	School Name:	Mount Carmel				School Code:	205
	Location:	10524 - 76 avenue Edmonton, Alberta T6E 1L3				Facility Code:	2009
	Region:	Central				Superintendent:	Dr. Dale W. Ripley
	Jurisdiction:	Edmonton RCSSD No. 40				Contact Person:	Mr. Garnet McKee
						Telephone:	(780) 453-4500 (Garnet)
	Grades:	K-IX				School Capacity:	Total 540

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	1925	1	1110	Framed/Asphalt Shingles	Perimeter hot water heating; limited exhaust ventilation	System fed from new boiler installation in 1948 wing.
Additions/ Expansions	1948 1950 1951 1962 1968	1 1 2 1 2	840.0 103.7 678.0 105.0 3095.1	Framed/B.U.R. T & G Framed/B.U.R. T & G Framed/B.U.R. T & G Framed/B.U.R. Masonry/B.U.R.	1948, 1951: Perimeter hot water heating; limited exhaust ventilation 1968: Perimeter hot water heating and separate ventilation system.	

						Evaluator's Name:	Bill Vance
						& Company:	Henderson Inglis Partridge

Upgrading/ Modernization (identify whether minor or major)	1984 1990 1996 1999		67.4			-Minor Modernization upgrade to Stage #131. -Minor Modernization convert Science Rm. Into a Computer Rm. -Minor Modernization upgrade acoustics in corridor, coats & C.R. #1,#2. Convert Medical area into a C.R. -Minor Modernization create Video Conference area, C.R. & smaller Library.
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)						
List of Reports/ Supplementary Information	See Section 8 for complete list.					

	Evaluation Components	Summary Assessment	Estim. Cost
1	**Site Conditions**	Some surfacing problems with walkways that require attention. Parking on busy throughway in front of school is less than desirable.	$71,000
2	**Building Exterior**	Very old portions of school in reasonable shape but in need of some attention. Roofing and windows are the most significant replacement items.	$191,500
3	**Building Interior**	Very old portions of the school with very tired looking finishes. Lack of handicapped access, repainting, ceilings and floor finishes are the principal deficient areas.	$317,500
4	**Mechanical Systems**	Install new ventilation systems complete with humidifcation in 1925, 1948, 1962, 1950 and 1051 wings; install heating coil and humidification in 1968 air handling system; replace entrance heaters.	$364,000
5	**Electrical Systems**	Older sections of school (pre 1968) require electrical upgrading and modernization; in particular 1925 distribution requires replacement. Also, luminaires throughout entire school require upgrading to energy efficient type.	$428,000
6	**Portable Buildings**		$0
7	**Space Adequacy:**		
	7.1 Classrooms	Surplus 248.5 S.M.	
	7.2 Science Rooms/Labs	Deficient 118 S.M.	
	7.3 Ancillary Areas	Deficient 122.4 S.M.	
	7.4 Gymnasium	Deficient 109.6	
	7.5 Library/Resource Areas	Deficient 28.7 S.M.	
	7.6 Administration/Staff Areas	Deficient 15.4 S.M.	
	7.7 CTS Areas	Deficient 145 S.M.	
	7.8 Other Non-Instructional Areas (incl. gross-up)	Surplus 1405.4 S.M.	
	Overall School Conditions & Estim. Costs	School in need of Arch., Mech., and Elec., work Overall Area Surplus of 1114.8 S.M.	$1,372,000

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	**General Site Condions**			$7,500
1.1.1	Overall site size.	4	Appears to be expansion potential to West if Lot 1A and Lot 2 are part of site.	
1.1.2	Outdoor athletic areas.	4	Winter Conditions - somewhat difficult to assess condition. No apparent problems.	
1.1.3	Outdoor playground areas, including condition of equipment and base.	4	Winter Conditions - somewhat difficult to assess condition. No apparent problems.	
1.1.4	Site landscaping.	4	Winter Conditions - somewhat difficult to assess condition. No apparent problems.	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4	Generally O.K.	
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	3	Back slope to asphalt by west Entrance between 1948 and 1925 addition. Some regrading of soft areas to provide positive drainage	$7,500
1.1.7	Evidence of sub-soil problems.	4		
1.1.8	Safety and security concerns due to site conditions.	4		
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.2	**Access/Drop-Off Areas/Roadways/Bus Lanes**			$5,000
1.2.1	Vehicular and pedestrian access points (i.e., size, number, visibility, safety).	4	Access to South parking lot seems less than ideal. See 1.3.2	Refer to 1.3.2
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	4	Asphalt	
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	Offsite Bus drop off area on North side of school on 77th Avenue. No problems associated with distance of Bus drop-off cited by staff.	
1.2.4	Fire vehicle access.	4	Seems Acceptable	
1.2.5	Signage.	3	Portable rented sign is used to provide community messaging. Improved signage would enhance school image.	$5,000
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.3	**Parking Lots and Sidewalks**			$58,500
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	4	South Side of School 10 stalls 5 duplex outlets North Side of School 11 stalls 8 duplex outlets	
1.3.2	Layout and safety of parking lots.	3	South Side of school is somewhat unsafe in that parking forces cars to back onto fairly busy street. Cost identified would be cost to create new lot equivalent size in alternate location.	$50,000
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	4	Generally O.K. although winter conditions preclude thorough inspection	
1.3.4	Layout and safety of sidewalks.	4		
1.3.5	Surfacing and drainage of sidewalks (note type of material).	3	Significant cracking/settlement in sidewalks, noted particularly at main entrance.	$7,500
1.3.6	Curb cuts and ramps for barrier free access.	3	No curb cuts noted on streets bordering school	$1,000
Other				
	Overall Site Conditions & Estimated Costs			$71,000

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.1	**Overall Structure**		**Bldg. Section**	**Description/Condition**	$0
2.1.1	Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains).	4	1925 1948 1950 1951 1962 1968	Generally O.K. considering age. No obvious signs of structural problems Generally O.K. considering age. Somewhat cracking where 1948 meets 1951 Generally O.K. considering age. No obvious signs of structural problems. Generally O.K. considering age. Somewhat cracking where 1948 meets 1951 Generally O.K. considering age. No signs of structural deficiencies.	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	4	1925 1948 1950 1951 1962 1968	Generally O.K. considering age. No obvious signs of structural problems Generally O.K. considering age. Somewhat cracking where 1948 meets 1951 Generally O.K. considering age. No obvious signs of structural problems. Generally O.K. considering age. Somewhat cracking where 1948 meets 1951 Generally O.K. considering age. No signs of structural deficiencies.	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4	All	Roof not inspected winter conditions. No indications of structural deficiencies.	
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**	$50,000
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	1925 1948 1950 1951 1962 1968	Roof not inspected winter conditions. No Inspection Reports provided by Edmonton Catholic Schools. Roofing information from "Roofing Projects" revised July 22 1999 supplied by Edmonton Catholic Schools. Staff identified continued problems with 1948 Section. Shingles (Asphalt) Reroofed 1987 - good 20 yr. pitch & gravel Reroofed 1982/1987- replace 20 yr. pitch & gravel Reroofed 1982 - good 20 yr. pitch & gravel - good 5 ply B.U.R. Reroofed 1982 - good B.U.R. Reroofed 1994 - good Research in Edmonton Catholic Schools Library indicates that inspections were done in 1994 and 1996 and that wrinkles and blisters were noted.	$50,000
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	4	All	Roof not accessed but from what can be observed from grade, there are no obvious signs of problems.	
2.2.3	Control of ice and snow falling from roof.	4	All	No indicators of problems	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).			None Identified	
Other					

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.3	**Exterior Walls/Building Envelope**		**Bldg. Section**	**Description/Condition**	$22,000
2.3.1	Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, effluorescence, water stains).	3	1925 1948 1950 51/62 1968	Brick, Tyndall Stone - Generally O.K. considering age. Stucco, Pre-finished metal - Requires patching/painting/refinishing north side of school Stucco Stucco, Pre-finished metal - Requires patching/painting/refinishing north side of school Brick, Stained Wd. - Stained Wd. areas require restaining	$10,000
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	3	1925 All Other	Ptd. Wd soffit requires repair/ refinish.	$2,000
2.3.3	Building envelope (i.e., evidence of air infiltration/ exfiltration through the exterior wall or ice build up on wall, eaves, canopy).	4			
2.3.4	Interface of roof drainage and ground drainage systems.	4			
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	2	1925 All Other	Basement Walls cracking/leaking Generally O.K. although many sections show obvious signs of the age of the school	$10,000
Other					
2.4	**Exterior Doors and Windows**		**Bldg. Section**	**Description/Condition**	$119,500
2.4.1	Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	All	Marginal Condition most sections , allowance to be made for some replacement/repair	$5,000

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	All	Marginal Condition most sections , allowance to be made for some replacement/repair	$2,000
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	4	All	Panic hardware noted .	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	1925 1948 1950 1951 1968	Poor Seals noted. Replace Basement windows. Original - replace West side and North side of 1962 New Windows 1988 Good Condition New Windows 1988 Good Condition Original - Allowance for some repair work	$20,500
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	All	Marginal condition most sections , allowance to be made for some replacement/repair but costs assumed to be in 2.4.4 above.	Refer to 2.4.4
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4	All	No obvious indicators of problems	
Other		3		Mechanical Systems Upgrades may require additional building space to accommodate requirements. Allowance is based on 3% of Gross Building Area.	$92,000
	Overall Bldg Exterior Condition & Estim Costs				$191,500

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.1	**Interior Structure**		**Bldg. Section**	**Description/Condition**	$0
3.1.1	Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).	3	1925 1948 1950 1951 1962 1968	In general terms 1925 - 1962 Sections of School show their age although appear to have been reasonably well maintained. Movement of wood structures over time creates cracking, 50 yrs. of repaints materials show age. 1968 section O.K. although staff indicated that it has been 6-7 yrs. since repaint so chipping is evident. School repainting costs have been included in 3.2.2	Refer to 3.2.2
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4	1925 - 1962 1968	1925-1962 Sections show age. Sloping floors/ level changes between sections are a natural consequence of frame construction this age. No apparent structural concern. Feels like substantial concrete structure good condition.	
Other					
3.2	**Materials and Finishes**		**Bldg. Section**	**Description/Condition**	$217,500
3.2.1	Floor materials and finishes.	3	1925 1948 1950 1951 1962 1968	VCT /Sheet Floor - Floor finishes show age. Phased replacement recommended VCT or Sheet Floor - Floor finishes show age Sheet Floor - Floor finishes show age VCT or Carpet- Carpet aged, asthma concerns VCT O.K. VCT or Sheet Floor or Wood Strip (Gym) or carpet - good	$25,000
3.2.2	Wall materials and finishes.	3	1925 1948 1950 1951 1962 1968	Plaster or Ptd. WD./Panel - Wall finishes show age/Pt. Chips Plaster or Ptd. WD./Panel - Wall finishes show age/Pt. Chips Plaster or Ptd. WD./Panel - Wall finishes show age/Pt. Chips Plaster or Ptd. WD./Panel - Wall finishes show age/Pt. Chips Plaster or GWB - Wall finishes show age/Pt. Chips Plaster or Ptd. Block or Tile faced Block or GWB - Wall finishes Pt. Chips	$75,000
3.2.3	Ceiling materials and finishes.	3	1925 1948 1950 1951 1962 1968	T-Bar - Given mechanical and electrical upgrades and marg. state of ceilings, T-Bar, Adhered Acoustic tile - 100% non- 1968 replacement is budgeted Adhered Acoustic Tile/T-Bar - good T-Bar - Looks New Some Areas; Good in others T-Bar - good T-Bar, Spray Acoustic Fibre (Boiler Rm.) Replace T-Bar in corridors, washrooms and music rm.	$103,000
3.2	**Materials and Finishes (cont'd)**		**Bldg. Section**	**Description/Condition**	

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.2.4	Interior doors and hardware.	3	All	Generally material O.K., in need of repaint. Repainting costs included as part of general school repaint in 3.2.2. Doors to 1948 section from 1925 are in poor condition	$2,500
3.2.5	Millwork	3	1925 1948 1950 1951 1962 1968	Generally O.K. considering age. Repaint required, chipped surfaces noted. Repainting in 3.2.2 Library, Word Processing, Video Conferencing Good Condition. Other areas need repaint	Refer to 3.2.2
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	4		Generally O.K. all areas considering age of some components.	
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	3		Generally O.K. all areas considering age of some components. Some lockers require repairs in 1968 section.	$2,000
3.2.8	Washroom materials and finishes.	3	1925 1951 1968	Sheet Floor Tile base Plaster Walls. Finishes show age. VCT Floor Plaster Walls. Finishes show age. Ceramic Tile Floor, Ptd. Conc. Blk. Or GWB, T-Bar. T-Bar needs replacing, repainting required.	$10,000
Other					
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**	$100,000
		F.I.		No inspection reports provided by School Board. Educational Facilities Master Plan 2007 Edmonton Catholic Schools March 1998 assesses Mt. Carmel as unsatisfactory or inappropriate related to Code issues. While compliance with 1997 Code is not a requirement now, the alterations identified in this report may in the eyes of the Plans examiner be considered substantial alterations to the building and compliance then a requirement.	

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.3.1	Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.	4	1925-1962 1968	Combustible, non-sprinklered Non Combustible/Combustible, non-sprinklered	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	F.I.		Doors between 1968 - 1951, 1968 - 1925, 1925 - 1948. No ratings were noted. Not possible to determine whether these are fire-separations or not.	
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	F.I.		No labels on Doors, no obvious signs of ratings of materials.	
3.3.4	Exiting distances and access to exits.	F.I.		Complicated collection/assembly of additions/Renovations make navigation difficult. No glaring Code violations.	
3.3.5	Barrier-free access.	2		Stairs everywhere. Only Main Floor of 1968 section could be accessed. Stage not accessible. No Barrier Free Washrooms. Doesn't seem practical to given layout of school to make all areas accessible. Allow for one elevator installation and construction of some ramps.	$100,000
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	F.I.		None provided by School Jurisdiction. None evident from documents in Edmonton Catholic Schools library.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)				
Other					
	Overall Bldg Interior Condition & Estim Costs				$317,500

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.1	**Mechanical Site Services**				$0
4.1.1	Site drainage systems (i.e., surface and underground systems, catch basins).	4		Site grading away from school; catch basin appropriately placed in asphalt play area.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4		Exterior hose bibbs adequately placed.	
4.1.3	Outside storage tanks.	N/A		N/A	
Other					
4.2	**Fire Suppression Systems**		**Bldg. Section**	**Description/Condition**	$0
4.2.1	Fire hydrants and siamese connections.	4		Fire hydrants distributed around perimeter. No siamese connection.	
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	4	All wings	Standpipe and hose system.	
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	4	All wings	Adequate hand extinguishers distributed throughout.	
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).	N/A		N/A	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.3	**Water Supply and Plumbing Systems**		**Bldg. Section**	**Description/Condition**	$2,000
4.3.1	Domestic water supply (i.e., pressure, volume, quality - note whether municipal or well supply).	4	1948	50 mm domestic cold water supply from Municipal service.	
4.3.2	Water treatment system(s).	N/A		N/A	
4.3.3	Pumps and valves (including backflow prevention valves).	2	1948	Recirc pumps in good condition; no backflow preventers on standpipe system; no leaks noted or reported.	$2,000
4.3.4	Piping and fittings.	4	All wings	Piping and fittings in good condition; no leaks noted or reported.	
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	4	All wings	Fixtures in good condition; replaced as needed.	
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	4	1968	2 copper tube boilers with separate storage tank - 2 at Raypak 732-T; 649,000 btuh (input) each.	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	4	All wings, 1968	Piping in good condition. No leaks/problems reported. 2 compartment collection sump in mechanical room.	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.4	**Heating Systems**		**Bldg. Section**	**Description/Condition**	$82,000
4.4.1	Heating capacity and reliability (including backup capacity).	4	1968 1948	Cast iron sectional boiler - Peerless Model 210-16-W at 3,150,000 btuh (input). 2 Weil Mclein cast iron sectional boilers, Model AMGB-8, each at 1,190,000 btuh (input); steam.	
4.4.2	Heating controls (including use of current energy management technology.	4	All wings	Individual room temperature controls, interfaced with Andover BCMS.	
4.4.3	Fresh air for combustion and condition of the combustion chimney.	3	1968 1948	Combustion air is adequate and chimney and flues in good condition. Combustion air is not extended to floor level.	$1,000
4.4.4	Treatment of water used in heating systems.	4	1968 1948	Chemical pot feeder assembly; sidestream filter; boiler water is clear. Automatic chemical feed pump assembly.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4	All wings	Boilers complete with adequate protection; failure alarms to Andover BCMS system.	
4.4.6	Heating air filtration systems and filters.	4	1968	Gymnasium - all air systems complete with filter system.	
4.4.7	Heating humidification systems and components.	3	1968 1925, 1948, 1962. 1950, 1951	Spray type humidifier showing signs of deterioration. No humidification.	$25,000

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	All wings	Hot water piping system to perimeter elements; individual room temperature control.	
4.4.9	Heating piping, valve and/or duct insulation.	4	All wings	Insulation in good condition.	
4.4.10	Heat exchangers.	4	1948	Steam to hot water heat exchanger for building heating - installed 1990, Bell & Gossett 90T78437-01.	
4.4.11	Heating mixing boxes, dampers and linkages.	N/A		N/A	
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	3	1968	All air systems in gym. Should extend hot water heat to gym space.	$18,000
4.4.13	Zone/unit heaters and controls.	3	1968 1925, 1948, 1950, 1951, 1962	Terminal units in ceiling space. Terminal units showing signs of wear.	$18,000
Other		3	1968	Valves showing signs of leaks and deterioration.	$20,000

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.5	**Ventilation Systems**		**Bldg. Section**	**Description/Condition**	$280,000
4.5.1	Air handling units capacity and condition.	2	1968	York Model AS50H (30 h.p.) supply fan system serves classroom; no heating coil; no return fan; roll type filters. Trane Torrivent (7-1/2 h.p.) supply fan system serves gymnasium, complete with heating coil.	$175,000
			1925, 1948, 1950, 1951	No air supply system; exhaust ventilation only.	
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	2	1968	No heating coil nor return air fan; system not capable of adequate O/A delivery at cold outside conditions.	$30,000
			All other wings	Inadequate outside air. Ref. Item 4.5.1	
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	2	1968	Good air distribution to overhead diffusers. Air distribution does not exist.	Ref. Item 4.5.1
4.5.4	Exhaust systems capacity and condition.	2	1968	Exhaust systems are adequate.	$50,000
			All other wings	Inadequate/worn exhaust systems.	
4.5.5	Separation of out flow from air intakes.	4	1968	Adequate separation.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	1	1925	No dust collection in CTS woodworking shop.	$15,000
Other					
4.5	**Ventilation Systems (cont'd)**		**Bldg. Section**	**Description/Condition**	
	Note: Only complete the following items if there are separate ventilation and heating systems.				

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.5.7	Ventilation controls (including use of current energy management technology).	4	1968	Pneumatic mixing dampers; supply systems interfaced with Andover BCMS system.	
4.5.8	Air filtration systems and filters.	4	1968	Roll filters on air supply system; flat filters on gym system.	
4.5.9	Humidification system and components.	3			Refer to item 4.4.7
4.5.10	Heat exchangers.	N/A		N/A	
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	4	1968	Duct distribution is adequate.	
Other		3	1968	Duct system should be cleaned.	$10,000

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.6	**Cooling Systems**		**Bldg. Section**	**Description/Condition**	$0
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**		**Bldg. Section**	**Description/Condition**	$0
4.7.1	Building wide/system wide control systems and/or energy management systems.	4	All Wings	Room controls in several rooms and main central plant equipment is integrated with BCMS (Andover) system.	
	Overall Mech Systems Condition & Estim. Costs				$364,000

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.1	**Site Services**				$40,000
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	2	1968 1925	-Main distribution (1968), 1000A, 3 phase, 208/120 VAC, approx. 6 breaker spaces for future -Underground feeders from pad mount transformer back side of 1968 wing -3 phase panels and service in 1968 wing, all other sections 1 phase -Meter peak demand 106 KVA (assessed capacity 432 KVA) -Obsolete and undersized to distribution in 1925 wing requires replacement	$40,000
5.1.2	Site and building exterior lighting (i.e., safety concerns).	4	**All**	-HPS or LPS wall units, canopy and door incandescent luminaires	
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	4	All	-Electrified plugs for approximately full parking area, separate panel; relay control from ECS central control	
Other		4	All	-Telephone service underground to main backboard in '1968' electrical room	
5.2	**Life Safety Systems**		**Bldg. Section**	**Description/Condition**	$0
5.2.1	Fire and smoke alarm systems (i.e., safety concerns, up-to-date technology, regularly tested).	4	All	-Simplex 2001 system, non addressable -14 zones in use, space for 12 additional device zones -24 zone annunciator and graphic mimic at main entry -Generally devices exist where required in storage rooms, IA areas, etc. -Recently verified	
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	4		-Dual head battery packs in key corridors, gymnasium computer rooms and in mechanical rooms -Tested every 3 months	
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	4		-Exit luminaires generally where required -Exits not connected to battery back-up or emergency power -Exits are incandescent	

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.3	**Power Supply and Distribution**		**Bldg. Section**	**Description/Condition**	$168,000
5.3.1	Power service surge protection.	3		-None -No isolation between equipment/mechanical and technology (user) loads. Add TUSS	$7,000
5.3.2	Panels and wireways capacity and condition.	3	1968 1925 1948 1950 1951 1962	-Components in 1968 panels still available - not obsolete -Approximately one-third space in 1968 panels -A limited number of the panels have been upgraded to new panels -Remaining original panels are obsolete with no space for additions	$48,000
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	N/A		-None	
5.3.4	General wiring devices and methods.	3	1968 1925 1949 1950 1951	-Recently renovated rooms utilize new panels, pak poles, surface conduit, etc. '-Two receptacles per classroom, one at front, one at side/rear (insufficient) -Some surface conduit and wiring	$105,000
5.3.5	Motor controls.	3	1925 1949 1950 1951 1968	-Motor services and controls are generally splitter/disconnect/starter configurations -Obsolete equipment in older sections of school	$8,000
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.4	**Lighting Systems**		**Bldg. Section**	**Description/Condition**	$197,000
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	4	All	-Newly renovated offices, computer and resource rooms utilize newer type recessed and suspended luminaires -Recessed fluorescents in 1968 corridors -All other areas surface fluorescent with wrap around lensing, T12 lamps, standard ballasts -All line voltage switched except low voltage switching in gymnasium, IA and computer areas -Illumination Levels: Classrooms - 600 - 800 lux Corridors - 400 - 500 lux Laboratories - 500 - 600 lux Computer areas - 450 - 550 lux Shop areas - 450 - 700 lux Offices - 670 - 700 lux Gymnasium - 350 - 450 lux Library - 600 - 900 lux (overlit) -Discoloured and broken lenses exist in older sections of school	
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	F1	1925 1948 1950 1951	-Vintage of older style fluorescent wrap arounds not known; may be pre 1968 and original ballasts would contain PCB	
5.4.3	Implementation of energy efficiency measures and recommendations.	3	All	-One or two recently renovated rooms utilize T8 lamps -Remainder all T12 lamps and standard ballasts; upgrade to T8 and electronic ballasts -Upgrade exits to full LED type -Upgrade gymnasium to HID lighting -In conjunction with ventilation upgrading & ceiling removal/replacement luminaries to be new in lieu of retrofit (exception 1968 wing)	$197,000
Other					

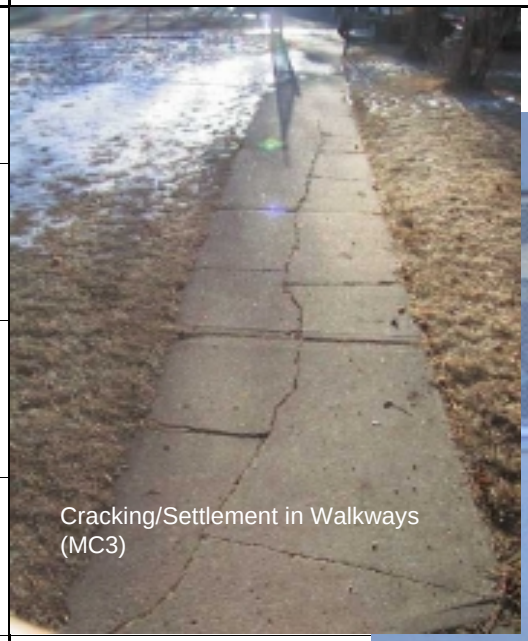
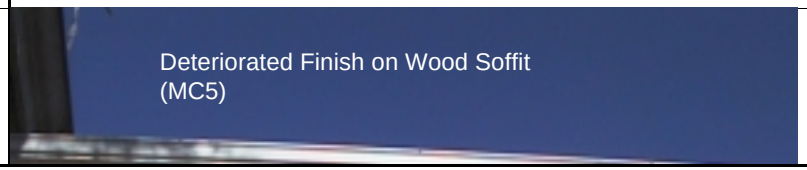
Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.5	**Network and Communication Systems**		**Bldg. Section**	**Description/Condition**	$23,000
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	4	All	-Recently upgraded telephone system Nitsuko DX, 2 cabinets -Incoming multiline cables -Older style terminal blocks mixed with new BIX blocks in old cabinets unused wiring should be removed and consistent termination approach applied	
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	4	All	-Classroom call and intercom via phone handsets in every classroom -PA system Dukane Petcom 2200; surface speakers in classrooms and corridors with exposed cable in pre 1968 sections of school -RFTV distribution to all classrooms in 1968 wing -Local VCR and TV's installed in most classrooms 1968 wing and portions of 1951 wing -Mix of recessed and exposed conduit/boxes/cabling for above systems	
5.5.3	Network cabling (if available, should be category 5 or better).	4	All	-Category 5 system (recently upgraded) -One dual outlet assembly in each classroom -Multi outlet assemblies in computer room and library -Central hubs and service adjacent to office area	
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	4	All	-Exposed conduit and surface plastic mold; also wiring via crawlspace in older sections of school -Use of pak poles for computer rooms and library clusters	
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	3	All	-Infrastructure and routing options limited by inaccessibility of some portions of building	$20,000
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	3		-Dedicated circuits only in recently upgraded computer room	$3,000
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.6	**Miscellaneous Systems**		**Bldg. Section**	**Description/Condition**	$0
5.6.1	Site and building surveillance system (if applicable).	4	All		
5.6.2	Intrusion alarms (if applicable).	4	All	-Custom security system common to all ECS Schools -12 zones, 3 spare (all intrusion detectors) -LED annunciator and graphic mimic at main entry	
5.6.3	Master clock system (if applicable).	4	1968 1925 1948 1950 1951	-Edwards master clock system in 1968 wing -All other building sections utilize local electric clocks	
Other					
5.7	**Elevators/Disabled Lifts (If applicable)**				$0
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.				
Other					
	Overall Elect. Systems Condition & Estim Costs				$428,000

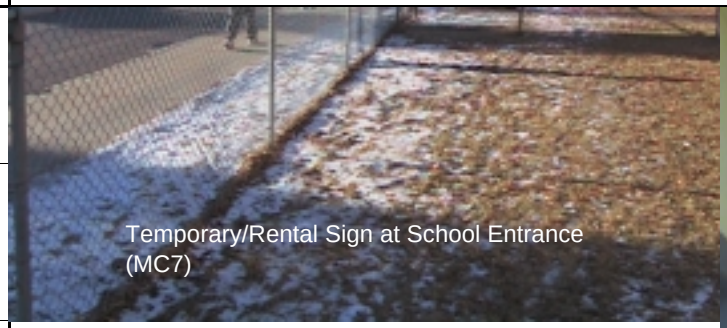
Section 6	Portable Buildings	Rating	Comments/Concerns	Estim. Cost
	Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.	N/A	None	
6.1.1	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).			
6.1.2	Roof 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			$0

Section 7	Space Adequacy	This Facility			Equiv. New Facility			Surplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	16		1288.5	13	80	1040	248.5	Mount Carmel is a combined Elementry & Junior High School, therefore Junior High School Equivalent New Facility chart was used to compile information.
7.2	Science Rooms/Labs	1		97	1 1	95 120	215	-118	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	6		407.6	1 2 1 1	130 90 130 90	530	-122.4	
7.4	Gymnasium (incl. gym storage)	3		545.4	1	655	655	-109.6	
7.5	Library/Resource Areas	2		221.3	1	250	250	-28.7	
7.6	Administration/Staff, Physical Education, Storage Areas	25		574.6			590	-15.4	
7.7	CTS Areas								
	7.7.1 Business Education				1	115	115	-115	
	7.7.2 Home Economics	1		130	1	160	160	-30	20 cap.
	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)	20		2667.4			1262	1405.4	Data sheets provided do not contain information about circulation, wall area & crush space for this school.
	Overall Space Adequacy Assessment			5931.8			4817	1114.8	

Evaluation Component/ Sub-Component	Additional Notes and Comments
1925	Basement - Water penetration through walls precludes intended use as computer space.
Building Code	Edmonton Catholic Schools provided a document entitled "Educational Facilities Master Plan 2007" dated March 1998 to the study team. This documented a physical evaluation of the schools similar to this study. The Educational Facilities Master Plan gives Mt. Carmel a 1 or unacceptable or unsafe rating with reference to Building Code issues. No specifics are given for the reasons for this rating. The study team for the 1999 evaluation did not evaluate the school in terms of 1997 Alberta Building Code, rather made some generalized comments about safety issues within the school. It is possible that the scope of work suggested by this evaluation or other modernizations contemplated by the School Jurisdiction may be considered by a plans examiner with the responsible authority to be a substantial alteration to the building and therefore 1997 Alberta Building Code Compliance may be deemed a requirement. The scope of work on costs for 1997.
Building Code Cont'd	Alberta Building Code Compliance has not been identified. Further Investigation may be required.
	 Entrance 1925 Section (MC9)
	 Parking Area South Side of 1925 Section (MC2)
(MC9)	General view of Main Entrance to School
(MC2)	Parking area which forces cars to back out onto relatively busy street.

Evaluation Component/ Sub-Component	Additional Notes and Comments
	 Cracking/Settlement in Walkways (MC3)
	 Exterior Paint/Stucco Finish Deterioration (MC4)
(MC3)	Exterior walkways are in need of repair some areas.
(MC4)	Stucco finish in need of repair and repainting in some areas.
	 Deteriorated Finish on Wood Soffit (MC5)

Evaluation Component/ Sub-Component	Additional Notes and Comments
	  Poor Condition Windows/Panels (MC6)
(MC5)	Soffit requires repair/repaint in 1925 section.
(MC6)	Leakage in basement may in part be attributable to windows/solid infill panels.
	  Soiled/Worn/Damaged Ceiling Tiles (MC8)

Evaluation Component/ Sub-Component	Additional Notes and Comments
	 Temporary/Rental Sign at School Entrance (MC7) 
(MC7)	Temporary "Rental Sign" seems poor image for school.
(MC8)	Suspended Ceiling systems are in need of replacement in many areas.

Evaluation Component/ Sub-Component	Additional Notes and Comments
List of Reports/ Supplementary Information	Educational Facilities Master Plan 2007 Edmonton Catholic Schools March 1998 Inventory of Core School Buildings – Edmonton Catholic School District Summary From Alberta Education School Buildings Service Areas in m2 Roofing Projects Revised July 22, 1999 1997 B.Q.R.P. 1998 B.Q.R.P. 1996 B.Q.R.P. 1995 B.Q.R.P. 1993 B.Q.R.P. Heating, Vemtilation and Air Conditioning Systems Portable Classroom Locations – Edmonton Catholic Schools Edmonton Catholic Schools Fire Alarm Systems Consultants for School Facilities Edmonton Catholic Schools – Legal Description December 01, 1998 Inventory of School Buildings – Edmonton Catholic Schools November 05, 1999 Edmonton Catholic Schools – Gymnasium Inventory Edmonton Catholic Schools – 1999/2000 Summary of Minor Modernization Projects From 1990 through to 1999 Major Modernizations and Additions Summary of Alternately Funded Renovation Projects Standard Assessment and Utilization Report 0018 Edmonton RCS REG DIV #40 Data Sheets Mount Carmel School March 15 1988 Mini-Plans Mount Carmel School 1968 – Last Rev. Dev.1997