# **RECAPP Facility Evaluation Report**

**Edmonton School District No. 7** 



**Ormsby Elementary School** 

B3238A Edmonton

# **Edmonton - Ormsby Elementary School (B3238A)**

# **Facility Details**

Building Name: Ormsby Elementary School

Address: 6323 - 184 Street

Location: Edmonton

Building Id: B3238A

Gross Area (sq. m): 4,024.91

Replacement Cost: \$8,772,181

Construction Year: 1980

# **Evaluation Details**

**Evaluation Company:** Lotus Architecture

Evaluation Date: November 16 2007

**Evaluator Name:** Tonu Mitra

Total Maintenance Events Next 5 years: \$1,585,020 5 year Facility Condition Index (FCI): 18.07%

### **General Summary:**

Ormsby elementary school is a one story building with flat roof and brick exterior with cedar board band. The original school was built in 1980; that same year eight portables were added in two pods, located to north-east and south-east of the school. In 2001, carpet was replaced throughout the school and the floors of the two pods were repaired and vinyl tiles replaced. All other components of the building is original.

# Area:

1980 Original building: 3,265.1 m2
Total area of two 1980 pods: 804.9 m2

Total gross area: 4,070.0 m2

Total capacity: 525 Current enrollment: 272

# **Structural Summary:**

Concrete strip footings and foundation walls. Concrete slab on grade. Load bearing concrete block exterior and interior walls. Open web steel joists and steel deck roof structure. Mechanical Room mezzanine built with structural concrete floor slab, supported by concrete block walls. Slab on grade at south-west corner has settled, causing cracks to develop on interior concrete block partitions.

Overall condition of building structure: 4 (Acceptable).

#### **Envelope Summary:**

Exterior walls are cavity wall system, comprising of exterior brick, air space, rigid insulation and load bearing concrete block back-up walls. Stained cedar board siding on upper walls of Gymnasium and as continuous band on top of exterior walls. Exterior windows are bronze anodized aluminum frame with two panes of glazing on spacer blocks. Insulated metal exterior doors on steel frames. Entrance doors are glazed with sidelites. Original built-up roofing throughout. The roof has exceeded service life and is recommended to be replaced.

Overall condition of building envelope: 4 (Acceptable).

# **Interior Summary:**

80% of interior partitions are painted concrete block walls. Steel stud partitions with painted vinyl finish gypsum board in administration areas and several classrooms. All interior doors are painted solid core wood on steel frames. Classroom doors incorporate sidelites. Fire doors are hollow metal and solid core wood on steel frames. Interior windows are steel frame with single glazing. Suspended acoustic tile ceiling in 80% of the school's interior. Gypsum board ceilings with texture finish in storage and utility rooms. New carpet was installed in 2001 throughout the school. Quarry tile flooring in entrance vestibules and the main entrance hallway. Ceramic mosaic tiles on floors and walls in Boys' and Girls' Washrooms, Change Rooms and Showers. Vinyl asbestos tiles in hallways, storage and utility rooms and small areas in classrooms. All components of building interior are original, except the following:

2001: New carpet installed in all classrooms, Administration areas, Staff Room, Music/Drama and Computer Room. Floors of portable classrooms pods were repaired and new subfloor and vinyl composite tiles were installed.

2002: Vanities in all washrooms were upgraded. Building interior was repainted.

It is recommended that all vinyl floor tiles (new and original) be replaced with marmoleum flooring.

Overall condition of building interior: 4 (Acceptable).

Report run on: July 17, 2008 3:56 PM Page 2 of 59

### Mechanical Summary:

The school is heated by two hot water heating boilers and circulating pumps. Perimeter fin radiation at the perimeter to take care of the envelope heat loss, while reheat coils in each classroom provide additional heat. For the gymnasium and the Music room, heating coil is used to provide all heating for the area. There are two central build up ventilation systems, one for all the classrooms and one for the gymnasium and Music area. The steam boiler and the two spray humidification grid in the air systems are in poor condition and are no longer in operation.

Plumbing and piping are in constant upgrade and the lavatories were replaced about 5 years ago with stainless steel lavatories.

Overall, mechanical systems are Acceptable.

#### **Electrical Summary:**

FPE 800amp 120/208volt 3phase 4wire main distribution panel c/w a 600amp main breaker. FPE 100 - 225amp 42cct branch panels supplying lighting and power loads. Westinghouse loose wall mounted starters controlling mechanical loads. A metallic and flexible conduit system throughout c/w copper conductors.

(1980,2003)Line voltage switching throughout, with low voltage switching in gymnasium. Incandescent fixtures upgraded to compact pl lamps. Florescent fixtures upgraded to T8 lamps and electronic ballasts. Designated fixtures throughout building controlled from EM generator. Exit lights upgraded to LED style. Theater style par fixtures c/w dimming packs in gymnasium. 200 and 75 watt HPS wall packs. Exterior lighting is controlled via photo electric cells c/w PEC bypass switch. Edwards 6500 main fire alarm control panel c/w manual pull stations, heat/smoke detectors, bells. Magnum Alert 3000 intrusion system c/w keypad located in electrical room, motion detectors throughout. Bogen Multicom 2000 system to ring bells only, clocks are ac operated and manually adjusted. Nortel Meridian phone system c/w handsets throughout, integrated with Bogen. Server room c/w data racks and switches, Cat 5 and 5e cabling throughout. Bogen Multicom 2000 system integrated with phone system. RG6 cable infrastructure in place, no signal. Supernet installed. APC 1500 and 350va protecting server, APC 750va for phone system, APC 350va for Supernet, APC 550va for BMS. Onan 15KW 120/208volt 3 ph NG generator feeding mechanical and lighting loads. Overall Rating: Good (5).

Rating Guide			
<b>Condition Rating</b>	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\*

Concrete strip footings and foundation walls. Concrete pads and concrete piers at interior steel column locations.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

# A1030 Slab on Grade - 1980 Section\*

Concrete slab on grade at SE corner area, incorporating Outdoor Storage, Utility and Storage Rooms.

Rating	<u>Installed</u>		<u>Updated</u>	
3 - Marginal	1980	0	MAR-08	

# Event: Mudjack slab at SE corner.

#### Concern:

The concrete slab in SE corner supports non-load bearing concrete block walls. The slab has hair line cracks and may have settled somewhat, judging by the cracks on interior block walls. Not known, if this has been a one-time occurrence or is on-going.

#### **Recommendation:**

Determine hollow spots and fill voids with lean concrete mix and mud jack the concrete slab in SE corner area, as required.

Type	<u>Year</u>	Cost	<b>Priority</b>
Repair	2009	\$2,288	Low

Updated: APR-08

# A1030 Slab on Grade - 1980 Section\*

Concrete slab on grade throughout. Evidence of minor settlement along corridor and classroom transitions.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1980	100	MAR-08

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

Load bearing concrete block walls and steel columns.

Rating	<u>Installed</u>	Design Life	<b>Updated</b>
5 - Good	1980	0	MAR-08

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

Load bearing concrete block walls.

Rating	Installed	Design Life	<b>Updated</b>	
5 - Good	1980	0	MAR-08	

# B1010.05 Mezzanine Construction - 1980 Section\*

The Mechanical Room mezzanine in Gymnasium area is made of 250mm reinforced concrete structural slab, supported by concrete block walls. Steel roof deck.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

# B1010.09 Floor Construction Fireproofing - 1980 Section\*

The mezzanine floor is concrete slab.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

### B1020.01 Roof Structural Frame - 1980 Section\*

Open web steel joists, steel beams and channels, and steel deck; supported by concrete block walls and steel columns. The sloped roof at clearstory well in Library is also steel frame structure.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

# B1020.04 Canopies - 1980 Section\*

Wood frame canopies, suspended from steel roof framing at the main entrance. Wood framing at recessed entrances. Steel framing at fascia bands above windows on the west side.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

# B1020.06 Roof Construction Fireproofing - 1980 Section\*

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# **S2 ENVELOPE**

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

90mm brick exterior wall skin (as part of the exterior wall system) throughout.

RatingInstalledDesign LifeUpdated5 - Good198075MAR-08

# B2010.01.06 Siding Panels - 1980 Section

Cedar boards on the upper portions of exterior walls of Gymnasium; the main entrance canopy and on fascia bands above windows on the west side. Cedar boards on the above roof portions of side walls and plywood panels on the front (window) portion of clearstory window well.

RatingInstalledDesign LifeUpdated5 - Good198040MAR-08

Event: Replace [B2010.01.06 Siding Panels - 1980 Section]

TypeYearCostPriorityLifecycle Replacement2020\$70,928Unassigned

Updated: APR-08

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

Exterior brick expansion joints.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

Rod and caulking at exterior brick expansion joints.

RatingInstalledDesign LifeUpdated4 - Acceptable198020MAR-08

Event: Repair [B2010.01.11 Joint Sealers (caulking): Ext.

Wall\*\* - 1980 Section]

TypeYearCostPriorityLifecycle Replacement2012\$24,180Unassigned

**Updated:** APR-08

# B2010.01.13 Paints (& Stains): Exterior Wall - 1980 Section\*\*

Solid stain on cedar board surfaces - see B2010.01.06.

RatingInstalledDesign LifeUpdated4 - Acceptable198015MAR-08

Event: Restain cedar boards.

TypeYearCostPriorityLifecycle Replacement2012\$21,736Unassigned

**Updated: APR-08** 

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

Solid stain on cedar boards and plywood panels of clearstory window well.

RatingInstalledDesign LifeUpdated3 - Marginal198015MAR-08

### **Event:** Restain clearstory window well surfaces.

Concern:

Stain on cedar and plywood surfaces have begun to wear.

Recommendation:

Restain cedar board and plywood surfaces of clearstory window well structure.

TypeYearCostPriorityPreventative Maintenance2009\$1,144Low

**Updated: APR-08** 

# B2010.02.03 Masonry Units: Ext. Wall Const. - 1980 Section\*

Load bearing concrete block back-up walls (part of the exterior cavity wall system).

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

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

Trowel applied adhesive vapour barrier on exterior walls. Building paper at cedar siding locations. 38mm rigid insulation at exterior cavity walls.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

Report run on: July 17, 2008 3:56 PM Page 7 of 59

### B2010.06 Exterior Louvers, Grilles, and Screens - 1980 Section\*

Metal louver on the north wall of Mechanical penthouse, painted to match adjacent solid stain colour.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

#### B2010.09 Exterior Soffits - 1980 Section\*

Main entrance canopy: Cedar boards, clear varnish finish, on building paper, wood framing and batt insulation (warm soffit). Recessed soffit at north entrance: Cedar boards, clear varnish finish, on wood framing (cold soffit).

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

#### B2020.01 Exterior Standard Windows - 1980 Section

Bronze anodized, aluminum frame windows with central mullions and rails in larger windows. Narrow windows on west wall incorporate insulated metal panels below windows. Single exterior pane of fixed safety or wired glazing and interior pane is installed in hinged sections that are screwed to frames. Prefinished aluminum sills. Awning or casement sections were added in 2004 to windows on the west facade. Diamond mesh security grilles on north windows.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-08

Event: Replace [B2020.01 Exterior Standard Windows -

1980 Section]

Recommendation:

6 windows @ 2.5m2 and 6 windows @ 2.78m2.

TypeYearCostPriorityLifecycle Replacement2020\$25,168Unassigned

Updated: APR-08

#### B2030.01 Exterior Entrance Doors - 1980 Section

Main and north entrances: Insulated hollow metal doors with glazed upper half (sealed double glazing). Steel frame with central mullion. Varnished fir rails. Sidelites at the main entrance door with insulated metal panels in lower portions. Diamond mesh security grilles on doors at north entrance.

South entrance: Insulated hollow metal doors with vision panels, complete with diamond mesh security screens. Steel frame with central mullion.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-08

Event: Replace [B2030.01 Exterior Entrance Doors - 1980

Section]

TypeYearCostPriorityLifecycle Replacement2012\$34,320Unassigned

**Updated: APR-08** 

Report run on: July 17, 2008 3:56 PM Page 8 of 59

### B2030.02 Exterior Utility Doors - 1980 Section\*\*

Single leaf, insulated hollow metal doors, on steel frames at roof access from Mechanical Penthouse; all classroom exterior doors, Outdoor Storage and Meter Room doors.

Insulated, hollow metal double exterior doors in Gymnasium. Steel frames with central mullions.

Paint on south and west facing doors are starting to fade.

RatingInstalledDesign LifeUpdated5 - Good198040MAR-08

Event: Replace [B2030.02 Exterior Utility Doors\*\* - 1980

Section]

Recommendation:

9 single leaf and 2 double leaf doors.

TypeYearCostPriorityLifecycle Replacement2020\$18,304Unassigned

Updated: APR-08

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

Rigid insulation and two layers of 40mm fibre board. Vapour retardant on exterior gypsum board sheathing - both for flat roof and small section of sloped roof of clearstory well. All components are original and to be replaced with new roofing - see B3010.04 and B3010.04.01.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# B3010.04 Membrane Roofing - 1980 Section

Built-up "Selvage Edge" roofing membrane on the sloped roof of clearstory structure.

RatingInstalledDesign LifeUpdated3 - Marginal198025MAR-08

### **Event:** Replace membrane roofing on sloped structure.

#### Concern:

The original membrane roofing on the sloped section has deteriorated. It is torn along roof edges and has delaminated, bubbled and curled.

#### Recommendation:

Replace membrane roof on the sloped portion of clearstory window with 2 ply SBS membrane roofing.

TypeYearCostPriorityFailure Replacement2008\$5,720Medium

**Updated:** APR-08



Torn and deteriorated membrane on the roof of clearstory well structure.

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

Original 4 ply asphalt and gravel built-up roofing throughout. Internal roof drains.

RatingInstalledDesign LifeUpdated3 - Marginal198025MAR-08

# Event: Replace original BUR roofing.

#### Concern:

The original BUR roofing has reached the end of service life. Air pockets have developed. No leaks have been reported.

#### Recommendation:

Replace all BUR roof with 2 ply SBS roofing. (Total roof area: approximately 3118m2).

TypeYearCostPriorityFailure Replacement2010\$331,760Medium

**Updated:** APR-08

# B3020.02.03 Roof Windows (Clearstory)

Bronze anodized aluminum frame window with intermediate mullions and sealed double glazing. Translucent plastic sheets have been added from inside to reduce impact of direct sun.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# **Event: Replace clearstory window.**

TypeYearCostPriorityLifecycle Replacement2020\$6,864Unassigned

**Updated: APR-08** 

# S3 INTERIOR

# C1010.01.03 Unit Masonry Assemblies: Partitions -

Approximately 50% of interior partitions are concrete block walls. Majority of block walls are load bearing. Non load bearing partitions in south west corner of the building have developed cracks, likely due to slab settlement - see A1030.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

### C1010.01.07 Framed Partitions (Stud) -

Approximately 40% of interior partitions are steel stud.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

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

Approximately 10% of partitions are demountable, mostly in Administration area.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# C1010.05 Interior Windows - \*

Interior window between Resource Room and Library, Classroom #7 and Library, Gymnasium and Phys Ed Instructor's Office: steel frame, wired glazing.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

# C1010.06 Interior Glazed Partitions and Storefronts - \*

Steel frame storefront between Administration and main entrance lobby. Clear fir rails.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

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

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

Majority of doors are solid core wood, painted, on steel frames. Classroom doors incorporate wired glass sidelites. Doors to Computer Room, Arts/Science Room and Computer Room incorporate wired glass vision panels. Interior entrance doors are double leaf hollow metal with glazing in upper half; on steel frames with central mullions, clear fir rails. Frame at the main entrance interior door incorporate sidelites and transom with wired glazing.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-08

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

Painted solid core wood doors and hollow metal doors on pressed steel frames. Double leaf hollow metal doors to Gymnasium and Gymnasium Storage, on steel frames with central mullions at Gymnasium doors. Paint on Gym Storage door is damaged. Most doors and frames are labeled. Hallway doors are double leaf hollow metal and solid core wood on steel frames. Electronic closers, tied to fire alarm.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# C1020.04 Interior Sliding and Folding Doors - \*

Vinyl covered folding partition between Music and Drama rooms - not used, since the whole space is used as Music Room.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1980	0	MAR-08

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

(1980) Original white boards in all classrooms, Computer, Arts/Science and Music Rooms; Staff and Conference Rooms. Green boards in Computer, Resource and Music Rooms. Original tack boards in all classrooms, Arts/Science, Music/Drama, Resource, Staff and Conference Rooms.

(2003) Two new tack boards added in Computer Room and one in Phys Ed Instructor's Office.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	0	20	MAR-08

# Event: Replace white boards and tack boards.

TypeYearCostPriorityLifecycle Replacement2012\$29,744Unassigned

**Updated:** APR-08

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

Metal toilet partitions in Boys' and Girls' Washrooms and Locker Rooms; Male and Female Staff Washrooms. Prefabricated metal shower stalls in Girls' shower (not used). Toilet partitions in washrooms were repainted in 2002. Barrier free stalls in Boys' and Girls' south-east Washrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-08

Event: Replace [C1030.02 Fabricated

Compartments(Toilets/Showers)\*\* - ]

TypeYearCostPriorityLifecycle Replacement2012\$25,168Unassigned

Updated: APR-08

# C1030.06 Handrails\*

Painted pipe guard rails around stair opening in mezzanine Mechanical Room.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-08

# C1030.08 Interior Identifying Devices - \*

Painted door signs.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# C1030.10 Lockers - \*\*

Prefabricated, 2-tier metal lockers in Girls' Change Room (not used), Coffee Room, Female Staff Washroom and Phys Ed Instructor's Office. Single tier lockers in Coustodian Storage Room (not used).

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-08

Event: Replace [C1030.10 Lockers\*\* - ]

Recommendation:

Approximately 20 lockers.

TypeYearCostPriorityLifecycle Replacement2012\$14,872Unassigned

**Updated:** APR-08

Report run on: July 17, 2008 3:56 PM Page 13 of 59

# C1030.12 Storage Shelving - \*

Painted wood shelving in storage, utility and janitor rooms and Resource Room. Deep wood and metal shelving in Gym Storage. Clear finish wood shelving with melamine shelving in Copy Room, Arts/Science Storage and Server Room.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

Tissue paper holders, paper napkin dispensers, soap dispensers, mirrors and waste baskets in all washrooms. Air dryers in boys' and Girls' washrooms. Paper napkins and soap dispensers in Arts/Science, Staff Room, Infirmary and Special Needs.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# C2010 Stair Construction\*

- Single flight concrete stair to mezzanine Mechanical Room.
- Metal steps and landing to roof access door from Mechanical Room.

RatingInstalledDesign LifeUpdated4 - Acceptable1980100MAR-08

# C2020.08 Stair Railings and Balustrades\*

Wall mounted, painted pipe rail at concrete stair. Painted pipe rails at metal steps.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-08

#### C2020.10 Stair Painting\*

Concrete stair and metal steps and landing are painted.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# C2030 Interior Ramps

Wood ramp on one end of tiered seating in Music/Drama. Carpet was replaced in 2001.

RatingInstalledDesign LifeUpdated3 - Marginal19800MAR-08

**Event:** Barrier Free Access Upgrade

Concern:

There is no handrail at the ramp in Music/Drama - independent barrier free movement is difficult.

Recommendation:

Provide a wall mounted handrail at the ramp in Music/Drama.

TypeYearCostPriorityRepair2008\$1,144High

Updated: APR-08

# C3010.02 Wall Paneling - \*\*

Stained cedar boards on low partitions between Library and corridors.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-08

Event: Replace [C3010.02 Wall Paneling\*\* - ]

TypeYearCostPriorityLifecycle Replacement2012\$1,144Unassigned

Updated: APR-08

# C3010.04 Gypsum Board Wall Finishes (Unpainted) - \*

Gypsum board on all steel stud and demountable partitions.

RatingInstalledDesign LifeUpdated4 - Acceptable198060MAR-08

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

25x25mm ceramic mosaic tiles (full height) in Boys'and Girls' showers and Change Rooms (not used); washroom and shower in Infirmary and in all Boys' and Girls' washroom walls. 25x25mm ceramic mosaic tiles around urinal in Mens' Staff Washroom.

RatingInstalledDesign LifeUpdated5 - Good198040MAR-08

Event: Replace [C3010.06 Tile Wall Finishes\*\* - ]

TypeYearCostPriorityLifecycle Replacement2020\$47,890Unassigned

Updated: APR-08

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

(1980) Built on site, acoustic wall treatment on the upper portions of Gymnasium walls, consisting of batt insulation, fabric and stained wood boards.

(2001) Carpet (full height) on rear wall of Music/Drama Room.

RatingInstalledDesign LifeUpdated4 - Acceptable020MAR-08

# Event: Replace [C3010.09 Acoustical Wall Treatment\*\* - ]

TypeYearCostPriorityLifecycle Replacement2012\$68,400Unassigned

**Updated: APR-08** 

# C3010.11 Interior Wall Painting - \*

(2002) All gypsum board (including vinyl surfaces) and concrete block surfaces were repainted. A large painted mural on the wall at east end of the main entrance hallway. Painted surfaces in the lower portions of walls of several Utility and Janitor Rooms are dirty.

(2004) Gymnasium block walls were repainted.

RatingInstalledDesign LifeUpdated4 - Acceptable010MAR-08

# C3010.12 Wall Coverings - \*

Painted vinyl covered gypsum boards at demountable and steel stud walls in Administration area, Arts/Science Room and several classrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable198015MAR-08

Report run on: July 17, 2008 3:56 PM Page 16 of 59

# C3020.01.02 Paint Concrete Floor Finishes - \*

Original paint on concrete floors in Electrical (Generator) Room, Outdoor Storage and Meter Room in SE portion of building and Mechanical Room in mezzanine.

RatingInstalledDesign LifeUpdated3 - Marginal198010MAR-08

#### **Event: Repaint concrete floors**

Concern:

Original paint on concrete floors has faded.

Recommendation:

Repaint concrete floors in Mechanical Room, Generator and Meter Rooms and Outdoor Storage. Prepare concrete surfaces.

TypeYearCostPriorityPreventative Maintenance2009\$4,576Low

**Updated:** MAY-08

# C3020.02 Tile Floor Finishes - \*\*

- 25x25mm ceramic mosaic tiles in Boys' and Girls' Change Rooms and Showers; in all Boys' and Girls' Washrooms, washroom and shower in Infirmary and around urinal in Male Staff Washroom.

- 100x200mm quarry tiles in the main entrance vestibule, main entrance hallway and north-west entrance vestibule.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	1980	50	MAR-08

# Event: Replace [C3020.02 Tile Floor Finishes\*\* - ]

TypeYearCostPriorityLifecycle Replacement2030\$15,129Unassigned

Updated: APR-08

# C3020.04.01 Wood Strip Flooring

Maple wood strip flooring in Gymnasium. Surface was buffed in 2002.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# **Event: Replace Gymnasium wood flooring.**

Recommendation:

Floor area: 490m2.

TypeYearCostPriorityLifecycle Replacement2012\$156,728Unassigned

**Updated:** APR-08

Report run on: July 17, 2008 3:56 PM Page 17 of 59

# C3020.07 Resilient Flooring - \*\*

Vinyl tiles in hallways, in front of sink cabinets in classrooms, Conference Room and Staff Room; Coffee Room, Server Room, Resource Room, Kitchen, Arts/Science, Arts Storage, Gym Storage, Phys Ed Instructor's Office, Staff Washrooms; all utility, storage and janitor rooms. New sheet vinyl flooring was installed in Kindergarten Washroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1980	20	MAR-08

### **Event:** Replace original vinyl tiles

#### Concern:

Original vinyl tiles in Storage, Janitor and utility rooms are in poor condition. Tile areas have already been patched at several locations. In south-east portion, water damage is evident and surfaces underneath tiles are soft. Tiles contain asbestos.

#### Recommendation:

Replace original vinyl tiles in all storage, utility and janitor rooms. Prepare surfaces, as required (approximately 253m2).

Type	<u>Year</u>	<u>Cost</u>	<b>Priority</b>
Failure Replacement	2009	\$14,872	Low

**Updated: MAY-08** 

# Event: Replace vinyl asbestos tiles with linoleum flooring.

#### Concern:

Vinyl floor tiles have served past lifecycle. Tiles appear worn and dated. Joints are opening up in high traffic areas and wet areas. Tiles contain asbestos.

#### Recommendation:

Replace vinyl asbestos tiles with linoleum flooring (approximately 983m2).

<u>Type</u>	<u>Year</u>	Cost	<u>Priority</u>
Hazardous Materials	2010	\$128,128	Low
Abatement			

**Updated:** MAY-08

# C3020.08 Carpet Flooring - \*\*

Carpet in all classrooms, Administration area, Staff Room, Resource Room, Library, Music/Drama Room (including tiered seating area and ramp) and Computer Room. Carpet in the whole facility was replaced in 2001, however, carpet is stained in Classroom #5.

RatingInstalledDesign LifeUpdated4 - Acceptable200115MAR-08

Event: Replace [C3020.08 Carpet Flooring\*\* - ]

TypeYearCostPriorityLifecycle Replacement2016\$122,408Unassigned

Updated: APR-08

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

Suspended acoustical tile ceiling in 70% of the spaces. Sloped tiles in Music/Drama Room. Several ceiling tiles are damaged or stained and should be replaced as regular maintenance.

RatingInstalledDesign LifeUpdated4 - Acceptable198025MAR-08

Event: Replace [C3030.06 Acoustic Ceiling Treatment

(Susp.T-Bar)\*\* - ]

TypeYearCostPriorityLifecycle Replacement2012\$57,520Unassigned

**Updated:** APR-08

#### C3030.08 Ceiling Trim and Decoration\*

Painted gypsum board lighting trough and borders around wood ceiling in Staff Room.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

# C3030.09 Other Ceiling Finishes\*

- Spray textured finished gypsum board ceilings in Generator Room and Storage Rooms. Plaster on concrete slab ceilings in Special Needs (not used) and showers in Boys' Change Room and Infirmary. Textured surfaces may contain asbestos, however they are encapsulated with paint. Painted gypsum board ceiling above Kitchen area of Staff Room.
- Painted steel decks and open web steel joists in Gymnasium, Gym Storage, mezzanine Mechanical Room, Storage Rooms in SE corner, Meter and Outdoor Storage Rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

Report run on: July 17, 2008 3:56 PM Page 19 of 59

# C3030.09.04 Linear Wood Ceilings

Varnished fir board ceilings in entrance vestibule, main entrance hallway, Staff Room and Library, including on clearstory well surfaces. Varnished fir boards on lighting bulkheads in Music/Drama Room. Chalky substance on surfaces of Staff Room ceiling.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1980	0	MAR-08

# **S4 MECHANICAL**

# D2010.04 Sinks - \*\*

Sinks were replaced with stainless steel bowls.

RatingInstalledDesign LifeUpdated5 - Good200230MAR-08

**Event: Replace sinks** 

TypeYearCostPriorityLifecycle Replacement2032\$5,720Unassigned

**Updated: MAY-08** 

# D2010.05 Showers - \*\*

Wall mounted stainless steel shower heads and wall mounted shut off valve.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-08

**Event:** Replace Showers

TypeYearCostPriorityLifecycle Replacement2012\$6,864Unassigned

Updated: APR-08

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

Stainless steel wall mounted drinking fountains.

RatingInstalledDesign LifeUpdated4 - Acceptable198035MAR-08

Event: Replace [D2010.08 Drinking Fountains / Coolers\*\* - ]

TypeYearCostPriorityLifecycle Replacement2015\$9,152Unassigned

Updated: APR-08

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

Lavatories were replaced in 2000 with stainless steel lavatories. Water closets and urinals are originals.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-08

**Event:** Replace water closets and urinals

TypeYearCostPriorityLifecycle Replacement2012\$57,200Unassigned

**Updated: APR-08** 

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

Domestic water piping are copper piping with soldered joints.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

Domestic water valves are copper/bronze valves.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-08

**Event:** Replace Domestic Water valves

TypeYearCostPriorityLifecycle Replacement2020\$11,440Unassigned

**Updated:** APR-08

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

Back-flow preventors were installed at the boilers and incoming water system.

RatingInstalledDesign LifeUpdated4 - Acceptable199720MAR-08

**Event:** Replace backflow Preventors

TypeYearCostPriorityLifecycle Replacement2017\$14,872Unassigned

**Updated:** APR-08

Report run on: July 17, 2008 3:56 PM Page 22 of 59

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

Bronze in-line pump.

RatingInstalledDesign LifeUpdated4 - Acceptable198020MAR-08

Event: Replace Plumbing Pumps: Domestic Water\*\* - ]

TypeYearCostPriorityLifecycle Replacement2012\$1,144Unassigned

**Updated: APR-08** 

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

Domestic hot water heater is "State" Model No. SBT 75250 NB1 DCGA, 225 MBH gas input, 75 gallons storage and 189 gallons per hour recovery. The original heater was installed in parallel with this "state" heater as standby and valved off. This original heater is "Jetglas" Model No. A85-200-JSB-2N-1-H, 83gallons storage and 183 gallons recovery per hour

RatingInstalledDesign LifeUpdated4 - Acceptable199720MAR-08

**Event:** Replace Domestic Water Heater

TypeYearCostPriorityLifecycle Replacement2027\$6,864Unassigned

Updated: APR-08

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

Fiberglass insulation with paper recovery jackets.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

Piping are black steel pipe with mechanical or soldered joints. Branch piping to lavatories less than 4' are copper pipe.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

Rain water drain piping are black steel piping with mechanical joints.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

Report run on: July 17, 2008 3:56 PM Page 23 of 59

#### D2040.02.04 Roof Drains - \*

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-08

**Event:** Replace roof drains

TypeYearCostPriorityLifecycle Replacement2020\$6,864Unassigned

**Updated:** APR-08

# D3010.02 Gas Supply Systems - \*

Gas piping are steel piping with yellow paint.

RatingInstalledDesign LifeUpdated4 - Acceptable198060MAR-08

**Event:** Replace gas supply systems

TypeYearCostPriorityLifecycle Replacement2040\$11,440Unassigned

Updated: MAY-08

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

There are two original building gas-fired hot water heating boilers. They are "teledyne Laars" Model No. HQ1666-KN11, 1668 MBH heating input.

RatingInstalledDesign LifeUpdated3 - Marginal198035MAR-08

# **Event: Replace boilers**

Concern:

The heating boilers require frequent maintenance and parts are hard to come by due to age.

Recommendation: Replace boilers.

Consequences of Deferral:

Boiler fails will stop school from operation during winter.

TypeYearCostPriorityFailure Replacement2009\$45,760High

**Updated:** APR-08

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

Sheet metal chimney with sheet metal breeching from boilers and domestic hot water heaters.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-08

Event: Replace Chimneys (&Comb. Air)

TypeYearCostPriorityLifecycle Replacement2012\$18,304Unassigned

**Updated: APR-08** 

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

There are two central build-up air systems (located in the mezzanine floor above the gymnasium) with supply air fan, return air fan, heating coil and spray steam humidifiers. One air system is for all the classrooms, and the other is for Gymnasium and Music room. For the classrooms system, the supply air fan is "Eng-A" supplying 12200 CFM @ 1.25" E.S.P. and 10 H.P. motor and the return fan is "Eng-A" returning 8400 CFM @0.35" E.S.P. and 5 H.P. Motor. For the gymnasium and Music room, the supply air fan is "Eng-A" supplying 11400 CFM @ 1.25" E.S.P. And 7.5 H.P. Motor, and the return fan is "Eng-A" returning 7600 CFM @ 0.5" E.S.P. And 3 H.P. motor.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-08

# **Event: Replace Air Handling Units**

TypeYearCostPriorityLifecycle Replacement2012\$228,800Unassigned

Updated: APR-08

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

Throw away cartridge filter with 30% efficiency is installed in the air systems.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# D3040.01.04 Ducts: Air Distribution - \*

All ductwork are sheet metal ducts with branch ducts to each classroom or each area (gymnasium and music room).

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

Square air diffusers in classrooms and Music room. Drum louvers are installed in Gymnasium.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

Schedule 40 black steel pipe material is being used for all heating piping.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-08

**Event:** Replaceheating piping system

TypeYearCostPriorityLifecycle Replacement2020\$228,800Unassigned

**Updated:** APR-08

# D3040.04 Special Exhaust Systems

There is a small exhaust outlet to remove the heat build up by equipment in the server room.

RatingInstalledDesign LifeUpdated3 - Marginal20090MAR-08

# **Event:** Repair the overheating problem in Server room

#### Concern:

The server room is hot due to heat build up without proper air movement.

#### Recommendation:

Provide a much larger rooftop exhaust fan with air make-up from the corridor with a wall opening with fire damper to allow cooler air from the corridor to replace the room air being exhausted.

TypeYearCostPriorityRepair2009\$3,432High

**Updated:** APR-08

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

All washrooms exhaust fans are rooftop fans.

RatingInstalledDesign LifeUpdated2 - Poor198030MAR-08

**Event: Replace rooftop exhaust fnas** 

Concern:

Rooftop exhaust fans are rusted.

Recommendation:

Replace all 6 rooftop exhaust fans.

TypeYearCostPriorityFailure Replacement2009\$6,864Low

Updated: APR-08

D3040.04.01 Fans: Exhaust\*\*

The Kiln exhaust fan is a sheet metal fan connected to the Kiln hood.

RatingInstalledDesign LifeUpdated4 - Acceptable199130MAR-08

**Event:** Replace Kiln exhaust fan

TypeYearCostPriorityLifecycle Replacement2021\$4,576Unassigned

**Updated:** APR-08

D3040.04.01 Fans: Exhaust\*\*

Kitchen exhaust fan with hood has the exhaust ducted to outside through the roof.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-08

Event: Replace kitchen exhaust fan and hood

TypeYearCostPriorityLifecycle Replacement2012\$1,144Unassigned

Updated: APR-08

D3040.04.03 Ducts: Exhaust - \*

Exhaust ducts are sheet metal ductwork.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

Exhaust air outlets and inlets are rectangular/square outlets connected to the exhaust fans except for the Kiln and kitchen exhaust fan as they are connected directly to their respective hood.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# D3050.02 Air Coils - \*\*

Coils are steel/copper coils. There are heating coils in the two air system. Also, there are re-heat coils in the branch ducts to the classrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-08

### **Event: Replace air coils**

TypeYearCostPriorityLifecycle Replacement2015\$13,728Unassigned

**Updated: MAY-08** 

# D3050.03 Humidifiers - \*\*

There is a steam boiler "Burnham American" and was abandoned for quite a while. Nameplate was not available for performance specification.

RatingInstalledDesign LifeUpdated2 - Poor198025MAR-08

# **Event: Replace steam boiler and humidifers**

# Concern:

The existing steam boiler was not working and abandoned. There were static electricity while door knobs were touched.

# **Recommendation:**

Replace steam boiler with steam grid humidifiers in the two air systems.

TypeYearCostPriorityFailure Replacement2009\$13,728Medium

**Updated: APR-08** 

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

There is a fan coil unit to heat the incoming combustion air.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-08

Event: Replace fan coil units.

TypeYearCostPriorityLifecycle Replacement2015\$6,864Unassigned

**Updated: MAY-08** 

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

Steel fin perimeter radiation is used for all perimeter classrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable198040MAR-08

**Event:** Replace finned tube radiation

TypeYearCostPriorityLifecycle Replacement2020\$137,280Unassigned

**Updated:** MAY-08

#### D3050.07 Other Terminal and Packaged Units - \*

There are heating water force-flow heaters at all entrances and unit heaters in the mezzanine mechanical room.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# D3060.02 HVAC Instrumentation and Controls -

The building control system is a D.D.C. Control with energy management feature with payback. The system is "inve3nsys" IA Series DDC control.

RatingInstalledDesign LifeUpdated4 - Acceptable200630MAR-08

**Event:** Replace building control system

TypeYearCostPriorityLifecycle Replacement2036\$45,760Unassigned

**Updated:** APR-08

Report run on: July 17, 2008 3:56 PM Page 29 of 59

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

Fire extinguishers are located all over school and are inspected twice a year.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1980	30	MAR-08

# S5 ELECTRICAL

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

FPE 800amp 120/208volt 3phase 4wire main distribution panel c/w a 600amp main breaker.

RatingInstalledDesign LifeUpdated5 - Good198040MAR-08

Capacity Size 800 Capacity Unit amps

**Event: Replace Main Electrical Switchboards (Main** 

Distribution)\*\* - ]

TypeYearCostPriorityLifecycle Replacement2020\$63,149Unassigned

**Updated:** APR-08

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

FPE 100 - 225amp 42cct branch panels supplying lighting and power loads.

RatingInstalledDesign LifeUpdated5 - Good198030MAR-08

<u>Capacity Size</u> <u>Capacity Unit</u> 100-225 amps

**Event: Replace Electrical Branch Circuit Panelboards** 

(Secondary Distribution)\*\* -

TypeYearCostPriorityLifecycle Replacement2012\$31,803Unassigned

Updated: APR-08

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

Westinghouse loose wall mounted starters controlling mechanical loads.

RatingInstalledDesign LifeUpdated5 - Good198030MAR-08

Event: Replace Motor Starters and Accessories\*\* -

TypeYearCostPriorityLifecycle Replacement2012\$5,720Unassigned

Updated: APR-08

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

A metallic and flexible conduit system throughout c/w copper conductors.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

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

(1980)(2003) Line voltage switching throughout, with low voltage switching in gymnasium.

RatingInstalledDesign LifeUpdated5 - Good00MAR-08

### D5020.02.02.01 Interior Incandescent Fixtures - \*

Incandescent fixtures upgraded to compact pl lamps.

RatingInstalledDesign LifeUpdated5 - Good200330MAR-08

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

Florescent fixtures upgraded to T8 lamps and electronic ballasts.

RatingInstalledDesign LifeUpdated5 - Good200330MAR-08

# **Event:** Replace Interior Florescent Fixtures\*\* -

TypeYearCostPriorityLifecycle Replacement2033\$188,874Unassigned

**Updated:** APR-08

# D5020.02.03.01 Emergency Lighting Built-in -\*

Designated fixtures throughout building controlled from EM generator.

RatingInstalledDesign LifeUpdated5 - Good200335MAR-08

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

Exit lights upgraded to LED style.

RatingInstalledDesign LifeUpdated5 - Good20030MAR-08

# D5020.02.05 Special Purpose Lighting - \*

Theater style par fixtures c/w dimming packs in gymnasium.

RatingInstalledDesign LifeUpdated5 - Good19870MAR-08

### D5020.03.01.04 Exterior H.P. Sodium Fixtures - \*

200 and 75 watt HPS wall packs.

RatingInstalledDesign LifeUpdated5 - Good20030MAR-08

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

Exterior lighting is controlled via photo electric cells c/w PEC bypass switch.

RatingInstalledDesign LifeUpdated5 - Good20030MAR-08

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

Edwards 6500 main fire alarm control panel c/w manual pull stations, heat/smoke detectors, bells.

RatingInstalledDesign LifeUpdated4 - Acceptable198025MAR-08

# Event: Replace Fire Alarm\*\*

Concern:

Fire alarm control panel and devices have reached it's

theoretical life cycle expectancy.

Recommendation: Replace with new.

Consequences of Deferral: Loss of life and/or property.

TypeYearCostPriorityLifecycle Replacement2011\$58,916High

**Updated: MAY-08** 

### D5030.02.02 Intrusion Detection - \*\*

Magnum Alert 3000 intrusion system c/w keypad located in electrical room, motion detectors throughout.

RatingInstalledDesign LifeUpdated5 - Good199625MAR-08

# Event: Replace Intrusion Detection\*\* -

TypeYearCostPriorityLifecycle Replacement2021\$34,663Unassigned

Updated: APR-08

Report run on: July 17, 2008 3:56 PM Page 33 of 59

# D5030.03 Clock and Program Systems - \*

Bogen Multicom 2000 system to ring bells only, clocks are ac operated and manually adjusted.

RatingInstalledDesign LifeUpdated5 - Good200625MAR-08

# D5030.04.01 Telephone Systems - \*

Nortel Meridian phone system c/w handsets throughout, integrated with Bogen.

RatingInstalledDesign LifeUpdated5 - Good200625MAR-08

# D5030.04.05 Local Area Network Systems - \*

Server room c/w data racks and switches, Cat 5 and 5e cabling throughout.

RatingInstalledDesign LifeUpdated5 - Good20020MAR-08

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

Bogen Multicom 2000 system integrated with phone system.

RatingInstalledDesign LifeUpdated5 - Good200620MAR-08

# Event: Replace Public Address and Music Systems\*\* -

TypeYearCostPriorityLifecycle Replacement2026\$14,300Unassigned

Updated: APR-08

#### D5030.06 Television Systems\*

RG6 cable infrastructure in place, no signal.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

### D5030.07 Other Communications and Security Systems - \*

Supernet installed.

RatingInstalledDesign LifeUpdated5 - Good20050MAR-08

Report run on: July 17, 2008 3:56 PM Page 34 of 59

# D5090.01 Uninterruptible Power Supply Systems - \*\*

APC 1500 and 350va protecting server, APC 750va for phone system, APC 350va for Supernet, APC 550va for BMS.

RatingInstalledDesign LifeUpdated5 - Good200230MAR-08

**Event: Replace UPS Systems** 

TypeYearCostPriorityLifecycle Replacement2032\$8,008Unassigned

**Updated:** MAR-08

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

Onan 15KW 120/208volt 3 ph NG generator feeding mechanical and lighting loads.

RatingInstalledDesign LifeUpdated5 - Good198035MAR-08

# **S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**

# E1020.03 Theater and Stage Equipment\*

Music/Drama Room: ceiling mounted theatre lighting and portable sound system; mobile folding tiered seating platforms for band - aluminum frame with carpet top.

Stage/ Change Room Alcove in Gymnasium: velvet curtain (manual operation) is torn but the alcove is not used.

RatingInstalledDesign LifeUpdated4 - Acceptable198025MAR-08

# E1020.05 Audiovisual Equipment\*

(1980)(2000) TV and projection screens in most classrooms, Arts/Science Room, Computer Room and Library. (2003) Electronic (Smart) boards in four classrooms and Computer Room.

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

# E1020.07 Laboratory Equipment - \*

Kiln, complete with exhaust in Arts/Science Storage. Kiln is not in use.

Rating	<u>Installed</u>	Design Life	<b>Updated</b>
4 - Acceptable	1980	0	MAR-08

### E1090.04 Residential Equipment - \*

Staff Room: deep freezer, refrigerators (2), dishwasher, stove and range hood, coffee machine, microwaves (2). Kitchen: refrigerator, dishwasher, stove and range hood, microwave. Kindergarten: Fridge and a microwave oven.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1980	0	MAR-08

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

Four basketball hoops (two fixed and two manually operated), wood wall climbing apparatus, floor exercise mats, floor hockey and badminton equipment and nylon Gym divider curtain.

Rating	<u>Installed</u>	Design Life	<b>Updated</b>
4 - Acceptable	1980	0	MAR-08

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

(1980) Main entrance hallway: recessed display case, wood frame, painted, with sliding glass doors. Conference Room: plastic laminate cabinets and cupboards, plastic laminate counter top with sink. Coffee Room: painted cabinets and cupboards with plastic laminate counter top. Staff Room: plastic laminate cabinets and counter tops with plastic laminate counter top with sink. Server Room: plastic laminate cupboards with melamine finish open adjustable shelving, plastic laminate counter top. Resource Room: 900mm deep plastic laminate counter with clear finished wood edge and siding. Computer Room: painted cabinets with drawers and plastic laminate counter top with sink. Arts/Science: plastic laminate finish perimeter cabinets with combination of open shelving and doors, plastic laminate counter tops with electric outlets island stations incorporate sink cabinets; cupboards with open melamine shelving. Arts/Science Storage: plastic laminate finish cabinets with drawers, plastic laminate counter tops with sink; wall mounted metal racks for paper rolls. Music/Drama Room: plastic laminate cabinets and plastic laminate counter top with sink. Kitchen: plastic laminate cabinets and cupboards with plastic laminate counter top with sink. Custodian's Office: plastic laminate cabinets with open shelving and cupboards with plastic laminate counter top with sink. Storage Rooms in SE corner and in Administration area: plastic laminate cabinets with open shelving and cupboards with plastic laminate counter tops. Library: Plastic laminate finish librarian's desk, cabinet and cupboards. All Classrooms: plastic laminate cabinets, cupboards with and counter tops with sink. Plastic laminate finish and painted book cases with open melamine shelves. Coat hooks and shelves (plastic laminate). Kindergarten millwork also incorporates full size plastic laminate finish storage cupboard. Male and female Staff Washrooms and washroom attached to Infirmary and Special Needs; Boys' and Girls' Change Rooms: plastic laminate finish vanities - staff washroom vanity heights are low.

Plastic laminate edge banding has delaminated on many counter tops; edge banding in Kitchen counter top broken and missing. Plastic laminate tops damaged in Kindergarten and cabinet doors broken in Arts/Science. All of these repairs should be completed as regular maintenance.

(2002) Vanities in all Boys' and Girls' Washrooms were replaced - plastic laminate finish. Vanities incorporate two heights of installations.

RatingInstalledDesign LifeUpdated4 - Acceptable198035MAR-08

Event: Replace [E2010.02 Fixed Casework\*\* - ]

TypeYearCostPriorityLifecycle Replacement2015\$210,576Unassigned

**Updated:** APR-08

#### **E2010.03 Window Treatments**

Window treatments includes a mixture of sheer drapes (for both interior and exterior windows), fabric curtains and roller shades. Several windows do not have window treatment.

RatingInstalledDesign LifeUpdated3 - Marginal19800MAR-08

# **Event:** Replace all drapes with roller shades

#### Concern:

With the exception roller shade on Kindergarten, all window treatment appear dated. Some are torn and dirty. Most fabric drapes do not operate properly and not useable.

## Recommendation:

Replace all drapes with roller shades. Install roller shades on windows in Administration and north classrooms. (Total approximately 26.38m2).

TypeYearCostPriorityFailure Replacement2009\$1,144Medium

**Updated:** MAY-08

## F1010.02.04 Portable and Mobile Buildings - Hallway, North-east Pod (1980)\*

Wood foundation and wood floor; west portion of hallway is slab on grade. Wood frame walls and wood roof structure. Exterior of west portion has aluminum cladding and stained cedar banding. Built-up roofing. Double leaf hollow metal exterior doors, on north wall, with vision panel and diamond security grille, on steel frame with central mullion. Interior components include vinyl face gypsum board with vinyl joint covers. Original brick of the main building on the west hallway. Suspended acoustic tile ceiling. Warped and damaged wood flooring was repaired in 2001, complete with new sub flooring and new vinyl tiles. Crawl space is ventilated. New vinyl tiles were also installed in slab on grade portion of the hallway. Interior door of hallway separating the east and the west portions: double leaf hollow metal fire doors with wired glass vision panels, on steel frame with central mullion. East end of the hallway accommodates a Storage Room: vinyl face gypsum board, same as in hallway, suspended ceiling, solid core wood door on steel frame. Clear finish, wooden storage shelving. Original vinyl asbestos tiles on wood flooring. The roof is part of the hallway roofing.

In 1985, an exhaust fan was installed in Storage Room, ducted from crawl space to exhaust crawl space air to outside. This is to minimize chance of excessive moisture build-up and rotting of wooden skids under the Pod. No other mechanical system in the hallway.

Rating	Installed	Design Life	<u>Updated</u>
3 - Marginal	1980	30	MAR-08

#### Event: Miscellaneous repairs.

#### Concern:

- (1) Storage Room floor was not repaired as in other areas. It is spongy (rotting of sub floor) and has original vinyl asbestos tiles which are in poor condition. Also, vinyl floor tile joints in other parts of hallway are opening up in spite of recent repairs, probably due to the ongoing problems with moisture build up in crawl space.
- (2) Paint on exterior door of the hallway has peeled.

#### Recommendation:

- (1) Remove existing vinyl asbestos tiles in Storage Room, remove plywood underlay and rotted plywood sub flooring. Provide new sub floor and new plywood underlay. Provide new marmoleum flooring. Add a vent for the crawl space under Storage Room. Replace vinyl tiles with marmoleum in hallway to withstand minor floor structure movements. (\$7,500).
- (2) Repaint exterior door, prepare surfaces, as required. (\$500).

<u>Type</u>	<u>Year</u>	Cost	<u>Priority</u>
Repair	2008	\$9.152	Medium

**Updated:** APR-08

# Event: Replace roof in hallway and Storage.

#### Concern:

The original BUR roofing has reached the end of service life. Air pockets have developed. No leaks have been reported.

#### Recommendation:

Replace BUR roof with 2 ply SBS roofing. (Total roof area: approximately 58.52m2). This work should be done at the same time as other portable roof replacement.

Report run on: July 17, 2008 3:56 PM Page 39 of 59

TypeYearCostPriorityFailure Replacement2010\$5,720Medium

**Updated:** MAR-08

#### F1010.02.04 Portable and Mobile Buildings - Hallway, South-East Pod (1980)\*

Wood foundation and wood floor; west portion of hallway is slab on grade. Wood frame walls and wood roof structure Exterior of west portion has aluminum cladding and stained cedar banding. Built-up roofing. Double leaf hollow metal exterior doors, on south wall, with vision panel and diamond security grille, on steel frame with central mullion. Interior components include vinyl face gypsum board with vinyl joint covers. Original brick of the main building on the west hallway. Suspended acoustic tile ceiling. Warped and damaged wood flooring was repaired in 2001, complete with new sub floorin and new vinyl tiles. Crawl space is ventilated. New vinyl tiles were also installed in slab on grade portion of the hallway. Interior door of hallway separating the east and the west portions: double leaf hollow metal fire doors with wired glass vision panels, on steel frame with central mullion. East end of the hallway accommodates a Storage Room: vinyl face gypsum board, same as in hallway, suspended ceiling, solid core wood door on steel frame. Clear finish, wooden storage shelving Original vinyl asbestos tiles on wood flooring. The roof is part of the hallway roofing.

In 1985, an exhaust fan was installed in Storage Room, ducted from crawl space to exhaust crawl space air to outside. This is to minimize chance of excessive moisture build-up and rotting of wooden skids under the Pod. No other mechanical system in the hallway.

Rating	Installed	Design Life	<u>Updated</u>
3 - Marginal	1980	30	MAR-08

#### Event: Miscellaneous repairs.

#### Concern:

- (1) Storage Room floor was not repaired as in other areas. It is spongy (rotting of sub floor) and has original vinyl asbestos tiles which are in poor condition. Also, vinyl floor tile joints in other parts of hallway are opening up in spite of recent repairs, probably due to the ongoing problems with moisture build up in crawl space.
- (2) Paint on exterior door of the hallway has peeled.

#### Recommendation:

- (1) Remove existing vinyl asbestos tiles in Storage Room, remove plywood underlay and rotted plywood sub flooring. Provide new sub floor and new plywood underlay. Provide new marmoleum flooring. Add a vent for the crawl space under Storage Room. Replace vinyl tiles with marmoleum in hallway to withstand minor floor structure movements. (\$7,500).
- (2) Repaint exterior door, prepare surfaces, as required. (\$500).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2008	\$9,152	Medium

**Updated:** APR-08

#### Event: Replace roof in hallway and Storage.

#### Concern:

The original BUR roofing has reached the end of service life. Air pockets have developed. No leaks have been reported.

## Recommendation:

Replace BUR roof with 2 ply SBS roofing. (Total roof area: approximately 58.52m2). This work should be done at the same time as other portable roof replacement.

TypeYearCostPriorityFailure Replacement2010\$5,720Medium

**Updated:** MAR-08

## F1010.02.04 Portable and Mobile Buildings - Portable #1, North-East Pod (1980)\*

Identified on Site as Classroom #10:

Wood foundation. Plywood skirting, buried under adjacent grade. Wood frame structure. Flat panel, vertical aluminum siding and continuous band of stained cedar boards on top. Painted plywood panels above and below windows. Residential type, clear anodized sliding aluminum windows with insect screens and diamond mesh exterior security screen. Insulated hollow metal exterior door on steel frame. Built-up asphalt and gravel roofing. Interior components include painted and vinyl finish gypsum board walls; suspended acoustic tile ceiling, painted solid core wood door on steel frame. In 2001, warped and damaged floor due to humidity in crawl space were repaired, complete with mechanical ventilation in crawl space, new sub floor and new carpet (70% of area) and vinyl tile flooring (30% of area). Plastic laminate finish bookcase along exterior wall with clear finish shelving, white boards, tack boards, roller window shades and projection screen.

Classroom contains a gas fired furnace (replaced in 2002), "WeatherMaker", Carrier Model No. 58TMA085-12, 84/69 MBH heating input/output. They are enclosed in acoustic enclosure. Air ducts connected to outside for outside air and combustion air. Supply air is ducted to the perimeter millwork with linear grilles on top of the millwork to provide supply air. Return air is connected back directly through the enclosure into the furnace. There is no plumbing.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	1980	0	MAR-08

## **Event: Miscellaneous repairs.**

#### Concern:

- (1) Exterior aluminum panels are damaged in two locations.
- (2) Vinyl floor tile joints are opening up in spite of recent repairs, probably due to the ongoing problems with moisture build up in crawl space.
- (3) A lot of noise comes through the return air duct, prompting the teacher to turn off the furnace often, which contravenes building codes.

#### **Recommendation:**

- (1) Replace damaged damaged exterior aluminum panel sections. Replace plywood panels with insulated prefinished metal panels, above and below windows and above exterior doors. (\$5,000).
- (2) Add more crawl space vents and replace vinyl tiles with marmoleum to withstand minor floor structure movements (\$4,500.00).
- (3) It is recommended that a 50 x 600mm acoustically insulated (25mm thick acoustic insulation with perforated liner) return air duct be mounted on top of the existing return air opening and surface mounted on the furnace enclosure to reduce noise. (\$500.00).

Type	<u>Year</u>	Cost	<b>Priority</b>
Repair	2009	\$11,440	High

**Updated:** APR-08

#### **Event:** Replace roof.

#### Concern:

The original BUR roofing has reached the end of service life. Air pockets have developed. No leaks have been reported.

Recommendation:

Replace BUR roof with 2 ply SBS roofing. (Total roof area: approximately 84.72m2). This work should be done at the same time as the main building roof replacement.

TypeYearCostPriorityLifecycle Replacement2010\$9,152Medium

**Updated:** APR-08

## F1010.02.04 Portable and Mobile Buildings - Portable #2, North-east Pod (1980)\*

#### Identified on Site as Classroom #11:

Wood foundation. Plywood skirting, buried under adjacent grade. Wood frame structure. Flat panel, vertical aluminum siding and continuous band of stained cedar boards on top. Painted plywood panels above and below windows. Residential type, clear anodized sliding aluminum windows with insect screens and diamond mesh exterior security screen. Insulated hollow metal exterior door on steel frame. Built-up asphalt and gravel roofing. Interior components include painted and vinyl finish gypsum board walls; suspended acoustic tile ceiling, painted solid core wood door on steel frame. In 2001, warped and damaged floor due to humidity in crawl space were repaired, complete with mechanical ventilation in crawl space, new sub floor and new carpet (70% of area) and vinyl tile flooring (30% of area). Plastic laminate finish bookcase along exterior wall with clear finish shelving, white boards, tack boards, roller window shades and projection screen.

Classroom contains a gas fired furnace (replaced in 2004), "WeatherMaker", Carrier Model No. 58TMA085-12, 84/69 MBH heating input/output. They are enclosed in acoustic enclosure. Air ducts connected to outside for outside air and combustion air. Supply air is ducted to the perimeter millwork with linear grilles on top of the millwork to provide supply air. Return air is connected back directly through the enclosure into the furnace. There is no plumbing.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	1980	30	MAR-08

## **Event: Miscellaneous repairs.**

#### Concern:

- (1) Painted plywood above and below windows and exterior door has deteriorated.
- (2) Vinyl floor tile joints are opening up in spite of recent repairs, probably due to the ongoing problems with moisture build up in crawl space.
- (3) A lot of noise comes through the return air duct, prompting the teacher to turn off the furnace often, which contravenes building codes.

## Recommendation:

- (1) Replace plywood panels (above and below windows and exterior door) with insulated prefinished metal panels. (\$3,000).
- (2) Add more crawl space vents and replace vinyl tiles with marmoleum to withstand minor floor structure movements (\$4,500.00).
- (3) It is recommended that a 50 x 600mm acoustically insulated (25mm thick acoustic insulation with perforated liner) return air duct be mounted on top of the existing return air opening and surface mounted on the furnace enclosure to reduce noise. (\$500.00).

<u>Type</u>	<u>Year</u>	Cost	<b>Priority</b>
Repair	2009	\$9,152	High

**Updated:** APR-08

#### **Event:** Replace roof.

#### Concern:

The original BUR roofing has reached the end of service life. Air pockets have developed. No leaks have been reported.

#### Recommendation:

Replace BUR roof with 2 ply SBS roofing. (Total roof area: approximately 84.72m2). This work should be done at the

same time as the main building roof replacement.

TypeYearCostPriorityLifecycle Replacement2010\$9,152Medium

**Updated:** APR-08

## F1010.02.04 Portable and Mobile Buildings - Portable #3, North-east Pod (1980)\*

#### Identified on Site as Classroom #12:

Wood foundation. Plywood skirting, buried under adjacent grade. Wood frame structure. Flat panel, vertical aluminum siding and continuous band of stained cedar boards on top. Painted plywood panels above and below windows. Residential type, clear anodized sliding aluminum windows with insect screens and diamond mesh exterior security screen. Insulated hollow metal exterior door on steel frame. Built-up asphalt and gravel roofing. Interior components include painted and vinyl finish gypsum board walls; suspended acoustic tile ceiling, painted solid core wood door on steel frame. In 2001, warped and damaged floor due to humidity in crawl space were repaired, complete with mechanical ventilation in crawl space, new sub floor and new carpet (70% of area) and vinyl tile flooring (30% of area). Plastic laminate finish bookcase along exterior wall with clear finish shelving, white boards, tack boards, roller window shades and projection screen.

Classroom contains a gas fired furnace (replaced in 2007), "WeatherMaker", Carrier Model No. 58TMA085-12, 84/69 MBH heating input/output. They are enclosed in acoustic enclosure. Air ducts connected to outside for outside air and combustion air. Supply air is ducted to the perimeter millwork with linear grilles on top of the millwork to provide supply air. Return air is connected back directly through the enclosure into the furnace. There is no plumbing.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	1980	30	MAR-08

## **Event: Miscellaneous repairs.**

#### Concern:

- (1) Painted plywood above and below windows and exterior door has deteriorated.
- (2) Vinyl floor tile joints are opening up in spite of recent repairs, probably due to the ongoing problems with moisture build up in crawl space.
- (3) A lot of noise comes through the return air duct, prompting the teacher to turn off the furnace often, which contravenes building codes.

## Recommendation:

- (1) Replace plywood panels (above and below windows and exterior door) with insulated prefinished metal panels. (\$3,000).
- (2) Add more crawl space vents and replace vinyl tiles with marmoleum to withstand minor floor structure movements (\$4,500.00).
- (3) It is recommended that a 50 x 600mm acoustically insulated (25mm thick acoustic insulation with perforated liner) return air duct be mounted on top of the existing return air opening and surface mounted on the furnace enclosure to reduce noise. (\$500.00).

<u>Type</u>	<u>Year</u>	Cost	<b>Priority</b>
Repair	2009	\$9,152	High

**Updated:** APR-08

#### **Event:** Replace roof.

#### Concern:

The original BUR roofing has reached the end of service life. Air pockets have developed. No leaks have been reported.

#### Recommendation:

Replace BUR roof with 2 ply SBS roofing. (Total roof area: approximately 84.72m2). This work should be done at the

same time as the main building roof replacement

TypeYearCostPriorityLifecycle Replacement2010\$9,152Medium

**Updated:** APR-08

## F1010.02.04 Portable and Mobile Buildings - Portable #4, North-east Pod (1980)\*

Identified on Site as Classroom #13:

Wood foundation. Plywood skirting, buried under adjacent grade. Wood frame structure. Flat panel, vertical aluminum siding and continuous band of stained cedar boards on top. Painted plywood panels above and below windows. Residential type, clear anodized sliding aluminum windows with insect screens and diamond mesh exterior security screen. Insulated hollow metal exterior door on steel frame. Built-up asphalt and gravel roofing. Interior components include painted and vinyl finish gypsum board walls; suspended acoustic tile ceiling, painted solid core wood door on steel frame. In 2001, warped and damaged floor due to humidity in crawl space were repaired, complete with mechanical ventilation in crawl space, new sub floor and new carpet (70% of area) and vinyl tile flooring (30% of area). Plastic laminate finish bookcase along exterior wall with clear finish shelving, white boards, tack boards, roller window shades and projection screen.

Classroom contains a gas fired furnace (replaced in 2000), "WeatherMaker", Carrier Model No. 58TMA085-12, 84/69 MBH heating input/output. They are enclosed in acoustic enclosure. Air ducts connected to outside for outside air and combustion air. Supply air is ducted to the perimeter millwork with linear grilles on top of the millwork to provide supply air. Return air is connected back directly through the enclosure into the furnace. There is no plumbing.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	1980	30	MAR-08

## **Event: Miscellaneous repairs.**

#### Concern:

- (1) Painted plywood above and below windows and exterior door has deteriorated.
- (2) Vinyl floor tile joints are opening up in spite of recent repairs, probably due to the ongoing problems with moisture build up in crawl space.
- (3) A lot of noise comes through the return air duct, prompting the teacher to turn off the furnace often, which contravenes building codes.

## Recommendation:

- (1) Replace plywood panels (above and below windows and exterior door) with insulated prefinished metal panels. (\$3,000).
- (2) Add more crawl space vents and replace vinyl tiles with marmoleum to withstand minor floor structure movements (\$4,500.00).
- (3) It is recommended that a 50 x 600mm acoustically insulated (25mm thick acoustic insulation with perforated liner) return air duct be mounted on top of the existing return air opening and surface mounted on the furnace enclosure to reduce noise. (\$500.00).

<u>Type</u>	<u>Year</u>	Cost	<b>Priority</b>
Repair	2009	\$9,152	High

**Updated:** APR-08

#### **Event:** Replace roof.

#### Concern:

The original BUR roofing has reached the end of service life. Air pockets have developed. No leaks have been reported.

#### Recommendation:

Replace BUR roof with 2 ply SBS roofing. (Total roof area: approximately 84.72m2). This work should be done at the

same time as the main building roof replacement.

TypeYearCostPriorityLifecycle Replacement2010\$9,152Medium

**Updated:** APR-08

## F1010.02.04 Portable and Mobile Buildings - Portable #5, South-East Pod (1980) \*

#### Identified on Site as Classroom #14:

Wood foundation. Plywood skirting, buried under adjacent grade. Wood frame structure. Flat panel, vertical aluminum siding and continuous band of stained cedar boards on top. Painted plywood panels above and below windows. Residential type, clear anodized sliding aluminum windows with insect screens and diamond mesh exterior security screen. Insulated hollow metal exterior door on steel frame. Built-up asphalt and gravel roofing. Interior components include painted and vinyl finish gypsum board walls; suspended acoustic tile ceiling, painted solid core wood door on steel frame. In 2001, warped and damaged floor due to humidity in crawl space were repaired, complete with mechanical ventilation in crawl space, new sub floor and new carpet (70% of area) and vinyl tile flooring (30% of area). Plastic laminate finish bookcase along exterior wall with clear finish shelving, white boards, tack boards, roller window shades and projection screen.

Classroom contains a gas fired furnace (replaced in 2007), "WeatherMaker", Carrier Model No. 58TMA085-12, 84/69 MBH heating input/output. They are enclosed in acoustic enclosure. Air ducts connected to outside for outside air and combustion air. Supply air is ducted to the perimeter millwork with linear grilles on top of the millwork to provide supply air. Return air is connected back directly through the enclosure into the furnace. There is no plumbing.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	1980	30	MAR-08

## **Event: Miscellaneous repairs.**

#### Concern:

- (1) Painted plywood above and below windows and exterior door has deteriorated.
- (2) Vinyl floor tile joints are opening up in spite of recent repairs, probably due to the ongoing problems with moisture build up in crawl space.
- (3) A lot of noise comes through the return air duct, prompting the teacher to turn off the furnace often, which contravenes building codes.

## Recommendation:

- (1) Replace plywood panels (above and below windows and exterior door) with insulated prefinished metal panels. (\$3,000).
- (2) Add more crawl space vents and replace vinyl tiles with marmoleum to withstand minor floor structure movements (\$4,500.00).
- (3) It is recommended that a 50 x 600mm acoustically insulated (25mm thick acoustic insulation with perforated liner) return air duct be mounted on top of the existing return air opening and surface mounted on the furnace enclosure to reduce noise. (\$500.00).

<u>Type</u>	<u>Year</u>	Cost	<b>Priority</b>
Repair	2009	\$9,152	High

**Updated:** APR-08

#### **Event:** Replace roof.

#### Concern:

The original BUR roofing has reached the end of service life. Air pockets have developed. No leaks have been reported.

#### Recommendation:

Replace BUR roof with 2 ply SBS roofing. (Total roof area: approximately 84.72m2). This work should be done at the

same time as the main building roof replacement.

TypeYearCostPriorityLifecycle Replacement2010\$9,152Medium

**Updated:** APR-08

## F1010.02.04 Portable and Mobile Buildings - Portable #6, South-East Pod (1980)\*

Identified on Site as Classroom #15:

Wood foundation. Plywood skirting, buried under adjacent grade. Wood frame structure. Flat panel, vertical aluminum siding and continuous band of stained cedar boards on top. Painted plywood panels above and below windows. Residential type, clear anodized sliding aluminum windows with insect screens and diamond mesh exterior security screen. Insulated hollow metal exterior door on steel frame. Built-up asphalt and gravel roofing. Interior components include painted and vinyl finish gypsum board walls; suspended acoustic tile ceiling, painted solid core wood door on steel frame. In 2001, warped and damaged floor due to humidity in crawl space were repaired, complete with mechanical ventilation in crawl space, new sub floor and new carpet (70% of area) and vinyl tile flooring (30% of area). Plastic laminate finish bookcase along exterior wall with clear finish shelving, white boards, tack boards, roller window shades and projection screen.

Classroom contains a gas fired furnace (replaced in 2002), "WeatherMaker", Carrier Model No. 58TMA085-12, 84/69 MBH heating input/output. They are enclosed in acoustic enclosure. Air ducts connected to outside for outside air and combustion air. Supply air is ducted to the perimeter millwork with linear grilles on top of the millwork to provide supply air. Return air is connected back directly through the enclosure into the furnace. There is no plumbing.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	1980	30	MAR-08

## **Event: Miscellaneous repairs.**

#### Concern:

- (1) Painted plywood above and below windows and exterior door has deteriorated.
- (2) Vinyl floor tile joints are opening up in spite of recent repairs, probably due to the ongoing problems with moisture build up in crawl space.
- (3) A lot of noise comes through the return air duct, prompting the teacher to turn off the furnace often, which contravenes building codes.

## Recommendation:

- (1) Replace plywood panels (above and below windows and exterior door) with insulated prefinished metal panels. (\$3,000).
- (2) Add more crawl space vents and replace vinyl tiles with marmoleum to withstand minor floor structure movements (\$4,500.00).
- (3) It is recommended that a 50 x 600mm acoustically insulated (25mm thick acoustic insulation with perforated liner) return air duct be mounted on top of the existing return air opening and surface mounted on the furnace enclosure to reduce noise. (\$500.00).

<u>Type</u>	<u>Year</u>	Cost	<b>Priority</b>
Repair	2009	\$9,152	High

**Updated:** APR-08

#### **Event:** Replace roof.

#### Concern:

The original BUR roofing has reached the end of service life. Air pockets have developed. No leaks have been reported.

#### Recommendation:

Replace BUR roof with 2 ply SBS roofing. (Total roof area: approximately 84.72m2). This work should be done at the

same time as the main building roof replacement.

TypeYearCostPriorityLifecycle Replacement2010\$9,152Medium

**Updated:** APR-08

## F1010.02.04 Portable and Mobile Buildings - Portable #7, South-East Pod (1980)\*

Identified on Site as Classroom #16:

Wood foundation. Plywood skirting, buried under adjacent grade. Wood frame structure. Flat panel, vertical aluminum siding and continuous band of stained cedar boards on top. Painted plywood panels above and below windows. Residential type, clear anodized sliding aluminum windows with insect screens and diamond mesh exterior security screen. Insulated hollow metal exterior door on steel frame. Built-up asphalt and gravel roofing. Interior components include painted and vinyl finish gypsum board walls; suspended acoustic tile ceiling, painted solid core wood door on steel frame. In 2001, warped and damaged floor due to humidity in crawl space were repaired, complete with mechanical ventilation in crawl space, new sub floor and new carpet (70% of area) and vinyl tile flooring (30% of area). Plastic laminate finish bookcase along exterior wall with clear finish shelving, white boards, tack boards, roller window shades and projection screen.

Classroom contains a gas fired furnace (replaced in 2002), "WeatherMaker", Carrier Model No. 58TMA085-12, 84/69 MBH heating input/output. They are enclosed in acoustic enclosure. Air ducts connected to outside for outside air and combustion air. Supply air is ducted to the perimeter millwork with linear grilles on top of the millwork to provide supply air. Return air is connected back directly through the enclosure into the furnace. There is no plumbing.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	1980	30	MAR-08

## **Event: Miscellaneous repairs.**

#### Concern:

- (1) Painted plywood above and below windows and exterior door has deteriorated.
- (2) Vinyl floor tile joints are opening up in spite of recent repairs, probably due to the ongoing problems with moisture build up in crawl space.
- (3) A lot of noise comes through the return air duct, prompting the teacher to turn off the furnace often, which contravenes building codes.

## Recommendation:

- (1) Replace plywood panels (above and below windows and exterior door) with insulated prefinished metal panels. (\$3,000).
- (2) Add more crawl space vents and replace vinyl tiles with marmoleum to withstand minor floor structure movements (\$4,500.00).
- (3) It is recommended that a 50 x 600mm acoustically insulated (25mm thick acoustic insulation with perforated liner) return air duct be mounted on top of the existing return air opening and surface mounted on the furnace enclosure to reduce noise. (\$500.00).

<u>Type</u>	<u>Year</u>	Cost	<b>Priority</b>
Repair	2009	\$9,152	High

**Updated:** APR-08

#### **Event:** Replace roof.

#### Concern:

The original BUR roofing has reached the end of service life. Air pockets have developed. No leaks have been reported.

#### Recommendation:

Replace BUR roof with 2 ply SBS roofing. (Total roof area: approximately 84.72m2). This work should be done at the

same time as the main building roof replacement.

TypeYearCostPriorityLifecycle Replacement2010\$9,152Medium

**Updated:** APR-08

## F1010.02.04 Portable and Mobile Buildings - Portable #8, South-East Pod (1980)\*

Identified on Site as Classroom #17:

Wood foundation. Plywood skirting, buried under adjacent grade. Wood frame structure. Flat panel, vertical aluminum siding and continuous band of stained cedar boards on top. Painted plywood panels above and below windows. Residential type, clear anodized sliding aluminum windows with insect screens and diamond mesh exterior security screen. Insulated hollow metal exterior door on steel frame. Built-up asphalt and gravel roofing. Interior components include painted and vinyl finish gypsum board walls; suspended acoustic tile ceiling, painted solid core wood door on steel frame. In 2001, warped and damaged floor due to humidity in crawl space were repaired, complete with mechanical ventilation in crawl space, new sub floor and new carpet (70% of area) and vinyl tile flooring (30% of area). Plastic laminate finish bookcase along exterior wall with clear finish shelving, white boards, tack boards, roller window shades and projection screen.

Classroom contains a gas fired furnace (replaced in 2007), "WeatherMaker", Carrier Model No. 58TMA085-12, 84/69 MBH heating input/output. They are enclosed in acoustic enclosure. Air ducts connected to outside for outside air and combustion air. Supply air is ducted to the perimeter millwork with linear grilles on top of the millwork to provide supply air. Return air is connected back directly through the enclosure into the furnace. There is no plumbing.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	1980	30	MAR-08

## **Event: Miscellaneous repairs.**

#### Concern:

- (1) Exterior aluminum panels are warped due to expansion in heat in two locations.
- (2) Vinyl floor tile joints are opening up in spite of recent repairs, probably due to the ongoing problems with moisture build up in crawl space.
- (3) A lot of noise comes through the return air duct, prompting the teacher to turn off the furnace often, which contravenes building codes.

## Recommendation:

- (1) Replace damaged damaged exterior aluminum panel sections. Replace plywood panels with insulated prefinished metal panels, above and below windows and above exterior doors. (\$5,000).
- (2) Add more crawl space vents and replace vinyl tiles with marmoleum to withstand minor floor structure movements (\$4,500.00).
- (3) It is recommended that a 50 x 600mm acoustically insulated (25mm thick acoustic insulation with perforated liner) return air duct be mounted on top of the existing return air opening and surface mounted on the furnace enclosure to reduce noise. (\$500.00).

Type	<u>Year</u>	Cost	<b>Priority</b>
Repair	2009	\$11,440	High

**Updated: MAR-08** 

#### **Event:** Replace roof.

#### Concern:

The original BUR roofing has reached the end of service life. Air pockets have developed. No leaks have been reported.

Recommendation:

Replace BUR roof with 2 ply SBS roofing. (Total roof area: approximately 84.72m2). This work should be done at the same time as the main building roof replacement.

TypeYearCostPriorityLifecycle Replacement2010\$9,152Medium

**Updated:** APR-08

## F2020.01 Asbestos - \*

Asbestos Building Material Survey Report, dated June 29, 2001 was prepared by PHH environmental Limited. Asbestos noted in the following materials:

- Various colours of 300x300mm vinyl tiles contain small amount of asbestos (0.25% chrysotile) most of these tiles are recommended to be replaced see C3020.07.
- Various pipe fittings and boiler breaching insulation materials found to be in good condition.
- A mechanical elbow fitting was found to be in poor condition in Meter Room this fitting was removed in November of the same year and reinsulated with non-asbestos material.

Rating	<u>Installed</u>	Design Life	<b>Updated</b>
4 - Acceptable	1980	0	MAR-08

## F2020.04 Mould - \*

Existence of mould not known or reported.

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

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

Presence of PCBs, mercury or other hazardous materials not known or reported.

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

# **S8 FUNCTIONAL ASSESSMENT**

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

Barrier free drop-off locations are south-east corner and on the street, at front entrance. Direct access to entrances.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

## K4010.02 Barrier Free Entrances - \*

Barrier free entrances are at SE corner and the main (west) entrance.

RatingInstalledDesign LifeUpdated3 - Marginal19800MAR-08

#### Event: Install auto openers at barrier free entrances.

#### Concern:

Entrance doors at south-east and main entrance are not equipped with auto openers for barrier free.

#### **Recommendation:**

Install auto openers on doors at barrier free entrances at southeast and the main entrance.

TypeYearCostPriorityBarrier Free Access Upgrade 2008\$22,880High

Updated: APR-08

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

All areas of the school are accessible. Handrail is recommended at ramp in Music/ Drama - see C2030.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

## K4010.04 Barrier Free Washrooms - \*

The south-east Boys' and Girls' Washrooms have one handicapped stall each. However, they were designed to 1975 code and do not comply with current standards such as door swing, grab bar placement, tilted mirrors etc. Infirmay has barrier free components and accessibility but this room is currently being used as storage.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

Report run on: July 17, 2008 3:56 PM Page 59 of 59

# **RECAPP Facility Evaluation Report**



Ormsby Elementary School
\$3238
Edmonton

# **Edmonton - Ormsby Elementary School (S3238)**

**Facility Details** 

Building Name: Ormsby Elementary School

Address:

Location: Edmonton

Building Id: \$3238
Gross Area (sq. m): 0.00
Replacement Cost: \$0
Construction Year: 0

**Evaluation Details** 

Evaluation Company: Lotus Arch./TTL Mech./BGME

Evaluation Date: November 16 2007

Evaluator Name: Tonu Mitra/Tom Lo/Jim Sherman

Total Maintenance Events Next 5 years: \$82,821 5 year Facility Condition Index (FCI): 0%

#### **General Summary:**

The site is accessed from 184 Street on the west side. An asphalt parking lot is located on the west side and the nearby Community Hall to south-east is accessed via this parking lot. Grass playfield is located on the east. Original basketball court is located in south-east. Shrub beds and lawn is located on the front (west) side. A wood pavilion structure is located to north-east. Concrete sidewalks on the north, south-east and front (west) sides. In 2002, a new playground, together with large asphalt play area was developed on the north side; Concrete sidewalk was added to east and south-east, a large basketball court was built near Community Hall to south-east and an outdoor classroom was developed between two pods. Also, in 2002 partial asphalt surface repairs were completed in the parking lot and trees planted throughout the site. The remaining original paved surfaces of the parking lot and original paved surfaces in south-east area deteriorating and should be re-surfaced to minimize future damages.

Overall rating: Acceptable (4).

#### Mechanical summary:

A 100mm water service copming from the 184 street into the Meter Room from the West of the school. The gas service comes into the same meter room from the southside of the school. A 150mm sanitary service and a 380mm storm service run into the school from the 184 Street as well under the Staff Work Room. A fire hydrant is located on the 184 Street curb facing the Staff Room. There are two catch basins around the school, one in the south parking Lot and one between the Gymnasium and the South Pod.

Overall rating: Acceptable (4).

## Electrical summary:

Underground feeders from utility owned transformer. Utility owned pad mount (size unknown) transformer, located on the South side of building. Approximately 27 stalls (25c/w receptacles and W.P. Covers) mounted on steel rail and controlled by BMS. Stall to staff ratio adequate. 100watt wall mounted HPS fixtures, controlled by photo cells. Overall Rating: Good (5).

#### **Structural Summary:**

**Envelope Summary:** 

**Interior Summary:** 

**Mechanical Summary:** 

#### **Electrical Summary:**

	Rating Guide
<b>Condition Rating</b>	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) - \*\*

Short access road from 184 Street to south parking lot is asphalt with concrete apron. The asphalt portion was rebuilt in 2002 with the parking lot - see G2020.02.02. A short asphalt roadway on the east leads to adjacent Community building from the school parking lot and belongs to the League.

RatingInstalledDesign LifeUpdated4 - Acceptable198025MAR-08

**Event:** Replace Pavement Roadway (Asphalt)

TypeYearCostPriorityLifecycle Replacement2012\$18,729Unassigned

**Updated: APR-08** 

## G2010.05 Roadway Curbs and Gutters - \*

Concrete curbs.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

Asphalt parking lot on south side, incorporating 27 stalls for staff (25 energized). Paved extended area on south-west corner incorporates one barrier free stall and two stalls for maintenance staff. A catch basin is located on the east edge of the lot but most of the lot has surface drainage to 184 Street.

In 2002, middle portion (drive way) was completely rebuilt for proper drainage.

RatingInstalledDesign LifeUpdated3 - Marginal200225MAR-08

# **Event:** Provide asphalt topping.

#### Concern:

Middle portion of parking lot was rebuilt recently and is in good condition. However, the remaining portions are original asphalt surface and deteriorating. Pot holes are forming and gravel is exposed. It has reached it's theoretical service life expectancy.

# Recommendation:

Repair pot holes and provide 50mm asphalt topping to all original asphalt surfaces.

TypeYearCostPriorityPreventative Maintenance2009\$18,304Medium

**Updated:** APR-08

**Event: Repave asphalt parking lot.** 

TypeYearCostPriorityLifecycle Replacement2027\$30,888Unassigned

**Updated:** APR-08

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

Concrete edge cubing. Small portions were repaired in 2003.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

## G2020.06.01 Traffic Barriers\*

Painted pipe rails and posts around a transformer in parking lot. Painted bollards at gas piping.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1980	25	MAR-08

# G2020.06.02 Parking Bumpers - \*

No precast bumpers.

RatingInstalledDesign LifeUpdated3 - Marginal19800MAR-08

## **Event:** Install precast bumpers

#### Concern:

There are no precast concrete bumpers, specifically on stalls along building walls.

#### Recommendation:

Supply and install precast bumpers on parking stalls after repaving of surfaces - see G2020.02.02.

TypeYearCostPriorityOperating Efficiency Upgrade 2009\$9,152Medium

**Updated: MAR-08** 

# G2020.06.03 Parking Lot Signs - \*

Barrier free and maintenance staff parking signs are posted on the wall. Private property sign posted at the entrance to parking lot - the sign has faded and should be replaced as regular maintenance.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# G2020.06.04 Pavement Markings - \*

No stall markings.

RatingInstalledDesign LifeUpdated3 - Marginal19800MAR-08

#### **Event: Repair stall markings**

#### Concern:

Stall markings are not evident - either not provided, or completely faded due to deteriorated asphalt surfaces.

#### Recommendation:

Provide stall markings, including the barrier free stall. Work is to be done after repaving of asphalt surfaces - see G2020.02.02.

 Type
 Year
 Cost
 Priority

 Repair
 2009
 \$1,144
 Medium

**Updated:** APR-08

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

(1980) 2.4m wide concrete sidewalk along the north building wall, connecting north entrances of the main building and NE pod and the City sidewalk - the sidewalk, along the north building wall, has separated from the wall. 4m wide concrete sidewalk to the main entrance from the City sidewalk at 184 Street. Large concrete apron between the main building and SE pod, complete with a catch basin. Concrete sidewalk from the SE apron to the east side. A network of concrete sidewalks on the SE corner of the site belongs to the Community League.

(2002) Concrete sidewalk added on the east side connecting the two pods and the outdoor classroom.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	0	25	MAR-08

# **Event:** Replace Pedestrian Pavement (Concrete)\*\*

TypeYearCostPriorityLifecycle Replacement2012\$24,052Unassigned

**Updated:** APR-08

## G2030.06 Exterior Steps and Ramps - \*

Concrete pad at all entrances - hair line cracks in concrete pad at the main entrance. Small concrete pads at classroom exit doors along the west facade have settled and should be repositioned with rebuilding of sub grades as regular maintenance.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1980	0	MAR-08

# G2040.02.01 Chain Link Fences and Gates\*

(1980) Chain link fence along the south edge of parking lot. Pipe guard rail along the north-west property line. (2002) 3m high chain link fence, complete with gate enclosing the courtyard (outdoor classroom) between NE and SE pods.

Rating	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	MAR-08

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

Large asphalt aprons on the north and south-east. Asphalt basketball court near the south-east pod. Large grass playfields on east.

RatingInstalledDesign LifeUpdated3 - Marginal198025MAR-08

#### **Event: Preventative Maintenance**

#### Concern:

Asphalt pavement surfaces have deteriorated in SE area and the original basketball court pavement near the SE pod. Gravel is exposed and cracks developing.

#### Recommendation:

Fill cracks and provide seal coat to original paved areas in SE apron and basketball court.

TypeYearCostPriorityFailure Replacement2009\$20,592Low

Updated: MAR-08

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

Sand base in play ground. Asphalt surfaces on the north was expanded to playground and the north-east, complete with concrete edge curbing. Large paved basketball court in south-east corner. Asphalt pads and precast pavers in outdoor classroom area.

RatingInstalledDesign LifeUpdated5 - Good200225MAR-08

#### **Event: Repave ashalt surfaces.**

TypeYearCostPriorityLifecycle Replacement2027\$34,320Unassigned

**Updated:** MAR-08

## G2040.05 Site and Street Furnishings\*

(1980) Metal frame, wood benches near the main entrance.

(2002) Prefabricated metal seating around the playground on the north side and east side. Metal frame picnic benches around the new basketball court on the south-east corner and in outdoor classroom area. Exposed aggregate, precast trash bin enclosures in south- east corner.

RatingInstalledDesign LifeUpdated4 - Acceptable00MAR-08

Report run on: July 18, 2008 1:58 PM Page 7 of 10

## G2040.06 Exterior Signs\*

Wood pylon sign at SE corner. Metal letters mounted on the cedar canopy at the main entrance. Illuminated box sign mounted on the wall of west facade.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# G2040.08 Flagpoles\*

One metal free standing flag pole near the main entrance.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

#### G2040.09 Covers and Shelters\*

Wood shelter in north-east corner, complete with wood trusses, wood posts and cedar shingles and fixed seating.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

## G2050.04 Lawns and Grasses\*

Lawn on the west side, between City sidewalk and building. Grass areas to north-west and along north edge.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

(1980) Evergreen trees, ornamental shrubs and annuals and perennials on the west and south-west sides. Mature deciduous trees on north and east.

(2002) A large number of evergreen (mostly pine) and deciduous trees planted on the north and east sides of the site. Bull rushes and irises around the pond in outdoor classroom.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

## G2050.07 Planting Accessories\*

An outdoor classroom (naturescape wetlands) was developed in the courtyard between the two pods. It incorporates a pond and two plant beds.

RatingInstalledDesign LifeUpdated4 - Acceptable200210MAR-08

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

There is a 100mm diameter water service coming into the Meter Room at the south west corner of the school from 184 street.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

There is a fire hydrant located on the 184 Street facing the Staff Lounge of the school.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

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

A 150mm sanitary service coming into the Work Room of the school from 184 Street.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

## G3030.01 Storm Water Collection\*

A 380mm diameter storm service connects all the roof drain pipes through the Work Room of the school to connect to the street 600mm storm trunk along 184 Street. There are two catch basins on site, one in the Parking Lot and the other is between the south potable classroom and the Gymnasium.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

#### G3060.01 Gas Distribution\*

The gas service runs into the Meter room at the south west corner of the school before it rise up on the rooftop to the Gymnasium mezzanine mechanical room.

RatingInstalledDesign LifeUpdated4 - Acceptable19800MAR-08

# G4010.02 Electrical Power Distribution Lines - \*

Underground feeders from utility owned transformer.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

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

Utility owned pad mount (size unknown) transformer, located on the South side of building.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

# G4010.04 Car Plugs-ins - \*

Approximately 27 stalls (25c/w receptacles and W.P. Covers) mounted on steel rail and controlled by BMS. Stall to staff ratio adequate.

RatingInstalledDesign LifeUpdated5 - Good19800MAR-08

# G4020.01 Area Lighting - \*

100watt wall mounted HPS fixtures, controlled by photo cells.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	2003	0	MAR-08