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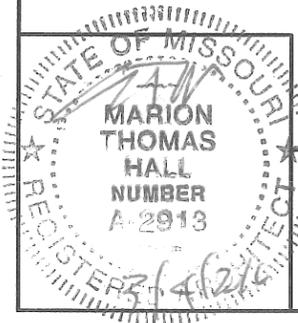
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# MISSOURI DEPARTMENT OF TRANSPORTATION

Boonville Office and Restroom Addition  
Central District  
Route 5  
Cooper County

CODE REQUIREMENTS

- BUILDING CODE - CURRENT IBC
- PLUMBING CODE - CURRENT IBC
- MECHANICAL CODE - CURRENT IBC
- ELECTRICAL CODE - CURRENT N.E.C.



COVER SHEET

MISSOURI DEPARTMENT  
OF TRANSPORTATION  
DIVISION OF GENERAL SERVICES  
FACILITIES MANAGEMENT

Boonville Office and Restroom Addition  
Central District - Cooper County  
Route 5 - Boonville, MO

DESIGN BY: LARRY CARVER

DATE: 4-1-16

Sheet  
1 of 14

**GRADING NOTES:**

CONTRACTOR WILL BE RESPONSIBLE FOR:

EXCAVATION OF THE SUB GRADE.

CRUSHED ROCK BASE UNDER INTERIOR SLAB.

PROVIDE ADEQUATE AMOUNT OF TOPSOIL, STARTER FERTILIZER, TRIPLE "T" SEED AND STRAW ON ALL AREA DISTURBED DURING CONSTRUCTION OR MATCH WITH LIKE MATERIALS AT AREAS DISTURBED DURING CONSTRUCTION.

EXCAVATED SOIL AND ROCK NOT USED CAN BE PLACED ON SITE. AREA TO BE DESIGNATED BY OWNER.

**SITE NOTES**

- (A) CONTRACTOR TO MAKE CONNECTION AS REQUIRED FOR AN OPERABLE GAS SERVICE FROM MODOT PROVIDED 500 GALLON PROPANE TANK. CONTRACTOR TO PROVIDE CORRECTLY SIZED 4" THICK CONCRETE PAD.
- (B) EXISTING 2" WATER LINE ENTERS AN EXISTING PIT AND CHANGES TO A 1-1/2" AT SHUT-OFF. REMOVE PIT AND SHUT-OFF. THEN THE CONTRACTOR TO PROVIDE AND INSTALL WATER METER PIT WITH HEAVY DUTY LID(S) PROVIDE 1-1/2" WATTS 007 DOUBLE CHECK BACK FLOW PREVENTER, METER & SHUT-OFF VALVE ALL IN ONE PIT AS REQUIRED FOR A FUNCTIONAL SYSTEM. CONNECT TO THE EXISTING 1-1/2" WATER LINE INTO BUILDING. CONNECT TO NEW WATER HEATER ON MEZZANINE WITH A 3/4" COPPER SUPPLY.
- (C) CONTRACTOR TO CONNECT TO NEW SEWER PUMP STATION PROJECT. COORDINATE DURING CONSTRUCTION FOR A FUNCTION SYSTEM.
- (D) CONTRACTOR TO STUB UP TO 15'-0" A.F.F. A 1-1/2" ELECTRICAL CONDUIT FOR FUTURE ELECTRICAL SERVICE FOR SEWER PUMP. EXTEND 36" BEYOND FOUNDATION WALL. PROVIDE SWEEPS, PULL WIRE, CAP & MARK. SEE SHEET 3.

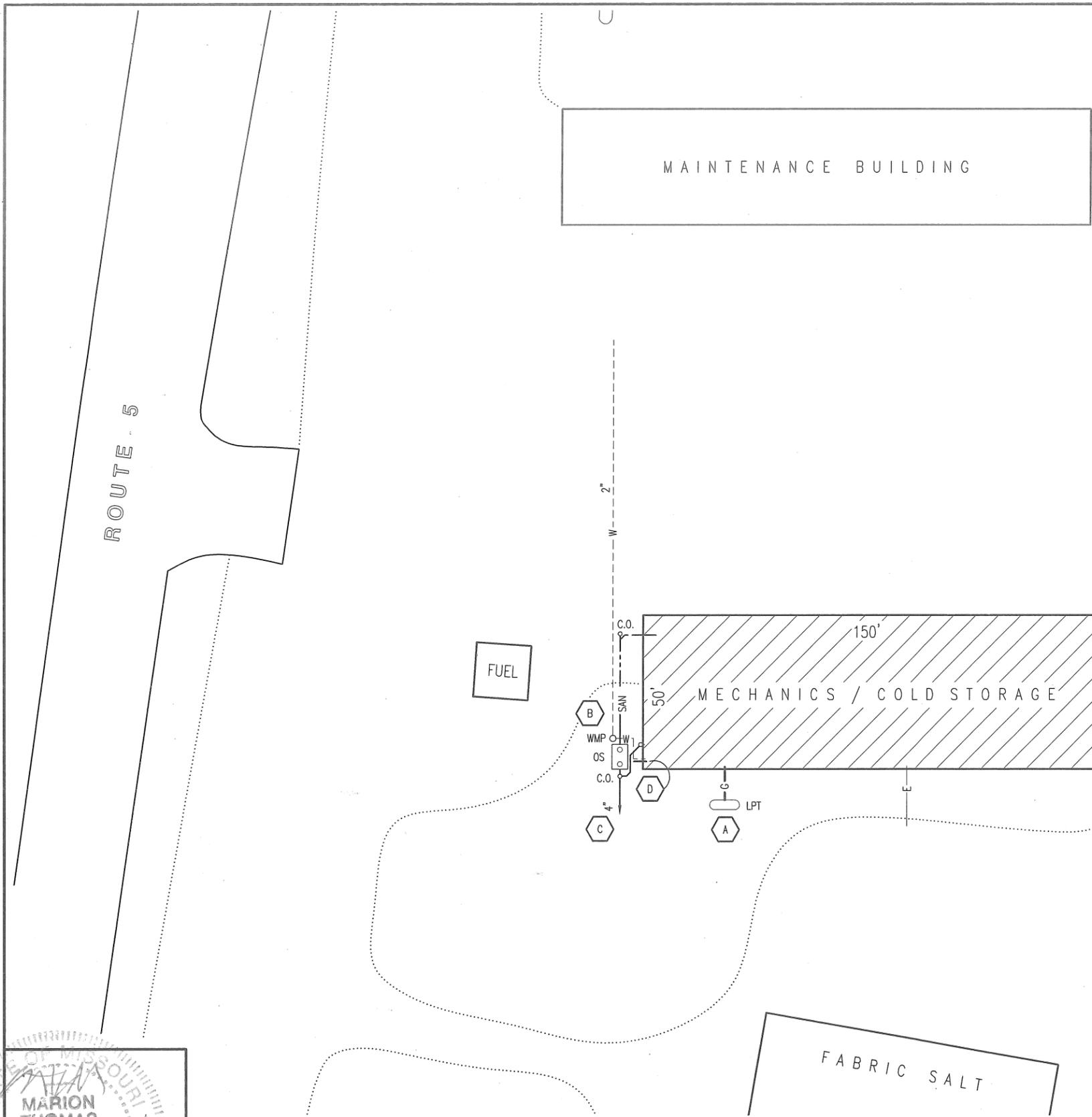
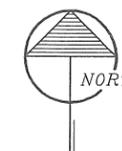
**LEGEND (EXISTING)**

WATER ----- W -----  
 ELECTRICAL ----- E -----

**LEGEND (NEW)**

PROPANE GAS ----- G -----  
 WATER ----- W -----  
 SANITARY SEWER ----- SAN -----  
 OIL SEPARATOR - OS  
 WATER METER PIT - WMP  
 500 GALLON PROPANE TANK - LPT

(A) SITE PLAN  
 (2) SCALE: 1" = 40'-0"



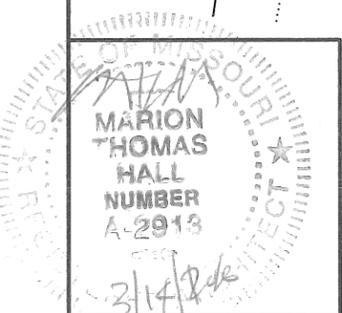
**SITE PLAN**

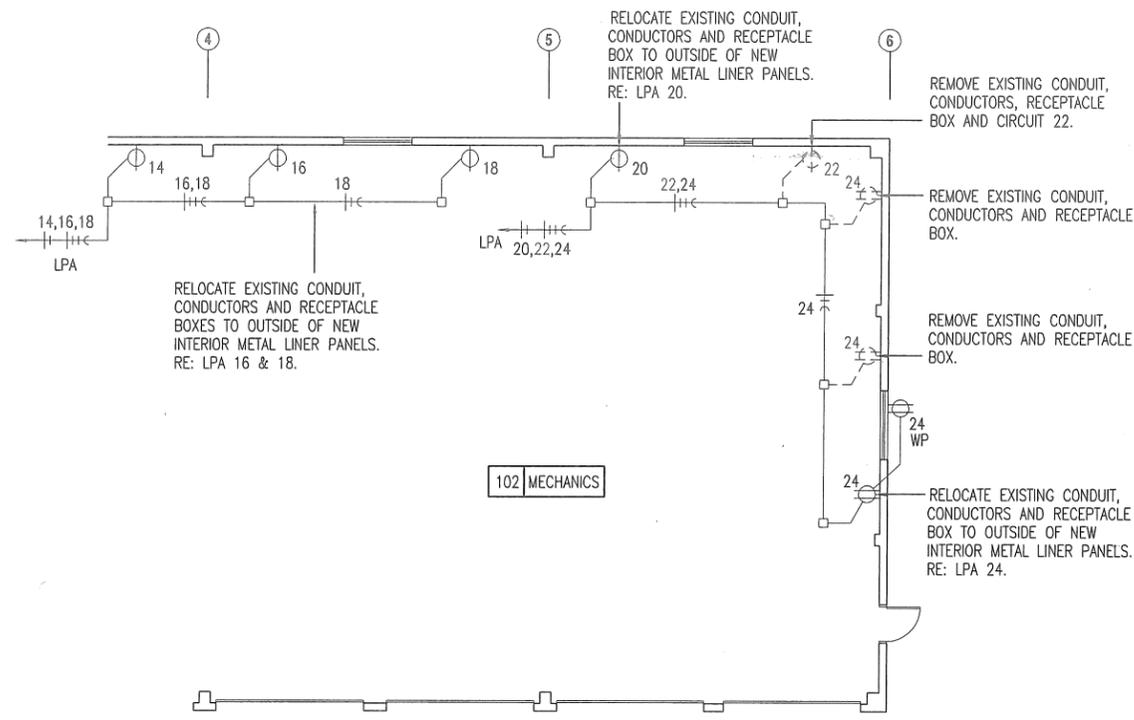
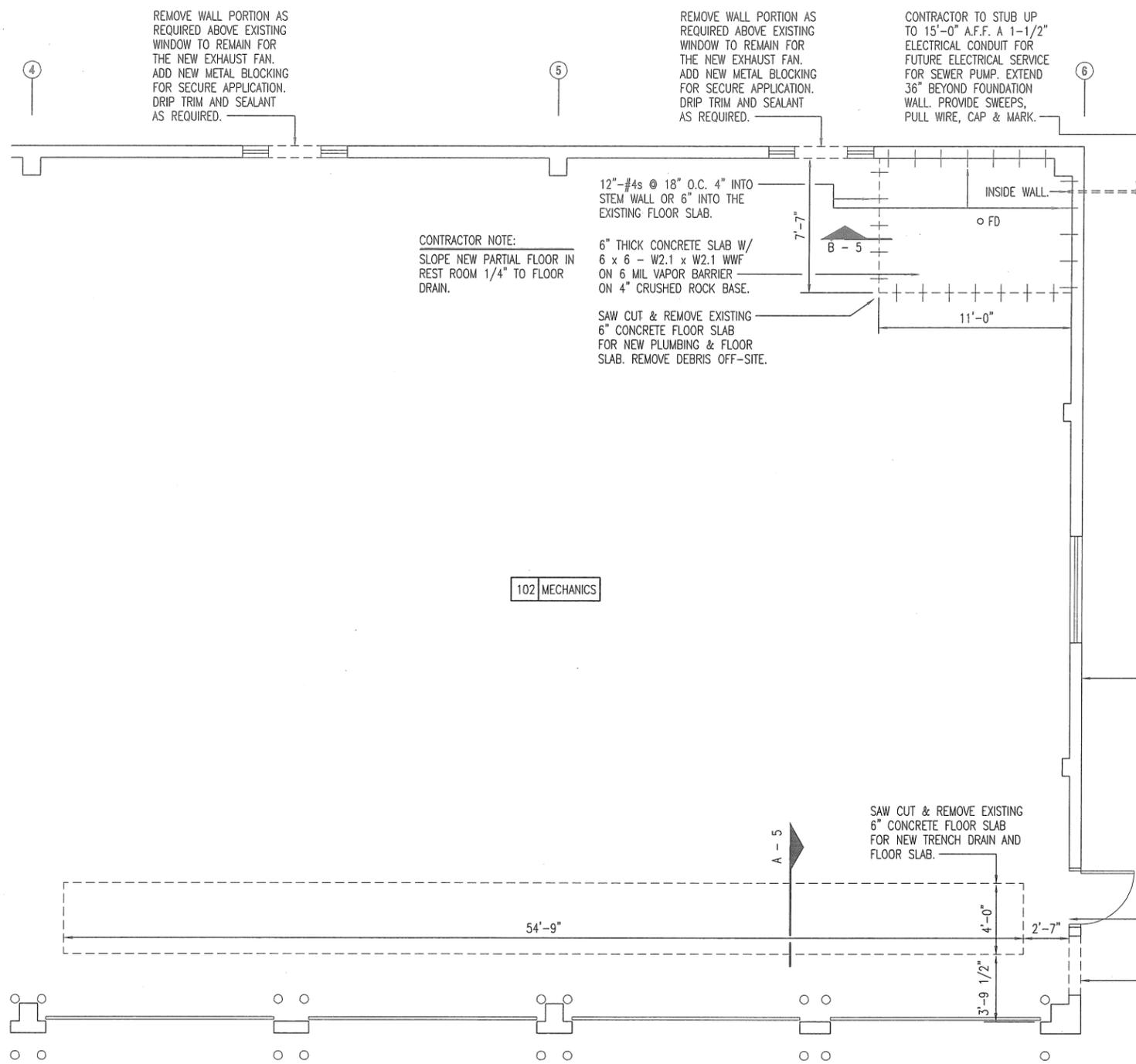
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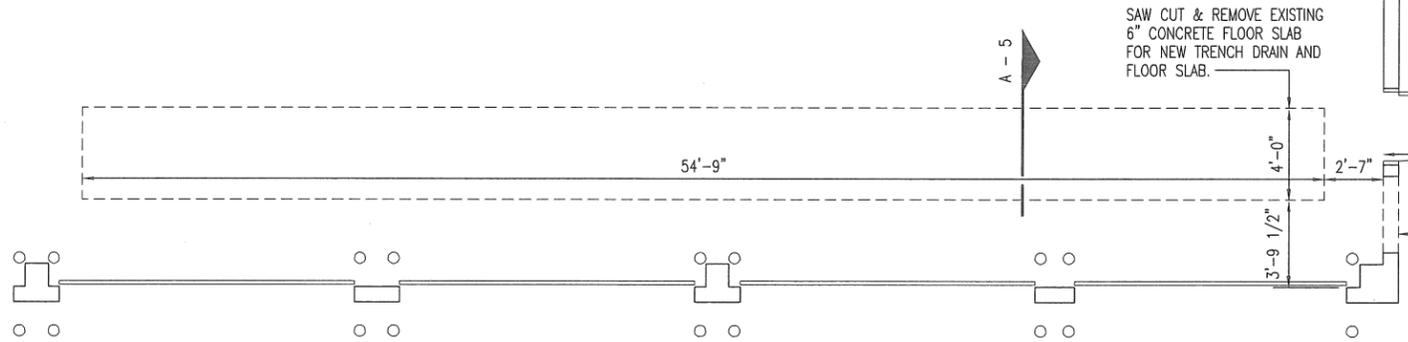




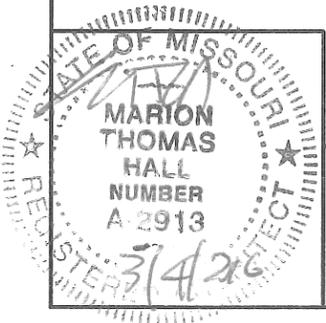
102 MECHANICS

102 MECHANICS

B  
3  
DEMOLITION TO EXISTING  
POWER PLAN  
SCALE: 1/16" = 1'-0"



A  
3  
DEMOLITION FLOOR PLAN  
SCALE: 1/8" = 1'-0"

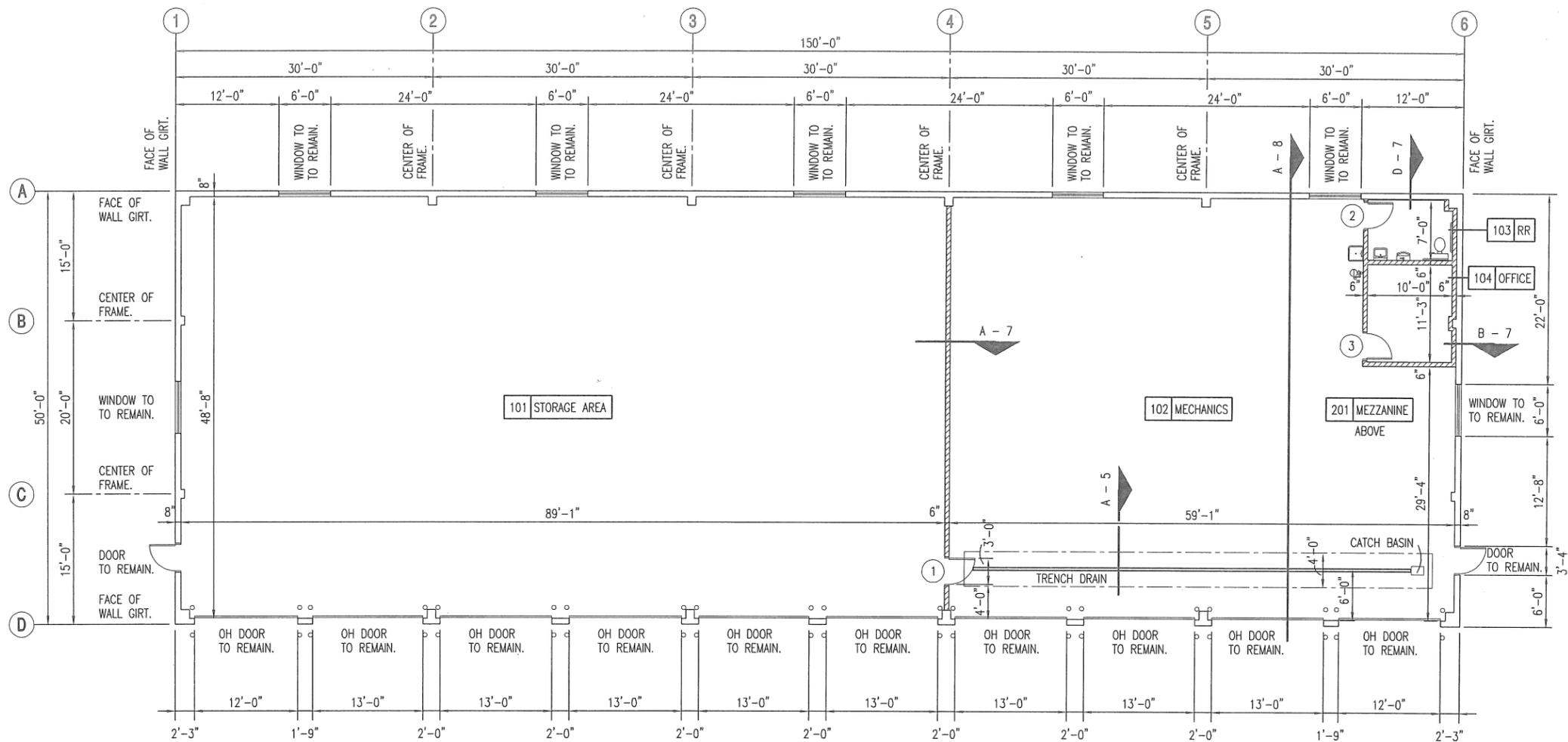


# DEMOLITION FLOOR PLAN

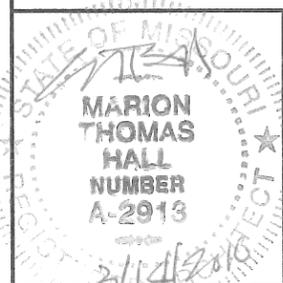
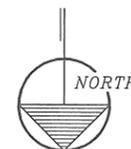
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A  
4 FLOOR PLAN  
SCALE: 1/8" = 1'-0"



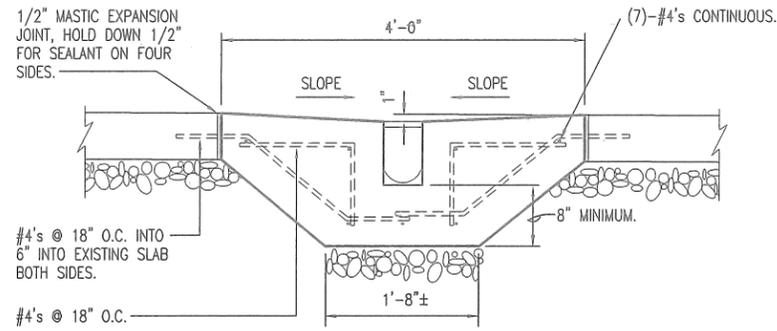
# FLOOR PLAN

MISSOURI DEPARTMENT  
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FACILITIES MANAGEMENT

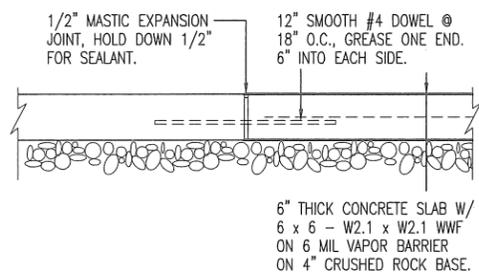
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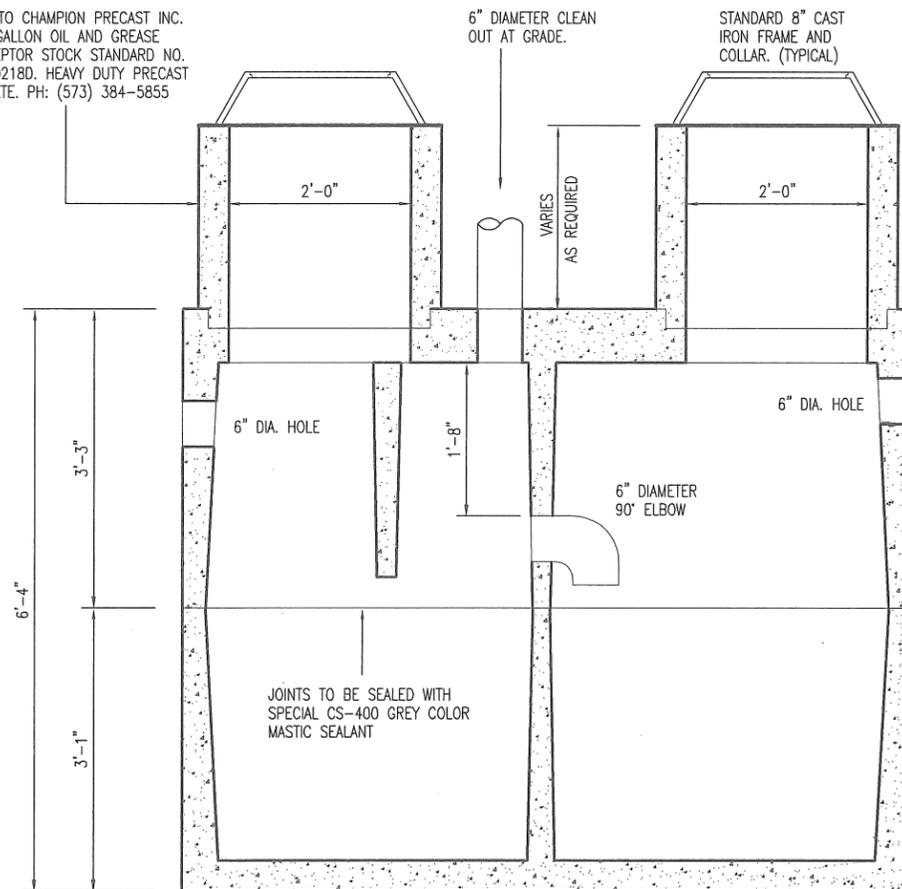


**A**  
5  
**TRENCH DRAIN**  
SCALE: 1/2" = 1'-0"

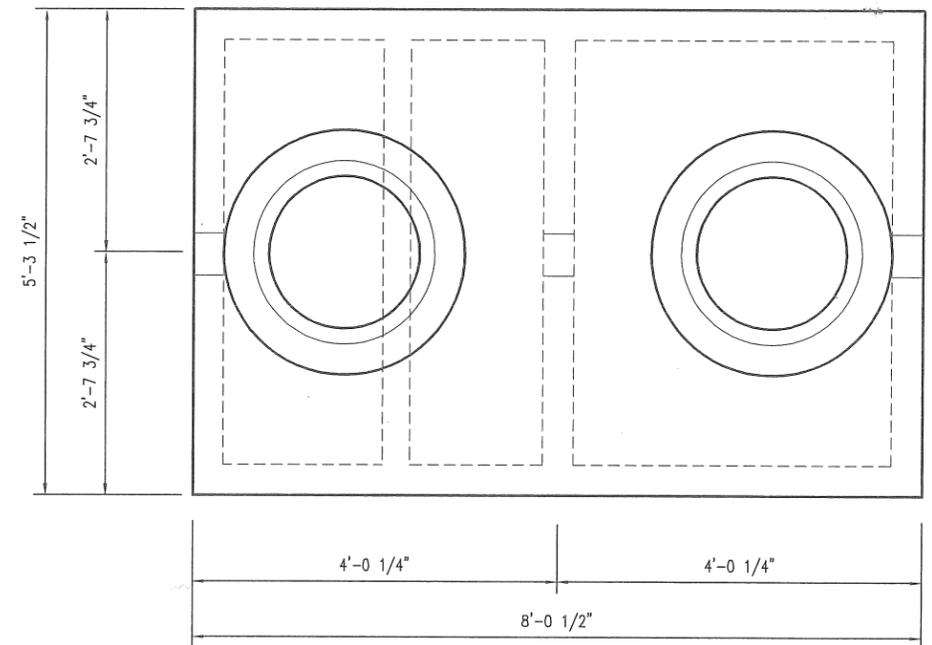


**B**  
5  
**EXPANSION JOINT**  
SCALE: 1/2" = 1'-0"

EQUAL TO CHAMPION PRECAST INC.  
1,200 GALLON OIL AND GREASE  
INTERCEPTOR STOCK STANDARD NO.  
140-00218D. HEAVY DUTY PRECAST  
CONCRETE. PH: (573) 384-5855



SECTION



PLAN VIEW

**C**  
5  
**1,200 GALLON OIL SEPARATOR**  
SCALE: 1/2" = 1'-0"

**CONCRETE NOTES**

1. CONCRETE WORK SHALL BE EXECUTED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE (A.C.I.) MANUAL OF CONCRETE PRACTICE.
2. FOUNDATION DESIGN IS BASED UPON AN ASSUMED SOIL BEARING CAPACITY OF 2,000 PSF. IF WET OR UNUSUAL SOIL CONDITIONS ARE ENCOUNTERED, NOTIFY THE DESIGNER AND CONSTRUCTION INSPECTOR BEFORE PROCEEDING WITH THE WORK.
3. IF CONDITIONS REQUIRING ROCK EXCAVATION ARE ENCOUNTERED, NOTIFY THE DESIGNER AND CONSTRUCTION INSPECTOR BEFORE PROCEEDING WITH THE WORK.
4. ALL CONCRETE SHALL BE TYPE 1 CEMENT WITH A COMPRESSIVE STRENGTH OF 4,000 PSI @ 28 DAYS AND NOT TO EXCEED 4" SLUMP.
5. DEFORMED STEEL REINFORCING BARS SHALL BE: #4 AND LARGER ASTM A615 GRADE 60.
6. SEE SPECIFICATION SECTION 03300 CONCRETE FOR ADDITIONAL INFORMATION.
7. CONCRETE EXPOSED TO THE EXTERIOR SHALL RECEIVE AIR ENTRAINMENT 6% +/- 2%.
8. COORDINATE WORK OF OTHER TRADES REQUIRED TO BE INSTALLED IN, UNDER, OR THROUGH CONCRETE PRIOR TO PLACEMENT OF CONCRETE. INSTALL ALL ANCHORAGES AND SLEEVES REQUIRED FOR THE INSTALLATION OF WORK BY OTHER TRADES.
9. SAWED CONTROL JOINTS SHALL BE CLEANED FREE OF ALL DEBRIS AND FILLED WITH SEALANT. SEE SECTION 07900.
10. ALL EXPOSED INTERIOR CONCRETE FLOORS SHALL RECEIVE A CURING/SEALING FINISH PER SPECIFICATION SECTION 03346.
11. PROVIDE PRECAST TRENCH DRAIN & CATCH BASIN AS SPECIFIED. INSTALL AS RECOMMENDED BY THE MANUFACTURER. ACTUAL CONSTRUCTION AND INSTALLATION MAY REQUIRE SOME FIELD MODIFICATIONS. ANY DEVIATION FROM THE DRAWINGS AND SPECIFICATIONS SHALL HAVE PRIOR APPROVAL FROM THE ARCHITECT OR BUILDING INSPECTOR.



**CONCRETE DETAILS**

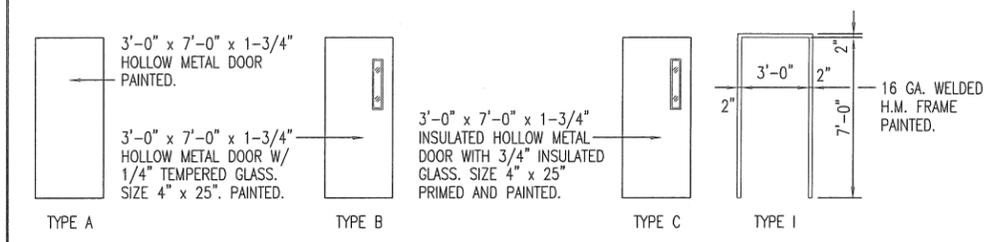
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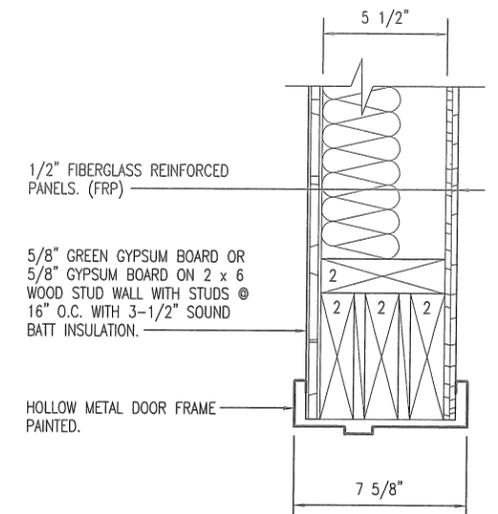
### DOOR SCHEDULE

NO.	SIZE	SWING	DR. TYPE	FRM. TYPE	DETAIL	DEPTH	HDWR. GRP.
1	3'-0" x 7'-0" x 1-3/4"	RHR	C	I	D - 6	6-1/2"	1
2	3'-0" x 7'-0" x 1-3/4"	LH	A	I	E - 6	7-5/8"	2
3	3'-0" x 7'-0" x 1-3/4"	RH	B	I	E - 6	7-5/8"	3

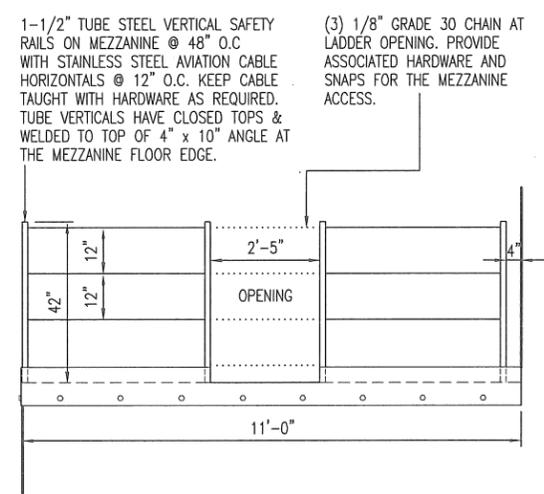


### FINISH SCHEDULE

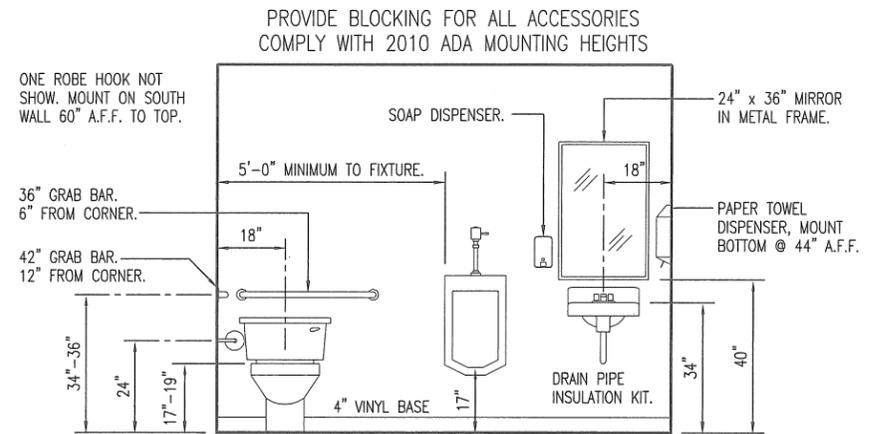
NO.	ROOM	FLOOR	WALLS										BASE		CEILING		
			3/4" T & G PLYWOOD. CURE AND SEALER ON NEW CONCRETE. REMAIN AS IS.	26 GAUGE INTERIOR LINER PANELS ON THE WEST WALL TO BOTTOM RED IRON.	26 GAUGE INTERIOR LINER PANELS ON THE EAST WALL TO BOTTOM RED IRON.	5/8" GREEN GYP. BD.	5/8" GYPSUM BOARD.	1/2" FRP ON OUTSIDE OF OFFICE AND REST ROOM AREAS.	R-20 CLOSED CELL SPRAY INSULATION ON THE EXISTING METAL WALL PANELS. PAINTED.	4" VINYL.	NONE.	4" VINYL OUTSIDE OF OFFICE & REST ROOM AREA.	EXISTING INSULATION TO REMAIN.	ACOUSTICAL CEILING TILE @ 8'-0" A.F.F.			
101	STORAGE AREA																
102	MECHANICS																
103	REST ROOM (RR)																
104	OFFICE																
201	MEZZANINE																



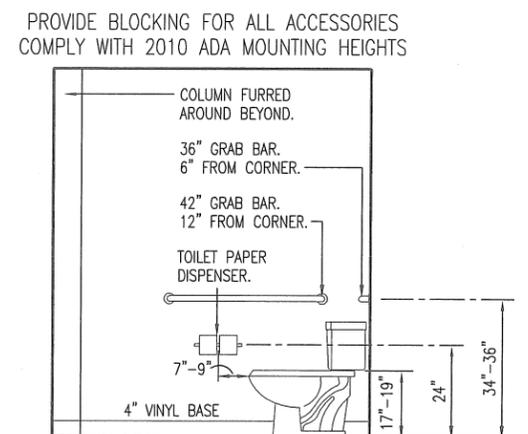
**E**  
6  
JAMB SIMILAR  
**DOOR HEAD**  
SCALE: 1-1/2" = 1'-0"



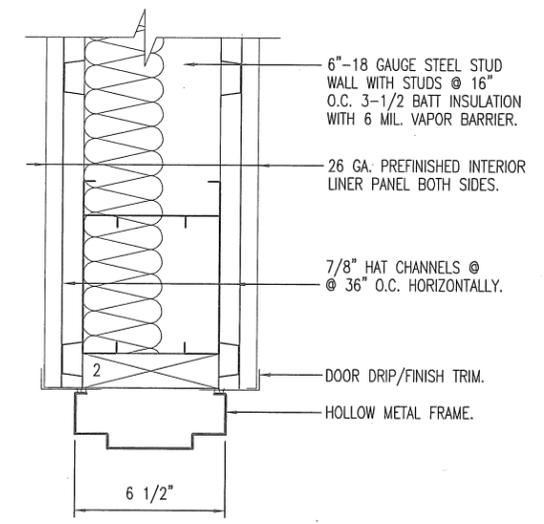
**A**  
6  
**MEZZANINE SAFETY RAIL**  
SCALE: 1/4" = 1'-0"



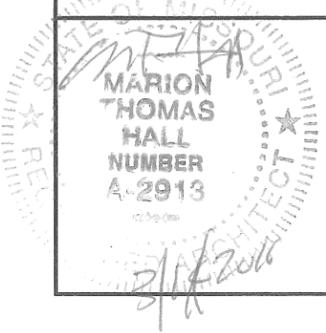
**B**  
6  
**REST ROOM ELEVATION**  
SCALE: 1/4" = 1'-0"



**C**  
6  
**REST ROOM ELEVATION**  
SCALE: 1/4" = 1'-0"



**D**  
6  
**DOOR HEADER/JAMB**  
SCALE: 1-1/2" = 1'-0"

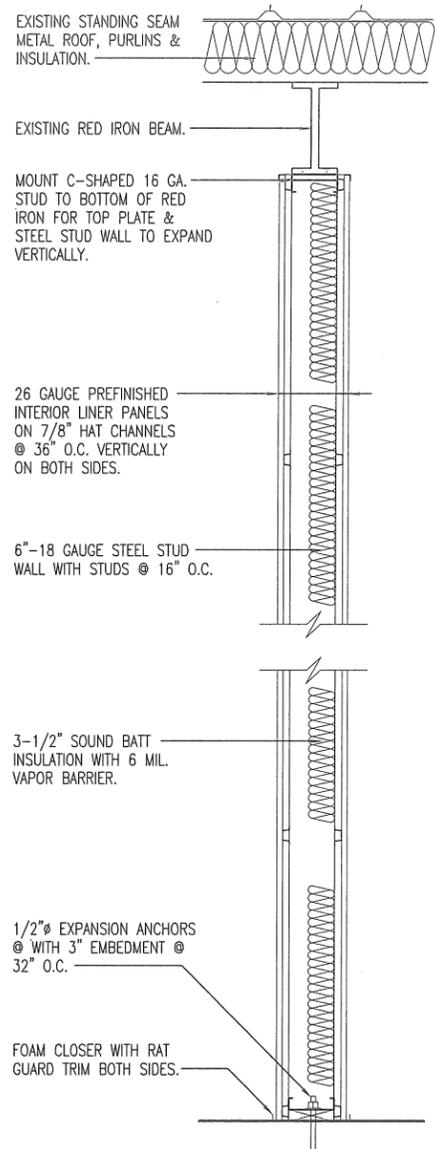


## SCHEDULES

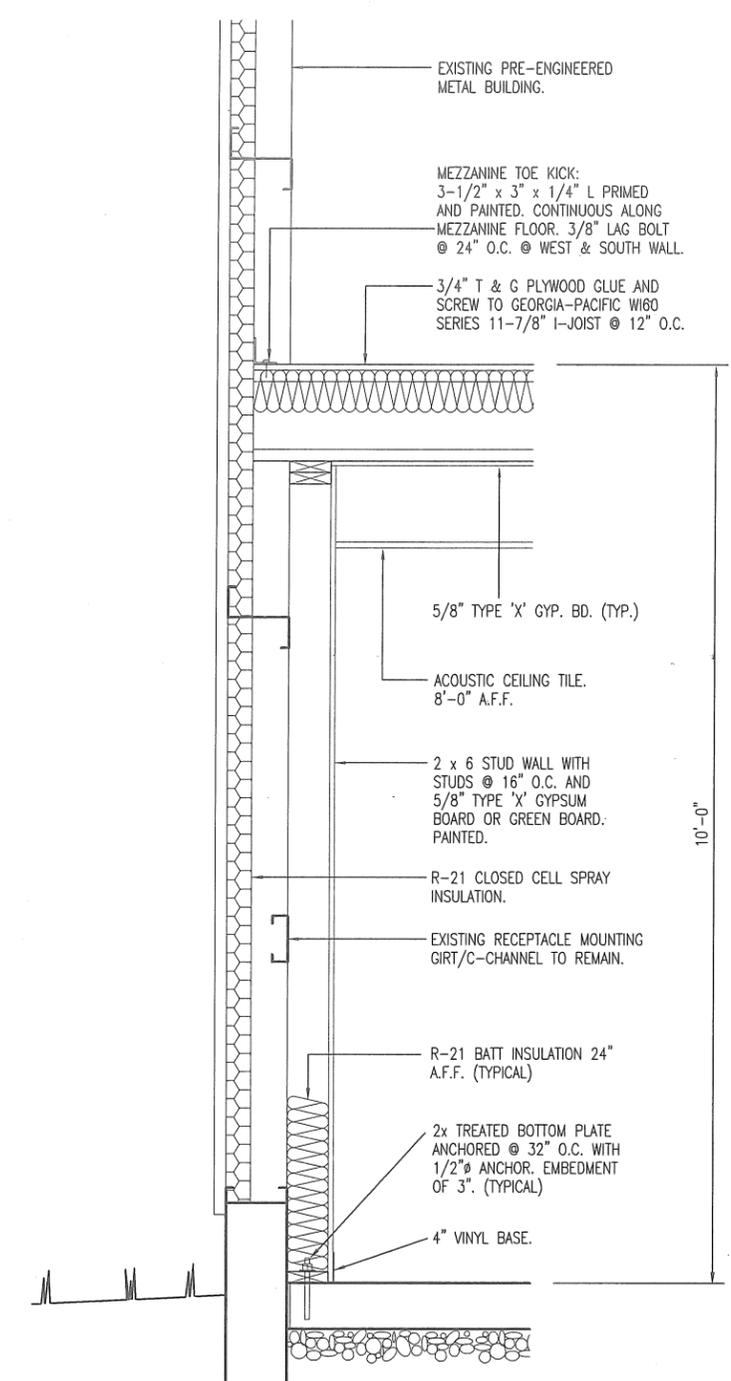
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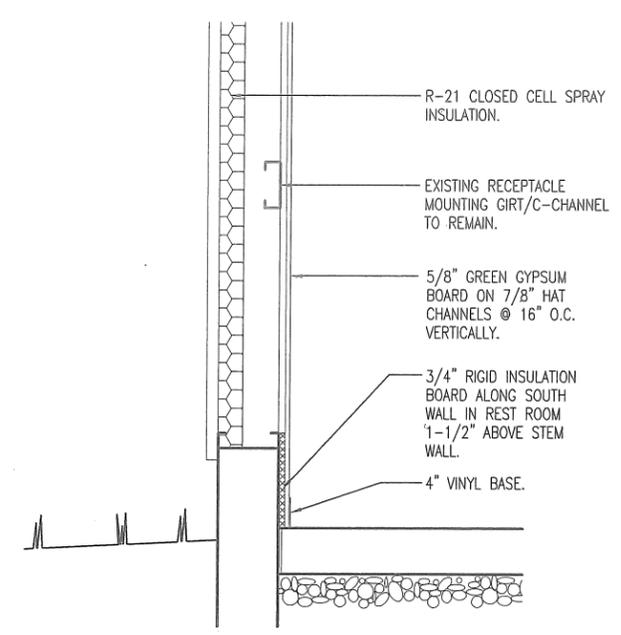
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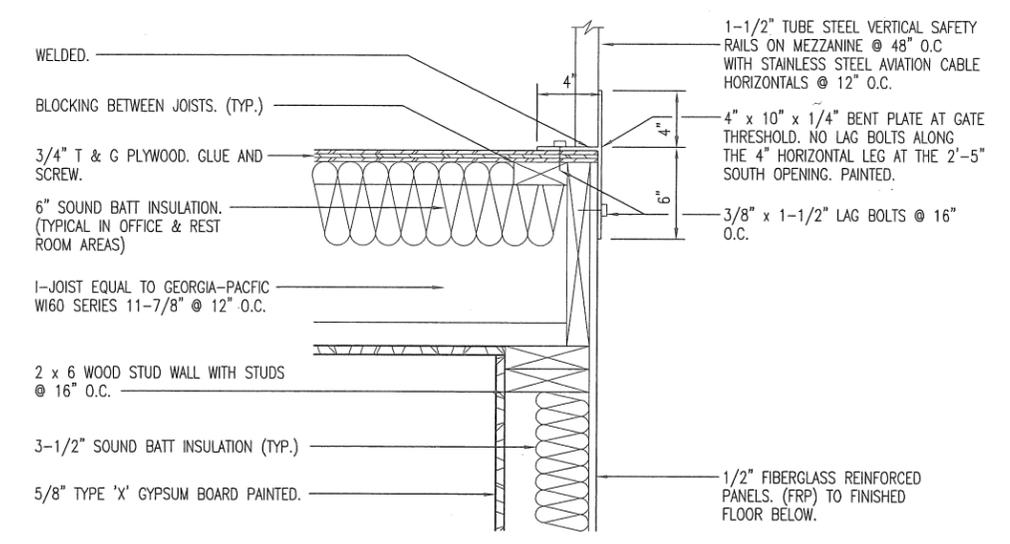
**A**  
7  
**WALL SECTION**  
SCALE: 1/2" = 1'-0"



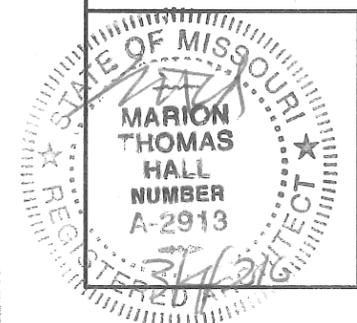
**B**  
7  
**WALL SECTION**  
SCALE: 1/2" = 1'-0"



**D**  
7  
**WALL SECTION**  
SCALE: 1/2" = 1'-0"



**C**  
7  
**MEZZANINE TOP OF WALL**  
SCALE: 1" = 1'-0"

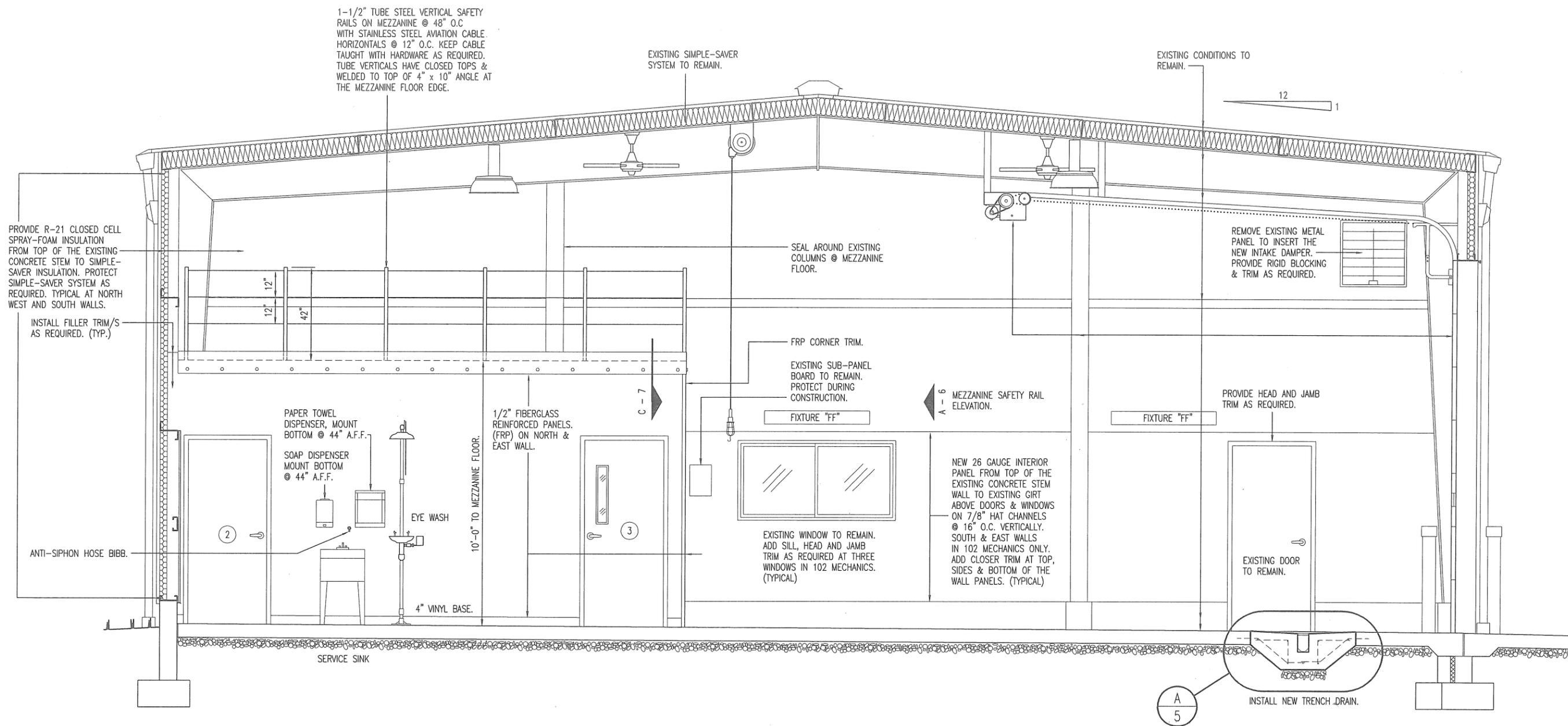


# WALL SECTIONS

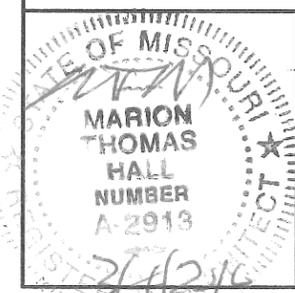
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**A**  
8 BUILDING SECTION  
SCALE: 1/4" = 1'-0"

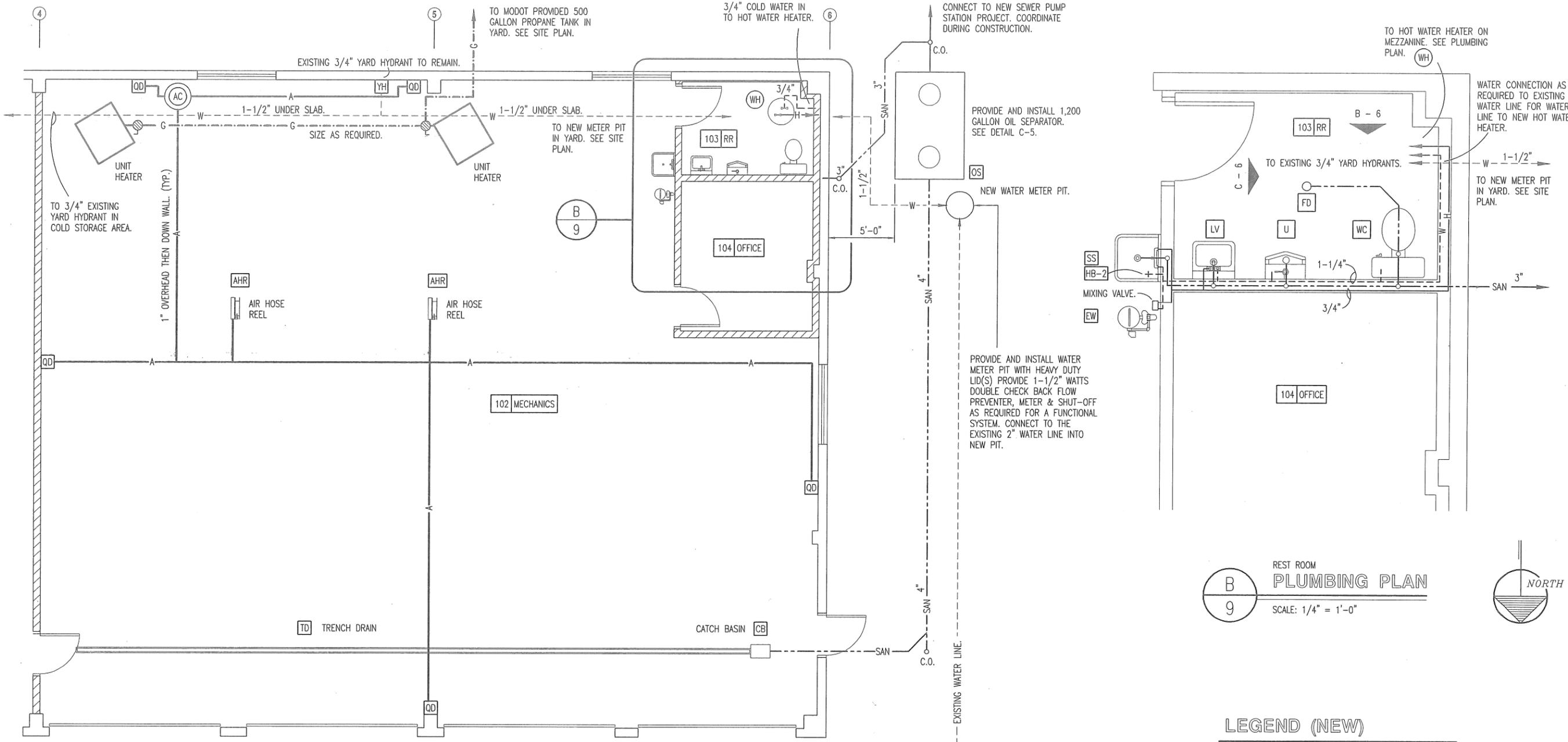


**BUILDING SECTION**

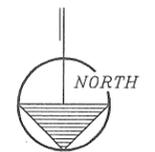
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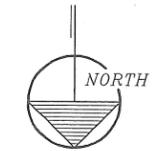


**A**  
9  
PLUMBING PLAN  
SCALE: 1/8" = 1'-0"



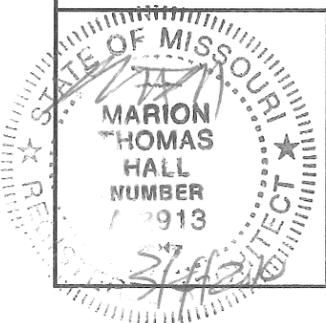
SEE SHEET 11 FOR PLUMBING SCHEDULE & NOTES.

**B**  
9  
REST ROOM  
PLUMBING PLAN  
SCALE: 1/4" = 1'-0"



**LEGEND (NEW)**

PROPANE GAS	----- G -----
COMPRESSED AIR	----- A -----
HOT WATER	----- H -----
WATER	----- W -----
SANITARY SEWER	----- SAN -----
CLEANOUT	C.O. ○
GAS VALVE	⊗

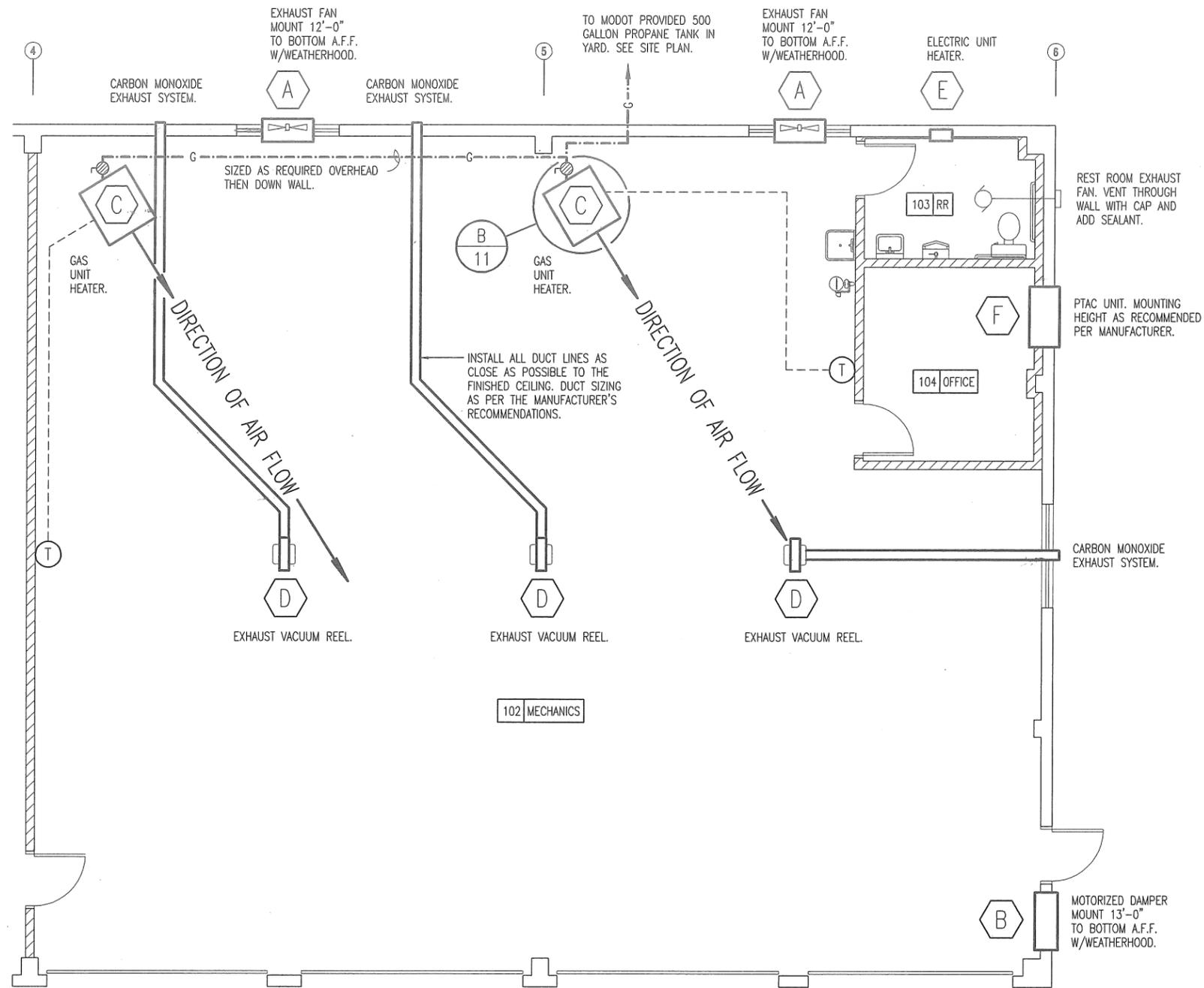


# PLUMBING PLAN

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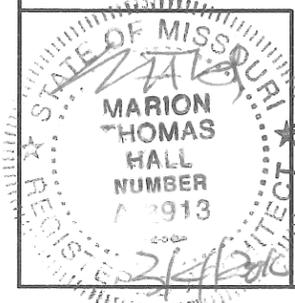


HVAC SCHEDULE						
SYM.	UNIT	MANUFACTURER	BTU OUTPUT	FUEL	VOLTAGE	REMARKS
A	36" X 36" SHUTTER MOUNT EXHAUST FAN W/WEATHERHOOD	DAYTON 1HLB6 & 1WBW2 OR EQUAL 6.4 AMPS	6,480 CFM	ELECTRIC	120	COMMERCIAL TYPE BELT DRIVE WALL EXHAUST FAN INCLUDING OSHA GUARD AND SHUTTER.
B	MOTORIZED DAMPER WITH WEATHERHOOD	DAYTON MODEL 3C728 & 1WBW1 OR EQUAL .37 AMPS	--	ELECTRIC	115	30" MEDIUM GRADE, MOTORIZED, GALVANIZED STEEL DAMPER WITH 1HP MOTOR. WIRE TO OPEN WHEN EXHAUST FAN IS TURNED ON.
C	GAS FIRED UNIT HEATER	REZNOR MODEL UDAP 75 OR EQUAL	62,250	PROPANE	115	SINGLE BURNER COMBUSTION, 3.3 AMPS, DIRECT SPARK IGNITION, 100% LOCK-OUT & CL-1 STANDARD HEATING ONLY THERMOSTAT.
D	CARBON MONOXIDE EXHAUST SYSTEM	CAR-MON MODELS TSR-S32, 6" REEL, CMW-9 OR EQUAL	--	ELECTRIC	115	INCLUDES HOSE, DIRECT DRIVE FLANGE MOUNTED EXHAUST FAN, DUCTING, EXTERIOR WALL HOOD, 3/4 HP MOTOR, 13.8 AMP.
E	ELECTRIC UNIT HEATER	QMARK MODEL CRA1512-T2 OR EQUAL	1,280	ELECTRIC	120	INCLUDES HEATER ASSEMBLY, BACK BOX, GRILLE, WITH FACTORY INSTALLED DP THERMOSTAT. 3.1 AMPS.
F	PTAC UNIT	FRIEDRICH MODEL PDH07K OR EQUAL	COOL 6.3K HEAT 7.7K	ELECTRIC	208/230	EER 12. INCLUDE PDXWSA WALL SLEEVE, PDXDEA LATERAL DUCT KIT & PXGA EXTERIOR GRILL.

A  
10  
MECHANICAL PLAN  
SCALE: 1/8" = 1'-0"



SEE SHEET 11 FOR MECHANICAL NOTES.



# MECHANICAL PLAN

MISSOURI DEPARTMENT OF TRANSPORTATION  
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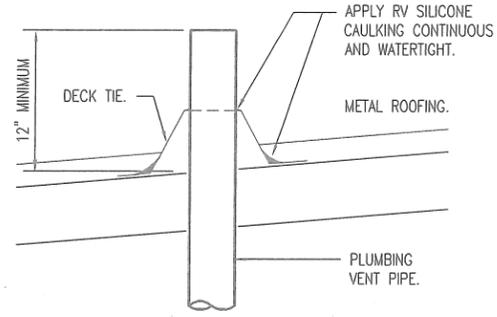
PLUMBING SCHEDULE						
SYM.	FIXTURE	PIPE CONNECTION				REMARKS
		CW	HW	S&W	VENT	
WC	WATER CLOSET	1/2"		3"	2"	EQUAL TO AMERICAN STANDARD #2467.016 FLOOR MOUNT. PRESSURE ASSISTED, 1.6 GPF/6.0 LPF, ELONGATED WATER-SAVER "CADET RIGHT HEIGHT" WATER CLOSET. 16-1/2" HIGH TO RIM. INCLUDE OPEN FRONT SEAT WITH LID. (WHITE)
U	URINAL	3/4"		1-1/2"	1-1/2"	EQUAL TO AMERICAN STANDARD #6601.021 "HYMNBOOK" 1.0 GALLON URINAL WITH SLOAN ROYAL 180-1 FLUSH VALVE.
LV	LAVATORY	1/2"	1/2"	2"	2"	EQUAL TO AMERICAN STANDARD #4867.024, 20" x 18" ENAMELED, CAST IRON "REGALYN" WALL MOUNT LAVATORY WITH 4" CENTERSET SYMMONS SYMMETRIC S-20-2-BH SINGLE LEVER LAVATORY FAUCET. INCLUDE AN ADA APPROVED INSULATION KIT.
SS	SERVICE SINK	1/2"	1/2"	1-1/2"	1-1/2"	EQUAL TO MUSTEE #18F, 20" x 24" FIBERGLASS, CRUSHED STONE AND RESIN BLEND SERVICE SINK WITH FAUCET BELAY LK406GN08L2, 4" CENTER, SWING SPOUT AND AERATOR END.
EW	EMERGENCY EYE WASH	1-1/4"	3/4"			EQUAL TO BRADLEY "MODEL S19-310" DRENCH SHOWER/EYE WASH UNIT SAFETY YELLOW. S19-2100 THERMOSTATIC MIXING VALVE.
WH	WATER HEATER	3/4"	3/4"			A.O. SMITH MODEL NUMBER EES-30 (2) 4500 WATT, 240 VOLT ELEMENTS, 30 GALLON ELECTRIC WITH PRESSURE RELIEF VALVE OR EQUAL. MOUNT ON MEZZANINE WITH DRAIN PAN.
TD	TRENCH DRAIN			4"		EQUAL TO TACO K100 CHANNEL SLOPE TRENCH DRAIN SYSTEM WITH TYPE 461Q DUCTILE QUICK CAST IRON GRATE.
CB	CATCH BASIN			4"		EQUAL TO TACO K900 CATCH BASIN, WITH PLASTIC TRASH BUCKET WITH TYPE 461Q DUCTILE QUICK CAST IRON GRATE FOR LID.
OS	OIL SEPARATOR			4"		EQUAL TO CHAMPION PRECAST INC. 1,200 GALLON OIL & GREASE INTERCEPTOR STOCK STANDARD NO. 140-00218D. HEAVY DUTY PRECAST CONCRETE. STANDARD 8" CAST IRON FRAMES, LIDS & COLLARS. PH: (573)384-5855.
FD	FLOOR DRAIN			2"		PVC FLOOR DRAIN WITH P-TRAP, 6-1/2" DIA. NICKLE-BRONZE STRAINER, 2" FIP THREADED THROAT-BALL BACKWATER DEVICE. 1-1/2" PRE-INSTALLED FIP CLEAN-OUT THREADS.
AC	AIR COMPRESSOR					EQUAL TO INGERSOLL-RAND MODEL #2340, 28A, 5 HP, 60 GALLON VERTICAL, 2-STAGE. PROVIDE RUBBERIZED WASHERS AT EACH FLOOR MOUNT TO ACT AS A SHOCK ABSORBER. SIZE MOUNT AS REQUIRED. PROVIDE LINE FILTERS AS REQUIRED. 30A BREAKER.
AHR	AIR HOSE REEL					EQUAL TO REELCRAFT 7850 OLP 57 300 LOW PRESSURE HEAVY DUTY ALL STEEL CONSTRUCTION WITH ONE PIECE WRAP AROUND GUIDE ARM.
QD	QUICK DISCONNECT					VERIFY SIZE WITH MODOT MECHANIC. MOUNT AT 48" A.F.F. ATTACH RIGIDLY TO GIRTS.
HB-2	HOSE BIBB	3/4"				INTERIOR - EQUAL TO WOODFORD MODEL 26 WALL FAUCET WITH 3/4" H.P.T. OUTLET, INTEGRAL VACUUM BREAKER-BACKFLOW PREVENTER.

**MECHANICAL NOTES**

- DRAWINGS AND DIAGRAMS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
- MECHANICAL WORK SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE IC MECHANICAL CODE.
- PROVIDE EQUIPMENT AND APPURTENANCES NOT NECESSARILY SHOWN OR SPECIFIED BUT NEEDED FOR COMPLETE AND PROPER INSTALLATION.
- ALL EQUIPMENT AND MATERIALS, IN PARTICULAR VALVES, FILTERS, MOTORS, AND CONTROLS SHALL BE ARRANGED TO PROVIDE PROPER CLEARANCE FOR SERVICE, MAINTENANCE AND INSPECTION.
- MECHANICAL SUBCONTRACTOR SHALL FULLY COORDINATE ALL WORK WITH PLUMBING AND ELECTRICAL WORKERS PRIOR TO COMMENCING OF THE MECHANICAL INSTALLATION.
- PROVIDE BLOCKING TO HVAC DEVICES AS REQUIRED FOR A SECURE APPLICATION.

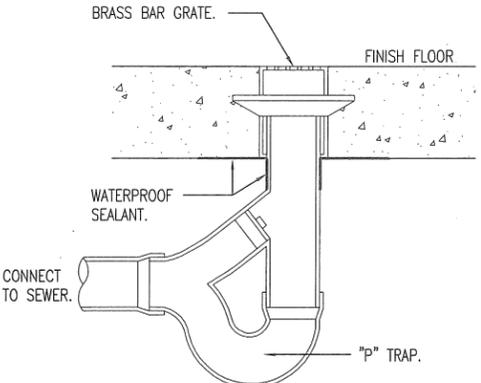
**PLUMBING NOTES**

- DRAWINGS AND DIAGRAMS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
- PLUMBING SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE.
- PLUMBING SHALL BE LOCATED AND PLACED UNDER THE SLAB PRIOR TO POURING OF CONCRETE. PIPING SHALL BE RUN IN SAND FILLED TRENCH UNDER THE BASE ROCK AND SLEEVED WITH PVC WHENEVER RUN THROUGH CONCRETE.
- PROVIDE PLUMBING EQUIPMENT AND ACCESSORIES REQUIRED FOR COMPLETE AND OPERATIONAL PLUMBING SYSTEMS AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS AND DIRECTIONS FOR SYSTEMS SPECIFIED.
- PLUMBING VENTS ARE NOT SHOWN ON THE PLANS. ALL FIXTURES SHALL BE PROPERLY VENTED AS PER IC PLUMBING CODE.
- ROOF VENTS SHALL BE COMBINED WHEREVER IN COMPLIANCE WITH THE NATIONAL PLUMBING CODE TO MINIMIZE ROOF PENETRATIONS.
- PROVIDE SHUT OFF VALVES AT EACH FIXTURE.
- PROVIDE SHOCK ABSORBERS AS REQUIRED AT EACH FAUCET.
- SEE MECHANICAL PLAN FOR GAS PIPING AND MECHANICAL REQUIREMENTS.
- CONTRACTOR TO PROVIDE CAST IRON VENT PIPING IN PLENUM AS REQUIRED BY CODE. SECURE AS REQUIRED.
- EXTERIOR BELOW GROUND WATER DISTRIBUTION PIPING SHALL RUN A MINIMUM OF 36" BELOW FINISH GRADE.
- CONTRACTOR TO PROVIDE AND INSTALL WATER METER PIT WITH HEAVY DUTY LID(S) PROVIDE 1-1/2" WATTS 007 DOUBLE CHECK BACK FLOW PREVENTER, METER & SHUT-OFF VALVE ALL IN ONE PIT AS REQUIRED FOR A FUNCTIONAL SYSTEM. CONNECT TO THE EXISTING 2" WATER LINE INTO PIT. CONNECT TO NEW WATER HEATER ON MEZZANINE WITH A 3/4" COPPER SUPPLY.
- PROVIDE BLOCKING TO ALL FIXTURES AS REQUIRED FOR A SECURE APPLICATION.
- CONTRACTOR TO CONNECT DRAIN PAN UNDER WATER HEATER TO SANITARY AS REQUIRED.



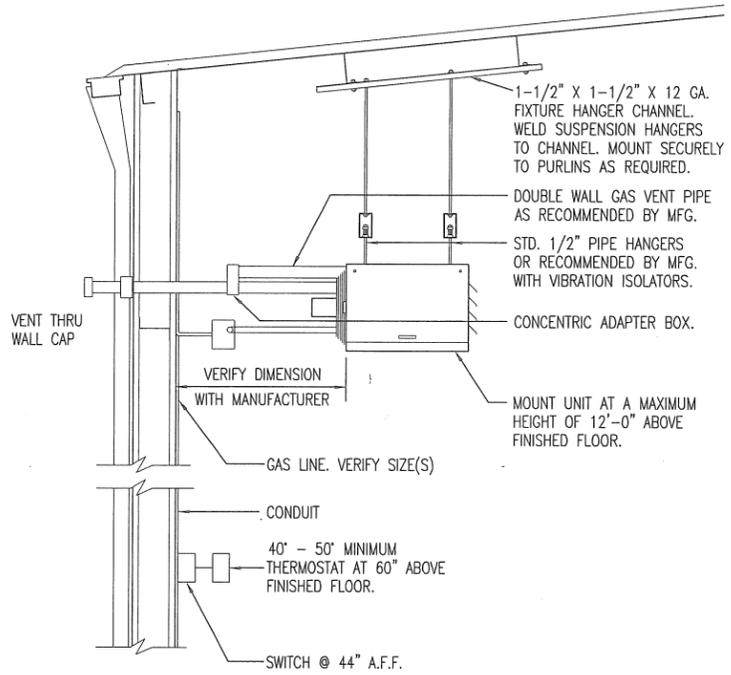
**VENT THROUGH ROOF DETAIL**

SCALE: NONE



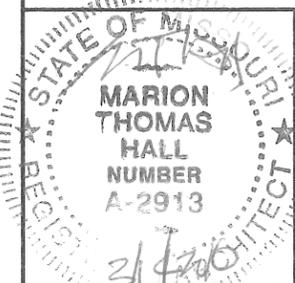
**FLOOR DRAIN DETAIL**

SCALE: NONE



**B 11 GAS FIRED UNIT HEATER**  
NOT TO SCALE

**A 11 PLUMBING & MECHANICAL NOTES**  
SCALE: NONE

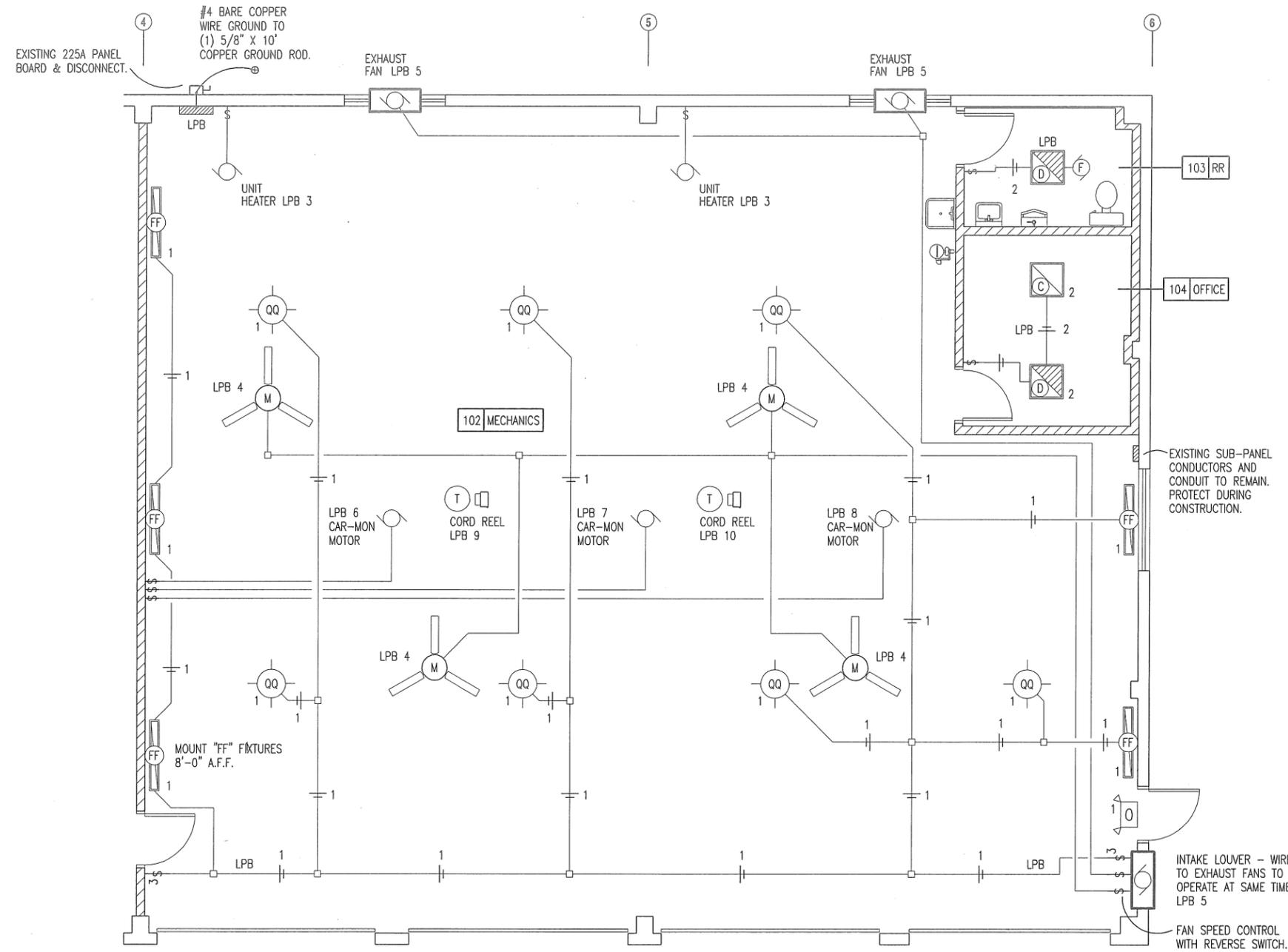


**Plumbing & Mechanical Notes**

MISSOURI DEPARTMENT OF TRANSPORTATION  
DIVISION OF GENERAL SERVICES  
FACILITIES MANAGEMENT

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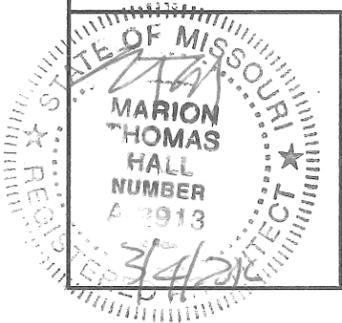
**LEGEND**

- § SINGLE POLE SWITCH, FLUSH MOUNTED IN FINISHED AREAS @ 48" A.F.F.
- §3 3-WAY SWITCH, SURFACE MOUNTED IN UNFINISHED AREAS @ 48" A.F.F.
- Φ DUPLEX RECEPTACLE FLUSH MOUNTED IN FINISHED OFFICE, REST ROOMS AND BREAK ROOM @ 18" A.F.F. TO BOTTOM OF OUTLET. DUPLEX RECEPTACLES IN MECHANICS AND MEZZANINE @ 48" A.F.F.
- Φ WP DUPLEX RECEPTACLE MOUNTED IN FS BOX WITH HUBBELL HBL5221 COVER.
- Φ W WELDER RECEPTACLE SURFACE MOUNTED 48" A.F.F., MOUNT IN 4" SQUARE BOX WITH RAISED COVER.
- Φ GFI DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER. PROVIDE SEPARATE GROUND PER CIRCUIT. TYPICAL.
- JUNCTION BOX, SIZE FOR WIRE, FILL ACCORDING TO ARTICLE 314-16 OF THE N.E.C.
- NON FUSED DISCONNECT SWITCH.
- Ψ DEDICATED RECEPTACLE FLUSH MOUNTED IN FINISHED AREAS @ 18" A.F.F. TO BOTTOM OF OUTLET.
- Υ VOICE AND DATA OUTLET FLUSH MOUNTED IN FINISHED AREAS @ 18" A.F.F. TO BOTTOM OF OUTLET.
- #12 COPPER NEUTRAL CONDUCTOR UNLESS NOTED.
- #12 COPPER PHASE CONDUCTORS UNLESS NOTED.
- 1/2" EMT UNLESS NOTED.
- #12 COPPER GROUNDING CONDUCTOR UNLESS NOTED.

**A LIGHTING PLAN**  
12  
SCALE: 1/8" = 1'-0"



SEE ELECTRICAL SCHEDULE & NOTES SHEET 14.

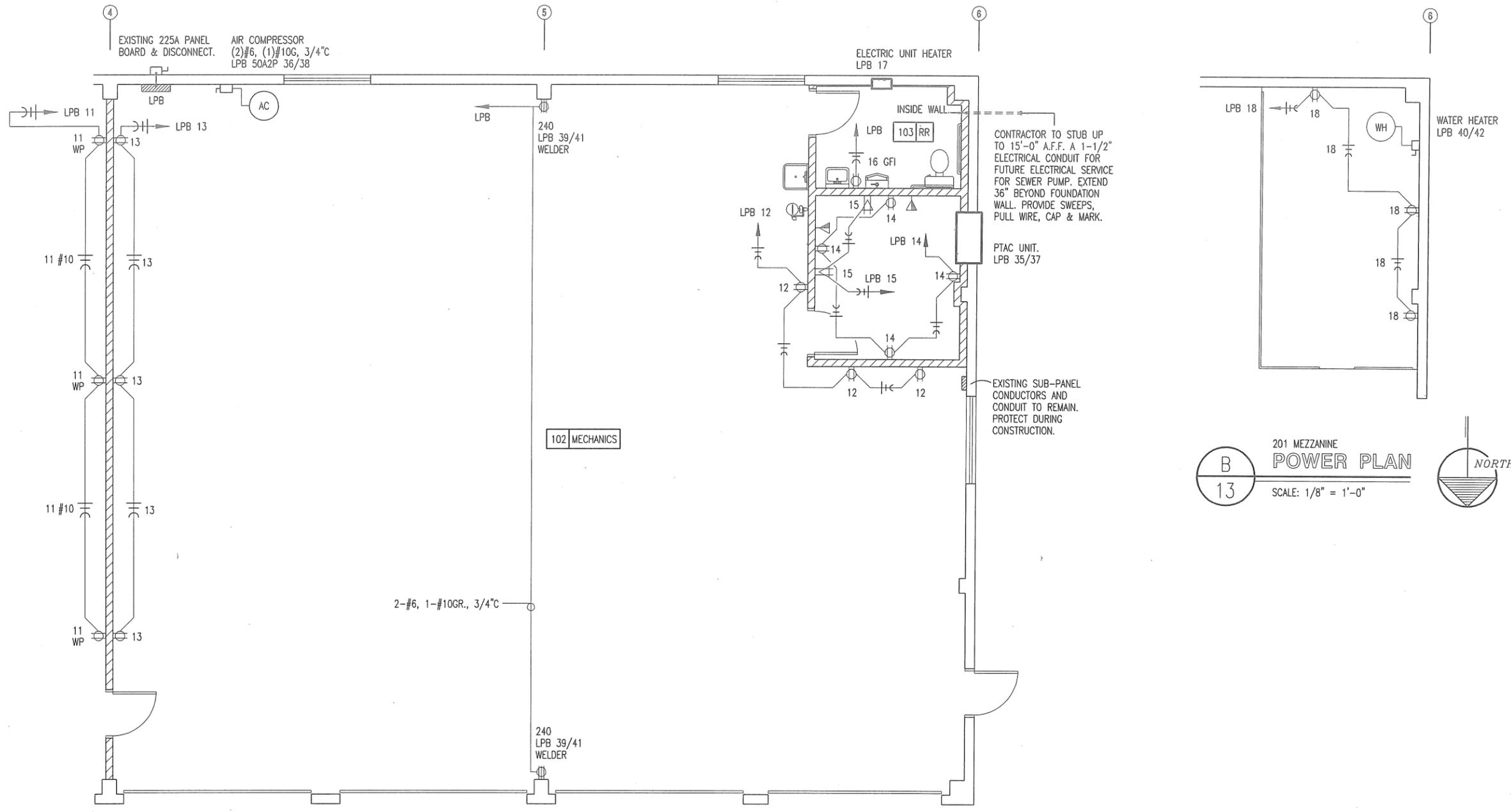


**LIGHTING PLAN**

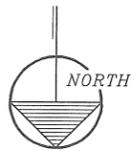
MISSOURI DEPARTMENT OF TRANSPORTATION  
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201 MEZZANINE  
**POWER PLAN**  
 B  
 13  
 SCALE: 1/8" = 1'-0"

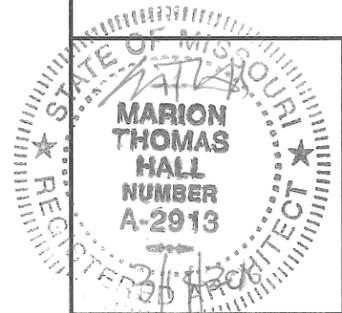


A  
 13  
**POWER PLAN**  
 SCALE: 1/8" = 1'-0"



SEE ELECTRICAL SCHEDULE  
 & NOTES SHEET 14.

SEE ELECTRICAL LEGEND  
 SHEET 12.



# POWER PLAN

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### ELECTRIC SCHEDULE

MANUF.	MODEL	#	LAMPS TYPE	W	MNT	REMARKS
WILLIAMS 	50G-S22-LED*UT30/85-RPC12125-ED*UT-UNV		LED	25	CLG	24" x 24" STATIC TROFFER FIXTURE, HOUSING: 22 GAUGE DIE FORMED C.R.S. SHIELDING: FROSTED PATTERN #12.
WILLIAMS 	50G-S22-LED*UT30/85-RPC12125-EM/BSL310-ED*UT-UNV		LED	25	CLG	24" x 24" STATIC TROFFER FIXTURE, HOUSING: 22 GAUGE DIE FORMED C.R.S. SHIELDING: FROSTED PATTERN #12 & EMERGENCY DRIVER.
BROAN 	GRAINGER #4C772				CLG	80 CFM CEILING MOUNT BATHROOM VENTILATOR.
DAYTON 	GRAINGER #5NP23				CLG	SINGLE-SPEED, 48" THREE-BLADE, HEAVY DUTY COMMERCIAL CEILING FAN. ADD SPEED CONTROL WITH REVERSE SWITCH. DAYTON #5NRA4.
LITHONIA 	LHQM P W3 R N				WALL	QUANTUM THERMOPLASTIC EXIT/UNIT COMBO (2) LED 5.4 KRYPTON LAMPS.
REELCRAFT 	L 4050 163 1				CLG	CEILING MOUNTED SPRING RETRACTABLE, ELECT. CORD REEL WITH INCANDESCENT LAMP & THREE PRONG OUTLET PLUG.
CREE 	LS4-40L-40K-10V-120		LED	40	WALL	2-5/8" x 48" SURFACE AMBIENT, 22 GAUGE, LOW-GLARE ACRYLIC LENS, WHITE. MOUNT 92.5" A.F.F. TO BOTTOM.
METALUX 	SSLED-LD1-24-W-UNV-LW850-CD2-U		LED	224	CLG	16-7/8" DIAMETER, DIE-CAST HOUSING. WHITE POLYESTER FINISH. HIGH-IMPACT POLYCARBONATE OPTICS DRIVER.
ELECTRICAL FIXTURES AND EQUIPMENT ARE SCHEDULED BY MANUFACTURER AND MODEL NUMBER FOR DESIGN INTENT ONLY, APPROVED EQUALS MAY BE SUBSTITUTED.						

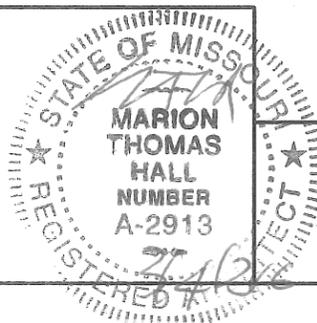
### EXISTING PANEL LPB

MAIN BUS: 225A MLO VOLTS: 240/120, 1PH, 3-WIRE BUS MATERIAL: COPPER MOUNTING: SURFACE		SQUARE "D" NOOD OR EQUAL W/ NEUTRAL BUS & GROUNDING BUS CIRCUIT BREAKERS BOLT-IN 10000 AIC				CONNECTED LOAD A PHASE 21575 VA B PHASE 19322 VA TOTAL 40897 VA 170 A		
CIR	SERVICE	VA	BKR		BKR	VA	SERVICE	CIR
1	LIGHTS - 102 MECHANICS	1574	20A1P	A	20A1P	75	LIGHTS - 103,105	2
3	UNIT HEATERS	744	20A1P	B	20A1P	312	CEILING FANS	4
5	EXHAUST FANS & DAMPER	1581	20A1P	A	20A1P	1553	CARBON MONOXIDE	6
7	CARBON MONOXIDE	1553	20A1P	B	20A1P	1553	CARBON MONOXIDE	8
9	CORD REEL	540	20A1P	A	20A1P	540	CORD REEL	10
11	RECEPTACLES - COLD BAY	540	20A1P	B	20A1P	540	102- WEST RECEPTACLES	12
13	102- EAST RECEPTACLES	540	20A1P	A	20A1P	720	OFFICE RECEPTACLES	14
15	OFFICE DEDICATED RECEPT.	360	20A1P	B	20A1P	180	REST ROOM GFI	16
17	ELECTRIC UNIT HEATER	372	20A1P	A	20A1P	540	MEZZANINE RECEPTACLES	18
19				B				20
21				A				22
23				B				24
25				A				26
27				B				28
29				A				30
31				B				32
33				A				34
35	PTAC UNIT	1440	20A2P	B	50A2P	4600	AIR COMPRESSOR	36
37		1440		A		4600		38
39	WELDER	4500	50A2P	B	30A2P	3000	WATER HEATER	40
41		4500		A		3000		42

⊗ CIRCUIT BREAKER SHALL BE GFI RATED

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- PROVIDE ELECTRICAL EQUIPMENT AND ACCESSORIES REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS AND DIRECTIONS FOR SYSTEMS SPECIFIED.
- SWITCHES AND RECEPTACLES SHALL BE EQUAL TO THE AMPERE RATING SHOWN IN THE PANEL SCHEDULE. RECEPTACLES SHALL BE GROUND-FAULT INTERRUPTION TYPE WHERE SHOWN OR AS REQUIRED BY CODE.
- SEE HVAC SCHEDULE FOR EQUIPMENT TO BE HARD WIRED, PROVIDE SERVICE DISCONNECT AT EACH.
- ALL RECEPTACLES IN GARAGE AREA TO BE MOUNTED AT 48" A.F.F.
- COORDINATE WORK WITH OTHER TRADES PRIOR TO COMMENCING WITH ELECTRICAL WORK.
- CONDUCTOR AND BREAKER SIZE MAY VARY PER MANUFACTURER ON THE EQUIPMENT SPECIFIED. ELECTRIC CONTRACTOR TO VERIFY SIZES WITH EXACT EQUIPMENT ORDERED PRIOR TO PURCHASING ELECTRICAL SUPPLIES.
- FIXTURE LOCATIONS ARE APPROXIMATE, EXACT LOCATIONS TO BE DETERMINED AFTER COLLABORATION WITH THE OWNER AND OTHER TRADES.
- CONTRACTOR SHALL PROVIDE SERVICE DISCONNECTS AS REQUIRED AT INTERIOR OF BUILDING.
- PROVIDE BLOCKING FOR ELECTRICAL DEVICES AS REQUIRED FOR A SECURE APPLICATION.
- CONTRACTOR TO PROVIDE CIRCUIT BREAKERS IN EXISTING PANEL BOARD LPB. PROVIDE CONDUCTORS IN CONDUIT TO NEW ELECTRICAL DEVICES SHOWN ON CONSTRUCTION DOCUMENTS AS REQUIRED FOR A FUNCTIONAL SERVICE. EXISTING DISCONNECT ON BUILDING TO REMAIN.



# ELECTRICAL PANEL

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