

RECAPP Facility Evaluation Report

Edmonton School District No. 7



Stratford Academic High School

B3336A
Edmonton

Facility Details

Building Name: Stratford Academic High School
Address: 8715 - 153 Street
Location: Edmonton

Building Id: B3336A
Gross Area (sq. m): 6,267.00
Replacement Cost: \$17,195,395
Construction Year: 0

Evaluation Details

Evaluation Company: Asset Evolution Incorporated (AEI)
Evaluation Date: May 21 2008
Evaluator Name: Mario Plastina

Total Maintenance Events Next 5 years: **\$3,433,000**
5 year Facility Condition Index (FCI): **19.96%**

General Summary:

Stratford Elementary & Junior High School (originally Stratford Academic High School) is a two-storey building with a full basement. The school was built in 1964 and has a total building area of 6267m². The two storey school comprises of several classrooms, a gymnasium with a stage, a large student gathering area (cafeteria), a library, industrial arts room, 4 science rooms, a computer lab and ancillary room. The science rooms and art room in the basement were modernized in 1980. The home economics room was modernized in 1984. The main floor cafeteria/music room was modernized in 2005. In 1993 & 2005 major modifications were conducted throughout the school. Currently, a portion of the school is leased to the YMCA.

There are 410 students enrolled in the 2008 calendar year.

Structural Summary:

The foundations consist of cast-in-place concrete grade beams and spread footings. The basement has a cast-in-place concrete slabs-on-grade with conventional steel reinforcement. The floors have heavy timber glu laminated beams with a wood joist assembly supported by concrete block walls. The roof has heavy timber glu laminated beams with arched, flat purlins & solid wood decking. Canopies are located above each entrance. The canopies are framed in concrete with painted wood glu-laminated beams and wood deck.

Overall the structural elements appeared to be in acceptable condition. Repair entrance canopies and exterior concrete stairs.

Envelope Summary:

The exterior cladding consists primarily of brick and stucco. The protruding angular stucco walls form a cavity for the mechanical systems. Exposed steel ducts are linked on the exterior walls through the mechanical cavity. The main entrances canopies have a wood deck and concrete structure. The canopy & soffits have a paint finish. The main entrances have decorative painted concrete block screens on the top of the stair landings.

The windows are aluminum frame fixed double glazed units. Glass block is located on the main level of the lunch room / music room.

The roof has a modified bituminous membrane roof assembly (SBS) and was replaced in 2003.

The majority of the main entrance doors are painted steel doors & frames, which have glazed transoms and sidelights. (9 doors). Several of the exit doors have a painted steel door & frame assembly with GWG panels.

Overall, the building envelope appears to be in acceptable condition.

Replace window units.

Replace building sealant on windows, doors and exterior wall assemblies

Repair & repaint exterior stucco walls.

Repair & repaint the entrance and perimeter soffits

Interior Summary:

Vinyl Tile (VCT) is located throughout the vestibules, lunch room/music room & renovated classrooms. The majority of the classrooms, staff room, administration area, and library have a carpet floor finish. The classrooms in the basement area have the original VAT flooring. The gymnasiums & stage have a hardwood floor finish. The corridors and stairwells have a terrazzo floor finish. The washrooms and change rooms have a ceramic tile floor finish. The majority of the utility areas and mechanical rooms have a paint finish on the concrete slab.

The majority of the interior wall finishes comprise of painted masonry block walls, painted plaster / gypsum board and ceramic tile.

The interior doors are painted and/or stained wood doors and/or painted steel doors in hollow metal frames. Several classroom doors have sidelights with GWG inserts.

The school has several ceiling types, including a suspended 2'x4' acoustical tile ceiling and a 12"x12" acoustical tile assembly. The wood structure is fully exposed in the gymnasium. Painted gypsum board ceilings are located in the washrooms and change rooms.

Overall, the interior finishes are in acceptable condition.

Remove and replace VAT tiles in the 2nd flr mechanical room- air chamber
Refurbish the elevator including controls upgrading and replacement of the worn tracks

Mechanical Summary:

MECHANICAL SUMMARY (May 2008)

Primary building heating is provided by two natural gas fired hot water boilers which supply the building hot water heating system, including the air handling unit heating coil and the building heating terminal units (terminal reheat coils, fan coil units, and a unit heater). Building cooling is provided by a direct expansion (DX) type cooling system which includes DX cooling coils in the air handling unit, a refrigerant compressor located in the boiler room, and a cooling tower for heat rejection.

Building ventilation is provided by one air handling system. The air handling system is a constant volume mixed air type system and the air handling unit has an associated return air fan (return air fan F5). The built-up air handling unit is equipped with a filter section, a hot water heating coil, two direct expansion type cooling coils, an axial flow type supply air fan, and a humidification system. The fresh air supplied to the building by the air handling unit is balanced by the exhaust air flow from the air handling unit and from five roof mounted exhaust fans.

Building HVAC equipment actuators and thermostats are generally pneumatic, and the control air supply system consists of an air compressor mounted on an air receiver tank (there is no control air dryer). The building has a rudimentary energy management system.

Washroom plumbing fixtures include toilets, lavatories and urinals. There are 24 toilets (15 vitreous china floor mounted flush valve type toilets and nine vitreous china floor mounted tank type toilets), 26 lavatories (21 wall mounted vitreous china lavatories, three counter mounted stainless steel lavatories, and two counter mounted enameled steel lavatories), and 11 urinals (11 floor mounted vitreous china flush valve type urinals). Other plumbing fixtures in the building include drinking fountains (7), various sinks (28), and 16 showers (boy's and girl's locker room showers and two individual showers). Two natural gas fired domestic hot water heaters provide domestic hot water for the building lavatories, sinks and showers.

Fire protection for the building consists of a standpipe system feeding standard fire hose cabinets located on all building levels, and wall mounted fire extinguishers (ABC type). Fire extinguishers are also located in the fire hose cabinets.

Current mechanical system requirements include replacement of the faucets for the general purpose sinks, replacement of two lavatories, replacement of the domestic hot water circulation pump, replacement of the building cooling system components (cooling tower, compressor and refrigerant piping system), replacement of the air handling unit dampers, replacement of the air handling unit humidifier, and replacement of the building pneumatic HVAC controls.

Overall, the building mechanical equipment and systems are in marginal to acceptable condition.

Electrical Summary:

The incoming hydro service to Stratford Academic High School is a 277/480V, 3-phase, 4-wire service. The main switchboard is rated 600A, 277/480V with a 600A moulded case main circuit breaker. Two MCC's and Individual motor starters provide power for the mechanical equipment.

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

Approximately 50% of the interior T12 fluorescent lighting fixtures have been replaced with T8 fluorescent lighting fixtures. The exit lighting in the building consists of metal units with LED lamps. The emergency lighting is fed directly from the emergency power panel (no transfer switch). The exterior lighting consists of incandescent and surface mounted HPS fixtures.

The building is equipped with a Simplex 4002 fire alarm system. Detection and end devices include, smoke and heat detectors, bells/strobes and pull stations.

The various communications and security systems within the school include; a Magnum Alert security system that monitors motion detectors and the exterior doors, a Nortel Meridian Telephone system and a Bogen Multicom P.A. System. A hard wired data network system has been 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.

The main concerns for the school are:

- The distribution equipment is approximately 44 years old - the MCC's should be replaced.
- The lighting controls
- Original T12 lighting fixtures
- Incandescent exterior lighting
- Emergency lighting
- Clock System
- Emergency power system

Overall the electrical systems for Stratford Academic High School are in marginal 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 - 1964 Section***

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

A1030 Slab on Grade - 1964 Section*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

A2020 Basement Walls (& Crawl Space) - 1964 Section*

The basement walls are a combination of poured in place and concrete block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

B1010.01 Floor Structural Frame (Building Frame) - 1964 Section*

Heavy timber glu laminated beams with wood joist assembly supported by concrete block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

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

Structural reinforced poured in place concrete columns, structural framed interior walls and steel beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

B1010.07 Exterior Stairs - 1964 Section*

Poured in place reinforced concrete stairs are located at main entrance F1 (west elevation) & F3 (east elevation). Poured in place concrete stairs are located at the south elevation @ the gymnasium exits. Painted steel railings and pickets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1964	40	OCT-08

Event: Repair all damaged concrete stairs. Repair/repaint steel handrails & pickets.

Concern:

The concrete on several treads is damaged and missing. The rebar is exposed in isolated areas. The base of the steel pickets have corroded. A large crack is located at the south-west corner of the building at the exit stair from the gym.

Recommendation:

Repair damaged concrete stairs at F3 and south stair to basement area and gymnasium. Repair & repaint handrails & pickets.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2008	\$25,000	Low

Updated: OCT-08

B1010.09 Floor Construction Fireproofing - 1964 Section*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

B1010.10 Floor Construction Firestopping - 1964 Section*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

B1020.01 Roof Structural Frame - 1964 Section*

Roof - Heavy timber glu laminated beams with arched and flat purlins & solid wood decking.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

B1020.04 Canopies - 1964 Section*

Canopies are located above each entrance. The canopies are framed in concrete with painted wood glu-laminated beams and wood deck.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	0	OCT-08

Event: Repaint the wood roof deck, beams and concrete columns.

Concern:

The paint finish on the wood deck and beams has deteriorated.

Recommendation:

Repaint all wood decks, beams and concrete columns.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2008	\$20,000	Low

Updated: OCT-08

B1020.06 Roof Construction Fireproofing - 1964 Section*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

S2 ENVELOPE**B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 1964 Section***

The majority of the south, east & west exterior walls have an exterior brick assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	75	OCT-08

B2010.01.08 Cement Plaster (Stucco): Ext. Wall - 1964 Section*

The protruding angular stucco walls form a cavity for the mechanical systems. The stucco walls are located on the east north and west elevations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	75	OCT-08

Event: Repair & repaint exterior stucco walls**Concern:**

The heavily textured stucco walls along with the mechanical shafts creates excessive dirt buildup on the exterior walls.

Recommendation:

Repair and repaint all stucco walls.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$50,000	Low

Updated: OCT-08

B2010.01.09 Expansion Control: Exterior Wall Skin - 1964 Section*

Expansion/control joints are located throughout the cladding assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1964 Section**

Sealant is located around all window, doors, brick cladding and stucco assemblies. Replace sealant during the window & door replacement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	20	OCT-08

Event: Replace building sealant on windows, doors and exterior wall assemblies**Concern:**

The sealant around windows & doors is deteriorated and missing on several units.

Recommendation:

Replace building sealant on windows, doors and cladding where applicable.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$35,000	Low

Updated: OCT-08

B2010.01.13 Paints (& Stains): Exterior Wall - 1964 Section**

The exposed concrete foundation wall has a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	15	OCT-08

Event: Repaint exterior concrete foundation walls.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$40,000	Unassigned

Updated: OCT-08

B2010.02.03 Masonry Units: Ext. Wall Const. - 1964 Section*

The interior face of the exterior walls has a concrete block wall assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

B2010.02.05 Wood Framing : Ext. Wall Const. - 1964 Section*

The interior face of the stucco exterior walls is partially framed in wood.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation - 1964 Section*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

B2010.06 Exterior Louvers, Grilles, and Screens - 1964 Section*

Exterior louvers are located on the upper & lower portion of the exterior walls opposite the mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

B2010.09 Exterior Soffits - 1964 Section*

The main entrances canopies have a wood deck and concrete structure. The soffits have a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	0	OCT-08

Event: Repair & repaint the entrance and perimeter soffits**Concern:**

Some of the wood panels are deteriorated. The paint finish is worn and faded in several area throughout the soffits.

Recommendation:

Repair & repaint the entrance and perimeter soffits

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2008	\$30,000	Low

Updated: OCT-08

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

The exterior window units are double glazed aluminum frame fixed glazed panels. Overall the classrooms do not have enough glazed window area. Three units were replaced on the main level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	40	OCT-08

Event: Replace original aluminum framed windows - 26 units**Concern:**

The window seals are deteriorated, condensation was observed on several windows.

Recommendation:

Replace all window units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$75,000	Medium

Updated: OCT-08

B2020.04 Other Exterior Windows* - Glass Block

Glass block is located on the main level of the lunch room / music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	0	OCT-08

B2030.01.02 Steel-Framed Storefronts: Doors**

The steel doors & frames are original and have glazed transoms and sidelights. (9 doors).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	30	OCT-08

Event: Replace painted steel doors, frames & hardware (9 doors)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$72,000	Unassigned

Updated: OCT-08

B2030.02 Exterior Utility Doors - 1964 Section**

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	40	OCT-08

Event: Replace exterior utility doors - 4 doors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$26,000	Unassigned

Updated: OCT-08

B3010.01 Deck Vapor Retarder and Insulation - 1964 Section*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

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

The roof covering above the entire roof was replaced in 2003 with a SBS roof assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	25	OCT-08

Event: Replace SBS roof assembly - Area 2600m2

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2028	\$400,000	Unassigned

Updated: OCT-08

S3 INTERIOR**C1010.01.03 Unit Masonry Assemblies: Partitions -**

Interior partitions in the corridors, gym, stairwells and classrooms typically consist of masonry block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

C1010.01.07 Framed Partitions (Stud) -

Interior classroom & office partitions typically consist of metal framed gypsum board walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

C1010.05 Interior Windows - *

Interior glazed windows with GWG are located in the stairwells, library and in the gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

C1010.07 Interior Partition Firestopping - *

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

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

The interior swing doors generally consist of solid core painted wood doors in painted steel frames. Each of the classroom doors have a fully glazed side panel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	40	OCT-08

C1020.03 Interior Fire Doors - *

Fire doors are located in the common area corridors and in the vestibule entrances. The majority of the doors are rated and labeled.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

C1030.01 Visual Display Boards - **

Tackboards, chalkboards and whiteboards are located in each classroom area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	20	OCT-08

Event: Replace Visual Display Boards

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2013	\$125,000	Unassigned

Updated: OCT-08

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

Painted metal washroom stall partitions are located in each boy's & girls washrooms & change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	30	OCT-08

Event: Replace Toilets and Shower partitions

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$28,000	Unassigned

Updated: OCT-08

C1030.08 Interior Identifying Devices - *

The room name is mounted on the interior doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

C1030.10 Lockers - **

Prefinished metal lockers are located throughout the school corridors and in the change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	30	OCT-08

Event: Replace prefinished metal lockers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$160,000	Unassigned

Updated: OCT-08

C1030.12 Storage Shelving - *

Metal storage shelving throughout the vestibules, custodial utility rooms and staff supply rooms. Painted wood storage shelving throughout the art room & music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

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.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

C2010 Stair Construction - *

The stairwells typically have a poured in place concrete assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

C2020.02 Terrazzo Stair Finishes - *

All the stairwells have a terrazzo floor finish throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	60	OCT-08

C2020.05 Resilient Stair Finishes - **

The stairs in the second floor mechanical room and stage area have a VCT floor finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	20	OCT-08

Event: Replace VCT flooring on stairs

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2013	\$4,000	Unassigned

Updated: OCT-08

C2020.08 Stair Railings and Balustrades - *

Painted steel pickets with a rubber handrail finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

C3010.02 Wall Paneling - **

Wood wall paneling is located in the corridor of the second office area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	30	OCT-08

Event: Replace Wall Paneling

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$20,000	Unassigned

Updated: OCT-08

C3010.06 Tile Wall Finishes - **

Ceramic tile wall finish is located throughout the washroom walls and student change rooms

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	40	OCT-08

Event: Replace ceramic tile wall finish in washrooms & change rooms

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$120,000	Unassigned

Updated: OCT-08

C3010.11 Interior Wall Painting - *

The interior partitions throughout the school have a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	10	OCT-08

C3020.01.02 Paint Concrete Floor Finishes - *

Painted/sealed concrete floors are located in the mechanical rooms and custodial rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	10	OCT-08

C3020.02 Tile Floor Finishes - **

The washrooms and change rooms have a ceramic tile floor finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	50	OCT-08

Event: Replace ceramic tile flooring in the washrooms & change rooms

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$72,000	Unassigned

Updated: OCT-08

C3020.03 Terrazzo Floor Finishes - *

Terrazzo flooring is located throughout the interior corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1964	75	OCT-08

C3020.04 Wood Flooring - **

Hardwood flooring is located in the gymnasium and area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1993	30	OCT-08

Event: Replace Hardwood Flooring in the gym and stage (Area-500m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$75,000	Unassigned

Updated: OCT-08

C3020.07 Resilient Flooring - ** VCT

Vinyl composite tile is located throughout the renovated areas, in the entrance vestibules, music room / lunch room, isolated classrooms and science rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	20	OCT-08

Event: Replace VCT flooring (1200m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$80,000	Unassigned

Updated: OCT-08

C3020.07 Resilient Flooring VAT**

Original Vinyl Tile (VAT) is located throughout a majority of the classrooms in the basement area & second floor mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	20	OCT-08

Event: Remove and replace VAT tiles in the 2nd flr mechanical room- air chamber (Cost of abatement is included) Area- 100m2

Concern:

Several of the VAT tiles are broken and loose in the 2nd floor mechanical air chamber.

Recommendation:

Replace VAT flooring in the 2nd floor mechanical air chamber.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Hazardous Materials Abatement	2008	\$15,000	Medium

Updated: OCT-08

Event: Replace VAT flooring (Cost of asbestos abatement is included) - (900m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$120,000	Unassigned

Updated: OCT-08

C3020.08 Carpet Flooring - **

The majority of the classrooms on the 1st & 2nd floor, staff room, administration area, computer room and library have a carpet floor finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	15	OCT-08

Event: Replace Carpet Flooring (Area - 2500m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$210,000	Unassigned

Updated: OCT-08

C3030.02 Ceiling Paneling (Wood) - *

The wood structure is exposed in the gymnasiums and stage area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1964	60	OCT-08

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

The majority of the corridors, office area and renovated classrooms have a suspended 2'x2' acoustical tile ceiling.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	25	OCT-08

Event: Replace suspended acoustic tile ceilings 2x4 (Area 1800m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$120,000	Unassigned

Updated: OCT-08

C3030.06 Acoustic Ceiling Treatment (Susp.T-Bar) 12"x12" ACT**

12"x12" acoustical ceiling tiles are located between the exposed glu-lam wood beams throughout the classrooms and office areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	25	OCT-08

Event: Replace 12"x12" Acoustical Ceiling Tiles (4000m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$210,000	Unassigned

Updated: OCT-08

C3030.07 Interior Ceiling Painting - *

All the interior gypsum board ceilings, plaster ceilings and exposed structures have a paint and/or stain finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1964	20	OCT-08

D1010.01.02 Hydraulic Passenger Elevators - **

RAM Manufacturing Ltd. hydraulic elevator, 1,000 pounds 2 person + wheelchair capacity, three stops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1993	30	OCT-08

Event: Refurbish Hydraulic Passenger Elevators

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$75,000	Unassigned

Updated: OCT-08

Event: Refurbish the elevator including controls upgrading and replacement of the worn tracks**Concern:**

The elevator requires excessive maintenance and repair and has had problems with the controls, the motor and excessive wear of the tracks.

Refurbish the elevator including controls upgrading and replacement of the worn tracks.

Consequences: Excessive elevator down time due to maintenance and repair requirements.

Recommendation:

Refurbish the elevator including controls upgrading and replacement of the worn tracks.

Consequences of Deferral:

Excessive elevator down time due to maintenance and repair requirements.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$30,000	Medium

Updated: OCT-08

S4 MECHANICAL**D2010.04 Sinks - ****

There are 28 sinks in the building including three custodian's service sinks and 25 general purpose sinks. The general purpose sinks include single bowl stainless steel sinks, double bowl stainless steel sinks, and one triple bowl stainless steel sink.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	30	OCT-08

Event: Replace the custodian's service sinks with mop sinks (3)**Concern:**

The custodian's service sinks are awkward to use for some tasks due to their height.

Recommendation:

Replace the custodian's service sinks with mop sinks.

Consequences of Deferral:

Custodians may have difficulty using the existing sinks for some tasks.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2009	\$6,000	Low

Updated: OCT-08

Event: Replace the faucets for the 25 general purpose sinks (in some cases the sinks may have to be replaced if compatible faucets cannot be obtained)**Concern:**

The faucets for most of the sinks are in poor condition due to wear, corrosion and scale build-up.

Recommendation:

Replace the faucets for the 25 general purpose sinks (in some cases the sinks may have to be replaced if compatible faucets cannot be obtained).

Consequences of Deferral:

Leaking faucets and poor appearance of the sinks and trim.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$15,000	Low

Updated: OCT-08

Event: Replace the original c.1964 general purpose sinks (not including faucets)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$23,000	Unassigned

Updated: OCT-08

D2010.05 Showers - **

There are 16 showers in the building, including eight showers in the boy's locker room, six showers in the girl's locker room, and two individual showers in the PE instructor's offices (rooms 130 and 136). The locker room showers and the shower in room 130 have ceramic tiled walls and floors, and the shower in room 136 has an enameled steel prefabricated shower unit. For the locker room showers and the shower in room 130, this element covers only the shower heads and controls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	30	OCT-08

Event: **Replace the individual shower stall in room 136, and the shower trim (heads and controls) in the boy's and girl's locker rooms and in room 130 (15 sets)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$17,000	Unassigned

Updated: OCT-08

D2010.08 Drinking Fountains / Coolers - **

There are seven drinking fountains in the building, including six vitreous china wall mounted double station drinking fountains (located two per floor in the in the corridors C18, C3 and C25), and one stainless steel refrigerated wall mounted drinking fountain located at the main entrance (corridor C2).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	35	OCT-08

Event: **Replace the seven drinking fountains in corridors C2, C3, C18 and C25**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$12,000	Unassigned

Updated: OCT-08

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

Washroom plumbing fixtures include toilets, lavatories and urinals. There are 24 toilets (15 vitreous china floor mounted flush valve type toilets and nine vitreous china floor mounted tank type toilets), 26 lavatories (21 vitreous china wall mounted lavatories, three counter mounted stainless steel lavatories, and two counter mounted enameled steel lavatories), and 11 urinals (11 floor mounted vitreous china flush valve type urinals).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	30	OCT-08

Event: Replace the two enameled steel counter mounted lavatories in room 125

Concern:

The enameled steel lavatories in room 125 are in poor condition due to chipping.

Recommendation:

Replace the two enameled steel counter mounted lavatories in room 125.

Consequences of Deferral:

Poor appearance and accelerated corrosion of the lavatories.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$3,000	Low

Updated: OCT-08

Event: Replace the washroom plumbing fixtures excluding the lavatories in room 125 (24 toilets, 24 lavatories and 11 urinals total)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$103,000	Unassigned

Updated: OCT-08

D2020.01.01 Pipes and Tubes: Domestic Water - *

There is one domestic water supply to the building (100 mm diameter) located in the boiler room (room 022). There is a water meter for the building domestic water distribution system (50 mm diameter). There is a backflow prevention device for the building domestic water supply (75 mm diameter) and a backflow prevention device for the building standpipe system (75 mm diameter). The water supply lines in the boiler room are galvanized steel, and the domestic water distribution system piping in the building is generally copper.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

D2020.01.02 Valves: Domestic Water - **

Domestic water system valves include the domestic water supply system main isolation valves, the domestic water distribution system zone isolating valves, and fixture isolating valves. The domestic water system valves are generally steel in larger diameters and brass or bronze in smaller diameters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	40	OCT-08

Event: Replace the domestic water distribution system isolation valves

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$52,000	Unassigned

Updated: OCT-08

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

There is one domestic water supply to the building (100 mm diameter) located in the boiler room (room 022). There is a backflow prevention device for the building domestic water supply (75 mm diameter) and a backflow prevention device for the building standpipe system (75 mm diameter). In addition, there are backflow prevention devices for the cooling tower make-up water (25 mm diameter), for the hot water heating system make-up water (19 mm diameter), and for the humidifier air compressor cooling water (19 mm diameter). The backflow prevention device for the cooling tower make-up water is located in mechanical room 212, and the remaining backflow prevention devices are located in the boiler room (room 022).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	20	OCT-08

Event: Replace the building backflow prevention devices (one at 25 mm diameter in room 212, two at 75 mm diameter in room 022 and two at 19 mm diameter in room 022)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$14,000	Unassigned

Updated: OCT-08

D2020.02.02 Plumbing Pumps: Domestic Water - **

There is a domestic hot water system circulation pump (P4) which maintains the domestic hot water loop at temperature. This pump is located in mechanical room 212.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	20	OCT-08

Event: Replace the domestic hot water circulation pump located in room 212**Concern:**

The domestic hot water circulation pump leaks, has an open motor, and has a damaged electrical feed cable (BX cable).

Recommendation:

Replace the domestic hot water circulation pump located in room 212.

Consequences of Deferral:

Increased maintenance and repair expense and potential failure of the pump and/or motor.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$2,000	Low

Updated: OCT-08

D2020.02.06 Domestic Water Heaters - c.2001**

There are two natural gas fired domestic hot water heaters located in mechanical room 212 which provide domestic hot water for the building sinks, lavatories and showers. This element covers the c.2001 domestic hot water heater which is a State Industries Inc. model SBF75120NECGAD with an input heating capacity of 108,000 Btu/h (31.65 kW) and a volume of 75 usg (284 L).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2001	20	OCT-08

Event: Replace the c.2001 State Industries domestic hot water heater in mechanical room 212

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$5,000	Unassigned

Updated: OCT-08

D2020.02.06 Domestic Water Heaters - c.2004 **

There are two natural gas fired domestic hot water heaters located in mechanical room 212 which provide domestic hot water for the building sinks, lavatories and showers. This element covers the c.2004 domestic hot water heater which is an A.O. Smith model BTRC120-110 with an input heating capacity of 120,000 Btu/h (35.17 kW) and a volume of 71 usg (269 L).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	20	OCT-08

Event: Replace the c.2004 A.O. Smith domestic hot water heater in mechanical room 212

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$5,000	Unassigned

Updated: OCT-08

D2020.03 Water Supply Insulation: Domestic - *

Where visible, the domestic water piping is insulated to prevent heat loss and condensation. Some of the water supply piping insulation may contain asbestos.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

D2030.01 Waste and Vent Piping - *

Visible waste and vent piping is generally copper in smaller diameters and cast iron in larger diameters. There is one sanitary sewer line exiting the building on the west side (150 mm diameter).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

D2040.01 Rain Water Drainage Piping Systems - *

Standard roof drains which discharge to interior rain water leaders are used to provide storm water drainage of the building roof areas. The storm water drainage piping is generally cast iron. There is one storm sewer line exiting the building on the west side (150 mm diameter). The three building entrances are covered and these roof areas each have a drain which discharges to ABS plastic piping (two of the three drains discharge to grade).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

D2040.02.04 Roof Drains - *

Standard roof drains with metal strainers are used to collect storm water from the roof areas of the building. There are 12 roof drains for the main roof and three roof drains for the roof sections over the building entrances (one drain for each of the three roof sections).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	40	OCT-08

D3010.02 Gas Supply Systems - *

The natural gas supply is underground to the building. The gas meter and pressure reducing station are located in the boiler room (room 022). Natural gas is supplied to the hot water heating boilers in the boiler room and to the domestic hot water heaters in room 212, as well as to the emergency generator in room 020. The natural gas piping is generally steel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	60	OCT-08

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

Primary building heating is provided by two natural gas fired hot water heating boilers (B1 and B2) located in the boiler room (room 022). The boilers are Cleaver-Brooks packaged boilers model CBH761-80, with an input heating capacity of 3,347,000 Btu/h (981.01 kW) each.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	35	OCT-08

Event: Replace the two natural gas fired hot water heating boilers in room 022

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$220,000	Unassigned

Updated: OCT-08

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

The combustion gases from the two hot water heating boilers discharge through a common duct which penetrates the wall of the boiler room on the east side of the building. On the outside of the building adjacent to the boiler room, there is a discharge stack which runs from grade level to above the roof level. There is a separate stack for the combustion gases from the domestic hot water heaters located in room 212. The domestic hot water heater stack discharges through the roof of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	30	OCT-08

Event: Replace the hot water heating boiler breeching and the discharge stack for the DHW heaters

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$35,000	Unassigned

Updated: OCT-08

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

Water treatment for the closed loop hot water heating system consists of manual chemical addition via a chemical pot feeder, and a bypass filter in parallel with the three main hot water circulation pumps (P1, P2 and P3).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

D3030.05 Cooling Towers**

The cooling tower for the building cooling system is located in room 213. The BAC model CM-A90A cooling tower provides heat rejection for the cooling system refrigerant using water sprays. Spray pump P5 provides circulation for the cooling tower water sprays.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	25	OCT-08

Event: Replace the cooling tower located in room 213

Concern:

The cooling tower is in poor condition due to wear and corrosion, and requires excessive maintenance and repair.

Recommendation:

Replace the cooling tower located in room 213.

Consequences of Deferral:

Poor cooling system reliability and excessive maintenance and repair expense.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$85,000	Medium

Updated: OCT-08

D3030.06.01 Refrigeration Compressors - **

The refrigerant compressor for the building cooling system is located in the boiler room (room 022). The compressor is a Trane model HE-2100. The cooling system utilizes R22 refrigerant.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	15	OCT-08

Event: Replace the refrigerant compressor located in the boiler room (room 022)

Concern:

The refrigerant compressor is in poor condition due to wear, and requires excessive maintenance and repair.

Recommendation:

Replace the refrigerant compressor located in the boiler room (room 022).

Consequences of Deferral:

Poor cooling system reliability and excessive maintenance and repair expense.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$140,000	Medium

Updated: OCT-08

D3030.06.02 Refrigerant Condensing Units - **

Condensing of the cooling system refrigerant occurs in the cooling tower heat exchanger. This element covers the refrigerant system components excluding the cooling tower and refrigerant compressor which are covered under separate elements, and the evaporator coils which are included with the main air handling unit. Refrigerant system components covered under this element include the refrigerant receiver located in room 213 and the refrigerant piping system (piping, insulation, valves, and piping specialties).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	25	OCT-08

Event: **Replace the refrigerant system receiver and piping system when the cooling tower and compressor are replaced**

Concern:

The refrigerant system piping and related components require excessive maintenance and repair, and the refrigerant system reliability is poor.

Recommendation:

Replace the refrigerant system receiver and piping system when the cooling tower and compressor are replaced.

Consequences of Deferral:

Poor cooling system reliability and excessive maintenance and repair expense.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$60,000	Medium

Updated: OCT-08

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

There is one air handling system for the building. The built-up air supply system includes filters, a hot water heating coil, two direct expansion type cooling coils (evaporator coils), a supply air fan (axial flow type), and a humidification system. The constant volume mixed air type system includes a remote return air fan (F5) and actuated dampers (fresh air, return air and supply air dampers).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	30	OCT-08

Event: Provide drainage piping for the air handling unit cooling coil drip trays

Concern:

Water leakage occurs in rooms 214 and 215 due to condensation from the cooling coils overflowing the coil drip trays.

Recommendation:

Provide drainage piping for the air handling unit cooling coil drip trays.

Consequences of Deferral:

Potential water damage caused by condensation overflow from the cooling coil drip trays.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$5,000	Low

Updated: OCT-08

Event: Replace the air handling system dampers (fresh air, return air and supply air dampers)

Concern:

The air handling unit dampers operate poorly and do not seal adequately due to wear and corrosion.

Recommendation:

Replace the air handling system dampers (fresh air, return air and supply air dampers).

Consequences of Deferral:

Poor air handling system performance and poor ventilation control.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$80,000	Medium

Updated: OCT-08

Event: Replace the main air handling unit components excluding dampers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$230,000	Unassigned

Updated: OCT-08

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

Air distribution fans remote from the air handling unit include the return air fan for the main air handling system (fan F5). The return air fan is an axial flow type fan.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

D3040.01.04 Ducts: Air Distribution - *

The air distribution ducts include the supply air, return air, and exhaust air duct systems for the building air handling unit. The duct systems include associated components not specifically listed elsewhere, including duct insulation, duct supports, turning vanes, dampers, mixing boxes, etc. The supply air to the perimeter classrooms is provided to the room fan coil units via an exterior duct on the west, north and east sides of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

Event: Investigate the cause of the ventilation and temperature control issues in basement rooms 031, 032 and 033, and rectify the problem

Concern:

Ongoing ventilation and temperature control issues exist in basement rooms 031, 032 and 033. These issues may be related to the supply air and return air configurations.

Recommendation:

Investigate the cause of the ventilation and temperature control issues in basement rooms 031, 032 and 033, and rectify the problem.

Consequences of Deferral:

Continued poor air quality in basement rooms 031, 032 and 033.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$12,000	Low

Updated: OCT-08

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

Air outlets and inlets include supply air diffusers and return air grilles. In the interior rooms, the supply air diffusers are typically square ceiling mounted diffusers or wall mounted grilles. In the perimeter rooms, the supply air enters the rooms via the fan coil units which have linear supply diffusers. The return air grilles are typically wall mounted grilles, or grilles which transfer air into the corridors. In the gymnasium, the supply air grilles are wall mounted and the return air grilles are ceiling mounted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

D3040.03.01 Hot Water Distribution Systems - **

The hot water heating system provides hot water to the air handling unit heating coil and provides building heating via hydronic terminal units including fan coil units, terminal reheat coils, and a unit heater. There are three main hot water circulation pumps (P1 for the west side of the building, P2 for the east side of the building, and standby pump P3) as well as a boiler circulation pump, all located in the boiler room (room 022). The hot water system atmospheric type expansion tank is located in the boiler room. The hot water distribution system includes all components of the closed loop hot water heating system including piping, valves, piping insulation, piping specialties, circulation pumps, and the expansion tank. The hot water supply and return piping for the perimeter fan coil units is located inside the perimeter air supply duct.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	40	OCT-08

Event: Replace the building hot water heating distribution system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$550,000	Unassigned

Updated: OCT-08

D3040.04.01 Fans: Exhaust - **

There are five roof mounted exhaust fans for the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	30	OCT-08

Event: **Install exhaust fans for the basement science preparation room (room 001) and the second floor server room (room 223)**

Concern:

Ventilation is poor for the basement science preparation room (room 001) and the second floor server room (room 223).

Recommendation:

Install exhaust fans for the basement science preparation room (room 001) and the second floor server room (room 223)

Consequences of Deferral:

Continued poor air quality in the science preparation room (room 001) and excessive temperatures in the server room (room 223).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2009	\$7,000	Low

Updated: OCT-08

Event: **Investigate the cause of the poor ventilation in the second floor boy's washroom (room 227), and rectify the problem**

Concern:

Ventilation in the second floor boy's washroom (room 227) is poor.

Recommendation:

Investigate the cause of the poor ventilation in the second floor boy's washroom (room 227), and rectify the problem.

Consequences of Deferral:

Continued poor air quality in the second floor boy's washroom.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$4,000	Low

Updated: OCT-08

Event: **Replace the building exhaust fans (five roof mounted exhaust fans)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$20,000	Unassigned

Updated: OCT-08

D3040.04.03 Ducts: Exhaust - *

Exhaust duct systems include the collection ducts associated with the five roof mounted building exhaust fans.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

D3040.04.05 Air Outlets and Inlets: Exhaust - *

Exhaust air inlets include the inlet grilles associated with the exhaust system collection ducts. There are no exhaust air outlets since the exhaust fans are all roof mounted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

D3050.02 Air Coils - **

The hot water heating system includes duct mounted terminal reheat coils for the building rooms not served by the perimeter fan coil units. There are 23 reheat coils in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	30	OCT-08

Event: Replace the hot water terminal reheat coils (23)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$115,000	Unassigned

Updated: OCT-08

D3050.03 Humidifiers - **

The humidification system for the building air handling unit consists of water sprays via atomizing nozzles which use compressed air to atomize the water droplets. The air compressor for the humidification system is located in the boiler room (room 022). The humidification system has been shut down by building maintenance personnel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1964	25	OCT-08

Event: Provide a self contained steam type humidification system for the building air handling unit

Concern:

The existing humidification system is inoperable.

Recommendation:

Provide a self contained steam type humidification system for the building air handling unit.

Consequences of Deferral:

No building humidification.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$20,000	Low

Updated: OCT-08

D3050.05.02 Fan Coil Units - **

For the perimeter classrooms, air is supplied to the rooms via fan coil units. There are 23 perimeter fan coil units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	30	OCT-08

Event: Replace the perimeter fan coil units (23)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$140,000	Unassigned

Updated: OCT-08

D3050.05.06 Unit Heaters**

A hot water unit heater provides heating for the boiler room (room 022).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	40	OCT-08

Event: Replace the hot water unit heater in the boiler room (room 022)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$4,000	Unassigned

Updated: OCT-08

D3060.01 Energy Management and Conservation System*

The building has a rudimentary energy management system (Reliable Controls) located in the custodian's office.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	0	OCT-08

D3060.02.02 Pneumatic Controls**

The building HVAC system controls and actuators are pneumatic. The control air supply system is located in the boiler room (room 022) and consists of an air compressor mounted on an air receiver tank. Pneumatic controls include pneumatic thermostats, control valves, and damper actuators. This element includes the control air distribution system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	40	OCT-08

Event: Replace the pneumatic HVAC controls, control valves and actuators including the control air supply system

Concern:

The pneumatic HVAC controls, control valves and actuators operate poorly due to wear and corrosion (there is no air dryer for the control air supply system).

Recommendation:

Replace the pneumatic HVAC controls, control valves and actuators, including the control air supply system.

Consequences of Deferral:

Poor HVAC system control and performance.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$90,000	Low

Updated: OCT-08

D4020 Standpipes - *

The building is equipped with a standpipe system for fire protection. The standpipe system feeds standard wall mounted fire hose cabinets which are located on each floor. The standpipe system water supply is equipped with a backflow prevention device (75 mm diameter).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	60	OCT-08

D4030.01 Fire Extinguisher, Cabinets and Accessories - *

Wall mounted fire extinguishers (ABC type) are located throughout the building, and fire extinguishers are also located in the fire hose cabinets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	30	OCT-08

S5 ELECTRICAL**D5010.02 Secondary Electrical Transformers (Interior)****

A 112.5kVA, 480-120/208V transformer, located in the main electrical room, provides power for the 400A, 120/208V CDP panel. The transformer is an FPE dry type transformer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1986	40	OCT-08

Event: Replace Secondary Transformer

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$14,000	Unassigned

Updated: OCT-08

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

The incoming hydro service to Stratford School is a 277/480V, 3-phase, 4-wire service from an EPCOR padmounted transformer, located on the southeast side of the school. The EPCOR meter is located in the main electrical room. The main electrical switchboard is an ITE switchboard rated at 600A, 277/480V, 3-phase, 4-wire. The switchboard has a main breaker rated at 600A. The distribution section has moulded case breakers feeding 2-277/480V branch circuit panels, MCC-1, MCC-2 and a 112.5kVA transformer for the 400A, 120/208V CDP panel. The main electrical switchboard is original equipment that was installed when the school was constructed. There is space within the switchboard for future breakers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	40	OCT-08

Event: Replace Main Electrical Switchboard

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$22,000	Unassigned

Updated: OCT-08

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution) - 1964**

The majority of the electrical branch circuit panelboards are ITE panels that were installed when the building was originally constructed. The ITE 400A CDP panel in the main electrical room feeds 8 original 120/208V panels. There are three 277/480V original ITE panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	30	OCT-08

Event: Replace Electrical Branch Circuit Panelboards

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$53,000	Unassigned

Updated: OCT-08

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution) - 1993**

Three Siemens 120/208V panels were added as part of a modernization project for the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	30	OCT-08

Event: Replace Electrical Branch Circuit Panelboards

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$10,500	Unassigned

Updated: OCT-08

D5010.07.01 Motor Control Centers**

MCC-1 is a 2-section General Electric Motor Control Centre, located in the basement mechanical room. MCC-1 has 7 starter units and 3 disconnect switches. MCC-2 is a single-section General Electric Motor Control Centre, located in the second floor mechanical room. MCC-2 has 4 starter units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	30	OCT-08

Event: Replace Motor Control Centres

Concern:

MCC-1 and MCC-2 are aged. Replacement parts are no longer available for the MCC's.

Recommendation:

Replace CGE MCC's with new Motor Control Centres.

Consequences of Deferral:

Inoperative mechanical systems.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$25,000	Medium

Updated: OCT-08



Aged MCC-1.

D5010.07.02 Motor Starters and Accessories**

There are motor rated starter switches within the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	30	OCT-08

Event: Replace Individual Motor Starters**Concern:**

The original individual motor starters are approximately 44 years old. Contacts will have worn over time. Replacement parts are not readily available.

Recommendation:

Replace original individual motor starters.

Consequences of Deferral:

Inoperative mechanical systems.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$5,000	Medium

Updated: OCT-08

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.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	50	OCT-08

D5020.02.01 Lighting Accessories (Lighting Controls)*

There are both 277V line voltage switches and low voltage switches within the school. Relays have been provided for the emergency lighting in the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	30	OCT-08

Event: Replace Interior Lighting Controls**Concern:**

The lighting relays are old and difficult to maintain.

Recommendation:

Provide new microprocessor based low voltage relay panels to replace existing lighting controls.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$20,000	Low

Updated: OCT-08



Emergency light relay.

D5020.02.02.01 Interior Incandescent Fixtures*

Incandescent A-lamps in porcelain bases have been provided in the second floor mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	30	OCT-08

Event: Replace Interior Incandescent Fixtures

Concern:

The incandescent lamps are not energy efficient and have a short lamp life. Exposed bulbs within the mechanical rooms are subject to damage.

Recommendation:

Replace incandescent fixtures with T8 fluorescent lighting c/w wire guards.



Incandescent lighting in mechanical room.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$2,000	Low

Updated: OCT-08

D5020.02.02.02 Interior Florescent Fixtures - T8**

T8 surface wrap-around fluorescent fixtures have been provided in approximately 50% of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	30	OCT-08

Event: Replace T8 Fluorescent Lighting Fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$158,000	Unassigned

Updated: OCT-08

D5020.02.02.02 Interior Fluorescent Fixtures - T12**

The typical lighting within the school consists of surface wrap-around fluorescent fixtures. Recessed 2 ft. x 4 ft. T12 fluorescent fixtures have been provided in some areas such as the main corridors. Industrial fluorescent lighting fixtures have been used for the main mechanical room. The original fluorescent lighting fixtures throughout the school have T12 lamps and magnetic ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	30	OCT-08

Event: Replace T12 Fluorescent Lighting Fixtures

Concern:

The original T12 fluorescent lighting fixtures are in poor condition. Lenses are broken or missing on many of the fixtures. The 4-lamp fixtures can be reduced to 2-lamp T8 fixtures for energy savings.

Recommendation:

Replace original T12 fluorescent fixtures with new T8 fluorescent lighting fixtures with electronic ballasts. Replace 4-lamp fixtures with 2-lamp fixtures where possible.

Consequences of Deferral:

High maintenance and operating costs.



Aged inefficient 4-lamp T12 fluorescent lighting.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$158,000	Medium

Updated: OCT-08

D5020.02.03.01 Emergency Lighting Built-in*

Emergency lighting within the school is typically from incandescent or compact fluorescent 120V lighting fixtures connected to the emergency panel. The emergency lighting fixtures are not connected to normal power and only come on when the generator starts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	35	OCT-08

Event: Replace Emergency Lighting Built-in

Concern:

Original incandescent fixtures are still used for emergency lighting. The recessed compact fluorescent fixtures have a poor light distribution for emergency lighting.

Recommendation:

Replace existing emergency lighting within the building. Ensure sufficient fixtures are provided to meet code requirements for emergency lighting.

Consequences of Deferral:

Life safety concern.



Incandescent emergency lighting fixture.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$22,500	High

Updated: OCT-08

D5020.02.03.02 Emergency Lighting Battery Packs**

Emergency battery powered emergency lighting units have been provided in the Daycare area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1964	20	OCT-08

Event: Replace Emergency Lighting Battery Packs

Concern:

The emergency lighting battery packs in the daycare are not reliable. One of the units was not operational.

Recommendation:

Replace emergency lighting battery packs with new units.

Consequences of Deferral:

Life safety concern.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$3,000	High

Updated: OCT-08



Aged emergency lighting battery unit - not operational.

D5020.02.03.03 Exit Signs*

Exit signs are generally located to indicate building exits and egress routes to exits. The exit signs have LED lamps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	30	OCT-08

D5020.03.01.01 Exterior Incandescent Fixtures*

Surface mounted incandescent fixtures with acrylic lenses are located around the perimeter of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	30	OCT-08

Event: Replace Exterior Incandescent Lighting

Concern:

The existing exterior incandescent lighting fixtures are aged. The lenses are discoloured and lighting efficiency for the fixtures is poor.

Recommendation:

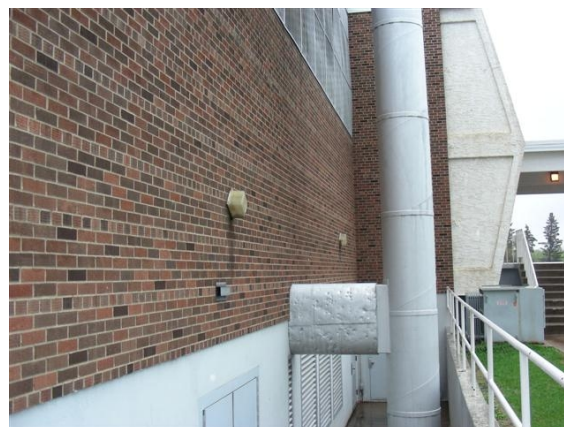
Replace the exterior incandescent lighting fixtures with new energy efficient H.I.D. wallpack or surface mounted fixtures. Provide additional fixtures along perimeter walls to ensure adequate security lighting.

Consequences of Deferral:

High operating costs, poor quality exterior lighting.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$6,000	Medium

Updated: OCT-08



Incandescent exterior lighting.

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

H.P.S. wallpack fixtures has been provided at the East and West entrances of the school. There is a surface mounted H.P.S fixture on the underside of the canopy at the South entrance and an H.I.D. floodlight on the S.W corner of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	30	OCT-08

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

A contactor has been provided for control of the exterior lighting.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	30	OCT-08

D5030.01 Detection and Fire Alarm**

The fire alarm system control panel is a Simplex 4002 panel with 16 active zones. The control panel is located in the general office area and there is a remote annunciator near the main entrance. New 10" dia. bells and strobes have been installed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1992	25	OCT-08

Event: Replace Fire Alarm System

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$110,000	Unassigned

Updated: OCT-08

D5030.02.02 Intrusion Detection**

The security system a Magnum Alert system with the main panel located outside of the main mechanical room on the basement level. A security system keypad has been installed in the custodian's room and at computer room locations. PIR motion detectors have been provided throughout the school and door contact sensors have been provided on exterior doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	25	OCT-08

Event: Replace Intrusion Detection System

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$15,000	Unassigned

Updated: OCT-08

D5030.03 Clock and Program Systems*

A Simplex 2350 clock system is located in the general office workroom. Many of the system clocks within the school have been changed over to battery powered or plug-in clocks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1980	25	OCT-08

Event: Replace Clock System

Concern:

The clock system is unreliable and high maintenance.

Recommendation:

Replace system clocks with atomic clocks.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$10,000	Low

Updated: OCT-08



Aged Simplex clock system.

D5030.04.01 Telephone Systems*

The telephone system is a Nortel Norstar system interfaced with the P.A. system. Telephone handsets are located in areas such as the classrooms and general office. The main telephone equipment is located in the main electrical room. Consulting services, located on the second floor, have their own Meridian telephone switch.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	25	OCT-08

D5030.04.05 Local Area Network Systems*

The data system server is located in a storage room on the second floor. Cat. 5 cables are used for the network wiring within the school. Supernet has been provided within the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	15	OCT-08

D5030.05 Public Address and Music Systems**

The P.A. system is a Bogen Multicom system with the main control panel located in the general office workroom. Speakers are typically round, recessed ceiling mounted units. The P.A. system is interfaced with the telephone system. The gymnasium sound system is a Rauland system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	20	OCT-08

Event: Replace Public Address System

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$25,000	Unassigned

Updated: OCT-08

D5030.06 Television Systems*

A cable TV service has been brought into the school. Cable TV outlets have been provided some areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	20	OCT-08

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

The emergency generator is located in the main electrical room. The generator is a Kohler 7.5kW natural gas generator with a 120/208V output. There is no transfer switch associated with the system. The generator was repaired in 2006 and a new battery charger was installed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	35	OCT-08

Event: Electrical Distribution Study

Concern:

A study should be completed to determine if a change from the non-standard 277/480V power distribution system should be initiated. The emergency power should be reviewed in conjunction with study.

Recommendation:

Perform power distribution study.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2008	\$10,000	Unassigned

Updated: OCT-08

Event: Replace Emergency Power System

Concern:

The generator is approximately 44 years old. There is no transfer switch associated with the system and relays are used to switch over emergency exit lighting.

Recommendation:

Replace emergency generator with new diesel generator and transfer switch.

Consequences of Deferral:

Life safety concern.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$30,000	High

Updated: OCT-08



Natural gas emergency generator.

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**E1020.03 Theater and Stage Equipment - ***

Curtains are located on the stage area in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

E1090.04 Residential Equipment - *

The staff room & home economics lab is equipped with refrigerator, stoves, microwaves and several small kitchen appliances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

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

Fixed & movable basketball hoops and a electronic scoreboard are located in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

E2010.02 Fixed Casework - **

Each classroom is equipped with custom wood open faced and/or painted cabinet units. Each science laboratory is equipped with upper wood cabinets, lower cupboards c/w counter-top, open fixed shelving. Most of the other labs, such as; home economics, art and music all have fixed storage wood cabinets throughout the room. The library have fixed and moveable wood shelving casework. Glass display cabinets are located in the corridors & entrance area. Fixed wood benches are located in the corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	OCT-08

Event: Replace all millwork

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$500,000	Unassigned

Updated: OCT-08

F2020.01 Asbestos - *

Suspected asbestos-containing materials observed in the building include vinyl tile flooring in the school corridors and classrooms, texture coated ceilings, gymnasium wallboard and piping insulation. An asbestos report by PHH Environmental Ltd. was conducted in April, 2000. For details see report

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

F2020.04 Mould - *

No mould known or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

F2020.09 Other Hazardous Materials - *

No hazardous material known or reported

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08

S8 FUNCTIONAL ASSESSMENT**K4010.01 Barrier Free Route: Parking to Entrance - ***

A designated handicap parking area is not provided. Barrier free access from the parking area to the building entrance is not provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	0	OCT-08

Event: **Provide & pave a designated handicap parking space. Provide a ramp at one entrance location**

Concern:

A designated handicap parking area is not provided. Barrier free access from the parking area to the building entrance is not provided.

Recommendation:

Provide & pave a designated handicap parking space. Provide a ramp at one entrance location.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2008	\$50,000	High

Updated: OCT-08

K4010.02 Barrier Free Entrances - *

No automatic door entrances are provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1964	0	OCT-08

Event: **Provided power operators for barrier free access at the main entrance of the building.**

Concern:

No automatic access is currently provided from any exterior entrance doors.

Recommendation:

Provided power operators for barrier free access at the main entrance of the building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2008	\$4,000	Low

Updated: OCT-08

K4010.03 Barrier Free Interior Circulation - *

Barrier free access is provided to most areas throughout the school. An elevator is provided at the north-end of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2001	0	OCT-08

K4010.04 Barrier Free Washrooms - *

Barrier free washroom's are provided. A barrier free compartment is provided in a boy's & girl's washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1964	0	OCT-08