

# RECAPP Facility Evaluation Report

Alberta Infrastructure



## Airdrie Alternative School

B0002A

Airdrie

**Facility Details**

**Building Name:** Airdrie Alternative School  
**Address:** 925 Veterans Boulevard  
**Location:** Airdrie

**Building Id:** B0002A  
**Gross Area (sq. m):** 1,227.40  
**Replacement Cost:** \$2,943,233  
**Construction Year:** 1973

**Evaluation Details**

**Evaluation Company:** Quinn Young Architects Ltd.  
**Evaluation Date:** October 21 2008  
**Evaluator Name:** Paul Tarbin

**Total Maintenance Events Next 5 years:** **\$86,800**  
**5 year Facility Condition Index (FCI):** **2.95%**

**General Summary:**

The Airdrie Alternative School occupies the east portion of an existing automotive sales and service building and has an asphalt access road and parking area that is separated from the adjoining building by a chain link fence. The building is in an acceptable condition.

**Structural Summary:**

Pre-cast concrete frame with pre-cast concrete double tee slabs to the roof and the mechanical mezzanine floor area. Metal deck on steel channel framing to the ceiling area at the offices in the Mechanics Room. No noticeable signs of building movement.

**Envelope Summary:**

The exterior building envelope consists of;  
 Built up felt roof, exterior walls are painted brick veneer, insulation complete with interior structural block wall, infill panels consist of acrylic stucco and insulation on metal stud framed walls. Punched aluminum windows located in the infill panels. Exterior hollow metal doors and frames. Aluminum main entry doors. Aluminum overhead Shop door. The envelope is in acceptable condition.

**Interior Summary:**

The interior consists of metal stud and drywall partitions complete with paint finish. Flooring is mainly sheet Marmoleum with rubber base. Carpet finish in Offices and Staff Room. Washrooms have sheet vinyl flooring and ceramic wall tile finish. Ceilings are acoustic tile and T-bar with painted drywall in the Washrooms. The Shop area has sealed concrete floor and painted concrete block walls and exposed ceiling structure. The interior is in acceptable condition.

**Mechanical Summary:**

The school mechanical system consists of a Burnham boiler rated at 237,000, BTU. These supply heating for the heat pumps, entrance fan coil and a small amount of baseboard radiation. A fluid cooler supplies cooling for the school with heat pumps. Domestic hot water for the school is from a Bradford White 40 Gal. HWT. There is municipal under ground gas, water, sanitary sewer, and storm sewer. The school has hose cabinets for fire protection. The school is part of a large building that is currently leased out to a Ford dealership. The Mechanical systems are 8 years old, The plumbing systems are in good serviceable condition. The heating system is plagued with continual problems. There are several work orders going all the time for a variety of troubles. There does not seem to be one thing to put your finger on, just a very high maintenance inadequate heating and cooling system. The shop has a Make up air unit that is too large and so is not used, because this is not used the shop is very cold when the exhaust fan is on. Over all the mechanical system is adequate except for the above mentioned issues.

**Electrical Summary:**

The facility is part of a existing building. The power is provided through an existing MCC. This delivers power to a 30 KVA transformer which then supplies the power for local panels. The fire alarm system is a Mirtone model 7532 zoned system and is tested yearly. The security system is a dukane system that utilizes motion detectors. The Phone system a northstar providing multiple line to the facility. Theover all condition of the Electrical equipment in the facility is in good working order. As the building is a shared facility there are no site devices included with this section of the facility.

## 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\***

HSS columns on existing concrete grade beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**A1030 Slab on Grade\***

200mm concrete slab.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

16 mm gypsum wall board, 38 metal furring channels, 190 concrete masonry units to u/s of structure c/w sand filled cores for insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**B1010.03 Floor Decks, Slabs, and Toppings\***

Metal deck above rooms at Mechanics Shop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	2000	0	FEB-09

**Event: Addition of guardrail****Concern:**

Metal deck above rooms used as storage for various items.  
No protective guard rail in place.

**Recommendation:**

Provide protective guard rail.

**Consequences of Deferral:**

Items stored above may fall off and cause injuries.

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

**Updated:** FEB-09

**B1010.05 Mezzanine Construction\***

Mechanical mezzanine concrete floor slab on precast concrete double tees.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**B1010.06 Ramps: Exterior\***

Concrete entrance ramp / slab to Shop area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	2000	40	FEB-09

**Event: Replace Exterior Ramp**

**Concern:**

Cracked and dropped exterior entry concrete slab.

**Recommendation:**

Replace damaged slab.

**Consequences of Deferral:**

Further damage to slab resulting in difficulty for vehicular access to Shop.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$3,000	Medium

**Updated:** FEB-09

**B1020.01 Roof Structural Frame\***

Pecast concrete double tees.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

Precast concrete exterior wall panel complete with exterior paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	75	FEB-09

**B2010.01.02.02 Concrete Block: Ext. Wall Skin\***

Existing concrete block wall, rigid insulation, air gap, and existing painted brick exterior facing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	75	FEB-09

**B2010.01.06.03 Metal Siding\*\***

Prefinished vertical metal siding on building paper, gypsum sheathing, metal studs, insulation, vapour barrier and drywall as infill panel above overhead door.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	40	FEB-09

**Event: Replace Metal Siding ( Approx 10m2 )**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2040	\$4,000	Unassigned

**Updated:** FEB-09

**B2010.01.08 Cement Plaster (Stucco): Ext. Wall\***

Typical infill wall panel- Acrylic stucco system, 25 rigid insulation, building wrap (air barrier), exterior gypsum sheathing, 90 metal studs, fiberglass insulation, poly vapour caulked to studs and type 'X' gypsum wall board.

This infill panels are in existing concrete block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	40	FEB-09

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

Typical caulked joints around window and door frames and at control joints in block walls and precast concrete panels. Some caulked joints require repair / recaulking.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	FEB-09

**Event: Replace Joint Sealers (caulking) (Approx 160 lin mtr )**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$12,000	Unassigned

**Updated:** FEB-09

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

Painted brick / block finish on exterior elevations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	15	FEB-09

**Event: Replace Paints (& Stains) ( Approx 640m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$10,000	Unassigned

**Updated:** FEB-09

**B2010.03.03.05 Sprayed Insulation: Exterior Wall**

Sprayed insulation on the interior face of the exposed precast concrete tee's at exterior walls at north, south and east sides of building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	75	FEB-09

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

Prefinished metal louvre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

Aluminum framed windows with sealed glass units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	40	FEB-09

**Event: Replace Aluminum Windows ( 10 units )**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2040	\$40,000	Unassigned

**Updated:** FEB-09**B2030.01.01 Aluminum-Framed Storefronts: Doors\*\***

Single glazed aluminum framed doors c/w Barrier Free operators and side lights..

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	FEB-09

**Event: Replace Exterior Entrance Doors ( one pair )**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$12,000	Unassigned

**Updated:** FEB-09**B2030.02.01 Metal Doors and Frames\*\***

Metal painted utility doors at north and south exterior walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	40	FEB-09

**Event: Replace Exterior Utility Doors ( 3 single doors )**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2040	\$7,500	Unassigned

**Updated:** FEB-09**B2030.03.02 Sectional Overhead Doors**

Aluminum overhead door complete with acrylic panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09



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

Built up felt roofing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	25	FEB-09

**Event: Replace Membrane Roofing ( Approx 1045m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$85,000	Unassigned

**Updated:** FEB-09

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

16 mm gypsum wall board, 38 metal furring channels, 190 concrete masonry units to u/s of structure, sand filled cores for insulation.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	2000	0	FEB-09

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

16mm gypsum wall board, 90 metal studs, 16mm gypsum wall board.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	2000	0	FEB-09

**C1010.05.02 Steel Windows**

Interior glazing in painted metal frames.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	2000	0	FEB-09

**C1010.07 Interior Partition Firestopping\***

Firestopping at Mechanical Room and Janitor walls.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	2000	50	FEB-09

**C1020.01.01 Metal Doors and Frames\***

Hollow metal interior doors with and without lights in painted metal frames.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	2000	40	FEB-09

**C1020.01.07 Wood Doors**

Birch faced solid core stained wood doors in painted metal frames.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	2000	0	FEB-09

**C1030.01 Visual Display Boards \*\***

Tack boards and white boards in Classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	FEB-09

**Event: Replace Visual Display Boards ( Approx 20 units)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$10,000	Unassigned

**Updated:** FEB-09**C1030.02 Fabricated Compartments(Toilets/Showers) \*\***

Metal prefabricated toilet partitions in Washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	FEB-09

**Event: Replace Fabricated  
Compartments(Toilets/Showers) (5 units)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$5,500	Unassigned

**Updated:** FEB-09**C1030.08 Interior Identifying Devices \***

White lamacoid signage in all areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**C1030.10 Lockers\*\***

Metal lockers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	30	FEB-09

**Event: Replace Lockers (30 units)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$8,500	Unassigned

**Updated:** FEB-09

**C1030.12 Storage Shelving \***

Metal storage shelving in Shop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

Soap dispensers, toilet paper holders, sanitary napkin dispenser and disposal and mirrors in all Washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**C2010 Stair Construction \***

Steel ladder with open treads and hand rail for access to Mechanical Mezzanine.  
One tread is damaged and requires repair.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**C3010.06 Tile Wall Finishes \*\***

100 x 100mm ceramic tile to walls up to 1800mm high in all Washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	40	FEB-09

**Event: Replace Tile Wall Finishes ( Approx 90m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2040	\$15,000	Unassigned

**Updated:** FEB-09

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

Painted drywall and concrete block walls throughout.  
Minor damage to paint and drywall throughout requires repair.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	10	FEB-09

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

Sealed hardened concrete floor in Shop area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	10	FEB-09

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

Marmoleum flooring with a rubber base throughout in Classrooms and Corridors. Vinyl sheet flooring in Washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	FEB-09

**Event: Replace Resilient Flooring ( Approx 455m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$35,000	Unassigned

**Updated:** FEB-09

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

Carpet with rubber base in the Administration area and part of the Staff Lounge.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	15	FEB-09

**Event: Replace Carpet Flooring ( Approx 150m2)**

**Concern:**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$6,500	Unassigned

**Updated:** FEB-09

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

Painted exposed double tees above Shop area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	100	FEB-09

**C3030.04 Gypsum Board Ceiling Finishes \***

Painted drywall ceiling at all Washrooms and Storage Rooms. Some painted drywall bulkheads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	60	FEB-09

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

600 x 1200mm acoustic tiles on T-bar ceiling in all Classrooms and Offices.  
 Numerous stained tiles require replacing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	25	FEB-09

**Event: Replace Acoustic Ceiling Treatment (Susp.T-Bar) (Approx 550m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$20,000	Unassigned

**Updated:** FEB-09

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

Painted drywall ceilings and bulkheads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	FEB-09

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

There are a variety of sinks in the school, a class room has a stainless steel sink, and the science room has 6. There is also a double SS sink in the staff room. The shop has a large Bradley wash basin.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	FEB-09

**Event: Replace Nine Sinks**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$9,500	Unassigned

**Updated:** FEB-09

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

There is one drinking fountain in the shop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	35	FEB-09

**Event: Replace One Drinking Fountains**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$1,000	Unassigned

**Updated:** FEB-09

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

There is a male and a female staff washroom with tank type toilets and wall hung basins. The student washrooms have typical fixtures and a wall hung urinal. All the washrooms are barrier free.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	FEB-09

**Event: Replace Approximately Eleven Washroom Fixtures (WC, Lav, Urnl)**

**Concern:**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$12,000	Unassigned

**Updated:** FEB-09

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

There is a water service from the domestic water in the larger building. This 1" water service has a separate meter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

There are valves of all shapes, sizes, and manufactures used in the schools water system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	40	FEB-09

**Event: Replace Valves: Domestic Water**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2040	\$2,800	Unassigned

**Updated:** FEB-09

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

There is a back flow preventer for the boiler feed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	FEB-09

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

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$1,100	Unassigned

**Updated:** FEB-09

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

There is a Bell and Gossett circulation pump for the domestic hot water.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	FEB-09

**Event: Replace Plumbing Pumps: Domestic Water**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$1,000	Unassigned

**Updated:** FEB-09



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

The school has a Bradford White 40 Gal. 36,000 BTU. Hot water tank for domestic hot water.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	FEB-09

**Event: Replace One Domestic Water Heaters**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$1,300	Unassigned

**Updated:** FEB-09

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

The water lines have fiberglass insulation with canvas covering in exposed areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

The under ground sewer is plastic and cast, above ground cast, plastic and copper piping is used.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**D2030.03 Waste Piping Equipment \***

All sewage for the school is drained into a sanitary sump, it is then pumped out with 2 sewer ejector pumps into the building sanitary sewer system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

The rain water pipe is cast and plastic above ground and below.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**D2040.02.04 Roof Drains \***

The roof drains are cast iron body's with domes.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	40	FEB-09

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

The school is serviced with a natural gas line from inside the larger building. This provides heat for the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	60	FEB-09

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

There is a Burnham boiler rated at 237,000 BTU's The boiler system has two circulation pumps for the boiler and two for the heat pump system. The system uses glycol, so there is a glycol pump and tank for make up fluid. The system balance is provided with 2 expansion tanks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	35	FEB-09

**Event: Replace One Heating Boilers and Accessories: H.W.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$34,500	Unassigned

**Updated:** FEB-09

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

The boiler vent is galvanized metal into a metal bestous chimney.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	FEB-09

**Event: Replace One Chimney (&Comb. Air): H.W. Boiler**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$2,400	Unassigned

**Updated:** FEB-09

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

There is a chemical treatment program in effect. The chemical is introduced into the system with a pot feeder. It is checked with a site glass and side stream filter. There is also a glycol tank and pump.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**D3020.04.03 Fuel-Fired Unit Heaters\*\***

There are two gas fired unit heaters in the shop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	FEB-09

**Event: Replace Two Fuel-Fired Unit Heaters**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$2,800	Unassigned

**Updated:** FEB-09

**D3030.05.04 Liquid Coolers and Evaporative Condensers**

There is a fluid cooler on the roof for the heat pumps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	25	FEB-09

**D3030.07 Heat Pumps\*\***

There are 9 McQuay heat pumps in the boiler room ceilings for the school rooms, offices, and common areas. The heat pumps are plagued with numerous service calls for a variety of problems.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	15	FEB-09

**Event: Replace Approximately Thirty Seven Heat Pumps**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$296,500	Unassigned

**Updated:** FEB-09

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

There is an Engineered Air make up air unit for the shop area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	2000	30	FEB-09

**Event: Replace One Air Handling Units: Air Distribution****Concern:**

The make up air unit is too large for the shop and works so poorly that it isn't used. Several attempts have been made to rectify the problem to no avail.

**Recommendation:**

Replace the make up air unit with one that is sized properly for the space and use.

**Consequences of Deferral:**

The shop will be uncomfortably cold because there is no heated make up air to replace the exhausted air. This is also causing a negative pressure in the rest of the school.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$78,800	Low

**Updated:** FEB-09

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

Air distribution is provided through galvanized duct work above the ceiling through out the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

There are square diffusers in the ceilings with egg crate returns.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

Threaded piping is used for the hot glycol for the heat pumps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	40	FEB-09

**Event: Replace Hot Water Distribution Systems**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2040	\$20,400	Unassigned

**Updated:** FEB-09

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

There are exhaust fans for all the washrooms, storage and janitor rooms. The staff room has a residential type vented range hood. The shop has a large general exhaust fan. There is also exhaust in two smaller rooms off the main shop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	FEB-09

**Event: Replace Approximately two Fans: Exhaust**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$4,800	Unassigned

**Updated:** FEB-09

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

Exhaust air is moved through galvanized duct work to the roof exhaust fans.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

Egg create grills are used for exhaust inlets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

There is a heater mounted in the ceiling for heating at the entrance of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	FEB-09

**Event: Replace One Fan Coil Unit**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$1,300	Unassigned

**Updated:** FEB-09

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

There is some base board radiation in the shop area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	40	FEB-09

**Event: Replace Finned Tube Radiation**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2040	\$1,100	Unassigned

**Updated:** FEB-09

**D3060.02.01 Electric and Electronic Controls\*\***

Electric and Electronic Controls are used for heating and cooling through out the school, mechanical equipment uses 24 volts and 110 volt for its operation. There are 24 volt programmable thermostats for the heat pumps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	FEB-09

**Event: Replace Electric and Electronic Controls**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$15,000	Unassigned

**Updated:** FEB-09

**D4020 Standpipes \***

There are two fire hose cabinets for the school, one in the school hall and the other in the shop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	60	FEB-09

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

The main service is supplied from a MCC that is part of the existing building. This MCC is rated at 480 volts and feed a 30 KVA transformer. The MCC is a Klockner Moeller.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	40	FEB-09

**Event: Replace Main Electrical Switchboards**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2040	\$42,000	Unassigned

**Updated:** FEB-09

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

The main panels in the facility are Siemens 100amp panels 42 cct and are located in various location throughout the facility. These panels are at 85 to 90% fill.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	30	FEB-09

**Event: Replace Electrical Branch Circuit Panelboards (Secondary Distribution)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$12,700	Unassigned

**Updated:** FEB-09

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

The motor starters are siemens brand and are used to control various pumps in the mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	30	FEB-09

**Event: Replace Motor Starters and Accessories**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$2,500	Unassigned

**Updated:** FEB-09

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

The branch wiring is provided through conduit and wire as well as AC 90.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

The switching in the facility is provided through line voltage switches local to each room. These switched are in good condition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

The fixtures in the facility are fluorescent with T-8 lamps. These fixtures are located in all room of the facility .

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	30	FEB-09

**Event: Replace Interior Florescent Fixtures**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$75,500	Unassigned

**Updated:** FEB-09

**D5020.02.02.03 Interior Metal Halide Fixture \***

The shop area has six low bay metal halide fixtures. Unable to determine the wattage of lamp.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	0	FEB-09

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

The battery packs in the facility are lumacell and are tested yearly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	FEB-09

**Event: Replace Emergency Lighting Battery Packs**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$10,700	Unassigned

**Updated:** FEB-09

**D5020.02.03.03 Exit Signs \***

The exit signs are lmacell and are all LED.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	0	FEB-09



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

The fire alarm system is a mirton system model 7532. The system is tested yearly the system is a zoned system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	25	FEB-09

**Event: Replace Detection and Fire Alarm**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$23,500	Unassigned

**Updated:** FEB-09

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

The alarm system in the facility is a Dukane system that is monitored externally. The system utilizes motion detectors throughout the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	25	FEB-09

**Event: Replace Intrusion Detection**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$13,900	Unassigned

**Updated:** FEB-09

**D5030.04.01 Telephone Systems \***

The phone system is a northstar system with Mitel phones. The phones are used for the PA as well. The system provides multiple lines for the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	25	FEB-09

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

The local area network system utilizes cisco equipment with multiple servers. The facility has cat 5e cable throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	0	FEB-09

**S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION****E1010.07.02 Vending Machines**

Drink and snack vending machines.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**E1030.01 Vehicle Service Equipment \***

Three 4-post hoists, tire change machine, wheel balance, brake lathe, wheel alignment, drill press, welder, scope/gas machine, glass bead machine.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**E1090.04 Residential Equipment \***

Microwave, coffee maker, stove and fridge.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

Birch plywood cabinetry and laminated countertops found in Science Room, Staff counter, Technician's desk and Computer Room.

Plastic laminated vanities for all washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	35	FEB-09

**Event: Replace Fixed Casework ( Approx 65 lin mtrs)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$85,000	Unassigned

**Updated:** FEB-09

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

PVC vertical blinds provided for all windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	FEB-09

**Event: Replace Blinds ( 10 units )**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$20,000	Unassigned

**Updated:** FEB-09

**F2020.01 Asbestos\***

No hazardous materials were evident or reported on the premises.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	0	FEB-09

**F2020.04 Mould\***

No hazardous materials were evident or reported on the premises.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	0	FEB-09

**F2020.09 Other Hazardous Materials\***

No hazardous materials were evident or reported on the premises.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	0	FEB-09

**S8 FUNCTIONAL ASSESSMENT****K1010 Site Location & Access**

Access to the site and parking areas is through a communal site entrance for both building tenants.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**K3010 Building Services**

The capacity of building services appear to be adequate for current use.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**K3020 Indoor Environment**

The indoor environment is generally acceptable.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

Dropped curb for wheel chair access.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

Main entry double doors with auto operators.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

Upper mezzanine (mechanical room) is the only area not accessible by wheelchair.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

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

Barrier free cubicles and grab bars are provided and are acceptable.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	FEB-09

**K4020 Building Code**

The building is separated from the rest of the existing building with a fire rated wall. The building appears to conform to code requirements.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	2000	0	FEB-09