

RECAPP Facility Evaluation Report

Northern Lights Health Region



St. Theresa General Hospital

B9636A

Fort Vermilion

Facility Details	
Building Name:	St. Theresa General Hospital
Address:	4506 - 46 Avenue
Location:	Fort Vermilion
Building Id:	B9636A
Gross Area (sq. m):	0.00
Replacement Cost:	\$0
Construction Year:	0

Evaluation Details	
Evaluation Company:	Jacques Whitford AXYS Ltd.
Evaluation Date:	October 8 2008
Evaluator Name:	Aaron Klenke

Total Maintenance Events Next 5 years: \$3,142,000
5 year Facility Condition Index (FCI): 0%

General Summary:

St. Theresa General Hospital is a two-level building, which includes a partial basement level, and a roof penthouse containing electrical and mechanical equipment. The building was constructed circa 1982 and generally consists of operating and procedure rooms, food service area, laboratory and administrative offices. The building encompasses a reported total gross floor area of 4,204 m².

Structural Summary:

The foundation of the facility appeared to be comprised of cast-in-place concrete pad footings and perimeter grade beams, with a partial basement with concrete block and cast-in-place concrete walls. The building's structural framework is believed to consist of loadbearing concrete block and cast-in-place concrete walls. The roof structural frame consists of metal decking supported by open-web steel joists and steel I-beams.

Major work recommended includes sealing the cracks in the upper floor slab of the Water Treatment room located in the basement level and directing storm water drainage away from the building.

The building's structural elements appear to be in generally acceptable condition.

Envelope Summary:

The majority of the exterior walls are finished with brick veneer. The upper portions of the exterior walls are generally finished with painted, standing-seam metal panel cladding. Exterior windows of the building consist of Insulating glazing units (IGU's) set in prefinished aluminum framing systems. The main entrance doors at the east side of the building and the entrance door at the east wing consist of single glazed units in aluminum frames. Exterior utility doors consist of painted metal set in painted metal frames, with some containing inset glazing with single-paned glass. All sections of the building roof are protected with a modified bituminous membrane assembly (SBS).

Major work recommended includes replacing the missing face brick at the Ambulance Drop-Off, replacing the missing standing-seam metal panel cladding at the north and west side roof perimeters, replacing the damaged nylon screen which covers the louver at the north side of the roof penthouse, repainting the deteriorated exterior utility door frame at the Ambulance Drop-Off, and replacing the damaged aluminum flashing at the base of the north-side roll-up door.

The facility's building envelope appears to be in generally acceptable condition.

Interior Summary:

General interior areas consist of operating and procedure rooms, food service area, laboratory and administrative offices. The majority of the interior partitions consist of non-loadbearing metal stud and gypsum board walls. Brick walls are located in the Solarium, as well as in the basement Dining Room. Exposed load-bearing concrete block and/or poured concrete walls are also present in the Ambulance Drop-Off, some basement rooms and stairways. Interior doors consist of solid wood units set in painted metal frames, equipped with standard commercial hardware. Some of these doors are also equipped with wired and non-wired glass inserts and metal kick plates. Interior doors also consist of single glazed units in aluminum frames. The majority of the building is finished with vinyl sheet flooring as well as suspended T-bar ceilings and inlaid acoustic tiles.

Recommended remedial work is to seal and monitor two cracks in the gypsum board wall in the East Wing corridor, install missing firestopping, replace water-stained ceiling panels, replace the water-stained portion of the gypsum board ceiling in the Laundry Room, refurbish Elevator #2 to meet barrier-free access recommendations, replace the worn countertops in Radiology, install automatic door openers at the Main Entrance, and renovate one of the washrooms to be fully compliant with current barrier free codes.

The building's interior finishes are in acceptable condition, overall.

Mechanical Summary:

The hospital was originally built in 1982. Ventilation in the building is provided by three indoor air handling units. There are backflow prevention devices (BFPs) present on the fire protection line. The domestic water is heated by two natural gas-fired domestic water heaters.

The building is heated by two hot water boilers. A steam boiler provides steam for the humidifiers. Cooling is provided to the building via an air-cooled condenser. Heating water and glycol distribution are through original steel piping to air handling units, VAV, reheat coils and unit heaters in the building. Building exhaust is provided by various roof mounted exhaust fans and air handling unit. An original pneumatic system controls the major mechanical equipment in the building. The entire building is protected by a wet sprinkler system. Fire extinguishers are located in fire extinguisher cabinets located throughout the building.

The following are recommended actions for the next five years:

- Install backflow preventors on domestic water line and boiler feed;
- Repair domestic water heater;
- Replace steam and hot water boilers and chimney.

Overall the mechanical systems in the building are in acceptable condition.

Electrical Summary:

The main electrical switchboard is rated at 1200 A, 347/600 V. The building has approximately four secondary transformers. The motor control centre, electrical sub-panels and wiring are generally original to the construction of the building. All observed wiring was in conduit and was reportedly copper.

Interior lighting is mainly provided by a combination of T12 and T8 fluorescent technology throughout the building. Exterior lighting is provided by high pressure sodium lights around the building. The emergency lighting in the building is powered by a central emergency generator. Exit lighting in the building is provided by incandescent fixtures.

The building is protected by an Simplex fire alarm control panel which controls fire alarm bells throughout the building. Initiation in the building is by manual pull stations, heat detectors, and smoke detectors.

Overall the electrical systems in the building are in acceptable condition.

Rating Guide

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

S1 STRUCTURAL

A1010 Standard Foundations*

The foundation for the building is believed to consist of cast-in-place concrete pad footings and perimeter grade beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

A1030 Slab on Grade*

The floors of the East and South Wings of the facility consist of concrete slabs-on-grade. Floors in other parts of the building are suspended reinforced concrete slabs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

A2020 Basement Walls (& Crawl Space)*

The foundation of the building consists of a partial basement with concrete block and cast-in-place concrete walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

B1010.01 Floor Structural Frame (Building Frame)*

The building's structural framework is believed to consist of loadbearing concrete block and cast-in-place concrete walls, as well as steel-reinforced masonry columns. Open-web steel joists and steel I-beams support the roof structure.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

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

Load-bearing interior walls are comprised of concrete block and cast-in-place concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

B1010.03 Floor Decks, Slabs, and Toppings*

The floors in the 'hub' part of the building consist of suspended cast-in-place concrete slabs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1982	100	MAR-09

Event: Seal the cracks in the upper floor slab of the Water Treatment room located in the basement level and direct storm water drain away from building

Concern:

Small cracks were observed in the concrete ceiling (upper floor slab) of the Water Treatment room located in the basement level. Water infiltration was observed at these cracks. The water source appeared to be from a storm water drain located adjacent to the building as water was heard trickling from the associated rainfall, however, the drain was obscured during the assessment due to thick vegetation adjacent to the building.

Recommendation:

The cracks in the concrete ceiling (upper floor slab) of the Water Treatment room located in the basement level should be properly sealed to prevent water infiltration. In addition, the storm water drainage located adjacent to the building should be directed away from the building.

Consequences of Deferral:

Lack of sealing the upper floor slab and directing the storm water drain away from the building may lead to increased water infiltration and affect the floor structural integrity.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$1,000	Medium

Updated: MAR-09

B1010.09 Floor Construction Fireproofing*

Spray-on fireproofing was observed on the steel beams supporting the floor deck. Penetrations through floors are generally sealed with firestopping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

B1020.01 Roof Structural Frame*

The roof structural frame consists of metal decking supported by open-web steel joists and steel I-beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

B1020.06 Roof Construction Fireproofing*

Spray-on fireproofing was observed on the metal roof decking.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

S2 ENVELOPE**B2010.01.02.01 Brick Masonry: Ext. Wall Skin***

The majority of the exterior walls are finished with brick veneer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	75	MAR-09

B2010.01.06.03 Metal Siding**

The upper portions of the exterior walls are generally finished with pre-finished, standing-seam metal panel cladding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	40	MAR-09

Event: Replace approx. 380 m² of standing-seam metal panels

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$78,000	Unassigned

Updated: MAR-09

Event: Replace approx. 5 m² of missing standing-seam metal panel cladding at the north and west side roof perimeters**Concern:**

Missing standing-seam metal panel cladding was observed at the north and west side roof perimeters.

Recommendation:

Replace the missing standing-seam metal panel cladding at the north and west side roof perimeters.

Consequences of Deferral:

The missing metal panel cladding detracts from building aesthetics.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$2,000	High

Updated: MAR-09

B2010.01.09 Expansion Control: Exterior Wall Skin*

Construction joints are provided at periodic intervals within the face brick cladding system for expansion control.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	75	MAR-09

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

Joint sealant is applied to control joints and on the perimeters of exterior window units, doors and brick expansion joints on all sides of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	MAR-09

Event: Replace approx. 260 lineal meters of joint sealants

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$11,000	Unassigned

Updated: MAR-09

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

The metal panel cladding and concrete soffits of the building are painted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	15	MAR-09

Event: Repaint approx. 400 m² of the standing seam metal and soffits

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$13,000	Unassigned

Updated: MAR-09

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

Some exterior walls consist of load-bearing poured concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

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

The majority of the exterior walls consist of load-bearing concrete block.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

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

Insulation and vapour barrier seals are present at exterior wall connections.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

B2010.05 Parapets*

The exteriors of the parapets consist of painted, standing-seam metal panel cladding. The interiors of the parapets consist of modified bituminous membrane assembly (SBS). Prefinished metal coping is located at the top of the parapets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

B2010.06 Exterior Louvers, Grilles, and Screens*

Metal louvers and screens are situated in the exterior walls at mechanical areas of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

B2010.09 Exterior Soffits*

Painted, concrete soffits are located at the entrances to the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

B2010.10 Other Exterior Walls*

A cast-in-place concrete wall is located adjacent to the west of the building, at the Ambulance Drop-Off. A brick wall encloses the mechanical equipment at the northeast side of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	MAR-09

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

Exterior windows are insulating glazing units set in prefinished aluminum framing systems.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace approx. 148 exterior windows of various sizes

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$305,000	Unassigned

Updated: MAR-09

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

The solarium's exterior windows are insulating glazing units set in prefinished aluminum framing systems.

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

Event: Replace approx. 43 exterior windows

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2040	\$89,000	Unassigned

Updated: MAR-09

B2030.01.01 Aluminum-Framed Storefronts: Doors**

The main entrance doors at the east side of the building and the entrance door at the east wing are single glazed units in aluminum frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace three storefront doors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$15,000	Unassigned

Updated: MAR-09

B2030.02 Exterior Utility Doors**

Exterior utility doors consist of painted metal set in painted metal frames, with some containing inset glazing with single-paned glass.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace approx. 15 utility doors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$21,000	Unassigned

Updated: MAR-09

B2030.03 Large Exterior Special Doors (Overhead)*

Two glass, overhead roll-up doors set in aluminum framing systems are located at the Ambulance Drop-Off. These overhead roll-up doors provide vehicular access into the facility. According to the site contact, the overhead roll-up doors were replaced in 2006.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2006	30	MAR-09

B3010.01 Deck Vapor Retarder and Insulation*

All roofing on the facility was replaced in 2003. It is assumed that the deck vapor retarder was replaced at that time as well as replacement and/or upgrading of the insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2003	25	MAR-09

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)**

All sections of the building roof are protected with a modified bituminous membrane assembly (SBS).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2003	25	MAR-09

Event: Replace approx. 2,550 m² of SBS roofing

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2028	\$667,000	Unassigned

Updated: MAR-09

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

The roof area is accessed by a painted metal door set in a painted metal frame which is located at the roof penthouse. A brick chimney roof vent/chimney is present at the east side of the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

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

The majority of the interior partitions consist of non-loadbearing metal stud and gypsum board walls. Brick walls are located in the Solarium, as well as in the basement Dining Room. Exposed load-bearing concrete block and/or poured concrete walls are also present in the Ambulance Drop-Off, some basement rooms and stairways.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	MAR-09

C1010.03 Interior Operable Folding Panel Partitions**

A manually operated, wood folding partition is present in the Patient Lounge.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace the wood folding partition

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$3,000	Unassigned

Updated: MAR-09

C1010.05 Interior Windows*

Interior windows are situated throughout the interior of the facility: eg. in offices, in patient rooms, in corridors, etc. The windows consist of single-pane glass set in painted metal frames, with some containing wired inserts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	80	MAR-09

C1010.07 Interior Partition Firestopping*

Interior partitions that are fire walls or fire separations are generally constructed with masonry block or cast-in-place concrete. All penetrations did not appear to be filled with a fire-rated sealant.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	50	MAR-09

Event: Install missing firestopping

Concern:

All penetrations through service/utility room walls for piping, ducts, electrical conduit, etc. did not appear to be properly sealed.

Recommendation:

Seal or repair the voids and gaps as necessary in service/utility rooms to provide a proper firestopping barrier.

Consequences of Deferral:

Potential accelerated migration of smoke or flame in the event of a fire emergency.

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

Updated: MAR-09

C1020.01 Interior Swinging Doors (& Hardware)*

Interior doors consist of solid wood units set in painted metal frames which are equipped with standard commercial hardware. Some of these doors are also equipped with wired and non-wired glass inserts and metal kick plates. Interior doors also consist of full IGUs in aluminum frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

C1020.03 Interior Fire Doors*

Fire doors consisting of painted metal units set in painted metal frames and solid wood units set in painted metal frames are located at entries to corridors and at various utility/service rooms and stairwells. Some of the doors are also equipped with wired glass inserts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

C1020.06 Interior Gates*

Folding, metal gates are located at the Reception counter in the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	MAR-09

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

Pre-finished metal partitions separate the toilet stalls in the washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace approx. 10 toilet partitions

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$22,000	Unassigned

Updated: MAR-09

C1030.05 Wall and Corner Guards*

Metal wall corner guards are present in the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	15	MAR-09

C1030.06 Handrails*

Wood handrails/wall guards are present in the corridors of the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

C1030.08 Interior Identifying Devices*

The signage system in the facility generally consists of wall-mounted and door-mounted lamicoïd signage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	MAR-09

C1030.10 Lockers**

Prefinished metal lockers are located in the male and female locker rooms of the basement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace approx. 55 lockers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$87,000	Unassigned

Updated: MAR-09

C1030.12 Storage Shelving*

Wood and metal storage shelving is present in various locations in the building, including offices, common areas, storage rooms and kitchen.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

C1030.14 Toilet, Bath, and Laundry Accessories*

Standard commercial quality hardware is located in the washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	MAR-09

C2010 Stair Construction*

Cast-in-place concrete steps provide access to the roof penthouse, Dining Room, and basement level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

C2020.05 Resilient Stair Finishes**

Vinyl-covered steps provide access to the roof penthouse and basement level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	MAR-09

Event: Replace approx. 25 m² of resilient stair finishes

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$4,000	Unassigned

Updated: MAR-09

C2020.06 Carpet Stair Finishes**

Carpet-covered concrete steps provide access to the Dining Room.

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

Event: Replace approx. 5 m² of carpet stair finishes

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$1,000	Unassigned

Updated: MAR-09

C2020.08 Stair Railings and Balustrades*

Painted steel railings are associated with the interior stairways.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

C3010.01 Concrete Wall Finishes (Unpainted)*

Unpainted concrete walls are present in some of the basement level rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

C3010.02 Wall Paneling**

Wood paneling is located on the upper walls of the Reception area at the Main Entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace approx. 15 m² of wood wall paneling

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$3,000	Unassigned

Updated: MAR-09

C3010.06 Tile Wall Finishes**

The walls in the Operating Room and portions of the walls in the Labor and Delivery Room are finished with ceramic wall tile.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace approx. 67 m² of ceramic wall tile

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$29,000	Unassigned

Updated: MAR-09

C3010.09 Acoustical Wall Treatment**

Fabric-covered acoustical wall treatment is located in the Conference Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	MAR-09

Event: Replace approx. 55 m² of acoustical wall treatment

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$18,000	Unassigned

Updated: MAR-09

C3010.11 Interior Wall Painting*

A paint finish is applied to the majority of the gypsum board and concrete partitions in the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2003	10	MAR-09

C3010.12 Wall Coverings*

Vinyl wall coverings are present in the Dining Room and Reception area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	15	MAR-09

C3020.01.02 Paint Concrete Floor Finishes*

Painted concrete floor finishes were observed in the roof penthouse and in the mechanical and large storage room of the basement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	10	MAR-09

C3020.02 Tile Floor Finishes**

Paver tile flooring is present in the Reception area of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

Event: Replace approx. 30 m² of paver tile

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2032	\$12,000	Unassigned

Updated: MAR-09

C3020.07 Resilient Flooring - Vinyl Sheet Flooring - Patient Lounge**

Vinyl sheet flooring is present in the patient lounge.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	20	MAR-09

Event: Replace approx. 37 m² of vinyl sheet flooring

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2028	\$6,000	Unassigned

Updated: MAR-09

C3020.07 Resilient Flooring - Vinyl Sheet Flooring - Remaining Areas**

Vinyl sheet flooring is present in the majority of the facility, including offices, patient rooms, operating and procedure rooms, washrooms, common areas, corridors and kitchen.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	MAR-09

Event: Replace approx. 3,200 m² of vinyl sheet flooring

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$439,000	Unassigned

Updated: MAR-09

C3020.07 Resilient Flooring - Vinyl Tile**

Vinyl floor tile was observed in two utility rooms of the basement level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	MAR-09

Event: Replace approx. 20 m² of vinyl floor tile

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$2,000	Unassigned

Updated: MAR-09

C3020.08 Carpet Flooring**

Carpeting was observed in the Dining Room, Maintenance and Housekeeping, IT Help Desk, Waiting Room, General Office and Conference Room and Quiet Room of the facility.

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

Event: Replace approx. 225 m² of carpet flooring

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$21,000	Unassigned

Updated: MAR-09

C3030.01 Concrete Ceiling Finishes (Unpainted)*

Unpainted concrete walls are generally present in mechanical areas of the basement levels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	MAR-09

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

The majority of the ceilings in the facility are finished with suspended T-bar and inlaid acoustic tiles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	25	MAR-09

Event: Replace approx. 5,700 m² of T-bar ceilings

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$373,000	Unassigned

Updated: MAR-09

Event: Replace approx. 7 m² of water-stained ceiling panels

Concern:

Approximately 10 water-stained, discolored ceiling panels due to previous plumbing leaks were observed in multiple locations of the facility.

Recommendation:

Replace the water-stained ceiling panels.

Consequences of Deferral:

Water-stained ceiling panels detract from aesthetics and have a potential to support microbial growth.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$1,000	High

Updated: MAR-09

C3030.07 Interior Ceiling Painting*

Select areas, including washrooms, storage rooms and the Laundry Room, are finished with painted gypsum board ceilings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	20	MAR-09

Event: Replace the water-stained portion of the gypsum board ceiling in the Laundry Room

Concern:

A portion of the painted gypsum board ceiling in the Laundry Room of the basement level contains water staining from a previous plumbing leak.

Recommendation:

Remove the water-stained portion of the gypsum board ceiling. No cost estimate has been provided since the repair would cost considerably less than the \$3000 cost threshold for reporting events. The repair event is being noted in this report due to the consequences of deferral noted below.

Consequences of Deferral:

Water-stained ceiling detracts from aesthetics and has a potential to support microbial growth.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$1,000	High

Updated: MAR-09

C3030.09 Other Ceiling Finishes*

The ceilings of the Dining Room and the Reception area at the Main Entrance are finished with wood paneling. A plastic grid ceiling is present in the Conference Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

D1010.01.02 Hydraulic Passenger Elevators**

Two hydraulic passenger elevators, each with a 4,000-lb (1,816 kg), 26 passenger capacity service the building. The elevators were manufactured by Dover.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	30	MAR-09

Event: Refurbish Elevator #2 to meet barrier-free access recommendations

Concern:

The passenger elevators do not meet the barrier-free access recommendations.

Recommendation:

Install new car operating panels at Elevator #2 arranged according to the barrier-free recommendations; install hall jamb plates mounted on both sides of all entrance jambs at barrier-free heights; install visual arrival signals that indicate the direction of travel visible from the hall area mounted at barrier-free recommended heights; and install audible announcement of floor position.

Consequences of Deferral:

Non-compliance with current barrier-free codes/standards and an impedance for handicapped users.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2009	\$15,000	Medium

Updated: MAR-09

Event: Refurbish/upgrade two hydraulic passenger elevators

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$224,000	Unassigned

Updated: MAR-09

D1010.02 Lifts**

A hydraulic lift, with a painted, steel platform, is located adjacent to the Service Entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

Event: Replace the hydraulic lift

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$10,000	Unassigned

Updated: MAR-09

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

There are approximately 18 stainless steel sinks located through the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace 18 sinks

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$38,000	Unassigned

Updated: MAR-09

D2010.05 Showers**

There are two shower stalls located in the basement washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace the showers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$3,000	Unassigned

Updated: MAR-09

D2010.06 Bathtubs**

There are approximately 25 bathtub located in the patient rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace 25 bathtubs

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$76,000	Unassigned

Updated: MAR-09

D2010.08 Drinking Fountains / Coolers**

There is a stainless steel refrigerated drinking fountain located in the waiting area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	MAR-09

Event: Replace the drinking fountain

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$3,000	Unassigned

Updated: MAR-09

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

There are approximately 47 vitreous china water closets, one floor-mounted vitreous china urinal, and 47 vitreous china lavatories provided in the washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	MAR-09

Event: Replace 47 water closets, one urinal and 47 lavatories

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$229,000	Unassigned

Updated: MAR-09

D2020.01.01 Pipes and Tubes: Domestic Water*

Where visible, the domestic hot water piping was found to be copper.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

D2020.01.02 Valves: Domestic Water**

There are isolation valves in place on the domestic plumbing lines.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace 10 domestic water valves

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$17,000	Unassigned

Updated: MAR-09

D2020.01.03 Piping Specialties (Backflow Preventors) - Domestic Water**

There are no backflow prevention devices provided on the domestic water line and boiler feeds.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	20	MAR-09

Event: Install backflow preventors on domestic water line and boiler feed

Concern:

No backflow prevention devices on domestic water line and boiler feed.

Recommendation:

Install backflow preventors on domestic water line and boiler feed.

Consequences of Deferral:

Possibility of contaminating the domestic water system.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Repair	2009	\$6,000	Medium

Updated: MAR-09

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

There is a backflow preventor on the sprinkler line.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	MAR-09

Event: Replace backflow preventor for sprinkler line

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$20,000	Unassigned

Updated: MAR-09

D2020.02.02 Plumbing Pumps: Domestic Water**

Two recirculation pumps are installed on the domestic hot water line.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	20	MAR-09

Event: Replace domestic hot water recirculation pumps

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$5,000	Unassigned

Updated: MAR-09

D2020.02.04 Domestic Water Conditioning Equipment**

There is a water softening system provided for the domestic water.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	MAR-09

Event: Replace water conditioning equipment

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$5,000	Unassigned

Updated: MAR-09

D2020.02.06 Domestic Water Heaters**

Two A.O.Smith, 740 MBH, natural gas-fired domestic water heaters are installed in the mechanical room. Leaks were noticed on one of the water heaters. Manufacture will repair or replace the leaky water heater, and the cost will be covered by warranty.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2007	20	MAR-09

Event: Replace two water heaters

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2027	\$12,000	Unassigned

Updated: MAR-09

D2020.03 Water Supply Insulation: Domestic*

Insulation on domestic water piping is original.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

D2030.01 Waste and Vent Piping*

Waste and vent piping is generally cast iron and original to the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

D2040.01 Rain Water Drainage Piping Systems*

Rain water drainage piping is generally cast iron and original to the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

D2040.02.04 Roof Drains*

The roof incorporates roof drains which are each fitted with gravel/debris strainers and internal rain water leaders which reportedly discharge onto the site at grade level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

D2090.11 Oxygen Gas Systems**

The building is equipped with a medical oxygen gas system. Oxygen reserve cylinders supply the oxygen gas to the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace medical oxygen system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$50,000	Unassigned

Updated: MAR-09

D2090.13 Vacuum Systems (Medical)**

The building's medical vacuum system is powered by a Busch medical vacuum pump.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2007	30	MAR-09

Event: Replace the medical vacuum system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2037	\$62,000	Unassigned

Updated: MAR-09

D2090.16 Medical Air System*

A Vital-Aire medical air system provides medical air to the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	MAR-09

D3010.01 Oil Supply Systems (Fuel, Diesel)*

There is a 1000 L diesel storage tank located in the storage room which can fuel the emergency generator. There is a fuel leak detection system in place.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	60	MAR-09

D3010.02 Gas Supply Systems*

Natural gas piping feeds the central heating boilers and domestic water heaters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	60	MAR-09

D3020.01.01 Heating Boilers & Accessories: Steam**

A natural gas-fired steam boiler manufactured by Cleaver Brooks with the capacity of 2,000 MBH supplies the air handling units for humidification.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1982	35	MAR-09

Event: Replace the steam boiler

Concern:

The steam boiler was not working at the time of the assessment because of the leaking problem. It was reported by site contacts that boiler replacement had been scheduled and the fund was available. The new steam boiler will be installed in late 2008 or early 2009.

Recommendation:

Install new Boiler

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$51,000	High

Updated: MAR-09

D3020.01.02 Feedwater Equipment*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	MAR-09

D3020.01.04 Water Treatment: Steam Boilers*

A water treatment system is provided for the steam boiler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	MAR-09

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

There are two original 5,000 MBH Cleaver Brooks hot water boilers that supply the building hydronic heating system. It was reported by site contacts that boiler replacements had been scheduled and the fund was available. Two new boilers will be installed in late 2008 or early 2009.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2008	35	MAR-09

Event: Replace 2 hot water boilers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2043	\$432,000	Unassigned

Updated: MAR-09

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

Original boiler flue extends through the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	30	MAR-09

Event: Repace chimney for boilers

Concern:

Original boiler chimney has passed its expected service life.

Recommendation:

Replace the chimney at the time of the hot water boiler replacement.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$30,000	Medium

Updated: MAR-09

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

Pot feeders for chemical treatment are connected to the boilers. A water treatment program serves the heating hot water system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

D3030.06.02 Refrigerant Condensing Units**

A Trane air cooled chiller with a cooling capacity of 100 Tons located on the north side of the mechanical room provides chilled water for air handling units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

Event: Replace the air-cooled chiller

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$234,000	Unassigned

Updated: MAR-09

D3040.01.01 Air Handling Units: Air Distribution**

Ventilation of the building is provided by three air handling units. AS-1 provides ventilation to the majority of the areas of the building and is equipped with a supply fan, filter section, glycol heating coil, chilled water coil and steam humidifier. AS-2 provides fresh air to the maternity room and is equipped with a supply fan, filter section, glycol heating coil and chilled water coil. AS-3 provides fresh air to the mechanical room in the basement and is equipped with a supply fan, filter section and a heating coil.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace AS-1, AS-2 and AS-3

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$293,000	Unassigned

Updated: MAR-09

D3040.01.04 Ducts: Air Distribution*

Air ducts are thermally insulated and appear to be functioning as intended.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

D3040.01.06 Air Terminal Units: Air Distribution (VAV Box)**

VAV boxes are located throughout the building. The VAV boxes are reportedly equipped with reheat coils and are functioning as intended.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace 50 VAV boxes

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$114,000	Unassigned

Updated: MAR-09

D3040.01.07 Air Outlets & Inlets:Air Distribution*

T-Bar ceiling mounted diffusers and grilles are installed in the building to provide supply air.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

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

The low pressure steam piping system is insulated and where visible, the piping appeared to be steel.Steam traps and condensate pumps are provided on the steam system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace steam piping system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$60,000	Unassigned

Updated: MAR-09

D3040.03.01 Hot Water Distribution Systems**

Heating hot water is distributed to radiation heaters, heat exchangers, unit heaters, forced flow units and reheat coils. Six circulation pumps are located in the boiler room and include three primary hot water pumps, two radiation pumps and two glycol pumps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace hot water distribution system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$383,000	Unassigned

Updated: MAR-09

D3040.03.02 Chilled Water Distribution Systems**

Chilled water distribution system is original to the building and includes two circulation pumps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace chilled water distribution system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$90,000	Unassigned

Updated: MAR-09

D3040.04.01 Fans: Exhaust**

There are approximately 10 rooftop and wall-mounted exhaust fans of varying sizes and capacities.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace 10 exhaust fans

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$25,000	Unassigned

Updated: MAR-09

D3040.05 Heat Exchangers**

There is one hot water-to-glycol heat exchanger located in the mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace heat exchanger

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$20,000	Unassigned

Updated: MAR-09

D3050.03 Humidifiers**

Steam humidifier complete with inlet strainer and steam traps are provided on AS-1.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

Event: Replace steam humidifier

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$15,000	Unassigned

Updated: MAR-09

D3050.05.03 Finned Tube Radiation**

The primary perimeter heating is provided by finned tube radiation heaters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace finned tube radiation heaters

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$130,000	Unassigned

Updated: MAR-09

D3050.05.06 Unit Heaters**

There are seven hot water suspended unit heaters located in the mechanical rooms and ambulance bay, and six cabinet unit heaters located in the vestibules of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace 13 unit heaters

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$53,000	Unassigned

Updated: MAR-09

D3060.02.02 Pneumatic Controls**

The building has an original Johnson Controls pneumatic control system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace pneumatic control system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$40,000	Unassigned

Updated: MAR-09

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

There is no building automation system in place.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

Event: Install a building automation system**Concern:**

The mechanical equipment in the building is controlled by an original pneumatic system which is not energy efficient.

Recommendation:

Install a building automation system coupled with the pneumatic control.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2009	\$171,000	Medium

Updated: MAR-09

Event: Replace building automation system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$171,000	Unassigned

Updated: MAR-09

D4010 Sprinklers: Fire Protection*

The building is fully protected by a wet sprinkler system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	60	MAR-09

D4030.01 Fire Extinguisher, Cabinets and Accessories*

The building has cabinets which each contain a fire extinguisher.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

D4090.04 Dry Chemical Fire Extinguishing Systems (Kitchen Hood)**

The kitchen is equipped with a chemical fire suppression system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace hood fire extinguishing system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$19,000	Unassigned

Updated: MAR-09

D4090.07 Fire Pumps & Water Storage Tanks*

Fire booster pumps are provided for the sprinkler system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

S5 ELECTRICAL**D5010.02 Secondary Electrical Transformers (Interior)****

There are approximately four transformers inside the electrical and service areas. All transformers were observed to be manufactured by Federal Pioneer and Square D.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace four secondary electrical transformers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$114,000	Unassigned

Updated: MAR-09

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

The main electrical switchboard was manufactured by Federal Pioneer and has a capacity of 1200 Amps at 347/600V.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	MAR-09

Event: Replace the main electrical switchboards

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$134,000	Unassigned

Updated: MAR-09

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

Electrical sub-panels are located throughout the building. The majority of the sub-panels are manufactured by Federal Pioneer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Install 5 electrical sub-panels

Concern:

Original sub-panels are generally at full capacity

Recommendation:

Install additional electrical sub-panels.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2009	\$35,000	Medium

Updated: MAR-09

Event: Replace 16 secondary branch circuit boards

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$110,000	Unassigned

Updated: MAR-09

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

A Westinghouse motor control center is provided in the mechanical room. It serves air handling units, pumps, and compressors in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace motor control centre

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$66,000	Unassigned

Updated: MAR-09

D5020.01 Electrical Branch Wiring*

Where visible the electrical branch wiring appeared to be in conduit and is reportedly copper.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

D5020.02.02.01 Interior Incandescent Fixtures*

There are some incandescent fixtures used for accent lighting.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

D5020.02.02.02 Interior Florescent Fixtures - T12 Fixtures**

Original florescent fixtures are used throughout the building and consist of T-bar recessed and surface mounted T12 fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace florescent fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$257,000	Unassigned

Updated: MAR-09

D5020.02.02.02 Interior Florescent Fixtures - T8 Fixtures**

The fluorescent fixtures in the hallways were upgraded to T8 fixtures with electronic ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2007	30	MAR-09

Event: Replace hallway florescent fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2037	\$43,000	Unassigned

Updated: MAR-09

D5020.02.03.03 Exit Signs*

There are standard incandescent exit signs throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Upgrade to LED exit signs

Concern:

Incandescent fixtures are less energy efficient than current LED technology.

Recommendation:

Upgrade the existing exit signs to LED fixtures.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2009	\$24,000	Medium

Updated: MAR-09

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

Exterior lighting around the building is provided by wall-mounted high pressure sodium fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

D5030.01 Detection and Fire Alarm**

The building is equipped with a Simplex fire alarm system. The fire alarm system consists of a fire alarm panel, alarm bells, pull stations, smoke and heat detectors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

Event: Replace fire alarm system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$128,000	Unassigned

Updated: MAR-09

D5030.02.02 Intrusion Detection**

A Simplex security system is installed and is tied into the nurse call and door access systems.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

Event: Replace the security system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$45,000	Unassigned

Updated: MAR-09

D5030.02.03 Security Access**

A door access system is in place and reportedly functioning as intended.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

Event: Replace security access system (6 doord)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$80,000	Unassigned

Updated: MAR-09

D5030.02.04 Video Surveillance**

A camera surveillance system is connected to monitors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

Event: Replace the surveillance system (5 camers)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$45,000	Unassigned

Updated: MAR-09

D5030.03 Clock and Program Systems*

A Simplex central clock system is installed in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

D5030.04.01 Telephone Systems*

A Nortel Companion telephone system is provided for the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

D5030.04.03 Call Systems**

The nurse call system is tied into the public address and telephone system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

Event: Replace the nurse call system (40 rooms+ 1 r00m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$87,000	Unassigned

Updated: MAR-09

D5030.04.05 Local Area Network Systems*

LAN system is installed complete with category 5 cable.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	15	MAR-09

D5030.05 Public Address and Music Systems**

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

Event: Replace public address system and speakers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$30,000	Unassigned

Updated: MAR-09

D5030.06 Television Systems*

A patient TV system is installed and operating throughout the building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	MAR-09

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

Emergency power is provided to the building by a 450 KW diesel-fired emergency generator. A transfer switch is provided in the main electrical room and rated at 3 phase, 4 wire, 150 A, 347/600 V.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	MAR-09

Event: Replace emergency generator and transfer switch

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$325,000	Unassigned

Updated: MAR-09

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**E1010.01 Security and Vault Equipment***

Security key pads are present at some entry doors which are accessed by the facility staff.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	MAR-09

E1010.06 Commercial Laundry and Dry Cleaning Equipment* - Commercial Dryers

Four commercial dryers are located in the Laundry Room of the basement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	0	MAR-09

E1010.06 Commercial Laundry and Dry Cleaning Equipment* - Remaining Equipment

Four commercial washers, folding tables etc. are located in the Laundry Room of the basement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	MAR-09

E1020.07 Laboratory Equipment*

Lab equipment generally consists of microscopes, operant conditioning chambers and measurement tools.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

E1020.08 Medical Equipment*

Medical equipment generally consists of hospital beds and stretchers, hospital imaging equipment, IV and infusion equipment, patient monitors and other equipment associated with the Maternity Ward, Operating Rooms, Patient Care and Physical Therapy. Automatic shelving systems for medical file storage are also present in the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

E1030.03 Loading Dock Equipment*

A hydraulic scissor lift, with a painted steel platform is located adjacent to the Service Entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

E1090.03 Food Service Equipment*

Commercial food service equipment was observed in the kitchen of the facility which included solid door refrigerators and freezers, steam cookers, dishwashers, and ice makers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	MAR-09

E1090.04 Residential Equipment*

The Lounge and break rooms are equipped with refrigerators, ranges and microwave ovens.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	10	MAR-09

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Therapeutic equipment included treatment tables, electrotherapy units, ultrasound machines, massage tables and whirlpools.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	15	MAR-09

E2010.02 Fixed Casework**

Fixed casework consists of painted and laminated wood units located in the majority of the offices, patient rooms, laboratories, kitchen, as well as common areas, including reception and nursing stations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	35	MAR-09

Event: Replace approx. 300 lineal meters of fixed casework

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$300,000	Unassigned

Updated: MAR-09

Event: Replace the worn countertops in Radiology

Concern:
Worn/deteriorated edges of the countertops from typical wear and tear were observed in Radiology.

Recommendation:
Replace the worn countertops in Radiology.

Consequences of Deferral:
Worn counter tops detract from aesthetics and perhaps interfere with functionality.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$1,000	Medium

Updated: MAR-09

E2010.03.01 Blinds**

Vertical blinds are located on the majority of the exterior windows in the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	MAR-09

Event: Replace approx. 148 blinds

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$25,000	Unassigned

Updated: MAR-09

E2020 Moveable Furnishings

Moveable furnishings in the waiting areas of the facility generally consist of steel-framed chairs with fabric coverings and associated wood tables.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	MAR-09

F1020.02 Special Purpose Rooms

The facility is equipped with a morgue located near the Service Entrance of the basement level used for body storage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	MAR-09

F1040.05 Liquid and Gas*: Storage Tanks*

An above ground storage tank (AST) is currently in use at the property. The AST is associated with the diesel-fired emergency generator located in a room adjacent to the Service Entrance. The tank has a capacity of 250-gallons (946-liters) and is located in steel secondary containment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2003	20	MAR-09

F2020.01 Asbestos*

Construction materials suspected to contain asbestos in the building includes vinyl flooring, gypsum board and joint compound, ceiling panels, and pipe insulation serving mechanical equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	MAR-09

F2020.04 Mould*

No suspected mould growth was noted on visible surfaces during the assessment. Wall cavities and the majority of the ceiling cavities were not reviewed during the site visit.

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

F2020.08 Biohazardous Materials*

Infectious or "red bag" waste is stored in plastic containers and was observed in various examination, operation and patient rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	MAR-09

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

The Main Entrance at the east side of the building has a barrier-free route from the adjacent parking lots to the entrance doors. A barrier-free stall exists in the parking lot.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	MAR-09

K4010.02 Barrier Free Entrances*

Exterior doors on the building perimeter are manually-operated, pivot-type doors.

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

Event: Install automatic door openers at the Main Entrance**Concern:**

Exterior doors at the building's Main Entrance are manually-operated, pivot-type doors (i.e., automated entry to the building is not provided).

Recommendation:

Install automated door openers at the Main Entrance to provide barrier-free access to the facility interior.

Consequences of Deferral:

Non-compliance with barrier-free standards and poor accessibility for handicapped persons.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2009	\$3,000	Medium

Updated: MAR-09

K4010.03 Barrier Free Interior Circulation*

Interior circulation is barrier free throughout the facility.

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

K4010.04 Barrier Free Washrooms*

None of the washrooms in the facility are considered to be barrier-free.

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

Event: Renovate one of the washrooms to be fully compliant with current barrier free codes

Concern:

None of the washrooms in the facility are considered to be barrier-free.

Recommendation:

Renovate one of the washrooms at the facility to be fully compliant with current barrier free codes.

Consequences of Deferral:

Non-compliance with current barrier-free codes/standards and an impedence for handicapped users.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2009	\$7,000	Medium

Updated: MAR-09