ADDENDUM NUMBER 003

DATE: March 20, 2025

PROJECT: Jonesboro Municipal Airport Terminal
OWNER: Jonesboro Municipal Airport Commission
ARCHITECT: Cooper Mixon Architects, PLLC

TO: BIDDERS

This Addendum forms a part of the Contract Documents and modifies the original Procurement Documents dated October 14, 2024, with amendments and additions noted below.
Acknowledge receipt of this Addendum in the space provided in the bid form. Failure to do so may disqualify the bidder.
This Addendum consists of the following documents and revisions:

CHANGES TO THE PROJECT MANUAL – INTRODUCTORY REQUIREMENTS, PROCUREMENT REQUIREMENTS AND CONTRACTING REQUIREMENTS:

1. Replace Section 00 01 10 – Table of Contents with revised Section issued with this Addendum.

2. Insert (this) Section 00 91 13 – Addendum Number 003 issued with this Addendum.

3. Replace Section 00 41 00 – Bid Form with revised Section issued with this Addendum.

CHANGES TO THE PROJECT MANUAL – SPECIFICATIONS

1. Replace Section 26 51 00 – INTERIOR LIGHTING with revised Section issued with this Addendum.

2. Replace Section 26 56 00 – EXTERIOR LIGHTING with revised Section issued with this Addendum.

3. Replace Section 28 46 00 – FIRE DETECTION AND ALARM with revised Section issued with this Addendum.

CHANGES TO THE DRAWINGS:

1. Insert the following attached revised Drawings and new drawings issued with this Addendum:

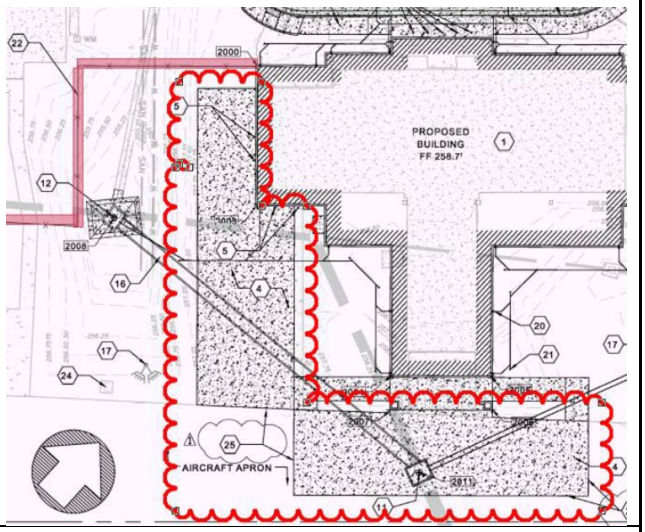
Sheet	**Title/Description**
ARCHITECTURAL	
A-111	FLOOR PLAN
A-121	REFLECTED CEILING PLAN
A-142	FINISH FLOOR PLAN EPOXY TERRAZZO

A-302 BUILDING SECTIONS
A-601 ALUMINUM FRAME & CURTAIN WALL ELEVATIONS

ELECTRICAL

E002 SITE PLAN - ELECTRICAL
E102 FLOOR PLAN – POWER AND SYSTEMS
E301 ELECTRICAL SCHEDULES

PRE-BID RFI'S:

#	Status	Title	Question	Official response
PB RFI 14.7	Answered	Fire Alarm	Please provide Fire Alarm Specification	See Specification Section provided with this addendum.
PB RFI 15	Reserved			
PB RFI 16	Answered	Non-Reinforced Concrete	What is the scope of the non-reinforced airside concrete pavement.	All concrete on the airside of the terminal is non-reinforced. See diagram below. 
PB RFI 17	Answered	Building Insulation, Purlins, and Soffits	– the plans call for the roof insulation to fill the purlin cavity. We can price R35 (8" R25 + 3"R10) that will work for both 8" and 10" purlins unless you know what the purlin depth will be from the metal building	- Add 7/8" 20 gauge hat channel at all eave and rake soffits. - Fill all purlin cavities. Coordinate insulation with PEMB purlin depth. For example. R30 as required for 8" purlins. R35 as required for 10" purlins. - Extend full purlin depth building insulation into all eave and rake soffits. - Exterior walls are steel studs, insulate accordingly.

			manufacturer. Some details show the overhangs to be fully insulated and some with no insulation. We usually insulate the over hangs with only the top layer of unfaced insulation to prevent condensation and frost line where the soffit is located outside the building envelope. How should we address the overhangs with soffit? It appears that the wall insulation will be for steel studs not metal building insulation, correct?	
PB RFI 18	Answered	Primary Feeders	What is the distance and location of the primary conduits from transformer to primary power.	See Revised Drawing with this addendum.
PB RFI 19	Answered	Resinous Flooring	Substitution Request	Substitution Request for Resinous Flooring included in this addendum is acceptable.
PB RFI 20	Answered	Roller Shades	Need clarification on scope.	See Revised Drawing with this addendum

END OF SECTION

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SECTION 01 25 10
SUBSTITUTION REQUEST FORM

DATE: 3/20/25

PROJECT NAME: Jonesboro Municipal Airport Terminal Building

Company Submitting Request (name and address):
Olympus Construction, 2506 west washington avenue, Jonesboro AR 72401

Contact Name: guy pardew **Phone:** 870-932-6670

Email: guy@olympusgc.com

SPECIFIED ITEM (Section, Page, and Description):
09 67 23 - 1

PROPOSED SUBSTITUTION (Provide product name, Model, manufacturer):
Hermetic™ Colored Quartz double broadcast, Elitecrete Systems

Differences between proposed substitution and specified product:
higher bond to concrete, compressive strength, tensil strength

POINT-BY-POINT COMPARATIVE DATA SHEET ATTACHED - REQUIRED BY ARCHITECT FOR THIS REQUEST:

A. Attached Data includes product description, specifications, drawings, photographs, and performance and test data, applicable portions of the data adequate for the evaluation of the request, and with applicable portions of the data clearly identified.

B. _____yes __X__no changes will be required to the Contract Documents for the proper installation of proposed product substitution. If yes, then attach data that includes description of changes.

THE UNDERSIGNED CERTIFIES THAT THE FOLLOWING PARAGRAPHS, UNLESS MODIFIED BY ATTACHMENTS, ARE CORRECT:

C. Proposed substitution has been fully investigated and determined to be equal or superior in all respects to the specified products performance.

D. Proposed substitution does not affect the building design, engineering design, dimensions, detailing, or performance values.

E. The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty requirements.

F. No maintenance is required by the proposed substitution other than that required for originally specified product.

G. Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by substitution.

SIGNATURE _____ **PRINTED NAME:** guy pardew

ARCHITECT'S REVIEW AND ACTION:

A. _____ Accepted As Noted _____ Incomplete Information

_____ Received Too Late _____ No Substitutions accepted for this product

B. Reviewed By: _____ DATE: _____

C. Processed by Addendum No. _____

John C. Mixon, AIA

Digitally signed by John C. Mixon, AIA
DN: C=US, E=jmixon@coopermixon.com, O="Cooper Mixon Architects, PLLC", OU=Architect, CN="John C. Mixon, AIA"
Reason: I agree to specified portions of this document
Date: 2025.03.21 17:30:23-05'00'

D. Comments:

_____

_____

END OF SECTION

SECTION 00 01 10
TABLE OF CONTENTS

END OF SECTION

SECTION 00 41 00
BID FORM

THE PROJECT AND THE PARTIES

1.01 TO:

A. Jonesboro Municipal Airport Commission (Owner)
3901 Lindbergh Drive, Bldg. #1
Jonesboro, Arkansas72401

1.02 FOR:

A. Project: 2226 - Jonesboro Municipal Airport Terminal
1. Architect's Project Number: 2226
2. City Contract Number: To be determined
3901 Lindbergh Drive, Bldg. #1
Jonesboro, Arkansas72401

1.03 DATE: _____ (BIDDER TO ENTER DATE)

1.04 SUBMITTED BY: (BIDDER TO ENTER NAME AND ADDRESS)

A. Bidder's Full Name _____
1. Address _____
2. City, State, Zip_____
3. Contractor's Liscense Number: _____

1.05 OFFER

A. Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Bid Documents prepared by Cooper Mixon Architects PLLC for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:

B. _____
_____ dollars
($_____), in lawful money of the United States of America.

C. We have included the required security Bid Bond as required by the Instruction to Bidders.

D. We have included the required performance assurance bonds in the Bid Amount as required by the Instructions to Bidders.

E. We have included the required Maintenance Bond required following the Supplementary Conditions.

F. All applicable federal taxes are included and State of Arkansas taxes are included in the Bid Sum.

G. All Cash and Contingency Allowances described in Section 01 21 00 - Allowances are included in the Bid Sum.

H. The total value of all Deductive Alternatives is included in the Bid Sum.

1.06 ACCEPTANCE

A. This offer shall be open to acceptance and is irrevocable for thirty days from the bid closing date.

B. If this bid is accepted by Owner within the time period stated above, we will:

1. Furnish the required bonds within ten days of receipt of Notice of Award.
2. Commence work within ten days after written Notice to Proceed of this bid.

C. If this bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required Bond(s), the security deposit shall be forfeited as damages to Owner by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed.

D. In the event our bid is not accepted within the time stated above, the required security deposit shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

E. Liquidated damages have no value when determining the lowest responsive and responsible Bidder.

1.07 CONTRACT TIME

A. If this Bid is accepted, we will:
1. Complete the Work in _____ calendar days from Notice to Proceed.

1.08 LIQUIDATED DAMAGES

A. The amount of Liquidated Damages per Day to be assessed shall be in accordance with the schedule that follows:

	Amount of Contract	Liquidated Damages Per Day
2.	Less than $25,000.00	$100.00
3.	Not less than $25,000.00 but less than $50,000.00	$150.00
4.	Not less than $50,000.00 but less than $100,000.00	$200.00
5.	Not less than $100,000.00 but less than $500,000.00	$250.00
6.	Not less than $500,000.00 but less than $1,000,000.00	$350.00
7.	Over $1,000,000.00	$500.00

1.09 UNIT PRICES

A. The following are Unit Prices for specific portions of the Work as listed. The Undersigned agrees that the following UNIT PRICES shall govern changes in the Work, whether they be ADDITIONS or DEDUCTIONS to the Contract Sum required during he course of the Work. Unit Prices shall be the same for Additions or Deductions. All Unit Prices shall be total installed costs including over head, profit, geotechnical engineering and all other necessary costs. Proposing separated add and deduct unit prices shall subject this Bid Proposal to be rejected as "non-responsive." The following is the list of Unit Prices:
1. Unit Price for Alternate Flooring Adhesive in the event such remediation is required. Refer to Section 09 05 61 Common Work Results for Flooring Preparation:
   a. Alternate flooring adhesive per square foot $_____.
2. Unit Price for Remedial Floor Coating in the event such remediation is required. Refer to Section 09 05 61 Common Work Results for Flooring Preparation:
   a. Remedial Coating per square foot $_____.
3. Moisture Mitigation: Two-component, high solids, moisture tolerant, high density, low odor, epoxy-based product produced by epoxy terrazzo resin manufacturer specifically recommended to reduce alkalinity levels and moisture emission to acceptable levels.
   a. Moisture mitigation per square foot $_____.
4. Crack Suppression/Isolation Membrane: As recommended, produced and supplied by approved terrazzo resin formulator, having minimum 120 percent elongation potential per

ASTM D 412.
a. Crack suppression/isolation membrane per linear foot $_____.
5. Unit Price for Undercutting in the event such remediation is required.
a. Undercutting per cubic yard $_____.

1.10 ALLOWANCES INCLUDED IN THE BASE PROPOSAL

A. Special Inspections Allowance: Include the stipulated sum listed below for engaging the independent special inspection agency and the required special inspections and testing as directed by the Architect.
1. $15,000.00

B. Furniture Allowance: Include the stipulated sum listed below for purchase, delivery, and installation of Furniture.
1. $90,000.00

C. Undercutting Allowance: The contractor shall include in the base bid contract amount an allowance for undercutting of existing unsuitable material and replacement with suitable fill material at the above contract unit price for following:
1. 1200 CY at the unit price indicated in the paragraph above.
a. CY x $_____

D. Moisture Mitigation Allowance: The contractor shall include in the base bid contract amount an allowance for two-component, high solids, moisture tolerant, high density, low odor, epoxy-based product produced by epoxy terrazzo resin manufacturer specifically recommended to reduce alkalinity levels and moisture emission to acceptable levels at the above contract unit price for the following:
1. 7,785 SF at the unit price indicated in the paragraph above.
a. SF x Unit Price = $_____

1.11 ADDENDA

A. The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.
1. Addendum # _____ Dated _____.
2. Addendum # _____ Dated _____.

1.12 DEDUCTIVE ALTERNATES

A. Deductive Alternate Number 1 - Kitchen Equipment Supply.
1. Deduct $_____

B. Deductive Alternate Number 2 - Kitchen Equipment Installation.
1. Deduct $_____

1.13 BID FORM SUPPLEMENTS

A. The following information is included with Bid submission:
1. Subcontractors: Mechanical Work - HVAC (indicative of heating, air conditioning, and ventilating) , Electrical Work (indicative of wiring and illuminating fixtures), and any other associated subcontractors working on the project.
2. I submit the names of the following subcontractors we propose to use, and their State contractor License Numbers. (Indicate "none" if subcontractor is not required for this project. Include Prime Bidder's name and license number if Prime Bidder is doing this work itself and the Prime Bidder's contractor license is qualified for this specialty.)
a. MECHANICAL WORK - HVAC

1) Name: _____
2) License # _____

b. PLUMBING WORK
1) Name: _____
2) License # _____

c. ELECTRICAL WORK
1) Name: _____
2) License # _____

d. ROOFING AND SHEET METAL WORK
1) Name: _____
2) License # _____

B. The following Supplements are to be attached by the Bidder to this Bid Form and are considered an integral part of this Bid Form:
1. The Anti-Collusion Certification (following 00 41 00 BID FORM) must be executed and submitted with the bids at the time proposals are submitted.
2. Suspension and Debarment Certification (following 00 41 00 BID FORM) must be executed and submitted with the bids at the time proposals are submitted.
3. STATEMENT OF BIDDER'S QUALIFICATIONS: Each Bidder shall submit on the form furnished for that purpose (following 00 41 00 BID FORM) , a statement of the Bidder's qualifications, his experience record in construction of work similar to that which here is involved, and his organization and equipment available for the work contemplated; and when specifically requested by the Owner, the Bidder shall provide a detailed financial statement. The Owner shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform his obligations under the Contract, and the Bidder shall furnish the Owner all such information and data for this purpose as it may request. The right is reserved to reject any bid where an investigation of the available evidence or information does not satisfy the Owner that the Bidder is qualified to carry out properly the terms of the Contract.

1.14 FURTHER CONDITIONS

A. The undersigned, by submitting this Bid, further agrees:
1. To accept the provisions of the "INSTRUCTIONS TO BIDDERS."
2. That Bidder understands that the Work must comply with accessibility laws and will ensure that the Work is built in strict accordance with the Contract Documents (Drawings, Plans, and Specifications), of which this Proposal is made a part.
3. To accomplish the Work, including products, equipment, and systems; complete and functional; ready for operation.
4. To allow any Federal, State or Local inspector, acting in their official capacity, access to the project site.
5. That Bidder or subcontractor will not employ or contract with any illegal immigrants.
6. That it is understood that the Owner may reject any or all bids and waive any informalities or irregularities.

1.15 ATTACHMENTS

A. [ ] Bid Security.

B. [ ] Power of Attorney for Bid Bond for the Bid Security.

1.16 BID FORM SIGNATURE(S)

The Corporate Seal of

_____

(Bidder - print the full name of your firm)

was hereunto affixed in the presence of:

_____

(Authorized signing officer, Title)

(Seal)

_____

(Authorized signing officer, Title)

1.17 IF THE BID IS A JOINT VENTURE OR PARTNERSHIP, ADD ADDITIONAL FORMS OF EXECUTION FOR EACH MEMBER OF THE JOINT VENTURE IN THE APPROPRIATE FORM OR FORMS AS ABOVE.

END OF SECTION

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SECTION 26 51 00
INTERIOR LIGHTING

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Interior luminaires.

B. Emergency lighting units.

C. Exit signs.

D. Drivers.

E. Lamps.

F. Accessories.

1.02 RELATED REQUIREMENTS

A. Section 26 05 29 - Hangers and Supports for Electrical Systems.

B. Section 26 05 33.16 - Boxes for Electrical Systems.

C. Section 26 09 23 - Lighting Control Devices.
   1. Includes automatic controls for lighting including occupancy sensors, outdoor motion sensors, time switches, outdoor photo controls, and daylighting controls.
   2. Includes lighting contactors.

D. Section 26 27 26 - Wiring Devices: Manual wall switches and wall dimmers.

E. Section 26 56 00 - Exterior Lighting.

1.03 REFERENCE STANDARDS

A. IEC 60529 - Degrees of Protection Provided by Enclosures (IP Code); 2013 (Corrigendum 2019).

B. IES LM-80 - Approved Method: Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays, and Modules; 2015, with Errata (2017).

C. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2015.

D. NECA/IESNA 500 - Standard for Installing Indoor Lighting Systems; 2006.

E. NECA/IESNA 502 - Standard for Installing Industrial Lighting Systems; 2006.

F. NEMA LE 4 - Recessed Luminaires, Ceiling Compatibility; 2012.

G. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

H. NFPA 101 - Life Safety Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

I. UL 844 - Luminaires for Use in Hazardous (Classified) Locations; Current Edition, Including All Revisions.

J. UL 924 - Emergency Lighting and Power Equipment; Current Edition, Including All Revisions.

K. UL 1598 - Luminaires; Current Edition, Including All Revisions.

L. UL 1598C - Light-Emitting Diode (LED) Retrofit Luminaire Conversion Kits; Current Edition, Including All Revisions.

M. UL 8750 - Light Emitting Diode (LED) Equipment for Use in Lighting Products; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination:
   1. Coordinate the installation of luminaires with mounting surfaces installed under other sections or by others. Coordinate the work with placement of supports, anchors, etc. required for mounting. Coordinate compatibility of luminaires and associated trims with mounting surfaces at installed locations.
   2. Coordinate the placement of luminaires with structural members, ductwork, piping, equipment, diffusers, fire suppression system components, and other potential conflicts installed under other sections or by others.
   3. Coordinate the placement of exit signs with furniture, equipment, signage or other potential obstructions to visibility installed under other sections or by others.
   4. Notify Architect of any conflicts or deviations from Contract Documents to obtain direction prior to proceeding with work.

1.05 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Shop Drawings:
   1. Indicate dimensions and components for each luminaire that is not a standard product of the manufacturer.
   2. Provide photometric calculations where luminaires are proposed for substitution upon request.

C. Product Data: Provide manufacturer's standard catalog pages and data sheets including detailed information on luminaire construction, dimensions, ratings, finishes, mounting requirements, listings, service conditions, photometric performance, installed accessories, and ceiling compatibility; include model number nomenclature clearly marked with all proposed features.
   1. LED Luminaires:
      a. Include estimated useful life, calculated based on IES LM-80 test data.
   2. Lamps: Include rated life, color temperature, color rendering index (CRI), and initial and mean lumen output.

D. Project Record Documents: Record actual connections and locations of luminaires and any associated remote components.

1.06 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

1.07 DELIVERY, STORAGE, AND PROTECTION

A. Receive, handle, and store products according to NECA/IESNA 500 (commercial lighting), NECA/IESNA 502 (industrial lighting), and manufacturer's written instructions.

B. Keep products in original manufacturer's packaging and protect from damage until ready for installation.

1.08 FIELD CONDITIONS

A. Maintain field conditions within manufacturer's required service conditions during and after installation.

1.09 WARRANTY

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

B. Provide three year manufacturer warranty for LED luminaires, including drivers.

C. Provide five year pro-rata warranty for batteries for emergency lighting units.

D. Provide ten year pro-rata warranty for batteries for self-powered exit signs.

PART 2 - PRODUCTS

2.01 LUMINAIRE TYPES

A. Furnish products as indicated in luminaire schedule included on the drawings.

2.02 LUMINAIRES

A. Manufacturers:
   1. Acuity Brands, Inc: www.acuitybrands.com/#sle.
   2. Hubbell Lighting, Inc: www.hubbelllighting.com/#sle.
   3. Philips Lighting North America Corporation; _____; www.lightingproducts.philips.com/#sle.

B. Provide products that comply with requirements of NFPA 70.

C. Provide products that are listed and labeled as complying with UL 1598, where applicable.

D. Provide products listed, classified, and labeled as suitable for the purpose intended.

E. Unless otherwise indicated, provide complete luminaires including lamp(s) and all sockets, drivers, reflectors, lenses, housings and other components required to position, energize and protect the lamp and distribute the light.

F. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, hardware, supports, trims, accessories, etc. as necessary for a complete operating system.

G. Provide products suitable to withstand normal handling, installation, and service without any damage, distortion, corrosion, fading, discoloring, etc.

H. Recessed Luminaires:
   1. Ceiling Compatibility: Comply with NEMA LE 4.
   2. Luminaires Recessed in Insulated Ceilings: Listed and labeled as IC-rated, suitable for direct contact with insulation and combustible materials.
   3. Luminaires Recessed in Sloped Ceilings: Provide suitable sloped ceiling adapters.

I. Hazardous (Classified) Location Luminaires: Listed and labeled as complying with UL 844 for the classification of the installed location.

J. LED Tape Lighting Systems: Provide all power supplies, drivers, cables, connectors, channels, covers, mounting accessories, and interfaces as necessary to complete installation.
   1. LED Tape - General Requirements:
      a. Listed.
      b. Designed for field cutting in accordance with listing.
      c. Wet Location Applications: IEC 60529, IP 68 (waterproof) rated.

K. Luminaires Mounted in Continuous Rows: Provide quantity of units required for length indicated, with all accessories required for joining and aligning.

2.03 EMERGENCY LIGHTING UNITS

A. Manufacturers:
1. Acuity Brands, Inc; _____: www.acuitybrands.com/#sle.
2. Hubbell Lighting, Inc; _____: www.hubbelllighting.com/#sle.
3. Philips Lighting North America Corporation;[____]; www.lightingproducts.philips.com/#sle.

B. Description: Emergency lighting units complying with NFPA 101 and all applicable state and local codes, and listed and labeled as complying with UL 924.

C. Operation: Upon interruption of normal power source or brownout condition exceeding 20 percent voltage drop from nominal, solid-state control automatically switches connected lamps to integral battery power for minimum of 90 minutes of rated emergency illumination, and automatically recharges battery upon restoration of normal power source.

D. Battery:
1. Sealed maintenance-free lead calcium unless otherwise indicated.
2. Size battery to supply all connected lamps, including emergency remote heads where indicated.

E. Diagnostics: Provide power status indicator light and accessible integral test switch to manually activate emergency operation.

F. Provide low-voltage disconnect to prevent battery damage from deep discharge.

G. Self-Diagnostics: Provide units that self-monitor functionality and automatically perform testing required by NFPA 101 where indicated; provide indicator light(s) to report test and diagnostic status.

H. Accessories:
1. Provide compatible accessory mounting brackets where indicated or required to complete installation.

2.04 EXIT SIGNS

A. Description: Exit signs complying with NFPA 101 and applicable state and local codes, and listed and labeled as complying with UL 924.
1. Number of Faces: Single- or double-face as indicated or as required for installed location.
2. Directional Arrows: As indicated or as required for installed location.

B. Powered Exit Signs: Internally illuminated with LEDs unless otherwise indicated.
1. Manufacturers:
a. Acuity Brands, Inc; _____: www.acuitybrands.com/#sle.
b. Hubbell Lighting, Inc; _____: www.hubbelllighting.com/#sle.
c. Philips Lighting North America Corporation; _____; www.lightingproducts.philips.com/#sle.

2.05 DRIVERS

A. Drivers - General Requirements:
1. Provide ballasts containing no polychlorinated biphenyls (PCBs).
2. Minimum Efficiency/Efficacy: Provide ballasts complying with all current applicable federal and state ballast efficiency/efficacy standards.

B. Dimmable LED Drivers:

1. Dimming Range: Continuous dimming from 100 percent to five percent relative light output unless dimming capability to lower level is indicated, without flicker.
2. Control Compatibility: Fully compatible with the dimming controls to be installed.
   a. Wall Dimmers: See Section 26 27 26.

2.06 LAMPS

A. Lamps - General Requirements:
   1. Unless explicitly excluded, provide new, compatible, operable lamps in each luminaire.
   2. Verify compatibility of specified lamps with luminaires to be installed. Where lamps are not specified, provide lamps per luminaire manufacturer's recommendations.
   3. Minimum Efficiency: Provide lamps complying with all current applicable federal and state lamp efficiency standards.
   4. Color Temperature Consistency: Unless otherwise indicated, for each type of lamp furnish products which are consistent in perceived color temperature. Replace lamps that are determined by the Architect to be inconsistent in perceived color temperature.
   5. Unless otherwise noted, color temperature shall be 3500k for indoor fixtures and 4000k for exterior fixtures.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that field measurements are as indicated.

B. Verify that outlet boxes are installed in proper locations and at proper mounting heights and are properly sized to accommodate conductors in accordance with NFPA 70.

C. Verify that suitable support frames are installed where required.

D. Verify that branch circuit wiring installation is completed, tested, and ready for connection to luminaires.

E. Verify that conditions are satisfactory for installation prior to starting work.

3.02 PREPARATION

A. Provide extension rings to bring outlet boxes flush with finished surface.

B. Clean dirt, debris, plaster, and other foreign materials from outlet boxes.

3.03 INSTALLATION

A. Coordinate locations of outlet boxes provided under Section 26 05 33.16 as required for installation of luminaires provided under this section.

B. Perform work in accordance with NECA 1 (general workmanship).

C. Install products in accordance with manufacturer's instructions.

D. Install luminaires securely, in a neat and workmanlike manner, as specified in NECA 500 (commercial lighting) and NECA 502 (industrial lighting).

E. Provide required support and attachment in accordance with Section 26 05 29.

F. Install luminaires plumb and square and aligned with building lines and with adjacent luminaires.

G. Suspended Ceiling Mounted Luminaires:
   1. Do not use ceiling tiles to bear weight of luminaires.
   2. Do not use ceiling support system to bear weight of luminaires unless ceiling support system is certified as suitable to do so.

3. Secure lay-in luminaires to ceiling support channels using listed safety clips at four corners.
4. In addition to ceiling support wires, provide two galvanized steel safety wire(s), minimum 12 gauge, connected from opposing corners of each recessed luminaire to building structure.
5. See appropriate Division 9 section where suspended grid ceiling is specified for additional requirements.

H. Recessed Luminaires:
1. Install trims tight to mounting surface with no visible light leakage.
2. Non-IC Rated Luminaires: Maintain required separation from insulation and combustible materials according to listing.
3. Luminaires Recessed in Fire-Rated Ceilings: Install using accessories and firestopping materials to meet regulatory requirements for fire rating.

I. Suspended Luminaires:
1. Install using the suspension method indicated, with support lengths and accessories as required for specified mounting height.
2. Install canopies tight to mounting surface.

J. Install accessories furnished with each luminaire.

K. Bond products and metal accessories to branch circuit equipment grounding conductor.

L. Emergency Lighting Units:
1. Unless otherwise indicated, connect unit to unswitched power from same circuit feeding normal lighting in same room or area. Bypass local switches, contactors, or other lighting controls.

M. Exit Signs:
1. Unless otherwise indicated, connect unit to unswitched power from same circuit feeding normal lighting in same room or area. Bypass local switches, contactors, or other lighting controls.

N. Install lamps in each luminaire.

O. Lamp Burn-In: Operate lamps at full output for prescribed period per manufacturer's recommendations prior to use with any dimming controls. Replace lamps that fail prematurely due to improper lamp burn-in.

3.04 FIELD QUALITY CONTROL

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

B. Inspect each product for damage and defects.

C. Operate each luminaire after installation and connection to verify proper operation.

D. Test self-powered exit signs and emergency lighting units to verify proper operation upon loss of normal power supply.

E. Correct wiring deficiencies and repair or replace damaged or defective products. Repair or replace excessively noisy ballasts as determined by Architect.

3.05 ADJUSTING

A. Aim and position adjustable luminaires to achieve desired illumination as indicated or as directed by Architect. Secure locking fittings in place.

B. Aim and position adjustable emergency lighting unit lamps to achieve optimum illumination of egress path as required or as directed by Architect or authority having jurisdiction.

C. Exit Signs with Field-Selectable Directional Arrows: Set as indicated or as required to properly designate egress path as directed by Architect or authority having jurisdiction.

3.06 CLEANING

A. Clean surfaces according to NECA 500 (commercial lighting), NECA 502 (industrial lighting), and manufacturer's instructions to remove dirt, fingerprints, paint, or other foreign material and restore finishes to match original factory finish.

3.07 CLOSEOUT ACTIVITIES

3.08 PROTECTION

A. Protect installed luminaires from subsequent construction operations.

END OF SECTION

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SECTION 26 56 00
EXTERIOR LIGHTING

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Exterior luminaires.

B. Ballasts.

C. Poles and accessories.

D. Luminaire accessories.

1.02 RELATED REQUIREMENTS

A. Section 03 30 00 - Cast-in-Place Concrete: Materials and installation requirements for concrete bases for poles.

B. Section 26 05 26 - Grounding and Bonding for Electrical Systems.

C. Section 26 05 29 - Hangers and Supports for Electrical Systems.

D. Section 26 05 33.16 - Boxes for Electrical Systems.

1.03 REFERENCE STANDARDS

A. IEEE C2 - National Electrical Safety Code; 2017.

B. IES LM-79 - Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products; 2008.

C. IES LM-80 - Approved Method: Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays, and Modules; 2015, with Errata (2017).

D. IES RP-8 - Recommended Practice for Design and Maintenance of Roadway and Parking Facility Lighting; 2018.

E. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2015.

F. NECA/IESNA 501 - Standard for Installing Exterior Lighting Systems; 2006.

G. NEMA LE 4 - Recessed Luminaires, Ceiling Compatibility; 2012.

H. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

I. UL 844 - Luminaires for Use in Hazardous (Classified) Locations; Current Edition, Including All Revisions.

J. UL 1598 - Luminaires; Current Edition, Including All Revisions.

K. UL 8750 - Light Emitting Diode (LED) Equipment for Use in Lighting Products; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination:
   1. Coordinate placement of poles and associated foundations with utilities, curbs, sidewalks, trees, walls, fences, striping, etc. installed under other sections or by others. Coordinate elevation to obtain specified foundation height.
   2. Notify Architect of any conflicts or deviations from Contract Documents to obtain direction prior to proceeding with work.

1.05 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Shop Drawings:
   1. Indicate dimensions and components for each luminaire that is not a standard product of the manufacturer.
   2. Provide photometric calculations where luminaires are proposed for substitution upon request.
   3. Provide structural calculations for each pole proposed for substitution.

C. Product Data: Provide manufacturer's standard catalog pages and data sheets including detailed information on luminaire construction, dimensions, ratings, finishes, mounting requirements, listings, service conditions, photometric performance, weight, effective projected area (EPA), and installed accessories; include model number nomenclature clearly marked with all proposed features.
   1. LED Luminaires:
      a. Include estimated useful life, calculated based on IES LM-80 test data.
   2. Poles: Include information on maximum supported effective projected area (EPA) and weight for the design wind speed.

D. Operation and Maintenance Data: Instructions for each product including information on replacement parts.

E. Project Record Documents: Record actual connections and locations of pole foundations, luminaires, and any pull or junction boxes.

1.06 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Receive, handle, and store products according to NECA/IESNA 501 and manufacturer's written instructions.

B. Keep products in original manufacturer's packaging and protect from damage until ready for installation.

1.08 WARRANTY

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

B. Provide three year manufacturer warranty for all LED luminaires, including drivers.

PART 2 - PRODUCTS

2.01 LUMINAIRE TYPES

A. Furnish products as indicated in luminaire schedule included on the drawings.

2.02 LUMINAIRES

A. Manufacturers:
   1. Acuity Brands, Inc; _____: www.acuitybrands.com/#sle.
   2. Hubbell Lighting, Inc; _____: www.hubbelllighting.com/#sle.
   3. Philips Lighting North America Corporation; _____; www.lightingproducts.philips.com/#sle.

B. Provide products that comply with requirements of NFPA 70.

C. Provide products that are listed and labeled as complying with UL 1598, where applicable.

D. Provide products listed, classified, and labeled as suitable for the purpose intended.

E. Unless otherwise indicated, provide complete luminaires including lamp(s) and all sockets, ballasts, reflectors, lenses, housings and other components required to position, energize and protect the lamp and distribute the light.

F. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, hardware, poles, foundations, supports, trims, accessories, etc. as necessary for a complete operating system.

G. Provide products suitable to withstand normal handling, installation, and service without any damage, distortion, corrosion, fading, discoloring, etc.

H. Provide luminaires listed and labeled as suitable for wet locations unless otherwise indicated.

I. Recessed Luminaires:
   1. Ceiling Compatibility: Comply with NEMA LE 4.
   2. Luminaires Recessed in Insulated Ceilings: Listed and labeled as IC-rated, suitable for direct contact with insulation and combustible materials.
   3. Luminaires Recessed in Sloped Ceilings: Provide suitable sloped ceiling adapters.

J. Hazardous (Classified) Location Luminaires: Listed and labeled as complying with UL 844 for the classification of the installed location.

K. Luminaires Mounted in Continuous Rows: Provide quantity of units required for length indicated, with all accessories required for joining and aligning.

L. LED Luminaires:
   1. Components: UL 8750 recognized or listed as applicable.
   2. Tested in accordance with IES LM-79 and IES LM-80.
   3. LED Estimated Useful Life: Minimum of 50,000 hours at 70 percent lumen maintenance, calculated based on IES LM-80 test data.

2.03 BALLASTS AND DRIVERS

A. Drivers - General Requirements:
   1. Provide drivers containing no polychlorinated biphenyls (PCBs).
   2. Minimum Efficiency/Efficacy: Providedrivers complying with all current applicable federal and state driver efficiency/efficacy standards.

2.04 POLES

A. Manufacturers:
   1. Acuity Brands, Inc; _____: www.acuitybrands.com/#sle.
   2. Hubbell Lighting, Inc; _____: www.hubbelllighting.com/#sle.
   3. Philips Lighting North America Corporation; _____; www.lightingproducts.philips.com/#sle.

B. All Poles:
   1. Provide poles and associated support components suitable for the luminaire(s) and associated supports and accessories to be installed.
   2. Structural Design Criteria:
      a. Wind Load: Include effective projected area (EPA) of luminaire(s) and associated supports and accessories to be installed.

3. Material: Steel, unless otherwise indicated. Fiberglass and Resin poles will not be accepted.
4. Shape: Square straight, unless otherwise indicated.
5. Finish: Match luminaire finish, unless otherwise indicated.
6. Mounting: Install on concrete foundation, height as indicated on the drawings, unless otherwise indicated.
7. Unless otherwise indicated, provide with the following features/accessories:
   a. Top cap.
   b. Anchor bolts with leveling nuts or leveling shims.
   c. Anchor base cover.
   d. Provision for pole-mounted weatherproof GFI receptacle where indicated.

2.05 ACCESSORIES

A. Stems for Suspended Luminaires: Steel tubing, minimum 1/2" size, factory finished to match luminaire or field-painted as directed.

B. Threaded Rods for Suspended Luminaires: Zinc-plated steel, minimum 1/4" size, field-painted as directed.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that field measurements are as indicated.

B. Verify that outlet boxes are installed in proper locations and at proper mounting heights and are properly sized to accommodate conductors in accordance with NFPA 70.

C. Verify that suitable support frames are installed where required.

D. Verify that branch circuit wiring installation is completed, tested, and ready for connection to luminaires.

E. Verify that conditions are satisfactory for installation prior to starting work.

3.02 PREPARATION

A. Provide extension rings to bring outlet boxes flush with finished surface.

B. Clean dirt, debris, plaster, and other foreign materials from outlet boxes.

3.03 INSTALLATION

A. Coordinate locations of outlet boxes provided under Section 26 05 33.16 as required for installation of luminaires provided under this section.

B. Perform work in accordance with NECA 1 (general workmanship).

C. Install products in accordance with manufacturer's instructions.

D. Install luminaires in accordance with NECA/IESNA 501.

E. Provide required support and attachment in accordance with Section 26 05 29.

F. Install luminaires plumb and square and aligned with building lines and with adjacent luminaires.

G. Recessed Luminaires:
   1. Install trims tight to mounting surface with no visible light leakage.
   2. Non-IC Rated Luminaires: Maintain required separation from insulation and combustible materials according to listing.

3. Luminaires Recessed in Fire-Rated Ceilings: Install using accessories and firestopping materials to meet regulatory requirements for fire rating.

H. Pole-Mounted Luminaires:
1. Maintain the following minimum clearances:
a. Comply with IEEE C2.
b. Comply with utility company requirements.
2. Foundation-Mounted Poles:
a. Install foundations plumb.
b. Install poles plumb, using leveling nuts or shims as required to adjust to plumb.
c. Tighten anchor bolt nuts to manufacturer's recommended torque.
3. Grounding:
a. Bond luminaires, metal accessories, metal poles, and foundation reinforcement to branch circuit equipment grounding conductor.
4. Install separate service conductors, 12 AWG copper, from each luminaire down to handhole for connection to branch circuit conductors.

I. Install accessories furnished with each luminaire.

J. Bond products and metal accessories to branch circuit equipment grounding conductor.

K. Install lamps in each luminaire.

3.04 FIELD QUALITY CONTROL

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

B. Inspect each product for damage and defects.

C. Operate each luminaire after installation and connection to verify proper operation.

D. Correct wiring deficiencies and repair or replace damaged or defective products. Repair or replace excessively noisy ballasts as determined by Architect.

3.05 ADJUSTING

A. Aim and position adjustable luminaires to achieve desired illumination as indicated or as directed by Architect. Secure locking fittings in place.

3.06 CLEANING

A. Clean surfaces according to NECA/IESNA 501 and manufacturer's instructions to remove dirt, fingerprints, paint, or other foreign material and restore finishes to match original factory finish.

3.07 CLOSEOUT ACTIVITIES

A. Just prior to Substantial Completion, replace all lamps that have failed.

3.08 PROTECTION

A. Protect installed luminaires from subsequent construction operations.

END OF SECTION

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SECTION 28 46 00
FIRE DETECTION AND ALARM

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fire alarm system design and installation, including all components, wiring, and conduit.

B. Transmitters for communication with supervising station.

C. Maintenance of fire alarm system under contract for specified warranty period.

1.02 RELATED REQUIREMENTS

A. Section 08 71 00 - Door Hardware: Electrically operated locks and door holder devices to be monitored and released by fire alarm system.

B. Section 21 13 00 - Fire-Suppression Sprinkler Systems: Supervisory, alarm, and actuating devices installed in sprinkler system.

C. Section 23 33 00 - Air Duct Accessories: Smoke dampers monitored and controlled by fire alarm system.

D. Section 26 05 48 - Vibration and Seismic Controls for Electrical Systems: Requirements for the seismic qualification of equipment specified in this section.

1.03 REFERENCE STANDARDS

A. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines; current edition.

B. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.

C. IEEE C62.41.2 - IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and less) AC Power Circuits; 2002 (Corrigendum 2012).

D. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

E. NFPA 72 - National Fire Alarm and Signaling Code; Most Recent Edition Cited by Referring Code or Reference Standard.

F. NFPA 101 - Life Safety Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Proposal Documents: Submit the following with cost/time proposal:
   1. NFPA 72 "Record of Completion", filled out to the extent known at the time.
   2. Manufacturer's detailed data sheet for each control unit, initiating device, and notification appliance.
   3. Certification by Contractor that the system design will comply with Contract Documents.
   4. Proposed maintenance contract.

C. Drawings must be prepared using Autocad or Revit..

D. Evidence of designer qualifications.

E. Design Documents: Submit all information required for plan review and permitting by authorities having jurisdiction, including but not limited to floor plans, riser diagrams, and description of operation:

1. Copy (if any) of list of data required by authority having jurisdiction.
2. NFPA 72 "Record of Completion", filled out to the extent known at the time.
3. Clear and concise description of operation, with input/output matrix similar to that shown in NFPA 72 Appendix A-7-5-2.2(9), and complete listing of software required.
4. System zone boundaries and interfaces to fire safety systems.
5. Location of all components, circuits, and raceways; mark components with identifiers used in control unit programming.
6. Circuit layouts; number, size, and type of raceways and conductors; conduit fill calculations; spare capacity calculations; notification appliance circuit voltage drop calculations.
7. List of all devices on each signaling line circuit, with spare capacity indicated.
8. Manufacturer's detailed data sheet for each component, including wiring diagrams, installation instructions, and circuit length limitations.
9. Description of power supplies; if secondary power is by battery include calculations demonstrating adequate battery power.
10. Certification by either the manufacturer of the control unit or by the manufacturer of each other component that the components are compatible with the control unit.
11. Certification by the manufacturer of the control unit that the system design complies with Contract Documents.
12. Certification by Contractor that the system design complies with Contract Documents.

F. Evidence of installer qualifications.

G. Evidence of instructor qualifications; training lesson plan outline.

H. Evidence of maintenance contractor qualifications, if different from installer.

I. Inspection and Test Reports:
   1. Submit inspection and test plan prior to closeout demonstration.
   2. Submit documentation of satisfactory inspections and tests.
   3. Submit NFPA 72 "Inspection and Test Form," filled out.

J. Operating and Maintenance Data: See Section 01 78 00 for additional requirements; revise and resubmit until acceptable; have one set available during closeout demonstration:
   1. Complete set of specified design documents, as approved by authority having jurisdiction.
   2. Additional printed set of project record documents and closeout documents, bound or filed in same manuals.
   3. Contact information for firm that will be providing contract maintenance and trouble call-back service.
   4. List of recommended spare parts, tools, and instruments for testing.
   5. Replacement parts list with current prices, and source of supply.
   6. Detailed troubleshooting guide and large scale input/output matrix.
   7. Preventive maintenance, inspection, and testing schedule complying with NFPA 72; provide printed copy and computer format acceptable to Owner.
   8. Detailed but easy to read explanation of procedures to be taken by non-technical administrative personnel in the event of system trouble, when routine testing is being conducted, for fire drills, and when entering into contracts for remodeling.

K. Project Record Documents: See Section 01 78 00 for additional requirements; have one set available during closeout demonstration:
   1. Complete set of floor plans showing actual installed locations of components, conduit, and zones.

2. "As installed" wiring and schematic diagrams, with final terminal identifications.
3. "As programmed" operating sequences, including control events by device, updated input/output chart, and voice messages by event.

L. Closeout Documents:
1. Certification by manufacturer that the system has been installed in compliance with manufacturer's installation requirements, is complete, and is in satisfactory operating condition.
2. NFPA 72 "Record of Completion", filled out completely and signed by installer and authorized representative of authority having jurisdiction.
3. Certificate of Occupancy.
4. Maintenance contract.

M. Maintenance Materials, Tools, and Software: Furnish the following for Owner's use in maintenance of project.
1. Furnish spare parts of same manufacturer and model as those installed; deliver in original packaging, labeled in same manner as in operating and maintenance data and place in spare parts cabinet.
2. In addition to the items in quantities indicated in PART 2, furnish the following:
a. All tools, software, and documentation necessary to modify the fire alarm system using Owner's personnel; minimum modification capability to include addition and deletion of devices, circuits, and zones, and changes to system description, operation, and evacuation and instructional messages.
b. One copy, on CD-ROM, of all software not resident in read-only-memory.
c. Extra Fuses: Two for each installed fuse; store inside applicable control cabinet.

1.05 QUALITY ASSURANCE

A. Designer Qualifications: NICET Level III or IV (3 or 4) certified fire alarm technician or registered fire protection engineer, employed by fire alarm control panel manufacturer, Contractor, or installer , with experience designing fire alarm systems in the jurisdictional area of the authorities having jurisdiction.

B. Installer Qualifications: Firm with minimum 3 years documented experience installing fire alarm systems of the specified type and providing contract maintenance service as a regular part of their business.
1. Authorized representative of control unit manufacturer; submit manufacturer's certification that installer is authorized; include name and title of manufacturer's representative making certification.
2. Installer Personnel: At least 2 years of experience installing fire alarm systems.
3. Supervisor: NICET level III or IV (3 or 4) certified fire alarm technician; furnish name and address.
4. Contract maintenance office located within 50 miles of project site.
5. Certified in the State in which the Project is located as fire alarm installer.

C. Maintenance Contractor Qualifications: Same entity as installer or different entity with specified qualifications.

D. Instructor Qualifications: Experienced in technical instruction, understanding fire alarm theory, and able to provide the required training; trained by fire alarm control unit manufacturer.

1.06 WARRANTY

A. Provide control panel manufacturer's warranty that system components other than wire and conduit are free from defects and will remain so for 1 year after date of Substantial Completion.

B. Provide installer's warranty that the installation is free from defects and will remain so for 1 year after date of Substantial Completion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Fire Alarm Control Units and Accessories:
   1. Honeywell Security & Fire Solutions/Notifier
   2. Siemens Building Technologies, Inc
   3. Simplex, a brand of Johnson Controls
   4. Provide control units made by the same manufacturer.
   5. Manufacturers owned by one of the companies listed above, but not directly listed will not be accepted.

B. Initiating Devices and Notification Appliances:
   1. Same manufacturer as control units.
   2. Provide initiating devices and notification appliances made by the same manufacturer, where possible.

2.02 FIRE ALARM SYSTEM

A. Fire Alarm System: Provide a new automatic fire detection and alarm system:
   1. Provide all components necessary, regardless of whether shown in Contract Documents or not.
   2. Protected Premises: Entire building shown on drawings.
   3. Comply with the following; where requirements conflict, order of precedence of requirements is as listed:
      a. ADA Standards.
      b. The requirements of the State Fire Marshal.
      c. The requirements of the local authority having jurisdiction.
      d. Applicable local codes.
      e. Contract Documents (drawings and specifications).
      f. NFPA 101.
      g. NFPA 72; where the word "should" is used consider that provision mandatory; where conflicts between requirements require deviation from NFPA 72, identify deviations clearly on design documents.
   4. Evacuation Alarm: Multiple smoke zones; allow for evacuation notification of any individual zone or combination of zones, in addition to general evacuation of entire premises.
   5. Voice Notification: Provide emergency voice/alarm communications with multichannel capability; digital.
   6. General Evacuation Zones: Each smoke zone is considered a general evacuation zone unless otherwise indicated, with alarm notification in all zones on the same floor, on the floor above, and the floor below.
   7. Fire Command Center: Location indicated on drawings.
   8. Fire Alarm Control Unit: New, located at supervising station.

B. Supervising Stations and Fire Department Connections:
   1. Public Fire Department Notification: By on-premises supervising station.

2. On-Premises Supervising Station: Existing proprietary station operated by Owner, located at _____.
3. Means of Transmission to On-Premises Supervising Station: Directly connected noncoded system.
4. Means of Transmission to Remote Supervising Station: Digital alarm communicator transmitter (DACT), 2 telephone lines.

C. Circuits:
1. Initiating Device Circuits (IDC): Class B, Style A.
2. Signaling Line Circuits (SLC) Within Single Building: Class B, Style 0.5.
3. Notification Appliance Circuits (NAC): Class B, Style W.

D. Spare Capacity:
1. Initiating Device Circuits: Minimum 25 percent spare capacity.
2. Notification Appliance Circuits: Minimum 25 percent spare capacity.
3. Fire Alarm Control Units: Capable of handling all circuits utilized to capacity without requiring additional components other than plug-in control modules.

E. Power Sources:
1. Primary: Dedicated branch circuits of the facility power distribution system.
2. Secondary: Storage batteries.
3. Capacity: Sufficient to operate entire system for period specified by NFPA 72.
4. Each Computer System: Provide uninterruptible power supply (UPS).

2.03 FIRE SAFETY SYSTEMS INTERFACES

A. Supervision: Provide supervisory signals in accordance with NFPA 72 for the following:
1. Sprinkler water control valves.
2. Dry-pipe sprinkler system pressure.
3. Dry-pipe sprinkler valve room low temperature.

B. Alarm: Provide alarm initiation in accordance with NFPA 72 for the following:
1. Sprinkler water flow.

C. HVAC:
1. Duct Smoke Detectors: Close dampers indicated; shut down air handlers indicated.

2.04 COMPONENTS

A. General:
1. Provide flush mounted units where installed in finish areas; in unfinished areas, surface mounted unit are acceptable.
2. Provide legible, permanent labels for each control device, using identification used in operation and maintenance data.

B. Fire Alarm Control Units: Analog, addressable type; listed, classified, and labeled as suitable for the purpose intended.

C. Master Control Unit: As specified for Basis of Design above, or equivalent.

D. Remote Annunciators

E. Initiating Devices:
1. Addressable Systems:
a. Addressable Devices: Individually identifiable by addressable fire alarm control unit.

b. Provide suitable addressable interface modules as indicated or as required for connection to conventional (non-addressable) devices and other components that provide a dry closure output.

2. Manual Pull Stations: .
   a. Provide 1 extra.
3. Smoke Detectors: .
   a. Provide 1 extra.
4. Heat Detectors: .
   a. Provide 1 extra.

F. Notification Appliances:
1. Horns..
   a. Provide 1 extra.
2. Speakers: _____.
3. Strobes:
   a. Provide 1 extra.

G. Circuit Conductors: Copper or optical fiber; provide 200 feet extra; color code and label.

H. Surge Protection: In accordance with IEEE C62.41.2 category B combination waveform and NFPA 70; except for optical fiber conductors.

I. Locks and Keys: Deliver keys to Owner.

J. Instruction Charts: Printed instruction chart for operators, showing steps to be taken when a signal is received (normal, alarm, supervisory, and trouble); easily readable from normal operator's station.
1. Frame: Stainless steel or aluminum with polycarbonate or glass cover.
2. Provide one for each control unit where operations are to be performed.
3. Obtain approval of Owner prior to mounting; mount in location acceptable to Owner.
4. Provide extra copy with operation and maintenance data submittal.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install in accordance with applicable codes, NFPA 72, NFPA 70, and Contract Documents.

B. Conceal all wiring, conduit, boxes, and supports where installed in finished areas.

C. Obtain Owner's approval of locations of devices, before installation.

D. Install instruction cards and labels.

3.02 INSPECTION AND TESTING FOR COMPLETION

A. Notify Owner 7 days prior to beginning completion inspections and tests.

B. Notify authorities having jurisdiction and comply with their requirements for scheduling inspections and tests and for observation by their personnel.

C. Provide the services of the installer's supervisor or person with equivalent qualifications to supervise inspection and testing, correction, and adjustments.

D. Prepare for testing by ensuring that all work is complete and correct; perform preliminary tests as required.

E. Provide all tools, software, and supplies required to accomplish inspection and testing.

F. Perform inspection and testing in accordance with NFPA 72 and requirements of local authorities; document each inspection and test.

G. Correct defective work, adjust for proper operation, and retest until entire system complies with Contract Documents.

H. Diagnostic Period: After successful completion of inspections and tests, Operate system in normal mode for at least 14 days without any system or equipment malfunctions.
   1. Record all system operations and malfunctions.
   2. If a malfunction occurs, start diagnostic period over after correction of malfunction.
   3. Owner will provide attendant operator personnel during diagnostic period; schedule training to allow Owner personnel to perform normal duties.
   4. At end of successful diagnostic period, fill out and submit NFPA 72 "Inspection and Testing Form."

3.03 OWNER PERSONNEL INSTRUCTION

A. Provide the following instruction to designated Owner personnel:
   1. Hands-On Instruction: On-site, using operational system.

B. Administrative: One-hour session(s) covering issues necessary for non-technical administrative staff; classroom:
   1. Initial Training: 1 session pre-closeout.

C. Basic Operation: One-hour sessions for attendant personnel, security officers, and engineering staff; combination of classroom and hands-on:
   1. Initial Training: 1 session pre-closeout.

D. Furnish the services of instructors and teaching aids; have copies of operation and maintenance data available during instruction.

3.04 CLOSEOUT

A. Closeout Demonstration: Demonstrate proper operation of all functions to Owner.
   1. Be prepared to conduct any of the required tests.
   2. Have at least one copy of operation and maintenance data, preliminary copy of project record drawings, input/output matrix, and operator instruction chart(s) available during demonstration.
   3. Have authorized technical representative of control unit manufacturer present during demonstration.
   4. Demonstration may be combined with inspection and testing required by authority having jurisdiction; notify authority having jurisdiction in time to schedule demonstration.
   5. Repeat demonstration until successful.

B. Occupancy of the project will not occur prior to Substantial Completion.

C. Substantial Completion of the project cannot be achieved until inspection and testing is successful and:
   1. Specified diagnostic period without malfunction has been completed.
   2. Approved operating and maintenance data has been delivered.
   3. Spare parts, extra materials, and tools have been delivered.
   4. All aspects of operation have been demonstrated to Owner.
   5. Final acceptance of the fire alarm system has been given by authorities having jurisdiction.
   6. Occupancy permit has been granted.

7. Specified pre-closeout instruction is complete.

3.05 MAINTENANCE

A. See Section 01 70 00 - Execution and Closeout Requirements, for additional requirements relating to maintenance service.

B. Provide to Owner, at no extra cost, a written maintenance contract for entire manufacturer's warranty period, to include the work described below.

C. Perform routine inspection, testing, and preventive maintenance required by NFPA 72, including:
   1. Maintenance of fire safety interface and supervisory devices connected to fire alarm system.
   2. Repairs required, unless due to improper use, accidents, or negligence beyond the control of the maintenance contractor.
   3. Record keeping required by NFPA 72 and authorities having jurisdiction.

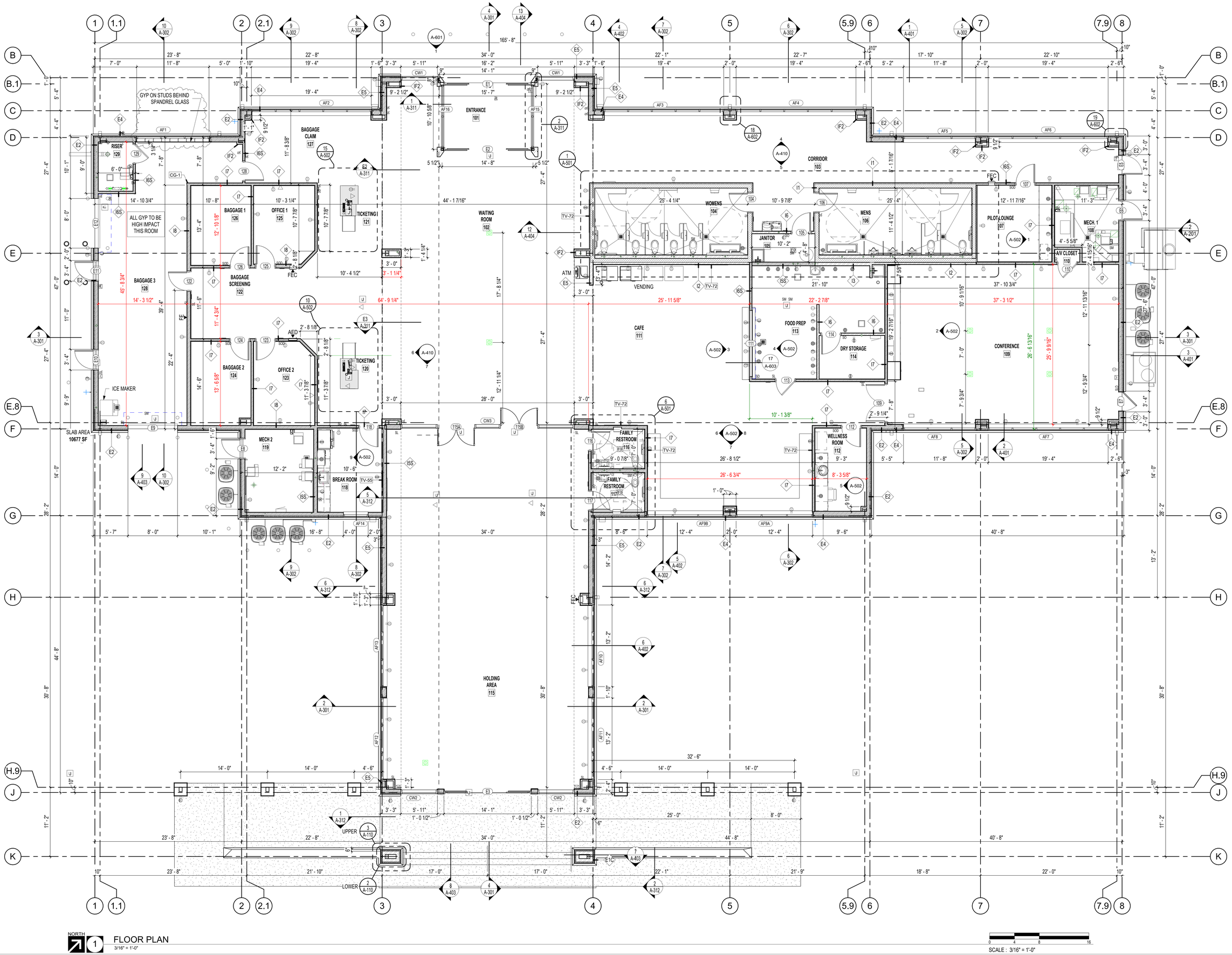
D. Provide trouble call-back service upon notification by Owner:
   1. Provide on-site response within 2 hours of notification.
   2. Include allowance for call-back service during normal working hours at no extra cost to Owner.
   3. Owner will pay for call-back service outside of normal working hours on an hourly basis, based on actual time spent at site and not including travel time; include hourly rate and definition of normal working hours in maintenance contract.

E. Provide a complete description of preventive maintenance, systematic examination, adjustment, cleaning, inspection, and testing, with a detailed schedule.

F. Maintain a log at each fire alarm control unit, listing the date and time of each inspection and call-back visit, the condition of the system, nature of the trouble, correction performed, and parts replaced. Submit duplicate of each log entry to Owner's representative upon completion of site visit.

G. Comply with Owner's requirements for access to facility and security.

END OF SECTION



NORTH

1 FLOOR PLAN

3/16" = 1'-0"

SCALE : 3/16" = 1'-0"

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3	03/21/2025	ADDENDUM 003

COOPER MIXON ARCHITECTS PLLC
LL237
REGISTERED ARCHITECTS
STATE OF ARKANSAS
10/14/2024

CONSTRUCTION DOCUMENTS

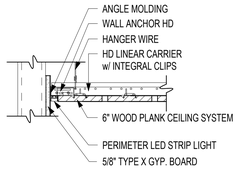
PROJECT NO.
2226

PROJECT NAME
TERMINAL REPLACEMENT

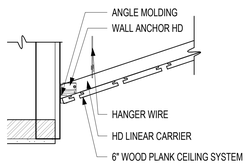
DATE
10/14/2024

CONTENTS
FLOOR PLAN

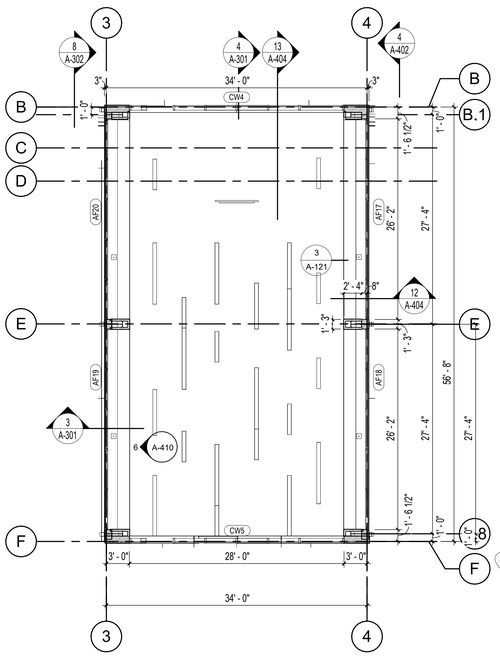
SHEET NUMBER
A-111



2 PERIMETER LED AT WOOD CEILING
1 1/2" = 1'-0"

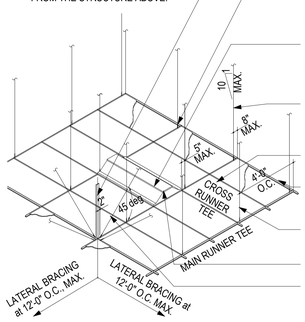


3 DETAIL AT SLOPED WOOD CEILING
1 1/2" = 1'-0"



4 UPPER WINDOWS
1/8" = 1'-0"

NOTES
1. GRID CEILING INSTALLATION TO MEET THE SEISMIC DESIGN CATEGORY REQUIREMENT OF LOCAL JURISDICTION
2. FIXTURES 56 LBS. OR MORE SHALL BE INDEPENDENTLY SUPPORTED FROM THE STRUCTURE ABOVE.



3 5/8" 20 GAUGE METAL STUD COMPRESSION STRUT -LATERAL BRACING AT 12'-0" ON CENTER MAXIMUM AND WITHIN 6'-0" OF EACH WALL ATTACHED TO STRUCTURAL MEMBER ABOVE

POP RIVET ALL TEES TO WALL ANGLE TYPICAL WITH HEAVY DUTY GRID SYSTEM; LIGHT FIXTURES AND OTHER

EQUIPMENT WEIGHING LESS THAN 56 LBS. TO BE SUPPORTED BY GRID SYSTEM AND TWO 12 GA. HANGERS AT OPPOSITE CORNERS (WIRES MAY BE SLACK)

8 GAUGE HANGER AT PERIMETER SUPPORTING MAIN RUNNERS AND CROSS RUNNERS 8" MAXIMUM FROM WALL - TYP.

ACOUSTICAL TILE PANEL - REFER TO FINISH SCHEDULE

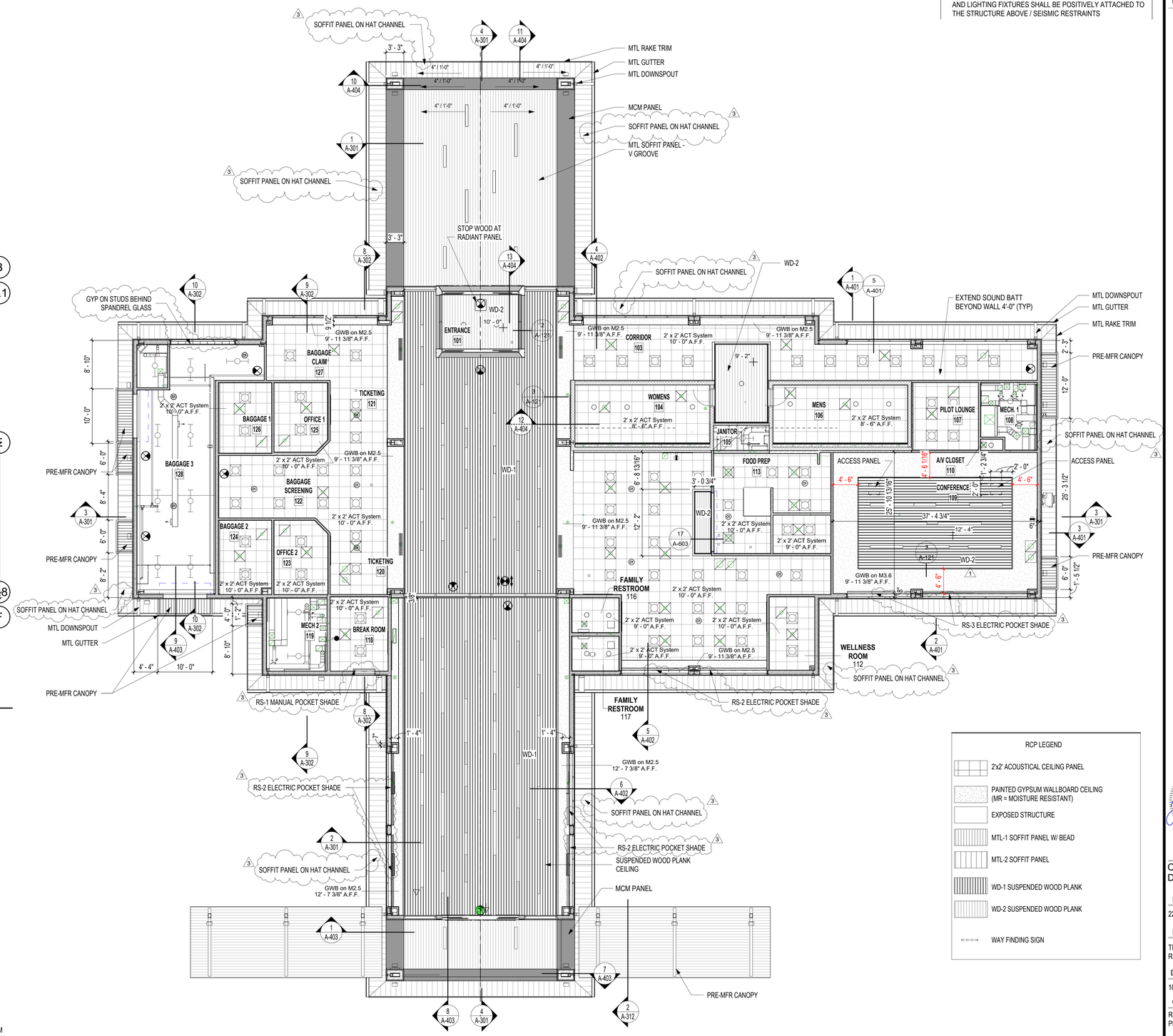
2" WIDE WALL ANGLE TRIM (HORIZONTAL LEG) TYPICAL AT PERIMETER IN GRIDS LARGER THAN 144 SQ. FT.

8 GAUGE HANGERS AT 48" ON CENTER EACH WAY - TYPICAL

RECESSED LIGHT FIXTURE

8 GAUGE LATERAL BRACING WIRES 2" MAXIMUM FROM MAIN AND CROSS RUNNER INTERSECTION EACH DIRECTION AT APPROX. 45 DEGREES - LOCATE LATERAL BRACING AT 6'-0" O.C. FROM WALL AND 12'-0" O.C. EACH WAY

5 SUSPENDED CEILING TILE
1 1/2" = 1'-0"



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

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

RCP - NOTES

1	ALL ELEVATIONS ARE ABOVE FINISHED FLOOR.
2	REFER TO ELECTRICAL DRAWINGS FOR POWER AND LIGHTING INFORMATION
3	REFER TO MECHANICAL DRAWINGS FOR VENTILATION AND HEATING VENTILATION AND AIR CONDITIONING INFORMATION
4	ALL CEILING GRIDS TO BE CENTERED IN ROOMS - TYPICAL UNLESS NOTED OR DIMENSIONED OTHERWISE
5	LIGHT FIXTURES IN GWB CEILINGS SHALL BE CENTERED IN ROOMS - REF; ELECTRICAL DRAWINGS FOR LOCATION.
6	ALL EXPOSED DUCTWORK, PIPES, CONDUIT AND STRUCTURE SHALL BE CLEAN AND FREE OF ANY MANUFACTURER OR CONSTRUCTION DEFECTS
7	THE SUSPENDED CEILING SYSTEM, MECHANICAL DUCTWORK AND LIGHTING FIXTURES SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE ABOVE / SEISMIC RESTRAINTS

RCP LEGEND

- 2'x2' ACOUSTICAL CEILING PANEL
- PAINTED GYPSUM WALLBOARD CEILING (MR = MOISTURE RESISTANT)
- EXPOSED STRUCTURE
- MTL-1 SOFFIT PANEL W/ BEAD
- MTL-2 SOFFIT PANEL
- WD-1 SUSPENDED WOOD PLANK
- WD-2 SUSPENDED WOOD PLANK
- WAY FINDING SIGN

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JONESBORO MUNICIPAL AIRPORT TERMINAL REPLACEMENT
3921 LINDBERGH DRIVE
JONESBORO, AR 72401

3	03/21/2025	ADDENDUM 003
1	03/07/2025	ADDENDUM 001

LL237 REGISTERED ARCHITECT STATE OF ARKANSAS
10/14/2024

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REFLECTED CEILING PLAN

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A-121

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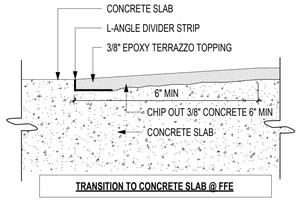
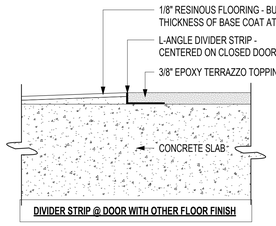
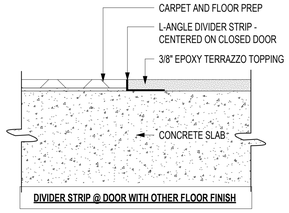


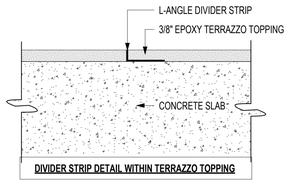
T TRANSITION TO CONCRETE - E-T
6" = 1'-0"



9 GUIDE DETAIL - E-9
6" = 1'-0"

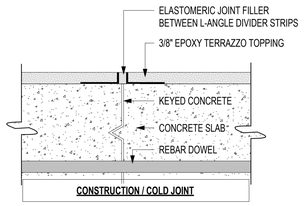


8 GUIDE DETAIL - E-8
6" = 1'-0"



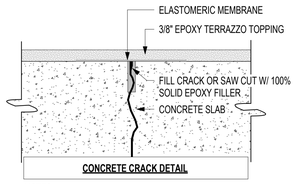
NOTES:
- A DIVIDER STRIP USED AS TERMINATION TO SEPARATE COLORS OR AS AESTHETIC FEATURE

7 GUIDE DETAIL - E-7
6" = 1'-0"



NOTES:
- USE AT CONSTRUCTION / COLD JOINTS WITH EITHER KEYED CONCRETE OR REBAR DOWELS.

6 GUIDE DETAIL - E-6
6" = 1'-0"

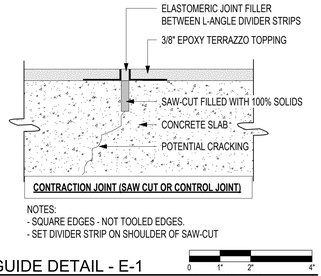


NOTES:
- ELASTOMERIC MEMBRANE AT THICKNESS AND WIDTH AS RECOMMENDED BY EPOXY TERRAZZO MANU.
- FIBERGLASS MESH REINFORCEMENT PER EPOXY MANU.

5 GUIDE DETAIL - E-5
6" = 1'-0"

1 FINISH FLOOR PLAN EPOXY TERRAZZO
1/8" = 1'-0"

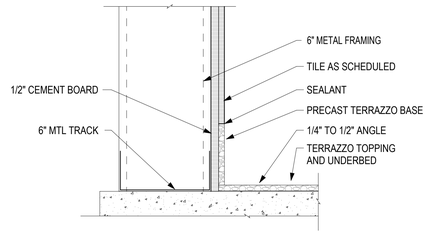
SCALE : 1/8" = 1'-0"



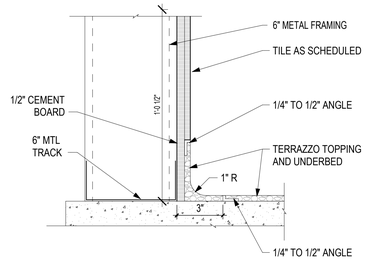
NOTES:
- SQUARE EDGES - NOT TOOLED EDGES.
- SET DIVIDER STRIP ON SHOULDER OF SAW-CUT

4 GUIDE DETAIL - E-1
6" = 1'-0"

SCALE : 6" = 1'-0"



3 EPOXY TERRAZZO FLOOR
3" = 1'-0"



2 EPOXY TERRAZZO COVE BASE
3" = 1'-0"

EPOXY LEGEND

NTMA STANDARD COLORS

- EP-III-71
- EP-I-52
- EP-II-61
- EP-II-68

GUIDE DETAILS

E-5	AS REQUIRED
E-1	E-5 E-6
E-7	
E-8	
E-T	

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JONESBORO MUNICIPAL AIRPORT TERMINAL REPLACEMENT

3921 LINDBERGH DRIVE
JONESBORO, AR 72401

3	03/21/2025	ADDENDUM 003
1	03/07/2025	ADDENDUM 001

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FINISH FLOOR PLAN EPOXY TERRAZZO

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A-142

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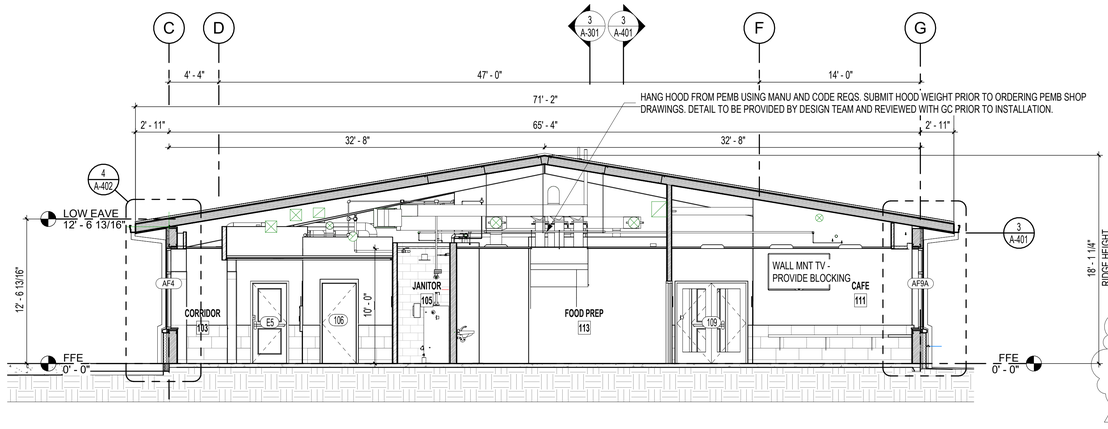
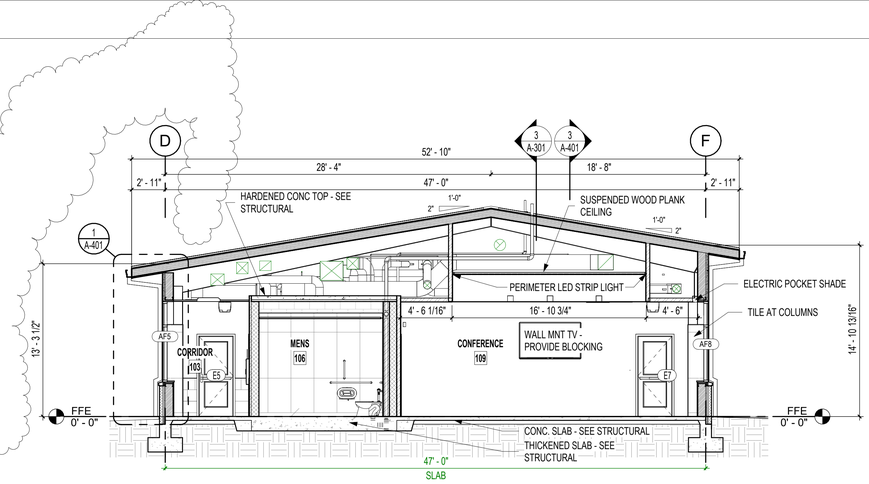
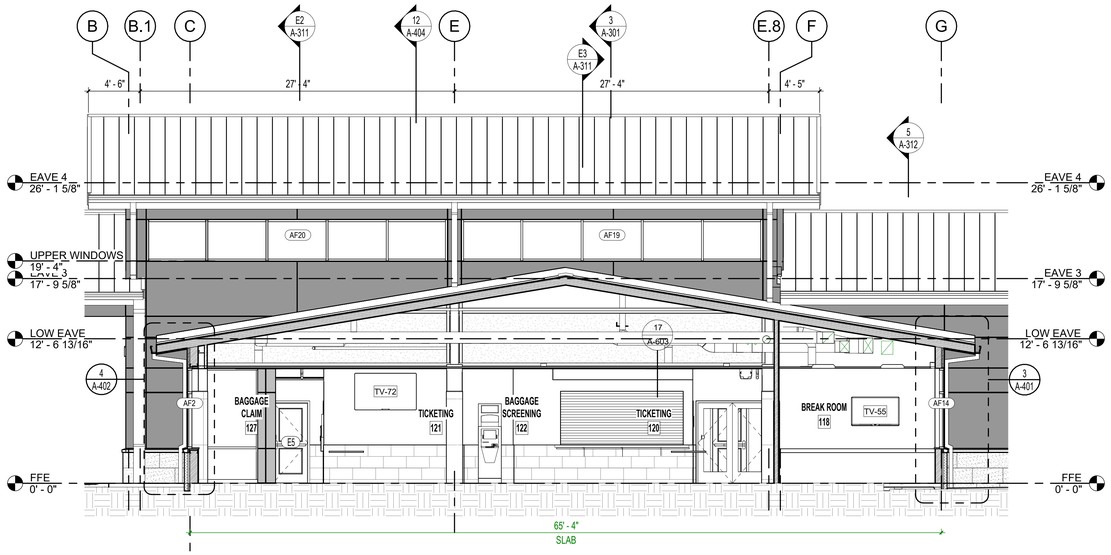


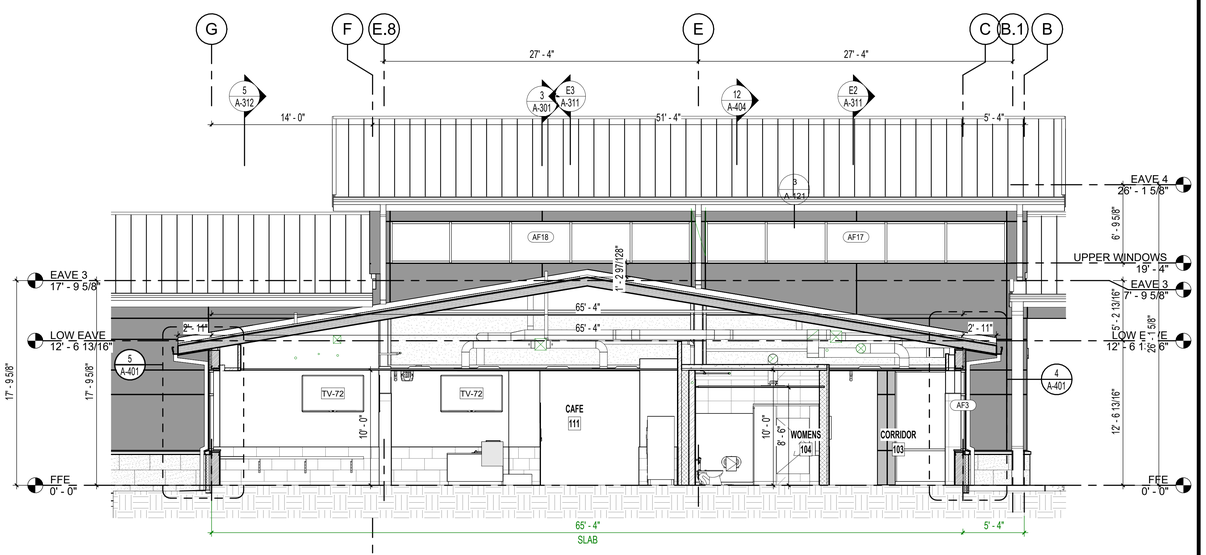
6 BUILDING SECTION 6
3/16" = 1'-0"



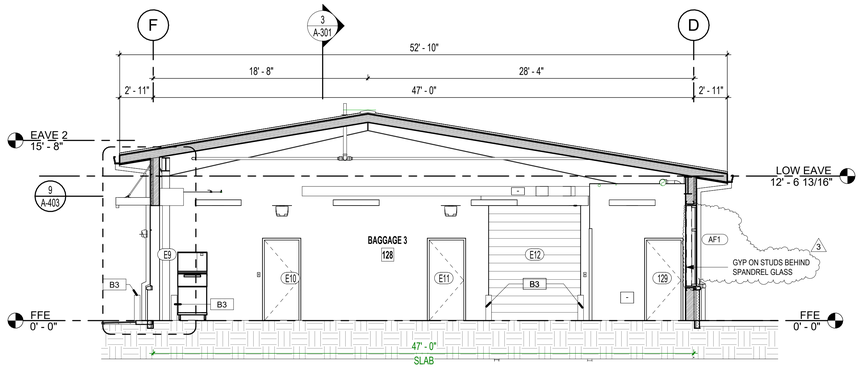
5 BUILDING SECTION 5
3/16" = 1'-0"



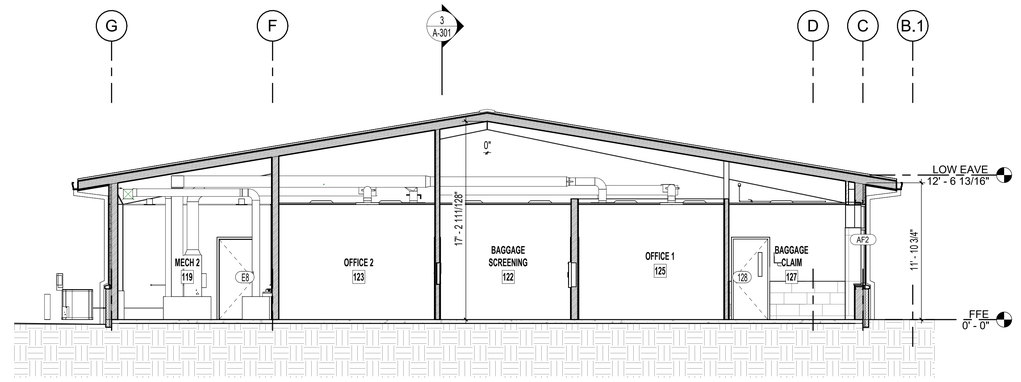
8 BUILDING SECTION 8
3/16" = 1'-0"



7 BUILDING SECTION 7
3/16" = 1'-0"



10 BUILDING SECTION 10
3/16" = 1'-0"



9 BUILDING SECTION 9
3/16" = 1'-0"

SCALE : 3/16" = 1'-0"

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JONESBORO MUNICIPAL AIRPORT TERMINAL REPLACEMENT

3921 LINDBERGH DRIVE
JONESBORO, AR 72401

3	03/21/2025	ADDENDUM 003

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LL237
REGISTERED ARCHITECT
STATE OF ARKANSAS
10/14/2024

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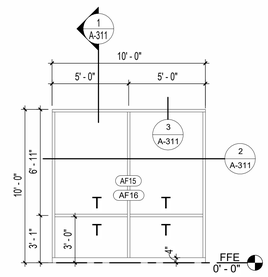
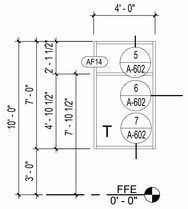
CONTENTS
BUILDING SECTIONS

SHEET NUMBER
A-302

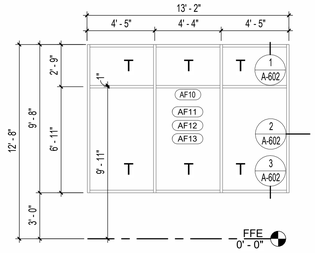
3/21/2025 5:27:38 PM



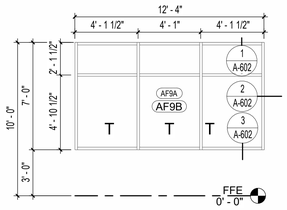
AF15 & AF16
1/4" = 1'-0"



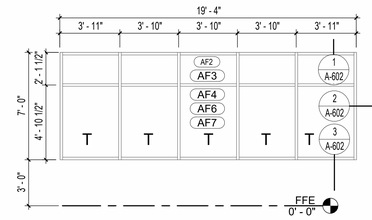
AF14
1/4" = 1'-0"



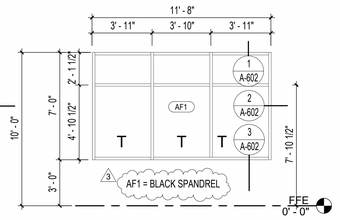
AF10, AF11, AF12 & AF13
1/4" = 1'-0"



AF9A & AF9B
1/4" = 1'-0"



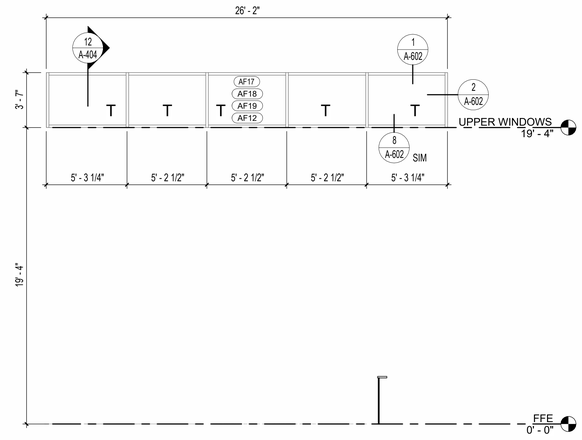
AF2, AF3, AF4, AF6 & AF7
1/4" = 1'-0"



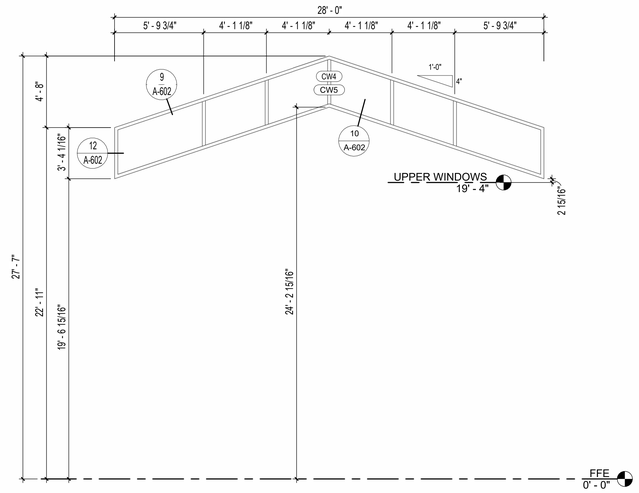
AF1, AF5 & AF8
1/4" = 1'-0"

SCALE : 1/4" = 1'-0"

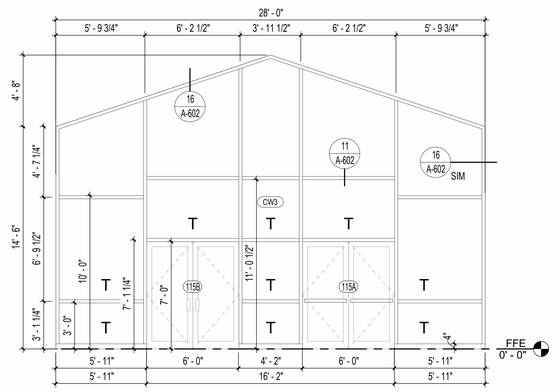
T = TEMPERED GLASS
SUPPLIER TO VARIFY
ALL TEMPERED PANELS
PER BUILDING CODES



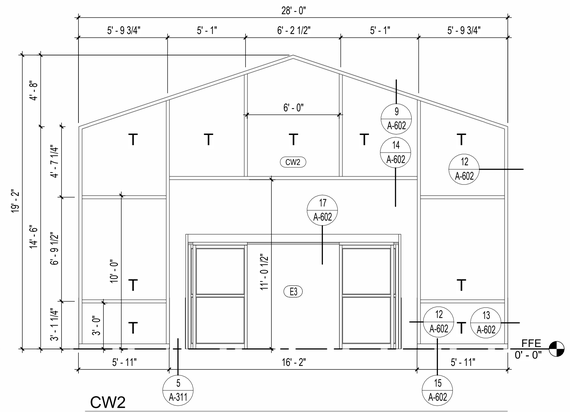
AF17, AF18, AF19 & AF20
1/4" = 1'-0"



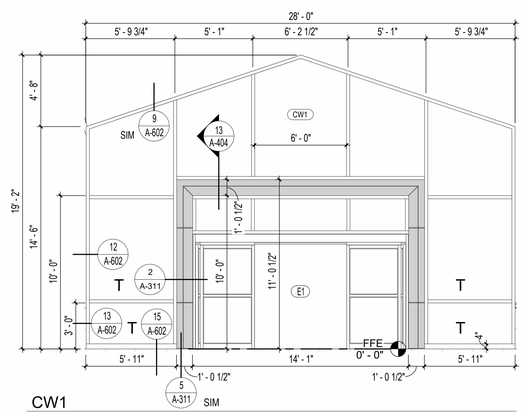
CW4 & CW5
1/4" = 1'-0"



CW3
1/4" = 1'-0"



CW2
1/4" = 1'-0"



CW1
1/4" = 1'-0"

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JONESBORO MUNICIPAL AIRPORT
TERMINAL REPLACEMENT

3921 LINDBERGH DRIVE
JONESBORO, AR 72401

3	03/21/2025	ADDENDUM 003

COOPER MIXON ARCHITECTS PLLC
LL237
REGISTERED ARCHITECT
STATE OF ARKANSAS
10/14/2024

CONSTRUCTION DOCUMENTS

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2226

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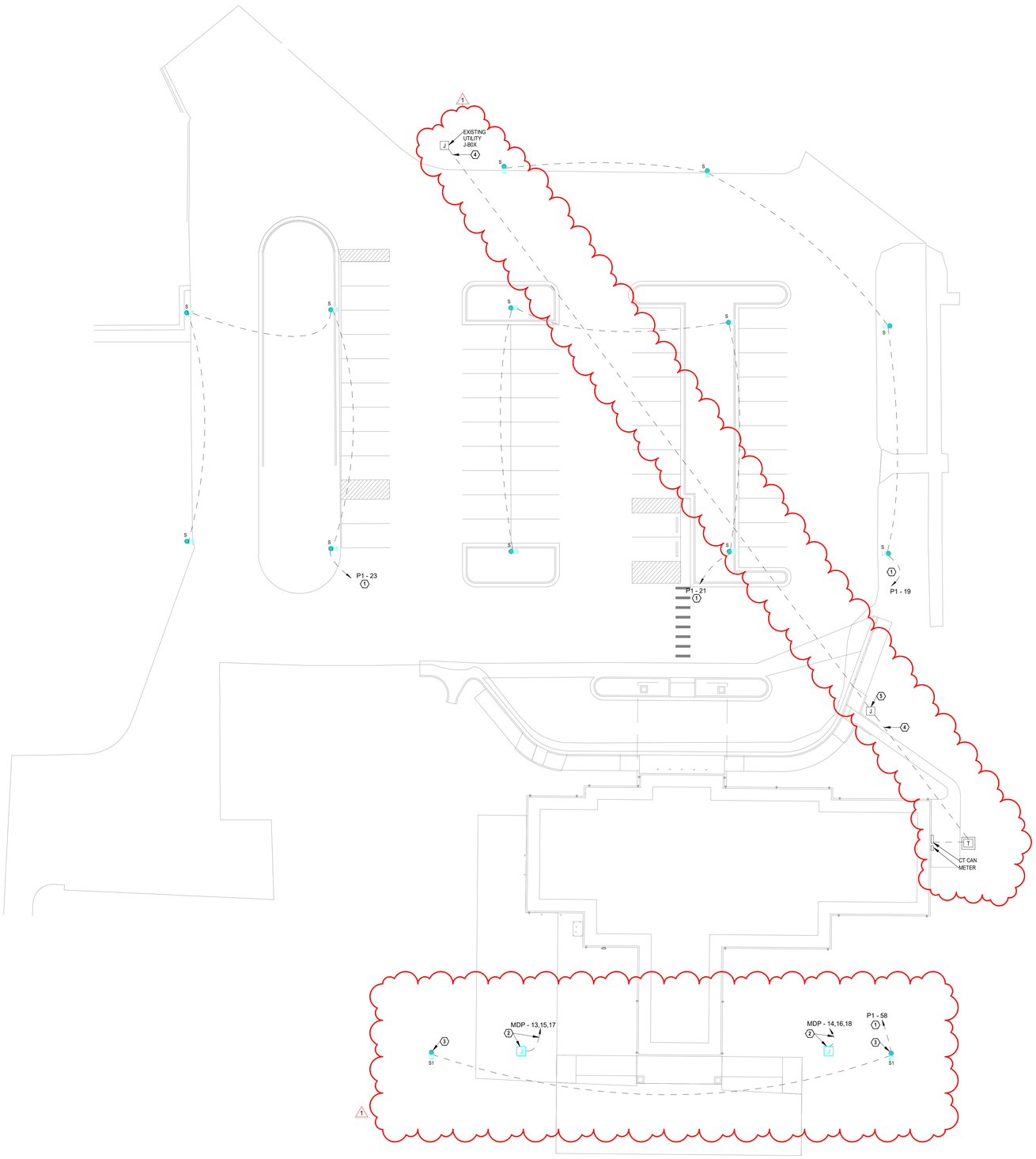
CONTENTS
ALUMINUM FRAME & CURTAIN WALL ELEVATIONS

SHEET NUMBER
A-601

3/21/2025 2:56:42 PM

KEYED NOTES

1. PROVIDE AND INSTALL #10 CONDUCTORS WITH #10G, IN 3/4" CONDUIT. ROUTE CIRCUIT THROUGH RELAY LOCATED IN "LCP" LIGHTING CONTROL PANEL. PHOTOCELL ON, TIME CLOCK OFF (VERIFY TIME WITH OWNER). TIME CLOCK ON (VERIFY TIME WITH OWNER). PHOTOCELL OFF.
2. VERIFY EXACT LOCATION OF AIRCRAFT APU WITH OWNER PRIOR TO INSTALL. PROVIDE AND INSTALL (4) #6 CONDUCTORS WITH (1) #6 IN 1-1/4" CONDUIT.
3. VERIFY EXACT LOCATION OF TARMAC APRON LIGHT FIXTURES WITH OWNER PRIOR TO INSTALL.
4. PROVIDE AND INSTALL (3) 2" PVC SCHEDULE 80 CONDUITS TIED INTO EXISTING UTILITY JUNCTION BOX. COORDINATE CONNECTIONS WITH UTILITY. CONDUIT MUST BE LONG SWEEP (36") 90 DEGREE ANGLES FOR ANY TURNS.
5. PROVIDE AND INSTALL NEW JUNCTION BOX. COORDINATE EXACT LOCATION WITH UTILITY.



1 SITE PLAN - ELECTRICAL
1" = 20'-0"

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JONESBORO MUNICIPAL AIRPORT
TERMINAL REPLACEMENT

3921 LINDBERGH DRIVE
JONESBORO, AR 72401

1	3/21/25	ADDENDUM 3

CONSTRUCTION DOCUMENTS

PROJECT NO.
2226

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DATE
10/18/2024

CONTENTS
SITE PLAN - ELECTRICAL

STATE OF ARKANSAS
JAMES PRESTON HARVEY
REGISTERED ENGINEER
No. 5822
10/16/2024

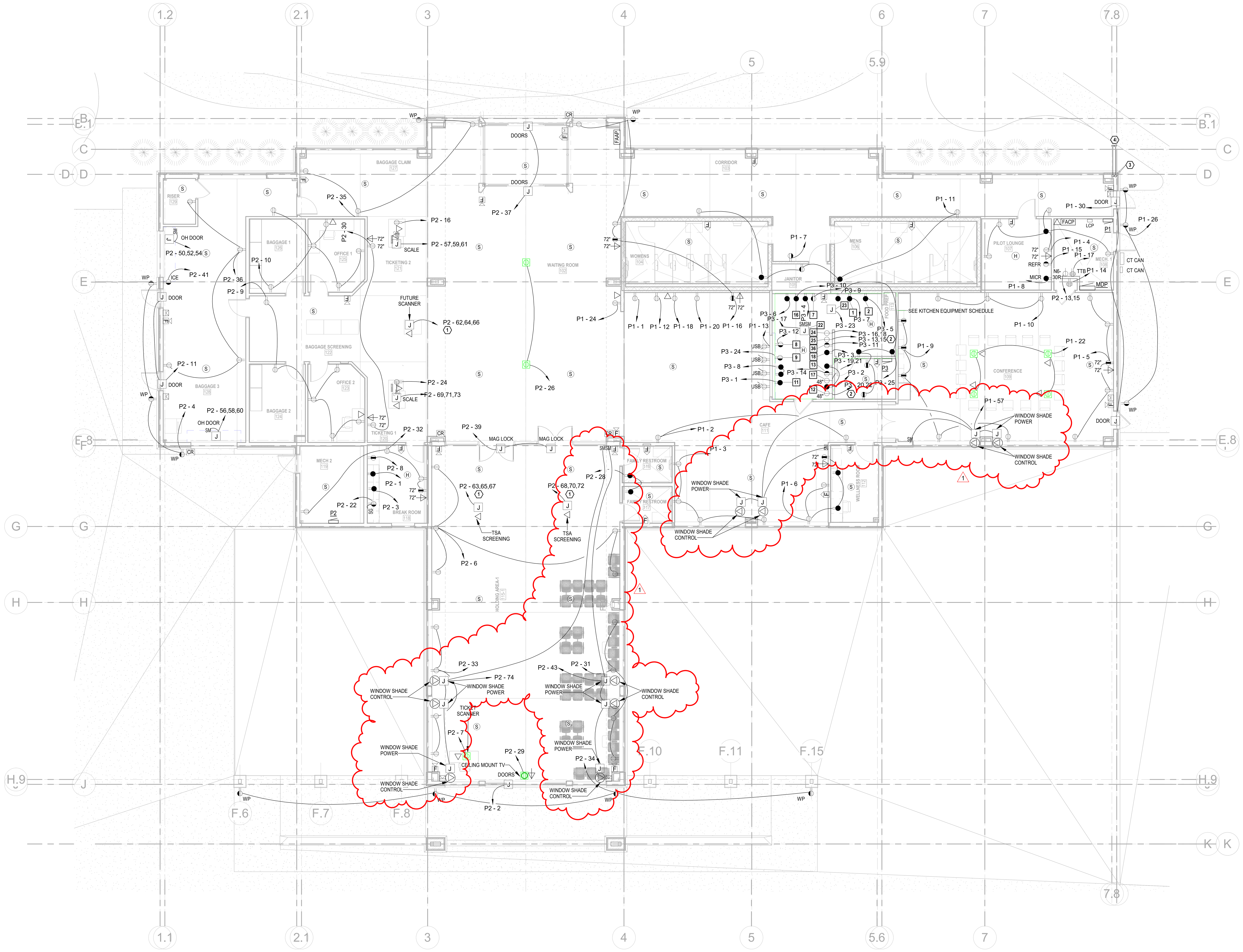
STATE OF ARKANSAS
INSIGHT ENGINEERING, PLLC
No. 3523

SHEET NUMBER
E002

3/21/2025 8:39:01 AM

KEYED NOTES

1. PROVIDE AND INSTALL (2) 2" CONDUITS BELOW GRADE TO FLUSH MOUNTED J-BOX FOR FUTURE CONDUCTORS.
2. PROVIDE AND INSTALL #8 CONDUCTORS, WITH #10G, IN 1" CONDUIT.
3. PROVIDE AND INSTALL (2) 2" CONDUITS IN WALL TO ABOVE ACCESSIBLE CEILING FOR FIBER INSTALLATION. FIBER TO BE ROUTED TO MECHANICAL 1 #108 VIA J-HOOKS ABOVE ACCESSIBLE CEILING TO TERMINATE IN MECHANICAL ROOM 1 #108.
4. CONDUIT SHALL EXTEND 5' OUTSIDE OF THE BUILDING BELOW GRADE AS REQUIRED BY FIBER UTILITY COMPANY. CONTRACTOR TO COORDINATE CONNECTION TO FIBER UTILTIY WITH OWNER'S REPRESENATIVE.



1 FLOOR PLAN - POWER AND SYSTEMS
1/8" = 1'-0"

KITCHEN EQUIPMENT SCHEDULE

ITEM NUMBER	DESCRIPTION
1	REFRIGERATOR
2	FREEZER
7	ICE MAKER
8	UNDERCOUNTER BEVERAGE REFRIGERATOR
9	KEG COOLER W/ TAP
11	POINT OF SALE
12	MICROWAVE OVEN
13	UNDERCOUNTER FREEZER
16	ELECTRIC PIZZA OVEN
17	PANINI SANDWICH UNIT
18	REFRIGERATED SANDWICH UNIT
22	HOOD (VERIFY LOCATION). ELECTRICAL CONTRACTOR TO CONNECT ALL LIGHTS AND FANS INTERNAL TO HOOD.
23	FIRE CONTROL SYSTEM (VERIFY LOCATION)
24	12" FRYER, ELECTRIC
25	24" GRILL, ELECTRIC
36	36" REFRIGERATED STAND

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JONESBORO MUNICIPAL AIRPORT
TERMINAL REPLACEMENT

3921 LINDBERGH DRIVE
JONESBORO, AR 72401

1	3/21/25	ADDENDUM 3

CONSTRUCTION DOCUMENTS

PROJECT NO.
2226

PROJECT NAME
TERMINAL REPLACEMENT

DATE
10/18/2024

CONTENTS
FLOOR PLAN - POWER AND SYSTEMS

SHEET NUMBER
E102

10/18/2024

3/21/2025 11:58:24 AM

Branch Panel: MDP

Panel Location: MECH. 1 108
Supply From: MDP
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 42,000
Bus Rating: 800 A
MCB Rating: 800 A

Notes:

CKT	Circuit Description	Trip (A)	Poles	"A"		"B"		"C"		Poles	Trip (A)	Circuit Description	CKT
1	P1 (SUBFEED)	225	3	22601	23167					3	225	P2 (SUBFEED)	2
3	--	--	--			23695	20203			--	--	--	4
5	--	--	--					23555	20193	--	--	--	6
7	P3	125	3	10474	6926					3	125	WH-1	8
9	--	--	--			10014	6926			--	--	--	10
11	--	--	--					4090	6926	--	--	--	12
13	AIRCRAFT APU	80	3	4299	4299					3	80	AIRCRAFT APU	14
15	--	--	--			4299	4299			--	--	--	16
17	--	--	--					4299	4299	--	--	--	18
19	KMAU-1 ELEC HEAT	60	2	4701	4982					2	60	KMAU-1	20
21	--	--	--			4701	4982			--	--	--	22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
		Total Load:		81448 VA		79118 VA		63361 VA					
		Total Amps:		699 A		680 A		528 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	742 VA	100.00%	742 VA		
Lighting	2624 VA	100.00%	2624 VA	**Total Conn. Load:**	223927 VA
Other	8899 VA	100.00%	8899 VA	**Total Est. Demand:**	204198 VA
Power	162204 VA	100.00%	162204 VA	**Total Conn. Current:**	635 A
Receptacle	49458 VA	60.11%	29729 VA	**Total Est. Demand Current:**	567 A

Branch Panel: P3

Panel Location: Space 110L
Supply From: MDP
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Bus Rating: 125 A
MCB Rating: 125 A

Notes:

CKT	Circuit Description	Trip (A)	Poles	A		B		C		Poles	Trip (A)	Circuit Description	CKT
1	(11) POINT OF SALE	20	1	240	560					1	20	Receptacle	2
3	(18) REFRIGERATED SANDWICH UNIT (SHUNT...	20	1			480	650			1	20	Receptacle	4
5	(2) FREEZER	20	1					480	650	1	20	Receptacle	6
7	(1) REFRIGERATOR	20	1	720	1200					1	20	Receptacle FOOD PREP 113	8
9	(7) ICE MAKER	20	1			1800	740			1	20	Receptacle	10
11	(36) REFRIGERATED STAND (SHUNT TRIP)	20	1					720	360	1	20	(8) UNDERCOUNTER BEVERAGE REFRIGERATOR	12
13	(25) GRILL (SHUNT TRIP)	40	2	3016	360					1	20	(13) FREEZER	14
15	--	--	--			3016	520			2	20	(24) FRYER (SHUNT TRIP)	16
17	(22) HOOD LIGHTS AND FAN	20	1					500	520	--	--	--	18
19	(17) PANINI PRESS	20	2	1040	1768					2	25	(12) MICROWAVE	20
21	--	--	--			1040	1768			--	--	--	22
23	(23) FIRE CONTROL SYSTEM	20	1					500	360	1	20	(9) KEG COOLER WITH TAP	24
25	Receptacle	20	1	1570	0					1	20	SPARE	26
27	SPARE	20	1			0	0			1	20	SPARE	28
29	SPARE	20	1					0	0	1	20	SPARE	30
31	SPARE	20	1	0	0					1	20	SPARE	32
33	SPARE	20	1			0	0			1	20	SPARE	34
35	SPARE	20	1					0	0	1	20	SPARE	36
37	SPACE	--	1	--	--					1	--	SPACE	38
39	SPACE	--	1			--	--			1	--	SPACE	40
41	SPACE	--	1					--	--	1	--	SPACE	42
		Total Load:		10474 VA		10014 VA		4090 VA					
		Total Amps:		95 A		91 A		34 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	1000 VA	100.00%	1000 VA		
Receptacle	23578 VA	71.21%	16789 VA	**Total Conn. Load:**	24578 VA
				Total Est. Demand:	17789 VA
				Total Conn. Current:	73 A
				Total Est. Demand Current:	49 A

Branch Panel: P1

Panel Location: MECH. 1 108
Supply From: MDP
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Bus Rating: 225 A
MCB Rating: MLO

Notes:

CKT	Circuit Description	Trip (A)	Poles	A		B		C		Poles	Trip (A)	Circuit Description	CKT
1	Receptacle	20	1	180	360					1	20	Receptacle	2
3	Receptacle	20	1			720	1080			1	20	Receptacle	4
5	Receptacle CONFERENCE 115	20	1					900	900	1	20	Receptacle Room 117	6
7	Receptacle	20	1	180	180					1	20	Receptacle	8
9	Receptacle	20	1			900	540			1	20	Receptacle	10
11	Receptacle Room 111, 112, 113	20	1					900	180	1	20	Receptacle	12
13	Receptacle	20	1	720	180					1	20	Receptacle	14
15	Receptacle	20	1			180	900			1	20	Receptacle	16
17	Receptacle	20	1					180	180	1	20	Receptacle	18
19	Lighting - SITE	20	1	380	180					1	20	Receptacle	20
21	Lighting - SITE	20	1			380	720			1	20	Receptacle CONFERENCE 115	22
23	Lighting - SITE	20	1					190	1000	1	20	Receptacle	24
25	Lighting	20	1	1764	180					1	20	Receptacle CONFERENCE 115	26
27	Lighting	20	1			1175	585			1	20	EF-1	28
29	Lighting	20	1					342	1000	1	20	POWER DOORS	30
31	Lighting CORRIDOR 103	20	1	635	447					1	20	CP-1 AND CP-2	32
33	Lighting	20	1			437	343			1	20	RCP	34
35	Lighting CONFERENCE 109	20	1					1175	2000	2	25	AUH-6	36
37	Lighting	20	1	2039	2000					--	--	--	38
39	Lighting	20	1			1997	3333			3	60	AHU-7	40
41	AHU-9	20	2					2500	3333	--	--	--	42
43	--	--	--	2500	3333					--	--	--	44
45	AHU-8	20	2			2500	1248			2	20	HP-6	46
47	--	--	--					2500	1248	--	--	--	48
49	HP-8	25	2	1560	3467					3	80	HP-7	50
51	--	--	--			1560	3467			--	--	--	52
53	HP-9	25	2					1560	3467	--	--	--	54
55	--	--	--	1560	756					1	20	KEF-1	56
57	WINDOW SHADES 109, 111	20	1			1440	190			1	20	Lighting - SITE	58
59	SPARE	20	1					0	0	1	20	SPARE	60
61	SPARE	20	1	0	0					1	20	SPARE	62
63	SPARE	20	1			0	0			1	20	SPARE	64
65	SPARE	20	1					0	0	1	20	SPARE	66
67	SPARE	20	1	0	0					1	20	SPARE	68
69	SPARE	20	1			0	0			1	20	SPARE	70
71	SPARE	20	1					0	0	1	20	SPARE	72
73	SPARE	20	1	0	0					1	20	SPARE	74
75	SPARE	20	1			0	0			1	20	SPARE	76
77	SPARE	20	1					0	0	1	20	SPARE	78
79	SPACE	--	1	--	--					1	--	SPACE	80
81	SPACE	--	1			--	--			1	--	SPACE	82
83	SPACE	--	1					--	--	1	--	SPACE	84
		Total Load:		22601 VA		23695 VA		23555 VA					
		Total Amps:		188 A		199 A		198 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	742 VA	100.00%	742 VA		
Lighting	2624 VA	100.00%	2624 VA	**Total Conn. Load:**	69851 VA
Other	8713 VA	100.00%	8713 VA	**Total Est. Demand:**	69131 VA
Power	46332 VA	100.00%	46332 VA	**Total Conn. Current:**	195 A
Receptacle	11440 VA	93.71%	10720 VA	**Total Est. Demand Current:**	192 A

Branch Panel: P2

Panel Location: MECH 2 119
Supply From: MDP
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Bus Rating: 225 A
MCB Rating: 225 A

Notes:

CKT	Circuit Description	Trip (A)	Poles	A		B		C		Poles	Trip (A)	Circuit Description	CKT
1	Receptacle	20	1	180	500					1	20	Power	2
3	Receptacle	20	1			180	540			1	20	Receptacle	4
5	CP-2	20	1					186	900	1	20	Receptacle HALLWAY 125	6
7	Receptacle HOLDING AREA 126	20	1	180	180					1	20	Receptacle	8
9	Receptacle OFFICE 2 105	20	1			1080	1080			1	20	Receptacle Room 109, 108	10
11	Power	20	1					1000	1560	2	25	HP-3	12
13	R IT	20	2	1500	1560					--	--	--	14
15	--	--	--			1500	180			1	20	Receptacle TICKETING 1 101A	16
17	HP-4	25	2					1560	1664	2	20	EUH-1	18
19	--	--	--	1560	1664					--	--	--	20
21	AHU-4	35	2			2500	180			1	20	Receptacle	22
23	--	--	--					2500	180	1	20	Receptacle TICKETING 2 101B	24
25	AHU-3	35	2	2500	360					1	20	R WAITING ROOM 102	26
27	--	--	--			2500	360			1	20	Receptacle Room 117	28
29	Receptacle HOLDING AREA 126	20	1					180	360	1	20	Receptacle TICKETING 2 101B	30
31	Receptacle	20	1	720	720					1	225	Receptacle	32
33	Receptacle HOLDING AREA 126	20	1			720	720			1	20	Receptacle	34
35	Receptacle Room 121	20	1					720	720	1	20	Receptacle	36
37	Power	20	1	1000	1248					2	20	HP-1	38
39	Power BAGGAGE CLAIM-1 121-1	20	1			1000	1248			--	--	--	40
41	Receptacle	20	1					1000	1248	2	20	HP-5	42
43	WINDOW SHADES HOLDING AREA-1 115-1	20	1	1440	1248					--	--	--	44
45	HP-3	20	2			1248	2000			2	25	AHU-2	46
47	--	--	--					1248	2000	--	--	--	48
49	AHU-1	25	2	2000	167					3	20	OVER HEAD DOOR	50
51	--	--	--			2000	167			--	--	--	52
53	AHU-5	25	2					2000	167	--	--	--	54
55	--	--	--	2000	167					3	20	OVER HEAD DOOR	56
57	Power	20	3			167	167			--	--	--	58
59	--	--	--					167	167	--	--	--	60
61	--	--	--	167	167					3	20	Power BAGGAGE SCREENING 101C	62
63	Power SCREENING AREA 102	20	3			167	167			--	--	--	64
65	--	--	--					167	167	--	--	--	66
67	--	--	--	167	167					3	20	Power SCREENING AREA 102	68
69	Power TICKETING 2 101B	20	3			167	167			--	--	--	70
71	--	--	--					167	167	--	--	--	72
73	--	--	--	167	1440					1	20	WINDOW SHADES HOLDING AREA-1 115-1	74
75	SPARE	20	1			0	0			1	20	SPARE	76
77	SPARE	20	1					0	0	1	20	SPARE	78
79	SPARE	20	1	0	--					1	--	SPACE	80
81	SPACE	--	1			--	--			1	--	SPACE	82
83	SPACE	--	1					--	--	1	--	SPACE	84
		Total Load:		23167 VA		20203 VA		20193 VA					
		Total Amps:		193 A		168 A		168 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	186 VA	100.00%	186 VA		
Power	48936 VA	100.00%	48936 VA	**Total Conn. Load:**	63562 VA
Receptacle	14440 VA	84.63%	12220 VA	**Total Est. Demand:**	61342 VA
				Total Conn. Current:	177 A
				Total Est. Demand Current:	170 A

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1	3/21/25	ADDENDUM 3

CONSTRUCTION DOCUMENTS

PROJECT NO.
2226

PROJECT NAME
TERMINAL REPLACEMENT

DATE
10/18/2024

CONTENTS
ELECTRICAL SCHEDULES

SHEET NUMBER
E301

STATE OF ARKANSAS — BRIAN T. FREEMAN — REGISTERED PROFESSIONAL ENGINEER — No. 5822 — BRIAN FREEMAN PRESTON HARRIS
CERTIFICATE OF AUTHORIZATION — INSIGHT ENGINEERING, PLLC — No. 3523 — ARKANSAS
10/18/2024

3/21/2025 11:58:24 AM