

NOTE: EXISTING ROOF INFORMATION TAKEN FROM RE-ROOFING DRAWINGS DATED MAY 1998 REF. 07 5130 "BUILT UP ROOF REPAIR" FOR OPENING MODIFICATIONS, ROOFING SYSTEM, AND FLASHINGS.

INTAKE HOUSING

SEAL TAPE NORTON 1 1/2" WIDE.

3/4" PERLITE "FEGCO"

14" PRE-MANUFACTURED CURB, BY "CUSTOM CURB" OR APPROVED EQUAL

TREATED WOOD BLOCKING W/ (2) 1/2" THRU BOLTS TO DECK, COUNTERSUNK

EXISTING CONCRETE MODIFIED FOR NEW OPENING REQUIREMENTS.

EXISTING METAL DECK TO BE MODIFIED FOR NEW OPENING REQUIREMENTS.

NEW STEEL FRAME SEE PLAN 20/A210.

3"  
RECEIVER  
16 OZ COPPER

2"  
BASE FLASHING

5"  
CNTR. FLASHING  
16 OZ COPPER

EXIST. GRAVEL GUARD.

GRAVEL SURFACE.

4" FIBROUS CANT RIGID INSULATION

1'-6" MIN. ALL SIDES

STRIP IN NEW BASE FLASHING AND REPLACE INSULATION AND BLOCKING AROUND OPENING



20

ROOF FLASHING @ AIR INTAKE  
3"=1'-0"  
RE: 1A-201

BAILEY ARCHITECTS

55 Waugh Drive, Suite 450  
PH: 713.524.2155

Houston, Texas 77007  
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**RESTORATION OF THE  
JEFFERSON Co. COURTHOUSE**  
PHASE 5 - MECHANICAL AND SAFETY UPGRADES

BEAUMONT, TX 77701

ADD#1-1

SCALE: 3"=1'-0"  
RE: 20A-210  
PROJ.NO: 13018  
ISSUE: 09-11-14

**SECTION 004990 - CONTRACTOR EVALUATION**

Date:

Contractor:

Conditions of Evaluation:

Based on the information provided by the Proposer in the Bid, the Contractor and Subcontractor Qualification Statements, and interviews with referenced clients and architects, the Owner shall use the following criteria to evaluate the proposals submitted as responsive and qualified. 100 Points is the maximum score. Bids will be awarded to the **LOWEST and BEST QUALIFIED BIDDER.**

- a. The experience of the Proposer in providing general contracting services for restoration preservation and adaptive use projects over the past ten (10) years.

**25 points maximum, weighted.**

- b. The experience of the Proposer's project team on similar projects.
1. Qualifications of the proposed project manager
  2. Qualifications of the proposed superintendent.

**15 points maximum, weighted.**

- c. The experience and reputation of proposed prime subcontractors on similar projects.

1. Prime subcontractors and suppliers for this project:
  - Demolition
  - Mechanical
  - Fire Alarm
  - Sprinkler
  - Masonry
  - Masonry Rehabilitation
  - Architectural Woodwork and wood rehabilitation

**15 points maximum, weighted.**

- d. The reputation of the Proposer and of the Proposer's services, based on interviews with past clients and architects.

1. Is the Proposer considered a "team player" or was the relationship "adversarial"?
2. Will past clients and architects work with Proposer again on future projects?
3. Does Proposer maintain project schedule and complete the project on time?
4. Does the Proposer pay subcontractors and suppliers on time?
5. Is the Proposer fair to the client in pricing change proposals?
6. Does the Proposer maintain good records during construction?

**15 points maximum, weighted**

e. The Proposer's performance during the final completion and closeout phase of the work.

1. Punch lists completed on schedule
2. Quality of punch list work equal to original work
3. Closeout documents provided as specified?
4. Satisfactory cleaning, equipment startup, Owner personnel training?
5. Accurate record documents provided as specified on time?

**15 points maximum, weighted.**

f. The Proposer's performance on warranty requests.

1. Responsiveness to warranty requests.
2. Quality of warranty work equal to original work: done by same subcontractors?
3. End-of-warranty inspections completed and done in a satisfactory manner?

**15 points maximum, weighted**



## SECTION 23 05 93 - SYSTEM TESTING, ADJUSTING AND BALANCING

### PART 1 GENERAL

1.1 The following sections are to be included as if written herein:

- A. 23 0000 -- Basic Mechanical Requirements
- B. 23 0529 -- Sleeves, Flashings, Supports and Anchors
- C. 23 0553 -- Mechanical Identification

### 1.2 SUMMARY

- A. Testing, adjusting and balancing (TAB) of the air conditioning systems and related ancillary equipment will be performed by an impartial technically qualified TAB firm selected and employed by the General Contractor, separate and apart from the Mechanical Contractor's contract.
- B. The firm shall be capable of performing the services specified at the location of the facility described within the time specified, of preparing and submitting the detailed report of the actual field work performed, and following up the basic work as may be required.

### 1.3 QUALIFICATIONS

- A. The Firm shall be one which is organized to provide professional services of this specified type in the State of Texas and as a minimum shall have one (1) professional engineer licensed in the State of Texas, with current registration, to perform such professional services. This engineer shall be personally responsible for developing the job site data as required in the test procedures outlined in these Specifications.
- B. The Firm shall have operated a minimum of five (5) years under its current Firm name, and shall be in good standing with the State of Texas, Franchise Tax Board. The firm shall submit their full incorporated name, Charter Number and Taxpayer's I.D. Number for proper verification of the firm's status.

~~C. The Firm shall be capable of providing a performance bond, by a bonding company licensed to do business in the State of Texas, if determined by the Owner that such a bond is required. The amount of the bond which may be required shall be equal to the cost of the proposal submitted, or in the case of more than one proposal, the sum of all such proposals and any awarded work in progress.~~

~~D.C.~~ All personnel used on the job site shall be either professional engineers or engineering technicians, who shall have been permanent, full time employees of the firm for a minimum of six (6) months prior to the start of work for this specific project.

~~E.D.~~ The TAB firm shall submit biographical data on the individual proposed who will directly supervise the TAB work, as well as other personnel scheduled to perform the technical work under the contract. It shall also submit a background record of at least five years of specialized experience in the field of air hydronic system balancing, and shall possess properly calibrated instrumentation. The supervisory personnel for the TAB firm shall be registered engineers in the mechanical field and all of the employees used in the TAB firm shall be permanent, full-time employees of the firm.

### 1.4 REFERENCES

- A. AABC - National Standards for Testing and Balancing Heating, Ventilating, and Air Conditioning Systems, Latest Edition.

- B. ASHRAE - 2007 HVAC Applications Chapter 37: Testing, Adjusting and Balancing.
- C. ANSI/ASHRAE Standard 111-1988 - Practices for Measurement, Testing, Adjusting and Balancing of Buildings, Heating, Ventilation, Air Conditioning and Refrigeration Systems.

#### 1.5 DOCUMENTS

- A. The TAB firm shall, as a requirement of the TAB contract, arrange with the Architect to compile one set of mechanical specifications, all pertinent change orders, and the following:
  - 1. One complete set of Drawings less the structural sheets.
  - 2. One set of mechanical floor plans.
- B. Approved submittal data on equipment installed, and related changes as required to accomplish the test procedures outlined in Paragraphs 1.6 through 1.10 of this Specification will be available through the Construction Inspector.

#### 1.6 RESPONSIBILITIES OF THE TAB FIRM

- A. The TAB personnel shall check, adjust, and balance the components of the air conditioning system which will result in optimal noise, temperature, and airflow conditions in the conditioned spaces of the building while the equipment of the system is operating economically. This is intended to be accomplished after the system components are installed and operating as provided for in the contract documents. It is the responsibility of the Mechanical Contractor to place the equipment into service. Variable air volume systems shall be balanced in accordance with AABC Latest Edition.
- B. Liaison and Early Inspection:
  - 1. The TAB firm personnel on the job shall act as liaison between the Owner, Architect and Contractor. The following reviews (observations) and tests shall be performed by the TAB Agency:
    - a. During the design stage, before the documents are finalized, review the mechanical drawings and specifications for balanceability and provide commentary.
    - b. During construction, review all HVAC submittals such as control diagrams, air handling devices, etc., that pertain to commissioning work and balanceability.
    - c. Allow for a fixed number of trips to the project site, over and above those required for testing and balancing for inspection of installation of the mechanical piping systems, sheet metal work, temperature controls and other component parts of the heating, air conditioning and ventilating systems during the construction stage. These inspections shall be made prior to and/or at the above ceiling inspection. Commentary will be provided to the County PM of each observation.
- C. During the balancing process, as abnormalities and malfunctions of equipment or components are discovered by the TAB personnel, the Construction Inspector shall be advised in writing so that the condition can be corrected by the Mechanical Contractor. The written document need not be formal, but must be understandable and legible. Data from malfunctioning equipment shall not be recorded in the final TAB report. The TAB firm shall not instruct or direct the Contractor in any of the work, but will make such reports as are necessary to the Owner.

#### 1.7 FINAL AIR BALANCE

- A. General: When systems are complete and ready for operation, the TAB Consultant will perform a final air balance for all air systems and record the results. The outside, supply, exhaust and return air volume for each air handling unit, supply fan and exhaust fan and the supply, exhaust

or return air volume for each distribution device shall be adjusted to within  $\pm 5\%$  of the value shown on the drawings. Air handling unit and fan volumes shall be adjusted by changing fan speed and adjusting volume dampers associated with the unit. Air distribution device volume shall be adjusted using the spin-in tap damper for flexible duct connected devices and the device OBD for duct connected devices. Air distribution devices shall be balanced with air patterns as specified. Duct volume dampers shall be adjusted to provide air volume to branch ducts where such dampers are shown. The general scope of balancing by the TAB Consultant will include, but is not limited to, the following:

1. Filters: Check air filters and filter media and balance only system with essentially clean filters and filter media. The Division 23 Contractor shall install new filters and filter media prior to the final air balance.
2. Blower Speed: Measure RPM at each fan or blower to design requirements. Where a speed adjustment is required, the Division 23 Contractor shall make any required changes.
3. Ampere Readings: Measure and record full load amperes for motors.
4. Static Pressure: Static pressure gains or losses shall be measured across each supply fan, cooling coil, heating coil, return air fan, air handling unit filter and exhaust fan. These readings shall be measured and recorded for this report at the furthest air device or terminal unit from the air handler supplying that device. Static pressure readings shall also be provided for systems which do not perform as designed.
5. Equipment Air Flow: Adjust and record exhaust, return, outside and supply air CFM (s) and temperatures, as applicable, at each fan, blower and coil.
6. Coil Temperatures: Set controls for full cooling and for full heating loads. Read and record entering and leaving dry bulb and wet bulb temperatures (cooling only) at each cooling coil, heating coil and HVAC terminal unit. At the time of reading record water flow and entering and leaving water temperatures (In variable flow systems adjust the water flow to design for all the above readings).
7. Zone Air Flow: Adjust each HVAC terminal unit and air handling unit for design CFM.
8. Outlet Air Flow: Adjust each exhaust inlet and supply diffuser, register and grille to within  $\pm 5\%$  of design air CFM. Include all terminal points of air supply and all points of exhaust. Note: For Labs and Rooms that are negative exhaust air flow shall be set to design to  $+10\%$  and supply to design to  $-5\%$ . Positive areas will have opposite tolerances.
9. Pitot Tube Traverses: For use in future troubleshooting by maintenance personnel, all exhaust ducts, main supply ducts and return ducts shall have air velocity and volume measured and recorded by the traverse method. Locations of these traverse test stations shall be described on the sheet containing the data.
10. Maximum and minimum air flow on terminal boxes.

## 1.8 FINAL CHILLED AND HEATING HOT WATER BALANCE

- A. General: When systems are completed and ready for operation, the TAB Consultant will perform a final water balance for each chilled and hot water system. The general scope of balancing by the TAB Consultant will include, but not be limited to, the following:
  1. Adjusted System Tests: Adjust balancing valves at each coil and heat exchanger for design flow,  $\pm 5\%$ . Adjust balancing valves at pumps to obtain design water flow. Record pressure

rise across pumps and GPM flow from pump curve. Permanently mark the balanced position for each valve (Note: If discharge valves on the pumps are used for balancing record the head being restricted by the valves).

2. Temperature Readings: Read and record entering and leaving water temperature at each water coil, converter and heat exchanger. Adjust as necessary to secure design and conditions. Provide final readings at all thermometer well locations.
3. Pressure Readings: Water pressure shall be recorded at all gauge connections. Pressure readings at coils and pumps shall be related to coil and pump curves in terms of GPM flow through flow measuring status, if provided and installed, at each air handler. The flow of water through all water coils shall be adjusted by manipulating valves until the rated pressure drops across each coil is obtained and total water flow is verified by flow measuring status. For coils equipped with 3 way valves, the rated pressure drop shall first be adjusted through the coils. The bypass valve shall then be adjusted on each coil until an equal pressure drop between supply and return connections is the same as with the flow through the coil.
4. Ampere Readings: Reading and record full load amperes for each pump motor.

#### 1.9 SOUND VIBRATION AND ALIGNMENT

- A. Sound: Read and record sound levels at up to 15 locations in the building designated by the Engineer. All measurements shall be made using an Octave Band Analyzer. All tests shall be conducted when the building is quiet in the presence of the Engineer, if he so desires.
- B. Vibration: Read and record vibration for all water circulating pumps, air handling units, and fans which have motors larger than 10 HP. Include equipment vibration, bearing housing vibration, foundation vibration, building structure vibration, and other tests as directed by the Engineer. Readings will be made using portable IRD (or approved equal) equipment capable of filtering out various unwanted frequencies and standard reporting forms. Maximum vibration at any point listed above, or specified, shall not exceed 1 mil on fans and 1 mil on pumps unless otherwise specified. Equipment manufacturers shall rectify all systems exceeding vibration tolerances.

#### 1.10 TESTING OF TEMPERATURE CONTROL SYSTEMS

- A. In the process of performing the TAB work, the TAB Agency shall:
  1. Work with the temperature control contractor to ensure the most effective total system operation within the design limitations, and to obtain mutual understanding of intended control performance.
  2. Verify that all control devices are properly connected.
  3. Verify that all dampers, valves and other controlled devices are operated by the intended controller.
  4. Verify that all dampers and valves are in the position indicated by the controller (open, closed or modulating).
  5. Verify the integrity of valves and dampers in terms of tightness of close-off and full-open positions. This includes dampers in terminal boxes and fire/smoke dampers.
  6. Observe that all valves are properly installed in the piping system in relation to direction of flow and location.
  7. Observe the calibration of all controllers.

8. Verify the proper application of all normally opened and normally closed valves.
  9. Observe the locations of all thermostats and humidistats for potential erratic operation from outside influences such as sunlight, drafts or cold walls.
  10. Observe the locations of all sensors to determine whether their position will allow them to sense only the intended temperatures or pressures of the media. Control Contractor will relocate as deemed necessary by the TAB Agency.
  11. Verify that the sequence of operation for any control mode is in accordance with approved shop drawings and specifications. Verify that no simultaneous heating and cooling occurs.
  12. Verify that all controller setpoints meet the design intent.
  13. Check all dampers for free travel.
  14. Verify the operation of all interlock systems.
  15. Perform variable volume system verification to assure the system and its components track with changes from full flow to minimum flow.
- B. A systematic listing of the above testing and verification shall be included in the final TAB report.

#### 1.11 REPORTS

- A. The activities described in this section shall culminate in a report to be provided in quadruplicate (4) individually bound to the County Project Manager. Neatly type and arrange data. Include with the data the date tested, personnel present, weather conditions, nameplate record of test instrument and list all measurements taken after all corrections are made to the system. Record all failures and corrective action taken to remedy incorrect situation. The intent of the final report is to provide a reference of actual operating conditions for the Owner's operations personnel.
- B. All measurements and recorded readings (of air, water, electricity, etc.) that appear in the reports must have been made onsite by the permanently employed technicians or engineers of the firm.
- C. At the option of the Construction Inspector, all data sheets tabulated each day by TAB personnel shall be submitted for initial by the Construction Inspector. Those work sheets so initialed, or copies thereof, shall be presented as a supplement to the final TAB report.
- D. Submit reports on forms approved by the Owner & Engineer which will include the following information as a minimum:
  1. Title Page
    - a. Company Name
    - b. Company Address
    - c. Company telephone number
    - d. Project name
    - e. Project location
    - f. Project Manager
    - g. Project Engineer
    - h. Project Contractor



- i. Project Identification Number
2. Instrument List
  - a. Instrument
  - b. Manufacturer
  - c. Model
  - d. Serial Number
  - e. Range
  - f. Calibration date
  - g. What test instrument was used for
3. Fan Data (Supply and Exhaust)
  - a. Location
  - b. Manufacturer
  - c. Model
  - d. Air flow, specified and actual
  - e. Total static pressure (total external), specified and actual
  - f. Inlet pressure
  - g. Discharge pressure
  - h. Fan RPM
4. Return Air/Outside Air Data (If fans are used, same data as for 3 above)
  - a. Identification/location
  - b. Design return air flow
  - c. Actual return air flow
  - d. Design outside air flow
  - e. Return air temperature
  - f. Outside air temperature
  - g. Required mixed air temperature
  - h. Actual mixed air temperature
5. Electric Motors
  - a. Manufacturer
  - b. HP/BHP
  - c. Phase, voltage, amperage, nameplate, actual
  - d. RPM
  - e. Service factor
  - f. Starter size, heater elements, rating
6. V-Belt Drive

- a. Identification/location
  - b. Required driven RPM
  - c. Driven sheave, diameter and RPM
  - d. Belt, size and quantity
  - e. Motor sheave, diameter and RPM
  - f. Center-to-center distance, maximum, minimum and actual
7. Duct Traverse
- a. System zone/branch
  - b. Duct size
  - c. Area
  - d. Design velocity
  - e. Design air flow
  - f. Test velocity
  - g. Test air flow
  - h. Duct static pressure
  - i. Air temperature
  - j. Air correction factor
8. Air Monitoring Station Data
- a. Identification/location
  - b. System
  - c. Size
  - d. Area
  - e. Design velocity
  - f. Design air flow
  - g. Test velocity
  - h. Test air flow
9. Air Distribution Test Sheet
- a. Air terminal number
  - b. Room number/location
  - c. Terminal type
  - d. Terminal size
  - e. Area factor
  - f. Design velocity
  - g. Design air flow

- h. Test (final) velocity
  - i. Test (final) air flow
10. Pump Data
- a. Identification/number
  - b. Manufacturer
  - c. Size/model
  - d. Impeller
  - e. Service
  - f. Design flow rate, pressure drop, BHP
  - g. Actual flow rate, pressure drop, BHP
  - h. Discharge pressure
  - i. Suction pressure
  - j. Total operating head pressure
  - k. Shut off, discharge and suction pressure
  - l. Shut off, total head pressure
  - m. Pressure differential settings
11. Cooling Coil Data
- a. Identification/number
  - b. Location
  - c. Service
  - d. Manufacturer
  - e. Entering air DB temperature, design and actual
  - f. Entering air WB temperature, design and actual
  - g. Leaving air DB temperature, design and actual
  - h. Leaving air WB temperature, design and actual
  - i. Water pressure flow, design and actual
  - j. Water pressure drop, design and actual
  - k. Entering water temperature, design and actual
  - l. Leaving water temperature, design and actual
  - m. Air pressure drop, design and actual
12. Heating Coil Data
- a. Identification/number
  - b. Location
  - c. Service
  - d. Manufacturer

- e. Air flow, design and actual
  - f. Water flow, design and actual
  - g. Water pressure drop, design and actual
  - h. Entering water temperature, design and actual
  - i. Leaving water temperature, design and actual
  - j. Entering air temperature, design and actual
  - k. Leaving air temperature, design and actual
  - l. Air pressure drop, design and actual
13. Sound Level Report
- a. Location (Location established by the design engineer)
  - b. NC curve for eight (8) bands - equipment off
  - c. NC curve for eight (8) bands - equipment on
14. Vibration Test on equipment having 10 HP motors or above
15. Location of points:
- a. Fan bearing, drive end
  - b. Fan bearing, opposite end
  - c. Motor bearing, center (if applicable)
  - d. Motor bearing, drive end
  - e. Motor bearing, opposite end
  - f. Casing (bottom or top)
  - g. Casing (side)
  - h. Duct after flexible connection (discharge)
  - i. Duct after flexible connection (suction)
16. Test readings:
- a. Horizontal, velocity and displacement
  - b. Vertical, velocity and displacement
  - c. Axial, velocity and displacement
17. Normally acceptable readings, velocity and acceleration
18. Unusual conditions at time of test
19. Vibration source (if non-complying)
20. Control verification indicating date performed and any abnormalities identified.
21. Point Location/Description
22. EMS Readout (Setpoint and Actual)

**SYSTEM TESTING,  
ADJUSTING & BALANCING**  
23 05 29-10

**Jefferson CCH PH5 Mechanical and Safety Upgrades  
Beaumont, Texas**  
Project No.13018

- 23. Actual Readout
- 24. Interlocks
- 25. Safeties
- 26. VSD Normal Operation
- 27. VSD Bypass Operation
- 28. Alarms
- 29. Sequences of Operation

End of Section 23 0593

Architect: Bailey Architects  
55 Waugh Drive, Suite 450  
Houston, TX 77007

Owner: Jefferson County  
1149 Pearl St.  
Beaumont, Texas 77701

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The following additions, deletions and revisions take precedence over referenced portions of the Project Manual and Drawings of the **Issue for Bid** dated **August 8, 2014**, for the above-named project and, in executing a Contract, shall become a part thereof.

Where any original item is amended, voided or superseded hereby, the provisions of such items not so specifically amended, voided or superseded shall remain in effect.

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### **GENERAL ITEMS**

1. Due to the malfunction of the fire alarm system in the Jail, which creates an emergency condition and the need to proceed quickly with the replacement of the systems, the entire scope of fire alarm replacement and repair work in the Jail building (demolition, fire alarm, cutting / patching, repairs, etc.) shall be deleted from the scope of this project. Drawings E-401, E-402, E-402M, E-403, E-403M, and E-404, as well as all references to Jail fire alarm scope on any other drawing sheets and in any sections of the Specifications shall be deleted.

#### Special Note to Bidders;

A new "Notifier" fire alarm system will be installed in the Jail as a separate contract. The County would prefer for the new fire alarm systems installed in the Annex and historic Courthouse be fully compatible, and provide full communication with the system installed in the Jail in order to avoid any difficulties presented by incompatible systems. The County will evaluate documentation other fire alarm manufacturers and products for consideration of "approved equals".

2. City of Beaumont building permit will be required. Contractor is responsible for securing all permits and necessary inspections.
3. Refer to drawing 2A-001 for proposed contractor staging area and entrance. No unused space is available in the courthouse; space within the construction area may be used—at the contractor's option—to store materials for a short term. All existing finishes shall be protected from damage. Any damage to existing finishes will be repaired at Contractor's expense, and as approved by the Architect and the THC.
4. Contractors shall use the Bid Bond form provided in the Specifications.
5. The insurance amounts listed for General Liability and Umbrella Liability (SECTION 001100 – Jefferson County Bid Documents, Page 12 of 16, item 7) are correct, and must be met by the General Contractors. The County does not determine the insurance requirements for the sub-contractors.



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6. Food and snacks are not allowed in work areas. The Contractor may designate one room within the work area as the “worker’s lunch room”, which shall be cleaned daily. Additionally, the courthouse complex has picnic benches, outdoor seating areas, and a café that are open to the public.
7. Cell phones are permitted in the Courthouse; however, with the exception of field supervision personnel and foremen, workers shall not be permitted to use cell phones during work hours.
8. The County will hold a 5% of contract amount as retainage.
9. The Schedule of Values shall be detailed and separated into parts to be reflective of the two enumerated phases of work within a single pay application for the total contract amount. After award of contract, the Courtroom paneling restoration work will be allocated into either phase one or phase two, based on mutual agreement between the Contractor and the County.
10. The project has no requirements for certified payrolls or Davis-Bacon wage rates.
11. Some arrangements can be made with the County for special after-hours work times, including work until 11pm for special areas like the operational Courtrooms which may present scheduling challenges. Special schedule arrangements will be made between the County and the selected contractor.
12. Replacement versus reinstallation of existing ceilings: refer to Specification 011000 Summary, Section 1.4E, Part 1, Item 1.4.E for additional information on optional replacement.
13. Clarification of plaster repairs: key note #2 on sheet A-021 is not a general note; specific areas are noted of damaged plaster to be removed. The extent of the damaged plaster is shown with a dashed line along the north and east walls, and shall be considered approx. 40” high. Refer to 1&15A-201 and 1A-310 for additional information.
14. Existing alarm to stay in operation until new is fully operational. This may imply, for example, two fire pulls close to each other: the inactive fire pull shall be covered to avoid confusion. Where new devices are to be installed in the same locations of existing devices, all rough-in and wire installation and programming of system shall be performed with sufficient time so that the new devices may be installed during the changeover from the old fire alarm system to the new fire alarm system.
15. The Contractor will not be responsible for maintaining the existing alarm but will be responsible for correcting any damage to the existing system as a result of his work.
16. The fire alarm system shall communicate with the remote 24-hour monitoring station over standard telephone lines. Re: Section 283100.
17. Clarification: All points from the air sampling-type detection systems shall be communicated to and reported by the fire alarm control panel. Re: Section 283146.
18. The main BAS server, existing building and application controllers for equipment that is not being removed that may serve other floors, the plant or the other buildings will remain. Refer to section 230923.



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19. Controls contractor shall walk the building with Jefferson County Personnel to verify locations of main servers, and any other backbone items (operator workstations, building controllers, etc.) that may be reused.
20. All new equipment shall have proper clearances per the manufacturer's recommendations. New equipment shall also ensure proper clearances to existing items such as NEC clearances for panels. Tentative existing equipment clearances with existing items do not need to be revised, but must maintain clearances with any new items.
21. Refer to revised specification section 23 05 93 for revised bonding requirements.
22. Clarification to Sheet M-200, note C: The mechanical equipment shall be removed and discarded. County has right of first refusal.
23. The following documents will be posted on an FTP site for Bidder's access and download. Contact the office of Dohn LaBiche for FTP access, phone 409.860.0197
  - a. The County's previous Asbestos Survey Report (January 2009)
  - b. Scanned images of the historic Courthouse original construction plans
  - c. A copy of the floor plans of the Historic Courthouse Master Plan.
24. A second (optional) site visit has been scheduled for **October 2, 2014 at 9am**, meeting in the Commissioners Courtroom. Additional visits may be scheduled, subject to Architect's availability. Contact the office of Dohn LaBiche for details. Phone 409-860-0197.

## **PROJECT MANUAL**

### **SECTION 001100 – Jefferson County Bid Documents**

Page 10 of 16, item 1:

Revise "Bidders shall submit one (1) original and two (2) copies of the bid" with  
"Bidders shall submit one (1) original and three (3) copies of the bid"

### **SECTION 002100**

Part 1.6, item A:

Substitute entire paragraph with "Requests for Substitution will be considered after Notice of Award. Refer to Section 01 2513"

Part 1.8, item D:

Replace "original plus 2 copies" with "original plus 3 copies"

### **SECTION 004100 – Supplements to Bid Form**

Page 1, Construction Cost Breakout, Base Bid

Item 6, substitute "Fire Alarm for Jail Building (including cutting and patching"  
with "Not Used."

### **SECTION 004990 – Contractor Evaluation**

Substitute entire Section. (Refer to attachments)





**SECTION 005300**

Part 11.1.6.2 Insurance Coverage Required, Section C, Item 6:  
Remove “windstorm, hurricane” from the list of perils for Builder’s Risk Insurance

**SECTION 011000 Summary of Work**

Part 1, Items 1.1.A.1 and 1.1.B  
Omit “and Jail”

**SECTION 06100**

Part 1, item 1.1B  
Add item 5: treated wood curbs (roofing mechanical penetrations)

**SECTION 260002**

**Part 1, item 1.2.B Utility Charges:**  
Revise entire paragraph to read “Refer to Section 015000”

**SECTION 283100**

Part 1, item 1.4B Manufacturers:  
Remove “GE EST or Siemens” and replace with “an approved equal manufacturer”

**PROJECT DRAWINGS**

**SHEET A-001**

Remove E-401 thru E-404 (6 items) from the Index

**ELECTRICAL SHEETS**

Delete the following sheets:

E - 401, E – 402, E - 402M, E – 403, E - 403M, E - 404

**END OF MODIFICATIONS NARRATIVE**

**ATTACHMENTS**

SECTION 004990 – Contractor Evaluation – revised  
SECTION 23 0593 – Testing Adjusting and Balancing - revised  
Sketch ADD.#1-1 for additional roof repair detail



9/11/14

Architect: Bailey Architects  
55 Waugh Drive, Suite 450  
Houston, TX 77007

Owner: Jefferson County  
1149 Pearl St.  
Beaumont, Texas 77701

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The following additions, deletions and revisions take precedence over referenced portions of the Project Manual and Drawings of the **Issue for Emergency Pricing**, dated **August 5, 2014**, for the above-named project and, in executing a Contract, shall become a part thereof.

Where any original item is amended, voided or superseded hereby, the provisions of such items not so specifically amended, voided or superseded shall remain in effect.

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### GENERAL ITEMS

1. Contractor is responsible for obtaining required permits and inspections.
2. Contractor shall coordinate with the County to ensure that all requirements for all plan reviews, tests, and inspections required by the Texas Commission on Jail Standards for the new fire alarm system in the Jail are met.
3. The existing fire alarm shall remain operational at all times until the new fire alarm system is activated, all required tests are performed and passed, and the system is approved by the Fire Marshal and Texas Commission on Jail Standards. The Contractor will not be responsible for maintaining the existing alarm but will be responsible for correcting any damage to the existing system as a result of his work.
4. Keeping the existing fire alarm active until the new fire alarm is fully operational may create some locations where two devices (one active and one inactive) may be side-by-side or close to each other: the inactive device shall be covered to avoid confusion. Where new devices are to be installed in the same locations of existing devices, all rough-in and wire installation and programming of system shall be performed with sufficient time so that the new devices may be installed during the changeover from the old fire alarm system to the new fire alarm system.
5. The fire alarm system shall communicate with the remote 24-hour monitoring station over standard telephone lines. Re: Section 283100.
6. The following substrates at abandoned fire alarm device locations shall be repaired as follows:
  - a. Plaster: repair plaster and paint to match existing.
  - b. CMU: patch CMU and paint to match existing.
  - c. Suspended acoustical tile ceilings: replace tile with new tile to match existing.
  - d. Perforated metal panels – penetrations smaller than 12": weld metal box cover to panel. Epoxy coat by Contractor to match adjacent finish. Gauge of metal cover to match gauge of metal panel.
  - e. Perforated metal panels – penetrations larger than 12": replace entire panel (TrussDek, 12 gauge galvaneal, perforated, factory prime coated, and epoxy coated by Contractor to match adjacent finish). Gauge of metal cover to match gauge of metal panel.



9/11/14

- f. ALTERNATIVE REPAIR METHOD (with prior approval of the Architect) Perforated metal panels – penetrations larger than 12”— weld a metal box cover in the areas of perforated metal panels, providing additional stiffeners on back of the repair plate for added security. Gauge of metal cover to match gauge of metal panel.
    - g. Caged smoke devices: abandon cages, repair substrates as indicated above.
7. Conduit and Finishes in locations of new devices shall be treated as follows:
  - a. Plaster: trench plaster for concealed conduit application. Repair plaster, and paint to match adjacent.
  - b. CMU: surface mounted conduit, painted to match substrate (only anticipated in guard corridors).
  - c. Suspended acoustical ceilings: plenum-rated wire
  - d. Perforated metal panels: concealed conduit, surface-mounted devices with tamper proof fasteners.
  - e. Concrete deck: surface mounted conduit (only anticipated in Mechanical Room).
8. Clarification: a complete conduit system shall be provided for the fire alarm system wiring in all areas of jail except areas that currently have suspended acoustical ceilings or plaster ceilings, where the use of plenum-rated wiring is acceptable.
  - a. Contractor shall provide a deductive cost alternate to provide rigid galvanized conduit only in secured areas within reach of inmates and EMT conduit where exposed and in inaccessible areas of the jail, all other non-secure areas shall receive plenum-rated wiring.
9. Clarification to Sheet E-401: the space labeled “Print & Mug Room C108” has been revised to show 2 separate rooms. A "V" device has been included in each of the two rooms.
10. Clarifications to sheet E-402:
  - a. The areas indicated by notes 9 and 11 are to be covered by the air-sampling smoke detection system with sampling tubes in the utility chase behind the holding cells.
  - b. An audible/strobe will be required in the vestibule; strobes will be required in the offices. Smoke detection in these areas is to be via the air-sampling smoke detection system per note 10.
11. Clarifications to sheet E-404 :
  - a. The dishwasher hood does not require fan shutdown.
  - b. No devices are required in the 6 WOMAN DAY ROOM.
  - c. A strobe device is required in the Patient Ward. Smoke detection is to be via the air-sampling smoke detection system.
  - d. AHU-2 (located on the east of the matchline) serves the jail. AHU-1 serves the Annex (area A & B). Devices serving AHU-2, purge fans, and the AHU-2 room shall tie into the jail FACP.
12. Refer to updated electrical drawing sheets for locations of controls for purge fans and dampers.
13. The room indicated to be MULTI-PURPOSE has been renovated into several offices and the Warden's office. Refer to revised sheet E-402.



14. Clarification: All points from the air sampling-type detection systems shall be communicated to and reported by the fire alarm control panel. Re: Section 283146.
15. Provide TAB for the existing smoke control/purge equipment to ensure the original airflows are being achieved. Refer to existing documents for original airflow volumes. Any items that are not meeting the original documents shall be noted to the Engineer and the County for remediation.
16. Scanned images of the original floor plans of the Jail will be posted for reference and download on an FTP site. Contact the office of Dohn LaBiche for FTP access, phone 409.860.0197

## **PROJECT MANUAL**

### **SECTION 230993**

Part 2, Item 2.6B:

Add: "Optional substitution: 24 volt actuator motors may be used in lieu of 120 volt for dampers. All step-down transformers, cabinets, and equipment required for a complete and operational installation shall be included."

### **SECTION 260002**

Part 1, item 1.2.B Utility Charges:

Revise entire paragraph to read "Refer to Section 015000"

## **PROJECT DRAWINGS**

Refer to revised sheets E- 401, E – 402, E - 402M, E – 403, E - 403M and E - 404

## **END OF MODIFICATIONS NARRATIVE**

### **ATTACHMENTS**

E- 401 – revised sheet

E - 402 – revised sheet

E - 402M – revised sheet

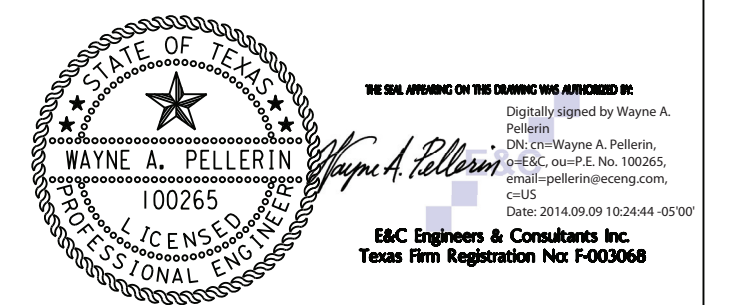
E - 403 – revised sheet

E - 403M – revised sheet

E - 404 – revised sheet



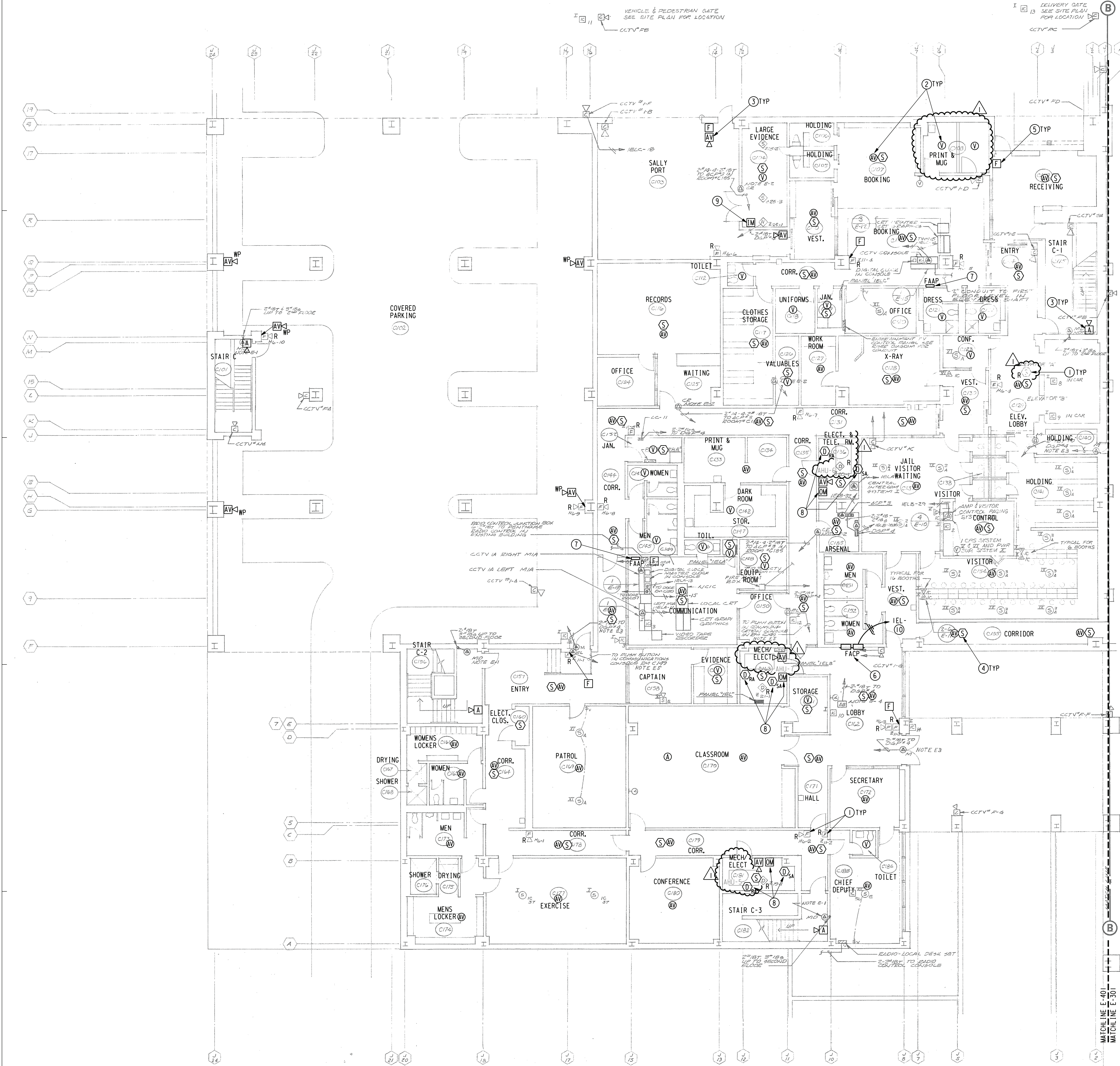
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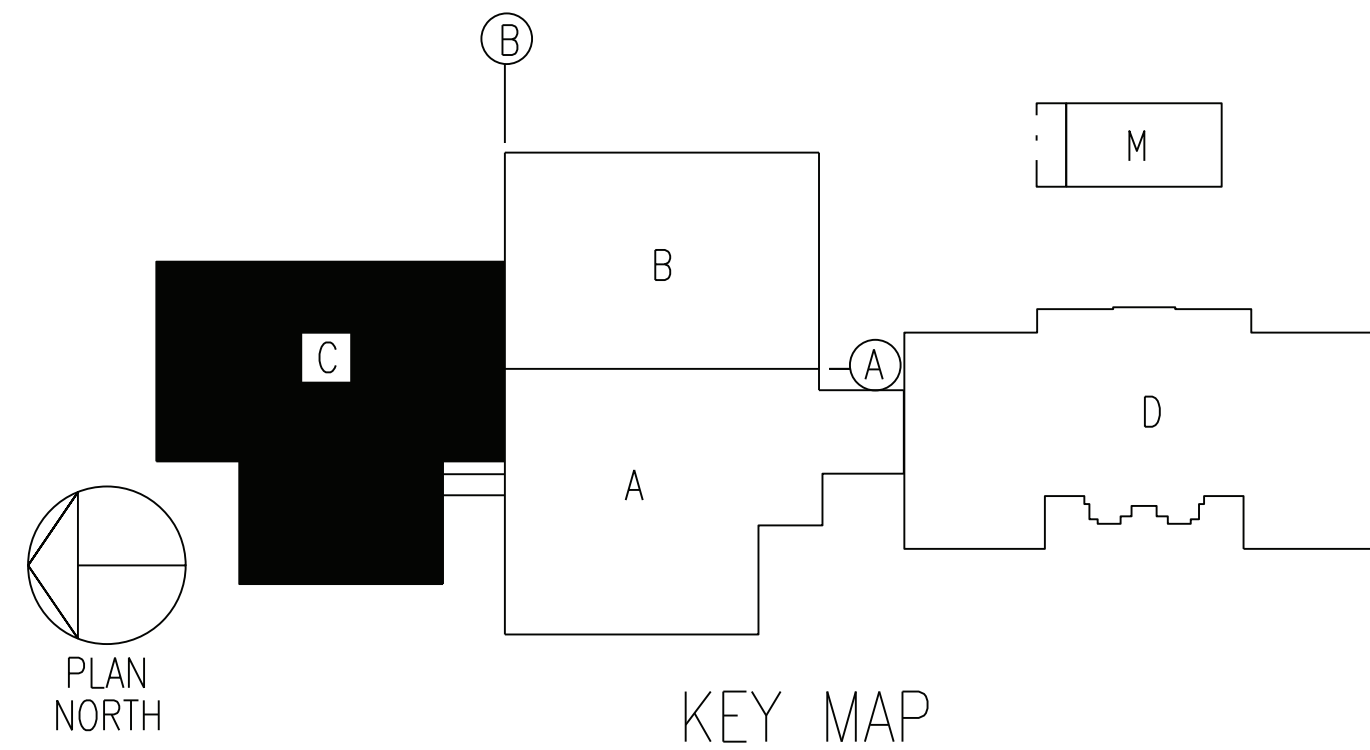
RESTORATION OF THE  
JEFFERSON Co. COURTHOUSE  
MECHANICAL & SAFETY UPGRADES  
PHASE 5  
149 PEARL ST.  
BEAUMONT, TX 77701

- GENERAL NOTES:**
- REF E-000 FOR ADDITIONAL GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - NO FIRE ALARM DEVICES OR CONDUIT SHALL BE MOUNTED ON MARBLE, GRANITE, ORNATE PLASTER, PLASTIC LAMINATE FINISHES, OR OTHER ELABORATE FINISHES UNLESS SPECIFICALLY DETAILED ON THE ARCHITECTURAL DRAWINGS. MOUNT ALL NEW DEVICES IN GYP BOARD WALLS, GYP BOARD CEILINGS, OR SUSPENDED ACOUSTICAL CEILING (SAC). IF ANY DEVICE LOCATION SHOWN ON THIS DRAWING OR ON THE FIRE ALARM INSTALLER'S SHOP DRAWINGS IS FOUND TO BE IN CONFLICT WITH THIS STATEMENT, CONTACT THE ARCHITECT IMMEDIATELY.
  - THE EXISTING HONEYWELL FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL AT ALL TIMES UNTIL THE NEW FIRE ALARM SYSTEM IS FULLY FUNCTIONAL. ALL EQUIPMENT AND WIRING ASSOCIATED WITH EXISTING FIRE ALARM SYSTEM SHALL BE REMOVED AFTER SUCH TIME.
  - INVESTIGATE ALL DATA-GATHERING PANELS (DGP) ASSOCIATED WITH THE EXISTING HONEYWELL FIRE ALARM SYSTEM. REMOVE ALL DGPs THAT HAVE BEEN ABANDONED OR BECOME SPARED DURING DEMOLITION OF THE FIRE ALARM SYSTEM. ENSURE THAT ANY DGPs REQUIRED AFTER FIRE ALARM REMOVAL REMAIN OPERATIONAL.
  - CEILING MOUNTED DEVICES TO BE INSTALLED IN A SUSPENDED ACOUSTICAL CEILING (SAC) SHALL BE CENTERED IN CEILING TILES, UNLESS NOTED OTHERWISE.
  - ALL FIRE ALARM SYSTEM WIRING WHICH IS EXPOSED, CONCEALED IN NEWLY CONSTRUCTED INACCESSIBLE LOCATIONS, OR WIRED BETWEEN FLOORS SHALL BE INSTALLED IN AN APPROVED RACEWAY. FIRE ALARM WIRING ROUTED IN EXISTING WALL PARTITIONS OR ABOVE EXISTING CEILINGS MAY BE INSTALLED USING APPROVED LOW SMOKE PLENUM RATED FIRE ALARM CABLE. ALL FIRE ALARM WIRING CONNECTING SYSTEM EQUIPMENT SHALL BE TYPE C1, 2-HOUR RATED AND INSTALLED IN AN APPROVED RACEWAY.
  - ALL CONDUIT SHALL BE ROUTED NEATLY AND FASTENED AS TIGHTLY AS POSSIBLE TO STRUCTURE.
  - THE INSTALLATION WITHIN THE JAIL BUILDING SHALL COMPLY WITH ALL REQUIREMENTS FOR CORRECTIONAL FACILITIES IN THE TEXAS ADMINISTRATIVE CODE FOR JAIL STANDARDS (TITLE 37, PART 9) AND IN THE IBC.
  - ALL FIRE ALARM AND BRANCH CIRCUIT WIRING INSTALLED WITHIN THE SECURE JAIL AREAS SHALL BE INSTALLED IN RIGID GALVANIZED STEEL CONDUIT AND SHALL UTILIZE JUNCTION BOXES WITHOUT KNOCKOUTS AND WITH TAMPER-RESISTANT SCREWS.
  - WHERE CEILING EXIST IN THE SECURE JAIL AREAS, THEY ARE OF THE METAL PERFORATED TYPE.
  - PROVIDE CAGE GUARDS WITH TAMPER RESISTANT SCREWS FOR ALL DEVICES IN ALL AREAS ACCESSIBLE BY PRISONERS.

- DRAWING NOTES:**
- REMOVE EXISTING FIRE ALARM DEVICE AND ALL ASSOCIATED WIRING. EXISTING CONDUIT AND BACKBOX MAY BE REUSED WHERE DEVICES ARE SHOWN TO BE REPLACED IN PLACE AND WHERE PATHWAY IS IN ACCEPTABLE CONDITION. EXPOSED CONDUIT SHALL BE REMOVED BACK TO CONCEALED LOCATION. COORDINATE PATCHING OF SUBSTRATE WITH GC.
  - FIRE ALARM CEILING MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
  - FIRE ALARM WALL MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
  - FIRE ALARM SMOKE DETECTOR.
  - FIRE ALARM MANUAL PULLSTATION.
  - PROVIDE FIRE ALARM CONTROL PANEL AND CONNECT TO CIRCUIT INDICATED. ALL TRANSponder PANELS REQUIRED FOR SERVING BUILDING SHALL BE INSTALLED AT THIS LOCATION. THIS PANEL SHALL SERVE ALL DEVICES IN THE JAIL (AREA C ON KEY MAP).
  - PROVIDE FIRE ALARM ANNUNCIATOR PANEL AT LOCATION INDICATED.
  - FIRE ALARM DUCT SMOKE DETECTORS AND OUTPUT MODULES/RELAYS FOR SHUTDOWN OF AHU.
  - FIRE ALARM INPUT MODULES FOR MONITORING ALL TROUBLE AND ALARM CONTACTS IN EXISTING FIRE SUPPRESSION SYSTEM CONTROL PANEL.
  - EXTEND CIRCUIT TO AND PROVIDE 20A/1P CIRCUIT BREAKER IN EXISTING PANEL. MARK CIRCUIT NUMBER ON CONSTRUCTION SET FOR LATER INCORPORATION INTO AS-BUILT DOCUMENTS.



**01** JAIL AREA C  
1ST FLOOR FIRE ALARM PLAN  
SCALE: 1/8" = 1' - 0"



DATE	DESCRIPTION
9/9/2014	ADDENDUM #1 TO EM. PRICING
8/5/2014	ISSUE FOR EM. PRICING
6/27/2014	ISSUE FOR 90% REVIEW
6/12/2014	ISSUE FOR 90% PRICING
5/16/2014	50% REVIEW
3/7/2014	ISSUE FOR DESIGN REVIEW

ISSUE	DATE	DESCRIPTION
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Sheet Title:  
**ELECTRICAL 1ST FLOOR  
FIRE ALARM PLAN  
AREA C (JAIL)**

Sheet No.:  
**E-401**  
SHEET: OF:



**RESTORATION OF THE  
 JEFFERSON Co. COURTHOUSE  
 MECHANICAL & SAFETY UPGRADES  
 PHASE 5**

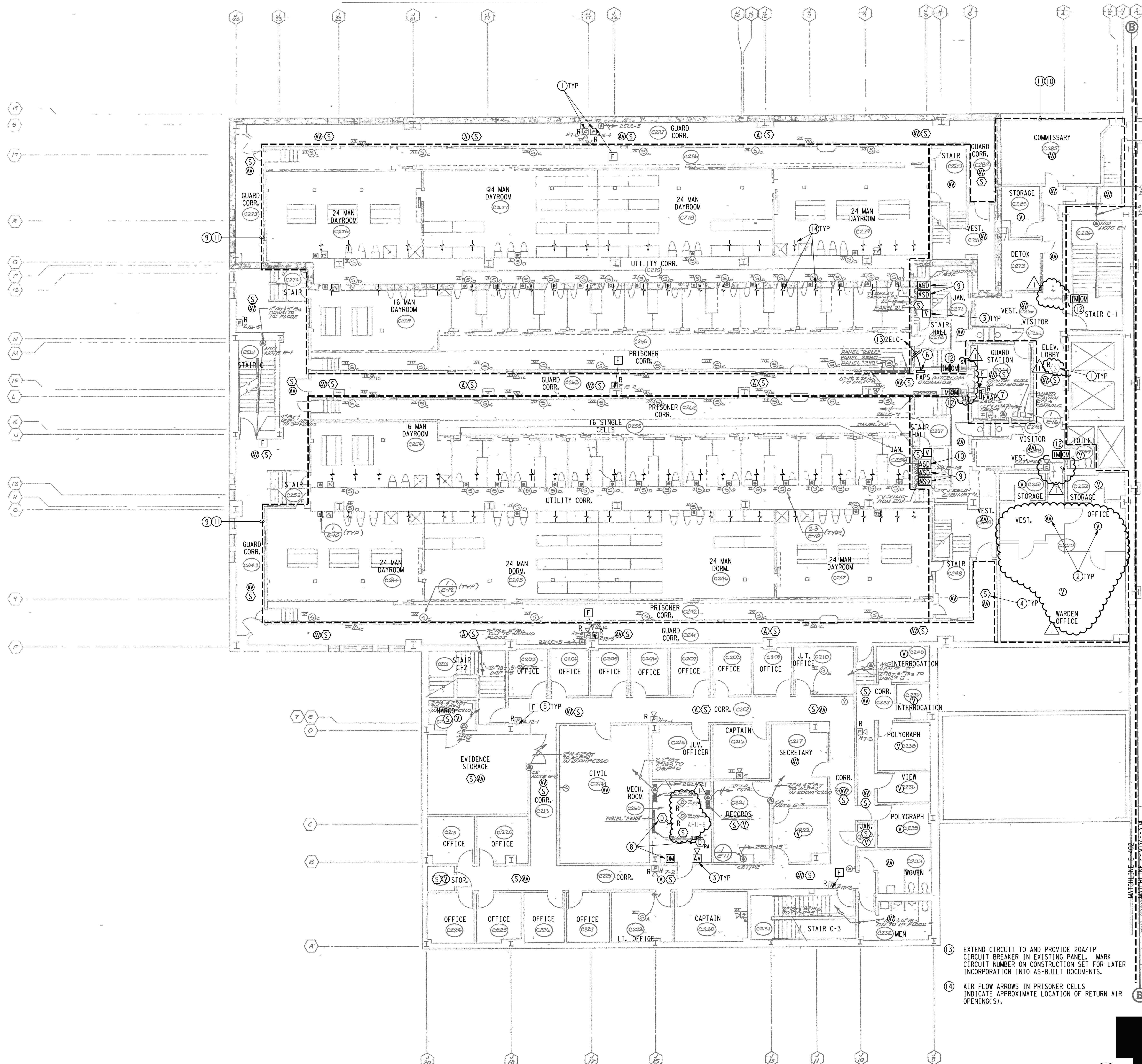
1449 PEARL ST. BEAUMONT, TX. 77701

**GENERAL NOTES:**

- A. REF E-000 FOR ADDITIONAL GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- B. NO FIRE ALARM DEVICES OR CONDUIT SHALL BE MOUNTED ON MARBLE, GRANITE, ORNATE PLASTER, PLASTIC LAMINATE FINISHES, OR OTHER ELABORATE FINISHES UNLESS SPECIFICALLY DETAILED ON THE ARCHITECTURAL DRAWINGS. MOUNT ALL NEW DEVICES IN GYP BOARD WALLS, GYP BOARD CEILINGS, OR SUSPENDED ACOUSTICAL CEILING (SAC). IF ANY DEVICE LOCATION SHOWN ON THIS DRAWING OR ON THE FIRE ALARM INSTALLER'S SHOP DRAWINGS IS FOUND TO BE IN CONFLICT WITH THIS STATEMENT, CONTACT THE ARCHITECT IMMEDIATELY.
- C. THE EXISTING HONEYWELL FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL AT ALL TIMES UNTIL THE NEW FIRE ALARM SYSTEM IS FULLY FUNCTIONAL. ALL EQUIPMENT AND WIRING ASSOCIATED WITH EXISTING FIRE ALARM SYSTEM SHALL BE REMOVED AFTER SUCH TIME.
- D. INVESTIGATE ALL DATA-GATHERING PANELS (DGP) ASSOCIATED WITH THE EXISTING HONEYWELL FIRE ALARM SYSTEM. REMOVE ALL DGPs THAT HAVE BEEN ABANDONED OR BECOME SPARED DURING DEMOLITION OF THE FIRE ALARM SYSTEM. ENSURE THAT ANY DGPs REQUIRED AFTER FIRE ALARM REMOVAL REMAIN OPERATIONAL.
- E. CEILING MOUNTED DEVICES TO BE INSTALLED IN A SUSPENDED ACOUSTICAL CEILING (SAC) SHALL BE CENTERED IN CEILING TILES, UNLESS NOTED OTHERWISE.
- F. ALL FIRE ALARM SYSTEM WIRING WHICH IS EXPOSED, CONCEALED IN NEWLY CONSTRUCTED INACCESSIBLE LOCATIONS, OR WIRED BETWEEN FLOORS SHALL BE INSTALLED IN AN APPROVED RACEWAY. FIRE ALARM WIRING ROUTED IN EXISTING WALL PARTITIONS OR ABOVE EXISTING CEILING MAY BE INSTALLED USING APPROVED LOW SMOKE PLENUM RATED FIRE ALARM CABLE. ALL FIRE ALARM WIRING CONNECTING SYSTEM EQUIPMENT SHALL BE TYPE CI, 2-HOUR RATED AND INSTALLED IN AN APPROVED RACEWAY.
- G. ALL CONDUIT SHALL BE ROUTED NEATLY AND FASTENED AS TIGHTLY AS POSSIBLE TO STRUCTURE.
- H. THE INSTALLATION WITHIN THE JAIL BUILDING SHALL COMPLY WITH ALL REQUIREMENTS FOR CORRECTIONAL FACILITIES AND IN THE TEXAS ADMINISTRATIVE CODE FOR JAIL STANDARDS (TITLE 37, PART 9) AND IN THE IBC.
- I. ALL FIRE ALARM AND BRANCH CIRCUIT WIRING INSTALLED WITHIN THE SECURE JAIL AREAS SHALL BE INSTALLED IN RIGID GALVANIZED STEEL CONDUIT AND SHALL UTILIZE JUNCTION BOXES WITHOUT KNOCKOUTS AND WITH TAMPER-RESISTANT SCREWS.
- J. WHERE CEILING EXIST IN THE SECURE JAIL AREAS, THEY ARE OF THE METAL PERFORATED TYPE.
- K. PROVIDE CAGE GUARDS WITH TAMPER RESISTANT SCREWS FOR ALL DEVICES IN ALL AREAS ACCESSIBLE BY PRISONERS.

**DRAWING NOTES:**

- 1 REMOVE EXISTING FIRE ALARM DEVICE AND ALL ASSOCIATED WIRING. EXISTING CONDUIT AND BACKBOX MAY BE REUSED WHERE DEVICES ARE SHOWN TO BE REPLACED IN PLACE AND WIRE PATHWAY IS IN ACCEPTABLE CONDITION. EXPOSED CONDUIT SHALL BE REMOVED BACK TO CONCEALED LOCATION. COORDINATE PATCHING OF SUBSTRATE WITH GC.
- 2 FIRE ALARM CEILING MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
- 3 FIRE ALARM WALL MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
- 4 FIRE ALARM SMOKE DETECTOR.
- 5 FIRE ALARM MANUAL PULLSTATION.
- 6 FIRE ALARM POWER SUPPLY WITH COMPONENTS AS REQUIRED. COORDINATE LOCATION WITH FIRE ALARM CONTRACTOR.
- 7 PROVIDE FIRE ALARM ANNUCIATOR PANEL AT LOCATION INDICATED.
- 8 FIRE ALARM DUCT SMOKE DETECTORS AND OUTPUT MODULES/RELAYS FOR SHUTDOWN OF AHU.
- 9 PROVIDE A 15-ZONE AIR SAMPLING-TYPE DETECTOR FOR PRISONER CELLS. EXTEND A DEDICATED SAMPLING TUBE FOR EACH CELL TO THE SECURE SIDE OF EACH RETURN AIR OPENING(S).
- 10 PROVIDE A 15-ZONE AIR SAMPLING-TYPE DETECTOR FOR AREAS OUTSIDE OF PRISONER CELLS. EXTEND A SAMPLING TUBE TO THE SECURE SIDE OF EACH RETURN AIR OPENING(S) WHERE APPLICABLE.
- 11 SMOKE DETECTION IN THIS AREA SHALL BE VIA AIR SAMPLING-TYPE DETECTOR.
- 12 FIRE ALARM INPUT AND OUTPUT MODULES FOR CONTROLLING AND MONITORING STATUS OF HVAC DAMPER (SUPPLY, RETURN, OR MAKE UP AIR) DURING SMOKE EVACUATION. COORDINATE CONNECTION TO NEW DAMPER ACTUATOR PROVIDED BY DIV. 23. DAMPERS ON FLOOR LEVEL AND MEZZANINE LEVEL SHALL CONNECT TO 2 BRANCH CIRCUITS IN PANEL 2ELC WITH NO MORE THAN 10 DAMPERS ON EACH CIRCUIT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. EXTEND CIRCUITS TO AND PROVIDE 20A/1P CIRCUIT BREAKERS IN EXISTING PANEL. MARK CIRCUIT NUMBER ON CONSTRUCTION SET FOR LATER INCORPORATION INTO AS-BUILT DOCUMENTS.
- 13 EXTEND CIRCUIT TO AND PROVIDE 20A/1P CIRCUIT BREAKER IN EXISTING PANEL. MARK CIRCUIT NUMBER ON CONSTRUCTION SET FOR LATER INCORPORATION INTO AS-BUILT DOCUMENTS.
- 14 AIR FLOW ARROWS IN PRISONER CELLS INDICATE APPROXIMATE LOCATION OF RETURN AIR OPENING(S).



**01 JAIL AREA C  
 2ND FLOOR FIRE ALARM PLAN**  
 SCALE: 1/8" = 1' - 0"



KEY MAP

DATE	DESCRIPTION
9/9/2014	ADDENDUM #1 TO EM. PRICING
8/5/2014	ISSUE FOR EM. PRICING
6/27/2014	ISSUE FOR 90% REVIEW
6/12/2014	ISSUE FOR 90% PRICING
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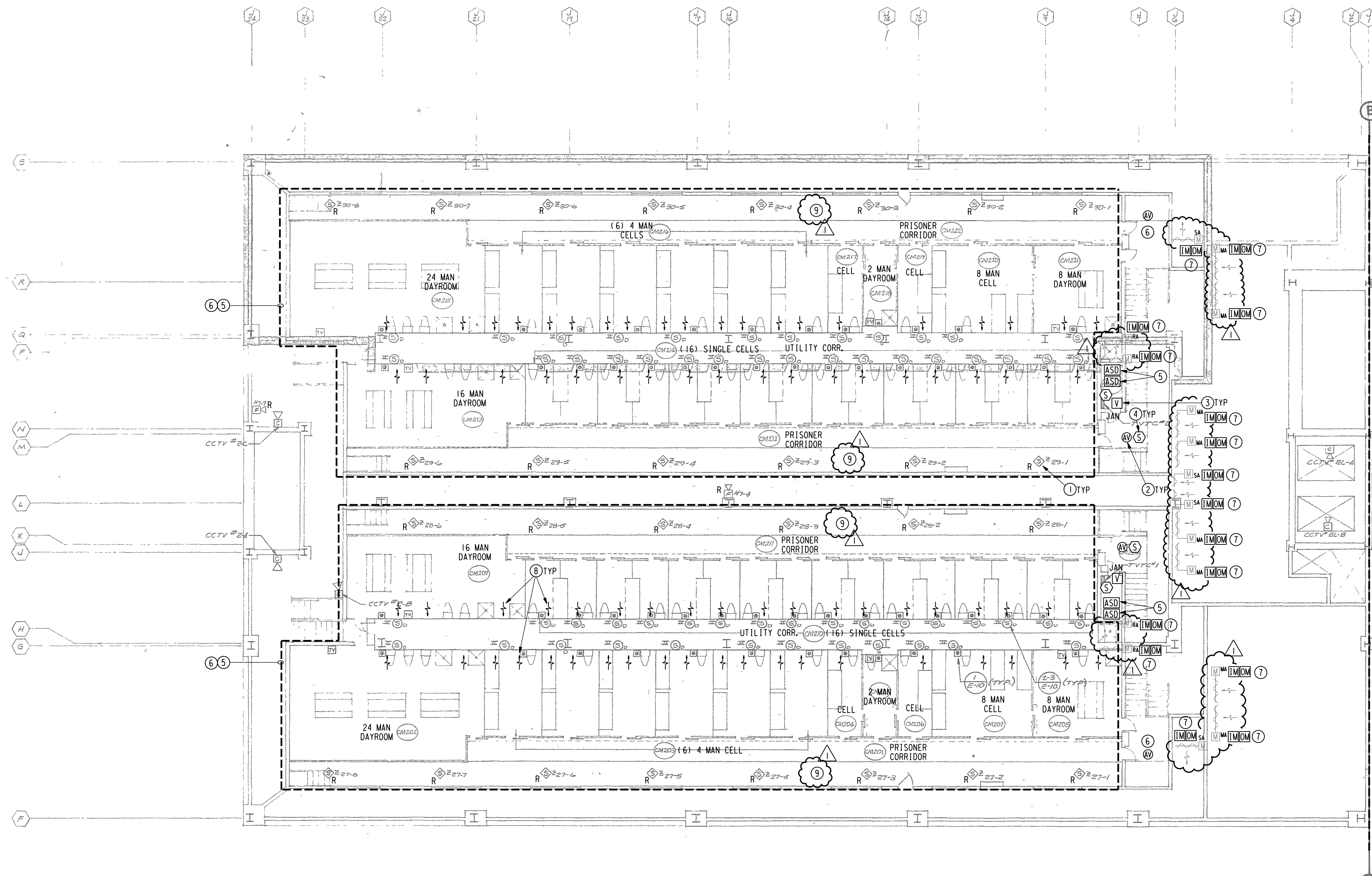
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Sheet Title:  
**ELECTRICAL 2ND FLOOR  
 FIRE ALARM PLAN  
 AREA C (JAIL)**

Sheet No.:  
**E-402**  
 SHEET: OF:



**RESTORATION OF THE JEFFERSON Co. COURTHOUSE MECHANICAL & SAFETY UPGRADES**  
PHASE 5  
1149 PEARL ST. BEAUMONT, TX. 77701



**01 JAIL AREA C 2ND FLOOR MEZZANINE FIRE ALARM PLAN**  
SCALE: 1/8" = 1'-0"

- GENERAL NOTES:**
- REF E-000 FOR ADDITIONAL GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - NO FIRE ALARM DEVICES OR CONDUIT SHALL BE MOUNTED ON MARBLE, GRANITE, ORNATE PLASTER, PLASTIC LAMINATE FINISHES, OR OTHER ELABORATE FINISHES UNLESS SPECIFICALLY DETAILED ON THE ARCHITECTURAL DRAWINGS. MOUNT ALL NEW DEVICES IN GYP BOARD WALLS, GYP BOARD CEILINGS, OR SUSPENDED ACOUSTICAL CEILING (SAC). IF ANY DEVICE LOCATION SHOWN ON THIS DRAWING OR ON THE FIRE ALARM INSTALLER'S SHOP DRAWINGS IS FOUND TO BE IN CONFLICT WITH THIS STATEMENT, CONTACT THE ARCHITECT IMMEDIATELY.
  - THE EXISTING HONEYWELL FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL AT ALL TIMES UNTIL THE NEW FIRE ALARM SYSTEM IS FULLY FUNCTIONAL. ALL EQUIPMENT AND WIRING ASSOCIATED WITH EXISTING FIRE ALARM SYSTEM SHALL BE REMOVED AFTER SUCH TIME.
  - INVESTIGATE ALL DATA-GATHERING PANELS (DGP) ASSOCIATED WITH THE EXISTING HONEYWELL FIRE ALARM SYSTEM. REMOVE ALL DGPS THAT HAVE BEEN ABANDONED OR BECOME SPARED DURING DEMOLITION OF THE FIRE ALARM SYSTEM. ENSURE THAT ANY DGPS REQUIRED AFTER FIRE ALARM REMOVAL REMAIN OPERATIONAL.
  - ALL FIRE ALARM SYSTEM WIRING WHICH IS EXPOSED, CONCEALED IN NEWLY CONSTRUCTED INACCESSIBLE LOCATIONS, OR WIRED BETWEEN FLOORS SHALL BE INSTALLED IN AN APPROVED RACEWAY. FIRE ALARM WIRING ROUTED IN EXISTING WALL PARTITIONS OR ABOVE EXISTING CEILINGS MAY BE INSTALLED USING APPROVED LOW SMOKE PLENUM RATED FIRE ALARM CABLE. ALL FIRE ALARM WIRING CONNECTING SYSTEM EQUIPMENT SHALL BE TYPE CI, 2-HOUR RATED AND INSTALLED IN AN APPROVED RACEWAY.
  - ALL CONDUIT SHALL BE ROUTED NEATLY AND FASTENED AS TIGHTLY AS POSSIBLE TO STRUCTURE.
  - THE INSTALLATION WITHIN THE JAIL BUILDING SHALL COMPLY WITH ALL REQUIREMENTS FOR CORRECTIONAL FACILITIES IN THE TEXAS ADMINISTRATIVE CODE FOR JAIL STANDARDS (TITLE 37, PART 9) AND IN THE IBC.
  - ALL FIRE ALARM AND BRANCH CIRCUIT WIRING INSTALLED WITHIN THE SECURE JAIL AREAS SHALL BE INSTALLED IN RIGID GALVANIZED STEEL CONDUIT AND SHALL UTILIZE JUNCTION BOXES WITHOUT KNOCKOUTS AND WITH TAMPER-RESISTANT SCREWS.
  - WHERE CEILINGS EXIST IN THE SECURE JAIL AREAS, THEY ARE OF THE METAL PERFORATED TYPE.
  - PROVIDE CAGE GUARDS WITH TAMPER RESISTANT SCREWS FOR ALL DEVICES IN ALL AREAS ACCESSIBLE BY PRISONERS.

- DRAWING NOTES:**
- REMOVE EXISTING FIRE ALARM DEVICE AND ALL ASSOCIATED WIRING. EXISTING CONDUIT AND BACKBOX MAY BE REUSED WHERE DEVICES ARE SHOWN TO BE REPLACED IN PLACE AND WHERE PATHWAY IS IN ACCEPTABLE CONDITION. EXPOSED CONDUIT SHALL BE REMOVED BACK TO CONCEALED LOCATION. COORDINATE PATCHING OF SUBSTRATE WITH GC.
  - FIRE ALARM CEILING MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
  - FIRE ALARM WALL MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
  - FIRE ALARM SMOKE DETECTOR.
  - PROVIDE A 15-ZONE AIR SAMPLING-TYPE DETECTOR FOR PRISONER CELLS. EXTEND A DEDICATED SAMPLING TUBE FOR EACH CELL TO THE SECURE SIDE OF EACH RETURN AIR OPENING(S).
  - SMOKE DETECTION IN THIS AREA SHALL BE VIA AIR SAMPLING-TYPE DETECTOR.
  - FIRE ALARM INPUT AND OUTPUT MODULES FOR CONTROLLING AND MONITORING STATUS OF HVAC DAMPER (SUPPLY, RETURN, OR MAKE UP AIR) DURING SMOKE EVACUATION. COORDINATE CONNECTION TO NEW DAMPER ACTUATOR PROVIDED BY DIV. 23. DAMPERS ON FLOOR LEVEL AND MEZZANINE LEVEL SHALL CONNECT TO 2 BRANCH CIRCUITS IN PANEL 2ELC WITH NO MORE THAN 10 DAMPERS ON EACH CIRCUIT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. EXTEND CIRCUITS TO AND PROVIDE 20A/1P CIRCUIT BREAKERS IN EXISTING PANEL. MARK CIRCUIT NUMBER ON CONSTRUCTION SET FOR LATER INCORPORATION INTO AS-BUILT DOCUMENTS.
  - AIR FLOW ARROWS IN PRISONER CELLS INDICATE APPROXIMATE LOCATION OF RETURN AIR OPENING(S).
  - PROVIDE A SEPARATE AIR-SAMPLING ZONE FOR SMOKE COVERAGE OF THE PRISONER CORRIDOR. SAMPLING PORTS SHALL BE LOCATED WHERE EXISTING SMOKE DETECTORS ARE BEING REMOVED AND SHALL BE ADDED WHERE NECESSARY. PORTS SHALL EXTEND THROUGH THE CEILING AND BE PROTECTED WITH CAGE GUARDS.

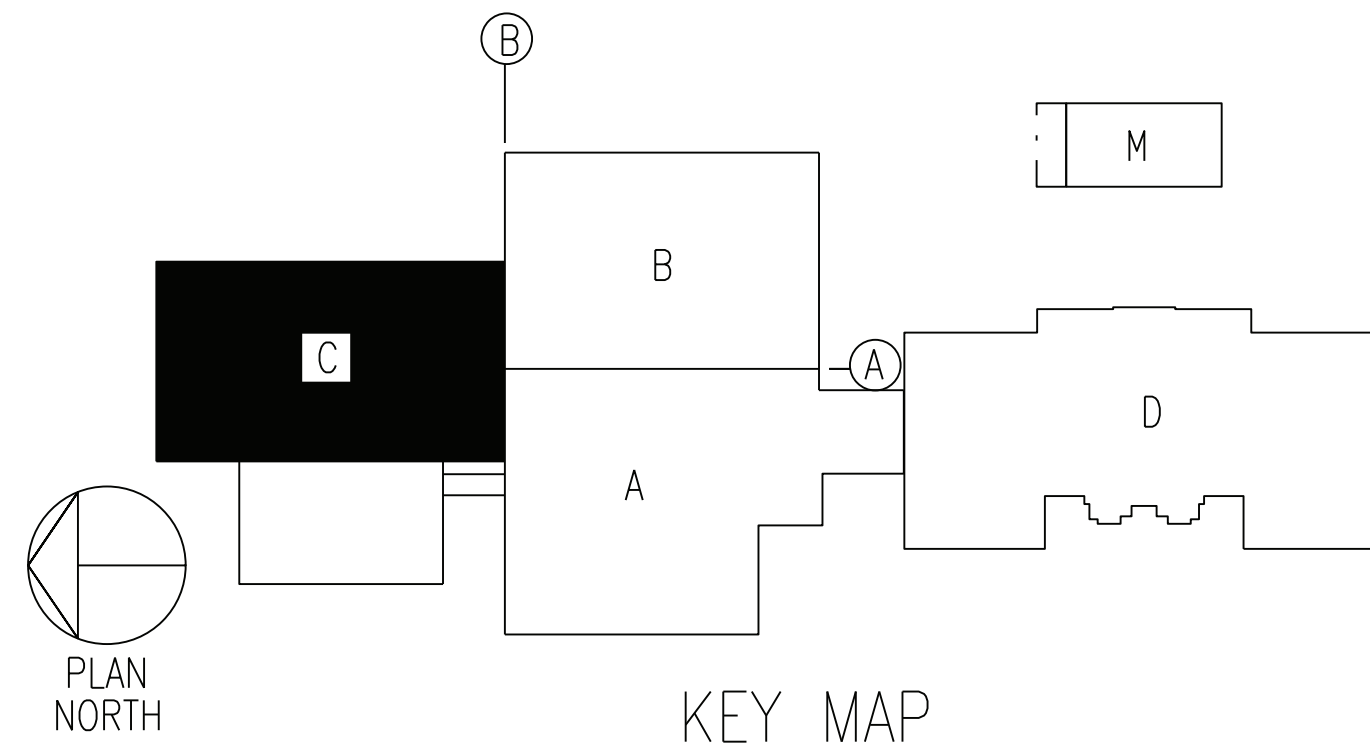
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ISSUE	DATE	DESCRIPTION
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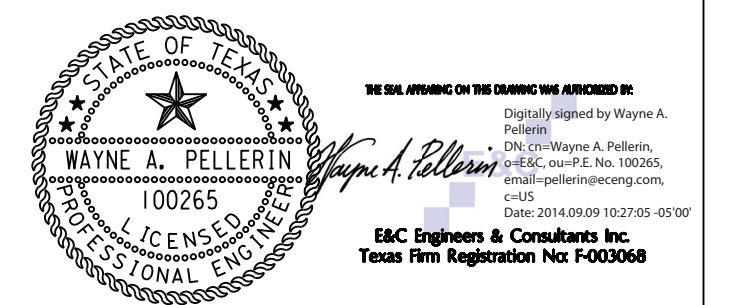
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**ELECTRICAL 2ND FLOOR MEZZ. FIRE ALARM PLAN AREA C (JAIL)**

Sheet No.:  
**E-402M**

SHEET: OF:



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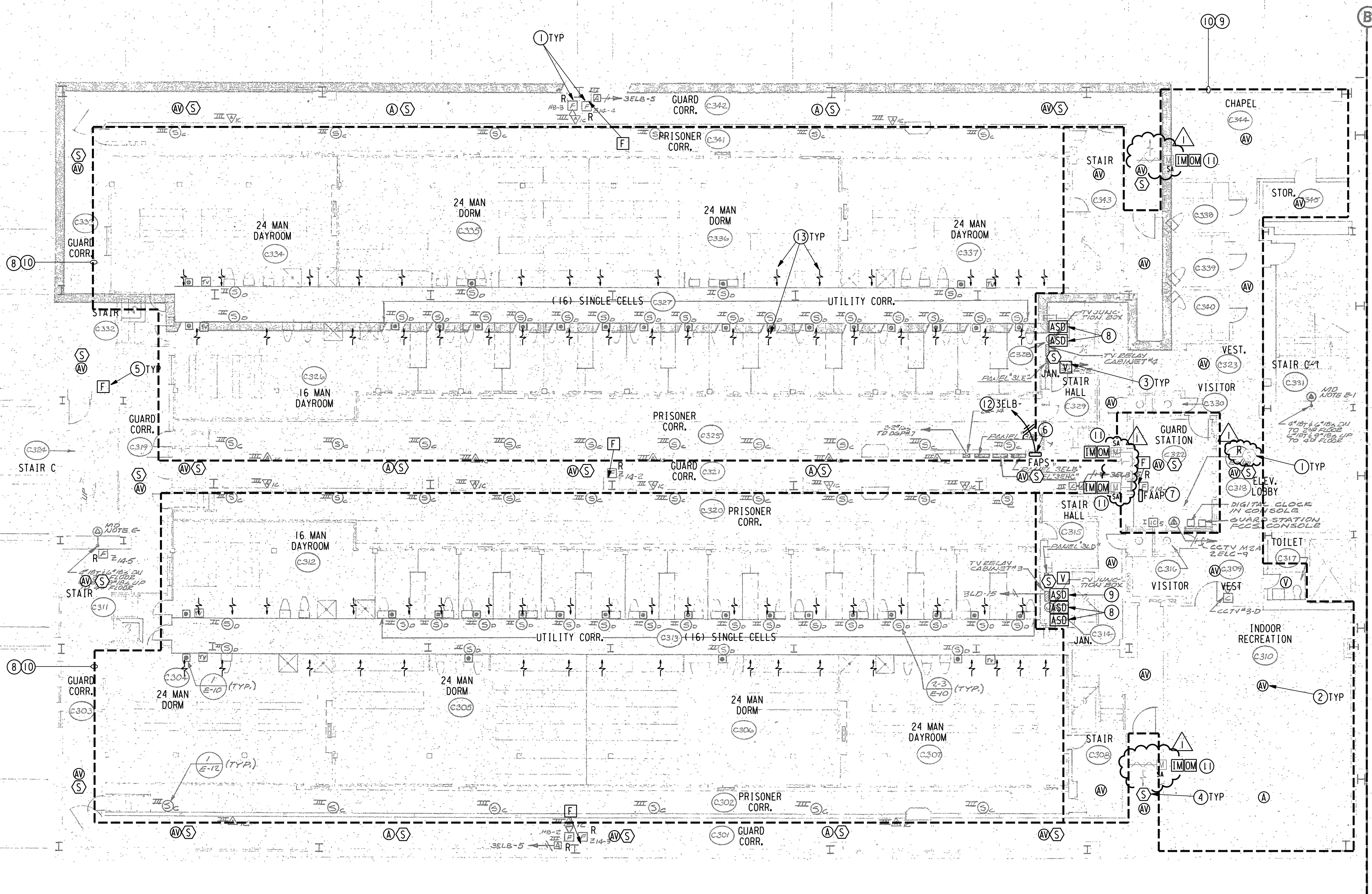
**RESTORATION OF THE  
 JEFFERSON Co. COURTHOUSE  
 MECHANICAL & SAFETY UPGRADES  
 PHASE 5**

1449 PEARL ST.  
 BEAUMONT, TX 77701

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- REF. E-000 FOR ADDITIONAL GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - NO FIRE ALARM DEVICES OR CONDUIT SHALL BE MOUNTED ON MARBLE, GRANITE, ORNATE PLASTER, PLASTIC LAMINATE FINISHES, OR OTHER ELABORATE FINISHES UNLESS SPECIFICALLY DETAILED ON THE ARCHITECTURAL DRAWINGS. MOUNT ALL NEW DEVICES IN GYP BOARD WALLS, GYP BOARD CEILING, OR SUSPENDED ACOUSTICAL CEILING (SAC). IF ANY DEVICE LOCATION SHOWN ON THIS DRAWING OR ON THE FIRE ALARM INSTALLER'S SHOP DRAWINGS IS FOUND TO BE IN CONFLICT WITH THIS STATEMENT, CONTACT THE ARCHITECT IMMEDIATELY.
  - THE EXISTING HONEYWELL FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL AT ALL TIMES UNTIL THE NEW FIRE ALARM SYSTEM IS FULLY FUNCTIONAL. ALL EQUIPMENT AND WIRING ASSOCIATED WITH EXISTING FIRE ALARM SYSTEM SHALL BE REMOVED AFTER SUCH TIME.
  - INVESTIGATE ALL DATA-GATHERING PANELS (DGP) ASSOCIATED WITH THE EXISTING HONEYWELL FIRE ALARM SYSTEM. REMOVE ALL DGP'S THAT HAVE BEEN ABANDONED OR BECOME SPARED DURING DEMOLITION OF THE FIRE ALARM SYSTEM. ENSURE THAT ANY DGP'S REQUIRED AFTER FIRE ALARM REMOVAL REMAIN OPERATIONAL.
  - CEILING MOUNTED DEVICES TO BE INSTALLED IN A SUSPENDED ACOUSTICAL CEILING (SAC) SHALL BE CENTERED IN CEILING TILES, UNLESS NOTED OTHERWISE.
  - ALL FIRE ALARM SYSTEM WIRING WHICH IS EXPOSED, CONCEALED IN NEWLY CONSTRUCTED INACCESSIBLE LOCATIONS, OR WIRED BETWEEN FLOORS SHALL BE INSTALLED IN AN APPROVED RACEWAY. FIRE ALARM WIRING ROUTED IN EXISTING WALL PARTITIONS OR ABOVE EXISTING CEILING MAY BE INSTALLED USING APPROVED LOW SMOKE PLENUM RATED FIRE ALARM CABLE. ALL FIRE ALARM WIRING CONNECTING SYSTEM EQUIPMENT SHALL BE TYPE C1, 2-HOUR RATED AND INSTALLED IN AN APPROVED RACEWAY.
  - ALL CONDUIT SHALL BE ROUTED NEATLY AND FASTENED AS TIGHTLY AS POSSIBLE TO STRUCTURE.
  - THE INSTALLATION WITHIN THE JAIL BUILDING SHALL COMPLY WITH ALL REQUIREMENTS FOR CORRECTIONAL FACILITIES IN THE TEXAS ADMINISTRATIVE CODE FOR JAIL STANDARDS (TITLE 37, PART 9) AND IN THE IBC.
  - ALL FIRE ALARM AND BRANCH CIRCUIT WIRING INSTALLED WITHIN THE SECURE JAIL AREAS SHALL BE INSTALLED IN RIGID GALVANIZED STEEL CONDUIT AND SHALL UTILIZE JUNCTION BOXES WITHOUT KNOCKOUTS AND WITH TAMPER-RESISTANT SCREWS.
  - WHERE CEILING EXIST IN THE SECURE JAIL AREAS, THEY ARE OF THE METAL PERFORATED TYPE.
  - PROVIDE CAGE GUARDS WITH TAMPER RESISTANT SCREWS FOR ALL FIRE DEVICES IN ALL AREAS ACCESSIBLE BY PRISONERS.

**DRAWING NOTES:**

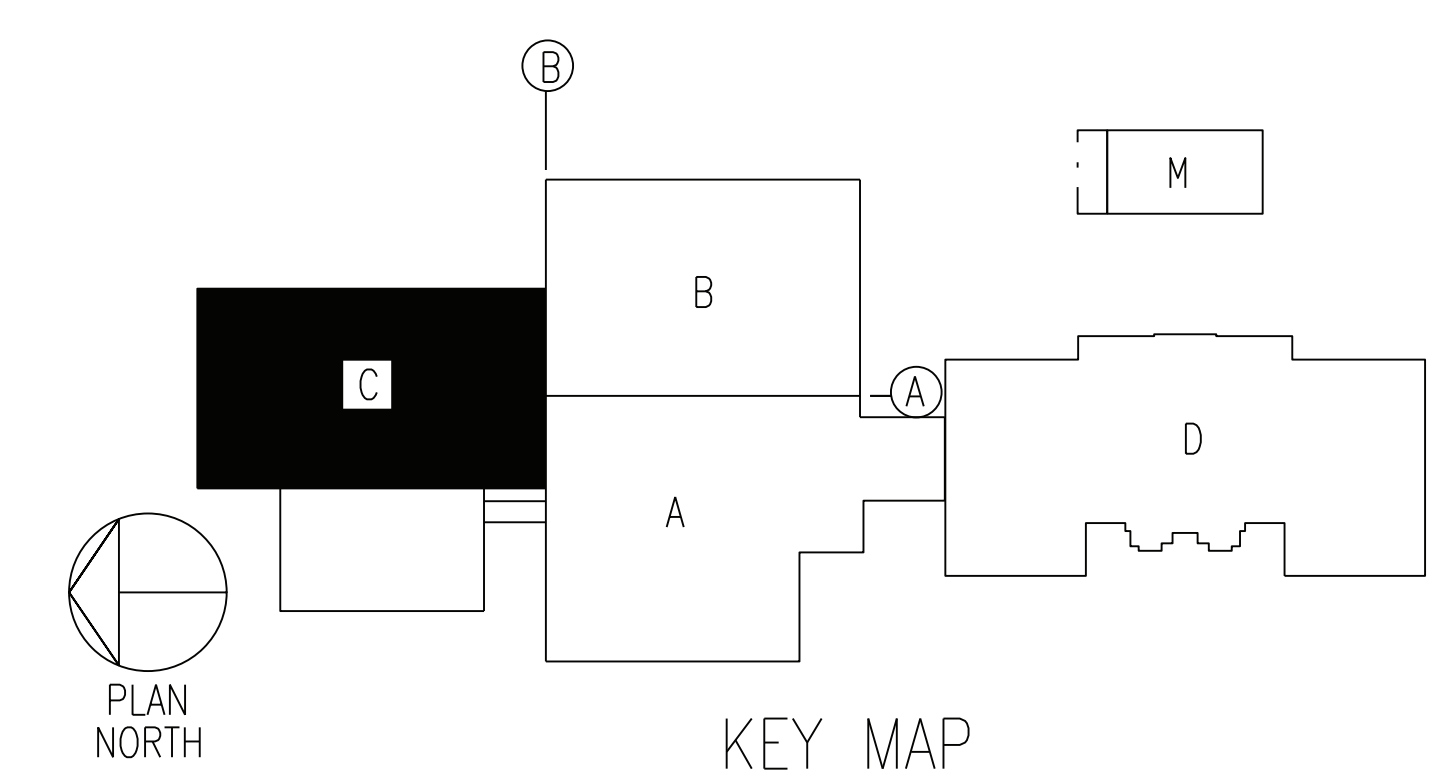
- REMOVE EXISTING FIRE ALARM DEVICE AND ALL ASSOCIATED WIRING. EXISTING CONDUIT AND BACKBOX MAY BE REUSED WHERE DEVICES ARE SHOWN TO BE REPLACED IN PLACE AND WHERE PATHWAY IS IN ACCEPTABLE CONDITION. EXPOSED CONDUIT SHALL BE REMOVED BACK TO CONCEALED LOCATION. COORDINATE PATCHING OF SUBSTRATE WITH GC.
- FIRE ALARM CEILING MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
- FIRE ALARM WALL MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
- FIRE ALARM SMOKE DETECTOR.
- FIRE ALARM MANUAL PULLSTATION.
- FIRE ALARM POWER SUPPLY WITH COMPONENTS AS REQUIRED. COORDINATE LOCATION WITH FIRE ALARM CONTRACTOR.
- PROVIDE FIRE ALARM ANNUNCIATOR PANEL AT LOCATION INDICATED.
- PROVIDE A 15-ZONE AIR SAMPLING-TYPE DETECTOR FOR PRISONER CELLS. EXTEND A DEDICATED SAMPLING TUBE FOR EACH CELL TO THE SECURE SIDE OF EACH RETURN AIR OPENING(S).
- PROVIDE A 15-ZONE AIR SAMPLING-TYPE DETECTOR FOR AREAS OUTSIDE OF PRISONER CELLS. EXTEND A SAMPLING TUBE TO THE SECURE SIDE OF EACH RETURN AIR OPENING(S) WHERE APPLICABLE.
- SMOKE DETECTION IN THIS AREA SHALL BE VIA AIR SAMPLING-TYPE DETECTOR.
- FIRE ALARM INPUT AND OUTPUT MODULES FOR CONTROLLING AND MONITORING STATUS OF HVAC DAMPER (SUPPLY, RETURN, OR MAKE UP AIR) DURING SMOKE EVACUATION. COORDINATE CONNECTION TO NEW DAMPER ACTUATOR PROVIDED BY DIV. 23. DAMPERS ON FLOOR LEVEL AND MEZZANINE LEVEL SHALL CONNECT TO 2 BRANCH CIRCUITS IN PANEL 3ELB WITH NO MORE THAN 10 DAMPERS ON EACH CIRCUIT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. EXTEND CIRCUITS TO AND PROVIDE 20A/1P CIRCUIT BREAKERS IN EXISTING PANEL. MARK CIRCUIT NUMBER ON CONSTRUCTION SET FOR LATER INCORPORATION INTO AS-BUILT DOCUMENTS.



**01 JAIL AREA C  
 3RD FLOOR FIRE ALARM PLAN**  
 SCALE: 1/8" = 1'-0"

- EXTEND CIRCUIT TO AND PROVIDE 20A/1P CIRCUIT BREAKER IN EXISTING PANEL. MARK CIRCUIT NUMBER ON CONSTRUCTION SET FOR LATER INCORPORATION INTO AS-BUILT DOCUMENTS.
- AIR FLOW ARROWS IN PRISONER CELLS INDICATE APPROXIMATE LOCATION OF RETURN AIR OPENING(S).

MATCHLINE E-403  
 MATCHLINE E-305/E-306



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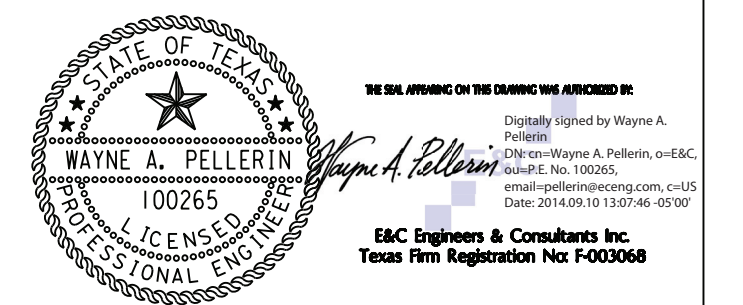
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	8/5/2014	ISSUE FOR EM. PRICING
	6/27/2014	ISSUE FOR 90% REVIEW
	6/12/2014	ISSUE FOR 90% PRICING
	5/16/2014	50% REVIEW
	3/7/2014	ISSUE FOR DESIGN REVIEW

PROJECT NO.:	13018	E&C PROJECT NO.:	3097.00
CAD DWG FILE:	3097_ea-jail-3c.dgn		
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Sheet Title:  
**ELECTRICAL 3RD FLOOR  
 FIRE ALARM PLAN  
 AREA C (JAIL)**

Sheet No.:  
**E-403**  
 SHEET: OF:





**RESTORATION OF THE  
 JEFFERSON Co. COURTHOUSE  
 MECHANICAL & SAFETY UPGRADES  
 PHASE 5**

1149 PEARL ST. BEAUMONT, TX 77701

DATE	DESCRIPTION
9/9/2014	ADDENDUM #1 TO EM. PRICING
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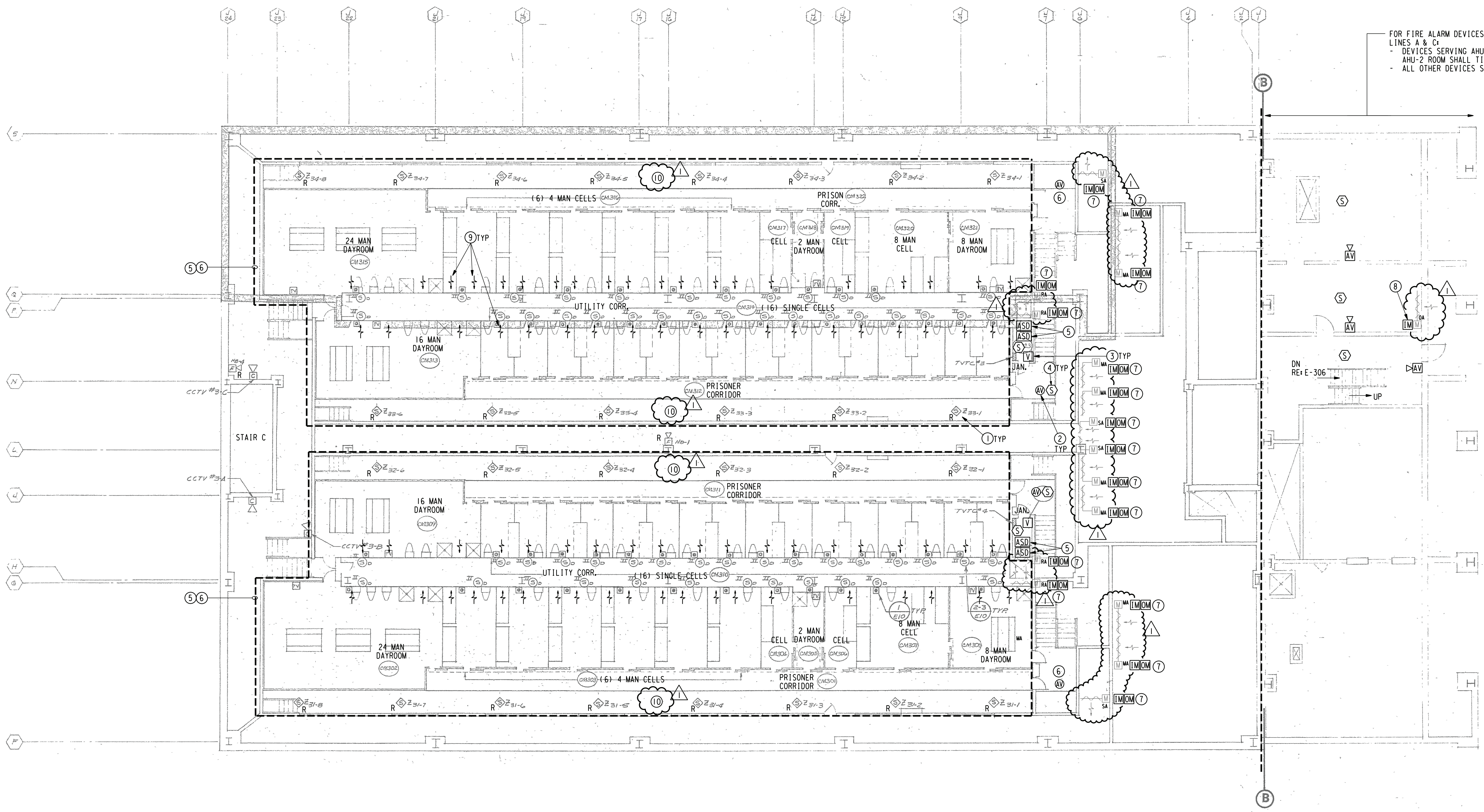
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CAD DWG FILE:	3097 eA-Jail-3cm.dgn
DRAWN BY:	XXXX
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Sheet Title:  
**ELECTRICAL 3RD FLOOR  
 MEZZ. FIRE ALARM PLAN  
 AREA C (JAIL)**

Sheet No.:

**E-403M**

SHEET: OF:



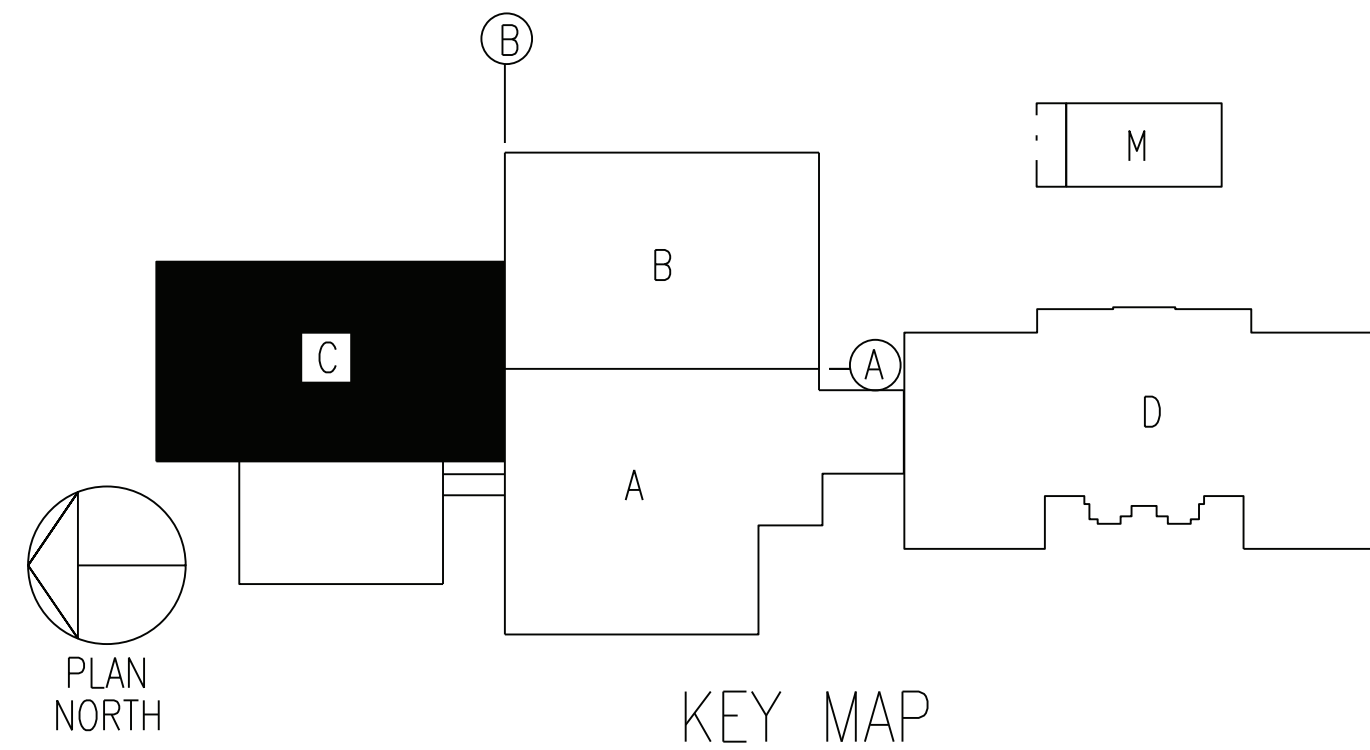
FOR FIRE ALARM DEVICES BETWEEN COLUMN  
 LINES A & C:  
 - DEVICES SERVING AHU-2, PURGE FANS, AND  
 AHU-2 ROOM SHALL TIE INTO JAIL FACP  
 - ALL OTHER DEVICES SHALL TIE INTO ANNEX FACP

**01 JAIL AREA C  
 3RD FLOOR MEZZANINE FIRE ALARM PLAN**  
 SCALE: 1/8" = 1' - 0"

⑩ PROVIDE A SEPARATE AIR-SAMPLING ZONE FOR SMOKE COVERAGE OF THE PRISONER CORRIDOR. SAMPLING PORTS SHALL BE LOCATED WHERE EXISTING SMOKE DETECTORS ARE BEING REMOVED AND SHALL BE ADDED WHERE NECESSARY. PORTS SHALL EXTEND THROUGH THE CEILING AND BE PROTECTED WITH CAGE GUARDS.

- DRAWING NOTES:**
- REMOVE EXISTING FIRE ALARM DEVICE AND ALL ASSOCIATED WIRING. EXISTING CONDUIT AND BACKBOX MAY BE REUSED WHERE DEVICES ARE SHOWN TO BE REPLACED IN PLACE AND WHERE PATHWAY IS IN ACCEPTABLE CONDITION. EXPOSED CONDUIT SHALL BE REMOVED BACK TO CONCEALED LOCATION. COORDINATE PATCHING OF SUBSTRATE WITH GC.
  - FIRE ALARM CEILING MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
  - FIRE ALARM WALL MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
  - FIRE ALARM SMOKE DETECTOR.
  - PROVIDE A 15-ZONE AIR SAMPLING-TYPE DETECTOR FOR PRISONER CELLS. EXTEND A DEDICATED SAMPLING TUBE FOR EACH CELL TO THE SECURE SIDE OF EACH RETURN AIR OPENING(S).
  - SMOKE DETECTION IN THIS AREA SHALL BE VIA AIR SAMPLING-TYPE DETECTOR.
  - FIRE ALARM INPUT AND OUTPUT MODULES FOR CONTROLLING AND MONITORING STATUS OF HVAC DAMPER (SUPPLY, RETURN, OR MAKE UP AIR) DURING SMOKE EVACUATION. COORDINATE CONNECTION TO NEW DAMPER ACTUATOR PROVIDED BY DIV. 23. DAMPERS ON FLOOR LEVEL AND MEZZANINE LEVEL SHALL CONNECT TO 2-BRANCH CIRCUITS IN PANEL 3ELB WITH NO MORE THAN 10 DAMPERS ON EACH CIRCUIT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. EXTEND CIRCUITS TO AND PROVIDE 20A/1P CIRCUIT BREAKERS IN EXISTING PANEL. MARK CIRCUIT NUMBER ON CONSTRUCTION SET FOR LATER INCORPORATION INTO AS-BUILT DOCUMENTS.
  - PROVIDE FIRE ALARM INPUT MODULES FOR DAMPERS POSITION STATUS. COORDINATE TERMINATION ON POSITION SWITCHES PROVIDED BY DIV. 23.
  - AIR FLOW ARROWS IN PRISONER CELLS INDICATE APPROXIMATE LOCATION OF RETURN AIR OPENING(S).

- GENERAL NOTES:**
- REF: E-000 FOR ADDITIONAL GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - NO FIRE ALARM DEVICES OR CONDUIT SHALL BE MOUNTED ON MARBLE, GRANITE, ORNATE PLASTER, PLASTIC LAMINATE FINISHES, OR OTHER ELABORATE FINISHES UNLESS SPECIFICALLY DETAILED ON THE ARCHITECTURAL DRAWINGS. MOUNT ALL NEW DEVICES IN GYP BOARD WALLS, GYP BOARD CEILINGS, OR SUSPENDED ACOUSTICAL CEILING (SAC). IF ANY DEVICE LOCATION SHOWN ON THIS DRAWING OR ON THE FIRE ALARM INSTALLER'S SHOP DRAWINGS IS FOUND TO BE IN CONFLICT WITH THIS STATEMENT, CONTACT THE ARCHITECT IMMEDIATELY.
  - THE EXISTING HONEYWELL FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL AT ALL TIMES UNTIL THE NEW FIRE ALARM SYSTEM IS FULLY FUNCTIONAL. ALL EQUIPMENT AND WIRING ASSOCIATED WITH EXISTING FIRE ALARM SYSTEM SHALL BE REMOVED AFTER SUCH TIME.
  - INVESTIGATE ALL DATA-GATHERING PANELS (DGP) ASSOCIATED WITH THE EXISTING HONEYWELL FIRE ALARM SYSTEM. REMOVE ALL DGP'S THAT HAVE BEEN ABANDONED OR BECOME SPARED DURING DEMOLITION OF THE FIRE ALARM SYSTEM. ENSURE THAT ANY DGP'S REQUIRED AFTER FIRE ALARM REMOVAL REMAIN OPERATIONAL.
  - ALL FIRE ALARM SYSTEM WIRING WHICH IS EXPOSED, CONCEALED IN NEWLY CONSTRUCTED INACCESSIBLE LOCATIONS, OR WIRED BETWEEN FLOORS SHALL BE INSTALLED IN AN APPROVED RACEWAY. FIRE ALARM WIRING ROUTED IN EXISTING WALL PARTITIONS OR ABOVE EXISTING CEILINGS MAY BE INSTALLED USING APPROVED LOW SMOKE PLENUM RATED FIRE ALARM CABLE. ALL FIRE ALARM WIRING CONNECTING SYSTEM EQUIPMENT SHALL BE TYPE C1, 2-HOUR RATED AND INSTALLED IN AN APPROVED RACEWAY.
  - ALL CONDUIT SHALL BE ROUTED NEATLY AND FASTENED AS TIGHTLY AS POSSIBLE TO STRUCTURE.
  - THE INSTALLATION WITHIN THE JAIL BUILDING SHALL COMPLY WITH ALL REQUIREMENTS FOR CORRECTIONAL FACILITIES IN THE TEXAS ADMINISTRATIVE CODE FOR JAIL STANDARDS (TITLE 37, PART 9) AND IN THE IBC.
  - ALL FIRE ALARM AND BRANCH CIRCUIT WIRING INSTALLED WITHIN THE SECURE JAIL AREAS SHALL BE INSTALLED IN RIGID GALVANIZED STEEL CONDUIT AND SHALL UTILIZE JUNCTION BOXES WITHOUT KNOCKOUTS AND WITH TAMPER-RESISTANT SCREWS.
  - WHERE CEILING EXIST IN THE SECURE JAIL AREAS, THEY ARE OF THE METAL PERFORATED TYPE.
  - PROVIDE CAGE GUARDS WITH TAMPER RESISTANT SCREWS FOR ALL DEVICES IN ALL AREAS ACCESSIBLE BY PRISONERS.



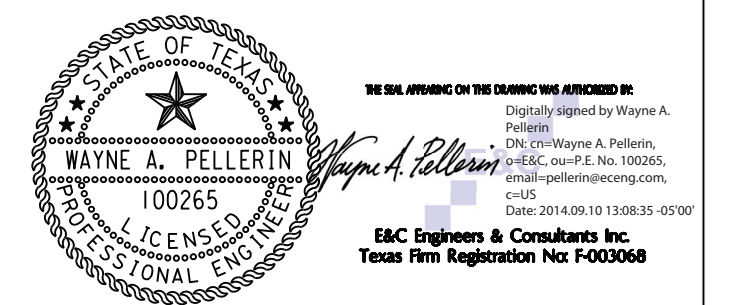
Consultants:

**The LaBiche Architectural Group**  
 Associate Architect

**E&C Engineers & Consultants, Inc**  
 MEP Engineers  
 E&C State of Texas  
 Registration No. F-003068

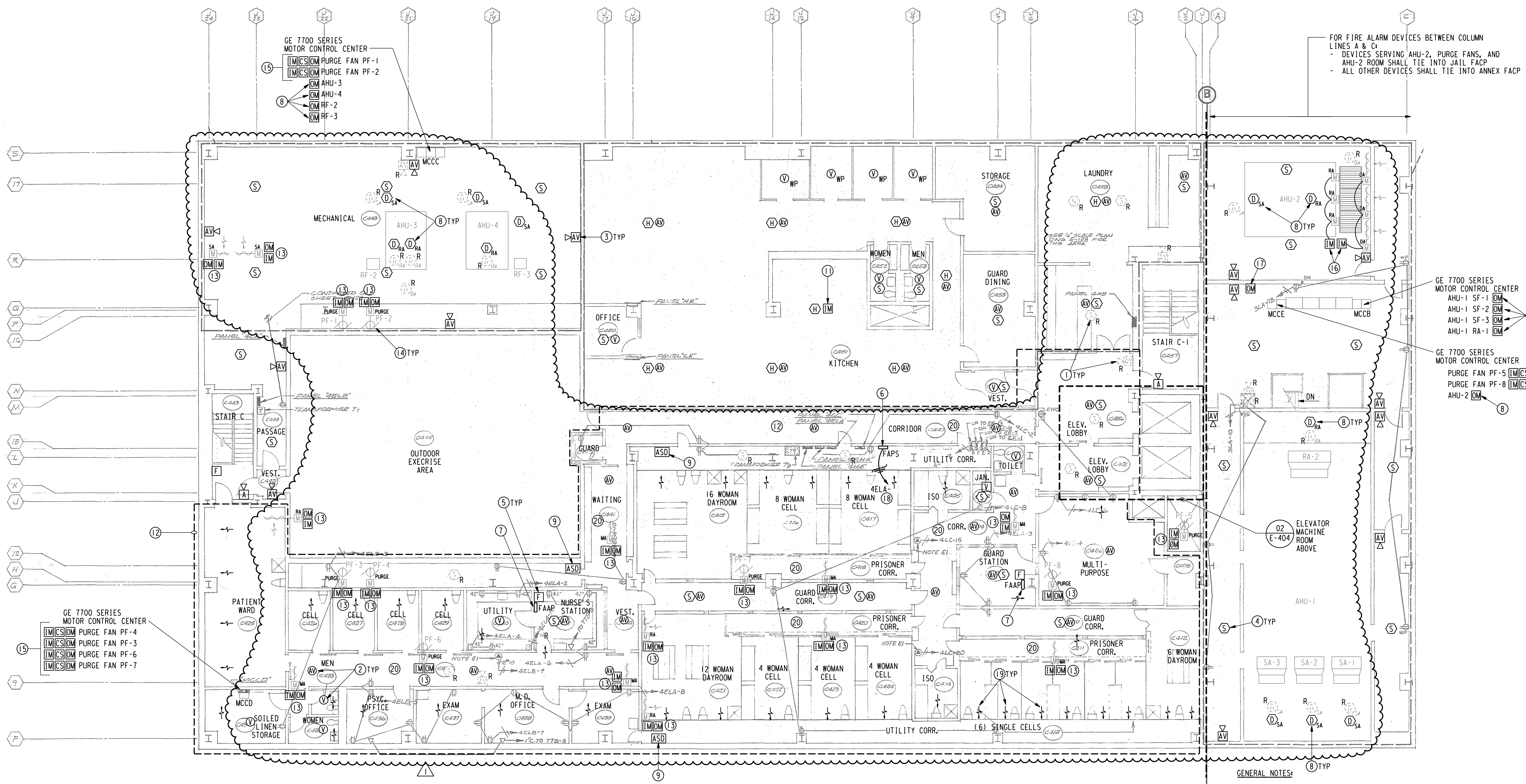
**Sparks Engineering, Inc.**  
 Structural Engineers

**Spiker Baldwin Associates, Inc.**  
 Specification Consultants



**RESTORATION OF THE  
 JEFFERSON Co. COURTHOUSE  
 MECHANICAL & SAFETY UPGRADES  
 PHASE 5**

1149 PEARL ST. BEAUMONT, TX 77701



FOR FIRE ALARM DEVICES BETWEEN COLUMN LINES A & C:  
 - DEVICES SERVING AHU-2, PURGE FANS, AND AHU-2 ROOM SHALL TIE INTO JAIL FAC  
 - ALL OTHER DEVICES SHALL TIE INTO ANNEX FAC

- GE 7700 SERIES MOTOR CONTROL CENTER  
 LMCSOM PURGE FAN PF-1  
 LMCSOM PURGE FAN PF-2  
 OM AHU-3  
 OM AHU-4  
 OM RF-2  
 OM RF-3

- GE 7700 SERIES MOTOR CONTROL CENTER  
 AHU-1 SF-1 OM  
 AHU-1 SF-2 OM  
 AHU-1 SF-3 OM  
 AHU-1 RA-1 OM

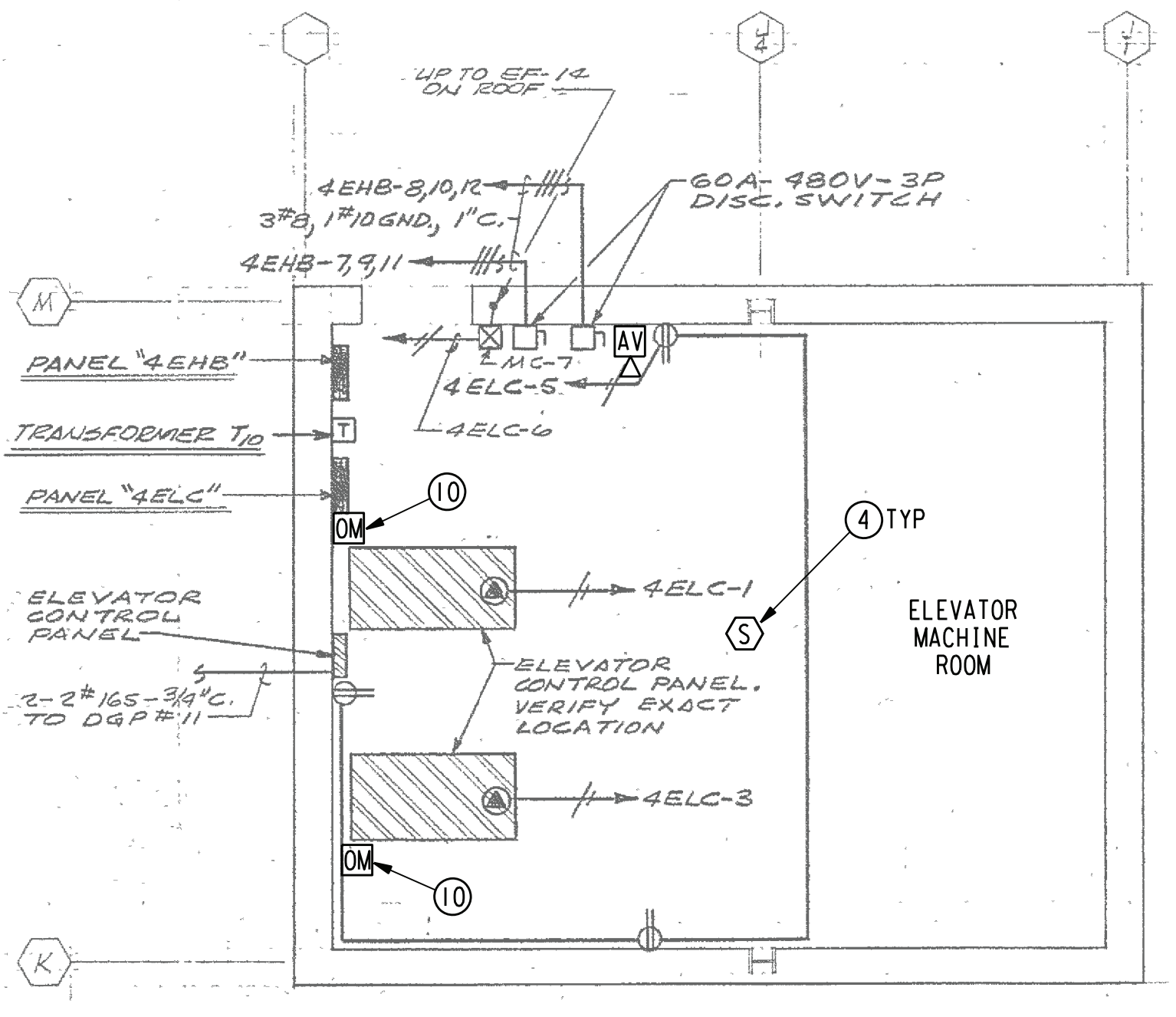
- GE 7700 SERIES MOTOR CONTROL CENTER  
 PURGE FAN PF-5 LMCSOM  
 PURGE FAN PF-8 LMCSOM  
 AHU-2 OM

- GE 7700 SERIES MOTOR CONTROL CENTER  
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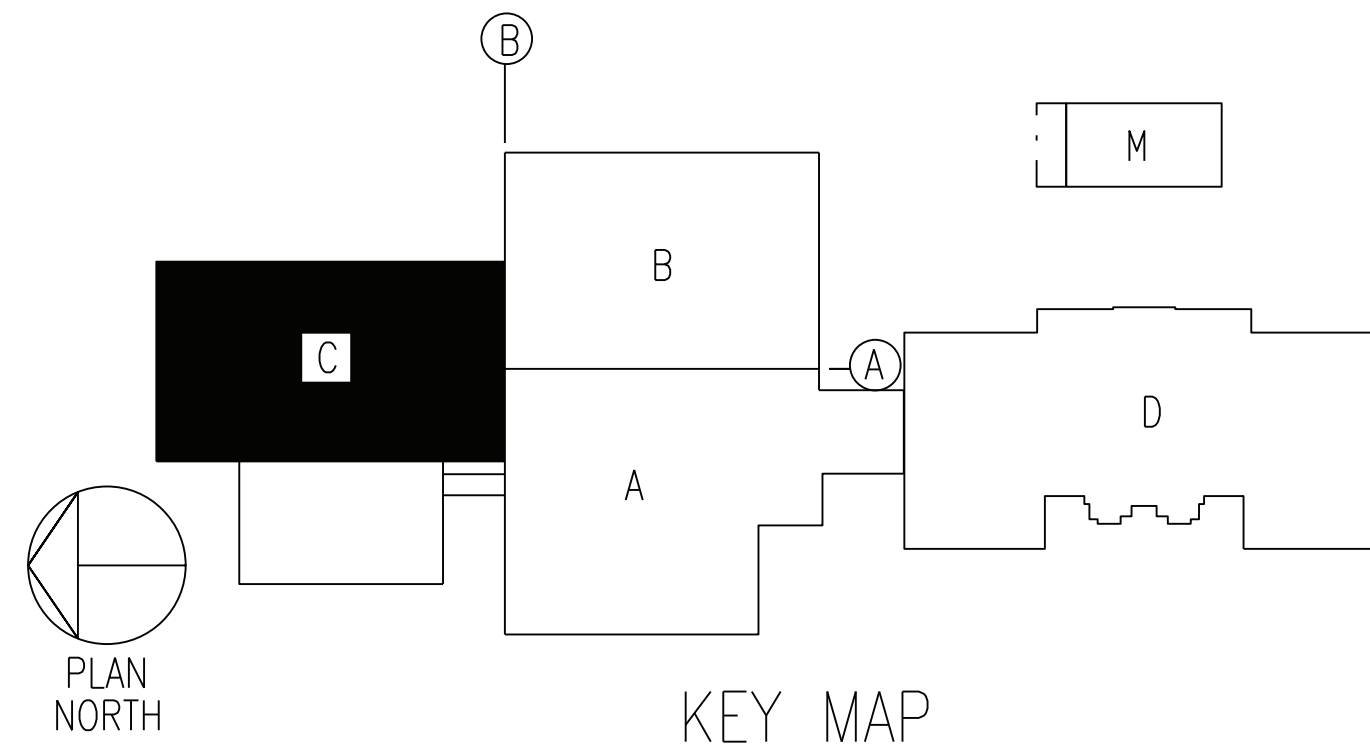
**01 JAIL AREA C  
 4TH FLOOR FIRE ALARM PLAN**  
 SCALE: 1/8" = 1'-0"

- 10 PROVIDE FIRE ALARM OUTPUT MODULES/RELAYS AS REQUIRED FOR ELEVATOR PRIMARY RECALL, ALTERNATE RECALL, AND SIGNAL TO FLASH CAB LIGHTS.
  - 11 PROVIDE INPUT MODULE FOR MONITORING HOOD FIRE SUPPRESSION SYSTEM.
  - 12 SMOKE DETECTION IN THIS AREA SHALL BE VIA AIR SAMPLING-TYPE DETECTOR.
  - 13 FIRE ALARM INPUT AND OUTPUT MODULES FOR CONTROLLING AND MONITORING STATUS OF HVAC DAMPER (SUPPLY, RETURN, OR MAKE UP AIR) DURING SMOKE EVACUATION. COORDINATE CONNECTION TO NEW DAMPER ACTUATOR PROVIDED BY DIV. 23. DAMPERS SHALL CONNECT TO 2 BRANCH CIRCUITS IN PANEL 4ELC WITH NO MORE THAN 10 DAMPERS ON EACH CIRCUIT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. EXTEND CIRCUITS TO AND PROVIDE 20A/1P CIRCUIT BREAKERS IN EXISTING PANEL. MARK CIRCUIT NUMBER ON CONSTRUCTION SET FOR LATER INCORPORATION INTO AS-BUILT DOCUMENTS.
  - 14 INDICATES PURGE FAN ABOVE ON ROOF.
  - 15 PROVIDE FIRE ALARM INPUT MODULE/CURRENT SWITCH AND OUTPUT MODULES/RELAYS FOR STARTING AND MONITORING EACH PURGE FAN. MODIFY EXISTING MOTOR STARTERS AS REQUIRED.
  - 16 PROVIDE FIRE ALARM INPUT MODULES FOR DAMPERS POSITION STATUS. COORDINATE TERMINATION ON POSITION SWITCHES PROVIDED BY DIV. 23.
  - 17 PROVIDE FIRE ALARM OUTPUT MODULE/RELAY FOR SIGNAL TO BUILDING AUTOMATION SYSTEM TO SET AHU-2 AND ROOM DAMPERS INTO SMOKE EVACUATION MODE.
  - 18 EXTEND CIRCUIT TO AND PROVIDE 20A/1P CIRCUIT BREAKER IN EXISTING PANEL. MARK CIRCUIT NUMBER ON CONSTRUCTION SET FOR LATER INCORPORATION INTO AS-BUILT DOCUMENTS.
  - 19 AIR FLOW ARROWS IN PRISONER CELLS INDICATE APPROXIMATE LOCATION OF RETURN AIR OPENING(S).
  - 20 PROVIDE A SEPARATE AIR-SAMPLING ZONE FOR SMOKE COVERAGE OF THE PRISONER CORRIDORS. SAMPLING PORTS SHALL BE LOCATED WHERE EXISTING SMOKE DETECTORS ARE BEING REMOVED AND SHALL BE ADDED WHERE NECESSARY. PORTS SHALL EXTEND THROUGH THE CEILING AND BE PROTECTED WITH CAGE GUARDS.
  - G. THE INSTALLATION WITHIN THE JAIL BUILDING SHALL COMPLY WITH ALL REQUIREMENTS FOR CORRECTIONAL FACILITIES IN THE TEXAS ADMINISTRATIVE CODE FOR JAIL STANDARDS (TITLE 37, PART 9) AND IN THE IBC.
  - H. ALL FIRE ALARM AND BRANCH CIRCUIT WIRING INSTALLED WITHIN THE SECURE JAIL AREAS SHALL BE INSTALLED IN RIGID GALVANIZED STEEL CONDUIT AND SHALL UTILIZE JUNCTION BOXES WITHOUT KNOCKOUTS AND WITH TAMPER-RESISTANT SCREWS.
  - I. WHERE CEILINGS EXIST IN THE SECURE JAIL AREAS, THEY ARE OF THE METAL PERFORATED TYPE.
  - J. PROVIDE CAGE GUARDS WITH TAMPER RESISTANT SCREWS FOR ALL DEVICES IN ALL AREAS ACCESSIBLE BY PRISONERS.
- DRAWING NOTES:**
- 1 REMOVE EXISTING FIRE ALARM DEVICE AND ALL ASSOCIATED WIRING. EXISTING CONDUIT AND BACKBOX MAY BE REUSED WHERE DEVICES ARE SHOWN TO BE REPLACED IN PLACE AND WHERE PATHWAY IS IN ACCEPTABLE CONDITION. EXPOSED CONDUIT SHALL BE REMOVED BACK TO CONCEALED LOCATION. COORDINATE PATCHING OF SUBSTRATE WITH GC.
  - 2 FIRE ALARM CEILING MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
  - 3 FIRE ALARM WALL MOUNTED STROBE, SPEAKER, OR SPEAKER/STROBE, CANDELA TO COMPLY WITH NFPA.
  - 4 FIRE ALARM SMOKE DETECTOR.
  - 5 FIRE ALARM MANUAL PULLSTATION.
  - 6 FIRE ALARM POWER SUPPLY WITH COMPONENTS AS REQUIRED. COORDINATE LOCATION WITH FIRE ALARM CONTRACTOR.
  - 7 PROVIDE FIRE ALARM ANNUNCIATOR PANEL AT LOCATION INDICATED.
  - 8 FIRE ALARM DUCT SMOKE DETECTORS AND OUTPUT MODULES/RELAYS FOR SHUTDOWN OF AHU. MODIFY EXISTING MOTOR STARTERS AS REQUIRED.
  - 9 PROVIDE A 15-ZONE AIR SAMPLING-TYPE DETECTOR FOR PRISONER CELLS AREAS OUTSIDE OF PRISONER CELLS WHERE INDICATED. EXTEND A DEDICATED SAMPLING TUBE FOR EACH CELL TO THE SECURE SIDE OF EACH RETURN AIR OPENING(S).

- GENERAL NOTES:**
- A. REF E-000 FOR ADDITIONAL GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - B. NO FIRE ALARM DEVICES OR CONDUIT SHALL BE MOUNTED ON MARBLE, GRANITE, ORNATE PLASTER, PLASTIC LAMINATE FINISHES, OR OTHER ELABORATE FINISHES UNLESS SPECIFICALLY DETAILED ON THE ARCHITECTURAL DRAWINGS. MOUNT ALL NEW DEVICES IN GYP BOARD WALLS, GYP BOARD CEILINGS, OR SUSPENDED ACOUSTICAL CEILING (SAC). IF ANY DEVICE LOCATION SHOWN ON THIS DRAWING OR ON THE FIRE ALARM INSTALLER'S SHOP DRAWINGS IS FOUND TO BE IN CONFLICT WITH THIS STATEMENT, CONTACT THE ARCHITECT IMMEDIATELY.
  - C. THE EXISTING HONEYWELL FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL AT ALL TIMES UNTIL THE NEW FIRE ALARM SYSTEM IS FULLY FUNCTIONAL. ALL EQUIPMENT AND WIRING ASSOCIATED WITH EXISTING FIRE ALARM SYSTEM SHALL BE REMOVED AFTER SUCH TIME.
  - D. INVESTIGATE ALL DATA-GATHERING PANELS (DGP) ASSOCIATED WITH THE EXISTING HONEYWELL FIRE ALARM SYSTEM. REMOVE ALL DGPs THAT HAVE BEEN ABANDONED OR BECOME SPARED DURING DEMOLITION OF THE FIRE ALARM SYSTEM. ENSURE THAT ANY DGP'S REMOVED AFTER FIRE ALARM REMOVAL REMAIN OPERATIONAL.
  - E. ALL FIRE ALARM SYSTEM WIRING WHICH IS EXPOSED, CONCEALED IN NEWLY CONSTRUCTED INACCESSIBLE LOCATIONS, OR WIRED BETWEEN FLOORS SHALL BE INSTALLED IN AN APPROVED RACEWAY. FIRE ALARM WIRING ROUTED IN EXISTING WALL PARTITIONS OR ABOVE EXISTING CEILINGS MAY BE INSTALLED USING APPROVED LOW SMOKE PLENUM RATED FIRE ALARM CABLE. ALL FIRE ALARM WIRING CONNECTING SYSTEM SHALL BE TYPE C1, 2-HOUR RATED AND INSTALLED IN AN APPROVED RACEWAY.
  - F. ALL CONDUIT SHALL BE ROUTED NEATLY AND FASTENED AS TIGHTLY AS POSSIBLE TO STRUCTURE.



**02 ELEVATOR MACHINE ROOM  
 ELECTRICAL ENLARGED PLAN**  
 SCALE: 1/4" = 1'-0"



DATE	DESCRIPTION
9/9/2014	ADDENDUM #1 TO EM PRICING
8/5/2014	ISSUE FOR EM PRICING
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ISSUE	DATE	DESCRIPTION
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Sheet Title:  
**ELECTRICAL 4TH FLOOR  
 FIRE ALARM PLAN  
 AREA C (JAIL)**

Sheet No.:  
**E-404**  
 SHEET: OF: