RECAPP Facility Evaluation Report

Edmonton School District No. 7

Meyonohk Elementary School

B3221A

Edmonton

Report run on: July 17, 2008 2:57 PM

Facility Details

Building Name: Meyonohk Elementary Scho
Address: 1850 Lakewood Road S.
Location: Edmonton

Building Id: B3221A
Gross Area (sq. m): 3,570.08
Replacement Cost: $7,780,891
Construction Year: 1980

Evaluation Details

Evaluation Company: Robert Irlam Consulting Inc.
Evaluation Date: November 22 2007
Evaluator Name: J. R. Irlam

Total Maintenance Events Next 5 years: **$1,795,394**
5 year Facility Condition Index (FCI): **23.07%**

General Summary:

The Meyonohk School is a single storey 3750m2 brick clad building constructed in 1980. In 2003 an addition was constructed on the east side of the school consisting of four class rooms off a single bank corridor with similar interior and exterior finishes to the original school. There are two identical metal clad pods each with four portable class rooms on the north and east sides of the school both installed in 1981. The school accommodates 373 kindergarten to grade six students and 29 staff.

Structural Summary:

The sub-structure for the 1980 and 2003 buildings consists of concrete piles carrying concrete grade beams which in turn carry load bearing concrete block walls. The roof is predominantly open web steel joists spanning the concrete block walls. There is slab on grade throughout the school.

The overall condition of the structure is good.

Envelope Summary:

The roof over the 1980 school is built up with a vapour barrier and rigid insulation on a metal roof deck. The roof over the 2003 addition is SBS on a metal deck. All the walls have a brick skin with an air space in front of rigid insulation and a concrete block back wall. The 2003 exterior walls also have a vapour barrier. The windows in the 1980 school are painted pressed steel frames with sealed units with awning opening lights. The windows in the 2003 section are anodized aluminum with sealed units and awning opening lights. Exterior doors are painted steel in pressed steel frames.

Overall the building envelope is in an acceptable condition.

Interior Summary:

The interior finishes consist of: T-bar ceilings with gypsum board ceilings in service rooms and wash rooms, walls of painted vinyl covered gypsum board and concrete block, a mix of carpet and vinyl tiles in class rooms and vinyl tiles in corridors. The furnishings are plastic laminate tables and desks with steel and chrome leg frames. Student chairs have plastic seats on steel and chrome leg frames. There is painted wood storage shelving and wood case work throughout the school.

Overall the interior is in good condition.

Mechanical Summary:

The mechanical systems include three primary air handling systems, a perimeter hydronic heating system, a domestic hot water system, and washroom exhaust. All distribution ducting and lines are in the corridor ceiling spaces. A roof-top gas fired packaged ventilation unit was installed for the 2002 addition. All portables (8) have individual furnaces. All systems are in satisfactory operating condition.

The overall condition of the mechanical systems is acceptable.

Electrical Summary:

The Service and Distribution Switchboard is a floor-mounted, circuit breaker type switchboard rated at 800A, 120/208V, 3 phase, 4 wire. Branch circuit panel boards, recessed or surface mounted are 120/208V, 3 phase for the main building and 120/240V, single phase for the portable classrooms.

A 20 kW natural gas generator provides emergency power for lighting, heating, life safety and security equipment. An

emergency lighting battery pack is used in the 2002 Addition.

The interior lighting is predominantly original fluorescent with magnetic ballasts and T12 lamps. Interior lighting in the 2003 Addition is T8 lamps with electronic ballasts. Incandescent lighting is used mainly to supplement the fluorescent and for special effects, such as spot lights and stage lighting. Lighting control is by line voltage switching, either locally or group switched except in the Gymnasium which uses low voltage switching devices. About 10% of the lighting system is under emergency power. The exit lights LED lamps, are also on emergency power. Exterior lighting is high pressure sodium, consisting of wall packs on the building walls and roof mounted floodlights for the parking lot. They are photoelectric cell and time clock controlled, with manual override.

The hard wired Edwards fire alarm system has a new addressable control panel (Edwards EST) and a remote annunciator at the main entrance. The field devices are zoned and hard wired. Except for a strobe light in the corridor of the 2003 Addition, the signaling devices are bells only. The intrusion alarm system (Magnum Alert) was replaced in 2000 and a separate alarm zone created for the new Computer Room in the 2003 section with its own keypad. A recently replaced sound and telephone system serve the public address, class change program, as well as the intercommunications and telephone needs of the School. Classrooms are provided with telephones, computer terminals, and television sets with DVD/VHS players and computer interface.

The electrical system are generally in good condition.

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

S1 STRUCTURAL

A1010 Standard Foundations - 1980 Section*

The foundation system consists of 500mm diameter concrete friction piles varying in length from 6100mm to 9500mm carrying poured concrete grade beams which vary in thickness from 200mm to 390mm and vary in depth from 432mm to 800mm.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

A1010 Standard Foundations - 2003 Section*

The foundation system consists of 400mm and 300mm diameter concrete friction piles varying in length from 5000mm to 7800mm carrying 200mm wide x 600mm deep poured concrete grade beams.

Rating	Installed	Design Life	Updated
5 - Good	2003	0	MAR-08

A1030 Slab on Grade - 1980 Section*

There is a 130mm slab on grade throughout this section reinforced with 150mm x 150mm welded wire steel mesh on polyethylene vapour barrier on compacted fill.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

A1030 Slab on Grade - 2003 Section*

The poured concrete slab on grade throughout this section is 100mm thick with 150mm x 150mm welded steel wire mesh reinforcing on poly vapour barrier on 100mm engineered fill.

Rating	Installed	Design Life	Updated
5 - Good	2003	0	MAR-08

B1010.01 Floor Structural Frame (Building Frame) - 1980 Section*

The building structural frame consists of open web steel joists varying in depth from 400mm over washroom areas to 1200mm over the gym spanning reinforced concrete block walls and in some locations onto wide flange steel beams. The second floor mechanical room comprises a poured reinforced concrete floor slab spanning concrete beams and concrete block walls with an open web steel joist roof structure spanning concrete block walls. Hollow section steel beams are used in some locations to pick up point loads.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

B1010.01 Floor Structural Frame (Building Frame) - 2003 Section*

The building frame consists of 550mm deep open web steel joists over class rooms spanning concrete block walls. There are steel H beams over the corridor area spanning concrete block walls. There are steel plates in the block walls to carry the joists or steel beams at the bearing points.

Rating	Installed	Design Life	Updated
5 - Good	2003	0	MAR-08

B1010.02 Structural Interior Walls Supporting Floors (or Roof) - 1980 Section*

All interior structural walls are concrete block with reinforcing every second course.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

B1010.02 Structural Interior Walls Supporting Floors (or Roof) - 2003 Section*

There is one main interior structural wall separating the class rooms from the corridor consisting of 200mm concrete block carried on a grade beam.

Rating	Installed	Design Life	Updated
5 - Good	2003	0	MAR-08

B1010.03 Floor Decks, Slabs, and Toppings - 1980 Section*

The first floor deck is a slab on grade with a trowelled finish. The second floor deck is also a reinforced poured concrete slab with a trowelled finish.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

B1010.03 Floor Decks, Slabs, and Toppings - 2003 Section*

The roof deck is steel deck spanning open web steel joists and steel beams with gypsum board finish to receive the roof assembly.

Rating	Installed	Design Life	Updated
5 - Good	2003	0	MAR-08

B1010.09 Floor Construction Fireproofing - 1980 Section*

The main floor and second are poured concrete and inherently fire proof.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

B1010.10 Floor Construction Firestopping - 1980 Section*

Fire stopping is installed throughout the school.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	0	MAR-08

Event: Replace fire stopping 2 locations

Concern:
There are conduit penetrations through the ceiling in the telephone room which are not fire stopped. There is also a section of gypsum board ceiling missing in the main electrical rrom.

Recommendation:
Replace fire stopping.

Consequences of Deferral:
Lack of fire stopping will continue to present a risk to the school.

Type	Year	Cost	Priority
Code Repair	2008	$1,144	High

Updated: APR-08

B1010.10 Floor Construction Firestopping - 2003 Section*

Fire stopping is installed in this section of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	2003	0	MAR-08

B1020.01 Roof Structural Frame - 1980 Section*

The roof structural frame comprises open web steel joists spanning concrete block walls.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

B1020.01 Roof Structural Frame - 2003 Section*

The roof structural frame consists of open web steel joists and steel beams spanning concrete block walls.

Rating	Installed	Design Life	Updated
5 - Good	2003	0	MAR-08

B1020.04 Canopies - 1980 Section*

There is a canopy over the main entrance consisting of a structural steel frame with a metal roof finish on two layers of rigid insulation on a vapour barrier on exterior quality gypsum board on metal deck. The soffit consists of stucco finish on metal studs with batt insulation over a vapour barrier.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 1980 Section*

There is brick masonry exterior wall skin on all elevations of the school. The wall is constructed with a 25mm air space behind the brick skin, 50mm rigid insulation on a 200mm or 250mm concrete block wall. The concrete block is exposed internally and painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	75	MAR-08

B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 2003 Section*

There is a brick exterior wall skin on all sides with an air space behind then 75mm rigid insulation on an air barrier on 200mm concrete block wall.

Rating	Installed	Design Life	Updated
5 - Good	2003	75	MAR-08

B2010.01.06.03 Metal Siding**

There is metal siding on the sides of the sloping skylights on the roof and above windows and doors.

Rating	Installed	Design Life	Updated
5 - Good	1980	40	MAR-08

Event: Replace metal siding [25m2]

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$11,440	Unassigned

Updated: MAR-08

B2010.01.09 Expansion Control: Exterior Wall Skin - 1980 Section*

There are expansion control joints in the exterior block wall and brick skin with a maximum spacing of 10.5m. The joint has rubber insert at the centre of the block wall and silicone caulking over a foam rod internally and externally.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1980 Section**

There is caulking in the exterior brick skin expansion joints and at door and window openings with a foam back rod.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	20	MAR-08

Event: Repair 50m caulking

Concern:
There are sections of caulking which have been damaged and are missing and require replacement.
Recommendation:
Replace damaged and missing caulking.
Consequences of Deferral:
Caulking will continue to deteriorate with potential damage to the interior of building.

Type	Year	Cost	Priority
Repair	2008	$1,144	Medium

Updated: MAR-08

Event: Replace caulking [120m]

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$2,288	Unassigned

Updated: MAR-08

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation - 1980 Section*

There is 50mm rigid insulation on the outside face of the concrete block back wall in the exterior wall assembly.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation - 2003 Section*

There is 75mm rigid insulation on a vapour barrier on the outside face of the concrete block back wall in the exterior wall assembly.

Rating	Installed	Design Life	Updated
4 - Acceptable	2003	0	MAR-08

B2020.01.01.01 Steel Windows (Glass & Frame) - 1980 Section**

The exterior windows are painted pressed steel frames with sealed units and awning opening lights.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	40	MAR-08

Event: Repair Sill

Concern:
There is damage to a section of the prefinished metal sill on the main facade and a section of missing sill.
Recommendation:
Replace damaged sill.
Consequences of Deferral:
The sill will continue to deteriorate with potential damage to the school interior.

Type	Year	Cost	Priority
Repair	2008	$2,288	Medium

Updated: APR-08

Event: Replace steel windows [80m2]

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$114,400	Unassigned

Updated: APR-08

B2020.01.01.01 Steel Windows (Glass & Frame) - 2003 Section**

The windows in this section are prefinished aluminum with sealed glazing units and awning openers.

Rating	Installed	Design Life	Updated
5 - Good	2003	40	MAR-08

Event: Replace 30m2 aluminum windows

Type	Year	Cost	Priority
Lifecycle Replacement	2043	$17,160	Unassigned

Updated: APR-08

B2030.01.02 Steel-Framed Storefronts: Doors - 1980 Section**

The main entrance doors (south side) are painted insulated hollow metal with safety glass panels and push bar opener in a pressed steel frame. Other entrance doors on the west side of the school are painted hollow steel with an insulated transom panel over in a pressed steel frame. There are also two sets of double exterior doors into the gym of insulated painted hollow metal in pressed steel frames.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace double entrance doors [3]

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$17,160	Unassigned

Updated: MAR-08

B2030.01.02 Steel-Framed Storefronts: Doors - 2003 Section**

The exterior entrance doors are painted steel with panic hardware in a pressed steel frame and stainless steel piano hinges.

Rating	Installed	Design Life	Updated
4 - Acceptable	2003	30	MAR-08

Event: Replace double entrance doors [1]

Type	Year	Cost	Priority
Lifecycle Replacement	2033	$5,720	Unassigned

Updated: MAR-08

B2030.02 Exterior Utility Doors - 1980 Section**

All class rooms have direct access to the outside by means of exterior utility doors which are painted hollow metal in pressed steel frames with windows on one side. There are also hollow metal utility doors to the main electrical room which is accessed from the outside and the grounds storage.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-08

Event: Replace metal utility doors [8]

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$6,864	Unassigned

Updated: MAR-08

B3010.01 Deck Vapor Retarder and Insulation - 1980 Section*

The roof deck has a vapour barrier under two layers of rigid insulation as part of the roof assembly.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

B3010.01 Deck Vapor Retarder and Insulation - 2003 Section*

The SBS roof finish is on 25mm fibre board on 100mm rigid insulation on a vapour barrier.

Rating	Installed	Design Life	Updated
4 - Acceptable	2003	0	MAR-08

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel) - 1980 Section**

The roof is the original built up felt roof with gravel finish applied to 12mm exterior quality gypsum board on metal deck.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	25	MAR-08

Event: Replace with 3800m2 SBS

Concern:
This original built up roof has deteriorated and has asphalt bleeding (blueberries) ponding, thinning of gravel cover and several patched sections.

Recommendation:
Replace roof with SBS.

Consequences of Deferral:
Roof will fail causing interior damage to finishes.

Type	Year	Cost	Priority
Failure Replacement	2008	$497,640	High

Updated: APR-08

B3010.04.04 Modified Bituminous Membrane Roofing (SBS) - 2003 Section**

The roof construction consists of a 2 ply SBS membrane on 25mm fibreboard on 100mm rigid insulation on a vapour barrier on 12.7mm gypsum board on the steel deck.

Rating	Installed	Design Life	Updated
3 - Marginal	2003	25	MAR-08

Event: Repair ridges and blisters (150m2)

Concern:
There are ridges and a large blister in this 2003 roof.
Recommendation:
Repair under contractor's warranty.
Consequences of Deferral:
Roof will continue to deteriorate.

Type	Year	Cost	Priority
Repair	2008	$22,880	High

Updated: APR-08

Event: Replace 450m2 SBS roof

Type	Year	Cost	Priority
Lifecycle Replacement	2028	$57,200	Unassigned

Updated: APR-08

B3020.01 Skylights - 1980 Section**

There are acrylic shallow domed skylights in aluminum frames over the general office areas.

Rating	Installed	Design Life	Updated
5 - Good	1980	25	MAR-08

Event: Replace Skylights [4]

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$11,440	Unassigned

Updated: MAR-08

B3020.01 Skylights - 2003 Section**

There are sloped north facing skylights over the library and main entrance with sealed units in aluminum frames.

Rating	Installed	Design Life	Updated
5 - Good	2003	25	MAR-08

Event: Replacement Sloped Skylights [6]

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$22,880	Unassigned

Updated: APR-08

B3020.02 Other Roofing Openings (Hatch,Vent, etc) - 1980 Section*

There are roof openings for exhaust and air intake and pipe penetrations with metal flashings.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

B3020.02 Other Roofing Openings (Hatch,Vent, etc) - 2003 Section*

There are roof openings for exhaust and pipe penetrations with metal flashings.

Rating	Installed	Design Life	Updated
4 - Acceptable	2003	0	MAR-08

S3 INTERIOR

C1010.01.07 Framed Partitions (Stud) - 1980 Section

There are gypsum board and steel stud walls between class rooms and offices with batt insulation. The music room has two rows of 92mm steel suds staggered with 152mm top and bottom plates also with two rows of batt insulation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

C1010.05 Interior Windows 2003 Section*

The doors into classrooms have side lights and side windows in pressed steel frames

Rating	Installed	Design Life	Updated
5 - Good	2003	80	MAR-08

C1010.05 Interior Windows - 1980 Section*

There are interior aluminum slider windows in the library. There are also interior windows with wired glass in pressed steel frames in class rooms .

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

C1010.06 Interior Glazed Partitions and Storefronts*

The general office area and offices of the principal and vice principal have pressed steel store fronts with a centre rail.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

C1020.01 Interior Swinging Doors (& Hardware)*

Typical interior doors to class rooms, offices and other areas are painted UL labeled wood solid core in pressed steel frames.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-08

C1020.03 Interior Fire Doors*

Fire doors in corridors and into the gym are UL labeled painted solid care with wired window slots in pressed steel frames.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

C1030.01 Visual Display Boards**

There are white boards and tack boards in all teaching rooms, library and staff room. There are also computerized "Smart Boards" in some class rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	20	MAR-08

Event: Replace visual display boards [200 m]

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

Updated: MAR-08

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

There are prefinished steel fabricated toilet partitions in student and staff wash rooms.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	30	MAR-08

Event: Repair 10 toilet compartments

Concern:
There are toilet partitions in student wash rooms which are damaged and require repair.
Recommendation:
Repair damaged steel partitions.
Consequences of Deferral:
Partitions will deteriorate further.

Type	Year	Cost	Priority
Repair	2008	$3,432	Medium

Updated: APR-08

Event: Replace toilet compartments [23]

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$26,312	Unassigned

Updated: MAR-08

C1030.08 Interior Identifying Devices*

There is a mix of plastic signs on doors to indicate room functions several with Chinese character equivalents.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

C1030.10 Lockers**

There are two double bank steel lockers in the female staff wash room and three full height steel lockers in the custodian's room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace lockers [5]

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$4,004	Unassigned

Updated: APR-08

C1030.12 Storage Shelving*

There is wood storage shelving both veneered and painted throughout the school including class rooms, store rooms and library.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

C1030.14 Toilet, Bath, and Laundry Accessories*

There are mirrors in chrome frames, electric hand dryers, paper towel and soap dispensers in student and staff wash rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

C2010 Stair Construction*

There is a painted poured concrete stair up to the second floor mechanical room with painted steel pipe rails and quarry tile nosings. In the mechanical room there are steel stairs to the exterior door and to the raised floor over the stage area below with steel grille treads and steel pipe rails.
There is a wood ramp with a carpet finish along the side of the stepped music room.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	MAR-08

C3010.06 Tile Wall Finishes**

There are ceramic tiles on walls in the staff and student washrooms, showers and locker rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-08

Event: Replace wall tiles [200m2]

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$53,768	Unassigned

Updated: APR-08

C3010.09 Acoustical Wall Treatment**

There are 2.4m high acoustic panels on the gym walls 3.2m from floor finish consisting of fabric glued to fibreboard aluminum frames.

Rating	Installed	Design Life	Updated
5 - Good	1980	20	MAR-08

Event: Replace acoustic panels [200m2]

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$40,040	Unassigned

Updated: APR-08

C3010.11 Interior Wall Painting*

Block and gypsum board interior walls are painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	10	MAR-08

C3010.12 Wall Coverings*

There are gypsum panels covered with vinyl and battens covering joints in corridors, class rooms and offices.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	15	MAR-08

C3020.01.02 Paint Concrete Floor Finishes*

There are painted concrete finishes in the mechanical room and the emergency generator room.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	10	MAR-08

Event: Repaint concrete floor [130m2]

Concern:
The painted floor in the mechanical and generator rooms are worn and unsightly.
Recommendation:
Paint floors.
Consequences of Deferral:
Floors will deteriorate further.

Type	Year	Cost	Priority
Repair	2008	$1,144	Low

Updated: APR-08

C3020.02 Tile Floor Finishes**

There are ceramic mosaic tile floor finishes in washrooms, showers and locker rooms. There are quarry tiles in the main vestibule.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	50	MAR-08

Event: Replace 150m2 ceramic tiles

Type	Year	Cost	Priority
Lifecycle Replacement	2030	$45,760	Unassigned

Updated: MAR-08

C3020.07 Resilient Flooring**

There are vinyl tiles throughout the school including washroom vestibules, classrooms, work room, janitor's room, storage rooms, art room and corridors.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	20	MAR-08

Event: Replace vinyl tiles [1500 m2]

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

Updated: MAR-08

C3020.08 Carpet Flooring**

There is carpet in offices, class rooms, library, music and drama rooms, staff lounge and other areas.

Rating	Installed	Design Life	Updated
5 - Good	1980	15	MAR-08

Event: Replace carpet [700m2]

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$40,040	Unassigned

Updated: APR-08

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

The ceilings throughout the school are primarily acoustic tiles in a T-bar suspension grid including corridors, classrooms, offices and library.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	25	MAR-08

Event: Replace acoustic ceiling [2000m2]

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

Updated: APR-08

C3030.07 Interior Ceiling Painting*

Gypsum board ceilings in store rooms, service rooms, washrooms and kitchen are painted. Exposed metal deck and open web steel joists are also painted in the mechanical and generator rooms. The textured finish on the bulk heads at the skylights are also painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	20	MAR-08

S4 MECHANICAL

D2010.04 Sinks**

There are 21stainless steel sinks with drinking bubblers located in the classrooms and other instructional areas. There is a triple compartment stainless steel sink in the kitchen, and a single compartment stainless steel kitchen style sink in the staff room. There are three mop service basins in separate locations throughout the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace Sinks [26]

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

Updated: MAR-08

D2010.05 Showers**

There are 6 showers in the Boy's Locker Room and 4 showers in the Girl's Locker Room, and one shower in the Infirmary washroom. With the exception of the Infirmary washroom, all other showers are not in use and the areas are used for storage of materials.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace Showers [11]

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$6,292	Unassigned

Updated: APR-08

D2010.08 Drinking Fountains / Coolers**

There are 3 ceramic drinking fountains located in the corridor areas.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-08

Event: Replace 3 Drinking Fountains

Recommendation:
Replacement assumes $1500 per unit.

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$5,148	Unassigned

Updated: APR-08

D2010.09 Other Plumbing Fixtures - Non Freeze Hose Bibs*

There are six non-freeze hose bibs located on the various exterior faces of the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

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

There are 26 stainless steel oval washroom lavatories with metering faucets. There are 23 flush valve type waterclosets and 2 tank type waterclosets. There are 7 semi-recessed urinals with flush valves.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace Washroom Fixtures (23 WC, 26 Lav, 7 Urnl)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$81,567	Unassigned

Updated: MAR-08

D2020.01.01 Pipes and Tubes: Domestic Water*

A 100mm domestic copper water service enters the metering room at the east end of the south face of the building. Hot and cold water is distributed via a corridor distribution system to the various fixtures located throughout the facility.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

D2020.01.02 Valves: Domestic Water**

Shut-off valves are provided in the corridor ceiling for each branch line and each group of fixtures. Valves range in size from 100mm at the water meter down to 12mm on the hot water recirc line.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-08

Event: Replace Valves [20]

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$13,728	Unassigned

Updated: MAR-08

D2020.01.03 Piping Specialties (Backflow Preventors)**

A back flow preventor is provided for the boiler make-up water supply. Backflow preventors are also installed on the janitor mop service basins.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	20	MAR-08

Event: Replace Backflow Preventors

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$3,604	Unassigned

Updated: MAR-08

D2020.02.02 Plumbing Pumps: Domestic Water**

There is one small domestic hot water recirculation pump adjacent to the domestic hot water tanks.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	20	MAR-08

Event: Replace Domestic Water Recirculation Pump

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$1,316	Unassigned

Updated: MAR-08

D2020.02.06 Domestic Water Heaters**

There are two domestic hot water heaters. One appears to be original, a Jetglas M85-168-J5B-2N, 199,000 btuh input (58.3 KW), 82 US gal storage, 160 USgph recovery. The other is a replacement unit (circa 1995), State Model # SBT 100 199 NET6F D CGA, 180,000 btuh input (52.75 KW), 100 USgal storage, 151 USgph recovery.

The original Jetglas unit is valved off and isolated from the system and is not in use at the present time.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	20	MAR-08

Event: Replace Domestic Water Heaters [2]

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$7,550	Low

Updated: MAR-08

D2020.03 Water Supply Insulation: Domestic*

Water lines are insulated and jacketed where exposed in the corridor ceiling spaces.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

D2030.01 Waste and Vent Piping*

Sanitary waste connects from the various fixtures to an underslab (cast iron) 150mm sanitary waste system that exits the south face of the building. Vent piping is located throughout with various roof penetrations (40, 65, 100mm)

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

D2040.01 Rain Water Drainage Piping Systems*

80mm and 100mm roof drains are strategically located throughout the roof area and drain into a 300mm buried storm drain that exits the south face of the building. There is one 80mm scupper drain located near the south vestibule entry.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

D2040.02.04 Roof Drains*

80mm and 100mm roof drains are strategically located throughout the roof area.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-08

D3010.02 Gas Supply Systems*

Natural gas enters the metering room on the east portion of the south face of the building and connects to the mechanical room boiler and domestic water heating equipment. A gas main exits the mechanical room and distributes gas to the rooftop equipment for the 2002 addition, and the portable pods on the east and north sides of the building. The 2002 Addition site plan lists the total natural gas load for the facility at 5637 mbh (1651.2 KW), 159.3 m3/hr at 35 Kpa.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	60	MAR-08

D3010.04 Hot Water Supply System Pumps*

There are two hydronic heating pumps, each is a Bell & Gosset rated for 72 Usgpm c/w 3 HP motors.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

Event: Replace Hot Water Supply System Pumps [2]

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$15,101	Unassigned

Updated: MAR-08

D3020.01.01 Heating Boilers & Accessories: Steam Humidification**

There is one Hydrotherm Model VGA-300 Steam Boiler, 300,000 btuh input (88 KW), 240,000 btuh output (70.3 KW). This steam boiler is isolated and shut down as the school facilities personnel do not humidify the school. The condition of the boiler is unknown.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-08

Event: Replace Steam Boiler

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$12,584	Unassigned

Updated: APR-08

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

There are two heating boilers, each is a SuperHot Model AA1320M, 1,320,000 btuh input (387 KW), 1,056,000 btuh output (310 KW).

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-08

Event: Replace Heating Boilers [2]

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$80,080	Unassigned

Updated: MAR-08

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

There is a 660mm and a 250mm Type 'B' gas vent through the roof of the boiler room for the boilers and hot water heaters respectively. A 600mm x 60mm combustion air supply louvre is located on the east face of the mechanical room. A 600mm x 250mm combustion air duct extends to the floor area adjacent to a 600mm x 300mm heated supply air duct from a unit heater above.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace 2 vents and 2 air ducts

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$15,558	Low

Updated: MAR-08

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

A chemical feeder is provided on the hydronic heating system. School Board personnel advise that the have 3 FTE's dedicated to perform water treatment to the various schools in their jurisdiction.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

D3030.06.02 Refrigerant Condensing Units**

There is one rooftop condensing unit for the computer room air conditioning in the 2002 addition. It is a Carrier Model 38HDL024311, R22, 208/1/60 unit.

Rating	Installed	Design Life	Updated
5 - Good	2002	25	MAR-08

Event: Replace Computer Room Condensing Unit

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$4,118	Unassigned

Updated: MAR-08

D3040.01.01 Air Handling Units: Air Distribution - 2002 Section Classrooms**

An Engineered Air DJ-40-0 rooftop gas-fired air handling unit serves the classrooms in the 2002 addition to the facility. Unit capacity is listed as 3433 cfm (1629 lps), 6" ESP, 208/3Ø/60, 250,000 btuh input (73.3 KW), 202,000 btuh output (59.2 KW)

Rating	Installed	Design Life	Updated
5 - Good	2002	30	MAR-08

Event: Replace Rooftop Air Handling Unit

Type	Year	Cost	Priority
Lifecycle Replacement	2032	$16,016	Unassigned

Updated: APR-08

D3040.01.01 Air Handling Units: Air Distribution - Classrooms & Offices**

Air handling Unit AS#3 serves the perimeter classrooms and office/admin areas. It is a MarkHot 73-002-067 - MVT with a Cat#67 20" blower.

The return fan is a MarkHot Cat#50 blower. The humidifier section is isolated and is not used by the school.

The capacity from a drawing diffuser take-off is 4130 lps.

There are three reheat coils on the distribution system. RHC#8 is provided for the Library, RHC#9 for the Resource Room, and RHC#10 for the interior Administration spaces.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace Air Handling Unit

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

Updated: APR-08

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

Air Handling Unit AS#2 provides ventilation and free cooling to the interior ancillary space with reheat coil RHC 6, the interior arts and science area with reheat coil RHC 7, and the drama/music rooms and adjacent spaces in the southeast portion of the building. The supply fan is a MarkHot Cat#5C 15"fan, and the return fan is is MarkHot Cat#3A 12" fan. The estimated supply air capacity at the diffusers is 1945 lps. The humidifier section is isolated and is not used by the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace Air Handling Unit AS-2

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$53,768	Low

Updated: MAR-08

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

This packaged air handling unit serves the gymnasium and the councilor/change room areas. The supply fan is a MarkHot 73-002-067 unit with a 20" blower. The return fan is a MarkHot Cat#15C with a 15" blower. There is no O&M data on site for fan capacity. From drawings, the total diffuser capacity is 4000 lps. The humidifier section is isolated and is not used by the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace Air Handling Unit AS1

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

Updated: MAR-08

D3040.01.04 Ducts: Air Distribution*

Supply air is ducted from the air handling units to the various areas of the facility via a corridor distribution system. Interior room zones are equipped with reheat coils to prevent the rooms from over-cooling during low or no occupancy periods.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

D3040.01.07 Air Outlets & Inlets:Air Distribution*

Square steel cone type ceiling diffusers are provided for the various rooms of the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

D3040.03.01 Hot Water Distribution Systems**

A hydronic heating distribution system is provided for the perimeter of the facility with individual thermostatic zoning for each classroom/perimeter space. Reheat coils are included on the airside interior distribution system for the ventilation air to prevent over-cooling of the interior spaces during low or unoccupied periods.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-08

Event: Replace Hot Water Distribution Systems

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$337,480	Unassigned

Updated: MAR-08

D3040.04.01 Fans: Exhaust**

There are six rooftop exhaust fans for a total exhaust of 2590 lps exhaust. There are 4 small interior fans for an estimated exhaust of 168 lps.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace 6 Roof Fans and 4 Interior Fans

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$14,872	Unassigned

Updated: MAR-08

D3040.04.03 Ducts: Exhaust*

Main exhaust ducts run through the corridor ceiling space and connect to exhaust branches from the various washrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

D3050.02 Air Coils**

Air Handling Unit AS1 for the Gymnasium has a preheat coil for the return air, a primary heating coil, and a heating coil for the councilor/locker room space.

Air Handling Unit AS2 has a primary preheat coil on the return air, and two zoned reheat coils for interior classroom space.

Air Handling Unit AS3 has a primary preheat coil on the return air, and three reheat coils on the distribution system for interior zones.

It is noted that the preheat coils on the return air are upstream of the mixing chamber and the relief air. Thus, the relief air that is vented has been heated.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace 10 Air Heating Coils

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$44,616	Unassigned

Updated: MAR-08

D3050.03 Humidifiers**

There are three steam grid humidifiers, one on each of the supply air ducts from each ventilation unit. This humidifiers have been isolated and shut-down by the school facilities personnel as they do not humidify the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	25	MAR-08

Event: Replace 3 Humidifiers

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

Updated: APR-08

D3050.05.02 Fan Coil Units**

There are two fan coil units at the ceiling level of the gymnasium to provide heating to the area.

There is one fan coil unit supplying heated room air to mix with the combustion air.

There are six wall and ceiling mounted force flows installed in the entrances to the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace 9 Fan Coil Units

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$32,032	Unassigned

Updated: MAR-08

D3050.05.03 Finned Tube Radiation**

Finned tube radiation is used for the perimeter of the school, with exception to the gymnasium area.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-08

Event: Replace Finned Tube Radiation

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$74,360	Unassigned

Updated: MAR-08

D3060.02.02 Pneumatic Controls**

The current automatic control system is the original pneumatic system with individual zone controls for the heating and reheat coils, the air handling unit mixing dampers, and the hydronic zone valves for the finned tube radiation. Line voltage thermostats control the entrance vestibule force flows. When the controls are updated, digital controls are recommended and the cost of a direct digital control system is assumed in the life cycle replacement costs.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace HVAC Instrumentation and Controls

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$97,240	Unassigned

Updated: MAR-08

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Portable fire extinguishers are located throughout the facility.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

S5 ELECTRICAL

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

The Main Switchboard is a floor-mounted and wall-supported Service Entrance and Distribution Switchboard (manufactured by Westinghouse) of the circuit breaker type, rated at 800A, 120/208V, 3 phase, 4 wire, with a 800A main breaker and distribution breakers ranging from 50A to 150A (12 with one spare) all thermal magnetic type. Demand is recorded at 90 kVA (250A @ 120/208V).

Rating	Installed	Design Life	Updated
5 - Good	1980	40	MAR-08

Capacity Size	Capacity Unit
800A, 120/208V	N/A

Event: Replace Main Electrical Switchboard

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$68,640	Unassigned

Updated: MAR-08

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution) - 1980 section**

Branch Circuit Panelboards are 120/208V, 3 phase, solid neutral panelboards of the circuit breaker type, manufactured by Westinghouse, rated 225A with 42 circuits. There are, however, two double panels with 60 or 84 circuits respectively. Panelboards for the portable classrooms are single phase, 120/240V, rated 100A - except when used as a distribution panel, then it is 125A - manufactured by Sylvania and self-contained within each classroom.

Rating	Installed	Design Life	Updated
5 - Good	1980	30	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

Event: Replace Branch Circuit Panelboards (8 - 3 ph panels & 8 single ph panels)

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

Updated: APR-08

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution) 2002 Section**

The Branch Circuit Panelboard for the 2003 Addition is a double panel of 84 circuits, 225A, 120/208V, 3 phase, solid neutral with 3 pole and single pole circuit breakers.

Rating	Installed	Design Life	Updated
5 - Good	2002	30	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

Event: Replace Panelboard (84 circuit Double Panel)

Type	Year	Cost	Priority
Lifecycle Replacement	2032	$6,864	Unassigned

Updated: MAR-08

D5010.07.02 Motor Starters and Accessories**

Motor starters are three phase magnetic starters, single speed, non-reversing type (Westinghouse) with overload relays, pilot lights and H-O-A switches.
Fractional horsepower motor starters are single phase manual starters complete with overload relays, also by Westinghouse.

Rating	Installed	Design Life	Updated
5 - Good	1980	30	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

Event: Replace 3 phase Magnetic Starters (10)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$11,440	Unassigned

Updated: APR-08

D5020.01 Electrical Branch Wiring*

Wiring method is cables in conduits, concealed in finished areas and surface mounted in utility areas.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

D5020.02.01 Lighting Accessories (Lighting Controls)*

Lighting control is line voltage switching, locally within the room or group controlled in corridors and public areas. Low voltage switching is used in the Gymnasium.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

D5020.02.02.01 Interior Incandescent Fixtures*

There are recessed incandescent down lights at the front entrance, spot lights under the skylights in the Library, emergency lights (enclosed wall lights that only come on when the generator is activated) in the interior classrooms and incandescent lights in utility areas.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

D5020.02.02.02 Interior Fluorescent Fixtures 2002 Section**

The 2003 Addition has electronic ballasts and the 32W T8 lamps (4100K). Recessed lights with acrylic lenses are used in the corridor and recessed lights in the classrooms have parabolic louvres for a glare-free environment including the computer room.

Rating	Installed	Design Life	Updated
5 - Good	2002	30	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

Event: Replace Fluorescent Fixtures (80)

Type	Year	Cost	Priority
Lifecycle Replacement	2032	$18,304	Unassigned

Updated: MAR-08

D5020.02.02.02 Interior Fluorescent Fixtures - 1980 Section**

The fluorescent lighting system is magnetic ballast and T12, 34W "watt saver" lamp (warm white) system, using various lighting fixtures with the 600mm x 1200mm recessed dominating, supplemented by the 600mm x 600mm recessed fixtures. There are also surface mounted fixtures with wrap around lenses. Gymnasium lights are the 2-lamp strip light box with wire guards while the utility strips are used without the wire guards. The locker room has vapour proof lights some wall mounted. The lighting fixtures in the Science/Art Room are refurbished original fixtures with updated the ballasts and lamps.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

Event: Change Fluorescent Lighting System to Electronic Ballasts and T8 lamps (600)

Concern:
Present lighting system is energy inefficient.
Recommendation:
Change magnetic ballasts to electronic and 34W T12 lamps to 32W T8. Pay back period could be 3-4 years dependent on usage and energy cost.
Refurbish fixtures.
Consequences of Deferral:
Inefficient lighting system will persist.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2008	$89,232	High

Updated: APR-08

Event: Replace Interior Fluorescent Fixtures (600)

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$137,280	Unassigned

Updated: MAR-08

D5020.02.03.02 Emergency Lighting Battery Packs - 2002 Section**

An emergency lighting battery pack with twin heads, manufactured by Lumacell, is located in the electrical room of the 2003 section. Remote lighting heads from the battery pack are located in the corridor in this section.

Rating	Installed	Design Life	Updated
5 - Good	2003	20	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

Event: Replace Emergency Lighting Battery Pack

Type	Year	Cost	Priority
Lifecycle Replacement	2022	$1,144	Unassigned

Updated: MAR-08

D5020.02.03.03 Exit Signs*

Exit signs are the internally illuminated type, originally with 2 - 25 W incandescent lamps, now replaced with LED lamps. Exit lights are connected to the emergency circuits.

Rating	Installed	Design Life	Updated
5 - Good	2000	0	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

D5020.02.05 Special Purpose Lighting*

High intensity incandescent stage lights are located in the Music Room and the Gymnasium, both dimmable.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

Exterior lighting is all high pressure sodium, with floodlights on the roof to light the parking lot and wall mounted fixtures with polycarbonate lenses and/or wireguards on building entrances, exits and along the perimeter.

Rating	Installed	Design Life	Updated
5 - Good	1998	0	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

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

Exterior lighting is controlled by photoelectric cell and time clock, with manual override.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

D5030.01 Detection and Fire Alarm**

The Fire Detection and Alarm System is a single stage, zoned and supervised system. The Edwards EST control panel (installed in 2006) is an addressable system with an alphanumeric annunciator (replacing the obsolete Edwards 6500 from the 1980 construction). The system is hard wired and zoned as before - 12 alarm zones and 1 signal circuit - retaining the field devices of the original system. The system uses manual and automatic heat and smoke detectors as detection devices and bells only (except in the 2002 Addition where a strobe is provided) for signaling devices.
A new remote annunciator is added at the building entrance.

Rating	Installed	Design Life	Updated
5 - Good	2006	25	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

Event: Replace Fire Alarm System

Type	Year	Cost	Priority
Lifecycle Replacement	2031	$57,200	Unassigned

Updated: APR-08

D5030.02.02 Intrusion Detection**

The intrusion alarm system is a Magnum Alert system using infrared motion sensors and a coded keypad, located at the Custodian's office just off the side entrance, for activation. A separate alarm and activation keypad is provided at the Computer Room. Alarm signals are transmitted to the School Board.

Rating	Installed	Design Life	Updated
5 - Good	1997	25	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

Event: Replace intrusion detection

Type	Year	Cost	Priority
Lifecycle Replacement	2022	$17,160	Unassigned

Updated: MAR-08

D5030.03 Clock and Program Systems*

The internal clock in the Bogen Public Address system provides the class change program and signals through the P.A. loudspeakers.
Clocks are either electric from a receptacle or battery powered.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	25	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

D5030.04.01 Telephone Systems*

The Norstar Networks (by Nortel) telephone system is a hybrid system, accommodating the telephone and intercom needs of the school. There is a telephone set in every classroom and office.
The system interfaces with the P.A. System for announcements and broadcasts. It is backed up by a 700W UPS by APC.

Rating	Installed	Design Life	Updated
5 - Good	2004	25	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

D5030.04.05 Local Area Network Systems*

SuperNet has been installed. There is extensive data distribution to the Computer Room (Learning Resources) and every classroom and office from the Server location behind the Library. A1400W UPS backs up the Server. Horizontal distribution uses Category 5 cables.

Rating	Installed	Design Life	Updated
5 - Good	2000	0	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

D5030.05 Public Address and Music Systems**

The Public Address system is a Bogen MultiCom-2000 system. While the Bogen control panel is upgraded, the filed devices are original. The modified system provides public address functions interfacing with the telephone system, school class changing program through the loudspeakers, and broadcasts the national anthem from a CD player.
A separate sound system (SRM 6302 Amplifier) provides independent sound reinforcement in the Gymnasium and interconnects with the P.A. System for everyday use.

Rating	Installed	Design Life	Updated
5 - Good	2004	20	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

Event: Replace PA system

Type	Year	Cost	Priority
Lifecycle Replacement	2024	$16,016	Unassigned

Updated: MAR-08

D5030.06 Television Systems*

Television sets with DVD/VHS players are provided to classrooms. Connections to computers are also available.
There is no cable television.

Rating	Installed	Design Life	Updated
5 - Good	2000	0	MAR-08

Capacity Size	Capacity Unit
N/A	N/A

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

The emergency power system is provided by a 20 kW (25 kVA @ 0.8 powerfactor) generator by Kohler. Located in a separate room off the mezzanine mechanical room, the natural gas driven, radiator cooled engine generator set provides the capacity to power the emergency and exit lighting as well as the essential heating requirements of the facility. The Robonic automatic transfer switch is also in the generator room.
The emergency power distribution panel (Panel EM) is located in the main electrical room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-08

Capacity Size	Capacity Unit
20 kW	N/A

Event: Replace Emergency Power System

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$51,480	Unassigned

Updated: APR-08

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.02 Library Equipment*

The library is equipped with plastic laminate tables with steel leg frames, chairs with plastic seats and steel and chrome legs as well as painted wood adjustable shelving.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

E1090.03 Food Service Equipment*

There is a kitchenette in the staff room equipped with a range and hood, coffee maker, microwave oven, two fridges and a stainless steel sink in a plastic laminate counter with cupboards above and below.
There is also a general school kitchen close to the gym which has a fridge, range and hood, freezer and double stainless steel sink in a plastic laminate counter with cupboards above and below. This kitchen also has an opening to the adjacent corridor with a steel roller shutter on a fusible link.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

There are wall bars in the gym and basket ball hoops and back boards. There are also steel post housings in the gym floor for volley ball and badminton net posts. The gym also has a fabric dividing curtain on a steel track.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

E2010.02 Fixed Casework**

There is fixed casework throughout the school in all class rooms and display casework in the corridor close to the main entrance.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-08

Event: Replace fixed casework [1000m]

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$228,800	Unassigned

Updated: MAR-08

E2010.03.01 Blinds 2003 Section**

There are fabric vertical blinds in class rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	2003	30	MAR-08

Event: Repalce 4 vertical fabric blinds

Type	Year	Cost	Priority
Lifecycle Replacement	2033	$3,432	Unassigned

Updated: MAR-08

E2010.03.01 Blinds - 1980 Section**

There are roller blinds in class rooms and staff room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-08

Event: Replace roller blinds [15]

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$11,440	Unassigned

Updated: APR-08

F1010.02.04 Portable and Mobile Buildings East Pod*

The east pod has four portable class rooms (identical to north pod). The foundation system is concrete piles. The pod structure is wood studs with fibre glass insulation, ply exterior sheathing and prefinished vertical metal siding exterior finish with a horizontal metal fascia. The interior finish is: vinyl covered gypsum board with battens over the vertical joints, carpet in class rooms and vinyl tiles in corridors. The ceilings are acoustic tiles in a T-bar grid. There are wood shelves with coat hooks under and fixed casework along the walls. The windows are aluminum sliders with painted exterior ply panels above and below. The interior doors are painted solid core in pressed steel frames, exterior doors are painted hollow steel in pressed steel frames. There is also wood deck outside an exterior door on the south west class room.
The roof is wood joists with a ply deck and a built up roof finish.

Electrical:
Each classroom in the pod has its own self-contained 120/240V, single phase panel board. Power is fed from the main distribution to the first panel, which is a 24 circuit, 125A, 120/240V, single phase, 3 wire panel, and is then sub-fed to the other three using 50A, 2 pole breakers. These three panels are 16 circuit, 100A, 120/240V panels.
Lighting is surface mounted fluorescent - 2 lamp fixtures with wrap around acrylic lenses - of the basic magnetic ballasts and T12 lamp system, same as those in the main building.

Mechanical:
Two classrooms have the original PalmAire Natural Gas furnaces with 75.600 btuh input.
The other two furnaces were replaced in 2000 and 2007- Carrier 58CTA070 natural gas furnace with 48,600 btuh output.
There is one original 1980 Hunter furnace installed in the corridor wall to provide heat to the corridors.
Furnaces have Type B gas vents.

Rating	Installed	Design Life	Updated
3 - Marginal	1981	30	MAR-08

Meyonohk School 108.jpg

Event: Repair siding, replace furnaces, roof, deck, ply panels

Concern:

The metal siding is damaged, appears unsightly and requires repair.
The roof is original and has deteriorated with bleeding of asphalt through the gravel finish.
The wood deck at the south west exterior door is rotted.
The exterior ply panels have deteriorated and require replacement.

Recommendation:

The recommendation is:

Refinish and repair 400m2 damaged metal siding: Cost: $15,000

Replace 300m2 roofing with SBS: Cost: $35,000

Replace 4m2 wood deck: Cost: $1,000

Replace 20 painted exterior ply panels (1200mm x 1200mm): Cost: $15,000

Total Cost: $66,000

Consequences of Deferral:

Siding, deck and roof will deteriorate further.

Type	Year	Cost	Priority
Repair	2008	$75,504	Medium

Updated: MAR-08

F1010.02.04 Portable and Mobile Buildings - North Pod*

The north pod has four portable class rooms (identical to east pod). The foundation system is concrete piles. The pod structure is wood studs with fibre glass insulation, ply exterior sheathing and prefinished vertical metal siding exterior finish with a horizontal metal fascia. The interior finish is: vinyl covered gypsum board with battens over the vertical joints, carpet in class rooms and vinyl tiles in corridors. The ceilings are acoustic tiles in a T-bar grid. There are wood shelves with coat hooks under and fixed casework along the walls. The windows are aluminum sliders with a painted exterior ply panel above and below. The interior doors are painted solid core in pressed steel frames, exterior doors are painted hollow steel in pressed steel frames.
The roof is wood joists with a ply deck and a built up roof finish.

Electrical:
Each classroom in the pod has its own self-contained 120/240V, single phase panel board. Power is fed from the main distribution to the first panel, which is a 24 circuit, 125A, 120/240V, single phase, 3 wire panel, and is then sub-fed to the other three using 50A, 2 pole breakers. These three panels are 16 circuit, 100A, 120/240V panels.
Lighting is surface mounted fluorescent - 2 lamp fixtures with wrap around acrylic lenses - of the basic magnetic ballasts and T12 lamp system, same as those in the main building.

Mechanical:
Three classrooms have the original PalmAire Furnaces with 75,600 btuh output,
Fourth furnace replaced in 2001.
There is one original 1980 Hunter furnace installed in the corridor wall to provide heat to the corridors.
Furnaces have Type B gas vents.

Rating	Installed	Design Life	Updated
3 - Marginal	1981	0	MAR-08

Meyonohk School 090.jpg

Event: Repair siding and ply panels, replace roof and furnaces

Concern:

The metal siding is damaged, appears unsightly and requires repair.
The roof is original and has deteriorated with bleeding of asphalt through the gravel finish.
The exterior ply panels have deteriorated and require replacement.

Recommendation:

The recommendation is:

Refinish and repair 400m2 damaged metal siding: Cost: $15,000

Replace 300m2 roofing with SBS: Cost: $35,000

Replace 20 painted exterior ply panels (1200mm x 1200mm): Cost: $15,000

Total Cost: $65,000

Consequences of Deferral:
Siding and roof will deteriorate further.

Type	Year	Cost	Priority
Repair	2008	$74,360	Medium

Updated: APR-08

F1040.06 Other Special Facilities*

The music room is constructed of wood steps with a wood ramp along one wall with a carpet finish throughout. There is a recess in the gym with a cedar lining which serves as a stage area at the same level as the gym floor.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

F2020.01 Asbestos*

A May, 2000, consultant's report concluded that of 15 samples of building materials tested for asbestos content only some floor tiles contain asbestos. The report also concluded that since the asbestos containing materials in the school were "found to be in good condition they represented little risk to occupant health if properly managed."
As a precaution, the consultant also posted hazard warning signs at the entrances to the mechanical room where asbestos is usually found in pipe insulation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

F2020.04 Mould*

A mould abatement project was carried out at the school in 2002. There were no indications of mould during the building audit.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

F2020.09 Other Hazardous Materials*

There were no other hazardous materials observed or reported during the audit.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

Access from the parking to the main entrance is barrier free.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	0	MAR-08

K4010.02 Barrier Free Entrances*

There are steps at secondary entrances to the school.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	0	MAR-08

Event: Install 3 ramps and mudjack sidewalk

Concern:
There are steps at the three entrance to the school and a step in the concrete side walk to the main entrance due to settlement.

Recommendation:
Install concrete ramps at entrances and mud jack side walk to main entrance.

Consequences of Deferral:
Lack of barrier free school access will persist.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2008	$11,440	Medium

Updated: APR-08

K4010.03 Barrier Free Interior Circulation*

Interior circulation is barrier free.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

K4010.04 Barrier Free Washrooms*

There are barrier free toilet cubicles with grab bars and low sinks in student wash rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

RECAPP Facility Evaluation Report

Meyonohk Elementary School

S3221

Edmonton

Report run on: May 6, 2008 2:08 PM

Facility Details

Building Name: Meyonohk Elementary Scho
Address:
Location: Edmonton

Building Id: S3221
Gross Area (sq. m): 0.00
Replacement Cost: $0
Construction Year: 0

Evaluation Details

Evaluation Company: Robert Irlam Consulting Inc.
Evaluation Date: November 10 2007
Evaluator Name: J. R. Irlam

Total Maintenance Events Next 5 years: **$176,748**
5 year Facility Condition Index (FCI): **0%**

General Summary:

The parking lot is located on the west side of the school. There are banks of bicycle racks on a gravel surface on the south east corner of the school. The main entrance on the south side is approached by a concrete sidewalk. There are asphalt play areas on the north and east side of the school.

There are mature trees in grassed areas at the front and sides of the school. There are also flower beds with wood curbs along the front of the school.

Overall the site is in an acceptable condition.

Structural Summary:

Envelope Summary:

Interior Summary:

Mechanical Summary:

Electrical Summary:

Rating Guide

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

S7 SITE

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

There is an asphalt roadway accessing the staff care park on the south side of the school.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	25	MAR-08

Event: Repair asphalt road [50m2]

Concern:
There are sections of asphalt roadway which have deteriorated, are cracked and appear unsightly.
Recommendation:
Repair asphalt roadway.
Consequences of Deferral:
Asphalt will deteriorate further.

Type	Year	Cost	Priority
Repair	2008	$2,288	Low

Updated: APR-08

Event: Replace asphalt road [170m2]

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

Updated: MAR-08

G2010.05 Roadway Curbs and Gutters*

There are poured concrete curbs level with the asphalt roadway.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	0	MAR-08

Event: Repair 60m of concrete curb

Concern:
There are sections of curbs which are damaged, appear unsightly and require replacement.
Recommendation:
Replace damaged sections of curbs.

Type	Year	Cost	Priority
Repair	2008	$10,296	Low

Updated: APR-08

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

There is an asphalt parking lot on the west side of the school.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	25	MAR-08

Event: Repair asphalt [200m2]

Concern:
There are sections of parking lot which have cracked and appear unsightly.
Recommendation:
Repair cracked and damaged sections of asphalt.
Consequences of Deferral:
Asphalt will deteriorate further.

Type	Year	Cost	Priority
Repair	2008	$11,440	Low

Updated: APR-08

Event: Replace asphalt parking lot [800m2]

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

Updated: APR-08

G2020.05 Parking Lot Curbs and Gutters*

There are poured concrete curbs level with the asphalt parking surface.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	0	MAR-08

Event: Repair 50m concrete curbs

Concern:
There are sections of curb which are damaged, appear unsightly and require replacement.
Recommendation:
Repair curbs.
Consequences of Deferral:
Curbs will deteriorate further.

Type	Year	Cost	Priority
Repair	2008	$9,152	Low

Updated: APR-08

G2020.06.01 Traffic Barriers*

There wood bollards at the end of the parking lot and painted steel pipe barriers along the sides of the parking lot which also accommodate plug ins. There are also painted steel bollards with concrete fill in the uprights and steel pipe rails protecting two metal storage sheds.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	0	MAR-08

Event: Replace 8 wood bollards

Concern:
The wood bollards have deteriorated and appear unsightly.
Recommendation:
Replace deteriorated bollards.
Consequences of Deferral:
Bollards will deteriorate further.

Type	Year	Cost	Priority
Failure Replacement	2008	$1,144	Low

Updated: APR-08

G2020.06.03 Parking Lot Signs*

There are numbers painted on the steel parking barriers to denote parking stalls and a parking sign affixed to the wall of the school overlooking the parking lot.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	0	MAR-08

Event: Repaint 27 stall numbers and parking sign

Concern:
The parking stall numbers and parking sign are faded and indistinct.
Recommendation:
Repaint numbers and sign.
Consequences of Deferral:
The numbers and sign will deteriorate further.

Type	Year	Cost	Priority
Repair	2008	$1,716	Low

Updated: APR-08

G2020.06.04 Pavement Markings*

There are parking stall lines on the asphalt parking surface.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	0	MAR-08

Event: Repaint 160m of parking stall lines

Concern:
The parking stall lines are indistinct and eroded.
Recommendation:
Repaint parking stall lines.
Consequences of Deferral:
Lines will deteriorate further.

Type	Year	Cost	Priority
Repair	2008	$1,144	Low

Updated: APR-08

G2030.04 Rigid Pedestrian Pavement (Concrete)**

There are concrete side walks to the main entrance on the south side of the school and to access the school on the east side.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	25	MAR-08

Event: Repair 25m2 concrete sidewalk

Concern:
The concrete sidewalk to the main entrance has settled creating a trip hazard .
Recommendation:
Mud-jack concrete sidewalk.
Consequences of Deferral:
Sidewalk will settle further.

Type	Year	Cost	Priority
Repair	2008	$5,720	Medium

Updated: MAR-08

Event: Replace 90m2 concrete sidewalk

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$18,304	Unassigned

Updated: MAR-08

G2040.02.01 Chain Link Fences and Gates*

There are chain link fences on the north and south sides of the school. There are also painted steel pipe lawn fences adjacent to the sidewalk at the main entrance and along the sides of the roadway into the parking lot.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	30	MAR-08

Event: Repair 12m chain link and 10m steel pipe fences

Concern:
There are sections of the chain link fence on the south side of the school and the steel pipe fence on the north side which are damaged and unsightly.
Recommendation:
Repair damaged sections of fence.
Consequences of Deferral:
Fences will continue to deteriorate.

Type	Year	Cost	Priority
Repair	2008	$2,288	Low

Updated: APR-08

G2040.03 Athletic and Recreational Surfaces**

There are asphalt play areas on the north and east side of the school some sections of which have a wood curb.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	25	MAR-08

Event: Repair 300m2 asphalt play area and wood curbs

Concern:
The asphalt play areas are cracking and pooling and unsightly.
The wood curbs have deteriorated.
Recommendation:
Repair asphalt play areas.
Consequences of Deferral:
Play areas will deteriorate further.

Type	Year	Cost	Priority
Repair	2008	$9,152	Low

Updated: APR-08

Event: Replace asphalt play area [1000m2]

Type	Year	Cost	Priority
Lifecycle Replacement	2012	$29,744	Unassigned

Updated: MAR-08

G2040.06 Exterior Signs*

There is a metal sign affixed to the face of the school and a free standing wood sign in the grassed area at the front of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

G2040.08 Flagpoles*

There is a painted steel flag pole at the front of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

G2040.09 Covers and Shelters*

There are two metal storage sheds on the west side of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

G2050.04 Lawns and Grasses*

There are grassed areas on all sides of the school.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	0	MAR-08

Event: Repair grassed area [1000m2]

Concern:
There are bare patches in the grassed areas on all sides of the school which are unsightly.
Recommendation:
Re-sod bare patches.
Consequences of Deferral:
Grassed areas will deteriorate further.

Type	Year	Cost	Priority
Repair	2008	$17,160	Low

Updated: MAR-08

G2050.05 Trees, Plants and Ground Covers*

There are mature coniferous and deciduous trees at the front and sides of the school. There are also flower beds and lines of scrubs along the front of the school with a wood curb.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

G3010.02 Site Domestic Water Distribution*

A 100mm domestic water connects to the municipal main line along Lakewood Road South and enters the metering room at the south face of the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

G3020.01 Sanitary Sewage Collection*

A 150mm buried sanitary waste line exits the building's south face to a new manhole midway to the south property line. The line continues to a municipal manhole located in the street south of the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

G3030.01 Storm Water Collection*

A 300mm buried storm water main exits the south face of the building to a new manhole at the south property line. Two catch basins southeast and southwest of the school also connect to this manhole. The main continues and connects to a municipal manhole immediately south in the street. There is also a catch basin in the parking lot west of the building that connects to an existing storm water main west of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

G3060.01 Gas Distribution*

A natural gas main sized for 5637 mbh (159.5 m3/hr) at 35Kpa pressure connects from the street south of the building to the metering room at the south face of the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-08

G4010.02 Electrical Power Distribution Lines*

There is an underground primary line from Lakewood Road South to the pad mounted transformer at the southwest corner of the school.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

G4010.04 Car Plugs-ins*

Energizied parking stalls for 29 cars with car parking receptacles in weatherproof enclosures are located on steel railings along the side of the parking lot. These receptacles, mostly split, with dedicated circuits are thermostically controlled and cycled.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-08

G4020.01 Area Lighting*

High pressure sodium wall mounted fixtures on exterior provide night time illumination along the perimeter of the building, specifically at entrances and exits. Additionally, roof mounted floodlights were installed in 1992 to give the staff parking lot extra illumination for security.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	MAR-08