



Department of Public Works
Engineering Division
Robert F. Phillips, P.E., City Engineer
City-County Building, Room 115
210 Martin Luther King, Jr. Boulevard
Madison, Wisconsin 53703
Phone: (608) 266-4751
Fax: (608) 264-9275
engineering@cityofmadison.com
www.cityofmadison.com/engineering

Deputy City Engineer
Gregory T. Fries, P.E.
Deputy Division Manager
Kathleen M. Cryan
Principal Engineer 2
Christopher J. Petykowski, P.E.
John S. Fahrney, P.E.
Principal Engineer 1
Christina M. Bachmann, P.E.
Mark D. Moder, P.E.
Janet Schmidt, P.E.
Facilities & Sustainability
Jeanne E. Hoffman, Manager
Bryan Cooper, Principal Architect
Mapping Section Manager
Eric T. Pederson, P.S.
Financial Manager
Steven B. Danner-Rivers

June 12, 2019

**NOTICE OF ADDENDUM
ADDENDUM NO. 1
City of Madison, Engineering Department**

CONTRACT NO. 7769

SYCAMORE AVE. PUBLIC WORKS MAINTENANCE FACILITY-OFFICE REMODEL PROJECT

This addendum is issued to modify, explain or correct the original Drawings, Specifications, or Contract Documents marked as **Sycamore Ave. Public Works Maintenance Facility – Office Remodel Project, City of Madison, Contract #7769, as issued on May 15, 2019** and is hereby made a part of the contract documents.

This addendum consists of the following documents:

- **Drawings A600 & A900**
- **Specification Pages (08 62 50 -1) thru (08 62 50 -3)**
- **Specification Pages (10 22 26 -1) thru (10 22 26 -3)**

Please attach these Addendum documents to the Drawings (Exhibit A), Specifications (Exhibit B), and Proposal Specifications in your possession.

1. **GENERAL CONTRACT CONDITIONS**

A. No Change.

2. **GENERAL QUESTIONS AND ANSWERS**

A. Q1: The elevations would infer that this building is all metal roof, I don't know if it's a screw down or standing seam but when I look at A102, I see someone else thinks this is a rubber Firestone Roof and that the contractor should even carry a specific amount for an inspection fee. I don't see a spec section for rubber roofing, so which is it?

A1: The existing roof is a fully adhered, white reinforced, single ply 45 mil TPO membrane roof system. Installed in 2007, the roof has a standard warranty of fifteen (15) years. Roof work to be done by a licensed firestone contractor in accordance with the firestone product repair guidelines to maintain the warranty.

B. Q2: It appears that the specifications are missing a steel and masonry section. Will these sections be added?

A2: See Structural Sheet S001 for steel and masonry structural specification information.

3. ACCEPTABLE EQUIVALENTS

- A. Specification Section 10 22 26 Partition Systems:
 - i. Modernfold Truss system is an approval equal to the Unispan 900 truss system.
- B. Specification Section 08 71 00 Door Hardware:
 - i. USA 8100 Swing Door Operator is an approved equal for the automatic operators.

4. SPECIFICATIONS

- A. Specifications 00 01 00 – Technical Sections – Table of Contents
 - i. Add 08 62 50 Tubular Daylighting Devices to Division 8 of the Table of Contents.
 - ii. Remove 10 22 00 – Partition Systems from Division 10 of the Table of Contents.
 - iii. Add 10 22 29 Folding Door and Partitions to Division 10 of the Table of Contents.
- B. Specification 08 62 50 - Tubular Daylighting Devices
 - i. Add specification section 08 62 50.
- C. Specification 10 22 00 – Partition Systems
 - i. Remove specification section 10 22 00.
- D. Specification 10 22 26 - Folding Door and Partitions
 - i. Add specification section 10 22 26.

5. DRAWINGS

- A. Architectural
 - i. **Drawing G001:** Add Note “XM 5” CMU” below XM4.
 - ii. **Drawing A200:** Revise all three “XTG METAL ROOFING” notes on elevation 2 to read “XTG TPO MEMBRANE ROOF”.
 - iii. **Drawing A600 (remove and replace with attached sheet):** Drawing revised to show partition callouts. See revised sheet A600.
 - iv. **Drawing A900 (remove and replace with attached sheet):** The Room Finish Schedule has been revised to correct a few room numbers and square footages. . See revised sheet A900.

6. PROPOSAL SPECIFICATIONS

- A. Revise SECTION D: SPECIAL PROVISIONS, SECTION 105.12 COOPERATION BY THE CONTRACTOR to include the added provision:
 - i. The City of Madison will hold a separate contract for asbestos removal. Please refer to REF DOC 2 for additional information on anticipated asbestos containing material type, location, and quantity. Contractor for this Work should assume multiple phases for asbestos removal and provide adequate time and notice for the City’s asbestos removal contractor to complete the Work. Contractor for this Work shall coordinate directly with the City’s asbestos removal contractor in order to complete the Work of this contract.

Please acknowledge this addendum in Section E on page E-1: Bidder’s Acknowledgement on Bid Express.

Electronic version of these documents can be found on Bid Express at <https://www.bidexpress.com/> and the City of Madison web site at <http://www.cityofmadison.com/business/PW/contracts/openforBid.cfm>

If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 to receive the material by another method.

For questions regarding this bid, contact:

The Project Architect for this contract is:	The City Project Manager for this contract is:
<u>Destree Design Architects</u> Jeremy Cynkar PH: 608-512-1883 Email: jcynkar@destreearchitects.com	<u>City of Madison</u> Brent Pauba PH: 608-266-4092 Email: bpauba@cityofmadison.com

Sincerely,



Robert F. Phillips, P.E., City Engineer



DESTREE
architecture & design

222 WEST WASHINGTON AVE. SUITE 310
MADISON, WI 53703
PH: 608.268.1499
www.destreearchitects.com



DESTREE DESIGN ARCHITECTS, INC.
HOLDS ALL RIGHTS INCLUDING THE
COPYRIGHT OF THIS DOCUMENT, AS
WELL AS THE CONCEPTS AND DESIGNS
INCORPORATED HEREIN AS AN
INSTRUMENT OF SERVICE. AS PROPERTY
OF DESTREE DESIGN ARCHITECTS, INC. IT
IS NOT TO BE COPIED, DISTRIBUTED, OR
USED IN WHOLE OR PART WITHOUT THE
EXPRESS WRITTEN CONSENT OF DESTREE
DESIGN ARCHITECTS, INC.

CITY OF MADISON
EAST STREET OFFICE REMODEL
4602 SYCAMORE AVENUE
MADISON, WI 53704

ISSUANCES:

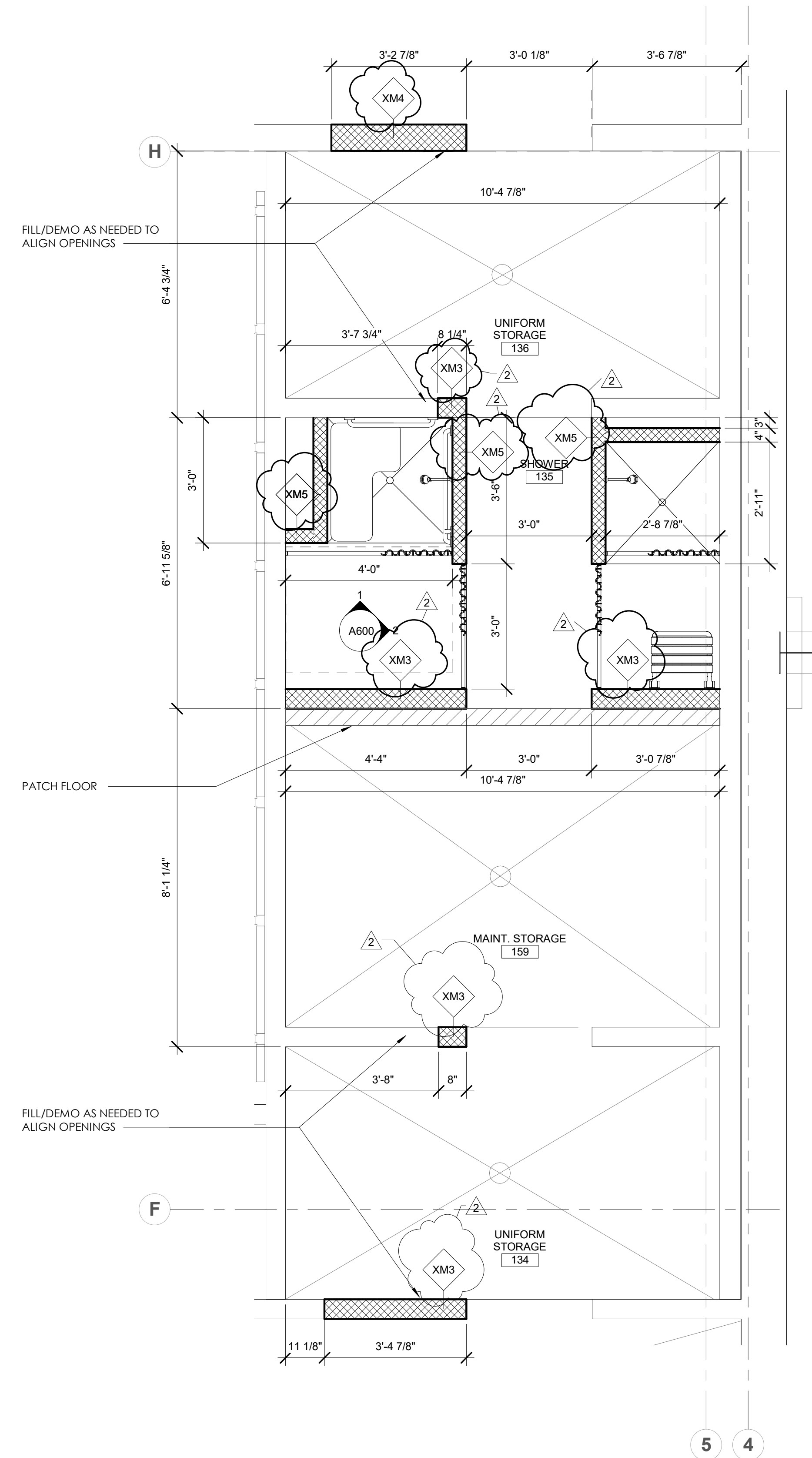
05-15-2019 BID SET
06-12-2019 ADDENDUM 1

PROJECT #: 171118.00
SHEET NUMBER

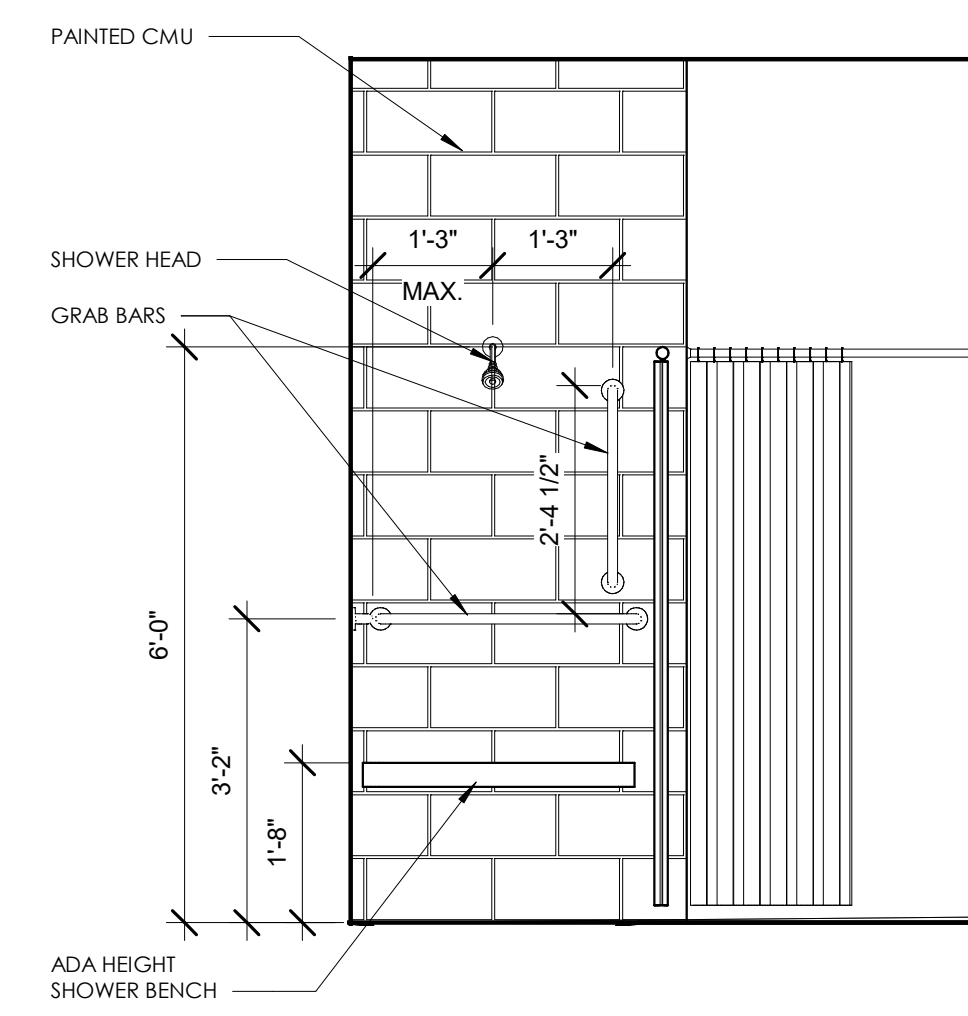
A600

SHOWER PLAN GENERAL NOTES

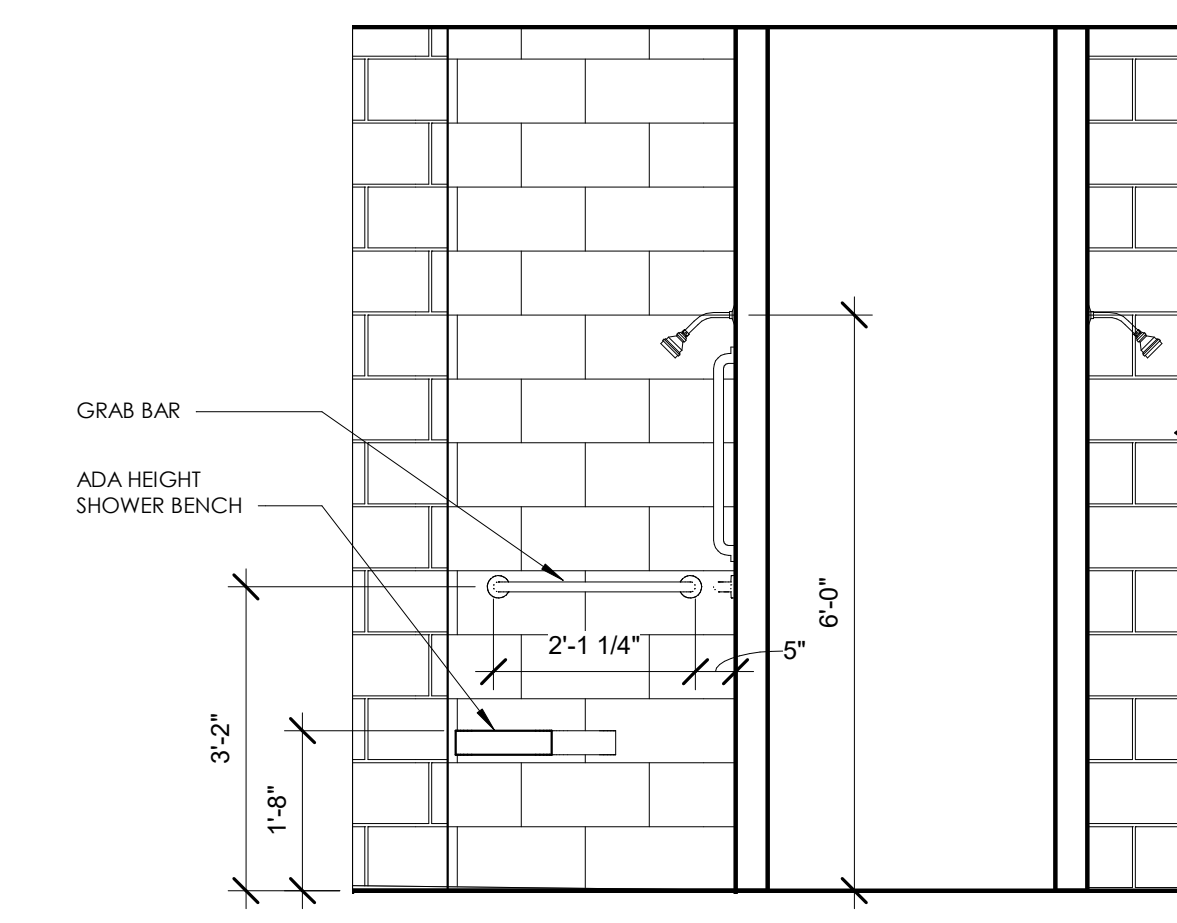
- 1. SHOWER ACCESSORIES PROVIDED BY OWNER AND INSTALLED BY OWNER, EXCEPT FOR GRAB BARS.



3 SHOWER PLAN
SCALE: 1/2" = 1'-0"



2 EAST ELEVATION ADA SHOWER
SCALE: 1/2" = 1'-0"



1 NORTH ELEVATION SHOWER
SCALE: 1/2" = 1'-0"

ROOM FINISH SCHEDULE									
NUMBER	NAME	AREA	FLOOR FINISH	CEILING FINISH	BASE FINISH	WALL FINISHES			
						EAST	WEST	NORTH	SOUTH
100	WOMEN'S LOCKER	176 SF	-	ACT-2	-	-	-	-	-
101	LACTATION RM	50 SF	-	ACT-2	-	-	-	-	-
102	SHOWER	55 SF	-	ACT-2	-	-	-	-	-
109	CORRIDOR-1	805 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-1	PT-3	PT-1
111	PARKS LUNCH RM	934 SF	CON. SEAL 1	ACT-1	VB-1	PT-2	PT-2	PT-1	PT-1
112	STREETS LUNCH RM	4409 SF	CON. SEAL 1	ACT-1	VB-1	PT-2	PT-2	PT-1	PT-1
113	WEIGHTS & MEASURES	230 SF	CON. SEAL 1	ACT-1	VB-1	PT-2	PT-2	PT-1	PT-1
114	PARKS GENERAL OFFICE	631 SF	CON. SEAL 1	ACT-1	VB-1	PT-2	PT-2	PT-1	PT-1
115	OFFICE A	185 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-2	PT-1	PT-1
116	OFFICE B	117 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-2	PT-1	PT-1
117	CONFERENCE ROOM	269 SF	CON. SEAL 1	ACT-1	VB-1	PT-2	PT-2	PT-1	PT-1
118	OFFICE C	140 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-1	PT-3	PT-1
119	RECEPTION HALLWAY	237 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-1	PT-1	PT-1
120	VESTIBULE	48 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-1	PT-1	PT-1
121	STREETS GENERAL OFFICE	1057 SF	CON. SEAL 1	ACT-1	VB-1	PT-2	PT-2	PT-1	PT-1
122	OFFICE F	149 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-2	PT-1	PT-1
123	STORAGE	153 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-1	PT-1	PT-1
124	OFFICE D	145 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-2	PT-1	PT-1
125	OFFICE E	216 SF	CON. SEAL 1	ACT-1	VB-1	PT-2	PT-2	PT-1	PT-1
126	VESTIBULE	57 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-1	PT-1	PT-1
127	CORRIDOR-2	269 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-3	PT-1	PT-1
127-A	CORRIDOR-3	63 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-1	PT-1	PT-1
128	ADA TOILET	85 SF	CT-1	ACT-1	VB-1	PT-4	PT-4	PT-1	PT-1
129	NORTH VESTIBULE	78 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-1	PT-1	PT-1
130	IT CLOSET	38 SF	CON. SEAL 1	ACT-1	-	PT-1	PT-1	PT-1	PT-1
131	MECH. & ELECT. ROOM	801 SF	CON. SEAL 1	ACT-1	-	PT-1	PT-1	PT-1	PT-1
131-A	EMERG. GENERATOR	137 SF	CON. SEAL 1	ACT-1	-	PT-1	PT-1	PT-1	PT-1
132	STREETS LOCKER	654 SF	STEAM CLEAN & SEAL	ACT-1	VB-1	PT-1	PT-1	PT-1	PT-4
133	MEN'S TOILET	586 SF	STEAM CLEAN & SEAL	ACT-1	VB-1	PT-4	PT-4	PT-1	PT-1
134	UNIFORM STORAGE	64 SF	STEAM CLEAN & SEAL	ACT-1	VB-1	PT-1	PT-1	PT-1	PT-1
135	SHOWER	62 SF	STEAM CLEAN & SEAL	ACT-2	-	PT-5	PT-5	PT-5	PT-5
136	UNIFORM STORAGE	63 SF	STEAM CLEAN & SEAL	ACT-2	VB-1	PT-1	PT-1	PT-1	PT-1
138	ELEC. PANEL	28 SF	CON. SEAL 1	ACT-1	-	PT-1	PT-1	PT-1	PT-1
139	PARKS LOCKER	580 SF	STEAM CLEAN & SEAL	ACT-1	VB-1	PT-1	PT-1	PT-4	PT-1
140	CORRIDOR-4	519 SF	CON. SEAL 1	ACT-1	VB-1	PT-1	PT-3	PT-1	PT-3
142	W. TOILET	129 SF	STEAM CLEAN & SEAL	ACT-1	VB-1	PT-4	PT-4	PT-1	PT-1
143	WOMEN'S LOCKER	183 SF	STEAM CLEAN & SEAL	ACT-1	VB-1	PT-1	PT-1	PT-1	PT-4
146	BREAK ROOM	144 SF	CON. SEAL 1	ACT-1	VB-1	PT-2	PT-1	PT-2	PT-1
147-A	MECH. MEZZ. STAIRS	36 SF	CON. SEAL 1	ACT-1	-	PT-1	PT-1	PT-1	PT-1
158	MAINT. CLOSET	31 SF	STEAM CLEAN & SEAL	ACT-1	VB-1	PT-1	PT-1	PT-1	PT-1
159	MAINT. STORAGE	79 SF	STEAM CLEAN & SEAL	ACT-1	VB-1	PT-1	PT-1	PT-1	PT-1

GENERAL REMARKS:

- SEE ELEVATION FOR WALL PAINT COLOR DESIGNATION.
- SEE FINISH PLAN FOR TILE PATTERN.

FINISH SPECIFICATIONS

TILE:

CT-1: MANUFACTURER: DAL TILE
 STYLE: GAINSWOOD
 COLOR: WALNUT GW07
 SIZE: 6" x 24"
 FINISH: MATTE
 APPLICATION: ADA RESTROOM FLOOR TILE

PAINT:

PT-1: MANUFACTURER: SHERWIN WILLIAMS
 COLOR: EIDER WHITE
 SHEEN: MATTE
 APPLICATION: GENERAL OFFICE COLOR

PT-2: MANUFACTURER: SHERWIN WILLIAMS
 COLOR: NAVAL
 SHEEN: MATTE
 APPLICATION: ACCENT WALL COLOR

PT-3: MANUFACTURER: SHERWIN WILLIAMS
 COLOR: BLACK FOX
 SHEEN: MATTE
 APPLICATION: ACCENT WALL COLOR

PT-4: MANUFACTURER: SHERWIN WILLIAMS
 COLOR: DOVETAIL
 SHEEN: MATTE
 APPLICATION: ACCENT WALL COLOR

PT-5: IMMERSION GRADE SYSTEM
 MANUFACTURER: SHERWIN WILLIAMS
 COLOR: TO MATCH EXISTING WALL COLOR
 1ST COAT: S-W KEM CATI-COAT HS EPOXY FILLER/SEALER, B42W400 SERIES
 2ND COAT: S-W MACROPOXY 646 FAST CURE EPOXY, B58-600 SERIES
 3RD COAT: S-W MACROPOXY 646 FAST CURE EPOXY, B58-600 SERIES
 SHEEN: SEMI-GLOSS
 APPLICATION: ACCENT WALL COLOR
 (REP: SUSAN SIENKOWSKI, SHERWIN WILLIAMS COMPANY, PHONE (312) 565-0622)

PLASTIC LAMINATE

PLAM-1: MANUFACTURER: WILSONART
 COLOR: GREY ELM
 FINISH: MATTE
 APPLICATION: COUNTERTOP ON CABINETS

PLAM-2: MANUFACTURER: WILSONART
 COLOR: GREY
 FINISH: SOFT GRAIN W/ AERON
 APPLICATION: CASE WORK

PLAM-3: MANUFACTURER: WILSONART
 COLOR: FUSION MAPLE
 FINISH: MATTE
 APPLICATION:

ACOUSTICAL CEILING TILE:

ACT-1: MANUFACTURER: ARMSTRONG
 STYLE: CALLA
 SIZE: 2' x 2' x 1"
 GRID PROFILE: SQUARE TEGULAR
 EDGE:
 COLOR: WHITE
 NRC: 0.85
 CAC: 35
 LR: 0.86
 APPLICATION: PRIVATE OFFICE/ ENCLOSED SPACES

ACT-2: MANUFACTURER: ARMSTRONG
 STYLE: KITCHEN ZONE
 SIZE: 2' x 2' x 5/8"
 GRID PROFILE: SQUARE TEGULAR
 EDGE:
 COLOR: WHITE
 NRC: N/A
 CAC: 33
 LR: 0.89
 APPLICATION: SHOWER

CORNER GUARDS

CG1: MANUFACTURER: INPRO
 COLOR: TAUPE
 TYPE: TAPE ON
 SIZE: 3' x 4'
 FINISH: 060
 APPLICATION: CORNER

VINYL BASE

VB-1: MANUFACTURER: JOHNSONITE
 COLOR: BURNT UMBER
 STYLE: 6" TRADITIONAL
 APPLICATION: MAIN WALL BASE

CONCRETE SEALANTS

CONC. SEAL 1: MANUFACTURER:
 PRODUCT:
 APPLICATION:

GENERAL NOTES

- REFER TO INTERIOR ELEVATIONS FOR FURTHER CLARIFICATION OF MATERIALS, LOCATIONS AND FINISHES.
- REFER TO FINISH PLAN FOR SPECIFIC INSTALLATION PATTERN AND ORIENTATION OF TILE.



DESTREE DESIGN ARCHITECTS, INC. HOLDS ALL RIGHTS INCLUDING THE COPYRIGHT OF THIS DOCUMENT, AS WELL AS THE CONCEPTS AND DESIGN INCORPORATED HEREIN AS AN INSTRUMENT OF SERVICE. AS PROPERTY OF DESTREE DESIGN ARCHITECTS, INC. IT IS NOT TO BE COPIED, DISTRIBUTED, OR USED IN WHOLE OR PART WITHOUT THE EXPRESS WRITTEN CONSENT OF DESTREE DESIGN ARCHITECTS, INC.

CITY OF MADISON
 EAST STREET OFFICE REMODEL
 4602 SYCAMORE AVENUE
 MADISON, WI 53704

ISSUANCES:

05-15-2019 BID SET
 06-12-2019 ADDENDUM 1

PROJECT #: 171118.00
 SHEET NUMBER

A900

SECTION 08 62 50
TUBULAR DAYLIGHTING DEVICES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Tubular daylighting devices and accessories.

1.2 RELATED SECTIONS

1.3 REFERENCES

- A. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- B. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- C. Daylight Reflective Tubes: Spectralight Infinity with INFRAREDuction Technology combines ultra-high Visible Light reflectance with Ultra-low Infrared (IR) reflectance. Patented spectrally-selective optical surface yields an average total- and specular-reflectance greater than 99.5% percent for the Visible Light spectrum (400 nm to 700 nm) providing maximized visible light transmission and less than 25% reflectance for Infrared (IR) heat wavelengths (750 nm to 2500 nm) for minimized heat transmission, resulting in a spectrally-selective Total Solar Spectrum (250 nm to 2500 nm) reflectance less than 37 percent, as measured using a Perkin Elmer Lambda 1050 spectrophotometer with a Universal Reflectance Accessory. Color: a* and b* (defined by CIE L*a*b* color model) shall not exceed plus 2 or be less than minus 2 as determined in accordance to ASTM E 308.
- D. SOLAMASTER 330 DS-O / 330 DS-C (OPEN/CLOSED CEILING)
1. AAMA/WDMA/CSA 101/IS2/A440, Class CW-PG80, size tested 21 inch (533 mm) diameter, Type TDDOC and Type TDDCC.
- a. Air Infiltration Test:
- 1) Air infiltration will not exceed 0.30 cfm/sf aperture with a pressure delta of 1.57 psf across the tube when tested in accordance with ASTM E 283.
- b. Water Resistance Test:
- 1) Passes water resistance; no uncontrolled water leakage with a pressure differential of 10.7 psf (512 Pa) or 15 percent of the design load (whichever is greater) and a water spray rate of 5 gallons/hour/sf for 24 minutes when tested in accordance with ICC-ES AC-16, ASTM E 547 and ASTM E 331.
- c. Uniform Load Test: All units tested with a safety factor of (3) for positive pressure and (2) for negative pressure, acting normal to plane of roof in accordance with ASTM E 330.
- 1) No breakage, permanent damage to fasteners, hardware parts, or damage to make daylighting system inoperable or cause excessive permanent deflection of any section when tested at a Positive Load of 150 psf (7.18 kPa) or Negative Load of 70 psf (3.35 kPa).

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Data sheets showing roof dome assembly, flashing base, reflective tubes, diffuser assembly, and accessories.
4. Installation requirements.
- C. Shop Drawings. Submit shop drawings showing layout, profiles and product components, including rough opening and framing dimensions, anchorage, roof flashings and accessories.
- D. Electrical wiring diagrams and recommendations for power and control wiring.
- E. Verification Samples: As requested by Architect.
- F. Test Reports: Independent testing agency or evaluation service reports verifying compliance with specified performance requirements.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Engaged in manufacture of tubular daylighting devices for minimum 20 years.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in manufacturer's original containers, dry, undamaged, seals and labels intact.
- B. Store products in manufacturer's unopened packaging until ready for installation.

1
2 **1.7 PROJECT CONDITIONS**

- 3 A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by
4 manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's
5 absolute limits.
6

7 **1.8 WARRANTY**

- 8 A. Daylighting Device: Manufacturer's standard warranty for 10 years.
9

10 **PART 2 - PRODUCTS**

11 **2.1 MANUFACTURERS**

- 12 A. Acceptable Manufacturer: Solatube International, Inc., which is located at: Solatube International 2210 Oak Ridge
13 Way; Vista, CA 92081-8341; Toll Free Tel: 888-765-2882; Tel: (760) 477-1120; Fax: (760) 597-4488;
14 Email:[request info \(commsales@solatube.com\)](mailto:request info (commsales@solatube.com)); Web:<http://www.solatube.com>
15 B. Requests for substitutions will be considered in accordance with provisions of Section 01 25 13.
16

17 **2.2 TUBULAR DAYLIGHTING DEVICES**

- 18 A. Tubular Daylighting Devices General: Transparent roof-mounted skylight dome and self-flashing curb, reflective tube,
19 and ceiling level diffuser assembly, transferring sunlight to interior spaces; complying with ICC AC-16.
20 B. SolaMaster Series: Solatube Model 330 DS, 21 inch (530 mm) Daylighting System:
21 1. Model:
22 a. Solatube Model 330 DS-C Closed (Penetrating) Ceiling. AAMA Type TDDCC.
23 2. Capture Zone:
24 a. Roof Dome Assembly: Transparent, UV and impact resistant dome with flashing base supporting dome and
25 top of tube.
26 1) Dome Glazing: Type DA, 0.143 inch (3.7 mm) minimum thickness injection molded acrylic classified as
27 CC2 material; UV inhibiting (100 percent UV C, 100 percent UV B and 98.5 percent UV A), impact
28 modified acrylic blend.
29 2) Tube Ring: Attached to top of base section; 0.090 inch (2.3 mm) nominal thickness injection molded
30 high impact PVC; to prevent thermal bridging between base flashing and tubing and channel
31 condensed moisture out of tubing. Attached to the base of the dome ring using butyl glazing rope
32 0.24 inch (6 mm) diameter; to minimize air infiltration.
33 3) Dome Seal: Adhesive backed weatherstrip, 0.63 inch (16 mm) tall by 0.28 inch (7 mm) wide.
34 4) LightTracker Reflector, made of aluminum sheet, thickness 0.015 inch (0.4 mm) with Spectralight
35 Infinity. Positioned in the dome to capture low angle sunlight.
36 b. Flashings:
37 1) Roof Flashing Base:
38 a) One Piece: One piece, seamless, leak-proof flashing functioning as base support for dome and top
39 of tube. Sheet steel, corrosion resistant conforming to ASTM A 653/A 653M or ASTM A 463/A
40 463M or ASTM A792/A 792M, 0.028 inch (0.7 mm) plus or minus .006 inch (.015 mm) thick.
41 1) Base Style: Type FC, Curb cap, with inside dimensions of 27 inches by 27 inches (685 mm by
42 685 mm) to cover curb as specified in Section 07600.
43 3. Transfer Zone:
44 a. Extension Tubes: Aluminum sheet, thickness 0.018 inch (0.5 mm).
45 1) Reflective Tubes:
46 a) Reflective extension tube, Type EXX and Type EL with total length of run as required.
47 b) Interior Finish: Spectralight Infinity with INFRAREDUCTION Technology combining ultra-high Visible
48 Light reflectance with Ultra-low Infrared (IR) reflectance.
49 2) Tube Options
50 a) Top Tube Angle Adapter and Bottom Tube Angle Adapter Kit: Type AK, reflective 45 degree
51 adjustable top and bottom angle adapters (one each), 16 inches (406 mm) long
52 4. Delivery Zone:
53 a. Diffuser Assemblies for Tubes Penetrating Ceilings: Ceiling mounted box transitioning from round tube to
54 square ceiling assembly, supporting light transmitting surface at bottom termination of tube 23.8 inches by
55 23.8 inches (605 mm by 605 mm) square frame to fit standard suspended ceiling grids or hard ceilings.
56 1) Polymeric Transition Box: Type TP, round-to-square transition box made of opaque polymeric material,
57 classified as CC2, Class C, 0.110 inch (2.8 mm) thick.

- 1 2) Lens: Type L2 Prismatic lens design to maximize light output and diffusion with extruded aluminum
2 frame and EPDM foam seal to minimize condensation and bug, dirt and air infiltration per ASTM E 283.
3 Visible Light Transmission shall be greater than 90 percent at 0.100 inches (2.5 mm) thick. Classified as
4 CC2.

- 5 5. Catalog Number: S330DS-C-DA-FC-CCI-AK-EXX-TP-L2
6

7 **2.3 ACCESSORIES**

- 8 A. Fasteners: Same material as metals being fastened, non-magnetic steel, non-corrosive metal of type recommended
9 by manufacturer, or injection molded nylon.
10 B. Suspension Wire: Steel, annealed, galvanized finish, size and type for application and ceiling system requirement.
11 C. Sealant: Polyurethane or copolymer based elastomeric sealant as provided or recommended by manufacturer.
12

13 **PART 3 - EXECUTION**

14 **3.1 EXAMINATION**

- 15 A. Do not begin installation until substrates have been properly prepared.
16 B. Examine openings, substrates, structural support, anchorage, and conditions for compliance with requirements for
17 installation tolerances and other conditions.
18 C. If substrate and rough opening preparation is the responsibility of another installer, notify Architect of unsatisfactory
19 preparation before proceeding.
20

21 **3.2 PREPARATION**

- 22 A. Clean surfaces thoroughly prior to installation.
23 B. Coordinate requirements for power supply, conduit and wiring.
24 C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate
25 under the project conditions.
26

27 **3.3 INSTALLATION**

- 28 A. Install in accordance with manufacturer's printed instructions.
29 B. Coordinate installation with substrates, air and vapor retarders, roof insulation, roofing membrane, and flashing to
30 ensure that each element of the Work performs properly and that finished installation is weather tight.
31 1. Install flashing to produce weatherproof seal with curb and overlap with roofing system termination at top of
32 curb.
33 2. Provide thermal isolation when components penetrate or disrupt building insulation. Pack fibrous insulation in
34 rough opening to maintain continuity of thermal barriers.
35 3. Coordinate attachment and seal of perimeter air and vapor barrier material.
36 C. Where metal surfaces of tubular unit skylights will contact incompatible metal or corrosive substrates, including
37 preservative-treated wood, provide permanent separation as recommended by manufacturer
38 D. Align device free of warp or twist, maintain dimensional tolerances.
39 E. After installation of first unit, field test to determine adequacy of installation. Conduct water test in presence of
40 Owner, Architect, or Contractor, or their designated representative. Correct if needed before proceeding with
41 installation of subsequent units.
42 F. Inspect installation to verify secure and proper mounting. Test each fixture to verify operation, control functions, and
43 performance. Correct deficiencies.
44

45 **3.4 CLEANING**

- 46 A. Clean exposed surfaces according to manufacturer's written instructions. Touch up damaged metal coatings and
47 finishes. Remove excess sealants, glazing materials, dirt, and other substances.
48

49 **3.5 PROTECTION**

- 50 A. Protect installed products until completion of project.
51 B. Touch-up, repair or replace damaged products before Substantial Completion.
52

53 END OF SECTION
54
55
56

**SECTION 10 22 26
FOLDING DOORS AND PARTITIONS**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this Section.

1.2 DESCRIPTION OF WORK:

- A. Extent of Folding Doors and Partitions is shown on the Drawings and in Schedules. Types of folding doors and partitions required include the following:
- 1) Manually operated flat wall type folding partitions.
 - 2) Self-supporting truss system for use with folding panel partition.

1.3 QUALITY ASSURANCE:

- A. Installer Qualifications: Experienced installer with not less than three years of successful experience in installation of units similar to those required for this project and who is certified in writing by the partition manufacturer as qualified to install the manufacturer's partition systems.
- B. Sound Transmission Classification (STC): Where shown, provide folding partition units capable of achieving STC rating indicated, when tested in accordance with procedures of ASTM E90.
- C. Flame Spread Rating: Use only facing materials which have a Flame Spread Rating of 25 or less when tested in accordance with ASTM E84.

1.4 SUBMITTALS:

- A. Product certificates signed by manufacturers of operable panel partitions certifying that their products comply with specified requirements.
- B. Product Data: Submit manufacturer's technical data and installation instructions for each type of operable partition.
- C. Certifications: Submit certifications by independent testing laboratories for the following:
- STC rating
 - Flame Spread Rating
- D. Samples for verification purposes of each type of panel finish face indicated; in sets for each color, texture and pattern specified, showing a full range of variations expected in these characteristics.
- E. Panel Finish Face: Manufacturer's standard size unit, not less than 3 inches square.
- F. Panel Edge Material: Manufacturer's standard size unit, not less than 3 inches square.
- G. Shop Drawings: Submit shop drawings showing location(s) and extent of folding partitions, complete sections, details and field-verified dimensions. Shop drawings shall fully detail:
- 1) Track and anchorage to self-supporting truss system
 - 2) Overhead stack track assembly with panels in stack area
 - 3) Panel carriers, locations and operating details
 - 4) Bottom retractable seals for manually operated partitions
 - 5) Vertical seals on panels
 - 6) Panel construction
 - 7) Self-supporting truss system including posts, attachment plates, sway bracing, etc.
- H. Template drawings prepared by manufacturer showing location of items supported or anchored by permanent construction.
- I. Maintenance data for panel finish face to include in the "Operating and Maintenance Manual."
- J. Precautions for cleaning materials and methods that could be detrimental to finishes and performance.
- K. Samples for initial selection purposes in the form of manufacturer's color charts showing a full range of colors, textures and patterns available for each type panel finish face indicated.

1.5 DELIVERY, STORAGE AND HANDLING:

1 This Contractor shall be responsible for all freight charges and receiving, unloading and moving of materials to site. Factory
2 wrap all panels in heavy plastic prior to crating and hang panels with protective plastic wrap in place. Remove wrapping to
3 complete installation.
4

5 **1.6 GUARANTEE:**

6 Guarantee partitions and installation under normal usage for a period of two (2) years after substantial
7 completion.
8

9 **PART 2 - PRODUCTS**

10 **2.1 ACCEPTABLE MANUFACTURERS:**

- 11 A. Manufacturer: Provide each type of operable partition assembly as a complete unit manufactured by one
12 manufacturer, including necessary hardware, fittings, accessories and anchorages.
13 B. Provide operable partitions by the following modified to be in strict conformance with these specifications:
14 1) Manually operated partitions: HUF COR: Model 632 or approved equal
15 2) Self-supporting truss system: HUF COR: Model U900 Unispan or approved equal
16 C. Other manufacturers may bid in strict conformance with specified function, utility, operation and quality, and
17 shall modify their partitions to be in full compliance with this specification, subject to Architect's approval prior to
18 bidding.
19

20 **2.2 MANUALLY OPERATED FLAT PANEL TYPE FOLDING PARTITIONS:**

- 21 A. Manually operated partition shall be top supported and hinged in pairs with an STC rating of 50, plus or minus 1
22 STC. Panels shall have a minimum panel thickness of 3.5". Color as selected from manufacturer's standards with
23 width of panels not to exceed 48".
24 B. Track and Suspension System: Unispan U900 self-supporting truss system.
25 C. Panels: Partition shall consist of equal size panels, 3.5" thick and not to exceed 48" wide. Panel faces shall be
26 standard vinyl fully laminated to minimum 1/2" gypsum board backer. Faces shall be mounted in full perimeter
27 metal frames to enclose and protect all edges of the surface material. Panels using wood frame construction
28 either internally or externally not permitted. Panel faces shall be removable and replaceable on the job site.
29 D. Panel configuration: Panels shall be hinged in pairs. No single panels or 3 panel groups will be acceptable.
30 E. Panel hinges shall be integral with or concealed by metal edge frame. Butt type hinges protruding more than
31 1/4" from panel face shall not be acceptable.
32 F. Weight of panels shall not exceed 9 pounds per square foot.
33 G. Sound seals shall be as follows: VERTICAL seals between panels shall be deep nesting tongue and groove type,
34 minimum of 7/8" deep. Bottom horizontal mechanical seals shall be operated simultaneously by a removable
35 handle concealed in the panel edge. Top seals to be constant contact type. The seals shall not contact the floor
36 during movement of the panels. Operation of the seals shall require no more than a 180 degree turn of the
37 handle. Operating mechanism shall be located approximately 42" above finished floor. Horizontal floor seals
38 shall provide for minimum 2" clearance and exert minimum of 40 pounds of downward stabilizing pressure
39 when extended. Mechanical seals shall allow panels to be locked into place anywhere along
40 track runs independent of other panels. Seals for all panels within hinged group shall operate simultaneously.
41 H. Jambs: Lead panel to have 1" vinyl bulb type compression seal. Provide bulb type acoustical seal on face of last
42 panel, sealing against adjacent wall. No hinged closure panels, attached to either the wall or last panel, or fixed
43 wall jambs permitted for partitions.
44

45 **2.3 SELF-SUPPORTING TRUSSES**

- 46 A. Truss: Fabricate truss of steel and aluminum components. Bolt together truss shall have anodized aluminum top
47 and bottom chords with integral anodized aluminum track and steel cross-members.
48 B. Posts: End columns shall be 2.5" x 5" clear anodized aluminum posts. Posts shall be attached to the truss with
49 steel brackets and bolts and anchored to the floor with concealed fasteners.
50 C. Anchorage: Provide sway bracing as required for lateral support to existing steel joists.
51

52 **2.4 FINISHES:**

- 53 A. Self-supporting Truss System: Exposed track, trim and posts to be clear anodized aluminum.

- 1 B. Panel Frames: Frames shall be steel with gray, lambs wool or dark brown powder coat finish, as selected by
2 Architect. Verify selections.
3 C. Panel Faces: Standard type 2 vinyl as selected from manufacturer's color card. Submit standard
4 colors to architect for selection.
5

6 **PART 3 - EXECUTION**

7 **3.1 EXAMINATION:**

- 8 A. Examine flooring, structural support and opening for compliance with requirements for installation tolerances
9 and other conditions affecting performance of operable panel partitions.
10 B. Do not proceed with installation until unsatisfactory conditions have been corrected.
11

12 **3.2 INSTALLATION:**

- 13 A. Install operable panel partitions and accessories complying with ASTM E 557 after other finishing operations,
14 including painting, have been completed.
15 B. Partition Contractor is responsible for carrying panels and support system into room as required for installation.
16 C. Install operable panel partitions that conform to Drawings and approved shop drawings and in
17 strict compliance with manufacturer's written installation instructions.
18 D. Match operable panel partitions for color and pattern by installing partitions from cartons in same sequence as
19 manufactured and packaged, if so numbered. Broken, cracked, chipped or deformed panels are not acceptable.
20 E. Acoustical Units: Install units with STC rating so that seals are in contact with entire perimeter
21 when unit is in closed position, forming light-tight barrier.
22

23 **3.3 ADJUSTMENTS:**

- 24 A. Adjust units as necessary and lubricate bearings and sliding parts. Assure smooth, quiet operation without
25 warping or binding. Check and readjust operating hardware so that latches engage accurately and positively
26 without forcing and binding.
27

28 **3.4 DEMONSTRATION:**

- 29 A. Start-up Services: Provide the services of a factory-authorized service representative to provide start-up service
30 and to demonstrate and train Owner's representative.
31 B. Train Owner's representative on procedures and schedules related to start-up and shut down, troubleshooting,
32 servicing and preventative maintenance.
33 C. Review data in the "Operating and Maintenance Manual."
34
35

36 END OF SECTION 10 22 26
37