# **RECAPP Facility Evaluation Report**

**Edmonton School District No. 7** 



# **Eastglen Composite High School**

B3096A Edmonton

# Edmonton - Eastglen Composite High School (B3096A)

# **Facility Details**

Building Name: Eastglen Composite High So

Address: 11430 - 68 Street

Location: Edmonton

Building Id: B3096A Gross Area (sq. m): 0.00

**Replacement Cost:** \$25,964,709

Construction Year: 0

# **Evaluation Details**

**Evaluation Company:** Stephens Kozak Carr and Brown

Evaluation Date: November 4 2005
Evaluator Name: Mr. Eric Lumley

Total Maintenance Events Next 5 years: \$8,858,530 5 year Facility Condition Index (FCI): 34,12%

# General Summary:

The building was constructed in 1953 with major additions in 1957 and 1961. The building is on two floors with basement areas under the main gymnasium and drama areas. There is an undergound corridor providing access to the adjacent Eastglen Swimming Pool. The total area of the facility is 15,728sq.m.

The building is in acceptable structural condition but requires total window replacement, asbestos abatement, and interior refinishing to classroom floors and paint.

The building is generally in marginal condition.

#### **Structural Summary:**

The structure comprises cast-in-place concrete foundation and basement walls on strip footings. The concrete column sit on pad foundations. The two storey structure is cast-in-place concrete columns and beams with cast-in-place concrete floors.

The structure is generally in acceptable condition.

#### **Envelope Summary:**

The building skin is brick veneer with wood and stell windows. The windows are in need of replacement. The roof is SBS roofing and is in good condition. The exterior doors are the original wood doors or have been upgraded to metal insulated doors. The wood doors are in need of replacement.

The envelope, with the exception of the windows, is generally in acceptable condition.

#### **Interior Summary:**

The interior is plaster walls on clay tile, with asbestos spray on the ceilings in most classrooms. The corridors are terrazzo finish with cove base, and ceramic tile walls to dado height, then painted plaster walls to ceiling level. Gymnasiums have wood floors. Classrooms have upgraded sheet vinyl flooring or still have the original lino flooring. Doors are painted solid core wood in steel frames. Some areas have been upgraded with new flooring and T-bar ceilings.

The interior condition is generally marginal.

# **Mechanical Summary:**

Original school built in 1953 with additions in 1957 and 1961. Heating system consists of three (3) low pressure steam boilers, distribution piping to air system coils and building terminal heat transfer units. Ten (10) low velocity air systems provide ventilation air throughout the building. Controls are pneumatic. BMCS not installed. Exhaust fans expel foul odors. Plumbing fixtures and brass are commercial quality. Fire protection consists of wet standpipe with fire hose cabinets, portion of building has wet sprinkler system, fire extinguishers.

Items found during review which should be addressed are:

- Replace janitor sinks.
- Install electric solenoid valve for science room.
- Install new heating plant.
- Install new hot water distribution system and terminal heat transfer units.
- Install fume hood make up units.
- Install air conditioning in computer rooms.

- Install air conditioning in server rooms.
- Install humidification.
- Install BMCS.
- Replace dated plumbing fixtures.

Mechanical systems and components are in marginal condition.

# **Electrical Summary:**

In general, the electrical systems in the school are in acceptable condition. The marginal components are as follows and should be considered for upgrading:

- Install pad mounted, exterior transformer.
- Install new main distribution panel c/w TVSS.
- Upgrade branch circuit panels and provide additional receptacles.
- Replace motor starters.
- Provide additional emergency lighting.
- Replace T12 fluorescent fixtures with T8 type.

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

# S1 STRUCTURAL

# A1010 Standard Foundations\*

Concrete foundation walls and strip footings.

RatingInstalledDesign LifeUpdated4 - Acceptable0100NOV-05

# A1030 Slab on Grade\*

Basement floor slab.

RatingInstalledDesign LifeUpdated4 - Acceptable0100NOV-05

#### A2020 Basement Walls (& Crawl Space)\*

Cast-in-place concrete basement walls and perimeter foundation walls.

RatingInstalledDesign LifeUpdated4 - Acceptable0100NOV-05

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

Cast-in-place concrete columns and beams, with cast-in-place floor slabs.

RatingInstalledDesign LifeUpdated4 - Acceptable0100NOV-05

# B1010.02 Structural Interior Walls Supporting Floors\*

Cast-in-place concrete walls in basement and gym mezzanine.

RatingInstalledDesign LifeUpdated4 - Acceptable0100NOV-05

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

Cast-in-place structural slabs at main and upper floors.

RatingInstalledDesign LifeUpdated4 - Acceptable0100NOV-05

#### B1010.05 Mezzanine Construction\*

Gym mezzanine cast-in-place concrete.

RatingInstalledDesign LifeUpdated4 - Acceptable0100NOV-05

#### B1010.06 Ramps: Exterior\*\*

Cast-in-place concrete ramps provided at all entrances above grade level.

RatingInstalledDesign LifeUpdated4 - Acceptable040NOV-05

#### B1010.07 Exterior Stairs\*\*

Cast-in-place concrete stairs at rear entrances.

RatingInstalledDesign LifeUpdated4 - Acceptable040NOV-05

# Edmonton - Eastglen Composite High School (B3096A)

# B1020.01 Roof Structural Frame\*

Concrete Tees visible in auditorium. Main roof structure assumed to be similar. 1961 gym addition has gluelam beams, joists and wood deck.

RatingInstalledDesign LifeUpdated4 - Acceptable0100NOV-05

# B1020.04 Canopies\*

Concrete slab projection forms canopy at main entrance.

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

# **S2 ENVELOPE**

# B2010.01.02.01 Brick Masonry: Ext. Wall Skin\*

Brick veneer to entire perimeter.

RatingInstalledDesign LifeUpdated4 - Acceptable075NOV-05

#### B2010.01.03 Stone Assemblies: Exterior Wall Skin\*

Tyndal stone window surrounds and sills and vertical pilasters at the library.

RatingInstalledDesign LifeUpdated4 - Acceptable075NOV-05

# B2010.01.03.04 Marble: Exterior Wall Skin

Decorative marble finish adjacent to main entrance.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

# B2010.01.06.03 Metal Siding\*\*

Vertical metal siding on the west face of the original gymnasium and returning round the north and south corners.

RatingInstalledDesign LifeUpdated4 - Acceptable040NOV-05

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

Caulked construction joint between the 1953 original building and the 1957 addition.

RatingInstalledDesign LifeUpdated4 - Acceptable015NOV-05

# B2010.02.03.04 Glass Masonry Units (Glass Block)

Glass block above windows.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

#### B2010.09 Exterior Soffits\*

Painted textured parging on concrete substrate.

RatingInstalledDesign LifeUpdated4 - Acceptable020NOV-05

# B2020.01.01.01 Steel Windows (Glass & Frame)\*\*

Steel windows with single glazing at library and central entrance foyer / stair.

RatingInstalledDesign LifeUpdated2 - Poor035NOV-05

# **Event:** Replace steel windows with aluminum curtain wall

sections.

#### Concern:

Steel windows are deteriorated and offer no thermal insulation value.

#### Recommendation:

Replace steel windows with aluminum curtain wall section and double glazing. (20 M)

TypeYearCostPriorityFailure Replacement2007\$53,500High

Updated: February 15 2006

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

The majority of the windows are the original wood frame. Some windows have inset double glazing retained by a metal glazing stop.

RatingInstalledDesign LifeUpdated1 - Critical035NOV-05

# **Event:** Replace all windows with new fibreglass or PVC windows.

#### Concern:

Existing windows are 53 years old and a significant number have rotted frames and sills.

#### Recommendation:

Remove the existing wood windows and glass block infill and replace with new fibreglass or PVC windows. Infill the wall opening with insulated steel stud construction, with a gypsum board interior finish and an acrylic stucco exterior finish. (140 window bays at \$11000 per bay).

Remove glass block and infill wall. (Part of window replacement event)

TypeYearCostPriorityFailure Replacement2007\$1,647,800High

Updated: February 15 2006

# B2030.01.02 Steel-Framed Storefronts\*\*

Hollow metal doorsand transom lites in steel frames at most entrances.

RatingInstalledDesign LifeUpdated4 - Acceptable015NOV-05

#### B2030.01.10 Wood Entrance Door\*\*

Main entrance and entrance to 1957 wing has varnished wood doors in wooden frames. original hardware is failing.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

Event: Replace exterior wooden doors and frames with insulated hollow metal doors and pressed steel frames.

Concern:

Existing wooden doors and frames are deteriorating and hardware is obsolete.

Recommendation:

Replace 8 wooden entrance doors and frames with hollow metal insulated doors and pressed steel frames.

TypeYearCostPriorityFailure Replacement2007\$32,100Medium

Updated: February 15 2006

# B2030.01.10 Wood Entrance Door\*\*Utility

Painted wood doors to mechanical room, roof access and other locations.

RatingInstalledDesign LifeUpdated3 - Marginal020NOV-05

Event: Replace exterior painted wood doors with insulated hollow metal doors. Provide new

hardware. (4 sets of double doors)

Concern:

Exterior painted wood doors are deteriorating.

Recommendation:

Replace 6 exterior painted wood doors with insulated hollow metal doors.

TypeYearCostPriorityFailure Replacement2007\$6,420Low

Updated: February 15 2006

# B2030.03 Large Exterior Special Doors\*

Manually operated wood sectional overhead doorswith glazed panels in woodworking shop and automotives areas (4)

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

Event: Replace wood sectional overhead doors with insulated prefinished metal overhead doors,

electrically operated.

#### Concern:

Overhead doors are wooden and in marginal condition. They provide little insulation value and are high maintenance items.

#### Recommendation:

Provide 4 new insulated metal sectional doors, electrically operated.

TypeYearCostPriorityFailure Replacement2007\$25,680Low

Updated: February 15 2006

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

Small area of original tar and gravel roof over the boiler room. (280 sq.m.)

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

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

Most areas have been reroofed between 1987 and 1991.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

# S3 INTERIOR

# C1010.01 Interior Fixed Partitions\*

Plaster on clay tile substrate. Upgraded areas have gypsum board on steel studs.

RatingInstalledDesign LifeUpdated4 - Acceptable050NOV-05

#### C1010.05 Interior Windows\*

Individual interior glazing in several locations, typically laminated glass in steel frames.

RatingInstalledDesign LifeUpdated4 - Acceptable040NOV-05

# C1020.01 Interior Swinging Doors\*\*

Painted wood doors in steel frames.

RatingInstalledDesign LifeUpdated4 - Acceptable050NOV-05

# C1020.03 Interior Fire Doors\*

Wood doors to stairs and on storage rooms and mechanical rooms are not rated.

RatingInstalledDesign LifeUpdated2 - Poor050NOV-05

# **Event:** Provide rated steel doors to stairs, storage rooms

and mechanical rooms.

(80 doors)

#### Concern:

Doors to stairs, storage rooms and mechanical rooms are not rated.

#### Recommendation:

Provide steel rated doors to stairs, storage rooms and mechanical rooms. 80 Doors

TypeYearCostPriorityCode Repair2007\$85,600Low

Updated: February 15 2006

# C1020.04 Interior Sliding and Folding Doors\*

Wood gym divider in main gym.

RatingInstalledDesign LifeUpdated4 - Acceptable040NOV-05

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

Combination of blackboards, whiteboards and display boards throughout classroom areas.

RatingInstalledDesign LifeUpdated4 - Acceptable010NOV-05

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

Metal toilet partitions, painted.

RatingInstalledDesign LifeUpdated3 - Marginal020NOV-05

Event: Replace painted toilet partitions with baked

enamel finish toilet partitions.

(28 stalls)

Concern:

Painted toilet partitions are scratched and bent.

Recommendation:

Replace painted toilet partitions with prefinished baked enamel toilet partitions.

TypeYearCostPriorityRepair2009\$44,940Low

Updated: February 15 2006

# C1030.06 Handrails\*

Painted pipe rail handrails and railings to mezzanine seating area.

RatingInstalledDesign LifeUpdated4 - Acceptable050NOV-05

#### C1030.08 Interior Identifying Devices\*

Cast aluminum and self adhesive plastic laminate signs on doors.

RatingInstalledDesign LifeUpdated4 - Acceptable010NOV-05

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

1280 full height steel lockers, painted. Original.

RatingInstalledDesign LifeUpdated4 - Acceptable030NOV-05

#### C1030.12 Storage Shelving\*

Millwork storage units in storage rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable020NOV-05

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

Miscellaneous washroom accessories such as electric handryers, roller towel dispensers, soap dispensers, toilet roll holders, mirrors.

RatingInstalledDesign LifeUpdated4 - Acceptable020NOV-05

# C2010 Stair Construction\*

Cast-in-place concrete stairs.

RatingInstalledDesign LifeUpdated4 - Acceptable0100NOV-05

# C2020.02 Terrazzo Stair Finishes\*

Terrazzo stair treads with carborundum strips on the nosings, integral coved terrazzo base.

RatingInstalledDesign LifeUpdated4 - Acceptable075NOV-05

#### C2020.08 Stair Railings and Balustrades\*

Stainless steel tubular handrails.

RatingInstalledDesign LifeUpdated4 - Acceptable050NOV-05

# C3010.01 Concrete Wall Finishes\*

Painted concrete walls in basement and connecting passageway to swimming pool.

RatingInstalledDesign LifeUpdated4 - Acceptable0100NOV-05

#### C3010.03 Plaster Wall Finishes\*

Plaster wall finish on clay tile substrate throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable040NOV-05

# C3010.04 Gypsum Board Wall Finishes\*

Upgraded areas have gypsum board finish on steel studs.

RatingInstalledDesign LifeUpdated4 - Acceptable040NOV-05

#### C3010.06 Tile Wall Finishes\*\*

Ceramic tile to dado height in corridors, stairs and washrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable050NOV-05

# C3010.06.02 Quarry Tile

Quarry tile floor in main science classroom.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### C3010.09 Acoustical Wall Treatment\*\*

12 x 12 perforated tile on acoustic matting in auditorium.

RatingInstalledDesign LifeUpdated4 - Acceptable020NOV-05

# C3010.11 Interior Wall Painting\*\*

Interior of classrooms and corridors above tile dado.

RatingInstalledDesign LifeUpdated3 - Marginal05NOV-05

**Event:** Repaint interior of classrooms and corridors above

tile dado. (20,250 sq.m.)

Concern:

Paint finish is dirty and blemished.

Recommendation:

Repaint interior of classrooms and corridors above dado height.

(11,000 sq M)

 Type
 Year
 Cost
 Priority

 Repair
 2007
 \$233,260
 Low

Updated: February 15 2006

#### C3020.01 Concrete Floor Finishes (Paint)\*

Painted storage room and utility room floors.

RatingInstalledDesign LifeUpdated4 - Acceptable075NOV-05

# C3020.02 Tile Floor Finishes\*\*

12 x 12 and 9 x 9 Vinyl asbestos tile in some classrooms and the entrance foyer to the auditorium.

RatingInstalledDesign LifeUpdated4 - Acceptable030NOV-05

# C3020.02.01 Ceramic Tile

Ceramic mosaic tile in washrooms.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

# Event: Replace ceramic mosaic tile in washrooms with

resilient sheet flooring.

Concern:

Ceramic mosaic tile in washrooms is patched and repaired in several locations.

Recommendation:

Remove ceramic mosaic tile and install sheet vinyl flooring. ( 200 sqM )

TypeYearCostPriorityFailure Replacement2007\$21,400Low

Updated: February 15 2006

#### C3020.03 Terrazzo Floor Finishes\*

Terrazzo flooring in corridors and main entrance, with coved terrazzo base.

RatingInstalledDesign LifeUpdated4 - Acceptable070NOV-05

#### C3020.04 Wood Flooring\*\*

Resilient wood flooring in both gymnasia. Wood strip flooring in I.A. woodworking area. New resilient wood flooring in dance studio.

RatingInstalledDesign LifeUpdated5 - Good025NOV-05

# C3020.07 Resilient Flooring\*\*Lino

Original linoleum flooring in 60% of the classrooms.

 Rating
 Installed
 Design Life
 Updated

 2 - Poor
 0
 20
 NOV-05

Event: Replace original linoleum flooring with new resilient sheet vinyl flooring. (approximately 4400 sq.m.)

Concern:

Original linoleum is 53 years old and worn with open seams.

Recommendation:

Replace linoleum flooring in 60% of the classrooms with new resilient sheet vinyl flooring. (3800 sq M)

TypeYearCostPriorityFailure Replacement2007\$282,480Medium

Updated: February 15 2006

# C3020.07.02 Resilient Sheet Flooring

Resilient sheet vinyl flooring in upgraded areas.

RatingInstalledDesign LifeUpdated5 - Good00NOV-05

# C3020.08 Carpet Flooring\*\*

Carpet in general office and staff areas.

RatingInstalledDesign LifeUpdated4 - Acceptable010NOV-05

# C3020.11 Floor Painting

Painted concrete floors to some utility rooms and storage rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable05NOV-05

#### C3020.14 Other Floor Finishes\*\*

Sealed concrete floor slab to mechanical rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable05NOV-05

#### C3030.01 Concrete Ceiling Finishes\*

Painted concrete finish to basement areas and connecting undergound passageway to the adjacent swimming pool.

RatingInstalledDesign LifeUpdated4 - Acceptable0100NOV-05

#### C3030.03 Plaster Ceiling Finishes\*

Plaster ceilings in utility rooms, storage rooms, washrooms and change rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable050NOV-05

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

Upgraded areas such as the Home Ec.area and the staff areas have T-bar ceilings with lay-in acoustic tile.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

# C3030.07 Interior Ceiling Painting\*\*

Painted ceilings throughout with the exception of upgraded areas which have T-bar ceilings.

RatingInstalledDesign LifeUpdated3 - Marginal010NOV-05

# Event: Repaint plaster ceilings in utility rooms, storage rooms, washrooms and change rooms.

#### ioonis, wasinoonis and change room

Paint finish to plaster ceilings in utility rooms, storage rooms, washrooms and change rooms is damaged and discoloured.

#### Recommendation:

Concern:

Repaint plaster ceilings in utility rooms and storage rooms. (1200 sq M)

TypeYearCostPriorityFailure Replacement2007\$26,750Low

Updated: February 15 2006

#### C3030.09 Other Ceiling Finishes\*Asbestos Acoustic Spray

Asbestos acoustic spray finish to underside of concrete floor and roof slabs, in most classrooms. See Asbestos Building Material Survey Report dated March 21, 2000. This material was identified as requiring scheduled repair or removal.

Rating Installed Design Life Updated 3 - Marginal 0 0 NOV-05

Event: Remove asbestos acoustic ceiling spray throughout

building. (6,800 sq.m.) Install T-bar ceilings.

Concern:

Acoustic ceiling spray is subject to deterioration and impacts upgrading costs.

**Recommendation:** 

Remove the asbestos ceiling spray and install T-bar ceilings with lay-in acoustic tiles. (7000 sq M)

TypeYearCostPriorityHazardous Materials2007\$1,018,640Medium

Abatement

Updated: February 15 2006

# C3030.09 Other Ceiling Finishes\*Tectum Acoustic Panels

Main gymnasium has Tectum acoustic panel ceiling.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

# D1010.01.02 Hydraulic Passenger Elevators\*\*

Handicapped elevator providing access to both floor levels and the basement.

Rating Installed Design Life Updated 5 - Good 0 30 NOV-05

# D1010.02 Lifts\*\*

Wheelchair stair lift providing access to Industrial Arts and Automotives wing.

Rating Installed Design Life Updated 5 - Good 0 25 NOV-05

# **S4 MECHANICAL**

# D2010.01 Water Closets\*\* - 1953

1953: Floor mounted, elongated and regular bowl, flush tank, flush valve, open and closed front seats.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

**Event:** Install new water closets.

Concern:

Several water closets cracked. Fixtures dated. Water wastage.

Recommendation:

Install new water closets (20).

TypeYearCostPriorityOperating Efficiency Upgrade 2007\$21,400Medium

Updated: February 15 2006

# D2010.01 Water Closets\*\* - 1957

1957: Floor mounted, elongated, flush tank, open front seat.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

# **Event:** Install new water closets.

Concern:

Several water closets cracked, fixtures rated. Water wastage.

Recommendation:

Install new water closets (6).

Type Year Cost Priority
Operating Efficiency Upgrade 2007 \$6,420 Medium

Updated: February 15 2006

# D2010.01 Water Closets\*\* - 1961

1961: Floor mounted elongated, open front, flush tank style.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

**Event: Install new water closet.** 

Concern:

Fixture dated. Water wastage.

Recommendation:

Install new water closet (1).

Type Year Cost Priority
Operating Efficiency Upgrade 2007 \$1,070 Medium

Updated: February 15 2006

D2010.02 Urinals\*\* - 1953

1953: Stall and wall hung, flush tank.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

Event: Install new flush valve urinals.

Concern:

Several urinals are cracked. Fixtures dated. Water wastage.

Recommendation:

Install new flush valve urinals (7).

TypeYearCostPriorityFailure Replacement2007\$14,980Medium

Updated: February 15 2006

D2010.02 Urinals\*\* - 1957

1957: Stall, flush tank.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

Event: Install new urinals.

Concern:

Urinals dated. Water wastage.

Recommendation:

Install new flush valve urinals (3).

TypeYearCostPriorityOperating Efficiency Upgrade 2007\$12,840Medium

Updated: February 15 2006

#### D2010.03 Lavatories\*\* - 1953

1953: Vitreous china wall hung, stainless steel countertop with time delay brass.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

**Event:** Install new stainless steel countertop lavatories,

time delay faucets and millwork.

Concern:

Wall hung lavatories have been vandalized.

Recommendation:

Install new stainless steel countertop lavatories (16).

TypeYearCostPriorityOperating Efficiency Upgrade 2007\$40,660Medium

Updated: February 15 2006

# D2010.03 Lavatories\*\* - 1957

1957: Vitreous china, wall hung, on/off brass.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

**Event:** Install new stainless steel countertop lavatories,

time delay faucets and millwork.

Concern:

Wall hung lavatories have been vandalized.

**Recommendation:** 

Install new stainless steel countertop lavatories, time delay faucets and millwork.

Type Year Cost Priority
Operating Efficiency Upgrade 2007 \$21,400 Medium

Updated: February 15 2006

# D2010.03 Lavatories\*\* - 1961

1961: Vitreous china, wall mounted, on/off brass.

RatingInstalledDesign LifeUpdated4 - Acceptable030NOV-05

# D2010.04 Sinks\*\*

Stainless steel counter sinks with swing spout, stainless steel sink, silk screen pressure wash sink, stainless steel lab sinks.

RatingInstalledDesign LifeUpdated4 - Acceptable030NOV-05

# D2010.05 Showers\*\* - 1953

1953: Institutional head, adjustable head, new central mix valves, time delay push button valve and on/off temperature adjustable valve. Female locker room shower renovated in 2003.

RatingInstalledDesign LifeUpdated4 - Acceptable030NOV-05

# D2010.05 Showers\*\* - 1961

1961: Stall, hot cold on/off brass, adjustable head. Physical education office.

RatingInstalledDesign LifeUpdated4 - Acceptable030NOV-05

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

Wall hung, vitreous china and stainless steel, non refrigerated and refrigerated.

RatingInstalledDesign LifeUpdated4 - Acceptable030NOV-05

# D2010.09 Other Plumbing Fixtures\*\*

Raised janitor sink. No vacuum breaker on brass.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

# **Event:** Replace janitor sink.

#### Concern:

Difficult to discharge waste from wash buckets into raised sink. No vacuum breaker on brass.

#### Recommendation:

Install floor mounted janitor sink and brass with vacuum breaker.

Type Year Cost Priority
Operating Efficiency Upgrade 2006 \$3,210 Medium

Updated: February 15 2006

#### D2010.09 Other Plumbing Fixtures\*\*

Gas turrets in science room.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

**Event:** Install electric solenoid valve and shut off

activation button.

Concern:

Unable to locate central shut off.

**Recommendation:** 

Install electric solenoid valve and shut off activation button.

TypeYearCostPriorityCode Upgrade2007\$9,630Medium

Updated: February 15 2006

# D2010.09 Other Plumbing Fixtures\*\*

Handicap water closets, Bradley wash fountains, dishwashers, washing machines, emergency wash showers, eye wash centers in labs, kitchens and mechanical rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### D2010.09 Other Plumbing Fixtures\*\* - 1957

1957: Floor mounted janitor mop sink brass with vacuum breaker.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

# D2020.01.01 Pipes and Tubes: Domestic Water\*

Copper piping and fittings.

RatingInstalledDesign LifeUpdated4 - Acceptable040NOV-05

# D2020.01.03 Piping Specialties (Backflow Preventors)\*\*

Exterior hose bibbs complete with vacuum breakers. Supervised backflow preventer installed on fire line.

Rating Installed Design Life Updated 5 - Good 0 30 NOV-05

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

In line circulation pump installed between storage tank and heat exchanger. Two (2) inline system circulation pumps.

RatingInstalledDesign LifeUpdated4 - Acceptable020NOV-05

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

Boiler room - one (1) A.O. Smith hot water heater, input 67,590 BTU/hr., one (1) State sandblaster hot water heater input 126,000 BTU/hr.

RatingInstalledDesign LifeUpdated5 - Good020NOV-05

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

Hot water storage room: Two (2) Bradford White hydrojet hot water heater (2005), input 125,000 BTU/hr, summer use only.

RatingInstalledDesign LifeUpdated5 - Good020NOV-05

# D2020.03 Water Supply Insulation\*: Domestic

Majority of domestic hot, cold, recirculation piping insulated.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

# Event: Insulate domestic water lines.

#### Concern:

Domestic piping is not fully insulated as there are sections throughout building without insulation.

#### Recommendation:

Insulate all domestic water lines where required.

TypeYearCostPriorityEnergy Efficiency Upgrade2007\$10,700Medium

Updated: February 15 2006

# D2030.01 Waste and Vent Piping\*

Cast iron sanitary piping, galvanized drain lines and copper vent piping. Varies in age up to 53 years.

RatingInstalledDesign LifeUpdated2 - Poor050NOV-05

# **Event: Install new drain piping.**

#### Concern:

Galvanized drain lines deteriorated.

Recommendation: Install new piping.

TypeYearCostPriorityFailure Replacement2006\$32,100High

Updated: February 15 2006

# D2030.02 Waste Piping Specialties\*

Bottle trap on science room sinks.

RatingInstalledDesign LifeUpdated2 - Poor050NOV-05

**Event:** Install new bottle traps on science lab sinks.

Concern:

Bottle traps in science labs are leaking.

**Recommendation:** Install new bottle traps.

TypeYearCostPriorityFailure Replacement2006\$8,560High

Updated: February 15 2006

# D2030.03 Waste Piping Equipment\*

Sewage lift pump provided for academic fan room.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### D2030.03 Waste Piping Equipment\*

Sump pump provided for fan room 008, boiler room and academic fan room.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### D2030.03 Waste Piping Equipment\*

Art room sinks and wash down hood in kitchen. Pot sink grease interceptor installed in kitchen.

Rating 2 - Poor 0 Design Life Updated NOV-05

Event: Install interceptors on wash down hood in kitchen and on art room sinks.

Concern:

No interceptors installed for kitchen wash down hood and art room sinks.

Recommendation:

Install interceptors on drains for wash down hood and art room sinks.

TypeYearCostPriorityCode Upgrade2007\$9,630Medium

Updated: February 15 2006

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

Rain water leaders from roof hoppers connected to underground storm drainage and drainage in crawl space.

RatingInstalledDesign LifeUpdated4 - Acceptable050NOV-05

# D2040.02.04 Roof Drains\*\*

Cast iron domes, full flow.

RatingInstalledDesign LifeUpdated4 - Acceptable040NOV-05

#### D2090.01 Compressed Air Systems\*\*

Two (2) simplex air compressors provide compressed air for shop wing.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

# D3010.02 Gas Supply Systems\*

Gas distribution piping to steam boilers, domestic hot water heaters, science rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable050NOV-05

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

Boiler #1 fire box low pressure steam boiler, original CRN: 789.2, capacity 3149 kg/hr.

Boiler #2 fire box low pressure steam heating boiler, original CRN: 789.2, capacity 3149 kg/hr.

Boiler #3 firetube low pressure steam boiler, original, CRN: C5729.52, capacity 1434 kg/hr.

RatingInstalledDesign LifeUpdated3 - Marginal035NOV-05

#### Event: Install new heating plant.

#### Concern:

Water leakage, energy inefficient, high maintenance, standing pilot.

#### Recommendation:

Install new heating plant. Install energy efficient coppertube boilers, fan assisted, low NOX, primary and secondary pumps.

TypeYearCostPriorityOperating Efficiency Upgrade 2008\$428,000Medium

Updated: February 15 2006

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

Masonry chimney. Insulated combustion air.

RatingInstalledDesign LifeUpdated4 - Acceptable035NOV-05

# D3020.01.04 Water Treatment: Steam Boilers\*

Chemical feed pumps.

RatingInstalledDesign LifeUpdated4 - Acceptable035NOV-05

# **D3040.01 Air Distribution Systems**

Auditorium ventilation is noisy.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

Event: Install acoustics to reduce noise.

Concern:

Auditorium ventilation is noisy.

Recommendation:

Install acoustics to reduce noise.

TypeYearCostPriorityIndoor Air Quality Upgrade2007\$74,900Medium

Updated: February 15 2006

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

Direct fired rooftop make up air unit. Purpose unknown.

RatingInstalledDesign LifeUpdated4 - Acceptable030NOV-05

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

Six (6) air systems of similar configuration. Built up air systems consist of motorized fresh, return, exhaust air dampers, filter bank, steam tempering coil, steam reheat coil, supply fan, low velocity ductwork distribution, ducted return air, return air fan. Two academic wing systems, 24,000 cfm each; gymnasium north and south air system 10,000 cfm each; auditorium air system 16,000 cfm; west gymnasium 12,000 cfm.

Four (4) air systems of similar configuration. Built up air systems consist of motorized fresh air damper, filter bank, steam preheat coil, steam tempering coil, steam reheat coil, supply fan, low velocity ductwork distribution. Locker room air system, 7000 cfm; rifle range air system 6000 cfm; shop air system, 12,000 cfm; cafeteria air system, 12,000 cfm.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

#### Event: Replace existing air systems.

#### Concern:

Freeze up of steam coils has occurred. Air bypass occurring on filters. Damper bushings worn, no seal on dampers, loose and damaged internal insulation.

#### Recommendation:

Replace existing air systems with new units. Propose fourteen new air systems. Air systems could be rooftop or indoor units. Propose installation of gas fired custom units with supply fan, return fan, motorized fresh, return, exhaust dampers, indirect fired heat exchanger, high turn down burner, medium efficiency filter bank, medium velocity ductwork to terminal boxes, CO2 sensor to vary amount of fresh air, variable frequency drives, connect to BMCS, cooling coil section for future cooling.

TypeYearCostPriorityFailure Replacement2008\$2,996,000Medium

Updated: February 15 2006

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

Air system filter sections complete with 50 mm throw away filters.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

#### D3040.01.04 Ducts: Air Distribution\*

Low velocity ceiling mounted supply ductwork to air outlets.

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

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

Air outlets vary as to type. Square and round diffusers, adjustable grilles, egg crate and linear return.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

**Event:** Replace damaged supply and return grilles and diffusers.

#### Concern:

Round diffusers in gym are damaged, adjustable wall mounted grilles in several classrooms are damaged. Return grilles in several classrooms are blocked offt.

#### Recommendation:

Install new supply and return diffusers and grilles

TypeYearCostPriorityFailure Replacement2007\$4,280Medium

Updated: February 15 2006

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

Steam condensate pumps located in fan room (009) and in hot water storage tank room. Both are piped to drain. COST INCLUDED IN D3040.02.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

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

Black iron piping to convectors, unit heaters. Condensate to three (3) steam boilers pumped from condensate receiver by two (2) condensate pumps. Condensate from shops, east and north west wings piped back to accumulator and then piped to condensate receiver by vacuum pumps. Remaining condensate piped directly to drains and condensate receiver.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

# Event: Install hot water heating piping and heating elements.

#### Concern:

Steam lines cannot be isolated at mains as isolation valves have failed. The building must be shut down in order to perform repairs. Condensate lines leaking. High maintenance.

#### Recommendation:

Install hot water heating piping and heating elements.

TypeYearCostPriorityFailure Replacement2008\$1,926,000Medium

Updated: February 15 2006

Report run on: June 8, 2006 7:25 AM Page 27 of 43

# D3040.04 Special Exhaust Systems

Cyclone dust collector related ductwork and hoods.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

Event: Install make up air unit.

Concern:

Dust collector is 100% exhaust air unit. No make up air.

Recommendation: Install make up air unit.

TypeYearCostPriorityOperating Efficiency Upgrade 2007\$53,500Medium

Updated: February 15 2006

# D3040.04 Special Exhaust Systems

Science room (112) has four (4) fume hoods, science room (114) has one (1) fume hood.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

Event: Install make up air units for science rooms.

Concern:

No make up air to offset exhaust air requirements.

Recommendation:

Install make up air units.

TypeYearCostPriorityCode Upgrade2008\$64,200Medium

Updated: February 15 2006

D3040.04.01 Fans: Exhaust\*\*

Roof mounted dome and centrifugal exhaust fans.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

**Event: Replace exhaust fans.** 

Concern:

Fan housing rusting.

Recommendation:

Replace failing exhaust fans (4).

TypeYearCostPriorityFailure Replacement2007\$17,120Medium

Updated: February 15 2006

D3040.04.03 Ducts: Exhaust\*

Low velocity ductwork to exhaust air outlets and fans.

D3040.04.05 Air Outlets and Inlets: Exhaust\*

Egg crate and linear bar exhaust air grilles.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

D3050.01.01 Computer Room Air Conditioning Units\*\*

Four (4) computer labs.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

**Event:** Install air conditioning in computer labs.

Concern:

No air conditioning in four (4) computer rooms. Rooms over heat.

Recommendation:

Install four (4) ductless air conditioning units with remote condensing unit.

Type Year Cost Priority
Operating Efficiency Upgrade 2007 \$171,200 Medium

Updated: February 15 2006

D3050.01.01 Computer Room Air Conditioning Units\*\* - Server Room

Server Room: Two (2) server rooms.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

Event: Install air conditioning in server rooms.

Concern:

No air conditioning in two (2) server rooms. Rooms over heat.

Recommendation:

Install two (2) ductless air conditioning units with remote condensing units.

TypeYearCostPriorityOperating Efficiency Upgrade 2007\$53,500Medium

Updated: February 15 2006

#### D3050.01.04 Unit Air Conditioners\*\*

Water cooled recirculation unit in book depository.

RatingInstalledDesign LifeUpdated4 - Acceptable030NOV-05

#### D3050.01.04 Unit Air Conditioners\*\*

Window air conditioning unit in Office 224.

RatingInstalledDesign LifeUpdated4 - Acceptable030NOV-05

# D3050.03 Humidifiers\*\*

No humidification.

RatingInstalledDesign LifeUpdated3 - Marginal025NOV-05

# Event: Install gas fired humidifiers.

#### Concern:

No humidification. Alberta Infrastructure Design Guidelines recommends humidification.

#### Recommendation:

Install low maintenance gas fired humidifiers (14) with multiple grids for proposed new air systems. Install water softener.

TypeYearCostPriorityIndoor Air Quality Upgrade2008\$599,200Medium

Updated: February 15 2006

#### D3050.05.01 Convectors\*\*

Exposed and recessed convectors. COST INCLUDED IN D3040.02.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

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

Recessed fan coil units installed in main entrance. COST INCLUDED IN D3040.02.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

#### D3050.05.03 Finned Tube Radiation\*\*

Limited amount of wall fin radiation installed. COST INCLUDED IN D3040.02.

RatingInstalledDesign LifeUpdated3 - Marginal040NOV-05

#### D3050.05.06 Unit Heaters\*\*

Vertical unit heaters installed in woods shop, automotive shop. Horizontal unit heater installed in various basement, main floor rooms, corridors, mechanical rooms. COST INCLUDED IN D3040.02.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

#### D3060.02.01 Electric and Electronic Controls\*\*

Electric thermostats cycle unit heaters, fan coil units to maintain set point. COST INCLUDED IN D3060.02.05.

Rating Installed Design Life Updated 3 - Marginal 0 30 NOV-05

# D3060.02.02 Pneumatic Controls\*\*

Two (2) Simplex air compressors, no refrigerated air dryer, pneumatic thermostats, dampers, control valve. COST INCLUDED IN D3060.02.05.

RatingInstalledDesign LifeUpdated3 - Marginal040NOV-05

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

No BMCS.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

# **Event:** Install BMCS.

#### Concern:

Current energy management technology not being utilized. Automatic control panels installed in 1989 are basically time clock control and do not provide temperature control of units. Majority of pneumatic controls are original and failure is imminent.

#### Recommendation:

Install BMCS to control equipment activation and provide global control in maintaining building environment. Replace existing pneumatic controls with digital controls throughout. Provide digital controls for proposed upgrades.

TypeYearCostPriorityEnergy Efficiency Upgrade2008\$749,000Medium

Updated: February 15 2006

#### **D4010 Sprinklers: Fire Protection\***

Wet sprinklers located in Industrial Arts room (157) and Special Needs room (155). Test valve located in Special Needs room.

RatingInstalledDesign LifeUpdated4 - Acceptable050NOV-05

# D4020 Standpipes\*

Wet standpipe fire hose cabinets complete with 65 mm angle valve, 40 mm hose valve, fire extinguisher.

RatingInstalledDesign LifeUpdated4 - Acceptable050NOV-05

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

ABC fire extinguishers, pressurized water extinguishers, pump style extinguishers, installed in cabinets and on wall brackets.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

# **Event:** Provide proper signage for all fire extinguishers and cabinets.

#### Concern:

Numerous fire extinguishers and cabinet locations not identified.

#### Recommendation:

Provide signage for fire extinguishers and cabinets to make location easily recognizable.

TypeYearCostPriorityCode Upgrade2007\$2,140Medium

Updated: February 15 2006

#### D4030.01 Fire Extinguisher, Cabinets and Accessories\*\* - 1957

1957: Fire hose cabinets located in stairwell.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

# **Event: Relocate fire hose cabinet.**

#### Concern:

Fire hose cabinet located in stairwell. If hose was used for fire in corridor, it would prevent stairwell door from closing.

# Recommendation:

Relocate fire hose cabinet into corridor.

TypeYearCostPriorityCode Upgrade2007\$12,840Medium

Updated: February 15 2006

#### D4090 Other Fire Protection Systems\*

Fire blankets installed in labs, flammable wooden and metal storage cabinets installed in science rooms.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

**Event:** Install metal flammable storage cabinets in place

of wooden.

Concern:

Flammable chemicals are stored in wooden cabinet.

Recommendation:

Install approved metal storage cabinet.

TypeYearCostPriorityOperating Efficiency Upgrade 2006\$12,840Medium

Updated: February 15 2006

**Event: Provide new flammable resistant storage cabinets** 

to accommodate chemicals currently stored in

cupboards.

Concern:

A large amount of chemicals were stored in regular cabinets.

Recommendation:

Install new flammable materials storage cabinets.

TypeYearCostPriorityIndoor Air Quality Upgrade2007\$14,980Medium

Updated: February 15 2006

# S5 ELECTRICAL

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

Three (3) interior Supreme Power Supplies transformers - 2.4kW, 120-240V - 3 Phase - 4 Wire rated 125kVA, located in basement high voltage room. 1952 Cemco main breaker, rated 5kW / 400A. The primary feeder is underground from an EPCOR source, west of the school in the ally across the field.

RatingInstalledDesign LifeUpdated3 - Marginal040NOV-05

**Event:** Replace interior transformers with exterior pad mounted transformer.

Concern:

Old original equipment, difficult to access and service.

Recommendation:

Install pad mounted transformer.

TypeYearCostPriorityFailure Replacement2007\$42,800Medium

Updated: February 15 2006

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

1952 Westinghouse main distribution panel rated 600 Amps, 120/208 Volts - 3 Phase - 4 Wire, original MDP is full, no further spaces. A Cutler-Hammer 400 Amp MDP spliced into existing Westinghouse MDP. Maximum demand = 262 kVA (64 Amps - primary). No surge protection.

RatingInstalledDesign LifeUpdated3 - Marginal040NOV-05

Event: Provide a new Main Distribution Panel c/w surge protection.

Concern:

Original equipment is obsolete, no surge protection.

Recommendation:

Replace MDP with new. Provide TVSS device.

TypeYearCostPriorityFailure Replacement2007\$53,500Low

Updated: February 15 2006

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

120/208 Volts - 3 Phase - 4 Wire panelboards located in mechanical, storage rooms, electrical rooms throughout the school. Some panels are full.

RatingInstalledDesign LifeUpdated3 - Marginal025NOV-05

**Event:** Provide additional electrical panels.

Concern:

Panel are full, cannot add additional circuits.

Recommendation:

Provide 20 new branch circuit panels.

TypeYearCostPriorityProgram Functional Upgrade2007\$53,500Low

Updated: February 15 2006

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

Loose motor starters and manual switches in mechanical rooms. Original equipment becoming obsolete.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

**Event:** Replace obsolete motor starters with new

equipment.2007

Concern:

Obsolete motor starters.

Recommendation:

Replace 15 motor starters with new equipment.

TypeYearCostPriorityFailure Replacement2007\$16,050Medium

Updated: February 15 2006

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

Wiring installed in conduit. Lack of receptacles in classrooms throughout the school.

RatingInstalledDesign LifeUpdated3 - Marginal050NOV-05

Event: Increase the number or circuits and qauntities of receptacles in classrooms and other areas

affected.

Concern:

Insufficient quantity of duplex receptacles.

Recommendation:

Add circuits and receptacles in classrooms. Allow for 200 new receptacles.

Type Year Cost Priority
Program Functional Upgrade 2007 \$53,500 Low

Updated: February 15 2006

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

Local 120V line voltage switching throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable030NOV-05

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

Lighting consists of surface or suspended 1X4 wraparound type light fixtures. Second floor and main floor corridors, gymnasium and 2nd floor classrooms have T8 lamps and electronic ballasts. Remaining to be replaced.

RatingInstalledDesign LifeUpdated3 - Marginal030NOV-05

Event: Replace remaining lighting fixtures with T8 lamps

and T8 electronic ballasts.

Concern:

Light fixtures are not energy efficient.

Recommendation:

Replace light fixtures with T8 lamps/ballasts. 1654 light

fixtures to be replaced.

TypeYearCostPriorityEnergy Efficiency Upgrade2007\$224,700Low

Updated: February 15 2006

#### D5020.02.02.05 Other Interior Fixtures\*

EXIT lights are located throughout the school. Incandescent type EXIT lights, not tied into battery packs.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

**Event:** Provide LED type EXIT lights.

Concern:

Existing EXIT lights not energy efficient.

**Recommendation:** 

Replace 30 existing lights with LED type and connect into battery packs.

TypeYearCostPriorityEnergy Efficiency Upgrade2007\$10,700Medium

Updated: February 15 2006

## D5020.02.03 Emergency Lighting\*

Emergency lighting consists of battery packs c/w integral and remote heads. Insufficient quantity of emergency lighting.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

## **Event:** Provide additional emergency battery packs.

Concern:

Insufficient emergency lighting.

Recommendation:

Provide 30 additional battery packs.

TypeYearCostPriorityCode Upgrade2007\$32,100Medium

Updated: February 15 2006

#### D5020.03.01.04 Exterior H.P. Sodium Fixtures\*

High pressure sodium flood lights mounted on roof for exterior lighting.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

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

Photo-electric control for exterior lighting.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

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

There is an Edwards IRC-3 fire alarm control panel located in the general office, annunciator panel located at the main entrance. System installed in 1996. Manual and automatic addressable devices throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

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

Intrusion alarm system is a MAX System control panel located in the general office electrical room. P.I.R.'s located throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

#### D5030.02.04 Video Surveillance\*\*

The video surveillance system consists of a National Electronics head-end cabinet in the general office electrical room. There are 16 colour cameras throughout the interior and exterior of the school. Viewing of the cameras are off the data network system, which is accessed by only authorized personnel with password access.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

#### D5030.03 Clock and Program Systems\*\*

Simplex master program clock controls class change signals. Located in general office storage room. Battery clocks are located throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

### D5030.04.01 Telephone Systems\*\*

Meridian telephone system head-end located in general office electrical room. Telephone sets in classrooms, staff areas, offices, general office, student services.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

#### D5030.04.04 Data Systems\*\*

Main server and data closet located in 2nd floor library A.V. room. A sub data panel located in general office electrical room.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

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

Rauland Public Address system located in general office storage room. System is being used for all-call via TOA microphone. Surface speakers in classrooms and corridors.

RatingInstalledDesign LifeUpdated4 - Acceptable020NOV-05

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

## E1020.02 Library Equipment\*

Security scanner at the library entrance.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

## E1020.03 Theater and Stage Equipment\*

The auditorium stage is equiped with stage drapery, spotlights and sound system. The stage is painted masonite finish on a wood stage platform.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

## E1020.07 Laboratory Equipment\*

The science rooms have a total of 5 fume hoods.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

### E1030.01 Vehicle Service Equipment\*

Automotives area has 2 hoists and a variety of small tools.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

#### E1090.03 Food Service Equipment\*

Cafeteria kitchen is equipped with 2 deep fryers, convection oven, commercial gas range and griddle, 2 chest freezers, 1 upright freezer, 1 double width upright freezer, 1 walk-in cooler, hot food storage trays, slush machine and a reach-in cooler.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

#### E1090.04 Residential Equipment\*

Staff areas have domestic kitchens with sink, fridge and microwave. Home Economics area has 11 electric ranges, dishwasher, laundry washer and dryer, electric range top, convection oven, 9 microwaves, 4 upright fridge/freezers and 3 upright freezers.

RatingInstalledDesign LifeUpdated4 - Acceptable025NOV-05

### E1090.07 Athletic, Recreational, and Therapeutic Equipment\*

Each gymnasium is equiped with four sidecourt plywood basketball backstops and two glass basketball backstops, upswing in the main gym and sideswing in the smaller gym.

RatingInstalledDesign LifeUpdated4 - Acceptable015NOV-05

#### E2010.02.05 Educational Facility Casework\*

Classrooms typically have perimeter shelving units which house heating cabinets.

RatingInstalledDesign LifeUpdated3 - Marginal035NOV-05

## **Event:** Replace perimeter shelving with new shelving.

#### Concern:

Perimeter shelving is in marginal condition, with overstressed shelves. Mechanical upgrading will necessitate the rmoval of this millwork.

#### Recommendation:

Replace perimeter millwork in conjunction with mechanical systems replacements.( 190 L M)

TypeYearCostPriorityFailure Replacement2007\$203,300Low

Updated: February 15 2006

#### E2010.02.07 Kitchen Casework\*

Cafeteria kitchen has base units with stainless steel tops, and upper storage cupboards.

RatingInstalledDesign LifeUpdated4 - Acceptable035NOV-05

## E2010.02.08 Laboratory Casework\*

Science rooms have perimeter and island millwork units.

RatingInstalledDesign LifeUpdated4 - Acceptable035NOV-05

#### E2010.02.09 Library Casework\*

Millwork shelving units and main librarian charge desk.

RatingInstalledDesign LifeUpdated4 - Acceptable035NOV-05

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

Roller blinds in classrooms, vertical blinds in staff areas and general office.

RatingInstalledDesign LifeUpdated3 - Marginal035NOV-05

**Event:** Replace roller blinds with perforated roller blinds

throughout classroom areas.

(380 blinds)

Concern:

Roller blinds are obsolete and mechanisms are worn.

Recommendation:

Replace existing roller blinds with new perforated roller blinds. (380 Blinds)

TypeYearCostPriorityFailure Replacement2007\$60,990Low

Updated: February 15 2006

## E2010.03.06 Curtains and Drapes\*\*

Window drapery in classrooms. Stage drapery in auditorium.

RatingInstalledDesign LifeUpdated3 - Marginal035NOV-05

#### Event: Remove and dispose of drapery from classrooms.

Concern:

Window drapery is obsolete.

Recommendation:

Remove and dispose of drapery from classrooms.

TypeYearCostPriorityRepair2007\$4,280Low

Updated: February 15 2006

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

Formed plywood seating on cast iron frames in auditorium. 1953 vintage.

RatingInstalledDesign LifeUpdated4 - Acceptable035NOV-05

#### E2020 Moveable Furnishings\*

Classroom and office furniture and equipment throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

# Edmonton - Eastglen Composite High School (B3096A)

## F1010.02.05 Grandstands and Bleachers\*\*

Pull-out bleachers in main gymnasium for spectator seating. Cast-in-place concrte mezzanine with fixed platforms for spectator seating.

RatingInstalledDesign LifeUpdated4 - Acceptable050NOV-05

#### F1040.01 Aquatic Facilities\*

Adjacent swimming pool (City owned) is accessed through an underground passageway.

RatingInstalledDesign LifeUpdated4 - Acceptable040NOV-05

#### F2020.01 Asbestos\*

Asbestos materails throughout ceilings and mechanical systems. See Asbestos Building Materials Survey Report dated march 21, 2000.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### F2020.02 PCBs\*

T12 lights with magnetic ballasts have PCB content. No sign of leakage.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

## F2020.03 Mercury\*

None identified

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### F2020.04 Mould\*

None evident

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### S8 FUNCTIONAL ASSESSMENT

## **K3010 Building Services**

Appear satisfactory.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

## **K3020 Indoor Environment**

Poor indoor air quality due to obsolete mechanical system. See mechanical system replacement events.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

## **K40 Current Code Issues**

Significant number of dead-end corridors in the basement area and lack of fire rated doors to stairs, storage rooms and mechanical rooms. Doors are identified in interior events.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

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

There are barrier free access routes to the car park area.

RatingInstalledDesign LifeUpdated5 - Good00NOV-05

#### K4010.02 Barrier Free Entrances

Barrier free entrances are provided.

 Rating
 Installed
 Design Life
 Updated

 5 - Good
 0
 0
 NOV-05

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

Barrier free interior circulation is provided.

RatingInstalledDesign LifeUpdated5 - Good00NOV-05

#### K4010.04 Barrier Free Washrooms

Barrier free washrooms are provided.

RatingInstalledDesign LifeUpdated5 - Good00NOV-05

# **RECAPP Facility Evaluation Report**

Eastglen Composite High School \$3096 Edmonton

# Edmonton - Eastglen Composite High School (S3096)

# **Facility Details**

Building Name: Eastglen Composite High So

Address:

Location: Edmonton

Building Id: \$3096
Gross Area (sq. m): 0.00
Replacement Cost: \$0
Construction Year: 0

## **Evaluation Details**

**Evaluation Company:** 

Evaluation Date: November 4 2005

**Evaluator Name:** 

Total Maintenance Events Next 5 years: \$375,570 5 year Facility Condition Index (FCI): 0%

## **General Summary:**

Shared site with Bellevue Elementary School. Relatively flat, grassed sports fields with cinder running track. Asphalt paved access roads and parking lots. Concrete sidewalks. Ornamental lawn area and mature trees at front of school. Chain link fence to the perimeter of the site, except for frontage to 68 Street.

#### **Structural Summary:**

## **Envelope Summary:**

#### **Interior Summary:**

## **Mechanical Summary:**

#### **Electrical Summary:**

Rating Guide				
<b>Condition Rating</b>	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)\*\*

Asphalt access roads and and combined parking lots.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

## **Event:** Replace asphalt paving and sub-base.

#### Concern:

Asphalt is cracked and heaving. Sub-base is likely deteriorated due to water penetration.

#### Recommendation:

Remove existing asphalt topping, repair or replace sub-base and provide new asphalt paving. 2600 sq.m.

TypeYearCostPriorityFailure Replacement2007\$306,020Medium

Updated: February 22 2006

#### G2020.06.02 Parking Bumpers\*

Parking rail between parking rows. Tubular steel parking rail and posts.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### G2020.06.03 Parking Lot Signs\*

Painted signs on parking rails.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### G2020.06.04 Pavement Markings\*

Painted parking lines.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

## G2030.04 Rigid Pedestrian Pavement (Concrete)\*\*

Concrete sidewalks.

RatingInstalledDesign LifeUpdated3 - Marginal00NOV-05

**Event:** Replace cracked concrete sidewalks.

Concern:

Concrete sidewalks are cracked and uneven.

Recommendation:

Replace 50% of concrete sidewalks. 450 sq.m.

TypeYearCostPriorityFailure Replacement2007\$69,550Medium

Updated: February 22 2006

## G2030.06 Exterior Steps and Ramps\*

Concrete stoops and ramps.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### G2040.02 Fences and Gates\*\*

Chain closes off access road to rear of school.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### G2040.03 Athletic and Recreational Surfaces\*\*

Grassed sports fields. Cinder running track.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### G2040.05 Site and Street Furnishings\*

Concrete freestanding waste receptacles. Metal freestanding bicycle racks.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

## G2040.06 Exterior Signs\*

Freestanding building sign, wood structure with ability to post school events.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### G2040.08 Flagpoles\*

Wall mounted aluminum flagpole.

Rating Installed Design Life Updated
4 - Acceptable 0 0 NOV-05

#### G2050.04 Lawns and Grasses\*

Grassed sports fields and ornamental lawn.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

## G2050.05 Trees, Plants and Ground Covers\*

Mature deciduous and evergreen trees at front of school.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### G3010.02 Site Domestic Water Distribution\*

150mm domestic line connected to city main.

RatingInstalledDesign LifeUpdated5 - Good00NOV-05

#### G3010.03 Site Fire Protection Water Distribution\*

No fire hydrant within 45 m of main entrance.

RatingInstalledDesign LifeUpdated2 - Poor00NOV-05

## Event: Install fire hydrant within 45m of main entrance.

#### Concern:

Code requires fire hydrant to be within 45m of main entrance.

#### **Recommendation:**

Install new fire hydrant close to main entrance, connected to 150mm domestic water line.

TypeYearCostPriorityCode Upgrade2006\$21,400High

Updated: February 22 2006

#### G3020.01 Sanitary Sewage Collection\*

Combined sanitary /storm system.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### G3030.01 Storm Water Collection\*

Catch basins in parking lot and landscaped areas. 200mm storm sewer from school to combined sanitary / storm system.

RatingInstalledDesign LifeUpdated4 - Acceptable00NOV-05

#### G3060.01 Gas Distribution\*

Natural gas line to interior meter.

RatingInstalledDesign LifeUpdated5 - Good00NOV-05

# **Edmonton - Eastglen Composite High School (S3096)**

## G4010.04 Car Plugs-ins\*

There are a total of 31 duplex weatherproof receptacles. In the south parking lot there are 10 duplex receptacles in an angled boxes mounted to steel tubular rails. In the west parking lot there are 21 receptacles, 8 are wall mounted and 13 are mounted in angled boxes on steel tubular rails. Each receptacle serves two stalls. The receptacles are time-clock controlled.

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

## G4020.01 Area Lighting\*

Area lighting consists of roof mounted high pressure sodium flood lights. There are HPS pole mounted luminaires.

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