RECAPP Facility Evaluation Report

Calgary School District #19



Canyon Meadows Elementary School B2564A Calgary

Report run on: April 4, 2013 9:19 AM

Facility Details		Evaluation Details		
Building Name:	Canyon Meadows Elementa	Evaluation Company:	Williams Engineering Ca	anada Inc.
	395 Canterbury Drive S. W.	Evaluation Date:	July 25 2012	
Location: Calgary	Calgary	Evaluator Name: WEC - Jennifer Lavier		ankovic
Building Id:	B2564A			
Gross Area (sq. m):	3,954.40			
Replacement Cost:	\$11,642,000			
Construction Year:	1971	Total Maintenand	ce Events Next 5 years:	\$1,352,201
General Summary:		5 year Facility Co	ondition Index (FCI):	11.61%

Single storey 3954.9m2 elementary school constructed in 1970 consisting of a Gymnasium and 21 classrooms, 14 of which form a circle and open area combined with Library. The school is on two levels over the length of the building to accommodate the site that slopes from the north parking lot to the south playing fields. The main entrance is to the North, Parking to the west and playfields to south and east. 486 student capacity.

Structural Summary:

1970 concrete slab on grade with perimeter strip foundations. Concrete masonry load bearing walls with flush pilasters at columns, open web steel joists and metal roof deck. Exposed steel roof beams and steel centre column supporting roof of circular classroom block.

The structure is in good condition.

Envelope Summary:

Building envelope consists of brick masonry veneer over air space, insulation and air vapour barrier on concrete masonry backup walls. Stucco fascias above window openings accent aluminum windows. Roof flashings are prefinished metal. The roof is clad with SBS roofing.

Envelope in good condition with minor defects.

Interior Summary:

Painted concrete masonry interior walls, painted gypsum board on steel studs in a few areas, and Interior demountable paritions.

Combination of sheet and vinyl tile flooring.

Finishes are in generally acceptable condition.

Mechanical Summary:

Mechanical systems totally upgraded in 1995-96. New boilers added and 7 roof top Ventilaire units complete with mixed air / air conditioning and heating coils that serve various zones with heat and ventilation air. Heating controls are pneumatic with DDC monitoring and remote control.

Overall the mechanical systems is in acceptable condition.

Electrical Summary:

The main electrical service is a Westinghouse 1600 amp, 120/208 volt, 3 phase, 4 wire panel. There are 7 sub-panels installed in the boiler room, storage room and electrical room to provide power for lighting and equipment. The interior of the building is lit with a combination of T8 fluorescent and incandescent fixtures. The exterior is lit with wall mounted wallpack fixtures. The building has five emergency lighting packs, 29 remote heads and 18 exit signs. The building has a NOTIFIER AFP-2000 fire alarm control panel and heat detectors, smoke detectors, pull-stations and bell/strobe throughout. The building is equipped with a Silent Knight intrusion system, internet and telephone system.

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

S1 STRUCTUR	
A1010 Standard Fou	indations*
Perimeter concrete fro	ost walls on concrete strip footings
Rating 4 - Acceptable	Installed Design Life Updated 1971 0 FEB-08
A1030 Slab on Grade	<u>e*</u>
Concrete slabs on gra	ade for entire school
Rating 4 - Acceptable	Installed Design Life Updated 1971 0 FEB-08
B1010.01 Floor Struc	ctural Frame (Building Frame)*
Wood stud framing fo	r support of stage
Rating 4 - Acceptable	Installed Design Life Updated 1971 0 FEB-08
	Interior Walls Supporting Floors (or Roof)* terior walls with integral flush pilasters
Rating 4 - Acceptable	Installed Design Life Updated 1971 0 FEB-08
B1010.03 Floor Deck	ks, Slabs, and Toppings*
Wood floor for raised	stage in gym
Rating 4 - Acceptable	Installed Design Life Updated 1971 0 FEB-08
B1010.06 Ramps: Ex	<u>cterior*</u>
	rom municipal sidewalk. nalt path to concrete pad at entry.
Rating 4 - Acceptable	InstalledDesign LifeUpdated19710APR-13
B1020.01 Roof Struc	<u>stural Frame*</u>
Classroom and admin supported on concrete	nistration roofs steel beams and columns supporting metal deck. Gym has open web steel joist e masonry walls

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1971	0	FEB-08

S2 ENVELOPE

Brick masonry veneer

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	FEB-08

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

Stucco fascia and soffit finish peeling and cracking

Rating	Installed	Design Life	Updated
2 - Poor	1971	0	APR-13

Event: Repair stucco soffits (approx. 300 sqm.)

Concern: Stucco fascia finish peeling and cracking Recommendation: Repair fascias Consequences of Deferral: Aesthetic appeal

<u>Type</u>	<u>Year</u>	<u>Cost</u>	Priority
Repair	2012	\$21,996	High

Updated: APR-13

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

Caulking at window perimeters and exterior door jambs

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	20	APR-13

Event: Replace Joint Sealers (approx. 260 meters)

<u>Type</u>	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$7,994	Unassigned

P2040.04.44 Joint Scolars (coullying): Evt. Wall** Deef Flockings
B2010.01.11 Joint Sealers (caulking): Ext. Wall** - Roof Flashings
Caulking at roof flashings
Rating Installed Design Life Updated 5 - Good 2000 20 APR-13
Event: Replace joint sealers (approx. 400 meters)
TypeYearCostPriorityLifecycle Replacement2020\$12,222Unassigned
Updated: APR-13
B2010.02.03 Masonry Units: Ext. Wall Const.*
Concrete masonry walls
Rating Installed Design Life Updated
4 - Acceptable 1971 0 FEB-08
B2010.03 Exterior Wall Vapour Retarders, Air Barriers, and Insulation*
Membrane vapour retarder, rigid insulation on concrete masonry
Rating Installed Design Life Updated
4 - Acceptable 1971 0 FEB-08
B2010.06 Exterior Louvers, Grilles, and Screens*
Painted metal grille to mechanical room
RatingInstalledDesign LifeUpdated4 - Acceptable19710FEB-08
B2010.09 Exterior Soffits*
Stucco soffits at entrances. Refer to B2010.01.08
RatingInstalledDesign LifeUpdated3 - Marginal19710FEB-08

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

Aluminum windows with panels

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	APR-13

Event: Replace windows (19)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$19,152	Unassigned

Updated: APR-13

B2030.01.02 Steel-Framed Storefronts: Doors**

Main Entrance doors and 3 corridor entrances. Wood doors in Steel frames. Doors were recently repainted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	APR-13

Event: Replace doors (11 leafs)

<u>Type</u>	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$27,720	Unassigned

Updated: APR-13

B2030.02 Exterior Utility Doors**

Two classrooms, Mechanical room, Gymnasium and stage. Wood doors in Steel frames. Doors were recently repainted.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	40	APR-13

Event: Replace doors (5)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$4,431	Unassigned

Updated: APR-13

B3010.01 Deck Vapour Retarder and Insu	lation*
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Vapour retarder membrane, 38mm rigid insulation

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	FEB-08

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

SBS roofing with pre-finished metal flashings and internal roof drains

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2000	25	APR-13

Event: Replace Roofing (approx. 3900 sqm)

Туре	Year	Cost	Priority
Lifecycle Replacement	2025	\$682,500	Unassigned

Updated: APR-13

B3010.07 Sheet Metal Roofing** - Pre-finished metal flashing

Pre-finished metal parapet flashings

Rating	Installed	Design Life	Updated
5 - Good	2000	40	APR-13

Event: Replace parapet flashings (approx. 480 sqm)

Туре	Year	Cost	Priority
Lifecycle Replacement	2040	\$120,960	Unassigned

Updated: APR-13

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

Metal roof hatch, various roof mounted vent hoods

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	APR-13

S3 INTERIOR		
C1010.01 Interior Fixe	ed Partitions* - Stud	
Gypsum board on meta	al studs in few areas ie office area(s).	
Rating 4 - Acceptable	InstalledDesign LifeUpdated19710APR-13	
C1010.01 Interior Fixe	ed Partitions* - Unit masonry	
Generally throughout; In	Interior concrete masonry partition walls	
Rating 4 - Acceptable	InstalledDesign LifeUpdated19710APR-13	
C1010.02 Interior Dem	nountable Partitions*	
Demountable partitions	s between classrooms	
Rating 4 - Acceptable	Installed Design Life Updated 1990 0 FEB-08	
C1010.03 Interior Ope	erable Folding Panel Partitions** - Classrooms	
4 Folding partitions be	etween classrooms	
Rating 4 - Acceptable	Installed Design Life Updated 1971 30 APR-13	
Event: Replace Fold	ling Panel Partitions (200 sqm)	

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$239,820	Unassigned

C1010.03 Interior Operable Folding Panel Partitions** - Gymnasium

Gym divider folding partition.

Rating	Installed	<u>Design Life</u>	Updated
3 - Marginal	1971	30	APR-13

Event: Replace Operable Partition (105 sqm)

Concern:

Gym accordian wall fabric torn. Divider in general well worn. **Recommendation:** Replace folding partition **Consequences of Deferral:** Lack of functional use.

Туре	Year	Cost	Priority
Failure Replacement	2012	\$125,906	High

Updated: APR-13

C1010.04 Interior Balustrades and Screens, Interior Railings*

Painted metal guardrail at interior ramp.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	APR-13

C1010.05 Interior Windows*

Interior windows in General office

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	APR-13

C1010.06 Interior Glazed Partitions and Storefronts*

Wood framed, wired glass and glasweld panels between corridor and General office. Wood framed, wired glass and glasweld panels between corridor and Conference room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	APR-13

C1020.01 Interior Swinging Doors (& Hardware)*

Interior doors are wood

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	APR-13

ULC Labelled doors and frames in various areas. Overall in acceptable condition.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	APR-13

C1020.03 Interior Fire Doors* - Roller shutter

1 Metal roller shutter between Foyer and General Office

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	2005	0	APR-13

C1030.01 Visual Display Boards**

Classroom whiteboards,	chalkboards.	tackboards.	and some	smartboards

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	1971	20	APR-13

Event: Replace Visual Display Boards (approx. 22)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$32,756	Unassigned

Updated: APR-13

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

Pre-finished metal toilet partitions in student and staff washrooms

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	APR-13

Event: Replace Toilet Partitions (approx. 21 stalls)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$25,821	Unassigned

Updated: APR-13

C1030.06 Handrails*

Painted metal handrail at stair from foyer, and stairs to gym stage

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	APR-13

C1030.08 Interior Identifying Devices	<u>5*</u>	
Plastic labels on doors, and walls		
RatingInstalled5 - Good1971	<mark>Design Life</mark> 0 0	P <mark>pdated</mark> APR-13
C1030.10 Lockers**		
Pre-finished metal lockers in library are	a	
RatingInstalled4 - Acceptable1971	Design Life U 30	APR-13
Event: Replace lockers (approx. 90	<u>)</u>	
	ear <u>Cost</u> 16 \$45,360	Priority Unassigned
Updated: APR-13		
C1030.12 Storage Shelving* - Metal		
Metal storage shelves at ends of corric	lors near washroo	oms
RatingInstalled4 - Acceptable1971	Design Life U 0	APR-13
C1030.12 Storage Shelving* - Wood		
Stained and painted wood shelves		
RatingInstalled4 - Acceptable1971	<mark>Design Life</mark> 0 0	APR-13
C1030.14 Toilet, Bath, and Laundry	Accessories*	
Soap, towel and toilet paper dispenser	s. Waste recepta	cles
RatingInstalled4 - Acceptable1971	<mark>Design Life</mark> 0 0	P <u>dated</u> FEB-08
C2010 Stair Construction*		
Metal stringer stair construction		Indefed
RatingInstalled4 - Acceptable1971	<mark>Design Life</mark> <u>U</u> 0	APR-13

C2020.05 Resilient Stair Finishes**
Resilient flooring on stair to gym stage, and stair from foyer area.
RatingInstalledDesign LifeUpdated4 - Acceptable197120APR-13
Event: Replace stair flooring (approx. 9 sqm)
TypeYearCostPriorityLifecycle Replacement2016\$1,000Unassigned
Updated: APR-13
C3010.06 Tile Wall Finishes**
Ceramic tiles at urinals
RatingInstalledDesign LifeUpdated4 - Acceptable197140APR-13
Event: Replace Tile Wall Finishes (approx. 3 sqm)
TypeYearCostPriorityLifecycle Replacement2016\$1,000Unassigned
Updated: APR-13
C3010.09 Acoustical Wall Treatment**
Classroom and gymnasium acoustic wall panels (perforated fibreboard panel)
RatingInstalledDesign LifeUpdated4 - Acceptable197120APR-13
Event: Replace Acoustical Wall Treatment (approx. 250 sqm)
TypeYearCostPriorityLifecycle Replacement2016\$59,063Unassigned
Updated: APR-13
C3010.11 Interior Wall Painting*
Painted concrete masonry and gypsum board walls
RatingInstalledDesign LifeUpdated4 - Acceptable20000FEB-08

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<u>C3020.0</u>	01.02 Painted Concrete	Floor Finishes				
Storage	/ electrical room floor					
Rating	Ins	talled Design	Life Update	ed		
3 - Margi	inal 1	971 0	APR-	13		
Event:	Repaint Concrete Floo	or Finish (appro	<u>x. 23 sqm)</u>			
	Concern:					
	Paint worn and peeling Recommendation:					
	Repaint floor					
	Consequences of Defe	erral:				
	Excessive maintenance	9				
	Type Failure Replacement	<u>Year</u> <u>Cost</u> 2012 \$1,0		<u>Priority</u> Low		
	Failure Replacement	2012 \$1,0	10	LOW		
	Updated: APR-13					
<u>C3020.(</u>	02 Tile Floor Finishes**					
Tile floo	ring at urinals					
<u>Rating</u> 4 - Acce		talled Design 971 50	Life Update APR-			
Event:	Replace tile flooring (a	approx. 4 sqm)				
	Туре	<u>Year</u> Cost		Priority		
	Lifecycle Replacement	2021 \$1,00	00	Unassigned		

C3020.04 Wood Flooring**

Wood maple sports floor in gym, and stage

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1971	30	APR-13

Event: Refinish wood floor (approx 450 sqm)

Concern:

Gymnasium floor requires refinishing **Recommendation:** Refinish floor **Consequences of Deferral:** Refinish for protection of wood floor - to eliminate traffic wear.

Туре	Year	Cost	Priority
Repair	2012	\$32,995	High

Updated: APR-13

Event: Replace Wood Flooring (approx. 540 sqm)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2016	\$144,585	Unassigned

Updated: APR-13

C3020.07 Resilient Flooring** - VCT 1971

Original VCT in various corridors, staff washrooms, and 2 classrooms

<u>Rating</u>	Installed	Design Life	Updated
3 - Marginal	1971	20	APR-13

Event: Repair VCT flooring (approx. 50 sqm)

Concern:

Tiles in various areas are well worn (portions broken off) and missing. Recommendation: repair Consequences of Deferral: Tripping hazard

Туре	<u>Year</u>	Cost	Priority
Repair	2012	\$2,673	High

Updated: APR-13

Event: Replace vinyl tile flooring (approx. 570 sqm)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$30,476	Unassigned

C3020.07 Resilient Flooring** - VCT 2007

Library and approx 18 classrooms with VCT replaced in 2007

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2007	20	APR-13

Event: Replace Resilient VCT Flooring (approx. 2600 sqm)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2027	\$139,012	Unassigned

Updated: APR-13

C3020.07 Resilient Flooring** - Vinyl sheet flooring

Student bathrooms, various service rooms and Foyer area

Rating	Installed	Design Life	Updated
3 - Marginal	1971	20	APR-13

Event: Replace resilient flooring (approx. 170 sqm)

Concern: Vinyl sheet flooring is worn through in various locations Recommendation: Install new flooring Consequences of Deferral: Will become tripping hazard over time

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2012	\$14,282	High

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<u>C3030.0</u>	06 Acoustic Ceiling	Treatment (S	usp. T-Bar	<u>ır)**</u>
Suspend	ded T-bar ceiling in c	lassrooms, co	orridors and	d offices
<u>Rating</u> 4 - Accer	otable	Installed D 1971	esign Life 25	P Updated APR-13
Event:	Replace Acoustic	Ceilings (app	orox. 2400 s	<u>sqm)</u>
	Type Lifecycle Replacemen	t 2016	<u>Cost</u> \$117,306	Priority Unassigned
	Updated: APR-13			
<u>Event:</u>	Replace ceiling tile Concern: Many ceiling tiles ar Recommendation: replace Consequences of P Aesthetic appeal	e stained	<u>40 sqm)</u>	
	Type Repair	<u>Year</u> 2012	<u>Cost</u> \$11,730	Priority Medium
	Updated: APR-13			
<u>C3030.0</u>	07 Interior Ceiling Pa	ainting*		
Painted	gypsum ceilings in w	ashrooms, se	ervice room	ns, and area (curved hallway) flanking library
<u>Rating</u> 4 - Accep	otable	Installed D 2000	e <mark>sign Life</mark> 0	P Updated APR-13
<u>C3030.0</u>	9 Other Ceiling Fin	shes* - Acou	utical ceilin	ng tiles
Acoustic	cal ceiling tiles on libr	ary ceiling		

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	APR-13

S4 MECHANICAL

D2010.04 Sinks**

There are 14 sinks varying between porcelain and stainless steel located throughout the building. Additional, there are 2 iron enamel service sinks and 1 mop sink.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1971	30	APR-13

Event: Replace Sinks (17)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$28,200	Unassigned

Updated: APR-13

D2010.05 Showers**

One metal shower located in the visitors room (former PE office). Note: the shower does not appear to be in regular use.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	APR-13

Event: Replace Showers (1)

Туре	<u>Year</u>	Cost	<u>Priority</u>
Lifecycle Replacement	2016	\$2,700	Unassigned

Updated: APR-13

D2010.08 Drinking Fountains/Coolers**

Six vitreous china wall mount fountains through-out the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	35	APR-13

Event: <u>Replace Drinking Fountains / Coolers (6)</u>

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

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

Washrooms have 29 wall mount vitreous china lavatories, 20 vitreous china floor mount flushometer water closets, 3 vitreous china tank style water closets located in rooms 131/132 and 12 standup vitreous china urinals.

Automatic Urinal Controls in boys washrooms (2012)

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	35	APR-13

Event: Completed 2012 - Upgrade Urinal Controls

Recommendation:

Upgrade Urinal Controls to decrease water usage

Туре	Year	Cost	<u>Priority</u>
Operating Efficiency Upgrade	2012	\$7,746	Medium

Updated: JUL-12

Event: Replace Washroom Fixtures (64)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$108,000	Unassigned

Updated: APR-13

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper piping located throughout the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	APR-13

D2020.01.02 Valves: Domestic Water**

Several brass gate and globe valves located throughout the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	APR-13

Event: Replace Domestic Water Valves (30)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$5,250	Unassigned

D2020.01.03 Piping Specialties (Backflow Preventers)**

Watts 2inm model 007M reduced pressure backflow devices in the mains and ahead of other systems.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1997	20	APR-13

Event: Replace Backflow Preventors (2)

TypeYearCostPriorityLifecycle Replacement2017\$19,000Unassigned

Updated: APR-13

D2020.02.02 Plumbing Pumps: Domestic Water**

One domestic hot water circulation pump located in the mechanical room. Apparently the pump was replaced in 2011 during the hot water tank change, however no tag or information was attached to the pump.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2011	20	APR-13

Event: Replace Domestic Water Recric Pump (1)

Туре	Year	Cost	Priority
Lifecycle Replacement	2031	\$5,000	Unassigned

Updated: APR-13

D2020.02.06 Domestic Water Heaters**

Bradford White 25 U.S gal, natural gas fired heater, 70200 Btu/hr.

Rating	Installed	Design Life	Updated
5 - Good	2011	20	APR-13

Event: Replace Domestic Water Heaters (1)

Туре	Year	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$1,400	Unassigned

Updated: APR-13

D2020.03 Water Supply Insulation: Domestic*

Some cold and hot piping is insulated. The insulation in the mechanical room was replaced in 2010.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	APR-13

D2030.01 Waste and Vent Piping*

Cast and copper through-out

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	FEB-08

D2030.02.04 Floor Drains*

Four typical floor drains located in bathrooms and mechanical room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	APR-13

D2040.01 Rain Water Drainage Piping Systems*

Cast and some asbestos pipe to local manholes.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	FEB-08

D2040.02.04 Roof Drains*

13 metal hopper roof drains.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1997	0	APR-13

D3010.02 Gas Supply Systems*

Natural gas to boilers and water heater, black iron piping. Note: meter is located in the boiler room.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	APR-13

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

Two SuperHot, models AAE-100-NM natural gas boilers, 1,200,00 BTU each, complete with pot feeder and safety controls. Boiler 1 has serial number ADL-5621 and boilder 2 has serial number ADL-5619.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1996	35	APR-13

Event: Replace Heating Boilers (2)

Туре	Year	Cost	Priority
Lifecycle Replacement	2031	\$71,514	Unassigned

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

The venting for each boiler merges in the mechanical room. From there the vent continues straight up through the roof.

Rating	Installed	Design Life	Updated
4 - Acceptable	1996	35	APR-13

Event: Replace Chimneys (30m)

TypeYearCostPriorityLifecycle Replacement2031\$19,500Unassigned

Updated: APR-13

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

Water treatment is by pot feeder with standard school board chemicals

Rating	Installed	Design Life	Updated
4 - Acceptable	1996	0	FEB-08

D3040.01.01 Air Handling Units: Air Distribution**

Seven Ventilaire roof top units serving various zones by galvanized ductwork. These units have return and outside air, also air conditioning. The heating coils are mounted down stream in the ductwork. The model of unit 1 is RCD1802 with serial number 010289-1. The model of unit 2 is RCD2002 with serial number 010289-2, unit 2 services the gym exclusively. The model of unit 3 is RCD2002 with serial number 010289-3. The model of unit 4 is RCD1002 with serial number 010289-4. The model of unit 5 is RCD2002 with serial number 010289-5. The model of unit 6 is RCD2002 with serial number 010289-6. The model of unit 7 is RCD2002 with serial number 010289-7.

Rating	Installed	Design Life	Updated
4 - Acceptable	1996	30	APR-13

Event: Replace Air Handling Units (7)

Туре	Year	Cost	Priority
Lifecycle Replacement	2026	\$419,900	Unassigned

Updated: APR-13

D3040.01.03 Air Cleaning Devices: Air Distribution*

Fiberglass filters in air handling units

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2011	0	APR-13

D3040.01.04 Ducts: Air Distribution*

Galvanized ductwork throughout school.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	APR-13

Calgary - Canyon Meadows Elementary School (B2564A)
D3040.01.07 Air Outlets & Inlets: Air Distribution*
Supply and return air grilles located throughout school.
RatingInstalledDesign LifeUpdated4 - Acceptable19710APR-13
D3040.03.01 Hot Water Distribution Systems**
One pump is an Armstrong 2hp, 1720rpm, 208v installed in 1996. The other pump has had the motor replaced in 2011 with a Marathon electric 2hp, 1730rpm, 208v. Both motors are attached to the original Armstrong impeller housing, model number 3D4360.
RatingInstalledDesign LifeUpdated4 - Acceptable199640APR-13
Event: Replace Hot Water Distribution Systems (3955 m^2 gfa)
TypeYearCostPriorityLifecycle Replacement2036\$374,000Unassigned
Updated: APR-13
D3040.04.01 Fans: Exhaust**
5 exhaust fans located in various locations, servicing washrooms. They are all JENN-Air model 142 BCR. The rest of the tag is illegible.
RatingInstalledDesign LifeUpdated4 - Acceptable199630APR-13
Event: Replace Exhaust Fans (5)
TypeYearCostPriorityLifecycle Replacement2026\$25,100Unassigned
Updated: APR-13
D3040.04.03 Ducts: Exhaust*
Galvanized ductwork located through out the building.
RatingInstalledDesign LifeUpdated4 - Acceptable19710APR-13
D3040.04.05 Air Outlets and Inlets: Exhaust*
Exhaust grilles
RatingInstalledDesign LifeUpdated4 - Acceptable19710FEB-08

	Calgary - Canyon Meadows Elementary School (B2564A
D3050.07 Other Teri	ninal and Packaged Units*
6 electrical forced flo	w heaters in entrance ways.
<u>Rating</u> 4 - Acceptable	Installed Design Life Updated 1971 0 APR-13
D3060.02.02 Pneum	atic Controls**
	vith DDC monitoring and remote control. The compressor is a Quincy brand with a Marathon Electric 8VC145TCDR5559AD.
Rating 4 - Acceptable	InstalledDesign LifeUpdated199640APR-13
Event: Replace HV m^2 gfa)	AC Instrumentation and Controls (3955
Type Lifecycle Rep	placement 2036 \$57,600 Priority Unassigned
Updated: A	\PR-13
D3060.02.05 Buildin	g Systems Controls (BMCS, EMCS)**
Partial DDC system,	only monitoring the mechanical systems.
Rating 4 - Acceptable	InstalledDesign LifeUpdated199620APR-13
Event: Replace DE	DC System (3955 m2 gfa)
Type Lifecycle Rep	YearCostPriorityplacement2016\$103,600Unassigned
Updated:	APR-13
D3090 Other Specia	I HVAC Systems and Equipment*
Electric baseboard h	eaters in some areas and electric forced flow heaters in the vestribules

Rating 4 - Acceptable Installed Design Life Updated 1971 0

FEB-08

D4010 Sprinklers: Fire Protection*

There is a fire hydrant on the North side of Canterbury Drive. Fire hose cabinets are located through out the building. Siamese connection in front of building. Sprinklers are installed above the stage area.

Rating	Installed	Design Life	Updated
4 - Acceptable	1996	0	APR-13

D4020 Standpipes*

Standpipes to hose cabinets

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	FEB-08

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Hand held extinguishers in hose cabinets through-out the school. There are a total of 6 cabinets and one single extinguisher in the staff workroom, room number 129.

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1996	0	APR-13

S5 ELECTRICAL

D5010.01.02 Main Electrical Transformers (Utility Owned)*

There is a Padmount utility transformer on the south of the building. The transformer is a three phase 120/208V and is c/w underground ducts for the primary and secondary side voltages.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	APR-13

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

The main board is located in the electrical room and is a Westinghouse, 120/208, 1600 amps, 3 phase 4 wire. There is limited space for adding breakers in this main board.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	40	APR-13
	Capacity	<u>Size</u> <u>Capac</u>	ity Unit
	1600	ar	nps

Event: Replace Main Electrical Switchboard

<u>Type</u>	Year	Cost	Priority
Lifecycle Replacement	2016	\$32,070	Unassigned

Updated: APR-13

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

There are 7 sub-panels (panel A, B, C, D, E, Z, Z-1) installed in the electrical room, storage room and boiler room to provide power for lighting and equipment. Panels A, B, C, D, E and Z are Westinghouse 225A, 3 phase, 4 wire 42 circuits, panel Z-1 in the boiler room is Westinghouse 100A, 1 phase, 3 wire 20 circuits. These panels are mostly full to capacity.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	APR-13
	Capacity 42		ity Unit I∕A

Event: Replace Electrical Branch Circuit Panelboards (7)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$34,748	Unassigned

D5010.07.02 Motor Starters and Accessories** (1971)

Two motor starters are Cutler Hammer installed in Allen-Bradley in 1971.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	APR-13

Event: Replace Motor Starters (2)

TypeYearCostPriorityLifecycle Replacement2016\$3,000Unassigned

Updated: APR-13

D5010.07.02 Motor Starters and Accessories** (1990)

Two motor starters are Cutler Hammer installed in 1990.

Rating	Installed	Design Life	Updated
5 - Good	1990	30	APR-13

Event: Replace Motor Starters (2)

Туре	Year	Cost	Priority
Lifecycle Replacement	2020	\$3,000	Unassigned

Updated: APR-13

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

The lighting control through out the school is provided by low voltage Control.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	FEB-08

D5020.02.02.01 Interior Incandescent Fixtures*

The incandescent fixtures though out the school, half of them have had their lamps changed to CF lamp, but another half have not.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	APR-13

Event: Relace incandescent bulbs (26).

Concern:

The half of incandescent fixtures though out the school still use incandescent bulbs. Incandescent bulbs are inefficient and costly to maintain. **Recommendation:**

Replace bulbs with compact fluorescent lamps.

Туре	Year	Cost	<u>Priority</u>
Energy Efficiency Upgrade	2013	\$1,300	Low

Updated: APR-13

D5020.02.02.02 Interior Fluorescent Fixtures**

Fluorescent lighting is prominent in all areas of the school The fluorescent fixture in this building have been upgraded toT8 lamps with electronic ballast.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	1998	30	APR-13

Event: Replace Interior Florescent Fixtures (488)

Туре	Year	Cost	Priority
Lifecycle Replacement	2028	\$146,400	Unassigned

Updated: APR-13

D5020.02.02.05 Other Interior Fixtures*

The gym and stage have mercury vapor lighting fixtures with remote ballast.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	APR-13

D5020.02.03.02 Emergency Lighting Battery Packs**

Emergency lighting is provided by Battery packs and dual and single remote heads. They were upgraded in 12009.

Rating	Installed	Design Life	Updated
5 - Good	2009	20	APR-13

Event: Replace Emergency Lighting Battery Packs (5)

TypeYearCostPriorityLifecycle Replacement2029\$6,070Unassigned

Updated: APR-13

D5020.02.03.03 Exit Signs*

18 exit signs are present in all areas of the school. They are all old style with incandescent bulbs except one of them is LED type.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	APR-13

Event: Replace iincandescent exit signs with L	LED type
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<u>(17)</u>

Concern:

Incandescent exit sign bulbs are inefficient and costly to maintain. Recommendation:

Replace incandescent exit signs with LED type.

Туре	Year	Cost	<u>Priority</u>
Energy Efficiency Upgrade	2013	\$9,605	Low

Updated: APR-13

D5020.03.01.03 Exterior Metal Halide Fixtures*

Metal halide fixtures are installed at several points along the building perimeter.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	APR-13

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

Exterior lighting is controlled by photo cell and time clock

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	FEB-08

D5030.01 Detection and Fire Alarm**

Fire alarm system consists of NOTIFIER AFP-2000 fire alarm control panel, heat detectors, smoke detectors, tamper switches, bell/strobes and pull stations throughout. The system was upgraded in 2001.

Rating	Installed	Design Life	Updated
5 - Good	2001	25	APR-13

Event:	Replace Detection and Fire Alarm (one panel and
	51 devices)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2026	\$23,298	Unassigned

Updated: APR-13

D5030.02.02 Intrusion Detection**

The security system was upgraded in 1995. The make of the system is a Silent Knight. The system is monitored and is controlled by motion sensors through out the school.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1995	25	APR-13

Event: Replace Intrusion Detection system (1)

Туре	Year	Cost	Priority
Lifecycle Replacement	2020	\$20,000	Unassigned

Updated: APR-13

D5030.03 Clock and Program Systems*

This clock system was upgraded in 1995 and is a simplex system. This control the clocks through out the school.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1995	0	APR-13

D5030.04.01 Telephone Systems*

The main telephone distribution is located in the Electrical room. Out going lines are located in the administration areas. The phone system was upgraded in2000 the system is a north star and is used for paging through out the school.

Rating	Installed	Design Life	Updated
5 - Good	2000	0	FEB-08

D5030.04.05 Local Area Network Systems*

Cat5e cabling connects all areas of the school, the server is located in the main electrical room. The system utilizes 3com components as well as Nortel networks.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	0	APR-13

D5030.05 Public Address and Music Systems**

The public address system is a Bogen installed in early 1990, is used for playing music. The door bell is also run through this system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	20	APR-13

Event: Replace Public Address and Music System (1)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$5,500	Unassigned

Updated: APR-13

D5030.06 Television Systems*

The television system is run local through the school and has a roof mounted antenna.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	FEB-08

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.04 Residential Equipment*

Frig, dishwasher, stove, sink, microwave

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	FEB-08

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Climbing wall, fixed basketball backstops (4)

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	FEB-08

E2010.02 Fixed Casework**

Millwork cabinetry (vanity c/w sinks) in classrooms, millwork at library reception and office, staff workroom, shelving in general office, storage shelving in elec / storage room(s)

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	35	APR-13

Event: Replace Fixed Casework (approx. 60 lineal meters)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$31,500	Unassigned

E2010.03.01 Blinds**

Classrooms; (inside mount venetian style blinds). Offices; outside mount venetian style.

Rating	Installed	Design Life	Updated
3 - Marginal	1971	30	APR-13

Event: Replace blinds (approx 6 sqm)

Concern: Various blinds are damaged Recommendation: replace Consequences of Deferral: Lack of functional use

Туре	Year	Cost	Priority
Repair	2012	\$1,000	Low

Updated: APR-13

Event: Replace blinds (approx 60 sqm)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$6,867	Unassigned

E2010.03.06 Curtains and Drapes**

Fabric stage curtains on metal track

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	APR-13

Event: Replace curtains (12)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$12,000	Unassigned

Updated: APR-13

Event: replace torn curtain (1)

Concern: Curtain is torn and hold together with tape. Recommendation: Replace with new curtain Consequences of Deferral: Lack of functional use

Туре	Year	Cost	Priority
Repair	2012	\$1,000	High

S8 SPECIAL ASSESSMENT

K3020.05 Overall Lighting and Levels*

Corridors and North Classrooms bright. Library and circular classroom block has little natural light

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	APR-13

K4010.01 Barrier Free Route: Parking to Entrance*

Barrier free parking north of entrance on Canterbury Drive SW. It's marked with appropriate signage. Parking lot must use city sidewalk to access ramp to main entrance. Concrete ramp from street sidewalk to level, on-site sidewalk to entrance. At grade entrances from playfields to South and West.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	APR-13

K4010.02 Barrier Free Entrances*

No automatic operator at main entrance

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	APR-13

Event: Install Barrier Free Entrance (1)

Concern: Limited accessibility due to lack of automatic entrance. Recommendation: Install automatic entrance Consequences of Deferral: Difficult for those who require barrier free entry

Туре	Year	Cost	Priority
Barrier Free Access Upgrade	2012	\$3,380	High

K4010.03 Barrier Free Interior Circulation*

Interior ramp installed previously making gym and north classrooms accessible to the main entrance. The ramp was installed prior to current Barrier free requirements, therefore deemed as acceptable.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	APR-13

Event: Assessment to upgrade ramp (1)

Concern:

Although deemed as acceptable, the ramp is not exactly barrier free compliant (to current standards). An assessment should be made as to what alterations would be required in order to bring the ramp up to current code.

Recommendation:

Assess what is required ie: floor plan changes / alterations. **Consequences of Deferral:**

A ramp that does not meet code might be a safety concern.

Туре	<u>Year</u>	Cost	Priority
Study	2012	\$1,000	High

Updated: APR-13

Event: Upgrade ramp required alterations (1 ramp)

Concern:

Although deemed as acceptable, the ramp is not exactly barrier free compliant (to current standards).

Recommendation:

Contingent on Study; Improvement of barrier free ramp to meet current standards

Consequences of Deferral:

A ramp that does not meet code might be a safety concern.

Туре	Year	Cost	Priority
Barrier Free Access Upgrade	2012	\$10,000	Low

Updated: APR-13

K4010.04 Barrier Free Washrooms*

Students washrooms equipped with barrier free watercloset stalls.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	FEB-08

K4030.01 Asbestos*

No asbestos known or reported

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	FEB-08

K4030.04 Mould*

No mould known or reported

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	FEB-08

K4030.09 Other Hazardous Materials*

No other hazardous materials known or reported

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	FEB-08

K5010.01 Site Documentation*

Site plan attached.

Prime Consultant: Williams Engineering Canada Inc. Site Review Date: July 25, 2012.

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



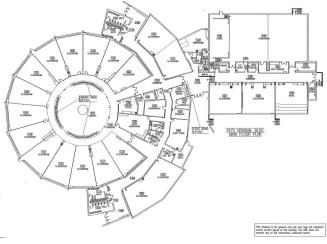
Canyon Meadows SitePlan.JPG

K5010.02 Building Documentation*

Floor plan attached.

Prime Consultant: Williams Engineering Canada Inc. Site Review Date: July 25, 2012.

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



Canyon Meadows Floor Plan.JPG