

RECAPP Facility Evaluation Report

Calgary RCSSD #1



Bishop Carroll Senior High School

B2537A

Calgary

Facility Details

Building Name: Bishop Carroll Senior High S
Address: 4624 Richard Road S. W.
Location: Calgary

Building Id: B2537A
Gross Area (sq. m): 0.00
Replacement Cost: \$20,244,483
Construction Year: 0

Evaluation Details

Evaluation Company: Asset Evolution Inc.
Evaluation Date: October 12 2005
Evaluator Name: Mr. Mario Plastina

Total Maintenance Events Next 5 years: \$439,770
5 year Facility Condition Index (FCI): 2.17%

General Summary:

Bishop Carroll Senior High School is situated on 20 acres of land and has a total building area is 12263.00m². The 5-split level school was originally constructed in 1972. In 1989 a music room was added at the north-west corner of the building.

The school was renovated to provide a 'self paced' learning environment. The school does not have many traditional classrooms, however it has several resource learning centres where students can consult with resource teachers. Teaching advisors monitor the learning progress of the students. A large testing centre enables the students to complete the tests for a particular module on their own schedule. The school has traditional spaces such as; science labs, library, music room, shops, gymnasium, theatre, cafeteria and chapel.

The student capacity is approximately 1200 (2005 enrollment 1180)

Overall the building was observed to be in good condition.

Structural Summary:

The foundation consists of cast in place walls and columns. The floors comprise of Concrete top on metal deck & steel joists. The roof comprises of a metal roof deck with steel structure supported by exterior & interior concrete walls. The structural walls and columns are either poured in place concrete.

Overall the structural components appeared to be generally in good condition.

Envelope Summary:

The exterior cladding consists of precast concrete panels and stucco.

The windows are aluminum frame double glazed units with operable double hung & casement type panels. The windows in the chapel are the original stained glazed panels.

The original 1972 building has a modified bituminous membrane roof assembly (SBS) replaced in 1997. The 1989 music addition also has a modified bituminous membrane roof assembly (SBS) installed in 1989

The main entrance has two sets of painted steel doors with no glazed infill panels. The majority of the exit doors have a painted steel door & frame assembly.

Overall, the building envelope appears to be in good condition.

The components recommended for replacement and/or major repair within the years 2005 to 2009 are as follows:

- Replace all exterior metal doors
- Replace all original window units
- Repaint the upper concrete wall & repaint stucco surfaces on the lower portion of the exterior walls

Interior Summary:

Sheet Vinyl flooring is located throughout the majority of the corridors, science labs, staff room, and the cafeteria. New sheet vinyl was replaced on the majority of level 1 in 1994.. Carpet flooring is found in the drama room, general office, chapel, resource centres, some classrooms, staff offices and music room. The carpet in the office areas was replaced in 1998.. The wood shop, gymnasium and theatre stage area has a hardwood floor finish. The majority of the utility areas and mechanical rooms have a paint finish on the concrete slab.

The majority of the interior walls are gypsum board or masonry block walls.

The majority of the ceiling throughout the school have a 2'-0"x4'-0" suspended acoustical tile ceiling. Gypsum board ceiling are located primarily in the change rooms & utility rooms. The music room, staff offices and some of the corridors have a sprayed stucco finish on the gypsum board ceiling.

The interior swing doors generally consist of solid core clear finished wood doors with a glazed insert in a painted pressed metal frame. The hardware typically is single cylinder with a stainless steel finish.

Overall, the interior finishes are in good condition.

The technical's recommended for replacement and/or major repair within the years 2005 to 2009 are as follows:

- Replace rubber finish on stair treads

Mechanical Summary:

Heating demand for the building is provided by two gas-fired hot water Bryan Boilers. Heating hot water is distributed to heating coils in the various Lennox multi-zone air handling units located throughout the building. A Lennox gas-fired roof top HVAC unit serves the Theatre. Two McQuay gas-fired make-up roof top units serve the Gymnasium. An Engineered Air system provided heating to the computer lab.

Ventilation for the building is provided by roof top exhaust fans and the air handling unit systems. The air handling unit systems provides supply air and general exhaust with local exhaust fans serving washrooms, labs, shops and service spaces.

Air conditioning is provided by a split DX cooling system. The Carrier roof top air cooled condenser and the DX cooling coils in the air handling units provides cooling to a majority of the building. An Engineered Air split DX system provides cooling to the computer lab.

HVAC control is provided by a pneumatic system with some DDC. The building management system consists of a Johnson Controls Metasys system.

The plumbing piping within the building includes copper supply lines and black iron waste piping. Plumbing fixtures include; enamel lavatories with manual dual controls faucets, Bradley wash fountains, floor mounted toilets with manual flush valves, floor mounted urinals with flush tanks, wall mounted water fountains and cast-iron enamel slop sinks. Domestic hot water is provided by two commercial type gas-fired hot water heaters.

Based on the age and condition of the mechanical systems the following components are recommended for replacement within the years 2005 to 2009.

- Replace wall mounted enamel lavatories.
- Replace porcelain drinking fountains.
- Repair cafeteria exhaust fan.
- Replace roof top package unit serving the Theatre.
- Re-located roof top hydrants.

Overall the mechanical systems are in acceptable condition.

Electrical Summary:

The main service to the building is fed underground from a pad mounted transformer which is located to the south of the building. The main Westinghouse switchboard which is rated at 1,200A 3 phase 4 wire and the main Cutler Hammer (MCC# 1) motor control center are located in the main mechanical room. Individual Westinghouse and Allen Bradley motor controls are also located in these areas and other mechanical/electrical rooms located throughout the school. Distribution panels for interior lights and receptacles were found in the electrical/mechanical rooms and distributed throughout the building.

The wiring in the building is standard wiring in conduit. Flexible conduit and cable are provided for final connections to mechanical equipment

The interior fluorescent lighting fixtures generally consist of surface mount and inlay type fixtures. Although some high efficiency T-8 lamped and electronic ballasted fixtures were identified (Level 2) a majority of the fluorescent fixtures are equipped with inefficient T-12 lamps and magnetic ballasts. Incandescent lighting is also present in the building and include pot lights in the Chapel and in the Music Room and utility lighting in service areas. The exit lighting in the building consists of incandescent units. Emergency lighting is provided by selected light fixtures which are powered by a gas-fired generator and some dual lamp battery packs. The exterior lighting consists of wall mounted high pressure sodium units, three parking light standards and recessed incandescent fixtures.

The building is equipped with an Edwards ESA2000 fire alarm system. Detection and end devices include, smoke and heat detectors, duct smoke detectors, bells/strobes and pull stations. Fire suppression consists of fire extinguishers and a standpipe system throughout the building and a localized sprinkler system serving the Theatre stage area.

The building is equipped with a Silent Knight security system that monitors door contacts and motion detectors.

The building is equipped with a natural gas powered Onan generator (45 kW), which supplies power for emergency lighting and heating pumps.

It is recommended, as routine maintenance, that a program for annual examination of major electronic components be instituted. Maintenance should include thermographic scans for hot spots and power shut down to allow examination of interior components for accumulated debris and signs of corrosion.

Based on the age and condition of the electrical systems the following components are recommended for replacement within the years 2005 to 2009.

- Add electrical panelboards on the third level.
- Upgrade interior incandescent lighting.
- Upgrade interior fluorescent lighting with high efficiency T8 lamps and electronic ballasts.
- Replace exterior wall pack units.
- Replace exterior incandescent lighting.
- Replace emergency generator.

Overall the electrical components are in acceptable 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*

The foundations consist of cast-in-place concrete grade beams and spread footings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

A1030 Slab on Grade*

Cast-in-place concrete slab-on-grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

A2020 Basement Walls (& Crawl Space)*

The basement wall (lower level 1) comprise primarily of concrete masonry block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1010.01 Floor Structural Frame*(Building Frame)

Typical floor assembly - Concrete top on metal deck & steel joists

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1010.02 Structural Interior Walls Supporting Floors*

Structural reinforced concrete block walls & cast in place concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1010.03 Floor Decks, Slabs, and Toppings*

Cast-in-place concrete assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1010.09 Floor Construction Fireproofing*

Floor Construction Fireproofing - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1010.10 Floor Construction Firestopping*

Floor Construction Firestopping - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1020.01 Roof Structural Frame*

Metal roof deck with steel structure supported by exterior & interior concrete walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1020.06 Roof Construction Fireproofing*

Roof Construction Fireproofing - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

S2 ENVELOPE

B2010.01.01 Precast Concrete: Exterior Wall Skin*

The majority of the exterior walls have a combination of precast concrete panels

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	OCT-05

B2010.01.08 Cement Plaster (Stucco): Ext. Wall*

The lower portion of the exterior concrete walls has a stucco wall finish. Evidence of previous repairs was observed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	OCT-05

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

Sealant is located around all window, doors and precast panel assemblies.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	OCT-05

B2010.01.13 Paints (& Stains): Exterior Wall**

The upper portion of the exterior concrete panel has a paint finish. The stucco on the lower portion of the exterior walls is also painted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	15	OCT-05

Event: Repaint the upper concrete wall & repaint stucco surfaces on the lower portion of the exterior walls

Concern:

The paint finish on the exposed concrete wall has deteriorated and flaked off the concrete surface. All the stucco walls surfaces do not match in colour due to the previous repairs.

Recommendation:

Repaint the upper concrete wall & repaint stucco surfaces on the lower portion of the exterior walls

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$80,250	Medium

Updated: February 1 2006

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

The interior face of the exterior precast walls has a concrete block wall assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

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

Exterior Wall Vapor Retarders, Air Barriers, and Insulation - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	OCT-05

B2010.06 Exterior Louvers, Grilles, and Screens*

Exterior louvres are located on the exterior walls outside the mechanical rooms and woodshop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	OCT-05

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

(2000) - The windows were replaced in the cafeteria. The remaining windows are aluminum frame double glazed units with operable double hung and/or casement type panels.
The windows in the chapel are the original stained glazed panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	35	OCT-05

Event: Replace all original window units

Concern:

Several of the window seals have failed. Many of the windows were not operable and the hardware is damaged.

Recommendation:

Replace all original window units

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$160,500	Low

Updated: February 1 2006

B2030.01.02 Steel-Framed Storefronts**

The main entrance has two sets of painted steel doors with no glazed infill panels. The majority of the exit doors have a painted steel door & frame assembly with no vision panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	15	OCT-05

Event: Replace all exterior metal doors

Concern:

The original exterior doors do not have vision panels, which is a safety concern of the students going in and out of the building. The door do not close properly at the south and main entrance.

Recommendation:

Replace all exterior metal doors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$32,100	High

Updated: February 1 2006

B3010.01 Deck Vapor Retarder and Insulation*

Deck Vapor Retarder and Insulation - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

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

Original 1972 Building - Modified bituminous membrane roof assembly (SBS) replaced in 1997
 1989 Addition - Modified bituminous membrane roof assembly (SBS) installed in 1989

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	OCT-05

B3010.07 Sheet Metal Roofing**

The stairwells have a sheet metal roofing finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	OCT-05

B3010.08.02 Metal Gutters and Downspouts**

Downspouts & metal gutters discharge water from the upper roof levels to the lower level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	OCT-05

B3020.01 Skylights**

Four circular dome skylights are located on the upper roof level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	OCT-05

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Interior partitions typically consist of painted masonry block walls and gypsum board partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	OCT-05

C1010.03 Interior Operable Folding Panel Partitions**

A folding partition is located in the cafeteria.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

C1010.05 Interior Windows*

Interior painted steel windows are located in the testing areas, lab areas and in the music practice rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	OCT-05

C1010.06 Interior Glazed Partitions and Storefronts*

Interior glazed partitions are located in the business centre, cafeteria, media centre, stairwells and general office area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	OCT-05

C1010.07 Interior Partition Firestopping*

Interior Partition Firestopping - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

C1020.01 Interior Swinging Doors**

The interior swing doors generally consist of solid core clear finished wood doors with a glazed insert in a painted pressed metal frame. The hardware typically is single cylinder with a stainless steel finish. Several doors have metal grilles. The staff offices on the 3rd level typical have a glazed sidelite as part of the door assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	OCT-05

C1020.03 Interior Fire Doors*

The stairwell doors and corridors generally consist of solid core clear finished wood doors with a GWG insert in a painted pressed metal frame. The doors are rated and labeled.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

C1030.01 Visual Display Boards**

Tackboards, sliding chalkboards and whiteboards are located in office corridors, most resource rooms, shops and labs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	OCT-05

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

(2003) - Prefinished metal washroom partitions are located in all men's & women's washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	OCT-05

C1030.08 Interior Identifying Devices*

Signage panels with room number or room name are located above & on the interior doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	OCT-05

C1030.10 Lockers**

(1998) - Prefinished metal storage lockers are located throughout most corridors, music room, and boy's & girl's change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	OCT-05

C1030.14 Toilet, Bath, and Laundry Accessories*

(2001) - The washrooms are equipped with typical washroom accessories: Paper towel dispensers, toilet paper dispensers, hand-soap dispensers, waste bins and mirrors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	OCT-05

C2010 Stair Construction*

The stairwells typically have a poured in place concrete assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
N/A	0	100	OCT-05

C2020.05 Resilient Stair Finishes**

All interior stair has a sheet vinyl finish on the landing and rubber on the stair treads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	20	OCT-05

Event: Replace rubber finish on stair treads

Concern:

The rubber finish is worn and the metal nosing at the top of the landing has shifted in isolated locations, creating a potential tripping hazard.

Recommendation:

Replace rubber finish on stair treads

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$16,050	Medium

Updated: February 1 2006

C2020.08 Stair Railings and Balustrades*

The stair railing have a combination of a wall mounted wood railing and a painted steel handrail in the centre of the stairs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

C3010.01 Concrete Wall Finishes*

Concrete block walls are located throughout the entire school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

C3010.02 Wall Paneling**

Wood paneling is located in isolated locations in the music rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

C3010.04 Gypsum Board Wall Finishes*

The majority of the non-load bearing wall partitions consist of a gypsum board finish. Many of the interior resource rooms, office walls, corridor walls and interior face of the exterior walls have gypsum board partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	OCT-05

C3010.06 Tile Wall Finishes**

Ceramic tile wall finish is located in the shower areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

C3010.09 Acoustical Wall Treatment**

Acoustical wall panels are located throughout the music rooms and in the music practice rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	OCT-05

C3010.11 Interior Wall Painting**

The majority of the interior walls have a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	5	OCT-05

C3020.01 Concrete Floor Finishes (Paint)*

Painted/sealed concrete floors are located in most of the mechanical & electrical utility rooms, custodial rooms and in the seating area of the theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	OCT-05

C3020.02 Tile Floor Finishes**

Ceramic tile/ quarry tile flooring is located throughout the entrance vestibules, washrooms and shower areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

C3020.04 Wood Flooring**

Hardwood flooring is located in the Gymnasium, theatre stage area and woodshop. The gym floor was refinished in 2000.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

C3020.07 Resilient FlooringSheet Vinyl**

Sheet Vinyl flooring is located throughout the majority of the corridors, science labs, staff room, and the cafeteria. New sheet vinyl was replaced on the majority of level 1 in 1994.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	OCT-05

C3020.08 Carpet Flooring**

Carpet flooring is found in the drama room, general office, chapel, resource centres, some classrooms, staff offices and music room. The carpet in the office areas was replaced in 1998.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	OCT-05

C3030.04 Gypsum Board Ceiling Finishes*

Gypsum board ceiling are located primarily in the washrooms & change rooms. The music room (226), and staff offices & corridor have a sprayed stucco finish on the gypsum board ceiling. The stucco finish may contain asbestos.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	OCT-05

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

(2001) - The majority of the ceiling throughout the school has a 2'-0"x4'-0" suspended acoustical tile ceiling.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	OCT-05

C3030.07 Interior Ceiling Painting**

The exposed metal deck ceiling in the gymnasium is painted. All the interior gypsum board ceilings have a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	10	OCT-05

D1010.01.02 Hydraulic Passenger Elevators**

The building is served by a hydraulic Schindler passenger elevator (909 kgs capacity or 12 persons). The elevator serves all 5 levels. The elevator is maintained on a regular basis under a service agreement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

S4 MECHANICAL

D2010.01 Water Closets**

Generally, floor mounted water closets with manual flush valves in the Men's and Women's washrooms and flush tank units in staff washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2010.02 Urinals**

Original floor mounted urinals (Crane) with flush tanks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2010.03 Lavatories** - Enamel Vanity Sinks

(2001) The lavatories in the Men's and Women's washrooms generally consist of enamel vanity type units with manual dual control faucets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2010.03 Lavatories** - Wall Mounted Enamel Units

Wall mounted enamel fixtures were identified in the locker rooms and some staff washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Replace Wall Mounted Enamel Sinks

Concern:

The original wall mounted enamel sinks in the Men's locker rooms showed signs of age and deterioration. Corrosion was noted at the overflows and the enamel finishes are discoloured.

Recommendation:

Replace deteriorated wall mounted enamel sinks.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$8,560	Medium

Updated: February 1 2006

D2010.04 Sinks**

Stainless sinks in the cafeteria kitchen and boiler room, enamel cast iron slop sinks and lab sinks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2010.05 Showers**

Communal showers are located in the Men's and Women's locker rooms. In the middle of the shower areas there are two Bradley shower wash fountains that have six heads and six mixing valves each. Along the perimeter of the shower area there are 13 additional shower spaces that are equipped with individual shower heads and Symmons Temptrol mixing valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2010.08 Drinking Fountains / Coolers - Porcelain**

Original wall mounted porcelain water fountains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Replace Porcelain Wall Mounted Water Fountains

Concern:

Porcelain wall mounted water fountains were located on the 5th level. The water fountains have surpassed their expected useful life, are antiquated and replacement parts are difficult to find.

Recommendation:

Replace the wall mounted porcelain water fountains.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$5,350	Low

Updated: February 1 2006

D2010.08 Drinking Fountains / Coolers - Stainless Steel**

(2000) Wall mounted stainless steel units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	OCT-05

D2010.09 Other Plumbing Fixtures**

A Bradley wash fountain with a stainless steel wash basin was observed in the Fine Arts room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

D2020.01.01 Pipes and Tubes: Domestic Water*

The plumbing piping is generally copper tubing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

D2020.01.03 Piping Specialties (Backflow Preventors)**

Back flow prevention devices were observed in the boiler room and room 107. Backflow preventors are supplied on the non potable boiler make-up water lines, on the main domestic water line, on the standpipe/sprinkler system and water irrigation system line. The back flow Preventors are inspected regularly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2020.02.02 Plumbing Pumps: Domestic Water**

Two domestic hot water circulating pumps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	OCT-05

D2020.02.06 Domestic Water Heaters**

(2004) Two commercial size gas-fired Bradford White (302 L) domestic hot water heaters located in the Boiler Room with two A.O. Smith (450 L) storage tanks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	OCT-05

D2030.01 Waste and Vent Piping*

The building's black iron waste piping is connected to the municipal system. The vent piping is through the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

D2040.01 Rain Water Drainage Piping Systems*

The rain water drainage piping system consists of roof drains connected to internal rainwater leaders that connect to the municipal storm water system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

D2040.02.04 Roof Drains**

The roof drains are dome and collar type drains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

D3010.02 Gas Supply Systems*

The main underground gas service enters the meter room adjacent to the boiler room at the south section of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

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

(2004) Two gas-fired hot water Bryan Boilers (4,200 MBH Model RU5000/W-FDG) with Power Flame burners are located in the main mechanical room in the south section of the building. Boiler accessories include two cushion tanks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	OCT-05

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

The boilers' insulated metal breeching is connected to a metal stack.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	OCT-05

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

The boiler water supply is treated using a chemical feeder system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	OCT-05

D3020.03.01 Furnaces**

There are 4 gas-fired forced air furnaces (2 Carrier Supersavers and 2 Climate Master units) in Room 424. The furnaces serve the music room and adjacent areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D3020.03.02 Chimneys (&Comb. Air): Furnace*

Galvanized metal flue lines.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3040.01.01 Air Handling Units: Air Distribution**

There are several air handling units within the building. (Retrofitted 2004) Lennox multi-zone air handling units serve Levels 1, 3, & 5, and are equipped with heating and cooling coils. (2004) A McQuay AHU in the boiler room serves the cafeteria and corridor on Level 2. (1995) An Engineered Air AHU with DX cooling coils and its associated exterior air cooled condenser provide HVAC to the computer room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3040.01.02 Fans: Air Distribution*

Woods return fans for each of the Lennox air handling units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3040.01.04 Ducts: Air Distribution*

The duct system includes all component related to the air distribution systems in the building. The air distribution systems include ducting for fresh air, return air, supply air. The duct systems include ductwork, insulation and other related components.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

D3040.01.07 Air Outlets & Inlets:Air Distribution*

The air outlets and inlets are of varying types and include air diffusers, dampers and supply and return grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3040.03.01 Hot Water Distribution Systems**

Heating piping systems are generally black iron. Piping system components include piping, insulation and cover, valves and pumps. (2004) Base mounted heating hot water circulation pumps were observed in the Boiler Room and two Taco pumps were identified in room 124.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	OCT-05

D3040.04.01 Fans: Exhaust**

Constant volume local exhaust fans serve the washrooms, Cafeteria, Industrial Arts, Theatre and labs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Replace Cafeteria Roof Top Exhaust Fan

Concern:

The roof top exhaust fan that serves the cafeteria was noisy when in operation.

Recommendation:

Replace cafeteria roof top exhaust fan.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$3,210	Medium

Updated: February 1 2006

D3040.04.03 Ducts: Exhaust*

The exhaust duct distribution systems includes the galvanized metal duct systems, insulation, and other related components.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

D3050.01.02 Packaged Rooftop Air Conditioning Units (& Heating Units)**

A Lennox gas-fired packaged roof top unit provides HVAC to the Theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Replace The Theatre's Lennox Roof Top Unit

Concern:

The Lennox roof top unit has surpassed it expected useful life and reportedly requires increased maintenance.

Recommendation:

Replace the Theatre's gas fired roof top unit.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$53,500	Medium

Updated: February 1 2006

D3050.01.02 Packaged Rooftop Air Conditioning Units (& Heating Units)**

(2004) Two McQuay gas-fired packaged roof top units provide heated make-up air to the Gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	15	OCT-05

D3050.05.02 Fan Coil Units**

(2005) Forced flow fan coil units were noted at main entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	OCT-05

D3060.02.03 Pneumatic and Electric Controls

Pneumatic controls are used to control the HVAC equipment. Control components include monitoring and measurement devices (Temperature sensors, pressure sensors, pressure gages, transmitters, etc) and include the control air supply system (compressor, receiver, and dryer). At the time of the site visit the original compressor and receiver tank were being used, however the new (2005) DeVair compressor was on site and ready for installation. DeVilbiss - Hankison dryer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

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

An in house Johnson Controls Metasys system which operates the fans only.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D4010 Sprinklers: Fire Protection*

The Theatre stage is protected by a branch of sprinkler heads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

D4020 Standpipes*

Fire suppression in the building is provided by a standpipe system. The fire hose storage system typically consists of hose pin racks within a metal cabinet. Roof top hydrants were identified.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	50	OCT-05

Event: Re-locate Roof Hydrants

Concern:

Roof hydrants are located on the roof level.

Recommendation:

Re-locate roof hydrants.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2008	\$32,100	Low

Updated: February 1 2006

D4030.01 Fire Extinguisher, Cabinets and Accessories**

Portable wall mounted fire extinguishers and fire extinguishers stored in the fire hose metal cabinets are located throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D4090 Other Fire Protection Systems*

Range Guard Karbaloy fire suppression system installed in the hood above the Cafeteria's gas-fired equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

S5 ELECTRICAL

D5010.02 Secondary Electrical Transformers (Interior)**

Secondary transformers are located in first and second floor mechanical rooms. Six Westinghouse (15kVA) transformers were identified in room 107. Four additional transformers were identified in the boiler room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

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

A 1,200 A 3 phase 4 wire Westinghouse main distribution switchboard is located in the main electrical/mechanical room (Room 217) in the south section of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

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

The panelboards are generally located in the electrical / mechanical rooms throughout the school. Westinghouse and Cutler Hammer panelboards were observed. The Distribution panels in the Theatre were reportedly upgraded in (1999).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	25	OCT-05

Event: Add Additional Panelboards On The Third Level.

Concern:

It was reported that circuit breakers are tripping on the Third Level due to the increased electrical demand from the computers and printers in this area.

Recommendation:

Install additional panelboards and branch wiring on the third level to accommodate increased electrical demand.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2006	\$32,100	High

Updated: February 1 2006

D5010.07 Motor Control Centers (Motor Control)**

(2004) The Cutler Hammer Freedom Series 2100 motor control center (MCC#1) which is located in the boiler room is rated 600A 3 phase 4 wire. (1995) The Westinghouse Series 21 motor control centre which is located in room 124 is rated 600A 480V 3 phase 4 wire.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D5010.07.02 Motor Starters and Accessories**

The individual motor starters are generally Westinghouse and Cutler Hammer products and are located in the mechanical/electrical rooms on each level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

D5020.01 Electrical Branch Wiring*

The electrical wiring in the building is standard wire in conduit. Flexible conduit and cable are provided for final connections to mechanical equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

D5020.02.01 Lighting Accessories (Lighting Controls)*

Lighting in the school is generally controlled by line voltage switches.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D5020.02.02.01 Interior Incandescent Fixtures*

Incandescent fixtures include pot lights in the Chapel and in the Theatre and utility lighting in the service rooms. Directional incandescent fixtures were also identified in the Chapel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Upgrade Incandescent Fixtures With High Efficiency Lamps

Concern:

The incandescent bulbs are inefficient.

Recommendation:

Replace incandescent bulbs with high efficiency lamps.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2008	\$5,350	Low

Updated: February 1 2006

D5020.02.02.02 Interior Florescent Fixtures**

The interior fluorescent lighting fixtures generally consists of surface mount and inlay type fixtures. Although some high efficiency T8 lamped and electronic ballasted fixtures were identified/reported, on Level 2, a majority of the fluorescent fixtures are equipped with inefficient T12 lamps and magnetic ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Upgrade Interior Fluorescent Lighting Fixtures With High Efficiency T8 Technology.

Concern:

A majority of the interior fluorescent fixtures are equipped with inefficient T12 lamps and magnetic ballasts. High utility costs.

Recommendation:

Upgrade interior fluorescent fixtures with high efficiency T8 lamps and electronic ballasts..

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2008	\$214,000	Low

Updated: February 1 2006

D5020.02.02.05 Other Interior Fixtures*

High bay lighting (mercury vapor) in the Gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

D5020.02.03 Emergency Lighting*

Emergency lighting is provided by selected light fixtures which are powered by a natural gas-fired generator. A dual lamp battery powered emergency light unit was also identified in the cafeteria kitchen.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

D5020.02.03.03 Exit Signs

Incandescent exit signs are located throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	OCT-05

Event: Replace Exits Signs

Concern:

The exist signs are inefficient, aged and require increased maintenance.

Recommendation:

Replace exist signs with LED type units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2008	\$21,400	Low

Updated: February 1 2006

D5020.02.05 Special Purpose Lighting*

Special purpose lighting, including spot lighting, was found in the Theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

There are approximately 8 exterior wall mounted HID light fixtures around the perimeter of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	25	OCT-05

Event: Replace Wall Mounted HPS Light Fixtures

Concern:

The exterior wall pack units are aged and showed signs of deterioration. Stained and discoloured lenses were identified.

Recommendation:

Replace the exterior HPS wall pack units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$5,350	Medium

Updated: February 1 2006

D5020.03.01.05 Other Exterior Fixtures*

There are three single lamp arched roadside type light standards in the parking areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

D5020.03.02 Lighting Accessories (Lighting Controls)*

Photocells and timers for the exterior HID fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.01 Detection and Fire Alarm**

(1999) The existing fire alarm system is an Edwards ESA2000 system. Detection and end devices include, smoke and heat detection, pull stations, bells/strobes and duct smoke detection.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.02.02 Intrusion Detection**

The Silent Knight "Regency" security system monitors exterior door contacts and motion detectors installed in the corridors and sensitive areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.03 Clock and Program Systems**

Paragon EC128 clock system. The clocks are battery operated units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.04.01 Telephone Systems**

Telephones are provided throughout the school and are used for intercom, paging, and external calling. The telephone service is provided by Telus and the hardware consists of a NT Meridian 1 system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.04.05 Local Area Network Systems*

Computers, servers, network cabling, network hubs & switches and peripheral I/O devices. Cabling is category 5. The building is connected to the Alberta Supernet system using Bell equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.05 Public Address and Music Systems**

(1999) The Public Address system is a stand alone console located in the administration office and is a Dukane system. The console is equipped with a Sony CD and cassette player. Flush mounted ceiling speakers are located throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

D5090.02 Packaged Engine Generator Systems (Emergency Power System)**

The building is equipped with a natural gas powered Onan generator (45 kW) which is located in the boiler room. The generator provides emergency power to corridor lights and stairwell lights as well as to various heating pumps to maintain minimum temperature levels in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	35	OCT-05

Event: Replace Natural Gas-Fired Generator.

Concern:

The original emergency generator has surpassed its useful life and does not provide enough power for the emergency loads. The existing generator will not operate if the natural gas supply is shut off.

Recommendation:

Replace existing emergency generator and transfer switch.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$74,900	Medium

Updated: February 1 2006

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.03 Theater and Stage Equipment*

Stage, curtains, lighting equipped and fixed seating is located in the theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

E1090.02 Solid Waste Handling Equipment*

Waste bins are located along the south elevation of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

E1090.03 Food Service Equipment*

The cafeteria has a complete kitchen facility with stainless steel tables, built in ovens, refrigerators, fumehoods and several smaller appliances. The kitchen facility is leased and maintained by Beaver Foods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

A electronic scoreboard, movable basketball hoops are located in the gymnasium. Exercise equipment is the weight room. Divider screens are located in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	15	OCT-05

E2010.02.05 Educational Facility Casework*

Each resource centre is equipped with custom wood open faced and/or painted cabinet units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	OCT-05

E2010.02.07 Kitchen Casework*

The cafeteria kitchen has wood preparation tables. The staff room has custom wood upper and lower cabinets with plastic laminate counter-tops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	OCT-05

E2010.02.08 Laboratory Casework*

Each science laboratory is equipped with upper wood cabinets, lower cupboards c/w counter-top, open fixed shelving. Most of the other labs, such as; fine art, graphics and television all have fixed storage wood cabinets throughout the room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	35	OCT-05

E2010.02.09 Library Casework*

The library and several of the resouce areas have fixed and moveable wood shelving casework.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	OCT-05

E2010.02.99 Other Casework*

Glass display cabinets are located in the main entrance area and in the corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

E2010.03.06 Curtains and Drapes**

Curtains are located in the library, staff room and most of the student area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	OCT-05

E2010.05 Fixed Multiple Seating**

Fixed seating is located in the theatre. The chairs frames are wood with a fabric cushion seat.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	OCT-05

E2020 Moveable Furnishings*

Desks with plastic laminate tops are located throughout the resources areas.. Labs & shops have metal base stools. The chapel has wood chairs with fabric covered seats.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	OCT-05

F1010.02.02 Metal Building Systems

A 4-bay maintenance storage for onsite maintenance vehicles is located at the south-east corner of the site.

Structure:

- Metal frame construction with slab on grade bearing on undisturbed soil.

Envelope:

- Cladding - The exterior skin has a prefinished metal siding with metal framing construction.
- Roof Covering - The roof has a prefinished metal roof assembly.

Interior:

- Flooring - Exposed concrete
- Ceiling - Exposed metal structure
- Walls - Exposed metal siding and metal stud framing.
- Doors - Two non-insulated overhead doors & 1 metal entry door

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	OCT-05

F1010.02.05 Grandstands and Bleachers**

Wood bleachers on retractable metal frames are located in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

F2020.01 Asbestos*

Suspected asbestos-containing materials observed in the building include vinyl tile flooring in the school corridors, classrooms, texture coated ceilings, gymnasium wallboard and piping insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

F2020.02 PCBs*

PCB's in lighting ballasts

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

F2020.04 Mould*

No hazardous material known or reported

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

F2020.09 Other Hazardous Materials*

No mould known or reported

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

S8 FUNCTIONAL ASSESSMENT**K40 Current Code Issues**

Original building - 1972
Music Room Addition - 1989

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

K4010.01 Barrier Free Route: Parking to Entrance

Barrier free access from the parking area to the building entrance is available on the north elevation (front of school). A designated handicap area is provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	OCT-05

K4010.02 Barrier Free Entrances

No automatic door entrances are provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	OCT-05

Event: Provided power operators for barrier free access at the south & north entrance of the 1972 original building.

Concern:

No automatic access is currently provided from any exterior entrance doors.

Recommendation:

Provided power operators for barrier free access at the south & north entrance of the 1972 original building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$7,490	Low

Updated: February 1 2006

K4010.03 Barrier Free Interior Circulation

One elevator is located in the main lobby area and is accessible to each level. See elevators for details.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

K4010.04 Barrier Free Washrooms

One barrier free washroom is identified in the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

Facility Details	
Building Name:	Bishop Carroll High School
Address:	
Location:	Calgary
Building Id:	S2537
Gross Area (sq. m):	0.00
Replacement Cost:	\$0
Construction Year:	0

Evaluation Details	
Evaluation Company:	
Evaluation Date:	
Evaluator Name:	

**Total Maintenance Events Next 5 years:
5 year Facility Condition Index (FCI): 0%**

General Summary:

Bishop Carroll Senior High School is situated on 20 acres of land and has a total building area is 12263.00m2.

The site include two large asphalt paved parking areas for students and staff along the west end of the site. The parking areas are accessible from 4624 Richard Road S.W. A drop-off - pick up areas is designated at the north east area of the parking area.

A sodded football/soccer field is located on the south end of the property. A baseball field is located at the south-west end of the site. Grass, shrubs and trees are located along the perimeter of the school. Waste Disposals are located at the south-east corner of the school. Pedestrian concrete walkways are located at most of the school entrances. The site drainage slopes away from the building with no reported concerns. The site has an irrigation system.

There are no portables on site, however a 4 bay garage is located at the south-east end of the site for maintenance vehicle storage.

The site technical's recommended for replacement and/or major repair within the years 2005 to 2009 are as follows:

- Repair Car Plug-Ins

Overall the site was observed to be in good condition.

Structural Summary:

Envelope Summary:

Interior Summary:

Mechanical Summary:

Electrical Summary:

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.

S7 SITE

G2010.02.02 Flexible Pavement Roadway (Asphalt)**

An asphalt paved roadway to the main parking areas is accessible from 4624 Richard Road S.W located at the north-east corner of the site.

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

G2010.05 Roadway Curbs and Gutters*

Poured in place concrete curbs are located along the edge of the roadway.

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

G2010.06 Roadway Appurtenances*

Precast concrete median barriers are located along the main roadway for access control to and from the parking area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	15	

G2020.02.02 Flexible Paving Parking Lots(Asphalt)**

The asphalt paved parking area on the North end of the site is accessible from Richard Road S.W.

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

G2020.02.04 Pavement Markings

The parking lots have yellow painted lines identifying the parking spaces.

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

G2020.05 Parking Lot Curbs and Gutters*

Poured in place concrete curbs are located at each parking space.

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

G2020.06.03 Parking Lot Signs*

Metal signs on the chain-link are located in the parking areas.

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

G2030.04 Rigid Pedestrian Pavement (Concrete)**

Poured in place concrete walkways lead to all the school entrances from the asphalt paved areas.

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

G2040.02 Fences and Gates**

Chain-link fencing is located along most of the property boundary.

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

G2040.03 Athletic and Recreational Surfaces**

A sodded playing field with baseball backstops and soccer goal posts are located at the south end of the property. Basketball hoops are located adjacent to the asphalt paved playground.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	

G2040.04 Athletic and Recreational Equipment*

The sodded playing field has baseball backstops and soccer goal posts located at the south end of the property. Basketball hoops are located adjacent to playing field.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	

G2040.05 Site and Street Furnishings*

Bicycle racks are located along the north end of the school. Outdoor lunch tables are located at the south end of the school adjacent to the parking area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	

G2040.06 Exterior Signs*

Exterior wall-mounted signage is provided on several of the building's entrances. School signage is located on the north wall.

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

G2040.08 Flagpoles*

A flagpole is located on the north elevation of the property adjacent to the main entrance.

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

G2050.01 Irrigation Systems*

Hose bibs and irrigation system.

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

G2050.04 Lawns and Grasses*

Grassed areas are located along the north and west sides of the school.

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

G2050.05 Trees, Plants and Ground Covers*

Mature trees and shrubs are located along the north, south & west sides of the site. Small shrubs are also located throughout the parking area.

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

G3010 Water Supply

The underground municipal water supply enters the building in the mechanical/electrical room (room 107) in the north section of the building and in the Gymnasium Storage room, adjacent the boiler room.

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

G3010.03 Site Fire Protection Water Distribution*

There is no Siamese connection, however a fire hydrant is located on a side street.

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

G3020.01 Sanitary Sewage Collection*

The building's black iron sanitary lines are connected to the municipal system.

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

G3030.01 Storm Water Collection*

Catch basins in the parking areas and positive drainage away from the building.

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

G3060.01 Gas Distribution*

The main gas lines enters the building at the meter room in the south section of the building.

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

G4010.03 Electrical Power Distribution Equipment*

A pad mounted transformer is located to the south of the building, adjacent the boiler room.

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

G4010.04 Car Plugs-ins*

There are approximately 85 duplex car plug-ins outlets in the parking areas around the building. The plug-ins consist of recessed duplex outlets in metal bollards.

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

G4020.01 Area Lighting*

Area lighting is provided by approximately 8 wall mounted HPS units and three lights standards in the parking area. The light standards are single lamp units.

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