

KITCHEN HOOD FOR WORT HOG BREWERY

41 BECKHAM STREET
WARRENTON, VIRGINIA 20186

DRAWING INDEX

ARCHITECTURALS

DATE	SHEET	TITLE
10/30/20	C1	COVER SHEET
10/30/20	A1	KITCHEN PLAN & KITCHEN EQUIPMENT SCHEDULE

MECHANICAL

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10/30/20	M1	SPECIFICATIONS
10/30/20	M2	HVAC/GAS PLAN, SCHEDULES, DETAILS & GAS RISER

ELECTRICAL

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PLUMBING

DATE	SHEET	TITLE
10/30/20	P1	PLUMBING SPECS, SCHEDULES, NOTES & DETAILS
10/30/20	P2	GAS PLAN & RISER

BUILDING DATA

USE GROUP (EXISTING)	A-2	CODE	2015 VIRGINIA CONSTRUCTION CODE 2009 ICC/ANSI A117.1
TYPE OF CONSTRUCTION (EXISTING)	III-B		
GROSS SQUARE FOOTAGE:			
NET SQUARE FOOTAGE	2261 S.F.		
AREA OF WORK	533 S.F.		
DESIGN CRITERIA:		OCCUPANT LOAD:	
WIND SPEED	MIN. 90 MPH	ASSEMBLY - KITCHEN	1 PER 200 S.F. = 3
ROOF SNOW LOADS	30 PSF		
FLOOR LOADS:			
FIRST FLOOR	LIVE LOADS 100 PSF	DEAD LOADS 10 PSF	

GENERAL NOTES

- NOTE 1: CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD & NOTIFY ARCHITECT OF ANY CONFLICT W/THESE CONSTRUCTION DOCUMENTS.
- NOTE 2: ALL WORK SHALL CONFORM TO ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES.
- NOTE 3: EQUIPMENT TO BE LOCATED WHERE SHOWN IN DRAWINGS. GENERAL CONTRACTOR TO COORDINATE ALL TRADES INVOLVED. ANY QUESTION OR ISSUE WITH THE PLACEMENT OF EQUIPMENT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO INSTALLATION.
- NOTE 4: CONTRACTOR TO BE RESPONSIBLE FOR CONSTRUCTION OF ROOF CURB TO SUPPORT EXHAUST FAN.
- NOTE 5: 'CAPTIVEAIRE' HOOD TO BE SUPPORTED TO EXISTING STRUCTURE USING 'KINDORF' STEEL CHANNEL AND ALL-THREAD RODS AS REQUIRED. CONTRACTOR TO BE RESPONSIBLE FOR FINAL METHODS AND MEANS.

PROJECT TEAM

OWNER

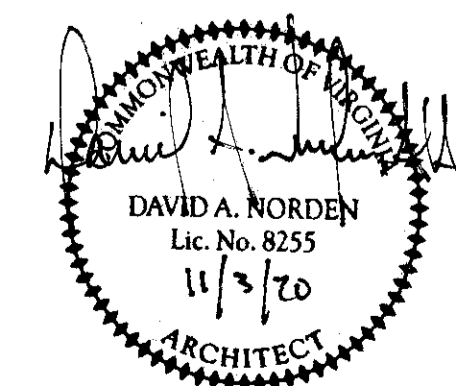
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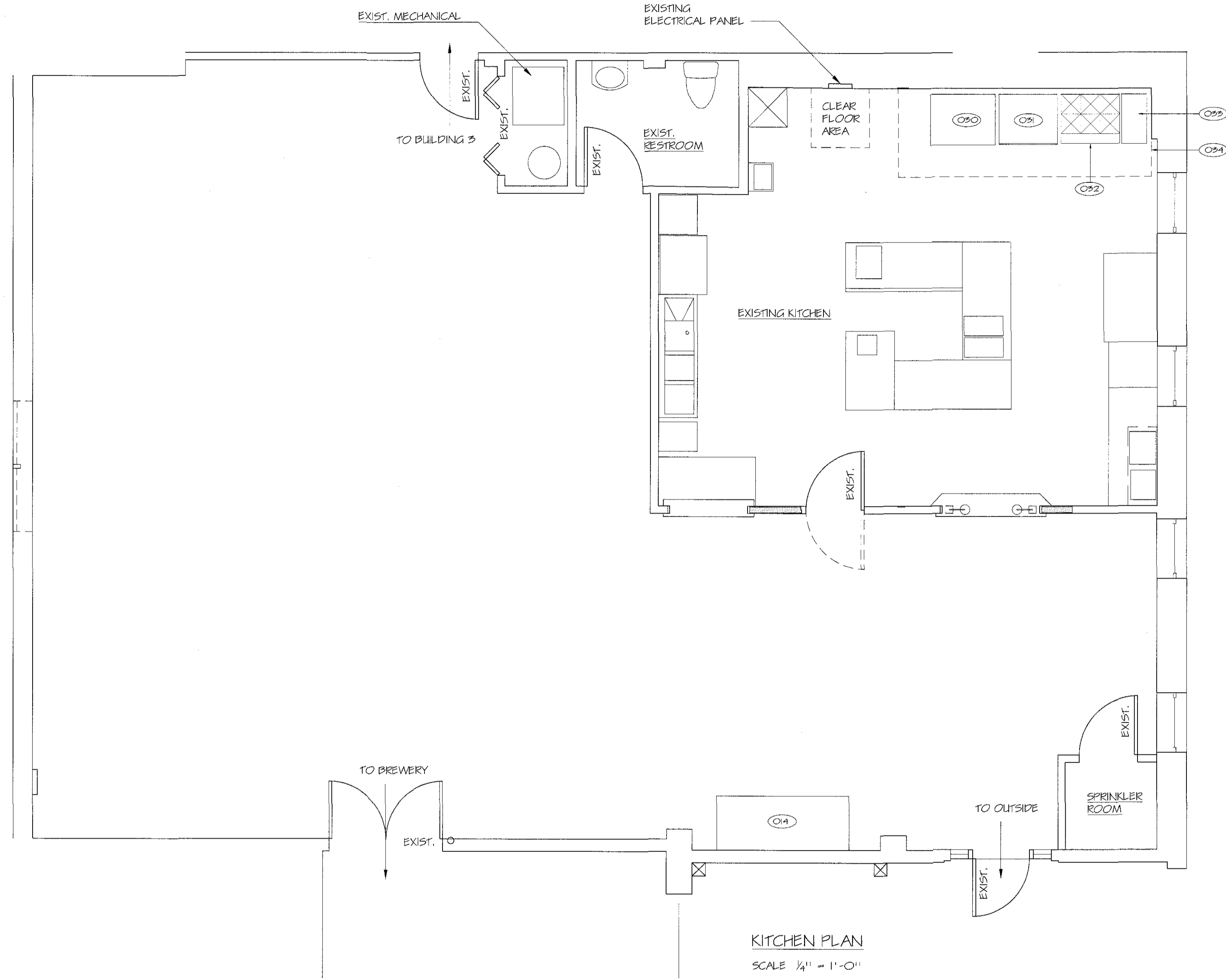
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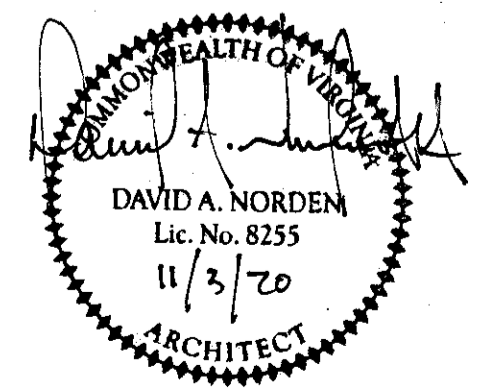
JOB KITCHEN HOOD FOR WORT HOG BREWERY
41 BECKHAM STREET WARRENTON, VIRGINIA 20186

SHEET COVER SHEET
DWG C-1
REVISION
DATE 12-30-20
SCALE AS NOTED
DRAWN PK
COMM NO. 1266-P



KITCHEN PLAN
SCALE 1/4" = 1'-0"

KITCHEN EQUIPMENT SCHEDULE			
NO.	ITEM	SIZE	MANUFACTURER & MODEL
030	CONVENTION OVEN	31"D. X 58.5"H. X 40"W.	EXISTING - VULCAN MODEL NO.
031	GAS COUNTERTOP GRIDDLE	36"W. X 28.6"D. X 15.2"H.	ATOSA MODEL NO. ATMG-36
032	GAS RANGE	36"W. X 32.625"D. X 56.375"H.	ATOSA MODEL NO. ATO-6B
033	GAS FLOOR FRYER	15.6"W. X 30.1"D. X 44.4"H.	ATOSA MODEL NO. ATFS-40
034	EXHAUST HOOD	13'-0"W. X 54"D.	CAPTIVEAIRE



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JOB KITCHEN HOOD FOR WORT HOG BREWERY
41 BECKHAM STREET WARRENTON, VIRGINIA 20186

SHEET KITCHEN PLAN & KITCHEN EQUIPMENT SCHEDULE
COMM NO. 1266-P DRAWN PK SCALE AS NOTED DATE 10-30-20

DWG
A-1
REVISION

PLUMBING SPECIFICATIONS

1. GENERAL
 - 1.1 DESCRIPTION OF WORK:
 - A. ALL FIXTURES, EQUIPMENT, ACCESSORIES, MATERIALS, AND LABOR REQUIRED TO PROVIDE COMPLETE, COORDINATED, AND FULLY FUNCTIONAL PLUMBING SYSTEMS GENERALLY AS INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN.
 1. NATURAL GAS - 7" WATER COLUMN
 - 1.2 RELATED DOCUMENTS:
 - A. THE REQUIREMENTS OF THE CIVIL, ARCHITECTURAL, STRUCTURAL, HVAC, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS SHALL APPLY TO AND BE CONSIDERED A PART OF THE PLUMBING WORK IN-SO-FAR AS THEY APPLY TO THE PLUMBING WORK AND ARE REQUIRED FOR COORDINATION.
 - 1.3 JOB CONDITIONS:
 - A. DUE TO THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED TO PROVIDE A COMPLETE INSTALLATION OF THE WORK DESCRIBED AND INDICATED.
 - B. PROVIDE FITTINGS, OFFSETS, TRANSITIONS, AND ACCESSORIES REQUIRED TO MEET CONDITIONS OF THE PROJECT.
 - C. PROVIDE SERVICE ACCESS FOR EQUIPMENT, CONTROL COMPONENTS, VALVES, AND SPECIALTIES.
 - D. PROVIDE ACCESS PANELS FOR VALVES, ACCESS DOORS, ETC. CONCEALED BEHIND FINISHED SURFACES.
 - 1.4 CONFORMANCE TO REGULATIONS:
 - A. WORK SHALL CONFORM WITH VIRGINIA UNIFORM STATEWIDE BUILDING CODE, NFPA, AND LOCAL ORDINANCES.
 - 1.5 QUALITY ASSURANCE:
 - A. COMPLY WITH MANUFACTURER'S REQUIREMENTS AND NOTES AND DETAILS SHOWN HEREIN FOR INSTALLATION OF EQUIPMENT.
 - 1.6 MATERIALS AND EQUIPMENT:
 - A. EQUIPMENT PROVIDED FOR THIS PROJECT SHALL BE EQUIVALENT TO PRODUCTS SPECIFIED.
 - B. CONTRACTOR SHALL GUARANTEE EQUIVALENCE AND IS RESPONSIBLE FOR MODIFICATIONS REQUIRED AND COORDINATION WITH OTHER TRADES TO FIT SUBSTITUTED PRODUCT INTO THE PROJECT.
 - C. MATERIALS AND EQUIPMENT OF THE SAME TYPE AND USE SHALL BE FROM A SINGLE MANUFACTURER.
 - D. PROTECT STORED MATERIALS AND EQUIPMENT FROM WEATHER.
 - 1.7 UTILITIES AND CONNECTIONS:
 - A. COORDINATE CONNECTIONS TO EXISTING UTILITIES WITH OWNER'S REPRESENTATIVE AND WITH EXISTING CONDITIONS. FIELD VERIFY EXACT LOCATIONS AND INVERTS OF EXISTING PRIOR TO ROUGH-IN OF NEW WORK. WORK TO EXISTING LOCATIONS AND INVERTS. PROVIDE TRANSITIONS IN SIZE AND MATERIAL AT POINT OF CONNECTION.
 - 1.8 SUBMITTALS:
 - A. SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR FIXTURES AND EQUIPMENT SPECIFIED HEREIN AND ON THE DRAWINGS. SHOP DRAWINGS AND PRODUCT DATA SHALL BE IDENTIFIED PER INDICATIONS ON DRAWINGS. SHALL BE MARKED TO INDICATED SPECIFIC ITEM BE PROPOSED, AND SHALL BE ORGANIZED IN AN ORDERLY MANNER. SUBMIT SHOP DRAWINGS ELECTRONICALLY IN PDF FORMAT.
 - B. SUBMIT OPERATING AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT INSTALLED IN THIS PROJECT. INCLUDE COPIES OF SPECIFIC EQUIPMENT WARRANTIES IN MANUAL.
 - C. UPON COMPLETION OF THE INSTALLATION, AND PRIOR TO ACCEPTANCE BY THE OWNER, CONTRACTOR SHALL FURNISH TWO COPIES OF AS-BUILT DOCUMENTATION. ALL CHANGES TO THE BIDDING DOCUMENTS SHALL BE NEATLY AND CLEARLY IDENTIFIED ON THE AS-BUILT DOCUMENTATION.
 - 1.9 PROJECT CLOSEOUT:
 - A. REPLACE OR REPAIR DAMAGED EQUIPMENT AND CLEAN ALL EXPOSED SURFACES.
 - B. TOUCH-UP SHOP APPLIED FINISHES TO RESTORE DAMAGED OR SOILED AREAS.
 - C. INSTRUCT OWNER'S REPRESENTATIVE IN OPERATION AND MAINTENANCE OF EQUIPMENT UTILIZING OPERATION AND MAINTENANCE MANUAL.

2. PRODUCTS
 - 2.1 PIPING SYSTEMS:
 - A. GAS PIPING - SCHEDULE 40 BLACK STEEL.
 - 2.2 PLUMBING FIXTURES AND EQUIPMENT:
 - A. REFER TO FIXTURE SCHEDULE AND EQUIPMENT LIST ON DRAWINGS FOR MANUFACTURER'S AND MODEL NUMBERS.
3. EXECUTION
 - 3.1 PIPING SYSTEMS
 - A. VERIFY INVERT ELEVATIONS PRIOR TO ROUGH-INS.
 - C. VERIFY EXACT LOCATION OF EQUIPMENT AND FIXTURES PRIOR TO ROUGH-IN.
 - D. COORDINATE ROUTING OF WORK WITH OTHER TRADES AND INSTALL TO ALLOW MAXIMUM HEADROOM CLEARANCES, SERVICE ACCESS AND MAINTAIN PROPER PITCH OF SLOPING LINES.
 - F. PROVIDE SLEEVES FOR PIPING PENETRATING WALLS.
 - G. FIRESTOP PIPING PASSING THROUGH FIRE RATED WALLS OR CEILINGS.
 - H. PATCH FINISHED AREAS DISTURBED BY WORK TO MATCH SURROUNDING AREAS.
 - I. WELDING SHALL BE DONE BY CERTIFIED WELDERS FOR THE APPROPRIATE SYSTEM BEING WELDED.
 - J. MAKE CONNECTIONS OF DISSIMILAR METALLIC PIPING WITH DIELECTRIC UNIONS.
 - K. PROVIDE CHROME PLATED ESCUTCHEON FOR EXPOSED PIPING PENETRATING A FINISHED SURFACE.
 - L. PROVIDE SHUT OFF VALVES AT EQUIPMENT CONNECTIONS. PROVIDE STOPS FOR ALL PLUMBING EQUIPMENT AND FIXTURES.
 - M. HANGERS SUPPORTING COPPER PIPING SHALL BE COPPER PLATED OR PLASTIC COVERED. HANGERS SUPPORTING INSULATED PIPING SHALL BE SIZED TO SURROUND INSULATION AND STEEL SADDLE.
 - O. TEST PIPING SYSTEMS AS FOLLOWS:
 1. TEST GAS PIPING IN ACCORDANCE WITH IFGC-2015.
 2. TESTS SHALL SHOW NO SUBSTANTIAL LOSS IN PRESSURE.
 3. PIPING RUN IN CONCEALED AREAS SHALL BE LEAK TESTED PRIOR TO BEING CONCEALED.
 - 3.2 PLUMBING FIXTURES
 - A. CAULK BETWEEN FIXTURE AND FINISHED SURFACES WITH WHITE SILICONE CAULKING.

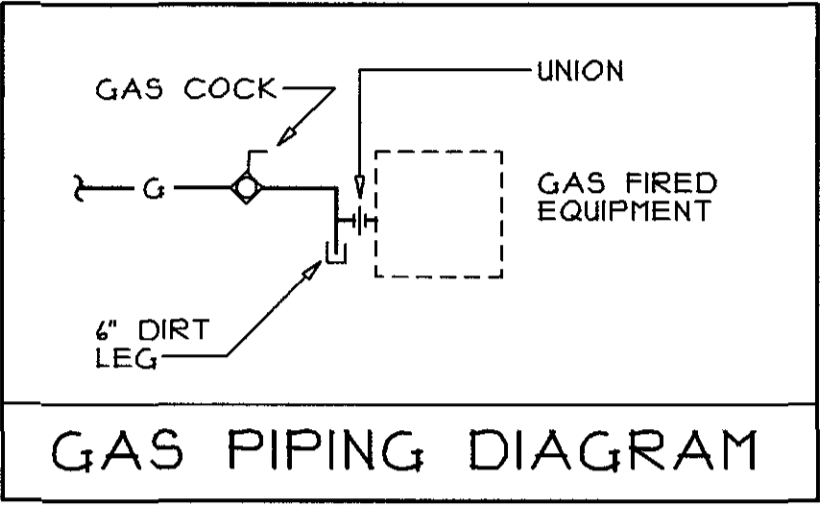
KITCHEN EQUIPMENT SCHEDULE							
NO.	DESCRIPTION	W	V	CW	HW	GAS	REMARKS
030	EXIST. ELEC. CONVECTION OVEN	--	--	--	--	--	
031	GAS COUNTERTOP GRIDDLE	--	--	--	--	3/4	90 MBH INPUT
032	4 BURNER GAS RANGE	--	--	--	--	3/4	171 MBH INPUT
033	GAS FRYER	--	--	--	--	3/4	102 MBH INPUT

NOTES:
1. VERIFY EXACT LOCATION, SIZE, AND TYPE OF CONNECTIONS FOR KITCHEN EQUIPMENT PRIOR TO ROUGH-IN.

- DEMOLITION NOTES
1. REMOVE PLUMBING FIXTURES AND EQUIPMENT AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN, OR AS REQUIRED TO CLEAR AREAS OF NEW CONSTRUCTION.
 2. REMOVE PIPING ASSOCIATED WITH FIXTURES INDICATED TO BE REMOVED BACK TO AS CLOSE TO ACTIVE MAIN OR BRANCH AND CAP.
 3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LIMITS OF DEMOLITION WORK.
 4. COORDINATE REMOVAL OF PIPING WITH OTHER TRADES AND EXISTING CONDITIONS. COORDINATE REQUIRED SHUT-DOWN OF UTILITIES WITH OWNER'S REPRESENTATIVE.
 5. REFER TO ARCHITECTURAL DRAWINGS FOR DESCRIPTION OF NEW FINISHED SURFACES. COORDINATE REMOVAL OF FIXTURES AND PIPING WITH TRADES RESPONSIBLE FOR NEW FINISHED SURFACES.
 6. CAP PIPING WITH MATERIAL SUITABLE FOR USE WITH THE PIPING SYSTEM BEING CAPPED AND INTENDED FOR THAT SPECIFIC USE.
 7. REPAIR DAMAGED PIPE INSULATION AND INSULATE CAPPED SECTIONS OF WATER PIPING TO MATCH EXISTING.

- LEGEND
- G— GAS PIPING
 - ⊕ GAS COCK
 - ↳ DROP IN PIPING
 - ⊕ RISER MARK - SEE DIAGRAM
 - ⊕ EQUIPMENT MARK - SEE SCHEDULE
 - ⊕ POINT OF CONNECTION NEW TO EXISTING

- ABBREVIATIONS
- AFF ABOVE FINISHED FLOOR
 - AFG ABOVE FINISHED GRADE
 - DN DOWN



JOB: WORT HOG BREWERY KITCHEN HOOD.
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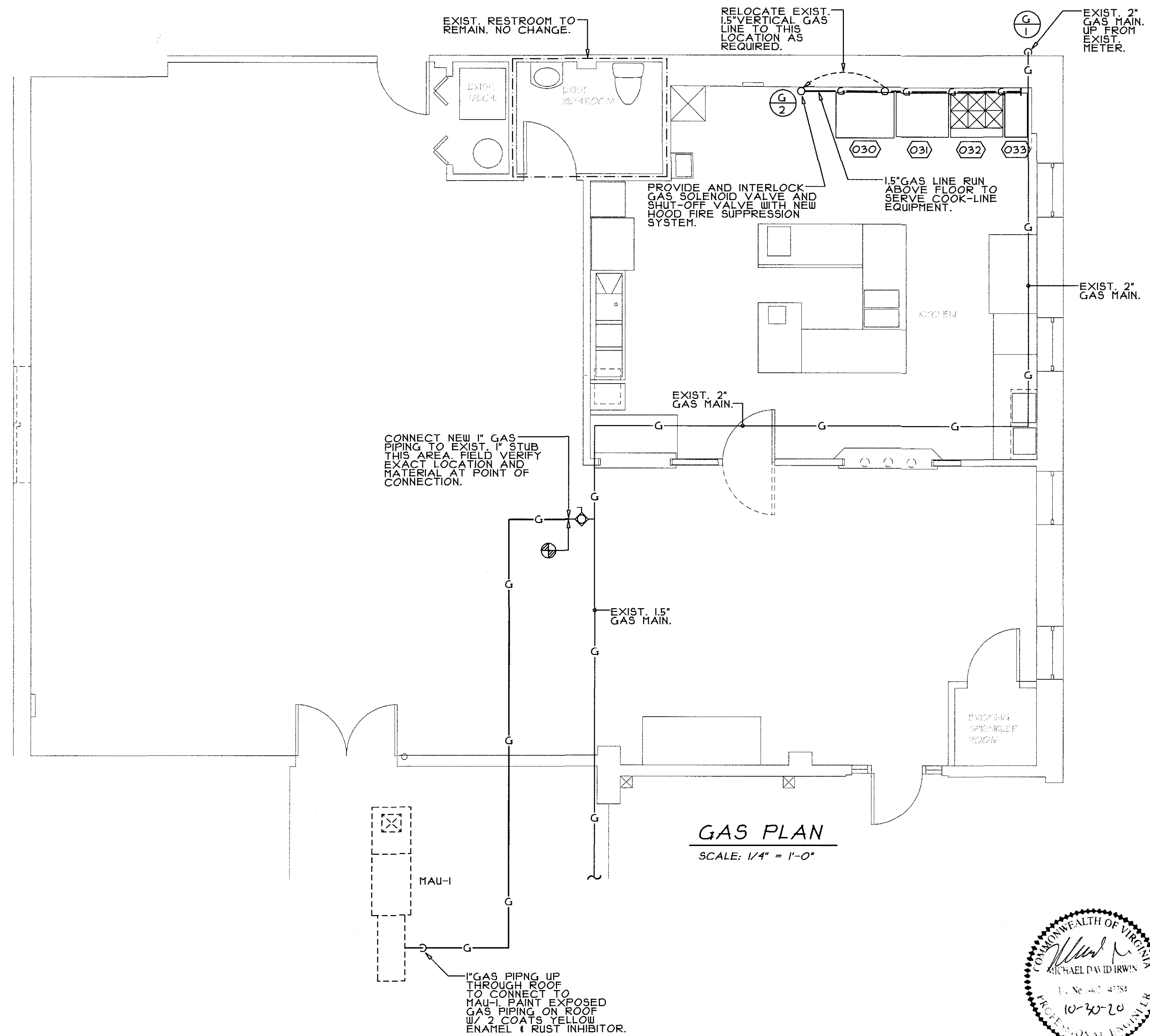
SHEET: PLUMBING SPECS, SCHEDULES, NOTES & DETAILS

JOB NUMBER: 20069
DRAWN: WLA
SCALE: None
DATE: 10-30-20

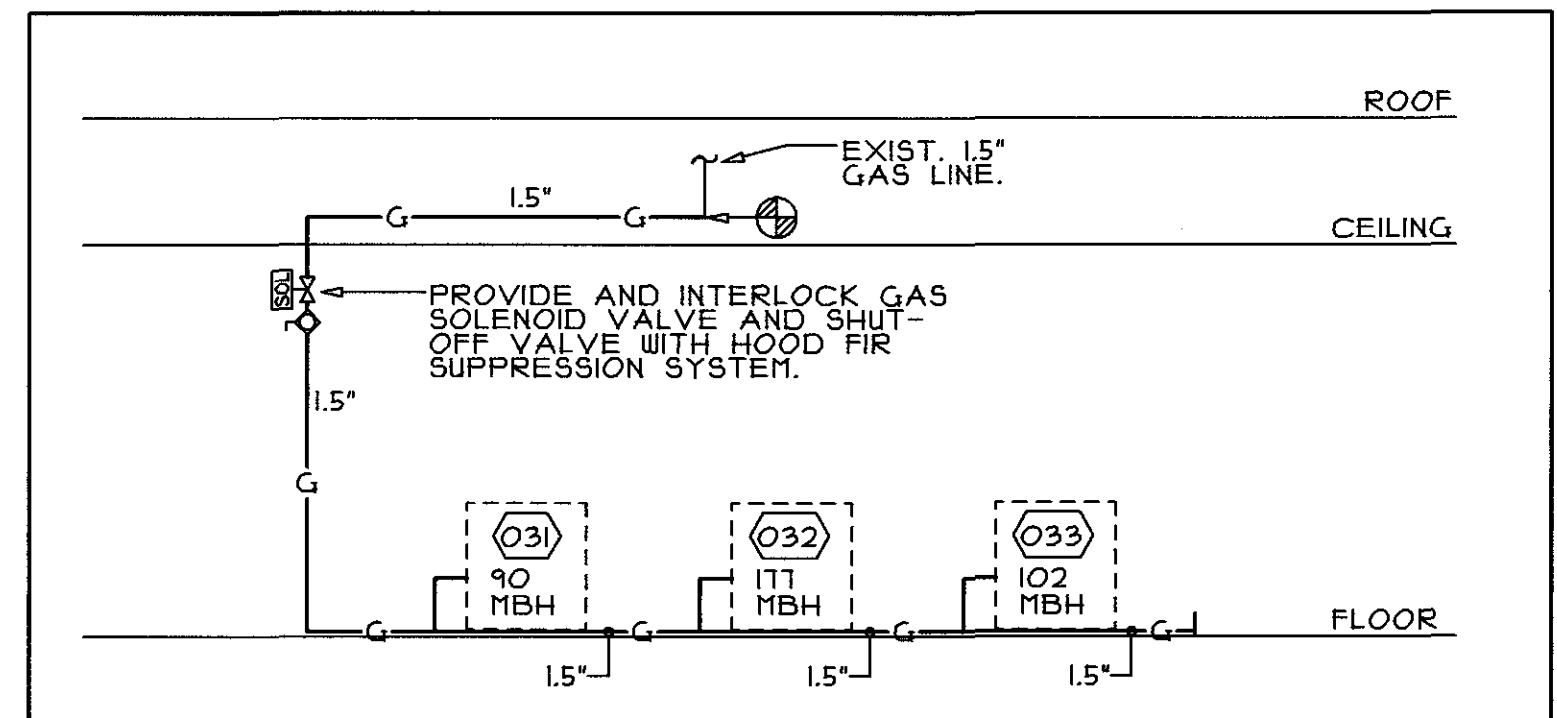
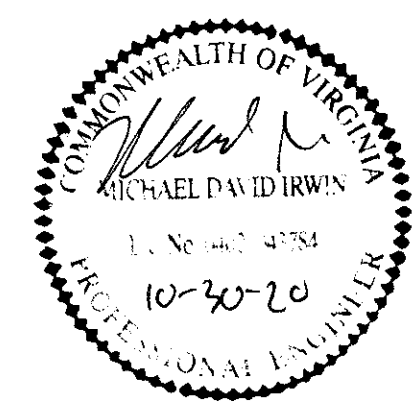
REVISION: DWG: P-1

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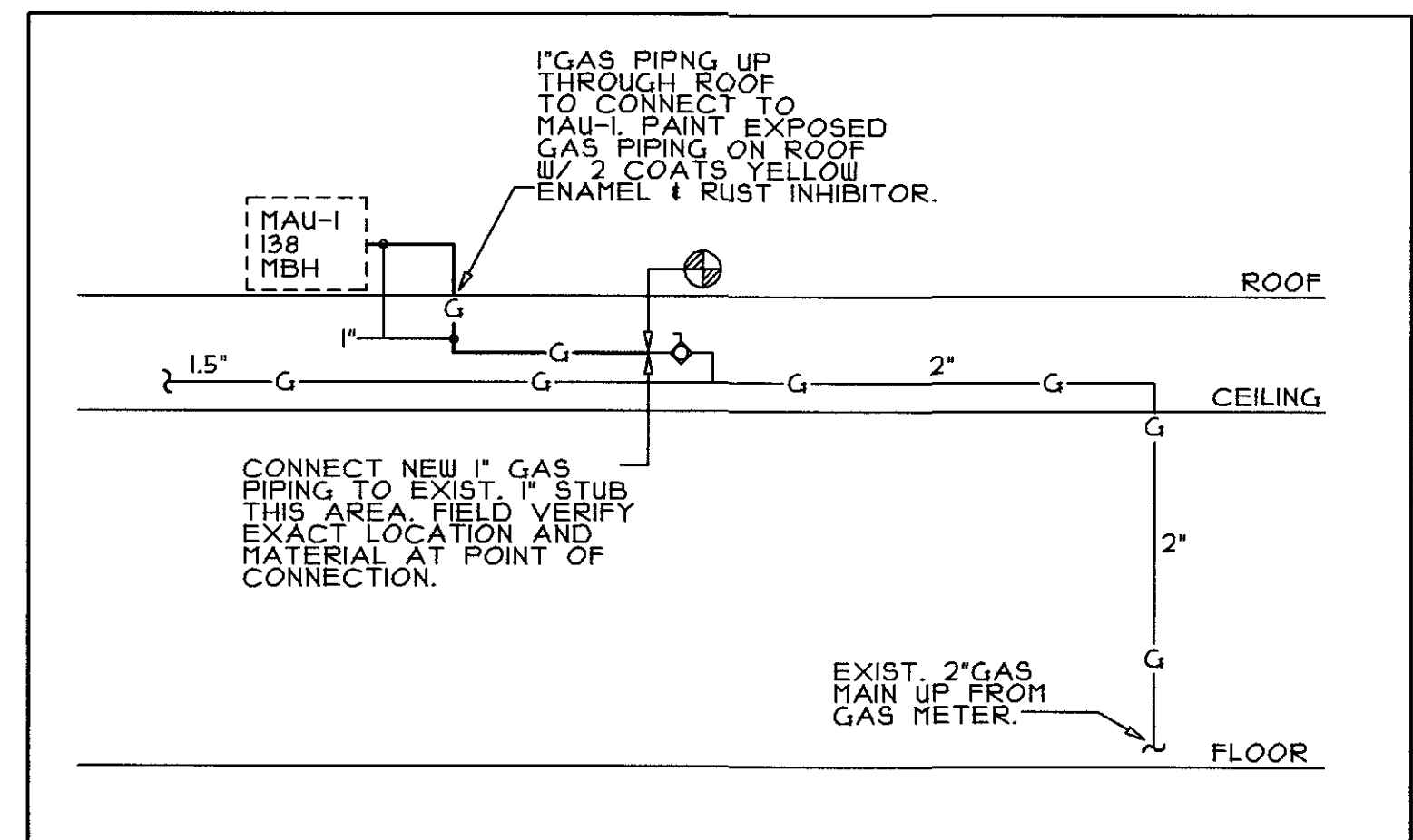


GAS PLAN
SCALE: 1/4" = 1'-0"



GAS RISER (G/I)

- NOTES:
1. THE MAXIMUM TOTAL DEVELOPED LENGTH OF PIPE IS LESS THAN 100 FEET.
 2. THE TOTAL NEW CONNECTED GAS LOAD FOR THE BUILDING IS 369,000 BTU.
 3. PIPE SIZES ARE BASED ON IFGC-2015 TABLE 402.4(2).
 4. SERVICE PRESSURE AT EXISTING METER IS 1" WATER COLUMN.



GAS RISER (G/I)

- NOTES:
1. THE MAXIMUM TOTAL DEVELOPED LENGTH OF PIPE IS LESS THAN 100 FEET.
 2. THE TOTAL NEW CONNECTED GAS LOAD FOR THE BUILDING IS 138,000 BTU.
 3. PIPE SIZES ARE BASED ON IFGC-2015 TABLE 402.4(2).
 4. SERVICE PRESSURE AT EXISTING METER IS 1" WATER COLUMN.

JOB: WORT HOG BREWERY KITCHEN HOOD.
41 BECKHAM STREET

SHEET: GAS PLAN AND RISER

JOB NUMBER: 20069

WARRENTON, VIRGINIA 20186

REVISION: DWG: P-2

DATE: 10-30-20

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

DRAWN: W.A.

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10/30/20	E2	ELECTRICAL PLAN & SCHEDULES & RISERS

PLUMBING

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10/30/20	P1	PLUMBING SPECS, SCHEDULES, NOTES & DETAILS
10/30/20	P2	GAS PLAN & RISER

BUILDING DATA

USE GROUP (EXISTING)	A-2	CODE	2015 VIRGINIA CONSTRUCTION CODE 2009 ICC/ANSI A117.1
TYPE OF CONSTRUCTION (EXISTING)	III-B		
GROSS SQUARE FOOTAGE:			
NET SQUARE FOOTAGE	2261 S.F.		
AREA OF WORK	533 S.F.		
DESIGN CRITERIA:		OCCUPANT LOAD:	
WIND SPEED	MIN. 90 MPH	ASSEMBLY - KITCHEN	1 PER 200 S.F. = 3
ROOF SNOW LOADS	30 PSF		
FLOOR LOADS:		LIVE LOADS	DEAD LOADS
FIRST FLOOR	100 PSF	10 PSF	

GENERAL NOTES

- NOTE 1: CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD & NOTIFY ARCHITECT OF ANY CONFLICT W/THESE CONSTRUCTION DOCUMENTS.
- NOTE 2: ALL WORK SHALL CONFORM TO ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES.
- NOTE 3: EQUIPMENT TO BE LOCATED WHERE SHOWN IN DRAWINGS. GENERAL CONTRACTOR TO COORDINATE ALL TRADES INVOLVED. ANY QUESTION OR ISSUE WITH THE PLACEMENT OF EQUIPMENT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO INSTALLATION.
- NOTE 4: CONTRACTOR TO BE RESPONSIBLE FOR CONSTRUCTION OF ROOF CURB TO SUPPORT EXHAUST FAN.
- NOTE 5: 'CAPTIVEAIRE' HOOD TO BE SUPPORTED TO EXISTING STRUCTURE USING 'KINDORF' STEEL CHANNEL AND ALL-THREAD RODS AS REQUIRED. CONTRACTOR TO BE RESPONSIBLE FOR FINAL METHODS AND MEANS.

PROJECT TEAM

OWNER

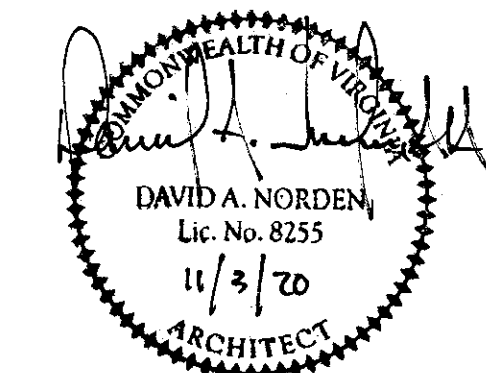
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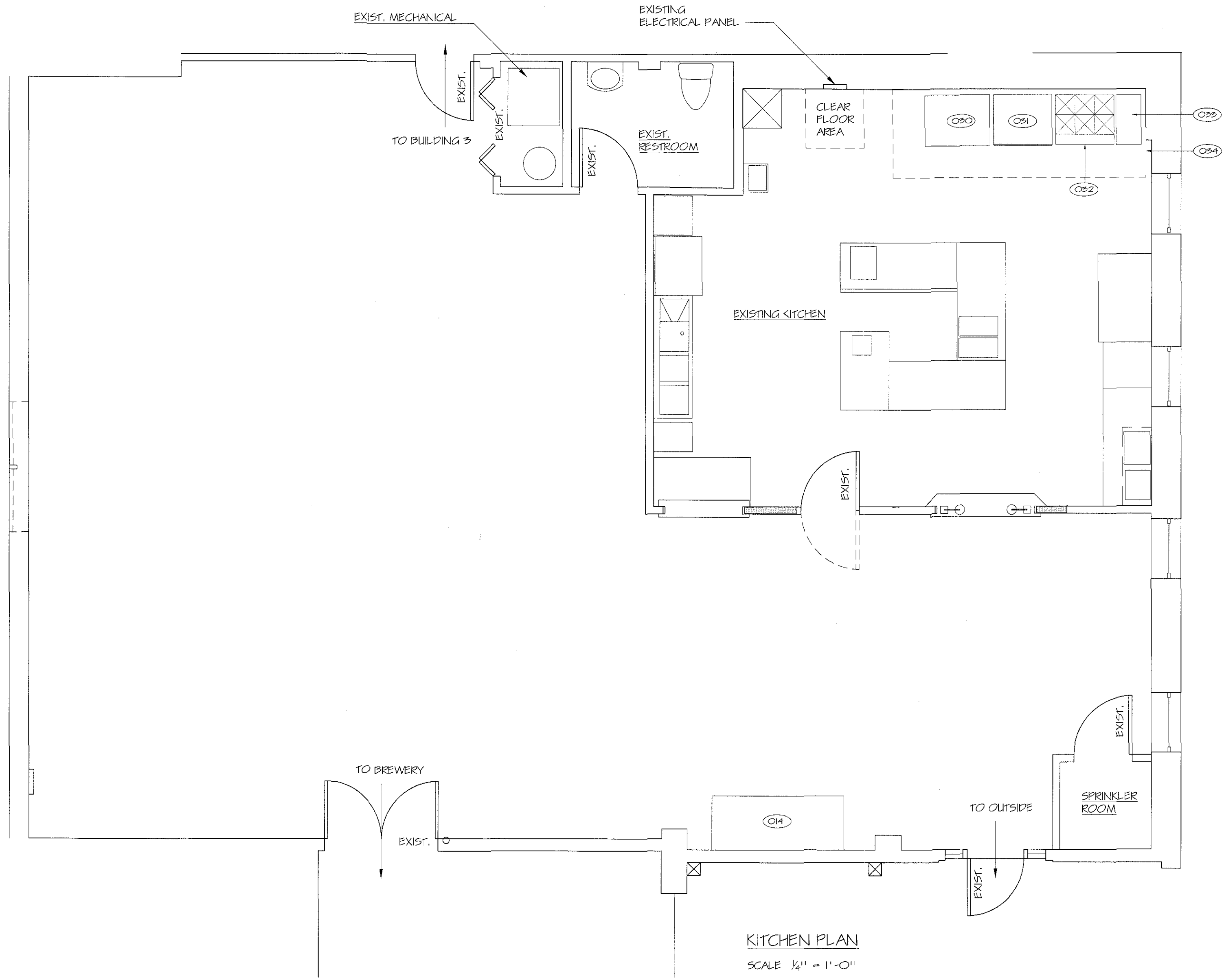
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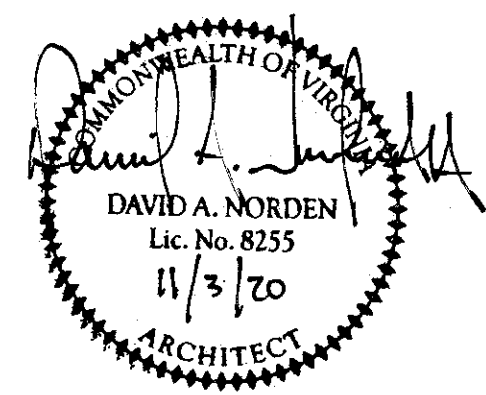
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SHEET COVER SHEET
DRAWN PK SCALE AS NOTED DATE 10-30-20
DWG C-1
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KITCHEN EQUIPMENT SCHEDULE			
NO.	ITEM	SIZE	MANUFACTURER & MODEL
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033	GAS FLOOR FRYER	15.6"W. X 30.1"D. X 44.4"H.	ATOSA MODEL NO. ATFS-40
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 41 BECKHAM STREET
 SHEET KITCHEN PLAN & KITCHEN EQUIPMENT SCHEDULE REVISION
 COMM NO. 1226-B DRAWN PK SCALE AS NOTED DATE 12-30-20 DWG A-1

HVAC SPECIFICATIONS

1. GENERAL

1.1 DESCRIPTION OF WORK:

A. ALL FIXTURES, EQUIPMENT, ACCESSORIES, MATERIALS, AND LABOR REQUIRED TO PROVIDE COMPLETE, COORDINATED, AND FULLY FUNCTIONAL HVAC SYSTEMS GENERALLY AS INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN.

1. VENTILATION SYSTEM
2. EXHAUST SYSTEMS

1.2 RELATED DOCUMENTS:

A. THE REQUIREMENTS OF THE CIVIL, ARCHITECTURAL, STRUCTURAL, PLUMBING AND ELECTRICAL DRAWINGS AND SPECIFICATIONS SHALL APPLY TO AND BE CONSIDERED A PART OF THE HVAC WORK IN-SO-FAR AS THEY APPLY TO THE HVAC WORK AND ARE REQUIRED FOR COORDINATION.

1.3 JOB CONDITIONS:

A. DUE TO THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED TO PROVIDE A COMPLETE INSTALLATION OF THE WORK DESCRIBED AND INDICATED.

B. PROVIDE FITTINGS, OFFSETS, TRANSITIONS, CONTROL TRANSFORMERS AND ACCESSORIES REQUIRED TO MEET CONDITIONS OF THE PROJECT.

C. PROVIDE SERVICE ACCESS FOR EQUIPMENT, CONTROL COMPONENTS, VALVES, FILTERS AND SPECIALTIES.

D. PROVIDE ACCESS PANELS FOR VALVES, ACCESS DOORS, ETC. CONCEALED BEHIND FINISHED SURFACES.

E. MODIFY DUCT DIMENSIONS AS REQUIRED BY BUILDING STRUCTURE OR OTHER WORK AT NO ADDITIONAL COSTS TO THE OWNER. MAINTAIN EQUIVALENT FREE AREA SIZES.

1.4 CONFORMANCE TO REGULATIONS:

A. WORK SHALL CONFORM WITH VIRGINIA UNIFORM STATEWIDE BUILDING CODE, NFPA, AND LOCAL ORDINANCES.

1.5 QUALITY ASSURANCE:

A. COMPLY WITH MANUFACTURER'S REQUIREMENTS AND NOTES AND DETAILS SHOWN HEREIN FOR INSTALLATION OF EQUIPMENT.

B. COMPLY WITH RECOMMENDATIONS OF SMACNA AND ASHRAE.

1.6 MATERIALS AND EQUIPMENT:

A. EQUIPMENT PROVIDED FOR THIS PROJECT SHALL BE EQUIVALENT TO PRODUCTS SPECIFIED.

B. CONTRACTOR SHALL GUARANTEE EQUIVALENCE AND IS RESPONSIBLE FOR MODIFICATIONS REQUIRED AND COORDINATION WITH OTHER TRADES TO FIT SUBSTITUTED PRODUCT INTO THE PROJECT.

C. MATERIALS AND EQUIPMENT OF THE SAME TYPE AND USE SHALL BE FROM A SINGLE MANUFACTURER.

D. PROTECT STORED MATERIALS AND EQUIPMENT FROM WEATHER.

E. IF HVAC EQUIPMENT IS OPERATED DURING CONSTRUCTION, PROVIDE TEMPORARY FILTERS TO PROTECT AIR HANDLING EQUIPMENT.

1.7 SUBMITTALS:

A. SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR FIXTURES AND EQUIPMENT SPECIFIED HEREIN AND ON THE DRAWINGS. SHOP DRAWINGS AND PRODUCT DATA SHALL BE IDENTIFIED PER INDICATIONS ON DRAWINGS, SHALL BE MARKED TO INDICATED SPECIFIC ITEM BE PROPOSED, AND SHALL BE ORGANIZED IN AN ORDERLY MANNER. SUBMIT SHOP DRAWINGS ELECTRONICALLY IN PDF FORMAT.

B. SUBMIT OPERATING AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT INSTALLED IN THIS PROJECT. INCLUDE COPIES OF SPECIFIC EQUIPMENT WARRANTIES IN MANUAL.

C. UPON COMPLETION OF THE INSTALLATION, AND PRIOR TO ACCEPTANCE BY THE OWNER, CONTRACTOR SHALL FURNISH TWO COPIES OF AS-BUILT DOCUMENTATION. ALL CHANGES TO THE BIDDING DOCUMENTS SHALL BE NEATLY AND CLEARLY IDENTIFIED ON THE AS-BUILT DOCUMENTATION.

1.8 PROJECT CLOSEOUT:

A. REPLACE OR REPAIR DAMAGED EQUIPMENT AND CLEAN ALL EXPOSED SURFACES.

B. TOUCH-UP SHOP APPLIED FINISHES TO RESTORE DAMAGED OR SOILED AREAS.

C. INSTRUCT OWNER'S REPRESENTATIVE IN OPERATION AND MAINTENANCE OF EQUIPMENT UTILIZING OPERATION AND MAINTENANCE MANUAL.

D. REPLACE FILTERS IN AIR HANDLING EQUIPMENT AT TIME OF PROJECT TURNOVER TO OWNER.

E. VACUUM INTERIORS OF DUCTWORK WHICH BECOMES DIRTY, PRIOR TO PROJECT TURNOVER TO OWNER. CLEAN ANY DIRTY EQUIPMENT COILS.

2. PRODUCTS

2.1 HVAC EQUIPMENT:

A. REFER TO SCHEDULE SHEETS AND EQUIPMENT LIST FOR MANUFACTURERS AND MODEL NUMBERS.

B. ALTERNATE MANUFACTURER'S ARE: TITUS, COOK, CARNES, TWIN CITY, ACME, TUTTLE & BAILEY

C. PROVIDE MINIMUM 25% EFFICIENT RETURN AIR FILTERS FOR AIR HANDLING EQUIPMENT.

2.2 AIR DISTRIBUTION:

A. METAL DUCTWORK: SHOP FABRICATED AS FOLLOWS.

1. MATERIALS: GALVANIZED STEEL SHEET, ASTM A 527-85.

2. CONSTRUCTION: PER SMACNA HVAC DUCT CONSTRUCTION STANDARDS FOR LOW PRESSURE SYSTEM UP TO 2" W.C. CONSTRUCTION.

3. JOINT SEALANT: FOSTER MASTIC, HARDCAST FTA-20, KINGCO 18-136.

4. SUPPLY AIR BRANCH DUCTS RUN IN CONCEALED AREAS MAY BE PRE-INSULATED, UL CLASS 1, FLEXIBLE DUCT - LIMIT LENGTH TO TEN FEET - USE RIGID DUCT FOR REMAINDER OF RUNOUT.

5. KITCHEN HOOD EXHAUST DUCT SHALL SPIRAL BE PRE MANUFACTURED ZERO CLEARANCE DOUBLED WALL GREASE DUCT. CAPTIVE AIR OR EQUAL. PROVIDE CLEANOUTS IN DUCT PER CODE REQUIREMENTS. NO FLEX DUCT CONNECTIONS TO HOOD ARE PERMITTED. ALL DUCTS SHALL BE RIGID.

B. DAMPERS - AS MANUF. BY RUSKIN, CESCO, ARROW, CREATIVE METALS, PREFCO

1. VOLUME DAMPERS SHALL BE GALVANIZED STEEL, 16 GAUGE, BLADE HEIGHT SHALL NOT EXCEED 12". DAMPER LINKAGE AND LOCKING QUADRANT SHALL BE OUTSIDE OF AIRSTREAM.

2. MOTORIZED DAMPERS - REFER TO EQUIPMENT LIST ON DRAWINGS.

C. ACCESS DOORS -

1. FACTORY BUILT WITH SASH LOCKS, BUTT HINGE, GASKET, 24 GA. DOOR AND 22 GA. FRAME.

2. ACCESS DOOR IN INSULATED DUCT SHALL BE DOUBLE CONSTRUCTION WITH INSULATION ENCASED.

3. MINIMUM SIZE TO BE 75% SIZE OF DUCT IN WHICH INSTALLED, OR 10" X 10" MINIMUM.

4. CESCO MODEL HAD-10, LOUVERS AND DAMPERS, KEES, INC. OR AIR BALANCE.

2.3 CONTROLS:

A. PROVIDE ALL RELAYS, TRANSFORMERS, CONTROL WIRING, TERMINAL BLOCKS, ETC. FOR A COMPLETE SYSTEM.

1. COMPONENT MANUFACTURER'S AND MODEL NUMBERS AS SPECIFIED ON DRAWINGS.

B. THE WARRANTY PERIOD SHALL COMMENCE AFTER 60 DAYS OF BENEFICIAL USE, MEASURED FROM THE DATE OF ACCEPTANCE FROM THE OWNER.

3. EXECUTION

3.1 HVAC EQUIPMENT:

A. PROVIDE PERMANENT TAG ON EQUIPMENT INDICATING EXPIRATION DATE OF WARRANTIES. LOCATE TAG IN A READILY VISIBLE LOCATION.

B. PROVIDE FACTORY AUTHORIZED START-UP OF EQUIPMENT AND SUBMIT TEST REPORTS. (INCLUDE IN O&M MANUAL). COMPLY WITH MANUFACTURER REQUIREMENTS AND NOTES STATED ON THE CONSTRUCTION DOCUMENTS FOR INSTALLATION OF EQUIPMENT. BALANCE THE OUTSIDE AIR CFM TO QUANTITIES LISTED.

C. MAKE UP AIR UNIT

1. INSTALL ROOF CURB ON ROOF WHERE INDICATED ON PLAN WITH TOP LEVEL. VERIFY FLASHING REQUIREMENTS.

2. INSTALL MAU ON ROOF CURB.

3. CONNECT DUCTWORK TO UNIT WITH FLEXIBLE FLAME RETARDANT DUCT CONNECTOR.

4. INSTALL OUTSIDE AIR HOOD AND CONNECT CONTROL WIRING.

D. KITCHEN HOOD:

1. SUPPORT HOOD FROM STRUCTURE WITH ALL THREAD STEEL RODS.

2. INSTALL CONTROL PANEL BOX AND FIRE SUPPRESSION SYSTEM. SECURE BOX TO STRUCTURE.

3. CONNECT DUCTWORK

4. ASSURE PROPER OPERATION OF FIRE SUPPRESSION SYSTEM, HEAT SENSOR, FAN AND LIGHTS OPERATION.

E. EXHAUST FAN

1. INSTALL ROOF CURB ON ROOF WITH TOP LEVEL - VERIFY FLASHING REQUIREMENTS.

2. INSTALL FAN ON ROOF CURB.

3. CONNECT DUCTWORK TO FAN

3.2 AIR DISTRIBUTION:

A. DUCTWORK:

1. SEAL JOINTS IN DUCTWORK WITH COATING OF HARDCAST SEALANT OR UL LISTED FSK DUCT TAPE.

2. INSTALL INTERNAL ENDS OF SLIP JOINTS IN DIRECTION OF AIRFLOWS.

3. MAXIMUM ANGLE OF OFFSETS AND TRANSITIONS SHALL NOT EXCEED 30 DEGREES.

4. ADEQUATELY SUPPORT DUCT AS PER CODE REQUIREMENTS -ELIMINATE SAGGING AND COMPRESSION OF DUCT.

5. TRANSITION DUCTS TO FIT EQUIPMENT. PROVIDE FLEXIBLE FLAME RETARDANT DUCT CONNECTIONS TO UNITS.

6. PROVIDE 1/2" THICK ACOUSTICAL SOUNDLINING IN SA & RA TRUNK DUCTS WITHIN TWENTY FEET OF RTU'S. SECURE LINER TO DUCTS WITH ADHESIVE AT 70% COVERAGE AND WITH MECHANICAL FASTENERS AT 18" CENTERS, AND WITHIN 6" OF BUTT JOINTS AND EDGES OF DUCT. COAT ALL EXPOSED "ROUGH" LINER WITH MASTIC. ENLARGE DUCT TO ACCOMMODATE THE LINER - SIZES ON THE PLANS ARE INSIDE FREE AREA DIMENSIONS.

7. USE LONG RADIUS RIGID DUCT FITTINGS AT ELBOWS IN FLEXIBLE DUCT EXCEEDING 60 DEGREE ANGLE. ELBOWS IN FLEXIBLE DUCT LESS THAN 60 DEGREE ANGLE SHALL BE LONG SWEEP TYPE.

B. INSULATE CONCEALED SUPPLY AND RETURN AIR DUCT SYSTEMS PER CODE OR AS FOLLOWS, WHICHEVER IS MORE STRINGENT:

1. WITHIN BUILDING STRUCTURE AND INSIDE OF BUILDING INSULATION ENVELOPE (OUTSIDE AIR - SUPPLY AND RETURN AIR DUCTS): ONE LB./CU.FT. DENSITY, 2" THICK FIBERGLASS, WITH FSK JACKET.

2. INSULATE SUPPLY AIR AND RETURN AIR DUCTS OUTSIDE OF BUILDING INSULATION WITH 3" THICK FIBERGLASS WITH FSK JACKET - MINIMUM R = 8.0 INSTALLED.

3. EXHAUST AIR DUCTS: DO NOT INSULATE.

4. SECURE INSULATION TO DUCTS W/ ADHESIVE AT 60% COVERAGE AND SECURE WITH MECHANICAL FASTENERS AND WASHERS AT 18" CENTERS - SEAL VAPOR BARRIER.

C. DAMPERS: ACTUATORS AND PUSH-RODS SHALL BE ACCESSIBLE.

1. ACTUATORS AND PUSH-RODS SHALL BE ACCESSIBLE.

2. PROVIDE COMBINATION DAMPER/EXTRACTOR/SPIN-IN FOR ROUND DUCT CONNECTIONS TO TRUNK DUCTS. PROVIDE 45 DEGREE BEVEL INLET WITH BALANCE DAMPER FOR RECTANGULAR DUCT CONNECTIONS TO TRUNK DUCT. DAMPER ADJUSTMENT TO BE LOCATED ON BOTTOM SIDE OF DUCT.

D. ACCESS DOORS - PROVIDE IN DUCT FOR ACCESS TO COILS, FILTERS, MOTORIZED DAMPERS AND ALL OTHER EQUIPMENT NOT OTHERWISE ACCESSIBLE. INSTALL TO ALLOW SERVICE ACCESS. PROVIDE LABEL ON ACCESS DOOR INDICATING DEVICE SERVED.

E. BALANCE AIR DISTRIBUTION TO WITHIN 10% OF DESIGN AND SUBMIT REPORT.

1. REPORT SHALL IDENTIFY ZONES, DESIGN AIRFLOWS AND FINAL AIRFLOWS (SUPPLY AIR, RETURN AIR AND OUTSIDE AIR), SUPPLY AND RETURN STATIC PRESSURES, ENTERING AND LEAVING AIR TEMPERATURES.

2. INCLUDE EXHAUST FAN SYSTEMS, AND HVAC EQUIPMENT.

3. COMPLY WITH NEBB AND AABC REQUIREMENTS.

3.3 CONTROLS:

A. SEAL PROBE PENETRATIONS FOR DUCT MOUNTED SENSORS.

B. PROVIDE JUNCTION BOX HOUSING FOR CONTROL WIRING INTERLOCK TO COMPONENTS.

C. ROUTE CONDUCTORS NEATLY AND PARALLEL OR PERPENDICULAR TO BUILDING CONSTRUCTION. WIRING AND CONDUCTORS IN FINISHED SPACES TO BE RUN CONCEALED.

D. SEQUENCE OF CONTROL

1. INTERLOCK MUA UNIT WITH KITCHEN HOOD EXHAUST. HEAT SENSOR IN KITCHEN HOOD TO ENABLE EXHAUST/MAKE-UP AIR FANS.



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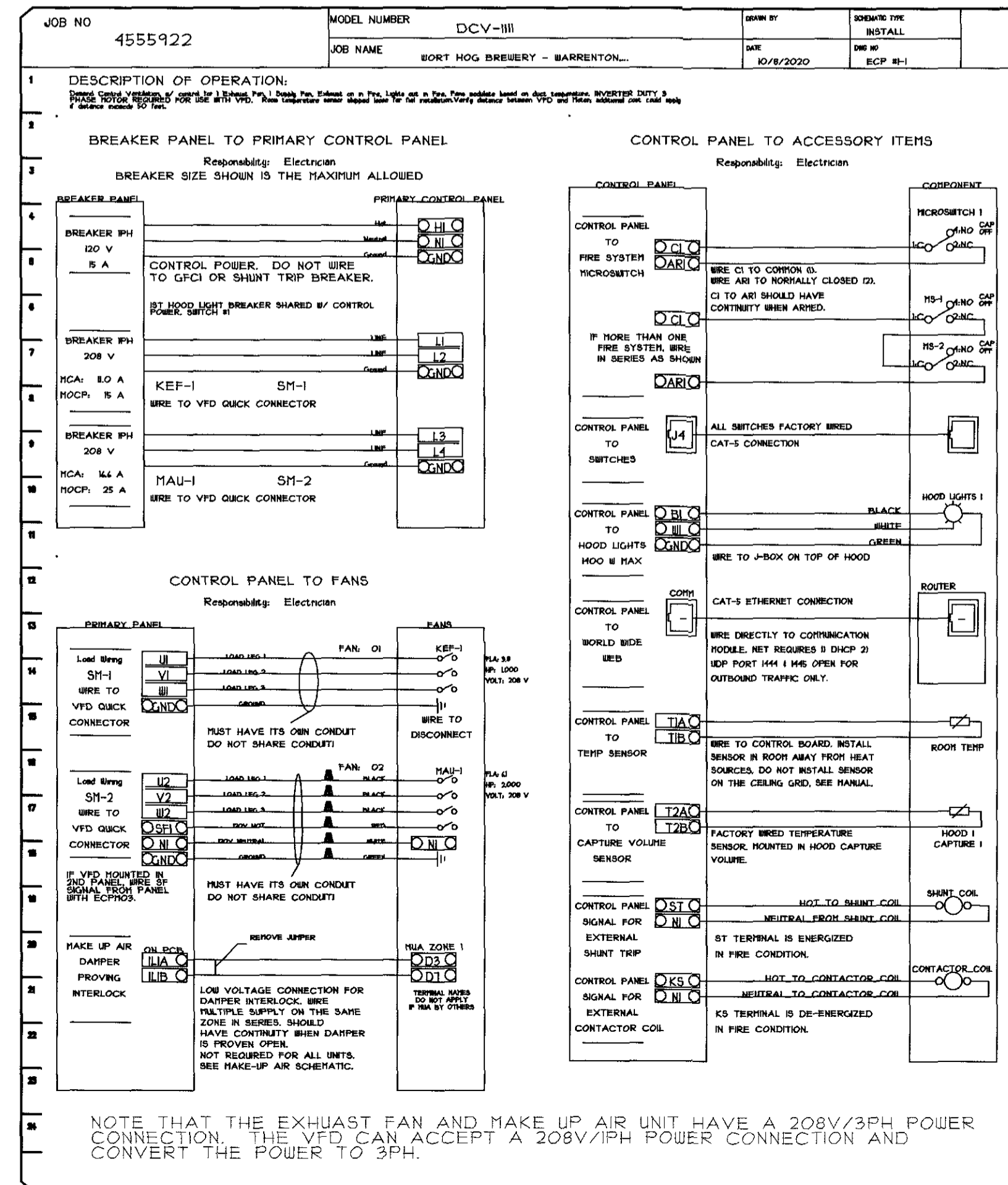
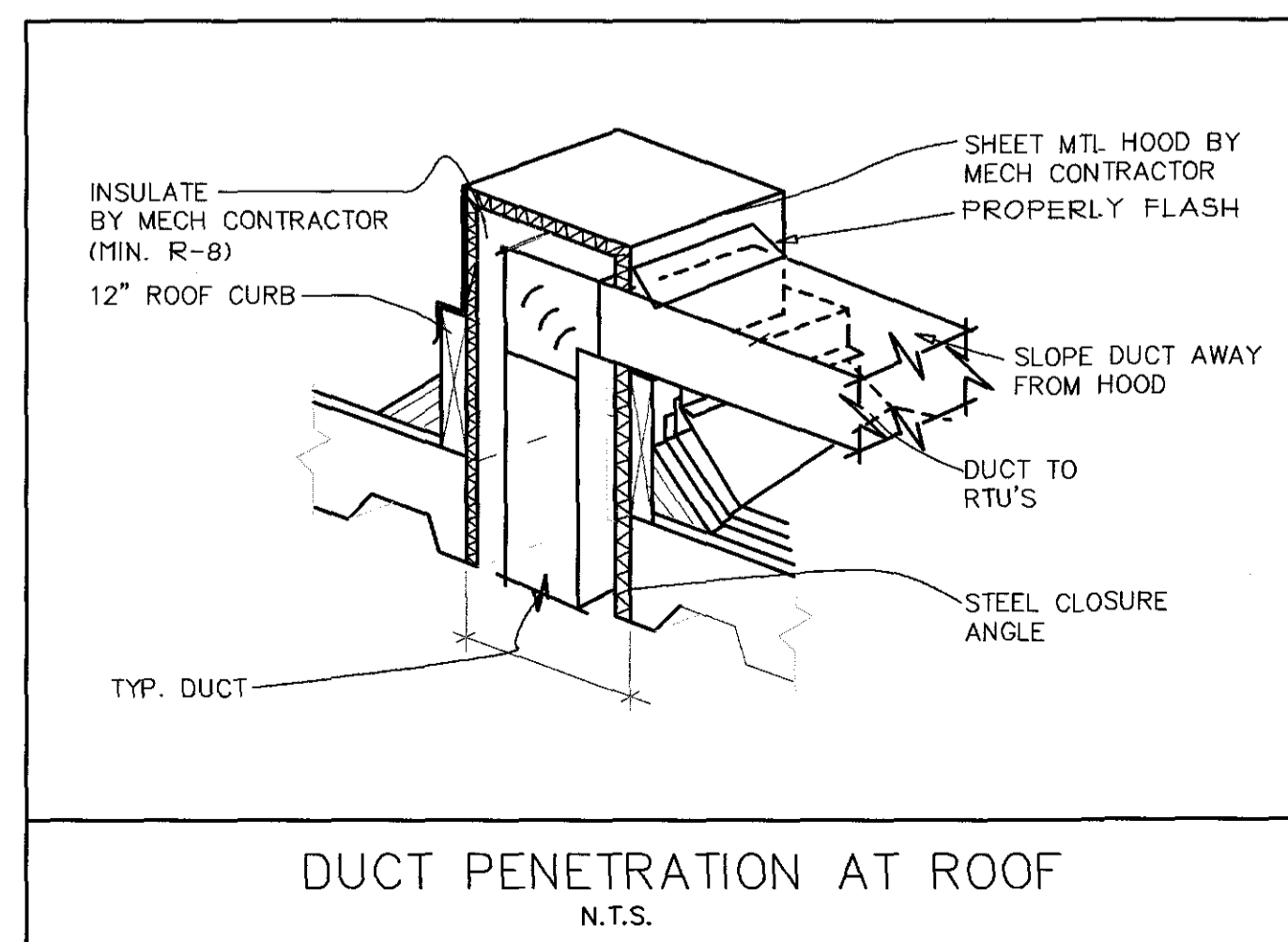
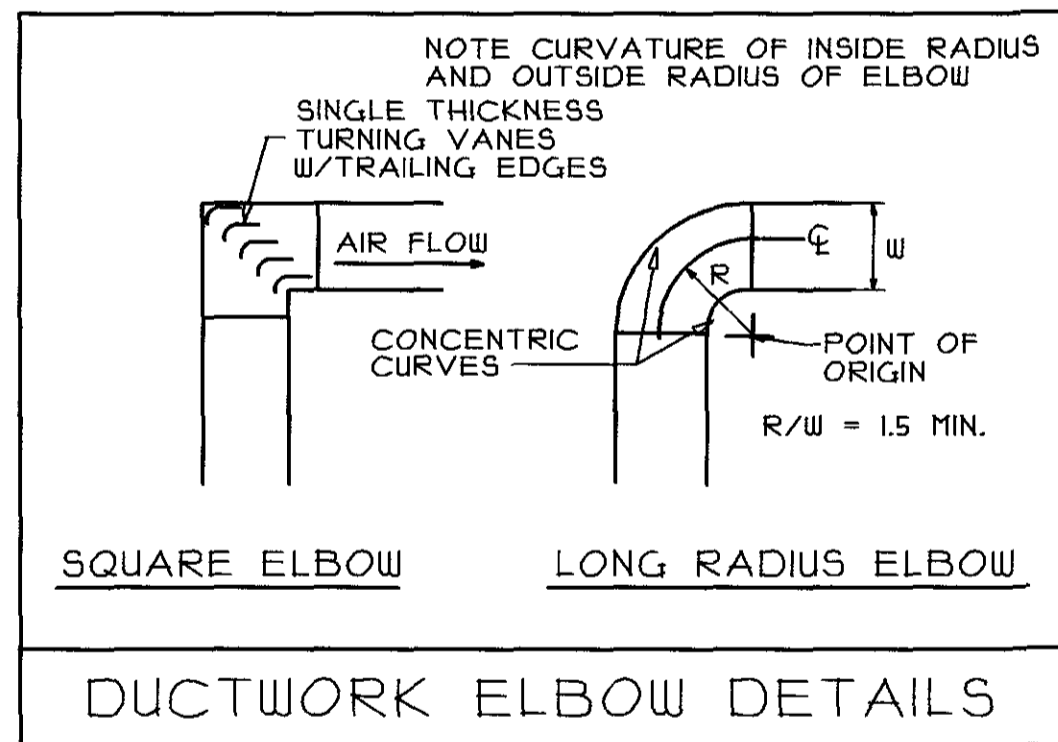
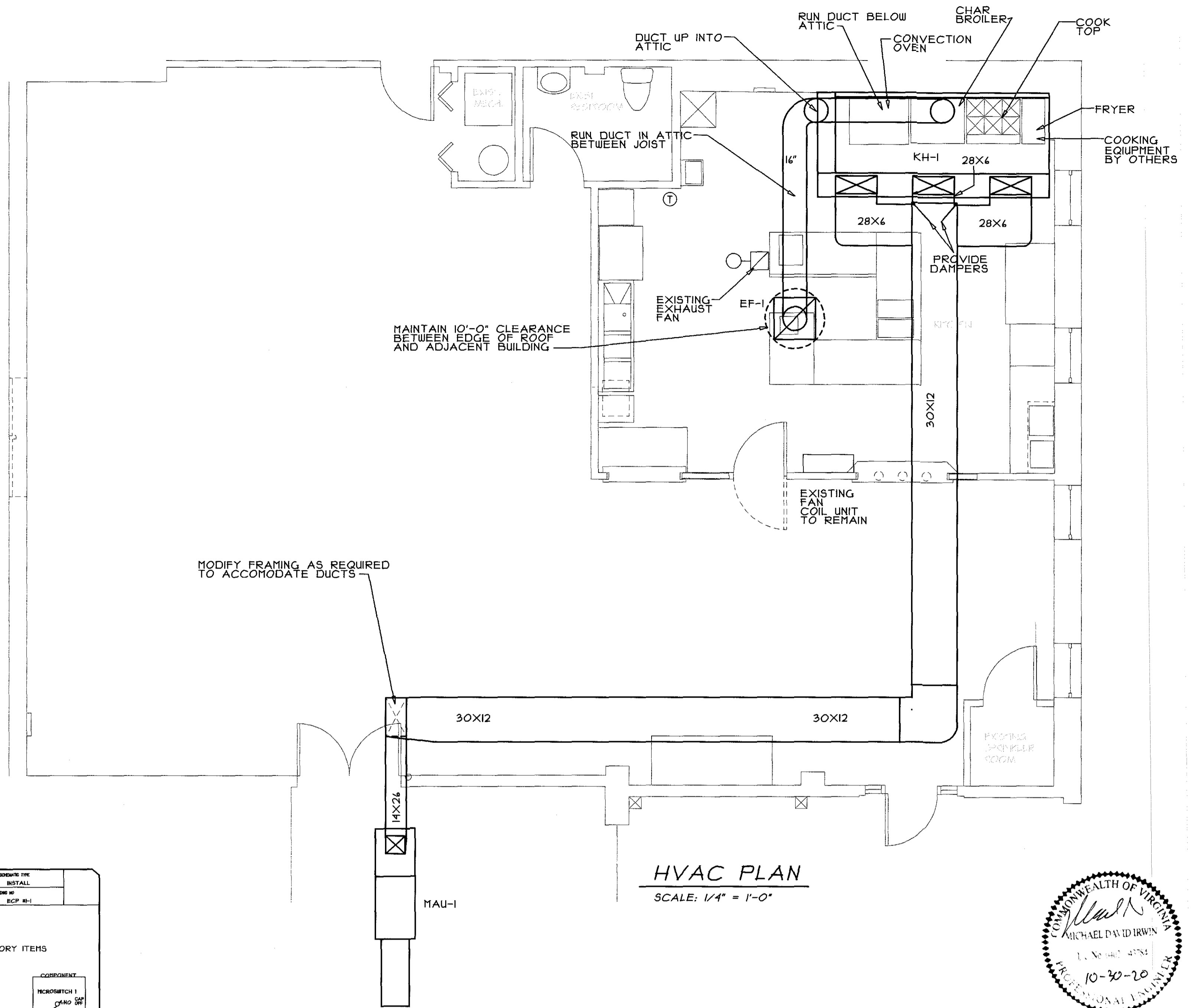
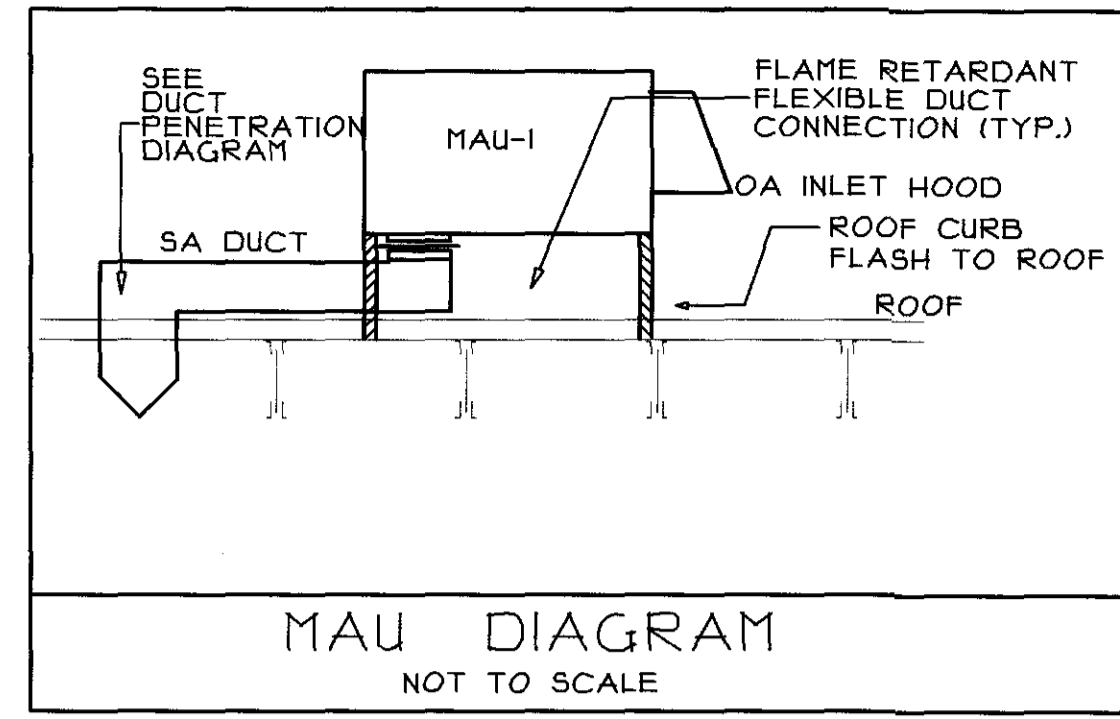
JOB: WORT HOG BREWERY KITCHEN HOOD.
41 BECKHAM STREET WARRENTON, VIRGINIA 20186

SHEET: SPECIFICATIONS

JOB NUMBER: 20069 DRAWN: MD/WLA SCALE: NONE DATE: 10-30-20

DWG: M-1

REVISION:



FAN SCHEDULE

NO.	DESCRIPTION	CFM	E.S.P.	HP	RPM	VOLT/PHASE	MFR. MDL.	REMARKS
EF-1	UPBLAST KITCHEN HOOD EXHAUST FAN	2400	1.0"	1.0	1090	208/3	CAPTIVE AIRE DUBOHFA	NOTES 1,3,4 150 LBS.

- #### NOTES
- WITH SAFETY SWITCH
 - WITH BACKDRAFT DAMPER
 - WITH SLOPE TYPE ROOF CURB
 - GREASE TYPE FAN, HINGED

EQUIPMENT LIST

EQUIPMENT: EQUIVALENT MANUFACTURERS MAY BE SUBSTITUTED. EQUIPMENT TO BE UL OR ETL LISTED.

KITCHEN HOOD - COMMERCIAL HOOD, UL GREASE FILTERS, UL LISTED LIGHTS, W/ TOP ENCLOSURE, ELECTRIC GAS SOLENOID VALVE, PREWIRE CONTROL PACKAGE, PREWIRE PACKAGE SYSTEM TO CONTROL HOOD LIGHTS AND FANS, COMPLETE WITH SWITCHES, MICROSWITCHES, HOOD MOUNTED FIRE CABINET-KH-1 ONLY, BACK SPLASH, HEAT SENSOR, MAINTAIN REAR CLEARANCE TO COMBUSTIBLES.

KH-1 - 12'-0" L X 54" . 2400 EA AT 0.143" SP. 2160 SA, CAPTIVE AIRE MDL. 5424-ND-2-PSP-F 430 SS WHERE EXPOSED. FRONT PLENUM MAKE-UP AIR, 831 LBS.

MAU-1 - ROOF MOUNTED MAKE UP AIR UNIT - DIRECT FIRED HEATER, 138 MBH INPUT, 2160 CFM BLOWER @ 0.5" SP. 2.5 HP, 208V/3PH, S.T. FLA, ISA MOCF ROOF CURB, DISCONNECT 501 LBS, INTAKE HOOD W/ FILTER, CAPTIVE AIRE MDL. AI-D.500-16Z.

SYMBOLS

- ☒ SUPPLY DUCT
- ☑ RETURN OR EXHAUST DUCT
- Ⓢ THERMOSTAT-MTD. 48" AFF
- Ⓐ INDICATES AIR OUTLET OR INLET TOP LETTER INDICATES GRID TYPE (SEE SCHEDULE); BOTTOM NUMERAL INDICATES CFM FOR BALANCING
- ⊢ DUCT TRANSITION
- GAS PIPING
- ⊕ GAS COCK
- ⊗ GAS REGULATOR

ABBREVIATIONS

- CD CEILING DIFFUSER
- DN DOWN
- EA EXHAUST AIR
- KH KITCHEN HOOD
- HTD. MOUNTED
- OA OUTSIDE AIR
- RA RETURN AIR
- RG RETURN GRILLE
- SA SUPPLY AIR
- TYP TYPICAL

