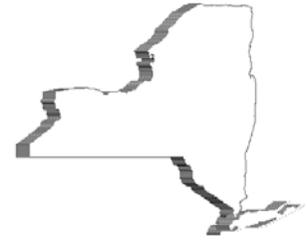




STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242



ADDENDUM NO. 1 TO PROJECT NO. 43436

**CONSTRUCTION WORK, HVAC WORK, ELECTRIC WORK
UPGRADE HEATING SYSTEMS AND
WINDOWS, BUILDING NO. 3
ATTICA CORRECTIONAL FACILITY
EXCHANGE STREET
ATTICA, NEW YORK**

March 20, 2015

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

SPECIFICATION GROUP

1. SECTION 085663 STEEL DETENTION WINDOW: **Add** the accompanying section (pages 085663 -1 through 085663-11) to the Project Manual
2. Page 088100 -2, Subparagraph 2.01 A. 6: **Delete** Noise Reduction Rating in its entirety.

DRAWINGS

3. Addendum Drawing
 - A. **Revise** Window Types as indicated on attached drawing AD1-SKA01, dated Mar. 20, 2015 that accompanies this addendum and forms part of the Contract Documents.
 - B. **Revise** Window Types as indicated on attached drawing AD1-SKA02, dated Mar. 20, 2015 that accompanies this addendum and forms part of the Contract Documents.

END OF ADDENDUM

Margaret F. Larkin
Executive Director
Design and Construction

SECTION 085663

STEEL DETENTION WINDOWS

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Built-In Anchors: Section 055000.
- B. Joint Sealants: Section 079200.
- C. Glass and Glazing: Section 088100.
- D. Security Glass and Glazing: Section 088853.

1.02 MANUFACTURERS

- A. Acceptable Manufacturer:
 - 1. Hope's Windows, Inc., 84 Hopkins Avenue, P.O. Box 580, Jamestown, New York 14702. Phone (716) 665-5124; www.hopeswindows.com.
 - 2. Optimum Window Mfg. Corp., 28 Canal Street, Ellenville, New York 12428, Phone (845) 647-1900; www.optimumwindow.com.

1.03 REFERENCES

- A. Except as shown or specified otherwise, the Work of this Section shall meet the requirements of the following:
 - 1. Steel Window Specifications by the Steel Window Institute (SWI).
 - 2. Structural Welding Code - Steel, AWS D1.1 and Structural Welding Code - Sheet Steel, AWS D1.3, as applicable, by the American Welding Society (AWS Codes).

1.04 WINDOW TYPES AND DESCRIPTIONS

- A. Type 3 Detention Windows: Steel maximum security thermally-broken ventilating detention windows with top pivoted awning-type ventilator. A grille consisting of vertical steel tubes is located behind the ventilator. Vertical grille tubes shall not exceed 5" on centers. The awning-type ventilator is operated by a concealed operating mechanism controlled with a manually removable hand crank. Maximum detention windows shall have a grille of freely-rotating tool-resisting steel bars concealed in the window frame and vertical tubes. A fixed screen is located behind the tubular grille and covering the ventilated area.

1.05 PERFORMANCE REQUIREMENTS

- A. Air Leakage: Meet or exceed ASTM E 283, Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors. Maximum allowable air infiltration and exfiltration 1/2 cfm/lin ft of crack perimeter when subjected to an exterior to interior static test pressure difference of 1.57 psf across window unit.

- B. Water Penetration: Meet or exceed ASTM E 331, Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference. No water leakage for 15 minutes when window is subjected to a rate of flow of 5 gal/sq ft/hr with test pressure difference across window unit of 2.86 psf.
- C. Tool-resisting steel (when specified), meets or exceeds ASTM A627-03, Grade 4, submit test reports from a qualified independent testing laboratory verifying that the window manufacturer's tool-resisting steel is in conformance with ASTM A627.
- D. Impact Test, meets or exceeds ASTM F1592-01 "Standard Test Methods for Detention Hollow Metal Vision Systems"
 - a. Impact Blows - Must withstand a minimum of 600 blows at each impact location (1200 total blows per frame without rail bar, 1800 total blows per frame with rail bar)
 - b. Glazing Test – The glazing and panels shall remain in place. No damage to the extent that forcible entry can be achieved.
 - c. Frame Test - No welded joints or the entire frame joint shall completely separate.
 - d. The wall anchoring shall retain the frame in place throughout the test procedure to the extent that forcible entry cannot be achieved.

1.06 SUBMITTALS

- A. Submittals related to this specification section shall be forwarded from the Contractor and/or his agent(s) as complete submittal packages. All information required from this section, including Installer's Qualifications, Shop Drawings, Rough Opening Dimensions, Product Data, Samples, and Quality Control submittals shall be submitted as one complete package. Partial or incomplete submittal packages will be rejected.
- B. Shop Drawings: Show window types, quantities, fabrication details, and connections to adjacent construction, including existing jamb, head, and sill conditions, and all associated dimensions. Include documentation of rough in field dimensions obtained for each window location. Include details of screens, hardware, insulation, and glazing details.
- C. Rough Opening Dimensions: Provide a completed 'Rough Opening Dimensioning Verification Chart' documenting all windows (chart attached at the end of this specification). This informational submittal will be reviewed and returned as 'Acknowledged' only as the Contractor is solely responsible for fully verifying and coordinating this data.
- D. Product Data: Catalog sheets, specifications, and installation instructions.
- E. Samples:
 - 1. Corner sample of frame, ventilator, detention members, and screen showing materials and construction of each window type.
 - 2. Hardware: Each item required.

3. Color Samples for Factory Prefinished Windows: Manufacturer's color for the specified finish listed in section 2.01, H. of this specification.
- F. Quality Control Submittals:
1. Manufacturer's Qualifications Data:
 - a. Names and addresses of 5 similar projects that have been in operation for not less than 3 years producing custom steel windows.
 - b. Manufacturer's listed in section 1.02 are exempt from this submittal requirement.
 2. Installers Qualifications Data:
 - a. Name of each person who will be performing the Work and their employer's name, business address and telephone number.
 - b. Names and addresses of 3 similar projects that each person has worked on during the past 3 years.
 3. Test Reports:
 - a. Certified air leakage and water penetration test reports for each type of window unit required.
 - b. Tool-Resisting Steel: Certified test reports verifying tool resisting steel conforms to ASTM A 627-03, as applicable.
- G. Contract Closeout Submittals:
1. Operation and Maintenance Data: Two copies of owner's manual, including instructions for cleaning windows and touching-up finish.

1.07 QUALITY ASSURANCE

- A. Detention Windows Manufacturer's Qualifications: The manufacturer shall be regularly engaged in the production of custom steel windows, shall have furnished steel windows for 5 projects of similar scale to that of this project, and that have been in operation for not less than 3 years. Window manufacturer shall be subject to the approval of the Director.
- B. Installers Qualifications: The persons installing the windows and their Supervisor shall be personally experienced in steel window work and shall have been regularly employed by a company that installs steel detention windows as a primary source of work for a minimum of 3 years.
- C. Testing Agency:
1. Air infiltration and water penetration tests shall be performed by a qualified independent testing laboratory.
 2. Tool-resisting steel certification tests shall be performed by a qualified independent testing laboratory.
- D. Field Dimensioning and Existing Conditions Verification:
1. Field verify all existing window opening conditions, including all rough opening dimensions. Document dimensions and confirm how variations in rough opening dimensions will be incorporated into selection of final window sizes.
 2. Submit summary of findings, including any conditions which deviate with Contract Drawings.

- E. Project Benchmark Installation:
1. Prior to installation of windows, fully remove one existing window unit at each location where a new window type is scheduled to be provided. This shall include removal of the existing window unit(s), including removals of any hazardous materials, structural items, or other associated components required in conjunction with the Work. The existing window selected for removal must not create a security breach and the locations selected shall be approved by the Director's Representative prior to removal of any window or associated component.
 2. Obtain digital photographs to document the existing window opening adequate to fully document the interior and exterior conditions of the remaining construction. Provide the digital photos to, and in an electronic format acceptable by, the Director's Representative.
 3. Weather tightness, energy efficiency, and security shall be maintained after the removal of the existing window removal.
 4. After approval by the Director's Representative, install a single window unit of each window type scheduled for the project, in its/their final location(s). Install window(s) with all materials, fasteners, welds, joints, interior and exterior sealants, and all other accessories required for the Work.
 5. Do not start the remainder of the window installation until the Director's Representative has approved each benchmark window installation.
 6. Approved windows will be the standard of workmanship required for all windows installed in like conditions. Failure to maintain this standard will be cause for rejection of the Work.
 7. Maintain approved windows until all Work has been installed and approved.

1.08 DELIVERY, STORAGE, AND HANDLING

- A. Deliver windows in sturdy, protective crates or containers.
- B. Store and handle windows in a manner that will not cause damage to the finish.

1.09 MAINTENANCE MATERIALS

- A. Touch-up Kit: For every 20 windows installed (and fraction thereof), furnish detention window manufacturer's factory finish touch-up kit for the factory finish on windows. Store touch-up kits at the site where directed.
 1. Label kits to identify locations used.
- B. Security Fastener Tools: Furnish two (2) sets of tools for installing, adjusting, and/or removing security fasteners.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Guard Frames, Muntins, Ventilator Frames, Ventilator Jambs, and Sill Rails composed of hot dipped galvanized hot rolled steel sections. Operable vent portion of frames shall be electro-galvanized per ASTM B633-11.
- B. Perimeter head, jamb, sills and muntins shall be hot-rolled steel sections, with hot dipped galvanized zinc coating in accordance with ASTM A123. Perimeter head, jamb, and sill shall weigh not less than 2 pounds per lineal foot and muntins shall weigh not less than 1.85 pounds per lineal foot. Frame members shall have profiles and dimensions as indicated on drawings.
- C. Glazing Beads: Formed steel glazing beads, screw-on type.
 - 1. Drill holes for screws before finishing. Space holes one inch from ends and 6 inches on center.
 - 2. Finish: Match window frame color specified below. D. Weatherstripping: Q-Lon Weatherseal (TM) by Schlegel.
- E. Hardware:
 - 1. Operating Arms: Solid bronze
 - 2. Pivots: Steel pivot leafs with brass pins.
 - 3. Friction and Limit Devices: Steel pivot or butt type hinges for interior bottom pivoted and exterior top hinged ventilators, with steel pivot side arms with bronze friction shoes to limit ventilator opening to 45 degrees.
 - 4. Exposed Hardware: Solid bronze, tumbled and oxidized to match US20 finish, and lacquered.
 - 5. Remote Window Operators: Manual controlled surface mounted window operators designed for ventilators indicated.
 - a. Controls: Crank operated rotary control box delivering forward and backward motion to a steel flexible cable traveling through surface mounted steel conduit.
 - b. Crank Handle: Removable.
- F. Anchors: Perimeter anchors shall be 1-1/4 inch x 1-1/4 inch hot-rolled steel angles or formed plate, both 3/16 inch thick.
- G. Angular Safety Screen:
 - 1. Screen frame: Angle shape formed of A60 hot-dip process zinc coating sheet steel not less than #12 gauge.
 - 2. Screen Cloth Clamping Plate: Formed of sheet steel not less than #12 gauge.
 - 3. Screen Cloth:
 - a. 028 (12x12) diameter stainless steel wire cloth mesh. Double crimped in retainer frame. Screw threads protruding through the retainer frame shall be cut flush to the frame. (No protrusion of threads will be permitted. Option to provide acorn nut with lock-tite over screw ends.)
 - b. Finish: to match window

4. Wickets: Horizontal sliding unit made from screen cloth and perimeter frame matching requirements specified above.
- H. Paint Finish:
1. Pretreatment - Zinc phosphate (bonderized) treated in a multi-stage process or approved equal.
 2. Primer – E-COAT, PPG powercron 8000 or approved equal
 3. Finish Coat - PPG Polyurethane or approved equal.
 - a. Custom Color: Medium Bronze MP36366 (Hopes/Matthews).
- I. Fasteners: Stainless steel, unless otherwise specified.
1. Exposed Fasteners: Plated Torx tamper-resistant truss head for exposed screws and bolts, finished to match windows.
- J. Sealing Mastic/Cap Bead: Non-staining sealant material recommended by window manufacturer.
- K. Open-Cell Polyurethane Foam Insulation: ASTM C 1029, Type II, with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, per ASTM E 84, compatible with adjacent rigid insulation.
- L. Cold Galvanizing Compound: Single component compound giving 93 percent pure zinc in the dried film, and meeting the requirements of SSPC-Paint 20 (rev. 2002).
- M. Tool-Resisting Steel: Homogeneous tool-resisting steel.
1. Flat Bars and Shapes: ASTM A627-03.

2.02 FABRICATION

- A. Fabricate windows in accordance with approved shop drawings.
- B. All formed frame members and muntins shall have detailed profile shapes and dimensions as indicated on drawings.
- C. Ventilator Sections: Hot rolled steel with integral flanges providing parallel double contact surfaces around perimeter of each ventilator.
1. Fabricate ventilator sections with a continuous integral dovetail groove located on the interior contact surface for the reception of weatherstripping.
 2. Aluminum bedding channels at ventilators are not acceptable.
- D. Angular Safety Screen:
1. Screens shall be fixed, permanently fastened, and fabricated not to interfere with ventilator operation.
 2. Provide Angular Safety Screens at all ventilators unless specifically indicated otherwise.
 3. Angle frame sections shall be solidly welded at corners and all face and contact surfaces dressed smooth.
 4. Double fold and hem the screen cloth at the frame edge and securely attach with #10 Torx Taptite truss head plated steel tamper resistant screws, spaced 4 inches on centers, 1 inch from ends, which penetrate the angle frame, wire cloth and clamp plate.

5. Screen shall be field attached with #10 screws, spaced 9 inches on centers and 1 inch from ends.
 6. Wickets: Unit shall be provided with interior and exterior perimeter steel flanges adequately sized to mechanically fasten screen frame flange to window frame with Torx tamper-resistant screws. Screen cloth shall be tack welded and sandwiched between flanges. Unit shall be non-binding and slide with minimal resistance. Unit shall utilize ¼" diameter, stainless steel rod guide tracks.
- E. Corners of frames, ventilators, and angular safety screens shall be mitered or coped. Exposed and contact surfaces shall be finished smooth and flush with adjacent surfaces.
1. Corner joints of frames and ventilators exposed to the weather shall be continuously welded and ground smooth on the exposed surface and spot welded on the concealed surface.
 2. Corner joints of angular safety screens shall be continuously welded on the concealed surface.
- F. Glazing: Windows shall be factory glazed by window manufacturer. Fabricate windows for outside glazing with glazing beads. Size glazing beads to match glazing rebates specified and to suit glass types specified.
- G. Weatherstripping: Continuous weatherstripping inserted in an integral dovetail groove located in the same plane in the interior contact surface of ventilator sections around the entire perimeter of ventilator. Weatherstripping that relies on adhesive for application, or screw applied weatherstripping will not be acceptable.
- H. Tolerance for Window Size (height and width) Dimensions: + 1/16 inch.
- I. Mullions: Fabricate to the design and profile shown on the Drawings. Finish mullions and covers to match windows.
- J. Muntin to muntin intersections shall be mechanically interlocked to obtain maximum strength without bending or distorting the sections. Guard frame and muntin intersections shall have 1/16 inch joints provided across inside and outside faces, which after assembly shall be deep welded solid. Welds may project not more than 1/16 inch, except where ventilators and screens are attached. Space vertical muntins not more than 6-3/8 inches on center and horizontal muntins not more than 9-3/8 inches on center.
- K. Anchor Accessories: Fabricate to shape and size, and furnish in quantity, as required to securely install and connect the Work of this Section to the construction shown.
- L. Hardware: Unless otherwise shown or specified, window manufacturer's standard hardware series produced for use with the particular type of window, location, and screen condition.

2.03 SHOP FINISHING

- A. All materials shall be either chemically or mechanically cleaned to remove mill scale, dirt, oil and other foreign matter. Provide one of the two approved shop finish systems listed below.

- B. Shop Finish System: E-COAT System.
 - 1. After fabrication; windows, covers, plates, screen frames and glazing beads shall be bonderized in a 13 stage E-COAT process, as a preparation for receiving paint.
 - 2. After pretreatment, a coat of PPG epoxy primer shall be electro-statically applied. (Type of primer depends on type of paint finish selected.)
 - 3. After prime coat, a top coat of PPG polyurethane shall be applied.
 - 4. All concealed steel members and perimeter anchors shall be protected by electro-galvanizing or zinc phosphate and prime painted.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions: Examine surfaces to receive detention windows for defects that will adversely affect the execution and quality of the Work. Do not proceed until unsatisfactory conditions are corrected.
 - 1. Check locations and conditions of required built-in anchors.
 - 2. Openings shall conform with details and dimensions shown on the approved shop drawings.
 - 3. Do not proceed until unsatisfactory conditions are corrected.

3.02 INSTALLATION

- A. Install the Work of this Section in accordance with the manufacturer's printed instructions, except as shown or specified otherwise.
 - 1. Install Angular Safety Screens at all ventilators unless specifically indicated otherwise.
- B. Anchor window units securely in place, plumb, level, aligned, without warp.
 - 1. Weld window weld plates to windows and built-in anchors with one inch long welds spaced 9 inches on center maximum.
 - 2. Weld channel surrounds to interior side of frames with one inch long welds spaced 9 inches on center maximum.
- C. Seal metal to metal joints, screw heads, and unneeded fastener holes with sealing mastic.
- D. Fill all voids around head, jambs, and sill with spray foam insulation or as indicated on drawings. Insulation shall not interfere with operable hardware.
- E. Locate remote window operators in locations indicated.

3.03 ADJUSTING

- A. Touch-up welded and abraded surfaces with a coating of cold galvanizing compound and multiple finish coats to match color and sheen of exposed factory applied finish.
- B. Adjust ventilators and hardware for smooth operation and weathertight closure. Lubricate hardware and other moving parts.

3.04 CLEANING

- A. Clean window units promptly after completion of installation.

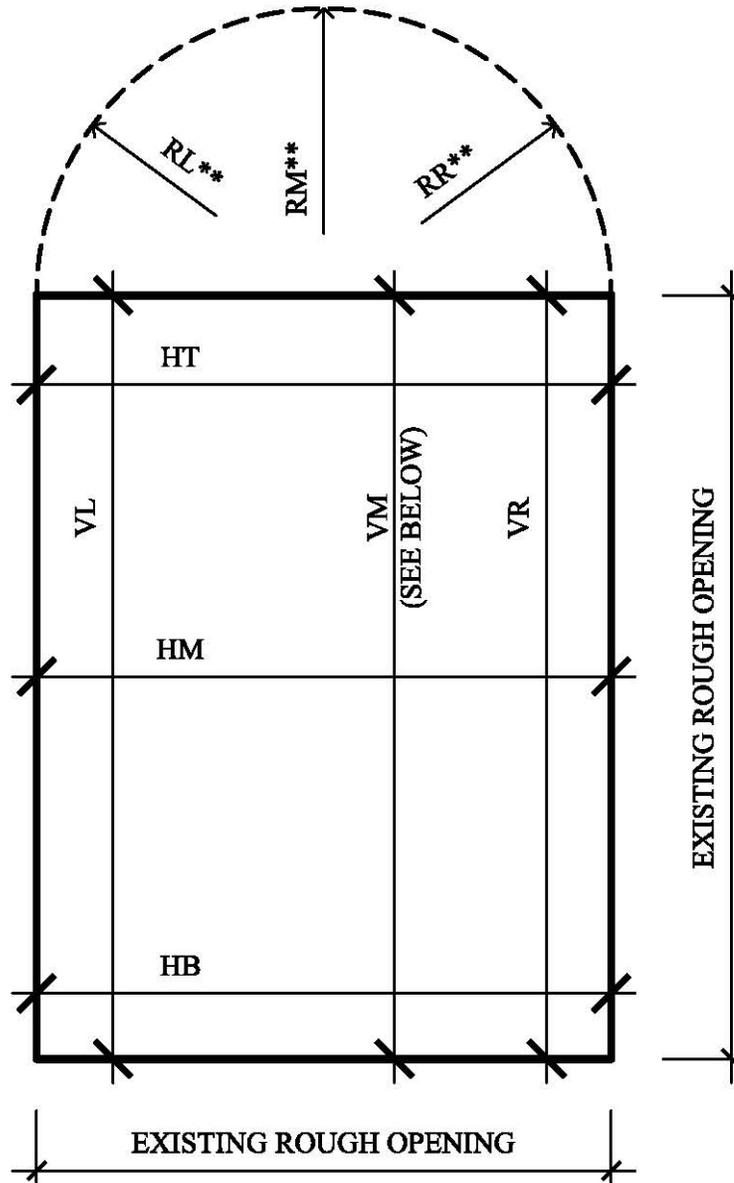
3.05 PROTECTION

- A. Protect installed windows and finish as necessary from adjacent work and cleaning operations.

FILL IN CHART FOLLOWS

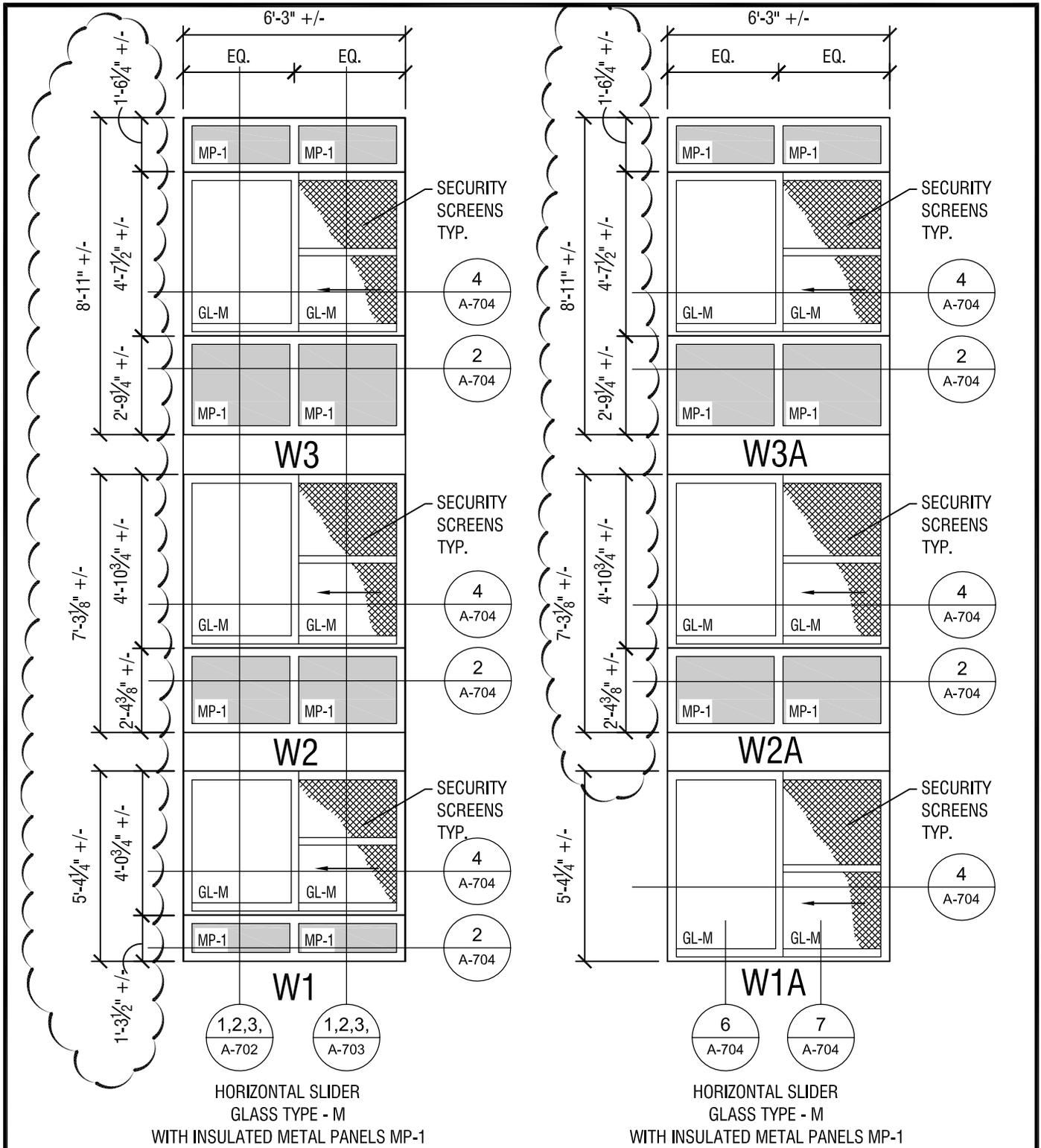
**ROUGH OPENING DIMENSIONING GUIDE – EXISTING WINDOW
ELEVATION**

**VIEW
LOOKING
FROM
INTERIOR**



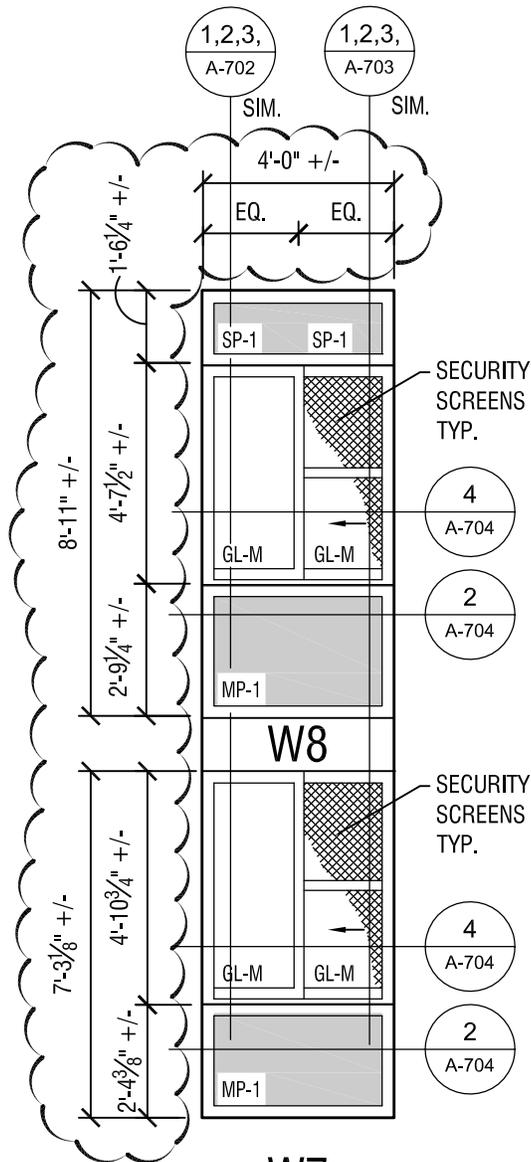
HT: HORIZONTAL TOP	VL: VERTICAL LEFT	RL: RADIUS LEFT**
HM: HORIZONTAL MIDDLE	VM: VERTICAL MIDDLE*	RM: RADIUS MIDDLE**
HB: HORIZONTAL BOTTOM	VR: VERTICAL RIGHT	RR: RADIUS RIGHT**

* VERTICAL MIDDLE DIMENSION REQUIRED WHERE WINDOW DIMENSION EXCEEDS 6'-0"



ADDENDUM NO. 1	REFERENCE SHEET: A-701
SHEET TITLE: WINDOW TYPE DIMENSIONAL REVISIONS	
PROJECT: UPGRADE HEATING SYSTEMS AND WINDOWS, BLDG NO. 3 ATTICA CORRECTIONAL FACILITY	
WARNING: THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.	DWG NO: AD1-SKA01

CONTRACT: CONSTRUCTION
PROJ. NO: 43436-C
DATE: MAR. 20, 2015
DRAWN: CJD
APPROVED: --



W7
 HORIZONTAL SLIDER
 GLASS TYPE - M
 WITH INSULATED METAL
 PANELS MP-1

		ADDENDUM NO. 1	REFERENCE SHEET: A-701
		SHEET TITLE: WINDOW TYPE DIMENSIONAL REVISIONS	
		PROJECT: UPGRADE HEATING SYSTEMS AND WINDOWS, BLDG NO. 3 ATTICA CORRECTIONAL FACILITY	
CONTRACT: CONSTRUCTION PROJ. NO: 43436-C DATE: MAR. 20, 2015 DRAWN: CJD APPROVED:--		<small>WARNING: THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.</small>	DWG NO: AD1-SKA02