

## **ADDENDUM No. 1**

**RFP No. 25-30**

### **Election Center Renovation**

**Due: June 27, 2025, at 2:00 P.M. (local time)**

The information contained herein shall take precedence over the original documents and all previous addenda (if any) and is appended thereto. **This Addendum includes twenty two (22) pages.**

The Proposer is to acknowledge receipt of this Addendum No. 1, including all attachments in its Proposal by so indicating in the proposal that the addendum has been received. Proposals submitted without acknowledgement of receipt of this addendum may be considered non-conforming.

The following forms provided within the RFP Document should be included in submitted proposal:

- Attachment B - General Declarations
- Attachment D - City of Ann Arbor Prevailing Wage Declaration of Compliance
- Attachment E - City of Ann Arbor Living Wage Declaration of Compliance
- Attachment G - Vendor Conflict of Interest Disclosure Form of the RFP Document
- Attachment H - City of Ann Arbor Non-Discrimination Declaration of Compliance

**Proposals that fail to provide these completed forms listed above upon proposal opening may be rejected as non-responsive and may not be considered for award.**

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## I. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the RFP. Respondents are directed to take note in its review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

Question 1: Regarding the new manual roller shades at the existing windows: I am assuming shades only need to be required at the windows in the rooms tagged with keynote #5 on sheet A-101. Is this correct?

Answer 1: Correct.

Question 2: Regarding the new manual roller shades at the existing windows: Roller shade fabrics are undefined. Keynote #5 says to refer to finish schedule, but I'm not able to find that. Could you please provide a basis of design specification or else performance requirements for both the sheer and blackout roller shade fabrics?

Answer 2: **Specification 122400 Window Roller Shades is added**

Question 3: Regarding the new manual roller shades at the existing windows: Do dual roller shades need a front fascia (or any other top treatment) or is an open bracket at the top acceptable?

Answer 3: Facia front and sides where exposed.

Question 4: Sheet A602 Finish Schedules appears to have not been issued. Please advise.

Answer 4: A602 references can be deleted.

Question 5: There is no spec for division 10 or division 12 spec, will these be issued?

Answer 5: **Acoustic Panel, Spray-on Acoustic Insulation, and Window Roller Shades specifications have been added**

Question 6: There is no spec for acoustic paneling or spray applied acoustical, will these be issued?

Answer 6: **Added Spec 098316**

Question 7: Can you provide more information on the unistrut system in the Studio?

Answer 7: **1 5/8" Unistrut rails hung from 3/8" threaded rods (at 4' o.c. each way) into existing roof structural members. Hung at various heights as shown in the documents.**

## ADDITIONAL INFORMATION

The following Clarification Addendum is considered additional information and is to be considered part of the contract documents.

1. Anticipated Project Schedule:

- a. Bid Award: August 18, 2025
- b. Before September 30, 2025
- c. Construction Completion and Building turnover: February 27, 2026

2. Owner Equipment within the building:

- a. Owner equipment will be moved out of the building before the start of Construction.

3. CTN Equipment requiring Contractor Relocation to the Miller Road facility:

- a. There is equipment noted to be relocated to the facility in the electrical drawings. This equipment will be relocated in the month of January, 2026 by the contractor in order to enable completion of work.

## **D R A W I N G S**

### **ARCHITECTURAL**

1. Refer to Drawing Sheet AD101 (Not Issued):
  - a. The contractor should refer to the door schedule for additional demolition of doors not indicated on the demolition plan but required by the project.

### **MECHANICAL**

2. Refer to Drawing Sheet M-101 (Not Issued):
  - a. There are two existing floor drains in the Receiving / Election Preparation room to the east of the toilet rooms (former "garage area") where two existing floor drains are to receive Pipe Plugs in the throat of the floor drain similar to Cherne Industries Hex nut rubber stopper plugs.

## **S P E C I F I C A T I O N S**

1. Table of Contents for the specifications issued.
2. Added specification sections 098316 Spray on Acoustical Insulation, 098400 Acoustic Wall Panels, 122400 Window Roller Shades.

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## **SECTION 09 8316 K-13 SPRAY-ON ACOUSTICAL INSULATION**

### **PART 1 – GENERAL**

#### **1.01 Section Includes**

- A. Sprayed cellulose thermal insulation. (07 21 29)
- B. Sprayed cellulose acoustical insulation. (09 83 16)

#### **1.02 Related Items**

- A. Clips, hangers, supports, sleeves and other attachments to spray bases are to be placed by other trades prior to the application of sprayed insulation.
- B. Ducts, piping, conduit or other suspended equipment shall not be positioned until after the application of sprayed insulation.
- C. Roof penetrations to be installed prior to application.

#### **1.03 Quality Assurance**

- A. Manufacturer must have a current Underwriters Laboratories (UL) Code Evaluation Report.
- B. Manufacturer must be in compliance with the 2009-2021 International Building Code.
- C. Manufacturer must be ISO 9001:2015 Certified.
- D. Manufacturer must be Forest Stewardship Council (FSC) Chain-of-Custody Certified.
- E. Applicator: Licensed by manufacturer.
- F. Manufacturer must subscribe to independent laboratory follow-up inspection services of Underwriters Laboratories and Factory Mutual. Each bag shall be labeled accordingly.
- G. Mock-up: Apply a 100 square foot representative sample to be reviewed by the Architect and/or Owner prior to proceeding.
- H. Manufacturer shall have a minimum 10-year successful performance history of producing and installing spray-applied cellulose on similar projects
- I. Material must be tested in accordance with ASTM E 1042 by a NVLAP accredited testing laboratory.

#### **1.04 Submittals**

- A. Submit product data that the product meets or exceeds the following specified requirements.
  - 1. Bond strength shall be greater than 150 psf per ASTM E 736.
  - 2. Product shall be Class 1 Class A per ASTM E 84/ UL 723.
  - 3. Non-corrosive per ASTM C 1149
  - 4. Bond Deflection per ASTM E 759: 6" Deflection in 10' Span – No Spalling or Delamination.
  - 5. R-Value to be 3.70 per inch per ASTM C 518.
  - 6. Comply with 2015 IBC Section 803.12 stability requirements for interior finishes.
  - 7. Meet ASTM C 1149
  - 8. Product shall be Cradle to Cradle® Certified v.3.1 or higher to a minimum certification level of Bronze
  - 9. Product shall be UL GREENGUARD Gold Certified
  - 10. Product must have a publicly available Health Product Declaration (HPD) to 100 PPM
  - 11. Product must have a third-party verified, publicly available, product-specific Environmental Product Declaration per ISO 14025
  - 12. Manufacturer's written certification that product contains no asbestos,



- fiberglass or other man-made mineral fibers.
- 13. Copy of manufacturer's ISO 9001:2015 Certification.
- 14. Minimum Fiber Recycled Content to be 80%.
- 15. Cannot contain any added Urea-Formaldehyde Resins.

#### **1.06 Delivery, Storage and Handling**

- A. Deliver in original, unopened containers bearing name of manufacturer, product identification and reference to U.L. testing.
- B. Store materials dry, off ground, and under cover.
- C. Protect liquid adhesive from freezing.
- D. Water to be potable.

### **PART 2 – PRODUCTS**

#### **2.01 Acceptable Manufacturers**

- A. International Cellulose Corporation  
12315 Robin Boulevard  
Houston, Texas 77045  
Phone: (713) 433-6701 or (800) 444-1252  
Fax: (713) 433-2029  
Website: [www.spray-on.com](http://www.spray-on.com)  
Email: [icc@spray-on.com](mailto:icc@spray-on.com)
- B. Sonaspray

#### **2.02 Materials**

- A. K-13 Spray-On-Systems.
  - 1. Color shall be from Manufacturer's standard color chart or custom color as noted
  - 2. Each bag must be labeled with appropriate UL classification and FM markings
  - 3. Each drum of adhesive must be labeled "SK-2000 adhesive to be used with K-13"

### **PART 3 – EXECUTION**

#### **3.01 Examination**

- A. Examine surfaces and report unsatisfactory conditions in writing. Do not proceed until unsatisfactory conditions are corrected.
- B. Verify surfaces to receive spray insulation to determine if priming/sealing is required to insure bonding and/or to prevent discoloration caused by migratory stains.

#### **3.02 Preparation**

- A. Provide masking, drop cloths or other satisfactory coverings for materials/surfaces that are not to receive insulation to protect from over-spray.
- B. Coordinate installation of the sprayed cellulose fiber with work of other trades.
- C. Prime surfaces as required by manufacturer's instructions or as determined by examination.
- D. Prime all gypsum board surfaces with high quality, commercial, gypsum board primer

#### **3.03 Installation**

- A. Install spray applied insulation according to manufacturer's recommendations.
- B. Comply with local Building Code requirements.
- C. Install spray applied insulation to achieve an average NRC of .90.

<b>K-13 Sprayed Thermal and Acoustical Insulation on Solid Backing:</b>		
<b>Thickness:</b>	<b>NRC:</b>	<b>R-Value:</b>
1.00"	0.80	3.70
1.50"	0.90	5.60
1.75"	1.00	6.50
2.00"	1.00	7.40
3.00"	1.00	11.10
4.00"	1.05	14.80
5.00"	1.00	18.50
<b>K-13 Sprayed Thermal and Acoustical Insulation on 1.50" Metal Deck:</b>		
<b>Thickness:</b>	<b>NRC:</b>	<b>R-Value:</b>
1.50"	1.05	5.60
3.00"	1.05	11.10
<b>K-13 Sprayed Thermal and Acoustical Insulation on 2" Metal Deck:</b>		
<b>Thickness:</b>	<b>NRC:</b>	<b>R-Value:</b>
1.00"	0.90	3.70
2.00"	1.05	7.40
<b>K-13 Sprayed Thermal and Acoustical Insulation on 3" Metal Deck:</b>		
<b>Thickness:</b>	<b>NRC:</b>	<b>R-Value:</b>
1.00"	0.95	3.70
1.50"	1.00	5.60
2.75"	1.05	10.20

- D. Cure insulation with continuous natural or mechanical ventilation.
  - a. Continuous ventilation must be maintained until the material has properly cured.
- E. Remove and dispose of over-spray.

#### **4.01 Protection**

- A. Protect finished installation under provision of Division 1.

END OF SECTION

## SECTION 09840 – ACOUSTICAL WALL PANELS

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. This section includes the following:
  - 1. Acoustical Wall Panel

#### **1.2 SUBMITTALS**

- A. Shop Drawings: Show fabrication and installation details for acoustical wall panels, including plans, elevations, sections, details and attachment to other work.
- B. Submittals: Furnish 12” x 12” samples, showing manufacturer full range of colors, texture and patterns available for each type of acoustical product specified.
- C. Product Test Report: From a qualified testing agency indicating wall panels comply with requirements.
- D. Qualification Data: For firms specified in “Quality Assurance” Article to demonstrate their capabilities and experience.
- E. Product Certificates: Signed by manufacturer certifying that the products furnished comply with requirements.

#### **1.3 QUALITY ASSURANCE**

- A. Manufacturer Qualification: Manufacturer shall have a minimum of 5 years experience in production of specified products and shall furnish supporting documentation showing completed jobs of approximately the same size and scope.
- B. Fire Test Reports: Provide acoustical wall panels with the following surface- burning characteristics as per ASTM E 84.
  - 1. Flame Spread: 25 or less
  - 2. Smoke Developed: 450 or less
- C. Acoustical Test Report: Provide acoustical test report from a qualified testing agency indicating acoustical wall panels meets 0.25-0.65 NRC per ASTM C-423.

## **1.4 DELIVERY, STORAGE, AND HANDLING**

- A. Protect Acoustical Wall Panels from excessive moisture when shipping, storing, and handling. Deliver in unopened skids and store in a dry place with adequate air circulation. Do not deliver material until all wet-work has been completed.

## **PART 2 – PRODUCTS**

### **2.1 WALL PANELS, GENERAL**

- A. Acoustical Wall Panels shall be nom. 1.0” (25mm) thick – 24 lb. per cubic foot mineral fiber core. Manufacturers standard panel construction, fully wrapped edges, with panel manufacturers standard full line of fabric.
  - 1. Products:
    - a. Model # Sound Quality S-3100  
Sound Seal  
Agawam, MA. USA
    - b. Acoufelt
  - 2. Facing Material: Guilford of Maine FR 701 – Style 2100 – 100% polyester (or other)
  - 3. Panel Thickness: nominal 1.0” (25 mm) thick
  - 4. Noise Reduction Coefficient: NRC 0.25-0.60
  - 5. Panel Width: 48 inches
  - 6. Panel Length: As indicated, up to 10 feet long.

### **2.2 CONSTRUCTION**

- A. The acoustical wall panel product shall be supplied in 48” wide panels with lengths as indicated. All edges will be fully wrapped with mounting as indicated.

### **2.3 MOUNTING**

- A. Back-Mounting Accessories: Manufacturers standard accessories for securely mounting panels, of type and size indicated and complying with the following requirements:

1. Construction adhesive and finish nails through face of panel. (When fabric permits)
2. Construction adhesive and contact cement.

## **2.4 ACOUSTICAL PERFORMANCE**

Sound Absorption: Per ASTM C – 423

Sound Absorption Coefficient per Octave Band Center Frequency  
(Hz)

	125	250	500	1000	2000	4000	NRC
1/2"	.06	.11	.18	.32	.36	.34	.25
3/4"	.07	.25	.71	.74	.60	.54	.60

## **2.5 FLAMMABILITY RATING**

- A. All components shall have a Class A Flammability rating per ASTM E- 84: Surface Burning Characteristics of Building Materials, with a Flame Spread of 25 or less and Smoke Developed of 450 or less

# **PART 3 – EXECUTION**

## **3.1 INSTALLATION**

- A. Install Acoustical Wall panels in locations indicated, top edges level and in alignment with other panels. Comply with manufacturers written instructions for installation of panels using type of mounting accessories indicated or, if not indicated, as recommended by manufacturer.

## **3.2 CLEANING**

- A. After completion of installation of panels, remove dust and other foreign material according to manufacturers written instructions.
- B. Remove surplus material, rubbish, and debris resulting from panel installation, on completion of the work, and leave areas of installation in a neat and clean condition.

SECTION 122400 – WINDOW ROLLER SHADES

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Manual sunscreen roller shades and accessories.
- B. Manual room-darkening shades and accessories.
- C. Manual double-roller sunscreen and room-darkening shades.
- D. Motorized roller shades and accessories.
- E. Motor controls, interfaces, and accessories.

**1.02 RELATED REQUIREMENTS**

- A. Section 06 10 00 - Rough Carpentry: Concealed wood blocking for attachment of shade brackets and accessories.
- B. Section 09 21 16 - Gypsum Board Assemblies: Coordination with gypsum board assemblies for installation of shade pockets, closures and related accessories.
- C. Section 09 51 13 - Acoustic Panel Ceilings: Coordination with acoustical ceiling systems for installation of shade pockets, closures and related accessories.

**1.03 REFERENCE STANDARDS**

- A. ASTM G21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi 2015.
- B. C2C (DIR) - C2C Certified Products Registry; Cradle to Cradle Products Innovation Institute [www.c2ccertified.org/products/registry](http://www.c2ccertified.org/products/registry).
- C. NFPA 70 - National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- D. NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films 2015.
- E. UL (GGG) - GREENGUARD Gold Certified Products Current Edition.
- F. UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems Current Edition, Including All Revisions.
- G. WCMA A100.1 - Safety of Window Covering Products 2018.

**1.04 ADMINISTRATIVE REQUIREMENTS**

- A. Preinstallation Meeting: Convene one week prior to commencing work related to products of this section; require attendance of all affected installers.
- B. Sequencing:
  - 1. Do not fabricate shades until field dimensions for each opening have been taken with finished conditions in place. "Hold to" dimensions are not acceptable.
  - 2. Do not install shades until final surface finishes and painting are complete.

**1.05 SUBMITTALS**

- A. Product Data: List of proposed products and manufacturer's printed information including:
  - 1. Preparation instructions and recommendations.

2. Styles, material descriptions, individual components, dimensions, performance criteria, profiles, features, finishes and operating instructions.
3. Provide test reports indicating compliance with specified fabric properties.
4. Storage and handling requirements and recommendations.
- B. Shop Drawings: Show window openings, window treatment type, components, dimensions, clearance requirements, blocking requirements, and attachment method.
  1. Field Measurements: Verify actual measurements for openings before fabrication, and after finish work is complete including painting and window installation. Indicate verified field measurements on the Shop Drawings.
  2. Provide installation templates for Work installed by others.
- C. Window Shade Schedule: Submit room list, field verified window dimensions, quantities, shade type, fabric, and color.
- D. Samples: Fabrics and metal finishes for initial and final selections by Architect.
  1. Verification Samples: For each finish product specified, two (2) full-size samples, representing actual product, color, material and pattern.
- E. For LEED projects, follow sustainability submittal requirements in Section 01 81 13.
- F. Project Record Documents: Record actual locations of control system components and show interconnecting wiring.
- G. Operation and Maintenance Data: List of all components with part numbers, and operation and maintenance instructions; include copy of shop drawings.
- H. Warranty: Submit sample of manufacturer's warranty and documentation of final executed warranty completed in Owner's name and registered with manufacturer.

#### 1.06 QUALITY ASSURANCE

- A. Motorized Shades: Comply with NFPA 70.
- B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than ten years of documented experience.
- C. Installer Qualifications: Company specializing in performing work of this type with minimum ten years of documented experience with shading systems of similar size, type, and complexity; manufacturer's authorized representative.
- D. NFPA Flame-Test: Passes NFPA 701. Materials tested shall be identical to products proposed for use.

#### 1.07 MOCK-UP

- A. Mock-Up: Provide full size mock-up of window shade system complete with selected shade fabric including example of seams and batten pockets or as required to simulate jobsite conditions when applicable.
  1. Obtain Architect-Engineer's approval of light and privacy characteristics of fabric prior to fabrication.
  2. Locate mock-up in window(s) designated by Architect.
  3. Do not proceed with remaining work until mock-up is accepted by Architect.
  4. Full-sized mock-up may become part of the final installation.

**1.08 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver shades in manufacturer's unopened packaging, labeled to identify each shade for each opening.
- B. Label containers and shades according to Window Shade Schedule.
- C. Handle and store shades in accordance with manufacturer's recommendations.

**1.09 FIELD CONDITIONS**

- A. Do not install products under environmental conditions outside manufacturer's absolute limits.

**1.10 WARRANTY**

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Provide manufacturer's standard, non-depreciating warranty, for interior shading only, covering the following:
  - 1. Shade Hardware: 10 years unless otherwise indicated.
  - 2. Shade Fabric: 25 years unless otherwise indicated.
  - 3. Electric Motors, Controls, and Accessories: Five years.

**PART 2 PRODUCTS****2.01 MANUFACTURERS**

- A. Draper, Inc.; [www.draperinc.com](http://www.draperinc.com)
- B. MechoShade Systems LLC; [www.mechoshade.com](http://www.mechoshade.com).
- C. OpenLight Roller Shade Systems by Creative Windows [www.openlightshades.com](http://www.openlightshades.com)
- D. Substitutions: See Section 01 25 00 Substitution Procedures

**2.02 ROLLER SHADES**

- A. General:
  - 1. Provide shade system components that are capable of being removed or adjusted without removing mounted shade brackets or cassette support channel.
  - 2. Provide shade system that operates smoothly when shades are raised or lowered.
  - 3. Provide shade system that is Cradle-to-Cradle certified and listed in C2C (DIR) or Green Guard
  - 4. Electrical Components: Listed, classified, and labeled as suitable for the purpose intended. Individual testing of components will not be acceptable in lieu of system testing. Where applicable, system components to be FCC compliant.
- B. Roller Shades, manually operated fabric window shades
  - 1. Provide universal drive capability to offset drive chain for reverse roll or regular roll shades.
  - 2. Drop Position: Regular roll.
  - 3. Mounting: as indicated in project drawings.
  - 4. Size: As indicated on drawings.
  - 5. Fabric: As indicated under Shade Fabric article.



6. Brackets and Mounting Hardware: As recommended by manufacturer for mounting indicated and to accommodate shade fabric roll-up size and weight.
  - a. Material: Steel, 1/8 inch (3 mm) thick.
  - b. Double Roller Brackets: Configured for light-filtering and room-darkening shades in one opening.
    - 1) Light-Filtering Fabric: Room-side of opening.
    - 2) Room-Darkening Fabric: Glass-side of opening.
  - c. Multiple Shade Band Operation: Provide hardware as necessary to operate more than one shade band using a single clutch operator.
  - d. Radiused Center Support Brackets: Provide brackets and connectors for radiused window applications.
    - 1) Maximum Offset: Eight degrees on each side for a 16 degree total offset.
7. Roller Tubes:
  - a. Material: Extruded aluminum or steel
  - b. Size: As recommended by manufacturer; selected for suitability for installation conditions, span, and weight of shades.
  - c. Fabric Attachment: Utilize extruded channel in tube to accept vinyl spline welded to fabric edge. Shade band to be removable and replaceable without removing roller tube from brackets or inserting spline from the side of the roller tube.
  - d. Roller tubes to be capable of being removed and reinstalled without affecting roller shade limit adjustments.
8. Hembars: Designed to maintain bottom of shade straight and flat.
  - a. Style: As indicated in project details, exposed hardware finishes as selected by Architect for manufacture's standard options and finishes.
  - b. Room-Darkening Shades: Provide a slot in bottom bar with wool-pile light seal.
9. Clutch Operator: Manufacturer's standard material and design integrated with bracket/brake assembly.
  - a. Provide a permanently lubricated brake assembly mounted on a oil-impregnated hub with wrapped spring clutch.
  - b. Brake must withstand minimum pull force of 50 pounds (22.7 kg) in the stopped position.
  - c. Mount clutch/brake assembly on the support brackets, fully independent of the roller tube components.
10. Drive Chain: Continuous loop stainless steel beaded ball chain, 95 pound (43 kg) minimum breaking strength. Provide upper and lower limit stops.
  - a. Chain Retainer: Chain tensioning device complying with WCMA A100.1.
11. Accessories:
  - a. Fascia, as indicated in project drawings: Removable fascia, size as required to conceal shade mounting, attachable to brackets without exposed fasteners; finish and profile to be selected by Architect from manufactures standard selections.

- 1) Fascia to be capable of installation across two or more shade bands in one piece.
- b. Ceiling Pockets, as indicated in project drawings: Premanufactured metal shade pocket with removable closure panel and ceiling tile support, for recess mounting in acoustical tile or drywall ceilings; size and configuration as indicated on drawings.
- c. Room-Darkening Channels, Standard: Bottom, side and center channels with brush pile edge seals, and concealed fasteners. Channels to accept one-piece exposed blackout hembar to assure side light control and sill light control. Profile and finish as selected by Architect from manufacturer's standard options.

### 2.03 SHADE FABRIC

- A. Fabric for Light Filtering Shades: Non-flammable, color-fast, impervious to heat and moisture, and able to retain its shape under normal operation.
  1. Material Composition:
    - a. PVC coated polyester yarns.
  2. Material Certificates and Product Disclosures:
    - a. Low-Emitting Material Certification: Greenguard Gold certified and listed in UL (GGG).
  3. Performance Requirements:
    - a. Flammability: Pass NFPA 701 large or small scale test.
    - b. Fungal Resistance: No growth when tested according to ASTM G21.
  4. Openness Factor: 3%, nominal, unless glazing visible transmission (TV) and elevation orientation warrants a decrease or increase in percentage of openness; and as indicated in project drawings.
  5. Color: As selected by Architect from manufacturer's standard colors.
  6. Weave: As selected by Architect.
- B. Fabric for Room-Darkening Shades: Non-flammable, color-fast, impervious to heat and moisture, and able to retain its shape under normal operation.
  1. Material Composition:
    - a. Vinyl coated fabric.
  2. Material Certificates and Product Disclosures:
    - a. Low-Emitting Material Certification: Greenguard Gold certified and listed in UL (GGG).
  3. Performance Requirements:
    - a. Flammability: Pass NFPA 701 large or small scale test.
    - b. Fungal Resistance: No growth when tested according to ASTM G21.
  4. Color: As selected by Architect from manufacturer's standard colors.
  5. Weave: As selected by Architect.

### 2.04 ELECTRONIC DRIVE SYSTEM

**A. Electronic Drive Unit (EDU) System - General Requirements:**

1. System to be certified and labelled as a UL 325 listed solution. Recognized component certification is not acceptable in lieu of system testing. Listing label and motor rating to be readily visible for inspection without requiring dismounting of shade assembly for motor or EDU to be removed from shade roller tube.
2. EDU size and configuration to be as recommended by manufacturer for the type, size, and arrangement of shades to be operated.
3. Conceal EDU inside shade roller tube.
4. Use EDU's rated at the same nominal speed for shades in the same room.
5. Total hanging weight of shade band not to exceed 80 percent of rated lifting capacity of shade EDU and tube assembly.
6. Provide EDU with capability of upgrading firmware from anywhere on network without touching the motor.
7. Consult City of Ann Arbor for power strategies including:
  - a. Line voltage with 120 VAC
  - b. Low Voltage (24 DC), i.e. Digital Ceiling

**2.05 MOTOR CONTROLS**

- A. Unless specifically indicated to be excluded, provide all required equipment, conduit, boxes, wiring, connectors, hardware, supports, accessories, software, system programming, etc. as necessary for a complete operating system that provides the control intent indicated.
- B. Provide all components and connections necessary to interface with other systems as indicated.
- C. Consult City of Ann Arbor for control requirements including but not limited to:
  1. Digital low voltage network
  2. Wireless controllers
  3. Required sensors
  4. Extent of integration into building management systems
  5. Level of system automation
  6. Data logging and analysis requirements

**2.06 ROLLER SHADE FABRICATION**

- A. Field measure finished openings prior to ordering or fabrication.
- B. Dimensional Tolerances: Fabricate shades to fit openings within specified tolerances.
  1. Vertical Dimensions: Fill openings from head to sill with 1/2 inch (13 mm) space between bottom bar and window stool.
  2. Horizontal Dimensions - Outside Mounting: Cover window frames, trim, and casings completely.
- C. Dimensional Tolerances: As recommended in writing by manufacturer.

- D. At openings requiring continuous multiple shade units with separate rollers, locate roller joints at window mullion centers; butt rollers end-to-end.

### **PART 3 EXECUTION**

#### **3.01 EXAMINATION**

- A. Examine finished openings for deficiencies that may preclude satisfactory installation.
- B. If substrate preparation is the responsibility of another installer, notify Architect-Engineer of unsatisfactory preparation before proceeding.
- C. Start of installation shall be considered acceptance of substrates.

#### **3.02 PREPARATION**

- A. Prepare surfaces using methods recommended by manufacturer for achieving best result for substrate under the project conditions.
- B. Coordinate with window installation and placement of concealed blocking to support shades.

#### **3.03 INSTALLATION**

- A. Install in accordance with manufacturer's instructions and approved shop drawings, using mounting devices as indicated.
- B. Replace shades that exceed specified dimensional tolerances at no extra cost to Owner.
- C. Adjust level, projection, and shade centering from mounting bracket. Verify there is no telescoping of shade fabric. Ensure smooth shade operation.

#### **3.04 SYSTEM STARTUP**

- A. Motorized Shade System: Provide services of a manufacturer's authorized representative to perform system startup.

#### **3.05 CLEANING**

- A. Clean soiled shades and exposed components as recommended by manufacturer.
- B. Replace shades that cannot be cleaned to "like new" condition.

#### **3.06 CLOSEOUT ACTIVITIES**

- A. Demonstration: Demonstrate operation and maintenance of window shade system to Owner's personnel.
- B. Training: Train Owner's personnel on operation and maintenance of system.
  - 1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.
  - 2. Provide minimum of two hours training by manufacturer's authorized personnel at location designated by the Owner.

#### **3.07 PROTECTION**

- A. Protect installed products from subsequent construction operations.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

### **END OF SECTION**

# SIGN IN SHEET

ELECTION CENTER RENOVATION

TIME





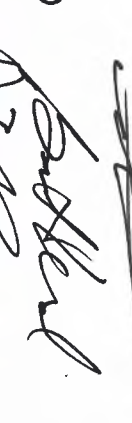








EVENT DATE






PRE BID MEETING

3021 Miller Rd, Ann Arbor, MI 48103

1:00 PM

06-05-2025

NO	PRINT NAME	PHONE	EMAIL	COMPANY REPRESENTING	SIGNATURE
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5	Bart Reed	248 569 1430	ext 331 bart@dsonline.com	DSD	
6	Jim Murphy	800 624 8062	jim.murphy.mes@gmail.com	Murphy Electrical	
7	Randy Stebbins	503 857-704	rstebbins@progressive.com	Progressive Insurance	
8	Andrew Henry	734-756-3753	andrehenry@spacebrothers.com	Space Brothers	
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