RECAPP Facility Evaluation Report



Prince Charles Elementary School
B3251A
Edmonton

Edmonton - Prince Charles Elementary School (B3251A)

Facility Details

Building Name: Prince Charles Elementary 5

Address: 12325 - 127 Street

Location: Edmonton

Building Id: B3251A Gross Area (sq. m): 0.00

Replacement Cost: \$4,405,208

Construction Year: 0

Evaluation Details

Evaluation Company: Koliger Schmidt

Evaluation Date: December 1 2004

Evaluator Name: Mr. Mario Macchione

Total Maintenance Events Next 5 years: \$434,484

5 year Facility Condition Index (FCI): 9.86%

General Summary:

Prince Charles elementary school was built in 1954 and an addition complete in 1956, both of wood framed construction. The total area of the facilities is 2736.4 m². Four freestanding portables are located on site on the east side of the school. In 1994 a minor modernization of the administration area was complete. The plans given to us by Alberta Infrastructure do not reflect this renovation nor the change to the boys and girls washroom areas. This school is no longer part Junior high.

Near closure years ago due to student population, the school has developed a "focus" that incorporates it's location in the city and represents the students that attend. It's strength in aboriginal studies and culture have allowed this school to become populated again. Unfortunatly many items in this school are in need of replacement and a modernization of the entire school is recommended. Also considerations for barrier free access are necessary. Prince charles is in fair condition.

Structural Summary:

This is a single storey wood framed construction with concrete floors. Minor settlement cracks in terazzo and in hallway ceiling. Structurally in good condition.

Envelope Summary:

The 1954 and 1956 building consist of painted stucco, brick wainscotting, glass block and some wood decorative pannelling above windows in the front of the school. Almost all exterior windows and doors have been upgraded from wood to vinyl windows and insulated hollow metal doors. The roof was redone in 1988 but extensive water damage is appearant in the access area up to the roof. Past report has noted the knowledge of the roof leaks and has been monitored by the division. The building envelope is in fair condition.

Interior Summary:

School walls are a painted plaster, sheet flooring, wood bases and painted plaster with 12x12 accoustical tile ceilings. On the 1956 building side most rooms have newer carpet and all areas have drop ceilings. Asbestos is present in parts of the school materials and needs to be removed. Modernization of the interior finishes are required, most are outdated and need to be replaced. The schools interior is in fair condition.

Mechanical Summary:

The heating is provide by two steam boilers originally fired by coal and converted to natural gas. The steam is supplied to perimeter fin throughout the building. One air handling provides air to the school. There is a pnuematic system for local controls only. Generally, the mechanical systems are the same since the original construction of the building in 1954. There is minimal ventilation supplied to classrooms. A major mechanical upgrade is recommended as part of a building modernization.

The mechanical systems are in poor condition.

Electrical Summary:

Main service is two parts. First service is 350 Amp, single phase, 120/240 volt. Second service is 50 Amp, three phase, 240 volt.. Branch circuit panel boards are located throughtout the facility. The lighting consists of T12 fluorescent light fixtures with some incandescent and HID light fixtures. Emergency lighting consists of battery packs c/w remote heads with energy efficient LED style exit lights throughout. The fire alarm system is Simplex 2001. Cat5 data network cabling is installed throughout. Telephone system is by Nortel. Paging system is Bogen. Upgrade main distribution switchgear. Upgrade Fire Alarm System by adding strobes. Replace existing lighting system with new T5 lighting system for energy efficiency and life cycle replacement. The electrical is in fair condition.

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Edmonton - Prince Charles Elementary School (B3251A)

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*

1954 and 1956 buildings

RatingInstalledDesign LifeUpdated4 - Acceptable0100DEC-04

A1030 Slab on Grade*

1954 gymnasium, front and south entrances to school.

RatingInstalledDesign LifeUpdated4 - Acceptable0100DEC-04

A2020.01.01 Cast-in-place Concrete: Basement Wall

Boiler room.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

B1010.01 Floor Structural Frame*(Building Frame)

Wood

RatingInstalledDesign LifeUpdated4 - Acceptable0100DEC-04

B1010.01.01 Columns Supporting Floors

Basement boiler room.

RatingInstalledDesign LifeUpdated5 - Good00DEC-04

B1010.01.02.01 Cast-in-place Concrete: Beams

Basement boiler room

RatingInstalledDesign LifeUpdated5 - Good00DEC-04

B1010.03 Floor Decks, Slabs, and Toppings*

1954 and 1956 buildings

RatingInstalledDesign LifeUpdated4 - Acceptable0100DEC-04

B1010.07.01 Cast-in-place Concrete:Exterior Stairs

North and east side of school

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

B1010.09 Floor Construction Fireproofing*

Crawl space. See F2020.01

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

B1010.10 Floor Construction Firestopping*

Boiler room in basement.

RatingInstalledDesign LifeUpdated2 - Poor00DEC-04

Event: Fill and seal ceiling and wall pentrations with firestopping material.

Concern:

Unsealed penetrations (conduit and pipe) through ceiling and walls compromising fire seperations.

Recommendation:

Fill and seal ceiling and wall penetrations with firestopping material to meet code.

TypeYearCostPriorityCode Repair2005\$6,480High

Updated: February 18 2005



B1010.11.01 Catwalks

1954 building- Above stage area (wood construction)

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

B1020.01 Roof Structural Frame*

Wood

RatingInstalledDesign LifeUpdated4 - Acceptable0100DEC-04

B1020.04 Canopies*

1954 and 1956 buildings- wood construction, stucco finish.

RatingInstalledDesign LifeUpdated4 - Acceptable0100DEC-04

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Wainscotting of wall and entrance cove areas.

RatingInstalledDesign LifeUpdated3 - Marginal075DEC-04

Event: Repointing of brick.

Concern:

Brick has cracked and deteriorated joints allowing water to penetrate inside, possibly causing future problems

Recommendation:

Repoint areas of brick work. (approx. 25m²)

TypeYearCostPriorityRepair2006\$1,620Low

Updated: February 18 2005



B2010.01.06.04 Wood Siding*

Wood panelling above windows on west side.

RatingInstalledDesign LifeUpdated3 - Marginal040DEC-04

Event: Sand and repaint panelling.

Concern:

Wood panelling above windows on the west side are peeling.

Recommendation:

Sand down, prime and repaint panels (approx. 186m²)

TypeYearCostPriorityRepair2006\$4,320Low

Updated: February 18 2005



B2010.01.08 Portland Cement Plaster: Ext. Wall*

1954 and 1956 buildings -painted; minor cracking.

RatingInstalledDesign LifeUpdated4 - Acceptable075DEC-04

B2010.02.03.04 Glass Masonry Units (Glass Block)

1954 building- Front of school, gymnasium, east side entrance

RatingInstalledDesign LifeUpdated3 - Marginal00DEC-04

Event: Repair window joints.

Concern:

Glass block seals are cracked and discolored.

Recommendation:

Repair and reseal glass on exterior and interior side of block.

TypeYearCostPriorityRepair2006\$1,080Low

Updated: February 18 2005



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

1954 and 1956 buildings

RatingInstalledDesign LifeUpdated4 - Acceptable0100DEC-04

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

1954 and 1956 buildings

RatingInstalledDesign LifeUpdated4 - Acceptable020DEC-04

B2010.06 Exterior Louvers, Grilles, and Screens*

1954 and 1956 building

RatingInstalledDesign LifeUpdated4 - Acceptable020DEC-04

B2010.09.04 Portland Cement Plaster:Soffits

1954 and 1956 buildings-painted

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

B2020.01.01.05 Wood Windows*

1954 building -Second floor projection and storage area.

RatingInstalledDesign LifeUpdated2 - Poor035DEC-04

Event: Replace wood windows

Concern:

Original wood windows haven't been replaced and area is cool and drafty. Window are showing signs of rotting and major deterioration.

Recommendation:

Replace windows with vinyl windows. 3 sets of double windows.

TypeYearCostPriorityFailure Replacement2005\$2,160Medium

Updated: February 18 2005



B2020.01.01.06 Vinyl, Fibreglass &Plastic Windows*

Newly replaced windows in 1954 and 1956 buildings

RatingInstalledDesign LifeUpdated5 - Good035DEC-04

B2030.01.02 Steel-Framed Storefronts*

2003- 1954 and 1956 buildings- New doors and hardware (panic bars).

RatingInstalledDesign LifeUpdated5 - Good030DEC-04

B2030.02.01 Metal Doors and Frames

2003- 1954 building- Exit from boiler room to grade and 2 other exit doors (all east side of building) all with panic bar hardware.

Rating Installed Design Life Updated
5 - Good 0 0 DEC-04

B3010.01 Deck Vapor Retarder and Insulation*

1954 building- Prior roof leaks but no apparent problems at this time.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)*

1988 reroofed- 1954 and 1956 buildings- 2 ply SBS roofing with internal drainage; prior roof leaks and regular maintenance but at present time no apparent problems. Otherwise winter conditions apply to exterior viewing.

RatingInstalledDesign LifeUpdated4 - Acceptable025DEC-04

B3010.09 Roof Specialties and Accessories*

Ladder

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

1956 building- Library has a partial wall with windows and door that seperates main library from resource office area. As well as science room has a partial wall that seperates storage area.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	0	50	DEC-04

C1010.01.07 Framed Partitions (Wood Stud)

1954 and 1956 buildings, painted.

<u>Rating</u>	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Patch, repair and repaint Gym storage area.

Concern:

Gym storage area with staircase up to projection room (which is used for storage now) has walls with crack and holes in the gypsum, also it's paint is peeling.

Recommendation:

Patch, repair and repaint walls in staircase area, projection room and upper storage room. If this area is going to be a permanent storage facility then provide shelves for better use of space. Coordinate with replacement of windows in B2020.01.01.05. (approx. 140m²)



Updated: February 18 2005

Event: Repair stage walls and ceiling in roof/catwalk access area.

Concern:

Water leak from roof has caused paint to peel and ceiling to crack and sag.

Recommendation:

Walls- remove paint, repair damages to building material and prime and repaint access area.

Ceiling- Remove ceiling and repair any further damages to roof construction, electrical work and investigate other leaks and repair. Install new ceiling (drop ceiling for easy access to roof construction if more leaks appear (can replace tile instead of whole ceiling.)

TypeYearCostPriorityRepair2006\$7,560Low



C1010.04 Interior Balustrades and Screens, Interior Railings*

1954 building

RatingInstalledDesign LifeUpdated3 - Marginal040DEC-04

Event: Install handrails to main stairs.

Concern:

Main entrance to 1954 building has a set of stairs without stair railings.

Recommendation:

Install a handrail to the main stairs.

TypeYearCostPriorityCode Upgrade2006\$1,080Medium

Updated: February 18 2005

C1010.05 Interior Windows*

1954 building- Main office, coucillors office, family coucilling; non-operable metal units. 1956 building- Library

Rating Installed Design Life Updated
5 - Good 0 40 DEC-04

C1010.07 Interior Partition Firestopping*

Boiler room- See B1010.10

RatingInstalledDesign LifeUpdated3 - Marginal00DEC-04

C1020.01.07 Wood Doors

1954 and 1956 buildings- solid wood frames and doors.

RatingInstalledDesign LifeUpdated3 - Marginal00DEC-04

Event: Replace all interior doors and frames

Concern:

All doors within the school are painted original solid wood core and frames with original hardware. These have been pained numerous times and are chipping. Some doors have windows, some have grilles, some have neither, all seem to be mismatched.

Recommendation:

Replace all wood doors and frames (approx 78 doors) and update hardware.

TypeYearCostPriorityLifecycle Replacement2006\$75,600Low



C1020.02 Interior Entrance Doors*

1954 and 1956 buildings

RatingInstalledDesign LifeUpdated3 - Marginal050DEC-04

Event: Original hardware

Concern:

Solid wood doors have original hardware.

Recommendation:

Replace hardware on 21 doors. Install panic bars.

TypeYearCostPriorityLifecycle Replacement2006\$20,520Low

Updated: February 18 2005

C1020.03 Interior Fire Doors*

1954 and 1956 buildings.

RatingInstalledDesign LifeUpdated2 - Poor050DEC-04

Event: Hold open devices and fire rated labels for doors.

Concern:

1954 building- Doesn't have fire rated labels or hold open devices.

1956 building- Doesn't have fire rated labels

Recommendation:

1954 building- Install hold open devices for 2 doors and get fire rated sticker for each. (materials \$500, labour \$250 each door) Cost for Fire alarm panel interface and power supply \$1,000 per door assembly.

1956 building- Requires fire labeled doors (2 doors)

TypeYearCostPriorityCode Upgrade2006\$4,860High



C1030.01.01 Chalkboards

1954 building- Classrooms 5,6 and 25 (on plan)

RatingInstalledDesign LifeUpdated3 - Marginal00DEC-04

Event: Replace chalkboards with whiteboards.

Concern:

Some children are allergic to chalk and also causes a mess with chalk residue on floors and walls.

Recommendation:

Replace 5 chalkboards with whiteboards. Repair walls as needed.

Type Year Cost Priority
Operating Efficiency Upgrade 2006 \$4,320 Low

Updated: February 18 2005



C1030.01.02 Markerboards

1954 and 1956 buildings- All classrooms except the ones listed in 1030.01.01

RatingInstalledDesign LifeUpdated5 - Good00DEC-04

C1030.01.03 Tackboards and Visual Aid Boards

1954 and 1956 buildings

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

C1030.02 Fabricated Compartments(Toilets/Showers)*

1954 building- Boys and girls washrooms

RatingInstalledDesign LifeUpdated2 - Poor00DEC-04

Event: Replace washroom partitions

Concern:

Old, rusted, stained and paint is peeling off. Hardware is also old and probably original.

Recommendation:

Remove existing partions and hardware and replace with new. (8 in total 1 in each washroom should be barrier free)

TypeYearCostPriorityLifecycle Replacement2006\$22,680Medium



C1030.08 Interior Identifying Devices*

1954 building- Main entrance has school plan and other signs showing school's focus.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

C1030.12 Storage Shelving*

1954 and 1956 building- Metal and wood shelving units in storage rooms, boiler room and classroom storage closets.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

C1030.14 Toilet, Bath, and Laundry Accessories*

1954 building- See C1030.02

RatingInstalledDesign LifeUpdated4 - Acceptable020DEC-04

C2010.01 Cast-In-Place Concrete Stair Construction

1954 building- Boiler room and hallway stairs.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

C2010.04 Wood Stair Construction

1954 building- Stage stairs down to gym and gym storage room up to projection loft.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

C2020.02 Terrazzo Stair Finishes*

1954 and 1956 buildings- Hallway stairs to exits (North, south and west sides of building)

RatingInstalledDesign LifeUpdated4 - Acceptable075DEC-04

C2020.05 Resilient Stair Finishes*

1954 building- Stage stairs down to gym and gym storage room up to projection loft; sheet

RatingInstalledDesign LifeUpdated4 - Acceptable020DEC-04

C2020.08.04 Wood Framed Railings and Balustrades

1954 building- Gym storage room up to projection loft and both entrances from hallway up to stage area; painted.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

C2020.08.06 Metal Railings and Balustrades

1954 building- Boiler room; painted.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

C2020.08.07 Wood Railings

1954 building- Stage stairs down to gym; painted.

Installed Design Life Updated Rating 4 - Acceptable 0 DEC-04

C3010.03 Plaster Wall Finishes*

1954 and 1956 buildings; painted.

Rating Installed Design Life Updated DEC-04 4 - Acceptable 40 0

C3010.04 Gypsum Board Wall Finishes*

1954 and 1956 buildings- Main office area and library; painted.

Rating Installed Design Life Updated 5 - Good 0 40 DEC-04

C3010.06 Tile Wall Finishes*

1954 building- Boys & girls and staff male & female washrooms.

Rating Installed Design Life Updated 3 - Marginal 50 DEC-04

Girls and Boys washrooms. Event:

Concern:

Tiles are old, cracked and discolored with stained grout. If a modernization is taking place and most of the finishes in these 2 washrooms need to be upgraded then the tiles should be as well. Boys washroom has a newer type of tile on most walls except urinal wall.

Recommendation:

Replace wall tiles.(approx 40m² in total both washrooms) Match tiles in boys washroom on urinal wall to the rest of the tiles in the room. Schedule following mechanical event to replace old floor urinals to wall mounted. D2010.02 Repair and paint top portion of boys and girls walls after all construction has been completed.

Type Year Cost Priority 2006 \$8,640 Low

Updated: February 18 2005





C3010.09 Acoustical Wall Treatment*

1954 building- Music room and gymnasium.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	0	20	DEC-04



C3010.14 Other Wall Finishes*

1954 building- main office, detention rooms have special wall treatment to allow for easy removal of graffiti.

RatingInstalledDesign LifeUpdated5 - Good00DEC-04

C3020.02 Tile Floor Finishes*

1954 building- Boys and mens staff washrooms. See Mech D2010.02 for tile replacement in boys washroom.

RatingInstalledDesign LifeUpdated3 - Marginal030DEC-04

C3020.03 Terrazzo Floor Finishes*

1954 and 1956 buildings- Hallways, boys and girls washrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable070DEC-04

C3020.04 Wood Flooring*

1954 building- Gymnasium and stage.

RatingInstalledDesign LifeUpdated2 - Poor025DEC-04

Event: Anchor gym floor.

Concern:

Gym flooring is wavy in areas and has overly loud areas of squeeking. Could potentially mean that the wood floor isn't properly fastened down to the subflooring.

Recommendation:

Fasten down wood flooring to subflooring. (Otherwise replacing gym floor will cost \$50,000)

TypeYearCostPriorityRepair2006\$2,160Medium

Updated: February 18 2005

C3020.07 Resilient Flooring*

1954 building- Classrooms, kitchen, staff room, staff washroom, science room and storage rooms. 1956 building- Classrooms.

RatingInstalledDesign LifeUpdated3 - Marginal020DEC-04

Event: Replace flooring.

Concern:

1954 building- Original sheet flooring in classrooms; Old, stained and in some classrooms is worn down.

Recommendation:

Replace all sheet flooring with VCT and install new rubber base where needed. (Approx. 873.6m²)

TypeYearCostPriorityFailure Replacement2006\$34,560Low

Updated: February 18 2005



C3020.08 Carpet Flooring*

1954 and 1956 building- Office area, councilors office, family services office, staff room, library and classrooms 28 & 34

RatingInstalledDesign LifeUpdated3 - Marginal010DEC-04

Event: Install rubber feet to desks and chairs.

Concern:

Classrooms are the first places showing holes in new carpet due to metal feet on chairs and desks.

Recommendation:

Fix holes that have appeared in carpet. In all areas carpeted it is necessary to use chairs and desks that increase the longevity of the flooring. Existing chairs and desks can also have rubber pads or covers added to their metal feet.

TypeYearCostPriorityPreventative Maintenance2005\$1,080Low

Updated: February 18 2005



C3020.11 Floor Painting

1954 building- Concrete floor in boiler room and in boys & girls corridors.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C3030.03 Plaster Ceiling Finishes*

1954 building- Classrooms and hallways

RatingInstalledDesign LifeUpdated3 - Marginal050DEC-04

Event: Install drop ceiling

Concern:

Tiles stained, cracked and missing from ceilings.

Recommendation:

Install drop ceilings to all classrooms and hallways that have painted plaster 12x12 accoustical tile. (approx. 934m²)

TypeYearCostPriorityRepair2006\$37,800Low

Updated: February 18 2005



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

1954 building- Classroom 25, 28 & 34, main office, staff room, gym and music room. 1956 building- All classrooms, library and office.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	0	25	DEC-04

S4 MECHANICAL

D2010.01 Water Closets*

2000 - Floor mounted, flush valve, open front seats. Some flush tank toilets in staff washrooms.

RatingInstalledDesign LifeUpdated5 - Good030DEC-04

D2010.02 Urinals*

1954 - Floor mounted urinals with automatic flush system.

RatingInstalledDesign LifeUpdated2 - Poor030DEC-04

Event: Replace urinals in main boys washroom.

Concern:

Urinals are stained and discolored.

Recommendation:

Replace 5 urinals with new wall hung units. Replace tile around urinals (Arch C3010.06)

TypeYearCostPriorityLifecycle Replacement2006\$16,200Low

Updated: February 18 2005



D2010.03 Lavatories*

2000 - Stainless steel lavatories with mixing tee in handicapped accessable washroom.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.03 Lavatories*

1954 - Original vitreous china lavatories with separate hot and cold water taps.

RatingInstalledDesign LifeUpdated2 - Poor030DEC-04

Event: Replace lavatories.

Concern:

Individual hot taps on lavatories means scalding is possible. Parts for taps likely not available.

Recommendation:

Replace 12 lavatories with stainless steel lavatories with mixing tees in millwork.

TypeYearCostPriorityLifecycle Replacement2006\$16,200High

Updated: February 18 2005



D2010.04 Sinks*

1980 - Stainless steel sinks in a few rooms, floor mounted plastic sink in janitor closet.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D2010.04 Sinks*

1954, 1956 - Steel enameled sinks in individual classrooms with mixing tees and drinking fountain bubbler.

<u>Rating</u>	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	0	30	DFC-04

Event: Replace sinks in classrooms.

Concern:

Sinks in classrooms are stained, parts for trim unavailable.

Recommendation:

Replace 11 sinks with stainless steel ones and install new trim.

<u>Type</u>	<u>Year</u>	Cost	<u>Priority</u>
Lifecycle Replacement	2007	\$10,800	Low



D2010.08 Drinking Fountains / Coolers*

1954 - Vitreous china drinking fountain.

RatingInstalledDesign LifeUpdated3 - Marginal030DEC-04

Event: Replace drinking fountains.

Concern:

Drinking fountains stained and parts likely not available.

Recommendation:

Replace 4 drinking fountains with new fibreglass ones.

TypeYearCostPriorityLifecycle Replacement2006\$4,320Low

Updated: February 18 2005

D2020.01.01 Pipes and Tubes: Domestic Water*

1954,1956 - Copper piping.

RatingInstalledDesign LifeUpdated4 - Acceptable040DEC-04

D2020.01.02 Valves: Domestic Water

1954 - Gate valves on main water line into building.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

D2020.01.03 Piping Specialties (Backflow Preventors)*

No backflow preventor on main water line. Backflow preventor on steam boiler makeup feed. Vacuum breakers on non-freeze hose bibbs outside building.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

D2020.02.02 Plumbing Pumps: Domestic Water*

Recirculation pump on domestic hot water.

RatingInstalledDesign LifeUpdated4 - Acceptable020DEC-04

D2020.02.06 Domestic Water Heaters*

1954 - Mor-Flo domestic water heater with 41 kW input.

RatingInstalledDesign LifeUpdated2 - Poor020DEC-04

Event: Replace hot water heater.

Concern:

Hot water tank is energy inefficient.

Recommendation:

Replace hot water heater.

TypeYearCostPriorityLifecycle Replacement2006\$1,620Low

Updated: February 18 2005

D2020.03 Water Supply Insulation*: Domestic

1980 - Some of the water piping is insulated.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

D2030.01 Waste and Vent Piping*

1954, 1956 - Cast iron hub and spigot. Some new abs where new water closets have been installed.

RatingInstalledDesign LifeUpdated4 - Acceptable050DEC-04

D2040.01 Rain Water Drainage Piping Systems*

1954, 1956 - Cast iron.

RatingInstalledDesign LifeUpdated4 - Acceptable050DEC-04

D2040.02.04 Roof Drains*

1954, 1956 - Gravel guards on roof drains.

RatingInstalledDesign LifeUpdated4 - Acceptable040DEC-04

D3010.02 Gas Supply Systems*

Gas distribution piping to boilers, domestic water heater, and portable furnaces.

RatingInstalledDesign LifeUpdated4 - Acceptable050DEC-04

D3020.01.01 Heating Boilers & Accessories: Steam*

1949 - Two Reliance Welding Works cast iron steam boilers. Converted from coal fired to natural gas fired. 53.61 m/2 heating surface.

RatingInstalledDesign LifeUpdated2 - Poor035DEC-04

Event: Upgrade to hot water boiler system.

Concern:

Existing steam boilers are inefficient. Components of the steam system are rusting and degraded.

Recommendation:

Upgrade steam system to hot water boiler system. Replace boilers, install new hot water coils for ventilations systems, install new fin radiation in classrooms and at entrances. Install new chimney and combustion air. This should be completed as part of a school modernization.

TypeYearCostPriorityEnergy Efficiency Upgrade2007\$162,000Low

Updated: February 18 2005



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

1954 - Metal chimney from boilers connects into ceramic chimney up to roof. (See Heating Boilers for action)

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
2 - Poor	0	0	DEC-04

D3020.01.04 Water Treatment: Steam Boilers*

1954 - Condensate receiver with chemical pot feeder.

Rating	Installed	Design Life	<u>Updated</u>
2 - Poor	0	0	DEC-04

D3040.01.01 Air Handling Units: Air Distribution*

1954 - One central fan supplies air to all rooms from underground trench. Includes low efficiency filters and steam heating coil. Motorized fresh and return dampers.

Rating 2 - Poor 0 Design Life Updated DEC-04

Event: Upgrade school ventilation system.

Concern:

The air handling system provides insufficient ventilation for classrooms. Large amounts of dust accumulation in building due to poor filtering.

Recommendation:

Provide new central air handling unit for school complete with high efficiency filters, hot water heating coils, mixing sections. Provide new ducting and air diffusers for each room. Should be completed as part of a school modernization.

TypeYearCostPriorityIndoor Air Quality Upgrade2007\$172,800Medium

Updated: February 18 2005



D3040.01.04 Ducts: Air Distribution*

1954 - Galvanized ducts supply air to each classroom. (See Air Handling Units for event.)

RatingInstalledDesign LifeUpdated3 - Marginal050DEC-04

D3040.01.07 Air Outlets & Inlets:Air Distribution*

1954, 1956 - Cone diffusers supply into rooms. Sidewall grills for return.

RatingInstalledDesign LifeUpdated4 - Acceptable050DEC-04

D3040.02 Steam Distribution Systems: Piping/Pumps*

1954 - Steam distribution piping steel. Steam traps upgraded over the years. (See steam boilers for event)

Rating	Installed	Design Life	<u>Updated</u>
3 - Marginal	0	30	DEC-04

D3040.04.01 Fans*: Exhaust

1954 - Two downblast fans on roof of building, one for washroom exhaust, one for general exhaust.

RatingInstalledDesign LifeUpdated4 - Acceptable030DEC-04

D3040.04.03 Ducts*: Exhaust

Low velocity metal ducts.

RatingInstalledDesign LifeUpdated5 - Good00DEC-04

D3040.04.05 Air Outlets and Inlets*: Exhaust

1954 - Eggcrate style grills for washroom exhaust.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

D3050.05.03 Finned Tube Radiation*

1954, 1956 - Fin tube radiation in all classrooms and at entrances. (See steam boilers for event.)

RatingInstalledDesign LifeUpdated3 - Marginal00DEC-04

D3060.02.02 Pneumatic Controls*

1980 - Pneumatic compressor for steam control valves and dampers in air handling unit.

RatingInstalledDesign LifeUpdated3 - Marginal040DEC-04

Event: Upgrade control system.

Concern:

Based on major heating and ventilation system changes recommended, controls should be upgraded to work with the new equipment installed.

Recommendation:

Installed new control system, including front end BMCS.

TypeYearCostPriorityLifecycle Replacement2007\$75,600Low

Updated: February 18 2005

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Chemical fire extinguishers mounted on wall.

RatingInstalledDesign LifeUpdated5 - Good030DEC-04

S5 ELECTRICAL

D5010.01 Main Electrical Transformers*

Underground service from transformer located on south side of property. Original installation

RatingInstalledDesign LifeUpdated4 - Acceptable040DEC-04

D5010.03 Main Electrical Switchboards (Main Distribution)*

Original Square D Main Distribution Panel c/w 16 spaces. Four spares are available. First service is 350 Amp, single phase, 120/240 volt. Second service is 50 Amp, three phase, 240 volt.

RatingInstalledDesign LifeUpdated3 - Marginal040DEC-04

Event: Original Equipment. First service is 350 Amp, single phase, 120/240 volt. Second service is 50 Amp, three phase, 240 volt.

Concern:

Equipment has passed its expected life expectancy. Breakers may fail in case of an electrical fault. Spare parts are no longer available.

Recommendation:

Replace existing switchgear with new equipment. Consolidate the service in new 400 Amp 120/208 volt three phase service.

TypeYearCostPriorityLifecycle Replacement2005\$48,600High

Updated: February 18 2005

Event: Original Service of 350 Amp single phase and 50 Amp three phase.

Concern:

Current service size may not meet future electrical needs of the school. Switch gear equipment is recommended for upgrade due to age.

Recommendation:

Conduct load analysis of existing electrical and mechanical loads and potential furture loads to determine adequate service size.

 Type
 Year
 Cost
 Priority

 Study
 2005
 \$5,400
 High

Updated: February 18 2005

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

1997 upgraded-Federal Pioneer Panels. Spare capacity available.

RatingInstalledDesign LifeUpdated5 - Good025DEC-04

D5010.07 Motor Control Centers (Motor Control)*

Individual Motor controls.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

D5010.07.02 Motor Starters and Accessories*

Individual motor starters manufactured by Square D and other models.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

D5020.01 Electrical Branch Wiring*

Wiring is original, installed in conduit.

RatingInstalledDesign LifeUpdated4 - Acceptable050DEC-04

D5020.02 Interior Lighting

Wrap Around Surface and Recessed 2x4 fluorescent light fixtures c/w magnatic ballasts and T12 lamps. Acrylic lenses shield the lamps.

RatingInstalledDesign LifeUpdated3 - Marginal035DEC-04

Event: Classrooms and Hallways use fluorescent light fixtures c/w T12 lamps and Acrylic lenses and magnatic ballasts.

Concern:

Existing light fixtures are at end of life. Acrylic lenses are yellowing in some areas. Existing light fixtures performance does not comply with IES recommendations for classrooms with VDT monitors.T12 technology c/w magnatic ballasts uses 75% more energy for a 2x4 light fixture c/w 4 lamps vs new 2x4 T5 light fixture c/w two lamps. Light levels in various areas are above new recommended light levels by IES for classroom environments.

Recommendation:

Upgrade lighting system in school with new light fixtures that utilize T5 lamps and electronic ballasts. Direct and indirect lighting should be utilized in classrooms with computers. Layout of the new lighting system shall be redesigned to comply with new layout of classrooms and computers. Payback will be within 5 year cycle.

TypeYearCostPriorityEnergy Efficiency Upgrade2005\$246,240Medium

Updated: February 18 2005

D5020.02.01 Lighting Accessories (Lighting Controls)*

Original Line voltage switching used in classrooms. Keyed switches are used in hallways and bathrooms. Individual dimming controls used in stage lighting.

RatingInstalledDesign LifeUpdated3 - Marginal030DEC-04

Event: Line voltage toggle switches are used to turn lights off. Keyed switches are used in common areas.

Concern:

Lights are left on without occupants in the area. Electrical energy is wasted. No master sweep to turn lights on or off at end or start of working hours.

Recommendation:

Install new Low Voltage relay system c/w programmable time clock for the various areas of the school c/w motion sensors in classrooms and washrooms.

TypeYearCostPriorityEnergy Efficiency Upgrade2005\$23,760Low

Updated: February 18 2005

D5020.02.03 Emergency Lighting*

Wall mounted battery packs c/w remote heads located through the school. Exit signs, c/w LED lamps located at required exits.

RatingInstalledDesign LifeUpdated4 - Acceptable030DEC-04

D5020.03 Exterior Building Lighting

Original HID and Incandescent light fixtures located around the exterior of the school.

RatingInstalledDesign LifeUpdated4 - Acceptable025DEC-04

D5030.01 Detection and Alarm Fire Alarm*

1987 Installed- Simplex 2001 Fire Alarm Control Panel. Inspected on annual basis.

RatingInstalledDesign LifeUpdated3 - Marginal025DEC-04

Event: 1987 installed- Fire Alarm Control panel Simplex

2001. Hard wired c/w 12 zones.

Concern:

Fire Alarm Control Panel has life span of 20 years. Approaching end of life cycle. Panel does not have capacity to handle new strobes.

Recommendation:

Replace control panel with new Fire alarm control panel.

TypeYearCostPriorityLifecycle Replacement2012\$27,000Low

Updated: February 18 2005

Event: Current fire alarm Bells do not have Strobes for the

visual annunciation of the fire alarm signal in all

areas.

Concern:

Hearing impaired occupants may be exposed to risk by not having proper notification of presense of an fire alarm signal.

Recommendation:

Install new strobes with current location of all bells.

TypeYearCostPriorityCode Upgrade2005\$5,400High

Updated: February 18 2005

D5030.02.02 Intrusion Detection*

Motion detectors are located in common areas and where windows are located. Magnum Alert Security System.

RatingInstalledDesign LifeUpdated4 - Acceptable025DEC-04

D5030.03 Clock and Program Systems*

Master Controller used for Bells only. Individual battery operated clocks are located in classrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable025DEC-04

D5030.04.01 Telephone Systems*

Norsta Meridian telephone system c/w four outside lines and one fax line. Telephone c/w intercom feature.

Rating Installed Design Life Updated 4 - Acceptable 0 25 DEC-04

Report run on: January 30, 2006 2:37 PM Page 29 of 40

Edmonton - Prince Charles Elementary School (B3251A)

D5030.04.02 Paging Systems*

2003 installed -New Paging, Music System by Bogen Muticom 2000.

RatingInstalledDesign LifeUpdated4 - Acceptable025DEC-04

D5030.04.05 Local Area Network Systems*

1998 installed - Cat5 data cabling, wired in conduit and free air and is located through out the school. Drops are in surface mounted conduit. Supernet is installed in school.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

D5030.05 Public Address and Music Systems*

2003 installed - Paging system and music system is in working order. Manufactured by Bogen Muticom 2000.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

D5030.06 Television Systems*

Cable TV is located in every classroom.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

D5090.01 Uninterruptible Power Supply Systems*

Individual Stand alone UPS Backup APC 1000 installed in Server Room. Emergency Battery Packs installed through the school for emergency lighting.

RatingInstalledDesign LifeUpdated4 - Acceptable025DEC-04

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.02 Library Equipment*

1956 building

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

E1020.03 Theater and Stage Equipment*

Lighting, curtains and painted backgrounds.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

E1090.02.03 Bins

East side of building are the city recycle and waste management bins.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

E1090.03 Food Service Equipment*

Countertop warmers.

RatingInstalledDesign LifeUpdated5 - Good00DEC-04

E1090.04 Residential Equipment*

1954 building- Staff kitchen has a deep freezer, fridge, water cooler, range, dishwasher, toaster and 5 microwaves. 1956 building- Kitchen has 1 range and fridge.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

1954 building- Gym- basket ball net, hockey equip, balls, nets and mats.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

E2010.02.05 Educational Facility Casework*

1954 and 1956 building- Classrooms

RatingInstalledDesign LifeUpdated2 - Poor00DEC-04

Event: Replace all countertops and casework that support

integral sinks.

Concern:

Vanities contain asbestos and supporting millwork for the sinks are old and worn.

Recommendation:

Replace all countertops and casework that support integral sinks. Co-ordinate with mechanical replacement of sinks D2010.04. Otherwise all other casework is old but well maintained. (11 sinks)

TypeYearCostPriorityLifecycle Replacement2006\$11,880Medium

Updated: February 18 2005

E2010.02.07 Kitchen Casework*

1954 and 1956 buildings- Staff kitchen and school kitchen.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

E2010.02.08 Laboratory Casework*

1954 building- Science room- Minor maintenance to laminate counter top required.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

E2010.02.09 Library Casework*

1956 building- painted wood

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

E2010.03.01 Blinds*

1954 and 1956 building- Verticle blinds.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

E2010.03.06 Curtains and Drapes*

1954 building- Classrooms 28 and 34

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

E2020 Moveable Furnishings*

1954 building- Audience seating under stage

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

E2020.05 Moveable Interior Landscaping

1954 and 1956 building- In hallway, stage, in front of office and hallways.

RatingInstalledDesign LifeUpdated5 - Good00DEC-04

F1010.02.04 Portable and Mobile Buildings 211

1990 construction, signage designates as portable 211.

Arch: Wood framed construction on concrete pads. Envelope consists of metal cladding, 2 ply SBS roofing membrane and aluminum framed windows with wire mesh security grilles. Interior components include carpet and VCT flooring, metal frames & doors, acoustical drop ceilings with painted gypsumboard, painted millwork and chalkboards / whiteboards / tackboards.

Mech: Heating and ventilation provided by Palm-Aire furnace with 30.8 kW input and 23.4 kW output. Programmable digital thermostat for control. The furnace comes with an outside wall intake louvre for fresh air and supplies air along ductwork to grills in the millwork of the portable. The furnace cannot provide the required minimum fresh air required by ASHRAE 62.

Elec: Electrical service is fed from main building. T12 wrap around light fixtures c/w line voltage switching.

RatingInstalledDesign LifeUpdated3 - Marginal00DEC-04

Event: Install furnace and fresh air system for portable

211.

Concern:

Furnace incapable of supplying sufficient fresh air for portable.

Recommendation:

Install new furnace and fresh air system.

TypeYearCostPriorityIndoor Air Quality Upgrade2006\$12,960Low

Updated: February 18 2005

F1010.02.04 Portable and Mobile Buildings 216

1990 construction, signage designates as portable 216.

Arch: Wood framed construction on concrete pads. Envelope consists of metal cladding, 2 ply SBS roofing membrane and aluminum framed windows with wire mesh security grilles. Interior components include carpet and VCT flooring, metal frames & doors, acoustical drop ceilings with painted gypsumboard, painted millwork and chalkboards / whiteboards / tackboards. Appears to be an after school centre.

Mech: Heating and ventilation provided by Palm-Aire furnace with 30.8 kW input and 23.4 kW output. Programmable digital thermostat for control. The furnace comes with an outside wall intake louvre for fresh air and supplies air along ductwork to grills in the millwork of the portable. The furnace cannot provide the required minimum fresh air required by ASHRAE 62.

Elec: Electrical service is fed from main building. T12 wrap around light fixtures c/w line voltage switching.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Install furnace and fresh air system for portable

<u>216.</u>

Concern:

Furnace incapable of supplying sufficient fresh air for portable.

Recommendation:

Install new furnace and fresh air system.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2006	\$12,960	Low

Updated: February 18 2005

F1010.02.04 Portable and Mobile Buildings 239

1991 construction, signage designates as portable 239.

Arch: Wood framed construction on concrete pads. Envelope consists of metal cladding, 2 ply SBS roofing membrane and aluminum framed windows with wire mesh security grilles. Interior components include carpet and VCT flooring, metal frames & doors, acoustical drop ceilings with painted gypsumboard, painted millwork and whiteboards / tackboards.

Mech: Heating and ventilation provided by Lennox furnace with 30.8 kW input and 23.4 kW output. Programmable digital thermostat for control. The furnace comes with an outside wall intake louvre for fresh air and supplies air along ductwork to grills in the millwork of the portable. The furnace has an economiser on the intake.

Elec: Electrical service is fed from main building. T12 wrap around light fixtures c/w line voltage switching.

<u>Rating</u>	Installed D	esign Life	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Replace verticle blinds and carpet.

Concern:

Carpet is stained and worn and the blinds are discolored and coming apart.

Recommendation:

Install new carpet and roll-down blinds.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$9,180	Low



F1010.02.04 Portable and Mobile Buildings 242

1991 construction, signage designates as portable 242.

Arch: Wood framed construction on concrete pads. Envelope consists of metal cladding, 2 ply SBS roofing membrane and aluminum framed windows with wire mesh security grilles. Interior components include carpet and VCT flooring, metal frames & doors, acoustical drop ceilings with painted gypsumboard, painted millwork and whiteboards / tackboards.

Mech: Heating and ventilation provided by Lennox furnace with 29.3 kW input and 23.4 kW output. Programmable digital thermostat for control. The furnace comes with an outside wall intake louvre for fresh air and supplies air along ductwork to grills in the millwork of the portable. The furnace has an economiser on the intake.

Elec: Electrical service is fed from main building. T12 wrap around light fixtures c/w line voltage switching.

<u>Rating</u>	Installed I	Design Life	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Add slip resistant material to exterior landing

Concern:

Existing carpet is worn and has large holes in it and is causing a huge tripping hazard.

Recommendation:

Remove carpet on stair landing and replace with a slip material thin enough for door to pass.

Type	<u>Year</u>	<u>Cost</u>	Priority
Repair	2005	\$108	Medium

Updated: February 18 2005



Event: Install new carpet and blinds

Concern:

Carpet is stained and worn and the blinds are discolored and coming apart.

Recommendation:

Install new carpet and roll-down blinds.

<u>Type</u>	<u>Year</u>	Cost	Priority
Failure Replacement	2006	\$9,180	Low



F2020.01 Asbestos*

1954 and 1956 buildings

RatingInstalledDesign LifeUpdated2 - Poor00DEC-04

Event: Investigate extent of asbestos materials.

Concern:

Materials in school are presumed to contain asbestos:

Hallways: painted wainscoting. Gymnasium foyer: asbestos board

Classrooms: vanities.

Both buildings- asbestos ceiling tiles.

Recommendation:

Investigate asbestos containing materials from classrooms (replace vanities E2010.02.05 includes costing) and from gym foyer. Hallway area requires to be continually maintained and repaired if damage occurs to the painted surface.



Updated: February 18 2005



F2020.09 Other Hazardous Materials*

Rating	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

Report run on: January 30, 2006 2:37 PM

Edmonton - Prince Charles Elementary School (S3251)

Facility Details

Building Name: Prince Charles Elementary 5

Address:

Location: Edmonton

Building Id: \$3251
Gross Area (sq. m): 0.00
Replacement Cost: \$0
Construction Year: 0

Evaluation Details

Evaluation Company: Evaluation Date:

Evaluator Name:

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

0%

General Summary:

Prince Charles is located on 127 street and 123 ave. The staff parking is located on the eastside of the school and other drop off areas are located in front of the school on 127street and on the north side. Field and play areas are large and have basketball hoops, baseball diamonds and soccor posts to play with. Winter conditions were present at time of evaluation so further inspection of grasses and tarmac area may be needed, no problems noted. Conflicts between onsite vehicle trafffic and children is apparent and a new staff parking lot should be constructed on the southside with appropriate fencing and control equipment. Otherwise site is in good condition.

Mechanical: The storm and sanitary sewers connect to municipal systems. Gas and water lines connect to utility mains. This is a fire hydrant near the school.

Electrical: Car receptacles are in good working order. Pad mounted transformer is in good condition. Exterior area lighting is adequately covered.

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)*

Rating Installed Design Life Updated

4 - Acceptable 0 0

G2010.05 Roadway Curbs and Gutters*

Rating <u>Installed</u> <u>Design Life</u> <u>Updated</u>

4 - Acceptable 0 0

G2020.02.01 Aggregate Parking Lots (Gravel)*

East side of 1954 building.

Rating Installed Design Life Updated

3 - Marginal 0 0

Event: Relocate and pave parking lot.

Concern:

Currently staff parking is located on east side of school and has no separation between pedestrians and vehicles. Parking lot has 15 parking stalls allocated in a gravel lot with no guard rails or fencing. Visitor parking is on grass.

Recommendation:

Relocate parking lot to southside of building grade and pave. Size new parking lot for 28 regular stalls 2 handicaped ones.

<u>Type</u> <u>Year</u> <u>Cost</u> <u>Priority</u>
Operating Efficiency Upgrade 2006 \$43,200 Low

Updated: February 18 2005



G2020.05 Parking Lot Curbs and Gutters*

Rating Installed Design Life Updated

3 - Marginal 0

Event: Install curbs and catch basin with construction of

new parking lot.

Concern:

With new parking lot to be relocated to the southside of school appropriate curbs and catch basin should be installed.

Recommendation:

Install curbs and catch basin to new paved parking lot, allow for appropriate curb cuts and ramp for barrier free access. Included is mechanical catch basin and trenching (\$10,000).

TypeYearCostPriorityOperating Efficiency Upgrade 2006\$23,760Low

Updated: February 18 2005

G2020.06.01 Traffic Barriers*

Rating Installed Design Life Updated

3 - Marginal 0

Event: Install duplex recepticles.

Concern:

Recepticles are needed for new parking lot for cars to plug in.

0

Recommendation:

Install electrical duplex recepticles c/w weatherproof covers and 2 dedicated circuits per recepticle:

15 duplex recepticles (\$50 each)

30 new dedicated circuits (\$2,000 -subject to wire lengths)

New 200 Amp, three phase 120/208 Volt panel, mounted in the parking lot c/w 42 spaces. (\$1,500)

New 200 Amp breaker inside the main electrical distribution of the building (\$500 plus feeder at \$750 for a total of \$1,250)

A new service from EPCOR with seperate metering (further analysis is required)

<u>Type</u> <u>Year</u> <u>Cost</u> <u>Priority</u> Operating Efficiency Upgrade 2006 \$5,940 Low

Updated: February 18 2005

Event: Install posts and railings

Concern:

New parking lot will require barriers

Recommendation:

Install metal posts and railings to incorporate car plug in recepticles.

TypeYearCostPriorityOperating Efficiency Upgrade 2006\$27,000Low

Updated: February 18 2005

Event: Install staff parking lighting.

Concern:

Security lighting for new staff parking.

Recommendation:

Install lighting for staff parking lot. Allow one pole mounted light fixture for each 8 cars. This would be 4 light posts at a cost of \$5,000 for each. Power for these fixtures would be from the new parking panel.

Type Year Cost Priority
Operating Efficiency Upgrade 2006 \$21,600 Low

Updated: February 18 2005

G2020.06.03 Parking Lot Signs*

Rating Installed Design Life Updated

3 - Marginal 0

Event: Install parking identification signs.

Concern:

With new parking lot to be relocated to the southside of school appropriate signage should be installed.

Recommendation:

Install parking identification signs to designate staff parking stalls, visitor stalls and barrier free parking. Replace existing warning sign with new metal one.

Type Year Cost Priority
Operating Efficiency Upgrade 2006 \$1,080 Low

Updated: February 18 2005



G2020.06.04 Pavement Markings*

Rating Installed Design Life Updated

3 - Marginal 0

Event: Paint parking lot pavement markings.

Concern:

With new parking lot to be relocated to the southside of school appropriate painted markings should be installed.

Recommendation:

Install new parking lot lines and painted barrier free stalls.

Type Year Cost Priority
Operating Efficiency Upgrade 2006 \$1,080 Low

Updated: February 18 2005

G2030.03 Pedestrian Unit Pavers*

Access to school from westside (front of school)

Rating Installed Design Life Updated

4 - Acceptable 0 0

G2030.06 Exterior Steps and Ramps*

1954 building- eastside

Rating Installed Design Life Updated

3 - Marginal 0

Event: Install barrier free ramp.

Concern:

No barrier free access to east side of building.

Recommendation:

Install barrier free ramp, incorporate with new stair construction.

TypeYearCostPriorityBarrier Free Access Upgrade 2006\$3,888Medium

Updated: February 18 2005



Event: Replace cracked stairs.

Concern:

Concrete stairs are cracked.

Recommendation:

Replace exterior stairs on boys side. (4 m²)

Type Year Cost Priority
Operating Efficiency Upgrade 2006 \$5,400 Low

Updated: February 18 2005



G2030.06.05 Metal Handrails and Railings

East side and south side of school; required.

Rating Installed Design Life Updated

3 - Marginal 0 0

Event: Install appropriate handrails and railings.

Concern:

1954 eastside and south side entrances require stair handrails.

Recommendation:

East side- Install two handrails on boys side of stairs and one handrail to girls entrance stairs. Coordinate with stair replacement. Install appropriate railings and curbs on new ramp construction as well.

South side- New exterior stairs and ramp require appropriate railings. Coordinate with south side entrance upgrade.

TypeYearCostPriorityCode Upgrade2006\$5,400Medium

Updated: February 18 2005

G2040.02 Fences and Gates*

Wire fences surround field area.

Rating Installed Design Life Updated

3 - Marginal 0 0

Event: Install fence

Concern:

No seperation between pedestrian traffic and vehicle traffic near east side playing field.

Recommendation:

Install fence along east side of back road, seperating playing field from parking lot area. (match to existing fence along street)

Type Year Cost Priority
Operating Efficiency Upgrade 2006 \$2,160 Low

Updated: February 18 2005



G2040.03 Athletic and Recreational Surfaces*

Winter conditions, no apparent problems.

Rating Installed Design Life Updated

4 - Acceptable 0 0

G2040.05.04 Bicycle Racks

East side of school.

Rating Installed Design Life Updated

4 - Acceptable 0 0

G2040.06 Exterior Signs*

1954 building- Sign mounted on building indicating school and date built (original) and another wood sign visible to 127 st.

Rating Installed Design Life Updated

4 - Acceptable 0 0

G2040.08 Flagpoles*

1954 building- Metal flag pole mounted to roof.

Rating Installed Design Life Updated

4 - Acceptable 0 0

G2050.04 Lawns and Grasses*

Winter conditions, no apparent problems.

Rating Installed Design Life Updated

4 - Acceptable 0 0

G2050.05 Trees, Plants and Ground Covers*

Large trees and shrubs in front of school and surrounding field.

Rating Installed Design Life Updated

4 - Acceptable 0

G3010.02 Site Domestic Water Distribution*

150 mm water line connected to City main.

Rating Installed Design Life Updated

5 - Good 0 0

G3010.03 Site Fire Protection Water Distribution*

One fire hydrant across street from school.

Rating Installed Design Life Updated

5 - Good 0 0

G3020.01 Sanitary Sewage Collection*

Two separate sanitary sewer lines connected to two different city mains, one for each of the 1954 and 1956 buildings.

Rating Installed Design Life Updated

5 - Good 0 0

G3030.01 Storm Water Collection*

Storm sewer line connected to city main.

Rating Installed Design Life Updated

5 - Good 0 0

G3060.01 Gas Distribution*

Gas line runs out to utility gas mains buried in street.

Rating Installed Design Life Updated

5 - Good 0 0

G4010.02 Electrical Power Distribution Lines*

Pad monted transformer. Power lines main and secondary are barried underground. Not accessible.

Rating Installed Design Life Updated

4 - Acceptable 0 0

G4010.04 Car Plugs-ins*

Weatherproof, rail mounted duplex receptacles are allocated as one duplex receptacle per each two stalls. Total of 16 energized stalls.

Rating Installed Design Life Updated

4 - Acceptable 0 0

G4020.01 Area Lighting*

Parameter lighting is mounted to the side of the building.

Rating Installed Design Life Updated

4 - Acceptable 0 0

S8 FUNCTIONAL ASSESSMENT

K1010 Site Location & Access

Building can be accessed on the west, north and south sides of the site. Staff parking and fire lane is located on the southside entrance from the street.

RatingInstalledDesign LifeUpdated4 - Acceptable00DEC-04

K2010.01 Building Entrance/ Reception (location)

Located beside the main school entrance doors; was modernized in 1994.

RatingInstalledDesign LifeUpdated5 - Good00DEC-04

K2010.02 Major Corridors (Layout, Orientation)

Schools main hallway runs north to south with the schools main entrance in the middle on the west side.

RatingInstalledDesign LifeUpdated5 - Good00DEC-04

K4010.01 Barrier Free Route: Parking to Entrance

Westside of building and south entrance is at grade at present time. See K4010.03 for modification of south entrance.

Rating 2 - Poor 0 Design Life Updated Decoration DEC-04

K4010.02 Barrier Free Entrances

1954 building

RatingInstalledDesign LifeUpdated2 - Poor00DEC-04

Event: Install power assist hardware to 2 exterior and

interior doors.

Concern:

This school has no barrier free entrances with power assist doors.

Recommendation:

Front entrance (at grade) requires power assist hardware and west entrance that will soon have a barrier free ramp will require power assist hardware. (2 exterior doors and 2 interior vestibule doors) Require hardware on entrances so that they can open both exterior and interior entrance doors simultaneously. Install push button door openers on both sides (interior and exterior). (\$850 each for electrical hook up included.)

TypeYearCostPriorityBarrier Free Access Upgrade 2006\$16,200Medium

Updated: February 18 2005

Report run on: January 30, 2006 2:37 PM

K4010.03 Barrier Free Interior Circulation

1954 building

Rating 2 - Poor 0 Design Life Updated DEC-04

Event: Construct new ramp.

Concern:

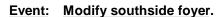
Ramp on west side of school (main entrance) is not to code. Distance is too short between top landing and interior vestibule doors.

Recommendation:

Remove existing wood ramp and construct code compliant ramp on other side of same stairs (furthest from office doors; north side). It will be neccessary to remove a portion of the stairs to construct new ramp. Also possible to add a wheelchair lift instead of constructing ramp; install to north side of main stairs (away from office).



Updated: February 18 2005



Concern:

The southside entrance and foyer area is not able to allow for easy access to and from the building for barrier free individuals. Storefront frames are too narrow, no power assist door hardware and vestibule area is too small to install a code compliant ramp.

Recommendation:

Modify existing vestibule area to allow for barrier free traffic. Raise vestibule floor to the same height of the main building floor of school and install the new exterior storefront to the new height. (same as interior storefront). This will allow for barrier free travel within the interior vestibule to be void of ramps and lack of space. Replace interior and exterior storefronts to allow for 2 doors not 3 small doors (28" clear opening with 3) modify walls to allow for new storefronts. Install power assist doors on one exterior and one interior door (to open simultaneously) Install exterior stairs and ramp to now suit this newly renovated entrance.

TypeYearCostPriorityBarrier Free Access Upgrade 2006\$64,800Medium

Updated: February 18 2005





K4010.04 Barrier Free Washrooms

1954 building- Boys and girls washrooms.

RatingInstalledDesign LifeUpdated2 - Poor00DEC-04

Event: Replace girls doors and install power assist door hardware.

Concern:

The girls washroom has double doors (in & out doors) that are too narrow for barrier free access.

The boys washroom has upgraded their doors from in and out doors to a single regular sized door but requires power assist hardware.

Recommendation:

Replace the girls washroom door to a single door large enough for barrier free access.

Install power assist hardware to both the boys and girls washroom doors. (1 for each washroom) (electrical service to doors is \$850 each)



Updated: February 18 2005

