

VARIABLE REFRIGERANT FLOW SCHEDULE

INDOOR UNIT											CONDENSING UNIT											REMARKS					
NO.	MAKE & MODEL	LOCATION	COOLING CAPACITY (BTU/HR)	HEATING CAPACITY (BTU/HR)	CFM	ESP	V	Ø	RATED AMPS (A)	HZ	WT (LBS.)	NO.	MAKE & MODEL	COOLING CAPACITY (BTU/HR)	HEATING CAPACITY (BTU/HR)	SEER	HSPF	V	Ø	HZ	COMPRESSOR AMPS (A)		FAN MOTOR AMPS (A)	MCA (A)	MOP (A)	WT (LBS.)	
FC 1	LG ARNUJ23BHA4	OFFICE	12,300	13,600	339	0.31	208-230	1	1.06	60	60	HP 1	LG ARUM241BTE5	240,000	243,000	-	-	208-230	3	60	CDMP (A) 25.6 CDMP (B) 23.2	8.0	63.2	80	666	W/ PROGRAMMABLE THERMOSTAT, W/ SELF DIAGNOSIS SETTING W/ MERV-8 FILTER, W/ CONDENSATE OVERFLOW SWITCH TO SHUT OFF FAN COIL UNIT.	
FC 2	LG ARNU363BGA4	FOYER/ MUD ROOM	36,200	40,600	1141	0.39	208-230	1	2.65	60	85																
FC 3	LG ARNU363NJA4	MASTER/ LIVING	36,000	40,000	990	0.5	208-230	1	1.12	60	121																
FC 4	LG ARNU363NJA4	KITCHEN	36,000	40,000	990	0.5	208-230	1	1.12	60	121																
FC 5	LG ARNU543BRA4	LIVING/ FAMILY	54,000	61,400	1801	0.55	208-230	1	3.5	60	115																
FC 6	LG ARNU363NJA4	BASEMENT	36,000	40,000	990	0.5	208-230	1	1.12	60	121																
FC 7	LG ARNU363NJA4	UNFINISHED BASEMENT	36,000	40,000	990	0.5	208-230	1	1.12	60	121																

* REFRIGERATION PIPE SIZES SHALL BE COORDINATED WITH MANUFACTURE BASED ON EXACT REFRIGERATION PIPE LENGTHS AND ELBOWS IN THE SYSTEM.
 ** VERIFY EXACT AVAILABLE VOLTAGE & PHASE, W/ ELECTRICAL ENG. PRIOR TO ORDERING THE AC UNITS, ELECTRICIAN TO VERIFY WITH MANUFACTURER FOR FUSE SIZE & FEEDER SIZE.

HEAT RECOVERY BOX SCHEDULE

INDOOR UNIT											REMARKS	
NO.	MAKE & MODEL	UNITS SERVED	MAX PORT CAPACITY (BTU/HR)	MAX UNIT CAPACITY (BTU/HR)	V	Ø	HZ	RATED AMPS (A)	MCA	MFA		WT (LBS.)
HRU 1	LG PRHR031A	FC-1 FC-2 FC-3	54,000	192,000	208-230	1	60	0.12	-	-	45	MAXIMUM 3 UNITS INSTALLED PER HEAT RECOVERY BOX. INSTALL PER MANUFACTURERS REQUIREMENTS. W/ SHUT OFF VALVE.
HRU 2	LG PRHR041A	FC-4 FC-5 FC-6 FC-7	54,000	192,000	208-230	1	60	0.16	-	-	50	MAXIMUM 4 UNITS INSTALLED PER HEAT RECOVERY BOX. INSTALL PER MANUFACTURERS REQUIREMENTS.

EXHAUST FANS SCHEDULE

SYMBOL	MAKE	MODEL	CFM	S.P.	ELECTRICAL			WT.(LBS.)	SERVICE	REMARKS	
					POWER	V	Ø				HZ
EF 1	BROAN	XB110	110	0.25	0.3 AMPS	120	1	60	20	POWDER ROOM	ENERGY STAR COMPLIANT EXHAUST FAN W/ BACK DRAFT DAMPER, W/ DISCONNECT SWITCH, RUN CONTINUOUS TO MEET ASHRAE 62.2 COMPLIANCE.
EF 2	BROAN	XB110H	110	0.25"	0.3 AMPS	120	1	60	20	BATHROOM	ENERGY STAR COMPLIANT EXHAUST FAN, W/ BACK DRAFT DAMPER, W/ DISCONNECT SWITCH, CONTROLLED BY LIGHT SWITCH AND BUILT-IN HUMIDISTAT.
EF 3	GREENHECK	BCF-106	200	0.25"	1/10 HP	120	1	60	80	MASTER BATH	W/ BACK DRAFT DAMPER, W/ DISCONNECT SWITCH, CONTROLLED BY LIGHT SWITCH AND HUMIDISTAT.
EF 4	BROAN	QTXE150	150	0.25"	0.5 AMPS	120	1	60	20	LAUNDRY	W/ BACK DRAFT DAMPER, W/ DISCONNECT SWITCH, CONTROLLED BY LIGHT SWITCH.
EF 5	BROAN	XB110	110	0.25"	0.3 AMPS	120	1	60	20	TOILET ROOM	W/ BACK DRAFT DAMPER, W/ DISCONNECT SWITCH, CONTROLLED BY LIGHT SWITCH.
EF 6	GREENHECK	BCF-106	500	0.25"	1/10 HP	120	1	60	80	GENERAL EXHAUST	W/ BACK DRAFT DAMPER, W/ DISCONNECT SWITCH, CONTROLLED BY LIGHT SWITCH.

WHOLE-BUILDING VENTILATION REQUIREMENTS (FROM ASHRAE 62.2)

AT LEAST ONE MECHANICAL VENTILATION SYSTEM IN THE BUILDING MUST BE DESIGNATED FOR USE IN COMPLIANCE WITH THE WHOLE-BUILDING VENTILATION REQUIREMENT. ALTERNATIVELY, THE SUM OF THE RATED AIRFLOWS FROM MULTIPLE FANS CAN BE UTILIZED TO MEET THE REQUIRED WHOLE-BUILDING VENTILATION AIRFLOW. THE SYSTEM(S) MUST DELIVER CONTINUOUS VENTILATION AIRFLOW AT A RATE GREATER THAN OR EQUAL TO THE RATE SPECIFIED IN EQUATION 4.1, AND FAN SONE RATINGS MUST NOT EXCEED 1.0. FOR DWELLING OCCUPANT DENSITIES KNOWN TO BE GREATER THAN (N_{BR} + 1), THE RATE SHALL BE INCREASED BY 7.5 CFM FOR EACH ADDITIONAL PERSON.

Where:
 A_{tot} = conditioned floor area, ft²
 N_{br} = number of bedrooms; not to be less than one
 Q_{req} = ventilation air requirement = fan flow rate, (cfm)

Eq 4.1a Calculation:
 $Q_{req} = 0.03A_{tot} + 7.5(N_{br} + 1)$

A_{tot} = 4,885
 N_{br} = 5
 Q_{req} = 192

H.V.A.C. LEGEND

SYMBOL	ABBREV.	DESCRIPTION
		DUCT RISER
		DUCT DROP
		DUCT SECTION (SUPPLY)
		DUCT SECTION (RETURN)
		DUCT SECTION (EXHAUST)
	C.D.	CEILING DIFFUSER
	R.A.R.	RETURN AIR REGISTER
	E.G.	EXHAUST AIR GRILLE
	S.W.S.	SIDE WALL SUPPLY
	S.W.R.	SIDE WALL RETURN
	S.W.E.	SIDE WALL EXHAUST
	R.G.	RELIEF GRILLE
	M.V.D.	MANUAL VOLUME DAMPER
	B.D.D.	BACK DRAFT DAMPER
	A.V.D.	AUTOMATIC VOLUME DAMPER
	D.L.	DOOR LOUVER
	STAT	ROOM THERMOSTAT
	D.H.	DUCT HEATER
	U.C.	UNDER-CUT
	C.W.S.	COND. WATER SUPPLY
	C.W.R.	COND. WATER RETURN
	H.W.S.	HDT WATER SUPPLY
	H.W.R.	HDT WATER RETURN
	CH.W.S.	CHILLED WATER SUPPLY
	CH.W.R.	CHILLED WATER RETURN
		DIRECTION OF FLOW
	G.V.	GATE VALVE
	B.V.	BUTTERFLY VALVE
	RED.	REDUCER
	STR.	STRAINER
	U	UNION
	P.G.	PRESSURE GAUGE
	A.D.	ACCESS DDDR
	A.P.	ACCESS PANEL
	S.A.	SUPPLY AIR
	R.A.	RETURN AIR
	E.A.	EXHAUST AIR
	C.A.	COMBUSTION AIR
	O.S.A.	OUTSIDE AIR
	DN.	DOWN
	CLG.	CEILING
	S.W.S.	SIDEWALL SUPPLY
	S.W.R.	SIDEWALL RETURN
	N.C.	NDRMALLY CLOSED
	N.D.	NDRMALLY OPEN
	N.I.C.	NOT IN CONTRACT
	P.O.C.	POINT OF CONNECTION
	G.C.	GENERAL CONTRACTOR
	P.C.	PLUMBING CONTRACTOR
	E.C.	ELECTRICAL CONTRACTOR
	U.T.R.	UP THRU ROOF
		FLEX. CONN. IN DUCT
		TURNING VANES
		EXTRACTORS
		FURN. & INST. BY ELEC.
		FURN. & INST. BY MECH.
		EXPANSION VALVE
	C.A.	CONTROL AIR
		DUCT LINING
	M.C.A.	MAX. CIRCUIT AMPACITY
	T.S.P.	TOTAL STATIC PRESSURE
	F.L.A.	FULL LOAD AMP
	B.D.D.	BACK DRAFT DAMPER
	M.BH	THOUSAND BTUH
	E.R.	EXHAUST REGISTER
	SFD	SMOKE AND FIRE DAMPER
	SD	SMOKE DUCT DETECTOR
		POINT OF CONNECTION
		THERMOSTAT SENSOR
	FSD	FLOOR SUPPLY DIFFUSER
	FRD	FLOOR RETURN DIFFUSER
	LSD	LINEAR SLOT SUPPLY DIFFUSER
	LRD	LINEAR SLOT RETURN DIFFUSER
	O.B.D.	OPPOSED BLADE DAMPER

PLAN REVIEW ACCEPTANCE
 FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.

BUILDING STRUCTURAL
 MECHANICAL PLUMBING
 ELECTRICAL ENERGY
 ACCESSIBILITY FIRE

PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.

BY: MEM DATE: 07/11/18
 WEST COAST CODE CONSULTANTS, INC.

POWDER MOUNTAIN HOUSE

OWNER:
TOM BUTTGENBACH
8645 EASET COPPER CREST
EDEN, UT 84310

ARCHITECT: TOM WISCOMBE ARCHITECTURE 2454 WILSHIRE BLVD., SUITE 406 LOS ANGELES, CA 90027 (213) 674-2238 WWW.TOMWISCOMBE.COM	STRUCTURAL ENGINEER: NOUS 527 W 7TH STREET LOS ANGELES, CA 90014 (213) 627-6987 WWW.NOUSENGINEERING.COM	CIVIL ENGINEER: TALISMAN 527 W 7TH STREET MURRAY, UT 84017 (801) 745-1300 WWW.TALISMANCIVIL.COM	MECHANICAL / PLUMBING: SHAMIM ENGINEERING CONSULTANTS INC 5520 CORBIN AVE, SUITE 300 IRVINE, CA 92618 (949) 788-6778 WWW.SHAMIMENGINEERING.COM	ELECTRICAL: ABRARI ENGINEERING OLENDALE, CA (714) 827-6987 WWW.ABRARI.COM	NGBS CONSULTING: ARGENTO/GRAHAM 811 WEST 7TH STREET, 10TH FLOOR LOS ANGELES, CA 90017 (323) 536-2578 WWW.ARGENTOGRAHAM.COM	GEOTECHNICAL: IGES 2702 SOUTH 1030 WEST SUITE 10 SOUTH SALT LAKE, UT 84020 (801) 270-9400 WWW.IGESINC.COM	LANDSCAPE ARCHITECT: LDG 328 W 200 S SUITE 102 SALT LAKE CITY, UT 84011 (801) 583-1255	LIGHTING DESIGNER: KGM 328 W 200 S SUITE 102 SALT LAKE CITY, UT 84011 (801) 583-1255 WWW.KGLIGHTING.COM
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SCHEDULES, NOTES, & LEGEND

REVISIONS:	BY:	DATE:	DATE:
			05/05/2018
			SCALE: 1/4" = 1'-0"
			DRAWN: K.S.
			SHEET: M1.0

GENERAL NOTES:

- 1. CODES, RULES AND REGULATIONS- DESIGN OF SYSTEM
A) ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES AND CODES.
B) WHEN THE DRAWINGS CALL FOR MATERIALS OR CONSTRUCTION OF A BETTER QUALITY OR LARGER SIZES THAN REQUIRED BY THE ABOVE MENTIONED CODES AND RULES, WORK SHALL BE AS SPECIFIED OR SHOWN RATHER THAN AS REQUIRED BY CODE. ALL ITEMS OR FEATURES OF THE MECHANICAL SYSTEMS REQUIRED BY CODE SHALL BE INCLUDED, EVEN THOUGH NOT SPECIFIED HEREIN.
C) INSTALLATION OF THE SYSTEMS SHALL BE IN ACCORDANCE WITH THE ABOVE MENTIONED CODES AND REGULATIONS AND ALSO SHALL CONFORM TO GOOD, ACCEPTED MECHANICAL PRACTICES.
2. FLEXIBLE CONNECTIONS AT SUPPLY AND RETURN AIR OPENINGS OF ALL AIR CONDITIONING UNITS.
3. OBTAIN APPROVAL FROM ARCHITECT FOR ALL FLOOR REGISTERS AND SIDE WALL REGISTERS PRIOR TO PURCHASE.
4. CEILING DIFFUSERS TO BE EQUAL TO TITUS SERIES CC WITH D.B.D. FLUSH MOUNTED FOR SUSPENDED T-BAR CEILING AND SURFACE MOUNTED FOR GYPSUM BOARD CEILING. SEE PLAN FOR LINEAR DIFFUSERS. LINEAR DIFFUSERS SHALL BE CARNES.
5. COORDINATE EXACT LOCATION OF ALL AIR OUTLETS AND INLETS.
6. SIDEWALL SUPPLY AND RETURN REGISTERS TO BE EQUAL TO TITUS LINEAR BAR.
7. COORDINATE EXACT LOCATION OF ALL AIR OUTLETS AND INLETS (DIFFUSERS AND REGISTERS) WITH APPROPRIATE ARCHITECTURAL PLANS (REFLECTED CEILING, ELEVATIONS, ETC.) COLOR AS DIRECTED BY ARCHITECT.
8. PROVIDE DUCT LINING TO SUPPLY DUCT OF EACH AC UNIT FOR MINIMUM OF 10 FT. DUCT LINING TO BE EQUAL TO JOHNS-MANVILLE, 1" THICK X 1-1/2" PCF DENSITY DUCT LINER. DUCTWORK TO BE INCREASED IN CROSS DIMENSION TO INCORPORATE THICKNESS OF LINING.
9. DUCT INSULATION TO CONFORM TO CALIFORNIA ENERGY CONSERVATION STANDARDS (TITLE 24).
10. WIRING DIAGRAM IS INTENDED TO INDICATE SEQUENCE OF CONTROL AND DOES NOT NECESSARILY SHOW ALL CONNECTIONS REQUIRED BY LOCAL CODES.
11. AUTOMATIC TEMPERATURE CONTROL DEVICE FOR REGULATION OF SPACE TEMPERATURE SHALL BE CAPABLE OF BEING SET FROM 55 TO 85°F, AND HAVE THE ABILITY TO OPERATE THE HEATING AND COOLING IN SEQUENCE. CONTROL SHALL BE ADJUSTABLE TO PROVIDE A RANGE OF UP TO 10°F BETWEEN FULL HEATING AND FULL COOLING AND HAVE CAPABILITY OF TERMINATING ALL HEATING AT A TEMPERATURE NO MORE THAN 70°F, AND COOLING AT A TEMPERATURE NOT LESS THAN 78°F.
12. ALL EQUIPMENT SHALL BE LABELED AS TO THE SPACE IT SERVES.
13. APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE FASTENED IN PLACE.
14. PROVIDE SEISMIC BRACING FOR ALL MECHANICAL EQUIPMENT STRUCTURE MOUNTED, 400 LBS. OR HEAVIER.
15. A MAINTENANCE LABEL SHALL BE AFFIXED TO MECHANICAL EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED FOR THE OWNERS USE.
16. PROVIDE VOLUME DAMPER FOR ALL DUCT WORK BRANCHES.
17. PROVIDE CEILING & ROOF ACCESS FOR ALL CEILING & ROOF MOUNTED EQUIPMENT & VOLUME DAMPERS.

- 18. TRANSVERSE JOINTS FOR ALL AIR SUPPLY DUCTS INSTALLED WHERE AIR LEAKAGE WOULD BE NON-BENEFICIAL TO THE OCCUPIED AREA, TEMPERATURE REQUIREMENTS SHALL BE SEALED WITH CITY OF LOS ANGELES APPROVED MASTIC OR TAPE.
19. PROVIDE GALVANIZED SHEET METAL DUCTS FABRICATED AND INSTALLED TO UMC 2014 EDITION.
20. REFRIGERANT PIPING TO BE TYPE "L" COPPER, REFRIGERATION GRADE. FITTINGS TO BE WROUGHT COPPER WITH JOINTS MADE UP WITH "SOLIFLOS" OR EQUAL. HARD SOLDER. ALL JOINTS TO BE ROUGHLY CLEANED PRIOR TO SOLDERING.
21. REFRIGERANT SUCTION
A) INSULATE WITH PERFORMED FIBERGLASS SNAP-ON INSULATION SUCH AS 25 ASL/SSL.
B) FOR PIPES UP TO 1" DIAMETER, PROVIDE 1" THICK INSULATION.
C) FOR PIPES 1" DIAMETER AND LARGER, PROVIDE 1-1/2" THICK INSULATION.
D) WHERE INSULATION IS EXPOSED TO WEATHER, PROTECT WITH WATER PROOF CORRUGATED ALUMINUM TO BE INTACT WITH NO GAPS OR TEARS.
E) INSTALL INSULATION IN ACCORDANCE WITH INSULATION MANUFACTURER'S RECOMMENDATION SEAL TRANSMISSION WITH SSL BUTT STRIPS, VAPORSEAL COVER.
22. MAINTAIN 10" SEPARATION BETWEEN AIR INTAKE TO THE BUILDING AND ANY EXHAUST OR VENT/EXTEND THE DSA. IF REQUIRED.
23. PROVIDE FIRE DAMPER OR SMOKE FIRE DAMPER WHERE DUCT PENETRATES FIRE RATED CEILING OR WALL IF APPLICABLE.

- 24. RECTANGULAR DUCTS CAN BE SUBSTITUTED WITH EQUIVALENT ROUND DUCTS WHERE APPLICABLE PER FOLLOWING SCHEDULE.
CEM DUCT SIZE
0-110 6"
110-240 8"
240-420 10"
420-675 12"
675-1050 14"
1050-1500 16"
1500-2000 18"
2000-2600 20"
FOR FLEX DUCT INSTALLATION, ALL ABOVE DUCT SIZES SHALL BE INCREASED TO ONE SIZE LARGER.
25. THE PROJECT SHALL BE AIR BALANCED BY AN AIR BALANCE CONTRACTOR AND A COPY OF THE FINAL REPORT SHALL BE PRESENTED TO THE TENANT AND OWNER.
26. THE MECHANICAL CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS AND FEES.
27. MECHANICAL CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO BID AND VERIFY EXISTING LOCATION OF ALL EQUIPMENT AND THEIR WORKING CONDITION PRIOR TO WORK. ANY DISCREPANCY SHALL BE REPORTED TO ARCHITECT.
28. ENERGY CONSERVATION STANDARDS FOR NEW RESIDENTIAL BUILDINGS HAVE BEEN REVIEWED AND DESIGNED SUBSTANTIALLY CONFORMS TO THEM.
29. ALL DUCT SIZES SHOWN ON THE FLOOR PLANS ARE CLEAR INSIDE DIMENSIONS. CONTRACTOR SHALL ENLARGE THE DUCT IN ORDER TO ACCOMMODATE LINING INSIDE OF DUCT IF REQUIRED.
30. SUCTION AND LIQUID LINE SIZES INDICATED ON THE SCHEDULE ABOVE ARE BASED ON 25' OF RUN, INCREASE PIPE SIZE FOR RUNS MORE THAN 25' AND CONSULT WITH MANUFACTURER FOR SIZING.

- 31. PRIOR TO ANY DUCT OR PIPING FABRICATION, EQUIPMENT INSTALLATION OR DUCT AND PIPE INSTALLATION, MECHANICAL CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES AND CEILING CLEARANCES AND PROVIDE COMPLETE SHOP DRAWINGS. OBTAIN APPROVAL FOR SHOP DRAWING FROM ARCHITECT/ENGINEER. DUCT MAY BE RESIZED TO EQUIPMENT SIZES IN ORDER TO ACCOMMODATE AVAILABLE SPACE, VERIFY WITH ENGINEER. NO EXTRA COST IS ALLOWABLE FOR LACK OF COORDINATION AFTER SHOP DRAWINGS ARE SUBMITTED.
32. SITE INSPECTION CONTRACTORS SHALL VISIT THE SITE OF WORK PRIOR TO SUBMISSION OF HIS BID AND THOROUGHLY FAMILIARIZE HIMSELF WITH THE WORKING CONDITIONS AND EXACT NATURE OF THE WORK. SUBMISSION OF A BID ACKNOWLEDGES FULL RESPONSIBILITY FOR FURNISHING A COMPLETE AND FUNCTIONAL SYSTEM. NO CHANGES IN CONTRACT WILL BE MADE TO ACCOMMODATE OR ALLOW EXTRA FUNDS FOR ANY SUBMISSION WHICH RESULTS FROM A FAILURE TO THOROUGHLY MAKE THE EXAMINATION.
33. IN BATHROOMS CONTAINING BATHTUBS, SHOWERS, SPAS AND SIMILAR BATHING, FIXTURES SHALL BE MECHANICALLY VENTILATED IN ACCORDANCE WITH CALIFORNIA MECHANICAL CODE 2007 CBC 1203.4.2.1.
34. TOILET EXHAUST DUCTS SHALL BE MADE OF METAL.
35. ALL DUCTWORK IN GARAGE EXHAUST SYSTEM & MAKE UP SHALL BE GALVANIZED SHEET METAL.
36. FLEXIBLE DUCT MAY BE USED FOR THE RESIDENTIAL UNITS WITH NO KINK AND BEND. ALL THE TURNS AND 90° ELBOWS SHALL BE SHEET METAL. FLEXIBLE DUCT MAY BE USED FOR STRAIGHT RUNS ONLY.
37. FOR NON-RESIDENTIAL AREAS ALL EXHAUST DUCTS AND OUTSIDE AIR SHALL BE SHEET METAL. THE STRAIGHT SUPPLY & RETURN RUNS MAY BE FLEXIBLE IF THEY ARE NOT EXPOSED. VERIFY WITH ARCHITECT FOR AVAILABLE CEILING HEIGHT.

- 38. APARTMENTS SIDEWALL REGISTERS SHALL BE "TURTLE & BAILEY" SINGLE DEFLECTION WITH OBD. ALL OTHER NOTES REGARDING DIFFUSERS & REGISTERS IN THIS SHEET APPLY TO THE COMMONS AREA AND AIR DISTRIBUTION.
39. DUCT INSULATION TO CONFORM TO CALIFORNIA ENERGY CONSERVATION STANDARDS (TITLE 24). DUCT INSULATION SHALL BE "REFLECTIK" R6.0 WITH A 0.75" INCHES AIR GAP. VERIFY "R" VALUE PER TITLE 24 CALCULATION.
40. THERMOSTAT SHALL BE CEC APPROVED W-F THERMOSTAT BY "VENSTAR" OR APPROVED EQUAL. THERMOSTAT SHALL BE CAPABLE OF RECEIVING AND RESPONDING TO DEMAND RESPONSE SIGNALS.
41. IF FLEXIBLE DUCT IS TO BE USED IN THE PROJECT, ALL DUCT SIZES SHALL BE INCREASE TO ONE SIZE LARGER.

DRYER NOTES

- 1- THE MAXIMUM LENGTH OF 5" DUCT SHALL NOT EXCEED 44' (FT.). DEDUCT 4' (FT.) FOR EACH 90° ELBOW.
2- PROVIDE CLEARDUTS THAT ARE ACCESSIBLE AND ARE SPACED NOT MORE THAN 20' (FT.) APART, THEY SHALL ALSO BE LOCATED AT BASE OF EACH VERTICAL RISER.
3- THE TERMINATION OF THE DUCT SHALL NOT BE RESTRICTED BY ANY LOUVERS OR SCREEN SAND THE FREE AREA OF THE DUCT SHALL NOT BE REDUCED.
4- THE DUCT SYSTEM DESIGN SHALL BE SUCH THAT THE SCREWS OR OTHER FASTENERS WILL NOT OBSTRUCT THE FLOW THROUGH THE DUCT SYSTEM.
5- THE LAP JOINTS ARE TO BE IN THE DIRECTION OF THE AIR FLOW.
6- DUCTS INSTALLED WITHIN A WALL SHALL NOT BE INSTALLED WHERE THE FREE AREA OF THE DUCT WILL BE REDUCED IN AREA.
7- DUCT SHALL HAVE BACK DRAFT DAMPER. EXHAUST DUCT LIMITED TO 14'-0" WITH 2 ELBOWS. (UMC 504.3)

DUCT SUPPORT TABLE
A. VERTICAL DUCTS
MAXIMUM SIDE OF RECTANGULAR DUCT | METAL STRAP ANGLE BRACKET | MAXIMUM DIAMETER OF ROUND DUCTS | STRAP
24" | 1" x 1/8" (STRAP) | 10" | 0.047" (NO. 18 GAGE) GALVANIZED STEEL 2" WIDE
36" | 1" x 1" x 1/8" ANGLE | 20" | 0.058" (NO. 16 GAGE) GALVANIZED STEEL 2" WIDE 1
48" | 1 1/8" x 1 1/8" x 1/8" ANGLE | 40" | 1/8" STEEL X 1 1/2" X 1
60" | 1 1/2" x 1 1/2" x 1/8" ANGLE | 60" | 1/8" X 2" X 1
OVER 60" | 2" X 2" X 1/8" ANGLE | OVER 60" | 3/16 STEEL X 2" X 1

B. HORIZONTAL DUCTS
MAXIMUM DIAMETER OF ROUND DUCT OR SIDE OF RECTANGULAR DUCT | HORIZONTAL SUPPORT ANGLE | HANGER
36" | 1-1/2" X 1-1/2" X 1/8" | 1/4" ROUND ROD OR 1" X 1" X 1/8" ANGLE
48" | 2" X 2" X 1/8" | 1/4" ROUND ROD OR 1" X 1" X 1/8" ANGLE
60" | 2" X 2" X 1/8" | 5/16" ROUND ROD OR 1" X 1" X 1/8" ANGLE
84" | 2" X 2" X 1/8" | 3/8" ROUND ROD OR 1" X 1" X 1/8" ANGLE

C. HORIZONTAL-DUCTS-TRAPEZIE-TYPE SUPPORTS
MAXIMUM DIAMETER OF ROUND DUCT OR SIDE OF RECTANGULAR DUCT | HORIZONTAL SUPPORT ANGLE | HANGER
36" | 1-1/2" X 1-1/2" X 1/8" | 1/4" ROUND ROD OR 1" X 1" X 1/8" ANGLE
48" | 2" X 2" X 1/8" | 1/4" ROUND ROD OR 1" X 1" X 1/8" ANGLE
60" | 2" X 2" X 1/8" | 5/16" ROUND ROD OR 1" X 1" X 1/8" ANGLE
84" | 2" X 2" X 1/8" | 3/8" ROUND ROD OR 1" X 1" X 1/8" ANGLE

RESIDENTIAL DUCT SIZING TABLE
AIR VOLUME CFM | DUCT HEIGHT INCHES | EQUIVALENT ROUND DUCT
4" 6" 8" 10" 12"
50 6X4 6"
75 6X4 6"
100 8X4 6X6 6"
125 10X4 6X6 7"
150 10X4 6X6 7"
175 12X4 8X6 8"
200 14X4 8X6 8"
225 16X4 10X8 8"
250 16X4 10X8 9"
275 12X6 8X8 9"
300 12X6 8X8 9"
400 14X6 10X8 10"
500 18X6 12X8 10X10 11"
600 20X8 14X8 12X10 12"
700 24X8 16X8 12X10 12"
800 26X8 18X8 14X10 12X12 13"
900 30X8 20X8 16X10 12X12 14"
1000 22X8 16X10 14X12 14"
1100 24X8 18X10 16X12 15"
1200 26X8 20X10 16X12 16"
1300 28X8 20X10 18X12 16"
1400 30X8 22X10 18X12 16"
1500 24X10 20X12 16"
1600 26X10 20X12 17"
1700 28X10 22X12 17"
1800 28X10 22X12 18"
1900 30X10 22X12 18"
2000 24X12 18"

CONSTRUCTION DETAILS FOR ROUND AND FLAT-OVAL DUCTS (LOW, MEDIUM AND HIGH PRESSURE)
DUCT DIAMETER B. & S. GAGE | MAX WIDTH | LOW PRESSURE | ROUND | FLAT-OVAL | SPIRAL SEAM | LONGITUDINAL SEAM | WELDED FITTINGS | MEDIUM & HIGH PRESSURE | MINIMUM GIRTH | GIRTH JOINTS | GIRTH PRESSURE | GIRTH MAX. SPACING & ANGLE SIZE
UP TO 9" | 24" | 0.019 (26) | 0.024 (24) | 0.019 (26) | 0.024 (24) | 0.030 (22) | 2" SLIP | NONE
9 TO 14" | 24" | 0.019 (26) | 0.024 (24) | 0.024 (24) | 0.030 (22) | 0.036 (20) | 4" SLIP | NONE
14 TO 23" | 22" | 0.030 (24) | 0.024 (24) | 0.030 (22) | 0.036 (20) | 0.036 (20) | 4" SLIP | NONE
23 TO 37" | 20" | 0.030 (22) | 0.036 (20) | 0.030 (22) | 0.036 (20) | 0.036 (20) | 4" SLIP | NONE
37 TO 51" | 18" | 0.036 (20) | 0.047 (18) | 0.036 (20) | 0.036 (20) | 0.047 (18) | 1 1/4" X 1 1/4" X 1/8" FLANGE | 1 1/4" X 1 1/4" X 1/8" ON 72"
51 TO 61" | 16" | 0.047 (18) | 0.058 (16) | 0.047 (18) | 0.047 (18) | 0.047 (18) | 1 1/4" X 1 1/4" X 1/8" FLANGE | 1 1/4" X 1 1/4" X 1/8" ON 72"
61 TO 84" | 14" | 0.058 (16) | 0.070 (14) | 0.058 (16) | 0.058 (16) | 0.058 (16) | 1 1/2" X 1 1/2" X 1/8" FLANGE | 1 1/2" X 1 1/2" X 1/8" ON 48"

SIDEWALL DIFFUSERS TABLE
SIZE IN. | OUTLET VELOCITY | THROW FEET | CFM
10 X 6 | 440 | 8 | 100
12 X 6 | 450 | 9 | 125
14 X 6 | 450 | 10 | 150
16 X 6 | 450 | 11 | 180
20 X 6 | 450 | 12 | 225
24 X 6 | 450 | 14 | 275
30 X 6 | 450 | 15 | 330
24 X 8 | 450 | 16 | 360

SUPPLY DIFFUSER & CEILING RETURN CFM TABLE
SIZE IN. | (CD) CEILING SUPPLY DIFFUSER | (CR) CEILING RETURN GRILLE
8X6 | 0-100 | 6X6 | 0-100
8X8 | 101-225 | 8X8 | 101-150
10X10 | 226-350 | 10X10 | 151-200
12X12 | 351-500 | 12X12 | 201-340
14X14 | 501-680 | 14X14 | 341-450
16X16 | 681-900 | 16X16 | 451-600
18X18 | 901-1120 | 18X18 | 601-800
20X20 | 1121-1395 | 20X20 | 801-1000
22X22 | 1396-1680 | 22X22 | 1001-1400
24X24 | 1681-2000 | 24X24 | 1401-1800

LINEAR SLOT DIFFUSER SCHEDULE (SUPPLY)

MARK | MANUFACTURER | MODEL | FACE SIZE (IN) | NUMBER OF SLOTS | CFM/FT. | TOTAL CFM | PLENUM MODEL | NC (NOISE CRITERIA) | NOTES
LS-1 (UNIT SUPPLY) | TITUS | FL10 | 9'-0" LONG-1" SLOT | 1 | 37 | - | FBPI-10 | <22 | A,B,C,E,F
LS-2 (UNIT SUPPLY) | TITUS | FL15 | 11'-0" LONG-1.5" SLOT | 2 | 103 | - | FBPI-15 | <22 | A,B,C,E,F
LS-3 (UNIT SUPPLY) | TITUS | FL10 | 4'-0" LONG-1" SLOT | 1 | 25 | - | FBPI-10 | <22 | A,B,C,E,F
LS-4 (UNIT SUPPLY) | TITUS | FL10 | 10'-0" LONG-1" SLOT | 1 | 40 | - | FBPI-10 | <22 | A,B,C,E,F
LS-5 (UNIT SUPPLY) | TITUS | FL10 | 10'-0" LONG-1" SLOT | 1 | 47 | - | FBPI-10 | <22 | A,B,C,E,F

LINEAR REGISTER SCHEDULE (RETURN)

MARK | MANUFACTURER | MODEL | FACE SIZE (IN) | NUMBER OF SLOTS | CFM/FT. | TOTAL CFM | PLENUM MODEL | NC (NOISE CRITERIA) | NOTES
LR-1 (UNIT RETURN) | TITUS | FL10 | 9'-0" LONG-1" SLOT | 1 | 37 | - | FBPI-10 | <22 | A,B,C,E,F
LR-2 (UNIT RETURN) | TITUS | FL25 | 15'-0" LONG-2.5" SLOT | 1 | 76 | - | FBPI-25 | <22 | A,B,C,E,F
LR-3 (UNIT RETURN) | TITUS | FL10 | 11'-0" LONG-1" SLOT | 1 | 47 | - | FBPI-10 | <22 | A,B,C,E,F
LR-4 (UNIT RETURN) | TITUS | FL20 | 4'-0" LONG-20" SLOT | 1 | 58 | - | FBPI-20 | <22 | A,B,C,E,F

LINEAR REGISTER SCHEDULE (EXHAUST)

MARK | MANUFACTURER | MODEL | FACE SIZE (IN) | NUMBER OF SLOTS | CFM/FT. | TOTAL CFM | PLENUM MODEL | NC (NOISE CRITERIA) | NOTES
LE-1 (EXHAUST) | TITUS | FL30 | 6'-0" LONG-3" SLOT | 1 | 83 | - | FBPI-30 | <22 | A,B,C,E,F
LE-2 (EXHAUST) | TITUS | FL10 | 5'-0" LONG-1" SLOT | 1 | 40 | - | FBPI-10 | <22 | A,B,C,E,F

- NOTES:
A. FINISH PER ARCHITECTS RECOMMENDATIONS.
B. BRANCH DUCT SIZE SHALL BE SAME AS NECK SIZE UNLESS OTHERWISE SHOWN ON DRAWINGS.
C. BORDER TYPE AND STYLE TO MATCH CEILING CONSTRUCTION, COORDINATE WITH ARCHITECT FOR BORDER TYPE AND STYLE.
D. WITH NO CONTROL PATTERN.
E. WITH CONTROL BLADES.
F. WITH LINED PLENUM BOOT.

FLOOR LINEAR BAR REGISTER SCHEDULE

MARK | MANUFACTURER | MODEL | TYPE | SLOT # | FACE SIZE (IN) | CFM/FT. | PLENUM MODEL | NOTES
ES-1 | CARNES | MODEL CC | - | - | 3' x 3" | 66-100 | * | A,B,C,D,E
ES-2 | CARNES | MODEL CC | - | - | 4' x 4.5" | 150 | * | A,B,C,D,E
EB-2 | CARNES | MODEL CC | - | - | 1' x 2" | 50 | * | A,B,C,D,E

- LEGEND:
PS = FLOOR SUPPLY DIFFUSER
FR = FLOOR RETURN SLOT DIFFUSER
NOTES:
A. BAKED ENAMEL FINISH, WHITE, PAINT PER ARCHITECTS RECOMMENDATIONS.
B. BRANCH DUCT SIZE SHALL BE SAME AS NECK SIZE UNLESS OTHERWISE SHOWN ON DRAWINGS.
C. COORDINATE WITH ARCHITECT FOR FRAME TYPE AND BORDER.
D. NO LEVEL SHALL BE BELOW 22
E. PENCIL PROOF.

PLAN REVIEW ACCEPTANCE
FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.
[X] BUILDING [X] STRUCTURAL
[X] MECHANICAL [X] PLUMBING
[X] ELECTRICAL [X] ENERGY
[] ACCESSIBILITY [] FIRE
PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.
MEM DATE 07/11/18
WEST COAST CODE CONSULTANTS, INC.

POWDER MOUNTAIN HOUSE

OWNER: TOM BUTTGENBACH
8045 EASET COPPER CREST
EDEN, UT 84310

ARCHITECT: TOM WISCOMBE ARCHITECTURE
STRUCTURAL ENGINEER: NOUS
CIVIL ENGINEER: TALISMAN
MECHANICAL / PLUMBING: SHAMIM ENGINEERING CONSULTANTS INC
ELECTRICAL: ABRARI ENGINEERING
NGBS CONSULTING: ARGENTO/GRAHAM
GEOTECHNICAL: IGES
LANDSCAPE ARCHITECT: LDG
LIGHTING DESIGNER: KGM

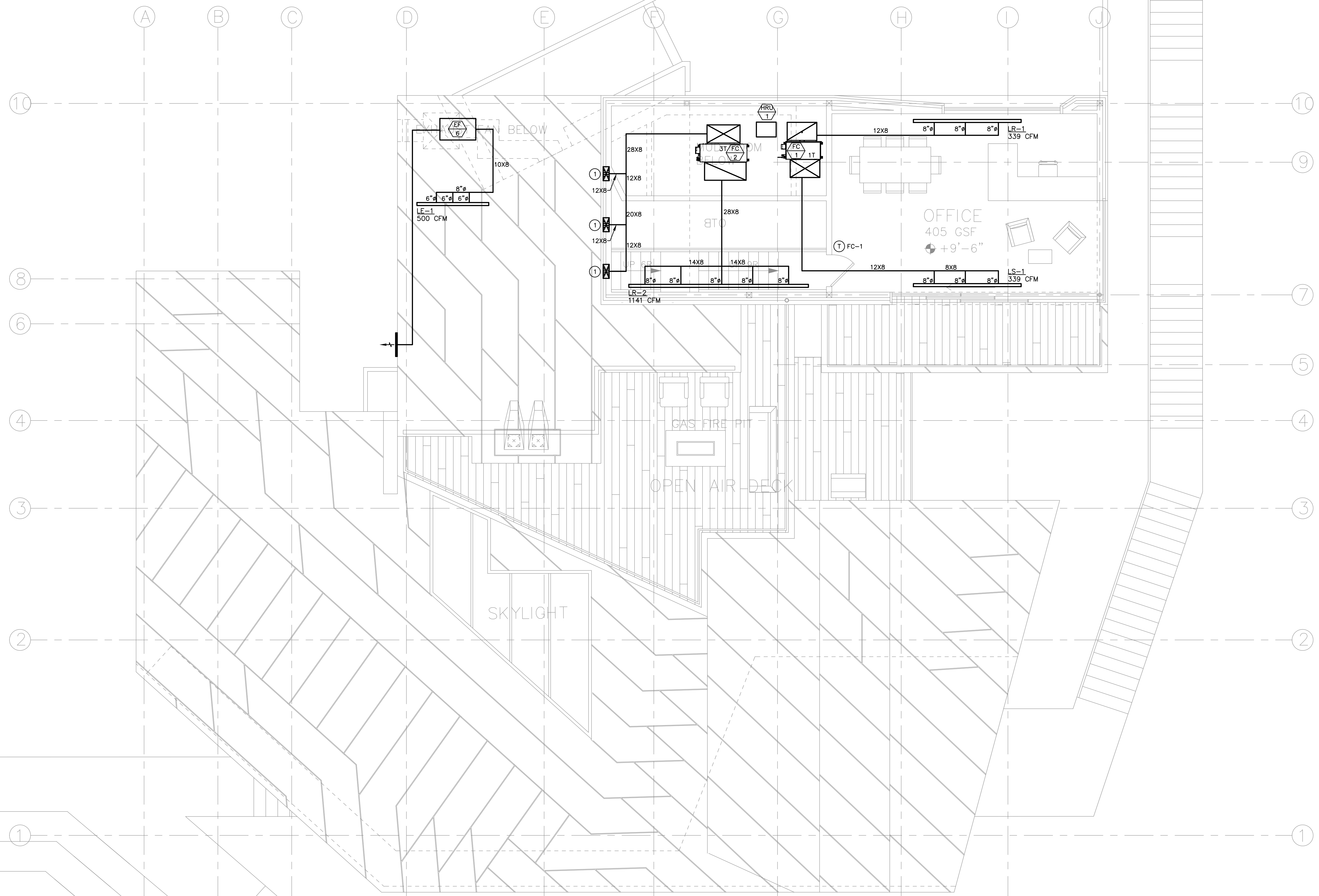


SCHEDULES, NOTES, & LEGEND

REVISIONS: BY: DATE: DATE: 05/05/2018
SCALE: 1/4" = 1'-0" DRAWN: K.S.
SHEET: M1.1

- NOTES:**
- AIR INLETS THAT ARE PART OF THE VENTILATION DESIGN SHALL BE LOCATED A MINIMUM OF 10 FEET FROM KNOWN SOURCES OF CONTAMINATION SUCH AS A STACK VENT AND EXHAUST TERMINATION. THE INTAKE SHALL BE PLACED SO THAT ENTERING AIR IS NOT OBSTRUCTED. FORCED AIR INLETS SHALL BE PROVIDED WITH RODENT/INSECT SCREENS (MESH NOT LARGER THAN 1/2 INCH).
 - PROVIDE LINED SUPPLY AIR AND RETURN AIR PLENUM.

- NUMBERED NOTES:**
- 14X6 SUPPLY DUCT DOWN TO SIDEWALL DIFFUSER.



PLAN REVIEW ACCEPTANCE
 FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.

<input checked="" type="checkbox"/> BUILDING	<input checked="" type="checkbox"/> STRUCTURAL
<input checked="" type="checkbox"/> MECHANICAL	<input checked="" type="checkbox"/> PLUMBING
<input checked="" type="checkbox"/> ELECTRICAL	<input checked="" type="checkbox"/> ENERGY
<input type="checkbox"/> ACCESSIBILITY	<input type="checkbox"/> FIRE

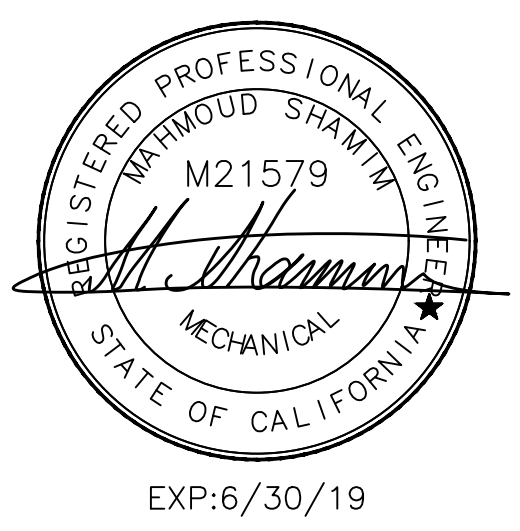
PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.

BY: **MEM** DATE: 07/11/18
 WEST COAST CODE CONSULTANTS, INC.

POWDER MOUNTAIN HOUSE

OWNER:
TOM BUTTGENBACH
 8645 EASET COPPER CREST
 EDEN, UT 84310

ARCHITECT: TOM WISCOMBE ARCHITECTURE <small>2424 WILSHIRE BLVD., SUITE 48 LOS ANGELES, CA 90057 (213) 674-2238 WWW.TOMWISCOMBE.COM</small>	STRUCTURAL ENGINEER: NOUS <small>527 W 7TH STREET LOS ANGELES, CA 90014 (213) 627-6887 WWW.NOUSENGINEERING.COM</small>	CIVIL ENGINEER: TALISMAN <small>527 W 7TH STREET MURRAY, UT 84107 (801) 745-1300 WWW.TALISMANOVILL.COM</small>	MECHANICAL / PLUMBING: SHAMIM <small>5520 CORBIN AVE, SUITE 300 IRVINE, CA 92618 (949) 788-6778 WWW.SHAMIMENGINEERING.COM</small>	ELECTRICAL: ABRARI <small>CLENDALE, CA (714) 458-7894 WWW.ABRARI.COM</small>	NGBS CONSULTING: ARGENTO/GRAHAM <small>911 WEST 7TH STREET, 10TH FLOOR LOS ANGELES, CA 90017 (323) 536-2578 WWW.ARGENTOGRAHAM.COM</small>	GEOTECHNICAL: IGES <small>2702 SOUTH 1030 WEST SUITE 10 SALT LAKE CITY, UT 84020 (801) 270-9400 WWW.IGESINC.COM</small>	LANDSCAPE ARCHITECT: LDG <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1255</small>	LIGHTING DESIGNER: KGM <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1255 WWW.KGMLIGHTING.COM</small>
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PENTHOUSE LEVEL

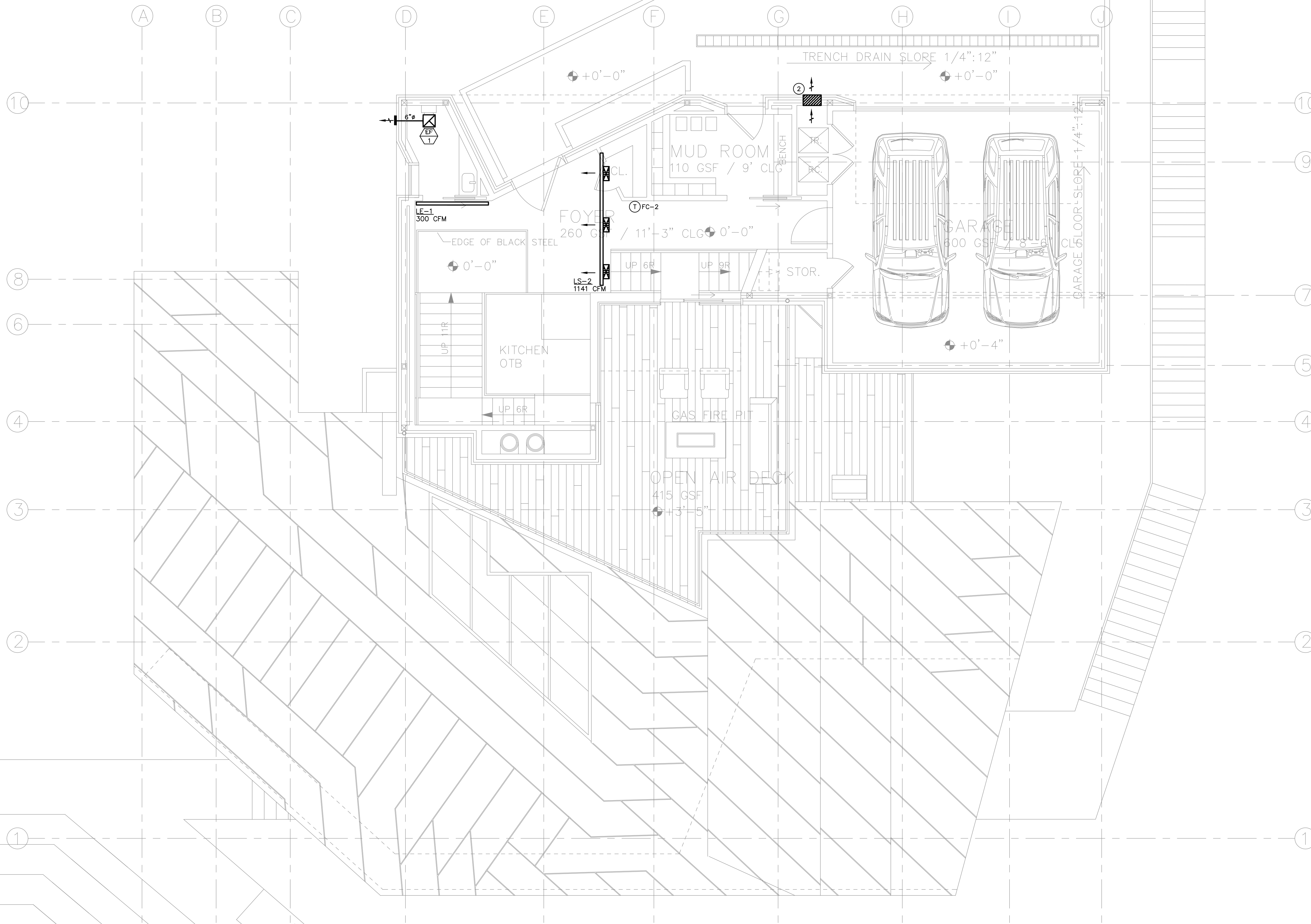
REVISIONS:	BY:	DATE:	DATE:
			05/05/2018
			SCALE: 1/4" = 1'-0"
			DRAWN: K.S.
			SHEET: M2.0

NOTES:

- 1- AIR INLETS THAT ARE PART OF THE VENTILATION DESIGN SHALL BE LOCATED A MINIMUM OF 10 FEET FROM KNOWN SOURCES OF CONTAMINATION SUCH AS A STACK VENT AND EXHAUST TERMINATION. THE INTAKE SHALL BE PLACED SO THAT ENTERING AIR IS NOT OBSTRUCTED. FORCED AIR INLETS SHALL BE PROVIDED WITH RODENT/INSECT SCREENS (MESH NOT LARGER THAN 1/2 INCH).
- 2- PROVIDE LINED SUPPLY AIR AND RETURN AIR PLENUM.

NUMBERED NOTES:

- ① 14X6 SUPPLY DUCT DOWN TO SIDEWALL DIFFUSER.
- ② 18X18 LOUVER.



PLAN REVIEW ACCEPTANCE
 FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.

<input checked="" type="checkbox"/> BUILDING	<input checked="" type="checkbox"/> STRUCTURAL
<input checked="" type="checkbox"/> MECHANICAL	<input checked="" type="checkbox"/> PLUMBING
<input checked="" type="checkbox"/> ELECTRICAL	<input checked="" type="checkbox"/> ENERGY
<input type="checkbox"/> ACCESSIBILITY	<input type="checkbox"/> FIRE

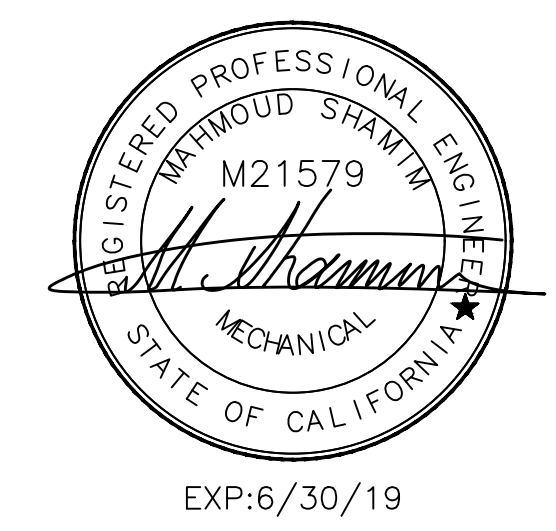
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BY: **MEM** DATE: 07/11/18
 WEST COAST CODE CONSULTANTS, INC.

POWDER MOUNTAIN HOUSE

OWNER: **TOM BUTTGENBACH**
 8645 EASET COPPER CREST
 EDEN, UT 84310

ARCHITECT: TOM WISCOMBE ARCHITECTURE <small>2454 WILSHIRE BLVD., SUITE 48 LOS ANGELES, CA 90057 (213) 674-2238 WWW.TOMWISCOMBE.COM</small>	STRUCTURAL ENGINEER: NOUS <small>527 W 7TH STREET LOS ANGELES, CA 90014 (213) 627-6887 WWW.NOUSENGINEERING.COM</small>	CIVIL ENGINEER: TALISMAN <small>527 W 7TH STREET MURRAY, UT 84107 (801) 745-1300 WWW.TALISMANCIVIL.COM</small>	MECHANICAL / PLUMBING: SHAMIM <small>5520 CORBIN AVE, SUITE 300 FARMERS, CA 91336 (818) 788-6778 WWW.SHAMIMENGINEERING.COM</small>	ELECTRICAL: ABRARI ENGINEERING <small>CLENDALE, CA (714) 456-7894 WWW.ABRARI.COM</small>	NGBS CONSULTING: ARGENTO/GRAHAM <small>911 WEST 7TH STREET, 10TH FLOOR LOS ANGELES, CA 90017 (323) 536-2578 WWW.ARGENTOGRAHAM.COM</small>	GEOTECHNICAL: IGES <small>2702 SOUTH 1030 WEST SUITE 10 SALT LAKE CITY, UT 84120 (801) 270-9400 WWW.IGESINC.COM</small>	LANDSCAPE ARCHITECT: LDG <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1255</small>	LIGHTING DESIGNER: KGM <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1255 WWW.KGMLIGHTING.COM</small>
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ENTRY LEVEL

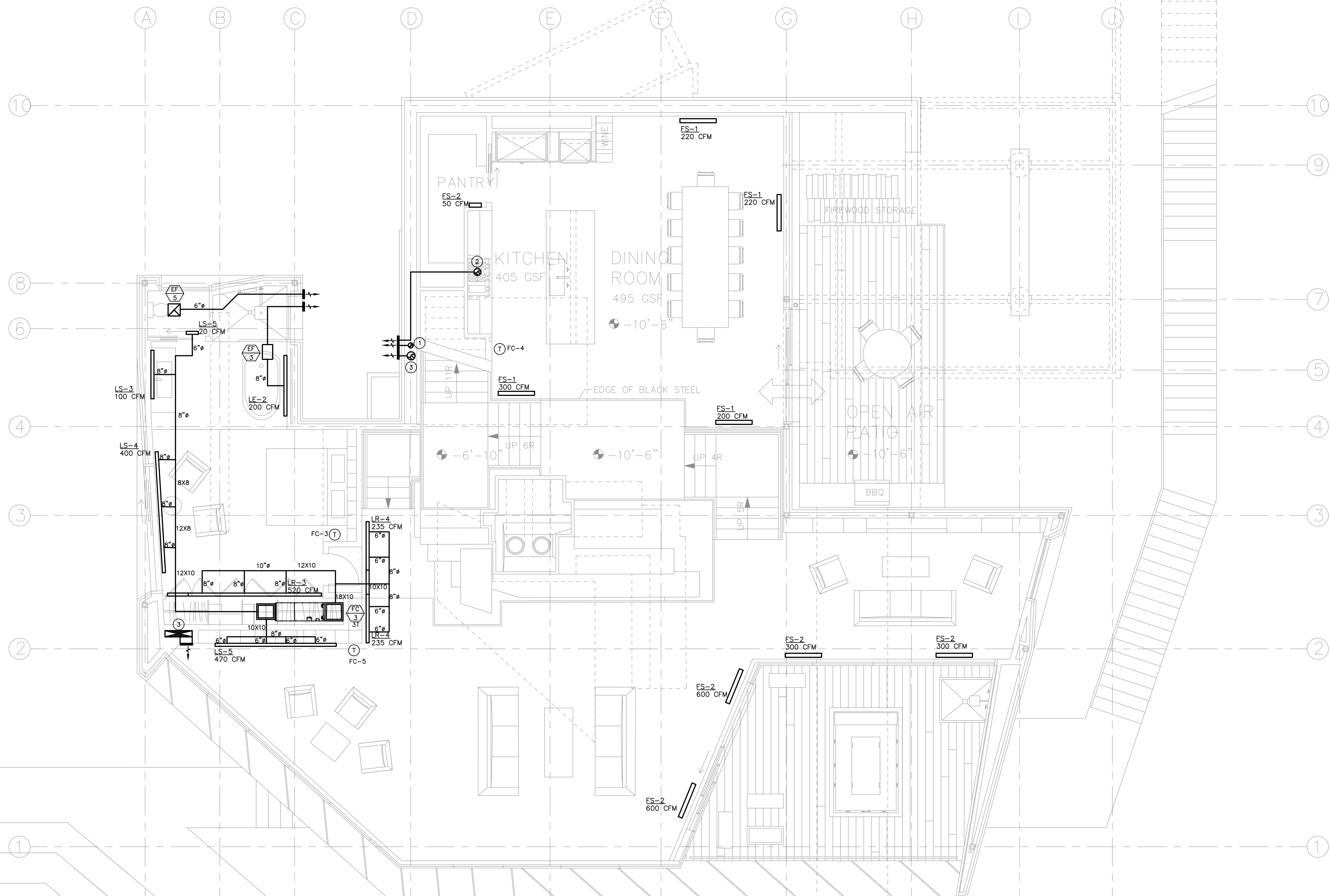
REVISIONS:	BY:	DATE:	DATE:
			05/05/2018
			SCALE: 1/4" = 1'-0"
			DRAWN: K.S.
			SHEET: M2.0

NOTES:

- 1- AIR INLETS THAT ARE PART OF THE VENTILATION DESIGN SHALL BE LOCATED A MINIMUM OF 10 FEET FROM KNOWN SOURCES OF CONTAMINATION SUCH AS A STACK VENT AND EXHAUST TERMINATION. THE INTAKE SHALL BE PLACED SO THAT ENTERING AIR IS NOT OBSTRUCTED. FORCED AIR INLETS SHALL BE PROVIDED WITH RODENT/INSECT SCREENS (MESH NOT LARGER THAN 1/2 INCH).
- 2- PROVIDE LINED SUPPLY AIR AND RETURN AIR PLENUM.
- 3- DRYER EXHAUSTS SHALL TERMINATE AT LEAST 3 FEET FROM PROPERTY LINE AND THREE FEET FROM OPENINGS INTO ANY BUILDING.
- 4- NO LOUVERS ALLOWED ON DRYER DISCHARGE.
- 5- CONCENTRIC WATER HEATER COMBUSTION INTAKE AND EXHAUST FLUE TO EXTERIOR WALL. VERIFY EXACT SIZE WITH MANUFACTURER.

NUMBERED NOTES:

- ① 5" DRYER EXHAUST DUCT FROM BELOW TO TERMINATE W/ WEATHERCAP.
- ② 7" (OR 3-1/4"x10") KITCHEN HOOD EXHAUST DUCT UTR WITH ROOF CAP OR TO SIDE WALL WITH WALL CAP. VERIFY DUCT SIZES PER MANUFACTURER'S REQUIREMENTS.
- ③ 8" EXHAUST DUCT FROM BELOW TO TERMINATE WITH WEATHERCAP.



PLAN REVIEW ACCEPTANCE
 FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.

<input checked="" type="checkbox"/> BUILDING	<input checked="" type="checkbox"/> STRUCTURAL
<input checked="" type="checkbox"/> MECHANICAL	<input checked="" type="checkbox"/> PLUMBING
<input checked="" type="checkbox"/> ELECTRICAL	<input checked="" type="checkbox"/> ENERGY
<input type="checkbox"/> ACCESSIBILITY	<input type="checkbox"/> FIRE

PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.

BY: **MEM** DATE: 07/11/18
 WEST COAST CODE CONSULTANTS, INC.

POWDER MOUNTAIN HOUSE

OWNER:
TOM BUTTGENBACH
 8645 EASET COPPER CREST
 EDEN, UT 84310

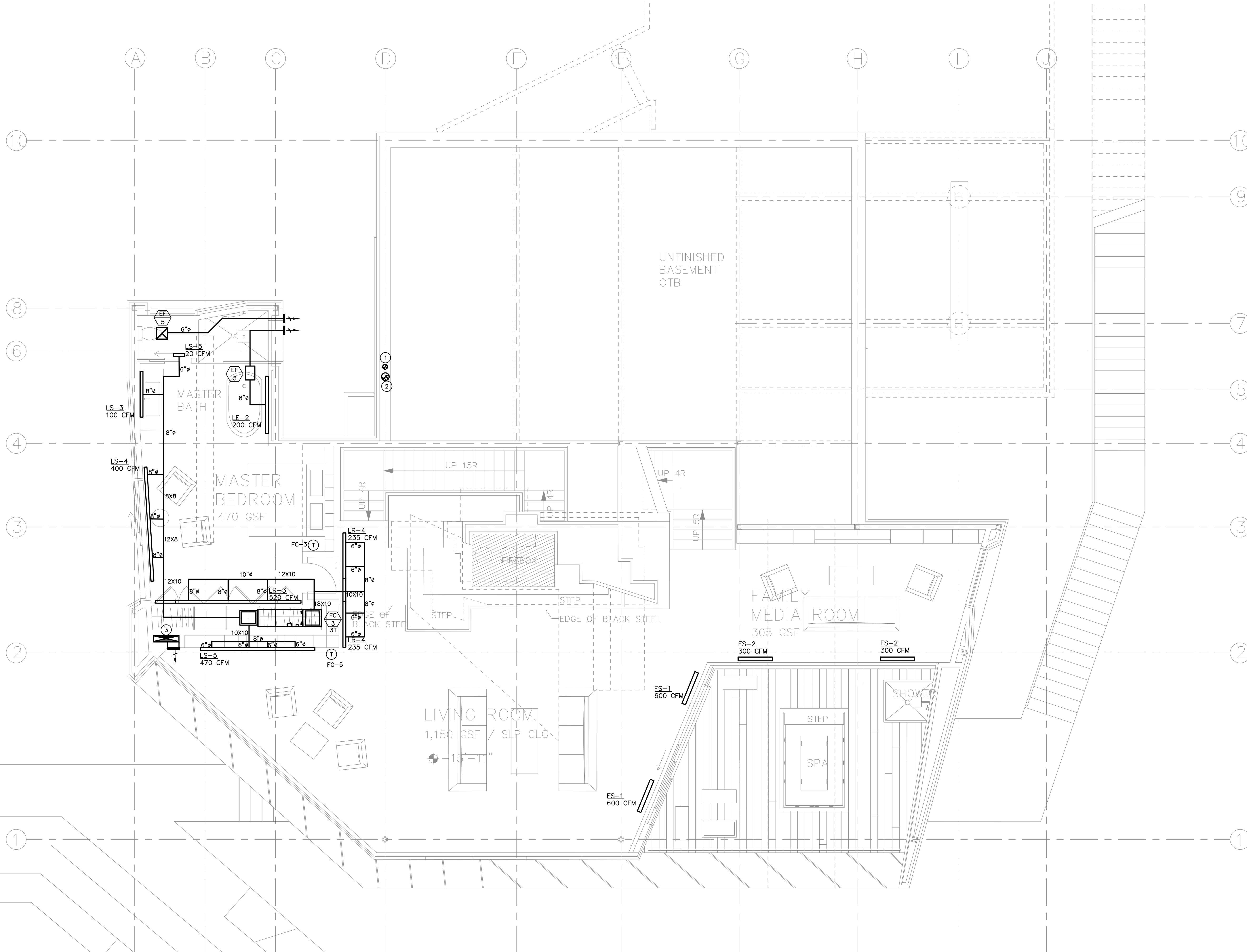
ARCHITECT: TOM WISCOMBE ARCHITECTURE <small>2454 WILSHIRE BLVD., SUITE 48 LOS ANGELES, CA 90057 (213) 674-2238 WWW.TOMWISCOMBE.COM</small>	STRUCTURAL ENGINEER: NOUS <small>527 W 7TH STREET LOS ANGELES, CA 90014 (213) 627-6887 WWW.NOUSENGINEERING.COM</small>	CIVIL ENGINEER: TALISMAN <small>5277 SOUTH STARR STREET MURRAY, UT 84107 (801) 745-1300 WWW.TALISMANCIVIL.COM</small>	MECHANICAL / PLUMBING: SHAMIM <small>5520 CORBIN AVE, SUITE 300 IRVING, CA 91356 (916) 788-6778 WWW.SHAMIMENGINEERING.COM</small>	ELECTRICAL: ABRARI ENGINEERING <small>CLENDALE, CA (707) 456-7894 WWW.ABRARI.COM</small>	NGBS CONSULTING: ARGENTO/GRAHAM <small>911 WEST 7TH STREET, 10TH FLOOR LOS ANGELES, CA 90017 (323) 536-2578 WWW.ARGENTOGRAHAM.COM</small>	GEOTECHNICAL: IGES <small>2702 SOUTH 1030 WEST SUITE 10 SALT LAKE CITY, UT 84020 (801) 270-9400 WWW.IGESINC.COM</small>	LANDSCAPE ARCHITECT: LDG <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1295</small>	LIGHTING DESIGNER: KGM <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1295 WWW.KGMLIGHTING.COM</small>
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EXP:6/30/19

MEZZANINE LEVEL

REVISIONS:	BY:	DATE:	DATE:
			05/05/2018
			SCALE: 1/4" = 1'-0"
			DRAWN: K.S.
			SHEET: M2.2



NOTES:

- 1- AIR INLETS THAT ARE PART OF THE VENTILATION DESIGN SHALL BE LOCATED A MINIMUM OF 10 FEET FROM KNOWN SOURCES OF CONTAMINATION SUCH AS A STACK VENT AND EXHAUST TERMINATION. THE INTAKE SHALL BE PLACED SO THAT ENTERING AIR IS NOT OBSTRUCTED. FORCED AIR INLETS SHALL BE PROVIDED WITH RODENT/INSECT SCREENS (MESH NOT LARGER THAN 1/8 INCH).
- 2- PROVIDE LINED SUPPLY AIR AND RETURN AIR PLENUM.
- 3- DRYER EXHAUSTS SHALL TERMINATE AT LEAST 3 FEET FROM PROPERTY LINE AND THREE FEET FROM OPENINGS INTO ANY BUILDING.
- 4- NO LOUVERS ALLOWED ON DRYER DISCHARGE.
- 5- CONCENTRIC WATER HEATER COMBUSTION INTAKE AND EXHAUST FLUE TO EXTERIOR WALL. VERIFY EXACT SIZE WITH MANUFACTURER.

NUMBERED NOTES:

- ① 5" DRYER EXHAUST DUCT UP.
- ② 8" EXHAUST DUCT FROM BELOW TO TERMINATE WITH WEATHERCAP.
- ③ 2 SQ. FT. FREE AREA LOUVERED FOR OUTSIDE AIR.

PLAN REVIEW ACCEPTANCE
 FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.

<input checked="" type="checkbox"/> BUILDING	<input checked="" type="checkbox"/> STRUCTURAL
<input checked="" type="checkbox"/> MECHANICAL	<input checked="" type="checkbox"/> PLUMBING
<input checked="" type="checkbox"/> ELECTRICAL	<input checked="" type="checkbox"/> ENERGY
<input checked="" type="checkbox"/> ACCESSIBILITY	<input type="checkbox"/> FIRE

PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.

BY: **MEM** DATE: 07/11/18
 WEST COAST CODE CONSULTANTS, INC.

POWDER MOUNTAIN HOUSE

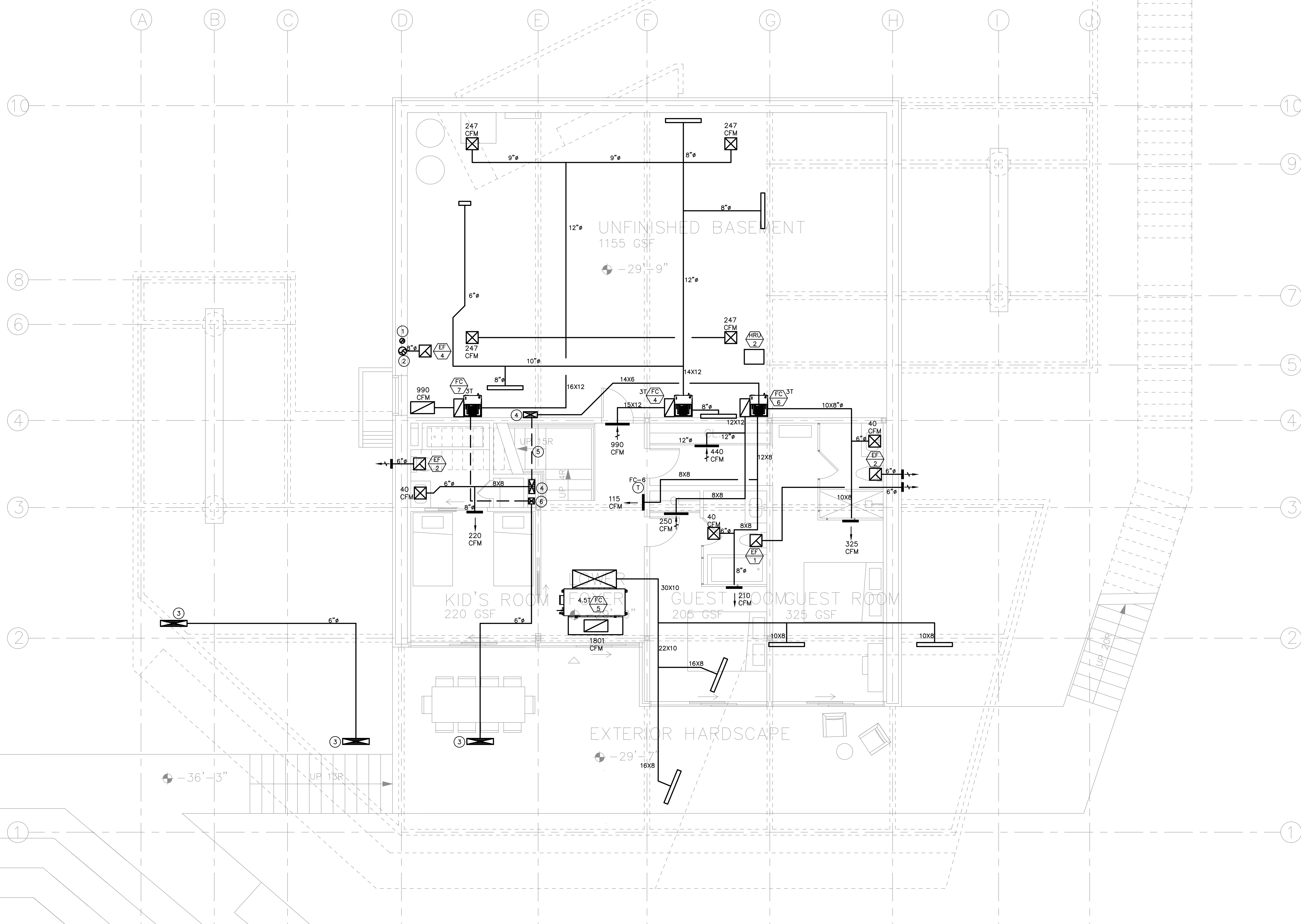
OWNER: **TOM BUTTGENBACH**
 8645 EASET COPPER CREST
 EDEN, UT 84310

ARCHITECT: TOM WISCOMBE ARCHITECTURE <small>2454 WILSHIRE BLVD., SUITE 48 LOS ANGELES, CA 90057 (213) 674-2238 WWW.TOMWISCOMBE.COM</small>	STRUCTURAL ENGINEER: NOUS <small>527 W 7TH STREET LOS ANGELES, CA 90014 (213) 627-6887 WWW.NOUSENGINEERING.COM</small>	CIVIL ENGINEER: TALISMAN <small>527 W 7TH STREET MURRAY, UT 84107 (801) 745-1300 WWW.TALISMANCIVIL.COM</small>	MECHANICAL / PLUMBING: SHAMIM ENGINEERING CONSULTANTS INC <small>5520 CORBIN AVE, SUITE 300 FRODOVA, CA 91356 (916) 788-6778 WWW.SHAMIMENGINEERING.COM</small>	ELECTRICAL: ABRARI ENGINEERING <small>CLENDALE, CA (714) 456-7894 WWW.ABRARI.COM</small>	NGBS CONSULTING: ARGENTO/GRAHAM <small>911 WEST 7TH STREET, 10TH FLOOR LOS ANGELES, CA 90017 (323) 536-2578 WWW.ARGENTOGRAHAM.COM</small>	GEOTECHNICAL: IGES <small>2702 SOUTH 1030 WEST SUITE 10 SALT LAKE CITY, UT 84020 (801) 270-9400 WWW.IGESINC.COM</small>	LANDSCAPE ARCHITECT: LDG <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1255</small>	LIGHTING DESIGNER: KGM <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1255 WWW.KGMLIGHTING.COM</small>
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LIVING ROOM LEVEL

REVISIONS:	BY:	DATE:	DATE:
			05/05/2018
			SCALE: 1/4" = 1'-0"
			DRAWN: K.S.
			SHEET: M2.3



- NOTES:**
- AIR INLETS THAT ARE PART OF THE VENTILATION DESIGN SHALL BE LOCATED A MINIMUM OF 10 FEET FROM KNOWN SOURCES OF CONTAMINATION SUCH AS A STACK VENT AND EXHAUST TERMINATION. THE INTAKE SHALL BE PLACED SO THAT ENTERING AIR IS NOT OBSTRUCTED. FORCED AIR INLETS SHALL BE PROVIDED WITH RODENT/INSECT SCREENS (MESH NOT LARGER THAN 1/8 INCH).
 - PROVIDE LINED SUPPLY AIR AND RETURN AIR PLENUM.
 - DRYER EXHAUSTS SHALL TERMINATE AT LEAST 3 FEET FROM PROPERTY LINE AND THREE FEET FROM OPENINGS INTO ANY BUILDING.
 - NO LOUVERS ALLOWED ON DRYER DISCHARGE.
 - CONCENTRIC WATER HEATER COMBUSTION INTAKE AND EXHAUST FLUE TO EXTERIOR WALL. VERIFY EXACT SIZE WITH MANUFACTURER.

- NUMBERED NOTES:**
- 5" DRYER EXHAUST DUCT UP.
 - 8" EXHAUST DUCT UP.
 - 2 SQ. FT. FREE AREA LOUVER FOR OUTSIDE AIR TO BE DUCTED TO THE UNIT AND OUTSIDE AIR CHASE.
 - 14X6 SUPPLY DUCT TO RUN UNDER STAIR AND TO COME UP TO CEILING.
 - TO RUN UNDER STAIRCASE CAVITY.
 - 6X6 OUTSIDE AIR DUCT TO GO DOWN AND TO TRAVEL IN STAIR CAVITY TO UNIT.

PLAN REVIEW ACCEPTANCE
 FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.

<input checked="" type="checkbox"/> BUILDING	<input checked="" type="checkbox"/> STRUCTURAL
<input checked="" type="checkbox"/> MECHANICAL	<input checked="" type="checkbox"/> PLUMBING
<input checked="" type="checkbox"/> ELECTRICAL	<input checked="" type="checkbox"/> ENERGY
<input checked="" type="checkbox"/> ACCESSIBILITY	<input type="checkbox"/> FIRE

PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.

BY: MEM DATE: 07/11/18
 WEST COAST CODE CONSULTANTS, INC.

POWDER MOUNTAIN HOUSE

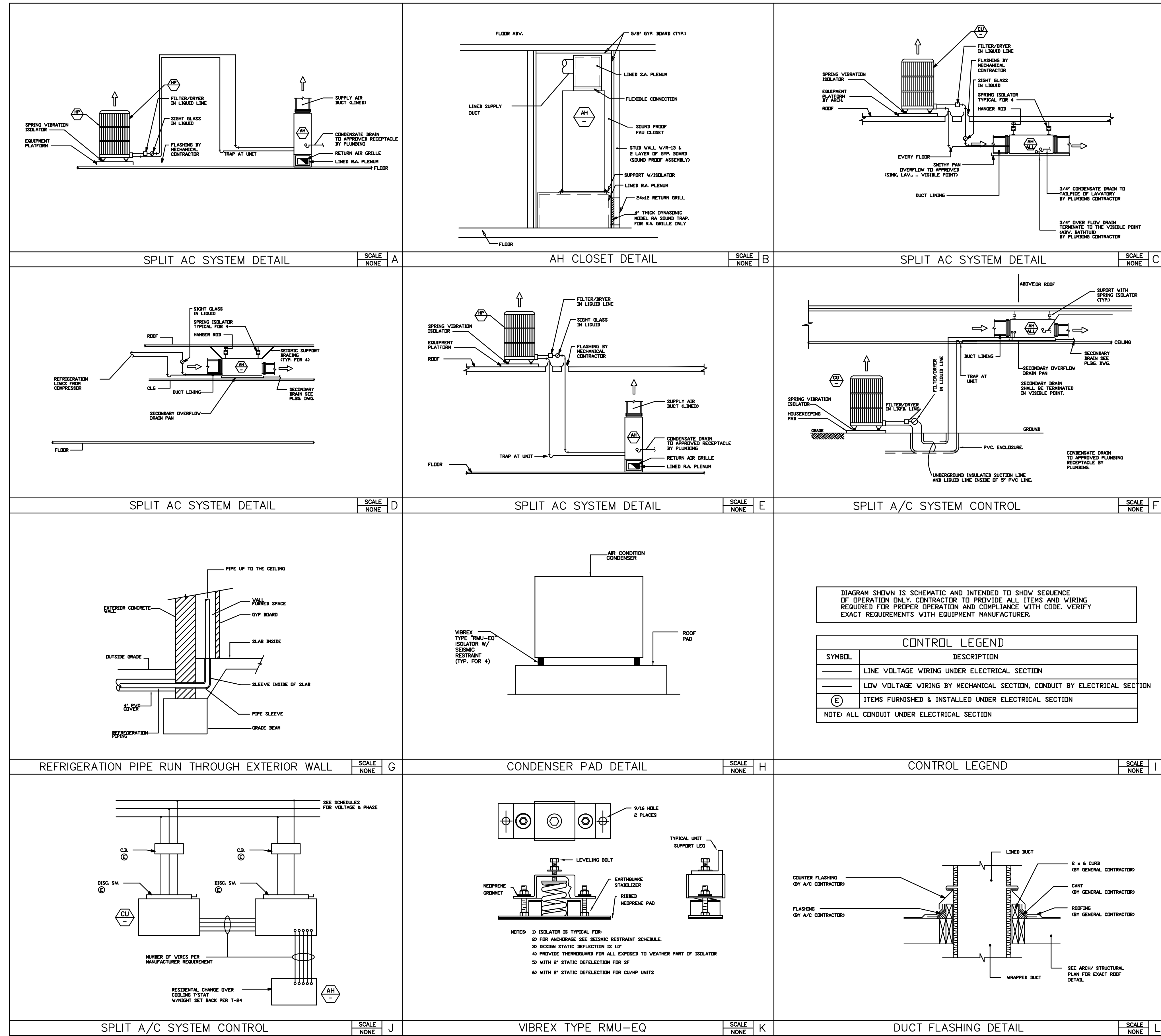
OWNER: TOM BUTTGENBACH
 8645 EASET COPPER CREST
 EDEN, UT 84310

ARCHITECT: TOM WISCOMBE ARCHITECTURE <small>2454 WILSHIRE BLVD., SUITE 4B LOS ANGELES, CA 90007 (213) 674-2238 WWW.TOMWISCOMBE.COM</small>	STRUCTURAL ENGINEER: NOUS <small>527 W 7TH STREET LOS ANGELES, CA 90014 (213) 627-6887 WWW.NOUSENGINEERING.COM</small>	CIVIL ENGINEER: TALISMAN <small>5217 WEST STAVE STREET MURRAY, UT 84107 (801) 745-1300 WWW.TALISMANCIVIL.COM</small>	MECHANICAL / PLUMBING: SHAMIM <small>5520 CORBIN AVE, SUITE 300 IRVINE, CA 92618 (949) 788-6778 WWW.SHAMIMENGINEERING.COM</small>	ELECTRICAL: ABRARI <small>CLENDALE, CA (707) 456-7894 WWW.ABRARI.COM</small>	NGBS CONSULTING: ARGENTO/GRAHAM <small>811 WEST 7TH STREET, 10TH FLOOR LOS ANGELES, CA 90017 (323) 536-2578 WWW.ARGENTOGRAHAM.COM</small>	GEOTECHNICAL: IGES <small>2702 SOUTH 1030 WEST SUITE 10 SALT LAKE CITY, UT 84120 (801) 270-9400 WWW.IGESINC.COM</small>	LANDSCAPE ARCHITECT: LDG <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1295</small>	LIGHTING DESIGNER: KGM <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1295 WWW.KGMLIGHTING.COM</small>
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BASEMENT LEVEL

REVISIONS:	BY:	DATE:	DATE:
			05/05/2018
		SCALE:	DRAWN:
		1/4" = 1'-0"	K.S.
		SHEET:	M2.4



PLAN REVIEW ACCEPTANCE
 FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.

BUILDING STRUCTURAL
 MECHANICAL PLUMBING
 ELECTRICAL ENERGY
 ACCESSIBILITY FIRE

PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.

BY: MEM DATE: 07/11/18
 WEST COAST CODE CONSULTANTS, INC.

POWDER MOUNTAIN HOUSE

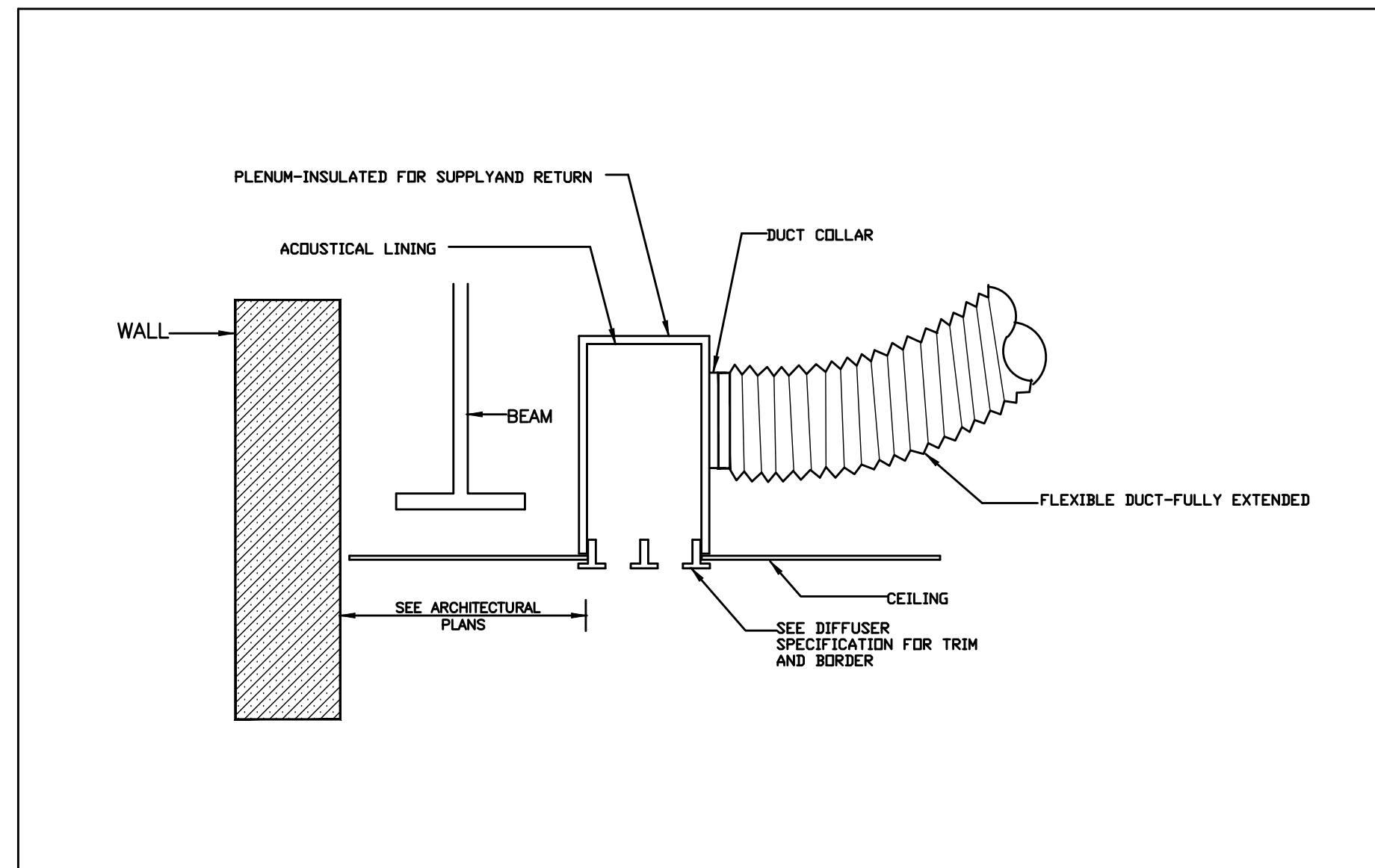
OWNER: **TOM BUTTGENBACH**
 8645 EASET COPPER CREST
 EDEN, UT 84310

ARCHITECT: TOM WISCOMBE ARCHITECTURE <small>2454 WILSHIRE BLVD., SUITE 4B LOS ANGELES, CA 90007 (213) 674-2238 WWW.TOMWISCOMBE.COM</small>	STRUCTURAL ENGINEER: NOUS <small>527 W 7TH STREET MURRAY, UT 84107 LOS ANGELES, CA 90014 (213) 627-6887 WWW.NOUSENGINEERING.COM</small>	CIVIL ENGINEER: TALISMAN <small>527 W 7TH STREET MURRAY, UT 84107 LOS ANGELES, CA 90014 (213) 627-6887 WWW.TALISMANCIVIL.COM</small>	MECHANICAL / PLUMBING: SHAMIM ENGINEERING CONSULTANTS INC <small>5520 CORBIN AVE, SUITE 300 THUNDERBOLT, CA 91506 (916) 788-6778 WWW.SHAMIMENGINEERING.COM</small>	ELECTRICAL: ABRARI ENGINEERING <small>OLENDALE, CA (714) 456-7894 WWW.ABRARI.COM</small>	NGBS CONSULTING: ARGENTO/GRAHAM <small>811 WEST 7TH STREET, 10TH FLOOR LOS ANGELES, CA 90017 (323) 536-2578 WWW.ARGENTOGRAHAM.COM</small>	GEOTECHNICAL: IGES <small>2702 SOUTH 1030 WEST SUITE 10 SALT LAKE CITY, UT 84120 (801) 270-9400 WWW.IGESINC.COM</small>	LANDSCAPE ARCHITECT: LDG <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1255</small>	LIGHTING DESIGNER: KGM <small>328 W 200 S SUITE 102 SALT LAKE CITY, UT 84101 (801) 583-1255 WWW.KGMLIGHTING.COM</small>
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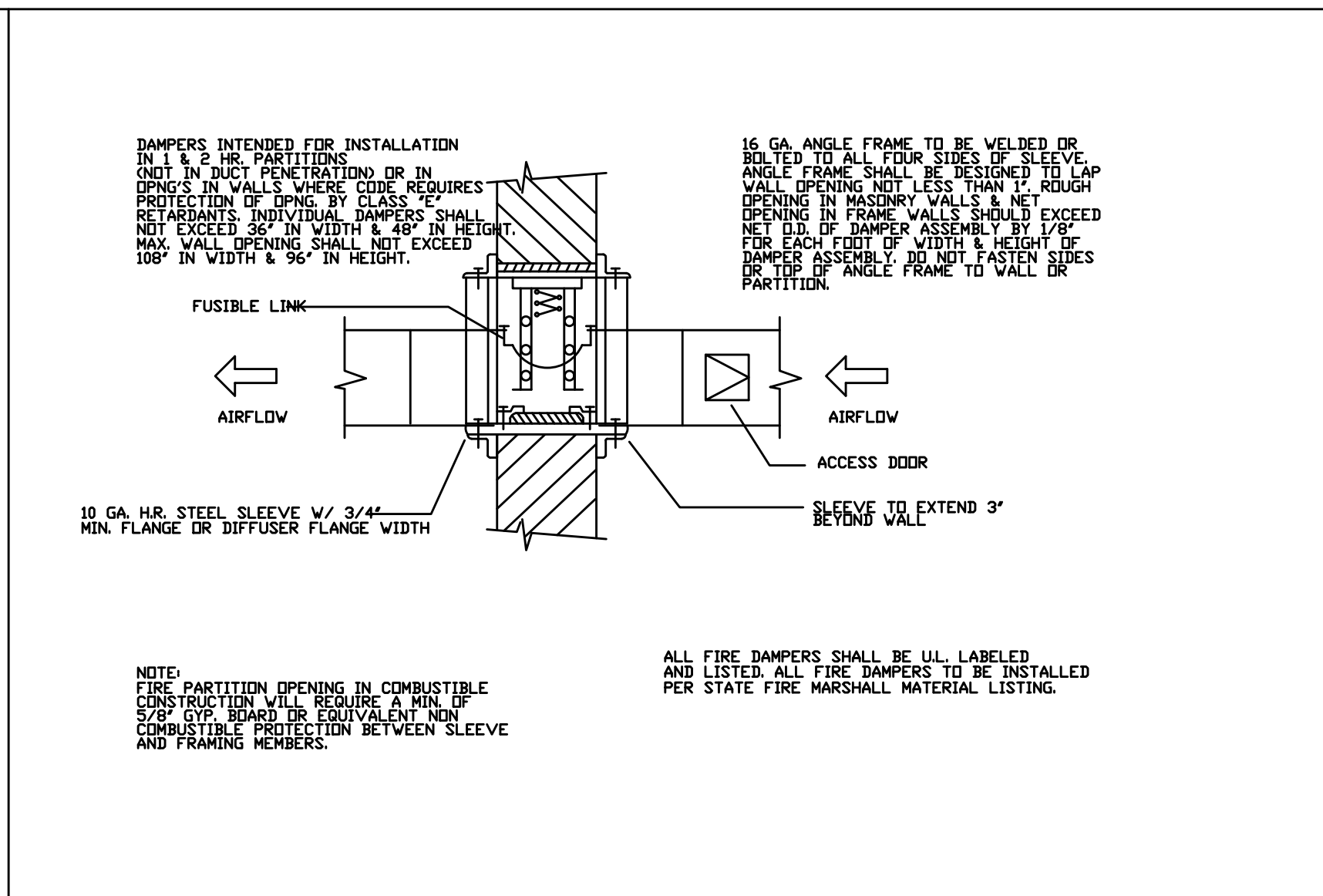
DETAIL SHEET

REVISIONS:	BY:	DATE:	DATE:
			05/05/2018
			SCALE: 1/4" = 1'-0"
			DRAWN: K.S.
			SHEET: M3.0



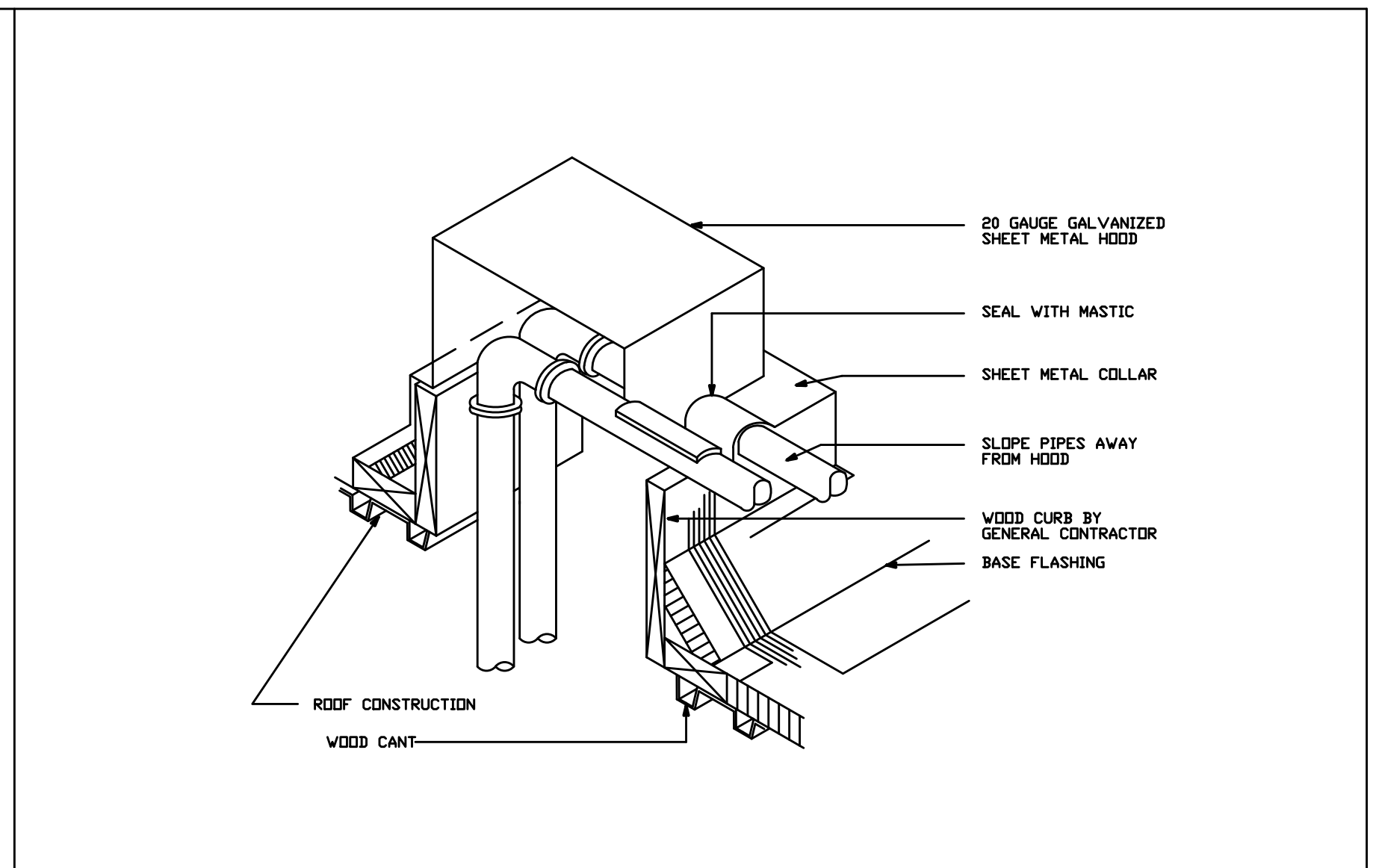
SCHEMATIC LINEAR DIFFUSER CONNECTION DETAIL

SCALE NONE A



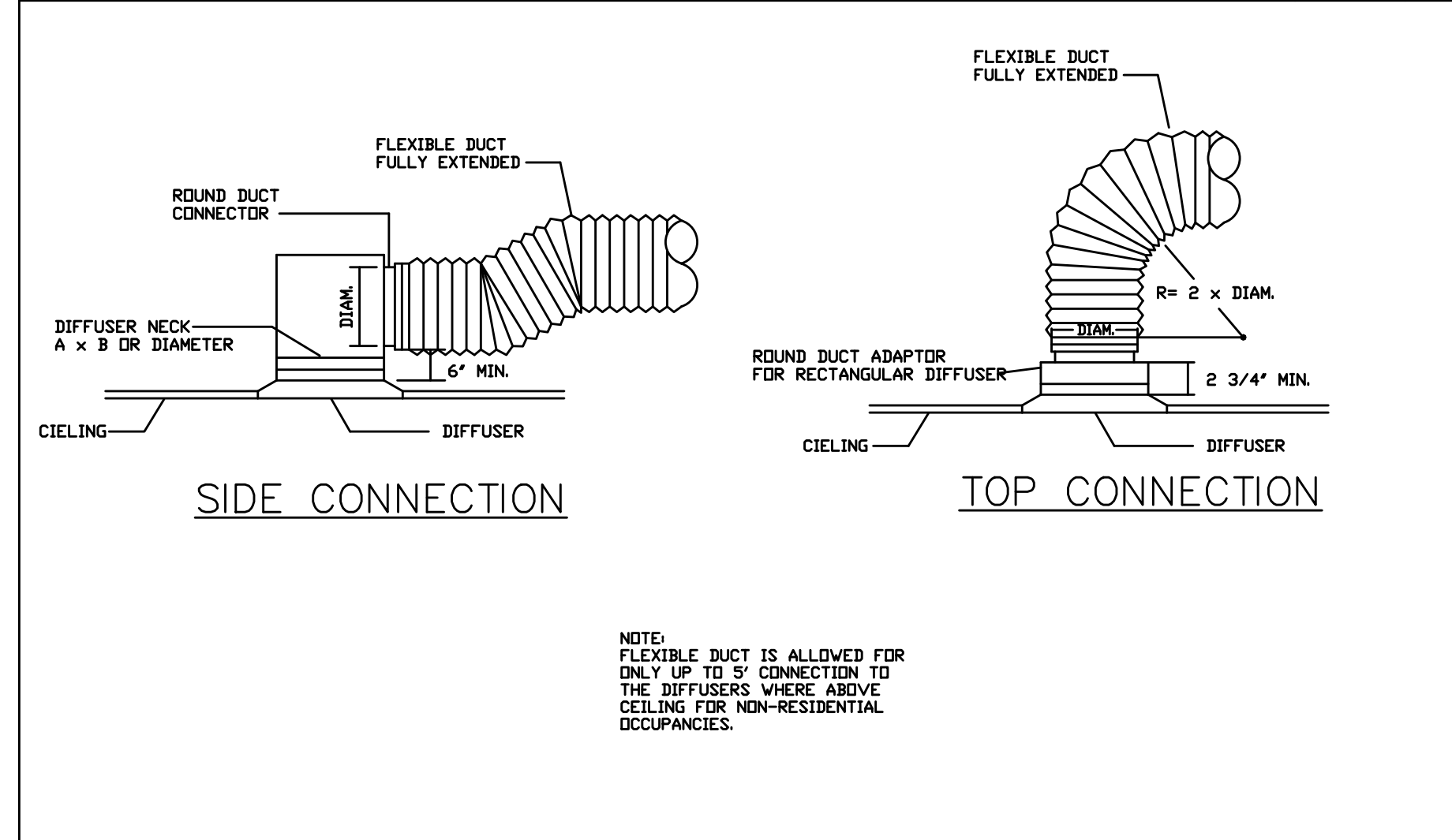
FIRE DAMPER DETAIL

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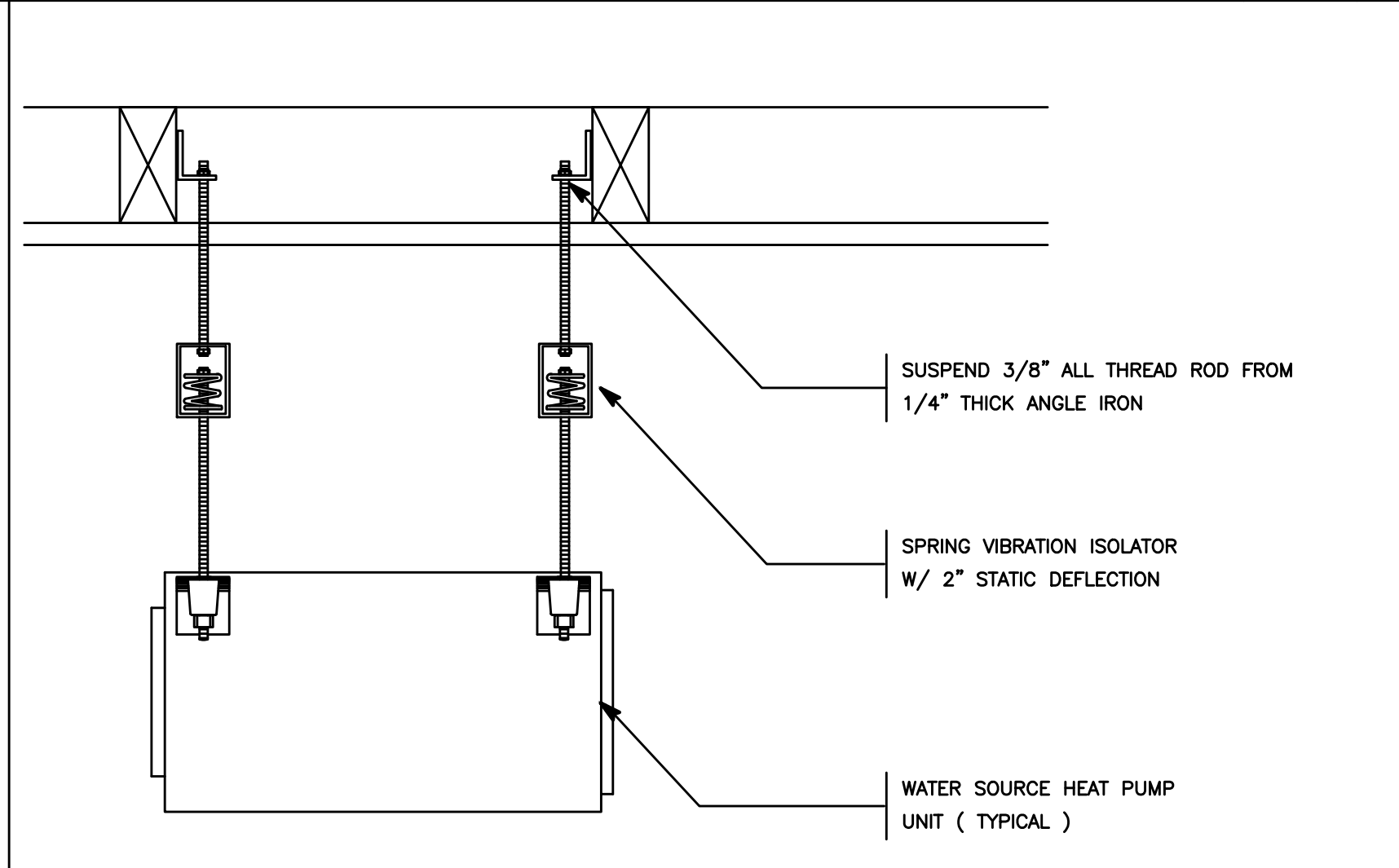
PIPE THRU ROOF DETAIL

SCALE NONE C



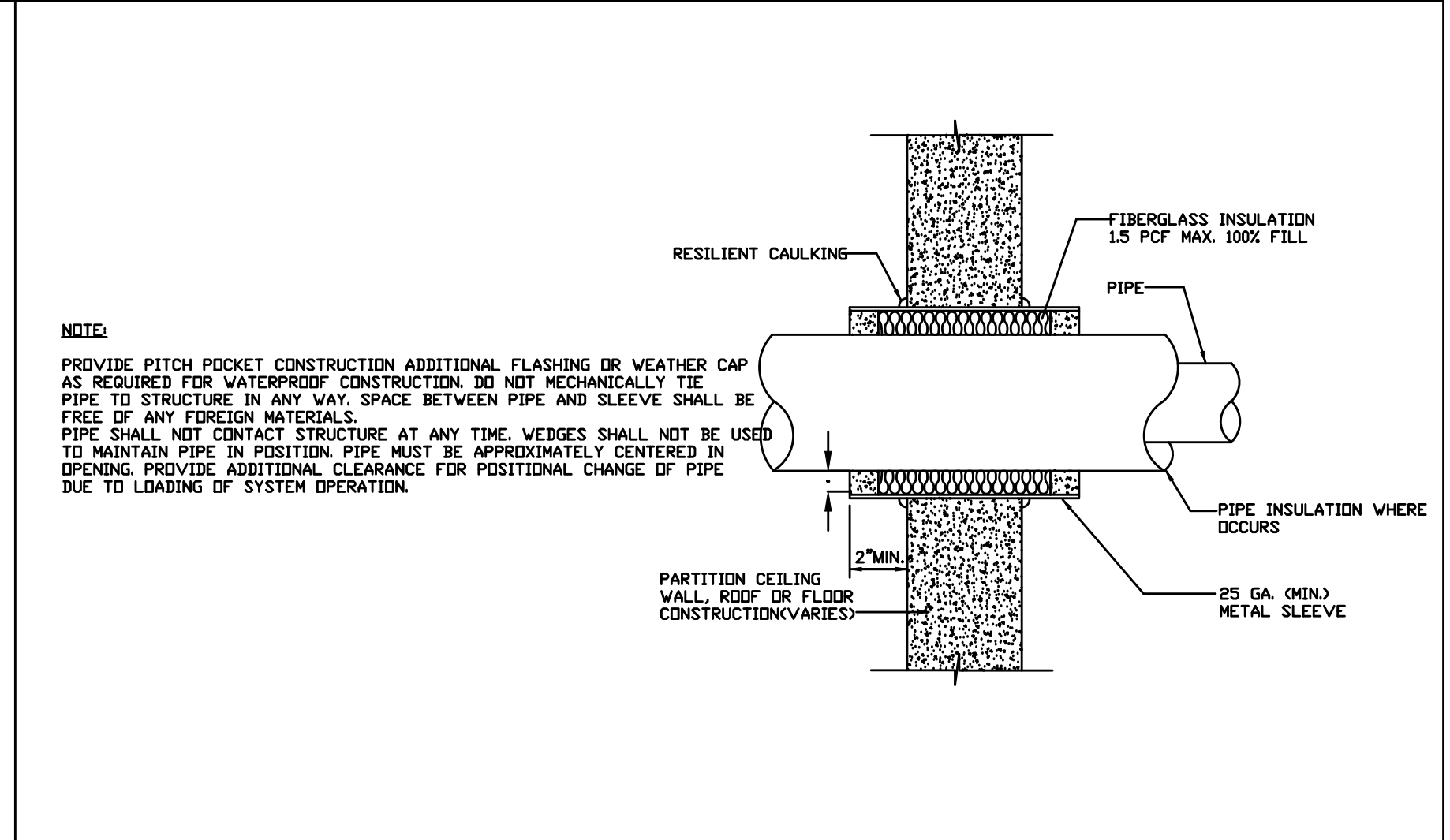
DIFFUSER CONNECTION

SCALE NONE D



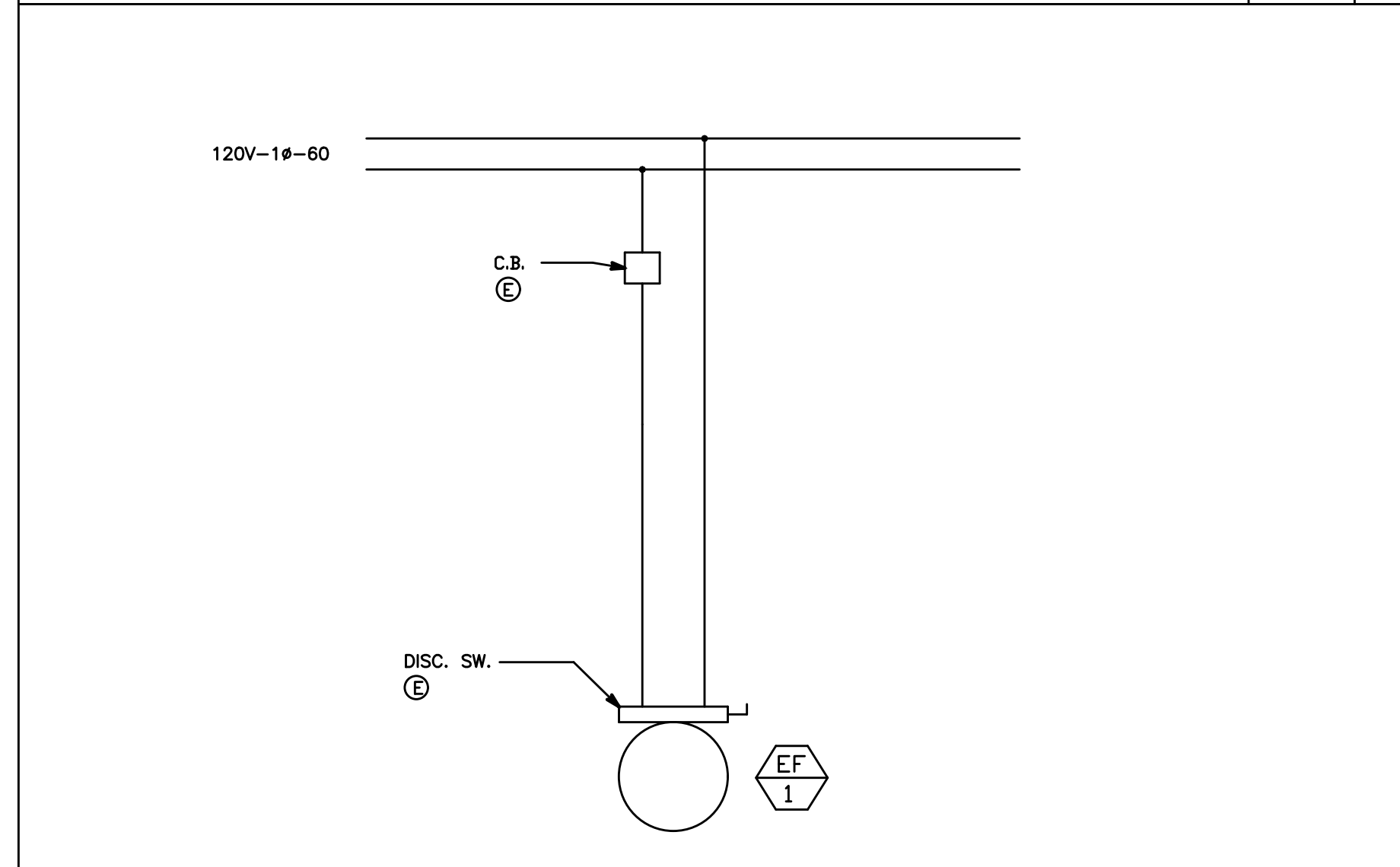
EXHAUST FAN W/ SPRING VIBRATION ISOLATOR

SCALE NONE E



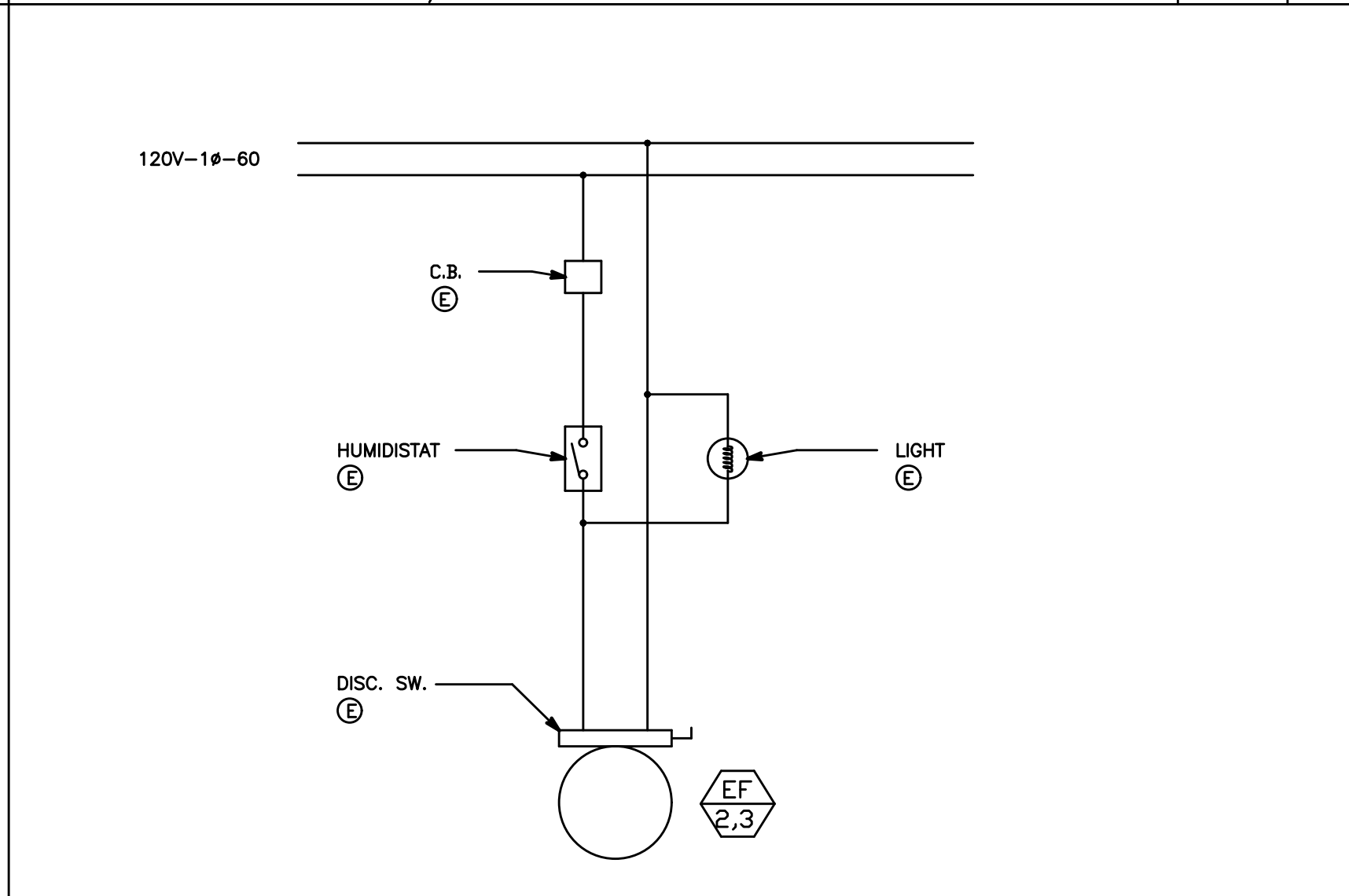
PIPE PENETRATION DETAIL

SCALE NONE F



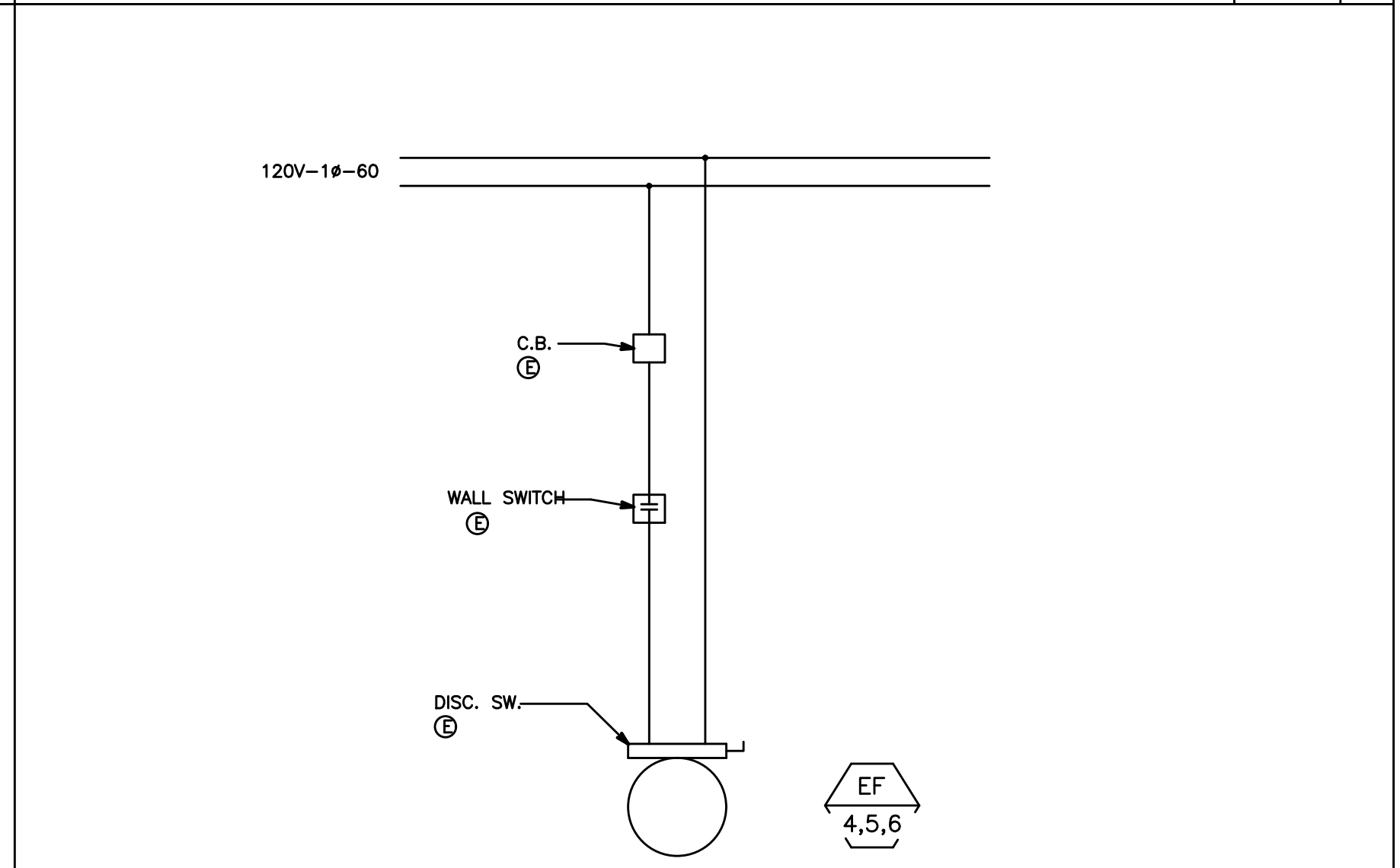
EXHAUST FAN CONTROL DIAGRAM

SCALE NONE G



EXHAUST FAN CONTROL DIAGRAM

SCALE NONE H



EXHAUST FAN CONTROL DIAGRAM

SCALE NONE I

PLAN REVIEW ACCEPTANCE FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.

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BY: MEM DATE: 07/11/18
 WEST COAST CODE CONSULTANTS, INC.

POWDER MOUNTAIN HOUSE

OWNER:
TOM BUTTGENBACH
 8645 EASET COPPER CREST
 EDEN, UT 84310

ARCHITECT:
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 2454 WILSHIRE BLVD., SUITE 48
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 (213) 674-2238
 WWW.TOMWISCOMBE.COM

STRUCTURAL ENGINEER:
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 527 W 7TH STREET
 LOS ANGELES, CA 90014
 (213) 627-6887
 WWW.NOUSENGINEERING.COM

CIVIL ENGINEER:
TALISMAN
 527 W 7TH STREET
 MURRAY, UT 84107
 (801) 745-1300
 WWW.TALISMANCIVIL.COM

MECHANICAL / PLUMBING:
SHAMIM
 5520 CORBIN AVE, SUITE 300
 PASADENA, CA 91356
 (818) 788-6778
 WWW.SHAMIMENGINEERING.COM

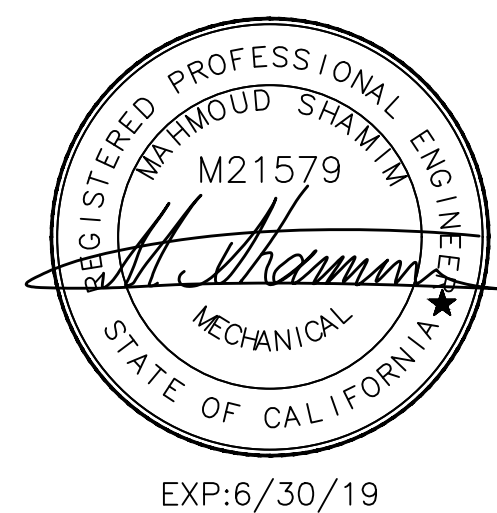
ELECTRICAL:
ABRARI ENGINEERING
 CLENDALE, CA
 (714) 456-7894
 WWW.ABRARI.COM

NGBS CONSULTING:
ARGENTO/GRAHAM
 811 WEST 7TH STREET, 10TH FLOOR
 LOS ANGELES, CA 90017
 (323) 536-2578
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GEOTECHNICAL:
IGES
 2702 SOUTH 1030 WEST SUITE 10
 SALT LAKE CITY, UT 84120
 (801) 270-9400
 WWW.IGESINC.COM

LANDSCAPE ARCHITECT:
LDG
 328 W 200 S SUITE 102
 SALT LAKE CITY, UT 84101
 (801) 583-1255

LIGHTING DESIGNER:
KGM
 3529 W 200 S SUITE 102
 SALT LAKE CITY, UT 84101
 (801) 583-1255
 WWW.KGMLIGHTING.COM



DETAIL SHEET

REVISIONS:	BY:	DATE:	DATE:
			05/05/2018
			SCALE: 1/4" = 1'-0"
			DRAWN: K.S.
			SHEET: M3.1