

# **RECAPP Facility Evaluation Report**

## **Edmonton School District No. 7**



### **Lorelei Elementary School**

B3197A  
Edmonton

**Facility Details**

**Building Name:** Lorelei Elementary School  
**Address:** 16230 - 103 Street  
**Location:** Edmonton  
  
**Building Id:** B3197A  
**Gross Area (sq. m):** 4,012.10  
**Replacement Cost:** \$8,744,262  
**Construction Year:** 1977

**Evaluation Details**

**Evaluation Company:** R.Saunders Architects Ltd.  
**Evaluation Date:** November 20 2007  
**Evaluator Name:** Raghbir Jagdev MRAIC MAAA MAIBC

**Total Maintenance Events Next 5 years:** **\$1,545,709**  
**5 year Facility Condition Index (FCI):** **17.68%**

**General Summary:**

The building was constructed in 1977 and is single storey with a second floor mechanical room. Two pods were added in 1978. A third pod was added in 1992. The main building is 2760 m2 including the second floor mechanical space. The pods are not relocatable.

**Structural Summary:**

The foundations are concrete grade beams on concrete strip footings. Concrete pedestals on concrete footings are used in the center portion to support a steel structure. The building is slab on grade throughout with a suspended cast in place floor slab supporting the second floor mechanical room. The roof structure is steel beams, owsj and steel deck supported by concrete block on the exterior and steel columns on the interior of the building. The south/east portion of the building has interior concrete block supporting the steel roof structure. The two 1978 pods have concrete piles supporting 6x6 steel beams. The 1992 pod has concrete piles supporting gluelam construction.

**Envelope Summary:**

The exterior walls have a brick veneer finish around the perimeter of the building with metal siding above the windows on portions of the building and gymnasium. The 1978 pods have metal siding with the portions above and below the windows, doors and mechanical grilles being painted plywood. The 1992 pods have metal siding. The building has aluminum windows. The pods have aluminum slider windows. The entire flat roof is membrane roofing. The 1992 pod has built-up-roofing with gravel finish.

**Interior Summary:**

Vinyl composite tile flooring in corridors, vestibules, portions of classrooms, storage areas, staff washrooms, caretakers office and various other locations. Carpet flooring in classrooms, portions of corridors, library, general office area and other locations. Boys and girls washrooms have epoxy concrete floor finish. Wood strip flooring in gymnasium. Suspended acoustic tile ceilings in corridors, classrooms, general office area, staff areas, library, pods and various other locations. Painted drywall ceiling finishes in some storage rooms, around skylights in corridors, storage rooms in pods and various other locations. Painted concrete block wall finish throughout most of the building. Painted vinyl board panels on demountable partitions between classrooms, some corridor walls, general office area and in 1978 pods. 1992 pods have painted drywall finish.

**Mechanical Summary:**

The mechanical systems for this facility are in acceptable condition for the age of the building. The Boilers and Air Handling Units will be approaching the end of their lifecycle in the next four to five years and some of the components already need changing. One of the hot water circulation system pumps needs to be replaced due to excessive noise and vibration. There are many storage rooms in the school that do not have exhaust fans installed and require the installation of ductwork and exhaust fans to meet present indoor air requirements as per the building code, and to improve the indoor air quality. The server room gets extremely overheated and requires a split unit air conditioning system installed in order to dissipate the heat gains in the room. The domestic water heater in the school is extremely oversized for the size and requirements of domestic hot water that the school has, in order to improve operating costs and efficiency and due to the fact that the domestic water heater is approaching the end of its lifecycle it is recommended that the unit be replaced by a much smaller unit. Aside for the above main notes the rest of the building is in acceptable to good condition.

**Electrical Summary:**

This school was built in 1977 with additions coming in 1978 and 1992. The main MDP is an ITE 1200 Amp panel. The interior florescent fixtures should be changed out to energy efficient T-8 lamps and electronic ballasts. A new security system was installed in 1997. A new public address system was installed in 2006. The remainder is original equipment.

This school is in acceptable condition.

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

## S1 STRUCTURAL

### A1010.01 Wall Foundations (Continuous Footing)

Foundations are concrete grade beams on concrete strip footings along the exterior and portions of the interior. Concrete pedestals on concrete footings are used in the center portion to support a steel structure.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

### A1020 Special Foundations (1978 pods)\*

hss beams on concrete piles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1978	0	MAR-08

### A1020 Special Foundations (1992 pod)\*

Gluelam construction on concrete piles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1992	0	MAR-08

### A1020 Special Foundations (main building)\*

Concrete pedestals on concrete footings supporting steel columns and roof structure.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

### A1030 Slab on Grade\*

Slab on grade throughout the building. Cracks developing in boys and girls change rooms, boys and girls washrooms, janitor room in c7, caretaker storage #15 and some other locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1977	0	MAR-08

### B1010.01.02.01 Cast-in-place Concrete: Beams

Cast in place concrete beams around second floor mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**B1010.01.02.04 Structural Steel: Beams (1978 pods)**

Hss beams floor structure.

As part of regular maintenance, paint beams as it is showing signs of rust. Cost is less than \$1000.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1978	0	MAR-08

**B1010.03.01 Cast-in-place Concrete:Slab**

Second floor mechanical room has suspended cast in place concrete floor slab.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**B1010.07 Exterior Stairs\***

Wood exterior exit stairs from classrooms in 1992 pod.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1992	40	MAR-08

**B1020.01 Roof Structural Frame - (1992 pod)\***

Steel deck on truss joists.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1992	0	MAR-08

**B1020.01.01.05 Structural Steel: Roof Column**

Structural steel hss columns in center area supporting steel roof structure.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**B1020.01.02.03 Structural Metal Framing:Roof Beams**

Steel beams around center area supporting steel roof structure.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**B1020.01.04.02 Steel Joists**

Owsj roof structure throughout the main building and gymnasium. Steel c-channels over the corridor in south/east portion of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**B1020.02 Structural Interior Walls Supporting Roofs\***

Concrete block structural interior walls supporting roof in south/east portion of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**B1020.03.05 Metal Deck**

Steel deck on steel structure throughout entire building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

## S2 ENVELOPE

### B2010.01.02.01 Brick Masonry: Ext. Wall Skin\*

Brick veneer on exterior walls of the main building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	75	MAR-08

### B2010.01.06.03 Metal Siding\*\* 1978 pods

Metal siding above the window head level around the majority of the building and gymnasium. The two 1978 pods have metal siding all around excluding the portions above and below the windows, doors and mechanical grilles. 1992 pod has metal siding all around.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1978	40	SEP-08

#### Event: Replace metal siding

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$194,200	Unassigned

**Updated:** SEP-08

### B2010.01.06.03 Metal Siding\*\* 1992 pod

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1992	40	SEP-08

#### Event: Replace metal siding

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2032	\$110,000	Unassigned

**Updated:** SEP-08

### B2010.01.06.03 Metal Siding\*\* Main Bldg

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	40	SEP-08

#### Event: Replace metal siding

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$152,300	Unassigned

**Updated:** SEP-08



**B2010.01.06.04 Wood Siding\*\***

Painted plywood under and over windows, doors and mechanical room grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1978	40	MAR-08

**Event: Replace plywood panels with metal siding****Concern:**

Painted plywood under and over windows, doors and mechanical room grilles is worn and deteriorating.

**Recommendation:**

Replace plywood panels with metal siding. Approx. 64 m2

**Consequences of Deferral:**

Further wear and deterioration.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$21,164	Low

**Updated:** APR-08



South/west pod.

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

Concrete block exterior walls around the perimeter of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	75	MAR-08

**B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation (1992 pod)\***

Batt insulation and vapour barrier in exterior walls and floors in 1992 pods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1992	100	MAR-08

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

Mastic vapour barrier on concrete block exterior walls. 1" rigid insulation on exterior walls all around the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**B2010.06 Exterior Louvers, Grilles, and Screens\***

Mechanical grilles on exterior walls of pods. Metal security screens on windows at the back of the building and pods.

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



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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1992	40	SEP-08

**Event: Replace aluminum windows in 1992 pods**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2032	\$48,000	Unassigned

**Updated:** SEP-08**B2020.01.01.02 Aluminum Windows (Glass & Frame)\*\***

Aluminum exterior windows in classrooms and all around building. Aluminum slider exterior windows in 1978 pods.  
Aluminum exterior windows in 1992 pods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	40	MAR-08

**Event: Replace aluminum windows**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$23,000	Unassigned

**Updated:** SEP-08**B2030.01.02 Steel-Framed Storefronts: Doors\*\***

Hollow steel insulated doors in steel frames at entrances to main building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	30	MAR-08

**B2030.02 Exterior Utility Doors\*\***

Hollow steel insulated doors in steel frames in meter room, roof access from mechanical room, gymnasium exits, yard storage and exit doors from pods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	40	MAR-08

**Event: Replace Exterior Utility Doors**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$11,500	Unassigned

**Updated:** MAY-08

**B3010.01.03 Roof and Deck Insulation (1992 pod)**

1" rigid fibre board insulation on polystyrene insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1992	0	MAR-08

**B3010.01.03.02 Roof Board Insulation**

3" rigid insulation on roof deck of main building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**B3010.04 Membrane Roofing**

Membrane roofing with embedded gravel finish on flat roof over the entire building and gymnasium. Reroofing was done in various stages in 1996, 1998 and 2000. 1992 pod has original roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	MAR-08

**B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel) (1992 pod)\*\***

Built-up-roofing with gravel finish on 1992 pod.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1992	25	MAR-08

**Event: Replace Built-up Bituminous Roofing (Asphalt & Gravel)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$47,000	Unassigned

**Updated:** MAY-08

**B3010.08 Flashing and Sheet Metal**

Prefinished metal flashing on parapets around the building.

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

**B3020.01 Skylights\*\***

Aluminum framed skylights in corridors and over library.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	25	MAR-08

**Event: Replace skylights**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$9,000	Unassigned

**Updated:** MAY-08

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

Concrete block infill walls throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**C1010.01.07 Framed Partitions (Stud)**

Steel stud framing around some storage rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	MAR-08

**C1010.02 Interior Demountable Partitions\***

Steel stud partitions between classrooms, in general office/staff area and various other locations.

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

**C1010.05 Interior Windows - General Office\***

Steel framed windows with wired glass in general office area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**C1010.05 Interior Windows - Roll Shutters\***

Roll shutter at pass thru window in kitchen.

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

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

Steel fire rated doors in steel frames in fire separation between gymnasium and lunch/study and physical education offices in the main building area. Steel fire rated doors in steel frames in stair to mechanical room and incinerator room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	40	MAR-08

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

Solid core wood doors in steel frames in classrooms, storage, janitor room, electrical room, boys and girls washrooms, change rooms, corridor doors, general office area and various other locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**C1020.03 Interior Fire Doors\***

Hollow steel fire doors with georgian wire glass in steel frames in fire separation between corridors c1/c2 separating main and south/east portion of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**C1030.01.01 Chalkboards**

Green board in classrooms.

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

**C1030.01.02 Markerboards**

White board in classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	MAR-08

**C1030.01.03 Tackboards and Visual Aid Boards**

Tackboards and Visual Aid Boards in classrooms, corridors and various other locations.

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

**C1030.02 Fabricated Compartments(Toilets>Showers)\*\***

Fabricated toilet compartments in boys and girls washrooms, change rooms and staff washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	MAY-08

**Event: Replace fabricated compartments**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$27,500	Unassigned

**Updated:** MAY-08

**C1030.06 Handrails\***

Wall mounted steel pipe handrail at stairs to mechanical room and at ramp going up to 1992 pod.

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

**C1030.08 Interior Identifying Devices\***

Identifying signs on doors in classrooms, washrooms, general office area and other locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**C1030.12 Storage Shelving\***

Metal boot racks at entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	MAR-08

**C1030.12 Storage Shelving\***

Prefabricated Wood Storage Shelving in library, resource room, classrooms, storage rooms and various other locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	MAR-08

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

Toilet and bath accessories in washrooms.

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

**C2010 Stair Construction\***

Steel stairs to mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	100	MAR-08

**C3010.09 Acoustical Wall Treatment - Gym\*\***

Acoustic wall panels in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	20	MAR-08

**Event: Replace Acoustical Wall Treatment in the Gym**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$32,000	Unassigned

**Updated:** MAY-08

**C3010.09 Acoustical Wall Treatment - Principals office\*\***

Lead lining under the drywall on the interior of the principals office.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	MAR-08

**Event: Replace Acoustical Wall Treatment in the Principals office**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$32,000	Unassigned

**Updated:** MAY-08

**C3010.11 Interior Wall Painting - Concrete Block\***

Painted concrete block interior walls throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	15	MAR-08

**C3010.11 Interior Wall Painting\***

Interior painted gypsum walls in general office area, storage rooms at entrances and 1992 pods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	15	MAR-08

**C3010.12.02 Vinyl Wall Covering**

Painted vinyl board panels on demountable partitions between classrooms, some corridor walls and in general office area.  
Painted vinyl board panels on demountable partitions in 1978 pods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	MAY-08

**C3020.01 Concrete Floor Finishes**

Concrete floor finish in incinerator room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08



**C3020.01.01 Epoxy Concrete Floor Finishes - \***

Epoxy Concrete Floor Finishes in boys and girls washrooms, caretaker storage and change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1977	0	MAR-08

**Event:** Refinish epoxy coating in boys and girls washrooms

**Concern:**

Heavy staining and random cracks.

**Recommendation:**

Refinish epoxy coating in boys and girls washrooms #30 (10m2),#31(10m2),#40 (17.5 m2),#41(12.8 m2),#44 (11.5m2),#45 (17.5 m2). Refinish epoxy coating in caretakers storage #15 (19.60m2). Total approximate area = 98.9m2. Fill crack in boys change room #23.

**Consequences of Deferral:**

Further staining.



Boys washroom #41

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$25,168	Medium

**Updated:** APR-08

**C3020.01.02 Paint Concrete Floor Finishes\***

Painted concrete floor finish in mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	10	MAR-08

**C3020.04.01 Wood Strip Flooring**

Wood strip flooring in gymnasium.

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

**Event: Replace Gym Flooring**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$115,086	Unassigned

**Updated:** APR-08

**Event: Sand and refinish gymnasium flooring****Concern:**

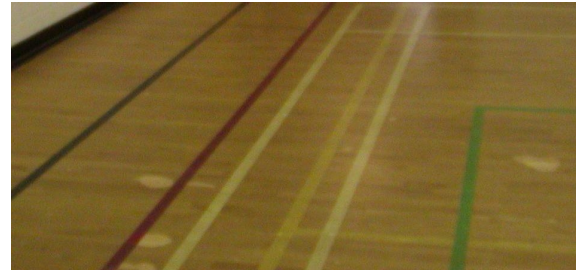
The finish on the wood strip flooring in the gymnasium is worn.

**Recommendation:**

Sand and refinish gymnasium flooring (357.70 m2)

**Consequences of Deferral:**

Further wear and damage to the wood strip flooring.



<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2009	\$17,160	High

**Updated:** MAY-08

Gymnasium floor

**C3020.07 Resilient Flooring\*\***

Vinyl composite tile flooring in corridors excluding corridors around library area, corridors leading to pods, pod corridors, vestibules, portions of classrooms, storage areas, staff washrooms, caretakers office and various other locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1977	20	MAR-08

**Event: Replace vinyl composite tile****Concern:**

Vinyl composite tile is old and worn with seams opening up.

**Recommendation:**

Replace vinyl composite tile with vinyl sheet flooring in corridors c2 (36.50 m2), c3 & c4 (100.3 m2), c7 (75.30), c10 (75.30m2) and c11(23.20 m2) including storage areas , washroom in kindergarden #11 (3.34 m2), infirmary #9 (21.20 m2), staff washrooms #3 (3.5 m2) and #4 (4.3 m2), caretakers office #20 (9.7 m2). Total area approx. 352.64 m2

**Consequences of Deferral:**

Further wear and damage.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$40,040	High

**Updated:** MAR-08

**C3020.08 Carpet Flooring\*\***

Carpet in 1978 pods and classrooms of the main building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	2002	15	SEP-08

**Event: Replace carpeting****Concern:**

Carpet is worn

**Recommendation:**

Replace carpet in the 1978 pods and classrooms of the main building

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2009	\$85,000	Unassigned

**Updated:** SEP-08

**C3020.08 Carpet Flooring\*\***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	15	SEP-08

**Event: Replace carpeting****Concern:**

Carpet is worn

**Recommendation:**

Replace carpeting in the main building

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2009	\$81,300	Unassigned

**Updated:** SEP-08

**C3020.08 Carpet Flooring\*\***

Carpet flooring in classrooms, computer lab, art preparation room, workrooms, general office area, resource room, library, corridor around library, lunch/study and pod classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1992	15	SEP-08

**Event: Replace carpet****Concern:**

Carpet is old in art preparation room #43. Carpet is torn in resource room #2.

**Recommendation:**

Replace carpet in art preparation room #43 (31.20 m2).  
Replace carpet in resource room #2 (41.87m2). Total area = 73.07 m2

**Consequences of Deferral:**

Further wear and damage.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$24,400	Medium

**Updated:** SEP-08

**C3020.14 Other Floor Finishes (1992 pod mechanical rooms)\***

Membrane with gravel finish floor finish in 1992 pod mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1978	0	MAR-08

**C3030.01 Concrete Ceiling Finishes (Unpainted) - \***

Concrete ceiling finish in storage areas under mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	100	MAR-08

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

Suspended acoustic tile ceilings in corridors, classrooms, computer lab, general office area, staff areas, some storage rooms, kitchen, electrical and mechanical rooms, incinerator room, caretakers office, caretakers storage, lunch/study, science room, library, timeout rooms, pods, pod classrooms and various other locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	25	MAR-08

**C3030.07 Interior Ceiling Painting - \***

Painted drywall ceiling finishes in some storage rooms, around skylights in corridors, storage rooms in pods and various other locations. Suspended drywall ceiling finish in change rooms and gym storage under mechanical room area.

Repaint the stained areas as regular maintenance cost less the \$1000.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
5 - Good	1977	20	MAR-08

## S4 MECHANICAL

### D2010.04 Sinks\*\*

The School is equipped with the following sinks:

- Six (6) counter top mounted, single compartment stainless steel sink by Steel Queen, complete with goosneck spout and metering faucet, serving the Kindergarten Classroom, Music Room, Janitor Room, Staff Washroom and Staff Room.
- Seven (7) counter top mounted, single compartment stainless steel sink by Steel Queen, complete with goosneck spout, metering faucet and drinking fountain serving the School's core Classrooms.
- One (1) counter top mounted, triple compartment, stainless steel sink by Steel Queen, complete with swing extendable spout and mixing valve serving the Kitchen.
- One (1) 24"x24" floor mounted mop sink complete with faucet and wall mounted liquid cleaning detergent dispenser.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	30	MAR-08

#### Event: Replace Sinks

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$15,581	Unassigned

**Updated:** APR-08

### D2010.05 Showers\*\*

The School has one (1) shower complete with industrial shower head and mixing valve serving the Physical Education Office. All other showers in the School have been removed, finished and made good before being turned into Storage Rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	30	MAR-08

#### Event: Showers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$1,384	Unassigned

**Updated:** APR-08

### D2010.08 Drinking Fountains / Coolers - \*\*

The School has three (3) wall hung recessed vitreous china drinking fountains, and three (3) stainless steel wall hung, drinking fountains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	35	MAR-08

#### Event: Drinking Fountains / Coolers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$6,737	Unassigned

**Updated:** APR-08

**D2010.09 Other Plumbing Fixtures - \***

School has four (4) non-freeze hose bibs located on the perimeter of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

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

The School's Washrooms are equipped with the following fixtures:

- Five (5) vanity top mounted, vitreous china lavatories, complete with Cranada push valve faucets.
- Six (6) wall hung, vitreous china lavatories complete with metering faucets.
- Ten (10) vanity top mounted, stainless steel lavatories by Queen Steel, complete with Cranada push valve faucets.
- Eighteen (18) floor mounted, vitreous china, flush valve water closets by American Standard.
- Four (4) floor mounted, vitreous china, close coupled, flush tank water closets by American Standard.
- One (1) low floor mounted, vitreous china, flush valve water closets by American Standard serving the Kindergarten Washroom.
- Seven (7) vitreous china, stall type, floor mounted, flush valve urinals.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	30	MAR-08

**Event: Washroom Fixtures (WC, Lav, Urnl)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$52,006	Unassigned

**Updated:** APR-08

**D2020.01.01 Pipes and Tubes: Domestic Water - \***

The domestic water lines are copper.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D2020.01.02 Valves: Domestic Water - \*\***

All plumbing fixtures isolated individually.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	40	MAR-08

**Event: Valves: Domestic Water**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$19,983	Unassigned

**Updated:** APR-08



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

Backflow prevention valve on feeder line to boilers 3/4" by Watts.

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

**Event: Piping Specialties (Backflow Preventors)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$9,152	Unassigned

**Updated:** APR-08

**D2020.02.02 Plumbing Pumps: Domestic Water - \*\***

The domestic water is re-circulated by a Bell & Gossett model: SSF-22 pump.

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

**Event: Plumbing Pumps: Domestic Water**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$2,872	Unassigned

**Updated:** APR-08

**D2020.02.06 Domestic Water Heaters - \*\***

The School is equipped with a Jetglass Commercial Domestic Water Heater (DWH) model M65-420-JIB-3N with an input of 500,000 BTUH, 65 gallon capacity and 420 gallon per hour recovery. The unit is oversized for an elementary school whose only consumption is by Washroom fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	20	MAR-08

**Event: Domestic Water Heaters****Recommendation:**

Appropriately size to smaller unit.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$3,003	Unassigned

**Updated:** APR-08

**D2020.03 Water Supply Insulation: Domestic - \***

All water supply lines are insulated throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D2030.01 Waste and Vent Piping - \***

PVC and ABS piping system throughout the school. Each fixture vented to atmosphere. Traps are provided where necessary. Sanitary drainage effluent is collected into common 6" sanitary main. Flows by gravity @ 1% slope, leaving the building at the East.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D2040.01 Rain Water Drainage Piping Systems - \***

Roof drains are connected to the 10" storm line providing the school's storm drainage to the East, the storm line connects to the municipal storm main.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D2040.02.04 Roof Drains\***

Zurn Flo-Control 4" roof drains connected to school's main storm water drainage. Insulated to 3.0 meters of roof penetration.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1998	40	MAR-08

**D3010.02 Gas Supply Systems - \***

4" Gas supply in Meter Room. The gas line splits past the gas meter into two lines, a 4" line that serves the Mechanical Room and a 2-1/2" line that serves the Portables.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	60	MAR-08

**D3020.02.01 Heating Boiler Accessories: H.W. - Portables\*\***

The 1992 Portables have one (1) Glycol-Water heat exchanger, complete with a Bell & Gossett Recirculation pump that provides 33 GPM @ 25 ft. of head powered by a 3/4 hp @ 1,800 rpm motor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1992	35	MAR-08

**Event: Heating Boiler Accessories: H.W. - Portables**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2027	\$13,728	Unassigned

**Updated:** MAR-08

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

The School has two (2) Raypack model: 1467-WTD hot water boilers with an input capacity of 1,467,000 BTUH. The boilers are complete with two (2) 60 GPM automatic flow control valves, low level water cut off sensors, one (1) Expanflex model 14NA63 expansion tank, one (1) chemical pot feeder, two (2) 100 GPM @ 60 ft of head, Bell & Gossett pumps model: 58125 BF with a 3 hp @ 1,800 rpm motors. One (1) of the pumps is noisy and vibrates excessively.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1977	35	MAR-08

**Event: Replace Heating Boilers - HW**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$73,336	Unassigned

**Updated:** APR-08

**Event: Replace Hot Water Circulation Pump****Concern:**

Pump #1 for Hot Water Circulation is noisy, and vibrates excessively.

**Recommendation:**

Replace with a new pump.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$5,148	High

**Updated:** MAR-08

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

Common vent serves the two (2) boilers and one domestic water heater.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	30	MAR-08

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

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$15,723	Unassigned

**Updated:** APR-08

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

Chemical pot feeder serving hot water system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D3040.01.01 Air Handling Units: Air Distribution - Main School\*\***

The School is equipped with two (2) Train Air Handling Units (AHU). The first unit provides the school's core with ventilation through galvanized steel ductwork and is complete with a Trane model 330A-9-1H return air fan powered by a Teco 4P AEEACD 5hp @ 1,750 rpm motor, and a Trane 35A-9-1 supply air fan powered by a US Electrical Type A 7.5hp @ 1,740 rpm motor. The second unit provides ventilation to the Gymnasium and is complete with a Trane model 19QA-9-1H return air fan powered by a A.O. Smith model: SCE 1.5hp @ 1,745 rpm motor, and a Trane 21OB-9-1H supply air fan powered by a Leeson model: C145 117DB2B 2hp @ 1,740 rpm motor. Both of the AHUs are complete with reheating coils throughout the ductwork.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	30	MAR-08

**Event: Replace Air Handling Units - Main School**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$323,166	Unassigned

**Updated:** APR-08

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

The Gymnasium has four (4) ceiling mounted propeller fans.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D3040.01.03 Air Cleaning Devices:Air Distribution - \***

Standard replaceable medium filters are used in all three air handling units, changed on regular intervals.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D3040.01.04 Ducts: Air Distribution - \***

School is equipped with galvanized steel ducts throughout. All three (3) AHUs have return air traveling through galvanized steel ducts and return air grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

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

Typical Classrooms have air supplied by standard ceiling mounted 12"x12" diffusers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D3040.03.01 Hot Water Distribution Systems - \*\***

Insulated copper piping distribution to perimeter radiation, force flow heaters, reheat coils, combustion air unit heater and unit heater serving the Mechanical Room roof access door.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	40	MAR-08

**Event: Hot Water Distribution Systems**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$254,448	Unassigned

**Updated:** APR-08

**D3040.04.01 Fans: Exhaust - \*\***

The School has one (1) Nutone kitchen exhaust canopy serving the range stove in the Kitchen providing 180 CFM of exhaust ventilation, and three (3) General Electric model: 5KH37NG384A 1/3hp @ 1,740 rpm exhaust fans serving washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1977	30	MAR-08

**Event: Add Fans for Storage Rooms****Concern:**

Twelve (12) of the School's Storage Rooms are missing exhaust fans, this includes the Gymnasium Storage room and eleven (11) other Storage Rooms throughout.

**Recommendation:**

Install fans and ductwork to provide negative pressure to the Storage Rooms.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2008	\$17,160	Low

**Updated:** MAR-08

**Event: Replace Fans: Exhaust**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$10,868	Unassigned

**Updated:** APR-08

**D3040.04.03 Ducts: Exhaust - \***

Exhaust air ductwork to roof and ceiling mounted fans. All ducts insulated with 25mm thermal insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D3040.04.05 Air Outlets and Inlets: Exhaust - \***

Standard egg crate grilles are provided to exhaust air ducts, grilles are in acceptable condition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D3050.02 Air Coils\*\***

The school has air coils serving the AHU serving the Office area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	30	MAR-08

**Event: Replace Air Coils**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$4,873	Unassigned

**Updated:** APR-08

**D3050.03 Humidifiers\*\***

The School has a Burnham America model: 606 steam boiler with an input of 504,000 BTUH and an output of 403,200. The humidifier is not in use and has been capped off and abandoned for several years.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	25	MAR-08

**Event: Replace Humidifier**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$8,754	Unassigned

**Updated:** APR-08

**D3050.05.02 Fan Coil Units - \*\***

The school has fan coils serving AHU-1 and 2.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	30	MAR-08

**Event: Replace Fan Coil Units**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$58,753	Unassigned

**Updated:** APR-08

**D3050.05.03 Finned Tube Radiation\*\***

The school has perimeter Finned Tube Radiation throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	40	MAR-08

**Event: Finned Tube Radiation**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$117,929	Unassigned

**Updated:** APR-08

**D3060.02 HVAC Instrumentation and Controls -**

The School is equipped with pneumatic and Westing House motor control electrical center controlled by a Barber Coleman Network 8000 DDC system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	30	MAR-08

**Event: HVAC Instrumentation and Controls**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$39,874	Unassigned

**Updated:** APR-08

**D4030.01 Fire Extinguisher, Cabinets and Accessories - \***

Fire cabinets complete with 5lbs. ABC fire extinguishers are provided throughout the School. 10 lbs CO2 fire extinguisher is located in the Mechanical Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	30	MAR-08



**S5 ELECTRICAL****D5010.03 Main Electrical Switchboards (Main Distribution) - \*\***

The Main Distribution Panel is an ITE 1200 Amp 120/208 Volt 3 Phase 4 Wire panel located in the main electrical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	40	MAR-08

**Event: Replace Main Electrical Switchboards**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$48,620	Unassigned

**Updated:** APR-08

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

The ITE branch circuit panel boards are just past their life cycle expectancy (2007). These panel boards are located throughout the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	30	MAR-08

**Event: Replace Electrical Branch Panelboards****Concern:**

The panels are past their lifecycle expectancy.

**Recommendation:**

Replace the panelboards and the Breakers.

**Consequences of Deferral:**

The breakers in the panelboards could cause nuisance tripping.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$27,236	Low

**Updated:** APR-08

**D5010.07.02 Motor Starters and Accessories - \*\***

The main MCC is a Westinghouse and is located in the Mechanical room.  
This MCC is just past its lifecycle (2007)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	30	MAR-08

**Event: Replace Motor Starters and Accessories****Concern:**

The MCC has passed the end of its lifecycle.

**Recommendation:**

Change out the MCC.

**Consequences of Deferral:**

The heating/cooling motors might be interrupted in their usage due to faulty switching or motor overloads.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$59,488	Low

**Updated:** APR-08

**D5020.01 Electrical Branch Wiring - \***

The branch wiring consists of Armored Cable and EMT piping with wire.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D5020.02.01 Lighting Accessories (Lighting Controls) - \***

Lighting controls are both line voltage and GE Low voltage switching.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D5020.02.02.02 Interior Florescent Fixtures - \*\***

T-12 lamping and magnetic ballasts throughout building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	30	MAR-08

**Event: Replace Interior Florescent Fixtures****Concern:**

The florescent fixtures are past their lifecycle.

**Recommendation:**

Replace fixtures with energy efficient T-8 lamping and electronic ballasts.

**Consequences of Deferral:**

The facility might have brown outs or complete blackouts with the break down of the lighting ballasts.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$253,459	Low

**Updated:** APR-08

**D5020.02.03.02 Emergency Lighting Battery Packs - \*\***

The emergency lighting battery packs are past their lifecycle. These battery packs are both Emergi-Lite and Lumacell and are located through out the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	20	MAR-08

**Event: Replace Emergency Lighting Battery Packs****Concern:**

The battery packs might fail in an emergency situation.

**Recommendation:**

Replace outdated battery packs with new battery packs.

**Consequences of Deferral:**

Emergency lighting failure during an emergency situation causing confusion and panic.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$11,537	Low

**Updated:** APR-08

**D5020.02.03.03 Exit Signs - \***

The exit lights are by Lumacell and are located through out the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D5020.03.01.01 Exterior Incandescent Fixtures - \***

There are incandescent fixtures at each point of access and egress through out the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D5020.03.01.03 Exterior Metal Halide Fixtures - \***

There is one 250 Watt fixture illuminating the parking lot on the south side of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

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

The exterior lights are energized by a photo cell located on the roof of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	0	MAR-08

**D5030.01 Detection and Fire Alarm - \*\***

The main fire alarm panel is an Edwards 6500 located in the main office.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	25	MAR-08

**Event: Replace Fire Alarm****Concern:**

Fire alarm system failure during a fire.

**Recommendation:**

Replace fire alarm system and upgrade to todays code.

**Consequences of Deferral:**

Safety for students and faculty might be impaired with a non-working fire alarm system.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$47,590	Unassigned

**Updated:** APR-08

**D5030.02.02 Intrusion Detection\*\***

The security system was replaced in 1997 with a Magnum Alert 3000 c/w a Magnum Alert keypad and motion sensors located through out the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1997	25	MAR-08

**Event: Replace Intrusion Detection System**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$5,949	Unassigned

**Updated:** APR-08

**D5030.03 Clock and Program Systems\***

In 2006 the clock system was replaced with a Bogen 2000 meridian system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	25	MAR-08

**D5030.04.01 Telephone Systems\***

The telephone system is a Nortel System c/w a 750 UPS back up battery pack.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	25	MAR-08

**D5030.04.05 Local Area Network Systems - \***

The local network system is Alberta Supernet by Bell.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1997	0	MAR-08

**D5030.05 Public Address and Music Systems\*\***

The public address system is run through the new Bogen 2000 Multicom system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	20	MAR-08

**Event: Replace Public Address and Music Systems**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$36,848	Unassigned

**Updated:** APR-08

## S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

### E1090.04.02 Residential Kitchen Equipment

Kitchen equipment in kitchen.

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

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

Athletic equipment in gymnasium.

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

### E2010.02 Fixed Casework\*\*

Fixed casework in classrooms, kindergarten, library, caretakers office, lunch/study room, boot room c3, womens staff washroom, art preparation room, science room, boys and girls washrooms and changerooms, pod classrooms and various other areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1977	35	MAR-08

#### Event: Rplace Millwork

##### **Concern:**

Plastic laminate is old and peeling from some counters. Millwork is old.

##### **Recommendation:**

Replace counters and sinks in kindergarten #11 (5.5m), caretakers office (1.5m), c3 (0.762) , c10 (0.762)

##### **Consequences of Deferral:**

Further wear and deterioration.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$14,872	Medium

**Updated:** APR-08



Counter in kindergarten #11

### E2010.02.03 Display Casework

Display casework in corridor near entrance.

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

### E2010.02.07 Kitchen Casework

Kitchen casework in kitchen and resource room.

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

**E2010.03.01 Blinds - \*\***

Blinds in classrooms in main building and pods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	MAR-08

**Event: Replace Blinds**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$2,500	Unassigned

**Updated:** MAY-08

**E2020.03.02 Moveable Floor Mats**

Moveable floor mats at entrances.

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

**F1010.02.04 Portable and Mobile Buildings Pod 1 (1978)\***

This pod consists of four classrooms#5,6,7,8.Each classroom has a FPE electrical panel in it . These Panels are fed from a Main FPE panel located in the pod storage room.

The classrooms have Armored cable and EMT piping c/w wire for branch wiring.The interior lighting is T-12 lamping and magnetic ballasts c/w line voltage switching.

The emergency lighting is by Lumacell as is the exit lighting. The fire alarm devices are tied into the Main Fire Alarm Panel.There are Incandescent lights at each point of egress from the pod.The public address and music system is tied into the new Bogen 2000 Multicom.

(1999)The portables are heated and ventilated by two (2) Lennox G24M3/4-100A furnaces with an input of 100,000 BTUH and an output of 82,000 BTUH providing 1,600 CFM of air at a external static pressure of 0.5", and two (2) Lennox G24M3/4-120S furnaces complete with a stainless steel heat exchanger with an input of 120,000 BTUH and an output of 98,400 BTUH providing 1,600 CFM of air at a external static pressure of 0.5".Furnaces and chimney in acceptable condition

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAY-08

**Event: Add fan in Storage Area****Concern:**

Portables do not have exhaust fans in the Storage Rooms

**Recommendation:**

Install exhaust fans into Storage Rooms to provide negative pressurization as per ASHRAE 62 code.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2008	\$1,144	Low

**Updated:** MAY-08



**F1010.02.04 Portable and Mobile Buildings Pod 2 (1992)\***

Pod 2 was installed in 1992 it also consists of four classrooms #12,13,14,15. These classrooms have a Commander branch circuit panel in them, they are fed from a Commander

Main Panel located in the pod mechanical room. Electrical branch wiring consists of Armored cable and EMT piping c/w wiring. The interior florescent lighting is T-12 lamping and

magnetic ballasts c/w line voltage switching. The exterior lighting is incandescent and is located over each point of egress from the pod. The fire alarm devices are tied into the

Main Fire Alarm Panel. The public address and music system is tied into the new Bogen 2000 Multicom panel. The emergency lighting is by Lumacell as well as the exit lights.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1992	30	MAY-08

**F1010.02.04 Portable and Mobile Buildings Pod 3 (1978)\***

This pod was installed in 1978 and has four classrooms in it #19,20,21,22.

These classrooms have FPE electrical panels in them, they are fed from the main FPE panel located in the pod storage room. The branch wiring is both EMT c/w wiring and Armored cable. The interior florescent fixtures are T-12 lamping and magnetic ballasts c/w line voltage switching. The exterior lighting is incandescent and is located over each point of egress from the pod. The fire alarm is tied into the Main Fire Alarm panel. The public address and music system is through the new Bogen 2000 Multicom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAY-08

**Event: Add Fan in Storage Room****Concern:**

Portables do not have exhaust fans in the Storage Rooms

**Recommendation:**

Install exhaust fans into Storage Rooms to provide negative pressurization as per ASHRAE 62 code.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2008	\$1,144	Low

**Updated:** APR-08

## S8 FUNCTIONAL ASSESSMENT

### K3010 Building Services

The Server Room is extremely hot and has no way of dissipating the heat generated by the electrical equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	0	MAR-08

**Event:** Install a split system air conditioning unit.

**Concern:**

The Server Room is extremely hot and has no way of dissipating the heat generated by the electrical equipment.

**Recommendation:**

Install a split system air conditioning unit.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2008	\$2,631	High

**Updated:** MAY-08

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

Parking to entrance is barrier free.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

### K4010.02 Barrier Free Entrances - \*

Entrances are barrier free.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

### K4010.03 Barrier Free Interior Circulation - \*

Interior circulation is barrier free.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

### K4010.04 Barrier Free Washrooms - \*

Washrooms #30 & #31 are barrier free.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

# RECAPP Facility Evaluation Report



## Lorelei Elementary School

S3197  
Edmonton

**Facility Details****Building Name:** Lorelei Elementary School**Address:****Location:** Edmonton**Building Id:** S3197**Gross Area (sq. m):** 0.00**Replacement Cost:** \$0**Construction Year:** 0**Evaluation Details****Evaluation Company:** R.Saunders Architects Ltd.**Evaluation Date:** November 20 2007**Evaluator Name:** Raghbir Jagdev MRAIC MAAA MAIBC**Total Maintenance Events Next 5 years:** **\$102,040****5 year Facility Condition Index (FCI):** **0%****General Summary:**

The grade along the front of the building is sinking and has poor drainage. The staff parking lot has potholes. Some boards are missing or damaged on the boardwalk along one of the pods. Front entrance slabs are sinking. One stoop is sinking.

**Structural Summary:****Envelope Summary:****Interior Summary:****Mechanical Summary:****Electrical Summary:****Rating Guide**

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

## S7 SITE

### G1030 Site Earthwork (Site Grading)\*

The grade at the front of the building, excluding the raised grade above main floor level and paved areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1977	50	MAR-08

#### **Event:** Regrade along the building

##### **Concern:**

The grade is sinking and sloping negatively toward the building in some areas.

##### **Recommendation:**

Regrade along the building and provide a positive slope away from the building. Approx length = 101'

##### **Consequences of Deferral:**

Further sinking of the grade and poor drainage.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2008	\$5,720	Low

**Updated:** MAY-08

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

Asphalt paved parking lot at south side of building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1977	25	MAR-08

#### **Event:** Repair Pothole

##### **Concern:**

Potholes in parking lot.

##### **Recommendation:**

Fill potholes. Approx 15m2

##### **Consequences of Deferral:**

Further deterioration and driving hazard.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2008	\$4,576	Medium

**Updated:** MAY-08



#### **Event:** Replace Asphalt parking lot

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$47,500	Unassigned

**Updated:** MAY-08

**G2020.05 Parking Lot Curbs and Gutters\***

Parking lot curbs around some areas of staff parking lot.

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

**G2020.06.02 Parking Bumpers - \***

Precast concrete wheel stops around portions of the staff parking lot.

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

**G2030 Pedestrian Paving (boardwalk)**

Wood boardwalk around north/east pod.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1978	0	MAR-08

**Event:** Replace missing or damaged boards.

**Concern:**

Some boards are missing or damaged from the boardwalk.

**Recommendation:**

Replace missing or damaged boards.

**Consequences of Deferral:**

Trip hazard.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2008	\$1,144	Low

**Updated:** APR-08

**G2030.02.02 Asphalt Pedestrian Pavement\*\***

Asphalt walkway around the pods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	MAR-08

**Event:** Replace Pedestrian Pavement

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$2,300	Unassigned

**Updated:** MAY-08



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

Concrete slab at the front entrance f1 and secondary front entrance f5.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1977	25	MAR-08

**Event: Raise the concrete slabs****Concern:**

Concrete slabs are sinking at the front entrances f1 and f5.

**Recommendation:**

Raise the concrete slabs to the level of the entrance. Approx. 6m2

**Consequences of Deferral:**

Further sinking, trip hazard and a barrier for handicap access.



<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2008	\$6,864	Medium

**Updated:** MAR-08

**Event: Replace Concrete pavement**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$26,500	Unassigned

**Updated:** MAY-08

**G2040.03 Athletic and Recreational Surfaces\*\***

Asphalt recreational surface between the pods and at south/east corner of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	25	MAR-08

**Event: Replace the stoop at entrance f3 with a concrete stoop****Concern:**

The stoop at entrance f3 is sinking. The asphalt is sloping negatively along the building in the paved recreational areas.

**Recommendation:**

Replace the stoop at entrance f3 with a concrete stoop. Approx. 3 m2 Provide positive slope for drainage along the building in the paved recreational areas. Approx. Perimeter = 205'

**Consequences of Deferral:**

The sinking stoop is a trip hazard and a barrier for handicap access. Further sinking and poor drainage along the building in the paved recreational areas.



<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$5,148	Medium

**Updated:** MAY-08

**G2040.05.04 Bicycle Racks**

Steel bicycle racks at the front of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1978	0	MAR-08

**G2040.06 Exterior Signs - \***

Exterior school sign.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**G2040.08 Flagpoles - \***

Flagpole at front of building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**G2040.11 Retaining Walls - \***

Cast in place concrete retaining walls in several locations around the south portion of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**G2050.04 Lawns and Grasses - \***

Lawn around the building and field.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08

**G2050.05 Trees, Plants and Ground Covers - \***

Trees and shrubs at the front of the building and other locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1977	0	MAR-08



**G3010.02 Site Domestic Water Distribution\***

Water to the school is provided by a 4" Domestic Cold Water line entering the property from the East. The DCW line travels south to enter the School from the South. The water line entering the school is coupled to the water meter by mild steel studs that are rusting.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1977	50	MAR-08

**Event:** **Replace rusted studs immediately with stainless steel studs to prevent water main break**

**Concern:**

Studs that couple the DCW line that enters the building before the water meter are made of mild steel and are rusted.

**Recommendation:**

Replace rusted studs immediately with stainless steel studs to prevent water main from breaking.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$2,288	High

**Updated:** APR-08

**G3010.03 Site Fire Protection Water Distribution\***

The site features a Fire Hydrant directly across from the Main Entrance to the School.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	50	MAR-08

**G3020.01 Sanitary Sewage Collection\***

The School is serviced by a 6" Sanitary line that Exist the School and property to the East connecting to the Municipal Main.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	50	MAR-08

**G3030.01 Storm Water Collection\***

Storm water on site is serviced by a Catch Basin in the Parking Lot that is connected to a 8" Storm line which joins a 10" Storm serving the School's roof drains connecting into a 12" line that exist the School Property to the East connecting to the Municipal Main. A second Catch Basin on the School's North Side is connected to the main 12" line exiting the School Property to the East.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1977	50	MAR-08

**G3030.03 Storm Water Ponds and Reservoirs\***

Roof is being used as a pond with Zurn Flo-Control roof drains connected to the 10" storm line.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
5 - Good	1998	50	MAR-08

**G3060.01 Gas Distribution\***

The School is serviced by a 4" Gas line which enters the Property from the East side of the School. The Gas line enters the Meter Room from the South.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1977	50	MAR-08

**G4010.02 Electrical Power Distribution Lines\***

The main power lines go from the padmount transformer to the MDP in the electrical room.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1977	50	MAR-08

**G4010.03 Electrical Power Distribution Equipment\***

The main electrical equipment is a padmount transformer.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1977	50	MAR-08

**G4010.04 Car Plugs-ins\***

There are eighteen car receptacles for thirty six parking stalls located in the south parking lot.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1977	25	MAR-08

**G4020.01 Area Lighting\***

There are two wall mounted 75 watt metal halide lights illuminating the parking lot.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1977	25	MAR-08