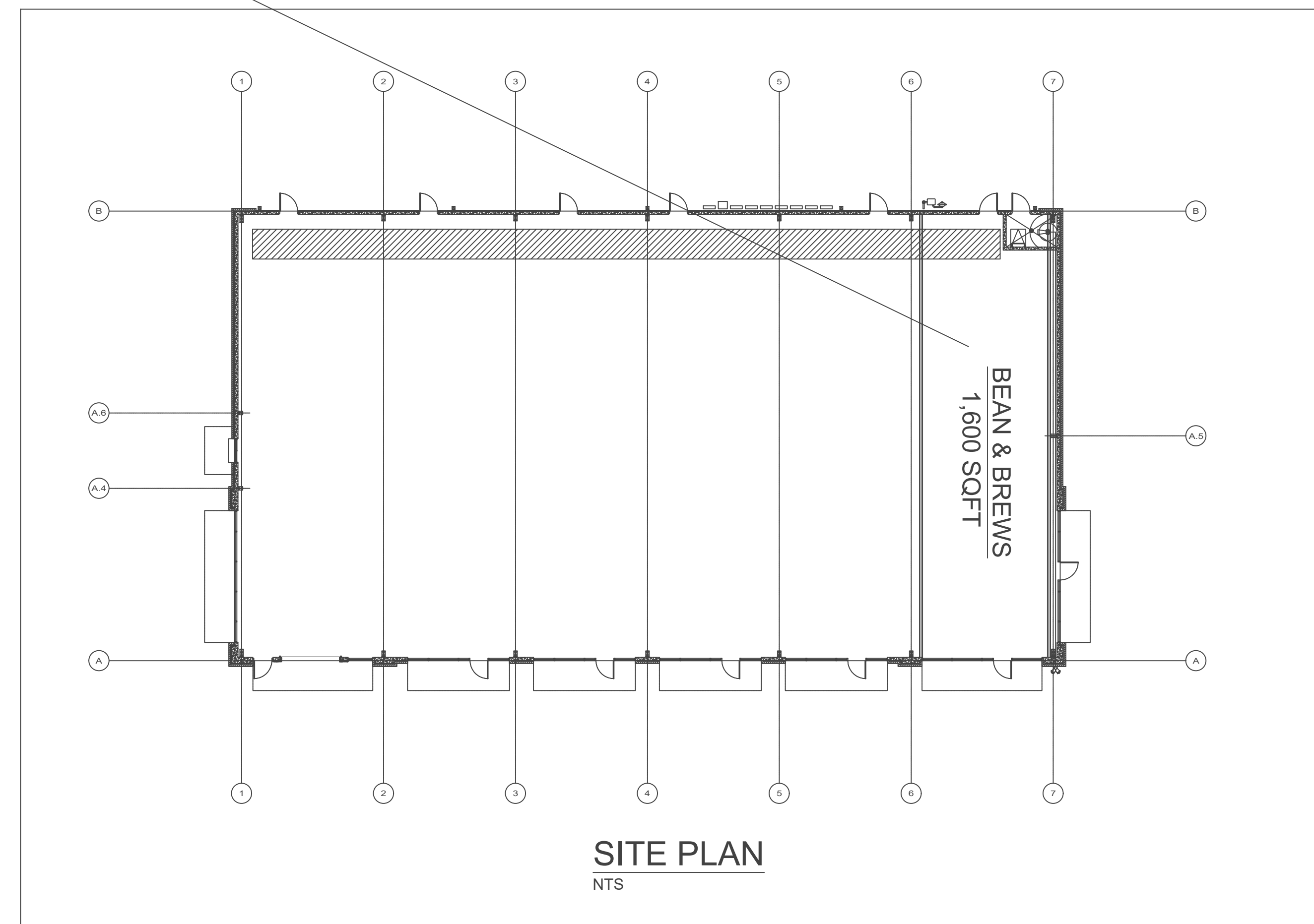
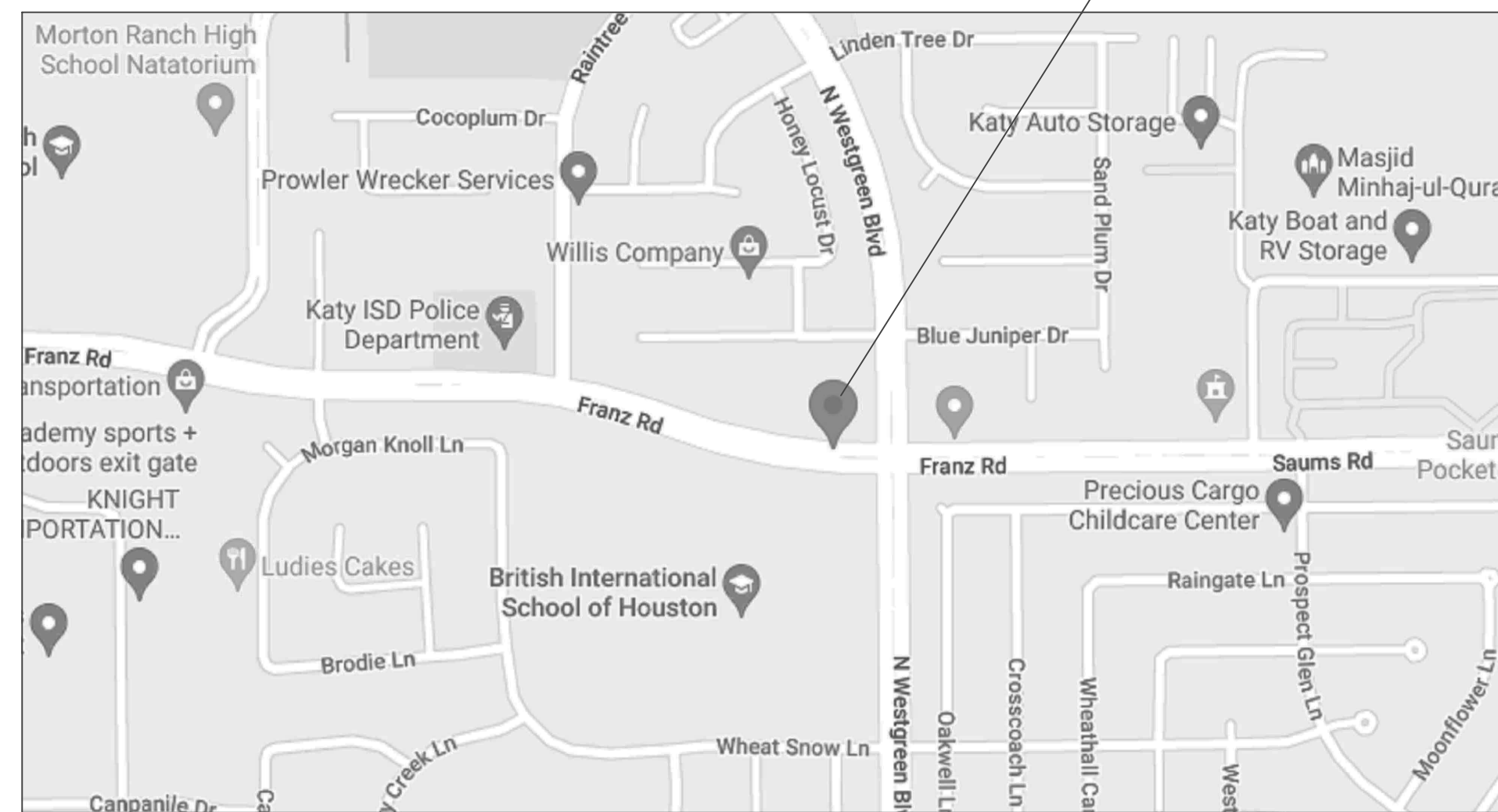


BEAN & BREWS

20314 FRANZ RD , STE # 500
KATY, TX 77449

BEAN & BREWS
1,600 SQFT



BEAN & BREWS

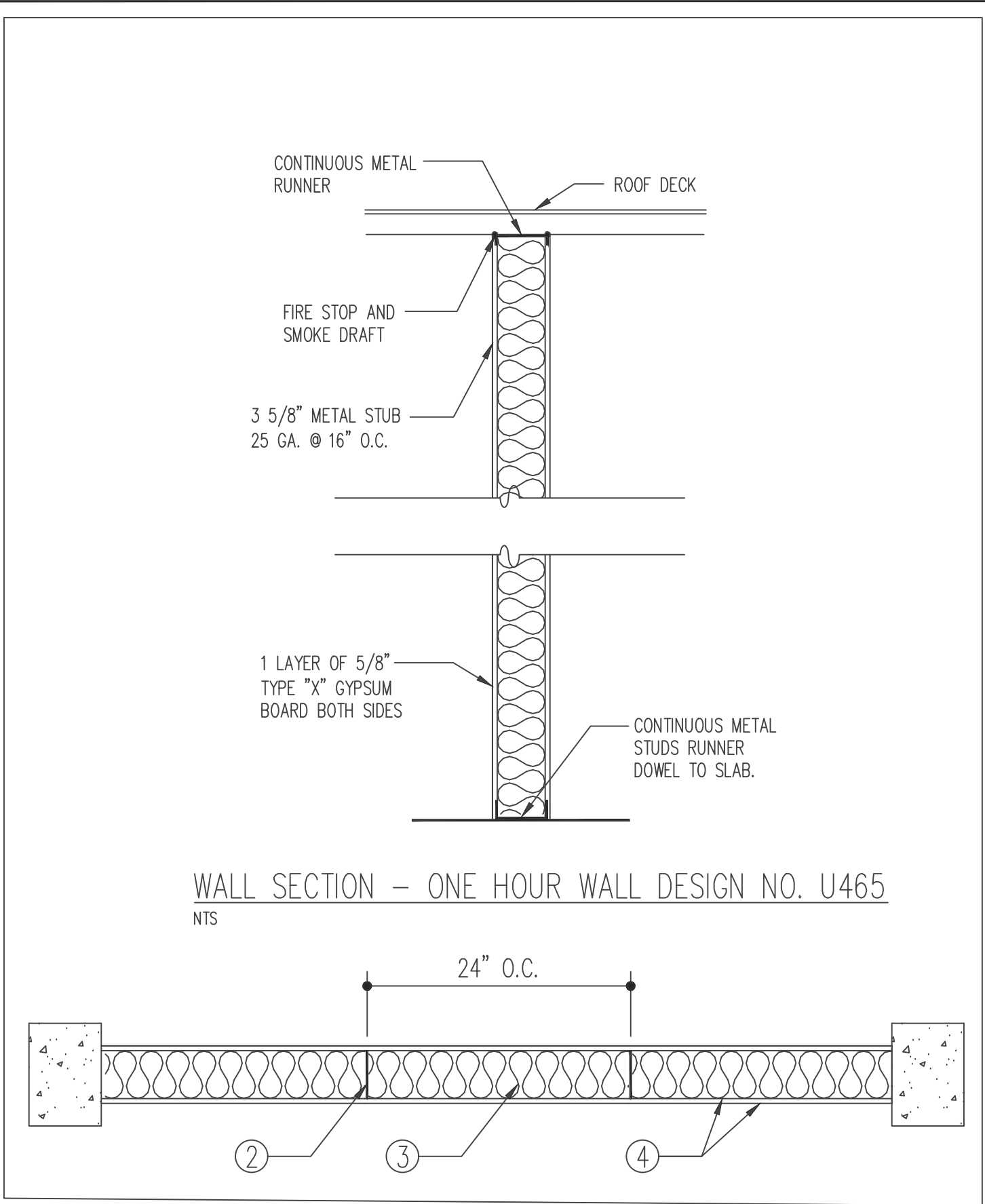
CODE INFORMATION	
2021-IBC	INTERNATIONAL BUILDING CODE
2021-IEBC	INTERNATIONAL EXISTING BUILDING CODE
2021-IECC	INTERNATIONAL ENERGY CONSERVATION CODE
2021-IFC	INTERNATIONAL FIRE CODE
2021-IMC	INTERNATIONAL MECHANICAL CODE
2021-UPC	UNIFORM PLUMBING CODE
2021-NEC / NAFTER 70	NATIONAL ELECTRICAL CODE

OCCUPANT LOAD ANALYSIS			
OCCUPANCY	SQUARE FOOTAGE	SF PER OCCUPANT	OCCUPANT LOAD
SEATING AREA	530	15	36
COUNTER AREA	220	100	3
PREP AREA	740	200	8
STORAGE AREA	70	300	1
RESTROOM & WALKWAYS	40	-	-
TOTAL:	1,600		48



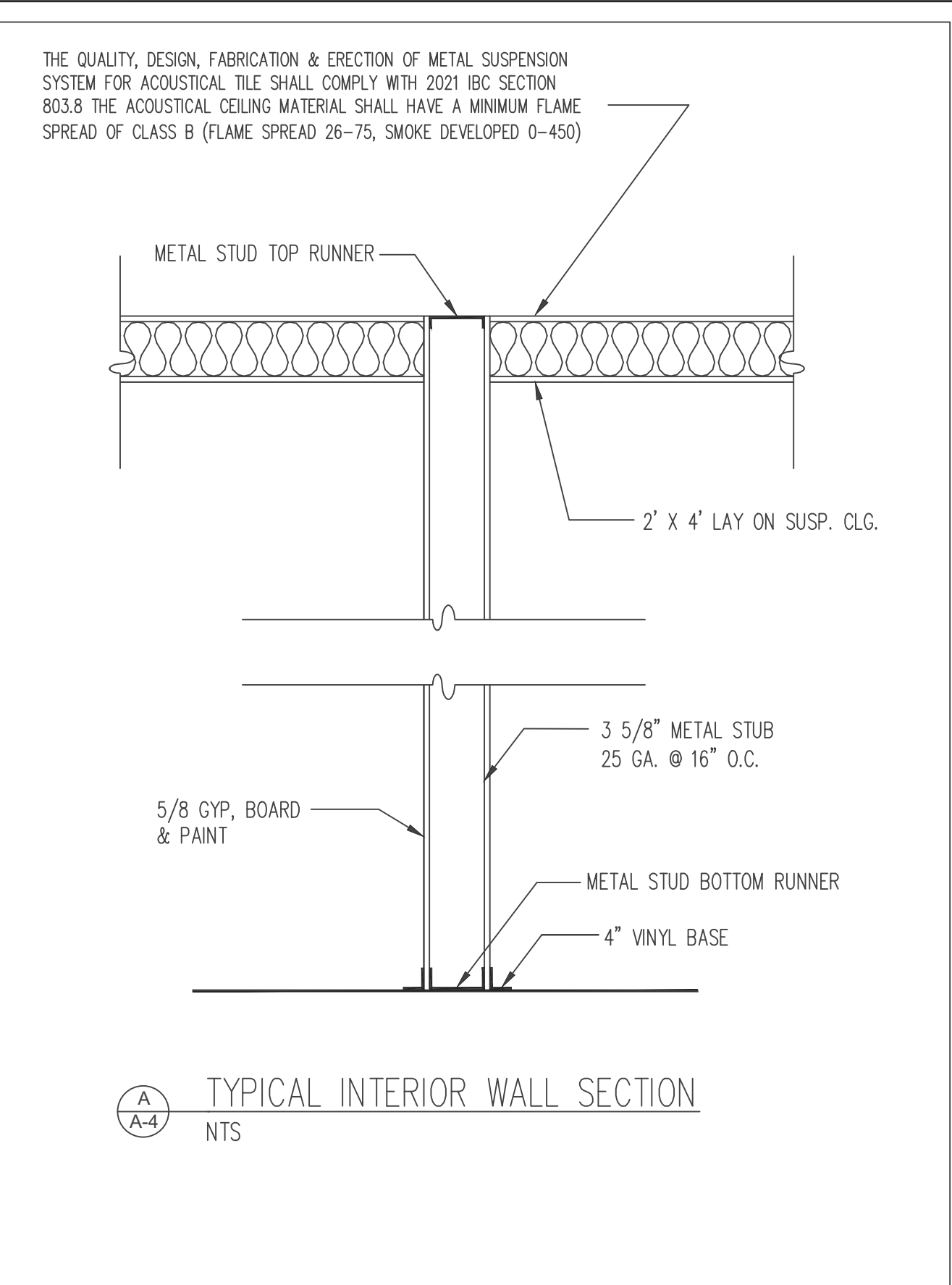
INDEX OF DRAWINGS:

FLOOR PLAN	A-1 of 11
FLOOR PLAN	A-2 of 11
CONSTRUCTION DETAILS.....	A-3 of 11
ELECTRICAL PLAN	E-1 of 11
ELECTRICAL PLAN	E-2 of 11
ELECTRICAL PLAN	E-3 of 11
MECHANICAL PLAN	M-1 of 11
PLUMBING PLAN	P-1 of 11
PLUMBING PLAN	P-2 of 11
REFLECTED CEILING PLAN	C-1 of 11
FIRE CODE REVIEW	F-1 of 12



- ① FLOOR AND CEILING RUNNER, 25 MSG MIN. GALVANIZED STEEL 1" HIGH, RETURN LEGS 3 5/8" WIDE MIN. ATTACHED TO FLOOR AND CEILING WITH FASTENERS @24" ON CENTERS.
- ② STEEL STUDS - 3 5/8" WIDE MIN. 1 1/4" LEGS, 3/8" RETURN, FORMED OF 25 MSG MIN. GALVANIZED STEEL MAX. STUD SPACING 24" ON CENTER. STUDS TO BE CUT 3/4" LESS THAN ASSEMBLY HEIGHT.
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 BORAL GYPSUM INC. TYPES DDN1, DDG2, OR DDDG3.
 CANADIAN GYPSUM CO., LTD., TYPES C, SCX, SHX, OR WRX.
 CELOTEX CORP., TYPE 1 OR FRP.
 DOMTAR GYPSUM, TYPES C, 4 OR 9.
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 GOLD BOND BUILDING PRODUCTS AN NATIONAL GYPSUM DIV., TYPES FSW OR FSW-G.
 JAMES HARDIE GYPSUM CORP., TYPE FIRE X.
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 STANDARD GYPSUM CORP., TYPE SGC OR SGC-C.
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 ** BEARING THE UL CLASSIFICATION MARKING

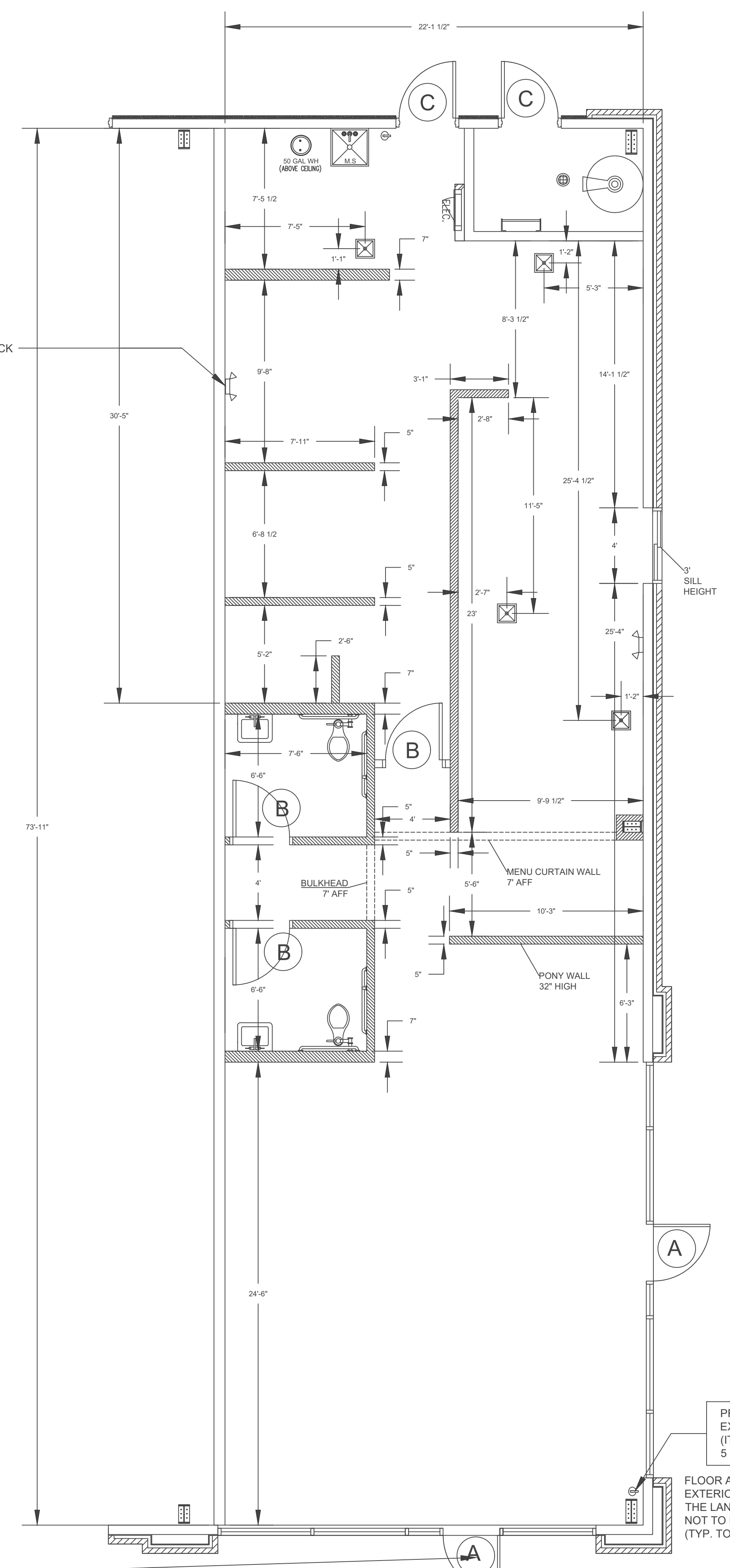
ONE HOUR WALL DESIGN NO. U 465
NTS



TYPICAL INTERIOR WALL SECTION
NTS

THE QUALITY, DESIGN, FABRICATION & ERECTION OF METAL SUSPENSION SYSTEM FOR ACOUSTICAL TILE SHALL COMPLY WITH 2021 IBC SECTION 803.8 THE ACOUSTICAL CEILING MATERIAL SHALL HAVE A MINIMUM FLAME SPREAD OF CLASS B (FLAME SPREAD 26-75, SMOKE DEVELOPED 0-450)

DIRECTIONAL EGRESS LIGHT WALLPACK W/ BATTERY BACKUP (TYP.2)



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

PACIFIC ENGINEERING GROUP
REGISTRATION NUMBER: F9160

NOTE FOR SIGN:
Main front exit doors requiring the use of a key, under IFC 1008.1.8.3, shall have a sign readily visible stating "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED" in one inch letters contrasting background.

PROPOSED PORTABLE FIRE EXTINGUISHERS (TYP. OF 2) (ITS TOP IS NOT HIGHER THAN 5 FT. ABOVE FINISH FLOOR)

FLOOR AND LANDING ON EACH SIDE OF THE EXTERIOR DOOR ARE THE SAME ELEVATION. THE LANDING OUTSIDE MAY HAVE A SLOPE NOT TO EXCEED 2% (TYP. TO EXTERIOR DOOR)

PROJECT:

BEAN & BREWS
20314 FRANZ RD., STE # 500
KATY, TX 77449

DRAWN BY:

MAN TRAN
DATE: JUN/28/2024

CHECK BY:

LOC NGUYEN
DATE: JUN/28/2024



SHEET TITLE:

FLOOR PLAN

SHEET:

A-1

SCALE 1/4" = 1'-0"

FINISH SCHEDULE							
AREA	FLOOR	BASE	WALL	CEILING	GROUT	CEILING HIGH	REMARKS
	CERAMIC TILE LIGHT CREAM	SEAL CONCRETE	EPOXY LIGHT GREY	VINYL LIGHT GREY FLOOR	WOOD MAHOGANY	GREY PLASTIC	
						4" EPOXY LIGHT CREAM	
						48" CERAMIC TILE LIGHT CREAM	
						EPOXY (PAINT)	
						W. P. GYP. BD. WITH WHITE FIBERGLASS REINFORCED PLASTIC FINISH	
						CERAMIC TILE LIGHT CREAM	
						LIGHT CREAM PAINT	
						2X2 BLACK FIBERGLASS/VINYL TILE	
						2X4 WHITE VINYL TILE	
						LIGHT CREAM WITH CLEAR SEAL	
REST ROOM							9'
SEATING AREA							12'
PREP AREA							10'

NOTES:

- DOOR LATCH SHALL RELEASE WHEN SUBJECTED TO A 5-POUNDS FORCE FOR INTERIOR DOOR AND A 8.5-POUNDS FORCE FOR EXTERIOR DOOR FROM INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL FORCE.
- THE LATCH SHALL HAVE THE LEVER AND SHALL BE MOUNTED AT 40 INCHES ABOVE FINISH FLOOR (A.F.F.); EXCEPT AT ACCESSIBLE STALLS WHICH SHALL BE MOUNTED BETWEEN 34 TO 36 INCHES A.F.F.
- ELECT. SWITCHES SHALL BE MOUNTED AT 42 INCHES A.F.F.
- RECEPTACLES ON WALL SHALL BE MOUNTED A MIN. OF 15 INCHES A.F.F.
- PROVIDE SELF-CLOSER FOR RESTROOM & VESTIBULE DOORS.

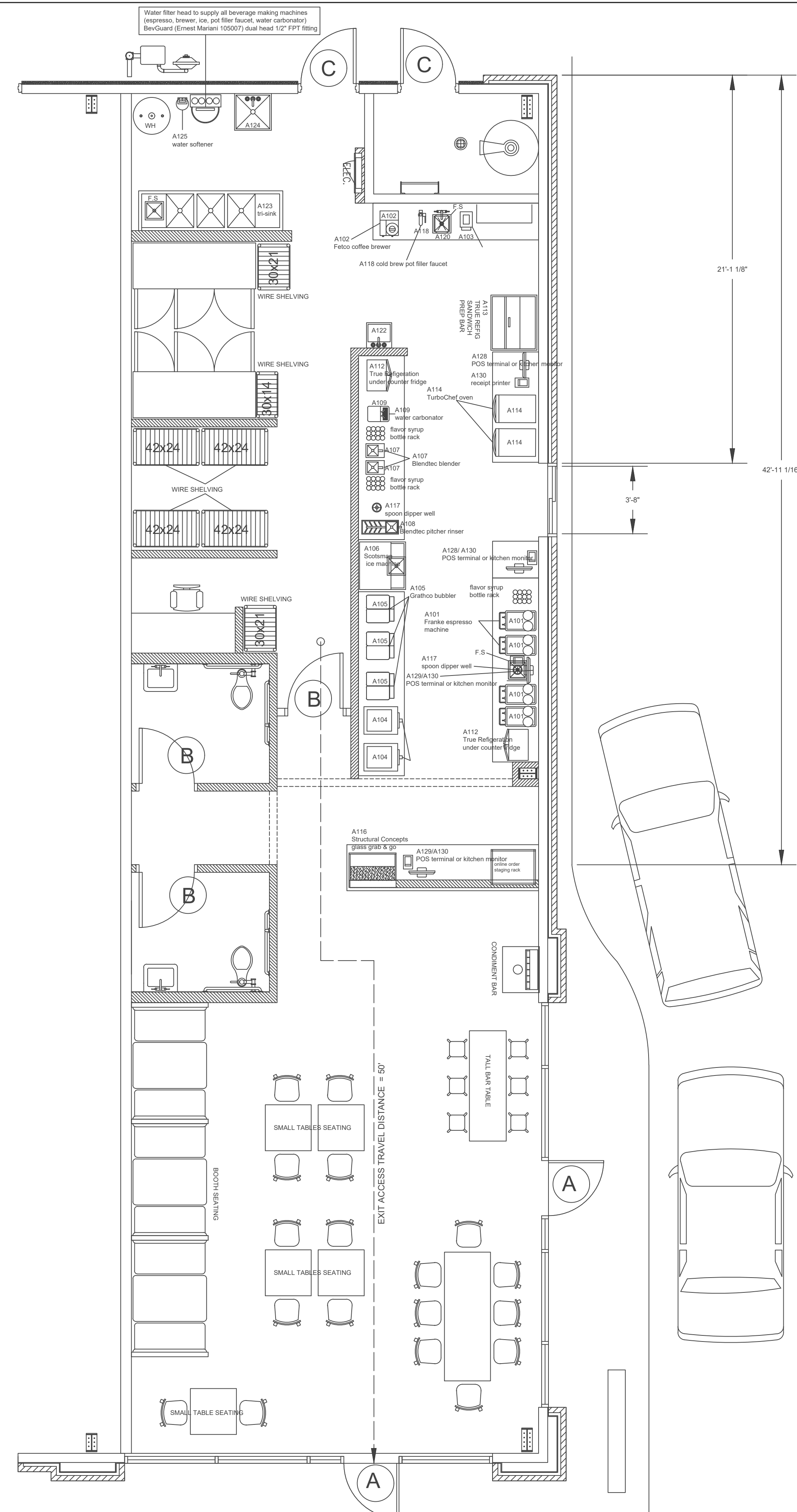
NOTES FOR PANIC & FIRE EXIT HARDWARE:

- THE ACTUATING PORTION OF THE RELEASING DEVICE SHALL EXTEND AT LEAST ONE-HALF OF THE DOOR LEAF WIDTH.
- THE MAXIMUM UNLATCHING FORCE SHALL NOT EXCEED 15 POUNDS APPLIED IN THE DIRECTION OF TRAVEL.

NOTE FOR INTERIOR FINISH:

INTERIOR WALL AND CEILING FINISH SHALL HAVE A FLAME SPREAD INDEX AS FOLLOWINGS:
GROUP E:

- EXIT ENCLOSURES, AND EXIT PASSAGEWAYS: CLASS A WITH FLAME SPREAD INDEX 0-25 AND SMOKE-DEVELOPED 0-450.
- CORRIDORS: CLASS B WITH FLAME SPREAD INDEX 26-75 AND SMOKE-DEVELOPED 0-450.
- ROOMS AND ENCLOSED SPACES: CLASS C WITH FLAME SPREAD 76-200 AND SMOKE-DEVELOPED 0-450.



BEANS FURNITURE, FIXTURES & EQUIPMENT

FLOOR PLAN

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

PACIFIC ENGINEERING GROUP
REGISTRATION NUMBER: F9160

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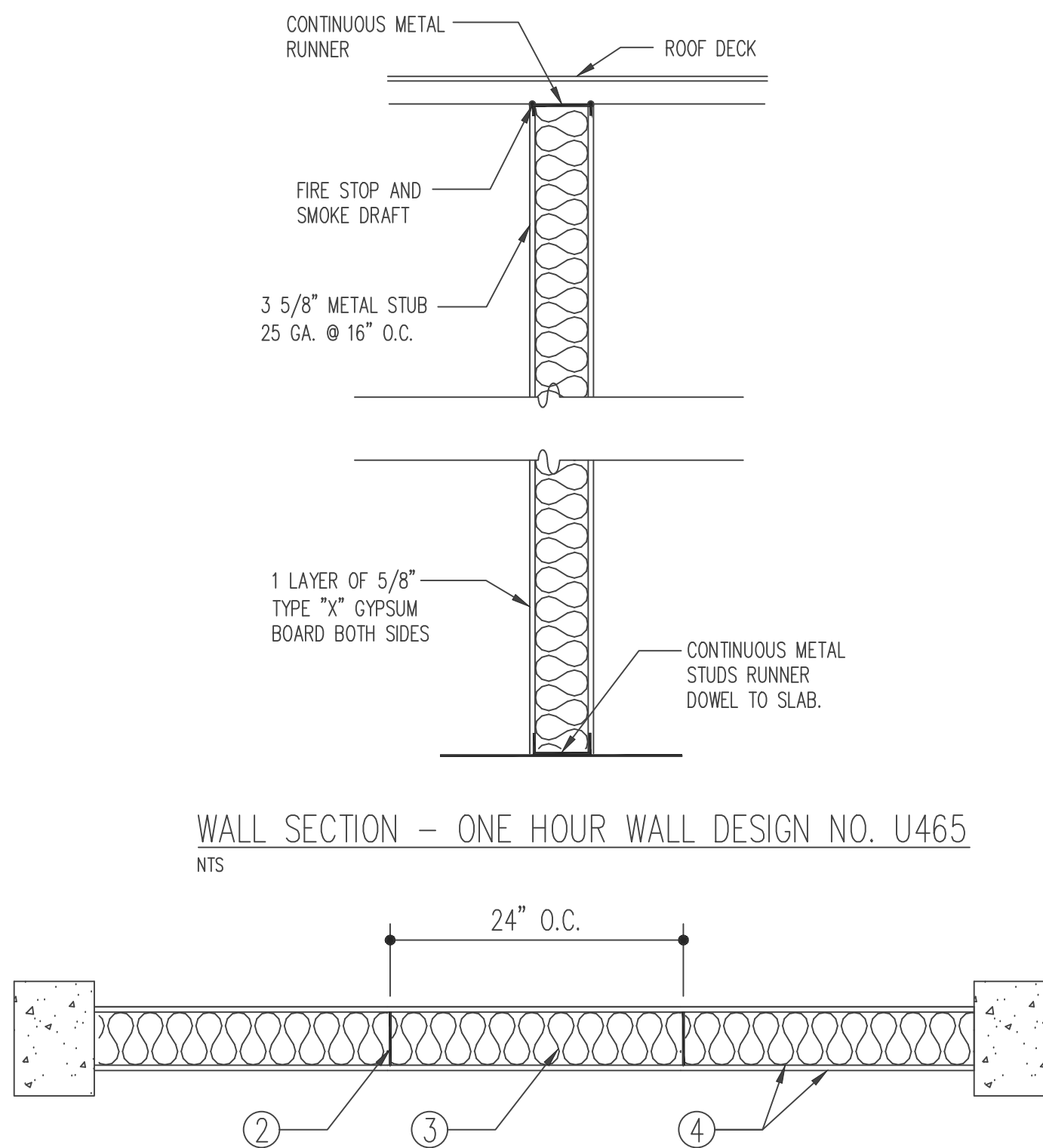
SHEET TITLE:

FLOOR PLAN

SHEET:

A-2

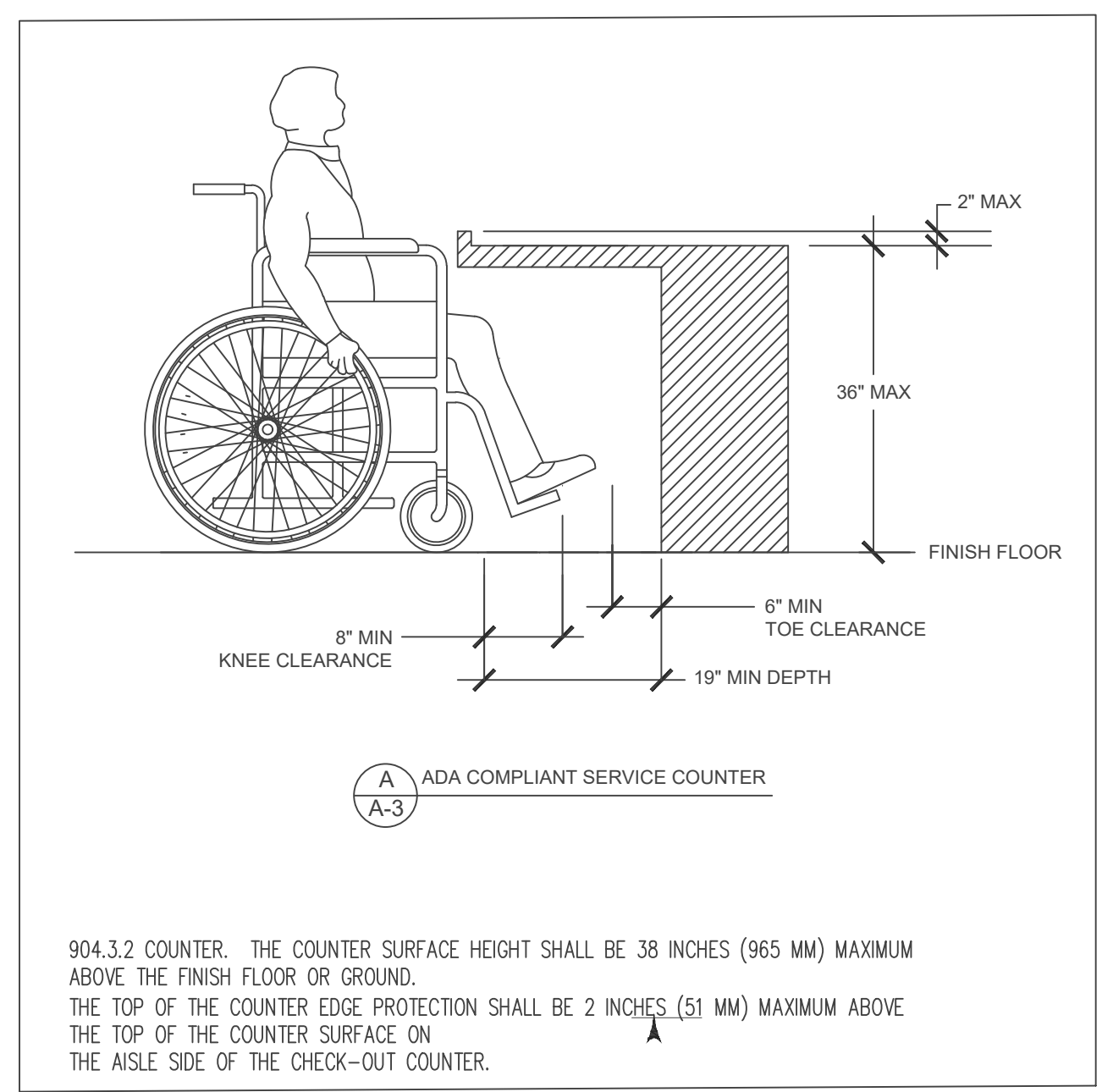
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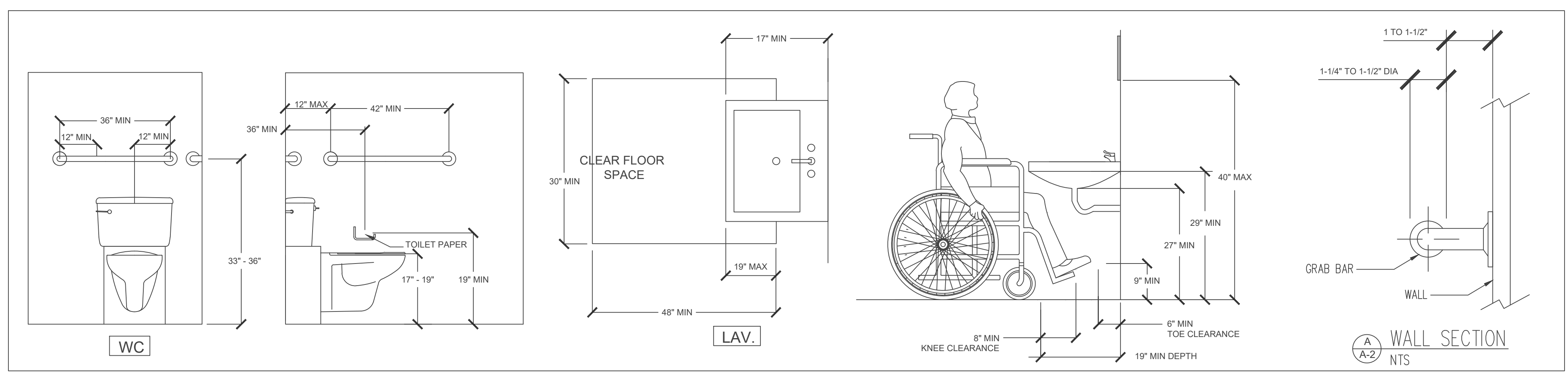
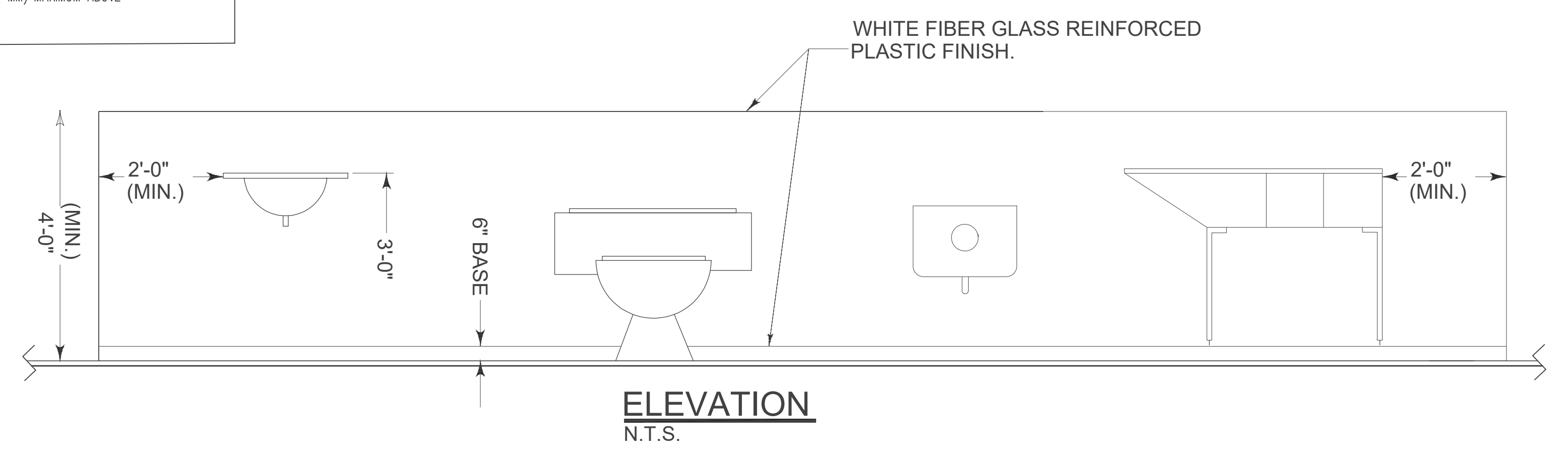
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 ** BEARING THE UL CLASSIFICATION MARKING

ONE HOUR WALL DESIGN NO. U 465
NTS

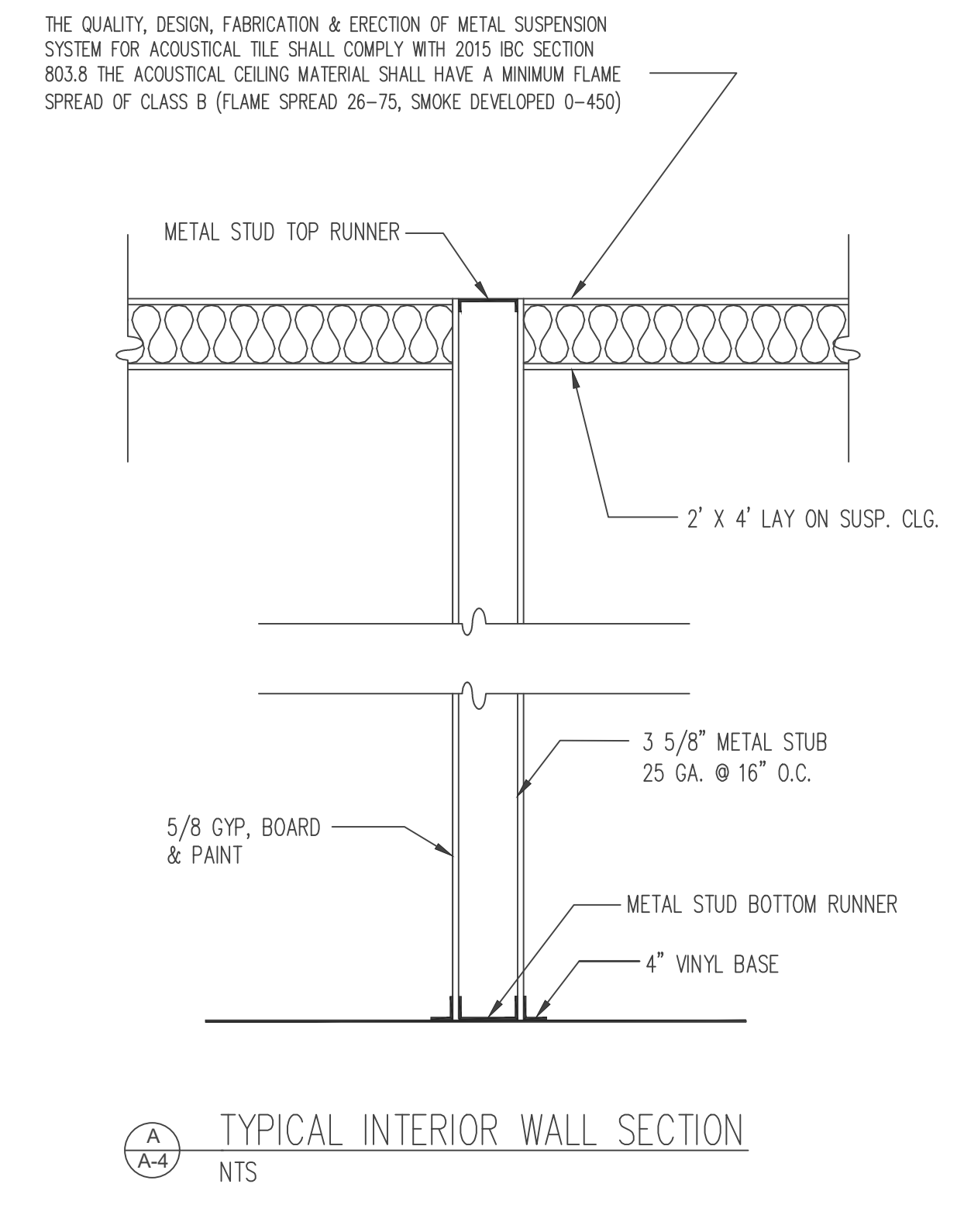
DOOR SCHEDULE						
TYPE	QTY	SIZE	DESCRIPTION	THICKNESS	FRAME	REMARKS & HARDWARES
A	2	36"x 84"	GLASS/METAL	1 3/4"	METAL	TEMP. GLASS DOOR WITH PANIC HARDWARE & SIGN (SEE NOTES ON A-2 OF 12.)
B	3	36"x 96"	8FT SOLID WOOD OR METAL DOOR	1 3/4"		HOLLOW CORE DOOR WITH LATCH (SEE NOTES ON A-2 OF 12.)
C	2	36"x 84"	METAL	1 3/4"	METAL	METAL CORE DOOR WITH PANIC HARDWARE (SEE NOTES ON A-2 OF 12.)



904.3.2 COUNTER. THE COUNTER SURFACE HEIGHT SHALL BE 38 INCHES (965 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.
 THE TOP OF THE COUNTER EDGE PROTECTION SHALL BE 2 INCHES (51 MM) MAXIMUM ABOVE THE TOP OF THE COUNTER SURFACE ON THE AISLE SIDE OF THE CHECK-OUT COUNTER.



HANDICAP RESTROOM DETAILS
N.T.S.



THE QUALITY, DESIGN, FABRICATION & ERECTION OF METAL SUSPENSION SYSTEM FOR ACOUSTICAL TILE SHALL COMPLY WITH 2015 IBC SECTION 803.8 THE ACOUSTICAL CEILING MATERIAL SHALL HAVE A MINIMUM FLAME SPREAD OF CLASS B (FLAME SPREAD 26-75, SMOKE DEVELOPED 0-450)

TYPICAL INTERIOR WALL SECTION
NTS

WALL SECTION
NTS

PACIFIC ENGINEERING GROUP
REGISTRATION NUMBER: F9160

PROJECT:

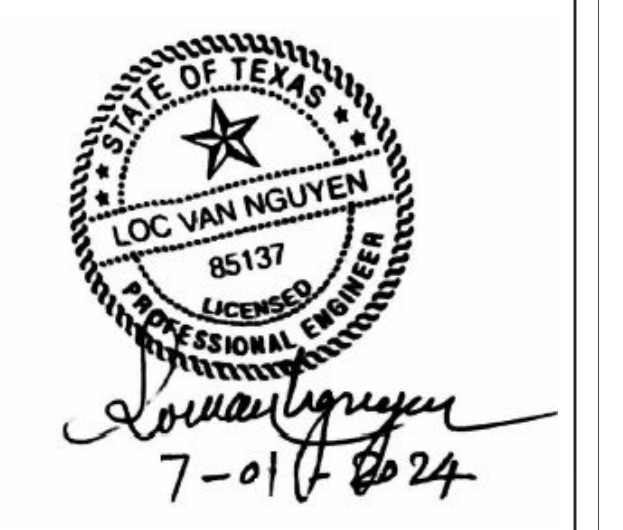
BEAN & BREWS
20314 FRANZ RD., STE # 500
KATY, TX 77449

DRAWN BY:

MAN TRAN
DATE: JUN/28/2024

CHECK BY:

LOC NGUYEN
DATE: JUN/28/2024



SHEET TITLE:

CONSTRUCTION DETAILS

SHEET:

A-3

SCALE 1/4" = 1'-0"

EMERGENCY POWER SUPPLY:

POWER SUPPLY FOR EXIT SIGN AND EMERGENCY LIGHTS SHALL BE PROVIDED BY PREMISES WIRING SYSTEM. IN THE EVENT OF NORMAL POWER FAILURE ILLUMINATION SHALL BE AUTOMATICALLY PROVIDED FROM AN EMERGENCY POWER - BATTERY BACK UP OR FROM AN ON-SITE EMERGENCY GENERATION SET, TO ENSURE CONTINUED ILLUMINATION FOR A DURATION OF NOT LESS THAN 90 MINUTES. PER SECTION 1003.2.10.5, IBC 2021 EDITION.

NOTES:

- 1- MOUNT RECEPTACLES 15" ABOVE FLOOR UNLESS NOTED OTHERWISE.
- 2- EQUAL FIXTURES MAY BE SUBSTITUTED.
- 3- SERVICE RUNS TO BE 5'-0" MINIMUM FROM EDGE OF ROOF.
- 4- CLEARLY LABEL EACH CIRCUIT BREAKER WITH TYPE WRITTEN IND. CARD PERMANENTLY AFFIXED INSIDE PANEL AND EACH DISC. SWITCH WITH PERMANENT PRINTED TAGS.
- 5- ALL WIRING TO BE COPPER.
- 6- ALL ROOF TOP ELECTRICAL CONDUIT LARGER THAN 1" TO BE SUPPORTED ON 4x4 BLOCKING STYROFORM.
- 7- ALL LIGHTING FIXTURES TYPE "A" U.N.O.
- 8- VERIFY EXACT LOCATION OF ROOF TOP A/C UNIT AND "I" STAT WITH MECHANICAL CONTRACTOR.
- 9- VERIFY ELECTRICAL REQUIREMENTS FOR A/C UNITS AND ELECTRICAL HEATER WITH MECHANICAL CONTRACTOR.
- 10- PROJECT ELECTRICAL CONTRACTOR VERIFY LOAD ANALYSIS AND RISER DIAGRAMS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES ERRONEOUS CALCULATIONS OR CODE VIOLATIONS PRIOR OF BIDDING.

NOTES FOR EXIT SIGN & EXIT ILLUMINATION:

- 700 E 09 D EXIT SIGNS CHAPTER 10 I.B.C.
 WHEN TWO OR MORE EXITS ARE REQUIRED FROM A ROOM OR AREA, EXIT SIGNS SHALL BE INSTALLED AT THE REQUIRED EXITS FROM THE ROOM OR AREA AND WHERE OTHERWISE NECESSARY TO CLEARLY INDICATE THE DIRECTION OF EGRESS. SIGN SHALL BE INTERNALLY ILLUMINATED BY TWO ELECTRIC LAMPS OR SHALL BE OF AN APPROVED SELF-LUMINOUS TYPE. WHEN LUMINANCE ON THE FACE OF AN EXIT SIGN IS FROM AN EXTERNAL SOURCE, IT SHALL BE HAVE AN INTENSITY OF NOT LESS THAN "5" FOOT CANDLES FROM EITHER LAMP. INTERNALLY ILLUMINATED SIGNS SHALL PROVIDED EQUIVALENT EXIT ILLUMINATION. POWER SUPPLY FOR EXIT SIGNS SHALL NORMALLY BE PROVIDED BY PREMISE WIRING SYSTEM. IN THE EVENT OF NORMAL POWER FAILURE ILLUMINATION SHALL BE AUTOMATICALLY PROVIDED FROM AN EMERGENCY POWER: BATTERY BACK UP OR FROM AN ON-SITE EMERGENCY GENERATION SET, FOR ALL GROUP 1 DIV. 1.1 & 1.2 OCCUPANCIES, AND ALL OTHER OCCUPANCIES WHERE THE EXITING SYSTEM SERVE AN OCCUPANT LOAD OF 100 OR MORE.
 - 700 E 09 E EXIT ILLUMINATION.
 CHAPTER 10: EXIT ILLUMINATION SHALL BE WITH LIGHT HAVING INTENSITY NOT LESS THAN ONE (1) FOOT-CANDLE AT FLOOR LEVEL. THE POWER SUPPLY FOR EXIT ILLUMINATION SHALL NORMALLY BE PROVIDED BY THE PREMISES WIRING SYSTEM. IN THE EVENT OF ITS FAILURE, ILLUMINATION SHALL BE AUTOMATICALLY PROVIDED FROM AN EMERGENCY SYSTEM. EMERGENCY SYSTEMS SHALL BE SUPPLIED FROM STORAGE BATTERIES OR AN ON-SITE GENERATOR SET, FOR ALL GROUP 1 DIV. 1.1 AND 1.2 OCCUPANCIES, ALL OTHER OCCUPANCIES WHERE EXISTING SYSTEM SERVE AN OCCUPANT LOAD OF 100 OR MORE. CHAPTER 10 I.B.C. LIGHTING LAYOUT MUST SHOW LIGHT FIXTURES THAT ARE TO BE DESIGNATED FOR EGRESS ILLUMINATION. IN MULTI-STORY BUILDINGS WITH ENCLOSED STAIRWAYS, THERE MUST BE EXIT ILLUMINATION IN THE STAIRWAYS. EXIT ILLUMINATION IS A CONTINUOUS AND UNOBSTRUCTED MEANS OF EGRESS TO A PUBLIC WAY.

NOTES FOR OUTLET REQUIRED AT A/C UNIT & HEATING UNIT:

1- ARTICLE 210.63 OF THE N.E.C. REQUIRES A 125 VOLT, SINGLE PHASE, 15 OR 20 AMPERES-RATED RECEPTACLE OUTLET SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING, AIR-CONDITIONING, AND REFRIGERATION EQUIPMENT. THE RECEPTACLE SHALL BE LOCATED ON THE SAME LEVEL WITHIN 25 FT. OF HEATING, AIR-CONDITIONING, AND REFRIGERATION EQUIPMENT.

2- ARTICLE 210.8 REQUIRES A RECEPTACLE TO BE GFCI PROTECTED.

3- ARTICLE 440.11 & 440.14 REQUIRE A DISCONNECTING MEANS.

NOTES FOR ENERGY CONSERVATION:

SPACE CONTROL

EACH SPACE ENCLOSED BY CEILING-HEIGHT PARTITION SHALL HAVE AT LEAST ONE CONTROL DEVICE TO INDEPENDENTLY CONTROL THE GENERAL LIGHTING WITH THE SPACE. EACH MANUAL DEVICE SHALL BE READILY ACCESSIBLE AND LOCATED SO THE OCCUPANTS CAN SEE THE CONTROLLED LIGHTING.

(A) A CONTROL DEVICE SHALL BE INSTALLED THAT AUTOMATICALLY TURNS LIGHTING OFF WITHIN 30 MINUTES OF ALL OCCUPANTS LEAVING A SPACE.

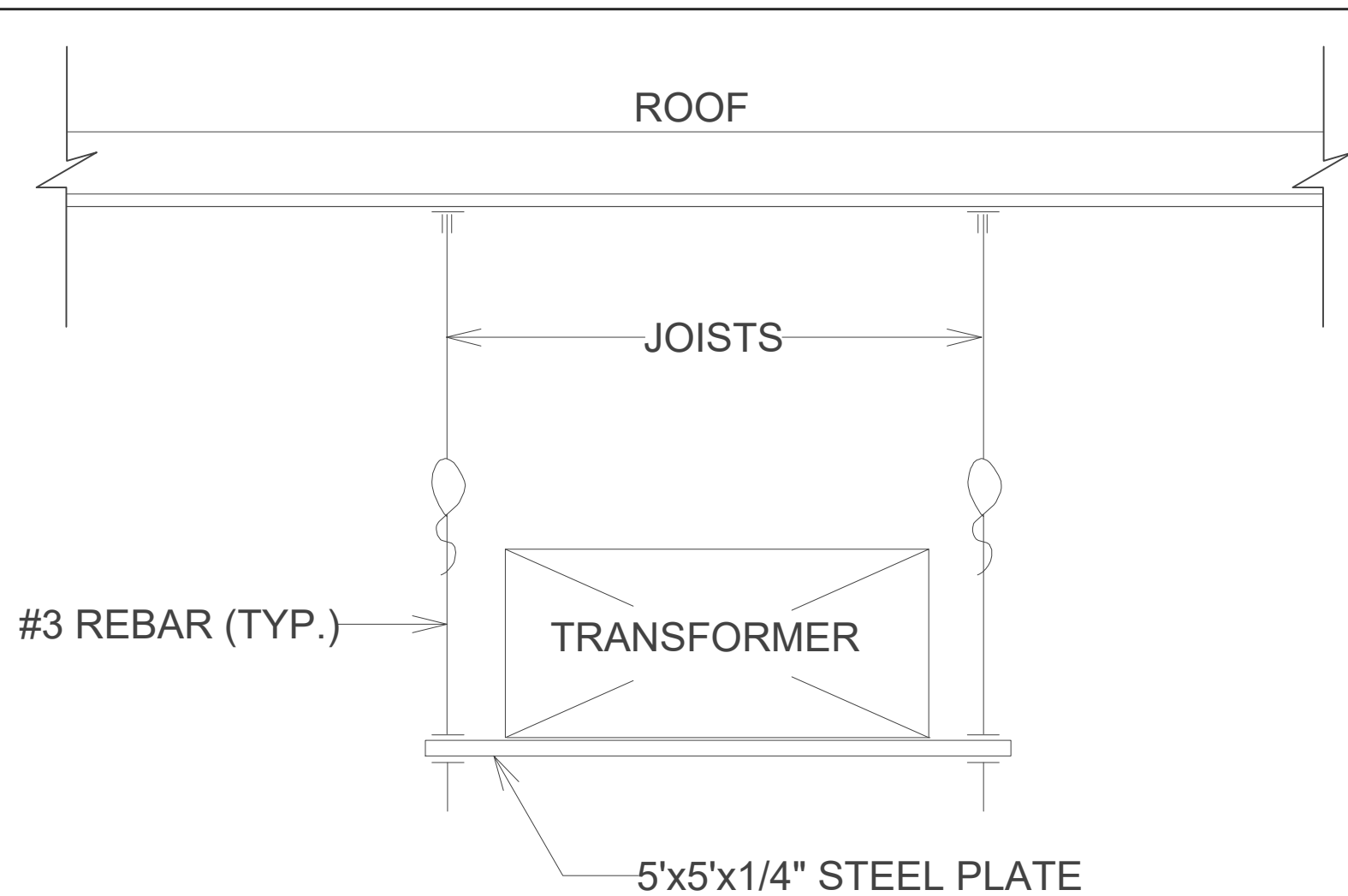
EXCEPTION TO 9.4.1.2(A): CLASSROOMS, CONFERENCE/MEETING ROOMS, AND EMPLOYEE LUNCH AND BREAKROOMS WITH BI-LEVEL SWITCHING.

(B) EACH CONTROL DEVICE SHALL BE ACTIVATED EITHER MANUALLY BY AN OCCUPANT OR AUTOMATICALLY BY SENSING AN OCCUPANT. EACH CONTROL DEVICE SHALL CONTROL A MAXIMUM OF 25,000 SQUARE FEET AREA FOR A SPACE 10,000 SQUARE FEET OR LESS AND A MAXIMUM OF 10,000 SQUARE FEET AND BE CAPABLE OF OVERRIDING AN TIME-OF-DAY SCHEDULE SHUT OFF CONTROL FOR NO MORE THAN FOUR HOURS.

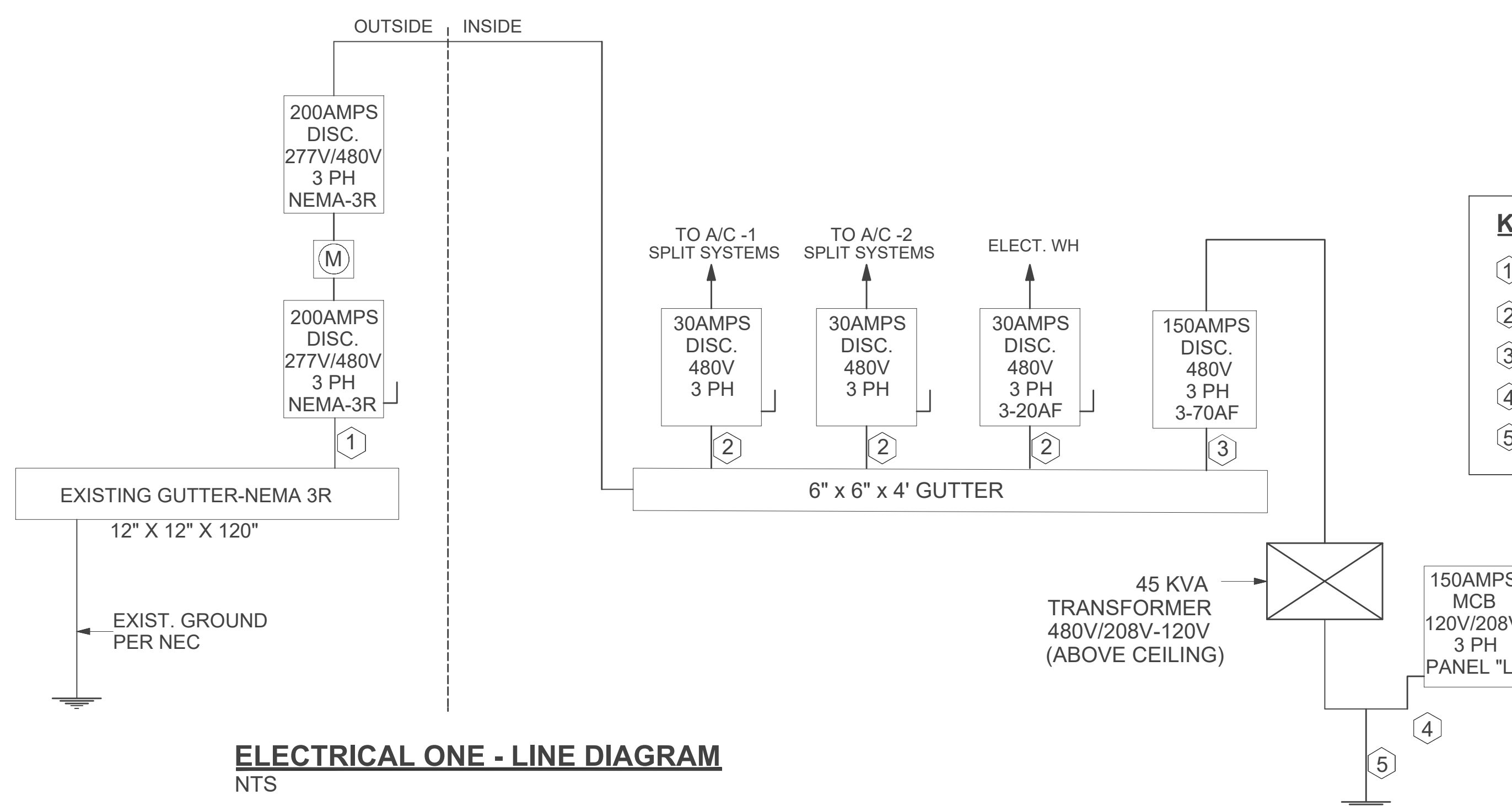
EXCEPTION TO 9.4.1.2 (B): REMOTE LOCATION SHALL BE PERMITTED FOR REASONS OF SAFETY OR SECURITY WHEN THE REMOTE CONTROL DEVICE HAS AN INDICATOR PILOT LIGHT AS PART OF OR NEXT TO CONTROL DEVICE AND THE LIGHT IS CLEARLY LABELED TO IDENTIFY THE CONTROLLED LIGHTING.

ELECTRICAL LEGEND	
	RECESSED DOWN LIGHT
	110V RECEPTACLE OUTLET
	DUPLEX RECEPTACLE CEILING OUTLET
	SINGLE POLE SWITCH
	2-WAY SWITCH
	240V RECEPTACLE OUTLET
	SMOKE DETECTOR (CARBON MONOXIDE ALARM) W/BATTERY BACKUP
	CEILING FAN
	EXHAUST FAN
	EMERGENCY LIGHT WITH BATTERY BACK UP
	EXIT LIGHT WITH BATTERY BACK UP
	DIRECTIONAL EXIT LIGHT W/ EGRESS LIGHTS AND BATTERY BACKUP
	DIRECTIONAL EGRESS LIGHT WALLPACK W/ BATTERY BACKUP

*** ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE OUTLETS WILL INSTALLED IN THIS ROOM WILL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER (AFCI)



TRANSFORMER ABOVE CEILING DETAIL
N.T.S.



ELECTRICAL ONE - LINE DIAGRAM
NTS

KEYED NOTES:

- ① 4 # 3/0 THWN, 1 1/4" CONDUIT
- ② 3 #10 , 1 # 12 THWN, 3/4" CONDUIT
- ③ 3 # 6 THWN, 1 #10 G, 3/4" CONDUIT
- ④ 4 # 1/0 THWN, 1 #4 G, 1-1/4" CONDUIT
- ⑤ 1 # 8 CU TO GROUNDING ROD &

PACIFIC ENGINEERING GROUP
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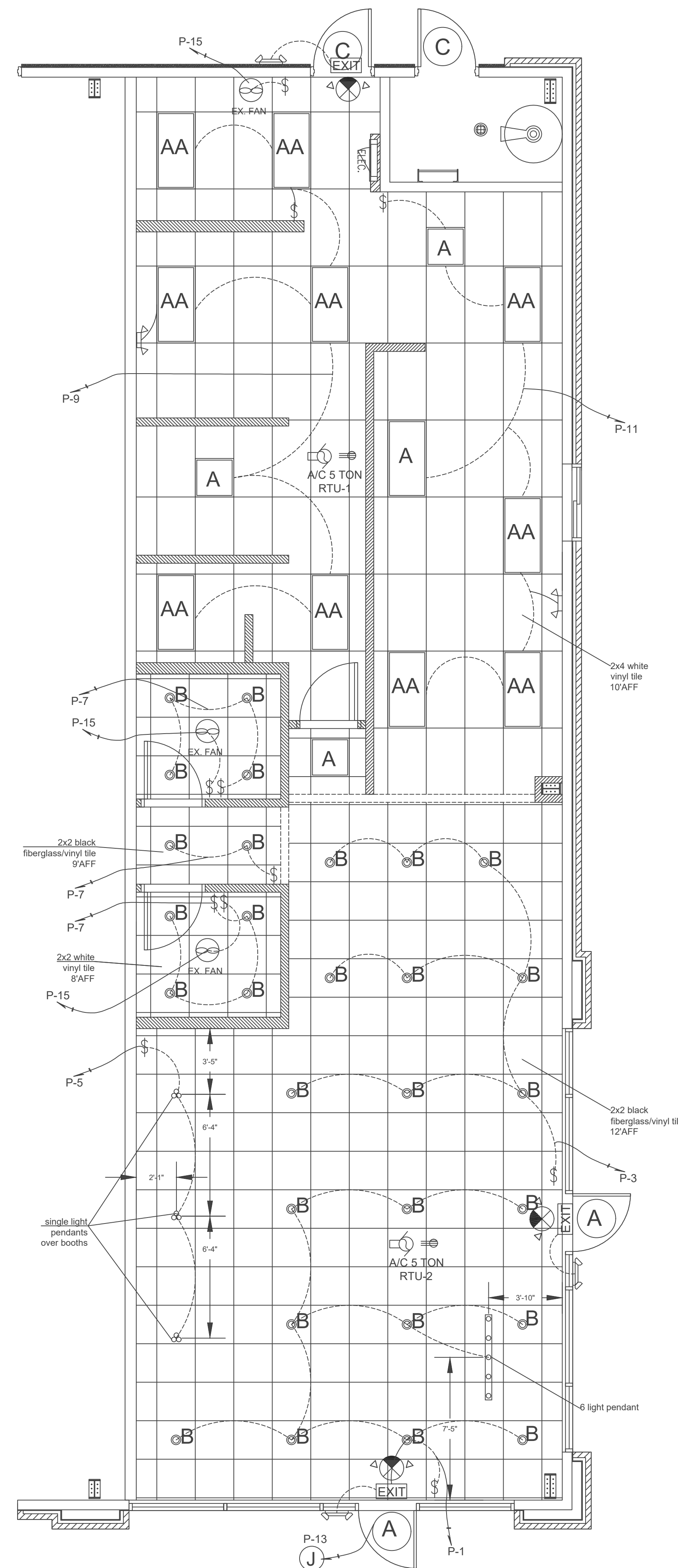
ELECTRICAL PLAN 1

SHEET:

E-1

SCALE 1/4" = 1'-0"

LIGHT FIXTURE SCHEDULE			
TYPE	MANUFACTURE & MODEL	NO, SIZE & TYPE OF LAMP	REMARKS
AA	METALUX 2 GC - 332 A	(3) 32 W F 32 T8 - 120 V	2' x 4' RECESSED GRID TROFFER
A	METALUX 2 GC - 332 A	(3) 32 W F 32 T8 - 120 V	2' x 2' RECESSED GRID TROFFER
B	LED RECESSED DOWNLIGHT (All recessed lights are dimmers)	120V, 27.6Watts, .2amps	LED LIGHT
C	SINGLE LIGHT PENDANTS OVER BOOTHS	120V, 27.6Watts, .2amps	LED LIGHT
EXIT	EXIST LIGHT LITHONIA 120/277 EL.	5 W - 120/277 V	EXIST LIGHT ABOVE DOOR LEVEL WITH BATTERY BACK-UP SHALL BE MAINTAINED THE LOAD FOR A PERIOD OF 1-1/2 HOURS MINIMUM
D	EMERGENCY LIGHT LITHONIA MU2E6 120/277 EL.	5 W - 120 V	EMERGENCY LIGHT WITH BATTERY BACK-UP SHALL BE MAINTAINED THE LOAD FOR A PERIOD OF 1-1/2 HOURS MINIMUM



LIGHTING PLAN

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

PACIFIC ENGINEERING GROUP
REGISTRATION NUMBER: F9160

PROJECT:

BEAN & BREWS
20314 FRANZ RD., STE # 500
KATY, TX 77449

DRAWN BY:

MAN TRAN
DATE: JUN/28/2024

CHECK BY:

LOC NGUYEN
DATE: JUN/28/2024



SHEET TITLE:

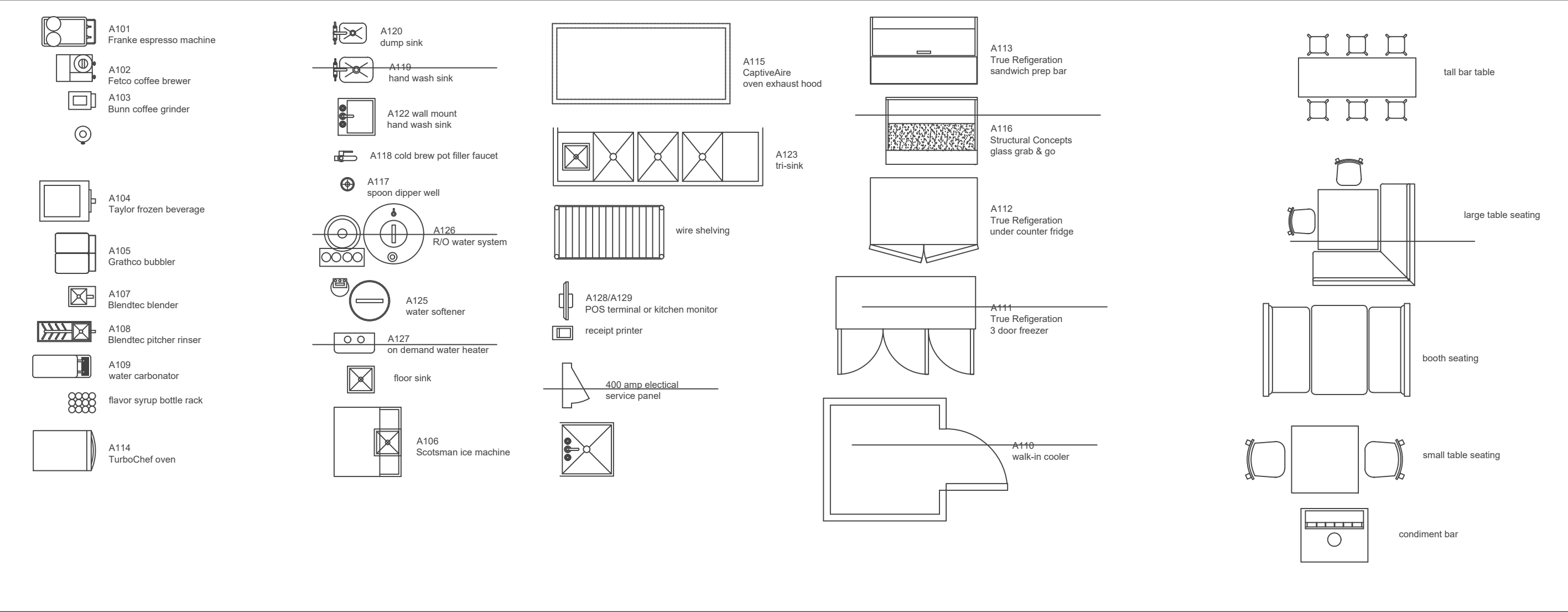
LIGHTING PLAN

SHEET:

E-2

SCALE 1/4" = 1'-0"

BEANS FURNITURE, FIXTURES & EQUIPMENT



PANEL "L"

SERVICE : 120V / 208V - 3PH - 4W
 MAINS : 150 AMPS - MCB
 CABINET: SURFACE MOUNTED

LOAD	VA	WIRE	BRK
LIGHTING	4,800	12	20
SIGN	1,200		
EXHAUST FANS (3 UNITS)	540		
RECEPTACLES	2,520		
POS REGS.(3X)	540		
COFFEE BREWING	1,200		
BUNN COFFEE	1,200		
COLD BREW POT	1,200		
TURBOCHEF OVEN	1,200		
TURBOCHEF OVEN	1,200		
SANDWICH PREP BAR	2,400		
4X ESPRESSO MACHINE	2,400		
3X GRATHCO BUBBLER	1,800		
WATER CARBONATOR	1,200		
WATER SOFTENER	1,200		

PANEL "H"

MAINS : 200 AMPS - MLO
 4 WIRE COPPER

LOAD	VA	WIRE	BRK
TRANS / 60A			
WH / 20A			
2X TAYLOR FROZEN BEV.	1,200		
REFIG. UNDER COUNTER	1,080		
2X BLENDTEC BLENDER	1,200		
BLENDTEC PITCHER RINSER	600		
SCOTSMAN ICE MACHINE	1,800		
FREEZER			
FREEZER			
USB OFFICE			
OFFICE			
OFFICE			
OFFICE			
OFFICE			
TV OUTLETS			
under counter fridge			
POS / PRINTER			
SPARE			
under counter fridge			
ice machine			
SPARE			
SPARE			

TOTAL LOAD: 36,000 KVA

NOTE:
 NO SINGLE POLE BREAKERS ARE TO BE CONNECTED TO THE HI-LEG.

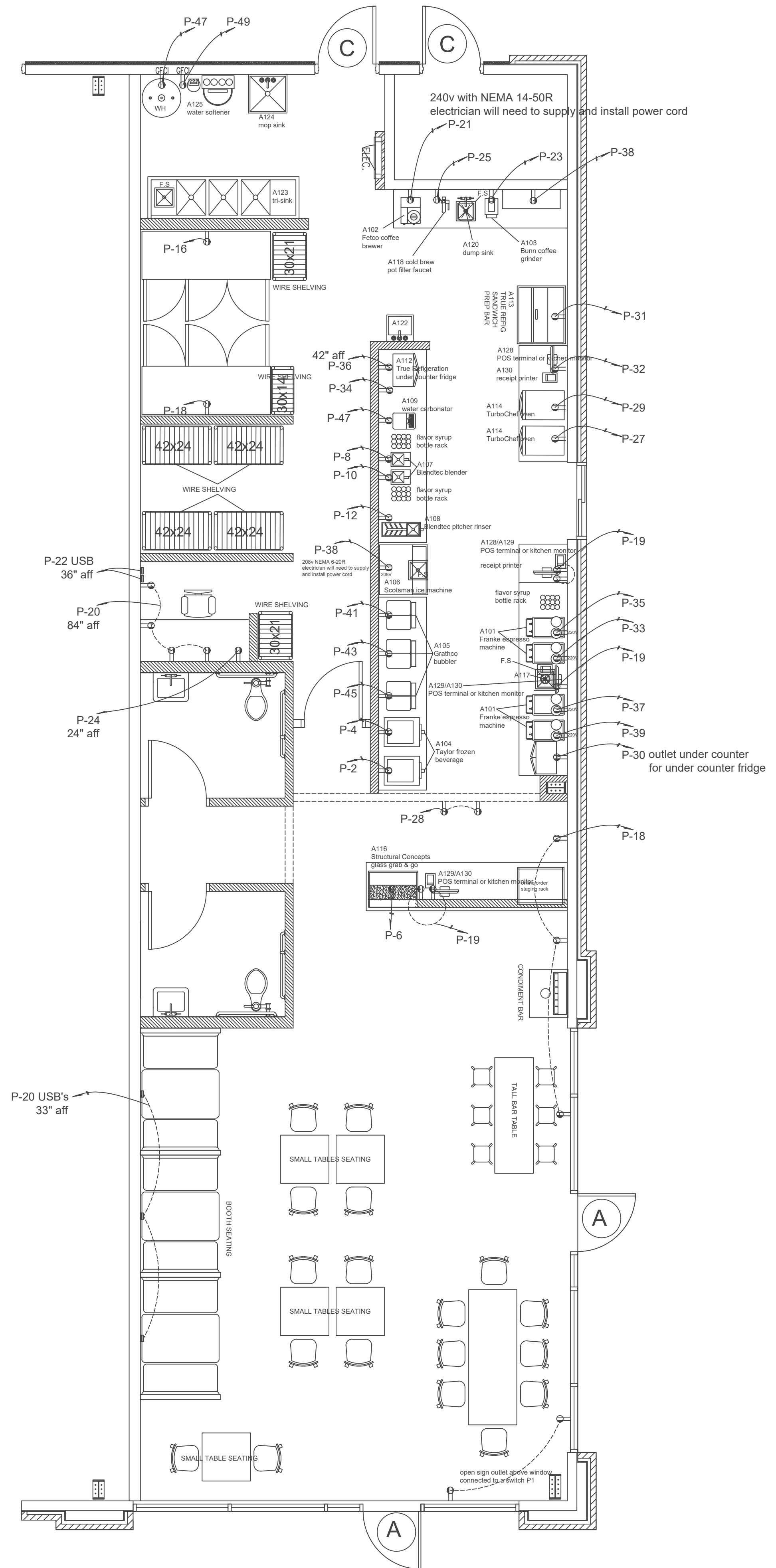
SERVICE:

	A	B	C	N
A/C (OMIT), HEATER = 10 KW @ 480 V - 3PH: 2 UNITS (5 TON) 10,000 VA -- 480√3 V	24.20	24.20	24.20	-
TRANSFORMER = 45 KVA @ 480 V - 3 PH 45,000 VA -- 480√3 V	54.15	54.15	54.15	-
TOTAL:	78.38	78.38	78.38	-

TRANSFORMER CALCULATIONS:

GENE. LIGHTING	= 1,600 SF x 3.00 VA	= 4,800 VA
SIGN		= 1,200 VA
EXHAUST FAN (R/R)	1.50 x 120v x 3	= 540 VA
SIGN		= 1,200 VA
EXHAUST FANS (3 UNITS)		= 540 VA
RECEPTACLES	35 X 180	= 6,300 VA
POS REGS.(3X)		= 540 VA
COFFEE BREWING		= 1,200 VA
BUNN COFFEE		= 1,200 VA
COLD BREW POT		= 1,200 VA
2X TURBOCHEF OVEN		= 2,400 VA
SANDWICH PREP BAR		= 2,400 VA
4X ESPRESSO MACHINE		= 2,400 VA
3X GRATHCO BUBBLER		= 1,800 VA
2X TAYLOR FROZEN BEV.		= 1,200 VA
REFIG. UNDER COUNTER		= 1,080 VA
2X BLENDTEC BLENDER		= 1,200 VA
BLENDTEC PITCHER RINSER		= 600 VA
WATER CARBONATOR		= 1,200 VA
WATER SOFTENER		= 1,200 VA
SCOTSMAN ICE MACHINE		= 1,800 VA
TOTAL:		36,000 VA

TRANSFORMER SIZE : 45 KVA @ 480 V - 3 PH. PRI.
 & 120V / 208 V - 3 PH. SEC.



POWER PLAN

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

PACIFIC ENGINEERING GROUP
 REGISTRATION NUMBER: F9160

BEAN & BREWS
 20314 FRANZ RD., STE # 500
 KATY, TX 77449

PROJECT:

DRAWN BY:

MAN TRAN
 DATE: JUN/28/2024

CHECK BY:

LOC NGUYEN
 DATE: JUN/28/2024



SHEET TITLE:

POWER PLAN

SHEET:

E-3

SCALE 1/4" = 1'-0"

BEAN & BREWS
 20314 FRANZ RD., STE # 500
 KATY, TX 77449

PROJECT:

DRAWN BY:

MAN TRAN
 DATE: JUN/28/2024

CHECK BY:

LOC NGUYEN
 DATE: JUN/28/2024



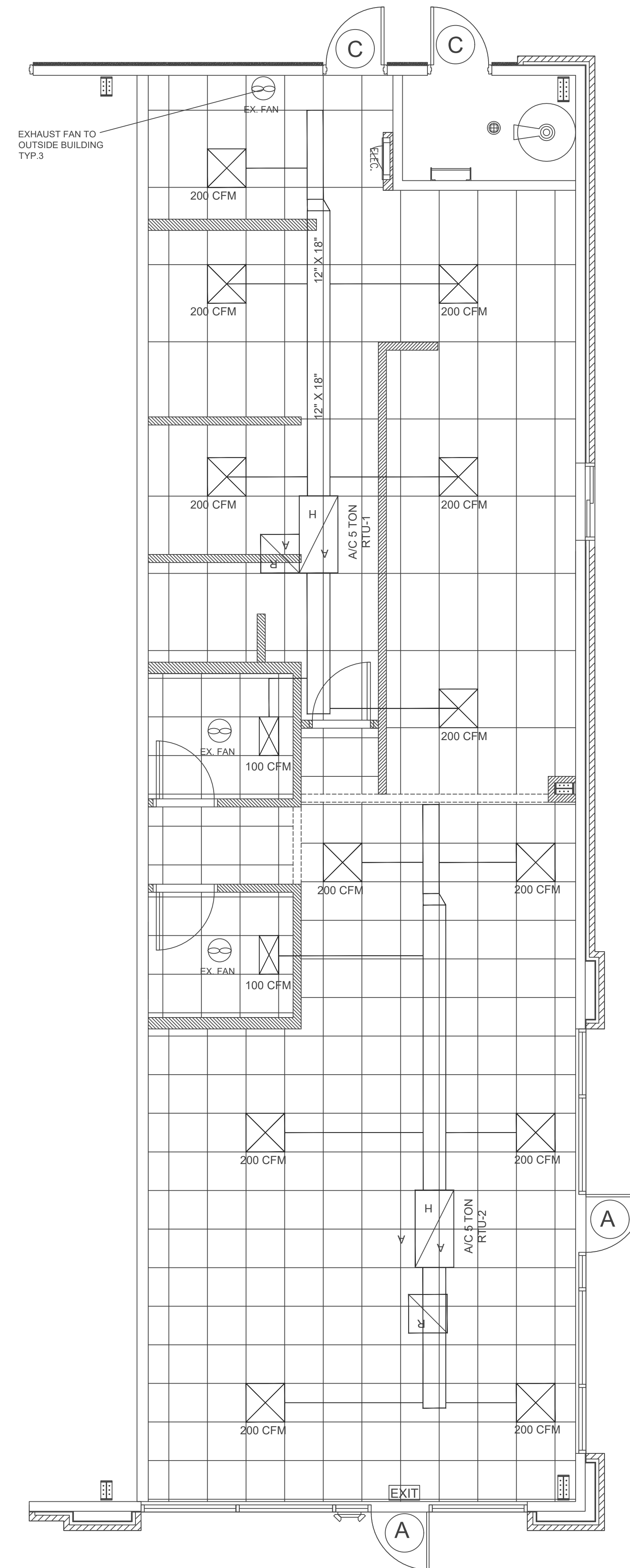
SHEET TITLE:

MECHANICAL
 PLAN

SHEET:

M-1

SCALE 1/4" = 1'-0"



HVAC EQUIPMENT SCHEDULE

EQUIP. (DIA.)	MODEL	COOL (BTU)	HEAT (KVA)	TON	ELECTRICAL	CFM	REMARKS	OUTDOOR AIR INTAKE
A/C RTU1	CARRIER OR EQUIV.	60,000	6.25	5	480V/3/60	3,000	500 CFM OUTDOOR AIR	8"
A/C RTU2	CARRIER OR EQUIV.	60,000	6.25	5	480V/3/60	3,000	500 CFM OUTDOOR AIR	8"
EF-1	BROAN OR EQUIV.				120V/1/60	100/EA		4"
EF-2	BROAN OR EQUIV.				120V/1/60	100/EA		4"
EF-3	BROAN OR EQUIV.				120V/1/60	100/EA		4"

*** HVAC HEAT MAX IS 40 AMPS.

MECHANICAL PLAN

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

PACIFIC ENGINEERING GROUP
 REGISTRATION NUMBER: F9160

ES-LF909S

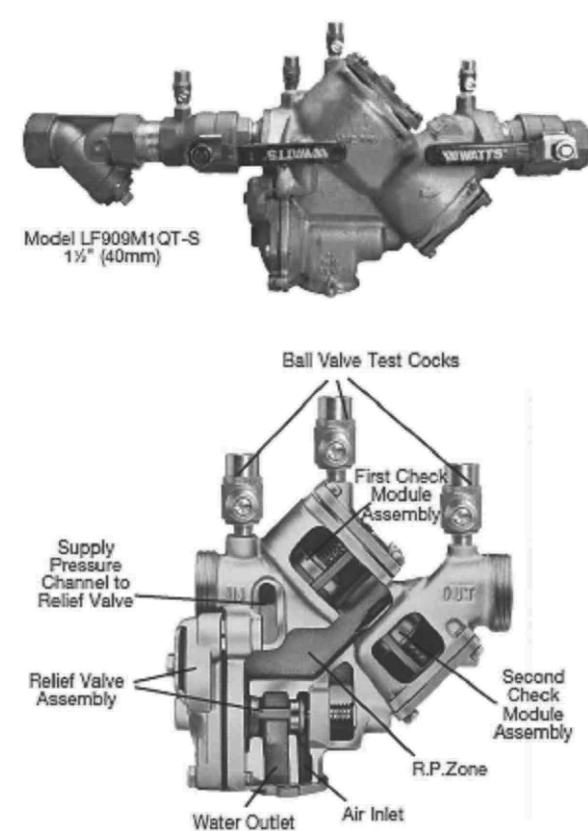
For Health Hazard Applications

Job Name _____ Contractor _____
 Job Location _____ Approval _____
 Engineer _____ Contractor's P.O. No. _____
 Approval _____ Representative _____

LEAD FREE
Series LF909
 Reduced Pressure Zone Assemblies

LF909 Sizes: 1/2", 1" (20, 25mm)
 LF909M1 Sizes: 1/2", 1 1/4", 2" (32, 40, 50mm)

Series LF909 Reduced Pressure Zone Assemblies are designed to provide superior cross-connection control protection of the potable water supply in accordance with national plumbing codes and containment control for water authority requirements. This series can be utilized in a variety of installations, including health hazard cross-connections in plumbing systems or for containment at the service line entrance. The LF909 features Lead Free construction to comply with Lead Free installation requirements. With its exclusive design incorporating the "air-in-washer-out" principle it provides maximum relief valve discharge during the emergency condition of combined backpressure and backflow. The assembly includes both check valves. Model LF909OT, standardly furnished with full port, resilient seated and Lead Free cast copper silicon alloy ball valve shutoffs. Sizes 1/2" and 1" (20 and 25mm) shutoffs have two handles.



Now Available
WattsBox Insulated Enclosures.
 For more information, send for literature ES-WB.

- Features**
- Modular design
 - Replaceable seats
 - Compact for installation ease
 - Horizontal or vertical (up or down) installation on limited sizes only
 - No special tools required for servicing

Specifications

A Reduced Pressure Zone Assembly shall be installed at each cross-connection to prevent backflow and backpressure of hazardous materials into the potable water supply. The assembly shall consist of a pressure differential relief valve located in a zone between two positive sealing check valves. Backpressure protection shall include provision to admit air directly into the reduced pressure zone via a separate channel from the water discharge channel, or directly into the supply pipe via a separate vent. The assembly shall be constructed using Lead Free cast copper silicon materials. The Lead Free reduced pressure zone assembly shall comply with state codes and standards, where applicable, requiring reduced lead content. The assembly shall include two tightly closing shutoff valves before and after the assembly, test cocks and a protective strainer upstream of the No. 1 shutoff valve. The assembly (specify Model LF909 for temperatures up to 140°F (60°C) or Model LF909HW for temperatures up to 210°F (99°C)) shall meet the requirements of ASSE Std. 1013, AWWA Std. C-511-02, CSA B64.4, FCOCHR of USC Manual Section 10, Listed by IAPMO cUPC, SBCCI (Standard Plumbing code). The assembly shall be a Watts LF909OT or LF909M1-HW.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

NOTE

The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



Models

QT Quarter-turn ball valves
 S Bronze strainer
 HW Stainless steel check modules for hot and harsh water conditions

NOTICE

The installation of a drain line is recommended. When installing a drain line, an air gap is necessary.

Materials

Body: Lead Free* Cast Copper Silicon Alloy
 Check Seats: 900 Calor®
 Relief Valve Seats: Stainless Steel 900HW
 Test Cocks: Lead Free* Cast Copper Silicon Alloy
 *Calor® is a registered trademark of Calor, Limited

Connections

1/2" - 1" (10 - 25mm) 900-NPT Female threaded body connection
 1/4" - 2" (32 - 50mm) 900-M1-NPT Male threaded body connection

Standards

AWWA C-511-02
 FCOCHR of USC Manual Section 10
 IAPMO cUPC, SBCCI (Standard Plumbing code)
 Tested and Certified by NSF International

Approvals

Listed by IAPMO
 1013 ASSE
 Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California. (QT and S Models)
 Vertical "flow-up" approval only on 1/2" (20mm) and 1" (25mm) sizes (Model LF909OT).

Dimensions - Weights

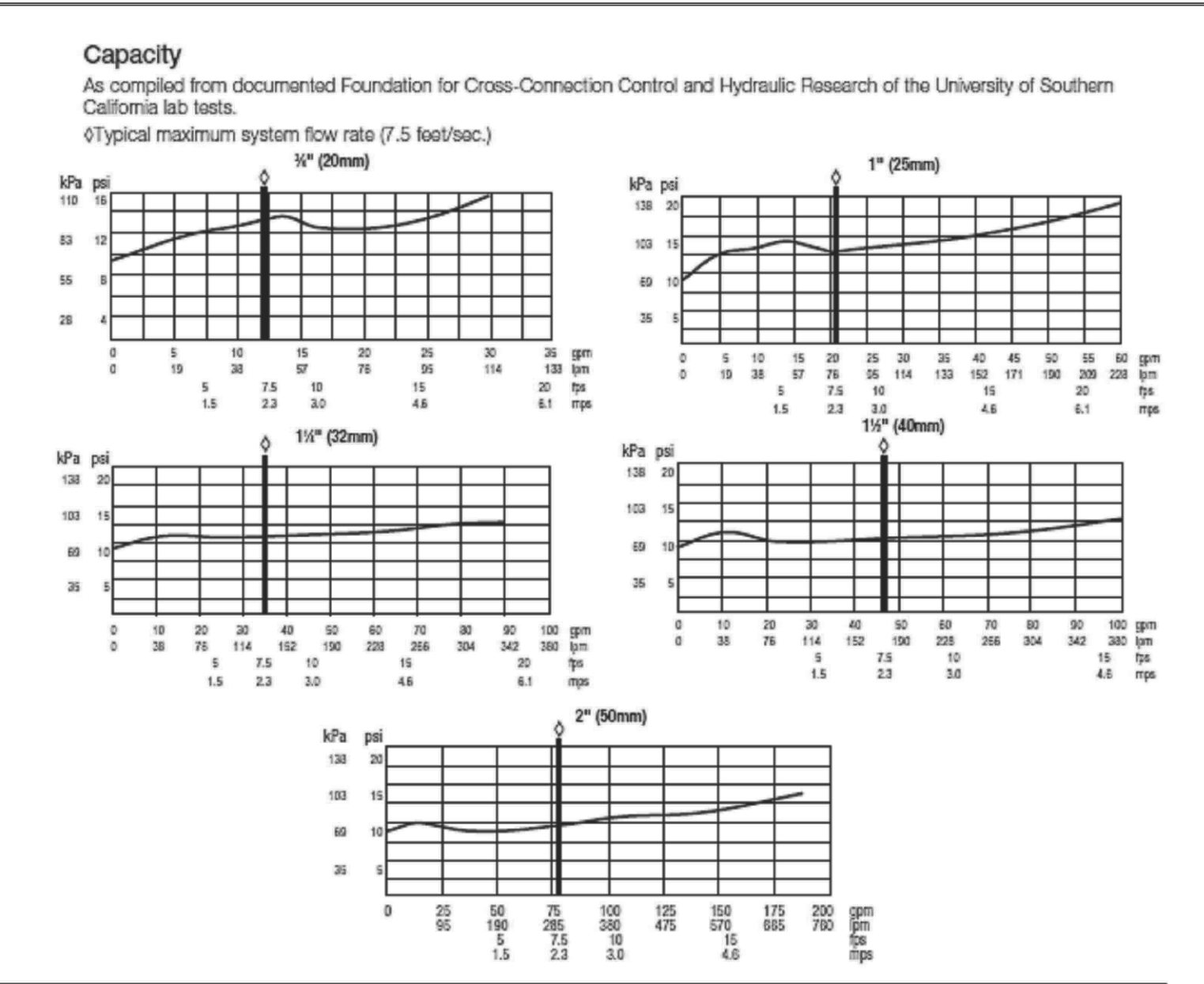
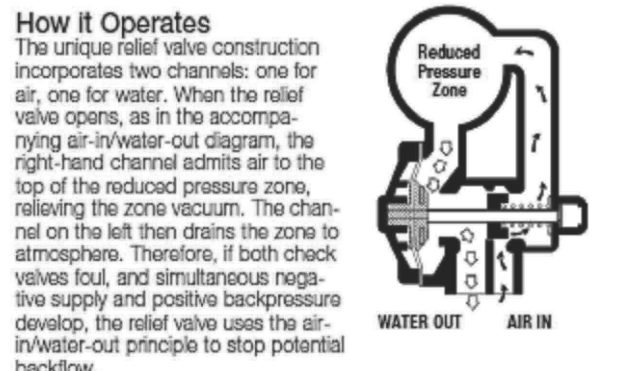
When installing a drain line use 900AG series Air Gaps on Series 900 backflow preventers. 1100EL series air gaps are for air gaps on backflow preventers in vertical installations.

Series 900AG Air Gaps

Size (in)	Size (mm)	NO. OF PORTS		DIMENSIONS		WEIGHTS		
		A	B	A	B	Net	Gross	
1/2"	12.7	1	2	1.25	3.1	0.5	1.2	1.7
900AG-C	Air Gap	1/2"	1.25	3.1	0.5	1.2	1.7	
900AG-E	Elbow	1/2"	1.25	3.1	0.5	1.2	1.7	
900AG-F	Air Gap	1/2"	3.2	2.5	4.4	1.1	1.7	1.5
900AG-F	Elbow	1/2"	3.2	2.5	4.4	1.1	1.7	1.5

Pressure - Temperature

Temperature Range: 33°F - 140°F (0.5°C - 60°C) continuous, 180°F (82°C) intermittent
 Maximum Working Pressure: 175psi (12.1 bar)
 Series LF909HW:
 Temperature Range: 33°F - 210°F (0.5°C - 99°C)
 Maximum Working Pressure: 175psi (12.1 bar)

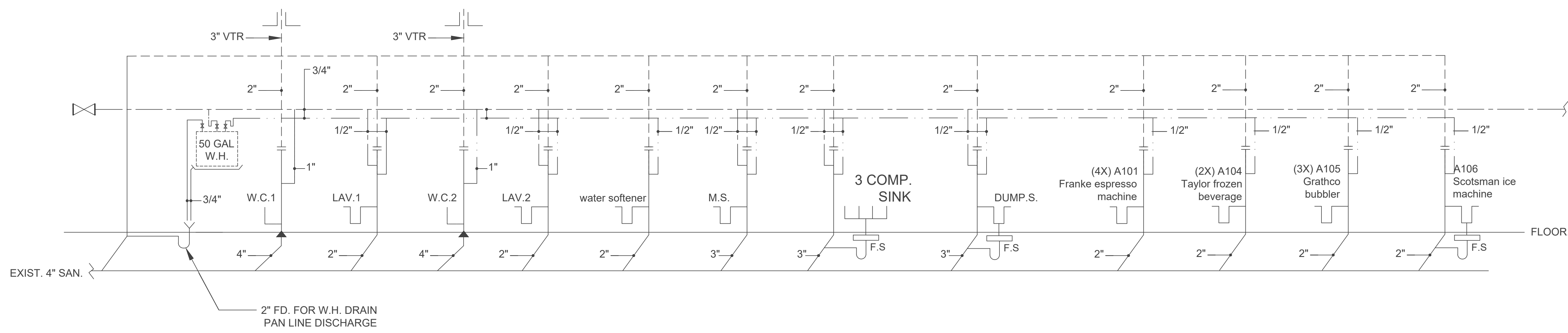


LF909OT, LF909OT-S

SIZE (in)	DIMENSIONS										WEIGHT											
	A	B	C	D	E	Fa	L	P	QT	OT-S	Net	Gross										
1/2"	1.46	3.65	1.61	4.59	0.81	2.22	4	1.02	4.1	1.21	6%	1.71	10%	2.59	7%	1.86	3%	98	14	6.4	15.8	7.1
1"	1.54	3.91	1.94	4.98	0.91	2.22	4	1.02	4.1	1.21	7	1.78	11	2.79	7%	1.96	3%	98	15	6.8	17.5	7.9
1 1/4"/M1	1.81	4.70	2.31	5.95	1.14	2.95	5/8	1.40	6%	1.65	7%	1.91	12%	3.10	10%	2.84	5%	133	40	18.1	42.8	19.4
1 1/2"/M1	1.9	4.83	2.41	6.19	1.14	2.95	5/8	1.40	6%	1.65	7%	1.91	12%	3.21	10%	2.84	5%	133	40	18.1	44.0	20.0
2"/M1	1.91	4.95	2.5%	6.69	1.14	2.95	5/8	1.40	6%	1.65	7%	1.91	12%	3.54	10%	2.84	5%	133	40	18.1	47.4	21.5

Subscript 'S' = strainer model

BACK-FLOW SPECIFICATION



PLUMBING RISER DIAGRAM

For Residential, Commercial and Institutional Applications

Job Name _____ Contractor _____
 Job Location _____ Approval _____
 Engineer _____ Contractor's P.O. No. _____
 Approval _____ Representative _____

LEAD FREE
Series LFMMV
 Thermostatic Mixing Valves

Sizes: 1/2" - 1" (15 - 25mm)

Series LFMMV Thermostatic Mixing Valves maintain and limit mixed hot water to a desired, selectable temperature. The LFMMV series can be set to any temperature between 80°F and 120°F with flow rates as low as 0.5 gpm and as high as 12 gpm (refer to capacity chart on back). This mixing valve series is listed under ASSE 1017 for valves used in hot water source applications, ASSE 1069 for single-pipe, tempered water applications and ASSE 1070 for valves used in individual or multiple fixture applications and also listed IAPMO cUPC. The LFMMV series features Lead Free construction to comply with Lead Free installation requirements.



WARNING

When used in an ASSE 1017 application at the hot water source, the Watts Thermostatic Mixing Valve Series LFMMV cannot be used by itself to control final temperature at fixtures where ASSE Standard 1016 or ASSE Standard 1070 listed devices are required. Such use may result in severe bodily injury (i.e. scalding or charring) and/or death. ASSE Standard 1016, ASSE 1069 or ASSE Standard 1070 listed devices, such as Watts Series LFUSG, LFL111 or LFMMV, should be used at point-of-use to prevent possible injury. Consult all product manuals, and instruction guides before installing any referenced product.

Recirculation systems should recirculate water at temperatures over 140°F to reduce the risk of bacterial growth in the piping. This valve should not be used at the hot water source in recirculation systems.

- Features**
- Lead Free* cast copper silicon alloy body construction
 - Solid wax hydraulic principle thermostat assures dependable mixing of hot and cold water
 - Thermostat controls both hot and cold water
 - Solder, threaded, PEX or CPVC, Quick-Connect and connection or wipress
 - Adjustment cap with locking feature
 - ASSE 1017 listed
 - ASSE 1069 listed
 - ASSE 1070 listed
 - IAPMO cUPC listed
 - Integral filter washers and check valves

Specifications

A Thermostatic Mixing Valve shall be installed on the hot water supply to fixtures. The valve shall be ASSE 1017, ASSE 1069, ASSE 1070 and IAPMO cUPC listed. It shall have a Lead Free cast copper silicon alloy body. Lead Free thermostatic valves shall comply with state codes and standards, where applicable, requiring reduced lead content. The valve shall include integral filter washers and check valves and an adjustment cap with locking feature. The valve shall be provided with solder (L-3), threaded (L-7), CPVC, (CPVC) Quick-Connect (L-C3) or PEX (-PEX) or wipress union connections. The valve shall be a Watts Series LFMMV-M1.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



PROJECT:

DRAWN BY:
 MAN TRAN
 DATE: JUN/28/2024

CHECK BY:
 LOC NGUYEN
 DATE: JUN/28/2024



SHEET TITLE:
 PLUMBING PLAN

SHEET:
 P-1

PACIFIC ENGINEERING GROUP
 REGISTRATION NUMBER: F9160

SCALE 1/4" = 1'-0"

BEAN & BREWS
 20314 FRANZ RD., STE # 500
 KATY, TX 77449

PROJECT:

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 DATE: JUN/28/2024



SHEET TITLE:

PLUMBING PLAN

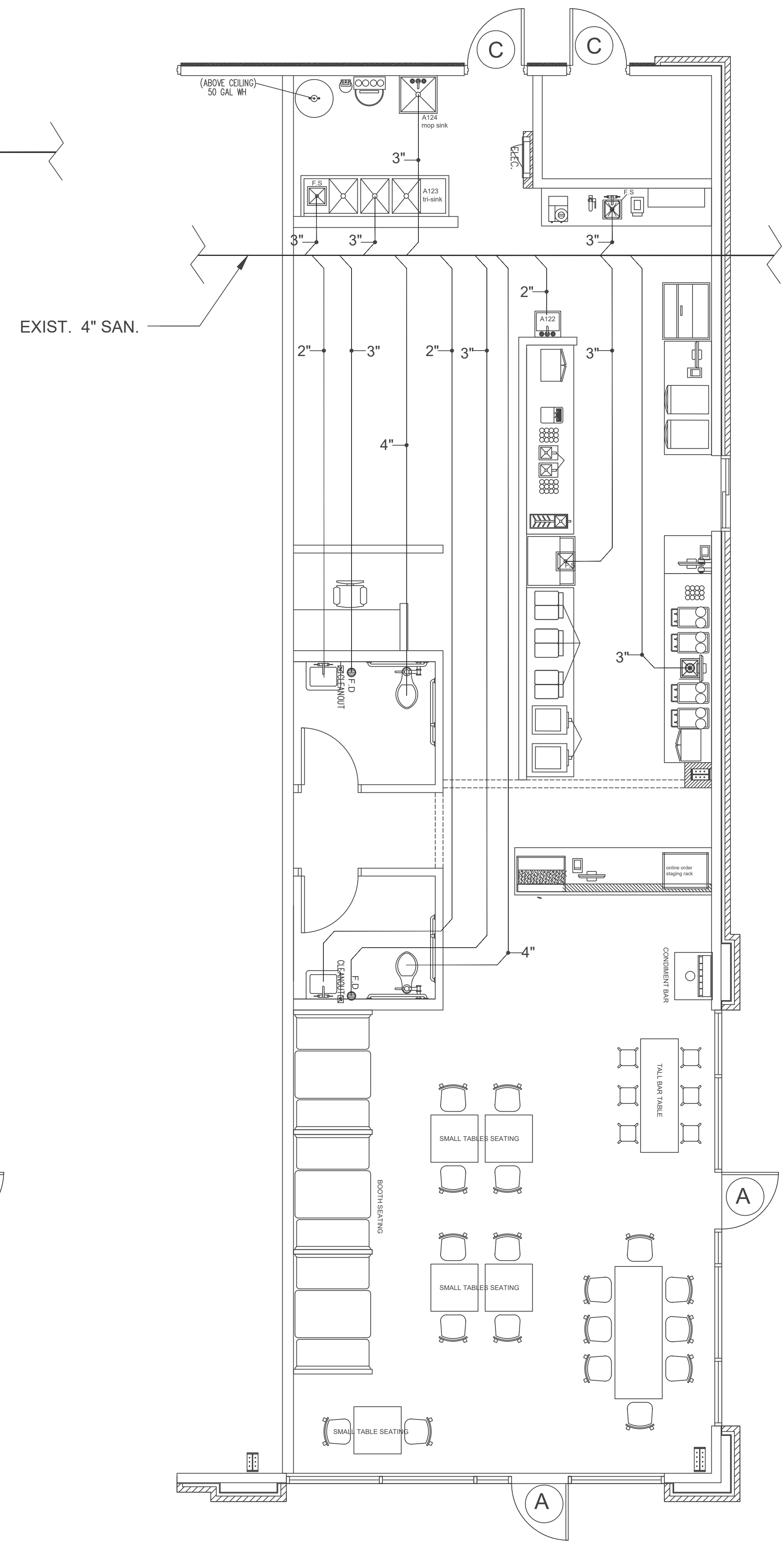
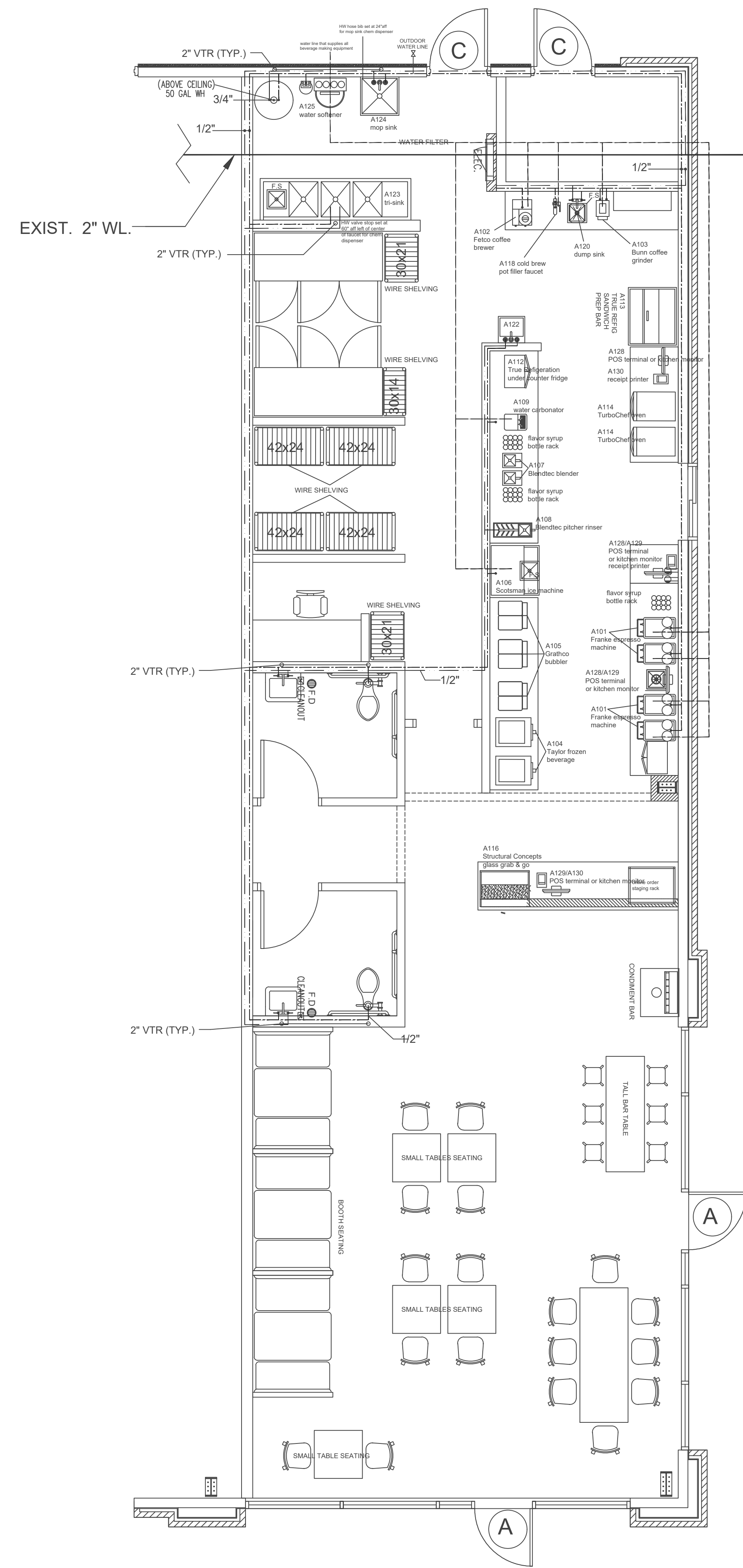
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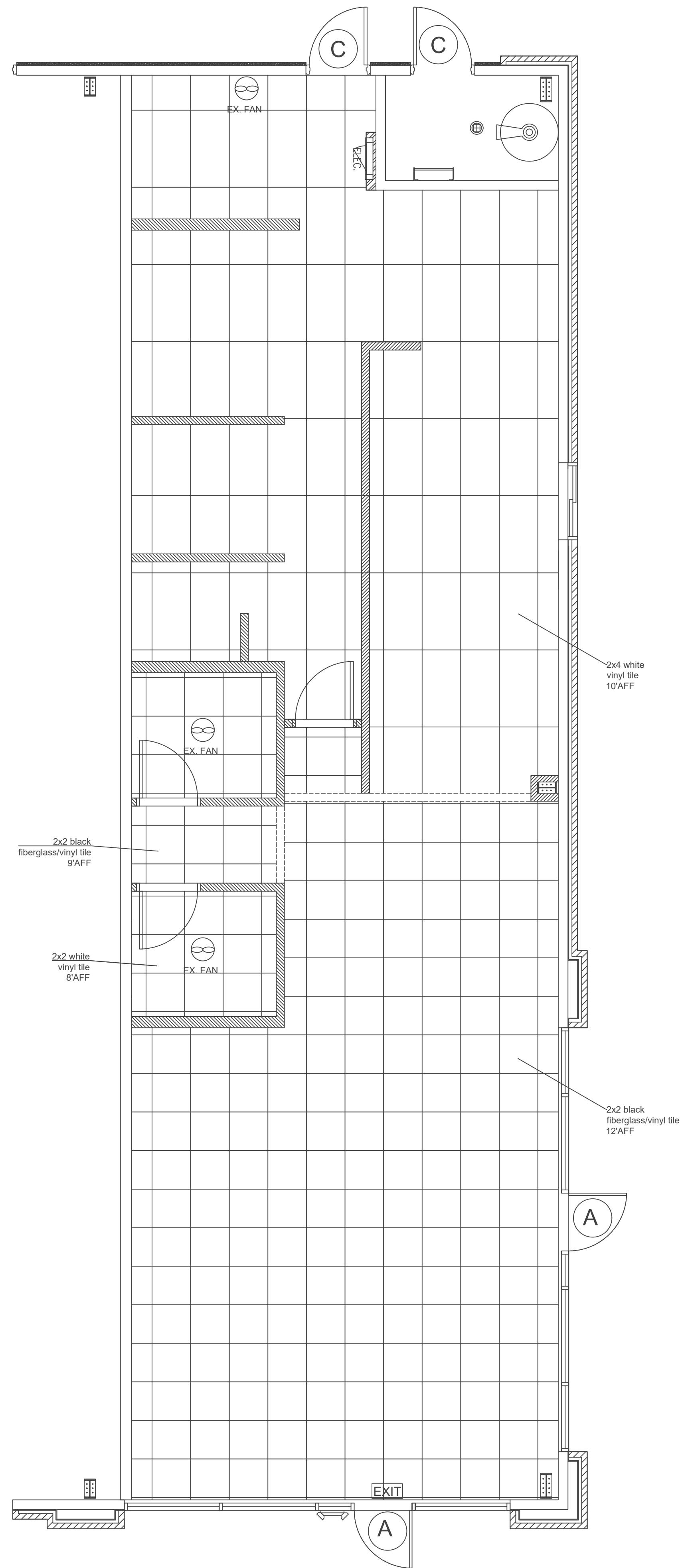
P-2

SCALE 1/4" = 1'-0"

PLUMBING SYMBOLS		
LEGEND	SYMBOLS	MATERIAL
WASTE PIPE		PVC SCHEDULE 40
VENT PIPE		PVC SCHEDULE 40
COLD WATER		PEX PINE
HOT WATER		PEX PIPE
WATER FILTER		PEX PINE
FLANGE GATE VALVE		STEEL (CITY APPROVE)

PLUMBING SYMBOLS & ROUGH-IN SCHEDULE						
SYMBOL	DESCRIPTION	CW	HW	SAN	VENT	REMARKS
WC	WATER CLOSET	1/2"	-	4"	2"	
LAV	LAVATORY	1/2"	1/2"	2"	2"	
HS	HAND SINK	1/2"	1/2"	2"	2"	
MS	MOP SINK	1/2"	1/2"	3"	2"	
FS	FLOOR SINK	1/2"	1/2"	3"	2"	
FD	FLOOR DRAIN	1/2"	1/2"	3"	2"	
D.S	DUMP SINK	1/2"	1/2"	3"	2"	
3COMP. SINK	3 COMPART SINK	1/2"	1/2"	3"	2"	





REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

PACIFIC ENGINEERING GROUP
REGISTRATION NUMBER: F9160

PROJECT:
BEAN & BREWS
20314 FRANZ RD., STE # 500
KATY, TX 77449

DRAWN BY:
MAN TRAN
DATE: JUN/28/2024

CHECK BY:
LOC NGUYEN
DATE: JUN/28/2024



SHEET TITLE:
**REFLECTED
CEILING PLAN**

SHEET:
C-1

SCALE 1/4" = 1'-0"

