### Bid# 2023008-BID3000 Columbia County Justice Center Renovation & Addition February 26, 2024

#### Addendum #3

This addendum forms a part of the Contract Documents and modifies the original drawings and specifications. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

#### **Clarifications**

- 1. Finish legend listed a WT-2 Tile. I cannot find it in the drawings. Please identify the areas where this product should be installed. WT-2 was not used and has been removed and labeled as VOID in the finish legend. WT-2 has also been removed from the project specifications.
- 2. WT-3 wall base in the restrooms is specified to be 6"x12" cove base. This product is not manufactured. 3"x24" bullnose tile is available. Please approve Schluter Dilex cove base trim to use instead of cove base tile which is not made. Schluter Dilex can be used, please reference revised finish legend on interior design drawings. Schluter Dilex has also been added to the project specifications.
- 3. FT-3 Floor Tile size and finish are not provided. Please provide. FT-3 will be standard size 24"x24" with a honed finish. Please reference revised finish legend on interior design drawings.
- 4. The specification section 075423 2.4 Roof Insulation calls for extruded polystyrene board insulation and later under 3.4.2 f specifies for the insulation to be adhered with insulation adhesive. The single ply manufacturers that are specified do not approve the adhesion of extruded polystyrene insulation with their low-rise foam adhesives. Please advise if we can use the industry standard polyisocyanurate insulation. Polyisocyanurate insulation can be used. The existing TPO specification has been removed and replaced with a new TPO specification added to the project specifications. The existing and new roof assemblies are (1) hour fire rated UL assemblies. Please refer to UL P827 during installation of new roofing on the existing structure; reference note 2A of the Roof Plan Notes, sheets A2.3A-A2.3C for all locations.
- 5. The same specification section under 2.5 D requires the use of 1/4" Dens Deck Prime but the cover board is not visible on any of the wall sections or roofing details except for the recover system of the existing roof at roof section C. Is the cover board at the roof sections A and B or can it be omitted?
  - The coverboard is used on portions of the existing roof in Area "A" and Area "B" as part of the re-roof/recover. Please reference note 2B of the Roof Plan Notes, sheets A2.3A-A2.3C for the locations.

- 6. When working in the Addition and Renovation areas will there be any type of security check, badging, or background checking required? If so, is there a cost associated with that? There will be required daily check-in and check-out for all workers. Badging is required for all workers at all times. All tools left onsite must be secured in a lock box daily. See revised project specifications. The County will handle costs associates with background checking.
- 7. There are several areas in the Mechanical drawings where work is to take place in the Renovation areas but they are not part of any particular phase. How is this to be addressed since it is not part of a Phase. This pertains to the Alternate to replace the VAV boxes entirely or replace only the controls and/or Trim. The General Contractor will need to develop and present a schedule of how they plan to accomplish all the work to be completed.
- 8. Is the Alternate to Replace the Controls and/or Trim a Deductive Alternate or is it an Add Alternate. It is not addressed on the Bid Form. Our opinion is that both would be add alternates but only one would be taken.
- 9. Will the building be occupied in the renovation area while construction is taking place? The building will be occupied during the renovations, but courthouse personnel will be shifted to other locations within the building while their spaces are under construction.
- 10. Drawing M2.1, M2.2, M3.1 and M3.2, Note #2 tells you to replace the controls and Trim on existing VAV Boxes under a alternate. Drawings M2.3 & Drawings M2.4 do not mention replacing any of the controls but drawing M3.3 & Drawings M3.4 tells you to replace the controls. Please confirm you are to replace the controls for all the existing VAV boxes on the 2nd floor. The alternates for terminal units apply to all existing terminal units. The piping drawings show the locations of all the existing terminal units.
- 11. Will work that takes place in the existing building take place during normal hours or will it take place after hours/weekends? Work will take place during normal hours, see project specifications.
- 12. **Civil:** All new curbs are to be painted yellow except for the portion at the northeast access area. Please see the attached Exhibit D for reference.

#### **Revisions to the DRAWINGS**

#### 1. REMOVE and REPLACE the following sheets:

- A1.1A First Floor Area "A" Existing/Demolition Plan
- A1.1B First Floor Area "B" Existing/Demolition Plan
- A1.1C First Floor Area "C" Existing/Demolition Plan
- A1.2A Second Floor Area "A" Existing/Demolition Plan
- A1.2B Second Floor Area "B" Existing/Demolition Plan
- A1.2C Second Floor Ares "C" Existing/Demolition Plan
- ID0.0 Finish Legend and Notes
- ID0.1 Basement finish Plan Area "B"
- ID0.2A First Floor Finish Plan Area "A"
- ID0.2B First Floor Finish Plan Area "B"
- ID0.2C First Floor Finish Plan Area "C"
- ID0.3A Second Floor Finish Plan Area "A"
- ID0.3B Second Floor Finish Plan Area "B"
- ID0.3C Second Floor Finish Plan Area "C"
- ID1.1 Finish Detail Elevations
- ID1.2 Finish Detail Elevations & Soffit/Crown Finishes
- ID1.3 Finish Detail Elevations
- ID2.2A First Floor Furniture Plan Area "A"
- ID2.2B First Floor Furniture Plan Area "B"
- ID2.2C First Floor Furniture Plan Area "C"
- ID2.3A Second Floor Furniture Plan Area "A"
- ID2.3B Second Floor Furniture Plan Area "B"
- ID2.3C Second Floor Furniture Plan Area "C"
- E1.0 Electrical Legend
- E2.0 Basement Floor Lighting Plan
- E2.1A First Floor Lighting Plan Part A
- E2.1B First Floor Lighting Plan Part B
- E2.2A Second Floor Lighting Plan Part A
- E2.2B Second Floor Lighting Plan Part B
- E3.0 Basement Floor Plan Power Part B
- E3.1A First Floor Plan Power Part A
- E3.2A Second Floor Plan Power Part A
- E3.2B Second Floor Power Plan Part B
- E4.1 First Floor Mechanical Power Plan
- E4.2 Second Floor and Roof Mechanical Power Plan
- E5.1 Basement and First Floor Fire Alarm Plan
- E5.2 Second Floor Fire Alarm Plan
- E5.5 First Floor Telecommunications System

#### **Revisions to the PROJECT MANUAL**

- **1. REPLACE** Table of Contents Volume I with attached Section.
- **2. REPLACE** Proposal with attached Section.
- **3. REPLACE** AIA Document A101 Standard Form of Agreement Between Owner and Contractor with attached Section.
- **4. REPLACE** EXHIBIT C SPECIFICATIONS TABLE OF CONTENTS with attached Section.
- **5. REPLACE** Section 011000 SUMMARY with attached Section.
- **6. REPLACE** Section 012000 ALLOWANCES with attached Section.
- **7. REPLACE** Section 017700 CLOSEOUT PROCEDURES with attached Section.
- **8. REPLACE** Section 072100 THERMAL INSULATION with attached Section.
- **9. REPLACE** Section 075423 THERMOPLASTIC-POLYOLEFIN (TPO) ROOFING with attached Section.
- **10.** SECTION 081115 DETENTION HOLLOW METAL SLIDING DOORS a. Paragraph 2.1, A.1.c, **ADD** American Steel Products.
- **11.** SECTION 081115.13 DETENTION HOLLOW METAL DOORS AND WINDOWS a. Paragraph 2.1, A.1.c, **ADD** American Steel Products.
- **12. REPLACE** Section 093013 CERAMIC TILING with attached Section.
- **13. REPLACE** Section 096623 TERRAZZO FLOORING with attached Section.
- **14. NOTE** Specification 283111 Digital Addressable Fire Alarm System:
  - a. The new fire alarm system shall be based on a Siemens Cerberus Pro System.
- **15. NOTE** Specification 282300 Video Surveillance: The contractor shall include in the base bid the following cameras for the total quantity of cameras in package. All communication drops for the total quantity of cameras shall be provided. The exact locations of these cameras shall be coordinated prior to shop drawings and installation.
  - a. Dual Camera: AXIS P4707-PLVE Panoramic Camera, Min 5MP, Smoked Dome Total Quantity: Six (6)
  - b. 360: AXIS M4318-PLVE Panoramic Camera, Min 12MP, recessed Quantity: Twenty-four (24)
  - c. Indoor Dome (Typical): AXIS P3268-LV Dome Camera, Min 8MP, Smoked Dome, recessed.

Quantity: Twenty (20)

- d. Outdoor Dome (Typical): AXIS Q3538-LVE Dome Camera, Min 8MP, Smoked Dome
  - Quantity: Four (4)
- e. Indoor PTZ: AXIS P5676-LE PTZ Camera, Min 4MP, Smoked Dome, recessed
  - Quantity: Twenty (20)
- f. Outdoor PTZ:AXIS Q6075-E PTZ Network Camera, Min 1080P, Smoked

Dome

Quantity: Six (6)

g. Rooftop PTZ: AXIS Q6010-E Network Camera, Quad camera built in, Min

1080PP, Smoked Dome

Quantity: Six (6)

#### **ATTACHMENTS:**

DRAWINGS: A1.1A, A1.1B, A1.1C, A1.2A, A1.2B, A1.2C, ID0.0, ID0.1, ID0.2A, ID0.2B, ID0.2C, ID0.3A, ID0.3B, ID0.3C, ID1.1, ID1.2, ID1.3, ID2.2A, ID2.2B, ID2.2C, ID2.3A, ID2.3B, ID2.3C, E1.0, E2.0, E2.1A, E2.1B, E2.2A, E2.2B, E3.0, E3.1A, E3.2A, E3.2B, E4.1, E4.2, E5.1, E5.2, E5.5 EXHIBIT D – Yellow Curbing SPECIFICATIONS listed above.

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

MAINTAIN FIRE-RESISTIVE RATING OF FLOOR SYSTEM. FINISH CONCRETE IN A MANNER SUITABLE FOR NEW FLOOR FINISHES. 15. PATCH ALL WALL INTERSECTIONS AND PENETRATIONS RESULTING FROM THE REMOVAL OF EXISTING WALLS, DUCTWORK, PIPING, ELECTRICAL RACEWAYS, ETC. IN THE INTERIOR WALLS TO REMAIN. THE PENETRATIONS SHALL BE FILLED FLUSHED WITH AND OF THE SAME MATERIALS AS THE ADJACENT WALLS.

13. VERIFY FLOOR ELEVATIONS ON EACH SIDE OF WALLS BEING

REMOVED. GRIND AND PATCH FLOOR AND INSTALL EPOXY FILL

14. PATCH ALL FLOOR PENETRATIONS RESULTING FROM REMOVAL OF

EXISTING DUCTWORK, PIPING ELECTRICAL RACEWAYS, ETC. FILL PENETRATION WITH CONCRETE, FULL FLOOR THICKNESS AND

MATERIAL AS REQUIRED FOR A SMOOTH LEVEL FLOOR CONDITION

16. REMOVE AND REPLACE EXISTING FIRE ALARM SYSTEM IN ITS ENTIRETY. REFER TO ELECTRICAL AND FIRE PROTECTION DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

17. REMOVE AND REPLACE ALL EXISTING LIGHTING ON THE FIRST FLOOR AND SECOND FLOOR. EXISTING LIGHTING IN THE BASEMENT TO REMAIN. REPAIR EXISTING BASEMENT LIGHT FIXTURES AS REQUIRED. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS.

18. REFER TO ATTACHED FLOOR PLANS FOR EXISTING CONSTRUCTION TO REMAIN, EXTENT OF DEMOLITION, AND SCHEDULED ITEMS FOR RELOCATION.

**DEMOLITION PLAN NOTES**  $\langle X \rangle$ 

REMOVE PORTION OF EXISTING WALL OR EXISTING WALL IN ITS ENTIRETY, INCLUDING ALL EXISTING WALL BRACING AND /OR STRUCTURAL REBAR IN CMU WALLS. REMOVAL OF WALL FOR NEW DOOR OPENING DIMENSIONS MUST BE COORDINATED WITH SPECIFIED DOOR ON NEW FLOOR PLANS AND DOOR SCHEDULE.

ALL DIMENSIONS SHOULD BE FIELD VERIFIED BY G.C. BEFORE ANY

DEMOLITION IS STARTED. CONTRACTOR IS RESPONSIBLE FOR ALL

WHETHER SHOWN HERE OR NOT. NOTIFY THE ARCHITECT OF ANY

MATERIALS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL. ALL WORK DEMOLISHED SHALL BE REMOVED FROM PREMISES DAILY.

DEMOLITION NECESSARY FOR INSTALLATION OF NEW WORK

THE GENERAL CONTRACTOR SHALL FURNISH ALL LABOR AND

ALL EXISTING EXTERIOR WALL DIMENSIONS ARE SHOWN TO THE

EXISTING FINISHED FACE OF WALLS UNLESS NOTED OTHERWISE.

PATCH OPENINGS IN WALLS, CEILINGS AND FLOORS RESULTING

STRUCTURE FOR NEW MECHANICAL, ELECTRICAL AND PLUMBING

DUCTWORK, PIPING AND CONDUIT. REINFORCE OPENINGS AS

INFORMATION ON OPENINGS AS REQUIRED BY NEW WORK AND

REFER TO MECHANICAL, ELECTRICAL, PLUMBING PLANS AND

ADEQUATE PRECAUTIONS TO PROTECT BUILDING OCCUPANTS.

AREAS SHALL BE MAINTAINED BY CONTRACTOR. DAMAGE TO

DEMOLITION OF EXISTING UTILITIES SHALL BE MADE SO THAT SERVICE TO OTHER AREAS UTILIZED BY THE OWNER ARE NOT

WHILE DEMOLITION IS OCCURRING. SENSITIVE GOVERNMENT

ACTIVITIES WILL BE PROCEEDING IN ADJACENT AREAS. MINIMIZE NOISE AND DUST LEVELS AND TEMPORARILY SUSPEND DEMOLITION

MATERIALS AND EXISTING FINISHES THROUGHOUT ALL PHASES OF

CONSTRUCTION. CONSTRUCTION AREAS AND OCCUPIED OR PUBLIC

EXISTING-TO-REMAIN CONSTRUCTION, MATERIALS OR EQUIPMENT TO

INTERRUPTED. PROVIDE TEMPORARY UTILITIES, ISOLATION VALVES, DISCONNECTS, ETC. WHERE REQUIRED DURING DEMOLITION AND

SPECIFICATIONS FOR REMOVAL, RELOCATION, OR REROUTING OF

SAW CUT AND PATCH EXISTING FLOOR SLABS AND ROOF

REQUIRED. SEE STRUCTURAL DRAWINGS FOR SPECIFIC

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING

BE RESTORED TO ORIGINAL CONDITION.

AS REQUESTED BY THE BUILDING OWNER.

FROM DEMOLITION WORK. PATCH WITH MATCHING MATERIALS AND

DISCREPANCIES PRIOR TO PROCEEDING.

CONSTRUCTION. UNLESS NOTED OTHERWISE.

EXISTING RENOVATIONS.

EXISTING UTILITIES.

NEW CONSTRUCTION.

DOOR TRIM (IF APPLICABLE). TERMINATE ANY EXISTING ELECTRICAL AND ACCESS CONTROL AS REQUIRED.

WOOD TRIM (IF APPLICABLE) AND GLAZING.

ELECTRICAL AND/OR PLUMBING AS REQUIRED. REFER TO

5A. REMOVE EXISTING MILLWORK, COUNTERTOPS AND SHELVING IN

SHELVING. SEE I.D. AND PLUMBING DRAWING AND SPECIFICATIONS.

5C. EXISTING MILLWORK, COUNTERTOP AND TRANSACTION WINDOWS

REMOVE EXISTING PLUMBING FIXTURES. TERMINATE ALL SUPPLY

REMOVE EXISTING EXTERIOR FRP COLUMN, STEEL COLUMNS, FRAMING AND WALL ABOVE. PROVIDE STRUCTURAL SUPPORT AT

ETC.) SHOULD BE SAVED AND STORED ON SITE FOR POSSIBLE REUSE IN FUTURE EXPANSION. PATCH AND REPAIR FLOORS AND

WALLS TO RECEIVE NEW FINISH.

DRAWINGS FOR ALL EXISTING DEVICES AND EQUIPMENT TO REMAIN

11. REMOVE EXISTING SUSPENDED GYPSUM BOARD CEILING AND/OR BE INSTALLED.

REQUIRED TO ACCOMMODATE NEW LIGHTING LAYOUT. REFER TO

13. REMOVE EXISTING FIRE SHUTTER AND ALL ASSOCIATED PARTS AND INFRASTRUCTURE. TERMINATE ALL ELECTRICAL AS REQUIRED. REFER TO ELECTRICAL DRAWINGS.

EXHAUST GRILLES AND ASSOCIATED APPURTENANCES. REFER TO MECHANICAL DRAWINGS.

15. REMOVE EXISTING JANITOR SINK AND FAUCET. TERMINATE ALL SUPPLY AND WASTE PIPING AS REQUIRED. REFER TO PLUMBING

16. REMOVE EXISTING EXTERIOR FRP CEILING/SOFFIT, INSULATION, AND TRIM TO ACCOMMODATE NEW CEILING. REFER TO NEW REFLECTED CEILING PLAN AND DETAILS FOR ADDITIONAL INFORMATION.

17. REMOVE EXISTING TOILET ACCESSORIES. PATCH AND REPAIR WALLS TO RECEIVE NEW FINISH.

18. REMOVE EXISTING CONCRETE SIDEWALK AND FOUNDATIONS AND REPAIR WITH NEW CONCRETE SLAB. NEW SLAB TO BE FLUSH WITH EXISTING FINISH FLOOR. REFER TO STRUCTURAL DRAWINGS.

19. REMOVE EXISTING GYPSUM BULKHEAD AND FRAMING AND/OR GLASS FIBER REINFORCED GYPSUM TRIM PROFILE IN ITS ENTIRETY. PATCH AND REPAIR WALLS AND CEILING TO RECEIVE

20. REPAIR EXISTING TERRAZZO (IN KIND) WHERE EXISTING WALLS, DOORS AND DOOR FRAMES ARE SCHEDULED FOR DEMOLITION. COLOR AND PATTERN TO MATCH EXISTING.

21. REMOVE EXISTING LIFE SAFETY EQUIPMENT AND DEVICES AS INDICATED BY THE ELECTRICAL DRAWINGS. PATCH AND REPAIR WALLS AND CEILINGS TO RECEIVE NEW FINISH

22. REMOVE EXISTING WALL MATERIALS AND SUBSTRATE DOWN TO EXISTING WOOD STUD WITH ONLY WOOD STUD FRAMING TO REMAIN. CAP ALL EXISTING POWER AND DATA SO IT CAN BE REUSED. RECONSTRUCT ALL EXISTING JUDGE'S BENCHES AND

CASEWORK, JURY BOX RAILS, BENCH RAILS AND OTHER WALLS AS NOTED, WITH NEW FINISH.

23. REMOVE, REPAIR AND/OR REPLACE, REFINISH AND REINSTALL EXISTING WOOD BASE, CHAIR RAIL, AND WOOD DOOR CASINGS (WHERE APPLICABLE). MATCH EXISTING STAIN COLOR AND TRIM PROFILE. SEE I.D. DRAWINGS.

24. REMOVE, REPAIR, REFINISH AND REINSTALL EXISTING WOOD PEWS IN ALL EXISTING COURTROOMS.

25. REMOVE AND REPLACE ALL EXISTING BOLTED DOWN CHAIRS THROUGHOUT ALL EXISTING COURTROOMS.

26. REMOVE AND REPLACE EXISTING RAISED PANEL, DOUBLE ACTING DOORS AND HARDWARE IN EXISTING COURTROOMS.

27. REMOVE AND REPLACE EXISTING WOOD VENEER SQUARES (11"X11") AND CURVED WOOD VENEER BACKING BEHIND JUDGE'S BENCH IN ALL EXISTING COURTROOMS, UNLESS NOTED OTHERWISE

28. PATCH AND REPAIR EXISTING WOOD VENEER WAINSCOT PANELING IN ALL EXISTING COURTROOMS. EXISTING WAINSCOT PANELING TO RECEIVE NEW PAINT FINISH.

 $_{\wedge}$  29. REMOVE AND REPLACE EXISTING WALL LOUVER. SEE MECHANICAL DRAWINGS AND SPECIFICATIONS. 

30. EXISTING HARDWOOD GUARDRAIL CAP AND HARDWOOD HANDRAIL TO BE REFINISHED, MATCH EXISTING STAIN COLOR. REPAIR OR REPLACE ANY DAMAGED HARDWARE AS REQUIRED.



- REMOVE EXISTING DOOR, HOLLOW METAL FRAME, AND WOOD
- REMOVE EXISTING INTERIOR AND/OR EXTERIOR WINDOWS, FRAMES,
- REMOVE EXISTING EQUIPMENT AND APPLIANCES. TERMINATE ALL ELECTRICAL AND PLUMBING DRAWINGS.
- ITS ENTIRETY TO ACCOMMODATE NEW CONSTRUCTION.
- 5B. REMOVE AND REPLACE EXISTING MILLWORK, COUNTERTOPS AND
- TO REMAIN. REPAIR OR REPLACE ANY DAMAGE AND REFINISH.
- AND WASTE PIPING AS REQUIRED. REFER TO PLUMBING DRAWINGS.
- NEW OPENING. REFER TO STRUCTURAL DRAWINGS REMOVE EXISTING FLOOR FINISHES AND BASE COVERINGS. ALL EXISTING SOLID WOOD TRIM (BASE, CHAIR RAIL, DOOR CASINGS,
- REMOVE EXISTING WALL FINISHES/ DECOR TO INCLUDE ALL WALL COVERINGS, DECORATIVE PANELING AND TRIM. PATCH AND REPAIR WALLS TO RECEIVE NEW FINISH.
- 10. REMOVE AND/OR REPLACE EXISTING ACOUSTICAL CEILING TILE AND GRID. SEE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. AND ALL NEW DEVICES AND EQUIPMENT TO BE INSTALLED.
- GYPSUM BOARD SECURITY CEILING. SEE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. DRAWINGS FOR ALL EXISTING DEVICES AND EQUIPMENT TO REMAIN AND ALL NEW DEVICES AND EQUIPMENT TO
- 12. REMOVE EXISTING LIGHT FIXTURES AND INFRASTRUCTURE AS ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR EXTENT OF DEMOLITION.
- 14. REMOVE EXISTING HVAC SUPPLY DIFFUSERS, RETURN OR

 $\times$ AREA "A" $\times$ **KEY PLAN** 

**EXISTING/ DEMOLITION FIRST FLOOR PLAN - AREA "A"** \A1.1A \ SCALE: 1/8" = 1'-0"

WALL LEGEND

EXISTING WALLS/COMPONENTS TO BE

REMOVED/CHANGED, SEE DEMOLITION PLANS

NEW WALLS/PARTITIONS, SEE WALL TYPES A2.0

EXISTING WALLS TO REMAIN

<u>COPY</u>

<u>RECORDS</u>

<u>ELEV. 4</u>

<u>BREAK</u>

CORR.

**CLERK** 

EXISTING TERRAZZO

BORDER (TYP.)

<u>WAITING</u>

FRONT DESK

**OFFICE** 

LOBBY

 $\langle 3 \rangle \langle 1 \rangle$ 

1 / A1.1C

**SUPERIOR** 

<u>COURT</u>

**8** 23

111 111 111 111 111 111 111 111 111 111 111

SECRETARY

<u>VAULT</u>

**CLERICAL** 

ATTORNEY

**EQUIP** 

<u>JUSTICE</u>

**CLERK** 

CLERK

**JUSTICE** 

REPORTER

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 $\langle 8 \rangle \langle 10 \rangle \langle 12 \rangle \langle 14 \rangle$ 

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STOR.

**STORAGE** 

COUNTY LUMBIA

CENTER

JUSTICE

ISSUED FOR BIE 01/29/2024 ADDENDUM #3

ISSUED FOR BIE 01/29/2024

**GENERAL DEMOLITION NOTES** WALL LEGEND ALL DIMENSIONS SHOULD BE FIELD VERIFIED BY G.C. BEFORE ANY EXISTING WALLS TO REMAIN DEMOLITION IS STARTED. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION NECESSARY FOR INSTALLATION OF NEW WORK — – – – – — EXISTING WALLS/COMPONENTS TO BE REMOVED/CHANGED, SEE DEMOLITION PLANS

NEW WALLS/PARTITIONS, SEE WALL TYPES A2.0

WHETHER SHOWN HERE OR NOT. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING.

THE GENERAL CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL. ALL WORK DEMOLISHED SHALL BE REMOVED FROM PREMISES DAILY.

ALL EXISTING EXTERIOR WALL DIMENSIONS ARE SHOWN TO THE EXISTING FINISHED FACE OF WALLS UNLESS NOTED OTHERWISE.

PATCH OPENINGS IN WALLS, CEILINGS AND FLOORS RESULTING FROM DEMOLITION WORK. PATCH WITH MATCHING MATERIALS AND CONSTRUCTION. UNLESS NOTED OTHERWISE.

SAW CUT AND PATCH EXISTING FLOOR SLABS AND ROOF STRUCTURE FOR NEW MECHANICAL, ELECTRICAL AND PLUMBING DUCTWORK, PIPING AND CONDUIT. REINFORCE OPENINGS AS REQUIRED. SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION ON OPENINGS AS REQUIRED BY NEW WORK AND EXISTING RENOVATIONS.

REFER TO MECHANICAL, ELECTRICAL, PLUMBING PLANS AND SPECIFICATIONS FOR REMOVAL, RELOCATION, OR REROUTING OF EXISTING UTILITIES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ADEQUATE PRECAUTIONS TO PROTECT BUILDING OCCUPANTS, MATERIALS AND EXISTING FINISHES THROUGHOUT ALL PHASES OF CONSTRUCTION. CONSTRUCTION AREAS AND OCCUPIED OR PUBLIC AREAS SHALL BE MAINTAINED BY CONTRACTOR, DAMAGE TO EXISTING-TO-REMAIN CONSTRUCTION, MATERIALS OR EQUIPMENT TO BE RESTORED TO ORIGINAL CONDITION.

DEMOLITION OF EXISTING UTILITIES SHALL BE MADE SO THAT SERVICE TO OTHER AREAS UTILIZED BY THE OWNER ARE NOT INTERRUPTED. PROVIDE TEMPORARY UTILITIES, ISOLATION VALVES, DISCONNECTS, ETC. WHERE REQUIRED DURING DEMOLITION AND NEW CONSTRUCTION.

WHILE DEMOLITION IS OCCURRING, SENSITIVE GOVERNMENT ACTIVITIES WILL BE PROCEEDING IN ADJACENT AREAS. MINIMIZE NOISE AND DUST LEVELS AND TEMPORARILY SUSPEND DEMOLITION AS REQUESTED BY THE BUILDING OWNER.

10. THE GENERAL CONTRACTOR SHALL SEAL OFF, REMOVE OR RENDER INACTIVE ALL EXISTING TELECOMMUNICATION, ELECTRICAL, PLUMBING, MECHANICAL, FIRE PROTECTION/ALARM DEVICES, SECURITY, ETC. THAT ARE INACTIVE AND/OR CANNOT BE INCORPORATED IN THE RENOVATION. ALL ABANDONED DEVICES /

PIPES / VENTS / CONDUITS / ETC. TO BE REMOVED BACK TO SOURCE AFTER WALL DEMOLITION. 11. PROVIDE TEMPORARY PARTITIONS TO MAINTAIN PROPER FIRE EXITS AND TO CONFINE PEDESTRIAN ACTIVITY TO OCCUPIED SPACES.

MAINTAIN REQUIRED MEANS OF EGRESS AND SIGNAGE FOR EGRESS. 12. WHERE DEMOLITION ACTIVITY DAMAGES OR REMOVES ANY APPLIED FIREPROOFING OR CONSTRUCTION INSTALLED AS PART OF A RATED

13. VERIFY FLOOR ELEVATIONS ON EACH SIDE OF WALLS BEING REMOVED. GRIND AND PATCH FLOOR AND INSTALL EPOXY FILL MATERIAL AS REQUIRED FOR A SMOOTH LEVEL FLOOR CONDITION.

14. PATCH ALL FLOOR PENETRATIONS RESULTING FROM REMOVAL OF EXISTING DUCTWORK, PIPING ELECTRICAL RACEWAYS, ETC. FILL PENETRATION WITH CONCRETE, FULL FLOOR THICKNESS AND MAINTAIN FIRE-RESISTIVE RATING OF FLOOR SYSTEM. FINISH CONCRETE IN A MANNER SUITABLE FOR NEW FLOOR FINISHES.

15. PATCH ALL WALL INTERSECTIONS AND PENETRATIONS RESULTING FROM THE REMOVAL OF EXISTING WALLS, DUCTWORK, PIPING, ELECTRICAL RACEWAYS, ETC. IN THE INTERIOR WALLS TO REMAIN. THE PENETRATIONS SHALL BE FILLED FLUSHED WITH AND OF THE SAME MATERIALS AS THE ADJACENT WALLS.

16. REMOVE AND REPLACE EXISTING FIRE ALARM SYSTEM IN ITS ENTIRETY. REFER TO ELECTRICAL AND FIRE PROTECTION DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

17. REMOVE AND REPLACE ALL EXISTING LIGHTING ON THE FIRST FLOOR AND SECOND FLOOR. EXISTING LIGHTING IN THE BASEMENT TO REMAIN. REPAIR EXISTING BASEMENT LIGHT FIXTURES AS REQUIRED. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS.

18. REFER TO ATTACHED FLOOR PLANS FOR EXISTING CONSTRUCTION TO REMAIN, EXTENT OF DEMOLITION, AND SCHEDULED ITEMS FOR RELOCATION.

TRIM TO ACCOMMODATE NEW CEILING. REFER TO NEW REFLECTED

CEILING PLAN AND DETAILS FOR ADDITIONAL INFORMATION.

18. REMOVE EXISTING CONCRETE SIDEWALK AND FOUNDATIONS AND

ENTIRETY. PATCH AND REPAIR WALLS AND CEILING TO RECEIVE

EXISTING FINISH FLOOR. REFER TO STRUCTURAL DRAWINGS.

19. REMOVE EXISTING GYPSUM BULKHEAD AND FRAMING AND/OR

GLASS FIBER REINFORCED GYPSUM TRIM PROFILE IN ITS

REPAIR WITH NEW CONCRETE SLAB. NEW SLAB TO BE FLUSH WITH

WALLS TO RECEIVE NEW FINISH.

## **DEMOLITION PLAN NOTES** (X)

- REMOVE PORTION OF EXISTING WALL OR EXISTING WALL IN ITS ENTIRETY, INCLUDING ALL EXISTING WALL BRACING AND /OR DOOR OPENING DIMENSIONS MUST BE COORDINATED WITH SPECIFIED DOOR ON NEW FLOOR PLANS AND DOOR SCHEDULE.
- REMOVE EXISTING INTERIOR AND/OR EXTERIOR WINDOWS, FRAMES, WOOD TRIM (IF APPLICABLE) AND GLAZING.
- REMOVE EXISTING EQUIPMENT AND APPLIANCES. TERMINATE ALL ELECTRICAL AND/OR PLUMBING AS REQUIRED. REFER TO
- ITS ENTIRETY TO ACCOMMODATE NEW CONSTRUCTION.
- TO REMAIN. REPAIR OR REPLACE ANY DAMAGE AND REFINISH.
- AND WASTE PIPING AS REQUIRED. REFER TO PLUMBING DRAWINGS.
- REMOVE EXISTING EXTERIOR FRP COLUMN, STEEL COLUMNS,
- REMOVE EXISTING FLOOR FINISHES AND BASE COVERINGS. ALL EXISTING SOLID WOOD TRIM (BASE, CHAIR RAIL, DOOR CASINGS ETC.) SHOULD BE SAVED AND STORED ON SITE FOR POSSIBLE
- GYPSUM BOARD SECURITY CEILING. SEE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. DRAWINGS FOR ALL EXISTING DEVICES AND EQUIPMENT TO REMAIN AND ALL NEW DEVICES AND EQUIPMENT TO BE INSTALLED.
- REQUIRED TO ACCOMMODATE NEW LIGHTING LAYOUT. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR EXTENT OF DEMOLITION.
- 13. REMOVE EXISTING FIRE SHUTTER AND ALL ASSOCIATED PARTS AND INFRASTRUCTURE. TERMINATE ALL ELECTRICAL AS REQUIRED. REFER TO ELECTRICAL DRAWINGS.

- STRUCTURAL REBAR IN CMU WALLS. REMOVAL OF WALL FOR NEW
- REMOVE EXISTING DOOR, HOLLOW METAL FRAME, AND WOOD DOOR TRIM (IF APPLICABLE). TERMINATE ANY EXISTING ELECTRICAL AND ACCESS CONTROL AS REQUIRED.
- ELECTRICAL AND PLUMBING DRAWINGS.

- 5C. EXISTING MILLWORK. COUNTERTOP AND TRANSACTION WINDOWS
- NEW OPENING. REFER TO STRUCTURAL DRAWINGS
- REUSE IN FUTURE EXPANSION. PATCH AND REPAIR FLOORS AND WALLS TO RECEIVE NEW FINISH. REMOVE EXISTING WALL FINISHES/ DECOR TO INCLUDE ALL WALL
- COVERINGS, DECORATIVE PANELING AND TRIM. PATCH AND REPAIR WALLS TO RECEIVE NEW FINISH. 10. REMOVE AND/OR REPLACE EXISTING ACOUSTICAL CEILING TILE AND
- 11. REMOVE EXISTING SUSPENDED GYPSUM BOARD CEILING AND/OR
- 12. REMOVE EXISTING LIGHT FIXTURES AND INFRASTRUCTURE AS
- 14. REMOVE EXISTING HVAC SUPPLY DIFFUSERS, RETURN OR EXHAUST GRILLES AND ASSOCIATED APPURTENANCES. REFER TO MECHANICAL DRAWINGS.

- 15. REMOVE EXISTING JANITOR SINK AND FAUCET. TERMINATE ALL SUPPLY AND WASTE PIPING AS REQUIRED. REFER TO PLUMBING 16. REMOVE EXISTING EXTERIOR FRP CEILING/SOFFIT, INSULATION, AND
- 17. REMOVE EXISTING TOILET ACCESSORIES. PATCH AND REPAIR

- 5A. REMOVE EXISTING MILLWORK, COUNTERTOPS AND SHELVING IN
- 5B. REMOVE AND REPLACE EXISTING MILLWORK, COUNTERTOPS AND
- SHELVING. SEE I.D. AND PLUMBING DRAWING AND SPECIFICATIONS.
- 6. REMOVE EXISTING PLUMBING FIXTURES. TERMINATE ALL SUPPLY
- FRAMING AND WALL ABOVE. PROVIDE STRUCTURAL SUPPORT AT

- GRID. SEE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. DRAWINGS FOR ALL EXISTING DEVICES AND EQUIPMENT TO REMAIN AND ALL NEW DEVICES AND EQUIPMENT TO BE INSTALLED.

`AREA "B" **KEY PLAN** 

EXISTING/ DEMOLITION FIRST FLOOR PLAN - AREA "B" A1.1B / SCALE: 1/8" = 1'-0"

CASE .

MAN.

**PANEL** 

COORD.

**DEPUTY** 

**CLERK** 

 $\langle 8 \rangle \langle 9 \rangle \langle 10 \rangle$ 

1 / A1.1C

<u>OFFICE</u>

**DOMESTIC** 

<u>DIVISION</u>

<u>OFFICE</u>

**DIVISION** 

<u> STAIR</u>

<u>OFFICE</u>

<u>SECRETARY</u>

**CONFERENCE** 

ACCOUNTING

<u>CORR.</u> (8\(\frac{9}{10}\)(12\(\frac{14}{2}\)

-EXISTING

**TERRAZZO** 

BORDER (TYP.)

**CLERK OF** 

CLOSET

**HOLDING** 

<u>ELEV. 5</u>

**CONSTABLES** 

WORKSPACE

LIBRARY

F===#

32'-10 1/4"

 $\sim\sim\sim\sim$ 

**WAITING** 

CORR.

HC/RR

**CHIEF** 

MARSHAL

 $\langle 8 \rangle \langle 9 \rangle$ 

VISITING

<u>JUDGE</u>

 $\langle 8 \rangle \langle 9 \rangle$ 

**NORKSPACE** 

**MAGISTRATE** 

<u>JUDGE</u>

⟨8∖⟨9⟩⟨23⟩

 $\sim$ 

CLERK OF COURT

 $\langle 8 \rangle \langle 9 \rangle \langle 23 \rangle$ 

**COPY/ BREAK** 

V777**7**7777

MAGISTRATE

20. REPAIR EXISTING TERRAZZO (IN KIND) WHERE EXISTING WALLS, DOORS AND DOOR FRAMES ARE SCHEDULED FOR DEMOLITION.

COLOR AND PATTERN TO MATCH EXISTING. 21. REMOVE EXISTING LIFE SAFETY EQUIPMENT AND DEVICES AS

INDICATED BY THE ELECTRICAL DRAWINGS. PATCH AND REPAIR WALLS AND CEILINGS TO RECEIVE NEW FINISH

22. REMOVE EXISTING WALL MATERIALS AND SUBSTRATE DOWN TO EXISTING WOOD STUD WITH ONLY WOOD STUD FRAMING TO REMAIN. CAP ALL EXISTING POWER AND DATA SO IT CAN BE REUSED. RECONSTRUCT ALL EXISTING JUDGE'S BENCHES AND CASEWORK, JURY BOX RAILS, BENCH RAILS AND OTHER WALLS AS NOTED, WITH NEW FINISH.

23. REMOVE, REPAIR AND/OR REPLACE, REFINISH AND REINSTALL EXISTING WOOD BASE, CHAIR RAIL, AND WOOD DOOR CASINGS (WHERE APPLICABLE). MATCH EXISTING STAIN COLOR AND TRIM

PROFILE. SEE I.D. DRAWINGS. 24. REMOVE, REPAIR, REFINISH AND REINSTALL EXISTING WOOD PEWS IN ALL EXISTING COURTROOMS.

25. REMOVE AND REPLACE ALL EXISTING BOLTED DOWN CHAIRS THROUGHOUT ALL EXISTING COURTROOMS.

26. REMOVE AND REPLACE EXISTING RAISED PANEL, DOUBLE ACTING DOORS AND HARDWARE IN EXISTING COURTROOMS.

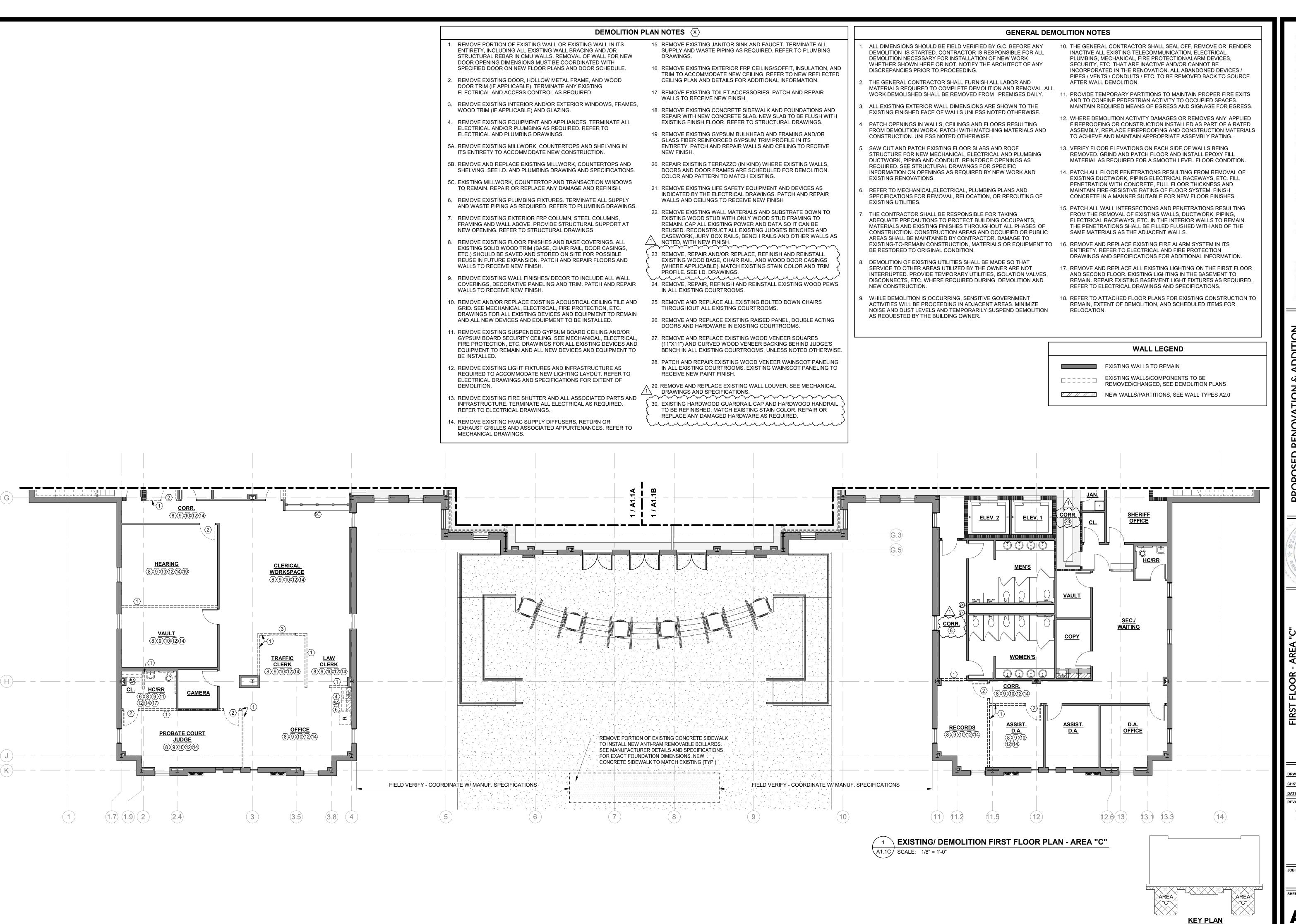
27. REMOVE AND REPLACE EXISTING WOOD VENEER SQUARES (11"X11") AND CURVED WOOD VENEER BACKING BEHIND JUDGE'S BENCH IN ALL EXISTING COURTROOMS, UNLESS NOTED OTHERWISE.

28. PATCH AND REPAIR EXISTING WOOD VENEER WAINSCOT PANELING IN ALL EXISTING COURTROOMS. EXISTING WAINSCOT PANELING TO RECEIVE NEW PAINT FINISH.

29. REMOVE AND REPLACE EXISTING WALL LOUVER. SEE MECHANICAL DRAWINGS AND SPECIFICATIONS.

30. EXISTING HARDWOOD GUARDRAIL CAP AND HARDWOOD HANDRAIL TO BE REFINISHED, MATCH EXISTING STAIN COLOR. REPAIR OR REPLACE ANY DAMAGED HARDWARE AS REQUIRED.

ADDENDUM #3



3 BOOKER+VIC ARCHITECT

LUMBIA COUNTY JUSTICE CENTER

CHRISTOPHER D. BOOKER

FIRST FLOOR - AREA "C"
EXISTING/DEMOLITION PLA

DRWN BY:CLB
CHK'D BY:CB

CHK'D BY:CB

DATE: JANUARY 29, 202

ISSUED FOR BID 01/29/2024 ADDENDUM #3 02/21/2024

1 NO.

SHEET NO.

A1.10

ISSUED FOR BIE 01/29/2024 ADDENDUM #3

2218

ALL DIMENSIONS SHOULD BE FIELD VERIFIED BY G.C. BEFORE ANY DEMOLITION IS STARTED. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION NECESSARY FOR INSTALLATION OF NEW WORK WHETHER SHOWN HERE OR NOT. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING. THE GENERAL CONTRACTOR SHALL FURNISH ALL LABOR AND

**WALL LEGEND** 

COURTROOM #2

\(\(8\)\(10\)\(23\)\(24\)\(25\)

-SPECTATOR SEATING-

 $\underbrace{\frac{\text{WITNESS}}{8 \times 23}}$ 

**LOBBY** 

-OPEN TO BELOW-

1 / A1.2C

EXISTING WALLS TO REMAIN

<u>ELEV. 4</u>

CONF.

**WITNESS** 

**ENFORCEMENT** 

HC HOLDING

CONF.

WAITING 8 23

**STAIRS** 

**COURTROOM #1** 

-SPECTATOR SEATING-

**WAITING** 

23

WITNESS 3/1

**WITNESS** 

(8)<del>2</del>3

WORK STATION

**STORAGE** 

**BREAKROOM** 

<u>WITNESS</u>

<u>VEST</u>

JURY ROOM

HC/

**WITNESS** 

**GRAND JURY** 

\_ - - - - - \_ EXISTING WALLS/COMPONENTS TO BE

REMOVED/CHANGED, SEE DEMOLITION PLANS

NEW WALLS/PARTITIONS, SEE WALL TYPES A2.0

MATERIALS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL. ALL WORK DEMOLISHED SHALL BE REMOVED FROM PREMISES DAILY.

ALL EXISTING EXTERIOR WALL DIMENSIONS ARE SHOWN TO THE EXISTING FINISHED FACE OF WALLS UNLESS NOTED OTHERWISE.

PATCH OPENINGS IN WALLS, CEILINGS AND FLOORS RESULTING FROM DEMOLITION WORK. PATCH WITH MATCHING MATERIALS AND CONSTRUCTION. UNLESS NOTED OTHERWISE.

SAW CUT AND PATCH EXISTING FLOOR SLABS AND ROOF STRUCTURE FOR NEW MECHANICAL, ELECTRICAL AND PLUMBING DUCTWORK, PIPING AND CONDUIT. REINFORCE OPENINGS AS REQUIRED. SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION ON OPENINGS AS REQUIRED BY NEW WORK AND EXISTING RENOVATIONS.

REFER TO MECHANICAL, ELECTRICAL, PLUMBING PLANS AND SPECIFICATIONS FOR REMOVAL, RELOCATION, OR REROUTING OF EXISTING UTILITIES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ADEQUATE PRECAUTIONS TO PROTECT BUILDING OCCUPANTS MATERIALS AND EXISTING FINISHES THROUGHOUT ALL PHASES OF CONSTRUCTION. CONSTRUCTION AREAS AND OCCUPIED OR PUBLIC AREAS SHALL BE MAINTAINED BY CONTRACTOR. DAMAGE TO EXISTING-TO-REMAIN CONSTRUCTION, MATERIALS OR EQUIPMENT TO BE RESTORED TO ORIGINAL CONDITION.

DEMOLITION OF EXISTING UTILITIES SHALL BE MADE SO THAT SERVICE TO OTHER AREAS UTILIZED BY THE OWNER ARE NOT INTERRUPTED. PROVIDE TEMPORARY UTILITIES, ISOLATION VALVES, DISCONNECTS, ETC. WHERE REQUIRED DURING DEMOLITION AND NEW CONSTRUCTION.

WHILE DEMOLITION IS OCCURRING, SENSITIVE GOVERNMENT ACTIVITIES WILL BE PROCEEDING IN ADJACENT AREAS. MINIMIZE NOISE AND DUST LEVELS AND TEMPORARILY SUSPEND DEMOLITION AS REQUESTED BY THE BUILDING OWNER.

SECURITY, ETC. THAT ARE INACTIVE AND/OR CANNOT BE

PIPES / VENTS / CONDUITS / ETC. TO BE REMOVED BACK TO SOURCE AFTER WALL DEMOLITION.

11. PROVIDE TEMPORARY PARTITIONS TO MAINTAIN PROPER FIRE EXITS AND TO CONFINE PEDESTRIAN ACTIVITY TO OCCUPIED SPACES. MAINTAIN REQUIRED MEANS OF EGRESS AND SIGNAGE FOR EGRESS.

12. WHERE DEMOLITION ACTIVITY DAMAGES OR REMOVES ANY APPLIED FIREPROOFING OR CONSTRUCTION INSTALLED AS PART OF A RATED ASSEMBLY, REPLACE FIREPROOFING AND CONSTRUCTION MATERIALS TO ACHIEVE AND MAINTAIN APPROPRIATE ASSEMBLY RATING.

13. VERIFY FLOOR ELEVATIONS ON EACH SIDE OF WALLS BEING REMOVED. GRIND AND PATCH FLOOR AND INSTALL EPOXY FILL MATERIAL AS REQUIRED FOR A SMOOTH LEVEL FLOOR CONDITION.

14. PATCH ALL FLOOR PENETRATIONS RESULTING FROM REMOVAL OF EXISTING DUCTWORK, PIPING ELECTRICAL RACEWAYS, ETC. FILL PENETRATION WITH CONCRETE, FULL FLOOR THICKNESS AND MAINTAIN FIRE-RESISTIVE RATING OF FLOOR SYSTEM. FINISH

15. PATCH ALL WALL INTERSECTIONS AND PENETRATIONS RESULTING FROM THE REMOVAL OF EXISTING WALLS, DUCTWORK, PIPING, ELECTRICAL RACEWAYS, ETC. IN THE INTERIOR WALLS TO REMAIN. THE PENETRATIONS SHALL BE FILLED FLUSHED WITH AND OF THE SAME MATERIALS AS THE ADJACENT WALLS.

16. REMOVE AND REPLACE EXISTING FIRE ALARM SYSTEM IN ITS ENTIRETY. REFER TO ELECTRICAL AND FIRE PROTECTION DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

17. REMOVE AND REPLACE ALL EXISTING LIGHTING ON THE FIRST FLOOR AND SECOND FLOOR. EXISTING LIGHTING IN THE BASEMENT TO REMAIN. REPAIR EXISTING BASEMENT LIGHT FIXTURES AS REQUIRED. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS.

18. REFER TO ATTACHED FLOOR PLANS FOR EXISTING CONSTRUCTION TO REMAIN, EXTENT OF DEMOLITION, AND SCHEDULED ITEMS FOR RELOCATION.

## **DEMOLITION PLAN NOTES** $\langle X \rangle$

REMOVE PORTION OF EXISTING WALL OR EXISTING WALL IN ITS ENTIRETY, INCLUDING ALL EXISTING WALL BRACING AND /OR STRUCTURAL REBAR IN CMU WALLS. REMOVAL OF WALL FOR NEW DOOR OPENING DIMENSIONS MUST BE COORDINATED WITH SPECIFIED DOOR ON NEW FLOOR PLANS AND DOOR SCHEDULE.

REMOVE EXISTING DOOR, HOLLOW METAL FRAME, AND WOOD DOOR TRIM (IF APPLICABLE). TERMINATE ANY EXISTING ELECTRICAL AND ACCESS CONTROL AS REQUIRED.

REMOVE EXISTING INTERIOR AND/OR EXTERIOR WINDOWS, FRAMES, WOOD TRIM (IF APPLICABLE) AND GLAZING.

4. REMOVE EXISTING EQUIPMENT AND APPLIANCES. TERMINATE ALL ELECTRICAL AND/OR PLUMBING AS REQUIRED. REFER TO ELECTRICAL AND PLUMBING DRAWINGS.

5A. REMOVE EXISTING MILLWORK, COUNTERTOPS AND SHELVING IN ITS ENTIRETY TO ACCOMMODATE NEW CONSTRUCTION.

5B. REMOVE AND REPLACE EXISTING MILLWORK, COUNTERTOPS AND SHELVING. SEE I.D. AND PLUMBING DRAWING AND SPECIFICATIONS.

5C. EXISTING MILLWORK, COUNTERTOP AND TRANSACTION WINDOWS TO REMAIN. REPAIR OR REPLACE ANY DAMAGE AND REFINISH.

6. REMOVE EXISTING PLUMBING FIXTURES. TERMINATE ALL SUPPLY

AND WASTE PIPING AS REQUIRED. REFER TO PLUMBING DRAWINGS. REMOVE EXISTING EXTERIOR FRP COLUMN, STEEL COLUMNS, FRAMING AND WALL ABOVE. PROVIDE STRUCTURAL SUPPORT AT NEW OPENING. REFER TO STRUCTURAL DRAWINGS

REMOVE EXISTING FLOOR FINISHES AND BASE COVERINGS. ALL EXISTING SOLID WOOD TRIM (BASE, CHAIR RAIL, DOOR CASINGS, ETC.) SHOULD BE SAVED AND STORED ON SITE FOR POSSIBLE REUSE IN FUTURE EXPANSION. PATCH AND REPAIR FLOORS AND WALLS TO RECEIVE NEW FINISH.

REMOVE EXISTING WALL FINISHES/ DECOR TO INCLUDE ALL WALL COVERINGS, DECORATIVE PANELING AND TRIM. PATCH AND REPAIR WALLS TO RECEIVE NEW FINISH.

10. REMOVE AND/OR REPLACE EXISTING ACOUSTICAL CEILING TILE AND GRID. SEE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. DRAWINGS FOR ALL EXISTING DEVICES AND EQUIPMENT TO REMAIN

AND ALL NEW DEVICES AND EQUIPMENT TO BE INSTALLED.

11. REMOVE EXISTING SUSPENDED GYPSUM BOARD CEILING AND/OR GYPSUM BOARD SECURITY CEILING. SEE MECHANICAL, ELECTRICAL FIRE PROTECTION, ETC. DRAWINGS FOR ALL EXISTING DEVICES AND EQUIPMENT TO REMAIN AND ALL NEW DEVICES AND EQUIPMENT TO BE INSTALLED.

12. REMOVE EXISTING LIGHT FIXTURES AND INFRASTRUCTURE AS REQUIRED TO ACCOMMODATE NEW LIGHTING LAYOUT. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR EXTENT OF DEMOLITION.

13. REMOVE EXISTING FIRE SHUTTER AND ALL ASSOCIATED PARTS AND INFRASTRUCTURE. TERMINATE ALL ELECTRICAL AS REQUIRED. REFER TO ELECTRICAL DRAWINGS.

14. REMOVE EXISTING HVAC SUPPLY DIFFUSERS, RETURN OR EXHAUST GRILLES AND ASSOCIATED APPURTENANCES. REFER TO MECHANICAL DRAWINGS.

- 15. REMOVE EXISTING JANITOR SINK AND FAUCET. TERMINATE ALL SUPPLY AND WASTE PIPING AS REQUIRED. REFER TO PLUMBING
- 16. REMOVE EXISTING EXTERIOR FRP CEILING/SOFFIT, INSULATION, AND TRIM TO ACCOMMODATE NEW CEILING. REFER TO NEW REFLECTED CEILING PLAN AND DETAILS FOR ADDITIONAL INFORMATION.
- 17. REMOVE EXISTING TOILET ACCESSORIES. PATCH AND REPAIR WALLS TO RECEIVE NEW FINISH.

18. REMOVE EXISTING CONCRETE SIDEWALK AND FOUNDATIONS AND REPAIR WITH NEW CONCRETE SLAB. NEW SLAB TO BE FLUSH WITH EXISTING FINISH FLOOR. REFER TO STRUCTURAL DRAWINGS.

19. REMOVE EXISTING GYPSUM BULKHEAD AND FRAMING AND/OR GLASS FIBER REINFORCED GYPSUM TRIM PROFILE IN ITS ENTIRETY. PATCH AND REPAIR WALLS AND CEILING TO RECEIVE

20. REPAIR EXISTING TERRAZZO (IN KIND) WHERE EXISTING WALLS, DOORS AND DOOR FRAMES ARE SCHEDULED FOR DEMOLITION. COLOR AND PATTERN TO MATCH EXISTING.

21. REMOVE EXISTING LIFE SAFETY EQUIPMENT AND DEVICES AS INDICATED BY THE ELECTRICAL DRAWINGS. PATCH AND REPAIR WALLS AND CEILINGS TO RECEIVE NEW FINISH

22. REMOVE EXISTING WALL MATERIALS AND SUBSTRATE DOWN TO EXISTING WOOD STUD WITH ONLY WOOD STUD FRAMING TO REMAIN. CAP ALL EXISTING POWER AND DATA SO IT CAN BE REUSED. RECONSTRUCT ALL EXISTING JUDGE'S BENCHES AND CASEWORK, JURY BOX RAILS, BENCH RAILS AND OTHER WALLS AS

NOTED, WITH NEW FINISH. 23. REMOVE, REPAIR AND/OR REPLACE, REFINISH AND REINSTALL EXISTING WOOD BASE, CHAIR RAIL, AND WOOD DOOR CASINGS (WHERE APPLICABLE). MATCH EXISTING STAIN COLOR AND TRIM PROFILE. SEE I.D. DRAWINGS.

24. REMOVE, REPAIR, REFINISH AND REINSTALL EXISTING WOOD PEWS IN ALL EXISTING COURTROOMS.

25. REMOVE AND REPLACE ALL EXISTING BOLTED DOWN CHAIRS THROUGHOUT ALL EXISTING COURTROOMS.

26. REMOVE AND REPLACE EXISTING RAISED PANEL, DOUBLE ACTING DOORS AND HARDWARE IN EXISTING COURTROOMS.

27. REMOVE AND REPLACE EXISTING WOOD VENEER SQUARES (11"X11") AND CURVED WOOD VENEER BACKING BEHIND JUDGE'S BENCH IN ALL EXISTING COURTROOMS, UNLESS NOTED OTHERWISE

28. PATCH AND REPAIR EXISTING WOOD VENEER WAINSCOT PANELING IN ALL EXISTING COURTROOMS. EXISTING WAINSCOT PANELING TO RECEIVE NEW PAINT FINISH.

 $_{\chi}$  29. REMOVE AND REPLACE EXISTING WALL LOUVER. SEE MECHANICAL DRAWINGS AND SPECIFICATIONS.

 $\overline{\phantom{a}}$ 30. EXISTING HARDWOOD GUARDRAIL CAP AND HARDWOOD HANDRAIL TO BE REFINISHED, MATCH EXISTING STAIN COLOR. REPAIR OR

>ARÊA "A">

**KEY PLAN** 

REPLACE ANY DAMAGED HARDWARE AS REQUIRED.

**EXISTING/ DEMOLITION SECOND FLOOR PLAN - AREA "A"** A1.2A / SCALE: 1/8" = 1'-0"

EXISTING DUCTWORK, PIPING ELECTRICAL RACEWAYS, ETC. FILL PENETRATION WITH CONCRETE, FULL FLOOR THICKNESS AND MAINTAIN FIRE-RESISTIVE RATING OF FLOOR SYSTEM. FINISH CONCRETE IN A MANNER SUITABLE FOR NEW FLOOR FINISHES. 15. PATCH ALL WALL INTERSECTIONS AND PENETRATIONS RESULTING

16. REMOVE AND REPLACE EXISTING FIRE ALARM SYSTEM IN ITS ENTIRETY. REFER TO ELECTRICAL AND FIRE PROTECTION

17. REMOVE AND REPLACE ALL EXISTING LIGHTING ON THE FIRST FLOOR AND SECOND FLOOR. EXISTING LIGHTING IN THE BASEMENT TO REMAIN. REPAIR EXISTING BASEMENT LIGHT FIXTURES AS REQUIRED. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS.

PLUMBING, MECHANICAL, FIRE PROTECTION/ALARM DEVICES, SECURITY, ETC. THAT ARE INACTIVE AND/OR CANNOT BE INCORPORATED IN THE RENOVATION. ALL ABANDONED DEVICES / PIPES / VENTS / CONDUITS / ETC. TO BE REMOVED BACK TO SOURCE AFTER WALL DEMOLITION. AND TO CONFINE PEDESTRIAN ACTIVITY TO OCCUPIED SPACES.

11. PROVIDE TEMPORARY PARTITIONS TO MAINTAIN PROPER FIRE EXITS

FIREPROOFING OR CONSTRUCTION INSTALLED AS PART OF A RATED ASSEMBLY, REPLACE FIREPROOFING AND CONSTRUCTION MATERIALS TO ACHIEVE AND MAINTAIN APPROPRIATE ASSEMBLY RATING.

13. VERIFY FLOOR ELEVATIONS ON EACH SIDE OF WALLS BEING REMOVED. GRIND AND PATCH FLOOR AND INSTALL EPOXY FILL MATERIAL AS REQUIRED FOR A SMOOTH LEVEL FLOOR CONDITION.

14. PATCH ALL FLOOR PENETRATIONS RESULTING FROM REMOVAL OF

FROM THE REMOVAL OF EXISTING WALLS, DUCTWORK, PIPING, ELECTRICAL RACEWAYS, ETC. IN THE INTERIOR WALLS TO REMAIN. THE PENETRATIONS SHALL BE FILLED FLUSHED WITH AND OF THE SAME MATERIALS AS THE ADJACENT WALLS.

DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

18. REFER TO ATTACHED FLOOR PLANS FOR EXISTING CONSTRUCTION TO REMAIN, EXTENT OF DEMOLITION, AND SCHEDULED ITEMS FOR

**DEMOLITION PLAN NOTES**  $\langle X \rangle$ 

REMOVE PORTION OF EXISTING WALL OR EXISTING WALL IN ITS ENTIRETY, INCLUDING ALL EXISTING WALL BRACING AND /OR STRUCTURAL REBAR IN CMU WALLS. REMOVAL OF WALL FOR NEW DOOR OPENING DIMENSIONS MUST BE COORDINATED WITH SPECIFIED DOOR ON NEW FLOOR PLANS AND DOOR SCHEDULE.

ALL DIMENSIONS SHOULD BE FIELD VERIFIED BY G.C. BEFORE ANY

DEMOLITION IS STARTED. CONTRACTOR IS RESPONSIBLE FOR ALL

WHETHER SHOWN HERE OR NOT. NOTIFY THE ARCHITECT OF ANY

MATERIALS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL. ALL

WORK DEMOLISHED SHALL BE REMOVED FROM PREMISES DAILY.

ALL EXISTING EXTERIOR WALL DIMENSIONS ARE SHOWN TO THE EXISTING FINISHED FACE OF WALLS UNLESS NOTED OTHERWISE.

PATCH OPENINGS IN WALLS, CEILINGS AND FLOORS RESULTING

SAW CUT AND PATCH EXISTING FLOOR SLABS AND ROOF

REQUIRED. SEE STRUCTURAL DRAWINGS FOR SPECIFIC

FROM DEMOLITION WORK, PATCH WITH MATCHING MATERIALS AND

STRUCTURE FOR NEW MECHANICAL, ELECTRICAL AND PLUMBING

DUCTWORK, PIPING AND CONDUIT. REINFORCE OPENINGS AS

INFORMATION ON OPENINGS AS REQUIRED BY NEW WORK AND

SPECIFICATIONS FOR REMOVAL, RELOCATION, OR REROUTING OF

CONSTRUCTION. CONSTRUCTION AREAS AND OCCUPIED OR PUBLIC

EXISTING-TO-REMAIN CONSTRUCTION, MATERIALS OR EQUIPMENT TO

REFER TO MECHANICAL, ELECTRICAL, PLUMBING PLANS AND

ADEQUATE PRECAUTIONS TO PROTECT BUILDING OCCUPANTS, MATERIALS AND EXISTING FINISHES THROUGHOUT ALL PHASES OF

AREAS SHALL BE MAINTAINED BY CONTRACTOR. DAMAGE TO

DEMOLITION OF EXISTING UTILITIES SHALL BE MADE SO THAT

WHILE DEMOLITION IS OCCURRING, SENSITIVE GOVERNMENT ACTIVITIES WILL BE PROCEEDING IN ADJACENT AREAS. MINIMIZE

SERVICE TO OTHER AREAS UTILIZED BY THE OWNER ARE NOT INTERRUPTED. PROVIDE TEMPORARY UTILITIES, ISOLATION VALVES,

DISCONNECTS, ETC. WHERE REQUIRED DURING DEMOLITION AND

NOISE AND DUST LEVELS AND TEMPORARILY SUSPEND DEMOLITION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING

BE RESTORED TO ORIGINAL CONDITION.

AS REQUESTED BY THE BUILDING OWNER.

DEMOLITION NECESSARY FOR INSTALLATION OF NEW WORK

THE GENERAL CONTRACTOR SHALL FURNISH ALL LABOR AND

DISCREPANCIES PRIOR TO PROCEEDING.

CONSTRUCTION. UNLESS NOTED OTHERWISE.

EXISTING RENOVATIONS.

EXISTING UTILITIES.

NEW CONSTRUCTION.

REMOVE EXISTING DOOR, HOLLOW METAL FRAME, AND WOOD DOOR TRIM (IF APPLICABLE). TERMINATE ANY EXISTING ELECTRICAL AND ACCESS CONTROL AS REQUIRED.

REMOVE EXISTING INTERIOR AND/OR EXTERIOR WINDOWS, FRAMES WOOD TRIM (IF APPLICABLE) AND GLAZING.

REMOVE EXISTING EQUIPMENT AND APPLIANCES. TERMINATE ALL ELECTRICAL AND/OR PLUMBING AS REQUIRED. REFER TO ELECTRICAL AND PLUMBING DRAWINGS.

5A. REMOVE EXISTING MILLWORK, COUNTERTOPS AND SHELVING IN ITS ENTIRETY TO ACCOMMODATE NEW CONSTRUCTION.

5B. REMOVE AND REPLACE EXISTING MILLWORK, COUNTERTOPS AND SHELVING. SEE I.D. AND PLUMBING DRAWING AND SPECIFICATIONS.

5C. EXISTING MILLWORK, COUNTERTOP AND TRANSACTION WINDOWS

TO REMAIN. REPAIR OR REPLACE ANY DAMAGE AND REFINISH.

REMOVE EXISTING PLUMBING FIXTURES. TERMINATE ALL SUPPLY AND WASTE PIPING AS REQUIRED. REFER TO PLUMBING DRAWINGS.

REMOVE EXISTING EXTERIOR FRP COLUMN, STEEL COLUMNS, FRAMING AND WALL ABOVE. PROVIDE STRUCTURAL SUPPORT AT NEW OPENING. REFER TO STRUCTURAL DRAWINGS

REMOVE EXISTING FLOOR FINISHES AND BASE COVERINGS. ALL EXISTING SOLID WOOD TRIM (BASE, CHAIR RAIL, DOOR CASINGS, ETC.) SHOULD BE SAVED AND STORED ON SITE FOR POSSIBLE REUSE IN FUTURE EXPANSION. PATCH AND REPAIR FLOORS AND WALLS TO RECEIVE NEW FINISH.

REMOVE EXISTING WALL FINISHES/ DECOR TO INCLUDE ALL WALL COVERINGS, DECORATIVE PANELING AND TRIM. PATCH AND REPAIR WALLS TO RECEIVE NEW FINISH.

10. REMOVE AND/OR REPLACE EXISTING ACOUSTICAL CEILING TILE AND GRID. SEE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. DRAWINGS FOR ALL EXISTING DEVICES AND EQUIPMENT TO REMAIN AND ALL NEW DEVICES AND EQUIPMENT TO BE INSTALLED.

. REMOVE EXISTING SUSPENDED GYPSUM BOARD CEILING AND/OR GYPSUM BOARD SECURITY CEILING. SEE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. DRAWINGS FOR ALL EXISTING DEVICES AND EQUIPMENT TO REMAIN AND ALL NEW DEVICES AND EQUIPMENT TO BE INSTALLED.

12. REMOVE EXISTING LIGHT FIXTURES AND INFRASTRUCTURE AS REQUIRED TO ACCOMMODATE NEW LIGHTING LAYOUT. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR EXTENT OF DEMOLITION.

13. REMOVE EXISTING FIRE SHUTTER AND ALL ASSOCIATED PARTS AND INFRASTRUCTURE. TERMINATE ALL ELECTRICAL AS REQUIRED. REFER TO ELECTRICAL DRAWINGS.

4. REMOVE EXISTING HVAC SUPPLY DIFFUSERS, RETURN OR EXHAUST GRILLES AND ASSOCIATED APPURTENANCES. REFER TO MECHANICAL DRAWINGS.

15. REMOVE EXISTING JANITOR SINK AND FAUCET. TERMINATE ALL SUPPLY AND WASTE PIPING AS REQUIRED. REFER TO PLUMBING

16. REMOVE EXISTING EXTERIOR FRP CEILING/SOFFIT, INSULATION, AND TRIM TO ACCOMMODATE NEW CEILING. REFER TO NEW REFLECTED CEILING PLAN AND DETAILS FOR ADDITIONAL INFORMATION.

17. REMOVE EXISTING TOILET ACCESSORIES. PATCH AND REPAIR WALLS TO RECEIVE NEW FINISH.

18. REMOVE EXISTING CONCRETE SIDEWALK AND FOUNDATIONS AND REPAIR WITH NEW CONCRETE SLAB. NEW SLAB TO BE FLUSH WITH

19. REMOVE EXISTING GYPSUM BULKHEAD AND FRAMING AND/OR GLASS FIBER REINFORCED GYPSUM TRIM PROFILE IN ITS ENTIRETY. PATCH AND REPAIR WALLS AND CEILING TO RECEIVE

EXISTING FINISH FLOOR. REFER TO STRUCTURAL DRAWINGS.

20. REPAIR EXISTING TERRAZZO (IN KIND) WHERE EXISTING WALLS, DOORS AND DOOR FRAMES ARE SCHEDULED FOR DEMOLITION.

21. REMOVE EXISTING LIFE SAFETY EQUIPMENT AND DEVICES AS INDICATED BY THE ELECTRICAL DRAWINGS. PATCH AND REPAIR WALLS AND CEILINGS TO RECEIVE NEW FINISH

22. REMOVE EXISTING WALL MATERIALS AND SUBSTRATE DOWN TO EXISTING WOOD STUD WITH ONLY WOOD STUD FRAMING TO REMAIN. CAP ALL EXISTING POWER AND DATA SO IT CAN BE REUSED. RECONSTRUCT ALL EXISTING JUDGE'S BENCHES AND

CASEWORK, JURY BOX RAILS, BENCH RAILS AND OTHER WALLS AS NOTED, WITH NEW FINISH 23. REMOVE, REPAIR AND/OR REPLACE, REFINISH AND REINSTALL EXISTING WOOD BASE, CHAIR RAIL, AND WOOD DOOR CASINGS

(WHERE APPLICABLE). MATCH EXISTING STAIN COLOR AND TRIM PROFILE. SEE I.D. DRAWINGS. 24. REMOVE, REPAIR, REFINISH AND REINSTALL EXISTING WOOD PEWS

25. REMOVE AND REPLACE ALL EXISTING BOLTED DOWN CHAIRS

THROUGHOUT ALL EXISTING COURTROOMS.

IN ALL EXISTING COURTROOMS.

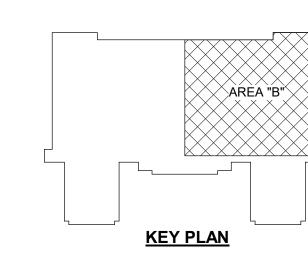
26. REMOVE AND REPLACE EXISTING RAISED PANEL, DOUBLE ACTING DOORS AND HARDWARE IN EXISTING COURTROOMS. 27. REMOVE AND REPLACE EXISTING WOOD VENEER SQUARES

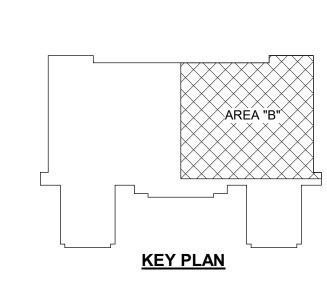
(11"X11") AND CURVED WOOD VENEER BACKING BEHIND JUDGE'S

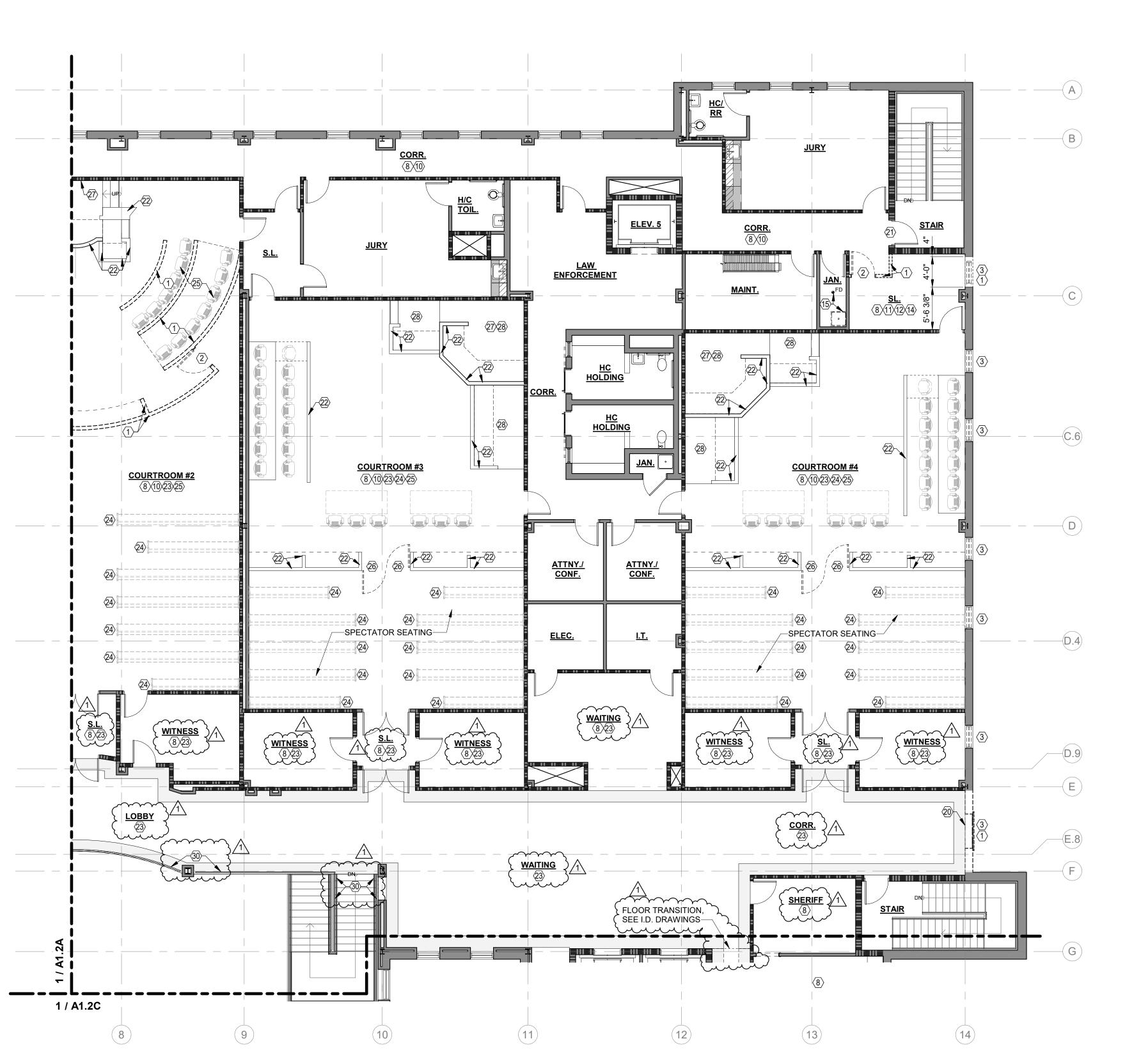
BENCH IN ALL EXISTING COURTROOMS, UNLESS NOTED OTHERWISE. 28. PATCH AND REPAIR EXISTING WOOD VENEER WAINSCOT PANELING IN ALL EXISTING COURTROOMS. EXISTING WAINSCOT PANELING TO RECEIVE NEW PAINT FINISH.

29. REMOVE AND REPLACE EXISTING WALL LOUVER. SEE MECHANICAL DRAWINGS AND SPECIFICATIONS.

 $\cdots$ 30. EXISTING HARDWOOD GUARDRAIL CAP AND HARDWOOD HANDRAIL TO BE REFINISHED, MATCH EXISTING STAIN COLOR. REPAIR OR REPLACE ANY DAMAGED HARDWARE AS REQUIRED.







EXISTING/ DEMOLITION SECOND FLOOR PLAN - AREA "B" \A1.2B \ SCALE: 1/8" = 1'-0"

**WALL LEGEND** 

EXISTING WALLS/COMPONENTS TO BE

REMOVED/CHANGED, SEE DEMOLITION PLANS

NEW WALLS/PARTITIONS, SEE WALL TYPES A2.0

EXISTING WALLS TO REMAIN

CHK'D BY:CB ATE: JANUARY 29, 2024

ISSUED FOR BIE 01/29/2024 ADDENDUM #3

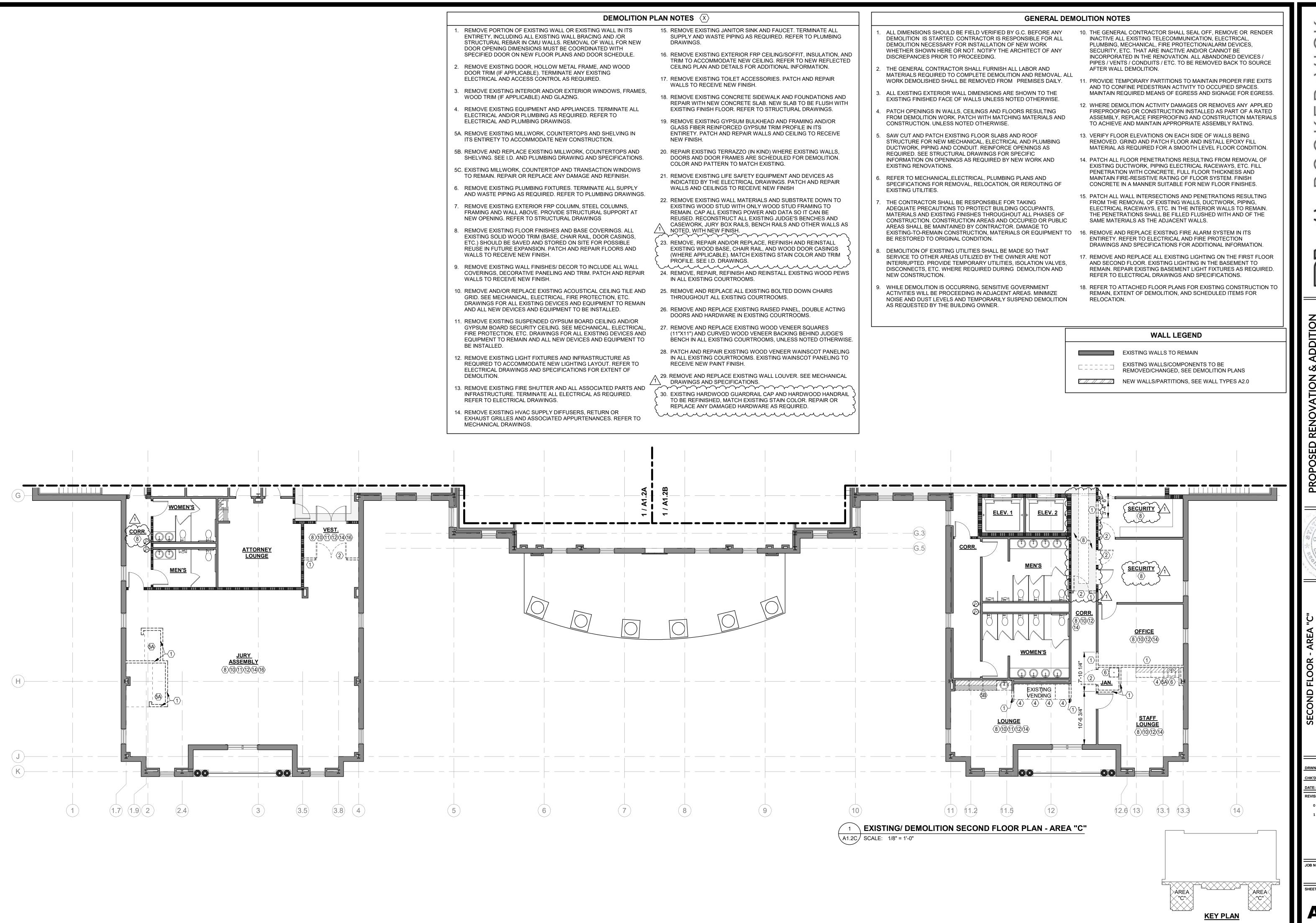
EXISTIN

CENTER

JUSTICE

Ŭ

LUMBIA



SOOKER+VIC ARCHITECT

DUNTY JUSTICE CENTER

COLUMBIA HISTOPHER BOOKER FV/2

ND FLOOR - AREA "C"

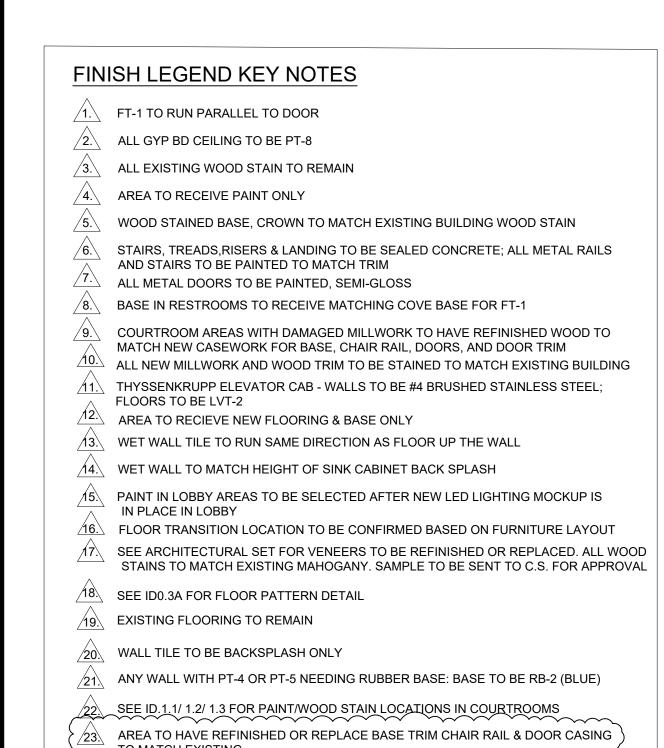
NG/ DEMOLITION PLAN

DRWN BY:CLB
CHK'D BY:CB

HK'D BY:CB ATE: JANUARY 29, 2024

ов NO. **2218** 

A1.20



PT-2 SW7506 LOGGIA (DK. NEUTRAL) LM-2 WILSONART ASIAN SAND 7952K-18 LINEARITY FINISH CPT-2 SHAW COMPILATION 5T515 ESSAY 75429 18"X36"  PT-3 SW7506 NATURAL TAIL (MD. NEUTRAL)  PT-4 SW0508 BUNGLEHOUSE BLUE (DK. BLUE)  PT-5 SW0508 NAME BROWNER STONEWAYS FLIGHT 6" X 12" COVEBASE FL-3 NURZY TERRAZZO TILE CUSTOM COLOR "DC943" (24X24) HONED FIN. W) NUSEAL  PT-6 LOBBY PAINT, KEY NOTE #15  PT-7 LOBBY COLUMNS AND CROWN, KEY NOTE #15						FINISH LEGEND							
PT-2 SW7506 LOGGIA (DK. NEUTRAL) PT-3 SW7507 NATURAL TAN (MD. NEUTRAL) PT-4 SW0408 BUNGLEHOUSE BLUE (DK. BLUE) PT-5 SW0408 NAMEDLE ON TAN (MD. NEUTRAL) PT-6 SW0408 PAINT, KEY NOTE #15 PT-7 LOBBY COLUMNS AND CROWN, KEY NOTE #15	PAINT DESCRIPTION	LAMINATI	ES LAMINATE DESCRIPTION	CARPE	T CARPET DESCRIPTION	WALL TILE	S	HARD SURFACE		FLOOR DESCRIPTION			LVT DESCRIPTION
SW7567 NATURAL TAN (MD. NEUTRAL)  PT-4 SW048 BUNGLEHOUSE BLUE (DK. BLUE)  PT-5 SW032 NEEDLEPOINT NAVY (DK. BLUE)  PT-6 LOBBY PAINT, KEY NOTE #15  PT-7 LOBBY COLUMNS AND CROWN, KEY NOTE #15	PT-1 SW 7568 NEUTRAL GROUND (LT. NEUTRAL)	LM-1	WILSONART ZANZIBAR 7957K-78 LINEARITY FINISH	CPT-1	24"X24"		CERAMICS STONEWAYS FLIGHT 12"X24"		GROUT:MAPEI 105 DRIFTWOOD	SCHLUTER DILEX COLOR	LŮMIŇŮM: TSC CREME 7 1	LVT-1	SHAW TERRAIN II 20 MIL 5MM 4110V SEQUOIA 07003 GLUEDOWN 6"X4
PT-3 SW7567 NATURAL TAN (MD. NEUTRAL)  V WT-3 TRINITY SURFACES CEASAR CERAMICS STONEWAYS FLIGHT 6" X 12" COVEBASE F1-3 NURAZZO TERRAZZO TILE CUSTOM COLOR "DC943" ((24X24) HONED FIN. W/ NUSEAL )  PT-4 SW0048 BUNGLEHOUSE BLUE (DK. BLUE)  WT-4 DALTILE MYTHOLOGY AURA MY95 4"X12" UNDULATED TILE (BLUE)  GROUT BACKGROUND TBD)  GROUT BACKGROUND TBD)	PT-2 SW7506 LOGGIA (DK. NEUTRAL)	LM-2	WILSONART ASIAN SAND 7952K-18 LINEARITY FINISH	I CPT-2	SHAW COMPILATION 5T515 ESSAY 75429 18"X36"	WT-2 VOID		FT-2	TRINITY SURFACES MILOS AMA	ANI BRONZE 3"X12" (SAME A	\$ WT-2); GROUT:	LVT-2	KARNDEAN INDIANA LLT202
PT-5 SW0032 NEEDLEPOINT NAVY (DK. BLUE) PT-6 LOBBY PAINT, KEY NOTE #15 PT-7 LOBBY COLUMNS AND CROWN, KEY NOTE #15 SC SEALED CONCRETE  SC SEALED CONCRETE  ON SEALED CO	PT-3 SW7567 NATURAL TAN (MD. NEUTRAL)					WT-3 TRINITY SURFACES CEASAR (	CERAMICS STONEWAYS FLIGHT 6" X 12" COVEBASE				4) HŎNĚĎ FĬN. W/ NÚSEÁL		
PT-6 LOBBY PAINT, KEY NOTE #15 PT-7 LOBBY COLUMNS AND CROWN, KEY NOTE #15	PT-4 SW0048 BUNGLEHOUSE BLUE (DK. BLUE)					WT-4 DALTILE MYTHOLOGY AURA N	Y95 4"X12" UNDULATED TILE (BLUE)	9	GROUT BACKGROUND TBD	7	~~~~~ <del>\</del>	7	
PT-7 LOBBY COLUMNS AND CROWN, KEY NOTE #15	PT-5 SW0032 NEEDLEPOINT NAVY (DK. BLUE)							SC	SEALED CONCRETE	/	Y		
	PT-6 LOBBY PAINT, KEY NOTE #15												
PT-8 SW7566 WESTHIGHLAND WHITE (CEILING)	PT-7 LOBBY COLUMNS AND CROWN, KEY NOTE #	15											
	PT-8 SW7566 WESTHIGHLAND WHITE (CEILING)												
			п	1	·		<u>'</u>		11				II .
	WALL		SOLID SS		DOOR								
WALL BASE DESCRIPTION  SOLID SS DOOR STAIN DESCRIPTION  SOLID SS DOOR STAIN DESCRIPTION  DOOR STAIN DESCRIPTION  DOOR STAIN DESCRIPTION  BOM FINISHES  MILLWORK	BASE WALL BASE DESC	RIPTION	SURFACES   DESCRIPTION   QUART	TZ	QUARTZ DESCRIPTION STAIN	DOOR STAIN DESCRIPTION	<u>• • • • • • • • • • • • • • • • • • •</u>	ITIOIIE					

VALL BASE	WALL BACE DECORIDATION	SOLID	SS	OLLABEZ	OLIABEZ DECORIDEIONI	DOOR STAIN	
			DESCRIPTION		QUARTZ DESCRIPTION		DOOR STAIN DESCRIPTION
3-1	JOHNSONITE RWDC-TG5 MACADAMIA; RECESS TOELESS BASE PROFILE	SS-1	CORIAN BONE	QTZ-1	CORIAN VALENTE PEARL	DO-1	MAHOGANY/WALNUT DOOR FINISH TO BE SELECTED ONCE G.C. HAS PROVIDED WOOD STAIN SAMPLES FOR ALL
B-2	JOHNSONITE RWDC-58 WINDSOR BLUE; RECESS TOELESS BASE PROFILE						WOOD TRIM - SAMPLE APPROVED BY C.S.
/S-1	MATCH EXISTING WOOD STAIN					WS-1	WOOD TRIM TO BE STAINED MAHOGANY TO MATCH EXISTING - SAMPLE APPROVED BY C.S.
						EW	EXISTING WOOD TO REMAIN
						ER	EXISTING WOOD TO BE REFINISHED TO MATCH NEW SAMPLE APPROVED BY C.S.

UPPER
LOWER
COUNTER

WALL

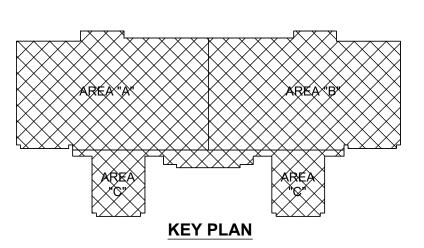
TRIM

**BASE** 

DOOR

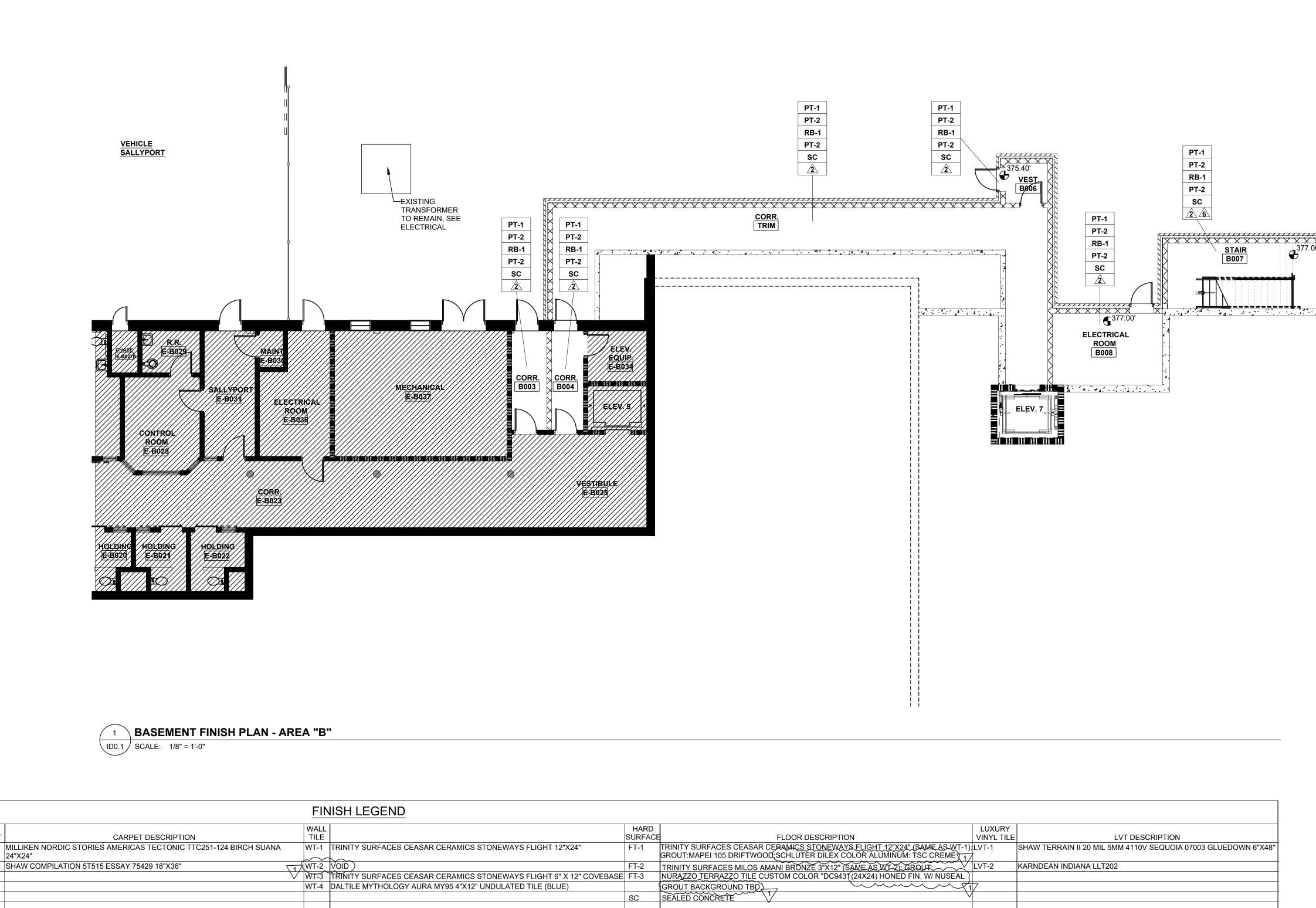
FLOOR

NOTE





AND LEGEND JANUARY 29, ISSUED FOR BID 01/29/2024 ADDENDUM #3 02/21/2024



NOTE

PAINT DESCRIPTION LAMINATES LAMINATE DESCRIPTION CARPET SW 7568 NEUTRAL GROUND (LT. NEUTRAL) WILSONART ZANZIBAR 7957K-78 LINEARITY FINISH | CPT-1 | MILLIKEN NORDIC STORIES AMERICAS TECTONIC TTC251-124 BIRCH SUANA PT-2 SW7506 LOGGIA (DK. NEUTRAL) WILSONART ASIAN SAND 7952K-18 LINEARITY FINISH | CPT-2 | SHAW COMPILATION 5T515 ESSAY 75429 18"X36" PT-3 SW7567 NATURAL TAN (MD. NEUTRAL) PT-4 SW0048 BUNGLEHOUSE BLUE (DK. BLUE) PT-5 | SW0032 NEEDLEPOINT NAVY (DK. BLUE) PT-6 LOBBY PAINT, KEY NOTE #15 PT-7 LOBBY COLUMNS AND CROWN, KEY NOTE #15 PT-8 SW7566 WESTHIGHLAND WHITE (CEILING) **ROOM MILLWORK** DOOR STAIN **FINISHES** SURFACES DESCRIPTION QUARTZ WALL BASE DESCRIPTION DOOR STAIN DESCRIPTION **UPPER** WALL DO-1 MAHOGANY/WALNUT DOOR FINISH TO BE SELECTED ONCE G.C. HAS PROVIDED WOOD STAIN SAMPLES FOR ALL WOOD TRIM - SAMPLE APPROVED BY C.S. RB-1 JOHNSONITE RWDC-TG5 MACADAMIA; RECESS TOELESS BASE PROFILE SS-1 CORIAN BONE QTZ-1 CORIAN VALENTE PEARL RB-2 JOHNSONITE RWDC-58 WINDSOR BLUE; RECESS TOELESS BASE PROFILE TRIM LOWER WS-1 MATCH EXISTING WOOD STAIN WS-1 WOOD TRIM TO BE STAINED MAHOGANY TO MATCH EXISTING - SAMPLE APPROVED BY C.S. EW EXISTING WOOD TO REMAIN **BASE** COUNTER ER EXISTING WOOD TO BE REFINISHED TO MATCH NEW SAMPLE APPROVED BY C.S. DOOR **FLOOR** 

FINISH LEGEND KEY NOTES

FT-1 TO RUN PARALLEL TO DOOR

ALL GYP BD CEILING TO BE PT-8

AREA TO RECEIVE PAINT ONLY

FLOORS TO BE LVT-2

IN PLACE IN LOBBY

18. SEE ID0.3A FOR FLOOR PATTERN DETAIL EXISTING FLOORING TO REMAIN

WALL TILE TO BE BACKSPLASH ONLY

ALL EXISTING WOOD STAIN TO REMAIN

AND STAIRS TO BE PAINTED TO MATCH TRIM ALL METAL DOORS TO BE PAINTED, SEMI-GLOSS

AREA TO RECIEVE NEW FLOORING & BASE ONLY

WOOD STAINED BASE, CROWN TO MATCH EXISTING BUILDING WOOD STAIN

BASE IN RESTROOMS TO RECEIVE MATCHING COVE BASE FOR FT-1

WET WALL TILE TO RUN SAME DIRECTION AS FLOOR UP THE WALL

WET WALL TO MATCH HEIGHT OF SINK CABINET BACK SPLASH

STAIRS, TREADS, RISERS & LANDING TO BE SEALED CONCRETE; ALL METAL RAILS

COURTROOM AREAS WITH DAMAGED MILLWORK TO HAVE REFINISHED WOOD TO MATCH NEW CASEWORK FOR BASE, CHAIR RAIL, DOORS, AND DOOR TRIM

THYSSENKRUPP ELEVATOR CAB - WALLS TO BE #4 BRUSHED STAINLESS STEEL;

PAINT IN LOBBY AREAS TO BE SELECTED AFTER NEW LED LIGHTING MOCKUP IS

SEE ARCHITECTURAL SET FOR VENEERS TO BE REFINISHED OR REPLACED. ALL WOOD STAINS TO MATCH EXISTING MAHOGANY. SAMPLE TO BE SENT TO C.S. FOR APPROVAL

16.\(\) FLOOR TRANSITION LOCATION TO BE CONFIRMED BASED ON FURNITURE LAYOUT

ANY WALL WITH PT-4 OR PT-5 NEEDING RUBBER BASE: BASE TO BE RB-2 (BLUE)

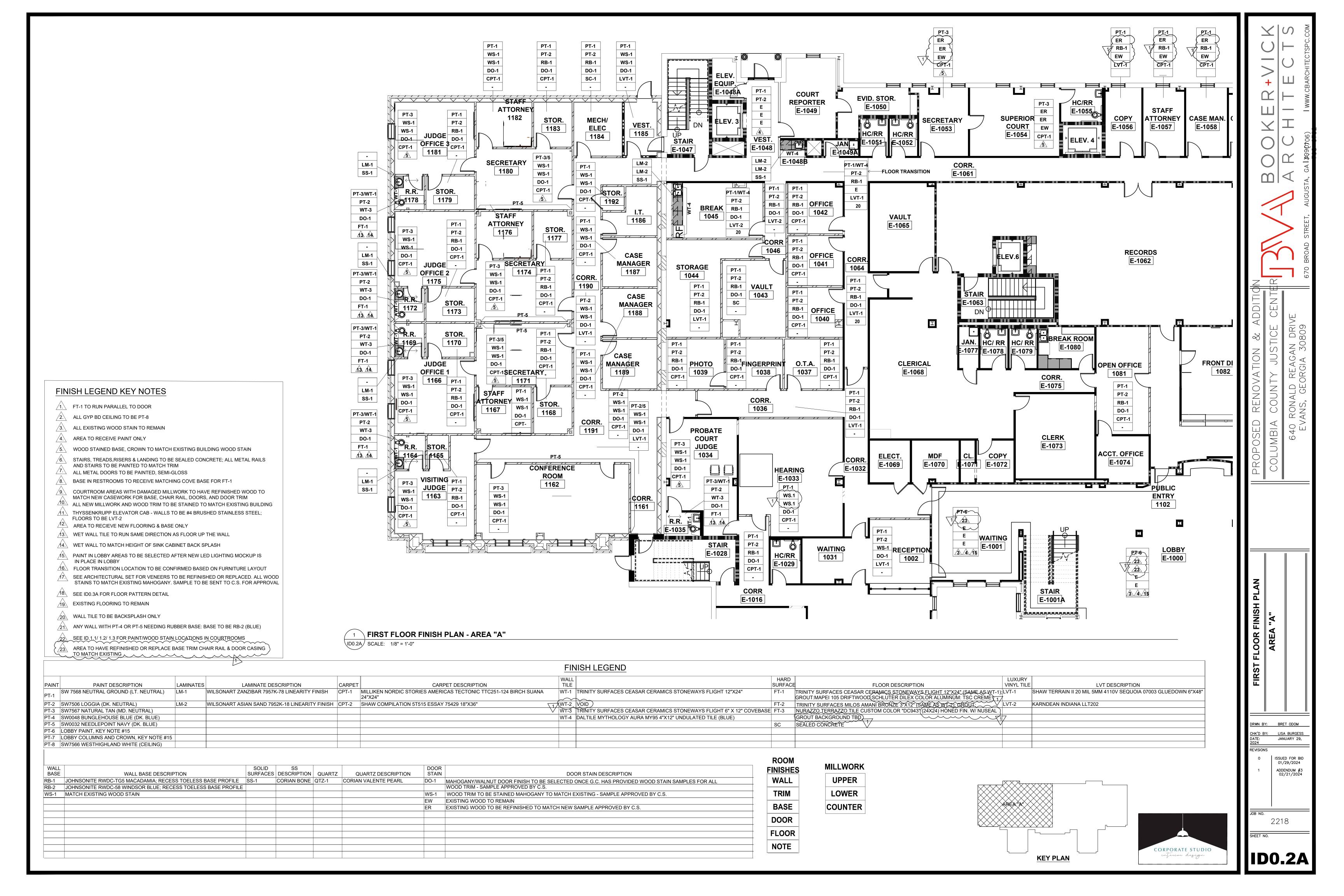
AREA TO HAVE REFINISHED OR REPLACE BASE TRIM CHAIR RAIL & DOOR CASING TO MATCH EXISTING

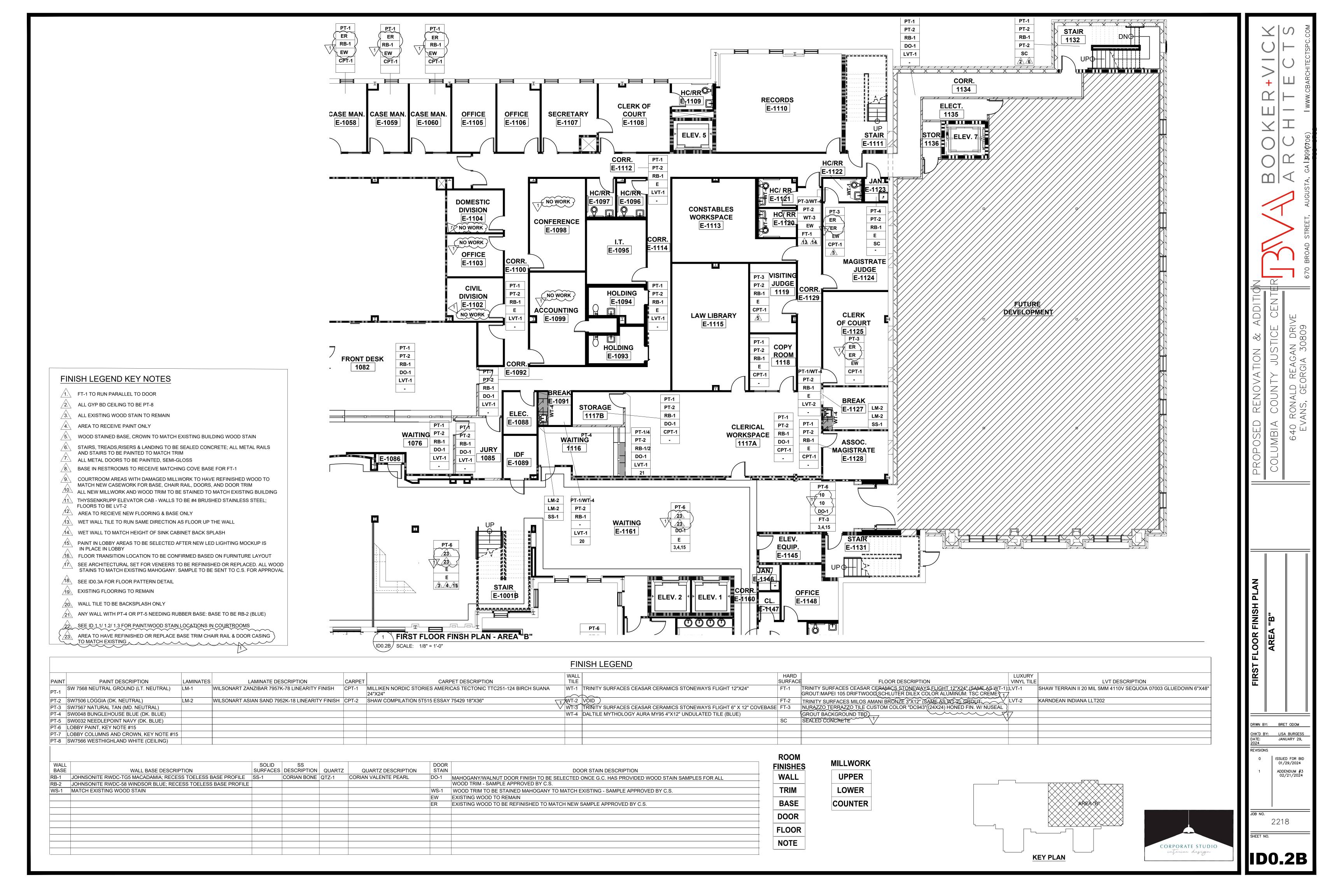
SEE ID.1.1/ 1.2/ 1.3 FOR PAINT/WOOD STAIN LOCATIONS IN COURTROOMS

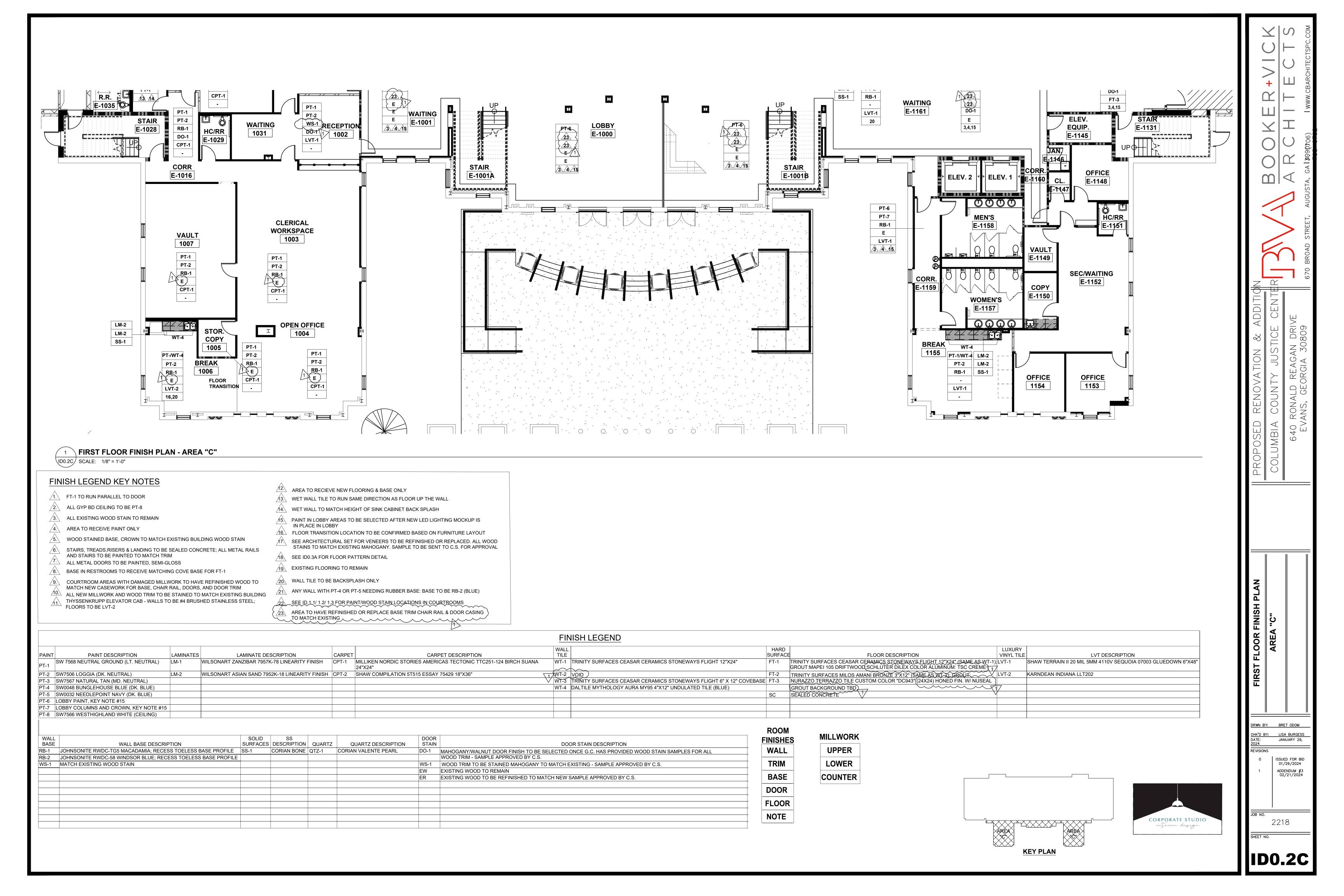
ALL NEW MILLWORK AND WOOD TRIM TO BE STAINED TO MATCH EXISTING BUILDING

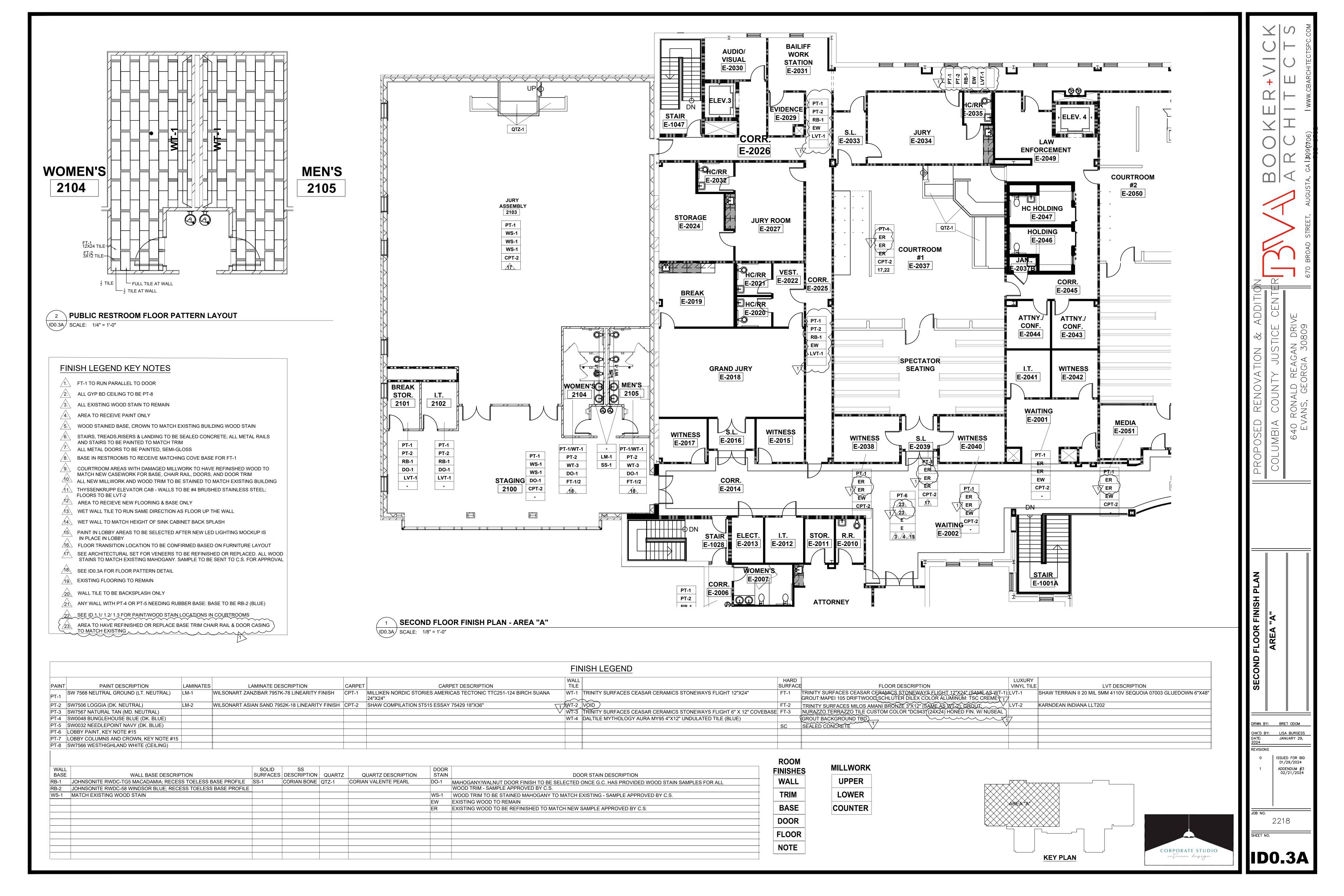
RWN BY: BRET ODOM LISA BURGESS JANUARY 29, ISSUED FOR BID 01/29/2024 ADDENDUM #3 02/21/2024

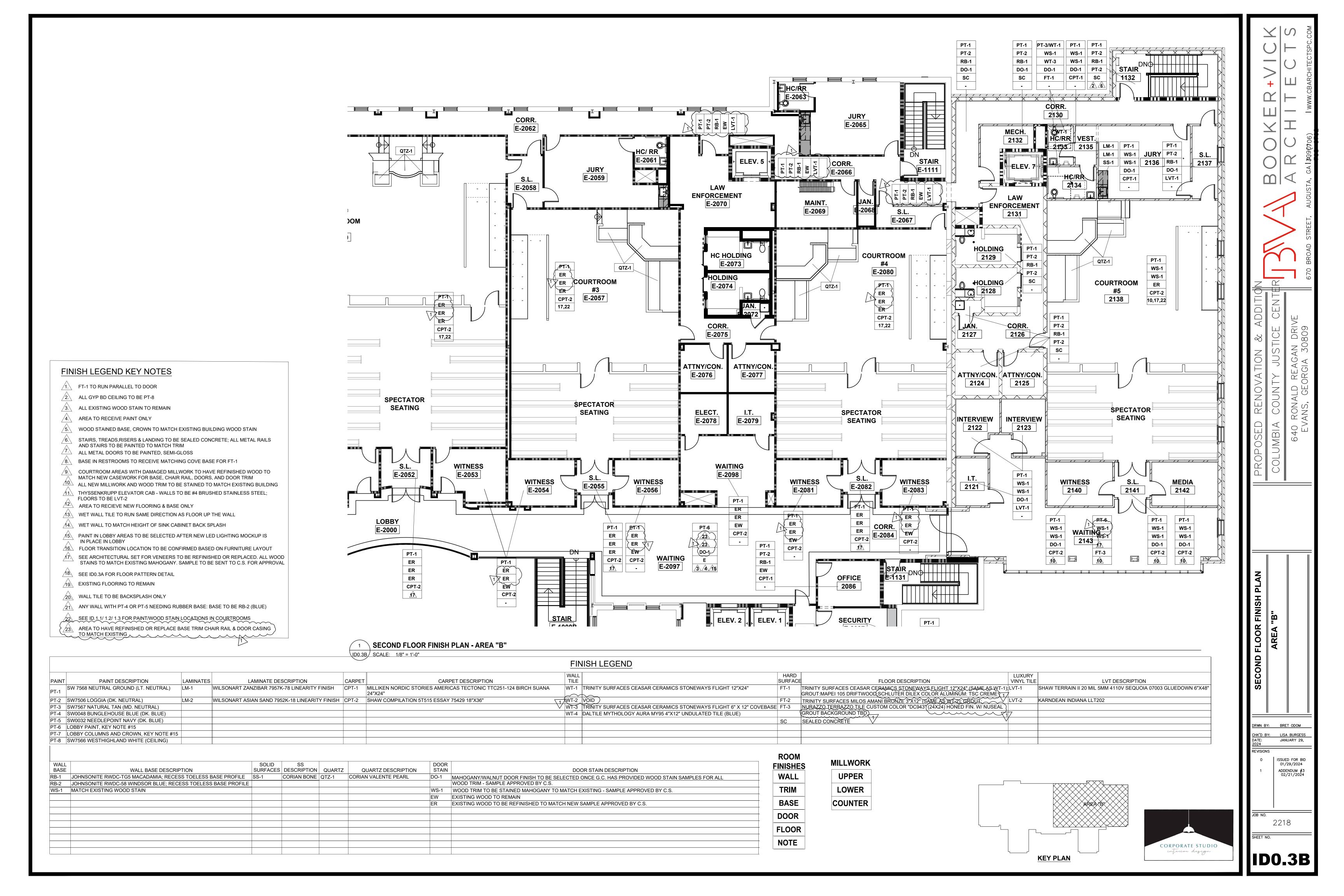
CORPORATE STUDIO interior design

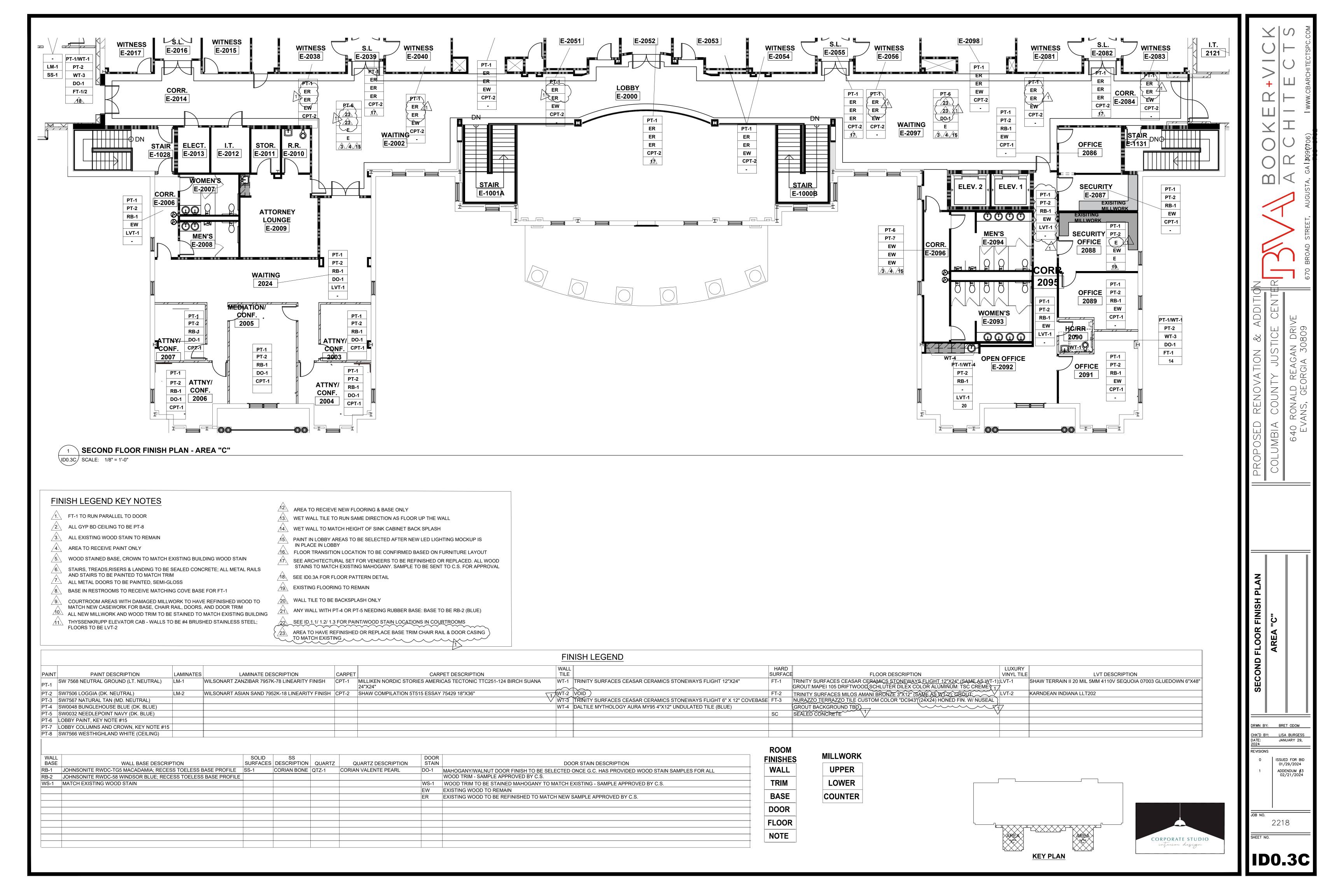


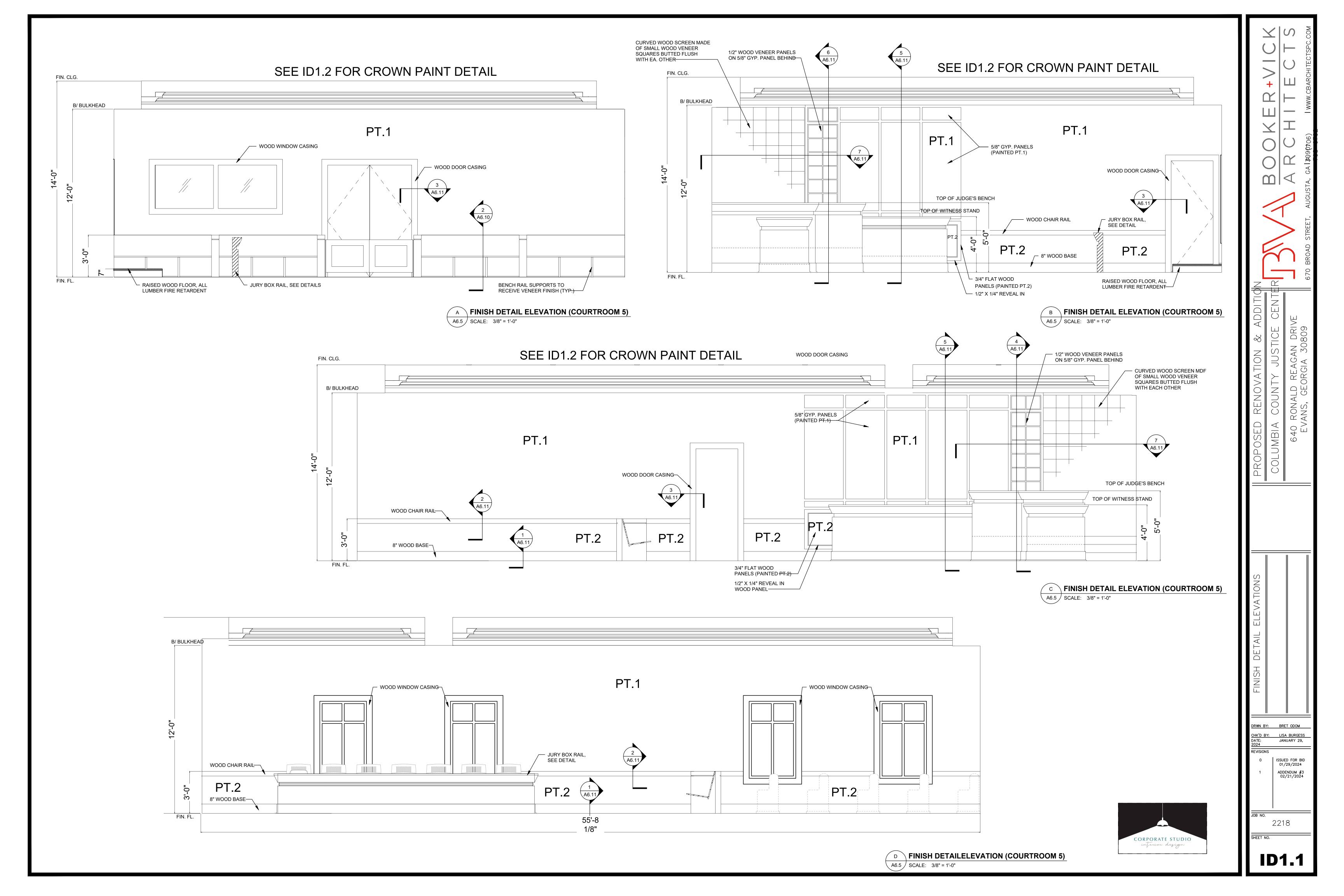


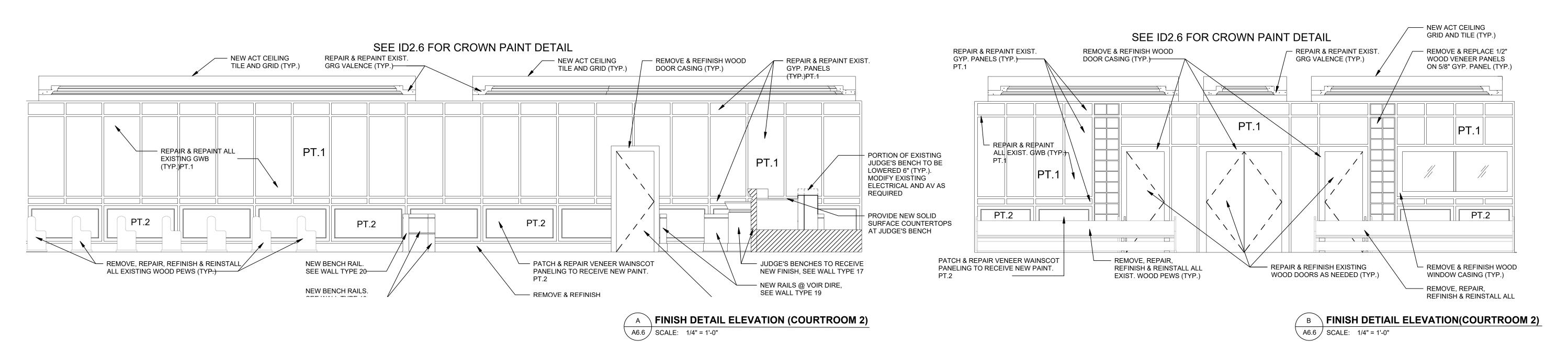


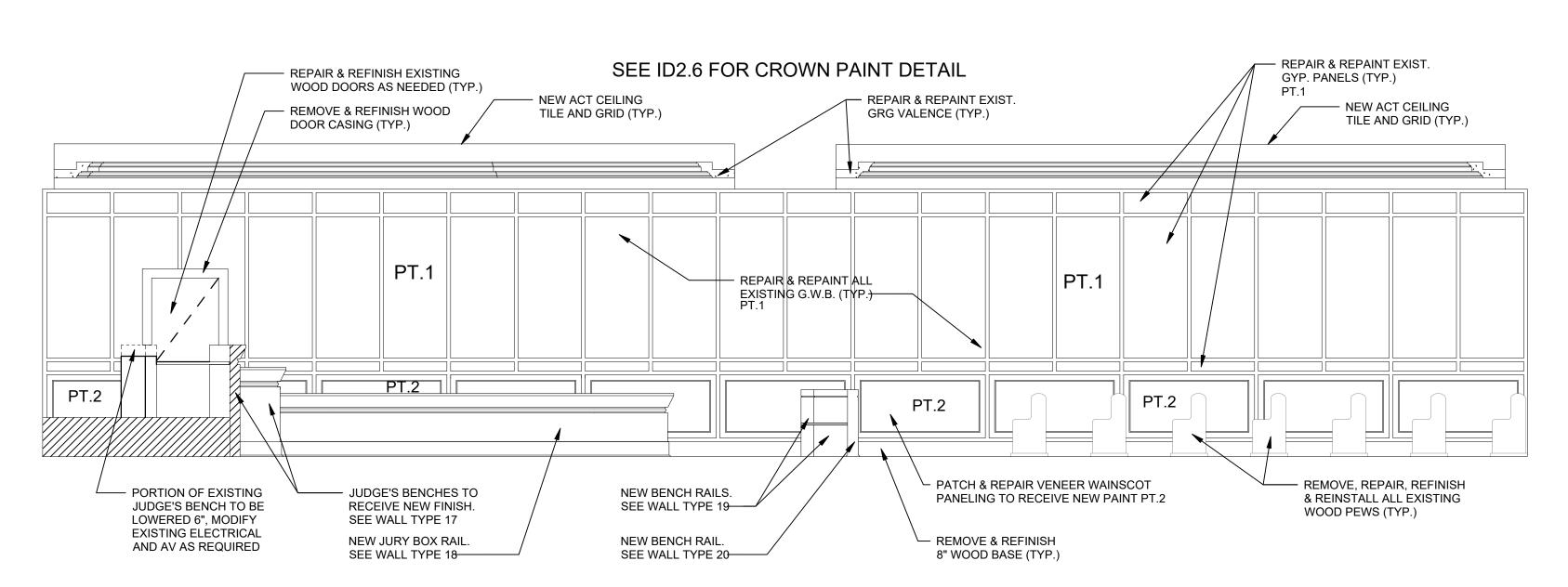






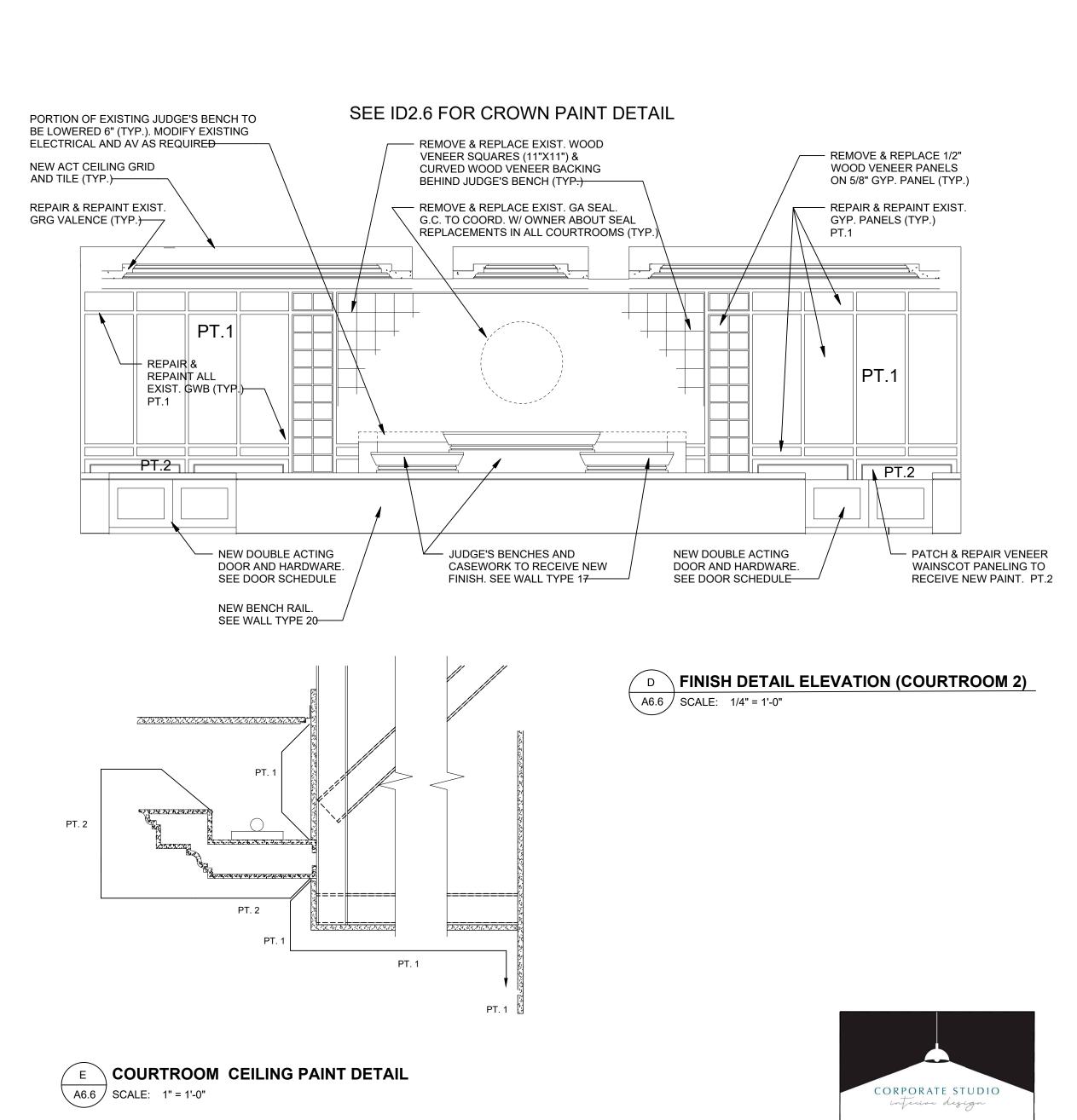






C FINISH DETAIL ELEVATION (COURTROOM 2)

A6.6 SCALE: 1/4" = 1'-0"

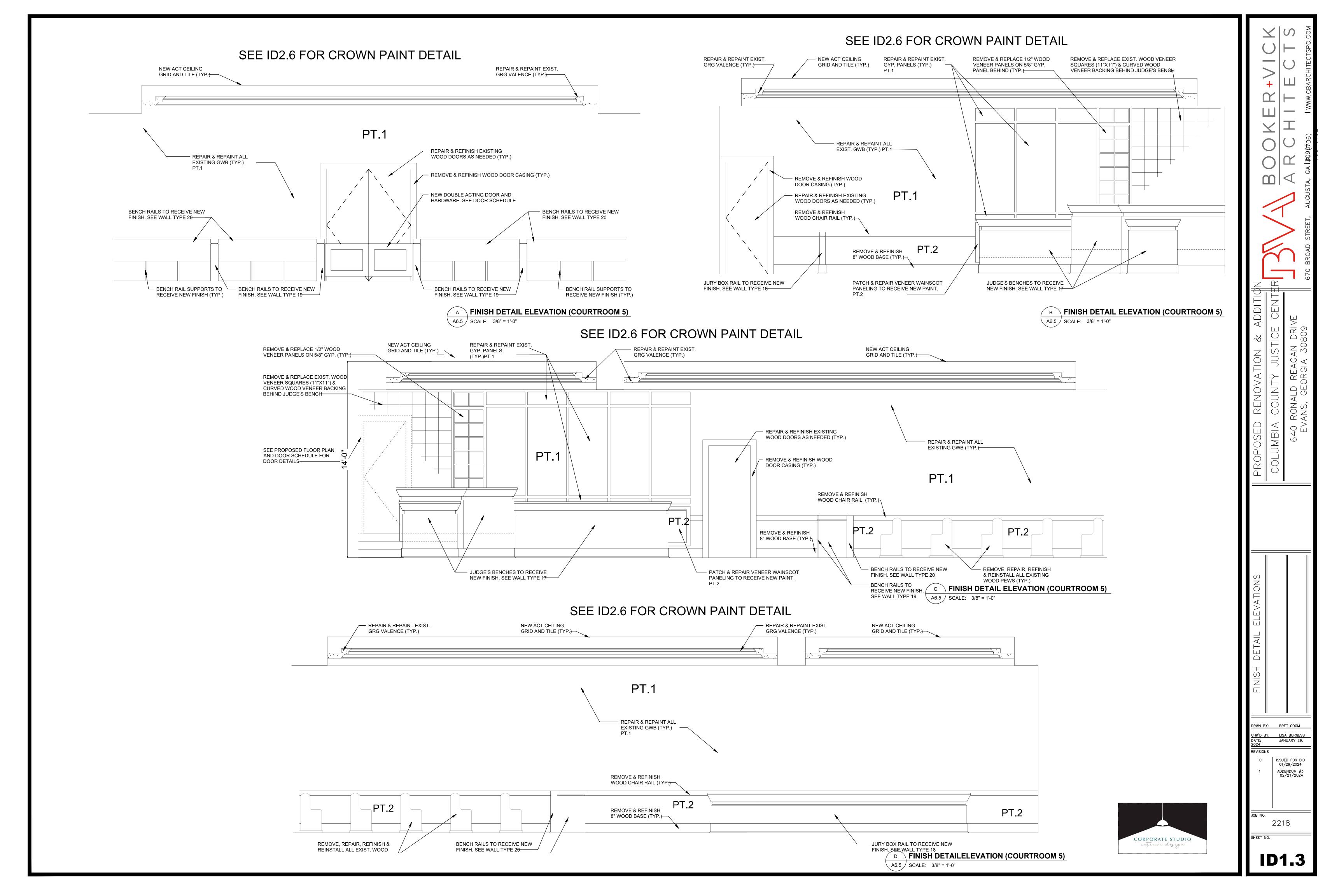


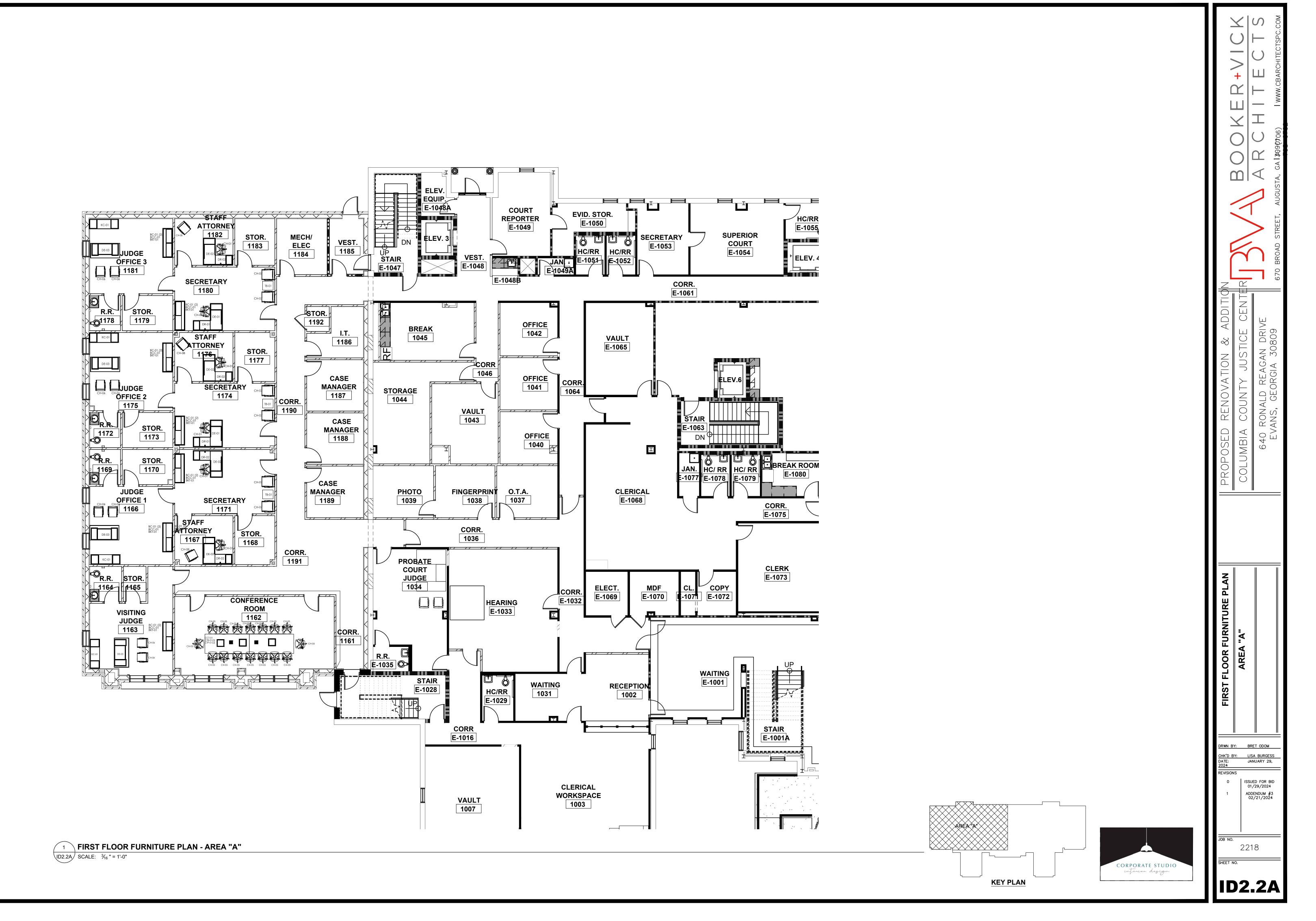
DRWN BY: BRET ODOM

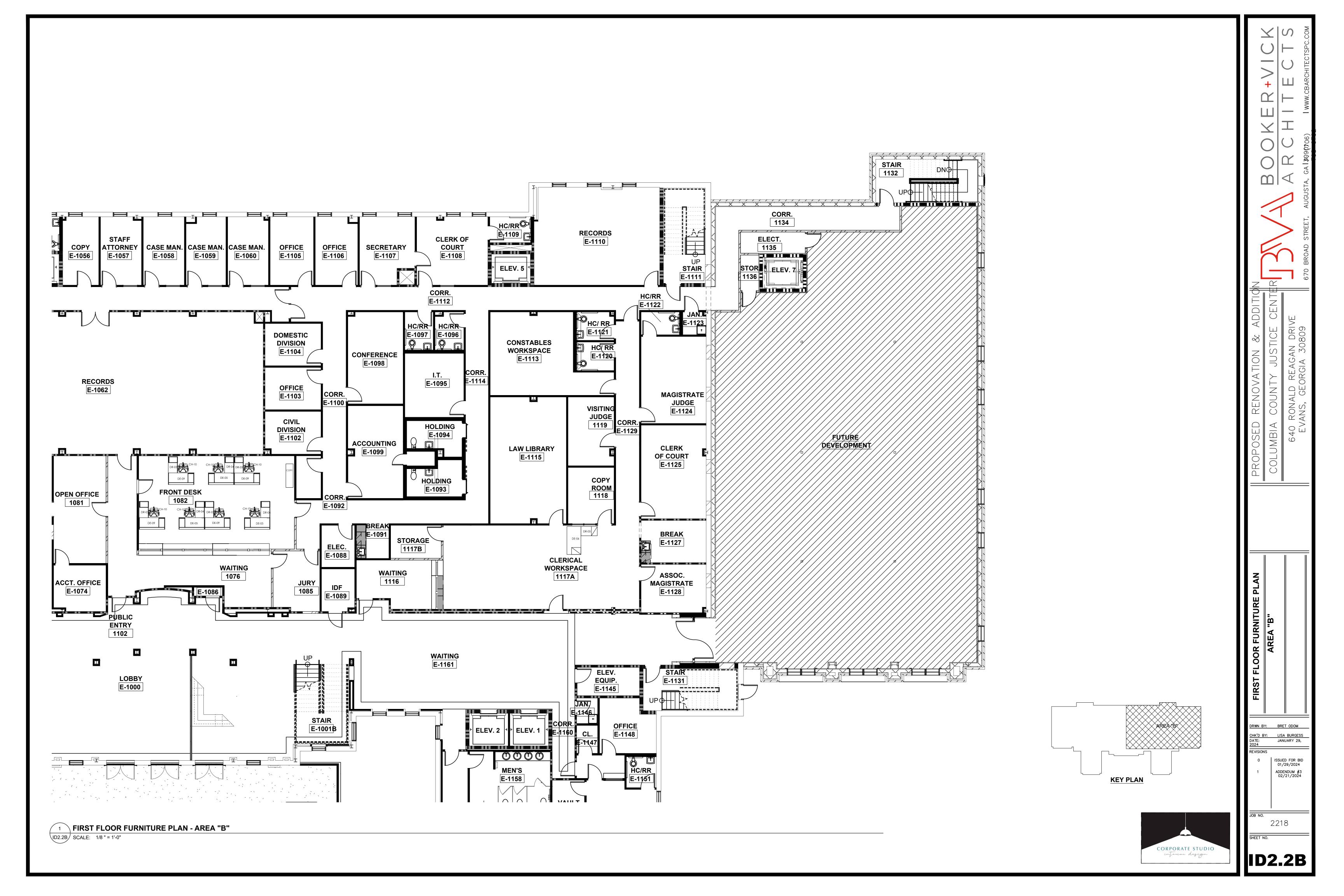
LISA BURGESS
JANUARY 29,

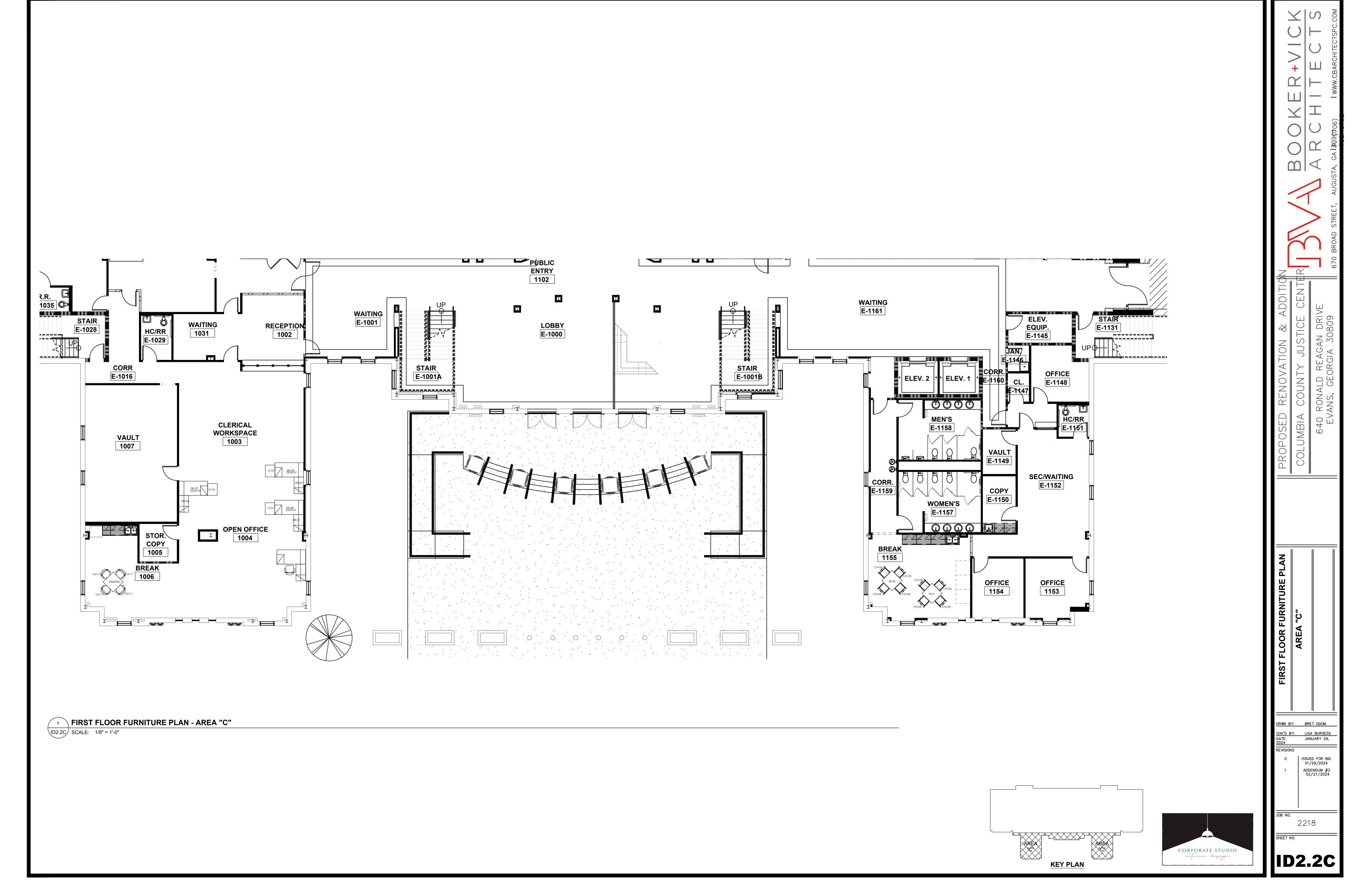
ISSUED FOR BID 01/29/2024

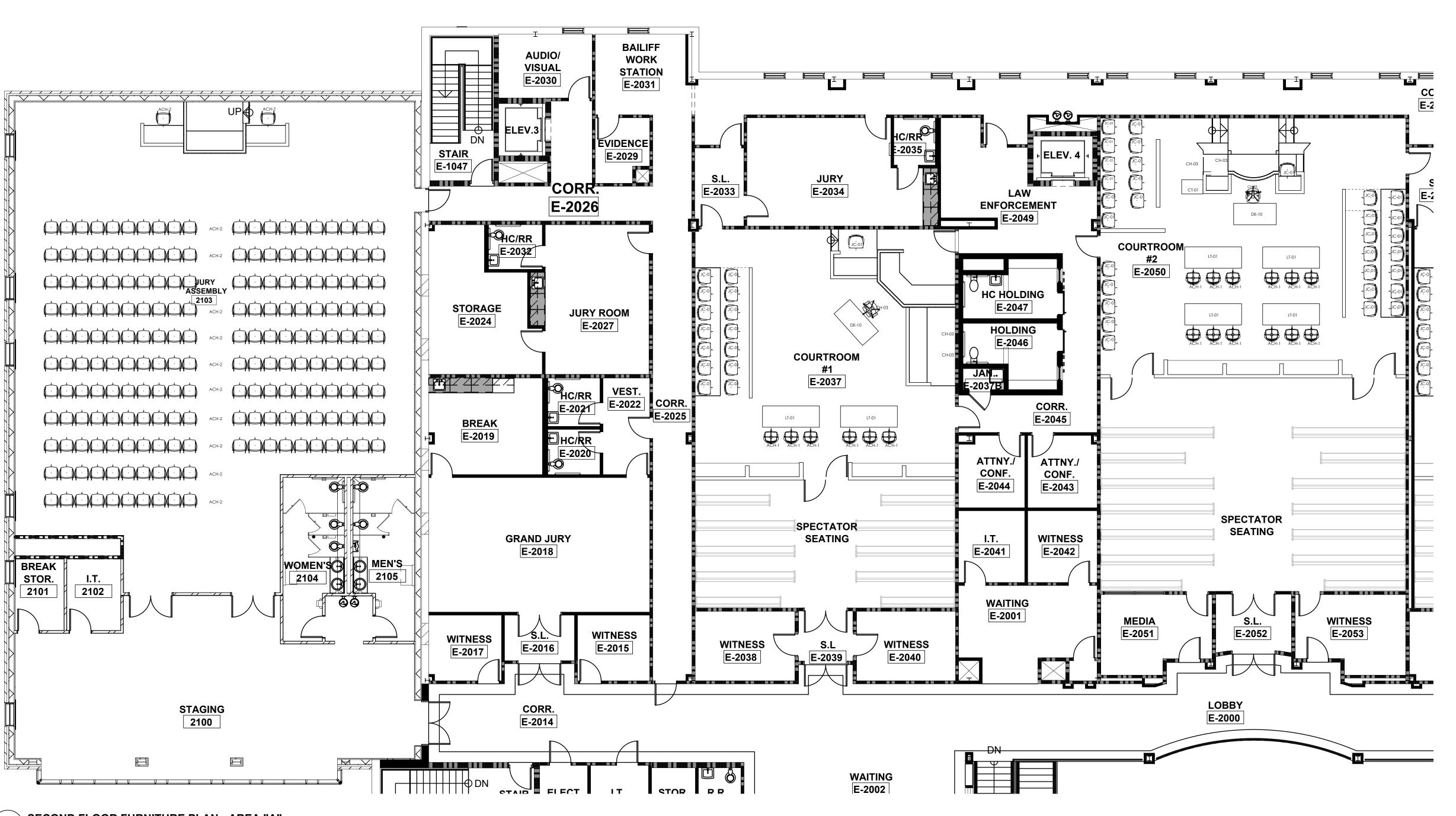
ADDENDUM #3 02/21/2024



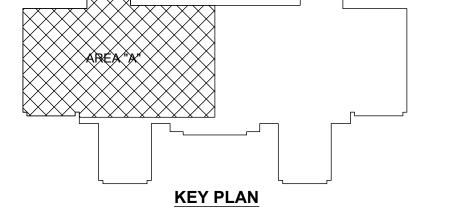








SECOND FLOOR FURNITURE PLAN - AREA "A" ID3.2A SCALE: 1/8 " = 1'-0"

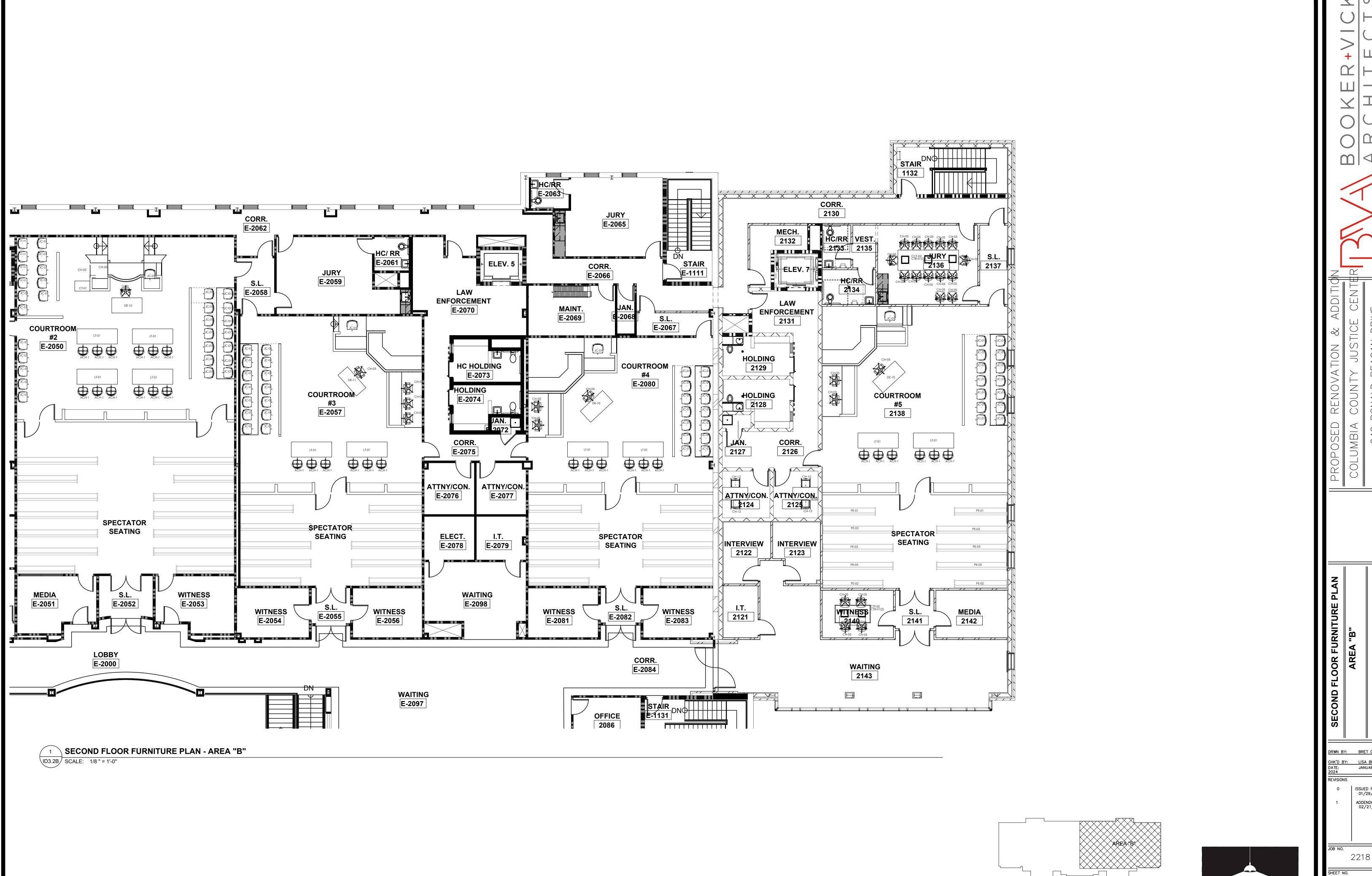




ISSUED FOR BID ADDENDUM #3 02/21/2024 2218 **ID2.3A** 

SECOND FLOOR FURNITURE PLAN AREA "A"

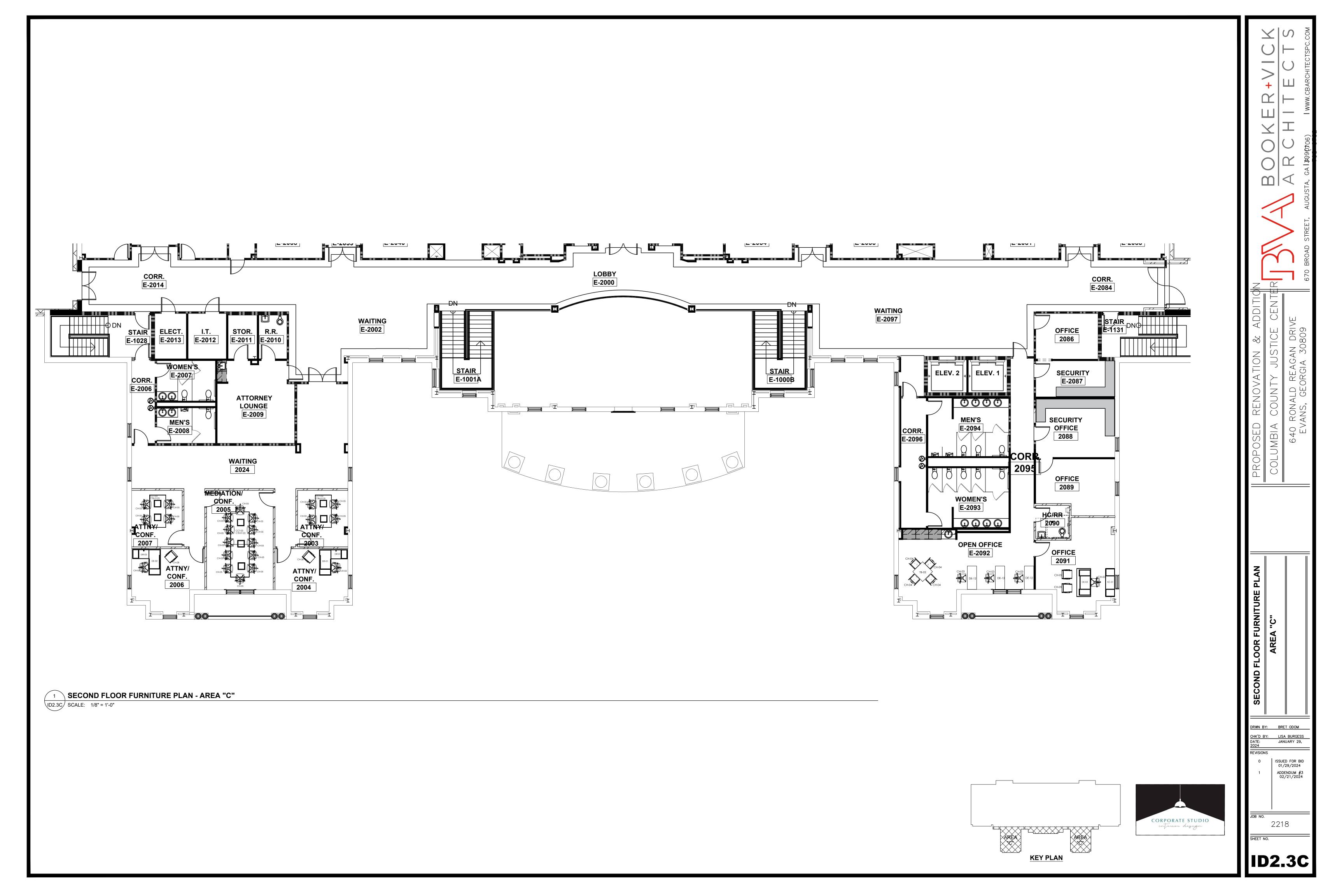
JANUARY 29,



LISA BURGESS JANUARY 29, ISSUED FOR BID 01/29/2024 ADDENDUM #3 02/21/2024 2218 **ID2.3B** 

CORPORATE STUDIO interior design

**KEY PLAN** 



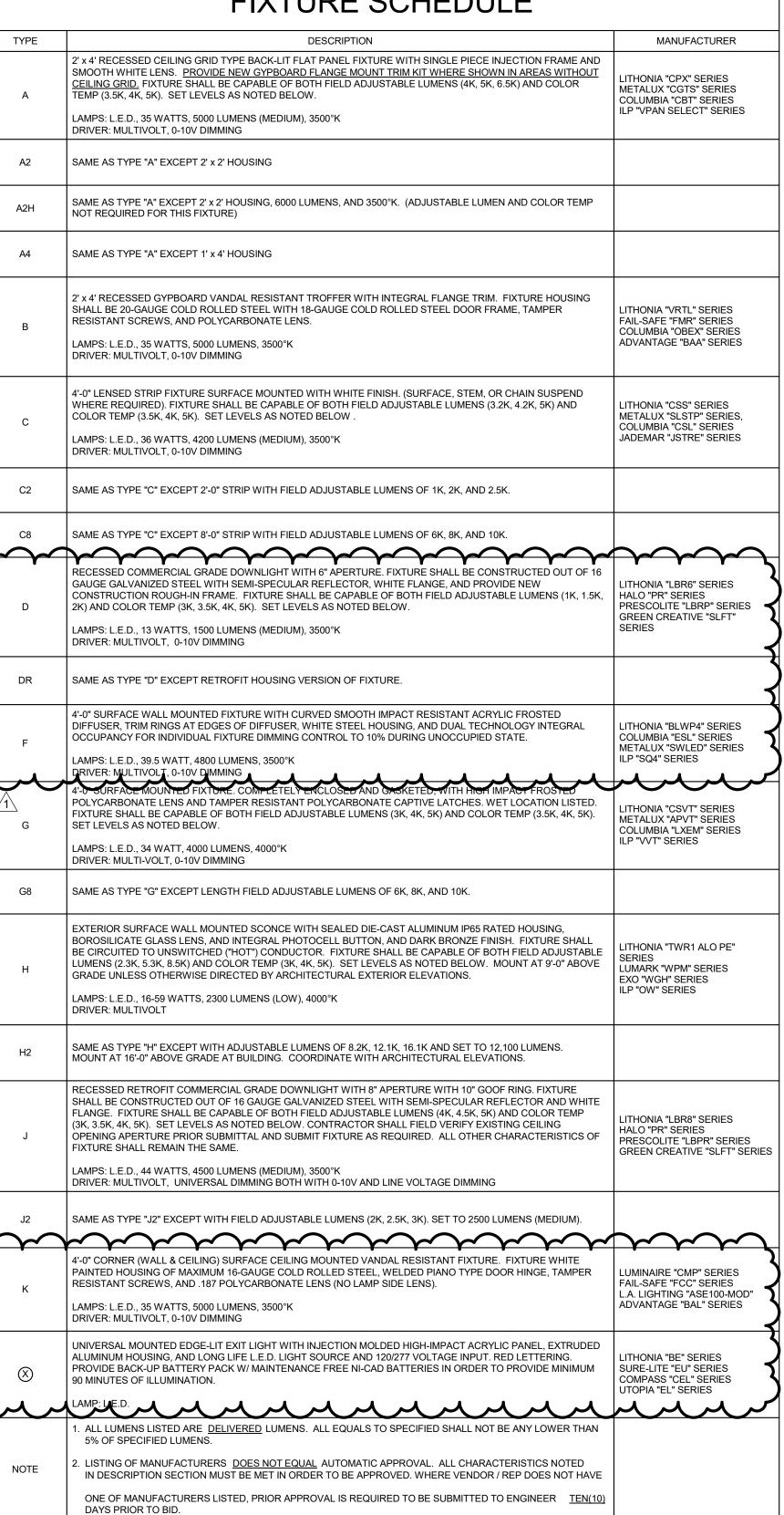
<u>EGEND</u>	T
	LIGHTING AND POWER  CONDUIT RUN CONCEALED ABOVE CEILING OR IN WALL CONTAINING 3 NUMBER 12 CONDUCTORS
	UNLESS SHOWN OTHERWISE. HASH MARKS, IF SHOWN, INDICATE QUANTITY OF NUMBER 12 CONDUCTORS. WHERE DRAWING SPACE PROHIBITS HASH MARKS BEING SHOWN REFER TO CIRCUIT NUMBERS AND PROVIDE REQUIRED NUMBER OF CONDUCTORS PER CIRCUIT TYPE.
:##	CONDUIT RUN CONCEALED IN OR BELOW FLOOR SLAB, OR UNDERGROUND.
A-2,4,6	HOMERUN TO PANELBOARD, LETTER OR LETTERS INDICATE PANELBOARDS, NUMBERS INDICATE CIRCUIT NUMBERS.
2-E (	L.E.D. LIGHTING FIXTURE, "2" INDICATES THE CIRCUIT NUMBER AND "E" THE FIXTURE TYPE. SEE FIXTURE SCHEDULE FOR DIMENSIONS AND MOUNTING TYPE.
0	EMERGENCY L.E.D. LIGHTING FIXTURE. SEE FIXTURE SCHEDULE FOR DIMENSIONS AND MOUNTING TYPE.
	L.E.D. FIXTURE, SURFACE OR STEM MOUNTED.  L.E.D. TROFFER FIXTURE. SEE FIXTURE SCHEDULE FOR DIMENSIONS
0	AND MOUNTING TYPE.
0	EMERGENCY L.E.D. TROFFER. SEE FIXTURE SCHEDULE FOR DIMENSIONS AND MOUNTING TYPE
Ю	L.E.D. LIGHTING FIXTURE, SURFACE WALL BRACKET MOUNTED. MOUNTING HEIGHT AS NOTED.  L.E.D. LIGHTING FIXTURE, SURFACE WALL BRACKET MOUNTED. MOUNTING HEIGHT AS NOTED.
	SEE FIXTURE SCHEDULE FOR BATTERY PACK INFORMATION (IF APPLICABLE).
$\bigcirc$	L.E.D. CHANDELIER OR PENDANT FIXTURE. CEILING PENDANT MOUNTED.
$\otimes$	EXIT LIGHT
	EMERGENCY PACK FIXTURE.  JUNCTION BOX, FLUSH WALL MOUNTED AT 18" AFF UNLESS OTHERWISE NOTED. PROVIDE 3/4"C.,
	W/ PULLSTRING TO STUB OUT ABOVE NEAREST ACCESSIBLE CEILING WHERE SHOWN.
<u> </u>	JUNCTION BOX LOCATED ABOVE CEILING OR BELOW GRADE.  DUPLEX CONVENIENCE OUTLET, +18" TO CENTER LINE OF OUTLET UNLESS OTHERWISE NOTED. 5
5 ⊕	INDICATES THE CIRCUIT NUMBER.
<del></del>	DUPLEX CONVENIENCE OUTLET MOUNTED ABOVE COUNTER, AT +46" TO CENTERLINE OF OUTLET DUPLEX CONVENIENCE OUTLET, GFI TYPE. +18" TO CENTER LINE UNLESS OTHERWISE NOTED.
<b>⇒</b>	"WP" WHERE SHOWN INDICATES WEATHER-RESISTENT DEVICE WITH METAL IN-USE WEATHERPROOF COVER.
<b>\(\rightarrow\)</b>	DUPLEX CONVENIENCE OUTLET, GFI TYPE. MOUNTED ABOVE COUNTER AT +46" TO CENTERLINE OF RECEPTACLE UNLESS NOTED OTHERWISE.
<b>■</b> +	SPECIAL RECEPTACLE TO SUIT EQUIPMENT FURNISHED.
<del> </del>	QUADRUPLEX RECEPTACLE, +18" TO CENTER LINE OF OUTLET UNLESS OTHERWISE NOTED.
	FLUSH CEILING MOUNTED RECEPTACLE. SEE DETAIL E3/7.2 FOR MOUNTING INFORMATION.  DUPLEX CONVENIENCE OUTLET CONNECTED TO EMERGENCY POWER, +18" TO CENTER LINE OF
<del> </del>	OUTLET UNLESS OTHERWISE NOTED.  DUPLEX CONVENIENCE OUTLET CONNECTED TO EMERGENCY POWER, +46" TO CENTER LINE OF
<u> </u>	OUTLET UNLESS OTHERWISE NOTED.  QUADRUPLEX CONVENIENCE OUTLET CONNECTED TO EMERGENCY POWER, +18" TO CENTER LINE
<u></u>	OF OUTLET UNLESS OTHERWISE NOTED.
	FLUSH FLOOR BOX WITH QUADRUPLEX RECEPTACLE AND TELECOMMUNICATION OUTLET. SEE SPECIFICATIONS FOR TYPE OF BOX.  PANELBOARD, SEE SCHEDULE.
	DISCONNECT SWITCH, SIZE AS NOTED ON DRAWINGS. FUSED PER MANUFACTURER'S NAME PLATE DATA OF EQUIPMENT SERVED.
Μ	SINGLE OR DOUBLE POLE, MINIMUM 20 AMP MOTOR RATED ENCLOSED SWITCH WITH "LOCK-OUT" OPTION. MOUNTED NEAR EQUIPMENT BEING SERVED.
(M)	MOTOR
	WALL MOUNTED 120V HAND DRYER. COORDINATE EXACT HEIGHT WITH ARCHITECTURAL
	ELEVATIONS PRIOR TO ROUGH-IN.  ELECTRICAL WATER COOLER. PROVIDE A DUPLEX RECEPTACLE AT WATER COOLER. CIRCUIT
 [G <sub>A</sub> ]	SHALL BE GFCI PROTECTED. REFER TO DETAIL 2/E7.2 FOR ROUGH-IN.  GENERATOR REMOTE ANNUNCIATOR. SURFACE MOUNTED.
LA .	LIGHTING CONTROL DEVICES
\$	SINGLE POLE TOGGLE SWITCH, +46" TO CENTER LINE MOUNTING HEIGHT.
\$ <sup>3</sup>	THREE OR FOUR WAY SWITCH AS INDICATED. +46" TO CENTER LINE MOUNTING HEIGHT.
\$ <sup>T</sup>	SINGLE POLE DIGITAL TIME SWITCH WITH OPTIONAL AUDIBLE ALERT. +46" TO CENTER LINE MOUNTING HEIGHT. WATTSTOPPER TS-400 OR EQUAL.
ķ	KEY OPERATED SINGLE POLE TOGGLE SWITCH, +46" TO CENTER LINE MOUNTING HEIGHT.
	LED DECORA STYLE DIMMER WITH ROCKER ON/OFF SWITCH AND SLIDE DIMMER ON SIDE OF ROCKER. 0-10VDC CAPABLE DIMMER +46" MOUNTING HEIGHT. LUTRON "DIVA 0-10V" OR EQUAL BY
þ	LEVITON, WATTSTOPPER, HUBBELL, OR COOPER. (NO ADDITIONAL POWER PACK REQUIRED). DIVISION 26 SHALL PROVIDE ALL ADDITONAL CONDUCTORS TO ALL FIXTURES CONNECTED FOR A PROPER 0-10VDC OPERATION. GRAY FINISH.
Eo	EMERGENCY OVERRIDE LIGHTING RELAY "BYPASS". SEE DETAIL 2/E7.4.
E <sub>N</sub>	EMERGENCY OVERRIDE LIGHTING RELAY "NORMAL". SEE DETAIL 3/E7.4.
<del></del>	OCCUPANCY SENSORS
þ°	LED DECORA STYLE DIMMER WITH ROCKER ON/OFF SWITCH AND SLIDE DIMMER ON SIDE OF ROCKER. 0-10VDC CAPABLE DIMMER WITH PASSIVE INFRARED OCCUPANCY SENSOR. +46" MOUNTING HEIGHT, GRAY FINISH. LUTRON "DIVA 0-10V" OR EQUAL BY LEVITON, WATTSTOPPER, HUBBELL OR COOPER. DIMMER MUST BE COMPATIBLE WITH ALL LIGHTING COMPONENTS (NO ADDITIONAL POWER PACK REQUIRED). DIVISION 26 SHALL PROVIDE ALL ADDITIONAL CONDUCTORS TO ALL FIXTURES CONNECTED FOR PROPER 0-10V OPERATION.
φ	SWITCH, WALL MOUNTED OCCUPANCY SENSOR (WATTSTOPPER PW-100 OR EQUAL). +46" TO CENTER LINE MOUNTING HEIGHT.
(\$)	DUAL TECHNOLOGY 360° OCCUPANCY SENSOR. CEILING MOUNTED. INFRARED/ULTRASONIC (WATTSTOPPER "DT" SERIES OR EQUAL). PROVIDE ALL NECESSARY COMPONENTS TO INSURE PROPER OPERATION (POWER PACKS, SLAVE PACKS, ETC.)
• • • • • • • • • • • • • • • • • • •	DUAL TECHNOLOGY OCCUPANCY SENSOR. CEILING MOUNTED AT CORNER UNLESS SHOWN
<b>\$</b>	OTHERWISE. INFRARED/ULTRASONIC (WATTSTOPPER "DT" SERIES OR EQUAL). PROVIDE ALL
\$\langle\$	OTHERWISE. INFRARED/ULTRASONIC (WATTSTOPPER "DT" SERIES OR EQUAL). PROVIDE ALL NECESSARY COMPONENTS TO INSURE PROPER OPERATION (POWER PACKS, SLAVE PACKS, ETC.)  ULTRASONIC OCCUPANCY SENSOR. CEILING MOUNTED (WATTSTOPPER "UT" SERIES OR EQUAL). PROVIDE ALL NECESSARY COMPONENTS TO INSURE PROPER OPERATION (POWER PACKS, SLAVE PACKS, ETC.)

	FIRE ALARM SYSTEM
VE	VOICE EVACUATION SIGNAL, SPEAKER, AND STROBE LIGHT, +6'-10" MOUNTING HEIGHT TO CENTER OF DEVICE
SL Ý	STROBE LIGHT, 6'-10" MOUNTING HEIGHT TO CENTER OF DEVICE.
F	PULL STATION. WALL MOUNTED +46" TO CENTER LINE MOUNTING HEIGHT.
FACP	FIRE ALARM CONTROL PANEL. SURFACE WALL MOUNTED.
DOC	FIRE ALARM DOCUMENTATION BOX.
	HEAT DETECTOR, CEILING MOUNTED.
⟨2⟩	SMOKE DETECTOR, CEILING MOUNTED.
<b>⊘</b> co	CARBON MONOXIDE DETECTOR, CEILING MOUNTED.
FAA	FIRE ALARM LCD REMOTE ALPHANUMERIC ANNUNCIATOR. FLUSH WALL MOUNTED.
S DD	DUCT SMOKE DETECTOR, LOCATED AT HVAC UNIT OR UP STREAM OF SMOKE DAMPER. COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS PRIOR TO ROUGHING IN.
VS	TAMPER SWITCH, FURNISHED AND INSTALLED WITH SPRINKLER SYSTEM. INTERLOCK WITH FIRE ALARM SYSTEM BY ELECTRICAL.
WF	FLOW SWITCH, FURNISHED AND INSTALLED WITH SPRINKLER SYSTEM. INTERLOCK WITH FIRE ALARM SYSTEM BY ELECTRICAL.
MIC	VOICE EVACUATION REMOTE MICROPHONE.
$C_M$	CONTROL/MONITOR MODULE.
ESR	FIRE ALARM REMOTE ELEVATOR INTERFACE MODULE.
	TELECOMMUNICATIONS SYSTEMS
TB	PLYWOOD BACKBOARD "T.B." INDICATES TELECOMMUNICATIONS BOARD.
	TELECOMMUNICATIONS RACK, 2 POST, WITH VERTICAL CABLE WIRE MANAGEMENT. SEE SPECIFICATIONS.
$\triangleright$	TELECOMMUNICATIONS OUTLET., +18" TO CENTER LINE OF OUTLET UNLESS NOTED OTHERWISE. STUB UP 1"C. TO CEILING SPACE ABOVE.
$\triangleright$	TELECOMMUNICATIONS OUTLET., +46" TO CENTER LINE OF OUTLET UNLESS NOTED OTHERWISE. STUB UP 1"C. TO CEILING SPACE ABOVE.
	VIDEO SURVEILLANCE CAMERAS
c <	CCTV SYSTEM CAMERA, WALL OR CEILING MOUNTED. ALL CAMERA LOCATIONS SHOWN ON EXTERIOR SHALL BE WEATHERPROOF TYPE. DIVISION 26 ROUGH IN RECESSED SINGLE BOX WITH 3/4"C. STUB-OUT TO ABOVE NEAREST ACCESSIBLE CEILING. CABLING SHALL BE PROVIDED AND INSTALLED BY DIVISION 27. CAMERA SHALL BE PROVIDED AND INSTALLED BY DIVISION 28
	ACCESS CONTROL / SECURITY
<b>©</b>	DOOR CONTACT POSITION SWITCH MOUNTED INSIDE DOOR FRAME AND CONNECT TO ACCESS CONTROL SYSTEM. DIVISION 26 TO PROVIDE AND INSTALL BACKBOX / CONDUIT. DIVISION 28 TO PROVIDE AND INSTALL CABLING. SEE PLANS E5.3 AND E5.4 FOR FURTHER REQUIREMENTS. SEE DETAIL 5/E7.3.
© <sub>₽</sub>	ACCESS CONTROL CREDENTIAL READER. DIVISION 26 TO PROVIDE SINGLE GANG FLUSH WALL MOUNTED BOX AT +48" A.F.F AND ROUTE 3/4"C. FROM BOX TO BE STUBBED OUT ABOVE CEILING. DIVISION 28 TO PROVIDE AND INSTALL CABLING. SEE PLANS E5.3 AND E5.4 FOR FURTHER REQUIREMENTS. SEE DETAIL 5/E7.3.
L	120V CONNECTION TO DOOR LOCKING TRANSFORMER LOCATED ABOVE CEILING. DIVISION 26 TO ROUTE 1/2"C FROM TRANSFORMER TO TOP OF DOOR FRAME. COORDINATE EXACT LOCATION WITH DOOR LOCKING SYSTEM VENDOR SHOP DRAWINGS AND OWNER.
Ô	DURESS ALARM BUTTON / INTERFACE LOCATION. DIVISION 26 TO PROVIDE SINGLE GANG FLUSH WALL BOX AT 36" AFF (UNLESS OTHERWISE DIRECT BY OWNER) AND ROUTE 3/4"C. FROM BOX TO BE STUBBED OUT ABOVE CEILING. DIVISION 28 TO PROVIDE AND INSTALL CABLING.

## **GENERAL NOTES:**

- 1. DO NOT SCALE DRAWINGS TO LOCATE EQUIPMENT OR OUTLETS.
- 2. MOUNTING HEIGHTS AS INDICATED ON THE DRAWINGS SHALL BE FROM THE FINISHED FLOOR TO THE CENTER LINE OF THE OUTLET BOX.
- 3. THE ELECTRICAL DRAWINGS ARE ONLY A PART OF THE CONTRACT DOCUMENTS. ALL OF THE DRAWINGS AND SPECIFICATIONS MUST BE REVIEWED FOR THEIR INTERRELATIONSHIP AND REQUIRED COORDINATION BETWEEN DISCIPLINES.
- 112 SYMBOL INDICATING ROOM OR SPACE NUMBER.
- 5. ALL CONDUIT ROUTED FROM DISCONNECT TO EXTERIOR HVAC UNITS SHALL BE ROUTED UNDERGROUND. TURN UP ADJACENT TO UNIT AND MAKE TRANSITION TO SEALTITE TO
- 6. ALL CONDUIT, OUTLET BOXES, AND LOW VOLTAGE CABLING SHALL BE APPROPRIATELY SUPPORTED THROUGHOUT THE PROJECT. SUPPORT OF THESE ITEMS BY CEILING GRID OR GRID SUPPORT WIRES IS NOT ACCEPTABLE.
- 7. ALL EXTERIOR DISCONNECTS SHALL BE RATED NEMA 3R. ALL DISCONNECTS SHALL BE HEAVY DUTY TYPE, FUSIBLE, WITH EQUIPMENT GROUND BAR.
- 8. COORDINATE EXACT LOCATION OF ALL MECHANICAL AND PLUMBING EQUIPMENT WITH MECHANICAL AND PLUMBING CONTRACTOR PRIOR TO ROUGH IN. ADJUST LOCATION OF DISCONNECTING MEANS AND BRANCH CIRCUITRY AS REQUIRED.
- 9. PRIOR TO PROJECT COMPLETION, ELECTRICAL CONTRACTOR SHALL OBTAIN FINAL SPACE NUMBERS FROM OWNER AND/OR ARCHITECT. TYPEWRITTEN PANELBOARD DIRECTORIES SHALL REFLECT SPACE DESIGNATION OF EACH CIRCUIT. NO EXCEPTIONS.
- 10. ALL CONDUIT ROUTED FROM SLAB UP TO PANELS AND EXPOSED CONDUIT ROUTED BELOW +48" A.F.F. SHALL BE GALVANIZED RIGID STEEL.
- 11. ALL LOW VOLTAGE CABLING ROUTED UNDERGROUND SHALL BE WEST PENN "AQUASEAL" OR EQUAL. ALL LOW VOLTAGE CABLING NOT IN CONDUIT SHALL BE PLENUM RATED.
- 12. ELECTRICAL CONTRACTOR SHALL WARRANTY ALL EQUIPMENT AND INSTALLATION OF SUCH FOR TWO (2) YEARS FROM DATE OF PROJECT ACCEPTANCE. WARRANTY APPLIES TO ENTIRE ELECTRICAL CONTRACTOR'S SCOPE.
- 13. SEE SPECIFICATIONS FOR COLORED TRACER REQUIRED ON ALL NEUTRAL CONDUCTORS FOR LIGHTING AND RECEPTACLE CIRCUITS.
- 14. REFER TO SPECIFICATIONS SECTION 260553 FOR LABELING OF ALL JUNCTION BOX COVERS AS WELL AS I.D. TAGS FOR DISCONNECTS AND PANELBOARDS. PROVIDE ENGRAVED I.D. TAGS PER DETAIL 4/E7.3.
- 15. ALL THHN / THWN WIRE SHALL HAVE A FACTORY INSTALLED COLOR CODED OUTER JACKET. REFER TO SECTION 260519. CONTRACTOR IS TO NOTE THAT ALL FEEDER CONDUCTORS SHALL HAVE FULL COLOR CODED OUTER JACKET INTEGRAL TO THE CONDUCTOR INSULATION. USE OF COLOR PHASING TAPE IS NOT ALLOWED.
- 16. REFER TO SPECIFICATIONS FOR LABELING REQUIRED AT ALL JUNCTION BOX COVERS. LABEL IN ACCORDANCE AS NOTED.
- 17. ALL WIRING DEVICE COVERPLATES SHALL BE HAND LABELED ON BACK OF COVERPLATE. LABELING SHALL BE PERMANENT MARKER, LEGIBLE, AND NOTE PANEL/CIRCUIT NUMBER SERVING DEVICE.

	FIXTURE SCHEDULE	
TYPE	DESCRIPTION	MANUFACTURER
A	2' x 4' RECESSED CEILING GRID TYPE BACK-LIT FLAT PANEL FIXTURE WITH SINGLE PIECE INJECTION FRAME AND SMOOTH WHITE LENS. PROVIDE NEW GYPBOARD FLANGE MOUNT TRIM KIT WHERE SHOWN IN AREAS WITHOUT CEILING GRID. FIXTURE SHALL BE CAPABLE OF BOTH FIELD ADJUSTABLE LUMENS (4K, 5K, 6.5K) AND COLOR TEMP (3.5K, 4K, 5K). SET LEVELS AS NOTED BELOW.	LITHONIA "CPX" SERIES METALUX "CGTS" SERIES COLUMBIA "CBT" SERIES
	LAMPS: L.E.D., 35 WATTS, 5000 LUMENS (MEDIUM), 3500°K DRIVER: MULTIVOLT, 0-10V DIMMING	ILP "VPAN SELECT" SERIES
A2	SAME AS TYPE "A" EXCEPT 2' x 2' HOUSING	
A2H	SAME AS TYPE "A" EXCEPT 2' x 2' HOUSING, 6000 LUMENS, AND 3500°K. (ADJUSTABLE LUMEN AND COLOR TEMP NOT REQUIRED FOR THIS FIXTURE)	
A4	SAME AS TYPE "A" EXCEPT 1' x 4' HOUSING	
В	2' x 4' RECESSED GYPBOARD VANDAL RESISTANT TROFFER WITH INTEGRAL FLANGE TRIM. FIXTURE HOUSING SHALL BE 20-GAUGE COLD ROLLED STEEL WITH 18-GAUGE COLD ROLLED STEEL DOOR FRAME, TAMPER RESISTANT SCREWS, AND POLYCARBONATE LENS.  LAMPS: L.E.D., 35 WATTS, 5000 LUMENS, 3500°K DRIVER: MULTIVOLT, 0-10V DIMMING	LITHONIA "VRTL" SERIES FAIL-SAFE "FMR" SERIES COLUMBIA "OBEX" SERIES ADVANTAGE "BAA" SERIES
С	4'-0" LENSED STRIP FIXTURE SURFACE MOUNTED WITH WHITE FINISH. (SURFACE, STEM, OR CHAIN SUSPEND WHERE REQUIRED). FIXTURE SHALL BE CAPABLE OF BOTH FIELD ADJUSTABLE LUMENS (3.2K, 4.2K, 5K) AND COLOR TEMP (3.5K, 4K, 5K). SET LEVELS AS NOTED BELOW.  LAMPS: L.E.D., 36 WATTS, 4200 LUMENS (MEDIUM), 3500°K DRIVER: MULTIVOLT, 0-10V DIMMING	LITHONIA "CSS" SERIES METALUX "SLSTP" SERIES, COLUMBIA "CSL" SERIES JADEMAR "JSTRE" SERIES
C2	SAME AS TYPE "C" EXCEPT 2'-0" STRIP WITH FIELD ADJUSTABLE LUMENS OF 1K, 2K, AND 2.5K.	
C8	SAME AS TYPE "C" EXCEPT 8'-0" STRIP WITH FIELD ADJUSTABLE LUMENS OF 6K, 8K, AND 10K.	
D	RECESSED COMMERCIAL GRADE DOWNLIGHT WITH 6" APERTURE. FIXTURE SHALL BE CONSTRUCTED OUT OF 16 GAUGE GALVANIZED STEEL WITH SEMI-SPECULAR REFLECTOR, WHITE FLANGE, AND PROVIDE NEW CONSTRUCTION ROUGH-IN FRAME. FIXTURE SHALL BE CAPABLE OF BOTH FIELD ADJUSTABLE LUMENS (1K, 1.5K, 2K) AND COLOR TEMP (3K, 3.5K, 4K, 5K). SET LEVELS AS NOTED BELOW.  LAMPS: L.E.D., 13 WATTS, 1500 LUMENS (MEDIUM), 3500°K DRIVER: MULTIVOLT, 0-10V DIMMING	LITHONIA "LBR6" SERIES HALO "PR" SERIES PRESCOLITE "LBRP" SERIES GREEN CREATIVE "SLFT" SERIES
DR	SAME AS TYPE "D" EXCEPT RETROFIT HOUSING VERSION OF FIXTURE.	
F	4'-0" SURFACE WALL MOUNTED FIXTURE WITH CURVED SMOOTH IMPACT RESISTANT ACRYLIC FROSTED DIFFUSER, TRIM RINGS AT EDGES OF DIFFUSER, WHITE STEEL HOUSING, AND DUAL TECHNOLOGY INTEGRAL OCCUPANCY FOR INDIVIDUAL FIXTURE DIMMING CONTROL TO 10% DURING UNOCCUPIED STATE.  LAMPS: L.E.D., 39.5 WATT, 4800 LUMENS, 3500°K DRIVER: MULTIVOLT, 0-10V DIMMING	LITHONIA "BLWP4" SERIES COLUMBIA "ESL" SERIES METALUX "SWLED" SERIES ILP "SQ4" SERIES
G G	4'-0 SURFACE MOUNTED FIXTURE. COMPLETELY ENCLOSED AND GASKETED, WITH HIGH IMPACT FROSTED POLYCARBONATE LENS AND TAMPER RESISTANT POLYCARBONATE CAPTIVE LATCHES. WET LOCATION LISTED. FIXTURE SHALL BE CAPABLE OF BOTH FIELD ADJUSTABLE LUMENS (3K, 4K, 5K) AND COLOR TEMP (3.5K, 4K, 5K). SET LEVELS AS NOTED BELOW.  LAMPS: L.E.D., 34 WATT, 4000 LUMENS, 4000°K DRIVER: MULTI-VOLT, 0-10V DIMMING	LITHONIA "CSVT" SERIES METALUX "APVT" SERIES COLUMBIA "LXEM" SERIES ILP "VVT" SERIES
G8	SAME AS TYPE "G" EXCEPT LENGTH FIELD ADJUSTABLE LUMENS OF 6K, 8K, AND 10K.	
н	EXTERIOR SURFACE WALL MOUNTED SCONCE WITH SEALED DIE-CAST ALUMINUM IP65 RATED HOUSING, BOROSILICATE GLASS LENS, AND INTEGRAL PHOTOCELL BUTTON, AND DARK BRONZE FINISH. FIXTURE SHALL BE CIRCUITED TO UNSWITCHED ("HOT") CONDUCTOR. FIXTURE SHALL BE CAPABLE OF BOTH FIELD ADJUSTABLE LUMENS (2.3K, 5.3K, 8.5K) AND COLOR TEMP (3K, 4K, 5K). SET LEVELS AS NOTED BELOW. MOUNT AT 9'-0" ABOVE GRADE UNLESS OTHERWISE DIRECTED BY ARCHITECTURAL EXTERIOR ELEVATIONS.  LAMPS: L.E.D., 16-59 WATTS, 2300 LUMENS (LOW), 4000°K DRIVER: MULTIVOLT	LITHONIA "TWR1 ALO PE" SERIES LUMARK "WPM" SERIES EXO "WGH" SERIES ILP "OW" SERIES
H2	SAME AS TYPE "H" EXCEPT WITH ADJUSTABLE LUMENS OF 8.2K, 12.1K, 16.1K AND SET TO 12,100 LUMENS. MOUNT AT 16'-0" ABOVE GRADE AT BUILDING. COORDINATE WITH ARCHITECTURAL ELEVATIONS.	
J	RECESSED RETROFIT COMMERCIAL GRADE DOWNLIGHT WITH 8" APERTURE WITH 10" GOOF RING. FIXTURE SHALL BE CONSTRUCTED OUT OF 16 GAUGE GALVANIZED STEEL WITH SEMI-SPECULAR REFLECTOR AND WHITE FLANGE. FIXTURE SHALL BE CAPABLE OF BOTH FIELD ADJUSTABLE LUMENS (4K, 4.5K, 5K) AND COLOR TEMP (3K, 3.5K, 4K, 5K). SET LEVELS AS NOTED BELOW. CONTRACTOR SHALL FIELD VERIFY EXISTING CEILING OPENING APERTURE PRIOR SUBMITTAL AND SUBMIT FIXTURE AS REQUIRED. ALL OTHER CHARACTERISTICS OF FIXTURE SHALL REMAIN THE SAME.	LITHONIA "LBR8" SERIES HALO "PR" SERIES PRESCOLITE "LBPR" SERIES GREEN CREATIVE "SLFT" SER
	LAMPS: L.E.D., 44 WATTS, 4500 LUMENS (MEDIUM), 3500°K DRIVER: MULTIVOLT, UNIVERSAL DIMMING BOTH WITH 0-10V AND LINE VOLTAGE DIMMING	
J2	SAME AS TYPE "J2" EXCEPT WITH FIELD ADJUSTABLE LUMENS (2K, 2.5K, 3K). SET TO 2500 LUMENS (MEDIUM).	~~~
К	4'-0" CORNER (WALL & CEILING) SURFACE CEILING MOUNTED VANDAL RESISTANT FIXTURE. FIXTURE WHITE PAINTED HOUSING OF MAXIMUM 16-GAUGE COLD ROLLED STEEL, WELDED PIANO TYPE DOOR HINGE, TAMPER RESISTANT SCREWS, AND .187 POLYCARBONATE LENS (NO LAMP SIDE LENS).  LAMPS: L.E.D., 35 WATTS, 5000 LUMENS, 3500°K	LUMINAIRE "CMP" SERIES FAIL-SAFE "FCC" SERIES L.A. LIGHTING "ASE100-MOD" ADVANTAGE "BAL" SERIES
⊗	UNIVERSAL MOUNTED EDGE-LIT EXIT LIGHT WITH INJECTION MOLDED HIGH-IMPACT ACRYLIC PANEL, EXTRUDED ALUMINUM HOUSING, AND LONG LIFE L.E.D. LIGHT SOURCE AND 120/277 VOLTAGE INPUT. RED LETTERING. PROVIDE BACK-UP BATTERY PACK W/ MAINTENANCE FREE NI-CAD BATTERIES IN ORDER TO PROVIDE MINIMUM 90 MINUTES OF ILLUMINATION.	LITHONIA "BE" SERIES SURE-LITE "EU" SERIES COMPASS "CEL" SERIES UTOPIA "EL" SERIES
NOTE	1. ALL LUMENS LISTED ARE <u>DELIVERED</u> LUMENS. ALL EQUALS TO SPECIFIED SHALL NOT BE ANY LOWER THAN 5% OF SPECIFIED LUMENS.  2. LISTING OF MANUFACTURERS <u>DOES NOT EQUAL</u> AUTOMATIC APPROVAL. ALL CHARACTERISTICS NOTED IN DESCRIPTION SECTION MUST BE MET IN ORDER TO BE APPROVED. WHERE VENDOR / REP DOES NOT HAVE	سسس



LECTRICAL DESIGN ELECTRICAL ENGINEERS
1201 BROAD ST., SUITE 1-A
AUGUSTA, GA 30901
PH: (706) 724-3551
FAX: (706) 724-8507

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01/29/2024

3. PROVIDE UN-SWITCHED EMERGENCY "HOT" CONDUCTOR TO EACH EXIT SIGN.

4. PROVIDE NEUTRAL CONDUCTOR TO ALL WALL MOUNTED OCCUPANCY SENSORS. IF SENSOR DOES NOT REQUIRE NEUTRAL, CAP NEUTRAL IN BOX.

5. FOR ALL CONDUIT INSTALLATIONS, CONTRACTOR SHALL PULL #18 AWG TFN SOLID COPPER CONTROL WIRING IN SAME CONDUIT AS LINE-VOLTAGE CONDUCTORS SHALL BE PURPLE AND GRAY. FIXTURE WHIPS SHALL BE PROVIDED WITH CONTROL WIRING INSTALLED IN WHIPS TO MATCH INSTALLATION. FIXTURE WHIPS SHALL NOT EXCEED 6'-0" IN LENGTH. NO EXCEPTIONS.

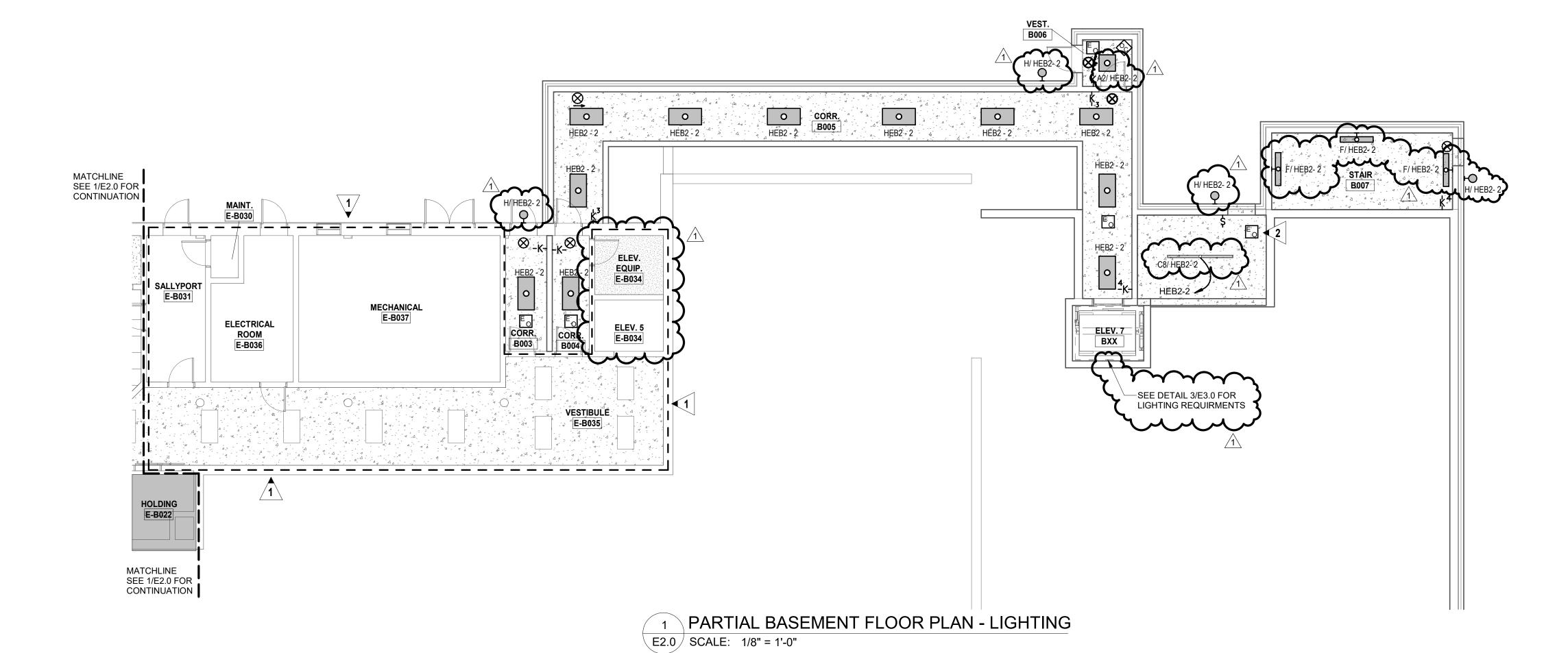
6. WHERE EMERGENCY OVERRIDE RELAYS ARE SHOWN IN AREAS WITH GYPBOARD (OR INACCESSIBLE CEILINGS), RELAY SHALL BE LOCATED IN ADJACENT SPACE WITH ACOUSTICAL TILE CEILING. PROVIDE LABEL AT T-GRID PER DETAIL

7. HOMERUN CIRCUITS ARE SHOWN AS NOTED. PROVIDE ALL BRANCH CIRCUIT CONDUIT/CONDUCTORS/TRAVELERS AS NECESSARY TO CONNECT ALL DEVICES SHOWN ON THE CIRCUIT. PROVIDE DEDICATED NEUTRALS FOR ALL CIRCUITS.

## **KEYED NOTES:**

1 ALL FIXTURES IN THIS AREA ARE EXISTING FIXTURES TO REMAIN.

2 EMERGENCY OVERRIDE RELAY DEVICE SHALL SERVE AS OVERRIDE DEVICE FOR LIGHTING IN STAIR B007 BUT BE LOCATED IN EMERGENCY ELECTRICAL ROOM AS SHOWN.



PROPOSED RENOVA

Begistered

COLUMBIA COUNTY

640 RONALD RE

EVANS, GEOF

CENTER

JUSTICE

BASEMENT FLOOR PLAN - LIGHTIN

DRWN BY: KH

CHK'D BY: TB

DATE: JANUARY 29, 202

DATE: JANUARY 29, 2024

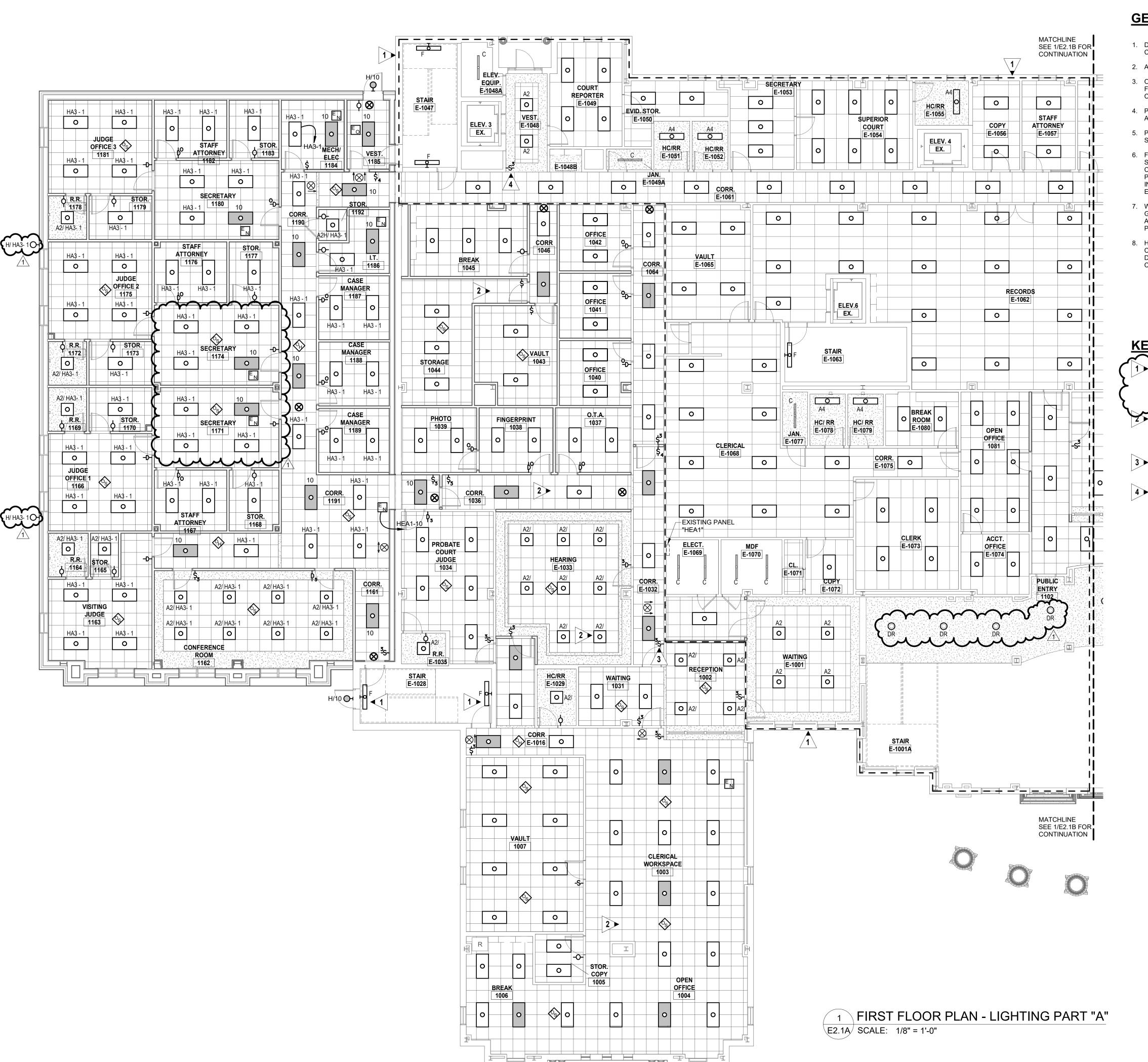
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0 ISSUED FOR BID 01/29/2024
1 ADDENDUM #3 02/21/2024

**Ј**ОВ NO. **2218** 

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## **GENERAL NOTES:**

- 1. DIVISION 26 TO REFER TO ARCHITECTURAL SHEETS FOR PROJECT CONSTRUCTION AREA OF WORK PER PHASE.
- 2. ALL 2' X 4' FIXTURES SHALL BE TYPE "A" UNLESS OTHERWISE NOTED.
- 3. OCCUPANCY SENSOR SHALL BE LOCATED TO PROVIDE MAXIMUM COVERAGE FOR ROOM. REFER TO DETAILS AND MANUFACTURER LAYOUT FOR
- 4. PROVIDE UN-SWITCHED EMERGENCY "HOT" CONDUCTOR TO EACH EXIT SIGN AND NIGHT LIGHT.
- 5. PROVIDE NEUTRAL CONDUCTOR TO ALL WALL MOUNTED OCCUPANCY SENSORS. IF SENSOR DOES NOT REQUIRE NEUTRAL, CAP NEUTRAL IN BOX
- FOR ALL CONDUIT INSTALLATIONS, CONTRACTOR SHALL PULL #18 AWG TFN SOLID COPPER CONTROL WIRING IN SAME CONDUIT AS LINE-VOLTAGE CONDUCTORS SHALL BE PURPLE AND GRAY. FIXTURE WHIPS SHALL BE PROVIDED WITH CONTROL WIRING INSTALLED IN WHIPS TO MATCH INSTALLATION. FIXTURE WHIPS SHALL NOT EXCEED 6'-0" IN LENGTH. NO EXCEPTIONS.
- 7. WHERE EMERGENCY OVERRIDE RELAYS ARE SHOWN IN AREAS WITH GYPBOARD (OR INACCESSIBLE CEILINGS), RELAY SHALL BE LOCATED IN ADJACENT SPACE WITH ACOUSTICAL TILE CEILING. PROVIDE LABEL AT T-GRID PER DETAIL
- 8. HOMERUN CIRCUITS ARE SHOWN AS NOTED. PROVIDE ALL BRANCH CIRCUIT CONDUIT/CONDUCTORS/TRAVELERS AS NECESSARY TO CONNECT ALL DEVICES SHOWN ON THE CIRCUIT. PROVIDE DEDICATED NEUTRALS FOR ALL

## **KEYED NOTES:**

- IN SAME LOCATIONS. DIVISION 26 TO REMOVE EXISTING FIXTURES PER DEMOLITION REQUIREMENTS NOTED ON E1.2 AND INSTALL NEW FIXTURE TYPE AS SHOWN. DIVISION 26 TO RECONNECT TO EXISTING LINE VOLTAGE CONDUCTORS CURRENTLY SERVING EXISTING FIXTURES AT THIS LOCATION. ALL EXISTING EXIST
- RENOVATION BOUNDARY. ALL LIGHT FIXTURES SHOWN ARE NEW FIXTURES AND LOCATIONS IN NEW GRID. UTILIZE EXISTING 277V CIRCUIT(S) FROM PANEL "HA1" FOR ALL NORMAL LIGHTING FIXTURES SHOWN. UTILIZE EXISTING EMERGENCY 277V CIRCUIT(S) FROM PANEL "HEA1" FOR ALL EMERGENCY FIXTURES SHOWN.
- 3 EXISTING 3-WAY SWITCH AT THIS LOCATION TO REMAIN AND BE RECONNECTED TO CONTROL LIGHTING IN CORRIDORS 1032 AND 1036 IN CONJUNCTION WITH NEW SWITCHES SHOWN IN THIS AREA.
- 4 EXISTING 3-WAY SWITCH AT THIS LOCATION TO REMAIN AND BE RECONNECTED TO CONTROL LIGHTING IN CORRIDORS 1064, 1061, 1046, AND 1048 IN CONJUNCTION WITH NEW SWITCH SHOWN IN THIS AREA.

2218

ISSUED FOR BII 01/29/2024

ADDENDUM #3

DRWN BY: KI

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COUNTY

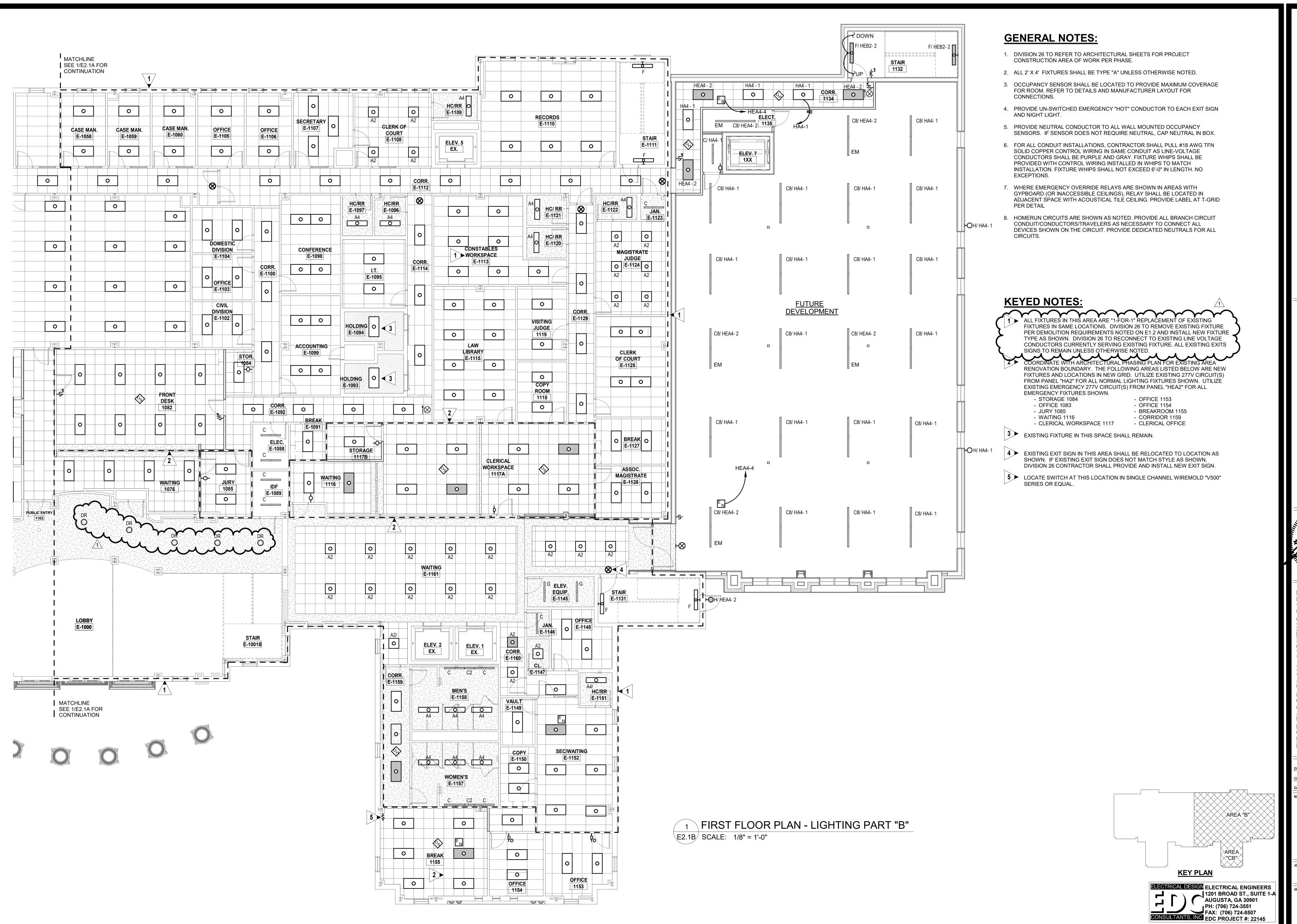
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**ADDITION** 

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PRO



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COUNTY JUSTICE CENTER

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WHITE STATES AND SECURITY AND SECU

R PLAN - LIGHTING PAR "B"

DRWN BY: KH

CHK'D BY: TB

DATE: JANUARY 29, 2024

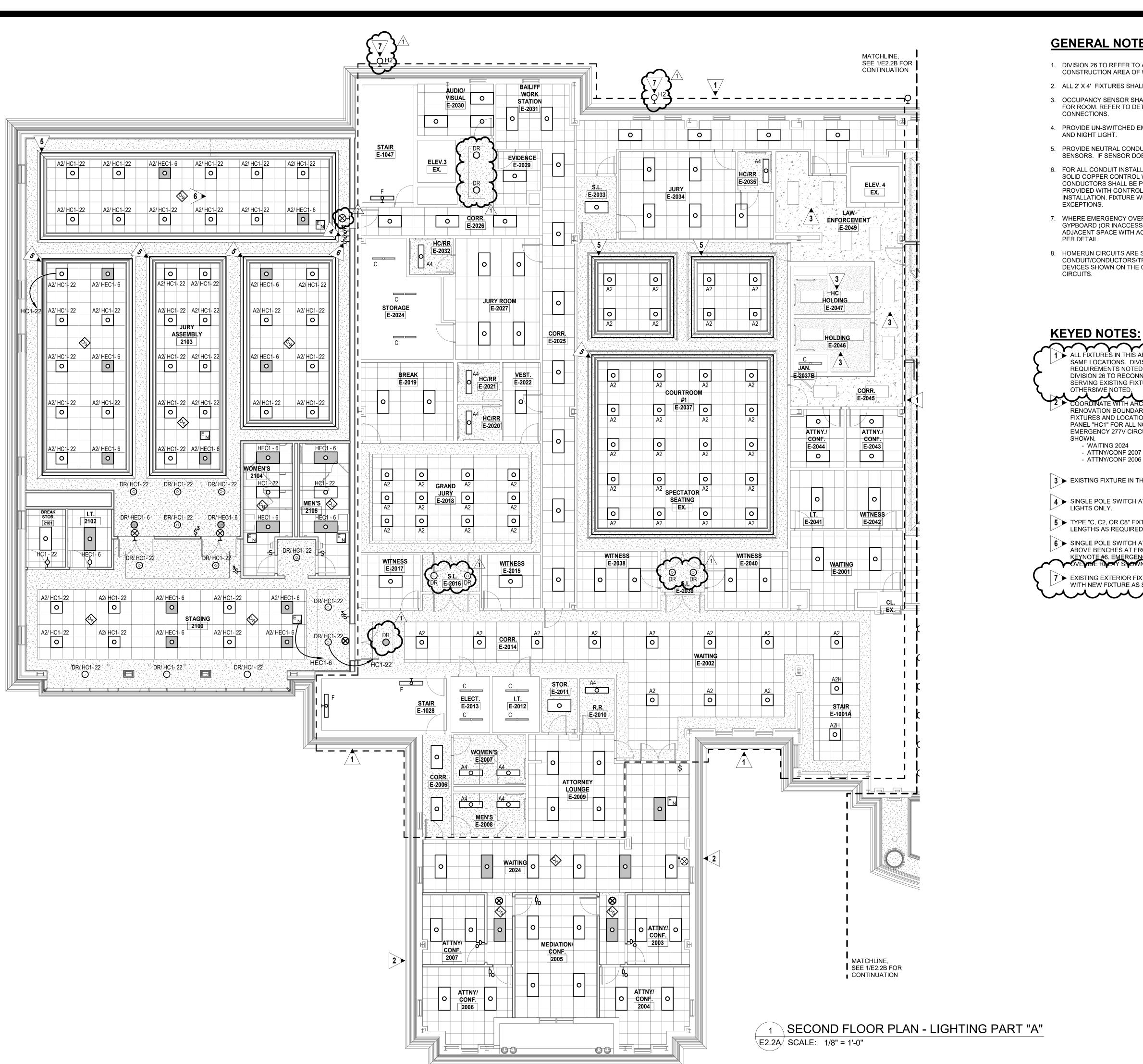
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**2218** 

E2 41

E2.1B



## **GENERAL NOTES:**

- 1. DIVISION 26 TO REFER TO ARCHITECTURAL SHEETS FOR PROJECT CONSTRUCTION AREA OF WORK PER PHASE.
- 2. ALL 2' X 4' FIXTURES SHALL BE TYPE "A" UNLESS OTHERWISE NOTED.
- 3. OCCUPANCY SENSOR SHALL BE LOCATED TO PROVIDE MAXIMUM COVERAGE FOR ROOM. REFER TO DETAILS AND MANUFACTURER LAYOUT FOR
- 4. PROVIDE UN-SWITCHED EMERGENCY "HOT" CONDUCTOR TO EACH EXIT SIGN
- 5. PROVIDE NEUTRAL CONDUCTOR TO ALL WALL MOUNTED OCCUPANCY SENSORS. IF SENSOR DOES NOT REQUIRE NEUTRAL, CAP NEUTRAL IN BOX.
- 6. FOR ALL CONDUIT INSTALLATIONS, CONTRACTOR SHALL PULL #18 AWG TFN SOLID COPPER CONTROL WIRING IN SAME CONDUIT AS LINE-VOLTAGE CONDUCTORS SHALL BE PURPLE AND GRAY. FIXTURE WHIPS SHALL BE PROVIDED WITH CONTROL WIRING INSTALLED IN WHIPS TO MATCH INSTALLATION. FIXTURE WHIPS SHALL NOT EXCEED 6'-0" IN LENGTH. NO
- 7. WHERE EMERGENCY OVERRIDE RELAYS ARE SHOWN IN AREAS WITH GYPBOARD (OR INACCESSIBLE CEILINGS), RELAY SHALL BE LOCATED IN ADJACENT SPACE WITH ACOUSTICAL TILE CEILING. PROVIDE LABEL AT T-GRID
- 8. HOMERUN CIRCUITS ARE SHOWN AS NOTED. PROVIDE ALL BRANCH CIRCUIT CONDUIT/CONDUCTORS/TRAVELERS AS NECESSARY TO CONNECT ALL DEVICES SHOWN ON THE CIRCUIT. PROVIDE DEDICATED NEUTRALS FOR ALL

## **KEYED NOTES:**

SAME LOCATIONS. DIVISION 26 TO REMOVE EXISTING FIXTURE PER DEMOLITION REQUIREMENTS NOTED ON E1.2 AND INSTALL NEW FIXTURE TYPE AS SHOWN. DIVISION 26 TO RECONNECT TO EXISTING LINE VOLTAGE CONDUCTORS CURRENTLY

RENOVATION BOUNDARY. THE FOLLOWING AREAS LISTED BELOW ARE NEW FIXTURES AND LOCATIONS IN NEW GRID. UTILIZE EXISTING 277V CIRCUIT(S) FROM PANEL "HC1" FOR ALL NORMAL LIGHTING FIXTURES SHOWN. UTILIZE EXISTING EMERGENCY 277V CIRCUIT(S) FROM PANEL "HEC1" FOR ALL EMERGENCY FIXTURES

 WAITING 2024 - ATTNY/CONF 2007

- ATTNY/CONF 2003 - MEDIATATION/CONF 2005 - ATTNY/CONF 2004

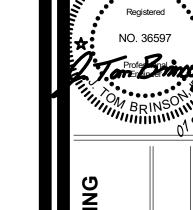
AREA "A"

AREA "CA"

**KEY PLAN** 

1201 BROAD ST., SUITE 1-A
AUGUSTA, GA 30901
PH: (706) 724-3551
FAX: (706) 724-8507
EDC PROJECT #: 22145

- 3 EXISTING FIXTURE IN THIS SPACE SHALL REMAIN.
- 4 SINGLE POLE SWITCH AT THIS LOCATION TO CONTROL ALL TYPE "C" SERIES COVE LIGHTS ONLY.
- 5 TYPE "C, C2, OR C8" FIXTURES TO BE INSTALLED IN COVE. DIVISION 26 TO PROVIDE LENGTHS AS REQUIRED TO FILL ENTIRE COVE AS SHOWN.
- 6 SINGLE POLE SWITCH AT THIS LOCATION TO CONTROL ALL TYPE "A2" IN CEILING ABOVE BENCHES AT FRONT OF ROOM (ONLY) WHERE SHOWN WITH ANOTHER



PRO

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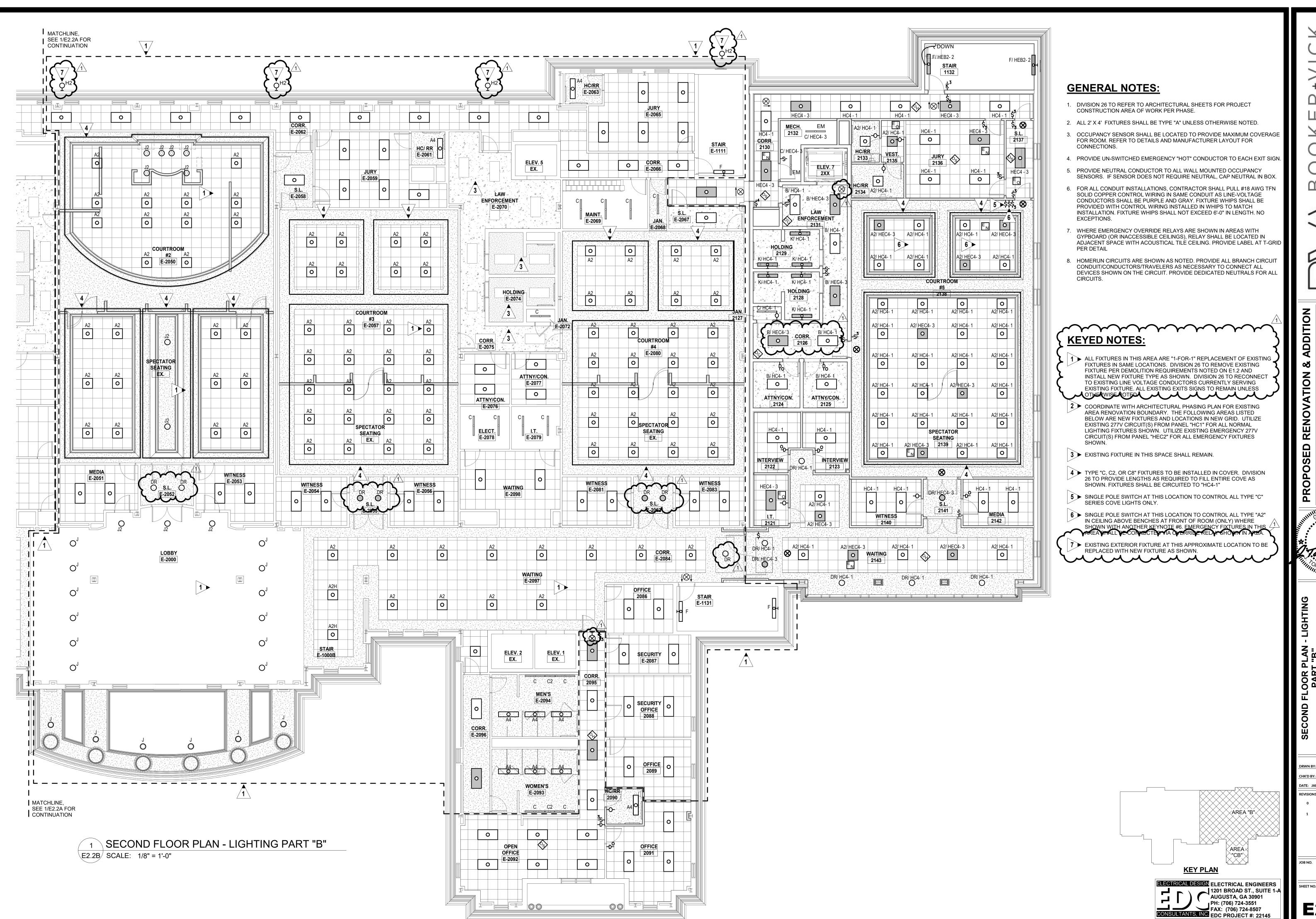
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**ADDITION** 

ISSUED FOR BID 01/29/2024



CENTER JUSTICE COUNTY UMBIA COL

ISSUED FOR BII 01/29/2024

ISSUED FOR BII 01/29/2024

2218



1. HOMERUN CIRCUITS ARE SHOWN AS NOTED. PROVIDE ALL BRANCH CIRCUIT CONDUIT/CONDUCTORS AS NECESSARY TO CONNECT ALL DEVICES SHOWN ON THE CIRCUIT. PROVIDE DEDICATED NEUTRALS FOR ALL CIRCUITS.

## **KEYED NOTES:**

CHASE

E-B027A

CONTROL

ROOM

E-B028

HOLDING

E-B021

E-B031

HOLDING

E-B022

**GROUP** 

HOLDING

**HOLDING** 

E-B020

CEILING CORRIDOR. SEE RISER FOR REQUIREMENTS.

DIVISION 26 SHALL BE RESPONSIBLE FOR PATCHING &

REPAINTING EXISTING CEILING UPON COMPLETION

-ROUTE ABOVE EXISTING GYPBOARD

E-B027

E-B025A

HOLDING

E-B018

HOLDING

GROUP

HOLDING

HOLDING

E-B019

E-B026

EQUIP.

E-B024

E-B023

E-B015

HOLDING

E-B017

-EXISTING PANEL "B"

TO REMAIN

ELEV. 4

E-B016

ELECT.

ROOM

E-B014

E-1063

ELEV.

EQUIP.

E-B013

ELEV. 6

TTTTTTTTSTAIR

EX.

REMAIN. DIVISION 26 TO PROVIDE ONE(1) NEW 150A/3P BREAKER TO SERVE NEW PANEL "HA3", ONE(1) NEW 200A/3P BREAKER TO SERVE A.T.S. #2/PANEL "HEB2", AND ONE(1) NEW 200A/3P BREAKER TO SERVE PANEL "HA4". BREAKER SHALL HAVE SAME CHARACTERISTICS OF

1 EXISTING SIEMENS "SB3" SERIES MAIN SWITCHGEAR TO EXISTING BREAKERS.

2 REFER TO ELEVATOR MACHINE ROOM REQUIREMENTS ON 3/E3.0 AND PROVIDE ALL DEVICES AND CONNECTIONS SHOWN.

# BASEMENT FLOOR PLAN - POWER AREA "A"

STORAGE

E-B002

**RECORDS** 

E-B001

ROUTE EXPOSED AT CEILING IN GALVANIZED

RIGID STEEL. SEE RISER FOR REQUIREMENTS

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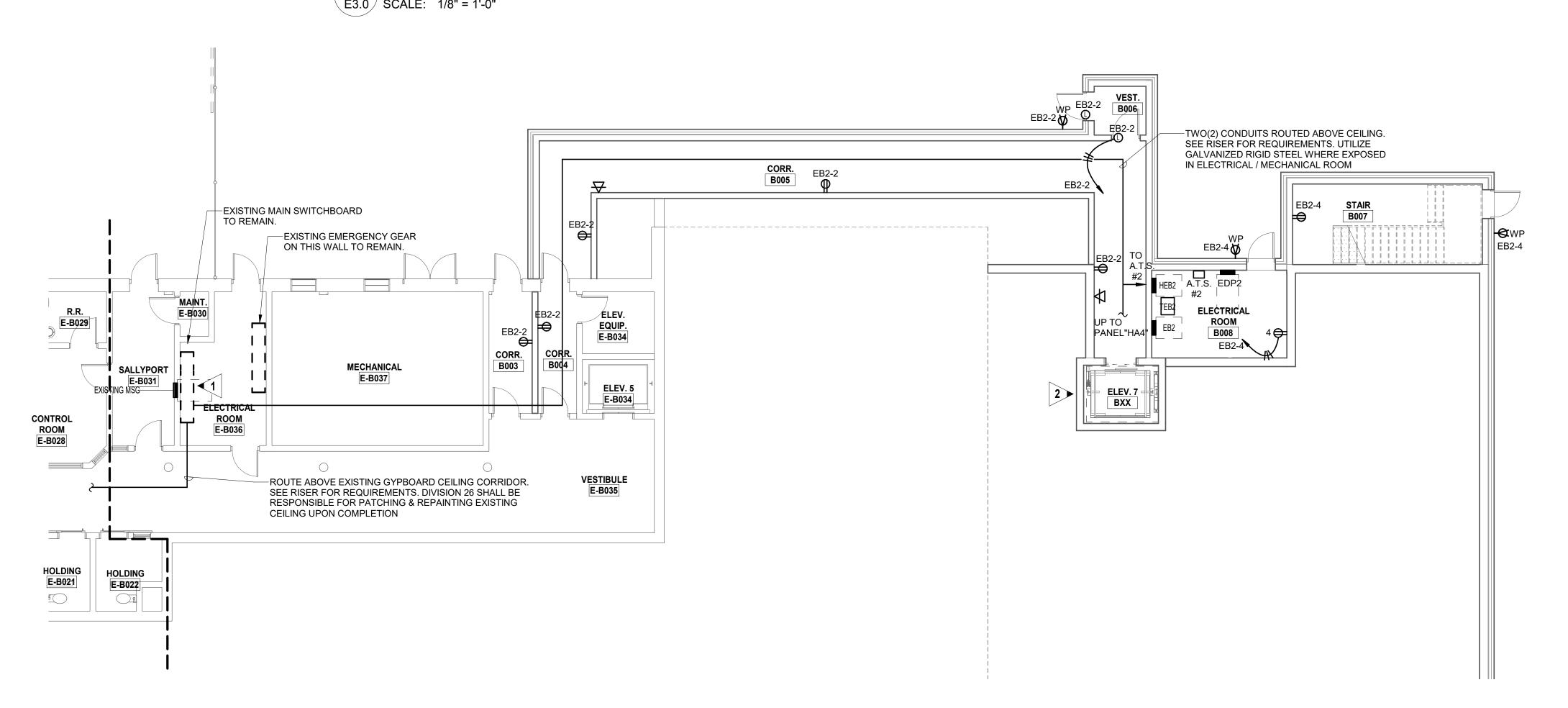
E-1047

TO PANEL -

SEE E3.1A.

ELEV. 3

EX.



2 BASEMENT FLOOR PLAN - POWER AREA "B"

E3.0 SCALE: 1/8" = 1'-0"

COORDINATE AMONG THE CONTRACTOR, SUB CONTRACTORS AND ELEVATOR SUPPLIER. SUBMIT AND COORDINATE ELEVATORS BOTH IN ADVANCE OF INSTALLATION AND BEFORE STUBBING OF THE CIRCUITS. SUBMIT ELECTRICAL EQUIPMENT FOR ELEVATORS ACTUALLY PROVIDED.

COORDINATE ELEVATOR WORK REGARDLESS OF THE DIVISION UNDER WHICH WORK IS SHOWN.

B. PROVIDE ELEVATOR WORK IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE INTERNATIONAL BUILDING CODE CHAPTER 30.

C. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING WORK:

**ELEVATOR GENERAL NOTES:** 

ELEVATOR CONTROL STATIONS AND RELATED CIRCUITING.

CONTROL CIRCUITING AND INTERLOCKS INCLUDING CONTROL "CARDS".

OTHER ITEMS REQUIRED BY THE ELEVATOR SUPPLIER OR CODES

EQUIPMENT ARRANGEMENT IN THE ELEVATOR CONTROL ROOM AS RECOMMENDED BY THE ELEVATOR SUPPLIER AND REQUIRED BY APPLICABLE CODES.

D. PER ANSI A17.1 RULE 1061E, EACH ELEVATOR PIT SHALL BE PROVIDED A PERMANENT FIXTURE AND GFI RECEPTACLE BELOW THE ELEVATOR WITH A SWITCH ACCESSIBLE AT THE TOP OF THE PIT LADDER OR THRU THE PIT ACCESS DOOR.

### E. ELEVATOR CONTROL ROOM SHALL BE:

PER ANS1A17.1 RULE 101.5, PROVIDED 10 FOOTCANDLES ILLUMINATION MINIMUM AT FLOOR LEVEL.

PROVIDED DISCONNECTS FOR EACH CAR'S 110 VAC LIGHTING. DISCONNECTS SHALL CONSIST OF SEPARATELY ENCLOSED 1-POLE BREAKERS LOCKABLE IN THE "OFF" POSITION. REFERENCE NEC SECTIONS 620-22 AND 620.52.

## F. ELEVATOR CONTROL SHALL:

A. THE CONTRACTOR SHALL:

IN ELEVATOR CONTROL ROOM, NEAR THE ENTRY DOOR, FOR EACH ELEVATOR, PROVIDE A LOCKABLE SHUNT TRIP BREAKER. (REFERENCE NFPA CHAP.70 620-51) MULTIPLE BREAKERS SHALL BE SEPARATELY ENCLOSED. SIZE FOR ELEVATORS ACTUALLY PROVIDED. DEVICE SHALL BE FULLY RATED FOR FAULT CURRENT AVAILABLE.

TWO-HOUR FIRE RATED ELEVATOR CONTROL ROOM: SPRINKLER AND AUTOMATIC DISCONNECTING MEANS SHALL NOT BE PROVIDED. PROVIDE SMOKE SENSING DEVICE IN EACH ELEVATOR LOBBY HOISTWAY, DEDICATED TO INITIATE FIREMANS EMERGENCY RETURN PER ANS1A17.1 RULE 211.3a.

PROVIDE WORKING TELEPHONE OR INTERCOMS IN EACH CAR WITH NECESSARY WIRING PULLED TO THE ELEVATOR CONTROLLER PER ANS1A17.1 RULE 211.1

PROVIDE CONDUIT AND CATEGORY - 6 CABLE TO THE COMMUNICATIONS ROOM WITH ONE CABLE PER ELEVATOR CAB. HOMERUNS MAY CONTAIN MULTIPLE CABLES.

PROVIDE SMOKE SENSING DEVICES IN EACH ELEVATOR MACHINE ROOM AND LOBBY HOISTWAY DEDICATED TO INITIATE FIREMAN'S EMERGENCY RETURN PER ANS1A17.1 RULE 211.3b.

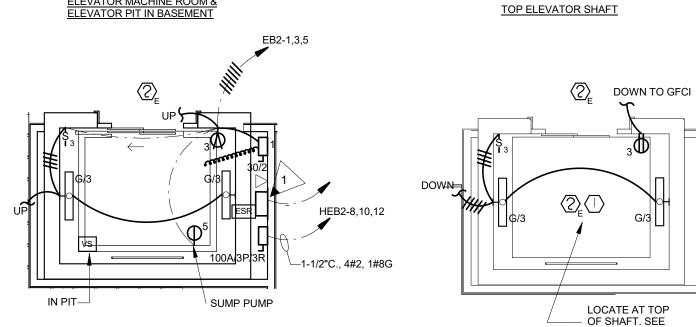
PER ANS1A17.1 RULE 211.3a CONNECT TWO DRY CONTACTS FROM THE MAIN SMOKE SENSING PANEL TO THE ELEVATOR CONTROLLER FOR FIRE SERVICE.

SMOKE DETECTOR AND HEAT DETECTOR SHALL BE LOCATED IN AN ACCESSIBLE FIRE RATED ACCESS PANEL ENCLOSURE AT TOP OF ELEVATOR HOISTWAY. ACCESS PANEL MUST BE FIRE RATED AND HAVE TYPE 2 LOCK. ACCESS PANEL OPENING INSIDE THE SHAFT MUST BE ENCLOSED IN A STEEL CAGE (EXPANDED METAL) TO PREVENT FOREIGN OBJECTS AND PERSONNEL FROM ENTERING ELEVATOR HOISTWAY. SMOKE DETECTOR SHALL BE MOUNTED 12" FROM TOP OF SHAFT AND BE MOUNTED INSIDE THE CAGED AREA FOR SERVICEABILITY.

### I. IN EVENT OF POWER LOSS: PROVIDE ELEVATOR CONTROLS SUCH THAT UPON POWER LOSS, THE ELEVATOR WILL OPEN AT EGRESS

J. CONTRACTOR SHALL ARRANGE BREAKERS TO PROVIDE MAXIMUM CLEARANCE. LAYOUT SHOWN IS A CIRCUIT GUIDE ONLY.



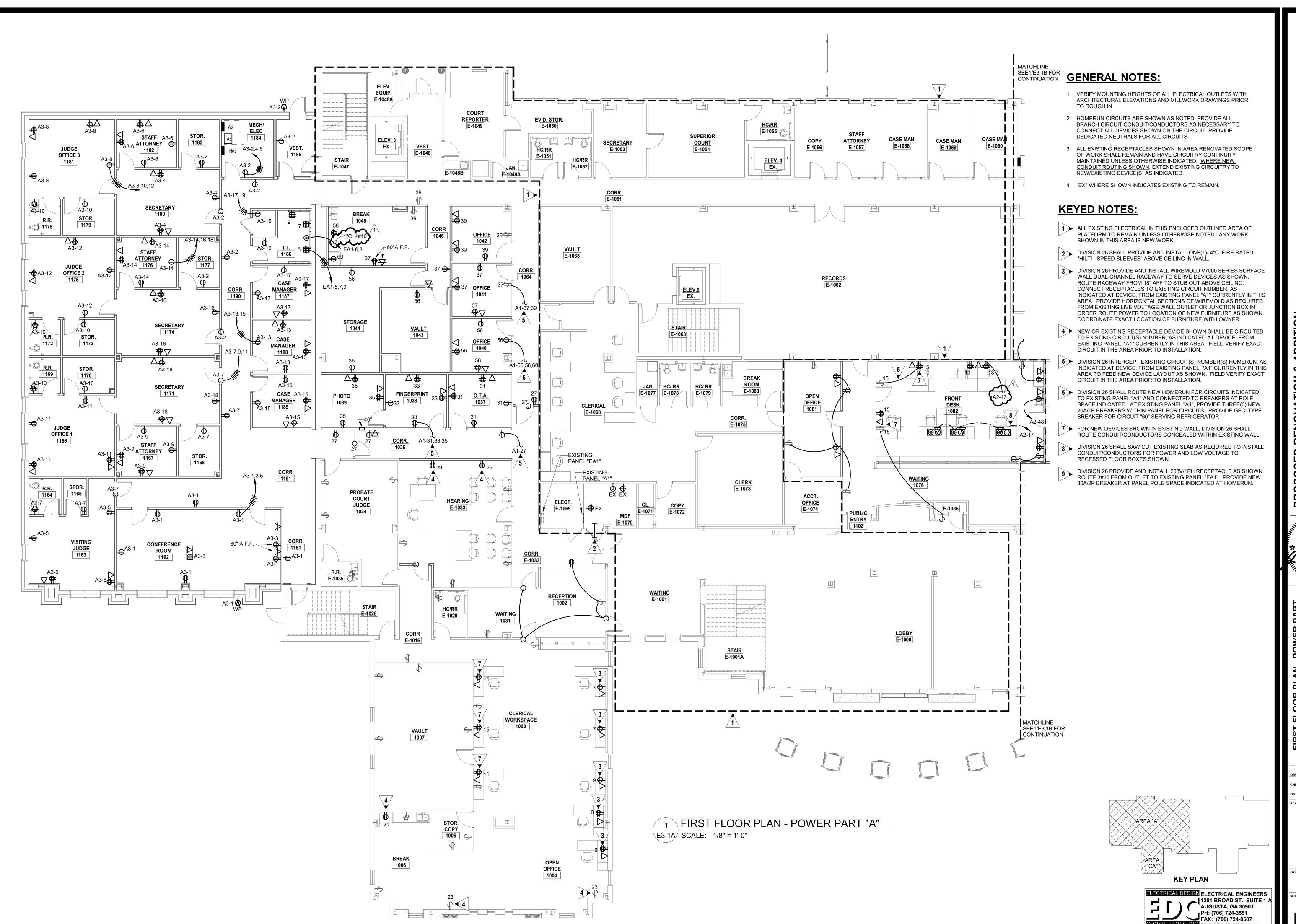


3 DETAIL - ELEVATOR WIRING E3.0 / SCALE: 1/4"=1'-0"

## **ELEVATOR KEYED NOTES:**

ELEVATOR CONTROL PANEL LOCATED AT IN ELEVATOR EQUIPMENT CAVITY. PROVIDE POWER FROM DISCONNECT SHOWN ADJACENT TO PANEL. PROVIDE CONNECTION FROM DATA DROP SHOWN ADJACENT TO PANEL. PROVIDE 3/4"C., FROM PANEL TO FIRE ALARM CONTROL PANEL FOR ELEVATOR RECALL INTERFACE CONNECTION. COORDINATE LOCATION WITH ELEVATOR VENDOR.

GENERAL NOTE "H"



BOOKER+VIC ARCHITECT

COUNTY JUSTICE CENTER

Registered

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UMBIA

LOOR PLAN - POWER PA "A"

DRWN BY: KH

CHK'D BY: TB

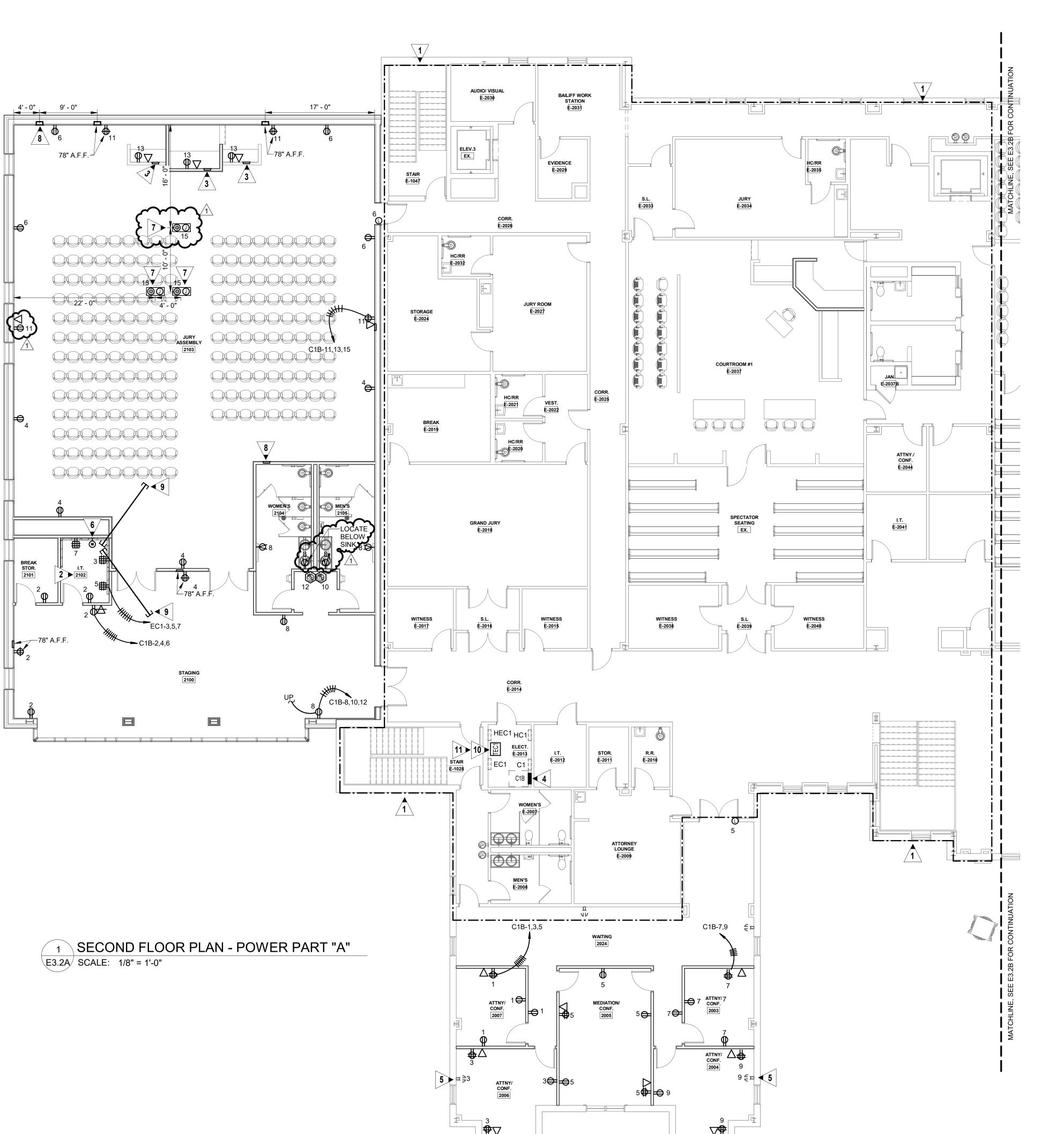
DATE: JANUARY 29, 2024

REVISIONS

ов NO. **2218** 

SHEET NO.

E3.1A



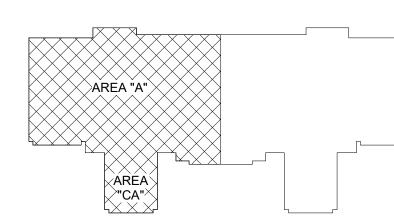
## **GENERAL NOTES:**

- 1. VERIFY MOUNTING HEIGHTS OF ALL ELECTRICAL OUTLETS WITH ARCHITECTURAL ELEVATIONS AND MILLWORK DRAWINGS PRIOR TO ROUGH IN
- 2. HOMERUN CIRCUITS ARE SHOWN AS NOTED. PROVIDE ALL BRANCH CIRCUIT CONDUIT/CONDUCTORS AS NECESSARY TO CONNECT ALL DEVICES SHOWN ON THE CIRCUIT. PROVIDE DEDICATED NEUTRALS FOR ALL CIRCUITS.

## **KEYED NOTES:**

- 1 ALL EXISTING ELECTRICAL IN THIS ENCLOSED OUTLINED AREA OF PLATFORM TO REMAIN UNLESS
- PRIOR TO ROUGH-IN, DIVISION 26 TO HAVE ON-SITE COORDINATION MEETING WITH OWNER'S I.T. TO REVIEW EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL RECEPTACLES SHOWN ON TELECOMMUNICATIONS BACKBOARD. LOCATE AS DIRECTED BY OWNER'S I.T. NUMBER
- NEAREST WALL, THEN UP WALL CAVITY TO STUB ABOVE CEILING OF JURY ASSEMBLY ROOM.
  PROVIDE PLASTIC BUSHING ON END OF CONDUIT AND LABEL END OF CONDUIT TO INDICATE
- WITHIN "C1" AND INSTALL NEW 50A/3P BREAKER TO SERVE NEW PANELBOARD "C1B". BREAKER SHALL HAVE SAME CHARACTERISTICS OF EXISTING BREAKERS. ROUTE 1"C., 4#6, 1#10G FROM BREAKER TO MAIN LUGS OF NEW PANELBOARD "C1B".
- 5 EXISTING RECEPTACLE AT THIS LOCATION TO REMAIN AND TO BE RECONNECTED TO EXISTING

- FINISH CEILING AT THIS LOCATION FOR INFRARED TRANSMITTER USAGE. ROUTE 3/4"C. W/
- PENETRATIONS PER DETAILS AND SPECIFICATIONS.
- DIVISION 26 TO REMOVE EXISTING 15KVA TRANSFORMER, REMOVE EXISTING 30A/3P BREAKER IN EXISTING PANEL "HEC1" (SIEMENS "S2" STYLE) SERVING EXISTING TRANSFORMER, EXISTING FEEDER AND SUPPLY CONDUIT/CONDUCTOR TO AND FROM TRANSFORMER, AND EXISTING 50A/3P BREAKER IN EXISTING PANEL "EC1" (SIEMENS "S1" STYLE).
- DIVISION 26 SHALL PROVIDE AND INSTALL NEW 30KVA TRANSFORMER AT THIS LOCATION.
  DIVISION 26 SHALL PROVIDE AND INSTALL NEW 50A/3P BREAKER IN EXISTING PANEL "HEC1" TO SERVE NEW TRANSFORMER. DIVISION 26 SHALL PROVIDE AND INSTALL 1"C., 3#8, 1#10G FROM BREAKER TO TRANSFORMER PRIMARY AS WELL AS PROVIDE AND INSTALL 1-1/2"C., 4#2,1#8G FROM TRANSFORMER SUPPLY TO EXISTING PANEL "EC1". DIVISION 26 SHALL PROVIDE AND INSTALL NEW 100A/3P SIEMENS "BL" STTYLE MAIN BREAKER IN EXISTING PANEL "EC1".



**KEY PLAN** 

ECTRICAL DESIGN ELECTRICAL ENGINEERS 1201 BROAD ST., SUITE 1-A AUGUSTA, GA 30901 PH: (706) 724-3551 FAX: (706) 724-8507 ONSULTANTS, INC. EDC PROJECT #: 22145

ISSUED FOR BID 01/29/2024

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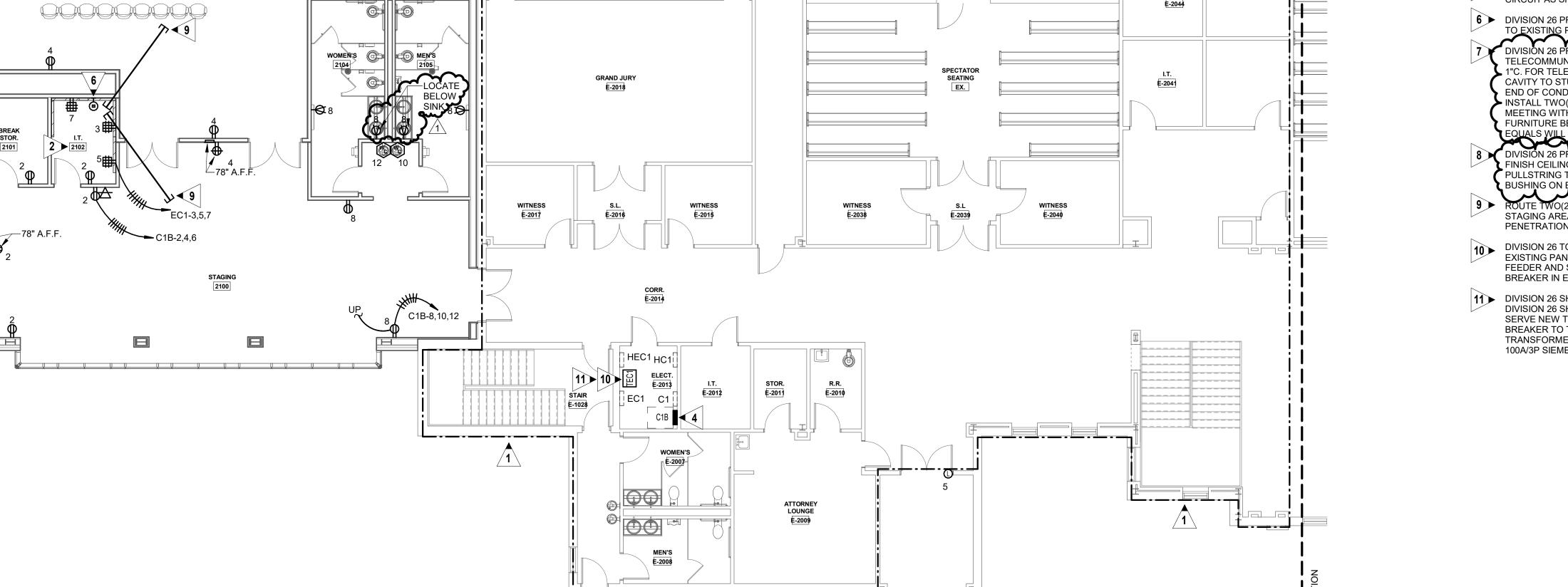
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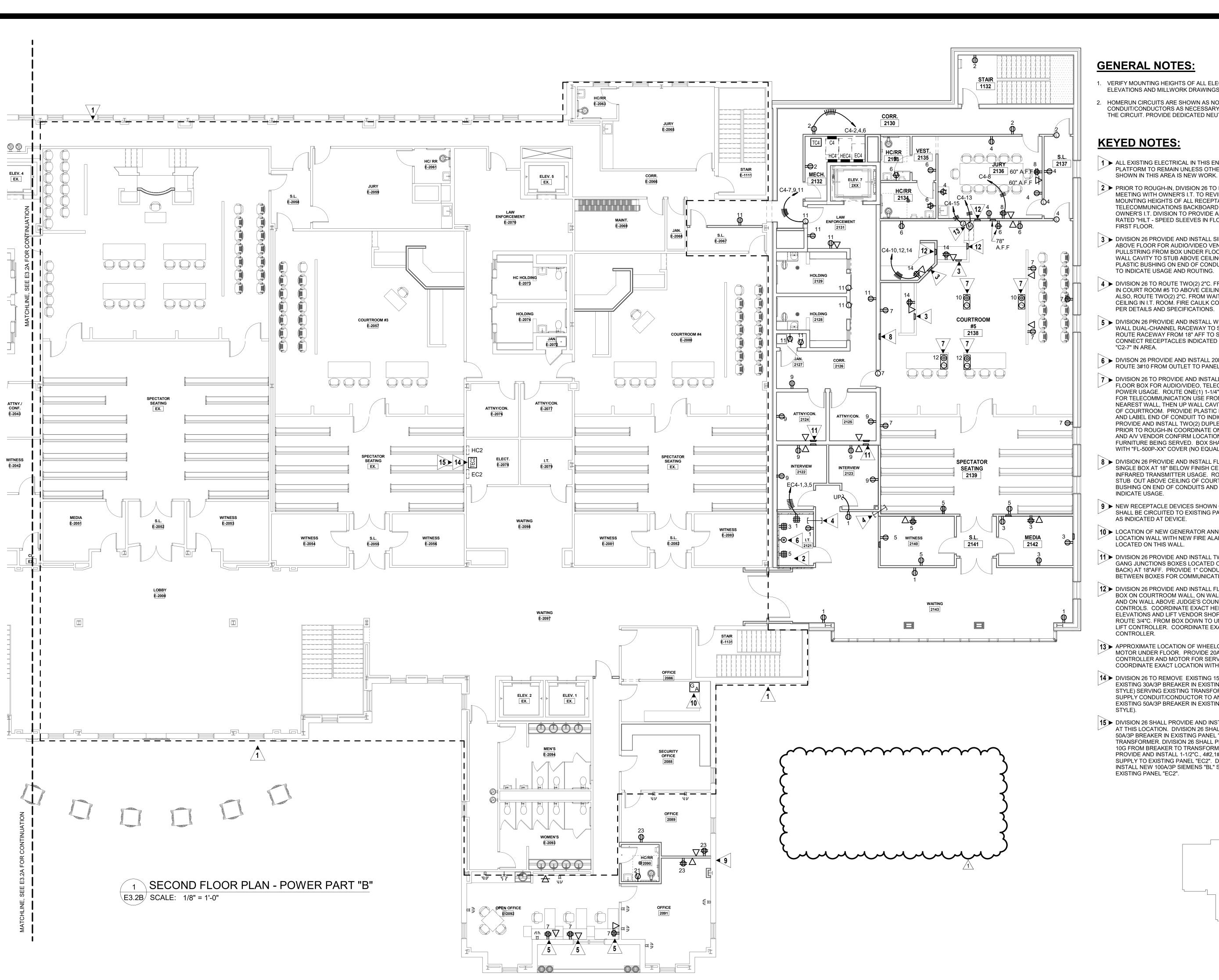
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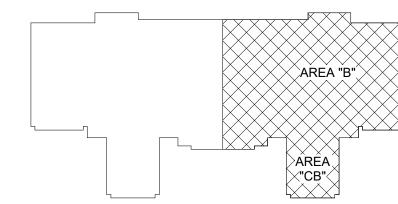
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- VERIFY MOUNTING HEIGHTS OF ALL ELECTRICAL OUTLETS WITH ARCHITECTURAL ELEVATIONS AND MILLWORK DRAWINGS PRIOR TO ROUGH IN
- HOMERUN CIRCUITS ARE SHOWN AS NOTED. PROVIDE ALL BRANCH CIRCUIT CONDUIT/CONDUCTORS AS NECESSARY TO CONNECT ALL DEVICES SHOWN ON THE CIRCUIT. PROVIDE DEDICATED NEUTRALS FOR ALL CIRCUITS.
- 1 ALL EXISTING ELECTRICAL IN THIS ENCLOSED OUTLINED AREA OF PLATFORM TO REMAIN UNLESS OTHERWISE NOTED. ANY WORK
- 2 > PRIOR TO ROUGH-IN, DIVISION 26 TO HAVE ON-SITE COORDINATION MEETING WITH OWNER'S I.T. TO REVIEW EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL RECEPTACLES SHOWN ON TELECOMMUNICATIONS BACKBOARD. LOCATE AS DIRECTED BY OWNER'S I.T. DIVISION TO PROVIDE AND INSTALL TWO(2) 4" FIRE RATED "HILT - SPEED SLEEVES IN FLOOR FOR CABLING ACCESS FROM
- 3 DIVISION 26 PROVIDE AND INSTALL SINGLE GANG 2" DEEP BOX AT 18" ABOVE FLOOR FOR AUDIO/VIDEO VENDOR USE. ROUTE 1-1/4"C. W/ PULLSTRING FROM BOX UNDER FLOOR TO NEAREST WALL, THEN UP WALL CAVITY TO STUB ABOVE CEILING OF JURY ROOM. PROVIDE PLASTIC BUSHING ON END OF CONDUIT AND LABEL END OF CONDUIT TO INDICATE USAGE AND ROUTING.
- 4 DIVISION 26 TO ROUTE TWO(2) 2"C. FROM ABOVE ACOUSTICAL CEILING IN COURT ROOM #5 TO ABOVE CEILING IN WAITING AREA AS SHOWN. ALSO, ROUTE TWO(2) 2"C. FROM WAITING AREA TO STUB OUT BELOW CEILING IN I.T. ROOM. FIRE CAULK CONDUITS AT WALL PENETRATIONS PER DETAILS AND SPECIFICATIONS.
- 5 DIVISION 26 PROVIDE AND INSTALL WIREMOLD V7000 SERIES SURFACE WALL DUAL-CHANNEL RACEWAY TO SERVE DEVICES AS SHOWN. ROUTE RACEWAY FROM 18" AFF TO STUB OUT ABOVE CEILING. CONNECT RECEPTACLES INDICATED TO EXISTING PANEL CIRCUIT
- 6 DIVISON 26 PROVIDE AND INSTALL 208V/1PH RECEPTACLE AS SHOWN. ROUTE 3#10 FROM OUTLET TO PANEL "EC2".
- 7 DIVISION 26 TO PROVIDE AND INSTALL 10" x 12" x 5" DEEP RECESSED FLOOR BOX FOR AUDIO/VIDEO, TELECOMMUNICATION, AND 120V POWER USAGE. ROUTE ONE(1) 1-1/4"C. FOR A/V USE AND ONE(1) 1"C. FOR TELECOMMUNICATION USE FROM BOX UNDER FLOOR TO NEAREST WALL, THEN UP WALL CAVITY TO STUB OUT ABOVE CEILING OF COURTROOM. PROVIDE PLASTIC BUSHING ON END OF CONDUITS AND LABEL END OF CONDUIT TO INDICATE USAGE AND ROUTING. PROVIDE AND INSTALL TWO(2) DUPLEX RECEPTACLES WITH BOX. PRIOR TO ROUGH-IN COORDINATE ON-SITE MEETING WITH ARCHITECT AND A/V VENDOR CONFIRM LOCATION OF BOX RELATIVE TO FURNITURE BEING SERVED. BOX SHALL BE "FSR INC - FL-500P-5-B" WITH "FL-500P-XX" COVER (NO EQUALS WILL BE ACCEPTED).
- 8 DIVISION 26 PROVIDE AND INSTALL FLUSH RECESSED WALL 2" DEEP SINGLE BOX AT 18" BELOW FINISH CEILING AT THIS LOCATION FOR INFRARED TRANSMITTER USAGE. ROUTE 3/4"C. W/ PULLSTRING TO STUB OUT ABOVE CEILING OF COURTROOM. PROVIDE PLASTIC BUSHING ON END OF CONDUITS AND LABEL END OF CONDUIT TO
- 9 NEW RECEPTACLE DEVICES SHOWN ON NEW WALLS IN THIS AREA SHALL BE CIRCUITED TO EXISTING PANEL "C2" CIRCUITS IN THIS ARE
- 10 LOCATION OF NEW GENERATOR ANNUCIATOR. COORDINATE EXACT LOCATION WALL WITH NEW FIRE ALARM PANEL SCHEDULED TO BE
- 11 DIVISION 26 PROVIDE AND INSTALL TWO(2) FLUSH RECESSED SINGLE GANG JUNCTIONS BOXES LOCATED ON EACH SIDE OF WALL (BACK-TO-BACK) AT 18"AFF. PROVIDE 1" CONDUIT SLEEVE THROUGH WALL BETWEEN BOXES FOR COMMUNICATION USE.
- 12 DIVISION 26 PROVIDE AND INSTALL FLUSH RECESSED SINGLE GANG BOX ON COURTROOM WALL, ON WALL ABOVE WITNESS COUNTER. AND ON WALL ABOVE JUDGE'S COUNTER FOR WHEELCHAIR LIFT CONTROLS. COORDINATE EXACT HEIGHT WITH ARCHITECTURAL ELEVATIONS AND LIFT VENDOR SHOP DRAWINGS PRIOR TO ROUGH-IN. ROUTE 3/4"C. FROM BOX DOWN TO UNDER FLOOR AT WHEELCHAIR LIFT CONTROLLER. COORDINATE EXACT LOCATION OF LIFT
- 13 APPROXIMATE LOCATION OF WHEELCHAIR LIFT CONTROLLER AND MOTOR UNDER FLOOR, PROVIDE 20A/1P MOTOR SWITCH FOR BOTH MOTOR UNDER FLOOR. PROVIDE 20A/1P MOTOR SWITCH FOR BOTH CONTROLLER AND MOTOR FOR SERVICE DISCONNECTING MEANS. COORDINATE EXACT LOCATION WITH LIFT VENDOR / INSTALLER.
- 14 ➤ DIVISION 26 TO REMOVE EXISTING 15KVA TRANSFORMER, REMOVE EXISTING 30A/3P BREAKER IN EXISTING PANEL "HEC2" (SIEMENS "S2" STYLE) SERVING EXISTING TRANSFORMER, EXISTING FEEDER AND SUPPLY CONDUIT/CONDUCTOR TO AND FROM TRANSFORMER, AND EXISTING 50A/3P BREAKER IN EXISTING PANEL "EC2" (SIEMENS "S1"
- 15 DIVISION 26 SHALL PROVIDE AND INSTALL NEW 30KVA TRANSFORMER AT THIS LOCATION. DIVISION 26 SHALL PROVIDE AND INSTALL NEW 50A/3P BREAKER IN EXISTING PANEL "HEC2" TO SERVE NEW TRANSFORMER. DIVISION 26 SHALL PROVIDE AND INSTALL 1"C., 3#8, 1# 10G FROM BREAKER TO TRANSFORMER PRIMARY AS WELL AS PROVIDE AND INSTALL 1-1/2"C., 4#2,1#8G FROM TRANSFORMER SUPPLY TO EXISTING PANEL "EC2". DIVISION 26 SHALL PROVIDE AND INSTALL NEW 100A/3P SIEMENS "BL" STTYLE MAIN BREAKER IN



KEY PLAN

ECTRICAL DESIGN ELECTRICAL ENGINEERS 1201 BROAD ST., SUITE 1-A AUGUSTA, GA 30901 PH: (706) 724-3551 FAX: (706) 724-8507 CONSULTANTS, INC. EDC PROJECT #: 22145

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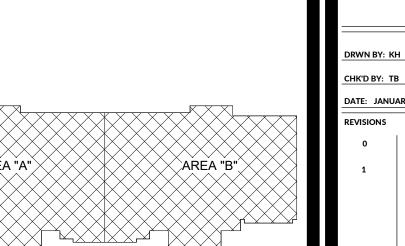
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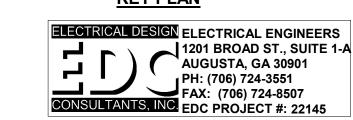
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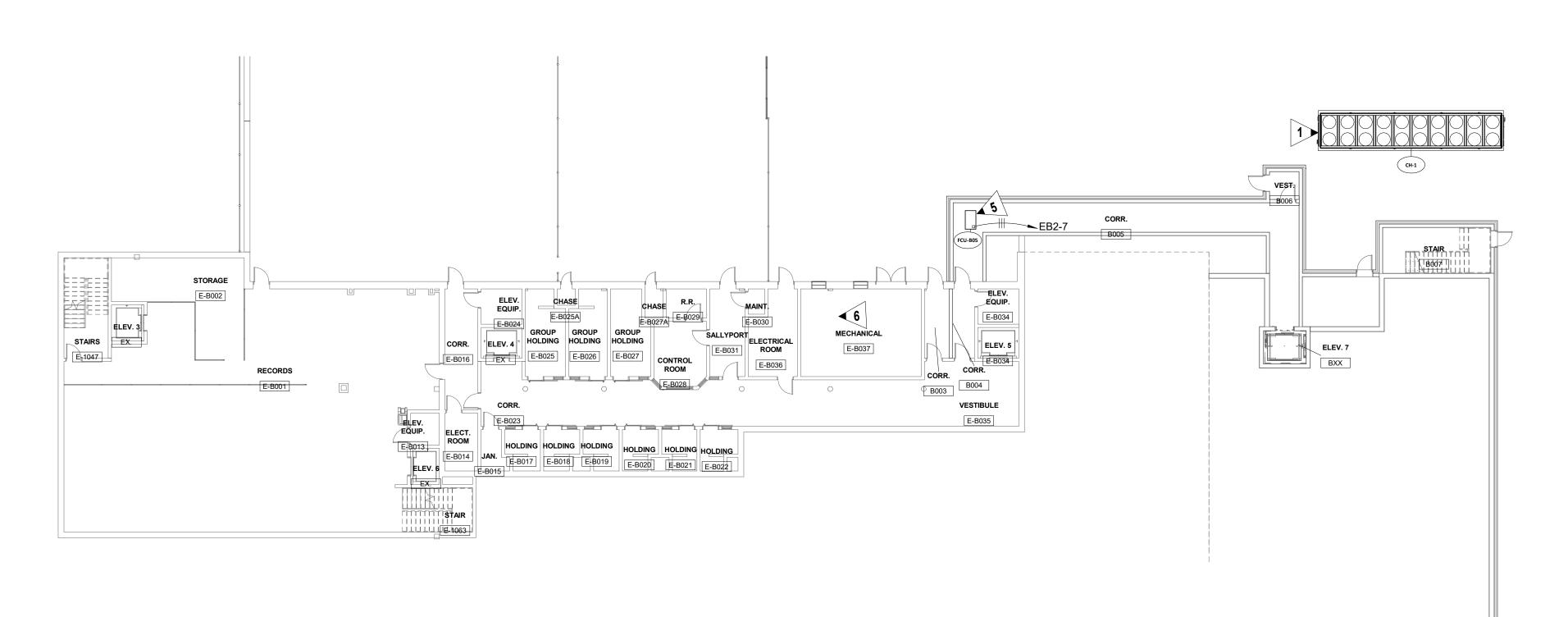
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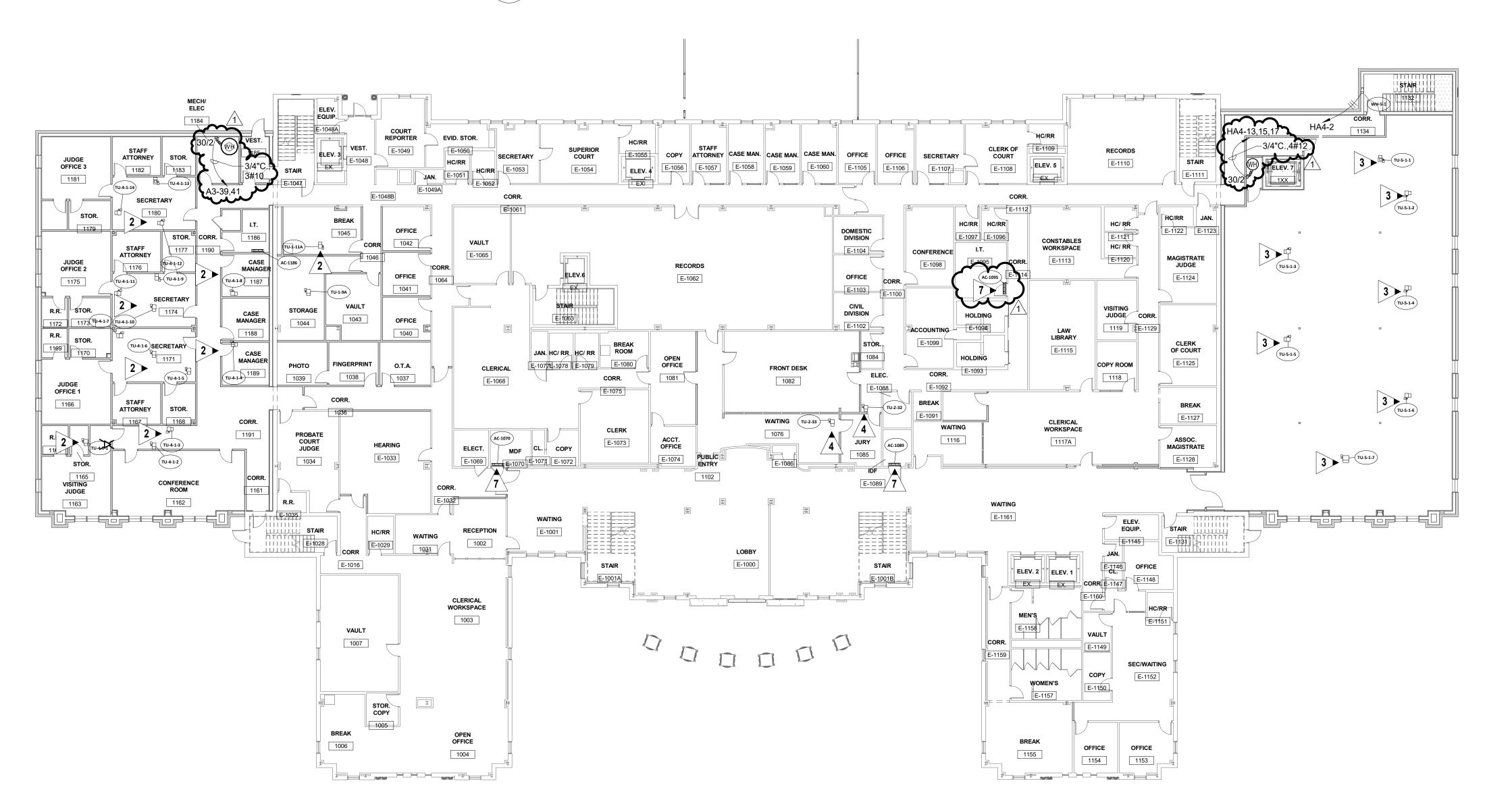
AREA "CA" KEY PLAN





## 1 BASEMENT FLOOR PLAN - MECHANICAL POWER

E4.1 SCALE: 1/16" = 1'-0"

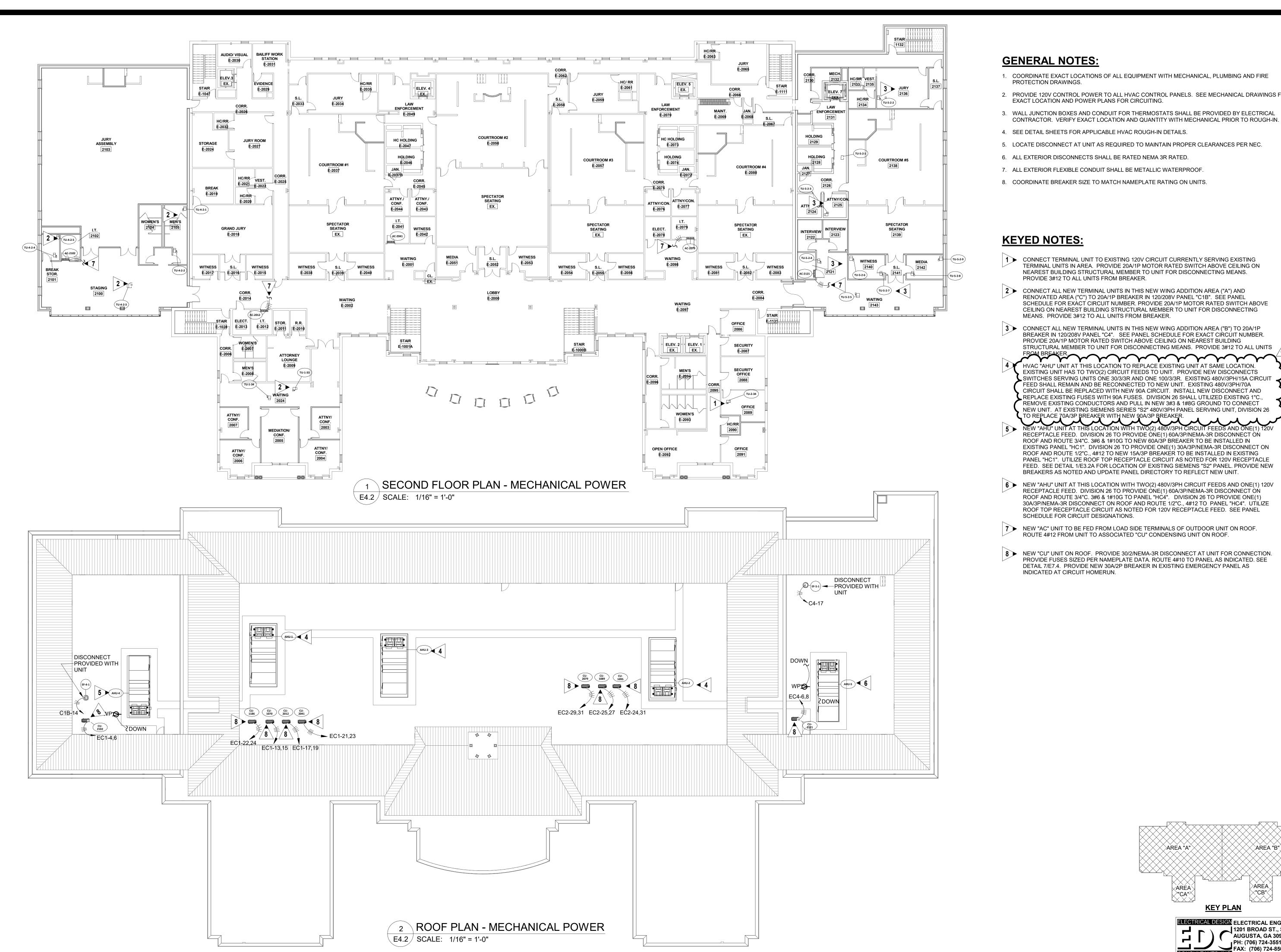


## **GENERAL NOTES:**

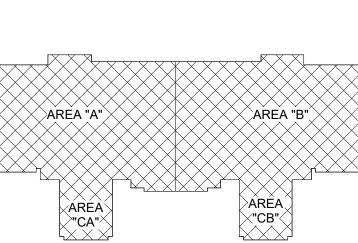
- 1. COORDINATE EXACT LOCATIONS OF ALL EQUIPMENT WITH MECHANICAL, PLUMBING AND FIRE PROTECTION DRAWINGS.
- 2. PROVIDE 120V CONTROL POWER TO ALL HVAC CONTROL PANELS. SEE MECHANICAL DRAWINGS FOR EXACT LOCATION AND POWER PLANS FOR CIRCUITING.
- 3. WALL JUNCTION BOXES AND CONDUIT FOR THERMOSTATS SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR. VERIFY EXACT LOCATION AND QUANTITY WITH MECHANICAL PRIOR TO ROUGH-IN.
- 4. SEE DETAIL SHEETS FOR APPLICABLE HVAC ROUGH-IN DETAILS.
- 5. LOCATE DISCONNECT AT UNIT AS REQUIRED TO MAINTAIN PROPER CLEARANCES PER NEC.
- 6. ALL EXTERIOR DISCONNECTS SHALL BE RATED NEMA 3R RATED.
- 7. ALL EXTERIOR FLEXIBLE CONDUIT SHALL BE METALLIC WATERPROOF.
- 8. COORDINATE BREAKER SIZE TO MATCH NAMEPLATE RATING ON UNITS.

## **KEYED NOTES:**

- 1 SEE SHEET E1.1 FOR CHILLER FEED REQUIREMENTS
- CONNECT ALL NEW TERMINAL UNITS IN THIS NEW WING ADDITION AREA ("A") TO 20A/1P BREAKER IN 120/208V PANEL "A3". SEE PANEL SCHEDULE FOR EXACT CIRCUIT NUMBER. PROVIDE 20A/1P MOTOR RATED SWITCH ABOVE CEILING ON NEAREST BUILDING STRUCTURAL MEMBER TO UNIT FOR DISCONNECTING MEANS. PROVIDE 3#12 TO ALL UNITS
- CONNECT ALL NEW TERMINAL UNITS IN THIS NEW WING ADDITION AREA ("B") TO 20A/1P BREAKER IN 120/208V PANEL "A4". SEE PANEL SCHEDULE FOR EXACT CIRCUIT NUMBER. PROVIDE 20A/1P MOTOR RATED SWITCH ABOVE CEILING ON NEAREST BUILDING STRUCTURAL MEMBER TO UNIT FOR DISCONNECTING MEANS. PROVIDE 3#12 TO ALL UNITS FROM BREAKER.
- CONNECT TERMINAL UNIT TO EXISTING 20A/1P BREAKER AT POLE #54 IN EXISTING SIEMENS "S1" TYPE PANEL "A2 SECT 2". UPDATE PANEL SCHEDULE TO REFLECT NEW LOAD. PROVIDE 20A/1P MOTOR RATED SWITCH ABOVE CEILING ON NEAREST BUILDING STRUCTURAL MEMBER TO UNIT FOR DISCONNECTING MEANS. PROVIDE 3#12 TO ALL UNITS FROM BREAKER.
- FAN COIL UNIT LOCATED ABOVE CEILING. PROVIDE 20A/1P MOTOR RATED SWITCH ABOVE CEILING ON NEAREST BUILDING STRUCTURAL MEMBER TO UNIT FOR DISCONNECTING MEANS. ROUTE TO PANEL CIRCUIT AS INDICATED.
- DIVISON 26 TO COORDINATE WITH DIVISION 22 AND DIVISION 23 FOR NEW EQUIPMENT TO REPLACE EXISTING EQUIPMENT IN THIS SPACE. DIVISION 26 TO DISCONNECT ALL EXISTING FEEDERS TO EQUIPMENT AND RECONNECT TO NEW EQUIPMENT OF SAME SIZE. DIVISION 26 IS RESPONSIBLE FOR VERIFYING (PRIOR TO BID) ALL EXISTING DISCONNECT FUSES AND REPLACE WITH NEW FUSES OF SAME AMPERAGE AND CHARACTERISTICS.
- NEW "AC" UNIT TO BE FED FROM LOAD SIDE TERMINALS OF OUTDOOR UNIT ON ROOF. ROUTE 4#12 FROM UNIT TO ASSOCIATED "CU" CONDENSING UNIT ON ROOF. ASSOCIATED CONDENSING HAS SAME 4-DIGIT NUMBERING NOMENCLATURE AS THIS "AC" UNIT. SEE SHEET E4.2 FOR ROOF PLAN AND DETAIL 7/E7.4.



- 1. COORDINATE EXACT LOCATIONS OF ALL EQUIPMENT WITH MECHANICAL, PLUMBING AND FIRE
- 2. PROVIDE 120V CONTROL POWER TO ALL HVAC CONTROL PANELS. SEE MECHANICAL DRAWINGS FOR
- 3. WALL JUNCTION BOXES AND CONDUIT FOR THERMOSTATS SHALL BE PROVIDED BY ELECTRICAL
- 5. LOCATE DISCONNECT AT UNIT AS REQUIRED TO MAINTAIN PROPER CLEARANCES PER NEC.
- 6. ALL EXTERIOR DISCONNECTS SHALL BE RATED NEMA 3R RATED.
- 7. ALL EXTERIOR FLEXIBLE CONDUIT SHALL BE METALLIC WATERPROOF.
- 8. COORDINATE BREAKER SIZE TO MATCH NAMEPLATE RATING ON UNITS.
- 1 CONNECT TERMINAL UNIT TO EXISTING 120V CIRCUIT CURRENTLY SERVING EXISTING TERMINAL UNITS IN AREA. PROVIDE 20A/1P MOTOR RATED SWITCH ABOVE CEILING ON NEAREST BUILDING STRUCTURAL MEMBER TO UNIT FOR DISCONNECTING MEANS.
- 2 CONNECT ALL NEW TERMINAL UNITS IN THIS NEW WING ADDITION AREA ("A") AND RENOVATED AREA ("C") TO 20A/1P BREAKER IN 120/208V PANEL "C1B". SEE PANEL SCHEDULE FOR EXACT CIRCUIT NUMBER. PROVIDE 20A/1P MOTOR RATED SWITCH ABOVE CEILING ON NEAREST BUILDING STRUCTURAL MEMBER TO UNIT FOR DISCONNECTING MEANS. PROVIDE 3#12 TO ALL UNITS FROM BREAKER.
- 3 CONNECT ALL NEW TERMINAL UNITS IN THIS NEW WING ADDITION AREA ("B") TO 20A/1P BREAKER IN 120/208V PANEL "C4". SEE PANEL SCHEDULE FOR EXACT CIRCUIT NUMBER. PROVIDE 20A/1P MOTOR RATED SWITCH ABOVE CEILING ON NEAREST BUILDING STRUCTURAL MEMBER TO UNIT FOR DISCONNECTING MEANS. PROVIDE 3#12 TO ALL UNITS
- HVAC "AHU" UNIT AT THIS LOCATION TO REPLACE EXISTING UNIT AT SAME LOCATION. EXISTING UNIT HAS TO TWO(2) CIRCUIT FEEDS TO UNIT. PROVIDE NEW DISCONNECTS SWITCHES SERVING UNITS ONE 30/3/3R AND ONE 100/3/3R. EXISTING 480V/3PH/15A CIRCUIT FEED SHALL REMAIN AND BE RECONNECTED TO NEW UNIT. EXISTING 480V/3PH/70A CIRCUIT SHALL BE REPLACED WITH NEW 90A CIRCUIT. INSTALL NEW DISCONNECT AND REPLACE EXISTING FUSES WITH 90A FUSES. DIVISION 26 SHALL UTILIZED EXISTING 1"C., REMOVE EXISTING CONDUCTORS AND PULL IN NEW 3#3 & 1#8G GROUND TO CONNECT
- RECEPTACLE FEED. DIVISION 26 TO PROVIDE ONE(1) 60A/3P/NEMA-3R DISCONNECT ON ROOF AND ROUTE 3/4"C. 3#6 & 1#10G TO NEW 60A/3P BREAKER TO BE INSTALLED IN EXISTING PANEL "HC1". DIVISION 26 TO PROVIDE ONE(1) 30A/3P/NEMA-3R DISCONNECT ON ROOF AND ROUTE 1/2"C., 4#12 TO NEW 15A/3P BREAKER TO BE INSTALLED IN EXISTING PANEL "HC1". UTILIZE ROOF TOP RECEPTACLE CIRCUIT AS NOTED FOR 120V RECEPTACLE FEED. SEE DETAIL 1/E3.2A FOR LOCATION OF EXISTING SIEMENS "S2" PANEL. PROVIDE NEW BREAKERS AS NOTED AND UPDATE PANEL DIRECTORY TO REFLECT NEW UNIT.
- 6 ► NEW "AHU" UNIT AT THIS LOCATION WITH TWO(2) 480V/3PH CIRCUIT FEEDS AND ONE(1) 120V RECEPTACLE FEED. DIVISION 26 TO PROVIDE ONE(1) 60A/3P/NEMA-3R DISCONNECT ON ROOF AND ROUTE 3/4"C. 3#6 & 1#10G TO PANEL "HC4". DIVISION 26 TO PROVIDE ONE(1) 30A/3P/NEMA-3R DISCONNECT ON ROOF AND ROUTE 1/2"C., 4#12 TO PANEL "HC4". UTILIZE ROOF TOP RECEPTACLE CIRCUIT AS NOTED FOR 120V RECEPTACLE FEED. SEE PANEL SCHEDULE FOR CIRCUIT DESIGNATIONS.
- NEW "AC" UNIT TO BE FED FROM LOAD SIDE TERMINALS OF OUTDOOR UNIT ON ROOF. ROUTE 4#12 FROM UNIT TO ASSOCIATED "CU" CONDENSING UNIT ON ROOF.
- 8 NEW "CU" UNIT ON ROOF. PROVIDE 30/2/NEMA-3R DISCONNECT AT UNIT FOR CONNECTION. PROVIDE FUSES SIZED PER NAMEPLATE DATA. ROUTE 4#10 TO PANEL AS INDICATED. SEE DETAIL 7/E7.4. PROVIDE NEW 30A/2P BREAKER IN EXISTING EMERGENCY PANEL AS



**KEY PLAN** 

ECTRICAL DESIGN ELECTRICAL ENGINEERS 1201 BROAD ST., SUITE 1-A
AUGUSTA, GA 30901
PH: (706) 724-3551
FAX: (706) 724-8507
EDC PROJECT #: 22145 ISSUED FOR BID 01/29/2024

2218

OND FLOOR OF MECHANICA

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JUSTICE

COUNTY

UMBIA

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**ADDITION** 

RENOVATION

OSED

PRO

VSVSVSWFWF

VESTIBULE

RISER PRIOR TO BID

E5.1 SCALE: 1/16" = 1'-0"

STORAGE

## COURT REPORTER CLERK OF HC/RR ATTORNEY 1182 JUDGE OFFICE 3 E-1110 1181 **(2**) HC/ RR E-1121 STOR. 1179 2 ELEV.6 STAFF ATTORNEY 1176 JUDGE OFFICE 2 1175 SL R.R. STOR 1172 1173 R.R. SL 1169 STOR. STOR. 1173 · **2** MANAGER 1189 110cd VE**▶**⊠ JUDGE OFFICE 1 ELEC. E-1088 1166 STAFF ATTORNEY 1167 CLERK E-1073 R.R. SL 1164 STOR ASSOC. MAGISTRATE E-1128 ACCT. OFFICE E-1074 PUBLIC ENTRY 2 VISITING JUDGE 1163 RECEPTION 1002 STAIR E-1001B STAIR E-1001A VAULT 1007 EN'S 155 COPY VE NO E-1150 OPEN OFFICE 2 BREAK 1155

<sup>2</sup> FIRST FLOOR PLAN - FIRE ALARM SYSTEM

E5.1 SCALE: 1/16" = 1'-0"

### **GENERAL NOTES:**

- 1. ALL SPEAKER STROBES OR STROBE ONLY DEVICES SHOWN SHALL HAVE A MINIMUM 15cd RATING UNLESS OTHERWISE NOTED ADJACENT TO THE DEVICE.
- 2. ALL DEVICES SHALL RECEIVE NEW FIRE ALARM CABLING AND ALL CABLING SHALL BE ROUTED IN CONDUIT PER SPECIFICATIONS. DIVISION 28 SHALL BE PERMITTED TO REUSED EXISTING FIRE ALARM CONDUIT RACEWAY WHERE POSSIBLE. ANY REUSED CONDUIT SHALL BE

1 > ALL FIRE ALARM DEVICES SHOWN IN THIS ENCLOSED OUTLINED AREA OF FLOOR PLAN ARE EXISTING LOCATIONS TO BE REMOVED PER E1.2 AND REPLACED WITH NEW DEVICE TO BE CONNECTED TO NEW FIRE ALARM PANEL. COORDINATE WORK WITH ARCHITECTURAL PHASING PLAN. DIVISION 26 TO INCLUDE "FIRE WATCH" SERVICES AS NEEDED TO COVER INTERIM PERIOD BETWEEN REMOVAL OF EXISTING FIRE ALARM SYSTEM HEAD END FORMALLY SERVING THESE DEVICE LOCATIONS AND CONNECTING NEW DEVICES IN THIS AREA TO NEW PANEL.

2 NEW DEVICE LOCATION TO BE LOCATED IN THIS AREA

ATTIC STOCK:

4 - UNITS

10 - UNITS F 6-UNITS

> AREA "CB" AREA "CA"

**KEY PLAN** 1201 BROAD ST., SUITE 1-A
AUGUSTA, GA 30901
PH: (706) 724-3551 CONSULTANTS, INC. EDC PROJECT #: 22145

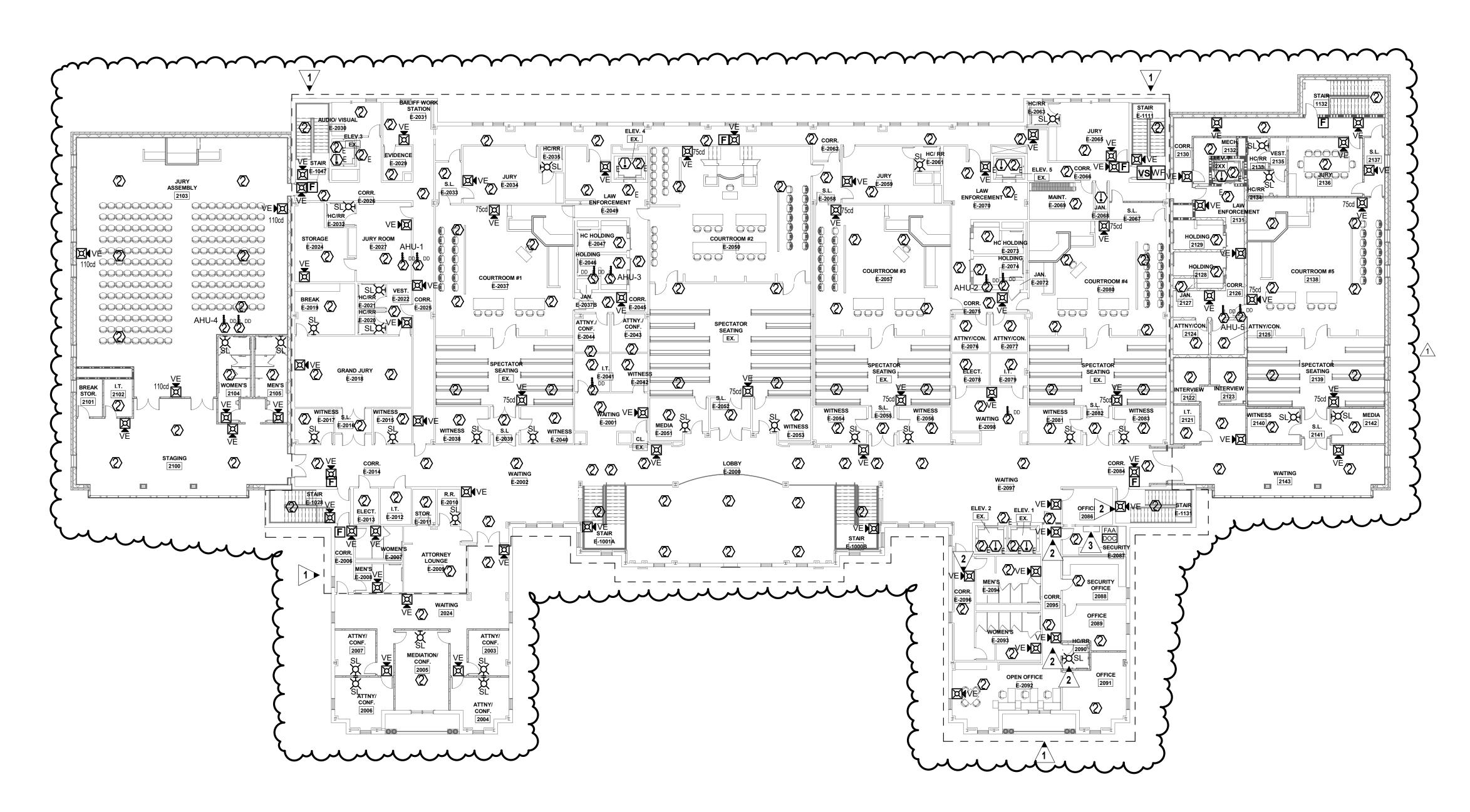
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2218



1 SECOND FLOOR PLAN - FIRE ALARM SYSTEM
E5.2 SCALE: 1/16" = 1'-0"

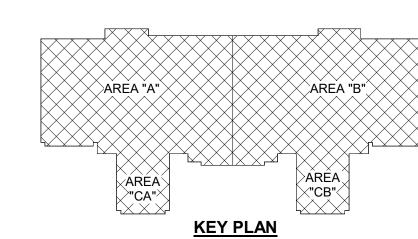
## **KEYED NOTES:**

- ALL FIRE ALARM DEVICES SHOWN IN THIS ENCLOSED OUTLINED AREA OF FLOORPLAN ARE EXISTING LOCATIONS TO BE REMOVED PER E1.2 AND REPLACED WITH NEW DEVICE TO BE CONNECTED TO NEW FIRE ALARM PANEL. COORDINATE WORK WITH ARCHITECTURAL PHASING PLAN.
- NEW DEVICE LOCATION TO BE LOCATED IN THIS AREA
- EXISTING UTC "VIGILANT" FIRE ALARM HEADEND, AMPLIFIERS, VOICE MICROPHONE, ETC AT THIS LOCATION TO BE REMOVED. DIVISION 28 TO INCLUDE "FIRE WATCH" SERVICES AS NEEDED TO COVER INTERIM PERIOD BETWEEN REMOVAL OF EXISTING SYSTEM HEADEND, NOTIFICATION DEVICES, CABLING, ETC. AND INSTALLATION OF NEW HEADEND, DEVICES, AND CABLING. NEW FIRE ALARM SYSTEM HEADEND SHALL BE INSTALLED ADJACENT TO EXISTING PANEL AS SHOWN.

## **GENERAL NOTES:**

- 1. ALL SPEAKER STROBE OR STROBE ONLY DEVICES SHOWN SHALL HAVE A MINIMUM 15cd RATING UNLESS OTHERWISE NOTED ADJACENT TO THE DEVICE.
- 2. ALL DEVICES SHALL RECEIVE NEW FIRE ALARM CABLING AND ALL CABLING SHALL BE ROUTED IN CONDUIT PER SPECIFICATIONS. DIVISION 28 SHALL BE PERMITTED TO REUSED EXISTING FIRE ALARM CONDUIT RACEWAY WHERE POSSIBLE. ANY REUSED CONDUIT SHALL BE PROVIDED WITH NEW CONDUIT SUPPORT PER SPECIFICATIONS WHERE REQUIRED.

  3. ALL DEVICES IN HOLDING ROOMS SHALL BE PROVIDE WITH A VANDAL PROOF GUARD.



KEY PLAN

2218

ECTRICAL DESIGN ELECTRICAL ENGINEERS
1201 BROAD ST., SUITE 1-A
AUGUSTA, GA 30901

PH: (706) 724-3551 FAX: (706) 724-8507

CONSULTANTS, INC. EDC PROJECT #: 22145

E5.2

01/29/2024

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RECORDS

E-1110

HC/ RR

E-1121 HC/ RR

VISITING
JUDGE CORR.

1119 E-1129

E-1152

1153

1154

COPY ROOM

CONSTABLES WORKSPACE

E-1115

STAIR

HÇ/RR

E-1122 E-1123

MAGISTRATE

E-1124

CLERK OF COURT

E-1125

ELEV. 7

ACCOUNT FOR QUANTITY THIRTY(30)

TELECOMMUNICATION DROPS IN THIS

LOCATIONS. COORDINATE ON SITE

ABOVE IN ROOM "I.T. 2121"

MEETING WITH OWNER TO DETERMINE

LOCATION OF DROPS/JACKS PER POLE.

CABLING FOR DROPS SHAL BE ROUTED

UP TO NEW IDF RACK ON SECOND FLOOR

OPEN AREA. REFER TO SHEET E3.1B FOR

COMBINATION POWER / TELECOMM POLE

COURT

HC/RR HC/RR

HOLDING

E-1094

E-1161

ELEV. 2 ELEV. 1

ELEV: 7

ELEV. 5

VESTIBULE

E-B035

E-B037

DOMESTIC DIVISION

E-1104

OFFICE

E-1103

CIVIL DIVISION

E-1102

1076

E-B017 E-B018 E-B019 E-B020 E-B021 E-B027

E5.5 / SCALE: 1/16" = 1'-0"

BASEMENT FLOOR PLAN - TELECOMMUNICATIONS SYSTEM

E-1062

ACCT. OFFICE

E-1073

E-1001

1003

1004

- ADDITIONAL WALL SLEEVES AND WALL PENETRATIONS. WILL BE REQUIRED FOR NETWORK CABLING. PROVIDE AS NECESSARY AND FIRESTOP ALL PENETRATIONS THROUGH RATED WALLS.
- 2. ALL CABLING SHALL BE BUNDLED AND SUPPORTED BY STRUCTURE ABOVE OR BY WALL AT EVERY 4-5 FEET. SUPPORT OF CABLING BY CEILING GRID OR GRID SUPPORT WIRES IS NOT ACCEPTABLE. PROVIDE D-RINGS, J-HOOKS OR OTHER SUPPORT MEANS AS PER EIA/TIA STANDARDS.
- ALL CABLING SHALL BE PLENUM RATED, OUTER JACKET ON ENHANCED CAT, 6 DATA CABLING SHALL BE GREEN, SURVEILLANCE CAMERA CABLING SHALL BE YELLOW, AND WIRELESS CABLING SHALL BE GREEN.
- 4. ALL TELECOMMUNICATION OUTLET JACKS SHALL BE PROVIDED WITH THE FOLLOWING LABELING NOMENCLATURE:

<u>X</u> <u>XXX</u> SEQUENTIAL NUMBER LEFT TO RIGHT BEGINNING WITH TOP PATCH PANEL TO LAST PATCH PANEL IN RACK. IE. 1-223, 1-224 — "X" FOR IDF-X

ALL PATCH PANELS SHALL BE CORRESPONDINGLY LABELED.

- 5. PROVIDE METAL D-RING OR RING RUNS AS NECESSARY TO PROPERLY LACE AND SUPPORT ALL VOICE CABLING AT TELEPHONE BACKBOARDS.
- PROVIDE BRUSHED STAINLESS STEEL, TYPE 302 COVER PLATES, WITH KEYSTONE JACKS, COLOR AS NOTED. TELECOMMUNICATION = GREEB, SURVEILLANCE = YELLOW, WIRELESS DROPS = GREEN.
- GROUND ALL RACKS WITH #6 COPPER LOCATED AT EACH BACKBOARD. SEE DRAWINGS FOR PANEL DESIGNATIONS. LOCATE RACKS A MINIMUM OF 2.5' OFF OF WALL. PROVIDE 12" CABLE RUNWAY SPANNING FROM TOP OF RACK TO WALL AND TURNED UP TO ABOVE DROP TILE CEILING IN ORDER TO ROUTE CABLE TO RACK. AT EACH RACK LOCATION PROVIDE A 3/4"x4'x8' PLYWOOD BACKBOARD PAINTED WITH TWO COATS OF BLACK FIRE RETARDANT PAINT. LOCATE 110 BLOCKS ON BACKBOARD. IDF RACKS SHALL BE 2 POST.
- TY-WRAPS SHALL NOT BE CINCHED DOWN TIGHT ENOUGH TO DEFORM CABLES. MAINTAIN MINIMUM BEND RADIUS ON FIBER, TIE CABLES, STATION WIRES, AND PATCH CORDS.
- 9. ANY DATA DROPS ROUTED IN UNDERGROUND CONDUIT SHALL BE UNDERGROUND DUCT RATED.
- 10. PROVIDE PATCH CORDS AT STATION END AND RACK END. PATCH CORDS SHALL BE COLOR CODED TO MATCH CABLE. SEE SPECIFICATIONS FOR PATCH CORD INFORMATION. PROVIDE 3', 5', OR 7' PATCH CORDS AT RACK END. LENGTH AS REQUIRED FOR PROPER CORD LACING. PROVIDE 10' CORDS AT STATION END
- 11. ALL TELECOMMUNICATION ELECTRONICS AND SYSTEM COMPONENTS ARE NOT IN CONTRACT.
- PRIOR TO ROUGH IN AND INSTALL OF ANY PATCH PANELS OR EQUIPMENT, COORDINATE AN ON-SITE MEETING WITH OWNER(I.T. DEPARTMENT). ADJUST SPACING OF EQUIPMENT AND MOUNTING AS DIRECTED BY OWNER.
- DURING SUBMITTAL PHASE, DIVISION 27 CONTRACTOR SHALL SUBMIT A CABLE ROUTING PLAN SHOWING PROPOSED CABLE ROUTING AND NOTE CABLE DISTANCES (DISTANCE TO INCLUDE SERVICE LOOPS). CABLING DISTANCES SHALL NOT EXCEED 300 FEET. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION.

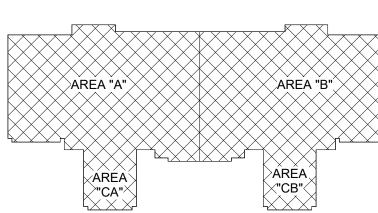
## **KEYED NOTES:**

STAIR

1 IN ADDITION TO REQUIREMENTS NOTED IN TELECOMMUNICATIONS LEGEND, DIVISION 27 TO PROVIDE ADDITIONAL CAT-6 DROP FROM THIS LOCATION TO STATE I.T. DATA RACK LOCATED IN ROOM E-1095. PROVIDE BLUE JACKET CABLING FOR THIS CABLE ONLY.

## **TELECOMMUNICATIONS VENDOR:**

DIVISION 27 CONTRACTOR SHALL BE STRUCTURED MEDIA SOLUTIONS, LLC CONTACT CHRIS KEESEE 404-433-7102 / chriskeesee@structuredmediasolutions-llc.com



**KEY PLAN** 

ECTRICAL DESIGN ELECTRICAL ENGINEERS 1201 BROAD ST., SUITE 1-A AUGUSTA, GA 30901 PH: (706) 724-3551 FAX: (706) 724-8507 CONSULTANTS, INC. EDC PROJECT #: 22145

FIRST FLOOR PLAN - TELECOMMUNICATIONS SYSTEM E5.5 SCALE: 1/16" = 1'-0"

E-1000

ELEV. 3 STAIRS EX.

CASE MANAGER

PROBATE COURT JUDGE

E-1016

1007

STOR. COPY

STAIR E-1028

RECORDS

REPORTER

✓ OFFICE

E<sub>1</sub>1047

JUDGE OFFICE 3

1181

JUDGE OFFICE 2

1175

R.R. STOR.

R.R. STOR.

OFFICE 1

1166

VISITING JUDGE

STOR.

STAFF ATTORNEY

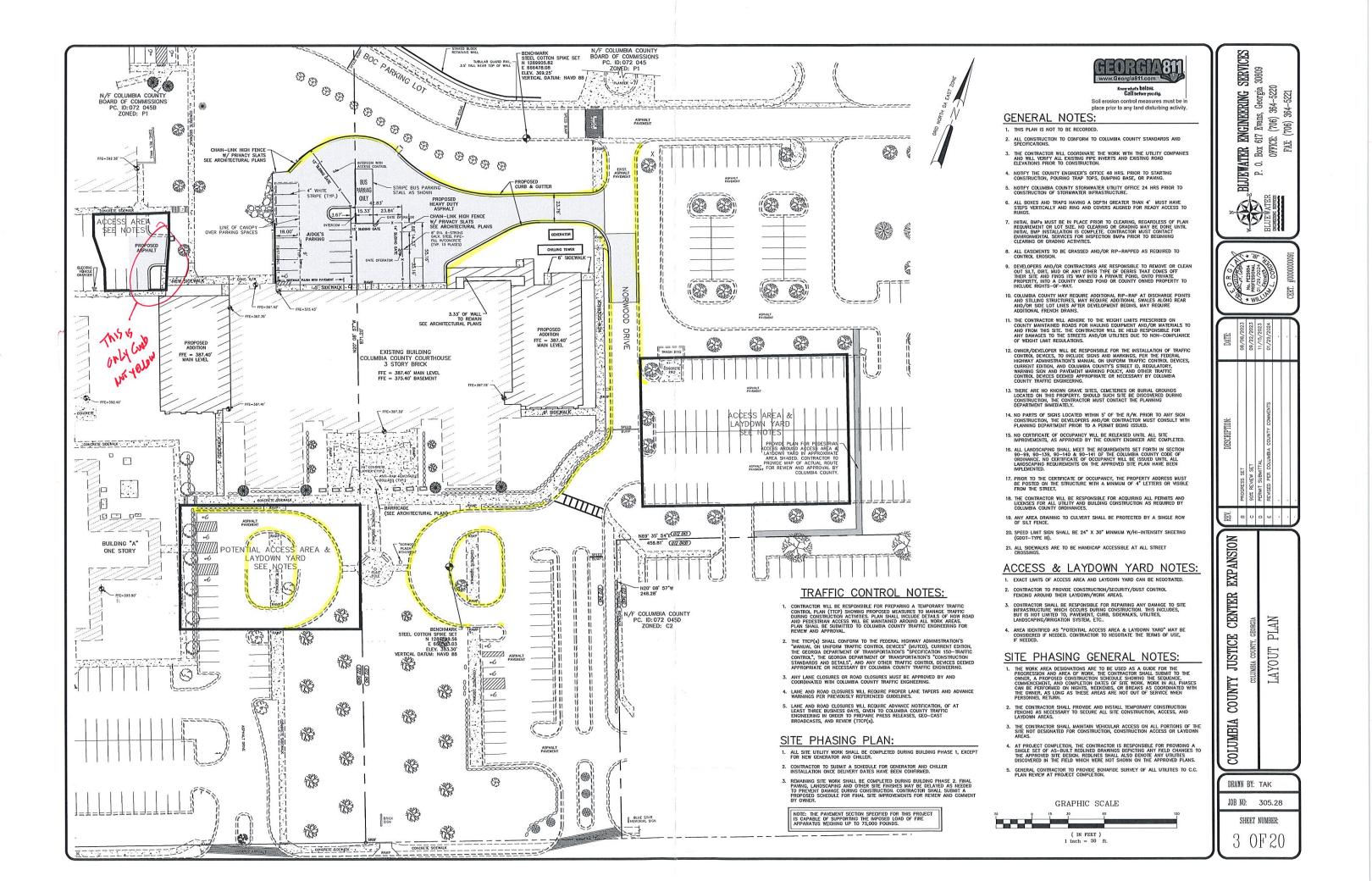
SECRETARY

ATTORNEY

UMBIA

ISSUED FOR BII 01/29/2024

2218



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130713.16	Bullet Resistant Security Glazing	2
133419	Metal Building Systems	 10
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144200	Wheelchair Lifts	 10
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210500	Common Work Results for Fire Suppression	 VOL. II
210519	Gages for Fire Protection Piping	 VOL. II
210523	General Duty Valves for Fire Protection	 VOL. II
210529	Hangers and Supports for Fire Suppression Piping and Equipment	 VOL. II
210553	Identification for Fire Suppression Piping and Equipment	 VOL. II
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#### **PROPOSAL**

PROPO	OSAL OF			_(hereinafter)
	"BIDDER", organized and business as	=		,
TO:	Columbia County, GA c/o Purchasing Dept. 500 Faircloth Drive Evans, Georgia 30809 (he	ereinafter called "OW	NER")	
of the	npliance with your Advertise Contract for: <b>BID# 2023(</b> rations, COLUMBIA COUN MENTS, within the time set	008-BID3000 Columb	<b>pia County Justice C</b> strict accordance v	enter Additions and vith the CONTRACT
certific consul	omission of this BID, each Bes as to his own organizat tation, communication, or a R or with any competitor.	ion, that this BID ha	s been arrived at inc	dependently, without
in the days t <u>dollars</u>	R hereby agrees to commer NOTICE TO PROCEED and hereafter. BIDDER further (\$1000.00) for each constantial Standard Form of Agreements	to fully complete the agrees to pay as liqu ecutive calendar day	e Project within 780 idated damages, the thereafter as provide	consecutive calendar sum of one thousand
BIDDE	R acknowledges receipt of t	he following ADDEND	UM(A):	
	No No	Dated Dated Dated Dated		

BIDDER acknowledges **GENERAL ALLOWANCE** included in the base bid amount of \$1,000,000.00.

BIDDER acknowledges **AUDIO VISUAL ALLOWANCES** included in the base bid amount of **\$325,000.00**.

SIGNAT	TURE REQUIRED ABOVE ACKNOWLEDGING ALLOWANCE
BIDDER agrees to perform all the for the total sum of	work described in the BASE BID of the CONTRACT DOCUMENTS
	AMOUNT WRITTEN IN WORDS
Dollars (\$).	
AMOUNTS ARE TO BE SHOWN IN AMOUNT SHOWN IN WORDS SHA	BOTH WORDS AND FIGURES. IN CASE OF DISCREPANCY, THE ALL GOVERN.
	ership", or "an individual", as applicable.  'NER reserves the right to reject any or all Bids and to waive any
The BIDDER agrees that this Bid scalendar days after the schedule	shall be good and may not be withdrawn for a period of 60 d closing time for receiving Bids.
•	Acceptance of this Bid, BIDDER will execute the formal Contract Surety Bond or Bonds as required by AIA 101 and AIA 201. The of:
Dollars (\$	AMOUNT WRITTEN IN WORDS ).
is to become the property of the	OWNER in the event the Contract and Bond are not executed ated damages for the delay and additional expense to the
	Respectfully Submitted:
	Ву:
	Signature
	Title:
	Firm Name:
(SEAL - if Bid is by a Corporation)	Address:

#### DATA TO BE SUBMITTED WITH BID

#### A. <u>SUPPLEMENTAL INSTRUCTIONS</u>:

The following instructions supplement the requirements of the Information For Bidders and provides instructions for completing the schedules which follow.

- 1. The Bidder shall submit a list of names and addresses of at least five (5) clients for which the Bidder has constructed similar work of comparable size and complexity.
- 2. The Bidder shall list in the space provided in Schedule C ALL major subcontractors to be used for construction of the project. Subcontractors so listed shall be used for the contract construction unless their replacement is approved by the Engineer and the Owner.

#### B. LIST OF **PRE-APPROVED** MAJOR SUBCONTRACTORS:

1.	Masonry:
	Address:
2.	Electrical:
	Address:
3.	HVAC Mech.:
	Address:
4.	Plumbing Mech.:
	Address:
5.	Fire Alarm:
	Address:
6.	Civil Site Work:
	Address:



# **Standard Form of Agreement Between Owner and Contractor** where the basis of payment is a Stipulated Sum

**AGREEMENT** made as of the day of in the year (In words, indicate day, month and year.)

#### **BETWEEN** the Owner:

(Name, legal status, address and other information)

Columbia County Georgia 630 Ronald Reagan Drive Building B Evans, Georgia 30809

and the Contractor:

(Name, legal status, address and other information)

for the following Project: (Name, location and detailed description)

Columbia County Justice Center Additions and Renovations 640 Ronald Reagan Dive. Evans, GA 30809

The Architect:

(Name, legal status, address and other information)

Booker + Vick Architects, Inc 670 Broad Street Augusta, GA 30901

The Owner and Contractor agree as follows.

#### **ADDITIONS AND DELETIONS:**

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

The parties should complete A101®–2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201®–2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

**User Notes:** 

#### TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 THE WORK OF THIS CONTRACT
- 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
- 4 CONTRACT SUM
- 5 PAYMENTS
- 6 DISPUTE RESOLUTION
- 7 TERMINATION OR SUSPENSION
- 8 MISCELLANEOUS PROVISIONS
- 9 ENUMERATION OF CONTRACT DOCUMENTS
- EXHIBIT A INSURANCE AND BONDS
- **EXHIBIT B DRAWINGS INDEX**
- **EXHIBIT C** SPECIFICATIONS INDEX
- EXHIBIT D ADDENDA

#### ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

#### ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

#### ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be: (Check one of the following boxes.)

. '	]	The date of this Agreement.
	-	

- [X] A date set forth in a notice to proceed issued by the Owner.
- [ ] Established as follows:

  (Insert a date or a means to determine the date of commencement of the Work.)

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

Init.

**User Notes:** 

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§ 3.3 Substantial	Comp	letion
-------------------	------	--------

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:

(Check one of the following boxes and complete the necessary information.)

[X] Not later than Seven Hundred and Eighty (780) calendar days from the date of commencement of the Work.

[ ] By the following date:

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work Substantial Completion Date

Additions 540 Days Renovations 240 Days

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

#### ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be (\$ ), subject to additions and deductions as provided in the Contract Documents.

#### § 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

ltem Price

§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement. (Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item Price Conditions for Acceptance

**§ 4.3** Allowances, if any, included in the Contract Sum: *(Identify each allowance.)* 

Item Price

#1 General Allowance One Million Dollars (\$1,000,000)

#2 Audio Visual for Courtrooms Allowance Three Hundred Twenty-Five Thousand Dollars (\$325,000)

#### § 4.4 Unit prices, if any:

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item Units and Limitations Price per Unit (\$0.00)

#### § 4.5 Liquidated damages, if any:

(Insert terms and conditions for liquidated damages, if any.)

#### Init.

**User Notes:** 

One Thousand Dollars (\$1,000) per Calendar Day if the work is not completed by the specified completion day unless the owner authorizes an extension of time for completion of the work. Should the Contractor fail for any reason to achieve total Substantial Completion in the number of calendar days set forth in Section 3.3, the Contractor shall pay liquidated damages (and any attorney's fees, as discussed below) to the Owner in the amount set forth above. The Parties agree that such liquidated damages are a reasonable estimate of the damages which Owner will suffer from such delay. Should litigation arise regarding the Contract Documents or the Work, attorney's fees shall be awarded to the party who prevail in such litigation. An award of liquidated damages under this provision shall not preclude Owner's right to recover attorney's fees. It is understood that the Contractor shall make all reasonable efforts to maintain the current project schedule as included in the contract and subsequent revisions

#### § 4.6 Other:

(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

N/A

#### ARTICLE 5 PAYMENTS

#### § 5.1 Progress Payments

- § 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.
- § 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:
- (25th) Twenty-Fifth Day of the Month
- § 5.1.3 Provided that an Application for Payment is received by the Architect not later than the 25th day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the 20th day of the following month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than Thirty (30) days after the Architect receives the Application for Payment; subject to the approval of Owner, provided that if a lien is filed, payment may be withheld until the lien has been released or properly bonded off..

(Federal, state or local laws may require payment within a certain period of time.)

- § 5.1.3.1 Each Application for Payment shall include a lien release for the current draw request (conditional), current monthly cost report and invoice coverpage, letter to Owner certifying that the estimated costs, as indicated on each Monthly Application for Payment are current and sufficient for the completion of construction of the Project; provided, however, neither this estimate nor the payment of any sum shall be deemed acceptance of Work not completed in accordance with the plans and specifications and Contractor shall remain obligated to complete the Work in accordance with the plans and specifications regardless of whether payment has been made.
- § 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.
- § 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.
- § 5.1.6 In accordance with AIA Document A201<sup>TM</sup>\_2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:
- § 5.1.6.1 The amount of each progress payment shall first include:
  - .1 That portion of the Contract Sum properly allocable to completed Work;

- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.
- § 5.1.6.2 The amount of each progress payment shall then be reduced by:
  - .1 The aggregate of any amounts previously paid by the Owner;
  - .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017;
  - .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
  - .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and
  - .5 Retainage withheld pursuant to Section 5.1.7.

#### § 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

5% (Five Percent)

§ 5.1.7.1.1 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

N/A

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

N/A

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:

(Insert any other conditions for release of retainage upon Substantial Completion.)

The Retainage of 5% of the contract shall not be reduced, plus the value of any incomplete work. The retainage at Substantial Completion of the entire project will not be reduced until such standard of completion of work has been achieved. The Architect will assign a value equal to 200% of the value of any remaining incomplete or unacceptable Punch List items. The Architect shall determine the value of any such items including appropriate value of any remaining final Close-Out Documents, Warranties, etc. Note: A value of 5% of the Line Item amount on the Continuation Sheet (G703) shall be assessed for each major warranty not furnished for the Project.

The contractor shall, within ten days from the contractor's receipt of retainage from the owner, pass through payments to subcontractors and shall reduce each subcontractor's retainage by the same percentage amount as the contractor's retainage is reduced by the owner; provided, however, that the work of the subcontractor is proceeding satisfactorily and the subcontractor has provided or provides such satisfactory reasonable assurances of continued performance and financial responsibility to complete his or her work, including any warranty work as the contractor in his or her reasonable discretion may require, including, but not limited to, a payment and performance bond.

User Notes: (1331187303)

The subcontractor shall, within ten days from the subcontractor's receipt of retainage from the contractor, pass through payments to lower tier subcontractors and shall reduce each lower tier subcontractor's retainage in the same manner as the subcontractor's retainage is reduced by the contractor; provided, however, that the work of the lower tier subcontractor is proceeding satisfactorily and the lower tier subcontractor has provided or provides such satisfactory reasonable assurances of continued performance and financial responsibility to complete his or her work, including any warranty work as the subcontractor in his or her reasonable discretion may require, including, but not limited to, a payment and performance bond.

- § 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201–2017.
- § 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

#### § 5.2 Final Payment

- § 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when
  - .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and
  - .2 a final Certificate for Payment has been issued by the Architect.
- § 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

#### No later than thirty (30) days after:

- (a) The Contractor submits to Owner an unconditional lien for the material and labor in connection with this Project for prior month's pay request. Such lien shall be from the Contractor, each subcontractor and each potential lien claimant and shall be executed and acknowledged before a notary; and
- (b) Completion of the scope of Work under this Agreement, with any amount paid, less the amount determined by the Architect for any incomplete items such as the Architect's punch work, the units' respective purchasers' punch work, and any warranty items; and
- (c) The amount is withheld from final payment to the Contractor at Substantial Completion shall be equal to 200% of the cost to complete the Architect's punch work, the units' respective purchasers' punch work, and any warranty items, with such cost to be determined by the Architect; and
- (d) Owner is in receipt of the **Contractors TWO (2) year warranty** and all warranties and manuals for each subcontractor as related to the close-out documents, which a list of such close-out documents is noted by the specifications such as test reports, redline/as-built drawings/specifications (2 copies) and termite inspection reports; and
- (e) The Contractor submits to Owner the copies of all permits, inspection reports, test reports, signed and approved by the local or regulating authority involving the Project; and
- (f) The Contractor submits the original of all certificates of occupancy, Architect's inspection reports and Civil Engineers' certifications; and
- (g) Owner's receipt of certificates of final completion of the Project from the Project's architects/engineers certifying that the Project has been substantially completed in accordance with the Contract Documents, subject to a minor punch list; and
- (h) Conditional full and final lien waivers from the Contractor and each subcontractor and potential lien claimant receiving money from the final payment and unconditional full and final waiver of liens from such parties within fifteen (15) working days after receipt of final payment from the Owner; and
- (i) Contractor's final accounting with the AIA G706, G706A and G707; and
- (j) Contractor has submitted a **bona fide survey** of the as-built condition of all public utilities on the project site to Columbia County Plan Review for approval.

#### § 5.3 Interest

Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located. (Insert rate of interest agreed upon, if any.)

0 % Zero

#### ARTICLE 6 DISPUTE RESOLUTION

#### § 6.1 Initial Decision Maker

The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker. (If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

N/A

#### § 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows: (Check the appropriate box.)

•	1	Arbitration	pursuant to	Section	15.4 of AIA	Document	A201-2017

[X] Litigation in state and federal law Courts located in Columbia County, Georgia shall have exclusive jurisdiction and venue for any dispute arising from this Agreement.

Other	(Specify)

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

#### ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2017.

§ 7.1.1 If the Contract is terminated for the Owner's convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Contractor a termination fee as follows: (Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner's convenience.)

Contractor shall be entitled to receive payment for Work executed, and purchased materials that cannot be returned for credit, and any other direct costs incurred in performance of the work and by reason of such termination, but there shall be no allowance for overhead and profit on work not yet executed, and there shall be no compensation for any consequential, indirect or special damages.

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017.

#### ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.1.1 In satisfaction of the requirement of O.C.G.A. 13-10-91, and the Rules of the Georgia Department of Labor relating to the Georgia Security and Immigration Compliance Act of 2006, it is agreed that compliance with the requirement of O.C.G.A. 13-10-91 and rule 300-10-1-.02 are conditions of this Agreement. Attached to this

Init.

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**User Notes:** 

Agreement and made a part hereof by specific reference, is a form entitled "Immigration and Security Form" which is to be completed by the Contractor and all subcontractors. The Contractor shall be responsible for securing from each of the subcontractors, such subcontractor's completion of the Immigration and Security Form. The Contractor's compliance with the requirements of O.C.G.A. 13-10-91 and rule 300-10-1-.02, shall be attested by the execution by the contractor of the Contractor Affidavit and Agreement, which is attached to and made a part of this Agreement. In the event the Contractor employs or contracts with any subcontractor(s) in connection with this Agreement, which is required to register to verify information on all new employees, the Contractor shall secure from such subcontractor(s), attestation of the subcontractors compliance with O.C.G.AS. 10-10-91 and Rule 300-10-1-.02 by the subcontractor's execution of the Subcontractor Affidavit shown in Rule 300-10-01.08 or a substantially similar Subcontractor Affidavit and maintain records of such attestation for inspection by the Owner at any time. Such Subcontractor Affidavit shall become a part of the contractor/subcontractor agreement.

#### § 8.2 The Owner's representative:

(Name, address, email address, and other information)

Steven D. Prather PO Box 498 Evans, Ga. 30809 sprather@columbiacountyga

#### § 8.3 The Contractor's representative:

(Name, address, email address, and other information)

§ 8.4 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

#### § 8.5 Insurance and Bonds

- § 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A101<sup>TM</sup>\_2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.
- § 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A101<sup>TM</sup>—2017 Exhibit A, and elsewhere in the Contract Documents.
- § 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201–2017, may be given in accordance with AIA Document E203<sup>™</sup>–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

§ 8.7 Other provisions:

#### ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

- § 9.1 This Agreement is comprised of the following documents:
  - 1 AIA Document A101<sup>™</sup>–2017, Standard Form of Agreement Between Owner and Contractor, as amended.
  - .2 AIA Document A101<sup>TM</sup>–2017, Exhibit A, Insurance and Bonds
  - **.3** AIA Document A201<sup>TM</sup>\_2017, General Conditions of the Contract for Construction, as amended.
  - .4 Drawings: Exhibit B, Cover Sheet, Drawings Index

(Paragraphs deleted)

**User Notes:** 

.5 .6 (Paragraphs Add	•	pit C, Specifications Inde	X		
	Number	Date		Pages	
	Portions of Addenda	relating to bidding or pro		are not part of t	
.7	Documents unless the bidding or proposal requirements are also enumerated in this Article 9.  Other Exhibits: (Check all boxes that apply and include appropriate information identifying the exhibit where required.)				
	[ ] AIA Document E204 <sup>TM</sup> _2017, Sustainable Projects Exhibit, dated as indicated below: (Insert the date of the E204-2017 incorporated into this Agreement.)				
	[ ] The Sustain	ability Plan:			
	Title	Dat	е	Pages	
	[ ] Supplement	ary and other Conditions	of the Contract:		
	Document	Title	)	Date	Pages
.8	Other documents, if any, listed below: (List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201 <sup>TM</sup> —2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)  A201 General Conditions of the Contract for Construction Columbia County Proposal/Bid Form Invitation to Bid A701 Instructions to Bidders A310 Bid Bond A312 Payment Bond			tructions to Bidders, bidding or proposal ceiving bids or eement. Any such	
This A aroom	A312 Performance E	Bond	ton above		
i ilis Agreem	em emerca into as of the	he day and year first writ	ich adove.		
OWNER (Sig	gnature)		CONTRACTOR (Sign	nature)	
	Duncan, Jr. Chairman County Board of Comm	issioners			
	me and title)		(Printed name and	title)	

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### Additions and Deletions Report for

AIA® Document A101® – 2017

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

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#### PAGE 1

Columbia County Georgia 630 Ronald Reagan Drive Building B Evans, Georgia 30809

Columbia County Justice Center Additions and Renovations 640 Ronald Reagan Dive. Evans, GA 30809

Booker + Vick Architects, Inc 670 Broad Street Augusta, GA 30901 PAGE 2

**EXHIBIT A INSURANCE AND BONDS** 

**EXHIBIT B DRAWINGS INDEX** 

EXHIBIT C SPECIFICATIONS INDEX

**EXHIBIT D ADDENDA** 

[ <u>X</u> ] A date set forth in a notice to proceed issued by the Owner. PAGE 3

[X] Not later than (→) Seven Hundred and Eighty (780) calendar days from the date of commencement of the Work.

Additions 540 Days Renovations 240 Days

#1 General Allowance

One Million Dollars (\$1,000,000)

#### #2 Audio Visual for Courtrooms Allowance Three Hundred Twenty-Five Thousand (\$325,000)

PAGE 4

One Thousand Dollars (\$1,000) per Calendar Day if the work is not completed by the specified completion day unless the owner authorizes an extension of time for completion of the work. Should the Contractor fail for any reason to achieve total Substantial Completion in the number of calendar days set forth in Section 3.3, the Contractor shall pay liquidated damages (and any attorney's fees, as discussed below) to the Owner in the amount set forth above. The Parties agree that such liquidated damages are a reasonable estimate of the damages which Owner will suffer from such delay. Should litigation arise regarding the Contract Documents or the Work, attorney's fees shall be awarded to the party who prevail in such litigation. An award of liquidated damages under this provision shall not preclude Owner's right to recover attorney's fees. It is understood that the Contractor shall make all reasonable efforts to maintain the current project schedule as included in the contract and subsequent revisions

N/A

(25th) Twenty-Fifth Day of the Month

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the 25th day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the 20th day of the following month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than (---) Thirty (30) days after the Architect receives the Application for Payment. Payment; subject to the approval of Owner, provided that if a lien is filed, payment may be withheld until the lien has been released or properly bonded off..

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.3.1 Each Application for Payment shall include a lien release for the current draw request (conditional), current monthly cost report and invoice coverpage, letter to Owner certifying that the estimated costs, as indicated on each Monthly Application for Payment are current and sufficient for the completion of construction of the Project; provided, however, neither this estimate nor the payment of any sum shall be deemed acceptance of Work not completed in accordance with the plans and specifications and Contractor shall remain obligated to complete the Work in accordance with the plans and specifications regardless of whether payment has been made.

PAGE 5

5% (Five Percent)

N/A

N/A

The Retainage of 5% of the contract shall not be reduced, plus the value of any incomplete work. The retainage at Substantial Completion of the entire project will not be reduced until such standard of completion of work has been achieved. The Architect will assign a value equal to 200% of the value of any remaining incomplete or unacceptable Punch List items. The Architect shall determine the value of any such items including appropriate value of any remaining final Close-Out Documents, Warranties, etc. Note: A value of 5% of the Line Item amount on the Continuation Sheet (G703) shall be assessed for each major warranty not furnished for the Project. The contractor shall, within ten days from the contractor's receipt of retainage from the owner, pass through payments to subcontractors and shall reduce each subcontractor's retainage by the same percentage amount as the contractor's

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retainage is reduced by the owner; provided, however, that the work of the subcontractor is proceeding satisfactorily and the subcontractor has provided or provides such satisfactory reasonable assurances of continued performance and financial responsibility to complete his or her work, including any warranty work as the contractor in his or her reasonable discretion may require, including, but not limited to, a payment and performance bond.

The subcontractor shall, within ten days from the subcontractor's receipt of retainage from the contractor, pass through payments to lower tier subcontractors and shall reduce each lower tier subcontractor's retainage in the same manner as the subcontractor's retainage is reduced by the contractor; provided, however, that the work of the lower tier subcontractor is proceeding satisfactorily and the lower tier subcontractor has provided or provides such satisfactory reasonable assurances of continued performance and financial responsibility to complete his or her work, including any warranty work as the subcontractor in his or her reasonable discretion may require, including, but not limited to, a payment and performance bond.

#### PAGE 6

#### No later than thirty (30) days after:

- (a) The Contractor submits to Owner an unconditional lien for the material and labor in connection with this Project for prior month's pay request. Such lien shall be from the Contractor, each subcontractor and each potential lien claimant and shall be executed and acknowledged before a notary; and
- (b) Completion of the scope of Work under this Agreement, with any amount paid, less the amount determined by the Architect for any incomplete items such as the Architect's punch work, the units' respective purchasers' punch work, and any warranty items; and
- (c) The amount is withheld from final payment to the Contractor at Substantial Completion shall be equal to 200% of the cost to complete the Architect's punch work, the units' respective purchasers' punch work, and any warranty items, with such cost to be determined by the Architect; and
- (d) Owner is in receipt of the Contractors TWO (2) year warranty and all warranties and manuals for each subcontractor as related to the close-out documents, which a list of such close-out documents is noted by the specifications such as test reports, redline/as-built drawings/specifications (2 copies) and termite inspection reports; and
- (e) The Contractor submits to Owner the copies of all permits, inspection reports, test reports, signed and approved by the local or regulating authority involving the Project; and
- The Contractor submits the original of all certificates of occupancy, Architect's inspection reports and Civil Engineers' certifications; and
- (g) Owner's receipt of certificates of final completion of the Project from the Project's architects/engineers certifying that the Project has been substantially completed in accordance with the Contract Documents, subject to a minor punch list; and
- (h) Conditional full and final lien waivers from the Contractor and each subcontractor and potential lien claimant receiving money from the final payment and unconditional full and final waiver of liens from such parties within fifteen (15) working days after receipt of final payment from the Owner; and
- (i) Contractor's final accounting with the AIA G706, G706A and G707; and
- Contractor has submitted a **bona fide survey** of the as-built condition of all public utilities on the project site to Columbia County Plan Review for approval.

PAGE 7		
<u>0</u> % <u>Zero</u>		
<u>N/A</u>		
[-]-	Litigation in a court of competent jurisdiction [X] located in Columbia County, Georgia shall have excharising from this Agreement.	Litigation in state and federal law Courts usive jurisdiction and venue for any dispute

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Contractor shall be entitled to receive payment for Work executed, and purchased materials that cannot be returned for credit, and any other direct costs incurred in performance of the work and by reason of such termination, but there shall be no allowance for overhead and profit on work not yet executed, and there shall be no compensation for any consequential, indirect or special damages.

§ 8.1.1 In satisfaction of the requirement of O.C.G.A. 13-10-91, and the Rules of the Georgia Department of Labor relating to the Georgia Security and Immigration Compliance Act of 2006, it is agreed that compliance with the requirement of O.C.G.A. 13-10-91 and rule 300-10-1-.02 are conditions of this Agreement. Attached to this Agreement and made a part hereof by specific reference, is a form entitled "Immigration and Security Form" which is to be completed by the Contractor and all subcontractors. The Contractor shall be responsible for securing from each of the subcontractors, such subcontractor's completion of the Immigration and Security Form. The Contractor's compliance with the requirements of O.C.G.A. 13-10-91 and rule 300-10-1-.02, shall be attested by the execution by the contractor of the Contractor Affidavit and Agreement, which is attached to and made a part of this Agreement. In the event the Contractor employs or contracts with any subcontractor(s) in connection with this Agreement, which is required to register to verify information on all new employees, the Contractor shall secure from such subcontractor(s), attestation of the subcontractors compliance with O.C.G.AS. 10-10-91 and Rule 300-10-1-.02 by the subcontractor's execution of the Subcontractor Affidavit shown in Rule 300-10-01.08 or a substantially similar Subcontractor Affidavit and maintain records of such attestation for inspection by the Owner at any time. Such Subcontractor Affidavit shall become a part of the contractor/subcontractor agreement.

#### PAGE 8

Steven D. Prather PO Box 498 Evans, Ga. 30809 sprather@columbiacountyga

.1 AIA Document A101<sup>TM</sup>–2017, Standard Form of Agreement Between Owner and Contractor, as amended.

#### PAGE 9

- AIA Document A201<sup>TM</sup>–2017, General Conditions of the Contract for Construction Construction, as amended.
- AIA Document E203<sup>TM</sup> 2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below: Drawings: Exhibit B, Cover Sheet, Drawings Index (Insert the date of the E203-2013 incorporated into this Agreement.)
- **Drawings**

**Title Date** Number

- Specifications: Exhibit C, Specifications Index
- **Specifications**

Section Title Date Pages 1

.7—Addenda, if any:

.8 Other Exhibits:

...

.9 Other documents, if any, listed below:

(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201<sup>TM</sup>\_2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

A201 General Conditions of the Contract for Construction
Columbia County Proposal/Bid Form
Invitation to Bid
A701 Instructions to Bidders
A310 Bid Bond
A312 Payment Bond
A312 Performance Bond

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Douglas R. Duncan, Jr. Chairman
Columbia County Board of Commissioners

...

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### Certification of Document's Authenticity

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(Signed)
(Title)
(Dated)



#### **EXHIBIT C**

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#### **SECTION 011000**

#### **SUMMARY**

## **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Project information.
  - 2. Work covered by Contract Documents.
  - 3. Phased construction.
  - 4. Owner-furnished/Contractor-installed (OFCI) products.
  - 5. Contractor's use of site and premises.
  - 6. Coordination with occupants.
  - 7. Work restrictions.
  - 8. Specification and Drawing conventions.

## B. Related Requirements:

- 1. Retain subparagraphs below to cross-reference requirements Contractor might expect to find in this Section but are specified in other Sections.
- 2. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
- 3. Section 017300 "Execution" for coordination of Owner-installed products.

# 1.3 DEFINITIONS

A. Work Package: A group of specifications, drawings, and schedules prepared by the design team to describe a portion of the Project Work for pricing, permitting, and construction.

## 1.4 PROJECT INFORMATION

- A. Project Identification:
  - 1. Project Location: Columbia County Justice Center Building, 640 Ronald Reagan Drive, Evans, Georgia 30809.
- B. Owner: Columbia County, Georgia.
  - 1. Owner's Representative: Steven D. Prather, Office (706) 312-7374.
- C. Architect: Booker + Vick Architects, Inc., 670 Broad Street, Augusta, Georgia 30901.
  - 1. Architect's Representative: Chris Booker, (706) 798-6792.
- D. Architect's Consultants: Architect has retained the following design professionals, who have prepared designated portions of the Contract Documents:
  - 1. Civil Engineering: Bluewater Engineering Services, P.O. Box 617, Evans, Georgia 30809
    - a. Civil Engineering Representative: Bill Corder, P.E., (706) 364-5220.
  - Structural Engineering: Slater Engineering, P.O. Box 1010, Augusta, Georgia 30903
    - a. Structural Engineering Representative: Brian Slater P.E., (706) 364-9547.

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- 3. Mechanical Engineering: PFA Engineering, 1201 Broad Street, Suite 3A, Augusta, Georgia 30901
  - a. Mechanical Engineering Representative: Joe Powell P.E./Brian Messer, P.E., (706) 722-3959.
- 4. Electrical Engineering: Electrical Design Consultants, Inc. (EDC), 1201 Broad Street, Suite 1-A, Augusta, Georgia 30901.
  - a. Electrical Engineering Representative: Tom Brinson P.E./ Kyle Holt, (706) 724-3551.
  - 5. Interior Design: Corporate Studio. 670 Broad Street, Suite 300, Augusta, Georgia 30901.
  - a. Interior Design Representative: Lisa Burgess, R.I.D., (706) 724-4800.

## 1.5 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and includes, but is not limited to, the following:
  - 1. Renovation and addition for the Columbia County Justice Center, Sprinklered three stories, Additions will be 25,000 square feet and Renovations will be 14,000 square foot of the existing 70,000 square foot facility and other Work indicated in the Contract Documents.
- B. Type of Contract:
  - 1. Project will be constructed under a single prime contract.

#### 1.6 PHASED CONSTRUCTION

A. Construct the Work in phases, with each phase substantially complete as indicated on Drawings:

Refer to Sheets PH1.0, PH2.0, PH2.1, PH 3.0, PH4.0, PH5.0, PH6.0 for phasing limits and requirements.

- 1. Phase 1 (Sheet PH1.0): First Floor Phasing Plan Description of limits and requirements for Phase.
- a. Commencement of Construction:
  - Notice to Proceed: Work of this phase shall commence immediately after the Notice to Proceed is executed between Columbia County, and awarded General Contractor.
  - 2) Start Date: Work of this phase shall commence immediately after Notice to Proceed.
- b. The Work in this Phase shall be substantially complete before start of the next Phase.

#### 2. Phase 2:

- Sheet PH2.0 Basement and First Floor Phasing Plans Description of limits and requirements for Phase.
- Sheet PH2.1 Second Floor and Roof Phasing Plans Description of limits and requirements for Phase.
- a. Before the start of this Phase, Owner's personnel will have ten (10) business days to move into new or temporary spaces.

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- b. The Work in this Phase shall be substantially complete before start of the next Phase.
- 3. Phase 3 (Sheet PH3.0): Basement, First Floor, and Second Floor Phasing Plans Description of limits and requirements for Phase.
- a. Before the start of this Phase, Owner's personnel will have ten (10) business days to move into new or temporary spaces.
- b. The Work in this Phase shall be substantially complete before start of the next Phase.
- 4. Phase 4 (Sheet PH4.0): First Floor and Second Floor Phasing Plans Description of limits and requirements for Phase.
- a. The Work in this Phase shall be substantially complete before start of the next Phase.
- 5. Phase 5 (Sheet PH5.0): First Floor and Second Floor Phasing Plans Description of limits and requirements for Phase.
- a. The Work in this Phase shall be substantially complete before start of the next Phase.
- 6. Phase 6 (Sheet PH6.0): Second Floor Phasing Plans Description of limits and requirements for Phase.
  - a. The remaining Work in this Phase shall be substantially complete at time of Substantial Completion of the Work.
- B. Before commencing Work of each phase, submit an updated copy of Contractor's construction schedule, showing the sequence, commencement and completion dates and move out and move in dates of Owner's personnel for all phases of the Work.

# 1.7 OWNER-FURNISHED/CONTRACTOR-INSTALLED (OFCI) PRODUCTS

- A. Owner's Responsibilities: Owner will furnish products indicated and perform the following, as applicable:
  - 1. Provide to Contractor Owner-reviewed Product Data, Shop Drawings, and Samples.
  - 2. Provide for delivery of Owner-furnished products to Project site.
  - 3. Upon delivery, inspect, with Contractor present, delivered items.
    - If Owner-furnished products are damaged, defective, or missing, arrange for replacement.
  - 4. Obtain manufacturer's inspections, service, and warranties.
  - 5. Inform Contractor of earliest available delivery date for Owner-furnished products.
- B. Contractor's Responsibilities: The Work includes the following, as applicable:
  - 1. Designate delivery dates of Owner-furnished products in Contractor's construction schedule, utilizing Owner-furnished earliest available delivery dates.
  - 2. Review Owner-reviewed Product Data, Shop Drawings, and Samples, noting discrepancies and other issues in providing for Owner-furnished products in the Work.
  - 3. Receive, unload, handle, store, protect, and install Owner-furnished products.

SUMMARY 011000 - 3

- 4. Make building services connections for Owner-furnished products.
- 5. Protect Owner-furnished products from damage during storage, handling, and installation and prior to Substantial Completion.
- 6. Repair or replace Owner-furnished products damaged following receipt.
- C. Owner-Furnished/Contractor-Installed (OFCI) Products:
  - Owner is to furnish and the Contractor is to install the following toilet accessories:
     Toilet tissue dispensers, soap dispensers, and paper towel dispensers. The remaining toilet accessories are to be furnished and installed by the Contractor. Contractor to provide blocking for all toilet accessories. Refer to drawings for locations and heights, and Section 102800 "Toilet, Bath and Laundry Accessories".

## 1.8 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Restricted Use of Site: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
- B. Limits on Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
  - 1. Driveways, Walkways and Entrances: Keep driveways parking garage, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
    - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
    - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.
- D. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

## 1.9 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy Project site and existing adjacent building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
  - Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
  - 2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.

# 1.10 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
  - 1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work to between 7:00 a.m. to 7:00 p.m., Monday through Friday, unless otherwise indicated. Work hours may be modified to meet Project requirements if approved by Owner and authorities having jurisdiction.

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- C. Building /Site Location: Awarded firm shall have 24/7 local presence until the Certificate of Occupancy has been received. Maximum 45-minute on-site response time is required (Superintendent or equivalent competent staff).
- D. Coordinate with requirements for temporary utilities specified in Section 015000 "Temporary Facilities and Controls."
- E. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging for temporary utility services according to requirements indicated: Notify Owner not less than two days in advance of proposed utility interruptions.
  - 1. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to Owner occupancy with Owner.
- F. Notify Owner not less than two (2) days in advance of proposed disruptive operations.
- G. Smoking and Controlled Substance Restrictions: Use of tobacco products, alcoholic beverages, and other controlled substances within the existing building and on Project site is not permitted.
- H. Employee Identification: Provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.
- I. Employee Screening: Comply with Owner's requirements for background screening of Contractor personnel working on Project site.
  - 1. Maintain list of approved screened personnel with Owner's representative.
  - 2. Background Checks: Criminal background checks will be required for each person working on or entering this job site. No workers with violent criminal histories will be permitted.
  - 3. There will be required daily check-in and check-out for all workers.
  - 4. Badging is required for all workers at all times.
- J. Tools: Any/all tools left onsite must be secured in a lock box daily.

#### 1.11 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
  - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
  - 2. Text Color: Text used in the Specifications, including units of measure, manufacturer and product names, and other text may appear in multiple colors or underlined as part of a hyperlink; no emphasis is implied by text with these characteristics.
  - 3. Hypertext: Text used in the Specifications may contain hyperlinks. Hyperlinks may allow for access to linked information that is not residing in the Specifications. Unless otherwise indicated, linked information is not part of the Contract Documents.
  - 4. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the Specifications.
- C. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

SUMMARY 011000 - 5

- D. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
  - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
  - 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings and published as part of the U.S. National CAD Standard.
  - 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 011000** 

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#### **SECTION 012100**

#### **ALLOWANCES**

#### **PART 1 - GENERAL**

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
  - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when direction will be provided to the Contractor. If necessary, additional requirements will be issued by Change Order.
- B. Types of allowances include the following:
  - 1. Unforeseen Conditions allowances.
  - General allowances.
- C. Related Sections:
  - 1. Divisions 02 through 49 Sections for items of Work covered by allowances.

#### 1.3 SELECTION AND PURCHASE

- A. Within 30 days of date established for the Notice to Proceed, advise Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

#### 1.4 SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.
- B. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- C. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.

ALLOWANCES 012100 - 1

D. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

## 1.5 COORDINATION

A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

## 1.6 UNFORSEEN CONDITIONS & GENERAL ALLOWANCES

- A. Use the general allowance and unforeseen conditions allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the general allowance and unforeseen conditions allowance are included in the Contract Base Bid amount.
- C. At Project closeout, Contractor shall credit unused amounts remaining in the allowances to the Owner by Change Order.

# PART 2 - PRODUCTS (Not Used)

# **PART 3 - EXECUTION**

## 3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

## 3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

# 3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1: General Allowance: Include a contingency allowance of \$ 1,000,000.00 for use according to Owner's written instructions.
- B. Allowance No. 2: Audio Visual Allowance: Include an allowance of \$325,000.00 for use according to Owner's written instructions.

## **END OF SECTION 012100**

012100 - 2 ALLOWANCES

#### **SECTION 017700**

## **CLOSEOUT PROCEDURES**

## **PART 1 - GENERAL**

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for Contract closeout, including, but not limited to, the following:
  - 1. Substantial Completion procedures.
  - 2. Final completion procedures.
  - 3. Warranties.
  - 4. Final cleaning.

# B. Related Requirements:

- 1. Section 012900 "Payment Procedures" for requirements for Applications for Payment for Substantial Completion and Final Completion.
- 2. Section 017500 "Project Warranties" for warranty submittal requirements prior to Substantial Completion.
- 3. Section 017823 "Operation and Maintenance Data" for additional operation and maintenance manual requirements.
- 4. Section 017839 "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.

## 1.3 DEFINITIONS

A. List of Incomplete Items: Contractor-prepared list of items to be completed or corrected, prepared for the Architect's use prior to Architect's inspection, to determine if the Work is substantially complete.

# 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of cleaning agent.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

## 1.5 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: For pest-control inspection.

## 1.6 MAINTENANCE MATERIAL SUBMITTALS

A. Schedule of Maintenance Material Items: For maintenance material submittal items required by other Sections.

# 1.7 SUBSTANTIAL COMPLETION PROCEDURES

A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's "punch list"), indicating the value of each item on the list and reasons why the Work is incomplete.

- B. Submittals Prior to Substantial Completion: Complete the following a minimum of ten (10) days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction, permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 2. Submit closeout submittals specified in other Division 01 Sections, including Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
  - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number.
    - a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Architect's for receipt of submittals.
  - 5. Submit testing, adjusting, and balancing records.
  - 6. Submit sustainable design submittals not previously submitted.
  - 7. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of ten (10) days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Advise Owner of pending insurance changeover requirements.
  - 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
  - 3. Complete startup and testing of systems and equipment.
  - 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
  - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
  - 6. Advise Owner of changeover in utility services.
  - 7. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
  - 8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - 9. Complete final cleaning requirements.
  - 10. Touch up paint and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of ten (10) days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect that must be completed or corrected before certificate will be issued.
  - 1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
  - 2. Results of completed inspection will form the basis of requirements for Final Completion.

## 1.8 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining Final Completion, complete the following:
  - 1. Submit a final Application for Payment in accordance with Section 012900 "Payment Procedures."
  - 2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  - 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  - 4. Submit pest-control final inspection report.
  - 5. Submit Final Completion photographic documentation.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
  - 1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

# 1.9 LIST OF INCOMPLETE ITEMS

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  - 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor listed by room or space number.
  - 2. Organize items applying to each space by major element, including categories for ceilings, individual walls, floors, equipment, and building systems.
  - 3. Include the following information at the top of each page:
    - a. Project name.
    - b. Date.
    - c. Name of Architect
    - d. Name of Contractor.
    - e. Page number.
  - 4. Submit list of incomplete items in the following format:
    - a. PDF Electronic File: Architect will return annotated file.

## 1.10 SUBMITTAL OF PROJECT WARRANTIES

- A. The following items are to be submitted to the Architect and Owner.
- B. 1. Copies of all manufacturers; punch lists and documentation of completion.
- C. 2. Copies of all consultants' punch lists and documents of completion.
- D. 3. Manufacturer's report that the roof has been inspected and is suitable for warranty.
- E. 4. Contractor's written two (2) year guarantee covering all materials and labor.
- F. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where warranties are indicated to commence on dates other than date of Substantial Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.

- G. Partial Occupancy: Submit properly executed warranties within fifteen (15) days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- H. Substantial Completion: Submit all required documentation upon completion of the work and prior to final payment.
- I. All warranties are to be submitted to the Owner prior to final payment.
- J. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
- K. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
  - 1. Submit on digital media acceptable to Architect
- L. Warranties in Paper Form:
  - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
  - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
  - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- M. Provide additional copies of each warranty to include in operation and maintenance manuals.

# **PART 2 - PRODUCTS**

# 2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

## **PART 3 - EXECUTION**

## 3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
    - a. Clean Project site of rubbish, waste material, litter, and other foreign substances.
    - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    - Rake grounds that are not planted, mulched, or paved to a smooth, even-textured surface.
    - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural

- weathering of exterior surfaces. Restore reflective surfaces to their original condition.
- f. Remove debris and surface dust from limited-access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
- g. Clean flooring, removing debris, dirt, and staining; clean according to manufacturer's recommendations.
- h. Vacuum and mop concrete.
- i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
- j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
- k. Remove labels that are not permanent.
- I. Wipe surfaces of mechanical and electrical equipment elevator equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- m. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- n. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- o. Clean ducts, blowers, and coils if units were operated without filters during construction, or that display contamination with particulate matter on inspection.
- p. Clean luminaires, lamps, globes, and reflectors to function with full efficiency.
- q. Clean strainers.
- r. Leave Project clean and ready for occupancy.
- C. Pest Control: Comply with pest control requirements in Section 015000 "Temporary Facilities and Controls." Prepare written report.
- D. Construction Waste Disposal: Comply with waste-disposal requirements in Section 017419 "Construction Waste Management and Disposal."

## 3.2 REPAIR OF THE WORK

A. Complete repair and restoration operations required by Section 017300 "Execution" before requesting inspection for determination of Substantial Completion.

#### **END OF SECTION 017700**

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#### **SECTION 072100**

#### THERMAL INSULATION

## **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Molded (expanded) polystyrene foam-plastic board insulation.
  - 2. Polyisocyanurate foam-plastic board insulation.
  - 3. Glass-fiber blanket insulation.
  - Mineral-wool blanket insulation.
- B. Related Requirements:
  - 1. Section 075423 "Thermoplastic-Polyolefin (TPO) Roofing".
  - 2. Section 092900 "Gypsum Board" for sound attenuation blanket used as acoustic insulation.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For the following:
  - 1. Molded (expanded) polystyrene foam-plastic board insulation.
  - 2. Polyisocyanurate foam-plastic board insulation.
  - Glass-fiber blanket insulation.
  - Mineral-wool blanket insulation.

#### 1.4 INFORMATIONAL SUBMITTALS

A. Installer's Certification: Listing type, manufacturer, and R-value of insulation installed in each element of the building thermal envelope.

# 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Protect insulation materials from physical damage and from deterioration due to moisture, soiling, and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing, and protecting during installation.
- B. Protect foam-plastic board insulation as follows:
  - Do not expose to sunlight except to necessary extent for period of installation and concealment.
  - 2. Protect against ignition at all times. Do not deliver foam-plastic board materials to Project site until just before installation time.
  - 3. Quickly complete installation and concealment of foam-plastic board insulation in each area of construction.

THERMAL INSULATION 072100 - 1

## **PART 2 - PRODUCTS**

# 2.1 MOLDED (EXPANDED) POLYSTYRENE FOAM-PLASTIC BOARD INSULATION

- A. Molded (Expanded) Polystyrene Board Insulation, Type IX ASTM C578, Type IX, 25-psi minimum compressive strength.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. Carlisle Syntec Systems.
    - b. CertainTeed Insulation.
    - c. Dow Chemical Company.
    - d. Owens Corning.
  - 2. Labeling: Provide identification of mark indicating R-value of each piece of insulation 12 inches and wider in width.

## 2.2 POLYISOCYANURATE FOAM-PLASTIC BOARD INSULATION

- A. Polyisocyanurate Board Insulation, Foil Faced ASTM C1289, foil faced, Type I, Class 1 or 2.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. Carlisle Syntec Systems.
    - b. Atlas Roofing Corporation Polyiso.
    - c. DuPont de Nemours, Inc.
    - d. Firestone Building Products.
    - e. <u>Johns Manville</u>; a Berkshire Hathaway company.
  - 2. Fire Propagation Characteristics: Passes NFPA 285 testing as part of an approved assembly.
- B. Polyisocyanurate Board Insulation, Glass-Fiber-Mat Faced ASTM C1289, glass-fiber-mat faced, Type II, Class 2.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. Rmax/Sika: ECOMAXci FR
    - b. <u>Carlisle Syntec Systems.</u>
    - c. Atlas Roofing Corporation Polyiso.
    - d. <u>DuPont de Nemours, Inc.</u>

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- e. <u>Firestone Building Products</u>.
- f. Johns Manville; a Berkshire Hathaway company.
- 2. Fire Propagation Characteristics: Passes NFPA 285 testing as part of an approved assembly.
- 3. Labeling: Provide identification of mark indicating R-value of each piece of insulation 12 inches and wider in width.

## 2.3 GLASS-FIBER BLANKET INSULATION

- A. Glass-Fiber Blanket Insulation, Unfaced ASTM C665, Type I; passing ASTM E136 for combustion characteristics. Sound attenuation batts, 55 STC or better.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. CertainTeed Insulation.
    - b. <u>Johns Manville: a Berkshire Hathaway Company.</u>
    - c. Owens Corning.
  - 2. Flame-Spread Index: Not more than 25 when tested in accordance with ASTM E84.
  - 3. Smoke-Developed Index: Not more than 50 when tested in accordance with ASTM E84.
  - 4. Labeling: Provide identification of mark indicating R-value of each piece of insulation 12 inches and wider in width.
- B. Glass-Fiber Blanket Insulation, Foil -Scrim-Kraft Faced (FSK-25) >: ASTM C665, Type III (nonreflective faced), Class A (faced surface with a flame-spread index of 25); Category 1 (membrane is a vapor barrier). R-13 Batts,min.,
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. CertainTeed Corporation; Saint-Gobain North America.
    - b. <u>Johns Manville; a Berkshire Hathaway company</u>.
    - c. Owens Corning.
  - 2. Labeling: Provide identification of mark indicating R-value of each piece of insulation 12 inches and wider in width.
- C. Glass-Fiber Blanket Insulation, Kraft Faced: ASTM C665, Type II (nonreflective faced), Class C (faced surface not rated for flame propagation); Category 1 (membrane is a vapor barrier). Sound attenuation batts, 55 STC or better.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. CertainTeed Corporation; Saint-Gobain North America.
    - b. Johns Manville; a Berkshire Hathaway company.

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- c. Owens Corning.
- 2. Labeling: Provide identification of mark indicating R-value of each piece of insulation 12 inches and wider in width.

#### 2.4 MINERAL-WOOL BLANKET INSULATION

- A. Mineral-Wool Blanket Insulation, Unfaced ASTM C665, Type I (blankets without membrane facing); consisting of fibers; passing ASTM E136 for combustion characteristics.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. Owens Corning.
    - b. USG.
  - 2. Flame-Spread Index: Not more than 25 when tested in accordance with ASTM E84.
  - 3. Smoke-Developed Index: Not more than 50 when tested in accordance with ASTM E84.
  - 4. Labeling: Provide identification of mark indicating R-value of each piece of insulation 12 inches and wider in width.
- B. Mineral-Wool Blanket Insulation, Reinforced-Foil Faced ASTM C665, Type III (reflective faced); Category 1 (membrane is a vapor barrier), faced with foil scrim, foil-scrim kraft, or foil-scrim polyethylene.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
    - a. Owens Corning.
    - b. USG.
  - 2. Flame-Spread Index: Not more than 25 when tested in accordance with ASTM E84.
  - 3. Smoke-Developed Index: Not more than 50 when tested in accordance with ASTM E84Labeling: Provide identification of mark indicating R-value of each piece of insulation 12 inches and wider in width.

## 2.5 INSULATION FASTENERS

- A. Adhesively Attached, Spindle-Type Anchors: Plate welded to projecting spindle; capable of holding insulation of specified thickness securely in position with self-locking washer in place.
  - 1. Plate: Perforated, galvanized carbon-steel sheet, 0.030 inch thick by 2 inches square.
  - 2. Spindle: Copper-coated, low-carbon steel; fully annealed; 0.105 inch in diameter; length to suit depth of insulation.
- B. Adhesively Attached, Angle-Shaped, Spindle-Type Anchors: Angle welded to projecting spindle; capable of holding insulation of specified thickness securely in position with self-locking washer in place.
  - 1. Angle: Formed from 0.030-inch-thick, perforated, galvanized carbon-steel sheet with each leg 2 inches square.
  - 2. Spindle: Copper-coated, low-carbon steel; fully annealed; 0.105 inch in diameter; length to suit depth of insulation.
- C. Insulation-Retaining Washers: Self-locking washers formed from 0.016-inch-thick galvanized-steel sheet, with beveled edge for increased stiffness, sized as required to hold insulation securely in place, but not less than 1-1/2 inches square or in diameter.

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- 1. Protect ends with capped self-locking washers incorporating a spring steel insert to ensure permanent retention of cap in the following locations:
  - a. Ceiling plenums.
- D. Insulation Standoff: Spacer fabricated from galvanized mild-steel sheet for fitting over spindle of insulation anchor to maintain air space of 1 inch between face of insulation and substrate to which anchor is attached.
- E. Anchor Adhesive: Product with demonstrated capability to bond insulation anchors securely to substrates without damaging insulation, fasteners, or substrates.

# 2.6 ACCESSORIES

- A. Insulation for Miscellaneous Voids:
  - 1. Glass-Fiber Insulation: ASTM C764, Type II, loose fill; with maximum flame-spread and smoke-developed indexes of 5, per ASTM E84.

#### **PART 3 - EXECUTION**

#### 3.1 PREPARATION

A. Clean substrates of substances that are harmful to insulation, including removing projections capable of puncturing insulation or vapor retarders, or that interfere with insulation attachment.

# 3.2 INSTALLATION, GENERAL

- A. Comply with insulation manufacturer's written instructions applicable to products and applications.
- B. Install insulation that is undamaged, dry, and unsoiled and that has not been left exposed to ice, rain. or snow at any time.
- C. Install insulation with manufacturer's R-value label exposed after insulation is installed.
- D. Extend insulation to envelop entire area to be insulated. Fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.
- E. Provide sizes to fit applications and selected from manufacturer's standard thicknesses, widths, and lengths. Apply single layer of insulation units unless multiple layers are otherwise shown or required to make up total thickness or to achieve R-value.

## 3.3 INSTALLATION OF INSULATION IN FRAMED CONSTRUCTION

- A. Blanket Insulation: Install in cavities formed by framing members according to the following requirements:
  - 1. Use insulation widths and lengths that fill the cavities formed by framing members. If more than one length is required to fill the cavities, provide lengths that will produce a snug fit between ends.
  - 2. Place insulation in cavities formed by framing members to produce a friction fit between edges of insulation and adjoining framing members.
  - 3. Maintain 3-inch clearance of insulation around recessed lighting fixtures not rated for or protected from contact with insulation.
  - 4. For metal-framed wall cavities where cavity heights exceed 96 inches, support unfaced blankets mechanically and support faced blankets by taping flanges of insulation to flanges of metal studs.

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- 5. Vapor-Retarder-Faced Blankets: Tape joints and ruptures in vapor-retarder facings, and seal each continuous area of insulation to ensure airtight installation.
  - a. Exterior Walls: Set units with facing placed toward as indicated on Drawings.
  - b. Interior Walls: Set units with facing placed toward areas of high humidity
- B. Miscellaneous Voids: Install insulation in miscellaneous voids and cavity spaces where required to prevent gaps in insulation using the following materials:
  - 1. Glass-Fiber Insulation: Compact to approximately 40 percent of normal maximum volume equaling a density of approximately 2.5 lb/cu. ft..

# 3.4 INSTALLATION OF CURTAIN-WALL INSULATION

- A. Install board insulation in curtain-wall construction according to curtain-wall manufacturer's written instructions.
  - 1. Hold insulation in place by securing metal clips and straps or integral pockets within window frames, spaced at intervals recommended in writing by insulation manufacturer to hold insulation securely in place without touching spandrel glass.
  - 2. Maintain cavity width of dimension indicated on Drawings between insulation and glass.
  - 3. Install insulation to fit snugly without bowing.

## 3.5 PROTECTION

- A. Protect installed insulation from damage due to harmful weather exposures, physical abuse, and other causes.
- B. Provide temporary coverings or enclosures where insulation is subject to abuse and cannot be concealed and protected by permanent construction immediately after installation.

**END OF SECTION 072100** 

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# **SECTION 075423**

# THERMOPLASTIC-POLYOLEFIN (TPO) ROOFING

## **PART 1 - GENERAL**

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Heat welded adhered thermoplastic polyolefin (TPO) roofing system.
  - 2. Vapor retarder.
  - Roof insulation.
  - 4. Cover board.
  - 5. Walkways.
- B. Section includes installation of sound-absorbing insulation strips in ribs of roof deck. Sound-absorbing insulation strips are furnished under Section 053100 "Steel Decking."
- C. Related Requirements:
  - 1. Section 061000 "Rough Carpentry" for wood nailers, curbs, and blocking; and for wood-based, structural-use roof deck panels.
  - 2. Section 072100 "Thermal Insulation" for insulation beneath the roof deck.
  - 3. Section 076200 "Sheet Metal Flashing and Trim" for metal roof flashings and counterflashings.
  - 4. Section 077100 "Roof Specialties" for manufactured copings and roof edge flashings.

5.

6. Section 079200 "Joint Sealants" for joint sealants, joint fillers, and joint preparation.

## 1.3 **DEFINITIONS**

A. Roofing Terminology: Definitions in ASTM D1079 and glossary in NRCA's "The NRCA Roofing Manual: Membrane Roof Systems" apply to Work of this Section.

## 1.4 PREINSTALLATION MEETINGS

- A. Preliminary Roofing Conference: Before starting roof deck construction, conduct conference at Project site.
  - 1. Meet with Owner, Architect, Construction Manager, roofing Installer, , and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.
  - 2. Review methods and procedures related to roofing installation, including manufacturer's written instructions.
  - 3. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  - 4. Review deck substrate requirements for conditions and finishes, including flatness and fastening.
  - 5. Review structural loading limitations of roof deck during and after roofing.
  - 6. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that affects roofing system.
  - 7. Review governing regulations and requirements for insurance and certificates if applicable.
  - 8. Review temporary protection requirements for roofing system during and after installation.

- 9. Review roof observation and repair procedures after roofing installation.
- B. Preinstallation Roofing Conference: Conduct conference at Project site.
  - 1. Meet with Owner, Architect, Construction Manager,, roofing Installer, and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.
  - 2. Review methods and procedures related to roofing installation, including manufacturer's written instructions.
  - 3. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  - 4. Examine deck substrate conditions and finishes for compliance with requirements, including flatness and fastening.
  - 5. Review structural loading limitations of roof deck during and after roofing.
  - 6. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that affects roofing system.
  - 7. Review governing regulations and requirements for insurance and certificates if applicable.
  - 8. Review temporary protection requirements for roofing system during and after installation.
  - 9. Review roof observation and repair procedures after roofing installation.

#### 1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include roof plans, sections, details, and attachments to other work, including the following:
  - 1. Layout and thickness of insulation.
  - 2. Base flashings and membrane termination details.
  - 3. Flashing details at penetrations.
  - 4. Tapered insulation layout, thickness, and slopes.
  - 5. Roof plan showing orientation of steel roof deck and orientation of roof membrane, fastening spacings, and patterns for mechanically fastened roofing system.
  - 6. Insulation fastening patterns for corner, perimeter, and field-of-roof locations.
  - 7. Tie-in with adjoining air barrier.
- C. Samples for Verification: For the following products:
  - 1. Roof membrane and flashings, of color required.
- D. Wind Uplift Resistance Submittal: For roofing system, indicating compliance with wind uplift performance requirements.

## 1.6 INFORMATIONAL SUBMITTALS

- A. Manufacturer Certificates:
  - 1. Performance Requirement Certificate: Signed by roof membrane manufacturer, certifying that roofing system complies with requirements specified in "Performance Requirements" Article.
    - a. Submit evidence of compliance with performance requirements.
  - 2. Special Warranty Certificate: Signed by roof membrane manufacturer, certifying that all materials supplied under this Section are acceptable for special warranty.
- B. Product Test Reports: For roof membrane and insulation, for tests performed by a qualified testing agency, indicating compliance with specified requirements.

- C. Evaluation Reports: For components of roofing system, from ICC-ES.
- D. Sample Warranties: For manufacturer's special warranties.

## 1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For roofing system to include in maintenance manuals.
- B. Certified statement from existing roof membrane manufacturer stating that existing roof warranty has not been affected by Work performed under this Section.

#### 1.8 QUALITY ASSURANCE

A. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's special warranty.

# 1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.
- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
  - Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D. Handle and store roofing materials, and place equipment in a manner to avoid permanent deflection of deck.

#### 1.10 FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

# 1.11 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period.
  - 1. Special warranty includes roof membrane, base flashings, roof insulation, fasteners, cover boards, vapor retarder, and other components of roofing system.
  - 2. Warranty Period: 20 years from date of Substantial Completion.

## **PART 2 - PRODUCTS**

#### 2.1 PERFORMANCE REQUIREMENTS

- A. General Performance: Installed roofing system and flashings shall withstand specified uplift pressures, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Roof system and flashings shall remain watertight.
  - 1. Accelerated Weathering: Roof membrane shall withstand 2000 hours of exposure when tested according to ASTM G152, ASTM G154, or ASTM G155.
  - 2. Impact Resistance: Roof membrane shall resist impact damage when tested according to ASTM D3746, ASTM D4272, or the "Resistance to Foot Traffic Test" in FM Approvals 4470.

- B. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required, as demonstrated by roof membrane manufacturer based on testing and field experience.
- C. Wind Uplift Resistance: Design roofing system to resist the following wind uplift pressures when tested according to FM Approvals 4474, UL 580, or UL 1897: As designated per structural engineer on Drawings.
- D. ENERGY STAR Listing: Roofing system shall be listed on the DOE's ENERGY STAR "Roof Products Qualified Product List" for low slope roof products.

# 2.2 THERMOPLASTIC POLYOLEFIN (TPO) ROOFING

- A. TPO Sheet: ASTM D6878/D6878M, internally fabric- or scrim-reinforced, fabric-backed TPO sheet.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. Carlisle SynTec Incorporated.
    - b. <u>Firestone Building Products</u>.
    - c. John Mansville.
    - d. Sika Sarnafil.
  - 2. Source Limitations: Obtain components for roofing system from roof membrane manufacturer or manufacturers approved by roof membrane manufacturer.
  - 3. Thickness: 60 milsnominal.
  - Exposed Face Color: White.

# 2.3 AUXILIARY ROOFING MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with other roofing components.
  - 1. Adhesive and Sealants: Comply with VOC limits of authorities having jurisdiction.
  - 2. Verify adhesives and sealants comply with the following limits for VOC content:
    - a. Plastic Foam Adhesives: 50 g/L.
    - b. Gypsum Board and Panel Adhesives: 50 g/L.
    - c. Multipurpose Construction Adhesives: 70 g/L.
    - d. Fiberglass Adhesives: 80 g/L.
    - e. Contact Adhesives: 80 g/L.
    - f. PVC Welding Compounds: 510 g/L.
    - g. Other Adhesives: 250 g/L.
    - h. Single-Ply Roof Membrane Sealants: 450 g/L.
    - i. Nonmembrane Roof Sealants: 300 g/L.
    - j. Sealant Primers for Nonporous Substrates: 250 g/L.
    - k. Sealant Primers for Porous Substrates: 775 g/L.
- B. Sheet Flashing: Manufacturer's standard unreinforced TPO sheet flashing, 55 mils thick, minimum, of same color as TPO sheet.
- C. Prefabricated Pipe Flashings: As recommended by roof membrane manufacturer.
- D. Roof Vents: As recommended by roof membrane manufacturer.
  - 1. Size: Not less than 4-inch diameter.

- E. Bonding Adhesive: Manufacturer's standard.
- F. Metal Termination Bars: Manufacturer's standard, predrilled stainless steel or aluminum bars, approximately 1 by 1/8 inch thick; with anchors.
- G. Metal Battens: Manufacturer's standard, aluminum-zinc-alloy-coated or zinc-coated steel sheet, approximately 1 inch wide by 0.05 inch thick, prepunched.
- H. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening roofing components to substrate, and acceptable to roofing system manufacturer.
- I. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, lap sealants, termination reglets, and other accessories.

## 2.4 ROOF INSULATION

- General: Preformed roof insulation boards manufactured or approved by TPO roof membrane manufacturer.
- B. Polyisocyanurate Board Insulation: ASTM C1289, Type II, Class 1, Grade 2, felt or glass-fiber mat facer on both major surfaces.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. Atlas Roofing Corporation Polyiso.
    - b. <u>Carlisle SynTec Incorporated</u>.
    - c. <u>Firestone Building Products</u>.
    - d. Johns Manville; a Berkshire Hathaway Company.
  - 2. Compressive Strength: 20 psi.
  - 3. Size: 48 by 48 inches.
  - 4. Thickness:
    - a. Base Layer: 1-1/2 inches.
- C. Tapered Insulation: Provide factory-tapered insulation boards.
  - Material: Match roof insulation.
  - 2. Minimum Thickness: 1/4 inch.
  - 3. Slope:
    - a. Roof Field: 2 inch per foot unless otherwise indicated on Drawings.
    - b. Saddles and Crickets: 1/2 inch per footunless otherwise indicated on Drawings.

# 2.5 INSULATION ACCESSORIES

- A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatibility with other roofing system components.
- B. Fasteners: Factory-coated steel fasteners with metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening roof insulationand cover boardsto substrate, and acceptable to roofing system manufacturer.
- C. Insulation Adhesive: Insulation manufacturer's recommended adhesive formulated to attach roof insulation to substrate or to another insulation layer as follows:
  - 1. Modified asphaltic, asbestos-free, cold-applied adhesive.
  - 2. Bead-applied, low-rise, one-component or multicomponent urethane adhesive.

- 3. Full-spread, spray-applied, low-rise, two-component urethane adhesive.
- 4. Verify adhesives and sealants comply with the following limits for VOC content:
  - a. Plastic Foam Adhesives: 50 g/L.
  - b. Gypsum Board and Panel Adhesives: 50 g/L.
  - c. Multipurpose Construction Adhesives: 70 g/L.
  - d. Fiberglass Adhesives: 80 g/L.
  - e. Contact Adhesives: 80 g/L.
  - f. PVC Welding Compounds: 510 g/L.
  - g. Other Adhesives: 250 g/L.
  - h. Single-Ply Roof Membrane Sealants: 450 g/L.
  - i. Nonmembrane Roof Sealants: 300 g/L.
  - j. Sealant Primers for Nonporous Substrates: 250 g/L.
  - k. Sealant Primers for Porous Substrates: 775 g/L.
- D. Cover Board: ASTM C1177/C1177M, glass-mat, water-resistant gypsum board or ASTM C1278/C1278M fiber-reinforced gypsum board.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements,:provide products by the following:
    - a. Georgia Pacific DensDeck Prime
  - 2. Thickness: 1/4 inch
  - 3. Surface Finish: Factory primed.

#### 2.6 WALKWAYS

- A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads or rolls, approximately 3/16 inch thick and acceptable to roofing system manufacturer.
  - 1. Size: Approximately Refer to drawings for location to determine size needed.
  - 2. Color: Contrasting with roof membrane.

# **PART 3 - EXECUTION**

# 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.
  - 1. Verify that roof openings and penetrations are in place, curbs are set and braced, and roof-drain bodies are securely clamped in place.
  - 2. Verify that wood blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.
  - 3. Verify that surface plane flatness and fastening of steel roof deck complies with requirements in Section 053100 "Steel Decking."
  - 4. Verify that minimum concrete drying period recommended by roofing system manufacturer has passed.
  - 5. Verify that concrete substrate is visibly dry and free of moisture, and that minimum concrete internal relative humidity is not more than 75percent, or as recommended by roofing system manufacturer, when tested according to ASTM F2170.
  - 6. Verify that concrete-curing compounds that will impair adhesion of roofing components to roof deck have been removed.
  - 7. Verify that joints in precast concrete roof decks have been grouted flush with top of concrete.
  - 8. Verify that minimum curing period recommended by roofing system manufacturer for lightweight insulating concrete roof decks has passed.

- 9. Verify any damaged sections of cementitious wood-fiber decks have been repaired or replaced.
- 10. Verify adjacent cementitious wood-fiber panels are vertically aligned to within 1/8 inch at top surface.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 PREPARATION

- A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing system installation according to roofing system manufacturer's written instructions. Remove sharp projections.
- B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.
- C. Install sound-absorbing insulation strips according to acoustical roof deck manufacturer's written instructions.

# 3.3 INSTALLATION OF ROOFING, GENERAL

- A. Install roofing system according to roofing system manufacturer's written instructions, SPRI's Directory of Roof Assemblies listed roof assembly requirements, and FM Global Property Loss Prevention Data Sheet 1-29.
- B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at end of workday or when rain is forecast. Remove and discard temporary seals before beginning Work on adjoining roofing.
- C. Install roof membrane and auxiliary materials to tie in to existing roofing to maintain weathertightness of transition.
- D. Coordinate installation and transition of roofing system component serving as an air barrier with air barrier specified under Section 072726 "Fluid-Applied Membrane Air Barriers."

# 3.4 INSTALLATION OF INSULATION

- A. Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at end of workday.
- B. Comply with roofing system and roof insulation manufacturer's written instructions for installing roof insulation.
- C. Installation Over Metal Decking:
  - 1. Install base layer of insulation with joints staggered not less than 24 inches in adjacent rows.
    - a. Locate end joints over crests of decking.
    - b. Where installing composite and noncomposite insulation in two or more layers, install noncomposite board insulation for bottom layer and intermediate layers, if applicable, and install composite board insulation for top layer.
    - c. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
    - d. Make joints between adjacent insulation boards not more than 1/4 inch in width.
    - e. Fill gaps exceeding 1/4 inch with insulation.
    - f. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
    - g. Mechanically attach base layer of insulation using mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to metal decks.
      - Fasten insulation to resist specified uplift pressure at corners, perimeter, and field of roof.

- 2. Install upper layers of insulation and tapered insulation with joints of each layer offset not less than 12 inches from previous layer of insulation.
  - a. Staggered end joints within each layer not less than 24 inches in adjacent rows.
  - b. Install with long joints continuous and with end joints staggered not less than 12 inches in adjacent rows.
  - c. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
  - d. Make joints between adjacent insulation boards not more than 1/4 inch in width.
  - e. Fill gaps exceeding 1/4 inch with insulation.
  - f. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
    - 1) Set each layer of insulation in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.
    - 2) Set each layer of insulation in a uniform coverage of full-spread insulation adhesive, firmly pressing and maintaining insulation in place.
- D. Installation Over Wood Decking:
  - 1. Install base layer of insulation with joints staggered not less than 24 inches in adjacent rows.
    - a. Where installing composite and noncomposite insulation in two or more layers, install noncomposite board insulation for bottom layer and intermediate layers, if applicable, and install composite board insulation for top layer.
    - b. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
    - c. Make joints between adjacent insulation boards not more than 1/4 inch in width.
    - d. Fill gaps exceeding 1/4 inch with insulation.
    - e. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
  - 2. Mechanically attach base layer of insulation using mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to wood decks.
    - Fasten insulation to resist specified uplift pressure at corners, perimeter, and field of roof.
  - 3. Install upper layers of insulation] with joints of each layer offset not less than 12 inches from previous layer of insulation.
    - a. Staggered end joints within each layer not less than 24 inches in adjacent rows.
    - b. Install with long joints continuous and with end joints staggered not less than 12 inches in adjacent rows.
    - c. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
    - d. Make joints between adjacent insulation boards not more than 1/4 inch in width.
    - e. Fill gaps exceeding 1/4 inch with insulation.
    - f. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
      - 1) Set each layer of insulation in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.
      - 2) Set each layer of insulation in a uniform coverage of full-spread insulation adhesive, firmly pressing and maintaining insulation in place.

## 3.5 INSTALLATION OF COVER BOARDS

- A. Install cover boards over insulation with long joints in continuous straight lines with end joints staggered between rows. Offset joints of insulation below a minimum of 6 inches in each direction.
  - 1. Trim cover board neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
  - 2. At internal roof drains, conform to slope of drain sump.
    - a. Trim cover board so that water flow is unrestricted.
  - 3. Cut and fit cover board tight to nailers, projections, and penetrations.
  - 4. Loosely lay cover board over substrate.

## 3.6 INSTALLATION OF ADHERED ROOF MEMBRANE

- A. Adhere roof membrane over area to receive roofing according to roofing system manufacturer's written instructions.
- B. Unroll roof membrane and allow to relax before installing.
- C. Start installation of roofing in presence of roofing system manufacturer's technical personnel.
- D. Accurately align roof membrane, and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.
- E. Bonding Adhesive: Apply to substrate and underside of roof membrane at rate required by manufacturer, and allow to partially dry before installing roof membrane. Do not apply to splice area of roof membrane.
- F. Fabric-Backed Roof Membrane Adhesive: Apply to substrate at rate required by manufacturer, and install fabric-backed roof membrane.
- G. In addition to adhering, mechanically fasten roof membrane securely at terminations, penetrations, and perimeter of roofing.
- H. Apply roof membrane with side laps shingled with slope of roof deck where possible.
- I. Seams: Clean seam areas, overlap roof membrane, and hot-air weld side and end laps of roof membrane and sheet flashings, to ensure a watertight seam installation.
  - 1. Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut edges of roof membrane and sheet flashings.
  - 2. Verify field strength of seams a minimum of twice daily, and repair seam sample areas.
  - 3. Repair tears, voids, and lapped seams in roof membrane that do not comply with requirements.
- J. Spread sealant bed over deck-drain flange at roof drains, and securely seal roof membrane in place with clamping ring.

## 3.7 INSTALLATION OF BASE FLASHING

- A. Install sheet flashings and preformed flashing accessories, and adhere to substrates according to roofing system manufacturer's written instructions.
- B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate, and allow to partially dry. Do not apply to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.
- D. Clean seam areas, overlap, and firmly roll sheet flashings into the adhesive. Hot-air weld side and end laps to ensure a watertight seam installation.

E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

## 3.8 INSTALLATION OF WALKWAYS

- A. Flexible Walkways:
  - 1. Install flexible walkways at the following locations:
    - a. Perimeter of each rooftop unit.
    - b. Between each rooftop unit location, creating a continuous path connecting rooftop unit locations.
    - Between each roof hatch and each rooftop unit location or path connecting rooftop unit locations.
    - d. Top and bottom of each roof access ladder.
    - e. Between each roof access ladder and each rooftop unit location or path connecting rooftop unit locations.
    - f. Locations indicated on Drawings.
    - g. As required by roof membrane manufacturer's warranty requirements.
  - 2. Provide 6-inch clearance between adjoining pads.
  - 3. Heat weld to substrate or adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.

## 3.9 FIELD QUALITY CONTROL

- A. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion, in presence of Architect, and to prepare inspection report.
- B. Repair or remove and replace components of roofing system where inspections indicate that they do not comply with specified requirements.
- C. Additional testing and inspecting, at Contractor's expense, will be performed to determine if replaced or additional work complies with specified requirements.

# 3.10 PROTECTING AND CLEANING

- A. Protect roofing system from damage and wear during remainder of construction period. When remaining construction does not affect or endanger roofing system, inspect roofing system for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.
- B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

**END OF SECTION 075423** 

#### **SECTION 081115**

## **DETENTION HOLLOW METAL SLIDING DOORS**

#### **PART 1 - GENERAL**

# 1.1 RELATED DOCUMENT

A. Drawings and General provisions of Contract, including General & Supplementary conditions and Division 1 Specifications sections apply.

## 1.2 SUMMARY

- A. Section Includes.
  - 1. "Detention" grade hollow metal doors and frames.
  - 2. The work of this section is intended to be included with the work of Detention Hardware and shall be assigned to the single responsibility of the qualified Detention Equipment Subcontractor (DES).
- B. Related Sections

1.	Section 033000:	Cast in Place Concrete.
2	Section 042200:	Concrete Unit Masonry.
3.	Section 042613:	Masonry Veneer.
4.	Section 051200:	Structural Steel.
5.	Section 061000:	Rough Carpentry.
6.	Section 081113:	Hollow Metal Doors and Frames.
7.	Section 081115.13:	Detention Hollow Metal Doors.
8.	Section 087100:	Door Hardware.
9.	Section 087173:	Detention Door Hardware.

10. Section 088000.13: Security Glazing.
11. Section 099123: Interior Painting.
12. Division 26: Electrical wiring.

## 1.3 REFERENCES

- A. Publications listed in this article form a part of this specification to the extent referenced. In case of conflict, the most restrictive requirements shall apply.
- B. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103:
  - 1. ASTM A370-07a:
    - Test Methods and Definition for Mechanical Testing of Steel Products.
  - 2. ASTM A569-98:
    - Specification for Steel, Carbon (0.15 Maximum Percent), Hot Rolled Sheet and Strip, Commercial Quality.
  - 3. ASTM 653/A653M-07:
    - Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvaneeled) by the Hot-Dip Process [Metric].
  - 4. ASTM F 1233-98 (2004):
    - Standard Test Method for Security Glazing Materials and Systems.
  - 5. ASTM F1450-05:

Standard Test methods for Hollow Metal Swinging Door Assemblies for Detention Facilities.

- C. National Association of Architectural Metal Manufacturers (NAAMM), 8 South Michigan Avenue, Chicago, IL 60603:
  - 1. HMMA 830-02:

Hardware Preparation and Locations for Hollow Metal Doors and Frames.

2. HMMA 840-99:

Installation and Storage of Hollow Metal Doors and Frames.

3. HMMA 850-00:

Fire Rated Hollow Metal Doors and Frames, Second Edition.

4. HMMA 863-04:

Guide Specifications for Detention Security Hollow Metal Doors and Frames.

- D. Underwriters Laboratories, Inc. (UL), 333 Pfingsten Road, Northbrook, IL 60062:
  - UL10C-1998:

Fire Tests of Door Assemblies.

2. UL 752-05:

Bullet Resisting Equipment.

- E. Door and Hardware Institute (DHI):
  - 1. Recommended Procedure for Processing Hardware Schedules and Templates-96.
  - 2. Installation Guide for Doors and Hardware-84.
- F. American Welding Society.
  - AWS D1.1 and D1.3, CSA W47.1-92 and RWMA, Resistance Welding Manual.

## 1.4 DEFINITIONS

- A. HMMA: Hollow Metal Manufacturers Association.
- B. NAAMM: National Association of Architectural Metal Manufacturers.
- C. DHI: Door and Hardware Institute.
- D. AWS: American Welding Society.

## 1.5 SUBMITTALS

- A. Submit in accordance with Division 1.
- B. Project Data.
  - 1. Submit manufacturer's material and fabrication specification and installation instructions modified to reflect project requirements and job conditions.
  - 2. Include instructions for handling, storage, and protection.
  - 3. Where applicable, provide instructions for installation in pre-cast and cast-in-place concrete.
  - 4. Include instructions for bracing of frames and frame tolerances.
- B. Shop Drawings
  - Provide details of openings.
    - a. Include door and frame elevations and sections.
      - b. Indicate required anchorage and accessory items, field dimensions, and finishes.
      - c. Include plan (horizontal) section through frames and elevations.

- Show erection, construction, and other requirements not fully described by manufacturer's data.
- e. Include a transverse and longitudinal section through the door showing construction and reinforcing.
- f. Include details of hardware reinforcements, joints, connections, and light cut-outs.
- g. Show proposed locations for Grout and Anchor Access Holes.
- 2. Provide a schedule listing the openings with description, door locations, gauges, and anchors.

# C. Quality Assurance Submittals

- 1. Notarized statement from the Manufacturer attesting to conformance with the requirements, standards and testing required by this section.
- 2. Reference list showing detention projects for which the manufacturer has supplied security hollow metal. Include dates of completion.
- 3. Notarized statement from manufacturer attesting that they are a current member of NAAMM and will conform to the NAAMM standards for fabrication methods and product quality control.
- 4. Mill Certification for materials used to fabricate specified items.

# D. Test reports:

- 1. Submit certified engineering reports from a nationally recognized independent testing laboratories showing that the results of the tests meet or exceed minimum specified performance requirements. Tested doors, frames, and other material shall be retained at the manufacturer's facility for possible future inspection.
- 2. Include specifications and details of the construction of the tested assemblies.
  - The removable glazing stop test report shall include specification and samples of security screws. The manufacturer shall submit a letter certifying that screws used on this project match the screws tested.
  - b. The manufacturer shall submit a letter certifying that door assemblies used on this project match the assemblies tested in all respects.

# 1.6 QUALITY ASSURANCE

# A. Manufacturer Qualifications

- 1. Personnel and plant equipment capable of fabricating security hollow metal assemblies of the type specified.
- 2. Meet the standards set by HMMA, a division of the NAAMM for fabrication methods and product quality control.
- 3. Member of NAAMM and subject to quality performance requirements.
- 4 Provide security hollow metal work manufactured by a single firm specializing in the production of detention hollow metal work. Provide doors and frames from the same manufacturer.
- Welders currently qualified under AWS B2.1 or certified under CSA W47.1-92 Classification 2.1 to perform the type of work required.
- At least 10 years of experience and 3 jobs of equal complexity which have been completed and occupied within the last 5 years. References shall include, but not be limited to the following:
  - a. Name and location of project, date of occupancy and contract value.
  - b. Name, address, and telephone numbers of the Owner's operations supervisor, Owner's maintenance supervisor, Owner, and General Contractor.
- 7 Provide documentation of labeling ability as required on specified assemblies.

# 1.7 DELIVERY, STORAGE AND HANDLING

A. Packing, Shipping, Handling, and Unloading

1. Carton, crate or palletize hollow metal doors, frames, and other items to provide protection in transit.

# B. Acceptance at Site

- 1. Conform to requirements of HMMA 840.
- 2. Inspect for damage and shortages.
- 3. Promptly repair minor damage. Clean and touch up with rust inhibitive primer or galvanizing repair paint as applicable.

## C. Storage and Protection

- 1 Conform to HMMA 840.
- 2. Remove wrappings or coverings from doors and frames immediately upon delivery to the project site.
- 3. Store materials in a dry covered area.
- 4. Place materials on planking or blocking, at least 4" off of the ground, 2" off of a paved area or floor slab. Do not store flat.
- 5. Store doors and frames in an upright position with heads upper most. Place no more than 5 single opening frames or 3 multi-opening frames in a group. Provide, by means of wood strips, a space of at least 1/4" between all units to permit air circulation.
- 6. Do not use non-vented plastic or canvas shelters which could create a humidity chamber.

# 1.8 SCHEDULING

- A. Coordinate installation with related sections.
- B Jamb face dimensions on drawings are nominal. Coordinate to provide jamb opening required to accommodate hardware. Coordinate incorporation of modified frame dimensions into wall construction.
- C. Where frames are located in precast walls, coordinate with precast manufacturer to ensure proper installation.

# 1.9 WARRANTY

A. Door manufacturer is to warranty their products for a minimum of 2 (two) Years, from the date of substantial completion.

# PART 2 - PRODUCTS

# 2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
  - 1. Products of the following manufacturers will be acceptable provided they furnish the certifications and test reports necessary to document conformance with the requirements of this specification
    - a. Apex Industries Inc., Attn: Donny Gallant 1(800) 268-3331 Website: <a href="https://www.apexindustries.com">www.apexindustries.com</a>
    - b. US Security Systems, Inc., Attn: Joseph Ames (334)424-1823 Website: www.ussecuritysystems.com
    - c. American Steel Products.
    - d. To be Determined.
  - 2. Products of other manufactures will be considered for approval if they conform to the manufacturer's qualification shown in Part 1 and if information required under "quality assurance" is submitted at least ten days prior to bid due date.

# 2.2 TESTING AND PERFORMANCE

#### A. ASTM F 1450.

- 1. Certify to successful completion and conformance to the security grades and test load requirements for the specified security grade. Include the following tests.
  - a. Door assembly impact test.
  - b. Door static load test.
  - c. Door rack test.
  - Door assembly fire test (where door assemblies are specified or shown as fire rated).
  - e. Door assembly and hardware tool attack test (Testing of individual door and frame components is acceptable).
  - f. Door edge crush test.
- 2. Provide door assemblies constructed the same as the test door assemblies.
  - a. Where door assembly cannot be certified as complying with ASTM 1450 because of additional specified requirements, provide proof of satisfactory completion of ASTM testing along with a certification from the manufacturer attesting that the assemblies are the same as the tested assemblies except for the modification.

# B. NAAMM

1. Comply with ANSI/NAAMM HMMA 863-04 "Guide Specifications for Detention Security Hollow Metal Doors and Frames," except as otherwise indicated.

# C. Welding

- Comply with welding standards as define in AWS D1.1 and D1.3, CSA W47.1 and RWMA, Resistance Welding Manual.
- 2. Welds shall have complete penetration and fusion.
- 3. Remove parent metal when testing welds to failure.

# 2.3 SECURITY GRADES

- A. Conform to the security grade requirements of requirements of ASTM F 1450:
  - 1. Security grade 1: Minimum 12 gauge door face sheet and 12 gauge frame.

# 2.4 BASIC MATERIALS

- A. Steel fabrications:
  - 1. Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.
- B. Galvanizing:
  - 1. Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames, HMMA 863".
  - 2. (G90) Mill phosphatize in addition to coating specified in HMMA 863.
  - 3. Galvanize (G90) or apply zinc coating to doors and frames in the following areas:
    - a. Interior doors and frames subject to corrosive conditions.
    - b. Other doors, frames, and components specified as galvanized.
- C. Supports, anchors, and fasteners:
  - 1. Supports and Anchors:
    - a. Manufacturer's standard except.
      - 1. Same material as frame including gage and galvanizing where indicated.
  - 2. Fasteners, Bolts, and Inserts.

- a. Manufacturer's standard units except:
  - 1) For exposed fasteners, provide Torx® security type.
- b. Hot-dip galvanize in compliance with ASTM A 153, Class C or D as applicable.

#### 3. Frame anchors

- a. Floor Anchors: Secure door jambs at floor.
- b. Sill Anchors: Where indicated on drawings, provide 1/8" continuous bent plate channel set in sealant, with minimum 0.0394" diameter x 3" expansion bolt anchors at 16" on centers.
- c. Jamb Anchors: Space at 16" on centers maximum in masonry.
- d. Head Anchors: Provide loose "T" anchors spaced 16" on centers at heads of frames in masonry openings more than 48" wide.
  - 1) Fabricate head anchors of same gauge as frame, 2" wide, with 10" long leg of "T" punched to engage lintel reinforcement.
- e. Completed Opening Frame Anchors: Provide expansion anchor Space anchors at same interval as specified for masonry frame anchors above unless otherwise indicated.
- 1). Accepted Anchor Bolts, supplied and installed by frame installer:
  - a) Hilti Sleeve Anchor.
  - b) Ramset/Red Head Dynabolt Sleeve.
  - c) Rawl Lok/Bolt.

# D. Finish:

- Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames". HMMA 863.
- 2. Treat surface to assure maximum paint adhesion.
- 3. Coat inside and outside surfaces of the frame and outside surfaces of the door with a rust inhibitive primer.

# E. Back Coating:

- Back Coat frames which are to be filled with grout or installed in concrete or masonry walls.
- 2. Material: Water resistant bituminous coating.
- 3. Back coating to be field applied.

# 2.5 HARDWARE PREPARATION

- A. Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.
- B. Concealed Hardware: Provide grout boxes to enclose item. Provide welded in mounting tabs to suit.
- C. Surface Applied Hardware: Drilling and tapping may be done at project site.
- D. Minimum gauges and sizes for hardware reinforcements:
  - 1. Mortise hinges and pivots:
    - a. Minimum 3/16" thick x 10" high.
    - b. Frame reinforcement: full width of the frame.
    - c. Weld minimum 12 gauge steel angle(s) at back of frame face and hinge reinforcement to resist deformation under swinging door load.
    - d. Provide additional reinforcement and bracing for top hinge by welding a 1" x 1" x 3/16" back-up angle to the inside of the frame.
  - 2. Surface applied security hinges: 1/4" plate.
  - 3. Locking device hangar attachments: per device manufacturer's template or installation instructions.

- 4. Lock fronts and door reinforcement for closers: Minimum 12 gauge.
- Internal reinforcements for surface applied hardware; Minimum 12 gauge. Reinforcement for door pulls shall be not less than 1 1/2" x 12".
- 6. Strike or keeper: Minimum 3/16". Weld at each of four sides to frame.
- 7. Frame reinforcement for closers: Minimum 1/8" x full width of the opening. This applies even where concealed closers are specified.
- 8. Flush bolt reinforcements: Minimum 3/16".
- 9. Frame mounted electric lock pockets: Minimum 1/8" steel back plate. or manufacturers standard 10 gauge, one-piece lock pocket meeting ASTM test requirements.

# 2.6 FRAMES

- A. Material thickness:
  - 1. As required by specified security grade.
- B. Design and Construction:
  - Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames" , ANSI/NAAMM HMMA 863.
  - 2. Frame Fill: Prepare heads, jambs, and sills abutting structure, walls, or floors for solid anchorage with full grout fill. Exclude grout from mullions except where otherwise indicated
  - 3. Grout Guards: At frames to be grouted, tightly weld 0.018" minimum steel grout guards at screw holes, cut outs, hardware preparations, including but not limited to those for silencers, removable glazing stops, locksets, pushbuttons, strike plates, and hinges. Additionally at hinge preparations provide polyurethane or polystyrene foam fill or otherwise tightly seal grout guards to keep screw holes grout free.
  - 4. Grout and Anchor Access Holes: Provide access holes in frames for anchoring frames in completed concrete or masonry openings and where frames cannot be grout filled from above. Provide closer plates for access holes in frames. Provide 0.106" x 2" minimum plate across frame throat welded both sides and 0.46" diameter center hole aligned to access hole.
  - 5. Field Splicing: Align splice joints flush, tight, and neat. Do not torch cut.
- C. Silencers: Provide rubber door mutes, 3 per single door frame, 2 per double door frame.

# 2.7 DOORS

- A. Face Sheet Thickness:
  - 1. As required by specified security grade.
- B. Design and Construction:
  - 1. Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.
  - 2. Fabricate door with face sheets both sides to overall thickness of 2".
  - 3. Steel Stiffeners. Provide either of the following:
    - a. Extend full height top to bottom and maximum 3" from door sides.
    - b. Where stiffeners are not continuous between face sheets, weld internal joints at maximum 6" on center.
    - c. Cope at hardware preparations only.
    - d. Provide the following internal reinforcements:
      - 1) Continuous, vertically formed steel sections, formed of minimum 18 gauge steel, spanning the full thickness of the interior space between door faces, spaced no more than 4" apart and securely fastened to both face sheets by spot welds spaced a maximum of 3" on centers vertically.
  - 4. Edge Channels: Spot weld to both face sheets at maximum 4" on center.

- 5. Flush Closing Channels: Provide at door bottom and top continuously welded in place.
- 6. Insulation: Core mineral fiber 48 kg/cubic meters density minimum.

# C. Openings:

1. Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.

# 2. Speaking Devices:

a. Provide speaking openings or devices at cell door frames and other doors where shown on the drawings or specified in the detention hardware section schedule of hardware Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.

# 3. Removable Glazing Stops:

- a. Provide 1" x 1"x 1/8" steel angle fastened to opening frame at maximum 6" on center and 3" maximum from corners. Provide Torx Security Plus, round, pan, or oval head 1/4-20 or 1/4-28, machine screw security fasteners
- b. Provide stainless steel Torx security plus screws for exterior and shower area removable glass stops.

#### 2.8 PANELS

A. Fabricate panels of the same materials and construction as specified for the doors.

#### 2.9 CLEARANCES AND TOLERANCES

A. Unless otherwise specified or required by Code, edge clearances and manufacturing tolerances for swinging doors, shall conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.

# 2.10 HARDWARE LOCATIONS

A. Unless otherwise shown or required by Code, locate hardware in accordance with "HMMA 830:Hardware Preparation and Locations for Hollow Metal Doors and Frames."

# **PART 3 - EXECUTION**

# 3.1 EXAMINATION

- A. Examine the conditions under which security hollow metal doors and frames are to be installed. Notify the Architect in writing of conditions which may be detrimental to the satisfactory and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected.
- B. Verify that frames to be grouted or installed in masonry or concrete walls have been back coated with specified material.

# 3.2 PREPARATION

- A. Prior to installation, examine frames and correct for size, swing, squareness, alignment, twist, and plumbness.
- B. Back coating to be field applied.

# 3.3 INSTALLATION/ERECTION

- A. Install in accordance with final shop drawings and manufacturer's instructions, and as specified.
- B. Frames:
  - Comply with the "Installation and Storage of Hollow Metal Doors and Frames", HMMA840.
  - 2. Place frames prior to construction of enclosing walls and ceilings.
    - a. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set.
    - b. Install a minimum of two wood frame spreaders as shown in the installation guides. Do not use temporary bottom shipping spreaders for installation.
  - 3. Fully slush (grout) frames. Hand trowel a grout of 4" maximum slump consistency in place.
  - 4. Install anchors at locations and in quantities specified or shown on drawings.
- C. Doors:
  - 1. Fit doors accurately in their respective frames in accordance with the "Installation and Storage of Hollow Metal Doors and Frames", HMMA 840.
  - 2. Maintain specified door clearances, except for special conditions otherwise noted.

# 3.4 FIELD QUALITY CONTROL

- A. Installation Records
  - 1. Prepare and maintain written records showing that:
    - installers have been instructed about the proper installation procedures and acceptable tolerances.
- B. Verify installation of frames for squareness, alignment, twist, and plumbness.
  - 1. Use a PLS Frame Set Door Frame Alignment tool to verify correctness. For sources go to www.plsframeset.com
  - 2. If installation is not within the tolerances specified under "Preparation", remove and reinstall the frame to comply with the specified tolerances.
- C. Check that edge clearances for swinging doors do not exceed that specified under "Manufacturing Tolerances" in Part 2 of this specification. Metal hinge shims may be used to maintain clearances.
- D. Verify that glazing sealant is pick resistant type.

# 3.5 ADJUSTING AND CLEANING

- A. Keep hollow metal surfaces clean and free of grout, tar, or other bonding material or sealer. Clean material off of frames and doors immediately following installation.
- B. Leave work clean and in proper operating condition. Remove defective work and replace with new material. Defective work includes but is not limited to doors and frames which are warped, bowed, or damaged.
- C. Finish smooth exposed field welds and touch up with rust inhibitive primer.
- D. Touch up primed or painted surfaces which have been scratched or marred during installation. Use rust inhibitive primer.

## **END OF SECTION 081115**

PROPOSED RENOVATION & ADDITION COLUMBIA COUNTY JUSTICE CENTER EVANS, GEORGIA

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#### **SECTION 081115.13**

# **DETENTION HOLLOW METAL DOORS AND WINDOWS**

# **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENT

A. Drawings and General provisions of Contract, including General & Supplementary conditions and Division 1 Specifications sections apply.

# 1.2 SUMMARY

- A. Section Includes.
  - 1. "Detention" grade hollow metal doors, windows and frames.
  - 2. The work of this section is intended to be included with the work of Detention Hardware and shall be assigned to the single responsibility. of the qualified Detention Equipment Subcontractor (DES).

#### B. Related Sections

1.	Section 033000:	Cast in Place Concrete.	
2	Section 042200:	Concrete Unit Masonry.	
3.	Section 042613:	Masonry Veneer.	
4.	Section 051200:	Structural Steel.	
5.	Section 061000:	Rough Carpentry.	
6.	Section 081113:	Hollow Metal Doors and Frames.	
7.	Section 081115.13:	Detention Hollow Metal Doors.	
8.	Section 087100:	Door Hardware.	
9.	Section 087173:	Detention Door Hardware.	

10. Section 088000.13 Security Glazing
10. Section 099123: Interior Painting.
12. Division 26: Electrical wiring.

# 1.3 REFERENCES

- A. Publications listed in this article form a part of this specification to the extent referenced. In case of conflict, the most restrictive requirements shall apply.
- B. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103:
  - 1. ASTM A370-07a:
    - Test Methods and Definition for Mechanical Testing of Steel Products.
  - 2. ASTM A569-98:
    - Specification for Steel, Carbon (0.15 Maximum Percent), Hot Rolled Sheet and Strip, Commercial Quality.
  - 3. ASTM 653/A653M-07:
    - Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvaneeled) by the Hot-Dip Process [Metric].
  - 4. ASTM F 1233-98 (2004):
    - Standard Test Method for Security Glazing Materials and Systems.
  - 5. ASTM F1450-05:
    - Standard Test methods for Hollow Metal Swinging Door Assemblies for Detention Facilities.

- C. National Association of Architectural Metal Manufacturers (NAAMM), 8 South Michigan Avenue, Chicago, IL 60603:
  - 1. HMMA 830-02:

Hardware Preparation and Locations for Hollow Metal Doors and Frames.

2. HMMA 840-99:

Installation and Storage of Hollow Metal Doors and Frames.

3. HMMA 850-00:

Fire Rated Hollow Metal Doors and Frames, Second Edition.

4. HMMA 863-04:

Guide Specifications for Detention Security Hollow Metal Doors and Frames.

- D. Underwriters Laboratories, Inc. (UL), 333 Pfingsten Road, Northbrook, IL 60062:
  - 1. UL10C-1998:

Fire Tests of Door Assemblies.

2. UL 752-05:

Bullet Resisting Equipment.

- E. Door and Hardware Institute (DHI):
  - 1. Recommended Procedure for Processing Hardware Schedules and Templates-96.
  - 2. Installation Guide for Doors and Hardware-84.
- F. American Welding Society.
  - 1. AWS D1.1 and D1.3, CSA W47.1-92 and RWMA, Resistance Welding Manual.

# 1.4 DEFINITIONS

- A. HMMA: Hollow Metal Manufacturers Association.
- B. NAAMM: National Association of Architectural Metal Manufacturers.
- C. DHI: Door and Hardware Institute.
- D. AWS: American Welding Society

# 1.5 SUBMITTALS

- A. Submit in accordance with Division 1.
- B. Project Data.
  - 1. Submit manufacturer's material and fabrication specification and installation instructions modified to reflect project requirements and job conditions.
  - 2. Include instructions for handling, storage, and protection.
  - 3. Where applicable, provide instructions for installation in pre-cast and cast-in-place concrete.
  - 4. Include instructions for bracing of frames and frame tolerances.
- B. Shop Drawings
  - Provide details of openings.
    - a. Include door and frame elevations and sections.
    - b. Indicate required anchorage and accessory items, field dimensions, and finishes.
    - c. Include plan (horizontal) section through frames and elevations.
    - d. Show erection, construction, and other requirements not fully described by manufacturer's data.

- e. Include a transverse and longitudinal section through the door showing construction and reinforcing.
- f. Include details of hardware reinforcements, joints, connections, and light cut-outs.
- g. Show proposed locations for Grout and Anchor Access Holes.
- 2. Provide a schedule listing the openings with description, door locations, gauges, and anchors.

#### C. Quality Assurance Submittals

- Notarized statement from the Manufacturer attesting to conformance with the requirements, standards and testing required by this section.
- 2. Reference list showing detention projects for which the manufacturer has supplied security hollow metal. Include dates of completion.
- 3. Notarized statement from manufacturer attesting that they are a current member of NAAMM and will conform to the NAAMM standards for fabrication methods and product quality control.
- 4. Mill Certification for materials used to fabricate specified items.

# D. Test reports:

- 1. Submit certified engineering reports from a nationally recognized independent testing laboratories showing that the results of the tests meet or exceed minimum specified performance requirements. Tested doors, frames, and other material shall be retained at the manufacturer's facility for possible future inspection.
- 2. Include specifications and details of the construction of the tested assemblies.
  - a. The removable glazing stop test report shall include specification and samples of security screws. The manufacturer shall submit a letter certifying that screws used on this project match the screws tested.
  - b. The manufacturer shall submit a letter certifying that door assemblies used on this project match the assemblies tested in all respects.

#### 1.6 QUALITY ASSURANCE

# A. Manufacturer Qualifications

- 1. Personnel and plant equipment capable of fabricating security hollow metal assemblies of the type specified.
- 2. Meet the standards set by HMMA, a division of the NAAMM for fabrication methods and product quality control.
- 3. Member of NAAMM and subject to quality performance requirements.
- 4 Provide security hollow metal work manufactured by a single firm specializing in the production of detention hollow metal work. Provide doors, windows and frames from the same manufacturer.
- Welders currently qualified under AWS B2.1 or certified under CSA W47.1-92 Classification 2.1 to perform the type of work required.
- At least 10 years of experience and 3 jobs of equal complexity which have been completed and occupied within the last 5 years. References shall include, but not be limited to the following:
  - a. Name and location of project, date of occupancy and contract value.
  - b. Name, address, and telephone numbers of the Owner's operations supervisor, Owner's maintenance supervisor, Owner, and General Contractor.
- 7 Provide documentation of labeling ability as required on specified assemblies.

# 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Packing, Shipping, Handling, and Unloading
  - Carton, crate or palletize hollow metal doors, windows, frames, and other items to provide protection in transit.

# B. Acceptance at Site

- 1. Conform to requirements of HMMA 840.
- 2. Inspect for damage and shortages.
- 3. Promptly repair minor damage. Clean and touch up with rust inhibitive primer or galvanizing repair paint as applicable.

# C. Storage and Protection

- 1 Conform to HMMA 840.
- 2. Remove wrappings or coverings from doors and frames immediately upon delivery to the project site.
- 3. Store materials in a dry covered area.
- 4. Place materials on planking or blocking, at least 4" off of the ground, 2" off of a paved area or floor slab. Do not store flat.
- 5. Store doors and frames in an upright position with heads upper most. Place no more than 5 single opening frames or 3 multi-opening frames in a group. Provide, by means of wood strips, a space of at least 1/4" between all units to permit air circulation.
- 6. Do not use non-vented plastic or canvas shelters which could create a humidity chamber.

#### 1.8 SCHEDULING

- A. Coordinate installation with related sections.
- B Jamb face dimensions on drawings are nominal. Coordinate to provide jamb opening required to accommodate hardware. Coordinate incorporation of modified frame dimensions into wall construction.
- C. Where frames are located in precast walls, coordinate with precast manufacturer to ensure proper installation.

# 1.9 WARRANTY

A. Door and window manufacturer is to warranty their products for a minimum of 1 (one) Year, from the date of substantial completion.

# PART 2 - PRODUCTS

# 2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
  - 1. Products of the following manufacturers will be acceptable provided they furnish the certifications and test reports necessary to document conformance with the requirements of this specification
    - a. Apex Industries Inc., Attn: Donny Gallant 1(800) 268-3331 Website: www.apexindustries.com.
    - b. US Security Systems, Inc., Attn: Joseph Ames (334)424-1823 Website: <a href="https://www.ussecuritysystems.com">www.ussecuritysystems.com</a>
    - c. American Steel Products.
    - d. Habersham.
    - e. Ambico.
  - 2. Products of other manufactures will be considered for approval if they conform to the manufacturer's qualification shown in Part 1 and if information required under "quality assurance" is submitted at least ten days prior to bid due date.

#### 2.02TESTING AND PERFORMANCE

# A. ASTM F 1450.

- 1. Certify to successful completion and conformance to the security grades and test load requirements for the specified security grade. Include the following tests.
  - a. Door and window assembly impact test.
  - b. Door and window static load test.
  - c. Door and window rack test.
  - d. Door and window assembly fire test (where door assemblies are specified or shown as fire rated).
  - e. Door assembly and hardware tool attack test (Testing of individual door and frame components is acceptable).
  - f. Door edge crush test.
- 2. Provide door assemblies constructed the same as the test door assemblies.
  - a.. Where door or window assembly cannot be certified as complying with ASTM 1450 because of additional specified requirements, provide proof of satisfactory completion of ASTM testing along with a certification from the manufacturer attesting that the assemblies are the same as the tested assemblies except for the modification.

#### B. NAAMM

1. Comply with ANSI/NAAMM HMMA 863-04 "Guide Specifications for Detention Security Hollow Metal Doors and Frames," except as otherwise indicated.

# C. Welding

- 1. Comply with welding standards as define in AWS D1.1 and D1.3, CSA W47.1and RWMA, Resistance Welding Manual.
- 2. Welds shall have complete penetration and fusion.
- 3. Remove parent metal when testing welds to failure.

# 2.3 SECURITY GRADES

- A. Conform to the security grade requirements of requirements of ASTM F 1450:
  - 1. Security grade 1: Minimum 12 gauge door face sheet and 12 gauge frame.

# 2.4 BASIC MATERIALS

- A. Steel fabrications:
  - Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.
- B. Galvanizing:
  - Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames, HMMA 863".
  - 2. (G90) Mill phosphatize in addition to coating specified in HMMA 863.
  - 3. Galvanize (G90) or apply zinc coating to doors and frames in the following areas:
    - a. Interior doors, windows and frames subject to corrosive conditions.
    - b. Other doors, windows, frames, and components specified as galvanized.
- C. Supports, anchors, and fasteners:
  - 1. Supports and Anchors:
    - a. Manufacturer's standard except.

- 1. Same material as frame including gage and galvanizing where indicated.
- 2. Fasteners, Bolts, and Inserts.
  - a. Manufacturer's standard units except:
    - 1) For exposed fasteners, provide Torx® security type.
  - b. Hot-dip galvanize in compliance with ASTM A 153, Class C or D as applicable.
- 3. Frame anchors
  - a. Floor Anchors: Secure door jambs at floor. .
  - b. Sill Anchors: Where indicated on drawings, provide 1/8" continuous bent plate channel set in sealant, with minimum 0.0394" diameter x 3" expansion bolt anchors at 16" on centers.
  - c. Jamb Anchors: Space at 16" on centers maximum in masonry.
  - d. Head Anchors: Provide loose "T" anchors spaced 16" on centers at heads of frames in masonry openings more than 48" wide.
    - 1) Fabricate head anchors of same gauge as frame, 2" wide, with 10" long leg of "T" punched to engage lintel reinforcement.
  - e. Completed Opening Frame Anchors: Provide expansion anchor Space anchors at same interval as specified for masonry frame anchors above unless otherwise indicated.
  - 1). Accepted Anchor Bolts, supplied and installed by frame installer:
    - a) Hilti Sleeve Anchor.
    - b) Ramset/Red Head Dynabolt Sleeve.
    - c) Rawl Lok/Bolt.

#### D. Finish:

- 1. Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.
- 2. Treat surface to assure maximum paint adhesion.
- 3. Coat inside and outside surfaces of the frame and outside surfaces of the door with a rust inhibitive primer.

# E. Back Coating:

- Back Coat frames which are to be filled with grout or installed in concrete or masonry walls.
- 2. Material: Water resistant bituminous coating.
- 3. Back coating to be field applied.

# 2.5 HARDWARE PREPARATION:

- A. Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.
- B. Concealed Hardware: Provide grout boxes to enclose item. Provide welded in mounting tabs to suit.
- C. Surface Applied Hardware: Drilling and tapping may be done at project site.
- D. Minimum gauges and sizes for hardware reinforcements:
  - 1. Mortise hinges and pivots:
    - a. Minimum 3/16" thick x 10" high.
    - b. Frame reinforcement: full width of the frame.
    - c. Weld minimum 12 gauge steel angle(s) at back of frame face and hinge reinforcement to resist deformation under swinging door load.
    - d. Provide additional reinforcement and bracing for top hinge by welding a 1" x 1" x 3/16" back-up angle to the inside of the frame
  - 2. Surface applied security hinges: 1/4" plate.
  - 3. Locking device hangar attachments: per device manufacturer's template or installation instructions.

- 4. Lock fronts and door reinforcement for closers: Minimum 12 gauge.
- Internal reinforcements for surface applied hardware; Minimum 12 gauge. Reinforcement for door pulls shall be not less than 1 1/2" x 12".
- 6. Strike or keeper: Minimum 3/16". Weld at each of four sides to frame.
- 7. Frame reinforcement for closers: Minimum 1/8" x full width of the opening. This applies even where concealed closers are specified.
- 8. Flush bolt reinforcements: Minimum 3/16".
- 9. Frame mounted electric lock pockets: Minimum 1/8" steel back plate. or manufacturers standard 10 gauge, one-piece lock pocket meeting ASTM test requirements.

# E. Preparation for electrified and pneumatic hardware:

- Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", ANSI/NAAMM HMMA 863.
- 2. Provide welded on junction boxes of sufficient size to properly encapsulate and protect the wiring connections and hardware from damage.
- 3. Provide conduit in doors and frames for electrified wiring to interconnect electrified hardware and security devices specified in detention hardware and electronic security sections. Coordinate with requirements for electronic security system to determine conduit size.
- 4. Provide lock pockets and covers for electrified locks. Fabricate pockets for frame mounted locks to allow a minimum of four inches above and below lock for wiring connections.
- 5. Do not cut away the lock edge reinforcing channel more than necessary to pass lock.
- 6. If cylinder extensions are not specified for locks keyed on two sides, provide recessed access to second cylinder. Recess shall be a minimum of 6" x 6".

# 2.6 FRAMES

- A. Material thickness:
  - As required by specified security grade
- B. Design and Construction:
  - Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", ANSI/NAAMM HMMA 863.
  - 2. Frame Fill: Prepare heads, jambs, and sills abutting structure, walls, or floors for solid anchorage with full grout fill. Exclude grout from mullions except where otherwise indicated
  - 3. Grout Guards: At frames to be grouted, tightly weld 0.018" minimum steel grout guards at screw holes, cut outs, hardware preparations, including but not limited to those for silencers, removable glazing stops, locksets, pushbuttons, strike plates, and hinges. Additionally at hinge preparations provide polyurethane or polystyrene foam fill or otherwise tightly seal grout guards to keep screw holes grout free.
  - 4. Grout and Anchor Access Holes: Provide access holes in frames for anchoring frames in completed concrete or masonry openings and where frames cannot be grout filled from above. Provide closer plates for access holes in frames. Provide 0.106" x 2" minimum plate across frame throat welded both sides and 0.46" diameter center hole aligned to access hole.
  - 5. Field Splicing: Align splice joints flush, tight, and neat. Do not torch cut.
- C. Silencers: Provide rubber door mutes, 3 per single door frame, 2 per double door frame.

# 2.7 DOORS AND WINDOWS

- A. Face Sheet Thickness:
  - 1. As required by specified security grade.

# B. Design and Construction:

- Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.
- 2. Fabricate door with face sheets both sides to overall thickness of 2".
- 3. Steel Stiffeners, Provide either of the following:
  - a. Extend full height top to bottom and maximum 3" from door sides.
  - b. Where stiffeners are not continuous between face sheets, weld internal joints at maximum 6" on center.
  - c. Cope at hardware preparations only.
  - d. Provide the following internal reinforcements:
    - Continuous, vertically formed steel sections, formed of minimum 18 gauge steel, spanning the full thickness of the interior space between door faces, spaced no more than 4" apart and securely fastened to both face sheets by spot welds spaced a maximum of 3" on centers vertically
- 4. Edge Channels: Spot weld to both face sheets at maximum 4" on center.
- 5. Flush Closing Channels: Provide at door bottom and top continuously welded in place.
- 6. Insulation: Core mineral fiber 48 kg/cubic meters density minimum.

# C. Openings:

- Conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.
- 2. Removable Glazing Stops:
  - a. Provide 1" x 1"x 1/8" steel angle fastened to opening frame at maximum 6" on center and 3" maximum from corners. Provide Torx Security Plus, round, pan, or oval head 1/4-20 or 1/4-28, machine screw security fasteners
  - b. Provide stainless steel Torx security plus screws for exterior and shower area removable glass stops.

#### 2.8 PANELS

A. Fabricate panels of the same materials and construction as specified for the doors.

# 2.9 CLEARANCES AND TOLERANCES

A. Unless otherwise specified or required by Code, edge clearances and manufacturing tolerances for swinging doors, shall conform to "Guide Specifications for Detention Security Hollow Metal Doors and Frames", HMMA 863.

# 2.10 HARDWARE LOCATIONS

A. Unless otherwise shown or required by Code, locate hardware in accordance with "HMMA 830: Hardware Preparation and Locations for Hollow Metal Doors and Frames."

# **PART 3 - EXECUTION**

# 3.1 EXAMINATION

A. Examine the conditions under which security hollow metal doors and frames are to be installed. Notify the Architect in writing of conditions which may be detrimental to the satisfactory and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected.

B. Verify that frames to be grouted or installed in masonry or concrete walls have been back coated with specified material.

# 3.2 PREPARATION

- A. Prior to installation, examine frames and correct for size, swing, squareness, alignment, twist, and plumbness.
- B. Back coating to be field applied.

# 3.3 INSTALLATION/ERECTION

A. Install in accordance with final shop drawings and manufacturer's instructions, and as specified.

#### B. Frames:

- Comply with the "Installation and Storage of Hollow Metal Doors and Frames", HMMA 840.
- 2. Place frames prior to construction of enclosing walls and ceilings.
  - a. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set.
  - b. Install a minimum of two wood frame spreaders as shown in the installation guides. Do not use temporary bottom shipping spreaders for installation.
- 3. Fully slush (grout) frames. Hand trowel a grout of 4" maximum slump consistency in place
- 4. Install anchors at locations and in quantities specified or shown on drawings.

# C. Doors:

- Fit doors accurately in their respective frames in accordance with the "Installation and Storage of Hollow Metal Doors and Frames", HMMA 840.
  - Maintain specified door clearances, except for special conditions otherwise noted.

#### 3.4 FIELD QUALITY CONTROL

- A. Installation Records
  - 1. Prepare and maintain written records showing that:
    - a. Installers have been instructed about the proper installation procedures and acceptable tolerances.
- B. Verify installation of frames for squareness, alignment, twist, and plumbness.
  - 1. Use a PLS Frame Set Door Frame Alignment tool to verify correctness. For sources go to <a href="https://www.plsframeset.com">www.plsframeset.com</a>.
  - 2. If installation is not within the tolerances specified under "Preparation", remove and reinstall the frame to comply with the specified tolerances.
- C. Check that edge clearances for swinging doors do not exceed that specified under "Manufacturing Tolerances" in Part 2 of this specification. Metal hinge shims may be used to maintain clearances.
- D. Verify that glazing sealant is pick resistant type.

# 3.5 ADJUSTING AND CLEANING

A. Keep hollow metal surfaces clean and free of grout, tar, or other bonding material or sealer. Clean material off of frames and doors immediately following installation.

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- B. Leave work clean and in proper operating condition. Remove defective work and replace with new material. Defective work includes but is not limited to doors and frames which are warped, bowed, or damaged.
- C. Finish smooth exposed field welds and touch up with rust inhibitive primer.
- D. Touch up primed or painted surfaces which have been scratched or marred during installation. Use rust inhibitive primer.

**END OF SECTION 081115.13** 

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#### **SECTION 093013**

# **CERAMIC TILING**

#### **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Porcelain tile.
  - Glazed wall tile.
  - 3. Tile backing panels.
  - 4. Waterproof membrane for thinset applications.
  - 5. Crack isolation membrane.
- B. Related Requirements:
  - 1. Section 079200 "Joint Sealants" for sealing of expansion, contraction, control, and isolation joints in tile surfaces.
  - 2. Section 092900 "Gypsum Board" for cementitious backer units.

# 1.3 DEFINITIONS

- A. General: Definitions in the ANSI A108 series of tile installation standards and in ANSI A137.1 apply to Work of this Section unless otherwise specified.
- B. ANSI A108 Series: ANSI A108.01, ANSI A108.02, ANSI A108.1A, ANSI A108.1B, ANSI A108.1C, ANSI A108.4, ANSI A108.5, ANSI A108.6, ANSI A108.8, ANSI A108.9, ANSI A108.10, ANSI A108.11, ANSI A108.12, ANSI A108.13, ANSI A108.14, ANSI A108.15, ANSI A108.16, and ANSI A108.17, which are contained in its "Specifications for Installation of Ceramic Tile."
- C. Face Size: Actual tile size, excluding spacer lugs.
- D. Module Size: Actual tile size plus joint width indicated.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show locations of each type of tile and tile pattern. Show widths, details, and locations of expansion, contraction, control, and isolation joints in tile substrates and finished tile surfaces.
- C. Samples for Initial Selection: For tile, grout, and accessories involving color selection.
- D. Samples for Verification:
  - 1. Full-size units of each type and composition of tile and for each color and finish required
  - 2. Assembled samples mounted on a rigid panel, with grouted joints, for each type and composition of tile and for each color and finish required. Make samples at least 12 inches square, but not fewer than four tiles. Use grout of type and in color or colors approved for completed Work.

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- 3. Full-size units of each type of trim and accessory for each color and finish required.
- 4. Stone thresholds in 6-inch lengths.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Master Grade Certificates: For each shipment, type, and composition of tile, signed by tile manufacturer and Installer.
- C. Product Certificates: For each type of product.
- D. Product Test Reports: For tile-setting and -grouting products and certified porcelain tile.

## 1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match and are from same production runs as products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Tile and Trim Units: Furnish quantity of full-size units equal to 3 percent of amount installed for each type, composition, color, pattern, and size indicated.
  - 2. Grout: Furnish quantity of grout equal to 3 percent of amount installed for each type, composition, and color indicated.

# 1.7 QUALITY ASSURANCE

# A. Installer Qualifications:

- 1. Installer is a Five-Star member of the National Tile Contractors Association or a Trowel of Excellence member of the Tile Contractors' Association of America.
- 2. Installer's supervisor for Project holds the International Masonry Institute's Foreman Certification.
- 3. Installer employs only Ceramic Tile Education Foundation Certified Installers or installers recognized by the U.S. Department of Labor as Journeyman Tile Layers for Project.

## 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirements in ANSI A137.1 for labeling tile packages.
- B. Store tile and cementitious materials on elevated platforms, under cover, and in a dry location.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination can be avoided.
- D. Store liquid materials in unopened containers and protected from freezing.

# 1.9 FIELD CONDITIONS

A. Environmental Limitations: Do not install tile until construction in spaces is complete and ambient temperature and humidity conditions are maintained at the levels indicated in referenced standards and manufacturer's written instructions.

#### **PART 2 - PRODUCTS**

# 2.1 MANUFACTURERS

A. Source Limitations for Setting and Grouting Materials: Obtain ingredients of a uniform quality for each mortar, adhesive, and grout component from single manufacturer and each aggregate from single source or producer.

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- 1. Obtain setting and grouting materials, except for unmodified Portland cement and aggregate, from single manufacturer.
- 2. Obtain waterproof membrane and crack isolation membrane, except for sheet products, from manufacturer of setting and grouting materials.
- B. Source Limitations for Other Products: Obtain each of the following products specified in this Section from a single manufacturer:
  - 1. Waterproof membrane.
  - 2. Crack isolation membrane.
  - 3. Cementitious backer units.

# 2.2 PRODUCTS, GENERAL

- A. ANSI Ceramic Tile Standard: Provide tile that complies with ANSI A137.1 for types, compositions, and other characteristics indicated.
- B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI A108.02, ANSI standards referenced in other Part 2 articles, ANSI standards referenced by TCNA installation methods specified in tile installation schedules, and other requirements specified.
- C. Factory Blending: For tile exhibiting color variations within ranges, blend tile in factory and package so tile units taken from one package show same range in colors as those taken from other packages and match approved Samples.
- D. Mounting: For factory-mounted tile, provide back- or edge-mounted tile assemblies as standard with manufacturer unless otherwise indicated.
  - 1. Where tile is indicated for installation in wet areas, do not use back- or edge-mounted tile assemblies unless tile manufacturer specifies in writing that this type of mounting is suitable for installation indicated and has a record of successful in-service performance.

# 2.3 TILE PRODUCTS

- A. Porcelain Tile Type FT-1: Unglazed porcelain tile.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
    - a. <u>Trinity Surfaces Ceasar Ceramics Stoneways Flight</u>
  - 2. Certification: Tile certified by the Porcelain Tile Certification Agency.
  - 3. Face Size: 12 x 24 inches.
  - 4. Face Size Variation: Rectified.
  - 5. Thickness: 0.040 inch.
  - 6. Face: Plain with square or cushion edges.
  - 7. Dynamic Coefficient of Friction: Not less than 0.42.
  - 8. Tile Color, Glaze, and Pattern: As indicated on Drawings.
  - 9. Shade Variation: Moderate (V3).
  - 10. Grout Color: Mapei 105 Driftwood
- B. Porcelain Tile Type FT-2: Unglazed porcelain tile.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
    - a. <u>Trinity Surfaces Milos Amani Bronze</u>
  - 2. Certification: Tile certified by the Porcelain Tile Certification Agency.
  - 3. Face Size: 3 x 12 inches.
  - 4. Face Size Variation: Rectified.
  - 5. Thickness: 8 mm.
  - 6. Face: Plain with square or cushion edges.

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- 7. Dynamic Coefficient of Friction: Not less than 0.42.
- 8. Tile Color, Glaze, and Pattern: As indicated on Drawings.
- 9. Shade Variation: Moderate (V3).
- 10. Grout Color: As selected by Interior Designer from Manufacturer's full range.
- C. Porcelain Tile Type WT-1: Unglazed porcelain wall tile.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
    - a. <u>Trinity Surfaces Ceasar Ceramics Stoneways Flight</u>
  - 2. Certification: Tile certified by the Porcelain Tile Certification Agency.
  - 3. Face Size: 12 x 24 inches.
  - 4. Face Size Variation: Rectified.
  - 5. Thickness: 0.040 inch.
  - 6. Face: Plain with square or cushion edges.
  - 7. Dynamic Coefficient of Friction: Not less than 0.42.
  - 8. Tile Color, Glaze, and Pattern: As indicated on Drawings.
  - 9. Shade Variation: Moderate (V3).
  - 10. Grout Color: Mapei 105 Driftwood
- D. Porcelain Tile Type WT-2: NOT USED.
- E. Porcelain Tile Type WT-3: Unglazed porcelain wall tile, cove base.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
    - a. Trinity Surfaces Ceasar Ceramics Stoneways Flight
    - b. <u>Schulter Dilex (Cove Base). Profile and color to be approved by Interior Designer.</u>
  - 2. Certification: Tile certified by the Porcelain Tile Certification Agency.
  - 3. Face Size: 6 x 12 inches.
  - 4. Face Size Variation: Rectified.
  - 5. Thickness: 0.040 inch.
  - 6. Face: Plain with square or cushion edges.
  - 7. Dynamic Coefficient of Friction: Not less than 0.42.
  - 8. Tile Color, Glaze, and Pattern: As indicated on Drawings.
  - 9. Shade Variation: Moderate (V3).
  - 10. Grout Color: Mapei 105 Driftwood
- F. Porcelain Tile Type WT-4: Glazed ceramic wall tile.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
    - a. <u>DalTile Mythology Aura MY95, Blue</u>
  - 2. Certification: Tile certified by the Porcelain Tile Certification Agency.
  - 3. Face Size: 4 x 12 inches.
  - 4. Face Size Variation: Undulated.
  - 5. Thickness: 5/16
  - 6. Face: Plain with square or cushion edges.
  - 7. Dynamic Coefficient of Friction: Not less than 0.42.
  - 8. Tile Color, Glaze, and Pattern: As indicated on Drawings.
  - 9. Shade Variation: Moderate (V3).
  - 10. Grout Color: As selected by Interior Designer from Manufacturer's full range.

# 2.4 THRESHOLDS

A. General: Fabricate to sizes and profiles indicated or required to provide transition between adjacent floor finishes.

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- 1. Bevel edges at 1:2 slope, with lower edge of bevel aligned with or up to 1/16 inch above adjacent floor surface. Finish bevel to match top surface of threshold. Limit height of threshold to 1/2 inch or less above adjacent floor surface.
- B. Marble Thresholds: ASTM C503/C503M, with a minimum abrasion resistance of 10] according to ASTM C1353 or ASTM C241/C241M and with honed finish.
  - 1. Description: Uniform, fine- to medium-grained white stone with gray veining.

#### 2.5 TILE BACKING PANELS

- A. Cementitious Backer Units: ANSI A118.9 or ASTM C1325, Type A, in maximum lengths available to minimize end-to-end butt joints.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. Georgia-Pacific Gypsum LLC.
    - b. USG Corporation.
    - Thickness: 1/2 inch

# 2.6 WATERPROOF MEMBRANE

2.

- A. General: Manufacturer's standard product, selected from the following, that complies with ANSI A118.10 and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.
- B. Chlorinated Polyethylene Sheet: Nonplasticized, chlorinated polyethylene faced on both sides with nonwoven polyester fabric.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
    - a. <u>Noble Company (The)</u>.
  - 2. Nominal Thickness: 0.030 inch.
  - 3. Nominal Thickness: 0.040 inch.
- C. Polyethylene Sheet: Polyethylene faced on both sides with fleece webbing; 0.008-inch nominal thickness.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
    - a. <u>Schluter Systems L.P.</u>
- D. Latex-Portland Cement Waterproof Mortar: Flexible, waterproof mortar consisting of cement-based mix and latex additive.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. <u>Laticrete International, Inc.</u>
    - b. MAPEI Corporation.
- E. Waterproofing and Tile-Setting Adhesive: One-part, fluid-applied product intended for use as both waterproofing and tile-setting adhesive in a two-step process.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
    - a. Bostik, Inc.

# 2.. CRACK ISOLATION MEMBRANE

A. General; Manufacturer's standard product, selected from the following, that complies with ANSI A118.12 for high performance and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.

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- B. Crack Isolation Membrane and Tile-Setting Adhesive: One-part, fluid-applied product intended for use as both a crack isolation membrane and tile-setting adhesive in a two-step process.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Laticrete International, Inc.
    - b. MAPEI Corporation.
    - c. Schulter Systems.

# 2.8 SETTING MATERIALS

- A. Portland Cement Mortar (Thickset) Installation Materials: ANSI A108.02.
  - 1. Cleavage Membrane: Asphalt felt, ASTM D226/D226M, Type I (No. 15); or polyethylene sheeting, ASTM D4397, 4.0 mils thick.
  - 2. Reinforcing Wire Fabric: Galvanized, welded-wire fabric, 2 by 2 inches by 0.062-inch diameter; comply with ASTM A185/A185M and ASTM A82/A82M, except for minimum wire size.
  - 3. Expanded Metal Lath: Diamond-mesh lath complying with ASTM C847.
    - Base Metal and Finish for Interior Applications: Uncoated or zinc-coated (galvanized) steel sheet, with uncoated steel sheet painted after fabrication into lath.
    - b. Base Metal and Finish for Exterior Applications: Zinc-coated (galvanized) steel sheet.
    - c. Configuration over Studs and Furring: Flat.
    - d. Configuration over Solid Surfaces: Self-furring.
    - e. Weight: 2.5 lb/sq. yd.
- B. Standard Dry-Set Mortar (Thinset): ANSI A118.1.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. Laticrete International, Inc.
    - b. MAPEI Corporation.
  - 2. For wall applications, provide mortar that complies with requirements for nonsagging mortar in addition to the other requirements in ANSI A118.1.
- C. Modified Dry-Set Mortar (Thinset): ANSI A118.4.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. Laticrete International, Inc.
    - b. MAPEI Corporation.
  - 2. For wall applications, provide mortar that complies with requirements for nonsagging mortar in addition to the other requirements in ANSI A118.4.

#### 2.9 GROUT MATERIALS

- A. Sand-Portland Cement Grout: ANSI A108.10, consisting of white or gray cement and white or colored aggregate as required to produce color indicated.
- B. Standard Cement Grout: ANSI A118.6.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:

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- a. Laticrete International, Inc.
- b. MAPEI Corporation.
- C. High-Performance Tile Grout: ANSI A118.7.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. Laticrete International, Inc.
    - b. MAPEI Corporation.
- D. Water-Cleanable Epoxy Grout: ANSI A118.3, with a VOC content of 65 g/L or less.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
    - a. <u>Laticrete International, Inc.</u>
    - b. MAPEI Corporation.

# 2.10 MISCELLANEOUS MATERIALS

- A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.
- B. Vapor-Retarder Membrane: Polyethylene sheeting, ASTM D4397, 4.0 mils thick.
- C. Metal Edge Strips: Angle or L-shaped, height to match tile and setting-bed thickness, metallic or combination of metal and PVC or neoprene base, designed specifically for flooring applications; stainless steel, ASTM A276/A276M or ASTM A666, 300 Series exposed-edge material.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
    - Schluter Systems L.P.
- D. 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.
- E. Floor Sealer: Manufacturer's standard product for sealing grout joints and that does not change color or appearance of grout.
  - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
    - a. <u>Laticrete International, Inc.</u>

# 2.11 MIXING MORTARS AND GROUT

- A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.
- B. Add materials, water, and additives in accurate proportions.
- C. Obtain and use type of mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

# **PART 3 - EXECUTION**

# 3.1 EXAMINATION

A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

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- 1. Verify that substrates for setting tile are firm; dry; clean; free of coatings that are incompatible with tile-setting materials, including curing compounds and other substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.
- 2. Verify that concrete substrates for tile floors installed with [thinset mortar comply with surface finish requirements in ANSI A108.01 for installations indicated.
  - Verify that surfaces that received a steel trowel finish have been mechanically scarified.
  - b. Verify that protrusions, bumps, and ridges have been removed by sanding or grinding.
- 3. Verify that installation of grounds, anchors, recessed frames, electrical and mechanical units of work, and similar items located in or behind tile has been completed.
- 4. Verify that joints and cracks in tile substrates are coordinated with tile joint locations; if not coordinated, adjust joint locations in consultation with Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

# 3.2 PREPARATION

- A. Fill cracks, holes, and depressions in concrete substrates for tile floors installed with [thinset mortar with trowelable leveling and patching compound specifically recommended by tile-setting material manufacturer.
- B. Where indicated, prepare substrates to receive waterproof membrane by applying a reinforced mortar bed that complies with ANSI A108.1A and is sloped 1/4 inch per foot toward drains.
- C. 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, either return to manufacturer or blend tiles at Project site before installing.

# 3.3 INSTALLATION OF CERAMIC / PORCELAIN TILE

- A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of the ANSI A108 series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.
  - 1. For the following installations, follow procedures in the ANSI A108 series of tile installation standards for providing 95 percent mortar coverage:
    - a. Tile floors in wet areas.
    - b. Tile floors consisting of tiles 8 by 8 inches or larger.
- B. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.
- C. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. 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. Provide manufacturer's standard trim shapes where necessary to eliminate exposed tile edges.
- E. Where accent tile differs in thickness from field tile, vary setting-bed thickness so that tiles are flush.

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- F. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.
  - 1. For tile mounted in sheets, make joints between tile sheets same width as joints within tile sheets so joints between sheets are not apparent in finished work.
  - 2. Where adjoining tiles on floor, base, walls, or trim are specified or indicated to be same size, align joints.
  - 3. Where tiles are specified or indicated to be whole integer multiples of adjoining tiles on floor, base, walls, or trim, align joints unless otherwise indicated.
- G. Joint Widths: Unless otherwise indicated, install tile with the following joint widths:
  - Glazed Wall Tile: 1/8 inch.
  - 2. Porcelain Tile: 1/8 inch
- H. Expansion Joints: Provide expansion joints and other sealant-filled joints, including control, contraction, and isolation joints, where indicated. Form joints during installation of setting materials, mortar beds, and tile. Do not saw-cut joints after installing tiles.
  - 1. Where joints occur in concrete substrates, locate joints in tile surfaces directly above them
- I. Stone Thresholds: Install stone thresholds in same type of setting bed as adjacent floor unless otherwise indicated.
  - 1. At locations where mortar bed (thickset) would otherwise be exposed above adjacent floor finishes, set thresholds in modified dry-set mortar (thinset).
  - 2. Do not extend waterproof membrane or crack isolation membrane under thresholds set in standard dry-set or modified dry-set mortar. Fill joints between such thresholds and adjoining tile set on waterproof membrane or crack isolation membrane with elastomeric sealant.
- J. Metal Edge Strips: Install where exposed edge of tile flooring meets carpet, wood, or other flooring that finishes flush with or below top of tile and no threshold is indicated.
- K. Floor Sealer: Apply floor sealer to cementitious grout joints in tile floors according to floor-sealer manufacturer's written instructions. As soon as floor sealer has penetrated grout joints, remove excess sealer and sealer from tile faces by wiping with soft cloth.

# 3.4 INSTALLATION OF TILE BACKING PANEL

A. Install panels and treat joints according to ANSI A108.11 and manufacturer's written instructions for type of application indicated. Use modified dry-set mortar for bonding material unless otherwise directed in manufacturer's written instructions.

# 3.5 INSTALLATION OF WATERPROOF MEMBRANE

- A. Install waterproof membrane to comply with ANSI A108.13 and manufacturer's written instructions to produce waterproof membrane of uniform thickness that is bonded securely to substrate.
- B. Allow waterproof membrane to cure and verify by testing that it is watertight before installing tile or setting materials over it.

# 3.6 INSTALLATION OF CRACK ISOLATION MEMBRANE

A. Install crack isolation membrane to comply with ANSI A108.17 and manufacturer's written instructions to produce membrane of uniform thickness that is bonded securely to substrate.

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B. Allow crack isolation membrane to cure before installing tile or setting materials over it.

# 3.7 ADJUSTING AND CLEANING

- A. Remove and replace tile that is damaged or that does not match adjoining tile. Provide new matching units, installed as specified and in a manner to eliminate evidence of replacement.
- B. Cleaning: On completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.
  - 1. Remove grout residue from tile as soon as possible.
  - 2. Clean grout smears and haze from tile according to tile and grout manufacturer's written instructions but no sooner than 10 days after installation. Use only cleaners recommended by tile and grout manufacturers and only after determining that cleaners are safe to use by testing on samples of tile and other surfaces to be cleaned. Protect metal surfaces and plumbing fixtures from effects of cleaning. Flush surfaces with clean water before and after cleaning.

#### 3.8 PROTECTION

- A. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage, and wear. If recommended by tile manufacturer, apply coat of neutral protective cleaner to completed tile walls and floors.
- B. Prohibit foot and wheel traffic from tiled floors for at least seven days after grouting is completed.
- C. Before final inspection, remove protective coverings and rinse neutral protective cleaner from tile surfaces.

## 3.9 INTERIOR CERAMIC TILE INSTALLATION SCHEDULE

- A. Interior Floor Installations, Concrete Subfloor:
  - 1. Ceramic Tile Installation TCNA F115; thinset mortar; epoxy grout.
    - a. Ceramic Tile Type: Porcelain
    - b. Thinset Mortar: Standard dry-set or Modified dry-set.
    - c. Grout: Water-cleanable epoxy grout.
  - 2. Ceramic Tile Installation: TCNA F125 Full except where partial coverage is indicated [TCNA F125-Partial]; thinset mortar on crack isolation membrane.
    - a. Ceramic Tile Type: Porcelain
    - b. Thinset Mortar: Modified dry-set or Medium-bed, modified dry-set.
  - 3. Grout: Standard sanded cement, Standard unsanded cement, High-performance sanded or Water-cleanable epoxy grout, Ceramic Tile Installation TCNA F131; water-cleanable, tile-setting epoxy; epoxy grout.
    - a. Ceramic Tile Type: Porcelain.
    - b. Grout: Water-cleanable epoxy grout.
- B. Interior Wall Installations, Wood or Metal Studs or Furring:
  - 1. Ceramic Tile Installation: TCNA W221 and ANSI A108.1C; cement mortar bed (thickset) over waterproof membrane on solid backing.
    - a. Ceramic Tile Type: Glazed Porcelain or Ceramic.
    - b. Bond Coat for Wet-Set Method: Standard dry-set, Modified dry-set mortar.
    - c. Bond Coat for Cured-Bed Method: Standard dry-set, Modified dry-set] mortar.
    - d. Grout: Sand-portland cement, Standard sanded cement, High-performance sanded, or Water-cleanable epoxy grout.
  - 2. Ceramic Tile Installation: TCNA W222 and ANSI A108.1C; one-coat cement mortar bed (thickset) over waterproof membrane on solid backing.
    - a. Ceramic Tile Type: Glazed Porcelain or Ceramic...

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- b. Bond Coat for Wet-Set Method: Standard dry-set, or Modified dry-set mortar.
- c. Bond Coat for Cured-Bed Method: Standard dry-set, or Modified dry-set mortar.
- d. Grout: Sand-portland cement, Standard sanded cement, High-performance sanded, or Water-cleanable epoxy grout.
- 3. Ceramic Tile Installation : TCNA W244C or TCNA W244F; thinset mortar on cementitious backer units or fiber-cement backer board.
  - a. Ceramic Tile Type: Glazed Porcelain or Ceramic.
  - b. Thinset Mortar: Standard dry-set or Modified dry-set mortar.
  - c. Grout: Sand-portland cement, Standard sanded cement, High-performance sanded, or Water-cleanable epoxy grout.
- 4. Ceramic Tile Installation: TCNA W245 or TCNA W248; thinset mortar on glass-mat, water-resistant gypsum backer board.
  - a. Ceramic Tile Type: Glazed Porcelain or Ceramic..
  - b. Thinset Mortar: Standard dry-set,or Modified dry-set mortar.
  - c. Grout: Sand-portland cement, Standard sanded cement, High-performance sanded, or Water-cleanable epoxy] grout.

# **END OF SECTION 093013**

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PROPOSED RENOVATION & ADDITION COLUMBIA COUNTY JUSTICE CENTER EVANS, GEORGIA

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# **SECTION 096623**

# **TERRAZZO FLOORING**

# **PART 1 – GENERAL**

- A. MARBLE Terrazzo tile and accessories
- B. Glass Terrazzo tile and accessories
- C. Related work specified elsewhere
  - 1. Section 03300: Cast in place concrete
  - 2. Section 06100: Rough Carpentry

# II. Quality Criteria

A. Provide Standard: The material is to comply with the following standards and provide the minimum results shown:

1.	Abrasive Resistance	ASTM D-04060	35 mg
2.	Impact Resistance	MIL-D3134F	Withstands 16 ft/lbs without cracking,
			delamination or chipping
3.	Slip Resistance	ASTMD-2047	Wet:0.62
			Dry: 0.85
4.	Compressive Strength	ASTM C-579, 7 days	10,000 psi minimum
5.	Tensile Strength	ASTM C-307	2,500 psi
6.	Flame Spread	ASTM D-84	20
7.	Smoke Generation	ASTM E-622	
8.	Flaming		124
9.	Non-Flaming		60
10	. Fire Rating		Class A
11	. Water Absorption	ASTM D-570	0.01%
12	. Freeze Thaw	ASTM 6-1026	No effect
13	. StainResistance	ASTMD-2299	Completely removed after 24 hours
14	. Toxicity Material Safety Data		Negative
15	. Critical Radiant Flux	ASTM D-648	I.0 (Class I)
16	. Fungus & Bacteria Growth	MIL-F-52505	Will not support growth of fungus or bacteria
			when subject to mildew and bacteria tests
17	. Indentation	MIL-D3134f	Withstands 2,000 lbs/sq. in. for 30
			minutes without indentation
18	. Flexural Strength	ASTM C-580	3,000 psi
19	. Thermal Coefficient of Expansion	ASTM C-580	21×10 <sup>-6</sup>

B. Application Setting Materials and all accessory items are to be material recommended by the manufacturer of Nurazzo.

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#### **III.Submittals**

- A. Product Date: Submit (4) copies of manufacturer's product literature including technical information and installation instruction for each type of Floor and Wall tile, accessory, and adhesive material.
  - B. Shop Drawings: Submit 4 blue prints of Nurazzo work. Shop Drawings are to be drawn to  $\frac{1}{2}$ " = 1'-0" scale or larger and are to show plans for layout work and details of joints and edge conditions. C.
- Samples: Submit 3 samples of each pattern and color of Nurazzo required, not less than 3' x 3'. Samples are to be review for color, pattern and texture only.
- D. Maintenance Instructions: Submit 3 copies of written instructions for recommended periodic maintenance of Nurazzo tiles.

# IV. Product Delivery, Storage and Handling

- A. Material is to be delivered to the job site in manufacturer's original unopened containers. B. Store materials inside, undercover and protected from moisture and edge damage.
- C. Handle all materials carefully to prevent damage to edges and corners.

#### V. Job Conditions

A. Interior – Do not begin Nurazzo installation until the building has been held to a minimum temperature of 70°F for 5 full days. Nurazzo tile must be removed from original packaging and stacked in area it is to be installed. Tiles must be allowed to acclimate for 72 hours prior to installation. A minimum of 70°F must be maintained throughout the installation period and for 2 days after the installation is complete.

# **VI.Warranty**

A. Nurazzo is backed by a 20 year limited warranty against wear-through. The limited warranty applies to Nurazzo that has been installed using Nurazzo manufacturer's approved support products and in strict conformity with Nurazzo Installation and Maintenance instructions. In the event of any such failure of wear-through within the warranty period, Nurazzo LLC's sole obligation is, at its expense, to furnish like or similar Nurazzo tile for the replacement of the individual tiles. The user, at his expense, will perform the replacement. Nurazzo LLC shall not be liable under any circumstances for incidental consequential damages of any kind whatsoever such as labor, inconvenience or injury. Nurazzo provides no warrant of merchantability or fitness for a particular purpose: user shall determine suitability of this product for its intended use and assumes all risks of its use and handling.

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# **PART 2 - PRODUCTS**

# I. Nurazzo Floor Tile

- A. Raw Material: Nurazzo Tile to be manufactured of natural stone, recycled glass, and an epoxy resin binding matrix.
- B. Size: Nurazzo Tile to be 1/4" thickness and 24" x 24" tile.
- C. Color: Custom Color "DC943". Color to be approved by Interior Designer.d. Nurazzo, P.O. Box 1208, Dalton, GA 30722, Phone: (706) 275-8000, website: nurazzo.com
- D. Finish: Honed, use NuSeal after floor installation.

#### **II. Thinset Method**

- A. Laticrete 254 Platinum as manufactured by Laticrete International (1 Laticrete Park North Bethany, CT 06524-3423, Phone: 203-393-0010 ext. 235 or 800-243-4788 ext.235).
- B. MAPEI: Thin-Bed Mortar: MAPEI, Ultraflex ™3, MAPEI, Kerabond Keralastic ™System. Rapid Setting; Granirapid System™ manufactured by MAPEI Corporation, 1144 East Newport Center Drive, Deerfield Beach, FL, 33442 (phone: 1-888-876-2734; fax 954-246-8805; email, www.mapei.com).
- C. TEC® Super Flex™orTEC Isolight™ Mortar as manufactured by H.B. Fuller Construction Products Inc. (1105 S. Frontenac Road, Aurora, IL 60504, Phone: 1-800-552-6225)

#### **III.Glue Down Method**

A. Nurazzo 2100 Adhesive as manufactured by Nurazzo 212 Boring Drive, Dalton, Georgia 30721; Phone:1-888-687-2996;www.nurazzo.com)

#### **IV. Joint Lines**

A. Nurazzo tiles are to be installed with a grout joint, grout should be an epoxy grout and joint lines can be as small as 1/8" but no greater than 1/4".

# V. Expansion Joint Control Strips

A. Materials to be type suitable for the joint size and recommended by specifier or approved by the Nurazzo Tile manufacturer.

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# **PART 3 - EXECUTION**

# I. General Preparation

A. Building temperature of 70°F to have been maintained for 5 days prior to the start of installation and all material is to have been acclimatized in the building for 72 hours.

# **II.** Substrate Preparation

#### A. Concrete

- 1. The concrete or concrete block substrate will have been placed and finished for a minimum of 28 days prior to beginning installation and must have a smooth, hard finish.
- 2. Where concrete does not have a smooth finish Lati-level 88 as manufactured by Laticrete International (1 Laticrete Park North Bethany, CT 06524-3423, Phone: 203-393-0010 ext 235 or 800-243-4788 ext 235) must be installable to bring the concrete to a smooth even finish.
- 3. All oils, waxes, curing compounds or other materials on the surface of the concrete that will inhibit adhesion are to be removed. Surface to be completely dry prior to installation of Nurazzo.

#### B. Plywood

- 1. Plywood sub floor to be composed of two layer of 5/8" exterior grade plywood. Plywood to be screwed to framing on 16" centers.
- 2. Surface to be completely clean and dry prior to installation of Nurazzo.
- 3. Entire surface is to be examined for soft spots. No flexing or deflection in the surface. Replace soft substrate or add additional bracing to eliminate defections.

## III. Installation: General

- A. All installation to be in strict accordance with manufacturer's printed installation instructions.
- B. All cutting of Nurazzo tile to be accomplished with an abrasive or diamond blade in a rotary wet saw.
- C. All hole or circles to be cut using carbide tipped drill or diamond hole saw.
- D. Control Joints to be installed when crossing expansion joints in substrate.

#### IV. Installation: Mortar

A. All installation to be in strict accordance with the manufacturer's printed installation instructions. B. Do not allow grout or mortar to get on the front side of the Nurazzo tile.

# V. Installation

A. All installation to be in strict accordance with manufacturer's printed instructions.

# VI. Clean Up and Protection

- A. Remove all excess and scrap materials from the job immediately after installation is complete.
- B. Provide Kraft paper covering over traffic areas until completion of project and floor is sealed.
- C. Remove any excess adhesive or grout from the Nurazzo immediately after it appears on the surface.

# VII. Finishing

A. Finish - All application tools must be clean and should not have been used for any other product. Prepare the floor first by stripping and neutralizing the surface making sure the floor is clean and dry before application. For best results, use a white, nylon finish mop to apply the product. Apply a thin coat of NuSeal, allowing 30-45 minutes to dry before applying additional coats. Do not recoat until previous coat is completely dry. 3 to 6 coats of NuSeal are required. Once finished has dried, buff floor with a high speed (1500 rpm) buffer. Buffing will produce a beautiful shine.

**END OF SECTION 096623** 

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