

City of Hamilton

McMaster University Town Ctr (old courthouse)



Construction Year : 1957

Structure Size (sq ft) : 105,262

**Details**

Latitude - Longitude  
GeoMedia Asset I.D. Number  
Building Code  
Total Replacement Value  
Structure Size (sq ft)  
Site Size (Acres)  
Construction Year

**Values**

43.254303, -79.867990  
133892  
CRP034  
2.92456e+007  
105,262  
2.00  
1957

**00. Surface & Site Systems**

Element Instance: 00. General

**Details**

Inspection Date

**Values**

May 28 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

The following report is an asset level condition assessment based on visual observations at the time of assessment. No comments can be made on assets which are not visible or accessible during the assessment.

All costs associated with asset upgrades, repairs, replacements, etc. are based on RSMMeans publications, and where required, the consultants experience and expertise. Replacement costs include labour for removal of existing asset conditions as well as supply and installation of the new asset. It should be noted that replacement of assets, where applicable, will include an energy upgrade of that asset. All costs are to be taken as high level estimates and are for the sole use of the City Of Hamilton, for such use.

**00.2 Surface & Site Systems**

**00.2-010 Parking Lots**

Element Instance: 00.2-010 Parking Lots -Paved Parking Surfaces

**Details**

Inspection Date

**Values**

May 28 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Exterior parking lots are provided on the east and west side of the building. The asphalt lots were observed in fair condition with some minor deterioration in the asphalt topping. Cracking was noted throughout both parking lots. Replacement of the asphalt topping is recommended at the end of its useful life to avoid any hazards to parking/driving vehicles. Repairs to the asphalt topping may be required prior to replacement.



General condition of the asphalt paved parking surface.



General condition of the asphalt paved concrete surface.





**00.2-010 Parking Lots -Paved Parking Surfaces Event #: 1**

<b>Brief Description</b>	Repair [00.2-010 Parking Lots] - Interior parking and concrete slab repairs			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Repair	2017	\$20,000	High	2013, Vanderweston Rutherford Mantecon

**Event Details** Repair asphalt parking lot as deterioration of the asphalt topping continues.

Quantity: 1  
Unit Price: \$20,000

**00.2-010 Parking Lots -Paved Parking Surfaces Event #: 2**

<b>Brief Description</b>	Replace [00.2-010 Parking Lots] - Asphalt parking areas			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2025	\$75,000	High	2013, Vanderweston Rutherford Mantecon

**Event Details** Replace asphalt topping in parking lots

Approx Quantity: 15,000 SF  
Unit Price: \$5.00 / SF

Total: \$75,000

**00.2-015 Walkways**

**Element Instance: 00.2-015 Walkways - Concrete Pavers**

<b>Details</b>	<b>Values</b>
Inspection Date	May 13 2013 12:00AM

**Component Details** Eric Neu, Vanderweston Rutherford Mantecon, 2013

The concrete pavers leading to, and located at the front of the building were noted in fair to poor condition during the assessment. Some lifted and damaged tiles create tripping hazards. Most tiles were discoloured and worn. Replacement is recommended to avoid trip hazards and maintain appearances.

**00.2-015 Walkways - Concrete Pavers Event #: 1**

<b>Brief Description</b>	Replace [00.2-015 Walkways - Concrete Pavers ]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2017	\$35,000	High	2013, Vanderweston Rutherford Mantecon

**Event Details** Replace concrete pavers

Approx Quantity: 5000 SF  
Unit Price: \$7.00 / SF

Total: \$35,000

**Element Instance: 00.2-015 Walkways - Unit Pavers**

**Details**

Inspection Date

**Values**

May 10 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

The walkway pavers leading to the building were noted in good condition during the assessment. No cracking or lifting units were observed.



General view of the Queenston walkway provided to the north of the building.



Deteriorated sections where attempts to restore have been undertaken.



Unrepaired deteriorated units observed during the assessment on the Queenston walkway.



Queenston unit pavers provided at the main building entrance.



**00.2-017 Retaining Walls**

Element Instance: 00.2-017 Retaining Walls - Concrete Retaining Walls

**Details**

Inspection Date

**Values**

May 10 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Poured concrete retaining walls surround the parking lots on the east and west faces of the building. The retaining walls were observed in fair condition. There appears to have been previous repairs to cracks and parging of the concrete face. General maintenance is anticipated for the life of the retaining walls.



Poured concrete retaining wall provided on the east and west property perimeter.



Hairline cracks on the planter boxes retaining wall adjacent to the concrete ramp.



Closer view of the displaced stone cap on east property perimeter.



Displaced stone cap on east property perimeter.



**00.2-017 Retaining Walls - Concrete Retaining Walls Event #: 1**

**Brief Description**

Repair [00.2-017 Retaining Walls - Concrete & Precast Retaining Walls]

**Event Type**

**Event Year**

**Event Cost**

**Priority**

**Data Origin**

Repair

2015

\$2,000

Medium

2013, Vanderwesten  
Rutherford Mantecon

This report was generated without using Virtual Events.



**Event Details**                      General maintenance on exterior poured concrete retaining walls (parging, caulking, etc.)

Quantity: 1  
Unit Price: \$2000

Total: \$2,000

**00.2-017 Retaining Walls - Concrete Retaining Walls Event #: 2**

**Brief Description**                      Repair [00.2-017 Retaining Walls - Concrete Retaining Walls]

<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Repair	2020	\$2,000	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details**                      General maintenance on exterior poured concrete retaining walls (parging, caulking, etc.)

Quantity: 1  
Unit Price: \$2000

Total: \$2,000

**00.2-017 Retaining Walls - Concrete Retaining Walls Event #: 3**

**Brief Description**                      Repair [00.2-017 Retaining Walls - Concrete Retaining Walls]

<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Repair	2025	\$2,000	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details**                      General maintenance on exterior poured concrete retaining walls (parging, caulking, etc.)

Quantity: 1  
Unit Price: \$2000

Total: \$2,000

**00.2-020 Flagpole**

**Element Instance: 00.2-020 Flagpole Aluminum**

<b>Details</b>	<b>Values</b>
Inspection Date	Feb 12 2013 12:00AM

**Component Details**

INSPECTION DATE:      2012, Dec. 5  
REF NO.:                  25  
TYPE:                      Ground  
MATERIAL:                Aluminum; tapered, ground set on concrete

CONDITION:              GOOD (no defects observed)

HITE COMMENTS:        Visible components appear to be acceptable.

LOCATION:

Old Court House  
50 Main St E

FINISH:                    GOOD

ULTRASONIC THICKNESS READINGS (inches):

Location	Base	2ft	4ft
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This report was generated without using Virtual Events.

North	0.327	0.322	0.310
East	0.328	0.315	0.325
South	0.319	0.322	0.329
West	0.318	0.326	0.315

COMPONENTS, PHOTOS:

Photo 10 - base plates  
Photo 11 - top of pole

APPROX HT (ft): 40  
RAISING SYSTEM: internal  
BASE OR FLASH: n/a

CONCRETE BASE &  
ANCHOR BOLTS:  
concrete in GOOD condition  
no anchor bolts visible

Base Dimensions	16" diam. x 2" thick & 12" diam. x 2" thick rings
Base Bolt Spacing	n/a
Minimum bolt edge distance	n/a
Anchor bolt length	n/a
Anchor bolt head size or diam.	n/a
Mount. Bracket & Fastener	n/a

FLAG: Ontario

NOTES: steel rings at base would not move



Photo 10 - base plates



Photo 11 - top of pole

Element Instance: 00.2-020 Flagpole Aluminum

**Details**

Inspection Date

**Values**

Feb 19 2013 12:00AM

**Component Details**

INSPECTION DATE: 2012, Dec. 5  
REF NO.: 24  
TYPE: Ground  
MATERIAL: Aluminum; tapered, ground set on concrete

CONDITION: GOOD (no defects observed)

HITE COMMENTS: Minor corrosion around the top of the base "cuff". Monitor corrosion annually.



Visible components appear to be acceptable.

LOCATION:

Old Court House  
50 Main St E

FINISH: GOOD

ULTRASONIC THICKNESS READINGS (inches):

Location	Base	2ft	4ft
North	0.327	0.322	0.310
East	0.328	0.315	0.325
South	0.319	0.322	0.329
West	0.318	0.326	0.315

COMPONENTS, PHOTOS:

Photo 8 - base plate  
Photo 9 - top of pole

APPROX HT (ft): 40  
RAISING SYSTEM: internal  
BASE OR FLASH: n/a

CONCRETE BASE &  
ANCHOR BOLTS:  
concrete in GOOD condition  
no anchor bolts visible

Base Dimensions	16" diam. x 2" thick & 12" diam. x 2" thick rings
Base Bolt Spacing	n/a
Minimum bolt edge distance	n/a
Anchor bolt length	n/a
Anchor bolt head size or diam.	n/a
Mount. Bracket & Fastener	n/a

FLAG: Canada

NOTES: steel rings at base would not move



Photo 8 - base plate



Photo 9 - top of pole

**01. Architectural & Structural**

**01.1 Foundations**

This report was generated without using Virtual Events.

**01.1-010 Footings & Foundations**

Element Instance: 01.1-010 Footings & Foundations

**Details**

Inspection Date

**Values**

May 9 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

The building is supported by a combination of poured reinforced strip and spread footings as well as poured reinforced foundation walls. The foundations were observed in good condition during the assessment with no major deficiencies to report.

**01.2 Superstructures**

**01.2-010 Structural Framing**

Element Instance: 01.2-010 Structural Framing

**Details**

Inspection Date

**Values**

May 9 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

The structural framing of the building consists of reinforced concrete columns and beams in the basement supporting a suspended concrete slab, and structural steel framing above grade. The majority of the structure is concealed, however where visible was noted in good condition with no major deficiencies to report.



**01.3 Exterior Closures**

**01.3-010 Exterior Walls**

Element Instance: 01.3-010 Exterior Wall Cladding

**Details**

Inspection Date

**Values**

May 10 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

The exterior wall cladding consists of a granite and limestone facing. The exterior cladding was observed in an overall good condition with no major deficiencies to report.

The penthouse is cladding with an aluminum siding. The siding was observed in good condition with no major deficiencies to report.



Fresco provided on the front elevation. Restoration of the fresco completed in the summer of 2006.



Granite stone facing provided on the exterior walls on all elevations.



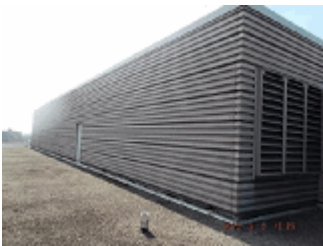
Granite stone facing provided on the exterior walls on all elevations.



Movement of the stone facing observed on the south elevation.



Fresco provided on the front elevation. Restoration of the fresco completed in the summer of 2006.





**01.3-030 Exterior Doors**

**Element Instance: 01.3-030 Exterior Doors - Aluminum Doors**

**Details**

Inspection Date

**Values**

May 10 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Two (2) sets of aluminum framed double doors with insulated glazed units located on the south face of the building were noted in good condition during the assessment. No deficiencies to report.



Aluminum door with IGUs on the south elevation.

**Element Instance: 01.3-030 Exterior Doors - Front Entrance Doors.**

**Details**

Inspection Date

**Values**

May 10 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

The main entrance doors consist of fully glazed units complete with door operators. The

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doors were noted in good working condition with no deficiencies to report. Replacement of the door operators at the end of their useful life is recommended to maintain barrier free access to the building.



Front Entrance Doors. The exterior doors are glass doors with pivot hinges.



Air leakages experienced at door interfaces.



**01.3-030 Exterior Doors - Front Entrance Doors. Event #: 1**

<b>Brief Description</b>	Replace [01.3-030 Exterior Doors - Front Entrance Doors.]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2020	\$5,000	High	2013, Vanderweston Rutherford Mantecon

<b>Event Details</b>	Replace main entrance door operators
	Quantity: 2
	Unit Price: \$2500
	Total: \$5,000

**Element Instance: 01.3-030 Exterior Doors - Garage Overhead Doors**

<b>Details</b>	<b>Values</b>
Inspection Date	May 10 2013 12:00AM

**Component Details** Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Two (2) sectional overhead doors located in the basement provide vehicle access into the parking garage. The doors were noted in fair to poor condition. Both doors were in working condition during the assessment. It is recommended that the doors be replaced at the end of their useful life as all vehicles parking in the garage or exterior parking lot

This report was generated without using Virtual Events.

must use both doors to either enter or exit.



Sectional metal overhead door provided at either ends of the parking garage.



Automatic overhead garage door open device.



Sectional metal overhead door provided at either ends of the parking garage.



**01.3-030 Exterior Doors - Garage Overhead Doors Event #: 1**

<b>Brief Description</b>	Replace [01.3-030 Exterior Doors - Garage Overhead Doors]				<b>Data Origin</b>
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>		
Replace	2020	\$12,000	High		2013, Vanderweston Rutherford Mantecon

<b>Event Details</b>	Replace overhead sectional doors
	Quantity: 2
	Unit Price: \$6000
	Total: \$12,000

**Element Instance: 01.3-030 Exterior Doors - Hollow Metal Doors**

<b>Details</b>	<b>Values</b>
Inspection Date	May 10 2013 12:00AM

This report was generated without using Virtual Events.



**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Two (2) exterior hollow metal doors were observed in fair to poor condition during the assessment. Surface rust was noted on the doors, frames and hardware. Replacement of the doors is recommended at the end of their useful life.



**01.3-030 Exterior Doors - Hollow Metal Doors Event #: 1**

**Brief Description**

Replace [01.3-030 Exterior Doors - Painted Hollow Metal Doors]

**Event Type**

**Event Year**

**Event Cost**

**Priority**

**Data Origin**

Replace

2016

\$2,400

High

2013, Vanderwesten  
Rutherford Mantecon

**Event Details**

Replace exterior hollow metal door

Quantity: 2

Unit Price: \$1200

Total: \$2400

**01.3-040 Windows**

Element Instance: 01.3-040 Windows

**Details**

**Values**

Inspection Date

May 10 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Exterior windows consist of insulated glazed units in aluminum frames. The date stamps on the units varied throughout the building and were noted from 1973-1991. Not all windows contained date stamps and not all windows were inspected for dates. The seals around the windows were deteriorated in some areas and noted in overall fair to poor condition. It is recommended that the windows be resealed, and replaced at the end of their useful life.





Typical window wall system seen on the south elevation.



Failed IGUs observed during the assessment.



Failed IGUs. Moisture infiltration has occurred.



**01.3-040 Windows Event #: 1**

<b>Brief Description</b>		Repair [01.3-040 Windows ]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>	
Repair	2014	\$5,650	High	2013, Vanderweston Rutherford Mantecon	

**Event Details**

Replace failing window seals (bulk cost provided)

Quantity: 1  
Unit Price: \$5000

Total: \$5000

**01.3-040 Windows Event #: 2**

<b>Brief Description</b>		Replace - 01.3-040 Windows - 01.3-040 Windows - Remaining Window Wall System			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>	
Replace	2018	\$1,000,000	High	2013, Vanderweston Rutherford Mantecon	

This report was generated without using Virtual Events.

**Event Details**

Replace majority of exterior windows at the end of their useful life

Approx Quantity: 20,000 SF

Unit Price: \$50 / SF

Total: \$1,000,000

**01.4 Roofing**

**01.4-010C01 Built Up Roof**

Element Instance: 01.4-010C01 Built Up Roof

**Details**

Inspection Date

**Values**

May 13 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

The fifth level and penthouse built up roof was noted in fair to poor condition during the assessment. No current leaks were reported. It is recommended that the roof be replaced before further deterioration occurs.



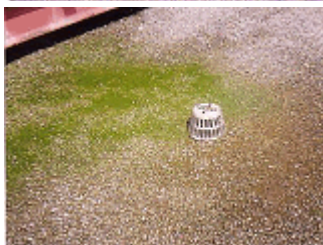
General view of the upper main roof, gravel requires replacement, poor condition.



Roof access on to Built Up Roof area.



Moss growing around a roof drain





General view of the upper main Built Up Roof.



General view of upper penthouse



View of boiler stack



General view of the upper main roof.



General view of the upper main roof.



View of Flashing at Cooling Tower will require replacement when BUR is replaced.



View of roof drain on BUR requires replacement.



View of cooling tower on main roof



**01.4-010C01 Built Up Roof Event #: 1**

<b>Brief Description</b>	Replace [01.4-010C01 Built Up Roof]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2015	\$210,000	High	2013, Vanderweston Rutherford Mantecon

**Event Details** Replace built up roof over fifth level and penthouse.

Approx Quantity: 15,000 SF  
Unit Price: \$14 / SF

Total: \$210,000

**01.4-010C02 Modified bituminous/thermoplastic Roof**

Element Instance: 01.4-010C02 Modified bituminous Roof

<b>Details</b>	<b>Values</b>
Inspection Date	May 10 2013 12:00AM

**Component Details** Eric Neu, Vanderwesten Rutherford Mantecon, 2013

The modified bituminous roof located on two (2) sections of the two-storey roof was observed in poor condition. The roofs were not accessible during the assessments, so a visual observation through the third and fourth level windows was done. Large amounts of ponding were observed during the assessment. A portion of the roof appears to have been recently repaired. No current leaking was reported. Replacement of the bituminous roof is recommended prior to further deterioration and possible leaking.

During the assessment staff noted that someone had recently assessed the roof anchors.





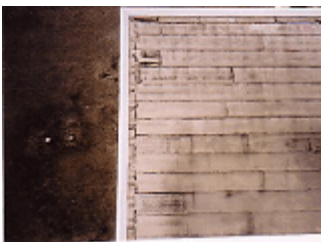
Portion of level 2 roof appears to have been replaced.



View of lower modified roofs, poor condition, requires replacement.



Lower modified bitumen roofs have evidence of ponding and seams are in poor condition.



View of lower modified roof, nearing end of life.



**01.4-010C02 Modified bituminous Roof Event #: 1**

<i>Brief Description</i>	<i>Event Year</i>	<i>Event Cost</i>	<i>Priority</i>	<i>Data Origin</i>
Replace [01.4-010C02 Modified bituminous/thermoplastic Roof]	2015	\$176,000	High	2013, Vanderweston Rutherford Mantecon

**Event Details** Replace modified bituminous roof

Approx Quantity: 16,000 SF  
Unit Price: \$11.00 / SF

This report was generated without using Virtual Events.



Total: \$176,000

**01.5 Interior Construction**

**01.5-030 Building Accessories (Fixed)**

**Element Instance: 01.5-030 Fittings & Equipment - Flag Pole & Wire Mesh Partitions**

**Details**

**Values**

Inspection Date Mar 13 2008 12:00AM

**Component Details**

Norman Lobo, Jacques Whitford, 2008

The flag pole, which is a 44 ft. high stainless steel seamless pole, remain from the original commissioning of the building. Approximately one month ago, Mr. Ross indicated that the flag pole was restrung, and top bearing and cap replaced

The wire mesh partitions on the basement storage area remain as described above. No significant deterioration was seen on the wire mesh partition.

(The prefinished metal lockers in the change room, the arms and sensors of the automatic parking gates, and the bookcases in the law library described in the previous assessment have been removed).

Wire mesh partition located in the basement.



**01.5-030 Fittings & Equipment - Flag Pole & Wire Mesh Partitions Event #: 1**

**Brief Description**

Repair - 01.5-030 Fittings & Equipment - Flag Pole & Wire Mesh Partitions

**Event Type**

**Event Year**

**Event Cost**

**Priority**

**Data Origin**

Repair	2014	\$5,000	High	2008, Jacques Whitford Ltd, Standard, Import
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**Event Details**

Maintenance of the wire mesh partitions in the basement storage room is required. Periodic painting of the wire mesh partition will defer replacement.

A lump sum cost of \$ 5,000 is provided.

Dec. 2007 - Wire mesh partitions in the basement storage room.



**01.5-050 Interior Doors**

**Element Instance: 01.5-050 Interior Doors - Glazed Aluminum Frame**

**Details**

**Values**

Inspection Date May 9 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Full glazed aluminum framed doors are located leading into stairwells, offices and in the main lobby. The doors were observed in fair working condition during the assessment.

This report was generated without using Virtual Events.

Replacement is recommended at the end of their useful life as they are typically in high traffic areas.



Glass doors in aluminum frames.

**01.5-050 Interior Doors - Glazed Aluminum Frame Event #: 1**

**Brief Description**

Replace [01.5-050 Interior Doors - Full Glazing Aluminum Framed]

**Event Type**

**Event Year**

**Event Cost**

**Priority**

**Data Origin**

Replace

2018

\$18,750

High

2013, Vanderweston  
Rutherford Mantecon

**Event Details**

Replace interior glazed aluminum framed doors

Approx Quantity: 25

Unit Price: \$750

Total: \$18,750

**Element Instance: 01.5-050 Interior Doors - Hollow Metal Doors**

**Details**

**Values**

Inspection Date

May 9 2013 12:00AM

**Component Details**

Eric Neu, Vanderweston Rutherford Mantecon, 2013

The majority of interior doors consisted of hollow metal doors and frames. The doors were observed in generally good to fair condition throughout. Replacement over the next 10-15 years is recommended to maintain proper use and exiting. The total amount of interior hollow metal doors is approximately two hundred (200).



Typical hollow metal doors. The doors were restored to remediate suspect hazardous containing materials.





**01.5-050 Interior Doors - Hollow Metal Doors Event #: 1**

<b>Brief Description</b>		Replace - 01.5-050 Interior Doors - Hollow Metal Doors		
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2023	\$37,500	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details** Replace Hollow Metal Doors (in current fair condition)

Approx Quantity: 75  
Unit Price: \$500

Total: \$37,500

**01.5-050 Interior Doors - Hollow Metal Doors Event #: 2**

<b>Brief Description</b>		Replace [01.5-050 Interior Doors - Hollow Metal Doors]		
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2028	\$37,500	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details** Replace Hollow Metal Doors (in current good condition)

Approx Quantity: 75  
Unit Price: \$500

Total: \$37,500

**Element Instance: 01.5-050 Interior Doors - Wood Doors**

<b>Details</b>	<b>Values</b>
Inspection Date	May 9 2013 12:00AM

**Component Details** Eric Neu, Vanderweston Rutherford Mantecon, 2013

Interior single and double leaf wood doors are located throughout the building. The doors were noted in generally fair condition with signs of wear and colour fading. Replacement is recommended at the end of their useful life for cosmetic and operational purposes. There are approximately one hundred (100) interior wood doors.





Wood doors provided as part of the floor re-distribution undertaken during occupancy by McMasters University.



**01.5-050 Interior Doors - Wood Doors Event #: 1**

<b>Brief Description</b>	Replace - 01.5-050 Interior Doors - Wood Doors				<b>Data Origin</b>
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>		
Replace	2018	\$30,000	High		2013, Vanderweston Rutherford Mantecon

**Event Details**

Replace Interior Wood Doors

Approx Quantity: 75  
Unit Price: \$400

Total: \$30,000

**01.5-070 Floor Finishes**

**01.5-070C03 Terrazzo**

Element Instance: 01.5-070C03 Terrazzo

<b>Details</b>	<b>Values</b>
Inspection Date	May 28 2013 12:00AM

**Component Details** Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Terrazzo flooring located in the basement corridors and stairwells was noted in fair condition during the assessment. Some minor areas of cracks and damages were noted. A portion of the cracks have been filled and sealed.

It is recommended that the terrazzo floor be properly cleaned and resealed to extend the useful life of the floor.





Terrazzo floor covering in the basement.



**01.5-070C03 Terrazzo Event #: 1**

**Brief Description**

Refinish - 01.5-070 Floor Finishes - Terrazzo

**Event Type**

Refinish

**Event Cost**

2015

**Priority**

\$15,000

**Data Origin**

Medium  
2013, Vanderwesten  
Rutherford Mantecon

**Event Details**

Properly clean and reseal terrazzo floor

Approx Quantity: 5000 SF  
Unit Price: \$3.00 / SF

Total: \$15,000



**01.5-070C04 Carpeting**

Element Instance: 01.5-070C04 Carpeting

**Details**

Inspection Date

**Values**

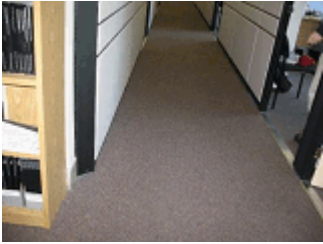
May 9 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Carpet flooring is provided throughout the buildings offices, court rooms, board rooms, etc. The carpet in high traffic areas, such as hallways, was noted in fair condition with signs of wear. The remainder of the carpet was noted in good condition. Replacements costs are to replace high traffic areas first followed by the remainder of the carpet.





Carpets installed in offices in 1998 during the McMaster University occupancy.



General condition of the carpet observed during the assessment.



Some staining as result of usage observed on the carpet.



Condition of the carpet in the Ontario Municipal Board room located on the 1st floor not replaced in 2007.





**01.5-070C04 Carpeting Event #: 1**

<b>Brief Description</b>	Replace [01.5-070C04 Carpeting]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2016	\$75,000	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details**

Replace carpet in high traffic areas

Approx Quantity: 15,000 SF  
Unit Price: \$5.00 / SF

Total: \$75,000

**01.5-070C04 Carpeting Event #: 2**

<b>Brief Description</b>	Replace [01.5-070C04 Carpeting]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2019	\$250,000	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details**

Replace remainder of carpets (non high traffic areas)

Approx Quantity: 50,000 SF  
Unit Price: \$5.00 / SF

Total: \$250,000

**01.5-070C05 Vinyl Floor Tile**

**Element Instance: 01.5-070C05 Vinyl Tile Floor**

<b>Details</b>	<b>Values</b>
Inspection Date	May 9 2013 12:00AM

**Component Details** Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Vinyl tile flooring, located in various areas throughout the building, was noted in overall fair condition during the assessment. Typical sign of wear on the tiles. Replacement is recommended at the end of its useful life to maintain appearances and avoid any future trip hazards from lifted tiles.



Condition of vinyl floor tile provided in the building.



Vinyl floor tiles provided in the building.



**01.5-070C05 Vinyl Tile Floor Event #: 1**

<b>Brief Description</b>	Replace [01.5-070C13 Special Floor Finishes] - Cork tile				<b>Data Origin</b>
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>		
Replace	2019	\$27,000	Medium	2013, Vanderwesten Rutherford Mantecon	

**Event Details**

Replace vinyl tile flooring

Approx Quantity: 6000 SF  
Unit Price: \$4.50 / SF

Total: \$27,000

**01.5-070C06 Sheet Vinyl Floor**

**Element Instance: 01.5-070C06 Sheet Vinyl Floor Covering**

<b>Details</b>	<b>Values</b>
Inspection Date	May 9 2013 12:00AM

**Component Details** Eric Neu, Vanderwesten Rutherford Mantecon, 2013

The vinyl sheet flooring noted on site was in fair condition during the assessment. The sheet flooring was mostly located in kitchen areas. There were some minor signs of wear noted on the floors. Replacement is recommended to maintain appearances and use.



Closer view of the sheet vinyl floor covering provided in the kitchenette.





Deterioration observed at the door thresholds.



Sheet vinyl floors provided in the kitchenette on each floor.

**01.5-070C06 Sheet Vinyl Floor Covering Event #: 1**

<b>Brief Description</b>	Replace [01.5-070C06 Sheet Vinyl Floor] - Vinyl tile and sheet flooring			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2020	\$8,250	Medium	2013, Vanderwesten Rutherford Mantecon

**Event Details**

Replace vinyl sheet flooring

Approx Quantity: 1500 SF  
Unit Price: \$5.50 / SF

Total: \$8250

**01.5-070C09 Painted/Sealed Concrete or Wood Floor**

**Element Instance: 01.5-070C01 Floor Finishes - Ceramic Floor Tile**

<b>Details</b>	<b>Values</b>
Inspection Date	May 9 2013 12:00AM

**Component Details** Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Ceramic floor tiles are located in washrooms throughout the building. The floors were noted in fair condition with some areas of cracked and damaged tiles. Some areas of deteriorated grout was also noted. Replacement of the ceramic floor tiles is recommended at the end of their useful life.



Typical condition of the ceramic tile floor covering provided in the washrooms.



Typical condition of the ceramic floor tiles provided in the washrooms.

**01.5-070C01 Floor Finishes - Ceramic Floor Tile Event #: 1**

<b>Brief Description</b>	Replace - 01.5-070 Floor Finishes - Ceramic Floor Tile			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2018	\$52,500	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details** Replace Ceramic Floor Tiles

Approx Quantity: 5000 SF  
Unit Price: \$10.50 / SF

Total: \$52,500

**Element Instance: 01.5-070C09 Sealed Concrete Floor**

<b>Details</b>	<b>Values</b>
Inspection Date	May 9 2013 12:00AM

**Component Details** Eric Neu, Vanderwesten Rutherford Mantecon, 2013

The sealed concrete floor located in the basement parking garage and boiler room was noted in poor condition during the assessment. There was deterioration noted in the concrete slab, specifically in the parking garage and under units in the boiler room. It is recommended that the concrete floor be resealed to prevent any further deterioration of the slab.



**01.5-070C09 Sealed Concrete Floor Event #: 1**

<b>Brief Description</b>	Repair [01.5-070C09 Sealed Concrete Floor]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Repair	2014	\$9,000	High	2013, Vanderweston Rutherford Mantecon

**Event Details**

Reseal concrete floor

Approx Quantity: 18,000  
Unit Price: \$0.50 / SF

Total: \$9,000

**01.5-070C11 Marble Floor**

**Element Instance: 01.5-070C11 Marble Floor**

<b>Details</b>	<b>Values</b>
Inspection Date	May 9 2013 12:00AM

**Component Details** Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Marble flooring is located in the main lobby and first floor hallways as well as the elevator lobby at each floor. The floor was noted in good condition with no deficiencies to report.



Marble floor covering provided in the corridors.



Portion of the marble floor covering seen in main entrance foyer.





**01.5-080 Ceiling Finishes**

**Element Instance: 01.5-080 Ceiling Finishes - Acoustic Tile Ceiling**

**Details**

Inspection Date

**Values**

May 9 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

1x1 acoustic ceiling tiles are located in classrooms and offices throughout the building. The tiles were noted in overall fair condition with some areas of tile coming loose. Replacement of the tile ceiling is recommended prior to falling or worn tiles.



Acoustic tile ceiling provided in some classrooms and offices.



Acoustic tile ceiling provided in some classrooms and offices.







**01.5-080 Ceiling Finishes - Acoustic Tile Ceiling Event #: 1**

<b>Brief Description</b>		Replace - 01.5-080 Ceiling Finishes - Acoustic Tile Ceiling		
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2016	\$230,000	High	2013, Vanderweston Rutherford Mantecon

**Event Details** Replace 1x1 acoustic ceiling tiles

Approx Quantity: 46,000 SF  
Unit Price: \$5.00 / SF

Total: \$230,000

**01.5-080C02 Suspended Acoustic Panel Ceiling**

**Element Instance: 01.5-080C02 Suspended Acoustic Panel Ceiling**

<b>Details</b>	<b>Values</b>
Inspection Date	May 9 2013 12:00AM

**Component Details** Eric Neu, Vanderwesten Rutherford Mantecon, 2013

2x4 suspended acoustic ceiling tile located in classrooms and various areas throughout the building was noted in fair condition during the assessment. Some signs of wear and age on the tiles. Replacement of the tiles is recommended to maintain appearances.



**01.5-080C02 Suspended Acoustic Panel Ceiling Event #: 1**

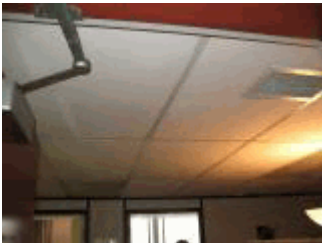
<b>Brief Description</b>	Replace [01.5-080C02 Suspended Acoustic Panel Ceiling] - Suspended acoustic tile ceiling			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2021	\$31,500	High	2013, Vanderweston Rutherford Mantecon

**Event Details**

Replace 2x4 suspended acoustic tile ceiling.

Approx Quantity: 7000 SF  
Unit Price: \$4.50

Total: \$31,500  
Dec. 2007 - Suspended ceiling tiles in some of the offices.



Dec. 2007 - Suspended ceiling tiles in some of the offices.

**01.5-080C04 Linear Metal Panel Ceiling**

Element Instance: 01.5-080C04 1x1 Metal Panel Ceiling

<b>Details</b>	<b>Values</b>
Inspection Date	May 9 2013 12:00AM

**Component Details** Eric Neu, Vanderwesten Rutherford Mantecon, 2013

1x1 metal panel ceiling is located throughout the main lobby and the hallways on all floors as well as some offices. The panels were noted in fair condition overall. Many holes in the metal panels appear to be clogged either with debris or paint. Replacement of the ceiling panels is recommended for appearances and to increase the amount of return air coming through the panels.



Loose metal panels. Painting undertaken undertaken in 1999 has closed some of the perforations thereby reducing the efficiency of the return air system.



Painting undertaken undertaken in 1999 has closed some of the perforations thereby reducing the efficiency of the return air system.



Loose metal panels. Painting undertaken undertaken in 1999 has closed some of the perforations thereby reducing the efficiency of the return air system.



Loose and deteriorated metal panels. Painting undertaken undertaken in 1999 has closed some of the perforations thereby reducing the efficiency of the return air system.



Preforated metal panel ceiling provided in the classrooms.



**01.5-080C04 1x1 Metal Panel Ceiling Event #: 1**

<b>Brief Description</b>	Replace [01.5-080C04 Linear Metal Panel Ceiling] - Painted perforated metal ceilings			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2022	\$180,000	High	2013, Vanderweston Rutherford Mantecon

**Event Details**

Replace 1x1 metal panel ceiling

Approx Quantity: 20,000 SF  
Unit Price: \$9.00 / SF

Total: \$180,000

**01.5-110 Interior Stairs**

**Element Instance: 01.5-110 Interior Stairs**

<b>Details</b>	<b>Values</b>
Inspection Date	May 10 2013 12:00AM

This report was generated without using Virtual Events.

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

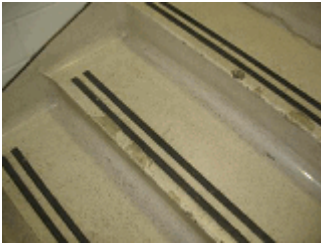
Two (2) sets of metal stairs and railings services all floors of the building. The stairs were observed in good condition with no major deficiencies to report. The stairs in the basement level are poured concrete.

Many areas in the basement level contain concrete steps. All basement level concrete stairs were noted in good condition during the assessment. No major deficiencies to report.

One (1) set of interior steel stairs provides access from the basement level storage room in the north east corner of the building to the main floor.



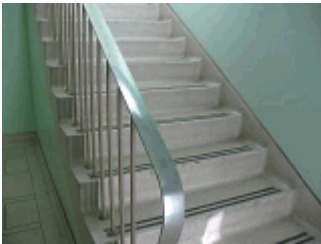
Repair undertaken on the terrazzo treads.

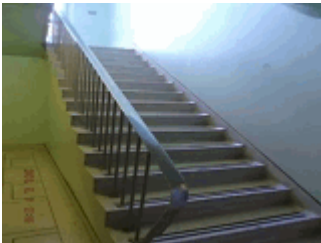


Metal framed stairs with terrazzo treads.



Poured concrete stairs to the basement, with terrazzo covers on the treads.





**01.6 Exterior Stairs, Ramps, Plazas, & Decks (Attached to Structure)**

**Element Instance: 01.6 Site Related Stairs, Plazas, & Ramps (Detached from Structure)**

**Details**

Inspection Date

**Values**

May 28 2013 12:00AM

**Component Details**

Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Two (2) sets of concrete stairs provide access from Jackson street to the two (2) lower levels parking areas. The stairs were observed in poor condition with deteriorated and damaged concrete steps. Repairs are recommended to prevent any trip hazards.

Two (2) sets of poured concrete stairs provide access from the basement of the building up to the exterior parking. These stairs were noted in good condition during the assessment with no major deficiencies to report.

Concrete stairs with metal handrails located at the front of the building provide access to the main entrance of the building. These stairs were noted in good condition with no

major deficiencies to report.

One (1) exterior steel ramp complete with with checkered plate provides barrier free access to the main entrance of the building. The ramp was noted in poor condition with large amounts of surface rust. Replacement is recommended to maintain proper barrier free access to the building.



Concrete ramps from the street to the surface and underground parking areas.



Poured concrete steps at either end of the Queenston sidewalk.



Concrete ramps from the street to the surface and underground parking areas.







**01.6 Site Related Stairs, Plazas, & Ramps (Detached from Structure) Event #: 1**

<b>Brief Description</b>	Repair [01.6 Site Related Stairs, Plazas, & Ramps (Detached from Structure)]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Repair	2014	\$1,000	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details** Repairs to concrete stairs at south side of the building from Jackson Street

Quantity: 2  
Unit Price: \$500

Total: \$1000

**01.6 Site Related Stairs, Plazas, & Ramps (Detached from Structure) Event #: 2**

<b>Brief Description</b>	Replace [00.2-016 Site Related Stairs, Plazas, & Ramps (Detached from Structure)]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2016	\$10,000	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details** Replace steel ramp at main entrance to building

Quantity: 1  
Unit Price: \$10,000

Total: \$10,000

**02. Vertical Movement**

**02.1 Passenger Elevators**

Element Instance: 02.1 Vertical Movement - Passenger Traction Elevators

<b>Details</b>	<b>Values</b>
Inspection Date	May 13 2013 12:00AM

**Component Details** Eric Neu, Vanderwesten Rutherford Mantecon, 2013

Two (2) OTIS traction elevator provide access to all levels of the building (excluding penthouse). The elevators are original to the building and were noted in fair working condition during the assessment. they have a capacity of 16 persons or 2500 lbs. The elevators are TSSA certified (certification expires in April of 2014).

The interior of the cab is out dated and in poor condition. Refinishing the interior of the cab should be considered.

Pending regular maintenance and continued TSSA certification, the elevators may need to be replaced as they have already exceeded their expected life use.



**02.1 Vertical Movement - Passenger Traction Elevators Event #: 1**

<b>Brief Description</b>	Replace [02.2 Vertical Movement - Traction Elevators]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2017	\$400,000	High	2013, Vanderweston Rutherford Mantecon

**Event Details** Replace interior traction elevators, 5 storey, 2500 lbs

Quantity: 2  
Unit Price: \$200,000

Total: \$ 400,000

**03. Mechanical**

**03.1 HVAC**

**03.1-010 Boilers**

Element Instance: 03.1-010 Boilers - Two Steam Boilers

<b>Details</b>	<b>Values</b>
Inspection Date	May 23 2013 12:00AM

**Component Details** David He, Vanderweston Rutherford Mantecon, 2013

There are two original boilers built in 1957. Boilers are York-Shibley model FV 40N. Each has 6,300 MBH input capacity, low pressure steam, gas fired, forced draft burner, fire tube boilers installed. The original oil burners have been updated to gas system. The boilers are operating as run/standby units. They are serving the perimeter radiation, the recessed cabinet units heaters and the steam heating coils of the main air handling unit SF-1, and the floor unit heaters (UH-1 and UH-2) in the garage. Water to the boilers is treated and analyzed by independent contractor.

There are a Vacuum pump, a condensate receiver and two condensate pumps to collect the condensate return from equipment and pump into boilers. The vacuum pump was installed about 8 years ago. It is in good condition. The condensate tank is stainless steel tank which in fair condition. The two condensate pumps are original pumps were installed in 1957. The pumps are in poor condition.

The boilers have passed their service life. Based on age the boilers are in poor condition. No major restoration of the boilers has reportedly been undertaken in the last

This report was generated without using Virtual Events.

22 years with the exception of some valve and pipe replacement.

The chimney flashing on roof is in poor condition which should be repair soon.



Corrosion seen on the boiler housing.



Boiler No.2 - at the time of the assessment was under repair.



Boiler No. 1 - only boiler currently operating. Boiler No, 2 was under repair at the time of the assessment.





**03.1-010 Boilers - Two Steam Boilers Event #: 1**

<b>Brief Description</b>	Replace - 03.1-010 Boilers - Two Steam Boilers			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2014	\$213,334	High	2013, Vanderweston Rutherford Mantecon

**Event Details**

Boilers are tested daily by the Facilities maintenance personnel, and monthly by the water treatment supplier. The yearly inspection is by the insuring company.

A replacement of the boilers is recommended given age, and reported and observed conditions. At the time of the assessment building heat was supported by a single boiler, which is dated. Failure of both boilers at the same time is likely, and this will result in a building shut down during the winter.

Replacement cost based on the boilers, are gas fired, natural or propane, cast iron, steam, gross output, 6970 MBH, includes standard controls and insulated jacket, packaged. Excludes cost for the removal of the existing boiler, and the replacement of the boiler auxiliary systems and gas piping.

Qty: 2 boilers  
Unit Cost: \$106,667/boiler.

Total: \$213,334

**03.1-040 Heat Exchangers**

**Element Instance: 03.1-040 Heat Exchangers - Snow Melt**

<b>Details</b>	<b>Values</b>
Inspection Date	May 24 2013 12:00AM

**Component Details**

David He, Vanderwesten Rutherford Mantecon, 2013

One steam/glycol heat exchanger and recirculation pump serve the snow melting system for the parking garage access ramps. Both the pump and heat exchanger are an original 1957 installation.

The heat exchanger and pump, which provide heating hot glycol water to the snow melt beneath concrete ramps and driveway, are disconnected. The concrete ramps and driveway snow melt has experienced leaks and is not in use.





Snow melt heat exchanger currently de-commissioned.

**03.1-040 Heat Exchangers - Snow Melt Event #: 1**

<b>Brief Description</b>	Replace - 03.1-040 Heat Exchangers - Snow Melt			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2014	\$29,881	High	2013, Vanderweston Rutherford Mantecon

**Event Details** Replacement of the heat exchanger and recirculation pump are required. Replacement to be coordinated with the snow melt for the parking garage access ramp.

Heat Exchanger Specifications: Shell & tube type, cast iron heads, cast iron tube sheet, steel shell, 2 or 4 pass, hot water 40Deg.F to 180Deg.F, by steam at 10 PSI, 240 GPM, 3/4" copper tubes. Cost does not include replacement of the snow melt system beneath the parking garage access.

Heat exchanger:  
Qty: 1 unit  
Unit Costs: \$21,810/unit

Total: \$21,810

Recirculation pump:  
Qty: 1  
unit Unit costs: \$8,000/unit

Total: \$8,000

**03.1-070 Terminal Units**

**Element Instance: 03.1-070 Terminal Units - Perimeter fin coils**

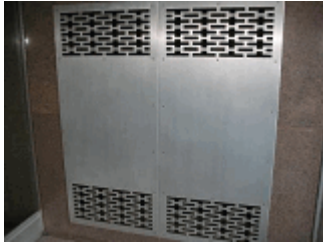
<b>Details</b>	<b>Values</b>
Inspection Date	May 23 2013 12:00AM

**Component Details** David He, Vanderwesten Rutherford Mantecon, 2013

The building has the original 1957 perimeter heating system comprising of steam radiators and convectors. In corridors, stairwells and the entrance vestibule heating is provided by wall recessed forced flow heaters.

The radiators and the convectors are in fair condition for their age.

Heating piping is installed in the steps at main entrance above garage as a snow melting system.



Forced flow heaters provided in the entrance vestibule.



Perimeter forced flow heaters provided in the kitchenettes on each floor.



Typical forced flow heaters provided in the some offices.

**03.1-070 Terminal Units - Perimeter fin coils Event #: 1**

**Brief Description**

Replace [03.1-070 Terminal Units]

**Event Type**

**Event Year**

**Event Cost**

**Priority**

**Data Origin**

Replace

2014

\$149,910

High

2013, Vanderweston  
Rutherford Mantecon

**Event Details**

The fin coil units and the forced flow heaters are in fair condition. Based on age replacement is recommended to maintain uninterrupted building comfort.

Qty: 263 units.  
Unit Costs: \$570/unit

Total: \$149,910

**03.1-100 Chillers**

**Element Instance: 03.1-100 Chillers - Mechanical Room**

**Details**

**Values**

Inspection Date

May 23 2013 12:00AM

**Component Details**

David He, Vanderwesten Rutherford Mantecon, 2013

The chiller is manufactured by TRANE. The unit is a model CenTraVac liquid chiller, approximately 320 nominal refrigeration ton capacity and was installed in 1991 to replace the original unit. The chiller is designed for refrigerant R11 or R123, and presently runs on HCFC-123 while running on R11 before.

The unit condition is consistent with age and good.

The chilled water pump is in poor condition and the condenser water pump is in fair condition. Both pumps are original pumps to be replaced.





Centrifugal chiller installed in 1990.



Reserve tank - R-11.



**03.1-100 Chillers - Mechanical Room Event #: 1**

<b>Brief Description</b>	Replace [03.1-100 Chiller pump and Condenser pump - Mechanical Room]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2014	\$10,000	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details** The chilled water pump is in poor condition and the condenser water pump is in fair condition. Both pumps are original pumps to be replaced in the short term.

Qty: 2 unit  
Unit Costs: \$5,000/unit

Total: \$10,000

**03.1-100 Chillers - Mechanical Room Event #: 2**

<b>Brief Description</b>	Replace - 03.1-100 Chillers - Mechanical Room			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2020	\$147,559	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details** Replacement based on age not anticipated in the short term.

Unit Cost based - Water chiller, centrifugal liquid chiller, packaged unit, water cooled, 400 ton, includes standard controls, excludes water tower.

Qty: 1 unit,  
Unit Costs: \$147,559/unit

Total: \$147,559

**03.1-110 Cooling Towers for AC Only (not Ice making)**

Element Instance: 03.1-110 Cooling Towers

<b>Details</b>	<b>Values</b>
Inspection Date	May 23 2013 12:00AM

This report was generated without using Virtual Events.

**Component Details**

David He, Vanderwesten Rutherford Mantecon, 2013

The cooling tower is a Marley model double flow aquatower cross flow cooling tower (base evaporator tons: approximately 320) installed in 1958. The cooling tower structure is wood.

The tower has passed its service life, it is in poor condition. And it is reported that it is kept only in working condition by the retrofit of the gear box of the fan, and the reinforcement of the supports and replacement of the eliminators. The wet deck surface and heat transfer system still show the sign of aging. It takes a special effort for the maintenance personnel to keep the tower in operation.



**03.1-110 Cooling Towers Event #: 1**

**Brief Description**

Replace [03.1-110 Cooling Towers]

**Event Type**

Event Year

Event Cost

Priority

Data Origin

Replace

2014

\$45,000

High

2013, Vanderwesten  
Rutherford Mantecon

**Event Details**

Cooling tower are designed to provide a service life of 30 years. Unit was installed during commissioning and hence based on age and condition will require replacement in the short term.

Qty: 1 unit,  
Unit Costs: \$45,000/unit

Total: \$45,000

**03.1-140 Air Handling Units**

Element Instance: 03.1-140 Air Handling Units - Mechanical Penthouse

**Details**

**Values**

Inspection Date

May 23 2013 12:00AM

**Component Details**

David He, Vanderwesten Rutherford Mantecon, 2013

One central hot deck-cold deck air Handling unit (SF-1) serves the building. The unit comprises the heating and cooling coils, the hot deck and the cold deck supply air fans (40 HP and 30 HP) and the return air fan (10 HP). The fans were manufactured by Silentvane Co. and their inlet vanes are controlled by duct mounted pressure sensors.

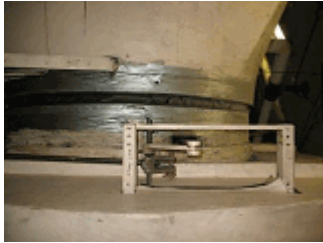
There are two 'heating only' floor unit heaters (TRANE, Torridor model, each equipped with 2 1/2 HP supply air fan motor). The units which heat the garage by recirculating indoor air are currently abandoned.

The unit and its components have passed their nominal service life, and are kept in good working order with continuous part replacements (i.e. bearings).

It is recommended that at the time of the system replacement the air distribution system be revised.



Return fan in the mechanical penthouse.



Deteriorated flex hose on the air handling unit.



Bag filters that replaced the abandoned precipitron.

**03.1-140 Air Handling Units - Mechanical Penthouse Event #: 1**

**Brief Description**

Replace - 03.1-140 Air Handling Units - Mechanical Penthouse

**Event Type**

**Event Year**

**Event Cost**

**Priority**

**Data Origin**

Replace

2014

\$80,000

High

2013, Vanderweston  
Rutherford Mantecon

**Event Details**

Replacement could be differed through a major refurbishment or overhaul of the system, which is generally the approach, due to prohibitive cost required to replace the system.

Qty: 1  
Unit Costs: \$80,000

Total: \$80,000

**03.1-180 Ventilation Fans**

Element Instance: 03.1-170 Diffusers/ Grilles

**Details**

**Values**

Inspection Date

May 24 2013 12:00AM

**Component Details**

David He, Vanderwesten Rutherford Mantecon, 2013

there are about 216 diffusers in the building. Most diffusers are in fair condition. About 10% of all diffusers are in poor conditions.





**03.1-170 Diffusers/ Grilles Event #: 1**

<b>Brief Description</b>	Replace [03.1-170 Diffusers]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2014	\$26,800	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details** About 10% of all diffusers are in poor condition.

Diffusers  
Qty: 22  
Unit Costs: \$400

Return/Exhaust Grilles  
Qty:120  
Unit Price: \$150

Total: \$26,800

**03.1-170 Diffusers/ Grilles Event #: 2**

<b>Brief Description</b>	Replace [03.1-170 Diffusers]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2018	\$77,600	Medium	2013, Vanderweston Rutherford Mantecon

**Event Details** About 90% of all diffusers are in fair condition.

Diffusers  
Qty:194  
Unit Costs: \$400

Total: \$77,600

**Element Instance: 03.1-180 Ventilation Fans - Mechanical Penthouse**

<b>Details</b>	<b>Values</b>
Inspection Date	May 23 2013 12:00AM

**Component Details** David He, Vanderweston Rutherford Mantecon, 2013

There are two major exhaust systems. They are original c. 1958 installations and they serve each group of washrooms (EF-1, 3 HP) and the garage (EF-2, 3 HP).

The two major exhaust system described above are located in the mechanical penthouse.



This report was generated without using Virtual Events.



Exhaust Fan 2 is the garage exhaust fan. The exhaust fan is located in the mechanical penthouse.



Exhaust Fan 1 is the washroom exhaust fan. The exhaust fan is located in the mechanical penthouse.

**03.1-180 Ventilation Fans - Mechanical Penthouse Event #: 1**

**Brief Description**

Major Repair [03.1-180 Ventilation Fans] - New systems for electrical and janitor rooms incl. Ductwork

**Event Type**

Replace

**Event Year**

2014

**Event Cost**

\$16,000

**Priority**

Medium

**Data Origin**

2013, Vanderweston  
Rutherford Mantecon

**Event Details**

No major refurbishment of units has been undertaken since the last assessment in 2008. Based on age the units are in poor condition. Replacement of the units based on age is required. A deferral could result in unit failures and poor indoor air quality.

Qty: 2

Units Costs: \$ 8,000/unit

Total: \$16,000



**03.3 Plumbing**

**03.3-010 Plumbing Fixtures**

Element Instance: 03.3-010 Plumbing Fixtures

**Details**

Inspection Date

**Values**

May 24 2013 12:00AM

**Component Details**

David He, Vanderweston Rutherford Mantecon, 2013

The standard plumbing fixtures consisting of hot and cold water fixtures (flush type WCs and urinals, lavatories and mop sinks) are mostly in fair to good condition. The mop sinks are in poor conditions. The vandal-proof stainless steel fixtures in the detention areas are in fair condition but the whole detention area are abandoned.



Typical ceramic sinks in the washrooms. The faucets dispense separate hot and cold water.



Typical toilet bowl with flush tank.



Typical toilet bowl with tank.

**03.3-010 Plumbing Fixtures Event #: 1**

**Brief Description**

Replace [03.3-010 Plumbing Fixtures - Mop sinks]

**Event Type**

Event Year

Event Cost

Priority

Data Origin

Replace

2014

\$3,600

Medium

2013, Vanderweston  
Rutherford Mantecon

**Event Details**

The mop sinks are in poor conditions and should be replaced.

Qty: 6

Units Costs: \$ 600/unit

Total: \$3,600



**03.3-010 Plumbing Fixtures Event #: 2**

**Brief Description**

Replace [03.3-010 Plumbing Fixtures]

**Event Type**

Event Year

Event Cost

Priority

Data Origin



Replace	2028	\$58,770	Medium	2013, Vanderweston Rutherford Mantecon
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**Event Details**

Replacement of the plumbing fixtures is required based on age and condition.

Approximate replacement cost: \$ 140,000

Qty : Approximately 58 Water Closets  
Unit Price: \$840

Qty : Approximately 12 Urinals  
Unit Price: \$840

Qty : Approximately 56 Lavatory  
Unit Price: \$700

Qty : Approximately 1 Showers  
Unit Price: \$420

Qty: Approximately 6 Stainless Steel Sink  
Unit Price: \$980

Qty: Approximately 4 Drinking Fountains  
Unit Price: \$2100

Total: \$58,770

**03.3-030 Domestic Water Heaters**

**Element Instance: 03.3-030 Domestic Water Heaters**

**Details**

Inspection Date

**Values**

May 24 2013 12:00AM

**Component Details**

David He, Vanderweston Rutherford Mantecon, 2013

The gas fired commercial domestic hot water heater is manufactured by Rheem-Ruud. The unit is a model G76-200-1, and has an actual capacity of 74 US gallons and input capacity of 199.9 MBH. The unit was installed in 2008 and is in good condition..



Domestic hot water heater installed in 1991.

**03.3-030 Domestic Water Heaters Event #: 1**

**Brief Description**

Replace [03.3-030 Domestic Water Heaters]

**Event Type**

**Event Year**

**Event Cost**

**Priority**

**Data Origin**

Replace

2026

\$8,400

Medium

2013, Vanderweston  
Rutherford Mantecon

**Event Details**

The water heater life cycle is 18 years. It should be replaced in 2026.

Qty: 1 unit,  
Unit Costs: \$8,400/unit

Total: \$8,400

This report was generated without using Virtual Events.

**03.5 Fire Protection**

**03.5-080 Fire Alarm Panel & Monitoring System**

Element Instance: 03.5-080 Fire Alarm System

**Details**

**Values**

Inspection Date May 28 2013 12:00AM

**Component Details**

Patti DeLange, Vanderwesten Rutherford Mantecon, 2013.

The main fire alarm control panel is located within main electrical room, the remote annunciators are located throughout building, the pull-stations are located at all exit doors and at fire rated areas, the smoke detectors at top of stairwells, the heat detectors are located throughout building, bells are located throughout building.



Main fire alarm control panel



Fire alarm manufactured by MirCom. Unit installed in 2004.



Fire alarm bells located throughout building

**03.5-080 Fire Alarm System Event #: 1**

**Brief Description**

Replace [04.5-010 Fire Alarm System] - Simplex fire alarm

**Event Type**

**Event Year**

**Event Cost**

**Priority**

**Data Origin**

Replace	2028	\$58,230	High	2013, Vanderwesten Rutherford Mantecon
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**Event Details**

Fire Alarm system was observed to be fair condition and replacement of system is recommended prior to un-available devices.

Entire Fire Alarm System  
Quantity: 1  
Unit Price: \$53,230

Total: \$53,230

**04. Electrical**

**04.1 Primary Electrical**

**04.1-010 Primary Switchgear**

Element Instance: 04.1-010 Primary Switchgear

This report was generated without using Virtual Events.

**Details**

Inspection Date May 28 2013 12:00AM

**Values**

**Component Details**

Patti DeLange, Vanderwesten Rutherford Mantecon, 2013.

The incoming service to the site is 4160volt.

The substation consists of two interrupter switches.



**04.1-010 Primary Switchgear Event #: 1**

**Brief Description**

Replace [04.1-010 Primary Switchgear]

**Event Type**

**Event Year**

**Event Cost**

**Priority**

**Data Origin**

Replace

2015

\$210,000

High

2013, Vanderwesten  
Rutherford Mantecon

**Event Details**

The primary switchgear is in fair condition overall. Replacement of the primary switchgear is anticipated at the conclusion of its EUL.

Quantity: 1

Unit Price: \$210,000

Total: \$210,000

**04.1-020 Primary Transformer**

**Element Instance: 04.1-020 Primary Transformer**

**Details**

Inspection Date May 28 2013 12:00AM

**Values**

**Component Details**

Patti DeLange, Vanderwesten Rutherford Mantecon, 2013.

The transformer substation contains of 2 at 750KVA 4610V - 600V dry type transformer to step down the incoming voltage.

The primary transformers are in fair condition.



750kva transformer

**04.1-020 Primary Transformer Event #: 1**

**Brief Description**

Replace [04.1-020 Primary Transformer]

**Event Type**

**Event Year**

**Event Cost**

**Priority**

**Data Origin**

Replace

2015

\$60,000

High

2013, Vanderwesten  
Rutherford Mantecon

**Event Details**

The primary transformers was observed to be in fair condition. Replacement is anticipated at the conclusion of its EUL.

This report was generated without using Virtual Events.

Quantity: 2  
Unit Price: \$30,000.00  
  
Total: \$60,000

**04.2 Secondary Electrical**

**04.2-010 Secondary Switchgear**

Element Instance: 04.2-010 Secondary Switchgear

**Details**

Inspection Date

**Values**

May 28 2013 12:00AM

**Component Details**

Patti DeLange, Vanderwesten Rutherford Mantecon, 2013.

The main distribution board is located in the substation in the main electrical room.

The main distribution board is a two section 347/600 V board.

The main disconnect switch is 2500A 600 V.

The secondary switchgear units were observed to be in fair condition.



**04.2-010 Secondary Switchgear Event #: 1**

**Brief Description**

Replace [04.2-010 Secondary Switchgear]

**Event Type**

Replace

**Event Year**

2018

**Event Cost**

\$374,500

**Priority**

Medium

**Data Origin**

2013, Vanderwesten  
Rutherford Mantecon

**Event Details**

Replacement of the secondary switchgear units is recommended at the conclusion of their EUL.

Main 600volt Panels:

Quantity: 2

Unit Price: \$32000

Total: \$64,000

Step Down Transformers:

Total of approx. 2 (between 30kva to 75kva)

Unit Price: \$7000.00

Total: \$14,000

Distribution Panels:  
Quantity: 2  
Unit Price: \$8030

Total: \$16,060

Electrical branch panels (30cct to 42cct):  
Quantity: 28  
Unit Price: \$7000

Total: \$196,000

Electrical branch panels (8cct to 30cct):  
Quantity: 7  
Unit Price: \$7500.00

Total: \$52,500

Splitter trough:  
Quantity: 1  
Unit Price: \$583

Total: \$583

Various Disconnect switches (400amp to 30amp) & time clocks:  
Unit Price: \$31,350

Total: \$31,350

### 04.3 Lighting Fixtures

#### 04.3-010 Interior Lighting

Element Instance: 04.3-010 Interior Lighting

##### Details

Inspection Date

##### Values

May 28 2013 12:00AM

##### Component Details

Patti DeLange, Vanderwesten Rutherford Mantecon, 2013.

The interior lighting within the building is the following:

Recessed 1x1, acrylic lens, fluorescent, 2lamp; located within jail cells, offices, kitchen, corridors;

Surface/suspended 4'-0" industrial 2lamp fluorescent fixture located within boiler, electrical, garage and storage rooms;

Recessed 1x4 2lamp parabolic fluorescent fixtures located within offices and computer room;

Recessed 2x4 4lamp acrylic lens fluorescent fixtures located within offices, kitchenette, meeting rooms, lunch room;

Surface/suspended glass globe small highbay type incandescent/compact fluorescent spiral fixtures located within boiler room, storage, electrical room, garage, penthouse;

Surface 8'-0" 1lamp strip fluorescent fixture located within electrical rooms;

Recessed 1x4 2lamp acrylic lens fluorescent fixture located within dining room, kitchen,

offices;  
Surface keyless lampholder with compact fluorescent spiral lamps located within sprinkler room, shafts and janitor rooms;  
Surface 1x4 2lamp acrylic lens fluorescent fixture located within telephone room, jail cell area, washrooms, lunch rooms, offices, stairwells, storage, corridors, classrooms;  
Surface 1x4 2lamp fibre body fluorescent fixture located within jail cells, corridors;  
Recessed 1x4 2lamp blade/parabolic type fluorescent fixture located within lunch room, offices, storage, corridors, kitchen area, washrooms;  
Recessed 2x4 4lamp parabolic fluorescent fixture located within computer room;  
Surface type round metal fixtures complete with 7 shades complete with compact fluorescent spiral lamps located within entrance of building;  
Surface mounted track lighting incandescent/compact fluorescent spiral lamps complete with smooth round heads located within dining room;  
Round shower light surface mounted located within showers;  
Surface 2x4 4lamp acrylic lens fluorescent fixtures located within offices and kitchen areas;  
Pot lights complete with incandescent and compact fluorescent spiral lamps located within office and entrances;  
Arrangement of fluorescent squares consist of 8'-0" 2lamp strip fixtures and 4'-0" 2lamp strip fixtures located within offices and meeting rooms;  
Surface 2x4 2lamp acrylic lens fluorescent fixtures located within offices, classrooms and lunch rooms;  
Wall mounted 4'-0" 2lamp opal lens fluorescent fixtures located within washrooms;  
Surface/suspended 4'-0" 2lamp strip fluorescent fixtures located within offices, washrooms;  
Suspended 8'-0" fluorescent fixture complete small blades located within Court room office;  
Pole mounted fixtures complete with egg shape lens, brass finish, black pole finish located within corridor/entrance;  
Recessed 2x4 4lamp blade/parabolic type fluorescent fixture located within board rooms;  
Incandescent wall mounted fixtures glass lens located within washrooms and stairwell at landings;  
Surface 4'-0" 1lamp yellow acrylic lens, white base in square shape located within offices.



Original light fixtures with T8 lamps.



Original light fixtures with T8 lamps







Square recessed fixtures with 8 foot and 4 foot fixtures located within meeting rooms and offices.



**04.3-010 Interior Lighting Event #: 1**

**Brief Description**

Replace [04.3-010 Interior Lighting]

**Event Type**

Event Year

Event Cost

Priority

Data Origin

Replace

2015

\$610,660

High

2013, Vanderweston  
Rutherford Mantecon

**Event Details**

Fixtures are in poor condition, the fixtures have reached the end of their expected useful life.

Replacement of the fixtures is recommended within 2-3 years to improve efficiency and prevent deterioration of fixtures.

Recessed 1x1, acrylic lens, fluorescent, 2lamp;  
Quantity: 73  
Unit Price: \$275.00

Total: \$20,075

Surface/suspended 4'-0" industrial 2lamp fluorescent fixture  
Quantity: 144  
Unit Price: \$225

Total: \$32,400

Recessed 1x4 2lamp parabolic fluorescent fixtures  
Quantity: 4  
Unit Price: \$261

Total: \$1046

Recessed 2x4 4lamp acrylic lens fluorescent fixtures  
Quantity: 41  
Unit Price: \$314.60

Total: \$12,900

Surface/suspended glass globe small highbay type incandescent/compact fluorescent  
spiral fixtures  
Quantity: 14  
Unit Price: \$212.00

Total: \$2968

Surface 8'-0" 1lamp strip fluorescent fixture  
Quantity: 2  
Unit Price: \$220

Total: \$440

Recessed 1x4 2lamp acrylic lens fluorescent fixture  
Quantity: 13  
Unit Price: \$244

Total: \$3172

Surface keyless lampholder with compact fluorescent spiral lamps  
Quantity: 12  
Unit Price: \$60.50

Total: \$726

Surface 1x4 2lamp acrylic lens fluorescent fixture  
Quantity: 430  
Unit Price: \$204.60

Total: \$88,000

Surface 1x4 2lamp fibre body fluorescent fixture  
Quantity: 5  
Unit Price: \$281.60

Total: \$1408

Recessed 1x4 2lamp blade/parabolic type fluorescent fixture  
Quantity: 673

Unit Price: \$410.00

Total: \$275,930

Recessed 2x4 4lamp parabolic fluorescent fixture

Quantity: 20

Unit Price: \$324.50

Total: \$6500

Surface type round metal fixtures complete with 7 shades complete with compact  
fluorescent spiral lamps

Quantity: 7 rings/7 shades per ring

Unit Price: \$2000.00

Total: \$14,000

Surface mounted track lighting incandescent/compact fluorescent spiral lamps complete  
with smooth round heads

Quantity: 6 @ 4'-0" c/w 12 heads in total

Total: \$1960

Round shower light surface mounted

Quantity: 4

Unit Price: \$315.70

Total: \$1260

Surface 2x4 4lamp acrylic lens fluorescent fixtures

Quantity: 117

Unit Price: \$314.60

Total: \$36,800

Pot lights complete with incandescent and compact fluorescent spiral lamps

Quantity: 44

Unit Price: \$293.70

Total: \$12,900

Arrangement of fluorescent squares consist of 8'-0" 2lamp strip fixtures and 4'-0" 2lamp  
strip fixtures

Quantity: 8'-0" = 46, 4'-0" = 88

Total: \$24,900

Surface 2x4 2lamp acrylic lens fluorescent fixtures

Quantity: 1776

Unit Price: \$344.30

Total: \$61,150

Wall mounted 4'-0" 2lamp opal lens fluorescent fixtures  
Quantity: 12  
Unit Price: \$347.60

Total: \$4175

Surface/suspended 4'-0" 2lamp strip fluorescent fixtures  
Quantity: 43  
Unit Price: \$172.70

Total: \$7,425

Suspended 8'-0" fluorescent fixture complete small blades  
Quantity: 1  
Unit Price: \$110

Total: \$110

Pole mounted fixtures complete with egg shape lens, brass finish, black pole finish  
Quantity: 4  
Unit Price: \$1000

Total: \$4000

Recessed 2x4 4lamp blade/parabolic type fluorescent fixture  
Quantity: 4  
Unit Price: \$600

Total: \$2400

Incandescent wall mounted fixtures glass lens  
Quantity: 18  
Unit Price: \$425

Total: \$7650

Surface 4'-0" 1lamp yellow acrylic lens, white base in square shape  
Quantity: 20  
Unit Price: \$110

Total: \$2200

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### **04.3-020 Exterior Lighting**

**Element Instance: 04.3-020 Exterior Lighting**

**Details**

Inspection Date

**Values**

May 28 2013 12:00AM

**Component Details**

Patti DeLange, Vanderwesten Rutherford Mantecon, 2013.

Exterior lighting includes wall-mounted fixtures around the building perimeter.

This report was generated without using Virtual Events.

There are pole mounted light fixtures located at front entrance.

Pot lights at each end of building at roof level.

Flood lights mounted on ground behind wireguards.

In-ground lighting within planters at front of building.



Typical lamp posts.

**04.3-020 Exterior Lighting Event #: 1**

**Brief Description**

Replace [04.3-020 Exterior Lighting] - Exterior lighting

**Event Type**

**Event Year**

**Event Cost**

**Priority**

**Data Origin**

Replace

2017

\$55,900

Medium

2013, Vanderweston  
Rutherford Mantecon

**Event Details**

The flood lights mounted on ground and on pole at front are in good condition.

The wall/pole mounted fixtures located on side of building was observed as being in good condition.

Based on age and condition, upgrade of the exterior lighting is recommended in 3-5 years to ensure adequate illumination and security of the site.

Pole mounted fixtures c/w pole:  
Quantity: 6 poles c/w 1 head each  
Unit Price: \$ 2000.00

Total: \$12,000

Wall mounted around entire building:  
Quantity: 10  
Unit Price: \$500

Total: \$5000

Pot lights at each end of building:  
Quantity: 72  
Unit Price: \$425

Total: \$30,600

Flood lights mounted on ground:  
Quantity: 4  
Unit Price: \$500

Total: \$2000

In ground at planters:  
Quantity: 10  
Unit Price: \$725

Total: \$7250

### 04.3-030 Exit Lighting

Element Instance: 04.3-030 Exit Lighting

**Details**

Inspection Date

**Values**

May 28 2013 12:00AM

**Component Details**

Patti DeLange, Vanderwesten Rutherford Mantecon, 2013.

Exit lighting are located at various points throughout the building.

The fixtures are generally connected to local battery packs for emergency power supply.

Exit signs generally appear to be in poor condition.

The exit lights are essentially the original fixtures installed during commissioning of the building.

The original exit lights are incandescent lights.

Typical incandescent exit sign.



Typical incandescent exit light with battery unit.



**04.3-030 Exit Lighting Event #: 1**

**Brief Description**

Replace [04.3-030 Exit Lighting]

**Event Type**

Replace

**Event Year**

2015

**Event Cost**

\$13,800

**Priority**

High

**Data Origin**

2013, Vanderwesten  
Rutherford Mantecon

**Event Details**

Replacement of the old incandescent lights with energy saving LED options is required. In general, our assessment concurs with the previous recommendations.

Quantity:22  
Unit Price: \$627

This report was generated without using Virtual Events.



Total: \$13,800

### 04.3-040 Emergency Lighting

Element Instance: 04.3-040 Emergency Lighting

#### Details

Inspection Date

#### Values

May 28 2013 12:00AM

#### Component Details

Patti DeLange, Vanderwesten Rutherford Mantecon, 2013.

Emergency power for lighting and exit signs is provided from a bank of not enclosed lead acid batteries, located in the basement electrical room.

Emergency power is directed through a rectifier. The rectifier is rated 120 V.

The emergency lighting system is supplemented with stand alone emergency battery units feeding concealed and surface mounted emergency lighting heads.



**04.3-040 Emergency Lighting Event #: 1**

<b>Brief Description</b>	Replace [04.3-040 Emergency Lighting] - Battery bank			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2015	\$14,300	High	2013, Vanderweston Rutherford Mantecon

**Event Details** Based on condition, replacement is recommended in 2-3 years to ensure adequate lighting in the event of power failure.

Ceiling and wall:  
Quantity:49  
Unit Price: \$292

Total: \$14,300

A replacement of the emergency lighting system is required. Failure during power outage could likely result in a security risk. The replacement to include installation of new inverter, batteries and end field devices.

**04.3-050 Combined Emergency & Exit Lighting**

Element Instance: 04.3-050 Combined Emergency & Exit Lighting

<b>Details</b>	<b>Values</b>
Inspection Date	May 28 2013 12:00AM

**Component Details** Patti DeLange, Vanderweston Rutherford Mantecon, 2013.

Combination Exit Emergency lighting is generally provided by LED exit signs with incandescent heads located at various points throughout the building.

Combination Units appeared to be in good condition overall.

**04.3-050 Combined Emergency & Exit Lighting Event #: 1**

<b>Brief Description</b>	Replace [04.3-050 Combined Emergency & Exit Lighting]			
<b>Event Type</b>	<b>Event Year</b>	<b>Event Cost</b>	<b>Priority</b>	<b>Data Origin</b>
Replace	2020	\$52,400	High	2013, Vanderweston Rutherford Mantecon

**Event Details** Based on condition, replacement is recommended in 7-9 years to ensure adequate lighting in the event of power failure.

Quantity:42  
Unit Price: \$1247.87

Total: \$52,400