Hastings and Prince Edward District School Board

Condition Assessment

Kente Public School, Building ID 6095-1

Facility Name (SFIS)	Kente Public School
Ministry Building Number	6095-1
GFA (m2)	3317
Year Built by Original/Additions	1966
Replacement Value - OTG	$7,333,010
Official FCI (%)	6.03
Comparable FCI (%)	34.03
Asset Address	264 County Rd 19
Asset City	Ameliasburgh
Asset Postal Code	K0K 1A0
-- 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	Yes
Energy efficient recovery system	No
Energy efficient HVAC pumps and fan motors	No
Energy efficient interior lighting	Yes
Building Automation System	Yes
Energy efficient faucets	No
Energy efficient urinals and toilets	No
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 –

Kente Public School Ministry ID – 6095 - 1 was assessed on October 31 2013 by VFA Canada Corporation

Ministry ID # 6095 - 1

School Name: Kente Public School

Address: 264 County Road 19 City & Province: Ameliasburgh Ontario

Total GFA M2 : 3,317 Year Built: 1966 Levels: 1 Additions: 1

Basement:

Site Area: 7.8 ha

Addition 1: 1,128 sq. m Year: 1973

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 Kente Public 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 metal with concrete and steel support beams and columns.

Exterior Construction:

Exterior wall claddings include exterior brick veneer wall, concrete cladding 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 and roof sections covered with EPDM single ply roofing system.

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, 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 Kante Public School is provided by 2 propane gas-fired hot water boilers, rated at 1000MBH and 1050MBH. The boilers provide hot water to perimeter-heating units, unit vents and hot water unit heater. Two roof-top unit are also installed and serving the library and science lab.

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 recirculated air for the library and science lab is provided by the roof top units.

The conditioned air in the science lab is supplied to the spaces via ceiling mounted diffusers and is returned through the plenum to the roof-top unit.

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 municipal water main enters through the boiler room via a 2-inch pipe and is distributed throughout the facility.

The domestic hot water for the facility is provided by a 60 gallon residential-grade propane-fired water heater. 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 and 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 400A 120/208V 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.

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

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 Kente Public School is bounded by treed lots and agricultural farm land. The site area is approximately 7.8 hectares.
An asphalt paved parking area occurs on the east side of the building.
Asphalt paved schoolyards exist on the north side of the building, with a grass playing field north 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 perimeter of the site. The soft landscaping consists of shrubbery around the perimeter of the building.
School signage is wall mounted and is oriented perpendicular to the wall.

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.

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All Elements

B SHELL

B20 Exterior Enclosure

B2010 Exterior Walls

Element Instance : B2010 Exterior Walls - Gym/ Foundation

Description

2013 - Review of construction drawings was not part of the scope of this assessment. Where observed, the foundation walls appear to be block and concrete with a parging coated finish

Condition Assessment

2013 - At the time of the assessment the foundation walls with block and concrete construction with a parging coated finish are showing signs of water infiltration and deteriorating parging.

Last Replacement Year	1973
Theoretical Life	75
Technical Condition	Poor

Study Exterior Walls - Gym/ Foundation

Event Type: Study **Priority:** High

Brief Description	Study Exterior Walls - Gym
Estimated Cost	$10,400
Fiscal Event Year	2014
2011-2015 Cost	$10,400
2011-2015 Priority	High
2011-2015 Year	2014

Recommendation

2013 - Continued water infiltration may result in premature deterioration and weakening of the building foundation walls, undermining of the foundation, and potential microbial issues. In order to determine the cause of the water infiltration, a study is recommended. The study should provide repair options and associated construction costs.

10/31/2013 Study Exterior Walls - Gym

10/31/2013 Study Exterior Walls - Gym

10/31/2013 Study Exterior Walls - Gym

10/31/2013 5:09:02 PM Study Exterior Walls - Gym/ Foundation

B2020 Exterior Windows

Element Instance : B2020 Exterior Windows - Addition 1

Description

2013 - The building windows are single glazed/double single glazed/insulated glass units (IGUs) throughout, installed in wood/metal frames. The operable units are vertical/horizontal sliding/outward/inward opening awning/hopper/casement style. The windows are reportedly original to construction.

Condition Assessment

2013 - At the time of the assessment the building windows are in fair/poor overall condition, with an aged appearance, deteriorating seals and reported water and air infiltration. Water staining was noted on interior window sills, verifying the occurrence of water leakage.

Last Replacement Year	1973
Theoretical Life	32
Technical Condition	Fair

Replacement Exterior Windows - Addition 1

Event Type: Replacement **Priority:** High

Brief Description	Replacement Exterior Windows - Addition 1
Estimated Cost	$16,900
Fiscal Event Year	2017
2011-2015 Cost	$16,900
2011-2015 Priority	High
2011-2015 Year	2017

Recommendation

2013 - The windows of the building are beyond their expected service life. Based on the windows performance and observed condition, age, design and thermal properties, replacement of the building windows is recommended.

10/31/2013 Replacement Exterior Windows - Addition 1

B2030 Exterior Doors

Element Instance : B2030 Exterior Doors & Hardware - Original Building

Description 2013 - Exterior doors were mostly hollow metal doors. The glazing, where provided, is single glazed wire reinforced (GWG).

Condition Assessment 2013 - At the time of the assessment the exterior door assemblies were observed to be original, with worn finish, damaged frames, deteriorated door seals, single glazed georgian wired glass and hardware have exceeded their useful design rated life.

Last Replacement Year	1966
Theoretical Life	27

Technical Condition Fair

Replacement Exterior Doors & Hardware - Original Building

Event Type: Replacement **Priority:** High

Brief Description	Exterior Doors & Hardware - Original Building
Estimated Cost	$10,400
Fiscal Event Year	2017
2011-2015 Cost	$10,400
2011-2015 Priority	High
2011-2015 Year	2017

Recommendation 2013 - The exterior door assemblies and hardware are original, aged and worn beyond useful design rated life. Replacement of the door assemblies and hardware is suggested.

10/31/2013 Replacement Exterior Doors & Hardware - Original Building

10/31/2013 Replacement Exterior Doors & Hardware - Original Building

B30 Roofing

B3010 Roof Coverings

Element Instance : B3010 Roof Coverings - Section 2

Description

2013 - Roof sections on the building are covered with aggregate-surfaced built up roof (BUR) assembly system. The waterproofing membranes are likely installed over rigid insulation. The presence of a vapor barrier is unknown

Condition Assessment

2013 - At the time of the assessment the condition of the aggregate-surfaced built up roof (BUR) assembly system on the original roof is consistent with its age and is in fair - poor condition overall.

Last Replacement Year	1973
Theoretical Life	22
Technical Condition	Fair

Replacement Roof Coverings - Section 2

Event Type: Replacement **Priority:** High

Brief Description	Replacement Roof Coverings - Section 2
Estimated Cost	$210,661
Fiscal Event Year	2016
2011-2015 Cost	$210,661
2011-2015 Priority	High
2011-2015 Year	2016

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

10/31/2013 Replacement Roof Coverings - Section 2

C INTERIORS

C10 Interior Construction

C1010 Partitions

C101003 Retractable Partitions

Element Instance : C101003 Retractable Partitions - Stage

Description 2013 - Retractable folding partition, this assembly would include all retractable or folding partitions and associated work including tracks and anchoring systems.

Condition Assessment 2013 - At the time of the assessment the retractable folding partition condition was fair to poor condition; coverings on the moveable partition are damaged and generally deteriorated.

Last Replacement Year	1966
Theoretical Life	20
Technical Condition	Poor

Replacement Retractable Partitions - Stage

Event Type: Replacement **Priority:** Medium

Brief Description	Replacement Retractable Partitions - Stage
Estimated Cost	$15,600
Fiscal Event Year	2015
2011-2015 Cost	$15,600
2011-2015 Priority	Medium
2011-2015 Year	2015

Recommendation 2013 - Based on the retractable folding partitions observed condition. Replacement is recommended.

10/31/2013 Replacement Retractable Partitions - Stage

10/31/2013 Replacement Retractable Partitions - Stage

C1030 Fittings

Element Instance : C1030 Fittings - Classroom millwork for original & addition 1

Description

2013 - Millwork is finished furniture-type equipment that is installed into the building, usually immediately following its construction, and fastened in place in order to supplement or facilitate the activity for which the building that includes all casework, built in chalkboard, built in locker, which they are part of the wall finishing and not add up furniture

Condition Assessment

2013 - At the time of the assessment, the original painted and veneer millwork was observed to have exceeded its effective rated design life. The millwork is in fair - poor condition based on its age with signs of routine refinishing and countertop replacements, which have extended its useful life.

Last Replacement Year	1966
Theoretical Life	20
Fittings Type	Millwork
Technical Condition	Fair

Replacement Fittings - Classroom millwork for original & addition 1

Event Type: Replacement **Priority:** Medium

Brief Description	Fittings - Classroom millwork for original & addition 1
Estimated Cost	$153,712
Fiscal Event Year	2017
2011-2015 Cost	$153,712
2011-2015 Priority	Medium
2011-2015 Year	2017

Recommendation

2013 - The millwork has exceeded its theoretical life. Periodic painting has minimized delaminating of substrate and deterioration, which was evident. Replacement based on age and condition is recommended

10/31/2013 Replacement Fittings - Classroom millwork for original & addition 1

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C103001 Compartments, Cubicles & Toilet Partition

Element Instance : C103001 Compartments, Cubicles & Toilet Partition - B & G change room

Description

2013 - Washroom assemblies are made up of the following; individual compartments, cubicles, and toilet partitions.

Condition Assessment 2013 - At the time of the assessment the metal washroom partitions were observed to be aged worn and deteriorated, with corrosion of panels.

Last Replacement Year	1973
Theoretical Life	15

Technical Condition Fair

Replacement Compartments, Cubicles & Toilet Partition - B & G change room

Event Type: Replacement **Priority:** Medium

Brief Description	Replacement Compartments, Cubicles & Toilet Partition - B & G change room
Estimated Cost	$21,320
Fiscal Event Year	2016
2011-2015 Cost	$21,320
2011-2015 Priority	Medium
2011-2015 Year	2016

Recommendation 2013 - The metal washroom partitions were observed to be aged worn and deteriorated, with corrosion of panels. Replacement is suggested.

10/31/2013 Replacement Compartments, Cubicles & Toilet Partition - B & G change room

10/31/2013 Replacement Compartments, Cubicles & Toilet Partition - B & G change room

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.

Condition Assessment 2013 – The majority of the plumbing fixtures are from 1966 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.

Last Replacement Year	1966
Theoretical Life	25
Technical Condition	Fair

Replacement [D2010 Plumbing Fixtures - Original Building & Addition 1

Event Type: Replacement **Priority:** Medium

Brief Description	Replacement [D2010 Plumbing Fixtures -Original Building & Addition 1]
Estimated Cost	$140,400
Fiscal Event Year	2017
2011-2015 Cost	$140,400
2011-2015 Priority	Medium
2011-2015 Year	2017

Recommendation

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.

10/31/2013 8:13:35 PM Replacement [D2010 Plumbing Fixtures - Original Building & Addition 1

10/31/2013 8:13:42 PM Replacement [D2010 Plumbing Fixtures - Original Building & Addition 1

10/31/2013 8:13:48 PM Replacement [D2010 Plumbing Fixtures - Original Building & Addition 1

D2020 Domestic Water Distribution

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

Description

2013 - The building domestic water system includes a main line, water meter, pressure reducer, associated piping and insulation. The building also includes a sanitary waste piping system which discharge to a septic system and roof drains connected to internal rainwater leaders, which discharge to the site.

Condition Assessment

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.

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Last Replacement Year	1966
Theoretical Life	37
Domestic Water Distribution Type	Plumbing Piping Systems
Technical Condition	Fair

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

Event Type: Replacement **Priority:** Medium

Brief Description	Replacement [D2020 Domestic Water Distribution - Original Building & Addition 1]
Estimated Cost	$204,147
Fiscal Event Year	2017
2011-2015 Cost	$204,147
2011-2015 Priority	Medium
2011-2015 Year	2017

Recommendation

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.

10/31/2013 8:13:58 PM Replacement [D2020 Domestic Water Distribution - Original Building & Addition 1]

10/31/2013 8:14:03 PM Replacement [D2020 Domestic Water Distribution - Original Building & Addition 1]

10/31/2013 8:14:24 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

10/31/2013 8:14:34 PM Study [D2020 Domestic Water Distribution - Original Building & Addition 1]

10/31/2013 8:14:40 PM Study [D2020 Domestic Water Distribution - Original Building & Addition 1]

D30 HVAC

D3040 Distribution Systems

D304003 Heating/Chilling water distribution systems

Element Instance : D304003 Heating/Chilling water distribution systems - Original Building & Addition 1

Description

2013 - Heating piping, which is mostly concealed, provides hot water to perimeter radiant heaters and unit ventilators throughout the building.

Condition Assessment

2013 - HVAC hot water distribution system includes heating hot water piping and the associated valves, expansion tank, insulation and circulation pumps supplying hot water to fin tube radiation units, unit ventilators and to unit heaters installed in various construction dates from 1966 to 1973.

Last Replacement Year	1966
Theoretical Life	45
Technical Condition	Fair

Replacement [D304003 Heating/Chilling water distribution systems - Original Building & Addition 1]

Event Type: Replacement **Priority:** High

Brief Description	Replacement [D304003 Heating/Chilling water distribution systems - Original Building & Addition 1]
Estimated Cost	$448,748
Fiscal Event Year	2017
2011-2015 Cost	$448,748
2011-2015 Priority	High
2011-2015 Year	2017

Recommendation

2013 - Partial upgrade of the heating piping was undertaken in 2005 with installation of the boilers, however the quantity and condition of original piping in the building is unknown. As original piping is approaching the end of its expected useful life, further investigation is recommended to determine current condition and possible need for replacement. With age, piping leaks may occur, damaging the building interiors.

10/31/2013 8:14:58 PM Replacement [D304003 Heating/Chilling water distribution systems - Original Building & Addition 1]

10/31/2013 8:15:09 PM Replacement [D304003 Heating/Chilling water distribution systems - Original Building & Addition 1]

10/31/2013 8:15:25 PM Replacement [D304003 Heating/Chilling water distribution systems - Original Building & Addition 1]

Study [D304003 Heating/Chilling water distribution systems - Original Building & Addition 1]

Event Type:	Study	**Priority:**	High

Brief Description	Study [D304003 Heating/Chilling water distribution systems - Original Building & Addition 1]
Estimated Cost	$12,480
Fiscal Event Year	2015
2011-2015 Cost	$12,480
2011-2015 Priority	High
2011-2015 Year	2015

Recommendation

2013 - The need for replacement of the heating & cooling piping system within the original building is beyond the scope of this survey (due to the specialized 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.

10/31/2013 8:15:42 PM Study [D304003 Heating/Chilling water distribution systems - Original Building & Addition 1]

D3050 Terminal & Package Units

Element Instance : D3050 Terminal & Package Units - Original Building & Addition 1

Description

2013 - The fin-tube radiation units provide heating in the washrooms, mechanical/electrical rooms, hallways, building entrances and exits and were original to the building's construction dates.

Condition Assessment

2013 - The fin-tube radiation units have exceeded their rated useful life of 15 years. Although portions have been properly maintained, the system has degraded in condition over the years. Due to age and deterioration the unit will require replacement soon.

Last Replacement Year	1966
Theoretical Life	15
Technical Condition	Poor

Replacement [D3050 Terminal & Package Units - Original Building & Addition 1]

Event Type: Replacement **Priority:** High

Brief Description	Replacement [D3050 Terminal & Package Units - Original Building & Addition 1]
Estimated Cost	$102,074
Fiscal Event Year	2015
2011-2015 Cost	$102,074
2011-2015 Priority	High
2011-2015 Year	2015

Recommendation

2013 - Although terminal units have surpassed their typical service life they remain in poor condition at this time. Planning for renewal is recommended only during the latter portion of the tactical planning period.

10/31/2013 8:16:04 PM Replacement [D3050 Terminal & Package Units - Original Building & Addition 1]

10/31/2013 8:16:12 PM Replacement [D3050 Terminal & Package Units - Original Building & Addition 1]

10/31/2013 8:16:23 PM Replacement [D3050 Terminal & Package Units - Original Building & Addition 1]

D305001 Unit Ventilators

Element Instance : D305001 Unit Ventilators - Original Building & Addition 1

Description

2013 - Several unit ventilators provide heating and ventilation to the school classrooms of the original building installed in 1966.

Condition Assessment

2013 - The unit ventilators have exceeded their rated useful life of 15 years. Although portions have been properly maintained, the system has degraded in condition over the years. Due to age and mechanical deterioration the unit ventilators have deteriorated, causing break down and problems thus affecting the Indoor Air Quality in the school and will require replacement soon.

Last Replacement Year	1966
Theoretical Life	15
Technical Condition	Poor

Replacement [D305001 Unit Ventilators - Original Building & Addition 1]

Event Type: Replacement **Priority:** High

Brief Description	Replacement [D305001 Unit Ventilators - Original Building & Addition 1]
Estimated Cost	$280,800
Fiscal Event Year	2015
2011-2015 Cost	$280,800
2011-2015 Priority	High
2011-2015 Year	2015

Recommendation

2013 – Replace the aged unit ventilators. Consideration should be made to replace them with high efficiency units.

10/31/2013 8:16:33 PM Replacement [D305001 Unit Ventilators - Original Building & Addition 1]

10/31/2013 8:16:46 PM Replacement [D305001 Unit Ventilators - Original Building & Addition 1]

10/31/2013 8:23:04 PM Replacement [D305001 Unit Ventilators - Original Building & Addition 1]

D50 Electrical

D5010 Electrical Service & Distribution

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 has exceeded the rated useful life and should be replaced due to age and reliability.

Last Replacement Year	1966
Theoretical Life	40
Technical Condition	Fair

Replacement [D501005 Panels - Original Building & Addition 1]

Event Type: Replacement **Priority:** High

Brief Description	Replacement [D501005 Panels - Original Building & Addition 1]
Estimated Cost	$178,164
Fiscal Event Year	2017
2011-2015 Cost	$178,164
2011-2015 Priority	High
2011-2015 Year	2017

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

10/31/2013 8:17:03 PM Replacement [D501005 Panels - Original Building & Addition 1]

10/31/2013 8:17:07 PM Replacement [D501005 Panels - Original Building & Addition 1]

10/31/2013 8:17:14 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	1966
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	$222,706
Fiscal Event Year	2017
2011-2015 Cost	$222,706
2011-2015 Priority	Medium
2011-2015 Year	2017

Recommendation 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.

10/31/2013 8:17:28 PM Replacement [D502001 Branch Wiring - Original Building & Addition 1]

10/31/2013 8:18:46 PM Replacement [D502001 Branch Wiring - Original Building & Addition 1]

10/31/2013 8:18:55 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 [D502001 Branch Wiring - 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 electrical distribution systems have surpassed their theoretical service life, but remain in service. A study is recommended to determine the condition, remaining service life, current service requirements and cost of replacement.

10/31/2013 8:18:07 PM Study [D502001 Branch Wiring - Original Building & Addition 1]

10/31/2013 8:18:14 PM Study [D502001 Branch Wiring - Original Building & Addition 1]

D502002 Lighting Equipment

Element Instance : D502002 Lighting Equipment - Original Building & Addition 1

Description

2013 – The interior lamps were upgraded to T8 with electronic ballast using the fluorescent lighting fixtures which are original to the building's construction date.

Condition Assessment

2013 - Although maintained properly, the interior lighting fixtures have exceeded their rated useful life. Due to age and heavy use fixtures were either burnt out, cracked, and fading in color and should be replaced.

Last Replacement Year	1966

Theoretical Life	30
Lighting Equipment Type	Interior Lighting
Technical Condition	Fair

Replacement [D502002 Lighting Equipment - Original Building & Addition 1]

Event Type: Replacement **Priority:** High

Brief Description	Replacement [D502002 Lighting Equipment - Original Building & Addition 1]
Estimated Cost	$300,662
Fiscal Event Year	2017
2011-2015 Cost	$300,662
2011-2015 Priority	High
2011-2015 Year	2017

Recommendation 2013 – Replace the aged fluorescent fixtures. Consideration should be made to replace them with high efficiency and reliable interior lighting fixtures including occupancy motion sensors in the installation.

10/31/2013 8:19:16 PM Replacement [D502002 Lighting Equipment - Original Building & Addition 1]

10/31/2013 8:19:23 PM Replacement [D502002 Lighting Equipment - Original Building & Addition 1]

10/31/2013 8:19:29 PM Replacement [D502002 Lighting Equipment - Original Building & Addition 1]

Element Instance : D502002 Lighting Equipment - Original Building & Addition 1

Description

2013 – Exit lighting in the school was originally installed in 1973.

Condition Assessment

2013 – Although maintained properly, the exit light and fixtures exceeded their rated useful life. The lamps are not energy efficient and should be replaced with high efficiency lamps and batteries.

Last Replacement Year	1973
Theoretical Life	30
Lighting Equipment Type	Exit Lighting

Technical Condition Fair

Replacement [D502002 Lighting Equipment - Original Building & Addition 1]

Event Type: Replacement **Priority:** High

Brief Description	Replacement [D502002 Lighting Equipment - Original Building & Addition 1]
Estimated Cost	$20,800
Fiscal Event Year	2017
2011-2015 Cost	$20,800
2011-2015 Priority	High
2011-2015 Year	2017

Recommendation

2013 - Exit lighting system is functional at this time and is in fair condition. Replace existing aged lamps and fixtures with high efficiency lamps and batteries.

10/31/2013 8:20:06 PM Replacement [D502002 Lighting Equipment - Original Building & Addition 1]

10/31/2013 8:20:10 PM Replacement [D502002 Lighting Equipment - Original Building & Addition 1]

Element Instance : D502002 Lighting Equipment - Original Building & Addition 1

Description

2013 – Emergency Lighting in the school was originally installed in 1973.

Condition Assessment

2013 – Although maintained properly, the emergency lamps and fixtures exceeded their rated useful life. The lamps are not energy efficient and should be replaced with high efficiency lamps and batteries.

Last Replacement Year	1973
Theoretical Life	18
Lighting Equipment Type	Emergency Lighting
Technical Condition	Fair

Replacement [D502002 Lighting Equipment - Original Building & Addition 1]

Event Type: Replacement **Priority:** High

Brief Description	Replacement [D502002 Lighting Equipment - Original Building & Addition 1]

Estimated Cost	$26,000
Fiscal Event Year	2017
2011-2015 Cost	$26,000
2011-2015 Priority	High
2011-2015 Year	2017

Recommendation

2013 - Emergency lighting is functional at this time and is in fair condition. Replace existing aged lamps and fixtures with high efficiency lamps and batteries.

10/31/2013 8:20:52 PM Replacement [D502002 Lighting Equipment - Original Building & Addition 1]

10/31/2013 8:21:09 PM Replacement [D502002 Lighting Equipment - Original Building & Addition 1]

D5030 Communications & Security

D503004 Public Address Systems

Element Instance : D503004 Public Address Systems - Original Building & Addition 1

Description

2013 - Building is provided with a public address system, which includes: Amplifier, intercom/monitor, volume control, speakers (ceilings or walls), conduit and shielded wires.

Condition Assessment 2013 - 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	1966
Theoretical Life	25

Technical Condition Fair

Replacement [D503004 Public Address Systems - Original Building & Addition 1]

Event Type: Replacement **Priority:** Medium

Brief Description	Replacement [D503004 Public Address Systems - Original Building & Addition 1]
Estimated Cost	$46,800
Fiscal Event Year	2017
2011-2015 Cost	$46,800
2011-2015 Priority	Medium
2011-2015 Year	2017

Recommendation 2013 - Communication system is 40 years old. Communication system is obsolete 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.

10/31/2013 8:21:30 PM Replacement [D503004 Public Address Systems - Original Building & Addition 1]

10/31/2013 8:21:39 PM Replacement [D503004 Public Address Systems - Original Building & Addition 1]

D503099 Other Communications & Alarm Systems

Element Instance : D503099 Other Communications & Alarm Systems - Original Building & Addition 1

Description

2013 - Building is provided with a telephone system, which includes: Telephone frame, phone outlets, conduit 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.

Last Replacement Year	1990
Theoretical Life	15

Technical Condition Fair

Replacement [D503099 Other Communications & Alarm Systems - Original Building & Addition 1]

Event Type: Replacement **Priority:** Medium

Brief Description	Replacement [D503099 Other Communications & Alarm Systems - Original Building & Addition 1]
Estimated Cost	$52,000
Fiscal Event Year	2017
2011-2015 Cost	$52,000
2011-2015 Priority	Medium
2011-2015 Year	2017

Recommendation

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

10/31/2013 8:21:51 PM Replacement [D503099 Other Communications & Alarm Systems - Original Building & Addition 1]

10/31/2013 8:21:56 PM Replacement [D503099 Other Communications & Alarm Systems - Original Building & Addition 1]

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	Kente Public School, Building ID 6095-1
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