

RECAPP Facility Evaluation Report

Calgary Health Region



High River General Hospital

B1097A
High River

Facility Details

Building Name: High River General Hospital
Address: 560 - 9 Avenue W.
Location: High River

Building Id: B1097A
Gross Area (sq. m): 10,988.00
Replacement Cost: \$0
Construction Year: 1982

Evaluation Details

Evaluation Company: Jacques Whitford AXYS Ltd.
Evaluation Date: January 13 2009
Evaluator Name: Mike Plomske

Total Maintenance Events Next 5 years: **\$4,955,000**
5 year Facility Condition Index (FCI): **0%**

General Summary:

The High River Hospital complex is comprised of several facilities, including the High River Hospital, Annex Building, Ambulance Garage, and the Old EMS Building.

The High River Hospital is a partial three-storey, steel, concrete and masonry block structure with a rooftop mechanical penthouse and no basement level, constructed in 1982. The building includes a single-storey addition constructed along its south elevation in 2004, and has a total floor area of approximately 10,980 square metres. The building houses patient and medical/examination rooms, service/support rooms, and general medical, operating and patient care equipment. The Annex Building was constructed northwest of the High River Hospital in 1955, and is comprised of a two-storey, wood-framed structure with a full basement level, which has a total floor area of approximately 873 square metres. The facility includes offices and meeting rooms.

The Ambulance Garage is situated northwest of the High River Hospital, and is comprised of a single-storey, masonry block facility with no basement level. The building was constructed in 1985, and has a total floor area of approximately 290 square metres. The building is used for Ambulance vehicle storage, and training purposes. The Old EMS Building is located west of the Ambulance Garage, and was constructed circa 1955. The building is a single-storey, masonry block and wood-framed structure with no basement level, and has a total floor area of approximately 250 square metres. The facility is used as a workshop and storage area.

Structural Summary:

Standard foundations for the High River Hospital and 2004 addition are understood to be comprised of cast-in-place and reinforced concrete piles and concrete grade beams, while foundations for the Annex Building, Ambulance Garage and Old EMS Building are assumed to consist of concrete grade beams and spread footings. The main floors of the High River Hospital and 2004 addition, Ambulance Garage and Old EMS Building are constructed at-grade, and have concrete slab-on-grade floors. A slab-on-grade floor is also provided on the full basement level of the Annex Building, which is understood to include cast-in-place concrete foundation walls.

The floor structural frame of the High River Hospital is comprised of steel beams and columns supporting suspended floor decks. Suspended floors within the Annex Building are understood to be supported by wood joists and beams. Structural interior walls supporting floors or roofs within the site buildings are comprised of load-bearing masonry block, with the exception of the Annex Building, where load-bearing wood-stud walls are used for support. The suspended floor decks of the High River Hospital are understood to be comprised of metal decking. Suspended floors within the Annex Building are understood to consist of wood plank floor decks.

Roof structural framework for the High River Hospital, its 2004 addition and Ambulance Garage is comprised of steel beams or open web steel joists and beams supporting suspended roof decks. The suspended roof decks of the Old EMS Building and Annex Building are understood to be supported by wood joists and beams, or wood truss assemblies, respectively.

Recommended work includes the following:

- Repair concrete slab-on-grade settlement in the High River Hospital based on the results of upcoming core sample tests to be conducted in early 2009.

Structural components were observed to be in acceptable condition, overall.

Envelope Summary:

The exterior walls of the High River Hospital and 2004 addition include a clay brick veneer with minor sections of pre-finished metal siding. The Annex Building is understood to include pre-cast concrete wall panels finished with a painted cement plaster finish, while the Ambulance Garage and Old EMS Building have painted masonry block walls on all elevations. Exterior windows on the High River Hospital, 2004 addition, and the Ambulance Garage generally

consist of insulating glazing units set in fixed or operable aluminum frames. Exterior windows comprised of single pane glass set in fixed and operable painted wood frames are provided on the exteriors of the Annex Building and Old EMS Building.

An exterior entry door on the south end of the Annex Building consists of a single, glazed pivot unit with insulating glass set in an aluminum frame, while the main entrance door on the east side of this facility is comprised of painted, solid core wood set in a painted metal frame. Automated (motion sensor-activated) sliding entry doors are situated at the main (south) entrance to the High River Hospital 2004 addition, and consist of insulating glazing units set in fixed and anodized aluminum framing. Similar exterior doors provide access to a rooftop patio on the building's second floor. Exterior utility doors are generally comprised of single and dual, painted and insulated metal pivot units set in painted metal frames, some with glazed inserts. The low-slope roofs of the High River Hospital and 2004 addition are equipped with modified bituminous membrane assemblies, while built-up bituminous membrane assemblies are provided on the Ambulance Garage and Old EMS Building. Pitched roof surfaces on the Annex Building have asphalt shingles.

Recommended work includes the following:

- Repair damaged mortar joints on the High River Hospital exterior
- Repair damaged cement plaster surfaces on the Annex Building perimeter
- Replace deficient sealant on the High River Hospital and Ambulance Garage perimeters
- Repaint exterior louvers and northeast parapet wall on the High River Hospital

Building envelope components were observed to be in acceptable condition, overall.

Interior Summary:

The site buildings are comprised of patient rooms and connecting corridors, medical/examination rooms, support/service rooms and staff/office areas. Interior finishes in the site buildings are a combination of vinyl tile, resilient sheet flooring and carpeting. Walls generally include gypsum board, lath & plaster or masonry block with painted finishes, while painted gypsum board, lath & plaster or suspended T-bar grid with inlaid acoustic panel ceilings are provided throughout the site buildings. Interior swinging doors are a combination of varnished solid core wood or painted hollow metal pivot units set in painted metal or wood frames.

Recommended work includes the following:

- Repair cracked mortar joints in fixed masonry block wall partitions in the High River Hospital
- Refinish exposed hardwood floors in the Annex Building
- Repaint damaged wall and door surfaces and concrete floors in the site buildings as necessary
- Replace vinyl tile floors throughout the Annex Building
- Replace deficient and poorly installed resilient flooring in the High River Hospital
- Replace carpet flooring in the medical records storage room of the High River Hospital
- Repaint line markings in the Ambulance Garage
- Repair damaged casework laminate countertops in the High River Hospital, and replace fixed casework in the Old EMS Building
- Renovate elevator cabs in the High River Hospital to allow barrier-free access
- Conduct a feasibility study and corresponding repairs to retrofit existing patient washrooms for barrier-free access

Interior finishes were observed to be in acceptable condition, overall.

Mechanical Summary:

High River Hospital consists of three buildings on the site:

- Main building built in 1982 with small addition in 2004;
- Ambulance Bay, constructed in 1985;
- Old EMS building, constructed in 1955; and,
- Annex Building, constructed in 1955.

Ventilation for the main building is provided by five original indoor air handling units and one roof-top HVAC unit added in 2003. Two air cooled chillers on the roof provide chilled water for cooling coils in AHU's. Three hot water boilers supply heating for radiation and reheat loops in the building. Heating hot water distribution is through original steel piping to air handling units, VAV and unit heaters in the building. Two steam boilers provide high pressure and low pressure steam for process and domestic hot water. The domestic water, sanitary, and rain water drainage piping is original to the construction of the building. There are backflow prevention devices (BFPs) present on the domestic water and fire protection supplies. Building exhaust is provided by various roof mounted and indoor exhaust fans and

AHU's. A DDC system controls the major mechanical equipment in the building. The building is protected by a stand pipe system and partially covered by a wet sprinkler system. Fire extinguishers are located in fire extinguisher cabinets located throughout the building.

An ambulance bay was built in 1985. A furnace supplies heating for the office area, and the garage is heated by two natural gas-fired unit heaters. There is no ventilation system in the building. A domestic hot water heater supply, hot water for the washroom. The mechanical equipment is controlled by thermostats. The old EMS building has limited mechanical equipment.

A two-storey Annex building is located on the north side of the site. A original steam boiler provides low pressure steam for radiation heating. Furnaces added in 1999 provide heated air to the building. There is no ventilation system in the building. A domestic hot water heater supply hot water for washrooms. The mechanical equipment is controlled by thermostats.

Repair of the original steam boiler and chimney in the Annex building is recommended for the next five years.

Overall the mechanical systems in the buildings on this site are in acceptable condition.

Electrical Summary:

High River Hospital consists of three buildings on the site:

- Main building built in 1982 with small addition in 2004;
- Ambulance Bay, constructed in 1985;
- Old EMS building, constructed in 1955; and,
- Annex Building, constructed in 1955.

The main electrical switchboard in the main building is rated at 2500 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. Electrical supply to the Ambulance Bay, Old EMS and Annex buildings is fed from the main building.

Interior lighting is mainly provided by T12 fluorescent technology throughout the buildings. Exterior lighting is provided by metal halide and high pressure sodium lights around the buildings. The emergency lighting in the main building is powered by a central emergency generator. Exit lighting in the main building is provided by incandescent fixtures. Battery pack powered emergency lighting and LED exit signs are installed in Annex building.

The buildings are protected by three standalone Edwards fire alarm control panels which control fire alarm bells and strobe lights throughout the buildings. Initiation in the building is by manual pull stations, heat detectors, or smoke detectors.

The following are recommended electrical system actions for the next five years:

- Upgrade Exit signs to T8; and,
- Install emergency lighting in Ambulance Bay.

Overall the electrical systems in the site buildings 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*

Construction drawings were not available for review during the assessment; however, standard foundations for the High River Hospital and 2004 addition are understood to be comprised of cast-in-place and reinforced concrete piles and concrete grade beams. Foundations for the Annex Building, Ambulance Garage and Old EMS Building are assumed to consist of concrete grade beams and spread footings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

A1030 Slab on Grade*

The main floors of the High River Hospital and 2004 addition, Ambulance Garage and Old EMS Building are constructed at-grade, and have concrete slab-on-grade floors. A slab-on-grade floor is also provided on the basement level of the Annex Building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	100	MAR-09

Event: Repair Hospital Slab-On-Grade (approx. 100 sq. m)

Concern:

Slab-on-grade movement and building settlement was reported and observed throughout the High River Hospital, most noticeably at the north end, within the Cart Dispatch/Assembly area. Site representatives indicated that Read Jones Christoffersen has conducted previous inspections of the slab settlement, and has recommended core tests for early in 2009, followed by future slab repairs.

Recommendation:

Conduct slab-on-grade repairs based on the results of the Read Jones Christoffersen core test investigation. An allowance for repair has been provided; however actual repair costs cannot be determined until the results of the investigation are known.

Consequences of Deferral:

Ongoing slab settlement, resulting in further floor/wall damage and loss of aesthetic appeal.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$15,000	Low

Updated: MAR-09

A2020 Basement Walls (& Crawl Space)*

A full basement level is provided in the Annex Building, which is understood to include cast-in-place concrete foundation walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

B1010.01 Floor Structural Frame (Building Frame)*

The floor structural frame of the High River Hospital is comprised of steel beams and columns supporting suspended floor decks. Suspended floors within the Annex Building are understood to be supported by wood joists and beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

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

Structural interior walls supporting floors or roofs within the site buildings are comprised of load-bearing masonry block, with the exception of the Annex Building, where load-bearing wood-stud walls are used for support.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

B1010.03 Floor Decks, Slabs, and Toppings*

The suspended floor decks of the High River Hospital are understood to be comprised of metal decking. Suspended floors within the Annex Building are understood to consist of wood plank floor decks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

B1010.05 Mezzanine Construction*

The garbage collection room of the High River Hospital includes a wood-framed mezzanine used for storage purposes. The mezzanine includes a wood-sheathed floor deck supported by wood joists, beams and adjoining load-bearing masonry block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

B1010.09 Floor Construction Fireproofing*

Exposed steel columns, beams and floor deck soffits throughout the High River Hospital are finished with a spray-on fireproofing material.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	MAR-09

B1010.10 Floor Construction Firestopping*

Ductwork or conduit penetrations through floors in the High River Hospital and Annex Building are generally sealed where voids are present.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	MAR-09

B1020.01 Roof Structural Frame*

Roof structural framework for the High River Hospital, its 2004 addition and Ambulance Garage is comprised of steel beams or open web steel joists and beams supporting suspended roof decks. The suspended roof decks of the Old EMS Building and Annex Building are understood to be supported by wood joists and beams, or wood truss assemblies, respectively.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

B1020.03 Roof Decks, Slabs, and Sheathing*

The roof decks of the High River Hospital, its 2004 addition and the Ambulance Garage are comprised of corrugated sheet metal. Wood-sheathed roof decks are provided for the Annex Building and Old EMS Building.

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

B1020.04 Canopies*

A canopy structure is situated at the main south entrance of the High River Hospital 2004 addition. The canopy includes metal decking supported by steel beams and posts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	50	MAR-09

B1020.06 Roof Construction Fireproofing*

Where exposed, a spray-on fireproofing material is applied to steel decking, open web steel joists and beams in the High River Hospital mechanical penthouse.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	MAR-09

S2 ENVELOPE

B2010.01.01 Precast Concrete: Exterior Wall Skin*

Pre-cast concrete wall panels are provided on the Annex Building perimeter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	75	MAR-09

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

A clay brick veneer is provided on all elevations of the High River Hospital and 2004 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	75	MAR-09

Event: Repair Brick Cladding (approx. 250 sq. m)

Concern:

Evidence of efflorescence staining and minor deterioration of mortar joints was observed on brick-clad walls on the High River Hospital perimeter.

Recommendation:

Re-point and repair damaged brick mortar joints on the building perimeter, as necessary.

Consequences of Deferral:

Potential moisture ingress into the building envelope, and loss of aesthetic appeal.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2010	\$30,000	Medium

Updated: MAR-09

B2010.01.02.02 Concrete Block: Ext. Wall Skin*

All elevations of the Ambulance Garage and Old EMS Building are finished with smooth-faced masonry block.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	MAR-09

B2010.01.06.03 Metal Siding** - Addition

Pre-finished metal siding panels are provided on the exterior walls of the Smoke/Day Lounge on the second floor of the High River Hospital.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	40	MAR-09

Event: Replace Metal Siding on the Hospital Addition

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$7,000	Unassigned

Updated: MAR-09

B2010.01.06.03 Metal Siding - Garage**

Sloped pre-finished metal siding is provided on the upper perimeter of the Ambulance Garage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	40	MAR-09

Event: Replace Metal Siding on the Ambulance Garage (approx. 150 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$25,000	Unassigned

Updated: MAR-09

B2010.01.06.03 Metal Siding - Hospital**

Pre-finished metal siding is provided on the exterior elevations of the corridor, leading to the Smoke/Day Lounge on the second floor of the High River Hospital. Pre-finished metal panels are also situated below exterior window units adjacent to the second floor corridor.

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

Event: Replace Metal Siding on the Hospital (approx. 90 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$15,000	Unassigned

Updated: MAR-09

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

Pre-cast concrete wall panels on the Annex Building perimeter appeared to be finished with a stucco cement plaster.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1955	75	MAR-09

Event: Repair Cement Plaster Walls

Concern:

Minor cracking and perforations in the cement plaster walls of the Annex Building was observed during the assessment, most noticeably below exterior windows.

Recommendation:

Patch and repair damaged cement plaster finishes as necessary on the building perimeter.

Consequences of Deferral:

Potential moisture ingress into the building envelope, and loss of aesthetic appeal.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2010	\$3,000	Medium

Updated: MAR-09

B2010.01.09 Expansion Control: Exterior Wall Skin*

Expansion joints are provided at periodic intervals in various cladding types for thermal expansion/contraction.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	MAR-09

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

Sealant is provided in construction joints and around exterior windows/doors on exterior elevations of the High River Hospital 2004 addition.

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

Event: Replace Sealant - Hospital Addition

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$3,000	Unassigned

Updated: MAR-09

B2010.01.11 Joint Sealers (caulking): Ext. Wall - Annex & Old EMS**

Sealant is provided in construction joints and around exterior windows/doors on the perimeter of the Annex Building and Old EMS Building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2006	20	MAR-09

Event: Replace Sealant - Annex & Old EMS

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$9,000	Unassigned

Updated: MAR-09

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

Sealant is provided in construction joints and around exterior windows/doors on the perimeter of the Ambulance Garage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	20	MAR-09

Event: Replace Sealant on Ambulance Garage

Concern:

Sealant in construction joints and around exterior doors/windows on the Ambulance Garage perimeter was noted to have failed adhesively, and exhibited a generally cracked and brittle appearance.

Recommendation:

Replace deficient sealant on the Ambulance Garage perimeter.

Consequences of Deferral:

Potential moisture ingress into the building envelope.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$2,000	Medium

Updated: MAR-09

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

Sealant is provided in construction joints and around exterior windows/doors on the perimeter of the High River Hospital.

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

Event: Replace Sealant on Hospital (approx. 1,400 m)

Concern:

Sealant in construction joints and around exterior doors/windows on the Hospital perimeter was noted to have failed adhesively, and exhibited a generally cracked and brittle appearance.

Recommendation:

Replace deficient sealant on the Hospital perimeter.

Consequences of Deferral:

Potential moisture ingress into the building envelope.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$45,000	Medium

Updated: MAR-09

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

Pre-finished metal panels on the exterior of the High River Hospital 2004 addition have a painted finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	15	MAR-09

Event: Repaint Metal Siding - Hospital Addition

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$2,000	Unassigned

Updated: MAR-09

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

Cement plaster surfaces and wood trim on the Annex Building perimeter have a painted finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	15	MAR-09

Event: Repaint Exterior Walls on the Annex (approx. 800 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$20,000	Unassigned

Updated: MAR-09

B2010.01.13 Paints (& Stains): Exterior Wall - Garage & Old EMS**

Painted masonry block walls are provided on the Ambulance Garage and Old EMS Building perimeters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	15	MAR-09

Event: Repaint Exterior Walls of the Garage (approx. 850 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$28,000	Unassigned

Updated: MAR-09

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

Pre-finished metal panels on the exterior of the High River Hospital have a painted finish.

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

Event: Repaint Metal Siding on the Hospital

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

Updated: MAR-09

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

Exterior wall construction for the High River Hospital, its 2004 addition, Ambulance Garage and Old EMS Building is comprised of masonry block.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

B2010.02.05 Wood Framing : Ext. Wall Const.*

Exterior wall construction for the Annex Building is understood to be comprised of wood stud framing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	100	MAR-09

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

The exterior walls of the High River Hospital, its 2004 addition and the Ambulance Garage are assumed to be equipped with vapor retarders and insulation; however construction drawings were not available for review during the assessment. The presence of vapor retarders or air barriers within the exterior walls of the Annex Building and Old EMS Building is considered unlikely.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

B2010.05 Parapets*

Parapet walls on the perimeter of low-slope roof sections for the High River Hospital and 2004 addition are comprised of a continuation of exterior wall construction, clad on outer-facing surfaces with consistent exterior wall finishes, while inner-facing surfaces are clad with a modified bituminous membrane. The parapets are capped with pre-finished metal copings.

A larger parapet wall is situated on the north elevation of the High River Hospital, at the northeast corner of the third floor roof. The parapet wall includes painted metal counter-flashing on its inner-facing wall surface.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	50	MAR-09

Event: Repaint Parapet Wall

Concern:

Excessive peeling of painted finishes was observed on the northeast parapet wall adjacent to the rooftop exit from the High River Hospital mechanical penthouse.

Recommendation:

Repaint the northeast parapet wall.

Consequences of Deferral:

Loss of aesthetic appeal and exposure of unprotected surfaces to exterior elements.

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

Updated: MAR-09

B2010.06 Exterior Louvers, Grilles, and Screens*

Pre-finished metal louvers are provided on the perimeters of the High River Hospital and 2004 addition to support air flow and ventilation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	50	MAR-09

Event: Repaint Exterior Louvers

Concern:

Excessive peeling of painted finishes was observed on exterior louvers on the High River Hospital perimeter.

Recommendation:

Repaint the exterior louvers.

Consequences of Deferral:

Loss of aesthetic appeal and exposure of unprotected surfaces to exterior elements.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$4,000	Medium

Updated: MAR-09

B2010.08 Exterior Balcony Walls and Railings*

The High River Hospital includes a second floor rooftop area which is used as an outdoor patio. An open edge is present at the southwest corner of the patio, where railings have been installed. The railings consist of painted metal support pillars mounted onto an adjoining parapet wall, and include glazed panel inserts and a painted metal pipe handrail.

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

B2010.09 Exterior Soffits*

Pre-finished metal panel soffits are provided where overhangs exist on the High River Hospital perimeter. The canopy structure at the main front entrance of the 2004 addition, as well as the overhang created by metal siding on the Ambulance Garage perimeter, also include pre-finished metal soffits. Painted wood soffits are provided on the perimeters of the Old EMS Building and Annex Building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	MAR-09

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

Exterior windows on the Ambulance Garage perimeter appeared to consist of dual-pane glazing units set in operable metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	40	MAR-09

Event: Replace Exterior Windows (approx. 12 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$17,000	Unassigned

Updated: MAR-09

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

Exterior windows on the High River Hospital 2004 addition are comprised of insulating glazing units set in fixed and anodized aluminum frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	40	MAR-09

Event: Replace Exterior Windows (approx. 45 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$70,000	Unassigned

Updated: MAR-09

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

Exterior windows on the High River Hospital perimeter are comprised of insulating glazing units set in fixed and operable, anodized aluminum frames.

Site representatives reported minor occurrences of exterior window leakage in the past. An exterior wall maintenance program has been established, which has included an investigation of the exterior walls with an infrared camera. No exterior wall repairs have been conducted to date.

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

Event: Replace Exterior Windows (approx. 700 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$1,100,000	Unassigned

Updated: MAR-09

B2020.01.01.05 Wood Windows (Glass & Frame) - Annex & Old EMS**

Operable wood windows with a painted finish and single pane glazing are provided on the Annex Building and Old EMS Building perimeters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	35	MAR-09

Event: Replace Exterior Windows (approx. 120 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$135,000	Unassigned

Updated: MAR-09

B2020.03 Glazed Curtain Wall**

The High River Hospital includes two areas where integral glazing structures are used; one in the lounge area at the northwest corner of the second floor, and the other at the cafeteria dining room at the northwest corner of the main floor. Each glazing structure includes insulating glazing units set in fixed aluminum framework fastened to the building exterior walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1992	40	MAR-09

Event: Replace Sloped Glazing (approx. 120 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2033	\$200,000	Unassigned

Updated: MAR-09

B2030.01.01 Aluminum-Framed Storefronts: Doors**

An exterior entry door on the south elevation of the Annex Building is comprised of a single glazed pivot unit with insulating glass set in an aluminum frame.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	30	MAR-09

Event: Replace Exterior Door

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$4,000	Unassigned

Updated: MAR-09

B2030.01.06 Automatic Entrance Doors**

Automated (motion sensor-activated) sliding entry doors are situated at the main south entrance to the High River Hospital 2004 addition, as well as along the corridor leading to the Smoke/Day Lounge on the building's second floor. The doors consist of insulating glazing units set in fixed and anodized aluminum framing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	30	MAR-09

Event: Replace Automatic Doors (1 Double Door, 2 Single Doors)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$68,000	Unassigned

Updated: MAR-09

B2030.01.10 Wood Entrance Door**

The main east entrance to the Annex Building is comprised of a painted, solid core wood unit with a glazing insert, set in a painted metal frame with matching sidelights.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	30	MAR-09

Event: Replace Exterior Door - Annex

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

Updated: MAR-09

B2030.02 Exterior Utility Doors - Addition**

Exterior utility doors on the 2004 addition of the High River Hospital are comprised of single and dual, painted and insulated metal pivot units set in painted metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	40	MAR-09

Event: Replace Utility Doors - Addition

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$4,000	Unassigned

Updated: MAR-09

B2030.02 Exterior Utility Doors - Garage**

Exterior utility doors on the Ambulance Garage perimeter are comprised of single painted and insulated metal pivot units set in painted metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	40	MAR-09

Event: Replace Utility Doors - garage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$8,000	Unassigned

Updated: MAR-09

B2030.02 Exterior Utility Doors - Hospital**

Exterior utility doors on the High River Hospital exterior are comprised of single and dual, painted and insulated metal pivot units set in painted metal frames.

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

Event: Replace Utility Doors (approx. 12 Doors) - Hospital Building

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$16,000	Unassigned

Updated: MAR-09

B2030.02 Exterior Utility Doors - Old EMS**

Exterior utility doors on the Old EMS Building perimeter are comprised of single solid core wood pivot units with a painted finish, set in painted wood frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	40	MAR-09

Event: Replace Utility Doors - old EMS

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

Updated: MAR-09

B2030.03 Large Exterior Special Doors (Overhead)*

Pre-finished, sectional metal panel overhead doors are provided on either side of the ambulance bay at the southeast corner of the High River Hospital 2004 addition, and in the receiving area of the original section. The Ambulance Garage includes three similar overhead doors on its south elevation. The Old EMS Building includes two overhead doors on its south elevation; two painted sectional wood doors and one pre-finished sectional metal door, all of which have glazed inserts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	MAR-09

B3010.01 Deck Vapor Retarder and Insulation*

Roofing assemblies for the site buildings are assumed to include a vapor retarder and insulation; however construction drawings were not available for review during the assessment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	MAR-09

B3010.02.01.01 Asphalt Shingles**

The pitched roof of the Annex Building includes asphalt shingle roofing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	25	MAR-09

Event: Replace Asphalt Shingles (approx. 385 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$20,000	Unassigned

Updated: MAR-09

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

The low-slope roof of the Ambulance Garage is reported to include a bituminous built-up roof membrane assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	25	MAR-09

Event: Replace Roofing (approx. 280 sq. m) - Garage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$67,000	Unassigned

Updated: MAR-09

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

The low-slope roof of the Old EMS Building is reported to include a bituminous built-up roof membrane assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	25	MAR-09

Event: Replace Roofing (approx. 250 sq. m) - old EMS

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$60,000	Unassigned

Updated: MAR-09

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

All low-slope roof surfaces on the High River Hospital 2004 addition are equipped with a modified bitumen membrane assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	25	MAR-09

Event: Replace Roofing (approx. 550 sq. m) - Hospital Addition

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$118,000	Unassigned

Updated: MAR-09

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

All low-slope roof surfaces on the High River Hospital are equipped with a modified bitumen membrane assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	25	MAR-09

Event: Replace Roofing (approx. 5,400 sq. m) - Hospital

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$1,150,000	Unassigned

Updated: MAR-09

B3010.07 Sheet Metal Roofing**

The pitched roof of the Smoke/Day Lounge on the second floor of the High River Hospital has pre-finished metal roofing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	40	MAR-09

Event: Replace Sheet Metal Roofing

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$6,000	Unassigned

Updated: MAR-09

B3010.08.02 Metal Gutters and Downspouts - Addition**

Painted metal gutters collect storm water runoff from the pitched roof above the Smoke/Day Lounge on the second floor of the High River Hospital. The gutters connect with painted metal downspouts, which discharge onto large roof surfaces below.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	30	MAR-09

Event: Replace Metal Gutters - Hospital Addition

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$1,000	Unassigned

Updated: MAR-09

B3010.08.02 Metal Gutters and Downspouts - Annex**

Painted metal gutters collect storm water runoff from the pitched roof of the Annex Building. The gutters connect with painted metal downspouts, which discharge onto landscaped surfaces at ground level.

Minor leakage was observed at connecting joints of metal gutter along several elevations of the Annex Building.

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

Event: Replace Metal Gutters - Annex

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$2,000	Unassigned

Updated: MAR-09

B3010.08.02 Metal Gutters and Downspouts - Old EMS**

A painted metal gutter also collects storm water runoff from the Old EMS Building roof, which connects and discharges onto paved surfaces at ground level via painted downspout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	MAR-09

Event: Replace Metal Gutters - old EMS

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$1,000	Unassigned

Updated: MAR-09

B3020.01 Skylights**

A skylight comprised of sloped, insulating glazing units set in fixed aluminum framework is situated above the second floor of the High River Hospital at its southwest corner.

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

Event: Replace Skylights (approx. 8 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$12,000	Unassigned

Updated: MAR-09

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

Wall-mounted, painted metal ladders provide access to various roof sections on the High River Hospital and 2004 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	MAR-09

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

Interior fixed partitions within the site buildings are comprised of masonry block, metal or wood stud framing.

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

Event: Repair Masonry Wall Step-Cracking**Concern:**

Step cracking in masonry block walls throughout the High River Hospital was observed during the assessment, as a result of the reported settlement as previously discussed under A1030 - Slab on Grade.

Recommendation:

Repair and seal step cracking in masonry block walls as necessary in conjunction with the future slab repair efforts.

Consequences of Deferral:

Ongoing crack propagation and separation of masonry block, potentially resulting in localized wall failure.

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

Updated: MAR-09

C1010.03 Interior Operable Folding Panel Partitions**

An operable, metal security gate is provided at the entrance to the gift shop on the ground floor of the High River Hospital. A folding wood panel partition also serves as a divider between the Occupational and Recreational Therapy rooms on the second floor of the facility.

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

Event: Replace Operable Partitions (approx. 45 sq. m)

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

Updated: MAR-09

C1010.05 Interior Windows*

Interior windows in the site buildings are generally fixed units set in painted metal frames with wired or tempered single-pane glass. An operable metal pass-through window is provided at the server for the staff cafeteria on the main floor of the High River Hospital.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	80	MAR-09

C1010.07 Interior Partition Firestopping*

Ductwork or conduit penetrations through fire separations in the site buildings are generally sealed where voids are present.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	MAR-09

C1020.01 Interior Swinging Doors (& Hardware)*

Interior swinging doors are a combination of varnished solid core wood or painted hollow metal pivot units set in painted metal frames. Wood frames are provided in the Annex Building. Standard door hardware includes lever or knob-type door handles, door closers, kick plates and lock sets where required. Several interior doors in the Trauma/Emergency/Day Surgery rooms in the High River Hospital are accessed via automated (push button-activated) pivot doors with consistent construction to the remaining doors in the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	40	MAR-09

Event: Repaint Interior Swinging Doors

Concern:

Scratched, scuffed and damaged finishes were observed on several interior swinging metal doors on the High River Hospital interior.

Recommendation:

Repaint the interior swinging doors where damaged finishes exist.

Consequences of Deferral:

Loss of aesthetic appeal.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2010	\$6,000	Low

Updated: MAR-09

C1020.02 Interior Entrance Doors*

Interior entrance doors at the main entrance vestibule of the High River Hospital 2004 addition include automated (motion sensor-activated) sliding entry doors consisting of insulating glazing units set in fixed aluminum framing. Double interior entrance doors also connect with the ambulance bay of this facility and include automated (motion sensor-activated) pivot units comprised of painted hollow metal in a painted metal frame.

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

C1020.03 Interior Fire Doors*

Interior fire doors at fire separations consist of painted metal pivot units set in painted metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	MAR-09

C1020.04 Interior Sliding and Folding Doors*

Interior sliding doors comprised of single pane glass set in aluminum frames are provided in the cart dispatch/assembly area on the main floor of the High River Hospital. Wood bifold closet doors are also typically provided in patient rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	MAR-09

C1030.01 Visual Display Boards**

Wall-mounted white boards and cork boards are provided in corridors, nursing stations, office/meeting rooms and examination rooms in the High River Hospital.

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

Event: Replace Visual Display Boards (approx. 20 White Boards & 40 Cork Boards)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$50,000	Unassigned

Updated: MAR-09

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

Floor-mounted, painted wood washroom stall partitions are provided in multi-user washrooms in the Annex Building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	30	MAR-09

Event: Replace Washroom Stall Partitions (approx. 6 Stalls) - Annex

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

Updated: MAR-09

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

Floor-mounted, pre-finished metal washroom and shower stall partitions are provided in the staff washroom of the Ambulance Garage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	MAR-09

Event: Replace Washroom Stall Partitions - Garage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$5,000	Unassigned

Updated: MAR-09

C1030.02 Fabricated Compartments(Toilets>Showers) - Hospital**

Floor-mounted, pre-finished metal washroom stall partitions are provided in staff change rooms and patient change cubicles in the High River Hospital.

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

Event: Replace Washroom Stall Partitions (approx. 12 Stalls) - Hospital

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

Updated: MAR-09

C1030.05 Wall and Corner Guards*

Wall and corner guards consisting of plastic or stainless steel are provided in corridors throughout the site buildings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	MAR-09

C1030.06 Handrails*

Interior railings in various corridors of the site buildings are comprised of wall-mounted wood or painted metal pipe.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	MAR-09

C1030.08 Interior Identifying Devices*

Metal and lamicoid interior identifying signage is posted in corridors and on most interior swinging doors in the site buildings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	MAR-09

C1030.10 Lockers**

Pre-finished metal lockers are provided in the staff change rooms and maintenance shop areas of the High River Hospital.

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

Event: Replace Lockers (approx. 75 Lockers)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$90,000	Unassigned

Updated: MAR-09

C1030.12 Storage Shelving*

Rolling (track-mounted) wood and metal shelving units are provided in the medical records room of the High River Hospital. Other storage rooms and maintenance closets within the site buildings include painted metal or wood shelving.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	MAR-09

C1030.14 Toilet, Bath, and Laundry Accessories*

Washrooms are typically equipped with wall-mounted grab bars, mirrors, and toilet paper/soap/paper towel dispensers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	MAR-09

C2010 Stair Construction*

A steel frame staircase with metal grille treads and landings provides access between the main and upper level mechanical room within the High River Hospital. Common area stairwells generally include concrete staircases, while painted wood stairs lead to the mezzanine floor in the garbage room. Two sets of wood staircases provide access between floors in the Annex Building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

C2020.05 Resilient Stair Finishes**

Common area staircases in the High River Hospital include resilient sheet flooring on treads, risers and landings.

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

Event: **Replace Resilient Stair Flooring (approx. 225 sq. m)**

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

Updated: MAR-09

C2020.06 Carpet Stair Finishes**

Both staircases in the Annex Building have carpeted treads, risers and landings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	10	MAR-09

Event: **Replace Stair Carpeting**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$8,000	Unassigned

Updated: MAR-09

C2020.08 Stair Railings and Balustrades*

Stair railings are a combination of base and wall-mounted, painted metal pipe in the High River Hospital. Wall-mounted maple railings are provided in the Annex Building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	MAR-09

C2020.10 Stair Painting*

The metal staircase providing access between floors in the main mechanical room of the High River Hospital includes exposed and painted metal surfaces.

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

C2030.01 Ramp Construction*

Two ramps of concrete construction are situated in the corridor leading to the Smoke/Day Lounge on the second floor of the High River Hospital. The ramps provide access to outdoor patio surfaces via automated exterior doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

C2030.02 Ramp Finishes*

Both ramps on the second floor of the High River Hospital are finished with resilient sheet flooring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	MAR-09

C2030.03 Ramp Railings*

Wall-mounted, painted wood handrails are provided along each ramp in the High River Hospital.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	MAR-09

C3010.02 Wall Paneling - Annex**

Wood paneling is provided in meeting rooms within the Annex Building, along with wood panel wainscoting in stairwells.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	30	MAR-09

Event: Replace Wall Paneling (approx. 150 sq. m) - Annex

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$16,000	Unassigned

Updated: MAR-09

C3010.02 Wall Paneling - Hospital**

Wood paneling is provided on a staircase wall adjoining the second floor dining room in the High River Hospital. The Chapel in the Recreational Therapy room on the building's second floor also has wood panel wall finishes.

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

Event: Replace Wall Paneling (approx. 100 sq. m) - Hospital

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

Updated: MAR-09

C3010.03 Plaster Wall Finishes (Unpainted)*

Most interior wall surfaces in the Annex Building are finished with plaster finishes on metal lath.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	60	MAR-09

C3010.04 Gypsum Board Wall Finishes (Unpainted)*

The majority of interior stud wall partitions in the High River Hospital, its 2004 addition and the Ambulance Garage are finished with gypsum board.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	60	MAR-09

C3010.06 Tile Wall Finishes - Garage**

Ceramic tile wall finishes are provided in the washroom of the Ambulance Garage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	40	MAR-09

Event: Replace Tile Wall Finishes - Garage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$7,000	Unassigned

Updated: MAR-09

C3010.06 Tile Wall Finishes - Hospital - 1982**

Ceramic tile wall finishes are provided in trauma rooms, treatment/examination rooms and cart dispatch/assembly area on the main floor of the High River Hospital. Tub rooms and shower rooms on the second floor of this facility also have ceramic tile walls.

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

Event: Replace Ceramic Tile Wall Finishes (approx. 650 sq. m) - Hospital: 1982

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$209,000	Unassigned

Updated: MAR-09

C3010.06 Tile Wall Finishes - Hospital - 2004**

Ceramic tile wall finishes are provided in washrooms within the renovated Imaging ward on the main floor of the High River Hospital.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	40	MAR-09

Event: Replace Ceramic Tile Wall Finishes - Hospital: 2004

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$4,000	Unassigned

Updated: MAR-09

C3010.07 Terrazzo Wall Finishes*

An epoxy wall finish appeared to be applied to patient room shower stalls in the High River Hospital, including tub/shower rooms on the second and third floors.

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

C3010.11 Interior Wall Painting*

Masonry block, gypsum board and plaster wall surfaces in the site buildings have a painted finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	10	MAR-09

Event: Repaint Interior Walls (approx. 2,400 sq. m)

Concern:

Interior walls within the site buildings were exhibiting stained, worn and faded paint finishes in random locations, including most interior wall surfaces within the Ambulance Garage bay area.

Recommendation:

Repaint interior walls where deficient finishes exist.

Consequences of Deferral:

Loss of aesthetic appeal.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2010	\$60,000	Low

Updated: MAR-09

C3010.12 Wall Coverings*

Fabric wall coverings are provided in the staff dining room, on the main floor of the High River Hospital.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2008	15	MAR-09

C3020.01.01 Epoxy Concrete Floor Finishes*

Epoxy floor finishes are provided in the wash bay of the cart dispatch assembly area, patient room shower stalls and common tub/shower rooms in the High River Hospital.

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

C3020.01.02 Paint Concrete Floor Finishes*

Mechanical and utility rooms in the site buildings are typically finished with painted/sealed concrete floors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	10	MAR-09

Event: Repaint Concrete Floors (approx. 600 sq. m)

Concern:

Painted concrete floor finishes in mechanical and utility rooms were exhibiting worn, faded and peeling surfaces in localized areas, most noticeably in the Old EMS Building and Annex Building.

Recommendation:

Repaint concrete floors where deficiencies exist.

Consequences of Deferral:

Loss of aesthetic appeal and exposure of unprotected surfaces.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2010	\$30,000	Low

Updated: MAR-09

C3020.02 Tile Floor Finishes - Addition**

Ceramic tile floor finishes are provided in the main entrance vestibule of the High River Hospital 2004 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	50	MAR-09

Event: Replace Ceramic Tile Flooring - Hospital Addition

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2054	\$3,000	Unassigned

Updated: MAR-09

C3020.02 Tile Floor Finishes - Annex**

Quarry tile flooring finishes are provided in a storage room on the Annex Building's basement level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	50	MAR-09

Event: Replace Quarry Tile Flooring - Annex

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

Updated: MAR-09

C3020.02 Tile Floor Finishes - Garage**

Ceramic tile flooring is provided in the washroom of the Ambulance Garage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	50	MAR-09

Event: Replace Ceramic Tile Flooring - Garage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$2,000	Unassigned

Updated: MAR-09

C3020.03 Terrazzo Floor Finishes*

Terrazzo flooring is provided in a washroom on the main floor of the Annex Building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	75	MAR-09

C3020.04 Wood Flooring**

A meeting room on the main level of the Annex Building is finished with hardwood flooring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1955	30	MAR-09

Event: Refinish Wood Floor

Concern:

Hardwood flooring in a main floor meeting room in the Annex Building was exhibiting worn and scuffed surfaces.

Recommendation:

Refinish the hardwood flooring in the Annex Building.

Consequences of Deferral:

Loss of aesthetic appeal and ongoing damage to hardwood flooring from pedestrian traffic.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2010	\$6,000	Low

Updated: MAR-09

Event: Replace Hardwood Flooring (approx. 60 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$19,000	Unassigned

Updated: MAR-09

C3020.07 Resilient Flooring - Annex**

Vinyl tile flooring is provided in kitchen areas, entrance vestibules, mechanical rooms and several washrooms in the Annex Building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1955	20	MAR-09

Event: Replace Vinyl Tile Flooring - Annex

Concern:

Vinyl tile flooring throughout the Annex Building interior was observed to be worn and lifting in random locations.

Recommendation:

Replace the vinyl tile flooring throughout the Annex Building interior.

Consequences of Deferral:

Loss of aesthetic appeal and ongoing deterioration resulting in the development of potential tripping hazards.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$9,000	Medium

Updated: MAR-09

C3020.07 Resilient Flooring - Garage**

Storage rooms along the east elevation of the Ambulance Garage are finished with resilient sheet flooring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	20	MAR-09

Event: Replace Resilient Flooring - Garage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$6,000	Unassigned

Updated: MAR-09

C3020.07 Resilient Flooring - Hospital - 1982**

Resilient sheet flooring is provided in corridors, patient rooms, gathering/dining rooms, washrooms and support/service rooms in the High River Hospital.

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

Event: Replace Resilient Flooring (approx. 7,500 sq. m) - Hospital: 1982

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$780,000	Unassigned

Updated: MAR-09

C3020.07 Resilient Flooring - Hospital - 2004**

Corridors, offices, treatment and examination rooms, washrooms and gathering areas within the High River Hospital 2004 addition are finished with resilient sheet flooring. The imaging ward and adjoining corridors and examination/trauma rooms in the original portion of the facility are also finished with resilient sheet flooring, renovated in 2004 along with the construction of the building addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	2004	20	MAR-09

Event: Repair Resilient Flooring - 2004

Concern:

Site personnel reported seam separation and poor finishing techniques on resilient floor surfaces in renovated areas within the High River Hospital.

Recommendation:

Conduct flooring repairs and modifications as necessary in areas where deficient flooring is present.

Consequences of Deferral:

Potential development of tripping hazards pose a risk to hospital staff and patients.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$8,000	Medium

Updated: MAR-09

Event: Replace Resilient Flooring (approx. 1,400 sq. m) - 2004

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$146,000	Unassigned

Updated: MAR-09

C3020.08 Carpet Flooring - Annex**

Corridors, offices and meeting rooms in the Annex Building are finished with carpet flooring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	15	MAR-09

Event: Replace Carpet Flooring (approx. 650 sq. m) - Annex

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

Updated: MAR-09

C3020.08 Carpet Flooring - Garage**

The Lecture & Training room and adjoining offices in the Ambulance Garage are finished with carpet flooring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	15	MAR-09

Event: Replace Carpet Flooring - Garage

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

Updated: MAR-09

C3020.08 Carpet Flooring - Hospital - 1982**

Original carpet flooring is included in the medical records storage room of the High River Hospital.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	15	MAR-09

Event: Replace Carpet Flooring - Hospital: 1982

Concern:

Carpet flooring in the medical records storage room on the main floor of the High River Hospital was observed to be heavily worn and is understood to be original to the building's construction in 1982.

Recommendation:

Replace the carpet flooring in the medical records storage room.

Consequences of Deferral:

Loss of aesthetic appeal.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$4,000	Low

Updated: MAR-09

C3020.08 Carpet Flooring - Hospital - 2004**

Carpet flooring is provided in offices/meeting rooms on all floors of the High River Hospital.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	15	MAR-09

Event: Replace Carpet Flooring (approx. 900 sq. m) - Hospital: 2004

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$63,000	Unassigned

Updated: MAR-09

C3020.11 Floor Painting*

Painted line markings to designate ambulance parking areas are provided on the concrete floor of the Ambulance Garage.

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

Event: Repaint Line Markings - Garage

Concern:

Painted line markings in the Ambulance Garage parking bay was noted to be worn and faded.

Recommendation:

Repaint line markings in the Ambulance Garage parking bay area.

Consequences of Deferral:

Loss of aesthetic appeal and poor parking control.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$1,000	Low

Updated: MAR-09

C3030.02 Ceiling Paneling (Wood)*

Wood panel ceiling finishes are provided above the staff cafeteria servery on the main floor of the High River Hospital.

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

C3030.03 Plaster Ceiling Finishes (Unpainted)*

Ceilings in the Annex Building have lath and plaster finishes.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	60	MAR-09

C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*

Gypsum board ceilings are provided in the Cart Dispatch/Assembly area in the High River Hospital, including examination/trauma rooms, patient and common washrooms, and dining areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	60	MAR-09

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

Suspended T-bar grid ceilings with inlaid acoustic panels are provided in storage rooms and the Training & Lecture room and adjoining offices in the Ambulance Garage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	25	MAR-09

Event: Replace Suspended Ceilings - Garage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$6,000	Unassigned

Updated: MAR-09

C3030.06 Acoustic Ceiling Treatment (Susp.T-Bar) - Hospital - 1982**

Corridors, patient rooms and support/service rooms in the High River Hospital have suspended T-bar grid ceilings with inlaid acoustic panels.

Several stained ceiling panels were observed in random locations throughout the facility due to previous plumbing leaks that have since been addressed.

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

Event: Replace Suspended Ceilings (approx. 7,550 sq. m) - Hospital: 1982

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$375,000	Unassigned

Updated: MAR-09

C3030.06 Acoustic Ceiling Treatment (Susp.T-Bar) - Hospital - 2004**

Suspended T-bar grid ceilings with inlaid acoustic panels are provided in corridors, gathering/assembly areas, offices, treatment and examination rooms in the High River Hospital 2004 addition, including the Imaging ward and adjoining corridors in the original building, renovated along with the construction of the building addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	25	MAR-09

Event: Replace Suspended Ceilings (approx. 2,300 sq. m) - Hospital: 2004

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$115,000	Unassigned

Updated: MAR-09

C3030.07 Interior Ceiling Painting*

The exposed soffit of suspended structural floors, gypsum board or plaster ceilings in the site buildings all have a painted or stippled finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	MAR-09

D1010.01.02 Hydraulic Passenger Elevators**

The High River Hospital includes four hydraulic passenger elevators which service floors one through three in the facility. The Montgomery-model elevators each have a carrying capacity of 4,000 lbs.

Site personnel reported that elevator cylinders were replaced over the past few years.

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

Event: Refurbish Elevator Controls (4 Elevators)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$380,000	Unassigned

Updated: MAR-09

D1010.02 Lifts**

The Annex Building includes two hydraulic wheelchair lifts, each of which were manufactured by Concord and have carrying capacities of 750 lbs. The south lift provides service between the building exterior and basement level, while a central lift provides service between the main floor and basement level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	25	MAR-09

Event: Refurbish Lifts (2 Lifts)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$60,000	Unassigned

Updated: MAR-09

S4 MECHANICAL

D2010.04 Sinks** - Annex Building

Approximately three stainless steel kitchen sinks are located throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	30	MAR-09

Event: Replace 3 kitchen sinks

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

Updated: MAR-09

D2010.04 Sinks** - Main Building

Approximately 30 stainless steel kitchen/lab sinks and eight fiberglass service sinks are located throughout the building.

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

Event: Replace miscellaneous sinks

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$60,000	Unassigned

Updated: MAR-09

D2010.05 Showers** - Main Building

There are approximately 41 shower stalls located in patient rooms.

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

Event: Replace 41 showers

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

Updated: MAR-09

D2010.05 Showers - Ambulance Bay**

There is a shower stall installed in the Ambulance Bay washroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	MAR-09

Event: Replace a shower stall

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$1,000	Unassigned

Updated: MAR-09

D2010.06 Bathtubs - Main Building**

There are approximately three standard enameled steel bath tubs and three jet tubs provided in the building.

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

Event: Replace bathtubs

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$40,000	Unassigned

Updated: MAR-09

D2010.10 Washroom Fixtures (WC, Lav, Urn) - Ambulance Bay**

There are one vitreous china water closet and vitreous china lavatory provided in the washroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	35	MAR-09

Event: Replace washroom fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$4,000	Unassigned

Updated: MAR-09

D2010.10 Washroom Fixtures (WC, Lav, Urn) - Annex Building**

There are approximately nine vitreous china water closets and nine vitreous china lavatories provided in the washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	35	MAR-09

Event: Replace washroom fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$34,000	Unassigned

Updated: MAR-09

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

There are approximately 110 vitreous china water closets and 110 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 washroom fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$416,000	Unassigned

Updated: MAR-09

D2020.01.01 Pipes and Tubes: Domestic Water* - Annex Building

Domestic piping is generally copper and original to the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	40	MAR-09

D2020.01.01 Pipes and Tubes: Domestic Water* - Main Building

Domestic piping is generally copper and original to the building.

<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 - Annex Building**

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	1955	40	MAR-09

Event: Replace domestic water valves

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$7,000	Unassigned

Updated: MAR-09

D2020.01.02 Valves: Domestic Water - Main Building**

There are isolation and mixing 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 25 valves

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$33,000	Unassigned

Updated: MAR-09

D2020.01.03 Piping Specialties (Backflow Preventors) - Main Building**

There are backflow preventors on the main supply to the main building, boiler feed and the wet pipe sprinkler system. Backflow preventors have been inspected annually.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	20	MAR-09

Event: Replace 4 backflow preventors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$20,000	Unassigned

Updated: MAR-09

D2020.02.02 Plumbing Pumps: Domestic Water - Ambulance Bay**

A domestic hot water recirculation pump is provided for Ambulance Bay.

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

Event: Replace DHWR pump

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

Updated: MAR-09

D2020.02.02 Plumbing Pumps: Domestic Water - Annex Building**

A domestic hot water recirculation pump is provided for Annex building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	20	MAR-09

Event: Replace DHWR pump

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$1,000	Unassigned

Updated: MAR-09

D2020.02.02 Plumbing Pumps: Domestic Water - Main Building**

Two domestic hot water recirculation pumps are provided for two tanks located in the boiler room. A booster pump (7.5HP) serves domestic cold water system.

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

Event: Replace 2 DWHR pumps and a booster pump

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$17,000	Unassigned

Updated: MAR-09

D2020.02.04 Domestic Water Conditioning Equipment - Main Building**

There is a water softening system with two tanks in place.

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

Event: Replace the water softener system

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

Updated: MAR-09

D2020.02.06 Domestic Water Heaters - Ambulance Bay**

There is a natural gas-fired Rheem domestic water heater provided in Ambulance Bay.

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

Event: Replace domestic water heater

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$3,000	Unassigned

Updated: MAR-09

D2020.02.06 Domestic Water Heaters - Annex Building**

There is a 40 USG natural gas-fired domestic hot water heater provided in Annex building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1991	20	MAR-09

Event: Replace domestic water heater

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

Updated: MAR-09

D2020.02.06 Domestic Water Heaters - Main Building**

Domestic hot water in the main building is provided by two domestic hot water tanks incorporating two steam-to-water shell-and-tube heat exchangers located in the boiler room.

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

Event: Replace two domestic water tanks w/t heat exchangers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$64,000	Unassigned

Updated: MAR-09

D2020.02.06 Domestic Water Heaters - Old EMS**

There is a natural gas-fired Rheem domestic water heater provided in the old EMS building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	20	MAR-09

Event: Replace domestic water heater

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

Updated: MAR-09

D2020.03 Water Supply Insulation: Domestic*

Insulation on water supply is original to the construction of all four buildings.

<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*

The waste water and vent piping was observed to be cast iron in all four buildings.

<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* - Ambulance Bay

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	1985	50	MAR-09

D2040.01 Rain Water Drainage Piping Systems* - Main Building

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* - Ambulance Bay

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	1985	40	MAR-09

D2040.02.04 Roof Drains* - Annex Building

Eavestroughs catch rain and snow run-off from the slop roof on Annex building and carry it to the downspouts which channel it onto the Site at grade level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	40	MAR-09

D2040.02.04 Roof Drains* - Main Building

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**

Oxygen gas system is provided by VitalAire.

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

Event: Replace oxygen gas systems

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$107,000	Unassigned

Updated: MAR-09

D2090.13 Vacuum Systems (Medical)**

The main building medical vacuum system is provided by Beacon Medical Products.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2002	30	MAR-09

Event: Replace medical vacuum systems

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2032	\$50,000	Unassigned

Updated: MAR-09

D2090.16 Medical Air System*

The main building medial air system is provided by Beacon Medical Products.

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

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

There is a diesel storage tank located in the generator room which can fuel the emergency generator.

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

D3010.02 Gas Supply Systems* - Ambulance Bay

Natural gas piping feeds the furnace and domestic water heater.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	60	MAR-09

D3010.02 Gas Supply Systems* - Annex Building

Natural gas piping feeds the steam boiler, furnaces and domestic water heater.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	60	MAR-09

D3010.02 Gas Supply Systems* - Main Building

Natural gas piping feeds the central heating boilers, make-up air units.

<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 - Annex Building**

A natural gas-fired steam boiler manufactured by Viking Boilers supplies hot steam for Annex building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1955	35	MAR-09

Event: Replace original steam boiler

Concern:

Original steam boiler in Annex building is obsolete and needs a lot of maintenance. The maintenance cost is high and replacement parts are difficult to obtain.

Recommendation:

Replace original boiler with new.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$47,000	Medium

Updated: MAR-09

D3020.01.01 Heating Boilers & Accessories: Steam - Main Building**

There are two Cleaver Brooks gas-fired steam boilers located in the boiler room. High pressure steam boiler #4 with a capacity of 2,000 MBH provides hot steam for hospital process and laundry facilities. Low pressure steam boiler #5 with a capacity of 4,000 MBH supplies domestic hot water tanks.

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

Event: Replace two steam boilers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$120,000	Unassigned

Updated: MAR-09

D3020.01.02 Feedwater Equipment* - Main Building

A boiler feedwater system is provided in the boiler room serving two steam boilers.

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

D3020.01.03 Chimneys (&Comb. Air) : Steam Boilers - Annex Building**

Boiler flue extends through a traditional masonry chimney on the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1955	35	MAR-09

Event: Intstall new chimney

Concern:

The original chimney for steam boiler in Annex building has passed its service life.

Recommendation:

New chimney should be installed at the time of the steam boiler replacement.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$10,000	Low

Updated: MAR-09

D3020.01.03 Chimneys (&Comb. Air) : Steam Boilers - Main Building**

Steam boiler flues extend through the roof.

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

Event: Replace the chimney for steam boilers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$10,000	Unassigned

Updated: MAR-09

D3020.01.04 Water Treatment: Steam Boilers* - Annex Building

The chemical treatment equipment is provided for steam boiler system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	35	MAR-09

D3020.01.04 Water Treatment: Steam Boilers* - Main Building

Water softener and chemical treatment equipment is provided for steam boiler system.

<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. - Main Building**

There are three 5,000 Mbh Cleaver Brooks hot water boilers that supply the building hydronic heating system.

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

Event: Replace three 5,000 MBH hot water boilers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$499,000	Unassigned

Updated: MAR-09

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

Boiler flues extend through the roof.

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

Event: Replace two chimneys for hot water boilers

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

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

D3020.03.01 Furnaces - Ambulance Bay and Old EMS**

There is one gas-fired furnaces provided in Ambulance Bay. Two furnaces heat old EMS building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	25	MAR-09

Event: Replace three furnaces

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

Updated: MAR-09

D3020.03.01 Furnaces - Annex Building**

There are five gas-fired furnaces provided in Annex building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	25	MAR-09

Event: Replace five furnaces

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$21,000	Unassigned

Updated: MAR-09

D3020.03.02 Chimneys (&Comb. Air): Furnace* - Ambulance Bay and Old EMS

Furnace flue extends through the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	25	MAR-09

D3020.03.02 Chimneys (&Comb. Air): Furnace* - Annex Building

Furnace flue extends through the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	25	MAR-09

D3020.04.03 Fuel-Fired Unit Heaters - Ambulance Bay**

There are two natural gas-fired suspended unit heaters located in the Ambulance Bay garage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	MAR-09

Event: Replace two fuel-fired unit heaters

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$8,000	Unassigned

Updated: MAR-09

D3020.04.03 Fuel-Fired Unit Heaters - Old EMS**

There is a natural gas-fired suspended unit heater located in the old EMS building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	MAR-09

Event: Replace fuel-fired unit heater

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$4,000	Unassigned

Updated: MAR-09

D3020.04.04 Chimney (&Comb.Air):Fuel-Fired Heater*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	MAR-09

D3030.04 Rotary-Screw Water Chillers - Main Building**

There are two roof-top Trane Series R 150 ton air-cooled helical-rotary liquid chillers providing chilled water to the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2002	25	MAR-09

Event: Replace two air-cooled liquid chillers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2027	\$400,000	Unassigned

Updated: MAR-09

D3040.01.01 Air Handling Units: Air Distribution - Main Building**

There are approximately five air handling units located throughout the building.
 F-1 supplies the second and third floor Patient Care areas. It is located in the mechanical penthouse, and has a hot water coil, chilled water coil, filter section, mixing section, supply and return air fans.
 F-4 supplies the first floor original section. It is located in the first floor mechanical room, and has a hot water coil, chilled water coil, filter section, mixing section, supply and return air fans.
 F-7 supplies the first floor mechanical room, and has a hot water coil, filter section and supply air fan.
 AS-3 supplies fresh air to OR area and is located in the first floor mechanical room.
 AS-6 supplies fresh air to the ambulance garage in the main building.

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

Event: Replace five air handling units

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$267,000	Unassigned

Updated: MAR-09

D3040.01.04 Ducts: Air Distribution* - Annex Building

Air duct connects furnaces to supply grilles throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	50	MAR-09

D3040.01.04 Ducts: Air Distribution* - Main Building

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) - Main Building**

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 80 VAV boxes

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

Updated: MAR-09

D3040.01.07 Air Outlets & Inlets:Air Distribution* - Ambulance Bay

There are inlet and outlet grills on all openings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	MAR-09

D3040.01.07 Air Outlets & Inlets:Air Distribution* - Annex Building

There are inlet and outlet grills on all openings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	30	MAR-09

D3040.01.07 Air Outlets & Inlets:Air Distribution* - Main Building

There are inlet and outlet diffusers and grills on all openings.

<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 - Annex Building**

The low pressure steam piping system is insulated and where visible, the piping appeared to be steel. Steam trap and condensate pump are provided on steam system. Steam system connects to steam-to-water heat exchanger for hot water heating system in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	40	MAR-09

Event: Replace steam distribution system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$17,000	Unassigned

Updated: MAR-09

D3040.02 Steam Distribution Systems: Piping/Pumps - Main Building**

The low pressure and high pressure steam piping systems are insulated and where visible, the piping appeared to be steel. Steam traps and condensate pumps are provided on steam system. Steam system connects to steam-to-water heat exchanger for domestic and process water system in the main building.

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

Event: Replace steam distribution system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$38,000	Unassigned

Updated: MAR-09

D3040.03.01 Hot Water Distribution Systems - Annex Building**

Heating hot water is distributed to radiation heaters throughout Annex building from a steam-to-water shell-and-tube heat exchanger.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	40	MAR-09

Event: Replace hot water distribution system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$90,000	Unassigned

Updated: MAR-09

D3040.03.01 Hot Water Distribution Systems - Main Building**

Heating hot water is distributed to radiation heaters, heat exchangers, unit heaters and reheat coils. Circulation pumps are located in the boiler room and include primary hot water pumps, radiation pumps and 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	\$786,000	Unassigned

Updated: MAR-09

D3040.03.02 Chilled Water Distribution Systems - Main Building**

Chilled water distribution system is original to the building and includes two chilled water 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	\$307,000	Unassigned

Updated: MAR-09

D3040.04.01 Fans: Exhaust - Main Building**

There are approximately 25 rooftop and indoor 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 25 exhaust fans

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$97,000	Unassigned

Updated: MAR-09

D3040.04.03 Ducts: Exhaust* - Main Building

Exhaust ductwork connected with exhaust fans is provided above the ceiling.

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

D3040.04.05 Air Outlets and Inlets: Exhaust* - Main Building

Ceiling or sidewall mounted grilles serve as exhaust air inlets.

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

D3040.05 Heat Exchangers - Annex Building**

There is a steam-to-water shell-and-tube heat exchanger provided for radiation heating in Annex building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	30	MAR-09

Event: Replace heat exchanger in Annex building

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

Updated: MAR-09

D3040.05 Heat Exchangers - Main Building**

There are two hot water-to-glycol shell-and-tube heat exchangers for the heating loop located in the boiler room.

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

Event: Replace 2 heat exchangers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$36,000	Unassigned

Updated: MAR-09

D3050.01.02 Packaged Rooftop Air Conditioning Units (& Heating Units) - Main Building Addition**

A roof-top mounted heating ventilation and air conditioning unit supplies the 2004 addition located on the south portion of the building. The unit has an indirect-fire heating unit, condensing unit, filter section, supply and return air fans.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	25	MAR-09

Event: Replace roof-top HVAC unit

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$48,000	Unassigned

Updated: MAR-09

D3050.05.03 Finned Tube Radiation - Annex Building**

Baseboard radiation heaters are installed along the perimeter of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	40	MAR-09

Event: Replace finned tube radiation heaters (based on building size)

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

Updated: MAR-09

D3050.05.03 Finned Tube Radiation - Main Building**

Baseboard radiation heaters are installed along the perimeter of the building.

<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 (based on building size)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$393,000	Unassigned

Updated: MAR-09

D3050.05.06 Unit Heaters - Main Building**

There are hot water heated suspended unit heaters located in the utility rooms and ambulance bay, and 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 20 unit heaters

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$64,000	Unassigned

Updated: MAR-09

D3060.02.02 Pneumatic Controls - Main Building**

The building has original Honeywell pneumatic controls.

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

Event: Replace pneumatic controls

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$70,000	Unassigned

Updated: MAR-09

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

A direct digital control system interacts with the existing pneumatic system in the main building. The mechanical equipment in the other three buildings is controlled by standalone electric controls.

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

Event: Replace the DDC system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2033	\$281,000	Unassigned

Updated: MAR-09

D4010 Sprinklers: Fire Protection* - Main Building

Wet sprinkler system covers part of the building.

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

D4020 Standpipes* - Main Building

The building is equipped with standpipes located in the fire hose cabinets.

<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* - Main Building

The building has cabinets which each contain a standpipe outlet with fire hose and 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	\$15,000	Unassigned

Updated: MAR-09

D4090.07 Fire Pumps & Water Storage Tanks*

A jockey pump is provided for the fire protection 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)** - Main Building**

There are approximately four transformers (112.5 ~ 450 KVA) inside the electrical and service areas. All transformers were observed to be manufactured by FPE.

<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	\$156,000	Unassigned

Updated: MAR-09

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

The main electrical switch board was manufactured by FPE and has a capacity of 2500 Amps at 347/600V. It also feeds Ambulance Bay and Annex building.

<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	\$159,000	Unassigned

Updated: MAR-09

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution) - Ambulance Bay and Old EMS**

The secondary electrical switch boards were manufactured by FPE and are fed from the main building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	MAR-09

Event: Replace switch gear

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$6,000	Unassigned

Updated: MAR-09

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

The electrical switch board was manufactured by FPE and is fed from the main building.

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

Event: Replace switch gear

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$9,000	Unassigned

Updated: MAR-09

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

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

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

Event: Replace 40 secondary branch circuit boards

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$216,000	Unassigned

Updated: MAR-09

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

A G.E. motor control center is provided in the boiler 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

D5010.07.03 Variable Frequency Drives - Main Building**

The supply and return fans on two air handling units are controlled by Danfoss VLT HVAC VFD's.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	30	MAR-09

Event: Replace 4 VFD's

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

Updated: MAR-09

D5020.01 Electrical Branch Wiring* - Ambulance Bay

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	1985	50	MAR-09

D5020.01 Electrical Branch Wiring* - Annex Building

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

D5020.01 Electrical Branch Wiring* - Main Building

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* - Main Building

Wall-mounted incandescent lighting fixtures are provided in the atriums.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	30	MAR-09

D5020.02.02.02 Interior Florescent Fixtures - Ambulance Bay**

Fluorescent fixtures are used in the garages and office in Ambulance Bay, and consist of T-bar recessed and ceiling surface mounted T12 fixtures with conventional ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	MAR-09

Event: Replace T12 fixtures with T8

Concern:

Estimate based on size of the building of 290 Sq. M..

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$23,000	Unassigned

Updated: MAR-09

D5020.02.02.02 Interior Florescent Fixtures - Annex Building**

Fluorescent fixtures are used in Annex building, and consist of T-bar recessed and ceiling surface mounted T12 fixtures with conventional ballasts.

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

Event: Replace T12 fixtures with T8

Concern:

Estimate based on size of the building of 873 Sq. M.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$86,000	Unassigned

Updated: MAR-09

D5020.02.02.02 Interior Florescent Fixtures - Main Building**

Fluorescent fixtures are used throughout the main building and consist of T-bar recessed and surface mounted T12 fixtures with magnetic ballasts.

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

Event: Replace T12 fixtures with T8

Concern:

Estimate based on size of the building of 10,980 Sq. M..

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$763,000	Unassigned

Updated: MAR-09

D5020.02.03.01 Emergency Lighting Built-in* - Main Building

Selected fluorescent fixtures in the main building are tied with emergency generator and function as emergency lighting in the hospital.

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

D5020.02.03.02 Emergency Lighting Battery Packs - Ambulance Bay**

There is no emergency lighting installed in Ambulance Bay.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	20	MAR-09

Event: Installed 3 emergency lighting battery packs with heads

Concern:

No emergency lighting is provided in Ambulance Bay.

Recommendation:

Install emergency lighting battery packs in Ambulance Bay.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2010	\$4,000	Medium

Updated: MAR-09

D5020.02.03.02 Emergency Lighting Battery Packs - Annex Building**

Emergency lighting in Annex building is provided by battery-powered emergency lighting fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	20	MAR-09

Event: Replace 10 emergency lighting fixtures and battery packs

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$13,000	Unassigned

Updated: MAR-09

D5020.02.03.03 Exit Signs* - Annex Building

There are LED exit signs throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	30	MAR-09

D5020.02.03.03 Exit Signs* - Main Building

There are standard incandescent Exit signs throughout the building.

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

Event: Upgrade to LED exit signs (40 fixtures)

Concern:

Standard incandescent exit signs are installed throughout the building.

Recommendation:

Upgrade the current exit signs to LED fixtures.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2010	\$25,000	Medium

Updated: MAR-09

D5020.03.01.01 Exterior Incandescent Fixtures* - Annex Building

Exterior incandescent lighting fixtures are installed at the entrances of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1955	30	MAR-09

D5020.03.01.01 Exterior Incandescent Fixtures* - Main Building

Exterior canopy-mounted incandescent fixtures are installed at the main entrance of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2003	30	MAR-09

D5020.03.01.03 Exterior Metal Halide Fixtures* - Ambulance Bay

Exterior lighting around the building is provided by wall-mounted metal halide fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	MAR-09

D5020.03.01.03 Exterior Metal Halide Fixtures* - Main Building

Exterior lighting around the building is provided by wall-mounted metal halide fixtures.

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

D5020.03.01.04 Exterior H.P. Sodium Fixtures* - Annex Building

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	1955	30	MAR-09

D5030.01 Detection and Fire Alarm - Ambulance Bay**

Ambulance Bay is equipped with an Edwards fire alarm system. The fire alarm system consists of a fire alarm panel, alarm bells, smoke and heat detectors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	25	MAR-09

Event: Replace fire alarm system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$7,000	Unassigned

Updated: MAR-09

D5030.01 Detection and Fire Alarm - Annex Building**

Annex building is equipped with an Edwards 2280 fire alarm system. The fire alarm system consists of a fire alarm panel, alarm bells, strobes, smoke and heat detectors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1970	25	MAR-09

Event: Replace fire alarm system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$23,000	Unassigned

Updated: MAR-09

D5030.01 Detection and Fire Alarm - Main Building**

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	25	MAR-09

Event: Replace fire alarm system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$276,000	Unassigned

Updated: MAR-09

D5030.02.03 Security Access - Main Building**

A card swipe 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

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$104,000	Unassigned

Updated: MAR-09

D5030.02.04 Video Surveillance - Main Building**

A camera surveillance system is connected to a monitor.

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

Event: Replace the surveillance system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$28,000	Unassigned

Updated: MAR-09

D5030.03 Clock and Program Systems* - Main Building

A 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 VOIP system is provided for the building. Telephone service feeds the telephone system in the other buildings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	25	MAR-09

D5030.04.03 Call Systems - Main Building**

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	2000	25	MAR-09

Event: Replace the nurse call system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$98,000	Unassigned

Updated: MAR-09

D5030.04.05 Local Area Network Systems* - Main Building

LAN system is installed complete with category 5 cable.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	15	MAR-09

D5030.05 Public Address and Music Systems - Main Building**

Public address system complete with speakers located throughout the building.

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

Event: Replace public address 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* - Main Building

A Patient TV system is installed and operating as intended.

<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 437 KW diesel-fired emergency generator. A transfer switch is provided in the generator room.

<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	\$180,000	Unassigned

Updated: MAR-09

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**E1010.05.01 Barber and Beauty Shop Equipment***

Barber shop and hair styling equipment is included in the Beauty Parlor room on the second floor of the High River Hospital.

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

E1010.06 Commercial Laundry and Dry Cleaning Equipment*

Commercial-grade washers and dryers are provided in the Cart Dispatch/Assembly area of the High River Hospital on the main floor.

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

E1020.01 Ecclesiastical Equipment*

A Chapel with alter is provided in the corner of the Recreational Therapy room on the second floor of the High River Hospital.

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

E1020.05 Audiovisual Equipment*

Wall-mounted, roll-up projector screens are typically provided in meeting/conference rooms on the third floor of the High River Hospital.

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

E1020.07 Laboratory Equipment*

Laboratory equipment and imaging devices are located in the Imaging ward and laboratory of the High River Hospital on the main floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	MAR-09

E1020.08 Medical Equipment*

The High River Hospital is equipped with specialized medical equipment, including operating, imaging, examination/treatment and patient care equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	MAR-09

E1020.09 Mortuary Equipment*

A morgue for temporary cadaver storage is provided adjacent to the receiving area on the main floor of the High River Hospital.

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

E1030.03 Loading Dock Equipment*

A hydraulic dock leveler is provided in the receiving area of the High River Hospital.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	MAR-09

E1090.02.07 Recycling Equipment*

A cardboard bailer is provided in the Garbage Room of the High River Hospital, adjacent to the receiving area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	MAR-09

E1090.03 Food Service Equipment*

The staff cafeteria kitchen is equipped with commercial-grade, stainless steel food preparation equipment, including a dishwasher and walk-in coolers/freezer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	MAR-09

E1090.04 Residential Equipment*

Residential-grade appliances, including refrigerators, stoves and dishwashers, are provided in staff rooms, lounges and gathering areas in the site buildings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	MAR-09

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

The High River Hospital includes a physiotherapy room with standard equipment on the main floor, including moveable stairs, support bars, etc.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	MAR-09

E2010.02 Fixed Casework - Annex**

Fixed wooden casework with laminate countertops are typically provided in kitchen, washroom and storage areas in the Annex Building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	35	MAR-09

Event: Replace Fixed Casework (approx. 80 m) - Annex

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$105,000	Unassigned

Updated: MAR-09

E2010.02 Fixed Casework - Garage**

Fixed wooden casework with laminate countertops are provided in the kitchen area of the Training & Lecture room in the Ambulance Garage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	35	MAR-09

Event: Replace Fixed Casework (approx. 18 m) - Garage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$24,000	Unassigned

Updated: MAR-09

E2010.02 Fixed Casework - Hospital - 1982**

Fixed wooden casework with laminate countertops are typically provided at nursing stations, file storage rooms, treatment reception areas and laboratory of the High River Hospital.

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

Event: Repair Casework Laminate - Hospital: 1982

Concern:

Loose and damaged casework laminate surfaces was observed at nursing stations and reception areas throughout the High River Hospital interior.

Recommendation:

Repair laminate surfaces on fixed casework throughout the High River Hospital.

Consequences of Deferral:

Loss of aesthetic appeal.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$7,000	Low

Updated: MAR-09

Event: Replace Fixed Casework (approx. 350 m) - Hospital: 1982

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$460,000	Unassigned

Updated: MAR-09

E2010.02 Fixed Casework - Hospital - 2004**

Fixed wooden casework with laminate countertops are typically provided at the main reception area, examination and treatment rooms in the High River Hospital 2004 addition. The Imaging ward, trauma and examination rooms in the original section of the facility also underwent renovation in 2004, and include similar fixed casework.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2004	35	MAR-09

Event: Replace Fixed Casework (approx. 100 m) - Hospital: 2004

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$132,000	Unassigned

Updated: MAR-09

E2010.02 Fixed Casework - Old EMS**

Fixed wooden casework with laminate countertops are provided in the work area of the Old EMS Building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1955	35	MAR-09

Event: Replace Fixed Casework - old EMS

Concern:

Fixed wooden casework in the Old EMS Building was observed to be heavily worn and damaged, including missing or loose hardware components, drawers and cabinetry.

Recommendation:

Replaced fixed casework in the Old EMS Building.

Consequences of Deferral:

Loss of aesthetic appeal and ongoing deterioration resulting in a loss of functionality.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$8,000	Low

Updated: MAR-09

E2010.03.01 Blinds - Annex**

A limited number of exterior windows in the Annex Building have metal venetian blinds.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1995	30	MAR-09

Event: Replace Blinds - Annex

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$3,000	Unassigned

Updated: MAR-09

E2010.03.01 Blinds - Garage**

Fabric vertical blinds are provided on exterior windows of the Ambulance Garage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	MAR-09

Event: Replace Binds - Garage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$2,000	Unassigned

Updated: MAR-09

E2010.03.01 Blinds - Hospital**

Metal venetian blinds are provided on exterior windows within offices and meeting rooms in the High River Hospital. Dining room windows on the second floor have fabric vertical blinds.

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

Event: Replace Blinds (approx. 200 sq. m) - Hospital

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$26,000	Unassigned

Updated: MAR-09

E2010.03.03 Shades*

Vinyl shades are provided on most exterior windows within the Annex Building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	0	MAR-09

E2010.03.06 Curtains and Drapes**

Track-mounted fabric privacy curtains are generally provided in patient and examining rooms in the High River Hospital and serve as privacy screens for patient change rooms and shower stalls. Several patient rooms also have manually-operated fabric curtains and drapery on exterior windows.

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

Event: Replace Curtains (approx. 500 sq. m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$65,000	Unassigned

Updated: MAR-09

E2010.06 Fixed Interior Landscaping*

Interior landscaping is provided within brick planter boxes on the second floor of the High River Hospital.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	MAR-09

F1040.05 Liquid and Gas*: Storage Tanks*

An above-ground diesel storage tank of steel construction is provided in the emergency generator room of the High River Hospital.

The storage tank is currently without a base tray to trap fuel spills/leaks. A metal tray or concrete berm should be provided below the storage tank to minimize the risk of spills/leaks entering floor drains in the area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	MAR-09

F2020.01 Asbestos*

Site representatives indicated that based on a previous investigation conducted by Golder & Associates, asbestos-containing material in the site buildings is limited to backing material on resilient sheet flooring.

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

F2020.04 Mould*

No evidence of suspected microbial growth was observed during the assessment.

Site representatives indicated that previous mold growth was addressed in the staff dining area in 2008 due to leakage from the exterior sloped glazing assembly.

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

F2020.09 Other Hazardous Materials*

Chemical storage within the site buildings appeared to be adequate.

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

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

Barrier-free parking stalls with signage and pavement markings are situated near the main entrances to the High River Hospital 2004 addition and Annex Building.

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

K4010.02 Barrier Free Entrances*

Barrier-free access is provided to the High River Hospital 2004 addition via automated, sliding entrance doors. A lift on the south end of the Annex Building provides barrier-free access into the facility.

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

K4010.03 Barrier Free Interior Circulation*

Interior circulation within the site buildings appeared to be barrier-free. Elevators provide access between the multiple levels of the High River Hospital.

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

Event: Upgrade Elevator Cabs (4 Elevators)

Concern:

Passenger elevators in the High River Hospital did not appear to incorporate barrier-free controls, including call buttons, control panels, floor change indicators, etc.

Recommendation:

Upgrade elevator cab interiors and controls to accommodate handicapped users.

Consequences of Deferral:

Non-compliance with current 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	2010	\$100,000	Medium

Updated: MAR-09

K4010.04 Barrier Free Washrooms*

Public washrooms in the High River Hospital 2008 addition appeared to be barrier-free. The Annex Building also includes a uni-sex washroom that is barrier-free accessible.

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

Event: Barrier Free Access Upgrade (approx. 80 Washrooms)

Concern:

While public barrier-free washrooms are provided in the High River Hospital, patient washrooms in this building do not appear to be adequate, as insufficient space is available in these rooms.

Recommendation:

Conduct washroom retrofits within patient rooms, based on the results of the initial study recommendations. A cost allowance has been provided herein; however actual retrofit costs cannot be determined until the results of the initial investigation are known.

Consequences of Deferral:

Non-compliance with current barrier-free standards and poor accessibility for patients.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2011	\$2,000,000	Medium

Updated: MAR-09

Event: Study Feasibility of Patient Washroom Retrofit

Concern:

While public barrier-free washrooms are provided in the High River Hospital, patient washrooms in this building do not appear to be adequate, as insufficient space is available in these rooms.

Recommendation:

Conduct a feasibility study to determine whether barrier-free washrooms can be incorporated into patient rooms in the High River Hospital.

Consequences of Deferral:

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

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2010	\$15,000	Medium

Updated: MAR-09