RECAPP Facility Evaluation Report

Calgary RCSSD #1



St. Rita Elementary School B2822A Calgary

Report run on: March 26, 2013 9:42 AM

Calgary - St. Rita Elementary School (B2822A)

Facility Details		Evaluation Details		
-	St. Rita Elementary School 7811 Ranchview Drive N. W	Evaluation Company:	Williams Engineering Cana WEC	ada Inc
Location:	Calgary	Evaluation Date:	December 4 2012	
Building Id:	B2822A	Evaluator Name:	WEC - Jennifer Lavier Jan	kovic
Gross Area (sq. m):	2,382.67			
Replacement Cost:	\$7,252,000			
Construction Year:	1981		ce Events Next 5 years: ondition Index (FCI):	\$966,467 13.33%

General Summary:

St.Rita Elementary school was constructed in 1981 with a gross area of 2382 sqm. It is a single storey structure with a mechanical mezzanine. At the time of assessment, two portables were located on site. The portables are assessed in separate files, the link structure to the portables is reported on in this file.

Structural Summary:

OWSJ bear on exterior load bearing cement masonry units (CMU), and interior HSS steel columns which are supported on reinforced concrete pads. The mechanical mezzanine floor is suspended concrete slab on reinforced loadbearing masonry block walls.

Overall, the structure is in acceptable condition.

Envelope Summary:

Brick over air space, load bearing cement masonry unit (CMU) behind. Upper portion of exterior walls are fitted with horizontal prefinished metal siding. Roofing is SBS membrane. New aluminum windows installed in 2010. All exterior doors are insulated metal (painted) in painted pressed steel frames.

Overall, the envelope is in acceptable condition.

Interior Summary:

Flooring is a combination of Vinyl sheet, VCT, Carpet tile, Maple sports floor in the gymnasium, painted concrete, and tile. Interior walls are a combination of painted and vinyl covered: gypsum board on steel stud, CMU, and demountable wall partitions. The ceilings in the school are primarily suspended T-bar. The ceiling in the gymnasium is coated with spray-fiber acoustical treatment. The doors are painted wood (some painted metal) in painted metal frames.

Overall, the interiors are in acceptable condition.

Mechanical Summary:

The heating is provided by 9 Hydro Therm hot water boilers and perimeter radiation. Repairs may be required on boiler 1 as it was non-functioning during the evaluation.

Two Trane Torrivent air handling units provide the ventilation to the school.

Two Bradford White hot water heaters provide the domestic hot water service.

Overall, the mechanical systems are in acceptable condition.

Electrical Summary:

The main electrical service is a Westinghouse 800 amp, 120/208 volt, 3 phase, 4 wire panel. There are 7 sub-panels installed in the mechanical rooms, storage rooms and corridors to provide power for lighting and equipment. The interior of the building is lit with a combination of T12 fluorescent fixtures. The exterior is lit with wall mounted High Pressure Sodium fixtures around the building and ceiling mounted incandescent lights at the entrances. The building has 4 emergency battery packs, 15 remote heads and 18 exit signs. The building has an EDWARDS 2280 fire alarm control panel and heat detectors, smoke detectors, pull-stations and bells throughout. The building is equipped with a Silent Knight intrusion, supernet, public address and telephone systems.

Overall, the electrical systems are in acceptable condition.

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

S1 STRUCTURAL

A1010 Standard Foundations*

Reinforced cip concrete foundation walls on reinforced cip concrete strip footings.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	MAR-13

Event: Perform structural study (2)

Concern:

Interior CMU walls in two locations showing signs of foundation movement.

Recommendation:

Perform a structural study in two locations (Electrical Room #113, boys and girls washrooms 123 / 125.)

Consequences of Deferral:

Foundations might continue to move.

Туре	Year	Cost	Priority
Study	2012	\$5,000	High

Updated: MAR-13

Event: Repair wall foundations (2)

Concern:

Interior CMU walls in two locations showing signs of foundation movement.

Recommendation:

Contingent on Study: Repair wall foundations in two locations (Electrical Room #113, boys and girls washrooms 123 / 125.) **Consequences of Deferral:**

Contingent on Study: Foundations might continue to move.

Туре	Year	<u>Cost</u>	Priority
Preventative Maintenance	2012	\$20,000	High

Updated: MAR-13

A1030 Slab on Grade*

Reinforced concrete slab on grade.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	MAR-13

B1010.01 Floor Structural Frame (Building Frame)*

The mechanical mezzanine floor is suspended concrete slab on reinforced loadbearing masonry block walls.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

B1010.05 Mezzanine Construction*

Structural reinforced suspended concrete slab supported on reinforced loadbearing masonry block walls.

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1981	0	MAR-13

B1010.10 Floor Construction Firestopping* - Mezzanine

Flexible sealant at utility penetrations through the mechanical mezzanine floor.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1981	0	FEB-08

B1020.01 Roof Structural Frame*

Metal decking on OWSJ bear on exterior load bearing cement masonry units (CMU), and interior HSS steel columns.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	MAR-13

S2 ENVELOPE

	ad bearing cement masonry unit (CMU) behind.
Rating 4 - Acceptable	InstalledDesign LifeUpdated19810MAR-13
B2010.01.06.03 Metal S	Siding**
Upper portion of exterior	r walls are fitted with horizontal prefinished metal siding.
Rating 4 - Acceptable	InstalledDesign LifeUpdated198140MAR-13
Event: Replace Metal	I Siding (550 sqm)
Type Lifecycle Replac	ement 2021 \$75,653 Priority Unassigned
Updated: MAR	र-13
B2010.01.09 Expansion	n Control: Ext. Wall*
Control joints blend in w	ith stacked bond mortar joints of brick.
Rating 4 - Acceptable	Installed Design Life Updated 1981 0 MAR-13
B2010.01.11 Joint Seal	lers (caulking): Ext. Wall**
Caulking around window	vs was replaced when new windows installed in 2010.
<u>Rating</u> 5 - Good	InstalledDesign LifeUpdated201020MAR-13
Event: Replair Joint S	Sealers (110 meters)
	Year Cost Priority
<u>Type</u> Lifecycle Replac	
	ement 2030 \$3,361 Unassigned
Lifecycle Replac	ement 2030 \$3,361 Unassigned
Lifecycle Replac Updated: MAF B2010.02.03 Masonry U	eement 2030 \$3,361 Unassigned

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

Cannot observe, no issues reported. Assumed acceptable.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	MAR-13

B2010.06 Exterior Louvers, Grilles, and Screens*

Painted metal louvers on the upper roof.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

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

New aluminum double glazed windows installed in 2010.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2010	40	MAR-13

Event: Replace Aluminum Windows (23)

Туре	Year	Cost	Priority
Lifecycle Replacement	2050	\$23,184	Unassigned

Updated: MAR-13

B2030.01.11 Metal Entrance Door**

All exterior doors are insulated metal (painted) in painted pressed steel frames.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	MAR-13

Event: Replace metal entrance doors (13)

<u>Type</u>	Year	Cost	Priority
Lifecycle Replacement	2016	\$11,521	Unassigned

Updated: MAR-13

B3010.01 Deck Vapour Retarder and Insulation*

Concealed, unable to observe. No issues reported.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1981	0	MAR-13

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

2-ply modified bitumen roofing (aka SBS) with granular surfaced capsheet and flashing throughout.

Rating	Installed	Design Life	Updated
4 - Acceptable	2006	25	MAR-13

Event: Replace SBS Roofing (2,382 sqm)

Туре	Year	Cost	Priority
Lifecycle Replacement	2031	\$437,692	Unassigned

Updated: MAR-13

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

Roof vents, soil vents and roof drains, etc. Roof is accessed by a passage door from the mechanical mezzanine level.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	MAR-13

S3 INTERIOR

C1010.01 Interior Fixed Partitions* - Metal stud

Painted gypsum on metal stud frame partitions in many locations throughout school, and located in the link structure corridor.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

C1010.01 Interior Fixed Partitions* - Unit Masonry

Painted masonry units (CMU) in various locations throughout.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1981	0	MAR-13

C1010.02 Interior Demountable Partitions*

Vinyl covered demountable partitions in admin area and other various locations throughout.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	MAR-13

C1010.03 Interior Operable Folding Panel Partitions**

Ceiling mounted folding panel partition in gymnasium.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	30	MAR-13

Event: Replace folding panel partition (130 sqm)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$155,883	Unassigned

Updated: MAR-13

C1010.05 Interior Windows*

Metal frame with security vision glass (Georgian wire glazing) in some classrooms.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	FEB-08

C1020.01 Interior Swinging Doors (& Hardware)*

Painted wood doors in painted metal frames. Painted metal doors in painted metal frames to various ancillary rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

C1020.03 Interior Fire Doors*
Hollow metal swing-type fire-doors with magnetic door hold open devices activated by central fire alarm system. Last recapp noted a code repair. No issues were apparent on the latest review.
RatingInstalledDesign LifeUpdated4 - Acceptable19810MAR-13
C1020.07 Other Interior Doors* - Roller shutter
Roller metal shutter in General office, and kitchen opposite gymnasium.
RatingInstalledDesign LifeUpdated4 - Acceptable19810MAR-13
C1030.01 Visual Display Boards**
Whiteboards, tackboards, and some chalkboards.
Rating Installed Design Life Updated
4 - Acceptable 1981 20 MAR-13
Event: Replace Visual Display Boards (50)
<u>Type</u> <u>Year</u> <u>Cost</u> <u>Priority</u>
Lifecycle Replacement 2016 \$34,388 Unassigned
Updated: MAR-13
C1030.02 Fabricated Compartments (Toilets/Showers)**
Prefinished fabricated metal toilet and shower compartments throughout.
Rating Installed Design Life Updated
4 - Acceptable 1981 30 MAR-13
Event: Replace fabricated compartments (28)
TypeYearCostPriorityLifecycle Replacement2016\$34,427Unassigned
Updated: MAR-13
C1030.06 Handrails*
Handrails at ramps.
Rating Installed Design Life Updated
RatingInstalledDesign LifeUpdated4 - Acceptable19810MAR-13

C1030.08 Interior Identifying Devices*

Engraved plastic classroom numbers and name plates; wall mounted emergency egress plans; etc.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	FEB-08

C1030.12 Storage Shelving*

Shelving is a combination of Industrial grey metal and painted wood.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

C1030.14 Toilet, Bath, and Laundry Accessories*

Mirrors, liquid soap dispensers, waste baskets and paper towel and toilet paper dispensers.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

C2010 Stair Construction*

All stairs in the building are constructed of cast in place concrete.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	MAR-13

C2020.01 Tile Stair Finishes*

Stairs in corridor	144 / 14	5 are fitted	with floor tile.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

C2020.05 Resilient Stair Finishes**

Stairs to gymnasium are fitted with resilient flooring.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	20	MAR-13

Event: Replace resilient stair finishes (5 sqm)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$1,000	Unassigned

C2020.08 Stair Railings and Balustrades*
All stairs are equipped with painted metal handrails.
RatingInstalledDesign LifeUpdated4 - Acceptable19810MAR-13
C2030 Interior Ramps*
All ramps are cast in place concrete.
RatingInstalledDesign LifeUpdated4 - Acceptable19810MAR-13
C3010.02 Wall Paneling**
Vinyl wall paneling on various walls throughout.
RatingInstalledDesign LifeUpdated4 - Acceptable198130MAR-13
Event: Replace wall paneling (120 sqm)
TypeYearCostPriorityLifecycle Replacement2016\$12,474Unassigned
Updated: MAR-13
C3010.04 Gypsum Board Wall Finishes (Unpainted)*
Gypsum wallboard in various locations, either vinyl covered or painted.
RatingInstalledDesign LifeUpdated4 - Acceptable19810MAR-13
C3010.06 Tile Wall Finishes**
Ceramic wall tile in boys and girls showers, and around urinals in boys washrooms.
RatingInstalledDesign LifeUpdated4 - Acceptable198140MAR-13
Event: Replace tile wall finishes (45 sqm)
TypeYearCostPriorityLifecycle Replacement2021\$11,671Unassigned
Updated: MAR-13

C3010.09 Acoustical Wall Treatment**

Spray on acoustic treatment on upper gymnasium walls.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	20	MAR-13

Event: Replace acoustical wall treatment (90 sqm)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$21,263	Unassigned

Updated: MAR-13

C3010.11 Interior Wall Painting*

Painted gypsum wallboard and masonry units. Painted gypsum wallboard in link structure.

Rating	Installed	Design Life	Updated
4 - Acceptable	2001	0	MAR-13

C3020.01.02 Painted Concrete Floor Finishes*

Mechanical room and gymnasium storage room floors are painted concrete.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	MAR-13

C3020.02 Tile Floor Finishes**

Showers, washrooms, and west corridor 144 and 145.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	50	MAR-13

Event: Replace Tile Floor Finishes (300 sqm)

Туре	Year	Cost	Priority
Lifecycle Replacement	2031	\$52,605	Unassigned

C3020.04 Wood Flooring** - Maple sports floor

Gymnasium equipped with maple sports floor. Assumed refinished in 2009.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2009	30	MAR-13

Event: Replace maple sports floor (375 sqm)

TypeYearCostPriorityLifecycle Replacement2039\$100,406Unassigned

Updated: MAR-13

C3020.07 Resilient Flooring** - VCT

Original VCT in changerooms, storage rooms, and various other ancillary rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	20	MAR-13

Event: Replace vinyl composite tile (250 sqm)

Туре	Year	Cost	<u>Priority</u>
Lifecycle Replacement	2016	\$13,367	Unassigned

Updated: MAR-13

C3020.07 Resilient Flooring** - Vinyl Sheet 1981

Original vinyl sheet flooring in corridors and two classrooms. Vinyl sheet flooring in link structure.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	20	MAR-13

Event: Replace vinyl sheet flooring (300 sqm)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$25,203	Unassigned

Updated: MAR-13

C3020.07 Resilient Flooring** - Vinyl Sheet 2012

All classrooms (except for two), general office, and staff room equipped with new vinyl sheet flooring in 2012.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2012	20	MAR-13

Event: Replace vinyl sheet flooring (800 sqm)

Туре	Year	Cost	Priority
Lifecycle Replacement	2032	\$67,208	Unassigned

C3020.08 Carpet Flooring**

Library, vice principal, and principal office fitted with carpet tile.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2011	15	MAR-13

Event: Replace carpet tile flooring (150 sqm)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2026	\$8,020	Unassigned

Updated: MAR-13

C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*

Storage rooms, and washrooms have gypsum board ceilings.

Rating	Installed	Design Life	Updated
4 - Acceptable	1982	0	MAR-13

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

Aside from the gymnasium, mechanical room, and areas fitted with gypsum board ceilings, the remainder of the school is fitted with suspended T-bar ceilings. Suspended T-bar ceilings in link structure.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	25	MAR-13

Event: Replace acoutical tile, dropped ceiling, existing grid left in place (1,800 sqm)

Туре	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$87,980	Unassigned

Updated: MAR-13

C3030.07 Interior Ceiling Painting*

Painted drywall ceilings in storage rooms, and washrooms.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2001	0	MAR-13

C3030.09 Other Ceiling Finishes*

Spray on acoustic treatment on gymnasium ceiling. Refer to K4030.01 Asbestos.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	MAR-13

S4 MECHANICAL

D2010.04 Sinks**

7 stainless steel sinks located in various classrooms, staff room and kitchen, 1 vitreous china sink and 2 enameled cast iron service sinks.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	30	MAR-13

Event: Replace Sinks (10)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$13,100	Unassigned

Updated: MAR-13

D2010.05 Showers**

13 shower heads and taps are wall mounted on ceramic tile in boys and girls change rooms and were separated by traditional washroom stall divisors. One self-contained shower unit in office adjacent gymnasium. Change rooms showers are not in use.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	30	MAR-13

Event: Replace Showers (14)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$23,100	Unassigned

Updated: MAR-13

D2010.08 Drinking Fountains/Coolers**

3 wall hung, non-refrigerated vitreous china drinking fountains throughout school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	35	MAR-13

Event: Replace Drinking Fountains (3)

Туре	<u>Year</u> Cost	Priority
Lifecycle Replacement	2016 \$5,914	Unassigned

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

The water closets, urinals and lavatories are vitreous china. The water closets are manual flush and the urinals have a gravity fed, timed dump tank. Total of 19 WC, 15 LAV, 6 Urnl.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	35	MAR-13

Event: Replace Washroom Fixtures (19 WC, 15 LAV, 6 URNL)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$62,600	Unassigned

Updated: MAR-13

D2020.01.01 Pipes and Tubes: Domestic Water*

Piping is copper and steel.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	FEB-08

D2020.01.02 Valves: Domestic Water**

Ball and gate valves on domestic and heating hot water distribution lines. Pressure release valves on hydronic systems. Freeze prevention valves as well as alarms on exterior faucets.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	40	MAR-13

Event: Replace Domestic Water Valves (30)

Туре	Year	Cost	Priority
Lifecycle Replacement	2021	\$5,800	Unassigned

Updated: MAR-13

D2020.01.03 Piping Specialties (Backflow Preventers)**

100mm backflow preventers, installed approximately in 2000.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2000	20	MAR-13

Event: Replace Backflow Preventers (3)

Туре	Year	Cost	Priority
Lifecycle Replacement	2020	\$17,463	Unassigned

				U_/		` _
D2020.0	02.02 Plumbing Pum	nps: Domest	ic Water**			
2 5hp ci	rculation pumps insta	alled in 2011.				
<u>Rating</u> 4 - Accep	otable	Installed 1981	Design Life 20	Updated MAR-13		
Event:	Replace Domestic	Hot Water F	<u>umps (2)</u>			
	Type Lifecycle Replacemer	10 Year 2016	<u>Cost</u> \$9,014	Priority Unassigned		
	Updated: MAR-13					
D2020.0	02.06 Domestic Wate	er Heaters**	- 1999 Mod	<u>el</u>		
Model # Serial #: Natural	d White Corporation : D65T6253N : SM 3874098 (mfg. gas, 56250 BTU/Hr y: 65 U.S. gal	1999)				
<u>Rating</u> 4 - Accep	otable	Installed 1999	Design Life 20	<u>Updated</u> MAR-13		
		Capacity Si 246		<mark>ity Unit</mark> tre		
Event:	Replace Domestic	Hot Water H	leater (1)			
	<u>Type</u> Lifecycle Replacemer		<u>Cost</u> \$2,816	<u>Priority</u> Unassigned		
	Updated: MAR-13					
D2020.0	02.06 Domestic Wate	er Heaters**	- 2004 Mod	<u>el</u>		
Model # Serial #: Natural	d White Corporation : MIITW65T6BNH15 : CA7209497 (mfg. Gas, 58500 BTU/Hr y: 65 U.S. gal	1986)				
<u>Rating</u> 4 - Accep	otable	Installed 2004	Design Life 20	Updated MAR-13		
		Capacity Si 246		<mark>ity Unit</mark> tre		
Event:	Replace Domestic	Water Heate	er (1)			
	<u>Type</u> Lifecycle Replacemer	Year 101 2024	<u>Cost</u> \$2,816	Priority Unassigned		
	Updated: MAR-13					

D2020.03 Water Supply Insulation: Domestic*

The majority of domestic hot, cold and recirculation piping is insulated. Possible asbestos-containing insulation on the pipe elbows and joints throughout the school.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1981	0	FEB-08

D2030.01 Waste and Vent Piping*

Sanitary waste piping is cast iron. Soil vents are ABS plastic with spun aluminum flashing at the roof and are capped with mesh to prevent debris from clogging.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	MAR-13

D2030.02.04 Floor Drains*

Typical cast iron floor drains installed in various locations around the building. Complete with strainers.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

D2040.01 Rain Water Drainage Piping Systems*

Piping system is cast iron and drains to city storm.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

D2040.02.04 Roof Drains*

Roof drains are equipped with ballast guards throughout entire roof. Parapets equipped with overflow scuppers.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1981	0	MAR-13

D3010.02 Gas Supply Systems*

Natural gas supply is orange-painted steel. Digital service meter has been upgraded circa 2002 and is located in main electrical room. Gas distribution piping to heating boilers and domestic hot water heaters.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

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

There are 9 Multi Temp boilers housed in 3 cases:

Hydro Therm Incorporated by Multi Temp Model #: MR600B Serial #: CHH1077 Natural Gas, 480 000 000 BTU/hr Year Built: 1981

Hydro Therm Incorporated by Multi Temp Model #: MR900B Serial #: CHK1042 Natural Gas, 810 000 000 BTU/hr Year Built: 1981

Hydro Therm Incorporated by Multi Temp Model #: MR600B Serial #: CHH1078 Natural Gas, 480 000 000 BTU/Hr Year Built:1981

Boiler 1 was non-functioning during the evaluation.

In addition the estimate included 1 expansion tank and 2 circulation pumps for the coils.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2001	35	MAR-13

Event: Repair Boiler (1)

Concern: Boiler 1 was non functioning at the time of the evaluation. **Recommendation:** Inspect and repair as required. **Consequences of Deferral:** Reduced heating capacity.

Туре	Year	Cost	Priority
Repair	2013	\$7,500	Medium

Updated: MAR-13

Event: Replace Heating Hot Water Boilers (9), Pumps (2), Expansion Tank (1)

Туре	Year	Cost	Priority
Lifecycle Replacement	2036	\$225,322	Unassigned

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

Boilers each have separate chimney, that tie into a single stack of unknown size due to concealment by insulation.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2001	35	MAR-13

Event: Replace Heating Boiler Chimneys (20m)

TypeYearCostPriorityLifecycle Replacement2036\$13,800Unassigned

Updated: MAR-13

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

Manual closed loop descaling chemical feeder pot.

Rating	Installed	Design Life	Updated
4 - Acceptable	2001	0	FEB-08

D3040.01.01 Air Handling Units: Air Distribution**

Two Trane Torrivent AHU's, one to supply gymnasium, one to supply rest of school.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	30	MAR-13

Event: Replacement Air Handling Units (2)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$175,000	Unassigned

Updated: MAR-13

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D3040.01.02 Fans: Air Distribution (Remote from AHU)*
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Caged ceiling fans located in gymnasium.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	FEB-08

D3040.01.04 Ducts: Air Distribution*

Sheet metal ducting throughout school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	FEB-08

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Square ceiling supply air diffusers in classrooms and corridors. The gymnasium has two fresh air supply vents with six direct exhaust vents.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

D3040.03.01 Hot Water Distribution Systems**

Insulated supply and return heating hot water distribution to perimeter finned tube radiation units and fan coil units throughout. Type and size unconfirmed due to insulation concealment.

Exterior has a Honeywell temperature sensor to prevent periphery piping from freezing.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	40	MAR-13

Event: Replace Hot Water Distribution System (2,382sqm

Туре	Year	Cost	Priority
Lifecycle Replacement	2021	\$236,600	Unassigned

Updated: MAR-13

D3040.04.01 Fans: Exhaust**

Combination of centrifugal and axial flow rooftop fans.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1981	30	MAR-13

Event: Replace Exhaust Fans (5)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2016	\$9,700	Unassigned

Updated: MAR-13

D3040.04.03 Ducts: Exhaust*

Low velocity exhaust air ductwork to vent air outlets.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	FEB-08

D3040.04.05 Air Outlets and Inlets: Exhaust*

Egg crate exhaust air grilles in classrooms and corridors. Gymnasium exhausted through vents on walls.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	MAR-13

D3050.02 Air Coils**

Duct mounted heating coils installed on Trane AHU's to temper the supply air.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	30	MAR-13

Event: Replace Air Coils (2)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$11,266	Unassigned

Updated: MAR-13

D3050.05.02 Fan Coil Units**

One original fan coil unit located in main mechanical room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	30	MAR-13

Event: Replace Fan Coil Unit (1)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$1,750	Unassigned

Updated: MAR-13

D3050.05.03 Finned Tube Radiation**

Finned tube radiation along periphery of classrooms, gymnasium and offices, with ceiling mounted radiation cabinets near entrance doors.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	40	MAR-13

Event: Replace Finned Tube Radiation (2,382sqm gfa)

Туре	Year	Cost	Priority
Lifecycle Replacement	2021	\$116,500	Unassigned

D3060.02.02 Pneumatic Controls**

HVAC controls include pneumatic thermostats for individual room control. Ventilation distribution systems controlled by pneumatics.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	40	MAR-13

Event: Replace Pneumatic Controls (2,382 sqm gfa)

Туре	Year	Cost	Priority
Lifecycle Replacement	2021	\$36,400	Unassigned

Updated: MAR-13

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

DCC computer terminal located in main electrical room upgraded in approximately 2005.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	2005	20	MAR-13

Event:Replace Building Automation Controls (2,382 sqm
gfa)TypeYear CostPriority

Туре	<u>rear</u>	Cost	Priority
Lifecycle Replacement	2025	\$65,500	Unassigned

Updated: MAR-13

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Wall mounted ABC-type dry chemical fire extinguishers throughout school.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	MAR-13

S5 ELECTRICAL

D5010.01.02 Main Electrical Transformers (Utility Owned)*

Main electrical transformer is located near the northwest corner of the school building. Vegetative distress and surface stains surrounding the transformer indicate coolant loss from the transformer. Investigate cause of coolant loss and repair or replace transformer, as required. Owner notified by Consultant.

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
3 - Marginal	1981	0	MAR-13

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

The main electrical service is a Westinghouse 800 amp, 120/208 volt, 3 phase, 4 wire panel.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1981	40	MAR-13
	Capacity S	Size Capaci	ity Unit
	800	800 amps	

Event: Replace Main Electrical Switchboard (1)

<u>Type</u>	Year	Cost	Priority
Lifecycle Replacement	2021	\$35,000	Unassigned

Updated: MAR-13

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

There are 7 sub-panels installed in the mechanical rooms, storage rooms and corridors to provide power for lighting and equipment. Panels are manufactured by Westinghouse.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	30	MAR-13
	Capacity S		ity Unit
	225	ar	nps

Replace electrical sub-panels (7) Event:

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$35,000	Unassigned

Updated: MAR-13

D5010.07.01 Switchboards, Panelboards, and (Motor) Control Centers**

Two Westinghouse 4 Plex Motor Control Centre are located in the mechanical room.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	30	MAR-13

Event: Replace motor control center (1 section)

Туре	Year	Cost	<u>Priority</u>
Lifecycle Replacement	2016	\$8,000	Unassigned

D5020.01 Electrical Branch Wiring*

The electrical wiring in the building is standard copper wire in conduit. Flexible conduit and cabling is provided to motors and other mechanical equipment.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

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

Lighting controls were toggle switches with the exception of keyed switches in public areas.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	FEB-08

D5020.02.02.02 Interior Fluorescent Fixtures**

Fluorescent fixtures are used throughout the school and consist of t-bar recessed and surface mounted T12 fixtures with conventional ballasts.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1981	30	MAR-13

Event: Replace Interior Florescent Fixtures (300)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$90,000	Unassigned

Updated: MAR-13

Event: Replace Interior Fluorescent lamps and ballasts

<u>(300)</u>

Concern:

T12 lamps are no longer be produced after 2011. Lamp burnouts and ballast failures may be more frequent.

Recommendation:

Keep existing fixtures and replace with new T8 lamps, ballasts and high efficiency reflectors to reduce energy consumption maintenance.

Туре	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2013	\$30,000	Medium

Updated: MAR-13

D5020.02.02.05 Other Interior Fixtures* - Mercury Vapor Fixture

Mercury vapor fixtures are provided in the gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

D5020.02.03.02 Emergency Lighting Battery Packs**

Emergency lighting is a mixture of original and newer 12 VDC battery packs with integral and remote halogen lamps throughout the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	20	MAR-13

Event: Replace Emergency Lighting Battery Packs (4)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$6,000	Unassigned

Updated: MAR-13

D5020.02.03.03 Exit Signs*

18 Exit signs are located at all exits, gymnasium and egress corridors.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	MAR-13

D5020.03.01.01 Exterior Incandescent Fixtures*

Incandescent fixtures are located on entrance soffits and along periphery of the school.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	FEB-08

D5020.03.01.05 Other Exterior Fixtures*

Wall mounted High Intensity Discharge (HID) lamps located on periphery of school.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1981	0	FEB-08

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

Combination electronic timer and photo cell controls.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	FEB-08

D5030.01 Detection and Fire Alarm** - 1981

The building has an EDWARDS 2280 fire alarm control panel and heat detectors, smoke detectors, pull-stations and bells throughout. Fire alarm panel was upgraded in 2005.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1981	25	MAR-13

Event: Replace fire alarm system devices (Based on GFA 2,382 sqm, field devices and wiring)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$25,000	Unassigned

Updated: MAR-13

D5030.01 Detection and Fire Alarm** - 2005

The building has an EDWARDS 2280 fire alarm control panel and heat detectors, smoke detectors, pull-stations and bells throughout. Fire alarm panel was upgraded in 2005.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	25	MAR-13

Event: Replace one fire alarm control panel only

Туре	Year	Cost	Priority
Lifecycle Replacement	2030	\$9,000	Unassigned

Updated: MAR-13

D5030.02.02 Intrusion Detection**

Motion sensors are located in corridors and offices to provide intrusion detection and are linked to the Silent Knight (model 2820) system.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	25	MAR-13

Event: Replace Intrusion Detection system (Based on GFA 2,382 sqm)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2030	\$20,000	Unassigned

Updated: MAR-13

D5030.03 Clock and Program Systems*

Individual wall-mounted clocks throughout school. School bells are associated with the public address system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

D5030.04.01 Telephone Systems*

Central Meridian telephony system located in main electrical room. Upgraded circa 2000.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2000	0	MAR-13

D5030.04.05 Local Area Network Systems*

Central Local Area Network (LAN) system located in main electrical room. Includes network data cabling throughout with network hub in computer room.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	0	MAR-13

D5030.05 Public Address and Music Systems**

Rauland public address system has been upgraded 1995. PA located in administrative office with terminal devices in classrooms with speakers in corridors.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1995	20	MAR-13

Event: Replace Public Address System (Based on GFA 2,382 sqm)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$9,000	Unassigned

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Fixed and moveable basket ball nets, wall-mounted climbing apparatus and miscellaneous sports gear.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	FEB-08

E2010.02 Fixed Casework**

Library book shelves and desk, staff room cabinetry, wood coat hooks with shelving in corridors, millwork at reception, various classrooms equipped with vanities and sinks.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1982	35	MAR-13

Event: Replace Fixed Casework (150 meters)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2017	\$75,000	Unassigned

Updated: MAR-13

E2010.03.01 Blinds**

Cloth drapes on windows.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	30	MAR-13

Event: Replace blinds (105 sqm)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$12,017	Unassigned

S8 SPECIAL ASSESSMENT

K4010.01 Barrier Free Ro	oute: Parking	to Entrance*	<u>*</u>
Designated barrier free sta	all with signag	je. Route to er	ntry relatively level.
Rating 4 - Acceptable	Installed 1981	Design Life 0	MAR-13
K4010.02 Barrier Free En	trances*		
No door operators.			
Rating 4 - Acceptable	Installed 1981	Design Life 0	MAR-13
Event: Install door oper	rator at main	entry (1)	
Concern: Access to interior Recommendatio Install door opera Consequences o Entry is not barrie	on: itor. of Deferral:	not possible w	without assistance.
Type Barrier Free Access		<u>ar</u> <u>Cost</u> 12 \$5,000	Priority Low
Updated: MAR-1		+0,000	

K4010.03 Barrier Free Interior Circulation*

All interior areas of school are barrier free accessible.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	MAR-13

K4010.04 Barrier Free Washrooms*

No barrier free washrooms provided.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

Event: Provide a Universal Barrier Free Washroom (1)

Concern: No barrier free washrooms. Recommendation: Alter existing configuration so as to provide a barrier free washroom. Consequences of Deferral:

Does not meet barrier free code washroom requirements.

Туре	Year	Cost	Priority
Barrier Free Access Upgrade	2012	\$15,000	Low

K4030.01 Asbestos*

Spray on acoustic treatment on upper gymnasium walls and ceiling suspected to contain asbestos.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1981	0	MAR-13

Event: Asbestos remediation (1)

Concern:

Contingent on outcome of study; the spray on acoustic treatment on upper gymnasium walls and ceiling might contain asbestos.

Recommendation:

Contingent on outcome of study; remove existing acoustical treatment.

Consequences of Deferral:

Contingent on outcome of Study; when asbestos as such is impacted, the fibers could aerosolize.

Туре	Year	Cost	Priority
Hazardous Materials Abatement	2012	\$45,000	High

Updated: MAR-13

Event: Review gymnasium acoustical coating (1)

Concern:

Spray on acoustic treatment on upper gymnasium walls and ceiling might contain asbestos. **Recommendation:**

Recommendation:

Assess as to whether the material contains asbestos.

Consequences of Deferral:

Potential health risk would avoid being assessed if study not performed.

Туре	Year	Cost	Priority
Study	2012	\$2,000	High

Updated: MAR-13

K4030.04 Mould*

No visible suspect mould identified at the time of assessment.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

K4030.09 Other Hazardous Materials*

No other known or reported hazardous materials.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	0	MAR-13

K5010.01 Site Documentation*

Site plan attached.

Site Review Conducted: December 4, 2012. Prime Consultant: Williams Engineering Canada Inc.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2012	0	MAR-13



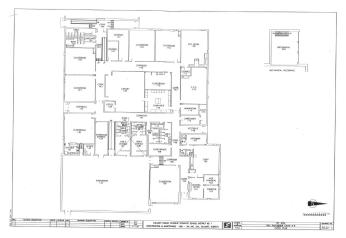
St Rita Siteplan.JPG

K5010.02 Building Documentation*

Floor plan attached.

Site Review Conducted: December 4, 2012. Prime Consultant: Williams Engineering Canada Inc.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2012	0	MAR-13



St Rita floor plan.JPG