

# CHURCHILL HIGH SCHOOL WOOD SHOP REMODEL

AUGUST 17, 2020 100% CONSTRUCTION DOCUMENTS

**ROWELL  
BROKAW**

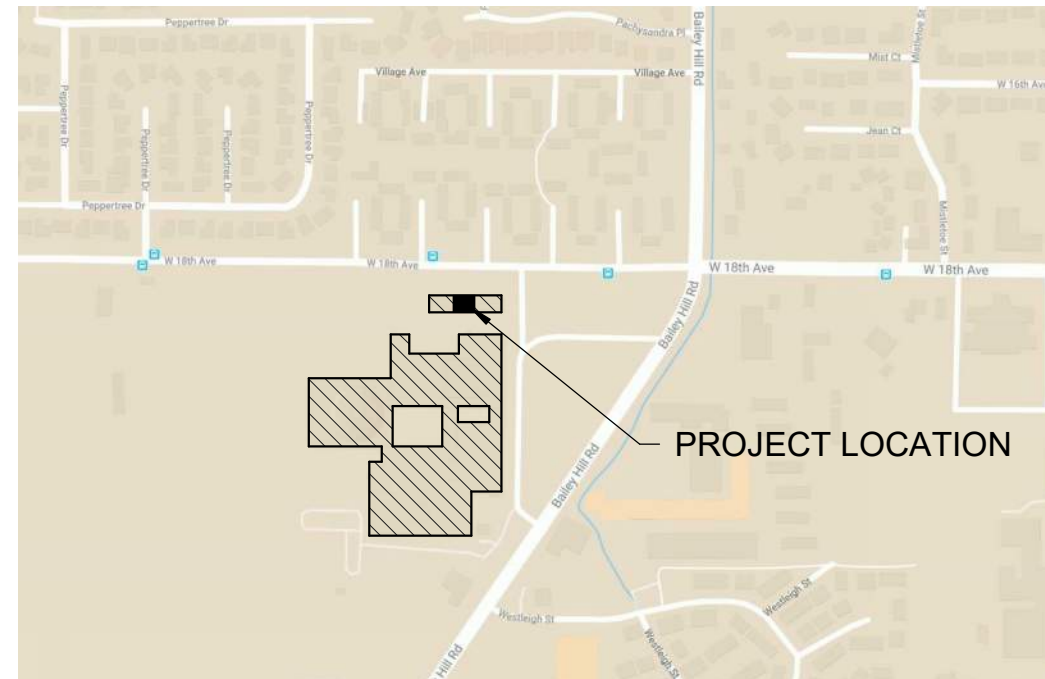
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Suite 210  
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541 485 1003  
rowellbrokaw.com

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STAMP



|   |  |  |  |  |  |
|---|--|--|--|--|--|
| <p><b>OWNER</b></p> <p>EUGENE SCHOOL DISTRICT 4J<br/>200 NORTH MONROE STREET<br/>EUGENE, OREGON 97402</p> <p>CONTACT:<br/>DEXTER RUMMEL<br/>RUMMEL_D@4JLANE.EDU</p> | <p><b>ARCHITECT</b></p> <p>ROWELL BROKAW ARCHITECTS<br/>1 EAST BROADWAY, SUITE 300<br/>EUGENE, OR. 97401<br/>PH: 541-485-1003</p> <p>CONTACTS:<br/>MARK YOUNG, AIA - PRINCIPAL<br/>MARK@ROWELLBROKAW.COM<br/>PAUL HARMAN - ARCHITECT<br/>PAUL@ROWELLBROKAW.COM</p> | <p><b>STRUCTURAL ENGINEER</b></p> <p>BRANCH ENGINEERING<br/>310 5TH STREET<br/>SPRINGFIELD, OREGON 97477</p> <p>CONTACT:<br/>RICK HERNANDEZ<br/>RICKH@BRANCHEENGINEERING.COM</p> | <p><b>MECHANICAL ENGINEER</b></p> <p>PAE<br/>44 WEST BROADWAY<br/>SUITE 430<br/>EUGENE, OREGON 97401</p> <p>CONTACT:<br/>JACK YOUSEY<br/>JACK.YOUSEY@PAE-ENGINEERS.COM</p> | <p><b>PLUMBING ENGINEER</b></p> <p>PAE<br/>44 WEST BROADWAY<br/>SUITE 430<br/>EUGENE, OREGON 97401</p> <p>CONTACT:<br/>JACK YOUSEY<br/>JACK.YOUSEY@PAE-ENGINEERS.COM</p> | <p><b>ELECTRICAL ENGINEER</b></p> <p>JLG ENGINEERING, LLC<br/>31910 CIVIL ROAD<br/>EUGENE, OREGON 97405</p> <p>CONTACT:<br/>JEFFERY GRAPER<br/>JEFFGRAPER@JLGENGINEERING.COM</p> |
|---|--|--|--|--|--|



VICINITY MAP

**BUILDING CODE INFORMATION**

BUILDING CODE: OSSC 2019  
FIRE CODE: 2019 OREGON FIRE CODE

BUILDING AREA: 13,234SF, ONE STORY BUILDING  
+1,792SF GREENHOUSE  
15,026SF TOTAL

CONSTRUCTION TYPE: VB, NON-SPRINKLERED  
FIRE SEPARATION DISTANCE IS GREATER THAN 30' ON ALL SIDES FOR SINGLE BUILDING

FIRE AREAS:  
BUILDING IS SEPARATED WITH A 2-HR FIRE BARRIER INTO TWO FIRE AREAS, EACH LESS THAN 12,000SF

OCCUPANCY: GROUP E: ALL SPACES USED FOR EDUCATION PURPOSES THROUGH 12TH GRADE.

MAIN BUILDING HEIGHT AND AREA LIMITATIONS (E OCCUPANCY)  
FOR E OCCUPANCY, NONSPRINKLERED TYPE VB

TABLE 504.3 HEIGHT: 40'  
TABLE 504.4 STORIES: 1  
TABLE 506.2 AREA: 9,500SF  
506.3 FRONTAGE INCREASE: 0.75 (30' FRONTAGE ALL SIDES)  
ALLOWABLE AREA 16,625SF

ACTUAL AREA INCLUDING GREENHOUSE: 15,026SF

416.3.1 - SPRAY FINISHING OPERATIONS IN GROUP E OCCUPANCIES SHALL BE LOCATED IN A SPRAY ROOM PROTECTED WITH AN AUTOMATIC SPRINKLER SYSTEM AND SEPARATED VERTICALLY AND HORIZONTALLY FROM THE REMAINDER OF THE BUILDING BY FIRE BARRIER WALLS AND HORIZONTAL ASSEMBLIES WITH NOT LESS THAN 1-HOUR FIRE RESISTANCE RATING.

(SEE AM&M SUBMITTED TO WAIVE THE AUTOMATIC SPRINKLER SYSTEM REQUIREMENT).

**ARCHITECTURAL ABBREVIATIONS**

|         |                                      |
|---------|--------------------------------------|
| &       | AND                                  |
| (E)     | EXISTING                             |
| @       | AT                                   |
| ADJ     | ADJACENT                             |
| AFF     | ABOVE FINISHED FLOOR                 |
| AV      | AUDIO / VISUAL                       |
| BD      | BOARD                                |
| BLW     | BELOW                                |
| BOC     | BOTTOM OF CONCRETE                   |
| BOS     | BOTTOM OF SLAB                       |
| BOT     | BOTTOM                               |
| BOTT    | BOTTOM                               |
| CJ      | CONTROL JOINT                        |
| CL      | CENTER LINE                          |
| CLG     | CEILING                              |
| CLR     | CLEAR                                |
| CMU     | CONCRETE MASONRY UNIT                |
| COE     | CITY OF EUGENE (BUILDING DEPARTMENT) |
| COL     | COLUMN                               |
| COMP    | COMPENSATING                         |
| CONC    | CONCRETE                             |
| CONT.   | CONTINUOUS                           |
| D.J.    | DRIFT JOINT                          |
| DBL     | DOUBLE                               |
| DEPR    | DEPRESSION                           |
| DIA     | DIAMETER                             |
| DS      | DOWN SPOUT                           |
| DW      | DISHWASHER                           |
| DWG     | DRAWING                              |
| DWR     | DRAWER                               |
| ELEV    | ELEVATION                            |
| ELEV    | ELEVATOR                             |
| ENC     | ENCLOSURE                            |
| ENT.    | ENTRY                                |
| EQ      | EQUAL                                |
| F.O.    | FACE OF                              |
| F.O.F.  | FACE OF FINISH                       |
| FC      | FAN COIL                             |
| FCS     | FIBER CEMENT SIDING                  |
| FD      | FLOOR DRAIN                          |
| FDC     | FIRE DEPARTMENT CONNECTION           |
| FE      | FIRE EXTINGUISHER                    |
| FEC     | FIRE EXTINGUISHER CABINET            |
| FIN     | FINISH                               |
| FLR, FL | FLOOR                                |
| FO      | FACE OF                              |
| FR      | FIRE RATED                           |
| FRMG    | FRAMING                              |
| FRP     | FIBER REINFORCED PLASTIC             |
| FS      | FIRE SPRINKLER                       |
| GF      | GROUND FLOOR                         |
| GL      | GLAZING                              |
| GWB     | GYPSPUM WALL BOARD                   |
| GYP     | GYPSPUM WALL BOARD                   |
| HGT     | HEIGHT                               |
| HR      | HOUR                                 |

**ARCHITECTURAL ABBREVIATIONS**

|        |                                      |
|--------|--------------------------------------|
| HR     | HANDRAIL                             |
| HS     | HOLLOW STEEL                         |
| INSUL  | INSULATION                           |
| LOCKR  | LOCKER                               |
| LOC    | LOCATION                             |
| MATL   | MATERIAL                             |
| MAX    | MAXIMUM                              |
| MECH   | MECHANICAL                           |
| MEMB   | MEMBRANE                             |
| MFR    | MANUFACTURER                         |
| MN     | MINIMUM                              |
| MIR    | MIRRORED                             |
| N.I.C. | NOT IN CONTRACT                      |
| N.T.S  | NOT TO SCALE                         |
| N/A    | NOT APPLICABLE                       |
| O.C.   | ON CENTER                            |
| OFCI   | OWNER FURNISHED CONTRACTOR INSTALLED |
| OFOI   | OWNER FURNISHED OWNER INSTALLED      |
| OPNG   | OPENING                              |
| OPP    | OPPOSITE                             |
| PLAM   | PLASTIC LAMINATE                     |
| PTD    | PAINTED                              |
| R.O.   | ROUGH OPENING                        |
| RCB    | RUBBER COVE BASE                     |
| REF    | REFLECTED CEILING PLAN               |
| REF    | REFRIGERATOR                         |
| REINF  | REINFORCING                          |
| REQ    | REQUIRED                             |
| SAM    | SELF-ADHERING MEMBRANE               |
| SF     | STOREFRONT                           |
| SF     | SQUARE FEET                          |
| SHWR   | SHOWER                               |
| SIM    | SIMILAR                              |
| SPEC   | SPECIFICATIONS                       |
| SQ     | SQUARE                               |
| SS     | STAINLESS STEEL                      |
| STFT   | STOREFRONT                           |
| STL    | STEEL                                |
| STRUC  | STRUCTURE                            |
| SUSP   | SUSPENDED                            |
| TBD    | TO BE DETERMINED                     |
| TOC    | TOP OF CONCRETE                      |
| TOF    | TOP OF FOOTING                       |
| TOS    | TOP OF SLAB                          |
| TWF    | THROUGH WALL FLASHING                |
| TYP    | ACOUSTIC CEILING TILE                |
| UNO    | UNLESS NOTED OTHERWISE               |
| W      | WITH                                 |
| WII    | WITHIN                               |
| WO     | WITHOUT                              |
| WA     | WALL ASSEMBLY                        |
| WH     | WATER HEATER                         |
| WP     | WATER PROOFING                       |
| WRB    | WEATHER RESISTANT BARRIER            |

**DRAWING INDEX**

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| E-130         | MEZZANINE PLAN- ELECTRICAL                     |
| E-601         | ONE LINE/ DETAILS                              |

**REVISIONS TO THIS SHEET**

| REV. | DATE | DESCRIPTION |
|------|------|-------------|
|      |      |             |

**SET ISSUE DATE**

8-17-2020 100% CD'S

**PROJECT TRACKING**

RBA #: 2002  
P.I.C.: MARK YOUNG  
PM / PA: PAUL HARMAN

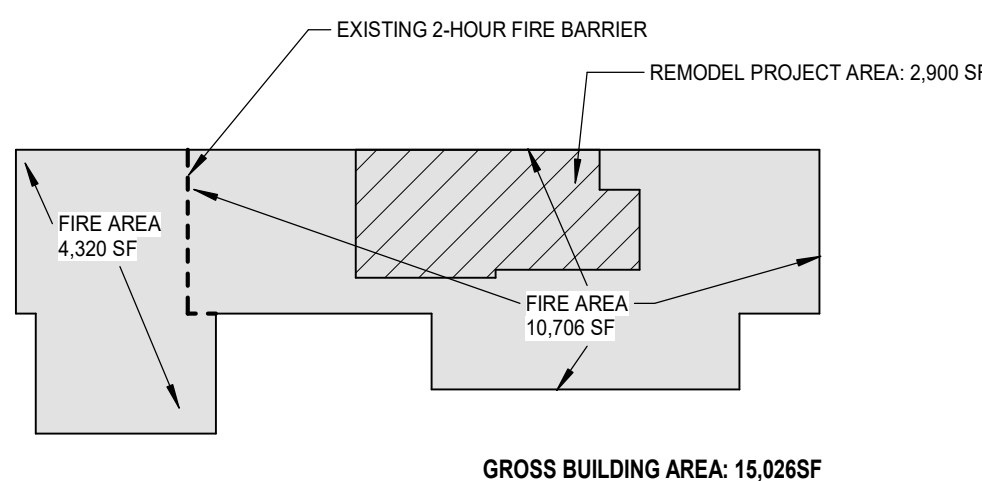
Owner  
**4J SCHOOL DISTRICT**

Project Name  
**4J CHURCHILL HS  
WOODSHOP REMODEL**

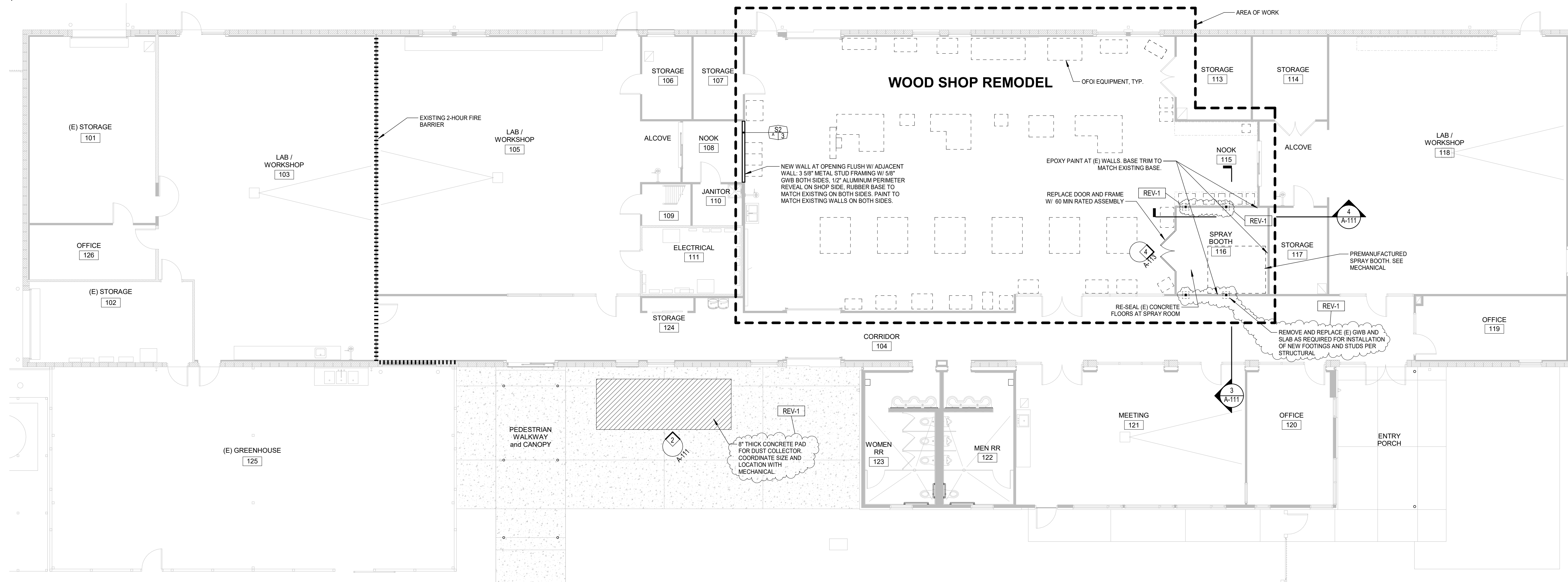
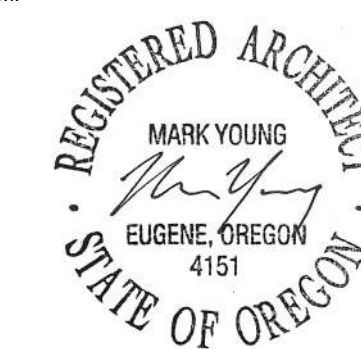
Project Address  
**1850 BAILEY HILL ROAD  
EUGENE, OREGON 97405**

COVER

**G-001**



**2 GROSS AREAS AND FIRE AREAS**  
1/4" = 1'-0"



**REVISIONS TO THIS SHEET**

| REV. | DATE  | DESCRIPTION |
|------|-------|-------------|
| 1    | REV-1 | 9-9-2020    |

**SET ISSUE DATE**

8-17-2020 100% CD'S

**PROJECT TRACKING**

RBA #: 2002  
P.I.C.: MARK YOUNG  
PM / PA: PAUL HARMAN

Owner  
**4J SCHOOL DISTRICT**

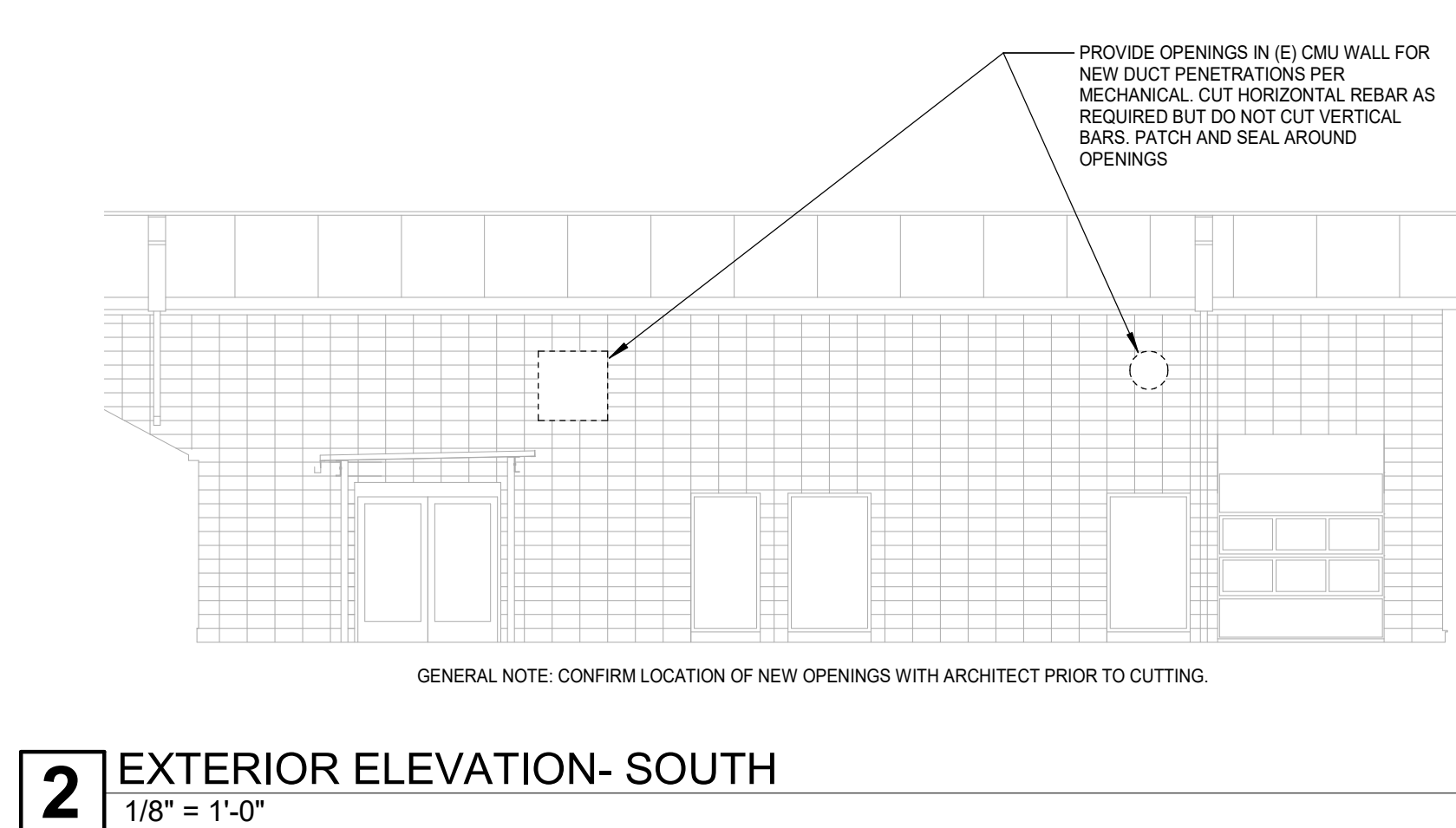
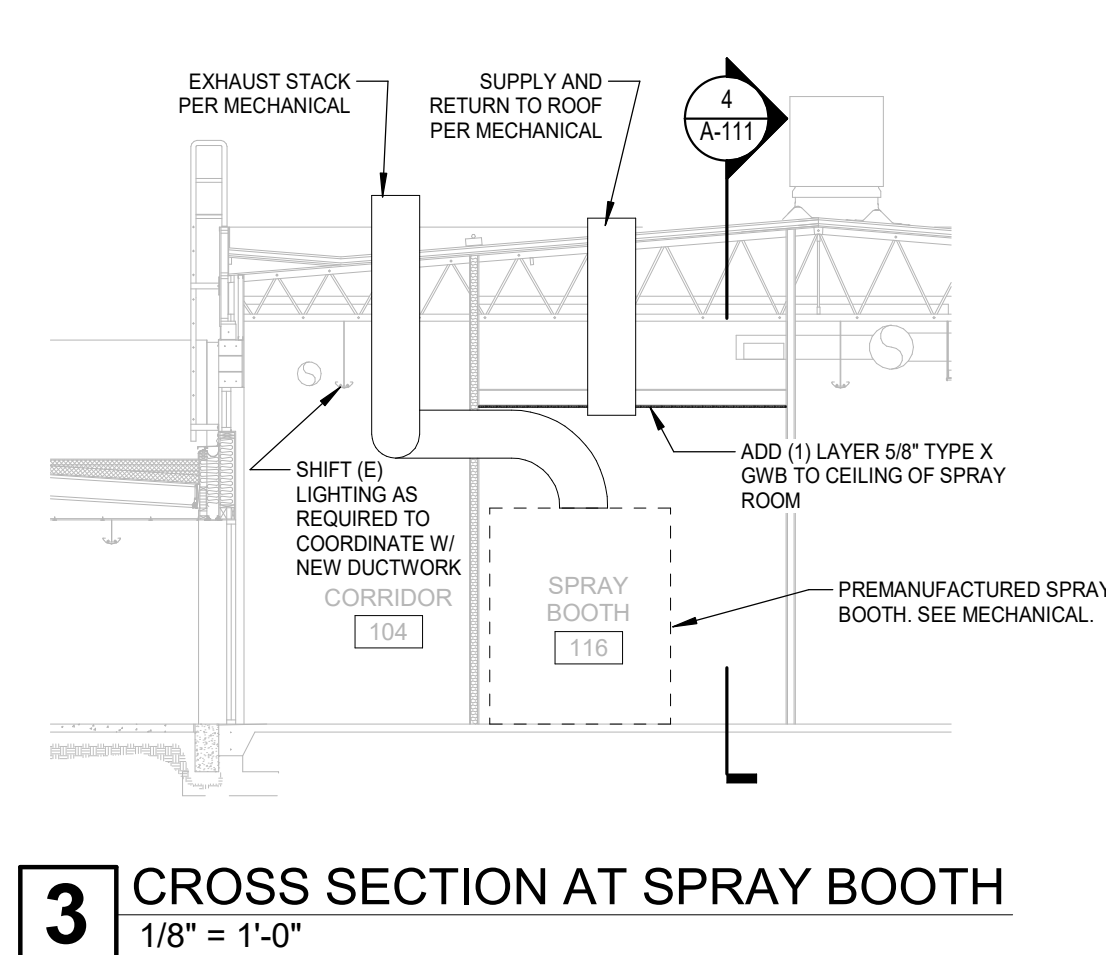
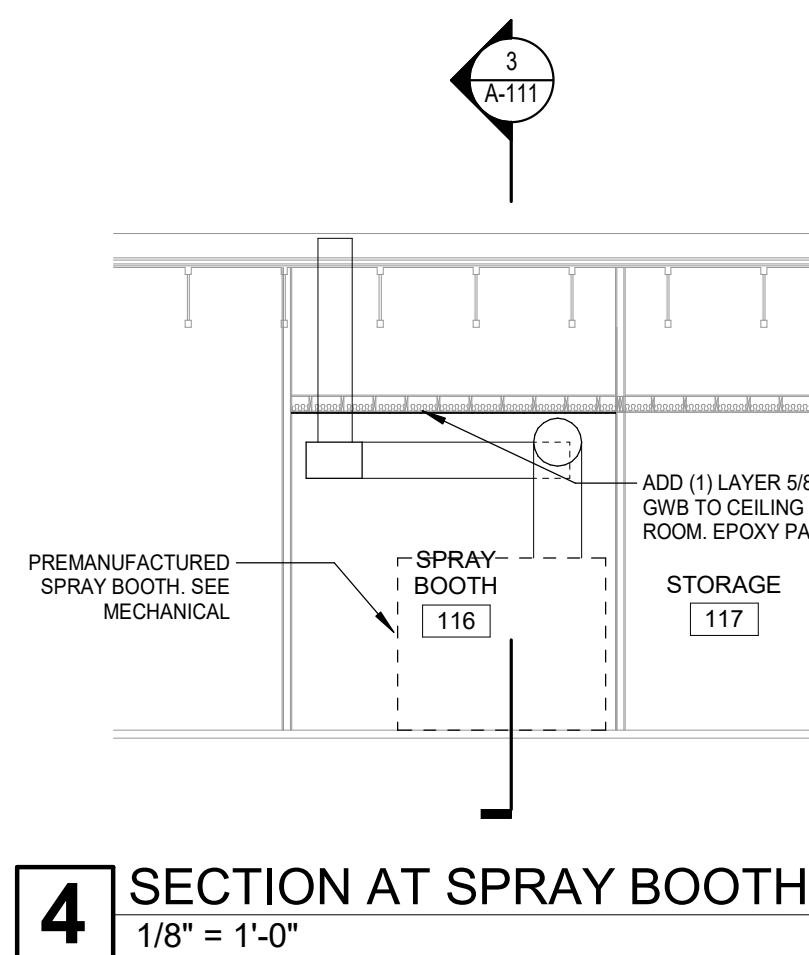
Project Name  
**4J CHURCHILL HS  
WOODSHOP REMODEL**

Project Address  
**1850 BAILEY HILL ROAD  
EUGENE, OREGON 97405**

**1ST FLOOR PLAN,  
EXTERIOR  
ELEVATION,  
SECTIONS**

**A-111**

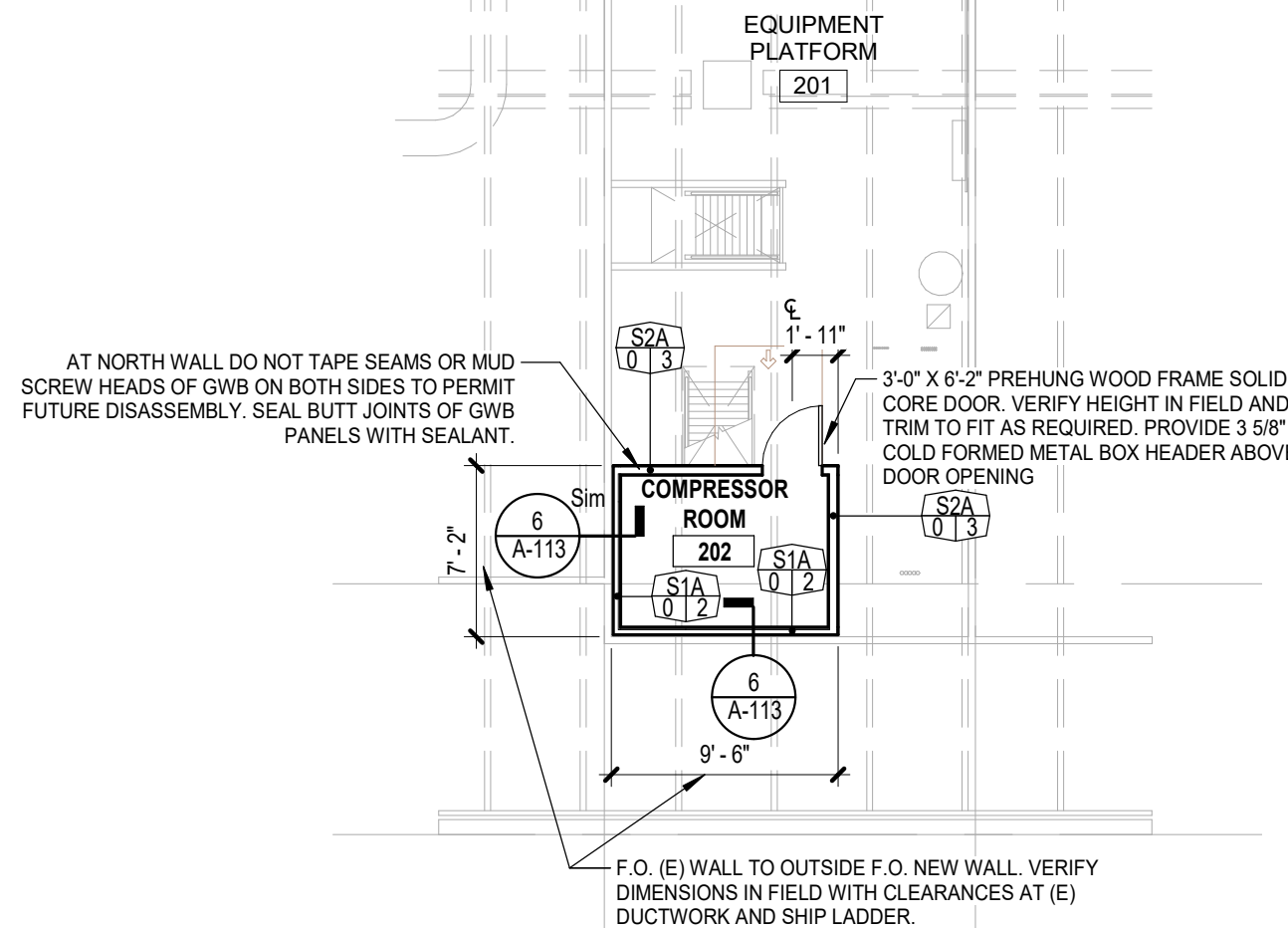
**1** 1ST FLOOR PLAN  
1/8" = 1'-0"



**4** SECTION AT SPRAY BOOTH  
1/8" = 1'-0"

**3** CROSS SECTION AT SPRAY BOOTH  
1/8" = 1'-0"

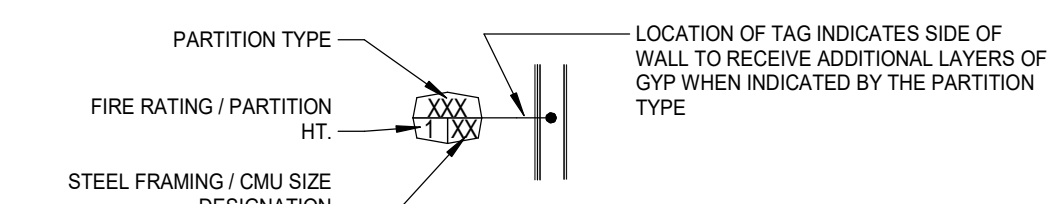
**2** EXTERIOR ELEVATION- SOUTH  
1/8" = 1'-0"



**GENERAL NOTES**

- ALL WALL TYPES TO PROVIDE 5/8" GYPSUM WALL BOARD ON STUDS AT 16" O.C. U.N.O.
- "A" NOTE IN PARTITION AND EXTERIOR WALL TYPE DESIGNATION REFERS TO "ACOUSTIC".  
- AT INTERIOR "A" TYPE WALLS, PROVIDE SOUND ATTENUATION BLANKET
- SOUND ATTENUATION BLANKET TO BE 3 1/2" U.N.O.

**INTERIOR PARTITION TYPE TAG**

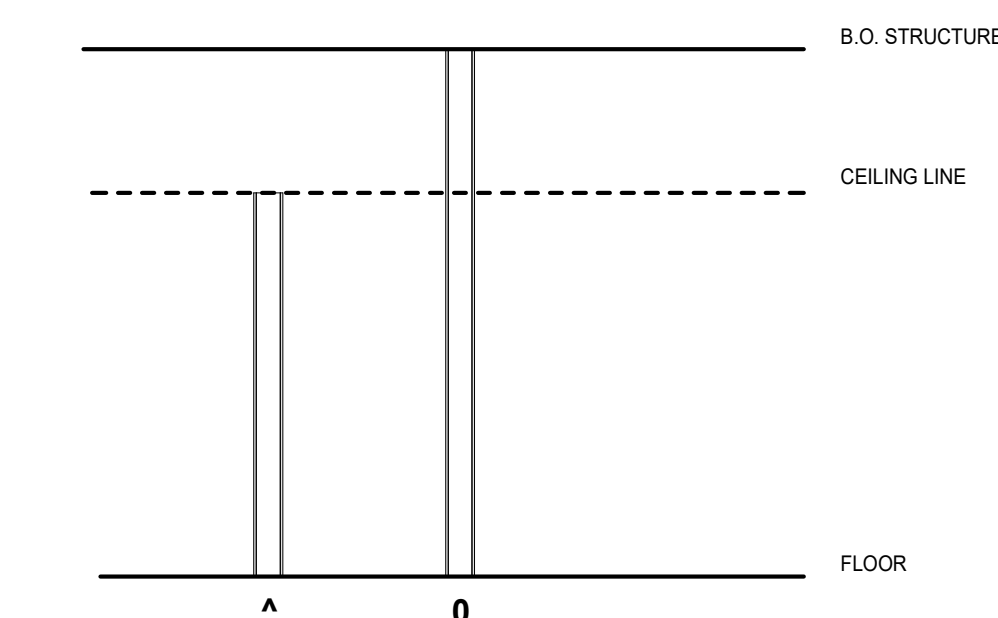


**STEEL FRAMING SIZE DESIGNATION**

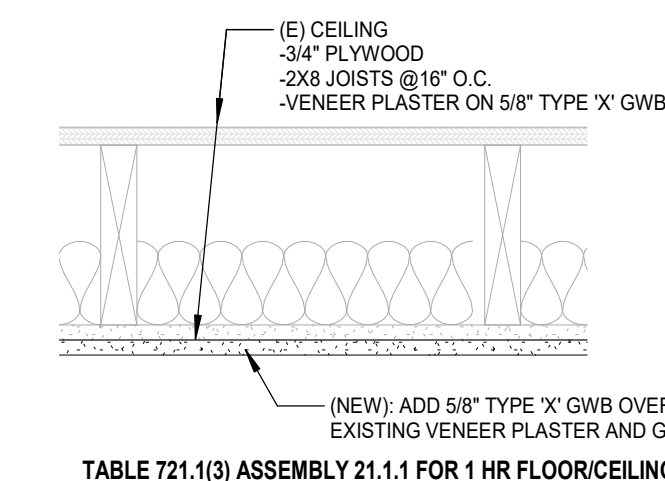
- | ID. | STUD SIZE |
|-----|-----------|
| 2=  | 2 1/2"    |
| 3=  | 3 5/8"    |

**GENERAL NOTES - WALL TYPES**

**PARTITION HEIGHT DESIGNATION**



- KEY**  
A: NON RATED TO B.O. CEILING  
0: NON RATED. EXTEND STUDS TO B.O. STRUCTURE ABOVE.  
EXTEND GYP. BOARD BOTH SIDES TO B.O. STRUCTURE ABOVE U.N.O.



**FLOOR ASSEMBLY**

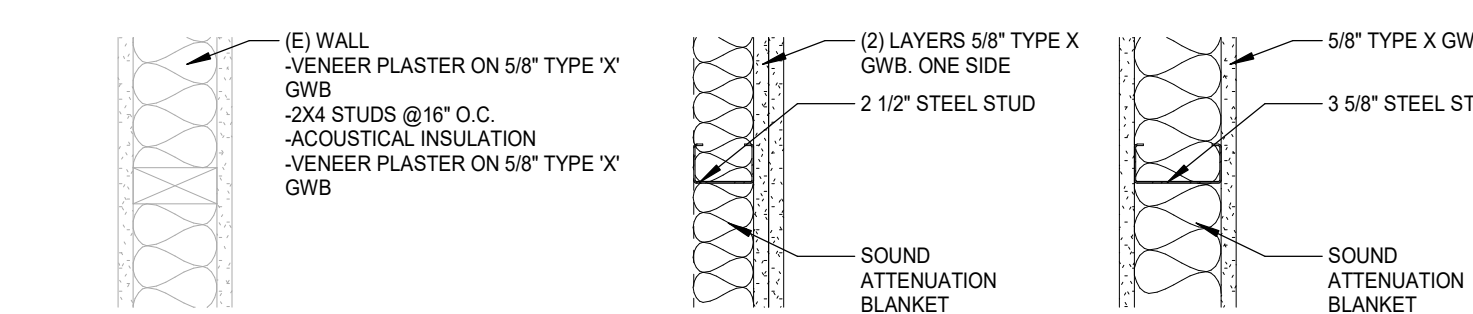


TABLE 721.1(2) ASSEMBLY 14.1.2 FOR 1 HR PARTITION

**WALL TYPES**



**REVISIONS TO THIS SHEET**

| REV. | DATE  | DESCRIPTION |
|------|-------|-------------|
| 1    | REV-1 | 9-9-2020    |

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8-17-2020 100% CD'S

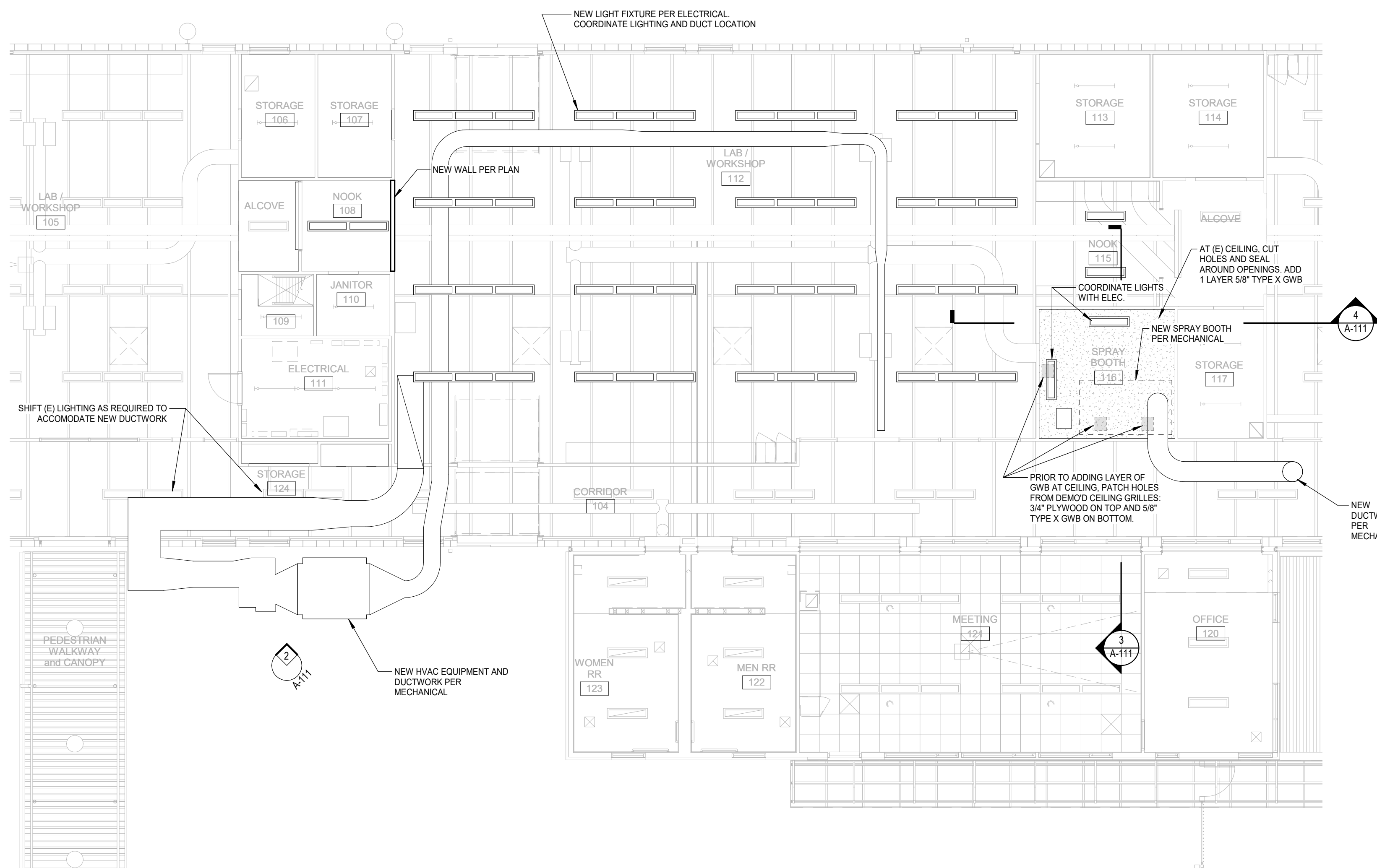
**PROJECT TRACKING**

RBA #: 2002  
P.I.C.: MARK YOUNG  
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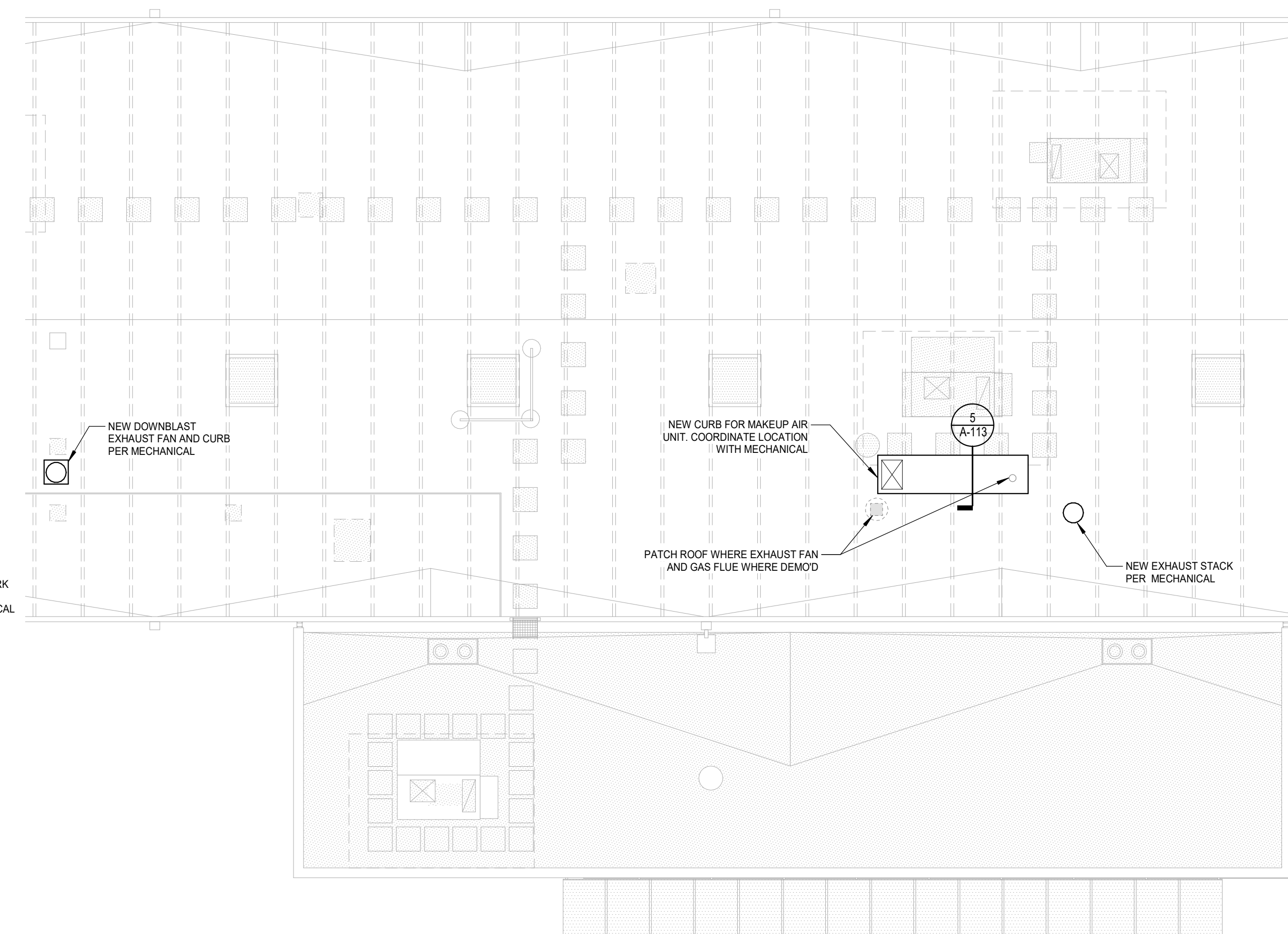
Owner  
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WOODSHOP REMODEL**  
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EUGENE, OREGON 97405**

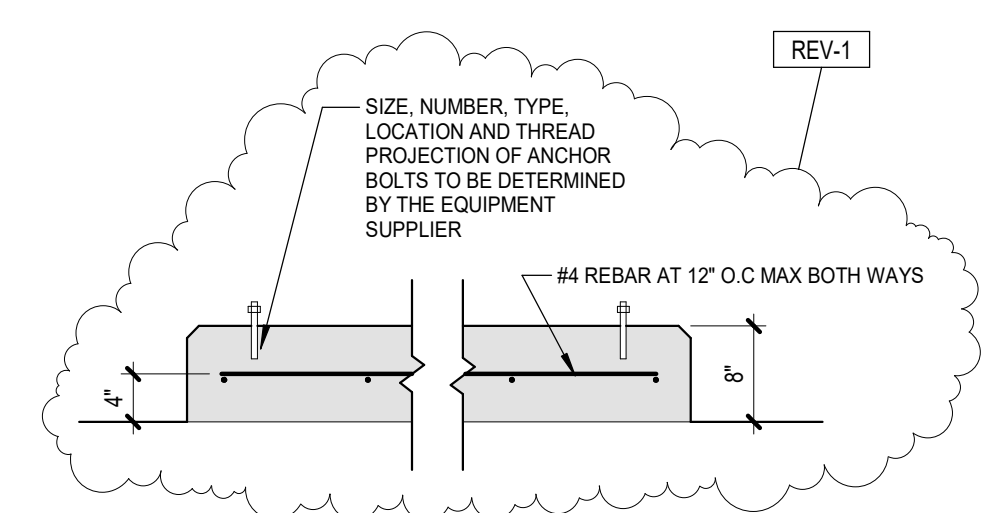
**1ST FLOOR RCP,  
ROOF PLAN,  
DETAILS**



**2** 1ST FLOOR REFLECTED CEILING PLAN  
1/8" = 1'-0"

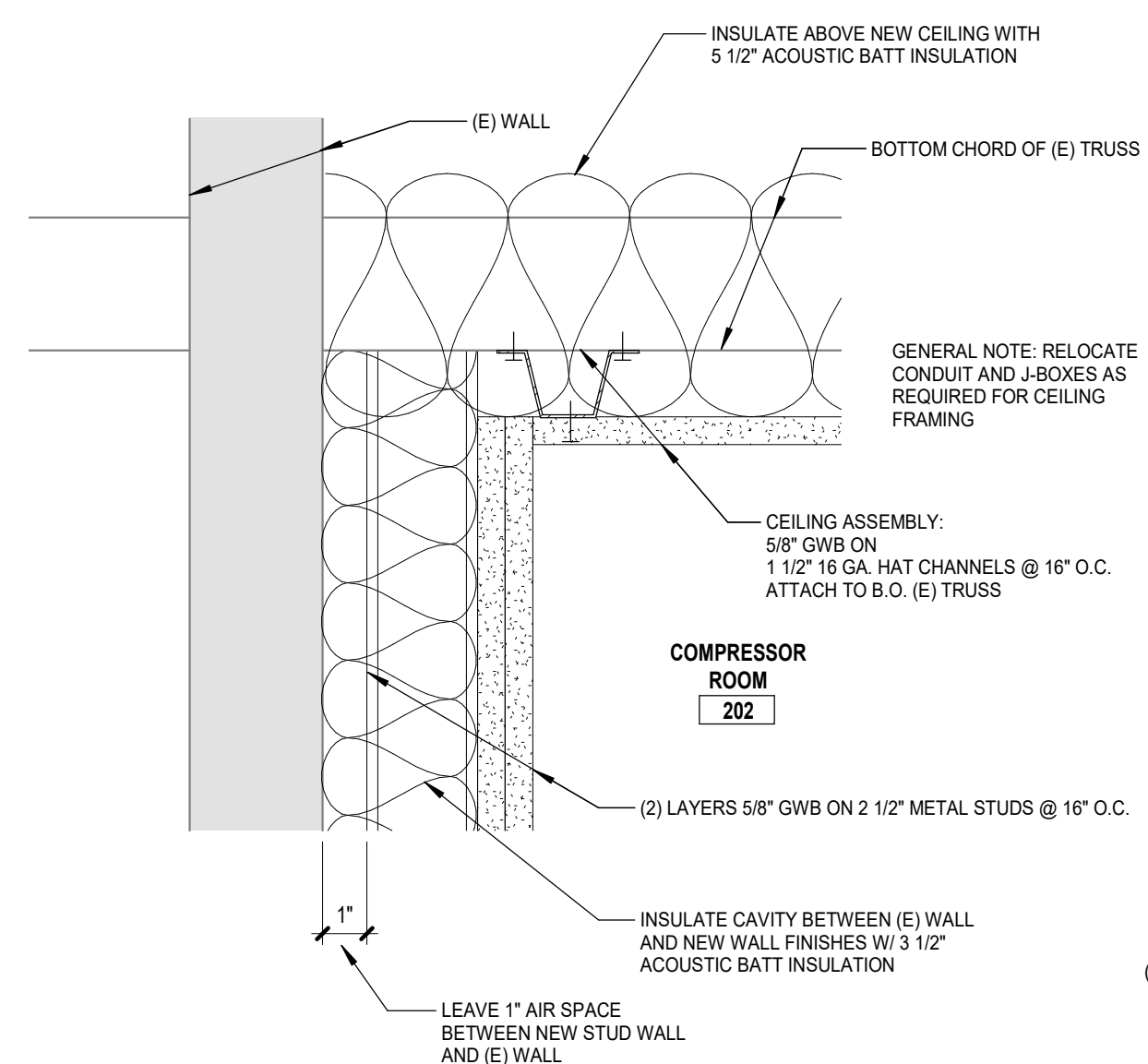


**1** PARTIAL ROOF PLAN  
1/8" = 1'-0"

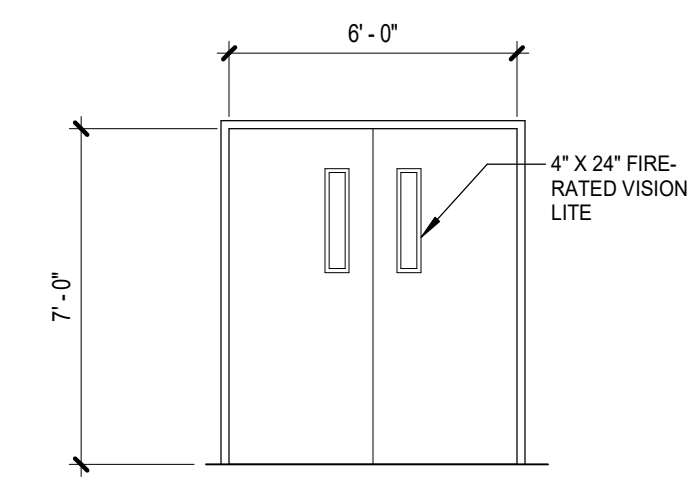


NOTES:  
1. REFER TO MECHANICAL FOR PAD SIZE  
2. ANCHOR BOLTS SHALL BE HELD IN PLACE BY TEMPLATE WHILE SLAB IS CAST  
3. CONTRACTOR TO SIZE AND LOCATE PAD REINFORCEMENT TO SUIT ALTERNATIVE BOLT ARRANGEMENTS.

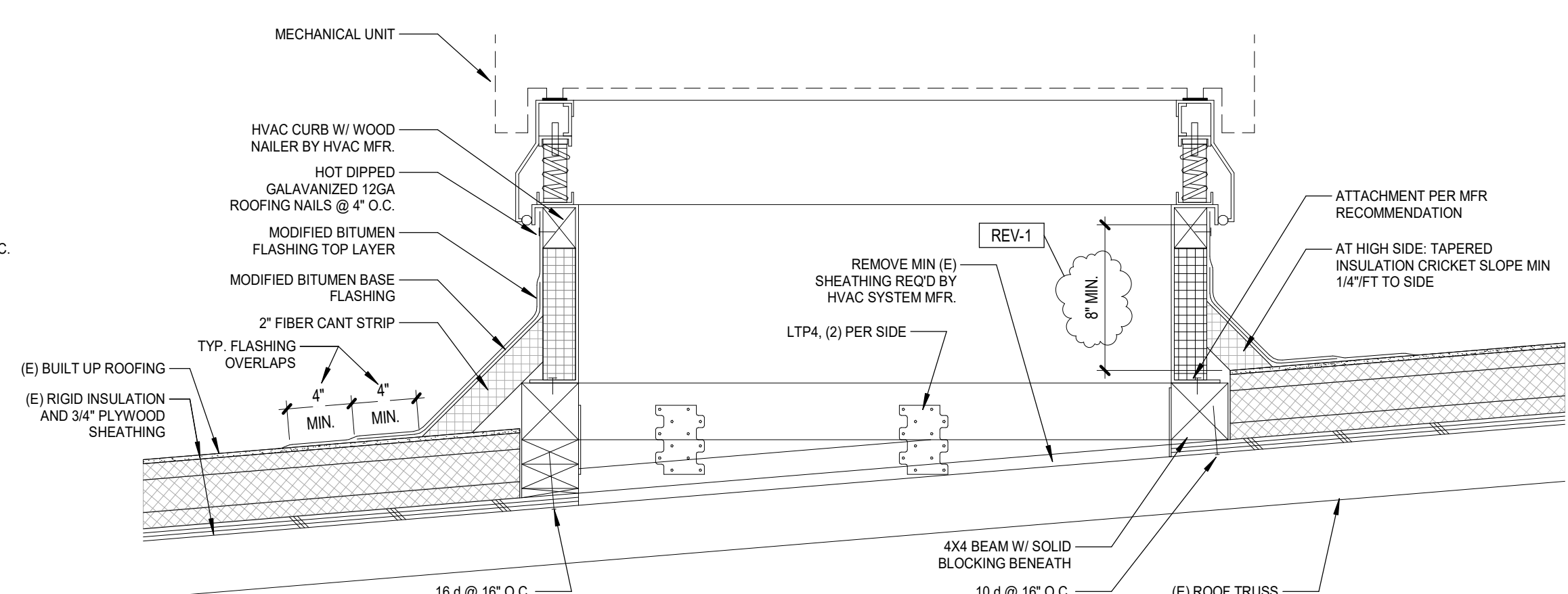
**7** TYPICAL HOUSEKEEPING PAD  
3/4" = 1'-0"



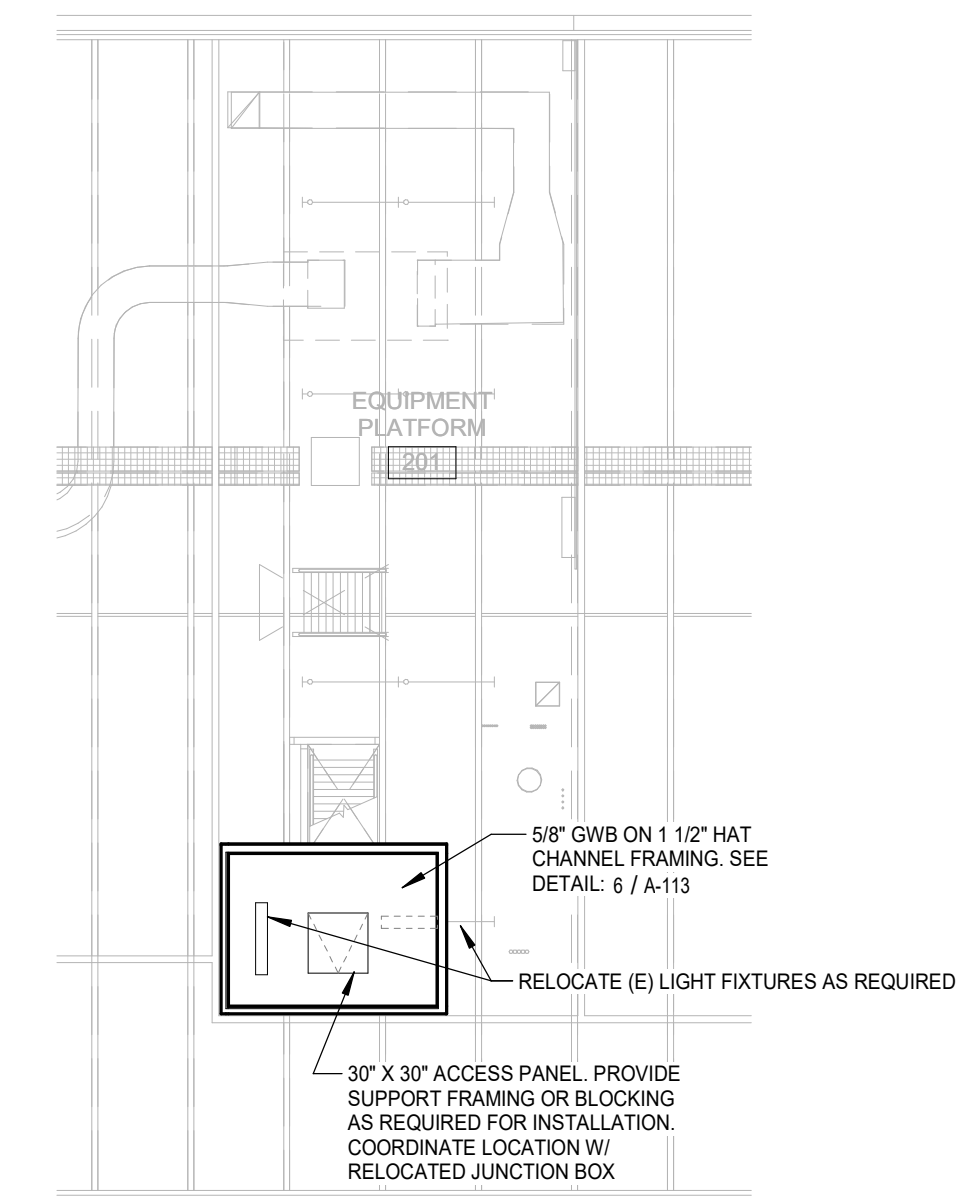
**6** DETAIL- TOP OF WALL AT COMPRESSOR ROOM  
3" = 1'-0"



**4** DOOR ELEVATION AT SPRAY ROOM  
1/4" = 1'-0"



**5** ROOF CURB  
1 1/2" = 1'-0"



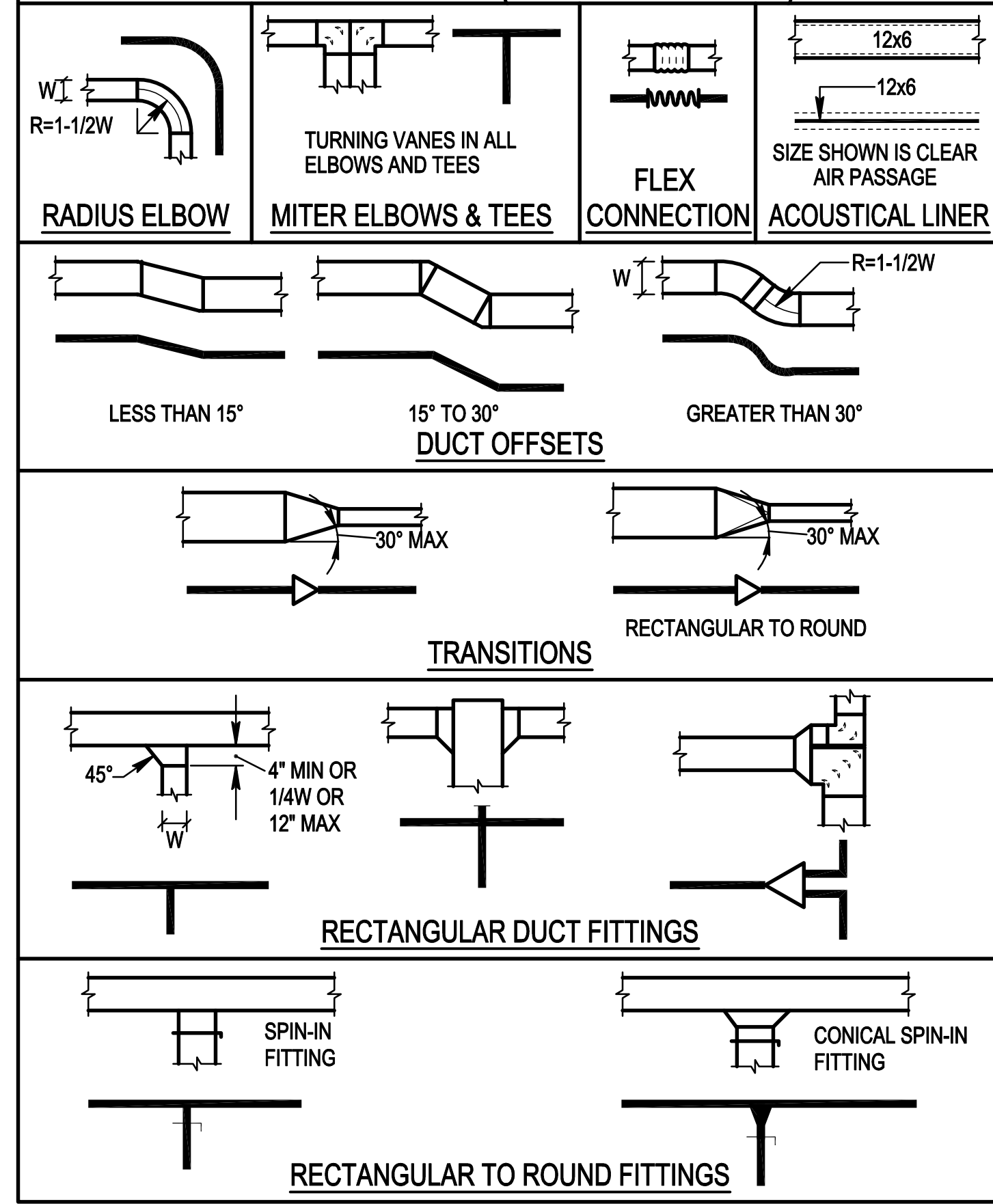
**3** MEZANNINE REFLECTED CEILING PLAN  
1/8" = 1'-0"



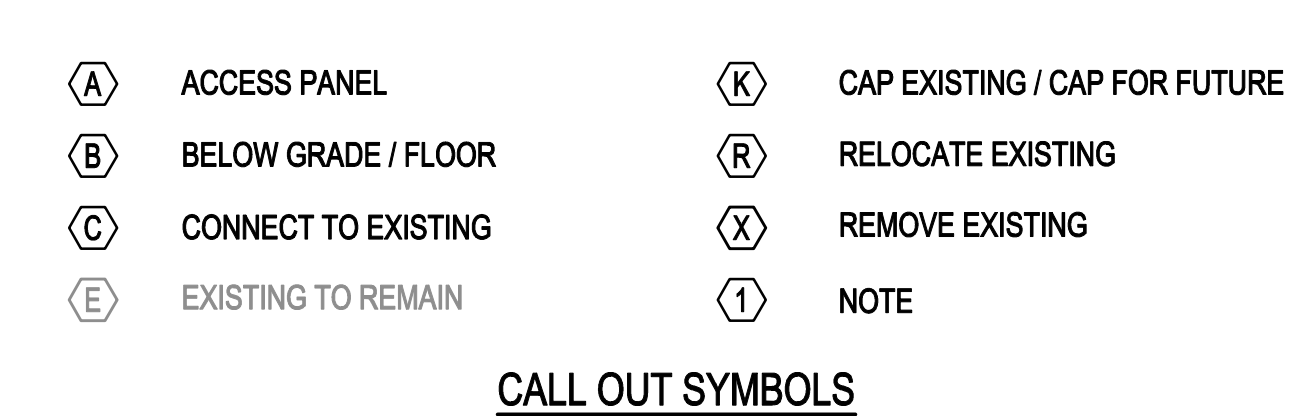
### STANDARD MECHANICAL ABBREVIATIONS

|        |                                |         |                                |
|--------|--------------------------------|---------|--------------------------------|
| AF     | AIRFOIL                        | IE      | INVERT ELEVATION               |
| AFF    | ABOVE FINISHED FLOOR           | IN      | INCHES                         |
| AHP    | APPARATUS HOUSING PLENUM       | INSUL   | INSULATION                     |
| ALT    | ALTERNATIVE                    | ISOL    | ISOLAT(OR)(ION)                |
| AL     | ALUMINUM                       | KW      | KILOWATT                       |
| APD    | AIR PRESSURE DROP              | KWH     | KILOWATT HOUR                  |
| APPROX | APPROXIMATELY                  | L       | LENGTH                         |
| ARCH   | ARCHITECT(URAL)                | LAT     | LEAVING AIR TEMP               |
| AUTO   | AUTOMATIC                      | LB      | POUND                          |
| BDD    | BACKDRAFT DAMPER               | LDB     | LEAVING DRY BULB               |
| BI     | BACKWARD INCLINED              | LF      | LINEAR FEET                    |
| BLDG   | BUILDING                       | LFT     | LEAVING FLUID TEMPERATURE      |
| BSMT   | BASEMENT                       | LVB     | LEAVING WET BULB               |
| BTU    | BRITISH THERMAL UNIT           | LWT     | LEAVING WATER TEMPERATURE      |
| BTUH   | BRITISH THERMAL UNITS PER HOUR | LX      | MAXIMUM                        |
| CFH    | CUBIC FEET PER HOUR            | MBH     | THOUSAND BTU PER HOUR          |
| CFM    | CUBIC FEET PER MINUTE          | MFR     | MANUFACTURER                   |
| CFS    | CUBIC FEET PER SECOND          | MIN     | MINIMUM                        |
| CLG    | CEILING OR COILING             | MISC    | MISCELLANEOUS                  |
| CO     | CLEANOUT                       | MTD     | MOUNTED                        |
| CONN   | CONNECTION                     | NC      | NORMALLY CLOSED                |
| CONT   | CONTINUE(ED)(UATION)           | NIC     | NOT IN CONTRACT                |
| CL     | CENTERLINE                     | NO      | NORMALLY OPEN                  |
| DDC    | DIRECT DIGITAL CONTROL         | OAD     | OUTSIDE AIR DAMPER             |
| DEFL   | DEFLECTION                     | OC      | ON CENTER DISTANCE             |
| DN     | DOWN                           | OSA     | OUTSIDE AIR                    |
| DP     | DEW POINT                      | PH      | PHASE                          |
| DWDI   | DOUBLE WIDTH DOUBLE INLET      | PP      | POLYPROPYLENE                  |
| DWG    | DRAWING                        | PSI     | POUNDS PER SQUARE INCH         |
| EA     | EXHAUST AIR                    | PVC     | POLYVINYL CHLORIDE             |
| EAD    | EXHAUST AIR DAMPER             | PVS     | PVC COATED STEEL               |
| EAT    | ENTERING AIR TEMPERATURE       | R (RAD) | RADIUS                         |
| EDB    | ENTERING DRY BULB              | RA      | RETURN AIR                     |
| EFF    | EFFICIENCY                     | RAD     | RETURN AIR DAMPER              |
| EFT    | ENTERING FLUID TEMPERATURE     | REV     | REVISION                       |
| ELEC   | ELECTRIC(AL)                   | RH      | RELATIVE HUMIDITY              |
| ELEV   | ELEVATION                      | RPM     | REVOLUTIONS PER MINUTE         |
| ENGR   | ENGINEER                       | SA      | SUPPLY AIR                     |
| EQ     | EQUAL                          | SCFM    | STANDARD CUBIC FEET PER MINUTE |
| EQUIP  | EQUIPMENT                      | SD      | SMOKE DAMPER                   |
| ESP    | EXTERNAL STATIC PRESSURE       | SECT    | SECTION                        |
| EWB    | ENTERING WET BULB              | SENS    | SENSIBLE                       |
| EWT    | ENTERING WATER TEMPERATURE     | SIM     | SIMILAR                        |
| EX     | EXTRACTOR                      | SP      | STATIC PRESSURE                |
| EXH    | EXHAUST                        | SPEC    | SPECIFICATION                  |
| EXIST  | EXISTING                       | SQ      | SQUARE                         |
| EXP    | EXPANSION                      | SF      | SQUARE FOOT(FEET)              |
| F      | DEGREES FAHRENHEIT             | SQ IN   | SQUARE INCH(ES)                |
| FC     | FORWARD CURVED                 | SS      | STAINLESS STEEL                |
| FIG    | FIGURE                         | STL     | STEEL                          |
| FILT   | FILTER                         | STRUCT  | STRUCTUR(E)AL                  |
| FLEX   | FLEXIBLE                       | SWP     | SINGLE WALL PLENUM             |
| FPD    | FLUID PRESSURE DROP            | SWSI    | SINGLE WIDTH SINGLE INLET      |
| FPM    | FEET PER MINUTE                | TEMP    | TEMPERATURE                    |
| FPS    | FEET PER SECOND                | TSP     | TOTAL STATIC PRESSURE          |
| FT     | FEET/FOOT                      | TYP     | TYPICAL                        |
| FTR    | FINNED TUBE RADIATOR           | V       | VOLTS                          |
| FU     | FIXTURE UNIT                   | VD      | VOLUME DAMPER                  |
| FUT    | FUTURE                         | VEL     | VELOCITY                       |
| FV     | FACE VELOCITY                  | VERT    | VERTICAL                       |
| GA     | GAGE/GAUGE                     | VFD     | VARIABLE FREQUENCY DRIVE       |
| GAL    | GALLON                         | VTR     | VENT THROUGH ROOF              |
| GALV   | GALVANIZED                     | W       | WIDTH                          |
| GLY    | GLYCOL                         | WG      | WATER GAUGE                    |
| GPH    | GALLONS PER HOUR               | WPD     | WATER PRESSURE DROP            |
| GPM    | GALLONS PER MINUTE             | WTD     | WATER TEMPERATURE DROP         |
| H      | HEIGHT                         | WTR     | WATER TEMPERATURE RISE         |
| HORIZ  | HORIZONTAL                     | W       | WITH                           |
| HP     | HORSEPOWER                     | W/O     | WITHOUT                        |
| HTG    | HEATING                        |         |                                |
| ID     | INSIDE(DIAMETER/DIMENSION)     |         |                                |

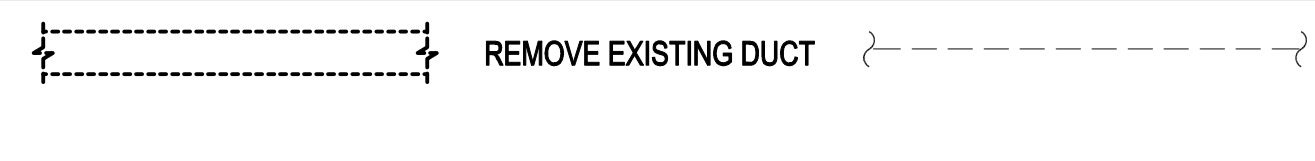
### DUCT DETAILS (LOW VELOCITY)



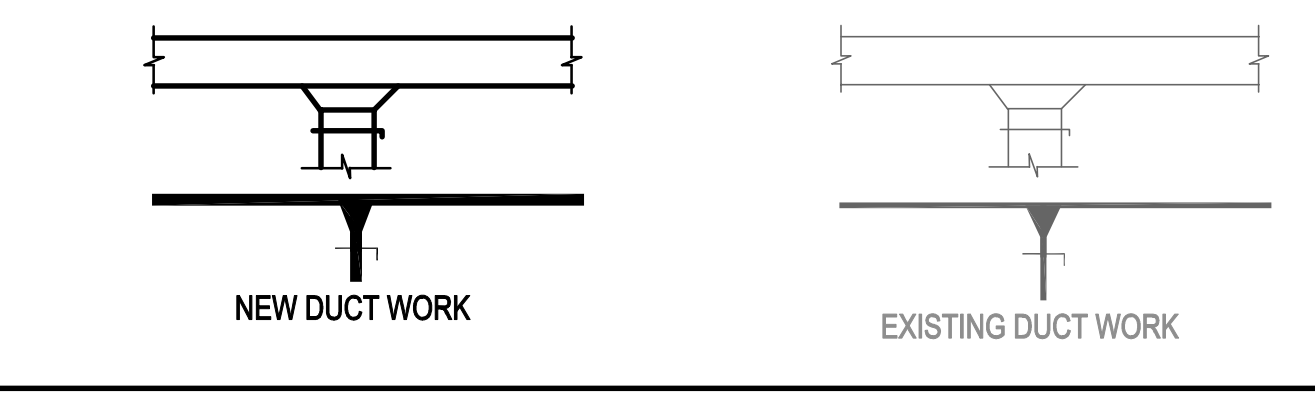
### SYMBOLS



### DEMOLITION LEGEND



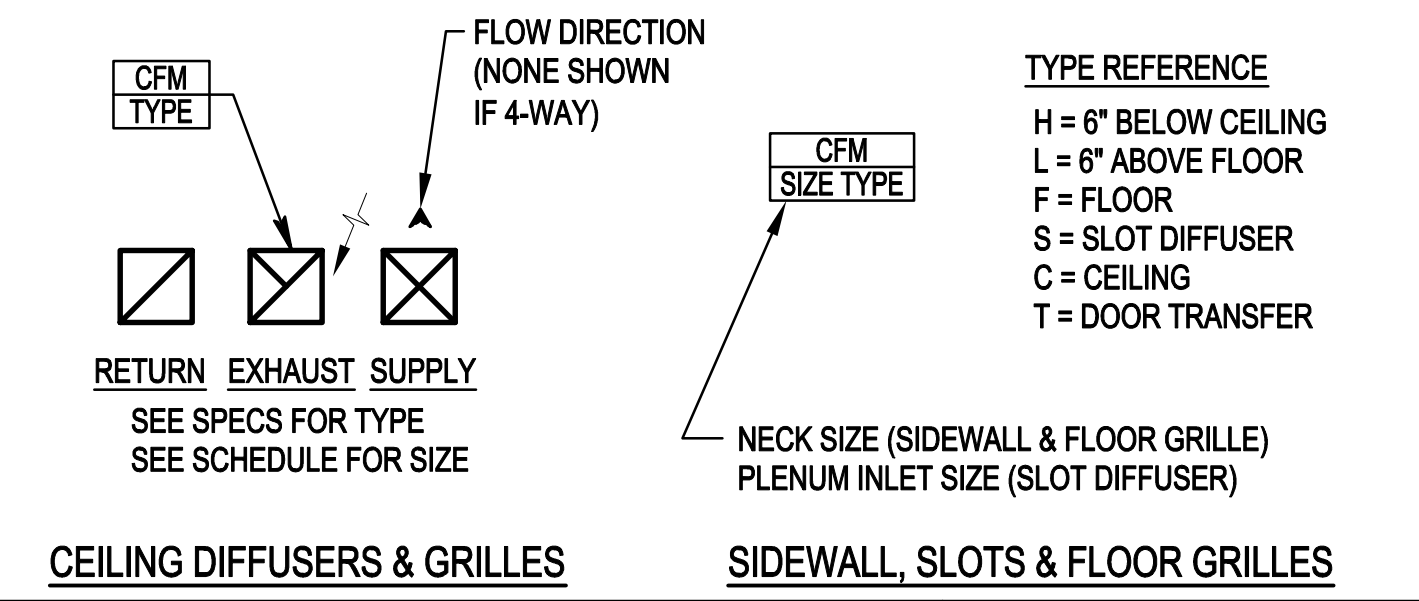
### NEW AND EXISTING WORK



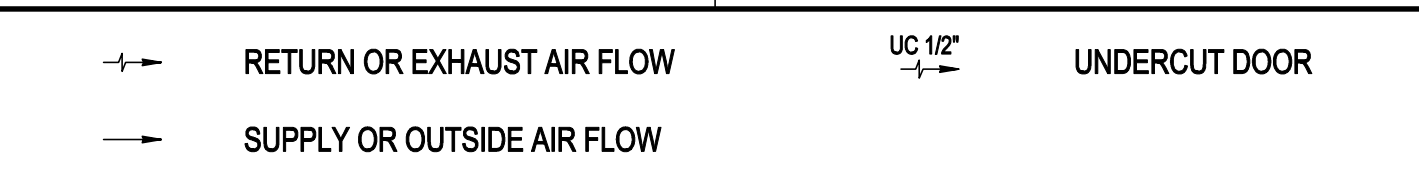
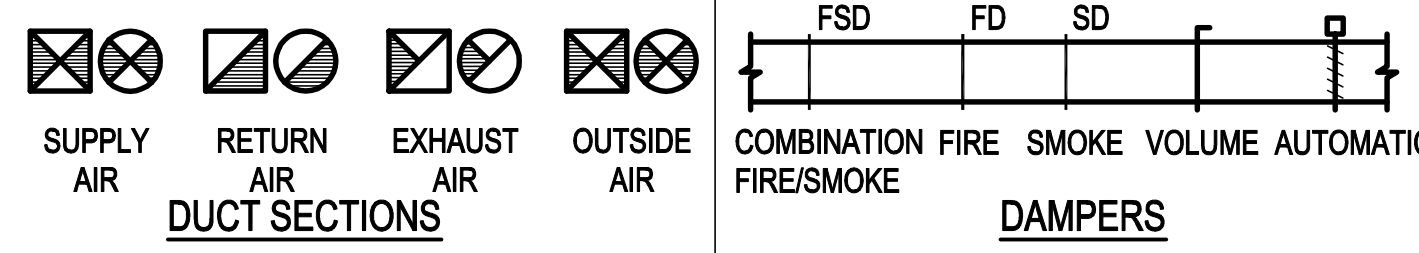
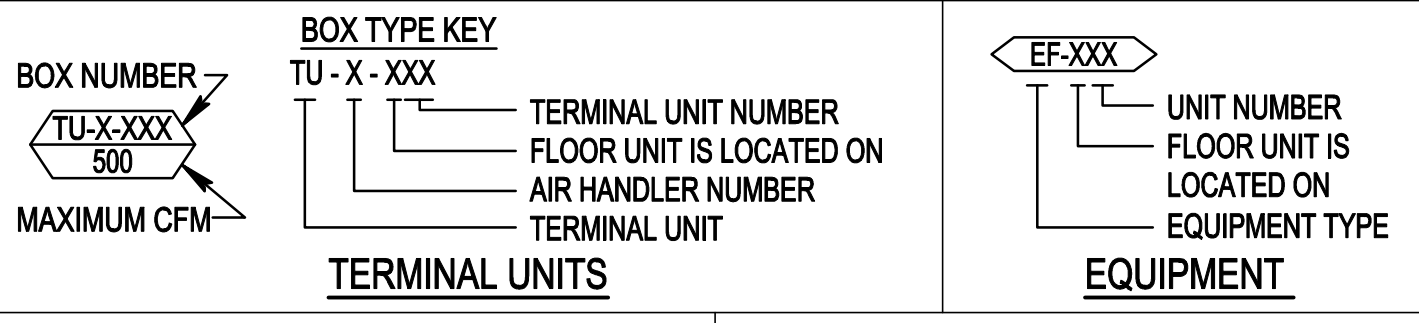
### GENERAL NOTE

THIS IS A STANDARD LEGEND SHEET, THEREFORE, SOME SYMBOLS MAY APPEAR ON THIS SHEET THAT DO NOT APPEAR ON THE DRAWINGS.

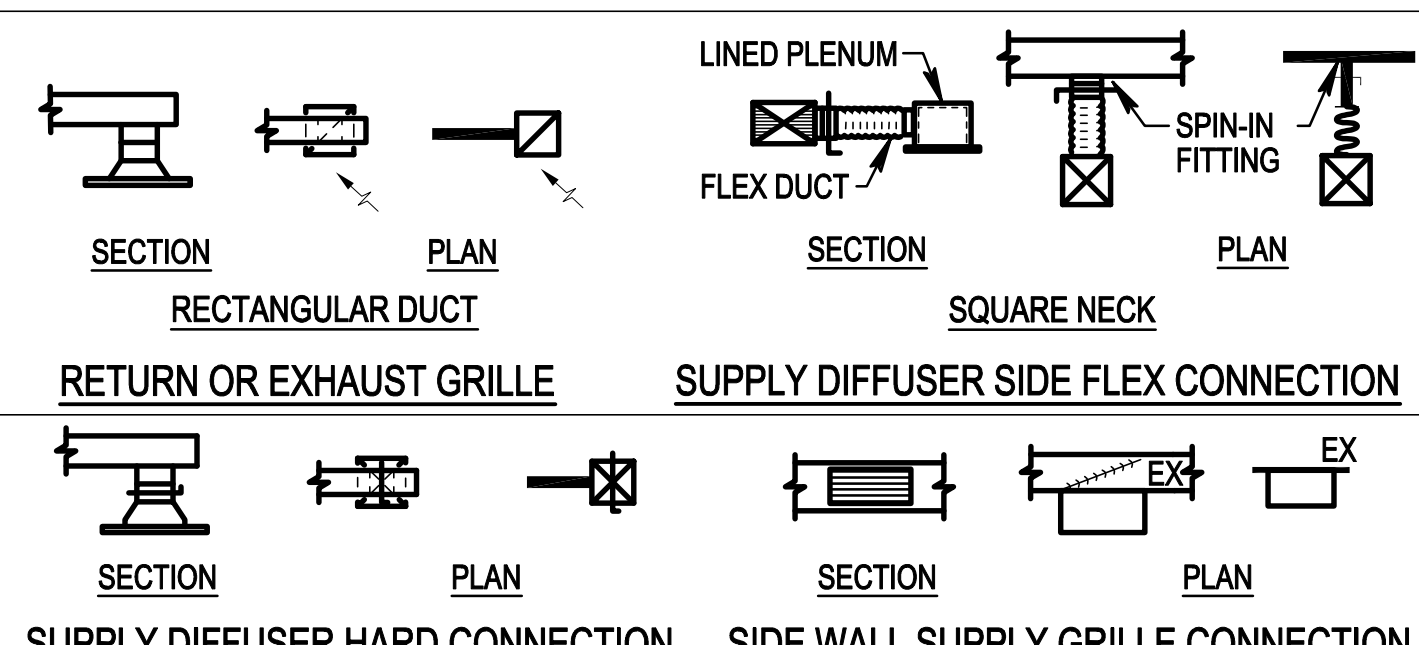
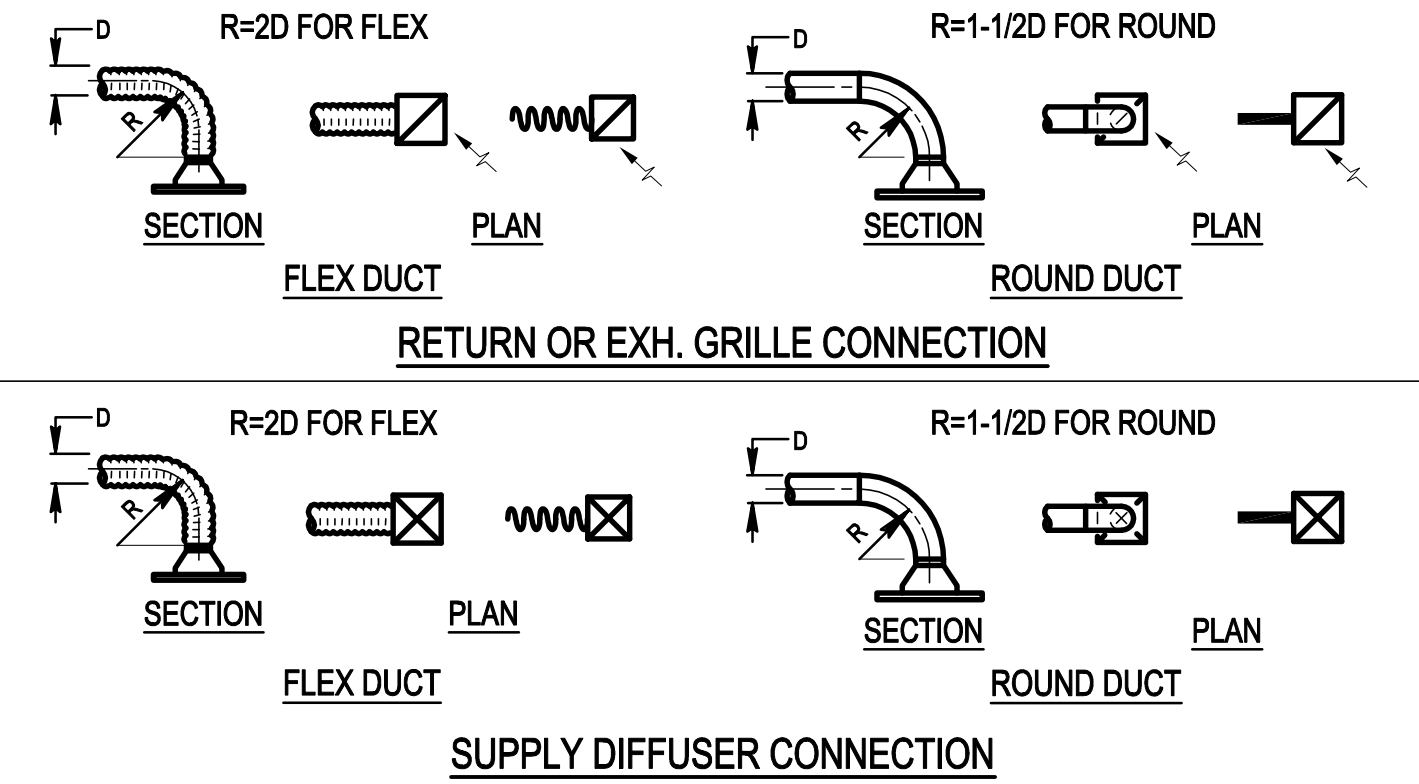
### DUCT LEGEND



### CEILING DIFFUSERS & GRILLES



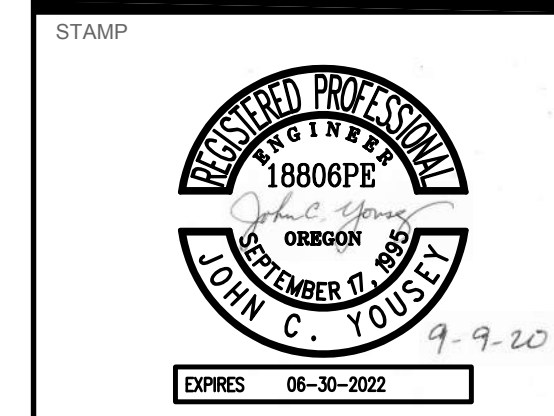
### LOW PRESSURE DUCTWORK



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**4J CHURCHILL HS WOODSHOP REMODEL**

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SYMBOLS, LEGENDS AND ABBREVIATIONS - MECHANICAL

# M-001

### DUCT SILENCERS

| TAG    | LOCATION      | SERVICE        | TYPE   | DIRECTION | AIRFLOW (CFM) | MAX TSP (IN WG) | DYNAMIC INSERTION LOSS (dB) AT OCTAVE BAND |        |        |        |          |          |          | SIZE     |            |             | APPROX. WEIGHT (LBS) | MANUFACTURER & MODEL | NOTES           |             |
|--------|---------------|----------------|--------|-----------|---------------|-----------------|--|--------|--------|--------|----------|----------|----------|----------|------------|-------------|----------------------|----------------------|-----------------|-------------|
|        |               |                |        |           |               |                 | 63 HZ                                      | 125 HZ | 250 HZ | 500 HZ | 1,000 HZ | 2,000 HZ | 4,000 HZ | 8,000 HZ | WIDTH (IN) | HEIGHT (IN) |                      |                      |                 | LENGTH (IN) |
| DS-101 | DC-101 OUTLET | DUST COLLECTOR | ELBOW  | FORWARD   | 10,200        | 0.61            | 4  | 7      | 10     | 14     | 24       | 18       | 18       | 17       | 58         | 14          | 42+24                | 320                  | VAW SYSTEMS REA | 1           |
| DS-102 | DC-101 RETURN | DUST COLLECTOR | INLINE | FORWARD   | 10,200        | 0.25            | 12   | 20     | 35     | 38     | 49       | 36       | 31       | 19       | 40         | 40          | 84                   | 500                  | VAW SYSTEMS RSA | 2           |

**GENERAL NOTES:**

- A. DIRECTION INDICATES PERFORMANCE RELATIVE TO AIRFLOW DIRECTION. FORWARD INDICATES NOISE AND AIRFLOW MOVE IN THE SAME DIRECTION, REVERSE INDICATES NOISE AND AIRFLOW MOVE IN OPPOSITE DIRECTIONS.
- B. PERFORMANCE DATA OBTAINED IN ACCORDANCE WITH ASTM E477 UNDER IDEAL FLOW CONDITIONS.

**NOTES:**

- 1. HIGH VELOCITY SILENCER: MAXIMUM FACE VELOCITY OF 2,000 FPM.
- 2. MEDIUM VELOCITY SILENCER: MAXIMUM FACE VELOCITY OF 1,200 FPM.
- 3. LOW VELOCITY SILENCER: MAXIMUM FACE VELOCITY OF 750 FPM.

### MAKE-UP AIR UNIT

| TAG NUMBER | LOCATION | SERVICE    | MAX OSA CFM | MIN OSA CFM | PRE-FILTER MERV RATING | FAN            |           |          | NATURAL GAS FIRED HEATING COIL |             |             |              |          |          | APPROX. WEIGHT (LBS) | MANUFACTURER & MODEL | NOTES        |          |
|------------|----------|------------|-------------|-------------|------------------------|----------------|-----------|----------|--------------------------------|-------------|-------------|--------------|----------|----------|----------------------|----------------------|--------------|----------|
|            |          |            |             |             |                        | TYPE           | MOTOR BHP | MOTOR HP | VFD                            | VOLT/ PHASE | INPUT (MBH) | OUTPUT (MBH) | CONTROL  | EAT (°F) |                      |                      |              | LAT (°F) |
| MAU-R01    | ROOF     | SPRAY ROOM | 5250        | 5250        | 8                      | FC CENTRIFUGAL | 3.24      | 5        | NO                             | 480/3       | 293         | 270          | MOD 25.1 | 22       | 70                   | 900                  | GREENHECK DG | 1        |

**GENERAL NOTES:**

- A. PROVIDE FLEXIBLE EQUIPMENT CONNECTION AT DUCT CONNECTIONS.

**NOTES:**

- 1. WITH WEATHER HOOD, AUTO OUTDOOR AIR DAMPER, DOWNWARD SUPPLY, END INLET

### FANS

| TAG    | LOCATION | SERVICE               | TYPE                | DRIVE  | AIRFLOW   |             |                 | ELECTRICAL  |             |             |                  | APPROX. WEIGHT (LBS) | MANUFACTURER & MODEL | NOTES |
|--------|----------|-----------------------|---------------------|--------|-----------|-------------|-----------------|-------------|-------------|-------------|------------------|----------------------|----------------------|-------|
|        |          |                       |                     |        | MAX (CFM) | TSP (IN WG) | FAN SPEED (RPM) | VOLT/ PHASE | POWER (BHP) | RATING (HP) | GEN. POWER (Y/N) |                      |                      |       |
| EF-R01 | ROOF     | AIR COMPRESSOR CLOSET | ROOFTOP - DOWNBLAST | DIRECT | 1,400     | 0.5         | 1,047           | 120/1       | 0.24        | 1/2         | NO               | 70                   | GREENHECK G          | 1     |

**GENERAL NOTES:**

- A. FURNISH WITH MANUFACTURER'S CURB AND AUTOMATIC DAMPER W/ 120 VOLT 2-POSITION ACTUATOR.

**NOTES:**

- 1. EC MOTOR.

### DUST COLLECTOR

| TAG NUMBER | LOCATION | SERVICE   | TYPE      | AIRFLOW |             | MOTOR   |        |             | APPROX. WEIGHT (LBS) | MANUFACTURER & MODEL | NOTES                                    |     |
|------------|----------|-----------|-----------|---------|-------------|---------|--------|-------------|----------------------|----------------------|--|-----|
|            |          |           |           | CFM     | ESP (IN WG) | FAN RPM | FAN HP | VOLT/ PHASE |                      |                      |  | VFD |
| DC-101     | EXTERIOR | WOOD SHOP | CARTRIDGE | 10200   | 14          | 1760    | 40     | 460/3       | YES                  | 4000/1900            | AMERICAN AIR FILTER PULSEPAK PRIME 10-2H |     |

**GENERAL NOTES:**

- A. DUST COLLECTION SYSTEM INCLUDES SEPARATELY MOUNTED EXHAUST FAN, ABORT GATE, CONTROL PANEL, AND SPARK DETECTION SYSTEM.
- B. DUCT SILENCERS ARE RESPONSIBILITY OF DUST COLLECTION SYSTEM MANUFACTURER. SEE SEPARATE SCHEDULE.

- C. WEIGHT SHOWN IS FOR DUST COLLECTION UNIT / FAN.

### SPRAY BOOTH

| TAG NUMBER | LOCATION   | SERVICE   | STYLE     | FAN TYPE   | AIRFLOW |             |         | WORKING DIMENSIONS |                |                 | MANUFACTURER & MODEL               | NOTES |
|------------|------------|-----------|-----------|------------|---------|-------------|---------|--------------------|----------------|-----------------|------------------------------------|-------|
|            |            |           |           |            | CFM     | ESP (IN WG) | FAN RPM | LENGTH (INCHES)    | WIDTH (INCHES) | HEIGHT (INCHES) |                                    |       |
| SB-101     | SPRAY ROOM | WOOD SHOP | CROSSFLOW | TUBE-AXIAL | 5250    | 0.50        | 1760    | 72                 | 72             | 84              | GLOBAL FINISHING SOLUTIONS IFP-676 |       |

**GENERAL NOTES:**

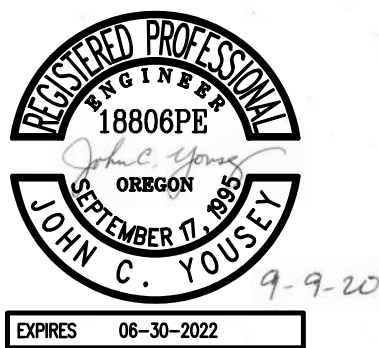
- A. MOUNT ON FLOOR.
- B. FAN W/ MOTOR COVER AND METAL SUPPORT STAND TO BE FURNISHED W/ SPRAY BOOTH. INSTALL ON ROOF. SEE MECH ROOF PLAN.

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**EQUIPMENT SCHEDULES - MECHANICAL**

# M-002

VENTILATION SCHEDULE - MULTIPLE SPACES - OREGON

HVAC-3

| LOCATION  | FLOOR AREA (SF) | PRIMARY AIRFLOW RATE (CFM) | OCCUPANCY CLASSIFICATION | PEOPLE OUTDOOR AIRFLOW RATE Rp (CFM/PERSON) | AREA OUTDOOR AIRFLOW RATE Ra (CFM/SF) | DEFAULT OCCUPANT DENSITY (PEOPLE/1000SF) | CODE POPULATION | DESIGN POPULATION | OUTDOOR AIRFLOW RATE Vbz (CFM) | NOTES |
|-----------|-----------------|----------------------------|--------------------------|---|---------------------------------------|--|-----------------|-------------------|--------------------------------|-------|
| WOOD SHOP | 2800            | 2900                       | Wood/metal shopsg        | 10  | 0.18                                  | 20                                       | 56.0            | 30.0              | 804.0                          |       |
|           |                 |                            |                          | -   | -                                     | -  | -               | -                 | -                              |       |
|           |                 |                            |                          | -   | -                                     | -  | -               | -                 | -                              |       |
| TOTALS:   | 2800            | 2900                       |                          |   |                                       |  | 56              | 30                | 804                            |       |

TOTAL AIRFLOW: 2900  
 SYSTEM POPULATION: 30  
 SYSTEM VENTILATION EFFICIENCY - Ev: 1.00  
 OCCUPANT DIVERSITY - D: 1.00  
 UNCORRECTED OUTDOOR AIR INTAKE - Vou: 804  
**CODE REQUIRED OUTDOOR AIR INTAKE FLOWRATE - Vot: 804**

GENERAL NOTES:

- A. SYSTEM OUTDOOR AIR CALCULATION IS BASED ON THE SECTION 403 OF THE 2019 OREGON MECHANICAL SPECIALTY CODE.
- B. REFER TO AIR HANDLING UNIT SCHEDULE FOR ACTUAL OUTDOOR AIR FLOW RATE.

NOTES:

- 1. DESIGN OCCUPANCY REPRESENTS THE AVERAGE OCCUPANCY, WHICH IS NOT LESS THAN 1/2 THE CODE OCCUPANCY.

OWNER-FURNISHED WOODWORKING EQUIPMENT

| TAG    | TOOL               | DUCT CONN (IN)   | CFM | ELECTRICAL  |      |             | MANUFACTURER | MODEL           | NOTES |
|--------|--------------------|------------------|-----|-------------|------|-------------|--------------|-----------------|-------|
|        |                    |                  |     | VOLT/ PHASE | AMPS | RATING (HP) |              |                 |       |
| ML-1   | TABLE SAW          | 4                | 400 | 230/1       | 13   | 3           | SAWSTOP      | PCS31230        |       |
| ML-2   | TABLE SAW          | 4                | 400 | 230/3       | 13   | 3           | SAWSTOP      | CB33230         |       |
| ML-3   | TABLE SAW          | 4                | 400 | 230/1       | 13   | 3           | ROCKWELL     | 34-476 (34-440) |       |
| ML-4   | PLANER             | 4                | 400 | 230/1       | 13   | 3           | JET          | JWP-15DX        |       |
| ML-5   | DRUM SANDER        | 4" x qty 2 to 5" | 600 | 230/1       | 25   | 5           | SHOP FOX     | W1678           |       |
| ML-6   | SHAPER             | 4                | 400 | 230/1       | 16   | 3           | JET          | JWS-25CS        |       |
| ML-7   | CNC                | 4                | 400 | 230/1       | 10   | 3           | POWERMATIC   | PM-2X4SPK       |       |
| ML-8   | BAND SAW           | 4" x qty 2 to 5" | 600 | 115/1       | 15   | 1.75        | JET          | JWBS-14SFX      |       |
| ML-9   | BAND SAW           | 4" x qty 2 to 5" | 600 | 115/1       | 15   | 1.75        | JET          | JWBS14SFX       |       |
| ML-10  | BAND SAW           | 4                | 400 | 115/1       | 15   | 1.75        | JET          | JWBS-14X        |       |
| ML-11  | JOINTER            | 4                | 400 | 115/1       | 13   | 1           | JET          | JJ-6CSDX        |       |
| ML-12  | OSCILLATING SANDER | 4                | 400 | 115/1       | 9    | 1.5         | JET          | OES-80CS        |       |
| ML-13  | BELT/DISC SANDER   | 4                | 400 | 115/1       | 12.8 | 1.5         | JET          | JSG-6DC         |       |
| ML-14  | BELT/DISC SANDER   | 4                | 400 | 115/1       | 12.8 | 1.5         | DELTA        | JSG-6DC         |       |
| ML-22  | MITER SAW          | 3                | 200 | 115/1       | 15   | 1           | DeWALT       | DWS780          | 1     |
| ML-23  | MITER SAW          | 3                | 200 | 115/1       | 15   | 1           | HITACHI      | C10FCE2         | 1     |
| ML-24  | MITER SAW          | 3                | 200 | 115/1       | 15   | 1           | HITACHI      | C10FCE2         | 1     |
| ML-25  | MITER SAW          | 3                | 200 | 115/1       | 15   | 1           | HITACHI      | C10FCE2         | 1     |
| ML-30  | SPINDLE SANDER     | 4                | 400 | 115/1       | 7.5  | 0.5         | JET          | JBOS-5          |       |
| ML-31  | ROUTER TABLE       | 4                | 400 | 115/1       | 10   | 0.5         | PORTER CABLE | 690LR           |       |
| ML-32  | ROUTER TABLE       | 4                | 400 | 115/1       | 10   | 0.5         | PORTER CABLE | 690LR           |       |
| ML-33  | ROUTER TABLE       | 4                | 400 | 115/1       | 10   | 0.5         | PORTER CABLE | 6902            |       |
| FUTURE | TBD                | FUT 4            | 400 |             |      |             |              |                 | 2     |
| FUTURE | TBD                | FUT 4            | 400 |             |      |             |              |                 | 2     |
| FUTURE | TBD                | FUT 4            | 400 |             |      |             |              |                 | 2     |
| FUTURE | SANDING TABLE      | FUT 4            | 400 |             |      |             |              |                 | 2     |

GENERAL NOTES:

- A. PROVIDE FLEX CONNECTION, MAX LENGTH 3 FT, AT FINAL CONNECTION TO EQUIPMENT
- B. PROVIDE BLAST GATE IN HARD DUCT FOR EACH PIECE OF EQUIPMENT
- C. BALANCE EACH PIECE OF EQUIPMENT TO SCHEDULED AIR QUANTITY. DO NOT ADJUST BLAST GATES AFTER BALANCING IS COMPLETE.

NOTES:

- 1. PROVIDE TRANSITION FROM 2" CONNECTION AT EQUIPMENT TO 3" FLEX
- 2. SEE PLAN FOR LOCATION OF FUTURE CONNECTION

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EQUIPMENT SCHEDULES - MECHANICAL

**M-003**

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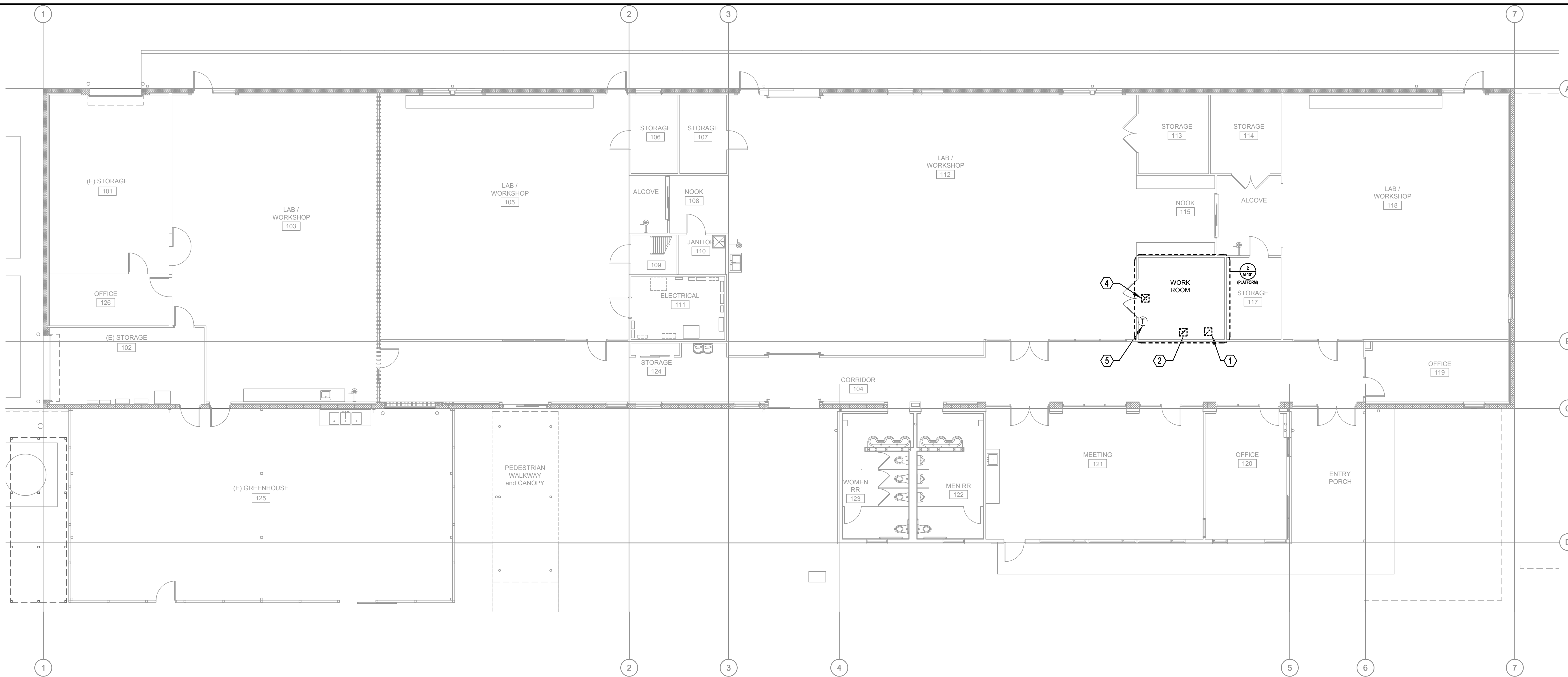
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**DEMO FLOOR PLANS  
- MECHANICAL**

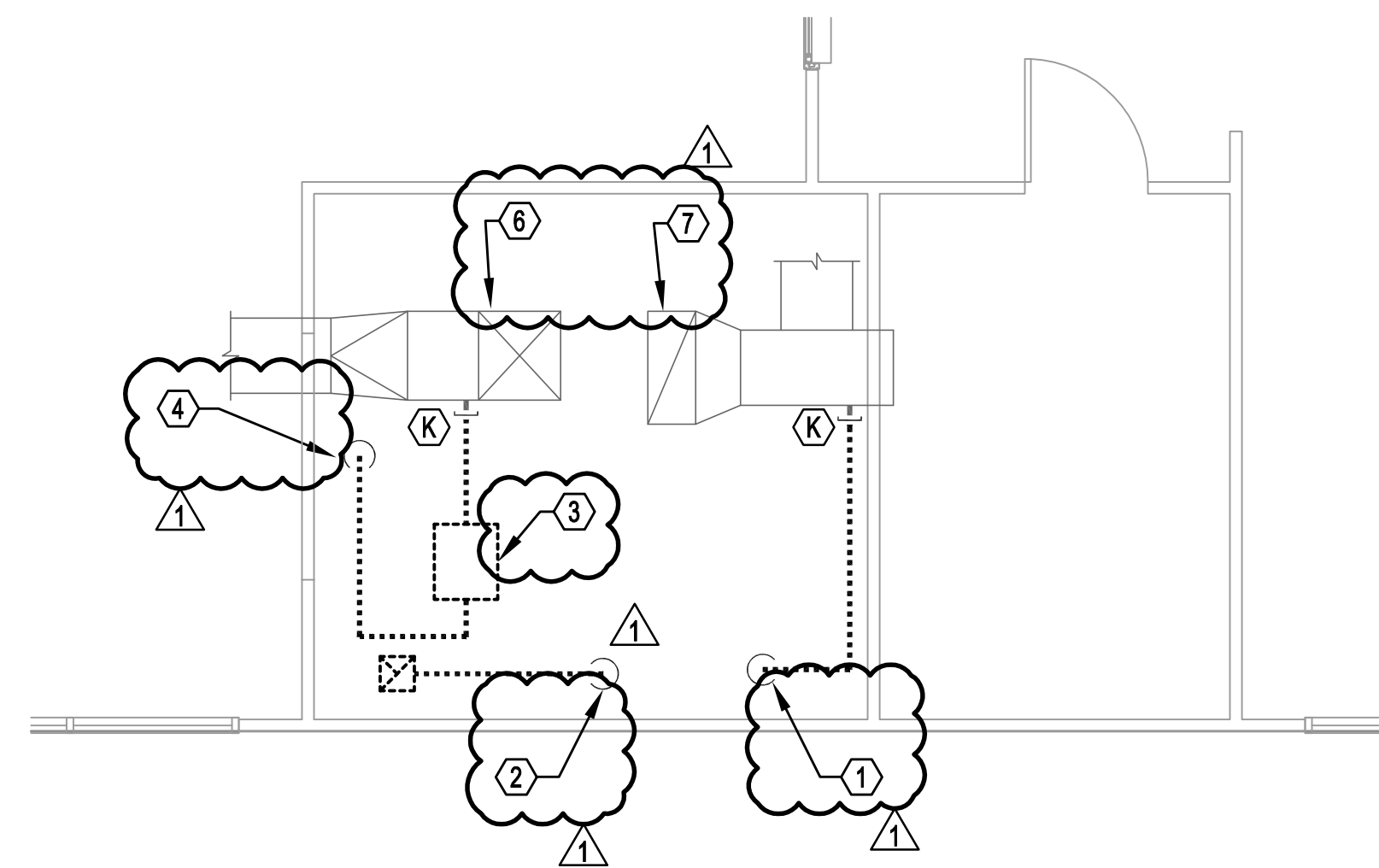
# M-101



**1 DEMO GROUND FLOOR PLAN - MECHANICAL**  
SCALE: 1/8" = 1'-0"

### NOTES:

1. DEMO RETURN GRILLE AND DUCT. CAP AT MAIN.
2. DEMO EXHAUST GRILLE, DUCT AND RISER TO EXHAUST FAN ON ROOF.
3. DEMO TERMINAL UNIT.
4. DEMO SUPPLY GRILLE AND SUPPLY DUCT. CAP AT MAIN.
5. DEMO THERMOSTAT SERVING TERMINAL UNIT.
6. EXISTING 24x25 SA UP TO HVAC-3 ON ROOF.
7. EXISTING 33x14 RA UP TO HVAC-3 ON ROOF.



**2 MECHANICAL PLATFORM  
DEMO ENLARGED PLAN - MECHANICAL**  
SCALE: 1/4" = 1'-0"

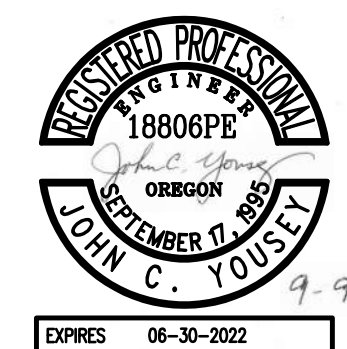


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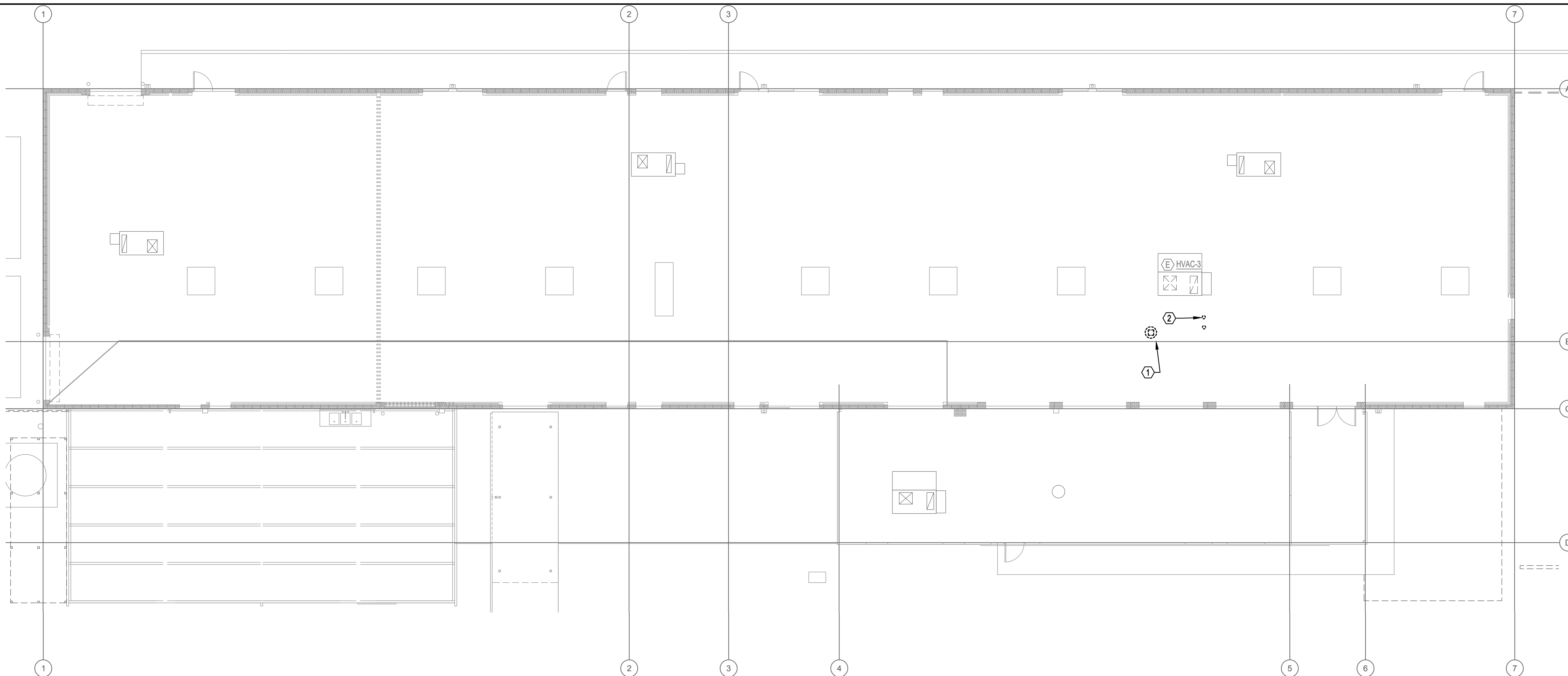
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**DEMO ROOF PLAN -  
MECHANICAL**

**M-103**



**1 DEMO ROOF PLAN - MECHANICAL**  
M-103 SCALE: 1/8" = 1'-0"

**NOTES:**

1. DEMO EXHAUST FAN E-3. PATCH ROOF. SEE ARCH.
2. DEMO GAS FLUE AND CAP (TYP 2). PATCH ROOF. SEE ARCH.

Date: 9/9/20 Time: 9:20am File: \\pae-engineers.com\Projects\2020\20-1117 - Churchill High School Wood Shop\_01 Production\02\_CAD\M-103.dwg User: jessicabryant

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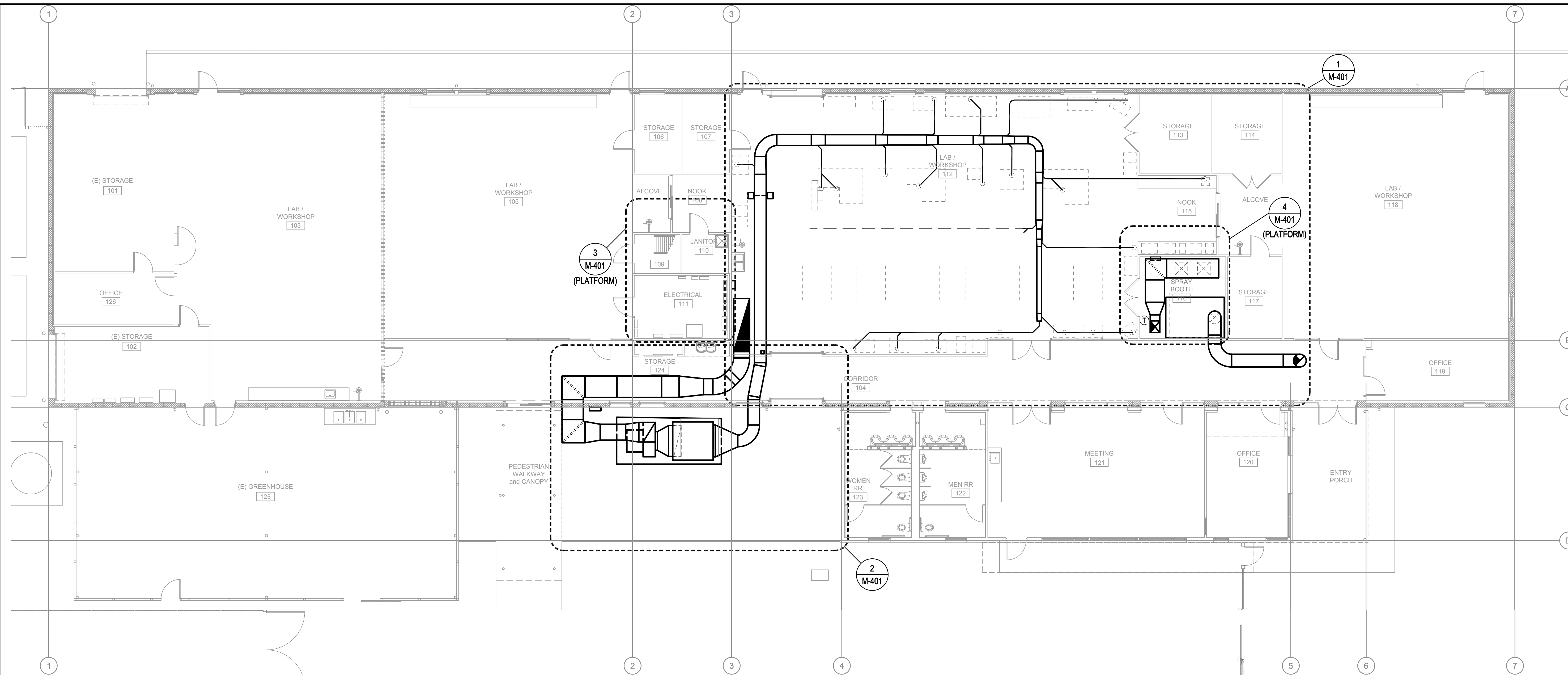
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**FLOOR PLAN -  
MECHANICAL**

# M-201



**1 FLOOR PLAN - MECHANICAL**  
SCALE: 1/8" = 1'-0"

### GENERAL NOTES:

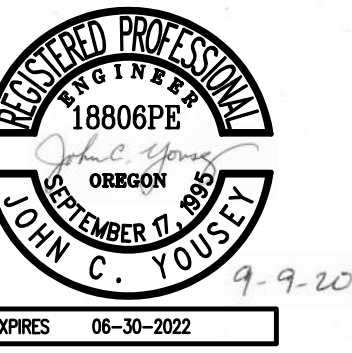
- A. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.
- B. ALL DETAILS APPLY TO THIS SHEET WHETHER TAGGED OR NOT.

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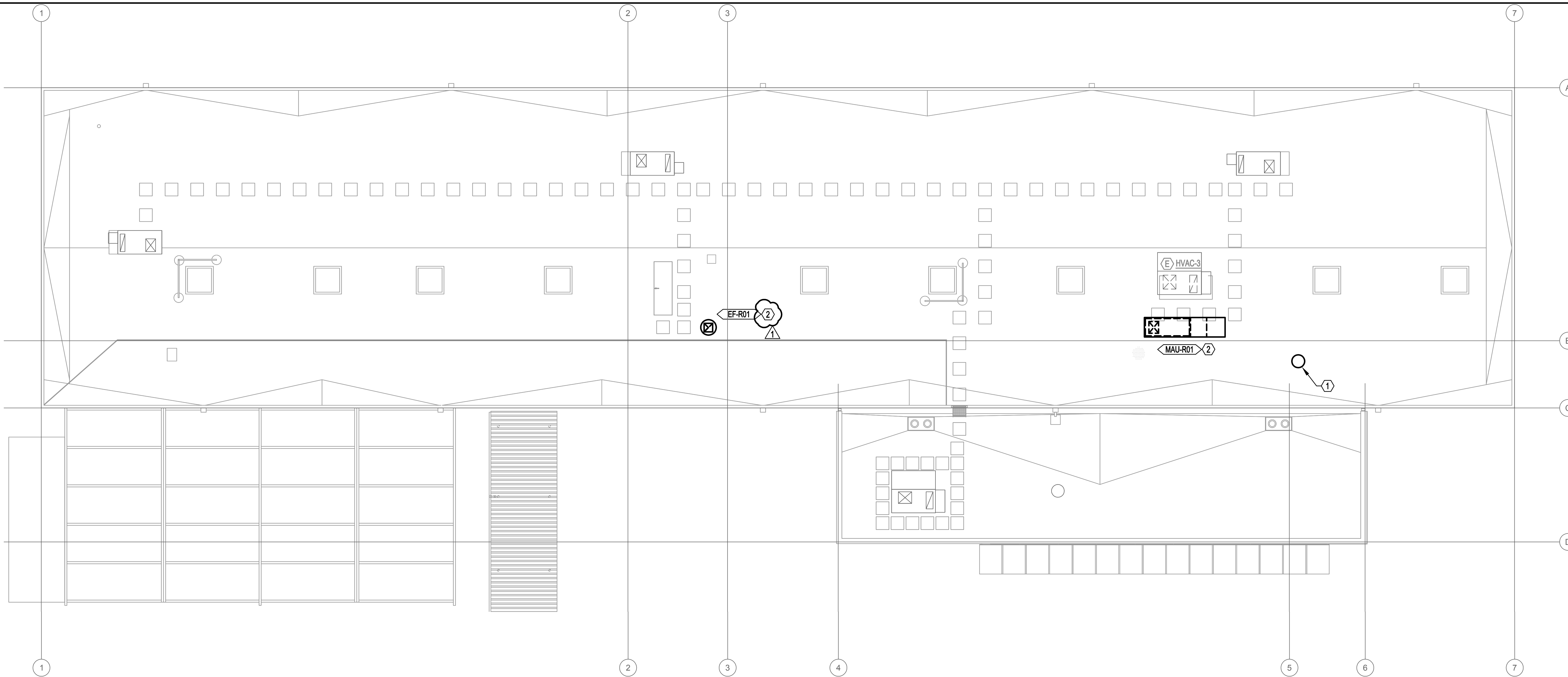
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**ROOF PLAN -  
MECHANICAL**

**M-203**



**1** ROOF PLAN - MECHANICAL  
M-203 SCALE: 1/8" = 1'-0"

#### NOTES:

1. SPRAY BOOTH EXHAUST FAN. MOUNT VERTICALLY ON METAL STAND FURNISHED W/ FAN. DISCHARGE UP TO 24" EXHAUST STACK. TERMINATE MIN 6 FT ABOVE ROOF. PROVIDE GRAVITY BUTTERFLY RELIEF DAMPER AT TOP OF DUCT TO PREVENT RAIN INTRUSION WHEN UNIT IS OFF. DO NOT PROVIDE CAP. SECURE STAND TO ROOF. COORDINATE W/ GC ROOF CURB APPLIED OVER STAND. PROVIDE CURB CAP, FLASH FAN AND CAP OVER CURB.

2. PROVIDE MANUFACTURER'S CURB.





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Project Address  
**1850 BAILEY HILL ROAD  
EUGENE, OREGON 97405**

ENLARGED PLANS -  
MECHANICAL

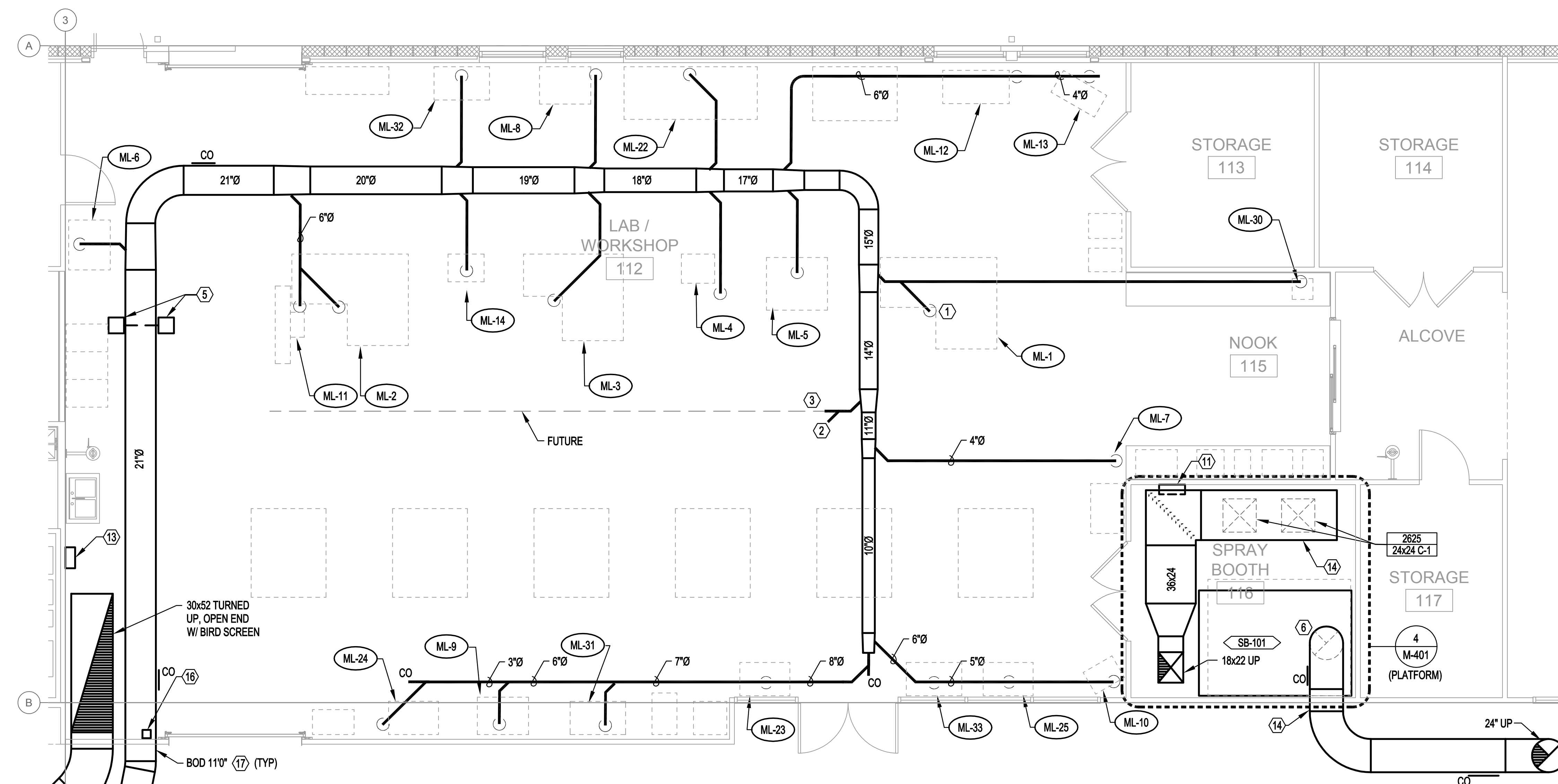
**M-401**

GENERAL NOTES:

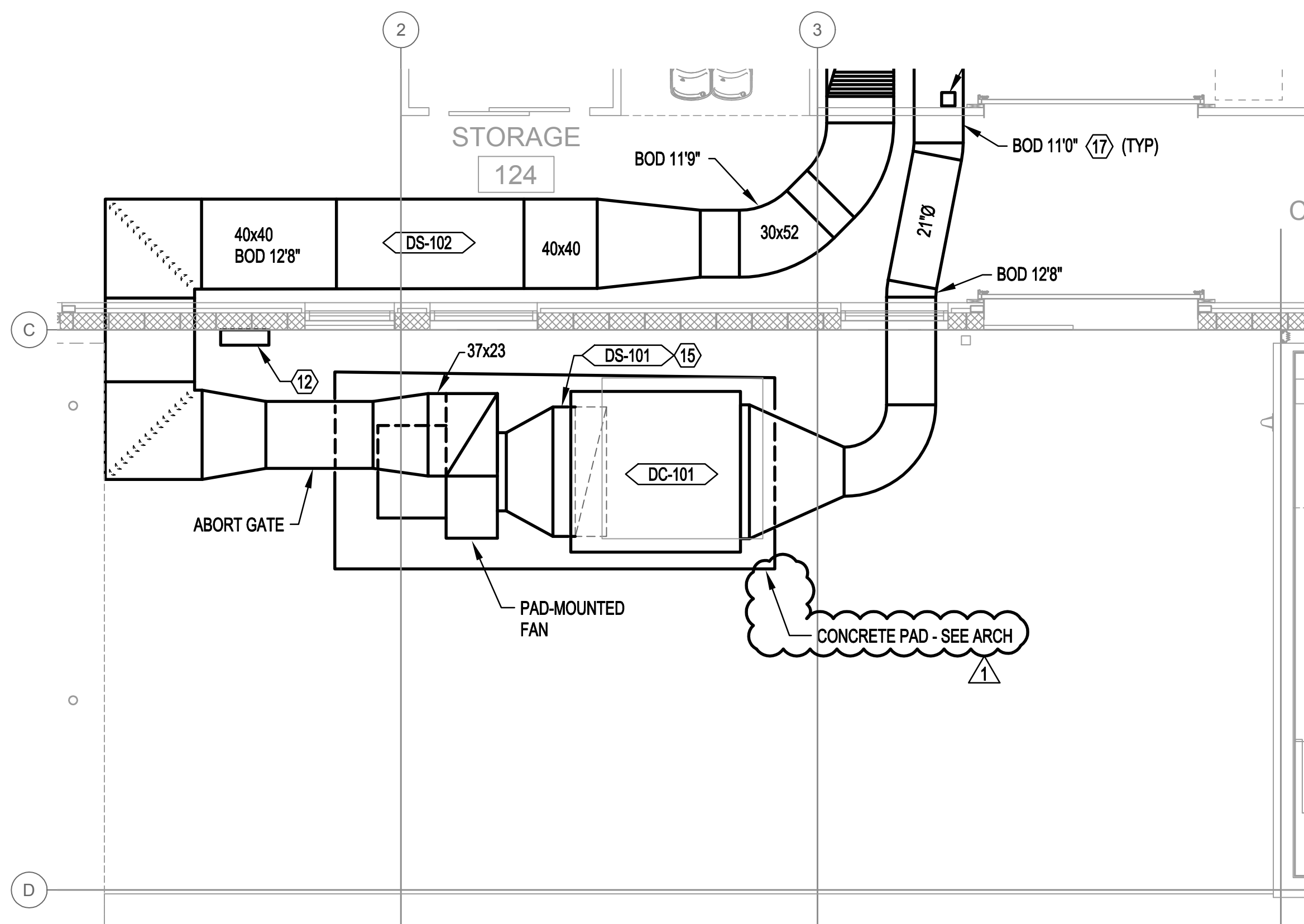
- VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.
- ALL DETAILS APPLY TO THIS SHEET WHETHER TAGGED OR NOT.

NOTES:

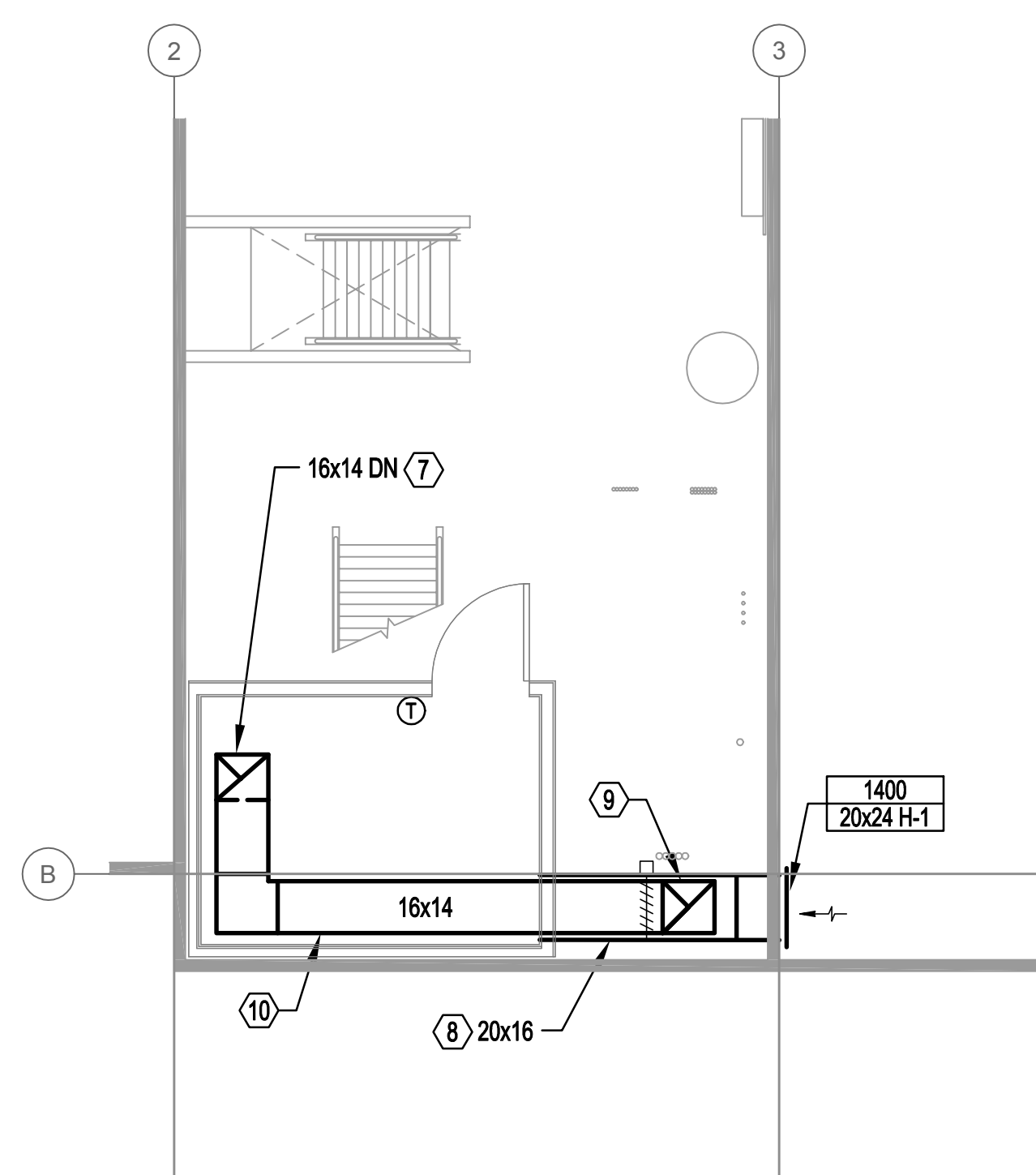
- PROVIDE BLAST GATE FOR AIR BALANCING, LOCK AT FIXED POSITION AFTER BALANCING. PROVIDE FLEX DUCT DROP TO EQUIPMENT CONNECTION. SEE EQUIPMENT SCHEDULE FOR DUCT SIZING (TYPICAL).
- BLAST GATE AND OPEN-ENDED 8" DUCT. BALANCE TO 1600 CFM. AS FUTURE EQUIPMENT IS INSTALLED ON THE BRANCH RE-BALANCE SO THAT THE SUM OF NEW EQUIPMENT AND AT THIS BLAST GATE REMAINS 1600 CFM.
- CAP 8" DUCT FOR FUTURE.
- LOCATION OF SPRAY NOZZLE. SEE PLUMBING DRAWINGS.
- SPARK DETECTOR (TYP 2). LOCATE MIN 4 FT FROM FINAL BRANCH DUCT CONNECTION. MAINTAIN 23 FT STRAIGHT DUCT BETWEEN DETECTORS AND SPRAY NOZZLE.
- 24" SPRAY BOOTH EXHAUST DUCT. CONNECT TO SPRAY BOOTH OUTLET. PROVIDE RADIUS ELBOW TO RUN HORIZONTALLY OUT TO HALLWAY. SLOPE HORIZONTAL DUCT TOWARD BOOTH.
- TERMINATE DUCT AT CEILING OF AIR COMPRESSOR ROOM. NO GRILLE REQUIRED.
- MOUNT DUCT AT FLOOR OF PLATFORM. TERMINATE AT LOW WALL OF AIR COMPRESSOR ROOM. NO GRILLE REQUIRED.
- UP TO EF-R01 ON ROOF.
- ROUTE DUCT IN JOIST SPACE ABOVE AIR COMPRESSOR ROOM.
- SPRAY BOOTH CONTROL PANEL.
- DC-101 CONTROL PANEL.
- SPARK DETECTION CONTROL PANEL.
- MOUNT DUCT TIGHT TO UNDERSIDE OF HARD CEILING.
- CONNECT ELBOW SILENCER TO DUST COLLECTOR OUTLET AT BOTTOM OF COLLECTOR. PROVIDE TRANSITION TO FAN INLET.
- REMOTE STOP/START BUTTON FOR DUST COLLECTION SYSTEM.
- DUCT HEIGHT IS CRITICAL FOR PROPER COORDINATION WITH LIGHTING AND STRUCTURAL.
- PROVIDE HORIZONTAL FIRE DAMPER IN FLOOR.



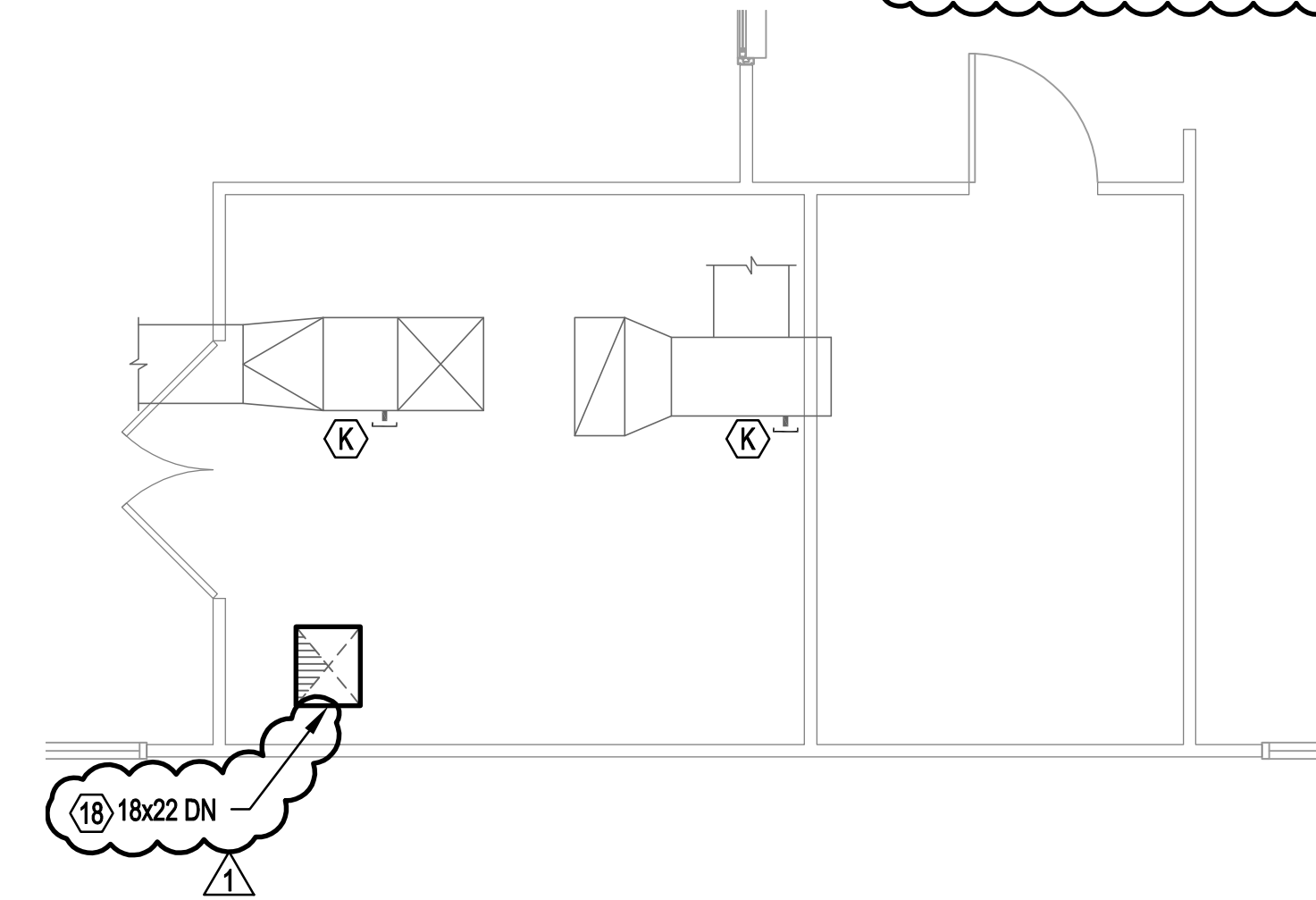
**1 WOOD SHOP ENLARGED PLAN - MECHANICAL**  
SCALE: 1/4" = 1'-0"



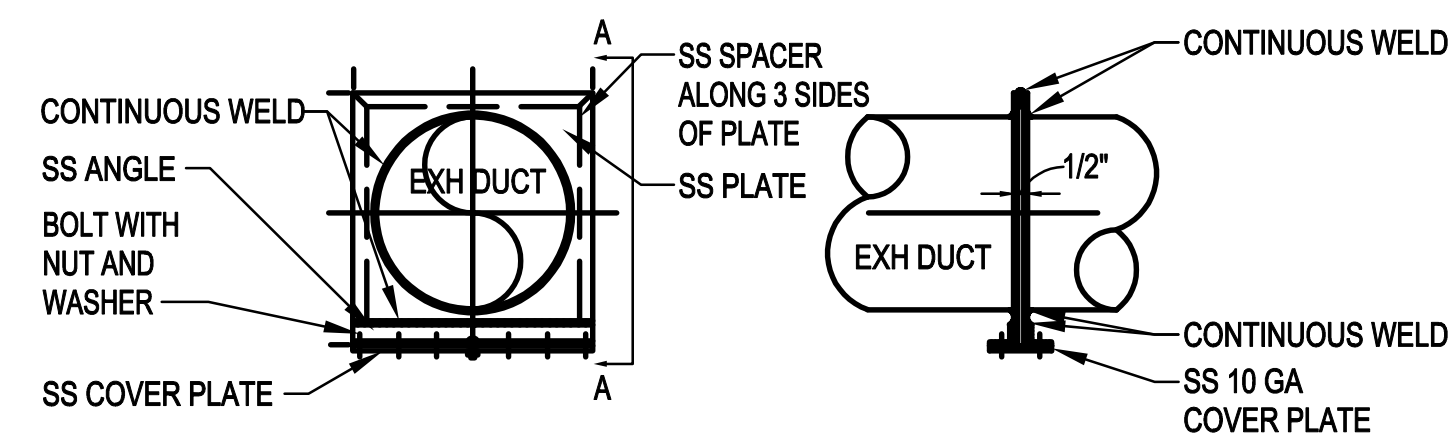
**2 DUST COLLECTOR ENLARGED PLAN - MECHANICAL**  
SCALE: 1/4" = 1'-0"



**3 PLATFORM ENLARGED PLAN - MECHANICAL**  
SCALE: 1/4" = 1'-0"



**4 MECHANICAL PLATFORM ENLARGED PLAN - MECHANICAL**  
SCALE: 1/4" = 1'-0"

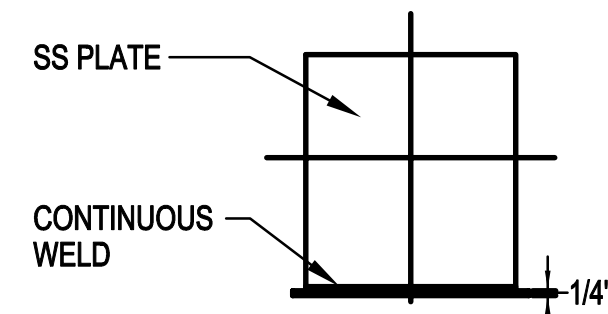


**PLAN VIEW**

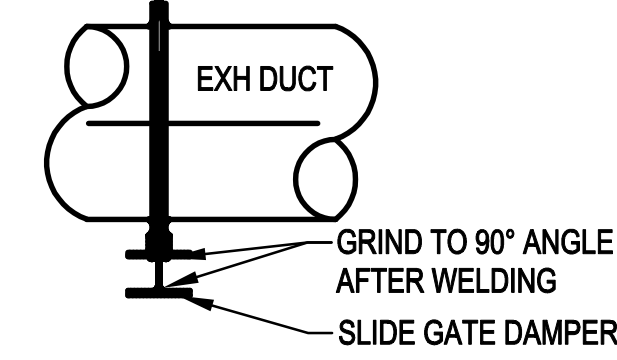
GENERAL NOTES:  
A. SHOWN WITH SLIDE GATE PORTION NOT INSTALLED

**SECTION A-A**

GENERAL NOTES:  
A. SHOWN WITH SLIDE GATE PORTION NOT INSTALLED

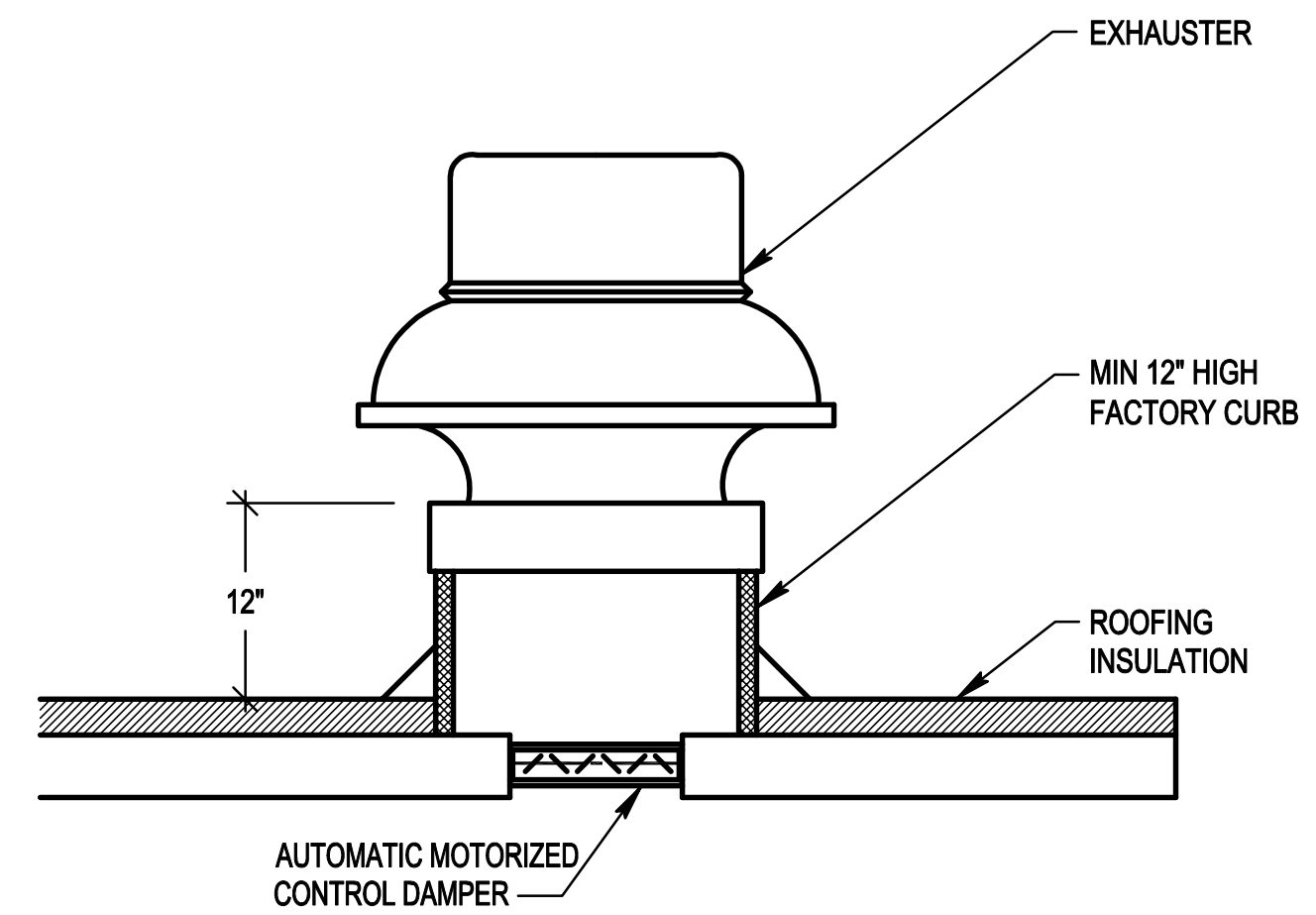


**SLIDE GATE DAMPER**



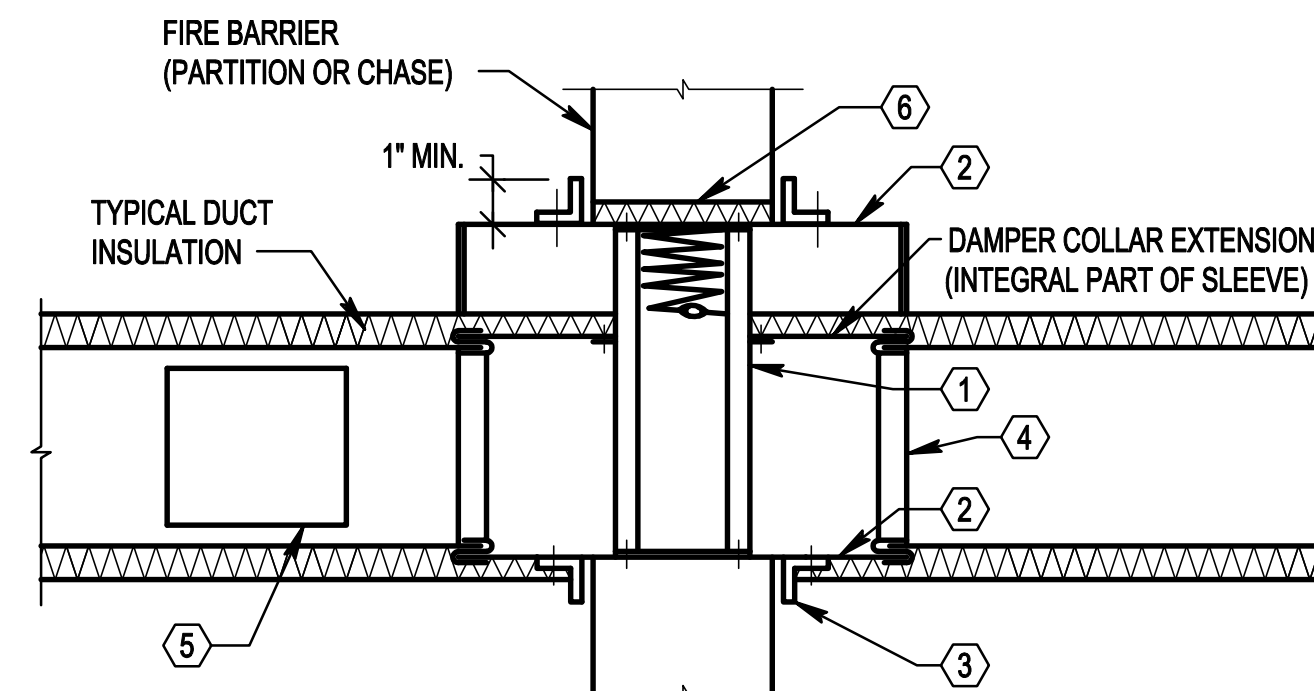
**PART SECTION A-A**

GENERAL NOTES:  
A. ASSEMBLED UNIT



**1 ROOF EXHAUSTER**  
SCALE: NONE

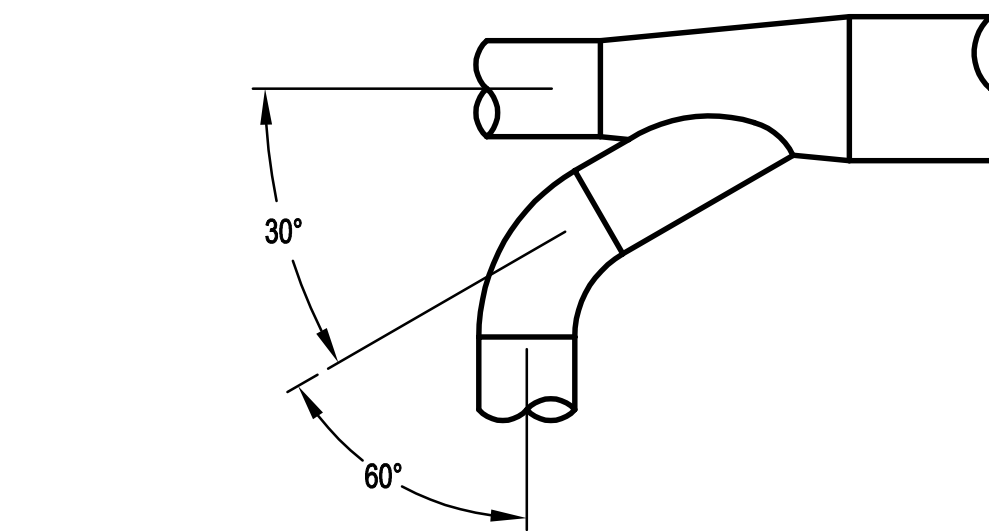
**4 SLIDE GATE DAMPER/DUCT DETAIL**  
SCALE: NONE



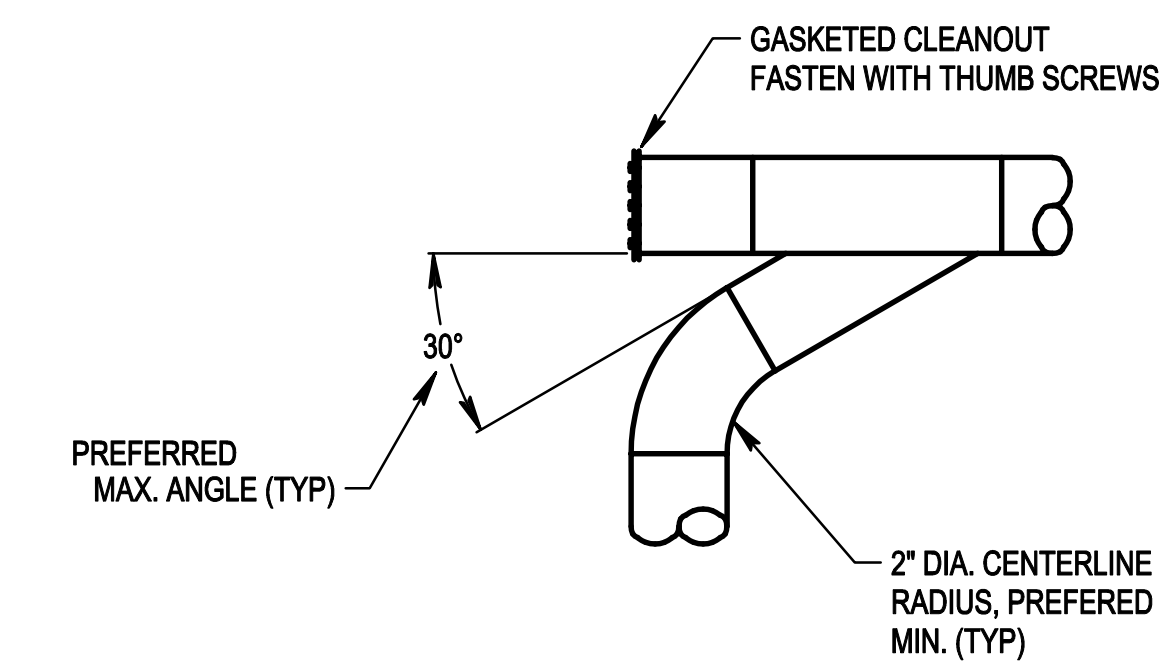
**NOTES:**

1. FIRE DAMPER (VERTICAL SUPPLY TYPE SHOWN, HORIZONTAL & RETURN/EXHAUST SIMILAR). INSTALL DAMPER IN FLOOR OR WALL PENETRATION, NOT OUTSIDE.
2. GALVANIZED STEEL SLEEVE-GAUGE NOT LESS THAN CONNECTING DUCT. FASTEN TO DAMPER FRAME AND PERIMETER ANGLES.
3. PERIMETER ANGLES-14 GA. GALVANIZED STEEL, 1 1/2 X 1 1/2 MIN. TO PROVIDE 1" MIN. OVERLAP OF OPENING ON ALL 4 SIDES. DO NOT FASTEN TO PARTITION.
4. BREAKAWAY DUCT CONNECTION.
5. ACCESS PANEL-SIZE & LOCATION TO PERMIT SERVICING FUSIBLE LINK.
6. PROVIDE 1/4" TO 1/2" CLEARANCE ON HEIGHT & WIDTH, OR AS SPECIFIED BY DAMPER MANUFACTURER. FILL OPENING WITH FIRESTOP MATERIAL.

**5 LOW PRESSURE FIRE DAMPER**  
SCALE: NONE



**2 DUST COLLECTION DUCT WYE**  
SCALE: NONE

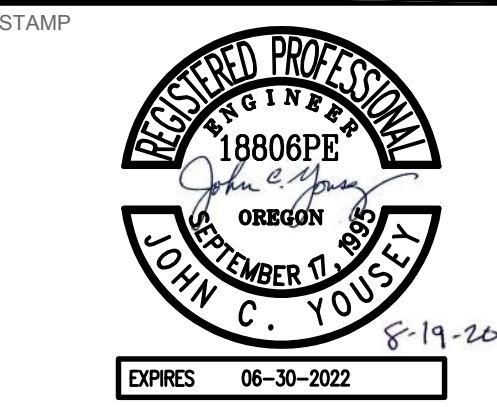


**3 DUST COLLECTION DUCT CLEAN OUT**  
SCALE: NONE

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**PROJECT TRACKING**

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Project Name  
**4J CHURCHILL HS WOODSHOP REMODEL**  
Project Address  
**1850 BAILEY HILL ROAD EUGENE, OREGON 97405**

**DETAILS - MECHANICAL**

**M-501**

| MISC. FITTINGS & SYMBOLS |                         |
|--------------------------|-------------------------|
|                          | DIRECTION OF FLOW       |
|                          | DIRECTION OF SLOPE      |
|                          | PIPE SLEEVE             |
|                          | REDUCER                 |
|                          | ANCHOR                  |
|                          | ELBOW (90°)             |
|                          | ELBOW (45°)             |
|                          | TEE                     |
|                          | CROSS                   |
| PIPING CONNECTIONS       |                         |
|                          | JOINT OR COUPLING POINT |
|                          | UNION                   |
|                          | FLANGED CONNECTION      |
|                          | CAP                     |
|                          | PLUG OR BLIND FLANGE    |
|                          | RISER                   |
|                          | ELBOW UP                |
|                          | ELBOW DOWN              |
|                          | TEE UP                  |
|                          | TEE DOWN                |
|                          | HORIZONTAL TEE          |
|                          | FLEXIBLE CONNECTION     |
|                          | BALL JOINT              |
|                          | MECHANICAL COUPLING     |

| SYMBOLS |                               |
|---------|-------------------------------|
|         | ACCESS PANEL                  |
|         | BELOW GRADE / FLOOR           |
|         | CONNECT TO EXISTING           |
|         | EXISTING TO REMAIN            |
|         | CAP EXISTING / CAP FOR FUTURE |
|         | RELOCATE EXISTING             |
|         | REMOVE EXISTING               |
|         | NOTE                          |

**CALL OUT SYMBOLS**

| DEMOLITION LEGEND |                      |
|-------------------|----------------------|
|                   | REMOVE EXISTING PIPE |

| NEW AND EXISTING WORK |                                       |
|-----------------------|---------------------------------------|
|                       | EXISTING WASTE (BELOW GRADE OR FLOOR) |
|                       | EXISTING COLD WATER                   |
|                       | NEW WASTE (BELOW GRADE OR FLOOR)      |
|                       | NEW COLD WATER                        |

| STANDARD PLUMBING ABBREVIATIONS |                                |         |                                |
|---------------------------------|--------------------------------|---------|--------------------------------|
| AF                              | AIRFOIL                        | IE      | INVERT ELEVATION               |
| AFF                             | ABOVE FINISHED FLOOR           | IN      | INCH(ES)                       |
| AHP                             | APPARATUS HOUSING PLENUM       | INSUL   | INSULATION                     |
| ALT                             | ALTERNATIVE                    | ISOL    | ISOLAT(OR)(ION)                |
| AL                              | ALUMINUM                       | KW      | KILOWATT                       |
| APD                             | AIR PRESSURE DROP              | KWH     | KILOWATT HOUR                  |
| APPROX                          | APPROXIMATELY                  | L       | LENGTH                         |
| ARCH                            | ARCHITECT(URAL)                | LAT     | LEAVING AIR TEMP               |
| AUTO                            | AUTOMATIC                      | LB      | POUND                          |
| BDD                             | BACKDRAFT DAMPER               | LDB     | LEAVING DRY BULB               |
| BI                              | BACKWARD INCLINED              | LF      | LINEAR FEET                    |
| BLDG                            | BUILDING                       | LFT     | LEAVING FLUID TEMPERATURE      |
| BSMT                            | BASEMENT                       | LVG     | LEAVING                        |
| BTU                             | BRITISH THERMAL UNIT           | LWB     | LEAVING WET BULB               |
| BTUH                            | BRITISH THERMAL UNITS PER HOUR | LWT     | LEAVING WATER TEMPERATURE      |
| CFH                             | CUBIC FEET PER HOUR            | MAX     | MAXIMUM                        |
| CFM                             | CUBIC FEET PER MINUTE          | MBH     | THOUSAND BTU PER HOUR          |
| CFS                             | CUBIC FEET PER SECOND          | MECH    | MECHANICAL                     |
| CLG                             | CEILING OR COOLING             | MFR     | MANUFACTURER                   |
| CONC                            | CONCRETE                       | MIN     | MINIMUM                        |
| CONN                            | CONNECT(ION)                   | MISC    | MISCELLANEOUS                  |
| CONT                            | CONTINUE(ED)(UATION)           | MTD     | MOUNTED                        |
| CL                              | CENTERLINE                     | NC      | NORMALLY CLOSED                |
| DDC                             | DIRECT DIGITAL CONTROL         | NIC     | NOT IN CONTRACT                |
| DEFL                            | DEFLECTION                     | NO      | NORMALLY OPEN                  |
| DN                              | DOWN                           | OAD     | OUTSIDE AIR DAMPER             |
| DP                              | DEW POINT                      | OC      | ON CENTER DISTANCE             |
| DWDI                            | DOUBLE WIDTH DOUBLE INLET      | OSA     | OUTSIDE AIR                    |
| DWG                             | DRAWING                        | PH      | PHASE                          |
| EA                              | EXHAUST AIR                    | PP      | POLYPROPYLENE                  |
| EAD                             | EXHAUST AIR DAMPER             | PSI     | POUNDS PER SQUARE INCH         |
| EAT                             | ENTERING AIR TEMPERATURE       | PVC     | POLYVINYL CHLORIDE             |
| EDB                             | ENTERING DRY BULB              | PVS     | PVC COATED STEEL               |
| EFF                             | EFFICIENCY                     | R (RAD) | RADIUS                         |
| EFT                             | ENTERING FLUID TEMPERATURE     | RA      | RETURN AIR                     |
| ELEC                            | ELECTRIC(AL)                   | RAD     | RETURN AIR DAMPER              |
| ELEV                            | ELEVATION                      | REV     | REVISION                       |
| ENGR                            | ENGINEER                       | RH      | RELATIVE HUMIDITY              |
| EQ                              | EQUAL                          | RPM     | REVOLUTIONS PER MINUTE         |
| EQUIP                           | EQUIPMENT                      | SA      | SUPPLY AIR                     |
| ESP                             | EXTERNAL STATIC PRESSURE       | SCFM    | STANDARD CUBIC FEET PER MINUTE |
| EWB                             | ENTERING WET BULB              | SD      | SMOKE DAMPER                   |
| EWT                             | ENTERING WATER TEMPERATURE     | SECT    | SECTION                        |
| EX                              | EXTRACTOR                      | SENS    | SENSIBLE                       |
| EXH                             | EXHAUST                        | SIM     | SIMILAR                        |
| EXIST                           | EXISTING                       | SP      | STATIC PRESSURE                |
| EXP                             | EXPANSION                      | SPEC    | SPECIFICATION                  |
| F                               | DEGREES FAHRENHEIT             | SQ      | SQUARE                         |
| FC                              | FORWARD CURVED                 | SF      | SQUARE FOOT(FEET)              |
| FIG                             | FIGURE                         | SQ IN   | SQUARE INCHES)                 |
| FILT                            | FILTER                         | SS      | STAINLESS STEEL                |
| FLEX                            | FLEXIBLE                       | STL     | STEEL                          |
| FPD                             | FLUID PRESSURE DROP            | STRUCT  | STRUCTUR(E)(AL)                |
| FPM                             | FEET PER MINUTE                | SWP     | SINGLE WALL PLENUM             |
| FPS                             | FEET PER SECOND                | SWSI    | SINGLE WIDTH SINGLE INLET      |
| FT                              | FEET/FOOT                      | TEMP    | TEMPERATURE                    |
| FTR                             | FINNED TUBE RADIATOR           | TSP     | TOTAL STATIC PRESSURE          |
| FU                              | FIXTURE UNIT                   | TYP     | TYPICAL                        |
| FUT                             | FUTURE                         | V       | VOLTS                          |
| FV                              | FACE VELOCITY                  | VD      | VOLUME DAMPER                  |
| GA                              | GAGE/GAUGE                     | VEL     | VELOCITY                       |
| GAL                             | GALLON                         | VERT    | VERTICAL                       |
| GALV                            | GALVANIZED                     | VFD     | VARIABLE FREQUENCY DRIVE       |
| GLY                             | GLYCOL                         | VTR     | VENT THROUGH ROOF              |
| GPH                             | GALLONS PER HOUR               | W       | WIDTH                          |
| GPM                             | GALLONS PER MINUTE             | WG      | WATER GAUGE                    |
| H                               | HEIGHT                         | WPD     | WATER PRESSURE DROP            |
| HORIZ                           | HORIZONTAL                     | WTD     | WATER TEMPERATURE DROP         |
| HP                              | HORSEPOWER                     | WTR     | WATER TEMPERATURE RISE         |
| HTG                             | HEATING                        | W/      | WITH                           |
| ID                              | INSIDE(DIAMETER/DIMENSION)     | W/O     | WITHOUT                        |

**GENERAL NOTE**

THIS IS A STANDARD LEGEND SHEET, THEREFORE, SOME SYMBOLS MAY APPEAR ON THIS SHEET THAT DO NOT APPEAR ON THE DRAWINGS.

| PLUMBING PIPING |     |                                     |
|-----------------|-----|-------------------------------------|
|                 | W   | WASTE (ABOVE GRADE OR FLOOR)        |
|                 | W   | WASTE (BELOW GRADE OR FLOOR)        |
|                 | PW  | PUMPED WASTE (ABOVE GRADE OR FLOOR) |
|                 | PW  | PUMPED WASTE (BELOW GRADE OR FLOOR) |
|                 | D   | DRAIN (CONDENSATE/INDIRECT)         |
|                 | V   | VENT                                |
|                 | CW  | COLD WATER                          |
|                 | HW  | HOT WATER                           |
|                 | RHW | RECIRCULATING HOT WATER             |
|                 | TW  | TEMPERED WATER                      |
|                 | ICW | INDUSTRIAL COLD WATER               |
|                 | G   | NATURAL GAS (LOW PRESSURE)          |
|                 | MPG | NATURAL GAS (MEDIUM PRESSURE)       |
|                 | A   | COMPRESSED AIR                      |

| MISC. VALVES & COCKS |                                     |
|----------------------|-------------------------------------|
|                      | SHUT-OFF VALVE                      |
|                      | GLOBE VALVE                         |
|                      | SHUT-OFF VALVE W/ TAMPER SWITCH     |
|                      | TRIPLE DUTY VALVE                   |
|                      | CHECK VALVE                         |
|                      | 2-WAY CONTROL VALVE                 |
|                      | 3-WAY CONTROL VALVE                 |
|                      | BALANCING VALVE                     |
|                      | FLOW CONTROL VALVE                  |
|                      | SOLENOID VALVE                      |
|                      | PRESSURE REDUCING VALVE             |
|                      | AIR VENT (MANUAL/AUTOMATIC)         |
|                      | RELIEF VALVE                        |
|                      | STRAINER                            |
|                      | STRAINER W/ BLOWDOWN                |
|                      | DRAIN VALVE                         |
|                      | HOSE BIBB                           |
|                      | WALL HYDRANT                        |
|                      | GROUND HYDRANT                      |
|                      | STEAM TRAP                          |
|                      | PRESSURE GAUGE                      |
|                      | PRESSURE/TEMPERATURE TEST PLUG      |
|                      | THERMOMETER                         |
|                      | FLOW SWITCH                         |
|                      | TEMPERATURE TRANSMITTER             |
|                      | SHOCK ARRESTOR                      |
|                      | VACUUM BREAKER                      |
|                      | WATER FLOW METER                    |
|                      | REDUCED PRESSURE BACKFLOW ASSEMBLY  |
|                      | DOUBLE CHECK VALVE ASSEMBLY         |
|                      | DOUBLE CHECK DETECTOR ASSEMBLY      |
|                      | BACKWATER VALVE                     |
|                      | UNDERGROUND GATE VALVE W/BOX        |
|                      | UNDERGROUND GATE W/POST INDICATOR   |
|                      | OUTSIDE SCREW & YOKE                |
|                      | Y PATTERN BOILER BLOWDOWN VALVE     |
|                      | NON-RETURN STOP VALVE               |
|                      | QUICK OPENING BOILER BLOWDOWN VALVE |

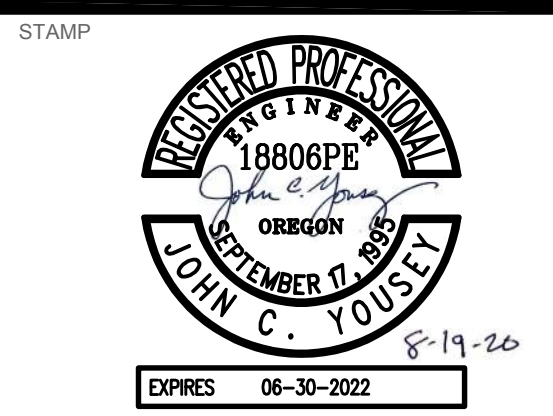
| MISCELLANEOUS PLUMBING EQUIPMENT SCHEDULE |               |  |                |       |  |
|---|---------------|--|----------------|-------|--|
| TAG NUMBER                                | LOCATION      | DESCRIPTION  | ELECTRICAL     | NOTES |  |
| RP-201<br>(HVAC MAKE-UP)                  | WEST PLATFORM | REDUCED PRESSURE BACKFLOW ASSEMBLY<br>19 GPM @ 5 PSI HEAD LOSS<br>BASED ON: FEBCO (L)  |                |       |  |
| CA-201                                    | WEST PLATFORM | AIR COMPRESSOR - OIL-LESS<br>8.8 SCFM @100 PSIG OPERATING PRESSURE, 3 HP NOMINAL MOTOR; SCROLL COMPRESSOR;<br>60 GALLON ASME HORIZONTAL RECEIVER; W/ GAUG, RELIEF VALVE, COND DRAIN<br>EQUIPPED WITH ISOLATION VALVE, CHECK VALVE, SAFETY VALVE, ODP MOTOR, BELTS AND<br>BELT GUARD, AFTER-COOLER.<br>STARTER/CONTROL PANEL; WEIGHT=430 LBS<br>BASED ON: POWEREX MODEL STS0302 | 460 V, 3.9 FLA | 1     |  |
| AD-201                                    | WEST PLATFORM | REFRIGERATED AIR DRYER, TANK-MOUNTED<br>WITH 0.01 MICRON COALESCING FILTER, ADJUSTABLE PRESSURE REGULATOR WITH GAUGE;<br>R-134A REFRIGERANT, INTEGRAL MOISTURE SEPARATOR, ISOLATION VALVE/STRAINER<br>BASED ON: POWEREX  |                | 1     |  |
| TD-201                                    | WEST PLATFORM | AIR COMPRESSOR RECEIVER TANK DRAIN<br>ELECTRONIC TIMER DRAIN INSTALLED ON RECEIVER<br>BASED ON: POWEREX  | 115 V          | 1     |  |

**NOTES:**  
1. FURNISHED AS A UNIT WITH AIR COMPRESSOR.

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### PROJECT TRACKING

RBA #:  
P.I.C:  
PM / PA:

### Owner

**4J SCHOOL DISTRICT**

Project Name  
**4J CHURCHILL HS WOODSHOP REMODEL**

Project Address  
**1850 BAILEY HILL ROAD EUGENE, OREGON 97405**

### SYMBOLS, LEGENDS, ABBREVIATIONS, AND SCHEDULES - PLUMBING

# P-001

# ROWELL BROKAW

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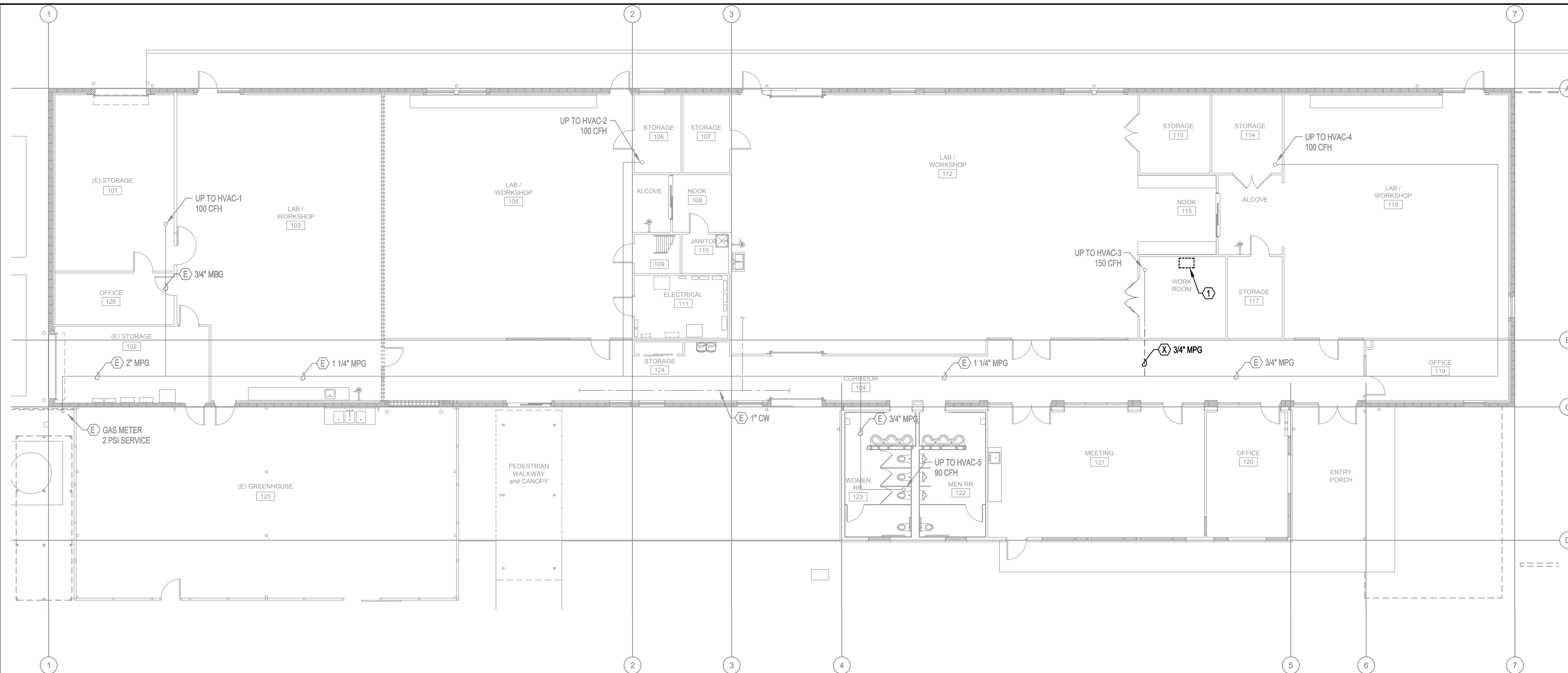
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**4J CHURCHILL HS  
WOODSHOP REMODEL**

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EUGENE, OREGON 97405**

**DEMO GROUND  
FLOOR PLAN -  
PLUMBING**

**P-101**



**1 DEMO GROUND FLOOR PLAN - PLUMBING**  
SCALE: 1/8" = 1'-0"

### NOTES:

1. DEMO SINK. CUT BACK WASTE AND PLUG AT FLOOR. CUT BACK HW, CW, HWR AND VENT TO BRANCHES FEEDING ADJACENT EYEWASH.

Date: 8/19/20 Time: 3:48pm File: \\pae-engineers.com\Projects\2020\20-1117 - Churchill High School Wood Shop\01\_Production\02\_CAD\VP-101.dwg User: jessicabryant



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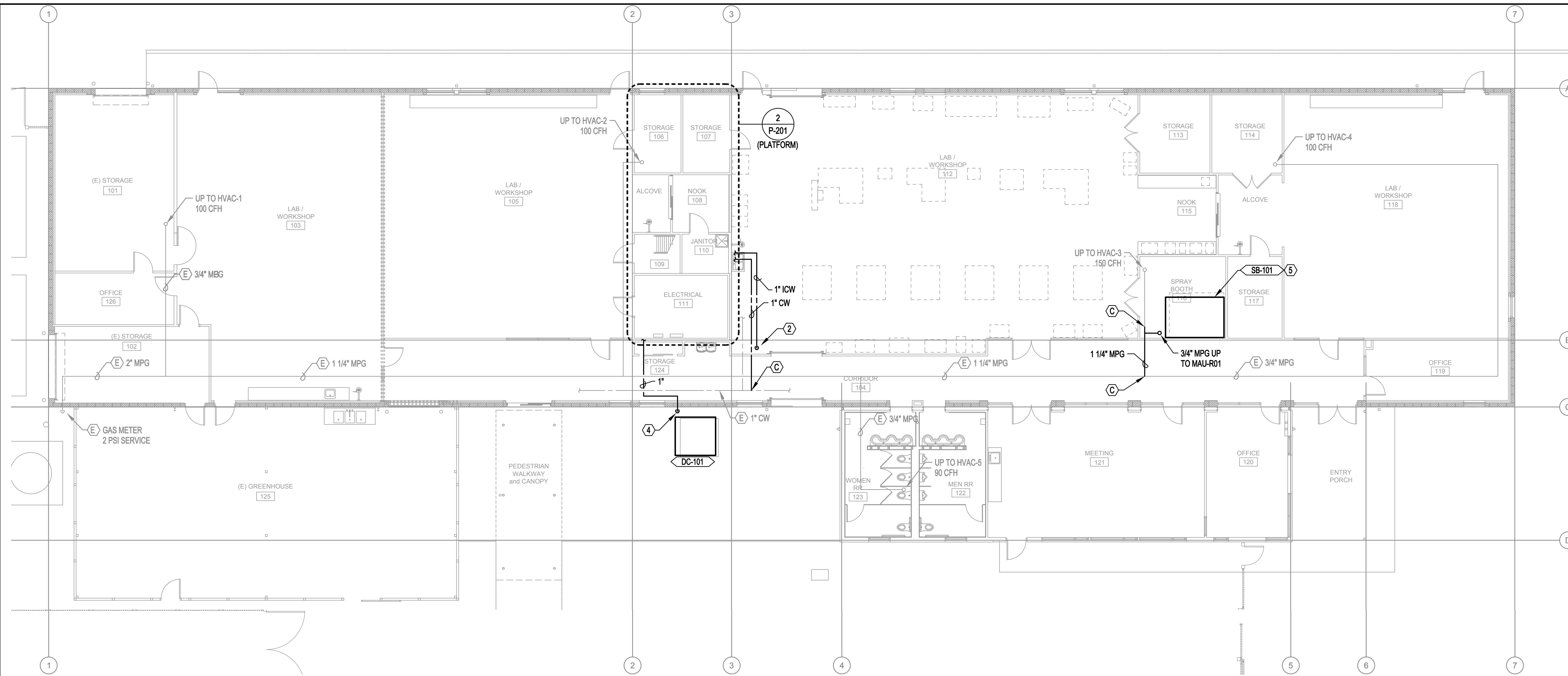
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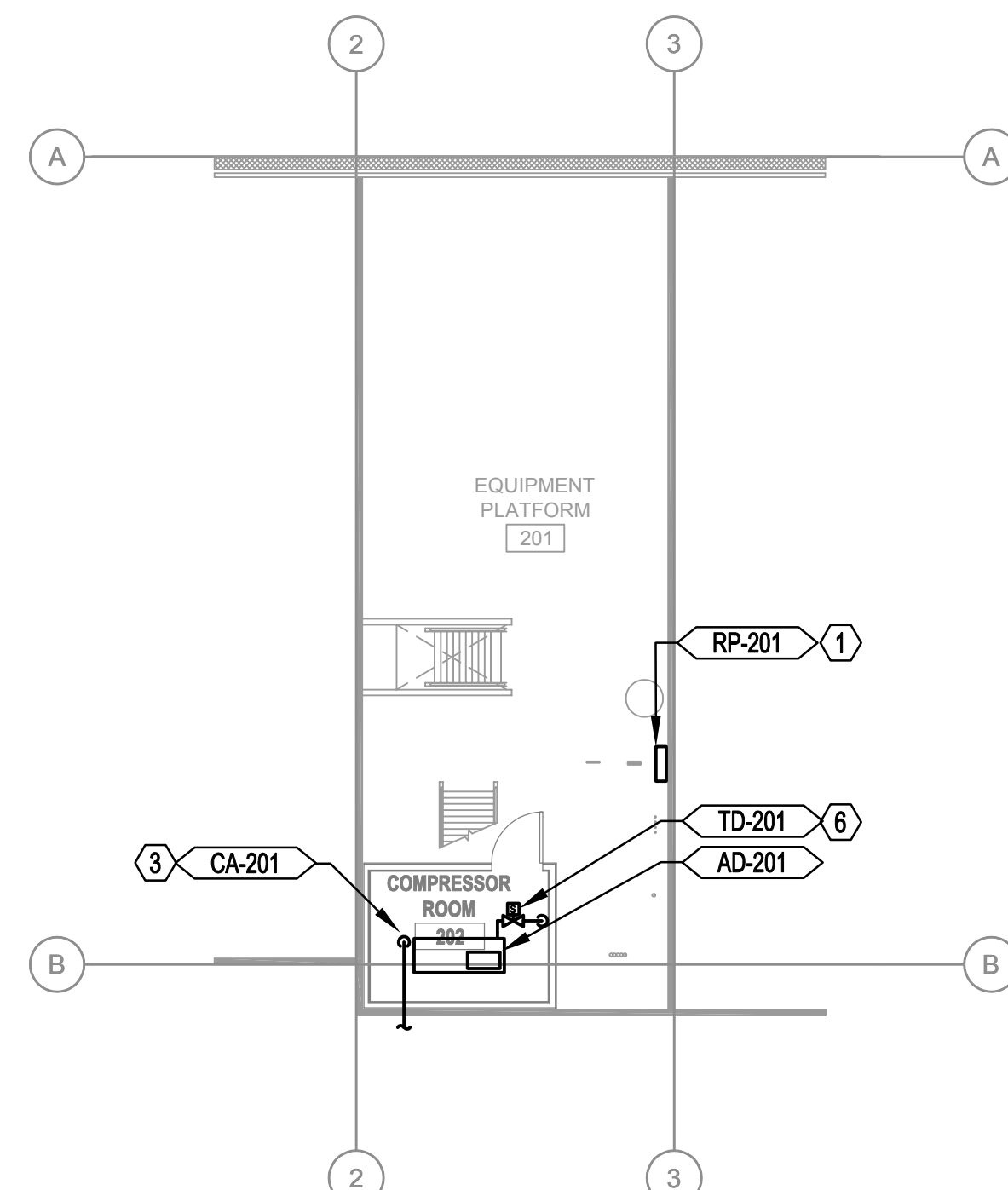
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**FLOOR PLANS -  
PLUMBING**

**P-201**



**1 GROUND FLOOR PLAN - PLUMBING**  
SCALE: 1/8" = 1'-0"



**2 EQUIPMENT PLATFORM PLAN - PLUMBING**  
SCALE: 1/8" = 1'-0"

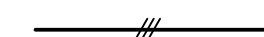


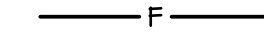



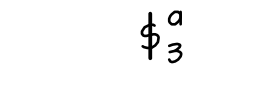

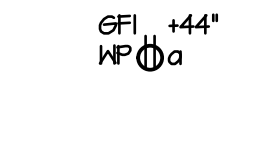
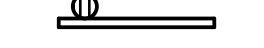

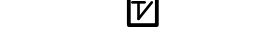


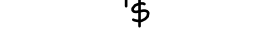
**NOTES:**

1. RP TO PROTECT CONTAMINATION FROM SPRAY NOZZLE. ROUTE DRAIN TO MOP SINK IN JANITOR ROOM BELOW.
2. SOLENOID VALVE AND SPRAY NOZZLE FOR DUST COLLECTION SPARK PREVENTION. INCLUDE STRAINER. AVAILABLE WATER PRESSURE AT VALVE SHALL BE NO LESS THAN 50 PSI. FLOW RATE TO BE 19 GPM.
3. AIR COMPRESSOR TO PROVIDE CLEAN DRY AIR TO DUST COLLECTOR FOR FILTER CLEANING PROCESS. MAINTAIN ELECTRICAL PANEL CLEARANCE AND CLEARANCE FOR AIRFLOW. BOLT TO FLOOR JOISTS.
4. COMPRESSED AIR TO DUST COLLECTOR AIR VALVES.
5. PROVIDE DRY CHEMICAL FIRE SUPPRESSION SYSTEM FOR PAINT SPRAY BOOTH AND DUCTWORK.
6. TERMINATE TANK DRAIN AT MOP SINK IN JANITOR ROOM BELOW.




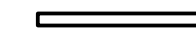







# SYMBOLS AND ABBREVIATIONS LEGEND

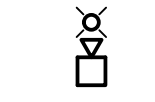


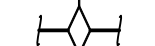

## POWER

-  NEW CONCEALED RACEWAY AND WIRE. NUMBER OF SLASHES INDICATES NUMBER OF CONDUCTORS IF MORE THAN TWO. SIZE OTHER THAN #12 AS NOTED. (APPLIES TO ALL WIRING SYMBOLS)
-  UNDERGROUND OR UNDERFLOOR RACEWAY
-  HOMERUN
-  SIGNAL WIRING: F = FIRE ALARM, I = INTERCOM, C = LOW VOLTAGE CONTROL, T = TELEPHONE, D = DATA, TV = TELEVISION, P = CLOCK PROGRAM, PC = PHOTO CONTROL
-  CONDUIT UP
-  CONDUIT DOWN
-  PANELBOARD
-  SWITCH: "a" = CIRCUITS CONTROLLED, "k" = KEY SWITCH, "P" = W/PILOT LIGHT, "2" = DOUBLE POLE, "3" = THREE-WAY, "M" = AUTOMATIC WALL SWITCH, "D" = DIMMING SWITCH, "TS" = DIGITAL TIMER SWITCH
-  JUNCTION BOX
-  DUPLEX RECEPTACLE - "WP" = WEATHERPROOF, "GFI" = GROUND FAULT INTERRUPTER TYPE, "m" = MOUNTING HEIGHT, "a" = CIRCUIT, "D" = DROP CORD, "SRG" = WITH SURGE SUPPRESSION, "TP" = TAMPER PROOF COVER, "L" = LOCKING
-  SURFACE RECEPTACLE RACEWAY
-  DOUBLE DUPLEX (QUAD) RECEPTACLE
-  TV OUTLET
-  SPECIAL RECEPTACLE. CONFIGURATION AS NOTED.
-  DISCONNECT SWITCH
-  MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION & LOCKABLE OFF COVER

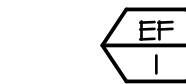

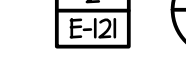



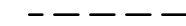
## LIGHT FIXTURES

-  AI: FIXTURE IDENTIFIER. FIXTURE TYPE "AI" SEE LIGHTING FIXTURE SCHEDULE.
-  SURFACE MOUNT FLUORESCENT - DRAWN TO SCALE WHERE POSSIBLE
-  FLUORESCENT WITH EMERGENCY POWER BACKUP
-  FLUORESCENT LUMINAIRE IN 4', 8', & 12' LENGTHS, MOUNTED END-TO-END WHERE SHOWN
-  EXTERIOR FLOOR LIGHT
-  LIGHT LEVEL SENSOR, PHOTO CELL
-  CEILING MOUNTED MOTION SENSOR COMPLETE SYSTEM WITH POWER PACK.
-  POWER PACK
-  WALL MOUNT FIXTURE



## FIRE ALARM

-  FIRE ALARM SYSTEM HORN W STROBE LIGHT. MOUNT @ 80" A.F.F.
-  FIRE ALARM SYSTEM MANUAL PULL STATION
-  FIRE ALARM SYSTEM SMOKE DETECTOR  
D = DUCT DETECTOR R = RELAY BASE
-  FIRE ALARM FLOW SWITCH
-  FIRE ALARM TAMPER SWITCH





## GENERAL

-  EQUIPMENT IDENTIFIER, EXHAUST FAN I SHOWN
-  SHEET REFERENCE NOTE
-  PLAN OR DETAIL NUMBER SHEET NUMBER
-  ROOM NUMBER
-  EXISTING WORK SHOWN LIGHT
-  NEW WORK SHOWN BOLD
-  EXISTING TO BE REMOVED

## DATA COMMUNICATIONS

-  COMBINATION PHONE/DATA PORT SHOWING QUANTITY OF EACH TYPE:  
V=VOICE (PHONE)/D=DATA
-  COMBINATION PHONE/DATA FLOOR BOX SHOWING QUANTITY OF EACH TYPE:  
V=VOICE (PHONE)/D=DATA

## INTERCOM

-  SURFACE MOUNTED ROUND SPEAKER  
T= INTERCOM TALK BACK  
V= VOICE REINFORCEMENT (APPLIES TO ALL SPEAKERS)
-  SWITCH/CALL STATION
-  AMPLIFIED SPEAKER
-  INTERCOM SPEAKER VOLUME CONTROL

## ABBREVIATIONS

|       |  |      |                                     |
|-------|--|------|-------------------------------------|
| AFF   | ABOVE FINISHED FLOOR                     | IDF  | INTERMEDIATE DISTRIBUTION FRAME     |
| BLDG  | BLDG                                     | L.V. | LOW VOLTAGE                         |
| C     | CONDUIT                                  | MDF  | MAIN DISTRIBUTION FRAME             |
| cd    | CANDELA                                  | MECH | MECHANICAL                          |
| CKT   | CIRCUIT                                  | NEW  | NEW                                 |
| DIM   | 0-10V DIMMING                            | PNL  | PANEL                               |
| DSP   | DIGITAL SIGNAL PROCESSOR                 | PRS  | PROGRAM RAPID START                 |
| (E)   | EXISTING                                 | SWBD | SWITCHBOARD                         |
| ELEC  | ELECTRICAL                               | TIB  | TELEPHONE TERMINAL BOARD            |
| EMERG | EMERGENCY                                | TVSS | TRANSIENT VOLTAGE SURGE SUPPRESSION |
| FAM   | FIRE ALARM MASTER                        | TYP  | TYPICAL                             |
| GFI   | GROUND FAULT INTERRUPTER                 | WG   | WIREGUARD                           |
| GND   | GROUND                                   | WP   | WEATHERPROOF                        |
| HVAC  | HEATING, VENTILATING, & AIR CONDITIONING |      |                                     |

## LIGHTING FIXTURE SCHEDULE

| TYPE   | DESCRIPTION                   | EXAMPLE MANUFACTURER                             | LAMP                             | NOTES  |
|--------|-------------------------------|--|----------------------------------|--|
| A      | VAPORTITE LED SUSPENDED       | METALUX<br>4VT3-LD55G-UNV<br>L840-CD1-VT3-SS-VBK | LED<br>44 W<br>4000K<br>5400 LUM | MOUNTING: SUSPENDED<br>HOUSING:<br>LENS/REFL:<br>VOLTAGE: 120<br>BALLAST: DIMMING<br>MISC: MOUNT @ 14' AFF |
| B      | 4' SURFACE HAZARDOUS LOCATION | HOLOPHANE<br>HXPL-SL-ST-AS                       | LED<br>47 W<br>4000K<br>5000 LM  | MOUNTING: SURFACE<br>HOUSING: STEEL<br>LENS/REFL: GLASS TUBE<br>VOLTAGE: 120<br>BALLAST:<br>MISC:          |
| NOTES: |                               |  |                                  |  |

## GENERAL NOTES:

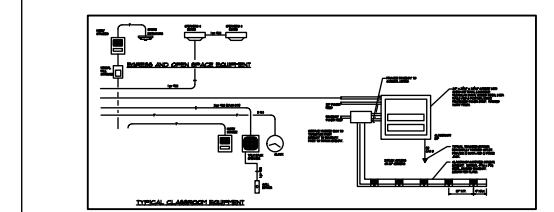
- THE FACILITY WILL BE OCCUPIED DURING CONSTRUCTION. COORDINATE ALL SHUTDOWNS AND CONSTRUCTION ACTIVITY WITH FACILITIES STAFF.
- SIZE AND LOCATION OF ALL EXISTING ELECTRICAL EQUIPMENT IS APPROXIMATE. SITE VERIFY THE EXACT LOCATION OF EXISTING AND CONSTRUCT ALL WORK FROM FIELD DIMENSIONS. MAKE ADJUSTMENTS NECESSARY TO ACCOMMODATE MINOR DEVIATIONS AT NO COST TO OWNER.
- LIGHT LINE WORK INDICATES EXISTING ELECTRICAL CIRCUITRY AND OTHER ELECTRICAL EQUIPMENT. DASHED LINE WORK INDICATES ELECTRICAL DEVICES AND EQUIPMENT TO BE REMOVED.
- WHERE EXISTING EQUIPMENT IS REMOVED AND NOT REPLACED IN THE SAME LOCATION, PATCH AND PAINT SURFACES TO MATCH ORIGINAL CONDITION.
- REMOVE ALL ABANDONED RACEWAY AND WIRING.
- RECONNECT ALL CIRCUITRY TO REMAINING DEVICES AND EQUIPMENT.
- REMOVE ALL ABANDONED COMMUNICATIONS/DATA CABLING.
- PROVIDE BLANK FACE PLATES FOR ALL SWITCHES AND COMMUNICATIONS/DATA BEING REMOVED.
- WHERE ALL LOAD IS REMOVED FROM A BREAKER PROVIDE NEW TYPED PANEL SCHEDULE IDENTIFYING BREAKER AS "SPARE".
- PROVIDE HANDLE-TIES FOR ALL BREAKERS THAT SERVE CIRCUITS WITH COMMON NEUTRALS AND BUNDLE CONDUCTORS TOGETHER PER NEC.

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## REVISIONS TO THIS SHEET

| REV. | DATE |
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## SET ISSUE DATE

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| REVIEW SET | 6/26/2020 |
| 50% CDs    | 7/15/2020 |
| 100% CDs   | 8/17/2020 |

## PROJECT TRACKING

RBA #:

P.I.C.:

PM / PA:

Owner  
**4J SCHOOL DISTRICT**

Project Name

**4J CHURCHILL HS WOODSHOP REMODEL**

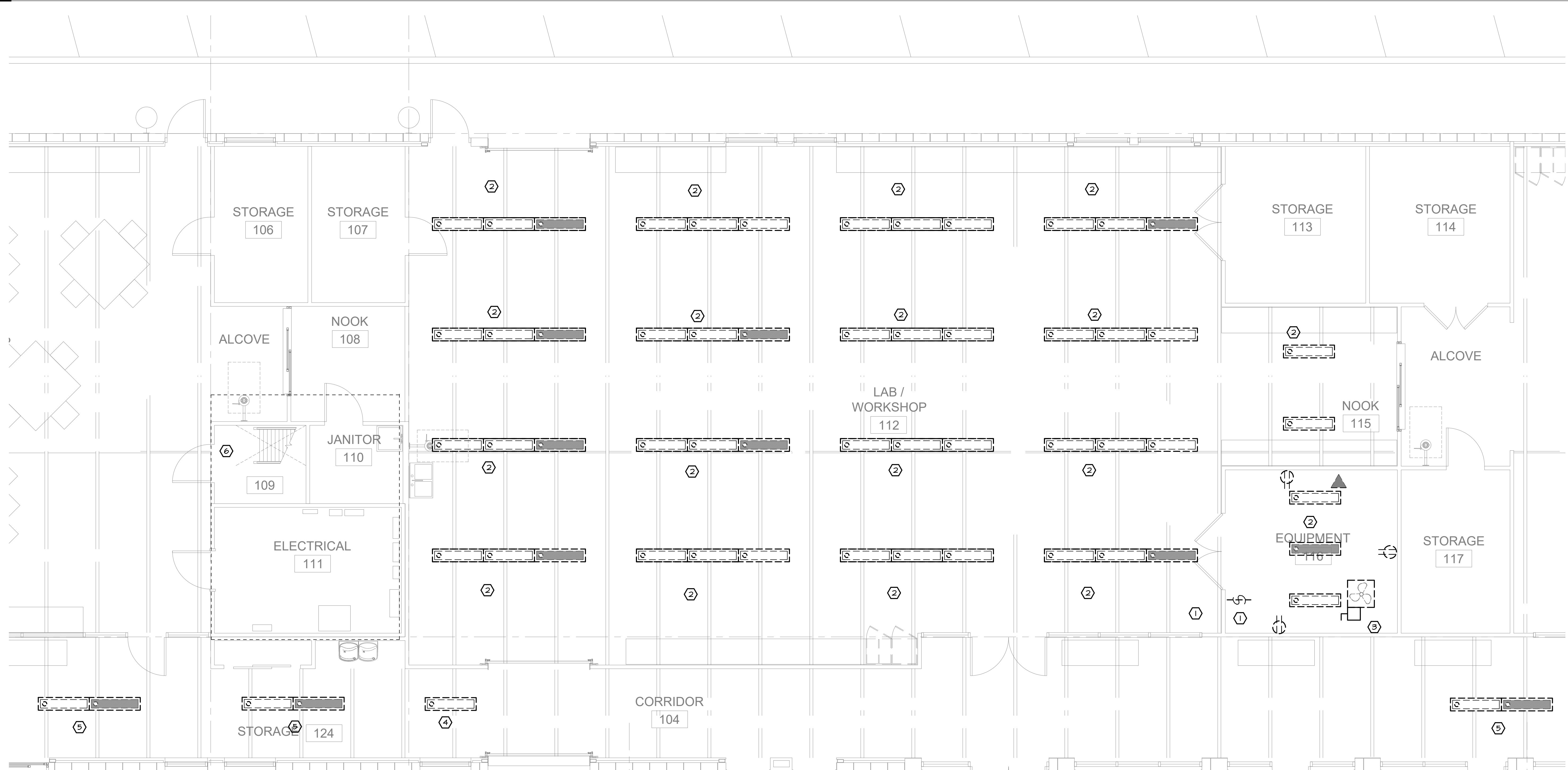
Project Address

**1850 BAILEY HILL ROAD  
EUGENE, OREGON 97405**

## SHEET NAME

**SYMBOL AND SCHEDULES**

# E-001



**REFERENCE NOTES:**

- ① DISCONNECT AND REMOVE ELECTRICAL EQUIPMENT IN AREAS SCHEDULED FOR MODIFICATION. REFER TO ELECTRICAL PLANS FOR NEW LAYOUTS AND AREAS / EQUIPMENT REQUIRING DEMOLITION.
- ② (E) FIXTURE TO BE REPLACED. MAINTAIN EXISTING WIRING FOR MODIFICATION AND REUSE.
- ③ DISCONNECT EQUIPMENT TO BE REMOVED.
- ④ REMOVE FIXTURE. EXTEND EXISTING CIRCUITRY TO FIXTURES TO REMAIN.
- ⑤ RELOCATE FIXTURES TO CLEAR NEW DUCTWORK. SEE LIGHTING PLAN FOR NEW LOCATIONS.
- ⑥ SEE SHEET E-130 FOR ADDITIONAL WORK IN MEZZANINE.

**FLOOR PLAN - DEMOLITION**

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

1  
E-100

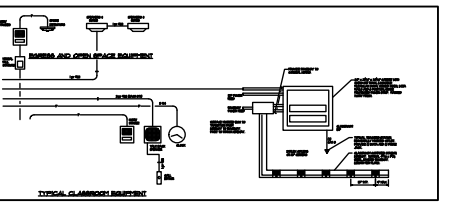


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Project Name  
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WOODSHOP REMODEL**

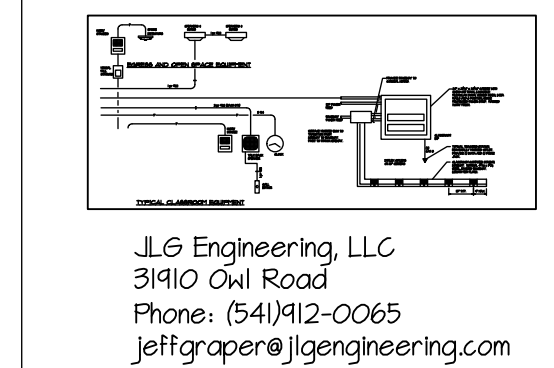
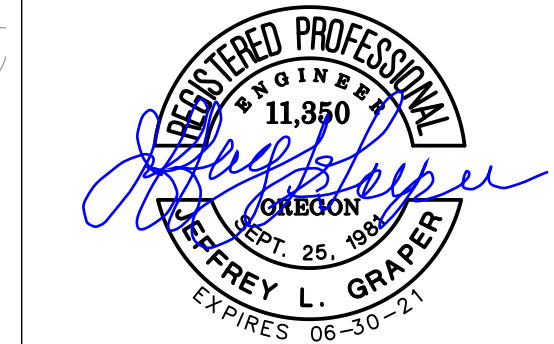
Project Address  
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**SHEET NAME**

**FLOOR PLAN -  
DEMOLITION**

**E-100**

STAMP



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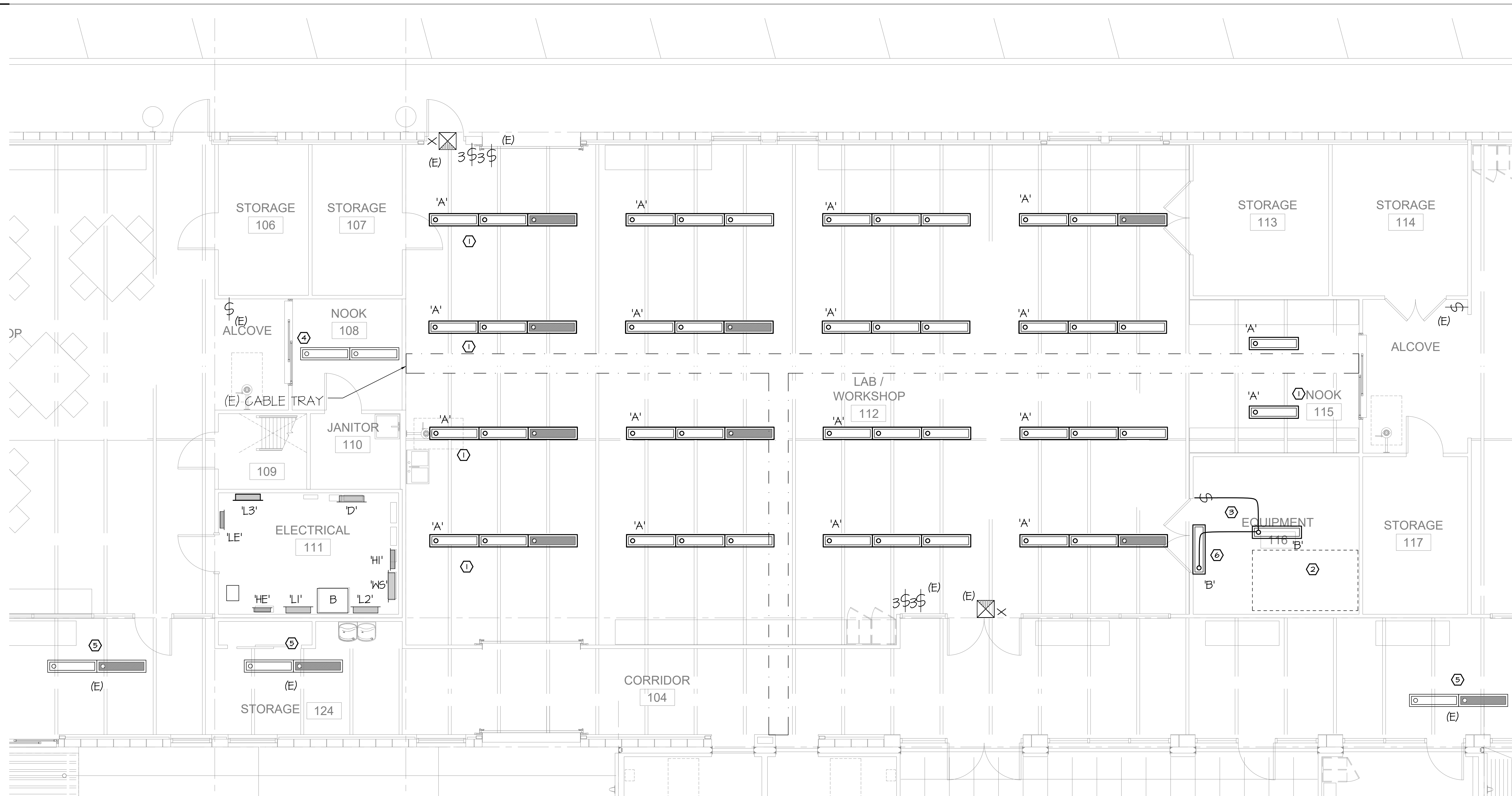
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**4J SCHOOL DISTRICT**

Project Name  
**4J CHURCHILL HS  
WOODSHOP REMODEL**  
Project Address  
**1850 BAILEY HILL ROAD  
EUGENE, OREGON 97405**

**SHEET NAME**

**FLOOR PLAN -  
LIGHTING**

**E-110**



**REFERENCE NOTES:**

- ① CONNECT NEW FIXTURES TO (E) SWITCHING AND CIRCUITRY, TYP.
- ② PAINT SPRAY BOOTH - CLASS I DIV 1
- ③ PAINT SPRAY AREA - CLASS I DIV 2
- ④ RECONNECT (E) FIXTURES TO ALCOVE SWITCH.
- ⑤ RELOCATE (E) FIXTURES TO CLEAR NEW DUCTWORK. SEE MECH. RECONNECT TO (E) CIRCUITRY AND SWITCHING.
- ⑥ LOCATE FIXTURES TO CLEAR DUCTWORK. SEE MECH.

**FLOOR PLAN - LIGHTING**

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

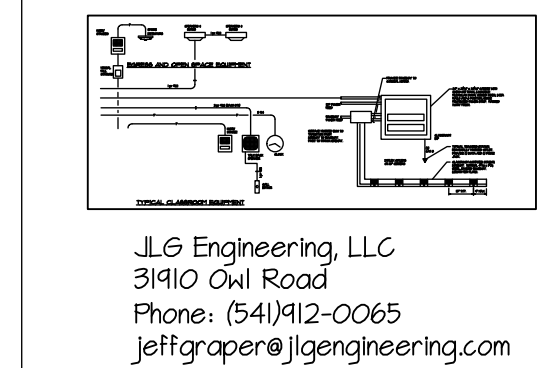
1  
E-110



**GENERAL NOTES:**

1. BRANCH CIRCUIT WIRING, OTHER THAN FEEDERS, NOT SHOWN. LOAD ON EACH LIGHTING CIRCUIT SHALL NOT EXCEED 12 AMPS. FIXTURES NOTED EMERGENCY SHALL BE CONNECTED TO EMERGENCY PANELS. SEE PANEL SCHEDULES FOR LIGHTING CIRCUIT ASSIGNMENTS.
2. RECONNECT NEW AND RELOCATED FIXTURES TO ORIGINAL CIRCUITRY AND SWITCHING WHERE POSSIBLE.
3. PROVIDE UL424 RELAY AND CONNECT EMERGENCY LIGHTS TO LOCAL OCCUPANCY SENSOR SYSTEM AND FIRE ALARM SYSTEM.

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**REVISIONS TO THIS SHEET**

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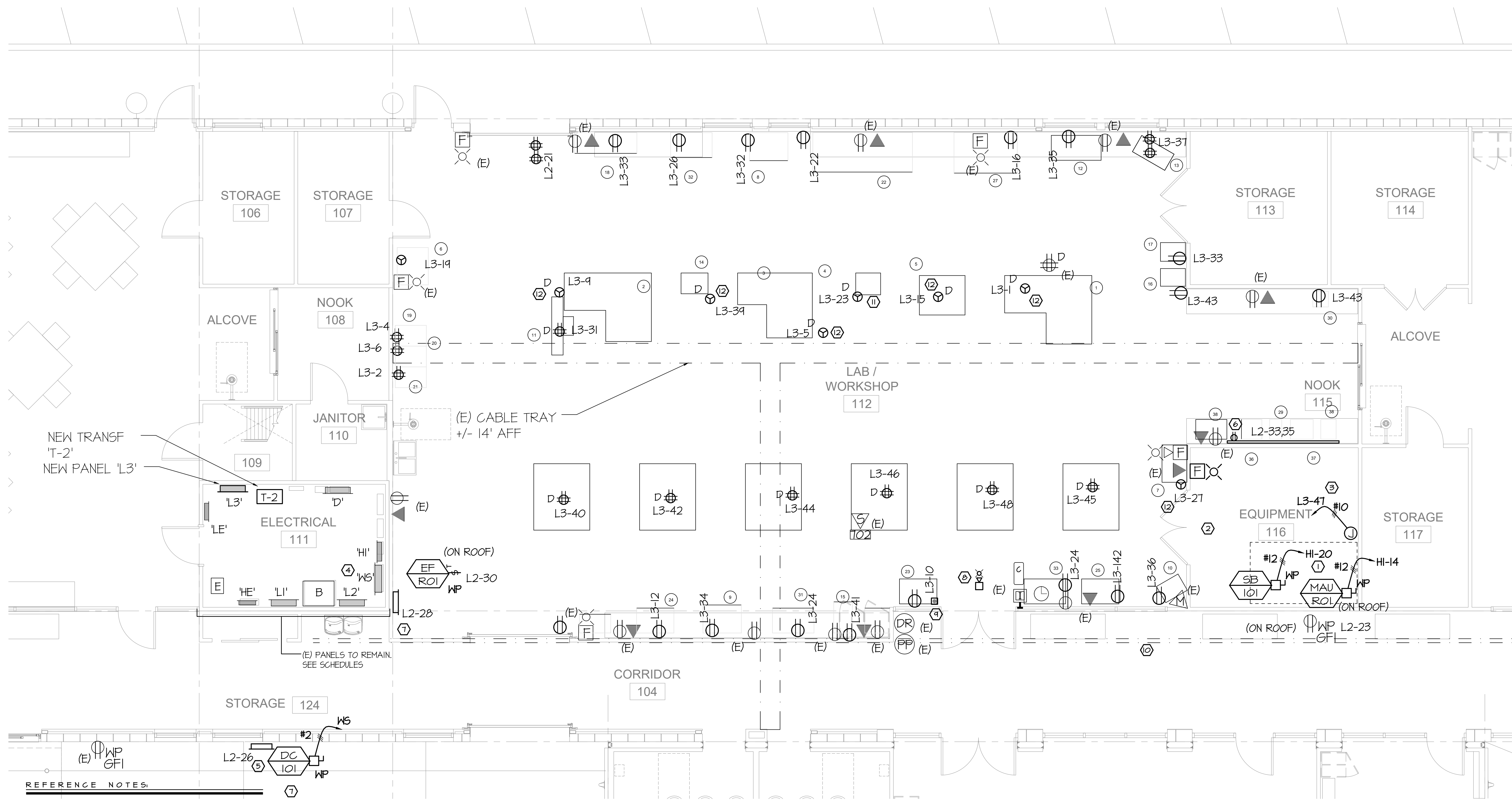
Project Name  
**4J CHURCHILL HS  
WOODSHOP REMODEL**

Project Address  
**1850 BAILEY HILL ROAD  
EUGENE, OREGON 97405**

**SHEET NAME**

**FLOOR PLAN - POWER  
AND SIGNAL**

**E-120**



**REFERENCE NOTES:**

- ① PAINT SPRAY BOOTH - CLASS I DIV 1
- ② PAINT SPRAY AREA - CLASS I DIV 2
- ③ LOCATE FOR SPRAY BOOTH CONNECTION. CONNECT SUPPRESSION PANEL TO FA SYSTEM.
- ④ PROVIDE NEW 175/3 IN PANEL C BREAKER POSITION. REMOVE (E) PANEL C BREAKER AND FEEDER FROM W5 TO C - SEE ONE-LINE DIAGRAM.
- ⑤ CONNECT TO SPARE 100/3 (G BREAKER POSITION). ROUTE FEEDER THROUGH VFD. SEE MECHANICAL.
- ⑥ NEW 2-CIRCUIT PLUGMOLD. CONNECT TO SPARE BREAKERS IN PANEL L2.
- ⑦ CONNECT DUST COLLECTOR CONTROL PANEL & SPARK DETECTION PANEL. SEE MECHANICAL.
- ⑧ SPARK DETECTION SYSTEM ALARM HORN/STROBE. SEE MECHANICAL.
- ⑨ DUST COLLECTOR REMOTE START/STOP. SEE MECHANICAL.
- ⑩ RELOCATE (E) EXPOSED WIRING TO CLEAR NEW DUCTWORK. SEE MECH.
- ⑪ 208V 30A RECEPTACLE AND CIRCUITRY.
- ⑫ 208V 20A RECEPTACLE AND CIRCUITRY.

**FLOOR PLAN - POWER & SIGNAL**

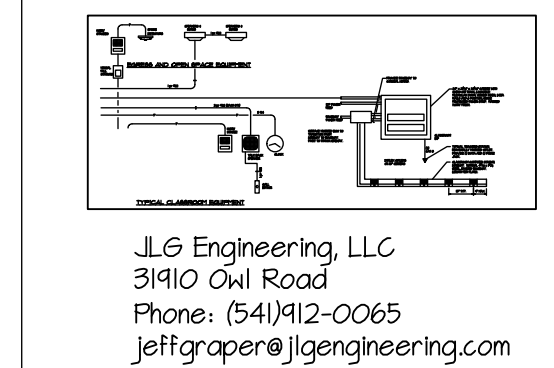
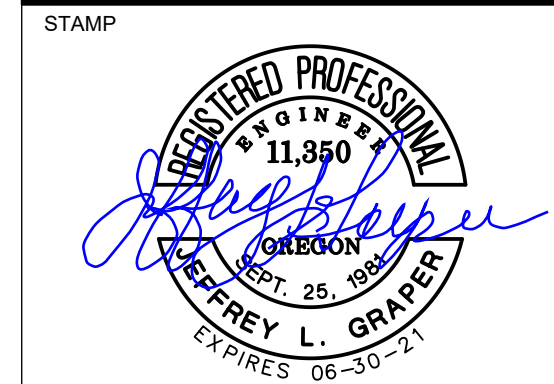
SCALE: 1/4" = 1'-0"

1  
E-120



**GENERAL NOTES:**

1. BRANCH CIRCUIT WIRING OTHER THAN FEEDERS, NOT SHOWN. LOAD ON EACH 20 AMP POWER CIRCUIT SHALL NOT EXCEED 12 AMPS AND 9 AMPS ON RECEPTACLE CIRCUITS. CONNECT MECHANICAL AND OTHER EQUIPMENT PER SCHEDULES. EQUIPMENT WITH LARGER THAN 20 AMP CIRCUITS AS NOTED. SEE PANEL SCHEDULES FOR CIRCUIT ASSIGNMENTS.
2. CIRCUITRY TO RECEPTACLES OTHER THAN STANDARD SHALL BE BASED ON RECEPTACLE RATINGS. SEE PANEL SCHEDULES FOR CIRCUIT AMPERAGE SIZING.
3. SEE ARCHITECTURAL PLANS FOR EXACT EQUIPMENT LOCATIONS AND EQUIPMENT SCHEDULES.
4. ALL DROP CORD RECEPTACLES SHALL BE LOCKING TYPE.
5. SEE SHEET E-130 FOR ADDITIONAL CONNECTIONS AND INTERLOCKS FOR THE DUST COLLECTION / SPARK DETECTION SYSTEMS.



**REVISIONS TO THIS SHEET**

| REV. | DATE |
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**PROJECT TRACKING**

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| RBA #:   |  |
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**Owner**  
**4J SCHOOL DISTRICT**

Project Name  
**4J CHURCHILL HS  
WOODSHOP REMODEL**  
Project Address  
**1850 BAILEY HILL ROAD  
EUGENE, OREGON 97405**

**SHEET NAME**

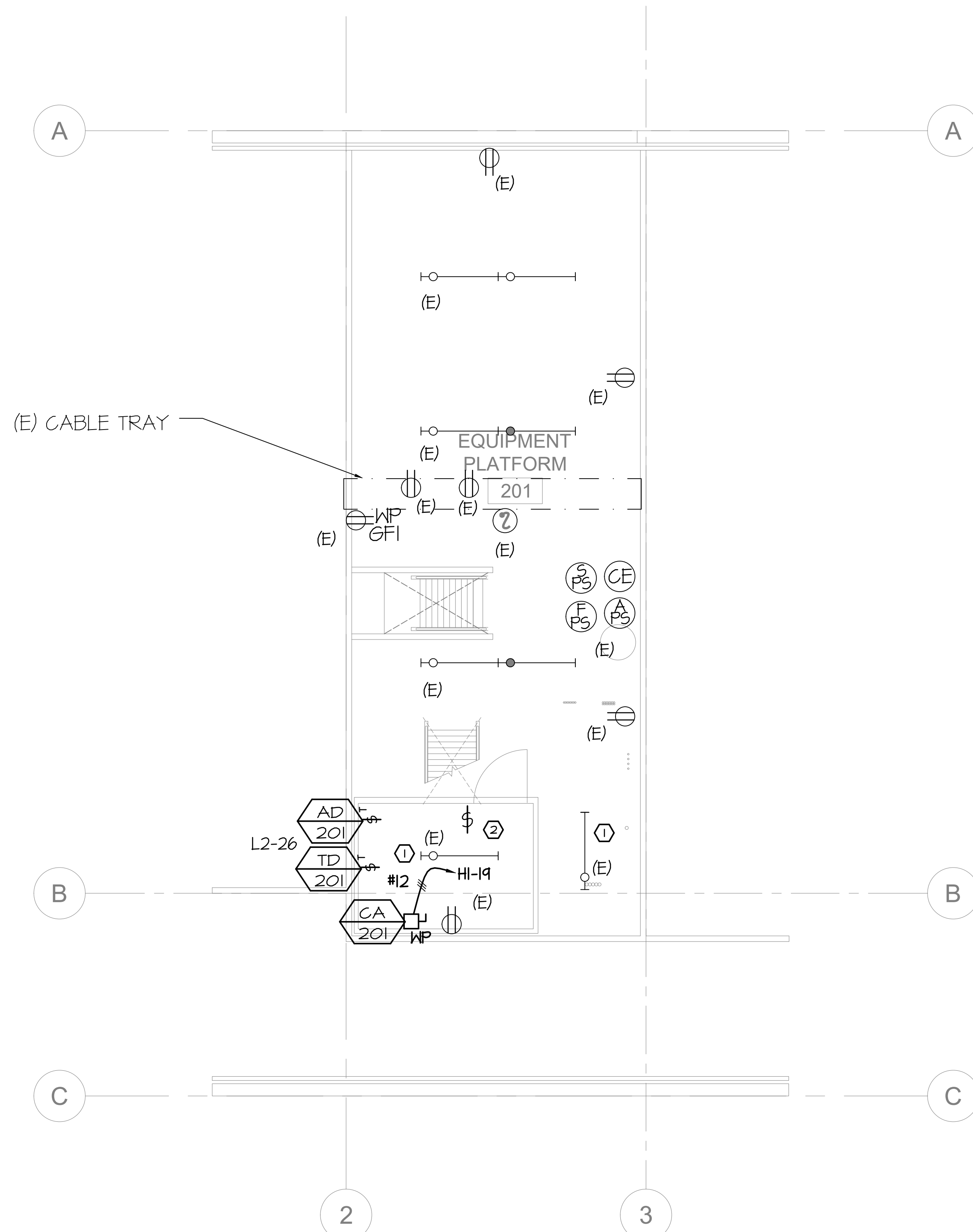
**MEZZANINE PLAN -  
ELECTRICAL**

**GENERAL NOTES:**

- BRANCH CIRCUIT WIRING, OTHER THAN FEEDERS, NOT SHOWN. LOAD ON EACH 20 AMP POWER CIRCUIT SHALL NOT EXCEED 12 AMPS AND 9 AMPS ON RECEPTACLE CIRCUITS. CONNECT MECHANICAL AND OTHER EQUIPMENT PER SCHEDULES. EQUIPMENT WITH LARGER THAN 20 AMP CIRCUITS AS NOTED. SEE PANEL SCHEDULES FOR CIRCUIT ASSIGNMENTS.
- SEE ARCHITECTURAL PLANS FOR EXACT EQUIPMENT LOCATIONS AND EQUIPMENT SCHEDULES.

**REFERENCE NOTES:**

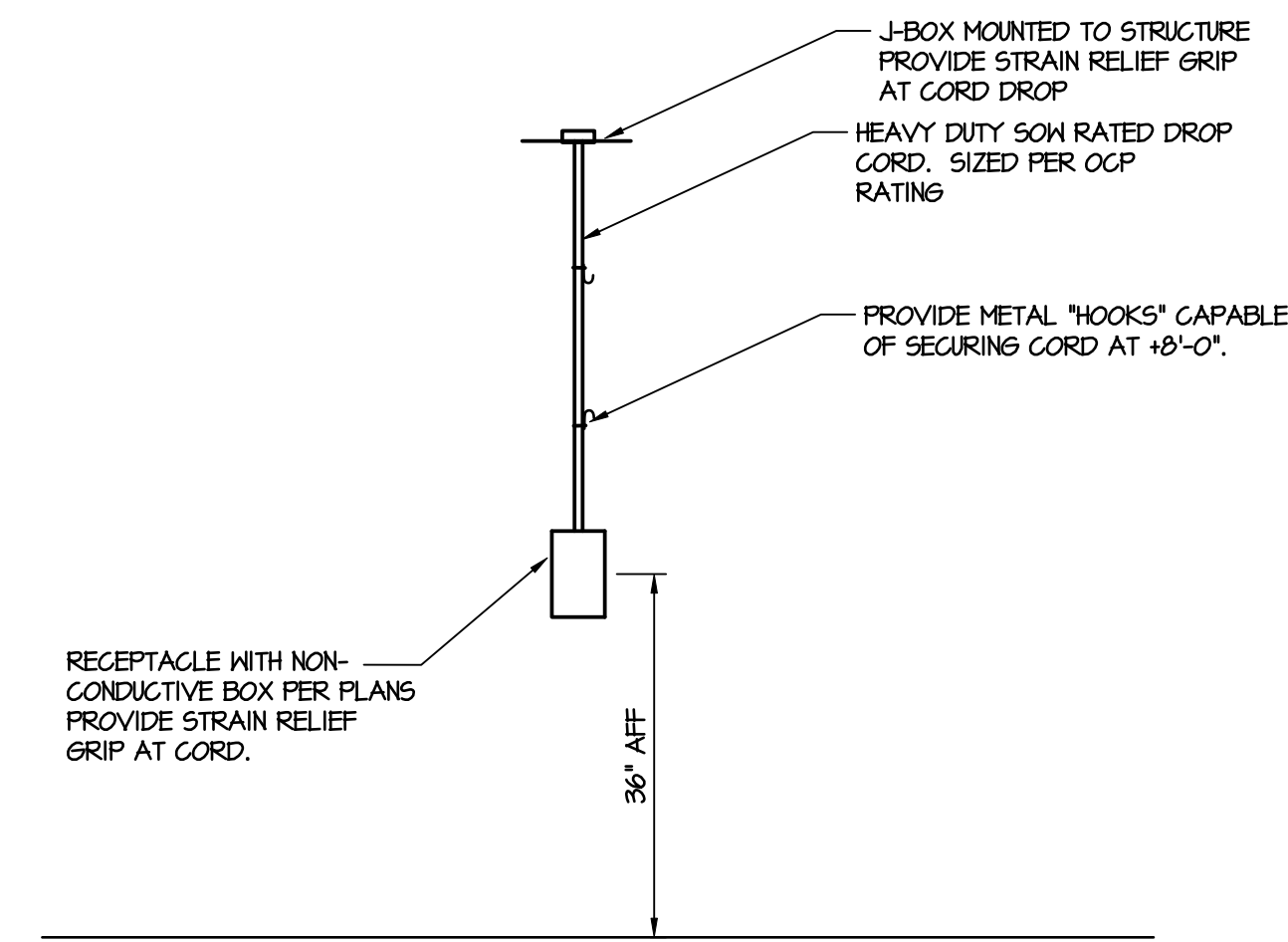
- RELOCATE (E) FIXTURES TO NEW LOCATIONS SHOWN. CONNECT TO (E) CIRCUITRY. RELOCATE CONDUIT AND J-BOXES AS REQUIRED FOR INSTALLATION OF NEW WALLS AND CEILING BELOW EXISTING ROOF JOISTS. MAINTAIN WORKING CLEARANCE AND ACCESS FOR ALL ELECTRICAL EQUIPMENT REQUIRING IT.
- PROVIDE NEW SWITCH AND CONNECT TO RELOCATED FIXTURE.



**MEZZANINE PLAN - ELECTRICAL**

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

**1**  
**E-130**

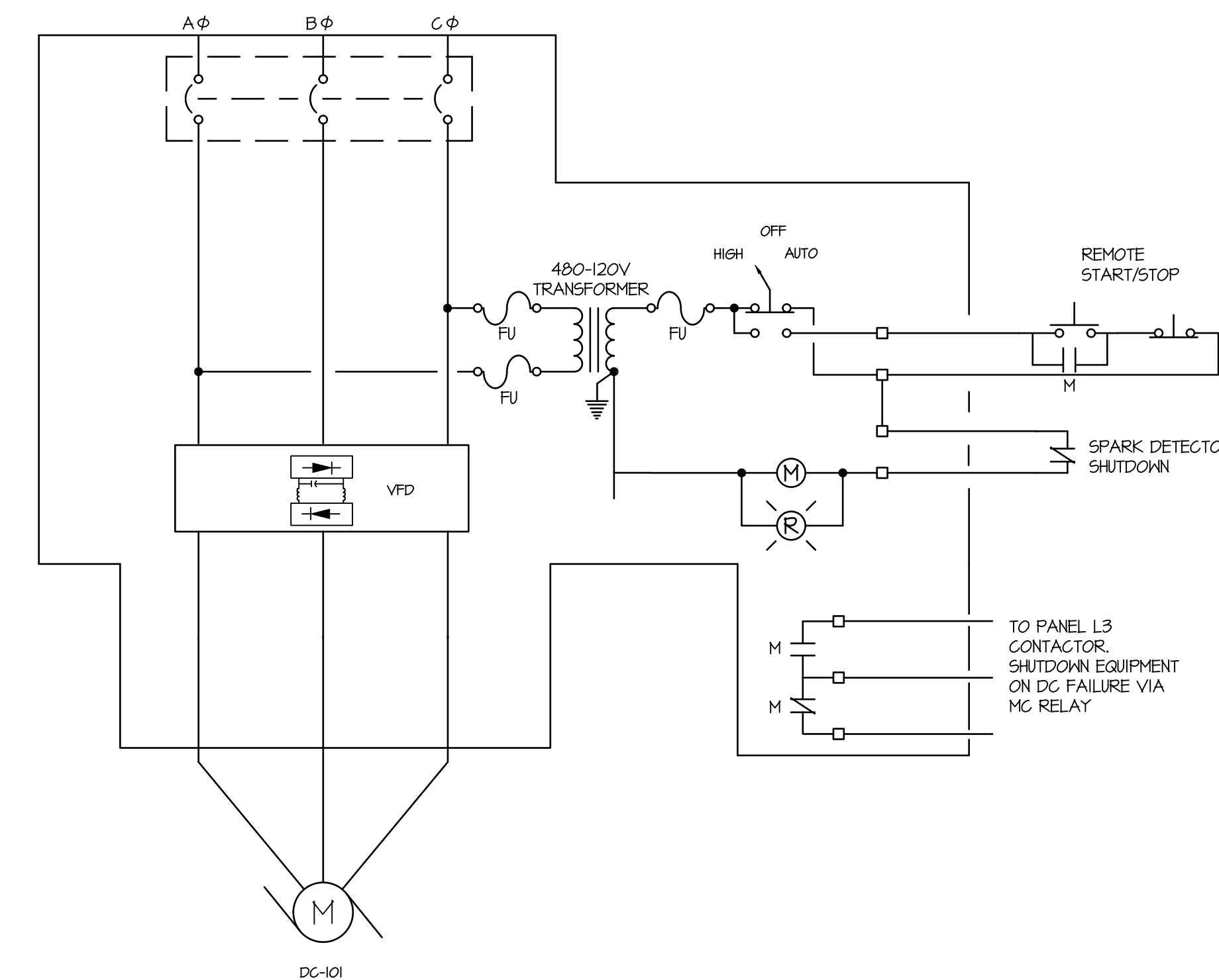


**DROP CORD DETAIL**

NOT TO SCALE

**2**

**E-130**



**MOTOR STARTER DIAGRAM**

NO SCALE

**3**

**E-130**

CONNECT DUST COLLECTOR INTERLOCK AND SPARK DETECTION INTERLOCK TO SHUT DOWN EQUIPMENT.  
CONNECT 120V POWER TO ABORT DAMPER AND SOLENOIDS.  
REFER TO EQUIPMENT DETAILS AND DIAGRAMS FOR FURTHER INFORMATION.  
SEE MECHANICAL FOR LOCATIONS AND DETAILS.

