Appendix C
SRPRS.19.167

DAVID DUNLAP OBSERVATORY & ADMINISTRATION BUILDING CONSERVATION PLAN

City of Richmond Hill
+VG Architects (Toronto) Ltd.

Tacoma Engineering - Structural
Integral Group – Mechanical & Electrical
Ed Bowcon – Metal Conservator
Counterpoint – Civil Engineering
A.W. Hooker – Quantity Surveying and Costing

September 12th, 2019

+VG ARCHITECTS
THE VENTIN GROUP LTD

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Introductory Information

1. Designated Property Data
2. Background Information
3. Brief History of the Site & Heritage Significance
4. Brief Description of the Site
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PART 1 – INTRODUCTORY INFORMATION

PROJECT:	**David Dunlap Observatory & Administration Building CONSERVATION PLAN**

Consulting Team:	Architectural:	Pietro Frenguelli	**Office:**	+VG Architects
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	Civil:	Charlotte Bush		Counterpoint
	Costing:	Deroy Destang		A.W. Hooker

1. DESIGNATED PROPERTY DATA

Asset No.:	N/A	Property Name:	David Dunlap Observatory
Street Address:	123 Hillsview Drive	City:	City of Richmond Hill
		Province:	ON, L4C 1T3
By-Law Designation:	No. 100-09		
Lot/Part:	Lot 42, Part Lot 41 and 43 Part 1, 65R - 29959		

Building(s)	Built	Size (GFA, total)	# Floors	#Rooms	Last Intervention
Administration Bld.	1933	14,080 sf. approx.	2 + Basm.t	46	N/A
Observatory	1939	6,500 sf. approx.	2 + Deck	10	N/A

Canadian Seismic Rating PGA:	0.111	Flood Zone Determination:	Unknown

2. BACKGROUND INFORMATION

Terms of Reference

+VG Architects was retained by the City of Richmond Hill (CRH) in May 2017 to conduct a building condition assessment (BCA) of three buildings located within the David Dunlap Observatory Park, at 123 Hillsview Drive, Richmond Hill, Ontario. Specifically, the Observatory, the Administration Building and the Radio Shack.

Following this assignment, in the fall of 2018, +VG was retained by the CRH to develop a conservation plan (CP) and detailed construction documentation for the preservation, rehabilitation and restoration, of all major envelope components as related to the Observatory and the Administration Building.

Scope of Work

In summary, the scope of work for the major envelope components at the Observatory and the Administration Building focuses on the itemized list below.

Administration Building:

- Installation of a new foundation drainage system
- Upgrades to the existing municipal services
- Landscaping work associated with drainage
- Restoration of wood windows and doors
- Masonry & concrete repairs and restoration
- Replacement of metal roofing and flashing
- Repairs and conservation of metal surfaces
- Repairs and conservation of metal domes

Observatory:

- Limited repairs to concrete podium foundation
- Repairs and conservation of metal surfaces
- Repairs and conservation of metal domes

To determine the correct approach, to finalize the scope of work and the development of the Conservation Plan the consulting team has reviewed reports and drawings, carried out interviews with City staff and on-site surveys/investigations as well as inter-disciplinary co-ordination between the Team's specialty consultants.

The building systems examined were:

- Exterior grounds and paved areas
- Building Envelope
- Structural components
- Mechanical, Electrical and Civil building systems and services

Studies, Reports and Publications

The following documents and reports were available to the Consulting Team for the preparation of this document:

1) "Conservation Management Plan", Town of Richmond Hill
2) "Maintenance and Repair: Heritage Permit Process for the DDO Lands", Sept. 9, 2014 – Heritage Richmond Hill
3) "Cultural Heritage Impact Assessment", August 26, 2014 – ERA Architects
4) "By-Law No.100-09, Designation of the land and buildings", Sept. 29, 2009 – Town of Richmond Hill
5) "David Dunlap Observatory Park Master Plan", April 2016 - Janet Rosenberg and Studio
6) "Drawing plans, details and diagrams of the Administration building" by Mathers & Haldenby Architects.
7) "Standards and Guidelines for the Conservation of Historic Places" - Parks Canada
8) "Ontario Heritage Tool Kit" Government of Ontario
9) "Heritage Conservation Principles for Land Use Planning" - Otario Ministry of Culture, Tourism and Sport
10) "Eight Guiding Principles for The Conservation Of Historic Places" – ON. Ministry of Culture, Tourism and Sport
11) "Designated Substances and Hazardous Materials Survey" File 702715-000, June 29, 2017 by Arcadis

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3. BRIEF HISTORY OF THE SITE & HERITAGE SIGNIFICANCE

History of the Site

The David Dunlap Observatory property is an area of 76.5 hectares (189 acres) bordered by Hillsview Drive to the north, Bayview Avenue to the east, 16th Avenue to the south and the CNR Bala Line rail tracks to the west.

The property was the site of a 19th-century farmstead owned by Alexander Marsh, comprised of a brick farmhouse, a lane from Yonge Street, agricultural fields with hedgerows and an orchard. When its observatory in downtown Toronto became unworkable due to light pollution, the University of Toronto identified the site as appropriate for a new facility, and the land was purchased as a gift to the University by Jessie Donalda Dunlap, as a memorial to her husband, David Alexander Dunlap.

The new Observatory, which opened in 1935, included a dome housing a 74-inch (1.88m) reflector telescope and an Administration Building with three smaller telescope domes. The main telescope was the second largest in the world at the time and remains the largest in Canada.

Increasing light pollution and new technical advancements eventually led the University to focus its research through other facilities. In June 2008, the University of Toronto sold the property to Corsica Developments Inc. The sale and subsequent development proposal by Corsica caused concern in the community, and the Town passed a heritage designation by-law in September of 2009 with the aim of protecting the features on the property which are of cultural heritage significance. Corsica's development proposal, and the ensuing Ontario Municipal Board appeals, led to a settlement under which Corsica agreed to transfer approximately half of the property to the Town for the purposes of preserving those lands (DDO Park Lands) for public use.

A portion of the DDO Park Lands, the Panhandle Lands, was purchased by the Town from Corsica in 2012 and the remaining DDO Park Lands have been transferred to the Town allowing for the creation of a major public green space in a key area of Richmond Hill.

To ensure that this new public space will be designed, restored, programmed, and operated in a manner that reflects the input and best interests of the community, the Town commissioned and obtained a comprehensive master plan within a phased planning process with an emphasis on community engagement. The Master Plan's Phase-1 identifies a set of principles to guide the development of options for design themes, programming, circulation, access, facilities and other park components.

Heritage Significance

Town Council on September 29, 2009 passed By-law No.100-09 on the David Dunlap Observatory Lands to designate a portion of the lands as a Cultural Heritage Landscape under the *Ontario Heritage Act*. Designating By-law No.100-09 establishes the boundary and extent of the area within the lands as a Cultural Heritage Landscape and identifies key heritage attributes including landforms, view sheds, structures, landscape features, and roadways within the property.

Moving forward from the designation under the *Ontario Heritage Act, The David Dunlap Observatory Lands Planning and Conservation Management Study* was initiated in October 2009 to develop a supportive land use and design policy framework to guide the property's future development. On January 25, 2010, Council endorsed the *Planning and Conservation Management Report* and the Town's new Official Plan (adopted by Council in July 2010) subsequently provides the policies for the DDO Lands that were informed by the planning and design principles from the planning study.

One of the primary cultural heritage conservation-related principles from the study, now incorporated into the new Official Plan, is the recognition of a prominent, functional and accessible Cultural Heritage Conservation Area (CHCA) within the boundary of the Cultural Heritage Landscape. The CHCA is an area which displays the highest concentration of heritage significance and is most sensitive to the impacts of change. The DDO Lands Conservation Management Plan describes in detail the considerations that inform the establishment of the Cultural Heritage Conservation Area, in this document identified as the Cultural Heritage Precinct, as well as buffer requirements for the attributes that helps define the area.

4. BRIEF DESCRIPTION OF THE SITE

Topography & Landscape

The site was originally selected for its topography; major earthworks were completed on the site to further enhance the natural knoll that was chosen for the Observatory. As a result, the Observatory is located on the highest portion of the site with a formal podium or raised terrace that was created for the Administration Building in order to increase its prominence in the landscape.

There are numerous vegetation and landscaping features on the site contributing to the cultural heritage of the site. These include evergreen plantations, plots, mixed evergreen and deciduous tree lines, a remnant orchard of apple trees and individual ornamental specimens planted at different periods of time but integrated in the overall landscape design of the site.

Vehicular & Pedestrian Circulation

The existing vehicular circulation system for the property has access from Hillsview Drive, a driveway link to the Observatory and Administration building, the parking lot and to Elms Lea. Serving as the main vehicular access and drop-off to the Administration building is the "Elliptical Drive". Within the area defined by the interior perimeter of the drive is the "Cosmic Island". These two features were deliberately planned and designed together to illustrate the first two of Kepler's Three laws of Planetary Motion. The island features a sun dial in axis to the Observatory building which can be considered the commencement of the formal path to this structure, along the north axis.

The pedestrian routes are much less developed or defined and consist of a paved walkway to the Observatory and Administration Building from the parking area and entrance court, and an unpaved pedestrian pathway/trail to the Radio Shack leading from a set of stairs at the east side of the Administration building.

5. DESCRIPTION OF BUILDINGS & STRUCTURE

Administration Building

The Administration Building footprint is shaped as a long rectangle terminated with semi-octagonal bays at each end. Design is symmetrical with a five-bay façade focused around the center bay. The main pedestrian entry is covered by a semi-circular colonnaded portico projecting from the façade. Parapet walls rise above the flat roof. The accessible roof forms a podium for the three observation domes. The larger dome is located at the centre with the two smaller domes placed at either end, terminating the semi-octagonal bays above the roof level.

The two-storey structure is built on a perimeter concrete foundation with above-grade walls constructed as multi-wythe masonry walls, primarily stone on the exterior and brick on the interior layers. Exterior walls are finished with cut-stone veneer complete with finished window and door trims. The cut stone veneer is rock faced Credit Valley limestone laid as broken coursed ashlar with Queenston limestone as cut stone accents, e.g. stringcourses, quoins and window surround as well as for decorative details such as swag panels, paterae (spiral discs), roof balustrade and urns.

The floor and roof structure is comprised of reinforced concrete slab and beam possibly cast together ("T" beams). The inner face of the perimeter walls is also furred out with tile above the basement. Non-loadbearing partition walls are typically constructed in clay-tile.

The three (3) rooftop observatory domes are constructed with riveted steel frames infilled with light-gauge

steel paneling shaped to suit the dome geometry. The bases of the domes are constructed with cast-in-place concrete walls supported on the roof structure.

Observatory

The Observatory is located to the north of the Administration building and has a 61' diameter circular plan fabricated to house the telescope and constructed with discrete steel frames, riveted together, and clad in a skin of galvanized light-gauge steel sheathing on both its outer and inner surfaces worked to suit the geometry of the dome and exterior walls. The double-skin of steel of the outer and inner surfaces serves primarily at improving on the ventilation of the structure. The primary steel framing is expressed on the exterior wall, at the base, as pilasters terminating to a beveled concrete podium. The outer building structure is supported on an exterior concrete foundation that appears to extend to below frost depth. The main floor slab is reported to be a slab-on-grade and is disconnected from the main foundation system.

The structure of the observatory's dome has a similar steel frame construction but includes a sheathing of agasote insulation set between the framing members and installed to the interior face of the dome. Agasote is an early fiberboard type of material applied here to help regulate the temperature within the dome. The dome is clad with flat seamed copper sheets. All exterior surfaces of dome and base are painted with a white reflective coating to better control and regulate extremes in temperature. The telescope itself is supported separately from the building by set monumental double branched concrete pier foundation (referred to as the "great pier") that extend to more than 25'-0" below grade to minimize the risk of vibration.

There are a total of fourteen steel multi-paned casement windows with adjustable louvers at the exterior of the base (below the dome) and a number of steel walkways, ship ladders and catwalks fastened to both the interior and exterior of the building used for the general maintenance of the dome's rotating mechanism or to service the retractable shutters.

The entrance vestibule, with doubled leaved paneled steel door, moulded surround and tripartite transom with balcony above, is the focal point of the exterior. The lower storey is comprised of a wide corridor at the southern half with the stair leading to the dome while the northern section houses the services for the building and the carriage and aluminizing chamber for the telescope. The main floor floats between the perimeter foundation and the great pier. The second storey is dominated by the great telescope, the catwalks, the shutter and dome rotation systems as well as the area partitioned off as the warm room for digital viewing.

Conservation Approach

1. Conservation Principles
2. Conservation Plan

PART 2 – CONSERVATION APPROACH

1. CONSERVATION PRINCIPLES

Standards & Conservation Strategy

Heritage conservation involves identifying, protecting, caring and promoting the tangible cultural heritage, artifacts and elements that our society values.

The correct strategy for the conservation of heritage assets shall be based on best-practice conservation principles that protect and enhance the cultural heritage value and heritage attributes of the cultural heritage resource.

The conservation principles outlined in the Parks Canada Standards and Guidelines for the Conservation of Historic Places in Canada and, for the specific of this site, the DDO Conservation Management Plan (among other documents) have formed the basis and guidance upon which a conservation approach and strategy was developed for this project. The strategy adopts an approach calling for minimal intervention by repairing rather than replacing existing heritage elements.

2. CONSERVATION PLAN

Objectives & Summary

Objectives of the conservation plan are to identify the cultural and historic significance of a site and to set out a policy/strategy for the conservation and management of the heritage values, attributes and integrity of this site by examining the short and long-term planning of the cultural resources, how to retain its significance in any future use, alteration, repair or development.

Conservation Plan shall contain comprehensive recommendations and provide sufficient details to make informed decisions regarding any proposed changes or impacts to identified cultural heritage resources.

Main objective of this Conservation Plan document is to repair the necessary architectural and structural elements as outlined and detailed in order to halt the on-going deterioration of the heritage attributes, stabilize and protect buildings and structure, provide direction for future long term interventions, and to ensure that the use is compatible with the building.

Where heritage attributes are too severely deteriorated to repair and where sufficient physical evidence exists, the elements shall be replaced with new that match the forms, material and detailing of sound versions of the same elements (replacing in kind). Where there is insufficient physical evidence, the form material and detailing of the new elements shall be compatible with the character of the historic place. The proposed scope of work for the conservation of all major envelope components of the Observatory and Administration Building is intended to ensure the long-term stability of the buildings while ensuring that building's heritage attributes are conserved.

Assessment of Existing Conditions

1. Administration Building
2. Observatory
3. Selected Photographic Reference & Diagrams

1. ADMINISTRATION BUILDING	
Attribute	**Description**
Ornamental Planting	Ornamental planting and flower beds are distributed along the west and south façade. It is noted that planting beds are encroaching onto the excavation zone of the proposed new foundation drainage system.
Specimen Trees	Several non-native trees (3) have grown too close to the building face and root systems are impacting on the foundation walls and wall substrates. Trees will also encroach on the new proposed drainage system around the perimeter of foundations.
Drainage, Footing and Grading	No surface standing or ponding water is noted around the perimeter of the building, indicating positive drainage away from the building, however water infiltration and moisture is noted at the base of interior basement walls around the perimeter of the building (also refer to "Structure and Foundations" below). Substantial amount of debris is found within the concrete window wells located along the perimeter of exterior walls, particularly around the well's area drains. Detailed investigations have confirmed that window wells are constructed as "French drains" i.e. drains are not connected by pipes to a storm sub-drain system and rainwater does not effectively percolate into the bed sub-grade. This condition shall explain why the basement walls are noted wet in several locations.
Municipal Services	Connections of incoming municipal services (domestic water and fire main) where services are penetrating through the exterior basement walls are old and deteriorated and past their useful life.
Structure and Foundations	The primary structure and foundation are typically in very good condition and appear to have been maintained to a high standard. Alterations to the building have been limited and do not appear to have affected the structure. Markings, peeling paint and efflorescence noted in several locations at the base of basement foundation walls. These as-found conditions suggest that a certain amount of moisture and vapour is driven to the interior foundation walls by hydrostatic soil pressure.
Wood Windows and Doors	The single-glazed wood windows are original to the building and are either rectangular in shape (single-hung) or round in design with sashes constructed as a multi-pane either as 12/8 lites on the second storey or as 12/12 lites at the ground floor. Windows typically incorporate a stone sill and apron stone panel immediately below. They are predominantly organized as single punched openings set in the deep stone jambs of the façade. The group of windows above the main entry portico is designed as a triptych with the larger centre window having a round top transom. There are semi-circular transom lunettes above each of the west and east door entrances.

There are no visible signs of structural damage or stress to the sashes or frames and generally these appear in very good condition. The original hardware is for the most part in good working order. No sever condensation or water markings noted as an indication that the windows are typically weathertight and performing within acceptable levels.

The peeling of paint finish and general deterioration of exterior wood surfaces is extensive. Deterioration is more pronounced for the windows on the south and west elevations that are exposed to direct sunlight and weather. Most of the damage is noted at horizontal sills, wood stops, and the bottom portions of the frames in direct contact to the sills where water and snow has the chance to sit and pond for longer times. The condition of the putty is typically dry and cracked. Sealant at all exterior joints between frames and masonry is old and deteriorated.

The condition of the wood doors is similar to the windows but less pronounced as doors are partially protected by projections and are of very solid construction. However, the bottom portion of doors frames, including door thresholds typically show severe wear and damage from pedestrian traffic and chemical de-icing salts. There are traces of past repairs particularly concentrated around sealed joints.

Metal Roofing and Flashing

The newer flat roofing membrane of the Administration building appears to be 2-ply modified bitumen type of roofing installed over roofing insulation (of unknown thickness). It is noted as a relative new installation and it is found to be in fair condition and state of maintenance. Conversely, and not surprisingly considering its age, the original copper sheathing and flashing material cladding the interior face of all parapet walls, cornices, flashing, caps and counter flashing at - or above - the main roof level is deteriorated and past beyond its useful life.

The flat seamed joints between larger sheets of copper cladding show unevenness and deterioration. There are numerous evident signs of old repairs (face fastened nails and abundance of caulking) aimed at keeping joints weathertight and cladding/flashing secured to the substrates that are now failing.

Open joints noted at reglets and starting strips. Sheet metal flashing and caps is not always, and positively, secured in reglets, but face fastened with material that is generally found loose due to poor adherence to the substrates. The condition of the existing roof concrete deck and walls should be thoroughly reviewed for signs of damage following the removal of the old cladding/flashing, prior to carrying out any replacement work.

Substantial atmospheric growth (moss) and stains, noted throughout the roof areas, particularly within lower roofs, shaded areas facing north and interior corners. These areas can be easily cleaned, and stains removed in due course.

Water run-off and spills from higher roof areas onto walls and windows below is noted in several locations as an indication that roof scupper or downspouts are either downsized or perhaps partially obstructed by debris and may no longer be 100% functional. No major active leaks noted in interior locations within the building, other than those within the roof-top observatory metal domes.

Masonry & Concrete Surfaces

Exposed concrete and stone wall surfaces are generally in good condition; however, most caulked joints (between different pours) and control joints are showing signs of deterioration. This is particularly evident near grade and on walls at roof level facing north and east, where drying is less likely to be effective. There are noted signs of efflorescence and atmospheric staining particularly over wall areas in permanent shade.

The concrete steps and apron connecting the drop-off area to the main entrance are in good condition. The three semi-circular stone steps and landing of the covered portico are in fair condition except for most mortar joints which are typically open and exposed to weather with missing or deteriorated mortar or sealant.

Particularly evident is the wear at the steps and bottom landings of the east and west stairs. In the worst cases the stone material is spalled or cracked particularly at the joints between steps and metal pickets.

Water courses (locations where the wall thickness changes) have weathered joints that show accelerated water damage. This is also noted at horizontal surfaces that are exposed to continuous action of rainwater such as sills and curbs where sills and curbs are not protected by cap flashing as well as at the underside of exposed lintels where water is not effectively diverted by drip edges.

Deteriorated steel lintels were noted on the east side of the roof access stair penthouse. This has resulted in some mortar and stone cracking. Inappropriate mortar has been used in previous repair work (in very few areas) and should eventually be replaced with mortar matching colour and profile of the original surfaces. Repointing was evident in several locations. Most of the vertical joints adjacent to jamb stones have been repointed. This repointing does not appear to have bonded to the underlying material.

Several open joints have been noted - particularly below windowsills, water courses and parapet-wall flashing where wind driven rain and water run-off is not properly diverted away or collected. Mortar joints are moderately deteriorated behind vertical drainpipes, particularly on the roof along the sidewalls of the centre observatory dome.

Metal Guards, Handrails and Balustrades

Metal guards, handrails and balustrades installed at the two north/south stairs, around the window wells and atop the front circular portico as well as the metal grating covering window wells are typically deteriorated and rusted. In the worst cases the metal is corroded to the point of structural failure and no longer positively supported.

Metal Domes	The three metal domes located above the roof level of the Administration building are constructed with an arrangement of worked steel angles riveted together to form a half-sphere cladded with flat-seemed copper panels on the exterior face and with an inner layer of "Agasote" an older, archaic type of fiberboard insulation set between the framing members. Domes are supported by a circular poured-in place concrete podium cladded in galvanized iron sheathing. The exterior surface of the metal cladding (of both podium and dome) has a reflective coat of white paint. Paint finish and Agasote insulation contribute to maintain and regulate the temperature within the dome. The domes are not mechanically heated. Domes are provided with retractable shutters supported by steel rails and girders and activated by pulley mechanisms. Domes are typically supported by a rotation system comprised of continuous circular steel rails and transfer steel wheels. The mechanisms for rotating and opening the domes are outside of this conservation scope of work; however, it should be noted that the tracks and wheels of the three observatory domes of the Administration Building are rusted. From a structural standpoint the condition of the domes metal frame and cladding is typically good; however surface deterioration and corrosion is noted in numerous locations, particularly where the coating has worn off or missing, and where dissimilar material is in contact such as the steel fasteners and copper cladding panels. There are noticeable signs of moisture condensation and penetration between the layers of cladding and over the interior face of the Agasote insulation. In many locations the paint finish is peeling off or has already fallen altogether as well as the insulation layer proper which is observed detached in several cases. No significant structural deterioration was noted at the time of the review.

2. OBSERVATORY	
Attribute	**Description**
Grading and Drainage	The grounds immediately adjacent to the Observatory are generally wide and open. The perimeter of the building is mostly surrounded by lawns sodded with grass material. No standing or ponding water noted in the landscaping, indicating positive drainage away from the building.
Structure, Foundations & Concrete Surfaces	The structure of the Observatory is in good condition. The primary steel framing is largely hidden between interior and exterior metal paneling and the open cavity allows for ventilation of the enclosed spaces. A review of the wall cavity found that the primary framing members and connections had sustained some minor surface corrosion. The concrete podium foundation is monolithic and of large proportions. The top of the circular foundation is beveled and sits at approximately 8" above average finished grade. This foundation generally appears in

good condition; however, several small cracks perpendicular to the dome are noted throughout the perimeter, including several locations where the concrete outer layer has spalled. These conditions do not present a concern from a structural point of view but should be addressed and repaired to avoid further damage from the action of on-going seasonal freeze/thaw cycles.

Metal Windows and Doors

The structural condition of the exterior metal stairs, catwalks, grating, shutters and railings is typically good. As well as the condition of the wall-mounted metal shutters and window frames. No significant structural deterioration noted. In regards to finishes however, corrosion and generalized surface deterioration is noted throughout with peeling paint and rusting particular evident to the underside of projections or where material is mostly in shade i.e. at interior corners, at the junction of dissimilar materials where these materials, and where paint finish has worn off by continuous use or prolonged exposure to weather and corroding salts.

The main entry double door to the building, including all windows and sashes are constructed entirely in metal and set within metal frames. Conditions are generally consistent to the condition of metal surfaces described above. The area with most deterioration is localized to the roof over the main entrance vestibule, where active water leaks and visible signs of past repairs are noted. Repairs were carried out with a coating of asphaltic material applied to the metal roof surfaces in the effort of stopping or preventing the leaks.

Observatory Dome

The large 61' diameter circular podium of the Observatory building is comprised of a steel frame cladded in galvanized iron sheathing on both inner and outer surfaces. The assembly of the dome is similar in construction, but only cladded with flat-seemed copper panels on the exterior face and with an inner layer of Agasote fiberboard insulation set between the framing members. The entire exterior and interior surface of the cladding (of both podium and dome) has a reflective coat of white paint. The Observatory building is not mechanically heated.

Dome is provided with retractable shutters c/w gaskets, supported by steel rails and girders and activated by pulley mechanisms. Dome is supported by a rotation system comprised of continuous circular steel rails and transfer steel wheels. The mechanisms for rotating and opening the domes are outside of the scope of this report; however, it should be noted that the tracks and wheels for the Observatory appeared to be in a good state of repair.

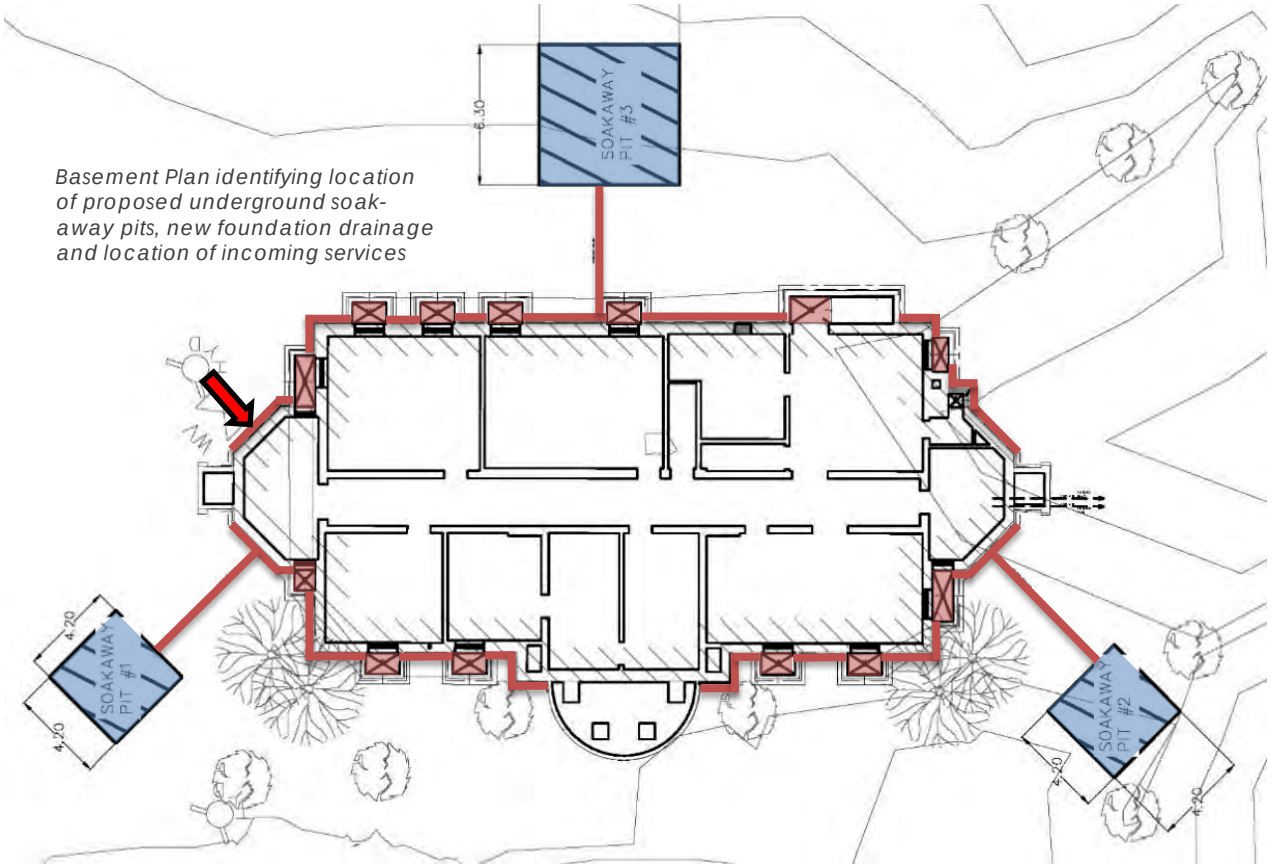
From a structural standpoint the condition of the dome metal frame and cladding is typically good; however surface deterioration and corrosion is noted in numerous locations, particularly where the coating has worn off or missing. There are noticeable signs of moisture condensation and penetration between the layers of cladding and over the interior face of the agasote insulation. In many locations the paint finish is peeling off or has already fallen altogether as well as the insulation layer proper which is observed detached in several cases. No significant structural deterioration was noted at the time of the review.

ADMINISTRATION BUILDING

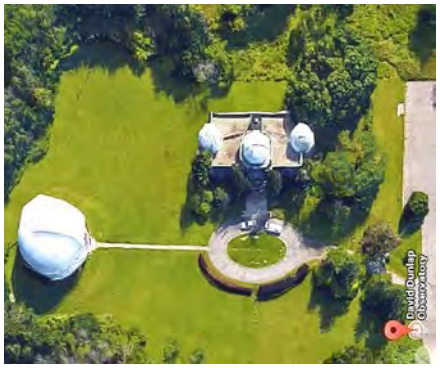
DRAINAGE & SERVICING WORK

Condition:

- Water infiltration and moisture at base of interior walls around the perimeter of basement level
- Connections of incoming services (domestic water and fire main) are past useful life and require replacement



Basement Plan identifying location of proposed underground soak-away pits, new foundation drainage and location of incoming services



Aerial photo of the site

Poor & inefficient drainage in window wells

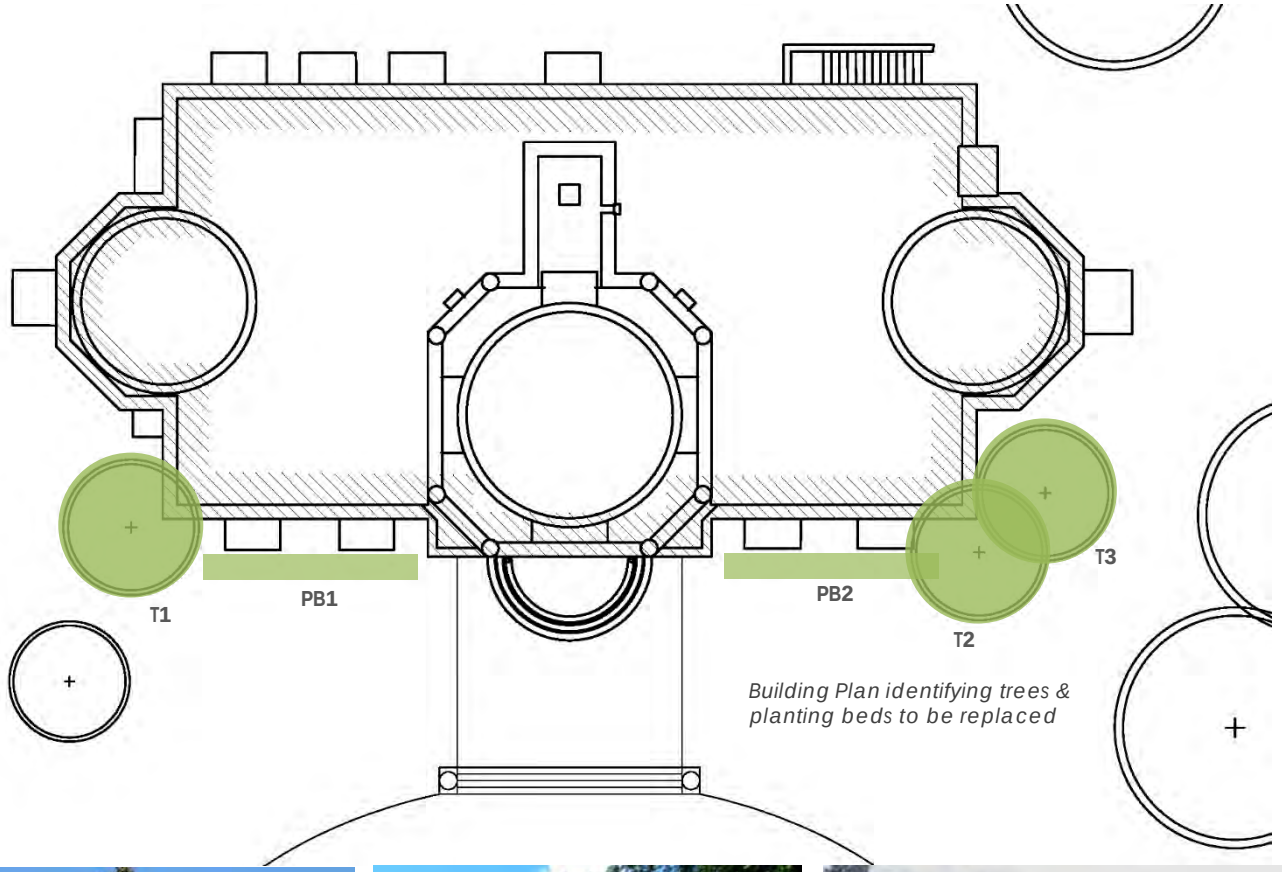
Old and deteriorated services connection

ADMINISTRATION BUILDING

LANDSCAPING & TREE REPLACEMENT

Condition:

- Several non-native trees has grown close to the building face and will impact on the new drainage system around the perimeter of foundations
- Planting beds along the west façade are encroaching onto the anticipated excavation zone for the proposed foundation drainage system.



Building Plan identifying trees & planting beds to be replaced

T1 (left)

T2 (left) and T3 (right)

1933 Architect's model (Symmetrical design)

ADMINISTRATION BUILDING

WOOD WINDOWS & DOORS

Condition:

- Extensive deterioration of finishes and sealants
- Most of damaged components are localized to sills and jambs
- Malfunctioning or missing hardware

West elevation identifying windows and doors to be restored

Heritage hardware requires cleaning and lubrication

Extensive deterioration of finishes and weatherstripping at windows

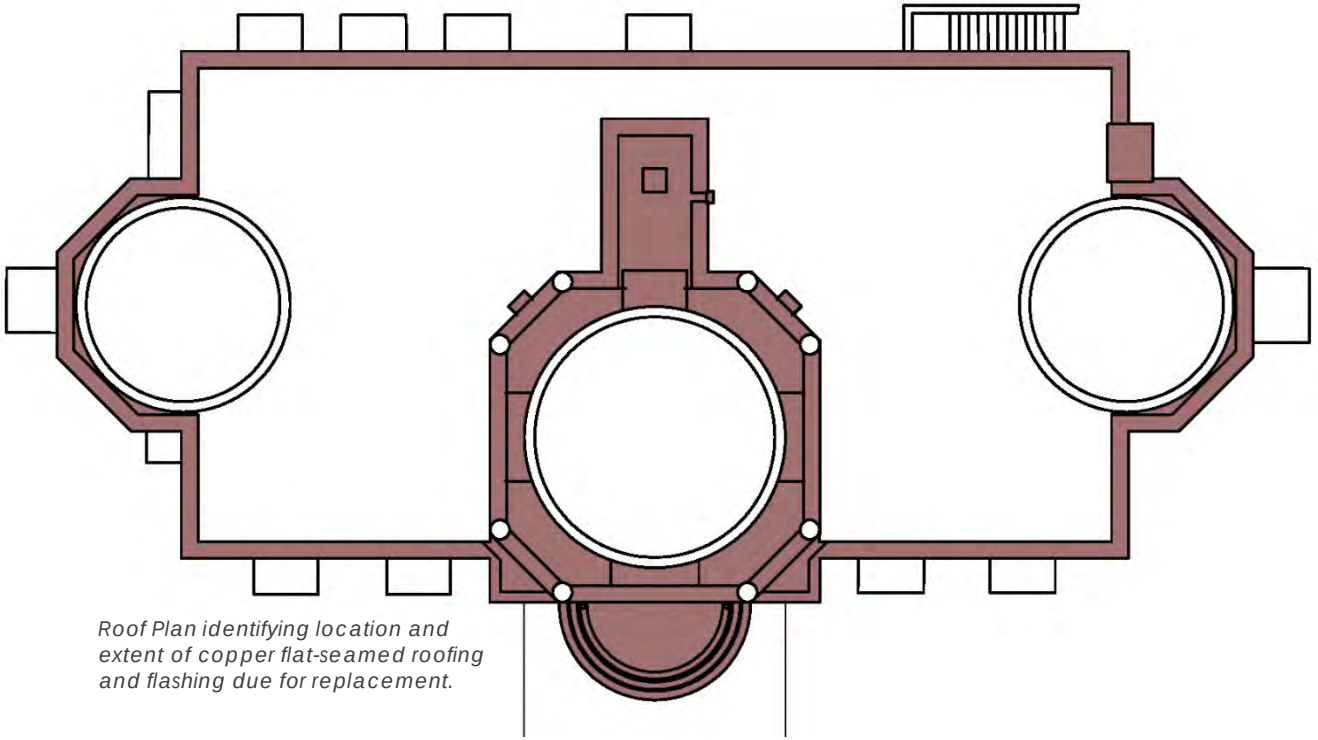
Restoration of three windows (photo of work in progress)

ADMINISTRATION BUILDING

METAL ROOFING & FLASHING

Condition:

- Copper material and fasteners are extensively deteriorated and at the end of useful life.
- Welded connections have failed. Signs of water infiltration to substrates.
- Previous repairs not sympathetic with the heritage character of the building (sealants, patches, etc.)



Roof Plan identifying location and extent of copper flat-seamed roofing and flashing due for replacement.

Old and deteriorated asphalt repairs over flat-seamed copper roofing.

Old and deteriorated cap-flashing and joints between dif. materials

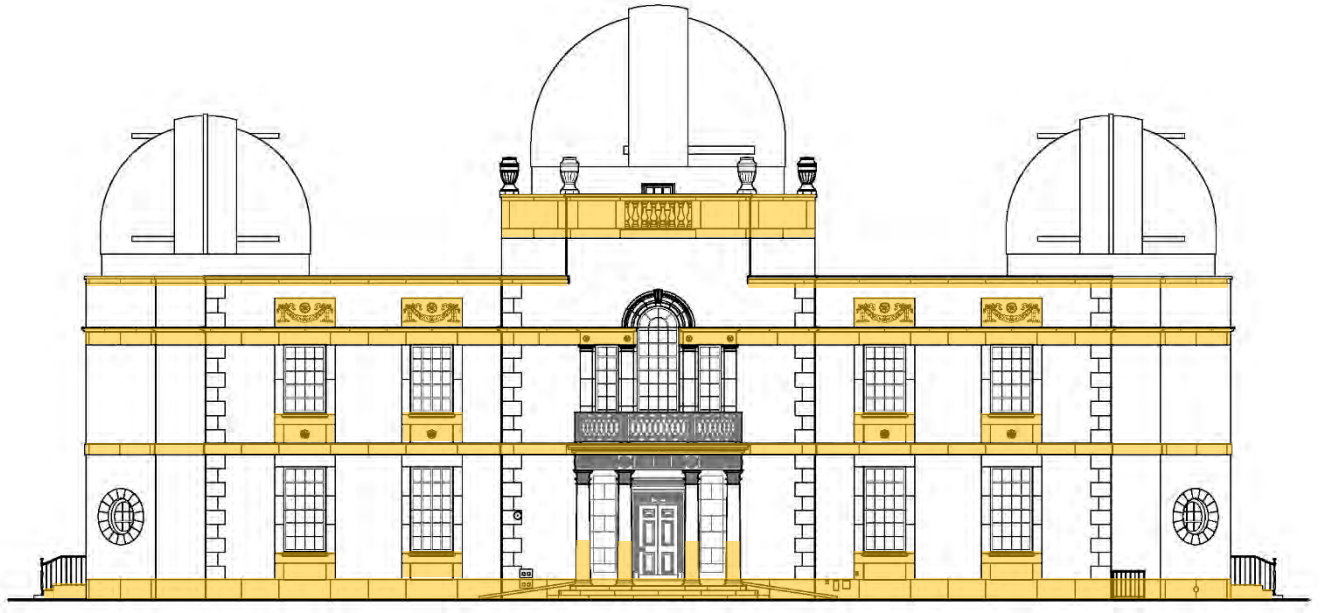
Deteriorated cap flashing and thru wall flashing

ADMINISTRATION BUILDING

MASONRY & CONCRETE SURFACES

Condition:

- Masonry walls and concrete surfaces require cleaning, repairs and selective replacements.



West elevation identifying areas where masonry deterioration is most pronounced. Other building's facades exhibit similar conditions.

Main portico and entry steps with atmospheric soiling

Cracks at stone threads of entry stairs and rust staining

Stained sills and weather courses

ADMINISTRATION BUILDING & OBSERVATORY

METAL RESTORATION (windows, doors, balustrades, catwalks, etc.):

Condition:

- Extensive deterioration and rusting of metal surfaces
- Loss of material due to corrosion

Corrosion and staining of exterior metal surfaces

Rusting of windows and deterioration of putty

Advanced corrosion at base of metal pickets

Observatory's entry vestibule where damage to metal is most evident

Loss of material due to corrosion at handrails

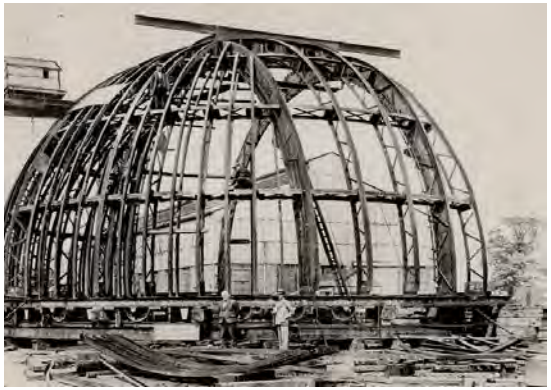
ADMINISTRATION BUILDING & OBSERVATORY

DOMES RESTORATION

Condition:

- Deterioration and rusting of metal surfaces.
- Hardware require repairs and lubrication.
- Failure of sealed joints and gaskets no longer weathertight.

The Observatory dome



Steel structural framing at large dome

Interstitial space between ext. and int. skin

North dome at Admin. building

Deteriorated "Agasote" insulation

Conservation Treatment

1. Administration Building
2. Observatory
3. Summary of Conservation Treatment

1. ADMINISTRATION BUILDING	
Attribute	**Intervention**
Ornamental Planting	Remove planting beds and replace with new (following the installation of the new foundation drainage system), ensuring that planting is conforming to the symmetrical design of the architect's original intent.
Specimen Trees	Remove existing non-native trees impacting on the existing foundations and replace with four (4) new replacement trees of native species, situated further from the building than the trees being replaced. New trees location is to be determined.
Drainage, Footing and Grading	Install a new foundation (vertical) wall drainage system comprised of waterproofing membrane and weeping tile along the existing footings and foundation walls. Drainage system shall be passive and able to divert storm water away from foundations and window wells and be connected to underground "soak-away" pits where water is collected and able to percolate into the soil subgrade. Establish an effective and comprehensive programme of maintenance to ensure drainage system is checked regularly and kept free of debris.
Municipal Services	Complete replacement of old and deteriorated incoming municipal services (domestic water and fire main) where services are penetrating through the exterior basement walls.
Structure and Foundations	It is anticipated that a limited number of localized interventions to the concrete surfaces of foundation walls, such as crack and patch repairs, will be required following excavation and prior to the installation of the new foundation wall drainage system. Repairs will be carried out with specialty concrete mixes suitable for the specific application and nature of existing material.
Wood Windows and Doors	Intent of this work is to undertake repair activities and refinishing work as necessary to ensure the ongoing preservation of wood windows and doors, including sashes and muntins, frames, jamb, casing, sill, apron, trim and all other components associated with the window and door assembly. At completion of the conservation work establish an effective and comprehensive programme of maintenance to ensure window systems and doors including hardware are checked and maintained/lubricated regularly. It is assumed that refurbishment and refinishing of wood windows (sashes) and doors is to be carried out in the shop and refurbishment/refinishing of wood surfaces including (but not limited to) jambs, frames, casings, sills, aprons, trims, etc. – is to be carried out in-situ. Removal and reinstallation of all sashes and doors will require provision for temporary plugs and doors. Doors are part of required exits and exits shall not be obstructed or made un-accessible at any time during the work.

Summary of conservation work:

1) Complete removal of existing finishes down to sound wood substrate and re-finish wood surfaces, including the selective replacement (in kind) of severely deteriorated wood components where the existing are noted to be beyond repair.

2) Replacement of sash cords (for double-hung windows) with new to match existing, including wood parting strips at jambs between upper and lower sash, replacement of glazing putty, and zinc rib strips at jambs and sills. Replacement of all spring bronze weather stripping to match existing from all casement windows and doors. Insect screens are to be replaced with new or provided as new to match existing.

3) The scope for the conservation of wood windows and doors strictly related to: 1) glass replacement, 2) dutchman repairs, 3) epoxy patching and repairs, and 4) selective replacement of hardware, will be finalized and approved by the consultant once the existing paint coating is removed.

4) Removal, cleaning, refurbishment and re-installation of all hardware and associated components or devices (door closers, thresholds, door contacts, etc.). Replace hardware to match existing where missing or damaged beyond repair.

5) Removal and re-installation of miscellaneous components such as window blinds, shutters, furniture, mechanical and electrical equipment etc. as required to carry out the work

Metal Roofing and Flashing

Intent of this work is to undertake the complete replacement of metal roofs and associated components for the areas listed below. Work shall include for stripping of the existing roofs to sound roof deck or substrate, removal and replacement of existing flashings and rainwater goods, and the provision of wood blocking, plywood sheathing, flashings, high-temperature roofing membranes, underlayment, eavestroughs, rainwater leaders, splashpads, scuppers & hoppers, window sills, door thresholds, louvres, mechanical doghouses and related materials to complete the roofs as specified and/or shown on the drawings.

Principal areas of intervention and summary of conservation work:

1) Metal roofing at (and around) the three Observation Domes including the window wells adjacent to the centre dome: replace in kind with fully soldered flat seam copper roofs and accessories c/w copper flashings, reinforced scupper openings, hoppers, downspouts, splashpads, roof drains incorporating custom metal detailing to match existing.

2) Wall cladding at all roof's parapet walls: replace copper wall cladding (in kind) including cap flashing, thru-wall flashing at guards, balustrades and walling including flashing over weather courses and masonry ledges.

3) Windowsills, door thresholds, mechanical louvres and doghouses: Replace in kind all existing deteriorated components and associated accessories incorporating custom metal detailing to match existing.

4) Roofing over the semi-circular portico at the main building entry: Provide fully soldered flat seam copper roof, copper flashings, reinforced scupper openings, and associated accessories. Incorporate custom metal detailing where abutting adjacent surfaces.

Allow for the temporary protection of the existing 2-ply BUR flat roofing, new parapet wall cladding will tie into the existing flat roof. Exposed roof and wall substrates will be protected during the work.

Repair deck and wall substrates as required prior to carrying out the copper roofing work.

Stone balustrades and decorative stone urns at high roof (around centre dome) will require dismantling to allow for the replacement of thru wall cap flashing. Balusters and urns will be rebuilt/re-installed at completion of copper work into masonry by steel anchors and epoxy grout.

Masonry & Concrete Surfaces

Intent of this work is to undertake the cleaning of all masonry walls and concrete surfaces including restoration activities and limited, selective replacements. The masonry and concrete conservation scope of work includes the following activities:

1) Complete cleaning of masonry and concrete surfaces from stains, soluble salts and atmospheric soiling with low-pressure, high-volume water-based equipment and non-ionic detergents suitable for use on masonry and concrete and through use of soft fibered nylon, natural soft and stiff bristle, phosphor bronze or stainless-steel brushes.

2) Cutting out deteriorated mortar, or improper and incompatible hard cement-based mortar (as related to past, old repairs), cleaning of joints where mortar is missing and re-pointing of joints.

3) Selective replacement of severely damaged and cracked stone units (where units are beyond repairs) with new to match existing in type, profile and size. I.e. entry steps and landing at north and east exterior stairs.

4) Selected (and limited) repairs to existing units thru dutchman or epoxy consolidation.

5) Cutting out new reglets (where missing) in existing surfaces to allow for the proper installation of new copper flashing at ledges, weather courses, and sills.

6) Crack repairs shall be carried out with epoxy consolidant and/or stainless-steel pinning. i.e. at stone balustrades and decorative stone urns.

7) Complete replacement of sealants at joints between dissimilar materials.

Metal Guards, Handrails and Balustrades

Intent of this work is to undertake the restoration of metal surfaces and associated components. The conservation scope of work includes the following activities:

1) Complete removal of existing finishes and corrosion from all metal surfaces down to bare metal thru chemical stripping (peel and strip) shall be carried out in-situ. Removal by micro abrasion for heavier metal components (steel channels) shall be carried out in shop.

2) Install an embossed stainless-steel tag with plastic coated tie wire to each component that is removed from the buildings. Tag is to carry a unique ID that allows the part to be located on a drawing and returned to its original location in the building. Record with digital photography and annotated drawings, the condition of each component.

3) Replace in kind where components are missing or damaged beyond repair. I.e. replacement sections of railing cap shall be casted as copies of the original, the iron channel under railing cap will require a full replacement, as well as sections of posts where connected into masonry. Tag and record location of each removed component such that they may be returned to their original locations.

4) Straighten bent components, re-thread holes, provide new screws, threaded fasteners and fittings with new in stainless steel, same size, head style and drive. Re-finish metal surfaces with one coat of zinc-rich epoxy primer and two coats of acrylic urethane finish coats.

Metal Domes

Intent of this work is to undertake the restoration of all domes metal surfaces and associated components, including cleaning and re-greasing guide wheels, pulleys and bearings in the manual shutter and rotation mechanisms. The domes conservation scope of work includes the following activities:

1) Remove the shutters from the dome and treat offsite, (or at least at ground level). The castor housings that the shutters roll on are cast iron and should not be used for lifting, however these castors could be unbolted and fabricated, (and engineered), steel lifting eyes can be bolted in their place if no other convenient attachment point is found. A lifting frame or balancing rig shall be required to remove the

shutters in their correct orientation. Install an embossed stainless-steel tag with plastic coated tie wire to each component that is removed from the buildings. Tag is to carry a unique ID that allows the part to be located on a drawing and returned to its original location in the building. Record with digital photography and annotated drawings, the condition of each component.

2) Complete removal of existing finishes and corrosion from all metal surfaces down to bare metal thru chemical stripping (peel and strip) shall be carried out in-situ. Removal by micro abrasion for heavier metal components (steel channels) shall be carried out in shop. Remove all sealants, caulking, foam tape and SS weather strips.

3) Repairs to copper including repairs to obvious damage, remove screens and replace with perforated metal, (stronger, better able to resist animal intrusion), replace gaskets and seals. Selective replacement to the steel members around shutter openings shall be required for those components that are found to be severely damaged or rusted beyond repair, for each shutter set.

4) Clean and re-grease guide wheels, pulleys and bearings in the manual shutter and rotation mechanisms. Replace all mechanism cables with new stainless cables, turnbuckles, etc.

5) Where fasteners are removed, replace with stainless versions of same head and drive style. If riveted joints are disassembled, then they can be re-assembled with RHS fasteners to approximate the riveted appearance while allowing the joint to be disassembled in the future.

6) Preserve the inoperative electrical drive systems as they are and rely on manual systems to operate shutters and rotate dome if possible. Seal shutters closed with reversible methods and materials

7) After sections of copper dome roof have been stripped of paint and corrosion they are to be primed and painted. The epoxy paint and urethane topcoats create the best inter-coat bond when applied with 24 to 48 hrs of one another. Re-finish metal surfaces with one coat of zinc-rich epoxy primer and two coats of acrylic urethane finish coats.

Special procedure for the replacement of Agasote panels:

Remove all Agasote panels, one at a time, replacing the panel thickness at all copper cladding fasteners with an appropriately sized spacer of soft neoprene such that the fastener is held in tension with the compression of the neoprene. The spacer is to be sized 50mm OD; ID to match fastener and thickness to be slightly more than that of the Agasote it is replacing. Each spacer will have a slit cut from ID to OD to allow the spacer to be inserted around the in-place fastener. The thicknesses may be variable as different thicknesses of Agasote may be found.

	Any Agasote remnants that remain adhered to the backside of the copper roof panels are to be carefully scraped off the copper. Nylon brushes, vacuum and plastic scrapers are acceptable. All fibrous dust and debris to be HEPA vacuumed from building interior after panel removal.
2. OBSERVATORY	
Attribute	**Intervention**
Structure, Foundations & Concrete Surfaces	Several localized interventions to the concrete surfaces of the podium foundation, such as crack and patch repairs, will be required. Repairs will be carried out with specialty concrete mixes suitable for the specific application and nature of existing material. The steel structure, largely hidden between the interior and exterior layers of the dome is inaccessible but well ventilated and has only sustained minor surface corrosion, No conservation work is proposed at this time.
Metal Windows and Doors	Intent of this work is to undertake repair activities and refinishing work as necessary to ensure the ongoing preservation of metal windows and doors, including sashes and muntins, frames, jamb, casing, sill, apron, trim and all other components associated with the window and door assembly. Removal and reinstallation of all sashes and doors will require provision for temporary plugs and doors. All doors are part of required exits and exits shall not be obstructed or made un-accessible at any time during the work. At completion of the conservation work establish an effective and comprehensive programme of maintenance to ensure window systems and doors including hardware are checked and maintained/lubricated regularly. 1) Refurbishment and refinishing of steel windows (sashes and frames) and doors is to be carried out in the shop and refurbishment/refinishing of surfaces including (but not limited to) jambs, frames, casings, sills, aprons, trims, etc. – is to be carried out in-situ. 2) Complete removal of existing finishes and corrosion from all metal surfaces down to bare metal thru chemical stripping (peel and strip) shall be carried out in-situ. Removal by micro abrasion for heavier metal components (steel channels) shall be carried out in shop. 3) Install an embossed stainless-steel tag with plastic coated tie wire to each component that is removed from the buildings. Tag is to carry a unique ID that allows the part to be located on a drawing and returned to its original location in the building. Record with digital photography and annotated drawings, the condition of each component.

4) Replace in kind where components are missing or damaged beyond repair, to match existing in material, profile and method of construction.

5) Straighten bent components, re-thread holes, provide new screws, threaded fasteners and fittings with new in stainless steel, same size, head style and drive. Re-finish metal surfaces with one coat of zinc-rich epoxy primer and two coats of acrylic urethane finish coats.

6) The scope for the conservation of metal windows and doors strictly related to: 1) epoxy patching and repairs, and 2) selective replacement of hardware, will be finalized and approved by the consultant once the existing paint coating is removed.

7) Removal, cleaning, refurbishment and re-installation of all hardware and associated components or devices (door closers, thresholds, door contacts, etc.). Replace hardware to match existing where missing or damaged beyond repair.

Metal Shutters, Catwalks, Landings and Stairs

Intent of this work is to undertake the restoration of all metal surfaces and associated components. The conservation scope of work includes the following activities:

1) Tag all removed components such that they may be returned to their original locations. All removed components transported to a shop.

2) Blast clean all surfaces of steel components. Grit size 35-70 maximum. Test use of chemical strippers to determine if their use before blast cleaning would be more efficient.

3) Make repairs as indicated on drawings and blast clean all new and repaired materials. Original methods of manufacture are to be respected and reproduced in the addition of repair or replacement pieces. No welds should be readily visible on the finished product.

4) All components – rethread holes, straighten bent elements, replace fasteners with same size and style in stainless steel. Re-finish metal surfaces with one coat of zinc-rich epoxy primer and two coats of acrylic urethane finish coats.

5) At completion of the conservation work establish an effective and comprehensive programme of maintenance to ensure metal components are checked and maintained regularly.

Observatory Dome

Intent of this work is to undertake the restoration of the dome exterior metal surfaces and associated components, including cleaning and re-greasing guide wheels, pulleys and bearings in the shutter and rotation mechanisms. The domes conservation scope of work includes the following activities:

1) The dome shutters shall be treated on-site and shutters be allowed to roll on their castors so to part shutters away from adjacent metal surfaces or dome surfaces located beneath the shutters as required as required to carry out conservation work.

2) Install an embossed stainless-steel tag with plastic coated tie wire to each component that is removed from the buildings. Tag is to carry a unique ID that allows the part to be located on a drawing and returned to its original location in the building. Record with digital photography and annotated drawings, the condition of each component.

3) Complete removal of existing finishes and corrosion from all metal surfaces down to bare metal thru chemical stripping (peel and strip) shall be carried out in-situ. Removal by micro abrasion for heavier metal components (steel channels) shall be carried out in shop. Remove all sealants, caulking, foam tape and SS weather strips.

4) Repairs to paneling including repairs to obvious damage, remove screens and replace with perforated metal, (stronger, better able to resist animal intrusion), replace gaskets and seals. Selective replacement to the steel members around shutter openings shall be required for those components that are found to be severely damaged or rusted beyond repair, for each shutter set.

5) Clean and re-grease guide wheels, pulleys and bearings in the shutter mechanism, guides and castors.

6) Where fasteners are removed, replace with stainless versions of same head and drive style. If riveted joints are disassembled, then they can be re-assembled with RHS fasteners to approximate the riveted appearance while allowing the joint to be disassembled in the future.

7) Preserve all electrical and/or manual drive systems as they are and rely on manual systems to operate shutters and rotate dome if possible.

8) After sections of copper dome roof have been stripped of paint and corrosion they are to be primed and painted. The epoxy paint and urethane topcoats create the best inter-coat bond when applied with 24 to 48 hrs of one another. Re-finish metal surfaces with one coat of zinc-rich epoxy primer and two coats of acrylic urethane finish coats.

PART 4 – SUMMARY OF CONSERVATION TREATMENT

1. ADMINISTRATION BUILDING Attribute	Short Term Intervention	Long Term Intervention	Drawing ref.
Planting	Remove planting beds, replace with new and ensure min. 2mt setback from building.	Monitor and replant ornamental planting beds as shrubs and trees mature.	**A1.1**
Specimen Trees	Remove non-native trees impacting on the existing foundations and replace with new native species.	Remove invasive vegetation and prune trees as required.	**A1.1**
Drainage, Footing and Grading	Install a new foundation (vertical) wall drainage system.	Establish programme of maintenance to ensure drainage system is checked regularly and kept free of debris.	**A2.1**
Municipal Services	Replacement of old and deteriorated municipal services (domestic water and fire main)	Service and monitor equipment on a regular basis	**A2.1** **A4.3**
Structure and Foundations	Repair cracked and spalled concrete surfaces with suitable materials and methods.	Monitor interior spaces for sign of moisture	**A2.1** **A3.6**
Wood Windows and Doors	Repair and refinish wood windows and doors, (strip or sand, paint & seal). Replace sash cords and wood parting strips at jambs with new to match existing. Replace glazing putty and zinc rib strips at jambs and sills. Replace spring bronze weather stripping to match existing from all casement windows/doors. Replace insect screens to match existing. Remove, clean, refurbish and re-install hardware and associated components.	Establish a programme of maintenance to ensure window systems and doors including hardware are checked, paint touch-ups are carried out when required, and hardware is maintained/lubricated regularly. Refinish (re-paint) all exterior elements in due course.	**A3.1** **A3.2** **A3.3** **A3.4** **A8.1** **A8.2** **A8.3** **A8.4** **A8.5** **Schedules in Appendix "6"**
Metal Roofing and Flashing	Replace copper roofs, cladding, paneling, flashing and associated components with new, in kind.	Establish a programme of maintenance to ensure roofing systems (membranes, welded joints, drains, scuppers, etc.) are regularly checked and maintained free of debris.	**A2.3** **A2.4** **A3.1** **A3.2**

	Allow for the temporary protection of the existing 2-ply BUR flat roofing Repair deck and wall substrates as required prior to carrying out the copper roofing work.		**A3.3** **A3.4** **A3.5** **A4.1** **A4.2** **A4.3**
Masonry & Concrete Surfaces	Complete cleaning of masonry and concrete surfaces from stains, soluble salts and atmospheric soiling. Cut-out deteriorated mortar, or improper and incompatible hard cement-based mortar. Selective replacement of damaged and cracked stone units (where units are beyond repairs) with new to match existing Repair cracks with epoxy consolidant and/or stainless-steel pinning. i.e. at stone balustrades and decorative stone urns. Complete replacement of sealants at joints between dissimilar materials.	Establish a programme of maintenance to ensure masonry and concrete surfaces are regularly maintained. Use non-aggressive, less-corroding, de-icing material (calcium chloride) at entrances in winter months. IMPORTANT: Ensure that once the de-icing product melts ice/snow, the slush is removed from the concrete before the de-icer wears off and the slush re-freezes. This is to avoid that the liquid is absorbed by the porous concrete and re-freezes in the concrete's pore structure, expand it and causing spalling/scaling.	**A3.1** **A3.2** **A3.3** **A3.4** **A3.5** **A3.6** **A4.1** **A4.2** **A4.3** **A5.1**
Metal Guards, Handrails and Balustrades	Complete removal of existing finishes and corrosion from all metal surfaces down to bare metal Repair damaged components. Replace in kind where components are missing or damaged beyond repair. Provide new screws, threaded fasteners and fittings with new in stainless steel, same size, head style and drive. Re-finish metal surfaces with paint.	Establish a programme of maintenance to ensure metal surfaces are checked regularly and paint touch-ups are carried before metal starts to rust. Refinish (re-paint) all exterior elements in due course.	**A3.6** **A5.1**

Metal Domes	Complete removal of existing finishes and corrosion from all metal surfaces down to bare metal. Repair deteriorated components. Selective replacement of components that are damaged or rusted beyond repair Clean and re-grease guide wheels, pulleys and bearings in the manual shutter and rotation mechanisms. Replace all mechanism cables with new stainless cables, turnbuckles, etc. Preserve the electrical drive systems Seal shutters closed with reversible methods and materials Re-finish metal surfaces with one coat of zinc-rich epoxy primer and two coats of acrylic urethane finish coats. Remove all Agasote panels, one at a time, replacing the panel thickness at all copper cladding fasteners with an appropriately sized spacer of soft neoprene	Establish a programme of maintenance to ensure metal surfaces are checked regularly and paint touch-ups are carried out before rusting of metal. Clean and re-grease guide wheels, pulleys and bearings in the manual shutter and rotation mechanisms. Refinish (re-paint) all exterior elements in due course.	**A3.1** **A3.2** **A3.3** **A3.4** **A4.4**

2. OBSERVATORY **Attribute**	**Short Term Intervention**	**Long Term Intervention**	
Structure, Foundations & Concrete Surfaces	Repair cracked and spalled concrete surfaces with suitable materials and methods suitable for the specific application and nature of existing material.	Establish a programme of maintenance to ensure masonry and concrete surfaces are regularly maintained. Use non-aggressive, less-corroding, de-icing material (calcium chloride) at entrances in winter months. IMPORTANT: Ensure that once the de-icing product melts ice/snow, the slush is removed from the concrete before the de-icer wears off and the slush re-freezes. This is to avoid that the liquid is absorbed by the porous concrete and re-freezes in the concrete's pore structure, expand it and causing spalling/scaling.	**A2.5**
Metal Windows and Doors	Complete removal of existing finishes and corrosion from all metal surfaces down to bare metal. Repair damaged components. Replace in kind where components are missing or damaged beyond repair. Provide new screws, threaded fasteners and fittings with new in stainless steel, same size, head style and drive. Re-finish metal surfaces with one coat of zinc-rich epoxy primer and two coats of acrylic urethane finish coats. Removal, cleaning, refurbishment and re-installation of all hardware and associated components or devices.	At completion of the conservation work establish an effective and comprehensive programme of maintenance to ensure window systems and doors including hardware are checked/maintained and paint touch-ups are carried out before rusting of metal. Refinish (re-paint) all exterior elements in due course.	**A2.5** **A3.7** **A3.8** **A3.9** **A3.10** **A4.5** **A4.7** **A4.8**

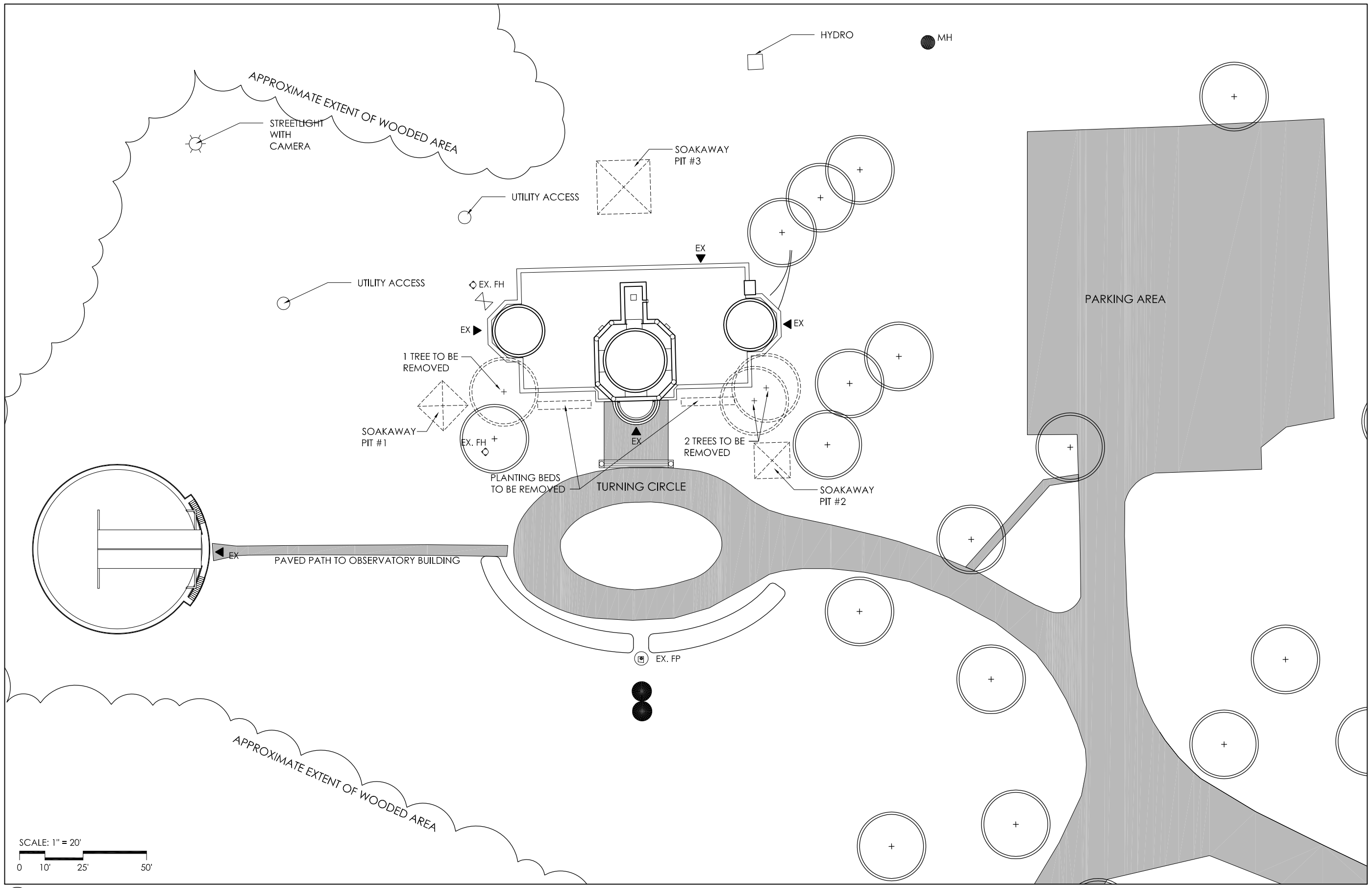
Metal Shutters, Catwalks, Landings and Stairs	Blast clean all surfaces of steel components. Repair damaged components. Replace in kind where components are missing or damaged beyond repair. Provide new screws, threaded fasteners and fittings with new in stainless steel, same size, head style and drive. Re-finish metal surfaces with one coat of zinc-rich epoxy primer and two coats of acrylic urethane finish coats. Provide a new waterproofing membrane over the roof of the entry vestibule.	Establish an effective and comprehensive programme of maintenance to ensure metal surfaces are checked/maintained and paint touch-ups are carried out before rusting of metal. Refinish (re-paint) all exterior elements in due course. Ensure roofing membrane is regularly checked and maintained free of debris.	**A2.5** **A2.6** **A3.7** **A3.8** **A3.9** **A3.10** **A4.5** **A4.6** **A4.7** **A4.8**
Observatory Dome	Complete removal of existing finishes and corrosion from all metal surfaces down to bare metal. Repair deteriorated components. Selective replacement of components that are damaged or rusted beyond repair. Clean and re-grease guide wheels, pulleys and bearings in the manual shutter and rotation mechanisms. Preserve the electrical drive systems. Re-finish metal surfaces with one coat of zinc-rich epoxy primer and two coats of acrylic urethane finish coats.	Establish a programme of maintenance to ensure metal surfaces are checked regularly and paint touch-ups are carried out before rusting of metal. Clean and re-grease guide wheels, pulleys and bearings in the manual shutter and rotation mechanisms. Refinish (re-paint) all exterior elements in due course.	**A2.6** **A3.7** **A3.8** **A3.9** **A3.10** **A4.6**

Appendices

1. Drawings
2. Doors & Windows Schedules
3. Tree Inventory and Preservation Plan

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DRIVE, RICHMOND HILL, ONTARIO, L4C 1T3



01 / A1.1 SITE PLAN
1" = 20'

SITE SYMBOLS & ABBREV.'S LEGEND

IDENTIFICATION MARKER LEGEND

EX	EXISTING ENTRANCE / EXIT
EX. FP	EX. FLAG POLE
	EX. TREE TO REMAIN TYP.
	EX. TREE TO BE REMOVED TYP.
	EX. PLANTING BEDS TO BE REMOVED. REFER TO ARBORIST'S REPORT FOR REMOVAL & REPLACEMENT OF PLANTING BEDS
	SOAKAWAY DRAINAGE PIT TYP.
EX. FH	EX. FIRE HYDRANT LOCATION (COORD. W/ SITE GRADING/SERVICES DWG.'S)

HATCH IDENTIFICATION MARKER LEGEND

EXISTING HARD SURFACE AREA

UTILITY CODE LEGEND

W	WATERMAIN
COM	COMMUNICATION CABLE
H	HYDRO CABLE
E	ELECTRICAL CABLE
R-FO	ROGERS FIBRE OPTIC
BT	BELL
G	GASMAIN
SL	STREETLIGHT CABLE
UNK	UNKNOWN

02 / A1.1 SITE LEGEND

DRAWING LIST

A1.1	SITE PLAN AND DRAWING LIST
A2.1	ADMIN. BLDG. - BASEMENT PLAN
A2.3	ADMIN. BLDG. - LOWER ROOF PLAN
A2.4	ADMIN. BLDG. - UPPER ROOF PLAN
A2.5	OBSERVATORY BLDG. - FLOOR PLANS
A2.6	OBSERVATORY BLDG. - ROOF PLAN
A3.1	ADMIN. BLDG. - WEST ELEVATION
A3.2	ADMIN. BLDG. - EAST ELEVATION
A3.3	ADMIN. BLDG. - SOUTH ELEVATION
A3.4	ADMIN. BLDG. - NORTH ELEVATION
A3.5	ADMIN. BLDG. - CENTRE DOME PAVILION ELEVATIONS
A3.6	ADMIN. BLDG. - ENTRY PORTICO PLANS & ELEVATIONS
A3.7	OBSERVATORY BLDG. - NORTH ELEVATION
A3.8	OBSERVATORY BLDG. - EAST ELEVATION
A3.9	OBSERVATORY BLDG. - SOUTH ELEVATION
A3.10	OBSERVATORY BLDG. - WEST ELEVATION
A4.1	ADMIN. BLDG. - COPPER FLASHING DETAILS
A4.2	ADMIN. BLDG. - COPPER FLASHING DETAILS
A4.3	ADMIN. BLDG. - TYPICAL MASONRY CONSERVATION DETAILS
A4.4	ADMIN. BLDG. - ADMINISTRATION BUILDING DOME DETAILS
A4.5	OBSERVATORY BLDG. - DETAILS
A4.6	OBSERVATORY BLDG. - SHUTTER DETAILS
A4.7	OBSERVATORY BLDG. - ENTRANCE & VESTIBULE DETAILS
A4.8	OBSERVATORY BLDG. - TERRACE DETAILS
A5.1	ADMIN. BLDG. - METAL RAILING DETAILS
A8.1	ADMIN. BLDG. - WINDOW & DOOR TYPE SCHEDULES
A8.2	ADMIN. BLDG. - WINDOW FRAME DETAILS
A8.3	ADMIN. BLDG. - WINDOW FRAME DETAILS
A8.4	ADMIN. BLDG. - EXTERIOR DOOR FRAME DETAILS
A8.5	ADMIN. BLDG. - EXTERIOR DOOR FRAME DETAILS
S1.1	ADMIN. BLDG - EAST ELEVATION STRUCTURAL RESTORATION
M100	ADMIN. BLDG - LEGEND, DRAWING LIST, GENERAL NOTE & SITE PLAN
M200	ADMIN. BLDG - BASEMENT PLAN PLUMBING

05 / A1.1 DRAWING LIST

ABBREVIATIONS

A.D.	AREA DRAIN
AFB	ACOUSTIC FIRE BATT INS.
A.F.F.	ABOVE FINISH FLOOR
ACT	ACOUSTIC CEILING TILE
A.P.	ANUNCIATOR PANEL
ALUM	ALUMINUM
A.V.	AUDIO VISUAL
AWP-1	ACOUSTIC WALL PANEL
BBH	BASEBOARD HEATER
BH	BULK HEAD
BN	BULLNOSED
BV	BRICK VENEER
C.B.	CONCRETE BLOCK
CLG	CEILING
C.J.	CONTROL JOINT
CONC	CONCRETE
CONCS	SEALED CONC.
CONCH	HARDENED & SEALED CONC.
CONCP	HARDENED, SEALED & POLISHED CONC.
CONT	CONTINUOUS
CP	CONTROL PANEL
CPT	CARPET
CPTT	CARPET TILE
CT	CERAMIC TILE
C/W	COMPLETE WITH
D.F.	DRINKING FOUNTAIN
EJ	EXPANSION JOINT
E.P.	ELECTRICAL PANEL
EPX	EPOXY PAINT & PRIMER
EX	EXPOSED

EXIST.	EXISTING
FDN	FOUNDATION
F.E.C.	FIRE EXTINGUISHER CABINET
F.R.	FIRE RATED
FRR	FIRE RESISTANCE RATING
FTG	FOOTING
GL	GLAZING
G.B.	GYPSUM BOARD
GWG	GEORGIAN WIRED GLASS
H.M.	HOLLOW METAL
H.B.	HOSE BIB
HDWD	HARDWOOD
HD	HAND / HAIR DRYER
H.S.S.	HOLLOW STEEL SECTION
HT.	HEIGHT
I.D.	INSIDE DIAMETER
INS.	INSULATION
LIN	LINOLEUM
M.O.	MASONRY OPENING
M	MIRROR
MTL.	METAL
N/A	NON-APPLICABLE
N	SAN. NAPKIN DISPENSER
ND	SAN. NAPKIN DISPOSAL
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O/C	ON CENTRE
O.D.	OUTSIDE DIAMETER
P.H.	PANIC HARDWARE
PL	PLATE

PLAM	PLASTIC LAMINATE
PLYWD.	PLYWOOD
PCT	PORCELAIN TILE
PREFIN	PREFINISHED
PNT	PAINT FINISH
PT	PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
R/A	RETURN AIR
R.D.	ROOF DRAIN
REINF	REINFORCED
RH	ROBE HOOK
RV'L	CONTINUOUS 13mm REVEAL
R.O.	ROUGH OPENING
RT	RUBBER TREAD
RUB	RUBBER BASE
RWL	RAIN WATER LEADER
SB	SOUND BLOCK
SPC	SPECIAL COATING
SD	SOAP DISPENSER
S.D.G.	SEALED DOUBLE GLAZING
SIM	SIMILAR
SOG	SLAB ON GRADE
SF	SPORTS FLOORING
SHV	SHEET VINYL FLOORING
S.S.	STAINLESS STEEL
ST	STONE
STL	STEEL
STN	STAIN FINISH
STR	STRUCTURE
SUSP	SUSPENDED
T.G.	TEMPERED GLASS

TM	TILTED MIRROR
TP	TOILET PAPER DISPENSER
T/O	TOP OF
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE
VB	VAPOUR BARRIER
VCT	VINYL COMPOSITE TILE
V.O.J.	VERIFY ON JOB SITE
W/	WITH
W/R	WASHROOM
WD.	WOOD
WIN.	WINDOW
WPF	WATERPROOF FLOOR
WPG	WATERPROOFING
WSC	WOOD SOLID CORE

03 / A1.1 ABBREVIATIONS

SYMBOLS LEGEND

W#	WINDOW TYPE
###	DOOR TAG
RM. NAME ###	ROOM TAG & NAME
FD	FLOOR DRAIN
AD	AREA DRAIN
RD	ROOF DRAIN
SD	SCUPPER DRAIN
	EXISTING TOILET
	EXISTING URINAL
	EXISTING SINK
XX / AX.X	SECTION REFERENCE
XX / AX.X	BUILDING ELEVATION REFERENCE
XX / AX.X	ELEVATION REFERENCE
XX / AX.X	PLAN DETAIL REFERENCE
XX / AX.X	SECTION DETAIL REFERENCE

04 / A1.1 SYMBOLS LEGEND

REVISIONS

NO.	DATE	PARTICULAR
01	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DRIVE
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

SCALE: 1/32" = 1' 0"

+VG ARCHITECTS
THE VENTIN GROUP LTD

N

SITE PLAN

A1.1

Plot Date: Sep 09, 2019 - 9:50am By: fred
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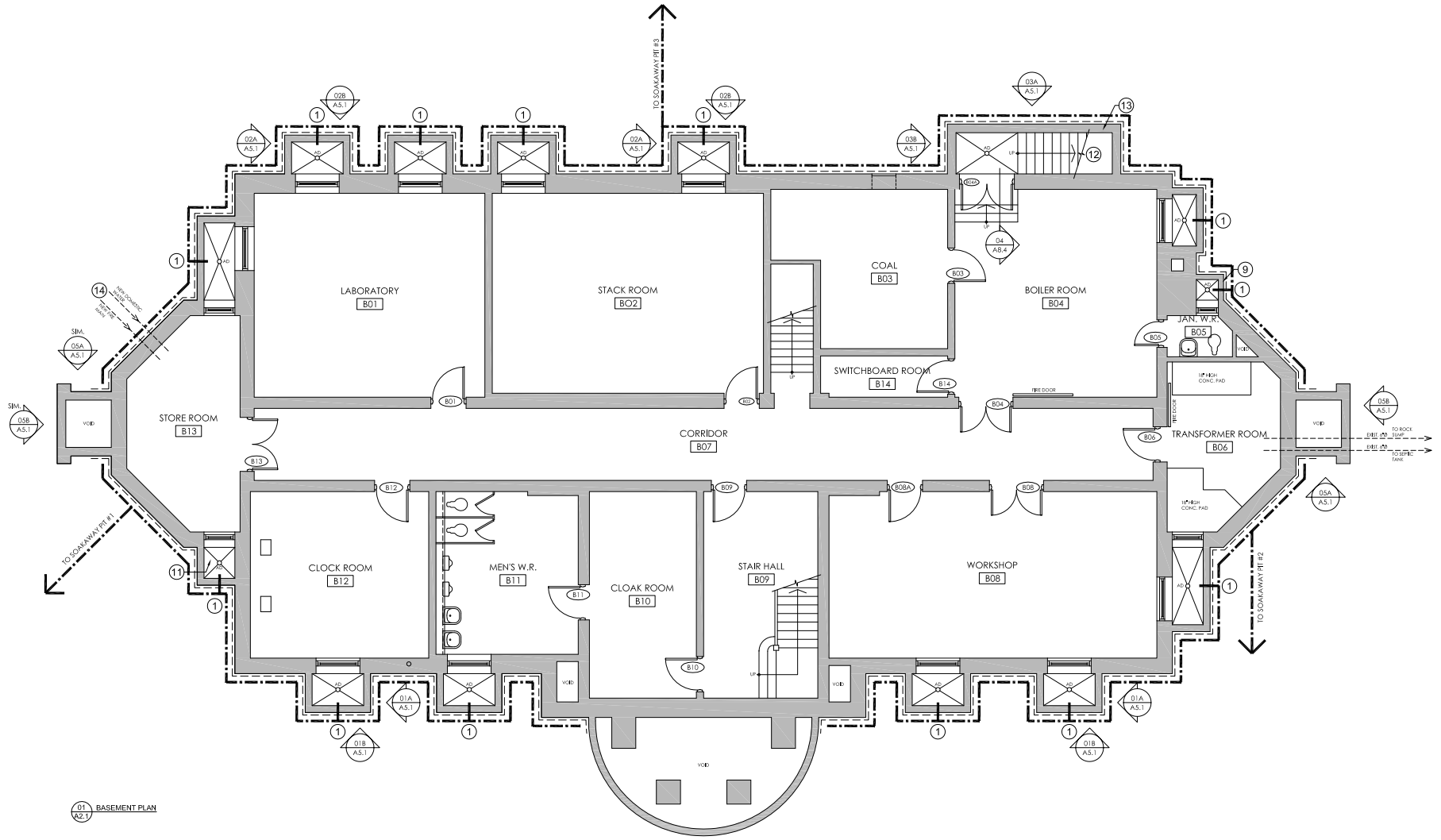


01 A2.1 BASEMENT PLAN

LEGEND - REPAIRS

FOR PROCEDURES REFER TO SPECIFICATIONS.

- EXISTING COPPER FLASHING TO BE REPLACED C/W SEPARATION SHEET
- NEW 6"Ø WEEPING TILE C/W FILTER SOCK SET IN GRAVEL
- WATER PROOFING MEMBRANE C/W DRAINAGE BOARD & FILTER FABRIC
- EXISTING WALLS

NOTES

1. CORE 6"Ø OPENING INTO EXISTING WINDOW WELL WALL AT LOWEST LEVEL TO ALLOW COLLECTED MOISTURE TO DRAIN
2. EXISTING COPPER ROOFING TO BE REMOVED. INSPECT SUBSTRATE & MAKE REPAIRS AS REQUIRED. INSTALL NEW HIGH TEMPERATURE WATERPROOFING MEMBRANE & SEPARATION SHEET. INSTALL NEW 20 oz. COPPER ROOFING TO MATCH EXISTING C/W HOLD DOWN CLIPS, SEAMS, CONCEALED WATER TIGHT FASTENERS, FROST LOCK ETC.
3. EXISTING COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO MATCH EXISTING
4. EXISTING COPPER CLADDING ON INSIDE SURFACE OF MASONRY PARAPET TO BE REMOVED. INSTALL ½" EXTERIOR GRADE PLY SHEATHING C/W HIGH TEMPERATURE ROOF MEMBRANE & SEPARATION SHEET FROM CAPSTONE DOWN TO LAP OVER EXISTING ROOF MEMBRANE. INSTALL NEW 20 oz. COPPER CLADDING OVER MEMBRANE SURFACE C/W HOOKING STRIPS, FROST LOCKS & CONCEALED FASTENERS. COPPER CLADDING TO BE TIED INTO EXISTING ROOF COUNTER FLASHING AT CANT STRIP.
5. EXISTING CHIMNEY CAP FLASHING TO BE REMOVED. EXISTING CHIMNEY FLUE TO BE CUT DOWN TO THE LEVEL OF THE EXISTING MASONRY. INSTALL NEW 20 oz. COPPER CAP OVER ENTIRE MASONRY CHIMNEY C/W SEPARATION SHEET AND 2% SLOPE TO DRAIN.
6. EXISTING COPPER CAP FLASHING TO BE REMOVED & REPLACED WITH NEW 20 oz. COPPER CAP FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, CONCEALED FASTENERS & FROST LOCKS AT SEAMS.
7. EXISTING COPPER FLASHING BENEATH STONE BALUSTERS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. DISASSEMBLE EXISTING STONE RAIL & BALUSTER ASSEMBLY TO ALLOW REMOVAL OF EXISTING COPPER FLASHING. PIN AND FILL BALUSTERS AS REQUIRED PRIOR TO DISASSEMBLY.
8. EXISTING COPPER FLASHING BENEATH STONE URNS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. REMOVE URNS TO ALLOW REMOVAL OF EXISTING COPPER FLASHING. MAKE ALL REPAIRS TO URNS AS REQUIRED PRIOR TO REMOVAL.
9. EXISTING CAST IN PLACE CONCRETE WINDOW WELL TO BE REPAIRED. REMOVE EXISTING METAL GRADING. CUT BACK EXISTING CONCRETE WELL CURB TO A MINIMUM UNIFORM DEPTH OF 8" OR COLD JOINT. CAST NEW CONCRETE CURB C/W STEEL DOWELS & STAINLESS STEEL SUPPORT BRACKETS FOR THE METAL GRILLE. REFINISH AND REINSTALL THE EXISTING METAL GRILLE.
10. EXISTING COPPER ROOFING, MEMBRANE & DRAINS TO BE REMOVED & REPLACED WITH NEW HIGH TEMPERATURE ROOF MEMBRANE. RE-USE EXISTING DRAINS WHERE POSSIBLE SECURED & SEALED TO EXISTING CONCRETE SUBSTRATE.
11. REMOVE EXISTING METAL GRADING. REMOVE EXISTING FINISH AND REPAIR AS REQUIRED. PREP FOR NEW FINISH AND REINSTALL.
12. EXISTING CAST IN PLACE CONCRETE BASEMENT ACCESS STAIR TO BE REPAIRED. REMOVE EXISTING CHIPPED AND LOOSE MATERIAL TO DOWN SOUND BASE MATERIAL. CAST IN NEW PATCHES AS REQUIRED TO MAKE GOOD AND LEVEL SURFACES.
13. EXISTING CAST IN PLACE CONCRETE BASEMENT ACCESS WELL TO BE REPAIRED. REMOVE EXISTING METAL RAILING AND CUT BACK EXISTING DAMAGED CONCRETE WELL CURB TO A MINIMUM UNIFORM DEPTH OF 8" OR COLD JOINT. CAST NEW CONCRETE CURB C/W STEEL DOWELS AND PREP TO RECEIVE REFINISHED & REPAIRED METAL RAILING.
14. NEW DOMESTIC WATER AND FIRE MAIN CONNECTIONS. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS.

GENERAL NOTES:

1. BUILDING MATERIALS:
   WINDOW WELLS - CONCRETE
   SPLIT FACED ASHLER - CREDIT VALLEY SANDSTONE
   DECORATIVE BANDING - QUEENSTON LIMESTONE
   BALLISTRATES AND URNS - QUEENSTON LIMESTONE
   CUT STONE - QUEENSTON LIMESTONE
   COLUMNS - QUEENSTON LIMESTONE
   STEPS AND LANDING - QUEENSTON LIMESTONE
2. ALL FACADES HAVE HEAVY ATMOSPHERIC SOILING. FULL CLEANING OF THE ENTIRE MASONRY EXTERIOR IS REQUIRED.
3. CREDIT VALLEY SANDSTONE AND QUEENSTON LIMESTONE BANDING TO BE CLEANED WITH THE JOS SYSTEM.
4. QUEENSTON LIMESTONE DECORATIVE CARVINGS TO BE CLEANED USING MICRO-ABRASIVE. POULTICING TO BE USED WHERE STAINING APPEARS RESISTANT TO INITIAL CLEANING EFFORTS.
5. ASSUME 30% REPOINTING OF SPLIT FACED ASHLAR SANDSTONE WALL SURFACE AND 25% REPOINTING OF LIMESTONE DECORATIVE HORIZONTAL AND VERTICAL BANDING.

02 A2.1 CONSERVATION LEGEND / ACTVITIES & NOTES

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

125 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

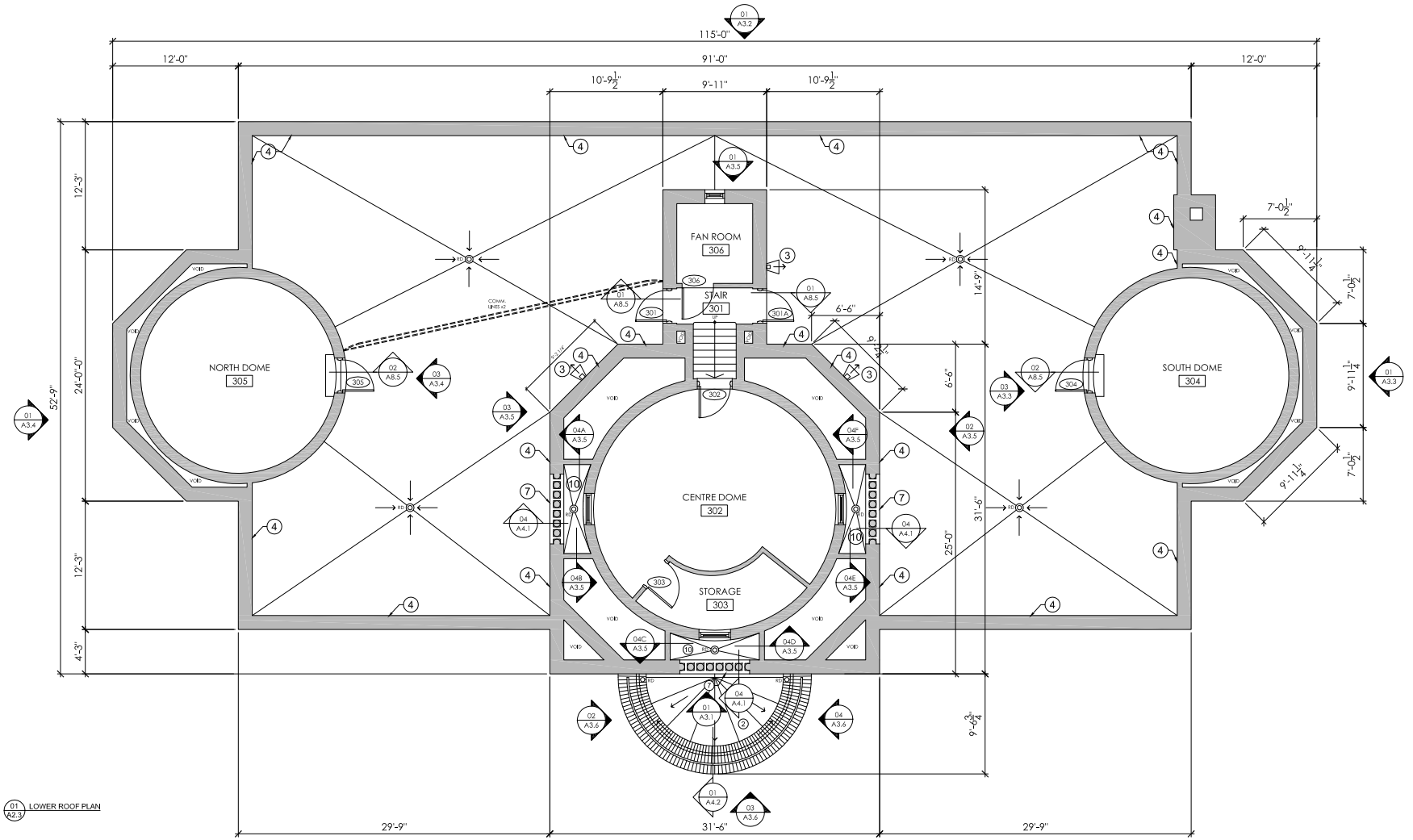
ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

+VG ARCHITECTS
THE VENTIN GROUP LTD

SCALE: 1/4"=1'-0"

BASEMENT PLAN

A2.1



01 A2.3 LOWER ROOF PLAN

LEGEND - REPAIRS

FOR PROCEDURES REFER TO SPECIFICATIONS.

- EXISTING COPPER FLASHING TO BE REPLACED C/W SEPARATION SHEET
- NEW 6"Ø WEEPING TILE C/W FILTER SOCK SET IN GRAVEL
- WATER PROOFING MEMBRANE C/W DRAINAGE BOARD & FILTER FABRIC
- EXISTING WALLS

NOTES

1. CORE 6"Ø OPENING INTO EXISTING WINDOW WELL WALL AT LOWEST LEVEL TO ALLOW COLLECTED MOISTURE TO DRAIN
2. EXISTING COPPER ROOFING TO BE REMOVED. INSPECT SUBSTRATE & MAKE REPAIRS AS REQUIRED. INSTALL NEW HIGH TEMPERATURE WATERPROOFING MEMBRANE & SEPARATION SHEET. INSTALL NEW 20 oz. COPPER ROOFING TO MATCH EXISTING C/W HOLD DOWN CLIPS, SEAMS, CONCEALED WATER TIGHT FASTENERS, FROST LOCK ETC.
3. EXISTING COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO MATCH EXISTING
4. EXISTING COPPER CLADDING ON INSIDE SURFACE OF MASONRY PARAPET TO BE REMOVED. INSTALL ½" EXTERIOR GRADE PLY SHEATHING C/W HIGH TEMPERATURE ROOF MEMBRANE & SEPARATION SHEET FROM CAPSTONE DOWN TO LAP OVER EXISTING ROOF MEMBRANE. INSTALL NEW 20 oz. COPPER CLADDING OVER MEMBRANE SURFACE C/W HOOKING STRIPS, FROST LOCKS & CONCEALED FASTENERS. COPPER CLADDING TO BE TIED INTO EXISTING ROOF COUNTER FLASHING AT CANT STRIP.
5. EXISTING CHIMNEY CAP FLASHING TO BE REMOVED. EXISTING CHIMNEY FLUE TO BE CUT DOWN TO THE LEVEL OF THE EXISTING MASONRY. INSTALL NEW 20 oz. COPPER CAP OVER ENTIRE MASONRY CHIMNEY C/W SEPARATION SHEET AND 2% SLOPE TO DRAIN.
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7. EXISTING COPPER FLASHING BENEATH STONE BALUSTERS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. DISASSEMBLE EXISTING STONE RAIL & BALUSTER ASSEMBLY TO ALLOW REMOVAL OF EXISTING COPPER FLASHING. PIN AND FILL BALUSTERS AS REQUIRED PRIOR TO DISASSEMBLY.
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9. EXISTING CAST IN PLACE CONCRETE WINDOW WELL TO BE REPAIRED. REMOVE EXISTING METAL GRADING. CUT BACK EXISTING CONCRETE WELL CURB TO A MINIMUM UNIFORM DEPTH OF 8" OF COLD JOINT. CAST NEW CONCRETE CURB C/W STEEL DOWELS & STAINLESS STEEL SUPPORT BRACKETS FOR THE METAL GRILLE. REFINISH AND REINSTALL THE EXISTING METAL GRILLE.
10. EXISTING COPPER ROOFING, MEMBRANE & DRAINS TO BE REMOVED & REPLACED WITH NEW HIGH TEMPERATURE ROOF MEMBRANE. RE-USE EXISTING DRAINS WHERE POSSIBLE SECURED & SEALED TO EXISTING CONCRETE SUBSTRATE.
11. REMOVE EXISTING METAL GRADING. REMOVE EXISTING FINISH AND REPAIR AS REQUIRED. PREP FOR NEW FINISH AND REINSTALL.
12. EXISTING CAST IN PLACE CONCRETE BASEMENT ACCESS STAIR TO BE REPAIRED. REMOVE EXISTING CHIPPED AND LOOSE MATERIAL TO DOWN SOUND BASE MATERIAL. CAST IN NEW PATCHES AS REQUIRED TO MAKE GOOD AND LEVEL SURFACES.
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GENERAL NOTES:

1. BUILDING MATERIALS:
   WINDOW WELLS - CONCRETE
   SPLIT FACED ASHLER - CREDIT VALLEY SANDSTONE
   DECORATIVE BANDING - QUEENSTON LIMESTONE
   BALLISTRATES AND URNS - QUEENSTON LIMESTONE
   CUT STONE - QUEENSTON LIMESTONE
   COLUMNS - QUEENSTON LIMESTONE
   STEPS AND LANDING - QUEENSTON LIMESTONE
2. ALL FACADES HAVE HEAVY ATMOSPHERIC SOILING. FULL CLEANING OF THE ENTIRE MASONRY EXTERIOR IS REQUIRED.
3. CREDIT VALLEY SANDSTONE AND QUEENSTON LIMESTONE BANDING TO BE CLEANED WITH THE JOS SYSTEM.
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5. ASSUME 30% REPOINTING OF SPLIT FACED ASHLAR SANDSTONE WALL SURFACE AND 25% REPOINTING OF LIMESTONE DECORATIVE HORIZONTAL AND VERTICAL BANDING.

02 A2.3 CONSERVATION LEGEND / ACTVITIES & NOTES

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

All dimensions and measurements must be checked and verified by the General Contractor

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

125 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCHI-E - 30"x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

+VG ARCHITECTS
THE VENTIN GROUP LTD

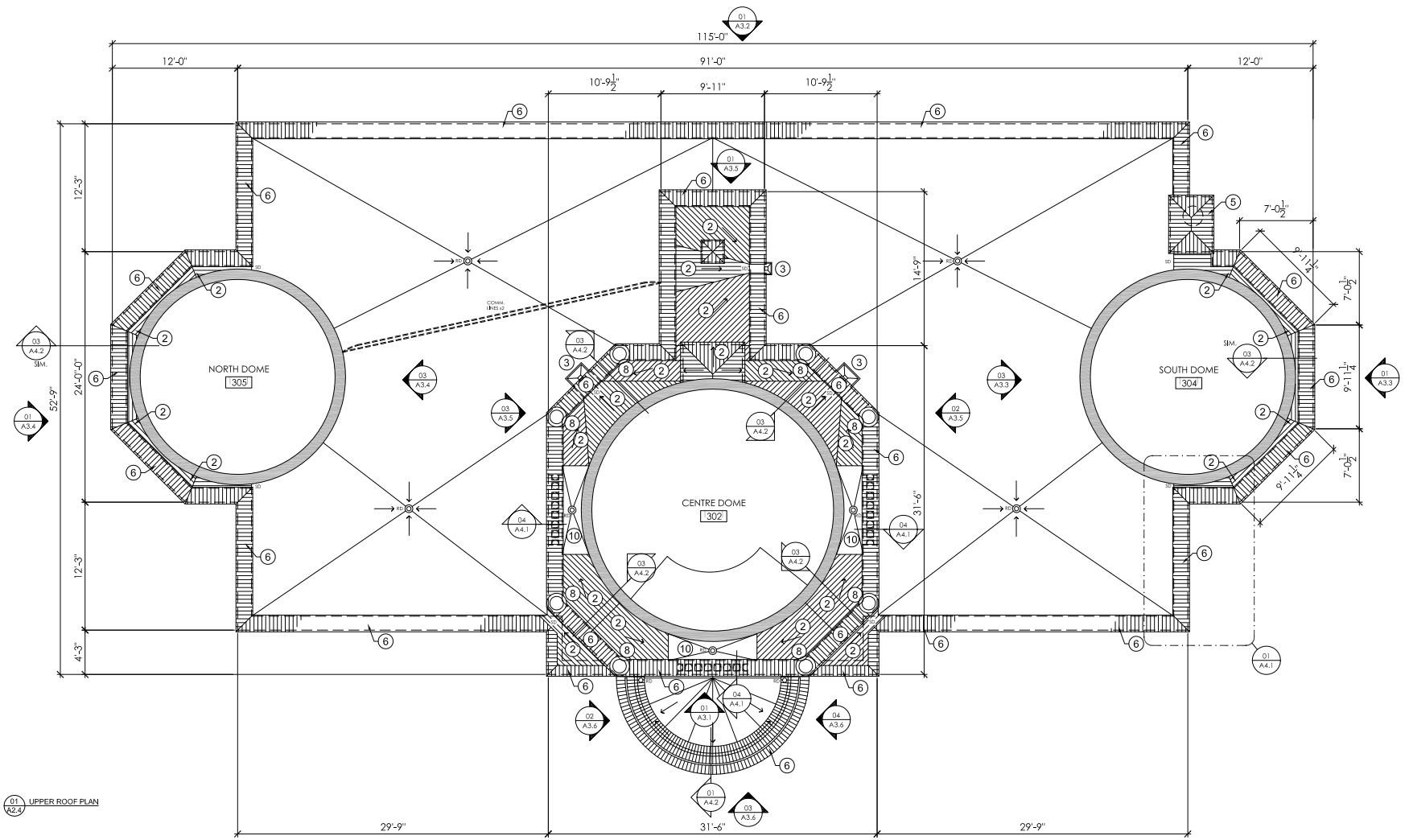
N

SCALE: 1/4"=1'-0"

LOWER ROOF PLAN

A2.3

Plot Date: Sep 05, 2019 - 3:06pm By: Neil
Filename: V:\VG+Projects\21886 - DDO Building Envelope Restoration\Authorities\Heritage Approval\Drawings\21886-A2.dwg



01 A2.4 UPPER ROOF PLAN

LEGEND - REPAIRS

FOR PROCEDURES REFER TO SPECIFICATIONS.

- EXISTING COPPER FLASHING TO BE REPLACED C/W SEPARATION SHEET
- NEW 6"Ø WEEPING TILE C/W FILTER SOCK SET IN GRAVEL
- WATER PROOFING MEMBRANE C/W DRAINAGE BOARD & FILTER FABRIC
- EXISTING WALLS

NOTES

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9. EXISTING CAST IN PLACE CONCRETE WINDOW WELL TO BE REPAIRED. REMOVE EXISTING METAL GRADING. CUT BACK EXISTING CONCRETE WELL CURB TO A MINIMUM UNIFORM DEPTH OF 8" OR COLD JOINT. CAST NEW CONCRETE CURB C/W STEEL DOWELS & STAINLESS STEEL SUPPORT BRACKETS FOR THE METAL GRILLE. REFINISH AND REINSTALL THE EXISTING METAL GRILLE.
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11. REMOVE EXISTING METAL GRADING. REMOVE EXISTING FINISH AND REPAIR AS REQUIRED. PREP FOR NEW FINISH AND REINSTALL.
12. EXISTING CAST IN PLACE CONCRETE BASEMENT ACCESS STAIR TO BE REPAIRED. REMOVE EXISTING CHIPPED AND LOOSE MATERIAL TO DOWN SOUND BASE MATERIAL. CAST IN NEW PATCHES AS REQUIRED TO MAKE GOOD AND LEVEL SURFACES.
13. EXISTING CAST IN PLACE CONCRETE BASEMENT ACCESS WELL TO BE REPAIRED. REMOVE EXISTING METAL RAILING AND CUT BACK EXISTING DAMAGED CONCRETE WELL CURB TO A MINIMUM UNIFORM DEPTH OF 8" OR COLD JOINT. CAST NEW CONCRETE CURB C/W STEEL DOWELS AND PREP TO RECEIVE REFINISHED & REPAIRED METAL RAILING.

GENERAL NOTES:

1. BUILDING MATERIALS:
   WINDOW WELLS - CONCRETE
   SPLIT FACED ASHLER - CREDIT VALLEY SANDSTONE
   DECORATIVE BANDING - QUEENSTON LIMESTONE
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2. ALL FACADES HAVE HEAVY ATMOSPHERIC SOILING. FULL CLEANING OF THE ENTIRE MASONRY EXTERIOR IS REQUIRED.
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5. ASSUME 30% REPOINTING OF SPLIT FACED ASHLAR SANDSTONE WALL SURFACE AND 25% REPOINTING OF LIMESTONE DECORATIVE HORIZONTAL AND VERTICAL BANDING.

02 A2.4 CONSERVATION LEGEND / ACTVITIES & NOTES

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

125 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCHITECTURAL D - 30" x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

+VG ARCHITECTS
THE VENTIN GROUP LTD

N

SCALE: 1/4"=1'-0"

UPPER ROOF PLAN

A2.4

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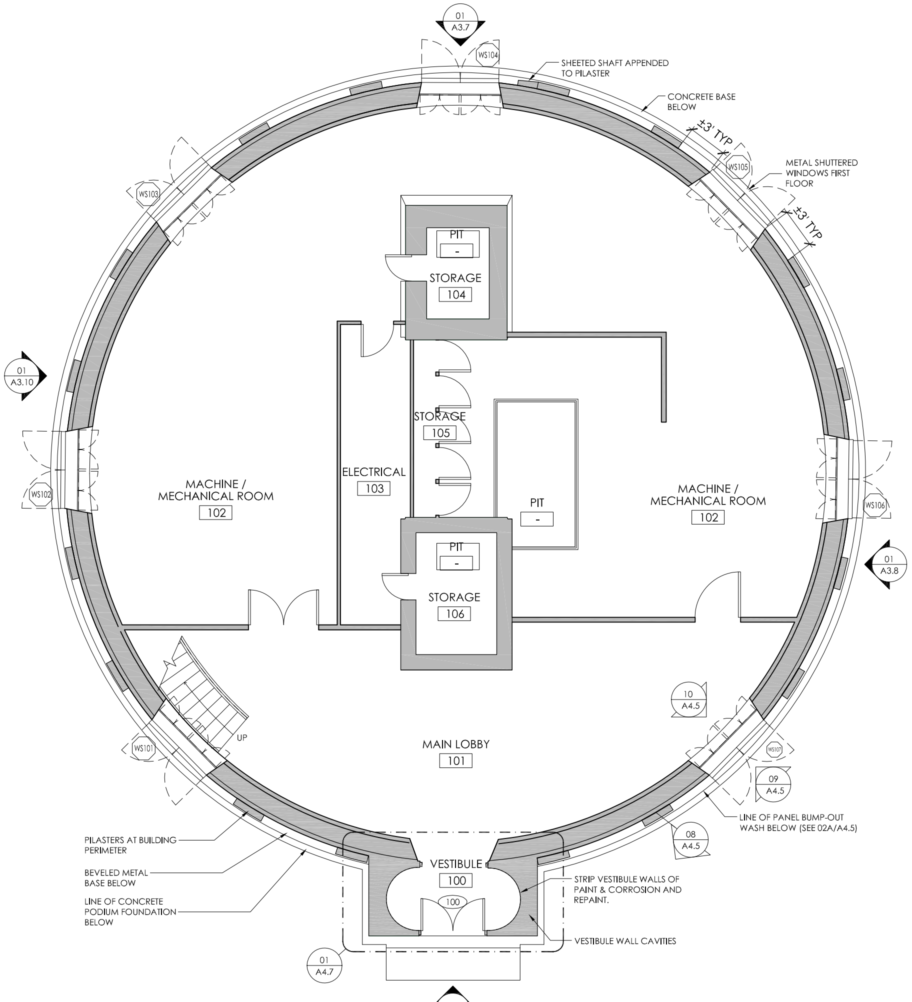
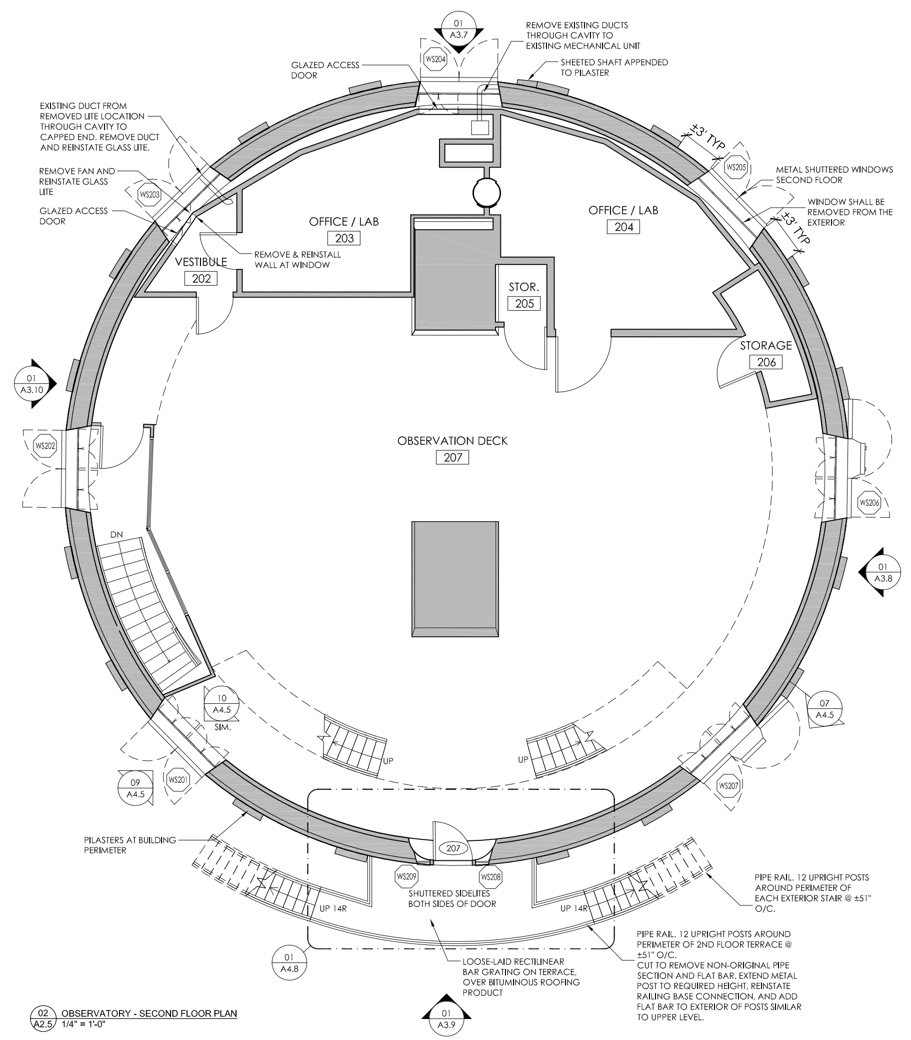


01 OBSERVATORY - FIRST FLOOR PLAN
A2.5 1/4" = 1'-0"



02 OBSERVATORY - SECOND FLOOR PLAN
A2.5 1/4" = 1'-0"

GENERAL NOTES:

1. ALL DIMENSIONS ARE ±. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE.
2. UNLESS NOTED OTHERWISE, ALL EXTERIOR ELEMENTS OF THE OBSERVATORY BUILDING ARE PAINTED METAL.
3. UNLESS NOTED OTHERWISE, ALL EXTERIOR PAINTED METAL ELEMENTS & SURFACES OF THE OBSERVATORY BUILDING ARE TO BE STRIPPED TO BARE METAL AND REPAINTED. UNLESS NOTED OTHERWISE THEY ARE TO BE STRIPPED AND REPAINTED IN-SITU. REMOVE ALL COATINGS; REPAIR AS NECESSARY; BLAST CLEAN TO BARE WHITE METAL; APPLY ZINC RICH EPOXY PRIMER; APPLY MASTIC EPOXY; APPLY 2K URETHANE
4. SASHES AND FRAMES ARE TO BE COMPLETELY REMOVED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK.
5. EXTERIOR STEEL SHUTTERS AT EACH WINDOW ARE TO BE COMPLETELY DISASSEMBLED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK
6. GRATINGS, CLIPS, AND ALL OTHER CATWALK ELEMENTS THAT CAN BE REMOVED FROM THE EXTERIOR OF THE BUILDING BY FASTENER REMOVAL ARE TO BE REMOVED FROM THE EXTERIOR OF THE BUILDING, RESTORED OFFSITE, AND REPLACED. CATWALK SUPPORT BRACKETS AND FRAMEWORK TO BE RESTORED ONSITE IN-SITU.
7. REPLACE ALL SEALANTS, CAULKING, GLAZING PUTTY, AND GASKETS ENTIRELY.
8. REPLACE ALL THREADED FASTENERS REMOVED WITH STAINLESS STEEL. LIGHTLY SANDBLAST UNTHREADED AREAS TO ALLOW INCREASED PAINT ADHESION.

LEGEND

- EXISTING PAINTED METAL TO REPLACED WITH NEW TO MATCH EXISTING.
- EXISTING WALLS
- 207 DOOR TAG. SEE SCHEDULE.
- WS### OBSERVATORY BUILDING WINDOW TAG. EXTERIOR STEEL SHUTTERS TYP. SEE SCHEDULE.

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DRIVE
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

Plot Date: Sep 05, 2019 - 4:54pm By: fred
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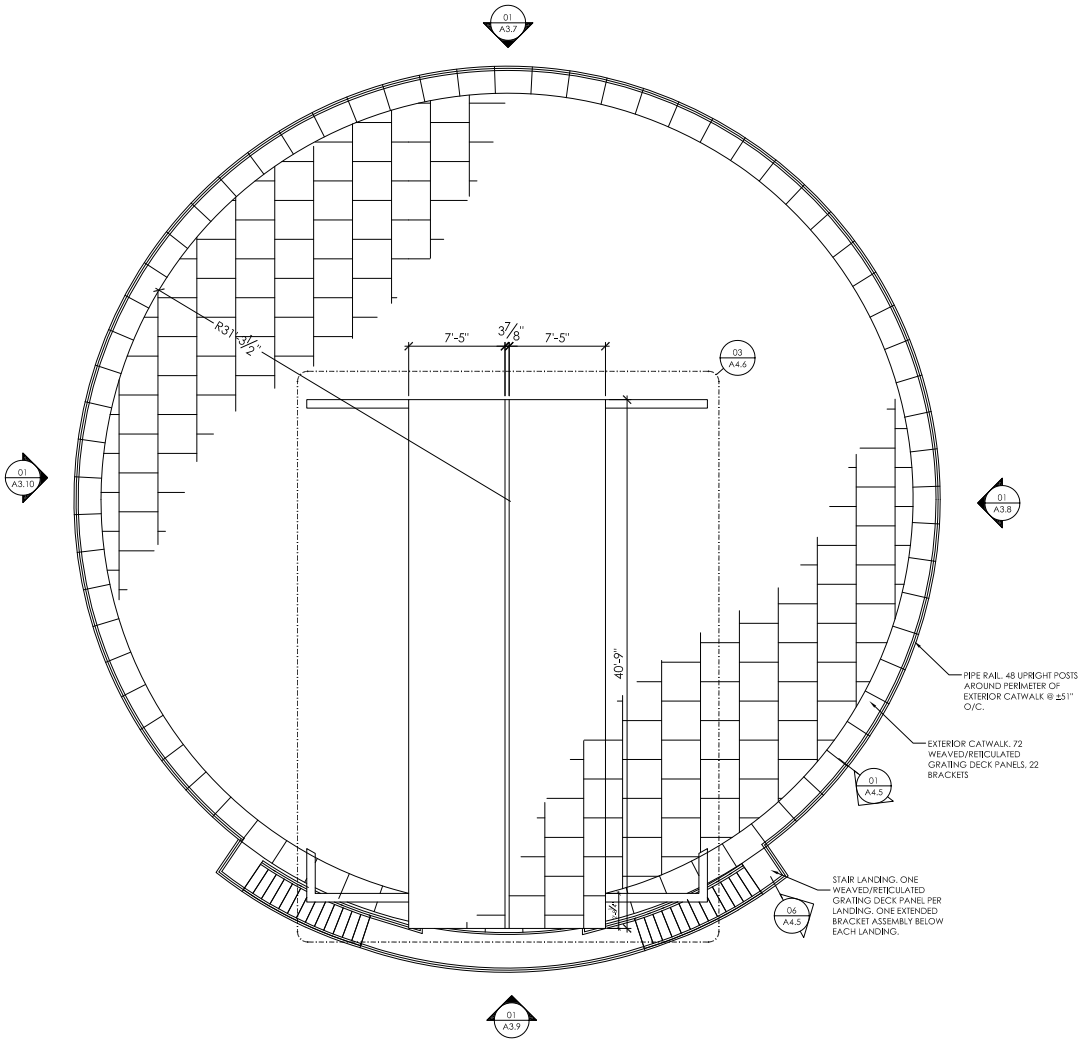
+VG ARCHITECTS
THE VENTIN GROUP LTD

N

OBSERVATORY - FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"

A2.5



01 A2.6 OBSERVATORY - ROOF PLAN
1/4" = 1'-0"

GENERAL NOTES:

1. ALL DIMENSIONS ARE ±. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE.
2. UNLESS NOTED OTHERWISE, ALL EXTERIOR ELEMENTS OF THE OBSERVATORY BUILDING ARE PAINTED METAL.
3. UNLESS NOTED OTHERWISE, ALL EXTERIOR PAINTED METAL ELEMENTS & SURFACES OF THE OBSERVATORY BUILDING ARE TO BE STRIPPED TO BARE METAL AND REPAINTED. UNLESS NOTED OTHERWISE THEY ARE TO BE STRIPPED AND REPAINTED IN-SITU. REMOVE ALL COATINGS; REPAIR AS NECESSARY; BLAST CLEAN TO BARE WHITE METAL; APPLY ZINC RICH EPOXY PRIMER; APPLY MASTIC EPOXY; APPLY 2K URETHANE
4. SASHES AND FRAMES ARE TO BE COMPLETELY REMOVED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK.
5. EXTERIOR STEEL SHUTTERS AT EACH WINDOW ARE TO BE COMPLETELY DISASSEMBLED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK
6. GRATINGS, CLIPS, AND ALL OTHER CATWALK ELEMENTS THAT CAN BE REMOVED FROM THE EXTERIOR OF THE BUILDING BY FASTENER REMOVAL ARE TO BE REMOVED FROM THE EXTERIOR OF THE BUILDING, RESTORED OFFSITE, AND REPLACED. CATWALK SUPPORT BRACKETS AND FRAMEWORK TO BE RESTORED ONSITE IN-SITU.
7. REPLACE ALL SEALANTS, CAULKING, GLAZING PUTTY, AND GASKETS ENTIRELY.
8. REPLACE ALL THREADED FASTENERS REMOVED WITH STAINLESS STEEL. LIGHTLY SANDBLAST UNTHREADED AREAS TO ALLOW INCREASED PAINT ADHESION.

LEGEND

- EXISTING PAINTED METAL TO REPLACED WITH NEW TO MATCH EXISTING.
- EXISTING WALLS
- 207 DOOR TAG. SEE SCHEDULE.
- RO### OBSERVATORY BUILDING WINDOW TAG. EXTERIOR STEEL SHUTTERS TYP. SEE SCHEDULE.

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

All dimensions and measurements must be checked and verified by the General Contractor

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

125 HILLSVIEW DRIVE
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

+VG ARCHITECTS
THE VENTIN GROUP LTD

N

SCALE: 1/4"=1'-0"

OBSERVATORY - ROOF PLAN

A2.6

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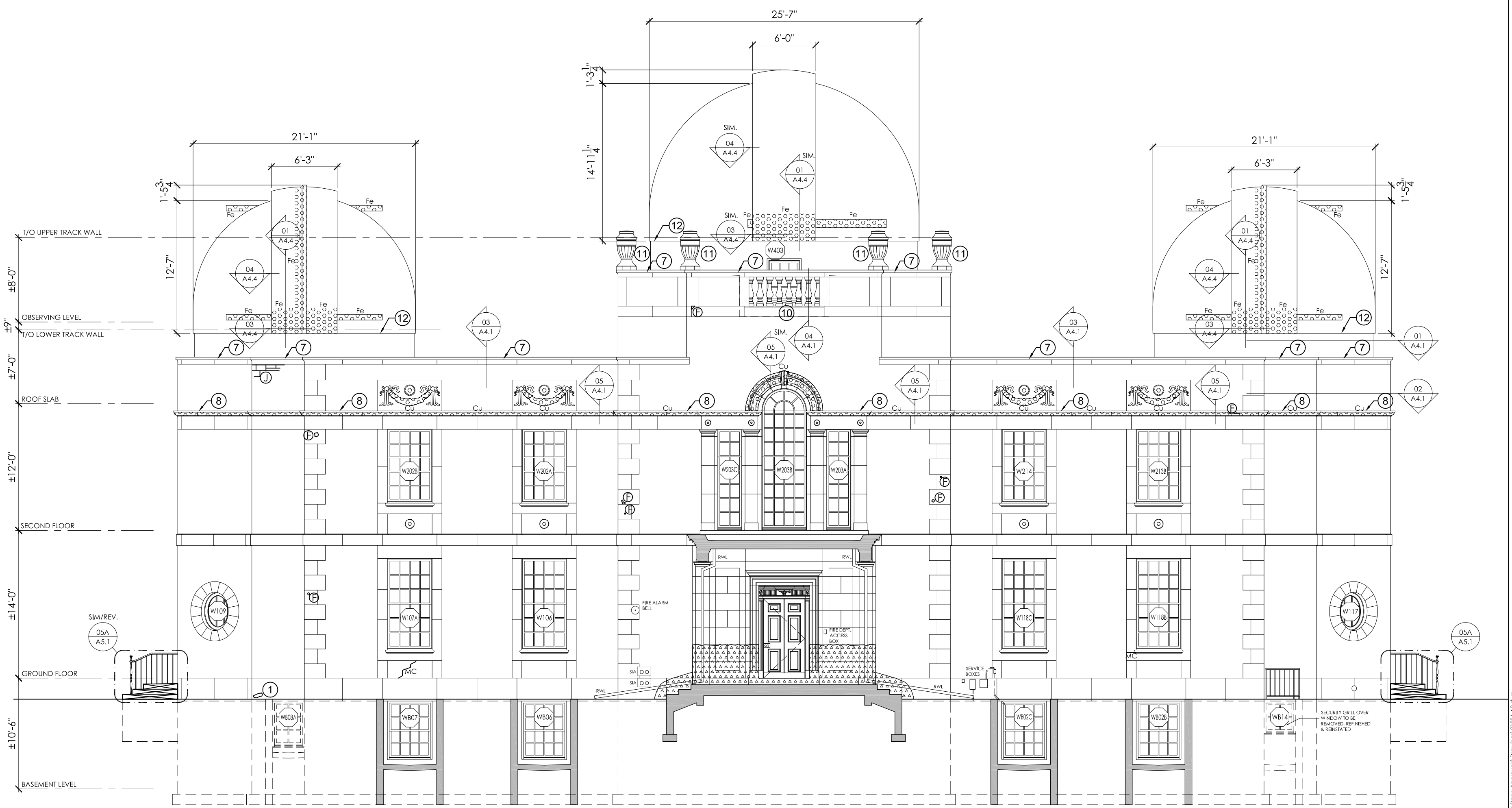


01 A3.1 WEST ELEVATION

LEGEND - REPAIRS
FOR PROCEDURES REFER TO SPECIFICATIONS.

- HEAVY ATMOSPHERIC SOILING - REMOVE
- CEMENTITIOUS COATING - REMOVE
- EFFLORESCENCE - REMOVE
- BIOLOGICAL SOILING - REMOVE
- Cu — COPPER OXIDE STAINS - REMOVE
- Fe — IRON OXIDE STAINS - REMOVE
- Pb — LEAD OXIDE STAINS - REMOVE
- DETERIORATION TO BE RUBBED BACK
- MASONRY REBUILD
- (R) RUB STONE BACK
- (S) SEALANT REMOVAL - REPLACE
- (PT) PAINT - REMOVE
- (PD) PIGEON DROPPINGS - REMOVE
- (A) EXISTING ANCHOR - REMOVE
- (F) EXISTING VOID - FILL WITH MORTAR RENDER
- (SC) SCALE STONE BACK
- (PR) PLASTIC RENDER
- (MR) MASONRY REBUILD
- (FR) FLASHING REPAIR
- DX EXISTING DUTCHMAN - REPLACE
- CRX EXISTING CRAMP - REMOVE FILL WITH MORTAR RENDER
- MC MAJOR CRACK TO BE PINNED/FILLED
- MP MISSING PIECE -FILL WITH MORTAR RENDER
- (J) MISSING JOINT TO BE MORTAR FILLED
- D DUTCHMAN
- STONE REPLACEMENT
- (22) STONE REPLACEMENT # REFER TO DETAILS A4.?

NOTES

1. PAINT TO BE REMOVED
2. ATMOSPHERIC SOILING CAUSED BY COAL SMOKE TO BE REMOVED
3. MINOR BIO GROWTH & ATMOSPHERIC SOILING TO BE REMOVED
4. EXISTING COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER SCUPPERS, COLLECTOR BOXES. DOWN SPOUTS & SPLASH PANS TO MATCH EXISTING
5. EXISTING COPPER CLADDING ON INSIDE SURFACE OF MASONRY PARAPET TO BE REMOVED. INSTALL ⅝" EXTERIOR GRADE PLY SHEATHING C/W HIGH TEMPERATURE ROOF MEMBRANE & SEPARATION SHEET FROM CAPSTONE DOWN TO LAP OVER EXISTING ROOF MEMBRANE. INSTALL NEW 20 oz. COPPER CLADDING OVER MEMBRANE SURFACE C/W HOOKING STRIPS, FROST LOCKS & CONCEALED FASTENERS. COPPER CLADDING TO BE TIED INTO EXISTING ROOF COUNTER FLASHING AT CANT STRIP.
6. EXISTING CHIMNEY CAP FLASHING TO BE REMOVED. EXISTING CHIMNEY FLUE TO BE CUT DOWN TO THE LEVEL OF THE EXISTING MASONRY. INSTALL NEW 20 oz. COPPER CAP OVER ENTIRE MASONRY CHIMNEY C/W SEPARATION SHEET AND 2% SLOPE TO DRAIN.
7. EXISTING COPPER CAP FLASHING TO BE REMOVED & REPLACED WITH NEW 20 oz. COPPER CAP FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, CONCEALED FASTENERS & FROST LOCKS AT SEAMS.
8. EXISTING COPPER CORNICE FLASHING TO BE REMOVED & REPLACED WITH NEW 20 oz. COPPER FLASHING SET INTO EXISTING REGLET C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, CONCEALED FASTENERS & FROST LOCKS AT SEAMS.
9. SUPPLY & INSTALL NEW COPPER FLASHING OVER STONE SILL C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. NEW 20 oz. COPPER FLASHING TO BE EXTENDED & SEALED BENEATH TRANSOM SILL.
10. EXISTING COPPER FLASHING BENEATH STONE BALUSTERS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. DISASSEMBLE EXISTING STONE RAIL & BALUSTER ASSEMBLY TO ALLOW REMOVAL OF EXISTING COPPER FLASHING. PIN AND FILL BALUSTERS AS REQUIRED PRIOR TO DISASSEMBLY.
11. EXISTING COPPER FLASHING BENEATH STONE URNS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. REMOVE URNS TO ALLOW REMOVAL OF EXISTING COPPER FLASHING. MAKE ALL REPAIRS TO URNS AS REQUIRED PRIOR TO REMOVAL.
12. DRILL DRAIN HOLES @ 24" O.C. IN EXISTING ROLLED GUTTER AT BOTTOM EDGE ON DOME
13. EXISTING ASHLER SANDSTONE TO BE REPOINTED, REPAIRED AND REPOSITIONED AS REQUIRED TO REPAIR STONE DISPLACEMENT ON THE SOUTH FACE OF THE OF THE UPPER ROOF PAVILION.
14. EXISTING CORRODED STEEL LINTEL TO BE REPLACED C/W DRIP EDGE FLASHING. REINSTATE STONE SOLDIER COURSE ABOVE LINTEL AND WINDOW BENEATH DISPLACED BY THE WORK.
15. EXISTING ROOFING & DRAINS TO BE REMOVED & REPLACED WITH NEW TWO PLY MOD BIT ROOFING COMPLETE WITH NEW DRAINS SECURED & SEALED TO EXISTING CONCRETE SUBSTRATE.
16. EXISTING CUT STONE CAPS AND ASHLER BASES LOCATED, ON EITHER SIDE OF THE WEST APPROACH STEPS, EXHIBIT EXTENSIVE EFFLORESCENCE, ATMOSPHERIC AND BIOLOGICAL SOILING. CLEAN WITH JOS SYSTEM AND REPOINT ENTIRE SPLIT FACE ASHLER STONE SURFACE.
17. EXISTING WALL MOUNTED METAL PIPE HANDRAIL TO BE REMOVED, STRIPPED AND REFINISHED. REINSTALL COMPLETE WITH NEW FASTENERS AND GALVANIZED EXPANSION SLEEVES SECURED INTO EXISTING OPENINGS IN STONE.
18. EXISTING PORTICO CEILING TO STRIPPED AND CLEANED IN PREPARATION FOR NEW PAINT FINISH. MAKE REPAIRS TO SUBSTRATE AS REQUIRED.
19. EXISTING PORTICO SOFFIT VENTS TO BE REMOVED STRIPPED AND CLEANED. PAINT TO MATCH NEW CEILING PAINT FINISH.
20. EXISTING PORTICO LIGHT FIXTURE TO BE REMOVED AND RECONDITIONED FOR RE-USE. ASSESS EXISTING WIRING AND FIXTURE SUPPORT AND MAKE REPAIRS AS REQUIRED.
21. EXISTING COPPER BASE FLASHING TO BE REPAIRED/REPLACED AT CORNER LOCATION.

GENERAL NOTES:

1. BUILDING MATERIALS:
   WINDOW WELLS - CONCRETE
   SPLIT FACED ASHLER - CREDIT VALLEY SANDSTONE
   DECORATIVE BANDING - QUEENSTON LIMESTONE
   BALLISTRATES AND URNS - QUEENSTON LIMESTONE
   CUT STONE - QUEENSTON LIMESTONE
   COLUMNS - QUEENSTON LIMESTONE
   STEPS AND LANDING - QUEENSTON LIMESTONE
2. ALL FACADES HAVE HEAVY ATMOSPHERIC SOILING. FULL CLEANING OF THE ENTIRE MASONRY EXTERIOR IS REQUIRED.
3. CREDIT VALLEY SANDSTONE AND QUEENSTON LIMESTONE BANDING TO BE CLEANED WITH THE JOS SYSTEM.
4. QUEENSTON LIMESTONE DECORATIVE CARVINGS TO BE CLEANED USING MICRO-ABRASIVE. POULTICING TO BE USED WHERE STAINING APPEARS RESISTANT TO INITIAL CLEANING EFFORTS.
5. ASSUME 30% REPOINTING OF SPLIT FACED ASHLAR SANDSTONE WALL SURFACE AND 25% REPOINTING OF LIMESTONE DECORATIVE HORIZONTAL AND VERTICAL BANDING.

02 A3.1 CONSERVATION LEGEND / ACTVITIES & NOTES

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

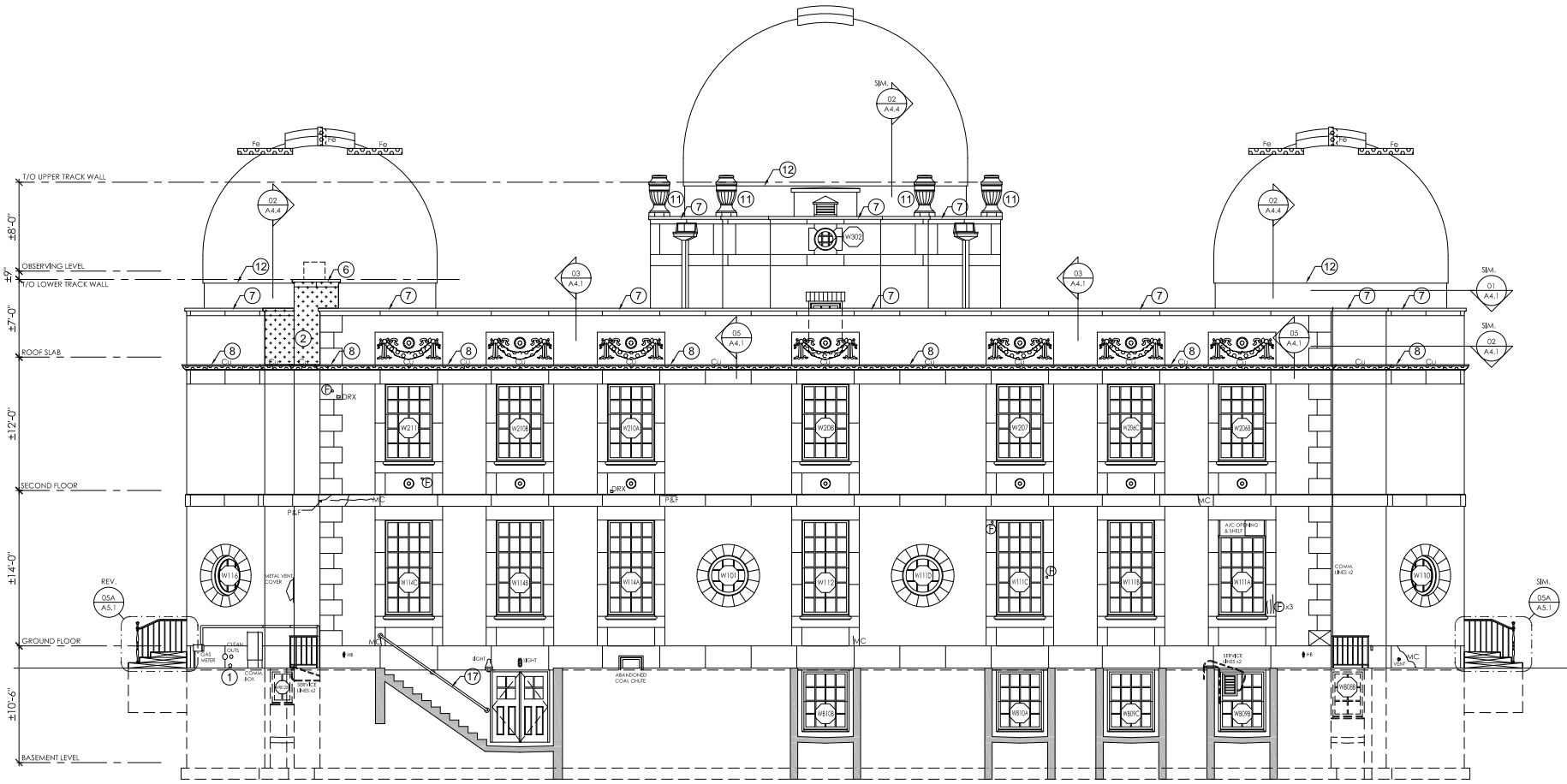
ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

+VG ARCHITECTS
THE VENTIN GROUP LTD

SCALE: 1/4"=1'-0"

WEST ELEVATION

A3.1



01 EAST ELEVATION
A3.2

LEGEND - REPAIRS
FOR PROCEDURES REFER TO SPECIFICATIONS.

HEAVY ATMOSPHERIC SOILING - REMOVE	EXISTING VOID - FILL WITH MORTAR RENDER
CEMENTITIOUS COATING - REMOVE	SCALE STONE BACK
EFFLORESCENCE - REMOVE	PLASTIC RENDER
BIOLOGICAL SOILING - REMOVE	MASONRY REBUILD
COPPER OXIDE STAINS - REMOVE	FLASHING REPAIR
IRON OXIDE STAINS - REMOVE	EXISTING DUTCHMAN - REPLACE
LEAD OXIDE STAINS - REMOVE	EXISTING CRAMP - REMOVE FILL WITH MORTAR RENDER
DETERIORATION TO BE RUBBED BACK	MAJOR CRACK TO BE PINNED/FILLED
MASONRY REBUILD	MISSING PIECE -FILL WITH MORTAR RENDER
RUB STONE BACK	MISSING JOINT TO BE MORTAR FILLED
SEALANT REMOVAL - REPLACE	DUTCHMAN
PAINT - REMOVE	STONE REPLACEMENT
PIGEON DROPPINGS - REMOVE	STONE REPLACEMENT # REFER TO DETAILS A4.?
EXISTING ANCHOR - REMOVE	

NOTES

1. PAINT TO BE REMOVED
2. ATMOSPHERIC SOILING CAUSED BY COAL SMOKE TO BE REMOVED
3. MINOR BIO GROWTH & ATMOSPHERIC SOILING TO BE REMOVED
4. EXISTING COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO MATCH EXISTING
5. EXISTING COPPER CLADDING ON INSIDE SURFACE OF MASONRY PARAPET TO BE REMOVED. INSTALL ⅜" EXTERIOR GRADE PLY SHEATHING C/W HIGH TEMPERATURE ROOF MEMBRANE & SEPARATION SHEET FROM CAPSTONE DOWN TO LAP OVER EXISTING ROOF MEMBRANE. INSTALL NEW 20 oz. COPPER CLADDING OVER MEMBRANE SURFACE C/W HOOKING STRIPS, FROST LOCKS & CONCEALED FASTENERS. COPPER CLADDING TO BE TIED INTO EXISTING ROOF COUNTER FLASHING AT CANT STRIP.
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11. EXISTING COPPER FLASHING BENEATH STONE URNS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. REMOVE URNS TO ALLOW REMOVAL OF EXISTING COPPER FLASHING. MAKE ALL REPAIRS TO URNS AS REQUIRED PRIOR TO REMOVAL.
12. DRILL DRAIN HOLES @ 24" O.C. IN EXISTING ROLLED GUTTER AT BOTTOM EDGE ON DOME
13. EXISTING ASHLER SANDSTONE TO BE REPOINTED. REPAIRED AND REPOSITIONED AS REQUIRED TO REPAIR STONE DISPLACEMENT ON THE SOUTH FACE OF THE OF THE UPPER ROOF PAVILION.
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17. EXISTING WALL MOUNTED METAL PIPE HANDRAIL TO BE REMOVED, STRIPPED AND REFINISHED, REINSTALL COMPLETE WITH NEW FASTENERS AND GALVANIZED EXPANSION SLEEVES SECURED INTO EXISTING OPENINGS IN STONE.
18. EXISTING PORTICO CEILING TO STRIPPED AND CLEANED IN PREPARATION FOR NEW PAINT FINISH. MAKE REPAIRS TO SUBSTRATE AS REQUIRED.
19. EXISTING PORTICO SOFFIT VENTS TO BE REMOVED STRIPPED AND CLEANED. PAINT TO MATCH NEW CEILING PAINT FINISH.
20. EXISTING PORTICO LIGHT FIXTURE TO BE REMOVED AND RECONDITIONED FOR RE-USE. ASSESS EXISTING WIRING AND FIXTURE SUPPORT AND MAKE REPAIRS AS REQUIRED.
21. EXISTING COPPER BASE FLASHING TO BE REPAIRED/REPLACED AT CORNER LOCATION.

GENERAL NOTES:

1. BUILDING MATERIALS:
   WINDOW WELLS - CONCRETE
   SPLIT FACED ASHLER - CREDIT VALLEY SANDSTONE
   DECORATIVE BANDING - QUEENSTON LIMESTONE
   BALLUSTRATES AND URNS - QUEENSTON LIMESTONE
   CUT STONE - QUEENSTON LIMESTONE
   COLUMNS - QUEENSTON LIMESTONE
   STEPS AND LANDING - QUEENSTON LIMESTONE
2. ALL FACADES HAVE HEAVY ATMOSPHERIC SOILING. FULL CLEANING OF THE ENTIRE MASONRY EXTERIOR IS REQUIRED.
3. CREDIT VALLEY SANDSTONE AND QUEENSTON LIMESTONE BANDING TO BE CLEANED WITH THE JOS SYSTEM.
4. QUEENSTON LIMESTONE DECORATIVE CARVINGS TO BE CLEANED USING MICRO-ABRASIVE. POULTICING TO BE USED WHERE STAINING APPEARS RESISTANT TO INITIAL CLEANING EFFORTS.
5. ASSUME 30% REPOINTING OF SPLIT FACED ASHLAR SANDSTONE WALL SURFACE AND 25% REPOINTING OF LIMESTONE DECORATIVE HORIZONTAL AND VERTICAL BANDING.

02 CONSERVATION LEGEND / ACTVITIES & NOTES
A3.2

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

All dimensions and measurements must be checked and verified by the General Contractor

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

125 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

+VG ARCHITECTS
THE VENTIN GROUP LTD

SCALE: 1/4"=1'-0"

EAST ELEVATION

A3.2

Plot Date: Sep 06, 2019 - 8:25pm By: Fred
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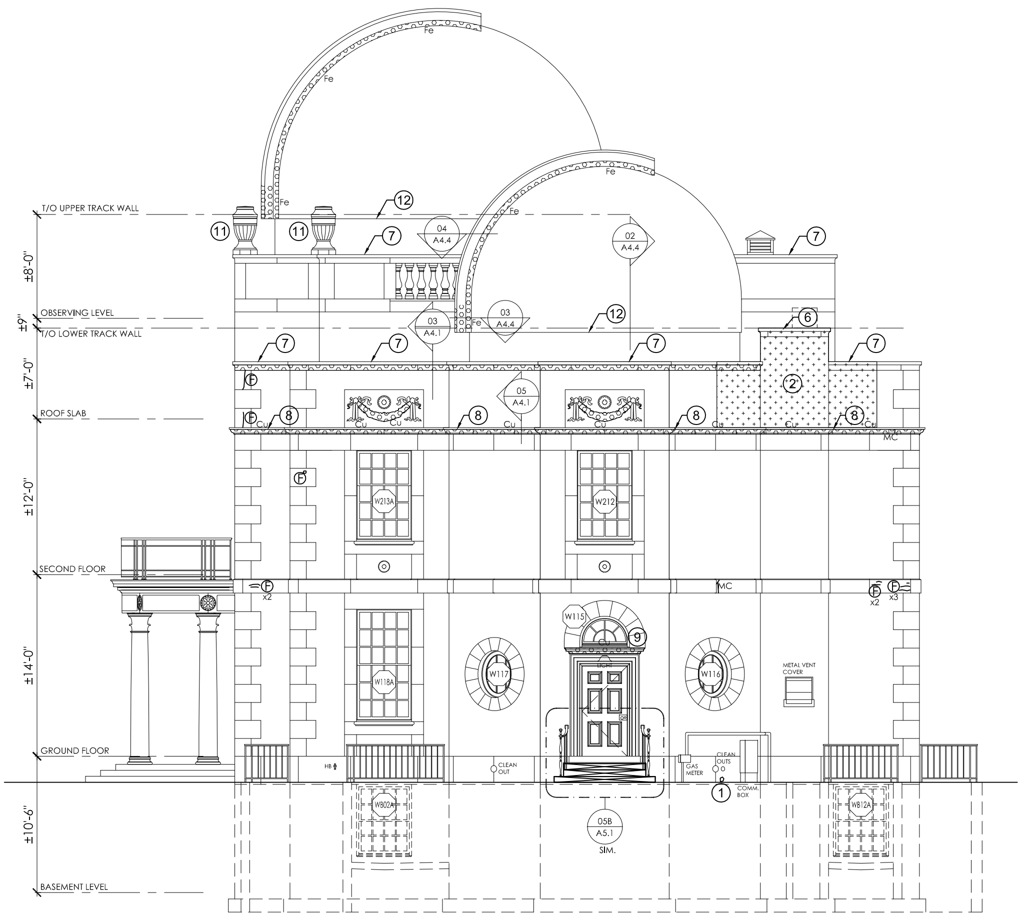
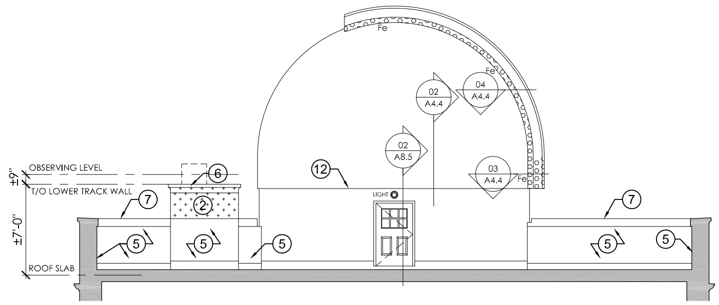


01 / A3.3 SOUTH ELEVATION



03 / A3.3 NORTH ELEVATION @ SOUTH DOME

LEGEND - REPAIRS
FOR PROCEDURES REFER TO SPECIFICATIONS.

- HEAVY ATMOSPHERIC SOILING - REMOVE
- CEMENTITIOUS COATING - REMOVE
- EFFLORESCENCE - REMOVE
- BIOLOGICAL SOILING - REMOVE
- Cu COPPER OXIDE STAINS - REMOVE
- Fe IRON OXIDE STAINS - REMOVE
- Pb LEAD OXIDE STAINS - REMOVE
- DETERIORATION TO BE RUBBED BACK
- MASONRY REBUILD
- (R) RUB STONE BACK
- (S) SEALANT REMOVAL - REPLACE
- (PT) PAINT - REMOVE
- (PD) PIGEON DROPPINGS - REMOVE
- (A) EXISTING ANCHOR - REMOVE
- (F) EXISTING VOID - FILL WITH MORTAR RENDER
- (SC) SCALE STONE BACK
- (PR) PLASTIC RENDER
- (MR) MASONRY REBUILD
- (FR) FLASHING REPAIR
- DX EXISTING DUTCHMAN - REPLACE
- CRX EXISTING CRAMP - REMOVE FILL WITH MORTAR RENDER
- MC MAJOR CRACK TO BE PINNED/FILLED
- MP MISSING PIECE -FILL WITH MORTAR RENDER
- (J) MISSING JOINT TO BE MORTAR FILLED
- D DUTCHMAN
- STONE REPLACEMENT
- (22) STONE REPLACEMENT # REFER TO DETAILS A4.?

NOTES

1. PAINT TO BE REMOVED
2. ATMOSPHERIC SOILING CAUSED BY COAL SMOKE TO BE REMOVED
3. MINOR BIO GROWTH & ATMOSPHERIC SOILING TO BE REMOVED
4. EXISTING COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER SCUPPERS, COLLECTOR BOXES. DOWN SPOUTS & SPLASH PANS TO MATCH EXISTING
5. EXISTING COPPER CLADDING ON INSIDE SURFACE OF MASONRY PARAPET TO BE REMOVED. INSTALL 5/8" EXTERIOR GRADE PLY SHEATHING C/W HIGH TEMPERATURE ROOF MEMBRANE & SEPARATION SHEET FROM CAPSTONE DOWN TO LAP OVER EXISTING ROOF MEMBRANE. INSTALL NEW 20 oz. COPPER CLADDING OVER MEMBRANE SURFACE C/W HOOKING STRIPS, FROST LOCKS & CONCEALED FASTENERS. COPPER CLADDING TO BE TIED INTO EXISTING ROOF COUNTER FLASHING AT CANT STRIP.
6. EXISTING CHIMNEY CAP FLASHING TO BE REMOVED. EXISTING CHIMNEY FLUE TO BE CUT DOWN TO THE LEVEL OF THE EXISTING MASONRY. INSTALL NEW 20 oz. COPPER CAP OVER ENTIRE MASONRY CHIMNEY C/W SEPARATION SHEET AND 2% SLOPE TO DRAIN.
7. EXISTING COPPER CAP FLASHING TO BE REMOVED & REPLACED WITH NEW 20 oz. COPPER CAP FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, CONCEALED FASTENERS & FROST LOCKS AT SEAMS.
8. EXISTING COPPER CORNICE FLASHING TO BE REMOVED & REPLACED WITH NEW 20 oz. COPPER FLASHING SET INTO EXISTING REGLET C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, CONCEALED FASTENERS & FROST LOCKS AT SEAMS.
9. SUPPLY & INSTALL NEW COPPER FLASHING OVER STONE SILL C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. NEW 20 oz. COPPER FLASHING TO BE EXTENDED & SEALED BENEATH TRANSOM SILL.
10. EXISTING COPPER FLASHING BENEATH STONE BALUSTERS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. DISASSEMBLE EXISTING STONE RAIL & BALUSTER ASSEMBLY TO ALLOW REMOVAL OF EXISTING COPPER FLASHING. PIN AND FILL BALUSTERS AS REQUIRED PRIOR TO DISASSEMBLY.
11. EXISTING COPPER FLASHING BENEATH STONE URNS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. REMOVE URNS TO ALLOW REMOVAL OF EXISTING COPPER FLASHING. MAKE ALL REPAIRS TO URNS AS REQUIRED PRIOR TO REMOVAL.
12. DRILL DRAIN HOLES @ 24" O.C. IN EXISTING ROLLED GUTTER AT BOTTOM EDGE ON DOME
13. EXISTING ASHLER SANDSTONE TO BE REPOINTED, REPAIRED AND REPOSITIONED AS REQUIRED TO REPAIR STONE DISPLACEMENT ON THE SOUTH FACE OF THE OF THE UPPER ROOF PAVILION.
14. EXISTING CORRODED STEEL LINTEL TO BE REPLACED C/W DRIP EDGE FLASHING. REINSTATE STONE SOLDIER COURSE ABOVE LINTEL AND WINDOW BENEATH DISPLACED BY THE WORK.
15. EXISTING ROOFING & DRAINS TO BE REMOVED & REPLACED WITH NEW TWO PLY MOD BIT ROOFING COMPLETE WITH NEW DRAINS SECURED & SEALED TO EXISTING CONCRETE SUBSTRATE.
16. EXISTING CUT STONE CAPS AND ASHLER BASES LOCATED, ON EITHER SIDE OF THE WEST APPROACH STEPS, EXHIBIT EXTENSIVE EFFLORESCENCE, ATMOSPHERIC AND BIOLOGICAL SOILING. CLEAN WITH JOS SYSTEM AND REPOINT ENTIRE SPLIT FACE ASHLER STONE SURFACE.
17. EXISTING WALL MOUNTED METAL PIPE HANDRAIL TO BE REMOVED, STRIPPED AND REFINISHED. REINSTALL COMPLETE WITH NEW FASTENERS AND GALVANIZED EXPANSION SLEEVES SECURED INTO EXISTING OPENINGS IN STONE.
18. EXISTING PORTICO CEILING TO STRIPPED AND CLEANED IN PREPARATION FOR NEW PAINT FINISH. MAKE REPAIRS TO SUBSTRATE AS REQUIRED.
19. EXISTING PORTICO SOFFIT VENTS TO BE REMOVED STRIPPED AND CLEANED. PAINT TO MATCH NEW CEILING PAINT FINISH.
20. EXISTING PORTICO LIGHT FIXTURE TO BE REMOVED AND RECONDITIONED FOR RE-USE. ASSESS EXISTING WIRING AND FIXTURE SUPPORT AND MAKE REPAIRS AS REQUIRED.
21. EXISTING COPPER BASE FLASHING TO BE REPAIRED/REPLACED AT CORNER LOCATION.

GENERAL NOTES:

1. BUILDING MATERIALS:
   WINDOW WELLS - CONCRETE
   SPLIT FACED ASHLER - CREDIT VALLEY SANDSTONE
   DECORATIVE BANDING - QUEENSTON LIMESTONE
   BALLISTRATES AND URNS - QUEENSTON LIMESTONE
   CUT STONE - QUEENSTON LIMESTONE
   COLUMNS - QUEENSTON LIMESTONE
   STEPS AND LANDING - QUEENSTON LIMESTONE
2. ALL FACADES HAVE HEAVY ATMOSPHERIC SOILING. FULL CLEANING OF THE ENTIRE MASONRY EXTERIOR IS REQUIRED.
3. CREDIT VALLEY SANDSTONE AND QUEENSTON LIMESTONE BANDING TO BE CLEANED WITH THE JOS SYSTEM.
4. QUEENSTON LIMESTONE DECORATIVE CARVINGS TO BE CLEANED USING MICRO-ABRASIVE. POULTICING TO BE USED WHERE STAINING APPEARS RESISTANT TO INITIAL CLEANING EFFORTS.
5. ASSUME 30% REPOINTING OF SPLIT FACED ASHLAR SANDSTONE WALL SURFACE AND 25% REPOINTING OF LIMESTONE DECORATIVE HORIZONTAL AND VERTICAL BANDING.

02 / A3.3 CONSERVATION LEGEND / ACTVITIES & NOTES

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

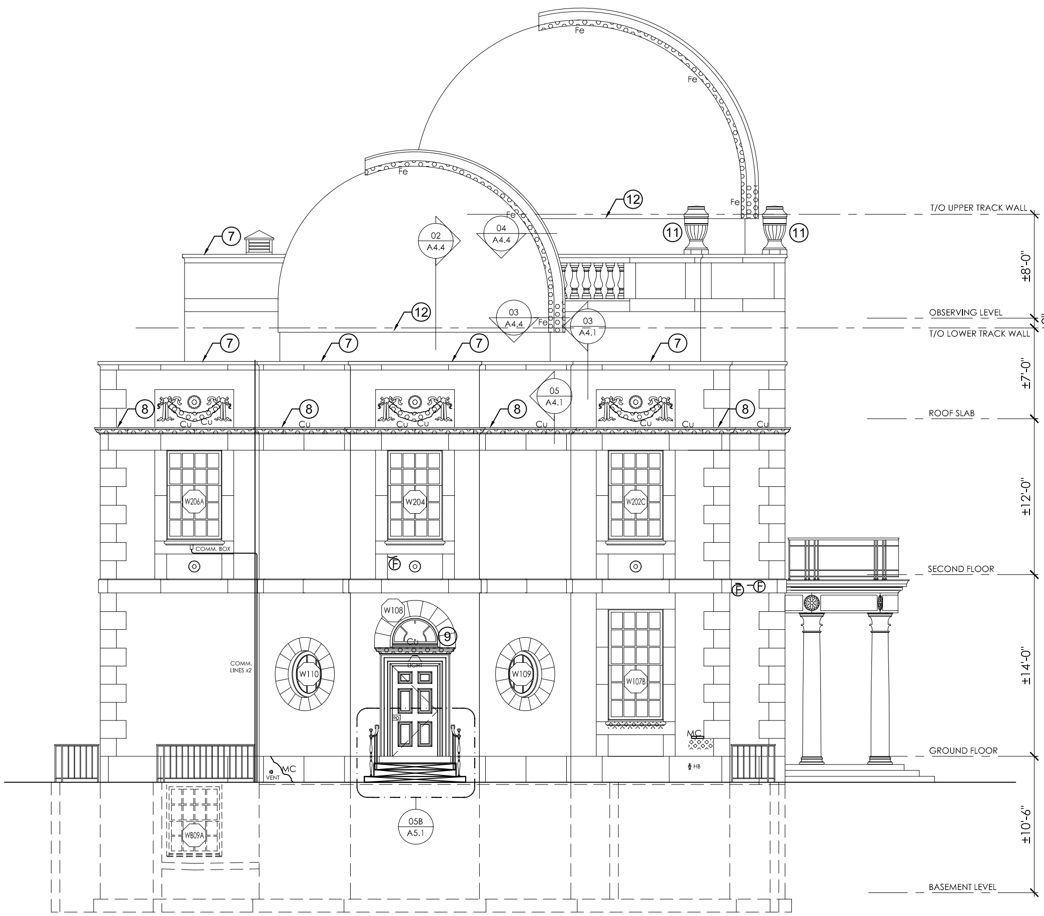
ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

SCALE: 1/4"=1'-0"

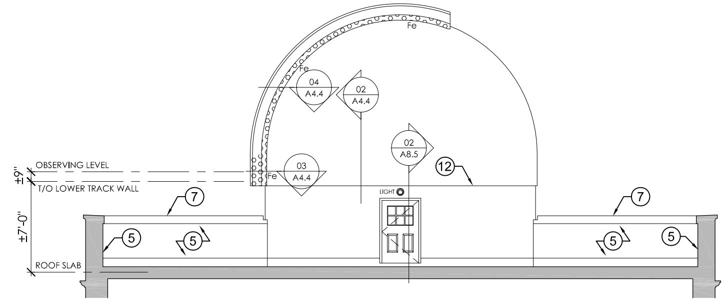
+VG ARCHITECTS
THE VENTIN GROUP LTD

SOUTH ELEVATION

A3.3



01 A3.4 NORTH ELEVATION



03 A3.4 SOUTH ELEVATION @ NORTH DOME

LEGEND - REPAIRS

FOR PROCEDURES REFER TO SPECIFICATIONS.

- HEAVY ATMOSPHERIC SOILING - REMOVE
- CEMENTITIOUS COATING - REMOVE
- EFFLORESCENCE - REMOVE
- BIOLOGICAL SOILING - REMOVE
- Cu — COPPER OXIDE STAINS - REMOVE
- Fe — IRON OXIDE STAINS - REMOVE
- Pb — LEAD OXIDE STAINS - REMOVE
- DETERIORATION TO BE RUBBED BACK
- MASONRY REBUILD
- (R) RUB STONE BACK
- (S) SEALANT REMOVAL - REPLACE
- (PT) PAINT - REMOVE
- (PD) PIGEON DROPPINGS - REMOVE
- (A) EXISTING ANCHOR - REMOVE
- (F) EXISTING VOID - FILL WITH MORTAR RENDER
- (SC) SCALE STONE BACK
- (PR) PLASTIC RENDER
- (MR) MASONRY REBUILD
- (FR) FLASHING REPAIR
- DX — EXISTING DUTCHMAN - REPLACE
- CRX — EXISTING CRAMP - REMOVE FILL WITH MORTAR RENDER
- MC — MAJOR CRACK TO BE PINNED/FILLED
- MP — MISSING PIECE -FILL WITH MORTAR RENDER
- (J) MISSING JOINT TO BE MORTAR FILLED
- D — DUTCHMAN
- STONE REPLACEMENT
- (22) STONE REPLACEMENT # REFER TO DETAILS A4.?

NOTES

1. PAINT TO BE REMOVED
2. ATMOSPHERIC SOILING CAUSED BY COAL SMOKE TO BE REMOVED
3. MINOR BIO GROWTH & ATMOSPHERIC SOILING TO BE REMOVED
4. EXISTING COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER SCUPPERS, COLLECTOR BOXES. DOWN SPOUTS & SPLASH PANS TO MATCH EXISTING
5. EXISTING COPPER CLADDING ON INSIDE SURFACE OF MASONRY PARAPET TO BE REMOVED. INSTALL 5/8" EXTERIOR GRADE PLY SHEATHING C/W HIGH TEMPERATURE ROOF MEMBRANE & SEPARATION SHEET FROM CAPSTONE DOWN TO LAP OVER EXISTING ROOF MEMBRANE. INSTALL NEW 20 oz. COPPER CLADDING OVER MEMBRANE SURFACE C/W HOOKING STRIPS, FROST LOCKS & CONCEALED FASTENERS. COPPER CLADDING TO BE TIED INTO EXISTING ROOF COUNTER FLASHING AT CANT STRIP.
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GENERAL NOTES:

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5. ASSUME 30% REPOINTING OF SPLIT FACED ASHLAR SANDSTONE WALL SURFACE AND 25% REPOINTING OF LIMESTONE DECORATIVE HORIZONTAL AND VERTICAL BANDING.

02 A3.4 CONSERVATION LEGEND / ACTVITIES & NOTES

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
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SCALE: 1/4"=1'-0"

+VG ARCHITECTS
THE VENTIN GROUP LTD

NORTH ELEVATION

A3.4

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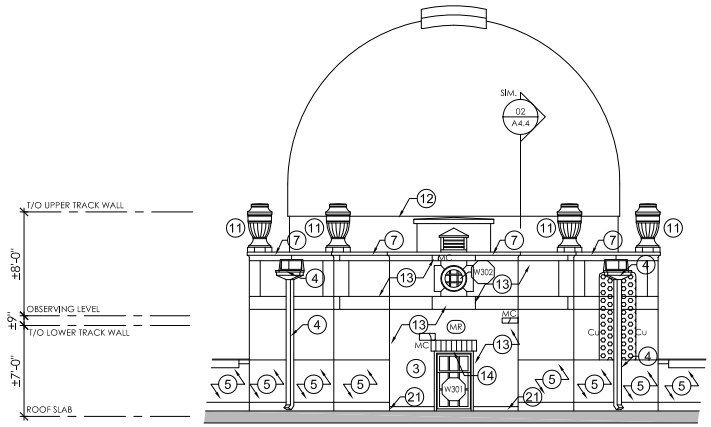
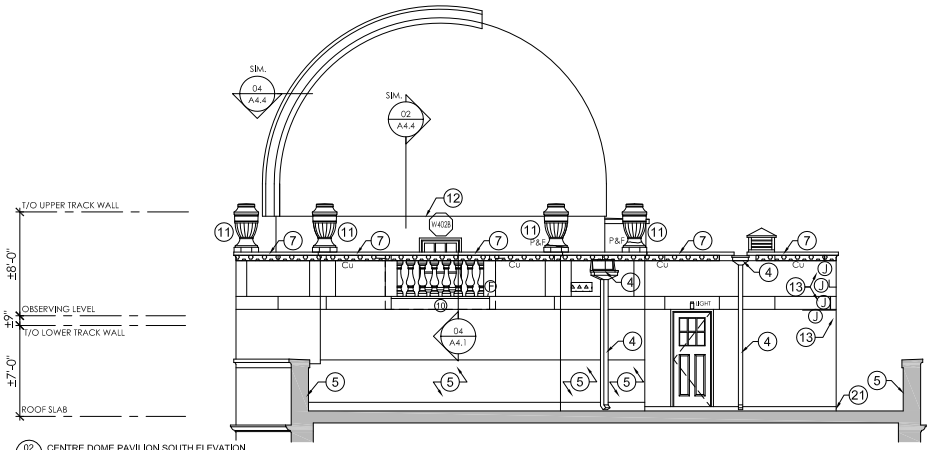


01 A3.5 CENTRE DOME PAVILION EAST ELEVATION



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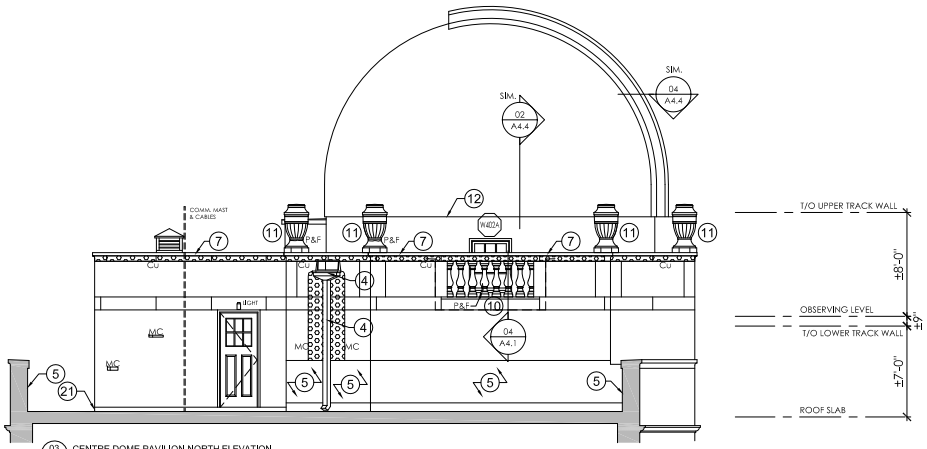
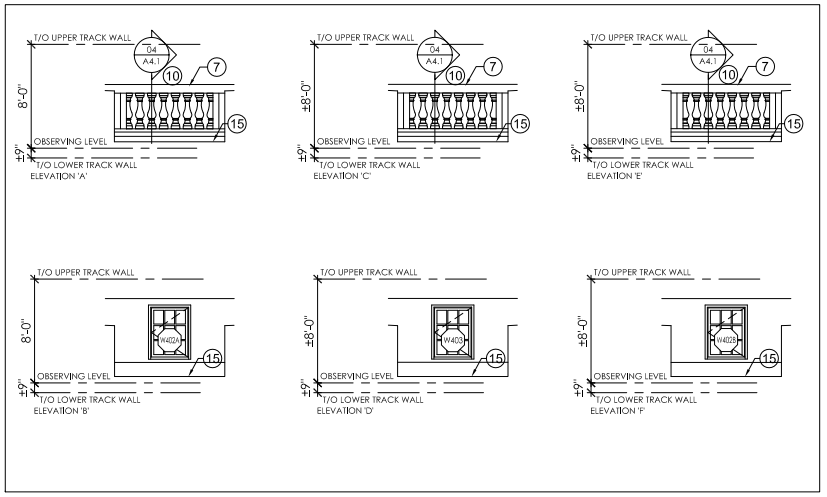


03 A3.5 CENTRE DOME PAVILION NORTH ELEVATION



04 A3.5 CENTRE DOME PAVILION WINDOW WELLS

LEGEND - REPAIRS

FOR PROCEDURES REFER TO SPECIFICATIONS.

- HEAVY ATMOSPHERIC SOILING - REMOVE
- CEMENTITIOUS COATING - REMOVE
- EFFLORESCENCE - REMOVE
- BIOLOGICAL SOILING - REMOVE
- Cu COPPER OXIDE STAINS - REMOVE
- Fe IRON OXIDE STAINS - REMOVE
- Pb LEAD OXIDE STAINS - REMOVE
- DETERIORATION TO BE RUBBED BACK
- MASONRY REBUILD
- (R) RUB STONE BACK
- (S) SEALANT REMOVAL - REPLACE
- (PT) PAINT - REMOVE
- (PD) PIGEON DROPPINGS - REMOVE
- (A) EXISTING ANCHOR - REMOVE
- (E) EXISTING VOID - FILL WITH MORTAR
- (SC) SCALE STONE BACK
- (PR) PLASTIC RENDER
- (MR) MASONRY REBUILD
- (FR) FLASHING REPAIR
- DX EXISTING DUTCHMAN - REPLACE
- CRX EXISTING CRAMP - REMOVE FILL WITH MORTAR RENDER
- MC MAJOR CRACK TO BE PINNED/FILLED
- MP MISSING PIECE -FILL WITH MORTAR RENDER
- (J) MISSING JOINT TO BE MORTAR FILLED
- D DUTCHMAN
- STONE REPLACEMENT
- (22) STONE REPLACEMENT # REFER TO DETAILS A4.?

NOTES

1. PAINT TO BE REMOVED
2. ATMOSPHERIC SOILING CAUSED BY COAL SMOKE TO BE REMOVED
3. MINOR BIO GROWTH & ATMOSPHERIC SOILING TO BE REMOVED
4. EXISTING COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO MATCH EXISTING
5. EXISTING COPPER CLADDING ON INSIDE SURFACE OF MASONRY PARAPET TO BE REMOVED. INSTALL ½" EXTERIOR GRADE PLY SHEATHING C/W HIGH TEMPERATURE ROOF MEMBRANE & SEPARATION SHEET FROM CAPSTONE DOWN TO LAP OVER EXISTING ROOF MEMBRANE. INSTALL NEW 20 oz. COPPER CLADDING OVER MEMBRANE SURFACE C/W HOOKING STRIPS, FROST LOCKS & CONCEALED FASTENERS. COPPER CLADDING TO BE TIED INTO EXISTING ROOF COUNTER FLASHING AT CANT STRIP.
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16. EXISTING CUT STONE CAPS AND ASHLER BASES LOCATED, ON EITHER SIDE OF THE WEST APPROACH STEPS, EXHIBIT EXTENSIVE EFFLORESCENCE, ATMOSPHERIC AND BIOLOGICAL SOILING. CLEAN WITH JOS SYSTEM. AND REPOINT ENTIRE SPLIT FACE ASHLER STONE SURFACE.
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GENERAL NOTES:

1. BUILDING MATERIALS:
   WINDOW WELLS - CONCRETE
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5. ASSUME 30% REPOINTING OF SPLIT FACED ASHLAR SANDSTONE WALL SURFACE AND 25% REPOINTING OF LIMESTONE DECORATIVE HORIZONTAL AND VERTICAL BANDING.

05 A3.5 CONSERVATION LEGEND / ACTVITIES & NOTES

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

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TOWN OF RICHMOND HILL

PROJECT:
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DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DR
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ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
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+VG ARCHITECTS
THE VENTIN GROUP LTD

CENTRE DOME PAVILION ELEVATIONS

SCALE: 1/4"=1'-0"

A3.5

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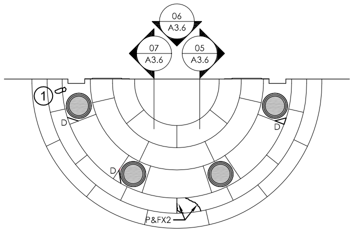
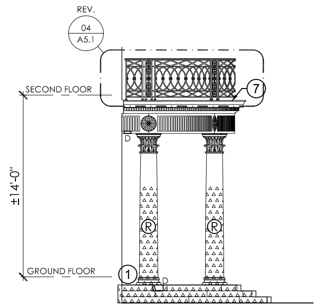
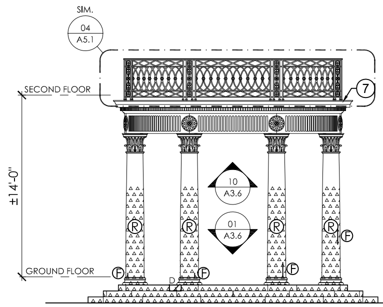


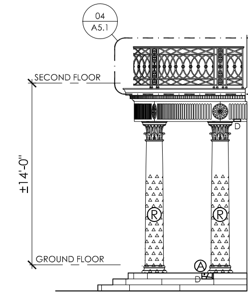
01 A3.6 MAIN ENTRY STAIR PLAN



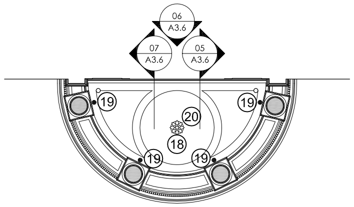
02 A3.6 ENTRY PORTICO NORTH ELEVATION



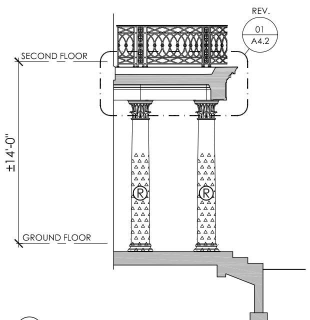
03 A3.6 ENTRY PORTICO WEST ELEVATION



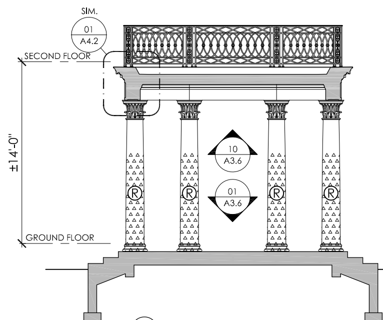
04 A3.6 ENTRY PORTICO SOUTH ELEVATION



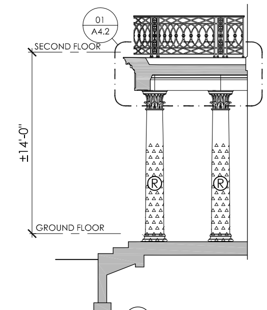
10 A3.6 MAIN ENTRY REFLECTED CEILING PLAN



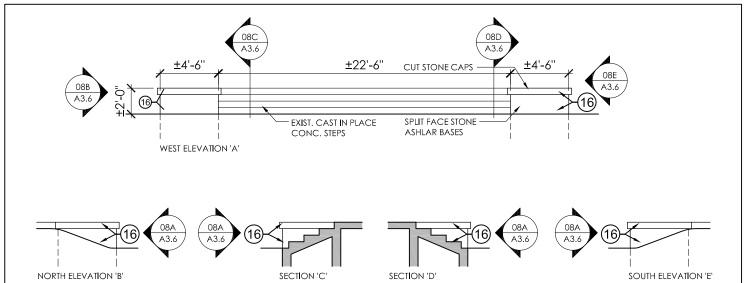
05 A3.6 ENTRY PORTICO
INTERIOR NORTH FACING ELEVATION



06 A3.6 ENTRY PORTICO
INTERIOR EAST FACING ELEVATION



07 A3.6 ENTRY PORTICO
INTERIOR SOUTH FACING ELEVATION



08 A3.6 ELEVATIONS @ WEST APPROACH STEPS

LEGEND - REPAIRS
FOR PROCEDURES REFER TO SPECIFICATIONS.

- HEAVY ATMOSPHERIC SOILING - REMOVE
- CEMENTITIOUS COATING - REMOVE
- EFFLORESCENCE - REMOVE
- BIOLOGICAL SOILING - REMOVE
- Cu COPPER OXIDE STAINS - REMOVE
- Fe IRON OXIDE STAINS - REMOVE
- Pb LEAD OXIDE STAINS - REMOVE
- DETERIORATION TO BE RUBBED BACK
- MASONRY REBUILD
- (R) RUB STONE BACK
- (S) SEALANT REMOVAL - REPLACE
- (PT) PAINT - REMOVE
- (PD) PIGEON DROPPINGS - REMOVE
- (A) EXISTING ANCHOR - REMOVE
- (F) EXISTING VOID - FILL WITH MORTAR RENDER
- (SC) SCALE STONE BACK
- (PR) PLASTIC RENDER
- (MR) MASONRY REBUILD
- (FR) FLASHING REPAIR
- DX EXISTING DUTCHMAN - REPLACE
- CRX EXISTING CRAMP - REMOVE FILL WITH MORTAR RENDER
- MC MAJOR CRACK TO BE PINNED/FILLED
- MP MISSING PIECE -FILL WITH MORTAR RENDER
- (J) MISSING JOINT TO BE MORTAR FILLED
- D DUTCHMAN
- STONE REPLACEMENT
- (22) STONE REPLACEMENT # REFER TO DETAILS A4.?

NOTES

1. PAINT TO BE REMOVED
2. ATMOSPHERIC SOILING CAUSED BY COAL SMOKE TO BE REMOVED
3. MINOR BIO GROWTH & ATMOSPHERIC SOILING TO BE REMOVED
4. EXISTING COPPER SCUPPERS, COLLECTOR BOXES, DOWN SPOUTS & SPLASH PANS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER SCUPPERS, COLLECTOR BOXES. DOWN SPOUTS & SPLASH PANS TO MATCH EXISTING
5. EXISTING COPPER CLADDING ON INSIDE SURFACE OF MASONRY PARAPET TO BE REMOVED. INSTALL ⅝" EXTERIOR GRADE PLY SHEATHING C/W HIGH TEMPERATURE ROOF MEMBRANE & SEPARATION SHEET FROM CAPSTONE DOWN TO LAP OVER EXISTING ROOF MEMBRANE. INSTALL NEW 20 oz. COPPER CLADDING OVER MEMBRANE SURFACE C/W HOOKING STRIPS, FROST LOCKS & CONCEALED FASTENERS. COPPER CLADDING TO BE TIED INTO EXISTING ROOF COUNTER FLASHING AT CANT STRIP.
6. EXISTING CHIMNEY CAP FLASHING TO BE REMOVED. EXISTING CHIMNEY FLUE TO BE CUT DOWN TO THE LEVEL OF THE EXISTING MASONRY. INSTALL NEW 20 oz. COPPER CAP OVER ENTIRE MASONRY CHIMNEY C/W SEPARATION SHEET AND 2% SLOPE TO DRAIN.
7. EXISTING COPPER CAP FLASHING TO BE REMOVED & REPLACED WITH NEW 20 oz. COPPER CAP FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, CONCEALED FASTENERS & FROST LOCKS AT SEAMS.
8. EXISTING COPPER CORNICE FLASHING TO BE REMOVED & REPLACED WITH NEW 20 oz. COPPER FLASHING SET INTO EXISTING REGLET C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, CONCEALED FASTENERS & FROST LOCKS AT SEAMS.
9. SUPPLY & INSTALL NEW COPPER FLASHING OVER STONE SILL C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. NEW 20 oz. COPPER FLASHING TO BE EXTENDED & SEALED BENEATH TRANSOM SILL.
10. EXISTING COPPER FLASHING BENEATH STONE BALUSTERS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. DISASSEMBLE EXISTING STONE RAIL & BALUSTER ASSEMBLY TO ALLOW REMOVAL OF EXISTING COPPER FLASHING. PIN AND FILL BALUSTERS AS REQUIRED PRIOR TO DISASSEMBLY.
11. EXISTING COPPER FLASHING BENEATH STONE URNS TO BE REMOVED AND REPLACED WITH NEW 20 oz. COPPER FLASHING C/W DRIP EDGES, SEPARATION SHEET, STARTER STRIPS, & CONCEALED FASTENERS. REMOVE URNS TO ALLOW REMOVAL OF EXISTING COPPER FLASHING. MAKE ALL REPAIRS TO URNS AS REQUIRED PRIOR TO REMOVAL.
12. DRILL DRAIN HOLES @ 24" O.C. IN EXISTING ROLLED GUTTER AT BOTTOM EDGE ON DOME
13. EXISTING ASHLER SANDSTONE TO BE REPOINTED, REPAIRED AND REPOSITIONED AS REQUIRED TO REPAIR STONE DISPLACEMENT ON THE SOUTH FACE OF THE OF THE UPPER ROOF PAVILION.
14. EXISTING CORRODED STEEL LINTEL TO BE REPLACED C/W DRIP EDGE FLASHING. REINSTATE STONE SOLDIER COURSE ABOVE LINTEL AND WINDOW BENEATH DISPLACED BY THE WORK.
15. EXISTING ROOFING & DRAINS TO BE REMOVED & REPLACED WITH NEW TWO PLY MOD BIT ROOFING COMPLETE WITH NEW DRAINS SECURED & SEALED TO EXISTING CONCRETE SUBSTRATE.
16. EXISTING CUT STONE CAPS AND ASHLER BASES LOCATED, ON EITHER SIDE OF THE WEST APPROACH STEPS, EXHIBIT EXTENSIVE EFFLORESCENCE, ATMOSPHERIC AND BIOLOGICAL SOILING. CLEAN WITH JOS SYSTEM AND REPOINT ENTIRE SPLIT FACE ASHLER STONE SURFACE.
17. EXISTING WALL MOUNTED METAL PIPE HANDRAIL TO BE REMOVED, STRIPPED AND REFINISHED. REINSTALL COMPLETE WITH NEW FASTENERS AND GALVANIZED EXPANSION SLEEVES SECURED INTO EXISTING OPENINGS IN STONE.
18. EXISTING PORTICO CEILING TO STRIPPED AND CLEANED IN PREPARATION FOR NEW PAINT FINISH. MAKE REPAIRS TO SUBSTRATE AS REQUIRED.
19. EXISTING PORTICO SOFFIT VENTS TO BE REMOVED STRIPPED AND CLEANED. PAINT TO MATCH NEW CEILING PAINT FINISH.
20. EXISTING PORTICO LIGHT FIXTURE TO BE REMOVED AND RECONDITIONED FOR RE-USE. ASSESS EXISTING WIRING AND FIXTURE SUPPORT AND MAKE REPAIRS AS REQUIRED.
21. EXISTING COPPER BASE FLASHING TO BE REPAIRED/REPLACED AT CORNER LOCATION.

GENERAL NOTES:

1. BUILDING MATERIALS:
   WINDOW WELLS - CONCRETE
   SPLIT FACED ASHLER - CREDIT VALLEY SANDSTONE
   DECORATIVE BANDING - QUEENSTON LIMESTONE
   BALLISTRATES AND URNS - QUEENSTON LIMESTONE
   CUT STONE - QUEENSTON LIMESTONE
   COLUMNS - QUEENSTON LIMESTONE
   STEPS AND LANDING - QUEENSTON LIMESTONE
2. ALL FACADES HAVE HEAVY ATMOSPHERIC SOILING. FULL CLEANING OF THE ENTIRE MASONRY EXTERIOR IS REQUIRED.
3. CREDIT VALLEY SANDSTONE AND QUEENSTON LIMESTONE BANDING TO BE CLEANED WITH THE JOS SYSTEM.
4. QUEENSTON LIMESTONE DECORATIVE CARVINGS TO BE CLEANED USING MICRO-ABRASIVE. POULTICING TO BE USED WHERE STAINING APPEARS RESISTANT TO INITIAL CLEANING EFFORTS.
5. ASSUME 30% REPOINTING OF SPLIT FACED ASHLAR SANDSTONE WALL SURFACE AND 25% REPOINTING OF LIMESTONE DECORATIVE HORIZONTAL AND VERTICAL BANDING.

09 A3.6 CONSERVATION LEGEND / ACTVITIES & NOTES

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

Plot Date: Sep 05, 2019 - 2:54pm By: fred Filename: \\VGT-FS\Data\21886 - DDO Building Envelope Restoration\Authorities\Heritage Approvals\Drawings\21886-A3.dwg

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886
DDO BUILDING ENVELOPE RESTORATION
123 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
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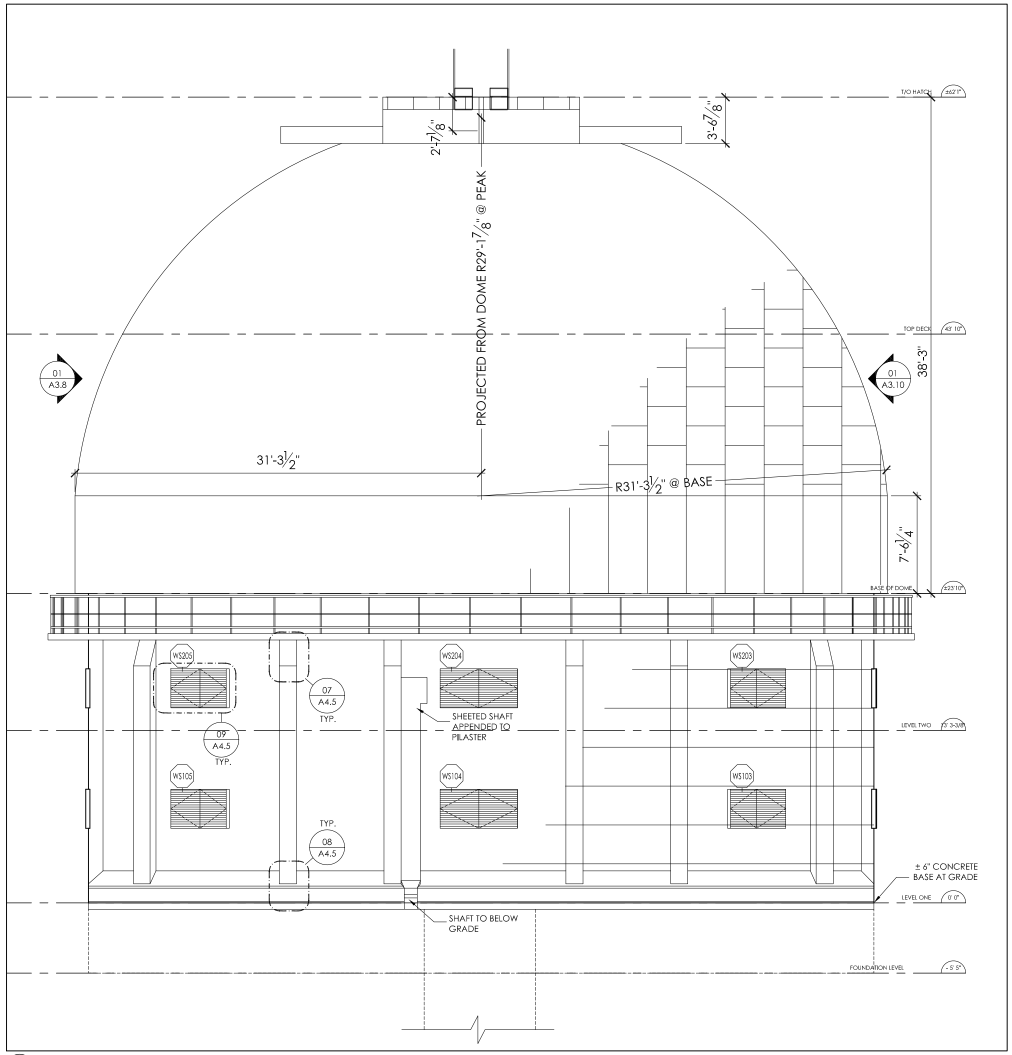
+VG ARCHITECTS
THE VENTIN GROUP LTD

N

ENTRY PORTICO PLAN & ELEVATIONS
SCALE: 1/4"=1'-0"

A3.6



01 / A3.7 OBSERVATORY - NORTH ELEVATION
1/4" = 1'-0"

GENERAL NOTES:

1. ALL DIMENSIONS ARE ±. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE.
2. UNLESS NOTED OTHERWISE, ALL EXTERIOR ELEMENTS OF THE OBSERVATORY BUILDING ARE PAINTED METAL.
3. UNLESS NOTED OTHERWISE, ALL EXTERIOR PAINTED METAL ELEMENTS & SURFACES OF THE OBSERVATORY BUILDING ARE TO BE STRIPPED TO BARE METAL AND REPAINTED. UNLESS NOTED OTHERWISE THEY ARE TO BE STRIPPED AND REPAINTED IN-SITU. REMOVE ALL COATINGS; REPAIR AS NECESSARY; BLAST CLEAN TO BARE WHITE METAL; APPLY ZINC RICH EPOXY PRIMER; APPLY MASTIC EPOXY; APPLY 2K URETHANE
4. SASHES AND FRAMES ARE TO BE COMPLETELY REMOVED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK.
5. EXTERIOR STEEL SHUTTERS AT EACH WINDOW ARE TO BE COMPLETELY DISASSEMBLED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK
6. GRATINGS, CLIPS, AND ALL OTHER CATWALK ELEMENTS THAT CAN BE REMOVED FROM THE EXTERIOR OF THE BUILDING BY FASTENER REMOVAL ARE TO BE REMOVED FROM THE EXTERIOR OF THE BUILDING, RESTORED OFFSITE, AND REPLACED. CATWALK SUPPORT BRACKETS AND FRAMEWORK TO BE RESTORED ONSITE IN-SITU.
7. REPLACE ALL SEALANTS, CAULKING, GLAZING PUTTY, AND GASKETS ENTIRELY.
8. REPLACE ALL THREADED FASTENERS REMOVED WITH STAINLESS STEEL. LIGHTLY SANDBLAST UNTHREADED AREAS TO ALLOW INCREASED PAINT ADHESION.

LEGEND

- EXISTING PAINTED METAL TO REPLACED WITH NEW TO MATCH EXISTING.
- EXISTING WALLS
- (207) DOOR TAG. SEE SCHEDULE.
- (WS###) OBSERVATORY BUILDING WINDOW TAG. EXTERIOR STEEL SHUTTERS TYP. SEE SCHEDULE.

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DRIVE
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
KEY TO DETAIL LOCATION:
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THE VENTIN GROUP LTD

SCALE: 1/4"=1'-0"

OBSERVATORY - ELEVATIONS

A3.7

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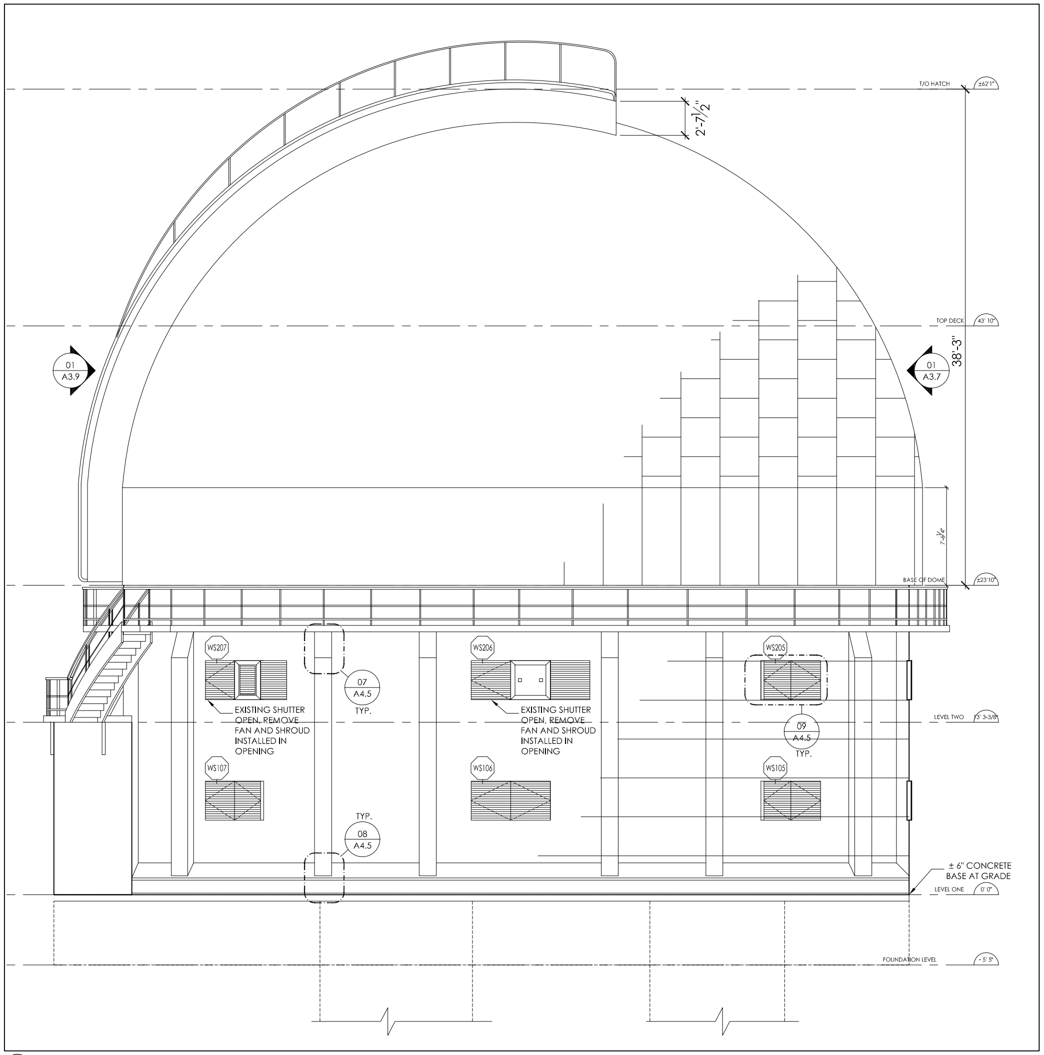

01 A3.8 OBSERVATORY - EAST ELEVATION
1/4" = 1'-0"

GENERAL NOTES:

1. ALL DIMENSIONS ARE ±. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE.
2. UNLESS NOTED OTHERWISE, ALL EXTERIOR ELEMENTS OF THE OBSERVATORY BUILDING ARE PAINTED METAL.
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LEGEND

- EXISTING PAINTED METAL TO REPLACED WITH NEW TO MATCH EXISTING.
- EXISTING WALLS
- 207 DOOR TAG. SEE SCHEDULE.
- WS### OBSERVATORY BUILDING WINDOW TAG. EXTERIOR STEEL SHUTTERS TYP. SEE SCHEDULE.

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DRIVE
RICHMOND HILL, ON
L4C 1T3

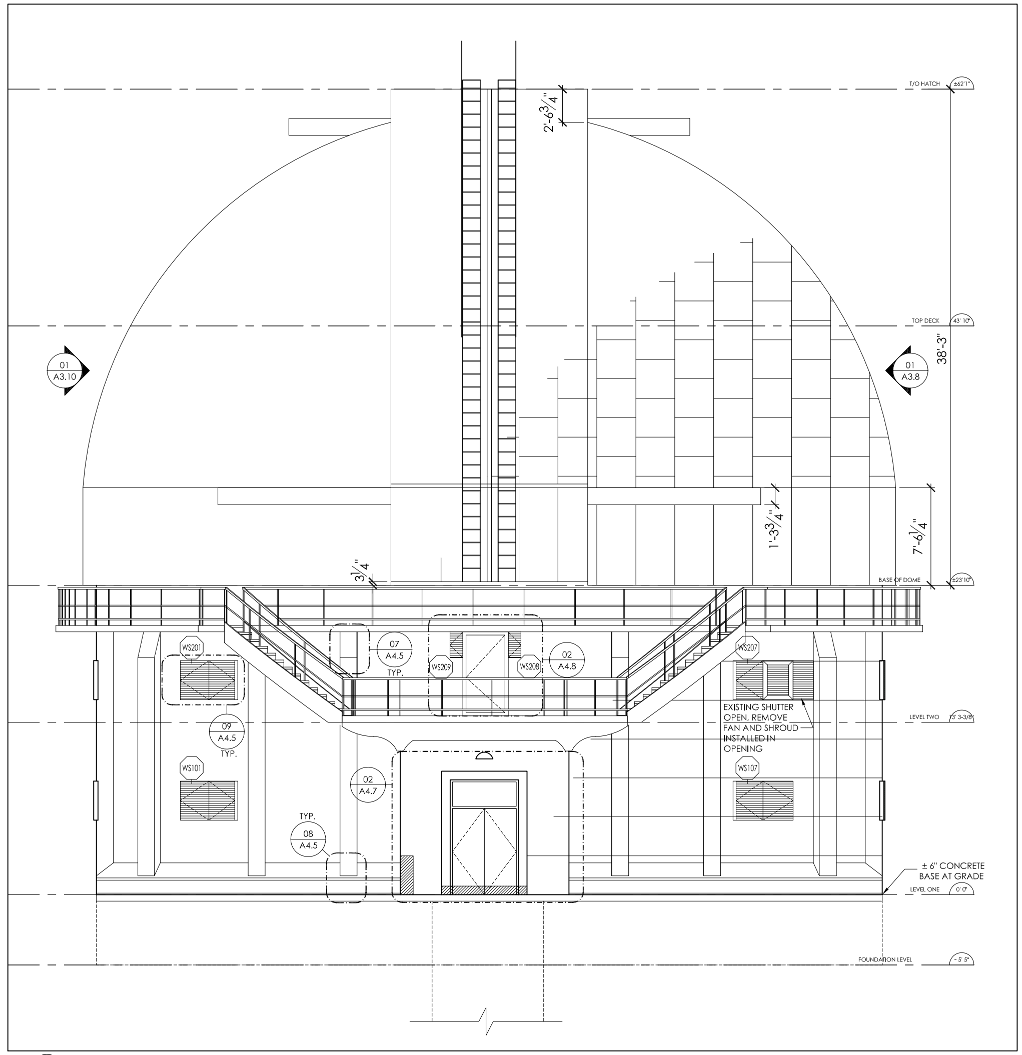
ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

SCALE: 1/4"=1'-0"

+VG ARCHITECTS
THE VENTIN GROUP LTD

OBSERVATORY - ELEVATIONS

A3.8



01 / A3.9 OBSERVATORY - SOUTH ELEVATION
1/4" = 1'-0"

GENERAL NOTES:

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LEGEND

- (hatched) EXISTING PAINTED METAL TO REPLACED WITH NEW TO MATCH EXISTING.
- (grey) EXISTING WALLS
- 207 — DOOR TAG. SEE SCHEDULE.
- WS### — OBSERVATORY BUILDING WINDOW TAG. EXTERIOR STEEL SHUTTERS TYP. SEE SCHEDULE.

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

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TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DRIVE
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
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SCALE: 1/4"=1'-0"

+VG ARCHITECTS
THE VENTIN GROUP LTD

OBSERVATORY - ELEVATIONS

A3.9

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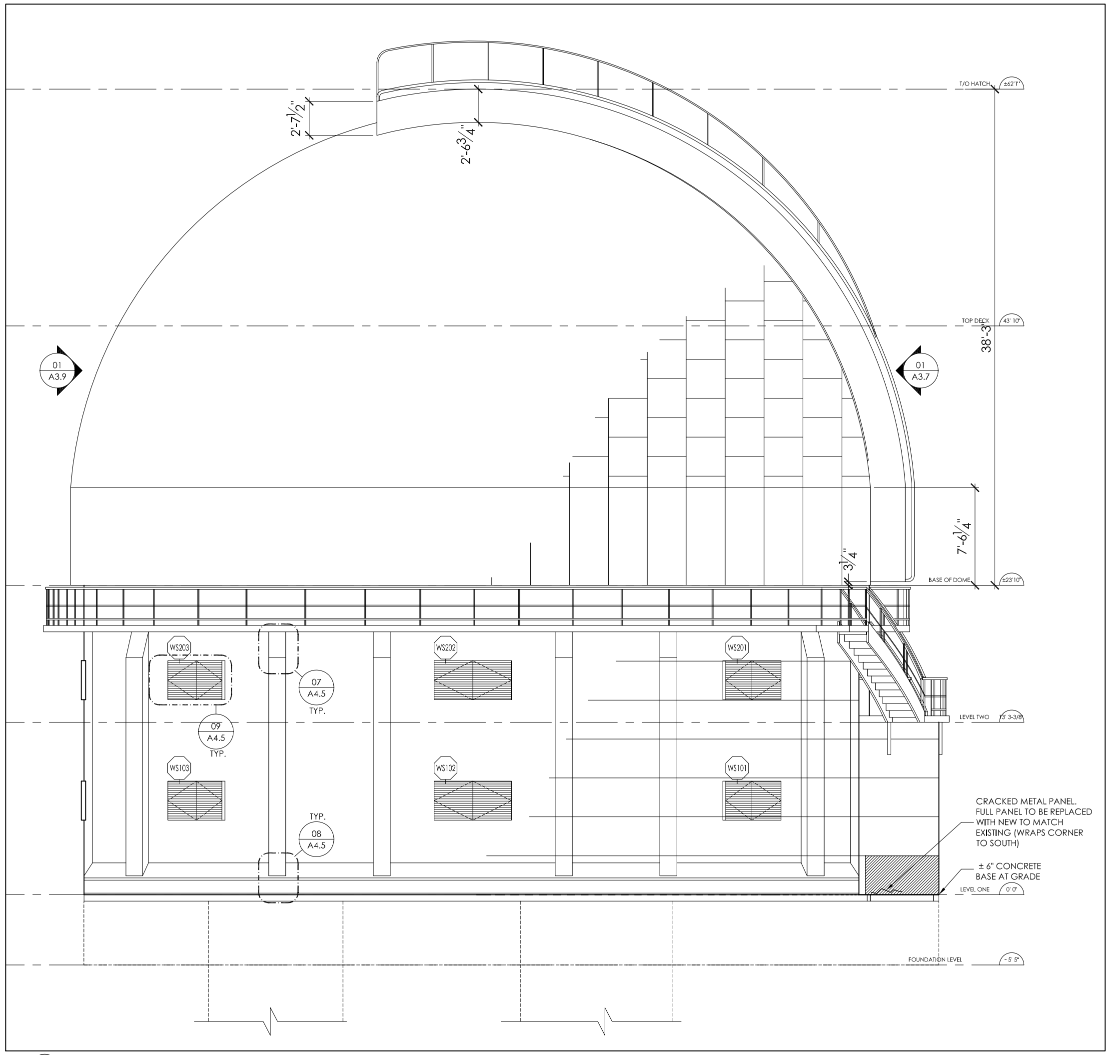

01 / A3.10 — OBSERVATORY - WEST ELEVATION
1/4" = 1'-0"

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LEGEND

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- EXISTING WALLS
- 207 — DOOR TAG. SEE SCHEDULE.
- WS### — OBSERVATORY BUILDING WINDOW TAG. EXTERIOR STEEL SHUTTERS TYP. SEE SCHEDULE.

REVISIONS

NO.	DATE	PARTICULAR
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02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

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TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DRIVE
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SCALE: 1/4"=1'-0"

OBSERVATORY - ELEVATIONS

A3.10

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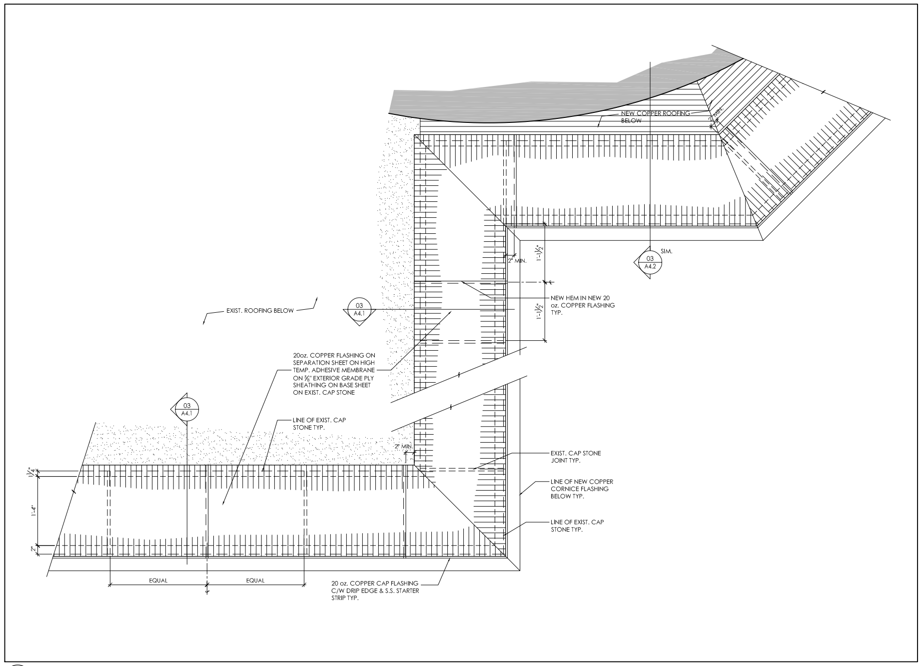
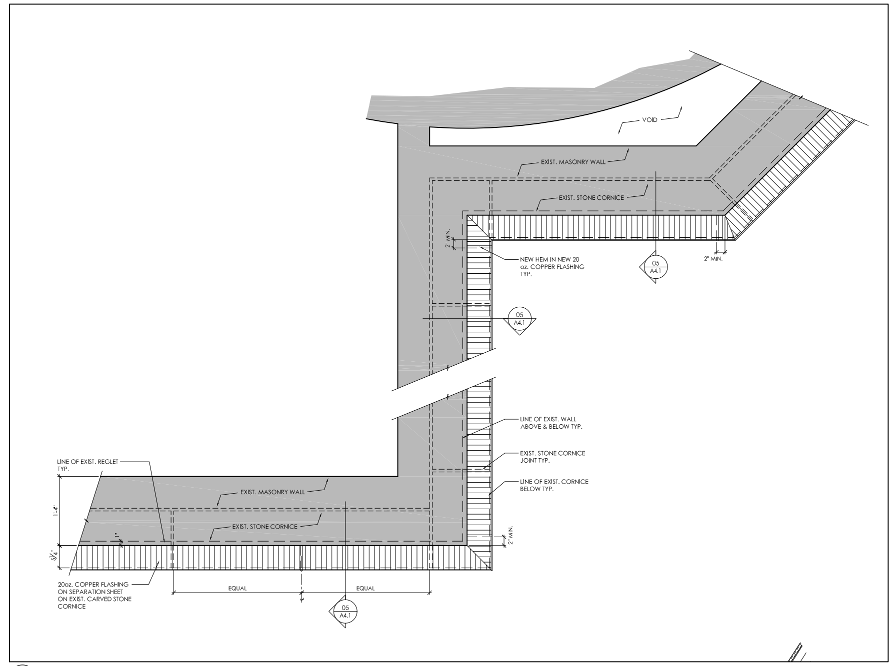
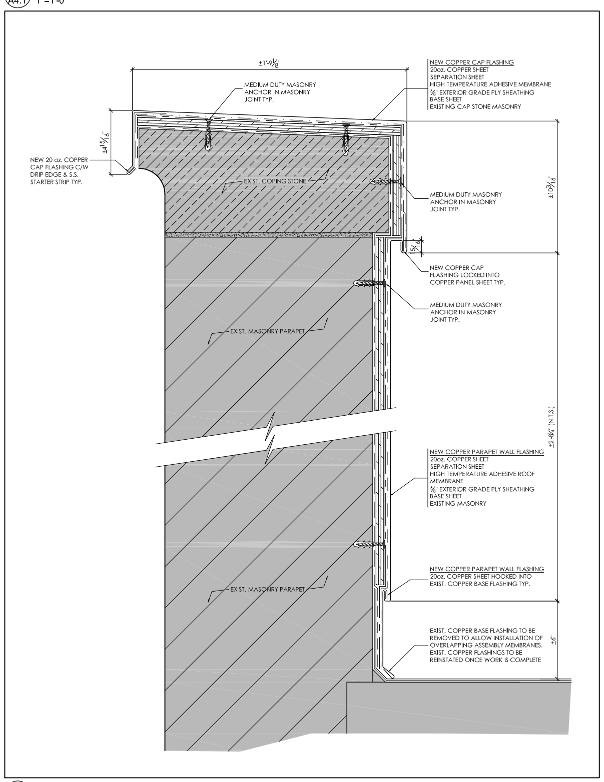


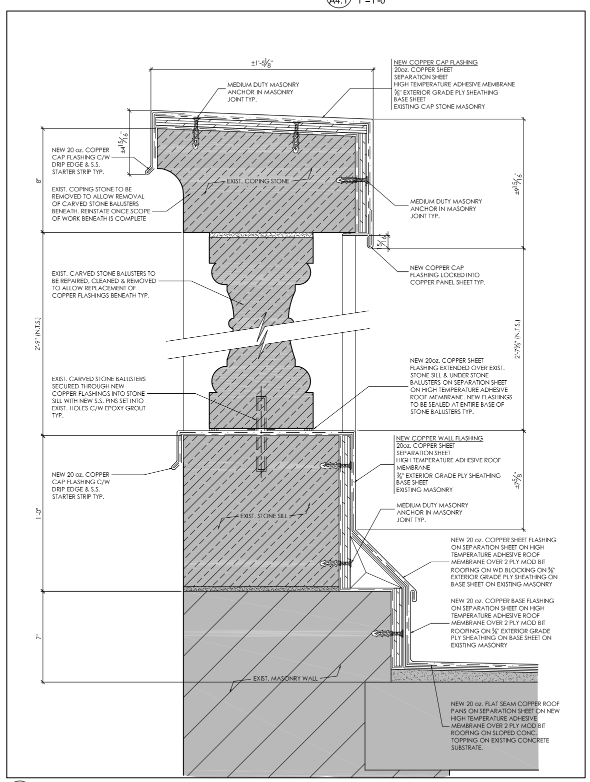
01 PLAN DETAIL @ PARAPET CAP STONE FLASHING
A4.1 1"=1'-0"



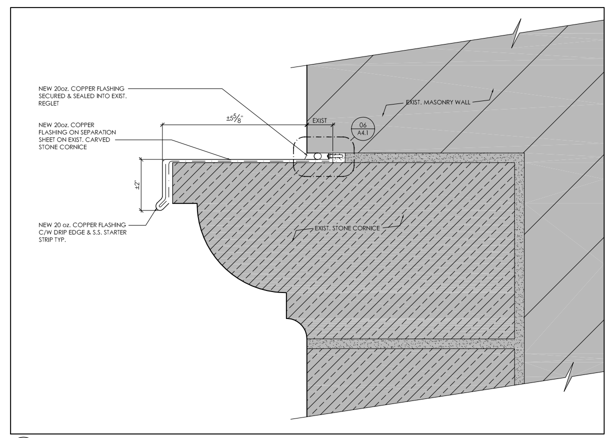
02 PLAN DETAIL @ CARVED STONE CORNICE FLASHING
A4.1 1"=1'-0"



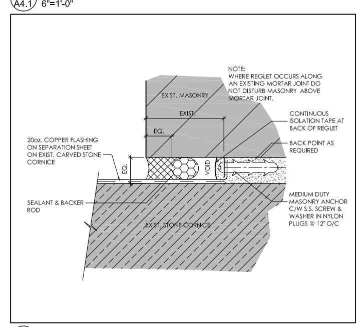
03 SECTION DETAIL @ TYPICAL PARAPET
A4.1 3"=1'-0"



04 SECTION DETAIL @ CENTRE DOME PAVILION BALUSTRADE
A4.1 3"=1'-0"



05 SECTION DETAIL @ CARVED STONE CORNICE FLASHING
A4.1 6"=1'-0"



06 SECTION DETAIL @ CARVED STONE CORNICE REGLET
A4.1 1"=1"

REVISIONS

NO.	DATE	PARTICULAR
01	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

SCALE: As Noted

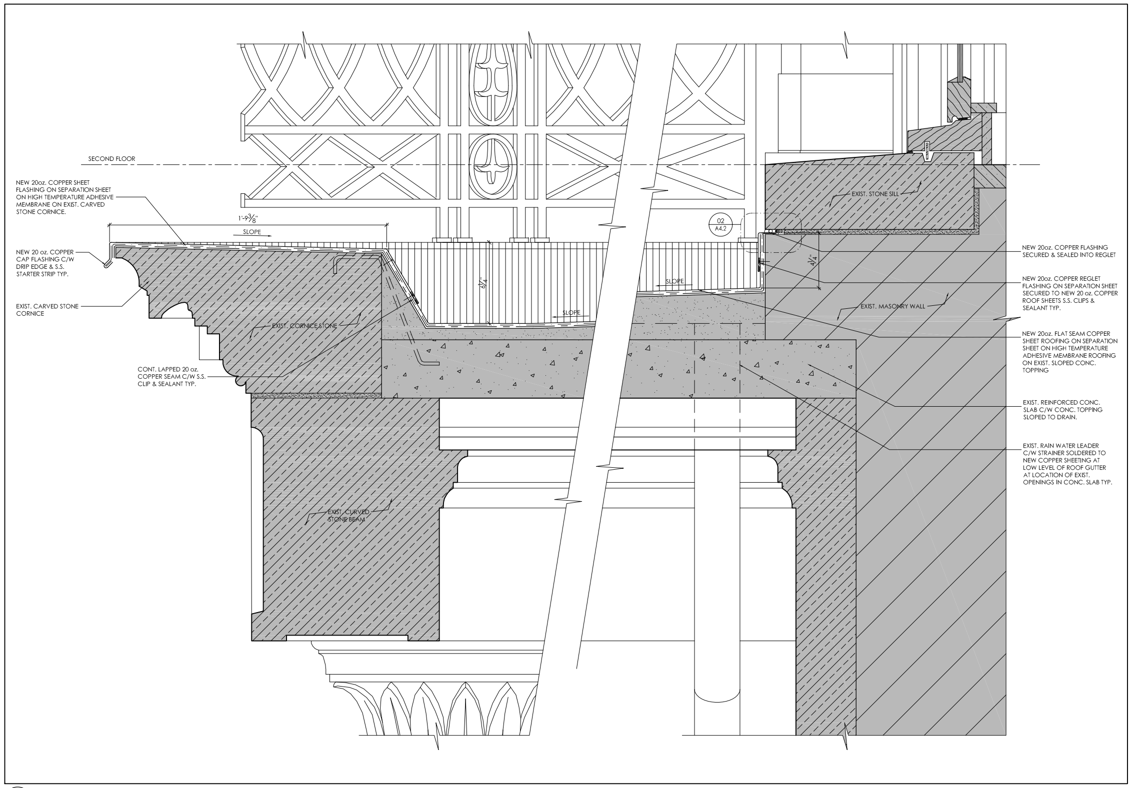
+VG ARCHITECTS
THE VENTIN GROUP LTD

N

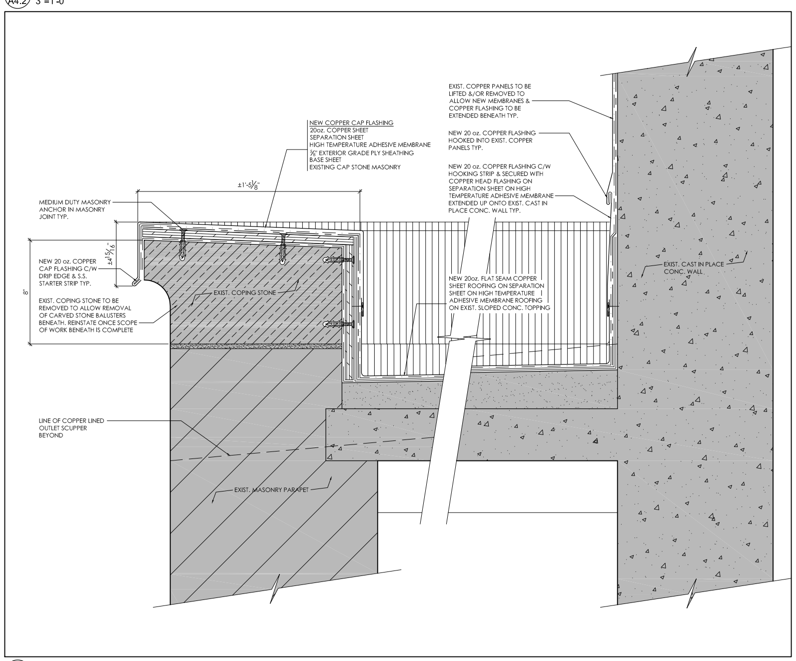
COPPER FLASHING DETAILS

A4.1

Filename: \\VGT-FS\Data\21886 - DDO Building Envelope Restoration\Authorities\Heritage Approvals\Drawings\21886-A4.dwg
Plot Date: Sep 05, 2019 - 2:51pm By: fred



01 / A4.2 SECTION DETAIL @ ENTRANCE PORTICO ROOF
3"=1'-0"



03 / A4.2 TYPICAL LOW ROOF TRANSITIONS
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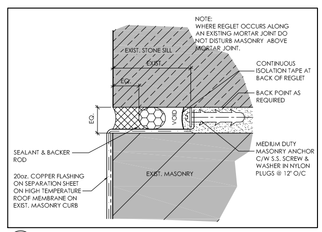
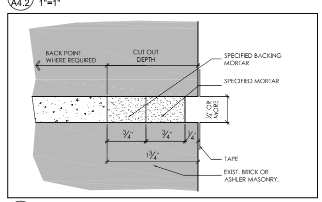
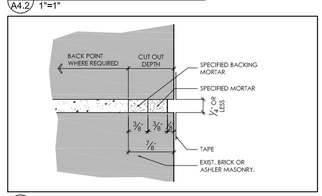


02 / A4.2 SECTION DETAIL @ PORTICO REGLET
1"=1"



04 / A4.2 DETAIL - STANDARD MASONRY JOINT
1"=1"



05 / A4.2 DETAIL - TYPICAL REPOINTING
1"=1"

REVISIONS

NO.	DATE	PARTICULAR
01	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

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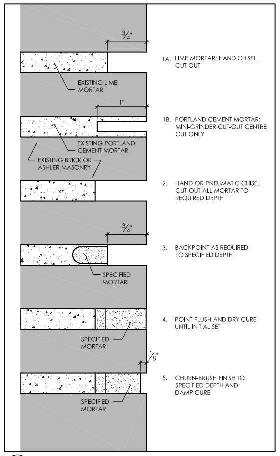
THE VENTIN GROUP LTD

COPPER FLASHING DETAILS

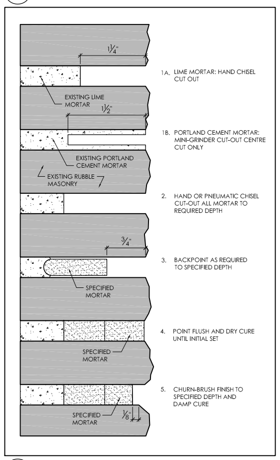
SCALE: As Noted

A4.2

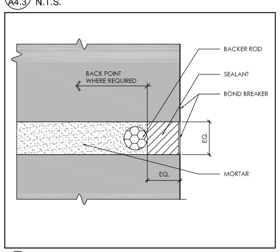
Plot Date: Sep 05, 2019 - 2:51pm By: fred
Filename: \\VGT-FS\Data\21886 - DDO Building Envelope Restoration\Authorities\Heritage Approvals\Drawings\21886-A4.dwg



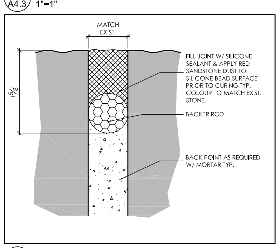
01 / A4.3 DETAIL - STANDARD REPOINTING SEQUENCE
N.T.S.



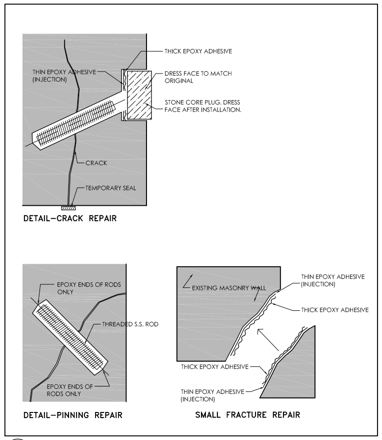
02 / A4.3 DETAIL - RUBBLE REPOINTING SEQUENCE
N.T.S.



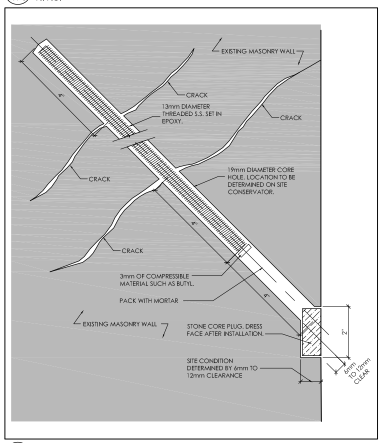
03 / A4.3 DETAIL - MASONRY SANDED DEALANT JOINT
1"=1"



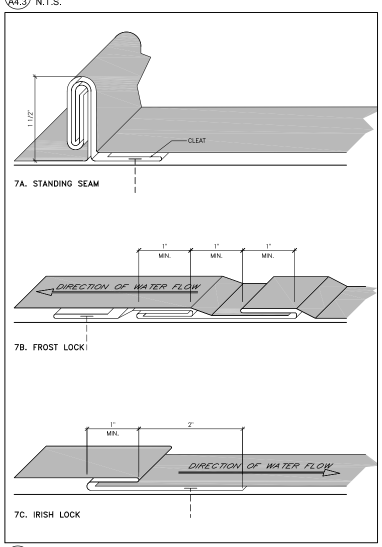
04 / A4.3 DETAIL - COPING SANDED SEALANT JOINT
1"=1"



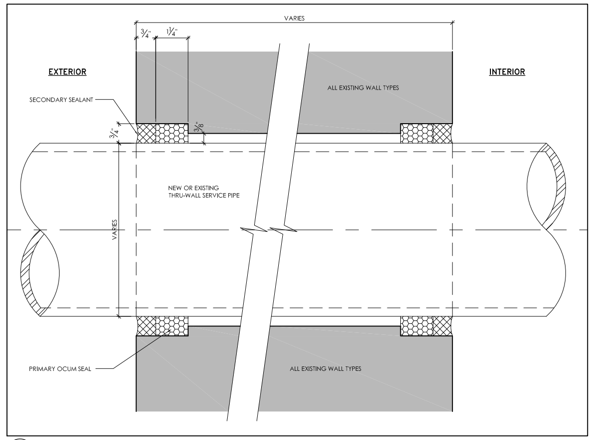
05 / A4.3 DETAIL - SMALL MASONRY REPAIRS
N.T.S.



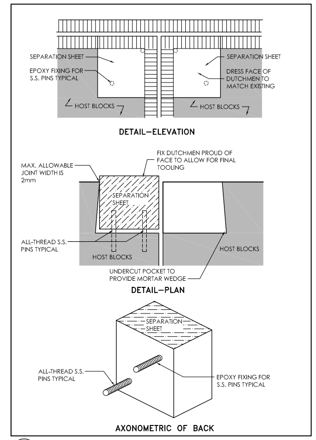
06 / A4.3 DETAIL - LARGE PINNING REPAIRS
N.T.S.



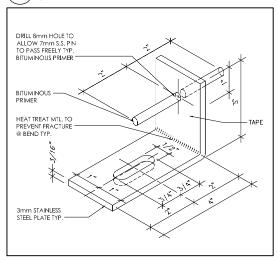
07 / A4.3 DETAIL - MASONRY SANDED DEALANT JOINT
1"=1"



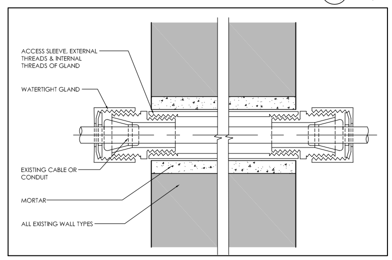
08 / A4.3 SECTION DETAIL - TYPICAL SERVICE PENETRATION
6"=1"



09 / A4.3 DETAIL - TYPICAL DUCHMEN REPAIR
N.T.S.



10 / A4.3 DETAIL - PINNED BRACKET DETAIL
N.T.S.



11 / A4.3 DETAIL - WEATHERTIGHT CONDUIT
N.T.S.

REVISIONS

NO.	DATE	PARTICULAR
01	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

Plot Date: Sep 05, 2019 - 2:52pm By: fred   Filename: \\VGT-FS\Data\21886 - DDO Building Envelope Restoration\Authorities\Heritage Approvals\Drawings\21886-A4.dwg

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

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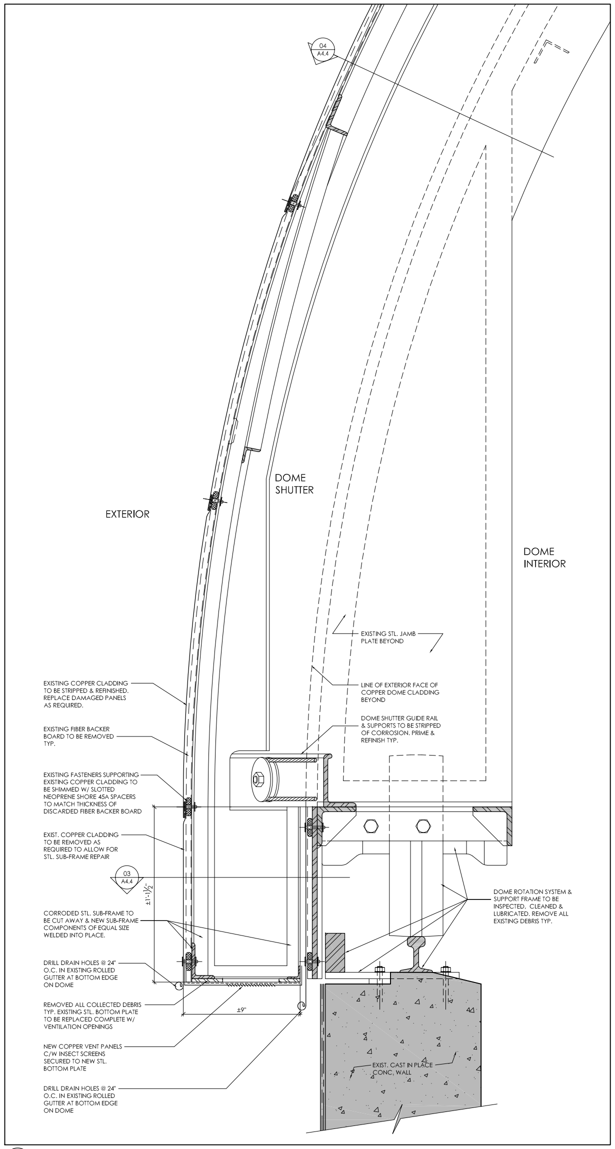
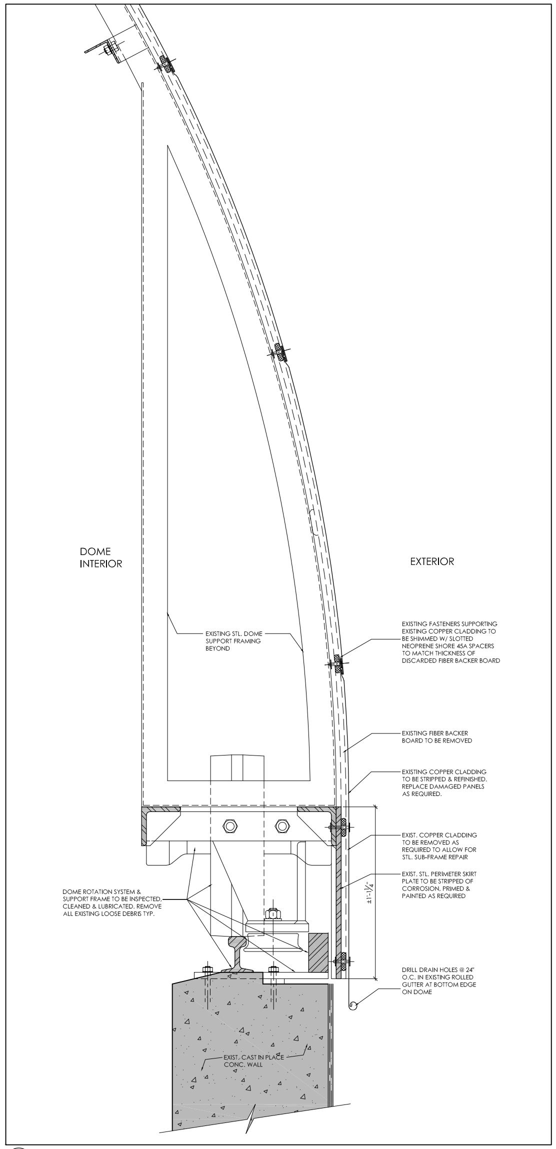
TYPICAL MASONRY CONSERVATION DETAILS
SCALE: As Noted

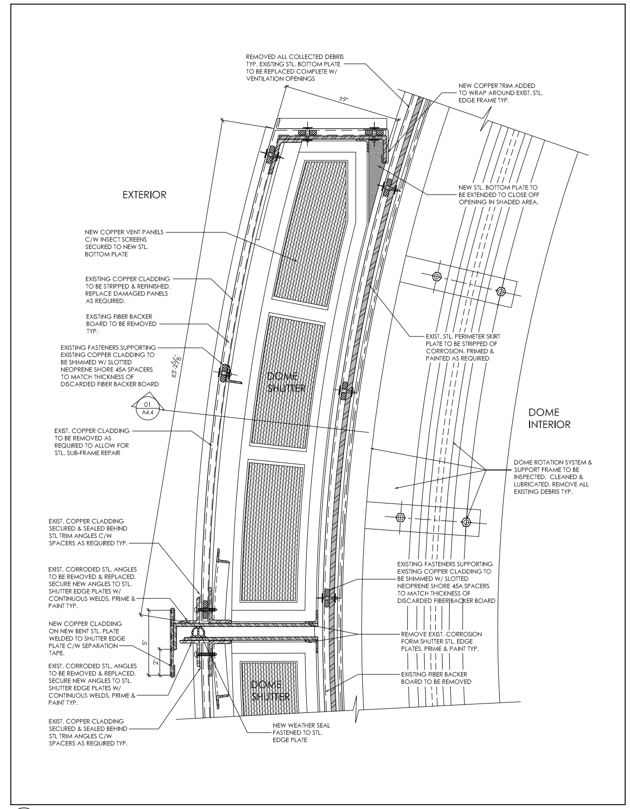
A4.3



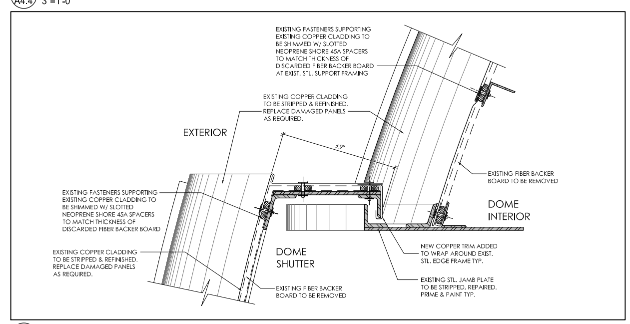
01 SECTION DETAIL @ DOME SHUTTER
A4.4 3"=1'-0"



02 TYPICAL SECTION DETAIL @ BASE OF DOME
A4.4 3"=1'-0"



03 PLAN DETAIL @ DOME SHUTTER
A4.4 3"=1'-0"



04 PLAN DETAIL @ SHUTTER JAMB
A4.4 3"=1'-0"

REVISIONS

NO.	DATE	PARTICULAR
01	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

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PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

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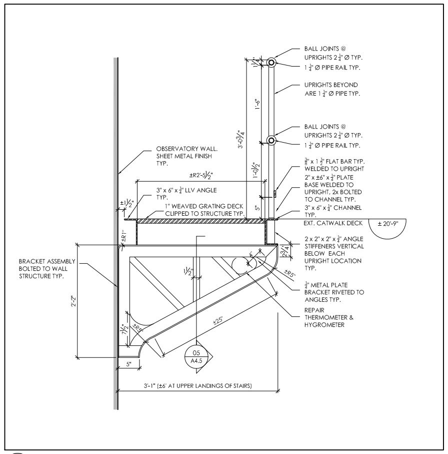
+VG ARCHITECTS
THE VENTIN GROUP LTD

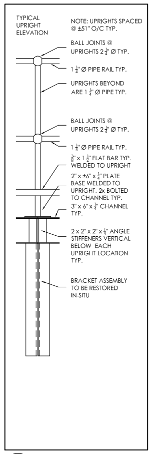
ADMINISTRATION BUILDING DOME DETAILS

SCALE: As Noted

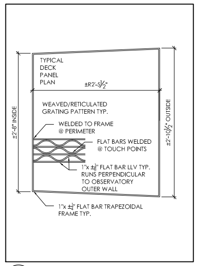
A4.4



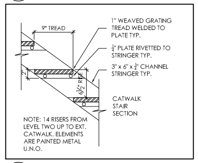
01 OBSERVATORY - EXTERIOR CATWALK SECTION
A4.5 1" = 1'-0"



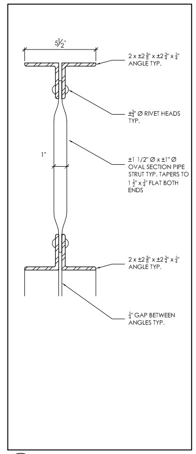
02 UPRIGHT ELEVATION
A4.5 1" = 1'-0"



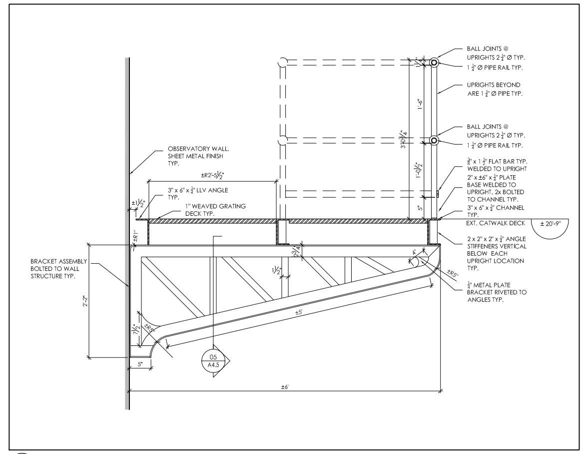
03 DECK PANEL PLAN
A4.5 1" = 1'-0"



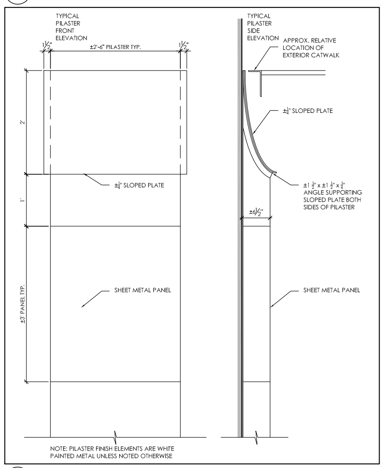
04 STAIR SECTION AT CATWALK
A4.5 1" = 1'-0"



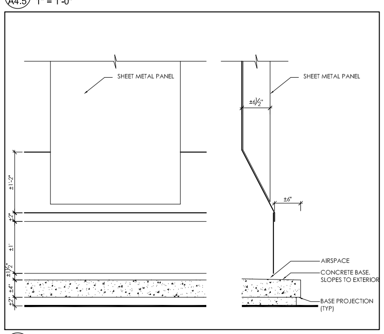
05 CATWALK BRACKET SECTION
A4.5 3" = 1'-0"



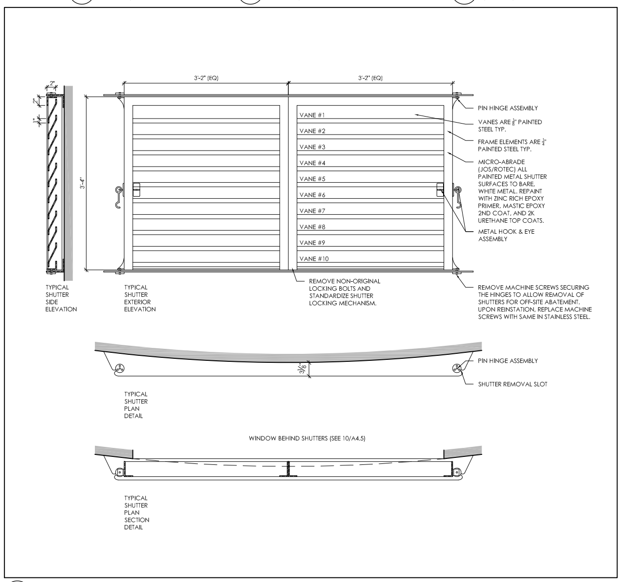
06 OBSERVATORY - EXTERIOR CATWALK SECTION AT STAIR LANDING BRACKET
A4.5 1" = 1'-0"



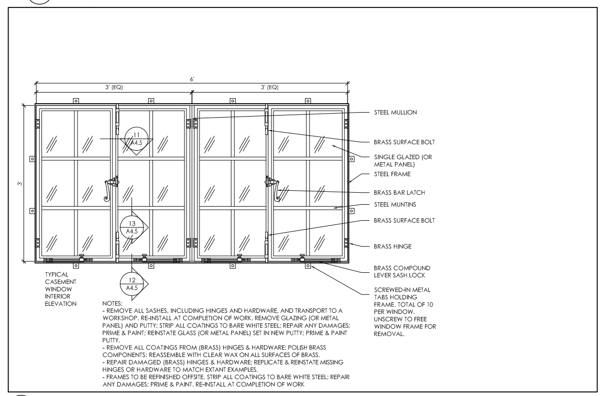
07 OBSERVATORY - PILASTER CAP ELEVATIONS
A4.5 1" = 1'-0"



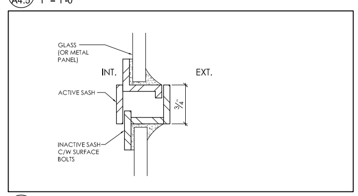
08 OBSERVATORY - PILASTER BEVELLED BASE ELEVATIONS
A4.5 1" = 1'-0"



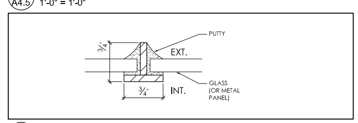
09 OBSERVATORY - TYPICAL SHUTTER/WINDOW DETAILS
A4.5 1" = 1'-0"



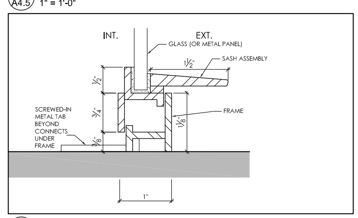
10 OBSERVATORY - TYPICAL WINDOW INTERIOR ELEVATION
A4.5 1" = 1'-0"



11 OBSERVATORY - PLAN DETAIL @ WINDOW SASH OVERLAP
A4.5 1'-0" = 1'-0"



13 OBSERVATORY - TYPICAL WINDOW MUNTIN DETAIL
A4.5 1" = 1'-0"



12 OBSERVATORY - SECTION DETAIL @ WINDOW SILL
A4.5 1" = 1'-0"

GENERAL NOTES:

1. ALL DIMENSIONS ARE ±. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE.
2. UNLESS NOTED OTHERWISE, ALL EXTERIOR ELEMENTS OF THE OBSERVATORY BUILDING ARE PAINTED METAL.
3. UNLESS NOTED OTHERWISE, ALL EXTERIOR PAINTED METAL ELEMENTS & SURFACES OF THE OBSERVATORY BUILDING ARE TO BE STRIPPED TO BARE METAL AND REPAINTED. UNLESS NOTED OTHERWISE THEY ARE TO BE STRIPPED AND REPAINTED IN-SITU. REMOVE ALL COATINGS; REPAIR AS NECESSARY; BLAST CLEAN TO BARE WHITE METAL; APPLY ZINC RICH EPOXY PRIMER; APPLY MASTIC EPOXY; APPLY 2K URETHANE
4. SASHES AND FRAMES ARE TO BE COMPLETELY REMOVED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK.
5. EXTERIOR STEEL SHUTTERS AT EACH WINDOW ARE TO BE COMPLETELY DISASSEMBLED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK
6. GRATINGS, CLIPS, AND ALL OTHER CATWALK ELEMENTS THAT CAN BE REMOVED FROM THE EXTERIOR OF THE BUILDING BY FASTENER REMOVAL ARE TO BE REMOVED FROM THE EXTERIOR OF THE BUILDING, RESTORED OFFSITE, AND REPLACED. CATWALK SUPPORT BRACKETS AND FRAMEWORK TO BE RESTORED ONSITE IN-SITU.
7. REPLACE ALL SEALANTS, CAULKING, GLAZING PUTTY, AND GASKETS ENTIRELY.
8. REPLACE ALL THREADED FASTENERS REMOVED WITH STAINLESS STEEL. LIGHTLY SANDBLAST UNTHREADED AREAS TO ALLOW INCREASED PAINT ADHESION.

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DRIVE
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
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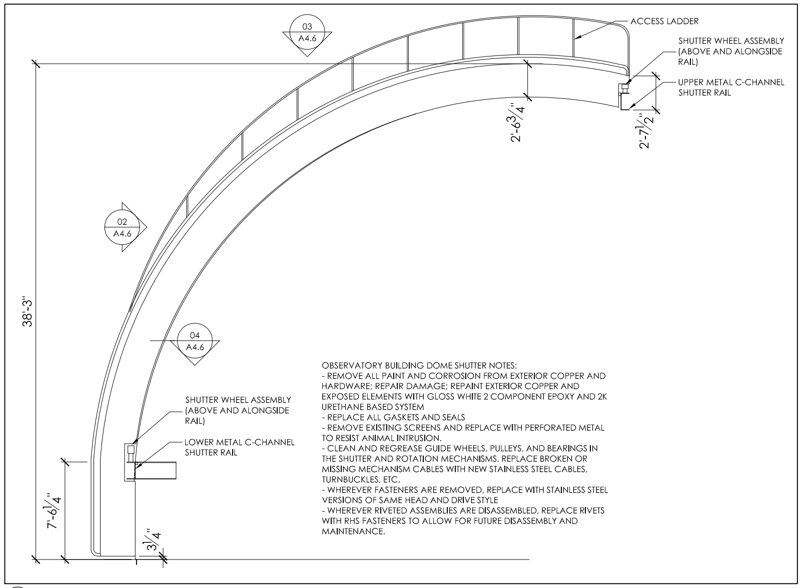
+VG ARCHITECTS
THE VENTIN GROUP LTD

SCALE: 1"=1'-0"

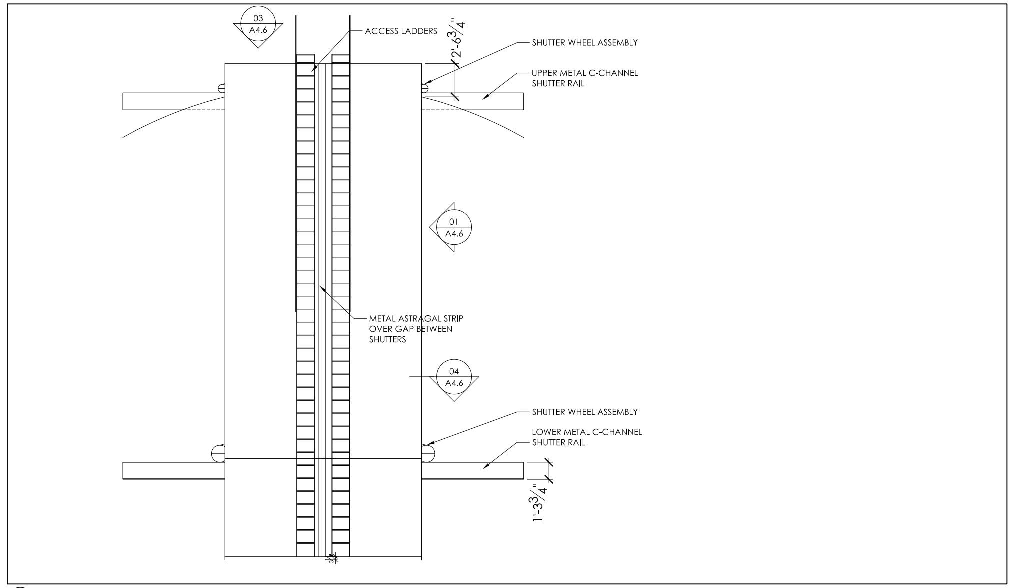
OBSERVATORY - DETAILS

A4.5

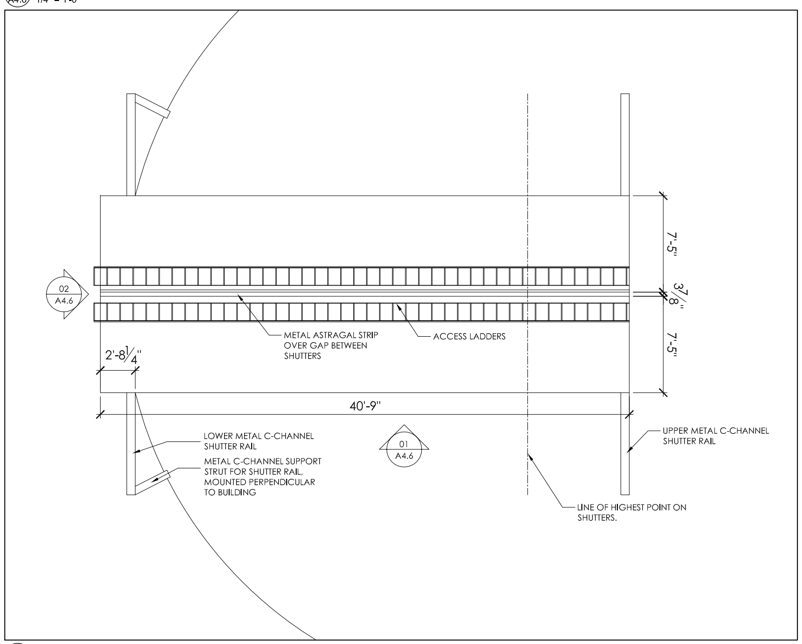


OBSERVATORY BUILDING DOME SHUTTER NOTES:
- REMOVE ALL PAINT AND CORROSION FROM EXTERIOR COPPER AND HARDWARE; REPAIR DAMAGE; REPAINT EXTERIOR COPPER AND EXPOSED ELEMENTS WITH GLOSS WHITE 2 COMPONENT EPOXY AND 2K URETHANE BASED SYSTEM
- REPLACE ALL GASKETS AND SEALS
- REMOVE EXISTING SCREENS AND REPLACE WITH PERFORATED METAL TO RESIST ANIMAL INTRUSION.
- CLEAN AND REGREASE GUIDE WHEELS, PULLEYS, AND BEARINGS IN THE SHUTTER AND ROTATION MECHANISMS. REPLACE BROKEN OR MISSING MECHANISM CABLES WITH NEW STAINLESS STEEL CABLES, TURNBUCKLES, ETC.
- WHEREVER FASTENERS ARE REMOVED, REPLACE WITH STAINLESS STEEL VERSIONS OF SAME HEAD AND DRIVE STYLE
- WHEREVER RIVETED ASSEMBLIES ARE DISASSEMBLED, REPLACE RIVETS WITH RHS FASTENERS TO ALLOW FOR FUTURE DISASSEMBLY AND MAINTENANCE.

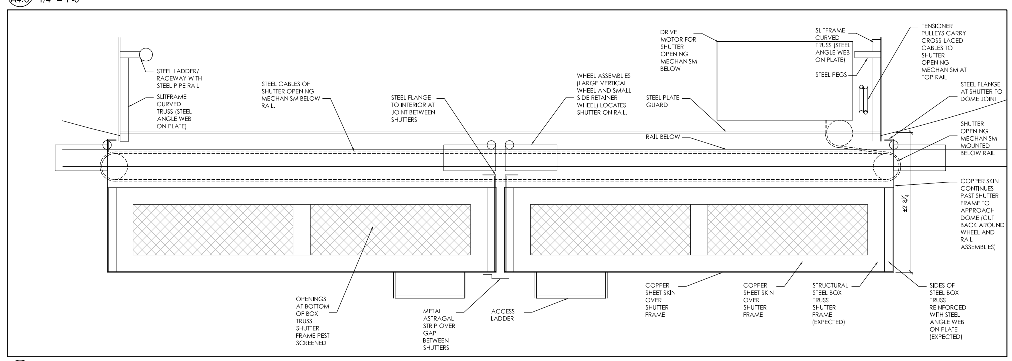
01 / A4.6 OBSERVATORY - SHUTTERS - SIDE ELEVATION
1/4" = 1'-0"



02 / A4.6 OBSERVATORY - SHUTTERS - FRONT ELEVATION
1/4" = 1'-0"



03 / A4.6 OBSERVATORY - SHUTTERS - PLAN
1/4" = 1'-0"



04 / A4.6 OBSERVATORY - SHUTTERS - SECTION DETAIL
1" = 1'-0"

GENERAL NOTES:

1. ALL DIMENSIONS ARE ±. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE.
2. UNLESS NOTED OTHERWISE, ALL EXTERIOR ELEMENTS OF THE OBSERVATORY BUILDING ARE PAINTED METAL.
3. UNLESS NOTED OTHERWISE, ALL EXTERIOR PAINTED METAL ELEMENTS & SURFACES OF THE OBSERVATORY BUILDING ARE TO BE STRIPPED TO BARE METAL AND REPAINTED. UNLESS NOTED OTHERWISE THEY ARE TO BE STRIPPED AND REPAINTED IN-SITU. REMOVE ALL COATINGS; REPAIR AS NECESSARY; BLAST CLEAN TO BARE WHITE METAL; APPLY ZINC RICH EPOXY PRIMER; APPLY MASTIC EPOXY; APPLY 2K URETHANE
4. SASHES AND FRAMES ARE TO BE COMPLETELY REMOVED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK.
5. EXTERIOR STEEL SHUTTERS AT EACH WINDOW ARE TO BE COMPLETELY DISASSEMBLED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK
6. GRATINGS, CLIPS, AND ALL OTHER CATWALK ELEMENTS THAT CAN BE REMOVED FROM THE EXTERIOR OF THE BUILDING BY FASTENER REMOVAL ARE TO BE REMOVED FROM THE EXTERIOR OF THE BUILDING, RESTORED OFFSITE, AND REPLACED. CATWALK SUPPORT BRACKETS AND FRAMEWORK TO BE RESTORED ONSITE IN-SITU.
7. REPLACE ALL SEALANTS, CAULKING, GLAZING PUTTY, AND GASKETS ENTIRELY.
8. REPLACE ALL THREADED FASTENERS REMOVED WITH STAINLESS STEEL. LIGHTLY SANDBLAST UNTHREADED AREAS TO ALLOW INCREASED PAINT ADHESION.

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DRIVE
RICHMOND HILL, ON
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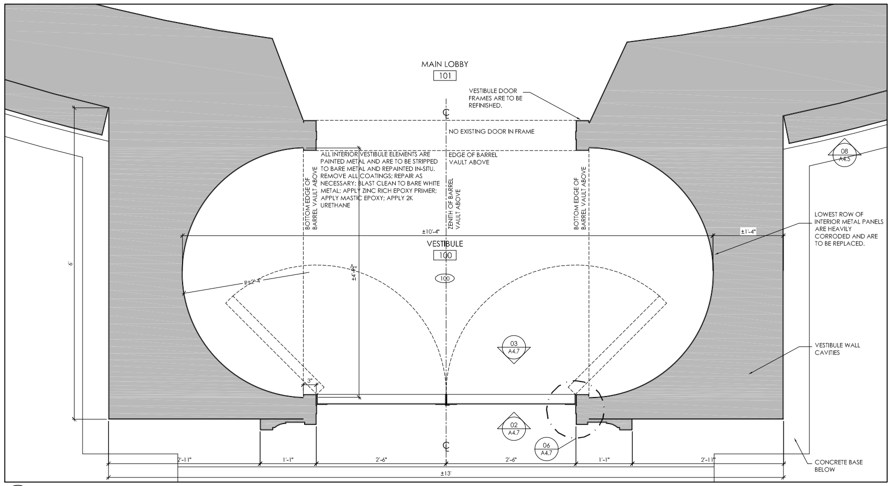
+VG ARCHITECTS
THE VENTIN GROUP LTD

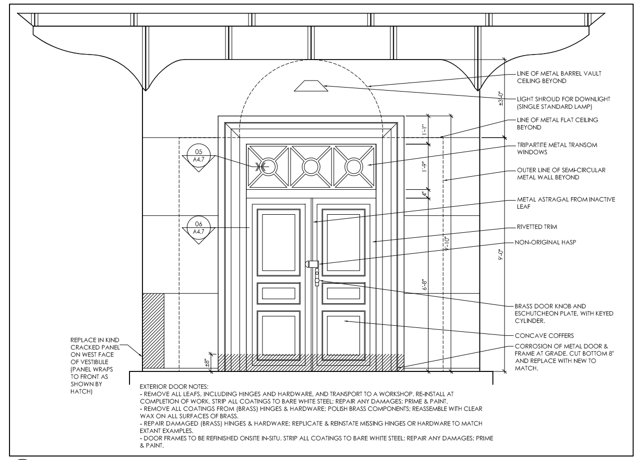
SCALE: NOTED

OBSERVATORY - SHUTTER DETAILS

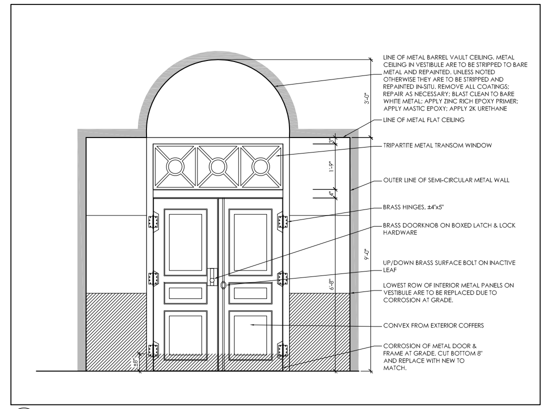
A4.6



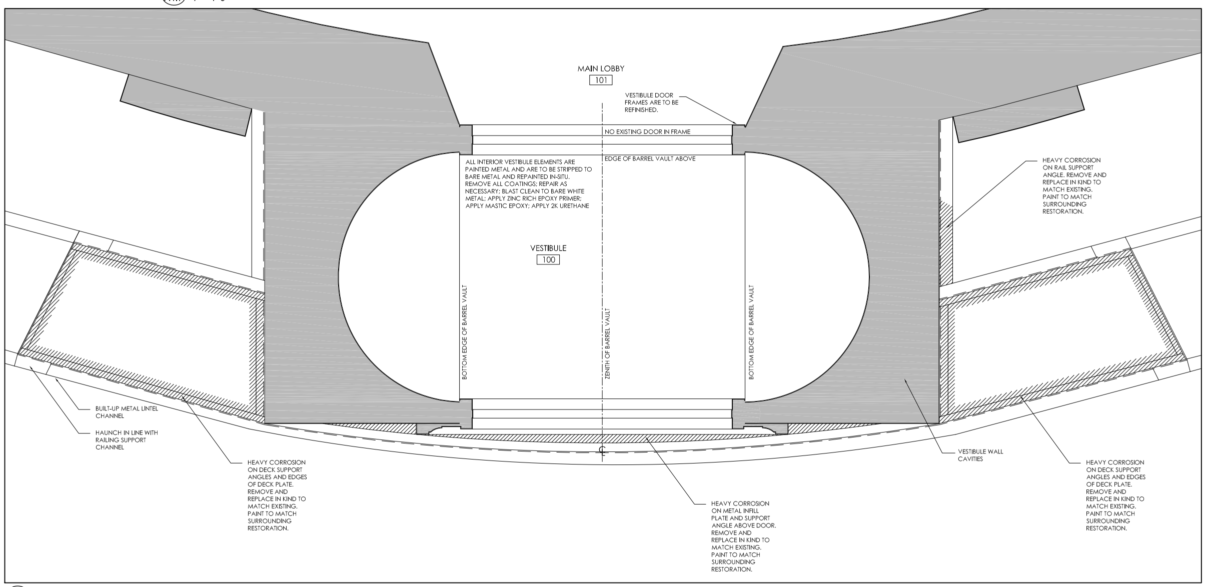
01 A4.7 OBSERVATORY - ENTRANCE - PARTIAL PLAN
1" = 1'-0"



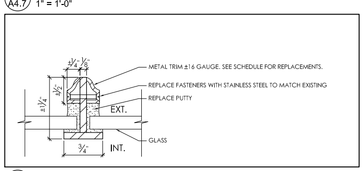
02 A4.7 OBSERVATORY - ENTRANCE - EXTERIOR ELEVATION
1/2" = 1'-0"



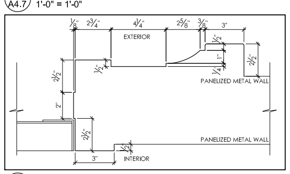
03 A4.7 OBSERVATORY - ENTRANCE - INTERIOR ELEVATION
1/2" = 1'-0"



04 A4.7 OBSERVATORY - ENTRANCE - PARTIAL REFLECTED CEILING PLAN
1" = 1'-0"



05 A4.7 OBSERVATORY - ENTRANCE - DETAIL AT METAL TRANSOM MUNTIN
1'-0" = 1'-0"



06 A4.7 OBSERVATORY - ENTRANCE - JAMB PLAN DETAIL
3" = 1'-0"

GENERAL NOTES:

1. ALL DIMENSIONS ARE ±. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE.
2. UNLESS NOTED OTHERWISE, ALL EXTERIOR ELEMENTS OF THE OBSERVATORY BUILDING ARE PAINTED METAL.
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4. SASHES AND FRAMES ARE TO BE COMPLETELY REMOVED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK.
5. EXTERIOR STEEL SHUTTERS AT EACH WINDOW ARE TO BE COMPLETELY DISASSEMBLED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK
6. GRATINGS, CLIPS, AND ALL OTHER CATWALK ELEMENTS THAT CAN BE REMOVED FROM THE EXTERIOR OF THE BUILDING BY FASTENER REMOVAL ARE TO BE REMOVED FROM THE EXTERIOR OF THE BUILDING, RESTORED OFFSITE, AND REPLACED. CATWALK SUPPORT BRACKETS AND FRAMEWORK TO BE RESTORED ONSITE IN-SITU.
7. REPLACE ALL SEALANTS, CAULKING, GLAZING PUTTY, AND GASKETS ENTIRELY.
8. REPLACE ALL THREADED FASTENERS REMOVED WITH STAINLESS STEEL. LIGHTLY SANDBLAST UNTHREADED AREAS TO ALLOW INCREASED PAINT ADHESION.

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DRIVE
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
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THE VENTIN GROUP LTD

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OBSERVATORY - ENTRANCE AND VESTIBULE

SCALE: NOTED

A4.7

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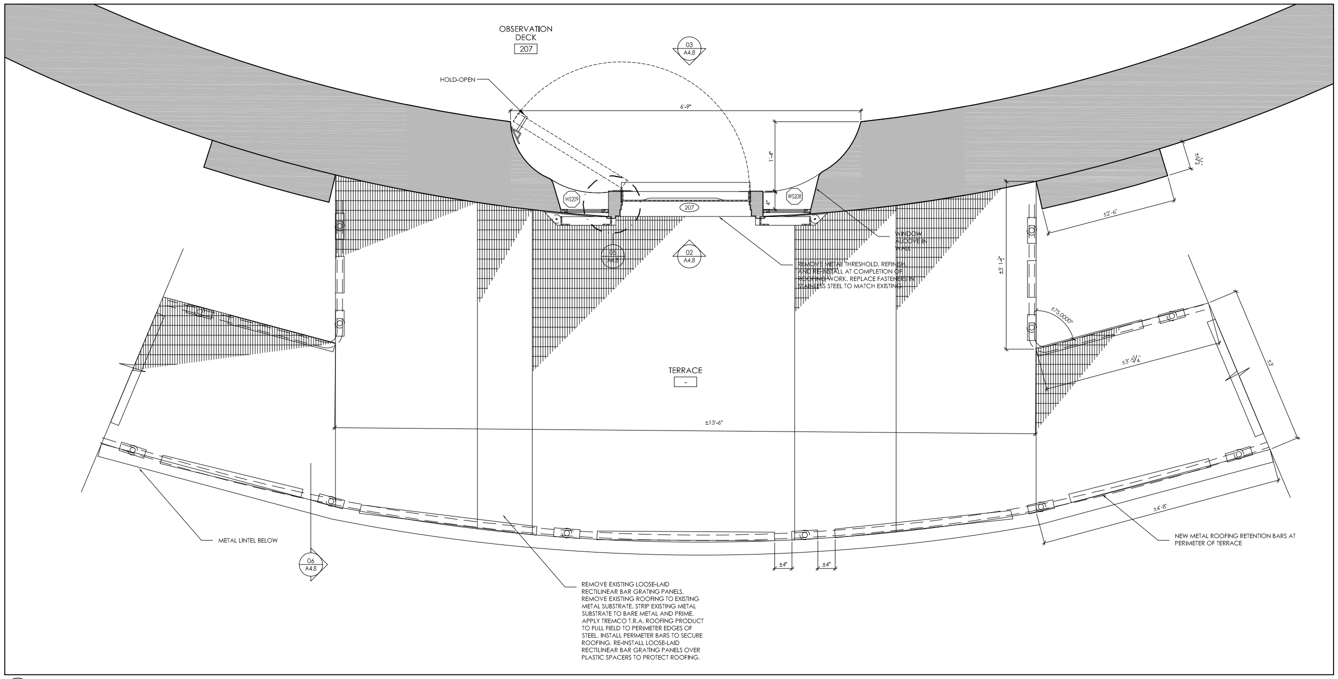

01 / A4.8 OBSERVATORY - TERRACE - PARTIAL PLAN
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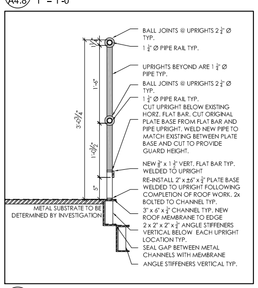

06 / A4.8 OBSERVATORY - TERRACE UPRIGHT SECTION
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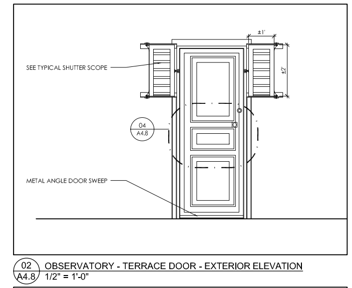

02 / A4.8 OBSERVATORY - TERRACE DOOR - EXTERIOR ELEVATION
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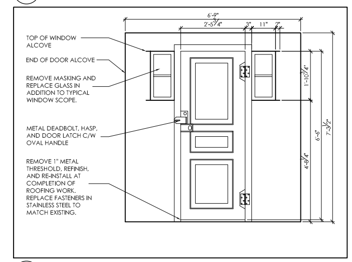
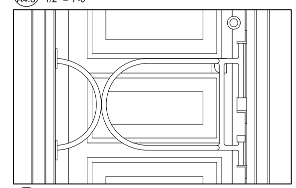
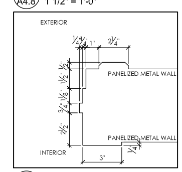


03 / A4.8 OBSERVATORY - TERRACE DOOR - INTERIOR ELEVATION
1/2" = 1'-0"



04 / A4.8 OBSERVATORY - TERRACE - PEDESTRIAN BARRIER
1 1/2" = 1'-0"



05 / A4.8 OBSERVATORY - TERRACE DOOR - JAMB PLAN DETAIL
3" = 1'-0"

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REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DRIVE
RICHMOND HILL, ON
L4C 1T3

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SCALE: NOTED

+VG ARCHITECTS
THE VENTIN GROUP LTD

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OBSERVATORY - TERRACE

A4.8

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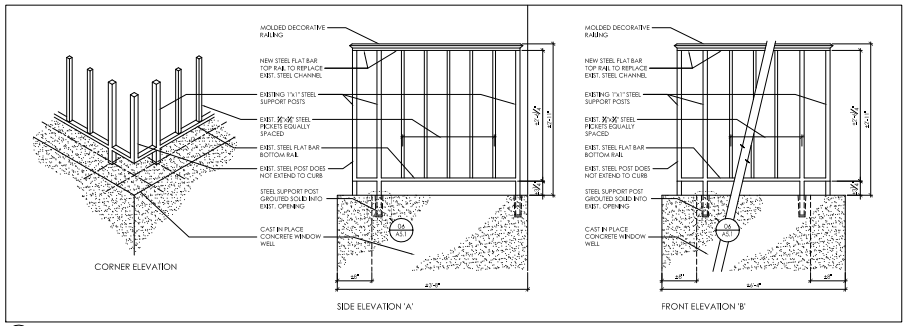
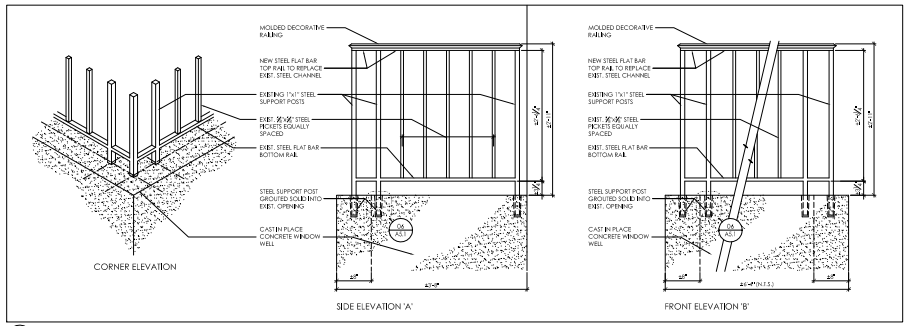
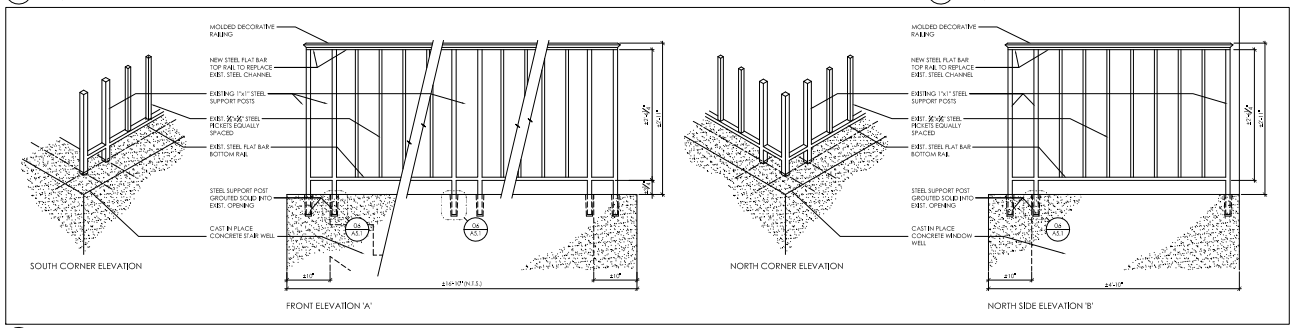


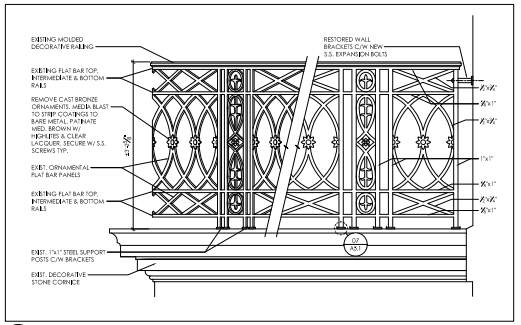
01 WEST WINDOW WELL RAILING ELEVATIONS
A5.1 1"=1'-0"



02 EAST WINDOW WELL RAILING ELEVATIONS
A5.1 1"=1'-0"



03 BASEMENT ACCESS STAIR RAILING ELEVATIONS
A5.1 1"=1'-0"



04 BASEMENT ACCESS STAIR RAILING ELEVATIONS
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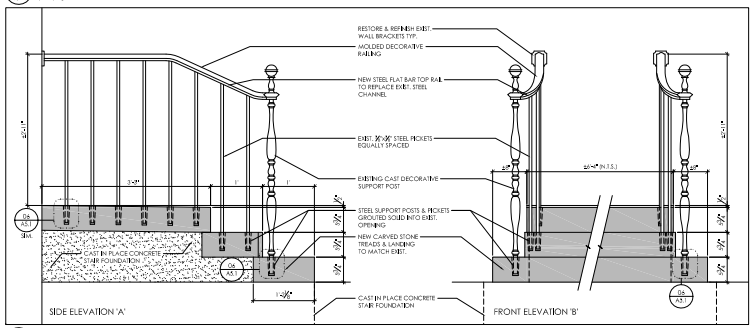
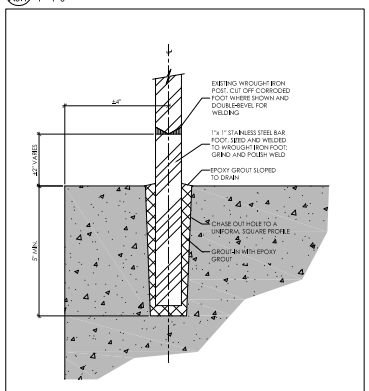
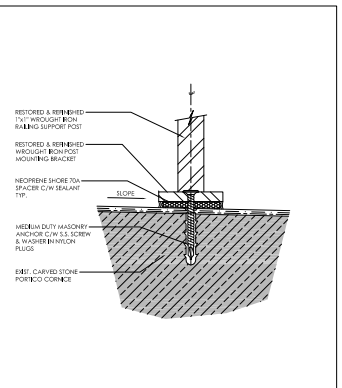


05 NORTH & SOUTH ENTRANCE STAIR RAILING ELEVATIONS
A5.1 1"=1'-0"



06 SECTION DETAIL @ TYPICAL METAL BALUSTRADE ANCHORAGE
A5.1 6"=1'-0"



07 SECTION DETAIL @ DECORATIVE PORTICO RAILING ANCHORAGE
A5.1 6"=1'-0"

RAILING/BALUSTARDE RESTORATION NOTES

1. EXIST. RAILINGS TO BE REMOVED FOR SHOP RESTORATION. CUT MAIN SUPPORT POSTS FLUSH WITH TOP OF EXISTING CAST IN PLACE CONCRETE WINDOW WELLS AND/OR EXISTING STONE LANDINGS AND STEPS. DRILL AND CORE-OUT REMAINING EMBEDDED POST AND PICKET ENDS FROM EXISTING SUBSTRATE. CUT BACK EXISTING POSTS AND PICKETS 1" ABOVE THEIR INTERSECTION WITH THE SUBSTRATE AND REPLACE WITH STAINLESS STEEL EXTENSIONS OF THE SAME LENGTH AND DIMENSION WELDED ON. REINSERT INTO TOOLED EXISTING OPENINGS IN SUBSTRATE WITH EPOXY GROUT SLOPED TO DRAIN.
2. EXIST. DECORATIVE RAILINGS TO BE REMOVED, SALVAGED, STRIPPED AND REFINISHED IN SHOP FOR RE-USE WHERE POSSIBLE.
3. WHERE EXIST. DECORATIVE RAILINGS ARE FOUND TO BE BEYOND REPAIR THEY ARE TO BE COPIED & REPRODUCED IN QUANTITIES TO ALLOW FOR REPLACEMENTS. WHERE REPLACEMENTS ARE REQUIRED FOR DAMAGED RAILINGS ON THE WEST AND SOUTH SIDES OF THE BUILDING EXISTING RECONDITIONED RAILINGS FROM THE EAST SIDE OF THE BUILDING WILL BE SALVAGED FOR USED. REPRODUCTIONS OF THE RAILINGS ARE TO BE USED ON THE EAST AND NORTH SIDES OF THE BUILDING EXCLUSIVELY.
4. EXIST. RAILING TOP CHANNEL TO BE REPLACED WITH STEEL FLAT BAR OF THE SAME DIMENSIONS. WELD EXISTING PICKETS TO UNDERSIDE OF NEW TOP FLAT BAR AND GRIND SMOOTH. DRILL AND TAP THE TOP OF THE NEW FLAT BAR TO ALLOW REINSTALLATION OF THE DECORATIVE RAILINGS WITH ROUND HEAD SLOT SCREWS TO MATCH EXISTING.
5. EXIST. CARVED SANDSTONE TREADS AND LANDINGS AT NORTH AND SOUTH ENTRANCE STAIRS TO BE REMOVED AND SALVAGED FOR RE-USE. INSTALL NEW SANDSTONE TREADS AND LANDINGS TO MATCH EXISTING. DRILL AND CARVE NEW SOCKETS TO RECEIVE RESTORED STEEL SUPPORT POSTS AND PICKETS COMPLETE WITH EPOXY GROUT.
6. EXIST. DECORATIVE PORTICO RAILING TO BE REMOVED FOR SHOP RESTORATION. RELEASE SUPPORT POSTS AND BRACKETS FROM TOP OF CARVED SANDSTONE PORTICO CORNICE. REMOVE EXISTING MOUNTING BRACKETS AND CUT BACK EXISTING SUPPORT POSTS 2" ABOVE BOTTOM OF POST. REPLACE WITH STAINLESS STEEL EXTENSIONS OF THE SAME LENGTH AND DIMENSION WELDED ON COMPLETE WITH NEW STAINLESS STEEL MOUNTING BRACKETS TO MATCH EXISTING IN THICKNESS AND SIZE.
7. RESTORED DECORATIVE PORTICO RAILING TO BE REINSTATED ONCE NEW COPPER FLASHINGS HAVE BEEN INSTALLED. RAILING TO BE MOUNTED WITH STAINLESS STEEL FASTENERS THROUGH MOUNTING BRACKETS COMPETE WITH NEOPRENE SHORE 70A SPACERS AND SEALANT. RECONNECT RAILING AT ENDS TO EXISTING WALL WITH RESTORED AND REFINISH BRACKETS COMPLETE WITH STAINLESS STEEL EXPANSION BOLTS SET INTO EXISTING OPENINGS IN MASONRY WALL.
8. RESTORED RAILINGS TO RECEIVE BLACK EPOXY FINISH TYPICAL.

08 RAILING RESTORATION NOTES
A5.1

REVISIONS

NO.	DATE	PARTICULAR
01	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

125 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30"x 42"
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THE VENTIN GROUP LTD

METAL RAILING DETAILS

SCALE: 1/4"=1'-0"

A5.1

Plot Date: Sep 05, 2019 - 2:49pm By: Neil
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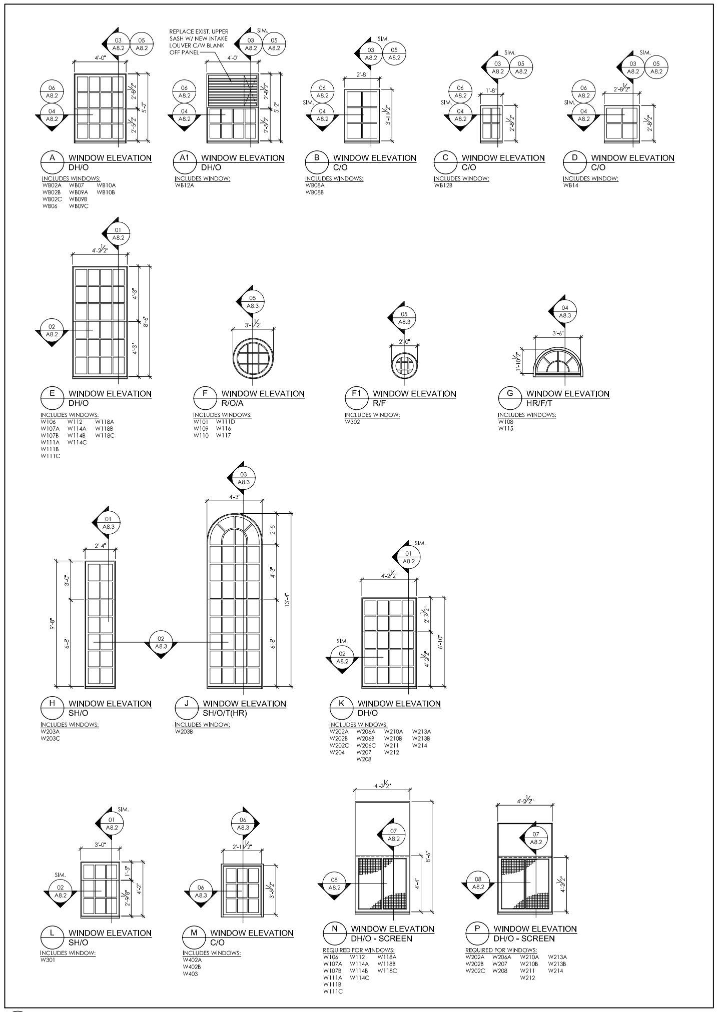

01/A8.1 WINDOW TYPE SCHEDULE
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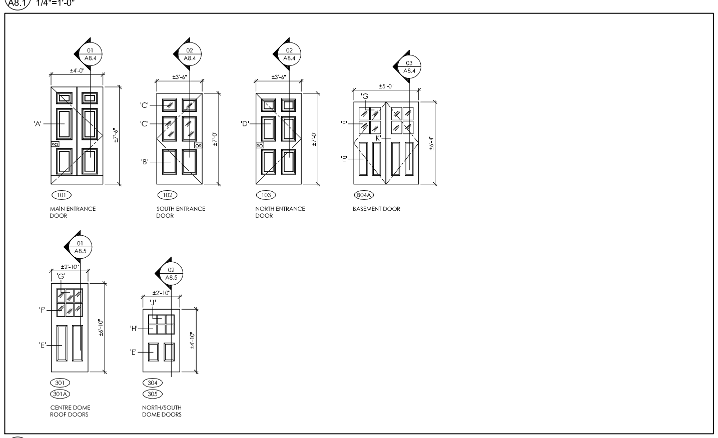
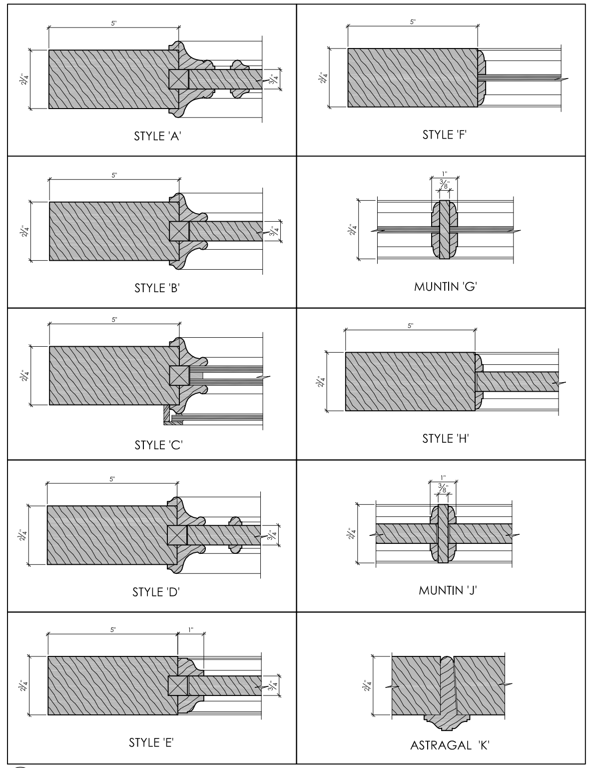


02/A8.1 DOOR TYPE SCHEDULE
1/4"=1'-0"



03/A8.1 DOOR ASSEMBLY DETAILS
6"=1'-0"

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
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TOWN OF RICHMOND HILL

PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
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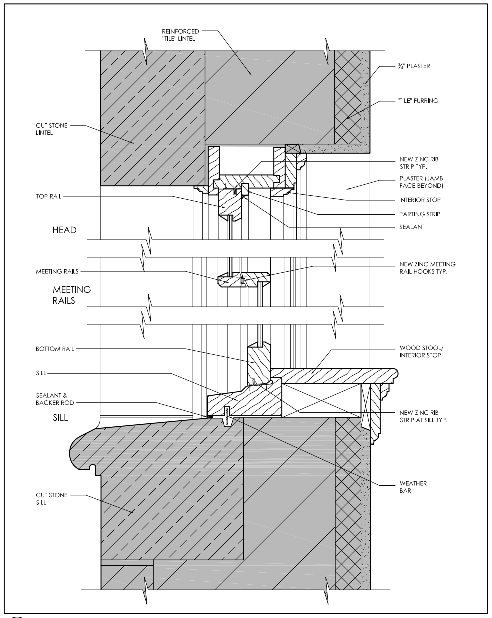
+VG ARCHITECTS
THE VENTIN GROUP LTD

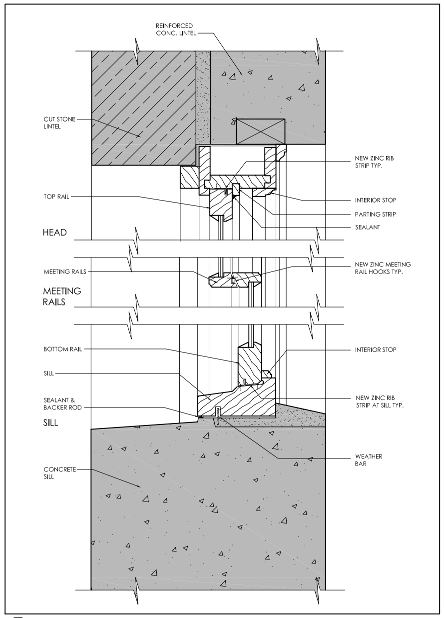
WINDOW & DOOR TYPE SCHEDULES

SCALE: 1/4"=1'-0"

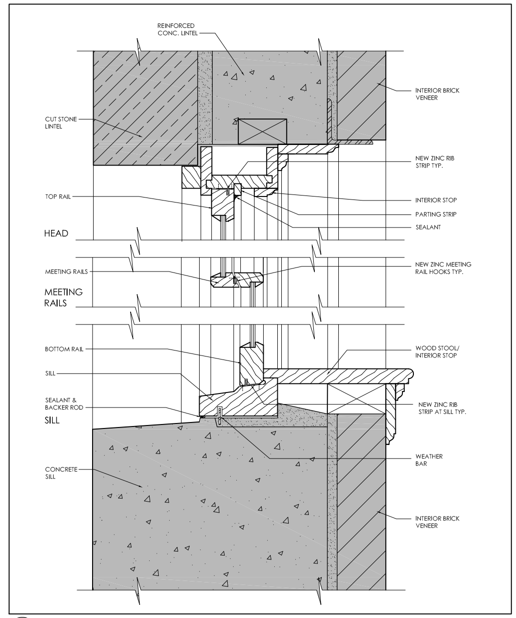
A8.1



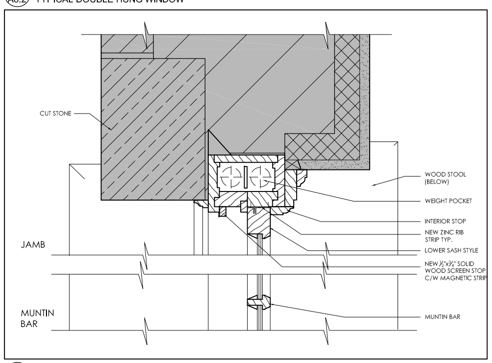
01 / A8.2 SECTION FRAME DETAILS @ TYPICAL DOUBLE HUNG WINDOW



03 / A8.2 SECTION FRAME DETAILS @ TYPICAL DOUBLE HUNG BASEMENT WINDOW



05 / A8.2 SECTION FRAME DETAILS WITH INTERIOR FINISH @ TYPICAL DOUBLE HUNG BASEMENT WINDOW



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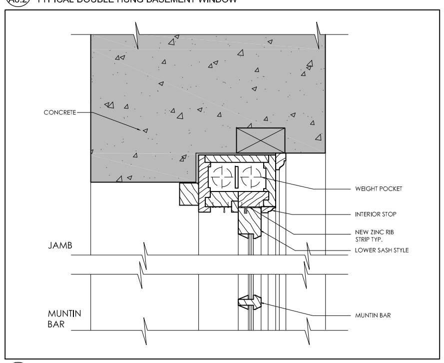

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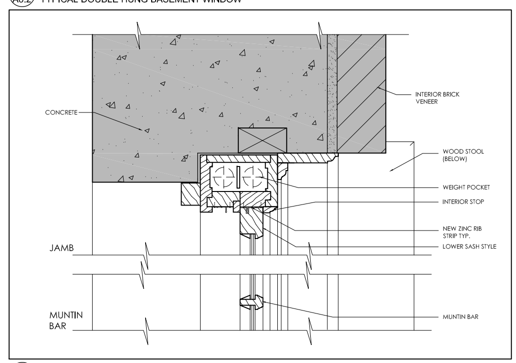
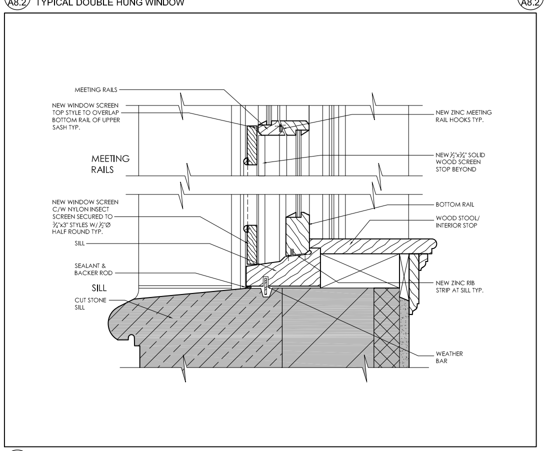
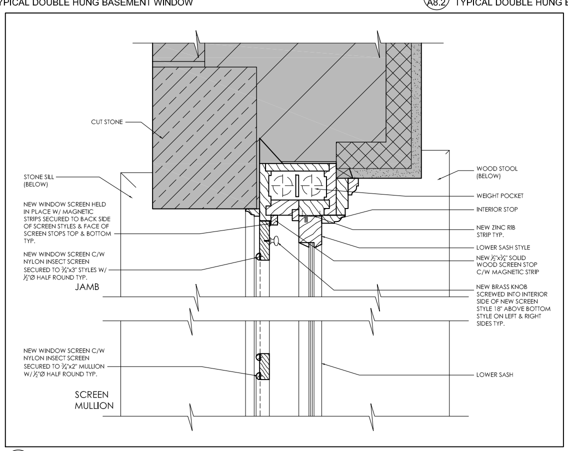


06 / A8.2 PLAN FRAME DETAILS WITH INTERIOR FINISH @ TYPICAL DOUBLE HUNG BASEMENT WINDOW



07 / A8.2 SECTION FRAME DETAILS @ DOUBLE HUNG WINDOW SCREEN



08 / A8.2 PLAN FRAME DETAIL @ DOUBLE HUNG WINDOW SCREEN

REVISIONS

NO.	DATE	PARTICULAR
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02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

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PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

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THE VENTIN GROUP LTD

SCALE: 3"=1'-0"

WINDOW FRAME DETAILS

A8.2

Plot Date: Sep 05, 2019 - 2:48pm By: fred
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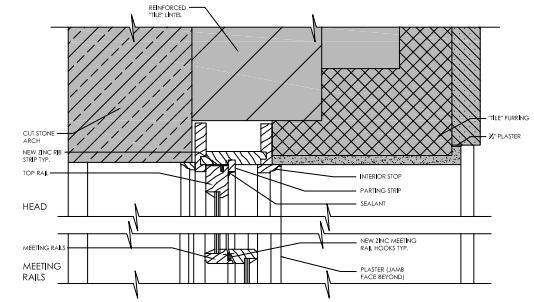
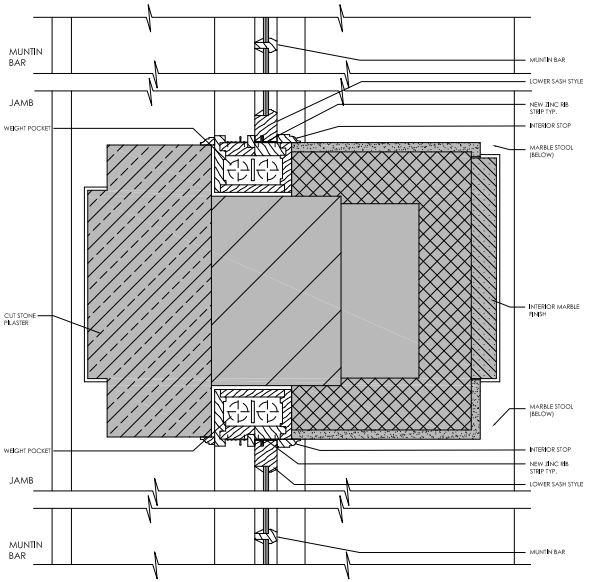
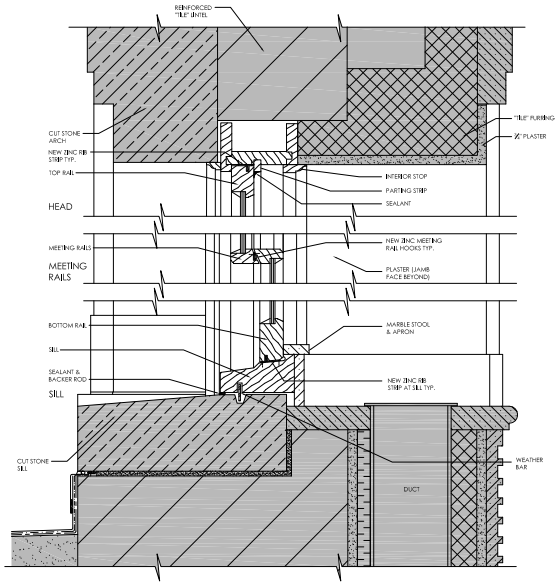


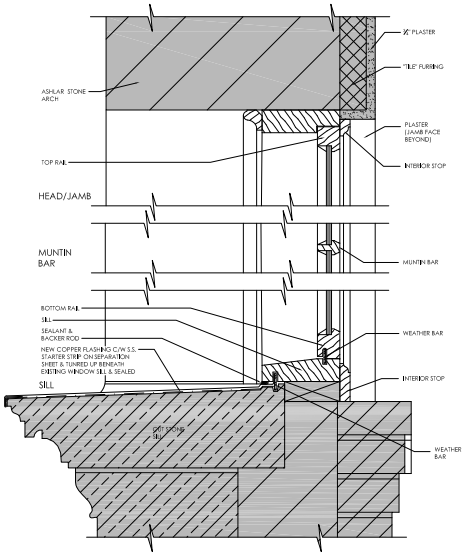
01 A8.3 SECTION FRAME DETAILS @ CENTRAL FLANKING DOUBLE HUNG WINDOW



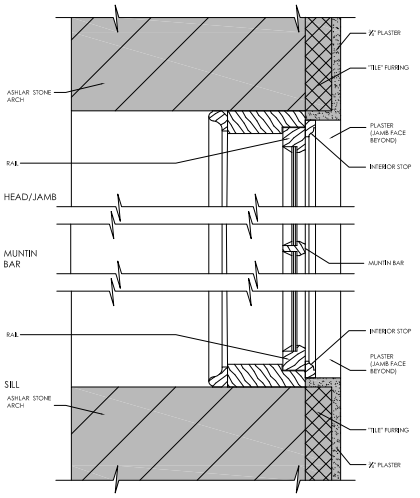
02 A8.3 PLAN FRAME DETAILS @ CENTRAL DOUBLE HUNG WINDOWS



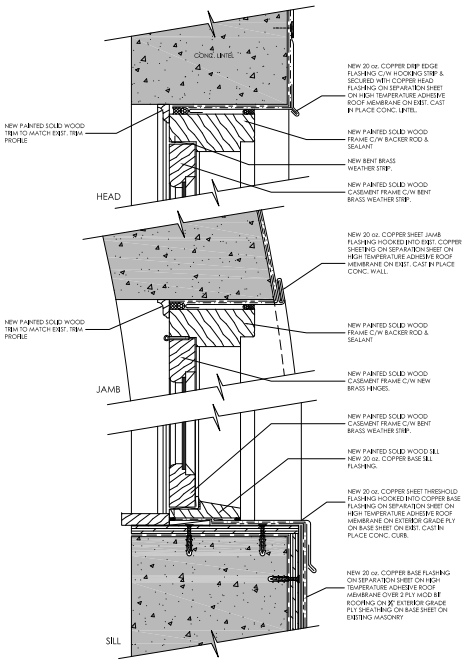
03 A8.3 SECTION FRAME DETAILS @ CENTRAL DOUBLE HUNG HALF ROUND WINDOW



04 A8.3 HALF - ROUND TRANSOM WINDOW FRAME DETAILS



05 A8.3 ROUND WINDOW FRAME DETAILS



06 A8.3 FRAME DETAILS @ CENTRE DOME CASEMENTS

REVISIONS

NO.	DATE	PARTICULAR
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PROJECT:
21886

DDO BUILDING ENVELOPE RESTORATION

123 HILLSVIEW DR
RICHMOND HILL, ON
L4C 1T3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"
KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

+VG ARCHITECTS
THE VENTIN GROUP LTD

SCALE: 3"=1'-0"

WINDOW FRAME DETAILS

A8.3

Plot Date: Sep 05, 2019 - 2:47pm By: Neal
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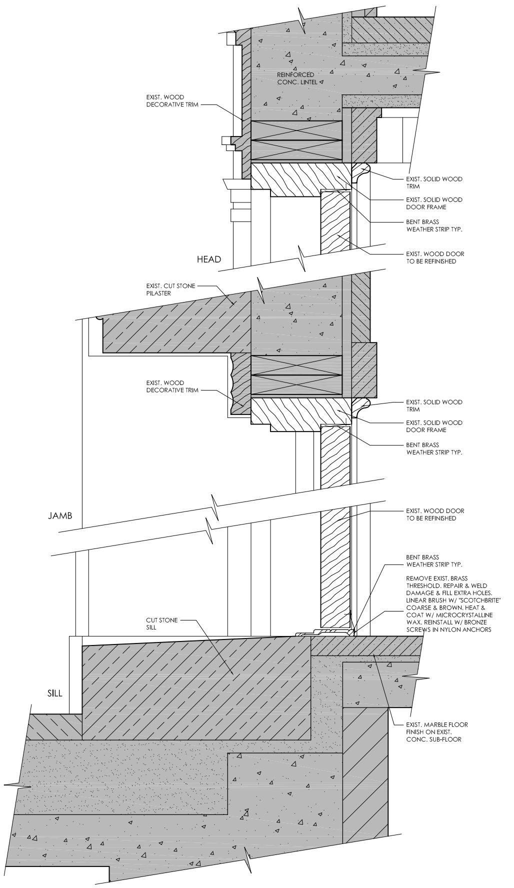
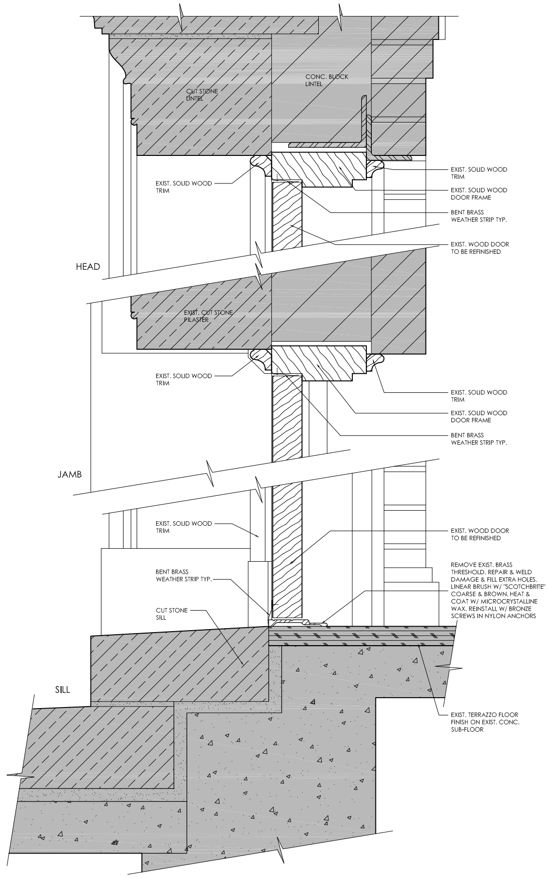
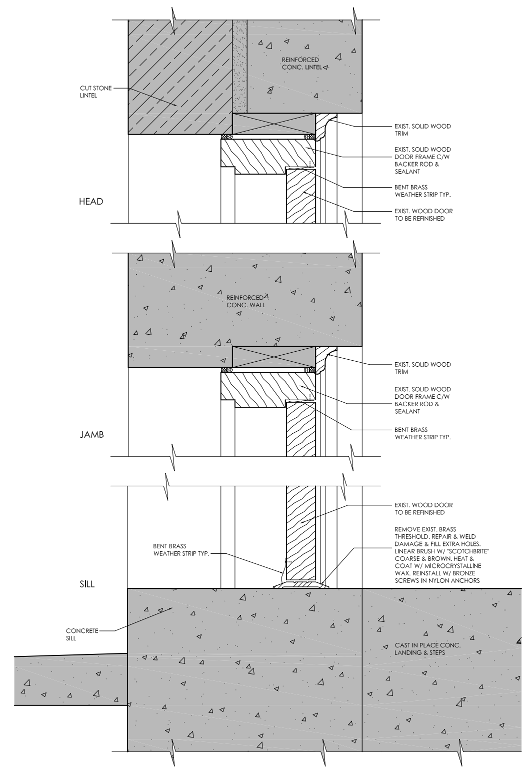


01 DOOR FRAME DETAILS @
A8.4 MAIN ENTRANCE



02 DOOR FRAME DETAILS @
A8.4 NORTH & SOUTH MAIN ENTRANCES



03 DOOR FRAME DETAILS @
A8.4 EAST BASEMENT ENTRANCE

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

CLIENT:
TOWN OF RICHMOND HILL

PROJECT:
21886

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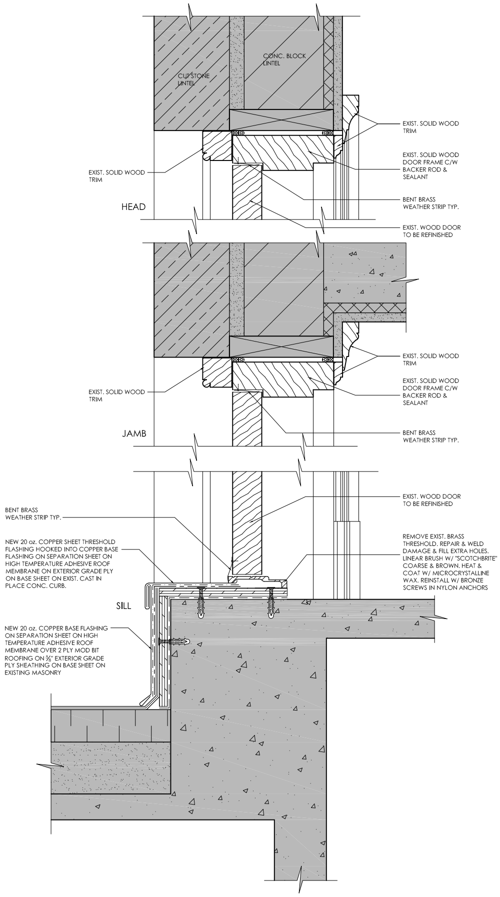
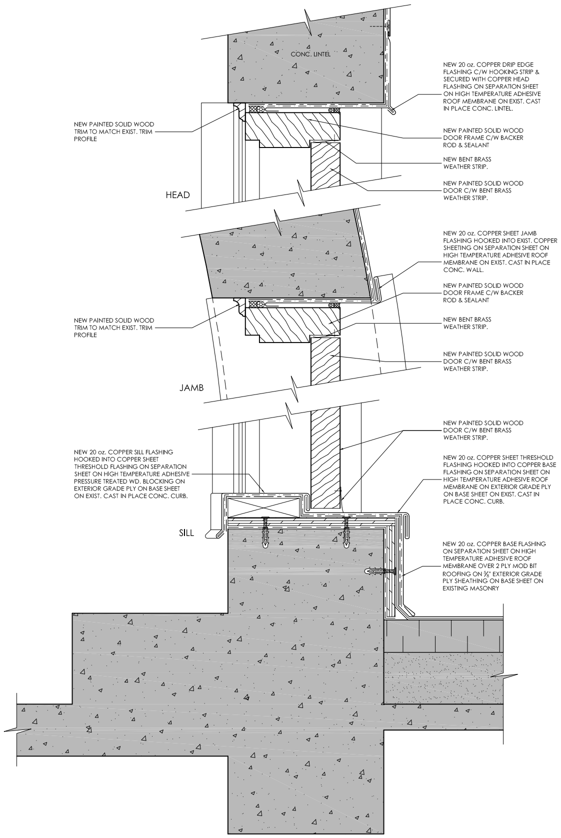
EXTERIOR DOOR FRAME DETAILS

A8.4

Plot Date: Sep 05, 2019 - 2:46pm By: fred Filename: \\VGT-FS\Data\21886 - DDO Building Envelope Restoration\Authorities\Heritage Approvals\Drawings\21886-A8.dwg



01 / A8.5 DOOR FRAME DETAILS @ NORTH / SOUTH ROOF ACCESS DOORS



02 / A8.5 DOOR FRAME DETAILS @ NORTH / SOUTH DOME ACCESS DOORS

REVISIONS

NO.	DATE	PARTICULAR
01	2019.02.15	ISSUED FOR CLASS 'C' COSTING
02	2019.06.21	ISSUED FOR CLASS 'A' COSTING

NOTES:

KEY PLAN:

Plot Date: Sep 05, 2019 - 2:46pm By: fred Filename: \\VGT-FS\Data\21886 - DDO Building Envelope Restoration\Authorities\Heritage Approvals\Drawings\21886-A8.dwg

CLIENT:
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DDO BUILDING ENVELOPE RESTORATION

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SCALE: 3"=1'-0"

EXTERIOR DOOR FRAME DETAILS

A8.5

APPENDIX 2 – DOORS AND WINDOWS SCHEDULES

1. ADMINISTRATION BUILDING

WOOD WINDOWS SCHEDULE	
	GENERAL CONSERVATION SCOPE OF WORK
1)	WOOD SILLS, FRAMES AND JAMBS UP TO 24" A.F. SILL WILL REQUIRE EPOXY COATING (PATCH REPAIR). THIS WORK IS TO BE INCLUDED IN BASE BID PRICE
2)	GLAZING PUTTY IS TO BE REPLACED ENTIRELY. SUPPLY/INSTALLATION OF NEW GLASS IS TO BE INCLUDED IN BASE BID PRICE, REFER TO SCHEDULE BELOW
3)	STRIP WOOD SURFACES OF FRAMES, JAMBS, CASINGS, ETC. DOWN TO BARE AND SOUND WOOD, PATCH, MAKE GOOD AND TYPICALLY REFINISH IN-SITU
4)	ALL SASHES ARE TO BE REMOVED AND REFINISHED IN SHOP. RE-INSTALL
5)	REPLACE CORDS AT COUNTERWEIGHTS OF HUNG WINDOWS (4 PER WINDOW) TYP.
6)	REMOVE ALL HARDWARE, CLEAN (INCLUDING THE REMOVAL OF ANY PAINT COATINGS), LUBRICATE AND RE-INSTALL. REPLACE WITH NEW TO MATCH EXISTING WHERE MISSING OR DAMAGED BEYOND REPAIR. REFER TO SCHEDULE BELOW FOR REPLACEMENTS OR REPAIRS TO BE INCLUDED IN BASE BID PRICE
7)	PATCH AND MAKE GOOD ALL SURFACES BEFORE REFINISHING. FILL EXISTING SCREW HOLES (AT HINGES, PULLS, ETC.) AND TAP NEW TO ENSURE SCREWS ARE POSITIVELY FASTENED INTO WOOD
8)	SUPPLY AND INSTALL NEW WOOD INSECT SCREENS C/W SCREWED-IN TABS TO MATCH EXISTING (TYP.) REFER TO SCHEDULE FOR NUMBER, SIZE AND LOCATION
9)	REMOVE BLINDS, BLACK-OUTS, INSECT SCREENS AND MECH./ELECT. EQUIPMENT, WIRING, ETC. AS REQUIRED TO CARRY OUT WINDOW RESTORATION. THOROUGLY CLEAN AND REINSTALL AT COMPLETION OF WORK
10)	REPLACE SPRING BRONZE WEATHERSTRIPPING C/W BRASS SCREWS AT CASEMENT WINDOWS WITH NEW TO MATCH EXISTING (TYP.)
11)	2ND FLOOR WINDOWS: SUPPLY AND INSTALL ¾" X ¾" STEEL CLIP ANGLE (SCA) TO LIMIT SIZE OF OPENING TO 4" (100mm) MAX. ABOVE FINISHED WINDOWSILL. CLIPS ARE TO BE INSTALLED ONE AT EACH JAMB, ABOVE LOWER SASH
12)	REMOVE AND REPLACE ZINC "RIB-STRIPS" FROM SILLS, JAMBS AND MEETING STYLES AT ALL HUNG WINDOWS WITH NEW TO MATCH EXISTING
13)	REMOVE AND REPLACE W/NEW WOOD STOPS AND PARTING STRIPS (I.E. BETWEEN SASHES AT DOUBLE HUNG WINDOWS) TO ALLOW REMOVAL OF SASHES, COUNTERWEIGHTS, OR OTHER WINDOWS COMPONENTS. REPLACE WITH NEW TO MATCH EXISTING IN TYPE AND SIZE, REFINISH TO MATCH REMAINDER OF SURFACES
14)	CAREFULLY REMOVE TRIMS, CASINGS, ETC. AS REQUIRED TO CARRY OUT RESTORATION WORK, REMOVAL OF SASHES, AND INSTALLATION OF NEW CORDS. RE-INSTALL AT COMPLETION OF WORK. PAINT FINISH SURFACES IMPACTED BY THE WORK
15)	REBALANCE COUNTERWEIGHTS FOLLOWING REPLACEMENT OF CORDS, THOROUGHLY TEST, CLEAN AND LUBRICATE AS REQUIRED WEIGHT POCKET AND COMPONENTS PRIOR TO ENCLOSING WEIGHTS IN POCKETS
16)	FOLLOWING RE-FINISHING IN THE SHOP, RE-INSTALL SASHES AND HARDWARE. ENSURE SASHES ARE FREE TO OPERATE SMOOTHLY AND LATCH POSITIVELY. SHIM, PLANE OR OTHERWISE ADJUST SASHES, JAMBS, SILLS AND HEAD SURFACES TO ENSURE FREE OPERATION
17)	REPLACE ALL SEALANTS AND CAULKING ENTIRELY
18)	REFER TO DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL LIST OF ACTIVITIES

APPENDIX 2 – DOORS AND WINDOWS SCHEDULES

LEGEND	ABBREVIATIONS	DESCRIPTION
TYPE and FUNCTION	SH	SINGLE HUNG
	A	AWNING
	DH	DOUBLE HUNG
	T	TOP SASH
	B	BOTTOM SASH
	F	FIXED
	O	OPERABLE
	TR	TRANSOM WINDOW
	R	ROUND WINDOW
	HR	HALF ROUND WINDOW
	C	CASEMENT WINDOW
	IS	REMOVEABLE INSECT SCREEN W/CLIPS
HARDWARE	PV	PIVOT HINGE (TYP. AT MIDPOINT OF HORIZ. AXIS)
	PH	HORIZ. PULL HANDLE
	PT	VERT. PULL HANDLE W/ KNOB TURN
	LS	LATCH AND STRIKE
	H	HINGE AT JAMB
	BS	HORIZ. BAR-STAY (INSIDE BOTTOM OF SASH & FRAME)
	CW	COUNTERWEIGHT (CONCEALED IN WEIGHT POCKET)
	BW	SPRING BRONZE WEATHERSTRIPPING ON ALL SIDES
	RP	ROPE AND PULLEY MECHANISM
	LH	SINGLE LEVER HANDLE
	RS	ZINC "RIB-STRIPS" SIZED & SHAPED TO MATCH EXISTING

APPENDIX 2 – DOORS AND WINDOWS SCHEDULES

WINDOW TYPE	TYPE & FUNCTION	HARDWARE	No. OF SASHES	LITES	DIMENSION (tot. opening and sashes)
A	DH, O SILL @ 38" AFF	PH (2) LS CW + RP	2	 4 over 2 4 over 2	48" x 62" 48" x 32" (T) 48" x 32" (B)
B	C, O SILL @ 48" AFF	H (2) PT, BS BW	1	2 over 3	32 ½" x 47 ½"
C	C, O SILL @ 64" AFF	H (2) PT, BS BW	1	2 over 2	20 ½" x 32 ½"
D	C, O SILL @ 54" AFF	H (2) PT, BS BW	1	2 over 2	32 ½" x 32 ½"
E	DH, O SILL @ 36" AFF	PH (2) LATCH CW + RP	2	 4 over 3 4 over 3	50 ½" x 8'-6" 50 ½" x 51" (T) 50 ½" x 51" (B)
F	R, O SILL @ 53" AFF	PV L (AT TOP)	1	9 Total	37 ½" Dia.
F1	R, F SILL @ 100" AFF	N/A	1	9 Total	24" Dia.
G	HR, F, TR SILL @ 100" AFF	N/A	1	6 Total	42" x 22 ½"
H	SH, O SILL @ 70" AFF	PH (2) LS SW + RP	2	 2 over 2 2 over 5	28" x 116" 28" x 36" (T) 28" x 80" (B)
J	SH, O, TR SILL @ 70" AFF	PH (2) LS CW + RP	2	 6 Total (TR) 4 over 4 4 over 5	51" x 160" 51" x 29" (TR) 51" x 51" (T) 51" x 80 (B)
K	DH, O SILL @ 36" AFF	PH (2) LS CW + RP	2	 4 over 2 4 over 3	50 ½" x 82" 50 ½" x 31 ½" (T) 50 ½" x 50 ½" (B)
L	SH, O SILL @ 56" AFF	PH (2) LS CW + RP	2	 3 over 1 3 over 2	36" x 50" 36" x 17" (T) 36" x 33" (B)
M	C, O SILL @ 24" AFF	H (2) PT, BW	2	3 over 3	35 ½" x 45 ½"

NOTES:

- DIMENSIONS ARE INDICATED AS: ORIZ. WIDTH **x** VERT. HEIGHT or DIAMETER (Dia.) FOR ROUND WINDOWS

APPENDIX 2 – DOORS AND WINDOWS SCHEDULES

- (TR) INDICATES "TRANSOM"
- (T) INDICATES "TOP SASH"
- (B) INDICATES "BOTTOM SASH"
- NOTED DIMENSIONS ARE "SASH DIMENSIONS" OR UNLESS OTHERWISE NOTED

BASEMENT LEVEL WINDOW SCHEDULE		
WINDOW #	**TYPE**	**SPECIAL NOTES**
WB02A	A	• MILLWORK BASE CABINET UP TO WINDOW SILL. CAREFULLY RELOCATE /REINSTALL AS REQUIRED TO CARRY OUT RESTORATION WORK
WB02B	A	
WB02C	A	• EXISTING CONDUIT (THRU UPPER FRAME) CARRYING ELECTRICAL FEED TO BOLLARDS AT MAIN ENTRY. WORK AROUND THIS OBSTRUCTION I.E. FRAME SHALL BE RESTORED ASSUMING CONDUIT WILL REMAIN IN PLACE
WB06	A	• SCREWED IN STOP-BLOCKS TO PREVENT BOTTOM SASH FROM RAISING, REMOVE AND RE-INSTALL AT COMPLETION OF WORK • TEXTURED GLASS
WB07	A	• WOOD SHUTTERS MOUNTED TO INSIDE FACE OF FRAME, REMOVE SHUTTERS TO ALLOW WINDOW RESTORATION WORK. REFINISH AND RE-PAINT SHUTTER AND REINSTALL AT COMPLETION OF WINDOW RESTORATION WORK.
WB08A	B	• REPAIR JAMMED/STUCK BAR-STAY
WB08B	B	• SUPPLY AND INSTALL MISSING BAR-STAY TO MATCH EXISTING • 2 OBSOLETE ELECTRICAL WIRES THRU UPPER FRAME. REMOVE WIRES, PATCH AND REFINISH FRAME
WB09A	A	• EQUIPMENT IN FRONT OF WINDOW (AUTOCLAVE) RELOCATE AS REQUIRED TO CARRY OUT WORK. REINSTALL AT COMPLETION
WB09B	A	• REMOVE FACE MOUNTED EXHAUST FAN ON UPPER SASH AS PART OF THIS WORK. HAND FAN OVER TO OWNER • SUPPLY AND INSTALL MISSING GLASS (TWO VISION LITES) • 2 ELECTRICAL CONDUITS THRU UPPER SASH FEED THE FRONT POLE AND SECURITY CAMERA. THESE WILL BE DISCONNECTED AND RELOCATED BY OWNER. GC TO CO-ORDINATE W/OWNER
WB09C	A	• MILLWORK IN FRONT OF WINDOW. RELOCATE /REINSTALL AS REQUIRED TO CARRY OUT RESTORATION WORK
WB10A	A	• REMOVE WOOD BLOCKING ON NORTH SIDE AT LOWER SASH
WB10B	A	
WB12A	A	• AIR INTAKE DUCT, GAS LINE PIPING AND COMM. WIRING THRU UPPER SASH. REPLACE UPPER SASH WITH NEW CUSTOM-MADE PRE-FIN. METAL LOUVERED INFILL PANEL FASTENED TO FRAME. TEMPORARILY REMOVE DUCT, DISCONNECT GAS LINE AND WIRING AS REQUIRED TO INSTALL INFILL PANEL AND TO CARRY OUT WINDOW RESTORATION WORK. REINSTALL/RECONNECT AT COMPLETION OF WORK
WB12B	C	• REPAIR JAMMED/STUCK BAR-STAY
WB14	D	• SUPPLY AND INSTALL MISSING BAR-STAY TO MATCH EXISTING • SASH WAS CUT TO ALLOW FOR DUCT. REQUIRE DUTCHMAN

		• PARTIAL OBSTRUCTION BY ELECTRICAL METERING CABINET ON RIGHT END SIDE. WORK AROUND THIS OBSTRUCTION

GROUND FLOOR LEVEL WINDOW SCHEDULE

WINDOW #	TYPE	NOTES
W106	E	• FULL HEIGHT PLASTIC VENETIAN BLINDS • INSECT SCREEN
W107A	E	• FULL HEIGHT PLASTIC VENETIAN BLINDS • INSECT SCREEN
W107B	E	• FULL HEIGHT PLASTIC VENETIAN BLINDS • INSECT SCREEN
W109	F	
W108	G	
W110	F	
W111A	E	• METAL VENETIAN BLIND W/ FULL HEIGHT CHANNELS BOTH JAMBS AND BOTTOM SILL • REMOVE ELECT. WIRE AND WALL MOUNTED A/C UNIT AND EXT. MTL BRACKET FOR THE A/C UNIT. HAND OVER TO OWNER • INSECT SCREEN
W111B	E	• METAL VENETIAN BLIND W/ FULL HEIGHT CHANNELS BOTH JAMBS AND BOTTOM SILL • INSECT SCREEN
W111C	E	• METAL VENETIAN BLIND W/ FULL HEIGHT CHANNELS BOTH JAMBS AND BOTTOM SILL • INSECT SCREEN
W111D	F	
W112	E	• RESTORATION OF THIS WINDOW IS N.I.C. • INSECT SCREEN
W101	F	
W114A	E	• FULL HEIGHT METAL VENETIAN BLINDS • INSECT SCREEN
W114B	E	• FULL HEIGHT METAL VENETIAN BLINDS • INSECT SCREEN
W114C	E	• FULL HEIGHT METAL VENETIAN BLINDS • INSECT SCREEN
W116	F	
W115	G	
W117	F	

W118A	E	• FULL HEIGHT PLASTIC VENETIAN BLINDS • INSECT SCREEN
W118B	E	• FULL HEIGHT PLASTIC VENETIAN BLINDS • INSECT SCREEN
W118C	E	• FULL HEIGHT PLASTIC VENETIAN BLINDS • INSECT SCREEN
SECOND FLOOR LEVEL WINDOW SCHEDULE		
WINDOW #	**TYPE**	**NOTES**
W202A	K	• FULL HEIGHT ROLL-UP BLIND • INSECT SCREEN • SUPPLY/INSTALL SCA
W202B	K	• FULL HEIGHT ROLL-UP BLIND • INSECT SCREEN • SUPPLY/INSTALL SCA
W202C	K	• FULL HEIGHT ROLL-UP BLIND • INSECT SCREEN • SUPPLY/INSTALL SCA
W203A	H	• FULL HEIGHT METAL VENETIAN BLINDS
W203B	J	• FULL HEIGHT METAL VENETIAN BLINDS
W203C	H	• FULL HEIGHT METAL VENETIAN BLINDS
W204	K	• SUPPLY/INSTALL SCA • REMOVE METAL FRAMED BLACK-OUT BLIND C/W TRACKS AND PLYWOOD SHEATHING OVER TOP SASH, CLEAN, ADJUST AND RE-INSTALL AT COMPLETION OF RESTORATION WORK
W206A	K	• INTERIOR WOOD BLACK-OUT SHUTTERS, REMOVE REFINISH AND RE-INSTALL AT COMPLETION OF RESTORATION WORK • INSECT SCREEN • SUPPLY/INSTALL SCA
W206B	K	• RESTORATION OF THIS WINDOW IS N.I.C. • SUPPLY/INSTALL SCA
W206C	K	• RESTORATION OF THIS WINDOW IS N.I.C. • SUPPLY/INSTALL SCA
W207	K	• FULL HEIGHT METAL BLINDS • INSECT SCREEN • SUPPLY/INSTALL SCA • REPLACE FRAME BOTTOM SILL ENTIRELY TO MATCH EXISTING
W208	K	• FULL HEIGHT METAL BLIND • INSECT SCREEN • SUPPLY/INSTALL SCA

W210A	K	• FULL HEIGHT ROLL-UP BLIND • INSECT SCREEN • SUPPLY/INSTALL SCA
W210B	K	• FULL HEIGHT ROLL-UP BLIND • INSECT SCREEN • SUPPLY/INSTALL SCA
W211	K	• FULL HEIGHT ROLL-UP BLIND • INSECT SCREEN • SUPPLY/INSTALL SCA
W212	K	• INSECT SCREEN • SUPPLY/INSTALL SCA • REPLACE FRAME BOTTOM SILL ENTIRELY TO MATCH EXISTING
W213A	K	• FULL HEIGHT WOOD VENETIAN BLINDS • INSECT SCREEN • SUPPLY/INSTALL SCA
W213B	K	• FULL HEIGHT WOOD VENETIAN BLINDS • INSECT SCREEN • SUPPLY/INSTALL SCA
W214	K	• FULL HEIGHT WOOD VENETIAN BLINDS • INSECT SCREEN • SUPPLY/INSTALL SCA
ROOF LEVEL WINDOW SCHEDULE		
WINDOW #	**TYPE**	**NOTES**
W301	L	• COPPER CLAD SILL, REPLACE TO MATCH EXISTING IN PROFILE • SUPPLY AND INSTALL MISSING CATCH AT TOP FRAME • FRAME AND SASH REQUIRE 100% EPOXY PATCH COATING
W302	F(SIM.)	• 24" DIAMETER ROUND WINDOW, FIXED WINDOW - MUST RESTORE IN-SITU. • FRAME AND SASH REQUIRE 100% EPOXY PATCH COATING
CENTRE DOME WINDOW SCHEDULE		
WINDOW #	**TYPE**	**NOTES**
W402A	M	• PLYWOOD BLACK-OUT PANEL INSTALLED ON INSIDE FACE, REMOVE, REFINISH AND RE-INSTALL AT COMPLETION OF WORK • REMOVE EXISTING PIPE THRU FRAME. PATCH AND MAKE GOOD • FRAME & SASH REQUIRE 100% EPOXY PATCH COATING
W402B	M	• PLYWOOD BLACK-OUT PANEL INSTALLED ON INSIDE FACE, REMOVE, REFINISH AND RE-INSTALL AT COMPLETION OF WORK • FRAME & SASH REQUIRE 100% EPOXY PATCH COATING

APPENDIX 2 – DOORS AND WINDOWS SCHEDULES

W403	M	• INTERFERENCE W/FURNITURE, REMOVE TO CARRY OUT WORK/ REINSTALL AT COMPLETION OF RESTORATION WORK • REMOVE EXISTING ALUMINIUM SLIDING WINDOW & FRAME FROM OPENING AND DISPOSE • CAREFULLY REMOVE EXIST. INTERIOR WOOD PANELS AND CASINGS FROM HEAD, JAMBS AND SILL. CUT WALL FURRING AND INFILL PANELLING DOWN TO ORIGINAL CONCRETE SILL TO ALLOW FOR THE INSTALLATION OF NEW WOOD WINDOW. PROVIDE NEW WOOD BLOCKING AS REQUIRED TO FRAME OPENING. PATCH AND MAKE GOOD EXISTING WALL SURFACES TO REMAIN. SUPPLY/INSTALL NEW PLYWOOD PANELLING TO CLOSE-OFF OPENING AT HEAD, JAMBS AND SILL C/W WOOD CASING (ON ALL SIDES). PAINT FINISH ALL SURFACES • REPAIR ORIGINAL FRAME AS REQUIRED TO ACCEPT NEW SASH. REQUIRE 100% EPOXY PATCH COATING • SUPPLY/INSTALL NEW CASEMENT SASH C/W DIVIDED LITES AND HARDWARE TO MATCH EXISTING W402A

WOOD DOOR SCHEDULE	
	GENERAL CONSERVATION SCOPE OF WORK
1)	STRIP SURFACES OF FRAMES, JAMBS, CASINGS AND THRESHOLDS DOWN TO SOUND & BARE SUBSTRATE, PATCH AND MAKE GOOD TO MATCH EXISTING AND REFINISH IN-SITU
2)	DOORS ARE TO BE REMOVED AND REFINISHED IN SHOP
3)	REMOVE ALL HARDWARE, CLEAN (INCLUDING REMOVAL OF PAINT), LUBRICATE AND RE-INSTALL. REPLACE WITH NEW TO MATCH EXISTING WHERE MISSING OR DAMAGED BEYOND REPAIR. REFER TO SCHEDULE BELOW FOR REPLACEMENTS TO BE INCLUDED IN BASE PRICE
4)	DISCONNECT AND REMOVE WIRED DOOR CONTACTS, BUTTONS, SWITCHES, WIRING AND ASSOCIATED DEVICES TO ALLOW FOR RESTORATION WORK. RE-INSTALL AND TEST AT COMPLETION OF WORK
5)	REMOVE GLAZING VISION PANELS TO CARRY OUT RESTORATION AND REFINISHING OF WOOD SURFACES. RE-INSTALL AT COMPLETION OF THE WORK
6)	REMOVE PROTECTIVE PLEXIGLASS PANELS HELD IN PLACE BY SCREWED-IN ALUMINIUM FLAT BAR FRAME REQUIRED TO CARRY OUT RESTORATION WORK. REPLACE RUBBER GASKETS AT ALL SIDES, MATCH EXIST. RE-INSTALL AT COMPLETION
7)	PATCH AND MAKE GOOD ALL SURFACES BEFORE REFINISHING. FILL EXISTING SCREW HOLES (AT HINGES, PULLS, ETC.) AND TAP NEW TO ENSURE SCREWS ARE POSITIVELY FASTENED INTO SUBSTRATES
8)	REPLACE SPRING BRONZE WEATHERSTRIPPING INSTALLED AT FRAME JAMBS, HEAD AND AT U/S OF DOOR WITH NEW TO MATCH EXISTING (TYP.)
9)	REPLACE BRONZE KICKPLATE (TYP. 8" HIGH) W/NEW TO MATCH EXISTING
10)	CLEAN BRONZE THRESHOLD IN SITU, REPLACE SHEET COPPER THRESHOLD TO MATCH EXISTING IN SIZE, SHAPE AND PROFILE
11)	FOLLOWING RE-FINISHING IN THE SHOP, RE-INSTALL DOORS AND ENSURE THESE ARE FREE TO OPERATE SMOOTHLY AND LATCH POSITIVELY. SHIM, PLANE OR OTHERWISE ADJUST SASHES, JAMBS, SILLS AND HEAD SURFACES TO ENSURE FREE OPERATION
12)	REPLACE ALL SEALANTS AND CAULKING ENTIRELY
13)	REFER TO DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL LIST OF ACTIVITIES

LEGEND

APPENDIX 2 – DOORS AND WINDOWS SCHEDULES

BT	Bronze Threshold
BW	Spring Bronze Weatherstripping
CO	Concrete (existing opening)
CT	Concrete Threshold
CR	Copper Threshold
DC	Door Closer
DL	Sliding Door Latch Lock (at top and bottom of inactive door leaf)
DH	Bronze Doorknob c/w Plate, Faceplate, Latch and Strike plate
GL	Glass Lites
H	Bronze Hinge
KP	Bronze Kickplate
ML	Mortise Lock
PT	Paint Finish
PP	Protective Plexiglass Panel c/w screwed-in Aluminium Flat Bar Frame
SJ	Stone Jamb (existing opening)
WD	Wood Solid Core
WC	Wired Door Contact

Door No.	Room Name	Door						Frame			In Wall type	Glaz.	Notes
		Width	Height	Thk	Mat'l	Fin.	Style	Mat'l	Fin.	Style			
100	MAIN ENTRY	4'-0"	7'-6"	2 ¼"	WD	PT	A	WD	PT	01 A8.4	SJ		
108	NORTH ENTRY	3'-8"	7'-0"	2 ¼"	WD	PT	D	WD	PT	02 A8.4	SJ		
115	SOUTH ENTRY	3'-8"	7'-0"	2 ¼"	WD	PT	B C	WD	PT	02 A8.4	SJ	GL	Four glass lites c/w plexiglass protective panels
B04A	BOILER ROOM	2x 2'-6"	7'-0"	2 ¼"	WD	PT	E F G K	WD	PT	03 A8.4	CO	GL	Replace astragal w/new in metal c/w weatherstripping. Replace wood glazing stops w/new to match existing. Four glass lites in each door c/w plexiglass protective panels
301	STAIR 1	3'-0"	6'-10"	2 ¼"	WD	PT	E F G	WD	PT	01 A8.5	SJ	GL	New wood door and door hardware in existing wood frame. Replace exterior wood brick mould, casings and trims to match existing. Dutchman at door strike required. Jambs require epoxy patch coating, assume 100% of surface. Re-use hinges. Six glass lites.
301A	STAIR 1	3'-0"	6'-10"	2 ¼"	WD	PT	E F G	WD	PT	01 A8.5	SJ	GL	New wood door and door hardware in existing wood frame. Replace exterior wood brick mould, casings and trims to match existing. Dutchman at door strike required.

APPENDIX 2 – DOORS AND WINDOWS SCHEDULES

													Jambs require epoxy patch coating, assume 100% of surface. Re-use hinges. Six glass lites.
304	SOUTH DOME	2'-10"	4'-10"	2 ¼"	WD	PT	E H J	WD	PT	02 A8.5	CO		New wood door, door frame and hardware in exist. opening
305	NORTH DOME	2'-10"	4'-10"	2 ¼"	WD	PT	E H J	WD	PT	02 A8.5	CO		New wood door, door frame and hardware in exist. opening

Door Hardware Schedule

Door	BT	BW	CT	CR	DC	DL	DH	GL	H	KP	ML	PP	WC
100	Yes	Yes			Yes		Yes		3	2	1		2
108	Yes	Yes			Yes		Yes		3	1	1		1
115	Yes	Yes			Yes		Yes	Yes	3	1	1	Yes	1
B04A		Yes	Yes			Yes		Yes	2 x 3		1	Yes	1
***301**		Yes		Yes				Yes	3				1
***301A**		Yes		Yes				Yes	3				1
***304**		Yes		Yes				Yes					
***305**		Yes		Yes				Yes					

Note:
Doors noted with * are new doors to match existing heritage and are to receive new door hardware unless noted otherwise. Refer to Door Hardware List of the Specifications for new door hardware.

APPENDIX 2 – DOORS AND WINDOWS SCHEDULES

2. OBSERVATORY

STEEL WINDOWS SCHEDULE	
	GENERAL CONSERVATION SCOPE OF WORK:
1)	SASHES AND FRAMES ARE TO BE COMPLETELY REMOVED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK
2)	GLAZING PUTTY AND GASKETS ARE TO BE REPLACED ENTIRELY
3)	SCRUB, CLEAN, PATCH AND MAKE GOOD INTERIOR SURFACES AROUND OPENINGS PRIOR TO THE RE-INSTALLATION OF RESTORED WINDOWS. REMOVE STAINS AND RUST, PAINT FINISH THE FOUR INTERIOR SIDES (HEAD, JAMBS, SILLS, ETC.) OF ALL OPENINGS TO MATCH EXISTING, PRIOR TO INSTALL WINDOWS.
4)	REMOVE ALL HARDWARE, CLEAN, (INCLUDING REMOVAL OF PAINT) LUBRICATE AND RE-INSTALL. REPLACE WITH NEW TO MATCH EXISTING WHERE MISSING OR DAMAGED BEYOND REPAIR. REFER TO SCHEDULE BELOW FOR REPLACEMENTS TO BE INCLUDED IN BASE PRICE
5)	EXTERIOR STEEL SHUTTERS AT EACH WINDOW ARE TO BE COMPLETELY DISASSEMBLED AND REFINISHED IN SHOP. RE-INSTALL AT COMPLETION OF WORK. LUBRICATE HARDWARE
6)	A NUMBER OF MECHANICAL VENTILATION FANS AND DUCTS ARE MOUNTED TO EITHER THE EXT. OR INT. FACE OF WINDOWS. THESE WILL REQUIRE REMOVAL. HAND OVER TO OWNER.
7)	THE GLASS LITE OF SEVERAL WINDOWS HAS BEEN REPLACED BY ZINC METAL INSET LITES. INSETS ARE TO BE REMOVED, PAINTED BOTH SIDES TO MATCH WINDOWS AND REINSTALLED W/GLAZING PUTTY
7)	THE GLASS LITE OF ONE WINDOWS IS BACK PAINTED. PAINT FINISH IS TO BE THOROUGHLY REMOVED. RE-FINISH INTERIOR SIDE OF GLASS W/SELF-ADHESIVE VINYL WINDOW FILM (OPAQUE, WHITE)
8)	REPLACE SCREWS AT TABS HOLDING DOWN FRAMES AND AT WINDOW HARDWARE (HINGES, HANDLES, ETC.) ENTIRELY WITH NEW TO MATCH EXISTING (TYP.)
9)	FOLLOWING RE-FINISHING IN THE SHOP, RE-INSTALL SASHES AND ENSURE THESE ARE FREE TO OPERATE SMOOTHLY AND LATCH POSITIVELY. SHIM, PLANE OR OTHERWISE ADJUST SASHES, JAMBS, SILLS AND HEAD SURFACES TO ENSURE FREE OPERATION
10)	REPLACE ALL SEALANTS AND CAULKING ENTIRELY
11)	REFER TO DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL LIST OF ACTIVITIES

LEGEND	ABBREVIATION	DESCRIPTION
TYPE and FUNCTION	F	FIXED
	O	OPERABLE
	C	CASEMENT WINDOW
HARDWARE	TB	SCREWED-IN TAB CONNECTING FRAME TO OPENING
	PT	VERTICAL PULL W/ LEVER HANDLE AND LATCH

APPENDIX 2 – DOORS AND WINDOWS SCHEDULES

	L	LATCH
	H	HINGE AT JAMB
	BS	HORIZ. BAR STAY (TYP. AT INSIDE BOTTOM OF FRAME)
	CB	TWO VERT. CANE BOLTS - TOP AND BOTTOM (WITH LATCH)

WINDOW TYPE	TYPE & FUNCTION	HARDWARE	No. OF SASHES	LITES	DIMENSION (tot. opening and sashes)
A	C, O SILL @ 70" AFF (LOWER LEVEL) SILL @ 18" A.F.F. (UPPER LEVEL)	PT (2) L (2) H (8) TB (8) BS (4) CB (4)	4	 2 X 2 over 3 2 X 2 over 3	72" x 36" 2 X 18" x 36" 2 X 18" x 36"
B	F SILL @ 57" AFF	TB (4)	1	1 over 2	8" x 23"
C	F, Transom SILL @ 108" AFF	See special notes	3	15 in total	72" x 24"

NOTES: DIMENSIONS ARE ORIZ. WIDTH **x** VERT. HEIGHT

LOWER LEVEL WINDOW SCHEDULE		
WINDOW #	**TYPE**	**SPECIAL NOTES**
WS100	C	• TRANSOM WINDOW ABOVE MAIN ENTRANCE DOOR 100 • SUPPORTING MULLIONS AND DIVIDED LITES ARE CONSTRUCTED IN STEEL "T" SECTIONS. THE ROUND, VERT. HORIZ. AND DIAGONAL SECTIONS ARE WELDED TOGETHER • GLASS STOPS (INSTALLED TO THE EXTERIOR) ARE MADE IN SECTIONS OF PREFORMED MILD STEEL PAIRED AND JOINED AT EACH MULLION. EACH STOP IS FASTENED TO THE SUPPORTING "T" BY A MIN. OF TWO SCREWS. REPLACE SCREWS W/NEW IN BRONZE. • A TOTAL OF 3 ROUND STOPS, 6 DIAGONAL STOPS, 2 VERTICAL STOPS AND 2 HORIZONTAL STOPS ARE MISSING. PROVIDE NEW TO MATCH EXISTING IN SHAPE AND PROFILE, PRICE TO BE INCLUDED IN BASE BID. • REPLACE THREADED FASTENERS ENTIRELY WITH S.S. TO MATCH EXISTING IN SIZE.
WS101	A	• ONE BROKEN HANDLE - REPLACE WITH NEW TO MATCH EXISTING
WS102	A	
WS103	A	
WS104	A	
WS105	A	

WS106	A	• TWO BROKEN GLASS LITES - REPLACE W/NEW TO MATCH EXISTING
WS107	A	

UPPER LEVEL WINDOW SCHEDULE

WINDOW #	TYPE	NOTES
WS201	A	• ZINC MTL INSET LITES • TWO BROKEN HANDLES - REPLACE W/NEW TO MATCH EXISTING
WS202	A	• ZINC MTL INSET LITES • TWO BROKEN HANDLES - REPLACE W/NEW TO MATCH EXISTING
WS203	A	• WINDOW IS PARTIALLY OBSTRUCTED BY PARTITION & ACCESS DOOR. WORK AROUND OBSTRUCTION TO CARRY OUT WORK • ONE FAN MOUNTED INSIDE – REMOVE • ONE INTERFERENCE W/SMALL DUCT – REMOVE AND REPLACE WITH NEW GLASS LITE TO MATCH EXISTING
WS204	A	• WINDOW IS PARTIALLY OBSTRUCTED BY PARTITION & ACCESS DOOR. WORK AROUND OBSTRUCTION TO CARRY OUT WORK • ONE LITE HAS A VENTILATION MTL MESH – REMOVE AND REPLACE W/NEW GLASS LITE • BACK-PAINTED GLASS – REMOVE PAINT AND RE-FINISH INTERIOR SIDE OF GLASS W/SELF-ADHESIVE VINYL WINDOW FILM (OPAQUE, WHITE)
WS205	A	• WINDOW IS OBSTRUCTED BY PARTITION – WINDOW & FRAME MUST BE REMOVED AND RE-INSTALLED FROM THE OUTSIDE. REMOVE GLASS FIRST TO ACCESS SCREWED-IN TABS HOLDING DOWN FRAME. REINSTALL WINDOW AT COMPLETION OF RESTORATION WORK BY REVERSING THE PROCESS
WS206	A	• ZINC MTL INSET LITES • ONE LARGE FAN AND SHROUD MOUNTED OUTSIDE – REMOVE • ONE BROKEN HANDLE - REPLACE W/NEW TO MATCH EXISTING
WS207	A	• ZINC MTL INSET LITES • ONE LARGE FAN AND SHROUD MOUNTED OUTSIDE – REMOVE • ONE BROKEN HANDLE - REPLACE W/NEW TO MATCH EXISTING
WS208	B	
WS209	B	

METAL DOORS SCHEDULE	
	GENERAL CONSERVATION SCOPE OF WORK:
1)	STRIP SURFACES OF FRAMES, JAMBS, CASINGS AND THRESHOLDS DOWN TO SOUND & BARE SUBSTRATE, PATCH AND MAKE GOOD TO MATCH EXISTING AND REFINISH IN-SITU
2)	DOORS ARE TO BE REMOVED AND REFINISHED IN SHOP
3)	REMOVE ALL HARDWARE, CLEAN (INCLUDING REMOVAL OF PAINT), LUBRICATE AND RE-INSTALL. REPLACE WITH NEW TO MATCH EXISTING WHERE MISSING OR DAMAGED BEYOND REPAIR. REFER TO SCHEDULE BELOW FOR REPLACEMENTS TO BE INCLUDED IN BASE PRICE

APPENDIX 2 – DOORS AND WINDOWS SCHEDULES

4)	DISCONNECT AND REMOVE WIRED DOOR CONTACTS, BUTTONS, SWITCHES, WIRING AND ASSOCIATED DEVICES TO ALLOW FOR RESTORATION WORK. RE-INSTALL AND TEST AT COMPLETION OF WORK
5)	PATCH AND MAKE GOOD ALL SURFACES BEFORE REFINISHING. FILL EXISTING SCREW HOLES (AT HINGES, PULLS, ETC.) AS REQUIRED AND TAP NEW TO ENSURE SCREWS ARE POSITIVELY FASTENED INTO SUBSTRATES
6)	FOLLOWING RE-FINISHING IN THE SHOP, RE-INSTALL DOORS AND ENSURE THESE ARE FREE TO OPERATE SMOOTHLY AND LATCH POSITIVELY. SHIM, PLANE OR OTHERWISE ADJUST SASHES, JAMBS, SILLS AND HEAD SURFACES TO ENSURE FREE OPERATION
7)	REPLACE ALL SEALANTS AND CAULKING ENTIRELY

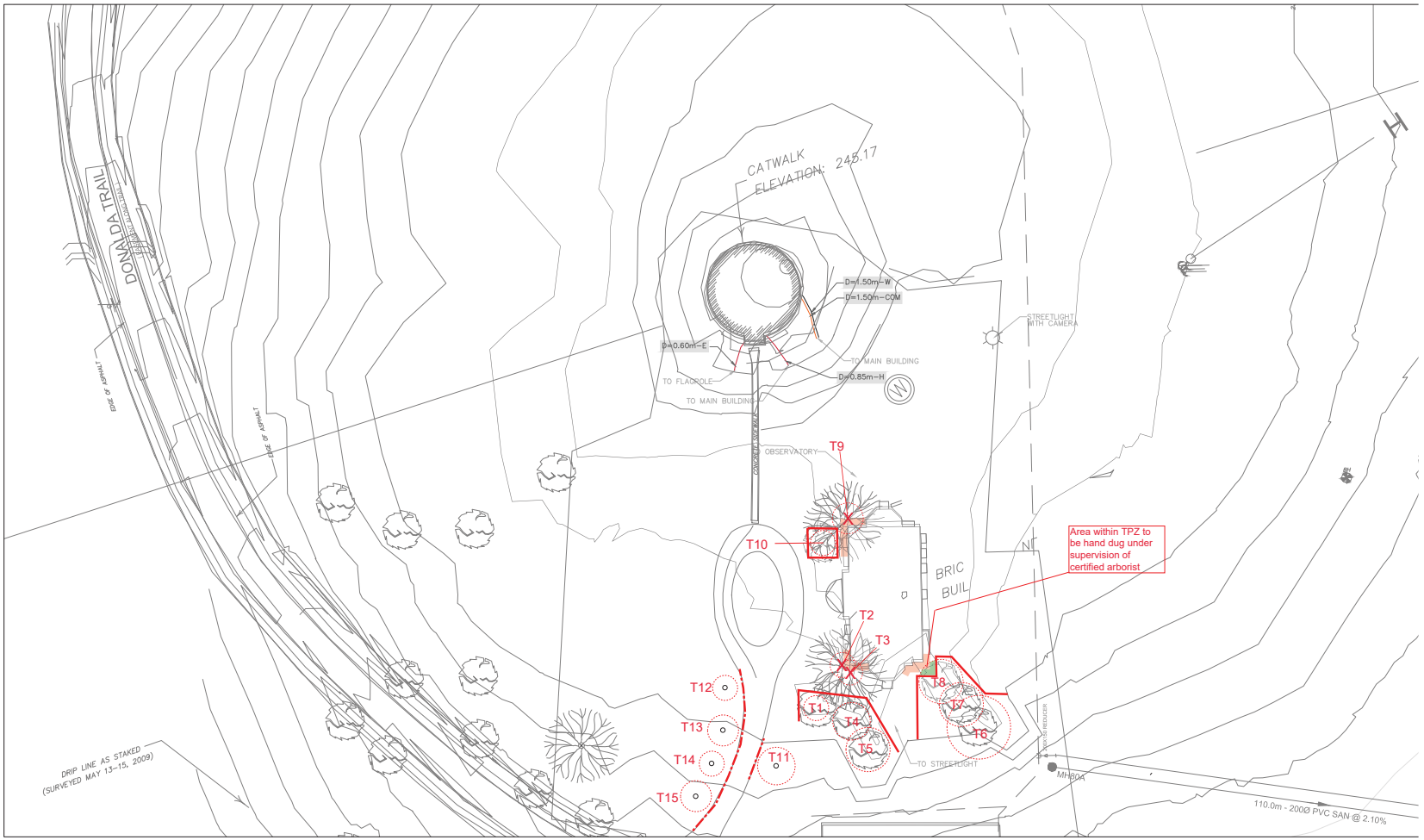
LEGEND

BT	Bronze Threshold
CL	Cylinder Lock
DL	Sliding Door Latch Lock (at top and bottom of inactive door leaf)
DH	Bronze Door Knob c/w Plate, Faceplate, Latch and Strike plate
H	Bronze Hinge
KP	Bronze Kickplate
ML	Mortise Lock
PT	Paint Finish
ST	Steel
TT	Terrazzo Threshold
WC	Wired Door Contact

Door No.	Room Name	Door						Frame			In Wall type	Glaz.	Notes
		Width	Height	Thk	Mat'l	Fin.	Style	Mat'l	Fin.	Style			
100	MAIN ENTRY	2x2'-6"	6'-6"	2 ½"	ST	PT	02 A4.7	ST	PT	04 A4.7	ST		
200	UPPER LEVEL	2'-6"	6'-6"	2 ½"	ST	PT	08 A4.7	ST	PT	11 A4.7	ST		

Door Hardware Schedule

Door	BT		CL	CT	CR	DC	DL	DH	GL	H	KP	ML	TT	WC
100						Yes		Yes		3	2	1	Yes	
108	Yes					Yes		Yes		3	1	1		



GENERAL NOTES:

1. This plan is to be read in conjunction with the arborist report prepared by Ontree and dated July 24, 2019.

2. Ontree provided all information in the legend, as well as the approximate locations of trees T11 – T15. All other information was provided by others.

3. This Tree Preservation Plan is overlaid on the drawing "Key Map".

NO.	DATE
1	JULY 24, 2019

LEGEND:

T1	TREE NUMBER
X	TREE TO BE REMOVED
	EXTENT OF TREE PROTECTION ZONE
	PLYWOOD TREE HOARDING
	PLASTIC TREE HOARDING
	VERTICAL TREE HOARDING

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Jody Steiger
ISA Certified
Arborist #ON-0338,
TRAQ

TITLE:
TREE PRESERVATION PLAN

SITE:
123 HILLSVIEW DRIVE

SCALE:
1:400

SHEET:
TPP-1

TREES ARE NOT TO BE REMOVED, ALTERED OR IMPACTED WITHOUT PRIOR CONSENT FROM PARKS, RECREATION & CULTURE DEPARTMENT

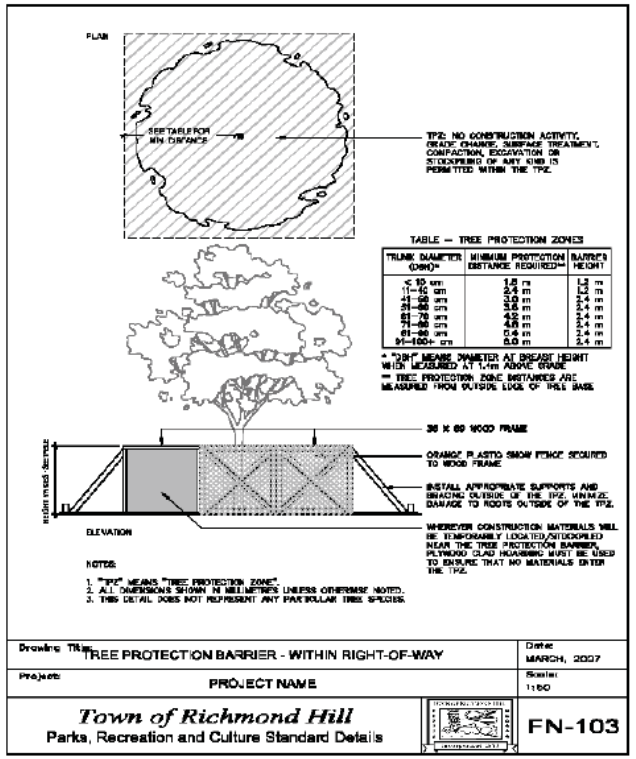
Prior to Start of Construction activities, and In order to comply with the Town of Richmond Hill's Tree protection Policy, the following will be observed:

- Hoarding will be installed prior to the commencement of any site activity.
- Hoarding will remain in an effective condition until all site activities are complete.
- The project supervisor will ensure that anyone related to the construction project and entering the property will be made aware of this tree protection plan, the tree protection zones, and the actions that must not be conducted within the tree protection zones. Furthermore, the project supervisor will ensure that anyone related to the construction project and entering the property is aware that some of the trees are protected by law, and that injuring a protected tree could result in a fine

During Construction Activities:

- Within the TPZ created by the hoarding, no construction activities will take place. Construction activity includes grade changes, surface treatments or excavation of any type.
- The TPZ will remain undisturbed at all times. No fill will ever be placed in this zone. As well, no construction materials, supplies, equipment, waste or debris will be stored within the TPZ.
- No liquids (e.g. concrete sleuth, gas, oil, paint, finish, cleaning fluids), will be disposed of within the TPZ.
- No vehicles, equipment or machinery will be allowed movement or parking within the TPZ. No pedestrians will be allowed movement within the TPZ.
- Open faced cuts outside a TPZ that are consistent with an approved plan and that require root pruning will be supervised by a Certifoed Arborist. An exploratory dig by hand or hydro vac will be conducted prior to commencing with open face cuts outside the TPZ.
- In the event that roots over 7.5 cm diameter are encountered outside the TPZ, such roots will be pruned by, or under the supervision of, Jody Steiger of Ontree.
- Any roots exposed more than 4 hours will be kept watered.
- A certified arborist will be contacted in the event it is necessary to conduct any pruning in any tree. This includes any cutting of any branch for any reason.
- When fill or excavate must be temporarily located near a TPZ, a plywood barrier must be used to ensure no material enters the TPZ.

TREE HOARDING:



GENERAL NOTES:

1. This plan is to be read in conjunction with the arborist report prepared by Ontree and dated July 24, 2019.

2. This plan is also to be read in conjunction with Sheet TPP-1.

1	JULY 24, 2019
NO.	DATE

LEGEND:

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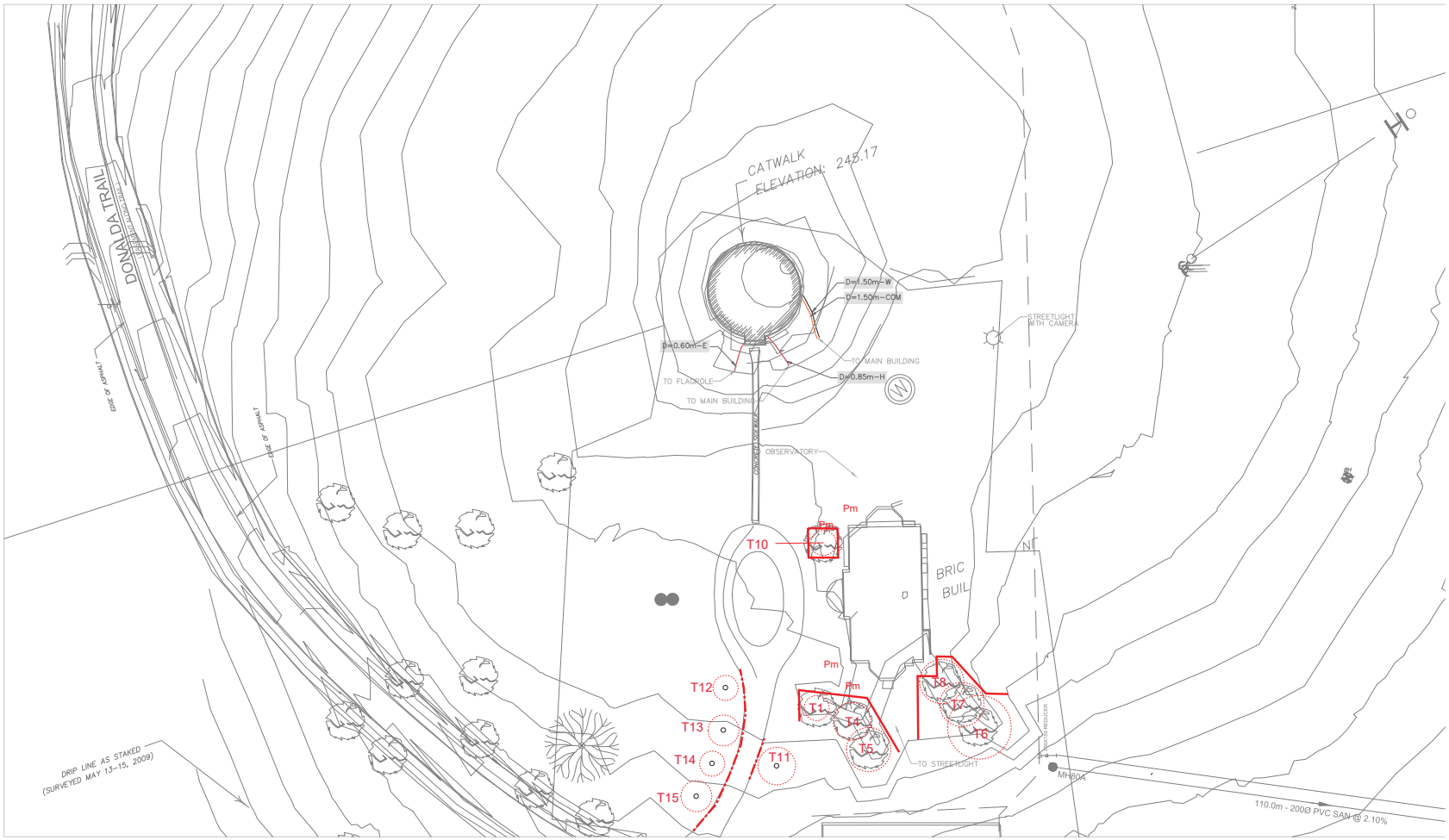
TITLE:	TREE PRESERVATION PLAN
SITE:	123 HILLSVIEW DRIVE
SCALE:	
SHEET:	TPP-2



GENERAL NOTES:

1. This plan is to be read in conjunction with the arborist report prepared by Ontree and dated July 24, 2019, and with the drawing TPP-1.

2. Ontree provided all information in the legend, as well as the approximate locations of trees T11 – T15. All other information was provided by others.

3. This Tree Preservation Plan is overlaid on the drawing "Key Map".

1	JULY 24, 2019
NO.	DATE

REPLACEMENT TREES:

Pm = BLACK SPRUCE

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