

# DESIGN & CONSTRUCTION GROUP THE GOVERNOR NELSON A. ROCKEFELLER EMPIRE STATE PLAZA ALBANY, NY 12242

# ADDENDUM NO. 1 TO PROJECT NO. Q1894

# CONSTRUCTION, HVAC, PLUMBING AND ELECTRICAL WORK RENOVATE 70 BEDROOM UNITS, HARDEN WALLS FINGER LAKES RESIDENTIAL CENTER 250 AUBURN ROAD LANSING, NY

October 1, 2025

**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.

# CONSTRUCTION WORK SPECIFICATIONS

1. SECTION 081102 STEEL DOORS AND FRAMES: Discard the Section bound in the Project Manual and substitute the accompanying Section (pages 081102 – 1 thru 081102 – 9) noted "Addendum No. 1".

# **END OF ADDENDUM**

Brady Sherlock, P.E. Director, Division of Design Design & Construction

# **SECTION 081102**

# STEEL DOORS AND FRAMES

# PART 1 GENERAL

# 1.01 SECTION INCLUDES

A. Steel doors and frames, including borrowed lites; sidelights; vision lites; glass moldings and stops; louvers; panels; hardware reinforcements; and accessories as shown in the contract documents.

### 1.02 REFERENCES

- A. ANSI- American National Standard Institute
  - 1. A240: Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
  - 2. A250.4-2001 Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors and Hardware Reinforcing's.
- B. NAAMM National Association of Architectural Metal Manufacturers
  - HMMA 830-1997 Hardware Preparations and Locations for Hollow Metal Doors and Frames.
  - 2. HMMA 831-1997 Recommended Hardware Locations for Hollow Metal
  - 3. Doors and Frames.
  - 4. HMMA 840-1999 Guide Specification for Installation and Storage of Hollow Metal Doors and Frames.
  - 5. HMMA 861-2000 Guide Specification for Commercial Hollow Metal Doors and Frames.
- C. NFPA National Fire Protection Association
  - 1. NFPA 80- 2010 Standard for Fire Doors and other Opening Protectives.

# 1.03 **DEFINITIONS**

- A. Steel Door and Frame Manufacturer: Manufacturer of steel doors and frames regularly engaged in the manufacturing of such products for use in commercial, institutional, educational, and other similar applications.
- B. Company Field Advisor(s): An employee of the steel door and frame manufacturer who is certified in writing by the manufacturer to be technically qualified in design, installation, and servicing of products.
- C. Steel Door and Frame Distributor: Distribution Company who regularly engages in the distribution of steel doors and frames of the manufacturer whose doors and frames are submitted for this project.
- D. Certified Installation Supervisor: Designated supervisor/installer, who has a minimum three years of experience in steel frame and door installation and is certified in writing by the steel door and frame manufacturer as qualified and responsible to ensure approved steel frames and doors are installed, adjusted, and operate properly.

### 1.04 SUBMITTALS

- A. Waiver of Submittals: "Waiver of Certain Submittal Requirements" in Section 01330 does not apply to this Section.
- B. Submittals Packages
  - 1. Door and Frame Schedule and Shop Drawings Package: Submit as a complete package. Incomplete packages will be returned unreviewed.
    - a. Quality Assurance Submittal
      - 1) Certification of Compliance as described in the Quality Assurance Article.
      - 2) Company Field Advisor's Qualification Data
        - Name of Company Field Advisor and Employer's name, business address and telephone number and e-mail address.
        - b) Names and addresses of 3 similar projects
          Company Field Advisor has worked on during the past three years.
        - c) Written certification on steel door and frame manufacturer's letterhead that Company Field advisor is technically qualified in design, installation, and servicing of the products furnished for this Project.
      - 3) Certified Supervisor's and Installer's Qualification Data
        - a) Name of Supervisor and each Installer performing Work, and Employer's name, business address and telephone number.
        - b) Names and addresses of 3 similar projects Supervisor and each Installer has worked on during the past three years.
        - c) Written certification on steel door and frame manufacturer's letterhead that Supervisor/Installer is technically qualified to ensure approved steel frames and doors are installed, adjusted, and operate properly.
    - b. Door and Frame Schedule:
      - 1) Include a Cover Sheet that lists:
        - a) OGS project name, project number, and project address.
        - b) Manufacturer's name, address, and telephone number.
        - c) Distributor's name, address, and telephone number.
        - d) Shop drawing preparer's name, telephone number and e-mail address.
        - e) Submission date.
      - 2) List by openings:
        - a) Door and Frame number and location by building and room name. Use the same reference numbers for openings and as those shown on Contract Drawings.
        - b) Door width, height, thickness, type, gage, and options
        - c) Frame type, width, height, jamb depth, gage, anchor type and options.
        - d) Door and frame elevations; head and jamb profiles and details; welding requirements; and reinforcements.
        - e) Fire Rating.
        - f) Glass type.
        - g) Undercut.
        - h) Electric preparations, if any.

- i) Hardware Set.
- j) Show dimensioned elevations; construction details of each door including vertical and horizontal edge details; and frame details for each type, including dimensions profiles; locations for finish hardware, including cutouts and reinforcements; gage of reinforcements; details of connections; anchors and accessories; and details of conduit and preparations for electrified door hardware and controls.
- 3) Product Data: Manufacturer's catalog sheets, specifications, and detailed installation instructions. Highlight products and options pertaining to this Project. Cross out information irrelevant to this Project.
- 4) Manufacturer's Written Certification of Compliance that their products conform to the requirements of the references named in the References Article of this specification section, and as modified by this specification.
- 5) Samples:
  - a) Frames: Corner sample of each type, 18 x 18 inches, with mortises and reinforcements, factory primed, or factory finished, as required.
  - b) Doors: Corner sample of each type of construction, 18 x 18 inches, with mortises and reinforcements, factory primed, or factory finished, as required.
- 2. Closeout Submittals: Submit as a complete package.
  - a. Operation and Maintenance Manuals: Furnish 2 (two) hard cover three ring binders with project name and number prominently displayed on the front cover and the spine.
  - b. Listing of Manufacturer, address and contact information.
  - Approved Door and Frame Submittal including shop drawings and product data sheets.
  - d. The manufacturer's dated warranty for this specific project is to be identified by Facility, OGS project number, and manufacturer's order number.
  - e. Certification: Written certification from the Company Field Advisor that their products are installed according to manufacturer's printed installation instructions and are operating properly.

# 1.05 OUALITY ASSURANCE

- A. Uniformity and sole source responsibility:
  - 1. Provide steel doors and frames from a sole source manufacturer who specializes in this type of work.
- B. Certification of Compliance: A statement, written on steel door and frame manufacturer's letterhead, which certifies their products, submitted for this Project, have been evaluated and comply with references named in the References Article of this specification section, and as modified by other requirements this specification.
- C. Construction Verification: In order to determine if the products furnished comply with the specifications, the Director may choose one or more doors and frames for examination. The examination may involve cutting doors to expose the

- internal construction to inspect reinforcements, cores, welds, and other construction details.
- D. Field Measurements: Verify existing openings by field measurements before fabrication and indicate measurements on shop drawings.
- E. Pre-Submittal Conference: Pre-Submittal Conference: Before the steel door and frame submittals are written, the contractor, the steel door and frame distributor, the steel door and frame shop drawing preparer, and the steel door and frame designer shall attend a conference to discuss the contract requirements for the steel door and frame submittal package, including but not limited to, quality assurance items to be submitted, the cover sheet, index, page numbering, schedule formatting, product nomenclature, installation notes, preparations for electric hardware, and product data sheets.
- F. Pre-installation Conference: When steel frames are on site, and before steel frame installation begins, the Director's Representative shall call a conference at the site to review the approved Steel Door and Frame Submittal, approved Finish Hardware Submittals, and proper installation procedures for the Work as well as:
  - 1. Pre-installation inspection of Doors and Frames.
    - a. Use and coordination of approved Steel Door and Frame submittals with approved Finish Hardware Submittals in the preinstallation inspection process.
    - b. Reading and understanding manufacturer's Door and Frame tags
    - c. Inspection and verification of labeling and label placement
      - 1) Specified fire labels (attached metal labels) on doors and frames,
      - 2) Label locations.
      - 3) Label legibility.
    - d. Inspection and verification of proper welding of frames
    - e. Inspection and verification of hardware reinforcement and preparations in frame head and jambs.
    - f. Inspection and verification of required anchors and fasteners.
    - g. Inspection and verification of glass kit preparations in doors
    - h. Inspection and verification of Electric hardware preparation in frames and doors
  - 2. Review of maximum allowable clearances between frames and doors; doors and floor; and meeting stiles of doors, and verification methods.
  - 3. Verification of plumb, square, and level frame installation with jamb rabbets parallel to one another.
  - 4. Review of proper frame installation tools.
  - 5. The contractor, frame installers, certified Company Field Advisor, OGS designer; and OGS inspector shall attend the conference. Facility personnel may attend. The OGS designer will present installation information.

# 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver doors and frames in heavy paper cartons or other protective packaging. Remove any plastic protective wrap from the package.
- B. Store doors and frames under cover, in a dry area, on raised platforms in vertical position with minimum 4-inch blocking between units to allow air circulation.
- C. Clearly label packaging of doors and frames, for identification and installation location.

# PART 2 PRODUCTS

### 2.01 MATERIALS

- A. Hot-Rolled Steel Sheets and Strip: Commercial quality carbon steel, pickled and oiled, complying with ASTM A1011/A1011M-04a 2004.
- B. Cold-Rolled Steel Sheets: Commercial quality carbon steel complying with ASTM A1008/A1008M-04b 2004.
- C. Galvannealed Steel Sheets: Zinc Iron Alloy-Coated carbon steel sheets of commercial quality complying with ASTM A 653/653M, with A 60 zinc coating.
- D. Anchors and Supports: Fabricate of not less than 16 gage sheet steel unless otherwise indicated.
  - 1. Galvanized Units: Galvanize anchors and supports to be used with galvanized frames, complying with ASTM A 153, Class B.
- E. Anchorage Devices, Bolts, and Other Fasteners: Manufacturer's standard units unless otherwise indicated.
  - 1. Galvanized Units: Galvanize items and comply with ASTM A 153, Class C or D as applicable.
- F. Solid Block polyurethane core with minimum .07 U Factor.
- G. Polystyrene slab with a minimum .24 U factor.
- H. Extruded polystyrene rigid insulation.

# 2.02 DOORS

- A. General:
  - 1. Design and Thickness: 2 outer stretcher-leveled steel sheets not less than 14-gauge, seamless, hollow construction, 1-3/4 inches thick.
  - 2. Construct doors with smooth flush surfaces without visible joints or seams on exposed faces or stile edges, except around glass and louver panels. Continuously MIG, ARC or laser weld vertical edges full height of door, grind smooth, and dress to achieve seamless edge. Tack welded; putty filled edges are not acceptable.
  - 3. Reinforce vertical edges by a continuous steel channel not less than 14ga extending the full height of door.
  - 4. Close top and bottom of horizontal edges with 14 gage steel channels, spot welded to the inside of the face sheets a maximum of 4 inches on center.
  - 5. Continuously weld the closing end channels to the vertical edge reinforcing channel at all four corners producing a fully welded exterior.
  - 6. Provide minimum 16 gage flush steel top and bottoms caps, notched at both ends to fit hinge and lock channels, installed with a minimum of 6 welds per cap. Grind welds, body fill and finish smooth.
  - 7. Sound Deadening (ASTM E 90): Minimum Sound Transmission Class of 25.
  - 8. Door Edges: Bevel lock stile edge of single acting hinged doors 1/8 inch in 2 inches. "V" bevel meeting stiles of pairs of doors, except at double egress locations where meeting stiles are parallel.
  - 9. Glazing Stops and Beads: Fixed steel stops, formed integral with door on non-threat side of doors. Removable steel beads, of not less than 14

gage formed steel sheet or solid bar stock, on other side of doors secured with torx head machine screws. Form corners with butted hairline joints. Coordinate width of rabbet between fixed stop and removable bead, and depth of rabbet, with type of glass and glazing required.

- B. Fire Rated Assemblies: Wherever a fire resistance classification is shown or scheduled for steel doors and frames; provide fire rated units that have been evaluated as fire door assemblies and comply with National Fire Protection Association (NFPA) Standard No. 80 and these specifications.
  - 1. Identify each door and frame with a factory applied metal UL, FM, or WHI label.
  - 2. Label shall remain legible and shall not be obscured by prime painting or finish painting.
  - 3. Indicate the applicable fire rating on the door label.
  - 4. Locate labels on the hinge edge of door and jamb rabbet of frame.
  - 5. Where continuous hinges are specified, apply labels on the header rabbet of frame and on top exposed edge of door. Locate labels as close to hinge edge as possible.
  - 6. At the manufacturer's and/or contractor's expense, retain a third-party inspector to recertify fire rated doors and frames, and to replace primed and finish painted labels.

# C. Interior Doors:

- 1. Fabricate doors with 2 outer stretcher-leveled, A60 galvanized steel sheets.
- 2. Reinforce the inside of doors with polystyrene slab with a minimum .24 U factor, permanently bonded to inside of each face sheet.

# 2.03 FRAMES

### A. General:

- 1. Furnish steel frames for doors, transoms, sidelites, borrowed lites, and other openings, as shown, of size and profile as indicated.
- 2. Construction: Full welded unit construction, with corners mitered and
- 3. continuously welded full depth and width of frame, unless otherwise specified or shown. Knock-down type frames will not be accepted.
  a. Fixed Stops: Integral 5/8 inch stop unless otherwise shown.
- 4. Do not drill frames for silencers.
- 5. Weld steel shipping spreaders to the underside of the jamb legs, requiring removal of the spreaders prior to frame installation.
- B. Interior and Exterior Frames: Form of hot-rolled steel sheets, not less than 14 gage, zinc alloy iron coated A60 galvannealed.

# C. Mullions and Transom Bars:

- 1. Furnish closed or tubular mullions and transom bars where shown. Fasten mullions and transom bars at crossings and to jambs by butt welding. Reinforce joints between frame members with concealed clip angles or sleeves of same metal and thickness as frame.
- 2. Where installed in masonry, leave vertical mullions in frames open at the top so they can be filled with grout.
- D. Wall Anchors: Unless otherwise specified or shown, formed of not less than 16 gage galvannealed steel.
  - 1. Masonry Construction: Adjustable, corrugated, or perforated T-shaped to suit frame size with legs not less than 2 inches wide by 10 inches long.

- a. Furnish at least 3 anchors per jamb up to 7'6" jamb height; 4 anchors per jamb up to 8-foot jamb height; one additional anchor
- 2. Anchors for Completed Openings: Anchorage devices designed to secure frame to in-place concrete or in-place masonry construction, as applicable.
  - a. Furnish at least 5 anchors per jamb up to 7'-6" jamb height; 6 anchors per jamb to 8-foot jamb height; one additional anchor per jamb for each 12 inches or fraction thereof over 8 feet high.
- E. Floor Anchors: Furnish floor anchor for each jamb and mullion which extends to floor, formed of not less than 16 gage steel, with 2 holes to receive fasteners, welded to bottom of jamb or mullion, and galvanized if used with galvanized frames.

# 2.04 FABRICATION

- A. Fabricate steel door and frame units to be rigid, neat in appearance, and free from warp, buckle, and defects. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's plant. To assure proper assembly at the Project site, clearly identify items that cannot be permanently factory-assembled before shipment.
- B. Exposed Fasteners: Countersunk flat, or oval head torx center pin screws and bolts. Unless otherwise indicated, locate fasteners 2 inches from the ends of members and not more than 12 inches apart.
- C. Finish Hardware Reinforcements:
  - 1. Minimum 10 gage continuous reinforcement for continuous hinges.
  - 2. Install 7 gage reinforcement for butt hinges, or hinge reinforcement in door edge may be one piece 12 gage channel full door height with extruded hinge screw holes having an average minimum thread pull-out strength of 1600 pounds per hole.
  - 3. Minimum 12 gage reinforcement for other hardware.
  - 4. Weld 14 gage steel tongues, 1-1/2 inches high, inside lock mortise to keep lock body centered in door.
  - 5. Closer reinforce doors and provide full profile closer reinforcement in frames for full width of opening, whether or not closers are specified.
- D. Finish Hardware Preparation:
  - 1. Factory prepare doors and frames to receive mortised and concealed hardware, including cutouts; reinforcing; drilling and tapping, in accordance with approved Finish Hardware Schedule and templates furnished by hardware manufacturers.
  - 2. Factory reinforced doors and frames to receive surface applied hardware. Drill and tap for surface applied hardware at project site.
- E. Finish Hardware Locations: Locate hardware reinforcements and mortises so hardware locations comply with requirements of HMMA 831, "Recommended Hardware Locations for Custom Hollow Metal Doors and Frames", and as follows:
  - 1. Knobs, Levers, Crescents: Centerline 3'2" from finished floor.
  - 2. Mortise Deadlocks: Centerline not to exceed 48" above finished floor.

- F. Clearances: Fabricate doors for their respective frames within the following clearances:
  - 1. Jambs and Head: 3/32 to 1/8 inch.
  - 2. Meeting Edges of Pairs: 1/8 to 3/16 inch.
  - 3. Bottom (no threshold): 3/4 inch, maximum to finished surface.
  - 4. Bottom (at threshold): 3/8 inch, maximum to top of threshold or carpet.
  - 5. Fire Rated Doors: Comply with clearances specified in NFPA Standard No.80.
  - 6. Measure door clearances from stile edge to jamb.

# G. Factory Prefinish Painting:

- 1. Chemically wash, rinse, and dry exposed and concealed surfaces of fabricated units.
- Apply one coat of primer with vinyl binder to surfaces and oven-bake units.
- 3. Units shall be capable of passing the following tests:
  - a. Salt Spray Test complying with ASTM B 117-97 for 120 continuous hours.
  - b. Water Fog Test complying with ASTM D 1735-97 for 240 continuous hours.\
- 4. Factory pre-finish doors and frames where indicated on the Door Schedule.
  - a. Provide custom color(s) as selected by the Director's Representative.
  - b. Provide 3 (three) touch-up paint kits for field repair. Turn over remaining paint to the Facility.

### PART 3 EXECUTION

# 3.01 EXAMINATION

A. Verification of Conditions: Examine substrates, areas, and conditions, with installer present under which frames are to be installed for defects that will adversely affect execution and quality of Work. Do not proceed until unsatisfactory conditions are corrected.

# 3.02 PREPARATION

- A. Prior to installation adjust and securely brace door frames for squareness, alignment, twist, and plumb to the following tolerances:
  - 1. Squareness: Plus, or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
  - 2. Alignment: Plus, or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
  - 3. Twist: Plus, or minus 1/16", measured at opposite face corners of the jambs on parallel lines, and perpendicular to plane of wall.
  - 4. Plumbness: Plus, or minus 1/16 inch, measured at jamb face on a perpendicular line from head to floor.
- B. Drill and tap doors and frames to receive non-templated mortised and surface mounted hardware.

# 3.03 INSTALLATION

- A. General: Install steel doors and frames plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.
- B. Frames: Install frame of size and profile indicated. Set frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set.
  - 1. Remove temporary braces necessary for installation only after frames have been properly set and secured.
  - 2. Check plumb, squareness, and twist of frames as walls are constructed. Adjust as necessary to comply with installation tolerances.
  - 3. Installation Tolerances: Adjust door frames for squareness, alignment, twist, and plumb to the following tolerances:
    - a. Squareness: Plus, or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
    - b. Alignment: Plus, or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
    - c. Twist: Plus, or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
    - d. Plumbness: Plus, or minus 1/16 inch, measured at jambs at floor.
- C. Doors: Fit non-fire-rated doors accurately in frames with the following clearances:
  - 1. Jambs and Head: 1/8 inch plus or minus 1/16 inch.
  - 2. Between Bottom of Door and Top of Threshold: Maximum 3/8 inch.
  - 3. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4 inch.

# 3.04 ADJUSTING AND CLEANING

- A. Final Adjustments:
  - 1. Check and readjust operating hardware items immediately before final inspection.
  - 2. Leave work in complete and proper operating condition.
  - 3. Remove and replace defective work including doors or frames that are warped, bowed, or otherwise unacceptable.
- B. Clean foreign materials off steel doors and frames immediately after installation.

# 3.05 FINAL INSPECTION

- A. Upon completion of the project, the Director's representative will schedule a final inspection to verify doors and frames are properly installed and adjusted. The contractor, door and frame installer, and design representative will attend.
- B. Upon verification, the design representative will certify in writing that components are properly installed and adjusted within referenced tolerances in accordance with this specification. Include this certification in the Close-out Submittals.

# **END OF SECTION**