

Building Condition Assessment Report

Asset	C3 - North Lawn
Address	Riverview Lands, 2601 Lougheed Highway, Coquitlam, BC. V5C 4J2
Construction Year	1955.
Size (Gross Floor Area)	123,196 Sq.Ft.
Asset Type	RV_Northlawn
Floors Above Ground	3
Report Date	August 2013



Executive Summary

North Lawn opened in 1955 as a tuberculosis clinic. It is the fourth largest building on site with 11,445 square meters of space on three floors. The building is institutional in design and is constructed of reinforced concrete on a concrete foundation. The exterior finish is paint with some brick on the main level. North lawn is in fair condition. It was not rated in the previous heritage evaluations. PHSA vacated the building in 2008. Since then the building has been kept in a warm, safe and dry condition

This report assumes a continuation of the current use (or previous use if building is vacant) and does not include costs associated with a change of use of the building.



Summary Results of Assessment: C3 - North Lawn

Replacement Costs	Renewal Costs	FCI
\$33,810,732.00	\$23,100,182.00	68%



Definitions:

- **Replacement Cost:** The combined costs (construction only - soft costs are not included) to replace all the components in the building without demolition and rebuilding. This number is arrived at from RS Means and other sources then verified (validated) by the persons doing the building assessments.
- **Renewal Cost:** The combined costs (construction only - soft costs are not included) of all the identified renewal needs.
- **Facility Condition Index (FCI):** a ratio of renewal costs divided by replacement costs
- **FCI Level Definitions:**
 - o Good: 0%-5%
 - o Fair: 6%-10%
 - o Poor: 11%-30%
 - o Critical: greater than 30%



A10 Foundations

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$362,196			
<u>What & Where</u>	Footings and foundations are reinforced concrete cast in place. Partial basement (mechanical room) and ground floor have reinforced slab on grade, cast in place.			
<u>Commentary (Condition ...)</u>	No visual signs of water infiltration, mould or foundation cracking. Recommend reducing level of grade to min. 6" below bottom of cladding for improved drainage and pest control.			
<u>Action</u>	1.			
<u>Action Type</u>	Study			
<u>Action Cost</u>	\$2,500			
<u>Brief Description</u>	Seismic study.			
<u>Commentary</u>	Consider Consultant study to address seismic and overall building conditions.			



A20 Basement Construction

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$1,091,517			
<u>What & Where</u>	Basement mechanical room. Reinforced concrete slab, concrete and masonry block walls with reinforced floor slab over.			
<u>Commentary (Condition ...)</u>	Overall good condition.			
<u>Action</u>	1.			
<u>Action Type</u>	Study			
<u>Action Cost</u>	\$0			
<u>Brief Description</u>	Seismic study, see A10 Foundations.			
<u>Commentary</u>	Consider Consultant study to address seismic and overall building conditions.			



B10 Superstructure

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$4,395,633			
<u>What & Where</u>	Reinforced Concrete.			
<u>Commentary (Condition ...)</u>	Reinforced columns, beams floor slabs, masonry block and roof slab, cast in place.			
<u>Action</u>	1.			
<u>Action Type</u>	Repair			
<u>Action Cost</u>	\$439,810			
<u>Action Year</u>	2014.			
<u>Brief Description</u>	Overall in good condition.			
<u>Commentary</u>	Consider Consultant study to determine seismic and overall building condition and upgrade requirements.			



B2010 Exterior Walls

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$2,603,131			
<u>What & Where</u>	Mix of reinforced concrete (painted), cast in place with brick veneer feature walls.			
<u>Commentary (Condition ...)</u>	Concrete areas require repair and paint. Brick veneer requires targeted repointing and caulking as required.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$2,603,132			
<u>Brief Description</u>	Mix of reinforced concrete (painted), cast in place with brick veneer feature walls.			
<u>Commentary</u>	Consider Consultant study to determine seismic and overall building condition upgrade requirements.			



B2020 Exterior Windows

<u>Component</u>	1	<u>Overall Condition</u>	Poor	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$862,372			
<u>What & Where</u>	Original steel and aluminum metal framed single glazed.			
<u>Commentary (Condition ...)</u>	246 single glazed windows approximately 8 ft. X 6 ft. Front entry doors are single glazed with additional side lites.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$862,372			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Replace windows.			
<u>Commentary</u>	Windows are a mix of steel and aluminum frame, however, all are single glazed and should be replaced. Consider Consultant study to address seismic and overall building condition to determine and receive new window types.			



B2030 Exterior Doors

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$93,629			
<u>What & Where</u>	Mix of: Metal framed single glazed institutional entry doors with exterior exit only with no panic hardware. Metal solid core exit doors with/without lites with/without panic hardware.			
<u>Commentary (Condition ...)</u>	2 sets of double doors. 12 single doors.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$93,629			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Replace exterior doors.			
<u>Commentary</u>	Doors are beyond life cycle. Condition is fair to poor. Glass doors with lites are single glazed, some Georgian wire. Maintain integrity of doors for security of building.			



B2040 Industrial Doors

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$7,392			
<u>What & Where</u>	Equipment rooms on roof.			
<u>Commentary (Condition ...)</u>	Door conditions range fair to poor.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$7,392			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Replace doors and frames			
<u>Commentary</u>	Doors are in fair to poor condition. Frames and doors have been compromised by the elements and are well beyond life cycle expectations.			



B30 Roofing

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$619,265			
<u>What & Where</u>	Mix of torch on modified bitumen flat roof, ballasted flat roof, roll on membrane (weather/age compromised) over reinforced concrete deck/roof slabs.			
<u>Commentary (Condition ...)</u>	Conditions range fair to poor. Foliage growing into roof composition in various areas.			
<u>Action</u>	1.			
<u>Action Type</u>	Study			
<u>Action Cost</u>	\$62,009			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Replace all roofing.			
<u>Commentary</u>	Maintain roofs short term, if building is to remain. Consider Roof Consultant to determine overall roof conditions.			



C1010 Partitions

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$1,462,337			
<u>What & Where</u>	Mix of steel frame with glazing, non-load bearing stud walls with wood panelling, drywall, painted. Utility chases have clay block walls.			
<u>Commentary (Condition ...)</u>	Bathrooms have commercial grade toilet stall partitions.			
<u>Action</u>	1.			
<u>Action Type</u>	Repair			
<u>Action Cost</u>	\$146,603			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Partitions and partition walls			
<u>Commentary</u>	Repair damaged walls and paint throughout, as required. Ensure any/all compromised drywall are reinstated to ensure fire separations remain intact. Asbestos identified in various areas, guidelines must be followed. Ensure Asbestos inventory is updated.			



C1020 Interior Doors

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$2,130,059			
<u>What & Where</u>	Interior doors are a mix of wood and metal. Fire doors solid core wood. Frames do not have a Fire Resistance Rating.			
<u>Commentary (Condition ...)</u>	Compartment doors have magnetic locks that are tied in to the fire alarm system.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$2,130,059			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Replace doors.			
<u>Commentary</u>	Re & re as required by code. Ensure code compliance at time of replacement.			



C1030 Fittings

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$158,923			
<u>What & Where</u>	Fittings vary throughout facility			
<u>Commentary (Condition ...)</u>	Overall good condition.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$158,923			
<u>Action Year</u>	2021.			
<u>Brief Description</u>	Millwork finishes vary but are mostly paint/stain grade.			
<u>Commentary</u>	Repair and or replace as required. Fittings will require upgrades and or modifications based on occupant needs.			



C20 Stairs

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$222,985			
<u>What & Where</u>	Reinforced concrete stairs. 5 interior stairwells.			
<u>Commentary (Condition ...)</u>	Mix finishes are exposed concrete, exposed aggregate, terrazzo and vinyl. Handrails vary from stainless, steel and aluminum.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$100,000			
<u>Action Year</u>	2014.			
<u>Brief Description</u>	Reinforced concrete stairs.			
<u>Commentary</u>	Re & re front entrance stairs finish and handrails to ensure code compliance.			



C3010 Wall Finishes

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$1,191,305			
<u>What & Where</u>	Concrete, masonry block and framed walls.			
<u>Commentary (Condition ...)</u>	Mix of reinforced concrete, reinforced concrete block, non-load bearing stud walls with plaster, drywall, painted. Some wood panelling and ceramic tile.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$1,191,305			
<u>Action Year</u>	2015.			
<u>Brief Description</u>	Maintain integrity of walls.			
<u>Commentary</u>	Ensure any/all compromised walls are reinstated to ensure fire separations remain intact. Asbestos identified in various areas. Guidelines must be followed. Ensure asbestos inventory is updated.			



C3020 Floor Finishes

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$1,124,779			
<u>What & Where</u>	Flooring throughout facility.			
<u>Commentary (Condition ...)</u>	Mix of Vc tile, vinyl sheet goods, carpet, terrazzo and mosaic tile.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$500,000			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Re & re Vinyl Composite tile flooring with Asbestos Containing Materials and other as required.			
<u>Commentary</u>	Resilient floors range good, fair, poor (ACM). Re & re as required. Asbestos identified in various areas, guidelines must be followed. Ensure Asbestos inventory is updated.			



C3030 Ceiling Finishes

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$1,057,022			
<u>What & Where</u>	Throughout facility.			
<u>Commentary (Condition ...)</u>	Mix of textured stucco (ACM), t-bar ceiling grid with drop-in acoustic panels, drywall/plaster painted and glued on ceiling tile.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$250,000			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Ceiling conditions range good, fair, poor. Repair/replace as required.			
<u>Commentary</u>	Asbestos identified in various areas, guidelines must be followed. Ensure Asbestos inventory is updated.			



D1010 Elevators & Lifts

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$662,794			
<u>What & Where</u>	1 Passenger elevator original to building (Otis, 1814 kg). 1 utility (dumb) waiter elevator.			
<u>Commentary (Condition ...)</u>	Inspections completed routinely, per safety branch.			
<u>Action</u>	1.			
<u>Action Type</u>	Study			
<u>Action Cost</u>	\$3,000			
<u>Action Year</u>	2014.			
<u>Brief Description</u>	Repairs/upgrades to elevator cab, motors and controls.			
<u>Commentary</u>	Consider Consultant study to determine overall condition including Safety Branch compliance.			



D2010 Plumbing Fixtures

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$2,882,786			
<u>What & Where</u>	Drinking fountains, eyewash stations, tubs, showers, stainless sinks and toilets and commercial grade stainless fittings.			
<u>Commentary (Condition ...)</u>	Mostly original units. Finishes and types vary. Consider Consultant study to define scope of work and order of magnitude to achieve economies of scale.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$2,882,787			
<u>Action Year</u>	2027.			
<u>Brief Description</u>	Replace plumbing fixtures, including common area washrooms, janitorial rooms and emergency stations.			
<u>Commentary</u>	Update fixtures with water efficient type units.			



D2020 Domestic Water Distribution

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	2011.			
<u>Replacement Value</u>	\$1,304,646			
<u>What & Where</u>	Source: Basement mechanical room supply throughout building.			
<u>Commentary (Condition ...)</u>	1 - Superhot electric booster hot water heater. 1 - 60 gallon Bradford White (2011) hot water tank.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$1,304,646			
<u>Action Year</u>	2048.			
<u>Brief Description</u>	Domestic water distribution.			
<u>Commentary</u>	Consider Consultant study to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.			



D2030 Sanitary Waste

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$960,929			
<u>What & Where</u>	Gravity based risers leading to 8 inch sewer pipe in the basement.			
<u>Commentary (Condition ...)</u>	Assessment required.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$960,929			
<u>Action Year</u>	2029.			
<u>Brief Description</u>	Assessment required.			
<u>Commentary</u>	Assess at time of Consultant Domestic Water Distribution study.			



D2040 Rain Water Drainage

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$147,835			
<u>What & Where</u>	Internal rain water drainage cast iron. Overflow scupper types vary.			
<u>Commentary (Condition ...)</u>	Gravity based storm system terminating in main collector on site.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$147,835			
<u>Action Year</u>	2029.			
<u>Brief Description</u>	Gravity based storm system.			
<u>Commentary</u>	Investigate and repair as required. Keep drains clear for proper drainage.			



D2095 Domestic Water Heaters

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$1,376,099			
<u>What & Where</u>	Basement and sub basement.			
<u>Commentary (Condition ...)</u>	1-Superhot electric booster HWTank. 1-Bradford White 60 gal. HWTank (2011). 1-20 gal. HWTank.			



D3024 Boiler Room Piping And Specialties

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$16,015			
<u>What & Where</u>	Boiler room in basement.			
<u>Commentary (Condition ...)</u>	Steam piping and booster pumps. Shut down at time of review.			
 <u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$16,015			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Boiler room piping systems and related equipment.			
<u>Commentary</u>	Consider Consultant study to determine overall condition and future use dependant on outcome of existing steam plant.			



D3026 Heating Generating Auxiliary Equipment

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1985.			
<u>Replacement Value</u>	\$129,356			
<u>What & Where</u>	Mechanical room in basement. Heat exchanger (vertical) (1985), 1210 Kpa at 232 deg. C.			
<u>Commentary (Condition ...)</u>	Steam plant currently shut down.			



D3027 Heating Generating Equipment & Piping Insulation

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$16,015			
<u>What & Where</u>	Steam piping from steam plant. 4 heat exchangers with 4 actuators, 2 expansion tanks, 1 - Superhot electric booster heater.			
<u>Commentary (Condition ...)</u>	Feeds to fin tube heat registers throughout building.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$16,015			
<u>Action Year</u>	2045.			
<u>Brief Description</u>				
<u>Commentary</u>				



D3034 Packaged Air Conditioning Units

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$906,723			
<u>What & Where</u>	Package units on roof.			
<u>Commentary (Condition ...)</u>	2 - Mitsubishi roof top AC units. 2 - York Roof top AC units. 2 - McQuay roof top AC units.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$906,723			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Replace units as required.			
<u>Commentary</u>	Consider Consultant study to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.			



D3036 Cooling Generating Equipment & Piping Insulation

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	2000.			
<u>Replacement Value</u>	\$9,856			
<u>What & Where</u>				
<u>Commentary (Condition ...)</u>				
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$9,856			
<u>Action Year</u>	2045.			
<u>Brief Description</u>				
<u>Commentary</u>				



D3043 Hydronic Distribution Systems

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$112,108			
<u>What & Where</u>	Intermediate pressure steam distribution to fin tube registers throughout.			
<u>Commentary (Condition ...)</u>	Equipment partial operation with report that steam plant to be shut down during summer months.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$112,108			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Upgrades to be determined based on future of existing steam plant.			
<u>Commentary</u>	Consider Mechanical Consultant study to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale and to determine future heating and cooling needs for this site.			



D3045 Exhaust Ventilation Systems

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$13,552			
<u>What & Where</u>	Located throughout facility.			
<u>Commentary (Condition ...)</u>	Building air handling equipment located in mechanical rooms on roof. Equipment currently shutdown.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$13,552			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Various exhaust system throughout facility. Replace/upgrade systems.			
<u>Commentary</u>	Consider Mechanical Consultant study to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.			



D3055 Fin Tube Radiation

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$193,418			
<u>What & Where</u>	Steam fed fin tubed heat registers.			
<u>Commentary (Condition ...)</u>	Appear to be in fair condition.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$193,418			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Replace fin tube radiators.			
<u>Commentary</u>	Consider Consultant study to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.			


D3060 Controls And Instrumentation

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$967,089			
<u>What & Where</u>	Thermostats and zoned controls.			
<u>Commentary (Condition ...)</u>	Original equipment with some upgrades. Fair to poor condition.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$967,089			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Replace thermostats and control systems.			
<u>Commentary</u>	Consider Consultant study to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.			

D3090 Other HVAC Systems And Equipment

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$5,238,294			
<u>What & Where</u>	Miscellaneous equipment throughout facility.			
<u>Commentary (Condition ...)</u>	Original equipment to building.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$5,238,294			
<u>Action Year</u>	2030.			
<u>Brief Description</u>	Re & re aging equipment as required.			
<u>Commentary</u>	Consider Consultant study to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.			



D4010 Sprinklers

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$460,753			
<u>What & Where</u>	No sprinkler system.			
<u>Commentary (Condition ...)</u>	Fire hydrants on site within proximity of building.			
<u>Action</u>	1.			
<u>Action Type</u>	Install			
<u>Action Cost</u>	\$460,753			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Install sprinkler system.			
<u>Commentary</u>	Consider Consultant study to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.			



D4020 Standpipes

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$113,340			
<u>What & Where</u>	No standpipes			
<u>Commentary (Condition ...)</u>	See "Sprinklers"			
<u>Action</u>	1.			
<u>Action Type</u>	Install			
<u>Action Cost</u>	\$113,340			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Install standpipe(s).			
<u>Commentary</u>	Consider Consultant study to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.			



D5010 Electrical Service And Distribution

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$449,665			
<u>What & Where</u>	15,000 volt transformers (2), located at rear of building.			
<u>Commentary (Condition ...)</u>	Switchgear and sub panels.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$449,665			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Perform infra-red scans of electrical distribution and panels. All feeder conductors should be checked for condition and ground continuity.			
<u>Commentary</u>	Consider Consultant study to define overall condition and scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.			



D5021 Branch Wiring

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$1,351,460			
<u>What & Where</u>	Insulated copper wiring			
<u>Commentary (Condition ...)</u>	Typically not visible.			
<u>Action</u>	1.			
<u>Action Type</u>	Repair			
<u>Action Cost</u>	\$135,516			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Interior/exterior wiring & devices.			
<u>Commentary</u>	All wiring devices should be tested for correct wiring polarity and retentive force. Any defective devices should be replaced.			



D5022 Lighting Equipment

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$337,557			
<u>What & Where</u>	Majority of lighting fluorescent, some T8's. some metal halide at exterior.			
<u>Commentary (Condition ...)</u>	Fixtures typically original to construction of building.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$337,557			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	Replace light fixtures.			
<u>Commentary</u>	Conduct lighting study/energy audit. Determine possible energy savings. Replace interior/exterior light fixtures.			



D5031 Public Address And Music System

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$89,933			
<u>What & Where</u>	Main panel in foyer/main entrance with sub panels located throughout facility.			
<u>Commentary (Condition ...)</u>	Replace PPA system.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$89,933			
<u>Action Year</u>	2030.			
<u>Brief Description</u>	Replace PPA system.			
<u>Commentary</u>				



D5032 Intercommunications And Paging

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$115,804			
<u>What & Where</u>	Nurse call system throughout. (Intercom & paging).			
<u>Commentary (Condition ...)</u>	Replace/upgrade as required by operational need.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$115,804			
<u>Action Year</u>	2030.			
<u>Brief Description</u>	Replace system as required.			
<u>Commentary</u>				



D5033 Telephone Systems

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$163,851			
<u>What & Where</u>	Service provider equipment in basement, handset at various locations in building.			
<u>Commentary (Condition ...)</u>	Phone system provided and maintained by service provider (Telus typically).			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$163,851			
<u>Action Year</u>	2030.			
<u>Brief Description</u>				
<u>Commentary</u>				



D5037 Fire Alarm System

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$123,196			
<u>What & Where</u>	Fire Alarm system is regularly tested as required by code.			
<u>Commentary (Condition ...)</u>	Altogether, the fire alarm system is in fair condition and may require periodic maintenance.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$123,196			
<u>Action Year</u>	2018.			
<u>Brief Description</u>	The fire alarm annunciator panel is located near the main entrance with sub panels throughout the building.			
<u>Commentary</u>	The panels are aging but should operate for another 3 to 5 years. It will still be operational; however; experience dictates that it becomes increasingly difficult to find replacement parts and technical support for older fire alarm control panels. Therefore, it becomes a discretionary call that at some point in it e replacing the panel is less costly than trying to maintain it. 123K has been suggested for the replacement of the fire alarm panel within 5 years time to account for changes in the product line of the suppliers.			



D5038 Security Systems

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	2000.			
<u>Replacement Value</u>	\$327,701			
<u>What & Where</u>	Fully alarmed with keypad system at designated locations. Monitored by Palladin Security on site.			
<u>Commentary (Condition ...)</u>	Security staff deactivate and reactivate as required.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$327,701			
<u>Action Year</u>	2025.			
<u>Brief Description</u>	Replace security system.			
<u>Commentary</u>	The condition of systems is good, however may require periodic maintenance. As with most electronic equipment, it's lifespan can be estimated to be approx. 15 years, as advances in technology will make the system obsolete, thus will become difficult to source replacement parts.			



D5091 Exit & Emergency Light Systems

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$7,392			
<u>What & Where</u>	Exit and Emergency lighting.			
<u>Commentary (Condition ...)</u>	Lighting fixtures are installed throughout the facility. These fixtures appear to be in fair condition and supported by rechargeable battery and/or generator back up systems.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$7,392			
<u>Action Year</u>	2030.			
<u>Brief Description</u>	Replace exit and emergency lighting.			
<u>Commentary</u>				



D5092 Emergency Power & Generation Systems

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$670,186			
<u>What & Where</u>	Backup generator in independent room adjacent to building.			
<u>Commentary (Condition ...)</u>	Not accessible at time of review.			
<u>Action</u>	1.			
<u>Action Type</u>	Replacement			
<u>Action Cost</u>	\$670,186			
<u>Action Year</u>	2015.			
<u>Brief Description</u>				
<u>Commentary</u>				

E1020 Institutional Equipment

<u>Component</u>	1	<u>Overall Condition</u>	Fair	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$1,828,229			
<u>What & Where</u>	Medical gas equipment and other.			
<u>Commentary (Condition ...)</u>	Institutional equipment has been decommissioned with most being removed.			

E2010 Fixed Furnishings

<u>Component</u>	1	<u>Overall Condition</u>	Good	
<u>Last Major Action Year</u>	1955.			
<u>Replacement Value</u>	\$115,804			
<u>What & Where</u>	Miscellaneous millwork and shelving throughout facility.			
<u>Commentary (Condition ...)</u>	Good to fair condition.			

<u>Action</u>	1.
<u>Action Type</u>	Replacement
<u>Action Cost</u>	\$115,804
<u>Action Year</u>	2018.
<u>Brief Description</u>	
<u>Commentary</u>	