# ADDENDUM No. 3

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| Project Name: | Owner: Charter Township of Canton<br>Project Name: Canton Public Safety Building Renovations | **Addendum No:** Three (3) |
| Project Number: | 21-130 | Issue Date: March 24, 2022 |
| Project Location: | 1150 South Canton Center Road, Canton Twp, MI 48188 | |

This Addendum forms a part of the above described Contract Documents and supersedes, supplements or clarifies parts thereof to the extent defined by the terms set forth in this Addendum.

This Addendum consists of (1) typed page and the following (two) attachments:

Specification Sections: 083343 and 101423.
Drawings: **None.**

**SPECIFICATIONS:**

**ITEM S1** TOC table of Contents (Revised But Not Re-Issued).
A. Added Sections 083343 Overhead Coiling Smoke Curtain and 101423 Panel Signage.

**ITEM S2** 0833343 Overhead Coiling Smoke Curtain (Issued).
A. Added specification section.

**ITEM S3** 101423 Panel Signage (Issued).
A. Added specification section.

****END OF ADDENDUM #3****

**SECTION** 083343 **- OVERHEAD COILING SMOKE CURTAINS**

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Deployable Draft-Protective Curtain Assemblies.

1.2 COORDINATION

A. Coordinate smoke curtain assemblies with power, signal, fire-alarm, and smoke-detection systems specified in Division 26 and Division 28.

B. Coordinate smoke-protective curtain assemblies with ceilings for operational clearances and maintenance access requirements.

C. Coordinate smoke-protective curtain assemblies with walls for support requirements, rating continuity above ceilings, and recessed wall switches.

D. Coordinate requirements for metal supports required for smoke-protective curtain assemblies.

1.3 INFORMATIONAL SUBMITTALS

A. Submit under provisions of Section 01 30 00.

B. Product Data: Manufacturer's product information and data sheets for each product specified in this section, including:

1. Substrate preparation instructions and recommendations

2. Installation means and methods.

3. Recommendations and requirements for proper storage and handling.

C. Shop Drawings:

1. Submit Manufacturer’s approved shop drawings detailing the section and elevation views of each product to be installed.

2. Coordinate with locations listed on Contract Drawings.

D. Warranty Information:

1. Submit confirmation and details of manufacturer’s warranty, extended warranty, and replacement policies.

1.4 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For smoke- and draft-protective curtain assemblies to include in emergency, operation, and maintenance manuals.

B. Field quality-control reports for required testing.

1.5 QUALITY ASSURANCE

A. Qualifications:

1. Manufacturer: Minimum of seven (7) years experience in manufacturing draft-control curtain assemblies at a facility in the United States that have been successfully installed in compliance with requirements of authorities having jurisdiction.

2. Installers: An entity that employs installers and supervisors who are trained and approved by manufacturer for both installation and maintenance of units required for this Project.

1.6 DELIVERY, STORAGE AND HANDLING

A. Deliver, store and handle materials and products in accordance with the manufacturer's instructions and recommendations and industry standards.

B. Store all materials in the manufacturer’s original packaging until ready for installation. Protect all products from damage or exposure to adverse weather conditions.

1.7 PROJECT CONDITIONS

A. Prior to fabrication, verify that dimensions are consistent with those found in the construction drawings. Where discrepancies exist, confirm the proper dimensions with the Architect before proceeding with work.

1.8 WARRANTY

A. Manufacturer Warranty: Provide manufacturer’s warranty covering parts and labor costs to repair or replace part that fail to perform.

1. Warranty Period: Parts and labor warranty for 12 months from date of Substantial Completion or date of purchase, whichever comes first.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Basis of Design Manufacturer: Smoke Guard, A CSW Industrials Company. 287 N. Maple Grove, Boise, ID 83704. Phone: (800) 574-0330. Website: https://smokeguard.com., or approved equivalent product.

B. Substitution Limitations:

1. Submit substitution requests in accordance with provisions of Section 012500.

2. Single manufacturer will provide, from a single source, a fully integrated smoke-and-draft containment system consisting of smoke-and-draft-protective curtains and the following components:

a. Smoke-and-Draft-Protective Curtain Operators.

b. Smoke-and-Draft-Protective Curtain Controls.

2.2 SMOKE-PROTECTIVE CURTAIN ASSEMBLIES

A. Alarm-activated fabric smoke curtain assembly complying with NFPA 92.

1. Basis of Design Product: Model 2100 Smoke, by Smoke Guard, a CSW Industrials Company.

B. Alarm-activated fabric smoke curtain assembly complying with NFPA 92.

1. Basis of Design Product: Model 2100 Draft, by Smoke Guard, a CSW Industrials Company.

C. Smoke Control: Provide smoke protective curtain assemblies that are listed and labeled with the letter "S" on the rating label by a qualified testing agency for smoke- and draft-control based on testing in accordance with UL 1784 without an artificial bottom seal; with maximum air-leakage rate of 3.0 cfm/sq. ft. (0.01524 cu. m/s x sq. m) of opening at 0.10 inch wg (24.9 Pa) for both ambient and elevated temperature tests.

D. Curtain Materials: Provide manufacturer’s standard multi-layer glass fiber fabric coated on one or both sides complying with each of the following:

1. Fire-Test-Response Characteristics: Provide products that pass NFPA 701, as determined by testing of fabrics that were treated using treatment-application method intended for use for this Project by a testing and inspecting agency acceptable to authorities having jurisdiction.

2. Flame-Spread and Smoke-Developed Indexes: 25 and 50, respectively, when tested in accordance with ASTM E84.

3. 3. Screen Reinforcement: Provide film with reinforcement to limit deflection or tearing.

E. Curtain Attachment: Curtain shall form a pressure-resisting seal with

1. Side Guides: Formed from galvanized-steel sheet conforming to ASTM A653/A653M with integral pressure-retaining tabs.

2. Weighted Bottom Bar: Provide weighted bottom bar to ensure smooth operation and hold curtain taut.

F. 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.

G. Housing Type: Sheet metal housings containing support rollers and associated electronics.

1. Coordinate operator wiring requirements and electrical characteristics with building electrical system.

H. Operation: Controlled descent automatically by fail-safe gravity deployment and motorized rewind. Curtain deploys on activation of one of the following:

1. Local Smoke Detector.
2. Building Fire Alarm.
3. Testing Key Switch.

I. Release Mechanism: Labelled as defined by UL864.

2.3 ACCESSORIES

1. End of Line Diode: Provide manufacturer's standard diode device installed at smoke detector to monitor the circuit.
   a. Power Requirements: 3.3 Volts, 2 Watts.
2. Firefighter's Smoke Control Station (FSCS): Provide manufacturer's standard integration with FSCS with the following functionality:
   a. Open/Retract Curtain.
   b. Open Confirm.
   c. Open Fault Alert.
   d. Close/Deploy Curtain.
   e. Close Confirm.
   f. Closed Fault Alert.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine substrates upon which work will be installed.

1. Verify related work performed under other sections is complete and in accordance with Shop Drawings.
2. Verify wall surfaces and elevator door frames are acceptable for installation of smoke containment system components.

B. Coordinate with responsible entity to perform corrective work on unsatisfactory substrates.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

D. Verify that locations of concealed reinforcements have been clearly marked for the installer.

E. Locate reinforcement points and clearly mark their locations if not already done.

3.2 PREPARATION

A. Clean surfaces prior to installation.

B. Prepare surfaces as recommended by the manufacturer for achieving optimal results.

3.3 INSTALLATION

A. Install in accordance with manufacturer's current installation instructions and industry recognized best practices.

B. Install in accordance with all code bodies having jurisdiction.

3.4 CLEANING AND PROTECTION

A. Clean and remove all stains, grime, or other soils using soap and water. Only use detergents approved by the manufacturer for use on the finishes specified. Do not use acid solutions, steel wool, and other harsh abrasives.

B. Damaged products must be repaired or replaced prior to substantial completion.

C. Protect installed products until completion of work specified in this section.

3.5 FIELD QUALITY CONTROL

A. Field Test: Follow manufacturer's cycle test procedures.

1. Notify Owner's Representative, local Fire Marshal, alarm sub-contractor and elevator sub-contractor or service company, minimum one week in advance of scheduled testing.

2. Complete maintenance service record.

3.6 DEMONSTRATION

A. Demonstrate required testing and maintenance procedures to Owner's Representative.

3.7 MAINTENANCE AND TESTING:

A. Perform minimum semi-annual maintenance and testing on each smoke containment system as required by the manufacturer's warranty, code agency evaluation reports, and as required by local authority having jurisdiction.

1. Retain permanent record of tests.

B. Fire Event: Owner shall engage a qualified inspector to assess unit(s) after exposure to a fire event.

**END OF SECTION**

**SECTION 101423 - PANEL SIGNAGE**

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Room Identification Signs.

1.2 SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For Room-identification signs.

1. Include fabrication and installation details and attachments to other work.
2. Show sign mounting heights, locations of supplementary supports to be provided by others, and accessories.
3. Show message list, typestyles, graphic elements, including raised characters and Braille, and layout for each sign at least half size.

C. Samples: Provide fully assembled full size sample for each type of sign product with colors and textures as specified.

D. Sign Schedule: Use same designations specified or indicated on Drawings or in sign schedule.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Accessibility Standard: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines for Buildings and Facilities and ICC A117.1 for signs.

2.2 ROOM IDENTIFICATION SIGNS

A. Basis-of-Design Product: Subject to compliance with requirements, provide “Slide System”, 9/16” thickness Modular Standard Sign System (as indicated on drawings) as manufactured by 2/90 Sign Systems Inc. (provide with tamper-resistant ends with spanner fasteners) or a comparable product by one of the following:

1. ACE Sign Systems, Inc.
2. Advance Corporation.
3. APCO Graphics, Inc.

4. ASE, Inc.
5. ASI Sign Systems, Inc.
6. Best Sign Systems, Inc.
7. Fossil Industries, Inc.
8. Mohawk Sign Systems.
9. Stamprite Supersine; a division of Stamp Rite Inc.

B. Panel Sign: Provide sign with smooth panel surfaces constructed with to remain flat under installed conditions within a tolerance of plus or minus 1/16 inch (1.5 mm) measured diagonally from corner to corner, uniform surfaces; with message and characters having uniform faces, sharp corners, and precisely formed lines and profiles; and as follows:

1. Laminated-Sheet Sign: Photopolymer face sheet with raised graphics laminated over subsurface graphics to acrylic backing sheet to produce composite sheet.
   a. Subsurface Graphics: Subsurface ADA.
   b. Color: As selected by Architect from full range of industry colors.
2. Sign-Panel Perimeter: Finish edges smooth.
   a. Edge Condition: Square cut.
   b. Corner Condition in Elevation: Square.
3. Frame: Vertical retainers.
   a. Material: Aluminum.
   b. Profile: Square.
   c. Corner Condition in Elevation: Square.
   d. Finish and Color: As selected by Architect from manufacturer's full range.
4. Exterior Locations: At exterior locations also provide top and bottom aluminum trim and tamper resistant fasteners.
5. Mounting: Surface mounted to wall with concealed anchors.
6. Size: As indicated on drawings.
7. Text: As indicated on drawings. Confirm with Owner prior to fabrication.
8. Lower Insert Material: Subsurface ADA
9. Upper Insert Material: Subsurface ADA
10. Tactile Characters: Characters and Grade 2 Braille raised 1/32 inch (0.8mm) above surface with contrasting colors as selected from manufacturer’s full range.

C. Refer to Signage Schedule for list of all signs.

## 2.3 PANEL-SIGN MATERIALS

A. Acrylic Sheet: ASTM D 4802, Type UVF (UV filtering).

## 2.4 ACCESSORIES

A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of signage, noncorrosive and compatible with each material joined, and complying with the following:

1. Use concealed fasteners and anchors.
2. Furnish stainless steel fasteners.
3. Exposed Metal-Fastener Components, General:

a. Fabricated from same basic metal and finish of fastened metal unless otherwise indicated.

B. Two-Face Tape: Manufacturer's standard high-bond, foam-core tape, 0.045 inch (1.14 mm) thick, with adhesive on both sides.

1. For use when signage is to be mounted on glass.

## 2.5 FABRICATION

A. General: Provide manufacturer's standard sign assemblies according to requirements indicated.

1. Mill joints to a tight, hairline fit. Form assemblies and joints exposed to weather to resist water penetration and retention.
2. Provide welds and brazes behind finished surfaces without distorting or discoloring exposed side. Clean exposed welded and brazed connections of flux, and dress exposed and contact surfaces.
3. Conceal connections if possible; otherwise, locate connections where they are inconspicuous.
4. Internally brace signs for stability and for securing fasteners.
5. Provide rebates, lugs, and brackets necessary to assemble components and to attach to existing work. Drill and tap for required fasteners. Use concealed fasteners where possible; use exposed fasteners that match sign finish.

B. Subsurface-Applied Graphics: Apply graphics to back face of clear face-sheet material to produce precisely formed image. Image shall be free of rough edges.

C. Subsurface-Engraved Graphics: Reverse engrave back face of clear face-sheet material. Fill resulting copy with manufacturer's standard enamel. Apply opaque manufacturer's standard background color coating over enamel-filled copy.

# PART 3 - EXECUTION

## 3.1 INSTALLATION

A. General: Locate and install signs where indicated using mounting methods indicated and according to manufacturer's written instructions.

1. Install signs level, plumb, true to line, and at locations and heights indicated, with sign surfaces free of distortion and other defects in appearance.
2. Install signs so they do not protrude or obstruct according to the accessibility standard.
3. Before installation, verify that sign surfaces are clean and free of materials or debris that would impair installation.
4. Corrosion Protection: Coat concealed surfaces of exterior aluminum in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.
5. Install signs on walls adjacent to latch side of door where applicable. Where not indicated or possible, such as double doors, install signs on nearest adjacent wall. Locate to allow approach within 36 inches (75 mm) of sign without encountering protruding objects or standing within the swing of the door. Coordinate exact location with overall plan layout to be submitted for review with shop submittal.

6. Where signs are specified to be mounted on glass, provide matching plain sign backing to be placed on opposite side of glass to cover back side of sign.

B. Mounting Methods:

1. Concealed Studs: Using a template, drill holes in substrate aligning with studs on back of sign. Remove loose debris from hole and substrate surface.
   a. Masonry Substrates: Fill holes with adhesive. Leave recess space in hole for displaced adhesive. Place sign in position and push until flush to surface, embedding studs in holes. Temporarily support sign in position until adhesive fully sets.
   b. Thin or Hollow Surfaces: Place sign in position and flush to surface, install washers and nuts on studs projecting through opposite side of surface, and tighten.
2. Two-Face Tape (for use at glass mountings): Clean bond-breaking materials from substrate surface and remove loose debris. Apply tape strips symmetrically to back of sign and of suitable quantity to support weight of sign without slippage. Keep strips away from edges to prevent visibility at sign edges. Place sign in position, and push to engage tape adhesive.

C. Remove temporary protective coverings and strippable films after construction is complete prior to turning over project to Owner.

**END OF SECTION 101423**