# **RECAPP Facility Evaluation Report**

**Chinook's Edge School Division No. 73** 



**Fox Run Middle School** 

B4713A Sylvan Lake

# Sylvan Lake - Fox Run Middle School (B4713A)

## **Facility Details**

**Building Name:** Fox Run Middle School Address: 2 Falcon Ridge Drive

Location: Sylvan Lake

Building Id: B4713A Gross Area (sq. m): 6,555.76 **Replacement Cost:** \$21,231,000

Construction Year: 1999

## **Evaluation Details**

Evaluation Company: Bacz Engineering Ltd.

Evaluation Date: October 19 2012

**Evaluator Name:** Eric Lumley

**Total Maintenance Events Next 5 years:** \$296,500 1.40%

5 year Facility Condition Index (FCI):

## **General Summary:**

The Fox Run School is a shared campus building with Mother Teresa School and has some shared space. It is masonry construction constructed in 2000. It is a two storey building with a gross area of 6555 sq.m..

#### **Structural Summary:**

This building has a structural steel framed on concrete foundation walls on concrete strip footings, concrete slab on grade, concrete topping on steel deck second floor, and a steel deck roof.

#### **Envelope Summary:**

This building has a split face block veneer to approximately 2400 high above grade used in combination with EIFS and metal cladding. Windows are double glazed in anodized aluminum frames. The roof is a single ply loose laid EPDM membrane.

### **Interior Summary:**

The interior walls are primarily painted gypsum board, with accent strips of metal cladding in the main lobby areas. The floor finish is resilient sheet vinyl. The steel stair treads are rubber finished complete with non-slip inserts. Most corridor walls are 200 mm concrete block, painted. Fire rated hollow metal doors and pressed steel frames are installed on Janitorial, storage, and service rooms, in addition to stairwells. Classroom doors are SCWD in pressed steel frames.

#### **Mechanical Summary:**

Heating and air conditioning system for the entire school consists of heat pumps system fed from the central boiler plant and complete with an outdoor dry cooler. Main boiler plant is located in common mechanical room that is located in the Chinook's Edge school section.

Heat pumps provide zone heating and cooling control to all areas.

Fresh air to the school is provide by designated hydronic air handling units serving Red Deer Catholic School, Chinook's Edge School, Common Areas, Kitchen and Industrial Arts.

Domestic hot water is generated by two tank type, gas fired commercial water heaters located in the boiler room.

Domestic hot water and tempered water recirculation system in place.

Conventional plumbing fixtures throughout the school.

Industrial Arts, Woodworking and Kitchen areas served by designated ventilation / exhaust systems.

All building controls are direct digital type complete with remote access.

Fire suppression system consists of sprinkler system and hand held fire extinguishers. Sprinkler tree complete with excess pressure pump located in boiler room.

Humidification system is currently disconnected and not required by maintenance personnel.

Overall mechanical system components are in good condition.

## **Electrical Summary:**

The building has underground power service, and is fed from an outdoor pad mounted transformer to an 1600A. 347/600V 3 phase main electrical distribution panel which is located inside Fox Run Building. The MDP feeds both schools. The main breaker for the school is EP-600A that feeds a CDP in room 280 to distribute power through out the building. Fiber optic is located inside Fox Run Building and feeds both schools. Analog telephone service is available and is fed from Mother Teresa. Telephone service for Fox Run is through VOIP. The cable TV service is fed from Mother Teresa. T8 fluorescent lights are installed throughout the school and T5 fluorescent lights were changed from metal halide inside gym. The fire alarm consists of an addressable Edwards EST2 main FACP located in main entrance of Fox Run, and two annuciators with one annuciator serving the Mother Teresa. The overall rating for electrical system is good.

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\*

The concrete foundation walls on strip footings.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

#### A1030 Slab on Grade\*

Concrete slab on grade throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

#### B1010.01 Floor Structural Frame (Building Frame)\*

Concrete topping on steel deck on steel columns and beams.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## B1010.03 Floor Decks, Slabs, and Toppings\*

Second floor concrete topping on metal deck.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## B1010.09 Floor Construction Fireproofing\*

It is assumed that fireproofing was done in accordance with the building code at the time of construction.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

#### B1010.10 Floor Construction Firestopping\*

Firestopping is acceptable throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable20000FEB-09

#### B1020.01 Roof Structural Frame\*

Steel deck on OWSJ on steel beams and columns.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

# **B1020.04 Canopies\***

Steel framed structures at main entrance and community entrance.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	2000	0	JAN-13

## **S2 ENVELOPE**

#### B2010.01.02.02 Concrete Block: Ext. Wall Skin\*

Concrete block exterior veneer. Some localized staining of the concrete block at the gym due to overflow from the roof scuppers.

RatingInstalledDesign LifeUpdated3 - Marginal20000JAN-13

Event: Clean concrete block where stained.B.O.E. 85

sq.m.

Concern:

Staining and discolouration of the split faced block at the gym due to overflow from the roof scuppers.

Recommendation:

Clean the block by scrubbing with soap and water.

**Consequences of Deferral:** 

Continual overflow on to the block may cause premature deterioration and is unsightly.

TypeYearCostPriorityRepair2014\$5,000Low

**Updated: JAN-13** 

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

Acrylic stucco is on all building facades and is used in conjunction with split faced concrete block and metal siding.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

#### B2010.01.06.03 Metal Siding\*\*

Corrugated metal siding used horizontally in conjunction with prefinished metal siding.

RatingInstalledDesign LifeUpdated4 - Acceptable200040JAN-13

Event: Replace Metal Siding. B.O.E. 100 sq.m.

TypeYearCostPriorityLifecycle Replacement2040\$14,200Unassigned

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

Caulking at all changes in materials and around doors and windows.

RatingInstalledDesign LifeUpdated4 - Acceptable200020JAN-13

Event: Replace Joint Sealers. B.O.E. 387 m

TypeYearCostPriorityLifecycle Replacement2020\$13,000Unassigned

**Updated: JAN-13** 

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

Tyvek building wrap is installed on the exterior side of the sheathing. It is assumed there is batt insulation between the steel stud exterior walls with polyethylene interior vapour retarder.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

#### B2010.06 Exterior Louvers, Grilles, and Screens\*

Prefinished metal louvres are on the east facade.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## B2010.09 Exterior Soffits\*

Prefinished metal soffits on projecting roof overhangs.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

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

Anodized aluminum frames with double glazing throughout the building.

RatingInstalledDesign LifeUpdated4 - Acceptable200040JAN-13

Event: Replace aluminum windows. B.O.E. 137 sq.m.

TypeYearCostPriorityLifecycle Replacement2040\$172,000Unassigned

Updated: JAN-13

## B2020.02 Storefronts: Windows\*\*- Aluminum Framed

Aluminum curtain walling at entrances.

RatingInstalledDesign LifeUpdated4 - Acceptable200040JAN-13

Event: Replace aluminum curtain walling. B.O.E. 135

sq.m.

TypeYearCostPriorityLifecycle Replacement2040\$169,000Unassigned

**Updated:** JAN-13

B2030.02 Exterior Utility Doors\*\*

Insulated hollow metal exterior doors.

RatingInstalledDesign LifeUpdated4 - Acceptable200040JAN-13

**Event:** Replace Exterior Utility Doors. B.O.E. 4 doors

TypeYearCostPriorityLifecycle Replacement2040\$3,600Unassigned

Updated: JAN-13

B2030.03 Large Exterior Special Doors (Overhead)\*

Two prefinished insulated metal panel overhead doors., each approximately 3m high x 3mwide.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

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

Loose laid single ply membrane.

RatingInstalledDesign LifeUpdated4 - Acceptable200025JAN-13

**Event:** Replace Membrane Roofing. B.O.E. 3910 sq.m.

TypeYearCostPriorityLifecycle Replacement2025\$837,300Unassigned

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

Access to the roof is through the hatch from the Mechanical room.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

## S3 INTERIOR

#### C1010.01 Interior Fixed Partitions\*

Concrete block partitions to corridors.

Partition walls between classrooms are steel stud with gypsum board both sides.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

#### C1010.03 Interior Operable Folding Panel Partitions\*\*

Folding operable wall in ancillary classroom.

RatingInstalledDesign LifeUpdated4 - Acceptable200030JAN-13

**Event:** Replace folding panel partitions.BOE: 18 sq.m.

TypeYearCostPriorityLifecycle Replacement2030\$22,000Unassigned

Updated: JAN-13

#### C1010.04 Interior Balustrades and Screens, Interior Railings\*

Painted metal railings and balustrades to mezzanines.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## C1010.05 Interior Windows\*

Interior windows are single glazed in painted, pressed steel frames.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## C1010.06 Interior Glazed Partitions and Storefronts\*

Interior storefronts at the office and administration areas are single glazed in pressed steel and aluminum frames.

RatingInstalledDesign LifeUpdated4 - Acceptable20000FEB-09

## C1020.01 Interior Swinging Doors (& Hardware)\*

Wood veneer solid core wood doors to classroom and offices.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

#### C1020.03 Interior Fire Doors\*

Fire rated metal doors and frames to storage rooms and mechanical areas.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## C1030.01 Visual Display Boards\*\*

Whiteboard and tackboard to classrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable200020JAN-13

## Event: Replace whiteboard and tackboard. B.O.E. 75 units

TypeYearCostPriorityLifecycle Replacement2020\$54,700Unassigned

Updated: JAN-13

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

Prefinished metal toilet partitions to washrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable200030JAN-13

#### Event: Replace toilet partitions. B.O.E. 14 cubicles.

TypeYearCostPriorityLifecycle Replacement2030\$29,000Unassigned

Updated: JAN-13

## C1030.08 Interior Identifying Devices\*

Interior doors are labeled with a room number, teachers name, or room function.

RatingInstalledDesign LifeUpdated4 - Acceptable20000FEB-09

#### C1030.10 Lockers\*\*

Prefinished full height lockers in corridors.

RatingInstalledDesign LifeUpdated4 - Acceptable200030JAN-13

Event: Replace Lockers. B.O.E. 385 lockers

TypeYearCostPriorityLifecycle Replacement2030\$209,000Unassigned

**Updated: JAN-13** 

## C1030.14 Toilet, Bath, and Laundry Accessories\*

All washrooms are equipped with mirrros, soap dispensers and toilet roll holders.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## C2010 Stair Construction\*

Steel pan stairs with concrete fill, steel stringers.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## C2020.05 Resilient Stair Finishes\*\*

Rubber studded treads and landings, with non-slip nosings.

RatingInstalledDesign LifeUpdated4 - Acceptable200020JAN-13

Event: Replace Resilient Stair Treads. B.O.E. 108 treads

TypeYearCostPriorityLifecycle Replacement2020\$15,000Unassigned

Updated: JAN-13

## C2020.08 Stair Railings and Balustrades\*

Painted metal guardrails and balusters.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## C3010.11 Interior Wall Painting\*

Paint finish concrete block and gypsum board walls throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## C3020.01.02 Painted Concrete Floor Finishes\*

Mechanical room concrete floor is painted.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## C3020.04 Wood Flooring\*\*

Cushioned maple sports flooring to gym.

RatingInstalledDesign LifeUpdated4 - Acceptable200030JAN-13

**Event:** Replace Gymnasium Wood Flooring. B.O.E. 460

sq.m.

TypeYearCostPriorityLifecycle Replacement2030\$181,000Unassigned

Updated: JAN-13

#### C3020.07 Resilient Flooring\*\*

Resilient sheet flooring in corridors and classrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable200020JAN-13

**Event:** Replace Resilient Flooring. B.O.E. 5450 sq.m.

TypeYearCostPriorityLifecycle Replacement2020\$502,000Unassigned

#### C3020.08 Carpet Flooring\*\*

Glued down carpet is installed in the administration offices and the library.

RatingInstalledDesign LifeUpdated4 - Acceptable200015JAN-13

**Event:** Replace Carpet Flooring. B.O.E. 645 sq.m.

TypeYearCostPriorityLifecycle Replacement2016\$48,500Unassigned

**Updated: JAN-13** 

## C3030.02 Ceiling Paneling (Wood)\*

Curved acoustic panels suspended from ceiling in music room.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

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

Lay-in acoustic tile is installed in corridors, classrooms, and the administration offices.

RatingInstalledDesign LifeUpdated4 - Acceptable200025JAN-13

Event: Replace Acoustic Ceiling Tiles. B.O.E. 2556 sq.m.

TypeYearCostPriorityLifecycle Replacement2025\$128,000Unassigned

Updated: JAN-13

## C3030.07 Interior Ceiling Painting\*

Painted gypsum board ceilings to utility areas, washrooms and change rooms. Painted steel deck form ceiling of atrium.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

# D1010.02 Lifts\*\*

The hydraulic Handicap Wheelchair Lift. Sized for one handicap person and one attendant.

RatingInstalledDesign LifeUpdated4 - Acceptable200025JAN-13

**Event:** Replace handicapped wheelchair lift.B.O.E. one

TypeYearCostPriorityLifecycle Replacement2025\$26,700Unassigned

## **S4 MECHANICAL**

#### D2010.04 Sinks\*\*

Stainless steel single and double compartment sinks located throughout the school.

Sinks serving science labs complete with bottle traps.

Semi circular washfountain located in the Industrial Arts area.

Floor mounted, molded stone mop sinks with vacuum breakers located in Janitor Rooms.

RatingInstalledDesign LifeUpdated5 - Good200030JAN-13

Event: Replace 21 Sinks.

TypeYearCostPriorityLifecycle Replacement2030\$30,000Unassigned

Updated: JAN-13

## D2010.05 Showers\*\*

Gang showers with push button faucets serving change rooms. Fiberglass shower with mixing valve serving teacher's change room.

**Event:** Replace 18 Showers.

TypeYearCostPriorityLifecycle Replacement2030\$36,000Unassigned

Updated: JAN-13

#### D2010.08 Drinking Fountains/Coolers\*\*

Wall mounted, stainless steel non refrigerated drinking fountains.

RatingInstalledDesign LifeUpdated5 - Good200035JAN-13

**Event: Replace 8 Drinking Fountains.** 

TypeYearCostPriorityLifecycle Replacement2035\$19,000Unassigned

#### D2010.10 Washroom Fixtures (WC, Lav, UrnI)\*\*

UR - wall mounted, vitreous china, flush valve operation.

WC - floor mounted, vitreous china, elongated bowl, open fron seat, less cover, flush valve.

LV - Bradley 3-station wash fountain complete with infrared faucets.

RatingInstalledDesign LifeUpdated5 - Good200035JAN-13

**Event: Replace 44 Washroom Fixtures (WC, Lav, Urnl)** 

TypeYearCostPriorityLifecycle Replacement2035\$66,000Unassigned

**Updated:** JAN-13

D2020.01.01 Pipes and Tubes: Domestic Water\*

Copper type L piping distribution to plumbing fixtures.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

D2020.01.02 Valves: Domestic Water\*\*

Gate, ball and check valves within the domestic water distribution system. Central mixing valve serving showers located in the boiler room.

RatingInstalledDesign LifeUpdated5 - Good200040JAN-13

Event: Replace 220 Valves: Domestic Water

TypeYearCostPriorityLifecycle Replacement2040\$45,000Unassigned

Updated: JAN-13

D2020.01.03 Piping Specialties (Backflow Preventers)\*\*

Double check valve assembly 100mm potable water system. Approved double check valve assembly serving sprinkler system.

Check valves serving domestic hot water system.

Vacuum breakers serving mops inks and hose bibbs.

RatingInstalledDesign LifeUpdated5 - Good200020JAN-13

**Event: Replace Piping Specialties (Backflow** 

Preventors)(1).

TypeYearCostPriorityLifecycle Replacement2020\$35,000Unassigned

**Updated:** JAN-13

## D2020.02.02 Plumbing Pumps: Domestic Water\*\*

In-line domestic hot water recirculation pumps, Armstrong S25.

RatingInstalledDesign LifeUpdated5 - Good200020JAN-13

**Event: Replace 2 Plumbing Pumps: Domestic Water.** 

TypeYearCostPriorityLifecycle Replacement2020\$4,500Unassigned

**Updated: JAN-13** 

# D2020.02.06 Domestic Water Heaters\*\* - 2006

Nautural gas fired, tank type domestic water heater. A..Smith model BTRC500A, 131 kW heating capacity, 285 I storage volume.

RatingInstalledDesign LifeUpdated5 - Good200620JAN-13

**Event:** Replace Domestic Water Heater.(1)

TypeYearCostPriorityLifecycle Replacement2026\$7,000Unassigned

Updated: JAN-13

## D2020.02.06 Domestic Water Heaters\*\* - 2009

Nautural gas fired, tank type domestic water heater. A..Smith model BTRC500A, 131 kW heating capacity, 285 l storage volume.

RatingInstalledDesign LifeUpdated5 - Good200920JAN-13

**Event:** Replace Domestic Water Heater.(1)

TypeYearCostPriorityLifecycle Replacement2029\$7,000Unassigned

Updated: JAN-13

## D2020.03 Water Supply Insulation: Domestic\*

Domestic water lines are insulated with standard fiberglass jacketed materials.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

#### D2030.01 Waste and Vent Piping\*

PVC and copper.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

## D2030.03 Waste Piping Equipment\*

Grease trap serving kitchen sinks. Bottle traps serving science lab sinks.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

## D2040.01 Rain Water Drainage Piping Systems\*

PVC. Rain water collection via roof drains and storm water piping to storm main.

Sump pump complete with Hydromatic spd50h submersible pump serving weeping tile system.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

#### D2040.02.04 Roof Drains\*

Cast iron domes, controlled flow and open flow roof drains.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

## D3010.02 Gas Supply Systems\*

Gas distribution piping to boilers and domestic water heaters. Steel schedule 40. Pressure regulators in mechanical room.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

## D3020.01.01 Heating Boilers & Accessories: Steam\*\*

Weil McLain LGB-6 boiler serving humidification system, 481 LBS/hr of steam. System complete with brine tank, water softener, backflow preventers, chemical treatment and steam piping distribution to three air handling units. Disconnected.

RatingInstalledDesign LifeUpdated5 - Good200035JAN-13

#### **Event: Replace Humidification Boiler and Accessories.(1)**

TypeYearCostPriorityLifecycle Replacement2035\$75,000Unassigned

Updated: JAN-13

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

Heating plant consists of two Weil McLain LGB-22 dual gas boilers. Both boiler have 800 kW heating capacity and provide 60% hot water heating capacity each. Units supply hot water to glycol heat pump loop, unit heaters and air handling units.

RatingInstalledDesign LifeUpdated5 - Good200035JAN-13

**Event:** Replace Boiler Plant.(1)

TypeYearCostPriorityLifecycle Replacement2035\$185,000Unassigned

**Updated:** JAN-13

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

900mm diameter common class B chimney serving boilers up through the roof. 1400X1000 combustion air duct complete with designated fan coil unit and wall louver.

RatingInstalledDesign LifeUpdated5 - Good200035JAN-13

**Event:** Replace Chimneys & Comb. Air.(1)

TypeYearCostPriorityLifecycle Replacement2035\$45,000Unassigned

Updated: JAN-13

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

Chemical pot feeders serving hot water and glycol system. Side stream filter.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

## D3030.05 Cooling Towers\*\*

Dry cooler serving heat pump loop. Cancoil model DFC-204, 1012.1 kW cooling capacity.

**Event: Replace Dry Cooler.(1)** 

TypeYearCostPriorityLifecycle Replacement2025\$135,000Unassigned

**Updated:** JAN-13

#### D3030.07 Heat Pumps\*\*

Horizontal and vertical cabinet heat pumps serving all areas.

Heat pumps are manufactured by Climate Master, HL and VL series. Capacities vary from 125 lps to 1888 lps.

RatingInstalledDesign LifeUpdated5 - Good200015JAN-13

**Event: Replace 54 Heat Pumps.** 

TypeYearCostPriorityLifecycle Replacement2016\$243,000Unassigned

**Updated:** JAN-13

## D3040.01.01 Air Handling Units: Air Distribution\*\*

Packaged indoor air handling units serving classrooms, common areas and Industrial Arts. Both units are complete with glycol heating coils, supply fan section, filter section and humidification (not used anymore).

MAU-1: Engineered Air LM-10, 416 kW heating capacity, 5900 lps supply air volume serving classrooms and Gymnasiums.

MAU-2: Engineered Air LM-16, 217 kW heating capacity, 3068 lps supply air volume serving common area.

Kitchen area is served by designated natural gas direct fired make-up air unit MAU-3 interlock with kitchen exhaust fans.

MAU-3: Engineered Air HE40, 117 kW heating capacity, 1699 lps supply air volume.

RatingInstalledDesign LifeUpdated5 - Good200030JAN-13

**Event:** Replace 3 Air Handling Units.

TypeYearCostPriorityLifecycle Replacement2030\$545,000Unassigned

**Updated:** JAN-13

#### D3040.01.03 Air Cleaning Devices: Air Distribution\*

Replaceable media filters serving air handling units and heat pumps.

Rating Installed Design Life Updated 5 - Good 2000 0 JAN-13

## D3040.01.04 Ducts: Air Distribution\*

Air distribution system via ceiling space.

Galvanized steel, single duct, low velocity, constant volume system.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

#### D3040.01.07 Air Outlets & Inlets: Air Distribution\*

Square supply air diffusers, duct mounted supply air grilles complete with volume dampers, egg crate return air grilles, heavy duty Gymnasium grilles.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

## D3040.03.01 Hot Water Distribution Systems\*\*

Steel and copper piping distribution system, with high and low temperature arrangements serving heat pump loop and heating loop. Glycol solution throughout.

Hot water is circulated via two base mounted single suction pumps: Armstrong 4030, 42 lps @ 150 kPa to perimeter heating units and injects heating water/glycol to heat pump loop.

Two base mounted single suction pumps: Armstrong 4030, 57 lps @ 300 kPa circulate hot water/glycol through heat pump loop.

Reverse return pipe arrangement.

RatingInstalledDesign LifeUpdated5 - Good200040JAN-13

**Event: Replace Hot Water Distribution System. BOE: 6555** 

sq.m. GFA.

TypeYearCostPriorityLifecycle Replacement2040\$660,000Unassigned

**Updated:** JAN-13

#### D3040.03.02 Chilled Water Distribution Systems\*\*

200mm diameter cooling glycol loop serving dry cooler complete with in-line pump, diverting valve, by=pass valve, temperature and pressure sensors.

RatingInstalledDesign LifeUpdated5 - Good200040JAN-13

**Event: Replace Cooling Piping Loop and** 

Accessories.(200mm)

TypeYearCostPriorityLifecycle Replacement2040\$235,000Unassigned

#### D3040.04.01 Fans: Exhaust\*\*

Various types exhaust fans serving designated portions of the building.

Roof mounted dome exhaust fans, ceiling mounted cabinet fans, self contained fume cabinet in Science Room, kitchen range hood fans in Home Economics.

An outdoor Murphy dust collector.

Common exhaust fans were grouped to serve the following areas:Paint Booth, Welding exhaust, Spot Welder Exhaust System, Dust collection, Kitchen Range, Washrooms, Change Roms, Wood shop and common exhaust system. Exhaust fans capacities vary from 94 lps to 2450 lps.

Rating Installed Design Life Updated 2000 30 JAN-13

#### **Event: Replace 17 Exhaust Fans**

TypeYearCostPriorityLifecycle Replacement2030\$43,000Unassigned

Updated: JAN-13

#### D3040.04.03 Ducts: Exhaust\*

Galvanized steel low velocity ductwork to common exhaust fans. Black steel medium velocity ductwork serving kitchen hood. Stainless steel exhaust ductwork serving fume hood exhaust fans.

Rating 5 - Good 2000 Design Life Updated JAN-13

## D3040.04.05 Air Outlets and Inlets: Exhaust\*

Egg crate.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

#### D3050.03 Humidifiers\*\*

Dri Steem maxi bank humidifers serving make up air units. 204 lbs/hr and 105 lbs/hr steam capacity. Humidifiers are disconnected and not required by maintenance personnel.

RatingInstalledDesign LifeUpdated4 - Acceptable200025JAN-13

**Event:** Replace 2 Humidifiers

TypeYearCostPriorityLifecycle Replacement2025\$20,000Unassigned

**Updated:** JAN-13

#### D3050.05.02 Fan Coil Units\*\*

Engineered Air CUH-9 hydronic force flow heaters serving vestibules.

RatingInstalledDesign LifeUpdated5 - Good200030JAN-13

**Event:** Replace 3 Force Flow Heaters

TypeYearCostPriorityLifecycle Replacement2030\$14,000Unassigned

**Updated:** JAN-13

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

Delta direct digital control system in place complete with remote access.

RatingInstalledDesign LifeUpdated5 - Good200020JAN-13

Event: Replace BMS. BOE: 6555 sq.m. GFA.

TypeYearCostPriorityLifecycle Replacement2020\$135,000Unassigned

Updated: JAN-13

## D4010 Sprinklers: Fire Protection\*

Sprinkler system in place as per NFPA 13.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

#### D4030.01 Fire Extinguisher, Cabinets and Accessories\*

Hand held ABC fire extinguishers provided throughout.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

## S5 ELECTRICAL

#### D5010.02 Secondary Electrical Transformers (Interior)\*\*

One 225KVA 600V to 120/208V/3phase dry type transformer is installed in room 280.

RatingInstalledDesign LifeUpdated5 - Good200040JAN-13

**Event:** Replace Secondary Electrical Transformers

(Interior) (one 600V/120/208V transformer)

TypeYearCostPriorityLifecycle Replacement2040\$14,504Unassigned

**Updated: JAN-13** 

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

The main electrical distribution is an 1600A, 347/600V 3 phase Federal Pioneer system, with a breaker section and CT, and a distribution section which has available breaker spaces. There are three breakers installed inside MDP, one 3P-600A is for Fox Run Building, one 3P-600A is for Common Area, and one 3P-400A is for Mother Teresa. All of theses three buildings are metered separately.

RatingInstalledDesign LifeUpdated5 - Good200040JAN-13

**Event:** Replace one Main Electrical Switchboard (Main

Distribution)

TypeYearCostPriorityLifecycle Replacement2040\$61,084Unassigned

**Updated:** JAN-13

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

RatingInstalledDesign LifeUpdated5 - Good200030JAN-13

**Event: Replace 14 Electrical Branch Circuit Panelboards** 

(12 panels plus 2 CDP)

Concern

14 Electrical Branch Circuit Panelboards (12 panels plus 2

CDP)

TypeYearCostPriorityLifecycle Replacement2030\$66,192Unassigned

#### D5010.07.02 Motor Starters and Accessories\*\*

There is a Square D Model 6 motor control centre with two sections located in the main mechanical room. This MCC supplies a variety of air handling units, circulation pumps and compressors.

RatingInstalledDesign LifeUpdated5 - Good200030JAN-13

**Event: Replace Motor Starters and Accessories (2 section** 

MCC)

TypeYearCostPriorityLifecycle Replacement2030\$12,977Unassigned

Updated: JAN-13

#### D5020.01 Electrical Branch Wiring\*

Branch circuit wiring for power and lighting systems is done with EMT and flexible metal conduit.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

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

Low voltage control are installed for the entire school through the Douglas low voltage lighting control panel at various locations.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

## D5020.02.02.02 Interior Fluorescent Fixtures\*\*

T8 fluorescent lights were installed throughout the school in 1999 and T5 fluorescent lights were changed from metal halide inside gym in 2012

RatingInstalledDesign LifeUpdated5 - Good200030JAN-13

**Event: Replace Interior Florescent Fixtures (1024 fixtures)** 

TypeYearCostPriorityLifecycle Replacement2030\$402,432Unassigned

## D5020.02.03.02 Emergency Lighting Battery Packs\*\*

Battery packs and exit/emergency battery pack combo are installed throughout the buildings.

RatingInstalledDesign LifeUpdated5 - Good200020JAN-13

Event: Replace Emergency Lighting Battery Packs (50 EM

battery packs)

TypeYearCostPriorityLifecycle Replacement2020\$57,850Unassigned

**Updated:** JAN-13

## D5020.02.03.03 Exit Signs\*

Exit signs with LED lamps are located throughout the school.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

#### D5020.03.01.03 Exterior Metal Halide Fixtures\*

This school has wall packs installed at the exterior wall, and pole mounted lights at the front parking lot.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

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

The exterior lighting is controlled by a photocell.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

## D5030.01 Detection and Fire Alarm\*\*

The fire alarm consists of an addressable Edwards EST2 main FACP located in main entrance of Fox Run, and two annuciators with one annuciator serving the Mother Teresa. The signaling devices consist of combination of bells and strobe lights.

RatingInstalledDesign LifeUpdated5 - Good200025JAN-13

Event: Replace Detection and Fire Alarm (\$32/square

meter)

TypeYearCostPriorityLifecycle Replacement2025\$209,760Unassigned

Updated: JAN-13

#### D5030.02.02 Intrusion Detection\*\*

The intrusion system consists of door contacts and motion sensors located throughout the school.

RatingInstalledDesign LifeUpdated5 - Good200025JAN-13

**Event: Replace Intrusion Detection (\$20/saqure meter)** 

TypeYearCostPriorityLifecycle Replacement2025\$131,100Unassigned

Updated: JAN-13

#### D5030.02.03 Security Access\*\*

The security access system consists of card reader located at the exterior doors of the school.

RatingInstalledDesign LifeUpdated5 - Good200025JAN-13

**Event: Replace Security Access (\$6110/each)** 

TypeYearCostPriorityLifecycle Replacement2025\$6,110Unassigned

Updated: JAN-13

## D5030.03 Clock and Program Systems\*

The clocks are battery operated.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

#### D5030.04.01 Telephone Systems\*

Analog telephone service is available and is fed from Mother Teresa. Telephone service for Fox Run is through VOIP.

## D5030.04.04 Data Systems\*

The school has the Alberta Supernet through fiber optic cables.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

#### D5030.04.05 Local Area Network Systems\*

The school has three server rooms and WIFI throughout the school.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

## D5030.05 Public Address and Music Systems\*\*

The public address system is integrated with the telephone system and with brand name Rauland Telecenter.

RatingInstalledDesign LifeUpdated5 - Good200020JAN-13

**Event: Replace Public Address and Music Systems** 

(\$10/square meter)

TypeYearCostPriorityLifecycle Replacement2020\$65,550Unassigned

Updated: JAN-13

## D5030.06 Television Systems\*

Television service is available and is fed from Mother Teresa.

RatingInstalledDesign LifeUpdated5 - Good20000JAN-13

## D5090.01 Uninterruptible Power Supply Systems\*\*

There are three APC1000 UPS battery back up for the Data System.

RatingInstalledDesign LifeUpdated5 - Good200030JAN-13

**Event: Replace three Uninterruptible Power Supply** 

Systems (\$1200/each)

TypeYearCostPriorityLifecycle Replacement2030\$3,600Unassigned

# **S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**

#### E2010.02 Fixed Casework\*\*

Upper and lower fixed cabinets are located in classrooms and administration offices.

RatingInstalledDesign LifeUpdated4 - Acceptable200035JAN-13

Event: Replace millwork. B.O.E. 205m

TypeYearCostPriorityLifecycle Replacement2035\$178,000Unassigned

Updated: JAN-13

#### E2010.03.01 Blinds\*\*

All windows have horizontal metal Venetian blinds.

RatingInstalledDesign LifeUpdated4 - Acceptable200030JAN-13

Event: Replace Blinds. B.O.E. 137 sq.m.

TypeYearCostPriorityLifecycle Replacement2030\$16,000Unassigned

Updated: JAN-13

## E2010.05 Fixed Multiple Seating\*\*

Bleacher seating in music room and gym.

RatingInstalledDesign LifeUpdated4 - Acceptable200035JAN-13

Event: Replace bleacher seating in music room and gym.

**B.O.E. 470 seats** 

TypeYearCostPriorityLifecycle Replacement2035\$153,000Unassigned

## S8 SPECIAL ASSESSMENT

#### K4010.01 Barrier Free Route: Parking to Entrance\*

Barrier free access from parking to entrance.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## K4010.02 Barrier Free Entrances\*

Power assist door operator at main entrance.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

#### K4010.03 Barrier Free Interior Circulation\*

Barrier free circulation at one level and a handicapped lift serves the upper floor.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## K4010.04 Barrier Free Washrooms\*

Barrier free washrooms are provided.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## K4030.01 Asbestos\*

No asbestos noted or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## K4030.04 Mould\*

No mould noted or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## K4030.09 Other Hazardous Materials\*

No hazardous materials noted or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable20000JAN-13

## K5010.01 Site Documentation\*

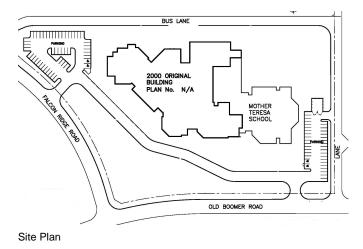
Prime Consultant: Bacz Engineering Ltd.

Year of Evaluation: 2012

Building Area Evaluated: 6555 m2

Rating	
4 - Acceptable	

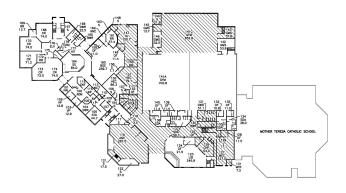
<u>Installed</u>	Design Life	<u>Updated</u>
2012	0	JAN-13



# K5010.02 Building Documentation\*

The School is a shared campus building with Mother Teresa School. It is two storey masonry construction built in 2000.

Rating	<u>Installed</u>	Design Life	<b>Updated</b>
4 - Acceptable	2012	0	JAN-13



Main Floor Plan