ISSUED FOR BIDDING 3-3-23
NOT FOR CONSTRUCTION

STERED ARCAILAND STORY OF NEW TOP NEW

Project Drawings For:

Town of Pendleton Community Center

SITE OF PROPOSED TOWN OF

CAMPBELL BLVD

Project Location:

Campbell Blvd Lockport, New York 14094

Project Number:

21-049

Drawing List:

G-1 Cover Sheet

Contract No. 21-049G General Construction

Λ-1 Elevations, Detail & Notes

Λ-2 Post Plan & Floor Plan

Λ-3 Foundation Plan & Schedules

A-4 Building & Wall Sections

Λ-5 Wall Sections

Λ-6 Door & Room Finish Schedules, Enlarged Plan & Details

Contract No. 21-049H

Heating & Ventilation Construction

M-1 HVAC Plan

M-2 HVAC Schedules and Details

Contract No. 21-049P Plumbing Construction

P-1 Plumbing - Drain & Vent

P-2 Plumbing - Water & Gas

P-3 Plumbing - Specifications

FP-1 Fire Protection

FP-2 Fire Protection Details

Contract No. 21-049E Electrical Construction

E-1 Electrical Service Details

E-2 Electrical - Power & Data

E-3 Electrical - Lighting
E-4 Electrical - Fire Alarm

-5 Electrical - Specifications

Pendleton Town Hall

Macorie Missiont at Pendleton Park...

Pendleton Center Market Station

Craft Coffee House

Location Map

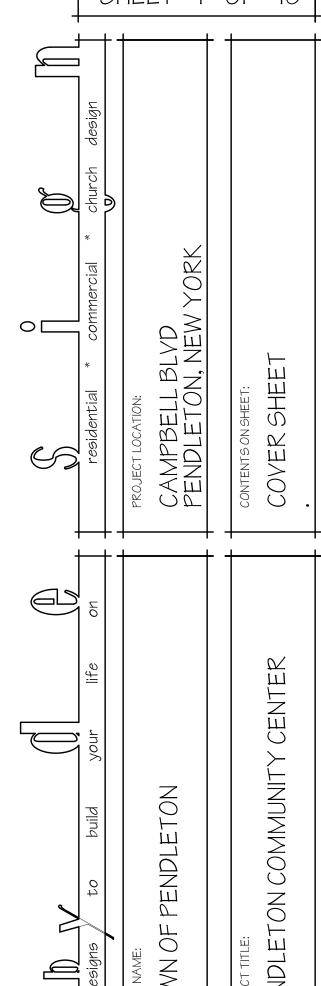
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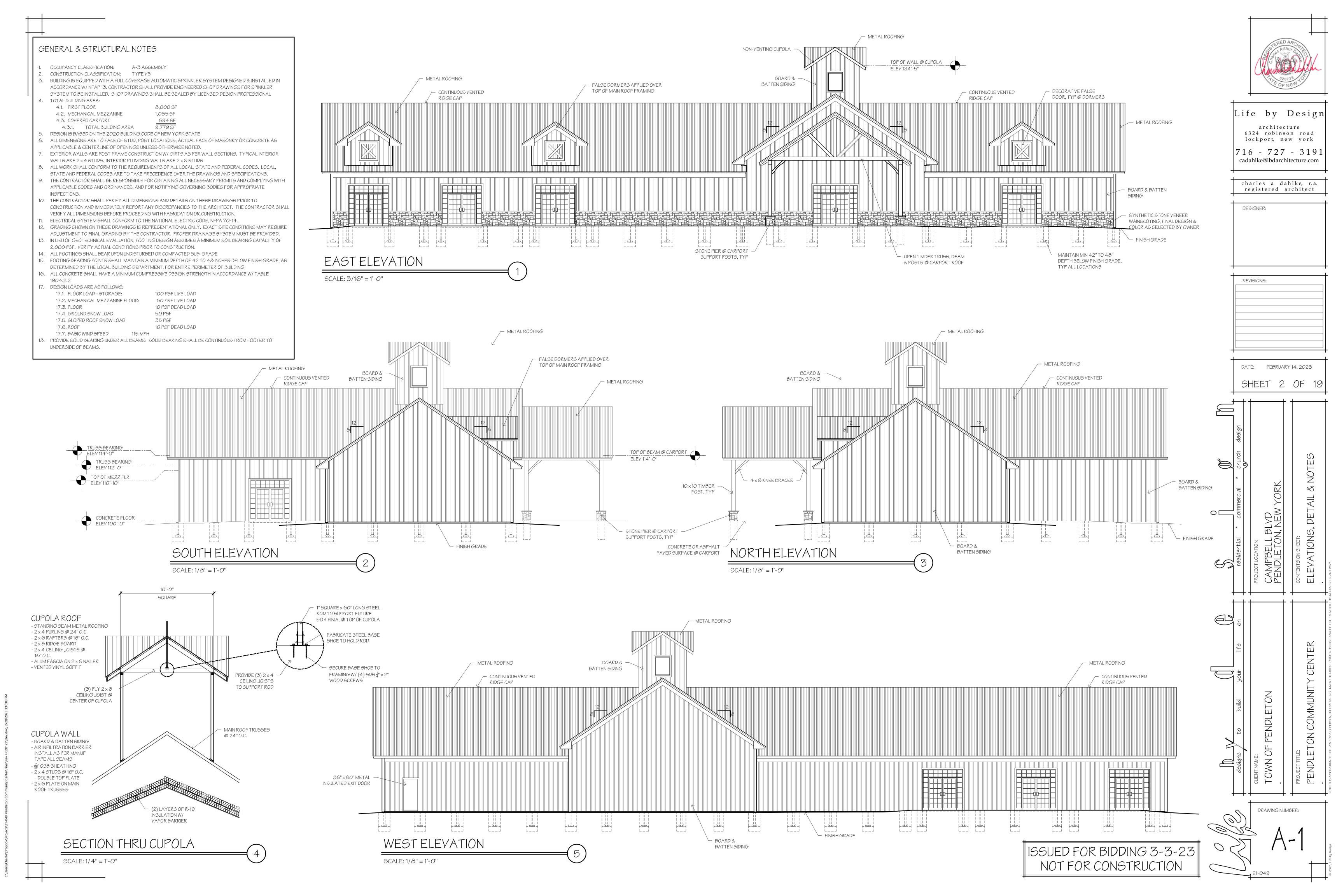
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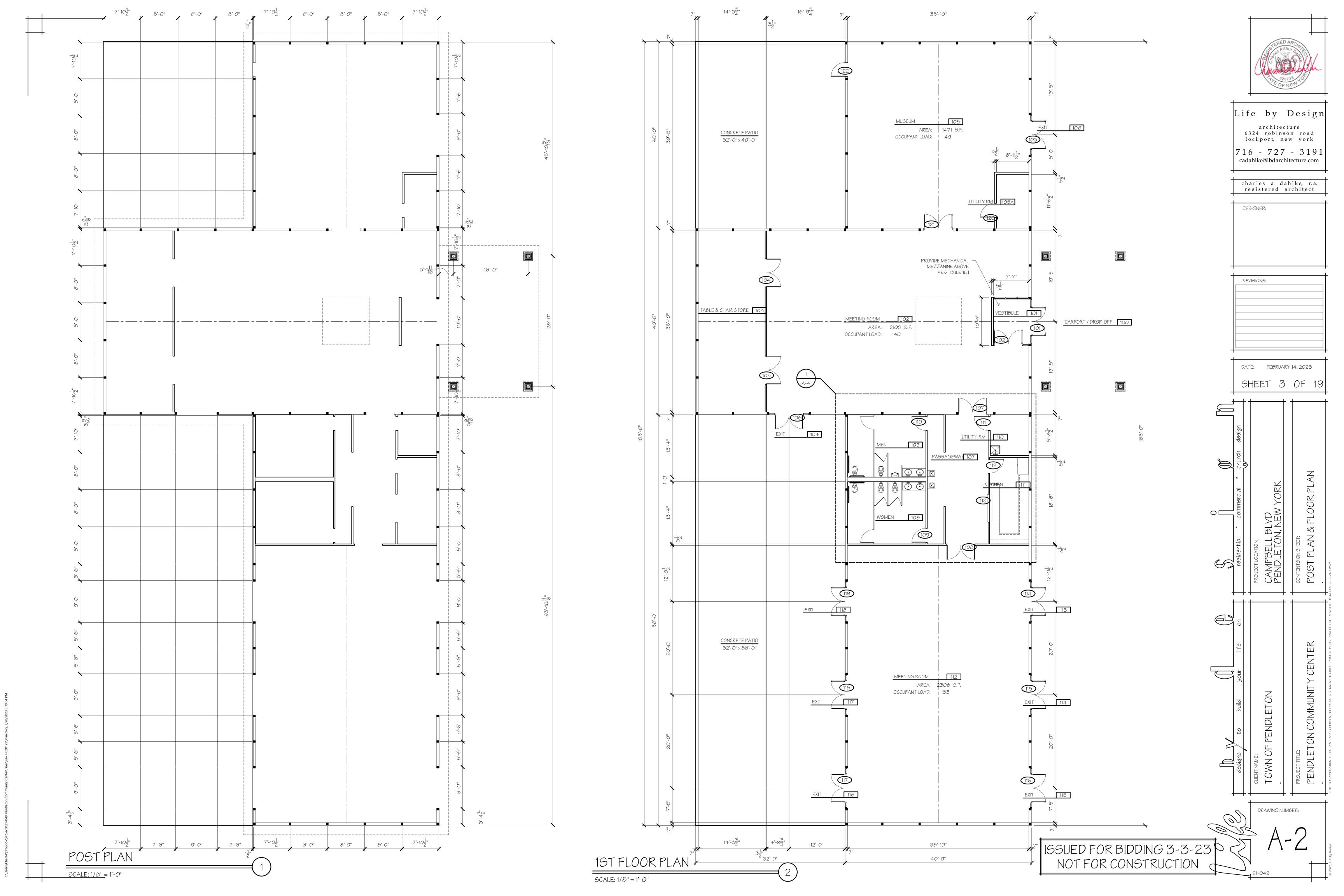
SHEET 1 OF 19

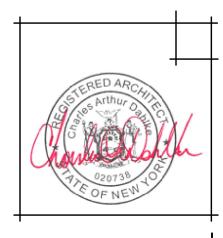


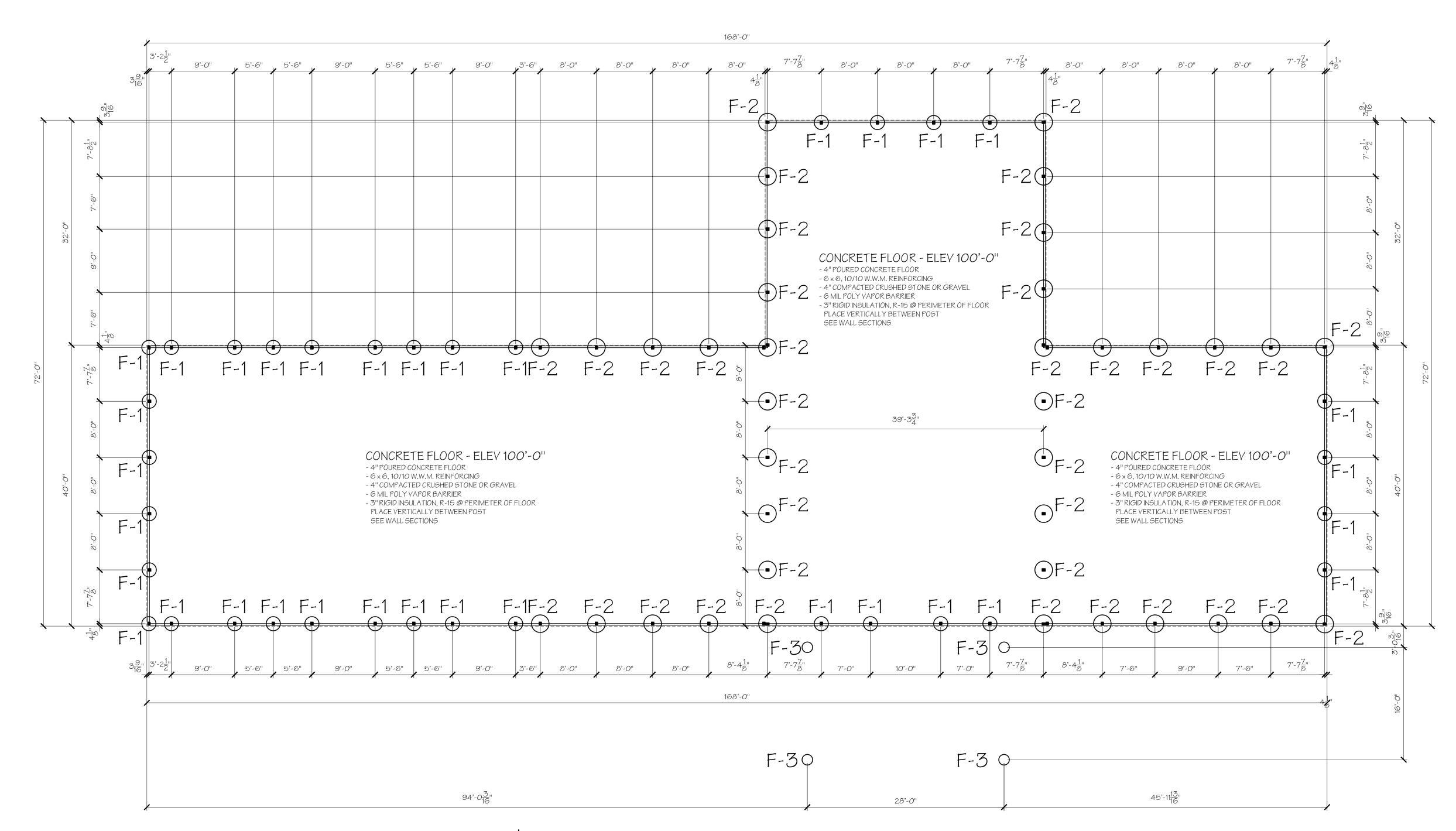
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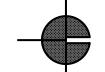








SCALE: 1/8" = 1'-0"

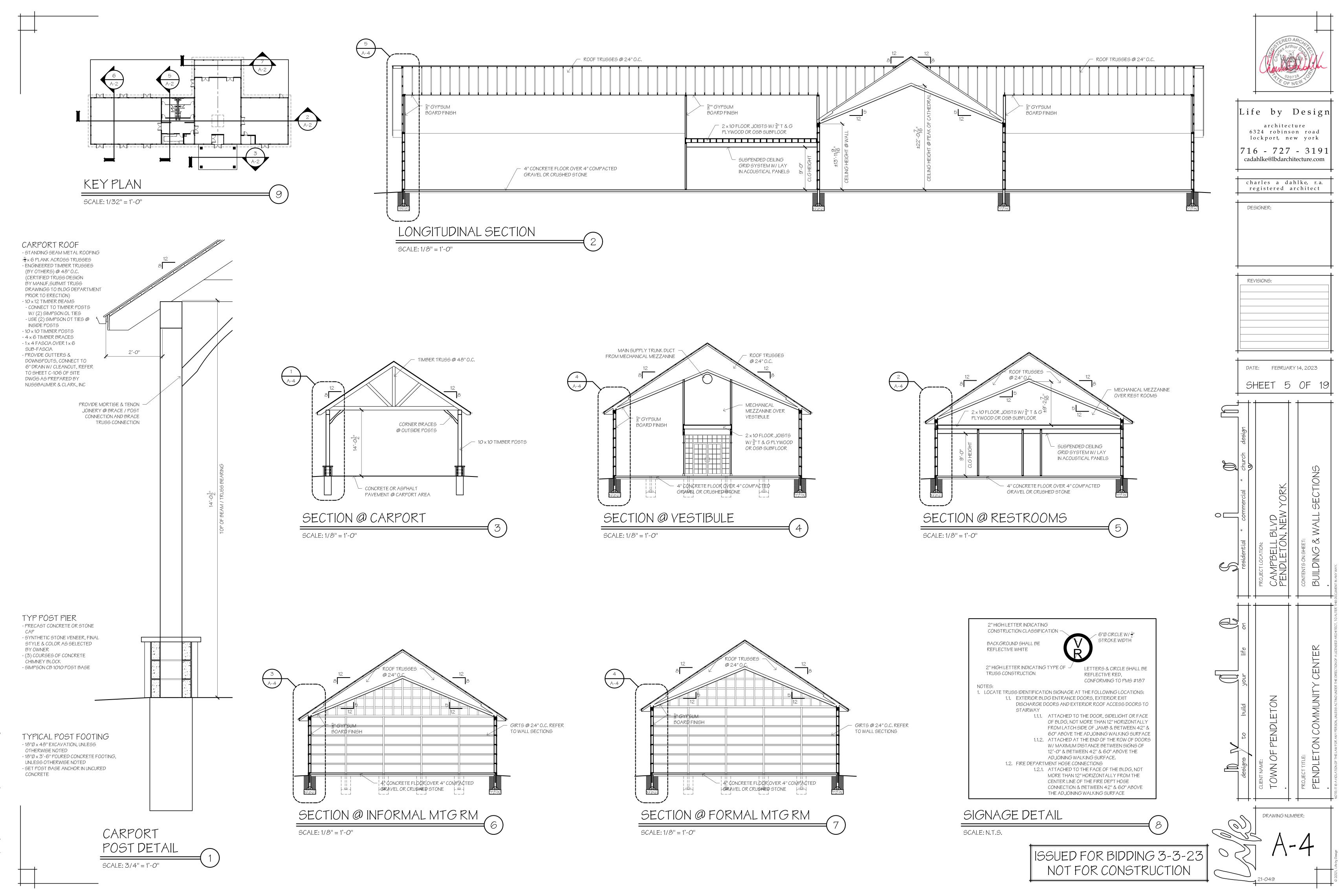


		NBLE 1806.2 LOAD - BEARING VALUES		
CLASS OF MATERIAL	VERTICAL FOUNDATION PRESSURE	LATERAL BEARING PRESSURE	LATERAL SLIDI	NG RESISTANCE
	(PSF)	(PSF/F BELOW NATURAL GRADE)	COEFFICIENT OF FRICTION	COHESION (PSF)
CRYSTALLINE BEDROCK	12,000	1,200	0.70	1
SEDIMENTARY AND FOLIATED ROCK	4,000	400	0.35	-
SANDY GRAVEL AND GRAVEL (GW AND GP)	3,000	200	0.35	-
SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL AND CLAYEY GRAVEL (SW, SP, SM, SC, GM AND GC)	2,000	150	0.25	-
CLAY, SANDY CLAY, SILTY CLAY, CLAYEY SILT, SILT AND SANDY SILT (CL, ML, MH AND CH)	1,500	100	-	130

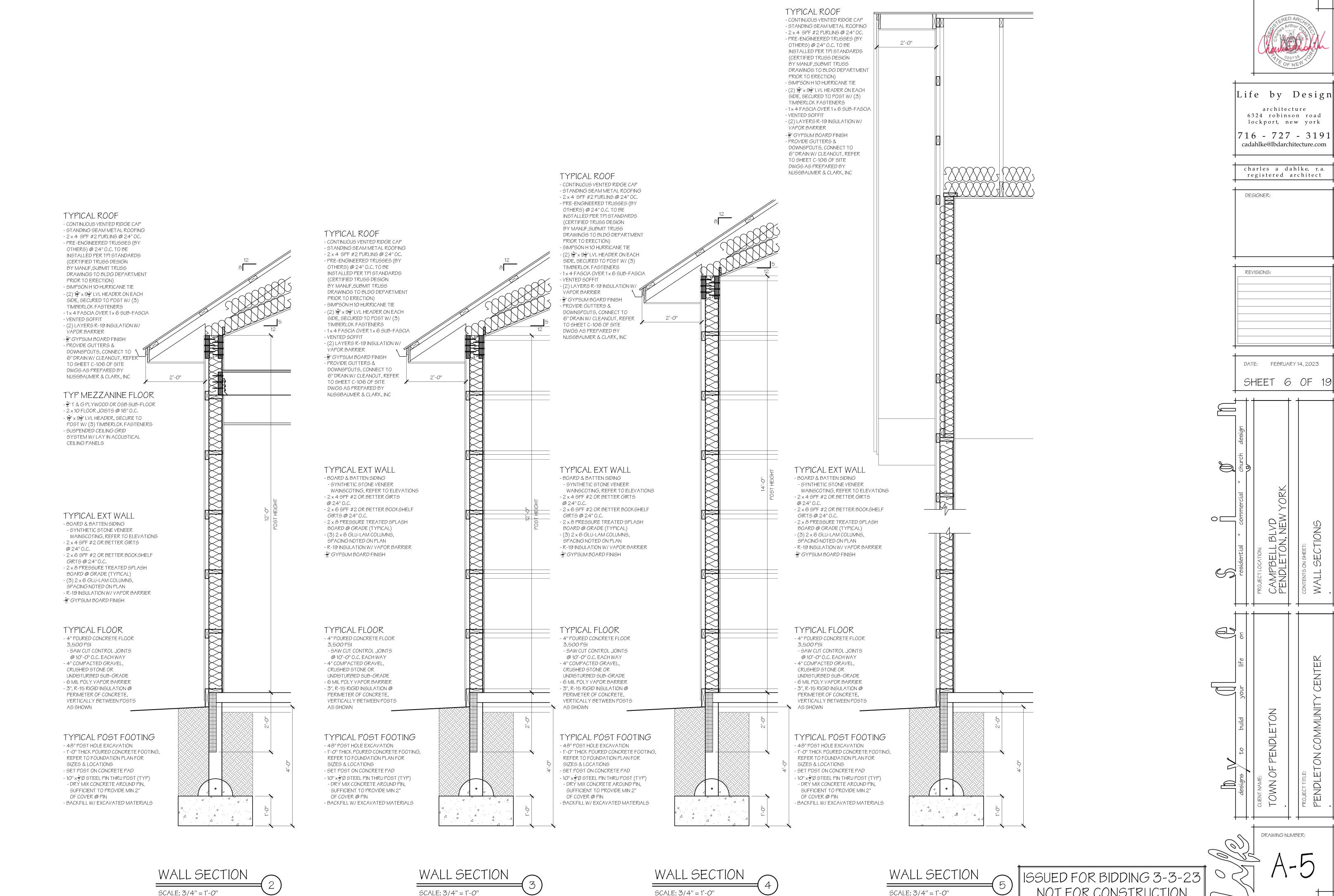
TABLE 1904.2.2 MINIMUM SPECIFIED COMPRESSIVE STRENGTH	H OF CONCRETE
LOCATION OF CONCRETE	SEVERE WEATHERING POTENTIAL
BASEMENT WALLS, FOUNDATIONS & CONCRETE NOT EXPOSED TO WEATHER	2,500 PSI AIR ENTRAINED WHERE SUBJECT TO FREEZING
BSMENT SLABS & INTERIOR SLABS ON GRADE, EXCEPT GARAGE FLOOR SLABS	2,500 PSI AIR ENTRAINED WHERE SUBJECT TO FREEZING
BSMENT, FOUNDATION, EXTERIOR WALLS & OTHER VERTICAL CONCRETE WORK EXPOSED TO WEATHER	3,000 PSI AIR ENTRAINED AT 5% TO 7%
PORCHES, CARPORT SLABS & STEPS EXPOSED TO WEATHER, & GARAGE FLOOR SLABS	3,500 PSI AIR ENTRAINED AT 5% TO 7%

	FOOTING	SCHEDULE
SYMB0L	SIZE	REMARKS
F-1	24"Ø×12" THICK	POURED CONCRETE POST FOOTING W/ DRY MIX CONCRETE AROUND BASE OF POST & PIN
F-2	30"∅×12" THICK	POURED CONCRETE POST FOOTING W/ DRY MIX CONCRETE AROUND BASE OF POST & PIN
F-3	18"Ø x 42" MIN DEPTH	POURED CONCRETE POST FOOTING @ CARPORT

-	63 10 716 cada	e by architect 324 robins of ckport, ne 6 - 727 ahlke@lbdarchi	ure on road w york - 3191 tecture.com
-	 	egistered a	rchitect
-	REV	/ISIONS:	
- -	DAT Sł	E: FEBRUARY	0F 19
	church design		S)
	* commercial *	PROJECT LOCATION: CAMPBELL BLVD PENDLETON, NEW YORK	ENTS ON SHEET: UNDATION PLAN & SCHEDULES
	residential	CAMPBELL BLVD PENDLETON, NEV	CONTENTS ON SHEET: FOUNDATIO
	life on		TER
	to build your	CLIENT NAME: TOWN OF PENDLETON	PROJECT TITLE: PENDLETON COMMUNITY CENTER FOUN NOTE: ITS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, TO ALTER THIS DOCUMENT IN ANY WAY.
	designs	CLIENT NAME: TOWN OF	+
		Y NAMING INDIA	



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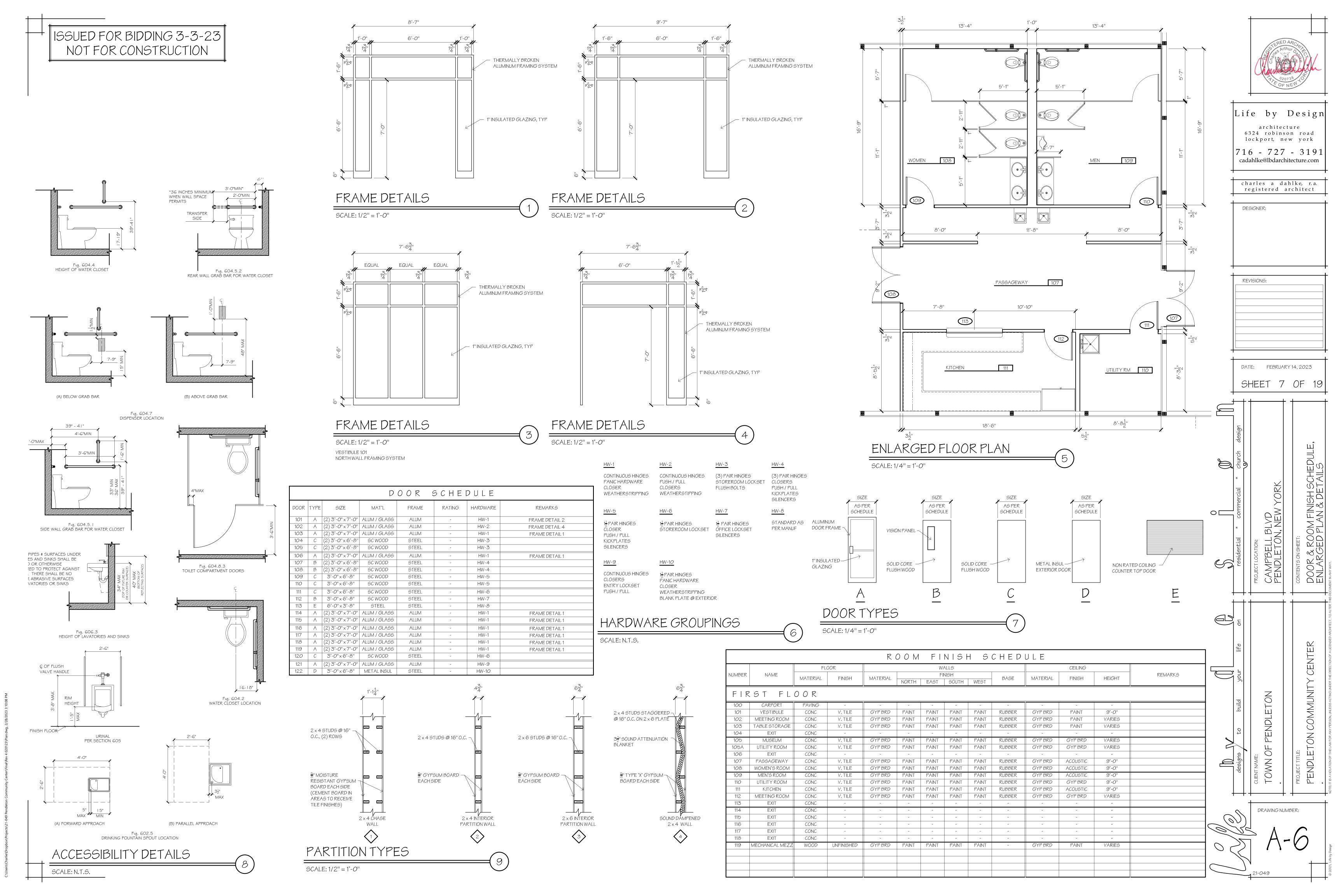


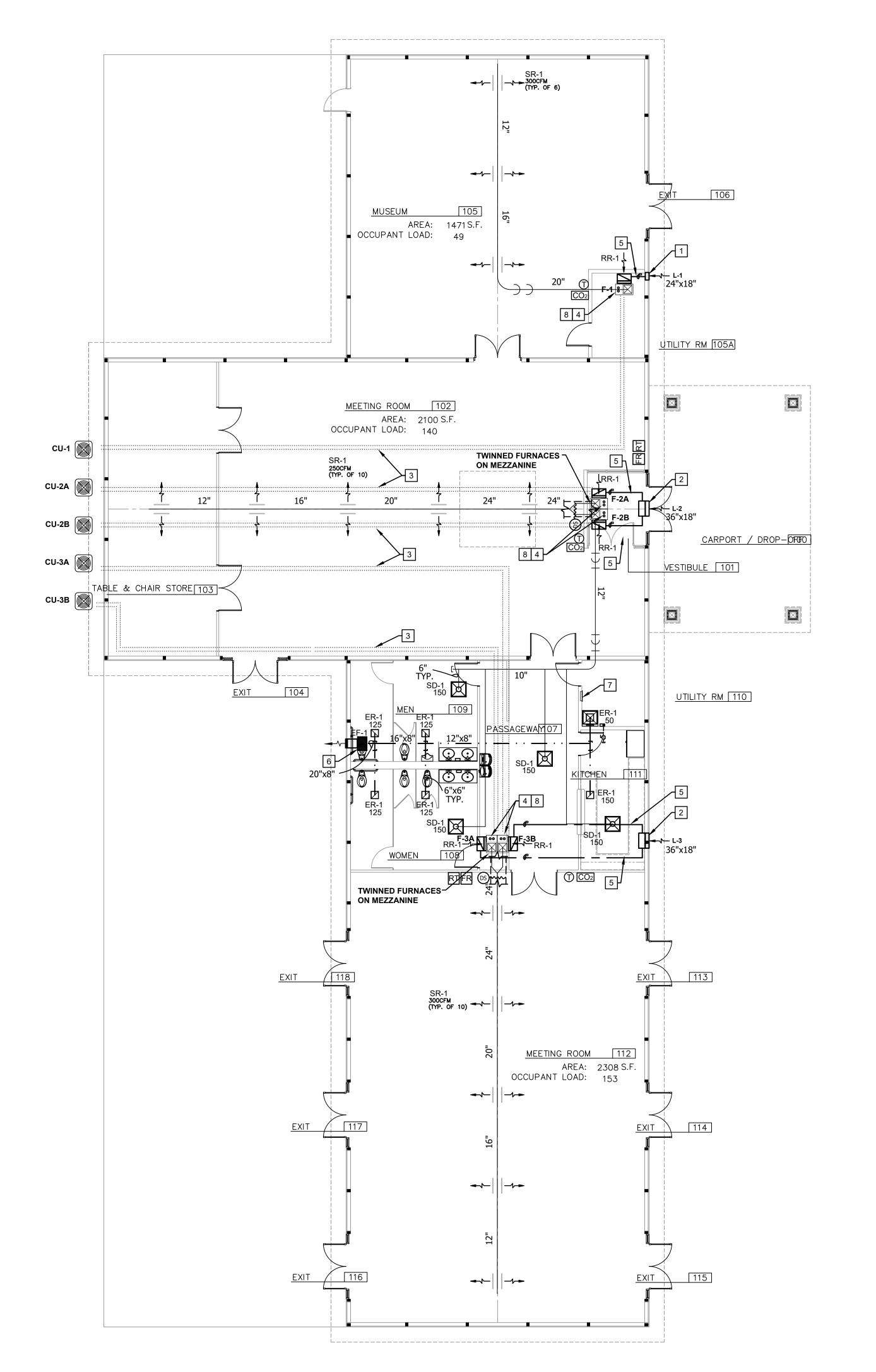
SCALE: 3/4'' = 1'-0''

SCALE: 3/4" = 1'-0"

SCALE: 3/4" = 1'-0"

NOT FOR CONSTRUCTION





 $\frac{1ST FLOOR PLAN}{SCALE: 1/8" = 1'-0"}$

GENERAL NOTES:

- 1. VERIFY EXACT LOCATION OF ALL CEILING FIXTURES AND DEVICES WITH THE ARCHITECTURAL REFLECTED CEILING PLAN.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A WATER TIGHT INSTALLATION OF NEW EQUIPMENT AND PENETRATIONS THROUGH ROOF CURBS AND RELATED ENCLOSURES.
- 3. BALANCE AIR FLOWS AS INDICATED.
- 4. WHERE DUCT SIZES ARE NOT SHOWN, SIZE BASED ON 900FPM MAX. AIR VELOCITY.
- 5. ALL DUCTWORK SHALL BE G90 GALVANIZED INSTALLED PER SMACNA. SEAL ALL JOINTS.
- 6. INSULATE ALL DUCTWORK WITH 1-1/2" FIBERGLASS WRAP W/ASJ.
- 7. CARBON DIOXIDE SENSOR TO CONTROL MOTORIZED DAMPERS ON OUTDOOR INTAKE DUCTS.
- 8. INSTALL ALL CONTROL WIRING FOR HVAC EQUIPMENT IN EMT CONDUIT.

DRAWING NOTES

- PROVIDE EXTRUDED ALUMINUM 12"X12"X4"DEEP STATIONARY WALL LOUVER. TURN OVER TO G.C. FOR INSTALLATION.
- PROVIDE EXTRUDED ALUMINUM 24"X12"X4"DEEP STATIONARY WALL LOUVER. TURN OVER TO G.C. FOR INSTALLATION.
- REFRIGERANT LINE SET FROM CONDENSING UNIT AT GRADE.
- INSTALL (2) 3" SCHED.40 FLUE & COMBUSTION AIR PIPING UP THROUGH ROOF WITH FURNACE MANUFACTURER'S CONCENTRIC TERMINATION KIT.
- INSULATED 12" Ø GALVANIZED OUTSIDE AIR INTAKE FROM WALL LOUVER TO RETURN DUCT WITH MOTORIZED DAMPER. INTERLOCK DAMPER WITH OPERATION OF FURNACE.
- INSTALL IN-LINE EXHAUST FAN WITH WALL VENT. SUPPORT WITH THREADED ROD AND VIBRATION ISOLATORS.
- INSTALL ELECTRIC WALL HEATER WITH BUILT-IN CONTROLS AND SEMI-RECESSED MOUNTING FRAME (QMARK MODEL # AWH4408F, 2000W, 208V/1PH, 9.6A, 105LBS).
- INSTALL 3/4"CPVC DRAIN FROM FURNACE CONDENSATE CONNECTIONS TO HUB DRAIN WITH AIR GAP. COORDINATE WITH PLUMBING CONTRACTOR.



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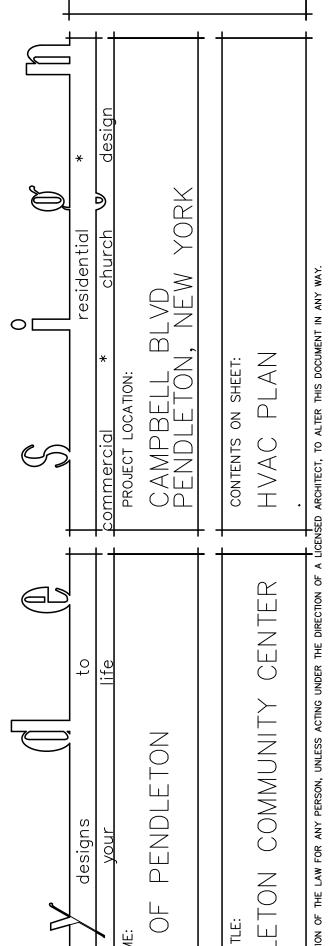
charles a dahlke, r.a.

registered architect

DESIGNER:

REVISIONS:

DATE: FEBRUARY 13, 2023



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CONSULTING ENGINEERS

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LEWISTON, NEW YORK 14092
PHONE (716) 870-8108
JFPEPC@VERIZON.NET

									GAS	FURNACE	AND CO	NDENSING	UNIT SCHEDULE									
						FU	RNACES										CONDENS	SING UNITS				
TAG	MANUFACTURER	MODEL #	THERMAL EFFICIENCY	STAGES	SUPPLY AIR CFM	RETURN AIR CFM	OUTSIDE AIR CFM	1ST STAGE HEATING	2ND STAGE HEATING	VOLTS/PHASE/HZ	FLA	MOCP	NOTES TAG	MANUFACTURER	MODEL#	S.E.E.R.	VOLTS/PHASE/HZ	MIN CIRCUIT AMPS	MOCP	REFRIGERANT	SOUND PRESSURE LEVEL	NOTES
F-1, F-2A, F- 2B, F-3A, F- 3B	ALLIED	A96UH2E110C20S	96%	2	2,000 @ .5" esp	1,600	400	72/70MBH	110/106MBH	120/1/60	10.9A	20A	1, 2, 3, 4, 5, 6, 7, 8 CU-1, CU-2A, C 2B, CU-3A, CU-3	I Δllied	4SCU16LE160P	14	208-230/1/60	29.6	50	R-410A	70dBA	9. 10

- 1. Furnace fan motor fto be high effiency-constant torque motor.
- 2. Furnace to have stainless steel heat exchanger. 3. Furnace fan spped shall be set on high speed.
- 4. Provide twinning kits for F-2A & F-2B, F-3A & F-3B.
- 5. Provide concentric vent kits.
- 6. Provide 7 day (5+1+1) programmable thermostat.
- 7. Provide MERV 8 filters. 8. Furnace to have 10 year limitedparts warranty, lifetime heat exchanger parts warranty. (warranty registration required within 60 days)
- 9. Provide louvered exterior enclosure. 10. Condensing Unit to have 10 year limited parts warranty, 10 year compressor parts warranty (warranty registration required within

			E	XHAUST F	AN S	CHE	DULE	•						
	Service									Motor				
TAG	Location	Manufacturer	Model	Туре	Drive	CFM	in W.G.	RPM	HP/W	Vol	PH	Hz	Sones	Accessories
EF-1	Restrooms	Soler & Palau	FFC 1500	Cabinet Fan	Direct	700	0.37	792	468	115	1	60	6.30	1, 2, 3, 4

Accessories

- 1. 8" X 12" TO 12" ROUND TRANSITION (FF/FFC900-1500)
- 2. SPD CNTRL 115V 10 AMP LOOSE
- 3. VIBRATION HANGERS (SET OF 4) FF100 TO FFC3500
- 4. LOUVERED WALL DISCHARGE

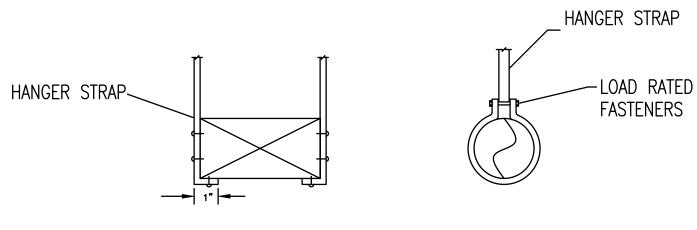
ı										
	AIR	DEVICE	SCHEDL	JLE						
TYPE	DESCRIPTION	CFM RANGE	NECK SIZE/ CONN.	MANUF.	MODEL	150	FPM	(FT) 50	PD IN. W.C	REMARKS
SR-1	SUPPLY REGISTER 10x6 SPRIAL DUCT	150-300	_	CARNES	RDDM	12	14	19	0.12	NOTES 1,2,3,4,5
SD-1	SUPPLY DIFFUSER 24x24 LAY-IN	150-225	8"ø	KRUEGER	PLQ	5	10	15	0.05	NOTES 1,2,3,4
RR-1	RETURN REGISTER 20x20 SURFACE MNTD	500-1800	_	KRUEGER	S85	_	_	_	0.1	NOTES 1,3,4
ER-1	EXHAUST REGISTER 12x12 LAY-IN	50-300	10"x10"	KRUEGER	S85	_	_	_	0.05	NOTES 1,2,3,4,6

NOTES:

2. BIRD SCREEN

- . PERFORMANCE AND CONSTRUCTION BASED ON EH PRICE.
- 2. REFER TO ARCH. RCP FOR LOCATIONS AND CEILING TYPES.
- 3. FINISH WHITE (STANDARD)
- 4. NOISE LEVEL SHALL NOT EXCEED NC 40.
- 5. PROVIDE NECK ADAPTER FOR CONNECTIONS AS REQUIRED.
- 6. AIR SCOOP WITH ROD OPERATOR.

								1
TAG	MANUFACTURER	MODEL NUMBER	SERVICE LOCATION	SIZE W X H X D	SQ. FT. FREE AREA	CFM/FPM / PD	FINISH	NOTES:
L-1			FURNACE F-1 18"W X 18"H X 4			400 / 444 / .018"		1, 2
L-2,	United Enertech	FL-D-4	FURNACE F-2A&2B	18"H X 36"W X 4"D	1.93	800 / 414 / .0175"	Mill	1, 2
L-3			FURNACE F-3A&3B	18"H X 36"W X 4"D	1.93	800 / 414 / .0175"		1, 2



DUCT SUPPORT DETAIL NOT TO SCALE

MECHANICAL SPECIFICATIONS

PART 1 - GENERAL

1.01 REFERENCES

A. APPLICABLE STANDARDS OF ASTM, ANSI, ASME, NFPA, AND LOCAL AND STATE BUILDING CODÉS.

1.02 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.03 COORDINATION

A. ARRANGE FOR PIPE SPACES, CHASES, SLOTS, AND OPENINGS IN BUILDING STRUCTURE DURING PROGRESS OF CONSTRUCTION, TO ALLOW FOR MECHANICAL INSTALLATIONS. B. COORDINATE REQUIREMENTS FOR ACCESS PANELS AND DOORS

FOR MECHANICAL ITEMS REQUIRING ACCESS THAT ARE CONCEALED BEHIND FINISHED SURFACES. 1.04 SUBMITTALS

A PRODUCT DATA: PROVIDE PRODUCT DESCRIPTION, CHARACTERISTICS AND LIST OF MATERIALS FOR EACH SERVICE, AND LOCATIONS.

1.05 QUALIFICATIONS

A. MANUFACTURER: COMPANY SPECIALIZING IN MANUFACTURING PRODUCTS SPECIFIED IN THIS SECTION WITH MINIMUM THREE YEARS DOCUMENTED EXPERIENCE. B. INSTALLER: COMPANY HAVING A MINIMUM FIVE YEARS DOCUMENTED EXPERIENCE.

1.06 WARRANTY A. INSTALLER SHALL COMPLY WITH OWNER'S GENERAL CONDITIONS.

PART 2 - PRODUCTS

2.01 DUCT MATERIALS

A. GALVANIZED STEEL DUCTS: ASTM A525 AND ASTM A527 GALVANIZED STEEL SHEET, LOCK-FORMING QUALITY, HAVING G60 ZINC COATING OF IN CONFORMANCE WITH ASTM A90.

B. STEEL DUCTS: ASTM A366. C. FASTENERS: RIVETS, BOLTS, OR SHEET METAL SCREWS.

D. HANGER ROD: ASTM A36; STEEL; CONTINUOUSLY THREADED.

2.02 DUCTWORK FABRICATION

A. FABRICATE AND SUPPORT IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS -METAL AND FLEXIBLE, AND AS INDICATED. PROVIDE DUCT MATERIAL, GAGES, REINFORCING, AND SEALING FOR OPERATING PRESSURES INDICATED.

B. SPIRAL DUCT FABRICATED PER SMACNA STANDARDS.

2.03 MINERAL-FIBER BLANKET THERMAL INSULATION: GLASS FIBERS BONDED WITH A THERMOSETTING RESIN. COMPLY WITH ASTM C 553, TYPE II, WITHOUT FACING AND WITH ALL-SERVICE JACKET MANUFACTURED FROM KRAFT PAPER, REINFORCING SCRIM, ALUMINUM FOIL, AND VINYL FILM.

2.04 TEXTILE DUCT LINING, ASTM C-411, OWENS CORNING QUIETR, BACTERIAL AND FUNGAL GROWTH RESISTANT, TYPE 200, R VALUE=4.1 PER INCH, OR EQUAL.

PART 3 - EXECUTION

3.01 DUCT INSTALLATION

A. COORDINATE DUCT LAYOUT AND DUCT ACCESSORY ARRANGEMENT WITH DRAWINGS.

B. DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF DUCT SYSTEM.

C. INSTALL DUCTS ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" UNLESS OTHERWISE INDICATED.

D. INSTALL ROUND DUCTS IN MAXIMUM PRACTICAL LENGTHS.

E. INSTALL DUCTS WITH FEWEST POSSIBLE JOINTS.

F. UNLESS OTHERWISE INDICATED, INSTALL DUCTS VERTICALLY AND HORIZONTALLY, AND PARALLEL AND PERPENDICULAR TO BUILDING LINES.

3.02 DUCT INSULATION

A. SERVICE: CONCEALED RECTANGULAR AND ROUND, SUPPLY AND RETURN AIR DUCTS, AND ALL OUTSIDE AIR DUCTWORK. 1. MATERIAL: MINERAL-FIBER BLANKET WITH ASJ.

2. THICKNESS: 1-1/2 INCH.

B. SERVICE: RECTANGULAR AND ROUND, EXPOSED SUPPLY AIR DUCTS AND PLENUMS WITHIN 10FT FROM UNIT,

MATERIAL: DUCT LINER.

2. THICKNESS: 1/2 INCH.

3.03 TESTING AND BALANCING

A. PERFORM TESTING AND BALANCING PROCEDURES ON EACH SYSTEM ACCORDING TO THE PROCEDURES CONTAINED IN AABC, ASHRAE 111, OR NEBB.

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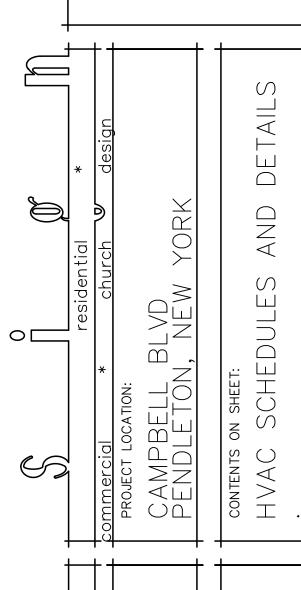
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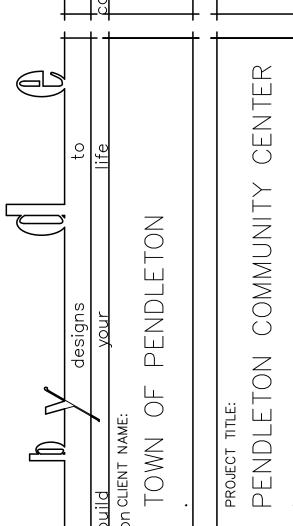
charles a dahlke, r.a.

registered architect **DESIGNER:**

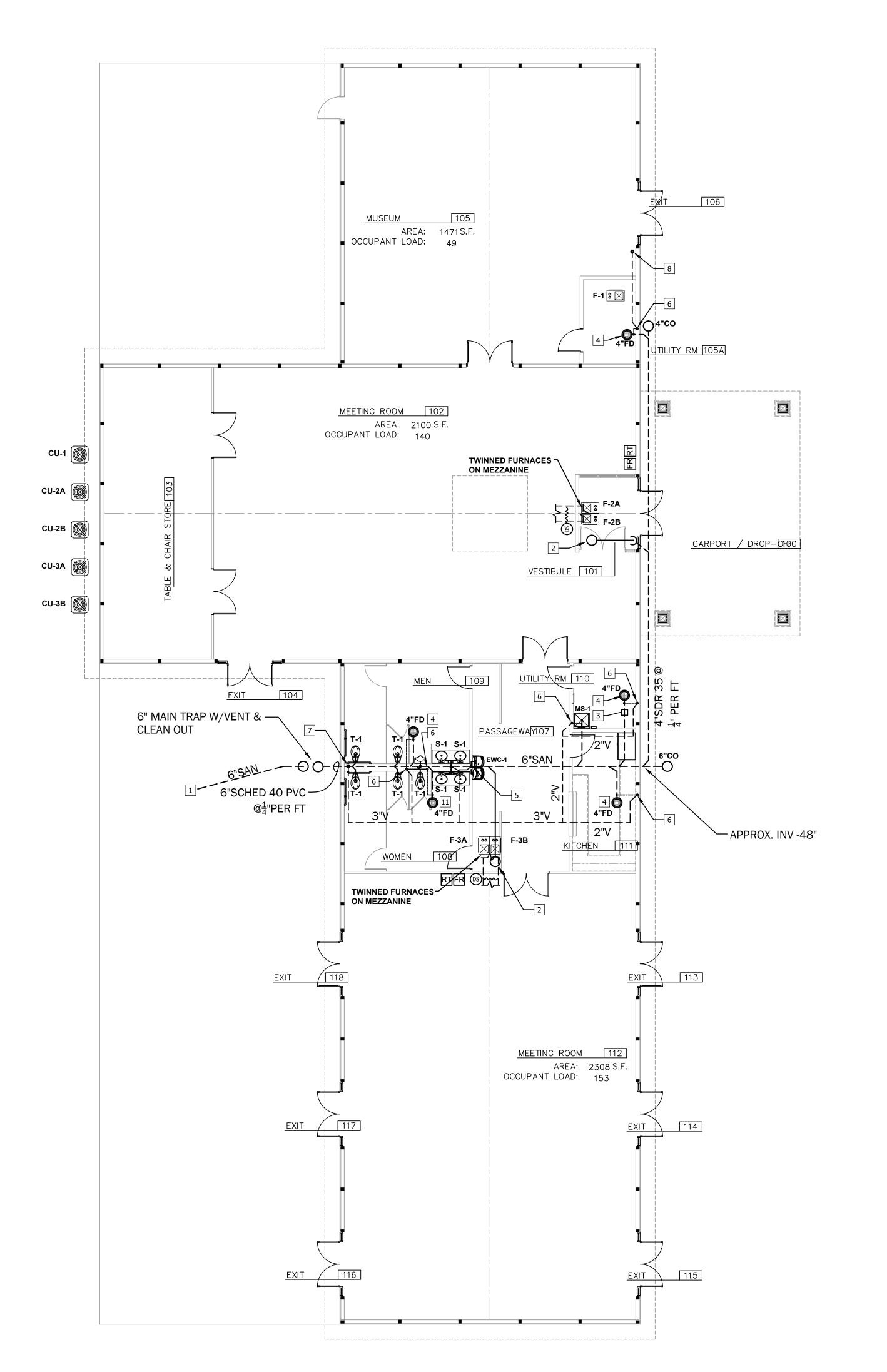
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DRAWING NUMBER:





- 1. VERIFY LOCATIONS AND INVERTS OF SANITARY LINES. COORDINATE WITH THE TOWN FOR CONNECTION REQUIREMENTS.
- 2. CONTRACTOR TO PAY ALL FEES REQUIRED.

DRAIN & VENT

- 1 REFER TO UTILITY PLAN ON DRAWING C-106.
- 2 4" HUB DRAIN ON MEZZANINE FOR FURNACE CONDENSATE.
- PROVIDE 4" BACKWATER VALVE.
- PROVIDE 4" TRAP SEAL (RECTORSEAL SURESEAL MODEL #SS4009V).
- 5 1-1/2"V DTF, 1-1/2"V UP.
- 6 2"VENT DTF, 2"V UP.
- 7 3"V UP, 4"VTR.
- 8 2"V UP, 3"VTR.

	PLUMBIN	IG	FIXT	ΓURI	E SC	HED	ULE	-	
LETTER	TYI	PE O	F FIXTU	IRE		DRAI	NAGE	SUF	PLY
						SS	V	CW	HW
T-1	FLR MTD TOILET, BATT	Г. ОР	FLUSH \	/ALVE —	17" HIGH	3"	_	1"	
U-1	WALL MTD URINAL, BA	ATT. O	P FLUSH	VALVE					
S-1	COUNTER, TOP MOUNT	Γ, VIT.	CHINA			1½"	1½"	1/2"	1/2"
MS-1	MOP SINK					3"	2"	3/4"	3/4"
FD	FLOOR DRAIN W/INLIN					4"	2"		
EHW	ELECTRIC WATER HEAT	TER (F	POINT-OF	-USE)				½"	1/2"
N 1 () A / 1 1	NON EDEEZE WALL IN	VDD A A	ı 					3/"	
	NON-FREEZE WALL H		Į Į					3/4"	3/"
WHA	WATER HAMMER ARRES	SIER						3/4"	3/4"
V	VATER CO	1/10	NEC	TIOI	N SC	HED	ULE		<u> </u>
			N	UMBER	OF FIX	TURES :	SUPPL	JED	
BRAN	NCH PIPE SIZE 1	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-	1/2"
1/2	' FIXTURE CONN.	. 2	3 TO 4	5 TO 7	8 TO 13	14 TO 23	_	_	

3 TO 4 5 TO 9

4 TO 7

3 TO 4

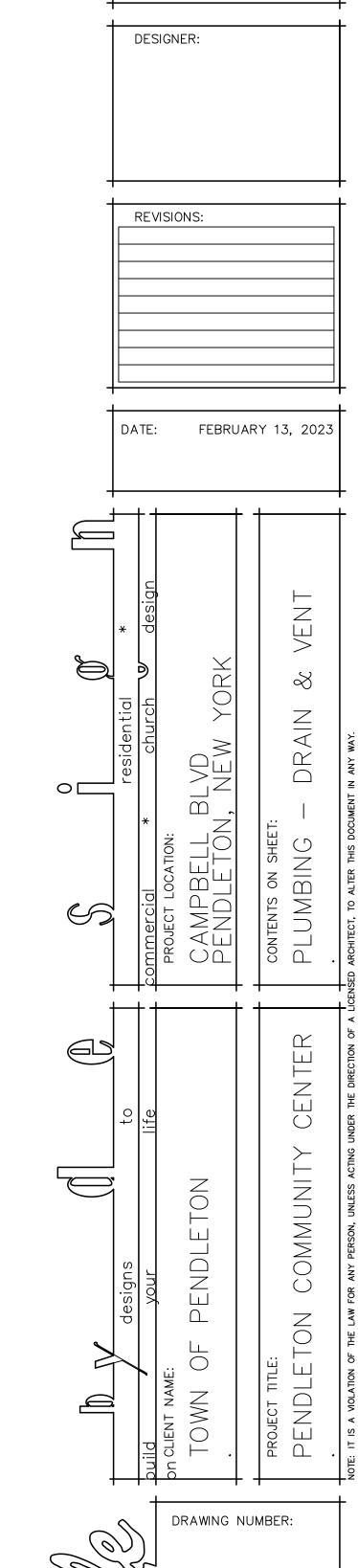
5 TO 12 13 TO 25

1" FLUSH VALVE

3/4" FIXTURE CONN

3/4" FLUSH VALVE

GENERAL SCHEDULE NOTES:
1. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS.
2. PROVIDE ALL FAUCETS, TRIM, TAIL PIECES, TRAPS, TUBING, ESCUTCHEONS, AND SERVICE VALVES AS REQUIRED.



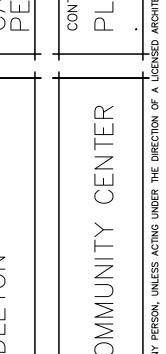
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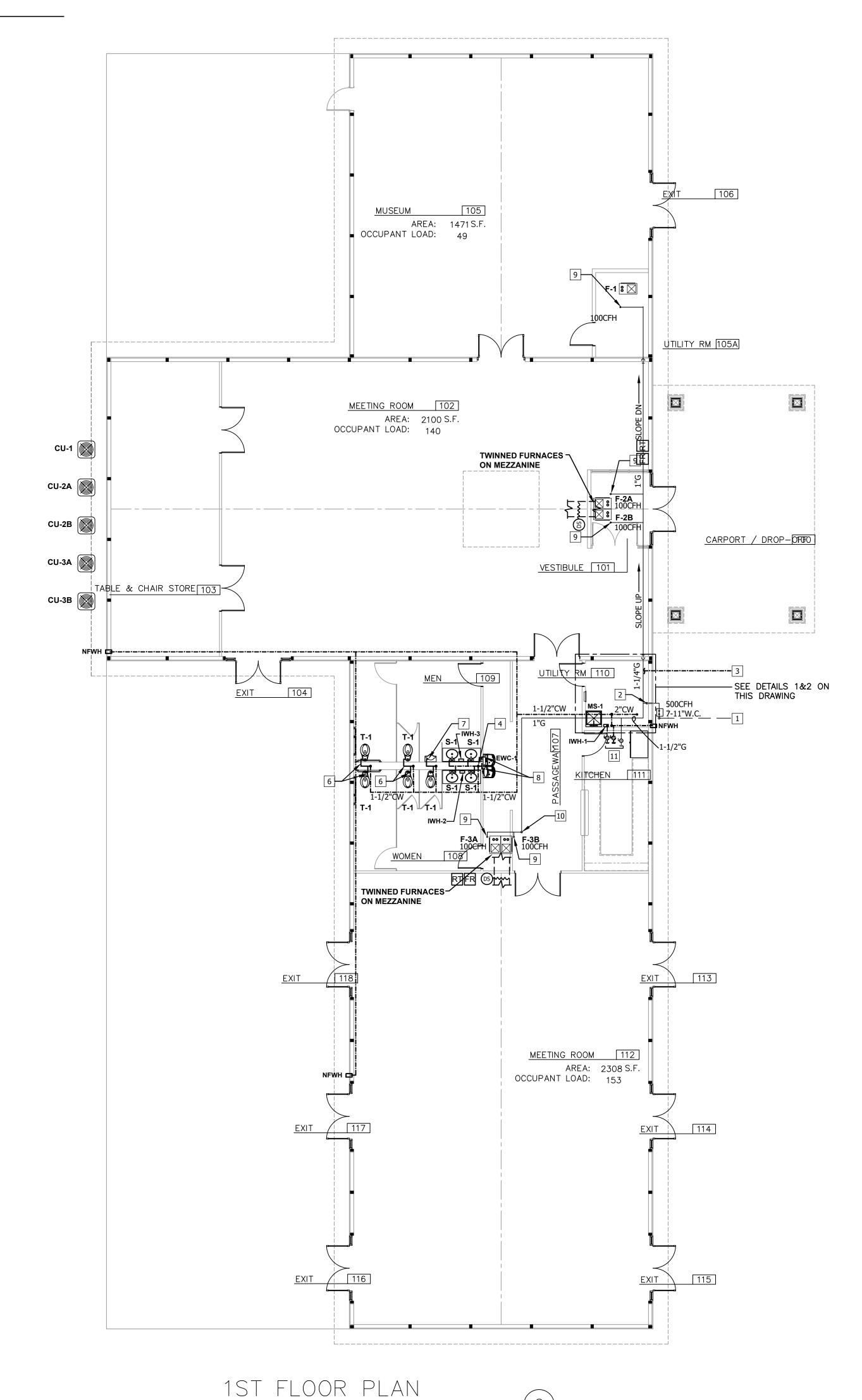
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GENERAL NOTES:

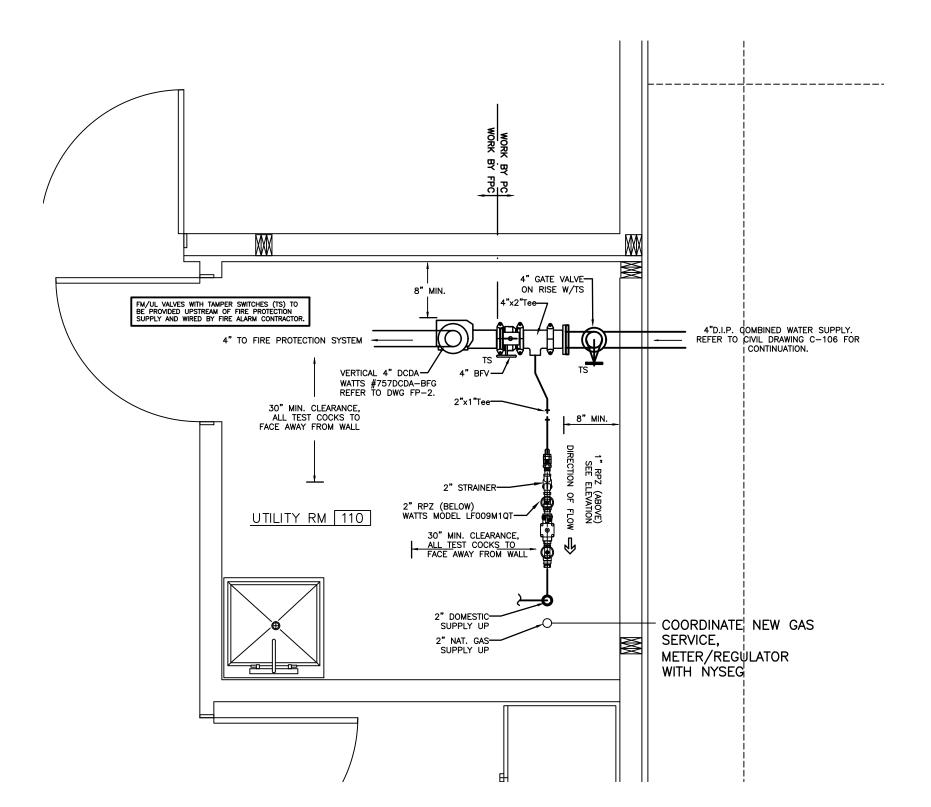
- 1. CONTRACTOR SHALL OBTAIN ALL OTHER PERMITS FOR CONSTRUCTION.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR INITIAL TESTING AND CERTIFICATION OF BACKFLOW DEVICES.
- 3. ALL VALVES ON FIRE PROTECTION SERVICES SHALL BE EQUIPED WITH TAMPER SWITCH AND CONNECTED TO SUPERVISED FIRE ALARM

DRAWING NOTES

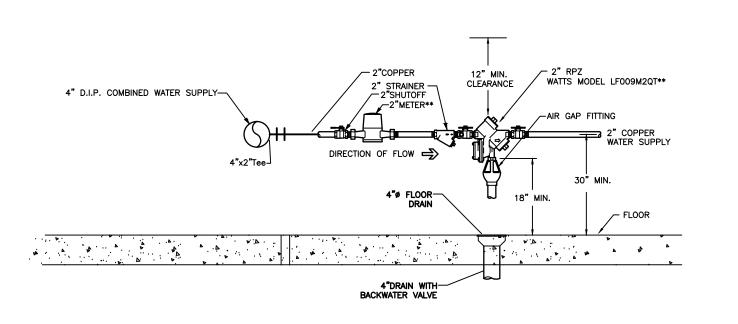
- NEW NATURAL GAS SERVICE FROM NYSEG. INSTALL 2" SUPPLY INTO BUILDING WITH SCHED40 PVC SLEEVE. COORDINATE WITH NYSEG FOR METER AND REGULATOR INSTALLATION.
- 2"GAS UP WITH LUBRICATED PLUG VALVE AT 12"AFF.
- NEW COMBINED WATER SERVICE FROM TOWN OF PENDLETON WATER DEPT.
- 1/2"CW DOWN TO SINK AND ELECTRIC WATER HEATER WITH 1/2"HW SUPPLY TO SINK.
- 3/4"CW DOWN TO MOP SINK AND ELECTRIC WATER HEATER WITH 3/4"HW SUPPLY TO SINK.
- 6 1"CW TO TOILET.
- 7 3/4"CW TO URINAL.
- 8 1/2"CW DOWN TO WATER COOLER.
- 9 3/4"GAS TO FURNACE WITH DIRT LEG AND BALL VALVE.
- 1"GAS UP MEZZANINE.
- 3/4"H&CW AND GAS WITH BALL VALVE, CAPPED FOR FUTURE CONNECTION.

ELECTRIC INSTANT WATER HEATER SCHEDULE

GPM °F RISE KW V/PH AMPS MANUF. MODEL# 3.0 40 17.5 208/1 3x28A EEMAX PRO24240 2,3 RESTRM SINKS 1.5 37 8.2 208/1 28 EEMAX PRO11240



WATER ENTRANCE DETAIL



ELEVATION - RPZ INSTALLATION



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charles a dahlke, r.a. registered architect

DESIGNER:

REVISIONS:

DATE: FEBRUARY 13, 2023

PENDLETON

JOHN J. FRANDINA, PE PC

DRAWING NUMBER:

PLUMBING SPECIFICATIONS

GENERAL

A. ALL PLUMBING WORK IS SUBLECT TO THE GENERAL REQUIREMENTS OF THE CONTRACT. ALL OTHER ARTICLES EITHER SHOWN ON THE PLANS OR METIONED IN THE SPECIFICATIONS, TOGETHER WITH ALL NSSARY FOR INCIDENTAL TO THE COMPLETION OF THE WORK, SHALL BE FURNISHED AND INSTALLED BY THE RESPECVTIVE PLUMBING CONTRACTOR, UNLESS OTHERWISE STATED. ALL ADJUSTMENTS SHALL BE MADE AND SYSTEM TURNED OVER TO THE OWNER IN PERFECT WORKING ORDER.

2. LAWS, CODES, PERMITS AND INSPECTIONS

- A. FILE ALL PLANS AND PAY FOR NESSARY PERMITS AND INSPECTIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER THIS WORK.
- B. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, ENERGY CONSERVATION AND LOCAL CODES AND ORDINANCES HAVING JURISDICTION OVER THIS WORK. THESE CODES SHALL SUPERSEDE THE SPECIFICATIONS AND DRAWINGS.
- C. AT THE COMPLETIONS OF THE WORK, THE PLUMBING CONTRACTOR SHALL DELIVER TO THE OWNER A CERTIFICATE OF INSPECTION AND ACCEPTANCE OF THE WORK BY THE LOCAL INSPECTION AUTHORITY.

GUARANTEE

A. THE CONTRACTOR SHALL GIVE A WRITTEN GUARANTEE UPN FINAL ACCEPTANCE OF THE WORK AGAINST DEFECTIVE WORKMANSHIP, MATERIALS, OR OPERATION THAT MAY RESULT WITHIN ONE (1) YEAR OF FINAL ACCEPTANCE BY THE OWNER.

4. EQUIPMENT AND MATERIALS

A. ALL EQUIPMENT AND MATERIALS FURNISHED UNDER THIS CONTRACT SHALL BE NEW (UNLESS OTHERWISE SPECIFIED). LISTED BY THE UNDERWRITERS LABORATORIES, AND SHALL BE OF THE SAME MAKE WHERE USED FOR SIMILAR PURPOSES.

5. MARKING AND LABELING

- PROVIDE ENGRAVED NAMEPLATES FOR ALL PLUMBING EQUIPMENT AS WELL AS PLASTIC PIPE MARKERS TO IDENTIFY ALL PIPING SYSTEMSFOR THIS
- LABEL INSULATION JACKET ON HIGH TEMPERATURE HOT WATER WITH 'CAUTION 140°F HW' EVERY 10FT.

6. FINAL CLEANING

A. AFTER TEST HAVE BEEN MADE AND THE INSTALLATION HAS BEEN FOUND SATISFACTORY BY THE ENGINEER, THOROUGHLY CLEAN THE ENTIRE INSTALLATION, BOTH EXPOSED SURFACES AND INTERIORS. REMOVE ALL DEBRIS CAUSED BY THE WORK UNDER THIS CONTRACT FROM ALL SPACES INSIDE AND OUTSIDE THE BUILDING. AT COMPLETION OF WORK, CLEAN ALL FIXTURES AND METAL WORK AND LEAVE IN POLISHED CONDITION.

7. PLUMBING PIPING

- BELOW GRADE DOMESTIC WATER PIPING AND FITTINGS SHALL BE TYPE "K" COPPER WITH SOLDER JOINTS. JOINTS SHALL BE AS PER ASTM B 32 WITH LEAD-FREE SOLDER AND FLUXES. B. ABOVE GRADE DOMESTIC WATER PIPING AND FITTINGS:
- 1. TYPE "L" COPPER WITH SOLDER JOINTS. JOINTS SHALL BE AS PER ASTM B 32 WITH LEAD-FREE SOLDER AND FLUXES. (OR)
- ABOVE AND BELOW GRADE SANITARY SEWER, VENT PIPING AND FITTINGS
- SHALL BE SCHEDULE 40 PVC. ABOVE GRADE NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK IRON PIPE. FITTINGS SHALL BE CLASS 150 MALLEABLE IRON ASTM A197, THREADED UP TO 2", WELDED OVER 2". ALL PIPING TO BE INSTALLED AND TESTED PER NFPA 54.

8. PLUMBING PIPING INSULATION

- A. LOCATION COLD WATER PIPING AND HOT WATER PIPING (EXCEPT WHERE CHROME PLATED EXPOSED IN ROOMS).
- B. TYPE FIBERGLASS 25 ASJ (ALL SERVICE JACKET) GLASS FIBER ON ALL CONCELED AND EXPOSED PIPING. GLASS FIBER SHALL BE HEAVY DENSITY RIGID FIBER MOLDED SNAP ON SECTIONS.
- C. MAKE OWENS CORNING, CERTAINTEED, KNAUF.
- D. APPLICATION ALL SEAMS LAPS AND END JOINTS ON GLASS FIBER WILL BE SEALED BY SELF-SEALING LAPON JACKET OR JOINT SEALING STRIPS INSTALLED IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDARTIONS. WHERE STAPLES ARE USED, THEY SHALL BE SEALED WITH BENJAMIN FOSTER 30-36 MASTIC.
- E. FITTINGS INCLUDE VALVES, FLANGES AND ALL OTHER PIPING COMPONENTS INSULATED WITH GLASS FIBER. INSUL-SURE MOLDED FIBERGLASS FITTINGS OR FABRICATED MITERED SEGMENTS SHALL BE COVERED WITH 1/4" COAT HARD SETTING FINISH CEMENT. ALL FITTINGS SHALL BE COVERED WITH GLASS FIBER LAGGING CLOTH EMBEDDED INTO BENJAMIN-FOSTER 30-35 MASTIC AND GIVEN FLOODING BRUSH COAT OF MASTIC OR ZESTIN'S ONE PIECE PREMOLDED INSULATED FITTINGS WITH JOINTS SEALED WITH Z-TAPE, PER MANUFACTURE'S RECOMMENDATIONS.
- F. SIZE: HOT & COLD WATER INSULATION SCHEDULE: UP TO 3/4" PIPE SIZE: 1" THICK. 2. 1" PIPE SIZE OR LARGER: 1-1/2" THICK.
- 9. GENERAL DUTY VALVES:
- A. SHUT-OFF: USE BALL VALVES FOR DOMESTIC WATER. B. USE LUBRICATED PLUG VALVES FOR NATURAL GAS PIPING.
- 10. SHOP DRAWINGS AND MANUFACTURER'S DATA.
- A. THE CONTRACTOR SHALL SUBMIT SIX (6) COPIES OF ALL SHOP DRAWINGS OR DESCRIPTIVE LITERATURE ON ALL EQUIPMENT TO BE SUPPLIED.

11. AS BUILT DRAWINGS

A. AT THE COMPLETION OF THE PLUMBING WORK, THE CONTRACTOR RESPONSIBLE FOR THE WORK PERFORMED UNDER THIS CONTRACT SHALL PROVIDE AS-BUILTS DRAWINGS.

12. EXCAVATION

A. PERFORM ALL EXCAVATION REQUIRED FOR THE INSTALLATION OF WORK IN THIS CONTRACT. EXCAVATION TO PROVIDE SUFFICIENT CLEARANCE FOR INSTALLATION OF WORK.

12. BACK FILLING

A. BACK FILLING UPON INSPECTION TEST AND APPROVAL BY LOCAL AUTHORITIES AND ARCHITECT. NO CINDERS OR OTHER CORROSIVE MATERIAL WILL BE PERMITTED. FILL MUST BE WELL TAMPED AND PACKED FOR GREATEST POSSIBLE SETTLEMENT. NO ROCK SHALL BE USED.

14. TESTING & CLEANING

- A. ALL WATER PIPING TO BE DISINFECTED IN ACCORDANCE WITH AWWA C-601-1954 AND CITY OF BUFFALO DEPT. OF WATER REQUIREMENTS. B. PRESSURE TEST
- 1. HOT & COLD WATER: 150PSIG HYDROSTATIC FOR 4 HOURS. 2. NATURAL GAS: 15PSIG AIR PRESSURE FOR 1 HOUR. . SANITARY WASTE & VENT: FILL WITH WATER TO 10FT ABOVE HIGHEST FIXTURE FOR 8
- 4. REPAIR AS NECESSARY AND RETEST.

15. PLUMBING FIXTURES

A. MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED IN SETTING FIXTURES AND ALL ROUGHING TO BE CENTERED.

16. CHROMIUM WORK

B. ALL FITTINGS AND EXPOSED PIPE, SCREWS, NUTS, WASHERS, WALL PLATES, RIM GUARDS, CHROMIUM PLATED BRASS, TEFLON TAPE SHALL BE USED ON ALL SCREWED JOINTS FOR CHROMIUM PIPE.

17. PLUMBING FIXTURES

ALL FIXTURES TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS SPECIFIED BELOW OR EQUAL AS APPROVED BY OWNER.

T-1
17" HIGH FLOOR MOUNTED VITREOUS CHINA TOILET. ADA COMPLIANT,
ELONGATED BOWL WITH 1-1/2" TOP SPUD, 1.6GPF, AMERICAN STANDARD
"TO 17 000 OR ARREDOVED FOUND WITH REMIS MODEL 'MADERA' MODEL #3043.660 OR APPROVED EQUAL, WITH BEMIS MODEL #1655SSCT EXTRA HEAVY-DUTY OPEN FRONT SEAT W/SELF-SUSTAINING HINGE, W/O COVER, AND 4YEAR BATTERY OPERATED SELECTRONIC FLUSH VALVE - 1.6GPF. PROVIDE RING AND BOLTS, SUPPLY PIPING CHROME PLATED ESCUTCHEON. COLOR OF WATER CLOSET AND SEAT SHALL BE

HIGH EFFICIENCY VITREOUS CHINA URINAL, WHITE, 3/4" TOP SPUD, AMERICAN STANDARD WASHBROOK FLOWISE MODEL 6590.001EC OR APPROVED EQUAL, WITH SLOAN MODEL G2 8188 BATTERY OPERATED FLUSH VALVE, 1.0GPF, 3/4"IPS. PROVIDE SUPPLY PIPING AND CHROME PLATED ESCUTCHEON. FOR ADA LOCATIONS, MOUNT WITH RIM AT 24"AFF.

UNDERMOUNT VITREOUS CHINA SINK, ADA COMPLIANT, 17"x14"x5-1/2"D BOWL, FRONT OVERFLOW, HIGH GLOSS, LESS STOPPER, WHITE (AMÉRICAN STANDARD 'OVALYN RELIANT' MODEL 0496221.020 PROVIDE OFFSET DRAIN, GRID STRAINER, LOOSE KEY STOP CONTROL, CHROME PLATED ESCUTCHEON AND SUPPLIES, SLOAN OPTIMA SENSOR FAUCET MODEL #EAF-150.

UNDER COUNTER SUPPLY AND WASTE PIPING SHALL BE COVERED WITH LAV GUARD2 PIPE COVERS AS MANUFACTURED BY TRUBRO, INC OR APPROVED EQUAL. COLOR OF PIPE COVERS SHALL BE WHITE.

ADA COMPLIANT, DUAL HEIGHT, REFRIGERATED, FILTERED WATER COOLER WITH BOTTLEFILLING STATION, 8GPH, 115V, 6A, 370W, (ELKAY MODEL #LZSTL8WSLK WITH SIX (6) MODEL #51300C REPLACEMENT FILTERS, MODEL #MLP200 WALL CARRIER. PROVIDE VALVES, WATER SUPPLY TUBING, AND TRAPS.

MOP SINK, 24"X24"X10"H, E.L. MUSTEE MODEL 65M, ONE PIECE MOLDED FIBERGLASS BASIN, SEALED DRAIN FOR 3" PIPE, REMOVABLE STAINLESS STEEL STRAINER SERVICE FAUCET (CHICAGO MODEL 897-RCF): CHROME PLATED WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, AND 3/4" HOSE THREAD ON SPOUT. PROVIDE WITH HOSE & HOSE HOLDER, MOP HANGER, S/S BUMPER GUARDS, PAIL HOOK.

FLOOR DRAIN SHALL BE WATTS MODEL FD-100-A, EPOXY COATED CAST IRON BODY, PIPE SIZE PER DRAWING. ADJUSTABLE HEEL-PROOF NICKLE-BRONZE STRAINER, NO-HUB OUTLET, WITH 4" INLINE TRAP SEAL (RECTORSEAL 'SURESEAL' MODEL #97044 OR EQUAL).

NON-FREEZE WALL HYDRANT, CHROME FACE, INTEGRAL VACUUM BREAKER, 3/4" HOSE CONNECTION, WATTS MODEL HY-420.





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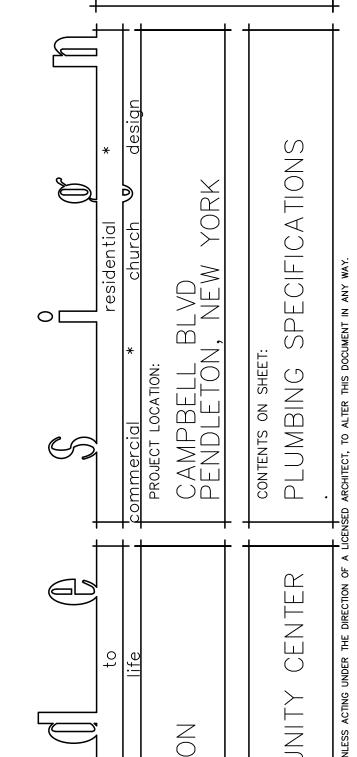
716 - 727 - 3191 cadahlke@lbdarchitecture.com

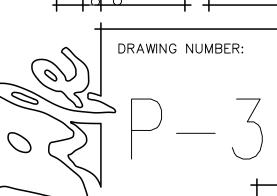
charles a dahlke, r.a. registered architect

DESIGNER:

REVISIONS:

DATE: FEBRUARY 13, 2023





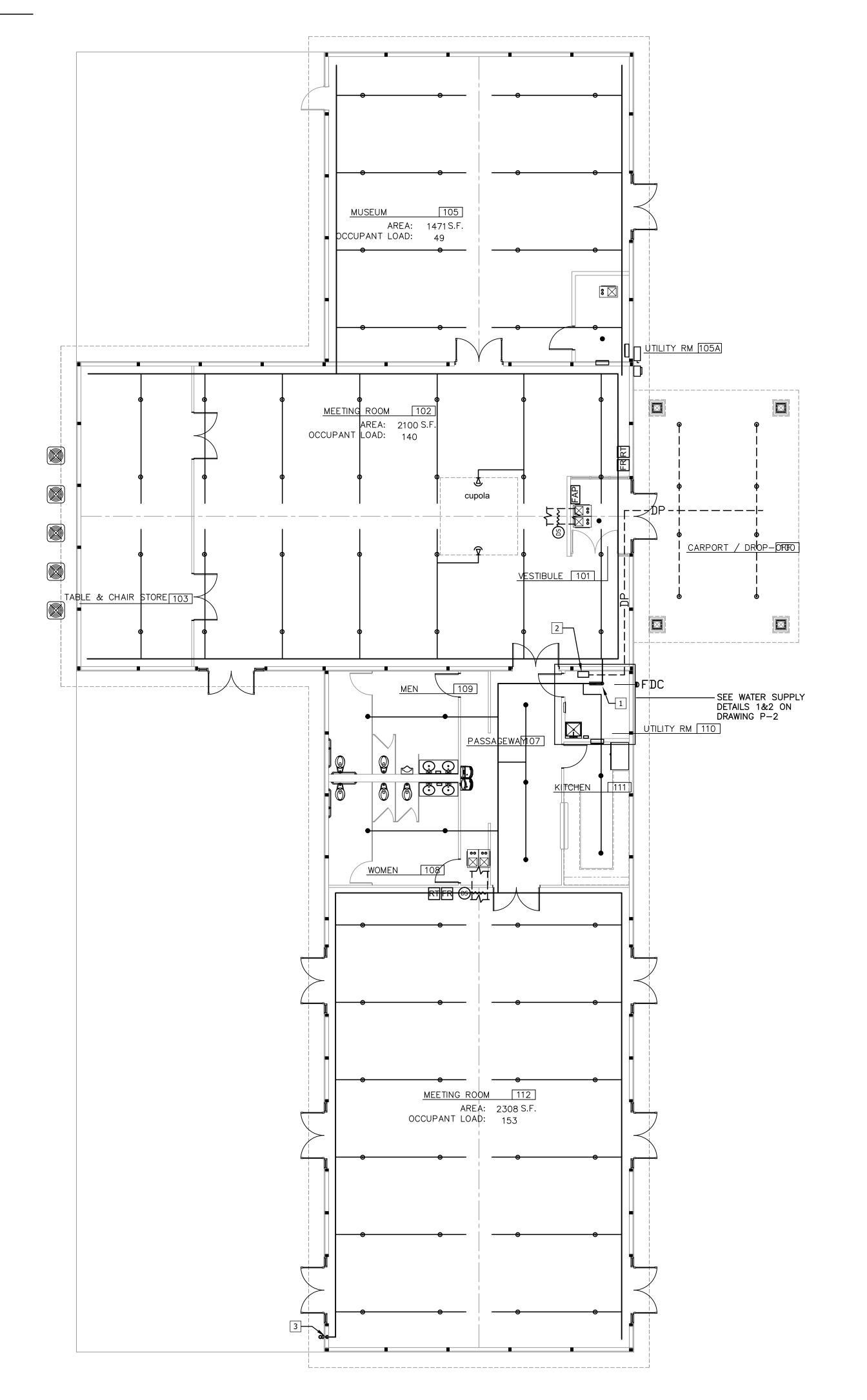
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ISSUED FOR BIDDING 3-3-23 NOT FOR CONSTRUCTION

JOHN J. FRANDINA, PE PC CONSULTING ENGINEERS



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

GENERAL NOTES

- A. ALL WORK SHALL CONFORM TO ALL STATE AND LOCAL CODES, RULES AND REGULATIONS AND ORDINANCES WITH LOCAL AMMEDIMENTS. THE CONTRACTOR SHALL SECURE AND PAY ALL FEES AND PERMITS PERTAINING TO THE CONTRACT.
- B. FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR SITE INVESTIGATION PRIOR TO START OF WORK TO REVEAL EXISTING CONDITIONS.
- C. IT IS THE CONTRACTORS RESPONSIBILITY TO REPLACE ANY DAMAGED CEILING TILES TO MATCH EXISTING.
- D. CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING, PATCHING AND REPAIRING OF MATERIALS AND FINISHES THAT ARE DISTURBED BY THEIR RESPECTIVE TRADES.
- E. WHERE PIPING PASSES THROUGH FIRE OR SMOKE BARRIER, THE PENETRATION SHALL BE PROPERLY SEALED AN APPROVED FIRE RATED MATERIAL TO MAINTAIN THE RATING OF THE PENETRATED WALL OR FLOOR.
- F. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER AND ALL OTHER TRADES. CONTRACTOR SHALL SCHEDULE ALL SHUTDOWNS THAT AFFECT UTILITIES AND PORTIONS OF THE BUILDING THAT MUST REMAIN IN OPERATION WITH THE OWNER.
- G. LEAVE ALL PIPING, HANGERS, FITTINGS, ETC. CLEAN AND FREE OF DEBRIS READY TO RECEIVE PAINT. IN EXPOSED AREAS, PROVIDE AND INSTALL MATERIAL TO COVER SPRINKLERS TO PROTECT DURING PAINTING. PAINTING CONTRACTOR WILL REMOVE PROTECTIVE MATERIALS UPON COMPLETION.
- H. PROVIDE AND HANG PVC TUBE WITH CAPS LOCATED NEAR SPRINKLER RISERS LABEL "SPRINKLER AS-BUILT DRAWINGS" & PROVIDE 1 COMPLETE SET OF DRAWINGS WITHIN TUBE. IN ADDITION, CONTRACTOR SHALL PROVIDE COMPLETE SET OF CLOSEOUT DOCUMENTATION NOT LIMITED TO, AS-BUILT DRAWINGS, TEST CERTIFICATES, SPARE SPRINKLERS AND HEAD WRENCHES, EQUIPMENT O&M MANUAL.
- I. SPRINKLER LOCATIONS ARE APPROXIMATE. CONFIRM ROUTING, HEAD LOCATIONS AND TYPES WHILE PREPARING SHOP DRAWINGS.
- J. PROVIDE ALL FACTORY MADE LABELS AND SIGNAGE AT RISERS, TEST CONNECTIONS, DRAINS, AND FDC.

DRAWING NOTES

- 4" SPRINKLER ALARM ASSEMBLY. REFER TO DETAIL 2 ON DRAWING FP-3.
- 2 DRYPIPE VALVE ASSEMBLY.
- 3 INSPECTOR'S TEST DRAIN.

SYMBOL LEGEND:

FIRE PROTECTION PIPING MAIN FIRE PROTECTION BRANCH PIPING PENDANT SPRINKLER, K5.6, WHITE, 165°F UPRIGHT SPRINKLER, K5.6, BRASS, 165°F SIDEWALL SPRINKLER, K5.6, WHITE, 165°F



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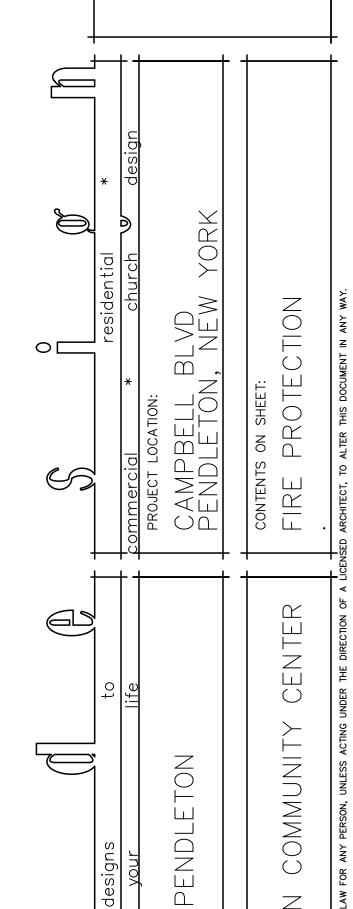
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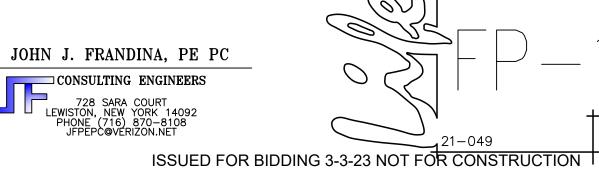
registered architect

DESIGNER:

REVISIONS:

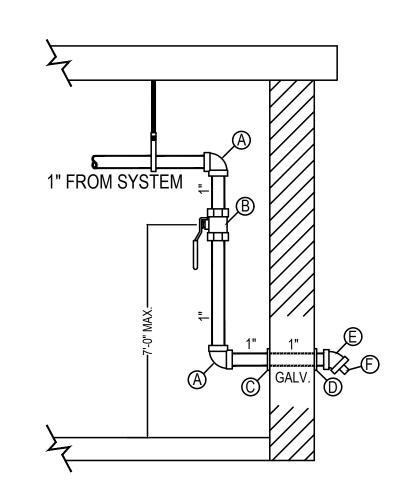
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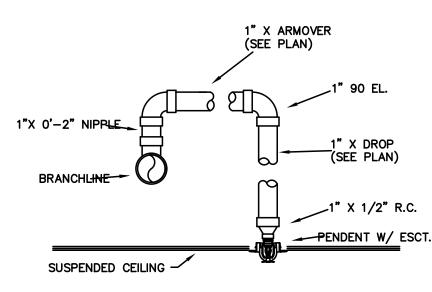


DRAWING NUMBER:

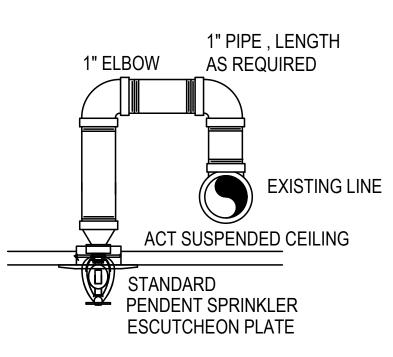


- (A) 1" CAST IRON ELBOW
- B 1" BALL VALVE WITH INSPECTORS TEST SIGN
- © 1" CAST IRON WALL PLATE
- ① 1" GALVANIZED WALL PLATE
- © 1" x ½" GALVANIZED 45° ELBOW
- © SMOOTH BORE CORROSION RESISTANT OUTLET GIVING FLOW EQUIVALENT TO ONE SPRINKLER

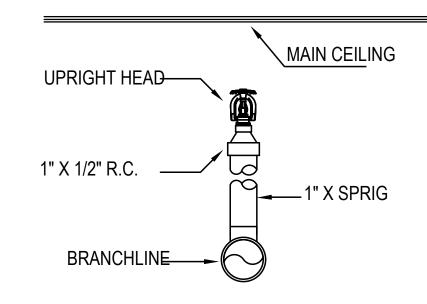
INSPECTOR'S TEST DETAIL -WET SYSTEM



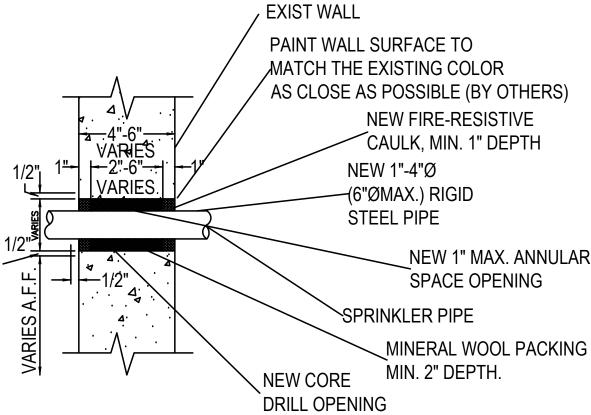
TYP. RETURN BEND ASSEMBLY



SWING JOINT DETAIL



UPRIGHT HEAD DETAIL

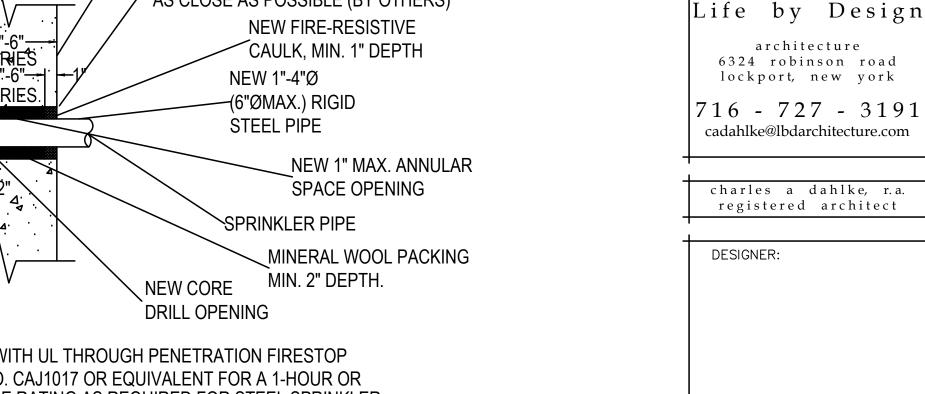


* COMPLY WITH UL THROUGH PENETRATION FIRESTOP SYSTEM NO. CAJ1017 OR EQUIVALENT FOR A 1-HOUR OR 2-HOUR FIRE RATING AS REQUIRED FOR STEEL SPRINKLER

FIRE STOPPING DETAIL

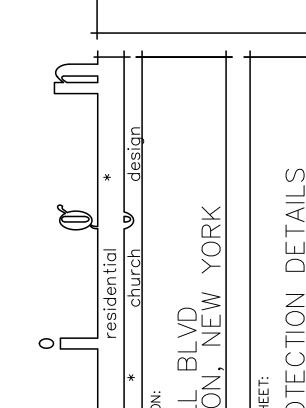
FIRE STOPPING OF FIRE RATED WALL PENETRATIONS FOR STEEL PIPE

STATIC PRESSURE - 57PSI



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DATE: FEBRUARY 13, 2023



DESIGN NOTES 1. SYSTEM DESIGN AND INSTALLATION SHALL BE IN COMPLIANCE WITH NFPA 13. 2. SYSTEM TYPE - WET AUTOMATIC SPRINKLER SYSTEM DESIGNED FOR COMMERCIAL ORDINARY HAZARD OCCUPANCY 3. WATER SUPPLY: PUBLIC WATER SUPPLY FLOW TEST DATA PROVIDED BY - TOWN OF PENDLETON WATER DEPT. 5-17-2021

RESIDUAL PRESSURE - 52 PSI @ 1060 GPM 4. MATERIAL SPECIFICATIONS - ALL PIPING SHALL BE STEEL WITH APPROVED FITTINGS - ALL RISER, DRAIN PIPING & FITTINGS SHALL BE BLACK STEEL.

- TEST ALL PIPING AFTER INSTALLATION IS COMPLETE TO 200 PSI FOR A MINIMUM OF 2 HRS 6. ALL PIPING HANGERS AND ATTACHMENTS MUST COMPLY WITH NFPA-13

7. HYDRAULIC NAME PLATE SHALL BE LOCATED AT SYSTEM RISER 8. CONTRACTOR SHALL PROVIDE FINAL SHOP DRAWINGS AND HYDRAULIC CALCULATIONS PE STAMPED FOR LOCAL FIRE MARSHALL APPROVAL AND ONE ELECTRONIC COPY FOR ENGINEER'S REVIEW.

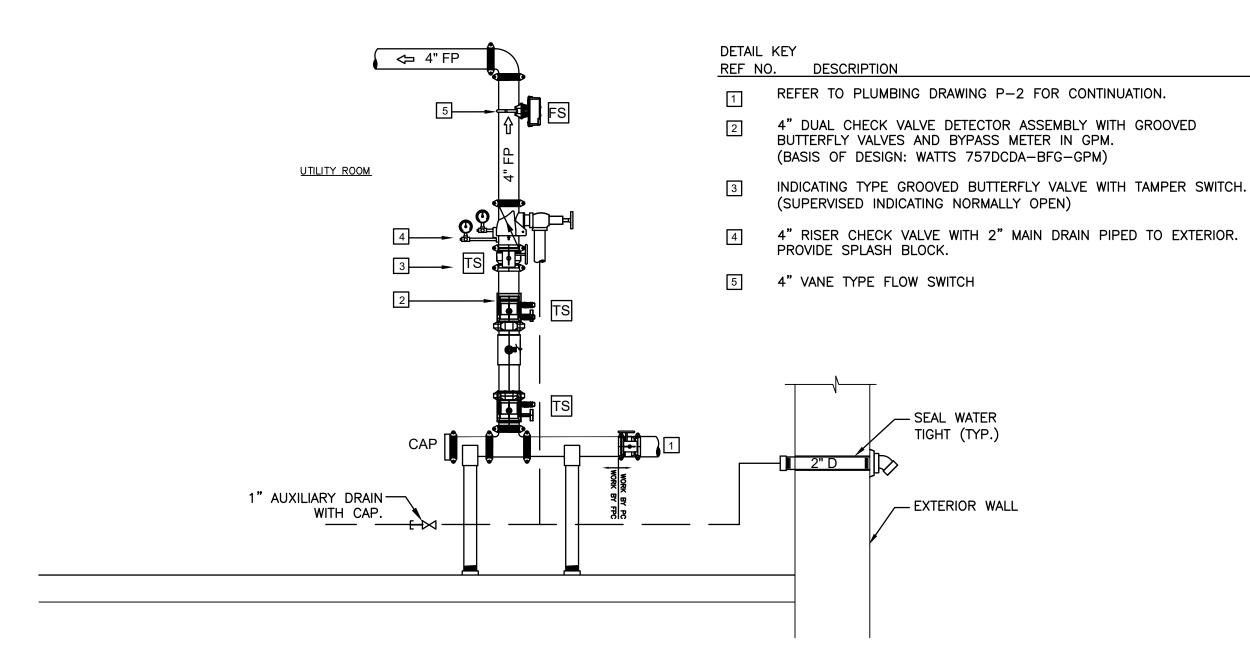
INSTALLATION NOTES

- SPRINKLERS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S LISTING - FIRE STOP ALL RATED PENETRATIONS TO MAINTAIN WALL / CEILING RATED ASSEMBLY - CONTRACTOR SHALL PROVIDE COMPLETED MATERIAL AND TEST CERTIFICATES AS IDENTIFIED IN NFPA-13 - CONTRACTOR SHALL COORDINATE AND ASSIST IN TESTING OF SPRINKLER FIRE ALARMS - PROVIDE STUD PIPE PROTECTORS AT ALL STUD PENETRATIONS

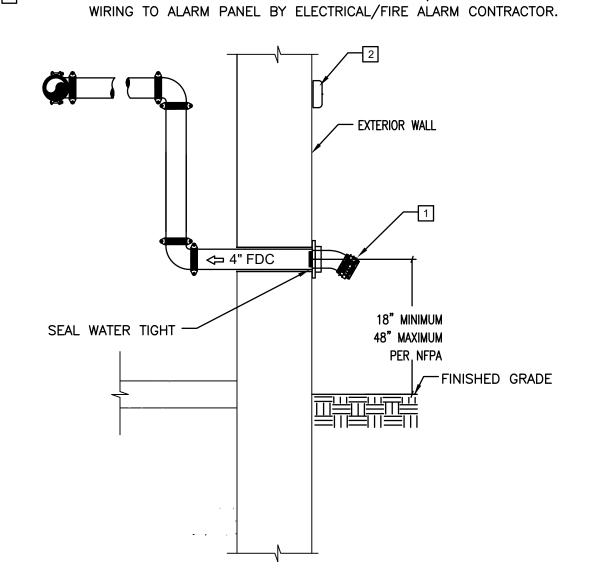
SYMBOL LEGEND

- ½" 155° QR WHITE CONCEALED PENDENT K = 5.6
- ∑ ½" 155° QR BRASS SIDEWALL WITH GUARD - K = 5.6
- ELECTRIC SPRINKLER ALARM BELL 24v
- OH1 AREA DESIGNED ORDINARY HAZARD WITH .2 GPM OVER 1,500 SQ. FT. (MEZZANINES, UTILITY ROOMS)
- AREA DESIGNED ACCORDING TO LIGHT HAZARD WITH .10 GPM OVER 1,500 SQ. FT. (RESTROOMS, PASSAGEWAYS, KITCHENETTE)

FIRE PROTECTION PIPING MAIN FIRE PROTECTION BRANCH PIPING



- 1. CONTRACTOR SHALL OBTAIN ALL OTHER PERMITS FOR CONSTRUCTION.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR INITIAL TESTING AND CERTIFICATION OF BACKFLOW DEVICES.
- 3. ALL VALVES ON FIRE PROTECTION SERVICES SHALL BE EQUIPED WITH TAMPER SWITCH AND CONNECTED TO SUPERVISED FIRE ALARM



STORZ CONNECTION 30 DEGREE, UL LISTED, 4 IN. X 5 IN. STORZ. RED POWDER COATED FINISH. W/ ALUMINUM WALL PLATE "AUTO SPRINK".

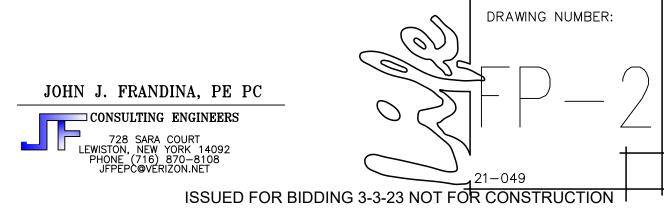
PROVIDE CAP WITH WEEP HOLE OR BALL DRIP DISCHARGED TO EXTERIOR,

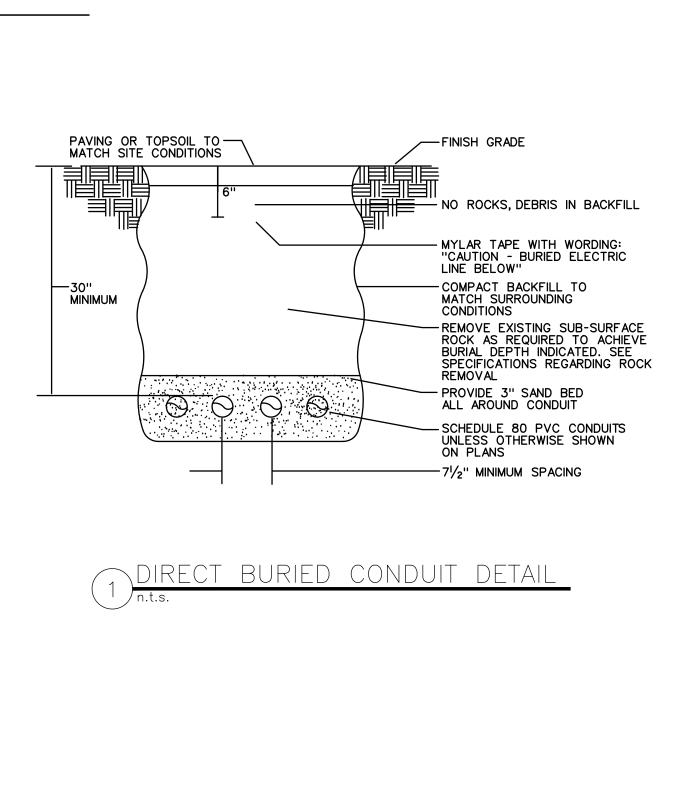
6 IN. 120 VAC ELECTRIC ALARM BELL AT 10 FT, ABOVE FINISHED GRADE.

DETAIL KEY

REF NO.

- 1. PROVIDE 7 IN. X 10 IN. REFLECTIVE "FIRE DEPARTMENT CONNECTION" SIGN ANCHORED TO BUILDING IN COMPLIANCE WITH NFPA-13.
- 2. CONTRACTOR SHALL COORDINATE LOCATION OF FIRE DEPARTMENT CONNECTION WITH BUFFALO FIRE DEPARTMENT PRIOR TO INSTALLATION.





UTILITY ROOM 105

(4)#250MCM&4/0G-

ÌN 3"EMT

TO LOADS

200A ML0

208Y/120\

3PH,4W

(4)#250MCM/0G

KITCHEN 111

TO LOADS

3PH,4W

EXTERIOR

EXTERIOR

PROVIDE AND LOCATE METER

AND DISCONNECT EQUIPMENT

PER ESB 757 AS APPROVED BY

NEMA 3R

400A/3P

MAIN

DISC.

ÌN 4"RGS

SEE DETAIL 2 ON THIS DRAWING FOR

GROUNDING ELECTRODE DETAIL

SWITCH

(4)#500MCM/0G-J

FUSED

NATIONAL GRID.

UL LISTED

NATIONAL GRID

AND CT CABINET

/ EXPANSION

FITTING (TYP.)

METER

320A SOCKET

INTERIOR

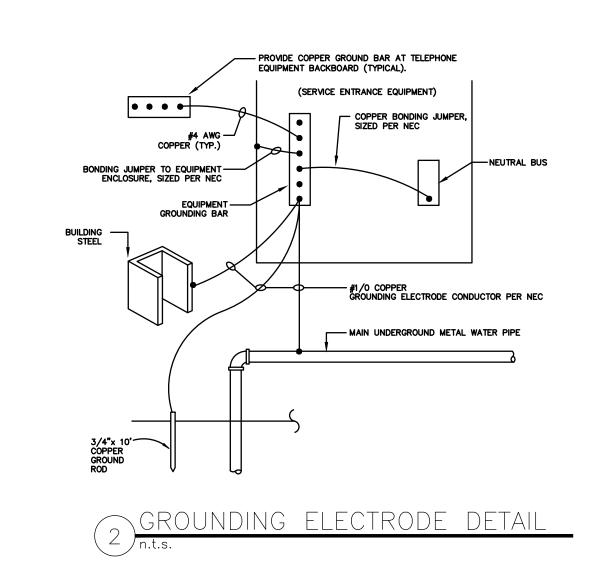
400A MCB

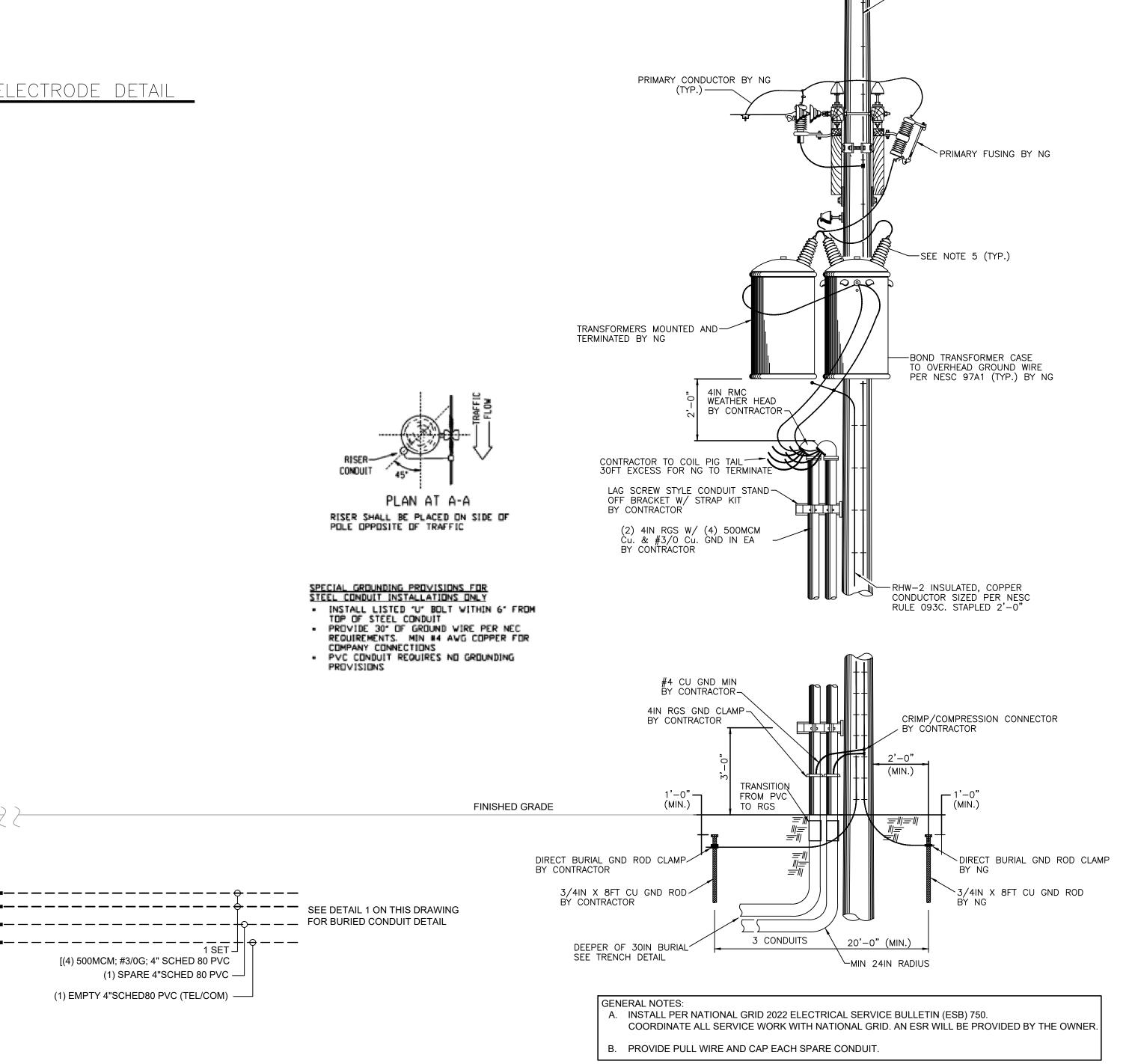
480/277V

3PH,4W

150KVA TRANSFORMER (4)#500MCM Cu &

480V Δ TO 208Y/120V #3/0G Cu IN 4"RGS





CONDUIT

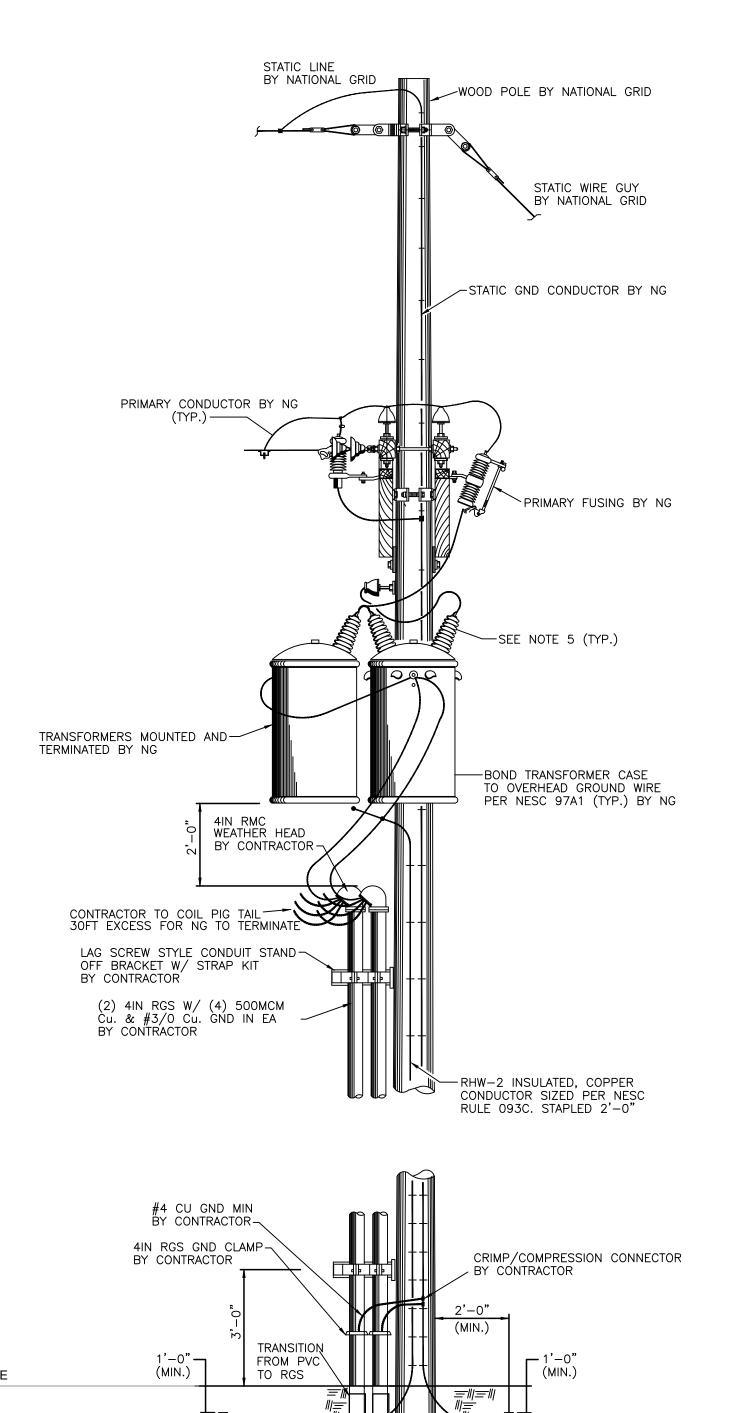
_ _ _ _ _ _ FOR BURIED CONDUIT DETAIL

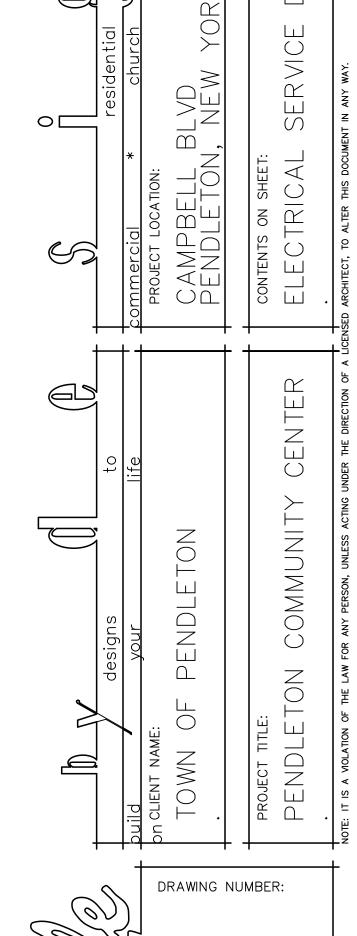
1 SET ⅃

[(4) 500MCM; #3/0G; 4" SCHED 80 PVC

(1) EMPTY 4"SCHED80 PVC (TEL/COM) ——

(1) SPARE 4"SCHED 80 PVC —





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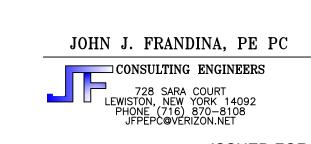
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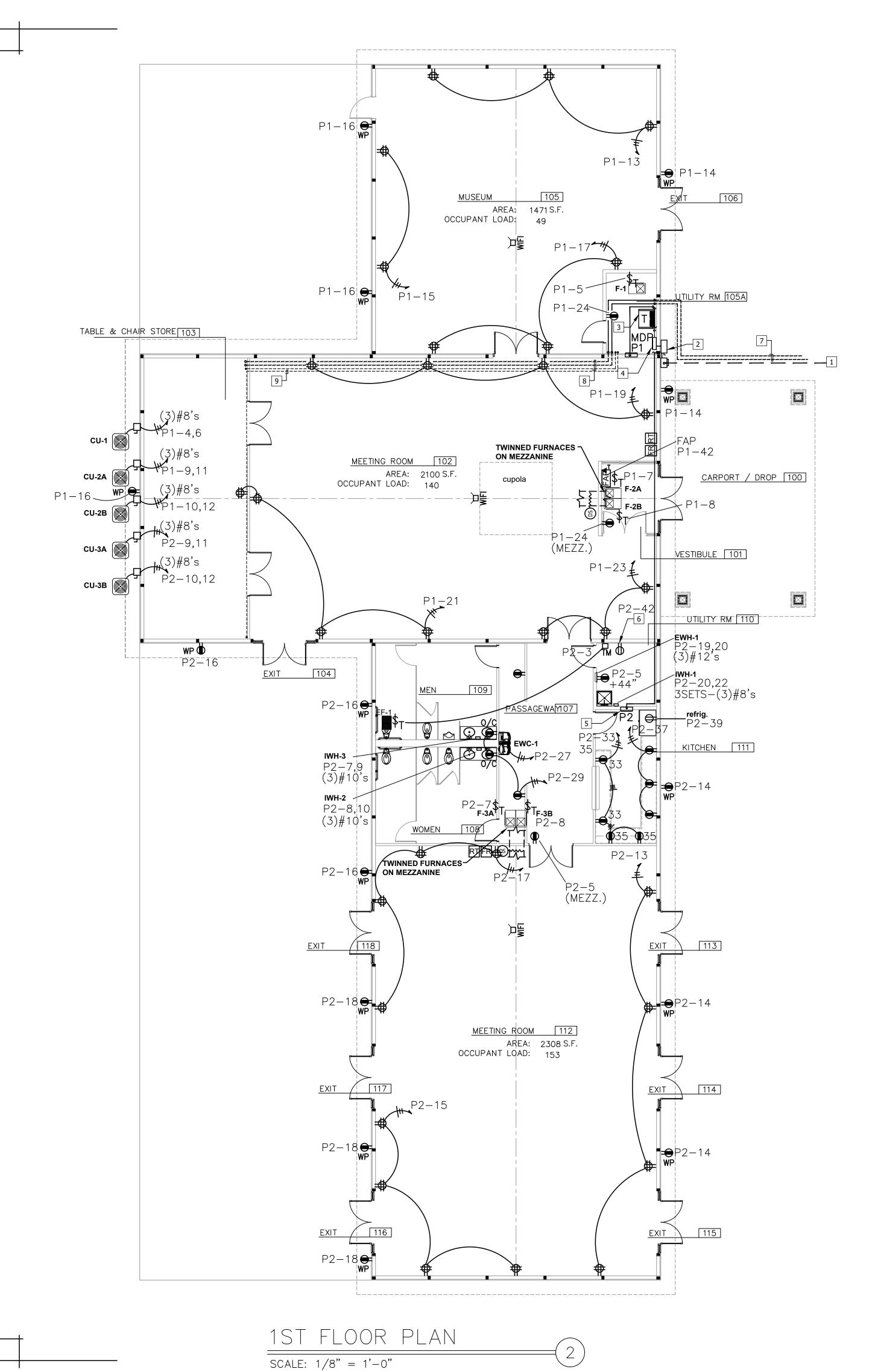
registered architect

FEBRUARY 13, 2023

DESIGNER:

REVISIONS:





				P A	NE	LBOA	RD	SCHE	DU	LE			
			VOLTS: 208Y/120	1		3: A.I.C	. RATING:	42K			TION: UTILITY RM 112		
	ME)P	PHASE: 3	MCB:	400A	•	R SPACE:			SOUR		ONNECT	
			WIRE: 4	MLO:			./NEMA #:			MAKE			
#			LOAD	BRE	4KER	CONNE	CTED LOAD			AKER	LOAD		#
	TYPE		DESCRIPTION	AMP	POLE	PH. A	PH. B	PH. C	POLE	AMP	DESCRIPTION	TYPE	
1	PWR					55 146						PWR	2
3	PWR	P1		200	3		90 159		3	200	P2	PWR	4
5	PWR							85 135				PWR	6
7	PWR											PWR	8
9		SPARE		200	3				3	200	SPARE	PWR	10
11	PWR											PWR	12
13	PWR											PWR	14
15		SPARE		100	3				3	100	SPARE	PWR	16
17	PWR											PWR	18
19		SPARE		20	1				1	20	SPARE	PWR	20
21	PWR	SPARE		20	2				1	20	SPARE	PWR	22
23					_								24
25													26
27													28
29													30
			TOTAL CONN			201.0	249.0	220.0			ACE MOUNTED ENCLOSURE	, HINGED	
			TOTAL CONN	IECTED	KVA:		80.4		LOCK	ABLE C	OVER.		

1010 7/05	DEMAND	DIVERSITY	PH. A	PH. B	PH. C	10.74
LOAD TYPE	DEMAND		(AMPS)	(AMPS)	(AMPS)	KVA
LIGHTING [LTG]	100%	100%	0	0	0	0
POWER [PWR]						
- 1ST 10 KVA	100%	50%	14	14	14	5.04
- ADDITIONAL KVA	50%	50%	43.25	55.25	48	17.58
HVÁC	100%	75%	0	0	0	0
ELECTRIC HEAT [EH]	100%	100%	0	0	0	0
OTHER [OT]	100%	50%	0	0	0	0
	TOTAL ANTICI	PATED LOAD:	57.25	69.25	62	22.62

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VOLTS: 208Y/120 N							at Attacks	. RATI					LOCATION: UTILITY RM 105A				
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WIRE: 4				MLO:		MTG./NEMA #: 1				MAKE: SQUARE D E2 SERIES							
#		LOAD			BRE	AKER	CC	NNEC	CTED	LOAE) (AMI	PS)		AKER	LOAD		#
π	TYPE			AMP	POLE	PH	l. A			PH	l. C	POLE	AMP	DESCRIPTION	TYPE	"	
1	LTG	EXIT LIGHTING			20	1	4	0					1	20	SPARE	PWR	2
3	PWR	SPARE			20	1			0	17			2	35	COND UNIT CU-1		4
5		FURNACE F-1			20	1					12	17				HVAC	
7	HVAC	FURNACE F-2A			20	1	12	12					1	20	FURNACE F-2B	HVAC	8
9	HVAC	COND UNIT CU-2A		CLL2A	40	2			17	17			2	2 40	COND UNIT CU-2B	HVAC	10
11	HVAC				70						17	17			COND CIVIT CO-2B	HVAC	12
13	PWR	RCPT - MU	JSEUM 1	05	20	1	8	6					1	20	RCPT - EXTERIOR FRONT	PWR	14
15		RCPT - MUSEUM 105		20	1			8	6			1	20	RCPT - EXTERIOR REAR	PWR	16	
17		RCPT - MUSEUM 105			20	1					8		1	20	SPARE	PWR	18
19		RCPT - MEETING 102			20	1	8						1	20	SPARE	PWR	20
21		RCPT - MEETING 102			20	1			8				1	20	SPARE	PWR	22
23		RCPT - MEETING 102			20	1					8		1	20	SPARE	PWR	24
25	PWR	SPARE			20	1							1	20	SPARE	PWR	26
27		SPARE			20	1							1	20	SPARE	PWR	28
29		SPARE		20	1							1	20	SPARE	PWR	30	
31		SPARE			20	1							1	20	SPARE	PWR	32
33		SPARE			20	1				9			1	20	LIGHTING - MUSEUM RM 105	LTG	34
35	PWR	SPARE			20	1							1	20	SPARE	LTG	36
37		SPACE						5					1	20	EXTERIOR LIGHTS -WALLPKS	LTG	38
39		SPACE								8			1	20	EXTERIOR LIGHTS -CARPORT	LTG	40
41	PWR	SPACE										6	1	20	FIRE ALARM PANEL	PWR	42
TOTAL CONNECTED LOAD: 55 90 85 NOTE: RECESSED ENCLOSURE, HINGED LOCKABLE																	
TOTAL CONNECTED KVA: 27.6 COVER																	
			D	EMAN	D / D	I V E	RS	SIT	Y	F	A C	ТО	R	SCI	HEDULE		
		OAD TYPE		DEMAND	DIVE	DOITY	PH	l. A	PH	. B	PH	l. C	1/2	VA			

| 100% | 75% | 18.0 | 38.3 | 47.3 | 100% | 100% | 0.0 | 0.0 | 0.0 | 100% | 50% | 0.0 | 0.0 | 0.0 | 100% | TOTAL ANTICIPATED LOAD: 38.0 | 66.3 | 58.3 |

100% 75% 21.8 27.8 24.0

 100%
 100%
 0.0
 0.0
 0.0

 100%
 50%
 0.0
 0.0
 0.0

 100%
 50%
 0.0
 0.0
 0.0

 TOTAL ANTICIPATED LOAD:
 69.3
 75.0
 61.3

POWER [PWR

OTHER [OT]

- 1ST 10 KVA

ELECTRIC HEAT [EH]

- 1ST 10 KVA

ELECTRIC HEAT [EH]

OTHER [OT]

- ADDITIONAL KVA

- ADDITIONAL KVA

VOLTS: 208Y/120				MAINS RATING:			A.I.C. RATING: 10			10K	10K		LOCATION: UTILITY RM 110				
P2		PHASE:	3	мсв:	-	BRKR SPACE:						SOURCE: P1					
	WIRE: 4		MLO: 200A			MTG./NEMA #: 1						MAKE: SQUARE D E2 SERIES					
ш	LOAD		BREAKER		CO	NNEC	TED	LOAD	(AMF	PS)	BREA	AKER LOAD		ш			
#	TYPE	PE DESCRIPTION		AMP	POLE	PH	l. A	PH	l. B	PH	. C	POLE	AMP	DESCRIPTION	TYPE	#	
1	PWR	SPARE		20	1	4	6					1	20	NIGHT LIGHTS	LTG	2	
3	PWR	TIMER/EXHAUST FAN EF-1			20	1			6	17			1	20	SPARE	PWR	4
5		RCPT - UTILITY 110			20	1					12	17	1	20	SPARE	PWR	6
7	HVAC	FURNACE	F-3A		20	1	12	12					1	20	FURNACE F-3B	HVAC	8
9	HVAC	COND UNIT CU-3A		40	2			16	16			2	40	COND UNIT CU-3B	HVAC	10	
11	HVAC	COI	COND UNIT CU-3A		40	-					16	16] _	40	COND ONLL CO-3B	HVAC	12
13	PWR	RCPT - ME	ETING 11	2	20	1	8	12					1	20	RCPT - EXTERIOR FRONT	PWR	14
15	PWR	RCPT - ME	ETING 11	2	20	1			8	12			1	20	RCPT - EXTERIOR REAR	PWR	16
17	PWR	RCPT - ME	ETING 11	2	20	1					8	12	1	20	RCPT - EXTERIOR REAR	PWR	18
19	HVAC	ELEC W//	VALL HEATER EWH-1		20	2	5	42					2	90	INSTANT WATER HEATER IWH-2	PWR	20
21	HVAC	LLLC VV			20				5	42				90	INOTANT WATERTIEATER TWIT-2	PWR	22
23	PWR	INICTANIT	VATER HEATER IWH-2		30	2					14	14	- 2	30	INSTANT WATER HEATER IWH-3	PWR	24
25	PWR	INSTANT			30		14	14					_	30	INSTANT WATER HEATER IVIII-3	PWR	26
27	PWR	RCPT - EL	PT - ELEC WTR COOLER		20	1			8	9			1	20	LIGHTING - MEETING RM 102	LTG	28
29		RCPT - RESTRMS / PASSAGE		20	1					6	6	1	20	LIGHTING - RESTRMS/KITCH.	LTG	30	
31		SPARE	PARE		20	1	0	9					1	20	LIGHTING - MEETING RM 112	LTG	32
33		RCPT - KIT	RCPT - KITCHEN (WEST WALL)		20	1			8	4			1	20	LIGHTING - STORAGE RM 103	LTG	34
35	PWR	RCPT - KIT	CHEN (SO	. WALL)	20	1					8		1	20	SPARE	PWR	36
37		RCPT - KIT			20	1	8						1	20	SPARE	PWR	38
39		RCPT - KIT	CHEN (RE	FRIG.)	20	1			8				1	20	SPARE	PWR	40
41	PWR	SPARE			20	1						6	1	20	DRY SYSTEM AIR COMP.	PWR	
			TC	TAL CONN	IECTED	LOAD:	14	46		59	13	35	NOTE:	RECES	SSED ENCLOSURE, HINGED LO	CKABLE	Ξ
			TC	TAL CONN	ECTED	KVA:			52	2.8			COVE	₹			
			DE	MAN	D / D	IVE	R S	SIT	Υ	F	A C	ТО	R	SCI	HEDULE		
	113	OAD TYPE		DEMAND	DIVE	RSITY	PH		PH	l. B	PH			/A			
			·	PLIVIAIND		NOITI	(AMPS)		(AMPS)		(AMPS)		1	/A			
	HTING [L			100%	10	0%	1	5	1	3	6	3	4.	08			
0'	WER [P\	NR]															
	10T4																

ELECTRICAL SYMBOLS

- INDICATES A HOME-RUN CIRCUITS AS SPECIFIED TO THE INDICATED PANELBOARD & CIRCUIT. ALL WIRING SO INDICATED IS MINIMUM SIZE #12 THHN COPPER IN EMT. MC CABLE IS ACCEPTABLE.
- INDICATED SPECIFICATION GRADE G.F.C.I. TYPE NEMA 5-20R DUPLEX RECEPTACLE AS SPECIFIED. MOUNTING HEIGHT ABOVE COUNTER OR AS INDICATED.
- INDICATED SPECIFICATION GRADE NEMA 5-20R DUPLEX RECEPTACLE AS SPECIFIED. MOUNTING HEIGHT 18" A.F.F. UNLESS OTHERWISE SPECIFIED.
- indicated specification grade nema 5-20r quadplex receptacle as specified. Mounting height 18" A.F.F. unless otherwise specified.
- INDICATED SPECIFICATION GRADE NEMA 10-30R 208-230V RECEPTACLE AS SPECIFIED. MOUNTING HEIGHT 18" A.F.F. UNLESS OTHERWISE SPECIFIED. O.C. = OVER COUNTER A.C. = ABOVE CEILING C.B. = CABINET BASE
- SINGLE POLE, 20A THERMAL OVERLOAD DISCONNECT SWITCH
- HEAVY DUTY FUSED DISCONNECT SWITCH
- STEEL JUNCTION BOX
- PLENUM RATED NETWORK CAT6 WIRE BACK TO UTILITY RM 105A
- T PLENUM RATED NETWORK CAT6 WIRE BACK TO PHONE DEMARC UTILITY RM 105A
- ☐ 24/7 ELECTROMECHANICAL TIMER.
- WIFI ROUTER MOUNTED TO UNDERSIDE OF TRUSS OR CEILING WITH PLENUM RATED NETWORK CAT6 WIRE BACK TO PHONE DEMARC UTILITY RM 105A

DRAWING NOTES

- 400A, 3PHASE, 4WIRE UNDERGROUND SERVICE AND SPARES TO CT CABINET, METER, COLD SEQUENCED. REFER TO SINGLE-LINE ON DRAWING E-1. COORDINATE WORK WITH NATIONAL GRID.
- INSTALL NEMA 3R 400A, 480/277V, 3PH MAIN DISCONNECT SWITCH.
- 480/277V DELTA to 208/120V Y DRY-TYPE TRANSFORMER, 150KVA (SQUARE D MODEL #EE150T3H).
- INSTALL 400A, 480/277V, 3PH, 4W PANEL (P1), 400A MCB (SQUARE D I- LINE, MODEL #HCM SERIES, TYPE 1). PROVIDE BREAKERS AS INDICATED.
- INSTALL 225A, 120/208V, 3PH, 4W SUB-PANEL (P2), MLO, 42 CIRCUIT (EATON POW-R- LINE CATALOG #P21A225LT42AH01). PROVIDE MINIMUM 20A, 1P BREAKERS UNLESS OTHERWISE INDICATED.
- 6 RECEPTACLE MOUNTED AT 60"AFF FOR DRY SYSTEM AIR COMPRESSER.
- INSTALL (2) 3" SCHED 80 PVC CONDUITS FROM POLE. PROVIDE PULL WIRE
- 8 INSTALL (2) 3" AND (1) 1-1/4" SCHED 80 PVC CONDUITS STUBBED UP TO 12"AFF IN RM 103. PROVIDE PULL WIRE IN EACH. INSTALL LB'S OR PULL BOXES AT TURNS. CONFIRM LOCATIONS AND ROUTING.
- 9 EXTEND EXISTING SERVICE CONDUIT USING SCHED 80 PVC FROM SOUTH OF RM 103 TO RM 105. CONFIRM LOCATIONS AND ROUTING.



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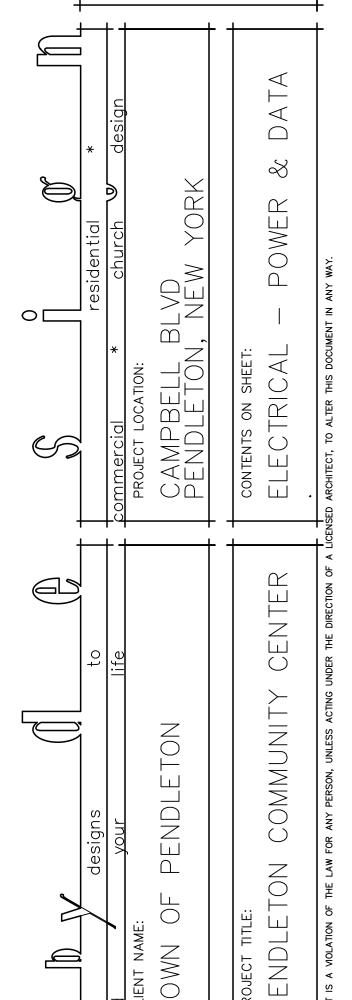
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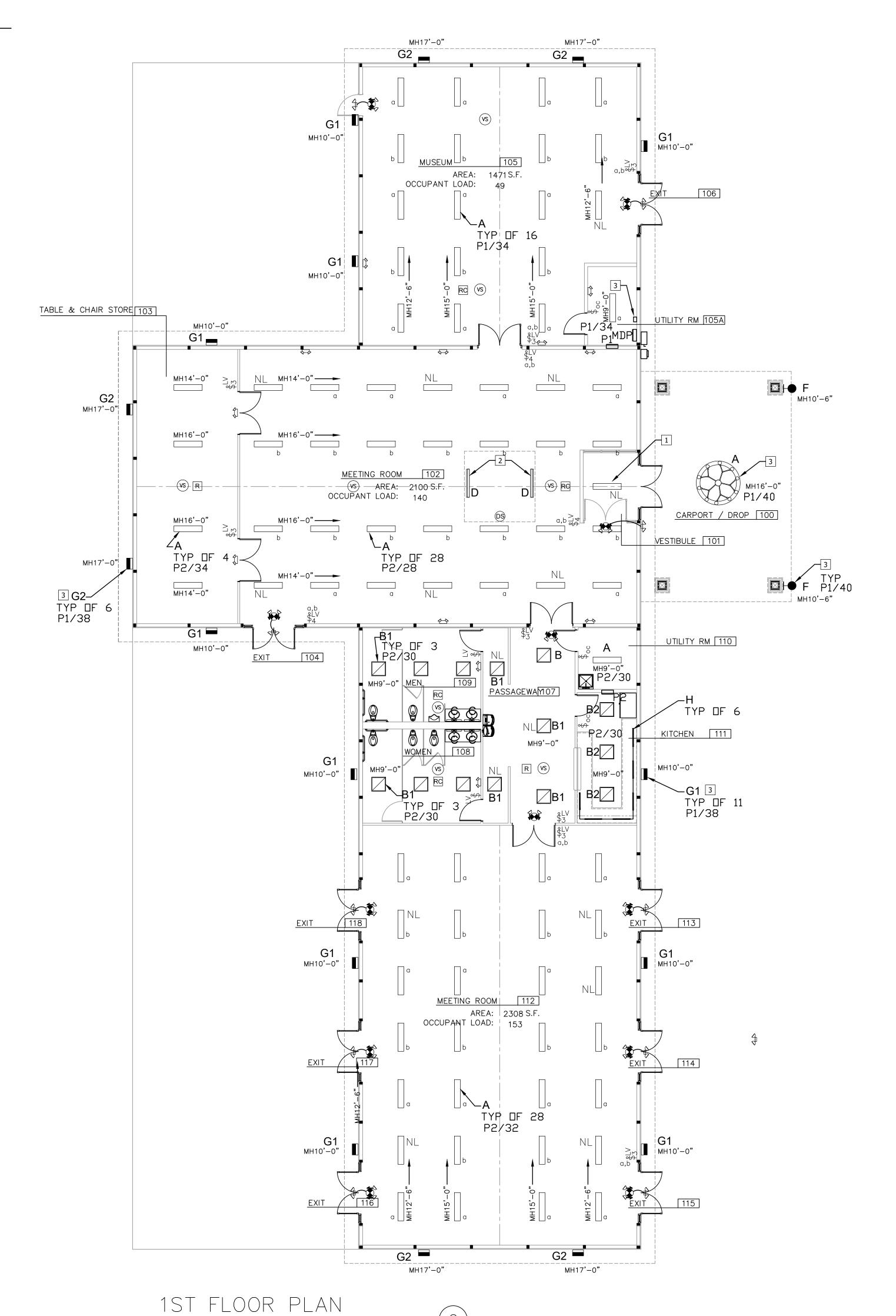
REVISIONS:

DATE: FEBRUARY 13, 2023



DRAWING NUMBER:

JOHN J. FRANDINA, PE PC CONSULTING ENGINEERS



SCALE: 1/8" = 1'-0"

GENERAL NOTES:

- 1. CONFIRM FINAL LOCATIONS AND MOUNTING HEIGHTS OF ALL LIGHT FIXTURES AND DEVICES WITH THE ARCHITECT AND OWNER.

 MOUNTING HEIGHTS SHOWN ARE TO BOTTOM OF FIXTURE.
- 2. VERIFY EXACT LOCATION AND HEIGHTS OF ALL RECEPTACLES WITH OWNER PRIOR TO ROUGH-IN.
- 3. PROVIDE EXIT AND EM LIGHTING FIXTURE WIRED UN-SWITCHED TO LOCAL LIGHTING AREA BRANCH CIRCUIT AHEAD OF SWITCH.
- 4. FIXTURES DESIGNATED AS NIGHTLIGHTS 'NL' AND EXIT SIGNS SHALL BE ON UNSWITCHED BRANCH CIRCUIT P2/2 FOR CONTINUOUS OPERATION.
- 5. SEAL ALL WALL PENETRATIONS WITH UL LISTED FIRE RATED CAULKING.

DRAWING NOTES

- 1 VESTIBULE FIXTURE.
- 2 COVE FIXTURE MOUNTED WITHIN CUPOLA WIRED THROUGH DAYLIGHT CONTROLLER.
- PROVIDE ELECTRICAL 24 / 7 PROGRAMMABLE TIMERS (TM1: TORK MODEL #EW101B, 120V, 40A) FOR EXTERIOR FIXTURES: CHANDELIER, WALL SCONCES, AND WALL PACKS.

LIGHTING SYMBOLS

- SINGLE POLE 120V WALL SWITCH, WHITE
- \$3 SINGLE POLE 120V 3-WAY WALL SWITCH, WHITE
- \$\frac{1}{3}\$ SINGLE POLE LOW VOLTAGE 3-WAY WALL SWITCH, WHITE
- WATTSTOPPER PASSIVE INFRARED WALL SWITCH
 OCCUPANCY SENSOR #PW-100-WH
- WATTSTOPPER DUAL TECHNOLOGY 0-10V DIMMING WALL SWITCH WITH VACANCY SENSOR #DW-311-WH
- SWITCH WITH VACANCY SENSOR #DW-311-WH
- WATTSTOPPER "X" 3-WAY OR 4-WAY LOW VOLTAGE SWITCH #LVSW-101-WH. 'a,b' INDICATES FIXTURES TO CONTROL. PROVIDE MULTIPLE SWITCHES IN 2-
- GANG BOX.
- WATTSTOPPER LOW VOLTAGE DUAL TECHNOLOGY CEILING VACANCY SENSOR #DT-305

WATTSTOPPER LOW VOLTAGE SWITCH #LVSW-101-WH

- R WATTSTOPPER UNIVERSAL VOLTAGE POWER PACK #BZ-150
- (DS) WATTSTOPPER LOW VOLTAGE DAYLIGHT SENSOR, CEILING MOUNTED
- RC WATTSTOPPER UNIVERSAL VOLTAGE ROOM CONTROLLER

LUMINAIRE SCHEDULE

TYPE	SYMBOL	LUMINAIRE DESCRIPTION	LIGHT SOURCE	VOLTAGE	DESIGN BASIS OR EQUAL
Α		4'LONG, SURFACE OR SUSPENDED LED, LINEAR WRAP, POLYCARBONATE LENS, INTEGRAL 0-10V DIMMABLE DRIVER	LED 4324Lm 33.1W 3500° K 82CRI	UNIV	EATON METALUX MODEL #4NWS3C3-UNV- MED-3500K
B1		2'x2', GENERAL LED PANEL, WHITE FROSTED ACRYLIC LENS, DIMMABLE.	LED 2720LMS 22W 3500° K 80CRI	UNIV	COOPER METALUX #22CGTS-L3C3-LOW-3500K
B2		2'x2', GENERAL LED PANEL, WHITE FROSTED ACRYLIC LENS, DIMMABLE.	LED 4700LMS 40.6W 3500° K 80CRI	UNIV	COOPER METALUX #22CGTS-L3C3-HIGH-3500K
С		2FT VANITY LIGHT, UL LISTED.	LED 2000LM 23W 3500° K	UNIV	COOPER METALUX #4BCLED-LD4-40SL-F-UNV- L835-CD1-U
D		5FT, ARCHITECTURAL COVE, INTEGRAL DRIVER, DIMMABLE	LED 7500LM 75W 3500° K	UNIV	COOPER IO LED COVIO #LM-15L-935-120-ID-UNIV-S- SM-STD-50F
Е		CHANDELIER	LED, 80CRI 3600LM 100W 3000° K	UNIV	AS SELECTED BY OWNER
F	•-1	WALL SCONCE, OUTDOOR, UL LISTED, BLACK, UP & DOWN, MEDIUM FLOOD,	LED 1525Lm 20W 3000°K	UNIV	EATON LUMIERE LANTERRA MODEL #9004-W2-RW-LED30 W-BK-L2-UNV
G1		WAL-PAK, FULL CUTOFF, IMPACT RESISTANT, BLACK, UL LISTED, PHOTOCONTROL	LED 1884Lm 27.2W 4000°K	UNIV	EATON LUMARK WAL-PAK MODEL #LDWP-FC-3B-ED-704
G2		WAL-PAK, FULL CUTOFF, IMPACT RESISTANT, BLACK, UL LISTED, PHOTOCONTROL	LED 3137Lm 47W 4000°K	UNIV	EATON LUMARK WAL-PAK MODEL #LDWP-FC-6B-ED-704
Н		30" LONG, UNDERCABINET STRIP, WHITE, ROCKER SWITCH, ADJUSTABLE CCT PROVIDE CONNECTORS AS REQUIRED.	LED 1095Lm 17.5W 3000°K	120	WAC LIGHTING MODEL #BA-ACLED30-27/30W
EM		EMERGENCY BATTERY PACK LIGHTING FIXTURE, 90 MINUTES BACKUP	LED	120/277	COOPER SURELITE #APEL
EXIT	101	THERMOPLASTIC, LED TYPE EXIT LUMINAIRE. WHITE HOUSING, RED "EXIT" ON FACE UNIVERSAL MOUNT. NI-CAD EM BATTERY	LED	120/277	COOPER SURELITE #APX7
EM/EX		COMBO EXIT AND EMERGENCY LIGHT. THERMOPLASTIC, LED TYPE EXIT LUMINAIRE. WHITE HOUSING, RED "EXIT" ON FACE UNIVERSAL MOUNT, NI-CAD BATTERY. HIGH POWER TO RUN 2 LED REMOTE HEADS.	LED 3.8W	120/277	COOPER SURELITE MODEL #APCH7
EMR	4	POWERED FROM EM/EX FIXTURE, BLACK. UL LISTED FOR WET LOCATIONS.	1W, 3.6V	-	COOPER SURELITE MODEL #APWR2

NOTES

- 1. PROVIDE FIXTURES COMPLETE WITH MOUNTING KITS.
- 2. PROVIDE APPROVED FIXTURES HAVING SIMILAR PERFORMANCE.
- 3. CONFIRM FINISHES AND MOUNTING HEIGHTS FOR ALL DECORATIVE PENDANTS.



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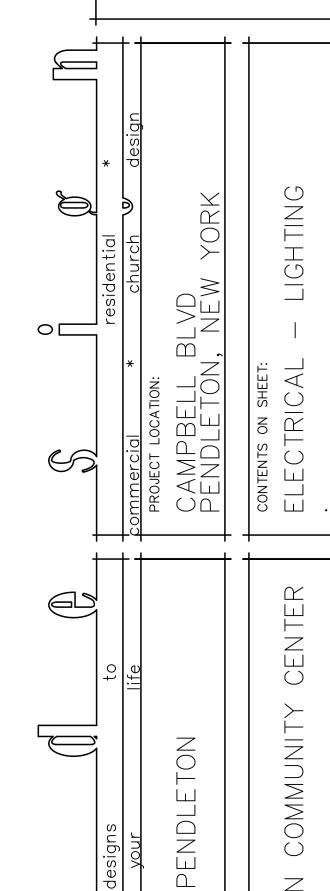
charles a dahlke, r.a.

registered architect

DESIGNER:

REVISIONS:

DATE: FEBRUARY 13, 2023

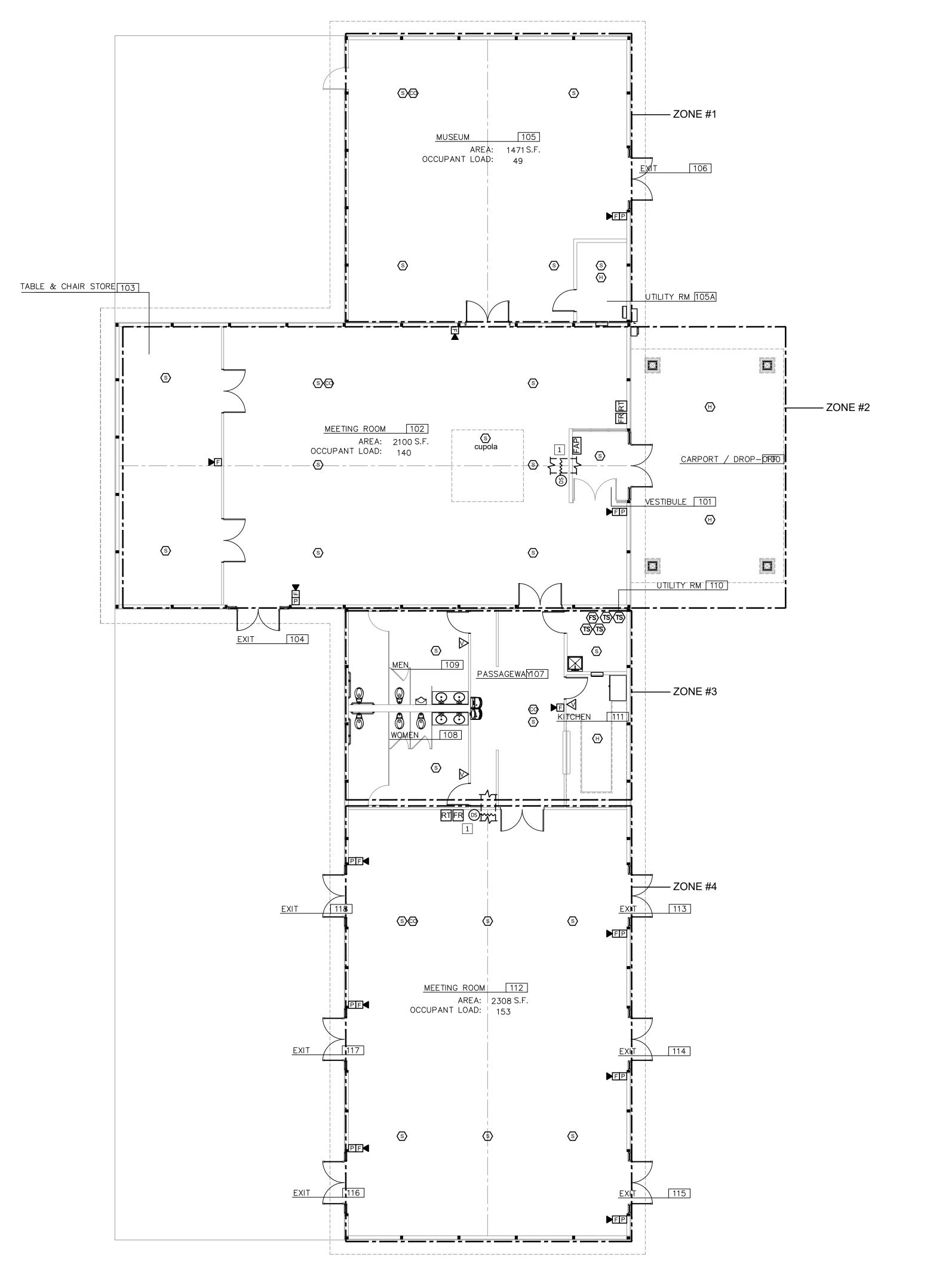


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 $\frac{1ST FLOOR PLAN}{SCALE: 1/8" = 1'-0"}$

GENERAL NOTES:

- INSTALL FIRE ALARM SYSTEM IN ACCORDANCE WITH NFPA 72. PROVIDE SHOP DRAWINGS, BATTERY CALCULATIONS, PANEL AND DEVICE SPEC SHEETS, AND INSTALLER QUALIFICATIONS FOR ENGINEERING AND BUILDING DEPARTMENT APPROVALS
- 2. ALL FIRE ALARM WIRING SHALL BE RUN IN EMT CONDUIT EXCEPT WHERE CONCEALED WITHIN CONSTRUCTION.
- 3. SEAL ALL WALL PENETRATIONS WITH UL LISTED FIRE RATED CAULKING.

DRAWING NOTES

PROVIDE ALL WIRING FOR DUCT SMOKE DETECTION, FAN SHUT DOWN, AND REMOTE TEST STATION.

FIRE DETECTION AND NOTIFICATION

- FAP FIRE ALARM PANEL WITH STANDBY
 BATTERY BACKUP. ADDRESSABLE NFPA72
 COMPLIANT W/ LOCAL LCD SCREEN AND
 REMOTE MONITORING CAPABILITIES.
- ADDRESSABLE SMOKE DETECTOR.
- ADDRESSABLE HEAT DETECTOR.
- ADDRESSABLE CARBON MONOXIDE DETECTOR.
- P ADDRESSABLE MANUAL PULL STATION.
- ADDRESSABLE VISUAL LED STROBE.
- ADDRESSABLE COMBINATION VISUAL STROBE AND AUDIO SIGNALING.
- DS ADDRESSABLE DUCT SMOKE DETECTOR
- RT REMOTE TEST STATION
- FR FAN SHUTDOWN RELAY
- ADDRESSABLE FLOW SWITCH.
- (TS) ADDRESSABLE TAMPER SWITCH.



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DESIGNER:

REVISIONS:

DATE: FEBRUARY 13, 2023

to

commercial * church design

PROJECT LOCATION:

CAMPBELL BLVD

CAMPBELL BLVD

PENDLETON, NEW YORK

contents on sheet:

CENTER

ELECTRICAL - FIRE ALARM

designs to to your Life

CLIENT NAME:

TOWN OF PENDLETON

PROJECT TITLE:

PENDLETON COMMUNITY CENTE

DRAWING NUMBER:

JOHN J. FRANDINA, PE PC

CONSULTING ENGINEERS

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ELECTRICAL SPECIFICATIONS

- A. ALL ELECTRICAL WORK IS SUBJECT TO THE GENERAL REQUIREMENTS OF THE CONTRACT.
- 2. LAWS, CODES, PERMITS & INSPECTIONS
- A. ALL WORK SHALL BE PERFORMED IN COMPLIANCE W/ ALL APPLICABLE FEDERAL, STATE & LOCAL CODES & ORDINANCES, AS WELL AS THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE INCLUDING SUBSEQUENT AMENDMENTS.
- B. AT COMPLETION OF WORK, THE ELECTRICAL CONTRACTOR SHALL DELIVER TO THE OWNER A CERTIFICATE OF INSPECTION & ACCEPTANCE OF THE WORK BY THE LOCAL INSPECTION

3. GUARANTEE

A. THE CONTRACTOR SHALL GIVE A WRITTEN GUARANTEE UPON FINAL ACCEPTANCE OF THE WORK AGAINST DEFECTIVE WORKMANSHIP, MATERIALS, OR OPERATION THAT MAY APPEAR WITHIN ONE (1) YEAR OF FINAL ACCEPTANCE BY THE OWNER.

4. EQUIPMENT & MATERIALS

- A. ALL EQUIPMENT & MATERIALS FURNISHED UNDER THIS CONTRACT SHALL BE NEW (UNLESS OTHERWISE SPECIFIED), LISTED BY THE UNDERWRITERS LABORATORIES, & SHALL BE OF THE SAME MAKE WHERE USED FOR SIMILAR PURPOSES.
- 5. TESTS & INSPECTIONS
- A. THE ENTIRE INSTALLATION SHALL BE TESTED & VERIFIED TO BE FREE FROM SHORT CIRCUITS, IMPROPER GROUNDS, & OPEN
- B. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL CONDUCT A TWO (2) HOUR TEST W/ ALL ELECTRICAL UTILIZATION EQUIPMENT ENERGIZED. DURING THIS PERIOD A CLOSE WATCH SHALL BE KEPT ON ALL PANELS & EQUIPMENT TO LOCATE ANY DEFECTIVE APPARATUS OR WORKMANSHIP. PARTICULAR ATTENTION SHALL BE PAID TO THE LOAD BALANCE ON VARIOUS PANELS & FEEDERS. WIRING DEVICES & APPLIANCES FOUND TO BE FUNCTIONING IMPROPERLY SHALL BE PROMPTLY REPLACED AT THE CONTRACTOR'S EXPENSE. ANY REQUIRED BALANCING OF CIRCUITS THAT BECOME APPARENT SHALL BE CARRIED OUT IMMEDIATELY.
- C. THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF THE START OF THE TEST SO THAT HE OR HIS REPRESENTATIVE CAN PLAN TO BE PRESENT DURING THE TESTING PERIOD.

6. MARKING & LABELING

- A. PROVIDE ENGRAVED NAMEPLATES FOR ALL DISCONNECTS. STARTERS, PANELBOARDS, TIMERS, CABINETS, ENCLOSURES, ETC. NAMEPLATES SHALL IDENTIFY THE ASSOCIATED EQUIPMENT BEING SERVED. THE NAMEPLATES SHALL BE PLASTIC LAMINATE W/ 3/16" BLACK ENGRAVED LETTERS ON A WHITE BACKGROUND, ATTACHED USING BOLTS, NUTS, & WASHERS.
- B. MAKE CERTAIN THAT ALL CIRCUIT BREAKERS IN ALL PANEL BOARDS ARE IDENTIFIED BY ROOM NUMBER &/OR NAME. EQUIPMENT SERVED, OR OTHER APPROPRIATE DESIGNATION. PANELS SHALL BE PROVIDED W/ DOOR MOUNTED, TYPE WRITTEN DIRECTORIES UNDER CLEAR PLASTIC; UPDATE EX. PANEL BOARD DIRECTORIES.

7. INSTRUCTION

A. THOROUGHLY INSTRUCT THE OWNER'S REPRESENTIVE IN THE PROPER OPERATIONS OF ALL EQUIPMENT FURNISHED UNDER THIS

8. FINAL CLEANING

- A. AFTER TESTS HAVE BEEN MADE & THE INSTALLATION HAS BEEN FOUND SATISFACTORY BY THE ENGINEER. THOROUGHLY CLEAN THE ENTIRE INSTALLATION, BOTH EXPOSED SURFACES & INTERIORS. REMOVE ALL DEBRIS CAUSED BY THE WORK UNDER THIS CONTRACT FROM ALL SPACES INSIDE & OUTSIDE THE BUILDING.
- 9. CONDUIT & RACEWAYS
- A. ALL CONDUIT SHALL BE ELECTRICAL METALLIC TUBING W/ SET SCREW FITTINGS (INTERIOR) OR PVC SCHEDULE 80 (EXTERIOR). EMT SHALL BE DELIVERED TO THE JOB SITE IN TEN-FOOT LENGTHS & SHALL BEAR THE UL LABEL & MANUFACTURER'S NAME OR TRADEMARK. MINIMUM SIZE: 3 INCH TRADE SIZE.
- B. THE ELECTRICAL RACEWAY SYSTEM SHALL BE INDEPENDENTLY ATTACHED OR SUPPORTED FROM THE BUILDING STRUCTURE & SHALL RUN PARALLEL W/ OR PERPENDICULAR TO THE STRUCTURAL MEMBERS.
- C. SUPPORTS & ATTACHMENTS PROVIDED SHALL BE SPECIFICALLY DESIGNED FOR THE INSTALLATION. PERFORATED HANGERS OR WIRE TIE SUPPORTS ARE NOT ACCEPTABLE.
- D. ALL RACEWAYS PASSING THROUGH A RATED FIRE SEPARATION SHALL HAVE A UL LISTED FIRE RATED INSTALLATION EQUAL TO THAT RATING. INSTALL WATER TIGHT SEAL FOR CONDUITS WHICH PENETRATE EXTERIOR WALLS.
- E. CONDUIT SHALL BE INSTALLED IN ORDER THAT A CONTINUOUS GROUNDING PATH IS ESTABLISHED THROUGHOUT THE ENTIRE RUN. PROVIDE A SEPERATE GREEN GROUNDING EQUIPMENT CONDUCTOR IN EACH CONDUIT.

10. CONDUCTORS

- A. ALL WIRE & CABLE SHALL BE NEW WITHIN ONE (1) YEAR OF MANUFACTURE WHEN DELIVERED TO THE JOB SITE & BEAR THE UL LABEL, INSULATION TYPE, VOLTAGE RATING, & MANUFACTURER'S NAME AT REGULAR INTERVALS ON THE
- B. ALL SINGLE CONDUCTOR WIRING IN RACEWAYS SHALL BE STRANDED COPPER, 600 VOLT RATED, TYPE THHN/THWN-2, 90°C. MINIMUM SIZE: #12 AWG.
- C. ALL MULTI-CONDUCTOR CABLE FOR BRANCH CIRCUIT WIRING SHALL BE TYPE "AC" ARMORED CABLE (COPPER) W/ CONTINUOUS INSULATED EQUIPMENT GROUNDING CONDUCTOR. MINIMÚM SIZE: #12 AWG COMPLYING WITH NEC
- D. ALL CONTROL CABLE RUN EXPOSED IN THE CEILING SPACE FOR COMMUNICATIONS, TELEPHONE, DATA, ETC, SHALL BE TEFLON JACKETED & BE UL LISTED FOR USE IN AN AIR HANDLING PLENUM.
- E. JOINTS, TAPS & SPLICES OF WIRE OF SIZE #10 & SMALLER SHALL BE MADE W/ "SCOTCHLOK" TYPE SPRING CONNECTORS; SIZES #8 & LARGER SHALL BE MADE W/ COMPRESSION CONNECTORS.

11. OUTLETS & WIRING DEVICES

- A. BOXES & FITTINGS FOR CONCEALED WORK SHALL BE PRESSED SHEET STEEL. CADMIUM COATED, OR ZINC GALVANIZED AS MANUFACTURED BY RACO, STEEL CITY, UNIVERSAL, OR EQUAL. IN CONCEALED WORK, INSTALL ALL BOXES SO THAT THE FRONT EDGES DO NOT PROTRUDE BEYOND THE FINISHED WALL SURFACE. OUTLET BOXES SHALL BE 4" SQUARE OR OCTAGONAL & NOT LESS THAN 1-1/2" DEEP. IN ALL CASES THEY SHALL BE OF A SIZE & SHAPE ESPECIALLY ADAPTED TO THE PARTICULAR USE TO WHICH THEY ARE PUT. WHERE SPACE LIMITATIONS DICTATE, 2" x 4" BOXES MAYBE USED, IF PROPER VOLUME AS DICTATED BY THE NEC.
- B. RECEPTACLES SHALL BE DUPLEX GROUNDING TYPE 20A, NEMA 5-20R, 120V, SPECIFICATION GRADE, W/ WHITE PLASTIC COVER PLATE. GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE RECEPTACLES SHALL BE UL 914 LISTED & PROVIDED IN LOCATIONS AS INDICATED. COLOR SHALL BE WHITE PLASTIC.
- C. RECEPTACLES IN PATIENT ROOMS SHALL BE LISTED FOR HOSPITAL GRADE, SINGLE PHASE, 20 AMPERE, 120 VOLTS, 2-POLE, 3-WIRE, NEMA 5-20R.
- D. GROUND FAULT CURRENT INTERRUPTER (GFCI) DUPLEX RECEPTACLES IN PATIENT ROOMS SHALL BE AN INTEGRAL UNIT, HOSPITAL-GRADE, SUITABLE FOR MOUNTING IN A STANDARD OUTLET BOX, WITH END-OF-LIFE INDICATION AND PROVISIONS TO ISOLATE THE FACE DUE TO IMPROPER WIRING. GFCI RECEPTACLES SHALL BE SELF-TEST RECEPTACLES IN ACCORDANCE WITH UL
- SWITCHES SHALL BE LINE VOLTAGE SINGLE POLE, OR THREE-WAY AS INDICATED, 20A, 120V-277V, SPECIFICATION GRADE, QUITE TYPE, W/ WHITE PLASTIC COVER.
- F. MANUFACTURES:
- 1) HUBBELL
-) LEVITON) BRYANT
- PASS & SEYMOUR (5) COOPER WIRING SYSTEM
- 12. LIGHT FIXTURE REQUIREMENTS
- A. ALL LIGHT FIXTURES ARE TO BE PROVIDED COMPLETED W/ ALL NECESSARY ACCESSORIES, SUPPORTS & FOR PROPER INSTALLATION. CATALOG NUMBERS SHOWN ARE BASIC FIXTURE TYPES.

13. GROUNDING

- A. ALL EQUIPMENT GROUNDING CONNECTIONS SHALL BE COMPLETELY CONNECTED PRIOR TO ENERGIZING EQUIPMENT, THE ENTIRE RACEWAY SYSTEM SHALL COMPOSE A CONTINUOS GROUND FROM THE INITIAL GROUND CONNECTION TO THE FURTHEST OUTLET.
- B. ALL RECEPTACLES SHALL HAVE A SEPARATE GROUNDING CONDUCTOR INSTALLED FROM THE GROUND TERMINAL ON THE DEVICE TO THE METALLIC

14. PANELBOARDS

- A. AS REQUIRED NEW CIRCUIT BREAKERS SHALL BE QUICK MAKE, QUICK-BREAK, W/ THERMAL MAGNETIC TRIP, CIRCUIT BREAKERS FOR HVAC EQUIPMENT LOADS SHALL BE SPECIFICALLY RATED FOR SUCH LOADS (HACR TYPE). MULTI-POLE BREAKERS SHALL HAVE A COMMON INTERNAL TRIP, UL LISTED AS MULTI-POLE UNITS. HANDLE TIES ARE NOT PERMITTED.
- 15. SHOP DRAWINGS & MANUFACTURER DATA
- A. THE CONTRACTOR SHALL SUBMIT W/ SUCH PROMPTNESS AS TO CAUSE NO DELAYS IN HIS WORK OR THAT OF OTHER CONTRACTORS. PROVIDE ONE (1) ELECTRONIC COPY OF ALL SHOP DRAWINGS OR DESCRIPTIVE LITERATURE ON ALL EQUIPMENT TO BE SUPPLIED.
- 16. AS BUILT DRAWINGS
- A. AT THE COMPLETION OF THE ELECTRICAL WORK, THE CONTRACTOR RESPONSIBLE FOR THE WORK PERFORMED UNDER THIS CONTRACT SHALL PROVIDE AS-BUILT DRAWINGS.
- B. THE CONTRACTOR WILL BE FURNISHED A SET OF PRINTS OF THE CONTRACT DRAWINGS FOR THE PURPOSE OF KEEPING A COMPLETE RECORD OF ALL INSTALLATION WORK. THE CONTRACTOR SHALL KEEP A COMPLETE RECORD AF ALL WORK & SHALL INDICATE DEVIATIONS FROM THE CONTRACT DRAWINGS. ALL CHANGES, REVISIONS &/OR ADDITIONS MADE IN THE INSTALLATION OF THE WORK, WHICH DIFFER FROM THAT REQUIRED BY THERE DRAWINGS, SHALL BE NOTED.

FIRE ALARM SYSTEM REQUIREMENTS

- 1. GENERAL
- 1.1 REFERENCES
- A. NFPA 70 NATIONAL ELECTRICAL CODE B. NFPA 72 - NATIONAL FIRE CODE
- 1.2 SYSTEM DESCRIPTION
- A. PROVIDE NEW ADDRESSABLE FIRE ALARM SYSTEM. THE SYSTEM SHALL BE FURNISHED, INSTALLED, TESTED & CERTIFIED BY A LICENSED FIRE ALARM INSTALLER.
- B. FIRE ALARM SYSTEM: NFPA 72, MANUAL & AUTOMATIC LOCAL FIRE ALARM SYSTEM; PROVIDE ONE YEAR (1) WARRANTY (FULL PARTS & LABOR).
- 1.3 QUALIFICATIONS
- A. MANUFACTURER: FIRE ALARM COMPANY SPECIALIZING IN MANUFACTURING THE PRODUCTS SPECIFIED IN THIS SECTION W/ MINIMUM THREE YEARS DOCUMENTED EXPERIENCE.
- 1.4 REGULATORY REQUIREMENTS
- A. CONFORM TO REQUIREMENTS OF NFPA 70, 72 & NFPA 101 B. FURNISH PRODUCTS LISTED & CLASSIFIED BY UL TESTING AS SUITABLE FOR FIRE ALARM SERVICE.
- 2. PRODUCTS
- 2.1 FIRE ALARM CONTROL PANEL (FACP) A. HONEYWELL FIRE-LITE MODEL #ES-200X OR EQUAL.
- 2.2 INITIATING DEVICES
- A. MANUAL PULL STATIONS: SEMI-FLUSH MOUNTED, AS MANUFACTURED BY FIRE ALARM MANUFACTURE W/ ADDRESSABLE MODULE. PROVIDE MANUFACTURER'S STANDARD BACKBOX. B. CEILING MOUNTED DETECTORS FOR SMOKE, HEAT, CARBON MONZIDE: ADDRESSABLE DETECTOR, SUITABLE FOR MOUNTING ON
- 2.2 SIGNALING APPLIANCES

4 INCH OUTLET BOX.

- A. ALARM HORN/STROBE UNIT: HORN SHALL BE NFPA 72 SURFACE TYPE FIRE ALARM HORN. SOUND RATING: 90 DB AT 10 FEET. PROVIDE INTEGRAL STROBE LAMP & FLASHER W/ RED LETTERED "FIRE" ON WHITE LENS.
- B. ALARM STROBE-ONLY UNIT: PROVIDE INTEGRAL STROBE LAMP & FLASHER W/ RED LETTERED "FIRE" ON WHITE LENS.
- 2.3 FIRE ALARM WIRE & CABLE
- A. FIRE ALARM POWER BRANCH CIRCUITS: BUILDING WIRE AS
- B. INITIATING DEVICE & INDICATING APPLIANCE CIRCUITS: ALL FIRE ALARM SIGNAL WIRING IN NEW CONSTRUCTION SHALL BE INSTALLED IN CONDUIT. WIRING SHALL BE (2) #16 COPPER, TWISTED/SHIELDED SIGNAL CABLE UL LISTED AS SUITABLE FOR USE IN FIRE ALARM SYSTEM INSTALLATIONS.
- SHOP DRAWINGS & MANUFACTURER DATA
- A. THE CONTRACTOR SHALL SUBMIT ONE (1) ELECTRONIC COPY OF SHOP DRAWINGS, PRODUCT SPEC SHEETS, BATTERY CALCULATIONS, INSTALLER QUALIFICATIONS, AND PROGRAMMING
- 4. EXECUTION
- 4.1 INSTALLATION
- D. INSTALL PRODUCTS IN ACCORDANCE W/ FIRE ALARM MANUFACTURER'S INSTRUCTIONS.
- E. INSTALL MANUAL STATION W/ OPERATING HANDLE 3 FEET 8 INCHES ABOVE FLOOR OR AS REQUIRED BY ADA CODE. INSTALL AUDIBLE & VISUAL SIGNAL DEVICES 6 FT-10 IN ABOVE FLOOR, BUT NOT LESS THAN 6" BELOW CEILING ..
- F. INSTALL ALL POWER & SIGNAL WIRING IN CONDUIT.
- G. MOUNT END-OF-LINE DEVICE BOX WITHIN LAST DEVICE OR SEPARATE BOX ADJACENT TO LAST DEVICE ON CIRCUIT.
- 5. PROJECT CLOSEOUT
- 5.1 AS BUILT DRAWINGS
- A. AT THE COMPLETION OF THE FIRE ALARM WORK. THE CONTRACTOR RESPONSIBLE FOR THE WORK PERFORMED UNDER THIS CONTRACT SHALL PROVIDE AS-BUILT DRAWINGS.
- 5.2 OWNER TRAINING, DEMONSTRATION, AND CERTIFICATION
- A. PERFORM SYSTEM TESTING AND CERTIFICATION.
- B. PROVIDE MINIMUM OF 2HRS TRAINING OF OWNER'S PERSONNEL AND REPRESENTATIVE OF LOCAL FIRE DEPARTMENT ON SYSTEM FEATURES, ALARMS, AND MONITORING.

END



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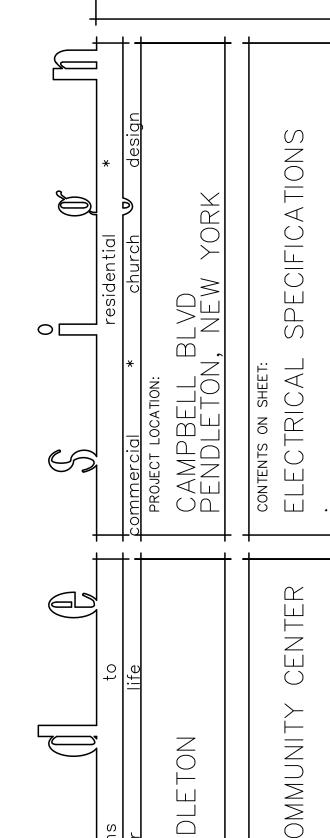
716 - 727 - 3191 cadahlke@lbdarchitecture.com

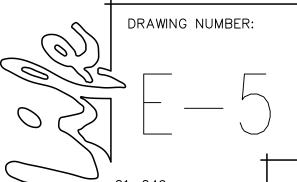
charles a dahlke, r.a. registered architect

DESIGNER:

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	REVISIONS:

DATE: FEBRUARY 13, 2023





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ISSUED FOR BIDDING 3-3-23 NOT FOR CONSTRUCTION

JOHN J. FRANDINA, PE PC CONSULTING ENGINEERS