

EXISTING CONDITION NOTES

STOP AND READ
THE CONTRACTOR AND SUB CONTRACTOR SHALL NOT INITIATE ANY WORK UNTIL EXISTING FIELD CONDITIONS ARE PROPERLY VERIFIED. WHEN DEMOLITION IS REQUIRED, THESE VERIFICATIONS SHALL INCLUDE BUT NOT LIMITED TO: DIMENSIONS- BOTH HORIZONTAL AND VERTICAL, ELECTRICAL SERVICE/PANELS LOCATION AND VOLTS/PHASE, LOCATION/QTY. OF ROOF MOUNTED HVAC EQUIPMENT, CONFIRM THAT INTERIOR HVAC HUNG UNITS HAVE PROPER SUPPORT CONNECTIONS FOR EXISTING STRUCTURE, FIRE SPRINKLER MAIN RUNS, TOILET ROOM DIMENSIONS, DOOR SWING FOR DOORS TO REMAINED ETC. IF NOT VERIFIED AND DISCOVERED AT A LATER TIME, THE CONTRACTOR SHALL REIMBURSE THE ARCHITECT FOR THE REDESIGN FEE. THIS DOES NOT INCLUDE HIDDEN WORK I.E. PITCH OF SANITARY LINES, ACTUAL CONDITIONS OF EXISTING HVAC EQUIPMENT, STRUCTURAL COLUMNS/BEARING WALLS OR CONDITIONS OF GREASE INTERCEPTORS AND ETC.

SCOPE OF WORK

THE SPACE IS TO BE CONDITIONED BY REUSING EXISTING TWO 10.0 TON ELECTRIC HEAT ROOF TOP UNITS WITH ALL NEW DUCTWORK ALONG WITH NECESSARY ACCESSORIES AS SHOWN IN THE PLAN.

KITCHEN IS TO BE PROVIDED WITH NEW VENTILATION SYSTEM INCLUDING EXHAUST HOOD, KITCHEN EXHAUST FAN AND MAKE UP AIR FAN. BOTH KITCHEN EXHAUST FAN AND MAKE UP AIR FAN ARE LOCATED AT THE ROOF.

TOILETS ARE TO BE VENTILATED VIA CEILING MOUNTED TOILET EXHAUST FANS

THE VILLAGES, FL BUILDING DEPARTMENT NOTES

ALL WORK SHALL COMPLY WITH APPLICABLE SECTIONS OF THE 2023 FLORIDA BUILDING CODE 8TH EDITION, AND ALL AMENDMENTS AND RULES AND REGULATIONS OF THE DEPARTMENT OF BUILDINGS TO DATE.

1. ALL HEATING AND COOLING LOADS CALCULATED PER ASHRAE/ACCA 183.

2. VENTILATION FOR ALL AREA SHALL COMPLY WITH 2023 FLORIDA MECHANICAL CODE 8TH EDITION, CHAPTER 4.

3. THE LICENSED PROFESSIONAL ENGINEER, ARCHITECT OR OTHER PERSON HAVING NOT LESS THAN FIVE (5) YEARS EXPERIENCE SUPERVISING THE INSTALLATION OF SUCH MECHANICAL SYSTEMS AND CONDUCTING SUCH TESTS WILL FILE DOCUMENTATION AND REPORTS OF TESTS THAT THE SYSTEM COMPLIES WITH THE CONSTRUCTION DOCUMENTS AND APPLICABLE LAWS.

4. TESTS OF MECHANICAL SYSTEMS SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING SECTIONS OF THE 2023 FLORIDA MECHANICAL CODE 8TH EDITION:

A. VENTILATION SYSTEM BALANCING - 2023 FLORIDA MECHANICAL CODE 8TH EDITION - 403.3

5. THE FOLLOWING WORK ITEMS, COMPONENTS, MATERIALS, CAPACITIES, ETC. SHALL COMPLY WITH THE REFERENCED CODE OR STANDARD:

A. STANDARDS OF HEATING - 2023 FLORIDA MECHANICAL CODE 8TH EDITION - 309.1

B. DUCT CONSTRUCTION AND INSTALLATION - 2023 FLORIDA MECHANICAL CODE 8TH EDITION - 603

C. AIR TAKES, EXHAUSTS AND RELIEF - 2023 FLORIDA MECHANICAL CODE 8TH EDITION - 401.5

D. AIR FILTERS - 2023 FLORIDA MECHANICAL CODE 8TH EDITION - 805

E. MANUAL AND AUTOMATIC FIRE AND SMOKE CONTROLS FOR AIR DISTRIBUTION SYSTEMS - 2023 FLORIDA MECHANICAL CODE 8TH EDITION - 606

6. MINIMUM TEMPERATURE TO BE MAINTAINED IN OCCUPIED SPACES DURING HEATING SEASON: 68 DEG. FAHRENHEIT.

7. A STATEMENT SHALL BE FILED BY THE OWNER OR TENANT IN POSSESSION THAT THE VENTILATION SYSTEM WILL BE KEPT IN CONTINUOUS OPERATION AT ALL TIMES DURING THE NORMAL OCCUPANCY OF THE STRUCTURE AS REQUIRED BY 2023 FLORIDA MECHANICAL CODE 8TH EDITION CHAPTER 403.3

8. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED FIRE-RATED WALL AND SMOKE WALL CONSTRUCTION AND LOCATION.

9. THESE PLANS ARE APPROVED ONLY FOR THE WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

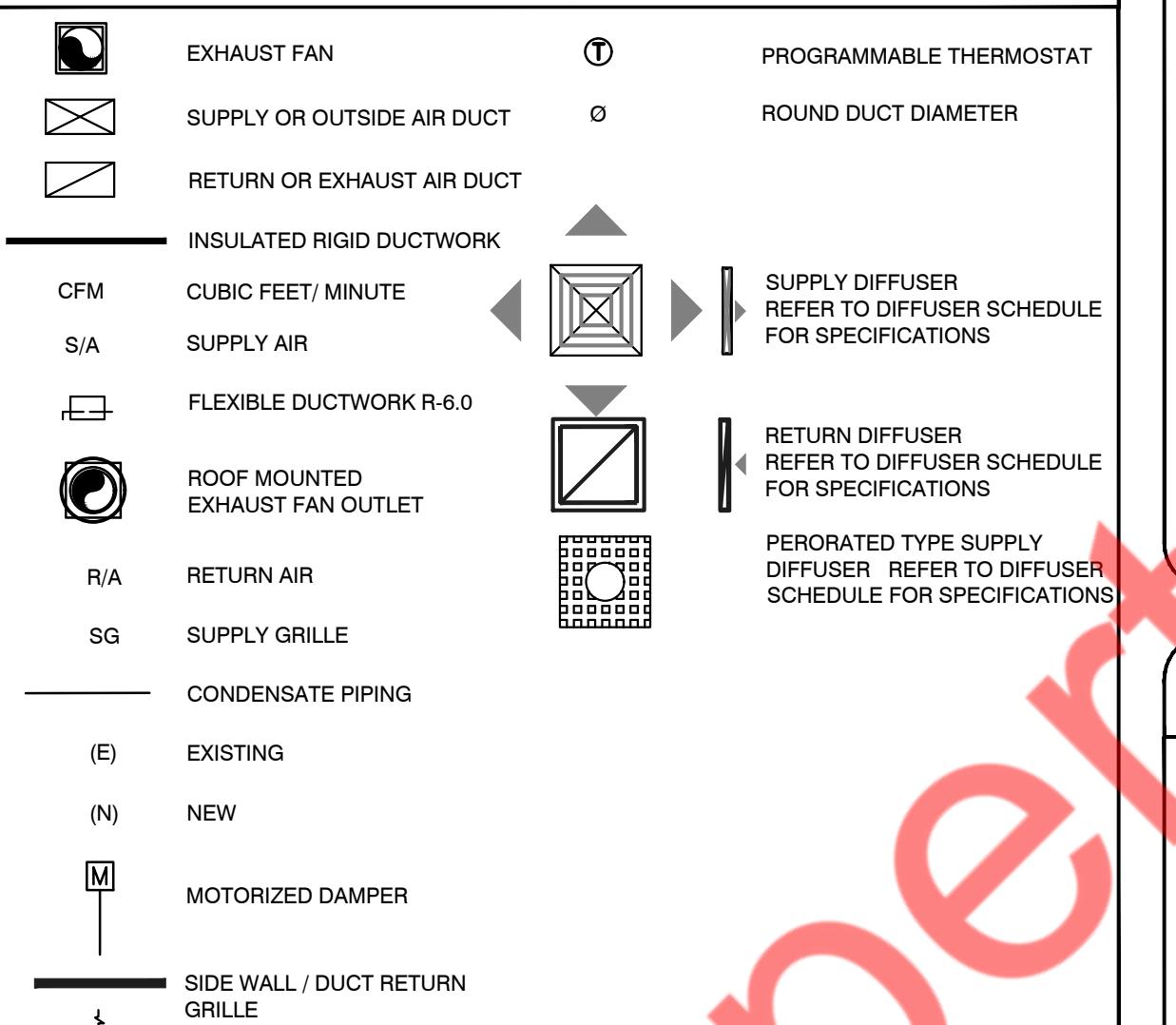
10. VENTILATION SYSTEMS SHALL BE BALANCED TO MAINTAIN THE MINIMUM VENTILATION AIRFLOW RATE AS SHOWN IN VENTILATION REQUIREMENT TABLE. THIS SYSTEM SHALL BE BALANCED BY APPROVED METHOD. CONTRACTOR TO SUBMIT THE AIR - BALANCE REPORT TO INSPECTOR OF RESPECTIVE BUILDING DEPARTMENT PRIOR TO FINAL INSPECTION.

GENERAL NOTES

- A. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS, INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET. PAY SPECIAL ATTENTION TO THE RESPONSIBILITY SCHEDULE, WORK DESIGNATED ON SCHEDULE SHALL BE CONSIDERED INCLUDED IN YOUR SCOPE OF WORK AND CONTRACT AMOUNT.
- B. CONTRACTOR TO VERIFY THAT ALL EQUIPMENT SHOWN AS EXISTING MATCHES THE DESCRIPTIONS AND SPECIFICATIONS SHOWN ON DRAWINGS AND SCHEDULES. IF DIFFERENT NOTIFY ARCHITECT/ENGINEER BEFORE BIDDING, ORDERING, OR PROCEEDING WITH WORK.
- C. DRAWINGS/DETAILS ARE TO BE CONSIDERED DIAGRAMMATIC, NOT NECESSARILY SHOWING IN DETAIL OR TO SCALE ALL MINOR ITEMS. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE STRUCTURAL, ARCHITECTURAL AND SITE CONDITIONS SHALL GOVERN EXACT LOCATIONS. CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK, AND CHECK/COORDINATE DRAWINGS OF ALL TRADES.
- D. COORDINATE WITH THE WORK OF OTHERS SECTIONS. EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE DUCT RISES AND DIPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.
- E. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALLED FOR EXACT MEASUREMENT. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
- F. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
- G. USE OF COMBUSTIBLE MATERIALS IS NOT ALLOWED IN THE RETURN AIR PLENUM. MATERIALS USED IN THE PLENUM SHALL HAVE FLAME SPREAD RATING NOT TO EXCEED 25, AND SMOKE DEVELOPED RATING NOT TO EXCEED 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84. ALL EXPOSED WIRING IN THE PLENUM SHALL BE PLENUM RATED.
- H. VERIFY LOCATION OF PERMISSIBLE NEW STRUCTURAL ROOF PENETRATIONS AND ADAPT THE REQUIRED DUCTS ACCORDINGLY. THE OPENINGS MUST BE LOCATED USING A REBAR LOCATOR, TRYING TO LEAVE A TRANSVERSE BAR WITHIN 4' FROM THE OPENING. LOCATE OPENINGS AT MID-DISTANCE BETWEEN THE STEMS OF THE DOUBLE TEE AND LONGITUDINAL REINFORCEMENT SHALL NEVER BE CUT. CALL THE ARCHITECT'S OFFICE IN CASE OF UNEXPECTED DIFFICULTIES.

- I. ALL A/C AND FRESH AIR ROUND EXPOSED DUCTS WILL BE SPIRAL GALVANIZED AND READY FOR PAINTING. ALL RECTANGULAR DUCTS OVER CEILINGS MAY BE SHEET METAL WITH EXTERNAL INSULATION AND ALL EXPOSED ROUND SHEET METAL DUCTS SHALL BE INTERNALLY INSULATED.
- J. G.C. SHALL CONTRACT LANDLORD-APPROVED ROOFING CONTRACTOR TO FLASH AND SEAL ALL ROOF PENETRATIONS TO MAINTAIN ROOFING WARRANTY.
- K. IF APPLICABLE CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR KITCHEN VENTILATION SYSTEM INCLUDING TYPE 1 HOOD AND FOR THE WALK-IN COOLER & FREEZER.
- L. REQUIRED INSURANCE SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- M. CONSTRUCTION "AS BUILT" DRAWINGS AND DOCUMENTS SHALL BE PROVIDED TO THE OWNER WITHIN 30 DAYS AFTER THE DATE OF ACCEPTANCE AND PROVIDE COPY TO LL.
- N. OPERATION MANUALS AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER.

MECHANICAL SYMBOLS



MECHANICAL PLAN NOTES

- A. REUSE EXISTING TWO 10 TONS ELECTRIC HEAT ROOF TOP UNITS. PROVIDE NEW DUCTWORK AND NECESSARY ACCESSORIES AS SHOWN IN THE PLAN. PROVIDE FLEXIBLE CONNECTORS ON SUPPLY AIR DUCT CONNECTIONS. TRANSITION TO DUCT SIZES SHOWN. PROVIDE DUCTWORK AND AIR DISTRIBUTION DEVICES AS INDICATED ON THE PLAN. REFER TO A/C UNIT SCHEDULE FOR ADDITIONAL REQUIREMENTS.
- B. FOR SYSTEM OVER 2,000 CFM CHECK FOR DUCT MOUNTED AIR SMOKE DETECTORS AND THAT MEET THE REQUIREMENTS OF UL 268A, INTERLOCKED TO SHUTDOWN A/C UNIT UPON DETECTION OF SMOKE. IF NECESSARY PROVIDE SMOKE DETECTOR WITH AN ANNUNCIATOR, ALARM AND POWER LED'S FOR VISIBLE AND AUDIBLE ALARM SIGNAL, AND VISIBLE TROUBLE SIGNAL. MOUNT ANNUNCIATOR ON ROOM SIDE OF CEILING.
- C. ALL DUCTS SHALL BE MINIMUM 26 GAUZE SHEET METAL WITH EXTERNAL DUCT WRAP INSULATION FOR CONCEALED DUCTS AND ALL EXPOSED DUCTS WITH INTERNAL INSULATION. ALL DUCTS TO BE MANUFACTURED AND INSTALLED ACCORDING TO ASHRAE AND SMACNA METAL DUCT CONSTRUCTION STANDARD, LATEST EDITION. ALL MATERIALS WILL CONFORM TO NFPA 90A.
- D. FACTORY-MADE FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOW OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE.
- E. THERMOSTATS SHALL BE 7-DAY PROGRAMMABLE TYPE. MOUNT THERMOSTAT 48" A.F.F. IF EXISTING THERMOSTAT AND REMOTE SENSOR ARE NOT REUSABLE THEN PROVIDE NEW THERMOSTAT WITH LOCKABLE COVER. COORDINATE LOCATION OF THERMOSTAT. PROVIDE REMOTE SENSOR LOCATED 72" ABOVE FINISHED FLOOR NEAR LOCATION INDICATED. SEAL WALL OPENINGS WITH CAULK. COORDINATE LOCATION ON SITE WITH GENERAL CONTRACTOR AND EQUIPMENT.
- F. ALL INDOOR DUCT AND PLENUM INSULATION SCHEDULE:

 1. CONCEALED, RECTANGULAR, ROUND AND FLAT-OVAL, SUPPLY-RETURN, OUTDOOR-AND EXHAUST-AIR DUCT AND AIR PLENUM INSULATION;
 2. FLEXIBLE ELASTOMERIC, MINERAL-FIBER BLANKET, MINERAL-FIBER BOARD OR POLYOLEFIN WITH MINIMUM INSTALLED THERMAL RESISTANCE AS FOLLOWS:

	SA PLENUM	RA PLENUM
UNCONDITIONED SPACES:	R-4.2	R-4.2
UNVENTED ATTIC ABOVE INSULATED CEILING:	R-6	R-4.2
EXTERIOR OF BUILDING:	R-6	R-4.2

- G. ALL SEAMS, JOINTS, ETC WILL BE SEALED TO MAKE AIR DUCT AIRTIGHT. PRESSURE SENSITIVE MATERIALS AND OTHERS APPROVED BY LATEST SMACNA. SEALING MATERIALS WILL BE USED.

- H. ALL EVAPORATOR UNITS SHALL HAVE A FLOAT SWITCH TO CONTROL OVERFLOW THAT WILL AUTOMATICALLY SHUT DOWN THE HVAC SYSTEM. THE DEVICE SHALL BE ATTACHED TO THE SECONDARY DRAIN OUTLET ON THE UNIT.

- I. ALL CONDENSATE DRAINS WILL BE PVC FULL DIAMETER OF OUTLET AND WILL TERMINATE IN THE NEAREST APPROVED PLACE OF DISPOSAL.

- J. ALL EQUIPMENT AND MATERIALS WILL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND ACCORDING TO THE BEST PRACTICE.

- K. TESTING AND BALANCING SHALL BE DONE IN ACCORDANCE WITH 2023 FBC - ENERGY CONSERVATION, 8TH EDITION SECTION C402.2.2. BALANCING PROCEDURES SHALL BE IN ACCORDANCE WITH THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (N.E.B.B.) THE ASSOCIATED AIR BALANCE COUNCIL (A.A.B.C.) NATIONAL STANDARDS OR EQUIVALENT PROCEDURES.

- L. HANGER ATTACHMENTS TO THE STEEL STRUCTURE WILL BE RATED POWER-ACTUATED FASTENERS, IC CLAMPS, WELDED STUDS, CLAMP HANGERS, JOIST CLAMPS OR OTHER METHODS RECOMMENDED BY SMACNA'S METAL AND FLEXIBLE STANDARDS: CHAPTER 4, AND WILL HAVE A MINIMUM SAFETY MARGIN OF 4:1. SUSPENDED FROM TOP CHORD OF JOISTS, NOTHING FROM DECK OR CROSS BRACING.

- M. ALL HVAC CONTROLS AND CONTROL WIRING SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.

- N. PROVIDE FIRE OR FIRE+SMOKE DAMPER WHEREVER DUCTS ARE CROSSING FIRE/SMOKE RATED WALLS/BARRIERS/SLABS. COORDINATE WITH ARCHITECTURAL DRAWING FOR FIRE RATING OF THE WALLS.

- O. COORDINATE ALL ROOF PENETRATION, CURB/ROOF RAIL LOCATION, ROOF EQUIPMENT WEIGHTS & DIMENSIONS WITH STRUCTURAL & ROOFING CONTRACTOR.

MECHANICAL ABBREVIATIONS

BD	BACK DRAFT DAMPER
CDS	CEILING DIFFUSER SUPPLY
CDR	CEILING DIFFUSER RETURN
CFM	CUBIC FEET OF AIR PER MINUTE
CD	CONDENSATE DRAIN
EER	ENERGY EFFICIENCY RATIO
SEER	SEASONAL ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
VD	VOLUME DAMPER
RTU	ROOF TOP UNIT
OA	OUTSIDE AIR
KEF	KITCHEN EXHAUST FAN
MUA	MAKE-UP AIR UNIT

OCCUPANCY CALCULATION PER 2023 FLORIDA MECHANICAL CODE, TABLE 403.3.1

BAR	416 SQ. FT.	26 PEOPLE
DINING AREA	800 SQ. FT.	69 PEOPLE
PRIVATE DINING	342 SQ. FT.	29 PEOPLE
KITCHEN	271 SQ. FT.	8 PEOPLE
BACK OF THE HOUSE	462 SQ. FT.	3 PEOPLE
SERVICE AREA	232 SQ. FT.	2 PEOPLE
	TOTAL	137 PEOPLE

VENTILATION REQUIREMENTS PER 2023 FLORIDA MECHANICAL CODE, TABLE 403.3.1.1

OUTSIDE AIR CALCULATIONS

BAR	416 SQ. FT. X 0.18 CFM/SQ. FT. +	269.9 CFM
DINING AREA	800 SQ. FT. X 0.18 CFM/SQ. FT. +	661.5 CFM
PRIVATE DINING	342 SQ. FT. X 0.12 CFM/SQ. FT. +	279.1 CFM
PASSAGE	99 SQ. FT. X 0.06 CFM/SQ. FT. =	5.9 CFM
KITCHEN	271 SQ. FT. X 0.12 CFM/SQ. FT. +	92.5 CFM
BACK OF THE HOUSE	462 SQ. FT. X 0.12 CFM/SQ. FT. +	77.9 CFM
SERVICE AREA	232 SQ. FT. X 0.12 CFM/SQ. FT. +	42.8 CFM
	TOTAL OUTSIDE AIR REQUIRED	1434.5 CFM
	TOTAL OUTSIDE AIR PROVIDED	1540 CFM

TOILET EXHAUST AIR CALCULATIONS

RESTROOMS	NO OF FIXTURE(1) X .70 CFM/FIXTURE =	70 CFM
	EXHAUST AIR REQUIRED FOR 4 RESTROOMS	70X4=280 CFM

AIR BALANCE

RTU-30-T102A(E)	+600 CFM
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THERMOSTATIC CONTROLS

A. C403.2.4.1 THERMOSTATIC CONTROLS
THE SUPPLY OF HEATING AND COOLING ENERGY TO EACH ZONE SHALL BE CONTROLLED BY INDIVIDUAL THERMOSTATIC CONTROLS CAPABLE OF RESPONDING TO TEMPERATURE WITHIN THE ZONE, WHERE HUMIDIFICATION OR DEHUMIDIFICATION OR BOTH IS PROVIDED, NOT FEWER THAN ONE HUMIDITY CONTROL DEVICE SHALL BE PROVIDED FOR EACH HUMIDITY CONTROL SYSTEM.
EXCEPTION: INDEPENDENT PERIMETER SYSTEMS THAT ARE DESIGNED TO OFFSET ONLY BUILDING ENVELOPE HEAT LOSSES, GAINS OR BOTH SERVING ONE OR MORE PERIMETER ZONES ALSO SERVED BY AN INTERIOR SYSTEM PROVIDED THAT BOTH OF THE FOLLOWING CONDITIONS ARE MET:
1. THE PERIMETER SYSTEM INCLUDES NOT FEWER THAN ONE THERMOSTATIC CONTROL ZONE FOR EACH BUILDING EXPOSURE HAVING EXTERIOR WALLS FACING ONLY ONE ORIENTATION (WITHIN ± 45 DEGREES) (0.8 RAD) FOR MORE THAN 50 CONTIGUOUS FEET (15 240 MM).
2. THE PERIMETER SYSTEM HEATING AND COOLING SUPPLY IS CONTROLLED BY THERMOSTATS LOCATED WITHIN THE ZONES SERVED BY THE SYSTEM.

B. C403.2.4.1.2 DEADBAND
WHERE USED TO CONTROL BOTH HEATING AND COOLING, ZONE THERMOSTATIC CONTROLS SHALL BE CONFIGURED TO PROVIDE A TEMPERATURE RANGE OR DEADBAND OF NOT LESS THAN 5°F (2.8°C) WITHIN WHICH THE SUPPLY OF HEATING AND COOLING ENERGY TO THE ZONE IS SHUT OFF OR REDUCED TO A MINIMUM.
EXCEPTIONS:
2. THERMOSTATS REQUIRING MANUAL CHANGEOVER BETWEEN HEATING AND COOLING MODES.
3. OCCUPANCIES OR APPLICATIONS REQUIRING PRECISION IN INDOOR TEMPERATURE CONTROL AS APPROVED BY THE CODE OFFICIAL.

C. C403.2.4.1.3 SETPOINT OVERLAP RESTRICTION
WHERE A ZONE HAS A SEPARATE HEATING AND A SEPARATE COOLING THERMOSTATIC CONTROL LOCATED WITHIN THE ZONE, A LIMIT SWITCH, MECHANICAL STOP OR DIRECT DIGITAL CONTROL SYSTEM WITH SOFTWARE PROGRAMMING SHALL BE CONFIGURED TO PREVENT THE HEATING SETPOINT FROM EXCEEDING THE COOLING SETPOINT AND TO MAINTAIN A DEADBAND IN ACCORDANCE WITH SECTION C403.2.4.1.2.

D. C403.2.4.2 OFF-HOUR CONTROLS
EACH ZONE SHALL BE PROVIDED WITH THERMOSTATIC SETBACK CONTROLS THAT ARE CONTROLLED BY EITHER AN AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROL SYSTEM.
EXCEPTIONS:
1. ZONES THAT WILL BE OPERATED CONTINUOUSLY.
2. ZONES WITH A FULL HVAC LOAD DEMAND NOT EXCEEDING 6,800 BTU/H (2 KW) AND HAVING A READILY ACCESSIBLE MANUAL SHUTOFF SWITCH.

E. C403.2.4.2.1 THERMOSTATIC SETBACK CAPABILITIES
THERMOSTATIC SETBACK CONTROLS SHALL BE CONFIGURED TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F (13°C) OR UP TO 85°F (29°C).

F. C403.2.4.2.2 AUTOMATIC SETBACK AND SHUTDOWN CAPABILITIES
AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROLS SHALL BE CAPABLE OF STARTING AND STOPPING THE SYSTEM FOR SEVEN DIFFERENT DAILY SCHEDULES PER WEEK AND RETAINING THEIR PROGRAMMING AND TIME SETTING DURING A LOSS OF POWER FOR AT LEAST 10 HOURS. ADDITIONALLY, THE CONTROLS SHALL HAVE A MANUAL OVERRIDE THAT ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR UP TO 2 HOURS; A MANUALLY OPERATED TIMER CAPABLE OF BEING ADJUSTED TO OPERATE THE SYSTEM FOR UP TO 2 HOURS; OR AN OCCUPANCY SENSOR.

G. C403.2.4.2.3 AUTOMATIC AND OPTIMUM START CAPABILITIES (MANDATORY)
AUTOMATIC START CONTROLS SHALL BE PROVIDED FOR EACH HVAC SYSTEM. THE CONTROLS SHALL BE CONFIGURED TO AUTOMATICALLY ADJUST THE DAILY START TIME OF THE HVAC SYSTEM IN ORDER TO BRING EACH SPACE TO THE DESIRED OCCUPIED TEMPERATURE IMMEDIATELY PRIOR TO SCHEDULED OCCUPANCY.
INDIVIDUAL HEATING AND COOLING SYSTEMS WITH SETBACK CONTROLS AND DIRECT DIGITAL CONTROL SHALL HAVE OPTIMUM START CONTROLS. THE CONTROL ALGORITHM SHALL, AS A MINIMUM, BE A FUNCTION OF THE DIFFERENCE BETWEEN SPACE TEMPERATURE AND OCCUPIED SET POINT, THE OUTDOOR TEMPERATURE, AND THE AMOUNT OF TIME PRIOR TO SCHEDULED OCCUPANCY. MASS RADIANT FLOOR SLAB SYSTEMS SHALL INCORPORATE FLOOR TEMPERATURE INTO THE OPTIMUM START ALGORITHM.

AIR CURTAIN SCHEDULE

TAG	ACH-1(N)	ACH-2(N)	ACH-3(N)	ACH-4(N)
MANUFACTURER	MARS (OR EQUIVALENT)	MARS (OR EQUIVALENT)	MARS (OR EQUIVALENT)	MARS (OR EQUIVALENT)
MODEL	LPV260-1UA-OB	LPV272-1UA-OB	LPV248-1UA-OB	LPV260-1UA-OB
QUANTITY	1	1	1	1
NOZZLE LENGTH (IN.)	60"	72"	48"	60"
AIR VOLUME (CFM)	1500	1800	1200	1500
MOTOR HP * NO. OF MOTORS	1/6	1/6	1/6	1/6
AMPS	2.6	2.6	2.4	2.6
V/P/HZ	115/1/60	115/1/60	115/1/60	115/1/60

NOTES:

1. CO-ORDINATE WITH ARCHITECT/OWNER FOR FINAL MOUNTING, FRAME TYPE, PAINT AND FINISH.
2. PROVIDE MANUFACTURER RECOMMENDED ACCESSORIES.
3. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER REQUIREMENT.

MAKEUP AIR UNIT SCHEDULE

TAG	MAU-1(N)
UNIT	GAS HEAT
MANUFACTURER	ECON-AIR
MODEL	EA2-D.250-20D
STATUS	NEW
MOUNTING	ROOF
TONNAGE	-
TOTAL COOLING CAPACITY	-
SENSIBLE COOLING CAPACITY	-
SEER	-
HEATING (IN)	146,823 MBH
HEATING (OUT)	135,077 MBH
THERMAL EFF(%)	92%
SUPPLY AIR (CFM)	3600 △4
ESP	0.5 IN. WC.
HP	2.0
VOLTAGE	208/3/60
FLA	8.3
MCA (A)	10.4
MOPC (A)	15
WEIGHT (lbs)	775 △4
MAU-1 (N):	
1. DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 20' MIXED FLOW DIRECT DRIVE FAN.	
2. INTAKE HOOD WITH EZ FILTERS.	
3. REFER SHEETS M-6 TO M-8 FOR MORE DETAILS.	

NY ENGINEERS

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PROJECT

ZUNZBAR

REVISIONS DATES:
07/10/2025 PROJECT CORD.
07/16/2025 BD COMMENTS
08/20/2025 BD COMMENTS
△4 08/21/2025 PROJECT CORD.
11/13/2025 PROJECT CORD.
11/20/2025 PROJECT CORD.

11/20/2025

MICHAEL TOBAS #7696
PROFESSIONAL ENGINEER
STATE OF FLORIDA

ISSUE DATE: 05.30.25
PROJECT #: 299F.1284F
DRAWN BY: NYE
CHECKED BY: NYE

HVAC NOTES &
SCHEDULES

M-1.1

REVISIONS DATES:
 1 07/10/2025 PROJECT CORD.
 07/16/2025 BD COMMENTS
 08/20/2025 BD COMMENTS
 08/21/2025 PROJECT CORD.
 11/3/2025 PROJECT CORD.
 6 11/20/2025 PROJECT CORD.

11/20/2025
 MICHAEL TOBAS #76496
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA

ISSUE DATE: 05.30.25
 PROJECT #: 299F.1284F
 DRAWN BY: NYE
 CHECKED BY: NYE

HVAC REFLECTED
 CEILING PLAN

M-2

GENERAL NOTES

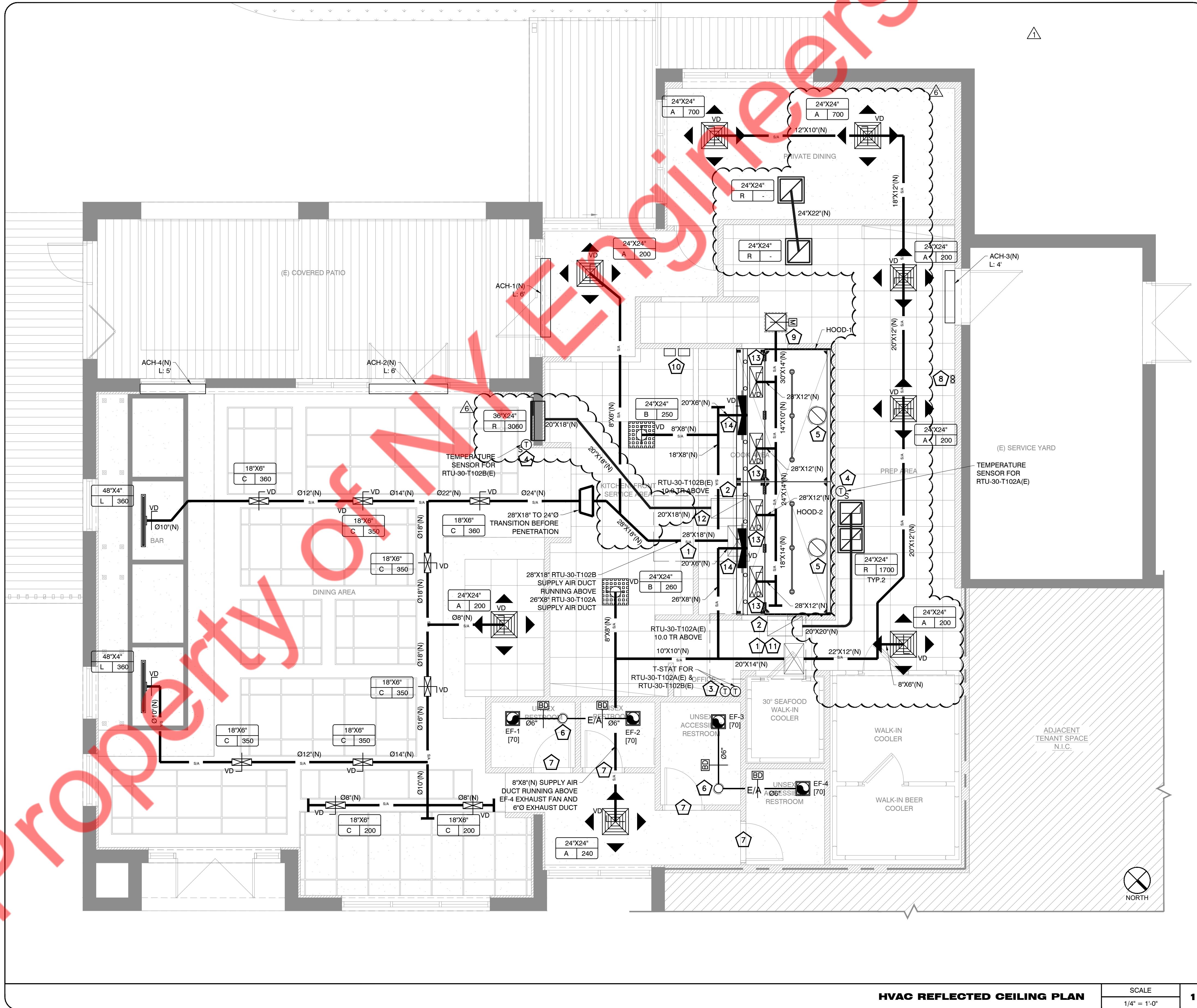
- A. CONTRACTOR SHALL BALANCE EACH DEVICE WITH THE CFM SHOWN ON PLAN.
- B. NEW DUCTWORK SHOWN ON PLAN ARE SCHEMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR PIPING AND DUCTWORK ROUTING, OFFSET AND RUN PIPING, DUCTWORK INSIDE THE STRUCTURE IF REQUIRED. PROVIDE ANY EXTRA PIPING, DUCTWORK, FITTINGS, INSULATIONS AND OTHER ACCESSORIES IN ORDER TO COMPLETE THE INSTALLATION.
- C. COORDINATE LOCATIONS AND SIZES OF INTAKE & EXHAUST OPENINGS WITH OWNER AND RESPECTIVE ENGINEER.
- D. EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
- E. DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
- F. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
- G. CONTRACTOR SHALL COORDINATE EQUIPMENT WEIGHTS AND SUPPORTS BASED ON ACTUAL EQUIPMENT SELECTED.
- H. COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
- I. ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.
- J. MOUNT DUCTWORK AS HIGH AS POSSIBLE.
- K. TEST AND BALANCE AIR SYSTEMS. PROVIDE REPORT TO G.C AND OWNER.
- L. NEW DUCTWORK IN CONCEALED AREAS MAY BE RECTANGULAR WITH EQUIVALENT CROSS SECTIONAL FLOW AREA.
- M. PROVIDE FIRE OR FIRE+SMOKE DAMPER WHEREVER DUCTS ARE CROSSING FIRE/SMOKE RATED WALLS/BARRIERS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR FIRE RATINGS OF THE WALLS.
- N. ARCHITECTURAL LAYOUT AND DIMENSIONS FOR EQUIPMENT TO TAKE PRECEDENCE OVER MEP.
- O. LIMIT FLEXIBLE DUCT LENGTH TO 5 LINEAR FEET. MAKE SURE DUCT IS FULLY STRETCHED OUT WITH NO KINKS & SHARP BENDS.
- P. PROVIDE CORD OPERATED DAMPER IN INACCESSIBLE CEILING.
- Q. PROVIDE INTERNAL INSULATION FOR ALL EXPOSED DUCTWORK AND EXTERNAL FOR ALL DUCTWORK IN CONCEALED AREAS.

KEYED NOTES

1. EXTEND FULL SIZE SUPPLY AND RETURN DUCTWORK FROM EXISTING ROOFTOP UNIT TO SPACE, EXTEND AS SHOWN. CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND SIZE.
2. EXISTING SMOKE DETECTOR TO REMAIN AND REUSED. IF NOT FOUND OR NOT REUSABLE, PROVIDE SMOKE DETECTOR IN SUPPLY DUCT TO SHUT DOWN CORRESPONDING UNIT UNDER ALARM CONDITIONS. ALL WIRING SHALL BE IN CONDUIT PER NRC SMOKE DETECTOR SHALL BE SYSTEM SENSOR MODEL DH100ACDLP.
3. RELOCATE THE EXISTING THERMOSTAT AT OFFICE SPACE AT SHOWN LOCATION. COORDINATE EXACT LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN. PROVIDE LOCKABLE COVER.
4. PROVIDE NEW REMOTE TEMPERATURE SENSOR AT SHOWN LOCATION. AVOID LOCATING NEAR DIRECT SOURCE OF HEAT. CONFIRM FINAL LOCATION OF TEMPERATURE SENSOR WITH ARCHITECT/CLIENT.
5. KITCHEN EXHAUST HOODS (HOOD-1 & 2) WITH 16" EXHAUST DUCT GOING TO FAN LOCATED ON ROOF. CONTRACTOR TO FILED VERIFY THE EXACT DUCT ROUTING AND FAN LOCATION. DUCT SHALL BE SLOPED 1/4" UNIT, VERTICAL IN 12" UNIT HORIZONTAL TOWARD ROOF. PROVIDE WITH CONTROLS PANEL & ANSUL SYSTEM AS PER MANUFACTURERS RECOMMENDATIONS. REFER SHEET M-6 FOR MORE DETAILS.
6. Ø8" TOILET EXHAUST DUCT UP TO ROOF. ARCHITECT TO PROVIDE 10" ROOF CUTOUT FOR THE EXHAUST DUCT GOING UP.
7. PROVIDE 1/2" DOOR UNDERCUT.
8. 3"Ø WATER HEATER (HWHT-1) COMBUSTION AIR INTAKE & FLUE VENT PIPING GOING TO ROOF. ARCHITECT TO PROVIDE 8"Ø ROOF CUTOUT FOR THE COMBUSTION AIR INTAKE AND VENTING DUCT GOING UP. REFER PLUMBING DRAWINGS FOR EXACT HWHT-1 LOCATION. CONTRACTOR TO FOLLOW MANUFACTURERS RECOMMENDATIONS FOR ALL DIRECT VENTING OPTIONS FOR HWHT-1.
9. 18"X16" MAU-1 DUCT GOING UP ARCHITECT TO PROVIDE 20"X18" ROOF CUTOUT FOR THE EXHAUST DUCT GOING UP. INTERLOCK MOTORIZED DAMPER WITH MAU-1 OPERATION. MAKE 18"X16" TO 30"X14" DUCT TRANSITION AS CLOSE TO SLAB AS POSSIBLE.
10. HOOD-1 & 2 MANUAL PULL STATION FOR ANSUL FIRE SUPPRESSION SYSTEM. CONTRACTOR TO MAKE SURE THAT THE PULL STATION IS INSTALLED IN EGRESS PATH WITHOUT ANY OBSTACLES AT EASY TO ACCESS HEIGHT FROM FLOOR.
11. TERMINATE 32"X18" RETURN AIR DUCT FROM RTU-30-T102A(E) ABOVE CEILING WITH WMS.
12. CONNECT 18"X20" RETURN AIR DUCT TO EXISTING 32"X18" RETURN AIR DUCT FROM RTU-30-T102B(E).
13. MAKE UP UNIT SUPPLY AIR OF 625 CFM EACH DIRECTLY CONNECTED TO HOOD PLENUM CONNECTION. CONTRACTOR TO MODIFY DUCT ROUTE IF NEEDED.
14. RTU-30-T102A(E) SUPPLY AIR OF 625 CFM EACH DIRECTLY CONNECTED TO PLENUM CONNECTION. CONTRACTOR TO MODIFY DUCT ROUTE IF NEEDED.

KITCHEN EXHAUST NOTES

1. PROVIDE CLEAN OUT AT ALL ELBOWS AND BOTTOM OF RISER AND EVERY 15 FEET HORIZONTAL KITCHEN EXHAUST DUCT.
2. COMMERCIAL KITCHEN GREASE DUCTS SHALL BE DESIGNED FOR THE TYPE-1 OF COOKING APPLIANCE AND HOOD SERVED.
3. IF NOT PROVIDED FACTORY FABRICATED THEN KITCHEN EXHAUST DUCT SHALL BE CONSTRUCTED OF 0.1046-INCH NO.16 GAUGE STEEL OR 0.0490-INCH NC 18 STAINLESS STEEL.
4. JOINTS, SEAMS AND PENETRATIONS OF GREASE DUCTS SHALL BE MADE WITH A CONTINUOUS LIQUID TIGHT WELD OR BRAZE MADE IN THE EXTERNAL SURFACE IF THE DUCT SYSTEMS.
5. DUCT TO EXHAUST FAN CONNECTIONS SHALL BE FLANGED, GASKETED AND BOLTED TO THE INLET OF THE FAN FOR SIDE-INLET UTILITY FANS APPROVED FLEXIBLE CONNECTIONS MAY BE PROVIDED.
6. A VIBRATION ISOLATION CONNECTOR FOR CONNECTING A DUCT TO A FAN SHALL CONSIST OF NON-COMBUSTIBLE PACKING IN A METAL SLEEVE JOINT OF APPROVED DESIGN OR SHALL BE A COATED FABRIC FLEXIBLE DUCT CONNECTOR LISTED AND LABELED FOR THE APPLICATION. VIBRATION ISOLATION CONNECTORS SHALL BE INSTALLED ONLY AT THE CONNECTION OF A DUCT TO A FAN INLET OR OUTLET.
7. GREASE DUCT BRACING AND SUPPORTS SHALL BE OF NON-COMBUSTIBLE MATERIAL SECURELY ATTACHED TO THE STRUCTURE AND DESIGNED TO CARRY GRAVITY AND SEISMIC LOADS WITHIN THE STREET LIMITATIONS. BOLTS, SCREWS, RIVETS AND OTHER MECHANICAL FASTENERS SHALL NOT PENETRATE DUCT WALLS.
8. THE CLEANOUTS FOR HORIZONTAL GREASE DUCT SHALL BE LOCATED ON THE SIDE OF THE DUCT WITH THE OPENING NOT LESS THAN 1.5" ABOVE THE BOTTOM OF THE DUCT AND NOT LESS THAN 1" BELOW THE TOP OF THE DUCT.
9. GREASE DUCT SHALL BE PERMITTED TO BE ENCLOSED IN ACCORDANCE WITH INTERNATIONAL BUILDING CODE REQUIREMENT FOR SHAFT CONSTRUCTION. SUCH GREASE DUCT SYSTEM AND EXHAUST EQUIPMENT SHALL HAVE A CLEARANCE TO COMBUSTIBLE CONSTRUCTION NOT LESS THAN 18 INCHES AND SHALL HAVE A CLEARANCE TO NONCOMBUSTIBLE CONSTRUCTION AND GYPSUM WALLBOARD ATTACHED TO NONCOMBUSTIBLE STRUCTURES OF NOT LESS THAN 6 INCHES.
10. PROVIDE 2 LAYERS OF 1.5" FIRE WRAP AROUND KITCHEN EXHAUST GREASE DUCTS.
11. PROVIDE MANUAL PULL STATION IN EGRESS PATH IN CASE OF EMERGENCY FOR SHUTTING OFF HOOD AND FANS.



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PROJECT

REVISIONS DATES:
△ 07/10/2025 PROJECT CORD.
 07/16/2025 BD COMMENTS
 08/20/2025 BD COMMENTS
△ 08/21/2025 PROJECT CORD.
 11/3/2025 PROJECT CORD.
 11/20/2025 PROJECT CORD.

11/20/2025

MICHAEL TOBAS #76496
PROFESSIONAL ENGINEER
STATE OF FLORIDA

ISSUE DATE: 05.30.25

PROJECT #: 299F.1284F

DRAWN BY: NYE

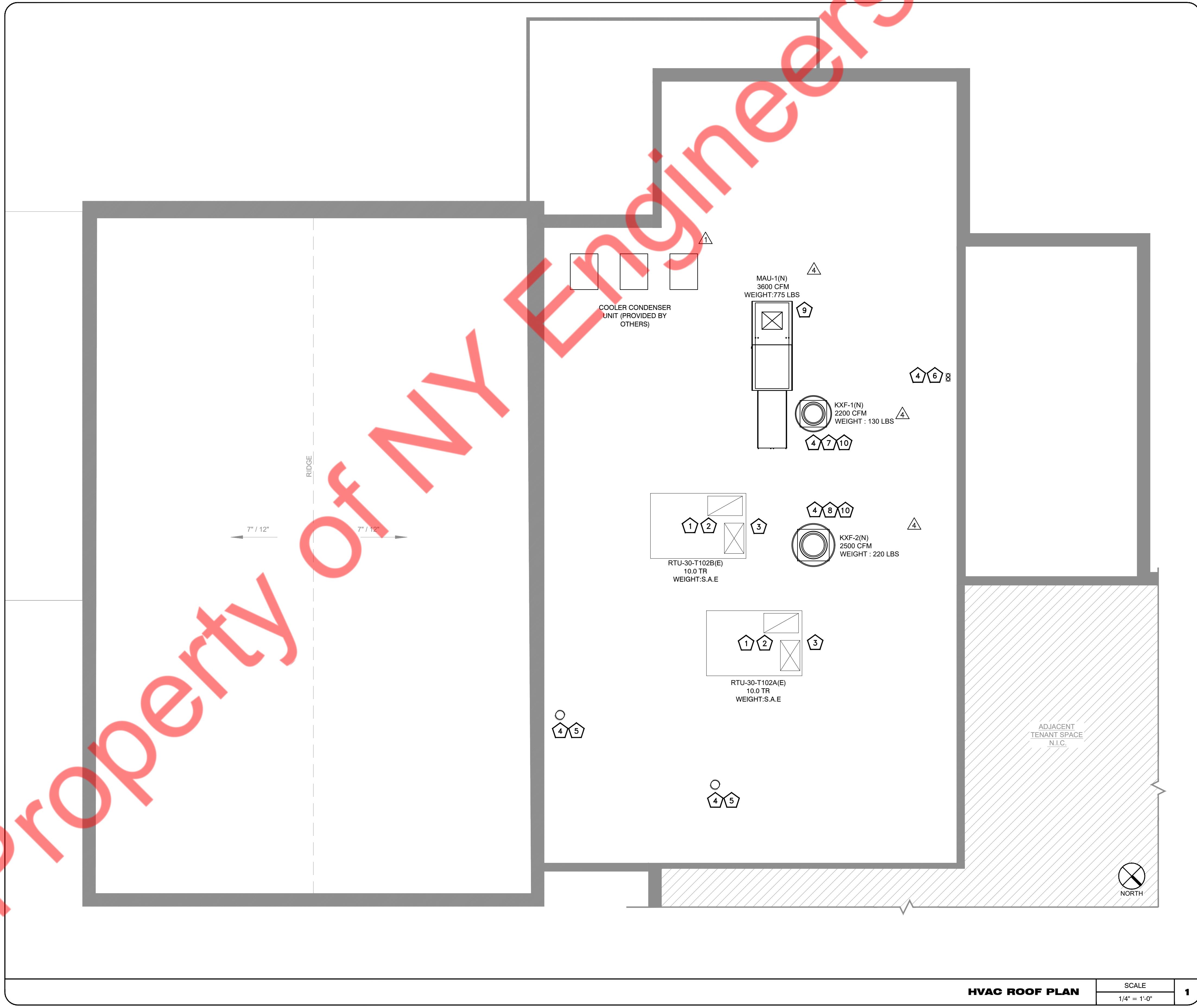
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HVAC ROOF PLAN

M-2.1

GENERAL NOTES	
A. COORDINATE LOCATIONS AND SIZES OF ROOF OPENINGS WITH OWNER AND STRUCTURAL ENGINEERS.	
B. EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.	
C. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.	
D. ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.	
E. PATCH THE EXTRA PENETRATIONS AS & IF REQUIRED OR CUT AN EXTRA PORTION OF THE ROOF IF EXISTING PENETRATION IS NOT FEASIBLE/WORKABLE. COORDINATE WITH ROOFING AND MECHANICAL CONTRACTOR.	
F. EXHAUST SHALL TERMINATE 3 FEET FROM THE PROPERTY LINE, 3 FEET FROM THE EXTERIOR WALL AND ROOFS, 3 FEET FROM THE OPERABLE OPENING INTO THE BUILDING AND 10 FEET FROM THE OUTSIDE AIR INTAKE OPENINGS.	
G. MATERIAL FROM EXISTING SYSTEM WHICH IS RENDERED USELESS SHALL BE REMOVED AND DISPOSED OF OFF SITE.	
H. CONTRACTOR TO FIELD VERIFY & CONFIRM IF THE EXISTING RTUs ARE INSTALLED WITH INBUILT ELECTRIC HEATERS OF CAPACITY AS MENTIONED IN THE SCHEDULE. IF NOT REPORT BACK TO ENGINEER IN RECORD PRIOR STARTING ANY CONSTRUCTION / BASE BID.	
I. ALL PROPOSED ROOF PENETRATIONS ARE TO BE PERFORMED BY THE LANDLORD'S ROOFER AT THE TENANT'S EXPENSE.	

KEY NOTES #	
1. EXISTING RTU ALONG WITH ALL ITS ACCESSORIES TO REMAIN AND TO BE REUSED. CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND CONFIGURATION ON SITE. CLEAN AND REFURBISH TO "LIKE-NEW" CONDITION. REPAIR/REPLACE ANY ACCESSORIES AS REQUIRED TO PROVIDE A FULLY FUNCTIONING.	
2. CONTRACTOR TO SET OUTSIDE AIR AS INDICATED ON RTU SCHEDULE. CONTRACTOR SHALL SCRIBE INTO UNIT POSITION OF OUTSIDE AIR DAMPER AND LABEL OUTSIDE AIR VOLUME AND PERCENTAGE OF OUTSIDE AIR. CONTRACTOR TO PROVIDE OUTSIDE AIR INTAKE ON RTU IF NOT FOUND. VERIFY IN FIELD PRIOR TO BID.	
3. ENSURE THAT THE EXISTING CONDENSATE DRAINS OF BOTH EXISTING RTUs ARE OF APPROVED MATERIAL AND ARE TERMINATED AT APPROVED PLACE OF DISPOSAL AS PER LOCAL CODES. CONDENSATE DRAIN TO REMAIN AS IT IS FOR BOTH THE EXISTING RTU. CONTRACTOR TO FLUSH AND CLEAN EXISTING DRAIN. CONTRACTOR TO REPAIR/REPLACE WITH SIMILAR KIND IF FOUND DAMAGED.	
4. ALL EXHAUST TERMINATIONS SHALL BE TERMINATED AT-LEAST 10' HORIZONTALLY AWAY OR 3' VERTICALLY ABOVE ALL OUTSIDE AIR INTAKE OPENINGS AND 10' FEET HORIZONTALLY AWAY FROM LOT LINES. CONTRACTOR TO FIELD VERIFY EXACT TERMINATION POINT ON SITE.	
5. Ø8" EXHAUST AIR DUCT FROM FIRST FLOOR. TERMINATE WITH GOOSENECK AND BIRD SCREEN. MAINTAIN MINIMUM 10'-0" DISTANCE FROM ANY OUTSIDE AIR INTAKE SOURCE.	
6. 3Ø COMBUSTION AIR INTAKE & FLUE VENT PIPING FOR HOT WATER HEATER WH-1 COMING FROM FLOOR BELOW.	
7. KXF-1(N) SHALL BE INTERLOCKED WITH HOOD-1 OPERATIONS.	
8. KXF-2(N) SHALL BE INTERLOCKED WITH HOOD-2 OPERATIONS.	
9. MAU-1(N) SHALL BE INTERLOCKED WITH HOOD 1 & 2 OPERATION. MAU-1(N) SHALL BE PROVIDED WITH VARIABLE SPEED OPTION DEPENDING UPON THE NUMBER OF HOODS OPERATING AT AN INSTANCE.	
10. EXHAUST SYSTEM SHALL BE PROVIDED WITH GREASE CLEANOUTS AND GREASE GUARD SYSTEM. REFER SHEET M-1 HVAC NOTES & SCHEDULES FOR GREASE DUCT SPECIFICATIONS.	

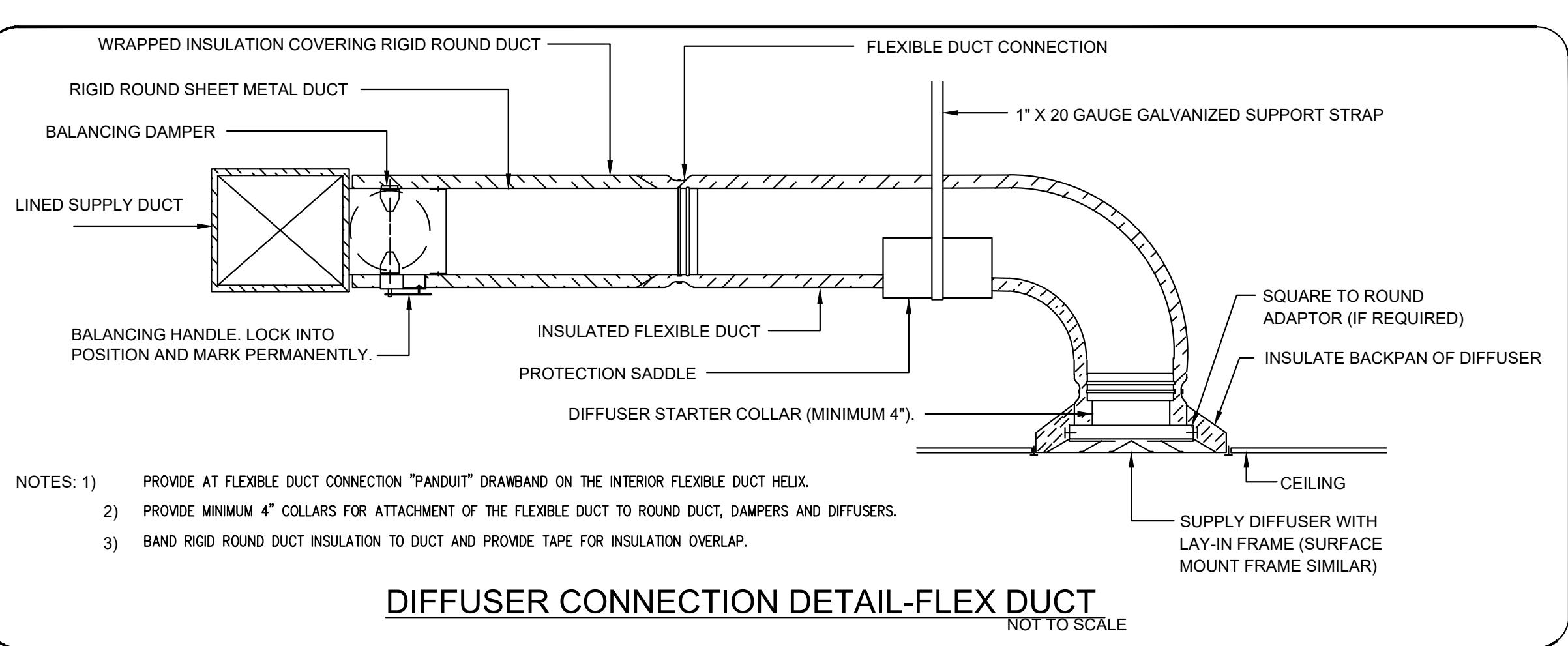
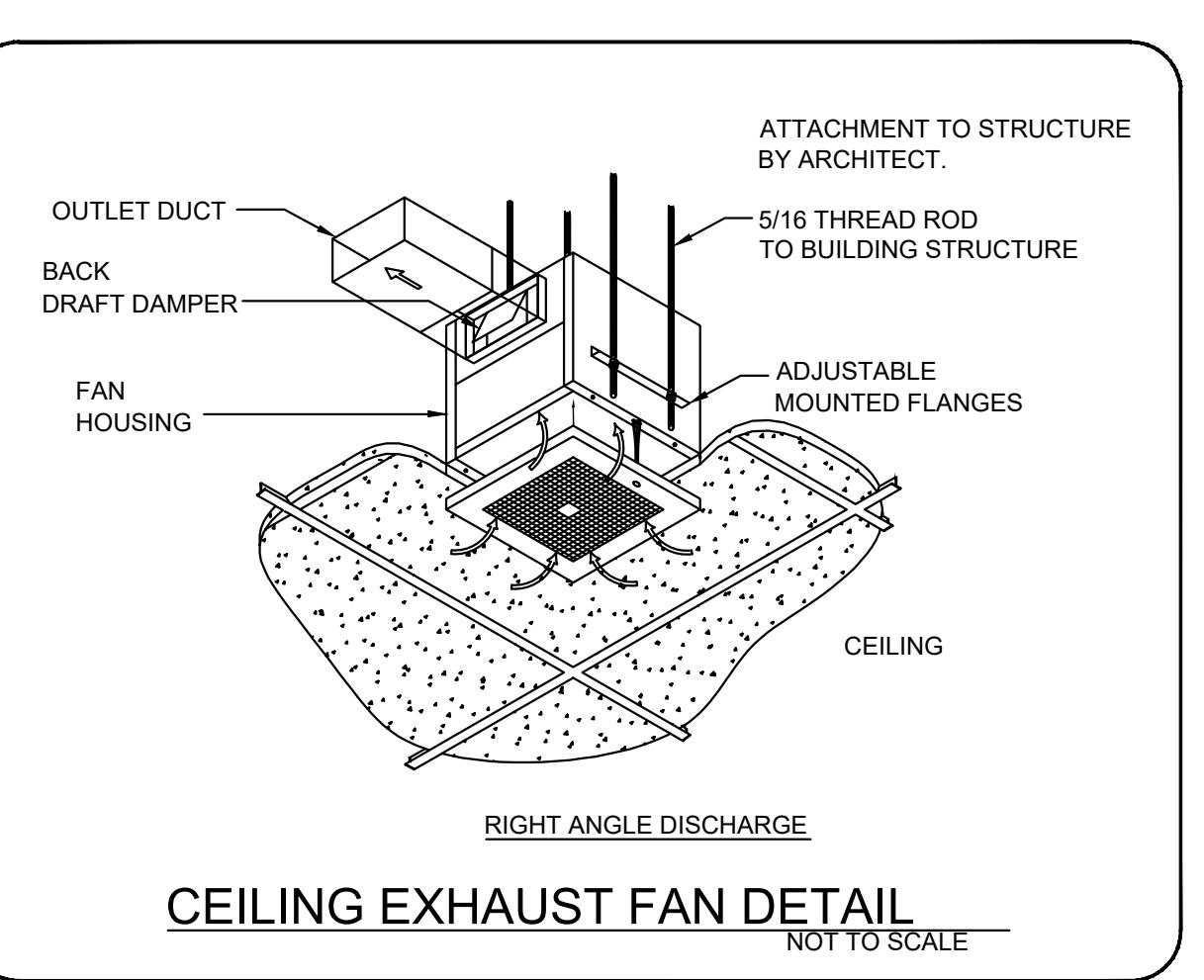
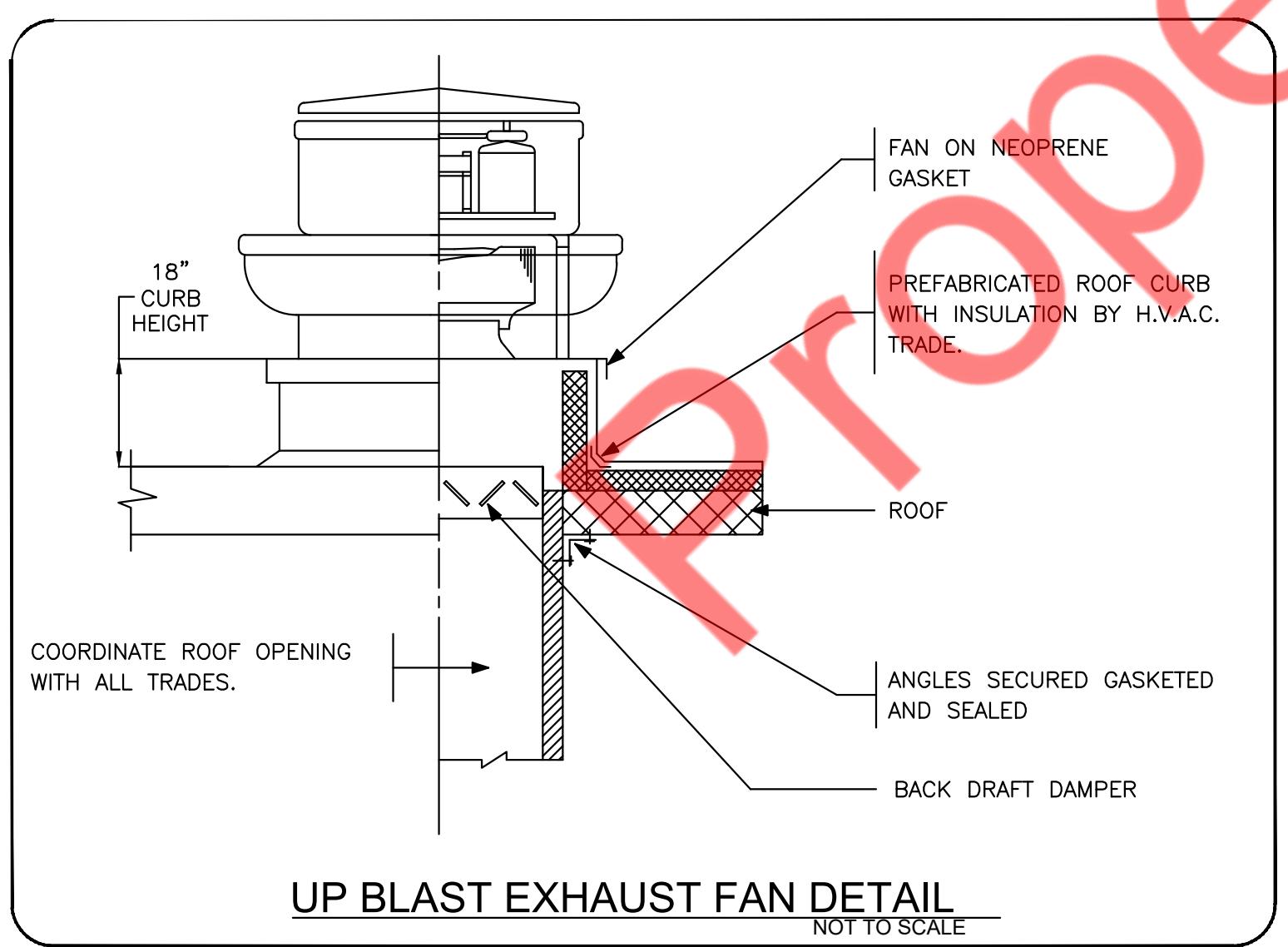
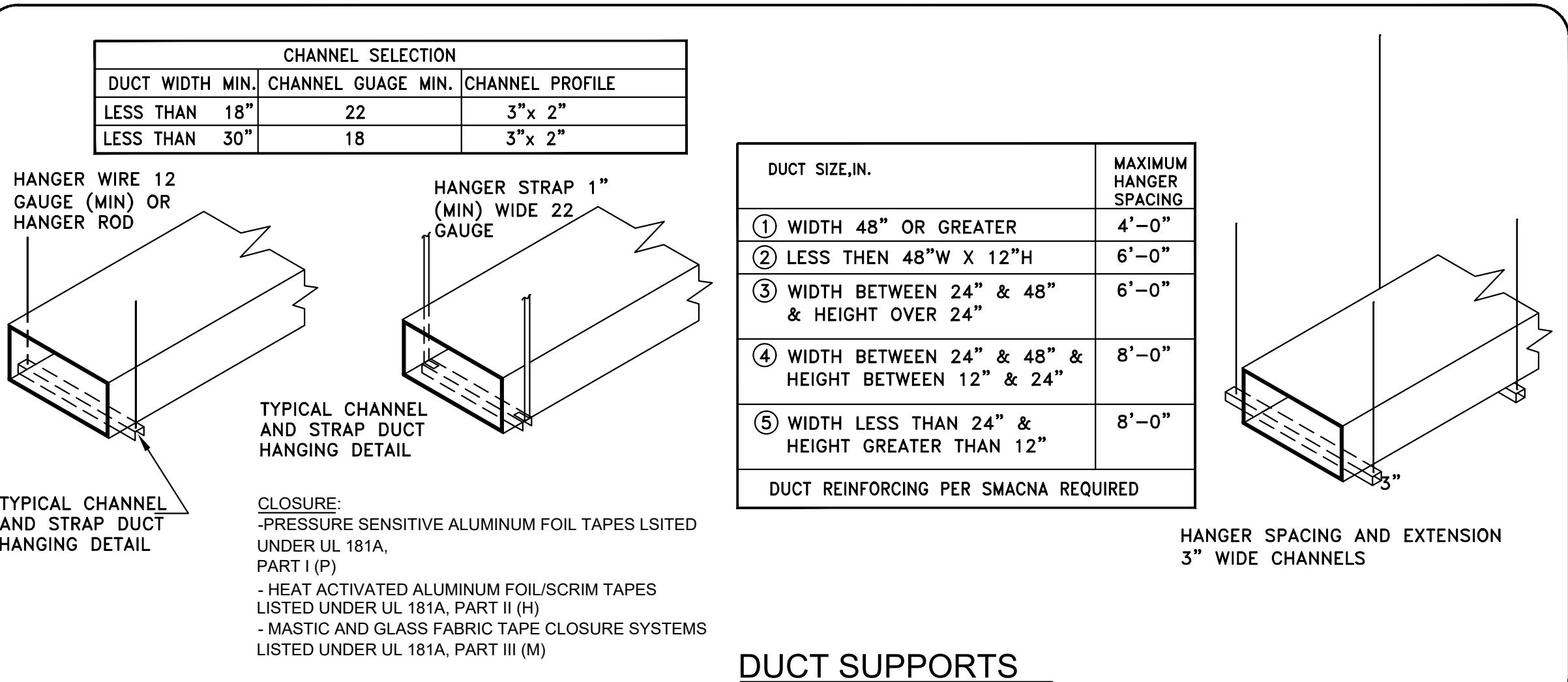
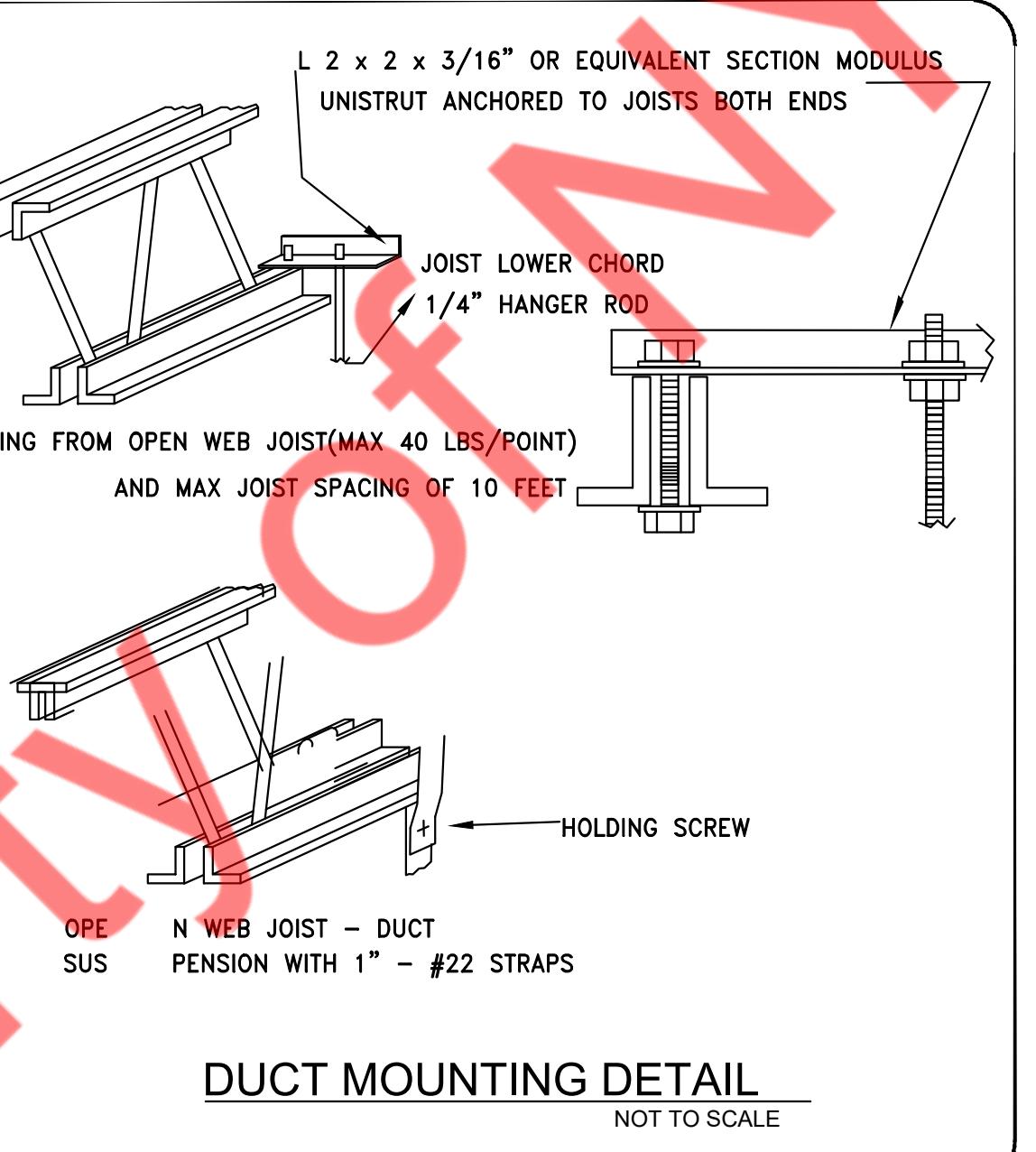
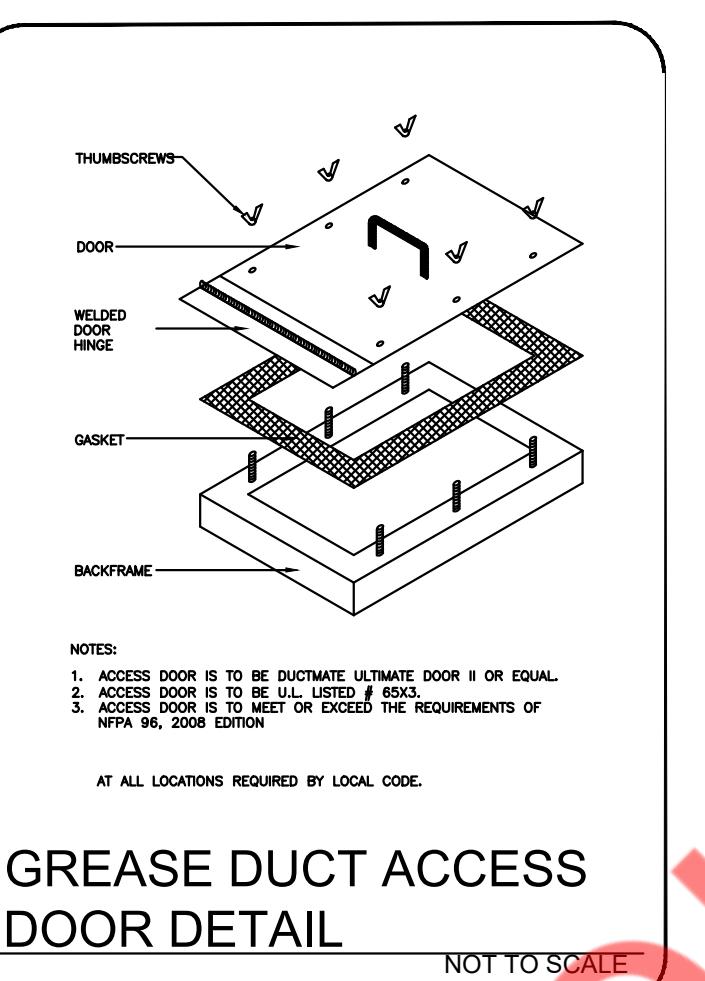
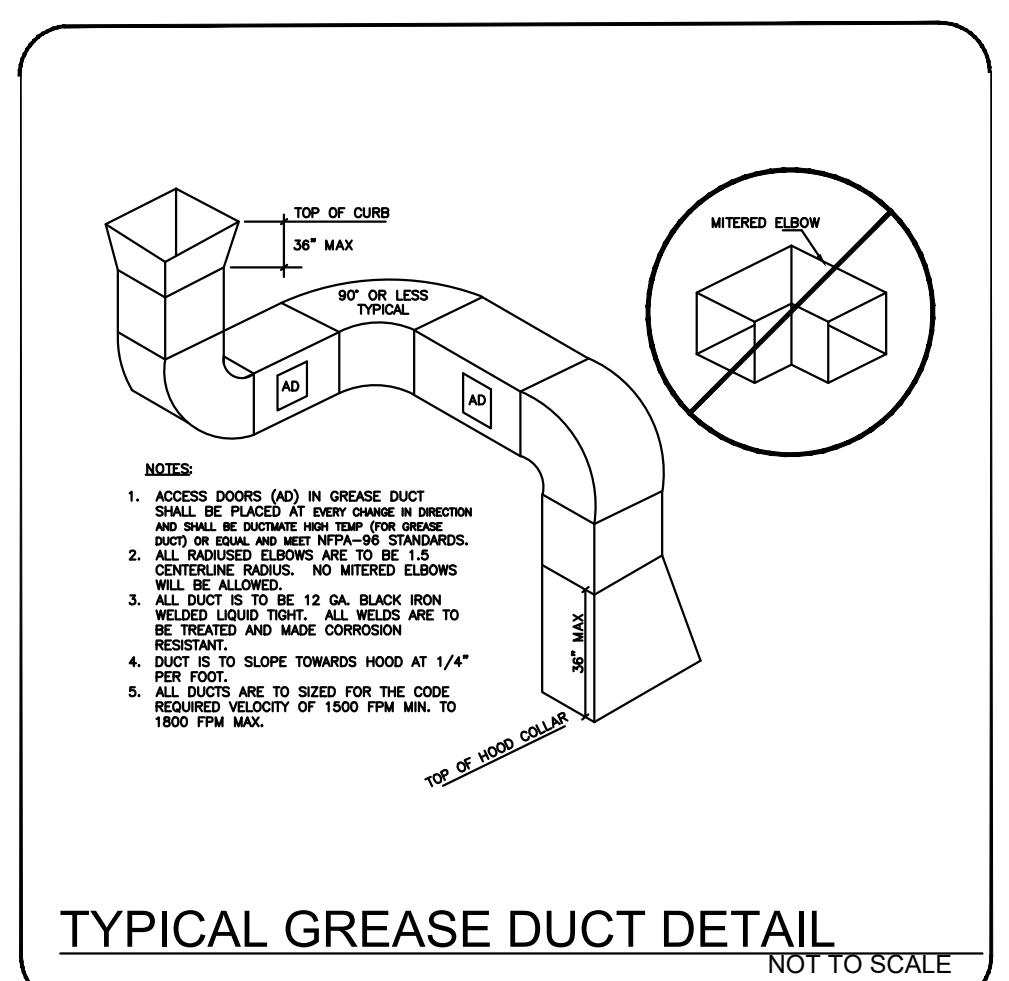
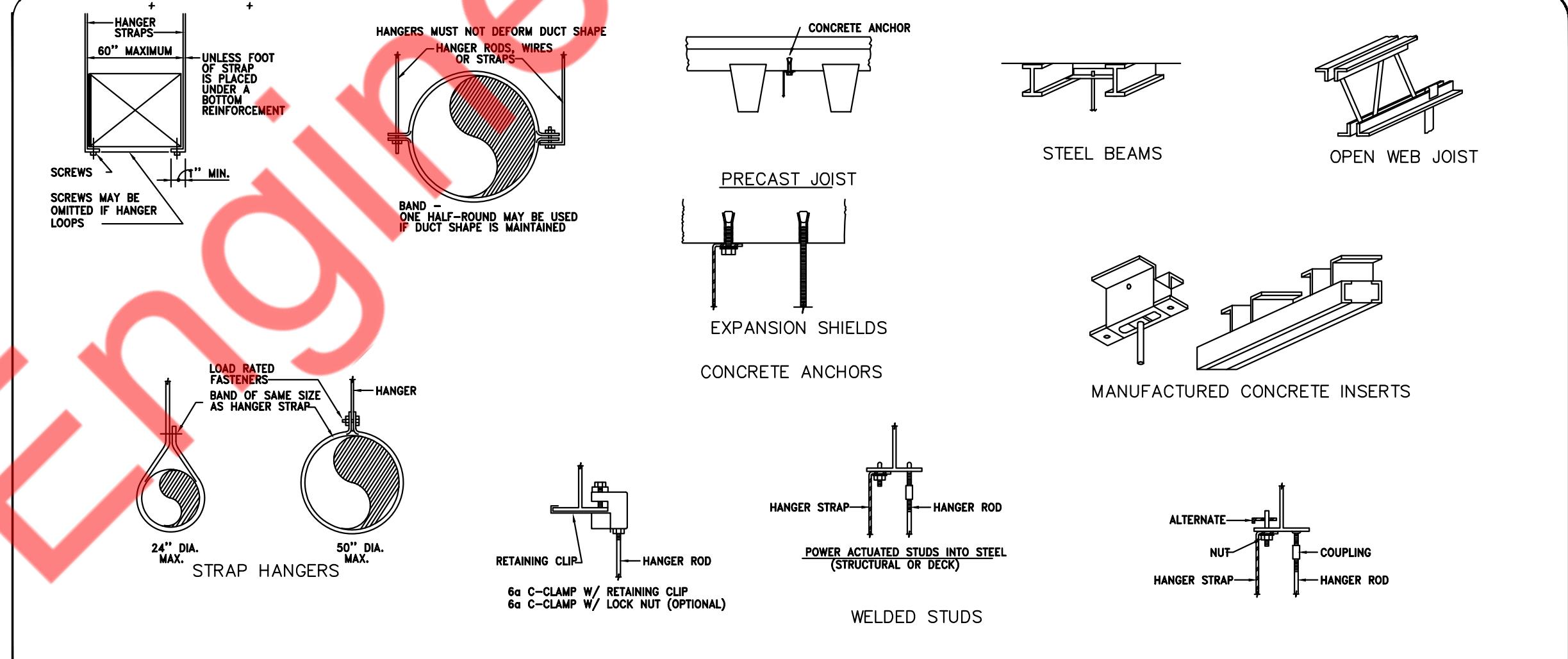
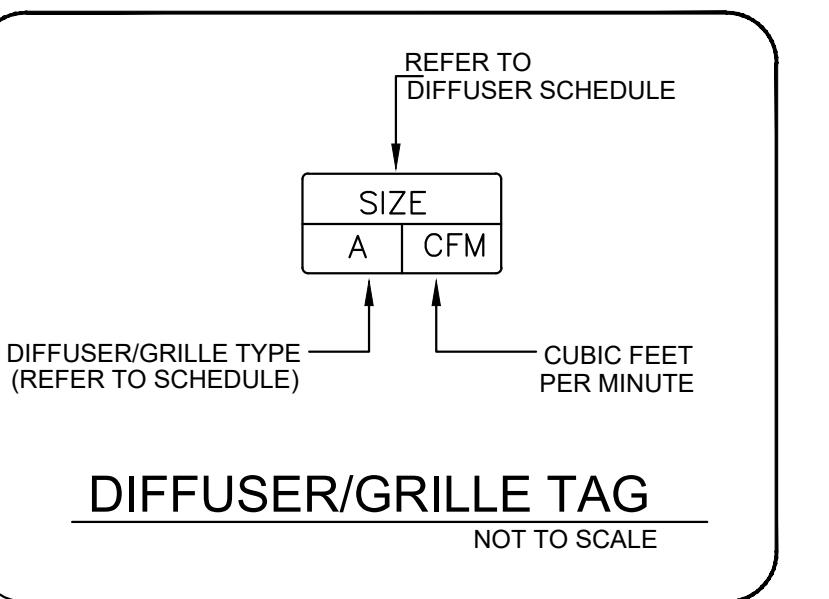
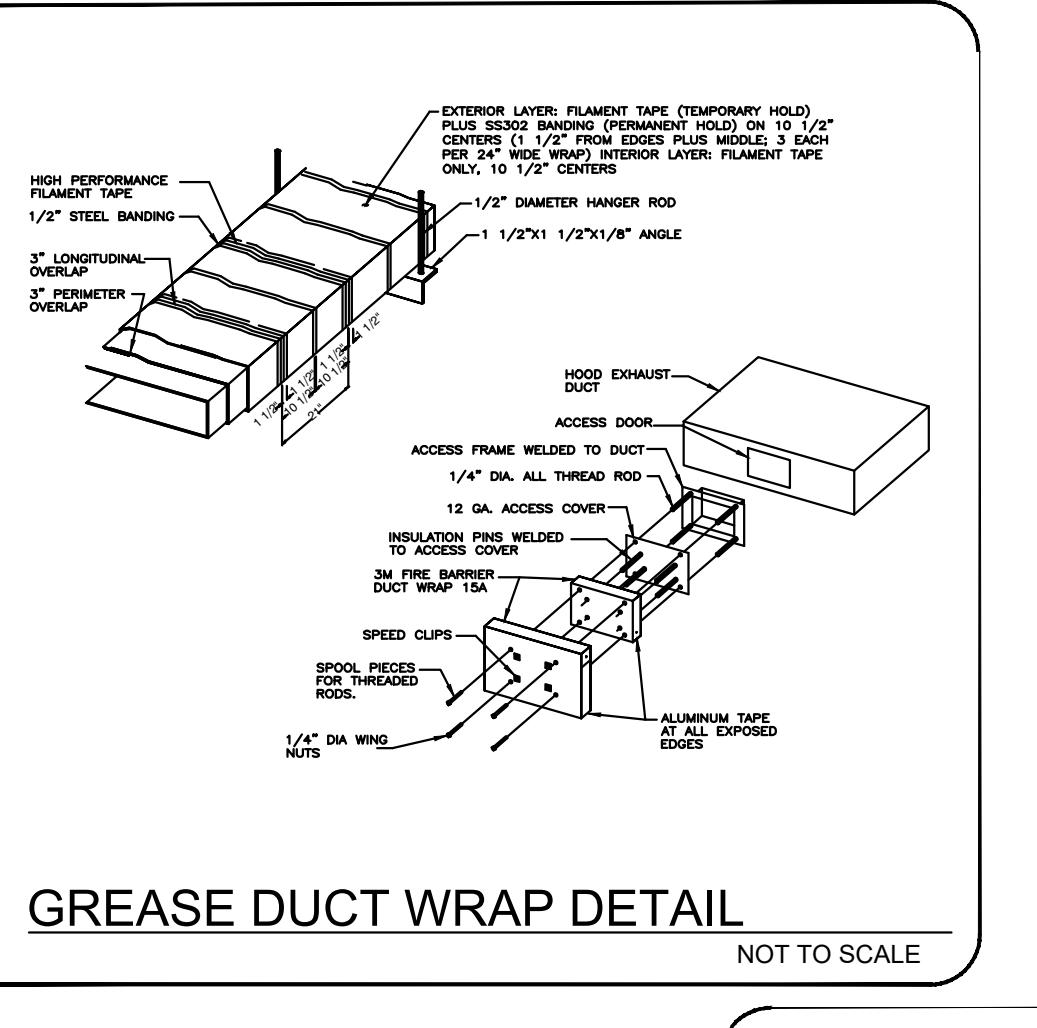
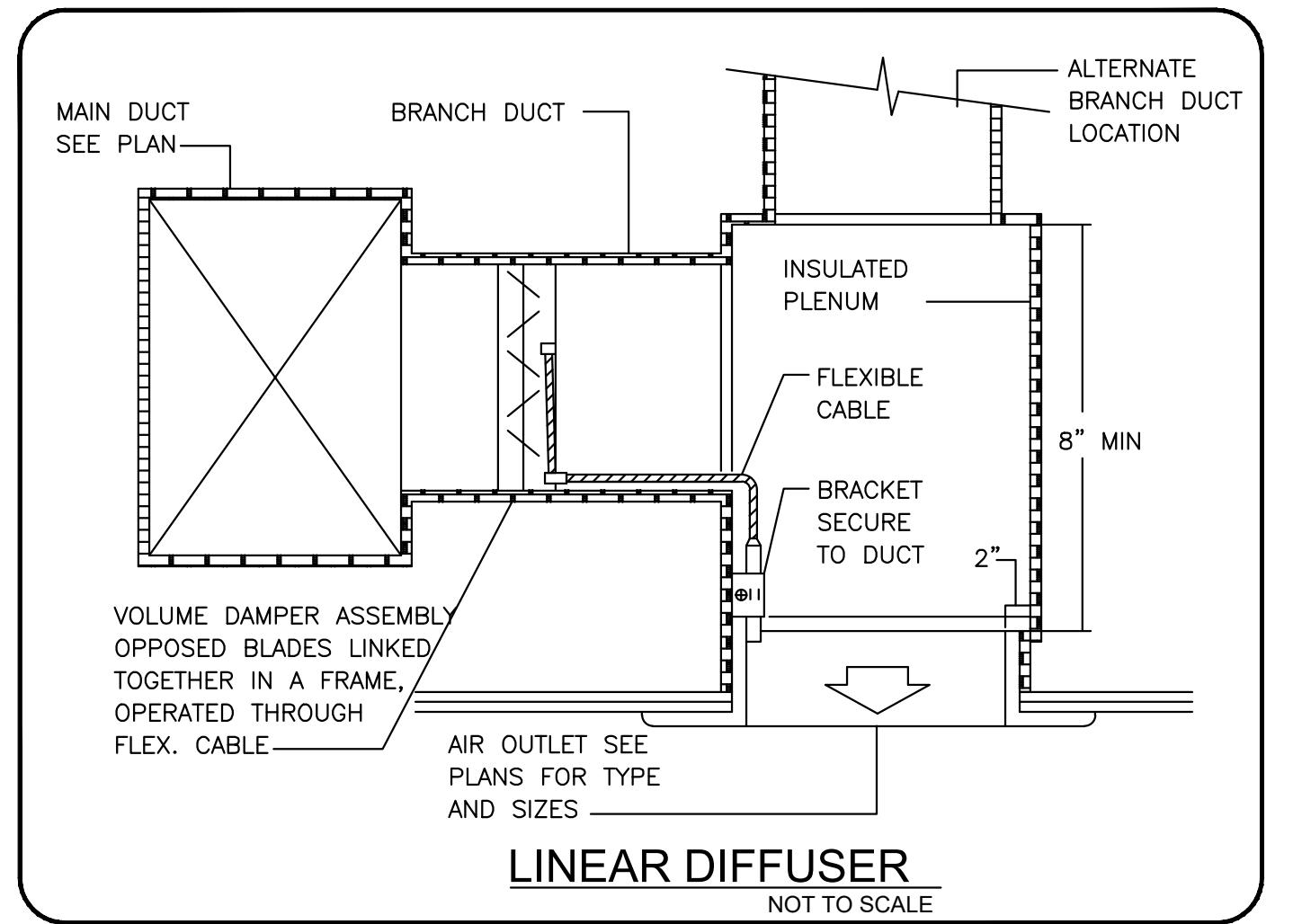
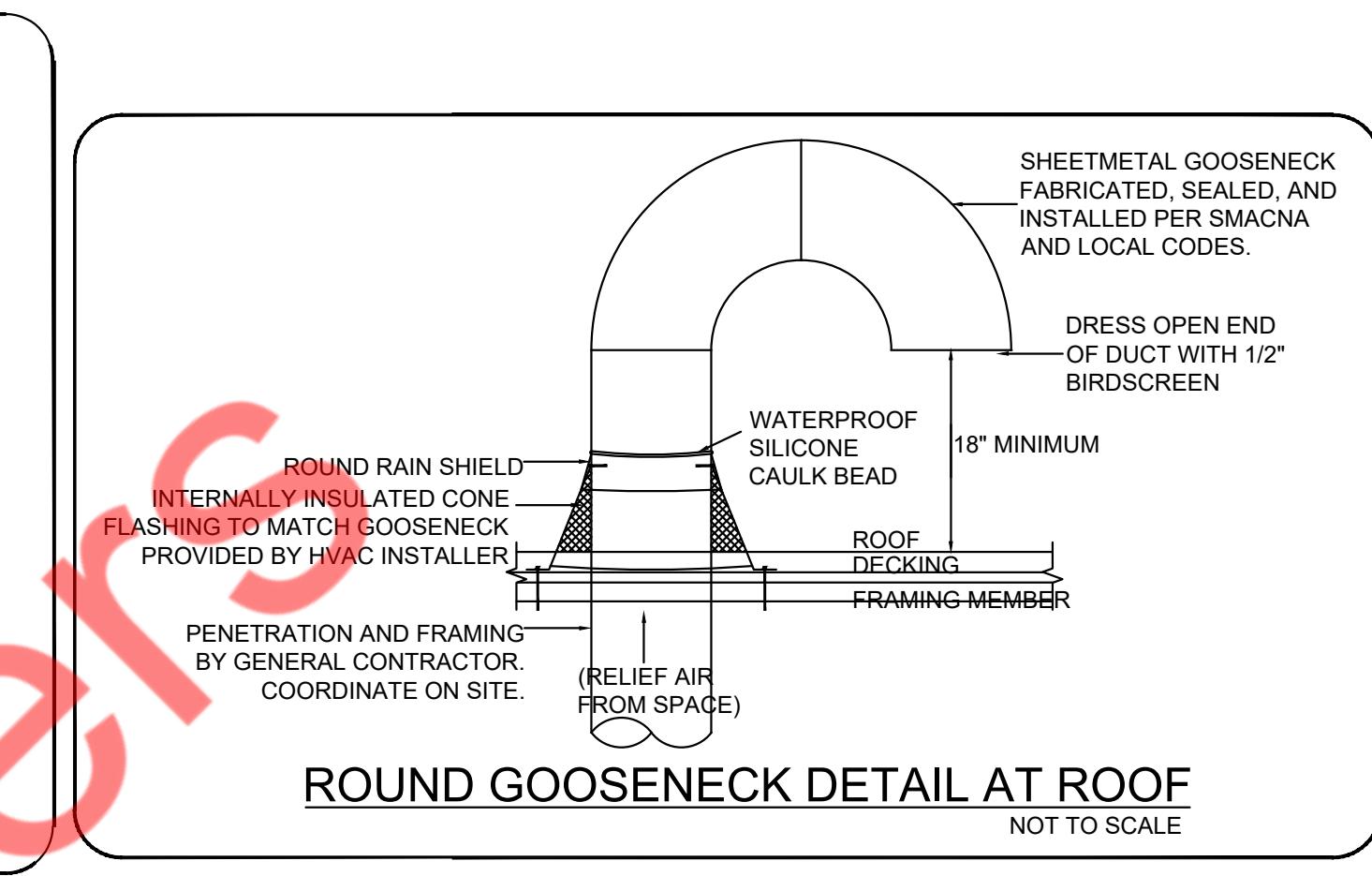
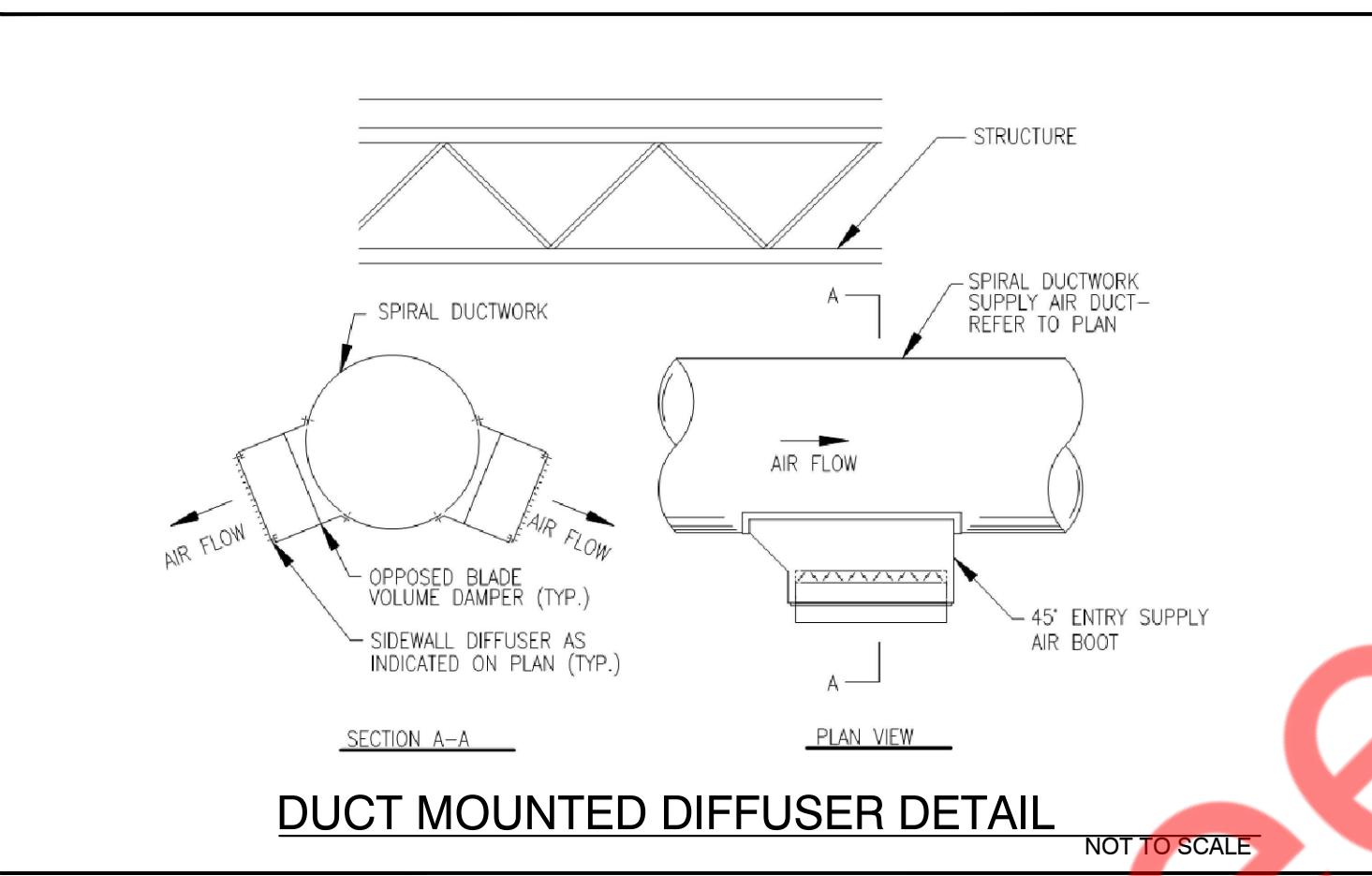
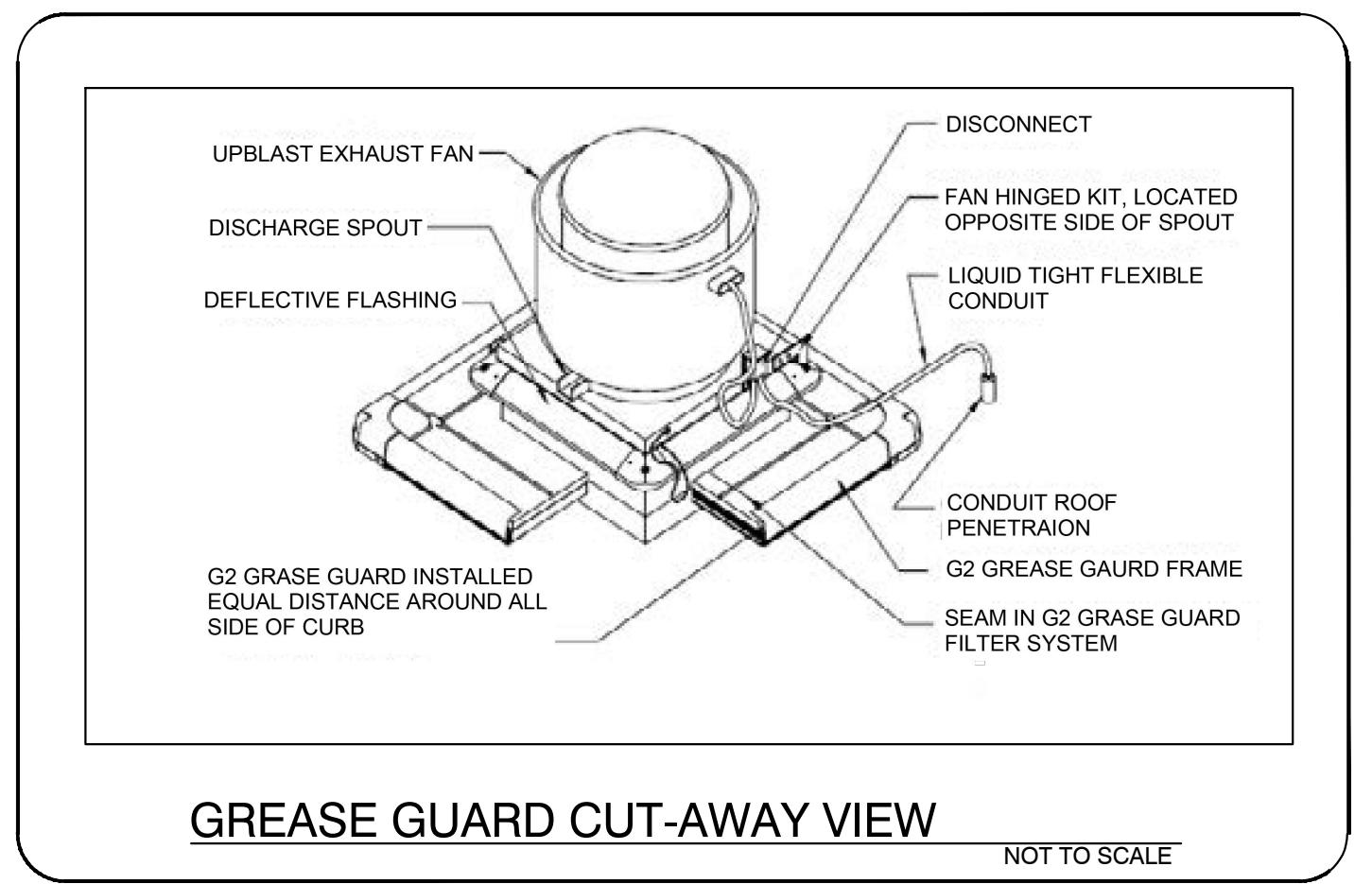
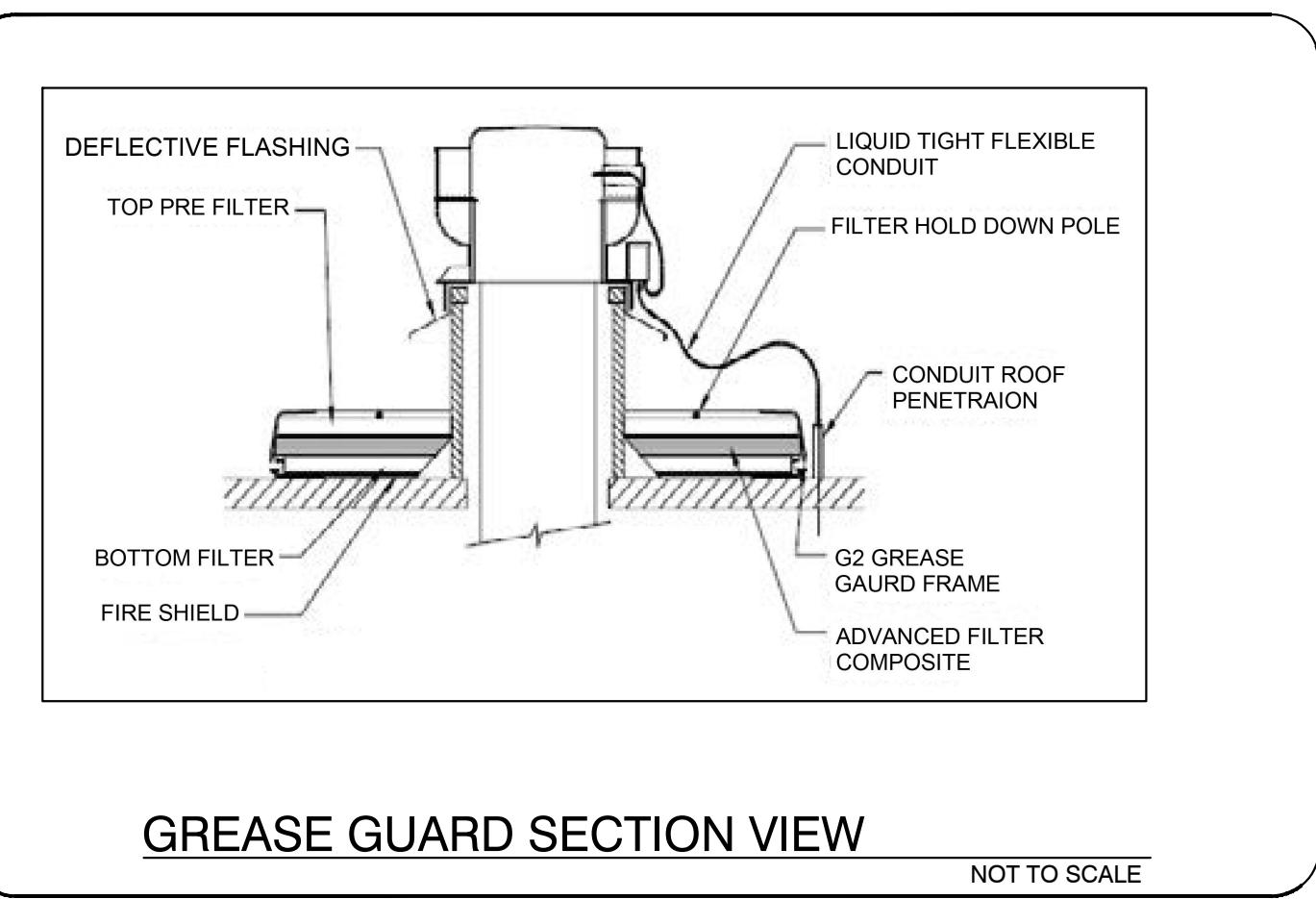


REVISIONS DATES:	
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11/20/2025
MICHAEL TOBIAS #76496
PROFESSIONAL ENGINEER
STATE OF FLORIDA

ISSUE DATE: 05.30.25
PROJECT #: 299F.1284F
DRAWN BY: NYE
CHECKED BY: NYE

HVAC DETAILS



System Checksums

By Trial

RTU-30-T102A

COOLING COIL PEAK										CLG SPACE PEAK					HEATING COIL PEAK					TEMPERATURES				
Peaked at Time: Mo/Hr: 8 / 19					Mo/Hr: Sum of OADB: Peaks					Mo/Hr: Heating Design OADB: 37					Single Zone									
	Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total		Space Sensible	Percent Of Total		Space Peak Space Sens	Coil Peak Tot Sens	Percent Of Total		Cooling	Heating										
	Btu/h	Btu/h	Btu/h	(%)		Btu/h	(%)		Btu/h	Btu/h	(%)													
Envelope Loads																								
Skylite Solar	0	0	0	0		0	0		Skylite Solar	0	0.00													
Skylite Cond	0	0	0	0		0	0		Skylite Cond	0	0.00													
Roof Cond	0	3,763	3,763	3		0	0		Roof Cond	0	4.45													
Glass Solar	13,656	0	13,656	12		21,031	29		Glass Solar	0	0.00													
Glass/Door Cond	2,261	0	2,261	2		1,301	2		Glass/Door Cond	-7,107	17.37													
Wall Cond	6,809	2,256	9,064	8		6,241	9		Wall Cond	-4,334	14.15													
Partition/Door	0	0	0	0		0	0		Partition/Door	0	0.00													
Floor	0	0	0	0		0	0		Floor	-2,355	5.75													
Adjacent Floor	0	0	0	0		0	0		Adjacent Floor	0	0													
Infiltration	3,818		3,818	3		770	1		Infiltration	-3,219	7.87													
Sub Total ==>	26,543	6,019	32,562	29		29,343	40		Sub Total ==>	-17,015	49.59													
Internal Loads									Internal Loads															
Lights	4,432	1,108	5,540	5		4,383	6		Lights	0	0.00													
People	15,497	0	15,497	14		8,010	11		People	0	0.00													
Misc	30,447	0	30,447	27		30,374	42		Misc	0	0.00													
Sub Total ==>	50,376	1,108	51,484	46		42,766	59		Sub Total ==>	0	0.00													
Ceiling Load	669	-669	0	0		578	1		Ceiling Load	-313	0.00													
Ventilation Load	0	0	28,382	25		0	0		Ventilation Load	0	-21,057	51.45												
Adj Air Trans Heat	0		0	0		0	0		Adj Air Trans Heat	0	0	0												
Dehumid. Ov Sizing			0	0					Ov/Undr Sizing	0	0	0.00												
Ov/Undr Sizing	0		0	0		0	0		Exhaust Heat	425	-1.04													
Exhaust Heat		-924	-924	-1					OA Preheat Diff.	0	0.00													
Sup. Fan Heat			0	0					RA Preheat Diff.	0	0.00													
Ret. Fan Heat			0	0					Additional Reheat	0	0.00													
Duct Heat Pkup			0	0					Underflr Sup Ht Pkup	0	0.00													
Underflr Sup Ht Pkup			0	0					Supply Air Leakage	0	0.00													
Supply Air Leakage			0	0																				
Grand Total ==>	77,589	5,533	111,504	100.00		72,687	100.00		Grand Total ==>	-17,328	-40,926	100.00												
COOLING COIL SELECTION										AREAS					HEATING COIL SELECTION									
Total Capacity	ton	MBh	Sens Cap.	Coil Airflow	Enter DB/WB/HR	Leave DB/WB/HR	Gross Total	Glass ft ²	(%)	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F											
			MBh	cfm	°F	°F	gr/lb																	
Main Clg	9.3	111.5	77.8	3,689	78.0	65.3	73.5	57.3	55.5	63.3	Main Htg	-40.9	3,689	66.2	76.2									
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Aux Htg	0.0	0	0.0	0.0									
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Int Door	0												
Total	9.3	111.5									ExFlr	92												
											Roof	1,358	0	0	0.0									
											Wall	1,436	337	23	0.0									
											Ext Door	30	30	100	0.0									
											Total	-40.9												

 Project Name: ZUNZBAR-THE VILLAGES
 Dataset Name: THE VILLAGES.TRC

 TRACE® 700 v6.3.3 calculated at 05:23 PM on 11/14/2024
 Alternative - 1 System Checksums Report Page 1 of 2

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Patent Numbers

FOR QUESTIONS, CALL THE
Western TN and MS Mechanical
PHONE: (901) 480-4443
FAX: (901) 480-4443
E-MAIL: mpm@mpmco.com

HOOD INFORMATION - J0987238101

HOOD ID	TAG	MANUFACTURER	LENGTH	MAX TEMP	TYPE	APPLIANCE	DESIGN CFM	TOTAL CFM	EXHAUST SOURCES	HOOD CONSTRUCTION	HOOD END TO ROW
1	Item #59 (Left)	ECON-AIR	10' 1"	600	I	HEAVY	210	220	4' 15" 2800 1576 0.70*	1800	625 WHERE EXPOSED LEFT ALONE
2	Item #64	6024	10' 1"	600	I	HEAVY	248	2500	4' 15" 2500 1790 0.95*	1800	425 SS WHERE EXPOSED RIGHT ALONE

HOOD INFORMATION

HOOD ID	TAG	TYPE	EFFICIENCY	WIRE GUARD	LOCATION	SIZE	TYPE	SWITCHES	HOOD PIPING	PIPING WEIGHT
1	Item #59 (Left)	CAPTRATE SOLD FILTER	7 20' 36"	855 SEE FILTER SPEC	RECESSED ROUND	ND			YES	625 LBS
2	Item #64 (Right)	CAPTRATE SOLD FILTER	7 20' 36"	855 SEE FILTER SPEC	RECESSED ROUND	ND			YES	625 LBS

HOOD OPTIONS

HOOD ID	TAG	OPTION
1	Item #59 (Left)	BACKSPLASH 120" HIGH X 244" LONG 430 SS VERTICAL LEFT END STANOFF FTNISH 1" WIDE 60" LONG INSULATED
2	Item #64 (Right)	BACKSPLASH INSIDE CORNER 800" HIGH X 200" LEG LENGTH 430 SS VERTICAL RIGHT SIDE FTNISH 120" HIGH X 300" LONG 430 SS VERTICAL STRUCTURAL FRONT PANEL

PERFORATED SUPPLY PLENUM(S)

HOOD ID	TAG	LENGTH	WIDTH	HEIGHT	TYPE	WIDTH	LENG	CFM	SP
1	Item #59 (Left)	Front	10'	28"	6"	MA	12"	6"	900 0.52*
2	Item #64 (Right)	Front	10'	28"	6"	AC	8"	6"	625 0.52*

WALL-MOUNT UTILITY CABINET

HOOD ID	LOCATION	SIZE	TYPE	SIZE	MODEL #	SWITCHES	QTY	WEIGHT
1	WALL MNT	10' 7" x 20"	TANK FS	4.0/4.0/4.0/4.0	SCV-011	1 LIGHT	1	540.00 LBS

ECON-AIR RECOMMENDS THE USE OF LISTED PRE-FABRICATED ROUND GREASE EXHAUST DUCT TO REDUCE STATIC PRESSURE IN THE SYSTEM, MINIMIZE INSTALLATION AND INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

HVAC DISTRIBUTION NOTE

HIGH VELOCITY DIFFUSERS OR HVAC RETURNS SHOULD NOT BE PLACED WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PRE-FABRICATED DIFFUSERS ARE RECOMMENDED.

VERIFY CEILING HEIGHT

HEIGHT REQUIRED TO VERIFY HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS

CUSTOMER APPROVAL TO MANUFACTURE:

APPROVED AS NOTED
APPROVED WITH NO EXCEPTION TAKEN
REUSE AND RECOMMIT
SIGNATURE _____ DATE _____

ZUNZBAR - The Villages, FL

Property of NY Engineers

REVISIONS

REVISION	DATE
1	8/13/2025

SPECIFICATION: CAPTRATE® GREASE-STOP® SOLD FILTER

THE CAPTRATE GREASE-STOP SOLD FILTER IS A SINGLE-STAGE FILTER FEATURING A 100% SOLID FILTER MEDIUM. IT IS A HEAVY DUTY FILTER, DESIGNED TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY. FILTER IS TO BE SECURED IN CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 8-INCH DEEP HOOD CHANNELS.

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPARTMENT FILTERS. THE CAPTRATE GREASE-STOP SOLD FILTER IS A HEAVY DUTY FILTER, DESIGNED TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY. FILTER IS TO BE SECURED IN CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 8-INCH DEEP HOOD CHANNELS.

MANUFACTURER'S APPROVAL FOR USE IN SOLID FILTER APPLICATIONS AS A SPARK ARRESTER.

TESTED VS. Particulate Diameter

HOOD INFORMATION

HOOD ID	TAG	TYPE	EFFICIENCY	WIRE GUARD	LOCATION	SIZE	TYPE	SWITCHES	HOOD PIPING	PIPING WEIGHT	
1	Item #59 (Left)	ECON-AIR	10' 1"	600	I	HEAVY	210	220	4' 15" 2800 1576 0.70*	1800	625 WHERE EXPOSED LEFT ALONE
2	Item #64	6024	10' 1"	600	I	HEAVY	248	2500	4' 15" 2500 1790 0.95*	1800	425 SS WHERE EXPOSED RIGHT ALONE

HOOD INFORMATION

HOOD ID	TAG	TYPE	EFFICIENCY	WIRE GUARD	LOCATION	SIZE	TYPE	SWITCHES	HOOD PIPING	PIPING WEIGHT
1	Item #59 (Left)	CAPTRATE SOLD FILTER	7 20' 36"	855 SEE FILTER SPEC	RECESSED ROUND	ND			YES	625 LBS
2	Item #64 (Right)	CAPTRATE SOLD FILTER	7 20' 36"	855 SEE FILTER SPEC	RECESSED ROUND	ND			YES	625 LBS

HOOD OPTIONS

HOOD ID	TAG	OPTION
1	Item #59 (Left)	BACKSPLASH 120" HIGH X 244" LONG 430 SS VERTICAL LEFT END STANOFF FTNISH 1" WIDE 60" LONG INSULATED
2	Item #64 (Right)	BACKSPLASH INSIDE CORNER 800" HIGH X 200" LEG LENGTH 430 SS VERTICAL RIGHT SIDE FTNISH 120" HIGH X 300" LONG 430 SS VERTICAL STRUCTURAL FRONT PANEL

GREASE DUCT & CHIMNEY SPECIFICATIONS:

PROVIDE GREASE DUCT EQUAL TO ECON-AIR MODEL "EDW". ROUND 20 GAUGE, 430 STAINLESS STEEL DUCTWORK, MODEL "EDW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "EDW" DOES NOT REQUIRE WELDING PROVIDED IT HAS BEEN INSTALLED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

PROVIDE GREASE DUCT ACCESSORIES AT EVERY CHANGE IN DIRECTION AND EVERY 12' BM CENTER. PER MANUFACTURERS LISTING MODEL "EDW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 3 1/16" PER 12". HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3 1/16" PER 12". DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO ECON-AIR MODEL "EDW- 28 PR TYPE HT, 3R, OR 32" ROUND 20 GAUGE, 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE, 430 STAINLESS OUTER SHELL.

ECON-AIR RECOMMENDS THE USE OF LISTED PRE-FABRICATED ROUND GREASE EXHAUST DUCT TO REDUCE STATIC PRESSURE IN THE SYSTEM, MINIMIZE INSTALLATION AND INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

HVAC DISTRIBUTION NOTE

HIGH VELOCITY DIFFUSERS OR HVAC RETURNS SHOULD NOT BE PLACED WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PRE-FABRICATED DIFFUSERS ARE RECOMMENDED.

VERIFY CEILING HEIGHT

HEIGHT REQUIRED TO VERIFY HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS

CUSTOMER APPROVAL TO MANUFACTURE:

APPROVED AS NOTED
APPROVED WITH NO EXCEPTION TAKEN
REUSE AND RECOMMIT
SIGNATURE _____ DATE _____

ZUNZBAR - The Villages, FL

Property of NY Engineers

REVISIONS

REVISION	DATE
1	8/13/2025

FIRE SYSTEM INFORMATION - J0987238101

ITEM ID	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION	LOCATION ON HOOD
1	Item #65	TANK FS	4.0/4.0/4.0/4.0	80	67	WALL UTILITY CABINET LEFT	N/A

FIRE SYSTEM PARTS LIST KEY

ITEM ID	KEY NUMBER	ITEM DESCRIPTION	QTY BY FACTORY	QTY BY DEST
1	0 - 0 - TANK FIRE SUPPRESSION POST-DISCHARGE PROTEC. UTILITY CABINET LABEL SHEET	1	1	
2	0 - 0 - TANK FIRE SUPPRESSION MAINTENANCE GUIDE UTILITY CABINET LABEL SHEET	1	0	
3	0 - 0 - 30-000900 QUICK SEAL - 1/2" O.D.	2	0	
4	0 - 0 - 30-000900 QUICK SEAL - 1/2" O.D.	6	0	
5	0 - 0 - 440PK12 1/2" MALE NPT TO 1/2" FEMALE 1/2" ELBOW, BRASS	4	0	
6	0 - 0 - 794PK12 1/2" NPT FEMALE TO 1/2" MALE PROPS ADAPTER	6	0	
7	0 - 0 - 795PK12 1/2" X 1/2" PRO-PRESS TEE X 1/2" NPT FEMALE CONNECTION, VIEGA	2	0	
8	0 - 0 - 87-100404-200 SECUNDARY ACTUATOR VALVE (SVAV) - SINGLE ACTUATOR, REQUIRES PROPRIETARY VALVE ACTUATOR	3	0	
9	0 - 0 - 87-100405-200 SECUNDARY ACTUATOR VALVE, 7/8" BRAIDED STAINLESS STEEL, PROPRIETARY VALVE ACTUATOR	3	0	
10	0 - 0 - 87-200205-000 TANK - Pressurized tank used for fire suppression.	4	0	
11	0 - 0 - 87-200303-000 FIRE THERMIST WITH 12' FOOT WIRE LEADS, NO CLOSING ON TEMP RISE, 120°F (49°C)	1	0	
12	0 - 0 - 87-200303-000 FIRE THERMIST WITH 12' FOOT WIRE LEADS, NO CLOSING ON TEMP RISE, 120°F (49°C)	1	0	
13	0 - 0 - 87-200303-000 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION	16	0	
14	0 - 0 - 87-200303-000 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION	16	0	
15	0 - 0 - 90972005 PRO-PRESS 1/2" X 1/2" PRESS TEE LD	8	0	
16	0 - 0 - 90972005 PRO-PRESS HARDWARE, DATANLOCK LOCKING BRACKET SNAUTS 5/16" ZINC, TANK FIRE SUPPRESSION	1	0	
17	0 - 0 - AD004243 TANK STRAP, 15' STAINLESS STEEL, 1" DEEP BACK BOX, RED COLOR	1	0	
18	0 - 0 - C30-106 CHROME PLATED PIPE FITTING, 3/8" NPT 90 DEGREE ELBOW	2	0	
19	0 - 0 - C30-223 CHROME PLATED PIPE FITTING, 3/8" NPT 223 DEGREE ELBOW	5	0	
20	0 - 0 - SLIP-ON-3/8" SURFACE LOOSE CONNECTION KIT, CONTAINS THE PARTS NEEDED TO CONNECT A 3/8" INCH DIA. TANK TO A 3/8" INCH DIA. TANK. KIT CONTAINS 7 FEET OF BLACK PVC VPC, 1 FEET OF TAN PVC WIRE, 30 FEET OF FLEXIBLE CONDUIT, AND ONE 3/8" INCH DIA. TANK	4	0	
21	0 - 0 - SLIP-ON-3/8" SURFACE LOOSE CONNECTION KIT, CONTAINS THE PARTS NEEDED TO CONNECT A 3/8" INCH DIA. TANK TO A 3/8" INCH DIA. TANK. KIT CONTAINS 7 FEET OF BLACK PVC VPC, 1 FEET OF TAN PVC WIRE, 30 FEET OF FLEXIBLE CONDUIT, AND ONE 3/8" INCH DIA. TANK	1	0	
22	0 - 0 - TANK STRAP, 15' STAINLESS STEEL, 1" DEEP BACK BOX	12	0	
23	0 - 0 - TANK STRAP, 15' STAINLESS STEEL, 1" DEEP BACK BOX, RED COLOR	4	0	
24	0 - 0 - TANK FIRE SUPPRESSION	4	0	
25	0 - 0 - TANK FIRE SUPPRESSION	16	0	
26	0 - 0 - TANK FIRE SUPPRESSION	16	0	
27	0 - 0 - TANK FIRE SUPPRESSION	16	0	
28	0 - 0 - TANK FIRE SUPPRESSION	1	0	

REVISIONS

REVISION	DATE
1	8/13/2025

SHEET NO.

ZUNZBAR - The Villages, FL

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REVISIONS DATES:

07/10/2025 PROJECT CORD.
07/16/2025 BD COMMENTS
08/20/2025 BD COMMENTS
08/21/2025 PROJECT CORD.
11/13/2025 PROJECT CORD.
11/20/2025 PROJECT CORD.

ISSUE DATE: 05.30.25
PROJECT #: 299F.1284F
DRAWN BY: NYE
CHECKED BY: NYE

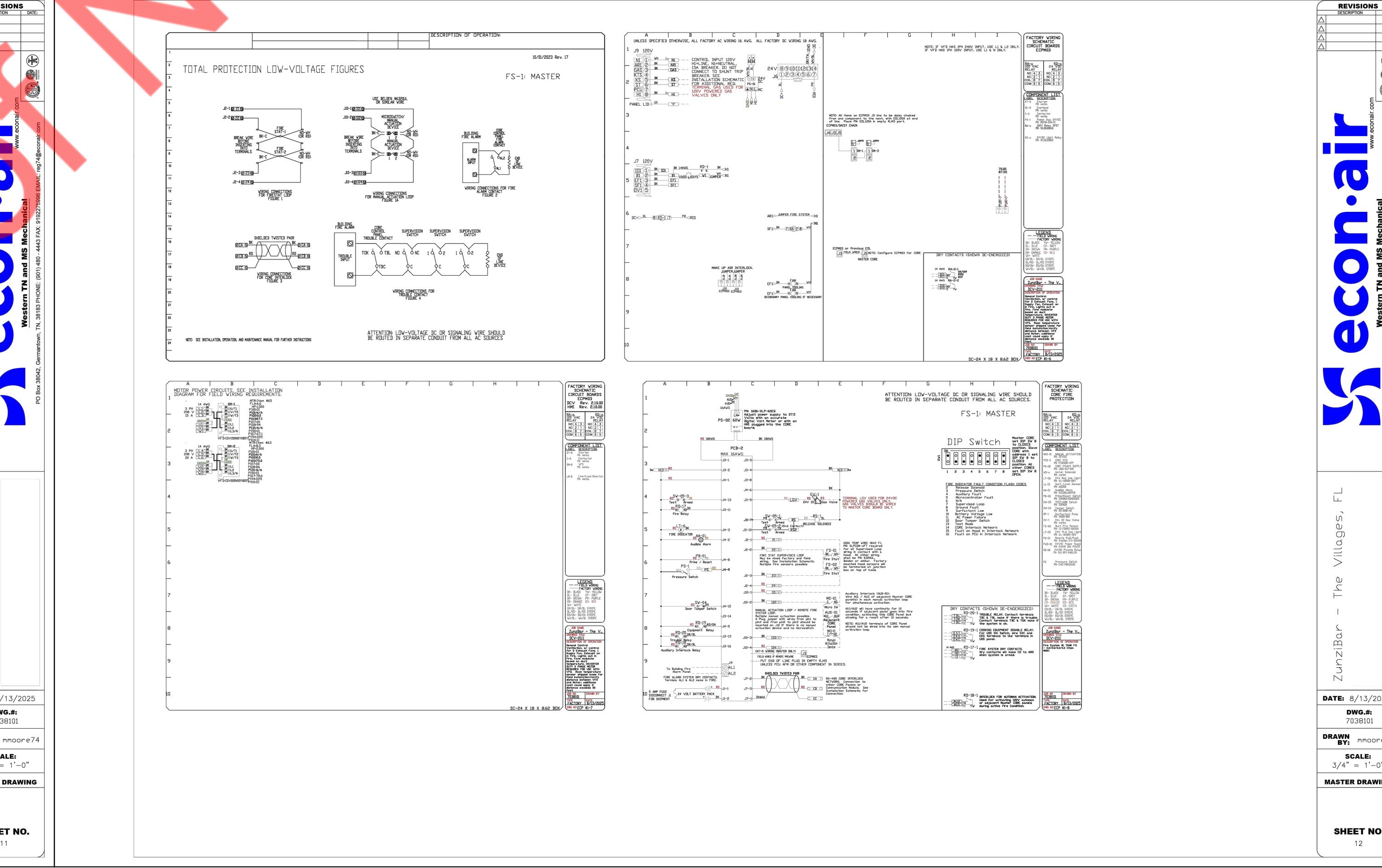
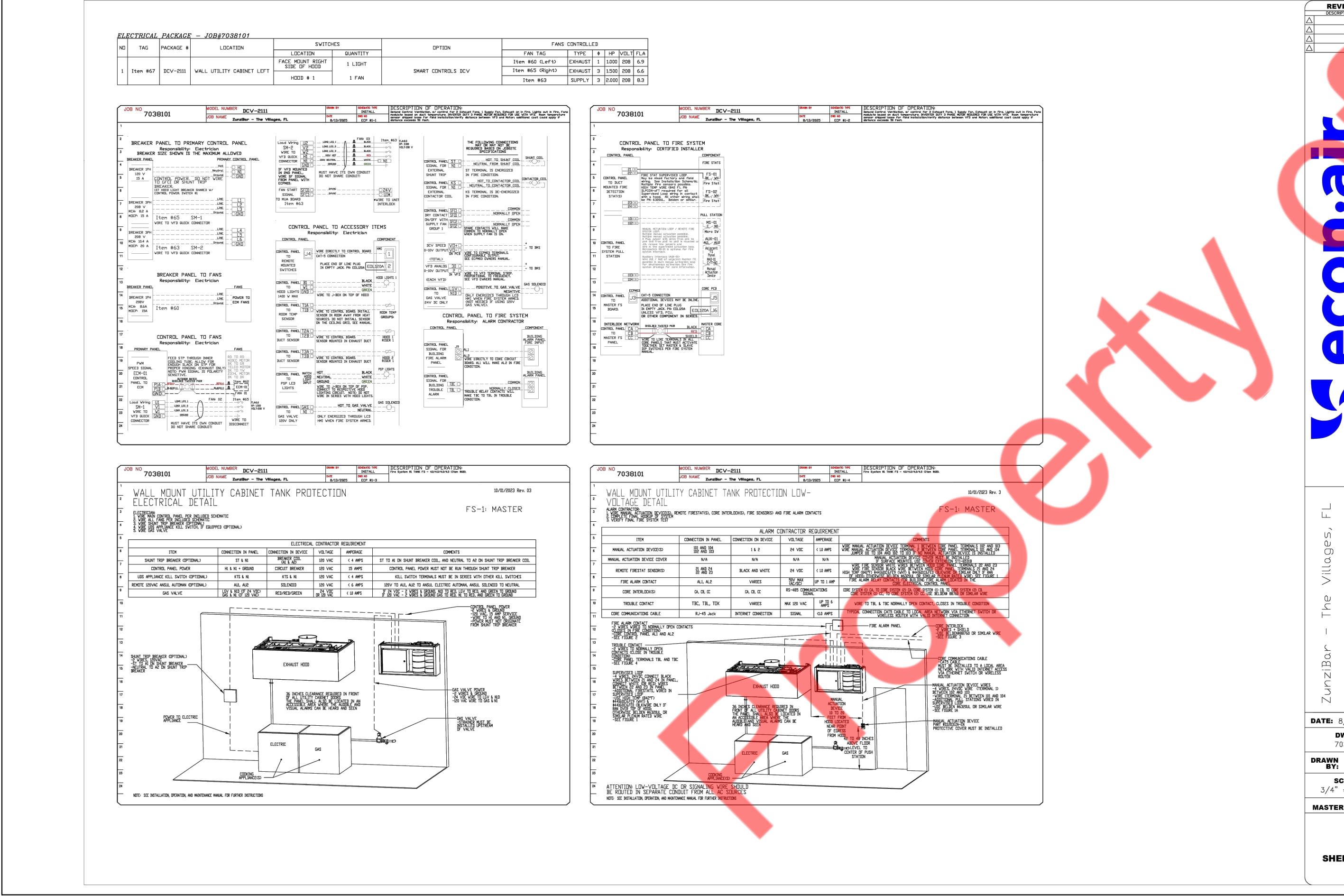
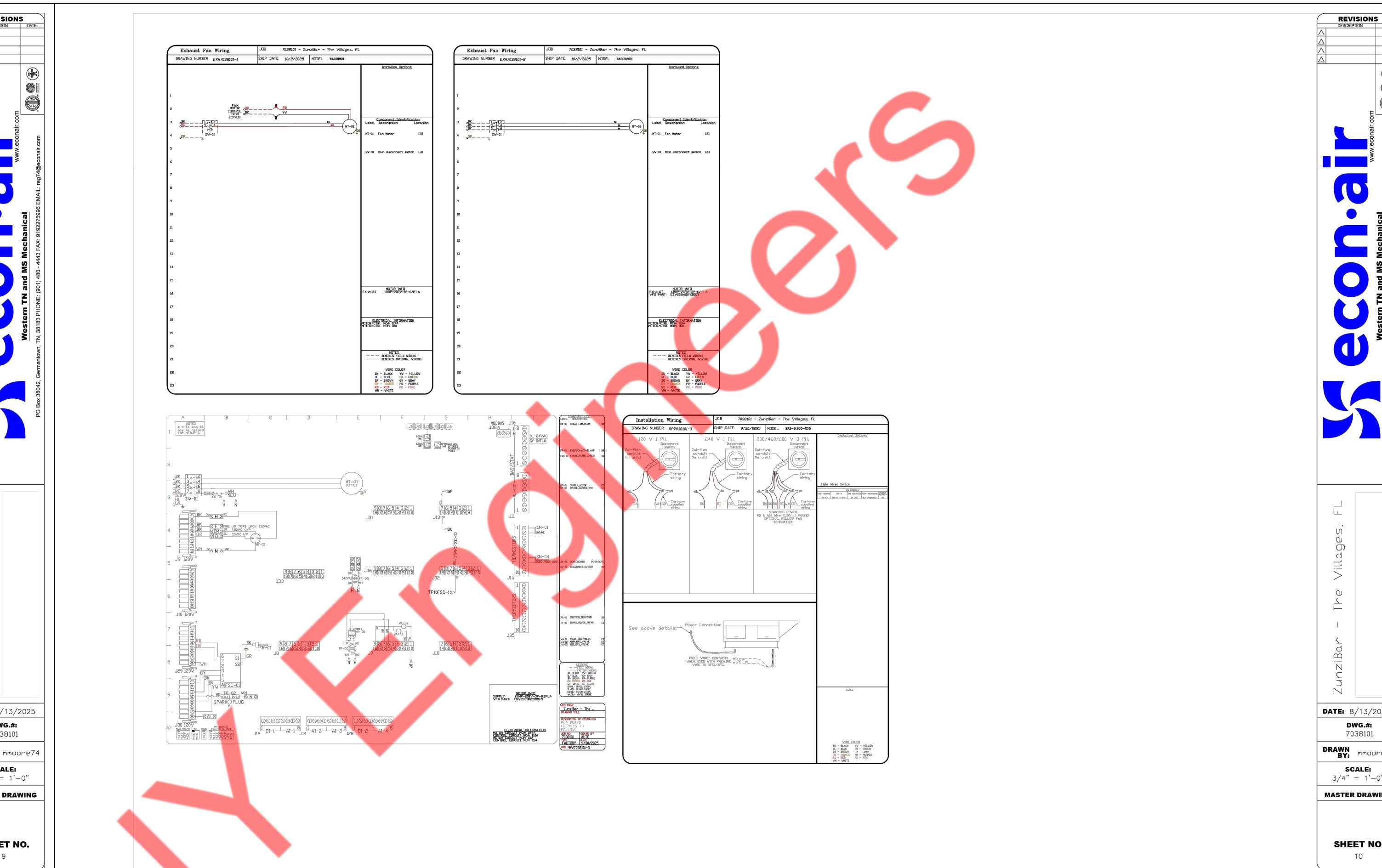
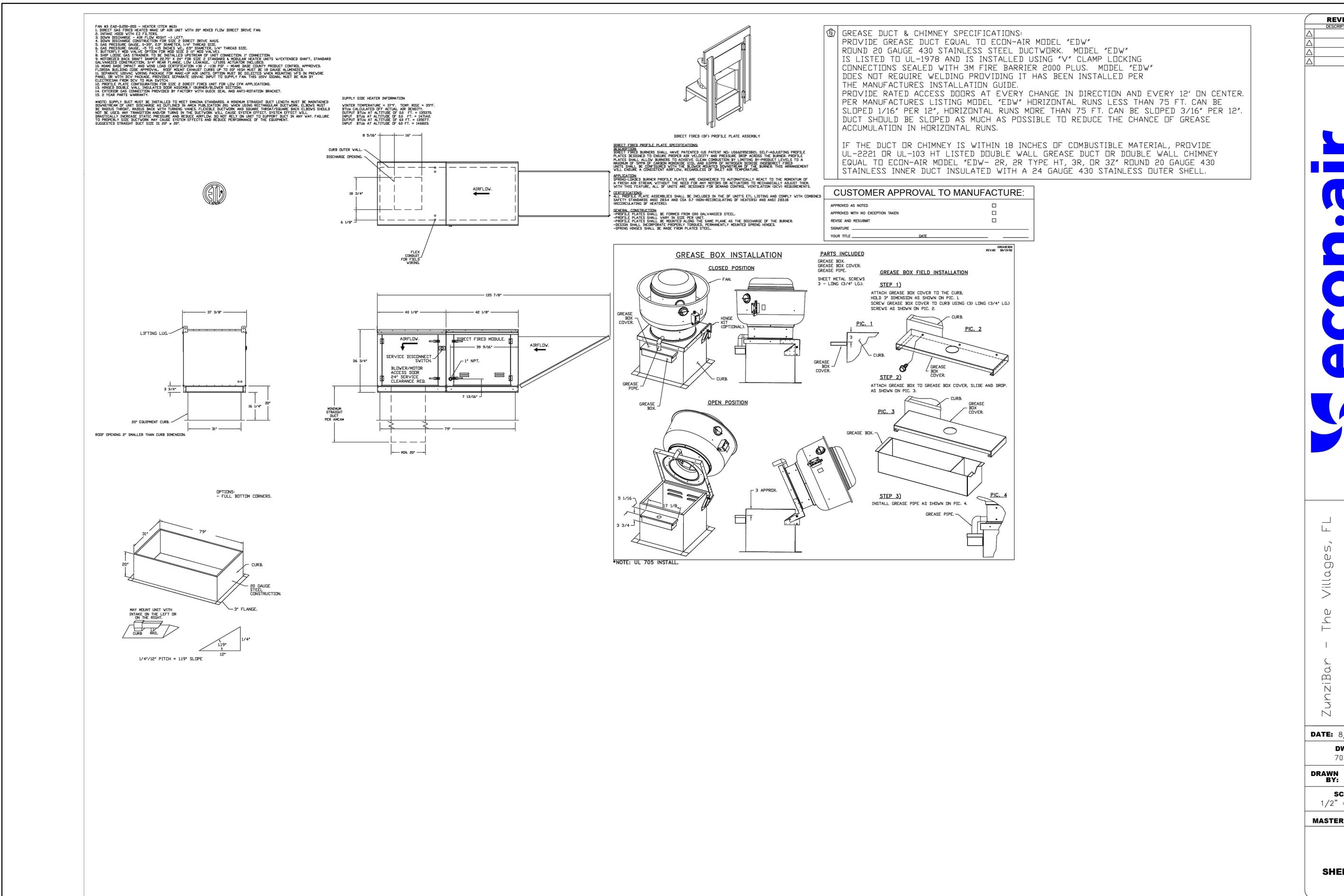
ZUNZBAR

HOOD DATA (1 OF 4)

SHEET NO.

ZUNZBAR - The Villages, FL

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REVISIONS DATES:
07/10/2025 PROJECT CORD.
07/16/2025 BD COMMENTS
08/20/2025 BD COMMENTS
4 08/21/2025 PROJECT CORD.
11/13/2025 PROJECT CORD.
11/20/2025 PROJECT CORD.

ISSUE DATE: 05.30.25
PROJECT #: 299F.1284F
DRAWN BY: NYE
CHECKED BY: NYE

HOOD DATA ▲
(4 OF 4)

M-9 ▲

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DEMAND CONTROL VENTILATION HOOD CONTROL PANEL SPECIFICATIONS:

CONTROLS SHALL BE LISTED BY ETL, UL, CSA AND SHALL COMPLY WITH DEMAND VENTILATION SYSTEM. THE CONTROL ENCLOSURE SHALL BE NEMA 1 RATED AND LISTED FOR INSTALLATION INSIDE OF THE HOOD EXHAUST SYSTEM. THE CONTROL ENCLOSURE MAY BE CONSTRUCTED OF STAINLESS STEEL OR PAINTED STEEL.

A DIGITAL CONTROLLER SHALL BE PROVIDED TO ACTIVATE THE HOOD EXHAUST FAN DYNAMICALLY BASED ON A FIXED DIFFERENTIAL BETWEEN THE AMBIENT AND DUCT TEMPERATURES SENSORS. THIS FUNCTION SHALL NOT OVERIDE THE COOKING APPLIANCE.

A DIGITAL CONTROLLER SHALL PROVIDE ADJUSTABLE HYSTERESIS SETTINGS TO PREVENT CYCLING OF THE FANS AFTER THE COOKING APPLIANCES HAVE BEEN TURNED OFF AND/OR THE HEAT IN THE EXHAUST SYSTEM HAS BEEN COOLED.

A DIGITAL CONTROLLER SHALL PROVIDE AN ADJUSTABLE MINIMUM FAN RUN-TIME SETTING TO PREVENT FAN CYCLING.

VARIABLE FREQUENCY DRIVES (VFD) SHALL BE PROVIDED FOR FANS AS REQUIRED. THE SYSTEM IS CAPABLE OF OPERATING IN ONE OR MORE OF THE FOLLOWING STATES AT ANY ONE TIME:

C. VARIABLE FREQUENCY DRIVES (VFD) SHALL MODULATE THE VFD RELATIVE A MINIMUM SETPOINT AND A MAXIMUM SETPOINT TO DEMAND. THE DUCT TEMPERATURE SENSOR INPUTS TO THE DIGITAL CONTROLLER SHALL BE USED TO CALCULATE THE VFD SPEED.

D. THE VFD SPEED RANGE OF OPERATION SHALL BE FROM 0% TO 100% FOR THE SYSTEM, WITH THE ACTUAL MINIMUM SPEED SET AS REQUIRED TO MEET MINIMUM VENTILATION REQUIREMENTS.

E. AN INTEGRATED GAS VALVE SHALL BE PROVIDED TO CONTROL THE EXHAUST FAN SPEED. A VFD'S SPEED IS PROPORTIONAL TO ALL EXHAUST FANS THAT ARE LOCATED IN THE SAME FAN GROUP AS THE SUPPLY FAN.

F. THE SYSTEM SHALL OPERATE IN PROG MODE DURING LIGHT COOKING LOAD OR COOL DOWN MODE WHEN COOKING APPLIANCES ARE TURNED OFF. THE SYSTEM WILL AUTOMATICALLY TURN OFF THE EXHAUST FANS WHEN COOKED OPERATION DURING EITHER OF THESE PERIODS WILL DISABLE THE SUPPLY FANS AND PROVIDE AN AUTOMATIC SHUT DOWN OF THE EXHAUST VENTILATION SYSTEM.

G. A DIGITAL CONTROLLER SHALL DISABLE THE SUPPLY FANS TO ACTIVATE THE EXHAUST FANS. ACTIVATE THE APPLIANCE SHUT DOWN AND DISABLE AN ELECTRIC GAS VALVE AUTOMATICALLY WHEN FIRE CONDITION IS DETECTED. THE SYSTEM WILL AUTOMATICALLY TURN OFF THE EXHAUST FANS WHEN FIRE IS DETECTED.

H. A DIGITAL CONTROLLER SHALL ALLOW FOR EXTERNAL BMS FAN CONTROL VIA DRY CONTACT (EXTERNAL CONTROL SHALL NOT OVERRIDE FAN OPERATION LOGIC AS REQUIRED BY CODE).

I. AN LCD INTERFACE SHALL BE PROVIDED WITH THE FOLLOWING FEATURES:

- A. INTEGRATED GAS VALVE FOR ELECTRONIC GAS VALVES AND RESET RELAY REQUIRED.
- B. INTEGRATED GAS VALVE RESET FOR ELECTRONIC GAS VALVES AND RESET RELAY REQUIRED.
- C. DUCT TEMPERATURE SENSOR FAILURE DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
- D. INTEGRATED GAS VALVE FAILURE DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
- E. A SINGLE LOW VOLTAGE CAT-5 RJ45 WIRING CONNECTION.
- F. AN ENERGY SAVINGS INDICATOR THAT UTILIZES MEASURED KWH FROM THE VFD.

SEQUENCE OF OPERATIONS:

THE HOOD CONTROL PANEL IS CAPABLE OF OPERATING IN ONE OR MORE OF THE FOLLOWING STATES AT ANY ONE TIME:

A. AUTOMATIC: THE SYSTEM OPERATES BASED ON THE DIFFERENTIAL BETWEEN HIGH TEMPERATURE AND LOW TEMPERATURE SENSORS. THE SYSTEM WILL AUTOMATICALLY TURN ON AND OFF AT A CONFIGURABLE TEMPERATURE DIFFERENTIAL THRESHOLD. DEPENDING ON THE JOB CONFIGURATION EACH FAN CAN BE CONTROLLED INDIVIDUALLY OR IN A GROUP. THE SYSTEM IS CAPABLE OF CONTROLLING A MOTOR SUCH AS EC MOTORS OR VFD DRIVEN MOTORS MODULATE WITH TEMPERATURE. IF THE PANEL IS CALCULATED THAT THE SYSTEM IS IN AN UNDESIRABLE STATE, THE SYSTEM WILL TURN OFF THE EXHAUST FANS IMMEDIATELY WITHIN A USER-DEFINED RANGE BASED ON THE TEMPERATURE DIFFERENTIAL. PANELS EQUIPPED WITH VARIOUS CONTROLS ARE CAPABLE OF CONTROLLING THE SYSTEM IN AUTOMATIC MODE.

B. SCHEDULE: THE SYSTEM IS CAPABLE OF SCHEDULING THE SYSTEM TO TURN ON AND OFF AT A SPECIFIED TIME. THE SYSTEM IS CAPABLE OF TURNING ON AND OFF THE EXHAUST FANS AT A SPECIFIED TIME. DURING UNCOUPLED TIME, THE SYSTEM WILL HAVE AN EXTRA OFFSET TO PREVENT UNINTENDED ACTIVATION. SCHEDULING IS A TIME WHEN THE SYSTEM IS NOT BEING OPERATED.

C. MANUAL: THE SYSTEM OPERATES BASED ON THE INPUT FROM AN HMI.

D. SCHEDULE & WEEKLY SCHEDULE: CAN BE SET TO RUN FANS FOR A SPECIFIED PERIOD THROUGHOUT THE WEEK. THE SYSTEM IS CAPABLE OF TURNING ON AND OFF THE EXHAUST FANS AT A SPECIFIED TIME. THIS IS SUITABLE TO THEIR NEEDS ANY TIME THAT IS WITHIN THE DEFINED COUPLED TIME. THE SYSTEM WILL RUN AT A SPECIFIED TIME DURING COUPLED TIME. DURING UNCOUPLED TIME, THE SYSTEM WILL HAVE AN EXTRA OFFSET TO PREVENT UNINTENDED ACTIVATION. SCHEDULING IS A TIME WHEN THE SYSTEM IS NOT BEING OPERATED.

E. FIRE: THE SYSTEM OPERATES BASED ON THE INPUT FROM AN EXTERNAL SOURCE (GAS, BMS OR HARDWIRED INTERLOCK).

F. FIRE: UPON ACTIVATION OF THE HOOD FIRE SUPPRESSION SYSTEM, THE EXHAUST FAN WILL COME ON OR TURN OFF. THE EXHAUST FAN WILL TURN OFF IMMEDIATELY UPON ACTIVATION OF THE FIRE. UPON ACTIVATING THE SHUT TRIP BREAKER PROVIDED BY THE ELECTRICIAN, FUEL GAS WILL SHUT OFF VIA A MECHANICAL/ELECTRICAL GAS VALVE ACTUATED BY THE HOOD FIRE SUPPRESSION SYSTEM.

G. SYSTEM DESIGN VERIFICATION (SDV):

IF ORDERED, GAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF GAS SERVICE HAS THE OPPORTUNITY TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL CHARGE FOR CHARGES.

DURING THE SDV, GAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

Zunzibar - The Villages, FL

DATE: 8/13/2025 **DWG. #:** 783601 **DRAWN BY:** nnpcore74 **SCALE:** 3/4" = 1'-0" **MASTER DRAWING:**

SHEET NO. 13

Zunzibar - The Villages, FL

DATE: 8/13/2025 **DWG. #:** 783601 **DRAWN BY:** nnpcore74 **SCALE:** 3/4" = 1'-0" **MASTER DRAWING:**

SHEET NO. 14

SCOPE OF WORK

1. REUSE THE EXISTING (1) 600A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL EXISTING FUSED DISCONNECT SWITCH AND CT METER FOR THE PROJECT SPACE.
2. NEW (1) 600A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "PP"
3. NEW (1) 150A(M.L.O), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "P"
4. NEW (1) 150A(M.L.O), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "K"
5. NEW (1) 150A(M.L.O), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "EP"
6. PROVIDE ALL NECESSARY EQUIPMENT AND ALL WIRING AND LIGHTING FOR THE PROPOSED TENANT SPACE. COORDINATE WITH G.C. FOR LOW VOLTAGE WIRING.

ELECTRICAL PLAN NOTES

1. ELECTRICAL CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THIS SET. COMPONENTS THEREOF, SHALL BE NEW AND SUCH AS APPEAR ON THE UL LIST OF APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF N.E.C., NEMA, AND IEC.
2. CONTRACTOR TO VERIFY THAT ALL EQUIPMENT SHOWN AS EXISTING MATCHES THE DESCRIPTIONS AND SPECIFICATIONS SHOWN ON DRAWINGS AND SCHEDULES. IF DIFFERENT, NOTIFY ARCHITECT/ENGINEER BEFORE BIDDING, ORDERING, OR PROCEEDING WITH WORK.
3. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW ELECTRICAL WORK INDICATED. CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT, CONTRACTOR SHALL NOTIFY THE OWNER OR HIS REPRESENTATIVE AS SOON AS POSSIBLE AFTER DISCOVERY OF THE PROBLEM AND SHALL NOT PROCEED WITH THAT PORTION OF THE WORK UNTIL OWNER HAS DIRECTED CORRECTIVE ACTION TO BE TAKEN.
4. ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATIONS INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. EXISTING CONDITIONS OF ELECTRICAL EQUIPMENT, LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING HIS BID.
5. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2020 EDITION OF THE NATIONAL ELECTRIC CODE AND ALL CODES AND ORDINANCES OF THE AUTHORITY HAVING JURISDICTION.
6. DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION FOR ALL EQUIPMENT. CONFIRM WITH OWNER'S REPRESENTATIVE.
7. ALL ELECTRICAL NOT BEING REUSED MUST BE REMOVED IN ITS ENTIRETY.
8. ALL CONDUIT IN OR UNDERGROUND OR IN CONCRETE MUST BE RIGID.
9. CIRCUIT BREAKERS AND PANELS TO BE BOLT ON TYPE.
10. ALL EQUIPMENT SHALL BE APPROVED BY UL OR OTHER NATIONALLY RECOGNIZED TESTING COMPANY.
11. ALL RECEPTACLES SHALL BE GROUNDED AS REQUIRED BY NEC 250.146
12. SUBMIT SERVICE ENTRANCE EQUIPMENT FOR SEPARATE APPROVAL.
13. ALL LOW VOLTAGE MUST BE IN CONDUIT TO ABOVE THE DROP CEILING. BRIDAL RINGS OR "J" HOOKS REQUIRED.
14. SEPARATE PERMITS ARE REQUIRED FOR ALL LOW VOLTAGE SUCH AS TELEPHONE, DATA, THERMOSTAT, MUSIC, ALARMS ETC.
15. SEPARATE PERMIT REQUIRED FOR SIGNAGE.
16. PRIOR TO ANY CONSTRUCTION WORK BEGINNING AN ON-SITE MEETING WITH GENERAL CONTRACTORS IS REQUIRED.
17. ELECTRICIAN MUST BE ON SITE FOR ALL INSPECTIONS.
18. MINIMUM WIRE SIZE SHALL BE #12 A.W.G. EXCLUDING CONTROL WIRING. ALL CONDUCTORS SHALL BE COPPER AND UNLESS OTHERWISE NOTED THIN INSULATION.
19. OUTLET BOXES SHALL BE PRERESSED STEEL IN DRY LOCATIONS, PLASTIC AND CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS, AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
20. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
21. ELECTRICAL SYSTEM SHALL BE COMPLETE AND EFFECTIVELY GROUNDED AS REQUIRED BY THE N.E.C. OR LOCAL CODES.
22. ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABELS WHERE APPLICABLE.
23. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY ENGINEER/ARCHITECT.
24. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
25. ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE THAT CERTIFICATE OF OCCUPANCY IS ISSUED. WARRANTY SHALL BE PROVIDED IN WRITING. PROVIDE COPY TO L.
26. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
27. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
28. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR TO OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT.
29. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER AND TELEPHONE COMPANIES.
30. CONTRACTOR SHALL COORDINATE WITH MECHANICAL DRAWINGS AND PROVIDE ALL NECESSARY CONTROL WIRING.
31. ALL CIRCUIT BREAKERS FEEDING MECHANICAL EQUIPMENT SHALL BE HACR TYPE CIRCUIT BREAKERS.
32. PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES, DEVICES, ETC. FOR ALL OUTLETS AS INDICATED.
33. MATERIALS, PRODUCTS, AND EQUIPMENT, INCLUDING ALL

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
EXHAUST FAN	
JUNCTION BOX	
BATTERY BACK UP EXIT LIGHT	
WALL SWITCH (SINGLE)	
WALL SWITCH (DIMMER)	
3-WAY WALL SWITCH	
DUPLEX RECEPTACLE	
QUADRUPLEX RECEPTACLE	
STUB UP FLEX TO RECEPTACLE	
STUB UP FLEX TO J-BOX	
STUB DOWN FROM CEILING FLEX TO RECEPTACLE	
STUB DOWN FROM CEILING FLEX TO J-BOX	
TELEPHONE/DATA PORT RECEPTACLE	
CEILING MOUNTED DUPLEX RECEPTACLE	
AC INDOOR UNIT	
MOTOR SWITCH	
MOTORIZED DAMPER	
ELECTRICAL PANEL	
TELEVISION OUTLET	
TELEPHONE/DATA OUTLET	
DATA OUTLET	
CEILING MOUNTED DATA OUTLET	
230 VOLT RECEPTACLE	
NON FUSED DISCONNECT SWITCH	
FUSED DISCONNECT SWITCH	
C.O. CONVENIENCE OUTLET	
DUPLEX RECEPTACLE WITH USB AND USB C PROVISION	

LIGHTING FIXTURE SCHEDULE

SYMBOL	TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLT	NUMBER OF FIXTURES	WATTAGE	TOTAL WATTS	MOUNTING	REFER TO REFLECTED CEILING PLAN IN ARCHITECTURAL DRAWINGS FOR MORE INFORMATION ON COLORS AND TRIMS REQUIRED.
(⊕)	L-1	RECESSED CAN LIGHTING @ THROUGHOUT	CREE LIGHTING	LR4X-2700K-TL 650	120	20	12 WATTS	240 WATTS	RECESSED	NOTE: 1. E.C. SHALL COORDINATE WITH ARCHITECT FOR FINAL FIXTURE COUNT AND TYPE. 2. E.C. SHALL RECEIVE APPROVAL FROM ARCHITECTURE FOR LIGHTING FIXTURE SELECTION BEFORE PURCHASE AND INSTALLATION.
(○)	L-2	HANGING PENDANTS @ LOW-TOP TABLES	CAPITAL LIGHTING	PLT-13421	120	4	3.5 WATTS	31.5 WATTS	RECESSED	3. ALL THE LIGHTING FIXTURE TYPES, QUANTITIES, AND TYPES OF CONTROLS SHALL BE COORDINATED WITH THE OWNER/ARCHITECT BEFORE COMMENCING ANY WORK. INFORM THE ELECTRICAL CONTRACTOR OF THE LIGHTING FIXTURES AND CONTROLS.
(○)	L-3	HANGING PENDANTS @ LOW-TOP TABLES	CAPITAL LIGHTING	PLT-13421	120	4	3.5 WATTS	31.5 WATTS	RECESSED	4. E.C. SHALL PROVIDE REQUIRED POWER PACKS AND RELAYS SUITABLE FOR THE ABOVE LIGHT FIXTURES IN COORDINATION WITH THE LIGHTING VENDOR. BASE BID ACCORDINGLY.
(○)	L-4	HANGING PENDANTS @ HIGH-TOP TABLES	CAPITAL LIGHTING	PLT-13421	120	8	3.5 WATTS	10.5 WATTS	RECESSED	5. E.C. SHALL COORDINATE WITH LIGHTING VENDOR FOR EXACT DIMMER CAPABILITY WITH THE LIGHT FIXTURE BASE BID ACCORDINGLY.
(○)	L-5	HANGING PENDANTS @ HIGH-TOP TABLES	CAPITAL LIGHTING	PLT-13421	120	8	3.5 WATTS	10.5 WATTS	RECESSED	6. *** INDICATES THE WATTAGE ASSUMPTION.
(⊕)	L-6	HANGING PENDANTS @ ENTRY	CAPITAL LIGHTING	PLT-13421	120	1	3.5 WATTS	3.5 WATTS	RECESSED	
(⊕)	L-7	HANGING PENDANTS @ MAIN BAR	NAUTICAL FURNISHINGS	PLT-13421	120	7	3.5 WATTS	24.5 WATTS	RECESSED	
(⊕)	L-8	RGB STRIP LIGHTING @ MILLWORK LIGHT BOXES	GM LIGHTING	LTR-S-24V-6.0W-RGBW-16	120	25	6 W/ FT	150 WATTS		
(—)	L-9	NEON SIGN @ EXPO SIGN BAND	LUMA-SPEC		120	10 FT	12W/ FT	120 WATTS		
(*)	L-10	EXTERIOR FANS @ UNDER BAR & SURF BOARD	CRAFTMADE	VENS2CW5	120	5	19 WATTS	95 WATTS	RECESSED	
(○)	L-11	WALL MOUNTED SCONCE @ EXTERIOR ENTRY	BARN LIGHT	BLE-G-CGG	120	3	4 WATTS	12 WATTS	RECESSED	
(○)	L-12	RECESSED CAN LIGHTING @ KITCHEN AREA	CREE LIGHTING	LR6X	120	13	12 WATTS	156 WATTS	RECESSED	
(—)	L-13	KITCHEN TROFFER	CREE LIGHTING	C-TR-B-BT22	120	10	36 WATTS	360 WATTS	RECESSED	
(*)	XC	CEILING MOUNTED EXIT SIGN / EMERGENCY LIGHT COMBO	LITHONIA LIGHTING	ECR-LED	120	7	4 WATTS	28 WATTS	WALL	
(—)	EU	WALL MOUNTED EMERGENCY LIGHTS	LITHONIA LIGHTING	ELM2	120	12	3 WATTS	36 WATTS	WALL	
(OS)	OS	CEILING OCCUPANCY SENSOR	LEVITON	O2C10-UDW	120	-	-	-	CEILING	
(*)	OS	OCCUPANCY WALL SWITCH	INTERMATIC	IOS-DDR-WH	120	-	-	-	WALL	
(QT 5WH)	QT 5WH	ATHENA 5" TOUCH SCREEN WHITE (QT 5 WH)	LUTRON	Q-TOUCH5-WH	120	-	-	-	WALL	
(DMX)	DMX	QS DMX OUTPUT CONTROL INTERFACE (DMX)	LUTRON	QSE-CL-DMX	120	-	-	-	WALL	
(4A 5)	4A 5	ENERGI SAVR NODE PHASE ADAPTIVE 4 OUTPUT (QSN-4A5-S)	LUTRON	QSN-4A5-S	120	-	-	-	WALL	
(QP5 1-E)	QP5 1-E	ATHENA 1-LINK PROCESSOR PANEL WITH INTEGRAL POE SWITCH	LUTRON	QP51L-POE	120	-	-	-	WALL	
(Q 5RL)	Q 5RL	SEE TOUCH QS INSERT 5 BUTTON WITH RAISE/ LOWER	LUTRON	QSIWS2-5BRL-WH-G	120	-	-	-	WALL	
(4T 20)	4T 20	ENERGI SAVR NODE 0-10V AND SOFTSWITCH	LUTRON	QSN2-4T20-S	120	-	-	-	WALL	
(E)	(E)	EXISTING TO REMAIN				-	-	-		

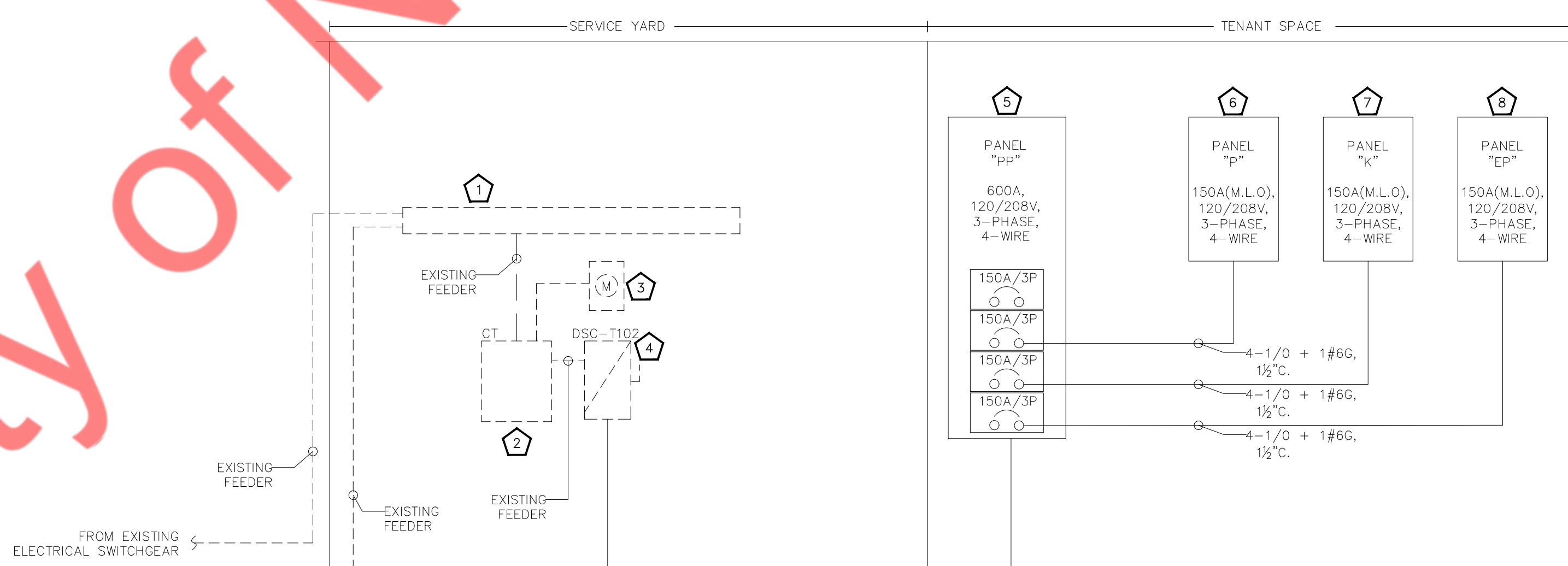
GENERAL LIGHTING NOTES

- A. UPPER CASE LETTER NEXT TO LIGHT FIXTURE DENOTES FIXTURE TYPE.
- B. ALL EMERGENCY FIXTURES SHALL BE CONNECTED TO AN UNSWITCHED HOT CONDUCTOR.

EXISTING CONDITIONS NOTES

STOP AND READ
THE CONTRACTOR AND SUB-CONTRACTORS SHALL NOT INITIATE ANY WORK UNTIL EXISTING FIELD CONDITIONS ARE PROPERLY VERIFIED. THIS SHALL HOLD TRUE FOR FIRST GENERATION AND 2ND GENERATION SPACES. WHEN DEMOLITION IS REQUIRED, THAT WILL BE PERMITTED TO EXPOSE CONDITIONS. THESE VERIFICATIONS SHALL INCLUDE BUT NOT LIMITED TO: DIMENSIONS BOTH HORIZONTALLY AND VERTICAL, ELECTRICAL SERVICE PANELS LOCATION AND VOLTS/PHASE, LOCATION/QTY OF ROOF MOUNTED HVAC EQUIPMENT, CONFIRM THAT INTERIOR HVAC HUNG UNITS HAVE PROPER SUPPORT CONNECTIONS FOR EXISTING STRUCTURE, FIRE SPRINKLER MAIN RUNS, TOILET ROOM DIMENSIONS, DOOR SWING FOR DOORS TO REMAIN AND ETC. IF NOT VERIFIED AND DISCOVERED AT A LATER TIME, THE CONTRACTOR SHALL REIMBURSE THE ARCHITECT FOR THE REDESIGN FEE. THIS DOES NOT INCLUDE HIDDEN WORK I.E. PITCH OR SANITARY LINES, ACTUAL CONDITIONS OF EXISTING HVAC EQUIPMENT, STRUCTURAL COLUMNS/BEARING WALLS OR CONDITIONS OF GREASE INTERCEPTORS AND ETC.

51. ABSOLUTELY NO FLEXIBLE CONDUIT IS PERMITTED IN DEMISING WALLS. FLEXIBLE CONDUIT IS PERMITTED FOR SHORT FINAL CONNECTIONS ONLY (6'-0" OR LESS).
52. EXPOSED CONDUIT SHALL BE INSTALLED IN STRAIGHT LINES, PARALLEL OR IN RIGHT ANGLES TO THE BUILDING STRUCTURE. DO NOT LOOP EXCESS FLEXIBLE CONDUIT IN CEILING SPACE OR WALL.
53. CABLE TYPES AC AND NM CABLES ARE NOT ACCEPTABLE. TYPE MC CABLE, ELECTRIC METALLIC TUBING (EMT) AND RIGID GALVANIZED CONDUIT ARE PERMITTED.
54. ALL EQUIPMENT, DEVICES AND FIXTURES SHALL BE GROUNDED IN COMPLIANCE WITH NEC AND UL REQUIREMENTS.
55. ALL PANELS TO BE UL LABELED.
56. 7-DAY 24-HOUR TIME CLOCK IS REQUIRED TO CONTROL STOREFRONT ENTRY LIGHTS, SHOW WINDOW LIGHTS, SHOW WINDOW RECEPTACLES AND STOREFRONT SIGNAGE. ILLUMINATED STOREFRONT SIGNS MUST REMAIN LIT DURING ALL MALL BUSINESS HOURS.
57. TENANT IS REQUIRED TO MAKE A FIELD SURVEY OF THE EXISTING ELECTRICAL SERVICE TO ENSURE THAT THE TOTAL CONNECTED LOAD DOES NOT EXCEED THE ELECTRIC SERVICE. ANY MODIFICATIONS OR UPGRADES NEEDED ARE SUBJECT TO LANDLORD'S PRIOR APPROVAL AND WILL BE COMPLETED BY TENANT/TENANT'S GC AT TENANT'S SOLE EXPENSE.
58. ALL ELECTRICAL PANELS TO BE MOUNTED ON PLYWOOD BACKER BOARD.
59. PANEL PHASE LOADS TO BE BALANCED WITHIN 10%.
60. ELECTRICAL PANELS MAY NOT BE RECESSED IN DIMINISHING PARTITIONS. SURFACE MOUNT OR FULL FURST WALL TO ACHIEVE FLUSH FINAL APPEARANCE.
61. COORDINATE ALL CONCRETE TRENCHING/CORING TO ENSURE THAT ANY UNDER SLAB UTILITIES, ETC. ARE NOT DAMAGED DURING FLOOR CUT. ANY DAMAGE TO BE REPAIRED AT TENANT'S EXPENSE. PRIOR APPROVAL AND COORDINATION WITH PROPERTY MANAGEMENT IS REQUIRED FOR ALL CONCRETE CUTTING.
62. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
63. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR TO OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT.
64. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER AND TELEPHONE COMPANIES.
65. CONTRACTOR SHALL COORDINATE WITH MECHANICAL DRAWINGS AND PROVIDE ALL NECESSARY CONTROL WIRING.
66. ALL CIRCUIT BREAKERS FEEDING MECHANICAL EQUIPMENT SHALL BE HACR TYPE CIRCUIT BREAKERS.
67. PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES, DEVICES, ETC. FOR ALL OUTLETS AS INDICATED.
68. MATERIALS, PRODUCTS, AND EQUIPMENT, INCLUDING ALL



ELECTRICAL LIGHTING PLAN GENERAL NOTES:

1. LIGHT FIXTURE SHALL BE SHIELDED.
2. COORDINATE WORK WITH MECHANICAL, REFRIGERATION AND EQUIPMENT CONTRACTORS, INCLUDING COOLER/FREEZER WORK AND ICE MACHINE CONDENSING UNITS.
3. VERIFY ROUGH-IN DIMENSIONS AND POWER REQUIREMENTS WITH KITCHEN EQUIPMENT DISTRIBUTOR PRIOR TO ROUGH-IN.
4. PROVIDE FINAL CONNECTIONS WITHIN FRONT COUNTER, COOKCENTER PANEL, REMOTE REFRIGERATION UNITS, AND ICE MACHINE REMOTE UNIT WHEN INSTALLED BY VENDOR.
5. ENSURE ADEQUATE CONDUIT SIZE FOR ELECTRICAL AND COMMUNICATION WIRING ON SITE AND INTO BUILDING.
6. CIRCUITS MAY BE GROUPED WITHIN COMMON CONDUITS PER NEC REQUIREMENTS UNLESS NOTED OTHERWISE.
7. WIRE ROOF TOP UNIT CONTROL CIRCUIT THROUGH AUXILIARY CONTACTS IN SMOKE DETECTOR AND MAKE ALL FINAL CONNECTIONS. (TYPICAL OF ALL ROOF TOP UNITS)
8. SEAL ROOF PENETRATIONS PER ROOFING MANUFACTURER'S INSTRUCTIONS.
9. COORDINATE WORK ABOVE THE CEILING WITH OTHER TRADES TO PROVIDE THE GREATEST POSSIBLE CLEARANCE. CONDUITS SHALL BE ROUTED IN THE DIRECTION OF THE TRUSSES.
10. ONLY EMT CONDUITS ARE ALLOWED IN RECEIVING/DRY STORAGE.
11. ELECTRICAL CONTRACTOR TO COORDINATE WITH LIGHTING VENDOR/OWNER FOR EXACT LIGHTING CONTROL AND ZONING REQUIREMENTS. INFORM ENGINEER ON RECORD FOR ANY DISCREPANCY BEFORE COMMENCING ANY WORK.. BASE BID ACCORDINGLY.

ELECTRICAL LIGHTING PLAN KEYED WORK NOTES:

A CONNECT ALL EMERGENCY EGRESS LIGHTING FIXTURES TO THE NEAREST LIGHTING BRANCH CIRCUIT AHEAD OF ALL SWITCHING AND CONTROLS PER STATE AND LOCAL CODES.

B E.C SHALL COORDINATE EXACT LOCATION OF ATHENA 5" TOUCH SCREEN-WHITE (QT 5 WH) AND SEETOUCH QS INSERT 5 BUTTON WITH RAISE/ LOWER (QSW52-BRL1-WH-G) WITH OWNER/ ARCHITECT/ LIGHTING VENDOR. E.C SHALL COORDINATE WITH LIGHTING VENDOR FOR EXACT MOUNTING HEIGHT AND POWER REQUIREMENTS FOR ATHENA 5" TOUCH SCREEN - WHITE (QT 5 WH). E.C SHALL COORDINATE EXACT QUANTITY PER SITE REQUIREMENT/ LIGHTING VENDOR REQUIREMENT. BASE BID ACCORDINGLY.

C NOT USED.

D E.C TO COORDINATE WITH OWNER/ SIGN VENDOR FOR THE EXACT POWER & CONNECTION REQUIREMENTS FOR BUILDING SIGNAGES. THE BUILDING SIGNAGES SHOULD BE CONTROLLED BY PHOTOCELL WITH ASTRONOMICAL TIME CLOCK. BASE BID ACCORDINGLY.

E EXISTING LIGHT FIXTURE IN THIS AREA DENOTED BY (E) SHALL REMAIN CONNECTED TO THE RESPECTED NEW ELECTRICAL PANEL ALONG WITH THEIR CONTROLS. E.C. SHALL VERIFY THE CONTROLS IN FIELD AND REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.

F EXISTING LIGHT FIXTURE IN THE WALK IN COOLER ALONG WITH ITS CONTROLS AND ELECTRICAL CONNECTION SHALL REMAIN AS IT IS AND SHALL REMAIN CONNECTED TO THE EXISTING ELECTRICAL PANEL. E.C. SHALL VERIFY THE OPERABLE CONDITION OF THE LIGHTING CONNECTION AND CONTROL BEFORE COMMENCING ANY WORK. PROVIDE NEW IF FOUND INOPERABLE. E.C. TO COORDINATE IN FIELD FOR ANY OTHER REQUIREMENT WITH OWNER/VENDOR. BASE BID ACCORDINGLY.

G PROVIDE SHOW WINDOW RECEPTACLE AS PER NEC 210.62. VERIFY EXACT LOCATION WITH ARCHITECT/OWNER.

H POWER AND DATA PROVISION FOR EXTERIOR TV. E.C SHALL COORDINATE WITH ARCHITECT/OWNER/VENDOR FOR EXACT LOCATION, MOUNTING HEIGHT AND POWER REQUIREMENT BEFORE COMMENCING ANY WORK. BASE BID ACCORDINGLY.

I PROVIDE VARIABLE SPEED CONTROL SWITCH FOR FAN. E.C SHALL COORDINATE WITH MANUFACTURER/ VENDOR FOR EXACT POWER REQUIREMENT PRIOR TO INSTALLATION. BASE BID ACCORDINGLY.

J INTERCONNECT EXHAUST FANS EF-1, EF-2, EF-3 & EF-4 WITH LIGHTS. E.C TO COORDINATE WITH MECHANICAL DRAWINGS.

K EXISTING EXTERIOR BUILDING LIGHT FIXTURE SHALL REMAIN CONNECTED TO THE RESPECTIVE EXISTING HOUSE PANEL ALONG WITH THEIR CONTROLS. E.C. SHALL VERIFY THE CONNECTION IN FIELD AND REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.

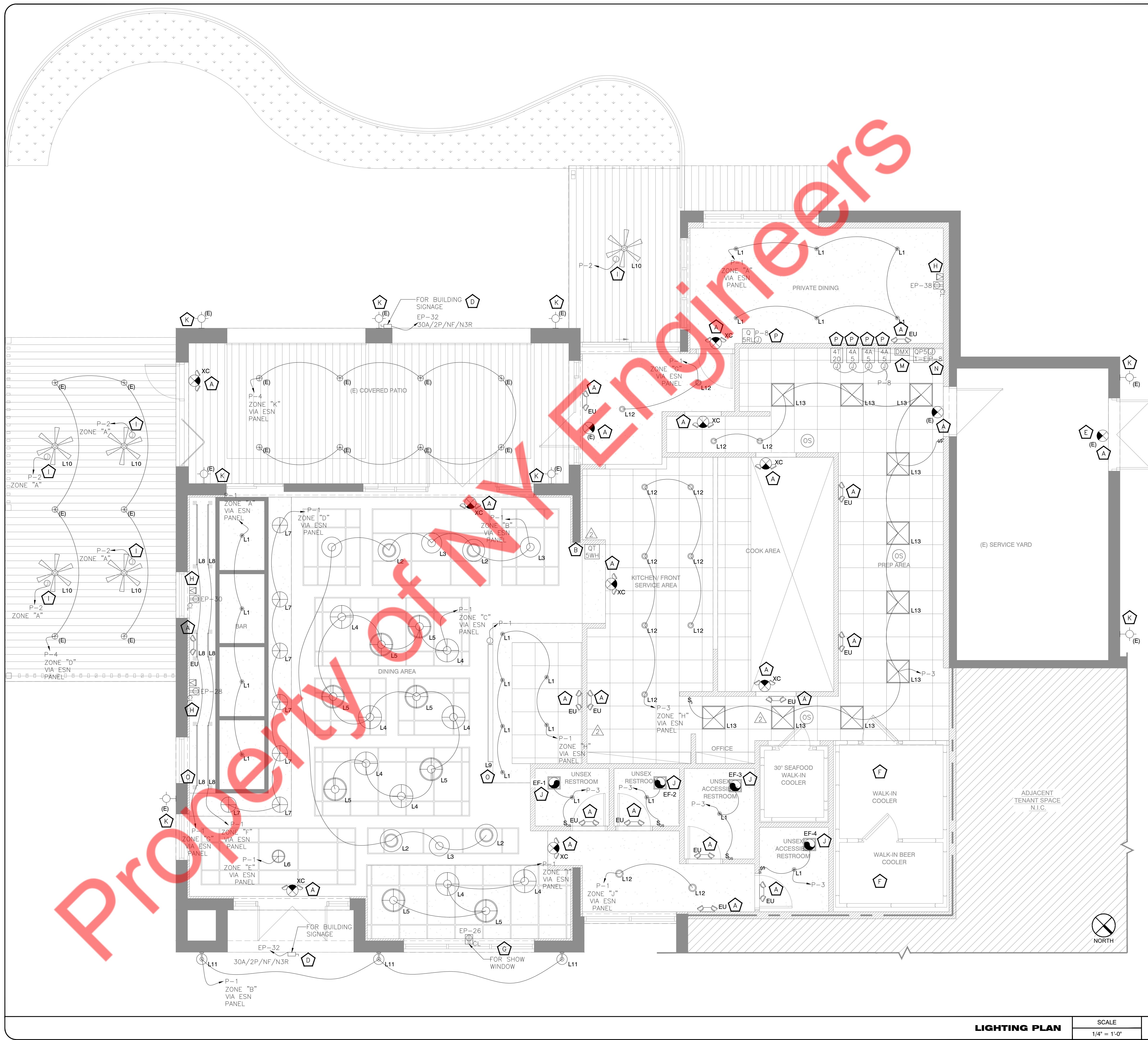
L NOT USED.

M E.C SHALL COORDINATE EXACT LOCATION OF QS DMX OUTPUT CONTROL INTERFACE (DMX) WITH OWNER/ ARCHITECT. E.C SHALL COORDINATE WITH LIGHTING VENDOR FOR EXACT MOUNTING HEIGHT AND POWER REQUIREMENTS FOR QS DMX OUTPUT CONTROL INTERFACE (DMX). E.C. SHALL COORDINATE EXACT QUANTITY PER SITE REQUIREMENT/ LIGHTING VENDOR REQUIREMENT. BASE BID ACCORDINGLY.

N E.C SHALL COORDINATE EXACT LOCATION OF ATHENA 1-LINK PROCESSOR PANEL WITH INTEGRAL POE SWITCH (QPS-1L-POE) WITH OWNER/ ARCHITECT. E.C SHALL COORDINATE WITH LIGHTING VENDOR FOR EXACT MOUNTING HEIGHT AND POWER REQUIREMENTS FOR ATHENA 1-LINK PROCESSOR PANEL WITH INTEGRAL POE SWITCH (QPS-1L-POE). E.C. SHALL COORDINATE EXACT QUANTITY PER SITE REQUIREMENT/ LIGHTING VENDOR REQUIREMENT. BASE BID ACCORDINGLY.

O E.C SHALL COORDINATE WITH LIGHTING VENDOR/ ARCHITECT/ OWNER FOR ANY ACCESSORIES AND CONTROL REQUIREMENT FOR THE LIGHT FIXTURE NAMED "L-8" AND "L-9" IN FIELD. E.C SHALL VERIFY EXACT LOCATION OF JUNCTION BOX IN FIELD. E.C SHALL VERIFY THE COMPATIBILITY OF LIGHT FIXTURE "L-8" AND "L-9" WITH LIGHT VENDOR BEFORE COMMENCING ANY WORK. INFORM ENGINEER ON RECORD FOR ANY DISCREPANCY. PROVIDE CIRCUIT AND CONTROL AS REQUIRED. BASE BID ACCORDINGLY.

P E.C SHALL COORDINATE EXACT LOCATION OF ENERGI SAVR NODE PHASE ADAPTIVE 4 OUTPUT (QSN-4A5-S), ENERGI SAVR NODE 0-10V AND SOFTSWITCH (OSN2-4T20-S) WITH OWNER/ ARCHITECT. E.C SHALL COORDINATE WITH LIGHTING VENDOR FOR EXACT MOUNTING HEIGHT AND POWER REQUIREMENTS FOR ENERGI SAVR NODE PHASE ADAPTIVE 4 OUTPUT (QSN-4A5-S). E.C SHALL COORDINATE EXACT QUANTITY PER SITE REQUIREMENT/ LIGHTING VENDOR REQUIREMENT. BASE BID ACCORDINGLY.



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11/20/2025 PROJECT CORD.

11/20/2025

MICHAEL TOBIAS #76496
PROFESSIONAL ENGINEER
STATE OF FLORIDA

ISSUE DATE: 05.30.25

PROJECT #: 299F.1284F
DRAWN BY: NYE
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LIGHTING PLAN

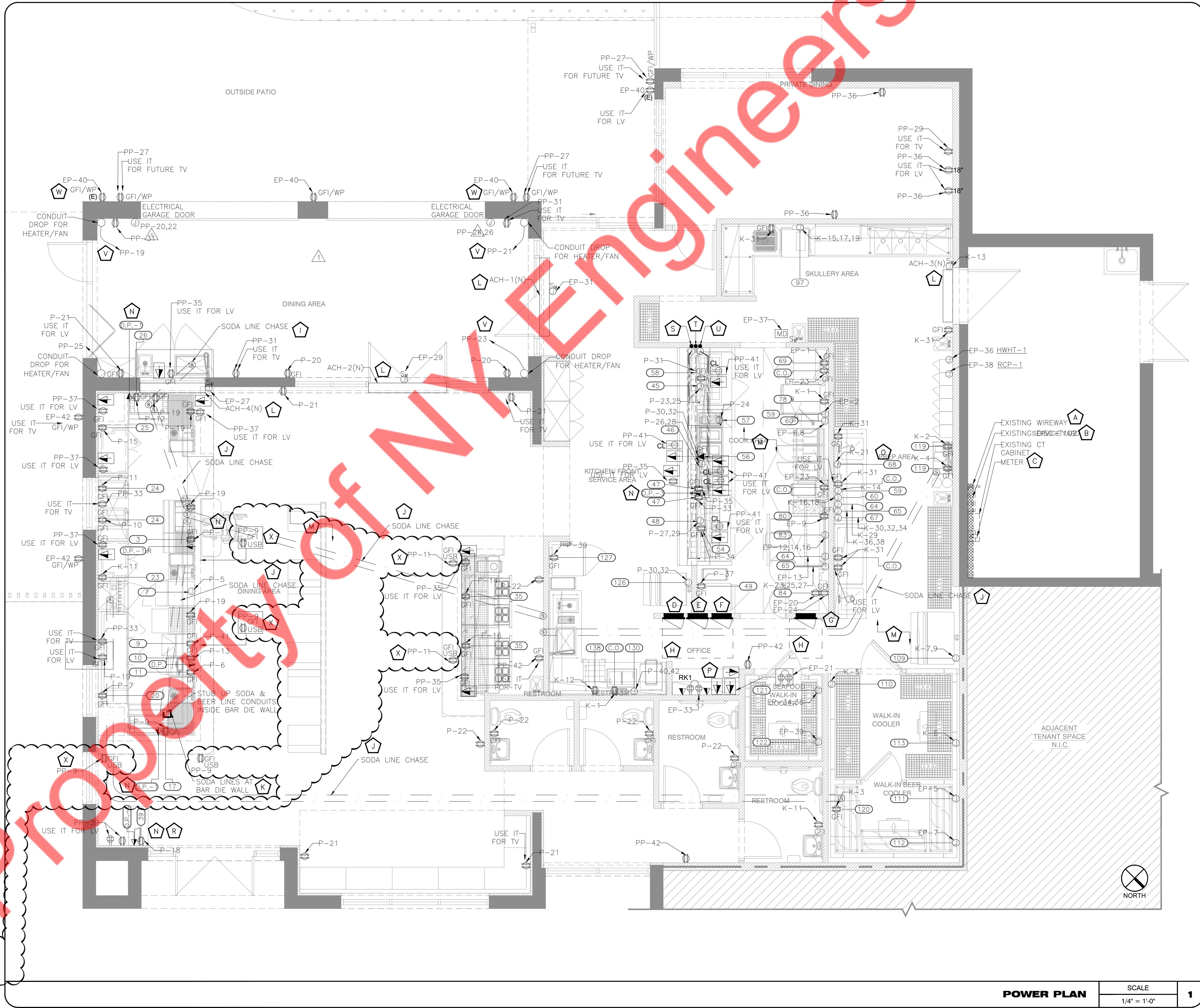
E-2

ELECTRICAL POWER PLAN GENERAL NOTE:

1. EC SHALL COORDINATE WITH THE EQUIPMENT MANUFACTURER FOR ALL THE EQUIPMENT WHICH NEEDS ELECTRICAL SUPPLY AND CONFIRM THE POWER PROVISION REQUIREMENTS PRIOR TO COMMENCING ANY WORK. COORDINATE THE MOUNTING HEIGHTS AS WELL BEFORE ROUGH-INS. BASE BID ACCORDINGLY.
2. EC SHALL COORDINATE WITH OWNER FOR EXACT POWER PROVISION REQUIREMENTS TO EACH ROOM PRIOR TO COMMENCING ANY WORK. COORDINATE THE MOUNTING HEIGHTS AS WELL BEFORE ROUGH-INS. BASE BID ACCORDINGLY.
3. ALL 125-VOLT THROUGH 250-VOLT RECEPTACLES SUPPLIED BY SINGLE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 50 AMPERES OR LESS, AND ALL RECEPTACLES SUPPLIED BY THREE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 100 AMPERES OR LESS, INSTALLED IN THE LOCATIONS SPECIFIED IN 210.8(B) SHALL HAVE GFCI PROTECTION. ALL THE KITCHEN EQUIPMENT SHALL HAVE GFI BREAKER IN PANELS.
4. DIMENSION OF RECEPTACLE/OUTLET FOR KITCHEN EQUIPMENT SHALL BE COORDINATED AS PER KITCHEN VENDOR/FOOD SERVICE EQUIPMENT ELECTRICAL ROUGH IN PLAN & SCHEDULE.
5. ALL EXTERNAL ELECTRICAL CONDUITS AND WIRING SHALL BE INSTALLED OR ROUTED UNDERGROUND/FULLY CONCEALED FROM PUBLIC VIEW.
6. EC SHALL COORDINATE WITH OWNER/LV CONTRACTOR/LV VENDOR FOR MOUNTING HEIGHT AND LOCATION OF EACH LV OUTLET(DATA/RECEPTACLE FOR LV/RECEPTACLE FOR TV) BEFORE ROUGH-INS. BASE BID ACCORDINGLY.

ELECTRICAL POWER PLAN KEYED WORK NOTES:

- A** EXISTING WIREWAY TO REMAIN.
- B** EXISTING 600A DISCONNECT SWITCH DISC(T-102) SERVING TENANT SPACE TO REMAIN.
- C** E.C TO CONFIRM THE CT COIL INSTALLATION. IF NOT PROVIDED PLEASE COORDINATE WITH UTILITY FOR THE SAME.
- D** NEW 600A, 120/208V, 3 PHASE, 4-WIRE ELECTRICAL PANEL "PP" FOR TENANT SPACE.
- E** NEW 150A (M.L.O), 120/208V, 3 PHASE, 4-WIRE ELECTRICAL PANEL "P" FOR TENANT SPACE.
- F** NEW 150A (M.L.O), 120/208V, 3 PHASE, 4-WIRE ELECTRICAL PANEL "K" FOR TENANT SPACE.
- G** NEW 150A (M.L.O), 120/208V, 3 PHASE, 4-WIRE ELECTRICAL PANEL "EP" FOR TENANT SPACE.
- H** E.C. TO COORDINATE WITH ARCHITECT/OWNER FOR THE EXACT LOCATION OF ELECTRICAL PANEL. E.C. SHALL VERIFY THE INSTALLATION OF ELECTRICAL PANELS IN COMPLIANCE WITH NEC ARTICLE 110.26(A) AND (B). E.C. SHALL FIELD VERIFY THAT THE PANELS ARE UNOBSTRUCTED AND THE AREA WHERE THE PANELS ARE PLACED SHALL NOT BE USED AS A STORAGE SPACE.
- I** E.C TO FURNISH AND INSTALL ALL CONDUIT FOR REFRIGERATION AND SODA, & BEER BEVERAGE LINES. ALL RUNS SHALL BE THROUGH A 6" ELECTRICAL PVC CHASE RUNNING OVERHEAD ABOVE CEILING AND UTILIZING 24" LONG SWEEPING RADIUS ELL'S FOR ALL 90 DEGREE TURNS. OVERHEAD SODA LINES TO "TEE" OFF AND SHALL DROP DOWN INSIDE INTERNAL BUILDING WALLS TO 12" AFF. SODA LINES SHALL EXIT WALL THRU A 6" TALL X 12" WIDE PULL BOX SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR. E.C SHALL VERIFY THE LOCATION OF THE PULL BOX FOR LINES WITH THE VENDOR PRIOR TO INSTALLATION. BASE BID ACCORDINGLY.
- J** E.C TO FURNISH AND INSTALL ALL CONDUIT S FOR REFRIGERATION AND BEVERAGE/SODA LINE CHASES. ALL RUNS SHALL BE THROUGH A 6" I.D. DIAMETER ELECTRICAL PVC CHASE UNDER SLAB AND UTILIZES 24" LONG SWEEPING RADIUS ELL'S FOR ALL 90 DEGREE TURNS. EXTEND PVC UP THROUGH PENETRATION TO 6" ABOVE FINISHED FLOOR. E.C SHALL VERIFY THE LOCATION OF THE PULL BOX FOR LINES WITH THE VENDOR PRIOR TO INSTALLATION. BASE BID ACCORDINGLY.
- K** ELECTRICIAN TO FURNISH AND INSTALL ALL CONDUIT S FOR REFRIGERATION, BEER, AND BEVERAGE/SODA LINE CHASES. ALL RUNS SHALL BE THROUGH A 6" I.D. DIAMETER ELECTRICAL PVC CHASE UNDER SLAB AND UTILIZES 24" LONG SWEEPING RADIUS ELL'S FOR ALL 90 DEGREE TURNS. EXTEND PVC UP THROUGH PENETRATION TO 6" ABOVE FINISHED FLOOR. THE ELECTRICIAN WILL VERIFY THE LOCATION OF THE PULL BOX FOR LINES WITH THE VENDOR PRIOR TO INSTALLATION.
- L** E.C SHALL COORDINATE WITH AIR CURTAIN VENDOR/OWNER FOR EXACT LOCATION AND POWER REQUIREMENT. BASE BID ACCORDINGLY.
- M** E.C SHALL COORDINATE WITH THE EQUIPMENT MANUFACTURER FOR ALL THE EQUIPMENT WHICH NEEDS ELECTRICAL SUPPLY AND CONFIRM THE POWER PROVISION REQUIREMENTS PRIOR TO COMMENCING ANY WORK. COORDINATE THE MOUNTING HEIGHTS AS WELL BEFORE ROUGH-INS. BASE BID ACCORDINGLY.
- N** E.C SHALL CO-ORDINATE WITH LV VENDOR FOR EXACT ROUTING, LOCATION, SIZE OF THE CONDUIT UNDER THE FLOOR FOR POS TICKET PRINTER & POS STATION. BASE BID ACCORDINGLY.
- O** ELECTRICAL CONTRACTOR TO CO-ORDINATE WITH FIRE SUPPRESSION SYSTEM VENDOR FOR ITS POWER REQUIREMENT, EXACT LOCATION AND OTHER DETAILS BEFORE COMMENCING ANY WORK. BASE BID ACCORDINGLY.
- P** QUAD RECEPTACLE OUTLET FOR PC/OFFICE DESK. ELECTRICAL CONTRACTOR TO CO-ORDINATE WITH ARCHITECT/OWNER FOR EXACT POWER REQUIREMENT, LOCATION, MOUNTING HEIGHT OF OUTLET/DATA AND OTHER DETAILS BEFORE COMMENCING ANY WORK. BASE BID ACCORDINGLY.
- Q** NOT USED.
- R** E.C. TO COORDINATE WITH ARCHITECT FOR THE EXACT LOCATION OF POS/SEATING MONITORING SYSTEM OUTLET AND MOUNTING DETAILS OF RETAIL AREA
- S** STUB DOWN FROM ABOVE CEILING IN BUILDING WALL FOR FOUR (4) ELECTRICAL CIRCUITS TO JUNCTION BOX AT 56"AFF FOR ITEMS #45, #46, #48, & #57 – DUAL HEAT LAMPS WITH DISPLAY LIGHTS – STUB-OUT AND FLEX EACH ELECTRICAL CIRCUIT UNDERNEATH S/S PASS-THRU OVERSHELF TO THE CONNECTION POINTS FOR EACH DUAL HEAT LAMP AS SHOWN ON THIS PLAN.
- T** STUB DOWN FROM ABOVE CEILING IN BUILDING WALL & STUB-OUT AT 18" AFF FOR THREE (3) ELECTRICAL CIRCUITS FOR ITEMS #54, #56, & #58 – FLEX ELECTRICAL CIRCUITS THRU HORIZONTAL ELECTRICAL CHASE ON BACK OF ITEM #40 – S/S DISH/PLATE CABINET TO JUNCTION BOXES/ELECTRICAL RECEPTACLES MOUNTED ON BACK OF DISH/PLATE CABINET AT 18" AFF AS SHOWN ON THIS PLAN.
- U** STUB DOWN FROM ABOVE CEILING IN BUILDING WALL FOR TWO (2) ELECTRICAL CIRCUITS AND FOUR (4) DATA PORT CAT6 OR CAT7 ETHERNET CABLES TO JUNCTION BOX AT 56"AFF FOR ITEMS #47 – POS ORDER TICKET PRINTER & D.P.-3 OUTLET – STUB-OUT & FLEX EACH ELECTRICAL CIRCUIT & ETHERNET CABLE UNDERNEATH S/S PASS-THRU OVERSHELF TO PEDESTAL OUTLETS MOUNTED ON TOP OF OVERSHELF AS SHOWN ON THIS PLAN.
- V** E.C. TO COORDINATE WITH MECHANICAL CONTRACTOR/MANUFACTURER FOR THE EXACT POWER REQUIREMENT, LOCATION, BREAKER SIZE, CONDUIT AND FEEDER SIZE FOR HEATER OR FAN.
- W** E.C. TO COORDINATE WITH MANUFACTURER FOR THE EXACT POWER REQUIREMENT AND CONNECTION OF ELECTRICAL GARAGE DOOR.
- X** ALL 125-VOLT 15- OR 20-AMPERE RECEPTACLE WITH USB CHARGER, THAT ADDITIONALLY PROVIDES CLASS 2 POWER SHALL BE LISTED AND CONSTRUCTED SUCH THAT THE CLASS 2 CIRCUITRY IS INTEGRAL WITH THE RECEPTACLE PER NEC 406.3(F). BASE BID ACCORDINGLY.



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2025 PR

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POWER PLAN

— 5 —

-2-

11. **What is the primary purpose of the following statement?**

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11/20/2025

MICHAEL TOBAS #76496
PROFESSIONAL ENGINEER
STATE OF FLORIDA

ISSUE DATE: 05.30.25
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POWER PLAN
ROOF

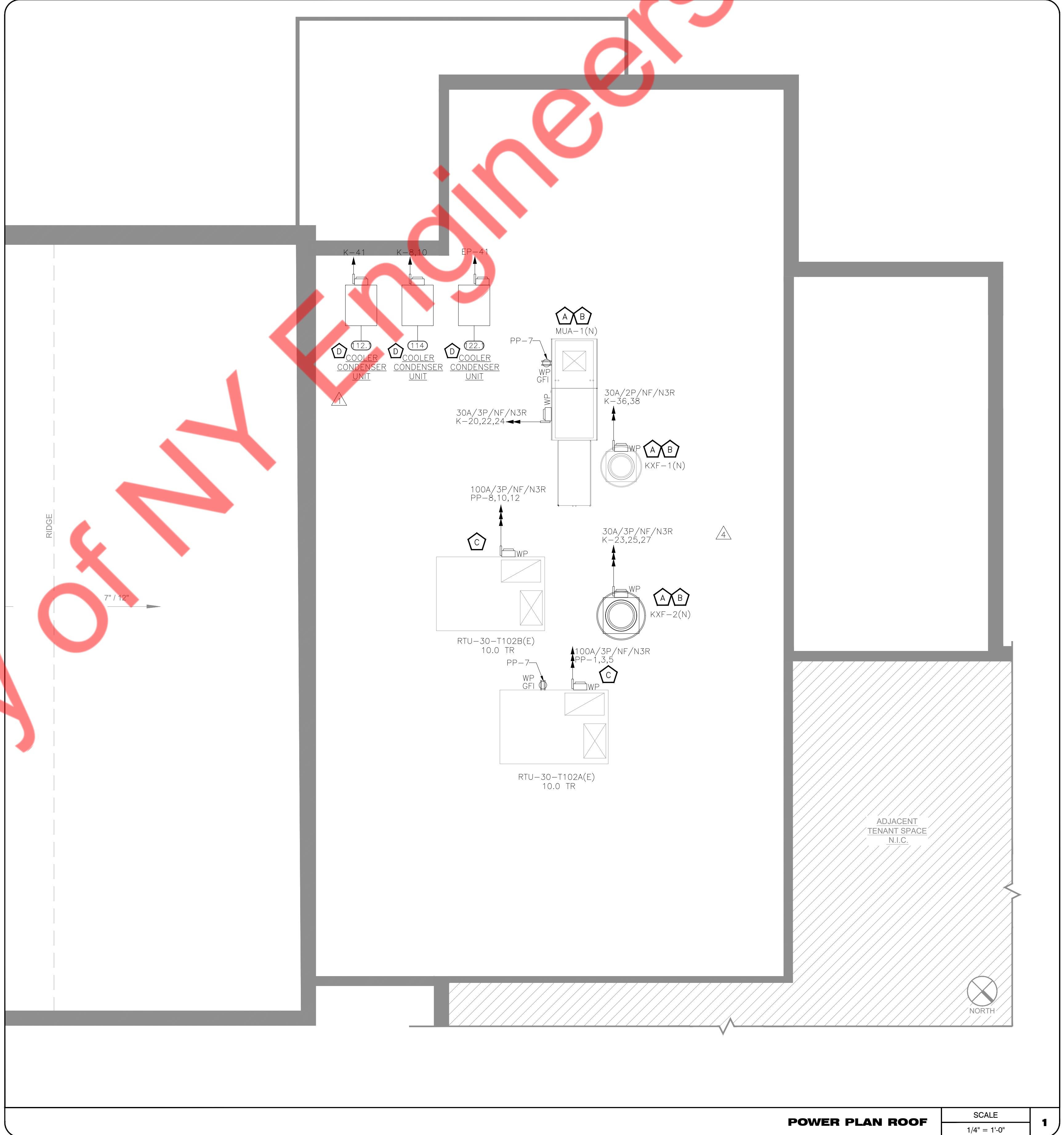
E-4

EQUIPMENT SCHEDULE

ITEM NO.	DESCRIPTION	VOLTS	PH.	AMPS	KW	HP	AFF
3	POS ORDER/RECEIPT TICKET PRINTER	115	1	4.0		39"	
7	GLASS WASHER (ECOLAB - OMEGA 5E)	115	1	16.0	3/4	12"	
9	19.75"W x 17.75"D x 39.50" TALL ICE MAKER WITH BIN (2" SQUARE CUBE ICE)	115	1	5.0	1/4	12"	
10	POS STATION	115	1	4.0		12"	
11	POS RECEIPT TICKET PRINTER	115	1	4.0		12"	
17	POS ORDER/RECEIPT TICKET PRINTER	115	1	4.0		39"	
20	84"W x 24-1/8"D x 41"H BACK BAR CABINET, REFRIGERATED, 3-SECTION (3-DOORS)	120	1	7.0	1/4	24"	
23	36"W x 24-1/8"D x 41"H BACK BAR CABINET, FREEZER, 1-SECTION (1-DOOR)	120	1	5.0	1/3	24"	
24	16-1/2"W, 26"D x 29"H FROZEN DRINK MACHINE, 2 - 8 QT HOPPER CAPACITY	115	1	13.0	3/4	30"	
25	44"W x 24-1/8"D x 41"H BACK BAR CABINET, REFRIGERATED, 2-SECTION (2-DOORS)	120	1	2.75	1/8	24"	
26	POS ORDER/RECEIPT TICKET PRINTER	115	1	4.0		39"	
35	48-1/4"W x 31"D x 35-5/8"H UNDERCOUNTER REFRIGERATOR UNIT, 2-SECTION (4-DRAWERS)	115	1	2.4	1/5	12"	
39	POS/SEATING MONITORING SYSTEM	115	1	4.0		24"	
45	42"W DUAL HEAT LAMP (MOUNTED UNDERNEATH PASS-THRU OVERSHELF)	120/208	1	8.0	1.53	54"	
46	54"W DUAL HEAT LAMP (MOUNTED UNDERNEATH PASS-THRU OVERSHELF)	120/208	1	10.9	2.09	54"	
47	POS ORDER TICKET PRINTERS	115	1	4.0		54"	
48	54"W DUAL HEAT LAMP (MOUNTED UNDERNEATH PASS-THRU OVERSHELF)	120/208	1	10.9	2.09	54"	
49	25-1/4"W x 30-3/4"D x 71"H HEATED HOLDING/PROOFING CABINET, 1-SECTION (1-DOOR)	120	1	16.7	2.0	24"	
54	60-1/4"W x 30"D x 35-3/5"H SANDWICH/SALAD PREP REFRIGERATED COUNTER UNIT, 2-SECTION (2-DOORS)	115	1	4.4	1/4	18"	
56	74"W x 31-1/2"D x 36"H 5-WELL HOT FOOD TABLE W/ SINGLE PANTRY FILL FAUCET	208	1	24.0		18"	
57	18"W HEAT LAMP (MOUNTED UNDERNEATH PASS-THRU OVERSHELF)	120	1	2.2	0.37	54"	
58	45-1/4"W x 30"D x 35-3/4"H SANDWICH/SALAD PREP REFRIGERATED COUNTER UNIT, 2-SECTION (2-DOORS)	115	1	4.4	1/3	18"	
59	EXHAUST HOOD - LIGHT CIRCUIT (HOOD SEC. #1)	120	1	15 ckt		CLG	
60	EXHAUST FAN	208	1	6.9		1.0 ROOF	
63	MUA SUPPLY FAN	208	3	8.3		2.0 ROOF	
64	EXHAUST HOOD - LIGHT CIRCUIT (HOOD SEC. #2)	120	1	15 ckt		*	
65	EXHAUST FAN	208	1	6.9		1.0 ROOF	
67	REMOTE EXHAUST HOOD ELECTRICAL CONTROL PANELBOX (INSIDE REMOTE S/S WALL UTILITY CABINET)	120/208	1/3	15/175		CLG	
68	REMOTE ANSUL - TANK FIRE SUPPRESSION (INSIDE REMOTE S/S WALL UTILITY CABINET)	120	1	15 ckt		CLG	
69	27-1/2"W x 30"D x 33-5/8"H WORKTOP REFRIGERATOR, 1-SECTION (1-DOOR)	115	1	2.2	1/5	24"	
80	60"W x 33-1/2"D x 21-3/8"H EQUIPMENT STAND, REFRIGERATED BASE UNIT, 1-SECTION (2-DRAWERS)	120	1	1.4		24"	
78	TLTING SKILLET, 30 GALLON	115	1	3.2	1/4	24"	
83	48"W x 31-1/2"D x 15-3/8"H HD GRIDDLE, ELECTRIC, COUNTERTOP	208	3	67.4	21.6	24"	
84	40-1/4"W x 37-3/4"D x 70"H DOUBLE DECK CONVECTION OVEN, GAS, MOBILE	TOP OVEN BOTTOM OVEN	120 120	1 1	7.7		48"
97	DISHWASHER (ECOLAB XL-HT VV)	208	3	51.7	3/4	24"	
104	AIR CURTAIN, UNHEATED	120	1	13.0	0.99 (2)1/2	114"	
109	48"W ICE MACHINE W/ WATER FILTER	208	1	18.5	4.66	66"	
110	WALK-IN COOLER	120	1	15 ckt		114"	
111	WALK-IN BEER COOLER	120	1	15 ckt		114"	
112	WALK-IN BEER COOLER EVAPORATOR COIL UNIT	115	1	0.8		114"	
112.1	WALK-IN BEER COOLER CONDENSING UNIT	208-230	1	5.7	1/2	48"	
113	WALK-IN COOLER EVAPORATOR COIL UNIT	115	1	1.6		114"	
114	WALK-IN COOLER CONDENSING UNIT	208-230	1	7.4	3/4	48"	
119	BAG-N-BOX, SODA DISPENSING SYSTEM	120	1	15 ckt		24"	
120	GLYCOL CHILLER/DRAFT BEER POWER PACK DISPENSING SYSTEM	120	1	7.0		114"	
121	30" SEAFOOD WALK-IN COOLER	120	1	15 ckt		114"	
122	30" SEAFOOD WALK-IN COOLER EVAPORATOR COIL UNIT	115	1	0.8		114"	
122.1	30" SEAFOOD WALK-IN COOLER CONDENSING UNIT	208-230	1	5.7	1/2	48"	
126	30"W PELLET ICE MACHINE W/ WATER FILTER	208	1	14.2	4.94	1.5	
127	28-3/4"W x 30-3/4"D x 78"H REACH-IN REFRIGERATOR, 1-SECTION (1-DOOR)	115	1	2.5		1/4	24"
130	DUAL COFFEE/TEA BREWER	120/240	1	25.0	6.0	48"	
138	DROP-IN ICE CREAM FREEZER	115	1	1.8		1/5	24"
C.O.	CONVENIENCE OUTLET	120	1	15 ckt		48"	
D.P.	DATA PORT RECEPTACLE	*	*	*	*	12"	
D.P.-1	DATA PORT RECEPTACLE	*	*	*	*	37"	
D.P.-2	DATA PORT RECEPTACLE	*	*	*	*	24"	
D.P.-3	DATA PORT RECEPTACLE	*	*	*	*	56"	

POWER PLAN KEYED NOTES:

- ① ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR FOR EXACT LOCATION AND POWER REQUIREMENT OF THE MECHANICAL UNITS IN THE FIELD. PROVIDE CIRCUIT AND CONTROL AS REQUIRED.
- ② ELECTRICAL CONTRACTOR SHALL COORDINATE DISCONNECT AND FUSE REQUIREMENT FOR MECHANICAL UNIT WITH MECHANICAL CONTRACTOR AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN AND PROVIDE AS REQUIRED. LOCATE AS REQUIRED TO MAINTAIN NEC CLEARANCES.
- ③ ELECTRICAL CONTRACTOR TO VERIFY IN FIELD THE EXACT LOCATION OF EXISTING RTU AND RECRUIT THE EXISTING UNIT TO TENANT SPACE AS SHOWN. ALSO, COORDINATE DISCONNECT AND FUSE REQUIREMENT WITH MECHANICAL CONTRACTOR AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN AND PROVIDE AS REQUIRED. LOCATE AS REQUIRED TO MAINTAIN NEC CLEARANCES.
- ④ ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE WALK-IN BOX MANUFACTURER/VENDOR/OWNER FOR EXACT LOCATION AND POWER REQUIREMENT OF THE WALK-IN BOX MANUFACTURER/VENDOR/OWNER UNITS IN THE FIELD. PROVIDE CIRCUIT AND CONTROL AS REQUIRED. BASE BID ACCORDINGLY.

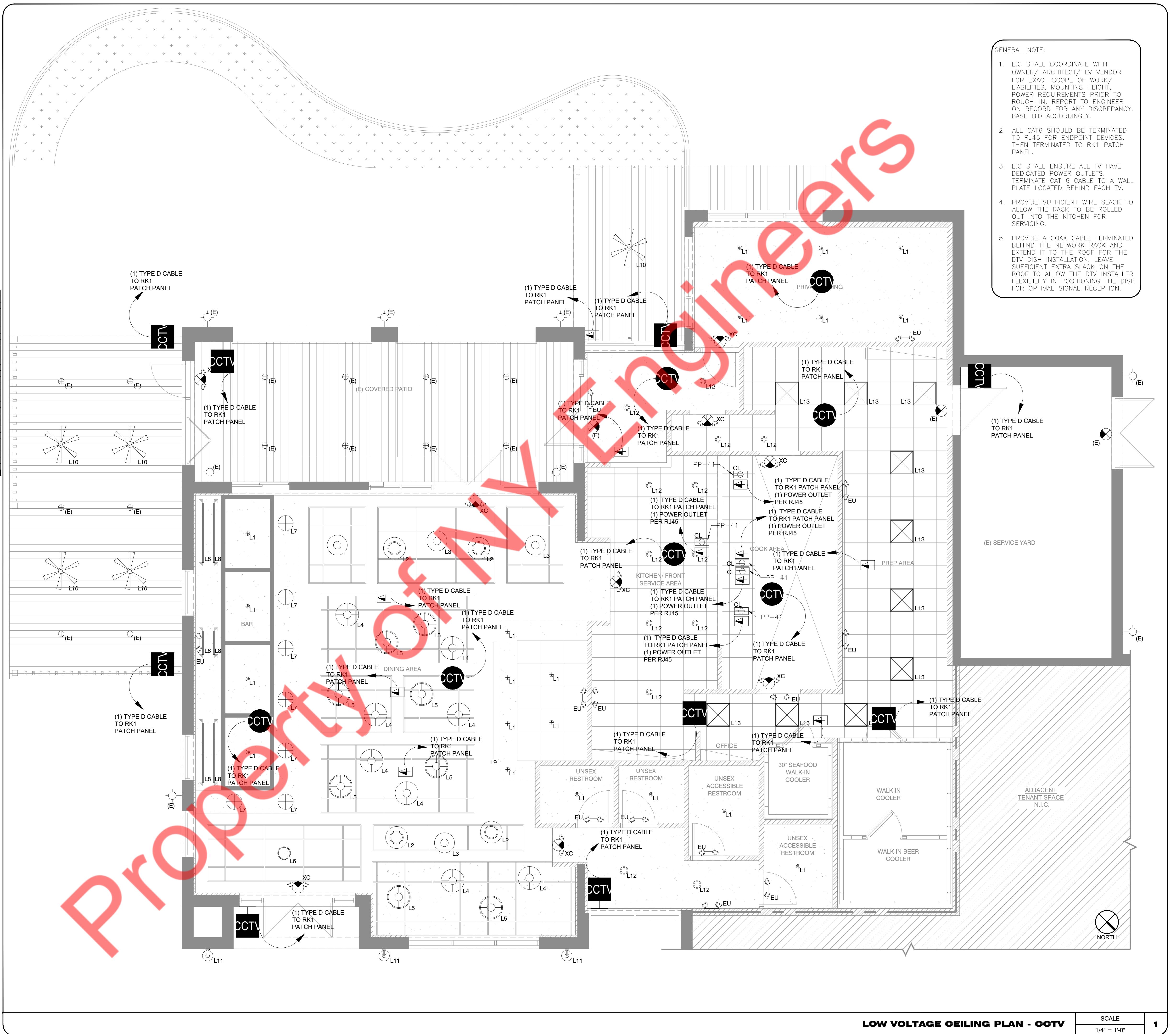


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LOW VOLTAGE
 CEILING PLAN -
 CCTV



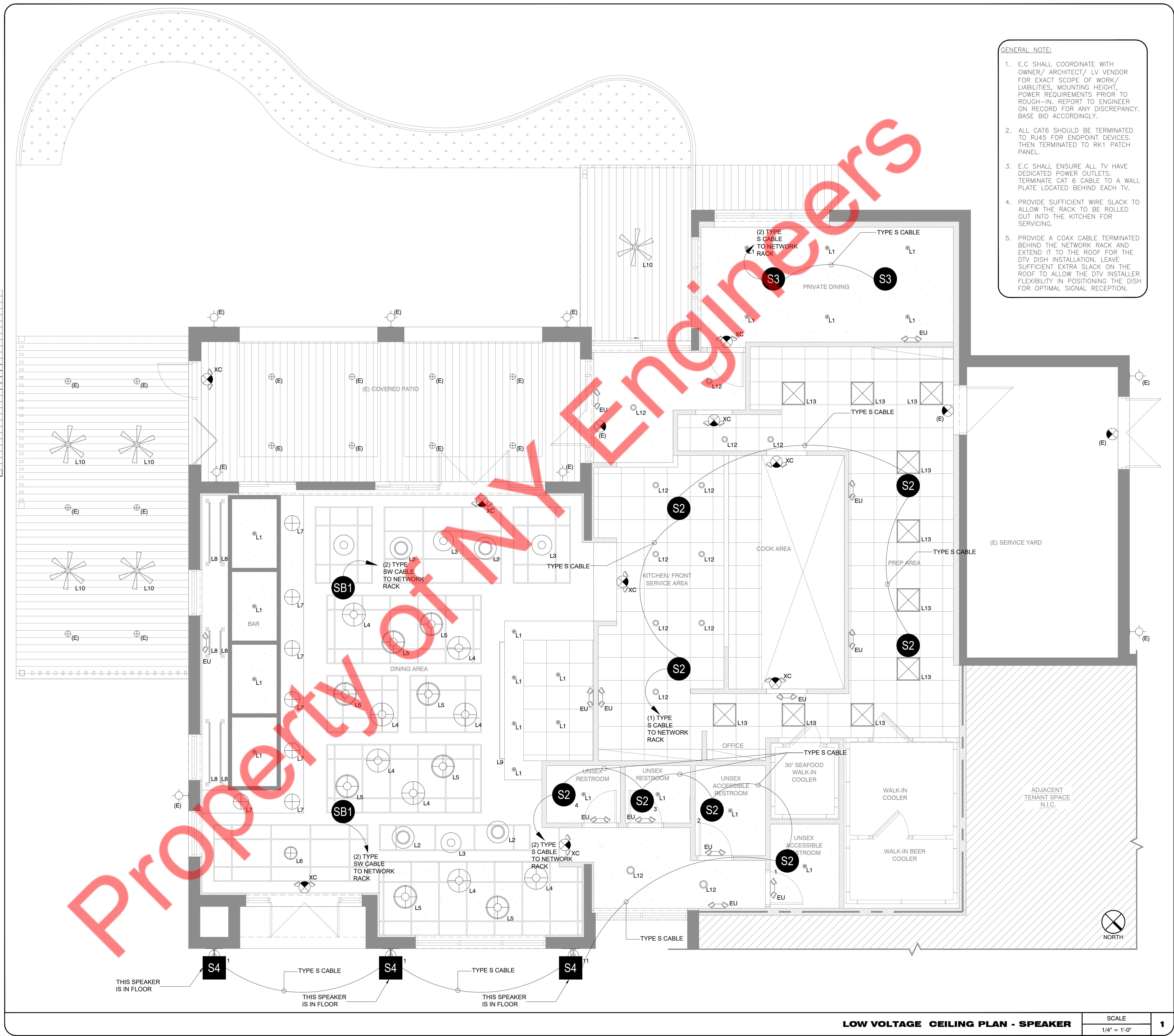
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LOW VOLTAGE
 CEILING PLAN -
 SPEAKER

GENERAL NOTE:
 1. E.C. SHALL COORDINATE WITH OWNER/ARCHITECT / L.V. VENDOR FOR EXACT SCOPE OF WORK/ LIABILITIES, MOUNTING HEIGHT, POWER REQUIREMENTS PRIOR TO ROUGH-IN. REPORT TO ENGINEER ON RECORD FOR ANY DISCREPANCY. BASE BID ACCORDINGLY.
 2. ALL CAT6 SHOULD BE TERMINATED TO RJ45 FOR ENDPOINT DEVICES. THEN TERMINATED TO RK1 PATCH PANEL.
 3. E.C. SHALL ENSURE ALL TV HAVE DEDICATED POWER OUTLETS. TERMINATE CAT 6 CABLE TO A WALL PLATE LOCATED BEHIND EACH TV.
 4. PROVIDE SUFFICIENT WIRE SLACK TO ALLOW THE RACK TO BE ROLLED OUT INTO THE KITCHEN FOR SERVICING.
 5. PROVIDE A COAX CABLE TERMINATED BEHIND THE NETWORK RACK AND EXTEND IT TO THE ROOF FOR THE DTV DISH INSTALLATION. LEAVE SUFFICIENT EXTRA SLACK ON THE ROOF TO ALLOW THE DTV INSTALLER FLEXIBILITY IN POSITIONING THE DISH FOR OPTIMAL SIGNAL RECEPTION.



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LOW VOLTAGE
 FLOOR PLAN -
 SPEAKER

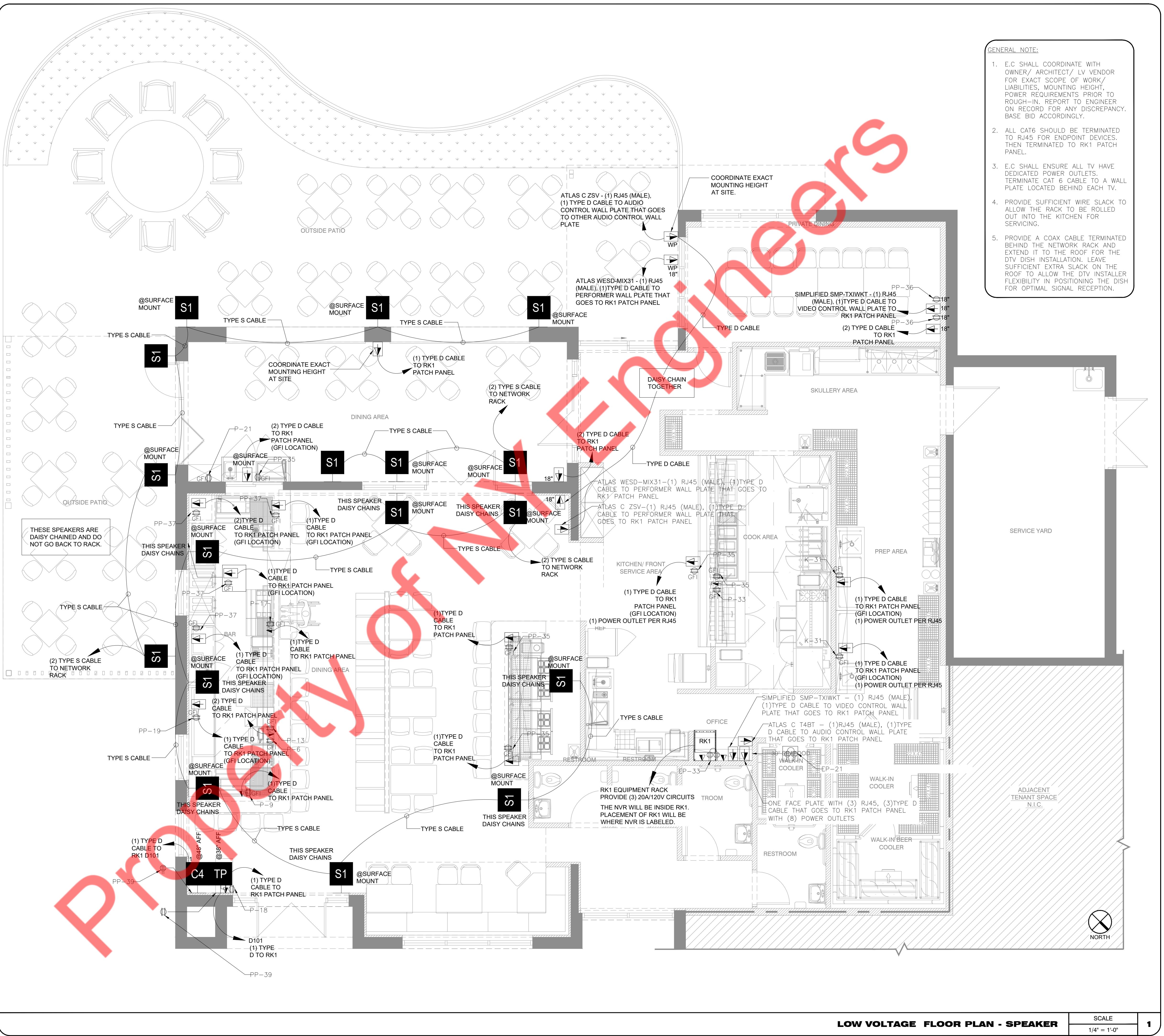
ID	DESCRIPTION	DEVICE LEGENDS				NOTES
		DIMENSIONS (HxWxD)	WEIGHT	DETAIL	BOX TYPE	
RK1	SANSUS CFR2144-44U	84.8" x 23.6" x 23.7"	240 LBS	1/AV-301	CABLE TRAY ABOVE SEE FLOOR PLAN	N/A (3) DEDICATED 120V/240V CIRCUITS TWO 120V/240V RANGE PASSIVE LOUDSPEAKER
S1	BIAMP EX-S8-U8-B	12.68" x 16.61" x 10.38"	35.271 LBS	1/AV-301	4" OCTAGON BOX	SEE DETAIL
S2	BIAMP DX-iC4-W	7.95" x (D) 5.7"	3.5 LBS	1/AV-301	-	SEE DETAIL
S3	BIAMP DX-iC8-W	VARIES	VARIES	1/AV-301	-	SEE DETAIL
S4	ACOUSTISCAPE TRU-AS-1	VARIES	VARIES	-	-	SEE DETAIL
SB1	BIAMP 65-212B	17.4" x 28.19" x 18.9"	75.6 LBS	DETAIL PENDING	2G BOX BOTTOM OF TRUSS	HIGH POWER SUB-BASS LOUDSPEAKER
TV1	55" 2000HR SYLVON OUTDOOR	VARIES	VARIES	1/AV-301	2G BOX W/ GND MURRING	SEE FLOOR PLAN DUPLEX OUTLET PER DETAIL
TV2	55" 10KIN SYLVON OUTDOOR	VARIES	VARIES	-	-	SEE DETAIL DUPLEX OUTLET PER DETAIL
TV3	55" INDOOR TV	VARIES	VARIES	-	-	SEE DETAIL DUPLEX OUTLET PER DETAIL
TV4	65" INDOOR TV	VARIES	VARIES	-	-	SEE DETAIL DUPLEX OUTLET PER DETAIL
C1	OPTIMAL AUDIO ZONE PAD 1-1 ZONE WALL CONTROL	3.39" x 5.75" x 1.55"	< 1 LB	3G BOX	SEE HEIGHT	-
C4	OPTIMAL AUDIO ZONE PAD 4-4 ZONE WALL CONTROL	3.39" x 5.75" x 1.55"	< 1 LB	2/AV-301	3G BOX SEE DETAIL	DEDICATED 120V/240V QUAD POWER (4) 120V/240V CIRCUITS PROVIDE 3/4" PLYWOOD BACKPLATE FOR QUAD BOX AND CONDUIT PER DETAIL
L1	ROCKFORD FOSGATE D-CLUB LOCAL MUSIC INPUT	DECORA	< 1 LB	3/AV-301	2G BOX W/G MURRING	RECEPTACLE HEIGHT (1) DEDICATED 120V/240V CIRCUIT QUAD OUTLET LOCATED ADJACENT TO L1 FOR BAND/D POWER (DEDICATED OUTLET)
TP	MICRO TOUCH MC-156IC ANDROID TOUCH COMPONENT AV CONTROL	9" x 15" x 1.5"	4.5 LBS	10/AV-301	FSR PWB-200	38" AFF DUPLEX OUTLET INSIDE BACKBOX MOUNT TO 1G KNOCKOUT CAV VIA 3/4" STUB-UP
PATCH PANEL TYPE R 800	VER-042-384/48/2U - 2 QUANTITY	-	-	-	-	-
WALL PLATE	ATLAS WESD-MIX31	-	-	-	-	COORDINATE EXACT QUANTITY WITH LV VENDOR/OWNER
WALL PLATE	ATLAS C ZSV	-	-	-	-	COORDINATE EXACT QUANTITY WITH LV VENDOR/OWNER
WALL PLATE	SIMPLIFIED SMP-TXWKT	-	-	-	-	COORDINATE EXACT QUANTITY WITH LV VENDOR/OWNER
WALL PLATE	ATLAS C T4BT-B	-	-	-	-	COORDINATE EXACT QUANTITY WITH LV VENDOR/OWNER

DESCRIPTION OF TASK		RESPONSIBLE PARTY		
AV	EC	GC	OWNER	FIRE
Provide ceiling speaker mounting Install in-ear speaker rack				
			x	x
Provide and install speakers				
			x	
Provide equipment rack (installed by E.C.)				
			x	
Provide "WC" wall control and bluetooth input (installed by E.C.)				
			x	
Pre-configure, program, and test equipment rack and controls onsite				
			x	
Perform final system commissioning onsite				
			x	
Install LMT controls and backboxes per AV drawings				
			x	
Provide cabling per AV drawings				
			x	
Obtain all necessary low voltage permits if required				
			x	
Install ceiling speaker mounting and speakers				
			x	
Coordinate space for RK equipment rack				
			x	
Decommission and remove equipment				
			x	
Field verify required clearance above finished ceiling at each speaker position				
			x	
Provide 3/4" plywood backing as noted on AV drawings				
			x	
Confirm exact location for equipment rack and WC wall controller				
			x	
Coordinate installation with Security vendor (ADT)				
			x	
Coordinate CTV installation				
			x	
Provide and install CCTV				
			x	
Provide TVs and installed				
			x	

		TYPE L	TYPE S (ALL)	TYPE D	N/A
		LINE AUDIO	SPEAKER	CAT6 DATA	120V POWER
TYPE L	LINE AUDIO	NONE	2"	2"	6"
TYPE S (ALL)	SPEAKER	2"	NONE	4"	6"
TYPE D	CAT6	2"	4"	NONE	6"
N/A	120V POWER	6"	4"	6"	NONE

TYPE	DESCRIPTION	MODEL	OD	JACKET	INSULATION	RATING
D	23 AWG CATEGORY 6 UNSHIELDED TWISTED PAIR (UTP)	WINDY CITY WIRE CAT6P	.215"	PVC	FEP, PE	CMP
S	14 AWG 2 CONDUCTOR TWISTED BARE COPPER	WINDY CITY WIRE 14-02P	.250"	PVC	UL LISTED (UL) CL3P	
SW	12 AWG 2 CONDUCTOR TWISTED BARE COPPER	WINDY CITY WIRE 12-02P	.250"	PVC	UL LISTED (UL) CL3P	
A	RGBX/UL 50 OHM COAXIAL CABLE WITH BNC	SHURE UA850	0.315"	PVC	FEP	CM
L	22 AWG 2 COND FOIL SHIELD	WINDY CITY WIRE 22-02SPKBLK	0.126"	PVC	PVC	CMP

ABBREVIATIONS:
1. CMP = COMMUNICATIONS MULTIPURPOSE CABLE, PLENUM-RATED.
2. CL3P = CLASS 3 POWER-LIMITED CIRCUITS, PLENUM-RATED.
3. CM = COMMUNICATIONS MULTIPURPOSE CABLE.
CABLE SEPARATION NOTES:
1. ALL NOTES ABOVE REFER TO FREE-AIR LOW VOLTAGE CABLING AND 120V/240V POWER IN FULLY BONDED, FERROUS METAL CONDUIT. AV TO PROVIDE WRITTEN DIRECTION FOR OTHER SCENARIOS.
2. WHERE THESE DISTANCES CANNOT BE MAINTAINED, PROVIDE FERROUS METAL CONDUIT FOR ALL LOW VOLTAGE CABLING.
3. CABLES OF DIFFERENT SIGNAL TYPES CANNOT SHARE CONDUIT.
AV NOTES:
1. ALL CABLES HOMERUN TO AV RACK RK1/NVR 32 CH UNLESS NOTED OTHERWISE.
2. PROVIDE EMT CONDUIT FOR ALL EXPOSED OR INACCESSIBLE CABLING.
3. MAINTAIN CONDUIT SEPARATION PER SCHEDULE ON AV-202 DETAIL 2 BETWEEN DIFFERENT SIGNAL TYPES.
4. COORDINATE COLOR OF ALL EXPOSED CABLING WITH ARCHITECT. CABLE SPECS LISTED IN CABLE LEGEND ARE INCOMPLETE. ANY SUBSTITUTION MUST BE CROSS-REFERENCED WITH THE PART NUMBERS ABOVE AND APPROVED BY AV.
5. SEE DRAWING DETAILS FOR SPEAKER MOUNTING DETAILS.



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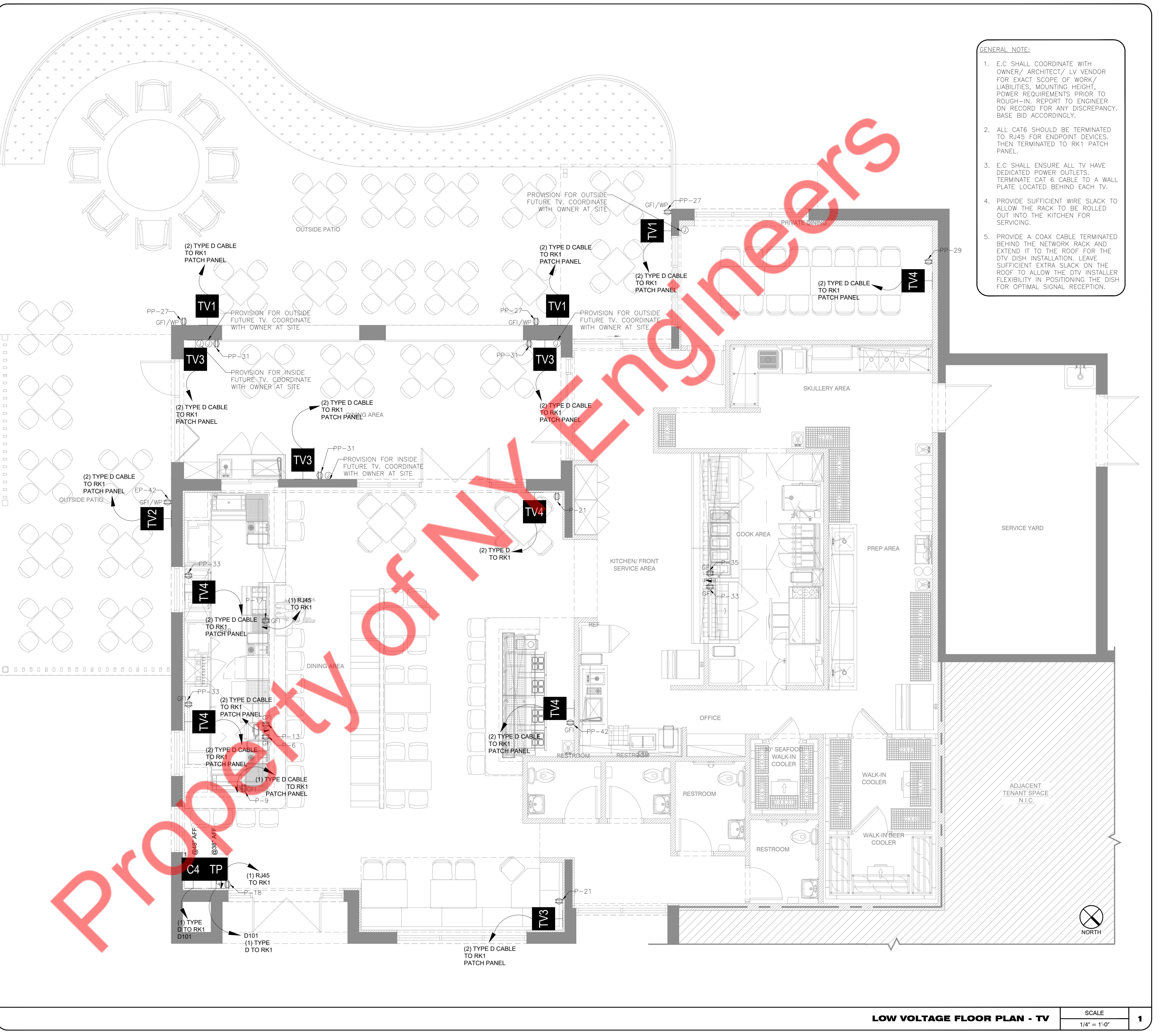
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LOW VOLTAGE FLOOR PLAN - TV

E-6.1

GENERAL NOTE:
 1. E.C. SHALL COORDINATE WITH OWNER/ ARCHITECT/ LV VENDOR FOR EXACT SCOPE OF WORK/ LIABILITIES, MOUNTING HEIGHT, POWER REQUIREMENTS PRIOR TO ROUGH-IN. REPORT TO ENGINEER ON RECORD FOR ANY DISCREPANCY. BASE BID ACCORDINGLY.
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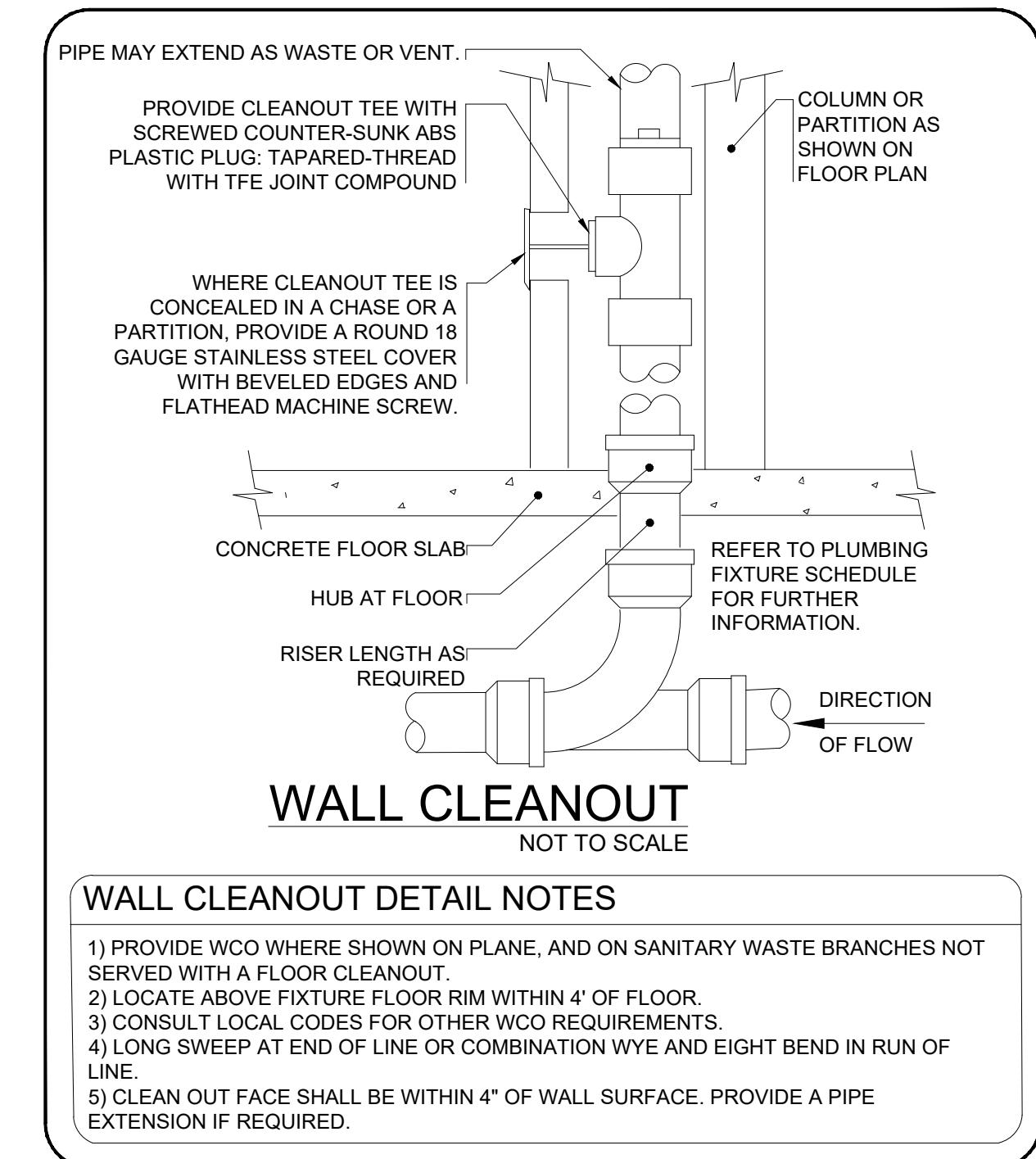
PANEL SCHEDULES

PANELBOARDS:

PANEL: PP (NEW)										MOUNTING: RECESSED		
208Y/120 VOLTS,		3 PHASE,		4 WIRE		PANEL LOCATION: STORAGE						
MAIN CB: 600A		MLO: NA		BUS: 600A		MIN.				FED FROM: EXISTING ELECTRICALS		
NOTE: L: LIGHTING, R: RECEPTACLES, E: KITCHEN/EQUIPMENT: HVAC, M: MOTOR, WH: ELECTRIC WATER HEATER, C: REFRIGERATION, O: OTHER/MISC. (TYPICAL)												
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)	MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
1	3	RTU-30-T102A (EX)	H	11.65	3-3 + 1#8G, 1" C.	25.74	4-1/0 + 1#6G, 11/2" C.	14.10	O	PANEL P (NEW)	150-3P	2
3			H	11.65		24.69		13.05	O			4
5			H	11.65		27.61		15.97	O			6
7	20	GE RECEPTACLE	R	0.36	2#12, #12G, 3/4" C	12.01		11.65	H	RTU-30-T102B (EX)	100-3P	8
9	20	RECEPTACLE BAR COUNTER - 1	R	0.72	2#12, #12G, 3/4" C	12.37		11.65	H			10
11	20	RECEPTACLE BAR COUNTER - 2	R	0.36	2#12, #12G, 3/4" C	12.01		11.65	H			12
13		PANEL EP (NEW)	O	14.80	4-1/0 + 1#6G, 11/2" C.	30.02	4-1/0 + 1#6G, 11/2" C.	15.23	O	PANEL K (NEW)	150-3P	14
15	150-3P		O	12.77		27.97		15.21	O			16
17			O	13.15		26.70		13.55	O			18
19	20	CONDUIT STUBS - HEATER/FAN	H	1.00	2#12, #12G, 3/4" C	2.00		1.00	M	GARAGE DOOR	20-2P	20
21	20	CONDUIT STUBS - HEATER/FAN	H	1.00	2#12, #12G, 3/4" C	2.00		1.00	M			22
23	20	CONDUIT STUBS - HEATER/FAN	H	1.00	2#12, #12G, 3/4" C	2.00		1.00	M	GARAGE DOOR	20-2P	24
25	20	CONDUIT STUBS - HEATER/FAN	H	1.00	2#12, #12G, 3/4" C	2.00		1.00	M			26
27	20	RECEPTACLE-OUTSIDE PATIO TV'S	R	0.54	2#12, #12G, 3/4" C	1.54	2#12, #12G, 3/4" C	1.00	L	LIGHTING - TIKI TORCH	20	28
29	20	RECEPTACLE-PRIVATE DINNING TV'S	R	0.18	2#12, #12G, 3/4" C	0.18				SPARE	20	30
31	20	RECEPTACLE-DINNING AREA TV'S	R	0.54	2#12, #12G, 3/4" C	0.54				SPARE	20	32
33	20	RECEPTACLE-DINNING AREA TV'S	R	0.36	2#12, #12G, 3/4" C	0.36				SPARE	20	34
35	20	RECEPTACLE-LV PROVISION	R	0.72	2#12, #12G, 3/4" C	1.08	2#12, #12G, 3/4" C	0.36	R	RECEPTACLE-CONVENIENCE , LV PROVISION	20	36
37	20	RECEPTACLE-LV PROVISION	R	0.72	2#12, #12G, 3/4" C	0.72				SPARE	20	38
39	20	RECEPTACLE-LV PROVISION	R	0.54	2#12, #12G, 3/4" C	0.54				SPARE	20	40
41	20	RECEPTACLE-LV PROVISION	R	0.72	2#12, #12G, 3/4" C	1.26	2#12, #12G, 3/4" C	0.54	R	RECEPTACLE-CONVENIENCE , LV PROVISION	20	42
TOTAL CONNECTED LOAD (KVA)												
						73.04	69.48	70.84				

PANEL: P (NEW)										MOUNTING: RECESSED		
208Y/120 VOLTS,		3 PHASE,		4 WIRE		PANEL LOCATION: STORAGE						
MAIN CB: NA		MLO: 150A		BUS: 225A		MIN.				FED FROM: EXISTING ELECTRICALS		
NOTE: L: LIGHTING, R: RECEPTACLES, E: KITCHEN/EQUIPMENT: HVAC, M: MOTOR, WH: ELECTRIC WATER HEATER, C: REFRIGERATION, O: OTHER/MISC. (TYPICAL)												
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)	MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
1	20	GENERAL LIGHTING	L	1.00	2#12, #12G, 3/4" C	1.50				2#12, #12G, 3/4" C	0.50	2
3	20		L	1.14	2#12, #12G, 3/4" C	2.14				2#12, #12G, 3/4" C	0.50	4
5	20		E	1.84	2#12, #12G, 3/4" C	2.30	2#12, #12G, 3/4" C	0.46	R	11_POS ORDER/RECEIPT TICKET PRINTER	20	6
7	20	20_REFRIGERATOR-3 DOOR	E	0.84	2#12, #12G, 3/4" C	1.34				2#12, #12G, 3/4" C	0.50	8
9	20	17_POS RECEIPT TICKET PRINTER	R	0.46	2#12, #12G, 3/4" C	1.96				2#12, #12G, 3/4" C	1.50	10
11	20	24_FROZEN DRINK MACHINE	E	1.50	2#12, #12G, 3/4" C	1.50				SPARE	20	12
13	20	10_POS STATION	R	0.46	2#12, #12G, 3/4" C	0.74				2#12, #12G, 3/4" C	0.28	14
15	20	25_REFRIGERATOR-2 DOOR	E	0.33	2#12, #12G, 3/4" C	0.61				2#12, #12G, 3/4" C	0.28	16
17	20	3.POS RECEIPT TICKET PRINTER	R	0.46	2#12, #12G, 3/4" C	0.92				2#12, #12G, 3/4" C	0.46	18
19	20	RECEPTACLE-CONVENIENCE , LV PROVISION	R	0.72	2#12, #12G, 3/4" C	1.08				2#12, #12G, 3/4" C	0.36	20
21	20	RECEPTACLE-CONVENIENCE , TV	R	0.90	2#12, #12G, 3/4" C	1.80				2#12, #12G, 3/4" C	0.90	22
23	20	20-2P 45_42" DUAL HEAT LAMP	E	0.83	2#12, #12G, 3/4" C	1.10				2#12, #12G, 3/4" C	0.27	24
25	20	45_42" DUAL HEAT LAMP	E	0.83	2#12, #12G, 3/4" C	1.14				2#12, #12G, 3/4" C	0.14	26
27	20-2P	48_54" DUAL HEAT LAMP	E	1.14	2#12, #12G, 3/4" C	2.28				2#12, #12G, 3/4" C	1.14	28
29			E	1.14						3.64		30
31	20	58_SANDWICH/SALAD PREP	E	0.50	2#12, #12G, 3/4" C	3.00				2#10, #10G, 3/4" C	2.50	32
33	20	47_POS ORDER TICKET PRINTER	R	0.46	2#12, #12G, 3/4" C	0.96				2#1		

ZUNZBAR



WALL CLEANOUT DETAIL NOTES

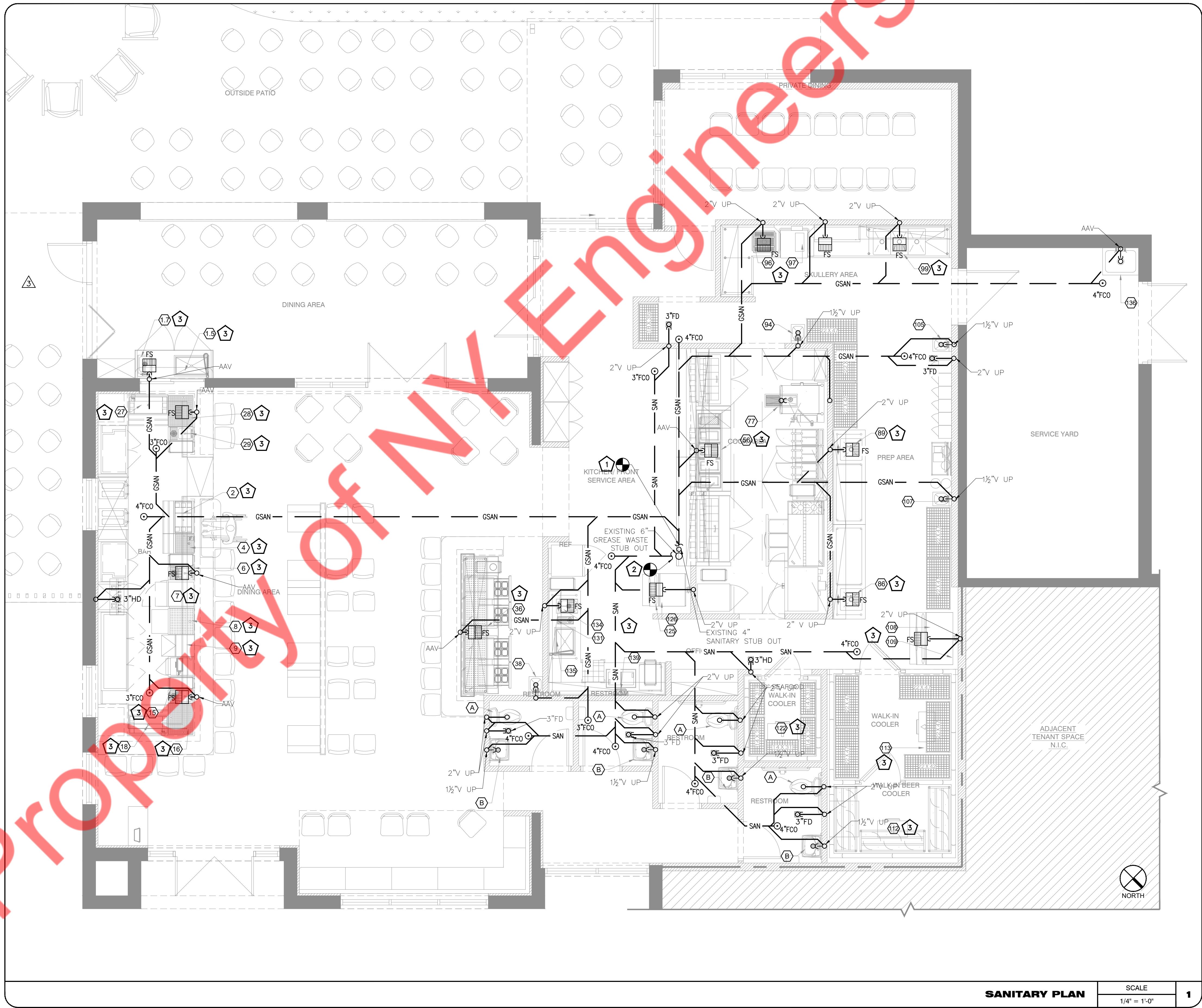
- 1) PROVIDE WCO WHERE SHOWN ON PLANE, AND ON SANITARY WASTE BRANCHES NOT SERVED WITH A FLOOR CLEANOUT.
- 2) LOCATE ABOVE FIXTURE FLOOR RIM WITHIN 4' OF FLOOR.
- 3) CONSULT LOCAL CODES FOR OTHER WCO REQUIREMENTS.
- 4) LONG SWEEP AT END OF LINE OR COMBINATION WYE AND EIGHT BEND IN RUN OF LINE.
- 5) CLEAN OUT FACE SHALL BE WITHIN 4" OF WALL SURFACE. PROVIDE A PIPE EXTENSION IF REQUIRED.

GENERAL NOTES

1. UNLESS OTHERWISE NOTED, SLOPE OF DRAINAGE SYSTEM TO BE 1/4" PER FOOT RISE FOR PIPE 8" OR GREATER, 1/8" PER FOOT FOR PIPE 3" TO 6" AND 1/4" PER FOOT FOR PIPE 2-1/2" AND SMALLER.
2. CONTRACTOR TO FIELD VERIFY FEASIBILITY OF SLAB PENETRATION AS PER STRUCTURAL REQUIREMENT.
3. ALL MATERIAL INDICATED AND IMPLIED ON THESE DRAWINGS SHALL BE NEW UNLESS OTHERWISE NOTED.
4. ALL CLEANOUTS TO BE ACCESSIBLE.
5. CONTRACTOR TO FIELD VERIFY THE EXISTING SANITARY, GREASE SANITARY AND VENT LOCATION AND ROUTING. MAKE NECESSARY CHANGES TO NEW PIPING AS PER THE EXISTING SITE CONDITION.
6. AS PER FLORIDA PLUMBING CODE, ALL VENTS SHALL RISE VERTICALLY (AT LEAST 45 DEGREES) TO A POINT AT LEAST 6" ABOVE THE FIXTURE FLOOR LEVEL RIM OF THE HIGHEST FIXTURE BEFORE OFF SETTING HORIZONTALLY.
7. CONTRACTOR CAN REUSE EXISTING GREASE WASTE, SANITARY AND VENT PIPING IF THE SIZING & LOCATION ARE EXACTLY THE SAME AS PER OUR DRAWING. ALSO MAKE SURE THAT THE EXISTING PIPING SHOULD BE IN GOOD CONDITION.

SANITARY PLAN & RISER KEY NOTES

- CONNECT NEW 4" GREASE SANITARY LINE TO EXISTING 6" GREASE SANITARY MAIN LINE IN SPACE. CONTRACTOR TO FIELD VERIFY THE SIZE, LOCATION & INVERT OF EXISTING SANITARY LINE AND UPGRADE IF REQUIRED.
- CONNECT NEW 4" SANITARY LINE TO EXISTING 4" SANITARY MAIN LINE IN SPACE. CONTRACTOR TO FIELD VERIFY THE SIZE, LOCATION & INVERT OF EXISTING SANITARY LINE AND UPGRADE IF REQUIRED.
- ROUTE INDIRECT WASTE TO THE NEAREST FLOOR SINK/HUB DRAIN.



ZUNZBAR

REVISIONS DATES:
 07/10/2025 PROJECT CORD.
 07/16/2025 BD COMMENTS
 08/20/2025 BD COMMENTS
 08/21/2025 PROJECT CORD.
 11/13/2025 PROJECT CORD.
 11/20/2025 PROJECT CORD.

11/20/2025

MICHAEL TOBIAS #76496
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA

ISSUE DATE: 05.30.25
 PROJECT #: 299F.1284F
 DRAWN BY: NYE
 CHECKED BY: NYE

PLUMBING
 DETAILS &
 WATER PLAN

P-3

GENERAL NOTES

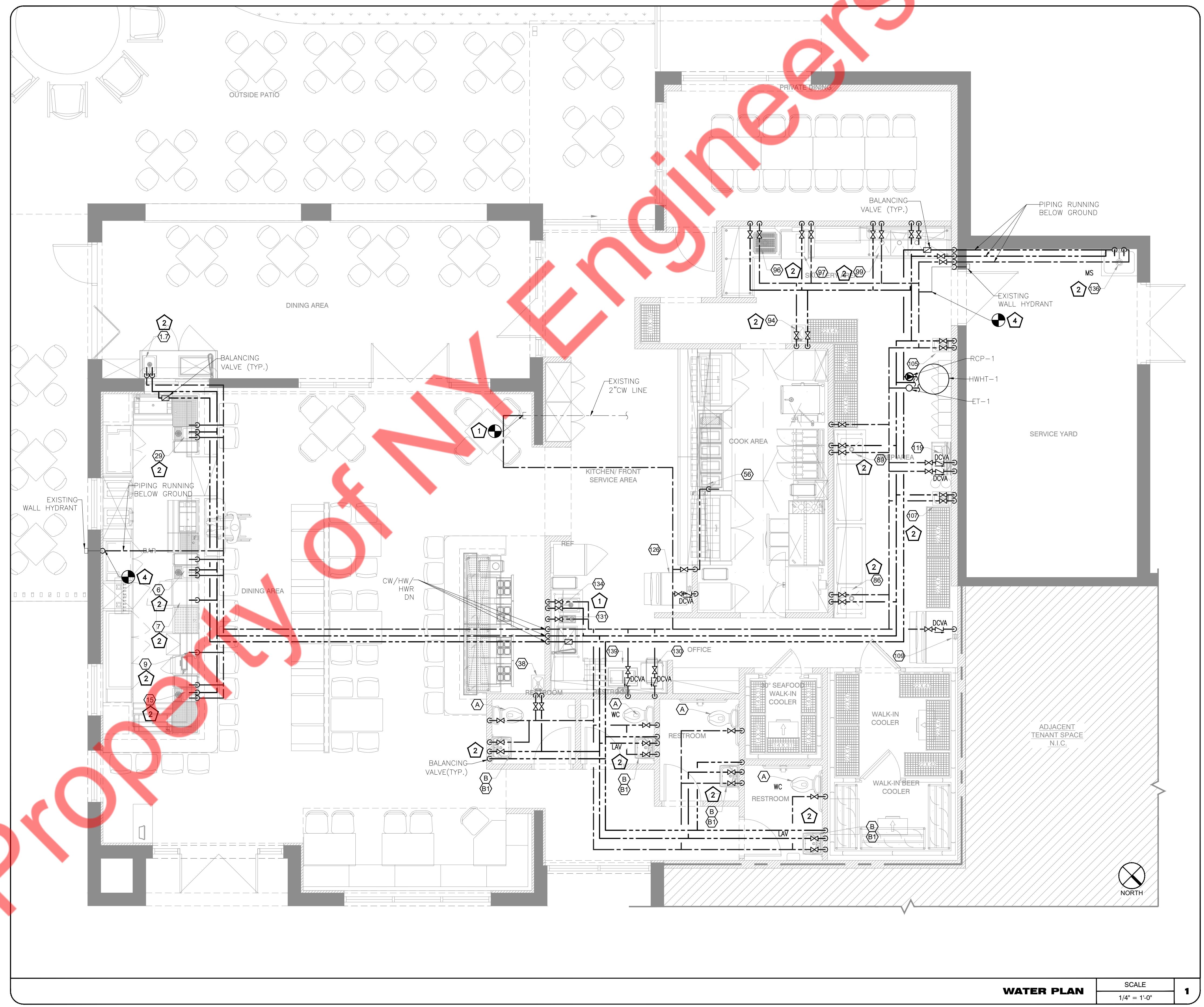
1. CW/HW/HWR PIPING TO BE PROVIDED WITH INSULATION AS PER 2023 FBC-ENERGY CONSERVATION CODE (ADOPTS IECC 2021) NOTES (REFER SHEET P-1)
2. PROVIDE BRANCH PRV IF PRESSURE EXCEEDS 80 PSI.
3. PROVIDE ACCESS PANELS FOR WATER HAMMER ARRESTOR & SHUT-OFF VALVES AS REQUIRED.

WATER KEY NOTES

1. CONNECT NEW 1-1/4" CW LINE TO EXISTING 2" MAIN COLD WATER LINE. CONTRACTOR TO FIELD VERIFY THE SIZE AND LOCATION OF EXISTING COLD WATER LINE AND UPGRADE IF REQUIRED.
2. PROVIDE ALL HAND SINKS AND LAVATORY WITH THERMOSTATIC MIXING VALVE. LIMIT HOT WATER TEMPERATURE TO 110°F SHALL COMPLY WITH ASSE 1017 AS PER FLORIDA PLUMBING CODE 2023.
3. NEW WATER HEATER AS SHOWN IN PLAN WITH ALL REQUIRED ACCESSORIES. REFER TO WATER HEATER SCHEDULE FOR MORE DETAILS.
4. CONNECT NEW CW PIPING TO EXISTING WALL HYDRANT CW PIPING. CONTRACTOR TO V.L.F. THE LOCATION OF EXISTING WALL HYDRANT & CHECK THE FEASIBILITY OF CONNECTION.

NEW STORAGE WATER HEATER SCHEDULE	
MANUFACTURER	RHEEM
MODEL	GHE-100-SS
EQUIPMENT TAG	HWHT-1
STATUS	NEW
FUEL	GAS
CAPACITY	100 GALLONS
QUANTITY	1
MBTU	160
RECOVERY	269 GPH*
VENT	3"
WEIGHT	-
NOTES:	
1.	*OPERATION @ 70°F TEMPERATURE RISE.
2.	INSTALL NEW EXPANSION TANK (ET-1) AMTROL MODEL THERM-X-TROL ST-12C-DD, 6.4 GAL VOLUME PER LOCAL CODE REQUIREMENTS, IF NOT EXISTING.

RECIRCULATION PUMP SCHEDULE	
MANUFACTURER & MODEL	GRUNDFOS UP-15-18 B5
EQUIPMENT TAG	RCP-1
STATUS	NEW
GPM	2
WATER TEMP. (°F)	140
PUMP TYPE	INLINE
MHP	85 WATTS
VPH/HZ	115/160
RPM	2280
SERVICE FACTOR	1.0
NOTE:	
1.	PROVIDE AQUA STAT WITH AUTOMATIC TIMER KIT FOR THE TEMPERATURE CONTROL OF HOT WATER SYSTEM. CONTRACTOR TO V.L.F. ELECTRICAL REQUIREMENTS FOR TIMER WITH ELECTRICAL CONTRACTOR.



GAS PLAN KEY NOTE

- 1 PROVIDE NEW GAS METER . CONTRACTOR TO FIELD VERIFY CONDITION, SIZE, PRESSURE AND LOCATION OF EXISTING GAS PIPING WITH LANDLORD/UTILITY COMPANY AND REPLACE IF REQUIRED. GAS METER CAPACITY SHOULD BE MINIMUM OF 1002 MBH.
- 2 CONTRACTOR TO FIELD VERIFY EXISTING AVAILABLE PRESSURE AND MAKE SURE TO PROVIDE ADEQUATE INLET PRESSURE REQUIRED FOR ALL MECHANICAL EQUIPMENTS, KITCHEN EQUIPMENT AND GAS FIRED WATER HEATER. PROVIDE PRESSURE REGULATOR IF REQUIRED.
- 3 THE CONTRACTOR IS REQUIRED TO FIELD VERIFY AND CONFIRM THAT THE GAS LINE ENTERING THE BUILDING IS POSITIONED NO HIGHER THAN 4 FEET ABOVE FINISHED FLOOR (AFF). ADDITIONALLY, ALL EXTERIOR PIPING MUST BE PAINTED TO MATCH THE BUILDING'S EXTERIOR.

This architectural floor plan illustrates the layout of a restaurant and bar complex. The plan includes several dining areas, an outside patio, a kitchen, a prep area, an office, and restrooms. Key features include a large dining area with a bar, a separate dining area, and an outside patio. The kitchen and prep area are detailed with various equipment and dimensions. A large red 'Proposed' stamp is diagonally across the plan, and a red 'Engineers' stamp is also present, indicating proposed and engineering details respectively. The plan is a technical drawing with various rooms labeled and dimensions indicated.

MY ENGINEERS

ZUNZIBAR

EDITIONS DATES:		
1	07/10/2025	PROJECT CORD.
	07/16/2025	BD COMMENTS
	08/20/2025	BD COMMENTS
4	08/21/2025	PROJECT CORD.
	11/13/2025	PROJECT CORD.
	11/20/2025	PROJECT CORD.

11/20/2025

MICHAEL TOBIAS #76496
PROFESSIONAL ENGINEER
STATE OF FLORIDA

SUE DATE: 05.30.25
PROJECT #: 299F.1284F
DRAWN BY: NYE
CHECKED BY: NYE

PLUMBING GAS PLAN

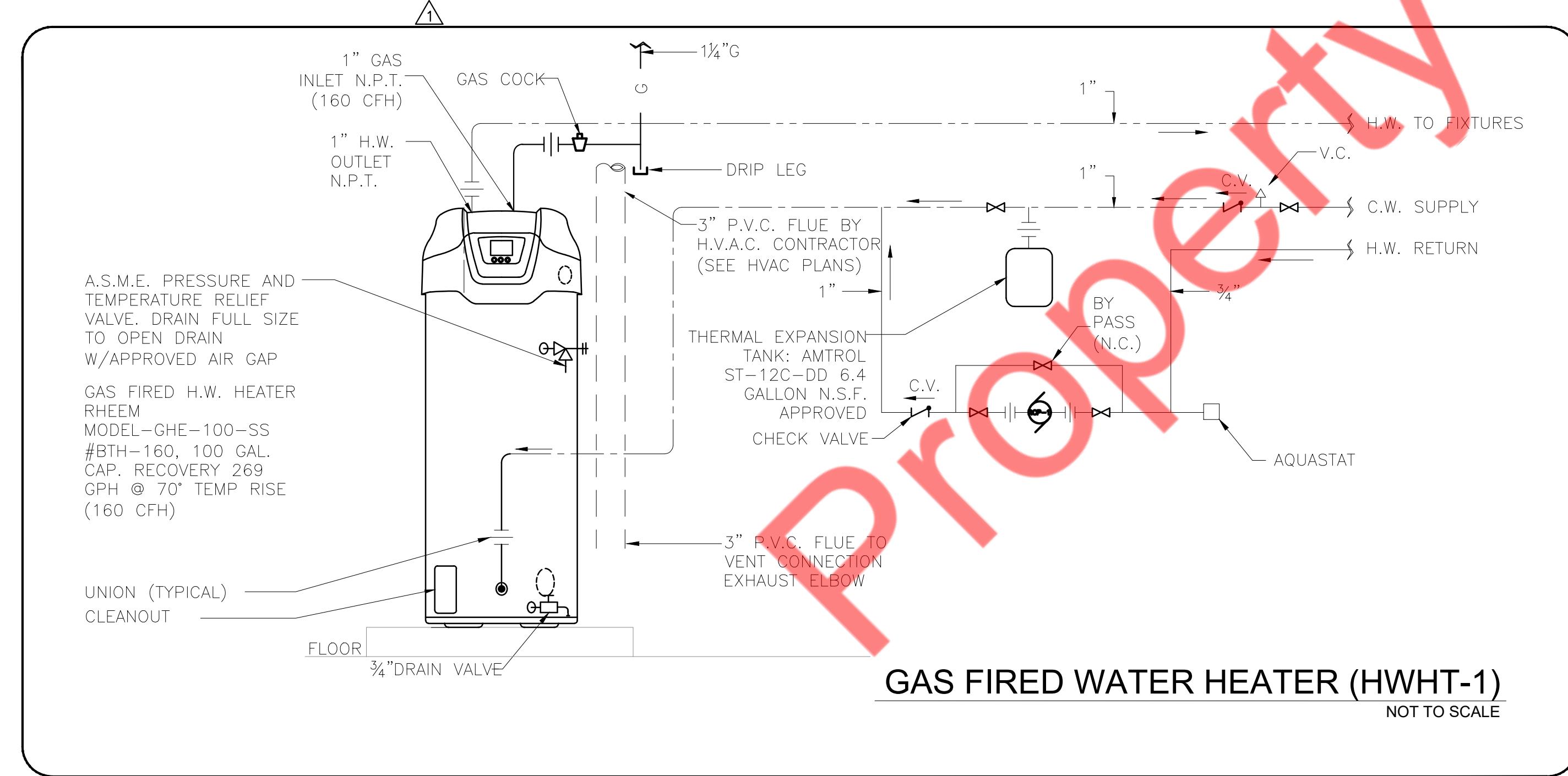
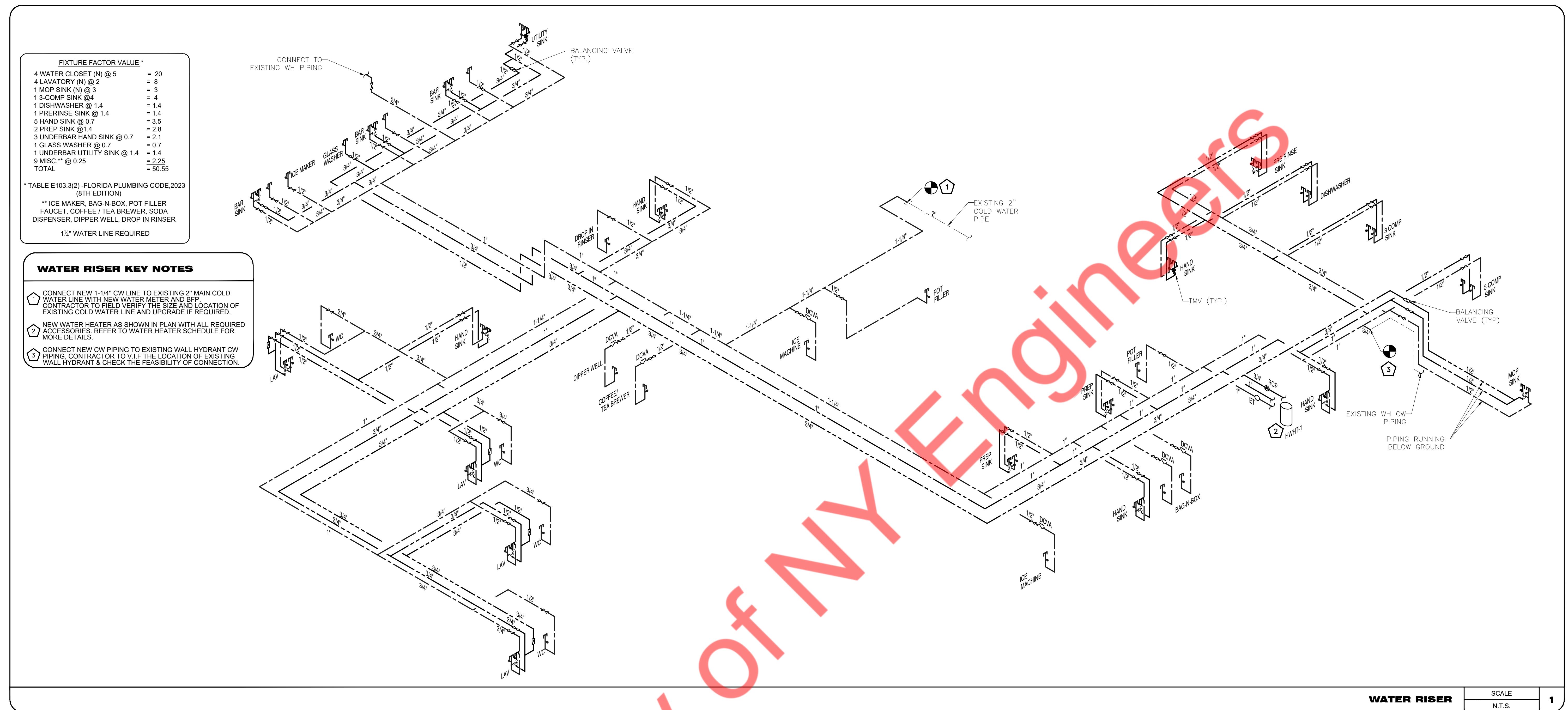
GAS PLAN

SCALE

SCAL

SCALE

P-4



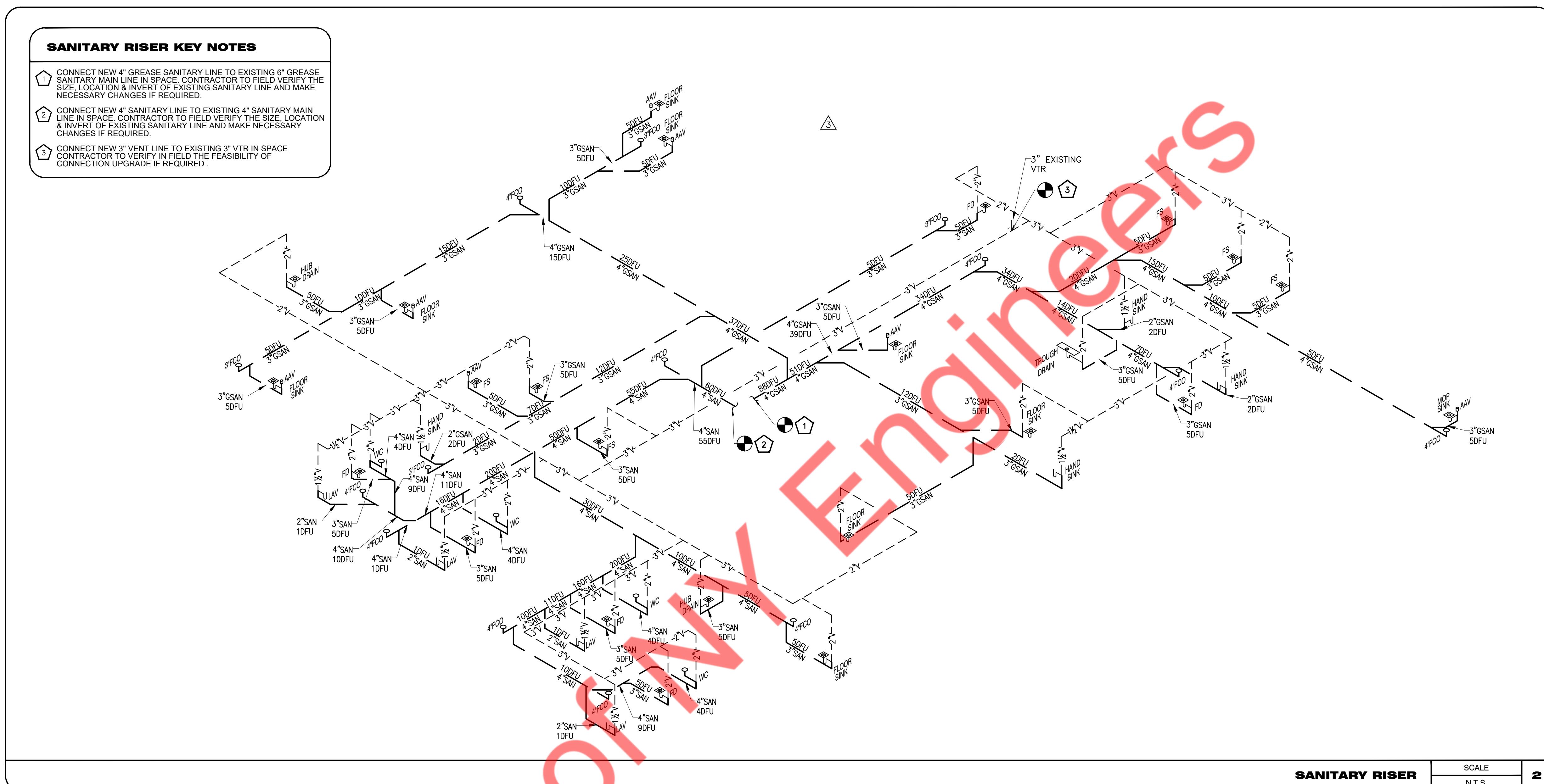
ZUNZBAR

REVISIONS DATES:
 07/10/2025 PROJECT CORD.
 07/16/2025 BD COMMENTS
 08/20/2025 BD COMMENTS
 08/21/2025 PROJECT CORD.
 11/3/2025 PROJECT CORD.
 11/20/2025 PROJECT CORD.

11/20/2025
 MICHAEL TOBIAS #76496
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA

ISSUE DATE: 05.30.25
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PLUMBING DETAILS & WATER RISER



ZUNZBAR

