Hastings and Prince Edward District School Board

Condition Assessment

Sophiasburgh Central School, Building ID 5558-1



Facility Name (SFIS)	Sophiasburgh Central School
Ministry Building Number	5558-1
GFA (m2)	2545
Year Built by Original/Additions	1965
Replacement Value - OTG	\$6,757,000
Official FCI (%)	4.96
Comparable FCI (%)	26.36
Asset Address	RR 2
Asset City	Picton
Asset Postal Code	K0K 2T0
ACCESSIBILITY CHECKLIST	
Designated parking space	Yes
Path of travel to the main entrance door.	Yes
Designated entrances	Yes
Path of travel to all floors/elevations.	Yes
Elevator	No
Instructional spaces entrance doors.	Yes
Fire policy and fire safety plan	Yes
Fire alarm system with strobe and audible signals	No
Communal washrooms	Yes
Designated washroom	Yes
ENERGY CHECKLIST	
Energy efficient boiler	Yes
Energy audit report	No
Energy efficient domestic hot water heater	No
Energy efficient recovery system	Yes
Energy efficient HVAC pumps and fan motors	No
Energy efficient interior lighting	Yes
Building Automation System	Yes
Energy efficient faucets	Yes
Energy efficient urinals and toilets	Yes
Architectural and Site Assessor	Nick Charlton
Mechanical and Electrical Assessor	Shahid Khan

How to read the final report

The Final Report contains assessment information for 5 years for this facility.

Asset details reported are either populated from the SFIS system (e.g. GFA, year built etc) or calculated based on Ministry's criteria (e.g. Replacement Value – OTG, Official FCI, Comparable FCI etc).

Accessibility and Energy assessment lists are provided in a yes/no format. For a full description of accessibility/energy definitions please check the TCPS database, Asset Narratives, under the Narratives Tab.

Asset Narratives include the following:

• Architectural & Structural Summary –a brief summary of the asset including construction dates and areas of the original and additions. A brief description of the structure, the exterior wall system, the roof assembly system and the building interiors.

- Mechanical Summary a brief summary of the mechanical systems.
- Electrical Summary a brief summary of the Electrical systems.
- Site Summary a brief summary of the Site systems.
- Limitations a summary of the scope of work and the Tactical Planning Window.

Building Elements listed are only the ones that require replacement in the next 5 years; their condition is Critical if failed or risk of imminent failure is observed, or Poor if it is not functioning as intended with significant repairs within the next two (2) years, or Fair if normal deterioration and minor distress is observed requiring repairs within three (3) to five (5) years.

2011-2015 Cost and Year information is a snapshot from the assessment and cannot be edited in TCPS.

2011-2015 Priority is the value of the Event priority calculated when the assessment data was imported in TCPS and stored in this read-only field.

Estimated Cost and Fiscal Year are values that can be edited at any time by end users.

Event Priority is a field populated with labels like Urgent, High, Medium and Low based on the Event Priority Value. This value is calculated based on the Element Type and Element Condition.

Photos are provided at the event level: old photos are suffixed with the world "Old", new photos are suffixed with the date of assessment.

A copy of this report in PDF format is saved in the TCPS database. You can access it by selecting the Asset Instance in Data Manager and opening this report in PDF format from the Document Tab.

1. Architectural & Structural Executive Summary

Architectural Summary -

Sophiasburgh Central School Ministry ID - 5558 - 1 was assessed on November 05 2013 by VFA Canada Corporation

Ministry ID # 5558 - 1

School Name: Sophiasburgh Central School

Address: 406 County Road 15, RR#2 City & Province: Picton Ontario

Total GFA M2 : 2,545 Year Built: 1965 Levels: 1 Additions: 1

Basement: None

Site Area: 4.9 ha

Addition 1: 545 sq. m Year: 1968

Typical Spaces -

General Classrooms Administration Kindergarten Gymnasium

Mechanical Services Washrooms Resource Centre Staff Room

Computer Lab Change Rooms

Additional Notes -

All area measurements are taken from drawings provided by Hastings Prince Edward DSB. Construction drawings were not available at the time of the assessment

Substructure Construction:

The substructure construction of Sophiasburgh Central School features concrete perimeter foundation walls on reinforced concrete strip footings. The facility has a concrete slab on grade foundation floor.

Superstructure:

The superstructure of the facility consists of reinforced concrete floor assemblies. Roofing decks are concrete with concrete and steel support beams and columns.

Exterior Construction:

Exterior wall claddings include exterior brick veneer wall and CMU backup walls.

Glazing system include operable and non-operable aluminum framed units with insulating glass.

Entry doors & exit doors typically include either 900 by 2100 or 1800 by 2100 storefront units and hollow metal units.

The roofs sections are covered with a built-up bituminous roofing BUR (Asphalt & Gravel) assembly possibly installed over insulation.

There are metal framed skylights on the roof of the facility.

Interior Construction:

Floor finishes throughout the facility include resilient flooring, ceramic floor tile, carpet, carpet tile, painted/sealed concrete and wood

strip sports flooring.

Wall finishes include painted concrete, painted gypsum wallboard, ceramic wall tile and acoustic wall panel.

The ceiling finishes include suspended 600 x 1200 acoustical ceiling tile, painted gypsum wallboard, concealed spline acoustic ceiling tile, painted overhead structure, or no finish (open to above structural components).

The interior doors include finished solid core wood/steel assemblies, some with glazed panels. The door operating hardware includes knob & lever type with panic devices where required at exterior door fire exit locations.

Hazardous Materials:

A designated substances report summarizing the quantity of identified designated substances in the building was provided by Hastings Prince Edward DSB.

Vertical Transportation:

This is a single level facility.

2. Mechanical Executive Summary

MECHANICAL

HVAC

The heating for the Sophiasburgh Central Public School is provided by 2 propane fired hot water boilers, rated at 713 MBH and 1000 MBH. The boilers provide hot water to perimeter-heating units and hot water unit heater. The system provides hot water to perimeter-heating units are also serving the building.

The boiler system also includes distribution piping, an expansion tank and water circulating pumps. The supply and return water temperatures of the hot water loop are monitored from the building automation system.

The fresh and re-circulated air for the building is provided by ERV units.

The HVAC ventilation system includes multiple exhaust fans serving the classrooms, hallways, offices, janitor's closet and restrooms

Controls & Instrumentation

The building HVAC system is controlled by a building automation system. A digital control system is also installed and works in conjunction with the building automation system.

Plumbing

The well water main enters through the water treatment room via a 2-inch pipe and is distributed throughout the facility.

The domestic hot water for the facility is provided by two residential-grade electric water heaters. The water is continuously circulated throughout the building by a circulation pump. Hot and cold water is distributed to restroom fixtures, sinks, janitor's closets, drinking fountains and other points of use.

The washroom fixtures include vitreous china urinals, water closets, lavatories and showers. The plumbing fixtures also include stainless steel kitchen sinks, floor mounted utility sinks as well as stainless steel/porcelain drinking fountains.

Rain water is removed from the roof via scuppers connected to cast iron downspouts which discharge to the site.

The building includes a sanitary waste piping system which discharges to the septic system.

Fire Protection

Handheld type fire extinguishers are located throughout the building as required.

3. Electrical Executive Summary

ELECTRICAL

Electrical Service and Distribution

School is provided with a 2000A 347/600V electrical service. The distribution has feeders supplying mechanical loads, local 100A and 200A panel boards, disconnects, and associated equipment.

Emergency Electrical Systems

Exit lights are provided to indicate the direction to means of egress. Battery pack units equipped with integrated or remote lighting heads provide lighting for safe egress from the building.

Lighting

Interior lighting is generally provided by upgraded T-8 fluorescent fixtures, equipped with electronic ballasts. The hallways and class rooms are generally lit with ceiling-mounted fluorescent fixtures. Exterior lighting is provided by low pressure sodium light fixtures.

Branch Wiring and Devices

The branch wiring for this building includes a typical concentration of branch wiring, devices, and utilization equipment.

Fire Alarm System

The facility is provided with a non-addressable fire alarm system consisting of a Mircom main control panel. The system includes manual pull stations, smoke detectors, heat detectors, audible bell.

Communications and Security

Telephone service is provided throughout the building from an on-site telephone system. Digital data services are delivered to the office and classroom areas via a wireless local area network (LAN). A communications link connects the building to the school district office. An intrusion alarm system, utilizing motion detectors, provides surveillance for the building.

associated with the PA system to indicate the beginning and end of classes is provided. It includes audible wall-mounted alarm devices.

A public address system is available to provide announcements to both the interior and the exterior of the building. Speaker types include trumpet type, wall and ceiling mounted type units. This system has a control console located in the main office. A system

Other Electrical

The gymnasium is equipped with a public address system with a sound control board.

4. Site Summary

Site Summary Notes:

The site at Sophiasburgh Central School is bounded treed areas and agricultural farmland.

The site area is approximately 4.9 hectares.

An asphalt paved parking area occurs on the west side of the building.

Asphalt paved schoolyards exist on the south side of the building, with a grass playing field south of the building beyond the asphalt schoolyard.

Concrete walkways service the site, with concrete landings or stairs at most building entrances.

Mature trees exist around the site. The soft landscaping consists of shrubbery around the perimeter of the building.

School signage is pedestal mounted and is located at the front of the building.

Definitions for Energy Checklist

Energy audit report: An ASHRAE Level I energy audit report was completed within the last three years.

Energy efficient boiler: The energy efficient boiler provided is a condensing boiler installed within the last five years or is energy star rated.

Energy efficient domestic hot water heater: The energy efficient domestic hot water heater provided is direct or power vented natural gas fired or has an electric heat coil.

Energy efficient recovery system: The building is provided with a Heat Recovery Unit (HRU).

Energy efficient HVAC pumps and fan motors: The energy efficient HVAC pumps and fan motors are reportedly provided with a variable frequency drive.

Energy efficient interior lighting: The provided interior lighting is controlled by motion sensors or building automation system and/or the interior light fixtures are provided with T8 or T5 fluorescent lamps and electronic ballast.

Building Automation System: The building has a comprehensive Direct Digital Control (DCC) automation system to monitor and control the mechanical system.

Energy efficient faucets: Approximately 50% of the lavatory faucets are provided with aerators and motion sensors.

Energy efficient urinals and toilets: Approximately 50% of the urinals and toilets are provided with a low flow flush valve (less than 1.6 gpf)

Definitions for Accessibility Checklist

Designated parking space: The provided designated Barrier Free Accessible parking space is a minimum 2,400 mm wide and is clearly marked with an accessibility sign.

Path of travel to the main entrance door: The provided accessible path of travel from the designated Barrier Free Accessible parking space to an accessible building entrance is a minimum 910 mm wide and includes curb cuts and ramps

Designated entrances: The provided designated Barrier Free Accessible entrance is a minimum 850 mm wide to allow a mobility device, clearly marked with an accessibility sign and is provided with an automatic door open device.

Path of travel to all floors/elevations: The Barrier Free Accessible path of travel is provided with either an accessible ramp or a vertical transportation device where a floor or an elevation difference exists.

Elevator: The provided Barrier Free Accessible Elevator has the following: clear audible communication indicating floors and up/down direction; doors, which open long enough and a minimum 900 mm wide; and a control panel, which is provided with Braille and an emergency call system and where the top is at a maximum height of 1,400 mm above floor.

Instructional spaces entrance doors: The instructional spaces are provided with an entrance door which is a minimum of 850 mm wide.

Fire policy and fire safety plan: Fire policy and fire safety plans are reportedly in place for the evacuation of people with disabilities.

Fire alarm system with strobe and audible signals: Fire alarm system is reported to include strobe lights and audible signals

Communal washrooms: There is a Barrier Free Accessible washroom stall, which is a minimum of 1,500 x 1,500 mm, in the each boys and girls washroom on each accessible floor.

Designated washroom: A designated Barrier Free Accessible washroom is provided on each floor, and is equipped with the following: an automatic door open device; grab bars; emergency call button; lever handle or motion sensor faucets; and a lavatory, where an insulated knee space is provided and the height of lavatory top is a maximum of 815 mm above the floor.

Limitations

This report has been prepared to meet the Ministry of Education (EDU) objectives for the Condition Assessment Program for Educational Facilities in Ontario. The purpose of the Condition Assessment Program was to assess the current physical condition of the schools and associated site features, and to validate information currently contained in the online capital renewal database software Total Capital Planning Solution (TCPS).

The validation of data was limited to a five year period, which is defined as the current assessment year plus four years. Information contained in the database beyond this period was not validated or reviewed.

The provided event costs are intended for global budgeting purposes only. The event costs were adjusted to include regional factors and were based on an approved unit cost list. Actual event costs for the work recommended may differ since the event costs can only be determined after preparation of tender documents, which would consider: specific design conditions, site restrictions, effects of ongoing building operations and construction schedule. The approved cost threshold for the Condition Assessment Program is \$ 10,000.

Barrier Free Accessibility and Energy Conservation Measures assessments were limited to a preapproved checklist presented on Page 2. The assessment of portables (classrooms not integrated with the building envelope), solar photovoltaic panels, other solar energy collectors, wind turbines, sheds, less than 45 sq.m., play-equipment/structures, score boards, goal posts and flag poles, fire extinguishers, decommissioned swimming pools, window coverings, black/white boards, benches, gymnastic equipment and the appropriateness of room space were excluded from the scope of work. Information related to these components contained in the database was not updated to reflect condition observed. Information related to events which are either planned or in progress, and currently locked were not updated.

All Elements

B SHELL

B10 Superstructure

B1020 Roof Construction

B102002 Structural Interior Walls

Element Instance : B102002 Structural Interior Walls - Fire stopping

Description

2013 - Missing fire stopping

Condition Assessment 2013 – At the time of the assessment there were numerous areas in the facility that lacked fire stopping, in both CMU wall system and in the GWB

Last Replacement Year		1965	
Theoretical Life		40	
Technical Condition		Poor	
Replacement - Structural	Interior Walls - Fire stopping		
Event Type:	Replacement	Priority:	High
Brief Description		Replacement	- Structural Interior Walls - Fire stopping
Estimated Cost		\$10,400	
Fiscal Event Year		2014	
2011-2015 Cost		\$10,400	
2011-2015 Priority		High	
2011-2015 Year		2014	

Recommendation

2013 - The recommendation is perform the necessary addition for the fire stopping and it related construction repairs

11/9/2013 4:11:10 PM Replacement - Structural Interior Walls - Fire stopping



Element Instance :	B102002 Structural Interior Walls - S	Step cracking
Description	2013 – Structural integrity – Step cracking in interior walls (CMU) and on the exterior brickwork (step cracks many times are an indication the footing under the foundation wall is moving.)	
Condition Assessment	2013 - At the time of the assessr masonry units	nent structural cracks were observed in many locations in the concrete
Last Replacement Year		1965
Theoretical Life		40
Technical Condition		Poor
Major Repair - Structur	ral Interior Walls - Step cracking	
Event Type:	Major Repair	Priority: High
Brief Description		Major Repair - Structural Interior Walls - Step cracking
Estimated Cost		\$125,952
Fiscal Event Year		2015
2011-2015 Cost		\$125,952
2011-2015 Priority		High
2011-2015 Year		2015
Recommendation		erform the necessary repairs based on the building consultants

2013 - The recommendation is perform the necessary repairs based on the building consultants recommendations and estimate for the construction related repairs

11/9/2013 4:11:21 PM Major Repair - Structural Interior Walls - Step cracking



11/9/2013 4:11:27 PM Major Repair - Structural Interior Walls - Step cracking



Study - Structural Interior Walls - Step cracking

Event Type:	Study	Priority: High
Brief Description		Study - Structural Interior Walls - Step cracking
Estimated Cost		\$10,400
Fiscal Event Year		2015
2011-2015 Cost		\$10,400
2011-2015 Priority		High
2011-2015 Year		2015

Recommendation

2013 - Step cracks many times are an indication the footing under the foundation wall is moving, based on this I would recommend a structural study be performed to determine how serious this issue is

11/9/2013 4:11:47 PM Study - Structural Interior Walls - Step cracking



B30 Roofing

B3010 Roof Coverings

Element Instance :	B3010 Roof Coverings - Addition 1	I
Description	insulation, expansion joints, tog	PDM/Inverted/Vinyl This system includes all waterproof roof coverings and ether with skylights, hatches, ventilators, and all required trim. In addition to roof all waterproof membranes and traffic toppings over below grade enclosed
Condition Assessment		sment the BUR assembly is aged and worn with displaced ballast due to wind tches, ridges, deteriorated flexible flashings with open joints, and pitch pockets noted.
Last Replacement Year		1987
Theoretical Life		22
Technical Condition		Fair
Replacement [B3010 R	oof Coverings - Addition 1]	
Event Type:	Replacement	Priority: High
Brief Description		Replacement [B3010 Roof Coverings - Addition 1]
Estimated Cost		\$231,587
Fiscal Event Year		2016
2011-2015 Cost		\$231,587
2011-2015 Priority		High
2011-2015 Year		2016

2013 - The aggregate-surfaced built up roof (BUR) assembly system on the original roof is approaching its expected service life, but continues to perform as intended. Replacement is anticipated in 2016.

11/9/2013 Replacement [B3010 Roof Coverings - Addition 1]





11/9/2013 Replacement [B3010 Roof Coverings - Addition 1]

Element Instance : B3010 Roof Coverings - Original Building - Section 2

 Description
 2013 - Roof Coverings - BUR/EPDM/Inverted/Vinyl This system includes all waterproof roof coverings and insulation, expansion joints, together with skylights, hatches, ventilators, and all required trim. In addition to roof coverings, the system includes all waterproof membranes and traffic toppings over below grade enclosed areas, balconies, and the like.

 Condition Assessment
 2013 - At the time of the assessment the BUR assembly is aged and worn with displaced ballast due to wind scouring and bleed through. Patches, ridges, deteriorated flexible flashings with open joints, and pitch pockets with brittle sealant were deficiencies noted.

 Last Replacement Year
 1965

 Theoretical Life
 22

 Technical Condition
 Fair

Replacement [B3010 Roof Coverings - Original Building - Section 2

Event Type:	Replacement	Priority:	High
Brief Description		Replacemen	t [B3010 Roof Coverings - Original Building - Section 2 & 5]
Estimated Cost		\$56,930	
Fiscal Event Year		2016	
2011-2015 Cost		\$56,930	
2011-2015 Priority		High	
2011-2015 Year		2016	

Recommendation

2013 - The aggregate-surfaced built up roof (BUR) assembly system on the original roof is approaching its expected service life, but continues to perform as intended. Replacement is anticipated in 2016.

1/9/2013 Replacement B3010 Roof Coverings - Original Building - Section 2



C INTERIORS

C10 Interior Construction

C1020 Interior Doors

Element Instance : C1020 Interior Doors

 Description
 2013 – Building interior doors generally consist of painted wood and hollow metal doors for classrooms and painted hollow metal doors for stairwells, corridor fire doors, utility rooms and the Gymnasium, with many including a Georgian wired vision panel.

 Condition Assessment
 2013 – The interior doors appear to be original to construction and are in fair condition overall. The doors

2013 – The interior doors appear to be original to construction and are in fair condition overall. The doors exhibit wear typical of their age, with scratched and delaminated door surfaces and a generally worn appearance. Some doors are damaged.

Last Replacement Year		1965	
Theoretical Life		25	
Technical Condition		Fair	
Replacement [C1020 li	nterior Doors]		
Event Type:	Replacement	Priority: Medium	
Brief Description		Replacement [C1020 Interior Doors]	
Estimated Cost		\$58,240	
Fiscal Event Year		2017	
2011-2015 Cost		\$58,240	
2011-2015 Priority		Medium	
2011-2015 Year		2017	

2013 – The interior doors of the building have exceeded their expected useful life, are worn and are aesthetically displeasing. Based on age and observed condition, replacement is recommended.

11/9/2013 3:41:35 PM Replacement [C1020 Interior Doors]



11/9/2013 3:41:41 PM Replacement [C1020 Interior Doors]	
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11/9/2013 3:42:08 PM Replacement [C1020 Interior Doors]

Element Instance : C1020 Interior Doors - Hardware Description 2013 - Interior door hardware was observed to consist of push bars, knob handles, push plates, kick plates, butt hinges and door closers 2013 - At the time of the assessment the interior door hardware was observed to be aged, worn and **Condition Assessment** deteriorated. Corrosion was noted on various components. 2005 Last Replacement Year **Theoretical Life** 15 **Technical Condition** Fair **Replacement Interior door hardware Priority:** Medium **Event Type:** Replacement **Brief Description** Replacement Interior door hardware **Estimated Cost** \$17,472 **Fiscal Event Year** 2017 2011-2015 Cost \$17,472 2011-2015 Priority Medium 2011-2015 Year 2017

Recommendation

2013 - The interior door hardware is of the same vintage as the interior door. Replacement of the door hardware along with the interior doors is suggested.

11/28/2013 Replacement of interior door hardware



C103	0 Fittings	
Element Instance :	C1030 Fittings	
Description	following its construction, and fa	ture-type equipment that is installed into the building, usually immediately astened in place in order to supplement or facilitate the activity for which the ork, built in chalkboard, built in locker, which they are part of the wall finishing
Condition Assessment	its effective rated design life. The	sment, the original painted and veneer millwork was observed to have exceeded he millwork is in fair - poor condition based on its age with signs of routine acements, which have extended its useful life.
Last Replacement Year		1965
Theoretical Life		20
Fittings Type		Unspecified
Technical Condition		Fair
Replacement [C1030 F	Fittings]	
Event Type:	Replacement	Priority: Medium
Brief Description		Replacement [C1030 Fittings]
Estimated Cost		\$97,240
Fiscal Event Year		2017
2011-2015 Cost		\$97,240
2011-2015 Priority		Medium
2011-2015 Year		2017
Recommendation		ded its theoretical life. Periodic painting has minimized delaminating of substrate vident. Replacement based on age and condition is recommended

11/9/2013 3:46:50 PM Replacement [C1030 Fittings]



11/9/2013 3:46:55 PM Replacement [C1030 Fittings]



11/9/2013 3:47:02 PM Replacement [C1030 Fittings]



11/9/2013 3:47:09 PM Replacement [C1030 Fittings]



C30 Interior Finishes C3030 Ceiling Finishes **Element Instance :** C3030 Ceiling Finishes Description 2013 - Acoustical 12"x12" ceiling tile system on substrate secured to the structure above. **Condition Assessment** 2013 - At the time of the assessment the fixed acoustic tile ceilings is in fair overall condition, with debonded tiles observed. Last Replacement Year 1965 Theoretical Life 25 Unspecified **Ceiling Finishes Type Technical Condition** Fair Replacement [C3030 Ceiling Finishes] Event Type: **Priority:** Medium Replacement **Brief Description** Replacement [C3030 Ceiling Finishes] **Estimated Cost** \$156,520 **Fiscal Event Year** 2015 2011-2015 Cost \$156,520 2011-2015 Priority Medium 2011-2015 Year 2015 Recommendation 2013 - The fixed acoustic tile ceilings are beyond their expected useful life. Based on age and observed condition, replacement is recommended.

11/9/2013 3:54:22 PM Replacement [C3030 Ceiling Finishes]



11/9/2013 3:54:46 PM Replacement [C3030 Ceiling Finishes]



11/9/2013 3:53:15 PM Replacement [C3030 Ceiling Finishes]



11/9/2013 3:53:32 PM Replacement [C3030 Ceiling Finishes]



D SERVICES

D20 Plumbing

D2010 Plumbing Fixtures

Element Instance : D2010 Plumbing Fixtures - Original Building & Addition 1

 Description
 2013 - The washroom plumbing fixtures includes vitreous china water closets, lavatories and urinals. The system includes Bradley wash fountains.

Condition Assessment 2013 – The majority of the plumbing fixtures are from 1965 and 1968 and appear to be functioning but in poor condition. Some fixtures have been replaced over time. The majority of fixtures have surpassed the end of their normal service life. Planning for renewal is recommended.

Technical Condition	Fair
Theoretical Life	25
Last Replacement Year	1965

Replacement [D2010 Plumbing Fixtures - Original Building & Addition 1

Event Type:	Replacement	Priority:	Medium
Brief Description		Replacemen	t [D2010 Plumbing Fixtures - Original Building & Addition 1
Estimated Cost		\$100,880	
Fiscal Event Year		2017	
2011-2015 Cost		\$100,880	
2011-2015 Priority		Medium	
2011-2015 Year		2017	

2013 - The installation of plumbing fixtures appears to be original to the building construction. The fixtures are aged and in poor shape. Corrosion, staining and damage was noted on the fixtures. The replacement of outdated fixtures is recommended.

11/5/2013 9:43:41 PM Replacement [D2010 Plumbing Fixtures - Original Building & Addition 1



11/5/2013 9:43:57 PM Replacement [D2010 Plumbing Fixtures - Original Building & Addition 1



11/5/2013 9:44:02 PM Replacement [D2010 Plumbing Fixtures - Original Building & Addition 1



D2020 Domestic Water Distribution

Element Instance : D2020 Domestic Water Distribution - Original Building & Addition 1

Description	piping and insulation. The build	water system includes a main line, water meter, pressure reducer, associated lding also includes a sanitary waste piping system which discharge to septic cted to internal rainwater leaders, which discharge to site.	
Condition Assessment	Due to age and heavy use, pipi recommended to determine the	2013 - The plumbing piping system is mostly concealed and therefore the current condition is not fully known. Due to age and heavy use, piping has signs of corrosion and deterioration. However, an intrusive study is recommended to determine the condition of the plumbing piping system and the recommended scope of work and the cost for system renewal.	
Last Replacement Year		1965	
Theoretical Life		37	
Domestic Water Distribution Type		Unspecified	
Technical Condition		Fair	
Replacement [D2020 Domestic	Water Distribution - Origina	al Building & Addition 1	
Event Type: Repla	acement	Priority: Medium	
Brief Description		Replacement [D2020 Domestic Water Distribution - All]	
Estimated Cost		\$156,636	
Fiscal Event Year		2017	

Fiscal Event Year	2017
2011-2015 Cost	\$156,636
2011-2015 Priority	Medium
2011-2015 Year	2017

2013 - Plumbing piping has exceeded its theoretical service life; however, condition cannot be fully determined. Replacement is subject to results of proposed study to determine current condition. Cost and schedule of replacement to be determined by study. Deferral may result in poor functioning or leaking of plumbing pipes, likely causing damage to other building components.

11/5/2013 9:44:35 PM Replacement [D2020 Domestic Water Distribution - Original Building & Addition 1



11/5/2013 9:44:39 PM Replacement [D2020 Domestic Water Distribution - Original Building & Addition 1



11/5/2013 9:44:47 PM Replacement [D2020 Domestic Water Distribution - Original Building & Addition 1 $\,$



Study [D2020 Domestic Water Distribution - Original Building & Addition 1]

Event Type:	Study	Priority: Medium
Brief Description		Study [D2020 Domestic Water Distribution - Original Building & Addition 1]
Estimated Cost		\$10,400
Fiscal Event Year		2015
2011-2015 Cost		\$10,400
2011-2015 Priority		Medium
2011-2015 Year		2015

Recommendation

2013 - The need for replacement of the plumbing piping system within the building is beyond the scope of this survey (due to the inaccessible nature of this component). As these systems have surpassed their typical service life, it is recommended that a specialized study be carried out to develop a strategy for renewal.

11/5/2013 9:44:59 PM Study [D2020 Domestic Water Distribution - Original Building & Addition 1]



11/5/2013 9:45:12 PM Study [D2020 Domestic Water Distribution - Original Building & Addition 1]



D30 HVAC

D3040 Distribution Systems

D304007 Exhaust Systems

Element Instance :	D304007 Exhaust Systems - Original Building & Addition 1	
Description	2013 - Various rooftop and internal exhaust fans that serve the classrooms, washrooms, change rooms, and kitchens are provided to the building for ventilation.	
Condition Assessment	2013 - The exhaust fans are typically original to the building. Many fans have damaged casing and many were vibrating excessively. The fans are in poor condition overall.	
Last Replacement Year	1965	
Theoretical Life	15	
Technical Condition	Fair	
Replacement [D304007 Exhaust Systems - Original Building & Addition 1]		
Event Type:	Replacement Priority: Medium	

Brief Description	Replacement [D304007 Exhaust Systems - Original Building & Addition 1]
Estimated Cost	\$61,880
Fiscal Event Year	2017
2011-2015 Cost	\$61,880
2011-2015 Priority	Medium
2011-2015 Year	2017

2013 - The exhaust fans are operating but have passed their expected useful lives and will likely require replacement in the short term as many are in poor condition.

11/5/2013 9:45:32 PM Replacement [D304007 Exhaust Systems - Original Building & Addition 1]



11/5/2013 9:45:51 PM Replacement [D304007 Exhaust Systems - Original Building & Addition 1]



11/5/2013 9:46:09 PM Replacement [D304007 Exhaust Systems - Original Building & Addition 1]



D50 Electrical

D5010 Electrical Service & Distribution

D501003 Main Switchboards

Element Instance : D501003 Main Switchboards - Original Building

Description 2013 – The switchboard and other assemblies including main distribution panel, breaker, fuses and meters are original in the building construction date.

Condition Assessment 2013 – The original main service switchboard including panel assemblies, main distribution panel, breaker, fuses and meters has exceeded the rated useful life and should be replaced due to age and reliability.

Technical Condition	Fair
Theoretical Life	40
Last Replacement Year	1965

Replacement [D501003 Main Switchboards - Original Building]

Event Type:	Replacement	Priority: High
Brief Description		Replacement [D501003 Main Switchboards - Original Building]
Estimated Cost		\$208,000
Fiscal Event Year		2017
2011-2015 Cost		\$208,000
2011-2015 Priority		High
2011-2015 Year		2017

 $2013-\mbox{Replace}$ the aged switchboard and other assemblies including main distribution panel, breaker, fuses and meters of the building

11/5/2013 9:47:04 PM Replacement [D501003 Main Switchboards - Original Building]



11/5/2013 9:47:10 PM Replacement [D501003 Main Switchboards - Original Building]



11/5/2013 9:47:25 PM Replacement [D501003 Main Switchboards - Original Building]



D501005 Panels

Element Instance : D501005 Panels - Original Building & Addition 1

Description		2013 – The electrical distribution system including main distribution panel, breaker, fuses and meters are original in the building construction date.		
Condition Assessment		2013 – The original distribution equipment including panel assemblies, main distribution panel, breaker, fuses and meters have exceeded the rated useful life and should be replaced due to age and reliability.		
Last Replacement Year		1965		
Theoretical Life		40		
Technical Condition		Fair		
Replacement [D501005 Panels - Original Building & Addition 1]				
Replacement [D501005 Pa	anels - Original Building & Additio	n 1]		
Replacement [D501005 Pa Event Type:	anels - Original Building & Additio Replacement	Priority: ^{High}		
		-		
		-		
Event Type:		Priority: High		
Event Type: Brief Description		Priority: High Replacement [D501005 Panels - Original Building & Addition 1]		
Event Type: Brief Description Estimated Cost		Priority: High Replacement [D501005 Panels - Original Building & Addition 1] \$125,308		
Event Type: Brief Description Estimated Cost Fiscal Event Year		Priority: High Replacement [D501005 Panels - Original Building & Addition 1] \$125,308 2017		
Event Type: Brief Description Estimated Cost Fiscal Event Year 2011-2015 Cost		Priority: High Replacement [D501005 Panels - Original Building & Addition 1] \$125,308 2017 \$125,308		

2013 – Replace the aged switchboard and other assemblies including main distribution panel, breaker, fuses and meters of the building.

11/5/2013 9:47:42 PM Replacement [D501005 Panels - Original Building & Addition 1]



11/5/2013 9:47:50 PM Replacement [D501005 Panels - Original Building & Addition 1]



11/5/2013 9:48:01 PM Replacement [D501005 Panels - Original Building & Addition 1]



D5020 Lighting & Branch Wiring

D502001 Branch Wiring

Element Instance :	D502001 Branch Wiring - Original Building & Addition 1	
Description	2013 - The cabling raceways and bus ducts are for the most part are original to their construction dates. The system includes cable, conduit, wall outlets and raceway.	
Condition Assessment	2013 – Although maintained properly, the branch wiring should be replaced due to age and reliability.	
Last Replacement Year	1965	
Theoretical Life	40	
Technical Condition	Fair	
Replacement [D502001 Branch Wiring - Original Building & Addition 1]		
Event Type:	Replacement Priority: Medium	

Brief Description	Replacement [D502001 Branch Wiring - Original Building & Addition 1]
Estimated Cost	\$170,874
Fiscal Event Year	2017
2011-2015 Cost	\$170,874
2011-2015 Priority	Medium
2011-2015 Year	2017

2013 – The switches, outlets, panels, and wiring throughout the building are outdated and inadequate. They have surpassed their theoretical life and exceeded the maximum capacity, replacement of these components is recommended. Replace cabling, raceways, bus ducts and breaker panels based on age, useful life and existing capacity. Cost provided is an estimate; a more accurate cost will depend on the evaluation study.

11/5/2013 9:48:13 PM Replacement [D502001 Branch Wiring - Original Building & Addition 1]



11/5/2013 9:48:17 PM Replacement [D502001 Branch Wiring - Original Building & Addition 1]



Study [D502001 Branch Wiring - Original Building & Addition 1]

Event Type:	Study	Priority:	Medium
Brief Description		Study [D5020	01 Branch Wiring - Original Building & Addition 1]
Estimated Cost		\$10,400	
Fiscal Event Year		2015	

Asset Assessment Program 2011-2015

Printed	On:	2014/04/22
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2011-2015 Cost	\$10,400
2011-2015 Priority	Medium
2011-2015 Year	2015

2013 - The branch wiring system has surpassed its theoretical service life, but remains in service. A study is recommended to determine the condition, remaining service life, current service requirements and cost of replacement.

11/5/2013 9:48:43 PM Study [D502001 Branch Wiring - Original Building & Addition 1]



11/5/2013 9:48:49 PM Study [D502001 Branch Wiring - Original Building & Addition 1]



D5030 Communications & Security

D503002 Telecommunications Systems

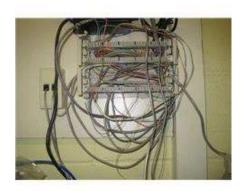
Element Instance : D503002 Telecommunications Systems - Original Building & Addition 1

Description2013 - Building is provided with a public address system, which includes: Amplifier, intercom/monitor, volume
control, speakers (ceilings or walls), conduit and shielded wires.Condition Assessment2013 - The existing PA system is at the end of its life cycle of 25 years and in fair to poor condition.
Replacement of the system is recommended.

Last Replacement Year		1990	
Theoretical Life		15	
Technical Condition		Fair	
Replacement [D503002 Telecommunications Systems - Original Building & Addition 1]			
Event Type:	Replacement	Priority:	High
Brief Description		Replacement Addition 1]	t [D503002 Telecommunications Systems - Original Building &
Estimated Cost		\$52,000	

Fiscal Event Year	2017
2011-2015 Cost	\$52,000
2011-2015 Priority	High
2011-2015 Year	2017

2013 - Communication system is over 40 years old. The PA system is in fair but functional at this time and is in fair condition. The Public Address System is aged and beyond its rated life and is recommended for replacement.



11/5/2013 9:49:19 PM Replacement [D503002 Telecommunications Systems - Original Building & Addition 1]



11/5/2013 9:49:26 PM Replacement [D503002 Telecommunications Systems - Original Building & Addition 1]

D503004 Public Address Systems D503004 Public Address Systems - Original Building & Addition 1 **Element Instance :** 2013 - Building is provided with a telephone system, which includes: Telephone frame, phone outlets, conduit Description and shielded wires. **Condition Assessment** 2013 - The existing phone system is at the end of its life cycle of 15 years and in fair to poor condition. Replacement of the system is recommended. 1990 Last Replacement Year Theoretical Life 25 **Technical Condition** Fair Replacement [D503004 Public Address Systems - Original Building & Addition 1] **Priority:** Medium **Event Type:** Replacement **Brief Description** Replacement [D503004 Public Address Systems - Original Building & Addition 1] **Estimated Cost** \$46,800 2017 **Fiscal Event Year** 2011-2015 Cost \$46,800 2011-2015 Priority Medium 2011-2015 Year 2017

Recommendation

2013 - Phone system is over 20 years old. The system is in fair condition but functional at this time. The phone system is aged and beyond its rated life and is recommended for replacement.

11/5/2013 9:49:50 PM Replacement [D503004 Public Address Systems - Original Building & Addition 1]



11/5/2013 9:50:01 PM Replacement [D503004 Public Address Systems - Original Building & Addition 1]



11/5/2013 9:50:26 PM Replacement [D503004 Public Address Systems - Original Building & Addition 1]



G BUILDING SITEWORK

G20 Site Improvement

Element Instance : G20 Site Improvement Exterior Concrete Stairs and Walkways

-		
1)000	intion	
Desu	ription	

2013 - Concrete walkway & CIP stairs

Condition Assessment

2013 – At the time of the assessment the exterior front concrete walkway and CIP stairs were in a very poor condition, the walkway was cracked, lifting and had vegetation growing in the cracks. The CIP stairs had a similar condition as the walkway with small rodent type creatures nesting in the ground under the CIP stairs

Medium

Event Type:	Replacement	Priority:
Replacement Exterior Concrete Stairs and Walkways		
Technical Condition		Fair
Theoretical Life		10
Last Replacement Year		1965

Brief Description	Replacement Exterior Concrete Stairs and Walkways
Estimated Cost	\$62,400
Fiscal Event Year	2016
2011-2015 Cost	\$62,400
2011-2015 Priority	Medium
2011-2015 Year	2016

2013 – Based on the observed condition it is recommended that the concrete walkway and CIP stair be replaced as soon as possible.

11/28/2013 Replacement Exterior Concrete Stairs and Walkways





11/28/2013 Replacement Exterior Concrete Stairs and Walkways

11/28/2013 Replacement Exterior Concrete Stairs and Walkways



G30 Site Ci	vil/Mechanical Utilities	
G3030	0 Storm Sewer	
Element Instance :	G3030 Storm Sewer - Site	
Description	2013 - The building roof drains a	re connected to internal rainwater leaders, which discharge to the site.
Condition Assessment	2013 - Board rep. indicated about on site.	ut the ongoing issue with rain water drainage system as rain water is pounding
Last Replacement Year		1965
Theoretical Life		50
Technical Condition		Critical
Study [G3030 Storm Se	ewer - Site]	
Event Type:	Study	Priority: High
Brief Description		Study [G3030 Storm Sewer - Site]
Estimated Cost		\$10,816
Fiscal Event Year		2013
2011-2015 Cost		\$10,816
2011-2015 Priority		High
2011-2015 Year		2013
Recommendation	2013 - Study is recommended to	determine the cause of rain water pounding issue.

11/5/2013 9:50:58 PM Study [G3030 Storm Sewer - Site]



11/5/2013 9:51:06 PM Study [G3030 Storm Sewer - Site]



Hastings and Prince Edward District School Board

Report Summary

Saved Report Name	Final Report Template mod1
User Name	william lo
Report Type	Text With Pictures
Report Name	Condition Assessment
Start Year	2013
Number of Years	5
Priority	Default
Structure / Instance	Sophiasburgh Central School, Building ID 5558-1
Filter	Parent Criteria Summary: Structure parent - A SUBSTRUCTURE OR Structure parent - B SHELL OR Structure parent - C INTERIORS OR Structure parent - D SERVICES OR Structure parent - G BUILDING SITEWORK - where the detail criteria for the parent node is - Technical Condition <> Not Assessed ;
Asset Photos	Default Photos Only
Current Backlog FCI	No
Element Photos	No Photos
Include Element ACL Criteria	No
Exclude Elements Without Events	Yes
Include Event level details	Yes
Event Photos	All Photos
Include Costlines	No
Printed Date	4/22/2014