RECAPP Facility Evaluation Report

Christ The Redeemer Cs Reg Div #3



St. Mary's School B4745A Okotoks

Facility Details

Building Name: St. Mary's School Address: 42 Cimarron Trail

Location: Okotoks

Building Id: B4745A

Gross Area (sq. m): 5,217.05

Replacement Cost: \$15,865,000

Construction Year: 1998

Evaluation Details

Evaluation Company: Friesen Tokar Architects

Evaluation Date: August 21 2012 **Evaluator Name:** Robin Bartsch

Total Maintenance Events Next 5 years: \$414,300 5 year Facility Condition Index (FCI): 2.61%

General Summary:

The St. Mary's School is a single-storey structure with no basement, originally constructed in 1998. Exterior walls are wood construction with brick veneer. Interior walls are concrete block or wood construction. The original school building has a total floor area of approximately 3,195 square metres. An addition was constructed to the northeast of the building in 2001 with an approximate floor area of 1,296 square metres. Twelve portables, with an approximate floor area of 1,120 square meters were added to the southeast end of the school: two were added in 1999; three were added in 2000, three were added in 2002, and two were added in 2012.

Structural Summary:

Structural drawings were provided at the time of the assessment. According to drawings, foundations consist of concrete piles with grade beams and cast-in-place slab on grade. All portions of the school have load-bearing masonry block and wood framed walls and reinforced, cast-in-place concrete floors. The roof structural frame for all sections of the school is comprised of metal deck supported by open web steel joists and steel wide flange beams.

No major work associated with the school structure was identified during the assessment.

The structural elements of the school are in acceptable condition.

Envelope Summary:

The majority of the exterior cladding of the school consists of clay brick veneer. The roof sections consist of a conventional, modified bitumen (BUR), asphalt and gravel assembly. Exterior doors are typically painted metal doors set in painted metal frames. Windows on the exterior of the building consists of insulating glazing units set in vinyl frames.

No major work associated with the school envelope was identified during the assessment.

The envelope and exterior components of the school are in acceptable condition.

Interior Summary:

The library, majority of the classrooms, staff room and the main office have carpet flooring and the remainder of the classrooms, corridors and the stage have resilient flooring. Mechanical spaces and storage rooms have painted/sealed concrete floors. Wood sports floor in the gymnasium. Ceramic floor tile in the washrooms, change rooms, and portions of some entry areas. The majority of the interior walls are steel stud walls, clad with painted gypsum board. Acoustic wall panels have been installed in the music room and in one of the classrooms. Ceramic wall tile is installed behind the urinals in the boys' washrooms. The majority of the ceiling consists of a suspended T-bar system with in-laid acoustic tiles. Gymnasium ceiling is exposed OWS joists and underside of steel decking.

No major work associated with the school interior was identified during the assessment.

The interior finishes of the school are in acceptable condition.

Mechanical Summary:

The building is served by a heat pump system with glycol heating and roof top dry cooler. The building is ventilated by a make-up air unit and an air handling unit. Hot water is provided by a domestic water heater. A wet pipe sprinkler system protects the school. The HVAC equipment is controlled by a DDC system. The domestic water, sanitary, and rain water drainage piping is generally original to the construction of the building. There are backflow prevention devices on the domestic plumbing lines.

Overall, the mechanical systems in the building are in acceptable condition.

Electrical Summary:

The building has a 1000 Amp, 120/208 volt 3 phase 4 wire service which feeds lighting, power receptacles, and mechanical equipment in the building. The electrical sub-panels and wiring are in good condition with adequate spare spaces. All observed wiring was in conduit. Interior lighting is provided by T8 fluorescent technology throughout the building. Exterior lighting is provided by metal halide wall packs around the building. Emergency lighting in the building is provided by battery pack emergency lighting fixtures. Exit lighting in the building is provided by LED fixtures. The building is protected by a Mirtone fire alarm system and Honeywell security system and is equipped with a Panasonic KX-TDA Hybrid IP PBX telephone system and 3COM LAN system with cat. 6 cable. There are no actions recommended for the next five years.

Overall, the electrical systems in the building 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*

According to construction drawings, the foundation for the main building consists of concrete piles and grade beams.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

A1030 Slab on Grade* - 1998 Section

According to structural drawings, the floor slab is cast-in-place concrete with standard steel reinforcing details.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

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

Load-bearing masonry block walls provided throughout the building support the school's roof structure.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

B1010.03 Floor Decks, Slabs, and Toppings*

The mechanical room on the mezzanine/second floor has a reinforced concrete slab.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

B1010.05 Mezzanine Construction*

The mechanical room is located in a mezzanine structure above the change rooms. Floor is cast-in-place concrete with thickened slab areas for equipment.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

B1010.06 Ramps: Exterior*

A wooden exterior ramp is installed on the southwest entrance to the newly installed portables (2012).

RatingInstalledDesign LifeUpdated5 - Good20120MAR-13

B1010.07 Exterior Stairs*

A set of wooden exterior stairs, part of the ramp structure, is installed on the southwest entrance to the newly installed portables (2012).

RatingInstalledDesign LifeUpdated5 - Good20120MAR-13

B1020.01 Roof Structural Frame*

The roof structural frame for the school consists of open web steel joists and steel wide flange beams.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

B1020.03 Roof Decks, Slabs, and Sheathing*

Roof consists of metal decking supported by structure below.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1998	0	MAR-13

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

The majority of the school is clad with a clay brick veneer on all elevations.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

B2010.01.06.03 Metal Siding**

Pre-finished vertical metal siding on the upper exterior section of the gymnasium and library/resource rooms, the upper section of the northeast addition, and along the main entry area.

RatingInstalledDesign LifeUpdated4 - Acceptable199840MAR-13

Event: Replace the vertical metal siding (approx. 390)

<u>sq.m.)</u>

TypeYearCostPriorityLifecycle Replacement2038\$51,000Unassigned

Updated: MAR-13

B2010.01.09 Expansion Control: Ext. Wall*

Construction joints are provided at periodic intervals within the clay brick cladding system for expansion control.

RatingInstalledDesign LifeUpdated4 - Acceptable20010MAR-08

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

Joint sealant is applied to control joints and on the perimeters of exterior window units and doors on all sides of the building.

RatingInstalledDesign LifeUpdated4 - Acceptable199820MAR-13

Event: Replace exterior joint sealers (approx. 380 m)

TypeYearCostPriorityLifecycle Replacement2018\$11,000Unassigned

Updated: MAR-13

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

Exterior walls are wood construction with brick facing.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

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

Architectural drawings indicate spray applied insulation and air/vapour barrier.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

B2010.06 Exterior Louvers, Grilles, and Screens*

Pre-finished metal louvers are positioned along the building's upper metal-clad areas to support air flow and ventilation within the school. No additional louvres or grilles are immediately evident on the building facades.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

B2020.01.01.06 Vinyl, Fibreglass & Plastic Windows**

Exterior windows on the building consist of fixed and operable, insulated glazing units. Windows were previously reported as being aluminum, but appear to be vinyl.

RatingInstalledDesign LifeUpdated4 - Acceptable199840MAR-13

Event: Replace exterior vinyl windows (approx. 58 units)

TypeYearCostPriorityLifecycle Replacement2038\$95,600Unassigned

Updated: MAR-13

B2020.02 Storefronts: Windows**

Steel framed storefront windows at main entrance.

RatingInstalledDesign LifeUpdated4 - Acceptable199840MAR-13

Event: Replace steel framed storefront windows (approx.

<u>15 sq.m.)</u>

TypeYearCostPriorityLifecycle Replacement2038\$2,700Unassigned

Updated: MAR-13

B2030.01.02 Steel-Framed Storefronts: Doors**

The main exterior entrance doors are painted metal set in painted metal frames with adjacent sidelites.

RatingInstalledDesign LifeUpdated4 - Acceptable199830MAR-13

Event: Replace the exterior entrance doors (1 double unit)

TypeYearCostPriorityLifecycle Replacement2028\$4,800Unassigned

Updated: MAR-13

B2030.02 Exterior Utility Doors**

Exterior doors on the building perimeter are generally painted metal and are set in painted metal frames.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

Event: Replace the exterior utility doors (approx. 13 units)

TypeYearCostPriorityLifecycle Replacement2038\$11,000Unassigned

Updated: MAR-13

B3010.01 Deck Vapour Retarder and Insulation*

According to architectural drawings, roof assemblies have rigid insulation and air/vapour retarder.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

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

Flat roof sections appear to be built-up asphalt and gravel roofing, consistent with the architectural drawings. (Although the previous report classified the roof as a modified bitumen membrane (SBS) assembly.)

RatingInstalledDesign LifeUpdated4 - Acceptable199825MAR-13

Event: Replace the BUR assembly (approx. 5,000 sq.m.)

TypeYearCostPriorityLifecycle Replacement2023\$690,000Unassigned

Updated: MAR-13

B3010.07 Sheet Metal Roofing**

The pitched and pop-up roof sections have a vertical metal roof system.

RatingInstalledDesign LifeUpdated4 - Acceptable199840MAR-13

Event: Replace the metal roof siding (approx. 400 sq.m.)

TypeYearCostPriorityLifecycle Replacement2038\$96,000Unassigned

Updated: MAR-13

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

A painted metal door and painted metal grate stairs provides access to the school roof.

Rating	<u>Installed</u>	Design Life	Updated
4 - Acceptable	1998	0	MAR-08

S3 INTERIOR

C1010.01 Interior Fixed Partitions* - CMU

The gymnasium walls, change room walls, and walls in the mechanical mezzanine are CMU.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

C1010.01 Interior Fixed Partitions* - Wood Frame

The majority of interior walls are wood frame construction.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

C1010.05 Interior Windows*

Interior windows are provided in the library and the adjacent classroom (formerly library space). The windows consist of single glazed or tempered glazing set in painted metal frames.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

C1020.01 Interior Swinging Doors (& Hardware)*

The majority of interior swinging doors consist of painted metal units set in painted metal frames with wired glass inserts and/or glazed sidelites.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

C1020.03 Interior Fire Doors*

Interior fire doors are painted metal units set in painted metal frames.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

C1030.01 Visual Display Boards**

Whiteboards and corkboards are provided in the classrooms throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable199820MAR-13

Event: Replace the visual display boards (approx. 64)

units)

TypeYearCostPriorityLifecycle Replacement2018\$36,000Unassigned

Updated: MAR-13

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

Pre-finished metal toilet partitions are provided in each student washroom in the building.

RatingInstalledDesign LifeUpdated4 - Acceptable199830MAR-13

Event: Replace the toilet partitions (approx. 12 units)

TypeYearCostPriorityLifecycle Replacement2028\$14,000Unassigned

Updated: MAR-13

C1030.08 Interior Identifying Devices*

Interior signage consists of vinyl plates, some with printed lettering (such as the Office Staff Lounge, Girls and Boys washrooms), some with blanks for inserting names.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

C1030.10 Lockers**

Metal lockers are provided in some corridors (north side) as well as in some classrooms (also north side, 2001 addition).

RatingInstalledDesign LifeUpdated4 - Acceptable200130MAR-13

Event: Replace lockers (approx. 180 units)

TypeYearCostPriorityLifecycle Replacement2031\$64,800Unassigned

Updated: MAR-13

C1030.12 Storage Shelving*

Wood shelving units are provided in most classrooms, work rooms and offices, as well as in storage rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

C1030.14 Toilet, Bath, and Laundry Accessories*

Commercial quality, wall-mounted mirrors as well as soap and paper towel dispensers are provided in each washroom in the building. Toilet paper dispensers are also provided in each washroom stall.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

C2010 Stair Construction*

Concrete stairs lead to the stage area and the mechanical room. A set of wood stairs leads to the Portables.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

C2020.05 Resilient Stair Finishes**

The wood stairs and the concrete stairs that lead to the stage area are finished with vinyl composite tiles.

RatingInstalledDesign LifeUpdated4 - Acceptable199820MAR-13

Event: Replace the resilient stair finish (approx. 65 sq.m.)

TypeYearCostPriorityLifecycle Replacement2018\$3,400Unassigned

Updated: MAR-13

C2030 Interior Ramps* - Concrete

A cast-in-place concrete ramp leads to the stage area.

RatingInstalledDesign LifeUpdated4 - Acceptable1998100MAR-13

C2030 Interior Ramps* - Wood

A wood framed ramp leads to the Portables.

RatingInstalledDesign LifeUpdated4 - Acceptable19990MAR-13

C3010.04 Gypsum Board Wall Finishes (Unpainted)*

Interior wood frame walls are finished with gypsum board.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

C3010.09 Acoustical Wall Treatment**

Fabric acoustical wall panels are located in the music room, room 114 (formerly the library, subdivided into library and a classroom) and room 112.

RatingInstalledDesign LifeUpdated4 - Acceptable199820MAR-13

Event: Replace acoustical wall panels (approx. 175 sq.m.)

TypeYearCostPriorityLifecycle Replacement2018\$39,400Unassigned

Updated: MAR-13

C3010.11 Interior Wall Painting*

The majority of the interior walls are painted.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

C3020.01.02 Painted Concrete Floor Finishes*

The mechanical and storage rooms have painted concrete floors.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

C3020.02 Tile Floor Finishes**

The boys and girls washrooms and change rooms, as well as some parts of entry areas have tile floors.

RatingInstalledDesign LifeUpdated4 - Acceptable199950MAR-13

Event: Replace the ceramic tile floors (approx. 210 sq.m.)

TypeYearCostPriorityLifecycle Replacement2049\$35,100Unassigned

Updated: MAR-13

C3020.04 Wood Flooring**

The gymnasium has a wood sports floor.

RatingInstalledDesign LifeUpdated4 - Acceptable199830MAR-13

Event: Replace the wood sports floor (approx. 580 sq.m.)

TypeYearCostPriorityLifecycle Replacement2028\$147,900Unassigned

Updated: MAR-13

C3020.07 Resilient Flooring**

The corridors, some areas of most classrooms, and entrance area floors are finished with resilient flooring.

Some areas of flooring have been replaced, but for the most part appear to be original.

RatingInstalledDesign LifeUpdated4 - Acceptable199820MAR-13

Event: Replace resilient flooring throughout (approx.

2,050 sq.m.)

TypeYearCostPriorityLifecycle Replacement2018\$164,000Unassigned

Updated: MAR-13

C3020.08 Carpet Flooring**

The staff room, library and the main office have carpet flooring. Some areas (the majority of the floor) in most classrooms have carpet flooring.

RatingInstalledDesign LifeUpdated3 - Marginal199815MAR-13

Event: Replace carpet flooring throughout (approx. 1,750

<u>sq.m.)</u>

TypeYearCostPriorityLifecycle Replacement2016\$127,300Unassigned

Updated: MAR-13

Event: Replace stained/damaged carpet where required

(approx. 360 sq.m.)

Concern:

Numerous areas of carpeting are significantly stained and showing some signs of wear. Some rooms showing damage are 154, 155 and 114.

Recommendation:

Replace carpeting in areas which have become stained and damaged.

Consequences of Deferral:

Loss of aesthetics.

TypeYearCostPriorityRepair2014\$26,200Low

Updated: MAR-13

C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*

Gypsum board finished ceilings in entry area (bulkheads), extending into administration area and into corridors. Gypsum board ceilings in washrooms and change rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

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

The majority of the ceiling in classrooms, staff areas and corridors consists of a suspended T-bar system with in-laid acoustic tiles. Some stained tiles, but maintenance appears to be performed on an on-going basis.

RatingInstalledDesign LifeUpdated4 - Acceptable199825MAR-13

Event: Replace acoustic ceiling tiles throughout (approx.

3,900 sq.m.)

TypeYearCostPriorityLifecycle Replacement2023\$181,500Unassigned

Updated: MAR-13

Event: Replace stained ACT where required (approx. 30

sq.m.)
Concern:

Some ceiling tiles have been stained. Apparent cause is water damage, although cooling system condensation is possible.

Recommendation:

Replace ACT where required. **Consequences of Deferral:**

Loss of aesthetics.

TypeYearCostPriorityRepair2013\$1,300Low

Updated: MAR-13

C3030.07 Interior Ceiling Painting*

The high ceiling areas in the school are painted.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

S4 MECHANICAL

D2010.04 Sinks**

There are several stainless steel sinks located throughout the school and are of various types. There are also 2 iron service sinks.

RatingInstalledDesign LifeUpdated4 - Acceptable199830MAR-13

Event: Replace Sinks (16)

TypeYearCostPriorityLifecycle Replacement2028\$25,700Unassigned

Updated: MAR-13

D2010.05 Showers**

A shower is provided in the physical education office.

RatingInstalledDesign LifeUpdated4 - Acceptable199830MAR-13

Event: Replace Shower (1)

TypeYearCostPriorityLifecycle Replacement2028\$2,100Unassigned

Updated: MAR-13

D2010.08 Drinking Fountains/Coolers**

There are three stainless steel, non-refrigerated, drinking fountains located throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable199835MAR-13

Event: Replace drinking fountains (3)

TypeYearCostPriorityLifecycle Replacement2033\$10,400Unassigned

Updated: MAR-13

D2010.09 Other Plumbing Fixtures*

Laboratory plumbing fixtures, including science sinks and gas turrents are provided in the science room.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

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

There are 18 vitreous china floor mounted flush tank water closets, 6 wall-mounted sensor flush vitreous china urinals, and 18 vitreous china countertop mounted lavatories in the washrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable199835MAR-13

Event: Replace Lav (18), Urinals (6) and Water Closets

<u>(18)</u>

TypeYearCostPriorityLifecycle Replacement2033\$73,600Unassigned

Updated: MAR-13

D2020.01.01 Pipes and Tubes: Domestic Water*

Domestic water piping is generally copper and original to the building.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D2020.01.02 Valves: Domestic Water**

There are valves in place on the domestic plumbing lines.

RatingInstalledDesign LifeUpdated4 - Acceptable199840MAR-13

Event: Replace Domestic Water Valves (30)

TypeYearCostPriorityLifecycle Replacement2038\$34,300Unassigned

Updated: MAR-13

D2020.01.03 Piping Specialties (Backflow Preventers)**

There are backflow prevention devices on the domestic water line (3"), boiler feed (3/4"), fire system (2"), and irrigation system (3").

RatingInstalledDesign LifeUpdated4 - Acceptable199820MAR-13

Event: Replace backflow preventors (4)

TypeYearCostPriorityLifecycle Replacement2018\$14,700Unassigned

Updated: MAR-13

D2020.01.08 Hose Bibbs*

There are 4 non-freeze, key operated hose bibs around the perimeter of the school.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

D2020.02.02 Plumbing Pumps: Domestic Water**

A TACO 1/6 Hp domestic hot water recirculation pump is provided on the domestic hot water system in the mechanical room.

RatingInstalledDesign LifeUpdated4 - Acceptable199820MAR-13

Event: Replace DHWR pump (1)

TypeYearCostPriorityLifecycle Replacement2018\$2,000Unassigned

Updated: MAR-13

D2020.02.06 Domestic Water Heaters**

One Bradford White gas-fired domestic hot water heaters with 100USG storage and 200 MBH input are located in the mechanical room.

RatingInstalledDesign LifeUpdated4 - Acceptable199820MAR-13

Event: Replace Domestic Water Heater (1)

TypeYearCostPriorityLifecycle Replacement2018\$3,400Unassigned

Updated: MAR-13

D2020.03 Water Supply Insulation: Domestic*

All the hot and cold water pipes are insulated, and the insulation is original.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D2030.01 Waste and Vent Piping*

Waste and vent piping is generally cast iron and original to the building.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D2030.02.04 Floor Drains*

There are 8 floor drains located in washrooms and the mechanical room.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

D2040.01 Rain Water Drainage Piping Systems*

Rain water drainage piping is generally cast iron inside the building and original to the building. They are connected to the city storm system. Portable portions are equipped with rain water leaders to grade.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D2040.02.04 Roof Drains*

The roof incorporates 16 roof drains which are each fitted with gravel/ debris strainers.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

D3010.02 Gas Supply Systems*

Natural gas piping feeds the heating boilers, steam humidifier, make air unit, domestic hot water heaters, and roof top HVAC units. The meter is located outside of the building.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

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

There are two Super Hot natural gas fired boilers, serving the heat pump system, with an input capacity of 1,440 MBH each in the mechanical room. Both are model number AAE-1440-N-E-M. There are 2 WEG glycol circulation pumps with a capacity of 2 Hp each located in the mechanical room. There are an additional 2 Emerson pumps, both rated at 7.5 Hp.

RatingInstalledDesign LifeUpdated4 - Acceptable199835MAR-13

Event: Replace Boilers (2)

TypeYearCostPriorityLifecycle Replacement2033\$113,200Unassigned

Updated: MAR-13

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

Original boiler flues through the roof. A combustion air inlet terminates in a cold trap.

RatingInstalledDesign LifeUpdated4 - Acceptable199835MAR-13

Event: Replace Chimney (20m)

TypeYearCostPriorityLifecycle Replacement2033\$13,800Unassigned

Updated: MAR-13

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

Pot feeders are connected to the boilers. A water treatment program is provided for hot water system.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D3030.05 Cooling Towers**

A Cancoil dry cooler is installed on the roof. It provides cooling for the heat pump loop. The manufacturer tag has degraded and is no longer legible.

RatingInstalledDesign LifeUpdated4 - Acceptable199825MAR-13

Event: Replace Cooling Tower (1)

TypeYearCostPriorityLifecycle Replacement2023\$56,200Unassigned

Updated: MAR-13

D3030.07 Heat Pumps**

There are approximately 43 water source heat pumps providing heating and cooling for the majority of the building. They are installed above the ceiling spaces throughout the building. The cooling capacities of the heat pumps range from 2 to 3 ton. The information available shows they are Climatemaster units with a rating of about 1/10 Hp.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

Event: Replace heat pumps (43)

TypeYearCostPriorityLifecycle Replacement2016\$259,500Unassigned

Updated: MAR-13

D3040.01.01 Air Handling Units: Air Distribution**

The building is ventilated by a indirect fired make-up air unit model DJ-60 serial number HL009GSCXRBGCAC, an input of 550MBU (3800 CFM) installed in 2001 and an air handling unit model LM-8-C, serial number 528087-MU-1 (8151 CFM) installed in 1999. They are manufactured by Engineered Air. The air handling unit is equipped with a glycol heating coil, steam humidifier, supply fan, and filter section.

RatingInstalledDesign LifeUpdated4 - Acceptable200030MAR-13

Event: Replace make-up air unit (1) and air handling unit

<u>(1)</u>

TypeYearCostPriorityLifecycle Replacement2030\$42,600Unassigned

Updated: MAR-13

D3040.01.04 Ducts: Air Distribution*

The air distribution ductwork is original and located in the ceiling space.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D3040.01.07 Air Outlets & Inlets: Air Distribution*

T-Bar ceiling mounted diffusers are throughout the building to provide supply air.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D3040.03.04 Glycol Systems*

Glycol heating distribution is through original insulated steel piping to the heating coil, heat pumps in the school.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

D3040.04.01 Fans: Exhaust**

There are 6 roof-top exhaust fans servicing various areas of the school.

RatingInstalledDesign LifeUpdated4 - Acceptable199830MAR-13

Event: Replace Exhaust Fans (6)

TypeYearCostPriorityLifecycle Replacement2028\$11,600Unassigned

Updated: MAR-13

D3040.04.03 Ducts: Exhaust*

Typical low velocity steel ductwork.

RatingInstalledDesign LifeUpdated4 - Acceptable19880MAR-13

D3040.04.05 Air Outlets and Inlets: Exhaust*

Sidewall and ceiling mounted grilles serve as exhaust air inlets.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D3050.03 Humidifiers**

A gas-fired steam humidifier is installed in the mechanical room. A distribution header is provided in the air handling unit.

RatingInstalledDesign LifeUpdated4 - Acceptable199825MAR-13

Event: Replace Humidifier (1)

TypeYearCostPriorityLifecycle Replacement2023\$11,900Unassigned

Updated: MAR-13

D3050.05.02 Fan Coil Units**

There are 3 fan coil units at the entrances of the building.

RatingInstalledDesign LifeUpdated4 - Acceptable199830MAR-13

Event: Replace Fan Coil Units (3)

TypeYearCostPriorityLifecycle Replacement2028\$16,700Unassigned

Updated: MAR-13

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

The HVAC equipment is controlled by a DDC system with an energy management program.

RatingInstalledDesign LifeUpdated4 - Acceptable199820MAR-13

Event: Replace DDC system (5,217 sqm gfa)

TypeYearCostPriorityLifecycle Replacement2018\$141,000Unassigned

Updated: MAR-13

D4010 Sprinklers: Fire Protection*

The school is covered by wet sprinkler system.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D4020 Standpipes*

Siamese connection is provided at the main entrance.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D4030.01 Fire Extinguisher, Cabinets and Accessories*

13 handheld fire extinguishers are located throughout the building and are checked annually.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

S5 ELECTRICAL

D5010.01.02 Main Electrical Transformers (Utility Owned)*

The main Electrical Transformer is owned by the utility and is 150 KVA and installed in 1998.

RatingInstalledDesign LifeUpdated5 - Good19980MAR-13

Capacity Size 1000 Capacity Unit amps

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

The main electrical service is estimated to be 1000 Amps, 120/208 volt, 3 Phase, 4 wire, and manufactured by Federal Pioneer.

Rating Installed Design Life Updated 1998 40 MAR-13

Event: Replace main eletrical switchboard (1)

TypeYearCostPriorityLifecycle Replacement2038\$66,500Unassigned

Updated: MAR-13

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

Electrical sub-panels are located throughout the building and are manufactured by Federal Pioneer.

RatingInstalledDesign LifeUpdated5 - Good199830MAR-13

Event: Replace all electrical branch circuit panelboards (

<u>17)</u>

TypeYearCostPriorityLifecycle Replacement2028\$84,400Unassigned

Updated: MAR-13

D5010.07.02 Motor Starters and Accessories**

Motor starters are provided for pumps and fans in the school. The majority of the motor starters were manufactured by Square D.

RatingInstalledDesign LifeUpdated5 - Good199830MAR-13

Event: Replace all motor starters (8)

TypeYearCostPriorityLifecycle Replacement2028\$12,000Unassigned

Updated: MAR-13

D5020.01 Electrical Branch Wiring*

The electrical wiring in the building is standard copper in conduit. Flexible conduit and cabling is provided to most of the motors and other mechanical equipment.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

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

The lighting in the school is controlled by an ETC Unison lighting control system.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D5020.02.02.01 Interior Incandescent Fixtures*

Interior incandescent pot lighting fixtures are installed in the corridors and main entrance.

RatingInstalledDesign LifeUpdated5 - Good19980MAR-08

D5020.02.02.02 Interior Fluorescent Fixtures**

Fluorescent fixtures are used throughout the school and consist of T-bar recessed and surface mounted T8 fixtures with electronic ballasts.

RatingInstalledDesign LifeUpdated5 - Good199830MAR-13

Event: Replace interior fluorescent fixtures (470)

TypeYearCostPriorityLifecycle Replacement2028\$47,000Unassigned

Updated: MAR-13

D5020.02.02.03 Interior Metal Halide Fixtures*

Interior metal halide fixtures are provided in the gymnasium.

RatingInstalledDesign LifeUpdated5 - Good19980MAR-08

D5020.02.03.02 Emergency Lighting Battery Packs**

Emergency lighting in the building is provided by battery-powered emergency lighting fixtures. The battery pack brand is READY-LITE.

RatingInstalledDesign LifeUpdated4 - Acceptable199820MAR-13

Event: Replace emergency lighting fixtures (25)

TypeYearCostPriorityLifecycle Replacement2018\$30,400Unassigned

Updated: MAR-13

D5020.02.03.03 Exit Signs*

LED type exit signs are provided throughout the building.

RatingInstalledDesign LifeUpdated5 - Good19980MAR-08

D5020.03.01.03 Exterior Metal Halide Fixtures*

Exterior lighting around the building is provided by wall-mounted metal halide fixtures.

RatingInstalledDesign LifeUpdated5 - Good19980MAR-08

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

Exterior lighting for the school is controlled by photocell.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

D5030.01 Detection and Fire Alarm**

Mirtone fire alarm system is connected to bells, manual pull stations and detectors throughout the building. Duct detectors are provided and connected to the fire alarm system.

Life cycle estimate based on the replacement of fire control panel with smoke/heat detectors, pull stations, strobes, and bells.

RatingInstalledDesign LifeUpdated4 - Acceptable199825MAR-13

Event: Replace fire alarm system throughout the school

(1 panel and devices for 5,000 sqm gfa))

TypeYearCostPriorityLifecycle Replacement2023\$168,000Unassigned

Updated: MAR-13

D5030.02.02 Intrusion Detection**

The building is equipped with a Honeywell security system. The infrared motion sensors are located in corridors and public areas.

RatingInstalledDesign LifeUpdated5 - Good199825MAR-13

Event: Replace intrusion detection system (1 panel and 30

motion sensors)

TypeYearCostPriorityLifecycle Replacement2023\$24,800Unassigned

Updated: MAR-13

D5030.03 Clock and Program Systems*

Battery powered clocks are installed throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D5030.04.01 Telephone Systems*

The building is served by Panasonic KX-TDA Hybrid IP PBX telephone systems.

RatingInstalledDesign LifeUpdated5 - Good19980MAR-08

D5030.04.05 Local Area Network Systems*

3COM network switch system is installed in communication room complete with Category 6 cable.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

D5030.05 Public Address and Music Systems**

The building is equipped with an Rauland Telecenter 2100 intercom system. Speakers are installed throughout the building.

RatingInstalledDesign LifeUpdated4 - Acceptable199820MAR-13

Event: Replace intercom system (1 sound system with 3

speakers in the gymnasium)

TypeYearCostPriorityLifecycle Replacement2018\$21,800Unassigned

Updated: MAR-13

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.03 Theatre and Stage Equipment*

A theatre and stage area is located adjacent to the gymnasium. Folding panel doors separate the stage from the gymnasium area. Theatre curtains are provided for performances.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

E1090.04 Residential Equipment*

Residential-style appliances are provided in the staff lounge and the kitchen. Appliances generally include a refrigerator, stove, oven, microwave and dishwasher.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Fixed basketball backboards and hoops, speakers and a scoreboard are mounted to the walls of the gymnasium.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-13

E2010.02 Fixed Casework**

Fixed wooden casework with laminated countertops is typically provided in the office, the kitchen and the staff room. Classrooms typically have student clothing storage nooks and hooks.

RatingInstalledDesign LifeUpdated4 - Acceptable199835MAR-13

Event: Replace fixed casework (approx. 330 m)

TypeYearCostPriorityLifecycle Replacement2033\$148,500Unassigned

Updated: MAR-13

E2010.03.01 Blinds**

Manually-operated blinds are provided on all exterior window units throughout the building.

RatingInstalledDesign LifeUpdated4 - Acceptable199830MAR-13

Event: Replace blinds throughout (approx. 240 sq.m.)

TypeYearCostPriorityLifecycle Replacement2028\$26,200Unassigned

Updated: MAR-13

S8 SPECIAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

A designated barrier free parking stall is provided in the parking lot. The path from the parking lot to the closest entrance was barrier free.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

K4010.02 Barrier Free Entrances*

Exterior doors on the building perimeter have automatic door openers.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

K4010.03 Barrier Free Interior Circulation*

All areas of the school are generally accessible to handicapped persons.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

K4010.04 Barrier Free Washrooms*

There is one barrier-free washroom stall provided in each of the boys and girls washrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-08

K4020.01 Safety Code (Fall Prevention)*

Fall arrest system single anchor points on both portables and main roof.

RatingInstalledDesign LifeUpdated5 - Good20100MAR-13

K4030.01 Asbestos*

No asbestos containing materials were observed during the inspection. It is unlikely that construction materials used in a building of this age would contain contain asbestos.

RatingInstalledDesign LifeUpdated4 - Acceptable00MAR-13

K4030.04 Mould*

No suspected mould growth was noted on visible surfaces during the assessment. Wall cavities and the majority of the ceiling cavities were not reviewed during the site visit.

RatingInstalledDesign LifeUpdated4 - Acceptable00MAR-13

K4030.09 Other Hazardous Materials*

No other hazardous materials were identified during the review of the facility.

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

K5010.01 Site Documentation*

Prime Consultant - ft3 Assessor - Robin Bartsch Date of Evaluation - August 21, 2012

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



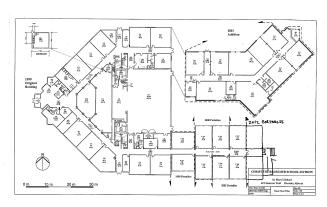
Aerial Site Photo - St. Mary's School with Portable Classrooms, Okotoks, AB (2012)

K5010.02 Building Documentation*

Prime Consultant - ft3 Assessor - Robin Bartsch Date of Evaluation - August 21, 2012

Floor plans were available at the time of the assessment. They were also provided prior to assessment.

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



Floor Plan.