

MECHANICAL GENERAL NOTES

- ALL WORK SHALL COMPLY WITH INTERNATIONAL MECHANICAL CODE (IMC), INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL ENERGY CONSERVATION CODE (IECC), AND ALL LOCAL CODES AND AMENDMENTS.
- CONNECT ALL DUCTS TO MECHANICAL EQUIPMENT BY FLEXIBLE DUCT CONNECTORS WITH NOT LESS THAN 3" SPACING BETWEEN DUCT AND EQUIPMENT.
- ALL DUCTWORK SHALL BE FABRICATED FROM G90 GALVANIZED STEEL IN ACCORDANCE WITH SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS. PROVIDE TURNING VANES AT ALL RIGHT ANGLE BENDS IN DUCTWORK. SEAL ALL JOISTS WITH MASTIC.
- ALL DUCT DIMENSIONS ARE INSIDE DIMENSIONS.
- INSTALL DUCTWORK, EQUIPMENT, AND PIPING CONCEALED IN CHASES OR ABOVE CEILINGS WHERE CEILINGS ARE INDICATED, UNLESS NOTED OTHERWISE. WHERE DUCTWORK OR PIPING IS INDICATED TO BE EXPOSED, INSTALL AS HIGH AS POSSIBLE. ELEVATIONS SHOWN ARE TO THE LOWEST POINT, UNLESS NOTED OTHERWISE.
- ANY PIPING SHOWN TO BE INSTALLED WITHIN AN EXTERIOR WALL MUST BE INSTALLED ON THE INTERIOR SIDE OF THE WALL INSULATION.
- WALL MOUNTED THERMOSTATS SHALL BE INSTALLED 44" ABOVE THE FLOOR AND HANDICAPPED ACCESSIBLE.
- PROVIDE 4" THICK CONCRETE PADS FOR EQUIPMENT INSTALLED ON FLOORS OR ON GRADE, 6" LARGER THAN THE EQUIPMENT ON ALL SIDES.
- SEAL OR CAP OPENINGS IN PIPES OR DUCTS UNTIL FINAL CONNECTIONS ARE MADE.
- INSTALL SUFFICIENT UNIONS IN PIPING SYSTEMS TO ALLOW SERVICE OF ANY CONNECTED EQUIPMENT WITHOUT BREAKING FITTINGS OR CUTTING PIPING CONNECTIONS.
- DIMENSIONS AND PIPE SIZES ARE IN INCHES UNLESS NOTED OTHERWISE.
- ROUTINGS TO EQUIPMENT SHALL BE RUN IN SIZES INDICATED ON PLANS OR SCHEDULES AND INCREASED OR REDUCED AT POINT OF FINAL CONNECTION.
- DO NOT RUN PIPING OR DUCTWORK OVER ELECTRICAL EQUIPMENT.
- PROVIDE SUFFICIENT CLEARANCE FOR OPERATION AND MAINTENANCE OF MECHANICAL EQUIPMENT ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE SERVICE CLEARANCE FOR ELECTRICAL EQUIPMENT AS REQUIRED BY THE NATIONAL ELECTRICAL CODE (NEC).
- PIPING INSTALLED ABOVE CEILINGS SHALL BE BELOW THE ROOF INSULATION.
- COORDINATE LOCATIONS OF ALL PIPING, DUCTWORK, EQUIPMENT AND DEVICES BEFORE INSTALLATION, WITH THE WORK OF OTHER TRADES. WHERE A CONFLICT IN CLEARANCES OCCURS, OBTAIN CLARIFICATION FROM THE ENGINEER, ARCHITECT, OR OWNER. INSTALL ALL NECESSARY PIPING, DUCTWORK AND FITTINGS, ETC. THAT ARE REQUIRED FOR A COMPLETE SYSTEM WITHOUT ADDITIONAL COST TO THE CONTRACT.
- TEST INSTALLATIONS IN ACCORDANCE WITH THE APPROPRIATE CODE REQUIREMENTS AS EACH PORTION IS INSTALLED.
- FOR ANY COOLING EQUIPMENT ABOVE CEILING, PROVIDE CONDENSATE OVERFLOW PROTECTION W/LIQUID DETECTOR AT TOP OF DRAIN PAN, WIRED TO SHUT DOWN THE SYSTEM.
- VERIFY MOUNTING HEIGHTS OF EQUIPMENT AND FIXTURES WITH ARCHITECTURAL DRAWINGS, AUTHORITY HAVING JURISDICTION, AND THE OWNER.
- BALANCE SYSTEM TO WITHIN +/-10% OF INDICATED AIRFLOW / HYDRONIC VALUES
- CONTRACTOR TO TEST HVAC CONTROL SYSTEMS FOR PROPER CALIBRATION AND OPERATION.
- ALL EQUIPMENT TO BE STARTED UP AND TESTED PER MANUFACTURER'S INSTRUCTIONS. IN ADDITION PROVIDE ALL INFORMATION AS REQUESTED BY THE ENGINEER'S COMMISSIONING PLAN.
- PRELIMINARY COMMISSIONING REPORT COMPLETED AND CERTIFIED BY REGISTERED DESIGN PROFESSIONAL OR APPROVED AGENCY.
- FINAL COMMISSIONING REPORT DUE TO BUILDING OWNER WITHIN 90 DAYS OF RECEIPT OF CERTIFICATE OF OCCUPANCY.

MINI SPLIT AIR HANDLER AND CONDENSER SCHEDULE

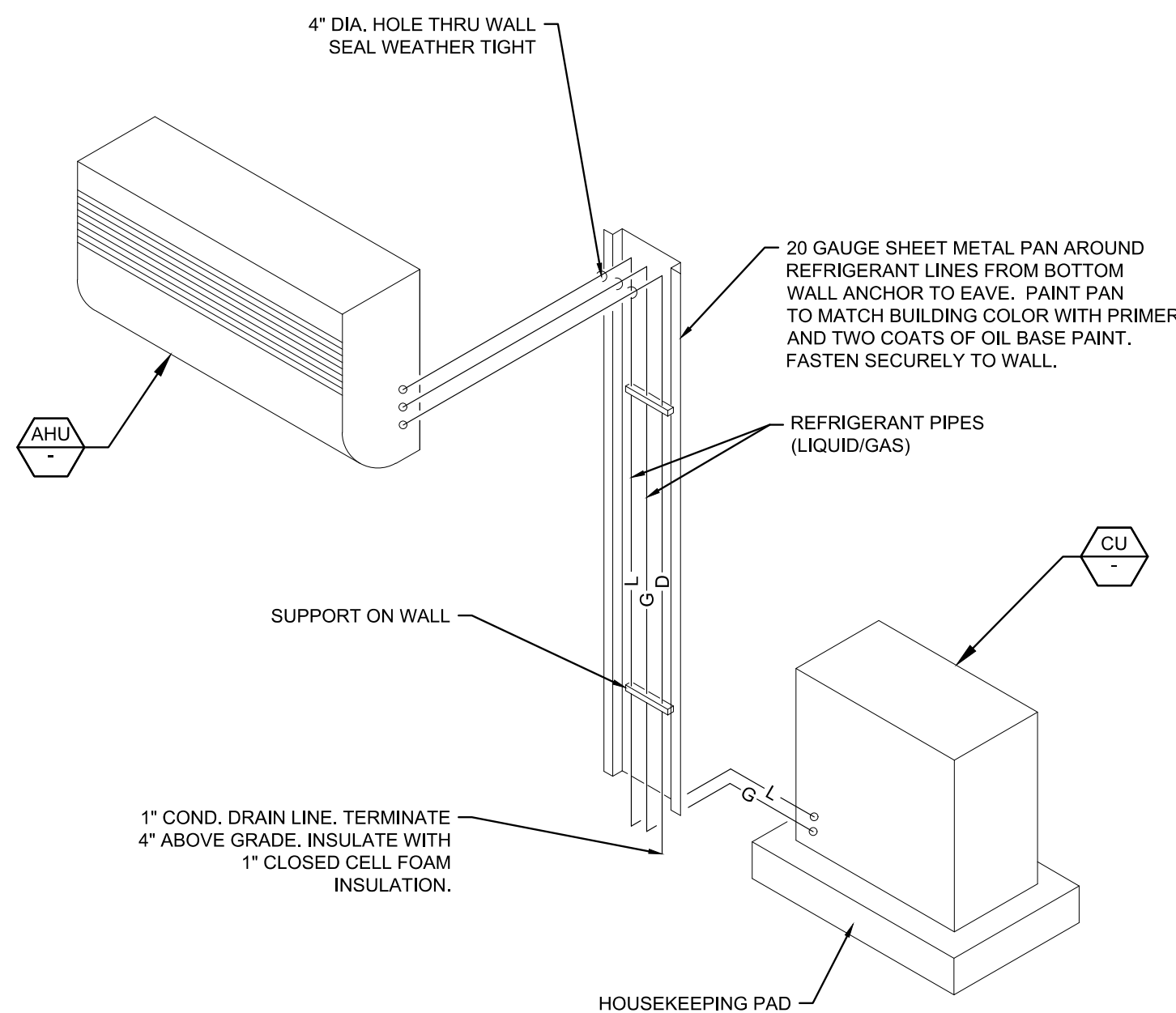
TAG	LOCATION / SERVICE	CONDENSER MFR MODEL #	AIR HANDLER MFR MODEL #	FAN	COOLING			HEATING		ELECTRICAL (AIR HANDLER)				ELECTRICAL (CONDENSER)				SEER HSPF	NOTES
				OSA (CFM)	NOMINAL TONS	T.C. (MBH)	REFR.	MAX (MBH)	RATED (MBH)	VOLT	PHASE	MCA	MOCP	VOLT	PHASE	MCA	MOCP		
AHU-1 CU-1	COMMON	DAIKIN MUZ-D36NA	DAIKIN MSZ-GL24NA	OPERABLE DOORS/WINDOWS	3	33.2	R410A	36	35.2	208-230	1	1	15	208-230	1	21	25	14.5 8.2	1, 2, 3, 4, 5, 6
AHU-2 CU-2	CLASSROOM #2	DAIKIN MUZ-D36NA	DAIKIN MSZ-GL24NA	OPERABLE DOORS/WINDOWS	2	22.4	R410A	36.9	27.6	208-230	1	1	15	208-230	1	18.1	20	20.5 12.5	1, 2, 3, 4, 5, 6
AHU-3A AHU-3B CU-3	MEN WOMEN	DAIKIN MXZ-3C24NAHZ2	DAIKIN MSZ-GL12NA MITSUBISHI	OPERABLE DOORS/WINDOWS	2	24	R410A	28	24	208-230	1	1	15	208-230	1	22.1	25	20.0 9.8	1, 2, 3, 4, 5, 6
AHU-4 CU-4	CLASSROOM #1	DAIKIN MUZ-D36NA	DAIKIN MSZ-GL24NA	OPERABLE DOORS/WINDOWS	2	22.4	R410A	36.9	27.6	208-230	1	1	15	208-230	1	18.1	20	20.5 12.5	1, 2, 3, 4, 5, 6
AHU-5 CU-5	COMMON	DAIKIN MUZ-D36NA	DAIKIN MSZ-D36NA	OPERABLE DOORS/WINDOWS	3	33.2	R410A	36	35.2	208-230	1	1	15	208-230	1	21	25	14.5 8.2	1, 2, 3, 4, 5, 6
AHU-6 CU-6	CLASSROOM #3	DAIKIN MUZ-D36NA	DAIKIN MSZ-GL24NA	OPERABLE DOORS/WINDOWS	2	22.4	R410A	36.9	27.6	208-230	1	1	15	208-230	1	18.1	20	20.5 12.5	1, 2, 3, 4, 5, 6

- NOTES:**
- PROVIDE INTEGRATED DX COOLING COIL AND REFRIGERANT PIPING TO THE EXTERIOR HEAT PUMP PER MANUFACTURER'S RECOMMENDATIONS.
 - PROVIDE STANDALONE THERMOSTAT.
 - PROVIDE LOW AMBIENT
 - PROVIDE SUPPORTS TO ELEVATE HEAT PUMP
 - NO SUBSTITUTIONS. EQUIPMENT MANUFACTURER SHALL BE AS LISTED.
 - THE AIR HANDLER CAN BE POWERED FROM THE CONDENSER WHEN LOCAL CODES ALLOW.

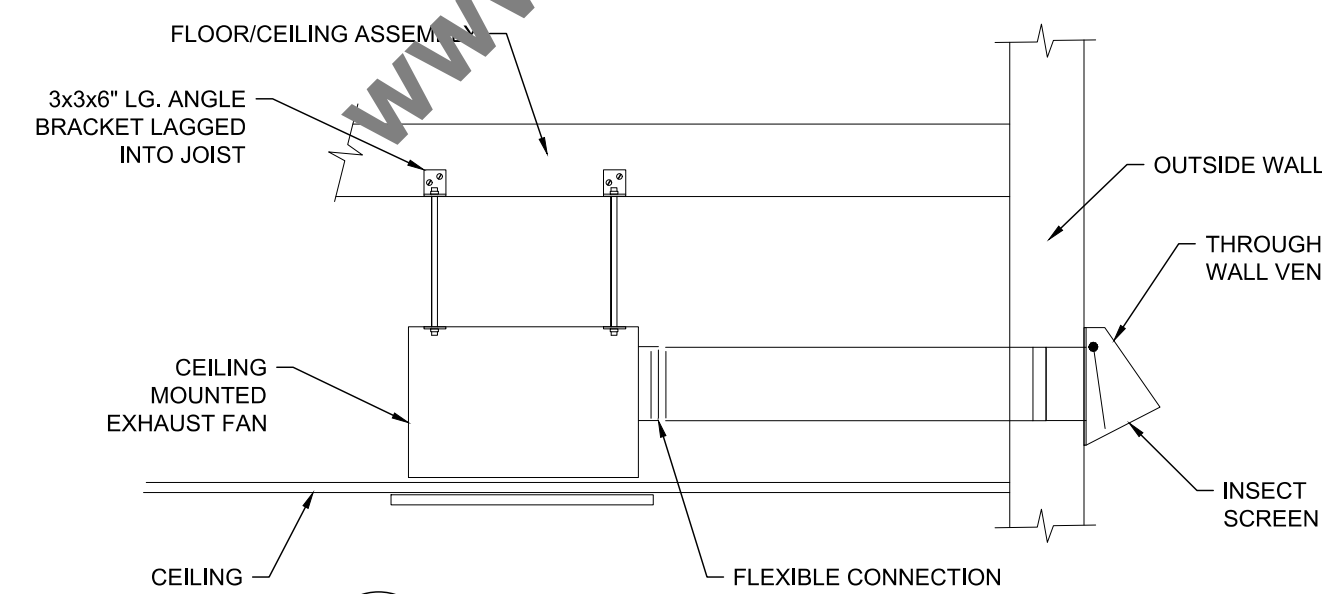
EXHAUST FANS SCHEDULE

TAG	SERVICE	MANUFACTURER	MODEL NO.	DRIVE	AIR FLOW (CFM)	ESP (W.C.)	SONE LEVEL	ELECTRICAL				NOTES
								VOLT	PHASE	HP (WATTS)	MCA	
EF-1	MEN'S RESTROOM	BROAN	L300	DIRECT	309	0.10	2.9	120	1	(212)	2.6	1, 2, 3
EF-2	WOMEN'S RESTROOM	BROAN	L250	DIRECT	261	0.10	2.3	120	1	(166)	2.1	1, 2, 3
EF-3	UNISEX RESTROOM	GREENHECK	SP-B90	DIRECT	89	0.125	1	120	1	(5)		2, 3

- NOTES:**
- CONTINUOUS WORK WHILE BUILDING IS OCCUPIED.
 - INTERLOCK WITH LIGHTING, PROVIDE TIME DELAY WHICH ALLOWS FAN TO RUN FOR 5-15 MINUTES (ADJUSTABLE) AFTER LIGHT IS SWITCHED OFF.
 - OR EQUIVALENT APPROVED.



1 DUCTLESS SINGLE ZONE SPLIT SYSTEM DETAIL
SCALE: NOT TO SCALE



2 EXHAUST FAN DETAIL
SCALE: NOT TO SCALE

NATURAL VENTILATION CALCULATIONS:

- BUILDING AREA REQUIRES 5343 S.F. X 4% = 214 S.F. OPERABLE DOORS AND WINDOWS NET AREA. DOORS PROVIDE 120 S.F. AND WINDOWS PROVIDE 96 S.F. OPERABLE OPENING WHICH TOGETHER = 216 S.F. AND EXCEEDS THE REQUIREMENTS.

VENTILATION REQUIREMENTS PER 2015 IMC

ROOM	SQUARE FEET	SPACE CLASSIFICATION PER T403.3 IMC	PEOPLE OUTDOOR RATE, CFM/PERSON	AREA BREATHING RATE, CFM/FT2	PEOPLE/1000FT2	CONTINUOUS EXHAUST, CFM	SWITCHED EXHAUST, CFM	UNIT #	PEOPLE	VENT CFM
MEN	246	RESTROOMS	0	0.06	0	0	309		0	15
JANITOR	21	STORAGE	0	0.12	0	0	0		0	3
WOMEN	236	RESTROOMS	0	0.06	0	0	261		0	14
SPORTS EQUIPMENT	24	STORAGE	0	0.12	0	0	0		0	3
STORAGE	257	STORAGE	0	0.12	0	0	0		20	31
ENTRY	277	ENTRY	5	0.06	10	0	0		3	32
CLASSROOM #1	513	CLASSROOM	10	0.12	25	0	0		13	192
FELLOWSHIP HALL	2386	MULTI-USE ASSEMBLY	7.5	0.06	100	0	0		239	1936
CLASSROOM #2	537	CLASSROOM	10	0.12	25	0	0		14	204
TABLE/CHAIR STORAGE	112	STORAGE	0	0.12	0	0	0		0	13
CLOSET	46	STORAGE	0	0.12	0	0	0		0	6
CLOSET	46	STORAGE	0	0.12	0	0	0		0	6
CLASSROOM #3	537	CLASSROOM	10	0.12	25	0	0		14	204
									TOTAL	2657

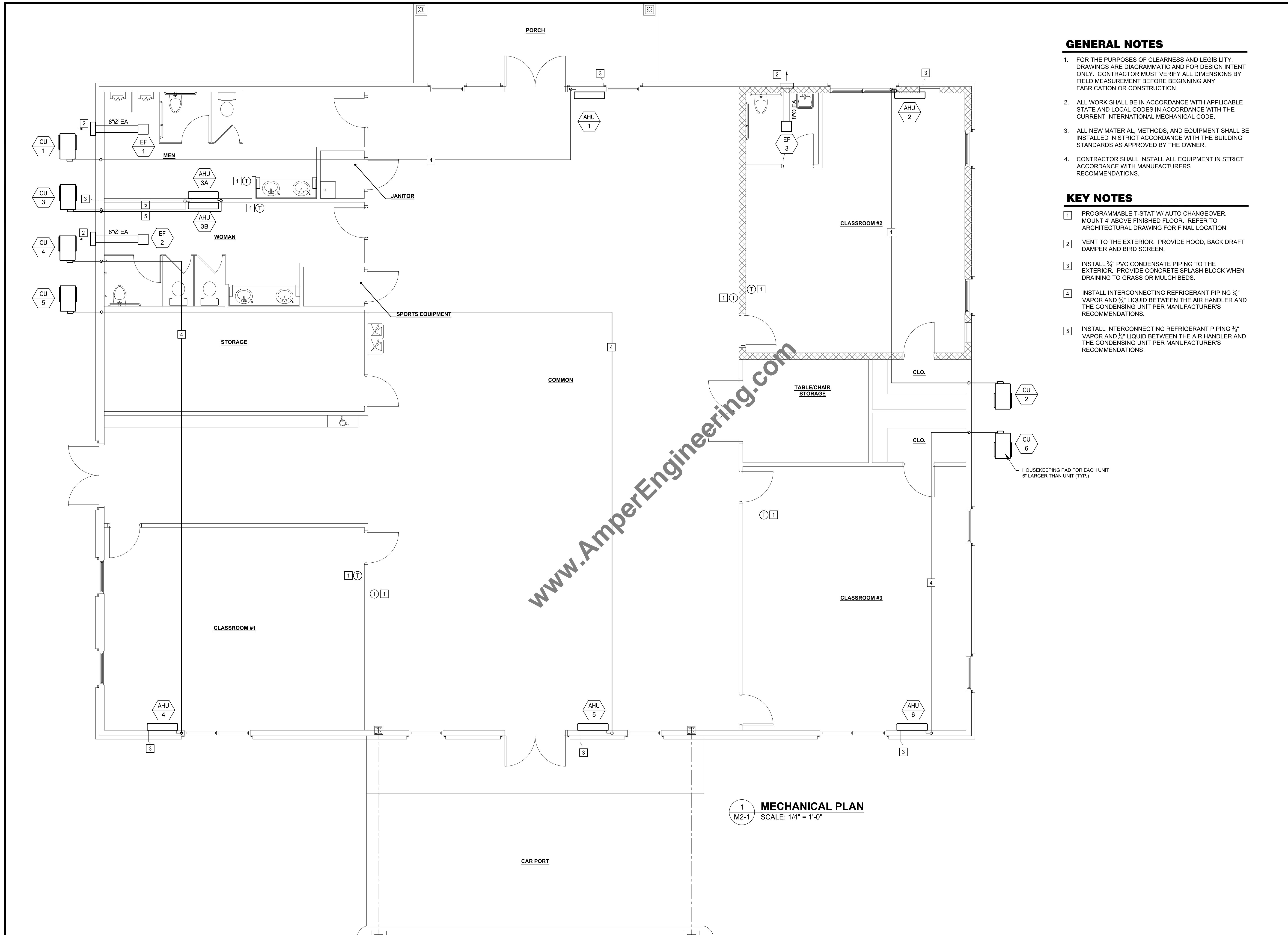


NO.	REVISION	DATE

PROPOSED BUILDING FOR
FRE
ITE SCHOOL
JARRION ROAD
FREDONIA, KY 42411

AE JOB# 1412
DATE ISSUED:
08/02/2021
DESIGNED BY:
JAK
DRAWN BY:
JAK
DRAWING TITLE:
MECHANICAL
NOTES, DETAILS
SCHEDULES
DRAWING NUMBER:

M1-0



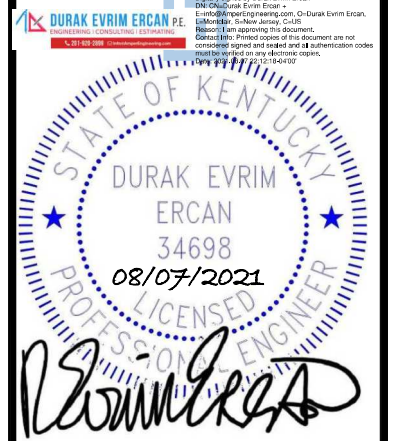
GENERAL NOTES

1. FOR THE PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE DIAGRAMMATIC AND FOR DESIGN INTENT ONLY. CONTRACTOR MUST VERIFY ALL DIMENSIONS BY FIELD MEASUREMENT BEFORE BEGINNING ANY FABRICATION OR CONSTRUCTION.
2. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL CODES IN ACCORDANCE WITH THE CURRENT INTERNATIONAL MECHANICAL CODE.
3. ALL NEW MATERIAL, METHODS, AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE BUILDING STANDARDS AS APPROVED BY THE OWNER.
4. CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

KEY NOTES

- 1 PROGRAMMABLE T-STAT W/ AUTO CHANGEOVER. MOUNT 4' ABOVE FINISHED FLOOR. REFER TO ARCHITECTURAL DRAWING FOR FINAL LOCATION.
- 2 VENT TO THE EXTERIOR. PROVIDE HOOD, BACK DRAFT DAMPER AND BIRD SCREEN.
- 3 INSTALL 3/4" PVC CONDENSATE PIPING TO THE EXTERIOR. PROVIDE CONCRETE SPLASH BLOCK WHEN DRAINING TO GRASS OR MULCH BEDS.
- 4 INSTALL INTERCONNECTING REFRIGERANT PIPING 3/8" VAPOR AND 3/4" LIQUID BETWEEN THE AIR HANDLER AND THE CONDENSING UNIT PER MANUFACTURERS RECOMMENDATIONS.
- 5 INSTALL INTERCONNECTING REFRIGERANT PIPING 3/8" VAPOR AND 1/2" LIQUID BETWEEN THE AIR HANDLER AND THE CONDENSING UNIT PER MANUFACTURERS RECOMMENDATIONS.

1 MECHANICAL PLAN
M2-1 SCALE: 1/4" = 1'-0"



NO.	REVISION	DATE

PROPOSED BUILDING FOR
 ITE SCHOOL
 MARION ROAD
 FREDONIA, KY 42411

FRE

AE JOB# 1412
 DATE ISSUED: 08/02/2021
 DESIGNED BY: JAK
 DRAWN BY: JAK
 DRAWING TITLE: MECHANICAL PLAN
 DRAWING NUMBER:

M2-1

ELECTRIC NOTES:

- 1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF 2017 NEC, ALL LOCAL CODES AND BE INSPECTED BY A REGISTERED ELECTRICAL INSPECTOR.
2. THIS DESIGN MAY BE USED FOR SECURING PERMITS, BID, PLANNING, THE COMPANY'S REVIEW OR SOME OTHER GOAL. THIS DESIGN DOES NOT GUARANTEE THESE APPROVALS.
3. THE ELECTRICAL CONTRACTOR SHALL PAY ALL PERMIT FEES, PLAN REVIEW FEES, LICENSE FEES, INSPECTION AND TAXES APPLICABLE TO THE ELECTRICAL WORK.
...
71. FOR ALL WIRING DEVICES, VERIFY FINISH COLOR WITH ARCHITECT.

SYMBOLS & ABBREVIATIONS

Table listing symbols and abbreviations for various electrical components such as G.C. (General Contractor), P.C. (Plumbing Contractor), H.C. (HVAC Contractor), E.C. (Electrical Contractor), HOMERUN TO PANEL, THREE CONDUIT, JUNCTION BOX, MOTOR, EXHAUST FAN, BATTERY UNIT, REMOTE HEAD, PANELBOARD, SAFETY SWITCH, CEILING-MOUNTED OCCUPANCY SENSOR SWITCH, EXHAUST FAN, DISCONNECT SWITCH.

LIGHTING FIXTURE SCHEDULE table with columns: SYMBOL, TYPE, DESCRIPTION, MANUFACTURER, MODEL NO., LAMPING, COMMENTS. Includes entries for F1, F2, F3, E1, E2, E3.

Table with columns: TOTAL A PHASE, TOTAL B PHASE, TOTAL LOAD. Values: 24397, 22709, 47106.

PANEL - 1 table showing ratings, types, phase/wire, voltage, mount, A.I.C., and quantities for various components like receptacles, lighting, electric water cooler, AHU units, and blank spaces.

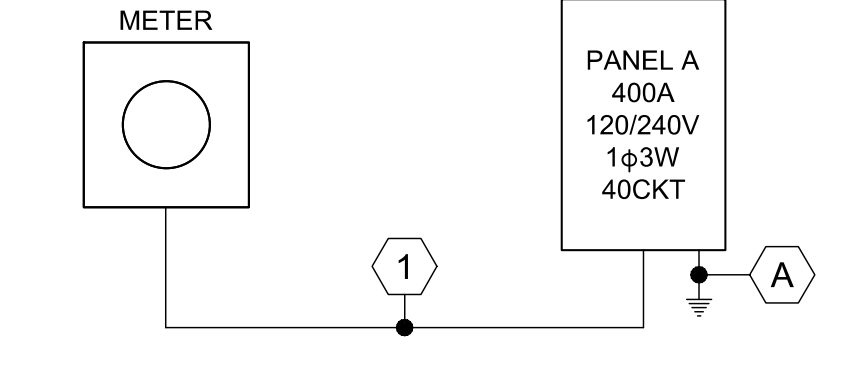
Table with columns: SUB TOTAL, 9367, 8429, 15030, 14280, SUB TOTAL.

CONDUIT/ WIRE SCHEDULE:

1. (2) SET 2 1/2" PVC, (3)#250 XHHW AL & (1) #6 XHHW AL GND

GROUND SCHEDULE:

A. #1/0 COPPER TO BUILDING STEEL & WATER PIPE AS APPLICABLE
#4 COPPER TO FOOTING STEEL
#6 COPPER TO GROUND RODS



- NOTE:
• ALL METHODS OF GROUNDING/ BONDING SHOULD BE SIZED AND INSTALLED AS PER NEC ARTICLE 250
• THE E.C. SHALL VERIFY ALL ASPECTS OF THE PROPOSED ELECTRICAL SERVICE WITH THE LOCAL ELECTRICAL INSPECTOR AND WITH LOCAL ELECTRIC UTILITY PRIOR TO PROVIDING ANY LABOR OR MATERIALS.
• FAULT CURRENT DATA FROM THE UTILITY MUST BE VERIFIED AND THE AIC RATING OF THE EQUIPMENT MUST BE RATED FOR THE FAULT CURRENT THAT IS AVAILABLE.

ELECTRICAL SINGLE LINE DIAGRAM
SCALE: N.T.S.



Signature of Durak Evrim Ercan

REVISION table with columns: NO., DATE, REVISION.

PROPOSED BUILDING FOR: FREDONIA, KY 42411

AE JOB# 1412

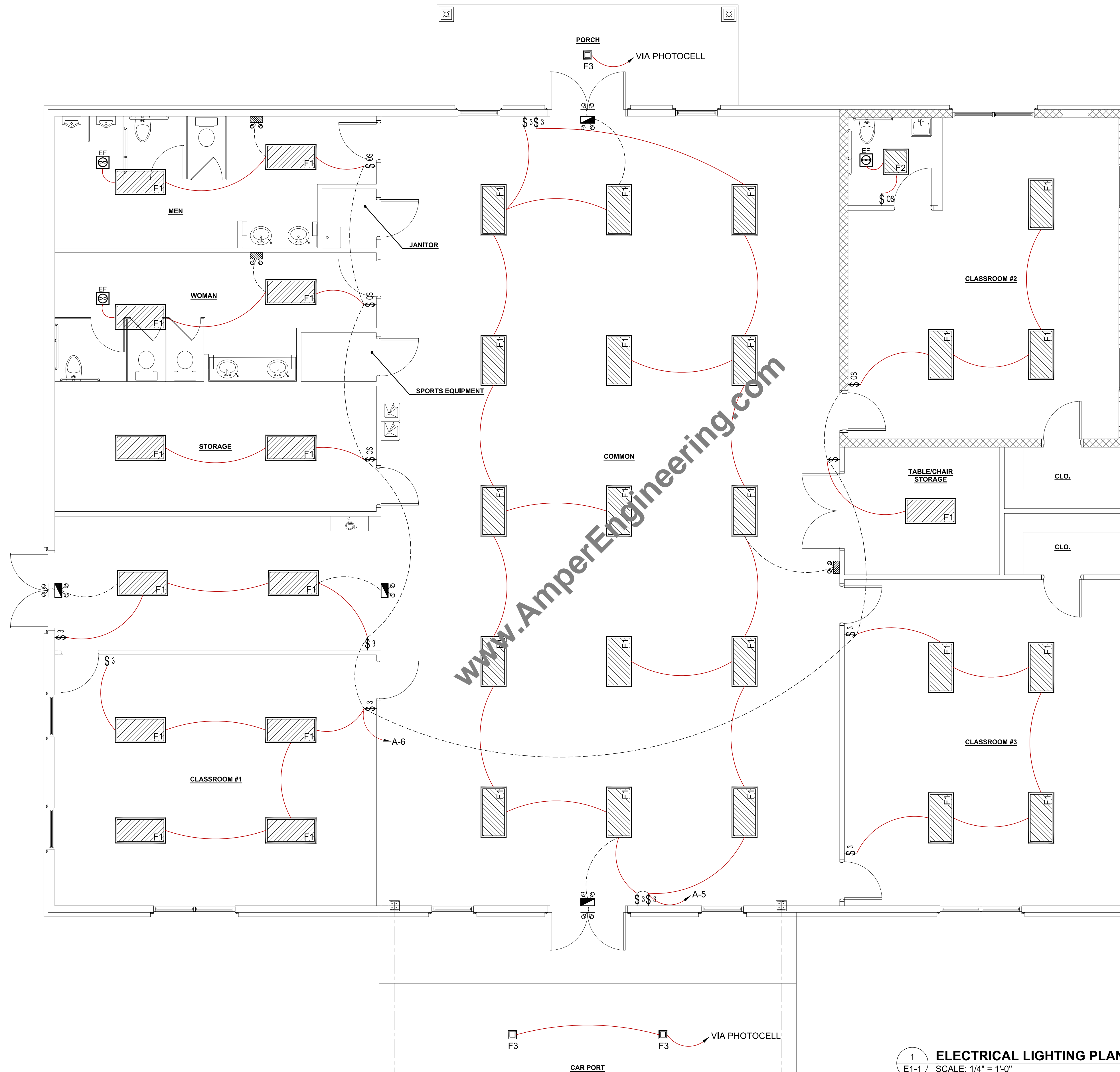
DATE ISSUED: 08/02/2021

DESIGNED BY: JAK

DRAWN BY: JAK

DRAWING TITLE: ELECTRICAL NOTES & SCHEDULES

DRAWING NUMBER: E1-0



1 **ELECTRICAL LIGHTING PLAN**
E1-1 SCALE: 1/4" = 1'-0"



NO. _____

DATE _____

REVISION	DATE

NO. _____

PROPOSED BUILDING FOR **ITE SCHOOL**
 MARION ROAD
 FREDONIA, KY 42411
FRE

AE JOB# 1412

DATE ISSUED: 08/02/2021

DESIGNED BY: JAK

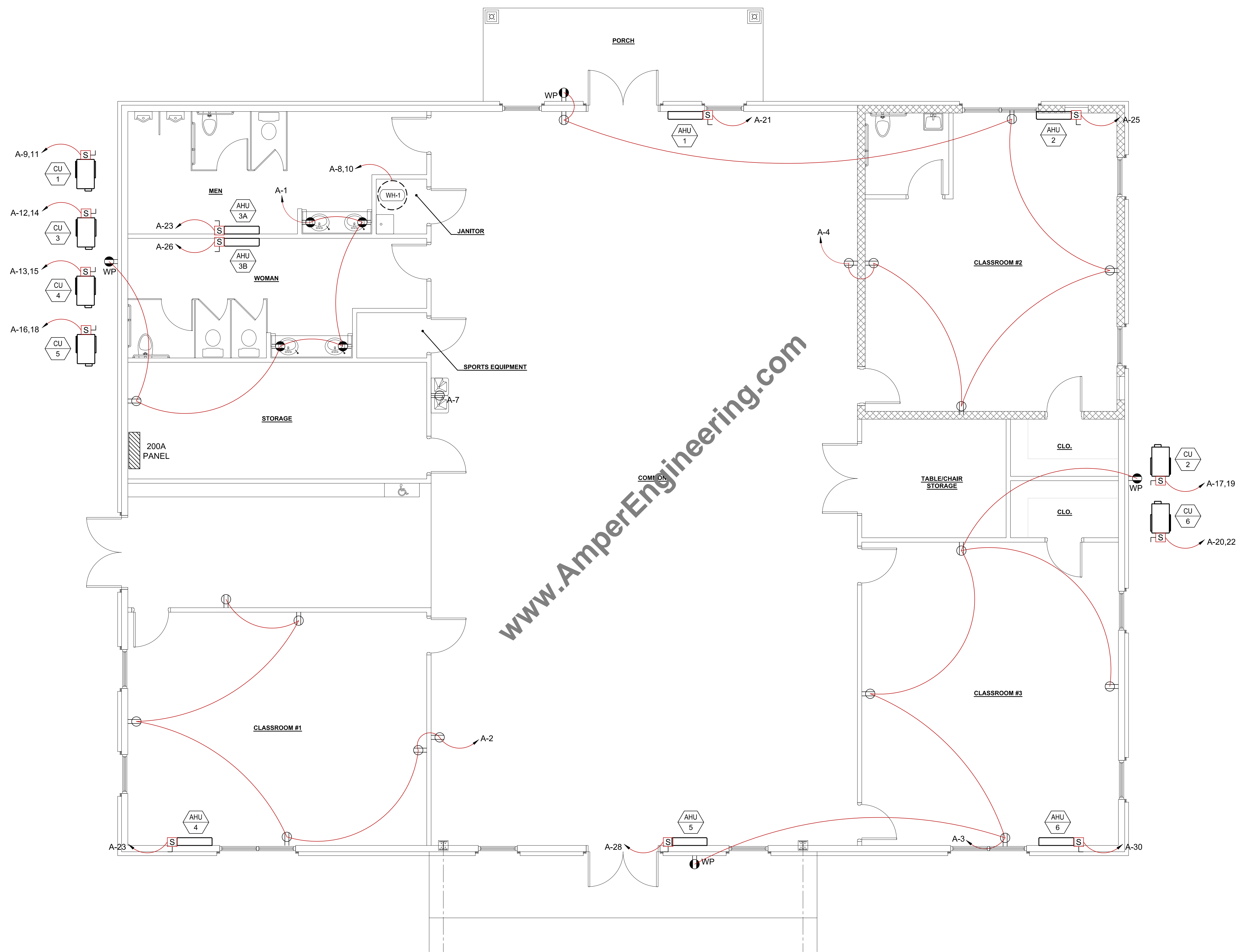
DRAWN BY: JAK

DRAWING TITLE:

ELECTRICAL LIGHTING PLAN

DRAWING NUMBER:

E1-1



NO.	REVISION	DATE

PROPOSED BUILDING FOR
ITE SCHOOL
 JARION ROAD
 FREDONIA, KY 42411
FRE

AE JOB# 1412
 DATE ISSUED: 08/02/2021
 DESIGNED BY: JAK
 DRAWN BY: JAK
 DRAWING TITLE: ELECTRICAL POWER PLAN
 DRAWING NUMBER:

E1-2

1 ELECTRICAL POWER PLAN
 E1-2 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- ALL MATERIALS AND INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE 2015 IPC, 2015 IEBC, LOCAL CODES, AND ALL AUTHORITIES HAVING JURISDICTION.
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL EQUIPMENT AND MATERIALS LISTED IN PLUMBING FIXTURE SCHEDULE.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT, MATERIALS, AND LABOR TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM AS INDICATED ON THE DESIGN DOCUMENTS.
- CONTRACTOR SHALL OBTAIN ALL PERMITS, INSPECTIONS, AND APPROVALS PRIOR TO AND DURING CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE ALL ROOF OPENINGS, FLASHING, AUXILIARY STEEL, THREADED RODS, ETC., TO SUPPORT HIS EQUIPMENT ON OR FROM THE STRUCTURE.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES AND IN FIELD PRIOR TO INSTALLATION OF ANY WORK. REPORT ALL CONFLICTS IMMEDIATELY TO ENGINEER.
- CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL EQUIPMENT WITH ENGINEER AND OTHER TRADES.
- THE CONTRACTOR SHALL PRESSURE TEST ALL PIPING IN ACCORDANCE WITH CODES AND AUTHORITIES HAVING JURISDICTION.

PLUMBING SPECIFICATIONS:

- VERIFY SERVICE POINTS AND METERING LOCATIONS FOR PROJECT WITH LOCAL UTILITIES
- SANITARY AND DRAINAGE PIPING 2" AND SMALLER SHALL BE INSTALLED WITH A MINIMUM SLOPE OF 1/8" PER FOOT. PIPING 3" AND LARGER SHALL BE SLOPED 1/4" PER FOOT.
- SANITARY WASTE AND VENT PIPING ABOVE GROUND SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN TABLE 702.1 2015 IPC.
- SANITARY WASTE AND VENT PIPING UNDERGROUND SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN TABLE 702.2 2015 IPC.
- DOMESTIC HOT AND COLD PIPING ABOVE GRADE TO BE PEX WITH INSULATION. BELOW GROUND SHALL BE TYPE "K" SOFT COPPER WITH NO JOINTS PERMITTED.
- PROVIDE 1/2" THK. ELASTOMERIC OR FIBERGLASS ALL SERVICE JACKET (ASJ) INSULATION ON ALL EXPOSED DOMESTIC HOT AND COLD WATER PIPING.
- FURNISH AND INSTALL SHUTOFF OR BALL VALVE AND DIELECTRIC UNION ON ALL EQUIPMENT HOT AND COLD WATER LINES. CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT. COORDINATE WITH EQUIPMENT SUPPLIER FOR EXACT REQUIREMENTS.
- JOINTS BETWEEN DIFFERENT PIPING MATERIALS SHALL BE MADE WITH APPROVED ADAPTOR FITTINGS. JOINTS BETWEEN DIFFERENT METALLIC PIPING MATERIAL SHALL BE MADE WITH APPROVED DIELECTRIC FITTINGS OR BRASS CONNECTION FITTINGS. PIPE HANGERS SHALL BE SECURELY ATTACHED TO BUILDING CONSTRUCTION.
- PIPING IN THE PLUMBING SYSTEM SHALL BE INSTALLED SO AS TO PREVENT STRAINS AND STRESSES WHICH WILL EXCEED STRUCTURAL STRENGTH OF THE PIPE. PROVISIONS SHALL BE MADE FOR EXPANSION AND CONTRACTION OF THE PIPING. PROVIDE THREE ELBOW SWING JOINT BRANCH TAKE-OFFS.
- HOLD TOP OF FLOOR DRAINS FLUSH WITH FINISHED FLOOR. SEE ARCH. SHEETS FOR FLOOR SLOPED AROUND DRAINS (IF REQUIRED)
- CONTRACTOR SHALL FURNISH AND INSTALL COPPER INDIRECT WASTE PIPING REQUIRED FROM EQUIPMENT TO FLOOR DRAINS, OPEN RECEPTACLES, OR FLOOR SINKS. PIPING SHALL COMPLY WITH STATE AND LOCAL CODES. COORDINATE WITH ALL EQUIPMENT SUPPLIERS AND SIZE AS REQUIRED BY PIECE OF EQUIPMENT BEING SERVED.
- ALL REQUIRED INDIRECT WASTE PIPING SHALL DISCHARGE INTO THE BUILDING DRAINAGE SYSTEM THROUGH AN AIR GAP OR AIR BREAK.
- ALL EQUIPMENT DRAINS SHALL HAVE A BACKFLOW PREVENTION DEVICE OR AIR GAP.
- SANITARY DRAINAGE SYSTEM VENTS THROUGH ROOFS SHALL NOT TERMINATE WITHIN 25 FEET OF ANY WINDOW, OR AIR INTAKE.
- THE CONTRACTOR SHALL SEAL ALL PENETRATIONS THROUGH FIRE RATED STRUCTURES WITH FIREPROOF SEALANT AS MANUFACTURED BY 3M OR APPROVED EQUAL.
- VERIFY MOUNTING HEIGHTS OF ALL BARRIER FREE FIXTURES WITH ARCH. DRAWINGS

EQUIPMENT SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL NO.	NOTES
WH-1	50 GAL. ELEC. WATER HEATER	A.O. SMITH	DRE-52-12	1
EXT-1	EXPANSION TANK	A.O. SMITH	PMC-5	1
MV-1	HOT WATER MIXING VALVE	WATTS	ES-LFMMV-HTK	1

NOTES:
1. OR EQUIVALENT APPROVED.

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	QTY	CW	HW	WASTE	TRAP	VENT	DFU	TOTAL DFU
(HCWC)	ADA WATER CLOSET	3	3/4"	-	4"	3"	2"	4	12
(WC)	WATER CLOSET	3	3/4"	-	4"	3"	2"	4	12
(UR)	ADA URINAL	2	3/4"	-	2"	2"	2"	3	6
(LAV)	ADA LAVATORY	5	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1	5
(S.SK)	SERVICE SINK	1	1/2"	1/2"	1 1/2"	2"	2"	2	2
(EWC)	DUAL ADA LEVEL ELECTRICAL WATER COOLER	1	1/2"	-	1 1/2"	1 1/2"	1 1/2"	1	1
(WH-1)	50 GAL. ELECTRIC WATER HEATER: A.O. SMITH - DRE-52-12	1	-	-	-	-	-	-	-
(FD)	FLOOR DRAIN - ZURN ZB415-0V-P-Y 6" DIA POLISHED BRONZE TYPE "O" STRAINER, SEDIMENT BUCKET, VANDAL PROOF SCREWS. PROVIDE W/ TRAP PRIMER CONNECTION (REQUIRED BY CODE)	2	-	-	3"	3"	-	3	6

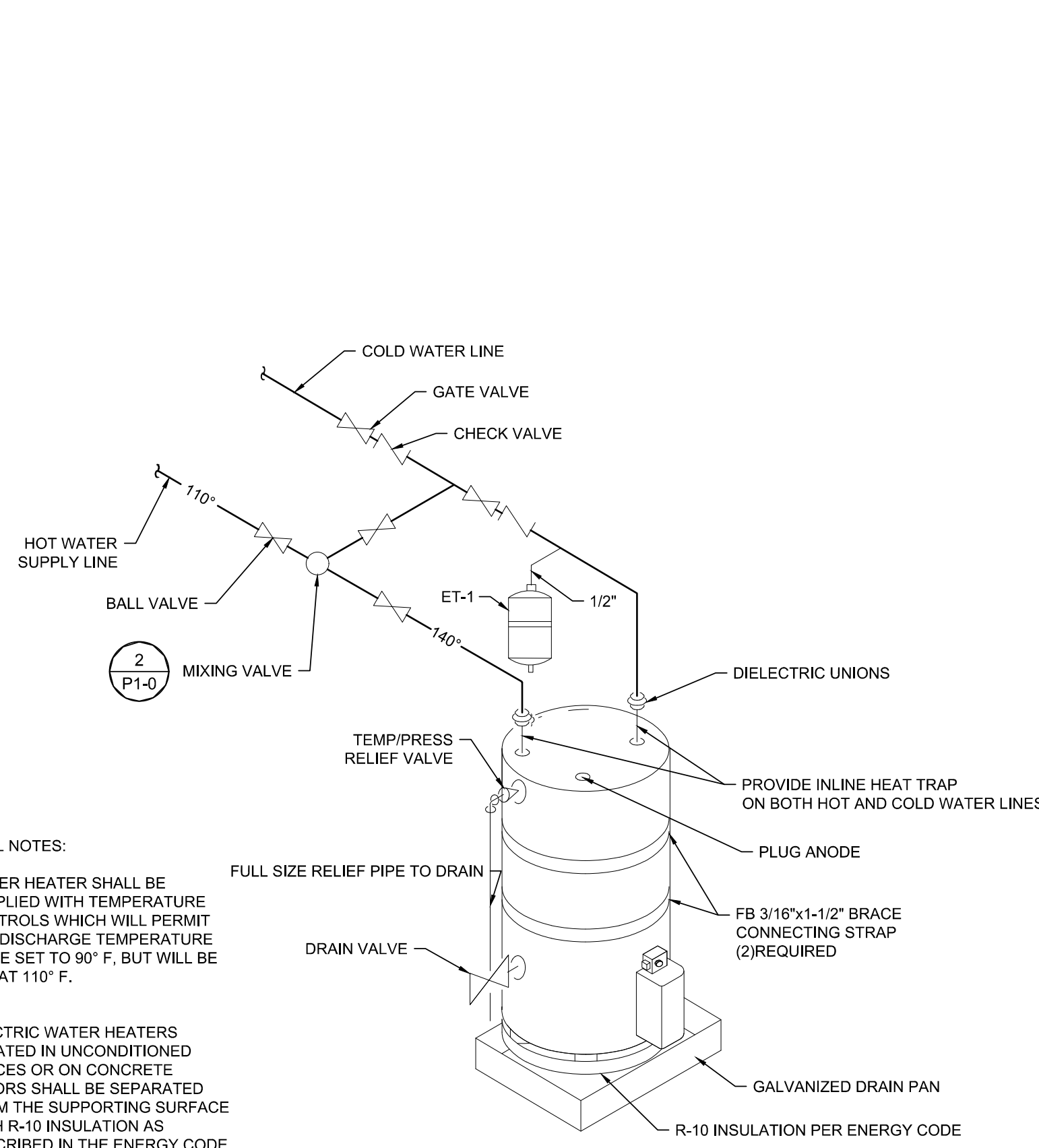
NOTES:
1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING HEIGHT OF ALL FIXTURES AND LOCATIONS OF ADA FIXTURES.
2. AN APPROVED EQUAL MAY BE USED FOR ALL FIXTURES SPECIFIED IF QUALIFIED IN BID.
3. CONTRACTOR SHALL PROVIDE AND INSTALL WATTS, ZERN, P.P.P.INC. (OR EQUAL) TRAP PRIMERS TO SERVE ALL FLOOR DRAINS REQUIRING PROTECTION PER CODE.

Fixture Type	Total Number of Fixtures	X	Unit Load Value	=	Water Supply Fixture Units (W.S.F.U.)
Water Closets	6		5.0		30
Urinal	2		3.0		6
Lavatories	5		2.0		10
Drinking Fountain	1		0.3		0.25
Service/ Mop Sink	1		3.0		3
Total Load Factor					49.25

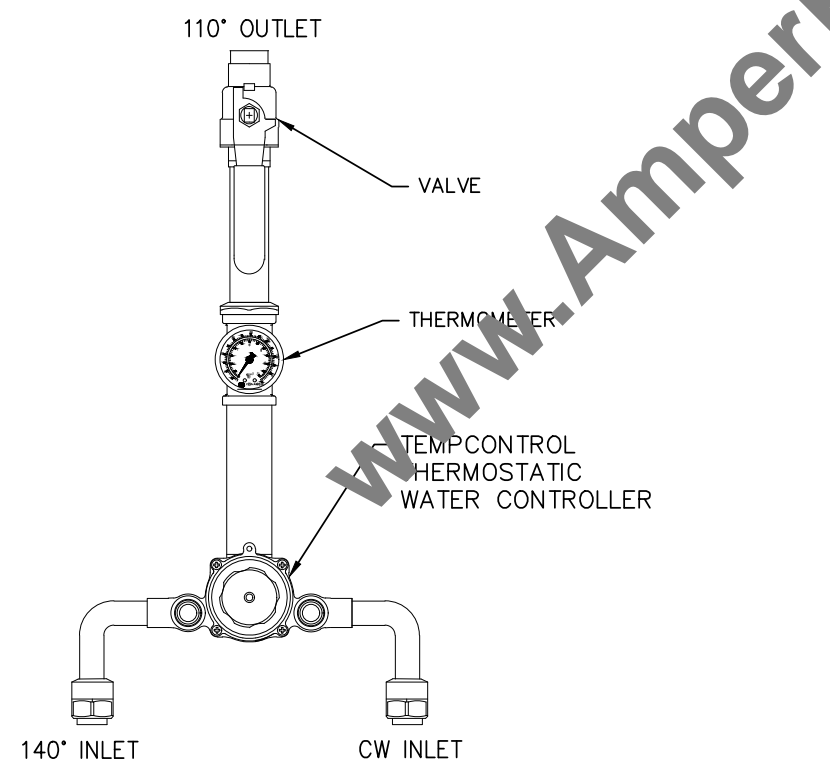
W.S.F.U.	Demand (GPM)	Pipe Size (Inches)	Pressure Loss (PSI/ 100' of Pipe)	Velocity (Ft./ Sec.)
2	2	1/2"	4.2	2.7
4	3	1/2"	8.7	4.2
6	5	1/2"	22.5	7.0
8	6.5	3/4"	6.3	4.3
10	8	3/4"	9.0	5.4
12	9.2	3/4"	11.5	6.1
14	10.4	3/4"	15.0	6.9
16	11.6	3/4"	18.0	7.7
20	14	1"	7.2	5.6
25	17	1"	10.0	6.6
30	20	1"	13.6	8.0
35	22.5	1 1/4"	5.8	5.7
40	25	1 1/4"	7.0	6.3
45	27	1 1/4"	8.2	6.9
50	29	1 1/4"	9.5	7.4

SYMBOLS & ABBREVIATIONS

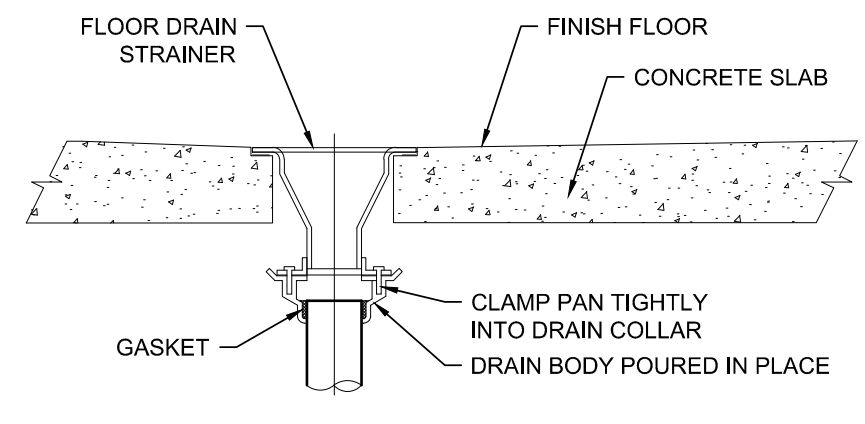
- | | | | |
|--------|--------------------------|--------|------------------|
| G.C. | GENERAL CONTRACTOR | FD | FLOOR DRAIN |
| P.C. | PLUMBING CONTRACTOR | TRAP | TRAP |
| H.C. | HVAC CONTRACTOR | B.V. | BALL VALVE |
| E.C. | ELECTRICAL CONTRACTOR | F.C.O. | FLOOR CLEAN OUT |
| A.F.F. | ABOVE FINISHED FLOOR | W.C.O. | WALL CLEAN OUT |
| B.F. | BELOW FLOOR | FS | FIXTURE STOP |
| WV | WET VENT | VTW | VENT THRU WALL |
| CDV | COMB. DRAIN & VENT | VTR | VENT THRU ROOF |
| W OR S | WASTE OR SANITARY PIPING | WM | WATER METER |
| V | VENT PIPING | G | GAS METER |
| CW | COLD WATER PIPING | HB | HOSE BIB |
| HW | HOT WATER PIPING | PC | POINT OF CONTACT |
| G | GAS PIPING | | |



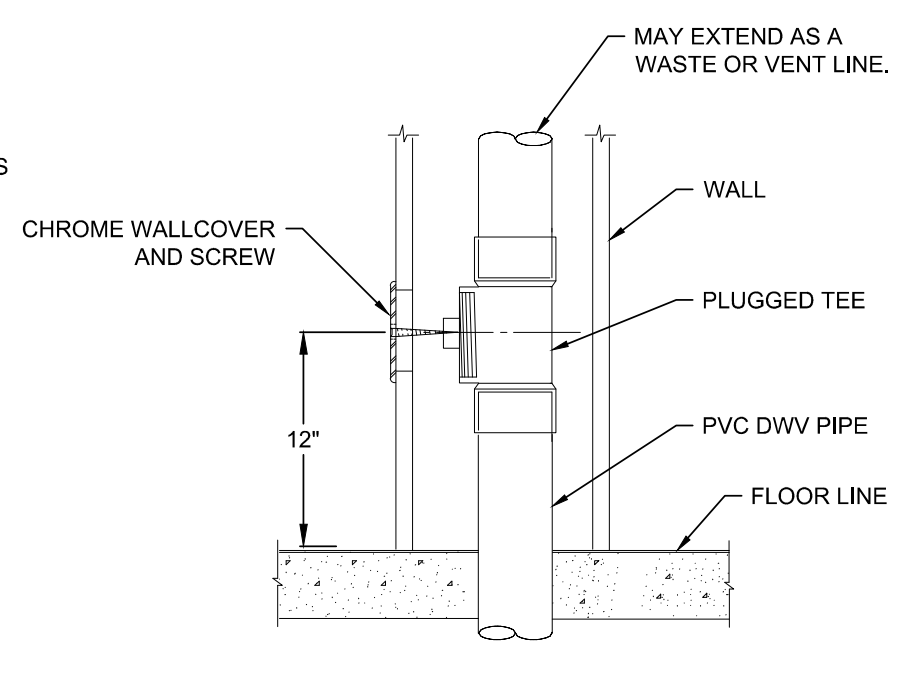
1 50 GAL. ELECTRIC WATER HEATER DETAIL
SCALE: NOT TO SCALE



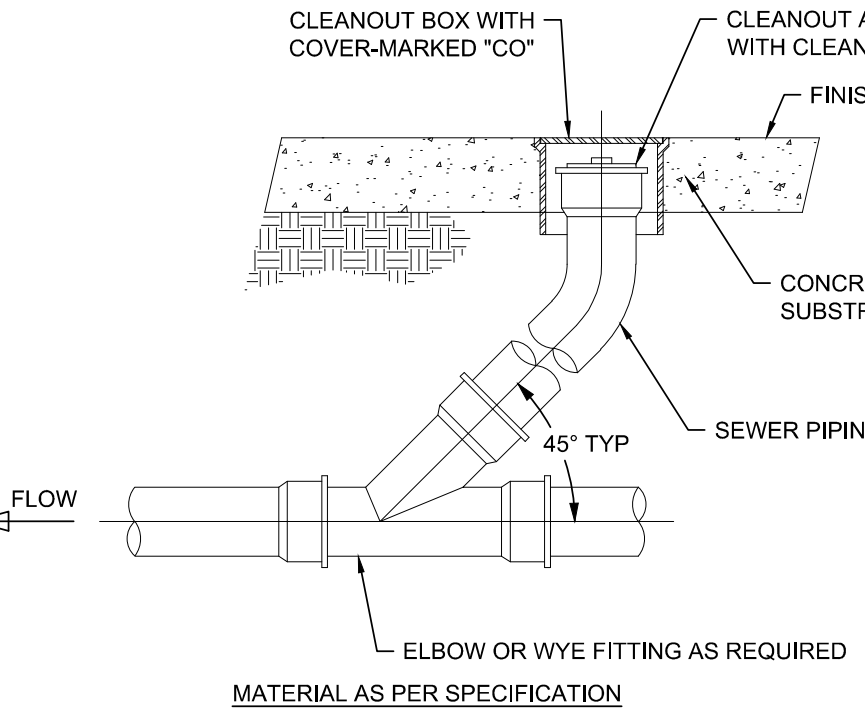
2 MIXING VALVE DETAIL
SCALE: NOT TO SCALE



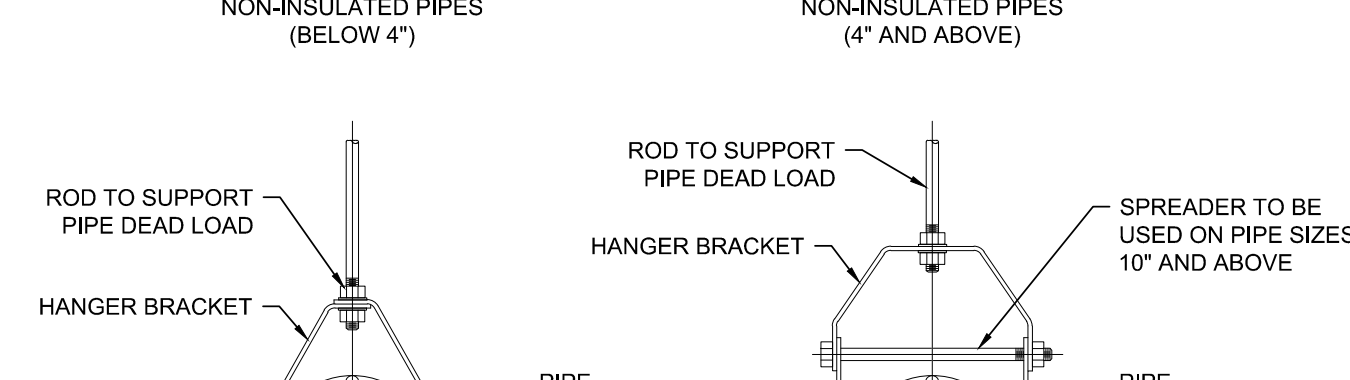
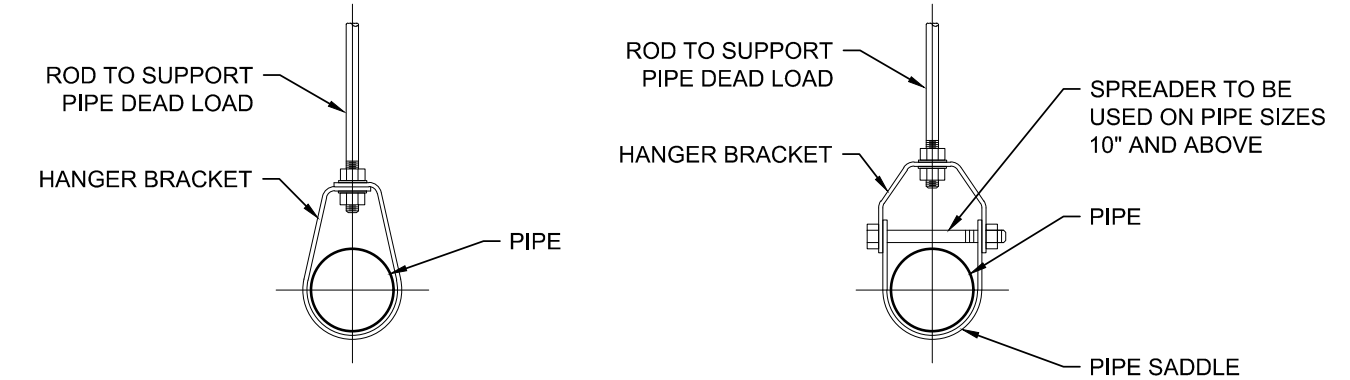
3 FLOOR DRAIN DETAIL (TYP.)
SCALE: NOT TO SCALE



5 WALL CLEAN-OUT DETAIL
SCALE: NOT TO SCALE



4 FLOOR CLEANOUT DETAIL
SCALE: NOT TO SCALE



6 PIPE SUPPORT DETAIL
SCALE: NOT TO SCALE



DATE	
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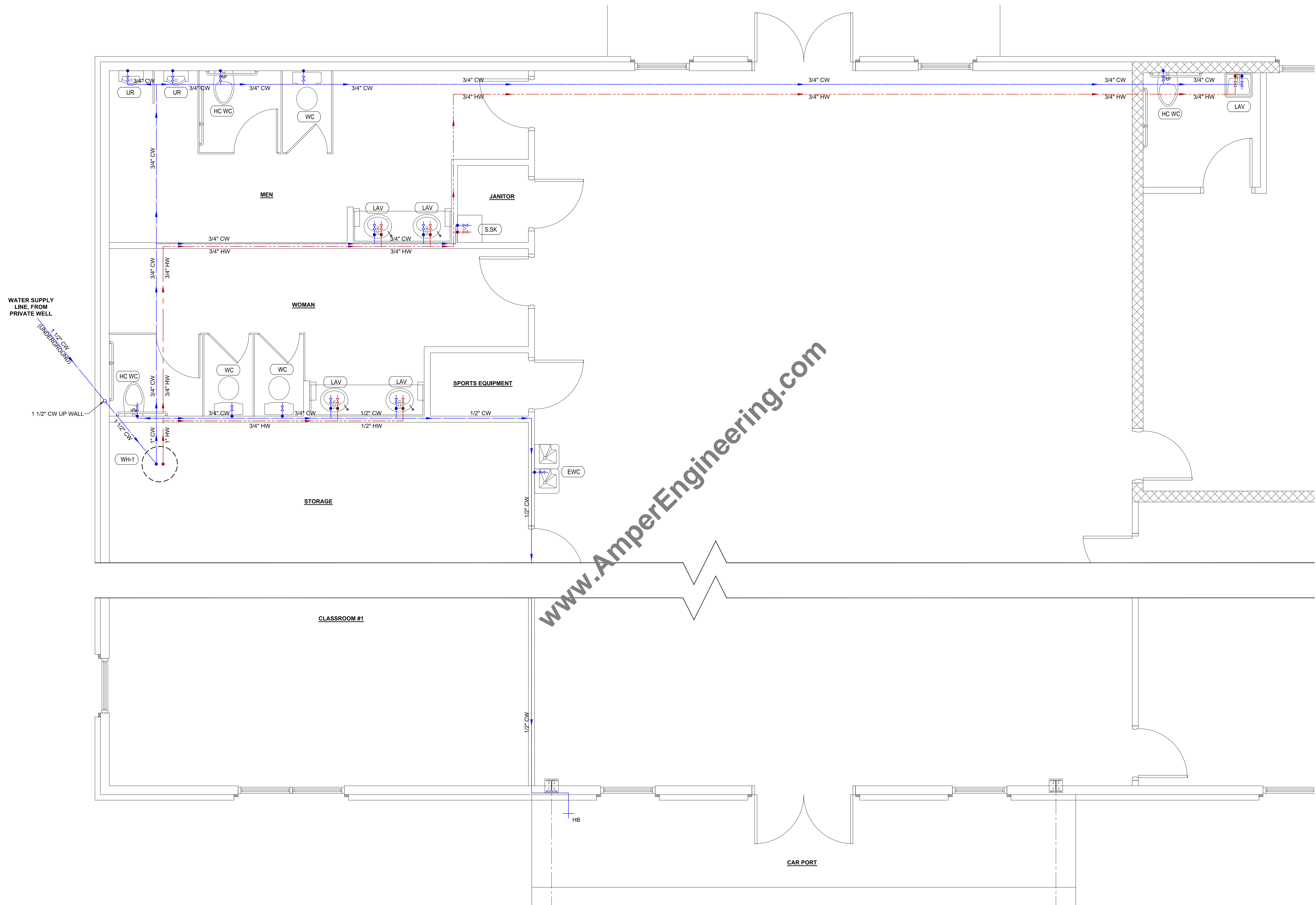
REVISION	
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NO.	
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PROPOSED BUILDING FOR
ITE SCHOOL
FIRE
MARION ROAD
FREDONIA, KY 42411

AE JOB# 1412
DATE ISSUED:
08/02/2021
DESIGNED BY:
JAK
DRAWN BY:
JAK
DRAWING TITLE:
PLUMBING
NOTES & SCHEDULES
DRAWING NUMBER:

P1-0



1 DOMESTIC WATER PLAN
 P1-1 SCALE: 3/8" = 1'-0"

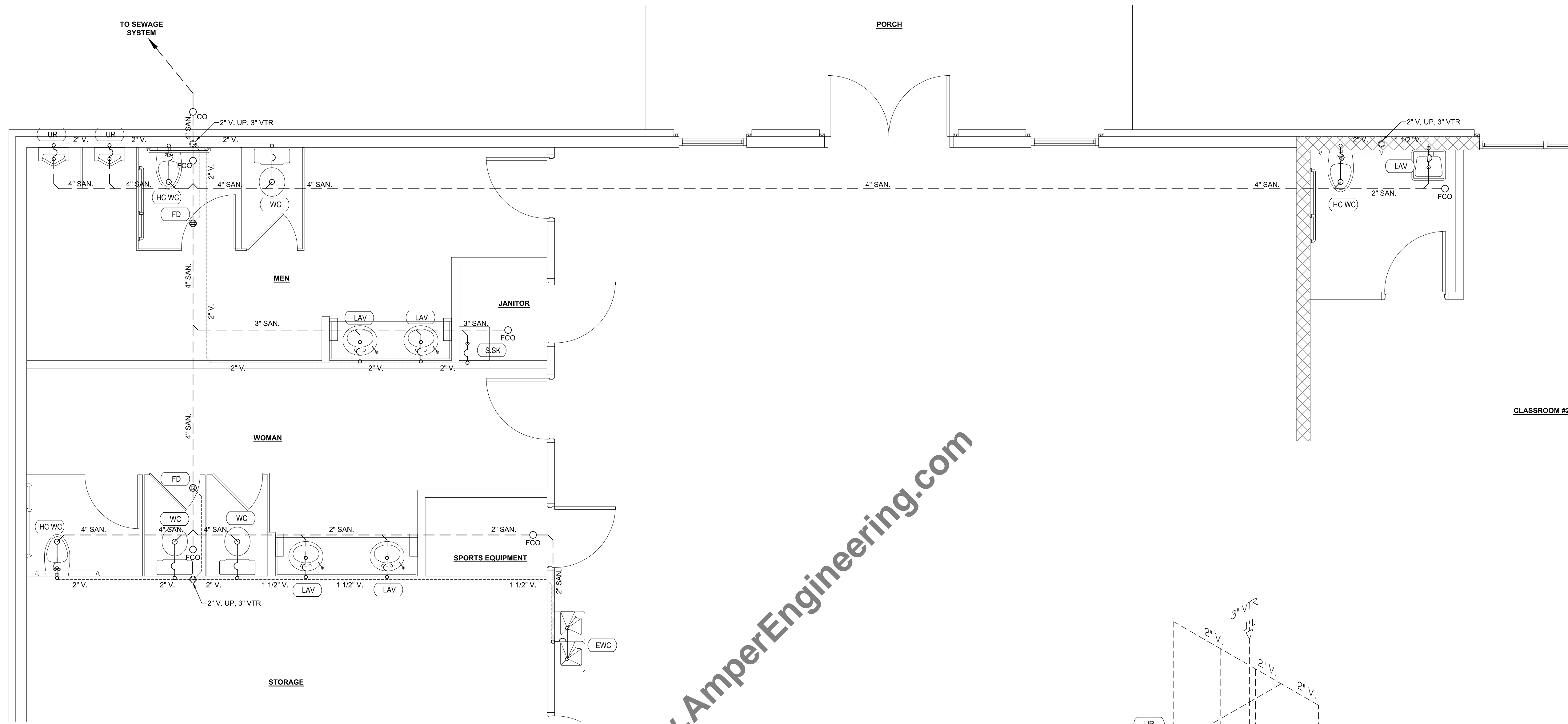


NO.	REVISION	DATE

PROPOSED BUILDING FOR
 ITE SCHOOL
 MARION ROAD
 FREDONIA, KY 42411
 FRE

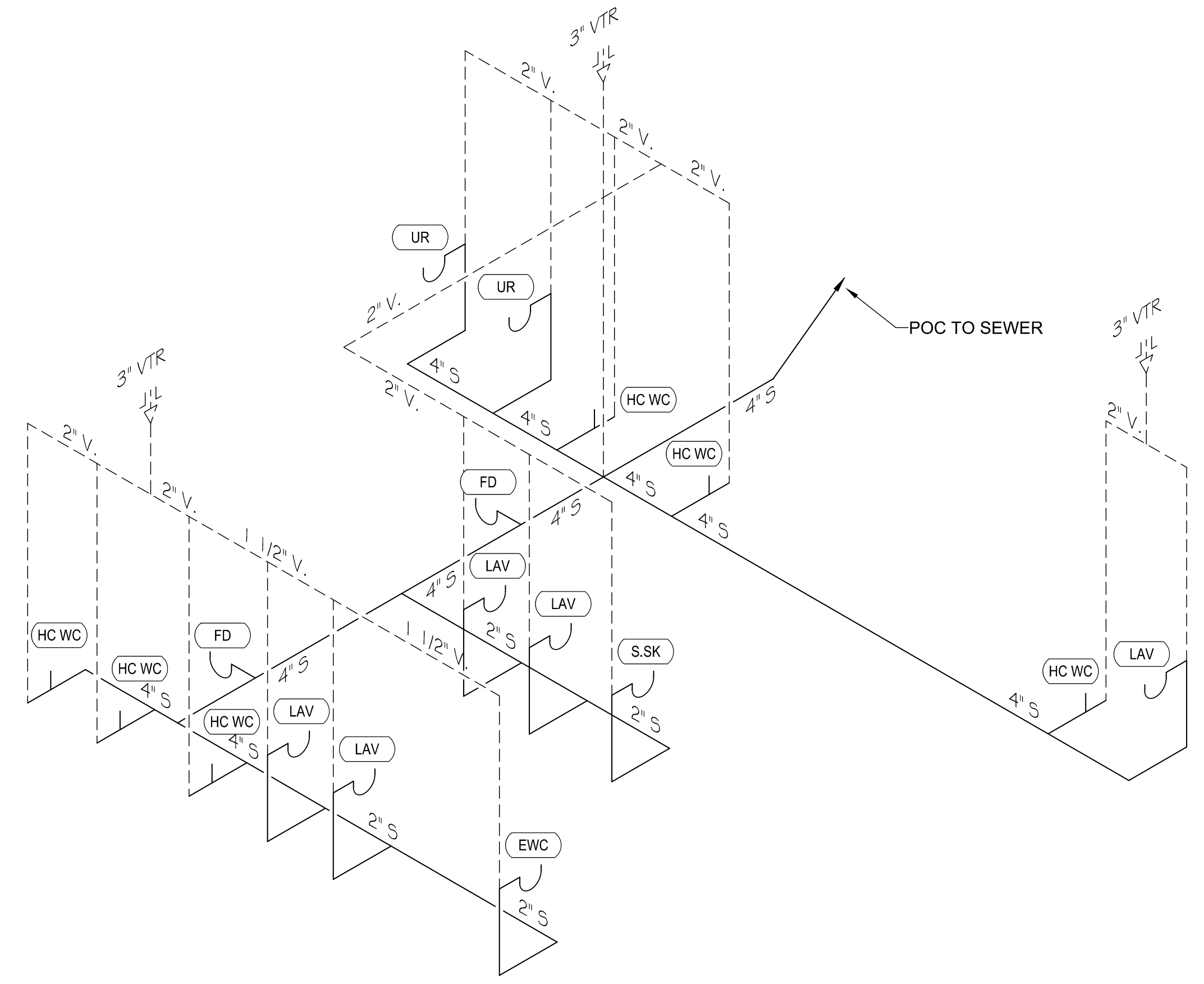
AE JOB# 1412
 DATE ISSUED: 08/02/2021
 DESIGNED BY: JAK
 DRAWN BY: JAK
 DRAWING TITLE: PLUMBING FLOOR PLANS
 DRAWING NUMBER:

P1-1

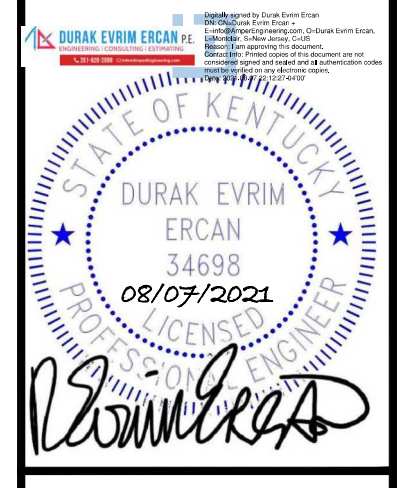


1 SANITARY SEWER AND VENT PLAN
 SCALE: 3/8" = 1'-0"

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2 SANITARY RISER DIAGRAM
 SCALE: N.T.S.



NO.	REVISION	DATE

PROPOSED BUILDING FOR
FRE **ITE SCHOOL**
 JARLON ROAD
 FREDONIA, KY 42411

AE JOB# 1412
 DATE ISSUED: 08/02/2021
 DESIGNED BY: JAK
 DRAWN BY: JAK
 DRAWING TITLE: PLUMBING FLOOR PLANS
 DRAWING NUMBER:

P1-2