

**SECTION 00 90 03  
BIDDING AND CONTRACT REQUIREMENTS  
ADDENDUM NUMBER 3**

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To: Prospective Bidders

Issued: May 8, 2026

**Re: ADDENDUM NUMBER (3) TO THE BIDDING DOCUMENTS FOR**

**Student Farm Renovations  
Issued for Bid**

Architect's Project Number: 25-037

This addendum forms a part of the bidding and contract documents and modifies the original bidding documents dated April 21, 2026. Acknowledge receipt of this addendum in the space provided on Bid Form. FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.

**ADDENDA TO THE PROJECT MANUAL**

1. 00 21 13 – INSTRUCTIONS TO BIDDERS
  - A. **REVISE** list of required documents noted in BIDDING PROCEDURES to add...  
'4. Document 00 43 22 – Unit Prices Form'
  - B. **REVISE** numbering for remaining items in list as required.
  - C. Note that the entire specification section has been reissued for clarity.
2. 00 43 22 – UNIT PRICES FORM
  - A. **ADD** the attached specification section in its entirety.
3. 21 13 02 – FIRE PROTECTION PERFORMANCE BASED DESIGN
  - A. **ADD** dry-pipe sprinkler system under section 1.1(c).
  - B. **ADD** dry pipe sprinkler system under section 1.8 (2)
  - C. **ADD** section 2.3 Pipe and Fittings – Dry Pipe Sprinkler System
  - D. **ADD** dry pipe system under section 3.1 (f)
  - E. **ADD** dry pipe valve under section 3.2 (c)
  - F. **ADD** dry piping under section 3.4 (c)
4. 28 31 00 – FIRE ALARM AND DETECTION SYSTEMS
  - A. **DELETE** sub-section 2.2.H.4 to be updated in future IFC set.

**ADDENDA TO THE DRAWINGS**

*NOTE: All drawings will be re-issued with revisions indicated unless otherwise noted.*

**CIVIL**

1. C-0
  - A. **REVISE** note #40 regarding haul off of excess material
2. C-02
  - A. **ADD** note to removal tag R-8.
  - B. **ADD** information to tank removal note.
  - C. **ADD** temporary construction fence and associated notes.
3. C-04
  - A. **ADD** hatch for limits of utility trench backfill and associated hatch legend.
  - B. **ADD** utility spoils note.
  - C. **REVISE** minimum bury depth for sanitary forcemain pipe.
  - D. **REVISE** sanitary forcemain crossing information & notes

## ARCHITECTURAL

1. A1.01
  - A. **REVISE** door tags as indicated on plans.
  - B. **ADD** paint tag to Reflected Ceiling Plan as indicated.
  - C. **REVISE** RCP Ceiling Types legend as indicated.
2. A6.01
  - A. **REVISE** plan details to show FRP in correct locations.
  - B. **REVISE** details to show correct paint tags / notes.
  - C. **ADD** stainless steel note for kitchen hood wall.
3. A10.00
  - A. **DELETE** remarks on Door and Frame Schedule – New Work.
  - B. **DELETE** doors 100.1(E), 106.1(E), and 109.1(E) from Door and Frame Schedule – Existing to Remain
  - C. **REVISE** door tags as shown on schedule.
  - D. **REVISE** Window Elevation A to show frame typ. frame width
4. A11.01
  - A. **REVISE** Finish Plan General Notes to include paint color as indicated.
  - B. **ADD** PT-01 paint color as indicated.
  - C. **ADD** PT-02, FRP-02, SS-01 to wall type legend and finish plan and clarified height extents of the FRP paneling.
  - D. **REVISE** wall base type as indicated.
  - E. **REVISE** floor finish type for sealed concrete.
  - F. **ADD** corner guard information to legend and finish plans.
  - G. **REVISE** note 1 as indicated.

## STRUCTURAL

1. S1.00
  - A. **REVISE** slab infill per revised underfloor plumbing drawings.
  - B. **ADD** bearing wall and joists to support revised ductwork layout.

## MECHANICAL

1. M1.01
  - A. **ADD** drainpipe from furnace humidifier.
  - B. **ADD** extend SG-1 to end of wall to help serve equipment alley.
2. M4.00
  - A. **ADD** note 2 to Make-up air unit schedule.

## PLUMBING

1. P1.01
  - A. **REVISE** floor drain in mechanical room to be closer to furnace.
  - B. **ADD** cold water piping to serve humidifier associated with furnace.

## FIRE PROTECTION

1. F0.00
  - A. **REVISE** Fire Protection Usage Schedule.
2. F1.01
  - A. **ADD** Dry pipe sprinkler system to serve attic.
  - B. **ADD** notes for Dry pipe sprinkler system.
  - C. **ADD** general sheet note to refer to Fire protection riser diagram
3. F1.01
  - A. **ADD** dry pipe system to FPML.
  - B. **ADD** dry pipe system and associated equipment to fire protection riser diagram

## ELECTRICAL

1. E1.02
  - A. **ADD** 208V 1PH electrical connection serving AC-1.
  - B. **ADD** manual starter serving AC-1.
  - C. **ADD** 120V 1PH electrical connection serving dry pipe sprinkler system control panel
  - D. **ADD** (2) monitor modules for dry sprinkler system.
  - E. **ADD** (1) control module for dry sprinkler system.
2. E2.00
  - A. **REMOVE** keynote #4 in detail 5/E2.00.
3. E4.00
  - A. **REVISE** panel schedule P2.
  - B. **REVISE** disconnect and starter schedule.

## KITCHEN EQUIPMENT

1. QF1.01
  - A. **REVISE** equipment schedule to include procurement responsibility as indicated.
  - B. **ADD** keynote 09 to keynote legend and equipment plan as indicated.

## **CLARIFICATIONS**

*NOTE: Refer to previously issued addenda for additional pre-bid RFI and the A/E response*

1. PRE-BID RFI #9: Is there a soils report for the project? What type of soils are we to assume for bidding?
  - A. **RESPONSE:** There is no soils report associated with the student farm project. All spoils are assumed to be clean and should be removed off site. It will be the contractors responsibility for final testing to confirm removal to a clean dump site. Refer to revised specs and drawings for details.
2. PRE-BID RFI #10: What type of underground tank is at the building? Are we to assume any fuel storage tanks, etc.?
  - A. **RESPONSE:** It is assumed to be a 500 gallon sanitary waste storage tank. There has been no observed leaking or tank integrity issues so a simple removal and disposal is all that should be included in the project scope. No other storage tanks are known to be on-site.
3. PRE-BID RFI #11: Are floors to remain as is? SC is shown on the finish schedule. Is this to be new or existing?
  - A. **RESPONSE:** All floors are to receive a new sealed concrete coating in all areas unless otherwise noted. Refer to the interior painting specs for sealed concrete coating details.
4. PRE-BID RFI #12: Is there a one line drawing available for this project? I do not see the drawings and there is also missing info for the MDP and the conduit runs. Please clarify
  - A. **RESPONSE:** One-line diagram and all Main Distribution Panel 'MDP' information can be found on detail 2/E2.00.
5. PRE-BID RFI #13: Is there any wall tile on the project? I see most walls are FRP and none are showing tile. Please confirm.
  - A. **RESPONSE:** There is no wall tile on the project.
6. PRE-BID RFI #14: Please verify the face size of window elevation A on drawing page A10.00. While the standard type A frame elevation dictates a 1 3/4" face, drawing A10.00 does not provide a specific dimension for the face size of the window elevation A unit. Please confirm if the window elevation A frame should also be 1 3/4" or provide the correct dimension if it differs from the standard type A frame.
  - A. **RESPONSE:** The face frame width will be 1 3/4" for elevation a doors. Refer to attached for clarifications.

7. PRE-BID RFI #15: The plans for the CCAL pole barn called for the signal to be relayed to the enunciator panel in the Campus Police office. That can only happen if it is hard wired. Please confirm the design intent.
  - A. RESPONSE: The wireless transmitter should send a signal to the city fire department, not relay the signal to the enunciator panel in the campus police office. Refer to revised drawings / specs for additional clarification.
8. PRE-BID RFI #16: Is the wireless communication via internet or via wireless technology (swift)? If its information transmitted via internet, would a CLSS gateway required to be installed? If it were to be wireless technology (swift technology), the building is too far away to communicate.
  - A. RESPONSE: Refer to response to RFI #15.
9. PRE-BID RFI #17: Are contractors to assume full height FRP to 10' for all walls throughout? There are no elevations showing details.
  - A. RESPONSE: FRP should be 10' H (or less where lower ceilings are located) and installed full height throughout the space above the wall base.
10. PRE-BID RFI #18: There is a specification for wall and corner guards, but none shown on the floor plan. Are we to include corner guards? If so, what locations?
  - A. RESPONSE: Refer to attached revised finish plans for corner guard locations, types, and heights.
11. PRE-BID RFI #19: Can you clarify the following items related to temporary fencing for this project...
  - 1) The total linear footage of temporary fence required for the project, as this is currently unclear on the civil plans given there appear to be two separate areas that may require fencing. 2) Whether the temporary fence is to be installed on bases with sandbags or with posts driven into the ground. 3) Whether windscreen is required to be attached to the fencing. 4) The required number of gates and the desired gate opening sizes. 5) The anticipated project duration.
  - A. RESPONSE: Refer to attached revised civil drawings for minimum required layout of fencing and access gates. Sandbags or driven posts are acceptable methods of installation with the contractor responsible for selecting the best method to maintain the fencing / gates as indicated throughout the duration of construction. No windscreen is required to be attached to the fencing. Refer to the attached revised civil drawings for the required gate locations. Gates should be sized as required for construction work and deliveries and secured so they can only be operated by the contractor and owner. The fencing / gates should be installed prior to the start of demolition and should remain in place until substantial completion.
12. Pre-Bid RFI #20 – Do we need temporary office building on site? What is exact size and requirements? Do we need temp facility to house people in the building to be demoed? Please clarify.
  - A. RESPONSE: No job site trailer is required for this project. Project meetings will be scheduled on campus with the owner. A temporary structure will not be required to house any occupants of the building.

**This addendum consists of 4 pages, excluding attachments.**

**END 00 90 03.**

**Attachments:**

1. 00 21 13 - INSTRUCTIONS TO BIDDERS
2. 00 43 22 - UNIT PRICES FORM
3. 21 13 02 - FIRE PROTECTION PERFORMANCE BASED DESIGN
4. C-01, C-02, C-04
5. A1.10, A6.01, A10.00, A11.01
6. S1.00
7. M1.01, P1.01, F0.00, F1.01, F3.00
8. E1.02, E2.00, E4.00
9. QF1.01

## **SECTION 00 21 13 - INSTRUCTIONS TO BIDDERS**

Sealed proposals are invited for the Student Farm Renovations for McHenry County College pursuant to specifications. Contractors who do not submit a bid or who do not respond with a "no bid" will be removed from our contractor list for this item.

### **PROPOSALS:**

Proposals will be received at the place, date, and time hereinafter designated.

**PLACE:** McHenry County College  
Room A246  
8900 US Hwy 14  
Crystal Lake, IL 60012

**DATE:** May 14, 2026

**TIME:** 10:00 AM prevailing time (FAXES ARE NOT ACCEPTABLE)

Proposals received after this time will not be accepted.

Proposals must be made in accordance with the instructions contained herein. They shall be submitted on the forms furnished in a sealed envelope, plainly marked, with the Bidder's Name and Address and the notation:

**BID:** **Student Farm Renovations**  
McHenry County College

Bids will be publicly opened and read aloud on May 14, 2026, following the receipt of bids at 10:30 AM, prevailing time, in Board Room A217.

### **TAX EXEMPTION:**

McHenry County College is exempt from Federal, State, and Municipal taxes.

### **SIGNATURE ON BIDS:**

McHenry County College requires the signature on bid documents to be that of an authorized representative of said company.

Each bidder, by making his bid, represents that he has read and understands the bidding documents and that these instructions to bidders are a part of the specifications.

### **BIDDING PROCEDURES:**

No bid shall be modified, withdrawn, or cancelled for ninety (90) days after the bid opening date without the consent of the College Board of Trustees.

Changes or corrections may be made in the bid documents after they have been issued and before bids are received. In such case, a written addendum describing the change or correction will be issued by the College to all bidders of record. Such addendum shall take precedence over that portion of the documents concerned, and shall become part of the bid documents. Except in unusual cases, addendum will be issued to reach the bidders at least five (5) days prior to date established for receipt of bids.

Each bidder shall carefully examine all bid documents and all addenda thereto, and shall thoroughly familiarize themselves with the detailed requirements thereof prior to submitting a proposal. Should a bidder find discrepancies or ambiguities in, or omissions from documents, or should they be in doubt as to their meaning, they shall, at once, and in any event, not later than ten (10) days prior to bid due date, notify the College who will, if necessary, send written addendum to all bidders. The college will not be responsible for any oral instructions. After bids are received, no allowance will be made for oversight by bidder.

Bidders shall submit three (3) complete copies (one original and two copies) of the Bid Forms including the following documents:

1. Document 00 41 13 – Bid Form
2. Document 00 43 13 – Bid Bond
3. Document 00 43 15 – Contractor Certification
4. Document 00 43 22 – Unit Prices Form
5. Document 00 43 25 – Substitution Sheet
6. Document 00 43 29 – Vendor W-9
7. Document 00 43 39 – MCC BEP Utilization Plan
8. Document 00 43 43 – Certificate of Compliance with Illinois Prevailing Wage Law

**SITE EXAMINATION:**

Bidder shall examine the project site before submitting a bid. A visit to the project site may be arranged for Bidders by contacting Sandy Schwendeman, Asst. VP of Facilities, (224) 833-0953, [sschwendeman@mchenry.edu](mailto:sschwendeman@mchenry.edu).

A MANDATORY Pre-Bid Meeting will be held on April 30, 2026, at 10:00 AM, prevailing time, in Board Room A217. Representatives from the College and the Architect's office will be present to answer questions regarding bidding procedures and project requirements. A site visit walkthrough to follow the Pre-Bid Meeting.

**SUBSTITUTIONS:**

Each bidder represents that his bid is based upon the materials and equipment described in the bidding documents. Any dealer bidding an equal product must specify brand name, model number, and supply specifications of product. The Board shall be the sole judge of whether an article shall be deemed to be equal. A bidder's failure to meet the minimum specifications as listed may result in disqualification of his bid.

**REJECTION OF BIDS:**

The bidder acknowledges the right of the College Board to reject any or all proposals and to waive informality or irregularity in any proposal received and to award each item to different bidders or all items to a single bidder. In addition, the bidder recognizes the right of the College Board to reject a proposal if the proposal is in any way incomplete or irregular. The College Board may also award, at its discretion, only certain items quoted on. The College Board also reserves the right to reject the proposal of a Bidder who has previously failed to perform properly or complete on time contracts of a similar nature, or a bid of a Bidder when investigation shows that Bidder is not in a position to perform the contract.

**ACKNOWLEDGEMENT OF ADDENDA:**

Signature of company official on original document shall be construed as acknowledgement of receipt of any and all addenda pertaining to this specific proposal. Identification by number of addenda and date issued should be noted on all proposals submitted. FAILURE TO ACKNOWLEDGE RECEIPT OF ADDENDA ON PROPOSAL SUBMITTED MAY RESULT IN DISQUALIFICATION OF PROPOSAL.

**SAMPLES:**

Bidder may be required to furnish samples upon request and without charge to the College.

**BID SECURITY:**

A certified check or bank draft or bid bond, made payable to McHenry County College, shall be submitted with the bid in the amount of ten (10) percent of your total bid. The bid security will be forfeited by the successful bidder in the event of the bidders failure to enter into a contract. Checks or drafts of unsuccessful bidders will be returned as soon as practicable after opening and checking the bids.

**INSURANCE:**

The successful bidder will be required to furnish a certificate of insurance in accordance with the General Conditions.

**PERFORMANCE BONDS:**

The successful bidder on this proposal must furnish a performance bond and a labor and material payment bond made out to McHenry County College, prepared on an approved form, as security for the faithful performance of their contract, within ten (10) days of their notification that their bid has been accepted. The surety thereon must be such surety company or companies as are authorized and licensed to transact business in the State of Illinois and have an minimum A-VI best rating. Attorneys in fact who sign bid bonds must file with each bond a certified copy of their power of attorney to sign said bonds. The performance and payment bonds shall be issued in an amount equal to one hundred percent (100%) of the contract sum. Such bonds shall be in force from the date of signing of the contract until one year after issuing of final certificate of payment. The cost of the bonds shall be included in the bidder's proposal.

**LAWS AND ORDINANCES:**

In execution of the work, the Contractor shall comply with applicable state and local laws, ordinances and regulation, the rules and regulations of the Board of Fire Underwriters, and OSHA standards.

**DAMAGE AND NEGLIGENCE:**

The Contractor agrees to indemnify and save harmless the College and employees from and against all loss, including costs and attorney's fees, by reasons or liability imposed by law upon the College for damages because of bodily injury, including death at any time resulting there from, sustained by any person or persons or on account of damage to property including loss of use thereof as provided in the General Conditions and Supplementary Conditions. College shall not be responsible for damages, delays, or failure to perform on its part resulting from acts or occurrences of force majeure. "Force majeure" means any (a) act of God, landslide, lightning, earthquake, hurricane, tornado, blizzard, floods and other adverse and inclement weather conditions; (b) fire, explosion, flood, acts of a public enemy, war, blockade, insurrection, riot or civil disturbance; (c) labor dispute, strike, work slow down, picketing, primary boycotts, secondary boycotts or boycotts of any kind and nature, or work stoppages; (d) any law, order, regulation ordinance, or requirement of any government or legal body or any representative of any such government or legal body; (e) inability to secure necessary materials, equipment, parts or other components of the project as a result of transportation difficulties, fuel or energy shortages, or acts or omission of any common carriers; or (f) any other similar cause or similar event beyond the reasonable control of College.

**INVESTIGATION OF BIDDERS:**

The College will make any necessary investigation to determine the ability of the bidder to fulfill the proposal requirements. McHenry County College reserves the right to reject any proposal if it is determined that the bidder is not properly qualified to carry out the obligation of the contract.

**CONTRACTOR REQUIREMENTS:**

The General Contractor shall employ a full-time superintendent to manage the day-to-day activities of the project. The superintendent shall be on-site at all times when subcontractors are working on-site. The superintendent shall be responsible to coordinate and manage all subcontractor work and shall have the authority to make decisions on behalf of the General Contractor.

General Contractors submitting a bid shall provide an 'AIA A305 - Contractor's Qualification Statement Form' upon request of the College immediately after the bid opening. References for a minimum of five (5) projects of similar scope and value completed within the past five (5) years. References shall include project name, owner contact information, architect's contact information, project scope, contract value, and date of completion.

General Contractors must state on the Bid Form all subcontractors intended to be used for this project. FAILURE TO DO SO MAY BE CAUSE FOR REJECTION OF BID.

**PREVAILING WAGE RATE:**

The successful bidder must pay not less than the prevailing hourly wage rate determined by the Illinois Department of Labor for the county where the contract is executed and the craft or type of worker needed to execute the contract. See the prevailing wage scale attached. If, during the course of work under this contract, the Department of Labor revises the prevailing rate hourly wages to be paid under this contract for any trade or occupation, Owner will notify Contractor and each Subcontractor of the changes in the

prevailing rate of hourly wages. Contractor shall have the sole responsibility and duty to ensure that the revised prevailing rate of hourly wages is paid by contractor and all Subcontractors to each worker to whom a revised rate is applicable. Revisions to the prevailing wage as set forth above shall not result in an increase in the Contract Sum.

**ILLINOIS STEEL PRODUCTS PROCUREMENT ACT:**

To the extent permitted by law, the project will be subject to all provisions of the "Steel Products Procurement Act" (30 ILCS 565 et. seq.) as it may be amended from time to time.

**OTHER:**

Sex Offender Registration Requirement Notification: Illinois Compiled Statutes (730 ILCS 150 3) requires that any person who is required by law to register as a sex offender and who is either a student or an employee at an institution of higher education, must also register with the Office of Public Safety of the institution they are employed by or attending. For purposes of this act, a student or employee is defined as anyone working at or attending the institution for a period of five (5) days or an aggregate period of more than thirty (30) days during a calendar year. **THIS INCLUDES PERSONS OPERATING AS OR EMPLOYED BY AN OUTSIDE CONTRACTOR AT THE INSTITUTION.** Anyone meeting the above requirements is required to register within five (5) days of enrolling or becoming employed. Persons failing to register are subject to criminal prosecution.

Substance Abuse Prevention: The successful bidder must comply with the Substance Abuse Prevention on Public Works Act (Public Act 95-0635.) The Act requires that every party to a public contract and every eligible bidder have a written substance abuse prevention program in place. By signing the bid form, the bidder certifies compliance to the conditions of this Act.

Human Rights Act: The College complies with the Human Rights Act (Public Act 88-1257.) The Act requires that every party to a public contract and every eligible bidder have written sexual harassment policies as described in this Act. By signing the bid form, the bidder certifies compliance to the conditions of this Act.

Concealed Carry Act: The College has established rules and regulations in accordance with the "Illinois Firearm Concealed Carry Act." See section 00 21 00 for detailed information.

**BID QUANTITIES:**

The College Board will reserve the right to increase or decrease, within reasonable limits, such quantities as need requires and at the unit price stated.

**BID AWARDS:**

The successful contractor, and/or any contractor shall not proceed on this bid until it receives a Notice to Proceed from the college. Failure to comply is the risk of that contractor.

**END OF SECTION 00 21 13**

**DOCUMENT 00 43 22 - UNIT PRICES FORM**

PART 1 - GENERAL

1.1 BID FORM SUPPLEMENT

- A. This form is required to be attached to the Bid Form.
- B. The undersigned Bidder proposes the amounts below be added to or deducted from the Contract Sum on performance and measurement of the individual items of Work and for adjustment of the quantity given in the Unit-Price Allowance for the actual measurement of individual items of the Work.
- C. If the unit price does not affect the Work of this Contract, the Bidder shall indicate "NOT APPLICABLE."

1.2 UNIT PRICES

- A. UNIT PRICE 1: Removal and disposal of spoils to a Subtitle D Facility (incremental cost increase over base bid).

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_) per cubic yard

1.3 SUBMISSION OF BID SUPPLEMENT

- A. Respectfully submitted this \_\_\_\_ day of \_\_\_\_\_, 2026.
- B. Submitted By: \_\_\_\_\_
- C. Authorized Signature: \_\_\_\_\_
- D. Signed By: \_\_\_\_\_
- E. Title: \_\_\_\_\_  
(Owner/Partner/President/Vice President).

**END OF DOCUMENT 00 43 22**



## SECTION 21 13 02 - FIRE PROTECTION SYSTEMS

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Pipe, Fittings, Valves, and Connections for Fire Protection System.
- B. Wet-Pipe Sprinkler System.
- C. **Dry-Pipe Sprinkler System.**

#### 1.2 QUALITY ASSURANCE

- A. Welding Materials and Procedures: Conform to ASME Code.
- B. Equipment and Components: Bear ULlabel or marking.
- C. Valves: Bear ULlabel or marking. Provide manufacturer's name and pressure rating marked on valve body. Pressure rating shall match specified pipe system pressure rating. Remanufactured valves are not acceptable.
- D. Specialist Firm: Company specializing in sprinkler systems with minimum three years' experience.
- E. Sprinkler design drawings submitted by the Contractor shall be prepared by a NICET Water-Based Fire Protection Systems Layout Level III or Level IV designer or PE.

#### 1.3 REFERENCES

- A. ANSI/ASME B16.1 - Cast Iron Pipe Flanges and Flanged Fittings, Class 25, 125, 250, and 800.
- B. ANSI/ASME B16.3 - Malleable Iron Threaded Fittings, Class 150 and 300.
- C. ANSI/ASME B16.4 - Cast Iron Threaded Fittings, Class 125 and 250.
- D. ANSI/ASME B16.5 - Pipe Flanges and Flanged Fittings.
- E. ANSI/ASTM A47 - Malleable Iron Castings.
- F. ANSI/AWWA C110 - Ductile Iron and Gray Iron Fittings.
- G. ANSI/AWWA C151 - Ductile Iron Pipe, Centrifugally Cast.
- H. ASTM A153 - Pipe, Steel, Black and Hot-Dipped, Zinc-coated Welded and Seamless.
- I. AWS B2.2 - Standard for Brazing Procedure and Performance Qualification.
- J. NFPA 101 - Life Safety Code,
- K. NFPA 13 - Standard for the Installation of Sprinkler Systems.

- L. NFPA 25 - Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.
- M. UL - Underwriter's Laboratory Fire Protection Equipment Directory.

#### 1.4 SUBMITTALS

- A. Submit shop drawings per Section 21 05 00. Indicate pipe materials, joining methods, supports, floor and wall penetration seals, sprinklers, equipment data and ratings, and hydraulic calculations.
- B. Submit detailed pipe and sprinkler layout and other calculations and forms as described in NFPA 13.
- C. Submit detailed working drawings and obtain review of them in the following order:
  - 1. Engineer/Architect/State Fire Marshal/Authority Having Jurisdiction
  - 2. Owner's Insurance Company
  - 3. Architect/Engineer
  - 4. Local Fire Department
  - 5. Owner's Insurance Company
  - 6. Architect/Engineer
- D. Working drawings shall include piping and sprinkler layout, sprinkler types and ratings, sections and elevations at critical points. Show coordination with lighting, ductwork, and diffusers, and indicate basic flow and hydraulic design information, including main location and date that the test was taken.
- E. Submit electrical power/controls wiring diagrams and product data indicating general assembly, components, safety controls, and service connections.
- F. Provide the Owner with one copy of NFPA 25. Standard for the Inspection Testing and Maintenance of Water-based Fire Protection Systems.

#### 1.5 EXTRA STOCK

- A. Provide metal storage cabinet, wrenches for each sprinkler type, and extra sprinklers per NFPA 13 and applicable building code.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store valves and sprinklers in shipping containers, with labels in place.
- B. Provide temporary protective coating on iron and steel valves.
- C. Maintain temporary end caps and closures in place until installation.

#### 1.7 WORK FURNISHED BUT INSTALLED UNDER OTHER SECTIONS

- A. Furnish sleeves to General Contractor for placement in walls and floors. Sleeve location to be determined by the Fire Protection Contractor prior to construction. If additional sleeves are required, they shall be core drilled by the Fire Protection Contractor.

## 1.8 SYSTEM DESCRIPTION

- A. Contractor shall design and install the following water-based fire protection systems for the areas noted on the contract documents:
  - 1. Wet pipe sprinkler system(s)
  - 2. **Dry pipe sprinkler system(s)**
- B. Sprinkler systems shall be designed and installed according to the following standard(s):
  - 1. NFPA 13 - Standard for the Installation of Sprinkler Systems
- C. System design and installation shall include all requirements by the Authority Having Jurisdiction, local and state building codes, and Owner's insurance company in addition to the previously listed design standard(s). Those requirements shall take precedence over the contract documents in the case of discrepancies.
- D. Systems shall be hydraulically calculated in accordance with the applicable design standard(s). Contractor is responsible for final pipe sizing based on results from hydraulic calculations. Pipe sizing shown on drawings for service entrance and main risers is preliminary and for coordination purposes only.
- E. The water supply source for this project is the following:
  - 1. Public waterworks system.
- F. Coordinate with Plumbing Contractor for installation of a floor drain or floor sink below the backflow preventer.

## 1.9 COORDINATION DRAWINGS

- A. Reference Coordination Drawings article in Section 21 05 00 for required fire protection systems electronic CAD drawings to be provided to Coordinating Contractor for inclusion into composite coordination drawings.

## 1.10 OPERATION AND MAINTENANCE DATA

- A. Submit manufacturers' operation and maintenance data. Include written maintenance data on components of system, servicing requirements, and record drawings.

## PART 2 - PRODUCTS

### 2.1 PIPE AND FITTINGS - WET PIPE SPRINKLER SYSTEMS

- A. Piping - 2" and Under (Steel Pipe):
  - 1. Design Pressure: 175 psig
  - 2. Pipe: Schedule 40 black steel, ASTM A53, ASTM A795, UL. Inner wall shall be coated with an anti-MIC (microbiologically influenced corrosion) coating.
  - 3. Schedule 40 Joints: Threaded or flanged.

4. Fittings:
  - a. Threaded:
    - 1) Cast iron, Class 125, black, UL, ANSI/ASME B16.4.
    - 2) Malleable iron, Class 150, black, UL, ANSI/ASME B16.3.
    - 3) Ductile iron, Class 150, black, UL, ANSI/ASME B16.3.
  - b. Flanged:
    - 1) Cast iron, Class 125, black, UL, ANSI/ASME B16.1.
5. Unions: Class 150 malleable iron, ANSI B16.39, ground joint with copper or copper alloy-to-iron seat.

B. Piping - 2-1/2" and Above (Steel Pipe):

1. Design Pressure: 175 psig
2. Pipe: Schedule 40, black steel ASTM A53, ASTM A795, UL. Inner wall shall be coated with an anti-MIC (microbiologically influenced corrosion) coating.
3. Joints: Grooved or flanged.
4. Fittings:
  - a. Grooved:
    - 1) Ductile iron housing ASTM A-536, Grade 65-45-12, UL, enamel coating, Grade E (Type A) EPDM molded pressure-responsive gaskets suited for 40F to 150F.
  - b. Flanged:
    - 1) Cast iron, Class 125 black, UL, ANSI/ASME B16.1ASTM A153.

## 2.2 FLEXIBLE FIRE SPRINKLER CONNECTIONS

- A. Flexible Connection: Stainless steel hose, 175 psig max working pressure, fully welded non-mechanical fittings, stainless steel braid, maximum of 6' hose length, leak-tested with a minimum 7/8" internal corrugated hose diameter made of 304 stainless steel, end fittings made of carbon or stainless steel. Outlet of end fittings shall be 1/2" or 3/4" to match sprinkler connection. UL.
- B. Ceiling Bracket: G90 galvanized steel, direct attachment type, integrated snap-on clip ends, tamper resistance screws, removable attachment hub with set screw for attachment and adjustment of stainless steel hose.
  1. Manufacturers:
    - a. Flexhead Industries
    - b. Victaulic VicFlex,
    - c. Sprinkflex
    - d. or approved equal.

## 2.3 PIPE AND FITTINGS - DRY PIPE SPRINKLER SYSTEMS

### A. Piping - 2" and Under (Steel):

1. **Design Pressure:** 175 psig
2. **Pipe:** Schedule 40, black steel, ANSI/ASTM A135, ASTM A795, UL. Inner wall shall be coated with an anti-MIC (microbiologically influenced corrosion) coating.
3. **Joints:** grooved or flanged.
4. **Fittings:**
  - a. **Grooved:**
    - 1) **Ductile iron housing ASTM A-536, Grade 65-45-12, UL, enamel coating, Grade E (Type A) EPDM molded pressure-responsive gaskets suited for 40F to 150F. Provide flush gap style gasket. Lubricate gasket according to manufacturer recommendations.**
  - b. **Flanged:**
    - 1) **Cast iron, Class 125, black, UL, ANSI/ASME B16.1 ASTM A153.**
5. **Unions:** Class 150 malleable iron, ANSI B16.39, ground joint with copper or copper alloy-to-iron seat.

### B. Piping - 2-1/2" and Above:

1. **Design Pressure:** 175 psig
2. **Pipe:** Schedule 40, black steel, ANSI/ASTM A53, ASTM A795, UL. Inner wall shall be coated with an anti-MIC (microbiologically influenced corrosion) coating.
3. **Joints:** grooved or flanged.
4. **Fittings:**
  - a. **Grooved:**
    - 1) **Ductile iron housing ASTM A-536 Grade 65-45-12, UL, enamel coating, Grade E (Type A) EPDM molded pressure-responsive gaskets suited for 40F to 150F.**
  - b. **Flanged:**
    - 1) **Cast iron, Class 125, black, UL, ANSI/ASME B16.1 ASTM A153.**

## 2.4 VALVES

- A. Provide handwheels for gate valves. Provide gear operators for butterfly valves.
- B. Provide all connections to match pipe joints. Valves shall be same size as pipe.

## 2.5 BACKFLOW PREVENTERS

- A. Provide backflow preventers as required by code and as specified on the drawings.

## 2.6 EQUIPMENT

- A. Equipment shall be as scheduled on the drawings.

## PART 3 - EXECUTION

### 3.1 INSTALLATION - PIPING

#### A. General Installation Requirements:

1. Coordinate piping and sprinkler locations with all other trades. Ductwork, diffusers and light fixture locations shall have priority over sprinkler piping and sprinklers.
2. Ream pipe and tube ends to full inside diameter. Remove burrs. Remove scale and foreign material, inside and outside, before assembly.
3. Die cut screw joints with full cut standard taper pipe threads.
4. Coat threads with pipe joint compound or wrap with Teflon tape.
5. Locate piping to minimize obstruction of other work.
6. Route piping in concealed spaces above finished ceiling.
7. Use full and double lengths of pipe wherever possible.
8. Slope all piping for complete drainage. Install auxiliary drains for all trapped piping per NFPA 13.
9. Reducers are generally not shown. Where pipe sizes change at tee, the tee shall be the size of the largest pipe shown connecting to it.
10. Comply with manufacturer's installation instructions.

#### B. Wall/Floor Penetration:

1. Provide sleeves when penetrating floors and walls.
2. Seal pipes passing through exterior walls with a wall seal per Section 21 05 29. Provide Schedule 40 galvanized sleeve at least 2 pipe sizes larger than the pipe. Sleeves through floors shall extend minimum 1.5" above finished floor.
3. Fire seal all pipe and sleeve penetrations (both wall and floor) to maintain fire separation required without restraining pipe.

#### C. Installation Requirements in Electrical Rooms:

1. Do not install piping or other equipment above electrical switchboards or panelboards. This includes a dedicated space extending 25 feet from the floor to the structural ceiling with width and depth equal to the equipment. Fire protection equipment dedicated to the electrical equipment room or space may be installed above equipment if other alternatives are not available.

#### D. Hangers and Supports:

1. Provide hangers and supports as required by NFPA 13 and UL, with the following exceptions:
  - a. Do not use powder driven devices, explosive devices, wooden plugs, or plastic inserts.
  - b. Do not install fasteners to carry the load in tension, unless absolutely necessary.

- E. Exposed Piping:
  - 1. Install chrome plated steel escutcheons where exposed pipes penetrate walls or floors.
  - 2. Remove all scale, rust, dirt, oils, stickers and thoroughly clean exterior of all bare metal exposed piping, hangers, and accessories.[]

**F. Dry Pipe System:**

- 1. **All fire protection piping within rooms served by dry pipe valves systems shall be downstream of dry pipe valve. Wet piping upstream of these devices shall not be installed above these rooms.**

3.2 INSTALLATION - VALVES

- A. Install gate valves with stems upright or horizontal, not inverted.
- B. Backflow Preventer:
  - 1. Provide an air gap fitting and piping to drain. On 2-1/2" and larger units, install a tail piece from air gap fitting to drain to prevent water from spraying out of drain air gap receptor. Maintain air gap distance required by Code.
  - 2. Units shall be field tested and tagged in accordance with manufacturer's instructions by a certified tester before initial operation.
  - 3. Install unit between 12" and 60" above finish floor.
  - 4. Provide monitor switches on all shutoff valves.

**C. Dry Pipe Valve:**

- 1. **Install dry pipe valve in heated area to prevent mechanical damage.**
- 2. **Provide all required trim and accessories for a fully functioning dry pipe valve system.**

**D. Shutoff Valve:**

- 1. Install buried shutoff valves in valve boxes. Provide post indicators.
- 2. Provide drain valves at main shutoff valves, low points of piping and apparatus.
- 3. Provide monitor switches on all shutoff valves.

3.3 INSTALLATION - EQUIPMENT

- A. Coordinate piping and sprinkler locations with all other trades. Ductwork, diffusers and light fixture locations shall have priority over system equipment and sprinklers.
- B. Fire Department Connection:
  - 1. Locate fire department connection in an accessible location as approved by the local fire department with sufficient clearance from walls, obstructions, and adjacent Siamese connectors to allow full swing of fire department wrench handle.
- C. Alarm Bell:
  - 1. Locate outside alarm bell on building wall as shown on drawings.

2. Wire all bells, flow switches and supervisory switches to fire alarm system. All wiring shall be in conduit and meet the requirements of the electrical specifications.

D. Test Valves:

1. Install test valves where required. Pipe to outdoors or drain. Test connection shall have flow equivalent to the smallest K-factor sprinkler.

E. Sprinklers:

1. Locate sprinklers to clear lights, ducts and diffusers. Do not run sprinkler pipes through ducts. Ductwork has priority over sprinkler pipes. Offset pipes as needed.
2. Center sprinklers in two directions in ceiling tiles and provide offsets as required.
3. Do not allow concealed sprinkler cover plates to be painted. Sprinkler cover plates are to be factory painted only. Do not field paint.
4. Apply strippable or paper covers so concealed sprinkler cover plates do not receive field paint finish.

### 3.4 SYSTEMS CLEANING AND TESTING

A. General Requirement:

1. All water used for testing and remaining in the piping system shall be obtained from a potable water source.

B. Interior Piping:

1. Verify adequate water flow at the inspector's test connection.
2. Flush all interior piping to remove scale and other foreign material before placing system into service.
3. Hydrostatically test the entire interior piping system at a minimum of 200 psig or 50 psig more than the normal system working pressure for systems subjected to pressures more than 150 psig. Maintain test pressure for 2 hours without loss of pressure. Test shall be performed with dry pipe valves in open position to prevent valve damage.

C. **Dry Piping:**

1. **On dry-pipe systems, also test the interior piping with an air pressure of 40 psi for 24 hours. Pressure loss shall not exceed 1-1/2 psi in 24 hours with allowance made for temperature change. An odorant, such as oil of wintergreen, may be added to help locate leaks.**

D. Fire Alarm System:

1. Test the alarm system by operating the inspector's test connection or the alarm test valves. Verify that the building fire alarm system activates.
2. Adjust all monitor switches for proper operation.

**END OF SECTION 21 13 00**

SPECIFICATIONS & GENERAL NOTES

All items of this project shall be governed by specifications included in the documents listed below:

- A. "Standard Specifications for Road and Bridge Construction" prepared by the Department of Transportation of the State of Illinois and adopted by said department (latest revision).
B. "Supplemental Specifications and Recurring Special Provisions" adopted by the Illinois Department of Transportation (latest revision date).
C. "Standards and Specifications for Soil Erosion and Sediment Control" (latest revision).
D. "Standard Specifications for Water and Sewer Main Construction in Illinois" (latest revision).

In addition the following special provisions supplement the said specifications, and in case of conflict with any part or parts of said specifications, these special provisions shall take precedence and shall govern.

- 1. SCOPE OF WORK. The proposed improvement consists of supplying all the necessary labor, material and equipment to satisfactorily construct and install all improvements according to the plans designated as McHENRY COUNTY COLLEGE ENGAGEMENT HALL.
2. CONSTRUCTION OF UNDERGROUND UTILITIES

A. Excavation. Where working conditions and right-of-way permit, pipe line trenches with sloping sides may be used.

The slopes shall not extend below the top of the pipe, and trench excavations below this point shall be made with vertical sides with widths not exceeding those specified herein for the various sizes of pipe.

Open-cut trenches shall be sheeted and braced as required by the governing State and Federal laws and municipal ordinances, and as may be necessary to protect life, property, or the work.

Where firm foundation is not encountered at the grade established due to unsuitable soil, all such unsuitable material shall be removed and replaced with approved compacted granular material.

B. Width of trench: See trench detail.

C. Removal of water: Contractors shall, at all times during construction, provide and maintain ample means and devices with which to remove and properly dispose of all water entering the excavations. No sanitary sewer shall be used for disposal of trench water, unless specifically approved by the Engineer and then only if the trench water does not ultimately arrive at existing pumping or sewage treatment facilities.

D. Bedding of pipe: All pipe shall be installed on a bed of approved, compacted granular material unless otherwise approved by the City Engineer. The bedding and backfilling of excavated materials shall be cleared with City first and be installed as per typical trench backfill detail.

E. Special backfill: Wherever the excavation is in existing or proposed street, parking areas, driveways, or other paved areas, the trench shall be backfilled with approved selected granular material compacted in place. The top 12" of the backfill shall be filled with road gravel or crushed stone and maintained as a temporary surface for the normal use of the area. Special backfill shall meet the requirements of the City of Crystal Lake Standard Detail 100-33 found on Sheet C-07. Note: Excavated materials may be used if approved by the City Engineer.

F. Restoration of drainage: As soon as possible after backfilling the trench, all ditching, grading and shaping necessary to restore the original drainage in the area of work shall be performed. Cuts/ers removed during the course of the work shall be replaced as soon as practicable. Adequate temporary drainage facilities shall be provided during construction.

G. Utilities: The Contractor shall notify all utilities prior to the installation of any pipe lines. Where conflict exists between underground utilities and the proposed underground piping requiring a revision to the plans, such construction shall not be undertaken until such changes are approved by the City Engineer in writing.

3. The subgrade shall be free of unsuitable material and shall be prepared in accordance with the recommendations noted in the geotechnical report prepared by Midway Standard, dated April 21, 2013 for this project. Testing for compaction shall be the responsibility of the contractor. The City of Crystal Lake will require a post-rail test if warranted by final soil composition. This also applies to the parking lot and drive subgrade and also upon gravel placement. All topsoil and any organic materials must be removed.

4. Easements for the existing utilities, both public and private, and utilities within public rights-of-way are shown on the plans according to available records. The Contractor shall be responsible for determining the exact location in the field of these utility lines and their protection from damage due to construction operations. If existing utility lines of any nature are encountered which conflict in location with new construction, the Contractor shall notify the Engineer so that the conflict may be resolved.

5. Contractor shall be responsible for securing all Permits including municipal permits.

6. INSPECTION: All improvements shall be subject to inspection by a duly authorized and qualified City Inspector both during the course of construction and after construction is complete. The Inspector shall have authority over methods of construction, methods of construction and workmanship to insure compliance with working drawings and specifications. The Contractor shall provide for reasonable tests and proof of quality of materials as requested by the Inspector. Inspector shall have forty-eight (48) hours notice prior to construction.

7. Wherever a sewer crosses under a water main, the minimum vertical distance from the top of the sewer to the bottom of the water main shall be 18". Furthermore, a minimum horizontal distance of 10' between sanitary sewers and water mains shall be maintained. If either the vertical or horizontal distances described above cannot be maintained, or the sewer crosses above the water main, the sewer pipe shall be pipe of water main type quality and water main quality joints, or the water main shall be encased in a steel sleeve for a perpendicular distance of 10' on each side of the sewer.

8. SAN. MAN. 74", 48" DIA. Manholes shall be constructed of prefabricated concrete sections meeting the requirements of ASTM C-478. Sections shall be joined using either flexible rubber gaskets or preformed bituminous plastic gaskets. The manhole bottom shall be precast with the first sewer section. Manholes shall have the pipe cast in place through the manhole or a water tight joint cast in the manhole wall to receive the pipe. Manhole frames and lids shall be of self-sealing type Menard 1712 or equal with approval by the municipality, with Type B lid and concrete pilehole with the word "Sanitary" cast in the lid. (See City Detail). Testing: Vacuum testing of sanitary manholes shall be completed by the contractor meeting the requirements of ASTM C-244.

9. Sanitary Overlay Sewer: Overlay sanitary sewer pipe shall be Polyvinyl Chloride (PVC) minimum SDR 26 conforming to ASTM 3034 with elastomeric gasketed joints conforming to ASTM D 3212. All sanitary sewers shall be cleaned and subjected to an air test, applicable deflection test and TV inspection by the contractor. All sanitary sewer service laterals shall be locatable in accordance with JULE & City of Crystal Lake requirements.

10. Sanitary Foreman: Sanitary foreman pipe shall be HDPE and shall be smooth-walled & shall meet the applicable requirements of ASTM D3035, DR 11, 200 psi, High Density Polyethylene (HDPE) shall meet the applicable requirements of ASTM F714. Polyethylene (PE) Plastic Pipe and ASTM D-1248 "Polyethylene Plastic Molding and Extrusion Materials". All pipe shall be made of virgin material. The pipe shall be homogeneous throughout and shall be free of visible cracks, holes, foreign material, inclusions, or other material defects. All HDPE fusion joints shall meet the minimum requirements of the manufacturer for cool-down time and all other fusing requirements. HDPE pipe shall be provided with necessary restraints and/or fittings to guarantee the pipe will not separate from the manholes at either end as might be caused by thermal expansion or contraction. Any such restraint or fitting shall be Tri-Plate VA (electrofusion fittings or approved equal, and be pre-approved for use with HDPE pipe and installed in strict conformance with the pipe manufacturer's instructions. All sanitary sewer service laterals shall be locatable in accordance with JULE & City of Crystal Lake requirements. All foreman shall be cleaned and pressure tested at 1.5x the maximum operating pressure and leak tested per the requirements of the Standard Specifications for Water & Sewer Main Construction in Illinois, latest edition.

11. Water Service: Water service pipe shall be High Density Polyethylene (HDPE) Pipe complying with AWWA C-906. Polyethylene pipe shall be furnished with an outside diameter conforming to ductile iron pipe sizes. Minimum thickness of HDPE pipe shall not be less than DR 11 when measured in accordance with ASTM D-2122. All polyethylene pipe and fittings shall be made of a high-density polyethylene pipe compound with extra high molecular weight that meets the requirements for Type III, Grade P34 Polyethylene material as defined in ASTM D-1248, latest revision. Pipes shall be joined to one another and polyethylene fittings by thermal butt fusion or by socket fusion in accordance with ASTM D-2851. Joining of pipe sections shall be performed in accordance with the procedures recommended by the pipe manufacturer. Joints between pipe sections shall be smooth on the inside and internal projection beads shall not be greater than .375-inch. The tensile strength at yield of the butt-fusion joints shall not be less than the pipe. A specimen of pipe cut across the butt-fusion joint shall be tested in accordance with ASTM D-638. All water service pipe shall be locatable in accordance with JULE & City of Crystal Lake requirements. Tracer wire shall be installed simultaneously with outside of the HDPE pipe. Wire shall either be wrapped around the pipe or taped to the pipe at 10 foot minimum intervals before installation. Contractor shall perform an available leakage test on the full length of pipe after all sections have been welded or fused in accordance with AAS/AWWA C600, latest revision. A hydrostatic pressure test shall also be performed on the installed pipe in accordance with AAS/AWWA C600. Water service shall be inspected per AWWA C651 and the requirements of the Standard Specifications for Water & Sewer Main Construction in Illinois, latest edition.

12. All manholes to be concentric, lids to have utility name.

13. All manholes and valve vaults shall be equipped with steps.

14. STORM SEWER FRAMES AND LIDS. All frames not falling in the flow line of the curb and gutter shall be Menard 1713 or as noted on the plans with a 1" thick frame and the word "Storm" cast in the lid. All curb inlets, and catch basins in gutter lines shall be Menard R-3281 Frame and Grate, or as noted on plans, with ENVIRO lids with Type B-12 curb and gutter is specified. All storm sewer grates shall have the ENVIRO Logo on them. All bituminous joining compound for manholes and catch basins shall be RAM-NEK or C-5700.

15. PROTECTION OF WATER MAIN AND WATER SERVICE LINES. Water mains and water service lines shall be protected from sanitary sewers, storm sewers, combined sewers, house sewer service connections and drains as follows:

- A. Water Service Lines:
1. Horizontal Separation
a. Water mains shall be laid at least 10' horizontally from any existing or proposed drain, storm sewer, sanitary sewer, combined sewer or sewer service connection.
b. Water mains may be laid closer than 10' to a sewer line when:
(1) Local conditions present a lateral separation of 10';
(2) The water main invert is at least 18" above the crown of the sewer; and
(3) The water main is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer with a minimum vertical separation of 18".

c. Both the water main and drain or sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, or PVC pipe meeting the requirements of Section 653.111 when it is impossible to meet (a) or (b) above. The drain or sewer shall be pressure tested to the maximum expected surcharge head before backfilling.

2. Vertical Separation.

- a. A water main shall be laid so that its invert is 18" above the crown of the drain or sewer wherever water mains cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main located within 10' horizontally of any sewer or drain crossed. A length of water main pipe shall be centered over the sewer to be crossed with joints equidistant from the sewer or drain.

b. Both the water main and sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, or PVC pipe meeting requirements of Section 653.111 when:
(1) It is impossible to obtain the proper vertical separation as described in (a) above; and
(2) The water main passes under a sewer or drain.

c. A vertical separation of 18" between the invert of the sewer or drain and the crown of the water main shall be maintained where a water main crosses under a sewer. Support the sewer or drain lines to prevent settling and breaking the water main.

d. Construction shall extend on each side of the crossing until the normal distance from the water main to the sewer or drain line is at least 10'.

B. Special Conditions. Alternate solutions shall be presented to the Agency when extreme topographical, geological or existing structural conditions make strict compliance with (A) and (B) above technically and economically impractical. Alternate solutions will be approved provided water-tight construction structurally equivalent to approved water main material is proposed.

17. The Contractor may not remove any material from the site except as directed by the Owner or Engineer in the case of excess material.

18. TOPSOIL PLACEMENT. All non-paved disturbed areas shall be restored w/ 6" topsoil and Class 1A Seed with excelsior blanket.

19. The Engineer and City of Crystal Lake Engineering Department shall be notified if, during construction, any buried field lines are exposed or disturbed. The Contractor shall reconstruct said field lines if deemed necessary.

20. Contractor shall provide insurance coverage as per Article 107.27 of the Standard Specifications. The "Department" shall be taken to mean HR Green, Inc. The policy of insurance shall include HR Green, Inc. the City of Crystal Lake and it's Agents as an additional insured or provide separate coverage with an Owner's Protective Policy, as per the amounts stated in the Standard Specifications. No work shall begin until the certificate of insurance is on file with the Engineer. All costs for insurance shall be considered incidental to the contract.

21. All handicapped parking signs must have a \$250.00 fine sign attached.

22. The Contractor shall be responsible for the installation and maintenance of adequate signs, traffic control devices, and warning devices to inform and protect the public during all phases of construction. See City Standard Traffic Control detail for close closures of public roads.

23. The Engineer shall be responsible for the following:

A. To visit the construction site in order to better carry out the duties and responsibilities assigned by the Owner and undertaken by the Engineer; and

B. The Engineer shall not, during such visits or as a result of such observations of the Contractor's work in progress, supervise, direct, have control over the Contractor's work, nor shall the Engineer have the authority over the responsibility for the means, methods, techniques, sequences, or procedures of construction executed by the Contractor, for safety, precautions and programs incidental to the work of the Contractor, or for any failure of the Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to the Contractor furnishing and performing his work. Accordingly, the Contractor shall secure guarantee the performance of the construction contracts by the Contractor nor assume responsibility for the Contractor's failure to furnish and perform his work in accordance with the Contract Documents.

27. No construction plans shall be used for construction unless specifically marked "For Construction." Prior to commencement of construction, the Contractor shall verify all dimensions and conditions affecting their work with the actual conditions at the job site. In addition, the Contractor must verify the Engineer's line and grade stakes. If there are any discrepancies from what is shown on the construction plans, he must immediately report same to the Engineer before doing any work, otherwise the Contractor assumes full responsibility. In the event of disagreement between the construction plans, standard specifications and special details, the Contractor shall secure written instructions from the Engineer prior to proceeding with any part of the work affected by omissions or discrepancies. Failing to secure such instructions, the Contractor will be considered to have proceeded at his own risk and expense.

In the event of any doubt or question arising with respect to the true meaning of the construction plans or specifications, the decision of the Engineer shall be final and conclusive.

28. The Contractor shall indemnify and hold harmless the City, City's Engineers their agents and it's employees, HR Green, Inc. and McHenry County College, from and against all claims, damages, losses and expenses, including attorney's fees arising out of or resulting from the performance of the Contractor's work in any and all claims against the City or its employees, by any employee of the Contractor, or anyone directly or indirectly employed by the Contractor, or anyone for whose acts the Contractor may be held liable, indemnification obligation shall not be limited in any way by any limitation on the amount of damages, waiver of subrogation compensation or benefits payable by or for the Contractor under Workers' Compensation acts, disability benefit acts or other employee benefit acts.

29. Sawing of removal items as noted on the plans, specified in Section 440 of the Standard Specifications, or as required by the engineer, shall be considered incidental to the cost of the item being removed, and no extra compensation will be allowed, unless otherwise specified.

30. SIGN PANEL - TYPE I, METAL POST - TYPE B. This work shall consist of furnishing and installing Type I sign panels on U-channel, and break away sign supports as indicated on the plans. Sign assemblies shall meet the requirements of Standard Specifications for Traffic Control Manual on Uniform Traffic Control Devices and as directed by the Engineer.

Furnishing, fabricating and installing sign assemblies will be paid for at the contract unit price per square foot for Sign Panel - Type I which price will be payment in full for all labor and material necessary to fabricate and install each sign assembly specified on the plans. The posts, including the break away assembly, shall be paid for at the unit price per foot for Metal Post - Type B.

31. PROTECTIVE COAT. This work shall be in accordance with Section 420 of the Standard Specifications insofar as applicable with the following revision:

The protective coat shall be applied to all exposed surfaces of Combination Concrete Curb and Gutter, Concrete Median and Concrete Corrugated Median.

This work will be paid for at the contract unit price per square yard for Protective Coat.

32. COMBINATION CONCRETE CURB AND GUTTER. Concrete curb, concrete gutter and combination concrete curb and gutter shall be constructed, measured and paid for in accordance with Section 606 of the Standard Specifications except as follows:

Revise the last sentence of the second paragraph of Article 606.07 to read as follows: "The traverse joints shall be contraction joints spaced on 12'-0" centers."

Any City requirements regarding expansion & contraction joints shall govern construction.

33. A performance guarantee shall be required (letter of credit) for all public utilities. Also, a two year maintenance bond shall be established upon completion of work.

34. All pavement markings on main access drives, approaches and parking lot shall be painted with two (2) coats of WHITE STRIPE PAINT, 75000406, TRAFFIC MARKING.

Pavement Striping: All proposed pavement striping to be painted.

All Handicap striping shall be yellow.

All curb & gutter crossings over trench locations shall be reinforced with 2-#4 rebar extended 2' beyond each side of trench.

Where storm sewer is located above the water main, the reinforced concrete pipe shall have O-rings to provide a water tight seal and to create a water quality pipe.

37. CURB RAMPS: All sidewalks shall be installed to accommodate the handicapped. A type "A" Ramp shall be installed in accordance with I.D.O.T. Standard Detail #24001-001, or the detail shown on the plan. Color of finished slopes shall be contrasting with the adjacent surface. Contractor to coordinate color with owner prior to ordering truncated dome panels.

38. SIDEWALKS. Unless otherwise shown on the plans, the proposed sidewalks in front of the site shall be constructed when the site work is substantially complete.

ALL PUBLIC AND PRIVATE SIDEWALKS SHALL BE CONSTRUCTED WITH A MAXIMUM RUNNING SLOPE OF NO GREATER THAN 1:20 (1"/FT) - 5% GRADIENT.

All materials shall meet the requirements of the "Standard Specifications for Road and Bridge Construction" of the Illinois Department of Transportation. Concrete shall be at least a six (6) bag mix, 48" to 66" wide, and shall have a slump of no less than two (2) inches more than four (4) inches. Fiberglass reinforced additives shall be used on all sidewalks extending through driveways. Sidewalks shall be placed on a minimum of four (4) inches of CA-6 crushed stone or Grade 9 compactable crushed stone. Driveway crossings for sidewalks shall be 6" P.C.C. with (4") inches of CA-6 crushed stone or Grade 9 compactable crushed stone.

Pre-molded bituminous expansion joints one-half (1/2") inch thick shall be placed every 50 feet minimum and one-half (1/2") inch thick between the sidewalk and all structures, which extend through the sidewalk. Control joints shall be on five (5) foot centers.

The side edges of the sidewalk shall have rounded edges and the surface shall be "broom" finished.

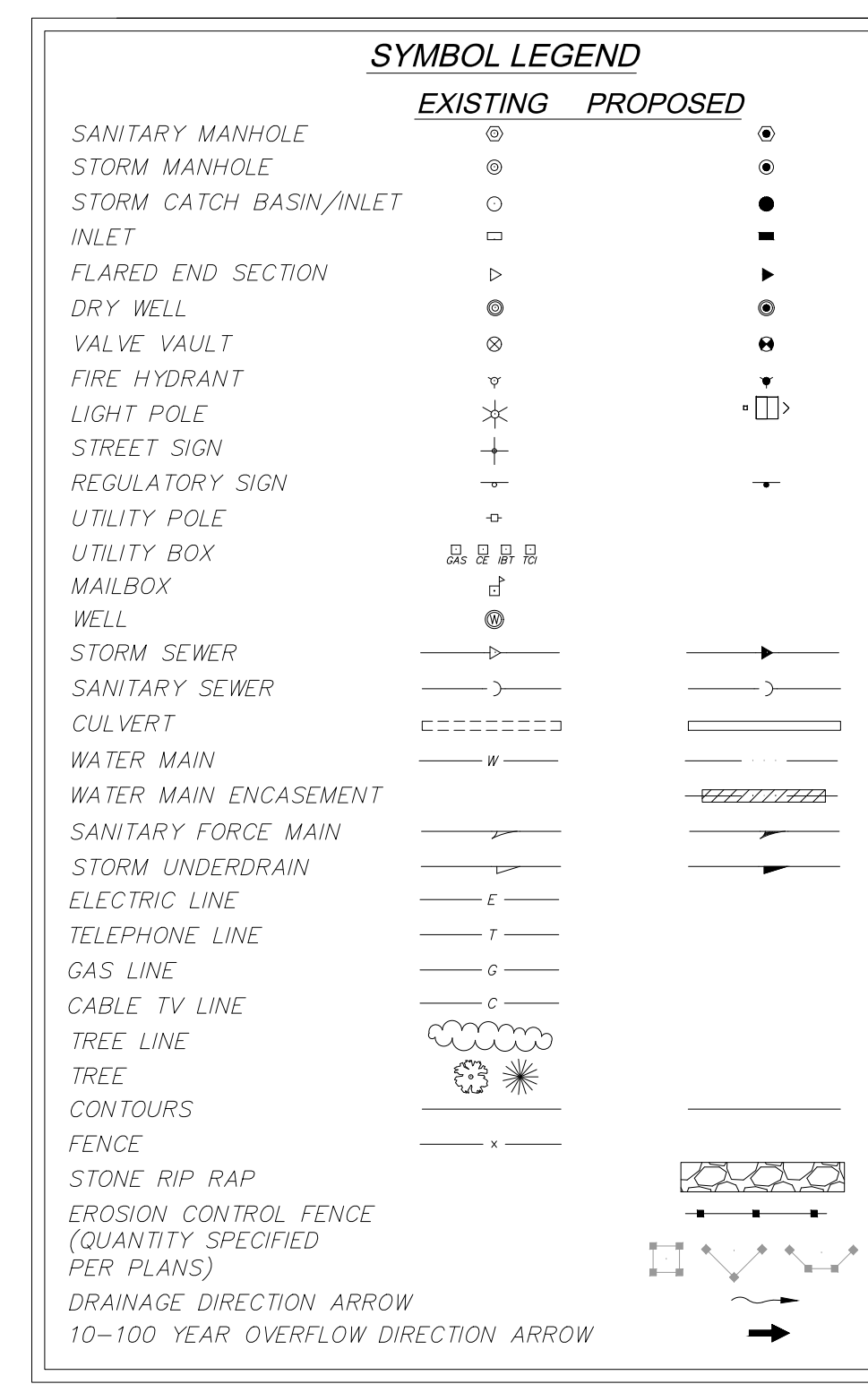
Protection and Curing: All exposed surfaces of concrete shall be protected against rain. The concrete shall be cured for a minimum period of three days after placing by one of the following methods:

Wet burlap
Impervious paper
Membrane curing compound

When the temperature of the air is expected to drop below 40 degrees F, within 24 hours placing the concrete shall be protected with nine inches of loose, dry straw and a layer of burlap over acceptable material, for a period of at least five days.

39. The concrete sealer, in addition to conforming with the referenced Standard Specification section, shall be selected from the current (DOT approved) product list for Plural Component Concrete Sealers, or equal. The concrete sealer must dry to a clear finish. All exterior concrete surfaces as well as the sprayed block retaining wall shall be sealed. The contractor shall provide documentation from the sealer provider, segmental block wall supplier and concrete pavement supplier noting the sealer is compatible with all exterior concrete surfaces that it is to be applied to. Contractor to also provide cut sheets of the desired sealer to the engineer for approval prior to ordering.

40. All surplus soil that will need to be hauled and disposed of, offsite, will need to be certified that it is not contaminated as defined under 410 ILCS 5/1160. Testing fees to be paid for by the contractor. Bidding contractor to provide unit cost for spoil removal / disposal to a Suitable Landfill if testing determines that the material is contaminated, for 666, 7066, 7066, 8066 charges charged by or through the operator of a clean construction or demolition debris (CDD), or uncontaminated soil fill operations for the acceptance of uncontaminated soil shall be paid for by the contractor and those fees included in their bid price.



ARCHITECT: DEMONICA KEMPER ARCHITECTS 125 N. HALSTED STREET, SUITE 301 CHICAGO, IL 60661 P: 312.496.0000

S-MEP-PP-T ENGINEER: IMEG CORP 263 SHUMAN BLVD, SUITE 550 NAPERVILLE, IL, 60563 P: 630.527.2320

CIVIL ENGINEER: HR GREEN 1391 CORPORATE DRIVE, SUITE 203 MCHENRY, IL, 60050 P: 815.385.1778

KITCHEN CONSULTANT: NEW VENTURE ADVISORS 2506 N. CLARK ST. #436 CHICAGO, IL, 60614 P: 773.245.3570

McHenry County College Student Farm Renovations 8900 Northwest Hwy #14, Crystal Lake, IL 60012 DKA PROJECT NO: 25-037

KEY PLAN:

ISSUE DATE: 04/21/2026 ISSUED FOR BID - NOT FOR CONSTRUCTION

Table with columns: NO., DESCRIPTION, DATE. Row 1: 1, ADDENDUM NO. 3, 05/08/26

SHEET TITLE: GENERAL NOTES, SPECIFICATIONS, & LEGEND

SHEET NUMBER:

ISSUED FOR BID - NOT FOR CONSTRUCTION C-01



ARCHITECT:  
**DEMONICA KEMPER ARCHITECTS**  
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**McHenry County College**  
**Student Farm Renovations**  
 8900 Northwest Hwy #14, Crystal Lake, IL 60012  
 DKA PROJECT NO: 25-037



**BID ALTERNATE NO. 2:**

- ADD TO THE LUMP SUM BASE BID TO ADD THE WATER MAIN CONNECTION BETWEEN BUILDING C AND BUILDING D. ADDED SCOPE OF WORK INCLUDES ALL WORK ASSOCIATED WITH DEMO, EXCAVATION, PIPING INSTALLATION, BACKFILL, AND RESTORATION OF EXISTING CONDITIONS. BASE BID HAS NO WORK IN THIS AREA OF THE PROJECT.

**LEGEND**

	INDICATES HMA REMOVAL
	INDICATES CONCRETE REMOVAL (FULL DEPTH) (SEE TAGS FOR INFORMATION)
	INDICATES GRAVEL REMOVAL
	INDICATES MISC. REMOVAL ITEMS
	INDICATES EXIST. CONCRETE CURB & GUTTER OR WALL TO BE REMOVED
	INDICATES TREE AND BRUSH REMOVAL (SEE LANDSCAPE PLANS)
	INDICATES TREE AND BRUSH PROTECTION
	INDICATES PAVEMENT SAWCUT
	INDICATES UTILITY LINE REMOVAL

**REMOVAL TAGS:**

NUMBER	DESCRIPTION	REMARKS
R-1	CONCRETE PAVEMENT/SIDEWALK	REMOVE (FULL DEPTH)
R-2	ASPHALT PAVEMENT	REMOVE (FULL DEPTH)
R-3	GRAVEL	REMOVE
R-4	CURB & GUTTER	REMOVE & REPLACE
R-5	TREE	REMOVE
R-6	ELECTRIC SERVICE & METER	REMOVE (COORD. W/ UTILITY)
R-7	WATER SERVICE	ABANDON IN PLACE
R-8	UNDERGROUND TANK & PIPES	REMOVE (PER HEALTH DEPARTMENT)

**NOTES:**

- MCHENRY COUNTY COLLEGE (MCC) SHALL BE NOTIFIED OF ALL NON IDENTIFIED UNDERGROUND UTILITIES OR CONDUITS DISCOVERED DURING CONSTRUCTION. IF ANY OF THE UTILITY OR CONDUITS NEED TO BE REPAIRED, PLUGGED, REROUTED AND OR ABANDONED IN PLACE, IT SHALL TAKE PLACE PER THE DIRECTION OF THE MCC.
- ALL NON-PAVED DISTURBED AREAS SHALL BE RESTORED W/ 6" TOPSOIL AND CL 1A SEED W/ EXCELSIOR BLANKET

**REMOVAL NOTES:**

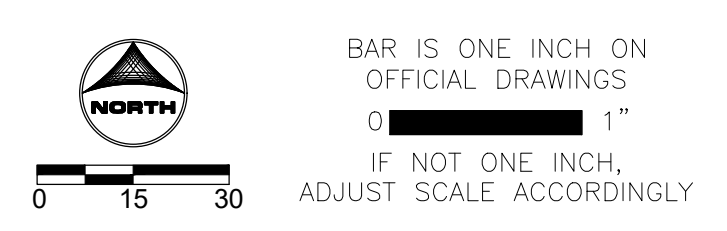
- ALL REMOVALS IN NON-PAVED AREAS DENOTED TO REQUIRE CLEARING AND GRUBBING SHALL INCLUDE TOPSOIL STRIP AND STOCKPILE AS PART OF THE REMOVAL UNLESS OTHERWISE NOTED.

**STAGING NOTE:**  
 (STAGING SUBJECT TO CHANGES PER SITE CONTRACTORS SCHEDULE AND METHODS OF OPERATION)

- EROSION CONTROL MEASURES
- PLAN REMOVALS
- UTILITY INSTALLATION
- BUILDING CONSTRUCTION / RENOVATIONS
- PAVING
- TOPSOIL RESPREAD/SEED

**PROJECT NOTES:**

- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. SEE SHEET C-06 FOR EROSION CONTROL MEASURES)
- ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.
- ALL STRUCTURES & DEBRIS SHALL BE REMOVED PRIOR TO CONSTRUCTION & DISPOSED OF OFFSITE.
- ANY EXISTING FIELD DRAIN TILES ENCOUNTERED SHALL BE RECONNECTED OR CONNECTED TO THE NEAREST STORM SEWER.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- CONTRACTOR TO KEEP RING ROAD (CIRCLE DR.) OPEN AT ALL TIMES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.



ISSUED FOR BID - NOT FOR CONSTRUCTION

KEY PLAN:

ISSUE DATE: 04/21/2026  
**ISSUED FOR BID - NOT FOR CONSTRUCTION**

NO.	DESCRIPTION:	DATE:
1	ADDENDUM NO. 3	05/08/26

SHEET TITLE:  
**SITE DEMOLITION PLAN**

SHEET NUMBER:  
**C-02**

Dial 811 or 1-800-892-0123  
**811**  
 Know what's below. Call before you dig.  
 CALL JULIE 1-800-892-0123  
 WITH THE FOLLOWING:  
 COUNTY McHenry  
 CITY-TOWNSHIP Crystal Lake - Dorr  
 SEC. & 1/4 SEC. NO. # SW 1/4 OF SEC-25-T-44N-7E  
 48 hours before you dig (Excluding Sat., Sun. & Holidays)



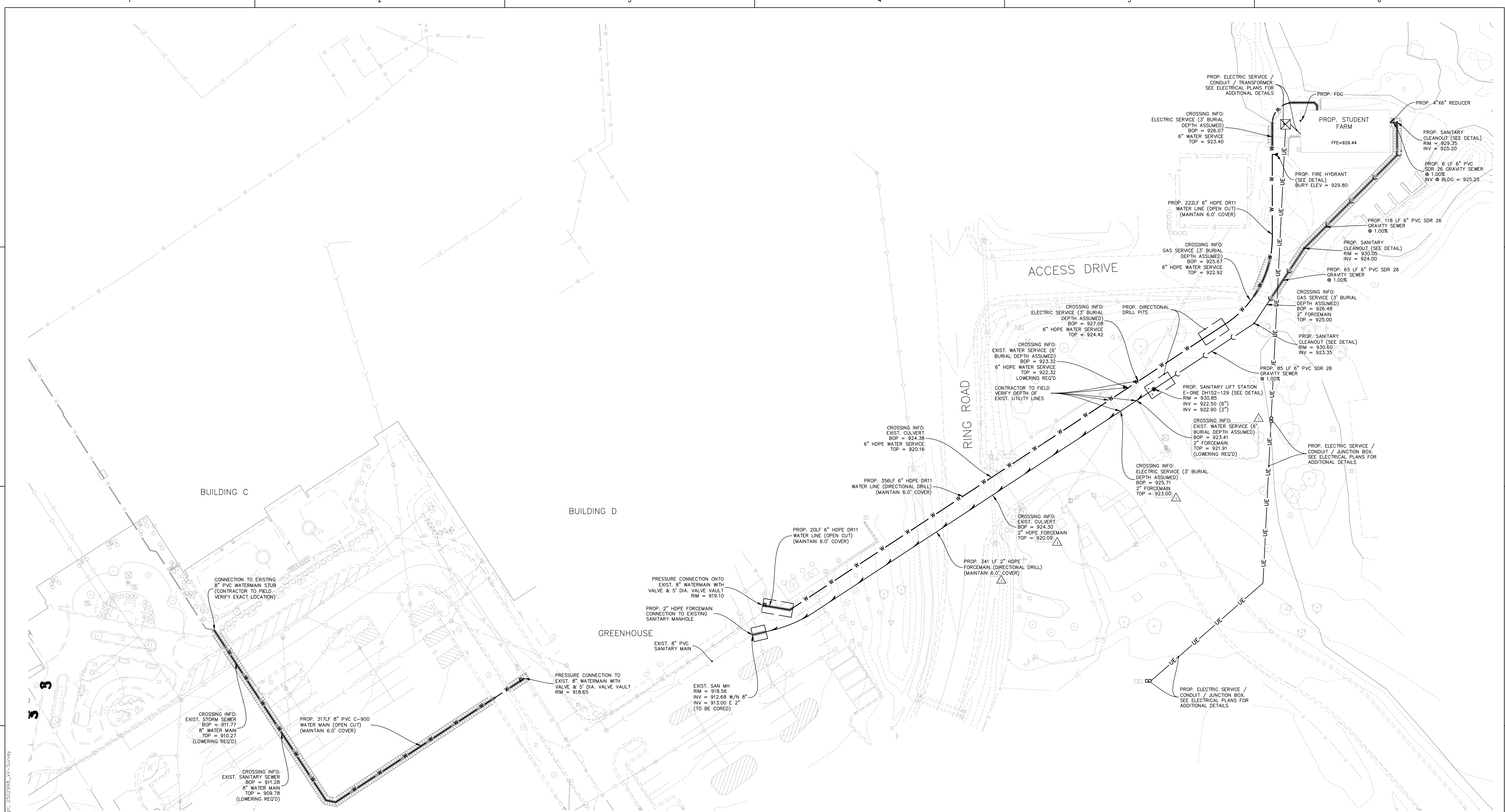
ARCHITECT:  
**DEMONICA KEMPER ARCHITECTS**  
 125 N. HALSTED STREET, SUITE 301  
 CHICAGO, IL 60661  
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**McHenry County College**  
**Student Farm Renovations**  
 8900 Northwest Hwy #14, Crystal Lake, IL 60012  
 DKA PROJECT NO: 25-037



**BID ALTERNATE NO. 2:**

- ADD TO THE LUMP SUM BASE BID TO ADD THE WATER MAIN CONNECTION BETWEEN BUILDING C AND BUILDING D. ADDED SCOPE OF WORK INCLUDES ALL WORK ASSOCIATED WITH DEMO, EXCAVATION, PIPING INSTALLATION, BACKFILL, AND RESTORATION OF EXISTING CONDITIONS. BASE BID HAS NO WORK IN THIS AREA OF THE PROJECT.

**UTILITY SPOILS NOTE:**

- ALL SURPLUS SOIL THAT WILL NEED TO BE HAULED AND DISPOSED OF OFFSITE WILL NEED TO BE CERTIFIED THAT IT IS NOT CONTAMINATED AS DEFINED UNDER 415 ILCS 5/3.160. TESTING FEES TO BE PAID FOR BY THE CONTRACTOR. BIDDING CONTRACTOR TO PROVIDE UNIT COST FOR SPOILS REMOVAL / DISPOSAL TO A SUBTILE D LANDFILL IF TESTING DETERMINES THAT THE MATERIAL IS CONTAMINATED. UNIT COST SHOULD INCLUDE ANY FEES, TAXES, SURCHARGES CHARGED BY OR THROUGH THE OPERATOR(S) OF CLEAN CONSTRUCTION DEMOLITION DEBRIS (CCDD) FACILITY.

**PRIVATE SANITARY LIFT STATION NOTES:**

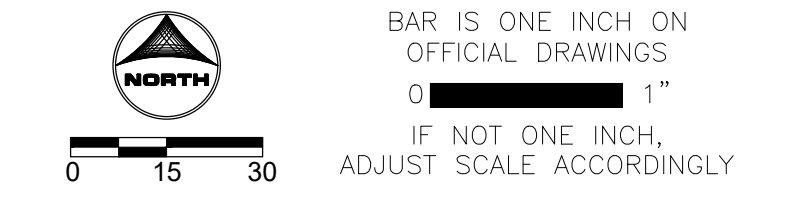
- BASE BID:
- E-ONE DH152-129 (SEE DETAIL)
- ACCEPTABLE ALTERNATES:
- FRANKLIN ELECTRIC 515209 - IGP-DPLX3672
- LIBERTY PUMPS D3696-SERIES

**LEGEND**

— DENOTES UTILITY TRENCH BACKFILL

- UTILITY NOTES:**
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, DOOR ACCESS, AND EXTERIOR GRADING. THE UTILITY SERVICE SIZES ARE TO BE DETERMINED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED. THE JURISDICTION UTILITY REQUIREMENTS SHALL ALSO BE MET, AS WELL AS COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY SERVICE, WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME.
  - FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
  - PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
  - MAINTAIN A MINIMUM OF 6.0' COVER OVER ALL WATER MAINS & SERVICES.
  - MAINTAIN A MINIMUM OF 3.5' COVER OVER ALL GRAVITY SANITARY SERVICES. (MAINTAIN A MINIMUM OF 6.0' COVER OVER ALL PRESSURE SANITARY SERVICES.)
  - ADJUST ALL MANHOLES AND FRAMES TO FINISHED GRADES.
  - ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE IEPA STANDARDS.
  - 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY/STORM SEWER AND WATER MAIN. (PER IEPA STANDARDS)
  - MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND PUBLIC WATER MAINS. (PER IEPA STANDARDS)
  - WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES, UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATIONS AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY CALL JULIE AT 1-800-892-0123 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
  - LOCATION OF SITE UTILITIES SHALL BE VERIFIED WITH PROPER UTILITY COMPANY PROVIDING SERVICE.
  - MATERIAL PERMITTED FOR USE AS GRAVITY SANITARY SEWER PIPES IS PVC SDR 26 FOR 6".
  - ALL SANITARY SEWER CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE CITY OF CRYSTAL LAKE.
  - ALL CONNECTIONS TO PUBLIC SANITARY MANHOLES SHALL BE CORE DRILLED.
  - ALL STORM DRAINAGE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF CRYSTAL LAKE.
  - ALL FIELD TILES ENCOUNTERED SHALL BE REPLACED AND/OR CONNECTED TO THE STORM SEWER SYSTEM AND LOCATED AND IDENTIFIED ON THE RECORD PLANS BY THE CONTRACTOR.
  - ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
  - PROVIDE UNDERDRAINS FROM SEEPS OR SPRINGS ENCOUNTERED. EXTEND TO STORM SEWER SYSTEM OR DAYLIGHT AT THE BOTTOM OF THE THE FILL SLOPE
  - ALL PROPOSED PIPE CONNECTIONS TO EXISTING OR PROPOSED MANHOLES SHALL CONFORM TO ASTM-C923.
  - ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
  - GENERAL CONTRACTOR SHALL HAVE APPROVAL FROM ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
  - ALL BUILDING UTILITY SERVICE LOCATIONS TO BE VERIFIED PRIOR TO CONSTRUCTION.
  - ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
  - CONTRACTOR TO COORDINATE W/ COLLEGE PRIOR TO CLOSING ANY PORTIONS OF ANY ADJACENT ACCESS DRIVES OR PARKING LOT.
  - MATERIAL FOR WATER MAIN SHALL BE PVC C-900 AND MATERIAL FOR WATER SERVICE SHALL BE HDPE DR11.
  - ALL NON-METALLIC UTILITY LINES SHALL BE INSTALLED WITH TRACER WIRE PER CITY STANDARDS.

- ONSITE WATERLINE NOTES:**
- THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS.
  - ALL FIRE HYDRANTS SHALL BE PROVIDED WITH AN APPROVED AUXILIARY GATE VALVE.
  - ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED BEFORE ACCEPTANCE. SEE SITE WORK SPECIFICATIONS.
  - ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
  - GENERAL CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
  - CONTRACTOR SHALL COORDINATE WITH MCHENRY COUNTY COLLEGE TO SCHEDULE WATER MAIN/SERVICE SHUTOFF FOR PROPOSED WATER MAIN WORK.



ISSUED FOR BID - NOT FOR CONSTRUCTION

Dial 811 or 1-800-892-0123

**811**

CALL JULIE 1-800-892-0123

WITH THE FOLLOWING:  
 COUNTY McHenry  
 CITY-TOWNSHIP Crystal Lake -Dorr  
 SEC. & 1/4 SEC. NO. # SW 1/4 OF SEC-25-T-44N-7E

Know what's below. Call before you dig.

48 hours before you dig (Excluding Sat., Sun. & Holidays)

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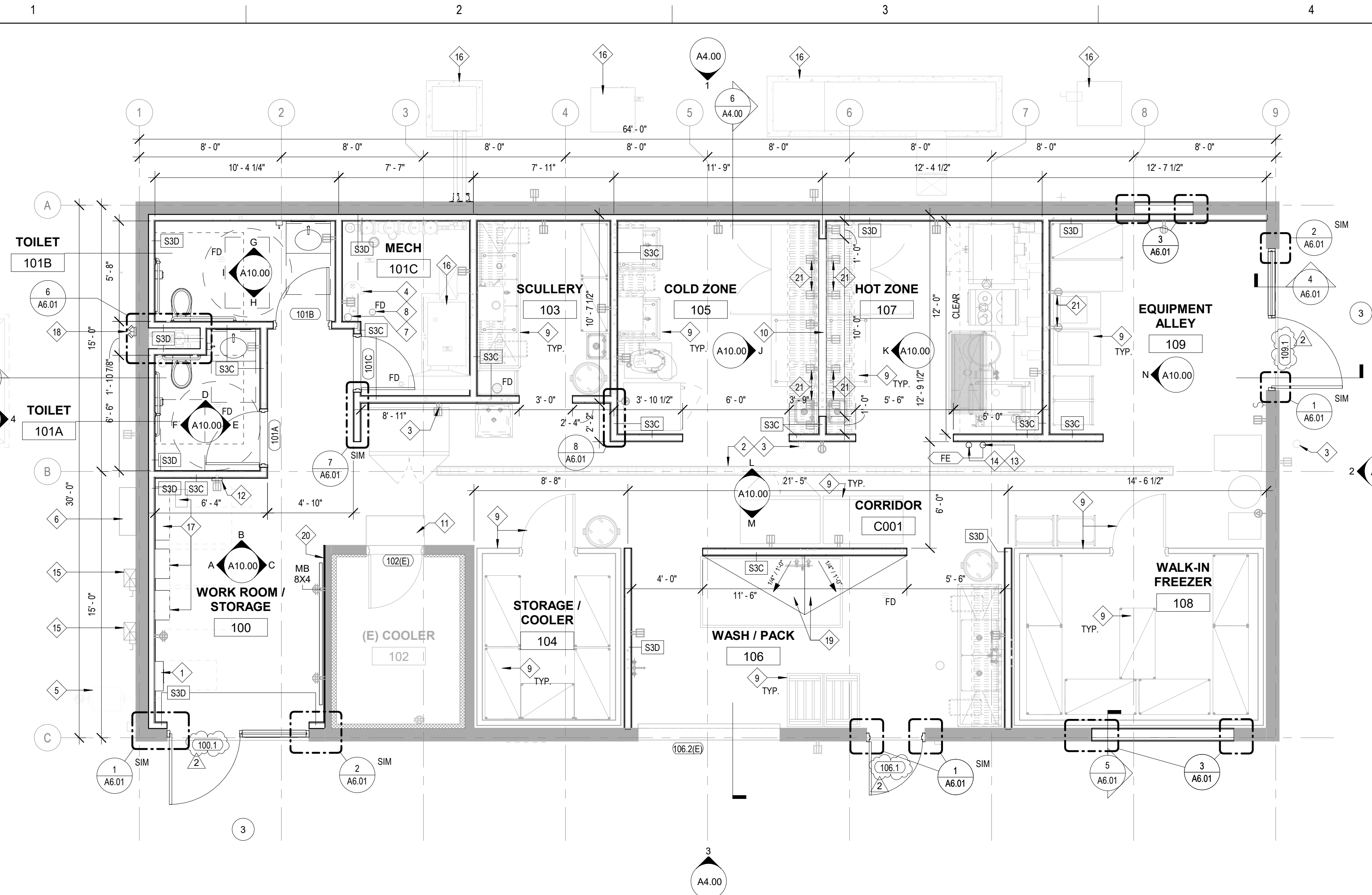
KEY PLAN:

ISSUE DATE: 04/21/2026  
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NO.	DESCRIPTION:	DATE:
1	ADDENDUM NO. 3	05/08/26

SHEET TITLE:  
**UTILITY PLAN**

SHEET NUMBER:  
**C-04**



**RCP SYMBOLS LEGEND:**

- NOTES:  
 1. GRAYTONE LINEWORK DENOTES EXISTING CONSTRUCTION TO REMAIN.  
 2. REFER TO ME/PP/D DRAWINGS FOR ADDITIONAL INFORMATION ON MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, AND TECHNOLOGY SYSTEMS.
- CEILING TYPE AND ELEVATION A.F.F.
  - SUSPENDED ACOUSTICAL TILE CEILING SYSTEM
  - GYPSUM BOARD OR PLASTER CEILING SYSTEM
  - EXISTING CEILING OUTLET
  - EXTERIOR LIGHT
  - LINEAR LIGHT FIXTURE - SEE ELECTRICAL
  - 2 x 2 FLUORESCENT LIGHT FIXTURE - SEE ELECTRICAL
  - SUPPLY AIR DIFFUSER - SEE MECHANICAL
  - RETURN AIR DIFFUSER - SEE MECHANICAL
  - EXHAUST AIR DIFFUSER - SEE MECHANICAL
  - EXIT SIGN, CEILING MOUNTED - SEE ELECTRICAL
  - EXIT SIGN, WALL MOUNTED - SEE ELECTRICAL
  - FIRE ALARM DEVICE - SEE ELECTRICAL
  - OCCUPANT SENSOR - SEE ELECTRICAL
  - FIRE ALARM NOTIFICATION SPEAKER - SEE ELECTRICAL

**RCP GENERAL NOTES:**

- REFER TO ME/PP/D DRAWINGS FOR ADDITIONAL INFORMATION ON MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, AND TECHNOLOGY SYSTEMS.
- DURING THE BID PERIOD, EACH BIDDING CONTRACTOR SHALL VISIT THE PROJECT TO REVIEW EXISTING CONDITIONS. CONTRACTOR'S FAILURE TO REASONABLY DETERMINE AND/OR ANTICIPATE THE NATURE OF EXISTING CONDITIONS AND THE WORK THEREBY INVOLVED SHALL NOT BE JUSTIFICATION FOR ADDITIONAL COMPENSATION.
- ALL ME/P ITEMS SHOWN ON ARCHITECTURAL REFLECTED CEILING PLANS ARE FOR REFERENCE AND COORDINATION ONLY. REFER TO ME/P FOR ACTUAL QUANTITIES. IN CASE OF CONFLICT BETWEEN ITEMS THE ARCHITECTURAL REFLECTED CEILING PLAN SHALL GOVERN LOCATION. IN AREAS THAT DO NOT HAVE REFLECTED CEILING PLANS NEW ITEMS TO BE INSTALLED IN OR ABOVE THE CEILING PLANE. THE CONTRACTOR SHALL REMOVE AND REINSTALL, REPLACE, OR MODIFY EXISTING CEILING CONSTRUCTION TO ACCOMMODATE THE NEW WORK. ANY NEW CEILING AREAS SHALL MATCH, AND PROVIDE A SEAMLESS TRANSITION TO EXISTING ADJACENT FINISHES.
- CENTER ALL FIXTURES IN CEILING TILES U.N.O. ALIGN ALL FIXTURES IN BOTH DIRECTIONS OF CEILING TILE U.N.O.
- CENTER ALL SPRINKLER HEADS IN CEILING TILES.
- EXTEND FACE OF ALL GYP. BD. SOFFITS AND HEADERS MINIMUM 4" ABOVE FINISHED CEILING U.N.O.
- ALL GYPSUM BOARD CEILINGS SHALL BE PAINTED W/1.1 U.N.O.

**RCP REFERENCED NOTES:**

- REFER TO ME/PP/D DRAWINGS FOR ADDITIONAL INFORMATION ON MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION SYSTEMS.
- EXISTING AIR CONDITIONING UNIT TO REMAIN. SEE MECH.
  - EXISTING CEILING OUTLETS TO REMAIN. SEE ELEC.
  - EXISTING LIGHT FIXTURE TO REMAIN. SEE ELEC.
  - LIGHT FIXTURE. SEE ELEC. AND DEMO FOR RE-USE VERSUS NEW FIXTURES.
  - EXISTING CEILING HATCH TO REMAIN. VERIFY LOCATION IN FIELD PRIOR TO NEW WORK.
  - NEW EXTERIOR LIGHT FIXTURE. SEE ELEC.
  - BATHROOM EXHAUST FAN. SEE MECH.

**RCP CEILING TYPES:**

TYPE	DESCRIPTION
1E/1	(1E) EXISTING METAL PANEL CEILING (1) EXISTING METAL PANEL CEILING - PAINT ALL METAL PANELS AND EXPOSED PIPING, DUCTWORK, CONDUITS, HANGERS, ETC PT-1
2E/2	(2E) EXISTING COOLER CEILING SYSTEM (2) NEW COOLER CEILING SYSTEM. SEE KITCHEN EQUIPMENT DRAWINGS
3	GYP. BD. ON METAL FRAMING.
4	D22 WASHABLE, ACOUSTICAL PANEL CEILING SYSTEM
5	KITCHEN HOOD. SEE MECH. AND KITCHEN EQUIPMENT DRAWINGS.

**FLOOR PLAN SYMBOLS LEGEND:**

- NOTES:  
 1. GRAYTONE LINEWORK DENOTES EXISTING CONSTRUCTION TO REMAIN.  
 2. REFER TO ME/P DRAWINGS FOR ADDITIONAL INFORMATION ON MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, AND TECHNOLOGY SYSTEMS.
- GYPSUM BOARD, PLASTER OR ON METAL
  - UNIT MASONRY PARTITION
  - FRAME AND DOOR
  - TAGS**
  - ROOM NAME AND NUMBER
  - DOOR NUMBER - SEE DOOR AND FRAME SCHEDULE
  - PARTITION TYPE - SEE PARTITION TYPES
  - ENLARGED DETAIL CALLOUT
  - BUILDING SECTION CALLOUT
  - WALL SECTION CALLOUT
  - ELEVATION VIEW CALLOUT
  - ELEVATION CALLOUT (RELATIVE TO ARCH 0'-0")
  - DEVICES**
  - WALL-MOUNTED FIRE EXTINGUISHER
  - MARKER BOARD, WIDTH x HEIGHT
  - FLOOR DRAIN - SEE PLUMBING

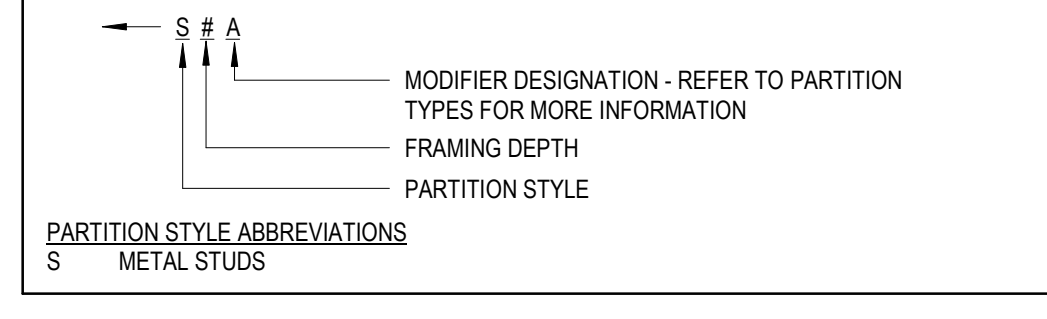
**FLOOR PLAN GENERAL NOTES:**

- ELEVATIONS SHOWN ON ARCHITECTURAL DRAWINGS ARE RELATIVE TO FIRST FLOOR FINISH ELEVATION OF 0'-0". REFER TO CIVIL DRAWINGS FOR COORDINATING USGS ELEVATION.
- REFER TO CODE PLANS ON SHEETS C11.10 FOR FIRE RATINGS AND AREA SEPARATION LOCATIONS FOR WALLS, ENCLOSURES, OPENINGS, ETC.
- DO NOT SCALE DRAWINGS.
- NOTIFY ARCHITECT OF ANY DISCREPANCIES IN THE DOCUMENTS PRIOR TO WORK COMMENCING.
- NOTES ON DRAWINGS SHALL APPLY TO ALL SIMILAR CONDITIONS WHETHER THEY ARE REPEATED OR NOT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF EXISTING CONDITIONS AND IN-FIELD DIMENSIONS PRIOR TO COMMENCING WORK.
- ALL INTERIOR DIMENSIONS ARE TO FACE OF FINISHED WALL UNLESS NOTED OTHERWISE.
- PROVIDE ACCESS PANELS AT LOCATIONS INDICATED AND AS REQUIRED FOR ACCESS TO EQUIPMENT AND DEVICES INCLUDING, BUT NOT LIMITED TO, MECHANICAL, PLUMBING AND ELECTRICAL WORK. PAINT ACCESS PANELS TO MATCH ADJACENT WALL OR CEILING FINISH.
- REFER TO A1.10 FOR PARTITION INFORMATION. ALL INTERIOR PARTITIONS SHALL BE TYPE S1A-U.N.O. ALL GYP. BD. COLUMN ENCLOSURES SHALL BE TYPE S2D, U.N.O.
- REFER TO EXTERIOR ELEVATIONS, SECTIONS AND DETAILS FOR CONSTRUCTION OF EXTERIOR WALLS.

**FLOOR PLAN REFERENCED NOTES:**

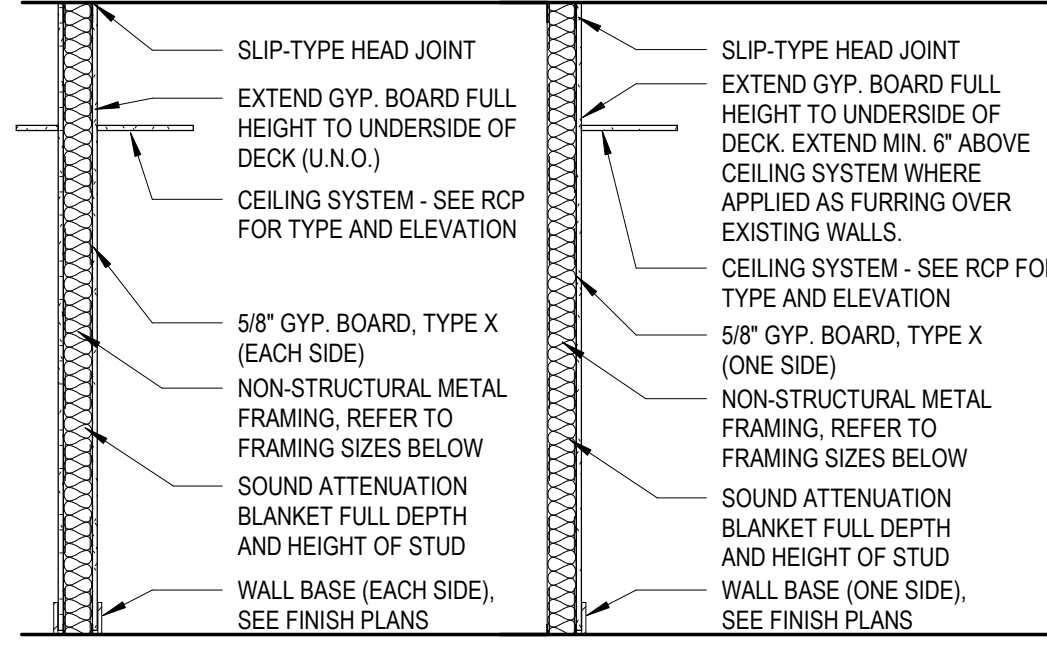
- REFER TO ME/PP/D DRAWINGS FOR ADDITIONAL INFORMATION ON MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION SYSTEMS.
- FIRE ALARM CONTROL PANEL. SEE ELEC.
  - EXISTING TRENCH DRAIN TO REMAIN. SEE PLUMB.
  - EXISTING CLEANOUT TO REMAIN. SEE PLUMB.
  - WATER HEATER. SEE MECH.
  - GAS LINE FEED / METER. SEE MECH.
  - ELECTRICAL METER. SEE ELEC.
  - EXISTING WATER LINE. SEE PLUMB.
  - EXISTING FLOOR DRAIN. SEE PLUMB.
  - EQUIPMENT PROVIDED AND INSTALLED BY CONTRACTOR. SEE KITCHEN EQUIPMENT DRAWINGS AND SPECS.
  - OPENING IN WALL. SEE ELEV.
  - EXISTING STEP UP TO COOLER TO REMAIN.
  - EXISTING WIRELESS HOTSPOT ENCLOSURE - REMOVE IN DEMO AND REINSTALL IN LOCATION INDICATED. PROVIDE POWER AS REQUIRED. SEE ELEC.
  - TYPE ABC FIRE EXTINGUISHER MOUNTED TO WALL.
  - TYPE K FIRE EXTINGUISHER MOUNTED TO WALL.
  - ELECTRICAL EQUIPMENT AND ASSOCIATED CLEARANCES. SEE ELEC.
  - TRANSFORMER AND CONCRETE PAD, IF APPLICABLE. SEE ELEC.
  - MECHANICAL EQUIPMENT AND ASSOCIATED CONCRETE PAD, IF APPLICABLE. SEE MECH. AND KITCHEN EQUIPMENT DRAWINGS.
  - ELECTRICAL EQUIPMENT AND ASSOCIATED CLEARANCES. SEE ELEC.
  - FIRE DEPARTMENT CONNECTION. SEE PLUMB.
  - SELF-LEVELING, SLOPED INTEGRAL FLOOR SYSTEM. SEE FINISH PLANS.
  - 5/8" GYP. BD. ON EXISTING WALL.
  - ELEC. POWER OUTLET @ 48" AFF. SEE ELEC AND KITCHEN EQUIPMENT DRAWINGS.

**PARTITION TYPE LEGEND**



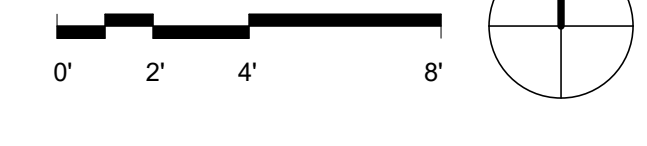
**PARTITION TYPE GENERAL NOTES:**

- ALL INTERIOR PARTITIONS SHALL BE TYPE S1A (U.N.O.)
- ALL GYP. BD. ENCLOSURES AROUND COLUMNS SHALL BE TYPE S2D (U.N.O.)
- PROVIDE SOLID FIRE RETARDANT TREATED WOOD BLOCKING, FLAT METAL STRAPS, OR METAL BACKING PLATES AT ALL WALL MOUNTED FIXTURES AND ACCESSORIES, INCLUDING BUT NOT LIMITED TO, DOOR STOPS, MILLWORK, DIGITAL DISPLAYS, VISUAL DISPLAY BOARDS, TOILET PARTITIONS, AND SIMILAR CONDITIONS.
- PROVIDE MOISTURE RESISTANT GYP. BD. AT ALL PLUMBING PARTITIONS NOT SCHEDULED TO RECEIVE TILE.
- SEE SPECIFICATIONS FOR ORIENTATION OF GYP. BD. PANELS, SIZING, AND SPACING OF METAL STUD FRAMING.
- SEE SPECIFICATIONS FOR TYPE AND SPACING OF CMU HORIZONTAL JOINT REINFORCEMENT.
- SEE INTERIOR ELEVATIONS FOR ANY GYP. BD. REVEAL PATTERNS.

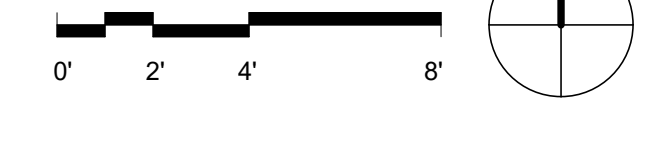


- S1A - GYP. BOARD EACH SIDE
- S2D - FRP ON GYP. BOARD EACH SIDE
- S3A - 3-5/8" FRAMING
- S3B - 3-5/8" FRAMING
- S3C - FRP ON GYP. BOARD EACH SIDE
- S3D - FRP ON GYP. BOARD ONE SIDE
- S3E - 3-5/8" FRAMING
- S3F - 3-5/8" FRAMING

**1 LEVEL 1 - FLOOR PLAN**  
1/4" = 1'-0"



**2 LEVEL 1 - REFLECTED CEILING PLAN**  
1/4" = 1'-0"



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 DKA PROJECT NO: 25-037

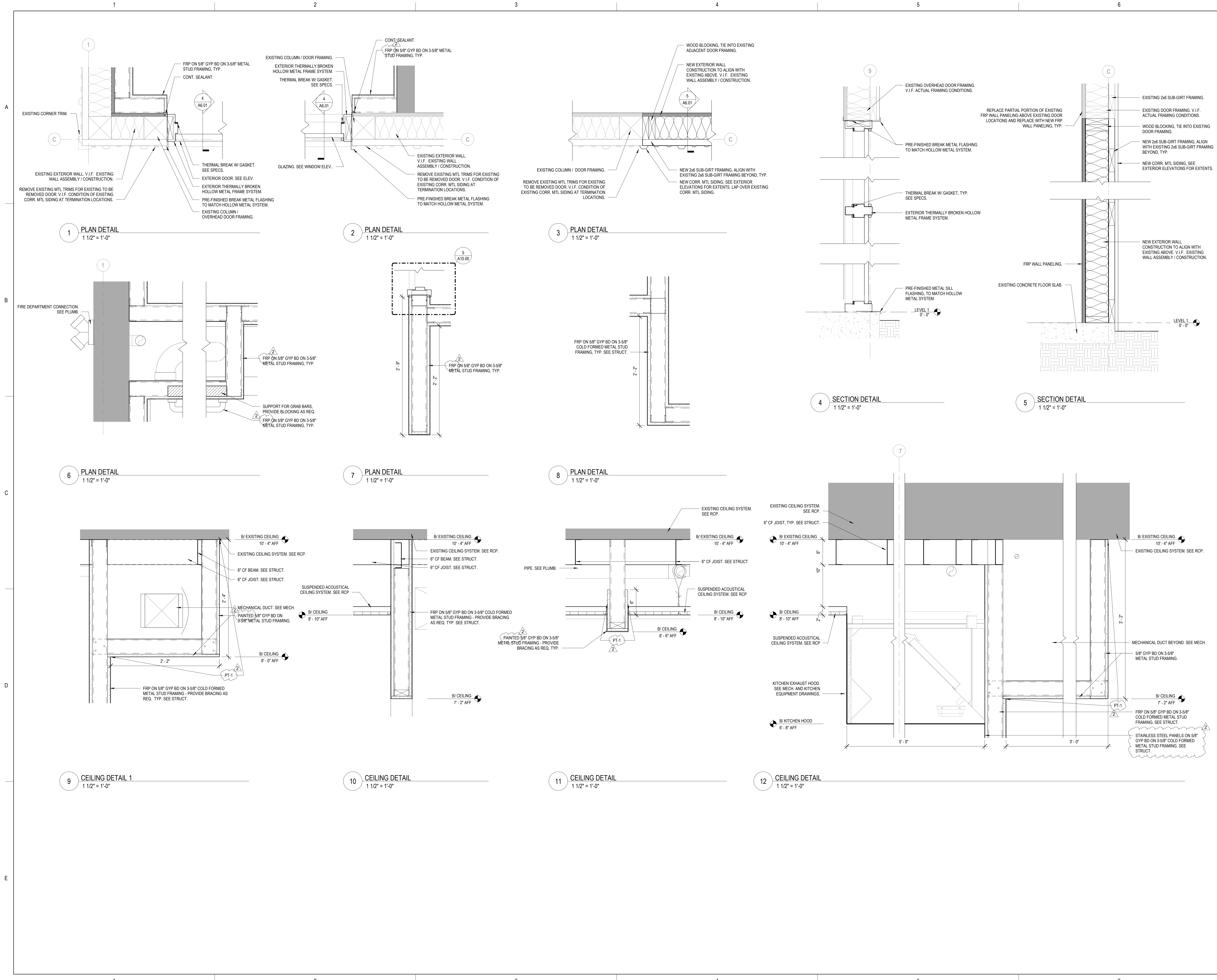
KEY PLAN:

SHEET STATUS: 04/21/2026  
**ISSUED FOR BID - NOT FOR CONSTRUCTION**

NO.	DESCRIPTION	DATE
1	ADDENDUM #1	05/01/2026
2	ADDENDUM #3	05/08/2026

SHEET TITLE:  
**FLOOR PLAN & REFLECTED CEILING PLAN**

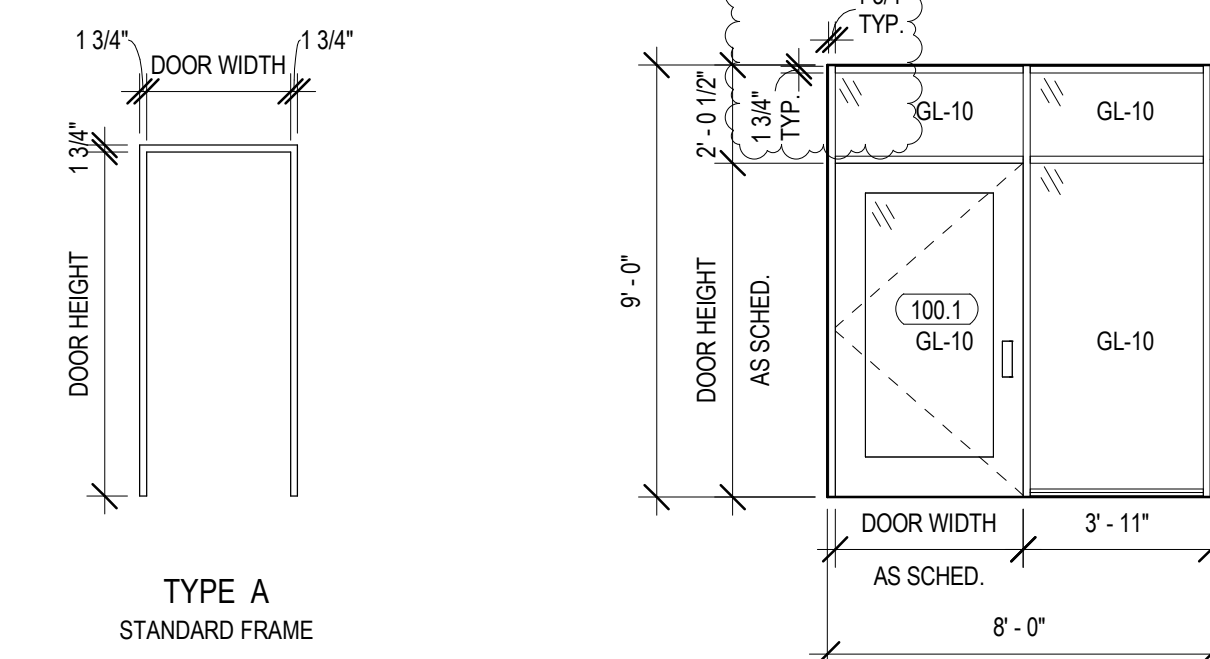
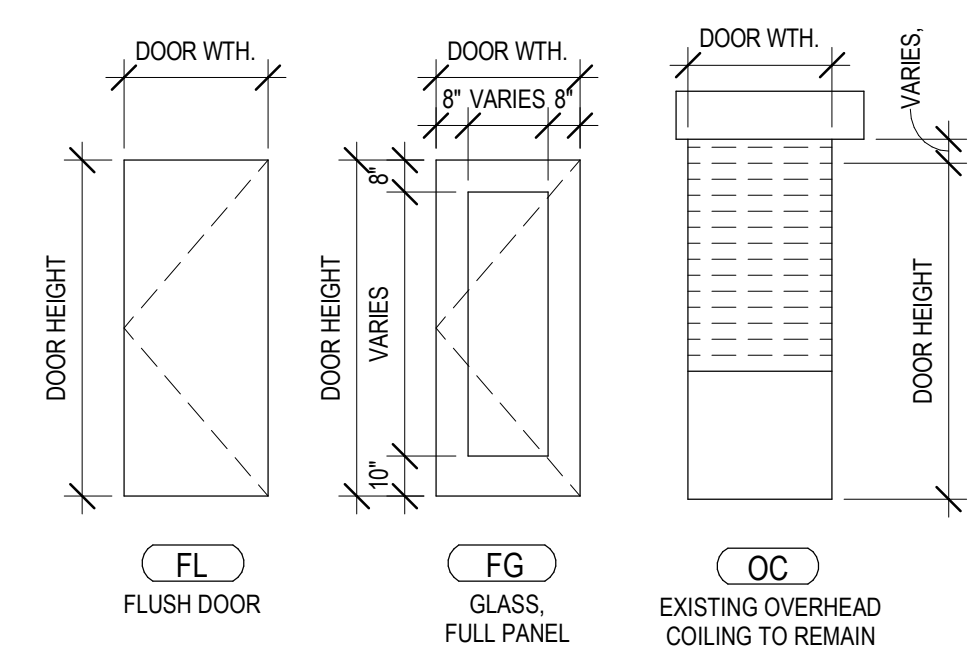
SHEET NUMBER:  
**A1.10**



DOOR AND FRAME SCHEDULE - NEW WORK												
NUMBER	ROOM NAME	DOOR			FIRE RATING	MATERIAL	ELEV	FRAME			HARDWARE SET	REMARKS
		WIDTH	HEIGHT	GLAZING TYPE				MATERIAL	ELEV	GLAZING TYPE		
100.1	WORK ROOM / STORAGE	4'-0"	7'-0"	-	HM	FG	GL-10	HM	WINDOW ELEV A	GL-10	HS-01	
101A	TOILET	3'-0"	7'-0"	-	HM	FL	-	HM	A	-	HS-02	
101B	TOILET	3'-0"	7'-0"	-	HM	FL	-	HM	A	-	HS-02	
101C	MECH	3'-0"	7'-0"	-	HM	FL	-	HM	A	-	HS-03	
106.1	WASH / PACK	3'-0"	7'-0"	-	HM	FG	GL-10	HM	A	GL-10	HS-01	
109.1	EQUIPMENT ALLEY	4'-0"	7'-0"	-	HM	FG	GL-10	HM	WINDOW ELEV A	GL-10	HS-01	

DOOR AND FRAME SCHEDULE - EXISTING TO REMAIN												
NUMBER	ROOM NAME	DOOR			FIRE RATING	MATERIAL	ELEV	FRAME			HARDWARE SET	REMARKS
		WIDTH	HEIGHT	GLAZING TYPE				MATERIAL	ELEV	GLAZING TYPE		
102(E)	(E) COOLER	3'-0"	7'-0"	-	-	-	-	-	A	-	-	EXISTING FLUSH DOOR AND FRAME TO REMAIN. REKEY TO NEW BUILDING KEYING / CORES.
106.2(E)	WASH / PACK	8'-0"	9'-0"	-	-	-	-	-	A	-	-	OVERHEAD DOOR, FRAME AND TRACK TO REMAIN.

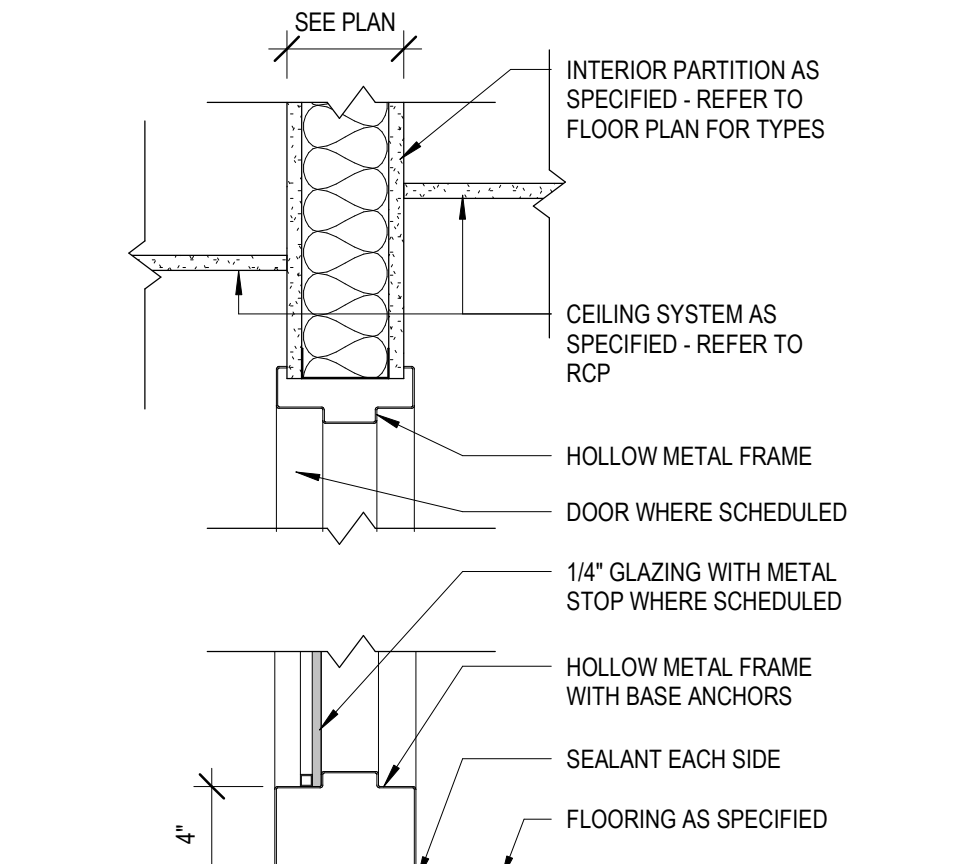
GLAZING SCHEDULE	
TYPE	DESCRIPTION
GL-10	1" INSULATED GLAZING UNIT - CLEAR



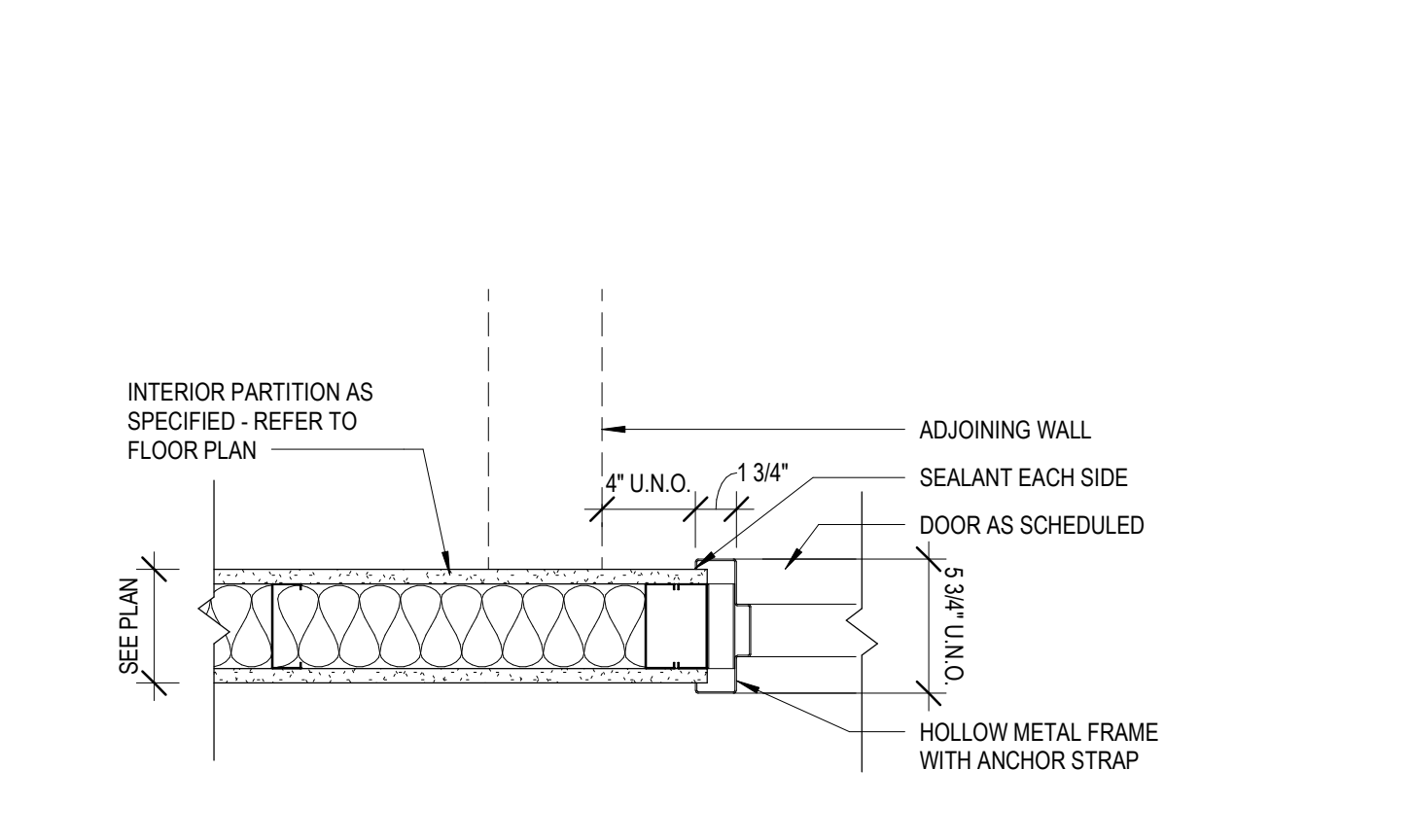
1 DOOR ELEVATIONS  
1/4" = 1'-0"

2 FRAME ELEVATION  
1/4" = 1'-0"

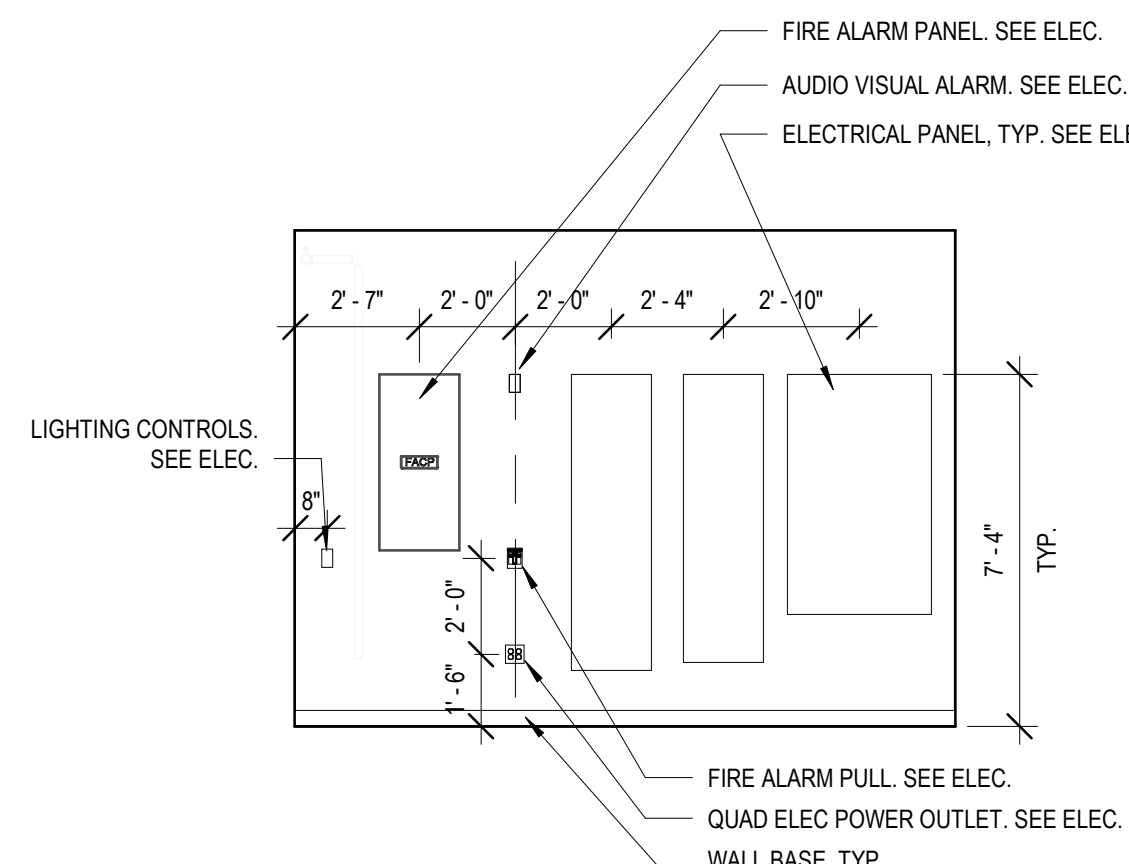
3 WINDOW ELEVATION A  
1/4" = 1'-0"



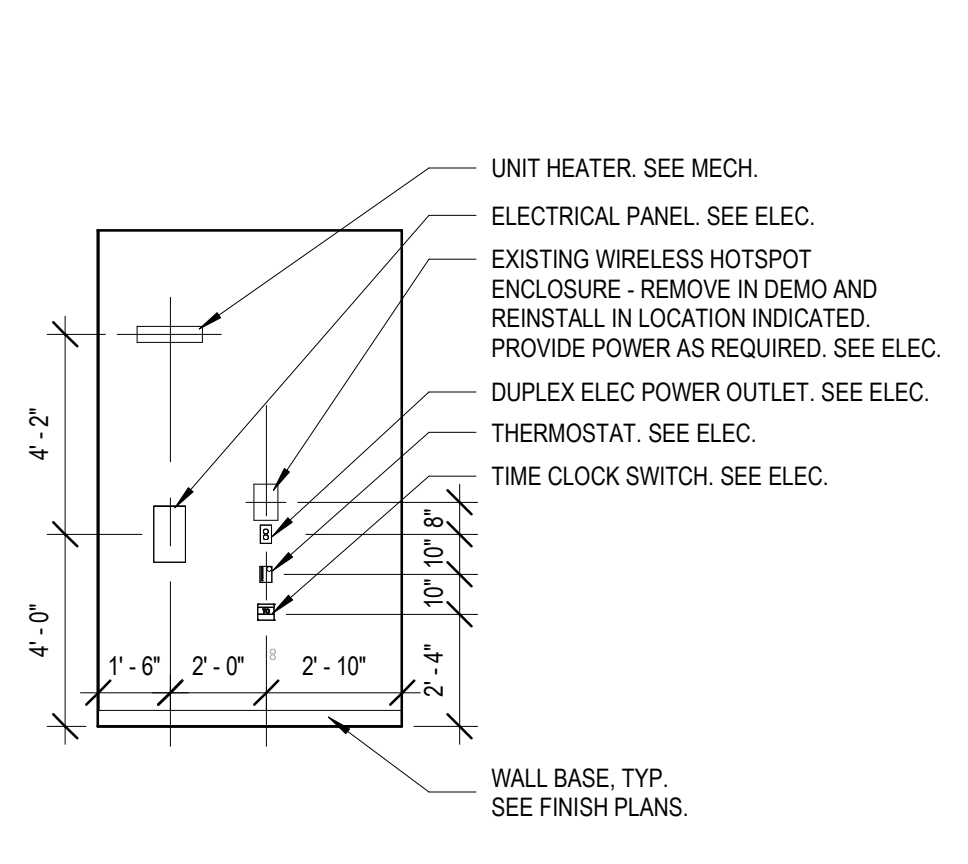
4 INTERIOR HOLLOW METAL FRAME - HEAD & SILL  
1 1/2" = 1'-0"



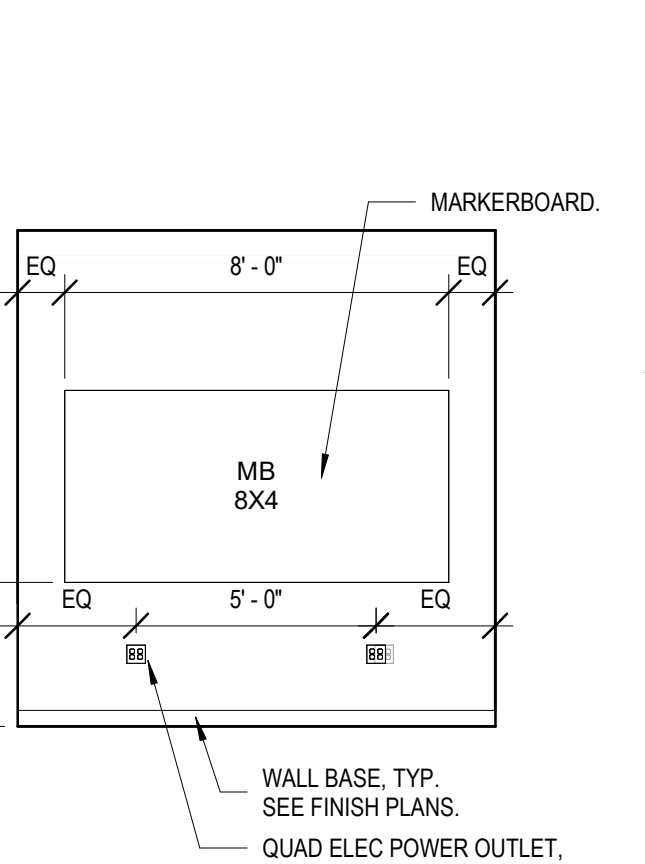
5 INTERIOR HOLLOW METAL FRAME - JAMB  
1 1/2" = 1'-0"



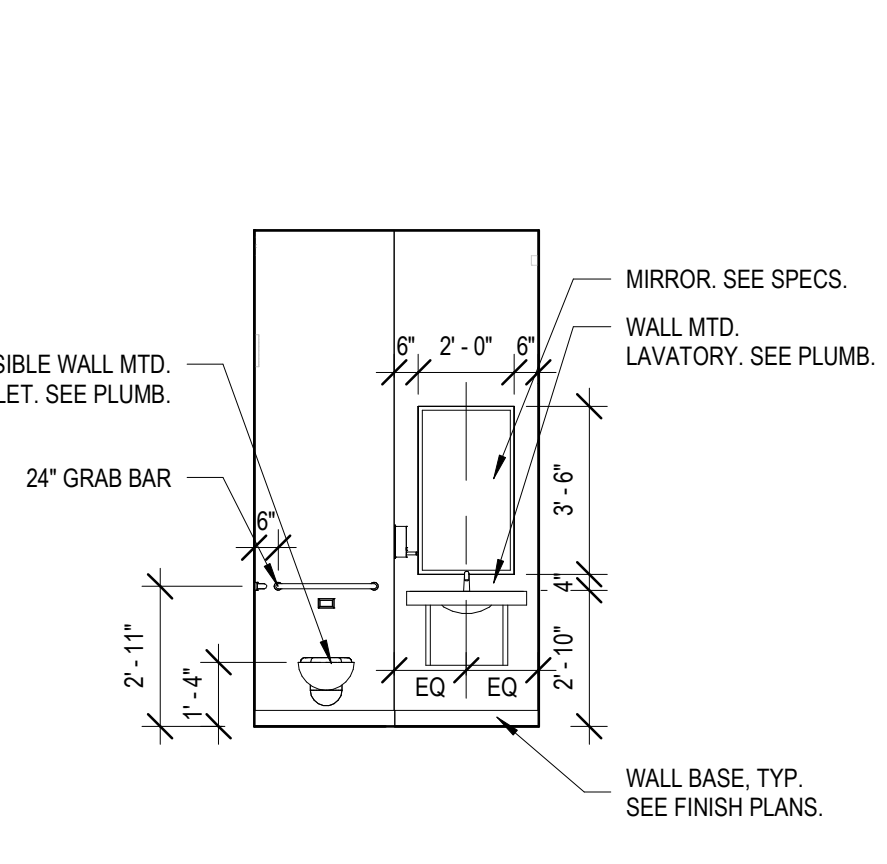
A INTERIOR ELEVATION  
1/4" = 1'-0"



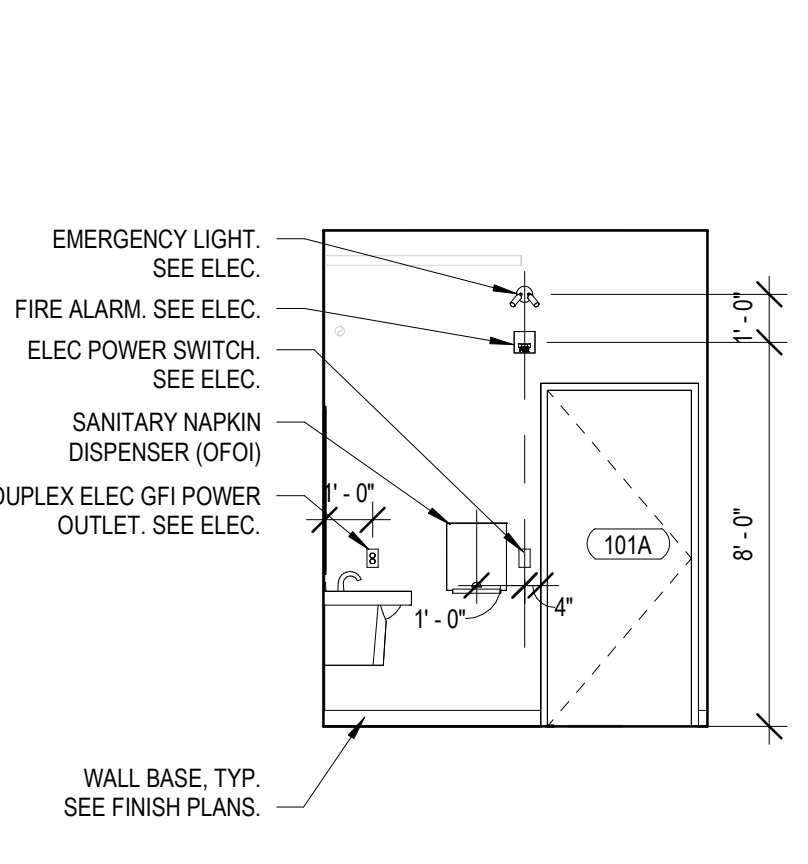
B INTERIOR ELEVATION  
1/4" = 1'-0"



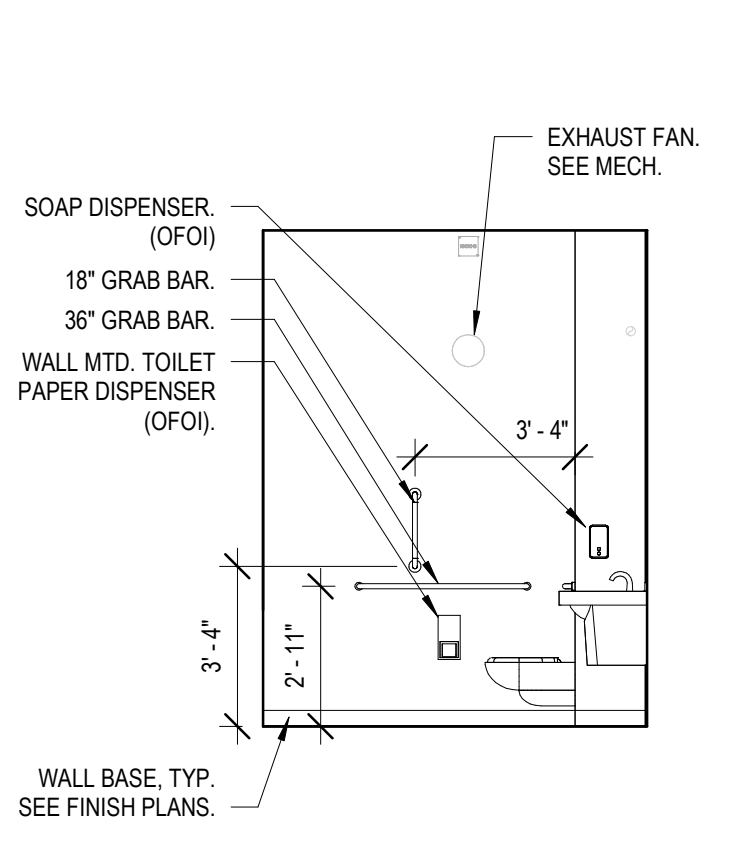
C INTERIOR ELEVATION  
1/4" = 1'-0"



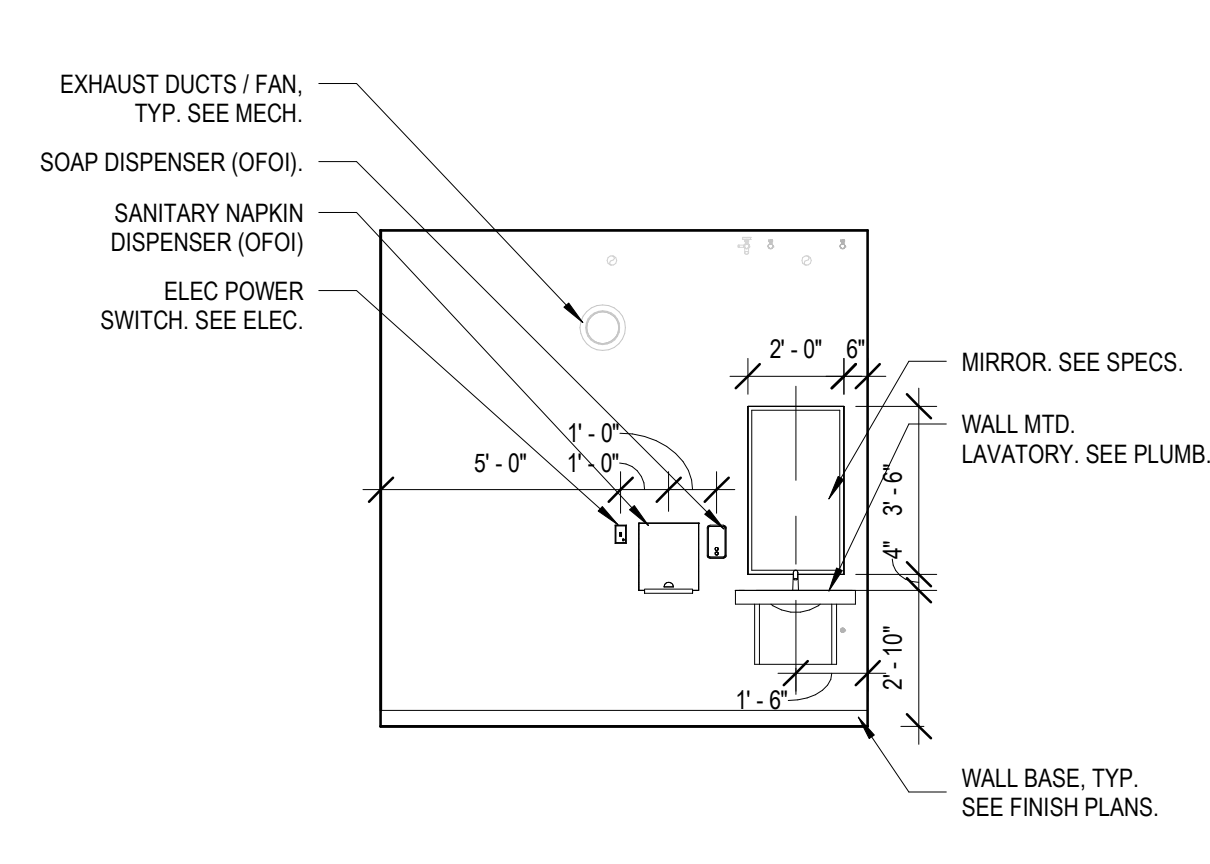
D INTERIOR ELEVATION  
1/4" = 1'-0"



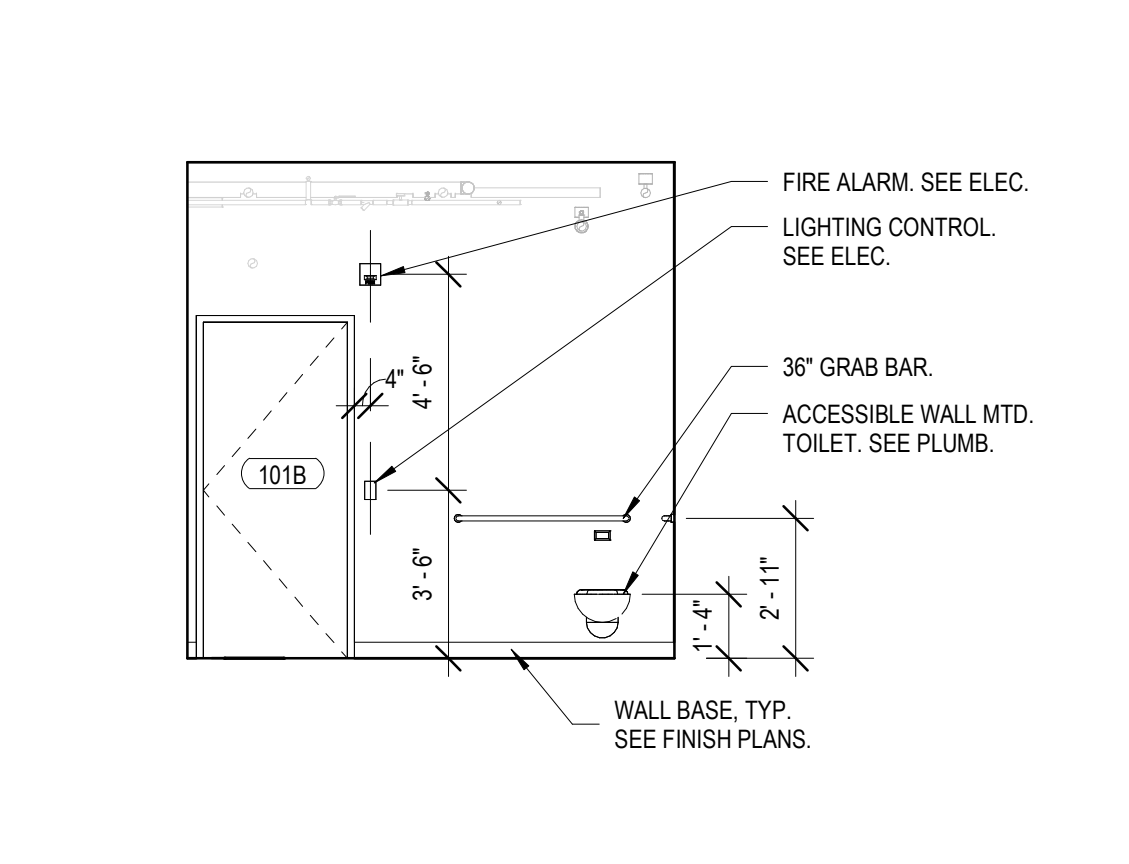
E INTERIOR ELEVATION  
1/4" = 1'-0"



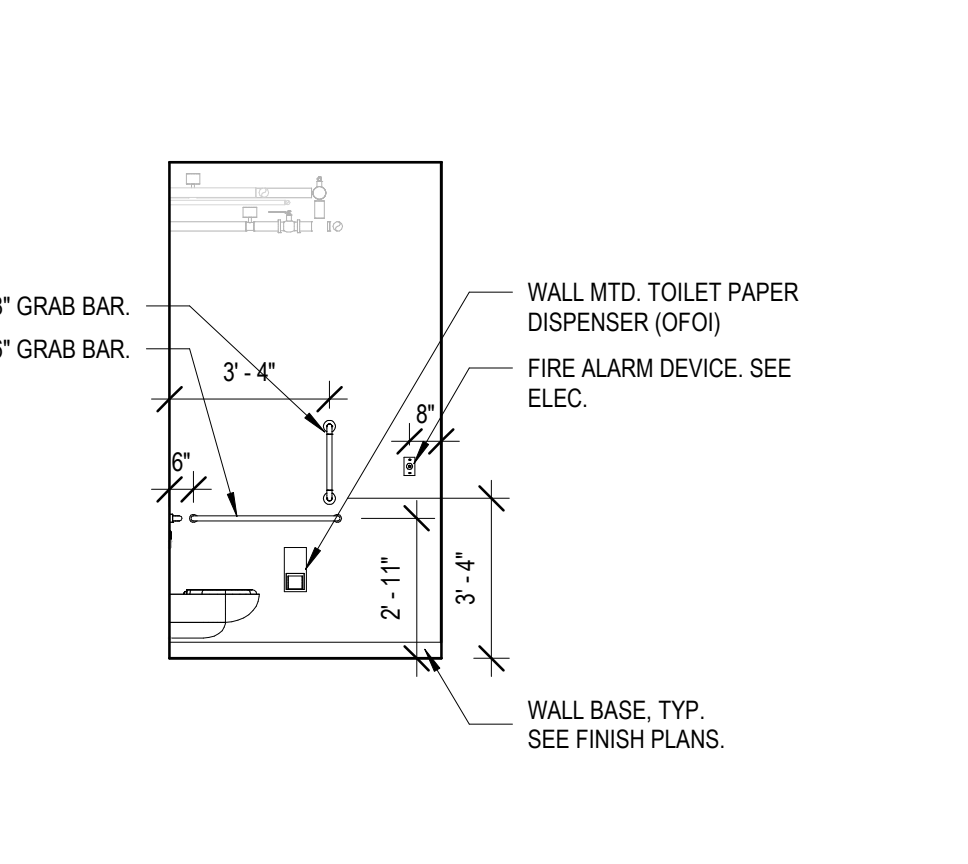
F INTERIOR ELEVATION  
1/4" = 1'-0"



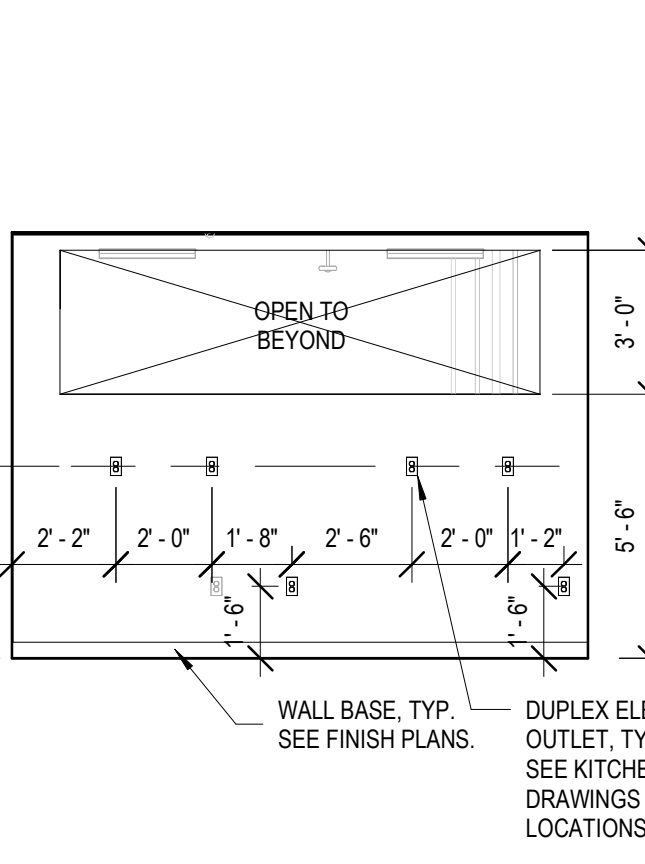
G INTERIOR ELEVATION  
1/4" = 1'-0"



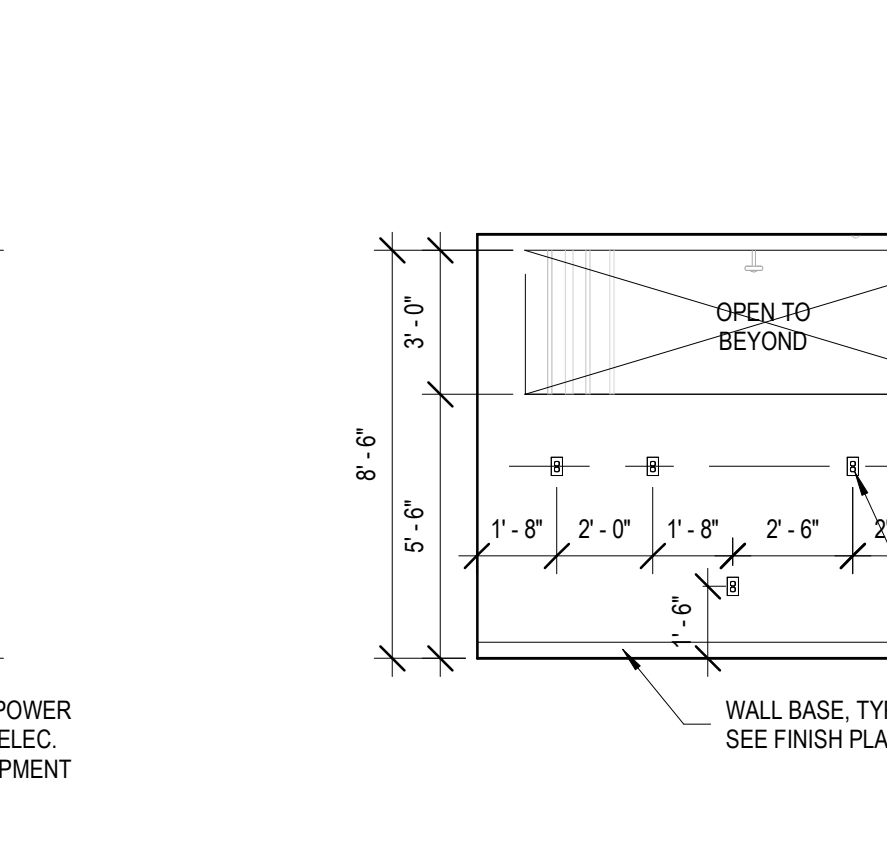
H INTERIOR ELEVATION  
1/4" = 1'-0"



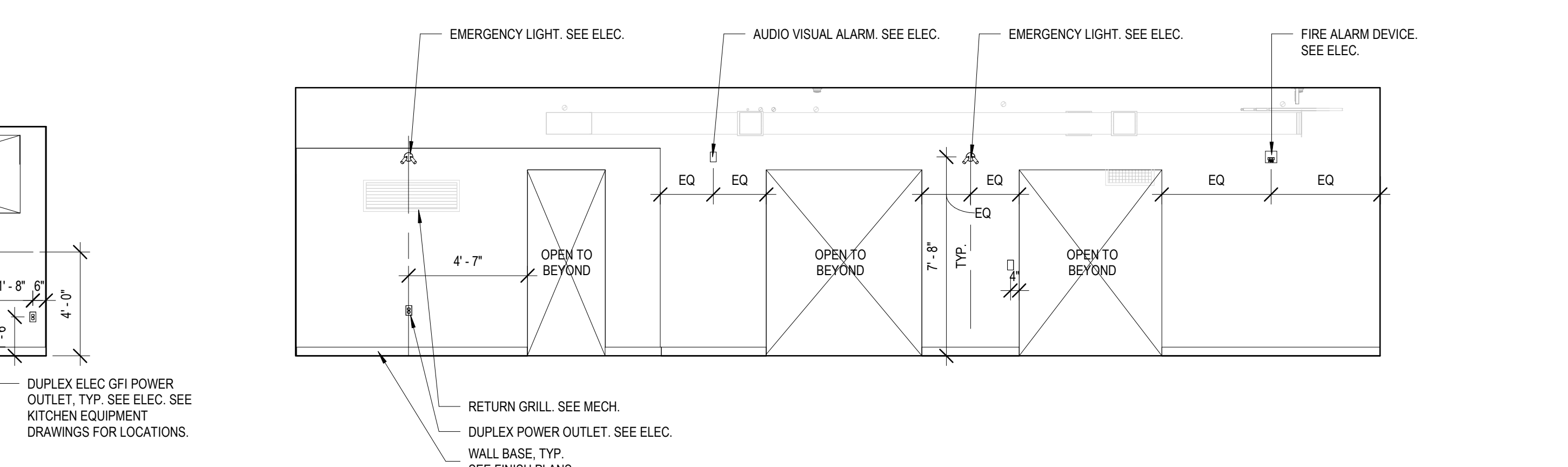
I INTERIOR ELEVATION  
1/4" = 1'-0"



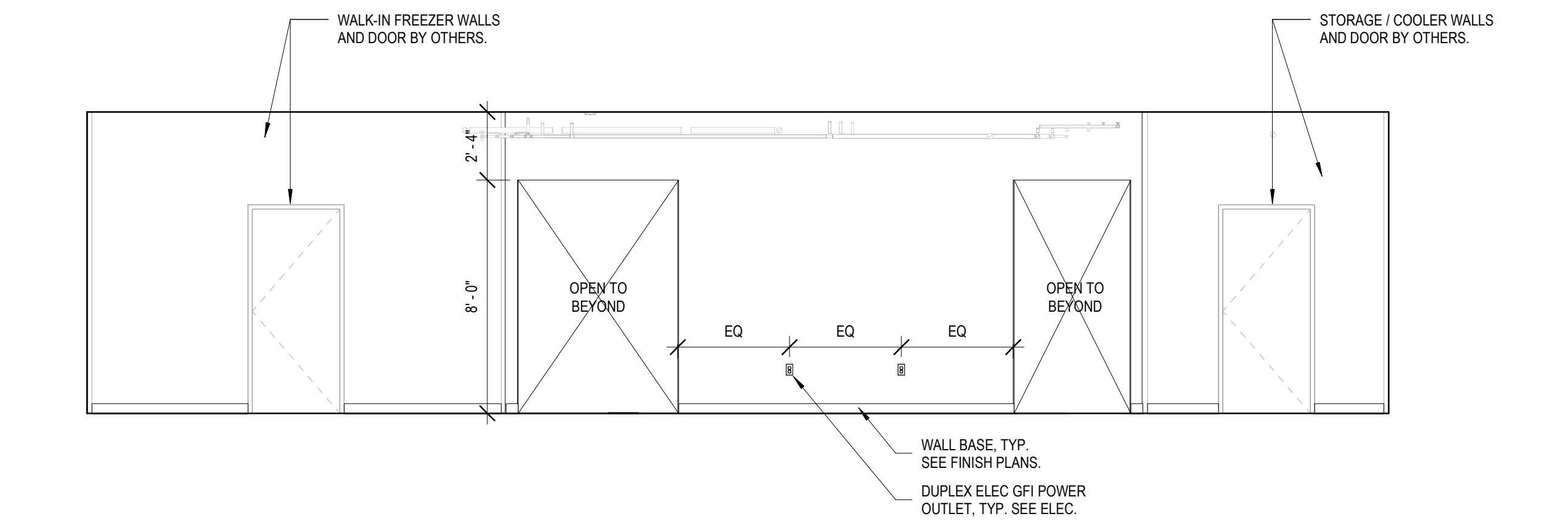
J INTERIOR ELEVATION  
1/4" = 1'-0"



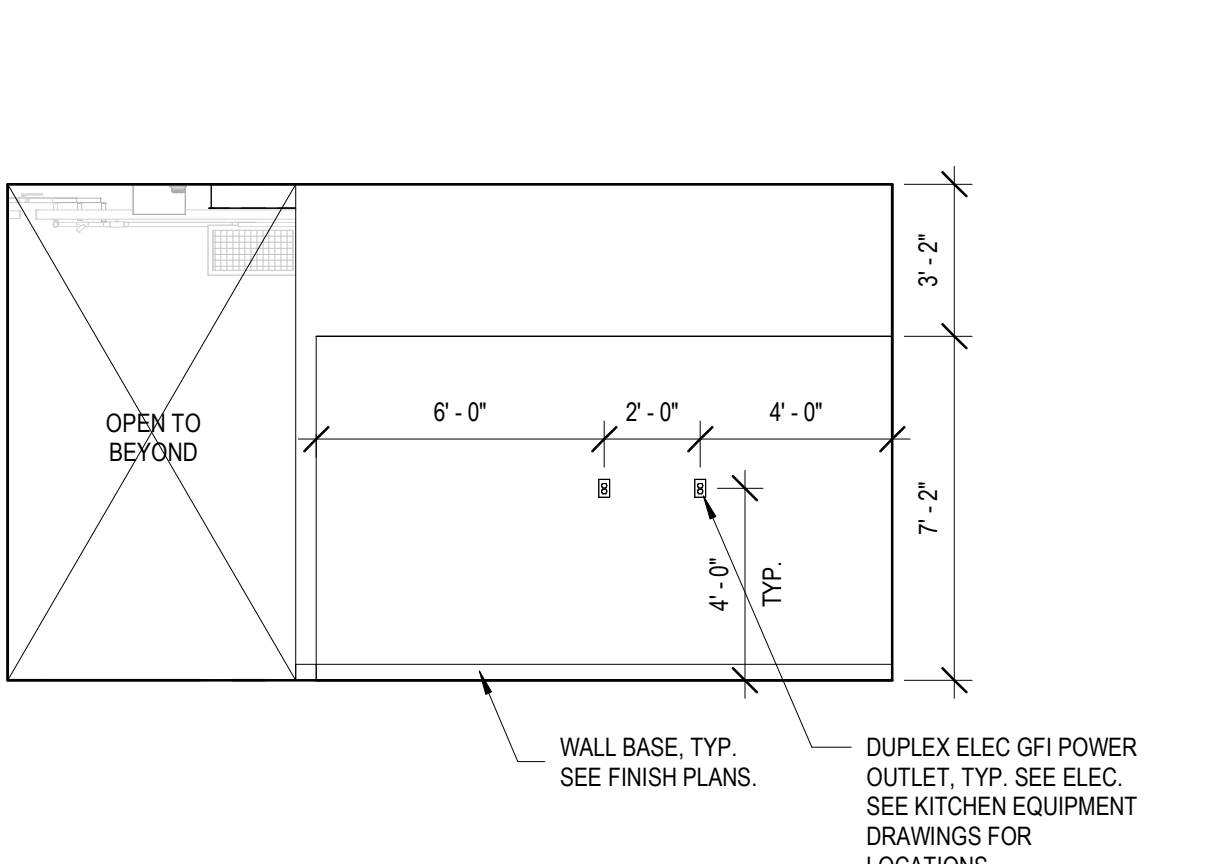
K INTERIOR ELEVATION  
1/4" = 1'-0"



L INTERIOR ELEVATION 16  
1/4" = 1'-0"



M INTERIOR ELEVATION  
1/4" = 1'-0"



N INTERIOR ELEVATION N  
1/4" = 1'-0"



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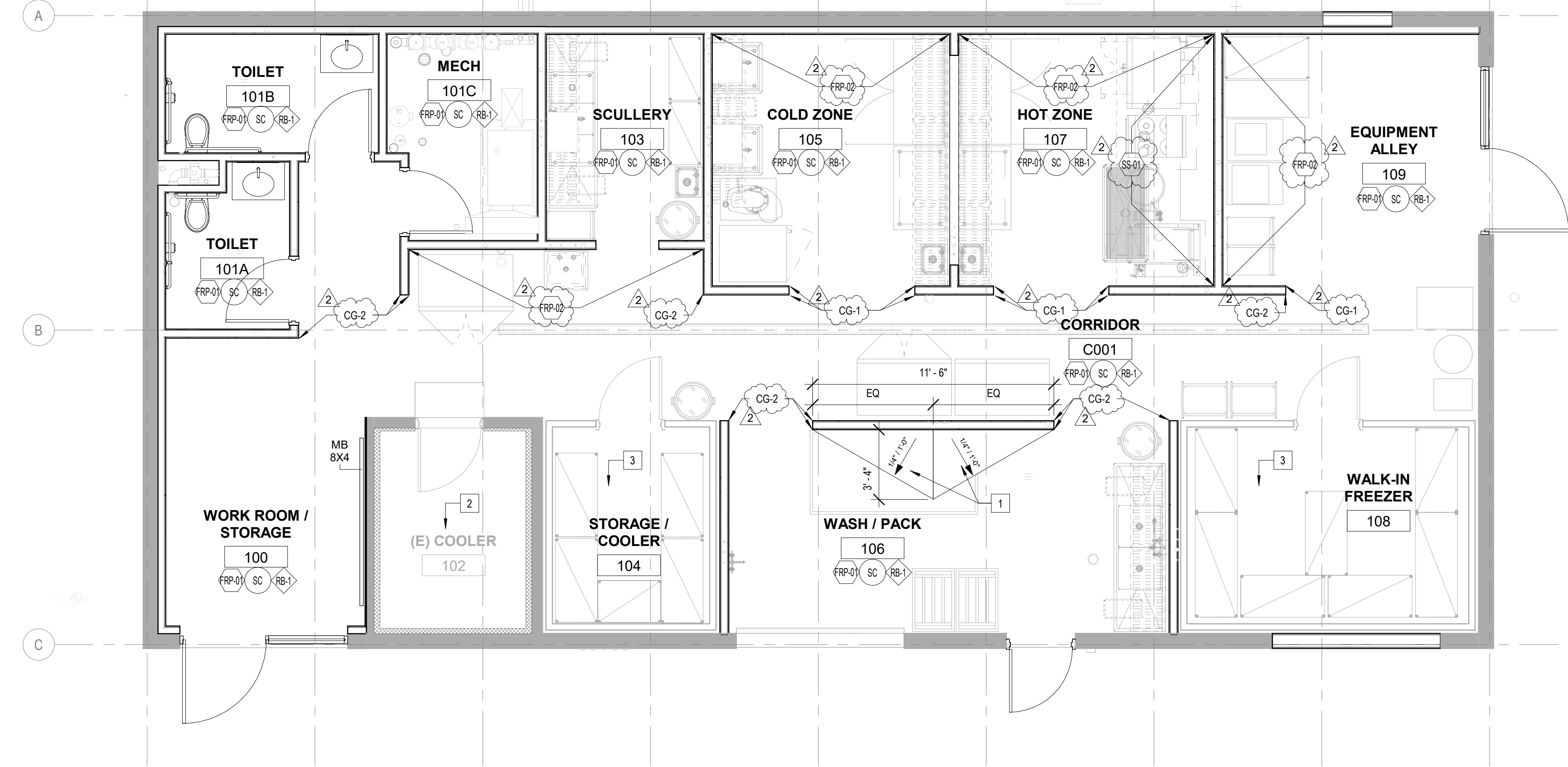
SHEET TITLE:  
**DOOR SCHEDULE, ELEVATIONS, AND DETAILS**

SHEET NUMBER:  
**A10.00**

1 2 3 4 5 6

1 2 3 4 5 6 7 8 9

A  
B  
C  
D  
E



**FINISH PLAN SYMBOLS LEGEND:**

(X)	WALL FINISH TYPE	(X)	WALL BASE TYPE	(X)	FLOOR FINISH TYPE
-----	------------------	-----	----------------	-----	-------------------

**FINISH PLAN GENERAL NOTES:**

1. PAINT ALL EXPOSED CONDUIT, DUCTWORK, PIPING, ETC. IN ALL FINISHED SPACES. REFER TO INTERIOR FINISH PLANS AND REFLECTED CEILING PLANS FOR CLARIFICATIONS.
2. PAINT ALL EXPOSED METAL ON EXTERIOR INCLUDING, BUT NOT LIMITED TO: CONDUIT, PIPING, FLASHING, MECHANICAL FLUES AND DUCTS, AND HOLLOW METAL FRAMES AND DOORS.
3. PROVIDE CEMENTITIOUS SELF-LEVELING UNDERLAYMENT AT REMOVAL OF EXISTING FLOOR DRAINS AS REQUIRED TO PROVIDE A LEVEL SUBSTRATE FOR NEW FLOOR FINISH.
4. ALL FINISHES ARE MONUMENTAL PER ROOM UNLESS NOTED OTHERWISE.
5. HOLLOW METAL DOORS AND FRAMES TO BE PAINTED PT-2 UNLESS NOTED OTHERWISE.
6. AT ALL LOCATIONS WHERE CASEWORK IS TO BE INSTALLED, THE SUBSEQUENT BASE TYPE SPECIFIED FOR EACH ROOM SHALL BE INSTALLED OVER CASEWORK TOE KICKS UNLESS NOTED OTHERWISE. REFER TO FLOOR PLANS FOR CASEWORK LOCATIONS.
7. PAINT ALL GYP. BD. CEILINGSS PT-1 UNLESS NOTED OTHERWISE.
8. ALL CARPET TILE TO BE INSTALLED QUARTER TURNED UNLESS SPECIFIED OTHERWISE.

**WALL FINISH TYPES:**

TYPE	DESCRIPTION	MANUFACTURER	NAME# / COLOR
PT-1	GENERAL PAINT	BENJAMIN MOORE	2125-70 OVAL WALK WHITE
PT-2	HOLLOW METAL FRAMES	SHERWIN WILLIAMS	COLOR MATCH TO ANSI TO GRAY.
FRP-01	FRP WALL PANELING	CRANE COMPOSITES	GLASBORD EMBOSSED PANELS, MIN. 0.075 THICKNESS, WHITE 085 10' HIGH TO DECK ABOVE OR CEILING IF LOWER
FRP-02	FRP WALL PANELING	CRANE COMPOSITES	SLATE GRAY 1125
SS-01	STAINLESS STEEL WALL PANELING	BY HOOD MFR. SEE KITCHEN DRAWINGS	BY HOOD MFR. SEE KITCHEN DRAWINGS

**WALL BASE TYPES:**

TYPE	DESCRIPTION	MANUFACTURER	NAME# / COLOR
RB-1	4" CH COVE RUBBER BASE	JOHNSONITE	LIGHT GREY

**FLOOR FINISH TYPES:**

TYPE	DESCRIPTION	MANUFACTURER	NAME# / COLOR
SC	SEALED CONCRETE	SEE SPECS	SEE SPECS

**CORNER GUARD TYPES:**

TYPE	DESCRIPTION	MANUFACTURER	NAME# / COLOR
CG-1	STAINLESS STEEL CORNER GUARD	INPRO	304 STAINLESS STEEL 7'-2" H
CG-2	STAINLESS STEEL CORNER GUARD	INPRO	304 STAINLESS STEEL 8'-0" H

**FINISH PLAN REFERENCED NOTES:**

1. PROVIDE SELF-LEVELING CEMENTITIOUS TOPPING (ARDEX K500 OR EQUAL) WITH AN INTEGRAL COUNTER SLOPE AS INDICATED OVER EXISTING SLOPED CONCRETE SLAB ON GRADE TO DIRECT WATER AWAY FROM WALL AND TOWARD EXISTING FLOOR DRAIN. PREP EXISTING CONCRETE SLAB AS REQUIRED FOR INSTALLATION OF TOPPING SYSTEM. FEATHER TOPPING FOR SMOOTH, HOMOGENEOUS TRANSITION. REFER TO FINISH PLANS FOR FLOOR FINISHING.
2. EXISTING COOLER FLOOR SYSTEM TO REMAIN.
3. NEW COOLER FLOOR SYSTEM. SEE KITCHEN DRAWINGS.

1 LEVEL 1 - FINISH PLAN  
1/4" = 1'-0"



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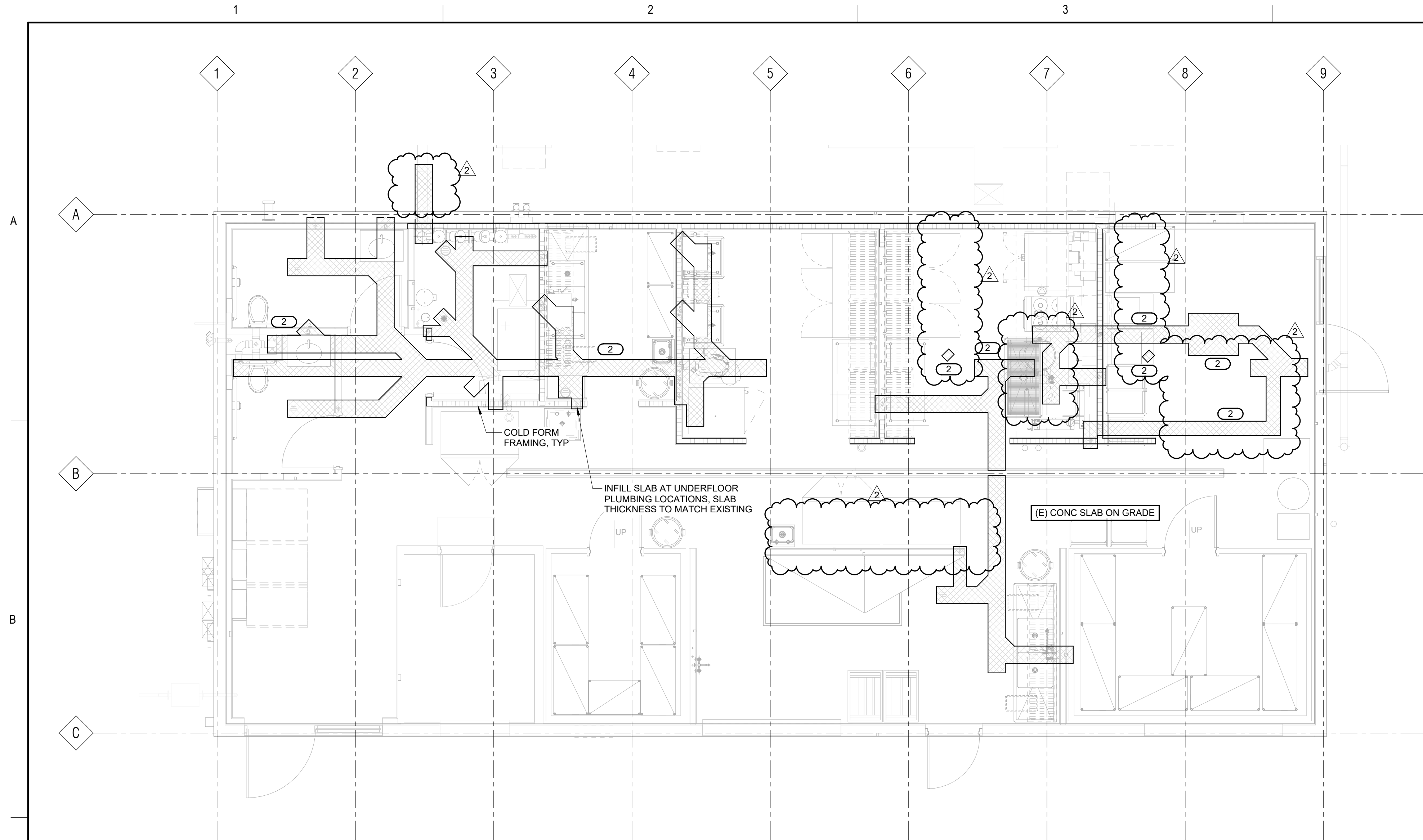
KEY PLAN:

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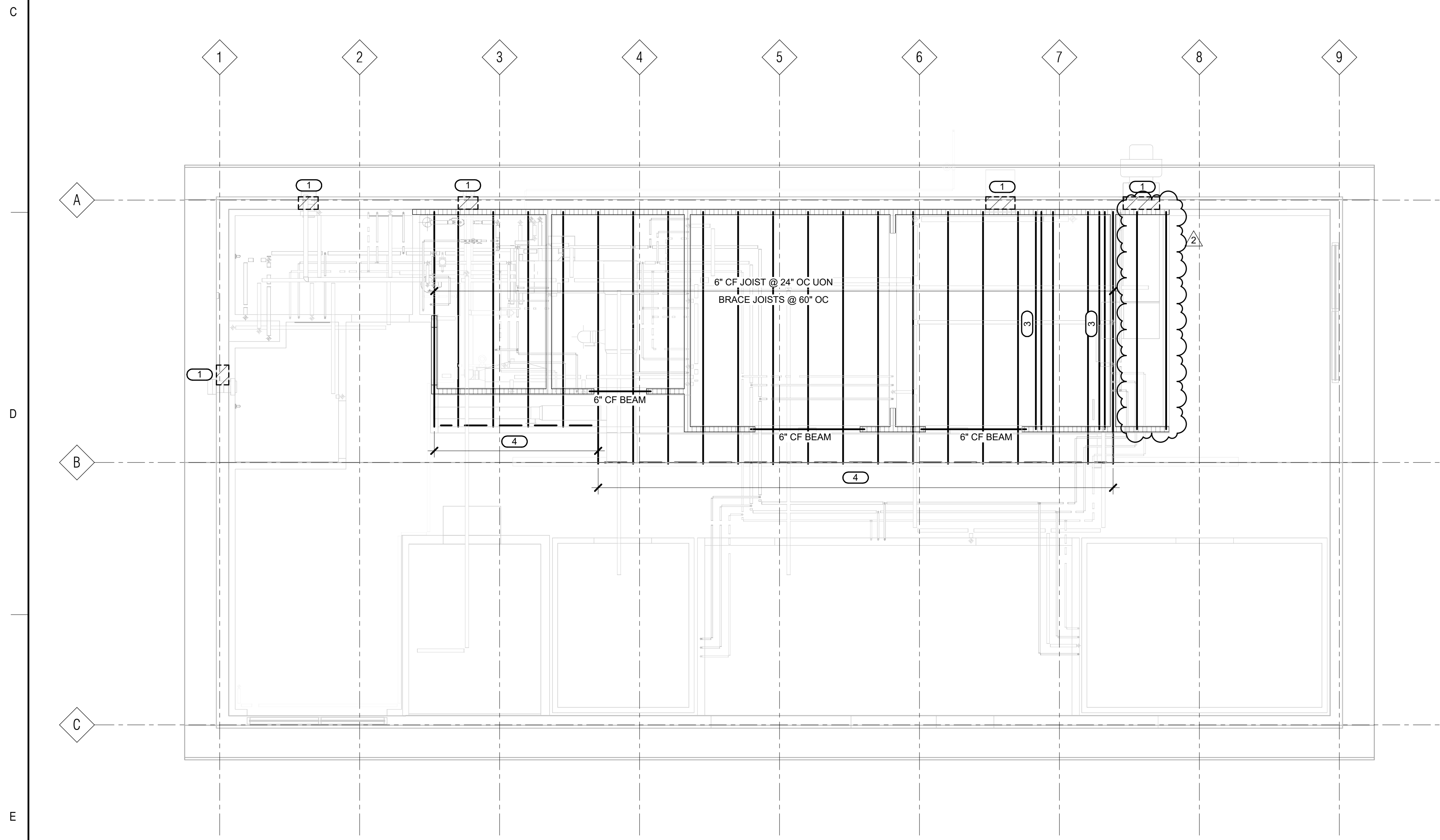
NO.	DESCRIPTION	DATE
2	ADDENDUM #3	05/08/2026

SHEET TITLE:  
**FINISH PLAN**

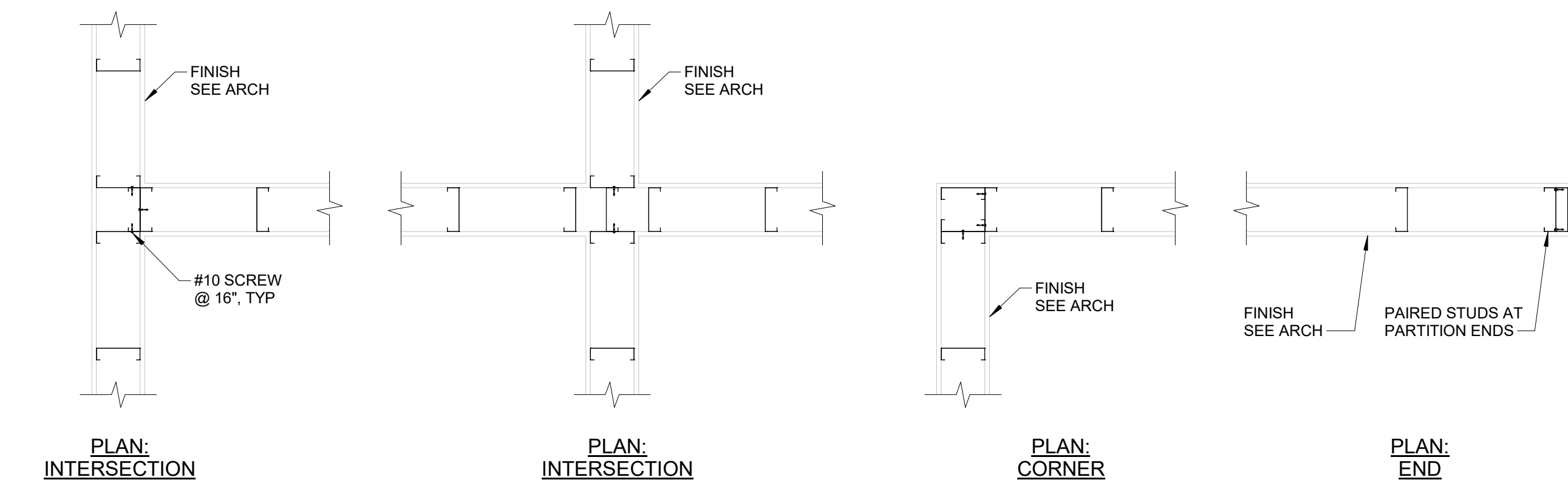
SHEET NUMBER:  
**A11.01**



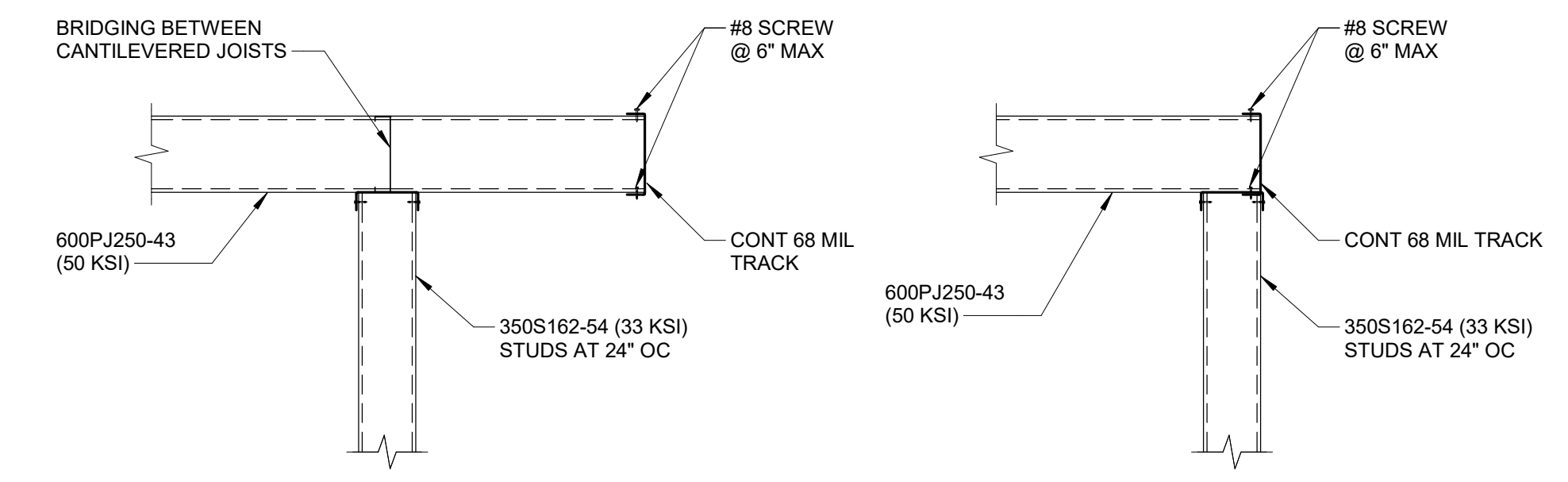
**1 FOUNDATION PLAN**  
1/4" = 1'-0"



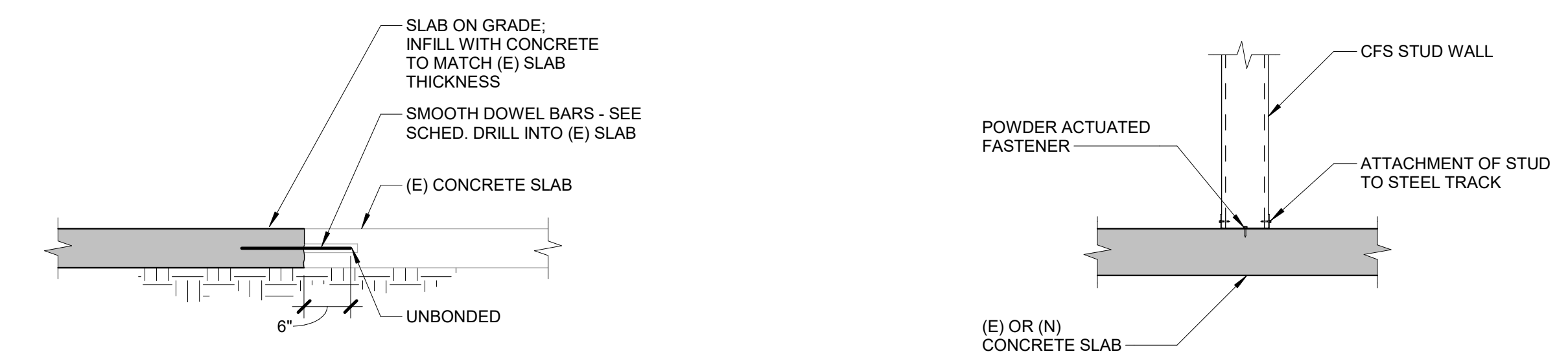
**2 ROOF FRAMING PLAN**  
1/4" = 1'-0"



**3 STUD WALL CORNER AND INTERSECTIONS**  
3/4" = 1'-0"



**4 CFS JOIST BEARING AT CFS WALL**  
3/4" = 1'-0"



**5 NEW TO EXISTING SLAB-ON-GRADE CONNECTION**  
3/4" = 1'-0"

**6 COLD FORMED TRACK TO SLAB CONNECTION**  
3/4" = 1'-0"

SLAB THICKNESS	SMOOTH DOWEL BAR
4"	1/2" x 1'-4" @ 18"
5"	3/4" x 1'-4" @ 12"
6"	3/4" x 1'-4" @ 12"

- (E) FOUNDATION & ROOF FRAMING SHEET NOTES:**
- STUDS ARE TO BE DESIGNED TO SUPPORT MECHANICAL DUCTWORK, PIPES AND HANGING KITCHEN EQUIPMENT. DEAD LOAD IS 10 PSF, TYP.
  - SEE GENERAL NOTES SECTIONS FOR ADDITIONAL INFORMATION.
  - CONTRACTOR VERIFY ALL DIMENSIONS WITH ARCH DRAWINGS.
- KEYNOTES: (#)**
- OPENING THRU EXISTING WALL FOR EXHAUST FAN. FRAME OPENING WITH COLD FORM STUDS AND HEADER SISTERED INTO EXISTING STUD WALL. THICKNESS OF HEADERS AND STUDS TO MATCH EXISTING WALL CONSTRUCTION.
  - DEMO EXISTING SLAB, AS REQUIRED, FOR PLUMBING UNDERFLOOR. COORDINATE WITH PLUMBING CONTRACTOR. INFILL WITH NEW CONC. SEE DETAIL 5/S1.00. THICKNESS OF SLAB TO MATCH (E) SLAB THICKNESS.
  - DOUBLE JOISTS AT KITCHEN HOOD CONNECTION. COORDINATE LOCATION WITH KITCHEN CONTRACTOR. HOOD WEIGHS 650 LBS.
  - CANTILEVER JOISTS TO SUPPORT DUCTWORK. COORDINATE WITH MECH CONTRACTOR.



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NO.	DESCRIPTION	DATE
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SHEET TITLE:  
**FOUNDATION PLAN, ROOF FRAMING PLAN AND DETAILS**

SHEET NUMBER:  
**S1.00**

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Illinois Design Firm Registration #184008976-0014  
PROJECT #25000535.00



**AIR TERMINAL SCHEDULE**

NOTES:  
 1. CONTRACTOR SHALL DETERMINE PROPER BORDER TYPE TO MATCH CEILING CONSTRUCTION.  
 2. REFER TO DRAWINGS FOR NECK SIZE. ALL BRANCH DUCTWORK TO AIR TERMINALS SHALL BE NECK SIZE UNLESS NOTED OTHERWISE.

TAG NAME	TYPE	MATERIAL	FINISH	FACE SIZE (NOTE 1.2)		BORDER (NOTE 3)	VOLUME DAMPER	MANUFACTURER	MODEL	NOTES
				WIDTH	HEIGHT					
CG-1	PLAQUE	STEEL	WHITE	24"	24"	LAY-IN	No	TITUS	OMNI	
EG-1	PLAQUE	STEEL	WHITE	8"	8"	SURFACE MOUNT	Yes	FANTECH	MGE 8	METAL EXHAUST GRILLE, WALL MOUNT, DIRECT DUCT CONNECTION
RG-1	35 DEGREE DEFLECTION	STEEL	WHITE	42"	12"	SURFACE MOUNT	No	TITUS	350	LONG BLADES
SG-1	DOUBLE DEFLECTION	STEEL	WHITE	8"	8"	1 1/4"	No	TITUS	300	LONG FRONT BLADES
SG-2	DOUBLE DEFLECTION	ALUMINUM	WHITE	10"	10"	SURFACE MOUNT	Yes	TITUS	US300FL	
SG-3	PERFORATED	ALUMINUM	WHITE	20"	20"	SURFACE MOUNT	No	TITUS	PAS-AA	PROVIDE WITH DEFLECTORS

**UNIT HEATER SCHEDULE - ELECTRIC (UH)**

NOTES:  
 1. PROVIDE ELECTRIC UNIT HEATER WITH FACTORY CONTROLS.

TAG NAME	AREA SERVED	CONFIGURATION	CFM	STAGES	KW	VOLTS	PH	ELECTRICAL				CONTROL DIAGRAM	MANUFACTURER	MODEL	NOTES
								DISCONNECT BY (NOTE A)	TYPE (NOTE B)	CONTROLLER/R/STARTER BY (NOTE A)	SCCR				
UH-1	TOILET 101A	ARCHITECTURAL WALL MOUNT	100	1	4	208	1	MFR	NF	MFR	5,000	4/M3.00	TRANE	UHAA-04	NOTE 1
UH-2	TOILET 101B	ARCHITECTURAL WALL MOUNT	100	1	4	208	1	MFR	NF	MFR	5,000	4/M3.00	TRANE	UHAA-04	NOTE 1

**CONDENSING UNIT SCHEDULE - COOLING (CU)**

NOTES:  
 1. UNIT SHALL INCLUDE FACTORY ECM inverter-driven compressor.

TAG NAME	SERVICE	TONNAGE IN (lb)	REFRIGERANT	SAT SUC TEMP °F	AMBIENT TEMP °F	NUMBER OF COMPRESSORS	NUMBER OF STAGES	NUMBER OF CIRCUITS	NUMBER OF FANS	RLA (AMP)	MCA	MOCF AMPS	VOLTS	PHASE	ELECTRICAL			MANUFACTURER	MODEL	NOTES	
															DISCONNECT BY (NOTE A)	TYPE (NOTE B)	CONTROLLER/STARTER BY (NOTE A)				
CU-1	F-1	267	R-454B	45	95	1	1	1	1	17.4	24	40	208	1	MFR	NF	MFR	5000	CARRIER	26VNA160W003	NOTE 1

**FURNACE SCHEDULE**

NOTES:  
 1. PROVIDE HIGH EFFICIENCY GAS FURNACE WITH FACTORY CONTROLS. COORDINATE FINAL OPERATION AND OCCUPIED SCHEDULE WITH OWNER.  
 2. PROVIDE WITH HUMIDITY CONTROL & BYPASS HUMIDIFIER ACCESSORY (CARRIER HUMCCLBP2417 OR EQUIVALENT) AS PART OF FURNACE PACKAGE.

TAG NAME	SERVICE	FAN/BLOWER				ELECTRICAL				HEATING				EVAPORATOR COIL				AMBIENT AIR °F	MANUFACTURER	FURNACE MODEL	EVAPORATOR COIL MODEL	CONTROL DIAGRAM	NOTES	
		EXT S.P. IN. WG	CFM (HIGH SPEED)	HP	RPM	VOLTAGE	PHASE	DISCONNECT BY (NOTE A)	TYPE (NOTE B)	CONTROLLER/STARTER BY (NOTE A)	SCCR	STAGES	INPUT MBH	OUTPUT MBH	LAT °F	EAT DB °F	EAT WB °F							TOTAL MBH
F-1	BUILDING	0.5	1,625	0.75	1100	115	1	EC	NF	MFR	5000	4	120	117	57	80	67	120	95	CARRIER	59MN7C120C24-22	CVAVA6024XMA	3/M3.00	NOTES 1, 2

**FAN SCHEDULE**

NOTES:  
 1. PROVIDE WITH STANDARD ONE FAN CONTROLLER TO ACHIEVE SEQUENCE OF OPERATION PER M2.01 CONTROL DIAGRAMS.  
 2. GREASE EXHAUST FAN TO BE GREASE RATED UL 702 ETC. EXHAUST FAN CONNECTION TO BE AT BACK OF HOOD.  
 3. EXHAUST FAN FINISH TO MATCH PANELING.

TAG NAME	SERVICE	DESIGN	TOTAL S.P. IN. WG	WHEEL DIA	DRIVE	FAN RPM	BACK DRAFT DAMPER TYPE	BHP (NOTE E)	MHP (NOTE E)	VOLTS	PH	ELECTRICAL			MANUFACTURER	MODEL	CONTROL DIAGRAM	NOTES	
												DISCONNECT BY (NOTE A)	TYPE (NOTE B)	CONTROLLER/STARTER BY (NOTE A)					
EF-1	TOILET 101A	75	1.36	N/A	DIRECT	3457	GRAVITY	0.09	0.12	120	1	MFR	NF	MFR	ECM	FANTECH	#44860	2/M3.00	NOTE 3
EF-2	TOILET 101B	75	1.36	N/A	DIRECT	3457	GRAVITY	0.09	0.12	120	1	MFR	NF	MFR	ECM	FANTECH	#44860	2/M3.00	NOTE 3
EF-3	HOT ZONE 107	2,367	0.75	16"	DIRECT	1202	GRAVITY	0.66	0.78	120	1	MFR	NF	MFR	ECM	GREENHECK	CUE- 160- VG	1/M3.00	NOTES 1, 2

**MAKE-UP AIR UNIT SCHEDULE (MAU)**

NOTES:  
 1. PROVIDE FACTORY CONTROLS CAPABLE OF INTEGRATION WITH KITCHEN HOOD CONTROLS. UNIT TO OPERATE IN COORDINATION WITH EXHAUST SYSTEMS. FINAL AIRFLOW, DISCHARGE AIR TEMPERATURE, AND OCCUPIED SCHEDULE TO BE COORDINATED WITH OWNER.  
 2. UNIT TO BE CAPABLE OF SIDE DISCHARGE OR PROVIDED WITH PLenum CURB FOR SIDE DISCHARGE AS REQUIRED.

TAG NAME	LOCATION	DESIGN	EXT S.P. IN. WG	FAN				HEATING SECTION				COOLING SECTION				ELECTRICAL				FILTER	CONTROL DIAGRAM	MANUFACTURER	MODEL	NOTES								
				CFM	MOTOR	MBH	TURN DOWN	INLET PSIG	REFRIGERATION TYPE	EER	FLUID TYPE	TOTAL	SENSIBLE	EAT DB °F	WB °F	LAT °F	DISCONNECT BY (A)	TYPE (B)	BY (A)						TYPE (C)	SCCR	EM PWR	FINAL A.P.D. IN. W.G.				
MAU-1	HOT ZONE	2,267	1	DIRECT	1.5	238.3	219.2	1	0.5	R-454B	16.35	R-454B	96.7	68.1	95	78	68	68	1	208	3	MFR	NF	MFR	VFD	5,000	No	1.95	1/M3.00	GREENHECK	DGX-P116-H12-D1-8	NOTE 1

**GAS REGULATOR SCHEDULE**

TAG NAME	DESCRIPTION	MANUFACTURER AND MODEL
GR-1	GAS PRESSURE REGULATOR - CAST IRON BODY, INTERNAL PRESSURE RELIEF, THREADED CONNECTIONS, ADJUSTABLE PRESSURE SETTING, TIGHT SHUTOFF. 2PSI INLET PRESSURE, 7" - 10" OUTLET PRESSURE, 180 CFH CAPACITY, MINIMUM CONTROLLABLE FLOW OF 27 CFH.	FISHER, ITRON, SENSUS, MAXITROL
GR-2	GAS PRESSURE REGULATOR - CAST IRON BODY, INTERNAL PRESSURE RELIEF, THREADED CONNECTIONS, ADJUSTABLE PRESSURE SETTING, TIGHT SHUTOFF. 2PSI INLET PRESSURE, 7" - 10" OUTLET PRESSURE, 180 CFH CAPACITY, MINIMUM CONTROLLABLE FLOW OF 24 CFH. PROVIDE GAS REGULATOR WITH VENT LIMITING DEVICE.	MAXITROL VLIMITER OR APPROVED EQUIVALENT
GR-3	GAS PRESSURE REGULATOR - CAST IRON BODY, INTERNAL PRESSURE RELIEF, THREADED CONNECTIONS, ADJUSTABLE PRESSURE SETTING, TIGHT SHUTOFF. 2PSI INLET PRESSURE, 7" - 10" OUTLET PRESSURE, 150 CFH CAPACITY, MINIMUM CONTROLLABLE FLOW OF 20 CFH. PROVIDE GAS REGULATOR WITH VENT LIMITING DEVICE.	MAXITROL VLIMITER OR APPROVED EQUIVALENT

**SCHEDULE GENERAL...**

**[A] DISCONNECT AND CNTRLR/STARTER FURNISHED AND INSTALLED BY:**  
 MFR = MANUFACTURER  
 EC = ELECTRICAL CONTRACTOR  
 MC = FURNISHED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.  
 MFR/EC = FURNISHED LOOSE BY MANUFACTURER INSTALLED BY ELECTRICAL CONTRACTOR.  
 TCC = TEMPERATURE CONTROL CONTRACTOR

**[B] DISCONNECT TYPE:**  
 CB = CIRCUIT BREAKER  
 F = FUSED  
 NF = NON-FUSED  
 PLUG = PLUG AND CORD

**[C] CONTROLLER STARTER TYPE:**  
 FV = FULL VOLTAGE  
 WYE = WYE-DELTA  
 SS = SOLID STATE (SOFT START)  
 MS = MANUAL STARTER  
 VFD = VARIABLE FREQUENCY DRIVE  
 VFD/B = VARIABLE FREQUENCY DRIVE WITH BYPASS  
 ECM = ELECTRONICALLY COMMUTATED MOTOR  
 NOTE: PROVIDE SHAFT GROUNDING ON MOTORS DRIVEN BY A VFD AS REQUIRED PER SPECIFICATIONS 22 05 13 AND 23 05 13.

**[D] RPM LIMITATION**  
 FAN RPM SHALL NOT EXCEED 110% OF SCHEDULED VALUE. WITH THE SCHEDULED WHEEL TYPE. SUBSTITUTION OF BI OR DIA FANS FOR PD IS ACCEPTABLE IF EFFICIENCY IS NOT LOWER.

**[E] HORSEPOWER LIMITATION**  
 NO EQUIPMENT SHALL BE SELECTED ABOVE 80% OF MOTOR NAME PLATE RATING.

**[F] RPM DEVIATION**  
 MUST BE WITHIN +/- 10% OF SCHEDULED RPM.

**[G] CURB / PAD TYPE:**  
 STD = STANDARD CURB  
 SAC = SOUND ATTENUATOR CURB  
 CONC = CONCRETE BASE (HOUSEKEEPING PAD)

**[G] CURB / PAD BY:**  
 MFR = MANUFACTURER  
 MC = MECHANICAL CONTRACTOR  
 EC = BY GENERAL CONTRACTOR

**[H] CONTROL / SENSOR TYPE**  
 1 = SENSOR ONLY  
 2 = SENSOR WITH ADJUSTMENT  
 3 = SENSOR WITH OVERRIDE  
 4 = SENSOR WITH ADJUSTMENT AND OVERRIDE.

**FOR REVIEW ONLY  
 NOT FOR  
 CONSTRUCTION**

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 REF. SCALE IN INCHES PROJECT #26000335.00



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**McHenry County College**  
**Student Farm Renovations**  
 8900 Northwest Hwy #14, Crystal Lake, IL 60012  
 DKA PROJECT NO: 25-037

KEY PLAN:

SHEET STATUS: 04/21/2026  
**ISSUED FOR BID**

NO.	DESCRIPTION:	DATE:
1	ADDENDUM #1	05/01/2026
2	ADDENDUM #2	05/06/2026
3	ADDENDUM #3	05/08/2026

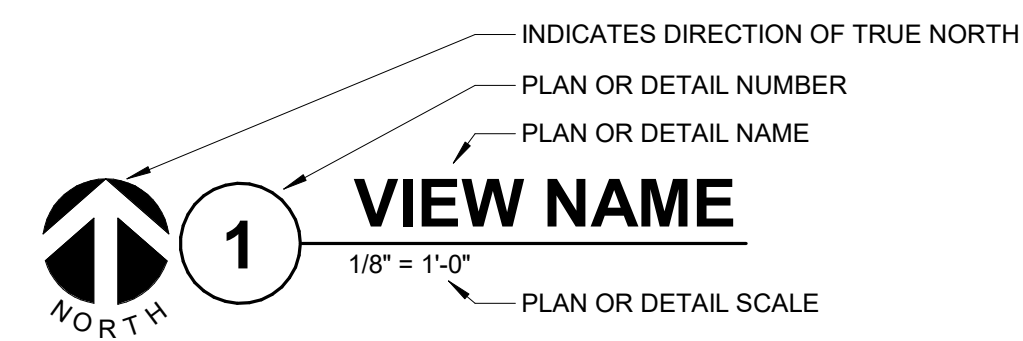
SHEET TITLE:  
**HVAC SCHEDULES**

SHEET NUMBER:  
**M4.00**



VIEW KEY

KEYNOTE: INDICATES NOTE USED TO DESCRIBE ADDITIONAL INFORMATION ABOUT WORK REQUIRED, SPECIFIC TO THE SHEET AND/OR DETAIL



LINE TYPE AND TAG KEY

NEW WORK BY THIS CONTRACTOR (WIDE LINE)

EXISTING TO BE REMOVED (SHORT DASHED PATTERN)

EXISTING TO REMAIN OR WORK BY OTHERS (NARROW LINE)

EXISTING TO BE REMOVED BY OTHERS (SHORT DASHED PATTERN)

HALF TONING DOES NOT MODIFY SCOPE.

TAG-1 UNDERLINED TAG INDICATES OBJECT IS IN-SCOPE. IF NEW, ADDITIONAL INFORMATION IS AVAILABLE IN A SCHEDULE, MATERIAL LIST, OR SYMBOL LIST

SYMBOL LIST - FIRE HAZARD ZONES

Table with 2 columns: SYMBOL, DESCRIPTION. Includes Fire Zone Boundary, Light Hazard, and Ordinary Group 1.

CONTRACTOR ABBREVIATION KEY

Table with 2 columns: ABBR., DESCRIPTION. Lists abbreviations for Civil, Food Service, Plumbing, Mechanical, and Fire Protection Contractors.

SYMBOL LIST - FIRE PROTECTION

Table with 2 columns: SYMBOL, DESCRIPTION. Lists symbols for Shutoff Valves, Automatic Drain Valves, Butterfly Valves, Check Valves, Flow Switches, and Union Flanges.

SYMBOL LIST - FIRE PROTECTION SYSTEMS

Table with 2 columns: SYMBOL, DESCRIPTION. Lists symbols for Drain, Fire Protection, and Fire Protection details.

FIRE PROTECTION ABBREVIATION KEY

Table with 2 columns: ABBR., DESCRIPTION. Lists abbreviations for Above Finished Floor, Backflow Preventer, Typical, and Unless Otherwise Noted.

MECHANICAL RENOVATION NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING AND MECHANICAL.

- 1. EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS... 2. NOT ALL EXISTING DUCTWORK AND PIPING IS SHOWN... 3. FIELD VERIFY THE AVAILABLE CLEARANCES FOR DUCTWORK AND PIPING BEFORE FABRICATION... 4. EACH CONTRACTOR SHALL FIELD VERIFY ACCESSIBILITY TO THE AREA OF THEIR WORK... 5. EACH CONTRACTOR SHALL CUT AND PATCH ROOFS, WALLS, AND FLOORS ASSOCIATED WITH THEIR WORK... 6. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF CEILING, CEILING TILES, AND CEILING GRIDS ASSOCIATED WITH AREAS OF WORK BY ALL CONTRACTORS... 7. WHERE EXISTING MECHANICAL SYSTEMS DIFFER FROM THOSE SHOWN ON THE PROJECT DRAWINGS AND CREATE CONFLICTS WITH NEW EQUIPMENT, PIPING, OR DUCTWORK INSTALLATIONS... 8. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION... 9. OBTAIN PERMITS FROM OWNER BEFORE SHUTTING DOWN ANY SYSTEM FOR ANY REASON... 10. MAINTAIN EXISTING SYSTEM IN SERVICE UNTIL NEW SYSTEM IS COMPLETE AND READY FOR THE N AND SWITCHOVER... 11. DISCONNECT AND REMOVE MECHANICAL DEVICES AND EQUIPMENT SERVING EQUIPMENT THAT HAS BEEN REMOVED.

FIRE PROTECTION GENERAL NOTES:

- 1. THE SYMBOLS AND THE MATERIAL LIST ARE FOR THE CONVENIENCE OF THE CONTRACTOR... 2. CATALOG NUMBERS SHALL NOT BE CONSIDERED COMPLETE, BUT ARE GIVEN AS AN AID TO THE CONTRACTOR... 3. CENTER SPRINKLERS IN CEILING TILES IN BOTH DIRECTIONS IN ALL AREAS... 4. NEW SPRINKLERS SHALL BE QUICK RESPONSE TYPE... 5. PROVIDE COVERAGE ABOVE (IF APPLICABLE) AND BELOW FLOATING CEILINGS... 6. FIRE PROTECTION PIPE ROUTING IS SHOWN FOR GENERAL LAYOUT... 7. THE FIRE PROTECTION SYSTEM SHALL BE DESIGNED TO MEET OWNER'S INSURANCE COMPANY STANDARDS... 8. ALL BUILDING AREA SHALL BE FULLY SPRINKLERED INCLUDING CANOPIES, WALKWAYS, OVERHANGS, SOFFITS, AND BUILDING PROJECTIONS... 9. PROVIDE RISER ROOM IDENTIFICATION SIGNAGE... 10. COORDINATE EXACT SIGN LANGUAGE WITH A.H.J... 11. INSTALL SYSTEM DRAINS AT LOW POCKET AREAS... 12. MAIN PIPING PASSING BELOW SKYLIGHTS OR CLERESTORIES ARE NOT PERMITTED... 13. FOLLOW STRUCTURAL DETAILS WHEN PENETRATING OR PASSING THROUGH STRUCTURAL ELEMENTS... 14. PROVIDE INTERMEDIATE TEMPERATURE SPRINKLER HEADS WHERE REQUIRED BY NFPA 13... 15. FINAL HEAD LOCATION, TYPE AND FINISH SHALL BE REVIEWED AND APPROVED BY THE ARCHITECT... 16. EXACT LOCATION OF THE ALL PANELS SHALL BE VERIFIED ON SITE... 17. PAINT ALL EXPOSED PIPING TO MATCH BACKGROUND OR AS DIRECTED BY THE ARCHITECT... 18. THE OWNER MUST BE NOTIFIED PRIOR TO EACH AND EVERY DRAINING OR RECHARGING OF THE SPRINKLER SYSTEM... 19. THE CONTRACTOR SHALL PREPARE A COORDINATED SET OF SHOP DRAWINGS... 20. DRAWINGS SHOW LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC... 21. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE.

FIRE PROTECTION SHEET INDEX

Table with 2 columns: SYMBOL, DESCRIPTION. Lists sheet numbers for coversheet, floor plan, details, diagrams, and material list.

FIRE SPRINKLER USAGE SCHEDULE (SPR)

- NOTES: 1. SEE FLOOR PLANS FOR ZONING REQUIREMENTS. 2. SPRINKLER SHALL HAVE COLOR CODED BULB THERMAL ELEMENT. 3. ALL SPRINKLERS SHALL BE UL LISTED. 4. CONTRACTOR TO VERIFY SPRINKLER REQUIREMENTS BASED ON ACTUAL INSTALLATION... 5. TAG NAME IS PRIMARILY FOR IDENTIFYING SPRINKLERS IN SUBMITTALS... 6. AREAS ARE GENERAL IN NATURE... 7. SPRINKLERS SHALL HAVE A 3min QUICK RESPONSE BULB. 8. SPRINKLERS SPECIFIED WITHIN FIRE SPRINKLER USAGE SCHEDULE ARE STANDARD COVERAGE TYPE... 9. EXTENDED COVERAGE SPRINKLERS ARE PERMITTED PROVIDED SPRINKLERS MEET THE REQUIREMENTS OF UL.

Table with columns: AREA (NOTE 1 & 6), DESCRIPTION, HAZARD, TAG NAME, TYPE, FINISH, RESPONSE, TEMP RATING, MANUFACTURER & MODEL, NOTES. Lists 5 sprinkler locations.

MECHANICAL GENERAL NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING AND MECHANICAL.

- 1. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC... 2. CATALOG AND MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE... 3. DETERMINATION OF QUANTITIES OF MATERIAL AND EQUIPMENT REQUIRED SHALL BE MADE BY THE CONTRACTOR... 4. DO NOT SCALE DRAWINGS... 5. COORDINATE ALL WORK WITH ALL OTHER TRADES... 6. REVIEW SPACE REQUIREMENTS OF EQUIPMENT... 7. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS... 8. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN... 9. CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS... 10. SEAL ALL WALL AND ROOF PENETRATIONS AIRTIGHT... 11. CALK ALL PIPE AND DUCT PENETRATIONS OF FULL HEIGHT... 12. DO NOT EXCEED 25 LBS PER HANGER AND A MINIMUM SPACING OF 2'-0\"/>



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McHenry County College Student Farm Renovations 8900 Northwest Hwy #14, Crystal Lake, IL 60012 DKA PROJECT NO: 25-037

KEY PLAN:

SHEET STATUS: 04/21/2026 ISSUED FOR BID

Table with 3 columns: NO., DESCRIPTION, DATE. Shows addendum #3 dated 05/08/2026.

SHEET TITLE: FIRE PROTECTION COVERSHEET

SHEET NUMBER:

F0.00

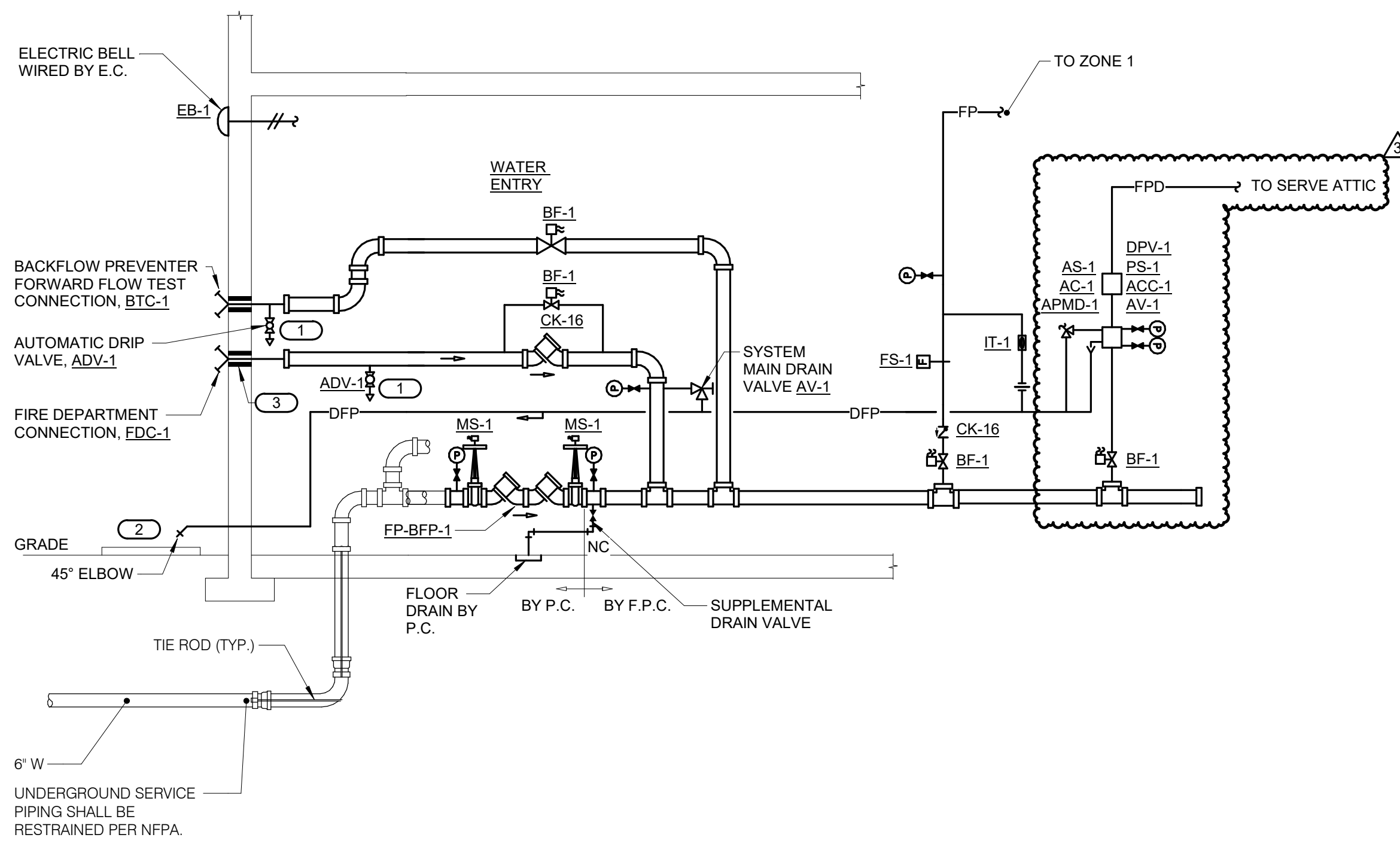
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**FIRE PROTECTION MATERIAL LIST**

TAG NAME	DESCRIPTION	MANUFACTURER AND MODEL
AC-1	RISE MOUNTED AIR COMPRESSOR, FULLY AUTOMATIC, DIRECT DRIVE, OIL LESS PISTON COMPRESSOR, SINGLE STAGE, AIR COOLED, UL LISTED FIELD ADJUSTABLE PRESSURE SWITCH, PRESSURE GAUGE, PRESSURE RELIEF VALVE, BUBBLE TIGHT CHECK VALVE, INTAKE FILTER, RISER MOUNTING BRACKET, STAINLESS STEEL FLEXIBLE HOSE, UL 1450 FOR USE WITH FIRE SPRINKLER SYSTEMS.  CAPACITY: SIZED TO FILL SPRINKLER SYSTEM TO 40 PSI WITHIN 30 MINUTES PER NFPA 13 REQUIREMENTS.  COMPRESSOR SIZING IS BASED ON CONSERVATIVE ESTIMATES OF SYSTEM VOLUME; FINAL SELECTION SHALL BE BASED ON HYDRAULIC CALCULATIONS.	GENERAL AIR PRODUCTS (G PLUS SERIES), GAST
ACC-1	ACCELERATOR, 250 PSI, PILOT OPERATED, 1500 GALLON MAXIMUM SYSTEM CAPACITY, AUTOMATIC OR MANUAL RESET, INTEGRAL OR EXTERNAL ANTI-FLOOD DEVICE, UL/FM.  ACCELERATOR SHALL BE THE SAME MFR. OF DRY PIPE VALVE. PROVIDE ALL REQUIRED TRIM FOR PROPER SYSTEM OPERATION.  ACCELERATOR, 250 PSI, PILOT OPERATED, 1500 GALLON MAXIMUM SYSTEM CAPACITY, AUTOMATIC OR MANUAL RESET, INTEGRAL OR EXTERNAL ANTI-FLOOD DEVICE, UL/FM.  ACCELERATOR SHALL BE THE SAME MFR. OF DRY PIPE VALVE. PROVIDE ALL REQUIRED TRIM FOR PROPER SYSTEM OPERATION.	VIKING E-1/B-1, TYCO ACC-1 RELIABLE B-1, VICTAULIC SERIES 746-LPA
ADV-1	AUTOMATIC DRIP VALVE, FOR USE ON INLET SIDE OF FDC OR PUMPER CONNECTION, 175 PSI, BRASS OR BRONZE BODY, STAINLESS STEEL OR BERYLLIUM COPPER SPRING AND RETAINING RING, MIN. CLOSING PRESSURE 7 PSI WITH INCREASING PRESSURE, MIN OPENING PRESSURE 5 PSI WITH DECREASING PRESSURE, 1/2" NPT INLET AND 1/4" NPT DRAIN OUTLET, VALVE ORIENTATION SHALL BE INSTALLED ACCORDING TO MFR. RECOMMENDATIONS, UL.	VIKING B-1, TYCO AD-2, RELIABLE MODEL C
APMD-1	AIR PRESSURE MAINTENANCE DEVICE, 13 PSI "ON" TO 18 PSI "OFF" AIR OPERATING RANGE, 150 PSI INLET AIR PRESSURE MAXIMUM, MAIN AND BYPASS LINE BALL GLOBE VALVES, UNION, WYE-STRAINER, PRESSURE GAUGE TEST PORT, FIELD ADJUSTABLE PRESSURE REGULATOR, RESTRICTIVE ORIFICE CHECK VALVE, UL/FM.	VICTAULIC (757 FIRELOCK), GENERAL AIR (AMD-1), VIKING CORP. (D-2), TYCO (AMD-1), RELIABLE (A-2)
AS-1	HIGH/LOW AIR SUPERVISORY PRESSURE SWITCH, 250 PSI, 10 TO 100 PSI FIELD ADJUSTABLE PRESSURE RANGE, 2 TO 5 PSI ACTUATION DIFFERENTIAL, TWO SINGLE POLE DOUBLE THROW CONTACTS, NEMA 4 INDOOR/OUTDOOR RATED METAL HOUSING, BLEEDER VALVE, UL/FM.	POTTER PS40, SYSTEM SENSOR EPS40
AV-1	ANGLE VALVE, 1/2" TO 2" 175 PSI, RISING STEM, BRASS/BRONZE BODY, BRASS/BRONZE BONNET, INTEGRAL SEAT, SOFT DISC, HANDWHEEL, THREADED UL.	UNITED BRASS WORKS 125SUL, NIBCO T-301-W, FPM 06-800
BF-1	INDICATING BUTTERFLY VALVE, NORMALLY OPEN, 175 PSI WWP, GROOVED TYPE, DUCTILE IRON BODY WITH PROTECTIVE COATING, ELECTROLESS NICKEL OR EPDM COATED DUCTILE IRON DISC, STAINLESS STEEL STEM AND SCREWS, CAST OR DUCTILE IRON HANDWHEEL, EPDM SEAT, INDICATOR FLAG, FACTORY MOUNTED INTEGRAL MONITOR SWITCHES, UL/FM.  LUGGED OR WAFER VALVES ARE ACCEPTABLE PROVIDED THEY HAVE THE FEATURES LISTED ABOVE.	VICTAULIC (SERIES 705), TYCO (BPV-300), KENNEDY (G300), RELIABLE (REL-BFG-300), NIBCO (GD-4765-6N)
BTC-1	FLUSH FOUR WAY BACKFLOW PREVENTOR TEST OUTLET CONNECTION, HORIZONTAL ORIENTATION, CAST BRASS OR DUCTILE IRON BODY WITH POLISHED CHROME FINISH, 6" INLET WITH FOUR 2-1/2" OUTLETS, BRASS NON RISING STEM HOSE VALVES, 3" FEMALE NPT INLET x 2-1/2" MALE HOSE THREAD OUTLETS, CAPS AND CHAINS, WALL PLATE WITH SAME FINISH AS BODY LABELED "BACKFLOW TEST CONNECTION".	POTTER ROEMER 5884, CROKER 8807, GUARDIAN SERIES 6744-6746
CK-16	SWING CHECK VALVE, 300 PSI WWP, GROOVED/FLANGED TYPE, DUCTILE IRON BODY, STAINLESS STEEL HINGE ASSEMBLY WITH RUBBER FACED CLAPPER, BRASS SEAT RING, ACCESS COVER, 1/2" OR 3/4" TAPPED BOSSES, VALVE LISTED FOR HORIZONTAL OR VERTICAL INSTALLATION, UL/FM.  FLANGED TYPE IS ACCEPTABLE PROVIDED VALVE HAS THE FEATURES LISTED ABOVE.	VIKING (G-1), TYCO (CV-1F)
DPV-1	DRY PIPE VALVE, LATCHING DIFFERENTIAL TYPE VALVE, GROOVED/FLANGED INLET/OUTLET, 175 PSI RATING, DUCTILE IRON BODY AND VALVE COVER, LATCHING SPRING LOADED CLAPPER ASSEMBLY, EXTERNAL RESET CAPABILITY, AIR TO WATER PRESSURE AREA DIFFERENTIAL OF APPROXIMATELY 6 TO 1, TAPPED OUTLET FOR DRAIN VALVE, UL/FM.  VALVE TRIM PIPE AND FITTINGS SHALL BE GALVANIZED, PROVIDE AIR AND WATER GAUGES, ISOLATION VALVES, DRIP CUP, AND DRAIN VALVE AS REQUIRED FOR PROPER SYSTEM OPERATION.	TYCO (DPV-1), VIKING (VVR), RELIABLE (DDX-LP), VICTAULIC (768N)
EB-1	FIRE SPRINKLER ELECTRICAL BOX, 10" GROUND SIZE, RATED FOR INDOOR OR OUTDOOR USE, WEATHERPROOF RED STEEL COVER AND BACKBOX, 120VAC, UL.	POTTER PS40, SYSTEM SENSOR SSV, ARGCO.
FDC-1	EXPOSED STORZ FIRE DEPT. CONNECTION INLET CONNECTION, 5" FEMALE NPT OUTLET x 1" STORZ INLET, INLET SCREEN, 30 DEGREE ANGLE BODY STYLE, ALUMINUM LOCKING CAPS WITH KEYWRENCH LOCK, BRASS WALL PLATE LABELED "AUTO SPKR".  CONTRACTOR TO COORDINATE PURCHASE OF LOCKING CAPS WITH LOCAL FIRE DEPARTMENT.	FDC: POTTER ROEMER 5795/5799, CROKER SERIES 6350-6365, GUARDIAN 6624-6629  LOCKING CAP: KNOX COMPANY [5001] 5002
FP-BFP-1	DOUBLE CHECK BACKFLOW PREVENTER, LISTED FOR USE IN FIRE PROTECTION SYSTEM, 175 PSI WWP AT 33°F TO 140°F, LEAD FREE, STAINLESS STEEL CONSTRUCTION, SAME SIZE AS PIPE 6", NON-CORROSIVE INTERNAL PARTS, STAINLESS STEEL SPRINGS, SPRING LOADED CHECK VALVES, INDICATING BUTTERFLY SHUT-OFF VALVES ON INLET AND OUTLET, TEST PORTS WITH SHUT-OFF VALVES, FACTORY TESTED, 8 PSI (MAXIMUM) PRESSURE DROP AT 10 FPS, ALL PARTS TO BE SERVICEABLE WITHOUT REMOVING UNIT FROM LINE, APPROVED BY USC FCCC & HR, AWWA C510-92, ASSE 1015, IAPMO AND SBCCI LISTED, UL.  MOUNT WITHIN 60" OF FINISHED FLOOR, FLOW PRESSURE DROP CURVES SHALL BE SUBMITTED, LISTED FOR HORIZONTAL OR VERTICAL CONFIGURATIONS.	AMES (C200), ZURN WILKINS (350AST), APOLLO (DCLF 4A)
FS-1	FLOW SWITCH - VANE TYPE, 450 PSI, FLOW SENSITIVITY OF 4-10 GPM, TWO SINGLE POLE DOUBLE THROW SWITCHES, PNEUMATIC RETARD ADJUSTABLE FROM 0-90 SECONDS WITH AUTOMATIC RESET, NEMA 4 INDOOR/OUTDOOR RATED METAL HOUSING, UL/FM.	POTTER VSR, SYSTEM SENSOR WFD
IT-1	COMBINATION INSPECTOR'S TEST AND DRAIN VALVE, 300 PSI, INTEGRAL SIGHT GLASS, BALL VALVE PLATE INDICATING OFF-TEST-DRAIN POSITIONS, FURNISHED WITH TEST ORIFICE GIVING FLOW EQUIVALENT TO ONE SPRINKLER OF A TYPE HAVING THE SMALLEST ORIFICE INSTALLED ON THE SYSTEM, PRESSURE RELIEF VALVE, UL/FM.	AGF (M1011A), RELIABLE (MODEL TD), VICTAULIC (SERIES LTD)
MS-1	MONITOR SWITCH - ELECTRIC, ONE SINGLE POLE, DOUBLE THROW CONTACT, CAST ALUMINUM HOUSING WITH CORROSION RESISTANT PARTS, WITH J-BOLTS FOR MOUNTING, UL/FM, VERIFY ELECTRICAL CHARACTERISTICS WITH ELECTRICAL CONTRACTOR PRIOR TO PURCHASE.	POTTER ELECTRIC OSYSU-1 SYSTEM SENSOR OSY2
PS-1	WATER/LOW PRESSURE SWITCH, 250 PSI, 4 TO 15 PSI FIELD ADJUSTABLE PRESSURE RANGE, 2 PSI ACTUATION DIFFERENTIAL, TWO SINGLE POLE DOUBLE THROW CONTACTS, NEMA 4 INDOOR/OUTDOOR RATED METAL HOUSING, BLEEDER VALVE, UL/FM.	POTTER PS10, SYSTEM SENSOR EPS10

- KEYNOTES:**
- DISCHARGE DOWN OVER NEAREST FLOOR DRAIN, INTO NEARBY FP DRAIN RISER, OR OUTDOORS.
  - PROVIDE CONCRETE SPLASHBLOCK AT GRADE.
  - SEAL WALL PENETRATION WATERTIGHT. (TYP.)



**1 FIRE PROTECTION RISER DIAGRAM**  
NO SCALE



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 DKA PROJECT NO: 25-037

KEY PLAN:

SHEET STATUS: 04/21/2026  
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NO.	DESCRIPTION	DATE
3	ADDENDUM #3	05/08/2026

SHEET TITLE:  
**FIRE PROTECTION DIAGRAMS MATERIAL LIST**

SHEET NUMBER:  
**F3.00**

**IMEG** 263 SHUMAN BOULEVARD  
 SUITE 550  
 NAPERVILLE, IL 60563  
 P: 630.527.2320

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REF. SCALE IN INCHES PROJECT #26000335-00

- GENERAL SHEET NOTES:**
- REFER TO SHEET E0.00 FOR ELECTRICAL GENERAL NOTES, INSTALLATION NOTES, RENOVATION NOTES, SYMBOL LIST, AND OTHER MISCELLANEOUS INFORMATION.
  - REFER TO SHEET E4.00 FOR PANEL SCHEDULES.
  - REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, MECHANICAL, FIRE PROTECTION, AND OTHER ELECTRICAL PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES.
  - VERIFY EXACT LOCATION AND ELEVATION OF RECEPTACLES WITH ARCHITECT.
  - REFER TO DETAIL 1/E2.00 FOR EXHAUST HOOD CONTROL DIAGRAM.
  - EXPOSED CONDUIT IS ACCEPTABLE WHERE A NEW DEVICE IS TO BE INSTALLED ON AN EXISTING WALL.
  - COORDINATE LOCATIONS OF ALL KITCHEN EQUIPMENT DEVICES MARKED 'FEQ-#F' WITH KITCHEN CONSULTANT PRIOR TO ROUGH-IN.

- KEYNOTES:**
- HOOD PROVIDED WITH LIGHT SWITCH, INSTALLED AND WIRED BY E.C.
  - MONITOR MODULE FOR EXHAUST HOOD CONTROL PANEL. REFER TO DETAIL 1/E2.00.
  - LIGHTING TO BE PROVIDED BY FREEZER/COOLER MANUFACTURER, INSTALLED AND WIRED BY E.C. PROVIDE LIGHTING CONTROL AS REQUIRED.
  - CONNECTION TO MOTOR CONTROLLER FOR MOTOR SHUTDOWN SEQUENCE.
  - CONNECT TO MANUFACTURER PROVIDED DISCONNECT/STARTER.
  - BACKBOX FOR MANUAL HOOD SUPPRESSION. COORDINATE LOCATION WITH HOOD INSTALLER. REFER TO DETAIL 1/E2.00 FOR WIRING DETAIL.
  - EMERGENCY GAS SHUTOFF SWITCH. REFER TO DETAIL 1/E2.00 FOR WIRING DETAIL.
  - GAS SOLENOID VALVE FOR COOKING APPLIANCE UNDER HOOD. COORDINATE EXACT LOCATION WITH M.C. REFER TO DETAIL 1/E2.00 FOR WIRING DETAIL.
  - INSTALL SAMPLING TUBE IN STRAIGHT RUN OF THE DUCT, DOWN STREAM OF FILTERS, AND AHEAD ANY BRANCH DUCTS. COORDINATE INSTALLATION WITH M.C. PRIOR TO ROUGH-IN. SEAL ALL DUCT PENETRATIONS AIR-TIGHT.
  - INSTALL REMOTE INDICATOR TEST SWITCH ON WALL IN THE CORRIDOR. LABEL AS PER ASSOCIATED MAU, DUCT SYSTEM, AND SMOKE DETECTOR ADDRESS.
  - VERIFY EXISTING EQUIPMENT ON SITE. COORDINATE RECEPTACLE CONFIGURATION WITH EXISTING PLUGS.
  - POWER REQUIREMENTS HAVE NOT BEEN PROVIDED TO IMEG DURING DESIGN. CONTRACTOR SHALL COORDINATE EXACT POWER REQUIREMENTS WITH APPROVED SHOP DRAWINGS.



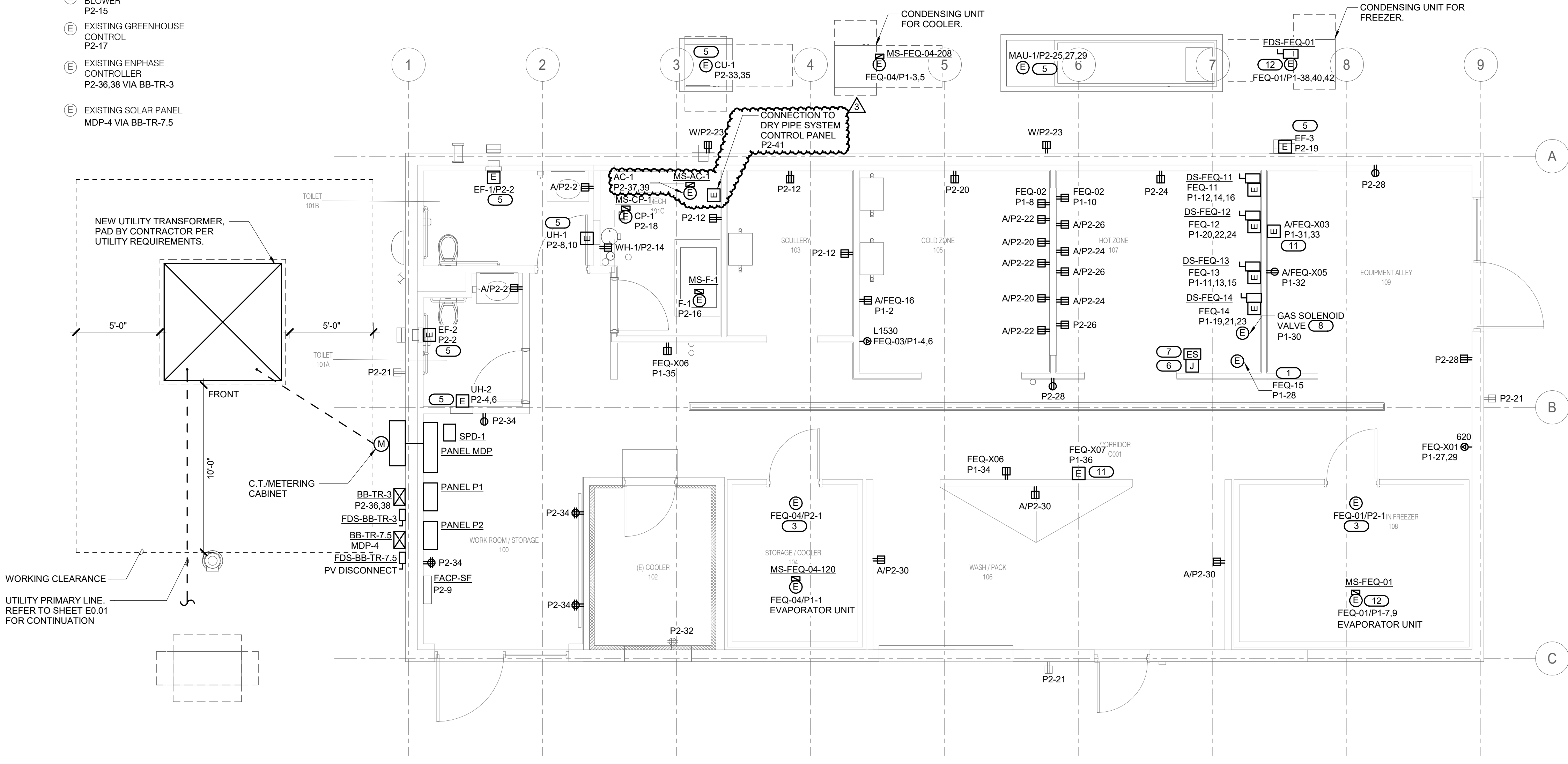
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 P: 312.496.0000

S-MEP-PP-T ENGINEER:  
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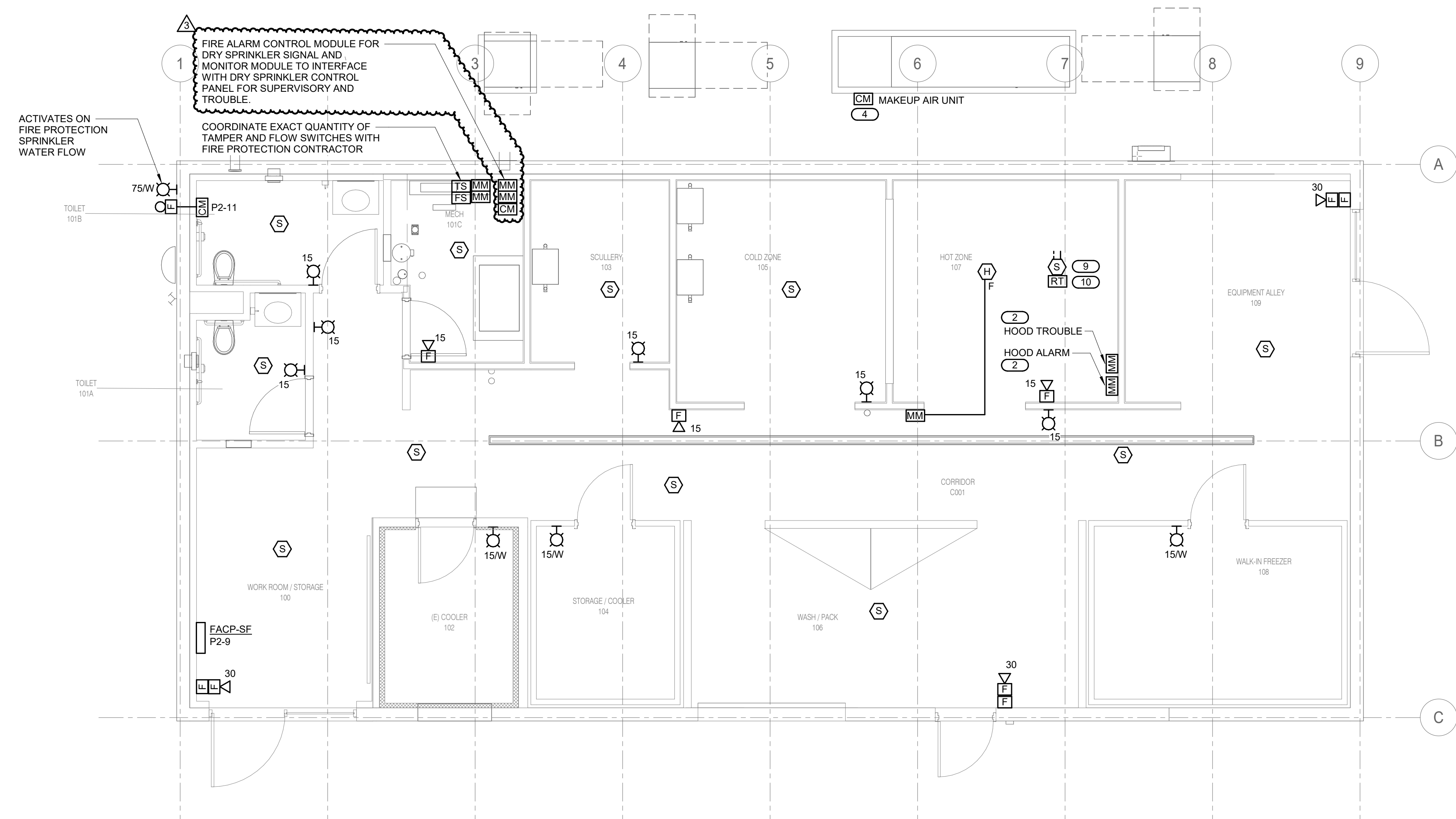
CIVIL ENGINEER:  
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 1391 CORPORATE DRIVE, SUITE 203  
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KITCHEN CONSULTANT:  
**NEW VENTURE ADVISORS**  
 2506 N. CLARK ST. #436  
 CHICAGO, IL, 60614  
 P: 773.245.3570

- (E) EXISTING GREENHOUSE LOAD P2-13
- (E) EXISTING GREENHOUSE BLOWER P2-15
- (E) EXISTING GREENHOUSE CONTROL P2-17
- (E) EXISTING ENPHASE CONTROLLER P2-36,38 VIA BB-TR-3
- (E) EXISTING SOLAR PANEL MDP-4 VIA BB-TR-7.5



**2 LEVEL 1 - FLOOR PLAN - POWER**  
 1/4" = 1'-0"



**1 LEVEL 1 - FLOOR PLAN - SYSTEMS**  
 1/4" = 1'-0"

**McHenry County College**  
**Student Farm Renovations**  
 8900 Northwest Hwy #14, Crystal Lake, IL 60012  
 DKA PROJECT NO: 25-037

KEY PLAN:

SHEET STATUS: 04/21/2026  
**ISSUED FOR BID**

NO.	DESCRIPTION:	DATE:
1	ADDENDUM #1	05/01/2026
3	ADDENDUM #3	05/08/2026

SHEET TITLE:  
**FLOOR PLAN - POWER & SYSTEMS**

SHEET NUMBER:  
**E1.02**

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REF. SCALE IN INCHES PROJECT #26000305.00



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 DKA PROJECT NO: 25-037

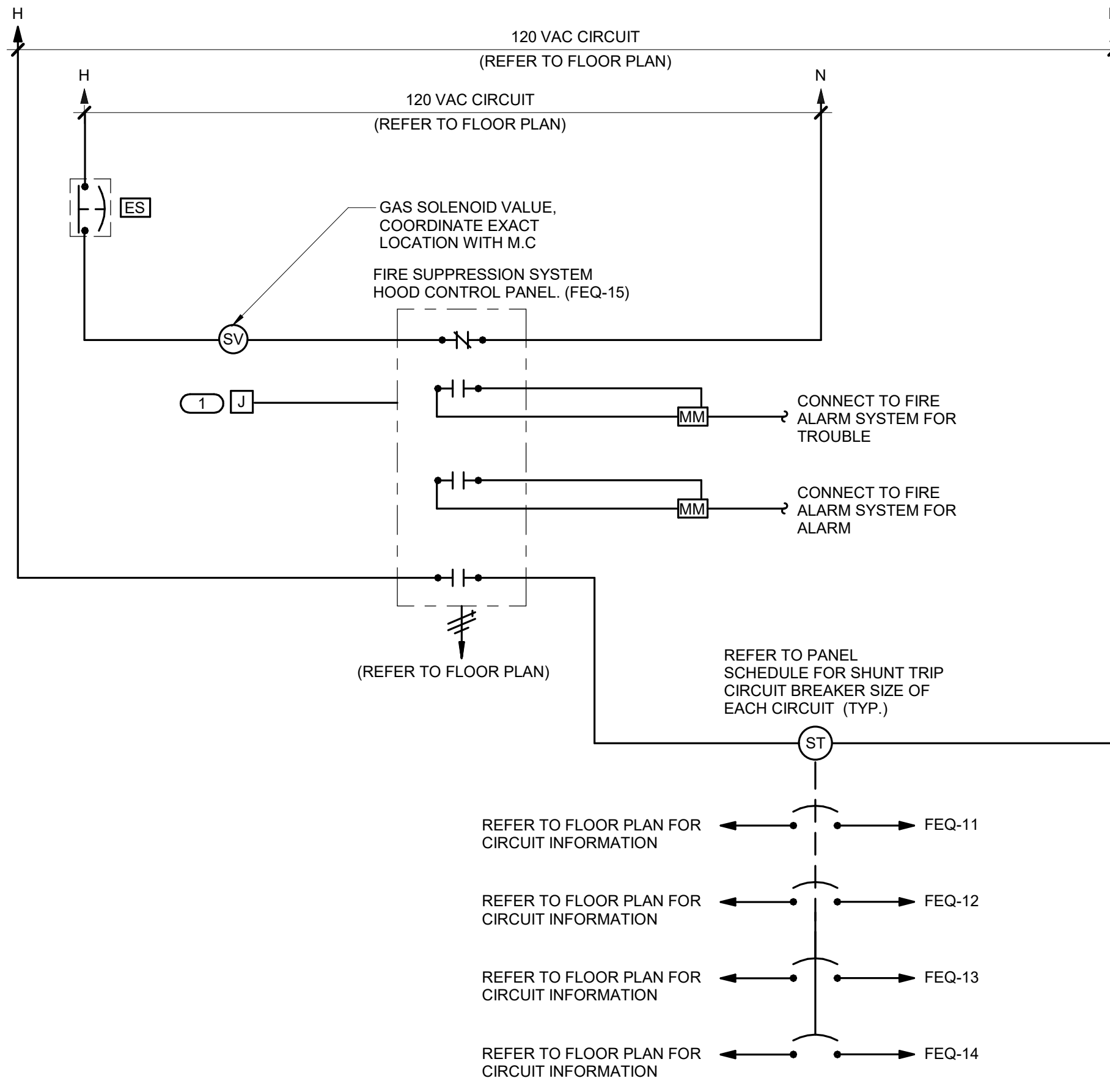
KEY PLAN:

SHEET STATUS: 04/21/2026  
**ISSUED FOR BID**

NO.	DESCRIPTION:	DATE:
2	ADDENDUM #2	05/06/2026
3	ADDENDUM #3	05/06/2026

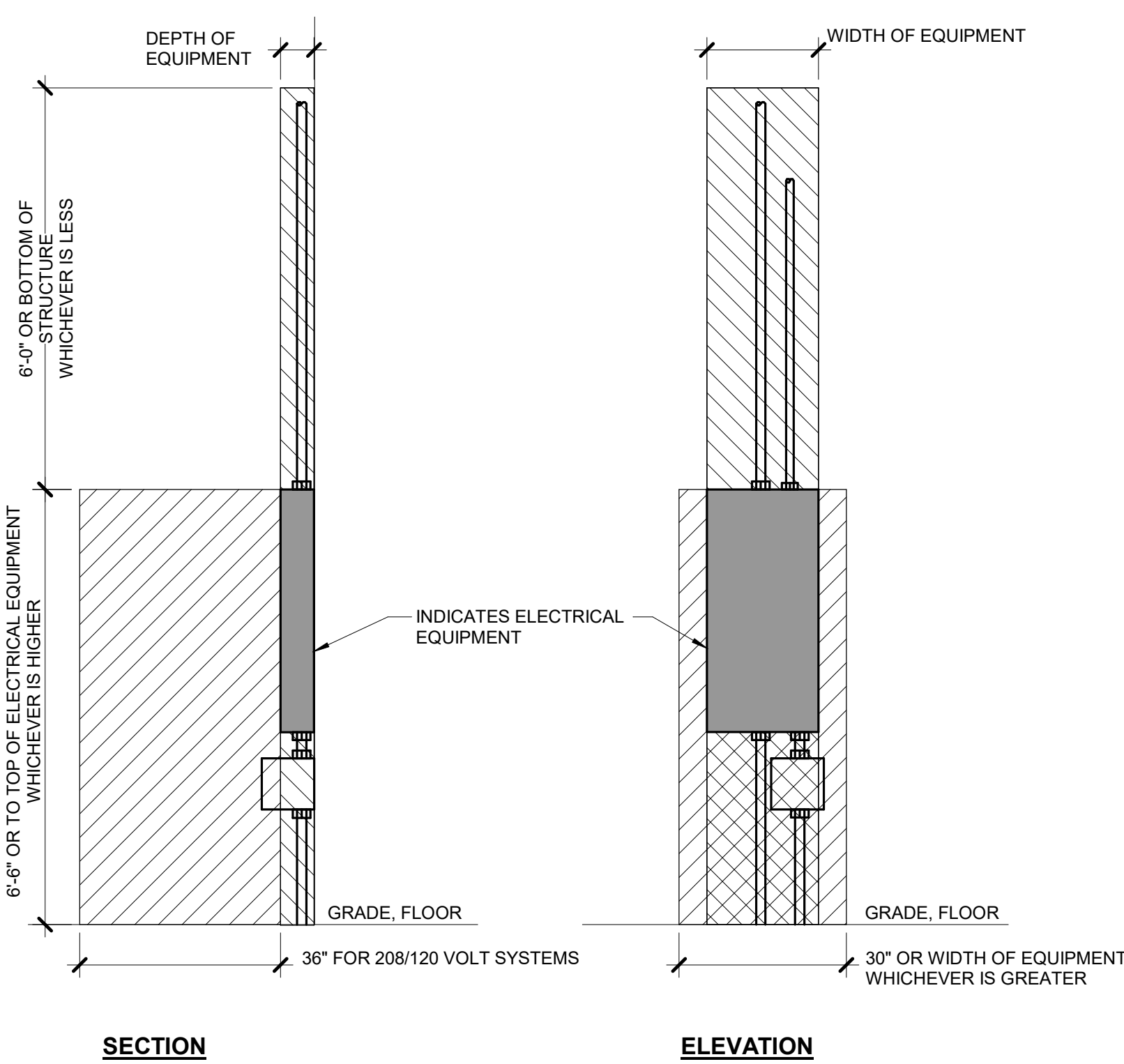
SHEET TITLE:  
**ELECTRICAL DETAILS**

SHEET NUMBER:  
**E2.00**



**1 EXHAUST HOOD CONTROL DIAGRAM**  
 NO SCALE

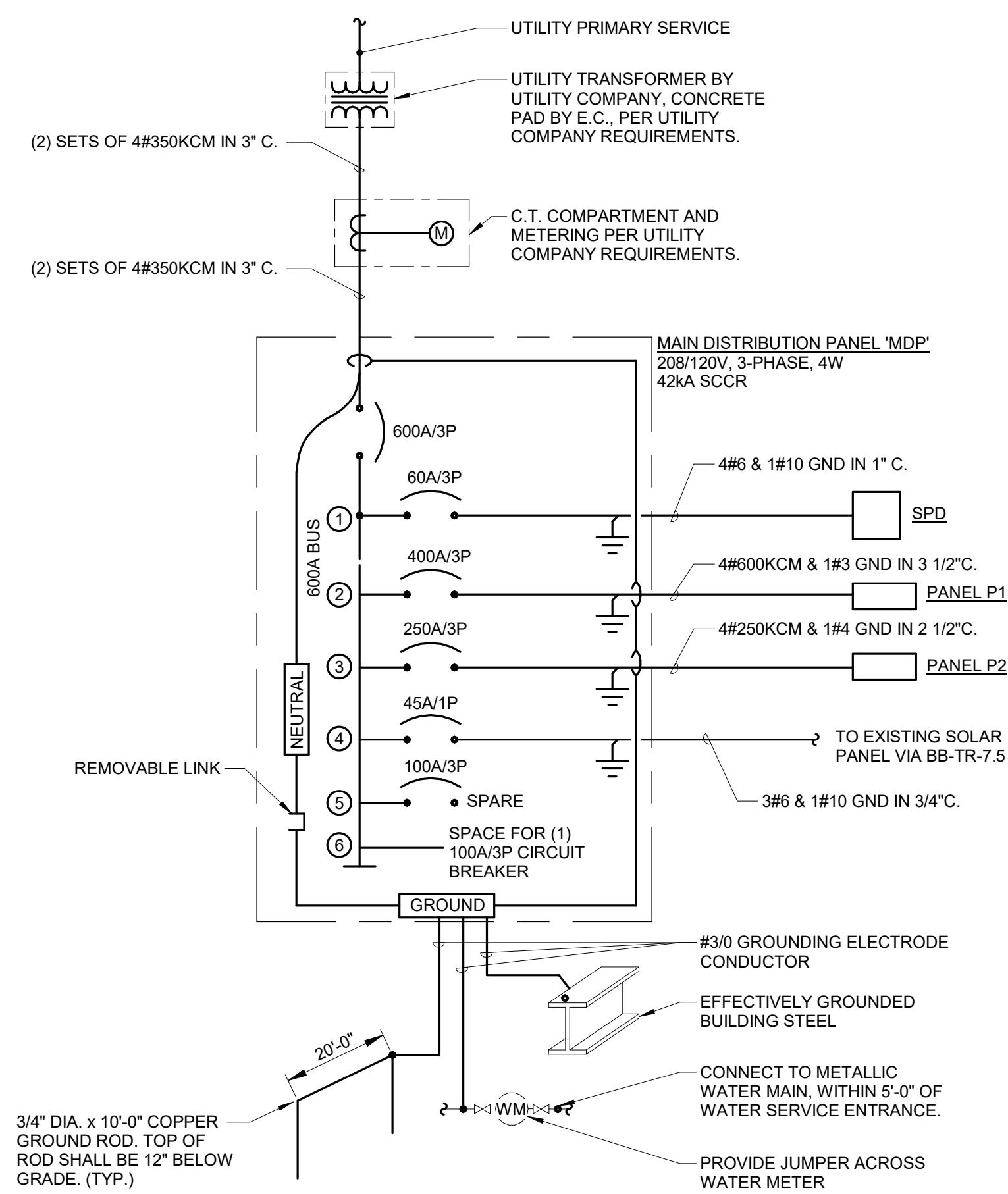
- NOTES:**
1. WIRING PER MANUFACTURER'S RECOMMENDATIONS. ALL WIRING SHALL BE INSTALLED IN CONDUIT.
- KEYNOTES: (#)**
1. PROVIDE BACKBOX AND CONDUIT FOR MANUAL PULL STATION PROVIDED BY FOOD SERVICE EQUIPMENT SUPPLIER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH SERVICE EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.



INDICATES WORKING SPACE REQUIRED PER LOCAL ELECTRICAL CODE. ELECTRICAL EQUIPMENT LOCATED ABOVE OR BELOW OTHER RELATED EQUIPMENT SHALL NOT EXTEND MORE THAN 6" IN FRONT OF SUCH EQUIPMENT.

INDICATES DEDICATED ELECTRICAL SPACE REQUIRED PER LOCAL ELECTRICAL CODE

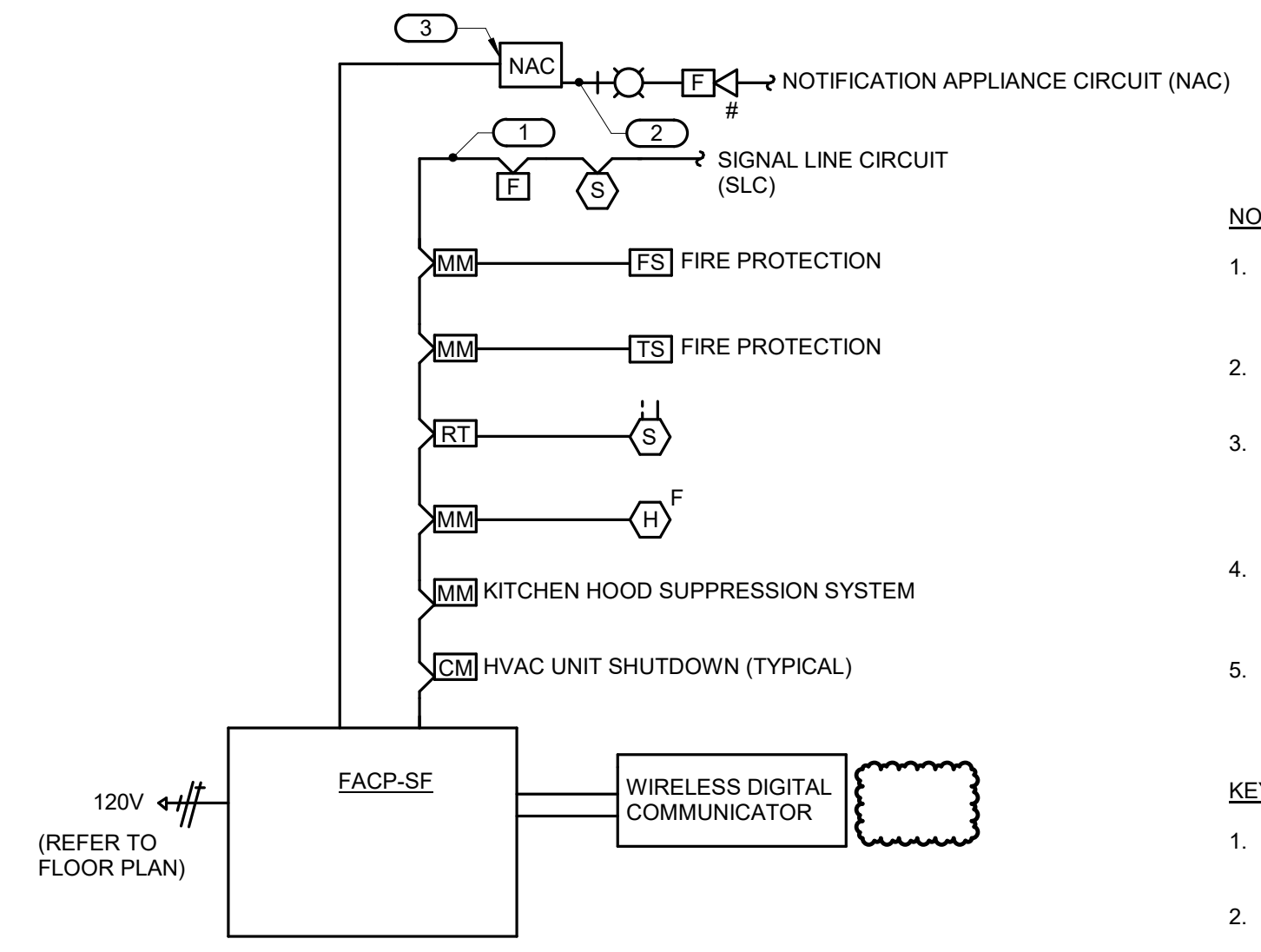
**3 PANELBOARD EQUIPMENT CLEARANCES**  
 NO SCALE



**2 ONE LINE DIAGRAM**  
 NO SCALE

SEQUENCE OF OPERATION	PANEL/INDICATOR ALARM INDICATION	PANEL/INDICATOR SUPERVISORY INDICATION	PANEL/INDICATOR TROUBLE INDICATION	AUDIBLE ALARMS SEQUENCE	VISUAL ALARMS SEQUENCE	MANUAL MECHANICAL FAN SHUTDOWN SEQUENCE
FIRE ALARM PANEL, TRANSPONDER, NAC PANEL LOW BATTERY	X					
FIRE ALARM PANEL, TRANSPONDER, NAC PANEL BATTERY OR CHARGER FAILURE		X				
FIRE ALARM PANEL, TRANSPONDER, NAC PANEL ABNORMAL SWITCH OR CONTROL POSITION	X					
FIRE ALARM PANEL, TRANSPONDER, NAC PANEL GROUND FAULT, OPEN CIRCUIT, SHORT CIRCUIT		X				
FIRE ALARM PANEL, TRANSPONDER, NAC PANEL AC POWER LOSS OR IRREGULARITY		X				
NOTIFICATION APPLIANCE CIRCUIT OR SLC LOOP GROUND FAULT, OPEN CIRCUIT, SHORT CIRCUIT			X			
INITIATING DEVICE FAILURE OR COMMUNICATION ERROR			X			
FIRE ALARM PANEL MANUAL FIRE DRILL		X		X	X	
MANUAL PULL STATION	[F]	X		X	X	
SMOKE DETECTOR	[S]	X		X	X	
HEAT DETECTOR	[H] <sub>F</sub>	X		X	X	
SMOKE DETECTOR FOR HVAC CONTROL	[S] <sub>T</sub>					X
SPRINKLER SYSTEM FLOW SWITCH	[FS]	X		X	X	
SPRINKLER SYSTEM TAMPER SWITCH	[TS]		X			

**4 FIRE ALARM OPERATION MATRIX**  
 NO SCALE



**5 FIRE ALARM RISER DIAGRAM**  
 NO SCALE

- NOTES:**
1. THE RISER DIAGRAM IS INTENDED TO CONVEY THE TYPES OF FIRE ALARM CONNECTIONS AND SPECIFICALLY DOES NOT INDICATE QUANTITIES, NUMBER OF CIRCUITS REQUIRED OR DISTANCES.
  2. THE COMPLETE FIRE ALARM SYSTEM SHALL MEET ALL APPLICABLE CODES AND MANUFACTURER'S RECOMMENDATIONS.
  3. CONTRACTOR SHALL COORDINATE ALL WIRE SIZES, TYPES AND REQUIREMENTS WITH THE VENDOR PRIOR TO BID. REFER TO SPECIFICATIONS TO DETERMINE CIRCUIT STYLES AND IF CONDUIT IS REQUIRED OR PLENUM RATED CABLE IS ACCEPTABLE.
  4. ALL +120VAC WIRING REQUIRED FOR OPERATION OF THE SYSTEM AS DESCRIBED IN THE CONSTRUCTION DOCUMENTS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
  5. ALL NECESSARY RELAYS MAY NOT BE SHOWN ON THIS PLAN, BUT WHERE REQUIRED FOR PROPER OPERATION OF THE SYSTEM THEY SHALL BE PROVIDED BY THE CONTRACTOR.
- KEYNOTES: (#)**
1. REFER TO SPECIFICATION FOR REQUIREMENTS OF EACH INITIATION LOOP AND WIRING STYLE. REFER TO FLOOR PLANS FOR DEVICES AND THEIR LOCATIONS.
  2. REFER TO SPECIFICATION FOR REQUIREMENTS OF EACH NOTIFICATION APPLIANCE CIRCUIT AND WIRING STYLE. REFER TO FLOOR PLANS FOR DEVICES AND THEIR LOCATIONS.
  3. PROVIDE NOTIFICATION APPLIANCE EXTENDER PANELS AS REQUIRED. DETERMINATION OF NEED TO BE MADE BY FIRE ALARM VENDOR. REFER TO SPECIFICATIONS FOR REQUIREMENTS AND ACCEPTABLE MOUNTING LOCATIONS.

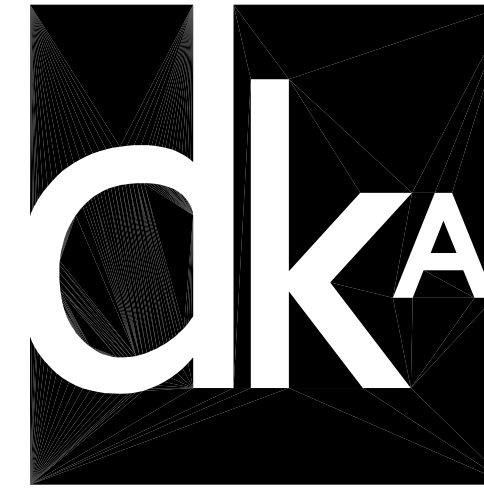
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REF. SCALE IN INCHES PROJECT #2600035.00





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 DKA PROJECT NO: 25-037

**FOOD SERVICE GENERAL NOTES**

1. ALL FINISHES IN KITCHEN, WASHING, COLD STORAGE AND SCULLERY AREAS ARE TO BE NON-POROUS CLEANABLE SURFACES. SUCH AS FRP. EXPOSED CONCRETE FLOORS ARE TO BE SEALED. COVE BASE IS TO BE USED IN ALL FOOD PREPARATION AND STORAGE AREAS.
2. ALL STORAGE SHELVES ARE TO BE INSTALLED IN SUCH A WAY THAT THE LOWEST SHELF IS AT LEAST 6" AFF.
3. ADEQUATE LIGHT WITH A MINIMUM OF 20 FOOTCANDLES IS TO BE PROVIDED IN ALL FOOD PREPARATION AND STORAGE AREAS.
4. PROTECTIVE SHIELDING SHALL BE PROVIDED FOR ALL LIGHT FIXTURES OVER ALL PREPARATION, STORAGE, WARE WASHING, REFRIGERATION AND HOOD AREAS.
5. THERMOMETERS ARE TO BE LOCATED IN ALL REFRIGERATION UNITS.
6. ALL EXTERIOR DOORS ARE TO BE TIGHT FITTING WITH SELF-CLOSING DEVICES.
7. ALL RESTROOM DOORS ARE TO BE FITTED WITH SELF-CLOSING DEVICES.
8. ALL EXPOSED PLUMBING, ELECTRICAL, AND REFRIGERATION LINES ARE TO BE LOCATED 6" OFF THE FLOOR AND 1/2" AWAY FROM WALLS.
9. ALL OPERABLE WINDOWS ARE TO BE SCREENED WITH 16 MESH INCH SCREENING.

**KEYNOTES**

- 01 PROVIDE IN-WALL BLOCKING PER ARCHITECTURAL SPECIFICATIONS FOR WALL MOUNTED SHELVING
- 02 NOT USED
- 03 EXISTING MESH TOP WASH TABLE
- 04 PROVIDE STRUCTURAL SUPPORT ABOVE FOR HOOD ATTACHMENT. PER MANUFACTURER'S INSTRUCTIONS, HOOD TO BE HUNG WITH 1/2" THREADED RODS FROM BUILDING STRUCTURAL SUPPORT SYSTEM TO FACTORY PROVIDED WELDED-ON ANGLE MOUNTING BRACKETS ON HOOD.
- 05 PROVIDE POWER FOR BENCHFOODS DEHYDRATOR AS FOLLOWS:  
 MAX POWER USAGE 3kW  
 AVG POWER USAGE 1.5 kW  
 VOLTAGE FREQUENCY 200-240/50-60Hz  
 MAX AMPERAGE 12A  
 SAFETY BREAKER REQUIRED SINGLE PHASE/15A  
 POWER CABLE 3-WIRE CABLE, N6-20P PLUG TIP
- 06 KITCHEN CONTRACTOR TO DESIGN ASSOCIATED PIPING TO CONDENSING UNIT. REFER TO MECHANICAL DRAWINGS FOR GROUND MOUNTED CONDENSING UNIT LOCATION. WALK-IN DRAIN LINE TO BE COORDINATED WITH PLUMBING.
- 07 RAMP FOR WALK-IN TO BE PROCURED AND INSTALLED BY KITCHEN CONTRACTOR
- 08 FINAL CLEAR DIMENSION TO BE VERIFIED IN FIELD PRIOR TO CONFIRMATION OF WALL-HUNG SHELVING SIZES
- 09 HOOD CONTROLLER LOCATED IN WALL MOUNTED UTILITY CABINET. FINAL LOCATION TO BE DETERMINED IN FIELD.

**DRAWING LEGEND**

- FEQ-XX EQUIPMENT TAG
- EPL-XX PLUMBING FIXTURE TAG
- H+ HOT WATER CONNECTION
- C+ COLD WATER CONNECTION
- D+ DRAIN CONNECTION
- ⊕ DUPLEX OUTLET (REFER TO EQUIPMENT SPECIFICATIONS FOR MOUNTING HEIGHT)
- ⊕ DUPLEX OUTLET MOUNTED AT 48" AFF
- ⊕ HARDWIRED CONNECTION AT EQUIPMENT

KEY PLAN:

SHEET STATUS: 05/01/2026  
 ISSUE FOR BID - NOT FOR CONSTRUCTION

NO.	DESCRIPTION	DATE
2	ADDENDUM #3	05/08/2026
1	ADDENDUM #1	05/01/2026

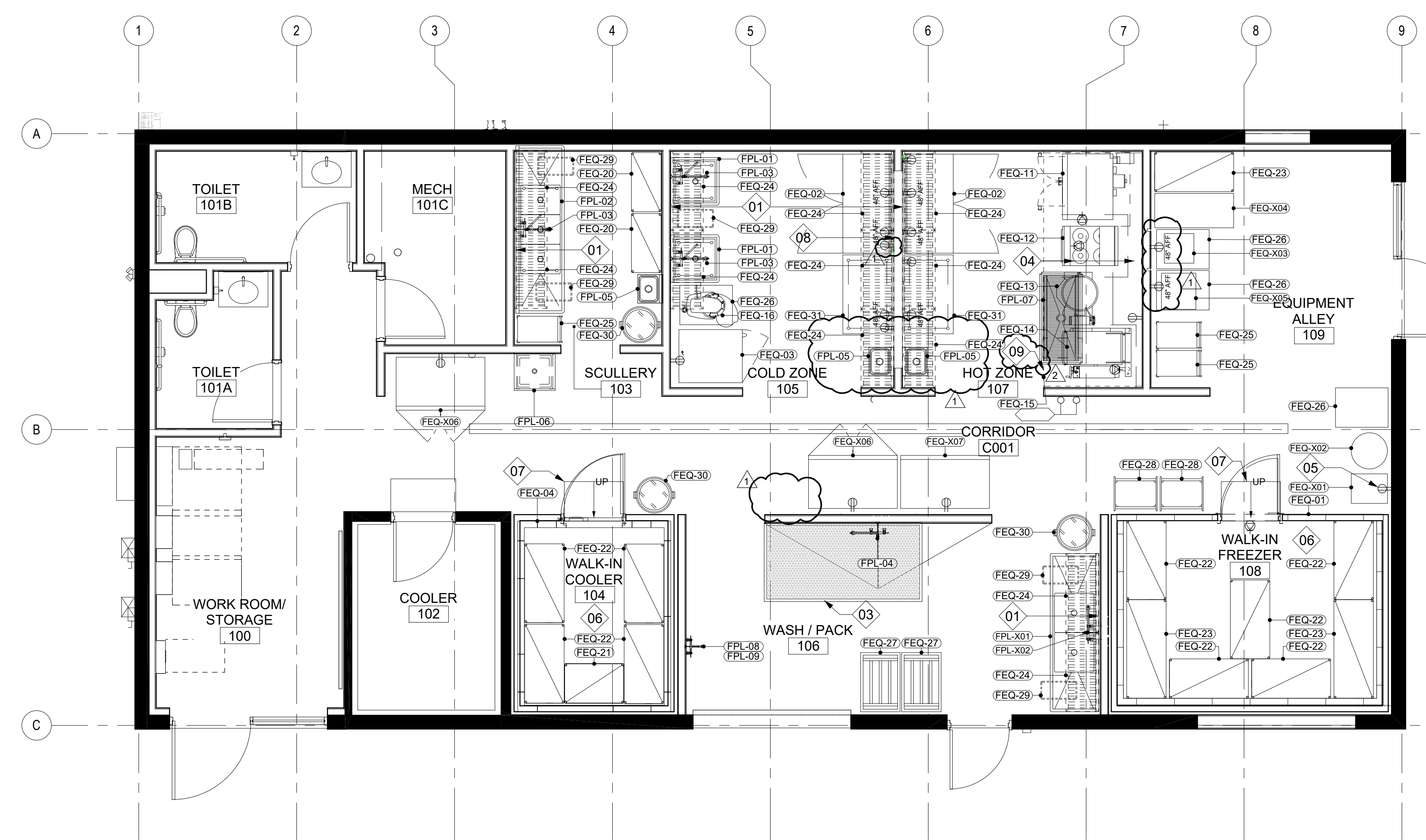
SHEET TITLE:  
**FOOD SERVICE PLANS**

SHEET NUMBER:  
**QF1.01**

**EQUIPMENT SCHEDULE**

Item No	New/Existing	Equipment Category	Manufacturer	Model Number	Notes	Procurement Responsibility
FEQ-01	New	Freezer, Walk-in	Koipak	Custom	10' x 14' x 76" interior / 8' exterior height. Manufacturer to include integrated floor and lighting and exterior ramp.	CFCI
	New	Walk-in Freezer Condensing Unit	Koipak	TBD	To be specified by manufacturer	CFCI
	New	Walk-in Freezer Evaporator Unit	Koipak	TBD	To be specified by manufacturer	CFCI
FEQ-02	New	Refrigerator, Undercounter	True Mfg. - General Foodservice	UC10150-FC		CFCI
FEQ-03	New	Chiller/Freezer, Blast	American Panel	ZP126CF150-2-P		CFCI
FEQ-04	New	Refrigerator, Walk-in Unit	Koipak	KFB-0810-CR-4	Manufacturer to include exterior ramp	CFCI
	New	Walk-in Cooler Condensing Unit	Koipak	TBD	To be specified by manufacturer	CFCI
	New	Walk-in Cooler Evaporator Unit	Koipak	TBD	To be specified by manufacturer	CFCI
FEQ-X06	Existing	Reach In Refrigerator	Nexel	WB243008		OFCI
FEQ-X07	Existing	Reach In Merchandiser Freezer	Nexel	WB2430308		OFCI
FEQ-11	New	Conv Oven Double SS430 Kit 208V Elec	EPI Sales	HCV1-2-208V ELC		CFCI
FEQ-12	New	Range, Heavy Duty, Electric	Imperial Range	IR-4-E		CFCI
FEQ-13	New	Kettle, Steam Jacketed	Cleveland Range	KE1-20-T		CFCI
FEQ-14	New	Tilting Braising Pan, Electric	Green	BPM-16EA		CFCI
FEQ-15	New	Hood	CaptiveAir	ND-2	Type 1 Stainless Steel Walk Canopy Exhaust-Only Hood. 11'10" Length. Include Integrated Fire Suppression System, Vertical End Panels (VEPs) and Wall-Mounted Utility Cabinet	CFCI
	New	Hood Control Panel	CaptiveAir	DCV-1111		CFCI
FEQ-16	New	Mixer, Counter	Hubart US Foodservice	HL200-15TD		CFCI
FEQ-20	New	Shelving	Steelworks	SW1936C		CFCI
FEQ-21	New	Shelving	Steelworks	SW2436C		CFCI
FEQ-22	New	Shelving	Steelworks	SW2448C		CFCI
FEQ-23	New	Shelving	Steelworks	SW2460C		CFCI
FEQ-24	New	Shelving, Wall Mounted	New Age Industrial	1122PR		CFCI
FEQ-25	New	Cart, Utility	Lakeside	316		CFCI
FEQ-26	New	Stand, Equipment	Lakeside	738		CFCI
FEQ-27	New	Dolly, Dunnage	Channel Manufacturing	WD2436		CFCI
FEQ-28	New	Rack, Tray	Lakeside	135		CFCI
FEQ-29	New	Trash Can	Rubbermaid	FG354008BLA		CFCI
FEQ-30	New	Trash Can w/ Lid & Dolly	Lavex	1326-2044		CFCI
FEQ-31	New	Work Tables	Steelworks	SWW15-2448-2R-319		CFCI
FPL-01	New	1 Comp. Sink	Steelworks	SW3TC242414-316		CFCI
FPL-02	New	3 Comp. Sink	Steelworks	SW33C182414-24LR-316		CFCI
FPL-X01	Existing	2 Comp Sink	BK Resources	BKS-2-24-14-24TS		OFCI
FPL-X02	Existing	Pre-Rinse Faucet, Wall Mount	BK Resources			OFCI
FPL-03	New	Pre-Rinse Faucet, Wall Mount	Krowne	DX-109		CFCI
FPL-04	New	Pre-Rinse Faucet, Wall Mount	Krowne	DX-109-X		CFCI
FPL-05	New	Hand Sink, Wall Mount	Advance Tabco	7-PS-EC-SP		CFCI
FPL-06	New	Mop Sink Storage Cabinet	Eagle Group/Metal Masters	F1916-VSCS		CFCI
FPL-07	New	Floor Trough	Advance Tabco	FFTG-2454		CFCI
FPL-08	New	Faucet, Service Sink	Krowne	19-12		CFCI
FPL-09	New	Coiled hose	HoseCoil Washdown Systems	HoseCoil PRO Series 25'		CFCI
FEQ-X01	Existing	Commercial Dehydrator	Benchfoods	30V-CUD		OFCI
FEQ-X02	Existing	40 Liter Hydross	Spiegel			OFCI
FEQ-X03	Existing	Electric Fruit Crusher	Koigland	KL23306		OFCI
FEQ-X04	Existing	Destemmer	Enotalia			OFCI
FEQ-X05	Existing	Vacuum Packing Machine	DJVac	DZ-450A		OFCI

**C1 FOOD SERVICE UTILITIES PLAN**  
 SCALE: 1/4" = 1' - 0"



**E1 FOOD SERVICE EQUIPMENT PLAN**  
 SCALE: 1/4" = 1' - 0"