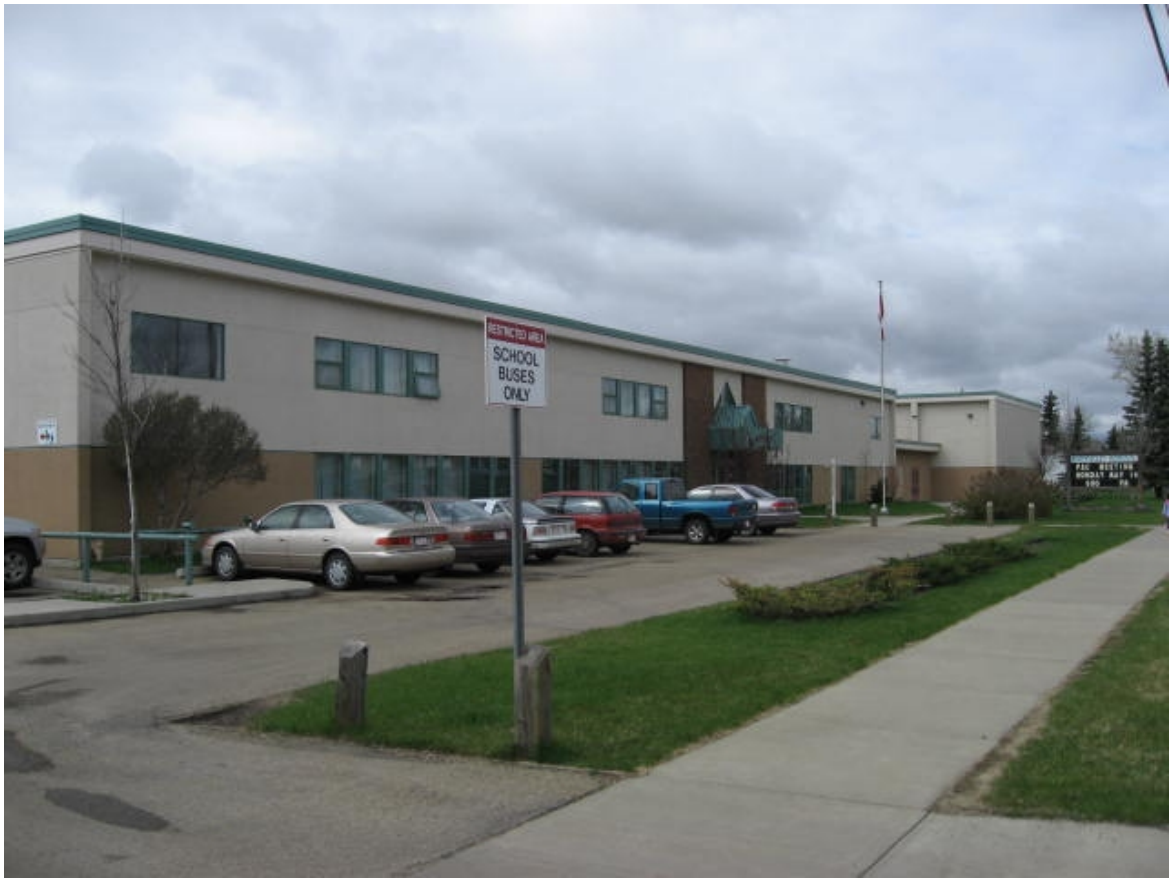
RECAPP Facility Evaluation Report

Regional School Board



Mayfield School

B3207A

Edmonton

Report run on: July 16, 2008 2:56 PM

Facility Details

Building Name: Mayfield School
Address: 10950 - 159 Street
Location: Edmonton

Building Id: B3207A
Gross Area (sq. m): 3,638.70
Replacement Cost: $7,930,447
Construction Year: 1958

Evaluation Details

Evaluation Company: Asset Evolution Incorporated (AEI)Asset Evolution Incorporated (AEI)
Evaluation Date: May 9 2007
Evaluator Name: Mario Plastina

Total Maintenance Events Next 5 years: **$1,320,862**
5 year Facility Condition Index (FCI): **16.66%**

General Summary:

Mayfield Elementary School is a two-storey school with a total building area of 3638 m2. The original school was built in 1958 with an area of 2430m2. An extension was added in 1962 with an area of 1208m2. The school was completely modernized in1997.

The two storey school comprised of several classrooms, a gymnasium, a library and a music room.

The 2007 student enrollment is 224 children.

Structural Summary:

1958 & 1962 Sections

The foundations consist of cast-in-place concrete grade beams and spread footings. The main floors have cast-in-place concrete slabs-on-grade with conventional steel reinforcement and the upper floor has a wood frame assembly. The majority of the roof structure is a wood frame assembly supported by, framed walls, beams and columns.

Overall the structural elements are in acceptable condition.

Envelope Summary:

1958 & 1962 Sections

The exterior cladding consists primarily of stucco & brick cladding. The stucco finish was completed during the 1997 modernization.

The windows are aluminum frame double glazed units with fixed & operable awning type panels. (1997 modernization)

The roof has a modified bituminous membrane roof assembly (SBS) throughout. (1997 modernization)

The majority of the metal doors & frames have full glazed panels with glazed transoms and sidelights. Several of the exit doors have a painted steel door & frame assembly with GWG panels. (1997 modernization)

Overall, the envelope of the building is in good condition.

Interior Summary:

Sheet Vinyl is located throughout the corridors, stairwells, computer room, some washrooms and partial sections of the classrooms. The classrooms, music room, staff room, administration area, and library have a carpet floor finish. The gymnasium & stage area have a hardwood floor finish. The washrooms have a ceramic tile floor finish. The utility areas including the mechanical room has a paint finish on the concrete slab.

The majority of the interior walls comprise of gypsum board with a paint finish and ceramic tile in the washroom areas..

The interior doors are painted wood doors and/or painted steel doors in hollow metal frames.

The majority of the school has a suspended 2'x4' acoustical tile ceiling. The wood structure is exposed in the gymnasium. Painted gypsum board ceilings are located in the washrooms.

Most of the interior finishes were replaced during the 1997 modernization.

Overall, the interior finishes are in good condition.

Mechanical Summary:

The building is heated by two gas fired hot water boilers which supply two hot water distribution systems. The hot water distribution system for the c.1958 original building supplies a glycol heat exchanger as well as hydronic terminal units including convectors, unit heaters and perimeter finned tube radiation cabinets. The glycol heat exchanger is part of a glycol heating loop which supplies the heating coils in air handling units AHU1 and AHU2. The hot water distribution system for the c.1962 building addition supplies the building addition air handling unit heating coil, as well as hydronic terminal units including convectors and perimeter finned tube radiation cabinets.

There are two air handling units serving the c.1958 original building, including mixed air system AHU1 which supplies all areas except the gymnasium, and fresh air unit AHU2 which supplies the gymnasium. Air handling unit AHU1 provides heating using a glycol heating coil and the gymnasium air handling unit AHU2 provides heating using a glycol preheating coil and a glycol heating coil. The mixed air ventilation system has an associated return air fan. There is one air handling unit serving the c.1962 building addition. This fresh air unit provides heating using a hot water heating coil. The fresh air supplied to the building by the air handling units is balanced by the exhaust air flow from air handling unit AHU1 and from numerous sanitary and local exhaust fans (including three roof mounted exhaust fans).

Building HVAC actuators are pneumatic, and the control air supply system includes an air compressor mounted on an air receiver tank. There is a Building Management and Control System (BMCS) providing control and monitoring functions for HVAC equipment (Barber-Colman Network 8000).

Washroom plumbing fixtures include toilets, lavatories and urinals. There are 26 toilets (floor mounted tank type), 28 lavatories (18 counter mounted lavatories and ten wall mounted lavatories), and ten urinals (floor mounted tank type) in the building. Other plumbing fixtures in the building include drinking fountains (12), janitor sinks (4), and general purpose stainless steel sinks (19). Two gas fired domestic hot water heaters provide domestic hot water for the building lavatories and sinks.

Fire protection for the building consists of cabinet mounted and wall mounted fire extinguishers.

Some mechanical equipment requires replacement or upgrading, including the replacement of some plumbing fixtures, the installation of additional backflow prevention devices, replacement of one domestic hot water heater, replacement of one heating boiler, replacement of one air handling unit, and the investigation and rectification of some heating control problems. Although some mechanical components require replacement, other components are in good condition because they have been replaced relatively recently (many as part of the c.1997 modernization), and the overall condition of the building mechanical equipment and systems is acceptable.

Electrical Summary:

Mayfield School is fed with an incoming 120/208V three phase, 4 wire system from EPCOR pole-mounted transformers. The main switchboard is rated at 600A, 120/208V. Individual motor starters have been provided for mechanical equipment.

The wiring in the building is typically standard wiring in conduit.

The interior fluorescent lighting fixtures have T-8 lamps and electronic ballasts. The exit lighting in the building consists of units with LED lamps. The emergency lighting is fed from emergency lighting battery packs. The exterior lighting consists of wall mounted H.P.S. fixtures.

The building is equipped with an Edwards 6616 fire alarm system. Detection and end devices include, smoke and heat detectors, bells and pull stations.
The various communications and security systems within the school include; a Magnum Alert security system that monitors motion detectors, a Bogen Multicom 2000 P.A. system and a Nortel Meridian telephone system. Cable TV and data systems are installed within the school.

It is recommended, as routine maintenance, that a program for annual examination of major electrical components be instituted. Maintenance should include thermographic scans for hot spots and power shut down to allow examination of interior components for accumulated debris and signs of corrosion.

Overall the electrical systems for Mayfield School are in acceptable to good condition.

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

S1 STRUCTURAL

A1010 Standard Foundations - 1958 Section*

The foundations consist of cast-in-place concrete grade beams and spread footings.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	100	NOV-07

A1010 Standard Foundations - 1962 Section*

The foundations consist of cast-in-place concrete grade beams and spread footings.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	100	NOV-07

A1030 Slab on Grade - 1958 Section*

The building has cast-in-place concrete slabs-on-grade with conventional steel reinforcement.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	100	NOV-07

A1030 Slab on Grade - 1962 Section*

The building has cast-in-place concrete slabs-on-grade with conventional steel reinforcement.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	100	NOV-07

B1010.01 Floor Structural Frame (Building Frame) - 1958 Section*

The floors are constructed of reinforced cast in place concrete and a wood frame system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	100	NOV-07

B1010.01 Floor Structural Frame (Building Frame) - 1962 Section*

The floors are constructed of reinforced cast in place concrete and a wood frame system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	100	NOV-07

B1010.02 Structural Interior Walls Supporting Floors (or Roof) - 1958 Section*

Wood framed walls supporting the floor & roof assembly.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	100	NOV-07

B1010.02 Structural Interior Walls Supporting Floors (or Roof) - 1962 Section*

Wood framed walls supporting the floor & roof assembly.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	100	NOV-07

B1010.09 Floor Construction Fireproofing - 1958 Section*

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

B1010.09 Floor Construction Fireproofing - 1962 Section*

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	50	NOV-07

B1010.10 Floor Construction Firestopping - 1958 Section*

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

B1010.10 Floor Construction Firestopping - 1962 Section*

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	50	NOV-07

B1020.01 Roof Structural Frame - 1958 Section*

Wood deck on glue laminated beams supported on structural wood walls throughout the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	100	NOV-07

B1020.01 Roof Structural Frame - 1962 Section*

Wood deck on glue laminated beams supported on structural wood walls throughout the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	100	NOV-07

B1020.06 Roof Construction Fireproofing - 1958 Section*

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

B1020.06 Roof Construction Fireproofing - 1962 Section*

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	50	NOV-07

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 1958 Section*

Accents of the original brick cladding is located at the main entrance (east Elevation)

Rating	Installed	Design Life	Updated
5 - Good	1958	75	NOV-07

B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 1962 Section*

Accents of the original brick cladding is located around the 1962 Section of the school.

Rating	Installed	Design Life	Updated
5 - Good	1962	75	NOV-07

B2010.01.05 Exterior Insulation and Finish Systems (EIFS) - All*

The majority of the exterior walls have been recladded with a exterior insulation and finish systems (EIFS).

Rating	Installed	Design Life	Updated
5 - Good	1997	75	NOV-07

B2010.01.06.03 Metal Siding -All**

Pre-finished metal siding is located above the main entrances..

Rating	Installed	Design Life	Updated
5 - Good	1997	40	NOV-07

Event: Replace metal siding

Type	Year	Cost	Priority
Lifecycle Replacement	2037	$17,160	Unassigned

Updated: APR-08

B2010.01.09 Expansion Control: Exterior Wall Skin - All*

Expansion/control joints are located throughout the cladding assembly.

Rating	Installed	Design Life	Updated
5 - Good	1997	75	NOV-07

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

Sealant is located around all window, door and exterior cladding assemblies.

Rating	Installed	Design Life	Updated
5 - Good	1997	20	NOV-07

Event: Replace exterior joint sealant.

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$34,320	Unassigned

Updated: APR-08

B2010.01.13 Paints (& Stains): Exterior Wall - All**

The exterior insulation and finish systems (EIFS) has a paint finish.

Rating	Installed	Design Life	Updated
5 - Good	1997	15	NOV-07

Event: Repaint EFIS assembly

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$91,520	Unassigned

Updated: APR-08

B2010.02.05 Wood Framing : Ext. Wall Const. - 1958 Section*

The interior face of the exterior walls has a wood frame wall assembly.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	100	NOV-07

B2010.02.05 Wood Framing : Ext. Wall Const. - 1962 Section*

The interior face of the exterior walls has a wood frame wall assembly.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	100	NOV-07

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation - 1958 Section*

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	100	NOV-07

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation - 1962 Section*

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	100	NOV-07

B2010.09 Exterior Soffits - 1958 Section *

The exterior soffit above the main entrance (F1) has a prefinished aluminum finish.

Rating	Installed	Design Life	Updated
5 - Good	1997	50	NOV-07

B2010.09 Exterior Soffits - 1962 Section*

The exterior soffits above each entrance has a stucco finish.

Rating	Installed	Design Life	Updated
5 - Good	1997	50	NOV-07

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

The exterior window units are double glazed aluminum frame with operable awning units & fixed glazed panels. The windows have metal screens attached to the outside structure.

Rating	Installed	Design Life	Updated
5 - Good	1997	40	NOV-07

Event: Replace Aluminum Windows - All (100 units)

Type	Year	Cost	Priority
Lifecycle Replacement	2037	$205,920	Unassigned

Updated: APR-08

B2030.01.02 Steel-Framed Storefronts: Doors - All **

The majority of the exterior doors have painted steel doors & frames with GWG glazed panel inserts.

Rating	Installed	Design Life	Updated
5 - Good	1997	30	NOV-07

Event: Replace Exterior Doors - 17 doors

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$58,344	Unassigned

Updated: APR-08

B3010.01 Deck Vapor Retarder and Insulation - 1958 Section*

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	25	NOV-07

B3010.01 Deck Vapor Retarder and Insulation - 1962 Section*

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	25	NOV-07

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

The entire roof has a modified bituminous membrane roof assembly (SBS).

Rating	Installed	Design Life	Updated
5 - Good	1997	25	NOV-07

Event: Replace SBS Roof assembly - Area - 2200m2

Type	Year	Cost	Priority
Lifecycle Replacement	2022	$343,200	Unassigned

Updated: APR-08

B3020.02 Other Roofing Openings (Hatch,Vent, etc) - 1958 Section*

There is one metal half door hatch that provides access to the roof.

Rating	Installed	Design Life	Updated
5 - Good	1997	25	NOV-07

S3 INTERIOR

C1010.01.07 Framed Partitions (Stud) -

Interior partitions typically consist of wood framed walls with gypsum wallboard.

Rating	Installed	Design Life	Updated
5 - Good	1958	100	NOV-07

C1010.05 Interior Windows - *

Interior glazed windows are located throughout the administrative area, computer room and library.

Rating	Installed	Design Life	Updated
5 - Good	1958	80	NOV-07

C1010.07 Interior Partition Firestopping - *

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

C1020.01 Interior Swinging Doors (& Hardware) - *

The interior swing doors generally consist of solid core doors with a paint finish in a painted steel frames. Several of the original doors & frames do not have a fire rated label.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	40	NOV-07

C1020.03 Interior Fire Doors - *

Painted steel fire doors are located in the corridors. The majority of the doors are rated and labeled.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

C1030.01 Visual Display Boards - **

Tackboards and whiteboards are located in each classroom area.

Rating	Installed	Design Life	Updated
5 - Good	1997	20	NOV-07

Event: Replace Visual Display Boards

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$57,200	Unassigned

Updated: APR-08

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

Prefinished metal washroom partitions are located in all boy's & girl's washrooms.

Rating	Installed	Design Life	Updated
5 - Good	1997	30	NOV-07

Event: Replace toilet partitions

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$22,880	Unassigned

Updated: APR-08

C1030.08 Interior Identifying Devices - *

Signage panels are located above each classroom entrance and the room number located above & on the interior doors

Rating	Installed	Design Life	Updated
5 - Good	1997	20	NOV-07

C1030.12 Storage Shelving - *

Clear finish plywood storage shelving throughout the school

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	30	NOV-07

C1030.14 Toilet, Bath, and Laundry Accessories - *

The washrooms are equipped with typical washroom accessories: Paper towel dispensers, toilet paper dispensers, hand-soap dispensers, waste bins and mirrors.

Rating	Installed	Design Life	Updated
5 - Good	1997	20	NOV-07

C2010 Stair Construction*

The majority of the stairwells typically have a steel stair with concrete infill panels. The stair to the mechanical room is an open steel structure.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	NOV-07

C2020.05 Resilient Stair Finishes -Sheet Vinyl**

The stairwells throughout the school have a sheet vinyl floor finish with rubber nosing.

Rating	Installed	Design Life	Updated
5 - Good	1997	20	NOV-07

Event: Replace sheet vinyl flooring

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$27,456	Unassigned

Updated: NOV-07

C2020.08 Stair Railings and Balustrades*

The stairwells have a double steel handrail with a paint finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	40	NOV-07

C2030.01 Ramp Construction*

There are several ramps located throughout the school corridors. The ramp appears to be constructed in wood framing.

Rating	Installed	Design Life	Updated
5 - Good	1997	100	NOV-07

C2030.02 Ramp Finishes*

The ramps are finished with carpeting

Rating	Installed	Design Life	Updated
5 - Good	1997	30	NOV-07

C2030.03 Ramp Railings*

Each ramp has painted steel handrails.

Rating	Installed	Design Life	Updated
5 - Good	1997	50	NOV-07

C3010.06 Tile Wall Finishes - Ceramic**

Ceramic tile wall finish is located throughout the washroom walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	40	NOV-07

Event: Replace ceramic wall tile in washrooms

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$68,640	Unassigned

Updated: APR-08

C3010.09 Acoustical Wall Treatment - **

Acoustical wall panels are located in the music rooms and in the gymnasium.

Rating	Installed	Design Life	Updated
5 - Good	2003	20	NOV-07

Event: Replace Acoustical Wall Panels

Type	Year	Cost	Priority
Lifecycle Replacement	2023	$68,640	Unassigned

Updated: APR-08

C3010.11 Interior Wall Painting - *

The interior partitions throughout the school have a paint finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	15	NOV-07

C3020.01.02 Paint Concrete Floor Finishes*

Painted concrete floors are located in the utility room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	10	NOV-07

C3020.02 Tile Floor Finishes - Ceramic**

Original ceramic floor tile is located in several washroom areas.

Rating	Installed	Design Life	Updated
5 - Good	1962	50	NOV-07

Event: Replace ceramic tile in washrooms (100m2)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$45,760	Unassigned

Updated: APR-08

C3020.04 Wood Flooring**

Hardwood flooring is located in the gymnasium & stage area.

Rating	Installed	Design Life	Updated
5 - Good	1997	30	NOV-07

Event: Replace hardwood flooring in the gym & stage area (600m2)

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$68,640	Unassigned

Updated: NOV-07

C3020.07 Resilient Flooring - Sheet Vinyl**

Rating	Installed	Design Life	Updated
5 - Good	1997	20	NOV-07

Event: Replace sheet vinyl (1400m2)

Concern:
Sheet Vinyl is located throughout the corridors and classrooms.

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$171,600	Unassigned

Updated: APR-08

C3020.08 Carpet Flooring - **

Carpeting is located in the majority of the classrooms, entrance vestibules, library & in the administration areas.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	15	NOV-07

Event: Replace Carpet Flooring (1600m2)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$102,960	Unassigned

Updated: APR-08

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

The majority of the ceilings have a 2'-0"x4'-0"suspended acoustical tile assembly.

Rating	Installed	Design Life	Updated
5 - Good	1997	25	NOV-07

Event: Replace Acoustic Ceiling (3000m2)

Type	Year	Cost	Priority
Lifecycle Replacement	2022	$217,360	Unassigned

Updated: APR-08

C3030.07 Interior Ceiling Painting - *

All the gypsum board ceiling in the vestibules have a paint finish.

Rating	Installed	Design Life	Updated
5 - Good	1997	20	NOV-07

D1010.01.02 Hydraulic Passenger Elevators**

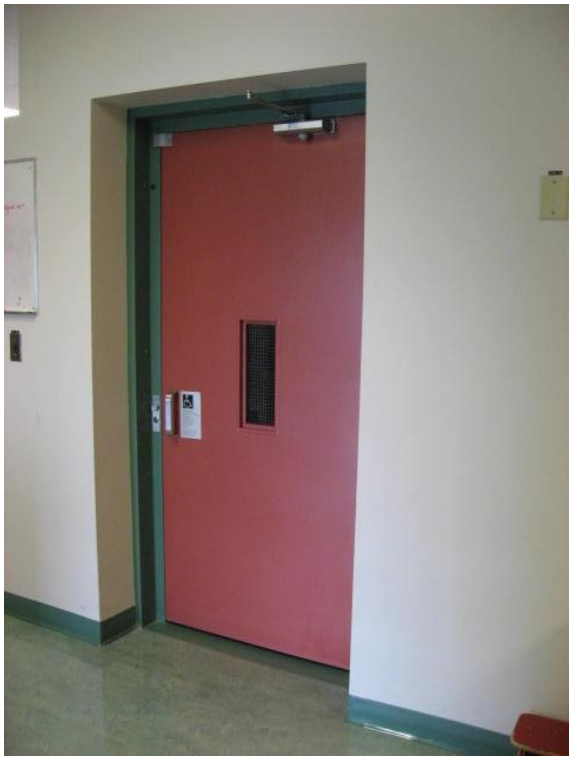
Two Robertson hydraulic elevators - 750# capacity, size 914 x 1372 mm with manually operated doors.

Rating	Installed	Design Life	Updated
5 - Good	1995	30	NOV-07

Event: Refurbish Hydraulic Passenger Elevator

Type	Year	Cost	Priority
Lifecycle Replacement	2025	$114,400	Unassigned

Updated: APR-08



Passenger elevator - Entrance F2

D1010.02 Lifts**

A Robertson open wheelchair lift (hydraulic) is located at the main entrance. The lift was out of service during the site inspection.

Rating	Installed	Design Life	Updated
3 - Marginal	1995	25	NOV-07

Event: Repair Lift

Concern:
The lift is currently out of service.
Recommendation:
Repair lift for service.

Type	Year	Cost	Priority
Repair	2008	$3,432	Low

Updated: APR-08

Event: Replace Lift at main entrance

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$28,600	Unassigned

Updated: NOV-07

Lift at main entrance (F1) East elevation

S4 MECHANICAL

D2010.04 Sinks - c.1958**

There are two original c.1958 janitor sinks in the original c.1958 building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	30	NOV-07

Event: Replace janitor sinks (2)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$4,576	Unassigned

Updated: APR-08

Event: Replace the two c.1958 janitor sinks in the c.1958 original building with floor level mop sinks

Concern:

The existing janitor sinks are difficult for school staff to use since they require lifting buckets of water to the height of the sink.

Recommendation:

Replace the existing janitor sinks with floor level mop sinks.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2008	$4,576	Low

Updated: NOV-07

D2010.04 Sinks - c.1962**

There are ten original c.1962 sinks in the c.1962 building addition. Typical sinks include stainless steel general purpose sinks (8) and enameled steel janitor sinks (2).

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	30	NOV-07

Event: Replace the eight general purpose stainless steel sinks in the c.1962 building addition

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$10,982	Unassigned

Updated: NOV-07

Event: Replace the two janitor sinks in the c.1962 building addition with floor level mop sinks

Concern:
The existing janitor sinks are difficult for school staff to use since they require lifting buckets of water to the height of the sink.

Recommendation:
Replace the existing janitor sinks with floor level mop sinks.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2008	$4,576	Low

Updated: NOV-07

D2010.04 Sinks - c.1997**

There are 11 stainless steel general purpose sinks in the original c.1958 building which were replaced as part of the c.1997 modernization.

Rating	Installed	Design Life	Updated
5 - Good	1997	30	NOV-07

Event: Replace the 11 c.1997 general purpose stainless steel sinks in the c.1958 original building

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$14,872	Unassigned

Updated: NOV-07

D2010.08 Drinking Fountains / Coolers - c.1958**

There are three original drinking fountains in the c.1958 original building. The drinking fountains are typically wall mounted vitreous china units which are not equipped with coolers.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	35	NOV-07

Event: Replace the three drinking fountains in the c.1958 original building

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$3,432	Unassigned

Updated: NOV-07

D2010.08 Drinking Fountains / Coolers - c.1962**

There are nine original drinking fountains in the c.1962 original building. The drinking fountains are typically wall mounted vitreous china units which are not equipped with coolers.

Rating	Installed	Design Life	Updated
3 - Marginal	1962	35	NOV-07

Event: Replace the seven classroom drinking fountains in the c.1962 building addition

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$8,008	Unassigned

Updated: NOV-07

Event: Replace the two corridor drinking fountains in the c.1962 building addition

Concern:

The two corridor drinking fountains in the c.1962 building addition are in poor condition, and exhibit excessive wear, water leakage, and/or significantly deteriorated mechanical components.

Recommendation:

Replace the two corridor drinking fountains in the c.1962 building addition.

Type	Year	Cost	Priority
Failure Replacement	2008	$2,288	Low

Updated: NOV-07

D2010.10 Washroom Fixtures (WC, Lav, Urnl) - c.1958**

Original c.1958 washroom plumbing fixtures in the c.1958 original building include six floor mount tank type urinals.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	35	NOV-07

Event: Replace six c.1958 urinals in the c.1958 original building

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$13,728	Unassigned

Updated: NOV-07

D2010.10 Washroom Fixtures (WC, Lav, Urnl) - c.1962**

Original c.1962 plumbing fixtures in the c.1962 building addition include ten lavatories, eight toilets and four urinals. The lavatories are typically wall mounted vitreous china units, the toilets are typically floor mounted vitreous china tank type units, and the urinals are typically floor mounted vitreous china tank type units.

Rating	Installed	Design Life	Updated
3 - Marginal	1962	35	NOV-07

Event: Replace ten lavatories in the c.1962 building addition

Concern:

The lavatories in the c.1962 building addition have been identified as being in poor condition due to cracked or damaged vitreous china components, water leakage, and/or significantly deteriorated mechanical components.

Recommendation:

Replace the ten original lavatories in the c.1962 building addition (four lavatories in room 64, four lavatories in room 67, one lavatory in room 65, and one lavatory in room 68).

Type	Year	Cost	Priority
Failure Replacement	2009	$13,728	Low

Updated: NOV-07

Event: Replace the original c.1962 washroom plumbing fixtures in the c.1962 building addition, excluding the lavatories (includes eight toilets and four urinals)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$24,024	Unassigned

Updated: NOV-07

D2010.10 Washroom Fixtures (WC, Lav, Urnl) - c.1997**

Toilets and lavatories in the c.1958 original building were replaced as part of the c.1997 modernization. These fixtures include 18 floor mounted vitreous china tank type toilets and 18 counter mounted lavatories (one stainless steel and 17 enameled steel).

Rating	Installed	Design Life	Updated
5 - Good	1997	35	NOV-07

Event: Replace the c.1997 washroom plumbing fixtures in the c.1958 original building (18 toilets and 18 lavatories)

Type	Year	Cost	Priority
Lifecycle Replacement	2032	$57,200	Unassigned

Updated: NOV-07

D2020.01.01 Pipes and Tubes: Domestic Water*

There is one 50 mm diameter domestic water supply to the building located in the original boiler room (room 35). The water supply is metered and no backflow prevention devices were visible. Water piping in the building is generally copper.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	40	NOV-07

D2020.01.02 Valves: Domestic Water**

Domestic water system valves include zone isolating valves and fixture isolating valves. The domestic water system valves in the c.1958 original buildingare generally brass with soldered connections.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	40	NOV-07

Event: Replace the domestic water distribution system valves

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$34,320	Unassigned

Updated: NOV-07

D2020.01.03 Piping Specialties (Backflow Preventors) - **

Backflow prevention devices are provided for the boiler make-up water supply lines in the two boiler rooms (room 35 in the c.1958 original building and room 63 in the c.1962 building addition). There is no backflow prevention device on the municipal water supply to the building.

Rating	Installed	Design Life	Updated
3 - Marginal	1997	20	NOV-07

Event: Install a backflow prevention device on the municipal water supply to the building

Concern:
The municipal water supply is not protected from potential backflow from the building.

Recommendation:
Install a backflow prevention device on the municipal water supply to the building.

Type	Year	Cost	Priority
Code Upgrade	2008	$9,152	Low

Updated: NOV-07

Event: Replace the two backflow prevention devices for the boiler make-up water supply lines

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$2,288	Unassigned

Updated: NOV-07

D2020.02.02 Plumbing Pumps: Domestic Water - **

There is a domestic hot water circulation pump (P4) located in the c.1958 boiler room (room 35), which circulates domestic hot water to keep the domestic hot water loop at temperature.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	20	NOV-07

Event: Replace the DHW circulation pump P4 in the c.1958 boiler room (room 35)

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$3,432	Unassigned

Updated: APR-08

D2020.02.06 Domestic Water Heaters - c.1962**

A Ruud Manufacturing Company natural gas fired domestic hot water heater (model CL80-80) located in the c.1962 building addition boiler room (room 63), provides domestic hot water for the building addition student and staff washrooms, and for the building addition sinks. The DHW heater has a capacity of 254 L and an input heating capacity of 95,200 Btu/h.

Rating	Installed	Design Life	Updated
3 - Marginal	1962	20	NOV-07

Event: Replace the domestic hot water heater in the c.1962 building addition boiler room (room 63)

Concern:
The reliability of the domestic hot water heater in the c.1962 building addition is poor due to the age and poor condition of the unit.

Recommendation:
Replace the domestic hot water heater in the c.1962 building addition boiler room (room 63).

Type	Year	Cost	Priority
Failure Replacement	2009	$4,576	Medium

Updated: NOV-07

D2020.02.06 Domestic Water Heaters - c.1997**

A State Industries Inc. natural gas fired domestic hot water heater (model SBT100199NET96ODCGA) located in the c.1958 original building boiler room (room 35), provides domestic hot water for the original building student and staff washrooms, and for the original building sinks. The DHW heater has a capacity of 379 L and an input heating capacity of 180,000 Btu/h.

Rating	Installed	Design Life	Updated
5 - Good	1997	20	NOV-07

Event: Replace the domestic hot water heater in the c.1958 original building boiler room (room 35)

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$4,576	Unassigned

Updated: NOV-07

D2020.03 Water Supply Insulation: Domestic - *

The domestic hot water lines are insulated to prevent heat loss and the domestic cold water lines are insulated to prevent condensation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	40	NOV-07

D2030.01 Waste and Vent Piping - *

Waste and vent piping in the building is generally cast iron in larger diameters and copper in smaller diameters.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

D2040.01 Rain Water Drainage Piping Systems - *

The building flat roof areas are drained by standard roof drains which discharge to the municipal storm sewer system via internal storm drainage piping. The storm drainage piping is generally cast iron. In the c.1962 building addition boiler room (room 63), there is a storm drainage sump pit equipped with a sump pump.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

D2040.02.04 Roof Drains - *

The flat roof areas of the building are drained by standard roof drains equipped with strainers.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	40	NOV-07

D3010.02 Gas Supply Systems - *

Natural gas is provided to the building underground to the c.1958 original building boiler room (room 35), where the gas meter is located. Natural gas pressure reducing stations are located in the c.1958 original building boiler room (room 35), and in the c.1962 building addition boiler room (room 63). The natural gas piping is steel.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	60	NOV-07

D3020.02.01 Heating Boilers and Accessories: H.W. - c.1962**

The boiler serving the c.1962 building addition is located in the boiler room (room 63). The natural gas fired boiler is a National-US model 12-66 with an input heating capacity of 2,750,000 Btu/h.

Rating	Installed	Design Life	Updated
3 - Marginal	1962	35	NOV-07

Event: Replace the hot water heating boiler in the c.1962 building addition boiler room (room 63)

Concern:

The reliability of the hot water heating boiler in the c.1962 building addition is poor due to the age and poor condition of the unit.

Recommendation:

Replace the hot water heating boiler in the c.1962 building addition boiler room (room 63).

Type	Year	Cost	Priority
Failure Replacement	2009	$51,480	Medium

Updated: NOV-07

D3020.02.01 Heating Boilers and Accessories: H.W. - c.1997**

The boiler serving the c.1958 original building is located in the boiler room (room 35). The boiler was replaced as part of the c.1997 modernization. The natural gas fired boiler is a Raytherm model E2100 T-N-2P with an input heating capacity of 1,890,000 Btu/h.

Rating	Installed	Design Life	Updated
5 - Good	1997	35	NOV-07

Event: Replace the c.1997 hot water boiler serving the c.1958 original building (located in boiler room 35)

Type	Year	Cost	Priority
Lifecycle Replacement	2032	$51,480	Unassigned

Updated: NOV-07

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

The hot water boilers have individual discharge stacks for combustion gases.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	35	NOV-07

Event: Replace the two heating boiler discharge stacks

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$20,592	Unassigned

Updated: APR-08

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

The c.1958 original building and c.1962 building addition have independent closed loop hot water heating systems. The hot water heating loops have chemical pot feeders for the manual addition of chemicals for water treatment, as well as side stream filtration systems.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	30	NOV-07

D3040.01.01 Air Handling Units: Air Distribution - c.1962**

The air handling unit serving the c.1962 building addition is located in the c.1962 building addition boiler room (room 63). This original Trane air handling unit has an estimated capacity of 3,500 cfm (1,652 L/s) and is equipped for hot water heating. This air handling unit provides fresh air (it is not a mixed air system).

Rating	Installed	Design Life	Updated
3 - Marginal	1962	30	NOV-07

Event: Replace the c.1962 building addition air handling unit with a new unit sized to provide an increased fresh air supply, including a new glycol heating loop for the AHU heating coil

Concern:

There were general complaints about the air flow and air quality in the building.

Recommendation:

Replace the c.1962 building addition air handling unit with a new unit sized to provide an increased fresh air supply. Include the installation of a glycol heating loop for the new air handling unit heating coil.

Type	Year	Cost	Priority
Failure Replacement	2008	$137,280	Low

Updated: APR-08

D3040.01.01 Air Handling Units: Air Distribution - c.1997**

There are two air handling units serving the c.1958 original building. Air handling unit AHU1, located in the boiler room (room 35), provides heating and ventilation for the original building excluding the gymnasium. This air handling unit (Engineered Air model LM-10-C) is a mixed air system equipped with filters and a glycol heating coil, and has a capacity of 10,800 cfm (5,098 L/s). Air handling unit AHU2, located in the stage area of the gymnasium (room 31), provides heating and ventilation for the gymnasium. This air handling unit (Engineered Air model LM-4-L) is a fresh air system equipped with filters and glycol preheating and heating coils. Air handling unit AHU2 has a capacity of 4,000 cfm (1,888 L/s).

Rating	Installed	Design Life	Updated
5 - Good	1997	30	NOV-07

Event: Replace air handling units AHU1 and AHU2 serving the c.1958 original building

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$102,960	Unassigned

Updated: NOV-07

D3040.01.02 Fans: Air Distribution (Remote from AHU) - *

Air distribution fans remote from the air handling units include the return air fan associated with air handling unit AHU1. This return air fan is located in the c.1958 original building boiler room (room 35).

Rating	Installed	Design Life	Updated
5 - Good	1997	30	NOV-07

D3040.01.04 Ducts: Air Distribution - *

Air distribution ducts include the supply air duct systems for the three air handling units (two serving the c.1958 original building and one serving the c.1962 building addition), as well as the return air duct system for the return air system for AHU1 in the c.1958 original building. In addition to the air distribution ducts, the duct systems include components not specifically listed elsewhere, including duct insulation, turning vanes, dampers, etc., as applicable.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

D3040.01.07 Air Outlets & Inlets:Air Distribution - *

Air outlets and inlets include air distribution system supply air diffusers and return air grilles.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	30	NOV-07

D3040.03.01 Hot Water Distribution Systems - Glycol c.1997**

As part of the c.1997 modernization, a glycol heating loop was added in the c.1958 original building to provide heating for the glycol coils in the new air handling units (AU1 and AHU2). The closed loop glycol heating system includes the glycol piping, insulation, valves, piping specialties, expansion tank, and circulation pump (P3). The glycol circulation pump and the glycol expansion tank are located in the c.1958 original building boiler room (room 35).

Rating	Installed	Design Life	Updated
6 - Excellent	1997	40	NOV-07

Event: Replace the glycol distribution system in the c.1958 original building

Type	Year	Cost	Priority
Lifecycle Replacement	2037	$68,640	Unassigned

Updated: NOV-07

D3040.03.01 Hot Water Distribution Systems - c.1958**

Primary heating in the c.1958 original building is provided by a hot water heating system supplying various hydronic terminal units including convectors, fin tube radiation cabinets, and unit heaters. The closed loop hot water heating system includes the hot water piping, insulation, valves, piping specialties, expansion tank, and circulation pumps. The hot water circulation pumps (P1 and P2) and the hot water expansion tank located in the c.1958 original building boiler room (room 35), were replaced in c.1997, although most of the hot water system components are original.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	40	NOV-07

Event: Replace the hot water distribution system in the c.1958 original building

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$217,360	Unassigned

Updated: NOV-07

D3040.03.01 Hot Water Distribution Systems - c.1962**

Primary heating in the c.1962 building addition is provided by a hot water heating system supplying various hydronic terminal units including convectors, fin tube radiation cabinets, and an air coil. The closed loop hot water heating system includes the hot water piping, insulation, valves, piping specialties, expansion tank, and circulation pumps. The hot water circulation pumps and the hot water expansion tank are located in the c.1962 building addition boiler room (room 63).

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	40	NOV-07

Event: Replace the hot water distribution system in the c.1962 building addition

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$108,680	Unassigned

Updated: NOV-07

D3040.04.01 Fans: Exhaust - **

There are numerous exhaust fans providing ventilation for the c.1958 original building, including two roof mounted sanitary exhaust fans, one roof mounted gymnasium exhaust fan, and seven local sanitary and general exhaust fans (ceiling type). For the c.1962 building addition, there is a sanitary exhaust fan (EF13), and two general exhaust fans (EF14 and EF15).

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	30	NOV-07

Event: Replace the building exhaust fans (13)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$35,464	Unassigned

Updated: APR-08

D3040.04.03 Ducts: Exhaust - *

Most of the building exhaust fans have associated duct systems for the collection of air from single or multiple source locations and for the discharge of the air to the exterior of the building. The exhaust duct systems include related components not specified elsewhere, including duct insulation and dampers, as applicable.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

D3040.04.05 Air Outlets and Inlets: Exhaust - *

Exhaust outlets and inlets include collection grilles and diffusers, as well as exhaust louvres where applicable.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	30	NOV-07

D3040.05 Heat Exchangers**

There is a shell and tube type hot water to glycol heat exchanger which provides heating for the glycol loop in the c.1958 original building, using hot water from the heating boiler.

Rating	Installed	Design Life	Updated
5 - Good	1997	30	NOV-07

Event: Replace the hot water to glycol heat exchanger in the c.1958 original building boiler room (room 35)

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$17,160	Unassigned

Updated: NOV-07

D3050.02 Air Coils - c.1962**

There is a hot water preheat coil for the combustion air supply to the c.1962 building addition boiler room (room 63).

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	30	NOV-07

Event: Replace the combustion air preheat coil in the c.1962 building addition boiler room (room 63)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$4,576	Unassigned

Updated: APR-08

D3050.05.01 Convectors - c.1958**

Hydronic terminal units in the c.1958 original building include force flow convection cabinets used in high heat load areas such as stairwells and entrance vestibules.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	40	NOV-07

Event: Replace the convectors in the c.1958 original building (6)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$20,592	Unassigned

Updated: NOV-07

D3050.05.01 Convectors - c.1962**

Hydronic terminal units in the c.1962 building addition include force flow convection cabinets used in high heat load areas such as stairwells and entrance vestibules.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	40	NOV-07

Event: Replace the convectors in the c.1962 building addition (6)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$20,592	Unassigned

Updated: NOV-07

D3050.05.03 Finned Tube Radiation - c.1958**

Hydronic terminal units in the c.1958 original building include finned tube radiation cabinets used for perimeter heating.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	40	NOV-07

Event: Replace the perimeter finned tube radiation cabinets in the c.1958 original building

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$125,840	Unassigned

Updated: NOV-07

D3050.05.03 Finned Tube Radiation - c.1962**

Hydronic terminal units in the c.1962 building addition include finned tube radiation cabinets used for perimeter heating.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	40	NOV-07

Event: Replace the perimeter finned tube radiation cabinets in the c.1962 building addition

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$80,080	Unassigned

Updated: NOV-07

D3050.05.06 Unit Heaters - c.1958**

Hydronic terminal units in the c.1958 original building include unit heaters used in the gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	30	NOV-07

Event: Replace the two unit heaters used in the gymnasium

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$6,864	Unassigned

Updated: NOV-07

D3060.02.01 Electric and Electronic Controls**

Electric controls include electric thermostats for the convectors and unit heaters.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	NOV-07

Event: Replace the electric thermostats for the convectors and unit heaters

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$4,576	Unassigned

Updated: NOV-07

D3060.02.02 Pneumatic Controls - Control Air Supply System**

The control air supply systems is located in the c.1962 building addition boiler room (room 63) and consists of a receiver mounted air compressor.

Rating	Installed	Design Life	Updated
5 - Good	2001	40	NOV-07

Event: Replace the control air supply system in the c.1962 building addition boiler room (room 63)

Type	Year	Cost	Priority
Lifecycle Replacement	2041	$9,152	Unassigned

Updated: NOV-07

D3060.02.02 Pneumatic Controls**

HVAC equipment pneumatic controls include pneumatic actuators for control valve and damper operation. Pneumatic controls include the control air distribution system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	40	NOV-07

Event: Replace the HVAC control system pneumatic actuators

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$28,600	Unassigned

Updated: NOV-07

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

A Barber-Colman Network 8000 building management and control system (BMCS) has been installed to provide digital monitoring and control of the building mechanical equipment.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	20	NOV-07

Event: Investigate and rectify the heating system control problems

Concern:
There were numerous reports of heating system control problems, including areas where the temperature is too hot, too cold, or not controllable.

Recommendation:
Investigate and rectify the heating system control problems.

Type	Year	Cost	Priority
Repair	2008	$22,880	Low

Updated: APR-08

Event: Replace the Barber-Colman building management and control system

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$68,640	Unassigned

Updated: NOV-07

D4030.01 Fire Extinguisher, Cabinets and Accessories - *

Wall mounted fire extinguishers are located throughout the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	NOV-07

S5 ELECTRICAL

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

The incoming hydro service to Mayfield School is a 120/208V, 3-phase, 4-wire service from EPCOR pole-mounted transformers. The EPCOR meter is located in the main electrical room. The main electrical switchboard is a Federal Pioneer switchboard rated at 600A, 120/208V, 3-phase, 4-wire. The switchboard has a 600A, CMH 3600E main breaker and a distribution section with breakers feeding seven branch circuit panels, AHU-1, car plugs and the Tycor surge suppressor for the panel.

Rating	Installed	Design Life	Updated
5 - Good	1997	40	NOV-07

Event: Replace Main Electrical Switchboard

Type	Year	Cost	Priority
Lifecycle Replacement	2037	$22,880	Unassigned

Updated: APR-08

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution) - 1962**

Panel P located in the 1962 wing mechanical room is an original Westinghouse branch circuit panelboard.

Rating	Installed	Design Life	Updated
3 - Marginal	1962	30	NOV-07

Event: Replace Westinghouse Panel P

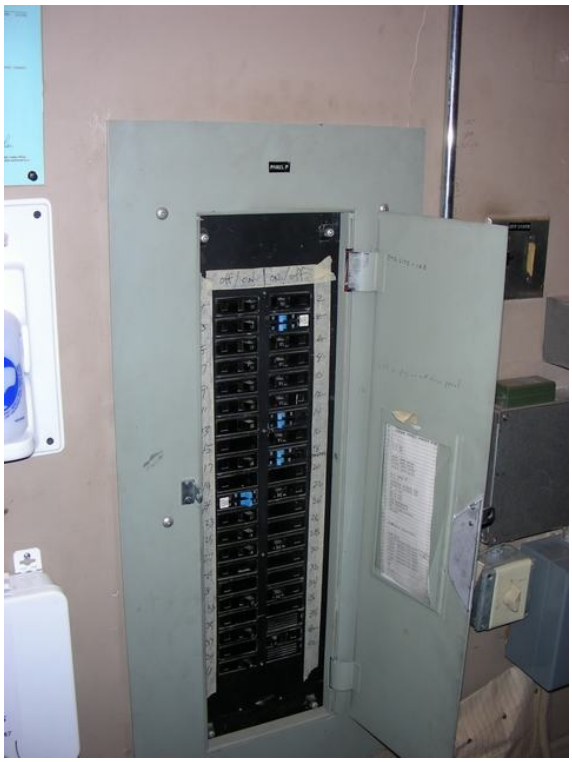
Concern:
Panel P (1962) is at the end of its life expectancy. Over the life of the panel, breaker contacts become worn and the breakers will no longer operate correctly and may trip unnecessarily. Older panels do not readily accept newer style breakers.

Recommendation:
Replace aged panelboards and reconnect branch circuit wiring.

Consequences of Deferral:
Deferring replacement could lead to partial power outages and intermittent tripping of breakers as well as increased maintenance costs.

Type	Year	Cost	Priority
Failure Replacement	2008	$4,576	Low

Updated: NOV-07



Aged Westinghouse panel P.

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

The majority of the electrical branch circuit panelboards within the school are new Federal Pioneer panels installed during the 1997 modernization.

Rating	Installed	Design Life	Updated
5 - Good	1997	30	NOV-07

Event: Replace Electrical Branch Circuit Panelboards

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$40,040	Unassigned

Updated: APR-08

D5010.07.02 Motor Starters and Accessories**

The majority of the starters are individual Telemechanique motor starters installed during the 1997 modernization.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	NOV-07

Event: Replace Motor Starters and Accessories

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$8,008	Unassigned

Updated: APR-08

D5020.01 Electrical Branch Wiring - 1962*

Approximately 10% of the branch wiring was not replaced during the 1997 modernization.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	50	NOV-07

D5020.01 Electrical Branch Wiring*

The majority of the cabling is standard building wire in EMT conduit. Armoured cable has been provided, in selected locations, for final connections to mechanical and miscellaneous equipment.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	50	NOV-07

D5020.02.01 Lighting Accessories (Lighting Controls)*

Standard 120V light switches are used within the classrooms. Corridor lighting is on keyed switches.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	NOV-07

D5020.02.02.01 Interior Incandescent Fixtures*

There are some incandescent lamps in porcelain bases in service rooms. Four incandescent low bay fixtures (on dimmers) with acrylic lenses have been provided in the gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	NOV-07

D5020.02.02.02 Interior Florescent Fixtures**

The standard lighting fixtures used throughout the school are 1 ft. x 4 ft. or 2 ft. x 4 ft. recessed, fluorescent fixtures. In some areas a deep cell parabolic lens has been provided for the fixture. Surface mounted fluorescent wrap-around fixtures have been provided in the corridors. The fluorescent fixtures typically have been provided with T8 lamps and electronic ballasts.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	NOV-07

Event: Replace Interior Florescent Fixtures

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$208,208	Unassigned

Updated: APR-08

D5020.02.02.03 Interior Metal Halide Fixture*

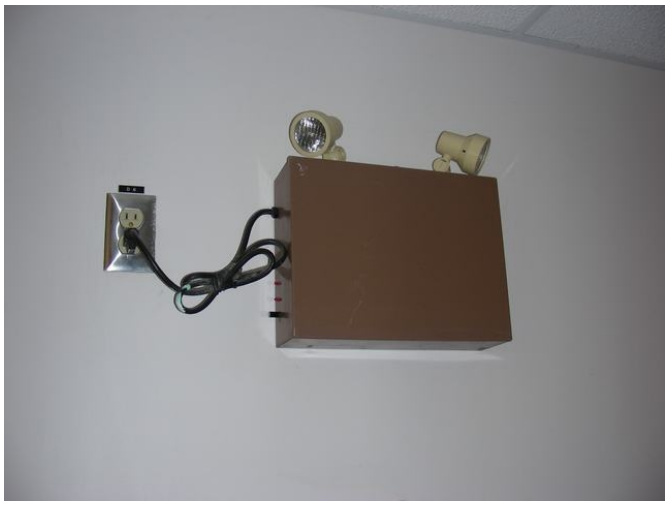
Twelve metal halide fixtures low bay fixtures with acrylic lenses have been provided in the gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	NOV-07

D5020.02.03.02 Emergency Lighting Battery Packs - 1962**

There are some older emergency lighting battery packs within the school that were not upgraded during the 1997 modernization.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	20	NOV-07



Aged emergency lighting battery pack.

Event: Replace Aged Emergency Lighting Battery Packs

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$3,432	Unassigned

Updated: NOV-07

D5020.02.03.02 Emergency Lighting Battery Packs - 1997**

Emergency lighting battery packs with lexan cube enclosures for the emergency lighting heads have been provided.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	20	NOV-07

Event: Replace Emergency Lighting Battery Packs

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$11,440	Unassigned

Updated: APR-08

D5020.02.03.03 Exit Signs*

The exit signs within the school are LED type.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	NOV-07

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

The exterior lighting for the school consists of HID wallpack and floodlighting fixtures. Surface mounted round fixtures with acrylic lenses are provided in some locations.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	NOV-07

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

A timer and relays have been provided for control of the exterior lighting. An override switch has been provided with the control system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	NOV-07

D5030.01 Detection and Fire Alarm**

The fire alarm system is an Edwards 6632 system that was installed in 1991. The main fire alarm control panel is located in the general office area. There is a remote annunciator at the main entrance. Fire alarm bells (some with strobes) are located throughout the school. Duct mounted smoke detection has been provided for air handling systems.

Rating	Installed	Design Life	Updated
4 - Acceptable	1991	25	NOV-07

Event: Replace Fire Alarm System

Type	Year	Cost	Priority
Lifecycle Replacement	2016	$62,920	Unassigned

Updated: APR-08

D5030.02.02 Intrusion Detection**

The security system is a Magnum Alert system with the main panel located in electrical room 18. A security system keypad has been provided in the custodian's room and at the main entrance. PIR motion detectors have been provided throughout the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	25	NOV-07

Event: Replace Intrusion Detection

Type	Year	Cost	Priority
Lifecycle Replacement	2022	$22,880	Unassigned

Updated: APR-08

D5030.03 Clock and Program Systems*

The majority of the clocks within the school are battery operated. Wall mounted clocks in the school are manufactured by Westclox or Edwards.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	25	NOV-07

D5030.04.01 Telephone Systems*

The telephone system is a Nortel Meridian system. Meridian telephone handsets are located in the classrooms and selected areas such as the general office. The main telephone equipment is located in electrical room 18.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	25	NOV-07

D5030.04.05 Local Area Network Systems*

The main server is located in electrical room 18. Cat. 5 cables are used for the network wiring within the school. Supernet has been installed in the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	15	NOV-07

D5030.05 Public Address and Music Systems**

The public address system is a Bogen Multicom 2000 system. The P.A. system panel is located in electrical room 18.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	20	NOV-07

Event: Replace Public Address and Music Systems

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$17,160	Unassigned

Updated: APR-08

D5030.06 Television Systems*

The cable television equipment is located in electrical room 18. Cable TV outlets are located in selected rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	20	NOV-07

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.04 Residential Equipment - *

Washers & dryers are located on the second floor utility room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	10	NOV-07

E1090.07 Athletic, Recreational, and Therapeutic Equipment - *

Fixed & movable basketball hoops are located in the gymnasium. A climbing apparatus is located on the south gym wall.

Rating	Installed	Design Life	Updated
5 - Good	1997	15	NOV-07

E2010.02 Fixed Casework - **

Each classroom is equipped with custom wood open faced and/or painted cabinet units along the exterior wall. The staff room has painted wood upper and lower cabinet units. The library has fixed and moveable wood shelving casework. Painted wood coat storage units are located in the corridors. Glass display cabinets are located in the main entrance area and in the corridors. The washrooms have plastic laminate counter tops.

Rating	Installed	Design Life	Updated
5 - Good	2003	35	NOV-07

Event: Replace Fixed Casework

Type	Year	Cost	Priority
Lifecycle Replacement	2038	$286,000	Unassigned

Updated: APR-08

E2010.03.01 Blinds - **

Vertical blinds are located on all exterior windows

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	NOV-07

Event: Replace Blinds (100 windows)

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$57,200	Unassigned

Updated: APR-08

F2020.01 Asbestos - *

An asbestos report was conducted by PHH Environmetal in December 2001 and provided by EDSB.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	0	NOV-07

F2020.04 Mould - *

No mould known or reported

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	0	NOV-07

F2020.09 Other Hazardous Materials - *

No hazardous material known or reported

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	0	NOV-07

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance - *

Barrier free access from the parking areas at the west end of the school is provided. Signage for a designated handicap parking space is provided.

Rating	Installed	Design Life	Updated
5 - Good	1997	0	NOV-07

K4010.02 Barrier Free Entrances - *

An automatic door entrance is provided at the main east entrance.

Rating	Installed	Design Life	Updated
5 - Good	1997	0	NOV-07

K4010.03 Barrier Free Interior Circulation - *

Barrier free access is provided to most areas throughout the school. A lift is provided at the main entrance, ramps are located throughout the corridors and an elevator is located at the south end of the school.

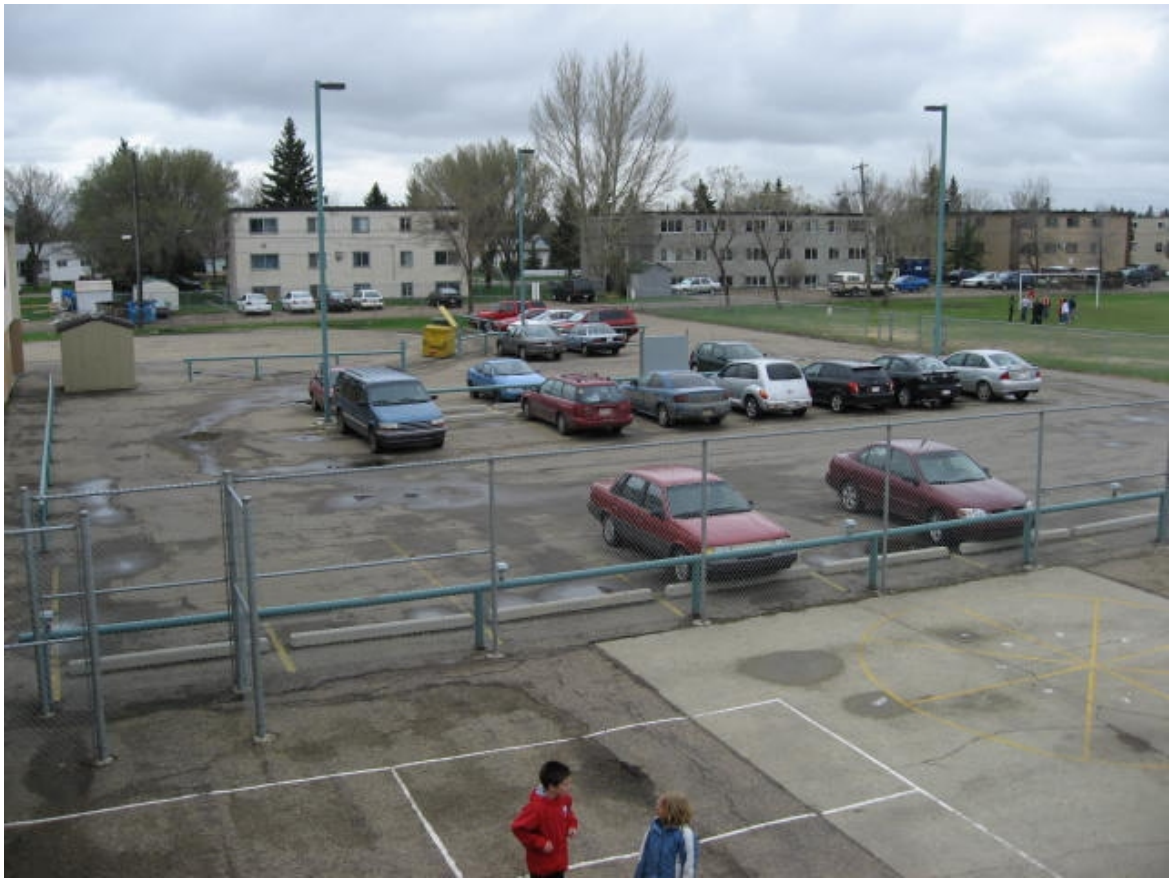
Rating	Installed	Design Life	Updated
5 - Good	1997	0	NOV-07

K4010.04 Barrier Free Washrooms - *

Barrier free washrooms are provided in several locations.

Rating	Installed	Design Life	Updated
5 - Good	1997	0	NOV-07

RECAPP Facility Evaluation Report



Mayfield School

S3207

Edmonton

Report run on: July 18, 2008 12:22 PM

Facility Details

Building Name: Mayfield School
Address:
Location: Edmonton

Building Id: S3207
Gross Area (sq. m): 0.00
Replacement Cost: $0
Construction Year: 0

Evaluation Details

Evaluation Company: Asset Evolution Incorporated (AEI)
Evaluation Date: May 9 2007
Evaluator Name: Mario Plastina

Total Maintenance Events Next 5 years: **$100,100**
5 year Facility Condition Index (FCI): **0%**

General Summary:

The site of Mayfield Elementary School (3.56 acres) includes an asphalt paved roadway & parking area accessible from 159th Street. A sodded playing field is located at the west end of the property. Grass, shrubs and trees are located along the north and east elevations of the school. An asphalt paved playground is located at the west end of the school. Pedestrian concrete walkways are located at all entrances to the school. Site drainage appears to slope away from the building with no problems indicated or observed.

Overall the site elements appeared to be in good condition, however repairs to the asphalt paved parking & playground areas are recommended.

Structural Summary:

Envelope Summary:

Interior Summary:

Mechanical Summary:

Electrical Summary:

Rating Guide

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

S7 SITE

G2010.02.02 Flexible Pavement Roadway (Asphalt) - **

An asphalt paved roadway to the main parking areas is accessible from 159 Street located at the east end of the site.

Rating	Installed	Design Life	Updated
4 - Acceptable	1999	25	NOV-07

Event: Replace Flexible Pavement Roadway

Type	Year	Cost	Priority
Lifecycle Replacement	2024	$22,880	Unassigned

Updated: APR-08

G2020.02.02 Flexible Paving Parking Lots(Asphalt) - **

The asphalt paved parking area on the east & west ends of the school accessible from 159th Street.

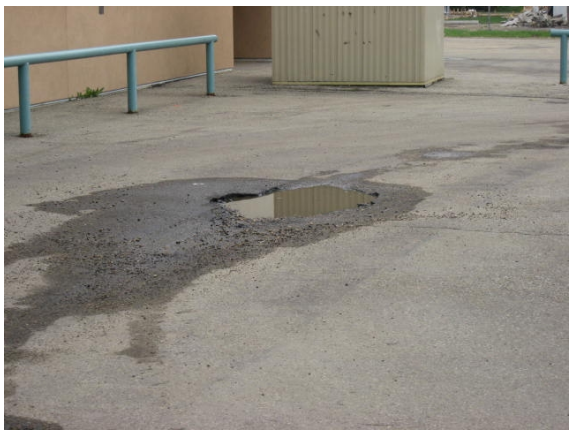
Rating	Installed	Design Life	Updated
3 - Marginal	1999	25	NOV-07

Event: Repair sinkholes & cracks in asphalt

Concern:
Sinkholes & cracks were observed in isolated areas throughout the asphalt paved parking area.
Recommendation:
Repair all damaged asphalt surfaces

Type	Year	Cost	Priority
Repair	2008	$11,440	Low

Updated: APR-08



Sinkhole in parking area.

Event: Replace Flexible Paving Parking Lots (3500SM)

Type	Year	Cost	Priority
Lifecycle Replacement	2024	$274,560	Unassigned

Updated: APR-08

G2020.05 Parking Lot Curbs and Gutters - *

The parking lot area has precast concrete curbs.

Rating	Installed	Design Life	Updated
4 - Acceptable	1999	25	NOV-07

G2020.06.02 Parking Bumpers - *

Painted steel parking bumpers are located at each parking stall.

Rating	Installed	Design Life	Updated
5 - Good	1958	25	NOV-07

G2020.06.03 Parking Lot Signs - *

Each parking bumper stall has a reference number.

Rating	Installed	Design Life	Updated
4 - Acceptable	1999	25	NOV-07

G2030.04 Rigid Pedestrian Pavement (Concrete) - **

Poured in place concrete walkways are located around the building and lead to all school entrances .

Rating	Installed	Design Life	Updated
5 - Good	1999	25	NOV-07

Event: **Replace concrete walkways**

Type	Year	Cost	Priority
Lifecycle Replacement	2024	$57,200	Unassigned

Updated: APR-08

G2040.02.01 Chain Link Fences and Gates*

A chain-link fence encloses parking area from the asphalt paved playground.

Rating	Installed	Design Life	Updated
5 - Good	1999	30	NOV-07

G2040.03 Athletic and Recreational Surfaces - **

An asphalt paved playground & a sodded playfield is located at the west end of the property.

Rating	Installed	Design Life	Updated
3 - Marginal	1999	25	NOV-07

Event: Repair damaged asphalt paved areas

Concern:
Severeal cracks were observed on the asphalt paved playground area.
Recommendation:
Repair all damaged areas & cracks.

Type	Year	Cost	Priority
Repair	2008	$8,580	Low

Updated: APR-08

Event: Replace asphalt paved playground area (1000m2)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$80,080	Unassigned

Updated: APR-08

G2040.05 Site and Street Furnishings - *

Bicycle racks are located along the east end of the school. Basketball hoops are located adjacent to the asphalt paved playground along the west elevation of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	15	NOV-07

G2040.06 Exterior Signs - *

Exterior wall-mounted signage is provided on the buildings main entrances. School signage is located on the east wall. A free-standing signage panel is located at the west elevation of the site.

Rating	Installed	Design Life	Updated
5 - Good	1958	25	NOV-07

G2040.08 Flagpoles - *

A flagpole is located on the east end of the site, adjacent to the main entrance.

Rating	Installed	Design Life	Updated
5 - Good	1958	30	NOV-07

G2050.04 Lawns and Grasses - *

Grassed areas are located along the north and west sides of the school.

Rating	Installed	Design Life	Updated
5 - Good	1999	15	NOV-07

G2050.05 Trees, Plants and Ground Covers - *

Small trees, shrubs and ground covered areas are located along the east side of the site.

Rating	Installed	Design Life	Updated
5 - Good	1958	10	NOV-07

G3010.02 Site Domestic Water Distribution - *

The building domestic water supply comes from the municipal water main on the street and enters the c.1958 original building boiler room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

G3020.01 Sanitary Sewage Collection - *

The building sanitary sewer discharges to the municipal sanitary sewer system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

G3030.01 Storm Water Collection - *

The building storm sewer discharges to a municipal storm sewer on the street. Catch basins on the site provide storm drainage for the paved parking areas and the grassed areas around the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

G3060.01 Gas Distribution - *

Natural gas is supplied to the building via underground piping to the c.1958 original building boiler room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1958	50	NOV-07

G4010.03 Electrical Power Distribution Equipment - *

A power distribution panel for car plug-ins is located in the parking lot for the school. The panel is located in a weatherproof enclosure.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	50	NOV-07

G4010.04 Car Plugs-ins - *

There are approximately 29 rail mounted car plug-ins each with two duplex receptacles.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	25	NOV-07

G4020.01 Area Lighting - *

There are three shoe box style pole mounted H.P.S. Fixtures that illuminate the parking area.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	25	NOV-07