



**STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION**



**2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546**

Phone: 860-594-3128

November 17, 2016

Subject: Project No. 131-205
F.A.P. No. N/A
Southington Maintenance Facility Renovation.

NOTICE TO CONTRACTORS:

This is to notify all concerned and especially the prospective bidders that the bid opening for the subject project is still scheduled for November 23, 2016 at 2:00 P.M. in the Conference Room of the Department of Transportation Administration Building, 2800 Berlin Turnpike, Newington, Connecticut.

Addendum No. 1 is attached and can also be obtained on the Statewide Contracting Portal at http://www.biznet.ct.gov/scp_search/BidResults.aspx?groupid=64

This addendum is necessary to revise special provisions and revise plan sheets.

To retrieve the official Bid Proposal Forms, please download the electronic bid proposal file and amendment files, if applicable at <https://www.bidx.com>.

Please send all future questions to <http://dot-contractsqanda.ct.gov/Default.aspx>

H. J. Emond

For: Gregory D. Straka
Contracts Manager
Division of Contracts Administration

NOVEMBER 17, 2016
SOUTHINGTON MAINTENANCE FACILITY RENOVATION
FEDERAL AID PROJECT NO. N/A
STATE PROJECT NO. 0131-0205
TOWN OF SOUTHINGTON

ADDENDUM NO. 1

This Addendum addresses the following questions and answers contained on the “CT DOT QUESTIONS AND ANSWERS WEBSITE FOR ADVERTISED CONSTRUCTION PROJECTS”:

Question and Answer No. 12.

SPECIAL PROVISIONS
REVISED SPECIAL PROVISIONS

The following Special Provision is hereby deleted in its entirety and replaced with the attached like-named Special Provision:

- **NOTICE TO CONTRACTOR – SUBMITTALS**

The following CSI Special Provision is hereby deleted in its entirety and replaced with the attached like-named Special Provision:

- **CSI SPECIFICATION SECTION 083613 – SECTIONAL DOORS**

PLANS
REVISED PLANS

The following Plan Sheets are hereby deleted and replaced with the like-numbered Plan Sheets appended with A1:

02.01.A1
10.08.A1
11.17.A1

The Bid Proposal Form is not affected by these changes.

There will be no change in the number of calendar days due to this Addendum.

The foregoing is hereby made a part of the contract.

NOTICE TO CONTRACTOR – SUBMITTALS

Unless otherwise noted, the Designer will be the “submittal reviewer.”

Any Product Samples that are to be sent to the Designer requiring review for conformance with the Contract shall be transmitted by letter and hand delivered or sent by mail directly to Mr. Christopher Bonsignore, P.E., Transportation Principal Engineer, Facilities Design, Bureau of Engineering and Construction, Connecticut Department of Transportation, 2800 Berlin Turnpike, P.O. Box 317546, Newington, CT 06131-7546, Room 3405.

The Engineer will be the “submittal reviewer” for the following materials:

Concrete Mix Design Certifications
Asphalt Mix Design Certifications
Erosion Control Plan and Materials
Demolition Plan
Disposal Plan
Welding (Welder) Certificates
Certified Test Reports, Material Certificates, etc. from Form 816 Standard Items (non “A” Items from Bid List)
“Non-A” items, including those items in CSI-Formatted Specifications

Environmental Compliance will be the “submittal reviewer” for review of work identified in the following special provisions:

1. Item No. 0020801A – Asbestos Abatement.
2. Item No. 0020902A – Lead Compliance for Building Demolition and Renovation.
3. Item No. 0100072A – Removal and Disposal of Underground Tanks.
4. Item No. 0101000A – Environmental Health and Safety.
5. Item No. 0101143A – Handling and Disposal of Regulated Items
6. Item No. 0101183A – PCB Building Materials Removal
7. Item No. 0101117A – Controlled Materials Handling.
8. Item No. 0101128A – Securing, Construction and Dismantling of a Waste Stockpile and Treatment Area.
9. Item No. 0202315A – Disposal of Controlled Materials.
10. Item No. 0202640A – 2” Monitoring Well Abandonment.

FM Global is identified as an outside agency as a secondary “submittal reviewer” for review of work are identified in the following CSI Sections:

1. Division 05 Section 053100, “Steel Decking.”
2. Division 07 Section 074213, Metal Wall Panels.”
3. Division 07 Section 075419, “Polyvinyl Chloride (PVC) Roofing.”
4. Division 07 Section 078413, “Penetration Firestopping.”

5. Division 07 Section 078446, "Fire-Resistive Joint Systems."
6. Division 08 Section 083613, "Sectional Doors."
7. Division 21, Section 211313, "Wet-Pipe Sprinkler Systems"
8. Division 28 Section 283111, "Digital, Addressable Fire-Alarm System."

The Department will forward the noted submittals to FM Global for their review, with FM Global comments being sent back to the Department for inclusion in one response to the Contractor. Hence, the Contractor shall allow 28 calendar days for outside agency review of the submittals noted above.

The Contractor shall send submittals e-mail alerts to the following key personnel:

Designer (Project Engineer):

Designer (Project Manager): Michael J. Strong

Designer (Consultant Project Manager):

Construction Project Chief Inspector:

Construction Supervising Engineer:

Owner:

Operator:

Add the following for submittals where Environmental Compliance is listed in NOTICE TO CONTRACTOR – SUBMITTALS as the "submittal reviewer:"

Environmental Designer (Project Engineer):

Environmental Designer (Project Manager):

Other key construction personnel will be identified at the Pre-Construction Meeting.

SECTION 083613 - SECTIONAL DOORS

PART 1 - GENERAL

1.1 SUMMARY:

A. This Section includes the following:

1. Electrically operated sectional doors.

B. Related CSI Sections:

1. Division 23 Section 230900, "Instrumentation and Control for HVAC" for overhead door contacts.
2. Division 26 Sections for electrical service and connections for powered operators and accessories.

1.2 PERFORMANCE REQUIREMENTS:

A. General Performance: Sectional doors shall meet performance requirements specified without failure due to defective manufacture, fabrication, installation, or other defects in construction and without requiring temporary installation of reinforcing components.

B. Operation Cycles Requirements: Provide sectional overhead door components and operators capable of operating for not less than 10,000 cycles.

C. Structural Performance, Exterior Doors: Capable of withstanding the design wind loads.

1. Design Wind Load: As Indicated on Structural Drawings.

2. Lateral Pressures:

- a. Corner Inward Pressure: 24.9 lbf/sq. ft.
- b. Corner Outward Pressure: 33.2 lbf/sq. ft.
- c. Field-of-Wall Inward Pressure: 24.9 lbf/sq. ft.
- d. Field-of-Wall Outward Pressure: 26.9 lbf/sq. ft.
- e. Uniform pressure as indicated on plans.
- f. Effective Wind area - Walls: 10 sq. ft.
- g. Factor of Safety: 1.6.

3. Testing: According to Florida Building Code Testing Application Standards (TAS) 201 and 203, ASTM standards E1886 and E1996, or ANSI/DASMA 115.

1.3 SUBMITTALS:

- A. Submit the following in accordance with Form 816 Article 1.20-1.05.02 and NOTICE TO CONTRACTOR – SUBMITTALS.
- B. Product Data: For each type and size of sectional door and accessory. Include the following:
 - 1. Motors: Show nameplate data and ratings, characteristics, and mounting arrangements
- C. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data. Include plans, elevations, sections, details, and attachments to other work.
 - 1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 2. Wiring Diagrams: For power, signal, and control wiring.
- D. Qualification Data: For qualified Installer.
- E. Maintenance Data: For sectional doors to include in the operation and maintenance manuals specified in Form 816 Article 1.20-1.08.14 subsection 2 and described in NOTICE TO CONTRACTOR – CLOSEOUT DOCUMENTS.
- F. Warranties: Sample of special warranties

1.4 QUALITY ASSURANCE:

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for both installation and maintenance of units required for this Project.
- B. Testing Agency Qualifications: Qualified according to Florida Building Code Testing Application Standards (TAS) 201 and 203, ASTM standards E1886 and E1996, or ANSI/DASMA 115.
- C. Source Limitations: Obtain sectional doors from single source from single manufacturer in accordance with Form 816 Article 1.20-1.06.01.
- D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

1.5 WARRANTY:

- A. Refer to Form 816 Article 1.20-1.06.08 and NOTICE TO CONTRACTOR – CLOSEOUT DOCUMENTS for additional information.
- B. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of sectional doors that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures including, but not limited to, excessive deflection.
 - b. Faulty operation of hardware.
 - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use; rust through.
 - d. Delamination of exterior or interior facing materials.
 - 2. Warranty Period: Five (5) years from date of Certificate of Compliance.
- C. Special Finish Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components that show evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Warranty Period: Ten (10) years from date of Certificate of Compliance.

PART 2 - PRODUCTS

2.1 STEEL DOOR SECTIONS:

- A. Exterior Section Faces and Frames: Fabricate from zinc-coated (galvanized), cold-rolled, commercial steel (CS) sheet, complying with ASTM A 653/A 653M, with indicated zinc coating and thickness.
 - 1. Fabricate section faces from single sheets to provide sections not more than 24 inches (610 mm) high and of indicated thickness. Roll horizontal meeting edges to a continuous, interlocking, keyed, rabbeted, shiplap, or tongue-in-groove weathertight seal, with a reinforcing flange return.
 - 2. For insulated doors, provide sections with continuous thermal-break construction, separating the exterior and interior faces of door.
- B. Section Ends and Intermediate Stiles: Enclose open ends of sections with channel end stiles formed from galvanized-steel sheet not less than 0.064-inch nominal coated thickness and welded to door section. Provide intermediate stiles formed from not less than 0.064-inch thick galvanized-steel sheet, cut to door section profile, and welded in place. Space stiles not more than 48 inches apart.

- C. Reinforce bottom section with a continuous channel or angle conforming to bottom-section profile and allowing installation of astragal.
- D. Reinforce sections with continuous horizontal and diagonal reinforcement, as required to stiffen door and for wind loading. Provide galvanized-steel bars, struts, trusses, or strip steel, formed to depth and bolted or welded in place. Ensure that reinforcement does not obstruct vision lites.
- E. Provide reinforcement for hardware attachment.
- F. Foamed-in-Place Thermal Insulation: Insulate interior of steel sections with door manufacturer's standard CFC-free polyurethane insulation, foamed in place to completely fill interior of section and pressure bonded to face sheets to prevent delamination under wind load, and with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, according to ASTM E 84. Enclose insulation completely within steel sections that incorporate the following interior facing material, with no exposed insulation:
 - 1. Interior Facing Material: Zinc-coated (galvanized), cold-rolled, commercial steel (CS) sheet, complying with ASTM A 653/A 653M, with indicated thickness.
 - 2. Interior Facing Material: Manufacturer's standard prefinished hardboard panel, 1/8 inch thick and complying with ANSI A135.5.
- G. Fabricate sections so finished door assembly is rigid and aligned, with tight hairline joints and free of warp, twist, and deformation.

2.2 TRACKS, SUPPORTS, AND ACCESSORIES:

- A. Tracks: Manufacturer's standard, galvanized-steel track system of configuration indicated, sized for door size and weight, designed for lift type indicated and clearances shown on Drawings, and complying with ASTM A 653/A 653M for minimum G60 (Z180) zinc coating. Provide complete track assembly including brackets, bracing, and reinforcement for rigid support of ball-bearing roller guides for required door type and size. Slot vertical sections of track spaced 2 inches apart for door-drop safety device. Slope tracks at proper angle from vertical or design tracks to ensure tight closure at jambs when door unit is closed.
- B. Track Reinforcement and Supports: Galvanized-steel track reinforcement and support members, complying with ASTM A 36/A 36M and ASTM A 123/A 123M. Secure, reinforce, and support tracks as required for door size and weight to provide strength and rigidity without sag, sway, and vibration during opening and closing of doors.
 - 1. Vertical Track Assembly: Track with wall jamb brackets attached to track and attached to wall.
 - 2. Horizontal Track Assembly: Track with continuous reinforcing angle attached to track and supported at points from curve in track to end of track by laterally braced attachments to overhead structural members.

- C. Weatherseals: Replaceable, adjustable, continuous, compressible weather-stripping gaskets of flexible vinyl, rubber, or neoprene fitted to bottom and top of overhead door.
 - 1. Provide motor-operated doors with combination bottom weatherseal and sensor edge.
 - 2. Provide continuous flexible seals at door jambs for a weathertight installation.
- D. Windows: ½" insulated glass window units set in two-piece molded high-impact polymer frames for metal-framed doors. Provide removable stops of same material as door-section frames.
 - 1. Size: Manufacturer's standard for type of glazing indicated.
 - 2. Vision Panels are to be factory installed, made by the door manufacturer for this purpose, and are fully covered under the warranty for the door.

2.3 HARDWARE:

- A. General: Provide heavy-duty, corrosion-resistant hardware, with hot-dip galvanized, stainless-steel, or other corrosion-resistant fasteners, to suit door type.
- B. Hinges: Heavy-duty, galvanized-steel hinges of not less than 0.079-inch nominal coated thickness at each end stile and at each intermediate stile, according to manufacturer's written recommendations for door size. Attach hinges to door sections through stiles and rails with bolts and lock nuts or lock washers and nuts. Use rivets or self-tapping fasteners where access to nuts is not possible. Provide double-end hinges where required, for doors over 14 feet wide unless otherwise recommended by door manufacturer.
- C. Rollers: Heavy-duty rollers with steel ball-bearings in case-hardened steel races, mounted with varying projections to suit slope of track. Extend roller shaft through both hinges where double hinges are required. Provide 3-inch diameter roller tires for 3-inch wide track and 2-inch diameter roller tires for 2-inch wide track.
- D. Push/Pull Handles: For push-up or emergency-operated doors, provide galvanized-steel lifting handles on each side of door.
- E. If door unit is power operated, provide safety interlock switch to disengage power supply when door is locked.

2.4 COUNTERBALANCE MECHANISM:

- A. Torsion Spring: Counterbalance mechanism consisting of adjustable-tension torsion springs fabricated from steel-spring wire complying with ASTM A 229/A 229M, mounted on torsion shaft made of steel tube or solid steel. Provide springs designed for number of operation cycles indicated.

- B. **Weight Counterbalance:** Counterbalance mechanism consisting of filled pipe weights that move vertically in a galvanized-steel weight pipe. Connect pipe weights with cable to weight-cable drums mounted on torsion shaft made of steel tube or solid steel.
- C. **Cable Drums and Shaft for Doors:** Cast-aluminum or gray-iron casting cable drums mounted on torsion shaft and grooved to receive door-lifting cables as door is raised. Mount counterbalance mechanism with manufacturer's standard ball-bearing brackets at each end of torsion shaft. Provide one additional midpoint bracket for shafts up to 14 feet long and two additional brackets at one-third points to support shafts more than 14 feet long unless closer spacing is recommended by door manufacturer.
- D. **Cable Safety Device:** Include a spring-loaded steel or spring-loaded bronze cam mounted to bottom door roller assembly on each side and designed to automatically stop door if either lifting cable breaks.

2.5 ELECTRIC DOOR OPERATORS:

- A. **General:** Electric door operator assembly of size and capacity recommended and provided by door manufacturer for door and "operation cycles" requirement specified, with electric motor and factory-prewired motor controls, starter, gear-reduction unit, solenoid-operated brake, clutch, remote-control stations, control devices, integral gearing for locking door, and accessories required for proper operation.
 - 1. Comply with NFPA 70.
- B. **Usage Classification:** Electric operator and components capable of operating for not less than number of cycles per hour indicated for each door.
- C. **Door-Operator Type:** Unit consisting of electric motor, gears, pulleys, belts, sprockets, chains, and controls needed to operate door and meet required usage classification.
 - 1. **Jackshaft, Side Mounted:** Jackshaft operator mounted on the inside front wall above door and connected to torsion shaft with an adjustable coupling or drive chain.
- D. **Electric Motors:** Comply with NEMA designation, temperature rating, service factor, enclosure type, and efficiency requirements unless otherwise indicated.
 - 1. **Electrical Characteristics:**
 - a. Phase: Three phase.
 - b. Volts: 208 V.
 - c. Hertz: 60.
 - 2. **Motor Type and Controller:** Reversible motor and controller (disconnect switch) for motor exposure indicated.

3. Motor Size: Minimum size as indicated. If not indicated, large enough to start, accelerate, and operate door in either direction from any position, at a speed not less than 8 in./sec. and not more than 12 in./sec., without exceeding nameplate ratings or service factor.
 4. Operating Controls, Controllers (Disconnect Switches), Wiring Devices, and Wiring: Manufacturer's standard unless otherwise indicated.
 5. Coordinate wiring requirements and electrical characteristics of motors and other electrical devices with building electrical system and each location where installed.
 6. Use adjustable motor-mounting bases for belt-driven operators.
- E. Control Station: Constant-contact, three-button control station with push-button controls labeled "Open," "Close," and "Stop." User must continuously hold the "Close" button for the door to be lowered.
- F. Emergency Manual Operation: Equip each electrically powered door with capability for emergency manual operation. Design manual mechanism so required force for door operation does not exceed 35 lbf.
- G. Emergency Operation Disconnect Device: Equip operator with hand-operated disconnect mechanism for automatically engaging manual operator and releasing brake for emergency manual operation while disconnecting motor without affecting timing of limit switch. Mount mechanism so it is accessible from floor level. Include interlock device to automatically prevent motor from operating when emergency operator is engaged.
- H. Motor Removal: Design operator so motor may be removed without disturbing limit-switch adjustment and without affecting emergency manual operation.
- I. Limit Switches: Equip each motorized door with adjustable switches interlocked with motor controls and set to automatically stop door at fully opened and fully closed positions.

2.6 DOOR ASSEMBLY:

- A. Steel Sectional Door: Sectional door formed with hinged sections.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Overhead Door Corporation.
 - b. Raynor.
 - c. Wayne-Dalton Corp.
- B. Operation Cycles: Not less than 10,000

- C. R-Value: 12.0 deg F x h x sq. ft./Btu
- D. Steel Sections: Zinc-coated (galvanized) steel sheet with G90 (Z275) zinc coating.
 - 1. Section Thickness: 2 inches.
 - 2. Exterior-Face, Steel Sheet Thickness: 0.019-inch nominal coated thickness.
 - a. Surface: Flat or ribbed to suit manufacturer's standard.
 - 3. Insulation: Foamed in place.
 - 4. Interior Facing Material: Zinc-coated (galvanized) steel sheet of manufacturer's recommended thickness to meet performance requirements nominal coated thickness.
- E. Track Configuration:
 - 1. Existing Bay Area: Standard Lift.
 - 2. Wash Bay Area: High-lift.
- F. Weatherseals: Fitted to bottom and top and around entire perimeter of door.
- G. Windows: Approximately 24 by 11 inches, with curved corners, and spaced apart the approximate distance as indicated on plans; in four rows at height indicated on plans; installed with insulated glazing of the following type:
 - 1. Insulating Glass: Manufacturer's standard.
- H. Roller-Tire Material: Manufacturer's standard.
- I. Locking Devices: Equip door with slide bolt for padlock.
- J. Counterbalance Type: Torsion spring.
- K. Electric Door Operator:
 - 1. Usage Classification: Standard Duty, up to 60 cycles per hour.
 - 2. Operator Type: Jackshaft, Side Mounted.
 - 3. Motor Exposure: Interior, clean, and dry.
 - 4. Emergency Manual Operation: Chain type.
 - 5. Remote-Control Station: Where shown on plans.
- L. Door Finish:
 - 1. Finish of Interior/Exterior Facing Material: White/Dark Brown.

2.7 GENERAL FINISH REQUIREMENTS:

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for substrate construction and other conditions affecting performance of the Work.
- B. Examine locations of electrical connections.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION:

- A. Install sectional doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- B. Tracks:
 - 1. Fasten vertical track assembly to opening jambs and framing, spaced not more than 24 inches apart.
 - 2. Hang horizontal track assembly from structural overhead framing with angles or channel hangers attached to framing by welding or bolting, or both. Provide sway bracing, diagonal bracing, and reinforcement as required for rigid installation of track and door-operating equipment.
 - 3. Repair galvanized coating on tracks according to ASTM A 780.
- C. Accessibility: Install sectional doors, switches, and controls along accessible routes in compliance with regulatory requirements for accessibility.
- D. Insulate behind control stations mounted on steel.

3.3 STARTUP SERVICES:

- A. Engage a factory-authorized service representative to perform startup service.

1. Complete installation and startup checks according to manufacturer's written instructions.
2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

3.4 ADJUSTING:

- A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.
- B. Lubricate bearings and sliding parts as recommended by manufacturer.
- C. Adjust doors and seals to provide weathertight fit around entire perimeter.
- D. Align and adjust motors, pulleys, belts, sprockets, chains, and controls according to manufacturer's written instructions.

3.5 TRAINING:

- A. Refer to Form 816 Article 1.20-1.08.14 subsection 3 for additional information.
- B. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain sectional doors.

END OF SECTION 083613