

RECAPP Facility Evaluation Report

Edmonton School District No. 7



Kenilworth Junior High School

B3179A
Edmonton

Facility Details

Building Name: Kenilworth Junior High Scho
Address: 7005 - 89 Avenue
Location: Edmonton

Building Id: B3179A
Gross Area (sq. m): 4,861.50
Replacement Cost: \$13,035,626
Construction Year: 1962

Evaluation Details

Evaluation Company: Bacz Engineering
Evaluation Date: September 14 2010
Evaluator Name: Shafraaz Kaba

Total Maintenance Events Next 5 years: **\$3,081,000**
5 year Facility Condition Index (FCI): **23.64%**

General Summary:

The original 4,778.00 sq.m. (masonry, precast concrete double tees, concrete columns & beams, non-combustible) school was constructed in 1962.

The school has a 2 storey east wing at a split level with the one storey west wing.

The building is non-sprinklered and is in good condition.

The school reported that a \$1.45 million upgrade was completed in November, 2005. In this upgrade, the school has new PVC exterior windows, exterior doors & frames, renovation of the administration area, new millwork in home economic classroom, some new interior doors & frames and miscellaneous minor repairs.

1967 portable building in acceptable condition is located to the south of the school and is used for fitness and exercise activities.

Structural Summary:

The 1962 original building has concrete wall foundation with continuous concrete footing. The main floor is concrete slab on grade. The upper floor structure and roof structure are precast concrete double tees supported by concrete columns and beams.

The structure is in good condition.

Envelope Summary:

The building has brick, painted concrete block walls, concrete beams and concrete columns.

The building has new PVC windows and new exterior doors & frames.

The BUR of the roof is re-roofed in 1990.

The building envelope is in good condition.

Interior Summary:

Vinyl floor tiles in corridors, classrooms and storage rooms. Sheet vinyl flooring in administration areas. Carpet in some administration areas, library and music room. Wood strip flooring in gymnasium, stage and Phys. Ed. Room.

Walls are painted concrete block, gypsum board and concrete surfaces. Ceramic wall tiles in staff washrooms, boys' shower room and girls' shower room.

Ceilings are acoustic ceiling tiles, suspended t-bar grid ceiling system with acoustic tiles, concrete ceiling and gypsum board.

Some vinyl floor tiles, acoustic ceiling tiles and acoustic tiles of the suspended t-bar grid ceiling system need replacement.

Mechanical Summary:

Ventilation system for the facility consists of three air handling units and one make-up air system. Unites were installed in 1961 and 2004. Classrooms are heating and ventilated via designated unit ventilators complete with heating coils. Heating water is generated by two gas fired boilers complete with circulation pumps.

Domestic hot water is provided by two gas fired tank type water heaters complete with hot water recirculation system. Copper piping distribution to conventional plumbing fixtures.

Municipal type services: gas, water, sanitary and storm.

Combination of pneumatic and direct digital controls.

Fire protection is provided in form of standpipe system and hand held fire extinguishers.

Overall mechanical system is in acceptable condition.

Electrical Summary:

Install new 600 amp bussing new switchgear and disconnect c/w new distribution panel for the 500 Amp service. Replace old starters with new six starters. Replace existing wiring with new wiring. Add new feeders based on panel loads. Install new circuits for microwave ovens and for stage lighting. School has a rating of acceptable.

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

S1 STRUCTURAL**A1010 Standard Foundations***

Concrete wall foundation (continuous footing).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

A1030 Slab on Grade*

Main floor, lower floor and boiler room have concrete slab on grade. Some settlement observed in a corner of the small gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

A2020 Basement Walls (& Crawl Space)*

The boiler room has concrete walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

B1010.01 Floor Structural Frame (Building Frame)*

The upper floor structure of the two storey is precast concrete double tees on concrete beams and columns.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

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

Concrete block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

B1010.03 Floor Decks, Slabs, and Toppings*

Main floor, lower floor and boiler room have concrete slab on grade. Concrete topping on upper floor. Wood deck on stage. Some minor cracking and movement observed in floor finishes in various locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

B1010.05 Mezzanine Construction*

The walkway in the boiler room is constructed of steel channels on steel frame.

Two mezzanines above two storage rooms with metal frame ceiling supported by concrete block walls & gypsum board on metal stud walls on the stage of gymnasium. These mezzanines have to be accessed by a portable ladder.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

B1010.07 Exterior Stairs*

An exterior concrete stair to the exterior concrete platform of boiler room and transformer room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

B1020.01 Roof Structural Frame*

The roof structure is precast concrete double tees on concrete beams and concrete columns.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

B1020.04 Canopies*

Concrete canopies at entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

S2 ENVELOPE**B2010.01.01 Precast Concrete: Exterior Wall Skin***

Precast concrete beams and columns. Some minor cracking observed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

The building has brick masonry cladding. Some cracking observed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

B2010.01.02.02 Concrete Block: Ext. Wall Skin*

The building has concrete block exterior walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

B2010.01.09 Expansion Control: Exterior Wall Skin*

The building has the original control joints.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

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

Joint sealants at window sills.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	2005	0	MAR-11

Event: Install or replace sealant. boe= 600 m.**Concern:**

Water damage to interior window sills caused by water infiltration. Improperly installed or absent joint sealant at exterior window sill suspected.

Recommendation:

Install new sealant.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$12,000	High

Updated: MAR-11

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

Joint sealants at window and door frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	20	MAR-11

Event: Replace sealants. boe= 600 m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$12,000	Unassigned

Updated: MAR-11

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

The building has painted concrete walls, concrete blocks, concrete columns and concrete beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	15	MAR-11

Event: Replacepaint. boe= 900 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$23,000	Unassigned

Updated: MAR-11

B2010.02.02 Precast Concrete: Ext. Wall Const.*

Precast concrete beams and columns, window sills.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

B2010.02.03 Masonry Units: Ext. Wall Const.*

The building has concrete exterior walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

B2010.06 Exterior Louvers, Grilles, and Screens*

The building has original aluminum louvers and grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	FEB-06

B2020.01.01.06 Vinyl, Fibreglass & Plastic Windows**

PVC framed windows replaced original windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	40	MAR-11

Event: Replace windows. boe= 560 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2045	\$560,000	Unassigned

Updated: MAR-11

B2030.01.02 Steel-Framed Storefronts: Doors**

The exterior doors were replaced with new hollow metal doors with pressed steel frames before November, 2005.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	30	MAR-11

Event: Replacedoors and hardware. boe= 10 doors.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$24,000	Unassigned

Updated: MAR-11

B2030.02 Exterior Utility Doors - 1962 Section**

Hollow metal doors in pressed steel frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	40	MAR-11

Event: Replacedoors. boe= 5 doors.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$12,000	Unassigned

Updated: MAR-11

B2030.03 Large Exterior Special Doors (Overhead)*

The industrial arts classroom has a metal overhead door.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	0	MAR-11

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

Re-roofed with SBS in 2005.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	25	MAR-11

Event: Replace roof. boe= 3360 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$590,000	Unassigned

Updated: MAR-11

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

There are vents, chimneys, exhaust hoods and hatches on the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

S3 INTERIOR**C1010.01 Interior Fixed Partitions***

Concrete block and gypsum board on metal stud frame partitions throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

C1010.03 Interior Operable Folding Panel Partitions**

Accordion folding partition in drama classroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1962	0	MAR-11

Event: Replace accordian folding partition. boe= 33 sm.

Concern:

Door is beyond design life and is worn out. Surfaces are badly damaged. Operation is difficult.

Recommendation:

Replace door.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$43,000	Medium

Updated: MAR-11

C1010.04 Interior Balustrades and Screens, Interior Railings*

Metal railings for the walkway in boiler room and two mezzanines above the storage rooms on the stage in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

C1010.05 Interior Windows*

Georgian wired glass and tempered glass set in pressed steel frames in vision sidelites at doors and windows throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

C1020.01 Interior Swinging Doors (& Hardware)*

Solid core wood doors and hollow metal doors with pressed steel frames throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	0	MAR-11

C1020.03 Interior Fire Doors*

Hollow metal doors with pressed steel frames throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	FEB-06

C1020.05 Interior Large Doors*

One above counter metal coiling push-up door for the dressing room at the west entrance. This push-up door is between the dressing room and the corridor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

C1030.01 Visual Display Boards**

Whiteboards and tackboards located throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	20	MAR-11

Event: Replace boards. boe= 180 boards.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$54,000	Unassigned

Updated: MAR-11

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

Floor supported metal partitions throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	30	MAR-11

Event: Replace compartments. boe= 21 cubicles.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$27,000	Unassigned

Updated: MAR-11

C1030.06 Handrails*

Metal handrails in main stairs, exit stairs at the end of the corridors of east 2 storey wing of the school, boiler room and stairs to stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

C1030.08 Interior Identifying Devices*

Plastic signs in most areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	0	MAR-11

C1030.10 Lockers**

Single tier and two tier metal lockers throughout the school for students and staff. Six tier metal lockers in boys' dressing room and girls' dressing room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	30	MAR-11

Event: Replace lockers. boe= 480 lockers.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$280,000	Unassigned

Updated: MAR-11

C1030.10 Lockers**

Single tier and two tier metal lockers throughout the school for students and staff. Six tier metal lockers in boys' dressing room and girls' dressing room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	30	MAR-11

Event: Install additional and replace damaged metal lockers. boe= 100 lockers.

Concern:

A number of existing metal lockers are damaged and maintenance is a concern. The school needs additional new metal lockers. The school also wants to replace the 6 tier metal lockers with new larger lockers.

Recommendation:

Install additional 49 new metal lockers and replace damaged metal lockers with new. A total of 100 new single tier and two tier metal lockers are required.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$60,000	Medium

Updated: MAR-11

C1030.12 Storage Shelving*

Painted plywood storage shelving throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	FEB-06

C1030.14 Toilet, Bath, and Laundry Accessories*

Commercial grade mirrors, soap dispensers, paper tower dispensers and toilet tissue holders located in all washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

C2010 Stair Construction*

Concrete construction for the main stairs, exit stairs at the end of the corridors of east 2 storey wing of the school. Metal construction for the stair in boiler room. Wood construction for the stairs to stage in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

C2020.02 Terrazzo Stair Finishes*

The upper floor and lower floor landings and upper stairs of 3 stairs in the east 2 storey wing of the school have terrazzo finish. Minor cracking observed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

C2020.05 Resilient Stair Finishes**

Vinyl floor tiles on the treads of the lower part of the 3 stairs in the east 2 storey wing of the school. Vinyl floor tiles on the treads of the stairs to stage. Resilient finish on the treads of the stairs at the north main entrance and the south entrance to the entrance hall on main floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	20	MAR-11

Event: Replace stair tread tiles. boe= 14 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$1,500	Unassigned

Updated: MAR-11

C2020.08 Stair Railings and Balustrades*

Metal railings for 3 stairs in the east 2 storey wing of the school (see Other Codes element and event). Metal railings for 2 mezzanines above 2 storage rooms on stage. Metal railings for the walkway in boiler room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

C3010.01 Concrete Wall Finishes (Unpainted)*

Painted concrete block wall in corridors, stairs, classrooms, science classrooms, preparation room, art classroom, drama classroom, music classroom, administration areas, washrooms, storage rooms, industrial arts classroom, home economic classroom, library, gymnasium, stage, Phys. Ed. Room, boys' shower & dressing room, girls' shower & dressing room, boiler room, transformer room, 2 Time-Out rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

C3010.01 Concrete Wall Finishes (Unpainted)*

The lower portion of the walls in the boiler room is concrete which has paint finish. Phys. Ed. Room, gymnasium, industrial arts classroom and corridors have concrete columns and some concrete surfaces with paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

C3010.03 Plaster Wall Finishes (Unpainted)*

Plaster finish at the top of the walls in Phys. Ed. Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	0	MAR-11

Event: Repair the cracked wall in Phys. Ed. Room.

Concern:

Crack at the top of the wall in Phys. Ed. Room which might be due to settlement of the foundation.

Recommendation:

Repair the crack on the wall.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2013	\$2,000	Low

Updated: MAR-11

C3010.04 Gypsum Board Wall Finishes (Unpainted)*

Gypsum board in classrooms, administration areas, home economic classroom and music classroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	FEB-06

C3010.06 Tile Wall Finishes**

Ceramic wall tiles in staff washrooms, boys' shower room, girls' shower room, walls around the urinals in boys' washrooms, ceramic tile base in washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

Event: Replace wall tile. boe= 90 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$23,000	Unassigned

Updated: MAR-11

C3010.09 Acoustical Wall Treatment**

Wood acoustic wall panels on the walls of music classroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	20	MAR-11

Event: Replace acoustic wall treatment. boe= 34 sm

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$7,500	Unassigned

Updated: MAR-11

C3010.11 Interior Wall Painting*

Painted concrete block, gypsum board, and concrete surfaces throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	FEB-06

C3020.01.02 Paint Concrete Floor Finishes*

Painted concrete floor finish in boiler room and transformer room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

C3020.02 Tile Floor Finishes**

Ceramic floor tiles in boys' washrooms, girls' washrooms, boys' shower & dressing room, girl's shower & dressing room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	50	MAR-11

Event: Replace floor tile. boe= 460 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$79,000	Unassigned

Updated: MAR-11

C3020.03 Terrazzo Floor Finishes*

Terrazzo floor finish in entrance hall on main floor. The upper floor and lower floor landings of 3 stairs in the east 2 storey wings of the school have terrazzo floor finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	FEB-06

C3020.04 Wood Flooring**

Wood strip flooring in gymnasium, stage and Phys. Ed. Room.
Wood tiles in industrial arts classroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

Event: Replace wood flooring. boe= 1420 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$345,000	Unassigned

Updated: MAR-11

C3020.07 Resilient Flooring - Sheet**

Vinyl sheet flooring in administration areas, staff washrooms and locker room in administration area, handicapped washroom, care taker office, 2 Time-Out rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

Event: Replace resilient tile and sheet flooring with resilient sheet. boe= 820 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$66,000	Unassigned

Updated: MAR-11

C3020.07 Resilient Flooring - Tile**

Vinyl floor tiles in corridors, art classroom, science classrooms, preparation room, home economic classroom, storage rooms, utility room, classrooms except one classroom with carpet.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	0	MAR-11

Event: Replace resilient floor tile. boe= 1,400 sm.

Concern:

Most of the vinyl floor tiles in corridors and classrooms are old and worn out. Tiles are showing wear and some joints opening up.

Recommendation:

Replace the old vinyl floor tiles in classrooms and corridors with new vinyl sheet flooring.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$112,000	High

Updated: MAR-11

C3020.08 Carpet Flooring**

Carpet in some administration areas, library, General purpose classroom, music classroom and one classroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	15	MAR-11

Event: Replace carpet. boe= 850 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$39,000	Unassigned

Updated: MAR-11

C3020.11 Floor Painting*

Painted concrete floor in boiler room and transformer room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

C3030.01 Concrete Ceiling Finishes (Unpainted)*

Painted concrete ceiling surfaces in gymnasium, stage, Phys. Ed. Room, boiler room, industrial arts classroom, storage rooms under the stairs in the east 2 storey wing, boys' shower & washroom on main floor, girls' shower & washroom on main floor and care taker's office.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	FEB-06

C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*

Painted gypsum board ceilings in some administration areas, stairs to stage, storage rooms, boys' dressing room and girls' dressing room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	FEB-06

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

Suspended t-bar grid system with acoustic tiles in Administration areas, staff locker room & staff washrooms in administration area, corridors, stairs in the east 2 storey wing, two large science classroom, computer classroom and handicapped washroom.

Some acoustic tiles in 2 large science classroom, stairs and corridors are damaged and stained.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	25	MAR-11

Event: Replace all suspended acoustic tile ceiling. boe= 1420 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$64,000	Unassigned

Updated: MAR-11

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

Suspended t-bar grid system with acoustic tiles in Administration areas, staff locker room & staff washrooms in administration area, corridors, stairs in the east 2 storey wing, two large science classroom, computer classroom and handicapped washroom.

Some acoustic tiles in 2 large science classroom, stairs and corridors are damaged and stained.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	25	MAR-11

Event: Replace damaged acoustic tiles boe= 400 sm..

Concern:

Ceiling tiles are dirty and damaged in 2 large classrooms and corridors. Suspension system has rusted and is dirty in areas.

Recommendation:

Replace acoustic tiles and suspension system.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$18,000	Medium

Updated: MAR-11

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

Acoustic ceiling tiles in art classroom, drama classroom, music classroom, library, home economic classroom, general purpose classroom, 2 Time-Out rooms in general purpose classroom, all classrooms except 2 large science classrooms & computer classroom with suspended t-bar ceiling, between concrete double tees in gymnasium, stage and Phys.Ed Room. These acoustic ceiling tiles are 230 mm x 230 mm or 300 mm x 300 mm tiles. A lot of tiles are damaged and stained.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	MAR-11

Event: **Replace damaged acoustic ceiling tiles. boe= 1,000 sm.**

Concern:

A lot of acoustic ceiling tiles in gymnasium, stage, Phys. Ed. Room, classrooms, art classroom, drama classroom, music classroom, library, home economic classroom, general purpose classroom are damaged and stained.

Recommendation:

Replace the damaged and stained acoustic ceiling tiles.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$45,000	Medium

Updated: MAR-11

C3030.07 Interior Ceiling Painting*

Concrete and gypsum board ceiling surfaces are painted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	FEB-06

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

13 - Single compartment stainless steel sinks in some classrooms and canteen. Staff room has a two compartment sink.
 6 - Science rooms have 250mm deep stainless steel single compartment sinks with gooseneck faucets and bottle traps.
 1 - Art room has single compartment stainless steel sinks with bottle traps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	30	MAR-11

Event: Replace 20 sinks

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2033	\$29,000	Unassigned

Updated: MAR-11**D2010.05 Showers****

2 - prefab shower shall's

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	30	MAR-11

Event: Replace 2 Showers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2033	\$4,000	Unassigned

Updated: MAR-11**D2010.08 Drinking Fountains/Coolers****

6 - Stainless steel Halsey-Taylor refrigerated drinking fountains in the corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	35	MAR-11

Event: Replace 6 Drinking Fountains

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$21,000	Unassigned

Updated: MAR-11**D2010.09 Other Plumbing Fixtures***

3 - mop sinks located throughout the school
 1 - Service sink located in custodial rooms and in the science preparation room. Prep room sink includes a sediment trap.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	0	MAR-11

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

17 - Stainless steel vanity mounted lavatories used in student and staff washrooms throughout. Pushbutton faucet in student washrooms.

4 - Handicapped washroom has china wall hung lave with lever handle and insulated, offset trap.

10 - Floor mounted flush tank urinals in boy's washrooms. Tanks have motion sensor flush control.

20 - Floor mounted flush valve water closets used in washrooms throughout. Units have elongated bowls with open front seats.

4 - Floor mounted flush tank water closets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	35	MAR-11

Event: Replace 55 Washroom Fixtures.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$85,000	Unassigned

Updated: MAR-11

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper and galvanized piping used on domestic water service throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	0	MAR-11

D2020.01.02 Valves: Domestic Water**

All plumbing fixtures c/w individually isolation valves .

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	40	MAR-11

Event: Replace 120 Domestic Water Valves

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$135,000	Unassigned

Updated: MAR-11

D2020.01.03 Piping Specialties (Backflow Preventors)**

Double checkvalve assembly provided on standpipe.
 Double checkvalve assembly on boiler make-up.
 Vacuum breakers provided on janitor's sinks and lab sinks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	20	MAR-11

Event: Replace Backflow Preventors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$9,000	Unassigned

Updated: MAR-11

D2020.02.02 Plumbing Pumps: Domestic Water**

B&G Bronze circulator used for domestic hot water recirculation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	20	MAR-11

Event: Replace 1 Domestic Water pump

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$2,000	Unassigned

Updated: MAR-11

D2020.02.06 Domestic Water Heaters**

2 - A.O. Smith BTRC120-110 tank type natural gas water heater used to provide domestic hot water throughout. Tanks have automatic flue dampers and spark igniters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	20	MAR-11

Event: Replace 2 Domestic Water Heaters

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$7,000	Unassigned

Updated: MAR-11

D2020.03 Water Supply Insulation: Domestic*

Domestic water piping is fully insulated in mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

D2030.01 Waste and Vent Piping*

Cast iron, plastic and copper DWV piping is used for drainage.
Storage/prep room sinks, science room sinks, and art room sinks include bottle and plaster traps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	0	MAR-11

D2030.02.04 Floor Drains*

Floor drains are installed in boiler room and washrooms

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

D2040.01 Rain Water Drainage Piping Systems*

Cast and asbestos rain water leaders. Piping is insulated 3m back from the roof drains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

D2040.02.04 Roof Drains*

Open flow roof drains with cast iron grates installed on roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

D3010.02 Gas Supply Systems*

Gas meter is located in main mechanical room. Gas is regulated to 7" to serve the equipment in the mechanical room. A 50mm low pressure gas line runs across the roof to the roof mounted gas fired air handling unit and make-up air unit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	0	MAR-11

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

Two RBI LB1970 induced draft natural gas fired, low NOx hot water heating boilers provide heating for the building. Each boiler has a high altitude output of about 475 kW.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	35	MAR-11

Event: Replace Heating Boilers and Accessories

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$175,000	Unassigned

Updated: MAR-11

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

Combustion air ducts have been provided in the mechanical room. Chimney clearances are adequate. Each boiler flue has a barometric draft damper.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	35	MAR-11

Event: Replace 30m Chimneys & Comb. Air

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$19,000	Unassigned

Updated: MAR-11

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

Chemical treatment is provided for the heating system including side stream filters and chemical pot feeders.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	0	MAR-11

D3020.03.02 Chimneys (& Comb. Air): Furnace*

Flue from furnace rises up to roof c/w cap.
Combustion air and outside air is provide by a dampered grille on wall.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

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

AS-1: Built up air system serves the gymnasium and locker room area. The unit includes a Recold cabinet fans for supply, a mixing section, filter section and a hot water heating coil with face and by-pass dampers. There are four discharge zones with individual re-heat coils serving the two gymnasiums, the locker rooms, and the stage. This unit is used for heating and ventilation.

AS-2: Built up air system serves the industrial arts room includes a Recold cabinet fans for supply air, a mixing box, filter section and a hot water heating coil. This unit is used for heating and ventilation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	30	MAR-11

Event: Replace 2 Air Handling Units**Concern:**

Air handling units are old and inefficient, the space is often very cold. Heating coils serving units require ongoing maintenance. Ventilation unit is required to run continuously to maintain space temperature.

Recommendation:

Replace existing air handling units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$220,000	Medium

Updated: MAR-11

D3040.01.01 Air Handling Units: Air Distribution - 2004**

Roof mounted Engineered Air DJ-20-0, indirect gas fired ventilation unit provides ventilation to the administration offices. Unit includes supply and exhaust fans, mixing section, heating section, and filters.

Roof Mounted Engineered Air HE-20-0, direct fired make-up air unit interlocked with the industrial arts dust collection system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	30	MAR-11

Event: Replace 2 air handling unit

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$60,000	Unassigned

Updated: MAR-11

D3040.01.04 Ducts: Air Distribution*

Low pressure ductwork exposed at high level in each gymnasium and in the Industrial Arts shop.

Low pressure ductwork in the ceiling space of the administration area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Round diffusers in the gymnasium and industrial arts. Return grilles in each gymnasium are damaged and should be replaced with heavy duty linear bar grilles.
 Square ceiling diffusers in administration.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

D3040.03.01 Hot Water Distribution Systems**

Each boiler has a dedicated Taco horizontal in-line circulating pump that draws return water from a common de-coupling header, through the associated boiler and back to the header thru a primary loop.
 2 - Taco model KS2508A vertical in-line pumps circulate heating water from the common header through finned tube radiation, cabinet unit heaters, radiant ceiling panels, and unit ventilators throughout the school.
 Piping is Schedule 40 steel with welded and flanged fittings. Smaller sizes use screwed fittings and/or copper piping.
 The Boilers are used to control the temperature in the building as there are no control vales on the unit ventilators in the classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	40	MAR-11

Event: Install Control Valves Serving Unit Ventilators.
Typical of 27.

Concern:

The boilers are used to control the building temperature by raising and lower the boiler water temperature. In the spring and fall this is below the recommended operating temperature from the boiler manufacture.

Recommendation:

Provide control vales on the unit ventilators so the boilers can operate at its recommended temperatures.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2012	\$45,000	Medium

Updated: MAR-11

Event: Replace Hot Water Distribution System: BOE: 4861
sq.m. GFA.

Concern:

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$450,000	Unassigned

Updated: MAR-11

D3040.04.01 Fans: Exhaust**

Roof mounted spun aluminum fans have been provided for washroom and locker room exhaust. General exhaust for each area of the building is provided by a pair of spun aluminum exhaust fans. Each pair of fans is sequenced to allow staged operation. These fans are intended to relieve excess air from the building to compensate for the fresh air being delivered by the unit ventilators.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	30	MAR-11

Event: Replace 8 Exhaust fans

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$32,000	Unassigned

Updated: MAR-11**D3040.04.03 Ducts: Exhaust***

Low pressure exhaust ductwork in the corridor ceiling space.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

D3040.04.05 Air Outlets and Inlets: Exhaust*

Ceiling mounted grilles in washrooms and locker rooms.
Ceiling and wall mounted exhaust grilles in the classroom for general exhaust.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

D3050.01.01 Computer Room Air Conditioning Units**

A 10.6 kW (3T) ductless split air conditioning system has been provided for the second floor computer lab. This unit includes a ceiling cassette type evaporator unit and a free standing roof mounted condenser.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2001	30	MAR-11

Event: Replace Split AC Unit

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$15,000	Unassigned

Updated: MAR-11

D3050.02 Air Coils**

Reheat coils provided in gymnasium air system discharge ductwork used for zone heating control.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	30	MAR-11

Event: Replace 2 heating coils

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$12,000	Unassigned

Updated: MAR-11

D3050.05.02 Fan Coil Units**

Force flow heater are installed in entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	30	MAR-11

Event: Replace 7 Fan Coil Units

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$36,000	Unassigned

Updated: MAR-11

D3050.05.03 Finned Tube Radiation**

Perimeter finned tube radiation cabinets is used in the main building corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	40	MAR-11

Event: Replace 15 m Finned Tube Radiation

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$7,000	Unassigned

Updated: MAR-11

D3050.05.06 Unit Heaters**

A horizontal hydronic unit heater is used in the mechanical room to temper the combustion air.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	30	MAR-11

Event: Replace 1 unit heater

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$6,000	Unassigned

Updated: MAR-11

D3050.05.07 Unit Ventilators**

Herman Nelson hot water unit ventilators are used in the classrooms for heating and ventilation. Heating coils are running wild with no control, thermostat operates fan only.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1960	30	MAR-11

Event: Replace Ventilation System**Concern:**

Existing unit ventilators require frequent maintenance with above average running costs. Replacement parts no longer available.

There is no control over the heating coil other than the cycling of the supply fan.

The boiler discharge temperature is lowered to maintain space temperature.

Recommendation:

Replace existing unit ventilators with one central air distribution system serving classrooms. Provide perimeter heating system.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$350,000	Medium

Updated: MAR-11

D3050.05.08 Radiant Heating (Ceiling & Floor)**

Radiant ceiling panels are used for heating in the administration area. The panels are not performing adequately and reheat coils have been added to some of the ventilation branch lines. The performance of the panels would improve significantly if the supply water temperature was increased. A review of the secondary water temperature reset schedule should be undertaken to determine if the reset schedule is appropriate.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	35	MAR-11

Event: Replace 7 radiant panels

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$7,000	Unassigned

Updated: MAR-11

D3060.02.01 Electric and Electronic Controls**

Line voltage thermostats cycle the cabinet unit heater fans on a call for heat. Electronic actuators are used on secondary heating three-way control valve and reheat coil valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	30	MAR-11

Event: Replace Electric Controls for a 4861 sq. m. building

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$8,000	Unassigned

Updated: MAR-11

D3060.02.02 Pneumatic Controls**

Quincy duplex tank-mounted control compressor with refrigerated air dryer. Dual pressure pneumatic thermostats and valve actuators for the classroom unit ventilators provide occupied/unoccupied control.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	40	MAR-11

Event: Replace Pneumatic Controls for a 4861 sq. m. building

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$29,000	Unassigned

Updated: MAR-11

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

Reliable Controls automation system for major HVAC equipment and building monitoring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	20	MAR-11

Event: **Replace Building Systems Controls BMCS for a 4861 sq. m. building**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$96,000	Unassigned

Updated: MAR-11

D3090 Other Special HVAC Systems and Equipment*

Murphy Dust collection system provided for the wood working equipment in the Industrial Arts shop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	0	MAR-11

D4020 Standpipes*

Standpipe and fire hoses in cabinets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1992	0	MAR-11

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Dry chemical fire extinguishers in fire hose cabinets, service spaces, mechanical rooms, and science labs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

S5 ELECTRICAL**D5010.01 Main Electrical Transformers****

Pad mounted transformer located at south corner of school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2001	40	MAR-11

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

600 Amp, 120/208 volt main service. Peak is 87 kVA. Main distribution equipment is 1962's vintage. Manufactured by Square-D.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	40	MAR-11

<u>Capacity Size</u>	<u>Capacity Unit</u>
600	amps

Event: Replace switchgear and main breaker. BOE= 600 amp bussing, switchgear, disconnect, and distribution panel

Concern:

Main switchgear is manufactured by Square-D, 1962's vintage. Equipment insulation characteristics are obsolete. Spare parts not available.

Recommendation:

Install new 600 amp bussing new switchgear and disconnect c/w new distribution panel for the 500 Amp service..

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$25,000	High

Updated: MAR-11

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

2004 Square-D and Federal Pioneer panels. 60% full.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	30	MAR-11

Event: Replace Branch Circuit Panelboards. BOE = 10 panels

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$47,000	Unassigned

Updated: MAR-11

D5010.07.02 Motor Starters and Accessories (1962)**

1962 Electrical Power Equipment Ltd starters, total of six units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	30	MAR-11

Event: Replace motor starters. BOE= 6 starters.

Concern:

Electrical Power Equipment Ltd, total of six are at end of life.
No spare parts available.

Recommendation:

Replace old starters with new starters.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$5,000	Medium

Updated: MAR-11

D5010.07.02 Motor Starters and Accessories (2004)**

Loose Square-D starters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	30	MAR-11

Event: Replace Motor Starters. BOE = 4 starters.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$4,000	Unassigned

Updated: MAR-11

D5020.01 Electrical Branch Wiring*

1962 wiring in conduit. 2004 electrical upgrade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	2004	0	MAR-11

Event: Replace existing wiring with new wiring. Add new feeders based on panel loads.

Concern:

Existing wiring insulation has passed its expected life. Some feeders might be over loaded.

Recommendation:

Replace existing wiring with new wiring. Add new feeders based on panel loads.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$45,000	High

Updated: MAR-11

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

Interior lighting is on line voltage, 120 Volt switches.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

D5020.02.02.02 Interior Fluorescent Fixtures**

Fluorescent lighting upgraded to T8 lamps and electronic ballasts all over the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	30	MAR-11

Event: Replace fluorescent fixtures. BOE = 856 fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$240,000	Unassigned

Updated: MAR-11

D5020.02.03.02 Emergency Lighting Battery Packs**

Mixture of Lumacell and Ready Lite battery packs and remote heads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	20	MAR-11

Event: Lifecycle Replacement. BOE = 5 battery packs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$7,000	Unassigned

Updated: MAR-11

D5020.02.03.03 Exit Signs*

LED exit signs over required exits.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2003	0	MAR-11

D5020.02.05 Special Purpose Lighting*

The school has a number of 1960s era stage lights in the drama room. Stage lighting is controlled by a Strand Lighting System 6 dimmer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	0	MAR-11

Event: Replace Stage lighting system. BOE = 1 controller, 10 lights

Concern:

Spare parts for the stage lighting system are unavailable.

Recommendation:

Replace stage lighting dimmer.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2013	\$10,000	Low

Updated: MAR-11

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

11 150W wall mount fixtures are distributed around the building.

1 wall mounted floodlight illuminates the parking lot.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2003	0	MAR-11

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

Exterior lighting is controlled by a photocell and a timer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	2003	0	MAR-11

Event: Change light schedule**Concern:**

5 of the wall mount HPS fixtures (near the Southwest corner of the building) remain on 24 hours a day.

Recommendation:

Change lighting controls so that these lights turn off during the day with the rest of the lights.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$2,000	Medium

Updated: MAR-11

D5030.01 Detection and Fire Alarm**

Simplex 4002 control panel and remote enunciator at front entrance. Bells and strobes are installed at required areas. Detection devices and pull stations are installed as required by code.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1992	25	MAR-11

Event: Replace Fire Alarm System. BOE = 1 Control panel, 4700 sq. m cfa

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$130,000	Unassigned

Updated: MAR-11

D5030.02.02 Intrusion Detection**

Magnum Alert 1000 alarm system, connected to the School board central. 3 keypads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	25	MAR-11

Event: Replace Intrusion Detection system. BOE = 4700 sq. m cfa

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$120,000	Unassigned

Updated: MAR-11

D5030.02.04 Video Surveillance**

Dedicated Micros Camera system with 4 remote controlled digital cameras at required areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	25	MAR-11

Event: **Replace Video Surveillance System. BOE = 4 cameras, control equipment**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$7,000	Unassigned

Updated: MAR-11

D5030.03 Clock and Program Systems*

Individual 120 volt and battery operated clocks in hallways and classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2003	0	MAR-11

D5030.04.01 Telephone Systems*

Nortel Norstar Meridian telephone systems with six lines and handsets in classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	0	MAR-11

D5030.04.04 Data Systems*

Supernet in school.

3 HP Procurve 2610 48 port switches at 80% full.

1 HP Procurve 5406zl switch with 2 24 port modules and 1 management module. 80% full.

HP Proliant Server.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2001	0	MAR-11

D5030.04.05 Local Area Network Systems*

Cat5 cables in conduit and free air in ceiling space.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2001	0	MAR-11

D5030.05 Public Address and Music Systems**

Bogen Multicom 2000 with speakers in classrooms. Controls period bell tones. Sound system on stage is a portable unit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	20	MAR-11

Event: Replace PA system. BOE =1 PA system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$18,000	Unassigned

Updated: MAR-11

D5030.06 Television Systems*

5 projectors of various make and model. Cable TV in library only.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	0	MAR-11

D5090.01 Uninterruptible Power Supply Systems**

APC 1500W UPS for server.

APC 350W UPS for switches in server room.

APC 750W UPS for phone system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2001	30	MAR-11

Event: Replace UPS. BOE = 3 UPS

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$2,500	Unassigned

Updated: MAR-11

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

Stage drapes, lights and lighting tracks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

E1020.07 Laboratory Equipment*

One fume hood in preparation room of science classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	FEB-06

E1090.04 Residential Equipment*

Residential grade range, refrigerator, dishwasher, microwave oven and counter top oven in staff room. Residential grade ranges, refrigerators, microwave ovens, dishwasher and counter ovens in home economic classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Eight basketball backboards in Gymnasium. Two basketball backboards in Phys. Ed. Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

E2010.02 Fixed Casework**

Educational Casework

Painted and plastic laminated plywood casework with plastic laminate countertops throughout classrooms.

Kitchen Casework

Plastic laminated clad cabinets with plastic laminate countertops in home economic classroom and staff kitchen.

Library Casework

Painted and plastic laminate plywood shelving. Plastic laminate countertop for check out counter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	35	MAR-11

Event: Replace all casework. boe= bal. of 4,778 sm/gfa.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$330,000	Unassigned

Updated: MAR-11

E2010.02 Fixed Casework**

Educational Casework (boe= 60 m.)

Painted and plastic laminated plywood casework with plastic laminate countertops throughout classrooms.

Laboratory Casework (boe= 30 m.)

Painted and plastic laminated plywood casework with plastic laminate countertops in science classrooms and preparation room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	35	MAR-11

Event: Replace casework.**Concern:**

Appearance of original casework dated. Counter-tops chipped and cracked. Finish of boxes chipped and cracked.

Recommendation:

Replace casework.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$90,000	Medium

Updated: MAR-11**E2010.03.01 Blinds****

Venetian blinds in administration areas and classrooms except Gen. Purpose classroom which has drapes.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	30	MAR-11

Event: Replace blinds. boe= 480 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$48,000	Unassigned

Updated: MAR-11**E2010.03.06 Curtains and Drapes****

Gen. Purpose classroom has drapes.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	30	MAR-11

Event: Replace drapes. boe= 20 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$2,000	Unassigned

Updated: MAR-11

F1010.02.04 Portable and Mobile Buildings - 1967 Portable Envelope**

Aging portable used as a fitness and exercise room.

The building has a metal-clad roof, with metal cladding on the upper portions of the exterior walls, and painted plywood on the lower portion. It has windows with 2 sliding single layers of glass in aluminum frames, and wood doors in wood frames. The roof structure is tongue and groove planks on glu-lam beams, supported by stud bearing walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1967	30	MAR-11

Event: Replace building envelope. boe= 83 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$48,000	Unassigned

Updated: MAR-11

F1010.02.04 Portable and Mobile Buildings - 1967 Portable Interior**

The flooring is covered with rubber interlocking tiles, and the interior walls with a wood-style paneling. There are a number of both chalkboards and white boards on the walls, a laminate countertop along one side of the interior. The building is currently used as an exercise/workout room, and houses a variety of fitness and gym equipment.

Overall the building appears to be in acceptable condition, aside from appearance. The most recognizable wear is on the wood doors and frames, as well as the laminate countertop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	MAR-11

Event: Replace interiors. boe= 83 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$24,000	Unassigned

Updated: MAR-11

F1010.02.04 Portable and Mobile Buildings- 1967 Portable Elelc.**

Power is fed to the portable via overhead line off the main building. The portable has a Federal Pioneer 60A 120/240V single phase 8 circuit panel

with 2 empty circuits. Lighting in the portable consists of 16 two lamp T12 surface mount 1x4 fixtures. Approximately 12 convenience receptacles (15A) are located around the wall.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1967	30	MAR-11

Event: Replace electrical. boe= 83 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$24,000	Unassigned

Updated: MAR-11

F1010.02.04 Portable and Mobile Buildings - 1967 Portable Mech.**

Mechanical system for the portable consists of one packaged gas fired furnace that heats and ventilated space via under floor ductwork.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1967	30	MAR-11

Event: Replace mechanical. boe= 83 sm.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$24,000	Unassigned

Updated: MAR-11

F1010.02.05 Grandstands and Bleachers**

Wood pull-out bleachers in drama classroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	30	MAR-11

Event: Replace bleachers. boe= 120 seats.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$420,000	Unassigned

Updated: MAR-11

F1020.02 Special Purpose Rooms

Two small Time -Out rooms in the Gen. Purpose classroom to provide an isolated & quiet environment for individual student to do work.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	50	FEB-06

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

It has barrier free route from 71 Street and parking area to the west entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	FEB-06

K4010.02 Barrier Free Entrances*

Install barrier free push paddles on entrance doors of west entrance which is a barrier free entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	0	MAR-11

Event: Install barrier free push paddles on the entrance doors of the west entrance which is a barrier free entrance. boe= 2 doors.

Concern:

It does not meet current code requirement.

Recommendation:

Install barrier free push paddles on the entrance doors of the west entrance.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2011	\$26,000	High

Updated: MAR-11

K4010.03 Barrier Free Interior Circulation*

The east two storey wing is at a split level with the remaining section of the school. There is no elevator for the wheelchairs to go to 3 different floor levels of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	0	MAR-11

Event: Install an elevator for the wheelchairs to go to 3 different floor levels of the school. boe= one 3-stop elevator.

Concern:

The east 2 storey wing is at a split level with the remaining section of the school. There is no elevator for the wheelchairs to go to 3 different floor levels of the school.

Recommendation:

Install an elevator for the wheelchairs to go to 3 different floor levels of the school.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2011	\$150,000	High

Updated: MAR-11

K4010.04 Barrier Free Washrooms*

A barrier free washroom for both male & female is on main floor. No access from upper and lower classroom floor levels. See also Barrier Free Interior Circulation item event.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1962	0	MAR-11

K4020.03 Other Codes*

Exit stairs lack proper height and design of guard.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1196	0	MAR-11

Event: Add guards to stairs. boe= 22 m.

Concern:

Exit stairs lack proper height and design of guard.

Recommendation:

Add guards to centre handrails.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2011	\$11,000	High

Updated: MAR-11

K4030.01 Asbestos*

The latest hazardous material audit was done in August, 2001. Asbestos is in debris in the crawl space, drywall joining compound, duct parging insulation located in various locations throughout the building and pipe fitting on mechanical & domestic water lines located in various locations throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	FEB-06

K4030.02 PCBs*

The school has not done any test for PCBs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

K5010 Reports and Studies*

Prime Consultant: Zygy Baczynski : Bacz Engineering (2004) Ltd.
 Evaluation Year: Sept. 14, 2010
 Total evaluated area: 4,861 sq.m.
 School area: 4,778 sq.m.
 Portable area: 83 sq.m.

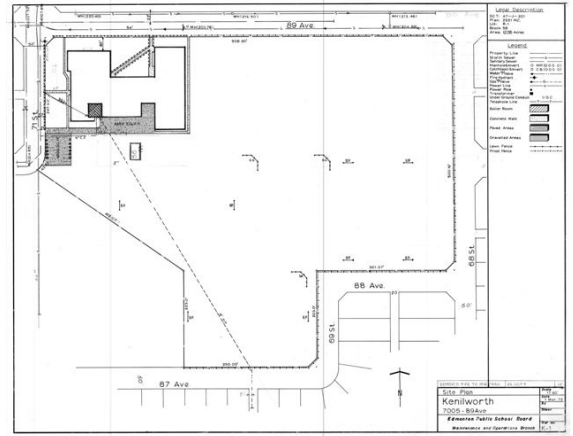
<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

Event: Building & Site Plans

<u>Type</u>	<u>Year</u>	<u>Cost</u>
Study	2010	\$0

Updated: MAR-11

Priority
Unassigned



Site Plan