

RECAPP Facility Evaluation Report

St. Albert Public School District No. 5565



Muriel Martin Elementary School

B4073A
St. Albert

Facility Details

Building Name: Muriel Martin Elementary Sc
Address: 110 Deer Ridge Drive
Location: St. Albert

Building Id: B4073A
Gross Area (sq. m): 4,882.91
Replacement Cost: \$13,441,000
Construction Year: 1991

Evaluation Details

Evaluation Company: Wade Engineering Ltd.
Evaluation Date: August 14 2012
Evaluator Name: Mike Pangman & Randy Kubik

Total Maintenance Events Next 5 years: \$793,849
5 year Facility Condition Index (FCI): 5.91%

General Summary:

In 1991, a single storey original 3190.6 m² school was constructed.
In 1991, four portables and a link were added (530 m²).
In 1992, four more portables, with a resource room, a kitchen and a link were added (491.2 m²).
In 1993, four portables and a link were added, and then removed in 2010.
In 1998, one free standing portable was added (94 m²).
In 2010, four new Modus portables replaced the 1993 portables (458.7 m²)
Also in 2010, two additional new Modus portables and a link were added (294.5 m²)

Barrier Free Route, Entrances, Circulation, and Washrooms are fully compliant except for power doors at the entrance and adding signage..

The total GFA is 5059 m², with a student capacity of 614 and a current enrollment of 531, in grades K to 5.

Note: Information on the Portables was moved to separate files in 2012-2013 with Trailer ID's (TID's) of T2812, T2813, T2814, T2815, T2816, T2817, T2818, T2819, T2820, T1612, T1613, T5577, T5578, T5579, and T5580.

Structural Summary:

The main building has a slab on grade with grade beams supporting a steel frame superstructure.

Overall structural condition is good.

Envelope Summary:

Masonry is the predominant cladding on the main building.
Windows are double glazed in aluminum frames with internal blinds. There are also several skylights.
Doors are insulated hollow core steel storefronts and utility in steel frames.
Roofs are original EPDM and sloped metal with newer SBS and BUR areas replacing most of the original EPDM systems. Replacement of the remaining EPDM roofs will complete the Replacement Program started in 2004.

Overall envelope condition is good.

Interior Summary:

Walls are vinyl covered or painted drywall and painted block. Ceramic tile walls in the washrooms.
Flooring is carpet, resilient tile and sheet, with ceramic tile at entrances, washrooms, and a few other rooms. The gym floor was recently replaced with a Taraflex synthetic sports flooring
Ceiling finishes are painted gypsum, acoustic suspended T-bar as well as exposed painted steel roof deck.

Overall the interior condition is good.

Mechanical Summary:

The plumbing systems of the building, domestic water distribution, natural gas, storm and sanitary piping, and plumbing fixtures are original. Domestic hot water is produced by a domestic hot water heater. The washrooms fixtures have recessed lavatories, wall mounted urinals, and both floor mounted tank and flush valve type water closets. There is a single shower with wall mounted shower head and hand valve operation. Custodial mop sinks are present in custodial rooms throughout the building. Stainless steel sinks are located in the several general purpose classrooms and the staff room. Most fixtures are in acceptable condition.

Heating of the building is provided by two natural gas fired boilers which circulate water through perimeter finned

radiation in the classrooms and offices, reheat coils, mechanical room unit heater, and heating coils in the air handling units. One air handling unit provides ventilation air for gymnasium while the other serves the classrooms.

A Delta digital control (DDC) and pneumatic control system controls the heating and ventilation to the building. Portable fire extinguishers are located on walls throughout the building. The facility also has a sprinkler system throughout.

There are no actions that should be considered within the next five years:

The mechanical systems overall appear to be in acceptable condition.

Electrical Summary:

Service for the school is 1200A, 120/208V, distributed from the main switchboard to surface or flush mounted circuit breaker type panelboards throughout the school. There is more than ample capacity for present power requirements and for future expansion.

A floor mounted motor control centre houses all the three phase motor starters while a customized wall cabinet contains the single phase manual starters, all in the mechanical room.

The interior lighting system is mainly fluorescent of T8 lamps and electronic ballasts. Compact fluorescent lamps have replaced most of the incandescent lamps. Metal halide is used sparingly in the central atrium, mostly as indirect, and as the main lighting system in the Gymnasium, supplemented by incandescent. The interior lighting system is controlled locally by line voltage switches and group controlled by low voltage switching. Exterior lighting is high pressure sodium, photoelectric cell controlled. Emergency lighting is provided by battery packs with integral and remote lighting heads. Exit lights are fitted with LED strips for AC and DC operations.

The hard wired fire alarm system has manual and automatic detection devices and audible signaling devices only. The control panel with its integral annunciator is located at the front entrance with a remote annunciator in the Administration Office. The intrusion alarm system of motion sensors has its coded keypads located at the rear entrance.

The public address system also provides the clock and program system for class changes. It interfaces with the telephone system for paging activities and a cassette for music broadcasts. The telephone system now replaces the intercom function that was inherent with the sound system. The school has a cable television system distributed to every classroom. Each classroom has a wide screen television set with a DVD/VCR player, as well as a wireless voice enhancement system. A local area network distributes computer facility to every classroom and offices as well as the computer room clusters.

The 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.

S1 STRUCTURAL**A1010 Standard Foundations***

Concrete grade beams on concrete piles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

A1030 Slab on Grade*

80mm and 100mm slabs on grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

B1010.01 Floor Structural Frame (Building Frame)*

Slab on grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

B1010.02 Structural Interior Walls Supporting Floors (or Roof)*

Concrete block bearing walls and steel frame.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

B1010.03 Floor Decks, Slabs, and Toppings*

Concrete in metal deck for second floor Mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

B1010.09 Floor Construction Fireproofing*

Non-combustible materials.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

B1020.01 Roof Structural Frame*

Cast-in-place concrete columns, precast concrete beams, steel roof trusses and joists.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

B1020.03 Roof Decks, Slabs, and Sheathing*

Metal roof deck.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

B1020.04 Canopies*

Steel roof framing and precast concrete beams and columns at front main entrance canopy.
 Precast concrete columns and beams with tinted glass insets forming decorative canopies above windows at several locations around the main building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

B1020.06 Roof Construction Fireproofing*

Steel roof deck of non-combustible construction.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Brick veneer

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

B2010.01.02.02 Concrete Block: Ext. Wall Skin*

Split face concrete block.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

B2010.01.06.03 Metal Siding**

Standing seam metal panels on the roof to match sloped metal roof panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	40	FEB-13

Event: Replace metal siding (100 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$13,000	Unassigned

Updated: FEB-13

B2010.01.09 Expansion Control: Ext. Wall*

Vertical control joints in masonry cladding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

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

Sealant at perimeter of widows and storefronts and at control joints.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	20	FEB-13

Event: Replace sealant (186 m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$6,000	Unassigned

Updated: FEB-13

B2010.02.99 Other Exterior Wall Construction*

Face brick or block is backed up by 25mm air space, 25mm rigid insulation on 115mm stressed skin panel of osb both sides insulation. Drywall interior finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

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

The stressed skin panels with gaskets at the joints provide the the air/vapour barrier.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

B2010.05 Parapets* - 1991 Original Roof & 2012 Re-Roofed Sections

Exposed pre-cast concrete roof parapets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

B2010.05 Parapets* - 2004 SBS

Pre-cast concrete parapets covered with SBS membrane and pre-finished metal cap flashings at 2004 & 2006 re-roofed areas

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	0	FEB-13

B2010.06 Exterior Louvers, Grilles, and Screens*

Metal supply and exhaust air louvres.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

B2010.09 Exterior Soffits*

Acrylic stucco on plywood at canopy soffit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

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

Double glazed with internal horizontal blinds in aluminum frame. Awning type openers with sealed glazing.
 Note: LCR increased by 20% for internal blinds.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	40	FEB-13

Event: Replace Aluminum Windows (87 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$100,200	Unassigned

Updated: FEB-13

B2020.03 Glazed Curtain Wall**

Exterior metal framed curtain wall forming a greenhouse in Science Room 138.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	40	FEB-13

Event: Replace Greenhouse Curtain Wall (10.5 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$12,000	Unassigned

Updated: FEB-13

B2030.01.02 Steel-Framed Storefronts: Doors**

Insulated pressed steel frames with tempered glass sidelights.
 Insulated hollow metal doors with tempered glass.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	30	FEB-13

Event: Replace steel doors & storefronts (10 panels)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$24,000	Unassigned

Updated: FEB-13

B2030.02 Exterior Utility Doors**

Insulated hollow metal doors in pressed steel frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	40	FEB-13

Event: Replace steel doors and frames (5 panels)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$4,500	Unassigned

Updated: FEB-13

B3010.01 Deck Vapour Retarder and Insulation*

Various install dates: 1991, 2004, 2006, and 2012:
Rigid insulation on sheet membrane or kraft paper vapour barrier assumed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

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

A 408 m² section of the original EPDM membrane on the main roof area (SE quadrant) was replaced with asphalt & gravel BUR over rigid insulation..

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	2012	25	FEB-13

Event: Replace BUR roof system (408 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2037	\$71,500	Unassigned

Updated: FEB-13

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

Installed in two stages from 2004 to 2006: Gymnasium roof (flat portion) (263 m²), and 55% of the main roof area (flat non-metal area) (1037 m²).
SBS membrane on rigid insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	25	FEB-13

Event: Replace SBS roofing (1300 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$227,500	Unassigned

Updated: FEB-13

B3010.04.05 Membrane Roofing (Single Ply, EPDM, PVC, TPO)**

The remaining original fully adhered EPDM membranes are on the ANC roof (70 m²), front canopy roof and adjacent area with mech. and change rooms (118 m²), and the remaining 23% of the main flat roof area (426 m²).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	25	FEB-13

Event: COMPLETED - Replace EPDM roof section (408 m²) with BUR

Concern:

COMPLETED in 2012 with BUR (408 m²)
THIS EVENT TO BE DELETED

EPDM roof has deteriorated.

Recommendation:

COMPLETED in 2012 with BUR (408 m²)
THIS EVENT TO BE DELETED

Roofing consultant has recommended replacement process begins in 2012.

Consequences of Deferral:

Roof leaks will occur in the near future.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$99,940	High

Updated: FEB-13

Event: Replace remaining EPDM (614 m²)

Concern:

Replacement program was started in 2004. About 3/4 of the original EPDM has now been replaced, some with SBS (1,300 m²) and some with asphalt & gravel BUR (408 m²).

The remaining EPDM roof membranes have deteriorated and are at the end of their life cycles. Future leaks are inevitable.

Recommendation:

Replace remaining EPDM roof systems.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2014	\$105,000	Medium

Updated: FEB-13

B3010.07 Sheet Metal Roofing**

Standing seam sloped metal roofing, with EPDM troughs at perimeters, over the gym (323 m²), front canopy (60 m²), and ANC (100 m²).

Sloped metal roofing with standing seams, without troughs, at the central area of the main roof area (over the Library and Corridors - 400 m²).

Sloped metal roofing with standing seams located over the Activity areas of 8 classrooms (64 m²). Each is a 2.5m x 2.5m pyramidal structure, seven with a small skylight tops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	40	FEB-13

Event: Replace metal roofing (947 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$227,300	Unassigned

Updated: FEB-13

Event: Replace missing metal flashing (2 pieces - 4 m)

Concern:

At the base of one of the framed skylights, one length of metal flashing is missing and another is loose. Left as is will allow moisture infiltration and possible further metal loss from wind damage.

Recommendation:

Replace missing metal flashing and secure loose flashings.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2012	\$1,800	High

Updated: FEB-13

B3020.01 Skylights - Aluminum Frame**

Five larger aluminum framed pyramid type skylights with sealed glazing on the sloped metal areas over the Library and Corridors.

Smaller aluminum framed skylights capping 7 of 8 pyramidal sloped metal structures located over the Activity areas of 7 classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	25	FEB-13

Event: Replace skylights (106 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$212,000	Unassigned

Updated: FEB-13

B3020.01 Skylights - Unit Skylights**

Four acrylic pyramidal unit skylights on the front canopy (1) and the main flat roof area (3).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	25	FEB-13

Event: Replace pyramidal unit skylights (16 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$36,800	Unassigned

Updated: FEB-13

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

"Bilco" type insulated metal access hatch. Plumbing vents stack, and exhaust vent curbs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

S3 INTERIOR

C1010.01 Interior Fixed Partitions* - Framed Stud

Drywall both sides steel studs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C1010.01 Interior Fixed Partitions* - Unit Masonry

Concrete block partitions in area of washrooms/gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C1010.02 Interior Demountable Partitions*

Gypsum on stud wall demountable partitions at some locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C1010.03 Interior Operable Folding Panel Partitions**

Acoustic folding wall separates ANC (music room) from gymnasium.

Note: Site personnel advise that the partition is not providing adequate acoustic separation. See K2030.06 Acoustical Privacy* for Program Functional Upgrade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	30	FEB-13

Event: Replace folding partition (28 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$30,800	Unassigned

Updated: FEB-13

C1010.05 Interior Windows*

Single or double glazing in pressed steel frames at various locations throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C1010.06 Interior Glazed Partitions and Storefronts*

Steel-Framed Storefronts separating the ANC (music room) from Hall-101 and in the Admin. area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C1010.07 Interior Partition Firestopping*

No open wall penetrations observed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

C1010.08 Other Partitions*

Fabric curtain divider in the Infirmary.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

C1020.01 Interior Swinging Doors (& Hardware)*

Painted hollow metal doors, some with GWG glazing and stainless steel kick-plates, in painted steel frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C1020.02 Interior Entrance Doors*

Hollow core steel doors in steel frames with GWG side lites forming vestibules at entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C1020.03 Interior Fire Doors*

Mechanical rooms, science preparation room, janitor rooms and some storage rooms have hollow metal doors in pressed metal frame with ULC label.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

C1020.05 Interior Large Doors*

Coiling overhead grille in hall at entrance to library and at kitchen counter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C1030.01 Visual Display Boards**

White boards and tack boards in classrooms and a few other areas. Boards are replaced as needed.
 Note: most classrooms also have a Smart board.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	20	FEB-13

Event: Replace whiteboards (24 white & 26 tack)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$15,000	Unassigned

Updated: FEB-13

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

Floor mounted steel toilet partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	30	FEB-13

Event: Replace toilet partitions (18 stalls)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$21,600	Unassigned

Updated: FEB-13

C1030.06 Handrails*

Painted steel pipe handrail at top of concrete side wall at stairs to gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C1030.08 Interior Identifying Devices*

Wall mounted acrylic plaques for room names and numbers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-08

C1030.10 Lockers**

Half height and full height steel lockers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	30	FEB-13

Event: Replace steel lockers (96 full, 58 - 1/2 size)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$64,000	Unassigned

Updated: FEB-13

C1030.12 Storage Shelving*

Painted wood and plastic laminated plywood and steel shelving throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C1030.14 Toilet, Bath, and Laundry Accessories*

Mirrors, soap, paper towel and toilet paper dispensers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C1030.17 Other Fittings*

Prefinished boot racks at entrance vestibules.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C2010 Stair Construction* - Cast-in-place

Stairs to Gym

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C2010 Stair Construction* - Wood

Stairs to Mech. Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

C2020.01 Tile Stair Finishes* - Gym Entrance

Ceramic tile stair finish to gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C2020.05 Resilient Stair Finishes - Mech. Rm**

Vinyl covered stairs to Mechanical Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	20	FEB-13

Event: Replace resilient stair finish (7 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$1,100	Unassigned

Updated: FEB-13

C2020.05 Resilient Stair Finishes - Stage**

Rubber covered stairs to stage installed in 2005.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	20	FEB-13

Event: Replace stage resilient stair finish (22.5 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$2,200	Unassigned

Updated: FEB-13

C2020.08 Stair Railings and Balustrades*

Painted steel pipe railings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

C2030 Interior Ramps*

Cast-in-Place ramp at front entrance to access the gym. Ceramic tile flooring with concrete side walls and painted steel pipe railings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C3010.06 Tile Wall Finishes**

Full height ceramic tile wall finishes in washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	40	FEB-13

Event: Replace ceramic wall tiles (229 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$56,500	Unassigned

Updated: FEB-13

C3010.09 Acoustical Wall Treatment**

Fabric covered, wall mounted insulation panels in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	20	FEB-13

Event: COMPLETED - Clean/replace acoustic panels (140m²)

Concern:

Panels are dirty and unsightly.

Recommendation:

Clean panel fabric or replace as required.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2012	\$3,943	Medium

Updated: FEB-13

Event: Replace acoustic wall panels (140 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2028	\$31,500	Unassigned

Updated: FEB-13

C3010.11 Interior Wall Painting*

Painted concrete block or drywall.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

C3010.12 Wall Coverings* - Vinyl

Vinyl on drywall typical throughout classrooms and public spaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

C3020.01.02 Painted Concrete Floor Finishes*

Painted concrete in some mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

C3020.02 Tile Floor Finishes**

Ceramic floor tiles at entrances, around interior planters, at barrier free ramp, gym storage, phys ed office, and washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	50	FEB-13

Event: Replace ceramic floor tiles (240 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2041	\$40,000	Unassigned

Updated: FEB-13

C3020.07 Resilient Flooring - 1991 Sheet (Corridors)**

Sheet flooring in corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	20	FEB-13

Event: Replace sheet flooring in corridors (300 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$24,000	Unassigned

Updated: FEB-13

C3020.07 Resilient Flooring - 1991 Tile**

Vinyl tile flooring in selected classrooms, storage and janitorial rooms, library, infirmary, staff rooms, some washrooms and mechanical rooms, .

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	20	FEB-13

Event: Replace vinyl floor tile (985 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$49,000	Unassigned

Updated: FEB-13

C3020.07 Resilient Flooring - 2010 Sheet**

Sheet flooring in Room 118 installed in 2010

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2010	20	FEB-13

Event: Replace resilient sheet flooring (72.4 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$5,800	Unassigned

Updated: FEB-13

C3020.07 Resilient Flooring - 2010 Tile**

Resilient tile flooring in Room 132 (BSE)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2010	20	FEB-13

Event: Replace tile flooring (84 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$4,200	Unassigned

Updated: FEB-13

C3020.07 Resilient Flooring - Sheet Flooring (DELETE)**

Sheet vinyl flooring in gymnasium (1991) and selected corridors.

Note: this Technical can be deleted. Remaining sheet in corridors (1991) added as a separate Technical.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2002	20	FEB-13

Event: COMPLETED - Replace sheet vinyl flooring (600m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$95,761	Unassigned

Updated: FEB-13

Event: COMPLETED - Study options for replacement of vinyl (80m2)

Concern:

Vinyl is "bubbling up" requiring extensive annual maintenance. (Includes areas in corridor where the vinyl replaced the carpet in approximately 2001.) Repairs are unsightly. Site personnel advise that the problem is alleviated in the gymnasium if higher temperatures are maintained.

Recommendation:

Retain an engineering consultant to assess the problem and/or install alternate material (eg; vinyl composite tiles) in a test area.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2012	\$5,633	High

Updated: FEB-13

C3020.08 Carpet Flooring - 1995**

Carpet in some classrooms, ANC and staff rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	15	FEB-13

Event: Replace Carpet (345 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$26,000	Unassigned

Updated: FEB-13

C3020.08 Carpet Flooring - 2000**

Carpet in central library/circulation space and admin.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	15	FEB-13

Event: Replace carpet (440 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$33,000	Unassigned

Updated: FEB-13

C3020.08 Carpet Flooring - Selected classrooms - DELETE**

Carpet in classrooms. Main building and 1992 portables 95) has been replaced with resilient sheet flooring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	15	FEB-13

Event: COMPLETED - Replace carpet (500m²)

Concern:

Carpet in selected areas is worn and soiled.

Recommendation:

Replace carpet in 7 classrooms.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$54,077	Medium

Updated: FEB-13

C3020.14 Other Floor Finishes*

Taraflex Synthetic Sports Flooring in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	0	FEB-13

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

Acoustic tiles in a suspended t-bar system in most classrooms, storage, some washrooms, kitchen, staff and admin areas.

Note: suspended ceiling tiles are replaced as needed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	25	FEB-13

Event: Replace Acoustic Ceiling Tile (1266 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$63,000	Unassigned

Updated: FEB-13

C3030.07 Interior Ceiling Painting* - Drywall

Painted drywall in most washroom areas, storage and mech. rooms etc.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C3030.07 Interior Ceiling Painting* - Exposed Steel Deck

Painted steel deck and steel joists in library and gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

C3030.09 Other Ceiling Finishes*

Hanging fabric acoustic panels in Library and fabric acoustic panels matching wall panels in Gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

S4 MECHANICAL

D2010.04 Sinks**

Sinks are stainless steel counter mounted in classrooms throughout the school. Terrazzo floor mounted mop receptors with wall mounted faucets are located in Janitors' Rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	30	FEB-13

Event: Replace Sinks (21)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$33,100	Unassigned

Updated: FEB-13

D2010.05 Showers**

There is a single shower stall with a shower head and mixing valve.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	30	FEB-13

Event: Replace Shower (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$4,000	Unassigned

Updated: FEB-13

D2010.08 Drinking Fountains/Coolers**

There are two types of drinking fountains. Free standing stainless steel drinking fountains and wall mounted drinking fountains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	35	FEB-13

Event: Replace Drinking Fountains (5)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$17,000	Unassigned

Updated: FEB-13

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

There are 5 wall hung flush valve urinals, 5 vitreous china, wall hung lavatories with manual faucets, 17 counter mounted stainless steel lavatories, 19 floor mounted flush valve water closets and 5 tank type water closets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	35	FEB-13

Event: Replace Washroom Fixtures (5-UR, 22-Lav, 24-WC)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$68,000	Unassigned

Updated: FEB-13

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper domestic water piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

D2020.01.02 Valves: Domestic Water**

Domestic water valves are bronze body.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	40	FEB-13

Event: Replace Domestic Water Valves (75 est.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$86,000	Unassigned

Updated: FEB-13

D2020.01.03 Piping Specialties (Backflow Preventers)**

Back flow prevention devices are installed on the sprinkler system, domestic water heater and to the heating system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	20	FEB-13

Event: Replace Backflow Preventors (1-100mm, 2-50mm)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$11,400	Unassigned

Updated: FEB-13

D2020.02.02 Plumbing Pumps: Domestic Water**

A bronze body in-line pump circulates domestic hot water in the distribution piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2010	20	FEB-13

Event: Replace Domestic Water Circulation Pump (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$1,000	Unassigned

Updated: FEB-13

D2020.02.06 Domestic Water Heaters**

A natural gas-fired domestic hot water heater manufactured by A.O. Smith (M/N:BTRC400A 118 and S/N:1025M000984) provides hot water to the building. The heating capacity of the tank is 251 MBH and the storage capacity is 100 US Gallons.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2010	20	FEB-13

Event: Replace Domestic Water Heater (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$12,000	Unassigned

Updated: FEB-13

D2020.03 Water Supply Insulation: Domestic*

Domestic water is insulated with fibreglas insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

D2030.01 Waste and Vent Piping*

Waste and vent piping is of copper and cast iron material.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

D2040.01 Rain Water Drainage Piping Systems*

Rain water drainage piping is made of cast iron.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

D2040.02.04 Roof Drains*

Roof drains have cast iron bodies and aluminum dome strainers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

D3010.02 Gas Supply Systems*

Natural gas is distributed to gas fired equipment with carbon steel piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

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

There are two Raypak E18226WTD-W hot water boilers. They are natural gas fired and atmospheric vented. Heating capacity of the boilers is 643 MBH. Boilers are equipped with low water fuel cut-off protection and relief valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	35	FEB-13

Event: Replace Heating Boilers & Accessories (2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$91,000	Unassigned

Updated: FEB-13

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

The boilers are vented separately with Class "B" chimneys. A galvanized sheet metal duct provides an opening for supplying combustion air from the outdoor into the mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	35	FEB-13

Event: Replace Chimneys (8m) & Comb. Air (8m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$12,000	Unassigned

Updated: FEB-13

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

Chemical water treatment for the hot water heating system can be introduced into the system with the pot feeder.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

D3040.01.01 Air Handling Units: Air Distribution**

There are two air handling units, one serves the Classrooms. The other unit serves the Gymnasium. The Classroom unit supplies 10,674 l/s and the Gymnasium unit supplies 4,300 l/s.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	30	FEB-13

Event: Replace Air Handling Units (2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$65,000	Unassigned

Updated: FEB-13

D3040.01.04 Ducts: Air Distribution*

Ducts are made of galvanized sheet metal.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Air outlets are primarily ceiling diffusers with some linear wall grilles and wall grilles with adjustable louvers. Outdoor louvers are used for air inlet.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

D3040.03.01 Hot Water Distribution Systems**

Hot water distribution is accomplished with two pumps circulating water from the heating boilers through a system of piping circuits to perimeter wall radiation, duct mounted reheat coils and to a heat exchanger which transfers heat to an ethylene glycol/water mixture for the H&V unit heating coils.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	40	FEB-13

Event: Replace Hot Water Distribution Systems (approx. 1200m piping)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$500,000	Unassigned

Updated: FEB-13

D3040.04.01 Fans: Exhaust**

Aluminum dome type roof mounted exhaust fans serve the washrooms. There are also centrifugal exhaust fans located on the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	30	FEB-13

Event: Replace Exhaust Fans (10)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$17,700	Unassigned

Updated: FEB-13

D3040.04.03 Ducts: Exhaust*

Exhaust ducts are made of galvanized sheet metal.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

D3040.04.05 Air Outlets and Inlets: Exhaust*

Exhaust grilles are mostly fixed louver grilles. Exhaust air is relieved through roof mounted relief air hoods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

D3050.02 Air Coils - Heating Coils**

There are reheat coils (17) in the supply air duct.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	30	FEB-13

Event: Replace Heating Coils (17)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$34,000	Unassigned

Updated: FEB-13

D3050.05.02 Fan Coil Units**

Fan coil units are used in the entrances to the main school. Two fan coil units are located above the ceiling and the remainder are mounted on the floor. The fans on the units are cycled with electric thermostats.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	30	FEB-13

Event: Replace Fan Coil Units (7)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$21,000	Unassigned

Updated: FEB-13

D3050.05.03 Finned Tube Radiation**

Finned tube radiation is located in steel cabinets which is mounted inside the exterior perimeter walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	40	FEB-13

Event: Replace Finned Tube Radiation (210m est.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$95,000	Unassigned

Updated: FEB-13

D3050.05.06 Unit Heaters**

Hydronic unit heaters, which are heated by the boiler heating system, are located in the gymnasium (3) and mechanical room (2).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	30	FEB-13

Event: Replace Unit Heaters (5)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$15,000	Unassigned

Updated: FEB-13

D3060.02.02 Pneumatic Controls**

A Johnson pneumatic control system was installed in 1991 and is used to operate terminal devices. The pneumatic system is supported with instrument air with a Devilbiss model 220 compressed air system with duplex compressors mounted on a horizontal tank.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	40	FEB-13

Event: Replace Pneumatic Controls (5284 m2 gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$77,000	Unassigned

Updated: FEB-13

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

A Delta DDC system with energy management and control functions manages the buildings systems.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	FEB-13

Event: Replace DDC System (5284 m2 gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$138,000	Unassigned

Updated: FEB-13

D4010 Sprinklers: Fire Protection*

The main school has a wet sprinkler system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Carbon dioxide hand type fire extinguishers are located in wall mounted cabinets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	0	FEB-13

S5 ELECTRICAL

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

The Main Switchboard is a free standing, front access service and distribution switchboard (Westinghouse Pow-R-Line) rated 1200A, 120/208V, 3 phase, 4 wire, with a 1200A thermal magnetic (fixed thermal, adjustable magnetic) main breaker and thermal magnetic distribution circuit breakers, ranging from 100A to 400A. The service is metered by the Utility but has a digital customer's meter also. Demand is recorded at 100 kVA (278A @ 120/208V).

Rating	Installed	Design Life	Updated
5 - Good	1991	40	FEB-08
	Capacity Size	Capacity Unit	
	1200A, 120/208V	N/A	

Event: Replace Main Switchboard

Type	Year	Cost	Priority
Lifecycle Replacement	2031	\$73,230	Unassigned

Updated: APR-08

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

Branch Circuit Panelboards are rated 225A, 120/208V, 3 phase, 4 wire solid neutral, typically 42 circuits - 84 circuit panels are doubled. Portables have their self-contained single phase, 120/240V panelboards.

Rating	Installed	Design Life	Updated
5 - Good	1991	30	FEB-08
	Capacity Size	Capacity Unit	
	N/A	N/A	

Event: Replace Branch Circuit Panelboards (9 - 120/208V, 7 - 120/240V)

Type	Year	Cost	Priority
Lifecycle Replacement	2021	\$50,697	Unassigned

Updated: APR-08

D5010.07.01 Switchboards, Panelboards, and (Motor) Control Centers**

The Motor Control Centre (MCC) by Westinghouse is a free standing, wall supported customized motor control centre consisting of 3 phase, full voltage, combination magnetic starters with circuit breaker disconnects, H-O-A switches and pilot lights. There are 6 two-speed starters, 8 single-speed starters and 5 single speed spares. The 5 section MCC includes has a control terminal section as well as some spaces for future additions.

Rating	Installed	Design Life	Updated
5 - Good	1991	30	APR-08
	Capacity Size	Capacity Unit	
	N/A	N/A	

Event: Replace Motor Control Centre (5 sections c/w 6 2-speed & 8 single speed starters)

Type	Year	Cost	Priority
Lifecycle Replacement	2021	\$39,431	Unassigned

Updated: APR-08

D5010.07.02 Motor Starters and Accessories**

Three phase magnetic starters by Westinghouse are contained in the MCC. Single phase manual starters, also by Westinghouse, are grouped together in a customized cabinet with labels and pilot lights.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	30	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

Event: Replace Manual Starters and Accessories (6)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$1,352	Unassigned

Updated: APR-08

D5020.01 Electrical Branch Wiring*

Wiring method is cables in conduit, concealed in finished areas (or, in some cases, in prefabricated raceways) and surface mounted in utility areas. Wiring devices are specification grades. There are typically 4 or 5 receptacles in a classroom from at least two circuits.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

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

Room lighting is locally controlled by line voltage switches. Corridor and public space lighting are group controlled by low voltage switches. Public washroom lights are motion sensor controlled. The Gymnasium HID lights are switched on with the supplementary incandescent lights, which are scheduled to remain on for about 10 minutes until the HID (metal halide) lights come to full brightness.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

D5020.02.02.01 Interior Incandescent Fixtures*

Incandescent lighting is present in the Gymnasium, controlled by the dimmer panel on stage.
 - Industrial type pendant lights with 300W lamps and protected by wireguards serve as supplementary lighting in the Gymnasium - coming on with the metal halide initially and as low level ambient lights during non-athletic functions (they are dimmable).
 - High intensity halogen floodlights; also use as stage lights.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

D5020.02.02.02 Interior Fluorescent Fixtures**

The fluorescent lighting system has been converted in 1994 to T8 32W lamps and electronic ballasts. Recessed downlights are all compact fluorescent lamps.

The dominant lighting fixture is the 3-lamp recessed type with parabolic louvres, centre lamp separately switched, for the classrooms and offices. There are also recessed fixtures with lay-in acrylic lenses and surface mounted with wrap around lenses. Valance lighting adorn the corridors and the centre portion of the building, which also includes some indirect (cove lighting) lights adjacent to the skylights. Tubular fixtures with egg crate louvres surround the Alcoves with skylights above.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1994	30	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

Event: Replace Fluorescent Fixtures (1300 fixtures)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$315,451	Unassigned

Updated: APR-08

D5020.02.02.03 Interior Metal Halide Fixtures*

The Gymnasium lighting system is metal halide (supplemented by incandescent pendant lights). These are 400W pendants (10) with Lexan prismatic lenses.

Direct and indirect metal halide fixtures are used in the atria - these are 175W.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

D5020.02.03.02 Emergency Lighting Battery Packs**

Emergency lighting battery packs (EmergiLite) with integral and remote lighting heads are provided in the corridors, at exit locations and in public washrooms - these are the ceiling mounted recessed, decorative type. Lighting packs in mechanical and electrical rooms are the standard wall mounted ones. Emergency lighting circuits are also connected to exit lights throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	20	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

Event: Replace Emergency Lighting Battery Packs (24)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$13,519	Unassigned

Updated: APR-08

D5020.02.03.03 Exit Signs*

Internally illuminated exit lights with solid state LED strips suitable for AC and DC operation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

High pressure sodium exterior lighting includes square packs on 6m lighting standards for the parking lot, wall packs of various sizes and recessed soffit lights at the main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

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

Exterior lighting is photoelectric cell controlled with manual override.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

D5030.01 Detection and Fire Alarm**

The Edwards ESA fire alarm system is a hard wired, single stage and multi-zoned system. The control panel with its integral annunciator is located at the front entrance with a remote annunciator in the Administration Office. The system uses manual and automatic (heat and smoke detectors) detection devices and audible only (bells) signaling devices. The system is monitored by ADT.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	25	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

Event: Replace Fire Alarm System (control panel & field devices)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$73,230	Unassigned

Updated: APR-08

D5030.02.02 Intrusion Detection**

The DSC Intrusion Alarm System employs motion sensors and door contacts for intrusion detection. It is activated by a coded keypad, located at the rear/staff entrance. The system is monitored by ADT.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	25	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

Event: **Replace Intrusion Alarm System (control panel and field devices)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2028	\$22,533	Unassigned

Updated: APR-08

D5030.02.03 Security Access**

RBH 2000 IRC keyless system is located at the front entry of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	25	FEB-13

Event: **Replace Security access system**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2028	\$6,500	Unassigned

Updated: FEB-13

D5030.02.04 Video Surveillance**

Video surveillance consists of indoor and outdoor cameras, monitored by ADT.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	25	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

Event: **Replace Video Surveillance Equipment (Cameras & control equipment)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$11,266	Unassigned

Updated: APR-08

D5030.03 Clock and Program Systems*

The master clock and program system is from the Dukane MCS panel, which provides programmed class changes via the public address loudspeakers. A few slave digital clocks from the MCS are evident but the majority of clocks are simply electric clocks from AC outlets or battery clocks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	0	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

D5030.04.01 Telephone Systems*

The telephone system is the Panasonic Digital Super Hybrid System, which provides the telephone and intercom needs throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	0	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

D5030.04.05 Local Area Network Systems*

There is extensive data distribution in the school - computer rooms in the middle of the school and all classrooms and offices - with a SuperNet entry. Cables are category 5 and some category 5e.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1998	0	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

D5030.05 Public Address and Music Systems**

The public address head end equipment is the Dukane MCS 350 Sound System, upgraded in 2003. It is essentially an amplifier which interfaces with the telephone system for paging activities and a cassette for music. The loudspeakers and wiring remain the same (1991) and the school sound intercom equipment is replaced by the telephone sets. The Rauland Gymnasium sound system, which interfaces with the main school sound system remains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	20	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

Event: **Replace Public Address System (head end equipment and field devices.)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$22,533	Unassigned

Updated: APR-08

D5030.06 Television Systems*

There is a cable television distribution system in the school and every classroom is provided with a connection. A large television set (JVC) with a DVD/VCR player (JVC) is provided to every classroom (including Staff Room and Administration Office).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	0	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

D5030.07 Other Communications and Security Systems*

A FM Voice Enhancement System is available in every classroom. It is a wireless system using a wireless microphone through radio frequency (FM) to the amplifier and distributed (hard wired) to separate loudspeakers in the classroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	N/A	N/A	

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.02 Library Equipment*

Free standing adjustable wood bookshelves, wood magazine and book racks. Various tables and chairs and study carrels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

E1020.03 Theatre and Stage Equipment*

Fabric stage curtains in ANC.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

E1090.01.03 Floor and Wall Cleaning Equipment*

Typical floor cleaning buckets and tools.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

E1090.04 Residential Equipment*

Full size refrigerators and stoves in staff room and gym servery.
Washer & dryer in janitor room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2002	0	FEB-13

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Retractable and fixed basketball backboards, hanging mesh curtain divider and climbing wall in the Gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

E2010.02 Fixed Casework**

Wall mounted and base cabinets and full height storage units.
Plywood with plastic laminate to counters and exposed surfaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	35	FEB-13

Event: Replace fixed casework (gfa - 3,190.6 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$303,000	Unassigned

Updated: FEB-13

E2010.03.01 Blinds**

Some interior blinds. Most blinds are internal to the window units (See B2020.01.01.02)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	30	FEB-13

Event: Replace Interior Blinds (25.6 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$2,800	Unassigned

Updated: FEB-13

E2010.04 Fixed Floor Grilles and Mats*

Steel floor grates cover openings for trees at 5 locations in the library.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

E2010.06 Fixed Interior Landscaping*

Five trees planted at 5 locations in openings in the slab in the central area. Steel floor grates cover openings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1991	0	FEB-13

S8 SPECIAL ASSESSMENT

K2030.06 Acoustical Privacy*

Re: C1010.03 Interior Operable Folding Panel Partition** - Site personnel advise that the partition is not providing adequate acoustic separation between the Gym and ANC (Music Room).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	2012	0	FEB-13

Event: Relocate the Music Room or add a second acoustic partition (28 m²)

Concern:

Site personnel advise that the partition is not providing adequate acoustic separation between the Gym and ANC (Music Room).

Recommendation:

Here are two recommended options:

Option 1:

If space is available, move the Music Room classroom to another location and retrofit that room to a special purpose music room and retain the existing ANC as a Stage and performance venue.

Option 2:

If space is available, and the logistics could work, add a second acoustic panel partition in front or behind the existing partition, effectively doubling up (or more) the existing mass to further decrease the sound levels between rooms further.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2013	\$30,000	Medium

Updated: FEB-13

K4010.01 Barrier Free Route: Parking to Entrance*

There is a BF parking stall with curb cut in the west parking lot which leads to a ramped concrete walkway leading to the front entrance doors

See K4010.02 BF Entrances for BF Access Upgrade: Add power doors and signage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

K4010.02 Barrier Free Entrances*

The entrance doors do not have power operators.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1991	0	FEB-13

Event: Install power door operators

Concern:

Power door operators are required to meet current barrier free standards.

Recommendation:

Install power door operators at the front entrance and signage from the parking to the BF entrance

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2012	\$5,633	Unassigned

Updated: FEB-13

K4010.03 Barrier Free Interior Circulation*

Interior circulation is barrier free. Ramps are located where required.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-13

K4010.04 Barrier Free Washrooms*

There is a barrier free washroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

K4030.01 Asbestos*

A report dated August 31, 2002 based on a survey conducted by G-Com Consulting indicates that no asbestos containing materials were found.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

K4030.04 Mould*

No mould identified or reported.

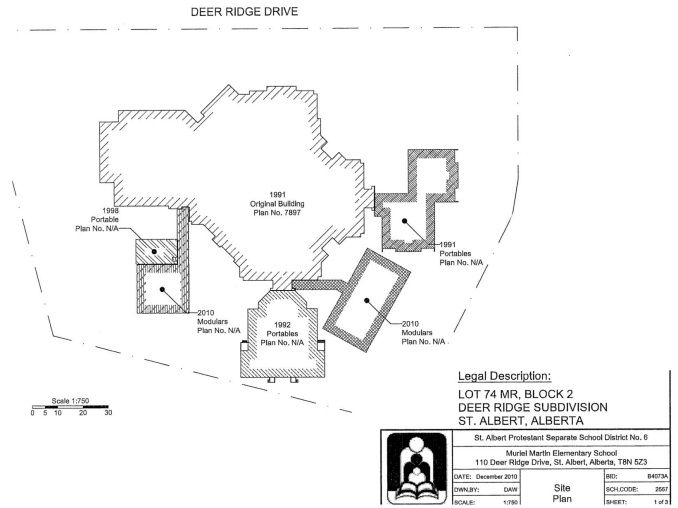
<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	0	FEB-08

K5010.01 Site Documentation*

Prime Consultant: Wade Engineering Ltd.
 Year of Evaluation: 2012
 Areas Evaluated: all

Site Plan 2010 and 2011 Google Earth image.

Rating	Installed	Design Life	Updated
5 - Good	2012	0	FEB-13



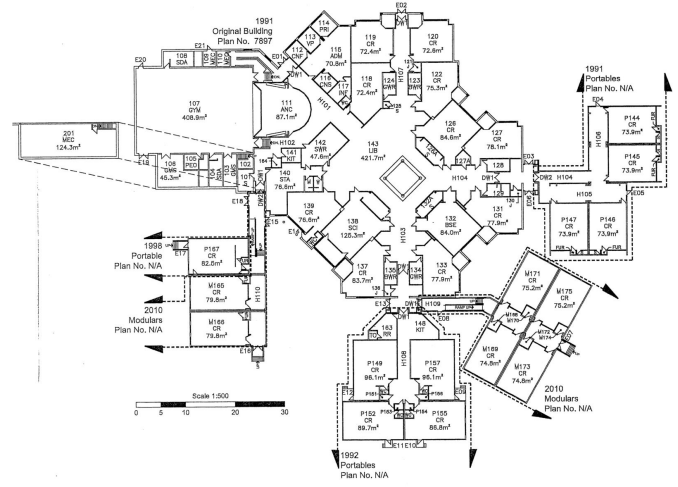
Site Plan (December 2010)

K5010.02 Building Documentation*

Prime Consultant: Wade Engineering Ltd.
 Year of Evaluation: 2012
 Areas Evaluated: all

Floor Plans December 2010

Rating	Installed	Design Life	Updated
5 - Good	2012	0	FEB-13



Floor Plan (December 2010)