RECAPP Facility Evaluation Report

Edmonton School District No. 7



Hillview Elementary School

B3151A Edmonton

Edmonton - Hillview Elementary School (B3151A)

Facility Details

Building Name: Hillview Elementary School

Address: 355 Woodvale Road E.

Location: Edmonton

Building Id: B3151A

Gross Area (sq. m): 2,867.00 **Replacement Cost:** \$6,152,000

Construction Year: 1980

Evaluation Details

Evaluation Company: A&E Architectural & Engineering Group

Inc.

Evaluation Date: November 4 2011
Evaluator Name: Vic Maybroda

Total Maintenance Events Next 5 years: \$1,835,050 5 year Facility Condition Index (FCI): 29.83%

General Summary:

The school is a single storey facility of 2189 sq. M constructed in 1980. In 1982 a six portable classroom pod was added of 660 sq. M to the northwest corner of the school.

The school including portables contains 3 early education rooms, a kindergarten, 7 classrooms, a library, a music room, an art room, a sensory gym room, a gymnasium, administration and ancillary support spaces.

At the time of the site visit there were 220 enrolled students.

Structural Summary:

The structure consists of metal roof deck on OWSJ supported by concrete block walls with concrete grade beams and concrete piles with concrete slab on grade.

Overall elements appear to be in acceptable condition.

Envelope Summary:

Roofing is of built-up asphalt membrane, walls consist of face brick with prefinished metal vertical cladding over window and door units with textured stucco panels below sealed fixed and opening aluminum framed window units. Exterior doors are painted metal clad in metal frames.

Clarestorey sealed fixed windows are located over the library area which has a stained horizontal wood siding finish over

Overall the elements appear to be in acceptable condition.

Interior Summary:

Floors consist of vinyl composite tile (VCT), carpeting, ceramic tile, wood strip and painted concrete. Walls are painted concrete block, vinyl covered gypsum wallboard and stained wood paneling.

Ceilings are of suspended acoustical tile and painted gypsum wallboard.

Casework is composed of painted cabinetry with plastic laminated counter tops.

Visual display boards are located in teaching areas.

Overall elements appear to be in acceptable condition.

Mechanical Summary:

The original building was built in 1980.

Portable classrooms added in 1982.

The building is heated by two heating water boilers with perimeter radiation and hot water coils in the air units,

The 2 air handling units are located in the mechanical room providing ventilation to the school.

The control system is operated by pneumatic controls.

There a domestic water heater providing hot water to the plumbing fixtures.

The portables are heated by furnaces.

Overall Mechanical system is in acceptable condition.

Electrical Summary:

The facility was originally built in 1980, had portable additions in 1982 and no modernization since than.

The main electrical service is 120/208V, 3-phase, 4-wire and rated 600A; The service is underground fed from a pad mounted transformer.

A natural gas 15 KW emergency generator is installed which provides emergency power to various hall and classroom light fixtures.

The fluorescent fixtures is T-12 lamp fluorescent with magnetic ballast.

All fire alarm, intrusion, telephone and Public address and Music systems meet current facility requirements.

The overall rating for the facility electrical systems shall be "Acceptable".

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 grade beams on concrete piles.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1980	0	MAR-12

A1030 Slab on Grade*

The concrete floor slab throughout has no visible cracking.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1980	0	MAR-07

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

Concrete block.

<u>Rating</u>	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	1980	0	MAR-12

B1020.01 Roof Structural Frame*

Metal deck on OWSJ with metal columns located in Library.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1980	0	MAR-12

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Face brick.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-12

B2010.01.06.03 Metal Siding**

Prefinished vertical metal siding located over windows and doors.

Prefinished vertical metal siding located over partial mechanical room.

RatingInstalledDesign LifeUpdated5 - Good200740MAR-12

Event: Replace 50 sq. M Metal Siding

TypeYearCostPriorityLifecycle Replacement2047\$14,500Unassigned

Updated: MAR-12

B2010.01.06.04 Wood Siding**

Exterior stained wood horizontal siding located above clerestory Library windows.

RatingInstalledDesign LifeUpdated3 - Marginal198040MAR-12

Event: Replace 30 sq. M Wood Siding

Concern:

Siding material deteriorating with cupped areas. Roof flashing and window units require refinishing.

Recommendation:

Replace wood siding with prefinshed metal.

TypeYearCostPriorityFailure Replacement2012\$8,700Medium

Updated: MAR-12

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

The stucco panels are located below the exterior windows.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-07

B2010.01.09 Expansion Control: Ext. Wall*

Caulked control joints located in face brick areas.

RatingInstalledDesign LifeUpdated3 - Marginal19800MAR-12

Event: Replace 110L M Caulked Joints

Concern:

Caulking losing elasticity and separating from substrate.

Recommendation:

Replace caulked face brick control joints.

TypeYearCostPriorityFailure Replacement2012\$3,300Medium

Updated: MAR-12

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

The exterior wall caulking is located around the windows, entrance door frames and other exterior wall penetrations.

RatingInstalledDesign LifeUpdated3 - Marginal198020MAR-12

Event: Replace 240L M Caulking

Concern:

Caulking material becoming brittle and separating from

substrate.

Recommendation:

Replace exterior caulking.

TypeYearCostPriorityFailure Replacement2012\$7,200Medium

Updated: MAR-12

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

Exterior door and frames and metal mesh window covering.

RatingInstalledDesign LifeUpdated4 - Acceptable198015MAR-12

Event: Repaint 60 sq. M Exterior Doors

TypeYearCostPriorityLifecycle Replacement2015\$1,500Unassigned

Updated: MAR-12

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

Painted wood siding, roof flashing, wood clerestorey windows over Library area,

RatingInstalledDesign LifeUpdated3 - Marginal198015MAR-12

Event: Replace 60 sq. M Painted Surfaces

Concern:

Painted wood siding, roof flashing, wood clerestorey windows

over Library area, Recommendation:

Replace Painted Surfaces.

TypeYearCostPriorityFailure Replacement2012\$1,500Medium

Updated: MAR-12

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

Concrete block.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

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

Not viewable. No concerns observed or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

B2010.06 Exterior Louvers, Grilles, and Screens*

Prefinished metal louvres to mechanical room.

Painted metal mesh grills over window units on play area side of building.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

B2010.09 Exterior Soffits*

Prefinished metal.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

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

Sealed fixed and opening units

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-12

Event: Replace 14 sq. M Aluminum Windows

TypeYearCostPriorityLifecycle Replacement2020\$14,000Unassigned

Updated: MAR-12

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

Sealed clerestorey window over Library area.

RatingInstalledDesign LifeUpdated3 - Marginal198035MAR-12

Event: Replace 38 sq. M Wood Windows

Concern:

Window units have worn frames and deteriorated seals.

Recommendation:

Replace with sealed aluminum or PVC windows.

TypeYearCostPriorityFailure Replacement2012\$38,000Medium

Updated: MAR-12

B2030.01.02 Steel-Framed Storefronts: Doors**

Entry doors are painted insulated metal clad with slotted sealed glazing units with painted metal mesh covers.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace 10 Entry Doors

TypeYearCostPriorityLifecycle Replacement2015\$20,000Unassigned

Updated: MAR-12

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B2030.02 Exterior Utility Doors** - 1980 Section

Painted metal clad insulated doors and frames.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-12

Event: Replace 14 Utility Doors

TypeYearCostPriorityLifecycle Replacement2020\$14,000Unassigned

Updated: MAR-12

B3010.01 Deck Vapour Retarder and Insulation*

Not view able. No concerns observed or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

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

Built-up bituminous roofing over all areas.

RatingInstalledDesign LifeUpdated3 - Marginal198025MAR-12

Event: Replace 2190 sq. M Roofing

Concern:

Roofing contains soft spots with ridging and exposed asphalt.

Recommendation:

Replace existing roof with SBS membrane roofing.

TypeYearCostPriorityFailure Replacement2012\$372,300Medium

Updated: MAR-12

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

The existing roof access hatch and access ladder are located in the janitor's room. Roof contains chimney, plumbing and exhaust vents and roof drains.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Concrete block.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-12

C1010.02 Interior Demountable Partitions*

Vinyl covered gypsum wallboard walls.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

C1010.05 Interior Windows*

Metal framed windows are found between the general office areas and library.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-07

C1010.06 Interior Glazed Partitions and Storefronts*

Metal framed glazed entry from Main Entrance to General Office.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-07

C1020.01 Interior Swinging Doors (& Hardware)*

Stained solid core wood doors in metal frames throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

C1020.03 Interior Fire Doors*

Rated hollow metal doors and frames applied to service and storage rooms and corridor locations.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

C1030.01 Visual Display Boards**

Chalkboards, whiteboards and tackboards located in teaching areas.

RatingInstalledDesign LifeUpdated4 - Acceptable198020MAR-12

Event: Replace 28 Visual Display Boards

Recommendation:

Replace boards (20 boards)

TypeYearCostPriorityLifecycle Replacement2015\$17,360Unassigned

Updated: MAR-12

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

9 -Floor supported Metal toilets partitions.

4 - Shower partitions.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Relace Fabricated Compartments

TypeYearCostPriorityLifecycle Replacement2015\$19,200Unassigned

Updated: MAR-12

C1030.08 Interior Identifying Devices*

Room names and numbers located on doors.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

C1030.12 Storage Shelving*

Painted wood.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

C1030.14 Toilet, Bath, and Laundry Accessories*

Commercial/Institutional grade mirrors, soap dispensers, paper towel dispensers and toilet tissue holders located in all washrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable19900MAR-07

C3010.02 Wall Paneling**

Wood strip paneling located on upper sections of Library walls. Wood strip paneling located on upper sections of Music Room.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace 120 sq. M Wall Paneling

TypeYearCostPriorityLifecycle Replacement2015\$18,000Unassigned

Updated: MAR-12

C3010.11 Interior Wall Painting*

Painted concrete block.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

C3020.01.02 Painted Concrete Floor Finishes*

Concrete floor in mechanical room is painted.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

C3020.02 Tile Floor Finishes**

42 sq. M Paver floor tile is located in the corridor outside of the general office. 140 sq. M Ceramic tile is located in wash and change rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable198050MAR-12

Event: Replace 182 sq. M Tiled Floors

TypeYearCostPriorityLifecycle Replacement2030\$25,480Unassigned

C3020.04 Wood Flooring**

Located in the gymnasium.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Refinish 364 sq, M Gymnasium Floor

Concern: Finish is worn, Recommendation:

Refinish floor and repaint game lines.

TypeYearCostPriorityPreventative Maintenance2012\$18,200Low

Updated: MAR-12

Event: Replace 364 sq. M Wood Flooring

TypeYearCostPriorityLifecycle Replacement2015\$91,000Unassigned

Updated: MAR-12

C3020.07 Resilient Flooring**

VCT is located in the corridors, classrooms and storage rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable198020MAR-12

Event: Replace 850 sq. M Resilient Flooring

TypeYearCostPriorityLifecycle Replacement2015\$46,750Unassigned

C3020.08 Carpet Flooring**

Carpet is located in classrooms, library, music room, sensory gymnasium and general office area.

RatingInstalledDesign LifeUpdated5 - Good200215MAR-12

Event: Replace 628 sq. M Carpeted Floors

TypeYearCostPriorityLifecycle Replacement2017\$40,820Unassigned

Updated: MAR-12

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

Suspended t-bar grid system with acoustic tiles in corridors, classrooms and office areas.

RatingInstalledDesign LifeUpdated4 - Acceptable198025MAR-12

Event: Replace 1480 sq. M Acoustical Tile Ceilings

TypeYearCostPriorityLifecycle Replacement2015\$81,400Unassigned

Updated: MAR-12

C3030.07 Interior Ceiling Painting*

Gypsum wall board ceilings located in wash, service and storage rooms.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-12

S4 MECHANICAL

D2010.04 Sinks**

Sinks are stainless steel counter mounted units with high spout faucets and some are c/w drinking fountain bubblers. Mop sinks are floor mounted fiberglass units, with vacuum breakers.

RatingInstalledDesign LifeUpdated4 - Acceptable200130MAR-12

Event: Replace 13 sinks

TypeYearCostPriorityLifecycle Replacement2031\$17,000Unassigned

Updated: MAR-12

D2010.05 Showers**

Showers rooms are tiled with wall mounted gang showers.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace 8 Showers

TypeYearCostPriorityLifecycle Replacement2015\$11,000Unassigned

Updated: MAR-12

D2010.08 Drinking Fountains/Coolers**

Wall mounted vitreous china drinking fountains in corridors.

RatingInstalledDesign LifeUpdated4 - Acceptable198035MAR-12

Event: Replace 2 Drinking Fountains

TypeYearCostPriorityLifecycle Replacement2015\$3,000Unassigned

D2010.10 Washroom Fixtures (WC, Lav, UrnI)** - 1981

Water closets are floor mounted vitreous china with flush valves and flush tanks in staff area Urinals are floor mounted vitreous china with flush valve.

RatingInstalledDesign LifeUpdated4 - Acceptable198035MAR-12

Event: Replace 21 Washroom Fixtures (WC=18, Urnl=3)

TypeYearCostPriorityLifecycle Replacement2015\$33,000Unassigned

Updated: MAR-12

D2010.10 Washroom Fixtures (WC, Lav, UrnI)** - 1995

Lavatories are stainless steel counter mounted units with single temperature spring return faucets.

RatingInstalledDesign LifeUpdated4 - Acceptable199535MAR-12

Event: Replace 17 lav

TypeYearCostPriorityLifecycle Replacement2030\$21,000Unassigned

Updated: MAR-12

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper piping and fittings to plumbing fixtures.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D2020.01.02 Valves: Domestic Water**

All plumbing fixtures are c/w isolation valves.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-12

Event: Replace 110 Domestic Water Valves

TypeYearCostPriorityLifecycle Replacement2020\$22,000Unassigned

Updated: MAR-12

D2020.01.03 Piping Specialties (Backflow Preventers)**

Backflow preventor on boiler make up water line.

RatingInstalledDesign LifeUpdated4 - Acceptable199720MAR-12

Event: Replace 1 Backflow Preventer

TypeYearCostPriorityLifecycle Replacement2017\$2,000Unassigned

Updated: MAR-12

D2020.02.02 Plumbing Pumps: Domestic Water**

Recirculation pump on the dom hot water.

RatingInstalledDesign LifeUpdated4 - Acceptable200420MAR-12

Event: Replace 1 Domestic Water Pumps

TypeYearCostPriorityLifecycle Replacement2024\$2,000Unassigned

Updated: MAR-12

D2020.02.06 Domestic Water Heaters**

A.O. Smith gas fired water heater model BTRC120-110, 35.2 Kw input, 268.7 I storage.

RatingInstalledDesign LifeUpdated4 - Acceptable200520MAR-12

Event: Replace 2 Domestic Water Heaters

TypeYearCostPriorityLifecycle Replacement2025\$9,000Unassigned

Updated: MAR-12

D2020.03 Water Supply Insulation: Domestic*

Domestic water hot and cold water lines were insulated with fiberglass.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D2030.01 Waste and Vent Piping*

Cast iron and copper piping is used for sanitary and vent piping.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D2030.02.04 Floor Drains*

Floor drains are located in all mechanical rooms, washrooms and showers.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D2040.01 Rain Water Drainage Piping Systems*

Storm water piping is cast iron within the building to piped to the city storm main.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D2040.02.04 Roof Drains*

Conventional roof drains with dome strainers.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D3010.02 Gas Supply Systems*

Schedule 40 steel piping connecting incoming gas service to boilers, domestic water heater & portable furnaces.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

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

Boilers Rheem CB1216-255, 320.6 Kw input. Heating pumps - make B & G 3/2BB 4.2 l/s @ 18.3m head.

RatingInstalledDesign LifeUpdated4 - Acceptable198035MAR-12

Event: Replace 2 Heating Boilers and Accessories

TypeYearCostPriorityLifecycle Replacement2015\$95,000Unassigned

Updated: MAR-12

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

Class B chimneys for each boiler. Insulated combustion air.

RatingInstalledDesign LifeUpdated4 - Acceptable198035MAR-12

Event: Replace 6m of Chimneys &Comb. Air

TypeYearCostPriorityLifecycle Replacement2015\$3,000Unassigned

Updated: MAR-12

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

Chemical pot feeder on hydronic system.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D3040.01.01 Air Handling Units: Air Distribution**

Classroom air system. Built up indoor unit. Consists of motorized fresh, return, exhaust air dampers, filter section, heating coil in return air, supply fan, & return fan.

Gymnasium air system. Built up indoor unit consists of motorized fresh, return, exhaust air dampers, filter section, heating coil in return air, supply fan, & return fan.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace 2 Air Handling Units

TypeYearCostPriorityLifecycle Replacement2015\$90,000Unassigned

Updated: MAR-12

D3040.01.04 Ducts: Air Distribution*

Ductwork is galvanized steel low velocity ductwork in ceiling space.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Square ceiling diffusers, linear grilles, adjustable bar grilles, rotojet grilles, egg crate and linear bar return air.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D3040.03.01 Hot Water Distribution Systems**

Heating water piping schedule 40 steel piping thuout building to baseboard heating cabinets in classrooms and offices and air unit reheat coils.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-12

Event: Replace Hot Water Distribution Systems BOE=2867

sq.m.

TypeYearCostPriorityLifecycle Replacement2020\$172,000Unassigned

Updated: MAR-12

D3040.04.01 Fans: Exhaust**

Rooftop mounted Delhi exhaust fans are used for building and bathroom exhaust.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace 6 Exhaust Fans

TypeYearCostPriorityLifecycle Replacement2015\$8,000Unassigned

Updated: MAR-12

D3040.04.03 Ducts: Exhaust*

Galvanized steel, low velocity ductwork in ceiling space.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D3040.04.05 Air Outlets and Inlets: Exhaust*

Various rectangular eggcrate ceiling exhaust ducts

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D3050.02 Air Coils**

Reheat coils on supply air ducts.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace 8 heating water coils

TypeYearCostPriorityLifecycle Replacement2015\$15,000Unassigned

Updated: MAR-12

D3050.05.01 Convectors**

Wall convectors in corridors.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-12

Event: Replace 4 convectors

TypeYearCostPriorityLifecycle Replacement2020\$2,000Unassigned

Updated: MAR-12

D3050.05.02 Fan Coil Units**

Wall mounted force flow heaters in entrance vestibules.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace 5 Fan Coil Units

TypeYearCostPriorityLifecycle Replacement2015\$15,000Unassigned

D3050.05.03 Finned Tube Radiation**

Base board cabinets are used around the perimeter of the building in most classrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-12

Event: Replace Finned Tube Radiation BOE=2867 sq.m.

TypeYearCostPriorityLifecycle Replacement2020\$86,000Unassigned

Updated: MAR-12

D3050.05.06 Unit Heaters**

Vertical unit heaters are installed in the mechanical room, electrical room and gym.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace 5 unit heaters

TypeYearCostPriorityLifecycle Replacement2015\$13,000Unassigned

Updated: MAR-12

D3060.02.01 Electric and Electronic Controls**

Line voltage controls for force flow heaters and unit heaters. Line and low voltage controls for boilers.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace Electric and Electronic Controls

BOE=2867 sq.m.

TypeYearCostPriorityLifecycle Replacement2015\$3,000Unassigned

Updated: MAR-12

D3060.02.02 Pneumatic Controls**

Duplex air compressor with refrigerated air dryer.

Pneumatic control of heating coils in air handling systems and perimeter radiation.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-12

Event: Replace Pneumatic Controls BOE=2867sq.m.

TypeYearCostPriorityLifecycle Replacement2020\$12,000Unassigned

Updated: MAR-12

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Dry chemical fire extinguishers throughout school on wall mounting brackets and in cabinets.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-12

S5 ELECTRICAL

D5010.01.02 Main Electrical Transformers (Utility Owned)*

A pad mounted transformer were installed and is located on south east side of the property. It is serviced by a utility company.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-12

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

A FPE 120/208V, 3-phase 4-wire, 600A rated main distribution panel were installed, and completed with a 600A main incoming breaker. The switchboard is located in the electrical room. Breakers are adequately marked in the distribution section. There is some spare space for future. The MDP is installed on a housekeeping pad.

RatingInstalledDesign LifeUpdated5 - Good198040MAR-12

Event: Replace Main Electrical Switchboards (Main

Distribution)

TypeYearCostPriorityLifecycle Replacement2020\$30,000Unassigned

Updated: MAR-12

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

Branch circuit panel boards have been provided throughout the school, and are located in mechanical rooms, and the corridors of classroom wings. There is ample spare capacity in the panels.

RatingInstalledDesign LifeUpdated5 - Good198030MAR-12

Event: Replace 10 Electrical Branch Circuit Panelboards

(Secondary Distribution)

TypeYearCostPriorityLifecycle Replacement2015\$50,000Unassigned

Updated: MAR-12

D5010.07.02 Motor Starters and Accessories**

Individual motor starters and load switches are used major mechanical ventilation units and some small water pumps. Starters are complete pilot lights and hand-off-auto selector switches.

RatingInstalledDesign LifeUpdated5 - Good198030MAR-12

Event: Replace 6 Motor Starters and Accessories

TypeYearCostPriorityLifecycle Replacement2015\$3,600Unassigned

Updated: MAR-12

D5020.01 Electrical Branch Wiring*

Wires are generally installed in conduits. BX wires are used for final connections to mechanical and miscellaneous equipment in the facility.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

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

Lighting control is by line voltage switches throughout the school except the gym which has been provided with a low voltage switching system. All areas are locally switched.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D5020.02.02.01 Interior Incandescent Fixtures*

Incandescent lighting is provided in uncommon areas.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D5020.02.02.02 Interior Fluorescent Fixtures**

T-12 magnetic ballasts fluorescent fixtures were used for general lighting throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace 450 Interior Fluorescent Fixtures

TypeYearCostPriorityLifecycle Replacement2015\$90,000Unassigned

Updated: MAR-12

D5020.02.03.01 Emergency Lighting Built-in*

Emergency lighting is provided by connecting selected fixtures around the school to an emergency power system as supplied by an on-site emergency engine-generator set and these act as emergency lights during a power outage. All paths and points of egress are well covered.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

Event: Replace 22 Emergency Lighting Built-in

TypeYearCostPriorityLifecycle Replacement2015\$8,800Unassigned

Updated: MAR-12

D5020.02.03.03 Exit Signs*

Exit signs are located at required locations and exits. Fixtures are upgraded to LED type.

RatingInstalledDesign LifeUpdated5 - Good20000MAR-12

D5020.02.05 Special Purpose Lighting*

Stage lighting has been provided in the drama room. Fixtures are of the incandescent type and are dimmer controlled.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

H.P.Sodium wall mounted light fixtures have been provided around the building.

RatingInstalledDesign LifeUpdated4 - Acceptable19980MAR-12

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

Exterior lighting control is by photo cell with manual override. Controls are located in the electrical room

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D5030.01 Detection and Fire Alarm**

Fire alarm system is consist of Edwards Model 6500 control panel located at the office and annunciator panel located at the main entrance, completed with detectors, manual pull stations, and bells. Fire alarm panel is obsolete and no longer supported by the manufacturer. Parts are no longer available in the market.

The system is externally monitored and annually tested.

RatingInstalledDesign LifeUpdated4 - Acceptable198025MAR-12

Event: Replace Detection and Fire Alarm

TypeYearCostPriorityLifecycle Replacement2015\$45,000Unassigned

Updated: MAR-12

D5030.02.02 Intrusion Detection**

A Magnum Alert panel has been provided for intrusion and security systems. It is complete with motion sensors, and key pad. System is externally monitored.

There are two local intrusion detection system installed for the computer, and early child education rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable199725MAR-12

Event: Replace Intrusion Detection

TypeYearCostPriorityLifecycle Replacement2022\$22,500Unassigned

Updated: MAR-12

D5030.04.01 Telephone Systems*

Telephone service is underground and the terminal board is located in the utility room. A Nortel Meridian telephone system has been provided. Telephone sets have been provided in the administration area, and each classrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable20020MAR-12

D5030.04.04 Data Systems*

Cat 5 and 5e data cabling has been provided throughout the school. Data outlets have been provided in each of the classrooms and in the administration areas. Fiber optic cables is used for super-net.

RatingInstalledDesign LifeUpdated5 - Good20000MAR-12

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D5030.04.05 Local Area Network Systems*

The network is located in a room off the library and is complete with wall mounted patch panels, hubs and switches. Wireless internet is provided in the school in 2010.

RatingInstalledDesign LifeUpdated4 - Acceptable20000MAR-12

D5030.05 Public Address and Music Systems**

Bogen wall-mounted Multicom 2000 Administrative Communication System were installed for PA functions. It also provides master clock control and emergency call features including "911" emergency all-call for increased security and quick response. Speakers have been provided throughout the school including one in each classroom.

RatingInstalledDesign LifeUpdated5 - Good200220MAR-12

Event: Replace Public Address and Music Systems

TypeYearCostPriorityLifecycle Replacement2022\$11,000Unassigned

Updated: MAR-12

D5030.06 Television Systems*

Cable television service has been provided and the terminal board is located in the utility room. A TV outlet has been provided in each classroom.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

D5030.07 Other Communications and Security Systems*

Super Net is provided for the facility.

RatingInstalledDesign LifeUpdated5 - Good20050MAR-12

D5090.01 Uninterruptible Power Supply Systems**

A 750VA UPS is provided for the telephone backboard, and a1500VA UPS is provided for the server.

RatingInstalledDesign LifeUpdated5 - Good200030MAR-12

Event: Replace Uninterruptible Power Supply Systems

TypeYearCostPriorityLifecycle Replacement2030\$8,000Unassigned

Updated: MAR-12

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

An Onan natural gas fired emergency engine-generator set has been provided. The unit is located in the electrical room . The unit is rated at 15kW, 120/208V, 3 phase, 4 wire. An automatic transfer switch, a battery charger and block heater have been provided. The unit supplies power to selected light fixtures around the school, selected mechanical equipment, and life safety systems such as the fire alarm system. The unit is serviced and tested regularly.

RatingInstalledDesign LifeUpdated4 - Acceptable198035MAR-12

Event: Replace Packaged Engine Generator Systems

(Emergency Power System)

TypeYearCostPriorityLifecycle Replacement2016\$30,000Unassigned

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.04 Residential Equipment*

Staff room contains an electric range with range hood, a refrigerator, a dish washer and microwave. Kitchen contains and electric range with range hood, refrigerator, dishwasher and microwave.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Gymnasium contains wall mounted basketball backboards, badminton and floor hockey nets.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

E2010.02 Fixed Casework**

In 2011 the estimated replacement costs are as follows:

Painted upper and lower cabinetry with plastic laminated counter tops

150/GSM = 9,000.00

Painted classroom cabinetry with plastic laminated counter tops.

100/GSM = 47,600.00

Plastic laminated vanity counter tops.

\$50/GSM = \$3,000.00

RatingInstalledDesign LifeUpdated4 - Acceptable198035MAR-12

Event: Replace Fixed Casework

TypeYearCostPriorityLifecycle Replacement2015\$59,600Unassigned

Updated: MAR-12

E2010.03.01 Blinds**

Vertical blinds at all exterior windows.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace 14 sq. M Blinds

TypeYearCostPriorityLifecycle Replacement2015\$1,400Unassigned

Updated: MAR-12

F1010.02.04 Portable and Mobile Buildings**

Six portable classrooms and storage room with link to north side of school added in 1982 of 662 sq. M.

The portables are wood framed supported on concrete pads with a crawl space with SBS membrane roofing installed in 2009, prefinished metal clad siding housing sealed fixed and opening aluminum framed window units with painted plywood panels above and below window units and painted metal mesh window covering, painted metal clad entry and utility doors and prefinished metal louvres.

Interiors consist of VCT and carpeted flooring, vinyl covered gypsum wallboard walls, ceilings of suspended acoustical tile, visual display boards, painted wood doors and metal frames, painted wood cabinetry with plastic laminated counter tops and louvred blinds.

In 2011 the estimated replacement costs are:

Envelope

660 sq. M SBS Membrane Roofing = \$ 112,200.00 640 sq. M Prefinished Metal Cladding = \$ 108,800.00 20 sq. M Aluminum Windows = \$ 15,000.00 10 Painted Metal Clad Doors = \$ 12,000.00

Interior

168 sq. M VCT Flooring = \$ 9,240.00 80 sq. Sheet Vinyl Flooring = \$ 7,200.00 400 sq. M Carpeting = \$ 26,000.00 600 sq. M Acoustical Tile = \$ 33,000.00 Millwork @ \$100/sq. M = \$ 60,000.00 20 sq. M Blinds = \$ 2,000.00 24 Visual Display Boards = \$ 15,000.00

Mechanical

Each portable is c/w a natural gas fired counter flow Carrier model 58CTAO70 (4@), Carrier model 58TMA105 -16.1(1@) and Lennox model 80MGF3/4-100A (1@) furnaces with ductwork and sill mounted grilles. Furnaces installed in 2001 and 2007.

Replacement cost = \$31.500.00

There is a roof mounted exhaust fan with ductwork for each portable.

Replacement cost = \$12,000.00

A hot water force flow heater is installed in each of the vestibules.

Replacement cost = \$18,000.00

Replace 1 wall mounted stainless steel sink = \$1,200.00

Electrical

- 1. Electrical Branch Circuit Panels: Six single phase, 3 wire 120/240V and rated 125A service panels were installed in portable sections of the building. Lifecycle replacement shall be occurred in 2015 and the cost will be \$18,000
- 2. Motor Starters and Accessories: Six load switches for these portable furnaces, lifecycle replacement shall be occurred in 2015 and the cost will be \$3,600
- 3. Interior Fluorescent lights: Fixtures are original T-12 lamp and completed with magnetic ballast. Lifecycle replacement shall be occurred in 2015 and the cost will be \$26,000.
- 4. The HPS wall packs were installed above the exit doors.
- 5. LED exit signs are provided for this portables.
- 6. The fire alarm system devices were connected to main building fire alarm panel, Lifecycle replacement shall be occurred in 2015 and the cost will be \$10,000.
- 7. The intrusion system devices were connected to main school security panel and Lifecycle replacement shall be occurred in 2022 and the cost will be \$5,000.
- 8. The PA system devices were wired to main school systems and lifecycle replacement shall be occurred in 2022 and the cost will be \$2,500.
- 9. The Telephone, data system outlets were installed in each class room.
- 10. Local area network system is provided, and tied into main school server.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1982	30	MAR-12



View of portables

Event: Replace Electrical

TypeYearCostPriorityLifecycle Replacement2015\$65,100Unassigned

Updated: MAR-12

Event: Replace Envelope

TypeYearCostPriorityLifecycle Replacement2015\$248,000Unassigned

Updated: MAR-12

Event: Replace Interiors

TypeYearCostPriorityLifecycle Replacement2015\$152,440Unassigned

Updated: MAR-12

Event: Replace Mechanical

TypeYearCostPriorityLifecycle Replacement2015\$62,700Unassigned

F1010.02.05 Grandstands and Bleachers**

A set of wood folding portable bleachers are located in the gymnasium.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-12

Event: Replace 150 Seat Bleachers

TypeYearCostPriorityLifecycle Replacement2015\$15,000Unassigned

S8 SPECIAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

Current path from parking lot to Main Entrance is a concrete sidewalk. The width of the sidewalk meets current code requirements.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-12

K4010.02 Barrier Free Entrances*

Power operators at Main Entrance for exterior and interior vestibule doors.

Rating Installed Design Life Updated
3 - Marginal 1980 0 MAR-12

Event: Install power operators at Main Entrance Doors

Concern:

Main Building Entrance does not meet current barrier free accessible code standards.

Recommendation:

Install power operated entrance doors at exterior and vestibule doors.

TypeYearCostPriorityBarrier Free Access Upgrade2012\$7,500Low

Updated: MAR-12

K4010.03 Barrier Free Interior Circulation*

Interior Circulation paths in school meet current code barrier free accessible requirements. Interior doors widths meet current code barrier free accessible requirements.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-07

K4010.04 Barrier Free Washrooms*

BFA wash rooms.

RatingInstalledDesign LifeUpdated3 - Marginal19800MAR-12

Event: Upgrade 2 Washrooms to BFA Requirements

Concern:

Washrooms do no meet current barrier free accessible code standards.

Recommendation:

Modify a Boys and Girls washroom to meet current barrier free accessible code standards. Modify washroom entrance from corridor (remove concrete block) and create barrier free stalls.

TypeYearCostPriorityBarrier Free Access Upgrade2012\$10,000Medium

Updated: MAR-12

K4030.01 Asbestos*

Asbestos Building Material Survey Report issued June 28, 2000. Asbestos Cement panels identified in a portable were removed in 2000.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-07

K4030.04 Mould*

None detected or reported during review.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-07

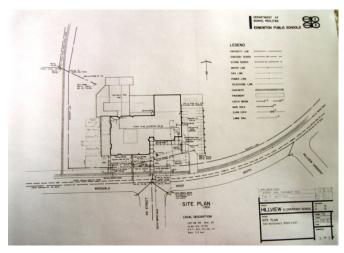
K4030.09 Other Hazardous Materials*

None detected or reported during review.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-07

K5010.01 Site Documentation*

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	2011	0	MAR-12



Site Plan

K5010.02 Building Documentation*

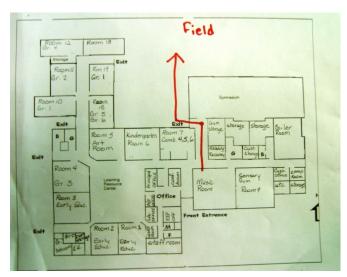
On 04 November 2011, Vic Maybroda of A&E Architectural & Engineering Group Inc. Supported by Neil Folkins of bacz Engineering Ltd. And Erol Seymen of Acuity Engineering & Consulting Services Ltd. Accompanied by Maintenance Supervisors of the Edmonton School Division No. 7 undertook an on site review of existing building and site conditions of the Hillside Elementary School.

The school is a single storey facility of 2189 sq. M constructed in 1980. In 1982 a six portable classroom pod was added of 660 sq. M to the northwest corner of the school.

The school including portables contains 3 early education rooms, a kindergarten, 7 classrooms, a library, a music room, an art room, a sensory gym room, a gymnasium, administration and ancillary support spaces.

At the time of the site visit there were 220 enrolled students.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	2011	0	MAR-12



Floor Plan