



## ADDENDUM

Lab Tech Bachelors Program  
Bakersfield College  
Kern Community College District  
550-0047

**Date:** February 12, 2024

**To:** All Bidders

**Subject:** Addendum #2

*Total Addendum includes:*  
*[2] 8.5x11*  
*[14] 30X42*

### NOTICE TO CONTRACTORS FIGURING THIS WORK

You are hereby notified of the following changes in the Plans and Specifications, which shall take precedence over anything to the contrary therein.

#### **Item #** **Description**

#### **2.1 Refer to Sheets E1.00, E1.01, E2.00, E2.01, E3.00, E4.00, E4.01:**

2.1.1 Replace Sheets in their entirety. All changes from previous version have been clouded (see Delta 1)

#### **2.2 Refer to Sheets M0.00, M1.01, M1.02:**

2.2.1 Replace Sheets in their entirety. All changes from previous version have been clouded (see Delta 1)

#### **2.3 Refer to Sheets P0.00, P1.01, P1.02, P2.00:**

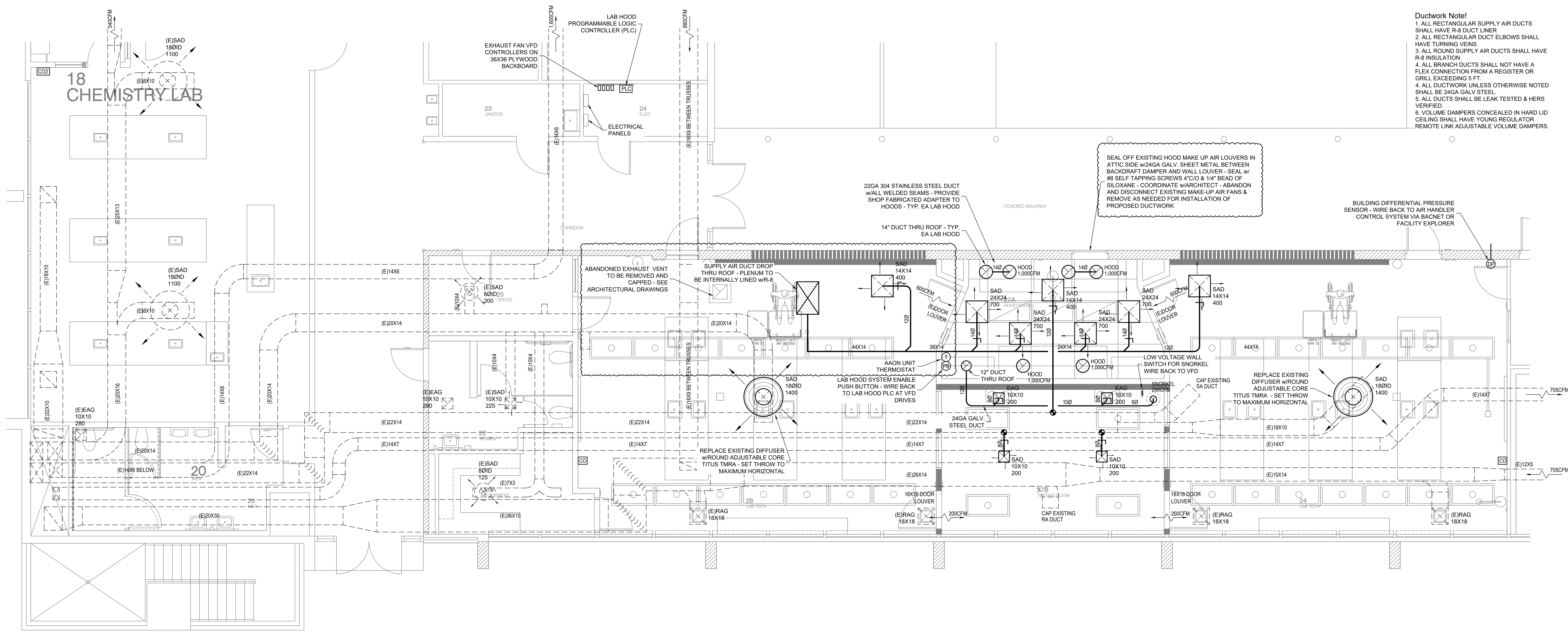
2.3.1 Replace Sheets in their entirety. All changes from previous version have been clouded (see Delta 1)

#### **2.4 Refer to Sheet A8.20:**

2.4.1 Replace Detail 33 on Sheet A8.20 with attached Detail 33. Fume hoods and supporting steel base cabinets to be provided by Owner and installed by Contractor as noted in Specification Section 011000. Fume hoods are pre-wired and pre-plumbed. See Mechanical, Electrical and Plumbing Sheets for additional information. Balance of steel cabinets with epoxy tops in Room 27A to be provided and installed by Contractor.

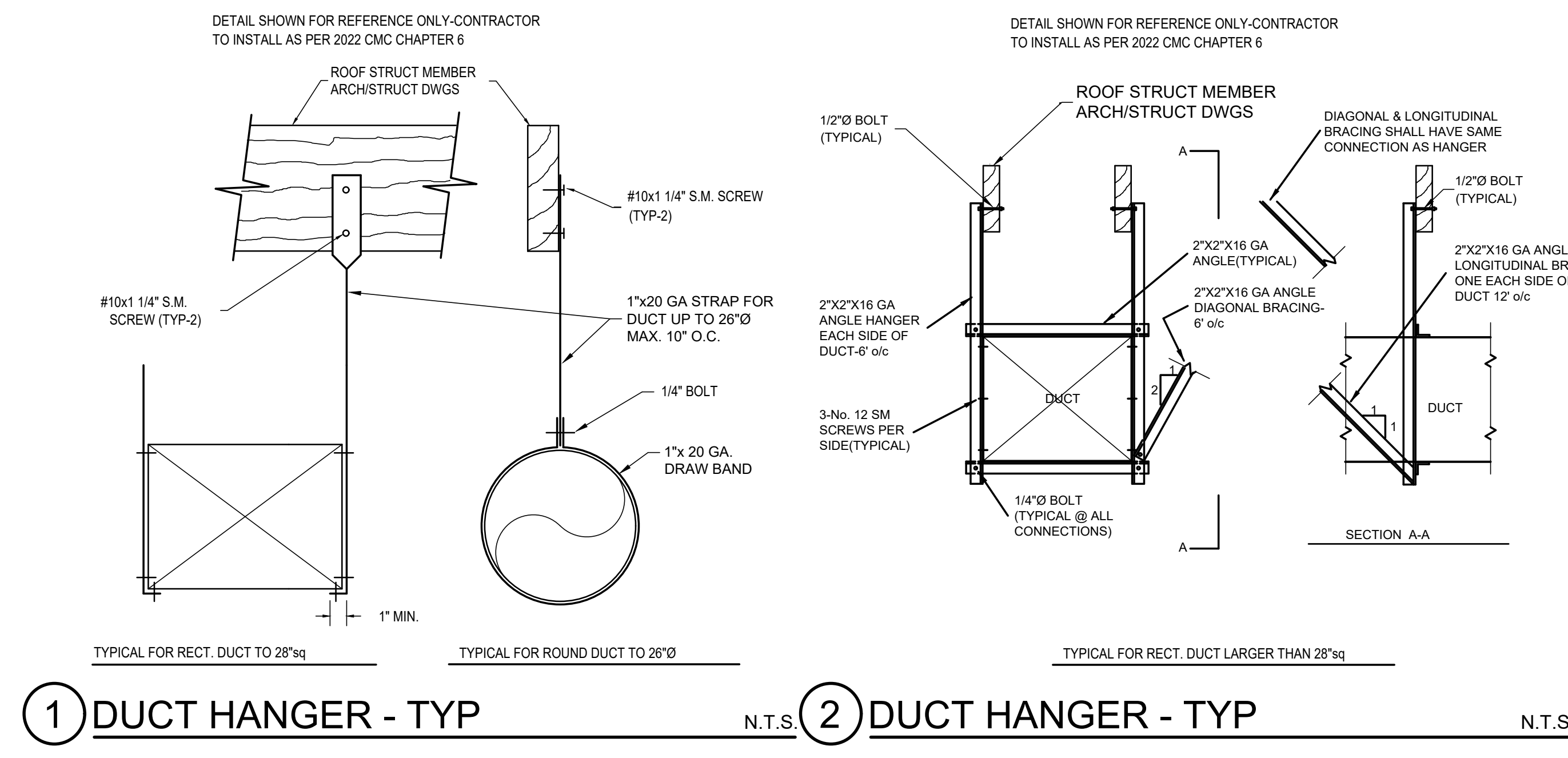
End of addendum





- Ductwork Note!**
1. ALL RECTANGULAR SUPPLY AIR DUCTS SHALL HAVE R-8 DUCT LINER
  2. ALL RECTANGULAR DUCT ELBOWS SHALL HAVE TURNING VEINS
  3. ALL ROUND SUPPLY AIR DUCTS SHALL HAVE R-8 INSULATION
  4. ALL BRANCH DUCTS SHALL NOT HAVE A FLEX CONNECTION FROM A REGISTER OR GRILL EXCEEDING 6 FT
  4. ALL DUCTWORK UNLESS OTHERWISE NOTED SHALL BE 24GA GALV STEEL
  5. ALL DUCTS SHALL BE LEAK TESTED & HERS VERIFIED
  6. VOLUME DAMPERS CONCEALED IN HARD LID CEILING SHALL HAVE YOUNG REGULATOR REMOTE LINK ADJUSTABLE VOLUME DAMPERS.

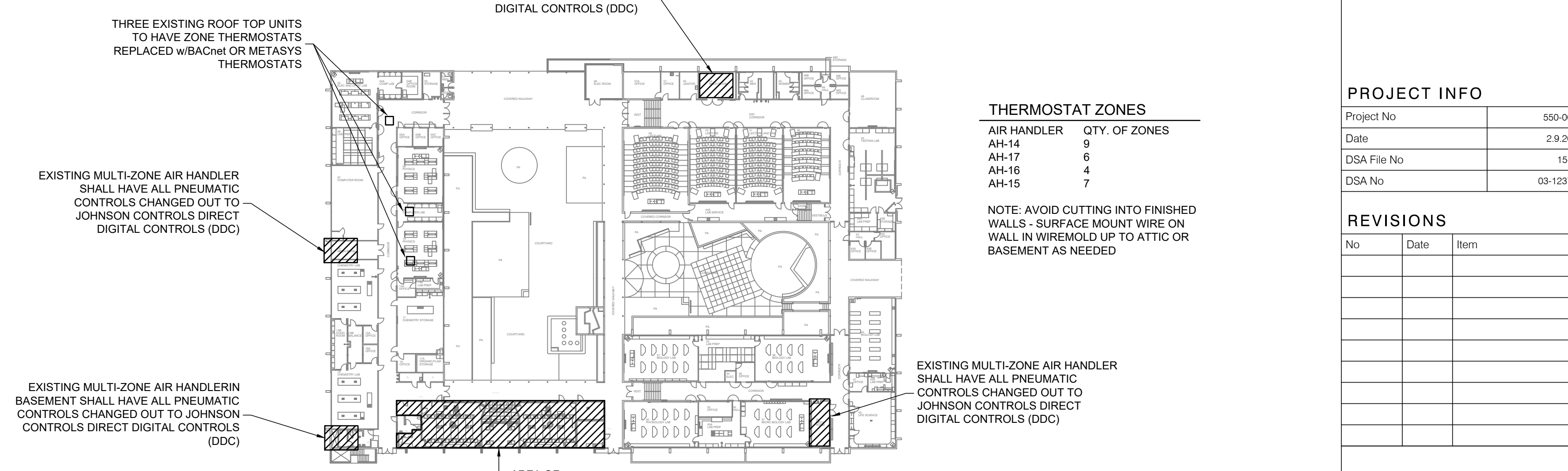
**ENLARGED FLOOR PLAN - HVAC 1/4"**



**1 DUCT HANGER - TYP** N.T.S. **2 DUCT HANGER - TYP** N.T.S.

**TRADES SEPARATION OF SCOPE**  
 HVAC & EQUIPMENT AS PER THE MECHANICAL SCHEDULE ON SHEET M0.00 SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR - HVAC & EQUIPMENT MEANS OF DISCONNECT & WIRING 120VAC AND ABOVE TO BE PROVIDED BY ELECTRICAL CONTRACTOR - ALL OTHER CONTROL WIRING TO BE PROVIDED BY MECHANICAL CONTRACTOR - VFD, LCL AND EM FILTERS PROVIDED BY MECHANICAL CONTRACTOR - AAON THERMOSTAT PROVIDED BY MECHANICAL CONTRACTOR - ALL OTHER DEVICES, PANELS, CONTROLLERS, ETC. AS REQUIRED FOR A COMPLETE SYSTEM TO BE PROVIDED BY THE CONTROLS CONTRACTOR.

**ALTERNATE BID**  
 ALL WORK SHOWN FOR CONVERTING PNEUMATIC CONTROLS TO DIRECT DIGITAL CONTROLS (DDC) SHALL BE ALTERNATE BID BY A CONTROLS CONTRACTOR.



**THERMOSTAT ZONES**

AIR HANDLER	QTY. OF ZONES
AH-14	9
AH-17	6
AH-16	4
AH-15	7

NOTE: AVOID CUTTING INTO FINISHED WALLS - SURFACE MOUNT WIRE ON WALL IN WIREMOLD UP TO ATTIC OR BASEMENT AS NEEDED

**OVERALL PLAN** N.T.S.

**ap architects**

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**BC LAB TECH BACHELORS PROGRAM**

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 ARCHITECT C-116670

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 canelmi@canelmi.net  
 PE ELECTRICAL #E118218  
 PE MECHANICAL #21190

**PROJECT INFO**

Project No	550-0047
Date	2.9.2024
DSA File No	15-C1
DSA No	03-12312

**REVISIONS**

No	Date	Item

**HVAC PLANS**

**M1.01**

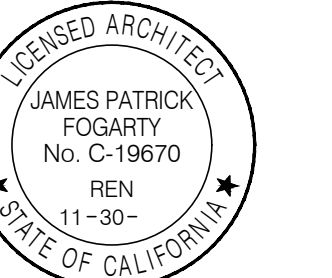


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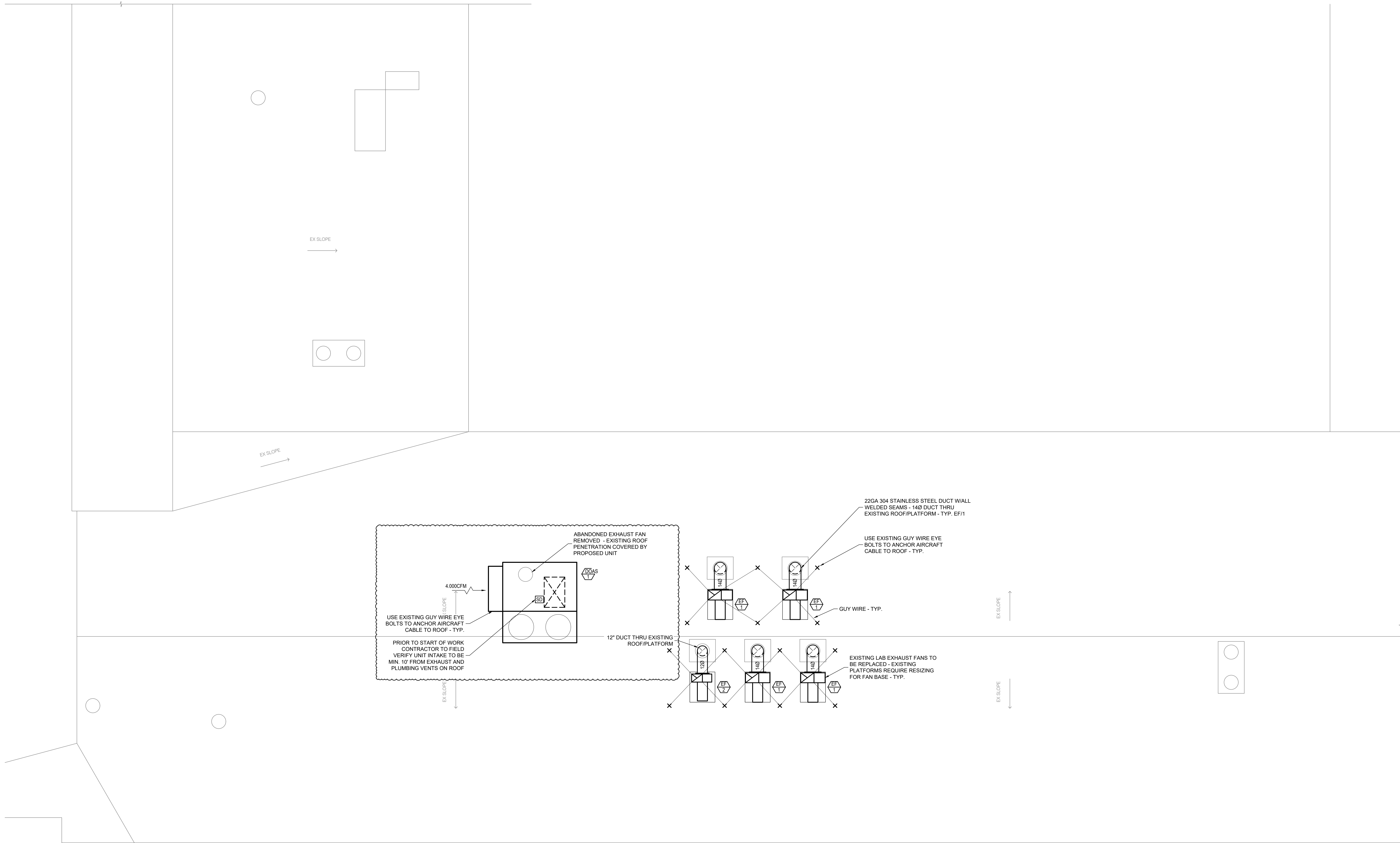
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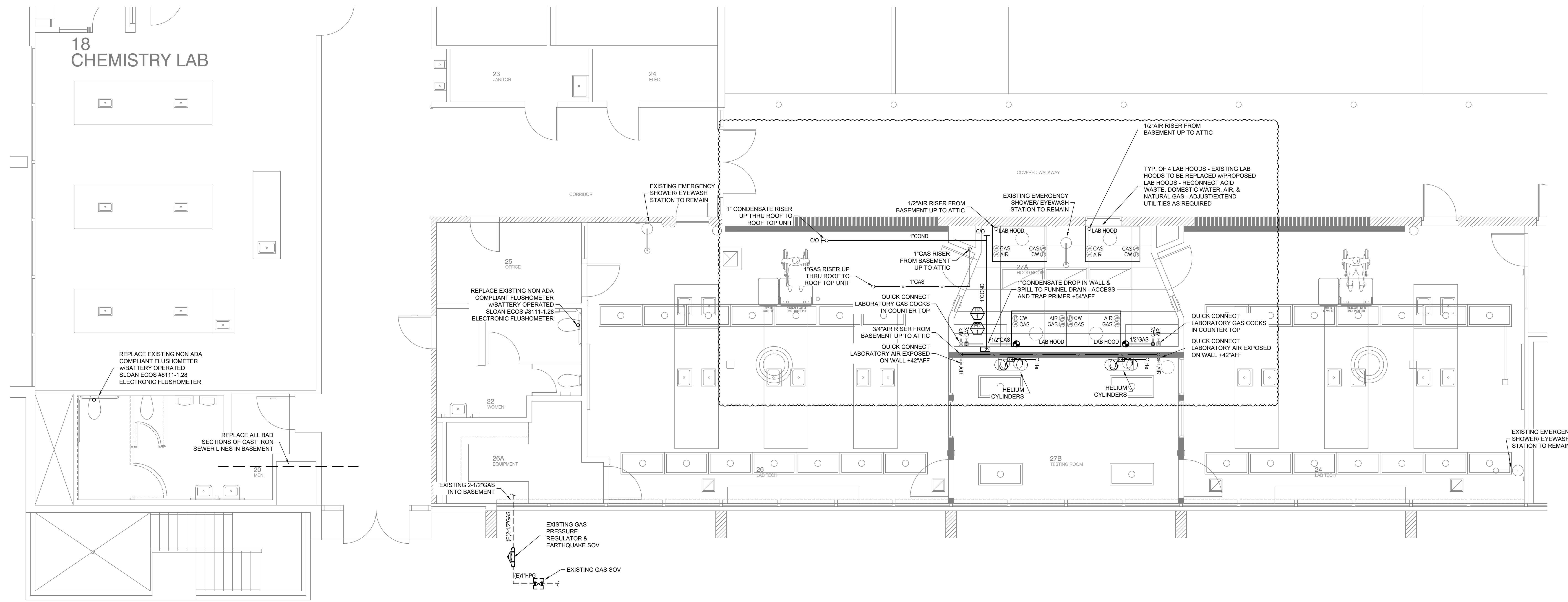
HVAC PLAN VIEWS

**M1.02**

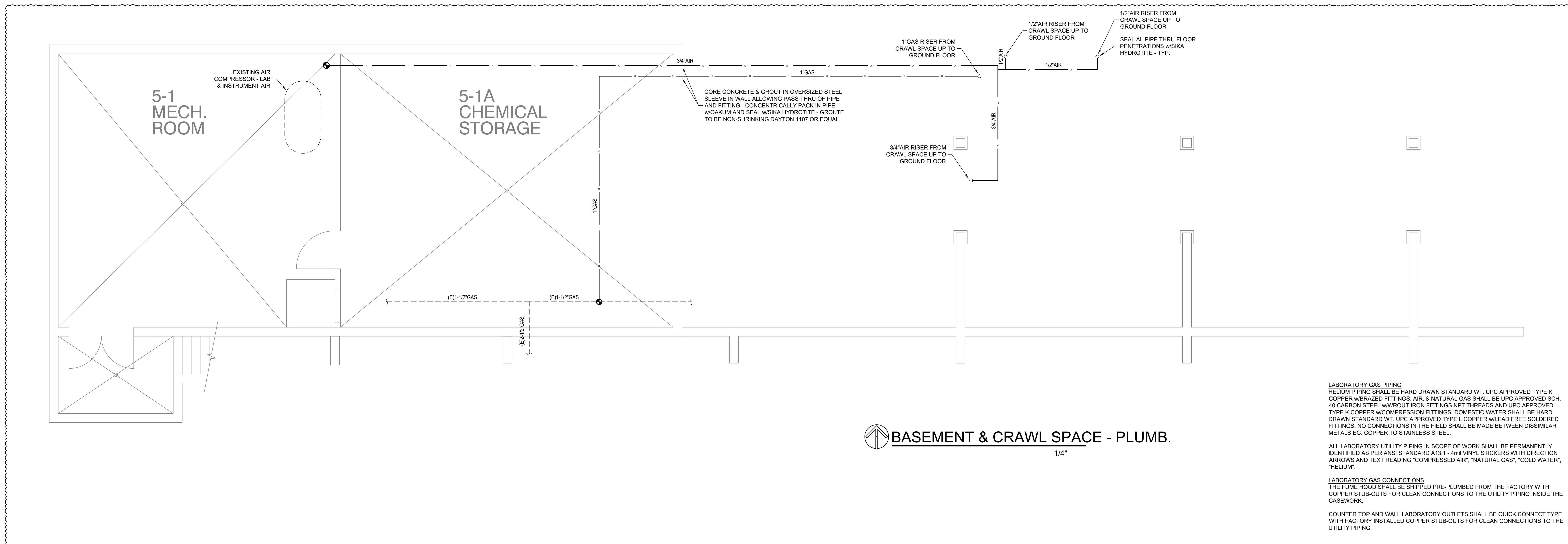


ROOF PLAN - HVAC 1/4"





FLOOR PLAN - PLUMB. 1/4"



BASEMENT & CRAWL SPACE - PLUMB. 1/4"

**LABORATORY GAS PIPING**  
 HELIUM PIPING SHALL BE HARD DRAWN STANDARD WT. UPC APPROVED TYPE K COPPER w/BRASZED FITTINGS. AIR, & NATURAL GAS SHALL BE UPC APPROVED SCH. 40 CARBON STEEL w/WROUT IRON FITTINGS NPT THREADS AND UPC APPROVED TYPE K COPPER w/COMPRESSION FITTINGS. DOMESTIC WATER SHALL BE HARD DRAWN STANDARD WT. UPC APPROVED TYPE L COPPER w/LEAD FREE SOLDERED FITTINGS. NO CONNECTIONS IN THE FIELD SHALL BE MADE BETWEEN DISSIMILAR METALS EG. COPPER TO STAINLESS STEEL.

ALL LABORATORY UTILITY PIPING IN SCOPE OF WORK SHALL BE PERMANENTLY IDENTIFIED AS PER ANSI STANDARD A13.1 - 4mil VINYL STICKERS WITH DIRECTION ARROWS AND TEXT READING "COMPRESSED AIR", "NATURAL GAS", "COLD WATER", "HELIUM".

**LABORATORY GAS CONNECTIONS**  
 THE FUME HOOD SHALL BE SHIPPED PRE-PLUMBED FROM THE FACTORY WITH COPPER STUB-OUTS FOR CLEAN CONNECTIONS TO THE UTILITY PIPING INSIDE THE CASEWORK.

COUNTER TOP AND WALL LABORATORY OUTLETS SHALL BE QUICK CONNECT TYPE WITH FACTORY INSTALLED COPPER STUB-OUTS FOR CLEAN CONNECTIONS TO THE UTILITY PIPING.

**ap**  
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**PROJECT INFO**

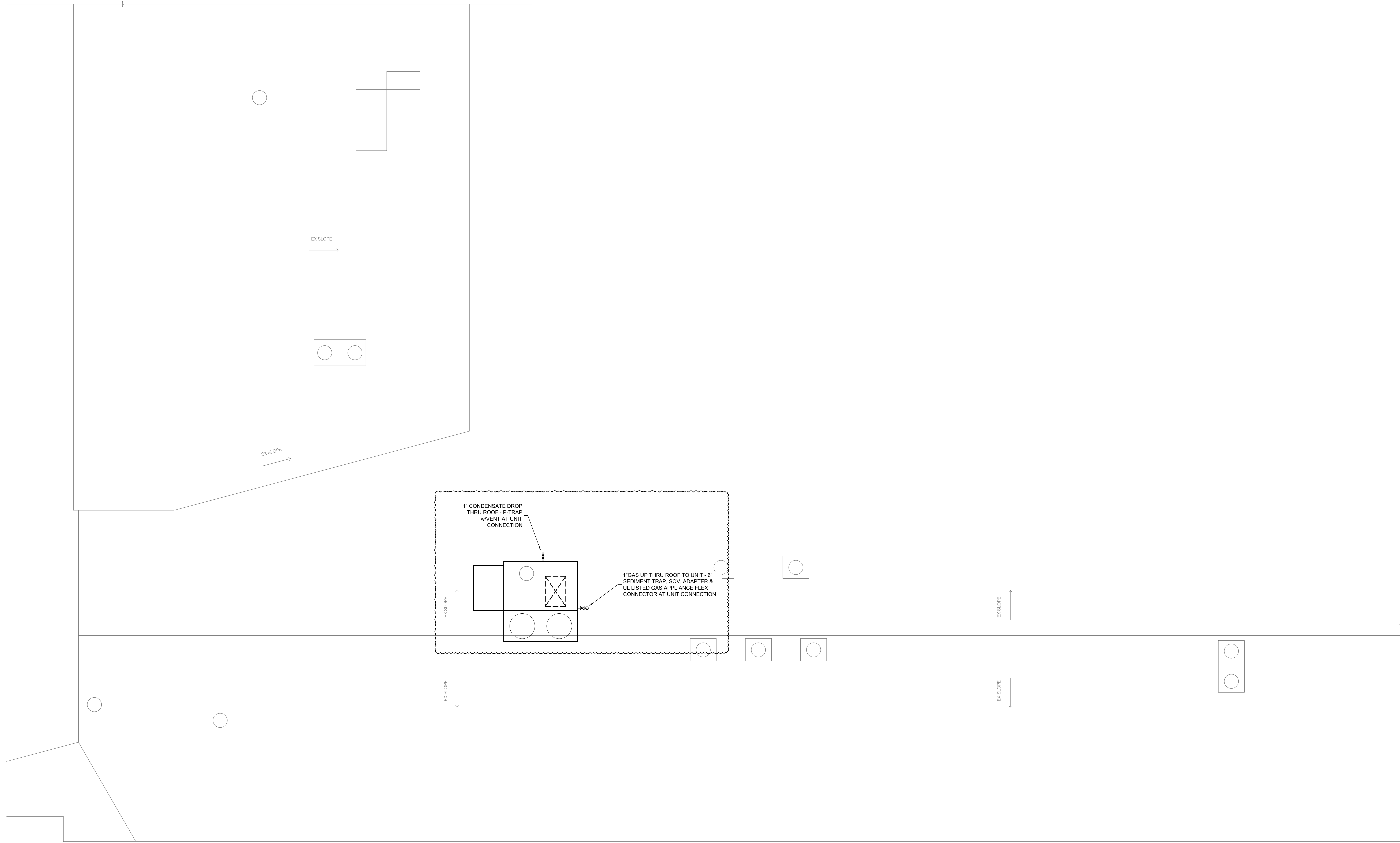
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DSA File No	15-C1
DSA No	03-123712

**REVISIONS**

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PLUMBING PLAN VIEWS

**P1.01**



ROOF PLAN - PLUMB. 1/4"

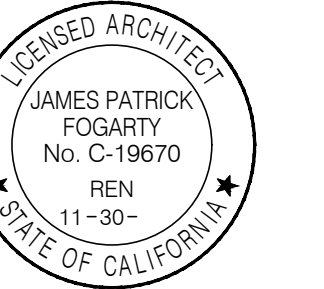


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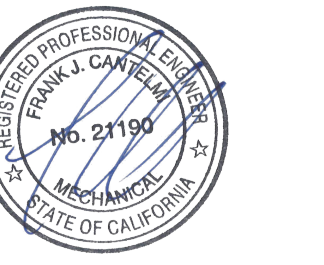


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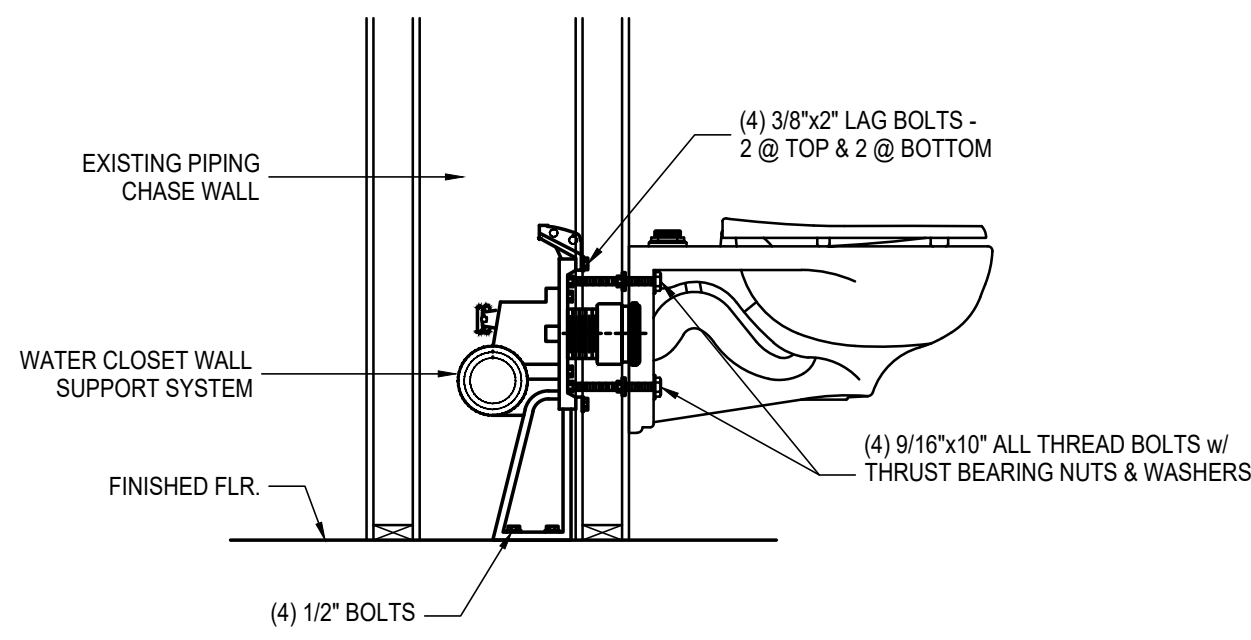
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REVISIONS

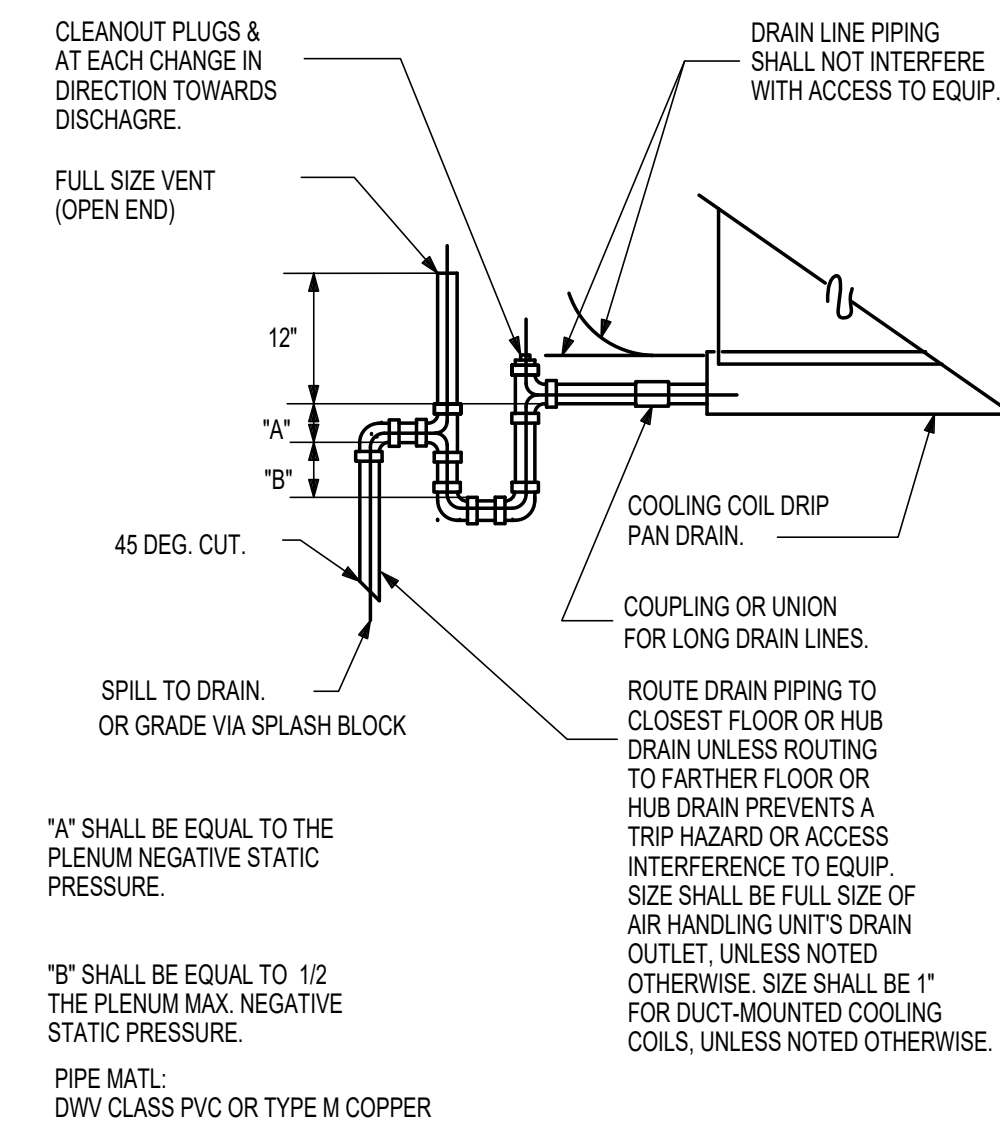
No	Date	Item

PLUMBING PLAN  
 VIEWS

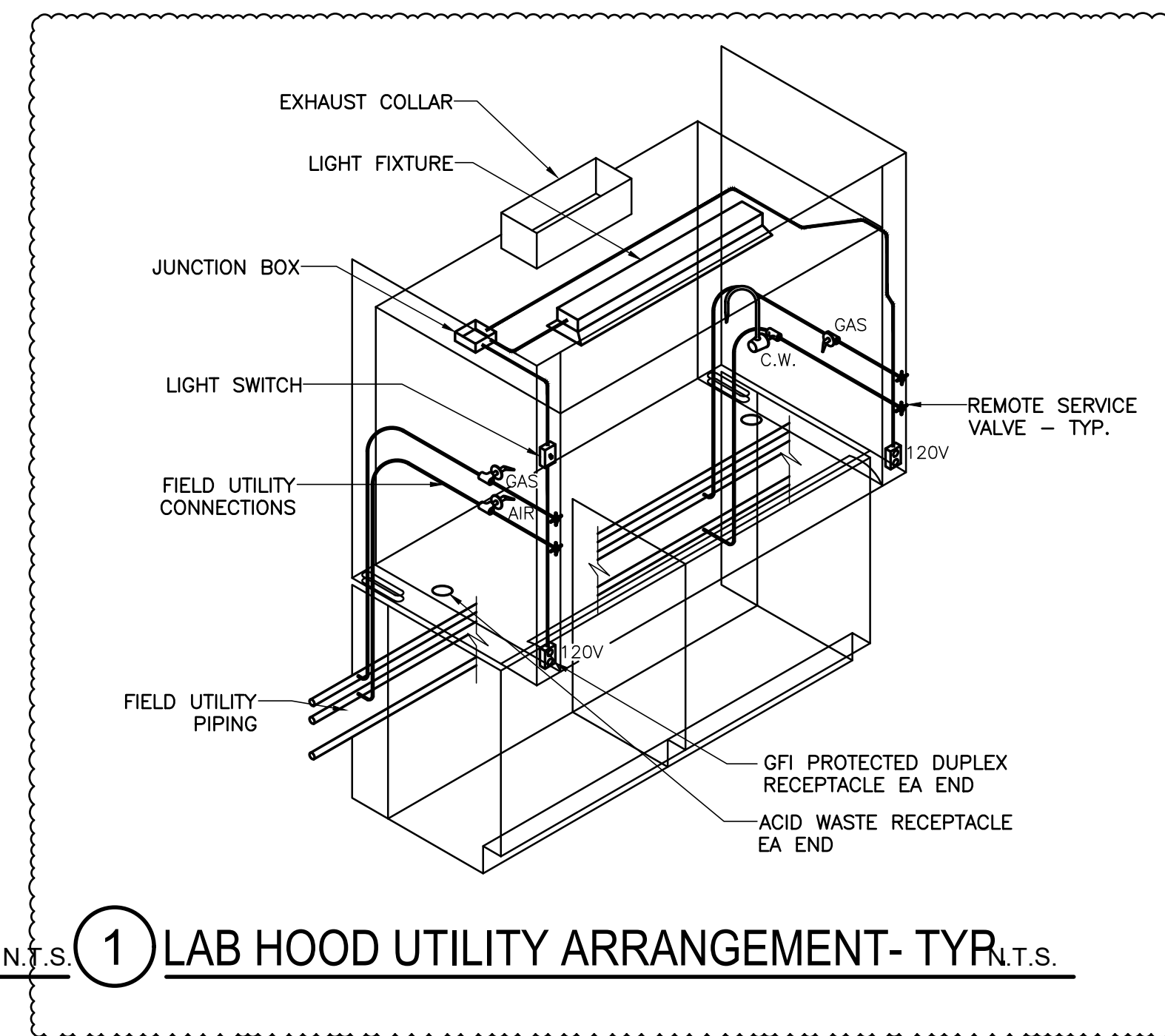
**P1.02**



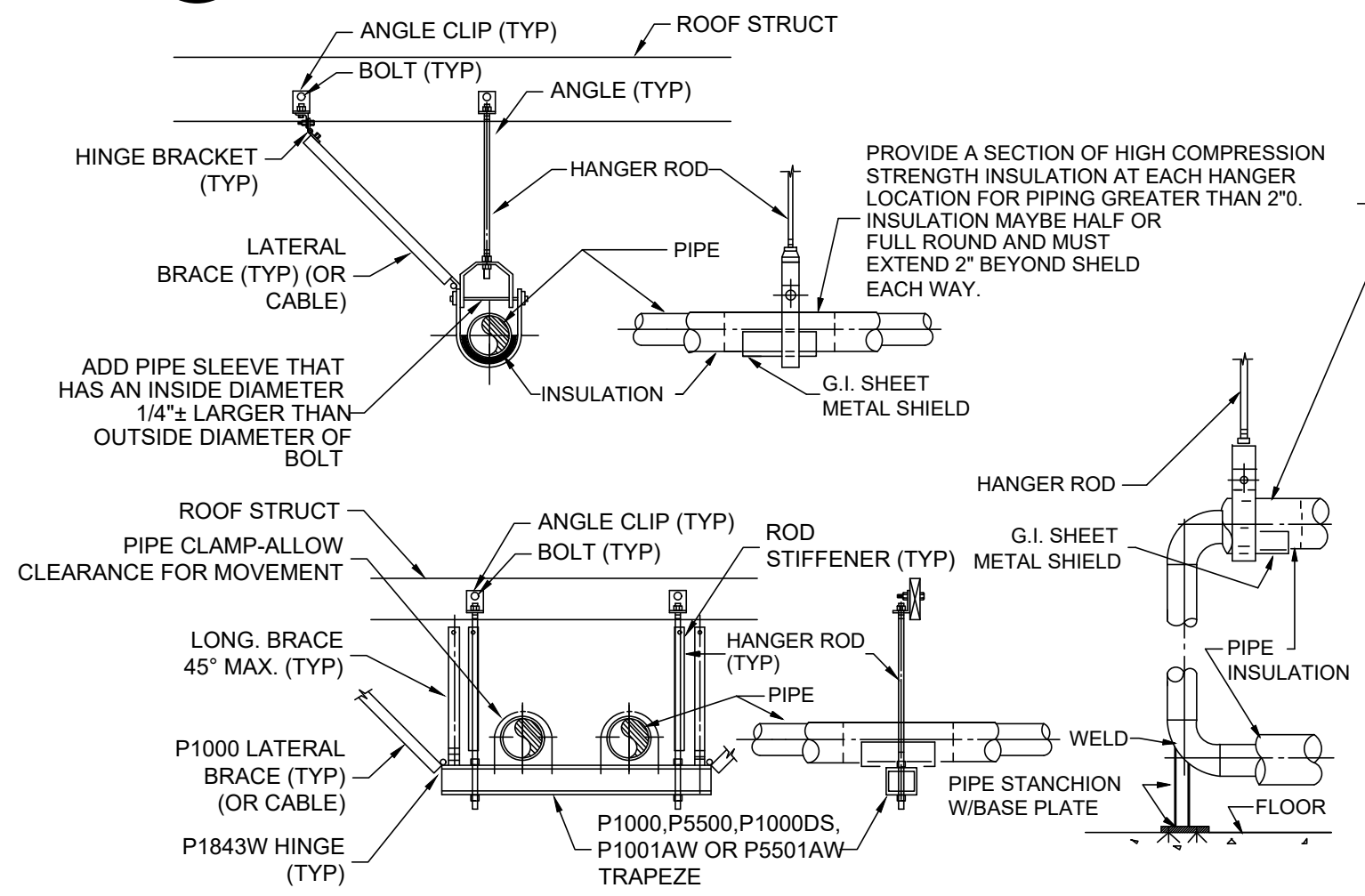
9 WATER CLOSET MOUNTING DETAIL N.T.S.



5 CONDENSATE DRAIN PAN - TYP. N.T.S.

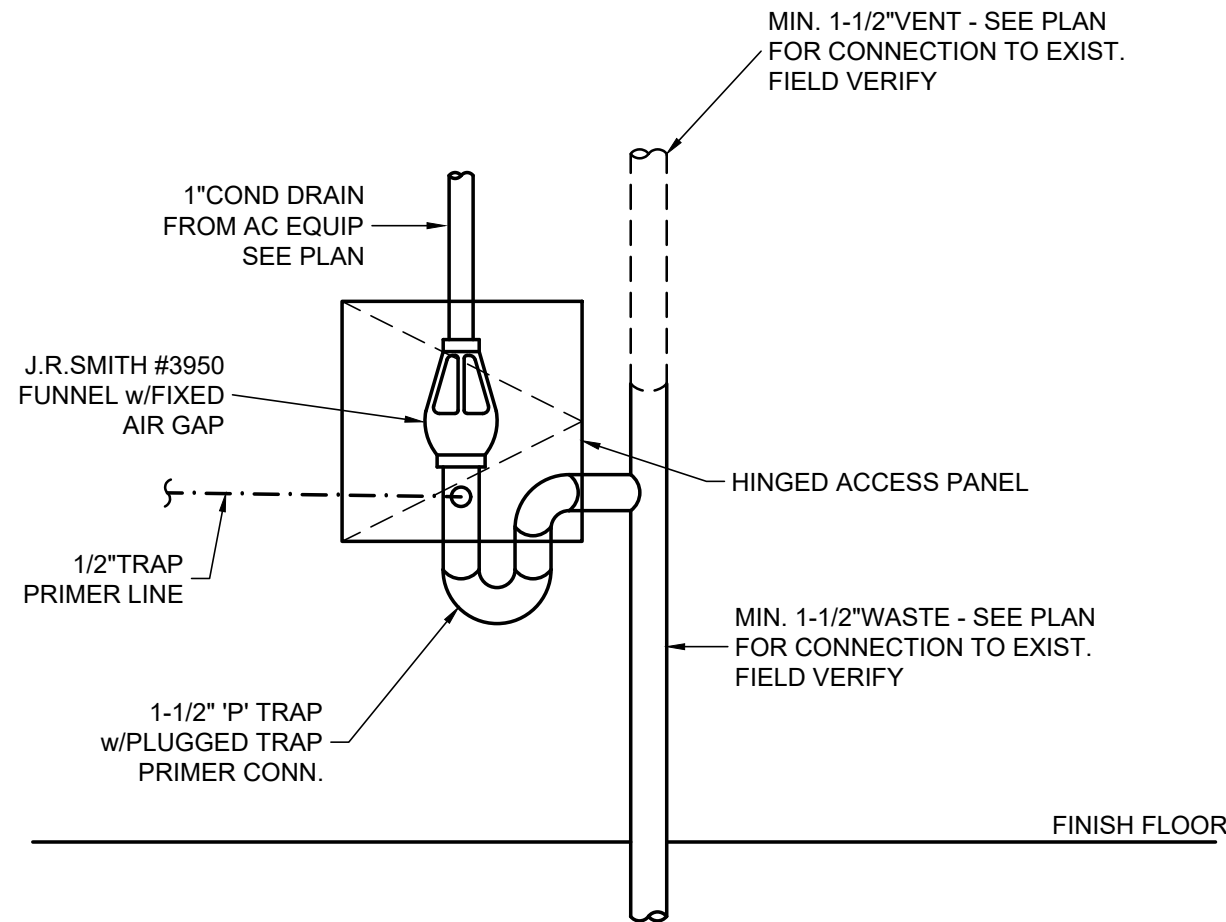


1 LAB HOOD UTILITY ARRANGEMENT- TYP. N.T.S.

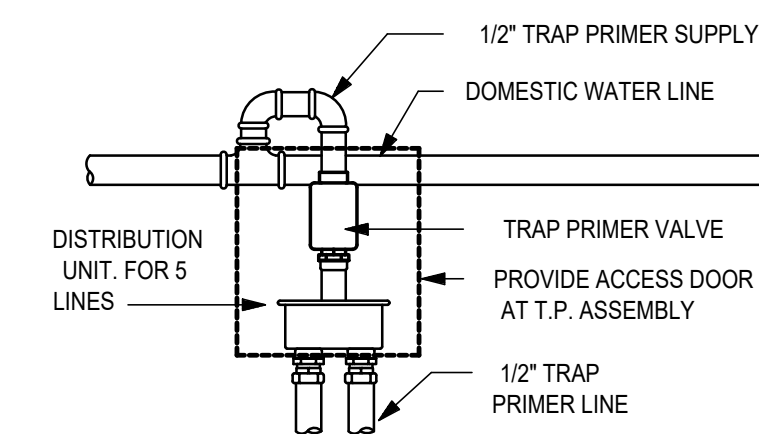


HANGERS & SUPPORTS SHALL MEET OR TITLE 24, PART 4 & 5.  
PIPING SHALL BE BRACED AS PER UNISTRUT SEISMIC MANUAL APPROVED HOPA-0120.  
A COPY OF THIS SEISMIC APPLICATION MANUAL SHOWING THE PROPER SEISMIC BRACE TABLES AND BRACE LOCATION REQUIREMENTS ALONG WITH THE OPA UNISTRUT GENERAL ENGINEERING CATALOG SHALL BE ON THE JOBSITE PRIOR TO STARTING THE INSTALLATION OF THE SEISMIC BRACING SYSTEM.

10 PIPE HANGER - TYP. N.T.S.

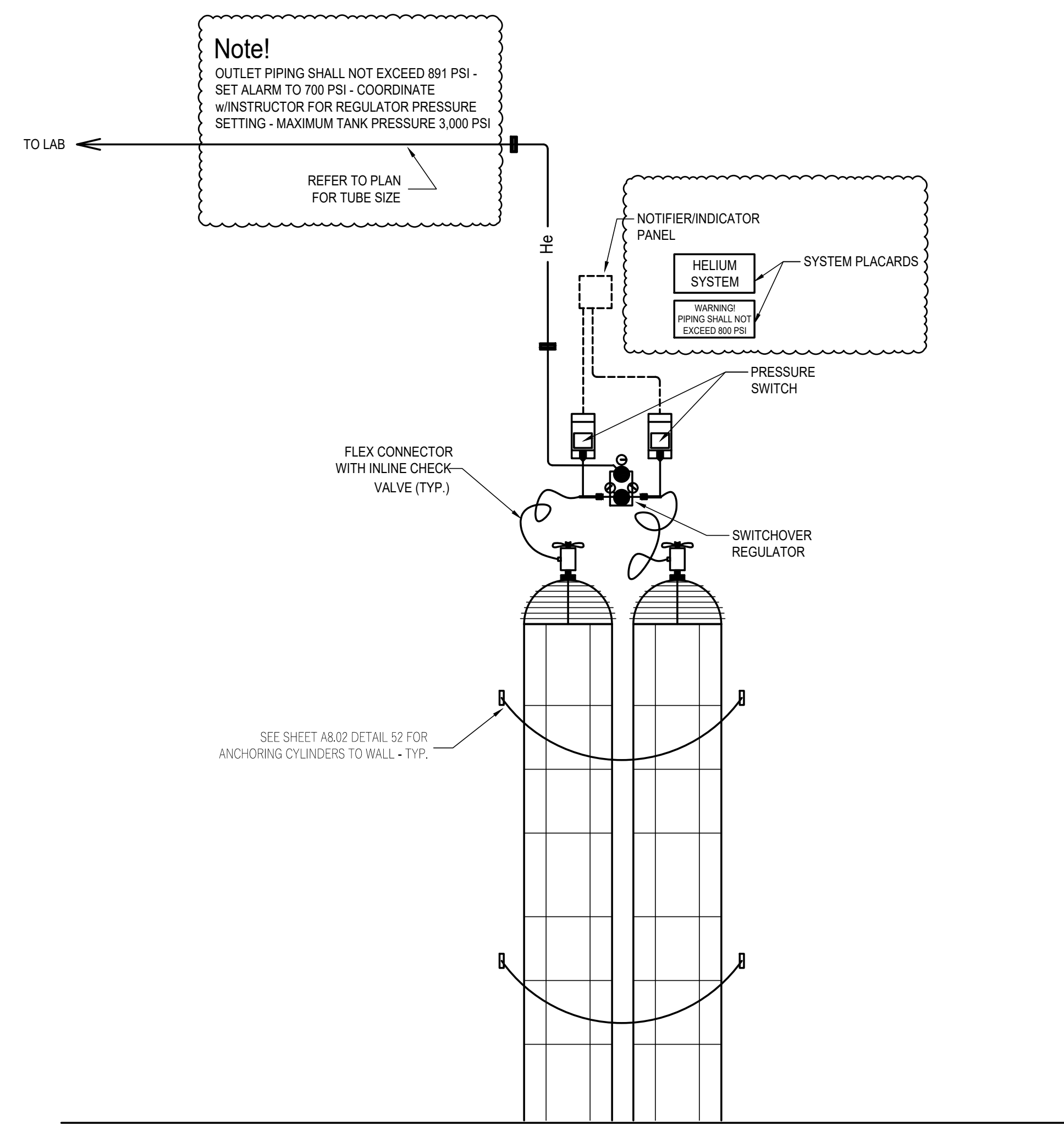


6 CONDENSATE CONNECTION - TYP. N.T.S.



2 TRAP PRIMER SCHEMATIC- TYP. N.T.S.

PLUMBING FIXTURE SCHEDULE (LEEDS CERTIFIED LOW FLOW)							
MARK	FIXTURE	DCW	DHW	S&W	TRAP	VENT	DESCRIPTION
TP 1	TRAP PRIMER	1/2"	-	-	-	-	PRECISION PLUMBING #PR-500 TRAP PRIMER MOUNTED IN WALL BOX - COPPER PRIMER LINE CONNECT TO FUNNEL DRAIN P-TRAP
FD 1	FUNNEL DRAIN	-	-	1-1/2"	1-1/2"	1-1/2"	J.R. SMITH #3950 FUNNEL MOUNTED IN WALL BOX ON P-TRAP - FIXED AIR GAP - TRAP PRIMER CONNECTION - 1" INLET PIPE



4 HELIUM CYLINDERS - TYP. N.T.S.

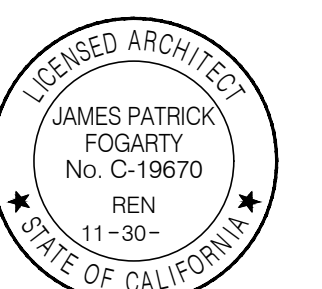


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PROJECT INFO

Project No	550-0047
Date	2.9.2024
DSA File No	15-C1
DSA No	03-123712

REVISIONS

No	Date	Item

PLUMBING DETAILS

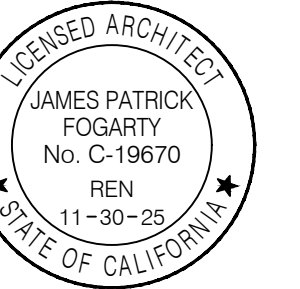
P2.00



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PROJECT INFO

Project No	550-0047
Date	11.08.23
DSA File No	15-C3
DSA No	03-123712

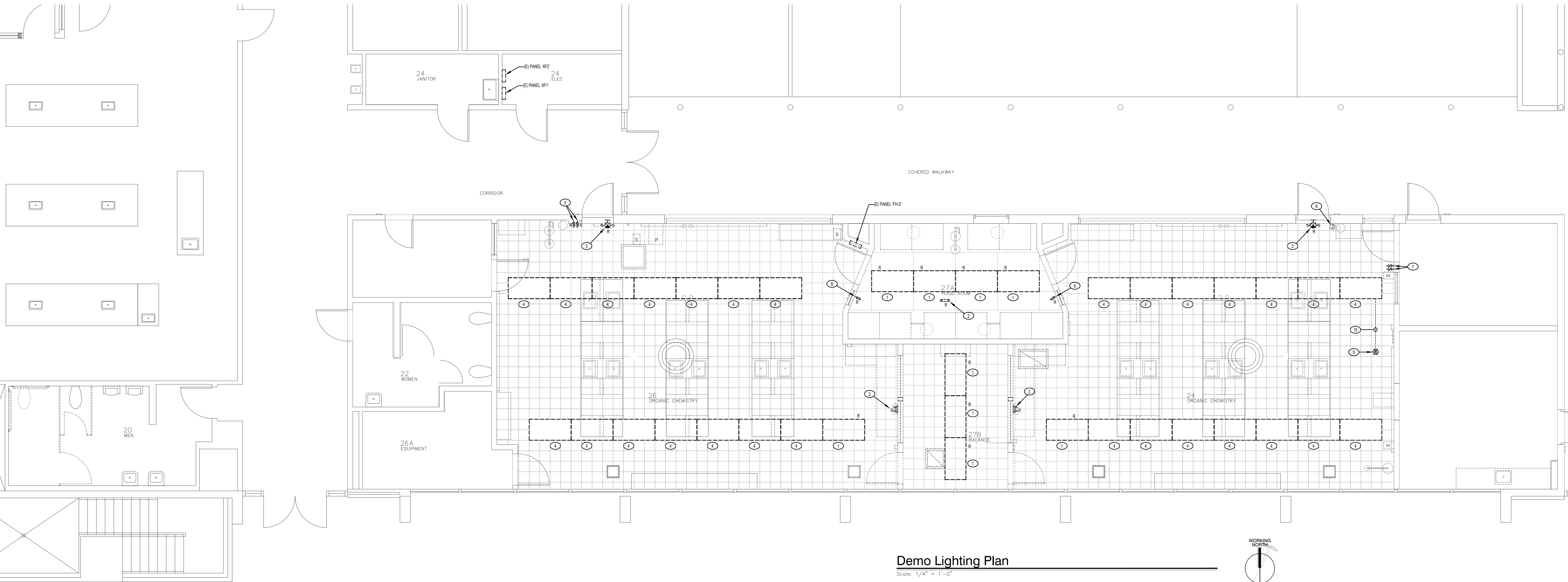
REVISIONS

No	Date	Item
1	02.09.24	BID ADDENDA

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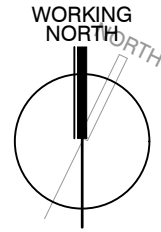
DEMO LIGHTING PLAN

**E1.00**



**Demo Lighting Plan**

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



Applicable Code: 2022 CBC

**Piping, Ductwork, and Electrical Distribution System Bracing Note**

Piping, ductwork, and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Sections 13.6.5, 13.6.6, 13.6.7, 13.6.8; and 2022 CBC, Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26.

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a preapproved installation guide (e.g., HCAi OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP), Electrical Distribution Systems (E):

MP  MD  PP  E  Option 1: Detailed on the approved drawings with project specific notes and details.

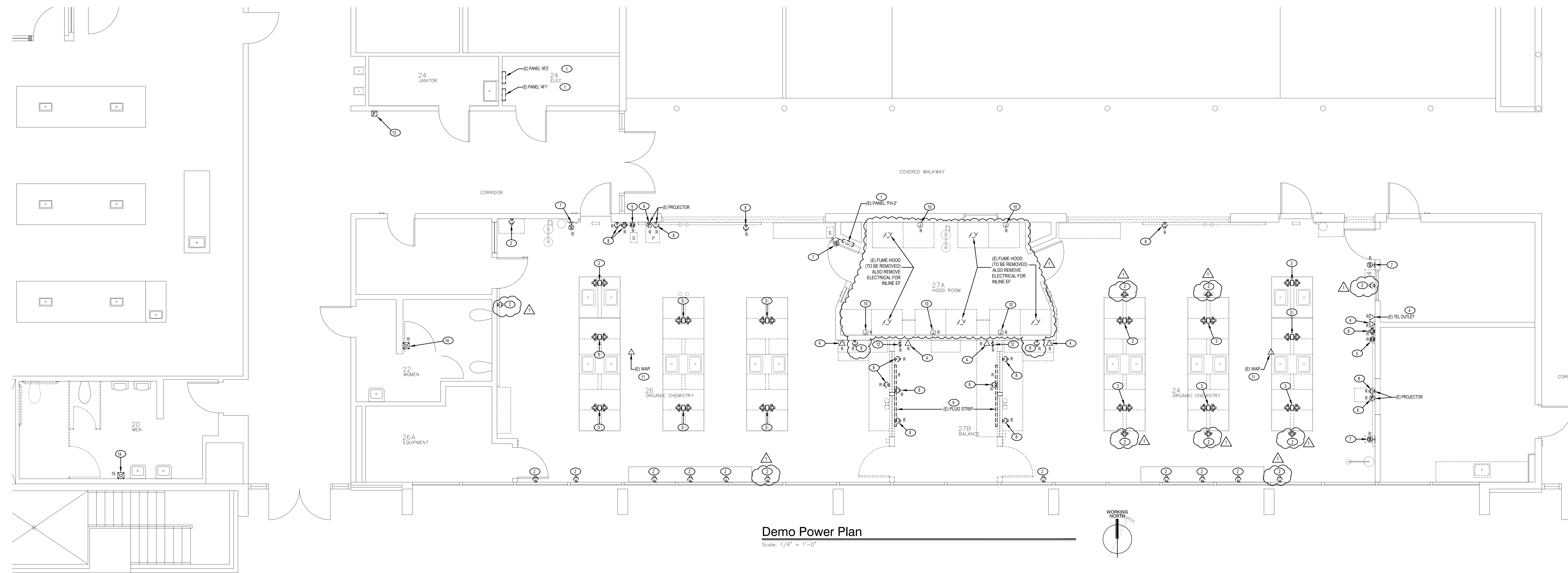
MP  MD  PP  E  Option 2: Shall comply with HCAi (OSHPD) Preapproval (OPM #) # \_\_\_\_\_, as included in these drawings with project-specific notes and details.

**DEMO LIGHTING PLAN NOTES:**

- 1. REMOVE EXISTING LIGHTS AND RELATED CONDUIT AND WIRING.
- 2. REMOVE EXISTING EMERGENCY LIGHT AND RELATED CONDUIT AND WIRING.
- 3. REMOVE EXISTING EMERGENCY EXIT SIGN WITH TWIN EMERGENCY LIGHT. REPLACE WITH NEW EMERGENCY LIGHT ON NEW FURRED WALL. REFER TO LIGHTING PLAN FOR REQUIREMENT.
- 4. LIGHT FIXTURES TO BE RETROFITTED WITH LED LIGHT KIT. EXISTING CONDUIT, WIRING AND CONTROLS TO REMAIN.
- 5. REMOVE EXISTING LIGHT SWITCH. REPLACE WITH NEW SWITCHES ON FURRED WALL. REFER TO LIGHTING PLAN FOR REQUIREMENT.
- 6. REMOVE EXISTING LIGHT SWITCH. REPLACE WITH DIMMER SWITCH. REFER TO LIGHTING PLAN FOR REQUIREMENT.
- 7. EXISTING SWITCHES AND RELATED CONDUIT AND WIRING TO REMAIN.
- 8. REMOVE SURFACE CONDUIT. SWITCH BOX AND RELATED CONDUIT AND WIRING THAT IS NO LONGER BEING USED. (SEEPY WORK REQUIRED IN FIELD)
- 9. EXISTING OCCUPANCY SENSOR TO REMAIN.
- 10. SURFACE WIREMOLD AND WIRING TO REMAIN.

**GENERAL ELECTRICAL DEMOLITION NOTES:**

1. ELECTRICAL CONTRACTOR SHALL REFER TO ALL CONSTRUCTION DOCUMENTS FOR ADDITIONAL ELECTRICAL DEMOLITION WORK REQUIRED. ALL ELECTRICAL DEMOLITION WORK SHALL BE DONE AS DIRECTED BY ARCHITECT AND/OR OWNER. VERIFY ALL WORK REQUIRED IN FIELD PRIOR TO SUBMITTING BID AND PRIOR TO STARTING WORK.
2. ALL EXISTING ELECTRICAL IN REMODEL AREA, INCLUDING BUT NOT LIMITED TO LIGHTING FIXTURES, ELECTRICAL DEVICES, OUTLET BOXES, CONDUITS AND WIRING, WHETHER OR NOT SHOWN ON DRAWINGS, IF NOT NOTED ON DRAWINGS TO BE REUSED SHALL BE REMOVED.
3. ALL EXISTING FIXTURES NOT REUSED SHALL BE RETURNED TO OWNER, OR DISPOSED OF, AND REMOVED FROM SITE AS DIRECTED BY OWNER.
4. WHERE EXISTING LIGHTING FIXTURES, ELECTRICAL DEVICES AND EQUIPMENT THAT REMAIN ARE NOTED TO BE RECONNECTED, CONTRACTOR SHALL BE PERMITTED TO REUSE EXISTING CONDUITS IF AVAILABLE. OTHERWISE PROVIDE NEW CONDUITS AND WIRING AS REQUIRED.
5. U.O.N. WHERE EXISTING ELECTRICAL IS TO BE AND/OR NOTED TO BE REMOVED, CONTRACTOR SHALL REMOVE ALL EXISTING CONNECTION, DEVICES, OUTLET BOXES, CONDUITS AND WIRING. PATCH WALLS AND/OR CEILINGS AS DIRECTED BY ARCHITECT. WHERE LOCATED IN BLOCK WALLS, CONTRACTOR SHALL REMOVE EXISTING DEVICES AND WIRING. BLANK OFF EXISTING OUTLETS. WHERE EXISTING CONDUITS ARE RUN UNDERGROUND, CONTRACTOR SHALL REMOVE EXISTING WIRING AND REMOVE PORTION OF CONDUITS ABOVE GRADE. EXISTING UNDERGROUND CONDUITS SHALL BE ABANDONED IN PLACE.



**Demo Power Plan**

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

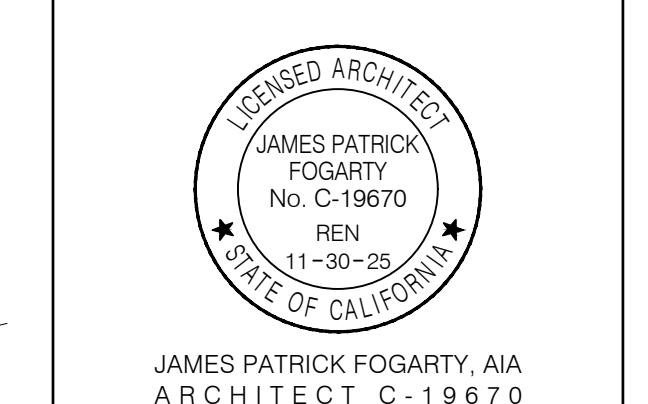
**DEMO POWER PLAN NOTES:**

- 1 EXISTING PANEL TO REMAIN AND TO BE REUSED.
- 2 EXISTING RECEPTACLE AND RELATED CONDUIT AND WIRING TO REMAIN.
- 3 EXISTING TOMB STONE RECEPTACLES AT LAB TABLE TO REMAIN. RUN NEW CIRCUITS TO LAB TABLES PER POWER PLAN.
- 4 REMOVE TEL/DATA OUTLET AND RELATE CONDUIT AND CABLING.
- 5 REMOVE EXISTING AUDIOVISUAL CONTROLS AND RELATED CONDUIT, WIREMOLD, AND CABLING.
- 6 REMOVE EXISTING PROJECTOR OUTLET AND RELATED CONDUIT, WIREMOLD, AND CABLING.
- 7 REMOVE EXISTING SPEAKER OUTLET AND RELATED CONDUIT, WIREMOLD, AND CABLING.
- 8 REMOVE EXISTING RECEPTACLE AND RELATED CONDUIT AND WIRING.
- 9 REMOVE EXISTING PLUG STRIP AND RELATED CONDUIT AND WIRING.
- 10 REMOVE CONNECTION TO HOOD, AND RELATED CONDUIT AND WIRING.
- 11 EXISTING CEILING MOUNTED WIRELESS ACCESS POINT TO REMAIN.
- 12 REMOVE SWITCH, DEVICES, OUTLET BOXES, AND RELATED WIRING.
- 13 EXISTING FIRE ALARM PULL STATION AND RELATED CONDUIT AND WIRING TO REMAIN.
- 14 EXISTING FIRE ALARM STROBE LIGHT AND RELATED CONDUIT AND WIRING TO REMAIN.

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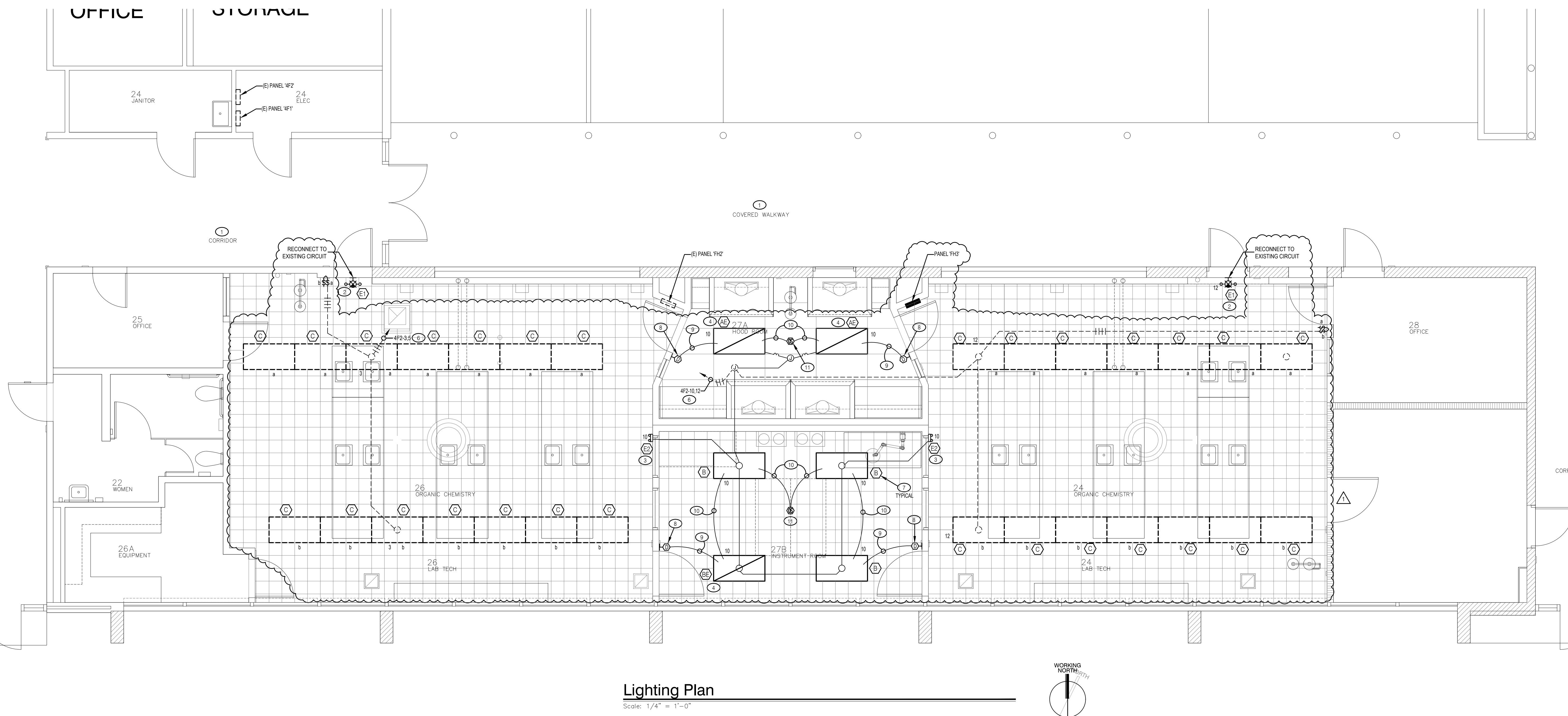
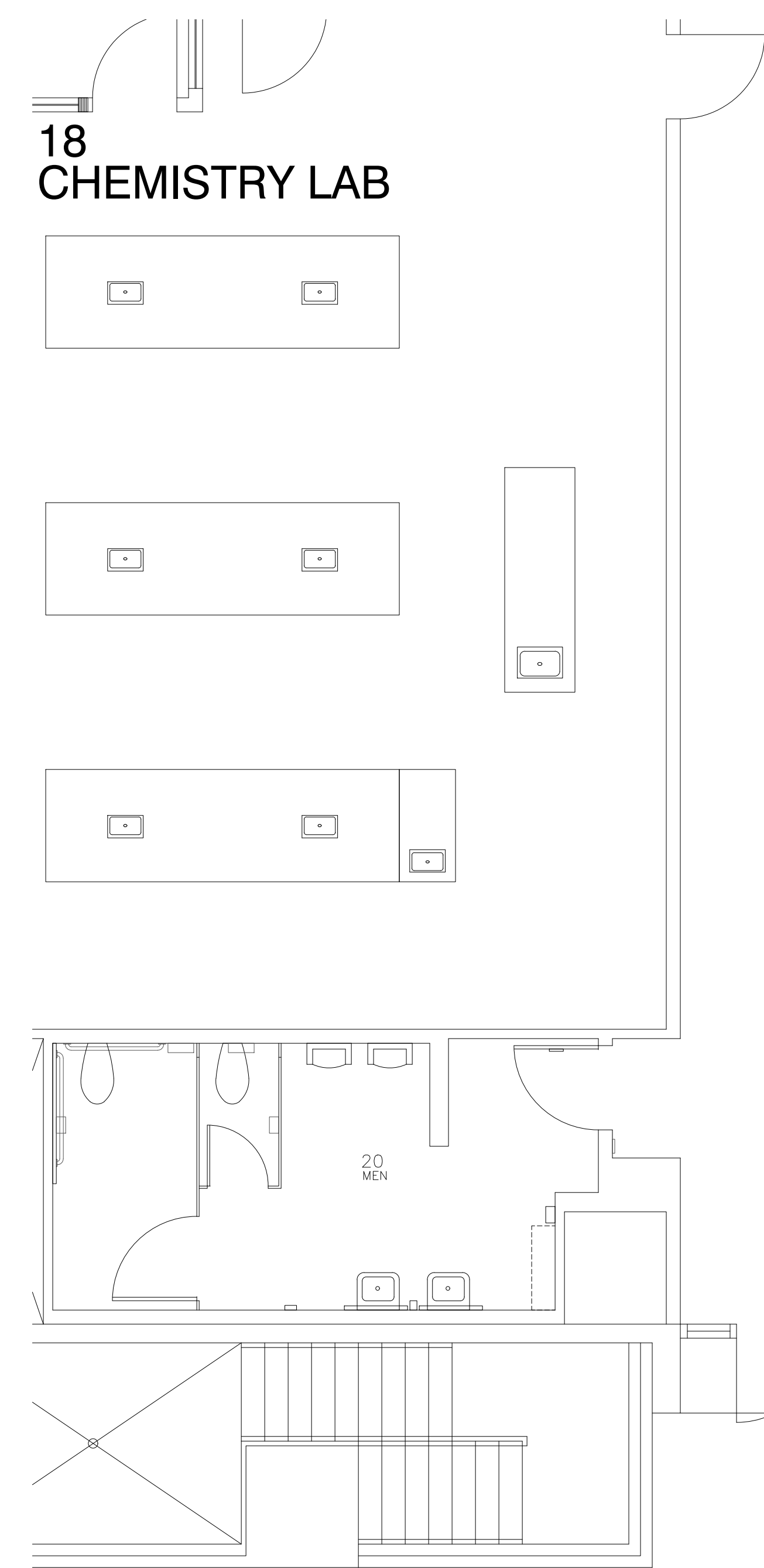
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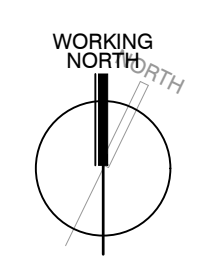
DEMO POWER PLAN

**E1.01**



**Lighting Plan**

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



**LIGHTING PLAN NOTES:**

- 1 EXISTING LIGHTS AND EMERGENCY LIGHTS OUTSIDE OF CLASSROOMS TO REMAIN.
- 2 TYPICAL: TYPE E2 SHALL BE EMERGENCY EXIT SIGN WITH BATTERY PACK AND TWIN HEADS. MOUNT ON WALL ABOVE DOOR. CONNECT TO UNSWITCHED LIGHTING CIRCUIT.
- 3 TYPICAL: TYPE E3 SHALL BE EMERGENCY LIGHT FIXTURE. MOUNT ON WALL. CONNECT TO UNSWITCHED LIGHTING CIRCUIT.
- 4 TYPICAL: TYPE 'AE' AND 'BE' ARE LIGHTS WITH INTEGRAL BATTERY PACK TO BE USED AS EMG LIGHTING. CONNECT EMERGENCY BATTERY PACK ON UNSWITCHED HOT LEG OF THE LIGHTING CIRCUIT.
- 5 TYPICAL OF TYPE 'C' FIXTURES: RETROFIT WITH LED LIGHT KIT PER FIXTURE SCHEDULE. EXISTING CONDUIT, WIRING AND CONTROLS TO REMAIN.
- 6 TYPICAL: VERIFY EXISTING CONDUIT, WIRING, AND CIRCUITING IN FIELD. PROVIDE NEW CONDUIT AND WIRING AS REQUIRED.
- 7 TYPICAL: TYPE 'AE', 'B', AND 'BE' FIXTURES SHALL HAVE 0-10V DIMMING DRIVER. FIXTURE SHALL ALSO HAVE INTEGRATED ALIGHT CONTROLS.
- 8 LOW VOLTAGE WALL DIMMER SWITCHES SHALL BE SENSOR SWITCH #P00MA-DX.
- 9 PROVIDE 3/4" FROM DIMMER INTO ACCESSIBLE ATTIC. RUN CAT-5E CABLE WITH RJ45 CONNECTORS BETWEEN DIMMER SWITCH AND LIGHT FIXTURE. ALIGHT CAT-5E CABLING TO BE RUN IN 3/4" CONDUIT IN NON-ACCESSIBLE ATTIC.
- 10 TYPICAL: PROVIDE CAT-5E CABLE WITH RJ45 CONNECTORS BETWEEN ALIGHT DEVICES. ALIGHT CAT-5E CABLING TO BE RUN IN 3/4" CONDUIT WHEN ATTIC IS NOT ACCESSIBLE.
- 11 LOW VOLTAGE WALL DIMMER SWITCH WITH OCCUPANCY SENSOR SHALL BE SENSOR SWITCH #WSX-PDT-LV-DX. SET OCCUPANCY SENSOR TIME DELAY TO 20-MINUTES.
- 12 LINE VOLTAGE OCCUPANCY SENSOR SHALL BE SENSOR SWITCH #CMR-PDT-9. WIRE FOR CONTROL OF LIGHTS IN ROOM. PROVIDE OCTAGONAL BOX IN CEILING. SET OCCUPANCY SENSOR TIME DELAY TO 20-MINUTES.

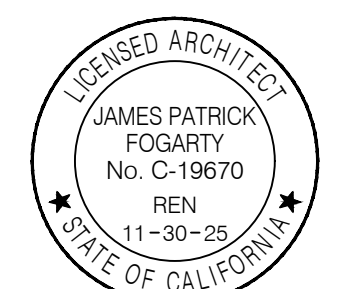


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**PROJECT INFO**

Project No	550-0047
Date	11.08.23
DSA File No	15-C1
DSA No	03-123712

**REVISIONS**

No	Date	Item
1	02.09.24	BID ADDENDA

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LIGHTING PLAN

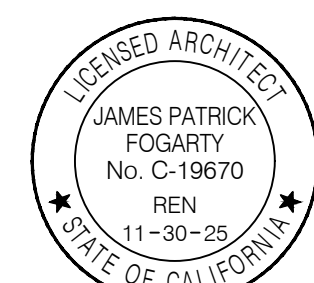
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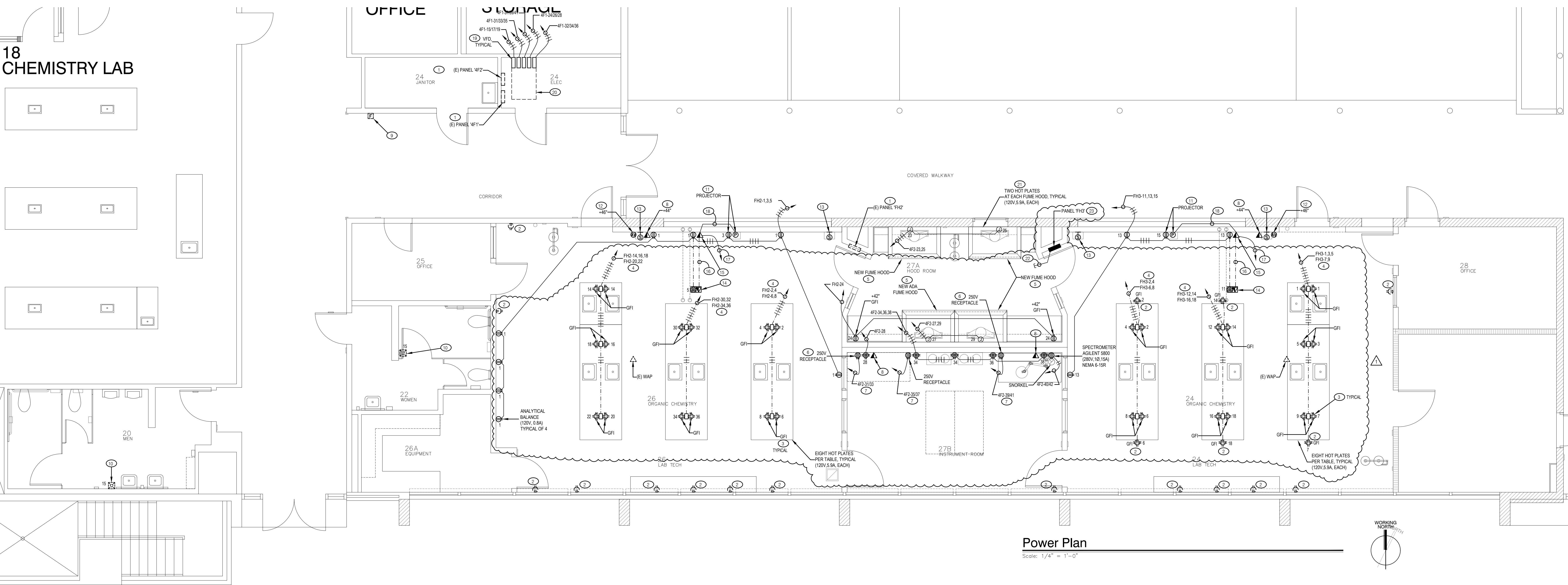
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POWER PLAN

**E2.01**

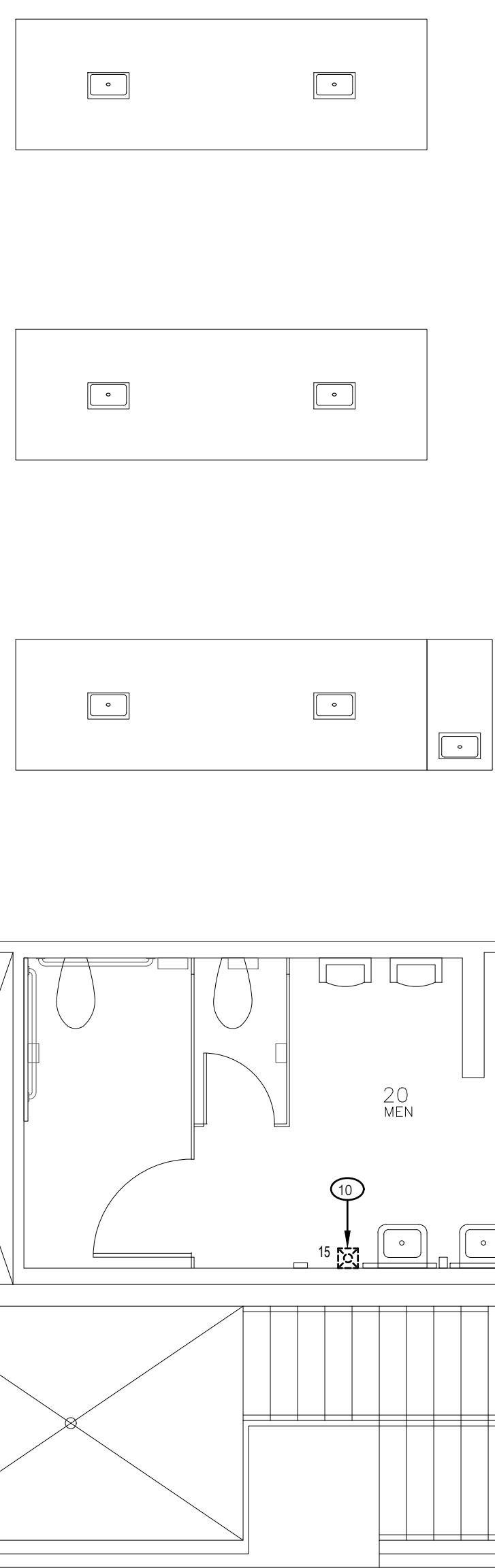


**Power Plan**

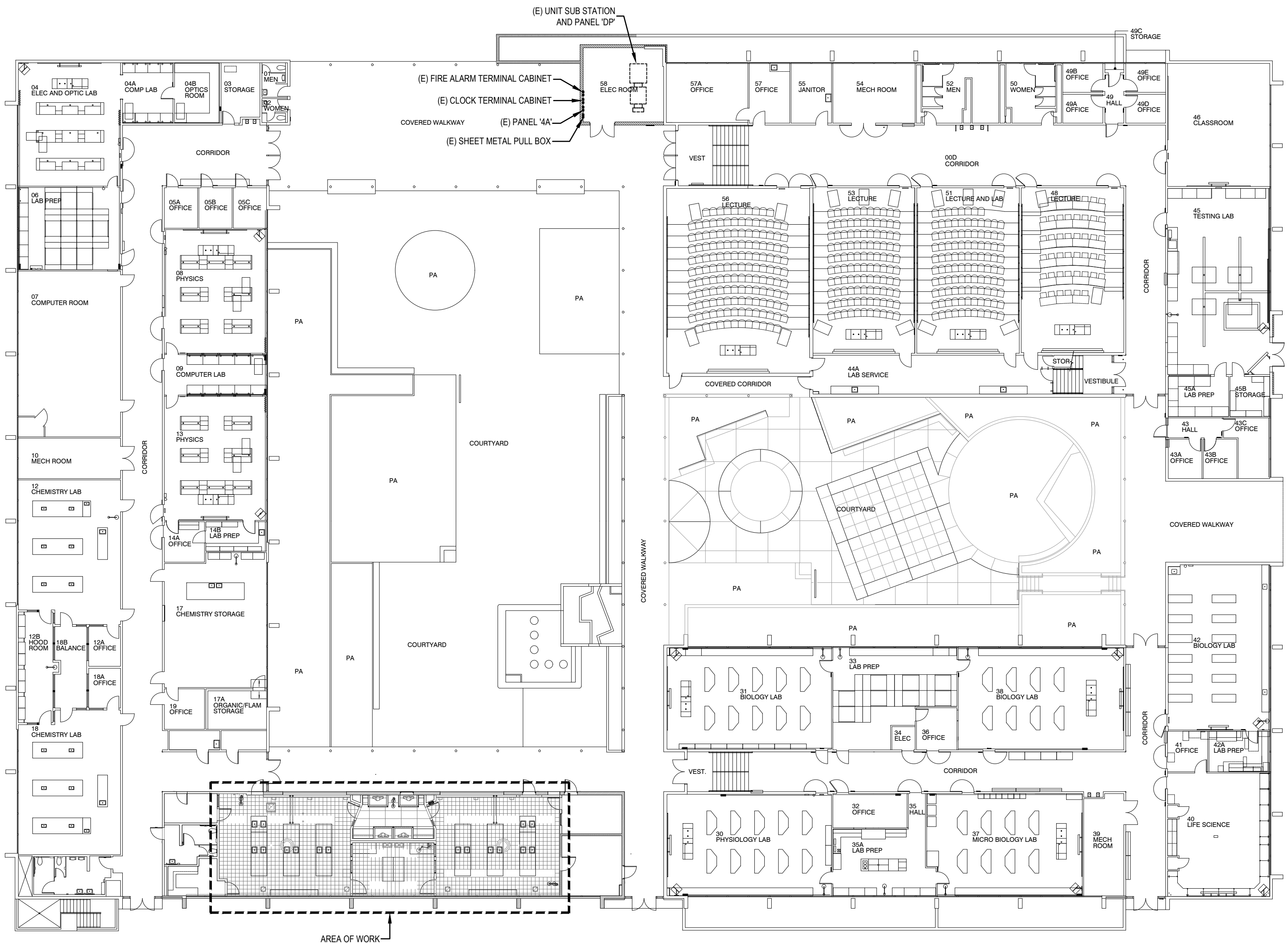
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**18  
CHEMISTRY LAB**

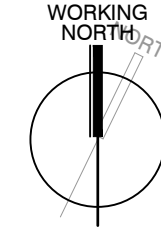


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**Vicinity Plan**

Scale: 1" = 20'-0"

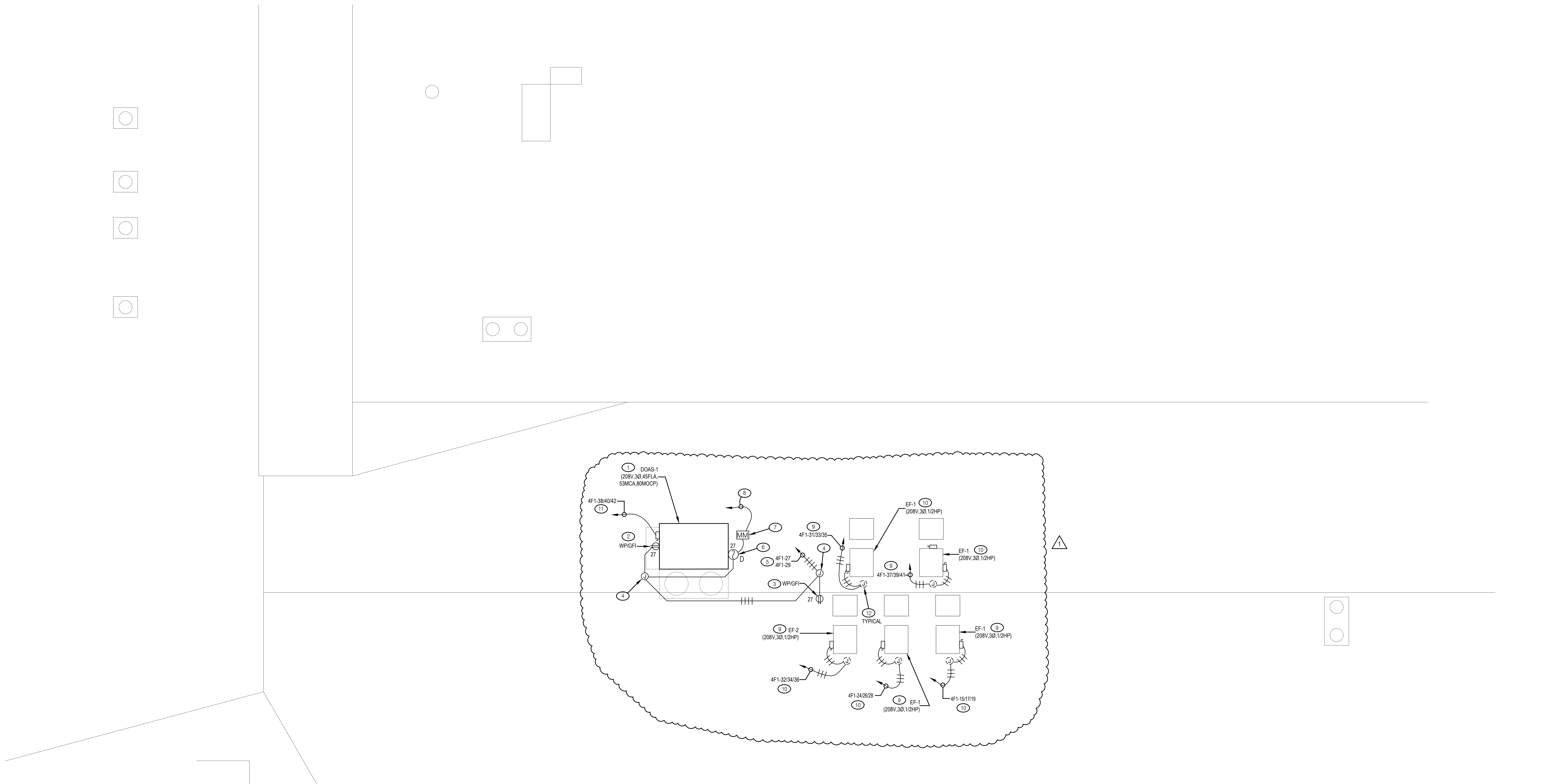


**POWER PLAN NOTES:**

- EXISTING PANEL TO REMAIN AND TO BE REUSED.
- EXISTING RECEPTACLE AND RELATED CONDUIT AND WIRING TO REMAIN.
- TYPICAL EXISTING TOMSTONE RECEPTACLES AT LAB TABLES TO BE RECONNECTED TO NEW CIRCUITS INDICATED. RUN NEW CIRCUITS AND WIRING TO LAB TABLES. PROVIDE NEW GFI RECEPTACLES IF NOT ALREADY GFI.
- RUN NEW WIRING IN EXISTING CONDUIT. VERIFY CONDUIT ROUTING IN FIELD. PROVIDE NEW UNDERGROUND CONDUIT IF REQUIRED. VERIFY WORK REQUIRED PRIOR TO BOOKING.
- CONNECT NEW FUME HOOD. VERIFY CONNECTION LOCATION AND REQUIREMENT WITH EQUIPMENT SUPPLIER.
- PROVIDE 250V, 30A RECEPTACLE. VERIFY POWER REQUIREMENTS AND RECEPTACLE CONFIGURATION WITH OWNER.
- 3/4" x 3/10" x 1/10" GND.
- TYPICAL OF ALL NEW COMBINATION TEL/DATA OUTLETS: PROVIDE 4-1/16" X 2-1/8" BOX WITH 1-GANG RING IN WALL. RUN 1" FROM OUTLET INTO ACCESSIBLE ATTIC. PROVIDE TWO JACKS AND A WALL PLATE FOR EACH OUTLET. PROVIDE TWO CAT-6 CABLES FOR EACH OUTLET TO EXISTING DATA RACK. LEAVE 6-FT SLACK AT IDF. VERIFY DATA RACK LOCATION IN FIELD. VERIFY REQUIREMENT WITH OWNER.
- EXISTING FIRE ALARM PULL STATION AND RELATED CONDUIT AND WIRING TO REMAIN.
- EXISTING FIRE ALARM STROBE LIGHT AND RELATED CONDUIT AND WIRING TO REMAIN.
- PROVIDE RECEPTACLE AND PROJECTOR OUTLET IN WALL. VERIFY MOUNTING HEIGHT WITH ARCHITECT. PROJECTOR OUTLET SHALL BE 6" X 6" X 2-1/2" BOX WITH 1-GANG RING AND BLANK PLATE IN WALL.
- AV CONTROL SWITCH TO BE PROVIDED BY OWNER. PROVIDE 4S BOX IN WALL. RUN ONE 1" TO PROJECTOR OUTLET. PROVIDE CABLES, JACKS, AND WALL PLATE AS DIRECTED BY OWNER.
- SPEAKER TO BE PROVIDED BY OWNER. PROVIDE 4S BOX IN WALL. RUN ONE 1" TO PROJECTOR OUTLET. PROVIDE CABLES, JACKS AND WALL PLATE AS DIRECTED BY OWNER.
- FLOOR BOX SHALL BE WIREMOLD POKE-THRU FLOOR BOX #8AT2P WITH FLUSH STYLE COVER PLATE. TWO 20A DUPLEX RECEPTACLES AND DATA/TEL COMPARTMENT. VERIFY POKE-THRU IS SUITABLE FOR EXISTING FLOOR CONDITION PRIOR TO ORDERING. PROVIDE JACKS AS DIRECTED BY OWNER. PROVIDE FLOOR BOX COVER TO MATCH FLOORING. FINISH TO BE SELECTED BY ARCHITECT. COORDINATE WITH OWNER AND ARCHITECT FOR ACCESS TO CRANE. SPACE BELOW FOR INSTALLATION OF FLOOR BOX.
- PROVIDE 4-1/16" X 2-1/8" OUTLET BOX WITH 1-GANG RING AND BLANK PLATE IN WALL FOR RUNNING OF CABLES.
- RUN ONE 1-1/4" FROM TEL/DATA COMPARTMENT OF FLOOR BOX TO WALL TEL/DATA OUTLET.
- RUN ONE 1-1/4" INTO ACCESSIBLE ATTIC. RUN TWO CAT-6 CABLES FROM FLOOR BOX TO WALL TEL/DATA OUTLET CONTINUOUS TO IDF. LEAVE 6-FT SLACK AT IDF.
- RUN ONE 1-1/4" BETWEEN WALL TEL/DATA OUTLET TO PROJECTOR OUTLET. RUN ONE HDMI CABLE CONTINUOUS FROM FLOOR BOX TO TEL/DATA WALL OUTLET CONTINUOUS TO PROJECTOR OUTLET. LEAVE 6-FT SLACK AT PROJECTOR OUTLET.
- VFD FOR CONTROL OF HOOD EXHAUST FANS TO BE PROVIDED BY MECHANICAL, AND CONNECTED BY ELECTRICAL. SEE ROOF PLAN FOR CONDUIT AND WIRING FROM ROOF EXHAUST FAN TO VFD. VERIFY VFD LOCATION IN ROOM THAT WILL ALLOW FOR 36" FRONT WORKING SPACE IN FRONT OF VFD.
- MAINTAIN 36" FRONT WORKING SPACE IN FRONT OF ELECTRICAL PANELS AND VFDs.
- THE FRONT OF HOOD SHALL HAVE TWO DUPLEX RECEPTACLES FOR CONNECTION OF TWO HOT PLATES EACH. VERIFY WITH EQUIPMENT SUPPLIER.
- STUBOUT ONE 1-1/4" WITH PULL WIRE INTO ACCESSIBLE ATTIC FOR FUTURE.
- PROVIDE EMERGENCY PUSH BUTTON FOR SHUT OFF OF SHUNT TRIP MAIN BREAKER IN MAIN PANEL FH2. PUSH BUTTON SHALL BE SQ. D TYPE K NORMALLY OPEN, MAINTAINED CONTACT PUSH BUTTON WITH 1-3/8" DIAMETER RED MUSHROOM CAP. LOCATE IN W/KNOW BOX. KNOW BOX TO BE PROVIDED BY GENERAL CONTRACTOR. PINK RED TRIANGLE ON COVER. VERIFY LOCATION OF THE EMERGENCY PUSH BUTTON WITH ARCHITECT. RUN 3/4" x 2-1/2" x 1-1/2" GROUND TO SHUNT TRIP MAIN BREAKER IN MAIN SWITCHBOARD.

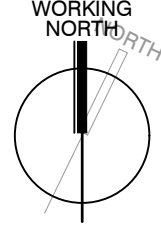
**EXISTING FIRE ALARM APPLICATION NUMBER:**

- CAMUS WIDE FIRE ALARM SYSTEM REPAIR, DSA #03-116379



**Roof Electrical Plan**

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



- ROOF ELECTRICAL PLAN NOTES:**
- 1 ELECTRICAL CONTRACTOR SHALL PROVIDE POWER AND CONTROL CONDUITS, WIRING AND CONNECTION FOR HVAC EQUIPMENT AS DIRECTED BY MECHANICAL CONTRACTOR. VERIFY LOCATION AND CONNECTION REQUIREMENT PRIOR TO ROUGH-IN. PROVIDE WP FUSED DISCONNECT SWITCH ON AC UNIT HOUSING.
  - 2 HOUSING, RECEPTACLE SHALL BE LISTED WEATHER-RESISTANT TYPE. RECEPTACLE SHALL HAVE "WEATHERPROOF WHILE IN USE EXTRA-DUTY HOOD". A RECEPTACLE SHALL BE WITHIN 25-FT OF ALL ROOF TOP EQUIPMENT.
  - 3 PROVIDE WEATHERPROOF/FGI RECEPTACLE. VERIFY MOUNTING AND LOCATION WITH OWNER. RECEPTACLE SHALL BE LISTED WEATHER-RESISTANT TYPE. RECEPTACLE SHALL HAVE "WEATHERPROOF WHILE IN USE EXTRA-DUTY HOOD".
  - 4 PROVIDE JUNCTION BOX IN ACCESSIBLE ATTIC. RUN ALL CONDUITS FOR ROOF EQUIPMENT IN ATTIC.
  - 5 RUN SEPARATE HOT AND NEUTRAL FOR DUCT SMOKE DETECTOR CIRCUIT.
  - 6 120V DUCT SMOKE DETECTOR AT SUPPLY AIR PLENUM SHALL BE FURNISHED AND INSTALLED BY CONTROL CONTRACTOR. VERIFY LOCATION AND CONNECTION REQUIREMENT IN FIELD.
  - 7 PROVIDE NEW ADDRESSABLE MONITOR MODULE IN ATTIC AT DUCT SMOKE DETECTOR LOCATION. MONITOR MODULE SHALL BE COMPATIBLE WITH EXISTING FIRE ALARM SYSTEM. INCLUDE IN BID THE PROGRAMMING AT EXISTING FIRE ALARM CONTROL PANEL FOR THE ADDRESSABLE DEVICE BY SCHOOLS FIRE ALARM CONTRACTOR. VERIFY WORK REQUIRED PRIOR TO BIDDING.
  - 8 RUN 1" C WITH TWO ADDRESSABLE CABLE (L.OOP) TO EXISTING INITIATION DEVICE. VERIFY WORK REQUIRED PRIOR TO BIDDING.
  - 9 CONNECT EXHAUST FAN. PROVIDE WP FUSED DISCONNECT SWITCH ON UNIT AS DISCONNECT.
  - 10 RUN CONDUIT AND WIRING TO VFD IN ELECTRICAL ROOM. SEE SHEET E2.01 FOR LOCATION. VERIFY WORK REQUIRED WITH MECHANICAL.
  - 11 1-1/4" C - 3Ø + 1Ø GND.
  - 12 TYPICAL: REUSE ROOF JUNCTION BOX AND CONDUIT INTO ROOF FOR CONNECTION OF NEW EXHAUST FAN. VERIFY WORK REQUIRED IN FIELD.

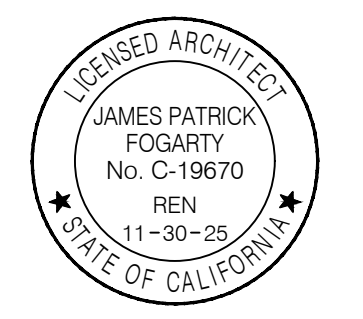


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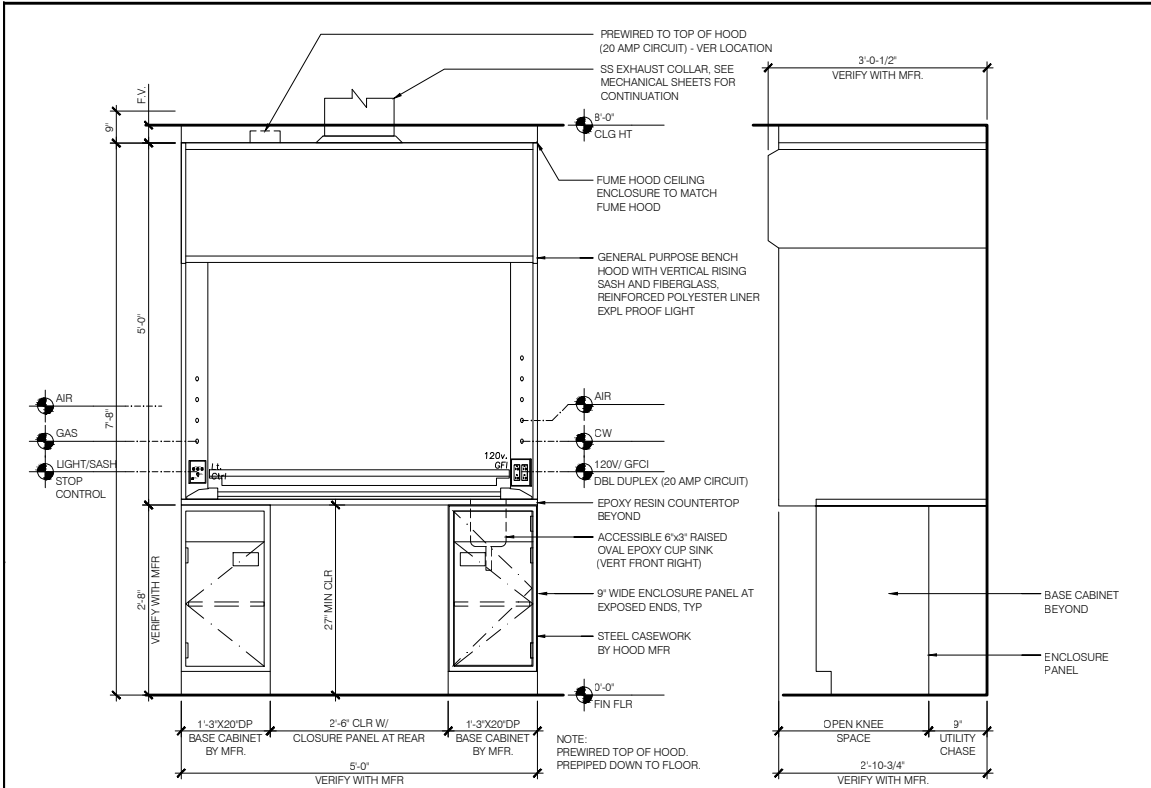
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**ROOF ELECTRICAL PLAN**

**E3.00**

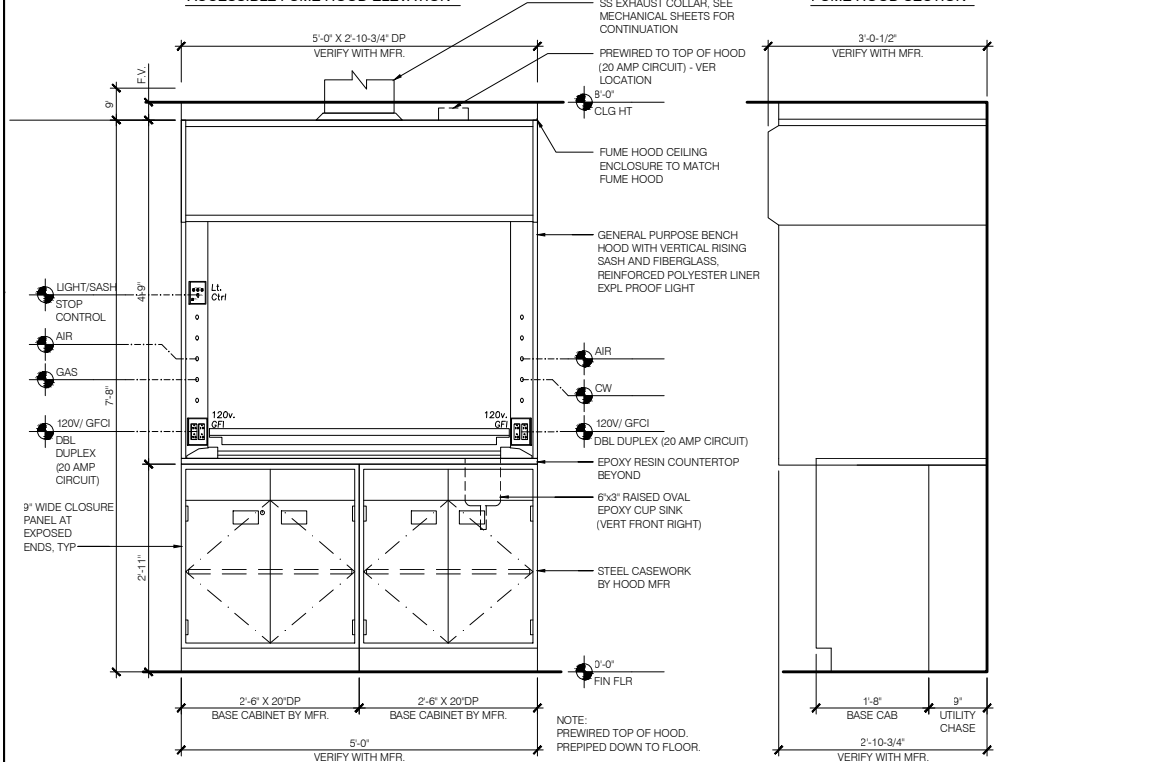






**ACCESSIBLE FUME HOOD ELEVATION**

**FUME HOOD SECTION**



**FUME HOOD ELEVATION**

**FUME HOOD SECTION**