

6" SCHEDULE 40 IRRIGATION SLEEVE

APPROXIMATELY 1,200 SQUARE FEET

PREMIUM TURFGRASS BLEND SOD

MISCANTHUS SINENSIS 'GRACILLIMUS'

REMOVE SPENT FLOWER STALKS

MAINTAIN HEDGE AT 6' HEIGHT MINIMUM

77 LEATHERLEAF VIBURNUM VIBURNUM RHYTIDOPHYLLUM

EASTERN REDBUD CERCIS CANADENSIS

8 TULIP POPLAR

WATCH FOR APHIDS

LIRIODENDRON TULIPIFERA

2" DBH, 8-10' HEIGHT STRAIGHT TRUNK

CUT TO GROUND IN SPRING BEFORE NEW GROWTH EMERGES

14,000± S.F. INCLUDING 10% FOR WASTE

2-3" DIAMETER RIVER ROCK

LIRIOPE MUSCARII 'BIG BLUE'

55 'BIG BLUE' LIRIOPE

#1 CONTAINER 2' O.C.

13 MAIDEN GRASS

DO NOT CROWD

#1 CONTAINER 42" O.C.

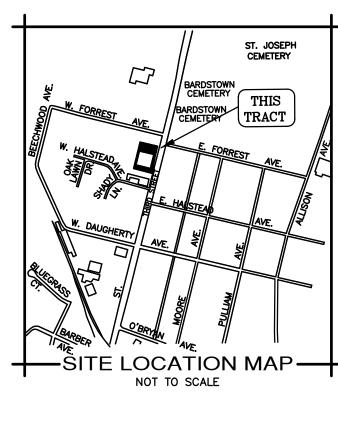
14 ADAM'S NEEDLE

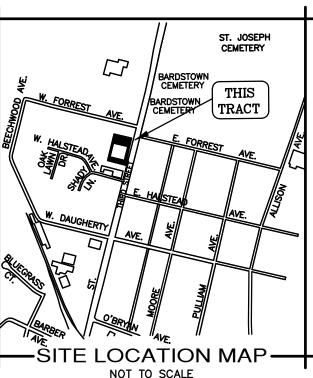
YUCCA FILAMENTOSA #3 CONTAINER 30" O.C.

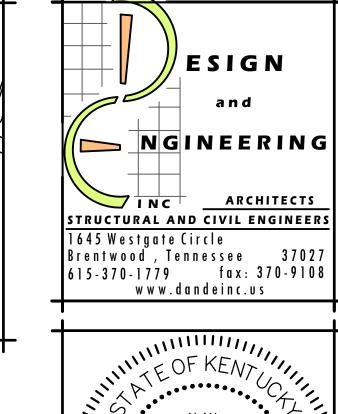
4' HEIGHT 4' O.C.

GROUNDCOVER

ORNAMENTAL GRASS







CAPE ARCHINI

Job Number: 68F-0019

Revisions: Λ 02–16–17 – CITY–COUNTY COMMENTS

JANUARY 13, 2017 Landscape Plan CD-82E-16-SD-30

LANDSCAPING REQUIREMENTS FRONTAGE REQUIREMENTS

(1 TREE/30' FRONTAGE)

PROPERTY LINE	LENGTH	TREES REQUIRED	TREES PROVIDE
NORTH (W. FORREST AVE.)	211'	7	7*
SOUTH			
EAST (US-31)	250'	8	8
WEST	1	-	_

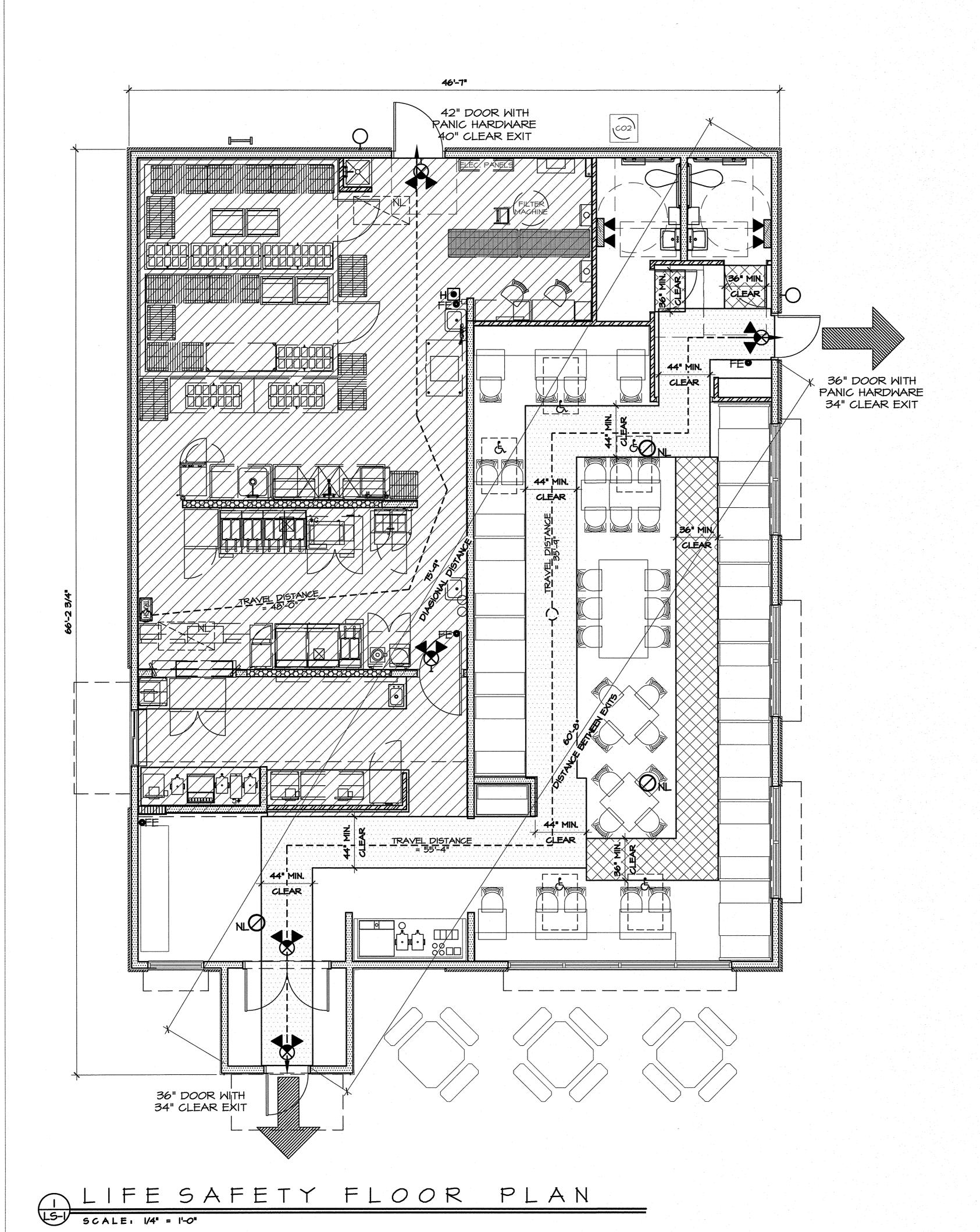
*UNDERSTORY TREES USED DUE TO OVERHEAD POWER BUFFER REQUIREMENTS - 4' HEIGHT EVERGREEN HEDGE TO BUFFER RESIDENTIAL USE

LANDSCAPE NOTES:

- 1. LOCATE ALL UTILITIES BEFORE DIGGING. PROTECT ALL UTILITIES FROM DAMAGE DURING CONSTRUCTION.
- 2. ELIMINATE EXISTING VEGETATION IN AREAS TO BE PLANTED. SPRAY WITH ROUNDUP AT MANUFACTURER'S RECOMMENDED RATE TWICE IN 14 DAYS.
- 3. TOP DRESS ALL AREAS TO RECEIVE PLANTINGS WITH 2" FINISHED MUSHROOM
- COMPOST PRIOR TO PLANTING.
- 5. DECREASE PLANT SPACING AS REQUIRED TO ALLOW PLACEMENT OF THE DESIGNATED NUMBER OF PLANTS PER GROUPING.
- 6. FERTILIZE ALL PLANTINGS WITH OSMOCOTE OR OTHER APPROVED SLOW RELEASE
- FERTILIZER AT MANUFACTURER'S RECOMMENDED RATE BEFORE MULCHING. 7. APPLY PREEN OR OTHER APPROVED PRE-EMERGENT HERBICIDE TO ALL PLANTING
- AREAS BEFORE MULCHING.
- 8. MULCH ALL AREAS OF TREE, SHRUB AND GROUNDCOVER MASS PLANTINGS WITH 3"
- SHREDDED HARDWOOD BARK MULCH. 9. QUANTITIES SHOWN IN PLANT LIST ARE FOR CONTRACTOR'S CONVENIENCE. VERIFY
- ALL PLANT QUANTITIES SHOWN ON PLAN AND IN PLANT LIST. 10. B&B MATERIAL MAY BE SUBSTITUTED FOR CONTAINER GROWN MATERIAL PROVIDED IT EXCEEDS THE MINIMUM SIZES NOTED.
- 11. SOD ALL DISTURBED AREAS WITH SPECIES SHOWN ON PLAN. 12. WARRANTY ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM FINAL ACCEPTANCE.
- IRRIGATION NOTES: 1. AUTOMATIC IRRIGATION SYSTEM TO PROVIDE 100% COVERAGE OF ALL
 - LANDSCAPE AREAS. 2. CONTRACTOR RESPONSIBLE FOR LOCATING AND SUPPLYING ELECTRICAL POWER TO CONTROLLER.

3. CONTRACTOR TO PROVIDE AND PAY FEES FOR SEPARATE IRRIGATION METER.

4. PROVIDE BACKFLOW PREVENTION PER CITY REQUIREMENTS. 5. PROVIDE RAIN SHUT OFF DEVICE PER STATE LAW.



ACCESSIBLE SEATING REQUIREMENTS

TOTAL NUMBER OF SEATS	% TO BE HANDICAP ACCESSIBLE	MIN. HANDICAP SEATS REQ.
82	5%	5 SPACES

MEANS OF EGRESS

SEAT COUNT IS: 82
OCCUPANT LOAD FOR PUBLIC AREAS IS: 88
EXIT UNITS:
-(2) EXITS PROVIDED (2) REQUIRED

-EXIT AISLES ARE 44" MIN. WIDTH -EXIT ACCESSWAYS ARE 36" MIN. WIDTH

-ALL EXIT DOORS MEET OR EXCEED 32" CLEAR WIDTH WHEN IN THE OPEN POSITION AND SWING IN THE DIRECTION OF TRAVEL.

-EXIT LOCATIONS MEET OR EXCEED THE REQUIRED NUMBER AND SEPARATION REQUIREMENTS.

EGRESS WIDTH:
PROPOSED SEAT COUNT = 82 SEATS + 6 WAITING = 88

.15 x 88 = 13.2" REQUIRED

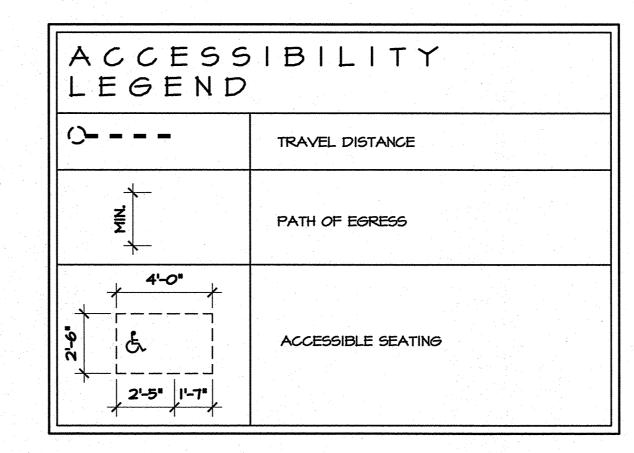
TOTAL EGRESS WIDTH (2 DOORS @ 34")= 68" 68" > 13.2"

-50% OF EGRESS MUST EXIT THROUGH MAIN ENTRY I DOOR @ 34" = 34" \$ 50% OF |3.2 = 6.6" 6.6" < 34"

NOTES:

I. G. C. TO VERIFY QUANTITY & LOCATIONS OF FIRE EXTINGUISHERS WITH LOCAL AUTHORITIES. G.C. TO SUPPLY ANY ADDITIONAL FIRE EXTINGUISHERS IF REQUIRED.

- 2. SEE DIMENSION PLAN FOR WALL TYPES AND LOCATIONS.
- 3. A SIGN STATING THE OCCUPANT LOAD OF THE BUILDING SHALL BE POSTED IN A CONSPICUOUS PLACE NEAR THE MAIN ENTRY. G.C. TO PROVIDE AND INSTALL OCCUPANT LOAD SIGN. G.C. TO VERIFY WITH LOCAL AUTHORITIES FOR LOCATION OF SIGN.
- 4. G.C. TO VERIFY WITH LOCAL AUTHORITY HAVING JURISDICTION IF KEY BOX IS REQUIRED. IF SO, G.C. TO COORDINATE WITH AUTHORITY HAVING JURISDICTION FOR PREFERRED LOCATION.



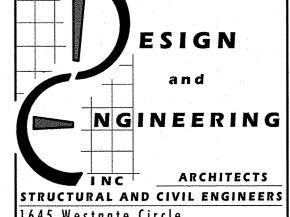
GENERAL NOTES

EGEND

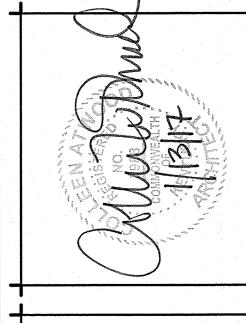
3 @ 34" = 68/.2 = 510 NEW EXIT CAPACITY OCCUPANTS = 151

REMOTE EXTERIOR

SEE ELECTRICAL SHEETS FOR EXACT LIGHT TYPE/MODEL.



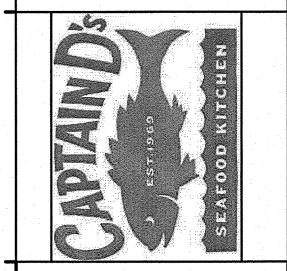
STRUCTURAL AND CIVIL ENGINEERS
1645 Westgate Circle
Brentwood , Tennessee 37027
615-370-1779 fax: 370-9108
www.dandeinc.us



PHAINSTREET

BARDSTOWN, KY

TRITON INVESTA



Job Number: 68F0019 Revisions:



FE WALL MOUNTED FIRE EXTINGUISHER

RECESSED CANPENDANT NIGHT LIGHT

EXIT LIGHT

WALL MOUNTED EMERGENCY LIGHT

EXIT LIGHT WITH EMERGENCY LIGHTING

MANUAL PULL STATION FOR HOOD FIRE SUPPRESSION

FIRE ALARM FLASHING LIGHT

FIRE ALARM FLASHING LIGHT/CHIME

CEILING MOUNTED SMOKE DETECTOR

EXIT LIGHT WITH EMERGENCY LIGHTING

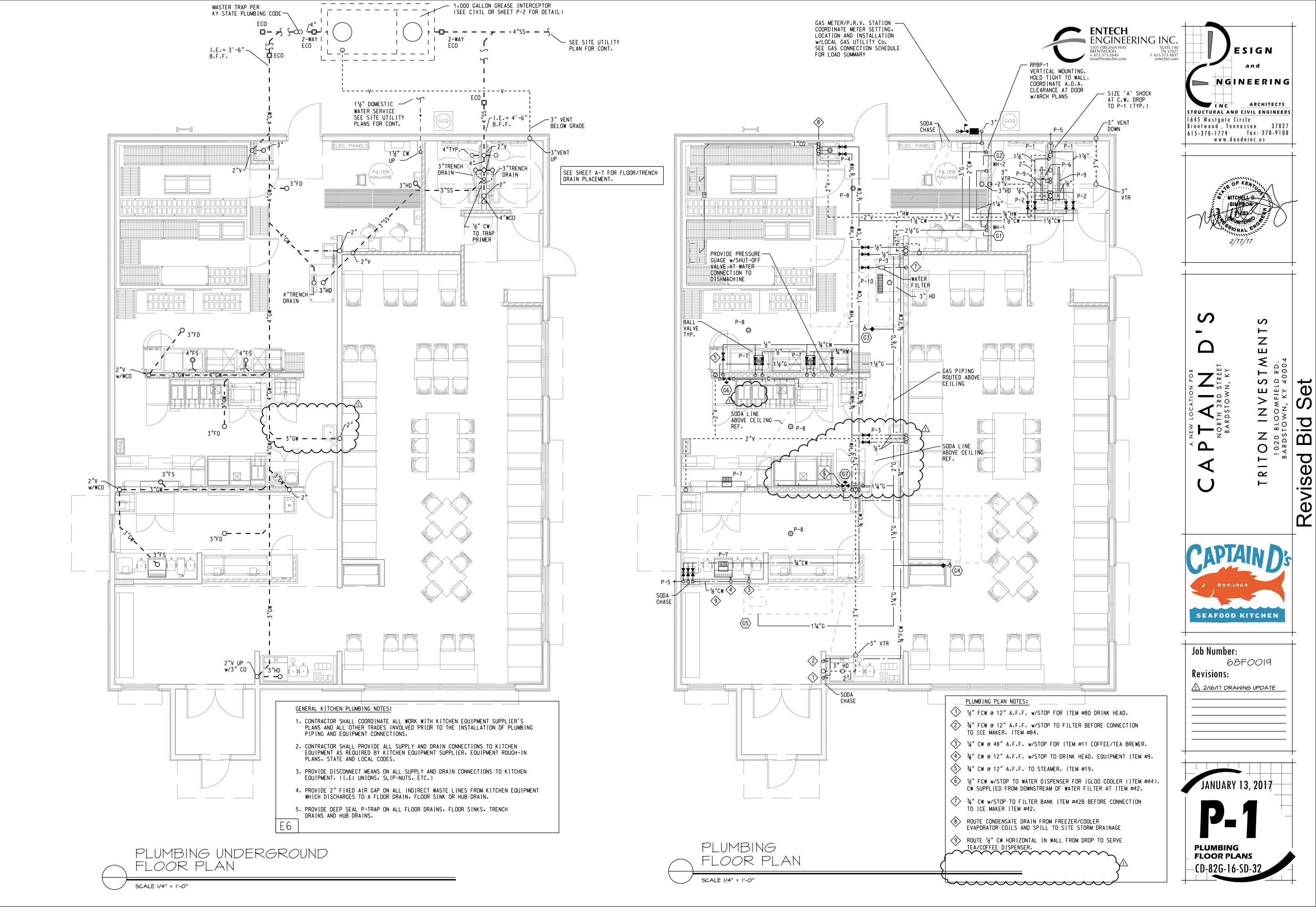
EXIT LIGHT WITH EMERGENCY LIGHTING

REQUIRED 36" CLEAR EXIT AISLE

ACCESSWAYS

REQUIRED 44" CLEAR EXIT AISLE

NON-PUBLIC AREAS

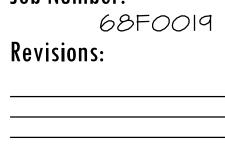


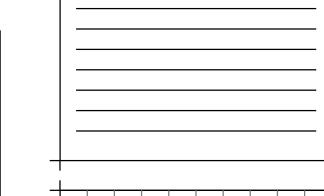
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EST.1969 SEAFOOD KITCHEN







ENTECH 5301 VIRGINIA WAY BRENTWOOD, v. 615.373.2640 SUITE 140 TN 37027 f. 615.373.4837 entechtn.cor

> 615-370-1779 fax: 370-9108 www.dandeinc.us

1645 Westgate Circle

ESIGN

ARCHITECTS

■ NGINEERING

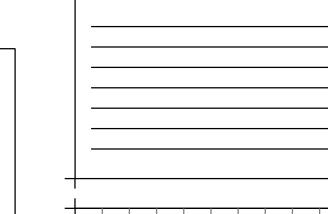
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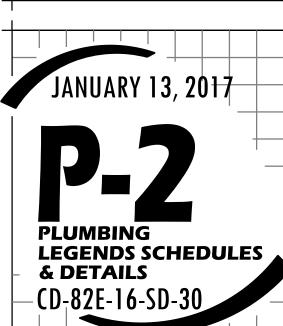
Brentwood, Tennessee 37027

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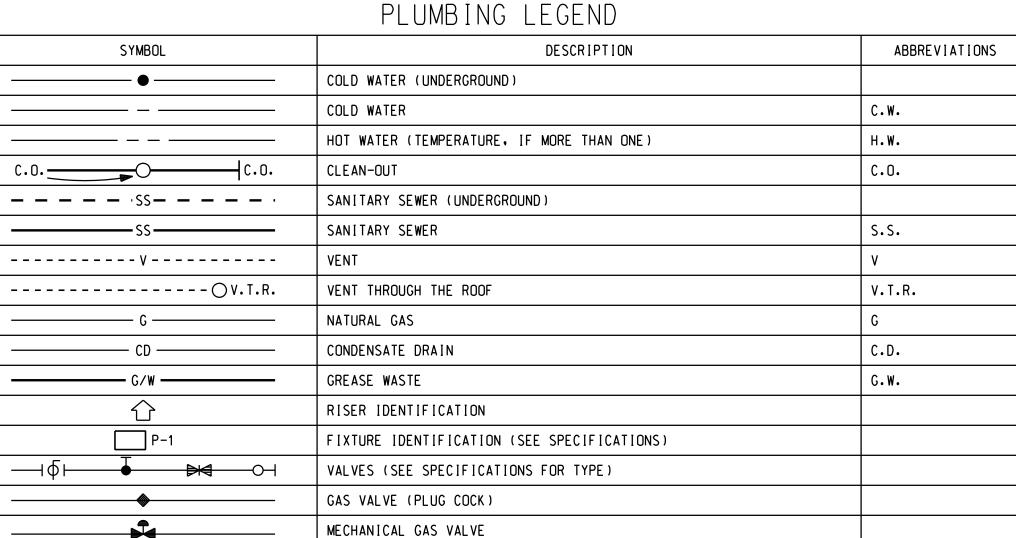
Job Number:

Revisions:





R.P.B.P.



	FIXTURE CONNECT	ION SCH	IEDULE		
P-#	DESCRIPTION	C.W. (IN.)	H.W. ([N.)	WASTE (IN.)	VENT (IN.
P-1	WATER CLOSET (H'CAP FLR. MTD., F.V.) AMERICAN STANDARD 2854.128 MADERA FLO-WISE, 16½" RIM HEIGHT, 1.28 G.P.F., ELONGATED BOWL, SIPHON JET, FLUSH VALVE WATER CLOSET. SLOAN 111-1.28 SFSM, 1.28 GPF BATTERY SENSOR, F.V. CHURCH 9500 SSCT ELONGATED OPEN FRONT SEAT W/SELF-SUSTAINING HINGE.	1		4	2
P-2	LAVATORY (WALL-HUNG. PUBLIC) AMERICAN STANDARD DECLYN #0321.026 LAVATORY W/WALL HANGER. SLOAN EBF-650 BATTERY OPERATOR SENSOR FAUCET W/ETF-460-A GRID STRAINER. 17 GA. CAST BRASS CHROME PLATED P-TRAP W/CHROME PLATED BRASS STOP W/BRAIDED SUPPLY.	1/2	1,2	11/4	11,4
P-3	HAND SINK W/SIDE SPLASH PANELS PROVIDED BY KEC. (ITEM #90).	1/2	1/2	11/4	11/4
P-4	JANITOR SINK FIAT MOP RECEPTOR MODEL SB2424 24"x 24"x 6" DEEP w/3" DRAIN. WALL MOUNTED FAUCET PROVIDED IN KITCHEN EQUIP. PACKAGE.	1/2	1/2	3	2
P-5	WALL HYDRANT WOODFORD 17 FREEZE RESISTANT WALL HYDRANT w/v.b., WALL FLANGE AND TEE KEY HANDLE	3/4			
P-6	TRAP PRIMER P.P.P. PRIME RITE	'⁄2 TO T.P.			
P-7	FLOOR SINK PLASTIC ODDITIES FBH400FN PVC BODY WITH 3/4 GRATE. SQUARE TOP WITH DOME BOTTOM STRAINER.			AS SHOWN	AS SHOWN
P-8	FLOOR DRAIN PLASTIC ODDITIES PHD8GOR (3") PVC BODY WITH 6" S.S. FULL GRATE ROUND TOP WITH BASKET STRAINER.			AS SHOWN	AS SHOWN
P-9	NARROW TRENCH DRAIN - RESTROOMS ZURN MODEL Z880-(2)E1-(1)U1.5-POG-48" (COLOR BY ARCH.) MODULAR 2-1/2" WIDE TRENCH DRAIN WITH HDPE DRAIN GRATE. GRATE COVER SAND OR GRAY TO MATCH ADJACENT FLOOR TILE. PROVIDE w/2" DEEP SEAL P-TRAP PRIMER CONNECTION AS REQUIRED BY LOCAL CODE AUTHORITY.			AS SHOWN	AS SHOWN
P-10	TRENCH DRAIN - ICE MACHINE ZURN MODEL Z886-(2)E1-(1)U4-SVF-PS-36" MODULAR CHANNEL DRAIN, BODY OF HDPE w/END CAPS, 4" OUTLET, STAINLESS STEEL GRATE & FRAME.			AS SHOWN	AS SHOWN

REDUCED PRESSURE BACKFLOW PREVENTER

PROVIDE w/DEEP SEAL TRAP.

MODEL NUMBER

RUC98i/WRIK INSTALL KIT

RUC98i/WRIK INSTALL KIT

— 11/4" GAS SUPPLY LINE

-|∕<mark>1 ▶1√ \$</mark> 1¹√4″ COLD WATER TO HEATER

- AMTROL ST-12

- DRIP LEG SEE GAS

DETAIL

OUTLET

FINISHED GRADE (REF.)

SEWER SYSTEM.

-4" SANITARY

-1/3 OF CAPICITY

MAX. (250 GAL. MIN.)

ELBOW MIN.

GAS SUPPLY LINE

SEE TYPICAL GAS CONNECTION DETAIL

CONNECTION

EXPANSION TANK

- CHECK VALVE (TYP.) INSTALL

IN HORIZONTAL POSITION

VACUUM RELIEF VALVE — OR DIP TUBE CONNECTION

COORDINATE FLUE VENTING

w/MECHANICAL PLANS AND

RECOMMENDATION —

(TYP.)

<u>WH-2</u> 140°

11/4" HEADER -

1. COORDINATE INSTALLATION WITH WATER HEATER MANUFACTURER'S RECOMMENDATIONS,

2. SECURELY ANCHOR WATER HEATERS TO WALL PER MANUFACTURER'S RECOMMENDATIONS.

4. COORDINATE INSTALLATION WITH WATER HEATER MANUFACTURER'S RECOMMENDATIONS. STATE & LOCAL CODES. PIPING SHALL BE ARRANGED AS SHOWN TO INSURE BALANCED

INCLUDE RECIRCULATING PUMP IN CONTROL SYSTEM.

3. PROVIDE CONTROLLER SYSTEM FOR MULTIPLE WATER HEATER UNIT CONTROL REU-EZC-1-US.

INSTANTANEOUS GAS WATER HEATER DETAIL

OR BRICK

NONE

RISER

19" MIN. 2" MIN. 4" PIPE MIN.

3' MIN.

2'-6" MIN. 6'-0" MAX.

GREASE TRAP DETAIL

IF NOT PROVIDED IN CIVIL DOCUMENTS

COORD. LOCATION & CONFIRM WITH CIVIL PLANS.

SCALE:

WH EQUIP. MANUFACTURERS

140°

- PLUMBING FIXTURE SCHEDULE NOTES: . CONTRACTOR SHALL FURNISH AND INSTALL CARRIER FOR EACH FIXTURE WHICH IS WALL HUNG, UNLESS OTHERWISE NOTED. PROVIDE APPRORIATE CARRIER PER FIXTURE TYPE AND REQUIREMENTS.
- 2. CONTRACTOR SHALL FURNISH AND INSTALL WATTS, ZURN, P.P.P. INC., OR EQUAL TRAP PRIMERS TO SERVE ALL APPROPRIATE FLOOR DRAINS AND/OR OPEN RECEPTACLES AS REQUIRED BY LOCAL CODES.
- 3. ACCEPTABLE ALTERNATE MANUFACTURERS FOR ITEMS INCLUDING BUT NOT LIMITED TO CLEANOUTS/FLOOR DRAINS/FLOOR SINKS/HUB DRAINS: ZURN, JOSAM, WADE.
- 4. WRAP ALL SUPPLIES AND P-TRAPS OF BARRIER FREE LAVATORIES WITH A PROTECTIVE INSULATING MATERIAL AND A SMOOTH JACKET (TRAP-WRAP OR EQUAL).
- 5. PLUMBING CONTRACTOR SHALL COORDINATE WITH ELEC. AND MECH. CONTRACTORS TO PROVIDE INFORMATION CONCERNING OPERATION OF WATER
- HEATER FOR CONNECTION OF AUTOMATIC FLUE DAMPERS AND/OR MOTORIZED COMBUSTION AIR LOUVERS (WHEN REQUIRED). 6. SHOCK ARRESTORS FOR BRANCH PIPING TO FIXTURES WITH QUICK CLOSING VALVES SHALL BE BY P.P.P. INC, ZURN (OR EQUAL), SIZED PER PDI REQUIREMENTS.
- . MAXIMUM FLOW RATES: WATER CLOSETS: 1.28 GALLONS PER FLUSH FAUCETS: 2.0 GALLONS PER MINUTE (SINKS AND LAVS) FITTINGS SHALL BE MARKED AS SUCH AND CERTIFIED
- 8. PROVIDE WILKINS 1070 TEMPERING/MIXING VALVE AT EACH HAND WASH LAVATORY OR SINK.

NERAL PLUMBING NOTES:			GAS	WATE	R HEA	TER	SCHE	DULE
INTENT OF THE SPECIFICATION AND THE DRAWINGS IS TO PROVIDE A MPLETE AND FULLY OPERATIONAL PLUMBING SYSTEM. THE PLUMBING NTRACTOR SHALL FURNISH AND INSTALL ALL LABOR, MATERIAL AND EQUIPMENT	DESIGNATION	INPUT	TEMP. RISE	G.P.M. FLOW	HEATER DEPTH		HEATER HEIGHT	MANUF ACTURER
CESSARY TO COMPLETE THE PLUMBING WORK.	WH-1	199,000 B.T.U.	90°	9.8	10"	18.3"	26"	RINNAI
TE EXAMINATION E PLUMBING CONTRACTOR SHALL THOROUGHLY EXAMINE ALL AREAS WHERE	WH-2	199,000 B.T.U.	90°	9.8	10"	18.3"	26"	RINNAI
(TURES, EQUIPMENT, AND PIPING WILL BE INSTALLED AND WILL REPORT ANY								

THERMOMETER ———

1¹/₄" 140°HOT ——

WATER TO SYSTEM

GAL VAN I ZED — NIPPLE (TYP.)

DIELECT.-UNION

BALL VALVE -

STATE AND LOCAL CODES.

FLOW THROUGH EACH HEATER.

FINISH FLOOR LINE

3" VENT (MIN.)-

HEAVY DUTY TRAFFIC-RATED CAST IRON MANHOLE FRAME AND

COVER 20" MINIMUM

OPENING (SQUARE OR ROUND) GROUTE INTO

PLACE. (TYP.)

4" OPEN TOP-

4" MIN. PIPE —

SIZE (TYP.)

2" MINIMUM —

1,000 GALLON PRE-CAST-

CONC. SEPTIC TANK

2/3 OF CAPACITY—

MIN. (500 GAL. MIN.)

(DESIGNED FOR HEAVY TRAFFIC LOADING)

SAN. TEE (TYP.)

(TYP.)

(TYP.)

5 -- 7

SCOPE COMPL NECES

THE F CONDITION THAT, IN HIS OPINION, PREVENTS THE PROPER INSTALLATION OF THE PLUMBING WORK.

EQUIPMENT AND MATERIALS SHALL CONFORM WITH APPROPRIATE PROVISIONS OF ASME, ASTM, UL, NEMA, ANSI, ASHRAE, NFPA, AS APPLICABLE TO EACH INDIVIDUAL UNIT OR ASSEMBLY.

ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES. IN CASE OF CONFLICT BETWEEN THE DRAWINGS/SPECIFICATIONS AND THE CODES AND ORDINANCES. THE HIGHEST STANDARD SHALL APPLY. THE MECHANICAL CONTRACTOR SHALL SATISFY CODE REQUIREMENTS AS A MINIMUM STANDARD WITHOUT ANY EXTRA COST.

PERMITS AND FEES THE PLUMBING CONTRACTOR SHALL PROCURE AND PAY FOR ALL PERMITS, FEES

AND INSPECTIONS NECESSARY TO COMPLETE THE PLUMBING WORK. THE PLUMBING CONTRACTOR SHALL UNCONDITIONALLY WARRANT ALL WORK TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE AND WILL REPAIR OR REPLACE ANY DEFECTIVE WORK PROMPTLY AND WITHOUT CHARGE AND RESTORE ANY OTHER EXISTING WORK DAMAGED IN THE COURSE OF REPAIRING DEFECTIVE MATERIALS AND WORKMANSHIP.

GENER

ESIGN

STRUCTURAL AND CIVIL ENGINEERS

Brentwood, Tennessee 37027

615-370-1779 fax: 370-9108

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1645 Westqate Circle

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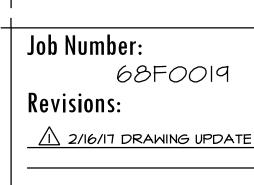
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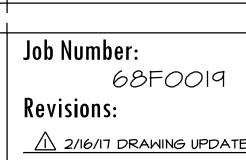
ARCHITECTS

Job Number: 68F0019 Revisions: 1 2/16/17 DRAWING UPDATE

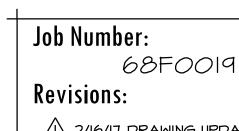
PLUMBING DETAILS

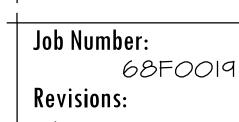
CD-82G-16-SD-3















NGINEERING

ς2" C.W. TO BLDG.

DOMESTIC WATER SYSTEM

TERMINATE R.P.B.P. DRAIN

-18" X 18" X 6" TH[CK

LONG SWEEP 1/4 BEND

NONE

OR COMB. "Y" & 1/8 BEND

CONCRETE PAD

-FINISHED GRADE

ABOVE JANITOR'S SINK AT

TWICE THE DIAMETER OF R.P.B.P. DRAIN PORT SIZE

MODEL NUMBER

909-QT-S

4'-6" MAX.

ABOVE FLOOR

REDUCED PRESSURE BACKFLOW PREVENTER SCHEDULE

MANUF ACTURER

1½" REDUCED

PREVENTER

R.P.B.P. No. 1 REDUCED PRESSURE BACKFLOW PREVENTER DETAIL

NOTE: R.P.B.P. MANUFACTURER AND INSTALLATION SHALL BE AS APPROVED BY LOCAL & STATE

EXTERIOR CLEANOUT DETAIL

SCALE:

PRESSURE BACKFLOW

- FULL SIZE DRAIN

PORT CONNECTION

| G.P.M. | P.D. (psig)

DESIGNATION QUANTITY

NOTE: ALL PIPING TO BE

PRESSURE GAUGE-

FULL LINE SIZE WYE-STRAINER WITH 1/3"

(TYP.)

BLOWDOWN

SERVICE MAIN-

SHUT-OFF VALVE

FINISHED FLOOR

11/2" WATER SERVICE

SEE SITE UTILITY

AND FOR LOCATION

CAST IRON CLEANOUT WITH-

EXTENSION - SAME SIZE-

AS SEWER, UP TO 4"

SEE SPECIFICATIONS-

SEE PLANS FOR SIZE-

FOR MATERIAL

COVER & "T" HANDLE

ASPHALT PAVING-

GRANULAR BASE-

PLANS FOR CONT.

OF METER

RIGIDLY SUPPORTED.

SERVING

DOM WATER

ENTECH		
ENGINEE	RING INC.	
5301 VIRGINIA WAY BRENTWOOD, v. 615.373.2640 email@entechtn.com	SUITE 140 TN 37027 f. 615.373.4837 entechtn.com	

REMARKS

1½" SIZE

NATURAL GAS CONNECTION SCHEDULE DEMAND LOAD AT 7" W.C. SIZE TO REMARKS CONNECTION U.O.N.

w/o GAS FRYERS

-MAIN × MAIN × EQUIP.

NONE

SIZE CONNECTION

REDUCING TEE

 $I_{ITEM}\langle GX \rangle_{I}$ DESCRIPTION SEE TYPICAL WH-1 (DOMESTIC) 1 ¼" 199 C.F.H. GAS CONNECTION DETAIL 1 ¼" 199 C.F.H. WH-2 (DOMESTIC) PIPING SIZED FOR 100 FT. G3 RTU #2 1 ¼ " 250 C.F.H. LONGEST RUN OF 7" W.C. 1 ¼" 250 C.F.H. G4 RTU #1 ROOF EXHAUST MAKE UP AIR G5 1 ¼″ 204 C.F.H. COOKING BATTERY #1 1 ½" 610 C.F.H. TO 3/4" 50 C.F.H. BROILER ITEM #28 140 C.F.H FRYER ITEM #24 140 C.F.H FRYER ITEM #24 3/4" FRYER ITEM #24 140 C.F.H 3/4"

FRYER ITEM #24 140 C.F.H COOKING BATTERY #2 362 C.F.H.(TOTAL 1 ¼" FRYER ITEM #26 122 C.F.H 3/4" FRYER ITEM #20 120 C.F.H FRYER ITEM #20 120 C.F.H. TOTAL DEMAND LOAD = | 2.074 C.F.H w/GAS FRYER

TOTAL DEMAND LOAD = 1.152 C.F.H. G7 G6 PROVIDE GAS VALVE, BELOW CEILING, INTERLOCKED WITH KITCHEN HOOD EXTINGUISHING SYSTEM. PROVIDE LINE SIZE DROP TO LINE SIZE HORIZONTAL MANIFOLD AT COOKING BATTERY AND CONNECT COOKING EQUIPMENT TO MANIFOLD. PROVIDE DIRT LEG AT BOTTOM OF PIPING DROP. VERIFY CONNECTIONS TO EACH PIECE OF KITCHEN EQUIPMENT. PROVIDE P.R.V. AT EACH CONNECTION NOT PROVIDED WITH AN EQUIPMENT

DIRT LEG

WITH CAPPED END

SCALE:

GAS MAIN — UN I ON - COORDINATE CONNECTION GAS COCK-TO EQUIPMENT W/EQUIPMENT SUPPLIER

TYPICAL GAS CONNECTION DETAIL

SUPPLIED P.R.V.

PIPING:

ITEM DESCRIPTION

STEAMER

20 * GAS FRYER/LARGE

24 * | GAS FRYER/SMALL

26 * GAS FRYER/SMALL

DISHWASHER

42A | ICE BIN

42B WATER FILTER

CONVEYOR BROILER

3 COMP SINK/FAUCET

ICE MACHINE-CUBER

WATER DISPENSER

DRINK HEAD w/ICE DESP.

HAND SINK W/SPLASH PANEL

90A | HAND SINK W/SPLASH PANEL

VEGETABLE SINK

ICE MAKER

84A | WATER FILTER

DRINK DISPENSER

TEA/COFFEE BREWER

SOIL. WASTE AND VENT PIPING SOIL, WASTE AND VENT PIPING 10" AND SMALLER SHALL BE SERVICE WEIGHT, HUBLESS, CAST IRON PIPE AND FITTINGS WITH NEOPRENE GASKET AND STAINLESS STEEL SHIELD AND CLAMP. PROVIDE HUB-TYPE PIPE AND FITTINGS BELOW GRADE WHERE REQUIRED BY LOCAL CODES. SCHEDULE 40 ABS OR PVC PIPE AND FITTINGS WITH SOLVENT WELD MAY BE SUBSTITUTED FOR SOIL, WASTE AND VENT PIPING ABOVE AND BELOW GRADE IF ALLOWED BY LOCAL AUTHORITY. HORIZONTAL RUNS 3" OR LESS SHALL DRAIN AT A GRADE OF 1/4" PER FOOT AND RUNS 4" OR MORE SHALL DRAIN AT 1/8" PER FOOT. PVC OR ABS PIPING WILL NOT BE ALLOWED TO BE INSTALLED IN RETURN AIR PLENUMS.

PROVIDE WATTS SD-2 BACK FLOW DEVICE AT CONNECTION

TO ITEM 9, 11, 19, 42, 42B, 44, 80, 84 & 84A.

SCHEDULE 40 BLACK STEEL WITH PIPING SUPPORT COMPATIBLE WITH ROOF SYSTEM.

DOMESTIC WATER PIPING DOMESTIC WATER PIPING 2" AND SMALLER SHALL BE PEX. EXPOSED WATER PIPING TO BE TYPE 'L' COPPER

CONDENSATE DRAINAGE PIPING THE PLUMBING CONTRACTOR SHALL PROVIDE CONDENSATE DRAINS FOR ROOFTOP UNITS. CONDENSATE DRAINAGE PIPING SHALL BE TYPE "M" COPPER TUBING WITH WROUGHT COPPER SWEAT FITTINGS JOINED WITH 50/50 SOLDER.

ACCESS COVERS.

HANGERS & SUPPORTS THE PLUMBING CONTRACTOR SHALL FURNISH ALL PIPE SUPPORTS REQUIRED FOR HIS EQUIPMENT AND MATERIAL. ALL HORIZONTAL RUNS OF PIPING SHALL BE SUPPORTED BY PIPE HANGERS SPACED NOT MORE THAN 10 FEET O.C. FOR PIPES 1-1/4" AND LARGER, AND 8 FEET O.C. FOR PIPES SMALLER THAN 1-1/4" AND A EACH JOINT FOR SOIL OR WASTE PIPE. ADDITIONAL SUPPORTS SHALL BE PROVIDED WHERE REQUIRED TO PREVENT SAGGING. HANGERS AND PIPE ATTACHMENTS TO BE FACTORY FABRICATED WITH GALVANIZED COATINGS; NONMETALLIC COATED FOR

INSTALL UNIONS ADJACENT TO EACH VALVE AND AT FINAL CONNECTION TO EACH PIECE OF EQUIPMENT. INSTALL DIELECTRIC COUPLINGS TO CONNECT PIPING MATERIALS OF DISSIMILAR METALS. SCREW JOINT STEEL PIPING UP TO AND INCLUDING 1-1/2". WELD PIPING USE LEAD FREE SOLDER FOR SOLDERING

DOMESTIC WATER COPPER PIPE. CLEANOUTS PROVIDE J.R. SMITH OR EQUIVALENT FLOOR AND WALL CLEANOUTS AS INDICATED ON THE DRAWINGS OR WHERE REQUIRED IN ALL SOIL. WASTE. AND DRAIN LINES. IN AREAS WITH CERAMIC TILE OR CARPETED FLOORING, PROVIDE CLEANOUTS WITH SQUARE, ADJUSTABLE, NICKEL BRONZE TOP. IN AREAS WITH RESILIENT FLOORING, PROVIDE CLEANOUTS WITH SQUARE, ADJUSTABLE, NICKEL BRONZE TOP WITH TILE RECESS. CLEANOUTS SHALL BE SAME SIZE AS PIPE EXCEPT THAT CLEANOUTS LARGER THAN 4" WILL NOT BE REQUIRED. WHERE CLEANOUTS OCCUR IN WALLS OF FINISHED AREAS. THEY SHALL BE CONCEALED BEHIND CHROME PLATED

INSTALLATION INSTALL EXPOSED PIPING FREE OF SAGS AND BENDS. PROVIDE BRACKET STANDOFFS FROM MOUNTING SURFACES SUFFICIENT TO ALLOW 1" CLEANING SPACE AROUND ALL PIPING, INCLUDING ANY ADDED PIPING INSULATION. INSTALL FITINGS FOR CHANGES IN DIRECTION AND BRANCH CONNECTIONS. INSTALL SLEEVES FOR PIPES PASSING THROUGH CONCRETE AND MASONRY WALLS, GYPSUM BOARD PARTITIONS, CONCRETE FLOOR AND ROOF SLABS, SEAL PIPE PENETRATIONS THROUGH RATED CONSTRUCTION WITH FIRESTOPPING SEALANT MATERIAL. UNDERGROUND WATER AND SEWER LINES SHALL BE LAID IN SEPARATE TRENCHES WITH A MINIMUM HORIZONTAL SPACING AS REQUIRED BY CODE, EXCAVATED TO THE

PROPER DEPTH AND GRADED TO PRODUCE THE REQUIRED FALL. ALL PIPES SHALL BE TESTED BY AN APPROVED METHOD BEFORE THEY ARE BACKFILLED OR CONCEALED. AFTER TESTING IS COMPLETE. THE PLUMBING CONTRACTOR SHALL DISINFECT THE POTABLE WATER SYSTEM AS REQUIRED BY

LOCAL AUTHORITY.

KITCHEN EQUIPMENT PLUMBING CONNECTION SCHEDULE

DIRECT

WASTE (IN.)

INDIRECT

1 ½

VENT

11/2

(INCHES) | (INCHES)

REMARKS

34" MALE GARDEN HOSE CONNECTION

VERIFY W/EQUIP.

140 C.F.H

122 C.F.H

50 C.F.H.

WATER THROUGH FILTER

VERIFY w/EQUIP.

WATER THROUGH FILTER

WATER (IN.)

HOT

COLD

INSULATION: WATER PIPING PROVIDE THERMAL INSULATION ON ALL HOT & COLD WATER, AND HORIZONTAL WASTE PIPING IN CEILING SPACES. USE SELF-SEALING CLOSED CELL FOAM OR JACKETED FIBERGLASS INSULATION WITH MANUFACTURE APPROVED ADHESIVES. SEALERS, AND COATINGS. ALL MATERIALS USED SHALL NOT EXCEED 25 FOR FLAME SPREAD, 50 FOR FUEL CONTRIBUTED, OR 50 FOR SMOKE DEVELOPED, UNLESS OTHERWISE REQUIRED BY THE LOCAL AUTHORITY OR ENERGY CODES, THE MINIMUM

INSULATION LEVELS SHALL BE A	AS FOLLOWS:	
PIPE SIZE 1" DIA. OR LESS 1" - 2" DIA. 2" DIA. OR GREATER (INSULATION VALUE = 4 TO 4.6	INSULATION 1" 1" 1-1/2" 5 / INCH)	THICKNES

VAL VES:

GENERAL PLUMBING CONTRACTOR TO PROVIDE VALVES WHERE INDICATED ON PLANS AND

AS	NECES	SARY	FOR P	ROPER	SYSTEM	OPERATI	ION AND	COMPONEN	T ISOLATION.
PRO							_	PIPING O BE AS F	F 125 PSI OR OLLOWS:

GREATER. UNLESS NOTED OTHERWISE VALVE		
VALVE TYPE CHECK VALVE (UP TO 2") FULL PORT BALL VALVE (UP TO 3")	MANUFACTURER NIBCO NIBCO	MODEL NO. #S-22 #S-FP-600
GATE VALVE (UP TO 3") TEMPERATURE AND PRESSURE RELIEF VALVE	NIBCO WILKINS	#S-113 #TP1100A

HANGERS IN DIRECT CONTACT WITH COPPER TUBING.

ESIGN

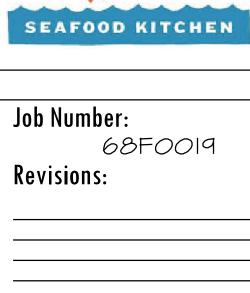
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JANUARY 13, 2017

WATER & DW&V RISER DIAGRAMS

-CD-82E-16-SD-30

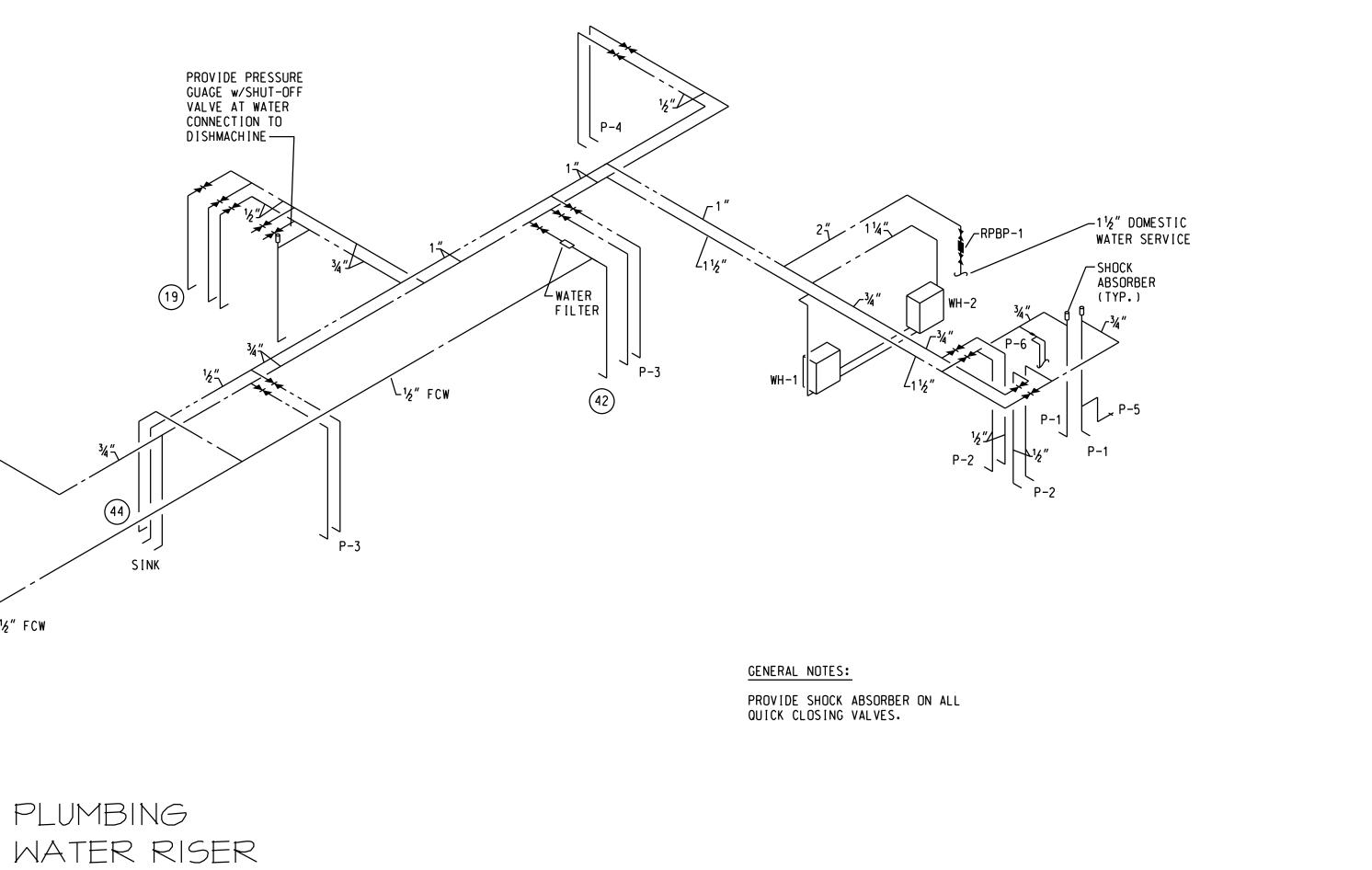


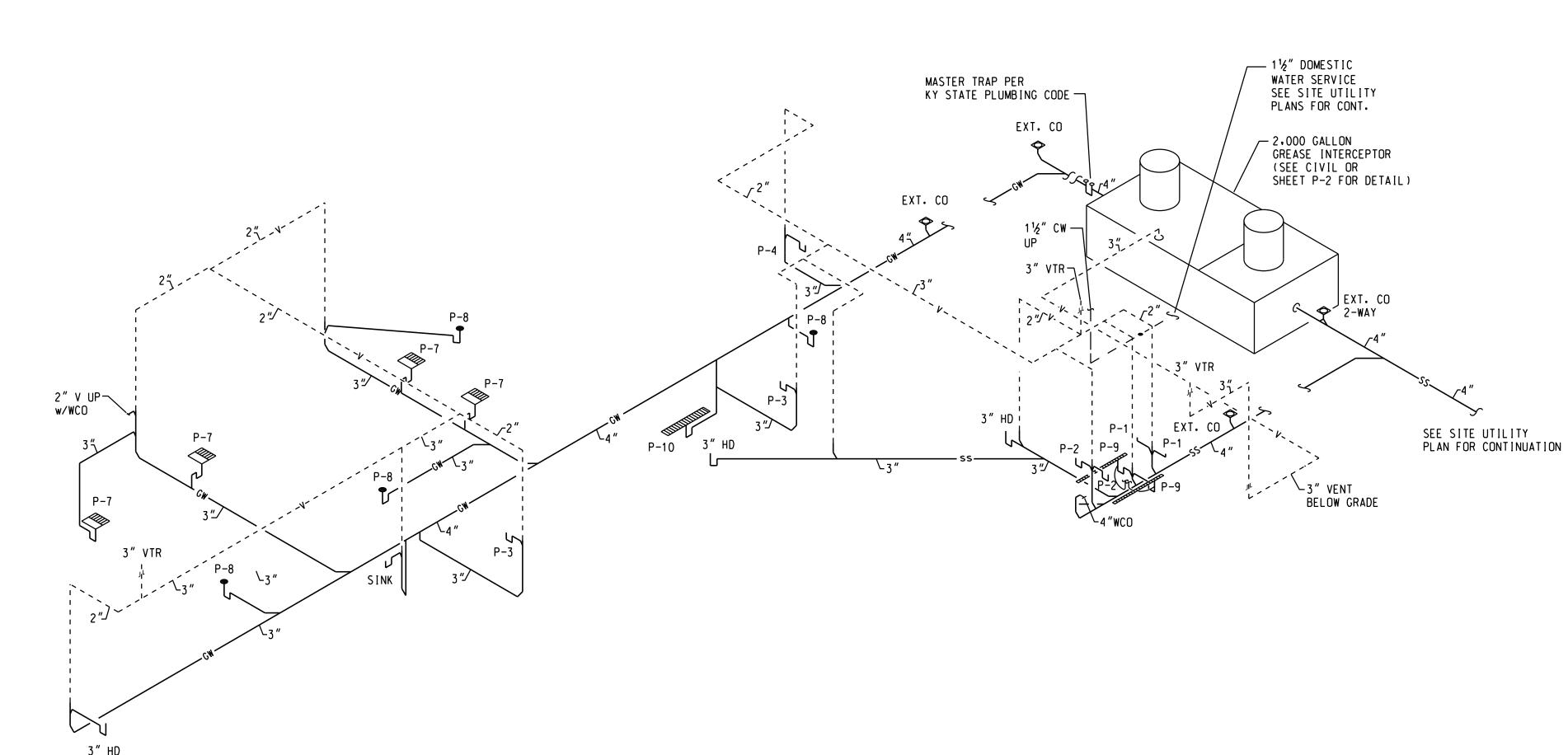
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ENTECH
ENGINEERING INC.

5301 VIRGINIA WAY
BRENTWOOD,
v. 615.373.2640
email@entechtn.com

SUITE 140
TN 37027
f. 615.373.4837
entechtn.com





SCALE- N.T.S.

PLUMBING

SCALE- N.T.S.

DW&V RISER

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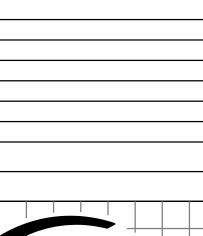
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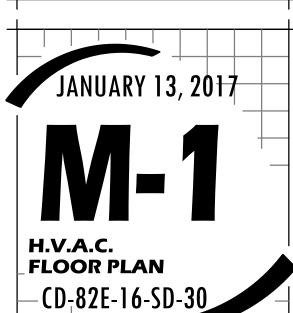
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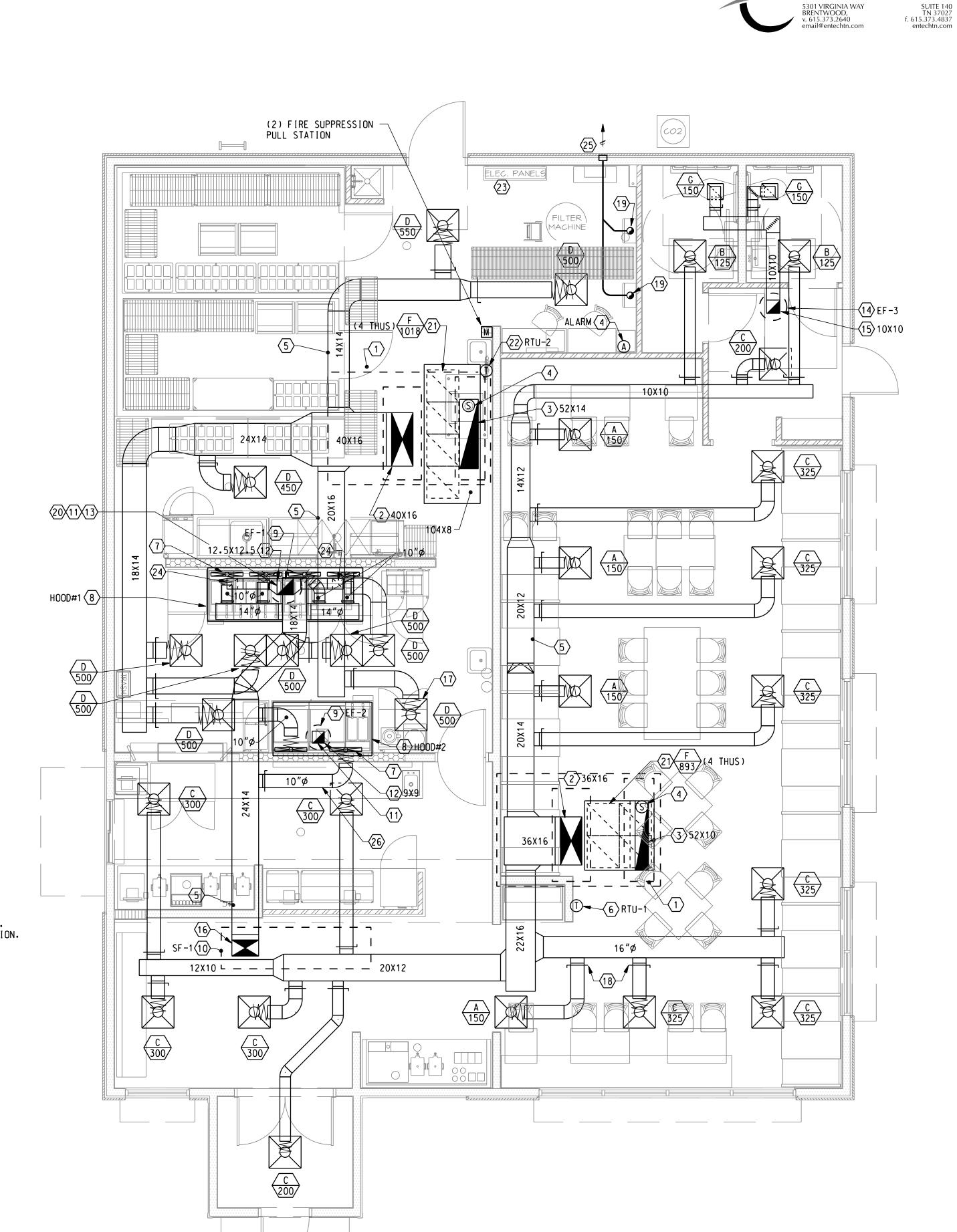
5301 VIRGINIA WAY SUITE 140
BRENTWOOD, TN 37027
V. 615.373.2640 f. 615.373.4837
email@entechtn.com entechtn.com



Job Number: 68F0019 **Revisions:**







H.V.A.C.

SCALE 1/4" = 1'-0"

FLOOR PLAN

- HVAC PLAN NOTES:
- 1. ROOFTOP UNIT, REFER TO MECHANICAL ROOF PLAN.
- 2. SUPPLY AIR DUCT FROM UNIT ON ROOF. OFFSET IN CURB AS REO'D TO AVOID ROOF STRUCTURE.
- 3. RETURN AIR DUCT FROM UNIT ON ROOF. OFFSET IN CURB AS REQ'D TO AVOID ROOF STRUCTURE.

4. DUCT MOUNTED SMOKE DETECTOR FOR UNIT SHUTDOWN, PROVIDE AN AUDIO AND

- VISUAL ALARM IN AN APPROVED LOCATION. ALARM SHALL BE LABELED "DUCT TROUBLE".
- 5. DUCTWORK LOCATED BELOW ROOF JOISTS, TYPICAL. 6. THERMOSTAT SENSOR FOR UNIT DESIGNEATED, MOUNT ON WALL @ 60" A.F.F.
- 7. MAKE-UP AIR CONNECTION AT HOOD, REFER TO HOOD DRAWINGS, TYPICAL. 8. KITCHEN HOOD, FURNISHED BY HOOD VENDOR, RECEIVED & INSTALLED BY MECHANICAL
- CONTRACTOR, REFER TO HOOD DRAWINGS. 9. KITCHEN HOOD EXHAUST FAN ON ROOF. REFER TO MECHANICAL ROOF PLAN. INTERLOCK WITH HOOD CONTROLS.

10. MAKE-UP AIR UNIT SF-1 ON ROOF. REFER TO MECHANICAL ROOF PLAN.

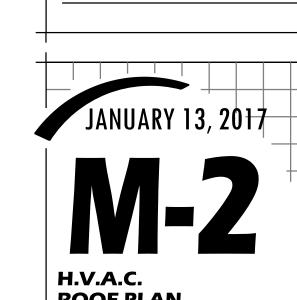
- 11. KITCHEN HOOD EXHAUST COLLAR. WELD EXHAUST DUCT TO COLLAR. REFER TO HOOD DRAWINGS, TYPICAL. 12. KITCHEN HOOD EXHAUST DUCT UP TO FAN ON ROOF. DUCT SHALL BE 16 GA. EXTERNALLY WELDED LIQUID TIGHT STEEL. DUCT SHALL BE ENCAPSULATED WITH A RATED DUCT WRAP. REFER TO DETAIL ON SHEET M-4.
- 13. HOOD EXHAUST DUCT SHALL SLOPE DOWN TO HOOD AT A MINIMUM OF 1/4" PER FT., TYPICAL.
- 14. RESTROOM EXHAUST FAN ON ROOF, REFER TO MECHANICAL ROOF PLAN. 15. RESTROOM EXHAUST DUCT UP TO FAN ON ROOF.
- 16. MAKE-UP AIR DUCT FROM UNIT ON ROOF. TRANSITION FROM UNIT DUCT SIZE TO 20"∮ TO RUN BETWEEN ROOF JOISTS. 17. PROVIDE INSULATED PLENUM ABOVE SUPPLY GRILLE. TYPICAL FOR THIS TYPE OF AIR DEVICE.
- 19. REFER TO PLUMBING DRAWINGS FOR WATER HEATING VENTING. COORDINATE WITH PLUMBING CONTRACTOR. 20. PROVIDE CODE REQUIRED CLEANOUT AT HOOD EXHAUST DUCT ELBOWS, TYPICAL. PROVIDE SIGN AT CLEANOUT THAT READS "GREASE DUCT CLEANOUT - DO NOT

18. PROVIDE MANUAL VOLUME CONTROL DAMPER, TYPICAL.

- 21. PROVIDE PLENUM ABOVE RETURN AIR GRILLE, COORDINATE WITH STRUCTURE,
- 22. THERMOSTAT SENSOR FOR UNIT DESIGNATED. MOUNT @ 60" A.F.F. 23. THERMOSTAT FOR ROOFTOP UNITS MOUNTED IN MAIN ELECTRICAL / TEMPERATURE
- 24. 8x8 EXHAUST CONNECTION.
- 25. PROVIDE CONCENTRIC VENTING AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR EXACT MOUNTING HEIGHT AND LOCATION.
- 26. CRITICAL LOCATION HOLD DUCTWORK AS HIGH AS POSSIBLE TO ALLOW INSTALLATION OF LIGHT FIXTURES BELOW. 27. (2) FIRE SUPPRESSION PULL STATION.



68F0019



Job Number:



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SUITE 140 TN 37027 f. 615.373.4837 entechtn.com

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Brentwood, Tennessee 37027 615-370-1779 fax: 370-9108

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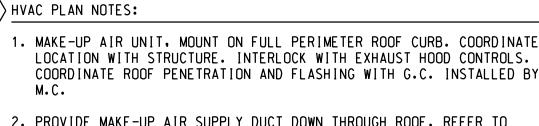


COOLER C.U.

'--------;

FREEZER C.U.

> HVAC PLAN NOTES:



COORDINATE ROOF PENETRATION AND FLASHING WITH G.C. INSTALLED BY

- 2. PROVIDE MAKE-UP AIR SUPPLY DUCT DOWN THROUGH ROOF. REFER TO MECHANICAL PLAN FOR SIZE AND CONTINUATION. 3. PROVIDE THRU THE BASE GAS CONNECTION TO HVAC UNIT, PROVIDE DIRT LEG, GAS VALVE AND UNION.

EXHAUST HOOD BELOW.

DRAWINGS.

- 4. GAS LINE UP FROM BELOW ROOF TO HVAC UNIT, SEE PLUMBING DRAWING FOR CONTINUATION. 5. CLEARANCE RADIUS, TYPICAL.
- 7. WALK-IN BOX CONDENSING UNIT PRE INSTALLED BY REFRIGERATION CONTRACTOR, FURNISHED IN VENDOR PACKAGE. COORDINATE WITH GENERAL CONTRACTOR.
- 8. ROOF CURB FOR CONDENSING UNITS PROVIDED IN VENDOR PACKAGE INSTALLED BY G.C. TYPICAL. 9. REFRIGERANT LINES DOWN TO EQUIPMENT EVAPORATOR. SEE DETAIL #3. 10. KITCHEN HOOD EXHAUST FAN MOUNTED ON FULL PERIMETER NON-COMBUSTIBLE ROOF CURB, COORDINATE LOCATION WITH STRUCTURE, PROVIDE PROPER

12. PROVIDE RESTROOM EXHAUST DUCT DOWN THRUOUGH ROOF, REFER TO

- CLEARANCES. INTERLOCK W/ HOOD CONTROLS. COORDINATE FLASHING W/ G.C. FAN AND CURB FURNISHED IN VENDOR PACKAGE, INSTALLED BY M.C. 11. RESTROOM EXHAUST FAN, FURNISHED IN VENDOR PACKAGE, INSTALLED BY M.C. MOUNTED ON FULL PERIMETER ROOF CURB, COORDINATE WITH STRUCTURE. COORDINATE FLASHING WITH G.C.
- MECHANICAL PLAN FOR SIZE AND CONTINUATION. 13. GAS FIRED PACKAGED ROOF TOP UNIT, FURNISHED IN VENDOR PACKAGE, INSTALLED BY MECHANICAL CONTRACTOR, MOUNT ON FULL PERIMETER ROOF CURB. COORDINATE ROOF PENETRATION AND FLASHING WITH G.C.
- 15. RETURN AIR DUCT DOWN WITHIN CURB, REFER TO MECHANICAL PLAN FOR CONTINUATION. OFFSET DUCT IN CURB AS REQUIRED. 16. PROVIDE TRAPPED CONDENSATE DRAIN DOWN THRU ROOF, REFER TO PLUMBING

ROOF. DUCT SHALL BE WRAPPED WITH A LISTED GREASE DUCT WRAP. REFER TO THE MECHANICAL PLAN FOR SIZE AND CONTINUATION.

17. PROVIDE 16 GA. WELDED LIQUID TIGHT STEEL EXHAUST DUCT DOWN THRU

EXHAUST FAN S	SCHEDULE		
UNIT DESIGNATION	EF-1	EF-2	EF-3
TYPE	UP-BLAST	UP-BLAST	UP-BLAST
MANUF ACTURER	TWIN CITY	TWIN CITY	СООК
MODEL #	BCRUR-210	BCRUR-120	ACE-B 70C3B
C.F.M.	1940	1050	300
STATIC PRESSURE			0.50"
FAN MOTOR RPM			1851
н.Р.	1.0	1/2	1/4
VOL TAGE	115/1/60	115/1/60	115/1/60
WEIGHT	245 LBS.	135 LBS.	95 LBS.

IELD	ADJUST	WITH	SPEED	CONTROL.	WHERE	APPLICABLE.
XHAUS	ST FAN N	NOTES	;			

1. PRE-WIRED STD. DISCONNECT NEMA 3R 2. UL 762 (327Y-300 DEG.)

6. STD. DISCONNECT

3. HINGED BASE KIT 7. BD-12 DAMPER 4. KEYWAY GREASE TROUGH 8. INSULATED CURB

9. EF-2 AND 3 SHALL BE FURNISHED WITH EXTENDED ROOF CURBS (SEE DETAIL). CURBS PROVIDED BY HOOD VENDOR. RECEIVED AND INSTALLED BY CONTRACTOR.

5. VENTED CURB (EXTENDED - SEE DETAIL)

MAKE-UP AIR UNIT SCHEDULE

UNIT DESIGNATION	SF-1		
SERVES	KITCHEN		
MANUF ACTURER	ABSOLUT AIRE		
MODEL #	V2-HOX		
C.F.M.	2211		
STATIC PRESSURE	1.0		
FAN MOTOR RPM			
H.P.	2		
VOLTAGE	208/3/60		
HEATING COIL	DIRECT FIRE		
FUEL	NATURAL GAS		
HEATING CAP. INPUT	204,000		
HEATING CAP. OUTPUT	204,000		
WEIGHT	495 LBS.		

MAKE-UP AIR UNIT NOTES:

- 1. THERMAL OVERLOAD MOTOR
- 2. STANDARD DISCONNECT PRE-WIRED
- 3. LIFTING LUGS / TIE DOWN
- 4. INSULATED ROOF CURB 5. DOWN FLOW
- 6. OUTDOOR AIR INTAKE HOOD FILTERED
- 7. PERMANENT FILTER, ON INCH, WASHABLE ALUMINUM
- 8. ADJUSTABLE PITCH DRIVE 9. VIBRATION ISOLATORS.
- 10. NON-HEATED

TRANE HVAC AND MATERIAL PACKAGE

FOR COMPLETE INFORMATION AND PRICING ON THE FOLLOWING PACKAGE OF EQUIPMENT CONTACT ALAN HASEMEYER, CAPTAIN D'S ACCOUNT REPRESENTATIVE AT TRANE NATION ACCOUNTS: 1-865-330-4248 FAX: 1-865-588-0600

ANY CHANGES OR VARIATIONS TO THE ORIGINAL EQUIPMENT PACKAGE DESCRIBED BELOW THAT WOULD AFFECT THE HVAC EQUIPMENT PACKAGE SHOULD BE BROUGHT TO THE ATTENTION OF THE ACCOUNT REPRESENTATIVE AT TRANE NATIONAL ACCOUNTS AT THE TIME OF QUOTATION.

FOR ELECTRIC HEAT UNITS, HEAT PUMPS, PROPANE (LP) FUEL OR ANY OTHER SPECIAL APPLICATIONS CONTACT TRANE NATIONAL ACCOUNTS FOR ENGINEERING, APPLICATIONS AND PRICING ASSISTANCE.

EQUIPMENT PACKAGE:

INCLUDES ALL ROOFTOP AIR CONDITIONING EQUIPMENT WITH ALL ACCESSORIES AS SPECIFIED ON THE PLANS AND SPECIFICATIONS. TAG: RTU-1 & RTU-2.

NOTE: ORDERING PROCEDURES

THE HVAC CONTRACTOR WILL BE RESPONSIBLE FOR EQUIPMENT WARRANTY. DELIVERY COORDINATION, RECEIVING AND INSTALLATION AS DESCRIBED IN THE SPECIFICATIONS.

COMPANY OWNED:

THE TRANE HVAC PACKAGE WILL BE SUPPLIED TO CAPTAIN D'S. THIS DOES NOT RELIEVE THE HVAC CONTRACTOR OF HIS RESPONSIBLITIES DESCRIBED ABOVE IN THE SPECIFICATIONS.

ERANCHISE OWNED:

THE TRANE HVAC PACKAGE IS AVAILABLE TO THE FRANCHISE OWNER OR THEIR G.C./HVAC CONTRACTOR AS A DIRECT PURCHASE FROM TRANE NATIONAL ACCOUNTS.

IMPORTANT NOTE

THE EQUIPMENT AND MATERIALS SPECIFIED FOR THIS PROJECT HAVE BEEN SPECIFICALLY SELECTED FOR THIS APPLICATION. MANY ITEMS FOUND IN THE TRANE HVAC PACKAGE ARE UNIQUE TO CAPTAIN D'S AND EQUALS ARE DIFFICULT TO PROVIDE. ANY SUBSTITUTIONS OR VARIATIONS IN REGARD TO THE STRUCTURE, SYSTEM(S), OTHER TRADES, ETC. IS THE SOLE RESPONSIBILITY OF THE INSTALLING CONTRACTOR.

THE INSTALLING CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE SYSTEM THAT CONFORMS TO THE PLANS AND SPECIFICATIONS. A COMPLETE SET OF WORKING DRAWINGS, SUBMITTALS, MAINTENANCE MANUALS, ETC. MUST BE SUBMITTED TO THE OWNER/OPERATOR PRIOR TO THE PROCEEDING WITH ANY CHANGES OR MODIFICATIONS.

UNIT DESIGNATION	RTU-1	RTU-2	
TYPE	GAS PACK-DOWNSHOT	GAS PACK-DOWNSHOT	
SERVICE	SEE PLANS	SEE PLANS	
MANUF ACTURER	TRANE	TRANE	
MODEL #	YHD150G	YHD150G	
WEIGHT (Ibs)	2326	2326	
GAS SIZE			
SUPPLY FAN			
TOTAL C.F.M.	4400	5000	
O.A. MINIMUM	828	928	
н.Р.	3.0	3.0	
VOL TAGE	208/3/60 208/3/60		
UNIT M.C.A./M.O.C.P.	65/80 65/80		
HEATING COIL			
HEATING CAP. INPUT - MBH	250	250	
HEATING CAP. OUTPUT - MBH	203	203	
E.A.D.B./L.A.D.B.	47/90	47/90	
COOLING COIL			
TOT/SENS CAP. (MBH)	149.6/113.4 149.6/113.4		
E.A.D.B./E.A.W.B.	E.A.D.B./E.A.W.B. 80/67		
ROOFTOP UNIT NOTES: 1. FULL PERIMETER ROOF CURB (14" FACTORY) 2. HINGED ACCESS PANELS 3. ECONOMIZER 4. LOW AMBIENT CONTROLS 5. OUTSIDE AIR INTAKE HOOD	 6. AUTO CHANGE OVER T-STAT W/REMOTE TEMP SENSOR, ALL CONTROLS TO BE MICRO PROCESSOR BASE. 7. RETURN AIR DUCT DETECTOR FOR UNISHUT DOWN. 8. 115V GFCI CONVENIENCE OUTLET (FIELD WIRED) 9. FACTORY FURNISHED DISCONNECTING MEANS. 10. HIGH STATIC DRIVE. 		

PACKAGED AC UNIT SCHEDULE

CONTROLS

- A. PROVIDE DIGITIAL, 7-DAY PROGRAMMABLE THERMOSTAT W/4 MODES PER DAY. PROVIDE TEMPERATURE REMOTE SENSORS IN SPACE (WALL PLATE STYLE) FOR RTU-1 AND RTU-2. THERMOSTATS AND SENSORS SHALL BE FURNISHED WITH THE TRANE PACKAGE.
- B. SMOKE DUCT DETECTORS: CONTRACTOR SHALL LOCATE IN RETURN AIR DUCT. PROVIDE WITH REMOTE TEST / RESET SWITCHES, PROVIDE TEST / RESET SWITCH, AUDIBLE SIGNAL, AND POWER / TROUBLE / ALARM LED'S IN ONE PACKAGE. ONE PER DUCT DETECTOR REQUIRED, CONTRACTOR SHALL BE RESPONSIBLE TO MOUNT THE RESET SWITCH AND TO CONNECT SIGNAL WIRE FOR SAME, REMOTE RESET SWITCHES SHALL BE MOUNTED IN A POSITION MEETING THE REQUIREMENTS OF THE AHJ (OWNER'S), AND NOT MORE THAN 8' FROM THE FLOOR.
- C. THERMOSTATS SHALL PROVIDE CONSTANT FAN DURING OCCUPIED PERIODS AND INTERMITTENT FAN DURING UNOCCUPIED PERIODS.
- D. ALL POWER WIRING SHALL BE BY THE ELECTRICAL CONTRACTOR. ALL CONTROL WIRING SHALL BE BY THE MECHANICAL CONTRACTOR.
- E. PROVIDE PHENOLIC LABEL ON ALL T'STATS AND REMOTE SENSORS.
- F. THE KITCHEN HOOD EXHAUST FAN SHALL BE INTERLOCKED WITH HOOD CONTROLS AND ROOFTOP UNITS BY AN ELECTRICAL INTERLOCK SWITCH TO ENERGIZE THE FANS AND MAKE-UP AIR (SF-1, RTU-1, & RTU-2). THE MAKE-UP AIR UNIT (SF-1) AND ROOFTOP UNITS (RTU-1 & RTU-2) SHALL SHUT DOWN UPON ACTIVATION OF THE HOOD FIRE PROTECTION SYSTEM. HOOD EXHAUST / MAKE-UP AIR SYSTEMS SHALL AUTOMATICALLY ENERGIZE WHEN COOKING EQUIPMENT IS ACTIVATED.

OUTDC	OOR AIR CALCULAT	I ON	
DINING	$\frac{987 \text{ SF}}{1000} \times 100 = 99 \text{ PEOPLE}$	99 X 7.5 / 0.8 = 928 CFM 987 SF X 0.18 / 0.8 = 222 CFM	
CORR	52 SF	52 X 0.06 / 0.8 = 4 CFM	
TIAW	$\frac{253 \text{ SF}}{1000} \times 30 = 8 \text{ PEOPLE}$	8 X 5 / 0.8 = 50 CFM 253 SF X 0.06 / 0.8 = 19 CFM	
VEST	60 SF	$60 \times 0.06 / 0.8 = 5 \text{ CFM}$	
SERVING	218 SF	218 X 0.7 / 0.8 = 191 CFM	
KITCHEN	302 SF	$302 \times 0.7 / 0.8 = 265 \text{ CFM}$	
OFFICE	$\frac{108 \text{ SF}}{1000} \times 5 = 1 \text{ PEOPLE}$	1 X 5 / 0.8 = 6 CFM 108 SF X 0.06 / 0.8 = 8 CFM	
STORAGE	355 SF	355 X .12 / 0.8 = 53 CFM	
	O.A. PROVIDED TH	TOTAL O.A. REQUIRED: 1751 CFM HROUGH RTU-1 & RTU-2: 1756 CFM	

GENERAL MECHANICAL LEGEND DESCRIPTION SUPPLY DUCTWORK RETURN DUCTWORK EXHAUST DUCTWORK OUTSIDE AIR DUCTWORK FIRE DAMPER COMBINATION FIRE & SMOKE DAMPER SUPPLY AIR DIFFUSER RETURN OR EXHAUST AIR REGISTER ROUND DUCTWORK OR FLUE UP THRU ROOF OR SLAB SUPPLY DUCT THRU SLAB OR ROOF - SEE PLANS RETURN OR EXHAUST DUCT THRU SLAB OR ROOF - SEE PLANS UNDERCUT DOOR 3/4" DOOR GRILLE - SEE PLANS FOR SIZE MANUAL VOLUME DAMPER (M.V.D.) MOTORIZED VOLUME DAMPER $\overline{}$ S.D. SMOKE DETECTOR 8" NECK SUPPLY AIR DIFFUSER @ 200 C.F.M. 8"X8" RETURN AIR REGISTER @ 150 C.F.M. 6"X6" EXHAUST AIR REGISTER @ 100 C.F.M. SPACE THERMOSTAT SENSOR MOUNTING HEIGHT PER ADA (60" AFF) SPACE HUMIDISTAT WALL SWITCH FOR CONTROL; MOUNTING HEIGHT PER ADA

AIF	AIR DEVICE SCHEDULE					
MARK	TITUS MODEL	AIR PAT.	NECK SIZE	CFM	MNT.	NOTES
Α	TDCA-AA	4	9x9 / 8"ø	125-150	T-BAR	2,4,8
В	TDCA	4	9x9 / 8″ø	125-150	SURF	5,8
С	TDCA-AA	4	12x12 / 10"ø	200-400	T-BAR	2,4,8
D	TDCA-AA	4	15x15 / 14"ø	450-600	T-BAR	2,4,8
E	PAR-AA	PERF	22×22	400-600	T-BAR	2,4,7
F	50FF	RET	45×21	700-1700	T-BAR	1,2,3,4,6
G	50F	EXH	10×10	100-150	SURF	2,3,5

FIRE SUPPRESSION PULL STATION (48" & 54" A.F.F.)

AIR DEVICE SCHEDULE NOTES:

1. FILTER GRILLE 2. ALUMINUM CONSTRUCTION 6. HINGED FOR CLEANING

4. T-BAR CEILING

5. SURFACE MOUNTED

3. EGGCRATE; ½"x½"x½" GRID 7. PERFORATED FACE W/PLENUM ABOVE (PLENUM BY M.C.) 8. PROVIDE SQUARE TO ROUND ADAPTOR

9. 12×12 BORDER

SEQUENCE OF OPERATION (RTU-1 & RTU-2)

THE MECHANICAL CONTRACTOR SHALL FURNISH ALL REQUIRED COMPONENTS FOR THE FOLLOWING SEQUENCES OF OPERATION FOR EACH HVAC UNIT. DISCONNECTS SHALL BE FURNISHED AND INSTALLED BY THE UNIT MANUFACTURER.

- A. UNIT SHALL BE STARTED AND STOPPED THRUOUGH ITS RESPECTIVE THERMOSTAT AS CONTROLLED BY THE HVAC CONTROL PANEL.
- B. ROOM THERMOSTAT SHALL ENERGIZE COOLING AND HEATING SYSTEMS TO MAINTAIN DESIRED SPACE TEMPERATURE.
- C. PROVIDE SMOKE DETECTOR IN THE RETURN AIR SIDE OF EACH UNIT IN THE AIR STREAM AHEAD OF ALL FANS, COILS, ETC. WHICH SHALL COMPLETELY SHUT DOWN THE UNIT WHEN SMOKE IS DETECTED. PROVIDE REMOTE TESTING, PER INTERNATIONAL MECHANICAL CODE.
- D. M.C. & G.C. SHALL HOLD A TRAINING SESSION (SUMMER & WINTER) WITH STORE MANAGER TO INSURE THEIR KNOWLEDGE OF PROPERLY USING THE CONTROLS IN BOTH SUMMER & WINTER MODE. TRAINING SCHEDULE TO BE DETERMINED BY OWNER.

SUPPLYING/WIRING OF SMOKE DETECTORS

MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL FIRE SAFETY INTERLOCK WIRING AT ALL A/C UNITS.

THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND WIRING THE PROVIDED SMOKE DETECTOR IN THE LOCATION AND ARRANGEMENT ACCEPTABLE TO THE LOCAL CODE OFFICIAL. (PLANS SHOW ALL SMOKE DETECTORS IN RETURN)



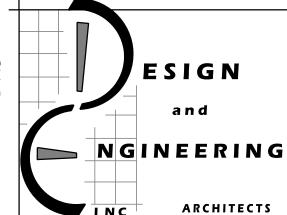
MECHANICAL GENERAL NOTES:

- 1. ALL RECTANGULAR, ROUND AND FLEXIBLE DUCTS SHALL BE SIZED AS SHOWN ON THESE DRAWINGS. MINIMUM INTERNAL DIMENSIONS ARE
- 2. ALL SUPPLY, RETURN, & MAKE-UP AIR DUCTS ARE SIZED FOR AIR VOLUME AND STATIC PRESSURE DROP WITHOUT INTERIOR INSULATION.
- 3. ALL CONCEALED SUPPLY, RETURN & MAKE-UP AIR DUCTS SHALL BE INSULATED. EXTERIOR INSULATION SHALL BE USED. INSULATION SHALL BE 2" THICK, 1 POUND PER CUBIC FOOT DENSITY (SUPPLY AIR DUCT SHALL BE A MIN. OF R-6 INSTALLED) PER 2012 IECC OR APPROVED EQUAL. ALL EXPOSED RECTANGULAR DUCT SHALL BE INTERNALLY LINED WITH THICK 2.0 PCF DUCT LINER.
- 4. ALL FLEXIBLE ROUND DUCT SHALL BE SIMILAR TO ATCO UPC#076. UL181, CLASS 1 AIR DUCT R=6. FLEXIBLE AIR DUCT.
- 5. ALL FLEXIBLE DUCTS SHALL BE CONNECTED TO TRUNK OR BRANCH DUCTS WITH MINIMUM OF THREE SHEET METAL SCREWS AT EACH CONNECTION AND TAPED TO PROVIDE AN AIR THIGHT SEAL.
- 6. FLEX DUCT HANGER STRIPS SHALL BE 1" X 16 GAUGE MINIMUM.
- 7. FLEXIBLE DUCTS SHALL BE INSTALLED AS STRAIGHT AS POSSIBLE WITHOUT SAG OR MULTIPLE BENDS, 6'-0" MAXIMUM LENGTH.
- 8. INSTALL TURNING VANES IN ALL 90° RECTANGULAR DUCT ELBOWS AND AT ALL DUCT "TEES".
- 9. COMPLETE HOOD FIRE PROTECTION SYSTEMS SHALL BE SUPPLIED AND INSTALLED BY THE OWNER AND A LICENSED INSTALLER.
- 10. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED ACCORDING TO THE MOST RECENTLY PUBLISHED ASHRAE AND SMACNA STANDARDS.

11. DUCTWORK SHALL BE MILD GALVANIZED STEEL UNLESS NOTED

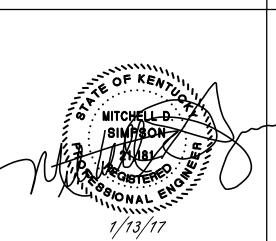
MAINTAINED ON ALL EQUIPMENT AND DUCTWORK.

- OTHERWISE. 12. MANUFACTURERS MINIMUM CLEARANCE RECOMMENDATIONS SHALL BE
- 13. THE CONTRACTOR SHALL CAREFULLY COORDINATE THE LOCATION OF ALL DUCTS, GRILLES, DIFFUSERS, ETC. WITH THE CEILING GRIDS AND THE PLUMBING, ELECTRICAL, AND FRAMING CONTRACTORS.
- 14. ALL RETURN AIR GRILLES SHALLBE EASILY REMOVABLE FOR CLEANING.
- 15. ALL CONTROL WIRING SHALL BE BY THE MECHANICAL CONTRACTOR.
- 16. EXHAUST FANS SHALL BE FURNISHED WITH BIRD SCREENS, BACK DRAFT DAMPERS AND DISCONNECTES WHERE APPLICABLE AND ACCORDING TO THE SCHEDULE.
- 17. THE CONTRACTOR SHALL CAREFULLY COORDINATE ALL THERMOSTAT LOCATIONS WITH INTERIOR FINISHES.
- 18. THE CONTRACTOR SHALL COOPERATE FULLY BETWEEN ALL OTHER TRADES.
- 19. THE SUBMISSION OF A BID OR PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF/HERSELF WITH THE PLANS AND BUILDING SITE, CLAIMS MADE SUB-SEQUENT TO THE PROPOSAL FOR MATERIALS AND/OR LABOR DUE TO THE DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED.
- 20. CONTRACTOR SHALL INSULATE ALL REFRIGERANT LINES WITH AN APPORVED REFRIGERANT INSULATION SUCH AS ARMAFLEX OR PRESTITE WITH THICKNESS AS RECOMMENDED BY THE MANUFACTURER. INSULATION EXPOSED TO THE WEATHER OR UNDERGROUND SHOULD BE COVERED WITH AN ASPHALT SATURATED VAPOR BARRIER AND PAINTED WITH TWO COATS OF ASPHALTIC WATERPROOFING COMPOUND. INSULATE UNDERGROUND LINES WITH APPROVED MATERIALS.
- 21. ALL REFRIGERANT LINES SHALL BE TYPE "L" COPPER TUBING IN CONTINUOUS, UNCOUPLED AND UNSPLICED LENGTHS FROM THE EVAPORATOR TO THE CONDENSER.
- 22. ALL POWER WIRING SHALL BE BY THE ELECTRICAL CONTRACTOR.



645 Westgate Circle

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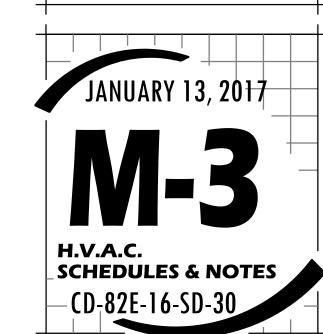
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Job Number: 68F0019 **Revisions:**



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Brentwood, Tennessee 37027 615-370-1779 fax: 370-9108

www.dandeinc.us

1645 Westgate Circle

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ARCHITECTS

TN 37027 f. 615.373.4837

H.V.A.C.

DETAILS

-CD-82E-16-SD-30

Job Number: 68F0019 **Revisions:**

DUCT SEAL CLASSES
SEALING REQUIREMENTS ^a
ALL TRAVERSE JOINTS, LONGITUDINAL SEAMS, & DUCT WALL PENETRATIONS, PRESSURE SENSITIVE TAPE SHALL NOT BE USED AS THE PRIMARY SEALANT.
ALL TRAVERSE JOINTS, LONGITUDINAL SEAMS. PRESSURE SENSITIVE TAPE SHALL NOT BE USED AS THE PRIMARY SEALANT.

TRAVERSE JOINTS ONLY. Q. LONGITUDINAL SEAMS ARE JOINTS ORIENTED IN THE DIRECTION OF AIRFLOW. TRANSVERSE JOINTS ARE CONNECTION OF TWO DUCT SECTIONS & ARE ORIENTED PERPENDICULAR TO AIRFLOW. DUCT WALL PENETRATIONS ARE OPENINGS MADE BY ANY SCREW FASTERNER. PIPE. ROD OR WIRE. SPIRAL LOCK SEAMS IN ROUND & FLAT OVAL DUCTS NEED NOT TO BE SEALED. ALL OTHER CONNECTIONS ARE CONSIDERED TRANSVERSE JOINTS. INCLUDING BUT NOT LIMITED TO SPIN-INS. TAPS & OTHER V BRANCH CONNECTIONS. ACCESS DOOR FRAMES AND JAMBS. AND DUCT CONNECTIONS TO EQUIPMENT.

MINIMUM DUCT SEAL LEVEL®

DUCT LOCATION

UNCONDITIONED SPACES

CONDITIONED SPACES

DUCT SEAL CLASS

a. SEE SEAL CLASS TABLE BELOW.

b. DUCT DESIGN STATIC PRESSURE CLASSIFICATION.

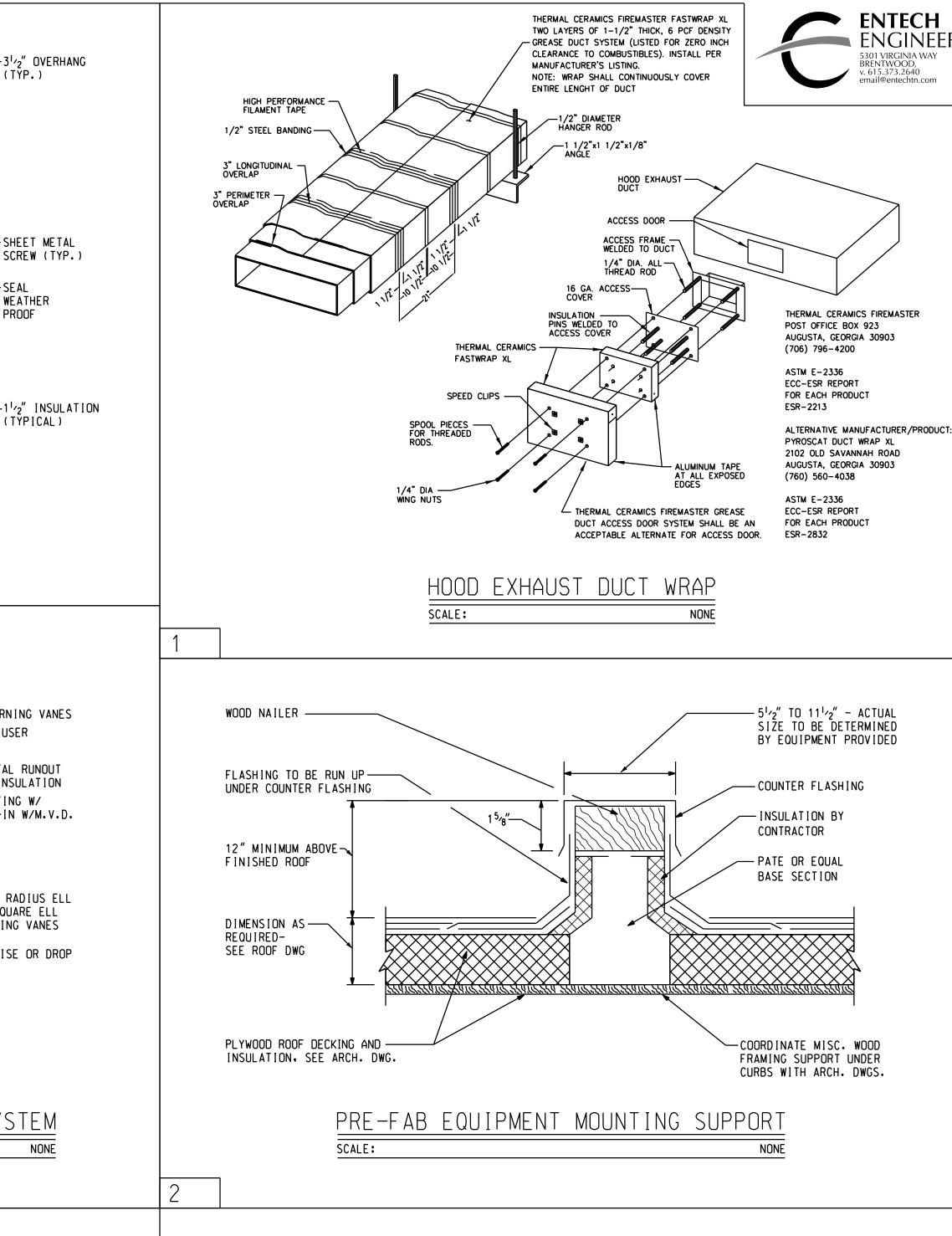
c. INCLUDES INDIRECTLY CONDITIONED SPACES, SUCH AS RETURN AIR PLENUMS.

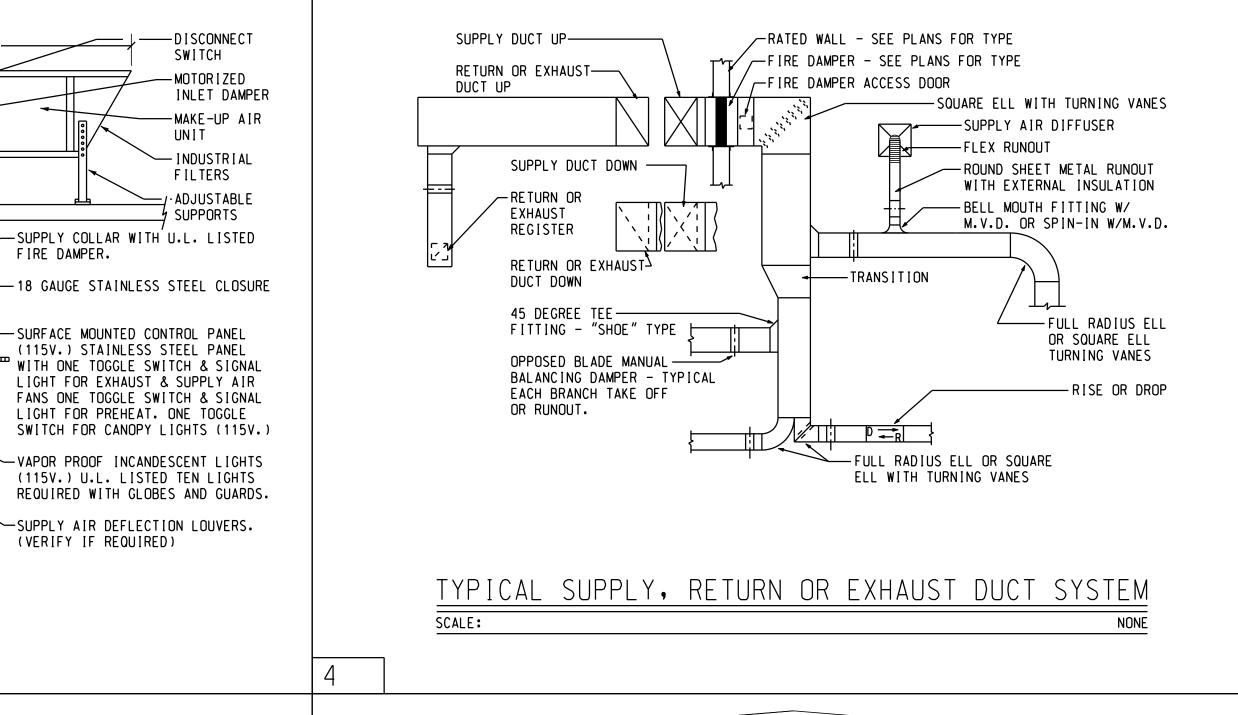
OUTDOORS ^C

SUPPL Y

DUCT TYPE

 \leq 2 IN. W.C.^b (500 Pa) \geq 2 IN. W.C.^b (500 Pa) EXHAUST RETURN





TRANSITION FUNNEL

KITCHEN EXHAUST FAN DETAIL

X\LIQUID TIGHT

FITTING 16 GA. WELDED/🚫

SAFETY CHAIN BY

GREASE TRAP

2 PER SIDE. -

3/8" LAG SCREW 12" ON CENTER, MINIMUM

14" HIGH FACTORY

SCALE:

PREFABRICATED

ROOF CURB

PIPE CURB DETAIL

NONE

SCALE:

-31/2" OVERHANG

-SHEET METAL

WEATHER

(TŸPICAL)

U.L. LISTED GREASE EXHAUST FAN

NEMA 3R DISCONNECT

FACTORY WIRED TO

-PROVIDE HIGH TEMPERATURE

DUCT WRAP TO TOP OF CURB

MOTOR

EXTENTION.

FIELD WIRING IN LIQUID

TIGHT FLEXIBLE

VENTED CURB EXTENSION

— FLASH AND COUNTERFLASH

RESILENT GASKET

ROOF CURB

INSULATION ROOF STRUCTURE

GREASE EXHAUST DUCT.

WELDED LIQUID TIGHT.

MINIMUM 16 GAUGE STEEL

CONDUIT

₹- ROOF

NONE

PROOF

SCREW (TYP.)

ANCHOR w/ HEX HEAD -

METAL SCREWS & LEAD

WASHERS.

NAILER.

2"X2" PRESSURE-

PLASTIC GROMMET-

CLAMPS ON EACH

PIPE (TYP.)

w/ STAINLESS STEEL

71/2" BASE FLANGE.

ANCHOR TO METAL DECK.

TREATED WOOD

- DUCT WORK MUST BE HUNG

FROM THE INSIDE CURB

EDGES OF THE CURB

- DUCT FLASHING

RIGID ROOF

INSULATION

-PLYWOOD DECKING

-FLEX. CONN. TYP.

FLANGES. IT MUST NOT BE

INSTALLED OVER THE TOP

— SIDE PANEL

TYP.

XXXXXX

NONE

FIRE DAMPER.

PER NFPA 96

ROOFTOP A.C. UNIT CURB

SCALE:

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EXT. PANEL

ROOFING MATERIAL

AND FLASHING

BY ARCHITECT

RIGID ROOF -

INSULATION

PLYWOOD DECKING

ROOF TRUSS —

TYP. DUCT FRAMING -

STRUCTURAL DETAILS

MEMBERS - SEE

SUPPLY AIR BLOWER ----

MASTER ELECTRICAL PANEL-

ACCESS DOOR PER NFPA-96-

1/2" HANGER RODS—

w/ TURNBUCKLES BY

INSTALLING CONTRACTOR.

EXHAUST FAN PER-

40" AFF (MIN.)—

18" AFF (MIN.)—

NFPA 96

WELDED PLATE - MODIFY AS -

REO'D FOR STRUCTURAL MEMBER