

RECAPP Facility Evaluation Report

Alberta Health Services-Edmonton



RAH - Anderson Hall

B1029R
Edmonton

Facility Details

Building Name: RAH - Anderson Hall
Address: 10959 - 102 Street
Location: Edmonton

Building Id: B1029R
Gross Area (sq. m): 7,358.00
Replacement Cost: \$0
Construction Year: 1968

Evaluation Details

Evaluation Company: Bacz Engineering Ltd.
Evaluation Date: November 19 2013
Evaluator Name: Eric Lumley

Total Maintenance Events Next 5 years: **\$3,983,050**
5 year Facility Condition Index (FCI): **0%**

General Summary:

The facility is eight storey high with offices and support services on the first and second levels built in 1968. There is an underground parking level and a partial parking level at grade. The upper levels have living units, some of which are used as overnight accommodation for medical personnel. The structure is a cast in place concrete frame with concrete floors and roof slab. The roofing is the original tar and gravel Built-Up roofing system. The windows are aluminum sliders and the exterior wall is mainly painted concrete block and painted stucco. The interior partitions are steel stud with gypsum board, stipple finish on gypsum board to most ceiling and a combination of resilient flooring and carpet. The front flowcharting floor windows have metal security grilles and there are metal guard rails and balusters to the parking level and the front courtyard.

Other than the roofing the general condition of the building is acceptable.

Structural Summary:

There is a concrete frame supporting concrete floor slabs. The parking basement has a concrete slab-on-grade and perimeter concrete retaining walls.

The structure of the building is in acceptable condition.

Envelope Summary:

The building envelope comprises the original B.U.R. The exterior walls are painted concrete block and painted stucco, with aluminum sliding windows.

The building envelope is generally in acceptable condition.

Interior Summary:

The interior of the building comprises stipple finish ceilings, painted steel stud partitions and a combination of resilient vinyl tile and sheet vinyl flooring with carpeting in the sleeping rooms and some office areas. Interior doors are painted wood and wood veneer.

The interior finishes are generally in acceptable condition.

Mechanical Summary:

Heating system for the building is provided by 25psi steam distribution to parkade mechanical room. Steam is supplied to shell and tube type heat exchanger which provides hot water to the building hydronic terminal units (finned tube radiation cabinets, unit heaters), air handling units and domestic water heater.

Cooling for the building (2nd floor only) is provided by designated split AC units installed in 1989.

Building ventilation is provided by two indoor air handling units. Designated make-up air units for the main building and parkade.

Plumbing fixtures in the building include janitor sinks, general purpose sinks, bathtubs, lavatories and toilets.

Domestic hot water is supplied by designated storage tank with an internal heat exchanger.

Fire protection is provided by automatic sprinklers in the building parkade, and the building standpipe system also feeds standard fire hose cabinets located on all building levels. Wall mounted fire extinguishers are provided throughout the building and the fire hose cabinets also contain fire extinguishers.

Controls are combination of pneumatics and direct digital control systems.

Overall mechanical systems and components are in acceptable condition.

Electrical Summary:

The main service is 120/208V, 3 phase, 4 wire and rated 1000A. The 23KW emergency generator is used for emergency power system.

The mixed T-12 and T-8 lamp fluorescent fixtures are used at main and second floor office area and the incandescent fixtures are used for rest of building.

The fire alarm, security access, intercom and data/telephone systems meet current building operation requirements.

The overall rating for electrical systems is "Acceptable".

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

S1 STRUCTURAL

A1010 Standard Foundations*

Concrete foundation walls on strip footings and concrete pad footings supporting columns.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

A1030 Slab on Grade*

Concrete slab-on-grade to parking level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

A2020 Basement Walls (& Crawl Space)*

Concrete basement walls extend from lower parking level to above grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

B1010.01 Floor Structural Frame (Building Frame)*

Concrete floor slabs are supported on concrete columns.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

B1010.06 Ramps: Exterior*

Reinforced concrete ramps provide vehicle access to the basement parking level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

B1010.09 Floor Construction Fireproofing*

The cast-in-place concrete floor slabs provide fireproofing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

B1020.01 Roof Structural Frame*

Cast-in-place concrete roof slab.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

B1020.06 Roof Construction Fireproofing*

Cast-in-place concrete roof slab provides fireproofing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

S2 ENVELOPE**B2010.01.02.02 Concrete Block: Ext. Wall Skin***

Painted exterior concrete block below windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

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

Painted cement stucco between window units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

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

Caulking around perimeter of exterior windows and doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	20	MAR-14

Event: Replace caulking.- B.O.E. 1268 m

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$36,900	Unassigned

Updated: MAR-14

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

Painted cement stucco and concrete block exterior.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	15	MAR-14

Event: Repaint building exterior.- B.O.E. 2645 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$57,700	Unassigned

Updated: MAR-14

B2010.02.01 Cast-in-place Concrete: Ext. Wall Const*

Cast-in-place concrete gables extend full height of building. Exposed floor slabs protrude at each floor level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

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

Building paper on exterior gypsum board sheathing. Batt insulation between steel studs and a polyethylene vapour barrier on the inside.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

B2010.05 Parapets*

Perimeter concrete parapets extend above roof slab. They are insulated in the inside face and have prefinished metal cap flashings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

B2010.06 Exterior Louvers, Grilles, and Screens*

Mechanical louvers and grilles discharge into the above grade parking at the rear of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

B2010.09 Exterior Soffits*

Painted concrete floor slab protrudes at each floor level and creates a narrow painted soffit at each level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

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

Aluminum sliding windows to all facades.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	40	MAR-14

Event: Replace aluminum windows.- B.O.E. 290 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$289,150	Unassigned

Updated: MAR-14

B2030.01.06 Automatic Entrance Doors**

Sliding automatic aluminum doors ate main entrance and vestibule.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	MAR-14

Event: Replace automatic entrance doors. -B.O.E. 2 double doors.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$27,350	Unassigned

Updated: MAR-14

B2030.02 Exterior Utility Doors**

Exterior wood doors to stair wells and parking areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	40	MAR-14

Event: Replace utility doors.- B.O.E. 5 doors

Concern:

Wood doors to stairs have exceeded their design life and have deteriorated.

Recommendation:

Replace exterior utility doors with metal insulated doors.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2015	\$4,250	Medium

Updated: MAR-14

B2030.03 Large Exterior Special Doors (Overhead)*

Metal insulated panel overhead doors to underground parking.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

B3010.01 Deck Vapour Retarder and Insulation*

Roofing felt vapour barrier on concrete roof slabs. 38mm rigid insulation to roof assemblies.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

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

Built-Up roofing throughout roof areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	25	MAR-14

Event: Replace B.U.R.- B.O.E. 668 sq.m.**Concern:**

Roofing has exceeded its design life with on-going roof leaks reported.

Recommendation:

Replace B.U.R.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2015	\$124,900	Medium

Updated: MAR-14

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

Steel stud and gypsum board partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

C1020.01 Interior Swinging Doors (& Hardware)*

Mixture of painted wood doors and veneer wood doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

C1020.03 Interior Fire Doors*

Fire rated doors to stairwells and mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

C1030.01 Visual Display Boards**

Tackboards in office areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	MAR-14

Event: Replace tackboards.- B.O.E. 10 units

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$2,500	Unassigned

Updated: MAR-14**C1030.12 Storage Shelving***

Wooden shelving in coats closets and office supplies rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

C1030.14 Toilet, Bath, and Laundry Accessories*

Toilet roll holders, mirrors, towel rail and waste bins in residential washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

C2010 Stair Construction*

Cast-in-place concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

C2020.08 Stair Railings and Balustrades*

Painted pipe rail handrails and supports.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

C2020.11 Other Stair Finishes*

Paint finish to stair treads and risers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

C2030.01 Ramp Construction

Concrete ramps provide access to underground parkade. (electrical heating to ramps reported to have failed.)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	100	MAR-14

C2030.02 Ramp Finishes

Concrete hardener.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	MAR-14

C3010.11 Interior Wall Painting*

Paint finish to walls throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

C3020.01.02 Painted Concrete Floor Finishes*

Painted concrete finish to mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

C3020.07 Resilient Flooring**

Resilient sheet flooring in entrance corridor, sacred room and circle room on second level and most offices on second level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	20	MAR-14

Event: Replace sheet vinyl flooring.- B.O.E. 450 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$36,000	Unassigned

Updated: MAR-14

C3020.07.01 Resilient Tile Flooring**

Resilient tile flooring in hallway, washroom and kitchen of living units. Resilient tile flooring in most corridors and most office areas on main and first floors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	20	MAR-14

Event: Replace VCT flooring.- B.O.E. 6119 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$311,600	Unassigned

Updated: MAR-14

C3020.08 Carpet Flooring**

Carpeting to hospice rooms is replaced on an as needed basis when the rooms become vacant. Average year of installation 2004.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	15	MAR-14

Event: Replace carpeting.- B.O.E. 5320 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$270,900	Unassigned

Updated: MAR-14

C3030.05 Veneer Plaster Finishes (Stipple)*

Stipple finish to gypsum board ceilings in all areas except native wellness centre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

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

Area of T-bar ceiling in native wellness centre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	25	MAR-14

Event: Replace T-bar lay-in tiles.- B.O.E. 320 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$14,900	Unassigned

Updated: MAR-14**C3030.07 Interior Ceiling Painting***

Painted concrete ceilings in parkade and stairwells.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

S4 MECHANICAL**D2010.04 Sinks** - 1989**

Stainless steel counter top sinks complete with gooseneck faucets.
Floor mounted mop sink in Janitor Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1989	30	MAR-14

Event: Replace 5 Sinks

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$8,000	Unassigned

Updated: MAR-14

D2010.04 Sinks -1968**

Single compartment stainless steel sinks in each suite.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	MAR-14

Event: Replace 66 Sinks.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$99,000	Unassigned

Updated: MAR-14

D2010.06 Bathtubs**

Fiberglass bathtubs, spout and shower heads.
Bathtubs replaced as needed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	MAR-14

Event: Replace 66 Bathtubs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$152,000	Unassigned

Updated: MAR-14

D2010.10 Washroom Fixtures (WC, Lav, Urnl) - 1968**

WC - floor mounted, vitreous china, flush tank.
 LV - counter mounted enameled steel c/w chrome faucets.
 Washroom fixtures replaced as needed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	35	MAR-14

Event: Replace 132 Washroom Fixtures.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$198,000	Unassigned

Updated: MAR-14**D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1989**

LV - vitreous china, wall mounted and counter mounted enameled steel.
 WC - floor mounted, vitreous china, flush valve or flush tank operation, elongated seat.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1989	35	MAR-14

Event: Replace 8 Washroom Fixtures.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$12,000	Unassigned

Updated: MAR-14**D2020.01.01 Pipes and Tubes: Domestic Water***

Copper piping distribution throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D2020.01.02 Valves: Domestic Water**

Plumbing fixtures complete with isolation valves.
 Main branches isolated.
 Ball and globe valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	40	MAR-14

Event: Replace 530 Water Valves.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$106,000	Unassigned

Updated: MAR-14

D2020.01.03 Piping Specialties (Backflow Preventers)**

Backflow prevention device installed on sprinkler line and water feed line.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	20	MAR-14

Event: Replace 4 Backflow Prevention Devices.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$28,000	Unassigned

Updated: MAR-14

D2020.02.02 Plumbing Pumps: Domestic Water**

Grundfoss UP15-42 in-line domestic water plumbing pumps located in the parkade mechanical room.
Centrifugal in-line domestic cold water booster pump in parkade mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1989	20	MAR-14

Event: Replace 2 domestic water pumps.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$22,000	Unassigned

Updated: MAR-14

D2020.02.06 Domestic Water Heaters**

Domestic hot water is supplied to the building from a domestic hot water storage tank in parkade mechanical room. The storage tank is equipped with steam heat exchanger. This tank provides domestic hot water to plumbing fixtures throughout Anderson Hall building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	20	MAR-14

Event: Replace 1 Domestic Water Heater.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$35,000	Unassigned

Updated: MAR-14

D2020.03 Water Supply Insulation: Domestic*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D2030.01 Waste and Vent Piping*

Cast iron and copper piping is used. Some of the cast iron sanitary drainage piping in the parkade has been replaced with PVC drainage piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D2030.02.04 Floor Drains*

General purpose cast iron floor drains are used at various locations throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D2040.01 Rain Water Drainage Piping Systems*

Cast iron piping.
Rain water collection via roof drains to storm mains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D2040.02.04 Roof Drains*

Large dome, sump roof drains with flashing flange and integral gravel stop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D2040.02.06 Area Drains*

Trench drains serving Parkade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D3030.06.02 Refrigerant Condensing Units**

Outdoor condensing units are located on the main floor lower level roof. Condensers are complete with refrigerant piping to split AC systems serving second floor area. Refrigerant type - unknown.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1989	25	MAR-14

Event: Replace 9 Condensing Units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$50,000	Unassigned

Updated: MAR-14

D3040.01.01 Air Handling Units: Air Distribution**

There are two Recold indoor air handling units serving parkade and main building complete with supply fan, steam heating coil, filter section and dampers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	30	MAR-14

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

Existing air handling units are deteriorated and corroded. Air handling unit serving main building can not provide adequate ventilation to the building, with second floor being converted to exam / office area. It results in insufficient fresh air supply and air exchange throughout areas renovated in 1989.

Replacement parts for the air handlers are not available.

Recommendation:

Replace two air handling units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2015	\$225,000	Medium

Updated: MAR-14

D3040.01.03 Air Cleaning Devices: Air Distribution*

Replaceable media filters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D3040.01.04 Ducts: Air Distribution*

Low velocity, galvanized steel ductwork distribution in parkade and vertical shaft along the elevator.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	0	MAR-14

Event: Install ductwork distribution system serving 2nd floor.- BOE: 920 m2.**Concern:**

2nd floor area was renovated in 1989 with very little provision for air distribution system.

Exam rooms and offices do not have adequate air exchange and ventilation rates.

Recommendation:

Install new ductwork distribution system serving 2nd floor area.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2015	\$75,000	Medium

Updated: MAR-14

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Louver face sidewall supply air grilles in hallways.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D3040.02 Steam Distribution Systems: Piping/Pumps**

High pressure steam is supplied to the building from central heating plant located in Glenrose Hospital. 25 psi steam service to heat exchangers serving heating system, air handling units and domestic hot water system. Condensate collection piping, piping insulation, traps, valves, piping specialties, and condensate tanks and pumps. Condensate return pumped back to central plant.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	40	MAR-14

Event: Replace Steam Distribution Piping (within building) and Associated Pumps.- BOE: 150 m length.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$145,000	Unassigned

Updated: MAR-14

D3040.03.01 Hot Water Distribution Systems**

Hot water heating loop which provides hot water to the building hydronic terminal units (finned tube radiation cabinets and force flow heaters). The hot water loop includes one steam to hot water shell and tube type heat, two circulation pumps and an expansion tank (all located in parkade mechanical). The heating loop also includes distribution piping, piping insulation, valves, and piping specialties. Steel schedule 40 and copper piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	40	MAR-14

Event: Replace Heating Piping Distribution System.- BOE: 7358 m2 GFA.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$740,000	Unassigned

Updated: MAR-14

D3040.04.01 Fans: Exhaust**

Variety of exhaust fans provided throughout the building, including electrical and elevator room room exhaust fans, mechanical room exhaust fan, parkade exhaust fans, washrooms exhaust fans and general exhaust fans. Exhaust fans are located on the roof, ceiling mounted and wall mounted type.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	MAR-14

Event: Install 66 Recirculation Range Hood Fans.**Concern:**

There are no designated range hood fans in the kitchen above ovens.

Recommendation:

It is recommended to install recirculation range hood fans complete with charcoal filters.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2015	\$35,000	Low

Updated: MAR-14

Event: Replace 18 Exhaust Fans

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$50,000	Unassigned

Updated: MAR-14

D3040.04.03 Ducts: Exhaust*

Low velocity galvanized steel ductwork serving kitchen exhaust and washroom exhaust systems, up in shafts to roof mounted exhaust fans.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D3040.04.05 Air Outlets and Inlets: Exhaust*

Louver face sidewall grilles located in washrooms and kitchens.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D3040.05 Heat Exchangers**

Steam to hot water shell and tube type heat exchanger.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	MAR-14

Event: Replace 1 Heat Exchanger.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$16,000	Unassigned

Updated: MAR-14

D3050.01.04 Unit Air Conditioners**

Mitsubishi Mr.Slim split air conditioning units (ceiling and wall mounted) serving 2nd floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1989	30	MAR-14

Event: Replace 9 Indoor AC Units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$45,000	Unassigned

Updated: MAR-14

D3050.05.02 Fan Coil Units**

Wall mounted, recessed force flow heater serving main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	MAR-14

Event: Replace 1 Force Flow Heater.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$5,000	Unassigned

Updated: MAR-14

D3050.05.03 Finned Tube Radiation**

Hot water terminal units include finned tube radiation cabinets which are used in various locations for heating.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	40	MAR-14

Event: Replace Finned Tube radiation.- BOE: 7358 m2 GFA.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$400,000	Unassigned

Updated: MAR-14

D3050.05.06 Unit Heaters**

Vertical discharge, ceiling mounted unit heaters serving parkade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	MAR-14

Event: Replace 10 Unit Heaters.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$40,000	Unassigned

Updated: MAR-14

D3060.02.02 Pneumatic Controls**

Building HVAC system controls are primarily pneumatic (thermostats, control valves, damper actuators, etc.). The control air supply system is located in the parkade mechanical room. Compressor and dryer had been replaced in 2010.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	40	MAR-14

Event: Replace Pneumatic Controls.- BOE: 7358 m2 GFA.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$135,000	Unassigned

Updated: MAR-14

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

Building is equipped with a Siemens building management and control system (BMCS) which provides monitoring and control functions for the main building HVAC equipment and systems.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1989	20	MAR-14

Event: Replace BMS.- BOE: 7358 m2 GFA.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$220,000	Unassigned

Updated: MAR-14

D4010 Sprinklers: Fire Protection*

Parkade of the building is protected by a wet type fire sprinkler system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D4020 Standpipes*

Building is equipped with standard fire hose cabinets on all levels for building fire protection. There is an exterior fire department siamese connection for the integrated sprinkler/standpipe system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Fire extinguishers are located throughout the building and include wall mounted fire extinguishers and fire extinguishers located in the fire hose cabinets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

S5 ELECTRICAL**D5010.01.02 Main Electrical Transformers (Utility Owned)***

The pad mounted transformer is used to provide power to the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

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

The main electrical switchboard is 120/208V 3 phase rated 1000A; the switchboard consists main incoming circuit breaker section, CT section and distribution section. The distribution section is at full capacity.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	40	MAR-14

Event: Replace 1 Main Switchboard

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$32,000	Unassigned

Updated: MAR-14

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)- 1968**

The panels were installed with original building and most of them are at full capacity.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	MAR-14

Event: Replace 13 Panels

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$65,000	Unassigned

Updated: MAR-14

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)- 1999**

The panels were installed for office tenant additional power requirements and most of panel have 15% spare spaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1999	30	MAR-14

Event: Replace 3 Branch Circuit Panels

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$15,000	Unassigned

Updated: MAR-14

D5010.07.01 Switchboards, Panelboards, and (Motor) Control Centers**

The MCC is used for major mechanical ventilation and pump controls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1968	30	MAR-14

Event: Replace 2 Sections of MCC

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$14,000	Unassigned

Updated: MAR-14

D5010.07.02 Motor Starters and Accessories**

The standalone magnetic starters are used for small mechanical loads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	MAR-14

Event: Replace 3 Motor Starters and Accessories

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$1,800	Unassigned

Updated: MAR-14

D5020.01 Electrical Branch Wiring*

All the wires are copper and installed in the conduits. BX wires are used for field wiring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1968	0	MAR-14

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

The line voltage switching is used for entire building lighting controls

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D5020.02.02.01 Interior Incandescent Fixtures*

The fixtures are installed through residence suites and common hallways.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D5020.02.02.02 Interior Fluorescent Fixtures**

The fixtures are mixed with T-8 and T-12 lamp fluorescent; and most of them are installed in the office areas on both main and secondary floors

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1999	30	MAR-14

Event: Replace 250 Fluorescent Fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$100,000	Unassigned

Updated: MAR-14

D5020.02.03.03 Exit Signs*

All the Exit signs were original installed with the building and the fixtures have been retrofit with LED lamps in recent years.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D5020.03.01.01 Exterior Incandescent Fixtures*

The fixtures are used outdoor under building parkade areas

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

The wall packs are installed around building perimeter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

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

The outdoor lighting is controlled by photo cell.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

D5030.01 Detection and Fire Alarm**

The fully addressable Notifier NFS-320C control panel is used for entire building fire alarm system. The control panel is located in the basement emergency generator room and the annunciate panel is located at main building entrance vestibule.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2011	25	MAR-14

Event: Replace Detection and Fire Alarm System.- BOE: 7358 m2 GFA.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$140,000	Unassigned

Updated: MAR-14

D5030.02.01 Door Answering*

The Viscount control panel is installed at building entrance vestibule. The intercom panel is for office area only.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1999	0	MAR-14

D5030.02.03 Security Access**

The Lenel FOB's are installed at building main entrance for tenant access to the building and parkade entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	25	MAR-14

Event: Replace One FOB Unit

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$1,000	Unassigned

Updated: MAR-14

D5030.02.04 Video Surveillance**

The outdoor cameras are installed at building exterior for parking lot monitoring and the signals are sent to Omnicast system in Active Treatment Center.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	25	MAR-14

Event: Replace Video Surveillance System.- BOE: 7358 m2 GFA.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$23,000	Unassigned

Updated: MAR-14

D5030.03 Clock and Program Systems*

The GPS Premix clocks are installed in the office areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2010	0	MAR-14

D5030.04.01 Telephone Systems*

The telephone system is tied to main telephone system in Active Treatment Center and have telephone outlets installed in the offices.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1999	0	MAR-14

D5030.04.04 Data Systems*

One Switch Hub is installed for the building and is tied to hospital main server by fiber optic.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1999	0	MAR-14

D5090.01 Uninterruptible Power Supply Systems**

The standalone UPS units are used for data switch equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1999	30	MAR-14

Event: Replace 2 UPS Units

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$2,400	Unassigned

Updated: MAR-14

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

The 23KW emergency generator is used for emergency power system; mainly is for lighting system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	35	MAR-14

Event: Replace 1 Emergency Generator

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$25,000	Unassigned

Updated: MAR-14

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**E1030.02 Parking Control Equipment***

Card access to underground parking.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

E1090.04 Residential Equipment*

Fridge and stove in living unit kitchens.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

E2010.02 Fixed Casework**

Kitchen cabinets and washroom vanity in living units. Reception counter in native wellness centre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	35	MAR-14

Event: Replace millwork.- B.O.E. 276 m

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$220,800	Unassigned

Updated: MAR-14**E2010.03.01 Blinds****

Vertical blinds throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	MAR-14

Event: Replace vertical blinds.- B.O.E. 290 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$31,600	Unassigned

Updated: MAR-14

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

Elevator provides access to main level from underground parking.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

K4010.02 Barrier Free Entrances*

Automatic sliding doors provided at main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

K4010.03 Barrier Free Interior Circulation*

Circulation at each floor is at one level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

K4010.04 Barrier Free Washrooms*

Not provided in original design.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

K4030.01 Asbestos*

None noted or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

K4030.04 Mould*

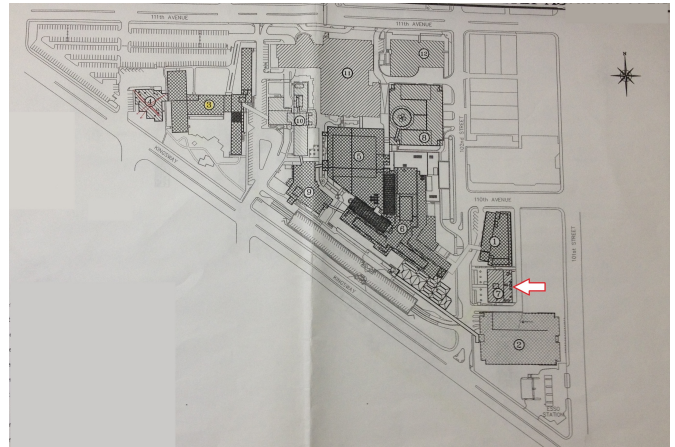
None noted or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	MAR-14

K5010.01 Site Documentation*

Prime Consultant: Bacz Engineering Ltd.
 Year of Evaluation: 2013
 Building Area Evaluated: 7358 m2

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2013	0	MAR-14

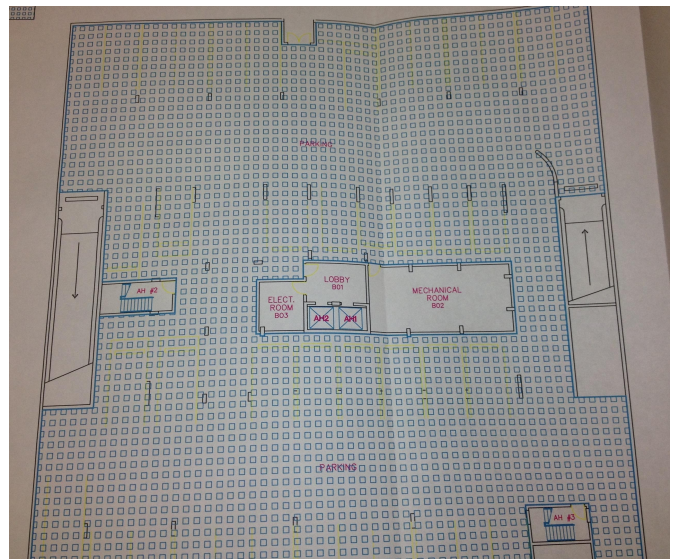


B1029R - site.jpg

K5010.02 Building Documentation*

The facility is eight storey high with offices and support services on the first and second levels. There is an underground parking level and a partial parking level at grade. The upper levels have living units, some of which are used as overnight accommodation for medical personnel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2013	0	MAR-14



Parkade