hose bibbs at building exterior. No irrigation. No problems noted.	
4.1.3	Outside storage tanks.	N/A			
Other					
4.2	Fire Suppression Systems				
4.2.1	Fire hydrants and siamese connections.	N/A			
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	3	1957	Fire hose cabinets fed from 51 mm water service. Installation does not comply with present code and should be upgraded with new water main.	\$50,000.00
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	4	All	ABC type multi-purpose fire extinguishers, last checked 08/99.	
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).	N/A		Not required.	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.3	Water Supply and Plumbing Systems				
4.3.1	Domestic water supply (i.e., pressure, volume, quality note whether municipal or well supply).	3	1957	51 mm municipal water service with 51 mm water meter. Service should be upgraded to provide proper size for building fire hose cabinets.	Costed in 4.2.2.
4.3.2	Water treatment system(s).	N/A			
4.3.3	Pumps and valves (including backflow prevention valves).	3	1957	No pumps or backflow prevention. Valves at water mains are old and appear to leak. Replace with new.	\$10,000.00
4.3.4	Piping and fittings.	3	All	Piping is original in building. No problems noted, however, given the age of the installation, it is likely that the piping should be replaced in the near future in order to provide reliable service.	\$150,000.00
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	4	All	Recessed stainless steel lavatories, wall hung urinals with flush valves, and water closets with flush valves. Installation appears to be in good shape with no problems noted.	
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	3	1946 1957	1-Johnwood 33.3 gal hot water heater. Tank is leaking and should be replaced with new. 2-Johnwood 60 gallon hot water tanks with Taco recirculating pump.	\$800.00
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	3	All	Municipal main service with cast iron installation. Given the age of the building, it is likely that the cast iron installation is in very poor shape and should be replaced with new.	\$130,000.00
Other					

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Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.4	Heating Systems				
4.4.1	Heating capacity and reliability (including backup capacity).	2	1946 1951 1957,61, 72	Heated from 2 Flamemaster Furnaces. Heated Building generally heated from 2 Weil McLain 2380 MBH steam boilers located in basement of 1957 phase feeding unit ventilators and air handling units in the building, system is very old and in poor shape, replace.	\$500,000.00
4.4.2	Heating controls (including use of current energy management technology).	4	1957,61, 72	Heating system controlled by building energy management system. No problems noted.	
4.4.3	Fresh air for combustion and condition of the combustion chimney.	2	All	Combustion air appears to be in good shape. Brick chimney in 1957 phase should be lined with stainless steel.	\$20,000.00
4.4.4	Treatment of water used in heating systems.	4	1957	Heating system treated with chemicals on a regular basis with no problems noted.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4	1957	Boilers fitted with low water cut-off and pressure relief valves. Boiler alarm provided through building energy management system.	
4.4.6	Heating air filtration systems and filters.	4	All	Furnaces and ventilation equipment all fitted with air filters. No problems noted.	
4.4.7	Heating humidification systems and components.	N/A	All	None and none requested.	

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Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.4	Heating Systems (cont'd)				
4.4.8	Heating distribution systems (i.e., piping, ductwork) and associated components (i.e., diffusers, radiators).	2	All	Schedule 40 steel piping to steam heating system. Ductwork to furnaces and ventilation equipment. Installation is very old, well beyond expected life, and should be replaced with new.	Costed in 4.4.1
4.4.9	Heating piping, valve and/or duct insulation.	2	1957	Piping and breeching are insulated. Insulation likely to contain asbestos and should be abated. Costs are for asbestos study and abatement.	\$40,000.00
4.4.10	Heat exchangers.	2	All	Furnaces are old and heat exchangers are likley in very poor shape. Steam heating boilers are old, and cast iron exchangers are likely also in poor shape. This equipment should be replaced with new.	Costed in 4.4.1
4.4.11	Heating mixing boxes, dampers and linkages.	2	All	Ventilation equipment is very old and subsequent linkages and dampers are also old and in poor shape. Upgrade required.	Costed in 4.5.1
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	2	All	Poor temperature control and uneven heat. Some spaces very hot while other spaces have no thermostat and subsequent poor temperature control. Upgrade recommended.	Costed in 4.4.1
4.4.13	Zone/unit heaters and controls.	3	1957 & 1962	Unit ventilators in classrooms are very old, in poor shape, and should be replaced with new.	Costed in 4.5.1
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.5	Ventilation Systems				
4.5.1	Air handling units capacity and condition.	3	1957, 61, 72 Balance	There is one built-up unit in the basement of the 1957 section, unit ventilators to the classrooms of the 1957 and 1961 sections, and two built-up units in the 1972 section. The ventilation systems in the building are generally very old and should be replaced.	\$400,000.00
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	3	All	Design requirements unknown. Given the age of the building, likely designed for 5 CFM per student which is unacceptable.	Costed in 4.4.1 and 4.5.1
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	2	All	Design requirements unknown. There are many areas with poor air flow. Upgrade required.	Costed in 4.4.1 and 4.5.1
4.5.4	Exhaust systems capacity and condition.	3	All	Exhaust systems are all very old and should be upgraded along with building ventilation system.	\$80,000.00
4.5.5	Separation of out flow from air intakes.	4	All	Appears to be good separation with no problems noted.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	N/A			
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.5	Ventilation Systems (cont'd)				
	<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).	N/A			
4.5.8	Air filtration systems and filters.	N/A			
4.5.9	Humidification system and components.	N/A			
4.5.10	Heat exchangers.	N/A			
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	N/A			
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.6	Cooling Systems				
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	N/A			
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	N/A			
4.6.3	Cooling system controls (including use of current energy management technology).	N/A			
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	N/A			
Other					
4.7	Building Control Systems				
4.7.1	Building wide/system wide control systems and/or energy management systems.	3	All	Building has an Andover Control system. Given the age of the building, many components are old and should be upgraded along with new building mechanical system.	\$70,000.00
Overall Mech Systems Condition & Estim. Costs					\$1,450,800

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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).	4	1957	Underground service from inground utility transformer. Service appears to have a 600 amp main circuit breaker, 120/208V/3PH/4W with Federal Pioneer switchgear. Service appears in good condition.	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	3	All	Generally high pressure sodium light fixtures installed along perimeter of building. Some incandescent light fixtures at entrances to 1957 building should be replaced with high pressure sodium light fixtures.	\$3,500.00
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	4	All	Approximately 18 electrified stalls on east side of building with no problems noted.	
Other					
5.2	Life Safety Systems				
5.2.1	Fire and smoke alarm systems (i.e., safety concerns, up-to-date technology, regularly tested).	3	All	Older Simplex fire alarm system located at building front entrance. Fire alarm system installation has old components and no visual strobe lights. Upgrade recommended in order to provide continued reliable service and to comply with present code requirements.	\$80,000.00
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	3	All	Emergency lighting in the building is generally provided from an AC generator in the 1961 building section. Installation is very old and should be upgraded to provide DC battery pack units with remote heads throughout the building.	\$80,000.00
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	2	All	Exit signs are in very poor shape and do not comply with present code requirements. Upgrade is required.	\$25,000.00
Other					

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Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.3	Power Supply and Distribution				
5.3.1	Power service surge protection.	3	All	Add surge protection.	\$5,000.00
5.3.2	Panels and wireways capacity and condition.	3	All	Panelboards are generally old, in poor shape, and filled to capacity. Upgrade is recommended.	\$80,000.00
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	3	1961	A natural gas fuelled, 2.5 KW Kohler generator is provided for service to the building emergency lighting system. Installation is very old and does not comply with present code requirements. Replace with DC emergency lighting system.	Costed in 5.2.2
5.3.4	General wiring devices and methods.	2	1946, 51, 57, & 1961	Installation is very old and likely using original building wiring. Devices are old and receptacle outlets likely not properly grounded to comply with present code requirements. Insufficient outlets in classrooms to accommodate current electrical requirements. Upgrade required.	\$85,000.00
5.3.5	Motor controls.	2	1946, 51, 57, & 1961	Motor starters provided to all major motor loads. Motor starters are generally very old and well beyond expected life. Upgrade required.	\$10,000.00
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.4	Lighting Systems				
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3	All	Light fixtures in building generally use surface and recess mounted fluorescent light fixtures with T12 lamps. Fixtures are old and should be replaced with new T8 style energy efficient light fixtures. Lighting levels in general are good.	\$190,000.00
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	4	All	No concerns noted.	
5.4.3	Implementation of energy efficiency measures and recommendations.	3	All	Fluorescent light fixtures should be upgraded to use T8 lamps with electronic ballast.	Costed in 5.4.1
Other					

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Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.5	Network and Communication Systems				
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	4	1957, 1961	Standard telephone system with telephones provided to general office. No problems noted.	
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	3	All	Bogen MCP35A intercom system. System is old and should be upgraded to maintain continued service in the building.	\$55,000.00
5.5.3	Network cabling (if available, should be category 5 or better).	4	All	Category type 5 wiring with no problems noted.	
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	4	All	Wiring generally installed in conduit. No problems noted.	
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	4	All	There is a dedicated hub area. No problems noted.	
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	4	All	Power wiring to computers and equipment appears good with no problems noted.	
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.6	Miscellaneous Systems				
5.6.1	Site and building surveillance system (if applicable).	N/A			
5.6.2	Intrusion alarms (if applicable).	4	All	General type of security system using motion detectors and magnetic door contact switches, and alarm keypad. System monitored through central monitoring system with no problems noted.	
5.6.3	Master clock system (if applicable).	4	All	Class change bells controlled from building energy management system with no problems noted.	
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).	3	1957, 61, & 1972	An elevator should be provided to provide for barrier free access to second floor.	Costed in 3.3.5
5.7.2	Condition of elevators/lifts.	N/A			
5.7.3	Lighting and ventilation of elevators/lifts.	N/A			
Other					
Overall Elect. Systems Condition & Estim Costs					\$613,500.00

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>		No Portables	
6.1.1	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).			
6.1.2	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).			
6.1.3	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).			
6.1.4	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).			
6.1.5	Interior finishes (i.e., floors, walls, ceiling).			
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).			
6.1.7	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)			
6.1.8	Heating system.			
6.1.9	Ventilation system.			
6.1.10	Electrical, communication and data network systems.			
6.1.11	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).			
6.1.12	Barrier-free access.			
	Overall Portable Bldgs Condition & Estim Costs			N/A

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Section 7	Space Adequacy	This Facility			Equiv. New Facility			Surplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	14	74.4	1042.1	15	80	1200	-157.9	Based on elementary tables, capacity 525. CTS areas indicate school built to accommodate Junior High grades as well.
7.2	Science Rooms/Labs	2	106.8	213.6	2	95	190	43.6	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	5	100.1	500.7	1 3	130 90	400	100.7	
7.4	Gymnasium (incl. gym storage)			620.6	1	473	473	147.6	Includes lockers.
7.5	Library/Resource Areas			167.7	1	230	230	-62.3	
7.6	Administration/Staff, Physical Education, Storage Areas			170.5	1 1 1	357 70 87	514	-343.5	
7.7	CTS Areas								
	7.7.1 Business Education								
	7.7.2 Home Economics	1		130	1	160	160	-30	
	7.7.3 Industrial Arts	1		208	1	280	280	-72	
	7.7.4 Other CTS Programs								
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			1693.8	1 1 1 1	624 299 126 63	1112	581.8	
	Overall Space Adequacy Assessment			4746.5			4559	187.5	