



ADDENDUM NO. 1 TO PROJECT NO. 44931

**CONSTRUCTION WORK, PLUMBING WORK, ELECTRICAL WORK
UPGRADE PERIMETER SECURITY TOWERS
ATTICA CORRECTIONAL FACILITY
EXCHANGE STREET
ATTICA, NY**

March 3, 2016

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.

**C CONTRACT:
SPECIFICATIONS**

1. Page 000110-3: **DIVISION 08 – OPENINGS**, add the following after 085123 Steel Windows and Doors:
“085663 Steel Detention Windows”
2. Immediately after Page 085123-8: Insert attached Specification Section **085663 Steel Detention Windows** in its entirety.
3. Page 085123-5: Change Paragraph 2.01 F to read:
“F. Simulated Divided Lite Muntins:
 1. Hot-rolled steel muntins solidly welded to perimeter framing and dressed smooth. Interior and exterior muntins as selected by Director’s Representative from manufacturer’s standard profiles.”
4. Page 085123-6: Delete the last three sentences of Paragraph 2.02 B.
5. Page 088100-3: Change Paragraph 2.01 A, Item 1 a. to read:
“a. Design Wind Pressures: 76 mph (90 mph, 3-second wind gust).
6. Page 088100-4: Change Paragraph 2.01 B, Items 1 and 2 to read:
“1. Exterior Glass (minimum): 1/8 inch float glass, .060” Polyvinyl Butyral (PVB) inner layer, 1/8 inch float glass with low-e coating.”
2. Interior Glass (minimum): 1/8” float glass, .060” PVB inner layer, 1/8 inch float glass.”
7. Page 088100-4, Article 2.01, Paragraph B: Add the following as Item 5:
“5. Insulating Glass Unit to meet the following properties:
 - a. $SHGC \leq 0.40$.
 - b. $VLT \geq 50\%$.”

**C CONTRACT:
DRAWINGS**

1. DRAWING SHEET A-502
 - a. Revised Detail 2 / A-502 is provided on SK-01 attached. Revised detail depicts horizontal grid tee muntin to be provided as shown on Revised Details 9 and 10 / A-601.

2. DRAWING SHEET A-504, Roof Removal Details 1, 3, 5, 7, 9, 11, 13, & 15
 - a. Edit the note that reads, "REMOVE EXISTING ROOFING SYSTEM DOWN TO CONCRETE DECK." to read:

"REMOVE EXISTING MEMBRANE ROOFING SYSTEM AND SLOPED, CEMENTITIOUS MUD BED DOWN TO EXISTING CONCRETE DECK."

3. DRAWING SHEET A-601
 - a. Revised Details 9 & 10 / A-601 are provided on SK-A02 attached. Revised details indicate locations of horizontal grid steel tee muntins.

4. DRAWING SHEET A-602
 - a. On all window schedules, revise column heading "QUANTITY" to read "PER TOWER QUANTITY".

5. DRAWING SHEET A-701
 - a. Add the following note to Detail 4 / A-701:

"THIS DETAIL SHOWS THE GENERAL CONCEPT TO PROVIDE A CONNECTION BETWEEN THE TEMPORARY TOWER AND THE EXISTING STEEL CATWALK. THE INTENTION IS TO UTILIZE STANDARD SCAFFOLDING SYSTEM COMPONENTS TO CONSTRUCT THE ELEVATED WALKWAY. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS FOR SCAFFOLD, ANCHORAGE, AND BRACING FOR INFORMATION ONLY. CALCULATIONS MUST BE STAMPED BY A NEW YORK STATE PROFESSIONAL ENGINEER HIRED BY THE CONTRACTOR."

**E CONTRACT:
DRAWINGS**

1. DRAWING SHEET E-119
 - a. Revise Key Note #3 to read as follows:

"CONNECT LUMINAIRES IN CUPOLA TO PHOTOSENSOR AND STOP / START BUTTON FOR CONTROL. REFER TO DETAILS FOR MORE INFORMATION."

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 Manufacturers:
 - 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 4 Detention Windows: Fixed steel maximum or medium security detention windows with horizontal and vertical grid steel tee muntins without detention screens.

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. For Type 4 Windows, tool-resisting steel shall meet or exceed 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 the requirement above.

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, and Sill Rails composed of hot dipped galvanized hot rolled steel sections.
- 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. 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.
- E. 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).
- F. Fasteners: Stainless steel, unless otherwise specified.
 - 1. Exposed Fasteners: Plated Torx tamper-resistant truss head for exposed screws and bolts, finished to match windows.
- G. Sealing Mastic/Cap Bead: Non-staining sealant material recommended by window manufacturer.
- H. 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.
- I. 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).
- J. Tool-Resisting Steel: Homogeneous tool-resisting steel.
 - 1. Flat Bars and Shapes: ASTM A627-03 Grade 4.

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. Corners of frames 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.
- D. 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.
- E. Tolerance for Window Size (height and width) Dimensions: + 1/16 inch.

- F. Steel tee 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. Provide steel grid tee muntins as shown on the drawings.
- G. Simulated Divided Lite Muntins:
 - 1. Hot-rolled steel muntins solidly welded to perimeter framing and dressed smooth. Interior and exterior muntins as selected by Director's Representative from manufacturer's standard profiles.
- H. 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.
- I. 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. Provide one of the following:
 - 1. Shop Finish System: E-COAT System:
 - a. After fabrication; windows, doors, covers, plates, screen frames and glazing beads shall be bonderized in a 13 stage E-COAT process, as a preparation for receiving paint.
 - b. After pretreatment, a coat of epoxy primer shall be electro-statically applied. (Type of primer depends on type of paint finish selected.)
 - c. After prime coat, a top coat of polyurethane shall be applied.
 - d. All concealed steel members and perimeter anchors shall be protected by electro-galvanizing or zinc phosphate and prime painted.
 - 2. Shop Finish System: Bonderized and Polyester Powder Coat: Total dry film thickness to be a minimum of 3.0 mils.
 - a. Bonderizing: After shot blasting; all materials to be bonderized or pretreated by a four stage process as a preparation for receiving paint.
 - b. Prime Paint: After bonderizing, a coat of zinc rich thermosetting epoxy prime paint shall be applied and oven baked.
 - 1) Dry film thickness of primer to be a minimum of 1.5 mils.
 - c. Finish Paint: After prime coat, a baked on polyester powder coat finish system shall be applied.

- C. Finish Color: As selected by the Director's Representative from manufacturers full range of standard colors.

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.

3.02 INSTALLATION

- A. Install the Work of this Section in accordance with the manufacturer's printed instructions, except as shown or specified 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.

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.

3.04 CLEANING

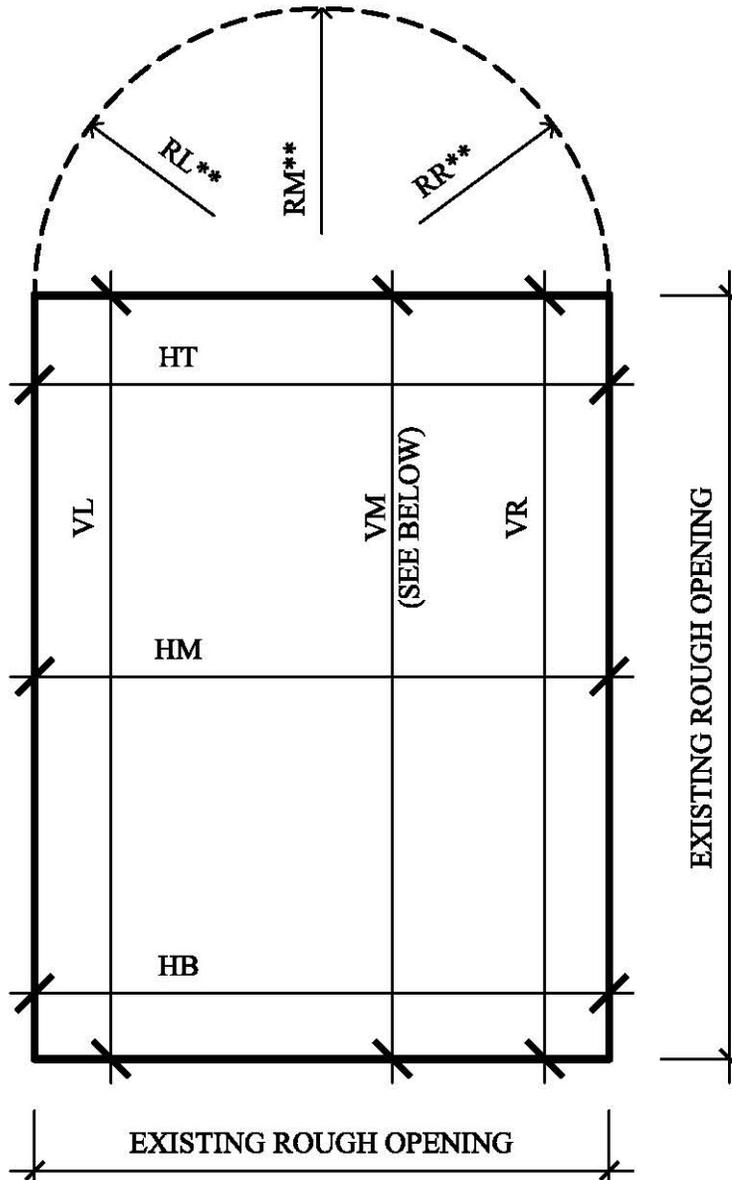
- A. Clean window units promptly after completion of installation.

3.05 PROTECTION

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

END OF SECTION

**ROUGH OPENING DIMENSIONING GUIDE – EXISTING WINDOW ELEVATION
VIEW LOOKING FROM INTERIOR**



HT: HORIZONTAL

HM: HORIZONTAL
MIDDLE

HB: HORIZONTAL
BOTTOM

VM: VERTICAL
MIDDLE*

VR: VERTICAL RIGHT

RM: RADIUS MIDDLE**

RR: RADIUS RIGHT**

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

** RADII DIMENSION(S) REQUIRED WHERE WINDOW INCLUDES CIRCULAR OR ROUNDED FRAMES



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CONSTRUCTION

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ATTICA CORRECTIONAL FACILITY

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DEPARTMENT OF CORRECTIONS
AND COMMUNITY SUPERVISION

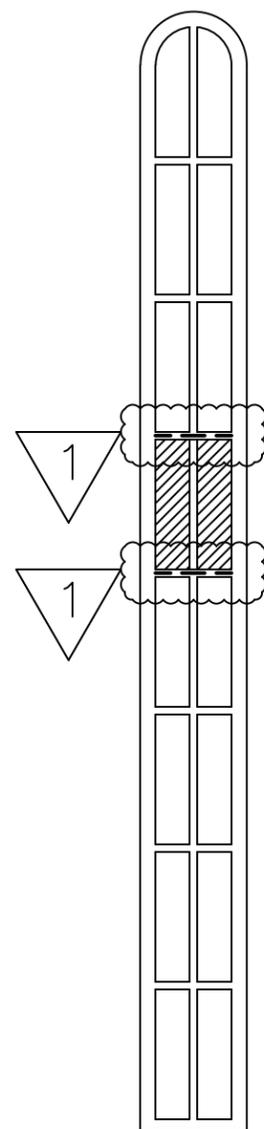
MARK	DATE	DESCRIPTION
▽	03/01/16	ADDENDUM 01

PROJECT NUMBER:	44931-C
DESIGNED BY:	TCO / TJR
DRAWN BY:	TJR
CHECKED BY:	TCO / TJR
APPROVED BY:	TCO

SHEET TITLE
**REVISED WINDOW
TYPE DETAILS
9 & 10 / A-601**

SK-02

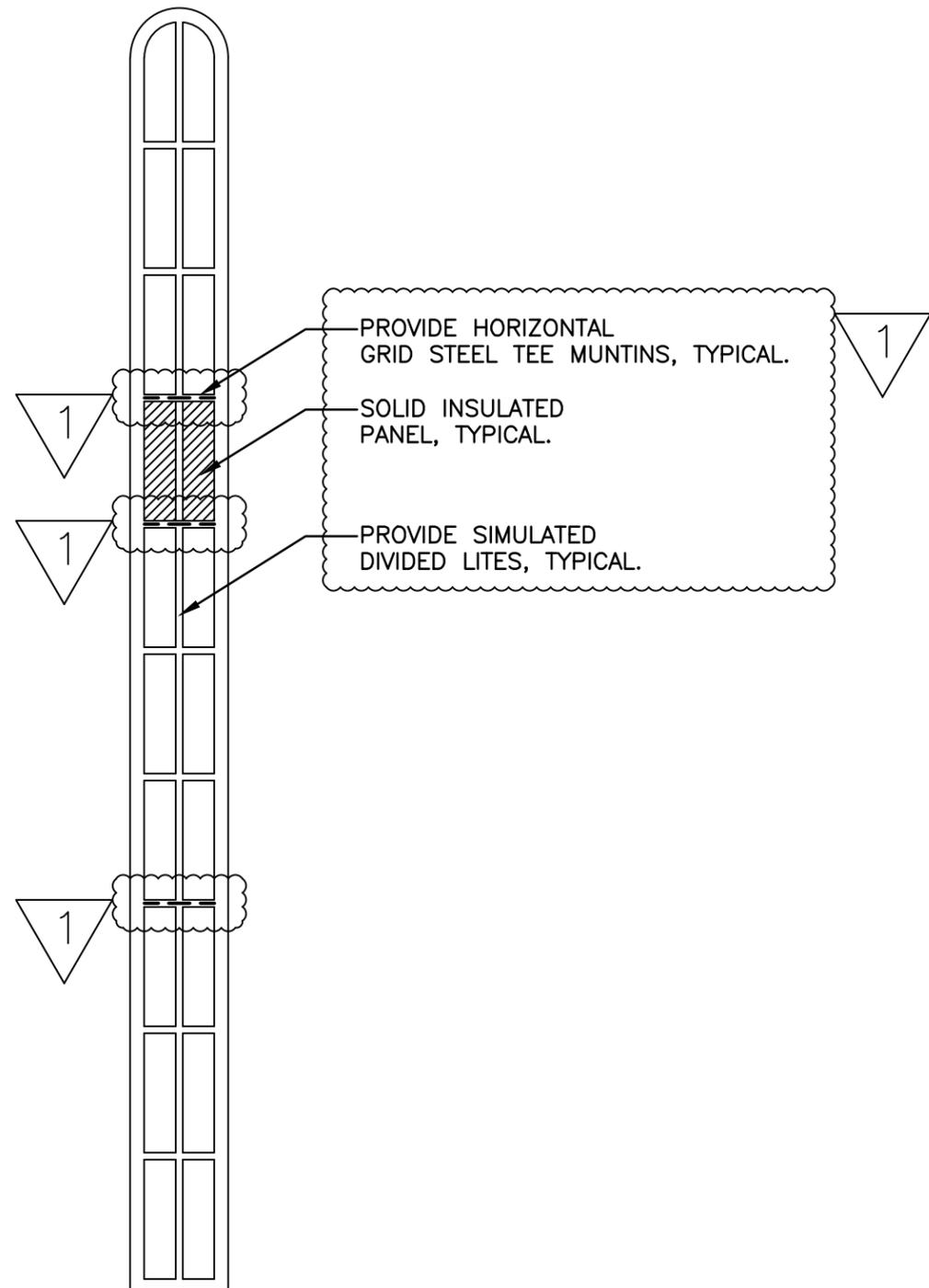
SHEET 2 OF 2



WINDOW
TYPE - W8

SCALE: 1/2" = 1'-0"

10



WINDOW
TYPE - W7

SCALE: 1/2" = 1'-0"

9

17x11 PLOT SHEET