



DIVISION OF FINANCE – PURCHASING DEPARTMENT

100 N. Broadway St, Suite 610 Wichita, KS 67202 • Phone (316) 660-7255 • Fax (316) 660-1839

PURCHASING@SEDGWICK.GOV • SEDGWICKCOUNTY.ORG

ADDENDUM #2

RFB #25-0086

SEDGWICK COUNTY ELECTIONS AND RECORDS MANAGEMENT REMODEL

November 24, 2025

The following is to ensure that vendors have complete information prior to submitting a *Request for Bid*. Here are some clarifications regarding the Sedgwick County Elections and Records Management Remodel:

Questions and/or statements of clarification are in **bold** font, and answers to specific questions are *italicized*.

PLEASE SEE ATTACHED.

Firms interested in submitting a *Request for Bid*, must respond with complete information and **deliver on or before 1:45 pm CST, December 2, 2025**. Late responses will not be accepted and will not receive consideration for final award.

“PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE RFB RESPONSE PAGE.”

Lee Barrier, NIGP-CPP
Senior Buyer

LB/ks

5 Addendum Number Two

This Addendum is hereby made part of the Contract Documents to the same extent as though it were originally included therein. Refer to "Bid Form" for acknowledgment of Addenda.

- 10 All Contractors, Subcontractors and suppliers are reminded that they shall be familiar with all Addenda items (as well as all parts of the Construction Documents) so as to understand the extent of their work and its interrelation with other trades.

To all bidders for furnishing all labor and materials necessary for the following Contract:

15 Sedgwick Co Elections and Records Management Remodel
3639 N. Comotara St
WICHITA, KANSAS 67226

20 Prepared by:
Schaefer Architecture

GENERAL:

- 25
- ITEM AD2-G01** **Pre-Bid Questions:**
CLARIFICATION
- 30 **Question:** Spec 10 14 00 Signage - no information given. Will the County provide that information?
 Answer: Section removed from the 00 01 10 Table of Contents.
- ITEM AD2-G02** **Specification Section 00 01 10 Table of Contents:**
ADDITION Following sections added:
35 10 73 13 Awnings added
 10 73 26 Walkway Coverings added
 11 52 13 Projection Screen added
ADDITION Section 10 14 00 Signage removed.
- 40
- ITEM AD2-G03** **Bid Form**
ADDITION Alternate #3 added about additional security cameras.
- ITEM AD2-G04** **Specification Section 01 23 00 Alternates:**
45 ADDITION Alternate No. 3 added.
- ITEM AD2-G05** **Specification Section 06 20 00 Finish Carpentry:**
ADDITION Section 2.03 Plastic Laminate Materials added.
- 50 **ITEM AD2-G06** **Specification Section 08 71 00 Door Hardware:**
REVISION Hardware Schedule revised.
- ITEM AD2-G07** **Specification Section 09 30 00 Tiling:**
ADDITION Section 2.01 Tile revised.
- 55 **ITEM AD2-G08** **Specification Section 10 73 13 Awnings:**

5	ADDITION	Section added.
	<u>ITEM AD2-G09</u> ADDITION	Specification Section 10 73 26 Walkway Coverings: Section added.
10	<u>ITEM AD2-G10</u> ADDITION	Specification Section 11 52 13 Projection Screens: Section added.
	<u>ITEM AD2-G11</u> REVISION	Specification Section 12 36 00 Countertops: Section revised.
15	<u>ITEM AD2-G12</u> REVISION	Specification Section 32 31 13 Chain Link Fences and Gates: Section revised.
20	<u>ITEM AD2-G13</u> REVISION	Drawing Sheet G14.1: Project Information and Code Plan revised to show new scope of work.
<u>ARCHITECTURAL:</u>		
25	<u>ITEM AD2-A01</u> REVISION ADDITION	Drawing Sheet A20.1: Keynotes Legend revised. Gate dimensions revision. Call out D9/A61.1 added.
30	<u>ITEM AD2-A02</u> REVISION	Drawing Sheet A21.1: Rm 124A door to remain.
35	<u>ITEM AD2-A03</u> REVISION ADDIITON	Drawing Sheet A22.1: Rm 124A revised. Keynote tags revised. Keynotes revised. Keynote tags added. Wall and door 124 added.
40	<u>ITEM AD2-A04</u> ADDITION	Drawing Sheet A22.1D: Dimension added to new wall in Rm 124A.
45	<u>ITEM AD2-A05</u> REVISION	Drawing Sheet A22.2: Keynote tags revised. Keynotes revised.
50	<u>ITEM AD2-A06</u> REVISION	Drawing Sheet A23.1: Dimensions for projector revised. Rm 124A revised.
	<u>ITEM AD2-A07</u> REVISION	Drawing Sheet A28.1: Rm 124A revised.
55	<u>ITEM AD2-A08</u> REVISION ADDITIONAL	Drawing Sheet A61.1: Details C3, C5, and C7 revised. Details B9, C9, D9, and F9 added.

5	<u>ITEM AD2-A09</u> REVISION	Drawing Sheet A72.1: Existing Door & Frame Schedule revised. Door & Frame Schedule revised. TW-2 renumber. Rm 124A revised in Enlarged Restrooms plan. Mothers Rm – 124A Elevation revised.
10		
	<u>MECHANICAL:</u>	
15	<u>ITEM AD2-M01</u> REVISION	Drawing Sheet M21.1 Remove existing diffuser in the women's restroom.
20	<u>ITEM AD2-M02</u> REVISION	Drawing Sheet M22.1 Add new diffuser in Rm 124A, Mother's Room. Move diffusers in other spaces to match ceiling grid.
	<u>ELECTRICAL:</u>	
25	<u>ITEM AD2-E01</u> REVISION ADDITION	Drawing Sheet E2.1: Accessible door opener push button relocated. Security intercom added outside of door E101 at Rm 101. Access control added to door E149 at Rm 149. Access control added to door E141d at Rm 141.
30	<u>ITEM AD2-E02</u> ADDITION	Drawing Sheet E2.2: General Note: Cameras added.
35	<u>ITEM AD2-E03</u> REVISION	Drawing Sheet E3.1: Light fixture location revised in Rm 124A.
40	<u>ITEM AD2-E04</u> REVISION ADDITION	Drawing Sheet E4.1: Accessible door opener push button relocated. General Note: Cameras added. Access control added to door E143A at Rm 143. Security system control panels added to Rm 138. Security intercom added outside of door E101 at Rm 101. Access control added to door E149 at Rm 149. Access control added to door E141d at Rm 141.
45	<u>Attached</u> 00 01 10 Table of Contents 03 – Bid Form 01 23 00 Alternates 06 20 00 Finish Carpentry	
50	08 71 00 Door Hardware 09 30 00 Tiling 10 73 13 Awnings 10 73 26 Walkway Coverings 12 36 00 Countertops	
55	32 31 13 Chain Link Fences and Gates	

- 5 G14.1 – Code Compliance
 - A20.1 – Site Plan
 - A21.1 – Demolition Plan – Area A
 - A22.1 – Floor Plan – Area A
 - A22.1D – Dimension Plan – Area A
- 10 A22.2 – Floor Plan – Area B
 - A23.1 – Reflected Ceiling Plan – Area A
 - A28.1 – Finish Plan – Area A
 - A61.1 – General Details
 - A72.1 – Door & Frame Schedule
- 15 M21.1 – HVAC Demo Plan
 - M22.1 – HVAC Plan
- 20 E2.1 – Floor Plan Area A – Power
 - E2.2 – Floor Plan Area B – Power
 - E3.1 – Floor Plan Area A - Lighting
 - E4.1 – Floor Plan Area - Systems

End of Addendum Number Two

SECTION 00 01 10 - TABLE OF CONTENTS**PROCUREMENT AND CONTRACTING REQUIREMENTS****Division 00 -- Procurement and Contracting Requirements**

- 00 01 07 - Seals Page
- 00 01 10 - Table of Contents
- Invitation for Bid
- Instructions To Bidders
- Bid Form
- Request for Bid Conditions
- Performance Labor and Material Bonds
- KS Statutory Payment Bond
- Performance Bond
- Certified Copy of a Resolution
- Exhibit A - small projects
- Project Subcontracting Work Sheet
- Form of Contract

AIA DOCUMENTS

- AIA A104 Standard Abbreviated Form of Agreement Between Owner & Contractor - 2017.

SPECIFICATIONS**Division 01 -- General Requirements**

- 01 10 00 - Summary
- 01 23 00 - Alternates
- 01 25 00 - Substitution Procedures
- 01 30 00 - Administrative Requirements
- 01 40 00 - Quality Requirements
- 01 41 00 - Regulatory Requirements
- 01 42 16 - Definitions
- 01 45 33 - Code-Required Special Inspections
- 01 50 00 - Temporary Facilities and Controls
- 01 51 00 - Temporary Utilities
- 01 60 00 - Product Requirements
- 01 70 00 - Execution and Closeout Requirements
- 01 78 00 - Closeout Submittals
- 01 79 00 - Demonstration and Training

Division 02 -- Existing Conditions

- 02 41 00 - Demolition

Division 03 -- Concrete**Division 04 -- Masonry****Division 05 -- Metals****Division 06 -- Wood, Plastics, and Composites**

- 06 10 00 - Rough Carpentry

06 20 00 - Finish Carpentry

Division 07 -- Thermal and Moisture Protection

07 21 00 - Thermal Insulation

07 84 00 - Firestopping

07 92 00 - Joint Sealants

Division 08 -- Openings

08 11 13 - Hollow Metal Doors and Frames

08 14 16 - Flush Wood Doors

08 31 00 - Access Doors and Panels

08 43 13 - Aluminum-Framed Storefronts

08 71 00 - Door Hardware

Hardware Schedule

08 80 00 - Glazing

08 91 00 - Louvers

Division 09 -- Finishes

09 05 61 - Common Work Results for Flooring Preparation

09 21 16 - Gypsum Board Assemblies

09 30 00 - Tiling

09 51 00 - Acoustical Ceilings

09 65 00 - Resilient Flooring

09 68 13 - Tile Carpeting

09 91 23 - Interior Painting

09 96 00 - High-Performance Coatings

Division 10 -- Specialties

10 28 00 - Toilet, Bath, and Laundry Accessories

10 44 00 - Fire Protection Specialties

10 73 13 - Awnings

10 73 26 - Walkway Coverings

Division 11 -- Equipment

11 52 13 - Projection Screens

Division 12 -- Furnishings

12 36 00 - Countertops

Division 22 -- Plumbing

22 05 05 - Plumbing General Provisions

22 05 06 - Basic Plumbing Materials and Methods

22 05 29 - Hangers and Supports for Plumbing Piping and Equipment

22 05 53 - Identification for Plumbing Piping and Equipment

22 11 16 - Domestic Water Piping

22 11 19 - Domestic Water Piping Specialties

22 13 16 - Sanitary Waste and Vent Piping

22 13 19 - Sanitary Waste Piping Specialties

22 34 00 - Fuel-Fired Domestic Water Heaters

22 40 00 - Plumbing Fixtures

Division 23 -- Heating, Ventilating, and Air-Conditioning (HVAC)

- 23 05 05 - Mechanical General Provisions
- 23 05 06 - Basic HVAC Materials and Methods
- 23 05 29 - Hangers and Supports for HVAC Piping and Equipment
- 23 05 93 - Testing and Balancing
- 23 07 13 - Duct Insulation
- 23 11 23 - Natural-Gas Piping
- 23 23 00 - Refrigerant Piping
- 23 31 13 - Metal Ducts
- 23 33 00 - Duct Accessories
- 23 34 23 - HVAC Power Ventilators
- 23 37 13 - Diffusers, Registers, and Grilles
- 23 40 00 - HVAC Air Cleaning Devices
- 23 81 19 - Rooftop Units
- 23 81 26 - Split System Air-Conditioner

Division 26 -- Electrical

- 26 05 00 - Basic Methods and Requirements
- 26 05 13 - Wires and Cables
- 26 05 26 - Grounding
- 26 05 30 - Raceway Systems
- 26 24 16 - Panelboards
- 26 27 26 - Wiring Devices
- 26 51 10 - LED Lighting Fixtures

Division 27 -- Communications

- 27 00 00 - Communications Systems (Conduit)
- 27 10 00 - Building Data Communication Cabling

Division 32 -- Exterior Improvements

- 32 31 13 - Chain Link Fences and Gates

END OF SECTION

DOCUMENT 004123 - BID FORM - CONSTRUCTION MANAGEMENT (SINGLE-PRIME CONTRACT)

1.1 BID INFORMATION

- A. Bidder: _____.
- B. Project Name: Sedgwick County Elections and Records Management Remodel.
- C. Project Location: 3639 N Comotara, Wichita, Kansas 67226.
- D. Owner: Sedgwick County.
- E. Owner Project Number: 25-0086.
- F. Architect: Schaefer Architecture.
- G. Architect Project Number: 5278.57.
- H. Construction Manager: N/A.

1.2 CERTIFICATIONS AND BASE BID

- A. Base Bid, Single-Prime (All-Trades) Contract: The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Schaefer Architecture and the Architect's consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of above-named Project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:
 - 1. _____ Dollars (\$_____).
 - 2. The above amount may be modified by amounts indicated by the Bidder below in the Alternates.

1.3 ALTERNATES

- A. The following are Alternates for specific portions of the Work as listed. The undersigned proposes to perform the Work called for in the following Alternates for the described additions to the above Base Bid. Refer to Section 01 23 00 for complete description of Alternate Work.
 - 1. Alternate # 1 **New Flooring** (Add) (Deduct) \$_____ Dollars.
 - 2. Alternate # 2 (Add) (Deduct) \$_____ Dollars.
 - a. **ALTERNATE #2 TIME OF COMPLETION**
 - 1) The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Documents on a date specified in a written Notice to Proceed

to be issued by Architect, and shall ~~fully~~ **finally** complete the Work **as one phase** by November 1, 2026. Liquidated damages of \$750 per calendar day will be assessed if any milestones are not met.

- a) Finally complete the entire work **as one phase** in _____ consecutive calendar days from the Notice to Proceed.

3. Alternate # 3 **Security Camera** (Add) (Deduct) \$ _____ Dollars.

1.4 BID GUARANTEE

- A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety as specified within 10 days after a written Notice of Award, if offered within 60 days after receipt of bids, and on failure to do so agrees to forfeit to Owner the attached cash, cashier's check, certified check, U.S. money order, or bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Base Bid amount above:

1. _____ Dollars (\$ _____).

- B. In the event Owner does not offer a Notice of Award within the time limits stated above, Owner will return to the undersigned the cash, cashier's check, certified check, U.S. money order, or bid bond.

1.5 TIME OF COMPLETION

- A. The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Documents on a date specified in a written Notice to Proceed to be issued by Architect, and shall ~~fully~~ **finally** complete the **Work by July 1, 2026**. Liquidated damages of \$750 per calendar day will be assessed if any milestones are not met.

1. Phase 1 all work ~~fully~~ **finally** complete by April 27, 2026

2. Phase 2 all work ~~fully~~ **finally** complete by July 1, 2026.

1.6 ACKNOWLEDGEMENT OF ADDENDA

- A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

1. Addendum No. 1, dated _____.
2. Addendum No. 2, dated _____.
3. Addendum No. 3, dated _____.
4. Addendum No. 4, dated _____.
5. Addendum No. 5, dated _____.
6. Addendum No. 6, dated _____.
7. Addendum No. 7, dated _____.
8. Addendum No. 8, dated _____.

1.7 CONTRACTOR'S LICENSE

- A. The undersigned further states that it is a duly licensed contractor, for the type of work proposed, in Wichita, Kansas, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.8 SUBMISSION OF BID

- A. Respectfully submitted this ____ day of _____, 2025.
- B. Submitted By: _____ (Name of bidding firm or corporation).
- C. Authorized Signature: _____ (Handwritten signature).
- D. Signed By: _____ (Type or print name).
- E. Title: _____ (Owner/Partner/President/Vice President).
- F. Witnessed By: _____ (Handwritten signature).
- G. Attest: _____ (Handwritten signature).
- H. By: _____ (Type or print name).
- I. Title: _____ (Corporate Secretary or Assistant Secretary).
- J. Street Address: _____.
- K. City, State, Zip: _____.
- L. Phone: _____.
- M. License No.: _____.
- N. Federal ID No.: _____ (Affix Corporate Seal Here).

END OF DOCUMENT 004123

SECTION 01 23 00 - ALTERNATES**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Description of Alternates.
- B. Procedures for pricing Alternates.

1.02 ALTERNATES - GENERAL

- A. Alternates are units of Work (products, materials, equipment, systems, methods and the like) which may, at the option of the Owner and under terms established in the Instructions to Bidders and Agreement, be selected for the Work in lieu of the corresponding requirements for Base Bid or to complete a unit of work not included in the Base Bid Work.
- B. Selection may be made prior to Contract Date, or may by the Agreement, be deferred for possible selection at a subsequent date.
- C. Refer to the Contract or Owner-Contractor Agreement, and subsequent modifications thereof (if any), for the determination of which Alternates have been accepted and therefore are in effect as though included originally in the Base Bid Work.
- D. Immediately following the award of Contract notify each entity or person involved in the performance of this project work, a notice of the status of each Alternate Bid indicating which Alternates have been: 1) accepted, 2) rejected, 3) deferred for consideration at a later date. Include description of modifications, if any, to the accepted Alternates.
- E. The Alternates herein are abbreviated descriptions but imply that each change must be complete for the scope of the work affected. A reference to this Section is included in specification sections to alert specification users that an alternate will affect that work. The Specifications and Drawings shall be referred to ascertain complete requirements for the Alternate Work. Coordinate related work and modify surrounding work as required to properly integrate or omit the work of the accepted Alternates.

1.03 ACCEPTANCE OF Alternates

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Fill in all required prices on the Bid Form.
- C. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.04 SCHEDULE OF Alternates

- A. **Alternate No. One - Remove all base and flooring in areas indicated in the drawings. Provide new base and flooring as indicated on Finish Schedule. Remove the wall between Rm 107 and Rm 108 up to header indicated.**
- B. **Alternate No. Two - 1) The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Documents on a date specified in a written Notice to Proceed to be issued by Architect, and shall fully complete the Work by November 1, 2026. Liquidated damages of \$750 per calendar day will be assessed if any milestones are not met.**
- C. **Alternate No. Three - Add 3-way security camera in Hall 122 as indicated on Electrical Systems plan.:**

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 06 20 00 - FINISH CARPENTRY**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Finish carpentry items.
- B. Wood door frames, glazed frames.
- C. Wood casings and moldings.
- D. Wood paneling and wood base.

1.02 RELATED REQUIREMENTS

- A. Section 06 10 00 - Rough Carpentry: Support framing, grounds, and concealed blocking.
- B. Section 06 41 00 - Architectural Wood Casework: Shop fabricated custom cabinet work.
- C. Section 08 14 16 - Flush Wood Doors.
- D. Section 09 91 23 - Interior Painting: Painting and finishing of finish carpentry items.
- E. Section 09 93 00 - Staining and Transparent Finishing: Staining and transparent finishing of finish carpentry items.

1.03 REFERENCE STANDARDS

- A. ANSI A135.4 - American National Standard for Basic Hardboard; 2012.
- B. ANSI A208.1 - American National Standard for Particleboard; 2009.
- C. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014.
- D. BHMA A156.9 - American National Standard for Cabinet Hardware; 2010.
- E. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood; 2009.
- F. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.
- G. NHLA G-101 - Rules for the Measurement & Inspection of Hardwood & Cypress; 2011.
- H. PS 1 - Structural Plywood; 2009.
- I. PS 20 - American Softwood Lumber Standard; 2010.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate the work with plumbing rough-in, electrical rough-in, and installation of associated and adjacent components.
- B. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.

1.05 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.
 - 1. Scale of Drawings: 1-1/2 inch to 1 foot (125 mm to 1 m), minimum.
 - 2. Provide the information required by AWI/AWMAC/WI (AWS).

1.06 QUALITY ASSURANCE

- A. Grade materials in accordance with the following:
 - 1. Softwood Lumber: In accordance with rules certified by ALSC; www.alsc.org.
 - 2. Plywood: Certified by the American Plywood Association.
 - 3. Hardwood Lumber: In accordance with NHLA G-101 Grading Rules; www.natlhardwood.org.
- B. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of experience.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Protect work from moisture damage.

PART 2 PRODUCTS**2.01 WOOD-BASED COMPONENTS**

- A. Wood fabricated from old growth timber is not permitted.

2.02 LUMBER MATERIALS

- A. Hardwood Lumber: Red oak species, rift cut sawn, maximum moisture content of 6 percent use where indicated and where indicated for a transparent finish.
 - 1. Grading: In accordance with NHLA G-101 Grading Rules; www.natlhardwood.org.
- B. Hardwood Lumber: Popular species, plain sawn, maximum moisture content of 6 percent, use where indicated and where indicated for a paint finish.
 - 1. Grading: In accordance with NHLA G-101 Grading Rules; www.natlhardwood.org.

2.03 PLASTIC LAMINATE MATERIALS

- A. Plastic Laminate: NEMA LD 3, HGS; color as selected by Architect Scheduled as "PL-2".
 - 1. Cherry Heartwood 9240-58 by Formica
 - a. Location: Existing base cabinets

2.04 FASTENINGS

- A. Adhesive for Purposes Other Than Laminate Installation: Suitable for the purpose; not containing formaldehyde or other volatile organic compounds.
- B. Fasteners: Of size and type to suit application; galvanized finish in concealed locations and Schaefer to select finish in exposed locations.
- C. Concealed Joint Fasteners: Threaded steel.
- D. Fasteners for Exterior Finish Carpentry: Hot-dip galvanized steel or stainless steel.

2.05 ACCESSORIES

- A. Primer: as specified in Section 09 90 00.
- B. Wood Filler: Solvent base, tinted to match surface finish color.

2.06 SITE FINISHING MATERIALS

- A. Stain, Shellac, Varnish, and Finishing Materials: In compliance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
- B. Finishing: Field finished as specified in Section 09 91 23.

2.07 FABRICATION

- A. Shop assemble work for delivery to site, permitting passage through building openings.
- B. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.

PART 3 EXECUTION**3.01 EXAMINATION**

- A. Verify adequacy of backing and support framing.
- B. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.
- C. See Section 06 10 00 - Rough Carpentry for installation of recessed wood blocking.
 - 1. Provide blocking for wood trim, wood base, etc.

3.02 INSTALLATION

- A. Install custom fabrications in accordance with AWI/AWMAC/WI (AWS) requirements for grade indicated.
- B. Set and secure materials and components in place, plumb and level.
- C. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch (0.79 mm). Do not use additional overlay trim to conceal larger gaps.
- D. Cope or miter inside corners and miter outside corners to produce tight-fitting and matching profile joints.
- E. Erect, shim and fasten members securely. Where loads are applied to members, assure fastening and gluing to resist loads and movement
- F. Select adjacent transparent finish members for compatibility of grain and color.
- G. Do not use warped or twisted members.
- H. Kerf back of trim members 6 inch (152 mm) and wider.
- I. Back prime members before installing. Prime shall not interfere with finish.
- J. Joints:
 - 1. Install in longest lengths possible to minimize joints.
 - 2. Diagonally cut joints (scarf joints).
 - 3. Stagger joints with adjacent members or multi-member elements.
 - 4. Dowel or spline and glue miter joints on members 4 inch (101 mm) and wider.
 - 5. Self-miter ends of exposed transparent finished members. Opaque finished members may be profiled to match face.
- K. Fastening:
 - 1. Use blind nailing whenever possible or if using concealed fastening, provide small head fasteners.
 - 2. Set exposed fasteners to allow for wood filler.
 - 3. Cover large head screw and similar fasteners with wood matching plug interior, set flush exterior

3.03 PREPARATION FOR SITE FINISHING

- A. Set exposed fasteners. Apply wood filler in exposed fastener indentations. Sand work smooth.
- B. Site Finishing: See Section 09 91 23.
- C. Before installation, prime paint surfaces of items or assemblies to be in contact with cementitious materials.

3.04 TOLERANCES

- A. Maximum Variation from True Position: 1/16 inch (1.6 mm).
- B. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch (0.79 mm).

END OF SECTION

SECTION 087100 - DOOR HARDWARE**PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

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

1.2 SUMMARY

- A. This Section includes commercial door hardware for the following:
 - 1. Swinging doors.
 - 2. Other doors to the extent indicated.
- B. Door hardware includes, but is not necessarily limited to, the following:
 - 1. Mechanical door hardware.
 - 2. Electromechanical door hardware.
 - 3. Cylinders specified for doors in other sections.
- C. Related Sections:
 - 1. Division 08 Section "Hollow Metal Doors and Frames".
 - 2. Division 08 Section "Flush Wood Doors".
- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
 - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
 - 2. ICC/IBC - International Building Code.
 - 3. NFPA 70 - National Electrical Code.
 - 4. NFPA 80 - Fire Doors and Windows.
 - 5. NFPA 101 - Life Safety Code.
 - 6. NFPA 105 - Installation of Smoke Door Assemblies.
 - 7. State Building Codes, Local Amendments.
- E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:
 - 1. ANSI/BHMA Certified Product Standards - A156 Series.
 - 2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
 - 3. ANSI/UL 294 - Access Control System Units.
 - 4. UL 305 - Panic Hardware.
 - 5. ANSI/UL 437- Key Locks.

1.3 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing, fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 - 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
 - 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door

or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.

3. Content: Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 - h. Warranty information for each product.
 4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Shop Drawings: Details of electrified access control hardware indicating the following:
1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:
 - a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
 - b. Complete (risers, point-to-point) access control system block wiring diagrams.
 - c. Wiring instructions for each electronic component scheduled herein.
 2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.
- D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.
- E. Informational Submittals:
1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

1.4 CLOSEOUT SUBMITTALS

- A. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.
- B. Project Record Documents: Provide record documentation of as-built door hardware sets in digital format (.pdf, .docx, .xlsx, .csv) and as required in Division 01, Project Record Documents.

1.5 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).
- C. Installer Qualifications: A minimum 5 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
- E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.
 - 1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
 - 2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.
- F. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.
- G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
 - 1. Function of building, purpose of each area and degree of security required.
 - 2. Plans for existing and future key system expansion.
 - 3. Requirements for key control storage and software.
 - 4. Installation of permanent keys, cylinder cores and software.
 - 5. Address and requirements for delivery of keys.
- H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review

proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
 2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
 3. Review sequence of operation narratives for each unique access controlled opening.
 4. Review and finalize construction schedule and verify availability of materials.
 5. Review the required inspecting, testing, commissioning, and demonstration procedures
- I. At completion of installation, provide written documentation that components were applied according to manufacturer's instructions and recommendations and according to approved schedule.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.7 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.8 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that

fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
 2. Faulty operation of the hardware.
 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 4. Electrical component defects and failures within the systems operation.
- C. Warranty Period: Unless otherwise indicated, warranty shall be one year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Hardware shall not have any visible manufacturer names on exposed materials, except cylinders, when the door is in a closed position.

2.2 BUTT HINGES

- A. Hinges: ANSI/BHMA A156.1 butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.
1. Quantity: Provide the following hinge quantity:
 - a. Two Hinges: For doors with heights up to 60 inches.
 - b. Three Hinges: For doors with heights 61 to 90 inches.
 - c. Four Hinges: For doors with heights 91 to 120 inches.
 - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.
 2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
 - a. Widths up to 3'0": 4-1/2" standard or heavy weight as specified.
 - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
 3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
 - a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
 - b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.
 4. Hinge Options: Comply with the following:
 - a. Non-removable Pins: With the exception of electric through wire hinges, provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for all out-swinging lockable doors.
 5. Manufacturers:
 - a. Hager Companies (HA) - BB Series, 5-knuckle.
 - b. McKinney (MK) - TA/T4A Series, 5-knuckle.

2.3 POWER TRANSFER DEVICES

- A. Concealed Quick Connect Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified

door hardware. Furnish with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:
 - a. Pemko (PE) - EL-CEPT Series.
 - b. Securitron (SU) - EL-CEPT Series.
- B. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.
 1. Provide one each of the following tools as part of the base bid contract:
 - a. McKinney (MK) - Electrical Connecting Kit: QC-R001.
 - b. McKinney (MK) - Connector Hand Tool: QC-R003.
 2. Manufacturers:
 - a. Hager Companies (HA) - Quick Connect.
 - b. McKinney (MK) - QC-C Series.

2.4 DOOR OPERATING TRIM

- A. Door Push Plates and Pulls: ANSI/BHMA A156.6 door pushes and pull units of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.
 1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
 2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
 3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
 4. Pulls shall be provided with a 10" clearance from the finished floor on the push side to accommodate wheelchair accessibility.
 5. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets. When through-bolt fasteners are in the same location as a push plate, countersink the fasteners flush with the door face allowing the push plate to sit flat against the door.
 6. Manufacturers:
 - a. Burns Manufacturing (BU).
 - b. Hiawatha, Inc. (HI).
 - c. Rockwood (RO).

2.5 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
 - 1. Manufacturers:
 - a. Match Existing, Field Verify.
- B. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:
 - 1. Threaded mortise cylinders with rings and cams to suit hardware application.
 - 2. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
 - 3. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
 - 4. Tubular deadlocks and other auxiliary locks.
 - 5. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
 - 6. Keyway: Match Facility Standard.
- C. Keying System: Each type of lock and cylinders to be factory keyed.
 - 1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
 - 2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
 - 3. Existing System: Field verify and key cylinders to match Owner's existing system.
- D. Key Quantity: Provide the following minimum number of keys:
 - 1. Change Keys per Cylinder: Two (2)
 - 2. Master Keys (per Master Key Level/Group): Five (5).
- E. Key Registration List (Bitting List):
 - 1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
 - 2. Provide transcript list in writing or electronic file as directed by the Owner.

2.6 KEY CONTROL

- A. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.
 - 1. Manufacturers:
 - a. Lund Equipment (LU).
 - b. MMF Industries (MM).
 - c. Telkee (TK).

2.7 CYLINDRICAL LOCKS AND LATCHING DEVICES

- A. Cylindrical Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.2, Series 4000, Operational Grade 1 Certified Products Directory (CPD) listed cylindrical locksets. Listed manufacturers shall meet all functions and features as specified herein.
 - 1. Manufacturers:

- a. Sargent Manufacturing (SA) - 10X Line.
 - b. No Substitution.
- B. Cylindrical Indicator Locksets, Grade 1 (Commercial Duty): ANSI/BHMA A156.2, Series 4000, Operational Grade 1 Certified Products Directory (CPD) listed. Listed manufacturers shall meet all functions and features as specified herein.
- 1. Provide locksets with functions and features as follows:
 - a. Visual status indicators in rose, displaying bold visuals for vacant or occupied lock status.
 - b. Meets ANSI/BHMA A156.41 for single motion egress.
 - c. Meets UL and CUL Standard 10C Positive Pressure, Fire Test of Door Assemblies with levers that meet A117.1 Accessibility Code.
 - d. Three-year limited warranty.
 - 2. Manufacturers:
 - a. ASSA ABLOY ACCENTRA (YA) - YPL Series.
 - b. Arrow (AW) - APL Series.
 - c. No Substitution.

2.8 LOCK AND LATCH STRIKES

- A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:
- 1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
 - 2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
 - 3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
 - 4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.
- B. Standards: Comply with the following:
- 1. Strikes for Mortise Locks and Latches: BHMA A156.13.
 - 2. Strikes for Bored Locks and Latches: BHMA A156.2.
 - 3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
 - 4. Dustproof Strikes: BHMA A156.16.

2.9 ELECTROMAGNETIC LOCKING DEVICES

- A. Surface Electromagnetic Locks (Heavy Duty): Electromagnetic locks to be surface mounted type conforming to ANSI A156.23, Grade 2 with minimum holding force strength of 1,200 pounds. Locks to be capable of accepting between 12 to 24 volts direct current and be UL listed for use on fire rated door assemblies. Electromagnetic coils are to consume no more than 1.5W during normal operation. Locks are to have an integrated door position switch, tamper switch, and lock bond sensor. Locks are to have integrated motion sensor and/or security camera as indicated in the hardware sets. Locks to be capable of detecting door prop conditions and entering low power mode. Provide mounting accessories as needed to suit opening conditions. Power supply to be by the same manufacturer as the lock with combined products having a lifetime replacement warranty.
- 1. Manufacturers:
 - a. Securitron (SU) - M680E Series.

- B. Surface Electromagnetic Locks (Heavy Duty): Electromagnetic locks to be surface mounted type conforming to ANSI A156.23, Grade 2 with minimum holding force strength of 1,200 pounds. Locks to be capable of either 12 or 24 voltage and be UL listed for use on fire rated door assemblies. Electronics are to be fully sealed against tampering and allow exterior weatherproof applications. As indicated in Hardware Sets, provide specified mounting brackets and housings. Power supply to be by the same manufacturer as the lock with combined products having a lifetime replacement warranty.

- 1. Manufacturers:

- a. Securitron (SU) - M62 Series.

2.10 ELECTRIC STRIKES

- A. Standard Electric Strikes: Electric strikes conforming to ANSI/BHMA A156.31, Grade 1, for use on non-rated or fire rated openings. Strikes shall be of stainless steel construction tested to a minimum of 1500 pounds of static strength and 70 foot-pounds of dynamic strength with a minimum endurance of 1 million operating cycles. Provide strikes with 12 or 24 VDC capability, fail-secure unless otherwise specified. Where specified provide latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike.

- 1. Manufacturers:

- a. HES (HS) - 1500/1600 Series.

- B. Surface Mounted Rim Electric Strikes: Surface mounted rim exit device electric strikes conforming to ANSI/BHMA A156.31, Grade 1, and UL Listed for both Burglary Resistance and for use on fire rated door assemblies. Construction includes internally mounted solenoid with two heavy-duty, stainless steel locking mechanisms operating independently to provide tamper resistance. Strikes tested for a minimum of 500,000 operating cycles. Provide strikes with 12 or 24 VDC capability supplied standard as fail-secure unless otherwise specified. Option available for latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike. Strike requires no cutting to the jamb prior to installation.

- 1. Manufacturers:

- a. HES (HS) - 9400/9500/9600/9700/9800 Series.

- C. Provide electric strikes with in-line power controller and surge suppressor by the same manufacturer as the strike with the combined products having a five year warranty.

2.11 CONVENTIONAL EXIT DEVICES

- A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

- 1. Exit devices shall have a five-year warranty.
 - 2. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
 - 3. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.

4. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
 5. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
 6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.
 - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
 - b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
 7. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
 8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
 9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
 10. Rail Sizing: Provide exit device rails factory sized for proper door width application.
 11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.
- B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed exit devices. Listed manufacturers shall meet all functions and features as specified herein.
1. Electromechanical exit devices shall have the following functions and features:
 - a. Universal Molex plug-in connectors that have standardized color-coded wiring and are field configurable in fail safe or fail secure and operate from 12vdc to 24vdc regulated.
 - b. EcoFlex or equivalent technology that reduces energy consumption up to 92% as certified by GreenCircle.
 - c. Options to be available for request-to-exit or enter signaling, latchbolt and touchbar monitoring.
 - d. Field configurable electrified trim to fail-safe or fail-secure that operates from 12-24VDC.
 - e. Five-year limited warranty for electromechanical features.
 2. Manufacturers:
 - a. Sargent Manufacturing (SA) - 80 Series.
 - b. No Substitution.

2.12 SURFACE DOOR CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.

2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
 3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.
 4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
 5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
 6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.
- B. Door Closers, Surface Mounted (Large Body Cast Iron): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control.
1. Large body cast iron surface mounted door closers shall have a 30-year warranty.
 2. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - DC8000 Series.
 - b. Norton Rixson (NO) - 9500 Series.
 - c. Sargent Manufacturing (SA) - 281 Series.

2.13 ARCHITECTURAL TRIM AND ACCESSORIES

- A. Door Protective Trim:
1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
 2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1" LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
 3. Where plates are applied to fire rated doors with the top of the plate more than 16" above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer's catalog and template book for specific requirements for size and applications.
 4. Protection Plates: ANSI/BHMA A156.6 protection plates (kick, armor, or mop), fabricated from the following:
 - a. Stainless Steel: 300 grade, .050-inch thick.
 5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
 6. Manufacturers:
 - a. Burns Manufacturing (BU).
 - b. Hager Companies (HA).
 - c. Hiawatha, Inc. (HI).

d. Rockwood (RO).

2.14 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.
 - 1. Manufacturers:
 - a. Burns Manufacturing (BU).
 - b. Hager Companies (HA).
 - c. Hiawatha, Inc. (HI).
 - d. Rockwood (RO).

2.15 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.
 - 1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.
- C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.
 - 1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NFPA 252, Standard Methods of Fire Tests of Door Assemblies.
- D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.
- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- F. Manufacturers:
 - 1. National Guard Products (NG).
 - 2. Pemko (PE).
 - 3. Reese Enterprises, Inc. (RE).

2.16 ELECTRONIC ACCESSORIES

- A. Push-Button Switches: Industrial grade momentary or alternate contact, back-lighted push buttons with stainless-steel switch enclosures. 12/24 VDC bi-color illumination suitable for either flush or surface mounting.
 - 1. Manufacturers:

- a. Alarm Controls (AK) - TS Series.
 - b. Security Door Controls (SD) - 400 Series.
 - c. Securitron (SU) - PB Series.
- B. Request to Exit Motion Sensor: Passive infrared request to exit (REX) motion sensor designed for detecting exiting through a door from the secure area to a non-secure area.
 - 1. Provide devices with functions and features as follows:
 - a. Adjustable infrared beam and relock time.
 - b. UL listed.
 - c. 12VDC or 24VDC power.
 - d. Single pole, double throw (SPDT) switch.
 - 2. Manufacturers:
 - a. Alarm Controls (AK) - SREX Series.
 - b. Security Door Controls (SD) - MD-31D Series.
 - c. Securitron (SU) - XMS2 Series.
- C. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.
 - 1. Manufacturers:
 - a. Alarm Controls (AK) - CP1-1026 Series.
 - b. Sargent Manufacturing (SA) - 3280 Series.
 - c. Security Door Controls (SD) - DPS Series.
 - d. Securitron (SU) - DPS Series.
- D. Switching Power Supplies: Provide the least number of power supplies at the appropriate amperage level sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.
 - 1. Power supplies shall meet all functions and features as specified herein.
 - a. UL listed dual voltage 12 or 24 VDC field selectable continuous output.
 - b. Tolerates brownout or overvoltage input $\pm$ 15% of nominal voltage.
 - c. Thermal shutdown protection with auto restart.
 - d. Circuit breaker protection against overcurrent and reverse battery faults.
 - e. Integrated battery charging circuit to prevent overvoltage on locking devices.
 - f. Available with a single relay fire trigger or individually triggered relayed outputs.
 - g. Monitoring options as specified.
 - 2. Manufacturers:
 - a. Life Safety Power (LP).
 - b. Securitron (SU) - AQD Series.

2.17 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws.

Provide screws according to manufacturers recognized installation standards for application intended.

2.18 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

- A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.
- B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
- 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
 - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
 - 2. DHI TDH-007-20: Installation Guide for Doors and Hardware.
 - 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
 - 4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9

Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

- D. Push Plates and Door Pulls: When through-bolt fasteners are in the same location as a push plate, countersink the fasteners flush with the door face allowing the push plate to sit flat against the door.
- E. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."
- F. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

- A. Field Inspection (Punch Report): Reference Division 01 Sections "Closeout Procedures". Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.
 - 1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.6 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

- A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.
 - 1. Quantities listed are for each pair of doors, or for each single door.

2. The supplier is responsible for handing and sizing all products.
3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.

B. Manufacturer's Abbreviations:

1. MK - McKinney
2. SU - Securitron
3. SA - SARGENT
4. YA - ASSA ABLOY ACCENTRA
5. HS - HES
6. RO - Rockwood
7. PE - Pemko

Hardware Sets

Set: 1.0

Doors: E102, E122A, E131, E136A, E150A

Description: Existing

2 Magnetic Lock	M680EBDX	630	SU	⚡
1 Pushbutton	PB5		SU	⚡
1 Power Supply	AQD2 X hardware requirements		SU	⚡

Notes: Balance of hardware is existing and will remain.

Card reader furnished by Owner.

Magnetic locks will be wired into the building fire alarm system.

Magnetic locks will have a built in motion sensor.

Operation: Doors are normally closed and locked. When a valid credential is presented to the wall mounted card reader the magnetic locks will release, and you can pull the doors open. From the push side of the door the magnetic locks have a motion sensor built in them to release these doors. If the magnetic locks will not release you can push the PB5 wall mounted push button to cut power to these doors. The magnetic locks will be wired into the building fire alarm system if the fire alarm goes off the magnetic locks will lose power and unlock.

Set: 2.0

Doors: E150B

Description: Existing

2 Magnetic Lock	M680EBDX	630	SU	⚡
1 Automatic Opener	6021 RF	689	NO	⚡
1 Pushbutton	PB5		SU	⚡
1 Pushbutton	ADA1012-2		NO	⚡
1 Post Push Plate	638		NO	⚡
1 Power Supply	AQD2 X hardware requirements		SU	⚡

Notes: Balance of hardware is existing and will remain.

Card reader furnished by Owner.

Magnetic locks will be wired into the building fire alarm system.

Magnetic locks will have a built in motion sensor.

Operation: Doors are normally closed and locked. When a valid credential is presented to the wall mounted card reader the magnetic locks will release, and you can pull the doors open. From the push side of the door the magnetic locks have a motion sensor built in them to release these doors. If the magnetic locks will not release you can push the PB5 wall mounted push button to cut power to these doors. The magnetic locks will be wired into the building fire alarm system if the fire alarm goes off the magnetic locks will lose power and unlock.

Set: 3.0

Doors: E103, E118, E119, E120, E129, E134, E135, E144, E149B

Description: Existing

1 Storeroom/Closet Lock	10XG04 LL GMK	US26D	SA	
1 Electric Strike	1500C	630	HS	⚡
1 SMART Pac Bridge Rectifier	2005M3		HS	⚡
1 ElectroLynx Harness	QC-C2500P		MK	⚡
1 Motion Sensor	XMS2		SU	⚡
1 Position Switch	DPS-M-BK or DPS-W as required		SU	⚡
1 Power Supply	AQD1 x hardware requirements		SU	⚡

Notes: ElectroLynx harness to be attached to the back to the electric strike and run to the power supply.

Balance of hardware is existing and will remain.

Card reader furnished by Owner.

Operation: Door is normally closed and locked. When a valid credential is presented to the wall mounted card reader the electric strike will release, and you can pull or push the door open. When the door comes back closed the electric strike will relock. The motion sensor will be used as the REX or request to exit switch for the access control system. You can always turn the inside lever and exit the space.

Set: 4.0

Doors: E149A

Description: Existing

1 SMART Pac Bridge Rectifier	2005M3		HS	⚡
1 Electric Strike	9400 or 9600 as required	630wired	HS	
1 ElectroLynx Harness	QC-C2500P		MK	⚡
1 Motion Sensor	XMS2		SU	⚡
1 Position Switch	DPS-M-BK or DPS-W as required		SU	⚡
1 Power Supply	AQD1 x hardware requirements		SU	⚡

Notes: ElectroLynx harness to be attached to the back to the electric strike and run to the power supply.

Balance of hardware is existing and will remain.

Card reader furnished by Owner.

Operation: Door is normally closed and locked. When a valid credential is presented to the wall mounted card reader the electric strike will release, and you can pull the door open. When the door comes back closed the electric strike will relock. The motion sensor will be used as the REX or request to exit switch. You can always push the push pad on the exit device and exit out of the space.

Set: 5.0

Doors: E141A, E143A, E148

Description: Existing

1 Magnetic Lock	M680EBD	630	SU	⚡
1 Pushbutton	PB5		SU	⚡
1 Power Supply	AQD1 x hardware requirements		SU	⚡

Notes: Balance of hardware is existing and will remain.

Card reader furnished by Owner.

Magnetic locks will be wired into the building fire alarm system.

Operation: Door is normally closed and locked. When a valid credential is presented to the wall mounted card reader the magnetic locks will release, and you can push the door open.

If the magnetic locks will not release you can push the PB5 wall mounted push button to cut power to these doors. The magnetic locks will be wired into the building fire alarm system if the fire alarm goes off the magnetic locks will lose power and unlock.

Set: 6.0

Doors: S141

Description: Existing Gate

1 Magnetic Lock	M62FGBD SASM		SU	⚡
1 Power Supply	AQD1 x hardware requirements		SU	⚡
1 Bracket	FMK-SW		SU	⚡
1 Bracket	FMB9-4		SU	⚡

Notes: Balance of gate hardware is existing and will remain.

Card reader furnished by Owner.

Magnetic locks will be wired into the building fire alarm system.

Set: 7.0

Doors: 133

Description: Records

6 Hinge, Full Mortise MK	T4A4786 or T4A3786 NRP 4-1/2" x 4-1/2"	US26D		
2 Electric Power Transfer	EL-CEPT	630	SU	⚡
1 Mullion	L980S x Height Required	PC	SA	
1 Rim Exit Device, Storeroom	55 56 8804 ETL GMK	US32D	SA	⚡
1 Rim Exit Device, Exit Only	55 8810 EO	US32D	SA	⚡
1 Mortise Cylinder	41 GMK	US32D	SA	
2 Door Closer	TB 281 CPS	EN	SA	
2 Kick Plate	K1050 10" x 1" LDW CSK BEV	US32D	RO	
2 Silencer	608		RO	
2 ElectroLynx Harness	QC-C2500P		MK	⚡
2 ElectroLynx Harness	QC-C Length Required		MK	⚡
2 Position Switch	DPS-M-BK or DPS-W as required		SU	⚡
1 Power Supply	AQD1 x hardware requirements		SU	⚡

Notes: Card reader furnished by Owner.

Operation: The doors will normally be closed and locked. When a valid credential is presented to the wall mounted card reader the latch on the exit device will retract and allow the door to be pulled open. When the door comes back closed the latch will extend and the

door will be relocked. There will be a REX or request to exit switch built into the push bar of the exit device. You can always exit out of the space by pushing the push rail on the exit device and leaving. The power supply listed in this hardware set will be used to power the electric latch retract on the exit device.

Set: 8.0Doors: [149](#)

Description: Training

3 Hinge, Full Mortise	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK
1 Storeroom/Closet Lock	10XG04 LL GMK	US26D	SA
1 Electric Strike	1500C	630	HS ⚡
1 SMART Pac Bridge Rectifier	2005M3		HS ⚡
1 Door Closer	281 P10	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK BEV	US32D	RO
1 Wall Stop	409	US32D	RO
3 Silencer	608		RO
1 ElectroLynx Harness	QC-C2500P		MK ⚡
1 Motion Sensor	XMS2		SU ⚡
1 Position Switch	DPS-M-BK or DPS-W as required		SU ⚡
1 Power Supply	AQD1 x hardware requirements		SU ⚡

Notes: ElectroLynx harness to be attached to the back to the electric strike and run to the power supply.

Card reader furnished by Owner.

Operation: Door is normally closed and locked. When a valid credential is presented to the wall mounted card reader the electric strike will release, and you can pull or push the door open. When the door comes back closed the electric strike will relock. The motion sensor will be used as the REX or request to exit switch for the access control system. You can always turn the inside lever and exit the space.

Set: 9.0Doors: [151](#), [152](#)

Description: Men, Women (Rated)

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Privacy w/ Indicator	AU YPL02	626	YA
1 Door Closer	281 O	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK BEV	US32D	RO
1 Wall Stop	409	US32D	RO
1 Gasketing	S88BL (Head & Jambs)		PE

Set: 10.0Doors: [153](#)

Description: Break Room (Rated)

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Passage Latch	10XU15 LL	US26D	SA
1 Door Closer	281 O	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK BEV	US32D	RO
1 Wall Stop	409	US32D	RO
1 Gasketing	S88BL (Head & Jambs)		PE

Set: 11.0

Doors: 124

Description: Mother's Room

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Privacy w/ Indicator	AU YPL02	626	YA
1 Wall Stop	409	US32D	RO
3 Silencer	608		RO

Set: 12.0

Doors: E121

Description: Existing

1 Rim Exit Device, Storeroom	8804 ETL	US32D	SA	
1 Electric Strike	1500C	630	HS	⚡
1 Electric Strike	9400 or 9600 as required	630uiredf	HS	
⚡ 1 ElectroLynx Harness	QC-C2500P		MK	⚡
1 Motion Sensor	XMS2		SU	⚡
1 Position Switch	DPS-M-BK or DPS-W-BK		SU	⚡
1 Power Supply	AQD1 x hardware requirements		SU	⚡

Notes: ElectroLynx harness to be attached to the back to the electric strike and run to the power supply.

Balance of hardware is existing and will remain.

Card reader furnished by Owner.

Operation: Door is normally closed and locked. When a valid credential is presented to the wall mounted card reader the electric strike will release, and you can pull or push the door open. When the door comes back closed the electric strike will relock. The motion sensor will be used as the REX or request to exit switch for the access control system. You can always turn the inside lever and exit the space.

END OF SECTION

SECTION 09 30 00 - TILING**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Tile for floor applications.
- B. Ceramic accessories.
- C. Non-ceramic trim.
- D. Crack Isolation Membrane.
- E. Metal Edge Strips.

1.02 RELATED REQUIREMENTS

- A. Section 07 92 00 - Joint Sealants: Sealing joints between tile work and adjacent construction and fixtures.
- B. Section 07 95 13 - Expansion Joint Cover Assemblies: Expansion joint components.
- C. Section 09 21 16 - Gypsum Board Assemblies: Tile backer board.

1.03 REFERENCE STANDARDS

- A. AIA A305 - Contractor's Qualification Statement; 1986.
- B. ANSI A108/A118/A136.1 - American National Standard Specifications for the Installation of Ceramic Tile (Compendium).; 2013.1.
 - 1. ANSI A108.1b - American National Standard Specifications for Installation of Ceramic Tile on a Cured Portland Cement Mortar Setting Bed with Dry-Set or Latex-Portland Cement Mortar; 1999 (Reaffirmed 2010).
 - 2. ANSI A108.5 - American National Standard Specifications for Installation of Ceramic Tile with Dry-Set Portland Cement Mortar or Latex-Portland Cement Mortar; 1999 (Reaffirmed 2010).
 - 3. ANSI A108.10 - American National Standard Specifications for Installation of Grout in Tilework; 1999 (Reaffirmed 2010).
 - 4. ANSI A108.13 - American National Standard for Installation of Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone; 2005 (Reaffirmed 2010).
 - 5. ANSI A118.3 - American National Standard Specifications for Chemical Resistant, Water Cleanable Tile-Setting and -Grouting Epoxy and Water Cleanable Tile-Setting Epoxy Adhesive; 2013 (Revised).
 - 6. ANSI A118.4 - American National Standard Specifications for Modified Dry-Set Cement Mortar; 2012 (Revised).
 - 7. ANSI A118.7 - American National Standard Specifications for High Performance Cement Grouts for Tile Installation; 2010 (Revised).
 - 8. ANSI A118.10 - American National Standard Specifications for Load Bearing, Bonded, Waterproof Membranes For Thin-Set Ceramic Tile And Dimension Stone Installation; 2014.
 - 9. ANSI A118.12 - American National Standard Specifications for Crack Isolation Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation; 2014.
 - 10. ANSI A137.1 - American National Standard Specifications for Ceramic Tile; 2013.1.
 - 11. ANSI A137.2 - American National Standard Specifications for Glass Tile; 2013.

12. ASTM C373 - Standard Test Method for Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products, Ceramic Tiles, and Glass Tiles; 2014a.

C. TCNA (HB) - Handbook for Ceramic, Glass, and Stone Tile Installation; 2015.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and adhesives.
- C. Shop Drawings: Indicate perimeter conditions, junctions with dissimilar materials, control and expansion joints, thresholds, ceramic accessories, and setting details.
- D. Samples for Initial Selection: For each type of tile and grout indicated. Include Samples of accessories involving color selection.
- E. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 1. See Section 01 60 00 - Product Requirements, for additional provisions.
 2. Extra Tile: 5 square feet (0.5 square meters) of each size, color, and surface finish combination.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the types of products specified in this section, with minimum five years of documented experience.
- B. Installers: Each Installer must comply with all requirements of the Specifications and Drawings. Approved installers for this project are as follows:
 1. CAP Carpet, Inc.
 2. Carpet Value
 3. Country Carpet, Inc.
 4. Five Star Tile, Company
 5. Fortney Tile & Flooring Company, Inc.
 6. Fox Ceramic Tile, Inc.
 7. Interior Surface Enterprises, LLC
 8. Kansas Carpet & Tile Inc.
 9. Manhattan Carpet & Interiors, Inc.
 10. Star Lumber & Supply Co., Inc.
 - Stuart & Associates Commercial Flooring
 11. Vitztum Commercial Flooring, Inc.
 12. Schaefer Architecture may approve additional Installers for this project based on proximity to the project site, work ethic, relevant project experience and company information. Installers seeking approval for this project shall submit AIA A305, Contractor's Qualification Statement to Schaefer Architecture. Requests must be received ten days prior to bid date.

1.06 MOCK-UP

- A. See Section 01 40 00 - Quality Requirements, for general requirements for mock-up.
- B. Construct tile mock-up, incorporating all components specified for the location.
 1. Approved mock-up may remain as part of the Work.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

1.08 FIELD CONDITIONS

- A. Do not install solvent-based products in an unventilated environment.
- B. Maintain ambient and substrate temperature of 50 degrees F (10 degrees C) during installation of mortar materials.

PART 2 PRODUCTS**2.01 TILE**

- A. Porcelain Tile: ANSI 137.1, and as follows: Scheduled "TF-1"
 - 1. Product: Notorious by Crossville.
 - 2. Color: Private Eye.
 - 3. Surface Finish: Unpolished.
 - 4. Size: 12 inch by 12 inch.
 - 5. Installation: Stacked, slope to drain if needed
 - 6. Location: Rm 151, 152
 - 7. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Porcelain Tile: ANSI 137.1, and as follows: Scheduled "TW-1"
 - 1. Product: Notorius by Crossville
 - 2. Color: Private Eye
 - 3. Surface Finish: Unpolished
 - 4. Size: 12 inch by 12 inch
 - 5. Installation: Stacked, 48 inch wainscot on all walls with metal trim top cap and cove base.
 - 6. Location: Rm 151, 152
- C. Porcelain Tile: ANSI 137.1, and as follows: Scheduled "TB-1"
 - 1. Product: Color story Wall by American Olean
 - 2. Surface Finish: Matte
 - 3. Size: 6 inch by 6 inch Cove Base
 - 4. Color: 0036 Calm A3601
 - 5. Installation: Patch new tile into existing cove base.
 - 6. Location: Rm 124, 124A
- D. Porcelain Tile: ANSI 137.1, and as follows: Scheduled "TW-2"
 - 1. Product: Color story Wall by American Olean
 - 2. Surface Finish: Matte
 - 3. Size: 4 inch by 4 inch
 - 4. Color: 0036 Calm
 - 5. Installation: Stacked, 3 foot 8 inches wainscot on matching cove base tile.
 - 6. Location: Rm 124A

2.02 TRIM AND ACCESSORIES

- A. Non-Ceramic Trim: Satin natural anodized extruded aluminum, style and dimensions to suit application, for setting using tile mortar or adhesive.
 - 1. Applications:
 - a. Open edges of wall tile.
 - b. Open edges of floor tile.
 - c. Wall corners, outside and inside.
 - d. Transition between floor finishes of different heights.

- e. Thresholds at door openings.
- f. Floor to wall joints.
- 2. Manufacturers:
 - a. Schluter-Systems: www.schluter.com/#sle.
 - b. Genesis APS International: www.genesis-aps.com/#sle.
 - c. Substitutions: See Section 01 60 00 - Product Requirements.

2.03 SETTING MATERIALS

- A. Manufacturers:
 - 1. Bostik Inc: www.bostik-us.com.
 - 2. Custom Building Products: www.custombuildingproducts.com.
 - 3. LATICRETE International, Inc: www.laticrete.com.
 - 4. ProSpec, an Oldcastle brand: www.prospec.com.
 - 5. Mapei Corporation: www.mapei.com.
 - 6. C-Cure: www.c-cure.com.
 - 7. TEC Specialty Products, Inc.: www.tecspecialty.com.
 - 8. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Latex-Portland Cement Mortar Bond Coat (Thin Set): ANSI A118.4.
 - 1. Applications: Use this type of bond coat where indicated and where no other type of bond coat is indicated.
 - 2. Provide prepackaged, dry-mortar mix to which only water must be added at Project site.
- C. Polymer Modified Mortar for Large Format Tile (Medium Bed Mortar): ANSI A118.4.
Provide prepackaged, dry-mortar mix to which only water must be added at Project site.
Large Format Tile has one side of the tile greater than 15 inch (381 mm).
 - 1. Application(s): Use this type of bond coat where large format tile is installed, regardless if other sized tile is intermingled.
 - a. Large Format Tile has one side of the tile greater than 15 inch (381 mm)
 - 2. Provide prepackaged, dry-mortar mix to which only water must be added at Project site.
 - 3. Products:
 - a. TEC; Ultimate Large Tile Mortar: www.tecspecialty.com.
 - b. Mapei; Ultraflex LFT: www.mapei.com.
 - c. Substitutions: See Section 01 60 00 - Product Requirements.

2.04 GROUTS

- A. Manufacturers:
 - 1. Bostik Inc: www.bostik-us.com.
 - 2. Custom Building Products: www.custombuildingproducts.com.
 - 3. LATICRETE International, Inc: www.laticrete.com.
 - 4. ProSpec, an Oldcastle brand: www.prospec.com.
 - 5. Mapei Corporation: www.mapei.com.
 - 6. C-Cure: www.c-cure.com.
 - 7. TEC Specialty Products, Inc.: www.tecspecialty.com.
 - 8. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Polymer Modified Grout: ANSI A118.7 polymer modified cement grout.

1. Applications: Use this type of grout where indicated and where no other type of grout is indicated.
2. Non-shrinking - non-expanding, non-toxic, dense, bacterial growth inhibitive, factory prepared, stain resistant, non-efflorescing, ready for mixing with water.
3. Use sanded grout for joints 1/8 inch wide and larger; use sanded grout for joints less than 1/8 inch wide.
4. Color(s): As selected by Schaefer Architecture from manufacturer's full line.

2.05 MAINTENANCE MATERIALS

- A. Grout Sealer: Liquid-applied, moisture and stain protection for existing or new Portland cement grout.
 1. Composition: Water-based colorless silicone.
 2. Polymerized silicone formulation designed for sealing grout joints and that does not change color or appearance of grout.
 3. Grout Sealer: Polymerized silicone formulation designed for sealing grout joints and that does not change color or appearance of grout. Grout sealer is not required for high performance grouts that by the manufacturer's literature, do not 'require' sealer.
 4. Products:
 - a. Micacle Sealants Company; 511 Impregnator: www.miraclesealants.com.
 - b. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Grout Release: Temporary, water-soluble pre-grout coating.
- C. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.

2.06 ACCESSORY MATERIALS

- A. Concrete Floor Slab Crack Isolation Membrane: Material complying with ANSI A118.12; not intended as waterproofing.
 1. Type: Sheet Membrane.
 2. Include reinforcement and accessories recommended by manufacturer. Width of crack isolation membrane shall be per manufacturers requirements for the size of the tile installed. Trowel applied crack isolation membrane may be applied in special areas if approved by Schaefer Architecture.
 - a. Joints to Receive Membrane: Saw cuts (control joints), construction joints (cold joints) and shrinkage cracks. Per TCNA (HB) F-125 Partial.
 3. Products:
 - a. LATICRETE International, Inc; LATICRETE Blue 92 Anti-Fracture Membrane: www.laticrete.com/#sle.
 - b. Noble Company; NobleSeal CIS: www.noblecompany.com..
 - c. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Expansion Joints:
 1. Expansion Joints: Per TCNA (HB) EJ-171 (no membrane)
 2. Expansion joints shall be clear and free of all mortar and grout.

3. Expansion joint for soft joints may be caulked with a matching caulking or a pre-manufactured joint may be used. Pre-manufactured joint type and color shall be approved by Schaefer Architecture.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive tile.
 1. Verify substrate floor is properly graded to drains.
- B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive tile.
- C. Verify that sub-floor surfaces are dust-free and free of substances that could impair bonding of setting materials to sub-floor surfaces.
- D. Verify that joints and cracks in tile substrates are coordinated with tile joint locations; if not coordinated, adjust joint locations in consultation with Schaefer Architecture.
- E. Verify that required floor-mounted utilities are in correct location.

3.02 PREPARATION

- A. Protect surrounding work from damage.
- B. Vacuum clean surfaces and damp clean.
- C. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.
 1. Fill cracks, holes, and depressions in concrete substrates for tile floors with trowelable leveling and patching compound specifically recommended by tile-setting material manufacturer.
- D. Prepare substrate surfaces for adhesive installation in accordance with adhesive manufacturer's instructions.
- E. Blending: For tile exhibiting color variations, verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved Samples. If not factory blended, blend tiles at Project site before installing.

3.03 INSTALLATION - GENERAL

- A. Install tile, thresholds, and stair treads and grout in accordance with applicable requirements of ANSI A108.1a through ANSI A108.13, manufacturer's instructions, and TCNA (HB) recommendations.
- B. Lay tile to pattern indicated. Do not interrupt tile pattern through openings.
- C. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align floor, base, and wall joints.
 1. Cuts shall be made with a saw or drill without marring visible surfaces.
 2. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.
- D. Use crack isolation membrane at all control joints.
 1. Install crack isolation membrane to comply with ANSI A108.17 and manufacturer's written instructions to produce membrane of uniform thickness and bonded securely to substrate.

2. Do not install tile or setting materials over crack isolation membrane until membrane has cured.
 3. Floor stone as required such that membrane thickness is not broadcasted thru finished floor.
- E. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make grout joints without voids, cracks, excess mortar or excess grout, or too little grout.
- F. Joints: 1/16 inch (1.58 mm) joints for ceramic tile. 1/4 inch (6.35 mm) joints for quarry tile. 3/16 inch (4.76 mm) joints for porcelain tile.
- G. Form wall internal angles square and external angles bullnosed.
1. If base matches wall tile, form base internal corners square. If base matches floor tile, form base internal angles coved (square if coved incorners are not available) and external angles bullnosed. Refer to required trim units.
- H. Install ceramic accessories rigidly in prepared openings.
- I. Install non-ceramic trim in accordance with manufacturer's instructions.
- J. Install thresholds where indicated.
- K. Sound tile after setting. Replace hollow sounding units.
- L. Keep control and expansion joints free of mortar, grout, and adhesive.
- M. Prior to grouting, allow installation to completely cure; minimum of 48 hours.
- N. Grout tile joints unless otherwise indicated.
- O. At changes in plane and tile-to-tile control joints, use tile sealant instead of grout, with either bond breaker tape or backer rod as appropriate to prevent three-sided bonding.
- P. Apply sealant to junction of tile and dissimilar materials and junction of dissimilar planes.
1. Provide sealant joints between hollow metal door/window frames and tile.
 2. Provide sealant joints between architectural wood casework and tile.
- Q. Replace marred, broken or chipped units.

3.04 INSTALLATION - FLOORS - THIN-SET METHODS

- A. Over exterior concrete substrates, install in accordance with TCNA (HB) Method F102, with standard grout.
- B. Over interior concrete substrates, install in accordance with TCNA (HB) Method F113, dry-set or latex-Portland cement bond coat, with standard grout, unless otherwise indicated.
1. Where waterproofing membrane is indicated, install in accordance with TCNA (HB) Method F122, with latex-Portland cement grout.
- C. Over wood substrate with backer board underlayment, install in accordance with TCNA (HB) Method F146, for coated glass mat backer boards, with standard grout.

3.05 INSTALLATION - FLOORS - LARGE FORMAT TILE

- A. Over interior and exterior concrete substrates, install in accordance with manufacturers instructions, polymer modified mortar designed for large format tile installation (medium bed mortar), with standard grout.

3.06 INSTALLATION - WALL TILE

- A. Over cementitious backer units on studs, install in accordance with TCNA (HB) Method W244.

- B. Over coated glass mat backer board on studs, install in accordance with TCNA (HB) Method W245.
- C. Over interior concrete and masonry install in accordance with TCNA (HB) Method W202, thin-set with dry-set or latex-Portland cement bond coat.

3.07 CONTROL AND EXPANSION JOINTS

- A. Joint Width: Minimum joint width 3/8 inch (9.5 mm) with quarry tile and 3/16 inch (4.7 mm) with porcelain and ceramic tile . Increase joint width 1/16 inch (1.58 mm) for each 4 feet (1.2 m) of spacing greater than 12 feet (3.6 m) between joints.
- B. Distance Between Joints:
 - 1. In accordance with TCNA (HB) EJ171 recommendations for frequency.
 - 2. Interior: Control or expansion joints not to exceed 24 feet (7.3 m) o.c. each way. Areas 12 feet (3.6 m) or less require no joint at edges and obstructions.
 - 3. Exterior: Control or expansion joints not to exceed 12 feet (3.6 m) o.c. each way.
 - 4. Interior tile work exposed to direct sunlight or moisture: Control or expansion joints not to exceed 12 feet (3.6 m) o.c. each way.
 - 5. Interior slab above grade: Control or expansion joints not to exceed 16 feet (4.8 m) o.c. each way and 12 feet (3.6 m) o.c. each way for large format tile.
- C. Provide joint at perimeter of tile areas, in recessed beds, and at other restraints.
- D. Joint layout in tile field above joints in substrate and subject to Schaefer Architecture approval.
- E. Construction joints full depth of tile and setting bed.
- F. Fill joint with compressible filler as back-up for sealant.
- G. Seal joints with sealant specified in Section 07 92 00 - Joint Sealants after grout is cured, control joints thoroughly cleaned and BEFORE tile sealer is applied. Color matching grout joint color or as selected by Schaefer Architecture.

3.08 GROUTING

- A. Do not mix grout material with any other material except clean potable water. Mix thoroughly.
- B. When tile is locked in place work mixed joint grout (filler) into joints until joints are full. Rub in and apply second coating as recommended by manufacturer.
- C. Clean surplus from surfaces. Use manufacturer recommended if absolutely necessary. If used apply cleaner only on wetted surfaces and thoroughly rinse off all cleaner when tile work is clean.

3.09 CLEANING

- A. Clean tile and grout surfaces.

3.10 SEALING

- A. Grout to cure a minimum of 48 hours prior to sealing. Surfaces must be clean, dry and free of previously applied sealers or coatings.
- B. Apply sealer to all grout and impervious mosaic tile surfaces in accordance with manufacturer's written recommendations.

3.11 PROTECTION

- A. Do not permit traffic over finished floor surface for 4 days after installation.

END OF SECTION

SECTION 10 73 13 - AWNINGS**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Aluminum framing and fittings.
- B. Covering material.

1.02 REFERENCE STANDARDS

- A. ASTM B210 - Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes; 2012.
- B. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2020.
- C. ASTM B241/B241M - Standard Specification for Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube; 2012.

1.03 DESIGN REQUIREMENTS

- A. Awning materials, assembly and attachments to resist snow loads, positive and negative wind design loads of ____ lb/sq ft (____ kPa) at any point without damage or permanent set.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on awning covering, color fastness, stitching and seaming methods, attachment devices to framing system.
- C. Shop Drawings: Indicate awning profiles, sizes, connection attachments, anchorage, size and type of fasteners, graphic images, patterns, and accessories.

PART 2 PRODUCTS**2.01 ALUMINUM FRAMING SYSTEM**

- A. Framing: 1.5 inch (38 mm) square, tubing, complying with ASTM B241/B241M.
- B. Fittings: Elbows, T-shapes, wall brackets; cast aluminum.
- C. Mounting: Brackets and flanges, with aluminum brackets for mounting in _____ wall construction.

2.02 COVERING MATERIALS

- A. Vinyl Laminated Polyester: 16 oz/sq yd (415 gm/sq m), resistant to ultra-violet light, mildew and water, flame resistant treated; _____ color as selected.

2.03 FABRICATION - FRAMING

- A. Fit and shop assemble components in largest practical sizes, for delivery to site.
- B. Fabricate components with joints tightly fitted and secured.
- C. Exposed Fastenings: Unobtrusively located; consistent with design of component, except where specifically noted otherwise.
- D. Supply components required for anchorage of framing. Fabricate anchors and related components of same material and finish as framing, except where specifically noted otherwise.

2.04 FABRICATION - COVERING

- A. Manufacture covering in one piece wherever possible, sized and configured to suit framing.

PART 3 EXECUTION**3.01 EXAMINATION**

- A. Verify that wall substrate anchors are acceptable and are ready to receive work.

3.02 INSTALLATION - FRAMING

- A. Install in accordance with manufacturer's instructions.
- B. Install components plumb and level, accurately fitted, free from distortion or defects.
- C. Provide anchors required for connecting framing to structure. Anchor framing to structure.
- D. Conceal bolts and screws whenever possible. Where not concealed, use flush countersunk fastenings.

3.03 INSTALLATION - COVERING

- A. Install covering over framing members, stretched taut without creases or folds.
- B. Attach covering and fasten securely.

3.04 SCHEDULES

- A. Exterior Entry: Square tubular aluminum framing system, medium bronze anodized, pale green plastic fabric covering.

END OF SECTION

SECTION 10 73 26 - WALKWAY COVERINGS**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Fabric walkway coverings.

1.02 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Fabric Product Data: Provide data on fabric covering, color fastness, stitching and seaming methods, attachment devices to framing system, and _____.

1.03 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.

PART 2 PRODUCTS**2.01 Walkway Coverings - GENERAL**

- A. Design Criteria: Design and fabricate to resist the following loads without failure, damage, or permanent deflection in accordance with ASCE 7.

2.02 FABRIC Walkway Coverings

- A. Covering Materials: Comply with applicable code for fire resistance ratings for awning covering.
 - 1. Vinyl Laminated Polyester: 16 oz/sq yd (415 gm/sq m), resistant to ultraviolet light, mildew and water, flame resistant treated; _____ color as selected.
 - 2. Covering Attachment:
 - a. Staples: Galvanized steel, 1/2 inch (13 mm) length minimum, space at 1-1/2 inches (38 mm) maximum.
 - b. Screws: Zinc-coated No.10, 3/4 inch (19 mm) self-tapping screws, space evenly at 6 inches (152 mm) apart, maximum.

2.03 FABRICATION - Fabric COVERING

- A. Manufacture covering in one piece wherever possible, sized and configured to suit framing.

2.04 FINISHES

- A. Finish Color: As selected by Schaefer Architecture from manufacturer's standard range.

PART 3 EXECUTION**3.01 EXAMINATION**

- A. Examine substrates and site area for conditions that might prevent satisfactory installation.
- B. Verify that foundation, electrical utilities, and placed anchors are in correct position.
- C. Do not proceed with installation until conditions are satisfactory.

3.02 INSTALLATION - Fabric COVERING

- A. Install covering over framing members, stretched taut without creases or folds.
- B. Attach covering and fasten securely.

3.03 FIELD QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements for additional requirements.

- B. Test for watertightness, water management, and lack of ponding of completed walkway covering and components, including decking, gutters, drain beams, and columns.

3.04 CLEANING

- A. See Section 01 70 00 - Execution and Closeout Requirements for additional requirements.
- B. Clean all exposed surfaces after installation.

3.05 PROTECTION

- A. Touch-up, repair, or replace damaged components before Date of Substantial Completion.
- B. Protect walkway covering after installation to prevent damage due to other work until Date of Substantial Completion.

END OF SECTION

SECTION 11 52 13 - PROJECTION SCREENS**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Front projection screen assemblies.

1.02 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's catalog cuts and descriptive information on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Show layouts and types of projection screens. Indicate location of screen centerline to ends of screen case, seams in viewing surface, drop lengths, anchorage details, details of juncture of exposed surfaces with adjacent finishes, accessories, wiring diagrams.
- D. Operation and Maintenance Data: Provide manufacturer's operation and maintenance instructions.
- E. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.03 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Experienced in manufacturing products specified in this section.
- B. Installer Qualifications: Experienced in installation of the work of this section.
- C. Source Limitations for Projection Screens: Obtain projection screens from single manufacturer. Obtain accessories, including necessary mounting hardware, from screen manufacturer.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver projection screens to project site in manufacturer's original unopened packaging. Inspect for damage and size before accepting delivery.
- B. Store in a protected, clean, dry area with temperature maintained above 50 degrees F (10 degrees C). Stack according to manufacturer's recommendations.
- C. Acclimate screens to building temperatures for 24 hours prior to installation, or in accordance with manufacturer's recommendations.

1.05 COORDINATION

- A. Coordinate layout and installation of projection screens with adjacent construction, including ceiling suspension systems, light fixtures, HVAC equipment, fire-suppression system and partitions.
- B. Electrical Screens: Switches by screen manufacturer. Conduit, control wiring, wiring and connections of electrical screens by Electrical Contractor.

1.06 FIELD CONDITIONS

- A. Maintain interior of building between 60 degrees F (15 degrees F) and 75 degrees F (24 degrees F) during and after installation of projection screens.

PART 2 PRODUCTS**2.01 MANUFACTURERS**

- A. Bretford; _____: www.bretford.com/#sle.
- B. Da-Lite Screen Company: www.da-lite.com.
- C. Draper, Inc: www.draperinc.com.
- D. Stewart Filmscreen Corporation: www.stewartfilmscreen.com.
- E. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 FRONT PROJECTION SCREENS

- A. Front Projection Screens: Factory assembled unless otherwise indicated.
 - 1. In Staff Training Room: Manual, matte light diffusing fabric screen, wall mounted.
 - a. Screen Viewing Area: 54 inch high x 96 inch wide (____ mm high x ____ mm wide).
 - b. Screen: black masking borders all four sides.
 - c. Screen Case: Made from metal with baked enamel finish. Without automatic closure door.
 - d. Finish on Exposed Surfaces: white.
- B. Matte Light Diffusing Fabric: Light diffusing screen fabric; washable, flame retardant and mildew resistant.
 - 1. Material: Matte white vinyl on fiberglass backing, with nominal gain of 1.0 over viewing angle not less than 70 degrees from axis, horizontally and vertically.
 - a. Mildew-Resistance Rating: 0 or 1 when tested according to ASTM G 21.
 - b. Flame Resistance: Passes NFPA 701.
 - c. Flame-Spread Index: Not greater than 75 when tested according to ASTM E 84.
 - 2. Seams: No seams permitted in fabric up to 96 inch (2438 mm) high by 72 inch (1829 mm) wide.
- C. Manually-Operated Screens:
 - 1. Roller: 1-3/4 inch (44 mm) aluminum; spring loaded with locking device.
 - 2. Screen Pull: Ring on bottom bar.
 - 3. Horizontal Tensioning: Tensioning bar.
- D. Provide mounting hardware, brackets, supports, fasteners, and other mounting accessories required for a complete installation, in accordance with manufacturer's recommendations for specified substrates and mountings.

PART 3 EXECUTION**3.01 EXAMINATION**

- A. Verify that substrate is finished and ready to accept screen installation.
- B. If substrate preparation is the responsibility of another installer, notify Schaefer Architecture of unsatisfactory preparation before proceeding.
- C. Do not install projection screens until climate control systems are in place and interior painting and other finishes are completed.

3.02 PREPARATION

- A. Coordinate screen installation with installation of projection systems.
- B. Coordinate installation with adjacent construction and fixtures, including ceilings, walls, lighting, fire suppression, and registers and grilles.

3.03 INSTALLATION

- A. Install in accordance with manufacturer's instructions, using manufacturer's recommended hardware for relevant substrates.
- B. Do not field cut screens.
- C. Install screens in mountings as specified and as indicated on drawings.
- D. Install multiple screens in accordance with drawings and manufacturer's instructions. Verify that screens are aligned horizontally and vertically, and that spacing between screens is uniform and of minimum size.
- E. Handle rigid screen materials with care to avoid damage. Use equipment only on uncoated side.
- F. Install plumb and level.
- G. Adjust projection screens and related hardware in accordance with manufacturer's instructions for proper placement and operation.

3.04 PROTECTION

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

END OF SECTION

SECTION 12 36 00 - COUNTERTOPS**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Countertops for architectural cabinet work.

1.02 RELATED REQUIREMENTS

- A. Section 06 41 00 - Architectural Wood Casework.

1.03 REFERENCE STANDARDS

- A. ANSI A208.1 - American National Standard for Particleboard; 2009.
- B. ANSI A208.2 - American National Standard for Medium Density Fiberboard for Interior Use; 2009.
- C. ASTM D570 - Standard Test Method for Water Absorption of Plastics; 1998 (Reapproved 2018).
- D. ASTM D635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position; 2018.
- E. ASTM D785 - Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials; 2008.
- F. ASTM D790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials; 2010.
- G. ASTM D792 - Density and Specific Gravity (Relative Density) of Plastics by Displacement; 2013.
- H. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2021a.
- I. AWI (QCP) - Quality Certification Program; current edition at www.awiqcp.org.
- J. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014.
- K. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- 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. Specimen warranty.
- C. Shop Drawings: Complete details of materials and installation ; combine with shop drawings of cabinets and casework specified in other sections.
 - 1. Show locations for plumbing fixtures, cut outs and other items installed in countertops.
- D. Selection Samples: For each finish product specified, color chips representing manufacturer's full range of available colors and patterns.
- E. Woodwork Quality Standard Compliance Certificates: AWI Quality Certification Program certificates, including the QCP project registration number for casework with plastic laminate countertops.

1.05 QUALITY ASSURANCE

- A. Plastic Laminate Countertops: Quality Assurance as indicated in 06 41 00 - Architectural Wood Casework.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.
- C. Protect plastic laminate tops from moisture damage.
- D. Do not deliver countertops until painting, wet work, grinding, and similar operations have been completed in installation areas.

1.07 FIELD CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
 - 1. Building shall be enclosed, wet work shall be complete, and HVAC system shall be operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Where countertop is indicated to be fitted to other construction, check actual dimensions of other construction by accurate field measurements before manufacturing countertop; show recorded measurements on shop drawings. Coordinate manufacturing schedule with construction progress to avoid delay of Work.
 - 1. Where field measurements cannot be made without delaying the Work, guarantee dimensions and proceed with manufacture of countertop without field measurements. Coordinate other construction to ensure that actual dimensions correspond to guaranteed dimensions.

PART 2 PRODUCTS**2.01 COUNTERTOPS**

- A. Quality Standard: See Section 06 41 00.
- B. Plastic Laminate Countertops: High-pressure decorative laminate (HPDL) sheet bonded to substrate.
 - 1. Laminate Sheet: NEMA LD 3, Grade HGS, 0.048 inch (1.2 mm) nominal thickness.
 - a. Manufacturers; Provide laminate from one or a combination of the following:
 - 1) Formica Corporation: www.formica.com.
 - 2) Panolam Industries International, Inc Nevamar: www.nevamar.com.
 - 3) Wilsonart: www.wilsonart.com.
 - 4) Substitutions: See Section 01 60 00 - Product Requirements.
 - b. Finish: matte.
 - c. Surface Color and Pattern: selected from manufacturer's full range of standard colors in matte finish.
 - 2. Exposed Edge Treatment: Square, substrate built up to minimum 1-1/4 inch (32 mm) thick; covered with matching laminate, where indicated.
 - 3. Exposed Edge Treatment: Extruded PVC, flat shaped; smooth finish; of width to match component thickness, color as selected from manufacturer's standards, where indicated.
 - a. Thickness: 0.12 inch (3 mm).
 - 4. Back and End Splashes: Same material, same construction.

- a. Provide end splashes at each end of a countertop; including countertops against a wall or other casework. Separate for field attachment.
5. Fabricate in accordance with AWI/AWMAC/WI (AWS), Section 11 - Countertops, Custom Grade.
6. Laminate Backer: BKL, 0.020 inch (0.51 mm) nominal thickness or thickness required by AWI/AWMAC/WI (AWS) standards, undecorated; for application to concealed backside of countertop faced with high pressure decorative laminate.

2.02 MATERIALS

- A. Wood-Based Components:
 1. Wood fabricated from old growth timber is not permitted.
- B. Particleboard for Supporting Substrate: ANSI A208.1 Grade 2-M-2, 45 pcf (20 kg/cu m) minimum density; minimum 3/4 inch (19 mm) thick; join lengths using metal splines.
 1. At Sinks: Industrial-grade particleboard for the entire length of the countertop.
- C. Medium Density Fiberboard for Supporting Substrate: ANSI A208.2.
 1. At Sinks: Fiberboard with a 24-hour thickness swell factor of 5% or less, and a 24-hour water-absorption factor of 10% or less for the entire length of the countertop.
- D. Adhesives: Chemical resistant waterproof adhesive as recommended by manufacturer of materials being joined.
- E. Joint Sealant: Mildew-resistant silicone sealant, in colors matching components and as selected.

2.03 FABRICATION

- A. Fabricate laminate or wood countertops in accordance with standards governing fabrication quality that are specified in 06 41 00 - Architectural Wood Casework .
- B. Fabricate tops and splashes in the largest sections practicable, with top surface of joints flush.
 1. Join lengths of tops using best method recommended by manufacturer.
 2. Fabricate to overhang fronts and ends of cabinets 1 inch (25 mm) except where top butts against cabinet or wall.
 3. Prepare all cutouts accurately to size; replace tops having improperly dimensioned or unnecessary cutouts or fixture holes.
 - a. Manufacturer of countertop shall provide all cutouts, including mechanical and electrical service fittings and sinks.
- C. Provide back/end splash wherever counter edge abuts vertical surface unless otherwise indicated.
 1. Secure to countertop with concealed fasteners and with contact surfaces set in waterproof glue.
 2. Height: 4 inches (102 mm), unless otherwise indicated.
- D. Wall-Mounted Counters: Provide skirts, aprons, brackets, and braces as indicated on drawings.
 1. Countertops to have hidden counter support. Outwater Industries 20in x 20in Powder coated hidden steel countertop support bracket, SKU: CSB20-NJ-WH or similar.

PART 3 EXECUTION**3.01 EXAMINATION**

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Schaefer Architecture of unsatisfactory preparation before proceeding.
- C. Verify that wall surfaces have been finished and mechanical and electrical services and outlets are installed in proper locations.

3.02 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

- A. Securely attach countertops to cabinets using concealed fasteners. Make flat surfaces level; shim where required.
 - 1. Locate field joints as shown on accepted shop drawings, factory-prepared so there is no jobsite processing of top and edge surfaces.
- B. Attach plastic laminate countertops using screws with minimum penetration into substrate board of 5/8 inch (16 mm).
- C. Seal joint between back/end splashes and vertical surfaces.

3.04 TOLERANCES

- A. Variation From Horizontal: 1/8 inch in 10 feet (3 mm in 3 m), maximum.
- B. Offset From Wall, Countertops: 1/8 inch (3 mm) maximum; 1/16 inch (1.5 mm) minimum.
- C. Field Joints: Joints butted tight.

3.05 CLEANING

- A. Clean countertops surfaces thoroughly.

3.06 PROTECTION

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

END OF SECTION

SECTION 32 31 13 - CHAIN LINK FENCES AND GATES**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Posts, rails, and frames.
- B. Wire fabric.
- C. Concrete.
- D. Manual gates with related hardware.
- E. Automatic gate operators.
- F. Accessories.

1.02 RELATED REQUIREMENTS

- A. Section 03 30 00 - Cast-in-Place Concrete: Concrete anchorage for posts.

1.03 REFERENCE STANDARDS

- A. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2017.
- B. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2016a.
- C. ASTM A392 - Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric; 2011a (Reapproved 2017).
- D. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2018a.
- E. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete; 2021a.
- F. ASTM F567 - Standard Practice for Installation of Chain-Link Fence; 2014a.
- G. ASTM F668 - Standard Specification for Polyvinyl Chloride (PVC) and Other Organic Polymer-Coated Steel Chain-Link Fence Fabric; 2017.
- H. ASTM F1043 - Standard Specification for Strength and Protective Coatings on Steel Industrial Fence Framework; 2018.
- I. ASTM F1083 - Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures; 2018.
- J. ASTM F1665 - Standard Specification for Poly(Vinyl Chloride)(PVC) and Other Conforming Organic Polymer-Coated Steel Barbed Wire Used with Chain-Link Fence; 2008 (Reapproved 2013).
- K. ASTM F2200 - Standard Specification for Automated Vehicular Gate Construction; 2020.
- L. CLFMI CLF-SFR0111 - Security Fencing Recommendations; 2014.
- M. FS RR-F-191/1D - Fencing, Wire and Post Metal (Chain-Link Fence Fabric); 1990.
- N. NEMA EN 10250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2024.
- O. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- P. UL 50 - Enclosures for Electrical Equipment, Non-Environmental Considerations; Current Edition, Including All Revisions.
- Q. UL 50E - Enclosures for Electrical Equipment, Environmental Considerations; Current Edition, Including All Revisions.
- R. UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on fabric, posts, accessories, fittings and hardware.
- C. Shop Drawings: Indicate plan layout, spacing of components, post foundation dimensions, hardware anchorage, and schedule of components.
 - 1. Gate Operator: Show locations and details for installing operator components, switches, and controls. Indicate motor size, electrical characteristics, drive arrangement, mounting, and grounding provisions.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of experience.
- B. Fence Installer: Company with demonstrated successful experience installing similar projects and products, with not less than five years of experience.

1.06 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.

PART 2 PRODUCTS**2.01 COMPONENTS**

- A. Line Posts:
 - 1. Line Posts heights up to 6 feet (1.83 m): 1.9 inch (48.3 mm) diameter.
 - a. Nominal weight per foot: 2.72 lbs/ft (4.05 kg/m).
- B. Corner and Terminal Posts:
 - 1. Corner and Terminal Posts heights up to 6 feet (1.83 m): 2.38 inch (60.3 mm) diameter.
 - a. Nominal weight per foot: 3.65 lbs/ft (5.43 kg/m).
- C. Gate Posts:
 - 1. Gate Height 6 feet (1.83 m) and under:
 - a. Gate width over 4 feet (1.22 m) to 10 feet (3.05 m): 2.88 inch (73 mm) diameter.
- D. Top and Brace Rail: 1.66 inch (42 mm) diameter, plain end, sleeve coupled.
 - 1. Over 12 feet (3.66 m) fence, provide top, bottom and 2 intermediate rails.
- E. Bottom Rail: 1.66 inch (42 mm) diameter, plain end, sleeve coupled.
- F. Gate Frame:
 - 1. Gate Frame height 6 feet (1.83 m) and under: 1.66 inch (42 mm) diameter for welded fabrication.
 - a. Nominal weight per foot: 1.83 lbs/ft (2.72 kg/m).
 - 2. Gate Frame height over 6 feet (1.83 m): 1.9 inch (48.3 mm) diameter for welded fabrication.
 - a. Nominal weight per foot: 2.28 lbs/ft (3.39 kg/m).
- G. Fabric: diamond mesh interwoven wire, 9 gauge, 0.1483 inch (3.8 mm) thick, top selvage twisted tight, bottom selvage knuckle end closed for fabric heights over 6 feet (1.8 m). For fabric heights 6 feet (1.8 m) and below, provide top and bottom selvage knuckle end closed.
- H. Tension Wire: 7 gauge, 0.177 inch (4.5 mm) thick steel, single strand.

- I. Tension Band: 0.074 inch (1.88 mm) thick steel.
 - 1. Space not over 15 inches (380 mm) o.c., to secure fabric and tension bars to posts.
- J. Tension Bars: 3/16 inch (4.76 mm) x 3/4 inch (19.05 mm) thick steel.
 - 1. One piece lengths equal to full height of fabric, provide one stretcher bar for each gate and end post, and two for each corner and pull post, except where fabric is integrally woven into post.
- K. Tie Wire: 9 gage (4 mm) thick steel.
- L. Rolling Gate Hardware:
 - 1. Three 1 5/8 inch (41 mm) standard pipe rails (track) with needed brackets for attaching rails to fence posts.
 - 2. Three bushing type sheaves or wheels with concave tread, to grip rails, each with mounting brackets to gate frame.
 - 3. One 2 wheel rubber tired trolley and mounting brackets at gate lead post edge.

2.02 MATERIALS

- A. Posts, Rails, and Frames:
- B. ASTM A1011/A1011M, Designation SS; hot-rolled steel strip, cold formed to pipe configuration, longitudinally welded construction, minimum yield strength of 50 ksi (345 MPa); zinc coating complying with ASTM F1043 and ASTM F1083.
- C. Line Posts: Type I round in accordance with FS RR-F-191/1D.
- D. Terminal, Corner, Rail, Brace, and Gate Posts: Type I round in accordance with FS RR-F-191/1D.
- E. Wire Fabric:
 - 1. ASTM F668 polymer-coated steel chain link fabric.
- F. PVC-coated steel, complying with ASTM F1665; 2 strands of 0.099 inch (2.51 mm) diameter wire, with 2-pointed barbs at 4 inches (102 mm) on center.
- G. Concrete:
- H. Type specified in Section 03 30 00.
 - 1. Ready-mixed, complying with ASTM C94/C94M; normal Portland cement; 2,500 psi (17 MPa) strength at 28 days, 3 inch (75 mm) slump; 1 inch (25 mm) nominal size aggregate, 2% to 4% entrained air.

2.03 Manual Gates and Related Hardware

- A. Hardware for Single Swinging Gates: 180 degree hinges, 2 for gates up to 60 inches (1,525 mm) high, 3 for taller gates; fork latch with gravity drop and padlock hasp; keeper to hold gate in fully open position.
- B. Hinges: Finished to match fence components.
 - 1. Brackets: Round.
 - 2. Mounting: Center.
 - 3. Closing: Manual.
- C. Latches: Finished to match fence components.

2.04 Automatic Gate Operators

- A. Sliding Gates: Pre-wired, pedestal mounted gate operator for horizontal sliding gates, per ASTM F2200 and UL 325.
 - 1. Operating type: drive belt.
 - 2. Control Functions: Open, Pause, Close.

3. Maximum Open/Close Time: 10 seconds.
4. Access: Card.
5. Exit: Exit loop detection and exit button mounted on pedestal.
6. Maximum gate weight: 500 pounds (187 kilograms).
7. Horsepower Rating: Suitable for connected load.
8. Entrapment Protection Devices: Provide sensing devices and safety mechanisms complying with UL 325.
9. Enclosures: Comply with NEMA EN 10250, and list and label as complying with UL 50 and UL 50E.
 - a. Environment Type per NEMA EN 10250: Unless otherwise indicated, as specified for the following installation locations:

2.05 LIGHT-DUTY ARCHITECTURAL HARDWARE

- A. Roller Assembly: Steel chassis assembly with permanently-lubricated and sealed roller bearings.
 1. Weight Rating: 1,000 pound (454 kg).
 2. Shaft: 1 inch (25.4 mm) diameter hardened steel shaft.
 3. Roller: Polymer casting, secured to shaft with nylon locknut.
 4. Mounting to Round Fence Post: U-bolts.
 5. Finish: PVC Coated fabric and painted steel: Black.

2.06 ACCESSORIES

- A. Caps: Cast steel galvanized; sized to post diameter, set screw retainer.
 1. Provide line post caps with loop to receive tension wire or top rail.
- B. Fittings: Sleeves, bands, clips, rail ends, tension bars, fasteners and fittings; steel.

2.07 FINISHES

- A. Components (Other than Fabric): Galvanized in accordance with ASTM A123/A123M, at 1.7 ounces per square foot (530 g/sq m).
- B. Components and Fabric: Vinyl coated over coating of 1.8 ounces per square foot galvanizing (over coating of 550 g/sq m galvanizing).
- C. Fabric: Minimum average zinc coating Class 1, 1.2 oz/sq ft (366 g/sq m).
- D. Tension Wire: ASTM-824 type II; zinc-coated Class 2, 1.2 oz/sq ft (366 g/sq m).
- E. Tie Wire: ASTM A 641; zinc coated Class 3, 1.2 oz/sq ft (366 g/sq m).
- F. Hardware: Hot-dip galvanized to weight required by ASTM A153/A153M.
- G. Accessories: Same finish as framing.
- H. Color: PVC Coated fabric and painted steel: Black.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install framework, fabric, accessories and gates in accordance with ASTM F567.
- B. Place fabric on outside of posts and rails.
- C. Excavation:
 1. Align and drill holes for posts in firm, undisturbed or compacted soil.
 2. If size not shown excavate holes to diameter equal to 3 times post outside diameter but not less than 8 inch (203 mm). Oversize the hole if needed to provide at least 2 inch (50 mm) concrete cover around posts.

3. Unless otherwise indicated, excavate hole depths approximately 3 inch (76 mm) lower than post bottom.
- D. Set all posts plumb in concrete footings with top of footing 2 inches (50 mm) above finish grade. Slope top of concrete for water runoff.
 1. Place concrete around posts and vibrate or tamp for consolidation. Check each post for vertical, alignment and top elevation. Hold in position during placement and finishing operations.
- E. Line Post Footing Depth Below Finish Grade: 3 feet (.9 m).
- F. Line Post Spacing: Space at maximum 96 inch (2440 mm).
- G. Corner, Gate and Terminal Post Footing Depth Below Finish Grade: 3 feet (.9 m), except gate posts with gates over 12 feet (3.6 m) long shall be set 4 feet (1.2 m) deep.
- H. Brace each gate and corner post to adjacent line post with horizontal center brace rail and diagonal truss rods. Install brace rail one bay from end and gate posts and at both sides of corner and pull posts.
 1. Install so posts are plumb when diagonal rod is under proper tension.
- I. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.
- J. Install tension wire before stretching fabric, pull wire taut, without sags.
 1. Extended along bottom of fence fabric.
 2. Install bottom tension wire within 6 inch (152 mm) of bottom of fabric and tie to each post with not less than same diameter and type of wire.
- K. Do not stretch fabric until concrete foundation has cured 28 days.
- L. Stretch fabric between terminal posts or at intervals of 100 feet (30 m) maximum, whichever is less.
- M. Position bottom of fabric 2 inches (50 mm) above finished grade.
- N. Attach fabric to end, corner, and gate posts with tension bars and tension bands.
 1. Thread tension bars through fabric or clamp to fabric 4 inch (101 mm) o.c., and secure to posts with tension bands spaced 15 inch (381 mm) o.c.
 2. Pull fabric taut and anchor to framework so fabric remains under tension after pulling force is released.
- O. Use U-shaped tie wires, conforming to diameter of pipe to which attached, clasping pipe and fabric firmly with ends twisted at least 2 full turns. Bend wire to minimize hazard to persons or clothing.
 1. Tie fabric to line posts at 12 inch (304 mm).
 2. Tie fabric to rails and braces at 24 inch (609 mm).
 3. Tie fabric to tension wire at 12 inch (304 mm).
- P. Install operator in accordance with manufacturer's instructions and in accordance with NFPA 70.
- Q. Gates:
 1. Provide horizontal and vertical members to ensure proper gate operations and for attachment of fabric, hardware and accessories. Space so that frame members are not more than 8 foot (2.4 m) apart and provide a horizontal member if the gate height is over 8 foot (2.4 m).

2. Use same fabric as for fence, unless otherwise indicated. Install fabric with tension bars at vertical edges. Bars may also be used at top and bottom edges. Attach tension bands to gate frame at not more than 15 inch (380 mm) o.c. Attach hardware to provide security against removal or breakage. Install diagonal cross-bracing consisting of 0.375 inch (9.5 mm) diameter adjustable length truss rods on gates to ensure frame rigidity without sag or twist, if required.

3.02 TOLERANCES

- A. Maximum Variation From Plumb: 1/4 inch (6 mm).
- B. Maximum Offset From True Position: 1 inch (25 mm).
- C. Do not infringe on adjacent property lines.

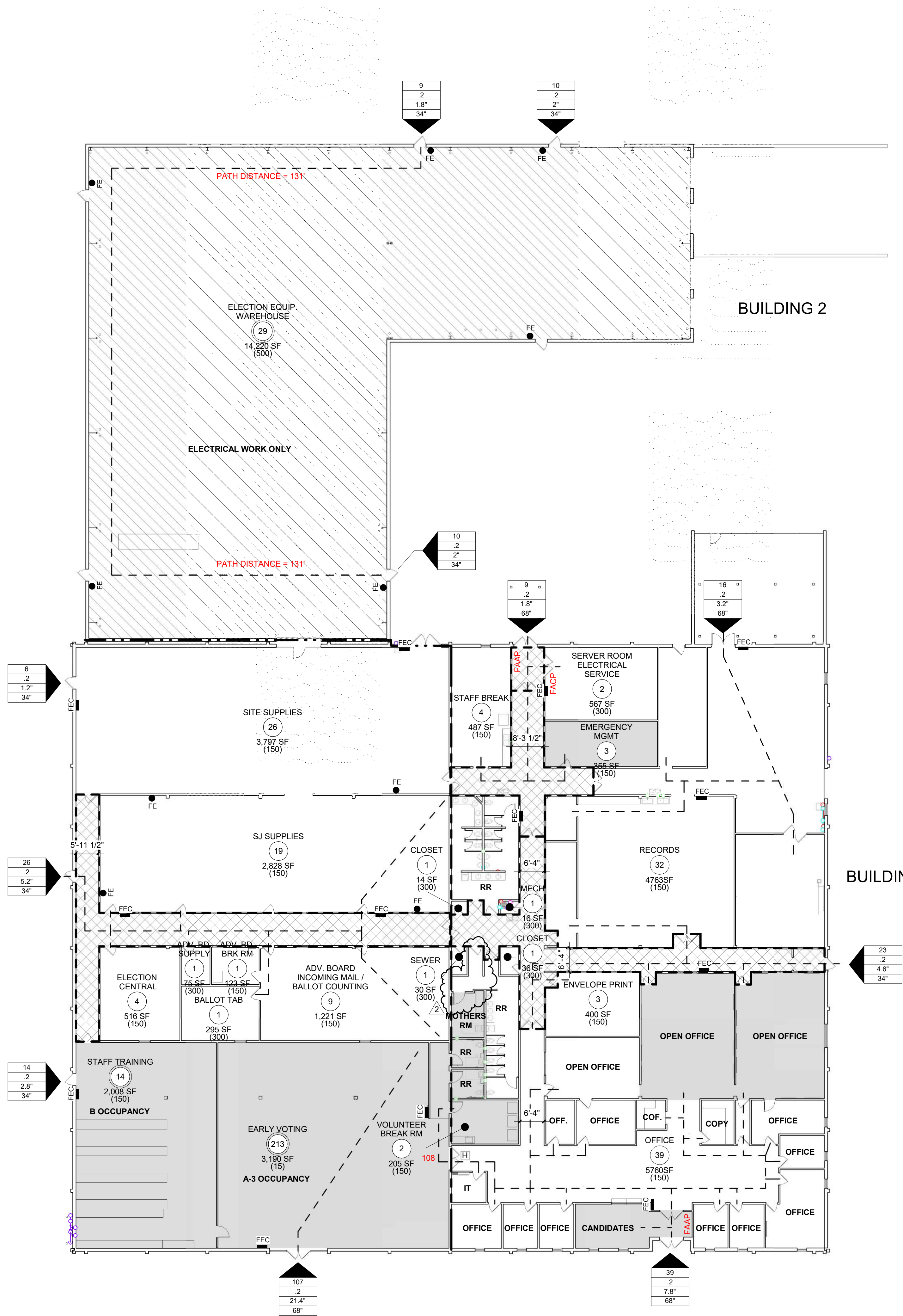
3.03 FIELD QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for additional requirements.
- B. Layout: Verify that fence installation markings are accurate to design, paying attention to gate locations, underground utilities, and property lines.
- C. Gates: Inspect for level, plumb, and alignment.

3.04 SCHEDULES

- A. Install 6 foot (_____ m) high fence as indicated.

END OF SECTION



A CODE PLAN
1/16" = 1'-0"

BUILDING 1 - TYPE 5B, 1 STORY, B OCC.

EXISTING NON-COMPLIANT BUILDING		
OCCUPANCY:	GROUP B	ACTUAL BLDG. SF: 31,945 S.F.
CONSTRUCTION TYPE:	V-B	ACTUAL HEIGHT: 16'
MIXED OCCUPANCY:	A-3 IS ACCESSORY	ACTUAL STORIES: 1

FIRE RESISTIVE REQUIREMENTS (TABLE 601)	
BUILDING ELEMENT	RATING (HOURS)
STRUCTURAL FRAME	0
BEARING WALLS - EXTERIOR	0
BEARING WALLS - INTERIOR	0
NON BEARING EXTERIOR WALLS	TABLE 602
NON BEARING INTERIOR WALLS	0
FLOORS	0
ROOF	0

EXTERIOR WALL PROTECTION (TABLE 602)	
<5'	1
>5', <10'	1
>10', <30'	0
>30'	0

BUILDING 2 - TYPE 2B, 1 STORY, S-2 OCC.

EXISTING BUILDING		
OCCUPANCY:	GROUP S-2	ACTUAL BLDG. SF: 14,220 S.F.
CONSTRUCTION TYPE:	II-B	ACTUAL HEIGHT:
MIXED OCCUPANCY:	NONE	ACTUAL STORIES: 1

FIRE RESISTIVE REQUIREMENTS (TABLE 601)	
BUILDING ELEMENT	RATING (HOURS)
STRUCTURAL FRAME	0
BEARING WALLS - EXTERIOR	0
BEARING WALLS - INTERIOR	0
NON BEARING EXTERIOR WALLS	TABLE 602
NON BEARING INTERIOR WALLS	0
FLOORS	0
ROOF	0

EXTERIOR WALL PROTECTION (TABLE 602)	
<5'	1
>5', <10'	1
>10', <30'	0
>30'	0

PROJECT INFORMATION

TYPE OF CONSTRUCTION:	RENOVATION
LOCATION:	3639 N COMOTARA, WICHITA, KS 67226
OWNER:	SEDGWICK COUNTY, 525 N. MAIN ST, WICHITA, KS 67203
COUNTY:	SEDGWICK
CITY:	WICHITA
ARCHITECT:	SCHAEFER ARCHITECTURE, INC.
HANDICAP PROVISIONS:	PATH OF TRAVEL, RESTROOMS, EXITS
WATER SUPPLY:	CITY OF WICHITA
SEWAGE TREATMENT:	CITY OF WICHITA
GAS:	KANSAS GAS
ELECTRICITY:	EVERGY
USE:	ELECTIONS AND RECORDS MANAGEMENT
AUTHORITY HAVING JURISDICTION:	CITY OF WICHITA
LOCAL FIRE:	CITY OF WICHITA
LOCAL CODE ENFORCEMENT:	WABCO
AREA OF RENOVATION:	8,092 S.F.
TOTAL BUILDING AREA:	16,155 S.F.

PROJECT CERTIFICATION

ARCHITECT: SCHAEFER ARCHITECTURE, INC.
I CERTIFY THAT THE SUBMITTED PLANS FOR THE PROJECT REFERENCED ABOVE COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING:

BUILDING	2024	INTERNATIONAL BUILDING CODE
2024	INTERNATIONAL EXISTING BUILDING CODE	
2021	INTERNATIONAL FIRE CODE	
ELECTRICAL	2023	NATIONAL ELECTRIC CODE (NFPA 70)
MECHANICAL	2024	INTERNATIONAL MECHANICAL CODE
2021	INTERNATIONAL FUEL AND GAS CODE	
PLUMBING	2021	UNIFORM PLUMBING CODE
2021	INTERNATIONAL FUEL GAS CODE	
2010	ADAAG ACCESSIBILITY GUIDELINES FOR BUILDINGS & FACILITIES	
1907	KANSAS FIRE PREVENTION CODE	

PER 2006 IBC SECTION 104.11, THE KANSAS STATE FIRE MARSHAL ACCEPTS APPLICATION OF THE 2018 IBC TO THIS PROJECT AS PROVIDING AN EQUIVALENT LEVEL OF MINIMUM LIFE SAFETY AS REQUIRED BY THE KANSAS FIRE PREVENTION CODE.

GENERAL NOTES

- ALL BUILDINGS ARE TO BE EQUIPPED WITH THE FOLLOWING:
 - HVAC SYSTEM: AIR HANDLERS
 - FUEL: NATURAL GAS
 - FIRE SAFETY:
 - FIRE ALARM SYSTEM
 - FIRE EXTINGUISHER
 - EXIT LIGHTS
 - EMERGENCY LIGHTS
- ACTIVE FIRE SAFETY SYSTEM:
 - FIRE ALARM SYSTEM PROVIDED
 - SMOKE DETECTION PROVIDED AT RATED DOORS W/ HOLD OPENS AND HVAC EQUIPMENT ABOVE 2000 CFM
 - EXIT LIGHTS AND EMERGENCY LIGHTS PROVIDED W/ BATTERY BACKUP
- PASSIVE FIRE SAFETY SYSTEM:
 - 1 HR RATED CORRIDOR @ EXISTING BUILDING
 - 3 HR RATED SEPARATION @ EXISTING BUILDING
- FIRE PREVENTION CODE KSA 31-133 AND 31-1354a. MOST BUILDINGS NEW OR EXISTING HAVE ONE OR MORE DEVIATIONS FROM ONE OF THE RECOGNIZED BUILDING CODES. STATE LAW MANDATES COMPLIANCE TO THE KANSAS FIRE PREVENTION CODE (KFPC) IN ALL OCCUPIED STRUCTURES.
- STATE LAW CAN BE SUMMARIZED AS:
 - a) EXISTING STRUCTURE CANNOT HAVE 'DISTINCTLY HAZARDOUS CONDITIONS' - THOSE THAT IMPEDE SPEEDY EXIT;
 - b) NEW CONSTRUCTION AND CHANGES IN OCCUPANCY SHALL COMPLY TO CURRENT STANDARDS;
 - c) ADDITION OR CHANGES IN EXISTING BUILDING CANNOT MAKE THE EXISTING CONDITION WORSE OR BLOCK EXITING.
- MOST CORRECTION TO DISTINCTLY HAZARDOUS CONDITIONS COMPENSATE FOR IMPAIRED EXITING. MANY COMPENSATORY MEASURES ACCEPTABLE TO THE KANSAS STATE FIRE MARSHAL'S OFFICE DO NOT UPGRADE THE BUILDING TO MEET THE LETTER OF A BUILDING, FIRE OR LIFE SAFETY CODE. EXISTING PORTIONS OF MANY BUILDINGS DO NOT COMPLY WITH A CERTAIN BUILDING CODE AND SHOULD BE SPECIFIED AS MEETING THE KANSAS FIRE PREVENTION CODE.

PLUMBING FIXTURES

REQUIRED FIXTURES FOR 406 OCCUPANTS (IBC TABLE 2902.1) USING B:			
	WATER CLOSETS	LAV'S	DRINKING FOUNTAINS
MEN	1 PER 25 = 5	1 PER 40 = 4	1 PER 100 = 5
WOMEN	1 PER 25 = 5	1 PER 40 = 4	

ACTUAL FIXTURES:			
	WATER CLOSETS	LAV'S	DRINKING FOUNTAINS
MEN	11	11	8
WOMEN	6	7	

SYMBOL LEGEND

INDICATES THE OCCUPANCY LOAD OF A SPECIFIC ROOM OR AREA REQUIRING TWO OR MORE EXITS	MAX OCCUPANCY 160 SF (300)	# OF OCCUPANTS ROOM AREA OCCUPANT LOAD FACTOR
INDICATES THE OCCUPANCY LOAD OF A SPECIFIC ROOM OR AREA REQUIRING ONE EXIT	MAX OCCUPANCY 150 SF (300)	# OF OCCUPANTS ROOM AREA OCCUPANT LOAD FACTOR
INDICATES THE OCCUPANT LOAD EXITING FROM THE BUILDING	100 2 20' 34'	LOCATION OF EXIT # OF OCCUPANTS EGRESS WIDTH PER OCCUPANT REQD WIDTH ACTUAL WIDTH
OCCUPANT LOAD FROM A TRIBUTARY AREA OF THE ADJACENT FLOOR ABOVE OR BELOW HORIZONTAL EXIT	25 H	
EXISTING FIRE EXTINGUISHER	FE	EXISTING NON-COMPLIANT 1-HR CORRIDOR
EXISTING FIRE EXTINGUISHER CABINET	FEC	REMODEL AREA
FIRE DEPARTMENT CONNECTION	FDC	
FIRE ALARM ANNUNCIATOR PANEL	FAAP	
FIRE ALARM CONTROL PANEL	FACP	
EXISTING 2HR FIRE WALL	---	
EXISTING 1HR FIRE PARTITION	---	
EXISTING 3HR FIRE BARRIER	---	
LINE OF EXIT PATH	---	

U.L. DATA

FOR OPENINGS IN 1-HR WALLS
• 1-HR. WOOD STUDS - INTERIOR PARTITION WITH GYPSUM WALLBOARD EACH SIDE U.L. IBC TABLE 721.1(2)

SHEET SCALE



- NOTE:
- DO NOT SCALE DRAWINGS
 - CONTRACTOR TO FOLLOW WRITTEN DIMENSIONS ONLY
 - NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND AMONG THE DOCUMENTS & SITE CONDITIONS

GENERAL NOTES

- CONTRACTOR TO VERIFY EXISTING SITE & BUILDING CONDITIONS.
- PROPERTY LINE SHOWN ON ARCHITECTURAL SITE PLAN IS APPROXIMATE. CONTRACT TO VERIFY WORK IS DONE WITHIN PROPERTY BOUNDARIES
- WORK ADJACENT TO PROPERTIES SHALL BE COORDINATED W/ PROPERTY OWNERS
- FOR EXISTING SITE INFORMATION, REF. MOST RECENT SURVEY DOCUMENT.
- FOR ELECTRICAL SERVICE CONNECTION @ BUILDING, REF. ELEC.
- FOR SITE LIGHTING, REF. ELEC.
- FOR SEWER SERVICE CONNECTION @ BUILDING, REF. PLUMBING.
- PAYING CONTRACTOR TO VERIFY EXISTING SITE AND BUILDING CONDITIONS PRIOR TO BIDDING. SURVEY EXISTING PAVING ELEVATIONS AND SUBMIT A PLAN SHOWING PROPOSED SLOPES AT NEW SIDEWALKS TO ARCHITECT FOR REVIEW AND APPROVAL.
- PORTIONS OF RETAINING/PLANTER WALLS THAT BECOME EXPOSED TO VIEW DUE TO RECONFIGURATION OF SITE STAIRS SHALL BE CLEANED UP, PATCHED, AND THE SURFACE TREATED TO BLEND WITH ADJACENT CONCRETE WALL SURFACES. METHODS MIGHT INCLUDE A LIGHT SANDBLAST OVER THE ENTIRETY OF THE WALLS; PRIOR APPROVAL REQUIRED BY OWNER.
- ABBREVIATIONS:
 - CJ CONTROL JOINT - REF. DETAIL
 - VIF VERIFY IN FIELD ACTUAL CONDITIONS

SITE LEGEND

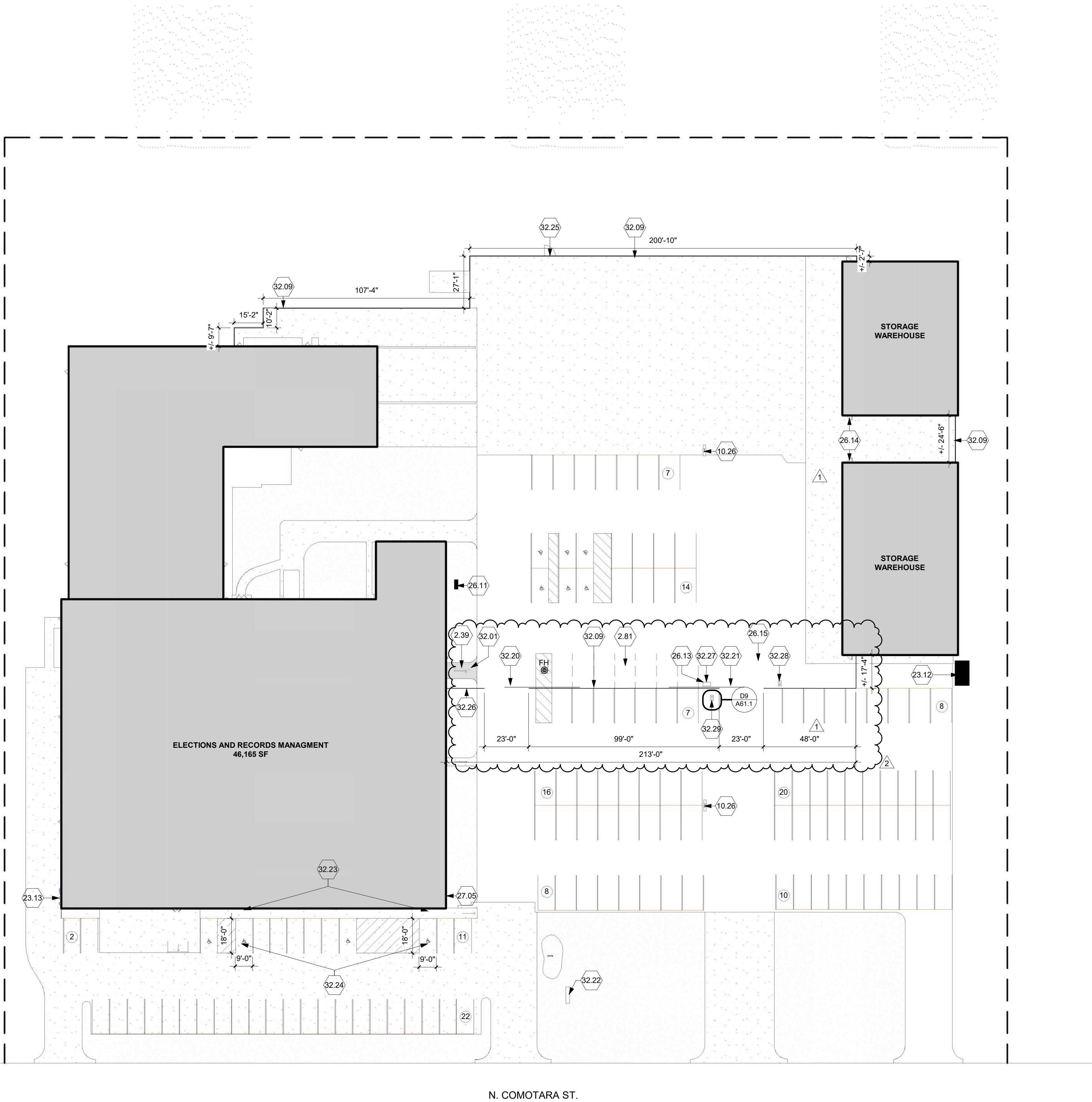
- EXISTING CONCRETE
- EXISTING ASPHALT
- EXISTING GRASS
- NEW CONCRETE

SYMBOL LEGEND

- PROPERTY LINE
- FIRE HYDRANT
- BUILDING OUTLINES

KEYNOTES

- 2.39 EXISTING CONCRETE RAMP TO BE REMOVED IN ITS ENTIRETY.
- 2.81 EXISTING PARKING STRIPING TO BE REMOVED.
- 10.26 EXISTING LIGHT POLE.
- 23.12 EXISTING TRANSFORMER.
- 23.13 EXISTING GAS METER.
- 26.11 EXISTING JUNCTION BOX.
- 26.13 CONDUIT FROM BUILDING TO GATE MOTOR - REF. ELEC.
- 26.14 REMOVE EXISTING AC AND PROVIDE NEW AC AT STORAGE WAREHOUSE.
- 26.15 NEW EXIT LOOP - REF. ELEC.
- 27.05 EXISTING FIBER LINE.
- 32.01 CONCRETE RAMP - REF. DETAILS
- 32.09 6' HIGH CHAIN LINK FENCE - REF. SPEC.
- 32.20 23' CANTILEVER SLIDING MANUAL GATE - REF. SPEC.
- 32.21 23' CANTILEVER SLIDING ELECTRICAL GATE - REF. SPEC.
- 32.22 REMOVE BOTH PANELS ON EXISTING DUAL-SIDED MONUMENTAL SIGN. PROVIDE AND INSTALL NEW SIGNAGE 48" X 96" ON BOTH SIDES. VERIFY DESIGN WITH OWNER.
- 32.23 ADA SIGNAGE WALL MOUNTED - REF. SITE DETAILS AND SPEC.
- 32.24 NEW ACCESSIBLE PARKING STALLS, REF. SITE DETAILS FOR PAINTED PAVEMENT MARKINGS
- 32.25 6'X6' WIDE SWINGING GATE - REF. SPEC.
- 32.26 KNOX BOX - COORDINATE LOCATION WITH FIRE DEPARTMENT AND OWNER, REF. SPEC.
- 32.27 SLIDE GATE OPERATOR - REF. SPEC.
- 32.28 EXIT BUTTON ON 42" BLACK GOOSENECK PEDESTAL WITH 6"X6" BLACK STEEL HOOD - REF. SPEC.
- 32.29 ACCESS CONTROL ON 72" DUAL HEIGHT SINGLE CHANNEL PEDESTAL 6"X6" BLACK STEEL HOODS AND BOLLARD ON 6" CONCRETE PAD - REF. DETAILS AND SPEC.



A SITE PLAN
1" = 30'-0"

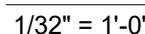


REVISIONS		
1	AD 1	11.03.2025
2	AD 2	11.20.2025

PROJECT NUMBER
5278.57

DATE
10.16.25

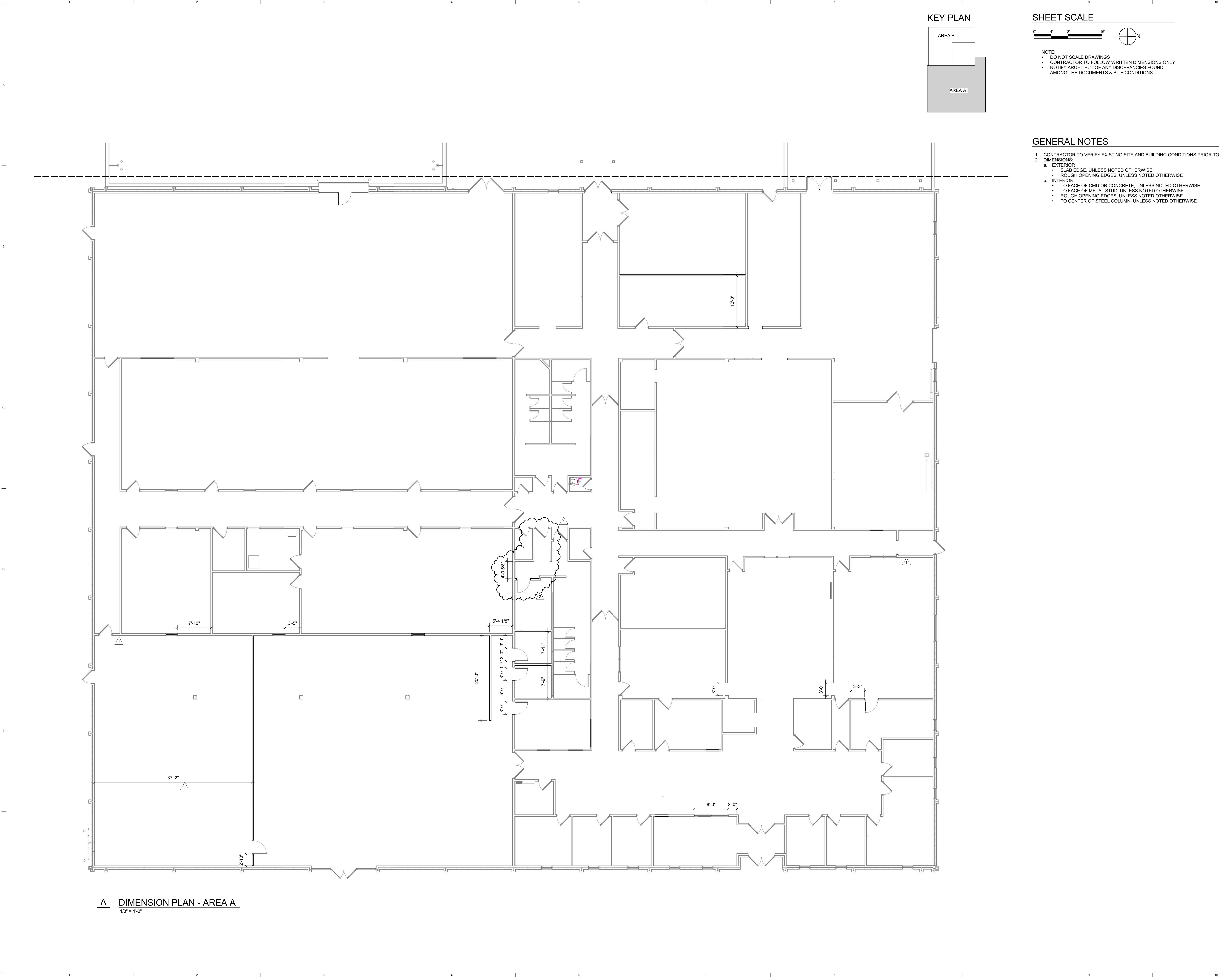
SITE PLAN



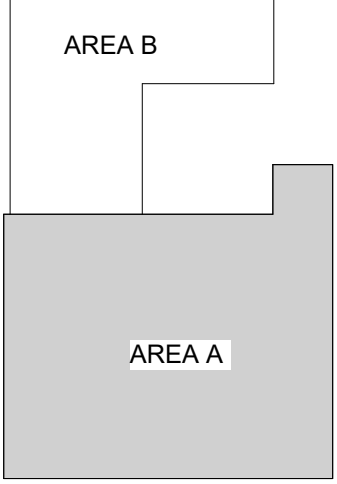
A FLOOR PLAN - AREA A
1/8" = 1'-0"

B PHASE PLAN

$$1/32'' = 1'-0'$$



KEY PLAN



SHEET SCALE



- NOTE:
- DO NOT SCALE DRAWINGS
 - CONTRACTOR TO FOLLOW WRITTEN DIMENSIONS ONLY
 - NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND AMONG THE DOCUMENTS & SITE CONDITIONS

GENERAL NOTES

1. CONTRACTOR TO VERIFY EXISTING SITE AND BUILDING CONDITIONS PRIOR TO BIDDING.
2. DIMENSIONS:
 - a. EXTERIOR
 - SLAB EDGE, UNLESS NOTED OTHERWISE
 - ROUGH OPENING EDGES, UNLESS NOTED OTHERWISE
 - b. INTERIOR
 - TO FACE OF CMU OR CONCRETE, UNLESS NOTED OTHERWISE
 - TO FACE OF METAL STUD, UNLESS NOTED OTHERWISE
 - ROUGH OPENING EDGES, UNLESS NOTED OTHERWISE
 - TO CENTER OF STEEL COLUMN, UNLESS NOTED OTHERWISE

Schaefer.
architecture

Schaefer Architecture
257 N. Broadway
Wichita, KS, 67202
316.684.0171



MIDWEST ENGINEERING, INC.
INTEGRATED CONSULTING ENGINEERS, P.A.

SEDGWICK COUNTY
ELECTIONS AND RECORDS MANAGEMENT
REMODEL

3639 N. Comotara St., Wichita, KS 67226

©2024
Schaefer Architecture, Inc.
All Rights Reserved

These drawings and their contents, including, but not limited to, all concepts, designs, & ideas are the exclusive property of Schaefer Architecture, and may not be used or reproduced in any way without express written consent.

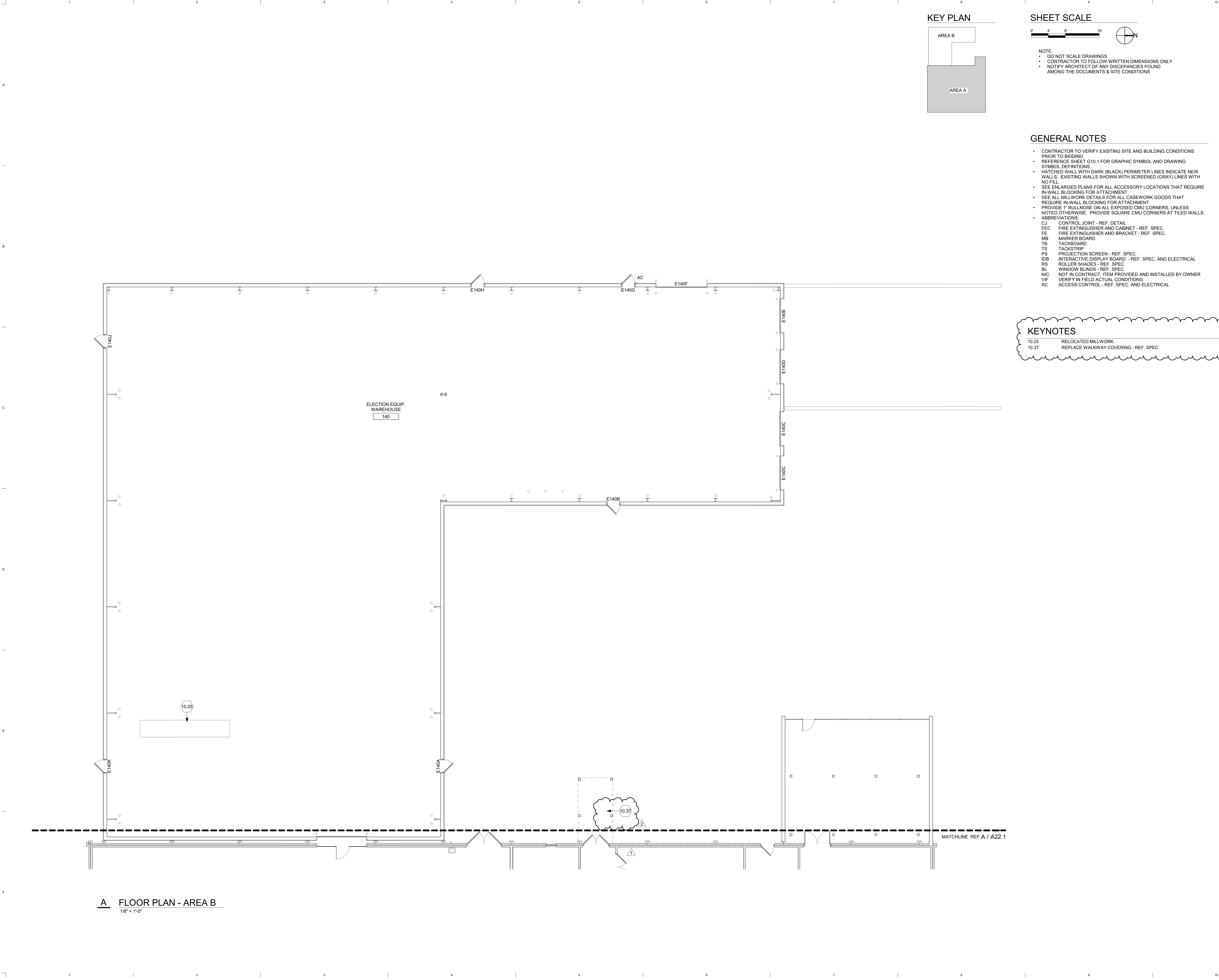
REVISIONS		
1	AD 1	11.03.2025
2	AD 2	11.20.2025

PROJECT NUMBER
5278.57

DATE
10.16.25

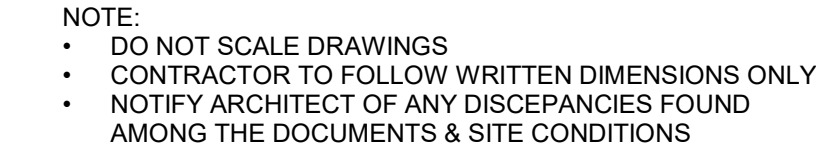
DIMENSION PLAN -
AREA A

A22.1D

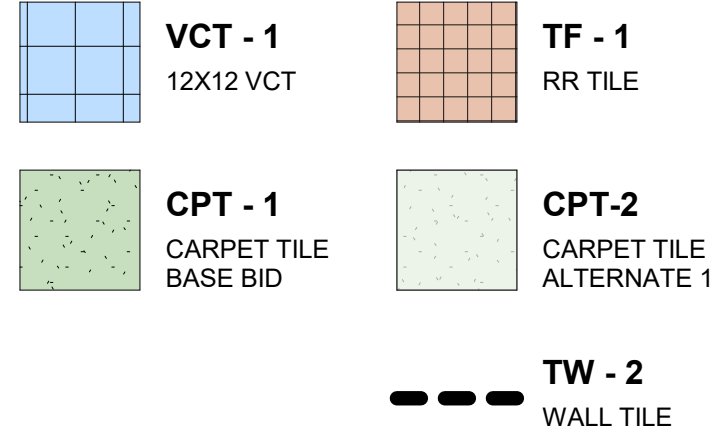


9.29	GYP. BD. HEADER AT 7'-2" A.F.F.
9.36	SALVAGED ACOUSTICAL TILE, GRID AND LIGHTING TIED INTO EXISTING CEILING
9.43	ALTERNATE 1: GYP. BD. HEADER AT 7'-2" A.F.F.
10.29	PROJECTOR PROVIDED BY OWNER. GC. TO PROVIDE CEILING MOUNT AND INSTALL.

A REFLECTED CEILING PLAN - AREA A
1/8" = 1'-0"

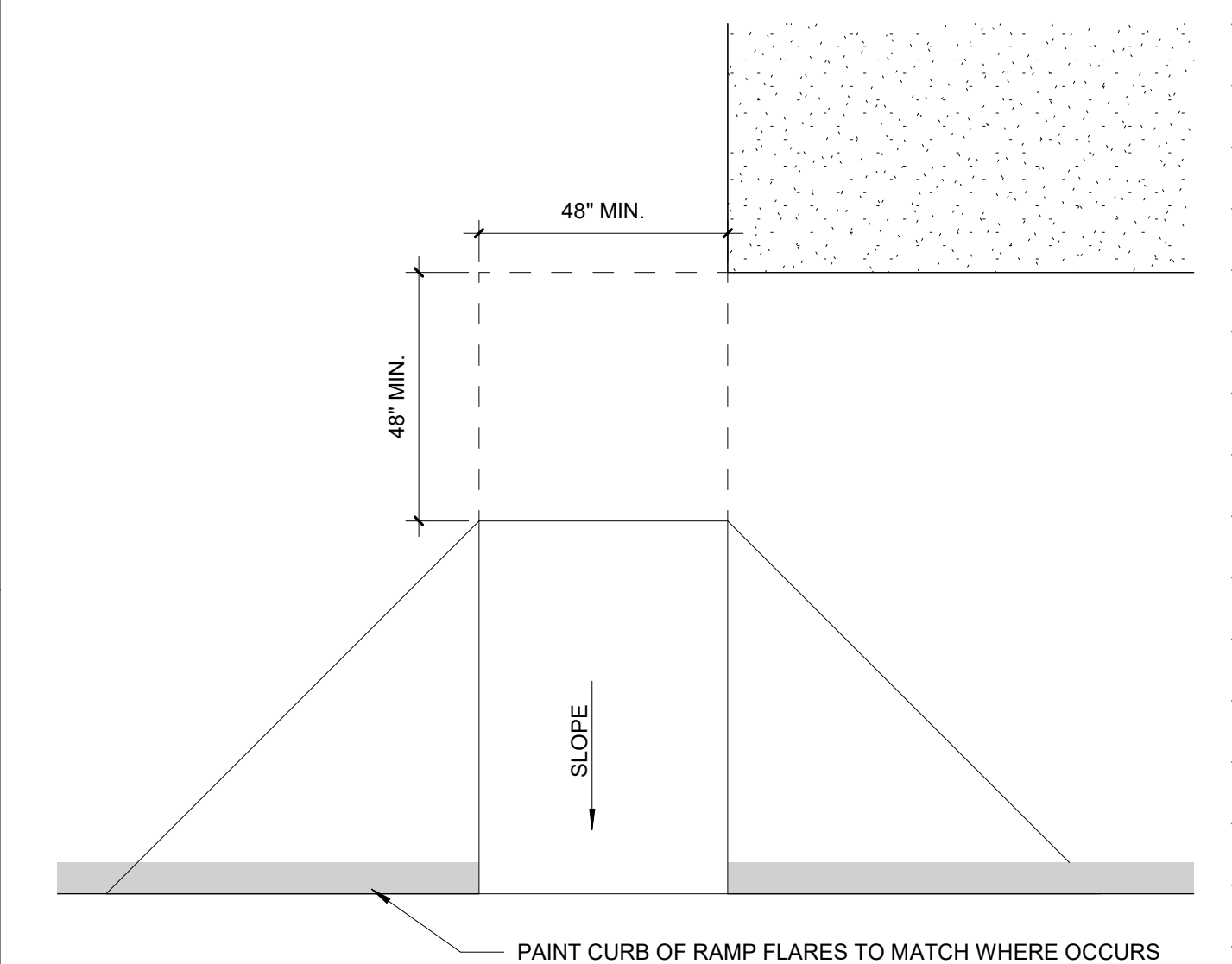
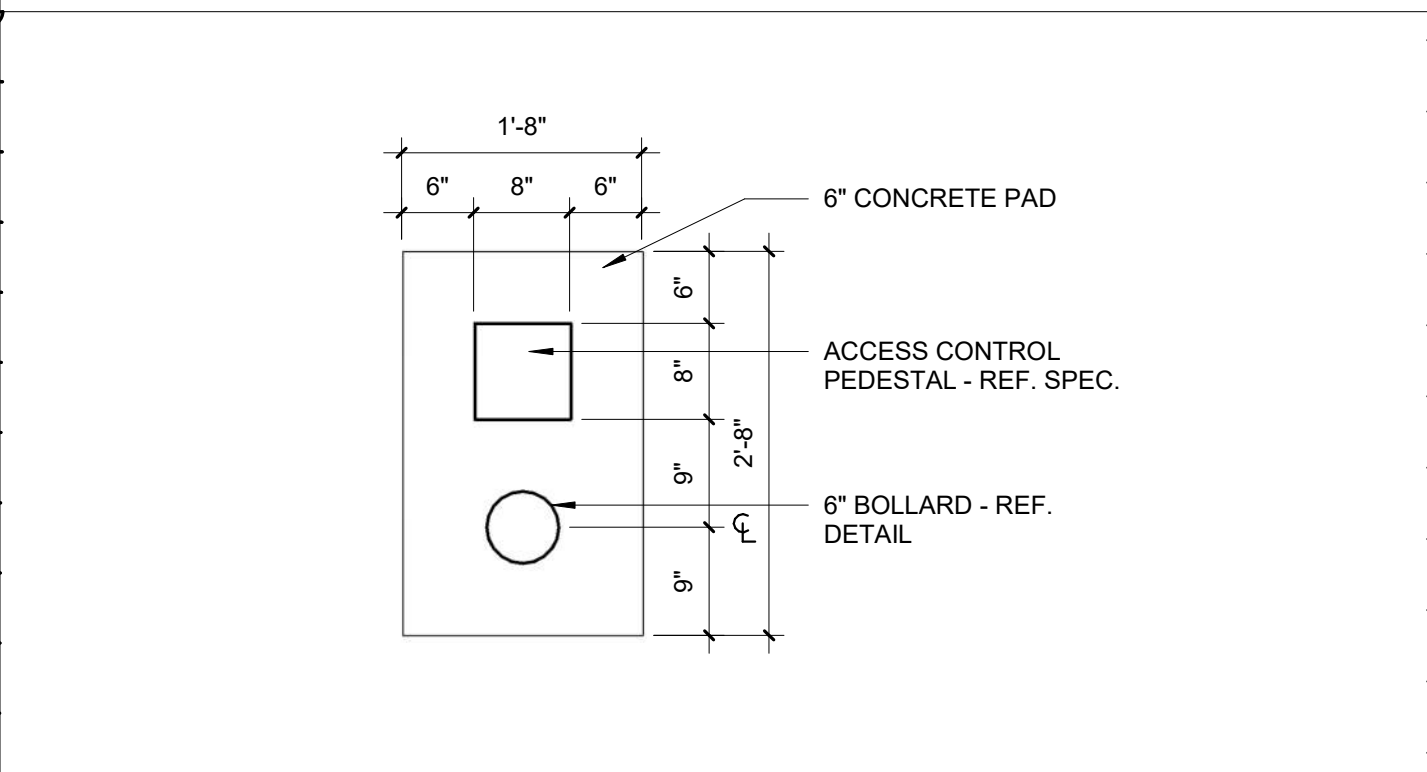
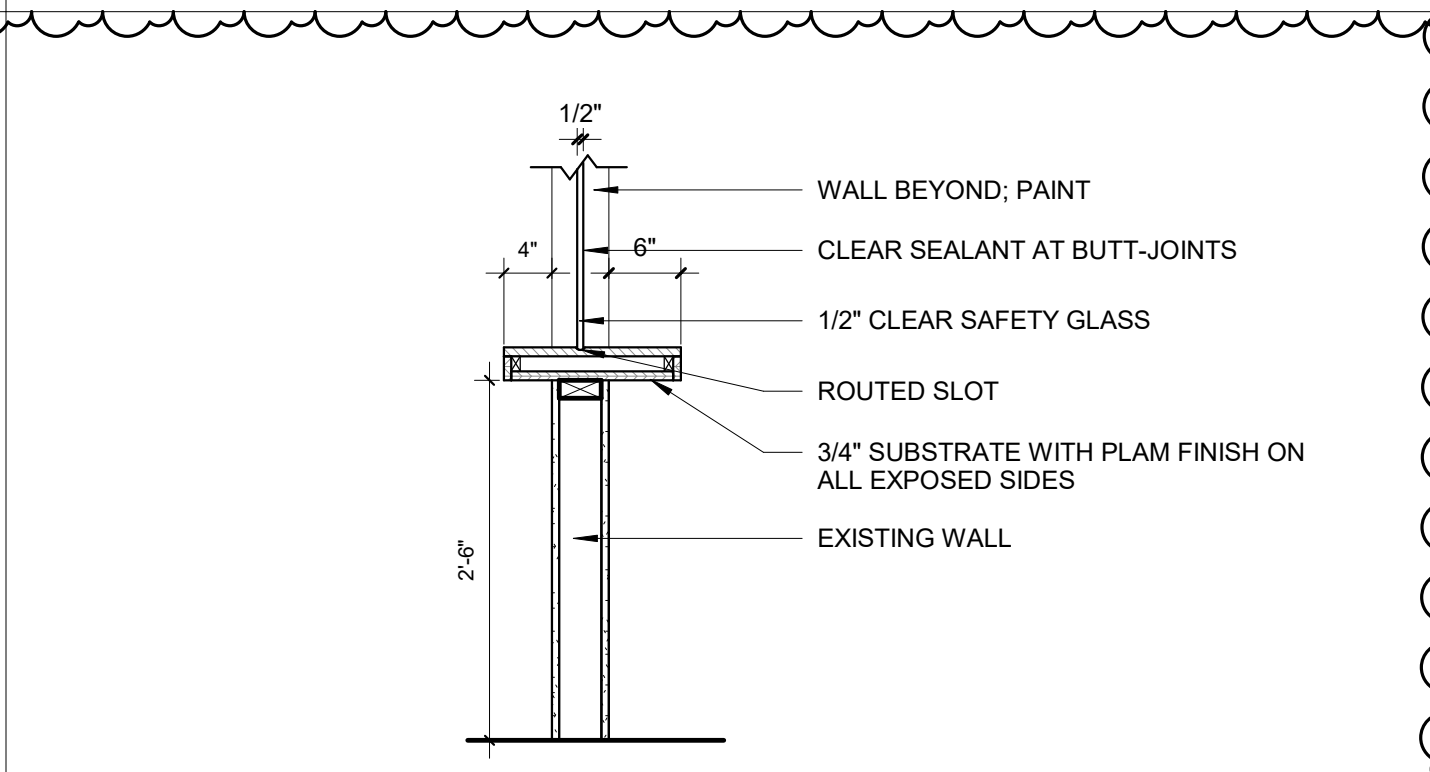
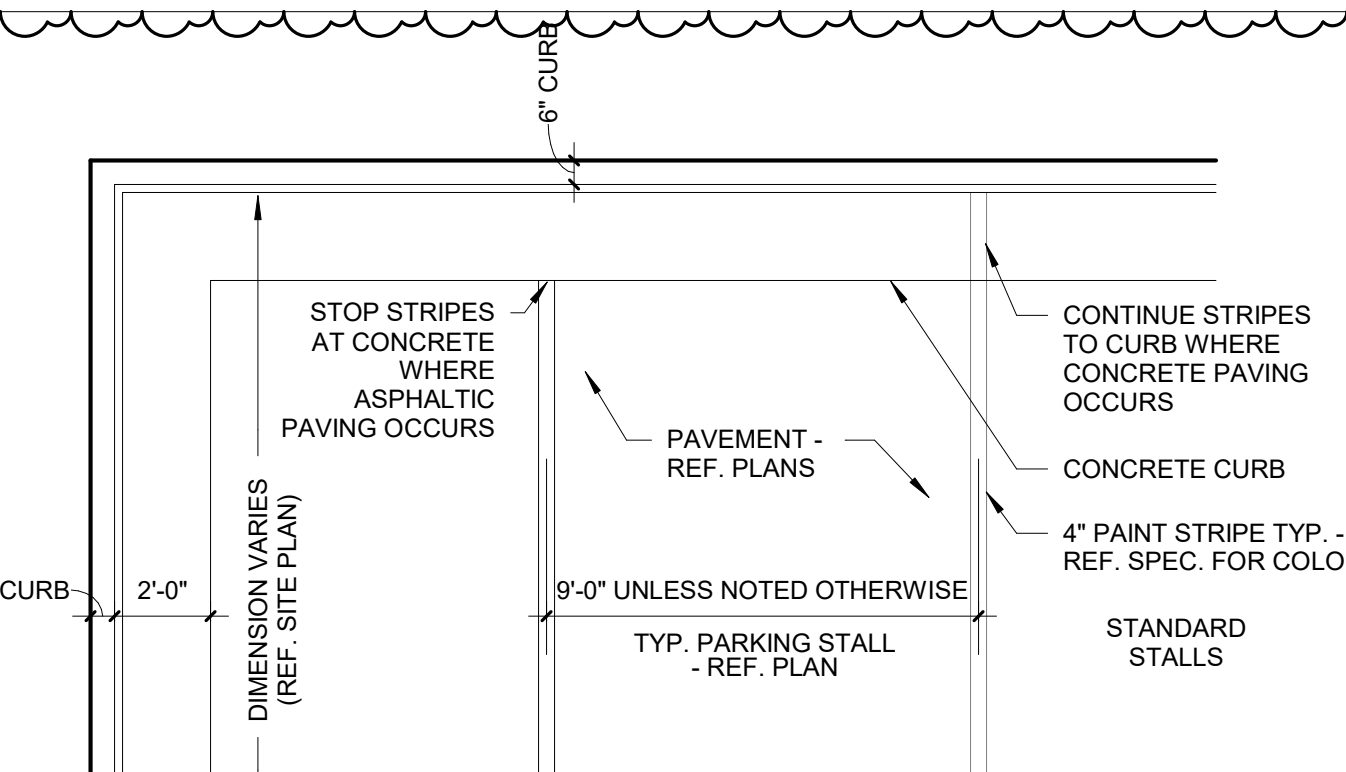
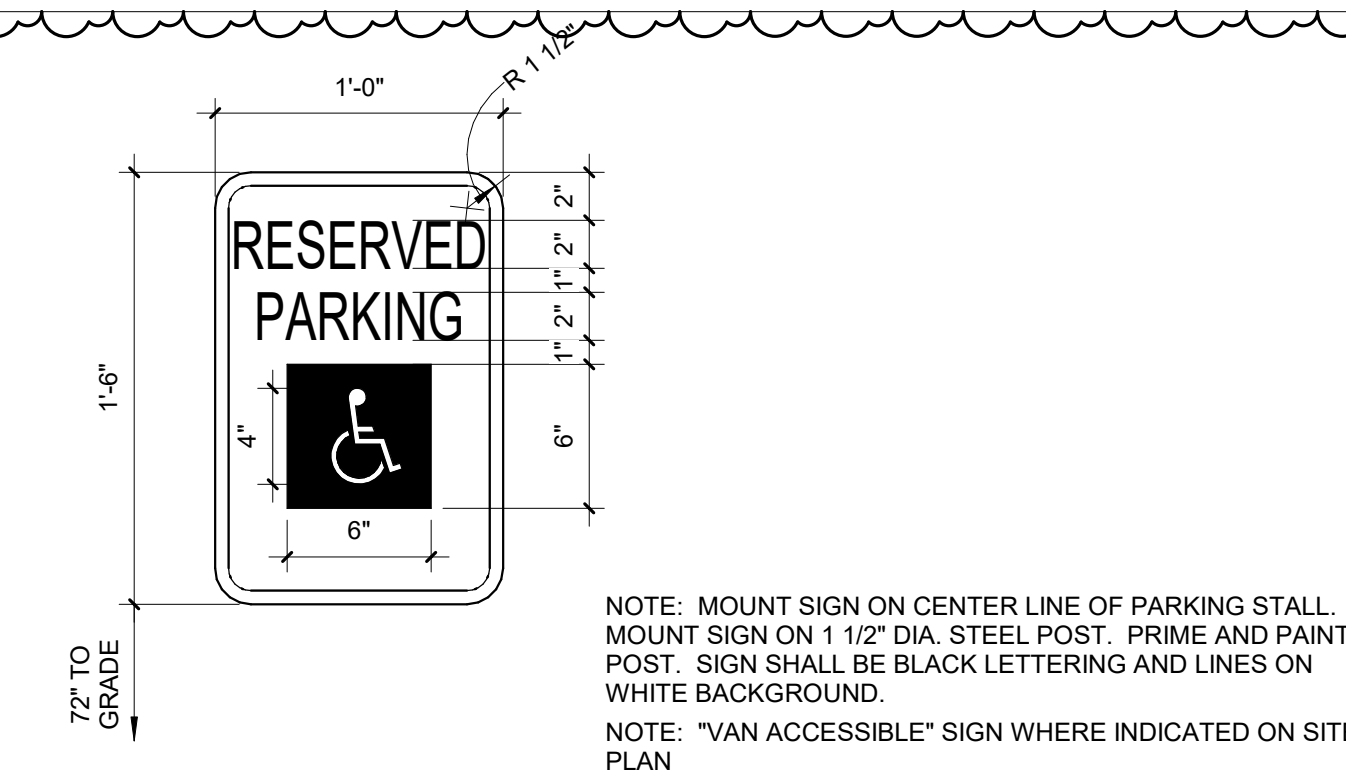
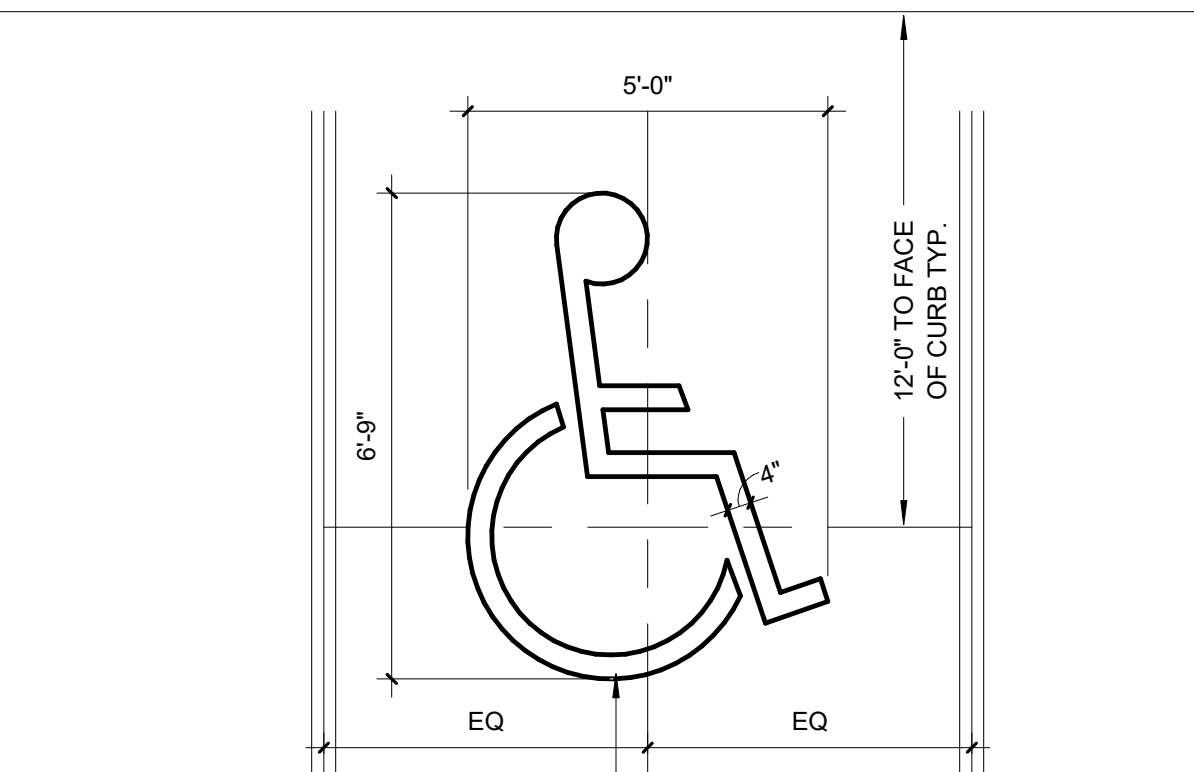
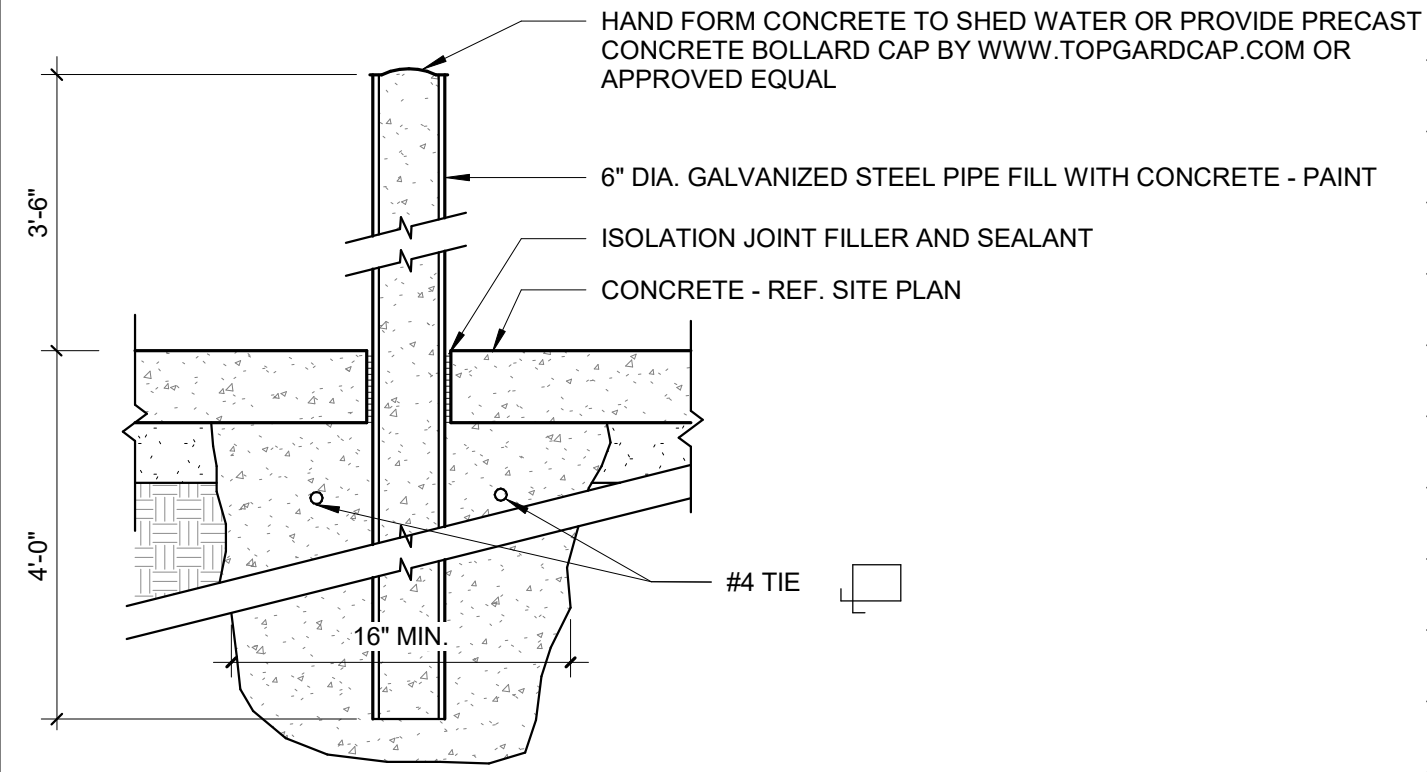
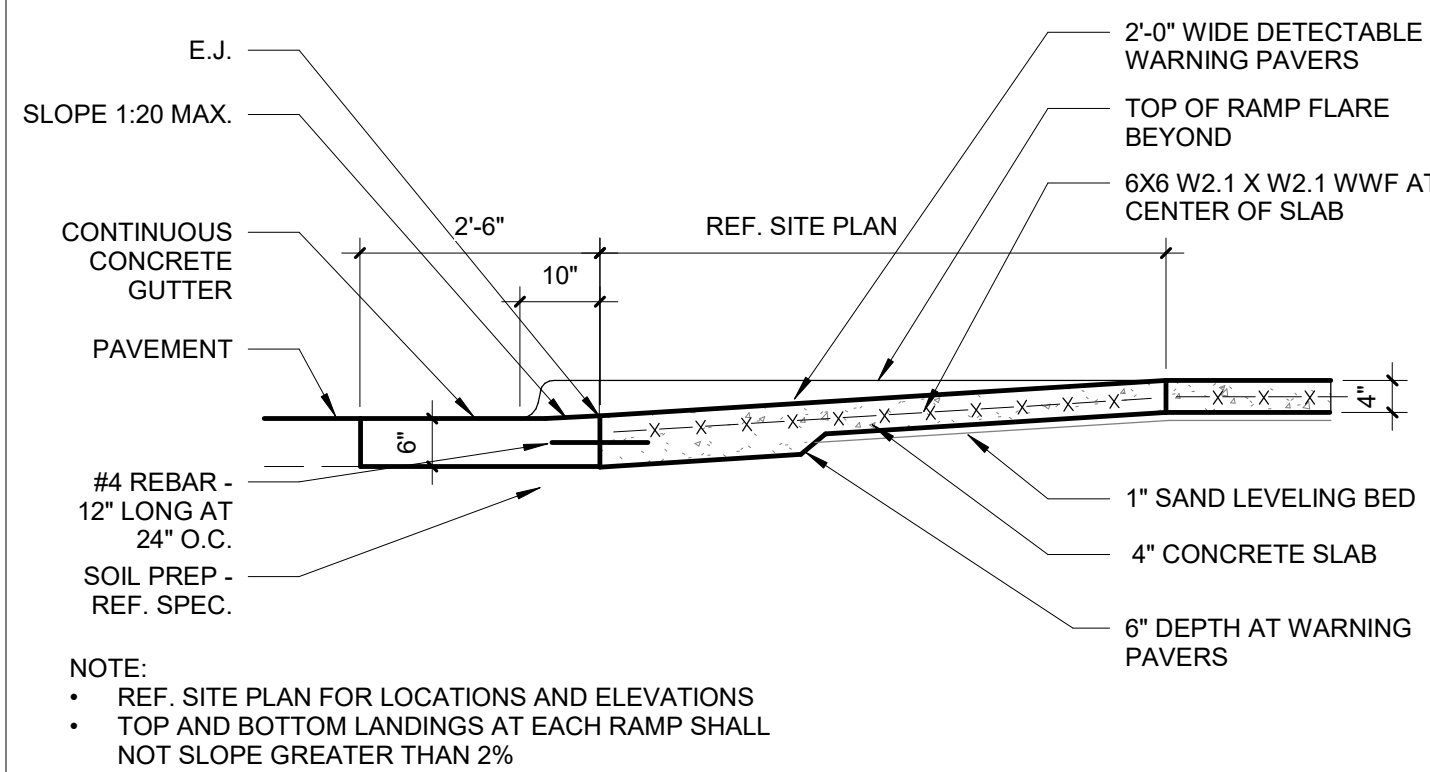
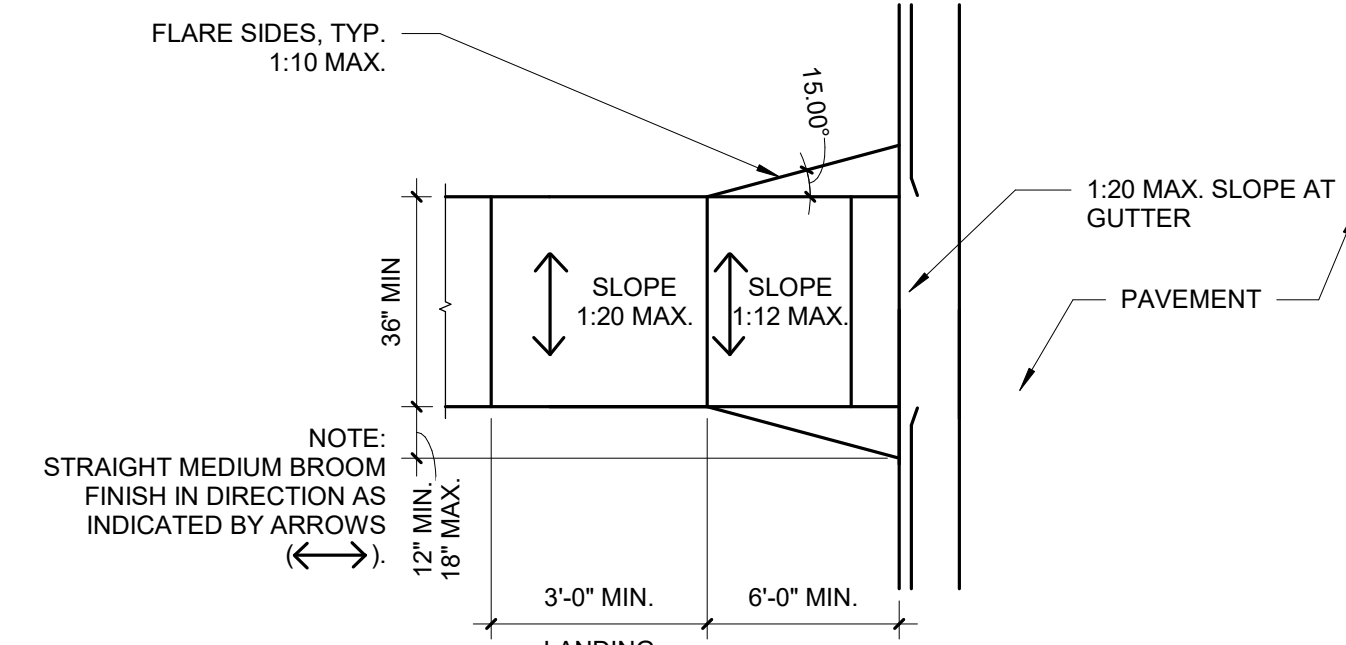
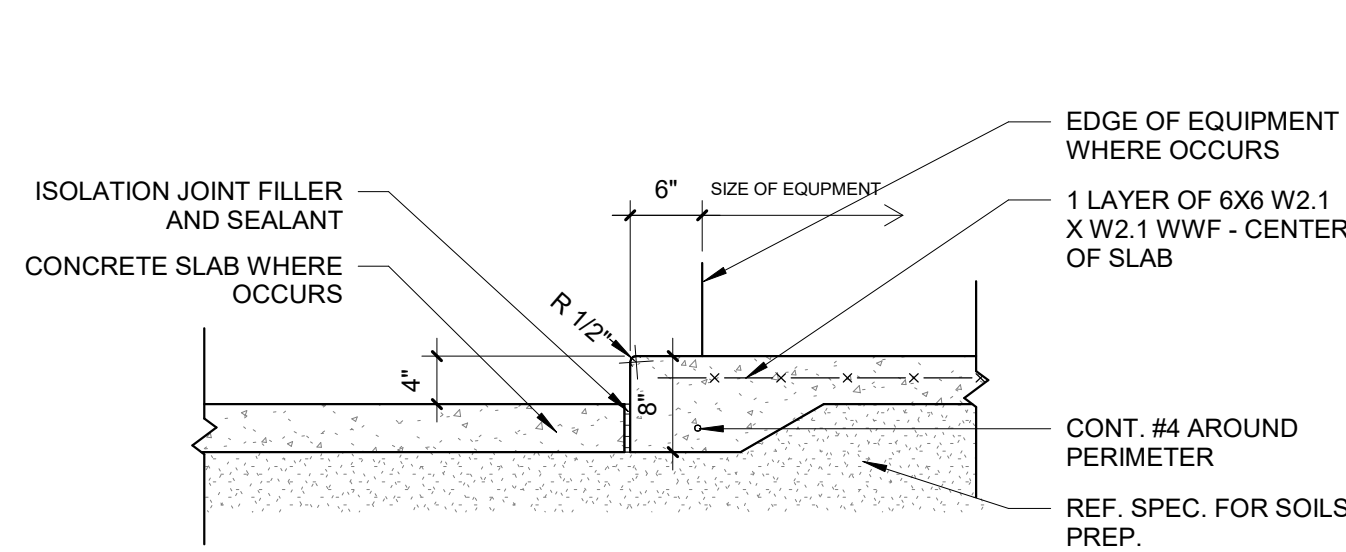
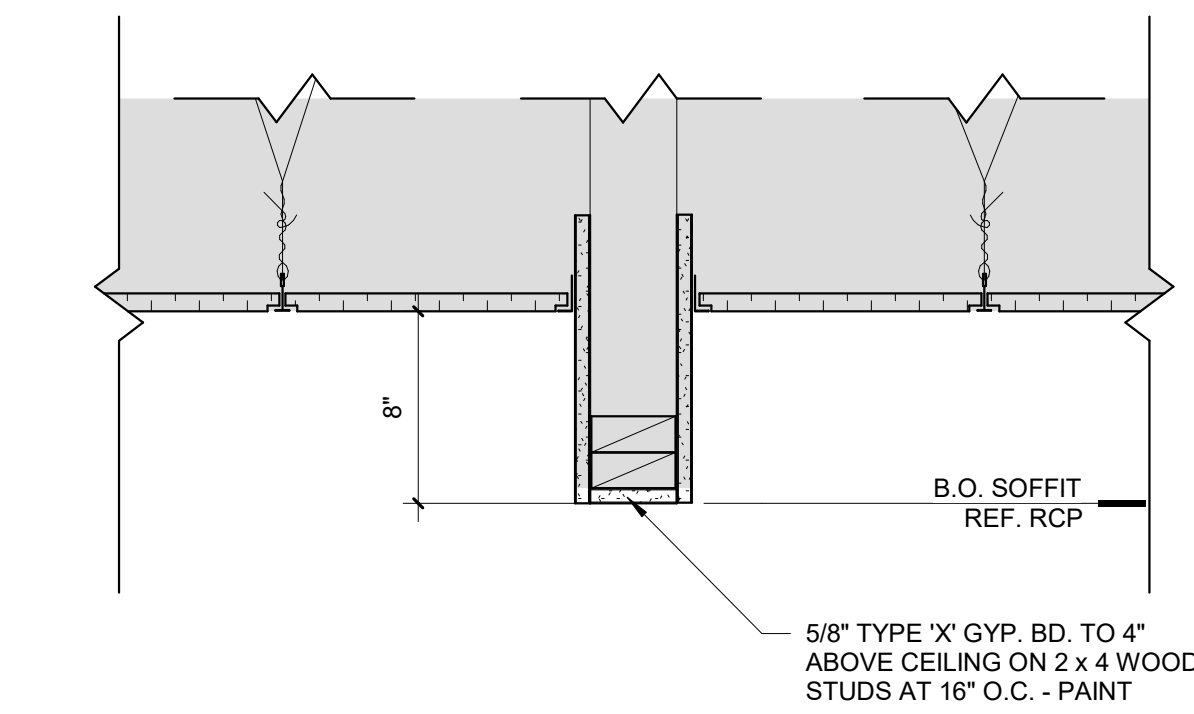
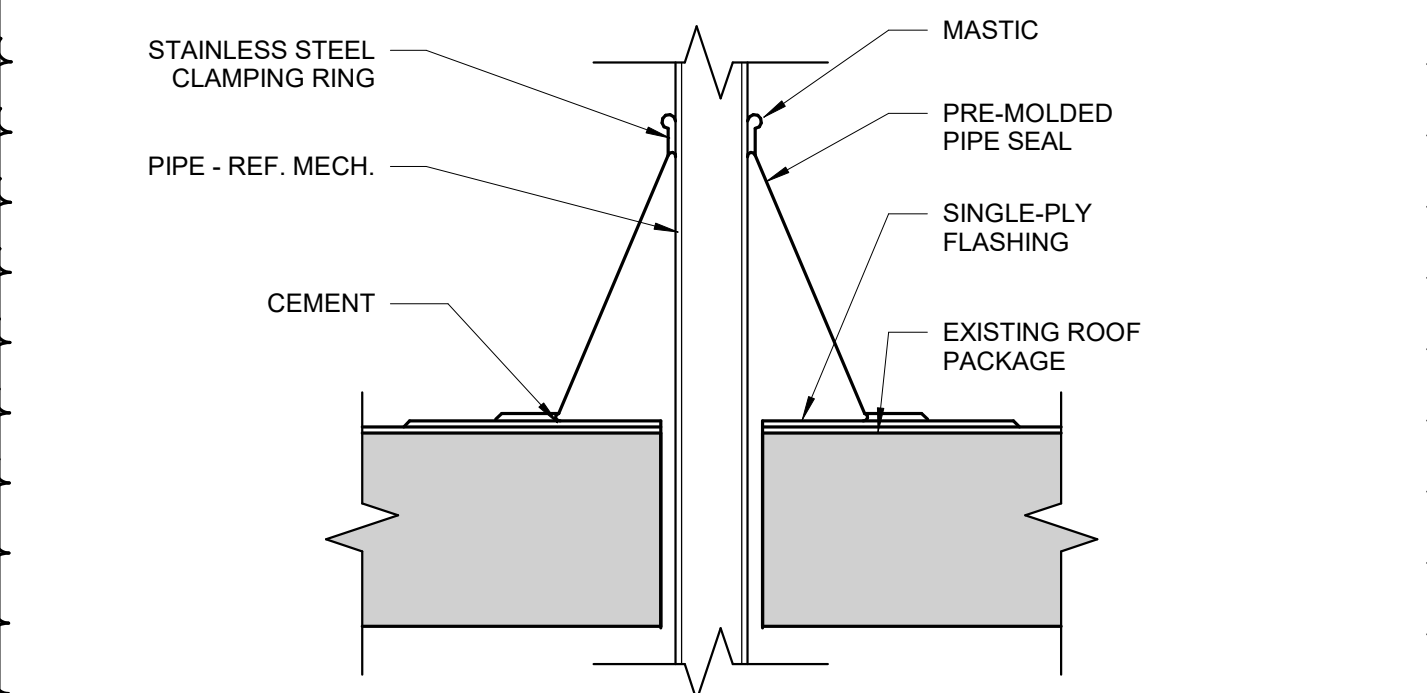
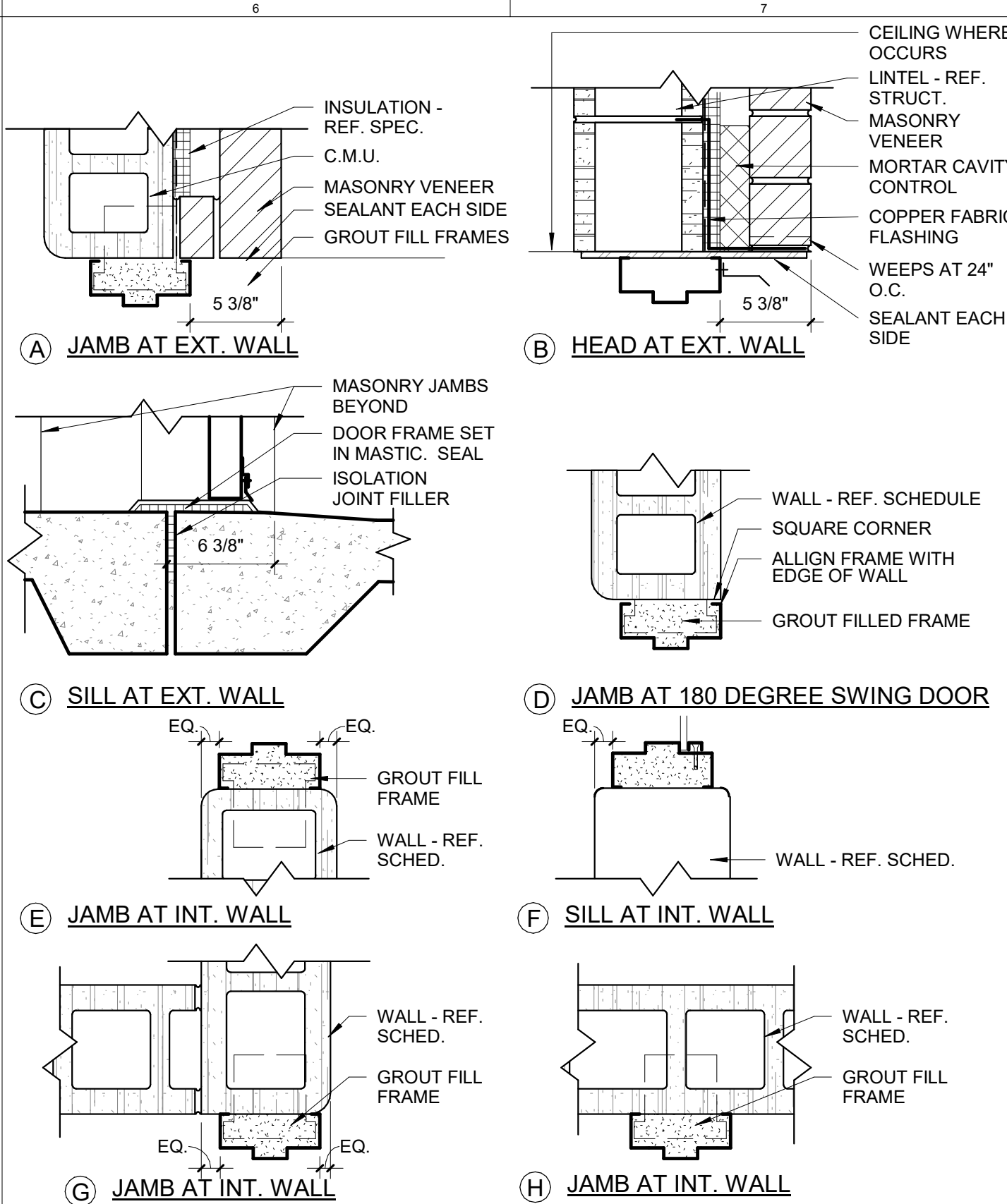
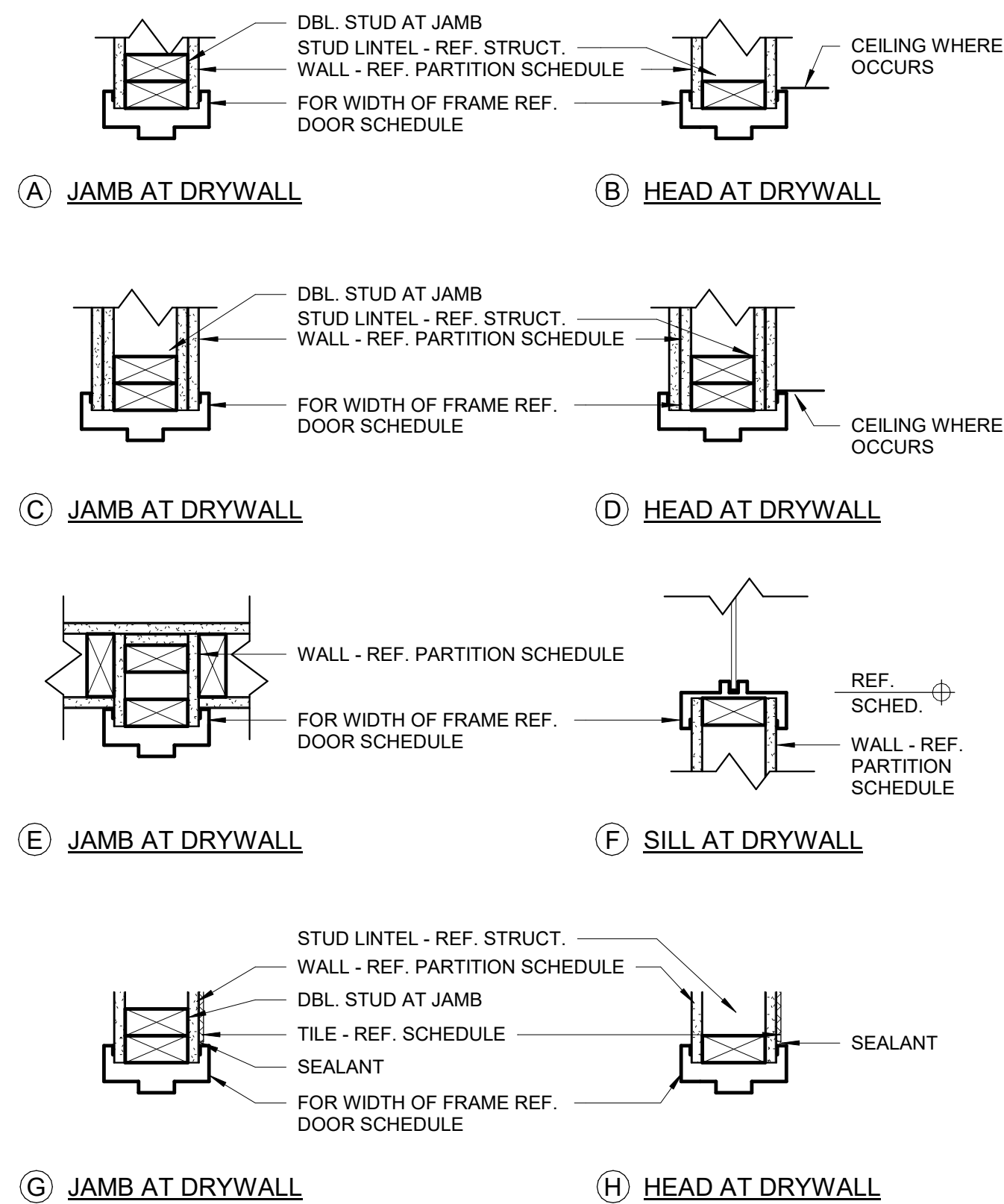
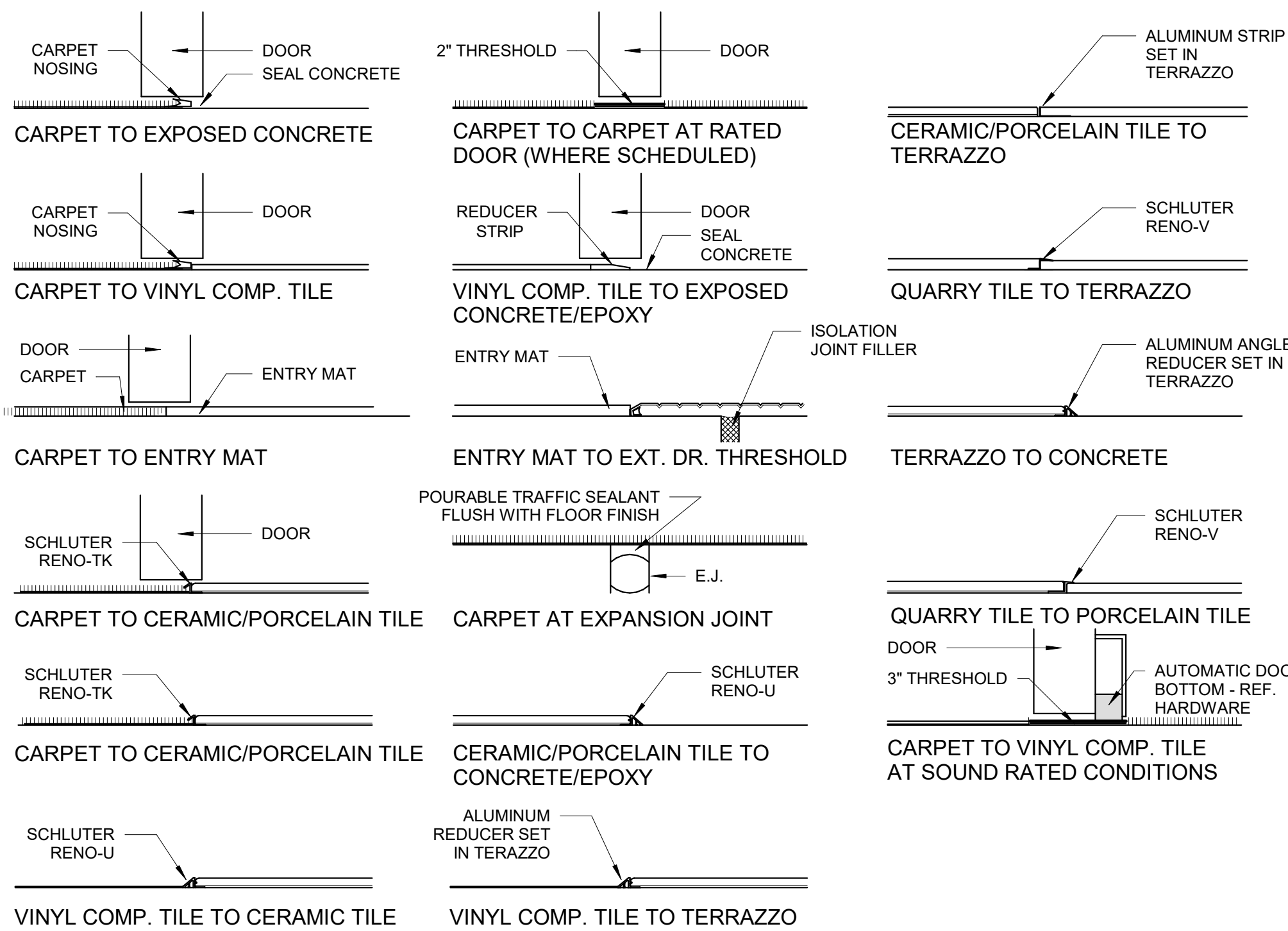
$$1/8'' = 1'-0''$$


- CONTRACTOR SHALL BE RESPONSIBLE TO BUILD TO FIELD CONDITIONS AND VERIFY ALL DIMENSIONS.
- FOR FLOOR FINISH TRANSITION DETAILS REFER TO A69 SERIES SHEETS.
- MANUFACTURER COLORS LISTED SHALL SET THE STANDARD. REF. SPEC. FOR APPROVED EQUALS. SUBSTITUTIONS MUST BE PRE-APPROVED PRIOR TO BIDDING.
- MATERIALS LEGEND AS INDICATED:



9.32	FLOOR TRANSITION - REF. DETAILS AND SPEC.
9.33	PAINT INTERIOR SIDE OF EXISTING DOOR.
9.34	NEW TILE COVE BASE - REF. SCHEDULE AND SPEC.
9.38	ADD BASE TO MISSING AREAS.
9.39	MATCH PAINT AND TEXTURE TO ADJACENT WALL.
9.45	USE CPT-2 AND RB-2 IF ALTERNATE 1 IS ACCEPTED

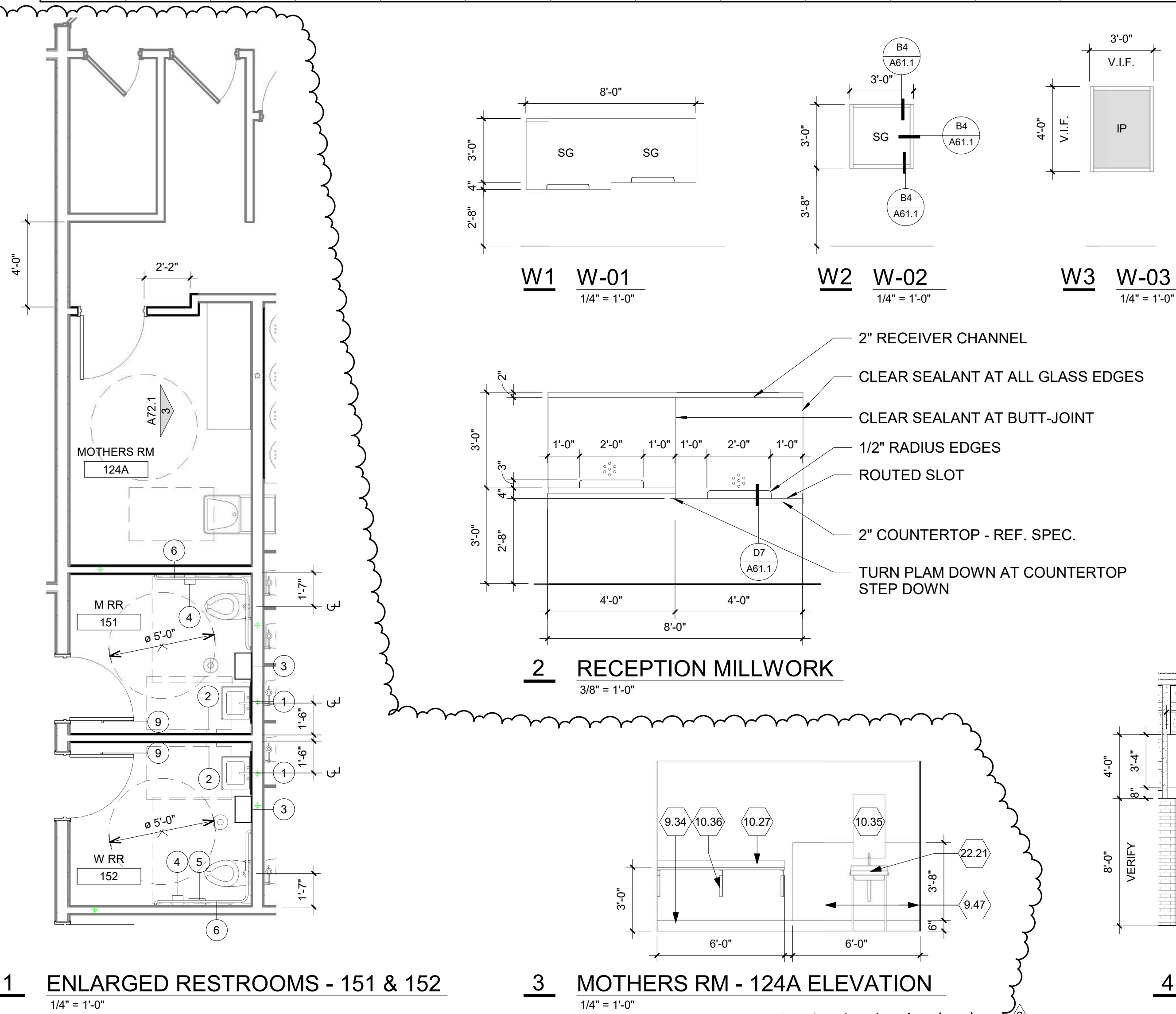
ROOM FINISH SCHEDULE								
ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	NORTH	EAST	SOUTH	WEST	REMARKS
101	VESTIBULE	OPT - 1	RB - 1	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
101A	CANDIDATES	OPT - 1	RB - 1	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
102	LOBBY	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
103	IT CLOSET	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
104	OFFICE	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
105	OFFICE	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
106	OFFICE	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
107	OFFICE	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
108	OFFICE	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
109	OFFICE	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
110	OFFICE	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
111	OFFICE	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
112	HALL	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
113	COPY	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
114	CORFEE	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
115	OFFICE	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
116	OFFICE	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
117	LOG. STAFF	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
119	REGIST. STAFF	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
120	REGIST. STAFF	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	ALTERNATE 1
121	VESTIBULE	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	
122	HALL	EXG.	EXG.	EXG.	EXG.	EXG.	EXG.	
124	WOMENS	EXG.	TB - 1	EXG.	EXG.	EXG.	EXG.	COVE BASE AND EPOXY PAINT ON SOUTH WALL. REFERENCE PLAN
124A	MOTHERS RM	EXG.	EXG. / TB	EP - 2 / TW - 2	EP - 2 / TW - 2	EP - 2	EP - 2	REF. ELEVATION
131	RECORDS	EXG.	RB - 1	EXG.	EXG.	EXG.	EXST	
135	EMERGENCY MGMT	EXG.	RB - 1	PT - 1	PT - 1	PT - 1	PT - 1	
137	STAFF BREAK	VCT - 1	RB - 1	PT - 1	PT - 1	PT - 1	PT - 1	
144	ELECTION CENTRAL	EXG.	RB	PT - 1	PT - 1	PT - 1	PT - 1	
147	ADV. BOARD INCOMING MAIL / BALLOT COUNTING	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	
148	BALLOT TAB	EXG.	EXG.	PT - 1	PT - 1	PT - 1	PT - 1	
149	STAFF TRAINING	EXG.	RB - 1	PT - 1	PT - 1	PT - 1	PT - 1	
150	EARLY VOTING	VCT - 1	RB - 1	PT - 1	PT - 1	PT - 1	PT - 1	
151	M RR	TF - 1	TB - 1	EP - 1 / TW - 1	EP - 1 / TW - 1	EP - 1 / TW - 1	EP - 1 / TW - 1	
152	W RR	TF - 1	TB - 1	EP - 1 / TW - 1	EP - 1 / TW - 1	EP - 1 / TW - 1	EP - 1 / TW - 1	
153	VOLUNTEER BREAK RM	VCT - 1	RB - 1	PT - 1	PT - 1	PT - 1	PT - 1	



DOOR & FRAME SCHEDULE - EXISTING		
DOOR MARK		REMARKS
E101	ACCESS CONTROL	
E102	ACCESS CONTROL	
E103	ACCESS CONTROL	
E104	--	
E105	--	
E106	--	
E107	--	
E108	--	
E109A	--	
E109B	--	
E110	--	
E111	--	
E112A	--	
E112B	--	
E113	--	
E115A	--	
E115B	--	
E116	--	
E117	--	
E118	ACCESS CONTROL	
E119	ACCESS CONTROL	
E120	ACCESS CONTROL	
E121	ACCESS CONTROL - NEW HARDWARE - REF. SPEC.	
E122A	ACCESS CONTROL	
E122B	--	
E123	--	
E124A	NEW DOOR HARDWARE - REF. SPEC.	
E124B	NEW DOOR HARDWARE - REF. SPEC.	
E125	--	
E126	--	
E127A	--	
E127B	--	
E128	--	
E129	ACCESS CONTROL	
E131	ACCESS CONTROL	
E132	--	
E133A	--	
E134	ACCESS CONTROL	
E135	ACCESS CONTROL	
E136A	ACCESS CONTROL	
E136B	--	
E138	ACCESS CONTROL	
E139	ACCESS CONTROL	
E140A	--	
E140B	--	
E140C	PAINT EXTERIOR SIDE OF DOOR - MATCH EXISTING	
E140D	PAINT EXTERIOR SIDE OF DOOR - MATCH EXISTING	
E140E	PAINT EXTERIOR SIDE OF DOOR - MATCH EXISTING	
E140F	PAINT EXTERIOR SIDE OF DOOR - MATCH EXISTING	
E140G	ACCESS CONTROL; PAINT EXTERIOR SIDE OF DOOR - MATCH EXISTING	
E140H	PAINT EXTERIOR SIDE OF DOOR - MATCH EXISTING	
E140J	--	
E140K	--	
E141A	ACCESS CONTROL	
E141B	--	
E141C	--	
E141D	--	
E141E	--	
E142A	--	
E142B	--	
E142C	--	
E142D	--	
E143A	ACCESS CONTROL	
E143B	--	
E144	ACCESS CONTROL	
E145	--	
E146	--	
E147A	--	
E147B	--	
E148	ACCESS CONTROL	
E149	ACCESS CONTROL; PAINT INTERIOR SIDE	
E149B	ACCESS CONTROL; PAINT INTERIOR SIDE	
E150A	ACCESS CONTROL; PAINT EXTERIOR SIDE OF DOOR - MATCH EXISTING	
E150B	ACCESS CONTROL; NEW INTERIOR AND EXTERIOR PUSH BUTTON OPENERS	
S141	OWNER PROVIDED GATE - ACCESS CONTROL	

DOOR & FRAME SCHEDULE												
DOOR			FRAME				DETAILS					
MARK	WIDTH	HEIGHT	MATERIAL	TYPE	GLASS	FIRE	DEPTH	MATERIAL	TYPE	GLASS	FIRE	REMARKS
124	3'-0"	6'-8"	WD	F	--	--	5 5/8"	HM	HM	--	--	
133	6'-0"	7'-0"	HM	F	--	--	5 3/4"	HM	HM	--	--	
149A	3'-0"	6'-8"	WD	F	--	EXST.	5 5/8"	HM	HM	--	--	
151	3'-0"	6'-8"	HM	F	--	180 MIN.	8 7/8"	HM	HM	--	180 MIN.	
152	3'-0"	6'-8"	HM	F	--	180 MIN.	8 7/8"	HM	HM	--	180 MIN.	
153	3'-0"	6'-8"	HM	F	--	180 MIN.	8 7/8"	HM	HM	--	180 MIN.	
S111	3'-0"	6'-8"	WD	EXST.	EXST.	EXST.	5 5/8"	HM	HM	--	--	

WINDOW & FRAME SCHEDULE												
WINDOW			FRAME				DETAILS					
MARK	HEIGHT	WIDTH	MATERIAL	FIRE	DEPTH	MATERIAL	TYPE	FIRE	JAMB	HEAD	SILL	REMARKS
W1	3'-0"	8'-0"	SG	--	--	--	--	--	--	--	--	
W2	3'-0"	3'-0"	HM	--	EXST.	EXST.	EXST.	--	--	--	--	
W3	3'-0" V.I.F.	4'-0" V.I.F.	IP	--	EXST.	EXST.	EXST.	--	--	--	--	NEW INFILL PANEL IN EXISTING FRAME



GENERAL NOTES

DOOR & FRAME MATERIAL:

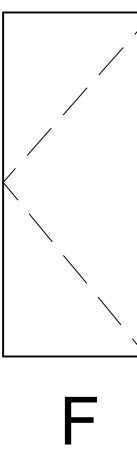
AL - ALUMINUM
HM - HOLLOW METAL
WD - WOOD
ST - STEEL
SS - STAINLESS STEEL
FRP - FIBERGLASS REINFORCED POLYMER

GLAZING MATERIAL:

IN - INSULATED
LM - LAMINATED
SG - SAFETY GLASS
W - WIRE GLASS
CLR - CLEAR GLASS
SP - SPANDREL GLASS
FR - 120 MIN RATED FIRE RESISTANCE GLASS
MEETING UL 263
IP - INFILL PANEL

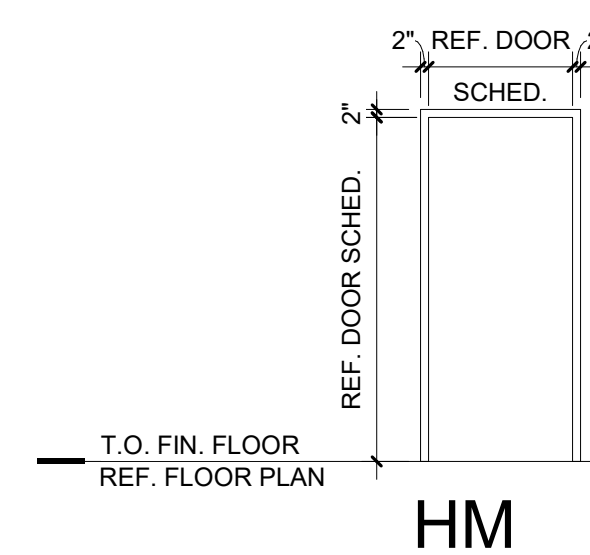
- ALL DOORS ARE UNDERCUT AS SPECIFIED.
- SAFETY GLAZING LISTED IS REQUIRED ONLY IN LOCATIONS TO MEET CODE REQUIREMENTS EXCEPT WHEN SHOWN IN REMARKS COLUMN OR DRAWINGS.
- DOOR DIMENSIONS REFER TO OPENING DIMENSIONS OF FRAME.
- WOOD DOORS TO BE FACTORY FINISHED UNLESS NOTED OTHERWISE - REF. SPEC.
- HOLLOW METAL DOORS TO BE PAINTED UNLESS NOTED OTHERWISE - REF. SPEC.
- ALUMINUM DOORS, STOREFRONT AND CURTAIN WALL TO BE FACTORY FINISH UNLESS NOTED OTHERWISE - REF. SPEC.
- FURNISH AND INSTALL ALUMINUM STOREFRONT OR CURTAIN WALL, FRAMES AND TRIM PER SPEC.
- FIELD VERIFY ALL DIMENSIONS OF OPENINGS TO RECEIVE NEW STOREFRONT, CURTAIN WALL OR DOOR FRAMES PRIOR TO FABRICATION. SIZES SHOWN ARE FOR ESTIMATING PURPOSES AND DESIGN INTENT. ACTUAL CONDITIONS MAY VARY. ADJUST DIMENSIONS TO INCLUDE NECESSARY SHIMS, SEALANTS AND FLASHING. G.C. TO COMMUNICATE DIMENSIONAL DISCREPANCIES TO ARCHITECT PRIOR TO FABRICATION.
- REPLACEMENT OF EXISTING WINDOW OR STOREFRONT:
 - KEEP DUST TO A MINIMAL AND CLEAN UP AFTER WORK IN THAT AFFECTED AREA'S UPON COMPLETION.
 - REPAIR ALL DAMAGED AREAS CAUSED BY WINDOW OR STOREFRONT REPLACEMENT INCLUDING (BUT NOT LIMITED TO) PLASTER OR GYP. BD. WALLS, WOOD TRIM, MILLWORK, CEILINGS, ETC. (VERIFY ALL EXISTING CONDITIONS PRIOR TO WORK).
 - FIELD VERIFY ALL DIMENSIONS OF EXISTING OPENINGS TO RECEIVE NEW WINDOWS OR STOREFRONT PRIOR TO FABRICATION.
 - CONTRACTOR SHALL REMOVE OLD UNITS AND INSTALL NEW WINDOW OR STOREFRONT UNITS IN THE SAME WORKING DAY.
- REMOVE ALL SEALANT FROM EXISTING SURFACES AFTER EXISTING WINDOW IS REMOVED. PREP. AREA TO RECEIVE NEW WINDOW OR STOREFRONT.

DOOR TYPES



F

FRAME TYPES



HM

KEYNOTES

- 9.34 NEW TILE COVE BASE - REF. SCHEDULE AND SPEC.
9.47 NEW TILE WAINSCOT - REF. FINISH PLAN AND SPEC.
10.27 RELOCATED COUNTERTOP.
10.34 NEW PREFABRICATED FIXED FRAME AWNING WITH FABRIC OVER, ANCHOR TO VERTICAL CONCRETE INTERMEDIATE SUPPORTS - REF. SPEC.
10.35 EXISTING MIRROR.
10.36 STEEL COUNTER SUPPORT, FIELD PAINT FINISH. 11 GA. STEEL. ALL CORNERS RADIUS WITH NO SHARP EDGES. PROVIDES KNEE CLEARANCE. UNDER COUNTER TOP, BRACKET LENGTH MUST BE APPROPRIATE TO SPECIFIED COUNTER DEPTH, PRE-DRILLED 1/4" MOUNTING HOLES - REF. SPEC.
22.21 EXISTING WALL-MOUNTED SINK.

EQUIPMENT SCHEDULE NOTES

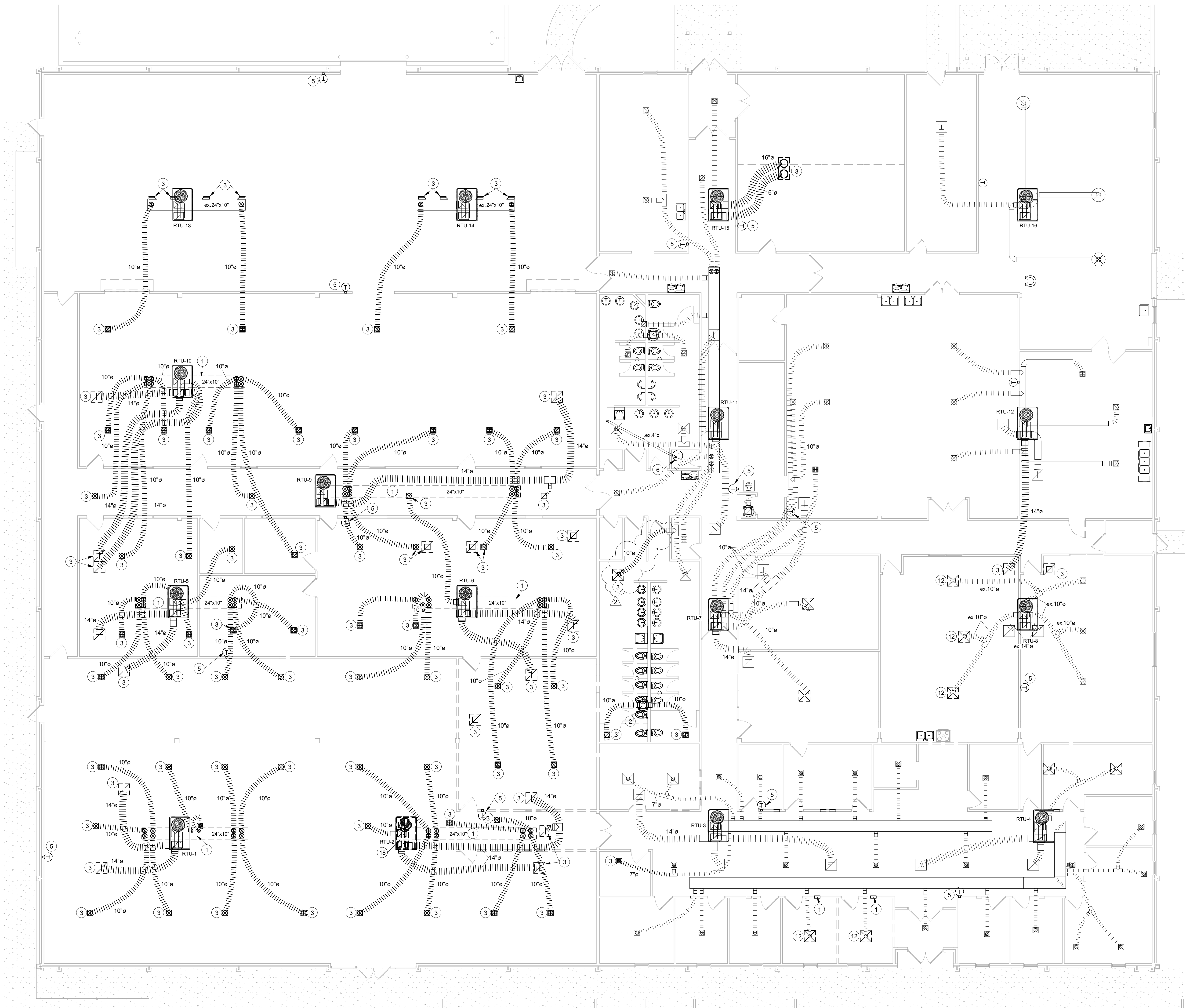
- G.C. RESPONSIBLE FOR INSTALLING ALL WOOD BLOCKING IN STUD WALL AS REQUIRED FOR INSTALLING ALL ACCESSORIES (INCLUDING OWNER PROVIDED ITEMS).
- ALL ACCESSORIES SHALL BE INSTALLED PER ADAAG REQUIREMENTS.
- REFERENCE SPEC. FOR MANUFACTURER, MODEL NUMBERS, AND ADDITIONAL INFORMATION.
- REFERENCE SHEET G14 ACCESSIBILITY CLEARANCES & MOUNTING HEIGHTS.

PARTITION SCHEDULE									
TYPE MARK	MATERIAL		GYPSUM BOARD		FIRE RATING	UL #	TOP OF WALL		REMARKS
	OTHER	LOCATION OF GYP BOARD	TYPE	SOUND BATT INSULATION					
7C	2X4 WOOD STUD	ONE LAYER, BOTH SIDES	5/8" "X"	-	N.R.		8" ABOVE CEILING		
7C-1	2X4 WOOD STUD	ONE LAYER, BOTH SIDES	5/8" "X"	-	N.R.		8" ABOVE CEILING		
7D-1	2X4 WOOD STUD	ONE LAYER, BOTH SIDES	5/8" "X"	-	1-HR	U305	--	WALL INFILL	

RESTROOM EQUIPMENT SCHEDULE

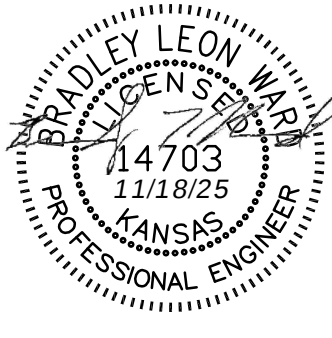
DESCRIPTION	NO.	MOUNTING HEIGHT	WIDTH	HEIGHT	DEPTH	MANUFACTURER	MODEL	REMARKS
WALL HUNG MIRROR	1	40" A.F.F. TO BOTTOM OF REFLECTIVE SURFACE	-	-	-	BY OWNER		
SOAP DISPENSER	2	8" ABOVE LAV.	-	-	-	BY OWNER		
PAPER TOWEL DISPENSER	3	48" A.F.F. TO TOP OF CONTROL	-	-	-	BY OWNER		
TOILET PAPER DISPENSER	4	19" A.F.F. TO CENTERLINE	-	-	-	BY OWNER		
SANITARY NAPKIN DISPOSAL	5	16" TO BOTTOM	11"	15 1/4"	4"	ASI	0475-1A	
GRAB BAR	6	33" A.F.F. TO CENTER	-	-	-	AMERICAN SPECIALTIES, INC.	#3257	
COAT HOOK	9	BACK SIDE OF DOOR; 48" MAX A.F.F.	-	-	-	BY OWNER	-	

RESILIENT BASE - RB RB 1 MANUFACTURER: TARKETT PRODUCT: 4" COLOR: 72 HARBOUR SIZE: - INSTALLATION: TRANSITIONS AND BASE THROUGHOUT NOTE: BASE BID RB 2 MANUFACTURER: JOHNSONITE PRODUCT: 4" COLOR: 121 CEMENT SIZE: - INSTALLATION: TRANSITIONS AND BASE THROUGHOUT NOTE: ALTERNATE 1	WOOD DOORS - D D 1 MANUFACTURER: REF. SPEC. PRODUCT: - COLOR: RED OAK SERENGETI, SE18 SIZE: - INSTALLATION: - LOCATION: -	PAINT - P P 1 MANUFACTURER: SHERWIN WILLIAMS COLOR / NO.: SW 7037 BALANCED BEIGE FINISH: EG-SHEL LOCATION: FIELD P 2 MANUFACTURER: SHERWIN WILLIAMS COLOR / NO.: SW 7038 TONY TAUPÉ FINISH: EG-SHEL LOCATION: DOOR FRAMES P 3 MANUFACTURER: SHERWIN WILLIAMS COLOR / NO.: MATCH EXISTING PAINT FINISH: MATCH EXISTING PAINT LOCATION: -	EPOXY PAINT - EP EP 1 MANUFACTURER: SHERWIN WILLIAMS COLOR / NO.: SW 7037 BALANCED BEIGE FINISH: EG-SHEL LOCATION: RESTROOMS 151, 152 EP 2 MANUFACTURER: SHERWIN WILLIAMS COLOR / NO.: MATCH EXISTING PAINT FINISH: MATCH EXISTING LOCATION: MOTHERS ROOM 124A	PLASTICE LAMINATE - PL PL 1 MANUFACTURER: WILSONART PRODUCT: 4944-38 COLOR: CASUAL LINEN SIZE: - INSTALLATION: RECEPTION COUNTER LOCATION: - PL 2 MANUFACTURER: FORMICA PRODUCT: 9240-58 COLOR: CHERRY HEARTWOOD SIZE: - INSTALLATION: EXISTING BASE CABINETS LOCATION: - PL 3 MANUFACTURER: FORMICA PRODUCT: 6220-58 COLOR: SMOKE QUARSTONE SIZE: - INSTALLATION: EXISTING COUNTERTOPS LOCATION: -	TILE FLOOR - TF TF 1 MANUFACTURER: CROSSVILLE PRODUCT: NOTORIOUS UNPOLISHED COLOR: PRIVATE EYE SIZE: 12" X 12" INSTALLATION: STACKED LOCATION: NEW RESTROOM 151, 152	TILE WALL - TW TW 1 MANUFACTURER: CROSSVILLE PRODUCT: NOTORIOUS UNPOLISHED COLOR: PRIVATE EYE SIZE: 12" X 12" INSTALLATION: 4'-0" A.F.F. W/ SCHULER EDGE & COVE BASE STACKED LOCATION: NEW RESTROOM 151, 152 TW 2 MANUFACTURER: AMERICAN OLEAN PRODUCT: COLOR STORY WALL COLOR: MATTE CALM 0036 SIZE: 4" X 4" INSTALLATION: 4'-0" A.F.F. W/ SCHULER EDGE, STACKED LOCATION: MOTHERS ROOM 124A - REF. FINISH PLAN	VINYL COMPOSITION TILE - VT FAF 1 MANUFACTURER: REF. SPEC. PRODUCT: IMPERIAL TEXTURE COLOR: 51803 PEARL WHITE SIZE: - INSTALLATION: - LOCATION: REF. FINISH PLAN	TILE BASE - TB TB 1 MANUFACTURER: AMERICAN OLEAN PRODUCT: COLOR STORY WALL COLOR: MATTE CALM 0036 SIZE: 6" X 6" COVE BASE A3601 INSTALLATION: - LOCATION: RM 124 & 124A
---	---	---	--	---	--	--	--	---



PLAN NOTES

- 1 REMOVE DUCTWORK.
- 2 REMOVE EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK.
- 3 REMOVE DIFFUSER/GRILLE AND ASSOCIATED DUCTWORK.
- 5 REMOVE THERMOSTAT.
- 6 REMOVE EXISTING WATER HEATER AND DISCONNECT PIPING.
- 12 REMOVE DIFFUSER/GRILLE.
- 18 REMOVE EXISTING RTU. REMOVE ASSOCIATED DUCTWORK. DISCONNECT POWER. DISCONNECT GAS PIPING. CAP PIPING FOR THE SHORT TERM AND PREP FOR CONNECTION TO NEW UNIT.

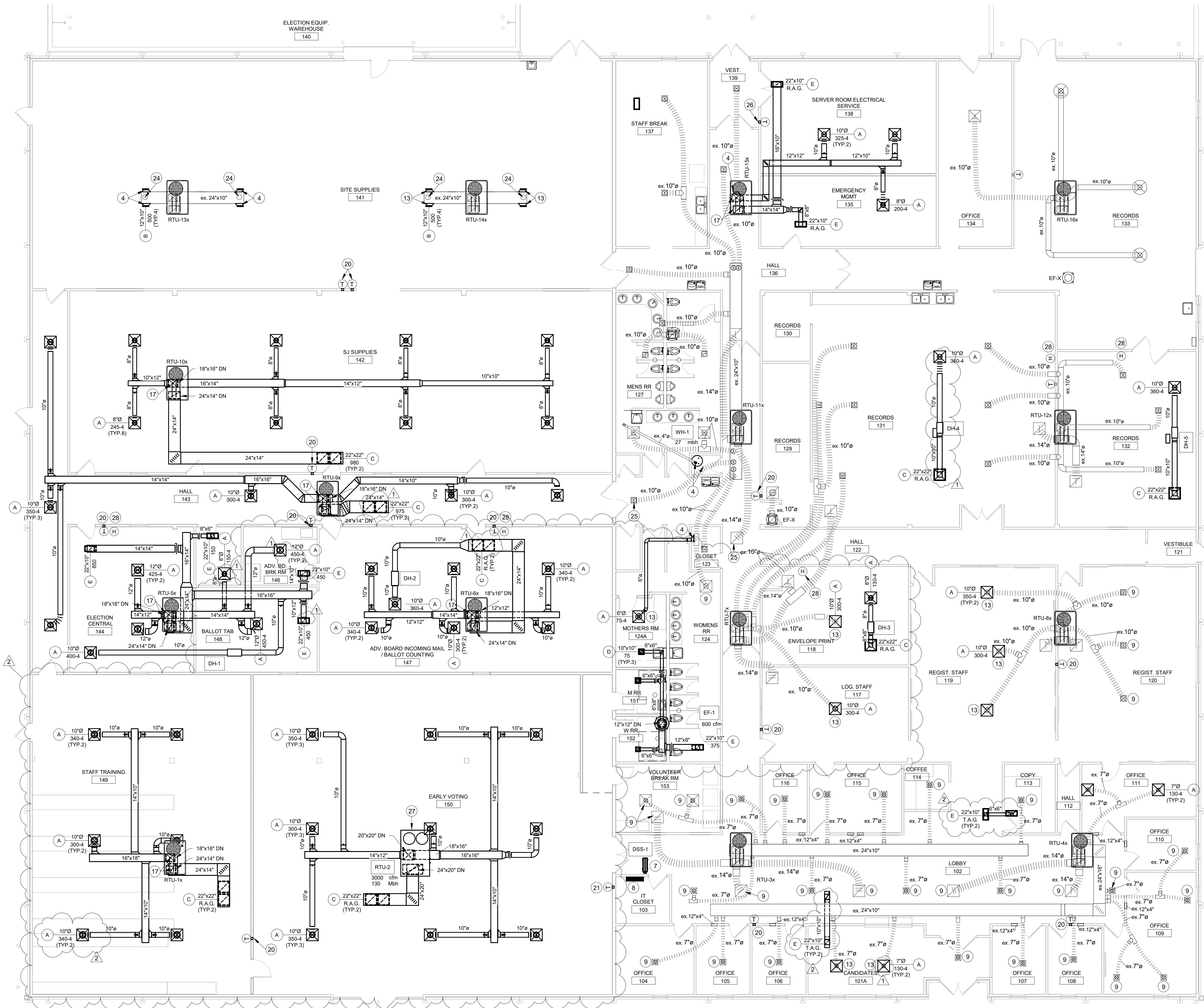


REVISIONS		
1	AD 1	11.03.2025
2	AD 2	11.20.2025

PROJECT NUMBER
5278.57

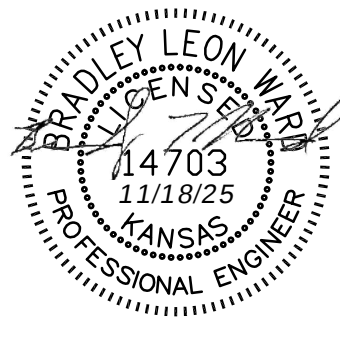
DATE
10.16.25

HVAC Demo Plan



PLAN NOTES

- 4 CONNECT TO EXISTING. FIELD VERIFY SIZE.
- 7 INSTALL NEW OUTDOOR CONDENSING UNIT ON ROOF. PROVIDE EQUIPMENT STAND.
- 8 MOUNT TOP OF INDOOR UNIT 8" MIN. BELOW CEILING.
- 9 EXISTING DIFFUSER/GRILLE TO REMAIN.
- 13 CONNECT NEW DIFFUSER TO EXISTING DUCTWORK.
- 17 CONNECT NEW DUCTWORK TO EXISTING RTU DROPS.
- 20 PROVIDE NEW THERMOSTAT. EQUAL TO HONEYWELL T5 7-DAY PROGRAMMABLE THERMOSTAT AND PROVIDE A LOCKABLE COVER.
- 21 PROVIDE NEW THERMOSTAT. EQUAL TO ACI ACP-RSO AND PROVIDE A LOCKABLE COVER.
- 24 CAP EXISTING DUCT TAKE-OFF.
- 25 THE EXISTING RUNOUT TO THE GRILLE/DIFFUSER HAS A 1 HR FIRE DAMPER AT THE GYP. SUB-CEILING. PROVIDE A SMOKE DAMPER, 120V, IN THE DUCT ABOVE THE GYP. CEILING IN THE RUNOUT WITHIN 12" OF THE FIRE DAMPER. MAINTAIN ADEQUATE DISTANCE FROM THE RADIANT DAMPER FOR PROPER OPERATION.
- 26 RELOCATE EXISTING THERMOSTAT FOR RTU-15.
- 27 NEW RTU TO BE PLACED IN SAME LOCATION AS EXISTING RTU. PROVIDE ADDITIONAL STEEL FRAMING AS REQUIRED FOR UNIT.
- 28 PROVIDE MANUFACTURER HUMIDISTAT FOR ROOM.

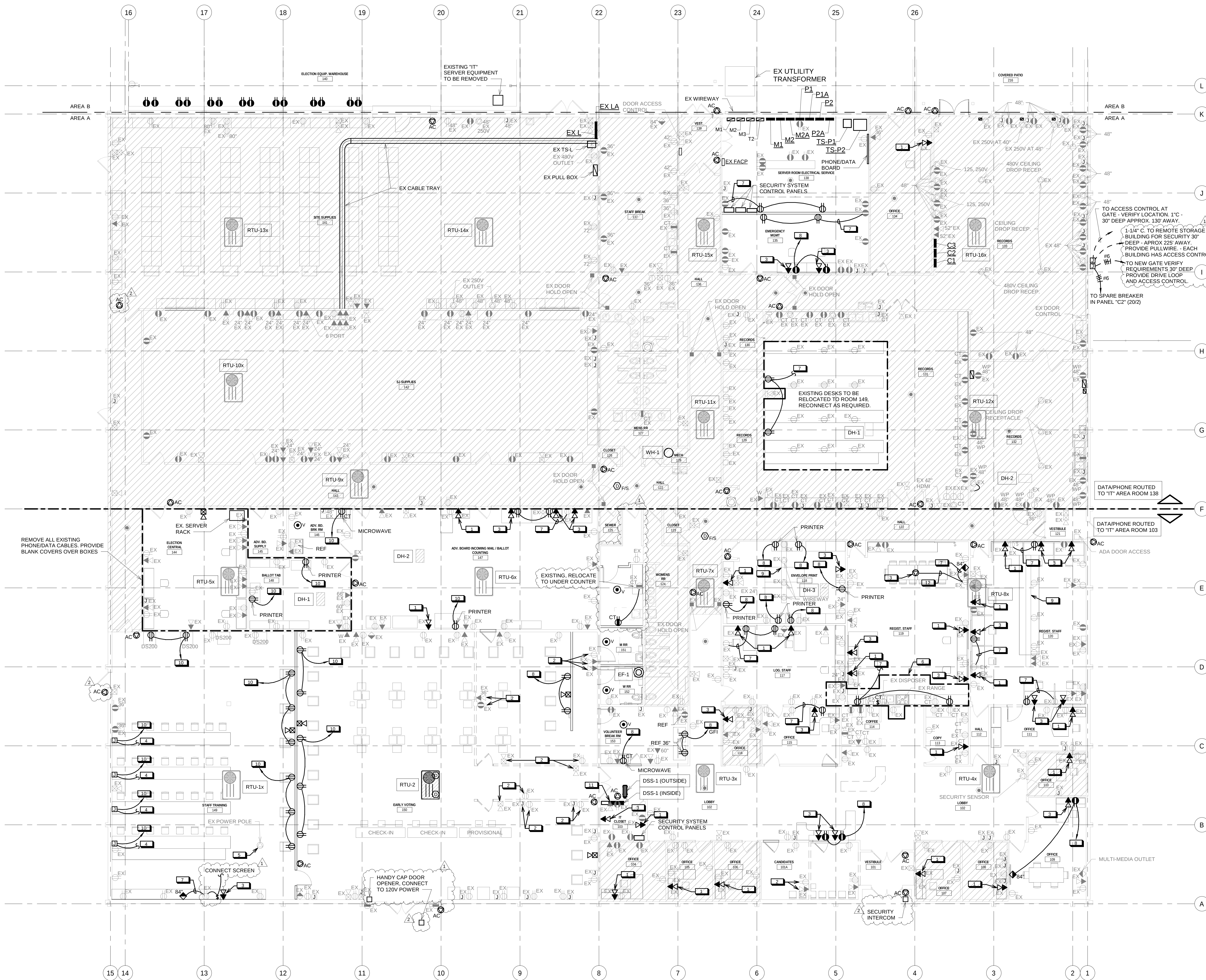


REVISIONS		
1	AD 1	11.03.2025
2	AD 2	11.20.2025

PROJECT NUMBER
5278.57

DATE
10.16.25

HVAC Plan



PLAN NOTES	
ICE - ELECTIONS BLDG.	
SYMBOL	DESCRIPTION
[Symbol]	REMOVE EXISTING PHONE/DATA CABLE AND INSTALL NEW PHONE/DATA CABLE (1) PHONE (6) (1) DATA (6)
[Symbol]	REMOVE EXISTING PHONE/DATA AND RECEPTACLES FROM REMOVED WALL.
[Symbol]	NEW PHONE/DATA LOCATIONS, EACH OUTLET REQUIRES CAT 6 CABLE.
[Symbol]	RECONNECT EXISTING DESK, SIMILAR TO EXISTING.
[Symbol]	REMOVE EXISTING POWER POLE, CIRCUIT COULD BE USED FOR NEW IN AREA.
[Symbol]	REMOVE EXISTING RANGE, DISPOSAL AND COUNTERTOP OUTLETS BACK TO POINT OF SUPPLY.
[Symbol]	RECONNECT TO EXISTING RECEPTACLE CIRCUIT.
[Symbol]	TO NEW OR EXISTING 2001 BREAKER IN EXISTING 120/208V PANEL. REPLACE EXISTING UNUSED 3P. BREAKERS NOT NEEDED AND REPLACE WITH 2001 BREAKERS REMOVE EXISTING 3P OUTLET AND FEEDER AS NEEDED.
[Symbol]	TO NEW OR EXISTING 2001 BREAKER IN EXISTING 120/208V PANEL "1" OR "1A". REPLACE EXISTING UNUSED 3P. BREAKERS NOT NEEDED AND REPLACE WITH 2001 BREAKERS REMOVE EXISTING 3P OUTLET AND FEEDER AS NEEDED.
[Symbol]	REMOVE EXISTING PHONE/DATA CABLE BACK TO SUPPLY LOCATION. PROVIDE BLACK COVER OVER OUTLET BOX.
[Symbol]	SURFACE RACEWAY ON FLOOR UNDER CARPET FOR PHONE/DATA/POWER LEGRAND CONNECTRAC SYSTEM, PROVIDE ALL PARTS AS REQUIRED FOR COMPLETE SYSTEM.

TO ACCESS CONTROL AT GATE - VERIFY LOCATION. 1" C - 30" DEEP APPROX. 130' AWAY.

(1-1/4" C. TO REMOTE STORAGE BUILDING FOR SECURITY 30' DEEP - APPROX 225' AWAY. PROVIDE PULLWIRE - EACH BUILDING HAS ACCESS CONTROL. TO NEW GATE VERIFY REQUIREMENTS 30" DEEP. PROVIDE DRIVE LOOP AND ACCESS CONTROL.

TO SPARE BREAKER IN PANEL "C2" (20/2)

DATA/PHONE ROUTED TO "IT" AREA ROOM 138

DATA/PHONE ROUTED TO "IT" AREA ROOM 103

ADA DOOR ACCESS

MULTI-MEDIA OUTLET

ALL REMOVED DATA/PHONE BOXES NOT REUSED SHALL HAVE BLANK COVERS INSTALLED.

A FLOOR PLAN AREA A - POWER
SCALE: 1/8" = 1'-0"

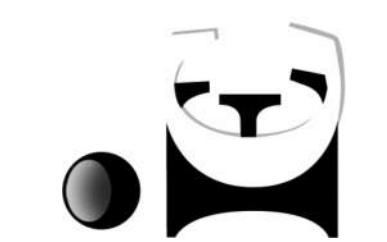
- NOTES:
- BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS FOR CLARITY ONLY. CONTRACTOR MAY GROUP SINGLE POLE BRANCH CIRCUITS IN MULTIPLE CIRCUIT HOME RUNS. (3 CIRCUIT MAXIMUM). EACH CIRCUIT WILL REQUIRE A SEPARATE, HOT & NEUTRAL CONDUCTOR. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL POWER RECEPTACLE, AND LIGHTING CIRCUITS.
 - FOR ELECTRICAL CONNECTIONS TO ITEMS SUPPLIED BY OTHER CONTRACTORS, SEE EQUIPMENT CONNECTION SCHEDULE.

Schaefer Architecture
257 N. Broadway
Wichita, KS. 67202
316.684.0171



2505-00-011

Integrated Consulting
Engineers, Inc.
349 South Hydraulic • Wichita, KS 67211
316.264.3588 • 316.264.3948 • www.iceengineers.net



SEDGWICK COUNTY
ELECTIONS AND RECORDS MANAGEMENT
REMODEL

3639 N. Comotara St., Wichita, KS 67226

©2025
Schaefer Architecture, Inc.
All Rights Reserved.

These drawings and their contents, including, but not limited to, all concepts, designs, & ideas are the exclusive property of Schaefer Architecture, and may not be used or reproduced in any way without express written consent.

REVISIONS		
1	AD 1	11.03.2025
2	AD 2	11.20.2025

PROJECT NUMBER
5278.57

DATE
10.16.25

FLOOR PLAN AREA
A - POWER

E2.1

PLAN NOTES

ICE - ELECTIONS BLDG.

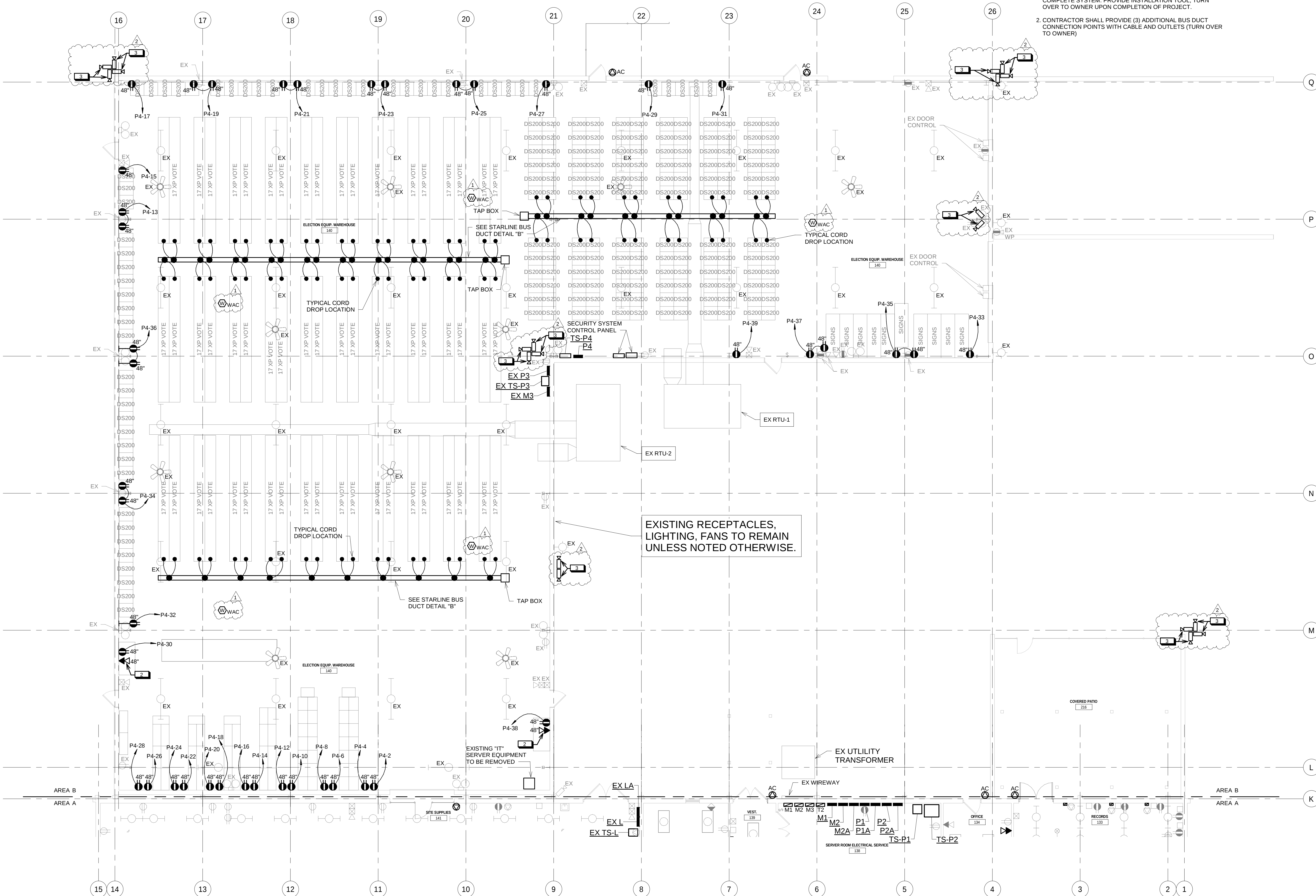
SYMBOL	DESCRIPTION
	TYPICAL BUS DUCT CORD DROP - SEE DETAIL.
	NEW PHONE/DATA LOCATION, EACH OUTLET REQUIRES A CAT 6 CABLE.
	CAMERA PROVIDED BY SECURITY CONTRACTOR. CABLING BY E.C.

B STARLINE BUS DUCT DETAIL

SCALE: N.T.S. VOLTAGE 120/208V 3Ø 4W

- NOTES:
CONTRACTOR SHALL PROVIDE ALL SPLICE KITS, ENDCAPS, CLOSURE STRIPS, CONNECTIONS, AND PARTS FOR A COMPLETE SYSTEM. PROVIDE INSTALLATION TOOL. TURN OVER TO OWNER UPON COMPLETION OF PROJECT.
- CONTRACTOR SHALL PROVIDE (3) ADDITIONAL BUS DUCT CONNECTION POINTS WITH CABLE AND OUTLETS (TURN OVER TO OWNER)

- NOTES:**
- BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS FOR CLARITY ONLY. CONTRACTOR MAY GROUP SINGLE POLE BRANCH CIRCUITS IN MULTIPLE CIRCUIT HOME RUNS. (3 CIRCUIT MAXIMUM). EACH CIRCUIT WILL REQUIRE A SEPARATE, HOT & NEUTRAL CONDUCTOR. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL POWER RECEPTACLE, AND LIGHTING CIRCUITS.
 - FOR ELECTRICAL CONNECTIONS TO ITEMS SUPPLIED BY OTHER CONTRACTORS, SEE EQUIPMENT CONNECTION SCHEDULE.



A FLOOR PLAN AREA B - POWER

SCALE: 1/8" = 1'-0"



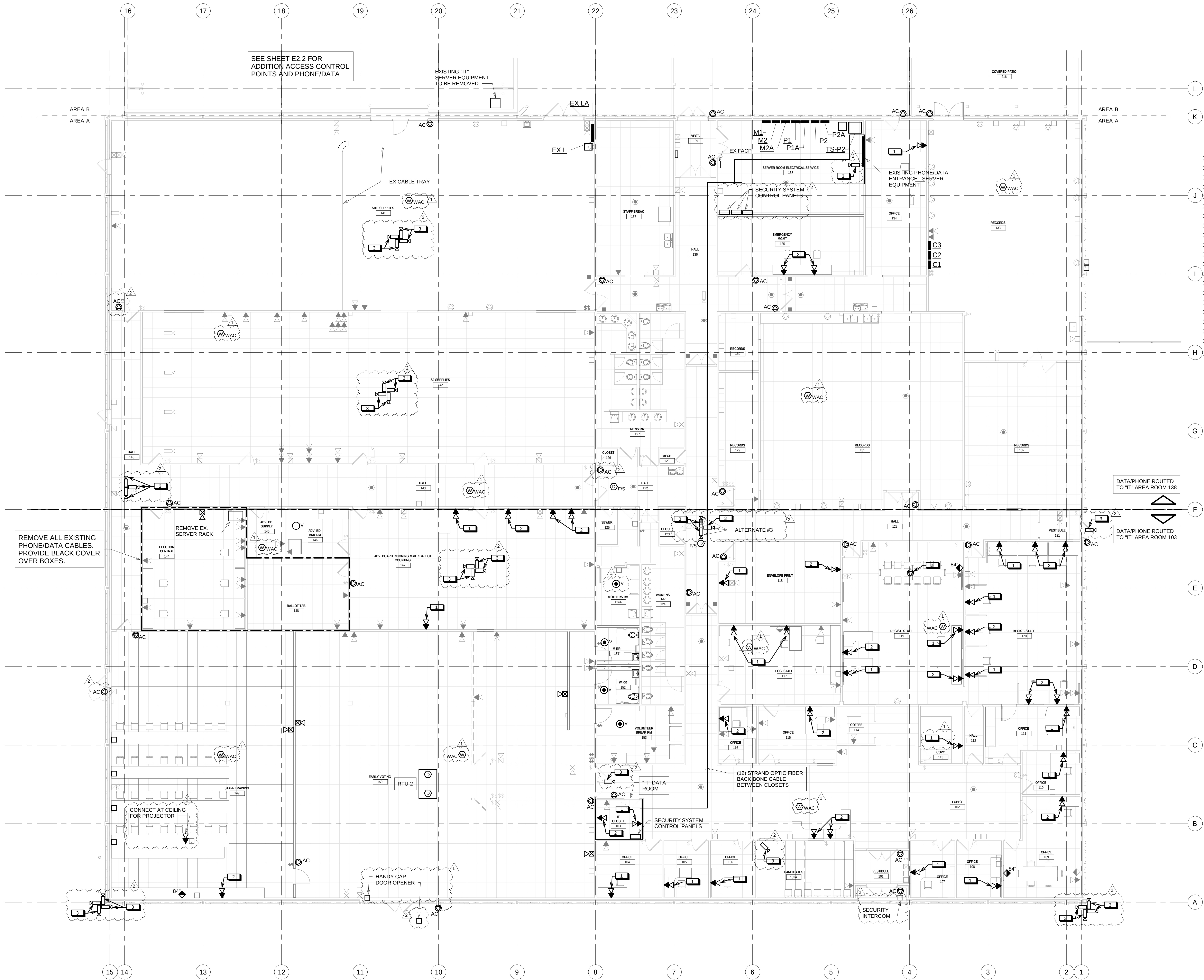


PLAN NOTES	
ICE - ELECTIONS BLDG.	
SYMBOL	DESCRIPTION
	REMOVE SWITCH, RECONNECT EXISTING FIXTURES TO EXISTING REMAINING ROOM SWITCH - REWIRE AS NEEDED.
	CONTRACTOR SHALL REMOVE EXISTING FIXTURES AND RELOCATE AS SHOWN, INSTALL NEW SWITCHING AS NOTED, RELOCATE EMERGENCY LIGHTS AND EXIT LIGHTS AS INDICATED, RECONNECT TO EXISTING CIRCUITS.
	EXISTING RELOCATED FIXTURE.
	RELOCATE FIRE ALARM DEVICE TO NEW WALL.

EXISTING LIGHTING FIXTURE
AND SWITCHING TO REMAIN
UNLESS NOTED OTHERWISE.

A FLOOR PLAN AREA A - LIGHTING
SCALE: 1/8" = 1'-0"

NOTES:
1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS FOR CLARITY ONLY. CONTRACTOR MAY GROUP SINGLE POLE BRANCH CIRCUITS IN MULTIPLE CIRCUIT HOME RUNS. (3 CIRCUIT MAXIMUM). EACH CIRCUIT WILL REQUIRE A SEPARATE, HOT & NEUTRAL CONDUCTOR. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL POWER RECEPTACLE, AND LIGHTING CIRCUITS.
2. FOR ELECTRICAL CONNECTIONS TO ITEMS SUPPLIED BY OTHER CONTRACTORS, SEE EQUIPMENT CONNECTION SCHEDULE.



PLAN NOTES	
ICE - ELECTIONS BLDG.	
SYMBOL	DESCRIPTION
	REMOVE EXISTING PHONE/DATA CABLE AND INSTALL NEW PHONE/DATA CABLE (1) PHONE (6) (1) DATA (6)
	NEW PHONE/DATA LOCATIONS, EACH OUTLET REQUIRES CAT 6 CABLE
	CAMERA PROVIDED BY SECURITY CONTRACTOR. CABLING BY E.C.

SYMBOL LIST		
ICE - ELECTIONS BLDG.		
SYMBOL	DESCRIPTION	MOUNTING
	TELEPHONE OUTLET (P=PAY, 44\"/>	1'-6\"/>
	SPEAKER	CEILING
	SPEAKER - HORN TYPE	
	PHONE/DATA OUTLET	1'-6\"/>
	FIRE ALARM MANUAL STATION	4'-0\"/>
	COMB. F.A. HORN & VISUAL SIGNAL	WALL 80\"/>
	FIRE ALARM HORN AND VISUAL SIGNAL	CEILING
	FIRE ALARM VISUAL SIGNAL	CEILING
	FIRE ALARM VISUAL SIGNAL	WALL 80\"/>
	AREA SMOKE DETECTOR, SEE GEN. NOTE #11	CEIL/WALL
	DUCT SMOKE DETECTOR	IN DUCT
	DUCT SMOKE DETECTOR AT FIRE/SMOKE DAMPER	IN DUCT
	HEAT DETECTOR	
	WIRELESS ACCESS POINT	CEILING
	ACCESS CONTROL	
	SECURITY CAMERA	CEIL/WALL

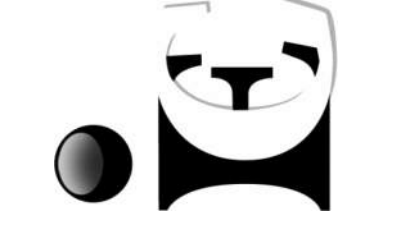
A FLOOR PLAN AREA A - SYSTEMS
SCALE: 1/8" = 1'-0"
NORTH

Schaefer Architecture
257 N. Broadway
Wichita, KS, 67202
316.684.0171



25205-00-001

Integrated Consulting
Engineers, Inc.
349 South Hydraulic • Wichita, KS 67211
316.264.3588 • 316.264.3948 • www.icengr.com



SEDGWICK COUNTY
ELECTIONS AND RECORDS MANAGEMENT
REMODEL
3639 N. Comotara St., Wichita, KS 67226

©2025
Schaefer Architecture, Inc.
All Rights Reserved.
These drawings and their contents, including, but not limited to, all concepts, designs, & ideas are the exclusive property of Schaefer Architecture, and may not be used or reproduced in any way without express written consent.

REVISIONS	
1. AD 1	11.03.2025
2. AD 2	11.20.2025

PROJECT NUMBER
5278.57

DATE
10.16.25

FLOOR PLAN AREA
A - SYSTEMS