RECAPP Facility Evaluation Report

Edmonton School District No. 7



Sherbrooke School B3253A Edmonton

Report run on: April 18, 2011 5:05 PM

Edmonton - Sherbrooke School (B3253A)

Facility Details

Building Name:	Sherbrooke School
Address:	12245 - 131 Street
Location:	Edmonton
Building Id:	B3253A
Gross Area (sq. m):	5,999.10

Replacement Cost: \$16,085,987

Construction Year: 1953

Evaluation Date: January 31 2011

Evaluation Company: Wade Engineering Ltd.

Evaluation Details

Evaluator Name: Roland Hoath

Total Maintenance Events Next 5 years:\$985,1325 year Facility Condition Index (FCI):6.12%

General Summary:

1953 - The original 1,482.7m² building constructed.

1954 - a 1,431.9m² addition was constructed. 1956 - a 192.0m² addition was constructed.

1963 - a 2.893.5m² addition was constructed.

Total equals 6000.1m².

1998 - Modernization.

1999 - Modernization.

2007 - Modernization of complete interior, mechanical equipment and electrical service distribution.

The school capacity is 715 students. Current grades are K-9.

Edmonton Public Schools stopped using Sherbrooke School in 1987 and has been leasing it to a variety of tenants since that time.

Tenant now is Aurora Charter School and Shumka Dance Studios.

Overall the school is in acceptable condition.

Structural Summary:

1953, 1954, 1956: Wood framed walls, roof and suspended floor over crawl space. All bearing on concrete foundation walls on strip footings.

1963: Precast concrete tees at roof and suspended floor assembly bearing on concrete beams and columns. Concrete slab on grade and grade beams on strip footings.

Structural systems are in acceptable condition.

Envelope Summary:

1953, 1954, 1956: Wood framed exterior walls with face brick at entrance. Acrylic stucco covers remaining exterior. Windows are new operable anodized aluminum framed. SBS roof on entire building was replaced in 2007.

1963: Exterior walls are Acrylic stucco as well as some face brick on gymnasium and entrance. Windows are new operable anodized aluminum framed.

Overall condition is acceptable.

Interior Summary:

1953, 1954, 1956: Partitions are typically wood frame with plaster wall finish. Ceiling finishes include plaster, asbestos stipple and 12 x 12 acoustic tiles. Floor finishes include vinyl tile, sheet vinyl, terrazzo, carpet, and seamless epoxy. Solid core wood door set in wood frames. Doors and millwork new in 2007 modernization.

1963: Partitions are typically concrete block. Ceiling finishes include acoustic tile and painted gypsum board. Floor finishes include vinyl tile, ceramic tile, hardwood and carpet.

The 2007 modernization included flooring, interior doors, interior windows and frames, paint and millwork in all sections of the building.

Interior componants are acceptable.

Mechanical Summary:

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Most mechanical systems were upgraded during 2007 modernization.

New Heating system consists of two Lochinvar 2,000,000 BTU boilers. Hot water tanks are located in mechanical rooms. Heat to classrooms in 1953/54 sections provided via wall unit ventilators. Two (2) built up low velocity air systems provide ventilation for 1963 addition. New roof top units supply 1953/54 sections with ventilation. Fire protection consists of wet standpipe/fire hose cabinets and fire extinguishers. Fire protection in 1953/54 sections by hand held ABC extinguishers.

Mechanical systems are in acceptable condition.

Electrical Summary:

Electrical main and distribution installed new during 2007 modernization. 120/240V/1PH 800 amp main power service. Fluorescent lighting in building isT8 lamps and electronic ballasts. Edwards fire alarm system with fire alarm bells and strobe lights. DC battery pack type emergency lighting system with LED exit signs. Security cameras in building interior. Intrusion detection system in building. Lighting fixtures with CFL's at building entrances. Telephone system is new and has paging abilities. Data system provided by local provider.

Electrical systems are in good condition.

Rating Guide			
Condition Rating	Performance		
1 - Critical	Unsafe, high risk of injury or critical system failure.		
2 - Poor	Does not meet requirements, has significant deficiencies. May have high operating/maintenance costs.		
3 - Marginal	Meets minimum requirements, has significant deficiencies. May have above average operating maintenance costs.		
4 - Acceptable	Meets present requirements, minor deficiencies. Average operating/maintenance costs.		
5 - Good	Meets all present requirements. No deficiencies.		
6 - Excellent	As new/state of the art, meets present and foreseeable requirements.		

51 STRUCTURAL				
A1010 Standard Founda	tions*			
Concrete foundation walls	and strip foot	tings in all sec	tions.	
Rating 4 - Acceptable	Installed 0	Design Life 0	Updated APR-11	
A1030 Slab on Grade*				
1953: Mechanical room sl 1963: Concrete slab-on-g		out.		
Rating 4 - Acceptable	Installed 0	Design Life 0	Updated APR-11	
A2020 Basement Walls (& Crawl Spa	<u>ce)*</u>		
1953, 1954, 1956: Cast-in	-place founda	ation walls in c	rawl space.	
Rating 4 - Acceptable	Installed 0	Design Life 0	Updated APR-11	
B1010.01 Floor Structura	al Frame (Bui	ilding Frame)	*	
1953, 1954, 1956: Suspe and interior concrete pads			ces are woo	od joists bearing on perimeter concrete foundation walls
Rating 4 - Acceptable	Installed 0	Design Life 0	Updated APR-11	
B1010.03 Floor Decks, S	labs, and To	ppings* - 195	3	
Main floor has suspended	wood framed	I floors with wo	ood decking	. Suspended concrete slabs at entrance vestibules.
Rating 4 - Acceptable	Installed 1953	Design Life 0	Updated APR-11	
B1010.03 Floor Decks, S	labs, and To	ppings* - 196	<u>3</u>	
Second floor on 1963 sec	tion has conc	rete topping po	oured over p	pre-cast concrete tees.
Rating 4 - Acceptable	Installed 1963	Design Life 0	Updated APR-11	
B1010.05 Mezzanine Cor	nstruction*			
Small gymnasium has M plywood deck.	ezzanine bui	It for storage	above the	stage. Wood framed joist construction with unfinished
Rating 4 - Acceptable	Installed 2010	Design Life	Updated APR-11	

B1010.07 Exterior Stairs*

Cast in place concrete steps at most exterior entrances. All are on very poor condition. Nosings have broken off and cast in place handrails are loosening up.

Landing off of East side of gym is wood construction and does not meet any building code. This must be made safe and to code.

Rating	Installed	Design Life	Updated
3 - Marginal	1953	0	APR-11

Repair/rebuild concrete Stairs Event:

Concern:

Nosing on stairs are broken off in many locations. This poses a tripping hazard. Landing at East Exit from gymnasium is wood construction and does not comply to any building code. **Recommendation:**

Rebuild nosings on all exterior concrete stair treads. Add none slip treatment.

Create new landing off gymnasium.

Туре	Year	Cost	Priority
Repair	2011	\$6,000	High

Updated: APR-11

B1020.01 Roof Structural Frame* - 1953

Diagonal wood planks on wood joists on load bearing wood stud walls. Wood roof joists and planking bearing on wood stud walls in most locations. Longer spans in gymnasium have steel trusses.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1953	0	APR-11

B1020.01 Roof Structural Frame* - 1963

Precast concrete roof bearing on concrete beams and columns.

Rating	Installed	Design Life	Updated
4 - Acceptable	1963	0	APR-11

B1020.04 Canopies* - 1953

Cantilever'd wood joists bearing on wood framed wing walls at North West entrance.

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	0	APR-11

B1020.04 Canopies* - 1963

Cantilever'd concrete canopy bearing on cast in place concrete frame at Main entrance.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1963	0	APR-11

S2 ENVELOPE

B2010.01.01 Precast Concrete: Exterior Wall Skin*

Acrylic stucco installed during modernization.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2007	0	APR-11

Event: Completed Replace 1953 exterior cladding with EIFS

Concern:

Plywood is rotted in areas and cement asbestos board is cracked.

Recommendation:

Remove plywood and cement asbestos board and provide new sheathing with EFIS system and sheet membrane vapour barrier. Reduce size of window openings to approximately 50% of current size. (2,150 sq.m.)

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2010	\$461,031	Medium

Updated: APR-11

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Small section of brick at main entrance, South wall of staff room and on East wall of gym.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1963	0	APR-11

B2010.01.05 Exterior Insulation and Finish Systems (EIFS)*

EIFS Acrylic stucco system on 1 1/2 inch rigid insulation. Peel and stick sheet membrane vapour barrier over existing sheathing.

Rating	Installed	Design Life	Updated
4 - Acceptable	2007	0	APR-11

B2010.01.11 Joint Sealers (caulking): Ext. Wall**

Joint seal caulking around all windows.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2007	20	APR-11

Event: Replace caulking (875 meters)

Туре	Year	Cost	Priority
Lifecycle Replacement	2027	\$41,125	Unassigned

B2010.02.03 Masonry Units: Ext. Wall Const.*

Small area of glass block adjacent North West entrance.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1953	0	APR-11

B2010.02.05 Wood Framing: Ext. Wall Const.*

Load bearing wood stud exterior walls on 1953 section.

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	0	APR-11

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation*

Peel and stick sheet membrane vapour barrier over existing sheathing.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	0	APR-11

B2010.06 Exterior Louvers, Grilles, and Screens*

Painted metal louvers for air handlers in classrooms and mechanical rooms throughout building.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	APR-11

B2010.09 Exterior Soffits*

1953, 1954, 1956: Painted plywood soffits.

NOTE: Have been replaced with acrylic stucco.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	0	APR-11

Event: Completed Replace plywood soffits

Concern:

Plywood soffits have rotting and delaminating components. **Recommendation:** Remove plywood soffits and replace with prefinished metal soffits (320 sq.m.)

Туре	Year	Cost	Priority
Failure Replacement	2010	\$33,721	Low

B2020.01.01.02 Aluminum Windows (Glass & Frame)**

1963: Early generation aluminum frames with double glazing and hopper vents.

Rating	Installed	Design Life	Updated
5 - Good	2007	40	APR-11

Event: Completed Replace aluminum windows

Concern:

Windows are cool to the touch; evidence of damage to interior finishes due to leaks.

Recommendation:

Replace windows with curtain wall type aluminum frame double glazed windows complete with vents. Co-ordinate installation with new exterior cladding for superior air seal membrane tie-ins. (245 sq.m. - 36 vents).

Туре	<u>Year</u>	<u>Cost</u>	Priority
Failure Replacement	2010	\$184,413	Unassigned

Updated: APR-11

B2020.01.01.02 Aluminum Windows (Glass & Frame)** - 2007

Anodized aluminum window frames C/W double 1/4 inch glazing installed during modernization.

Rating	Installed	Design Life	Updated
5 - Good	2007	40	APR-11

Event: Replace Windows (530m²)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2047	\$1,209,460	Unassigned

B2020.01.01.05 Wood Windows (Glass & Frame)**

1953: Wood window frames with double glazing complete with hopper vents.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	35	APR-11

Event: Completed Replace wood windows

Concern:

Wood window frames have deteriorated significantly: some rotting in exterior sills, joints opening up, feels drafty.

Recommendation:

Replace wood window with curtain wall type aluminum framed complete with double glazed sealed units and vents. Coordinate with new exterior cladding to acheive superior air seal. Reduce size of windows by 50% (420 sq.m. - 60 vents)

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2010	\$316,136	Medium

Updated: APR-11

B2030.01.01 Aluminum-Framed Storefronts: Doors**

Aluminum store front assembly at front entrance.

Rating	Installed	Design Life	Updated
5 - Good	2007	30	APR-11

Event: Replace store front (1)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	3	\$17,500	Unassigned

B2030.01.10 Wood Entrance Door** - 1953

(3) The original 1953 North West entrance wooden doors in wood frames were not replaced during 2007 modernization.

Rating	Installed	Design Life	Updated
5 - Good	2007	30	APR-11

Event: Completed Replace wood entrance doors

Concern:

Original wood doors and frames are in marginal condition and provide very little insulation. Joints in wood frames are opening up. Some door panels are de-laminating.

Recommendation:

Remove exterior wood doors and frames and provide new insulated metal doors, frames and hardware. (16 doors and frames)

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2011	\$42,152	Medium

Updated: APR-11

B2030.02 Exterior Utility Doors** - Steel

New steel insulated Utility doors and steel frames installed during modernization.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2007	40	APR-11

Event: Replace Exterior Utility Doors (15)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2047	\$24,000	Unassigned

B2030.02 Exterior Utility Doors** - Wood - 1953

Wood doors set in wood frames. Double doors off Small gymnasium and a single off mechanical room. Both in 1953 section.

Rating	Installed	Design Life	Updated
2 - Poor	1953	40	APR-11

Event: Replace exterior wood utility doors (3)

Concern:

Wood doors and frames have deteriorated; panels are delaminating, hardware and weather stripping are worn out. **Recommendation:**

Replace exterior utility doors with new insulated hollow metal doors and frames.

Туре	<u>Year</u>	<u>Cost</u>	Priority
Failure Replacement	2011	\$7,500	High

Updated: APR-11

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel)** - 1953

1953, 1953, 1956: Original BUR roofing replaced with new BUR in 1981.

New SBS in 2007.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2007	25	APR-11

Event: Completed Replace 1953 roof.

Concern: Roofing has had leaks in the past but not currently leaking. Nearing end of effective life. **Recommendation:** Replace BUR in 1953, 1954 and 1956 with 2 ply SBS membrane (3,107 sq.m.).

Туре	Year	Cost	Priority
Failure Replacement	2010	\$491,328	Medium

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel)** - 1963

Original BUR roofing still in place.

New SBS in 2007.

Rating	Installed	Design Life	<u>Updated</u>
5 - Good	2007	25	APR-11

Event: Completed Replace 1963 roof

Concern:

Evidence of ponding and reports of past and current leaks. Roof is beyond normal life expectancy. **Recommendation:** Replace BUR in 1963 phase with 2 ply SBS membrane (1,900 sq.m.).

Туре	<u>Year</u>	Cost	<u>Priority</u>
Failure Replacement	2010	\$300,329	Medium

Updated: APR-11

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)**

New SBS roof system installed during modernization to entire school roof. 1" fiberboard, sloped rigid insulation, 6mil poly vapour barrier.

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
4 - Acceptable	2007	25	APR-11

Event: Replace SBS Roof System (6000m²)

Туре	Year	Cost	Priority
Lifecycle Replacement	2032	\$1,033,400	Unassigned

Updated: APR-11

B3020.02 Other Roofing Openings (Hatch, Vent, etc)*

Roof hatch in two locations for roof access.

Rating	Installed	Design Life	Updated
4 - Acceptable	2007	0	APR-11

S3 INTERIOR

C1010.01 Interior Fixed Partitions* - 1953 Section

Plaster finish on wood lath on wood studs.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1953	0	APR-11

C1010.01 Interior Fixed Partitions* - 1963 Section

Concrete block partitions throughout.

Rating	Installed	Design Life	Updated
4 - Acceptable	1963	0	APR-11

C1010.04 Interior Balustrades and Screens, Interior Railings*

Metal pipe balustrade at balcony over looking 1963 gym. Height of railing and balustrade spacing does not comply to current codes and is a hazard.

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
3 - Marginal	1963	0	APR-11

Event: Replace balcony rail

Concern:

Spacing between balustrades (10 inches) and height (39 inches) may create a situation where a child can fall between them.

Recommendation:

Replace existing rail with new code compliant rail or modify existing rail to comply.

Туре	Year	Cost	Priority
Failure Replacement	2011	\$4,610	Medium

Updated: APR-11

C1010.05 Interior Windows*

Anodized aluminum interior window frames separate office from front corridor and West wing offices..

Rating	Installed	Design Life	Updated
5 - Good	2007	0	APR-11

C1010.06 Interior Glazed Partitions and Storefronts*

Anodized aluminum frames with 1/4 inch glazing separate computer learning room with library.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	0	APR-11

C1010.07 Interior Partition Firestopping*

Structure, mechanical ductwork and electrical conduit penetrate fire partitions throughout.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	0	0	APR-11

Event: completed Repair fire stopping

Concern: Openings in fire separations have not been properly fire stopped **Recommendation:** Provide fire stopping at all fire rated partitions

Туре	Year	Cost	Priority
Code Upgrade	2010	\$8,562	Unassigned

Updated: APR-11

C1020.01 Interior Swinging Doors (& Hardware)*

Painted wood doors in wood frames.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	0	APR-11

Event: Completed Replace interior doors and hardware`

Concern:

Doors and frames have been damaged. Hardware is breaking down.

Recommendation:

Replace interior doors and hardware (98 doors). Upgrade door locksets to lever design.

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2010	\$129,089	Low

Updated: APR-11

C1020.01 Interior Swinging Doors (& Hardware)* - 2007

All interior doors and hardware replace during modernization. Wood painted.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2007	0	APR-11

C1020.02 Interior Entrance Doors* - 1953

Glazed wood doors set in wood frames at entrance vestibules.

Rating	Installed	<u>Design Life</u>	Updated
3 - Marginal	1953	0	APR-11

Event: Replace interior entrance doors (2)

Concern:

Doors in entrance vestibule at 1953 North West entrance have been used extensively and door hardware is worn out. **Recommendation:**

Replace interior entrance doors at North West entrance vestibule with aluminum to match main entrance. (Double doors and frame).

Туре	Year	Cost	Priority
Failure Replacement	2011	\$19,759	Low

Updated: APR-11

C1020.02 Interior Entrance Doors* 1963

New Anodized Aluminum vestibule doors and frames installed during modernization at main entrance.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	0	APR-11

C1020.03 Interior Fire Doors*

All interior fire doors have been replaced during the modernization.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2007	0	APR-11

Event: Completed Add fire rated doors and frames

Concern:

Doors and frames in fire rated assemblies are not fire rated.

NOTE: All replaced with steel doors during modernization.

Recommendation:

Provide fire rated doors and frames in rated assemblies. (33 doors and frames).

Туре	Year	<u>Cost</u>	Priority
Code Upgrade	2010	\$65,862	Low

C1020.05 Interior Large Doors*

Metal rollup door on concession opening.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	0	APR-11

C1030.01 Visual Display Boards**

Chalkboards and tackboards throughout.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	2007	20	APR-11

Event: Completed Replace chalkboards and tackboards - (250 boards)

Concern:

Original chalkboards have deteriorated writing surfaces. Removal includes asbestos abatement because of the transite board construction. They are recessed into the plaster walls.

NOTE: All replace new during modernization.

Recommendation:

Remove chalkboards, repair walls and provide new whiteboards and tackboards. (28 classrooms @ \$3000 per classroom.)

Туре	Year	Cost	Priority
Failure Replacement	2010	\$87,500	Low

C1030.02 Fabricated Compartments (Toilets/Showers)**

Original painted wood and metal toilet partitions.

NOTE: 18 new partitions installed during modernization.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	30	APR-11

Event: Completed Replace toilet partitions (18)

Concern:

Original toilet partitions have a painted finish and are in marginal condition with broken hinges and bent panels. **Recommendation:**

Provide new baked enamel finish metal toilet partitions. (21 cublices).

Туре	Year	Cost	Priority
Failure Replacement	2010	\$42,300	Low

Updated: APR-11

C1030.08 Interior Identifying Devices*

Variety of Engraved plastic signage types and styles.

Rating	Installed	Design Life	Updated
5 - Good	2007	0	APR-11

Event: Completed Replace signage

Concern:

Signage system is incomplete and consists of a variety of types and styles.

Recommendation:

Replace signage with a single durable and flexible system.

Type Failure Replacement
 Year
 Cost

 2010
 \$6,586

Priority Low

Updated: APR-11



Laminated paper signage.

C1030.10 Lockers**

Metal lockers recessed along corridor walls.

NOTE: All lockers replace during modernization.

Rating	Installed	Design Life	Updated
5 - Good	2007	30	APR-11

Event: Completed Replace lockers (203)

Concern:

Lockers located in corridors are banged up and damaged. Some have been re-painted which presents a maintenance concern.

Recommendation:

Remove existing lockers and replace with new pre-finished lockers (245 lockers).

Туре	Year	Cost	<u>Priority</u>
Failure Replacement	2010	\$358,092	Unassigned

Updated: APR-11

C1030.12 Storage Shelving*

Painted Plywood or stained maple perimeter millwork shelves in classrooms and in storage rooms.

NOTE: Millwork and shelving all replace new during modernization.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	0	APR-11

Event: Completed Replace storage shelving

Concern:

Existing millwork shelving is damaged and chipped; painting is a maintenance concern.

Recommendation:

Replace millwork shelving with clear finish shelving (20 meters).

Туре	Year	Cost	Priority
Failure Replacement	2010	\$10,537	Low

C1030.14 Toilet, Bath, and Laundry Accessories*

Miscellaneous washroom accessories throughout.

NOTE: All accessories installed new during modernization.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2007	0	APR-11

Event: Completed Replace washroom accessories

Concern: Washroom accessories are damaged and old. **Recommendation:** Provide new washroom accessories. (\$500 per toilet)

TypeYearCostPriorityFailure Replacement2010\$16,466Low

Updated: APR-11

C2010 Stair Construction*

Wood stairs to stage and to lower storage area.

1953, 1954, 1956 Sections - Concrete stairs located in mechanical room.
1963 Section - Concrete treads and risers to second floor. Covered with rubber treads and nosings. These treads and nosings are in poor condition and should be replaced.

1963 - Concrete stairs to mechanical room.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	0	0	APR-11

C2020.02 Terrazzo Stair Finishes*

Terrazzo stairs at North West entrance. Two steps only. Landing covered with sheet vinyl flooring.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	APR-11

C2020.08 Stair Railings and Balustrades*

Painted steel rails with vinyl covering on each side of stairs leading to second floor. Pipe handrails to stairs leading to basement mechanical rooms. Balustrades are 1/2 inch square painted steel.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	0	APR-11

C3010.06 Tile Wall Finishes**

1953 Section had ceramic tiles installed from floor, up 2.5 meters on perimeter walls in boys and girls washrooms during modernization.

No other tiled walls in school.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	2007	40	APR-11

Event: Replace Tile Wall Finishes (100m²)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2047	\$47,000	Unassigned

Updated: APR-11

C3010.09 Acoustical Wall Treatment**

Wood stripped wall panels installed on top half of gym walls for acoustic suppression. No concerns from staff.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1985	20	APR-11

Event: Replace Acoustical Wall Treatmen (185m²)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2014	\$46,250	Unassigned

Updated: APR-11

C3010.11 Interior Wall Painting*

All concrete block, plaster and gypsum board surfaces have been painted.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	0	APR-11

Event: Completed Repaint interior walls

Concern: Paint surfaces are damaged, dirty and yellowing in many areas. **Recommendation:** Repaint interior walls. (12,000 sq.m.)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Failure Replacement	2010	\$142,262	Low

C3020.01.01 Epoxy Concrete Floor Finishes*

1963 section has epoxy concrete surface on stairs and landings leading from main floor to second floor in the stairwell only.

Rating	Installed	Design Life	Updated
4 - Acceptable	1963	0	APR-11

C3020.02 Tile Floor Finishes**

Ceramic floor tiles including base in front entrance corridor, washrooms and change rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	2007	50	APR-11

Event: Replace Tile Floor Finishes (266m²)

Туре	Year	Cost	Priority
Lifecycle Replacement	2057	\$81,130	Unassigned

Updated: APR-11

C3020.03 Terrazzo Floor Finishes*

The 1953 section has Terrazzo floor finish at North West entrance foyer only.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1953	0	APR-11

C3020.04 Wood Flooring**

Hard wood sports flooring in gymnasium.

Rating	Installed	Design Life	<u>Updated</u>
5 - Good	2007	30	APR-11

Event: Completed Refinish 1963 gym floor(368m²)

Concern:

Refinishing is necessary to avoid surface damage to the wood flooring. Sand down to bare wood, make minor repairs and re-finish.

NOTE: Sports floor refinished during modernization. **Recommendation:**

Refinish gymnasium wood floor. (368 sq.m.)

Туре	Year	Cost	Priority
Failure Replacement	2010	\$24,369	Low

C3020.07 Resilient Flooring** - Sheet

New sheet flooring in all corridors during modernization.

Rating	Installed	Design Life	Updated
5 - Good	2007	20	APR-11

Event: Completed Replace 1963 resilient flooring (2000m²)

Concern:

Vinyl tiles are in very poor condition; damaged and curling, some mismatched patterns.

Recommendation:

Remove vinyl and vinyl asbestos tiles and replace with new vinyl tiles. (1,200 sq.m. plus \$25,000 for asbestos abatement).

Туре	Year	Cost	Priority
Failure Replacement	2010	\$306,000	Medium

Updated: APR-11

C3020.07 Resilient Flooring** - VCT

Vinyl tiles in most classrooms.

All VC tiles replace new during modernization.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2007	20	APR-11

Event: Completed Replace 1953 classrooms flooring (2040m²)

Concern:

Joints in vinyl tile and sheet vinyl are opening up. Damaged and stained areas throughout.

Recommendation:

Replace resilient flooring in 1953 phase classrooms (1,420 sq.m.).

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2010	\$201,960	Medium

C3020.08	Carpet	Flooring**
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Office areas, library and a few of classrooms have carpet flooring.

Rating	Installed	Design Life	Updated
5 - Good	2007	15	APR-11

Event: Completed Replace carpet (477m²)

Concern:

Carpet is worn and stained throughout; difficult to keep clean. **Recommendation:**

Remove carpet in offices and library and replace with new carpet (580 sq.m.). Remove carpet in classrooms and replace with resilient flooring (490 sq.m.).

Туре	Year	Cost	Priority
Failure Replacement	2010	\$48,200	Low

Updated: APR-11

C3020.11 Floor Painting*

Painted concrete floor in mechanical room. Epoxy type paint/coating on concrete in stairwells to second floor.

Rating	Installed	Design Life	Updated
4 - Acceptable	1963	0	APR-11

C3020.14 Other Floor Finishes*

Sheet rubber flooring provided by tenant in 1953 original library and in 1954 gymnasium.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1990	20	APR-11

C3030.01 Concrete Ceiling Finishes (Unpainted)*

Precast concrete floor beams are ceiling of mechanical room. These are not painted.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1963	0	APR-11

C3030.06 Acoustic Ceiling Treatment (Susp. T-Bar)**

1963 Section has suspended T-bar grid with acoustic panels in corridors, main office and staff room.

Rating	Installed	Design Life	Updated
4 - Acceptable	2007	25	APR-11

Event: Completed Remove 1963 T-bar ceiling

Concern:

Ceiling tiles are damaged and water stained. **Recommendation:** Replace T-bar ceiling in 1963 phase corridors and main floor lobby (480 sq.m.).

Туре	<u>Year</u> <u>Cost</u>	Priority
Hazardous Materials Abatement	2010 \$22,393	Low
Updated: APR-11		

Event: Replace Acoustic T-Bar (480m²)

Туре	Year	Cost	Priority
Lifecycle Replacement	2032	\$35,040	Unassigned

Updated: APR-11

C3030.07 Interior Ceiling Painting*

Painted plaster ceilings in storage rooms, washrooms, gyms and portions of classrooms and corridors.

NOTE: All completed during modernization.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	2007	0	APR-11

Event: Completed Re-paint selected ceiling

Concern:

Painted ceiling finishes are dirty, yellowing. Recommendation:

Re-paint selected ceilings in rooms likely to remain as painted: storage rooms, washrooms, gymnasium, mechanical rooms, locker rooms (910 sq.m.)

Туре	Year	Cost	Priority
Failure Replacement	2010	\$10,801	Low

C3030.09 Other Ceiling Finishes* - 1953 Stipple

1953, 1954, 1956 - Stipple ceiling finish throughout most classrooms. Has been painted during modernization. May contain asbestos.

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	0	APR-11

Event: Hazardous Material Management review

Concern:

Stipple ceilings in 1953, 54, 56 sections may contain asbestos.

Recommendation:

Retain the services of an asbestos abatement company to determine if stipple contains hazardous asbestos and procedures to follow if removal or disruption of material is required.

Туре	Year	<u>Cost</u>	Priority
Hazardous Material Management Upgrade	2011	\$3,000	Medium

Updated: APR-11

C3030.09 Other Ceiling Finishes* - Glue on Acoustic

1953, 1954, 1956 Sections - Perforated 400 X 400 glue on type acoustic ceiling tiles in corridors and classrooms. (1963 Gymnasium) These tiles are installed between every other roof support beam in gymnasium to hide mechanical ducting and wiring for lights.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	APR-11

Edmonton - Sherbrooke School (B3253A)

S4 MECHANICAL

D2010.04 Sinks** - All sections
Stainless steel (9). Wall hung ceramic (2). Mop (2)
RatingInstalledDesign LifeUpdated5 - Good200730APR-11
Event: Replace sinks (13)
TypeYearCostPriorityLifecycle Replacement2037\$23,132Unassigned
Updated: APR-11
D2010.05 Showers**
(1) Fiberglass shower in Co-Ed barrier free staff washroom.
RatingInstalledDesign LifeUpdated5 - Good200730APR-11
Event: Replace fiberglass shower (1)
TypeYearCostPriorityLifecycle Replacement2037\$3,000Unassigned
Updated: APR-11
D2010.08 Drinking Fountains/Coolers**
Wall mounted ceramic on-refrigerated (3). Wall mounted Stainless steel body Refrigerated (5)
RatingInstalledDesign LifeUpdated4 - Acceptable200735APR-11
Event: Replace drinking fountains (8)
TypeYearCostPriorityLifecycle Replacement2042\$27,000Unassigned
Updated: APR-11

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1953

Floor flush valve and tank, open front seat (11). See Lifecycle Replacement under D2020.10 - All sections

Rating	Installed	Design Life	Updated
5 - Good	2007	35	APR-11

Event: Completed Replace water closets.

Туре	Year	Cost	Priority
Lifecycle Replacement	2014	\$21,076	Unassigned

Updated: APR-11

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1953

Stall urinals, flush tank (7). See Lifecycle Replacement under D2020.10 - All sections

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2007	35	APR-11

Event: Completed Replace urinals.

Concern: Urinals cracked. Recommendation: Install new urinals with flush valves.

Туре	Year	Cost	Priority
Failure Replacement	2010	\$36,883	High

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1953

Wall hung. On/off brass (10). See Lifecycle Replacement under D2020.10 - All sections

Rating	Installed	Design Life	Updated
5 - Good	2007	35	APR-11

Event: Completed Replace lavatories

Concern:

Vitreous china lavatories have separate hot and cold spouts. **Recommendation:** Install new countertop stainless steel lavatories complete with time delay faucet and mixing valve.

Туре	Year	Cost	Priority
Operating Efficiency Upgrade	2010	\$63,227	High

Updated: APR-11

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1963

Floor, flush valve and tank, open front seat (15). See Lifecycle Replacement under D2020.10 - All sections

Rating	Installed	Design Life	Updated
5 - Good	2007	35	APR-11

Event: Completed Replace water closets.

Туре	Year	Cost	Priority
Lifecycle Replacement	2014	\$30,296	Unassigned

Updated: APR-11

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1963

Stall urinals, flush valve (8). See Lifecycle Replacement under D2020.10 - All sections

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	35	APR-11

Event: Completed Replace urinals.

Туре	Year	Cost	Priority
Lifecycle Replacement	2014	\$42,152	Unassigned

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1963

Wall hung. On/off brass (8). See Lifecycle Replacement under D2020.10 - All sections

Rating	Installed	Design Life	Updated
5 - Good	2007	35	APR-11

Event: Completed Replace lavatories

Concern:

Vitreous china lavatories have separate hot and cold spouts. **Recommendation:** Install new countertop stainless steel lavatories complete with time delay faucet and mixing valve.

Туре	Year	<u>Cost</u>	Priority
Operating Efficiency Upgrade	2010	\$26,344	High

Updated: APR-11

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - All sections

All washroom fixtures installed new during the 2007 modernization.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	35	APR-11

Event: Replace (WC (32), Lav (25), Urnl (18)

Туре	Year	Cost	Priority
Lifecycle Replacement	2042	\$201,620	Unassigned

Updated: APR-11

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper piping and fittings. Some piping replaced during modernization.

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	0	APR-11

D2020.01.02 Valves: Domestic Water** - 1953

Operation of valves suspect. Many do not hold or operate.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	40	APR-11

 Event:
 Completed Replace domestic water isolation valves. (20)

 Concern:
 Isolation valves do not hold.

 Recommendation:
 Recommendation:

Replace isolation valves throughout.

Туре	<u>Year</u>	<u>Cost</u>	Priority
Failure Replacement	2010	\$26,344	Medium

Updated: APR-11

D2020.01.02 Valves: Domestic Water** - 1963

Operation of valves suspect. Many do not hold or operate.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	40	APR-11

 Event:
 Completed Replace domestic water isolation valves. (40)

 Concern:
 Isolation valves do not hold.

 Recommendation:
 Replace isolation valves throughout.

Туре	Year	Cost	Priority
Failure Replacement	2010	\$52,344	Medium

D2020.01.03 Piping Specialties (Backflow Preventors)**

No backflow prevention installed on fire line. No backflow prevention installed on water main. No backflow prevention on boiler make up line.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2007	20	APR-11

Event: Completed Install deficient backflow preventor.

Concern:

No backflow prevention installed on fire line, main water supply or boiler make up.

Recommendation:

Install backflow prevention to comply to City of Edmonton bylaw.

Туре	<u>Year</u>	Cost	Priority
Code Upgrade	2010	\$18,441	High

Updated: APR-11

Event: Replace Backflow Preventors (3)

Туре	Year	Cost	Priority
Lifecycle Replacement	2027	\$32,000	Unassigned

Updated: APR-11

D2020.02.02 Plumbing Pumps: Domestic Water**

Grundfos recirculation pumps (2).

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	20	APR-11

Event: Replace pumps (2)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2027	\$6,000	Unassigned

D2020.02.06 Domestic Water Heaters**

Older hot water heaters in both sections. One does not work. The other goes out on flame failure often.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
2 - Poor	1986	20	APR-11

Event: Replace hot water heaters (2)

Concern:

Hot water heaters are 23 years old. One could not be fired. The other is unreliable. **Recommendation:** Replace both hot water heaters with new ones.

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2011	\$12,500	Medium

Updated: APR-11

D2020.03 Water Supply	Insulation: Domestic*
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Supply line is insulated.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1963	0	APR-11

D2030.01 Waste and Vent Piping* - #1

Cast iron, copper, galvanized piping.

Rating	Installed	Design Life	Updated
5 - Good	2007	0	APR-11

Event:	Completed Replace exposed waste and vent piping in crawl space.				
	Concern:				
	Existing piping varies in age up to 53 years. Musty odor noted in crawl space. Recommendation:				
	Replace exposed waste a	na vent	piping in crawl spa	ace.	
	Tuno	Year	Cost	Priority	
	Type Failure Replacement	2010	\$79,034	High	

D2030.01 Waste and Vent Piping* - #2

Cast iron underground sewer lines.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2007	0	APR-11

Event: Completed Video underground sewer lines. Concern: Existing piping varies in age up to 53 years. Recommendation: Video underground sewer lines to determine condition of piping.

Туре	Year	Cost	Priority
Study	2010	\$11,855	High

Updated: APR-11

D2030.01 Waste and Vent Piping* - All sections

Cast iron, ABS, copper, and galvanized piping. underground sewer lines.

Rating	Installed	Design Life	Updated
4 - Acceptable	2007	0	APR-11

D2040.01 Rain Water Drainage Piping Systems*

ABS pipe to sanitary sewer.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	0	APR-11

D2040.02.04 Roof Drains* - All sections

New roof drains installed during roof replacement.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2007	0	APR-11

D3010.02 Gas Supply Systems*

New low pressure gas lines installed to serve new roof top units. New supply header and meter.

Rating	Installed	Design Life	<u>Updated</u>
5 - Good	2007	0	APR-11

D3020.01.01 Heating Boilers & Accessories: Steam**

Two (2) Reliance low pressure steam boilers. Complete with low water cut off, auxiliary low water cut off, pressure relief valve.

Components replace with new hot water boilers in 2007.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1953	35	APR-11

Event: Completed Install new heating plant.

Concern:

Energy inefficient, high maintenance. Frequent blowdown required to reduce scale build up. Chemical treatment level high. Water leakage at plugs.

Recommendation:

Install new hot water heating plant, steam distribution piping, heating elements.

Туре	Year	Cost	Priority
Operating Efficiency Upgrade	2010	\$1,580,680	High

Updated: APR-11

D3020.01.03 Chimneys (& Comb. Air): Steam Boilers**

Masonry chimney, insulated combustion air duct. Components replace with new hot water boilers in 2007.

Rating	Installed	Design Life	Updated
2 - Poor	1953	35	APR-11

Event: Completed Install new chimney. Included in D3020.01.01.

Туре	Year	Cost	Priority
Operating Efficiency Upgrade	1953	\$0	High

D3020.01.04 Water Treatment: Steam Boilers*

Condensate receiver complete with funnel for chemical addition. Chemical injection pump.

Rating	Installed	<u>Design Life</u>	Updated
2 - Poor	1953	0	APR-11

Event: Completed Replace condensate tank.

Concern: Condensate tank corrosion excessive. Failure imminent. **Recommendation:** Replace condensate tank.

Туре	<u>Year</u>	Cost	Priority
Failure Replacement	2010	\$26,344	High

Updated: APR-11

D3020.02.01 Heating Boilers and Accessories: H.W.**

One natural draft cast iron sectional. Complete with low water cut off, flow switch, relief valve. 1,552,800 BTU/hr. input.

Rating	Installed	Design Life	<u>Updated</u>
5 - Good	2007	35	APR-11

Event: Completed Replace heating boiler.

Concern:

Heating boiler is 43 years old, energy inefficient, standing pilot. Failure imminent. Single boiler no standby. **Recommendation:** Install new heating plant with two (2) energy efficient fan

assisted low NOx boilers. Primary/secondary pumps.

Туре	Year	Cost	Priority
Operating Efficiency Upgrade	2010	\$395,170	High

Updated: APR-11

Event: Replace Heating Boilers (2)

Туре	Year	Cost	Priority
Lifecycle Replacement	2042	\$154,000	Unassigned

D3020.02.02 Chimneys (& Comb. Air): H.W. Boiler**

Masonry chimney.

Rating	Installed	Design Life	Updated
5 - Good	2007	35	APR-11

Event: Completed Replace chimneys. Included in D3020.02.01

Туре	Year	Cost	Priority
Operating Efficiency Upgrade	2010	\$0	Unassigned

Updated: APR-11

Event: Replace Chimneys &Comb. Air (14 Meters)

Туре	Year	Cost	Priority
Lifecycle Replacement	2042	\$14,000	Unassigned

Updated: APR-11

D3020.02.03 Water Treatment: H. W. Boiler*

Easily accessible Chemical pot feeder.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	0	APR-11

D3040.01.01 Air Handling Units: Air Distribution** - Class

Built up air system consists of motorized fresh, return, exhaust air dampers, filter bank, heating coil, supply fan, low velocity ductwork distribution, ducted return air, return air fan. System serves 1963 section classrooms and corridors.

Rating	Installed	Design Life	Updated
5 - Good	2007	30	APR-11

Event: Completed Replace air handling unit (1)

Concern:

Air bypass occurring on filters, damper bushings worn. No seal on dampers. Loose and damaged internal insulation. **Recommendation:** Replace existing air system and distribution ductwork with

new. Air system could be rooftop or indoor.

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2010	\$125,000	High

D3040.01.01 Air Handling Units: Air Distribution** - Gym

Built up air system consists of motorized fresh, return, exhaust air dampers, filter bank, heating coil, low velocity duct distribution, supply air fan, ducted return air. Difficult to maintain required outside air to maintain differential between supply air and return air with single fan. System serves gymnasium.

Rating	Installed	Design Life	Updated
5 - Good	2007	30	APR-11

Event: Completed Replace Air Handling Unit (1)

Concern:

Damper bushings worn, no seal on dampers, loose and damaged internal insulation. Not suitable for high occupancy load.

Recommendation:

Replace existing air system and ductwork distribution with new.

Туре	<u>Year</u>	Cost	Priority
Failure Replacement	2010	\$125,000	High

Updated: APR-11

D3040.01.03 Air Cleaning Devices: Air Distribution*

Standard mesh filters in filter cages used.

Rating	Installed	Design Life	Updated
4 - Acceptable	2010	0	APR-11

D3040.01.04 Ducts: Air Distribution*

Low velocity galvanized supply air ductwork to air outlets. Ducted return air.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1963	0	APR-11

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Painted metals inlets and outlets.

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	0	APR-11

D3040.02 Steam Distribution Systems: Piping/Pumps**

Low pressure steam and condensate piping to unit ventilators, convectors, radiation. Condensate receiver complete with one (1) condensate pump.

<u>Rating</u>	Installed	Design Life	Updated
2 - Poor	1953	40	APR-11

Event: Completed Install new heating piping. Included in D3020.01.01.

Concern:

D3020.01.01.

Original traps, valve condition suspect, high maintenance, condensate piping condition suspect. **Recommendation:** Install new hot water piping distribution. Included in

Туре	Year	Cost	Priority
Operating Efficiency Upgrade	2010	\$0	High

Updated: APR-11

D3040.03.01 Hot Water Distribution Systems**

Two (2) base mount pumps and two (2) in line circulate heating water from boiler via black iron piping to radiation, air system heating coils, heating elements.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2007	40	APR-11

Event: Replace hot water distribution (gfa 6000m²)

Туре	Year	Cost	Priority
Lifecycle Replacement	2047	\$558,000	Unassigned

Updated: APR-11

D3040.04.01 Fans: Exhaust**

Dome rooftop centrifugal exhaust fans for washroom, gymnasium and general building exhaust.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2007	30	APR-11

Event: Replace exhaust fans (6)

Туре	Year	Cost	Priority
Lifecycle Replacement	2037	\$16,800	Unassigned

D3040.04.03 Ducts: Exhaust*

Low velocity, galvanized connected to exhaust air outlets and fans.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	0	APR-11

D3040.04.05 Air Outlets and Inlets: Exhaust*

Vary as to year installed. Linear bar, egg crate.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	APR-11

D3050.05.03 Finned Tube Radiation**

Fin tube radiation supplies classrooms and common areas.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1963	40	APR-11

Event: Replace radiationm fin tube radiation (gfa 6000m²)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2014	\$276,000	Unassigned

Updated: APR-11

D3050.05.06 Unit Heaters**

Five entrances have wall mounted unit heaters.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2007	30	APR-11

Event: Replace unit heaters (5)

Туре	Year	Cost	Priority
Lifecycle Replacement	2037	\$34,000	Unassigned

D3050.05.07 Unit Ventilators**

Unit ventilators installed in 24 classrooms.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2007	30	APR-11

Event: Completed Replace unit ventilators.(24)

Concern:

Unit ventilators de-activated by occupants due to noise. Dampers stick. Poor temperature control. Freeze up of coils has occurred. Damper bushings worn. No seal on dampers. Minimum occupant outside air volume not maintained. Inadequate filtration. Fresh air intakes located adjacent to parking lot. Car exhaust can be drawn into rooms served by unit ventilators.

Recommendation:

Remove unit ventilators and install new air systems with distribution ductwork. Propose five (5) rooftop air systems.

Туре	Year	Cost	Priority
Failure Replacement	2010	\$384,000	High

Updated: APR-11

D3060.02.02 Pneumatic Controls**

Simplex air compressor, Deltech air dryer, control valves, damper motors. Used in combination with new electronic controls.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	40	APR-11

Event:	Completed Replace pneumatic controls. (GFA -
	<u>6000m²)</u>

<u>Type</u> Failure Replacement <u>Year</u> <u>Cost</u> 2010 \$25,609 Priority Unassigned

D3060.02.05 Building Systems Controls (BMCS, EMCS)**

BMS system controls installed during modernization.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	20	APR-11

Event: Completed Install BMCS. (GFA - 6000m²)

Concern:

No BMCS. Latest technology not being utilized to control systems.

Recommendation:

Install BMCS. Cost includes proposed mechanical upgrades.

Туре	<u>Year</u>	<u>Cost</u>	Priority
Failure Replacement	2010	\$180,000	High

Updated: APR-11

D4020 Standpipes*

Wet standpipe to supply fire hose cabinets.

Rating	Installed	Design Life	Updated
4 - Acceptable	1963	0	APR-11

D4030.01 Fire Extinguisher, Cabinets and Accessories*

ABC fire extinguishers installed on wall brackets. Evidence of annual inspections.

Rating	Installed	Design Life	Updated
5 - Good	2007	0	APR-11

S5 ELECTRICAL

D5010.03 Main Electrical Switchboards (Main Distribution)**

Square D main distribution switchboard, 120/240V/1PH complete with 800 amp main circuit breaker.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2007	40	APR-11

Event: Completed Replace Main Distribution Switchboard

Concern:

Main distribution switchboard is in poor condition, is beginning to fail, and repair parts no longer manufactured.

Recommendation:

Replace main distribution switchboard with new main distribution switchboard with service connection to new pad mounted utility transformer at exterior of building.

Consequences of Deferral:

Switchboard could fail and leave building without power.

Туре	Year	Cost	Priority
Failure Replacement	2010	\$197,585	High

Updated: APR-11

Event: Replace Main Switchboard (1)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2047	\$23,000	Unassigned

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)**

Square D branch circuit panelboards located throughout school.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2007	30	APR-11

Event: Completed Replace Panelboards.

Concern:

Existing panelboards are in poor condition and are unreliable. **Recommendation:**

Replace panelboards complete with new feeder to main distribution switchboard. Estimate 12 panels required @ \$15,000. Per panel.

Consequences of Deferral:

Panels could fail and leave portions of school without power.

Туре	Year	Cost	Priority
Failure Replacement	2010	\$237,102	Medium

Updated: APR-11

Event: Replace Branch Circuit Panelboards (18)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2037	\$141,300	Unassigned

Updated: APR-11

D5010.07.02 Motor Starters and Accessories**

Square D manual and magnetic motor starters for service to mechanical equipment.

Rating	Installed	Design Life	Updated
4 - Acceptable	2007	30	APR-11

Event: **Replace Motor Starters and Accessories (4)**

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2037	\$43,525	Unassigned

D5020.01 Electrical Branch Wiring*

New 3/12 copper wiring pulled to all panels. New switches and recepticals during modernization.

Rating	Installed	Design Life	<u>Updated</u>
5 - Good	2007	0	APR-11

Event: Completed Replace Electrical Devices & Wiring

Concern:

Existing light switches and receptacle outlets in poor condition and are failing. Insulation on wiring in conduit is brittle and failing.

Recommendation:

Replace electrical devices and wiring with new. Estimate cost as 5999 SM @ \$110.00/SM

Consequences of Deferral:

Devices and wiring will fail and pose a fire or electrical hazard.

Туре	Year	Cost	Priority
Failure Replacement	2010	\$869,374	High

Updated: APR-11

D5020.02.01 Lighting Accessories: Interior (Lighting Controls)*

Light switches in each room to control lights. Upgrade during modernization.

Rating	Installed	Design Life	Updated
4 - Acceptable	2007	0	APR-11

D5020.02.02.02 Interior Fluorescent Fixtures**

Pendant hung continuous fixtures in classrooms, surface mounted lights in other areas. Fixtures upgraded to T8 lamps with electronic ballasts in 2002.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2002	30	APR-11

Event: Replace Florescent Fixtures (GFA 6000m²)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2032	\$312,080	Unassigned

D5020.02.03.02 Emergency Lighting Battery Packs**

DC emergency lighting battery packs with remote heads.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2002	20	APR-11

Event: Replace Battery Packs (14)

Туре	Year	Cost	Priority
Lifecycle Replacement	2022	\$18,900	Unassigned

Updated: APR-11

D5020.02.03.03 Exit Signs*

LED exit light fixtures throughout the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	0	APR-11

D5020.03.01.01 Exterior Incandescent Fixtures*

Entrances have incandescent fixtures with Compact fluorescent bulbs in place of incandescent bulbs.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1963	0	APR-11

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

High Pressure sodium lighting on building flooding staff parking area.

Rating	Installed	Design Life	Updated
4 - Acceptable	2007	0	APR-11

D5020.03.02 Lighting Accessories: Exterior (Lighting Controls)*

Exterior lighting photocell controlled.

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	0	MAR-07

D5030.01 Detection and Fire Alarm**

Edwards EST-2 system with fire detection devices, two remote annunciator's. Alarm bells with strobe lights covers entire building.

Heat and smoke detectors in every room.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1999	25	APR-11

Event: Replace Fire Alarm System (GFA 6000m²)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2024	\$150,000	Unassigned

Updated: APR-11

D5030.02.02 Intrusion Detection**

Three security systems installed in building with one for second floor of 1963 section, one for main floor of 1963 section, and one for remainder of building. Installations include alarm keypads, motion sensors, and door sensors. Systems are monitored.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	25	APR-11

Event: Replace Intrusion Detection (1)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2015	\$150,000	Unassigned

Updated: APR-11

D5030.03 Clock and Program Systems*

Clocks in classrooms and administration and corridors.

Rating	Installed	Design Life	<u>Updated</u>
5 - Good	2007	0	APR-11

Event: Complete Provide Clock System

Concern: No clocks in building. Recommendation: Provide clocks in each classroom and corridors. Estimate 60 clocks required @ \$100.00 each. Consequences of Deferral: Required for school operation.

Туре	Year	Cost	<u>Priority</u>
Program Functional Upgrade	2010	\$7,903	High

D5030.04.01 Telephone Systems*

New telephone/paging system installed during modernization.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	0	APR-11

Event: Completed Provide Telephone System

Concern:

No telephone system in building. Some corridor speakers exist, however, do not appear to be operational. **Recommendation:** Provide integrated telephone system in building complete with telephone in each classroom and speakers in all rooms.

Estimate cost as 5999 SM @ \$25.00/SM

Consequences of Deferral:

Required for school operation.

Туре	Year	Cost	<u>Priority</u>
Program Functional Upgrade	2010	\$197,585	High

Updated: APR-11

D5030.04.04 Data Systems*

Wireless Data systems to administration and selected classrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	2007	0	APR-11

Event: Completed Add Data System to School

Concern:

No data system present in school.

Recommendation:

Provide new data system in school complete with data rack, server, and required components. Estimate cost as 300 data outlets @ \$500.00 per outlet **Consequences of Deferral:**

Required for school operation.

Туре	Year	Cost	Priority
Program Functional Upgrade	2010	\$197,585	High

Updated: APR-11

D5030.04.05 Local Area Network Systems*

Lan system installed during modernization.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2007	0	APR-11

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.04 Residential Equipment*

(2) refrigerators, (2) microwaves, (1) electric cook stove for staff use.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2007	0	APR-11

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Basketball backstops in Gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	1963	0	APR-11

E2010.02 Fixed Casework**

Painted wood casework in 2 science rooms and prep room.

New Maple finished cupboards and shelving installed in every classroom and other educational spaces as well as staff room during modernization.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	35	APR-11

Event: Completed Replace casework (GFA - 6000m²)

Concern:

Wood casework is damaged. Painted countertops and plastic laminate countertops not suited for science rooms. Layout is incomplete or dysfunctional.

Recommendation:

Replace science room casework with plastic laminate casework complete with acid resistant countertops (70 meters).

Туре	Year	Cost	Priority
Failure Replacement	2010	\$347,900	Low

E2010.03.01 Blinds**

All Phases: Predominately horizontal louvre blinds throughout.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	30	APR-11

Event: Completed Replace blinds (510m²)

Concern:

Horizontal louvre blinds are in poor condition and do not provide appropriate light control.

Recommendation:

Replace blinds with new perforated roller blinds. (305 windows)

Туре	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$95,900	Low

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

Main entrance has asphalt ramp to barrier free parking. This ramp is a bit to steep but not a hazard as it is very short run (1.2 meters).

North West entrance has concrete walkway to doors flush with visitor and staff parking lots.

R	at	ing	
3	- N	/larg	inal

InstalledDesign LifeUpdated19530APR-11

Event: Construct code compliant ramp

Concern: Main entrance barrier free ramp not code compliant. **Recommendation:** Construct code compliant ramp.

Туре	Year	Cost	Priority
Barrier Free Access Upgrade	2011	\$15,000	Medium

Updated: APR-11

K4010.02 Barrier Free Entrances* - Main entrance

Handicapped push button door opener on main entrance and vestibule doors.

Rating	Installed	Design Life	Updated
5 - Good	2007	0	APR-11

Event: Barrier Free Access Upgrade

Concern:

Power door operators at main entrance to building during modernization.

Туре	Year	Cost	Priority
Barrier Free Access Upgrade	0	\$0	Unassigned

K4010.02 Barrier Free Entrances* - North West entrance

North West entrance vestibule requires a code compliant barrier free ramp as this section is used after hours and main entrance is locked.

Rating	Installed	Design Life	Updated
2 - Poor	1953	0	APR-11

Event: Construct ramp (1)

Concern:

Wood ramp provided at North West entrance vestibule is not code compliant. Ramp is not anchored and slope is very steep and butts up to exterior door.

Recommendation:

Re-configure vestibule entrance to accommodate code compliant ramp.

Туре	Year	Cost	Priority
Barrier Free Access Upgrade	2011	\$15,000	Medium

Updated: APR-11

K4010.03 Barrier Free Interior Circulation*

School has interior steps at grade change between 1950's section and 1963 section. Wheel chair lift has been installed.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	2007	0	APR-11

K4010.04 Barrier Free Washrooms*

Washrooms were modified during modernization to make them barrier free. This includes a staff washroom.

Rating	Installed	Design Life	Updated
4 - Acceptable	2007	0	APR-11

Event: Provide barrier free washrooms

Concern:

Room to maneuver to washrooms is too tight. Clearances at doors are deficient, additional grab bars required, clearances at sinks are deficient, hardware on toilet compartments no longer complies to code.

Recommendation:

Provide barrier free washroom on each floor.

<u>Type</u>	<u>Year</u>	Cost	Priority
Barrier Free Access Upgrade	2010	\$65,862	Medium

Updated: APR-11

K4030.01 Asbestos*

The maintenance of the school is managed by Edmonton public schools. (epsb) Current head custodian reported that the epsb started removal of asbestos and debris in crawl space but work has stopped with no explanation as to why. Asbestos removal outerwear (coveralls, masks etc.) have been left in crawl space. Recently there was a leak in the crawl space and staff had to enter the space and deal with the alleged hazardous debris.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	0	0	APR-11

Event: Remove contaminated crawlspace dirt (3100m²)

Concern:

PHH Environmental report notes that crawlspace is contaminated with asbestos.

Recommendation:

Remove 300mm of contaminated crawl space dirt. Add polyethylene and 50mm sand base throughout crawl space of 1953, 1954, 1956 phases. (3,100m²)

Туре	Year	Cost	Priority
Hazardous Materials	2011	\$612,513	High
Abatement			

Updated: APR-11

K4030.04 Mould*

None reported or noted.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	APR-11

K5010 Reports and Studies*

Site and floor plan copies.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1953	0	APR-11

Event: Floor plan & Site plan.

Туре	Year	Cost
Study	2010	\$0

Updated: APR-11

Priority Unassigned



Site plan.