

RECAPP Facility Evaluation Report

Calgary School District #19



Emily Follensbee Centre

B9120A

Calgary

Facility Details

Building Name: Emily Follensbee Centre
Address: 5139 - 14 Street S. W.
Location: Calgary

Building Id: B9120A
Gross Area (sq. m): 3,629.74
Replacement Cost: \$11,093,000
Construction Year: 1964

Evaluation Details

Evaluation Company: ARUP DATTA ARCHITECT LTD.
Evaluation Date: September 9 2011
Evaluator Name: Brian Dennis

Total Maintenance Events Next 5 years: **\$1,068,742**
5 year Facility Condition Index (FCI): **9.63%**

General Summary:

The Emily Follensbee School is a single-storey concrete and wood-framed structure with a partial basement, originally constructed in 1964. The original building has a total floor area of approximately 1,373 square metres.

A steel-framed, single-storey addition was constructed in 1982 on the southeast side of the original building, which has a total main floor area of approximately 2,257 square metres and a basement floor area of 411.7 square meters. The majority of the addition is comprised of classrooms and an indoor pool area.

The school is primarily used for assisting children with disabilities. Current student population : 76, ratio - 1 Aide : 2 students.

Structural Summary:

Structural drawings were not available for review during the assessment, however the building's foundations likely consist of a poured concrete assembly with concrete grade beams and pad footings. The structure consists of reinforced, poured concrete floors and load-bearing wood-framed walls. The 1982 addition has structural steel columns supporting the roof structure. The suspended main floor slab above the basement level is cast-in-place reinforced concrete.

The roof structural frame for the original portion of the building is comprised of wood decking supported by glulam beams. The 1982 addition has steel roof decking supported by open-webbed steel joists and beams. The indoor play atrium area in the 1982 addition has steel trusses supporting metal decking.

Studies have been identified to review damage to the pool concrete walls in the basement

The building's structural elements are in acceptable condition overall.

Envelope Summary:

Exterior cladding consists of a combination of clay brick and vertical metal siding. All flat roof sections of the original building consist of a membrane roofing assembly. The sloped roof sections of the 1982 addition are pre-finished metal with metal gutters and downspouts. Main entrance doors are metal with insulating glazing units and are set in aluminum frames. Windows are fixed and operable with double-glazed units set in aluminum frames.

Repair of the skylight located above the entry corridor required.

The building envelope and exterior components are in acceptable condition

Interior Summary:

Corridors typically have vinyl sheet flooring. A combination of old and new resilient sheet flooring is provided in a majority of the classrooms, offices and administration areas, with a few rooms having vinyl floor tiles or a rubberized floor finish system. The basement level of the building has painted/sealed concrete floors. Wood parquet flooring is provided in the gymnasium. The majority of the interior walls consist of painted gypsum board or ceramic tiles. The building has either painted gypsum board ceilings or a suspended acoustic panel ceiling system.

The building interior finishes are in acceptable condition

Mechanical Summary:

Emily Follensbee School was originally constructed in 1964 with a major renovation and expansion in 1982. The majority of the domestic water, sanitary, and rain water drainage piping was replaced during the 1982 renovation. There are backflow prevention devices (BFPs) present on the domestic water supply, boiler feed water supply, fire protection riser, and the pool and whirlpool supply lines. The auxiliary electric domestic water heaters were also

installed in 1982.

The building is heated by two steam boilers. Steam is converted to heating hot water and glycol via six converters located in the main boiler room. Heating distribution is through piping to convectors, reheat coils, fan coils, and unit heaters. The hot water heating distribution system is original to the 1982 renovation.

Bathrooms, kitchens, and the main pool area are equipped with independently operated roof-mounted exhaust fans. Air conditioning is provided by the integral cooling components in the rooftop air conditioner. Start-stop control of the primary heating, ventilation, and air conditioning equipment in the building is provided by a Johnson Controls DSC-8500 control system.

The building has a standpipe system which feeds a sprinkler system which covers the entire building.

The following are recommended actions for the next five years, including scheduled replacements:

- Recertify the backflow prevention device on the fire protection standpipe system
- Test and repair the backflow prevention devices on the boiler feed water, pool supply, and whirlpool supplies
- Re-duct the boiler room air handling unit to provide effective air delivery to the space

Overall the mechanical systems in the building are in good condition.

Electrical Summary:

1200 Amps, 120/208 Volts main service. The electrical sub-panels and wiring are original to the major renovation of the building in 1982. Three new panels were added in 2009. Observed panels had adequate additional capacity. All observed wiring was in conduit.

Interior lighting is provided by T-12 fluorescent technology in 70% of the building. Remaining 30% were upgraded to T8 in 2009. Metal Halide accent lighting is used in the Gym, Pool and some of the classrooms. Exterior lighting is provided by high pressure sodium wall-mounted fixtures around the building. Emergency lighting is provided by nickel-cadmium battery packs. Exit lighting in the building is provided by LED Exit fixtures.

The building is protected by a Simplex fire alarm panel. Detection in the building is by manual pull stations and heat detectors.

The building has a Silent Knight security system, which is externally monitored, a Norstar Meridian telephone system, a Bogen public address system, a Bell fibreoptic internet service, and a hardwired and WIFI Local Area Network. Upgrade of the T12 fixtures is recommended.

Overall the electrical systems in the building are 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*

Structural drawings were not available for review during the assessment. The building foundations presumably consist of cast-in-place concrete pad footings and perimeter grade beams with conventional steel reinforcement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	JAN-07

A1030 Slab on Grade* - 1964

The main floor of the original school is a cast-in-place concrete slab-on-grade which is presumed to have conventional steel reinforcement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12

A1030 Slab on Grade* - 1982

The main floor and basement floor of the addition is a cast-in-place concrete slab-on-grade which is presumed to have conventional steel reinforcement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

A2020 Basement Walls (& Crawl Space)*

A basement level consisting of the mechanical room is situated below the pool room. The basement walls are cast-in-place concrete which are presumed to have conventional steel reinforcement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	0	FEB-12

Event: Inspect pool leak condition

Concern:

Staining and minerals built up has occurred in some locations due to water leakage from the pool which can cause further deterioration of concrete walls.

Recommendation:

Inspect the pool for leaks. Repair as required.

Consequences of Deferral:

Leaks could become larger over time, causing rapid deterioration of concrete pool walls.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2012	\$4,000	Low

Updated: FEB-12

Event: Repair leaks BOE order of magnitude

Concern:

Staining and minerals built up has occurred in some locations due to water leakage from the pool

Recommendation:

Repair as determined by the study

Consequences of Deferral:

Depending on the results of the study more damage could be possible

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2013	\$25,000	Medium

Updated: FEB-12

B1010.01 Floor Structural Frame (Building Frame)* - 1982

The suspended main floor slab above the basement level is cast-in-place reinforced concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

B1010.02 Structural Interior Walls Supporting Floors (or Roof)* - 1964

Interior walls throughout the original school building are comprised of wood frame construction.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12

B1010.03 Floor Decks, Slabs, and Toppings*

The exterior wood deck over the open basement area is wood deck on wood beams supported by steel columns.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	0	FEB-12

Event: Refinish wood deck (100 sq m)

Concern:

Wood finish is deteriorated and bare wood is exposed over most of the deck

Recommendation:

Paint wood deck

Consequences of Deferral:

Continued deterioration of the finish and wood deck material

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2012	\$1,200	Low

Updated: FEB-12

B1010.07 Exterior Stairs*

Exterior cast-in-place concrete stairs on the east side of the building lead from the basement level to a wood deck and garden area on the ground floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	JAN-07

B1010.09 Floor Construction Fireproofing*

Cast-in-place concrete slab is fire rated over basement boiler room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

B1010.10 Floor Construction Firestopping*

Voids and gaps around mechanical and electrical conduit penetrations through the suspended floor slab above the basement are sealed with a fire rated sealant.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

B1020.01 Roof Structural Frame* - 1964

The original school is wood framed construction which supports the glulam beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12

B1020.01 Roof Structural Frame* -1982

The 1982 addition at the southeast corner of the building is comprised of steel roof decking supported by structural steel columns and beams, with a steel truss roof assembly in the indoor play atrium area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

B1020.04 Canopies*

An exterior canopy located at the north portion of the building is comprised of a steel truss assembly with metal roofing. The canopy is supported by steel columns mounted on concrete pads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

B1020.06 Roof Construction Fireproofing* - 1964

One storey building roof fire proofing not applicable.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12

B1020.06 Roof Construction Fireproofing* - 1982

One storey building roof fire proofing not applicable.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

A clay brick veneer is provided on all sides of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	JAN-07

B2010.01.06.03 Metal Siding**

Pre-finished metal siding is provided on all sides of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	FEB-12

Event: Replace Metal Siding fascia and soffit (BOE 1000 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$180,000	Unassigned

Updated: FEB-12

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

Painted spandrel panel is provided on west side of original building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12

B2010.01.09 Expansion Control: Ext. Wall*

Expansion joints are provided at periodic intervals between sections of brick cladding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	JAN-07

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

Sealant is provided in construction joints and around window and door units on the building perimeter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	FEB-12

Event: Replace Sealant (BOE = 600 m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$18,000	Unassigned

Updated: FEB-12

B2010.02.04 Load-Bearing-Metal Studs: Ext. Wall*

Architectural drawings or exterior wall cavities were not reviewed as part of the assessment; however, the 1982 addition presumably uses metal stud-framed walls on its exterior.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

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

Exterior walls on the original school building are of wood-frame construction.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	JAN-07

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

the exterior wall assemblies in the original school building and 1982 addition are presumably equipped with a vapor retarder, air barrier and insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12

B2010.06 Exterior Louvers, Grilles, and Screens*

Pre-finished metal louvers are provided on the building exterior to feed the building's ventilation system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	JAN-07

B2010.09 Exterior Soffits*

Exterior soffits on the building consist of glulam beams and prefinished metal siding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	JAN-07

B2020.01.01.02 Aluminum Windows (Glass & Frame) - 1964 Section**

All exterior windows on the perimeter of the original school building are fixed, insulating glazing units set in aluminum frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	40	FEB-12

**Event: Replace Aluminum Windows (Glass & Frame)
(BOE 50m²)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$120,000	Unassigned

Updated: FEB-12

B2020.01.01.02 Aluminum Windows (Glass & Frame) - 1982 Section**

All exterior windows on the perimeter of the 1982 addition are fixed, insulating glazing units set in pre-finished aluminum frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	FEB-12

Event: Replace Aluminum Windows (Glass & Frame) (BOE 95m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$240,000	Unassigned

Updated: FEB-12

B2030.01.01 Aluminum-Framed Storefronts: Doors**

The majority of the exterior entrances on the school perimeter are comprised of fully-glazed pivot doors with single-pane glazing set in pre-finished aluminum frames.

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

Event: Replace Aluminium-framed Storefronts Doors BOE 23 doors sidelights

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$55,000	Unassigned

Updated: FEB-12

B2030.02 Exterior Utility Doors**

Single and double doors metal door in steel frames from the basement to the exterior and single doors for exiting and access to storage room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	FEB-12

Event: Replace exterior utility doors BOE 7 single and 1 double doors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$21,000	Unassigned

Updated: FEB-12

B3010.01 Deck Vapour Retarder and Insulation*

Architectural drawings and ceiling cavities were not reviewed as part of the assessment; however the roofing assembly for the school presumably consists of a deck vapor retarder and insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2007	0	FEB-12

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

SBS membrane roofing to flat roof of original building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2007	25	FEB-12

Event: Replace SBS roof membrane (BOE 4010 sq m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2032	\$682,000	Unassigned

Updated: FEB-12

B3010.07 Sheet Metal Roofing**

Sloped roof sections of the building are provided with sheet metal roofing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	FEB-12

Event: Replace metal roofing (BOE 2200 sq m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$605,000	Unassigned

Updated: FEB-12

B3010.08.02 Metal Gutters and Downspouts**

The sloped roofs of the building are drained via metal gutters and downspouts which discharge storm water to paved surfaces at ground level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2007	30	FEB-12

Event: Replace Metal Gutters and Downspouts (BOE 32 m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2037	\$18,000	Unassigned

Updated: FEB-12

B3020.01 Skylights**

A domed skylight is situated above the corridor at the north end of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1982	25	FEB-12

Event: Replace skylight (BOE 20 sq m)

Concern:

The skylight has failed. Gaps in sealant and breaks in skylight material is allowing leakage of water into the building.

Recommendation:

Replace the skylight

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$40,000	High

Updated: FEB-12

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

A roof hatch provides access to all the roof sections of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	JAN-07

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Interior fixed partitions in the school consist of painted gypsum board walls on wood and metal stud partitions. Most corridors are provided with a 9" plastic base above 4" cove base.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C1010.03 Interior Operable Folding Panel Partitions**

Folding curtains (2) on ceiling mounted track. Manually pulled across room to create separate areas in "gym" room

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

Event: Replace folding curtains BOE 100 sq m

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$20,000	Unassigned

Updated: FEB-12

C1010.04 Interior Balustrades and Screens, Interior Railings*

Stainless steel handrails are installed in the pool area for access to pool.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C1010.05 Interior Windows*

Interior windows are single-glazed and set in aluminum frames. The windows are provided around the main office administration area, rooms surrounding the indoor play atrium and the viewing area to the "gym".

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C1010.06 Interior Glazed Partitions and Storefronts*

Aluminum framed and single glazed partitions around main office.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C1010.07 Interior Partition Firestopping*

VOIDS and gaps around electrical and mechanical conduit penetrations through fire separations are sealed with a fire rated sealant. There is an unrated opening between the electrical and mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C1020.01 Interior Swinging Doors (& Hardware)*

Interior doors within the original building and 1982 addition consist of a combination of painted wood doors and painted steel doors set in pressed steel frames. Hardware is metal and also includes kickplates on most doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C1020.03 Interior Fire Doors*

Interior fire doors in corridors consist of painted metal doors set in painted metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C1030.01 Visual Display Boards**

Fixed blackboards and tackboards are generally provided in each classroom. A few smartboards were observed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	FEB-12

Event: Replace black and white boards BOE 41 tack, 6 white, 8 black boards

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$33,000	Unassigned

Updated: FEB-12

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

Pre-finished metal toilet partitions are provided in the washrooms and pool change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1982	30	FEB-12

Event: Replace Fabricated CompartmentsToilets/Showers BOE 14 stalls

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$18,000	Unassigned

Updated: FEB-12

C1030.05 Wall and Corner Guards*

Metal corner guards are observed throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C1030.08 Interior Identifying Devices*

Metal room number tags are mounted on the doors of classrooms, offices and other miscellaneous rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1982	0	FEB-12

C1030.10 Lockers**

Painted metal lockers are provided in the locker rooms at the north end of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1982	30	FEB-12

Event: Replace Lockers BOE 18

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$9,000	Unassigned

Updated: FEB-12

C1030.14 Toilet, Bath, and Laundry Accessories*

Various hardware items including paper towel, soap and toiler paper dispensers, mirrors, etc. are provided in washrooms throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C2010 Stair Construction*

Stairs leading to the basement level are constructed of cast-in-place concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C2020.05 Resilient Stair Finishes**

Resilient stair finishes are provided from stair landing to mechanical level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	FEB-12

Event: Replace Resillient Stair Finishes (BOE 13m²]

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$1,200	Unassigned

Updated: FEB-12

C2020.08 Stair Railings and Balustrades*

A painted metal railing is located in the stairwell leading to the basement level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1964	0	JAN-07

C2020.11 Other Stair Finishes*

Exterior concrete stairs leading from the basement level are unfinished.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C2030 Interior Ramps*

The pool has a ramp into the pool. The pool ramp is equipped with a ceramic tile finish. Stainless steel railings are provided on either side of the ramp in the swimming pool and around the hot tub.

There is a concrete ramp in mechanical room. Metal pipe railing is installed to ramp in mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C3010.06 Tile Wall Finishes**

Ceramic tile wall finishes are provided in the locker rooms, pool area and washrooms throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	FEB-12

Event: Replace ceramic tile (BOE 605m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$145,200	Unassigned

Updated: FEB-12

C3010.11 Interior Wall Painting*

Painted gypsum board walls are provided in classrooms, corridors and office and administrative areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	0	FEB-12

C3010.11 Interior Wall Painting*

Gypsum board walls are generally provided in all classrooms, administrative and office areas in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12

C3010.14 Other Wall Finishes*

The corridors of the building are finished with a canvas type wainscotting. Forms a continuous tackboard.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C3020.01.02 Painted Concrete Floor Finishes*

Painted concrete floors are provided in the main mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C3020.02 Tile Floor Finishes**

Ceramic, clay and quarry tile flooring is provided in washrooms, locker rooms, the indoor play atrium, pool area, the northeast entrance of the building, and all corresponding vestibules, respectively.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	FEB-12

Event: Replace tile floor finish (BOE 1050m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2032	\$210,000	Unassigned

Updated: FEB-12

C3020.04 Wood Flooring**

Hardwood flooring is provided in the main gymnasium.

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

Event: Replace wood flooring (BOE 237m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$60,000	Unassigned

Updated: FEB-12

C3020.07 Resilient Flooring - 1982 Sheet**

Old sheet resilient flooring is generally provided in the corridors and classrooms of the building and in miscellaneous storage areas. A rubberized flooring system is used in a few rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	FEB-12

Event: Replace Sheet Vinyl Flooring (BOE 1250m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$100,000	Unassigned

Updated: FEB-12

C3020.07 Resilient Flooring - 1982 Vinyl Tile**

A number of classrooms, offices and staffrooms are finished with vinyl tile flooring. Stairs leading to the basement level are also finished with vinyl floor tiles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	FEB-12

Event: Replace vinyl floor tiles (BOE 305m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$16,000	Unassigned

Updated: FEB-12

C3020.07 Resilient Flooring - 2009 Sheet**

Resilient sheet flooring have been replaced in some classrooms, offices in original building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	20	FEB-12

Event: Replace Sheet Vinyl Flooring (BOE 405m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$33,000	Unassigned

Updated: FEB-12

C3020.08 Carpet Flooring**

Carpet flooring is provided in conference room (room 136 on plan).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	15	FEB-12

Event: Replace carpet (BOE 5m²)

Concern:

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$2,000	Unassigned

Updated: FEB-12

C3030.01 Concrete Ceiling Finishes (Unpainted)*

The ceiling of the mechanical level are unfinished concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

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

Some classrooms and corridors have a suspended T-bar grid ceiling with in-laid acoustic panels. A couple of panels observed in a south classroom were stained.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	FEB-12

Event: Replace Acoustic Ceiling Susp.T-Bar (BOE 600m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$27,000	Unassigned

Updated: FEB-12

C3030.07 Interior Ceiling Painting*

Gypsum board ceilings throughout the building have a painted finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

C3030.09 Other Ceiling Finishes* - Ceramic Tile

Ceramic tile ceiling finishes are provided in change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

S4 MECHANICAL

D2010.04 Sinks** - 1982

13 stainless steel sinks installed throughout the 1982 building addition.

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

Event: Replace sinks BOE (13)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$19,400	Unassigned

Updated: FEB-12

D2010.04 Sinks** - 2009

9 stainless steel sinks were installed in the 2009 renovation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	30	FEB-12

Event: Replace sinks BOE (9)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$15,500	Unassigned

Updated: FEB-12

D2010.05 Showers**

There are 9 wall-mounted showers are located in the change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	30	FEB-12

Event: Replace showers BOE (9)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$16,100	Unassigned

Updated: FEB-12

D2010.06 Bathtubs**

1 acrylic tub installed in room 139 appears to be original to the 1984 addition.

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

Event: Replace bathtub BOE (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$4,000	Unassigned

Updated: FEB-12

D2010.08 Drinking Fountains/Coolers**

There are 3 stainless steel refrigerated drinking fountains throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	FEB-12

Event: Replace drinking fountains BOE (3)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$10,600	Unassigned

Updated: FEB-12

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

Alberta Infrastructure this Technical can be deleted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2011	35	FEB-12

Event: 2011 - Lifecycle Replacement

Recommendation:

Replace equipment

Consequences of Deferral:

Broken equipment causes water damage, repairing damage is costly

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$33,178	High

Updated: FEB-12

D2010.10 Washroom Fixtures (WC, Lav, Urnl) - 1982**

There are 24 tankless vitreous china water closets, 14 vitreous china lavatories and 1 urinal throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	FEB-12

Event: Replace washroom fixtures BOE (24) WC, (14) Lav, (1) Urnl

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$58,300	Unassigned

Updated: FEB-12

D2010.10 Washroom Fixtures (WC, Lav, Urnl) - 2009**

There are 6 tankless vitreous china water closets, and 13 stainless steel/vitreous china lavatories throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	35	FEB-12

Event: Replace washroom fixtures BOE (6) WC, (13) Lav

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$28,300	Unassigned

Updated: FEB-12

D2020.01.01 Pipes and Tubes: Domestic Water*

The domestic water piping is copper throughout the building and appears to still be in pretty good condition. There did not appear to be any signs of leaks or breaks in the piping throughout the school

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1982	0	FEB-12

D2020.01.02 Valves: Domestic Water**

There are a number of isolation, shut off, check valves etc. located throughout the school and are accessible through either ceiling tiles or access panels. There also a number of various kinds of valves located in the mechanical room servicing the mechanical equipment within.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	FEB-12

Event: Replace valves BOE (30)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$34,400	Unassigned

Updated: FEB-12

D2020.01.03 Piping Specialties (Backflow Preventers)**

There are backflow prevention devices on the domestic water supply, fire protection riser, boiler feed water supply, pool supply, and whirlpool supply. All devices have been checked and verified within the last year.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	20	FEB-12

Event: Replace backflow preventers BOE (5)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$15,300	Unassigned

Updated: FEB-12

D2020.02.02 Plumbing Pumps: Domestic Water**

The Armstrong domestic hot water recirculation pump was operational at the time of this report and appeared to be in good working condition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	FEB-12

Event: Replace domestic water pump BOE (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$1,200	Unassigned

Updated: FEB-12

D2020.02.03 Water Storage Tanks**

There is a 120 us gallon AO Smith glass lined hot water storage tank used for storing domestic hot water.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	30	FEB-12

Event: Replace storage tank BOE (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2037	\$2,000	Unassigned

Updated: FEB-12

D2020.02.06 Domestic Water Heaters**

Domestic hot water is supplied to the building by two Natural Gas fired Bradford White domestic hot water heater tanks located in the main boiler room. Model # M2TW75T6MNH Capacity 75 gallons each, 68,400 btuh input

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	20	FEB-12

Event: Replace hot water tanks BOE (2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2027	\$4,250	Unassigned

Updated: FEB-12

D2020.03 Water Supply Insulation: Domestic*

The domestic hot and cold water have canvas wrapped insulation throughout the mechanical room and fiberglass insulation throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D2030.01 Waste and Vent Piping*

Waste and vent piping is generally cast iron and original to the 1982 renovation of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1982	0	JAN-07

D2030.02.04 Floor Drains*

Steel and cast iron floor drains located throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D2030.03 Waste Piping Equipment*

Storm sump pumps located in a pit in the mechanical room for lifting the storm to the city mains. Sanitary sump pumps located in a pit in the mechanical room for lifting the sanitary to the city mains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D2040.01 Rain Water Drainage Piping Systems*

There is cast iron rain water piping connected to roof drains on the roofs that carry the rain water out to the city mains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D2040.02.04 Roof Drains*

Most of the roofs is drained through the use of scuppers however there a few roof drains located on the roof of the building for rain water drainage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D3010.02 Gas Supply Systems*

The natural gas supply is provided below grade on the east side of the building. The piping feeds the central steam boilers in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

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

There are two 4 million BTU Cleaver Brooks natural gas fired boilers serving various building heating systems throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	FEB-12

Event: Replace boilers BOE (2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$107,400	Unassigned

Updated: FEB-12

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

The 2 boilers are vented separately through the use of B-Vent up through the roof c/w a rain cap.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	FEB-12

Event: Replace chimney BOE (20m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$13,000	Unassigned

Updated: FEB-12

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

There was not any documentation of the boiler water treatment available at the time of the inspection.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D3040.01.01 Air Handling Units: Air Distribution - 1982 Original**

2 Engineered Air units (heating only, glycol heating loop) located in the ceiling of the mechanical room provide conditioned air to the boiler room and the pool area.

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

Event: Replace air handling units BOE (2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$25,700	Unassigned

Updated: FEB-12

D3040.01.01 Air Handling Units: Air Distribution - Heat only units**

AHU-2 is located on the roof and provides conditioned air to the building. Unit is a Engineered Air Model LM6/C/0 Heating only with a supply fan capacity of 4000cfm.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	30	FEB-12

Event: Replace air handling units BOE (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2037	\$15,000	Unassigned

Updated: FEB-12

D3040.01.04 Ducts: Air Distribution*

There are number of ducts located in the ceiling space of the building which provide air to the spaces from the various air handing equipment on the roof and in the mechanical room. There did not appear to be any significant air noise observed throughout the building and a visual inspection of the ductwork where it could be seen indicated it to be in good condition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D3040.01.06 Air Terminal Units: Air Distribution (VAV/CV Box)**

Supply air temperature is regulated by reheat coils, controlled by adjustable thermostats located in the space.

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

Event: Replace re-heat coils BOE (16)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$17,500	Unassigned

Updated: FEB-12

D3040.01.07 Air Outlets & Inlets: Air Distribution*

There are a number of supply air grilles and diffusers and return air grilles located in the walls and ceilings throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D3040.03.01 Hot Water Distribution Systems**

Heating distribution is through copper piping to convectors, fan coils, reheat coils, and unit heaters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	FEB-12

Event: Replace hot water distribution piping BOE (3630m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$355,200	Unassigned

Updated: FEB-12

D3040.04.01 Fans: Exhaust**

General building exhaust (including washroom, changeroom, kitchen, and pool areas) is provided by a variety of roof mounted exhaust fans.

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

Event: Replace exhaust fans BOE (8)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$27,500	Unassigned

Updated: FEB-12

D3040.04.03 Ducts: Exhaust*

There are number of ducts located in the ceiling space of the building which carry exhaust air from the spaces to the various exhaust fans on the roof. There did not appear to be any significant air noise observed throughout the building and a visual inspection of the ductwork where it could be seen indicated it to be in good condition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D3040.04.05 Air Outlets and Inlets: Exhaust*

There are a number of exhaust grilles located throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D3040.05 Heat Exchangers**

A total of 4 shell and tube heat exchangers provide heat energy to the following systems: perimeter building heating (convectors), reheat coils, air handling unit and rooftop unit heating coils (glycol loop), apartment area heating, swimming pool heating, and whirlpool heating.

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

Event: Replace heat exchangers BOE (4)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$58,100	Unassigned

Updated: FEB-12

D3050.01.02 Packaged Rooftop Air Conditioning Units (& Heating Units)**

A total of 7 rooftop air handling units (with glycol heating and integral cooling components) provide conditioned air to the majority of the building (with the exception of the main boiler room and the pool area).

All units are manufactured by Engineered Air. AC-1 Model FWA113/0 Supply fan capacity 4500cfm/Return Fan Capacity 3700cfm, AC-2 Model # GWB153/0 Supply Fan Capacity 4800cfm/Return Fan Capacity 4000cfm, AC-3 Model #FWB313/0 Supply Fan Capacity 10,000cfm/Return Fan Capacity 8300cfm, AC-4 Model #FWA31/0 Supply Fan Capacity 800cfm, AC-5 Model #FWB143/0 Supply Fan Capacity 5000cfm/Return Fan Capacity 4100cfm, AC-6 Model #FWA9310 Supply Fan Capacity 3180cfm/Return Fan Capacity 2930cfm, AC-7 Model #FWA113/0 Supply Fan Capacity 4500cfm/Return Fan Capacity 3700cfm.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	30	FEB-12

Event: Replace rooftop units BOE (7)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2037	\$343,700	Unassigned

Updated: FEB-12

D3050.05.02 Fan Coil Units**

Auxiliary heating at building entrances is provided by recessed fan coil units.

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

Event: Replace fan coil units BOE (10)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$52,700	Unassigned

Updated: FEB-12

D3050.05.03 Finned Tube Radiation**

The building is heated through the use of finned tube radiation throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	FEB-12

Event: Replace finned tube radiation BOE (3630m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$187,800	Unassigned

Updated: FEB-12

D3060.02.01 Electric and Electronic Controls**

Various areas including entrance heaters and fan coils located throughout the building.

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

Event: Replace electronic controls BOE (3630m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$5,600	Unassigned

Updated: FEB-12

D3060.02.02 Pneumatic Controls**

The majority of the building controls are pneumatic and provide no energy management functions. Control air is provided by a Johnson Controls compressor located in the basement mechanical area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	FEB-12

Event: Replace pneumatic controls BOE (3630m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$23,200	Unassigned

Updated: FEB-12

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

Start-stop control of the primary heating, air conditioning, and ventilation equipment in the building is provided by a Johnson Controls DSC-8500 controls system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	FEB-12

Event: Replace building control system BOE (3630m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$83,200	Unassigned

Updated: FEB-12

D4010 Sprinklers: Fire Protection*

The entire building is protected by a three-zone, wet-pipe sprinkler system connected to the fire protection system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Fire extinguishers are located throughout the building. Extinguishers are tested on a yearly basis.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

S5 ELECTRICAL

D5010.01.02 Main Electrical Transformers (Utility Owned)*

Located in the north side of school. Maintained by ENMAX.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

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

Westinghouse 1200 Amp, 120/208 volt three phase main breaker and MDP. 70% full. Digital meter in place.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	FEB-12

<u>Capacity Size</u>	<u>Capacity Unit</u>
1200 Amps, 120/208 Volts	amps

Event: Replace 1200 Amp three phase 120/208 volt main distribution

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$110,641	Unassigned

Updated: FEB-12

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)** - 1982

Nine Westinghouse panels, 1982 install. Panels are 90% full.

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

Event: Replace nine electrical panesl and related breakers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$27,000	Unassigned

Updated: FEB-12

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)** - 2009

Three Square D panels, 2009 install. Panels are 40% full.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	30	FEB-12

Event: Replace three electrical panesl and related breakers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$9,000	Unassigned

Updated: FEB-12

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

Westinghouse 600 Amp 208 volt three phase MCC c/w four sections and 14 starters. Four spaces spare.

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

Event: Replace 600 Amp MCC c/w 14 starters

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$20,000	Unassigned

Updated: FEB-12

D5010.07.02 Motor Starters and Accessories**

38 Westinghouse and Allen Bradley loose starters in the boiler room.

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

Event: Replace 38 loose starters

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$19,000	Unassigned

Updated: FEB-12

D5020.01 Electrical Branch Wiring*

Wiring in EMT and Ac90 conduit as required.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

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

Line voltage switching for T8 light fixtures. Westinghouse Low voltage lighting relays and switches for Metal Halide fixtures. Dimmer switches for incandescent light fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D5020.02.02.01 Interior Incandescent Fixtures*

Pot lights and wall scones in pool and suite areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D5020.02.02.02 Interior Fluorescent Fixtures - 1982**

70% of pendants and surface mounted fixtures are T12.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	30	FEB-12

Event: Replace 508 T12 fixtures.

Concern:

T12 technology is obsolete and discontinued. Fixtures have exceeded their theoretical life.

Recommendation:

Replace 508 fluorescent light fixtures with T8 technology.

Consequences of Deferral:

High maintenance and energy costs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$152,400	Medium

Updated: FEB-12

D5020.02.02.02 Interior Fluorescent Fixtures - 2009**

30% fixtures are T8. Fixtures with waffle diffusers and K12 lenses.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	30	FEB-12

Event: Replace 218 T8 fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$65,400	Unassigned

Updated: FEB-12

D5020.02.02.03 Interior Metal Halide Fixtures*

Interior lighting in the gym and main atrium is provided by remotely ballasted, metal halide uplight fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D5020.02.03.02 Emergency Lighting Battery Packs**

Lumacell battery packs used as central units and single units with remote heads as required.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	20	FEB-12

Event: Add 17 dual head emergency heads and three battery packs

Concern:

Change in educational areas' use for special needs students requires addition of new fire alarm signal devices.

Recommendation:

Add new remote emergency lighting heads and related battery packs in Classrooms A015, 111, 112, 115, 116, 117, 118, 119, 120, 121, 122, 123 and in Mechanical room A105. Add four strobes in multi-stall student and staff washrooms.

Consequences of Deferral:

Loss of emergency lighting for special need students and staff in case of loss of power for lighting in the building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2012	\$5,100	Low

Updated: FEB-12

Event: Replace 20 emergency lighting battery packs

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$10,000	Unassigned

Updated: FEB-12

D5020.02.03.03 Exit Signs*

Led exit signs located as required over exits.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	0	FEB-12

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

HPS wall packs located beside exits. One light standard c/w four HPS light fixtures over the parking area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

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

Photocell controlled.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D5030.01 Detection and Fire Alarm**

Single stage Simplex 4008 c/w 10 zones. Horn strobes and detection and initiation devices located through out the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	25	FEB-12

Event: Add 18 new fire alarm devices

Concern:

Change in educational areas' use for special needs students requires addition of new fire alarm signal devices.

Recommendation:

Add new combination horn strobes or strobes in Classrooms A015, 111, 112, 115, 116, 117, 118, 119, 120, 121, 122, 123 and in Mechanical room A105. Add four strobes in multi-stall student and staff washrooms. Remove obsolete Pyrotronic annunciator in the suite.

Consequences of Deferral:

Loss of signal notification to special need students and staff in case of fire alarm operation.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2012	\$3,600	Medium

Updated: FEB-12

Event: Replace fire alarm system in area of 3,629.74m2/gfa

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$105,262	Unassigned

Updated: FEB-12

D5030.02.02 Intrusion Detection**

Silent Knight security system, complete with motion detectors as required.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	25	FEB-12

Event: Replace security system in area of 3,629.74m2/gfa

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$36,297	Unassigned

Updated: FEB-12

D5030.03 Clock and Program Systems*

The building is equipped with a Simplex master clock system that controls the bells. Battery operated clocks in classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

D5030.04.01 Telephone Systems*

Norstar Meridian telephone system with handsets in classrooms..

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1997	0	FEB-12

D5030.04.05 Local Area Network Systems*

AMP HUBS AND Nortel Switches in data room. Supernet in school. Cat5 cabling. WIFI all over the school area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1997	0	FEB-12

D5030.05 Public Address and Music Systems**

The building is equipped with a Bogen PA system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	FEB-12

Event: Replace public address and music system in area of 3,629.74m2/gfa

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$4,742	Unassigned

Updated: FEB-12

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.04 Residential Equipment*

Residential type equipment in use in the building includes fridges, stoves, microwaves and dish washers in the kitchen areas, and residential type washing machines and dryers in the laundry room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Lifting and exercising equipment for handicapped occupants are located in the gymnasium and indoor play atrium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1995	0	JAN-07

E2010.02 Fixed Casework**

Fixed wooden casework with laminate finishes are typically provided in each classroom and office in the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	FEB-12

Event: Replace Fixed Casework (BOE building area 2000 sq m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$176,000	Unassigned

Updated: FEB-12

E2010.03.01 Blinds**

Frame-mounted operable blinds are provided between window glazing or mounted on walls in front of windows, typically in each classroom and office area.

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

Event: Replace Blinds** (BOE 240m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$30,000	Unassigned

Updated: FEB-12

E2010.06 Fixed Interior Landscaping*

Interior landscaping, such as small trees, shrubs and plants and a low tiled water feature are located along the north and west perimeters of the indoor play atrium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

F1020.02.02 Sound-Conditioned Rooms*

Special "sensory rooms" are equipped with rubberized flooring and specialized audio/ video equipment such as projectors, blacklight, led curtains etc.for special needs students

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	FEB-12

F1040.01 Aquatic Facilities*

An indoor pool and hot tub are located in the pool room at the east end of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1982	0	FEB-12

S8 SPECIAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

No handicapped parking stalls or signage is provided in front of the school or in the paved parking area north and east of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1964	0	FEB-12

Event: Provide two barrier-free parking stalls

Concern:

Only standard parking stalls are provided in the north and east parking areas.

Recommendation:

Provide one barrier-free parking stalls closest to the northwest entrance of the school. The re-distribution of adjacent parking stall markings may be required to accommodate this installation.

Consequences of Deferral:

Non-compliance with current barrier-free standards and poor accessibility for handicapped persons.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2012	\$3,000	Medium

Updated: FEB-12

K4010.02 Barrier Free Entrances*

The northwest entrance to the building is equipped with an automated door-opener.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

K4010.03 Barrier Free Interior Circulation*

All areas of the school interior are generally accessible to persons with disabilities.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

K4010.04 Barrier Free Washrooms*

The majority of the washrooms in the building are equipped to accommodate barrier-free usage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	FEB-12

K4030.01 Asbestos*

Although the building was renovated in 1982, because of the age of the original building, the potential exists for undiscovered asbestos containing materials to be present in wall and ceiling cavities. The school board conducts assessment reports and monitors conditions for any construction work.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12

K4030.02 PCBs*

No PCBs observed or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12

K4030.04 Mould*

No visible signs mould observed or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12

K5010.01 Site Documentation*

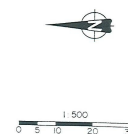
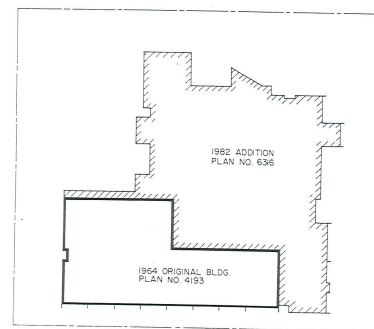
Prime Consultant; ARUP DATTA ARCHITECT LTD.

Year of Evaluation: 2011

Site description::

The site is occupied by the Emily Follensbee School, which is located near the southeast corner of the property. The site features include a paved parking lot to the northeast of the building, a courtyard with landscaping and concrete unit and resilient composite paved surfaces to the southeast, and a play area to the south of the building. There are concrete sidewalks to each building entrance. The landscaped areas are provided adjacent to the south, east and west sides of the building. No irrigation systems are provided on-site. Drainage on landscaped areas is provided by land infiltration and/or overland flow.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12



PLT. ID.: 00319	SITE PLAN	DATE: 03/06/20	SCALE: 1:500
CORE: 8036		DRAWN BY: L.C.	SHEET: 1 of 4
ALGARY SCHOOL DIST. NO. 19			
EMILY FOLLENSBEE SCHOOL			
SCHOOL BUILDINGS SERVICES			

Site plan

K5010.02 Building Documentation*

Prime Consultant; ARUP DATTA ARCHITECT LTD.

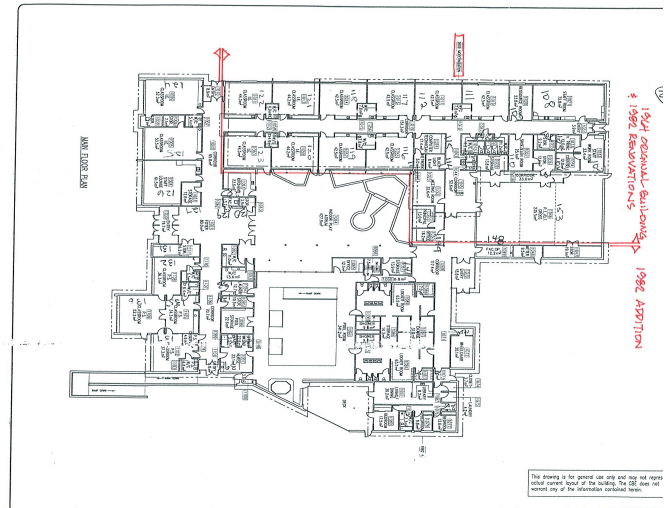
Year of Evaluation: 2011

Building area evaluated: Main floor area of 3621.7 square meters and basement floor area of 411.7 square meters for total of 4033.5 square meters per Calgary Board of Education data.

Building /building sections not evaluated: - all areas evaluated.

Anomalies regarding evaluation environment, drawings or areas evaluated: - none.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	FEB-12



Main floor plan with phasing