RECAPP Facility Evaluation Report

Elk Island Pub Sch Reg Div #14



Rudolph Hennig Elementary / Junior High School

B3451A

Fort Saskatchewan

Report run on: March 12, 2007 9:29 AM

Facility Details

Building Name: Rudolph Hennig Elementary
Address: 9512 - 92 Street
Location: Fort Saskatchewan

Building Id: B3451A
Gross Area (sq. m): 5,395.64
Replacement Cost: $9,814,896
Construction Year: 0

Evaluation Details

Evaluation Company: Kenneth M. Lee Architect
Evaluation Date: October 31 2006
Evaluator Name: Ken Lee

Total Maintenance Events Next 5 years: **$1,353,800**
5 year Facility Condition Index (FCI): **13.79%**

General Summary:
The original one storey 2,821.28 sq.m. school was constructed in 1970.

A one storey 1,776.53 sq.m. addition was added in 1972 and another one storey 797.83 sq.m. addition was added in 1976. The 1972 and 1976 additions have the same type of construction as the original building.

The building is non-sprinklered and in good condition.
The student capacity is 394.
The school is well maintained.

Structural Summary:
The 1970 original building and the 1972 and 1976 additions have concrete wall foundations with continuous concrete footing.

The roof structures of the 1970 original building and the 1972 and 1976 additions are steel deck on steel joists supported by concrete block walls and concrete walls.
The structure is in good condition.

Envelope Summary:
The majority of the exterior walls of the building are clad with stucco. Some exterior walls are painted concrete block walls.
The building has aluminum windows in wood frames. Two classrooms facing the interior courtyard have small wood windows.
Entrance doors are aluminum doors and hollow metal doors.
BUR of the 1970 original building and the 1972 addition are in acceptable condition. BUR of the 1976 addition was re-roofed in 2002.
The building envelope is in acceptable condition.

Interior Summary:
Vinyl floor tiles and sheet vinyl flooring in classrooms, science classrooms and computer classroom. Quarry floor tiles in corridors of 1970 original building and 1976 addition. Sheet vinyl flooring in corridors of 1972 addition. Carpet in administration area and library. Walls are painted concrete block, concrete and gypsum board. Ceilings are acoustic ceiling tiles in classrooms, science classrooms and multi-purpose room. Textured coating on gypsum board ceilings in vestibules, corridors and library. Wood panel ceiling in music room.
The interior is in acceptable condition.

Mechanical Summary:
The mechanical systems and equipment are generally in acceptable condition. Ventilation systems are at the end of their life and will require upgrading. Many of the plumbing fixtures will require upgrades to meet code and water consumption standards.

Electrical Summary:
800 Amp 120/208 volt three phase manufactured by General Electric, fed from an underground service. Main Distribution Panel is original, and is 100% full. Branch circuit panels are 65% full and original for the most part. Stand alone motor starters and disconnects for HVAC equipment. Wiring is in conduit. Lighting fixtures have been upgraded in 2004 to T8 lamps and electronic ballasts for interior areas. HPS wall packs used for exterior lighting. Gym has metal halide high bay fixtures. Lighting is switched using low voltage relayed switches, and line voltage switches. Exterior lighting is controlled by photo cell. Emergency lighting is provided by emergency panel from the emergency generator. LED EXIT

signs are located at required exits. Fire alarm system is inspected on annual basis. Bells are located in hallways. Security system is operational. Main entrance buzzers operate after hours. Clocks in school are part of the Simplex Master Clock system. Telephone handsets are located in offices and library. Intercom switches are located in classrooms. Public address system is complete with tape and CD player and radio. Supernet is in school. Computer network and hardware is located in server room. Cat5 cabling is used. Televisions, VHS and DVDs are on mobile carts.

The following items will require replacement or upgrade:
Install new main transformer.
Install new main distribution panel and main breaker.
Add receptacles in classrooms.
Install new motor starters.
Install new fire alarm system c/w new strobes and horns.
Install new security system.
Install new clock system.
Install telephone handsets in classrooms.
Install new public address system.
Install UPS for telephone equipment.

Rating of Marginal

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 wall foundation (continuous footing).

Rating	Installed	Design Life	Updated
5 - Good	0	100	MAR-07

A1030 Slab on Grade*

Concrete slab on grade except the stage.

Rating	Installed	Design Life	Updated
5 - Good	0	100	MAR-07

B1010.01 Floor Structural Frame*(Building Frame)

1970 - The stage has concrete floor on concrete walls.

Rating	Installed	Design Life	Updated
5 - Good	1970	100	MAR-07

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

All sections have concrete block walls.

Rating	Installed	Design Life	Updated
5 - Good	0	100	MAR-07

B1010.03 Floor Decks, Slabs, and Toppings*

1970, 1972, 1976 - Concrete slab grade except the stage.
1970 - The stage has concrete floor on concrete walls.

Rating	Installed	Design Life	Updated
5 - Good	0	100	MAR-07

B1010.05 Mezzanine Construction*

1970 - Two furnace rooms in 2 stairwells for 2 stairs from main floor to gymnasium. These 2 furnace rooms are above the stair landings and stairs in the stairwells. These furnace rooms have concrete floors supported by concrete walls and concrete block walls.

Rating	Installed	Design Life	Updated
5 - Good	1970	80	MAR-07

Event: Install wall-mounted steel ladder.

Concern:

Two mezzanine furnace rooms are located at each end of the stage. There is only 1 steel ladder. It is not easy and not safe to move this steel ladder to get access to these furnace rooms.

Recommendation:

Install 1 additional wall-mounted 4.30 m long steel ladder for one of the furnace rooms. After the installation of this steel ladder, each furnace room will have its own steel ladder for access.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2007	$1,500	High

Updated: MAR-07

B1010.07 Exterior Stairs**

1972 - Two west exterior stairs.

Rating	Installed	Design Life	Updated
5 - Good	1972	40	MAR-07



B1020.01 Roof Structural Frame*

1970, 1972, 1976 - Steel deck on steel joists supported by concrete block walls and concrete walls.

Rating	Installed	Design Life	Updated
5 - Good	0	100	MAR-07

B1020.04 Canopies*

1970, 1972, 1976 - Steel deck on steel joists supported by concrete beam on concrete block walls and concrete walls.

Rating	Installed	Design Life	Updated
5 - Good	0	50	MAR-07

S2 ENVELOPE

B2010.01.02.02 Concrete Block: Ext. Wall Skin*

1976 - Concrete block wall at exterior entrance to gymnasium.

Rating	Installed	Design Life	Updated
5 - Good	1976	75	MAR-07

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

1970, 1972, 1976 - Stucco is the major cladding on the exterior walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	75	MAR-07

B2010.01.09 Expansion Control: Exterior Wall Skin*

1970, 1972, 1976 - All phases have original expansion joints.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	75	MAR-07

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

Some concrete walls are painted in 2001. Concrete block wall of the exterior entrance to the gymnasium is painted in 2001.

Rating	Installed	Design Life	Updated
5 - Good	2001	15	MAR-07

B2010.02.01 Cast-in-place Concrete:Ext.Wall Const*

1970, 1972, 1976 - Concrete exterior walls.

Rating	Installed	Design Life	Updated
5 - Good	0	100	MAR-07

B2010.02.02 Precast Concrete: Ext. Wall Const.*

1970 - The roof top heating & cooling unit has precast concrete exterior walls.

Rating	Installed	Design Life	Updated
5 - Good	1970	100	MAR-07

B2010.06 Exterior Louvers, Grilles, and Screens*

1970, 1972, 1976 - All phases have original aluminum louvers and grilles.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	MAR-07

B2010.09 Exterior Soffits*

1970, 1972, 1976 - Wood soffits at entrances. Painted in 2001.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	MAR-07

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

1970, 1972, 1976 - Aluminum windows in wood frames.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	MAR-07

Event: Replace aluminum windows.

Recommendation:
Replace aluminum windows in wood frames. (10 units)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$8,000	Low

Updated: MAR-07

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

1970 - Two classrooms have small wood windows facing the interior courtyard.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	35	MAR-07



Event: Replace small wood windows.

Recommendation:
Replace small wood windows with aluminum windows. (20 units)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$4,000	Low

Updated: MAR-07

B2030.01.01 Aluminum-Framed Storefronts**

1970, 1972 - All entrances have aluminum doors in aluminum frames except the exterior entrance to the gymnasium has hollow metal doors in pressed metal frame.

Rating	Installed	Design Life	Updated
5 - Good	0	30	MAR-07

Event: Replace Storefronts

Recommendation:
Replace aluminum store front windows. (16 units)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$95,000	Low

Updated: MAR-07

B2030.05 Other Exterior Doors**

1970 - The exterior entrance to the gymnasium has one double hollow metal door in pressed metal frames.
1976 - Hollow metal doors in pressed metal frames. (3 double door, 1 single door)

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	MAR-07

Event: Replace

Recommendation:
Replace hollow metal doors. (4 double door, 1 single door)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$13,500	Low

Updated: MAR-07

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

1970 - BUR. Re-roofed in 1991.
1972 - BUR. Re-roofed in 1992.
1976 - BUR. Re-roofed in 2002.

Rating	Installed	Design Life	Updated
5 - Good	0	25	MAR-07

B3020.01 Skylights**

1970 - There are 4 dome skylights.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	20	MAR-07

Event: Replace skylights (4)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$40,000	Low

Updated: MAR-07

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

1970, 1972, 1976 - There are vents, chimneys, exhaust hoods and hatches on the roof.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	MAR-07

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

1970, 1972, 1976 - Concrete block walls, concrete walls and gypsum board on metal stud partitions throughout.

Rating	Installed	Design Life	Updated
5 - Good	0	50	MAR-07

C1010.02 Interior Demountable Partitions*

1972 section - It was installed in spring of 2006 for the hub room for computer servers.

Rating	Installed	Design Life	Updated
5 - Good	2006	30	MAR-07

C1010.05 Interior Windows*

1970, 1972, 1976 - Georgian wired glass and tempered glass set in pressed metal frames.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	MAR-07

C1020.01 Interior Swinging Doors**

Solid core wood doors in pressed metal frames for many rooms in the school.
Hollow metal doors in pressed metal frames for science prep. rooms, corridors and mechanical rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	MAR-07

Event: Replace doors (48)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$50,000	Low

Updated: MAR-07

C1020.03 Interior Fire Doors*

1970, 1976 - mechanical rooms have hollow metal doors in pressed metal frames.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	MAR-07

C1030.01 Visual Display Boards**

All sections have whiteboards and tackboards throughout the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	20	MAR-07

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

Floor mounted metal toilet partitions throughout.
1972 - Replaced in 2000.
1972 - Replaced in 2000.
1976 - Installed in 1976.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	MAR-07

Event: Replace toilet partitions.

Recommendation:
Replace the metal toilet partitions in the 1976 addition. (3 partitions and 3 doors)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$2,700	Low

Updated: MAR-07

C1030.06 Handrails*

1970 - Stairs from main floor to gymnasium have wall-mounted wood handrails.
1972 - Two west exterior stairs have floor-mounted metal handrails.

Rating	Installed	Design Life	Updated
5 - Good	1970	50	MAR-07

C1030.08 Interior Identifying Devices*

1970, 1972, 1976 - Plastic signs in most areas. (Note: The school has installed a new design for room signs. When the sign needs to be changed, the school types the new sign on a piece of paper and slid it behind the transparent plastic cover of the signage frame.)

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	20	MAR-07

C1030.10 Lockers**

1970, 1972 - Double tier metal lockers in corridors, boy's change room and girl's change room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	30	MAR-07

Event: Replace lockers in the corridors.

Recommendation:
Replace the lockers (300 double tier in corridors, 176 double tier in change rooms).

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$63,500	Low

Updated: MAR-07

C1030.12 Storage Shelving*

Painted and clear finish storage shelving throughout.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	20	MAR-07

C1030.14 Toilet, Bath, and Laundry Accessories*

1970, 1972, 1976 - Commercial grade mirrors, soap dispensers, paper towel dispensers and toilet tissue holders located in all washrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	20	MAR-07

C2010 Stair Construction*

1970 - Concrete stairs from main floor to gymnasium. Concrete stair from gymnasium to stage. Concrete stair in south vestibule of gymnasium to exterior.

Rating	Installed	Design Life	Updated
5 - Good	1970	100	MAR-07

C2020.01 Tile Stair Finishes*

1970 - Ceramic floor tiles on stairs from main floor to gymnasium and on stair from gymnasium to stage.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	60	MAR-07

C2020.08 Stair Railings and Balustrades*

1970 - Wood handrails for stairs from main floor to gymnasium and for stair from gymnasium to stage.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

C3010.01 Concrete Wall Finishes*

Painted concrete walls throughout. Painted in 2002.

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	100	MAR-07

C3010.01 Concrete Wall Finishes* --Concrete Block

Painted concrete block walls throughout. Painted in 2002.

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	100	MAR-07

C3010.02 Wall Paneling**

1970 - Wood panels on lower portion of gymnasium walls (Installed in 1990). Wood panels on walls below skylights (installed in 1990). Fiberglass wall panels on lower portion of walls in multi-purpose room (installed in 2001).

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	30	MAR-07

C3010.03 Plaster Wall Finishes*

1972 - Plaster finish on walls in vestibules.
1976 - Plaster finish on a wall in handicapped washroom.

Rating	Installed	Design Life	Updated
5 - Good	1972	60	MAR-07

C3010.04 Gypsum Board Wall Finishes*

1970, 1972, 1976- Gypsum board on metal stud partitions throughout. Painted in 2002.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	60	MAR-07

C3010.06 Tile Wall Finishes**

1970, 1972 - Ceramic wall tiles in boys's washrooms, girl's washrooms, boy's shower room, girl's shower room and showers in phys. ed. offices.
1976 - Original ceramic wall tiles in boy's washroom and girl's washroom.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	40	MAR-07

Event: Replace Tile Wall Finishes

Recommendation:
Replace the ceramic wall tiles in boy's washrooms, girl's washrooms, boy's shower room, girl's shower room and showers in phys. ed. offices. (260.00 sq.m.)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$48,500	Low

Updated: MAR-07

C3010.09 Acoustical Wall Treatment**

Teckem boards on upper portion of walls in multi-purpose room. Acoustic panels on walls of band room and 2 practice rooms in band room.

Rating	Installed	Design Life	Updated
4 - Acceptable	2000	20	MAR-07

C3010.11 Interior Wall Painting**

1970, 1972, 1976 - Gypsum board, concrete block and concrete are painted. Painted in 2002.

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	10	MAR-07

C3010.14 Other Wall Finishes**

Some walls have vinyl covered gypsum boards.

Rating	Installed	Design Life	Updated
4 - Acceptable	1996	20	MAR-07

C3020.01.02 Paint Concrete Floor Finishes**

Painted concrete floor in boy's change room, girl's change room, janitor room, gym. storage room, furnaces rooms and mechanical rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	10	MAR-07

C3020.02 Tile Floor Finishes**

Ceramic floor tiles in boy's washrooms, girl's washrooms, boy's shower room, girl's shower room and showers in phys. ed. offices.
Quarry tiles in vestibules and corridors.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

C3020.04 Wood Flooring**

Hardwood floor in gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	30	MAR-07

Event: Replace wood flooring (441.46 sq.m.)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$80,000	Low

Updated: MAR-07

C3020.07.01 Resilient Tile Flooring

Vinyl floor tiles in classrooms, science classroom, science prep.room, multi-purpose room, time-out room, band room, 2 practice rooms in band room, storage rooms, staff meeting room and stage.
Vinyl floor tiles in science classroom, science prep room, one classroom staff washrooms and kitchen area in staff room.
Vinyl floor tiles in teaching area of home economics room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	0	MAR-07

Event: Replace vinyl floor tiles.

Recommendation:
Replace vinyl floor tile. (1,575.00 sq.m.)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$63,000	Low

Updated: MAR-07

C3020.07.02 Resilient Sheet Flooring

1972 - Sheet vinyl flooring in corridors, computer classroom and classrooms.
1976 - Sheet vinyl flooring in graphic arts room of industrial arts, sewing room & kitchens in home economics. The teaching area in home economics has vinyl floor tiles.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	MAR-07

Event: Replace sheet vinyl flooring.

Recommendation:
Replace sheet vinyl flooring. (1,300.00 sq.m.)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$97,500	Low

Updated: MAR-07

C3020.08 Carpet Flooring**

Carpet in music room (replaced in 1997).
Carpet in administration area and 3 offices (replaced in 2004).
Carpet in staff room, 2 staff workrooms and counseling room (replaced in 1995).
Carpet in library (replaced in 1997).

Rating	Installed	Design Life	Updated
4 - Acceptable	0	15	MAR-07

Event: Replace carpet.

Concern:
It will reach the theoretical design life in 2010.
Recommendation:
Replace those carpets installed in 1995 and 1997 (80.0 sq.m.).

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$5,600	Low

Updated: MAR-07

C3020.14 Other Floor Finishes** --Concrete Hardener Coating

1976- Concrete hardener coating for the concrete floor of the wood working, metal work & ceramic room of industrial arts. (Note: Industrial arts has 2 rooms. One room is for wood working, metal works and ceramics. Another room for graphic arts.)

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	20	MAR-07

C3030.02 Ceiling Paneling (Wood)*

1970 - Wood panel ceilings in music room and 2 stairwells from main floor to gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	60	MAR-07

C3030.04 Gypsum Board Ceiling Finishes*--Paint

Painted gypsum board ceilings in science prep. room, storage rooms, mechanical room, showers in phys. ed. Offices, boy's washrooms, girl's washrooms, boy's change room and girl's change room.
Painted gypsum board ceilings in science prep. room, boy's washroom and girl's washroom.
Painted gypsum board ceilings in mechanical room and handicapped washroom.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	60	MAR-07

C3030.04 Gypsum Board Ceiling Finishes*--Texture Coating

1970 - Textured coating on gypsum board ceilings in vestibules, corridors, multi-purpose room, janitor room, staff meeting room, administration area, time-out room and phys. ed. offices.
1972 - Textured coating on gypsum board ceilings in vestibules, corridors, staff room, staff washrooms, staff workrooms, counseling room and library.
1976 - Textured coating on gypsum board ceilings in vestibule, boy's washroom, girl's washroom and corridors,

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	MAR-07

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

1970 - Suspended T-Bar grid system with acoustic tiles in classrooms, science classroom, multi-purpose room, and band room.
1972 - Suspended T-Bar grid system with acoustic tiles in classrooms, science classroom, computer classroom, and audio visual room.
1976 - Suspended T-Bar grid system with acoustic tiles in sewing in home economics room, kitchen & teaching in home economics room, graphic arts room in industrial arts, wood working, metal work and ceramic room in industrial arts.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	MAR-07

Event: Replace acoustil ceiling tiles.

Recommendation:
Replace acoustic ceiling tiles. (2,660.00 sq.m.)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$106,500	Low

Updated: MAR-07

C3030.07 Interior Ceiling Painting**

1970 - Painted gypsum board ceilings in science prep. room, storage rooms, mechanical room, showers in phys. ed. offices, boy's washrooms, girl's washrooms, boy's change room and girl's change room.
1972 - Painted gypsum board ceilings in science prep. room, boy's washroom and girl's washroom.
1976 - Painted gypsum board ceilings in mechanical room and handicapped washroom.

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	20	MAR-07

C3030.09 Other Ceiling Finishes* --Acoustic panels

1970 - Acoustic panels on the ceilings of 2 practice rooms in band room (installed in 2000).

Rating	Installed	Design Life	Updated
4 - Acceptable	2000	50	MAR-07

D1010.02 Lifts**

A wheelchair lift was installed for the access from main floor to the gymnasium in July, 2006. It is a RAM wheelchair lift for a maximum of 550 lb or 1 person & a wheelchair.

Rating	Installed	Design Life	Updated
5 - Good	2006	25	MAR-07



S4 MECHANICAL

D2010.01 Water Closets** 1970

Floor mounted flush valve water closets used in the students' washrooms. Standard units have round bowls with open front seats. Each washroom includes one handicapped water closet with elongated bowl.

Rating	Installed	Design Life	Updated
3 - Marginal	1970	35	MAR-07

Event: Replace Water Closets

Concern:
Round bowls do not meet code requirements for public washrooms.

Recommendation:
Replace 20 flush valve water closets with elongated bowl models with open front seats.

Type	Year	Cost	Priority
Code Upgrade	2008	$10,000	Medium

Updated: MAR-07

D2010.01 Water Closets** 1972

Flush tank water closets are used in staff washrooms and student washrooms. These are 5 gallon flush models with elongated bowls and open front seats.

Rating	Installed	Design Life	Updated
4 - Acceptable	1992	35	MAR-07

D2010.01 Water Closets** 1976

Flush tank water closets are used in staff washrooms and gymnasium office washrooms. These are 5 gallon flush models and most have round bowls and open front seats.

Rating	Installed	Design Life	Updated
3 - Marginal	1976	35	MAR-07

Event: Replace Water Closets

Concern:
Round bowls do not meet code requirements for public washrooms. 5 gal flush toilets are inefficient.

Recommendation:
Replace 20 flush tank water closets with ULF water closets with elongated bowls and open front seats.

Type	Year	Cost	Priority
Code Upgrade	2008	$10,000	Medium

Updated: MAR-07

D2010.02 Urinals** 1970, 1972

Wall mounted and floor mounted urinals with Delta Infrared Flushometers.

Rating	Installed	Design Life	Updated
5 - Good	2001	35	MAR-07

D2010.02 Urinals** 1976

Floor mounted urinals with flush valves.

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	35	MAR-07

Event: Replace urinals (6)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$9,000	Low

Updated: MAR-07

D2010.03 Lavatories** 1972

Vanity mounted stainless steel with Delta blade handled faucets.

Rating	Installed	Design Life	Updated
5 - Good	2001	35	MAR-07

D2010.03 Lavatories** 1976

Vanity mounted porcelain enameled steel with ribbed handled faucets or push button mixing faucets.
Wall hung china lavs in handicapped accessible washroom.

Rating	Installed	Design Life	Updated
3 - Marginal	1976	35	MAR-07

Event: Replace 10 Lavatories

Concern:
A number of chipped lavatories. The finish on most units is worn out.

Recommendation:
Replace lavatories with stainless steel to match washrooms in the 1972 section.

Type	Year	Cost	Priority
Failure Replacement	2008	$3,000	Medium

Updated: MAR-07

D2010.04 Sinks**

Single and double compartment stainless steel sinks with goose neck faucets for classrooms.
Double compartment stainless steel sinks with swing spouts in Home Economics room
One two-compartment stainless steel sink with swing spout for staff room.
Floor mounted janitor's sinks.
Two custom stainless steel sinks with plaster traps in the Art Room
Stainless steel paint sink with plaster traps in Industrial Arts
Stainless steel wash fountain in Industrial Arts
(Note: It is for the 1970 original building and the 1972 and 1976 additions.)

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	30	MAR-07

Event: Replace sinks (12)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$12,000	Low

Updated: MAR-07

D2010.05 Showers**

Students' showers are not in use.
Two Staff showers in gymnasium offices.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	30	MAR-07

D2010.08 Drinking Fountains / Coolers**

China, wall hung water fountains in corridors.

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	35	MAR-07

D2020.01.01 Pipes and Tubes: Domestic Water*

100 mm domestic water service to gymnasium meter room. 50 mm galvanized domestic water service. 25 mm water meter. Copper distribution piping throughout school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	40	MAR-07

D2020.01.02 Valves: Domestic Water**

Bronze globe and gate valves used on domestic water service for isolation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	40	MAR-07

Event: Replace domestic water isolation.

Recommendation:
Replace 16 (estimated) isolation valves.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$4,000	Low

Updated: MAR-07

D2020.02.02 Plumbing Pumps: Domestic Water**

Taco inline circulator used for domestic hot water recirculation for 1977 addition.
Armstrong H52AB inline circulator used for domestic hot water recirculation for main school located in gymnasium mechanical room.
Armstrong domestic water circulating pump used for domestic water heating for main school located in gymnasium mechanical room.

Rating	Installed	Design Life	Updated
5 - Good	2003	20	MAR-07

D2020.02.06 Domestic Water Heaters**

RBI 33SB0350-2 domestic water heating boiler coupled with a 360gal vertical storage tank. Unit serves the 1970 and 1972 portions of the school.

Rating	Installed	Design Life	Updated
5 - Good	2003	20	MAR-07

Capacity Size	Capacity Unit
89	kW

D2020.02.06 Domestic Water Heaters** CTS

One Bradford White model MI504-S6 natural gas fired, tank type water heater is located in the 1977 addition mechanical room. Unit serves the 1977 CTS wing of the school.

Rating	Installed	Design Life	Updated
5 - Good	2001	20	MAR-07

Capacity Size	Capacity Unit
13	kW

D2020.03 Water Supply Insulation: Domestic*

Fiberglass insulation on all domestic hot and cold domestic water lines. Insulation has been recovered with canvas in exposed areas.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	30	MAR-07

D2030.01 Waste and Vent Piping*

Cast iron piping with bell and spigot connections. Copper DWV used throughout. Some sink traps use ABS.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

D2040.01 Rain Water Drainage Piping Systems*

Rain water leaders are cast with bell & spigot connections.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

D2040.02.04 Roof Drains**

Deep sump flow control roof drains with cast aluminum strainers.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	40	MAR-07

Event: Replace roof drains (12)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$18,000	Low

Updated: MAR-07

D3010.02 Gas Supply Systems*

Gas meter is located in the gymnasium meter room at the east end of the building. Gas is regulated to low pressure before being distributed throughout the building. A 100 mm low pressure line runs up to the roof to serve roof mounted ventilation units. Gas piping is threaded and welded steel throughout. Piping supports are adequate.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	60	MAR-07

D3020.04.03 Fuel-Fired Unit Heaters**

Reznor V3 model UDAP gas fired unit heaters have been provided in the gymnasium mechanical room.

Rating	Installed	Design Life	Updated
5 - Good	2004	30	MAR-07

D3040.01.01 Air Handling Units: Air Distribution**

There are two Lennox air handling units serving the gymnasium. These consist of supply and return cabinet fans, mixing dampers, filters, and gas-fired duct heaters. These are located in mezzanine fan rooms above the stage area and are accessed via portable ladders.

Rating	Installed	Design Life	Updated
3 - Marginal	1972	30	MAR-07

Event: Replace Air Handling Units

Concern:
Air handling units are difficult to access. They are in poor condition and require significant upgrades.

Recommendation:
Replace units with roof mounted air handling units. (2 units)

Type	Year	Cost	Priority
Failure Replacement	2008	$40,000	High

Updated: MAR-07

D3040.01.01 Air Handling Units: Air Distribution**

There are a total of five (5) roof mounted air handling systems serving the 1970 and 1972 portions of the building. These are Lennox model DZM gas-fired, low pressure, constant volume air handling units. Each unit includes a forward curved supply fan, filters, mixing section, and indirect gas fired heating section.

Rating	Installed	Design Life	Updated
4 - Acceptable	1972	30	MAR-07

Capacity Size	Capacity Unit
30000	L/s

Event: Replace 5 Roof Mounted Air Handling Units

Recommendation:
Replace 5 air handling systems.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$200,000	Low

Updated: MAR-07

D3040.01.01 Air Handling Units: Air Distribution** - CTS

A Climatemaster FLM-1-H-360 gas -fired, multi-zone air handling unit is used for heating and ventilation in the Home-Ec and industrial arts areas. The unit provides 2,800 lps at constant volume and has a modulating gas fired heat exchanger capable of about 150 kW of heating output.
An ICG gas fired make up air system provides tempered air to the Industrial Arts shop to replace exhaust air.

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	30	MAR-07

Capacity Size	Capacity Unit
2800	L/s

Event: Replace CTS Air Handling Unit

Recommendation:
Replace air handling unit and make up air system.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$33,000	Low

Updated: MAR-07

D3040.01.03 Air Cleaning Devices:Air Distribution*

Dust collection system in industrial arts.

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	30	MAR-07

D3040.01.04 Ducts: Air Distribution*

Low velocity ductwork used throughout, concealed in ceiling space.

Rating	Installed	Design Life	Updated
4 - Acceptable	1972	50	MAR-07

D3040.01.07 Air Outlets & Inlets:Air Distribution*

Square ceiling diffusers in the CTS classrooms. Linear bar grilles in vestibules.
Side wall diffusers in corridor walls of 1970/72 classrooms. Eggcrate return grilles.

Rating	Installed	Design Life	Updated
4 - Acceptable	1972	30	MAR-07

D3040.04.01 Fans: Exhaust**

Roof mounted centrifugal fans used for washroom and general exhaust applications in the 1970 and 1972 portions of the school

Rating	Installed	Design Life	Updated
4 - Acceptable	1972	30	MAR-07

Capacity Size	Capacity Unit
9	number

Event: Replace Exhaust Fans (9)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$27,000	Low

Updated: MAR-07

D3040.04.01 Fans: Exhaust** - CTS

Two spun aluminum roof mounted exhaust fans used for Home Ec and Industrial Arts exhaust. A belted vent set is also used for fume extraction in Industrial Arts.

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	30	MAR-07

Capacity Size	Capacity Unit
3	number

Event: Replacement Exhaust Fans

Recommendation:
Replace 3 exhaust fans.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$9,000	Low

Updated: MAR-07

D3040.04.03 Ducts: Exhaust*

Low pressure ductwork in corridor ceiling space from washrooms and classrooms to roof mounted exhaust fans.

Rating	Installed	Design Life	Updated
4 - Acceptable	1972	50	MAR-07

D3060.02.01 Electric and Electronic Controls**

Low voltage thermostats used on gas fired unit heaters in mechanical room.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	30	MAR-07

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

Delta BMCS was installed in 2003. Many existing electric actuators have been retained on dampers. Provides basic monitoring and control of building systems. Energy management capabilities are limited because of the limitations of the existing mechanical systems.

Rating	Installed	Design Life	Updated
4 - Acceptable	2003	25	MAR-07

Capacity Size	Capacity Unit
65	points

D4020 Standpipes*

50mm piping for standpipe system . Siamese connection at southeast entrance. Fire hose cabinets throughout.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	60	MAR-07

D4030.01 Fire Extinguisher, Cabinets and Accessories**

Fire extinguishers appropriately located in cabinets, fire hose cabinets, and wall hung in service spaces. 5# and 10# ABC

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	30	MAR-07

Capacity Size	Capacity Unit
22	number

S5 ELECTRICAL

D5010.01 Main Electrical Transformers**

Pad mounted transformer located at west side of school. Underground to main disconnect in electrical room. Maintained by Fortis.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	40	MAR-07

Event: Replace main transformer

Recommendation:
Install new electrical transformer.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$50,000	Low

Updated: MAR-07

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

800 Amp 120/208 volt three phase manufactured by General Electric. Main Distribution Panel is 100% full.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	40	MAR-07

Event: Replace main distribution switchgear

Recommendation:
Replace with new 800 Amp 120/208 volt three phase main distribution panel and main breaker.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$25,000	Low

Updated: MAR-07

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

General Electric panels located throughout the school in the hallways and storage rooms. Panels are 65% full.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	30	MAR-07

Event: Replace electrical panels

Recommendation:
Replace 10 electrical panels located throughout the school.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$20,000	Low

Updated: MAR-07

D5010.07.02 Motor Starters and Accessories**

Delta Control, Allen Bradely, and Intermatic motor starters and disconnects.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	30	MAR-07

Event: Replace motor starters

Recommendation:
Replace 12 motor starters.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$6,000	Low

Updated: MAR-07

D5020.01 Electrical Branch Wiring*

Wiring is run in conduit.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

D5020.01.03 Wiring Devices

Majority of the classrooms only have two receptacles.

Rating	Installed	Design Life	Updated
2 - Poor	1970	0	MAR-07

Event: Add receptacles in classrooms.

Concern:
Need more receptacles in classrooms. Extension cords used to reach equipment.
Recommendation:
Add 105 new receptacles in school in various classrooms.
Consequences of Deferral:
Insufficient receptacles to educational tools.

Type	Year	Cost	Priority
Program Functional Upgrade	2008	$10,500	High

Updated: MAR-07

D5020.02.01 Lighting Accessories (Lighting Controls)*

GE Low Voltage switching in classrooms and Gym. Relays are in wall panels. Some class rooms have 120 volt switches.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	30	MAR-07

D5020.02.02.02 Interior Florescent Fixtures**

All sections are equipped with surface mounted and recessed fluorescent light fixtures T8 lamps and electronic ballasts.

Rating	Installed	Design Life	Updated
5 - Good	2004	30	MAR-07

D5020.02.02.03 Interior Metal Halide Fixture*

Metal Halide high bay light fixtures in Gym area.

Rating	Installed	Design Life	Updated
5 - Good	2004	30	MAR-07

D5020.02.02.05 Other Interior Fixtures*

Quartz stage lighting located in Stage area. Portable spot lights locate din Drama Class.

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	30	MAR-07

D5020.02.03.01 Emergency Lighting Built-in*

Fluorescent light fixtures located in required locations and energized from emergency generator through emergency panel.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	35	MAR-07

D5020.02.03.03 Exit Signs*

LED exit signs located at required exits. Connected to emergency generator through emergency panel.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	30	MAR-07

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

HPS wall packs located around perimeter of school.

Rating	Installed	Design Life	Updated
5 - Good	2004	30	MAR-07

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

Photocell control used to operate exterior lighting.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	30	MAR-07

D5030.01 Detection and Fire Alarm**

Simplex4002 fire alarm panel c/w 8 zones, bells, pull stations and smoke and heat detectors.

Rating	Installed	Design Life	Updated
3 - Marginal	1970	25	MAR-07

Event: Repalce fire alarm system

Concern:
Detectors and pull stations are required in Mechanical room, and Data room. Visual signals are not available for the hearing impaired students. Safety issues to personnel in case of fire alarm condition.

Recommendation:
Install new fire alarm system with new detection devices and horn strobes.

Consequences of Deferral:
Safety issues to hard of hearing students and property in case of fire alarm condition. Possible failure of the fire alarm system protection.

Type	Year	Cost	Priority
Failure Replacement	2007	$35,000	High

Updated: MAR-07

D5030.02.01 Door Answering*

Main entrance push button buzzer.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	25	MAR-07

D5030.02.02 Intrusion Detection**

Bolt security system in school. DSC 864 control panel. Infrared detectors and door contacts located in various areas of the school. Keyed door entry tied to security.

Rating	Installed	Design Life	Updated
3 - Marginal	1976	25	MAR-07

Event: Replace security system

Concern:
Spare parts not available.

Recommendation:
Replace security system detectors and control panel.

Consequences of Deferral:
Failure of intrusion detection in school.

Type	Year	Cost	Priority
Failure Replacement	2007	$10,000	High

Updated: MAR-07

D5030.03 Clock and Program Systems**

Simplex master clock and clocks in classrooms and Gym.

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	25	MAR-07

Event: Replace master clock system

Recommendation:
Install new central master clock and 35 individual clocks in classrooms, library, main administration office and Gym.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$22,000	Low

Updated: MAR-07

D5030.04.01 Telephone Systems**

AT and T telephone system. Handsets are located in offices and library only. Three telephone lines and one fax line.

Rating	Installed	Design Life	Updated
3 - Marginal	1976	25	MAR-07

Event: Install new telephone system

Concern:
Telephone hand sets are not available in classrooms.
Recommendation:
Install new digital telephone system. Connect to intercom and public address system. Install 35 new handsets.

Type	Year	Cost	Priority
Program Functional Upgrade	2008	$25,000	High

Updated: MAR-07

D5030.04.04 Data Systems**

Cat5 cables are installed in conduit and free air in ceiling space. Supernet in school. Five servers by Dell, AB CDD. Four switches by 3com and CISCO. Three Amp patch panels. Network is 70% full.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	25	MAR-07

D5030.05 Public Address and Music Systems**

Dukane Sound system c/w tape and CD player and radio. Intercom switches are located in classrooms. FM systems are located in most class rooms.

Rating	Installed	Design Life	Updated
3 - Marginal	1976	20	MAR-07

Event: Replace Sound system and add handsets in classrooms.

Concern:
Class rooms have no access to telephone handsets.

Recommendation:
Install 35 telephone handsets in the various classrooms. Upgrade the sound system. Connect to the phone system.

Consequences of Deferral:
Inability to request outside communications for staff or students in case of emergency. Possible loss of communication system in school.

Type	Year	Cost	Priority
Failure Replacement	2007	$30,000	High

Updated: MAR-07

D5030.06 Television Systems*

Portable TV and VHS / DVD units on carts located in various classrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	2000	20	MAR-07

D5090.01 Uninterruptible Power Supply Systems**

Computer servers has two APC 1400 UPS unit. Telephone equipment does not have UPS protection.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	30	MAR-07

Event: Install UPS protection for the telephone system.

Concern:
Telephone equipment is not energized from power backup systems.

Recommendation:
Install one new UPS unit for telephone equipment.

Consequences of Deferral:
Lose of telephone communications in case of power outage.

Type	Year	Cost	Priority
Program Functional Upgrade	2007	$2,500	High

Updated: MAR-07

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

10 kW 120/208 volt three phase Kohler Genset. Zeneth Transfer switch. Natural gas fired.

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	35	MAR-07

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.07 Laboratory Equipment*

1972 - One fume hood in science classroom.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	25	MAR-07

E1090 Other Equipment

1976 - Sewing machines in home economics room.
1976 - Industrial arts rooms have 1 kiln, variety of manual and power working equipment completed with dust collection system, metal work equipment, ceramic work equipment, exhaust hoods for various equipment. Dark rooms have photo processing equipment.

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	0	MAR-07

E1090.04 Residential Equipment*

1972 - Residential refrigerator, range, microwave ovens in staff room.
1976 - Residential grade refrigerators, ranges, microwave ovens, 1 washer and 1 dryer in home economics room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1996	25	MAR-07

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

1970 - Six basketball backboards and 1 score board in the gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	15	MAR-07

E2010.02 Fixed Casework**

1970, 1972 - Painted and plastic laminated plywood casework throughout classroom. (Note: The home economics room was renovated in 2001with new casework.)

Rating	Installed	Design Life	Updated
4 - Acceptable	0	35	MAR-07

Event: Replace casework.

Recommendation:
Replace the casework. (280.00 linear meter)

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$123,000	Low

Updated: MAR-07

E2010.03.01 Blinds**

Venetian blinds in the classrooms and administration office areas.

Rating	Installed	Design Life	Updated
4 - Acceptable	1996	30	MAR-07

F2020.01 Asbestos*

1970, 1972, 1976 - Asbestos in duct-uninsulated F/G insulated tape in ceiling spaces above corridors.
1970 - Asbestos in ductwork-Rigid F/G insulation with cementatious parge coat in furnace rooms, storage tanks coating and gymnasium AHU elbow insulation.
1976 - Asbestos in F/G insulated piping in ceiling spaces above 2 home economics classrooms, 2 industrial arts rooms and flue fitting in mechanical room.
(Note: The information is from an asbestos report dated September, 1994. This report also mentioned asbestos in the ceiling tiles in 2 home economics classrooms and 2 industrial arts. These 4 rooms have T-Bar suspended system with acoustic ceiling tiles in this site visit.)

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	0	MAR-07

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance

It has barrier free routes from the parking area to the main entrance and 2 north entrances.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	0	MAR-07

K4010.02 Barrier Free Entrances

Barrier free entrances at main entrance, 2 north entrances, 3 east entrance and 1 west entrance. There is no barrier free push paddles on the main entrance doors.

Rating	Installed	Design Life	Updated
3 - Marginal	1970	0	MAR-07

Event: Install barrier free push paddles on entrance doors.

Concern:
It does not meet code requirement.
Recommendation:
Install barrier free push paddles on main entrance doors.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2007	$5,000	High

Updated: MAR-07

K4010.03 Barrier Free Interior Circulation

Barrier free access to all areas. (Note: A Ram wheelchair lift was installed for the access from main floor to the gymnasium in July, 2006.)

Rating	Installed	Design Life	Updated
4 - Acceptable	2006	0	MAR-07

K4010.04 Barrier Free Washrooms

1970, 1972, 1976 - Barrier free washrooms are provided.

Rating	Installed	Design Life	Updated
5 - Good	1970	0	MAR-07

RECAPP Facility Evaluation Report



Rudolph Hennig Elementary / Junior High School

S3451

Fort Saskatchewan

Report run on: March 15, 2007 2:43 PM

Facility Details

Building Name: Rudolph Hennig Elementary
Address:
Location: Fort Saskatchewan

Building Id: S3451
Gross Area (sq. m): 0.00
Replacement Cost: $0
Construction Year: 0

Evaluation Details

Evaluation Company: Kenneth M. Lee Architect
Evaluation Date: October 1 2006
Evaluator Name: Ken Lee

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

General Summary:

Asphalt paved roadway, asphalt pavement, concrete sidewalks and concrete pavement are in acceptable condition. The site is well maintained. The rating for architectural site work is acceptable.
The rating for mechanical site work is acceptable.
Pad mounted transformer is located on west side, original installation. 38 car receptacles are post mounted, tied to energy management. Lighting is controlled by photocell. Exterior lighting is done by HPS wall packs. The rating for electrical site work is acceptable.

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)**

A roadway (asphalt) from 92 Street to the west parking lot. Another roadway (asphalt) from 92 Street to the east parking lot.

Rating	Installed	Design Life	Updated
4 - Acceptable	2001	25	MAR-07

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

Asphalt paved west parking lot with an asphalt paved roadway from 92 Street for 28 stalls and 1 handicapped stall. Asphalt paved east parking lot with access from the back lane for 28 stalls.

Rating	Installed	Design Life	Updated
4 - Acceptable	2001	10	MAR-07

G2020.06 Parking Lot Appurtenances

1970 - Steel guard rails on the north side and at the middle of the east parking lot. 16 receptacles mounted on the steel guard post at the middle of this parking lot. 12 duplex receptacles mounted on the east exterior wall of the 1970 original building.
1972 - Steel guard rails on the east and north sides of the west parking lot. 8 receptacles mounted on the steel guard rails on the east side of this parking lot.
(Note: No theoretical design life for steel guard rails and posts.)

Rating	Installed	Design Life	Updated
5 - Good	1970	0	MAR-07

G2020.06.01 Traffic Barriers*

Steel guard post gate in the east roadway to stop vehicles to get to the park.

Rating	Installed	Design Life	Updated
5 - Good	1970	25	MAR-07



G2020.06.03 Parking Lot Signs*

1972 - One wall mounted parking lot sign for the west parking lot.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	25	MAR-07

Event: Install parking lot signs.

Concern:
There is not enough parking lot signs to provide information for visitors.

Recommendation:
Install additional parking lot signs. (5 for east parking lot and 5 for west parking lot.)

Type	Year	Cost	Priority
Program Functional Upgrade	2007	$4,000	High

Updated: MAR-07

G2020.06.04 Pavement Markings*

There are pavement markings in the east parking lot and the west parking lot.

Rating	Installed	Design Life	Updated
4 - Acceptable	2001	25	MAR-07

G2030.02.02 Asphalt Pedestrain Pavement**

Asphalt pavement on the west side and south side of the 1972 addition. Asphalt pavement on the south side of 1970 original building and 1976 addition. The 1970 original building also has 900 mm wide asphalt pedestrian pavements along a portion of the north exterior wall for connection to the concrete sidewalks.

Rating	Installed	Design Life	Updated
4 - Acceptable	1998	10	MAR-07

G2030.04 Rigid Pedestrian Pavement (Concrete)**

Three concrete sidewalks from 92 Street to the main entrance and 2 other entrances. Concrete pavements in front of all the entrances of the building. A concrete sidewalk on the north exterior wall of the 1970 original building from the east parking lot to the main entrance.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	15	MAR-07

G2040.02 Fences and Gates**

Chain link fence on the west property line. The wood fence on the east side is built by private property owners.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	30	MAR-07

G2040.03 Athletic and Recreational Surfaces**

The school has one asphalt paved basketball court, one basketball court on the lawn and 2 children playgrounds.
The adjacent community park by the City of Ft. Saskatchewan has soccer field, football field, baseball field and children playground.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	25	MAR-07

G2040.06 Exterior Signs*

A school name sign on the exterior wall at the main entrance. One free standing wood sign on the lawn facing 92 Street.

Rating	Installed	Design Life	Updated
5 - Good	1970	25	MAR-07

G2040.08 Flagpoles*

One flagpole at the main entrance.

Rating	Installed	Design Life	Updated
5 - Good	1970	30	MAR-07

G2050.04 Lawns and Grasses*

Lawns on the north and south sides of the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	15	MAR-07

G2050.05 Trees, Plants and Ground Covers*

A few trees on the north lawn. One tree on the south lawn. Trees in the round concrete planters on the gravel pavement between the public concrete sidewalk and the road of 92 Street. (Note: These round concrete planters and gravel pavement are the property of City of Ft. Saskatchewan.)

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	10	MAR-07

G2050.07 Planting Accessories*

One concrete planter at the main entrance. Round concrete planters on the gravel pavement between the public concrete sidewalk and the road of 92 Street. (Note: The round concrete planters and gravel pavement are the property of City of Ft. Saskatchewan.)

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	10	MAR-07

G3010.02 Site Domestic Water Distribution*

100 mm domestic water from municipal service enters utility room behind gymnasium storage.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

G3010.03 Site Fire Protection Water Distribution*

Fire hydrant located across the street within 90 m of the front entrance. Fire department connection for hose system at southeast entrance.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

G3020.01 Sanitary Sewage Collection*

A 150 mm sanitary line leaves the building below the gymnasium storage and ties into the municipal sewer service east of the property.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

G3030.01 Storm Water Collection*

Storm water from the site is drained on the surface.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

G3060.01 Gas Distribution*

The medium pressure gas service connects into the utility main and runs underground to the point of entry outside the gymnasium utility room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

G4010.02 Electrical Power Distribution Lines*

Underground feeders from pad mounted transformer to main distribution panel and main disconnect.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

G4010.03 Electrical Power Distribution Equipment*

Pad mounted transformer located at west side of school. Maintained by Fortis.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	50	MAR-07

G4010.04 Car Plugs-ins*

38 car receptacles are post mounted. Receptacles are controlled by the main energy system of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1970	25	MAR-07

G4020.01 Area Lighting*

HPS wall packs located around perimeter of school.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	25	MAR-07