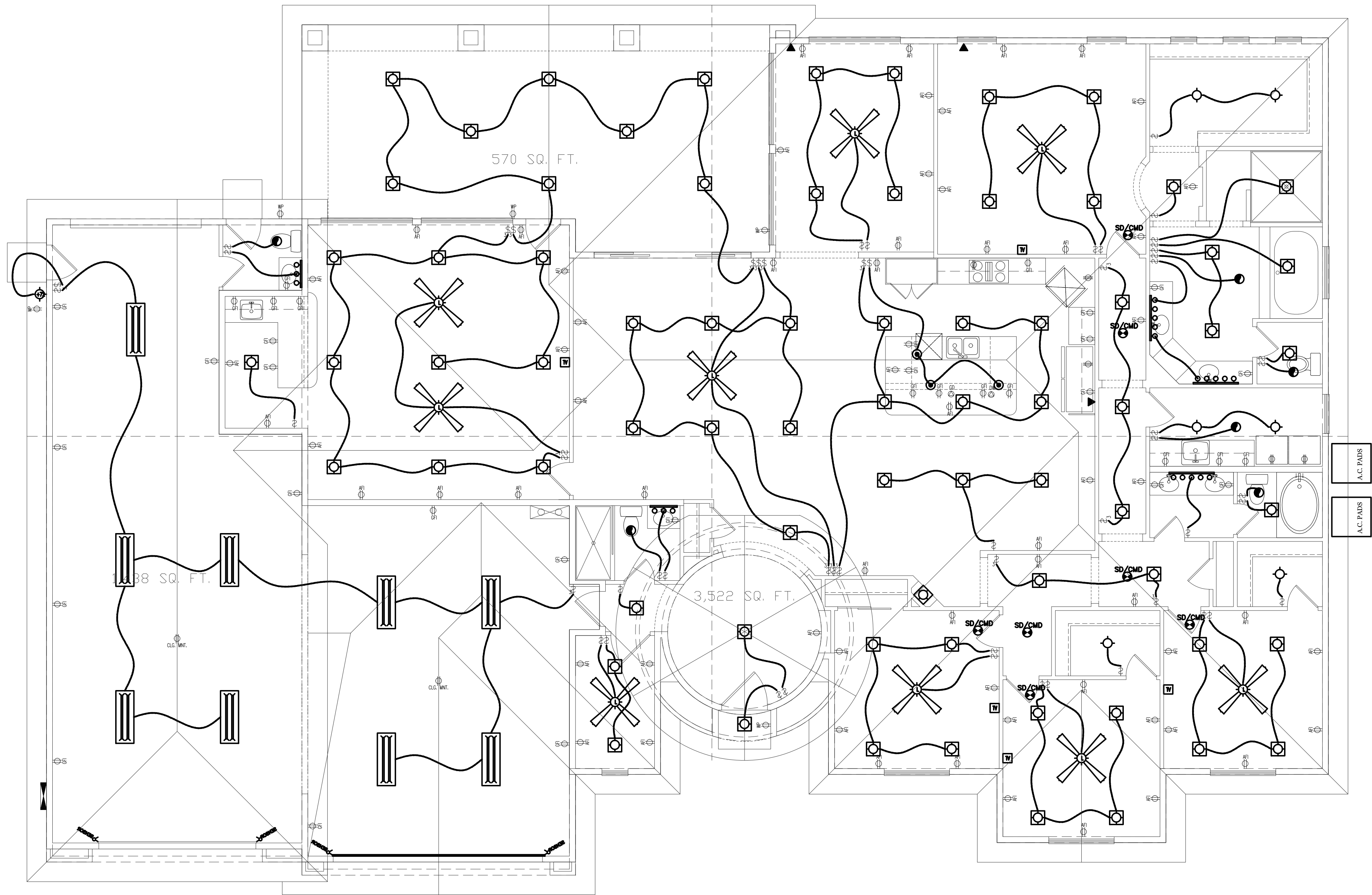




ELEC. FIXTURES SCHEDULE	
	110 VOLT DUPLEX OUTLET
	110 VOLT DUPLEX OUTLET PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER
	110 VOLT DUPLEX GROUND FAULT INTERRUPT OUT.
	220 VOLT OUTLET
	110 VOLT SPLIT WIRE DUPLEX OUTLET (1/2 HOT)
	110 VOLT WEATHER PROOF OUTLET
	DISHWASHER OUTLET
	GARAGE DISPOSAL OUTLET
	CEILING LIGHT - PENDANT
	CEILING LIGHT - FLUSH MOUNT
	WALL MOUNT SCONCE
	RECESSED CEILING 'CAY' LIGHT
	RECESSED CEILING 'CAY' LIGHT (4FT IN ALL BEDROOMS & CLOSETS & BEDRM)
	RECESSED CEILING 'CAY' LIGHT (WATERPROOF)
	LOW VOLT FM SPOT LIGHT
	RECESSED CEILING 'CAY' LIGHT (OPTIONAL)
	3 LIGHT BHR
	5 LIGHT BHR
	2 LIGHT 24" FLOURESCENT FIXTR
	2 LIGHT 48" FLOURESCENT FIXTR
	2 LIGHT 48" FLOURESCENT FIXTR RECESSED IN CEILING
	CEILING FAN WITH LIGHT
	CEILING FAN ONLY (NO LIGHT)
	CEILING EXHAUST FAN
	CEILING MOUNTED MULTI - SMOKE/CARBON MONOXIDE DETECTOR
	SWITCH
	3-WAY SWITCH
	4-WAY SWITCH
	DIMMER SWITCH
	FAN SWITCH
	TELEPHONE JACK WITH OR DATA LINE (CAT-5 OR CAT-6) SEE OWNER/BUILDER FOR LOCATION
	TELEVISION JACK (CABLE READY)
	THERMOSTAT
	GARAGE OPENER BUTTON
	GAS VALVE
	GARAGE DOOR SENSOR-LT
	GARAGE DOOR SENSOR-RT
	JUNCTION BOX
	ELECTRICAL PANEL

NOTE: ALL RECEPTACLES SPECIFIED IN 210.52 THAT ARE NON-LOCKING SHALL BE TAMPER-RESISTANT RECEPTACLES NEC404.12.

NOTE: A MINIMUM OF 80% OF PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS 2018 EDC R404.1 2018 CODE.

NOTE: ALL 120-VOLT, SINGLE PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORES, LIBRARIES, DEKS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. (NEC ARTICLE 210.12(A)).

NOTE: ALL 120-VOLT, SINGLE PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORES, LIBRARIES, DEKS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. (NEC ARTICLE 210.12(A)).

NOTE: ALL RECEPTACLES SPECIFIED IN 210.52 THAT ARE NON-LOCKING SHALL BE TAMPER-RESISTANT RECEPTACLES NEC404.12.

NOTE: A MINIMUM OF 80% OF PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS 2018 EDC R404.1 2018 CODE.

REVISIONS

NO.	DATE
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NAME:
ASSURED DEVELOPMENT

SITE ADDRESS:
736 NAPLES ST. (LOT3)
HENDERSON, NV. 89015

DESIGN BUILD ELECTRIC
LIC# 60151

PHONE:
(702) 868-0900

MAILING ADDRESS:
PO BOX 530778
HENDERSON
NV 89053

DESIGN BUILD ELECTRIC
NV Lic # 60151
Ben Goffney

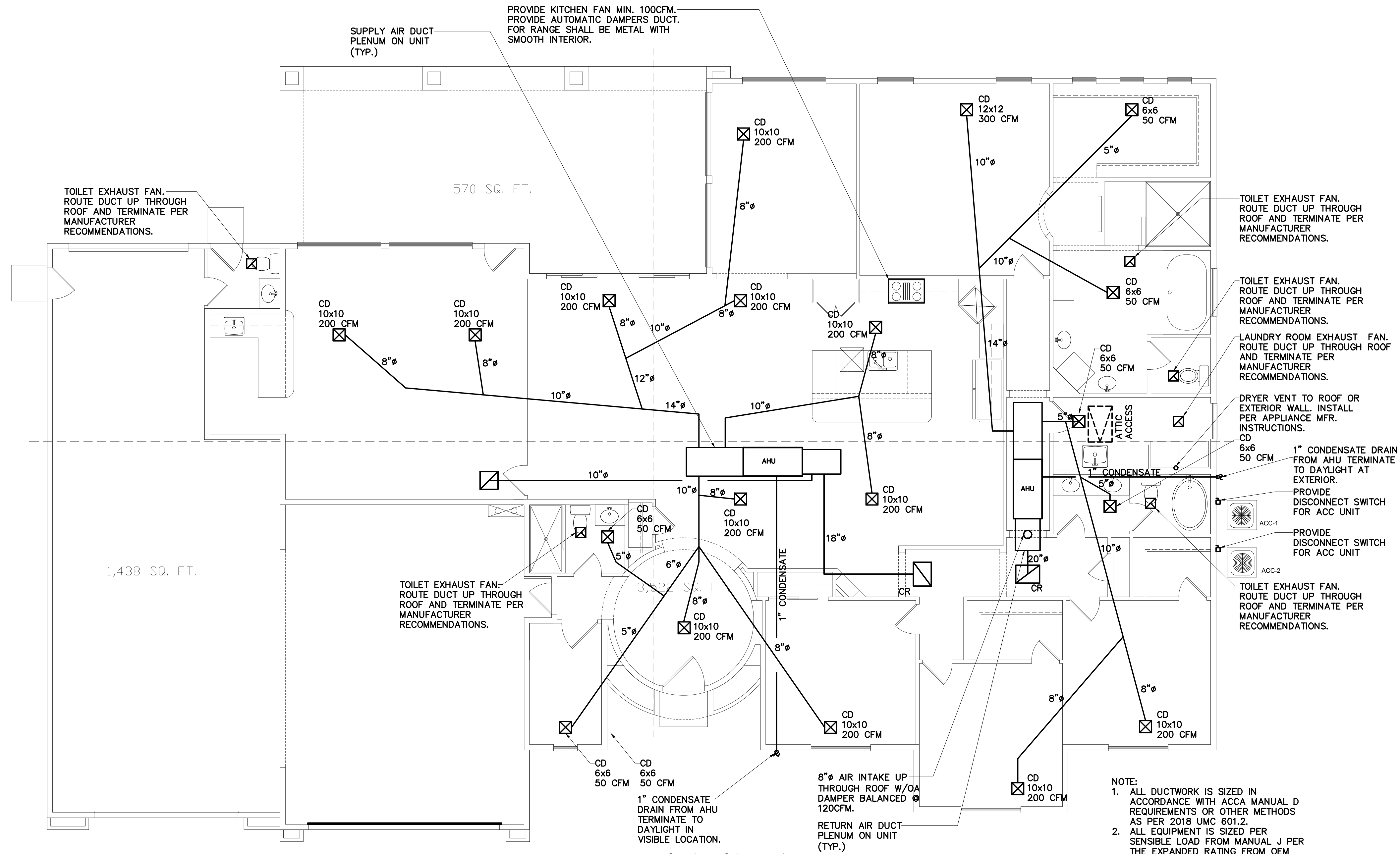
ELECTRICAL PLAN

ORIGINAL DATE:
05/01/20

SCALE:
3/16" = 1'-0"

LIVABLE AREA:
3,522 SQ. FT.

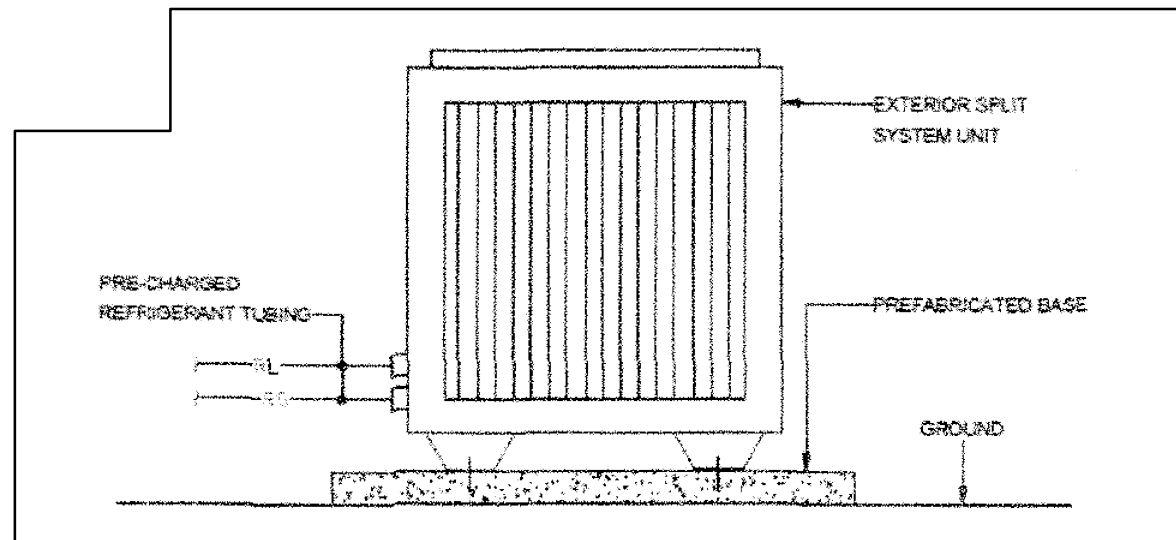
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MECHANICAL PLAN

SCALE: 3/16" = 1'-0"

LEGEND	
SYMBOL	DESCRIPTION
	NEW SUPPLY DIFFUSER
	NEW RETURN GRILLE
	NEW T-STAT
	FAN SWITCH
	NEW RIGID DUCT
	TAKE-OFF WITH VOLUME DAMPER
	FLEXIBLE CONNECTION
	UNDER CUT DOOR
	VOLUME DAMPER
	FSD/AD FIRE SMOKE DAMPER W/ACCESS DOOR



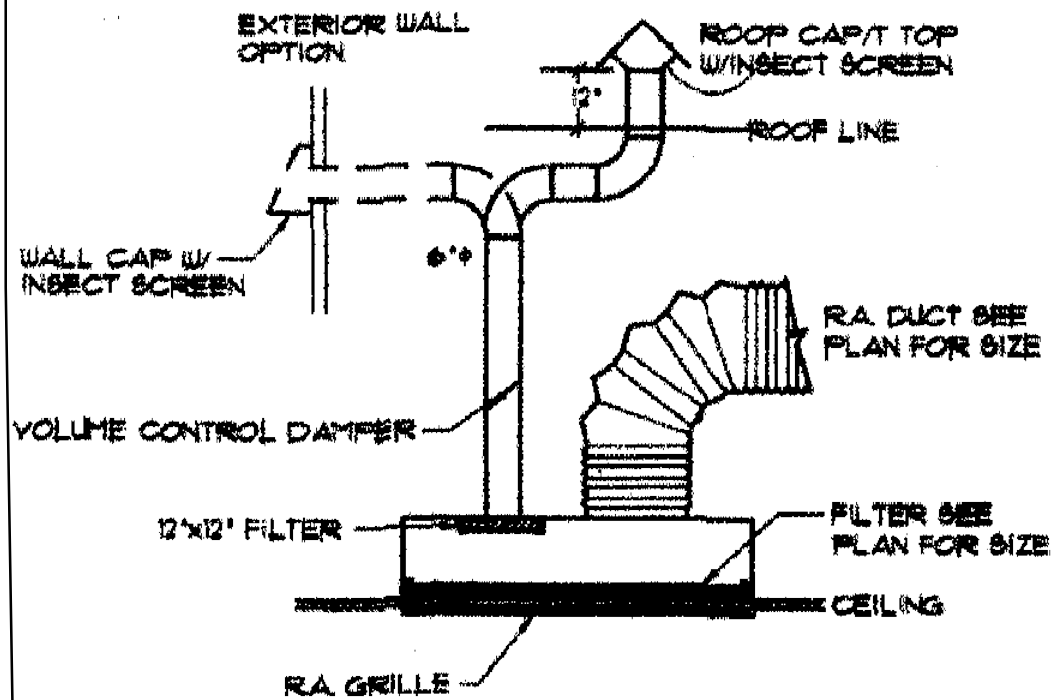
AIR OUTLETS SCHEDULE		
TYPE	DESCRIPTIONS	MFR. MODEL NO.
CD	CEILING SUPPLY DIFFUSER FOR GYP. BOARD CLG. INDIVIDUALLY ADJUSTABLE ALUMINUM CONSTRUCTION. ROUND NECK ADAPTER AND WITH DAMPER.	NAILOR 51C OR EQUAL
CR	CEILING RETURN REGISTER WITH 1/2" GRID CORE FACE GYP. BD W/FILTER FRAME, FILTER AND ROUND NECK ADAPTER.	NAILOR 51FE OR EQUAL

MECHANICAL UNIT SCHEDULE		
EQUIPMENT	TONNAGE	ELECTRICAL
RHEEM 5.0 TON SYSTEM GAS/ELECTRIC	5.0 TONS	208/1
RHEEM 5.0 TON SYSTEM GAS/ELECTRIC	5.0 TONS	208/1

EXHAUST FAN SCHEDULE		
EQUIPMENT	QTY.	ELECTRICAL
EF-1 BROAN 100 CFM CEILING MOUNT	2	120/1
KITCHEN EXHAUST FAN 100 CFM MIN	1	120/1

- GENERAL NOTES:
- ALL WORK SHALL BE IN ACCORDANCE WITH 2018 IBC, UMC, UPC & NFPA, IE22 AND 2017 NEC. ALL LATEST RULES, REGULATIONS AND ORDINANCES OF THE CLARK COUNTY AND STATE OF NEVADA.
 - ALL EXPOSED ROUND DUCT SHALL BE SPIRAL DUCT.
 - ALL NEW DUCTWORK WILL BE CONSTRUCTED AND SUPPORTED UNDER LATEST EDITION OF SMACNA AND 2018 UMC. ALL ROUND FLEXIBLE DUCT ABOVE CEILING SHALL BE FLEXIBLE DUCT WITH MIN R-8 INSULATION. GREASE DUCT SHALL BE 18 GA. STAINLESS STEEL.
 - DUCT INSULATION WILL BE IN ACCORDANCE WITH 2018 IECC ENERGY CODE
 - ALL DUCT SHALL BE INSTALLED TO CLEAR LIGHTS AND BUILDING STRUCTURES.
 - ALL WORK SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATION.
 - KITCHEN HOOD INSTALLATION SHALL COMPLY WITH CLARK COUNTY REQUIREMENTS.
 - PROVIDE AUTOMATIC FIRE EXTINGUISHING SYSTEM TO BE INTERCONNECTED WITH COOKING EQUIPMENT FUEL SUPPLY FOR AUTOMATIC SHUT-OFF.
 - SUBMIT THREE COPIES OF SHOP DRAWINGS AND SUBMITTALS FOR REVIEW AND APPROVAL BEFORE ORDERING MATERIALS.
 - SUBMIT THREE COPIES OF BALANCING REPORT.
 - COORDINATE WITH ELECTRICIAN FOR POWER CONNECTIONS.

Air intakes shall close automatically and be located min of 10ft from vents, chimneys or plumbing vents



RETURN AIR W/ OA CONNECTION

NO SCALE

Provide make up Air

Bedrooms 4+1=5x5=25 CFM
Livable Area 3716sqftx 0.06=222.96 CFM
Grand Total = 247.96 CFM

REVISIONS	
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NAME: ASSURED DEVELOPMENT
PHONE: (702) 868-0900
MAILING ADDRESS: PO BOX 530778 HENDERSON NV 89053

SITE ADDRESS: 736 NAPLES ST. (LOT3) HENDERSON, NV. 89015
PARCEL # 179-04-503-001



MECHANICAL PLAN

ORIGINAL DATE: 05/01/20
SCALE: 3/16" = 1'-0"
LIVABLE AREA: 3,522 SQ. FT.

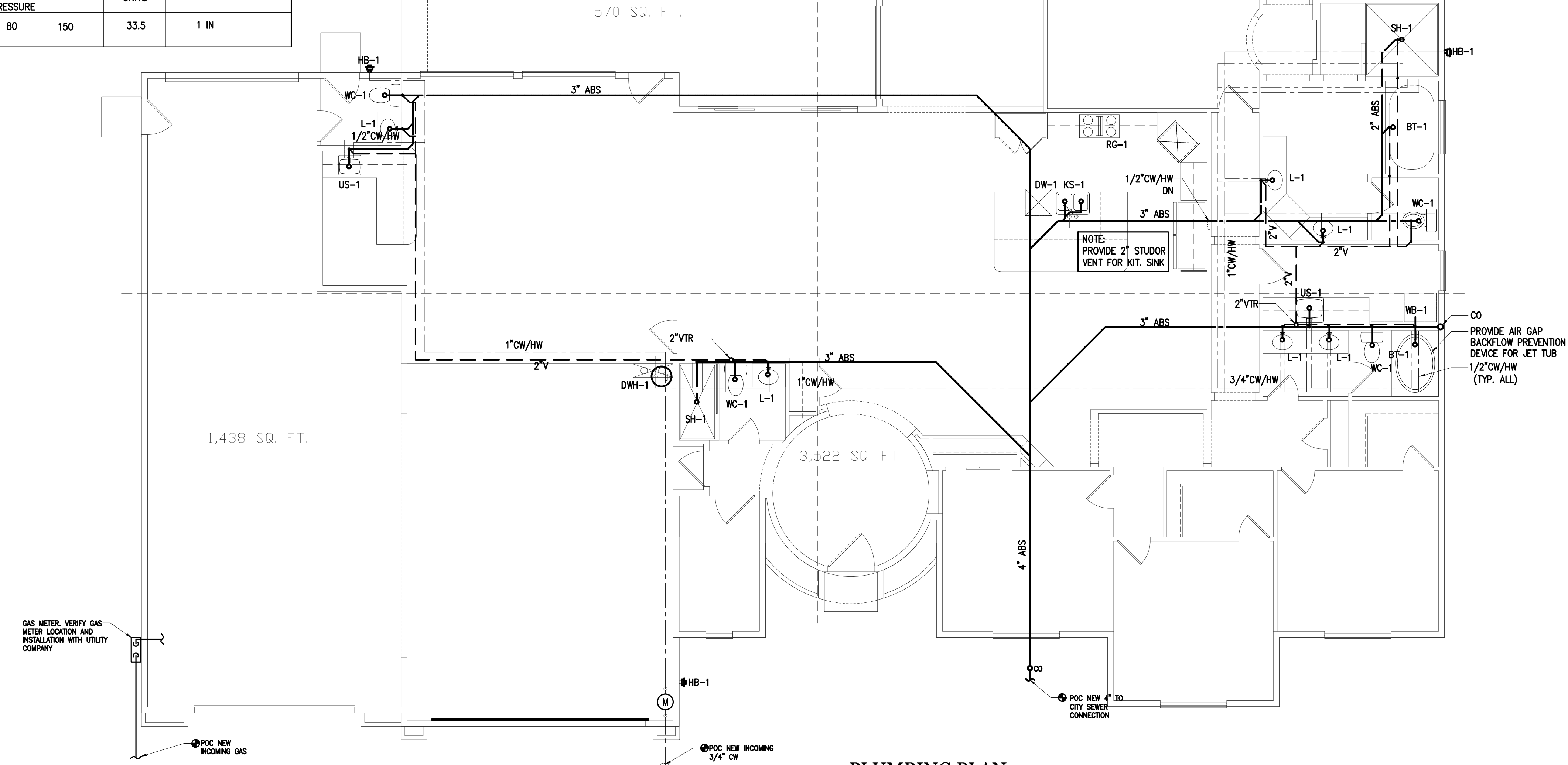
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FIXTURE UNITS APPENDIX C (2018)
1.6 GPF GRAVITY TANK WC

WSFU (UPC 610.3)			
FIXTURE	UNITS	QTY	TOTAL
3 BATHROOMS	9	1	9
ADD 1/2 BATH	0.5	1	0.5
BT	4	1	4
SH	2	2	4
KITI GROUP	1.5	1	3
LAU GROUP	4	1	4
HOSE BIBBS	2.5	3	7.5
UTILITY SINK	1.5	1	1.5
TOTALS	11		33.5

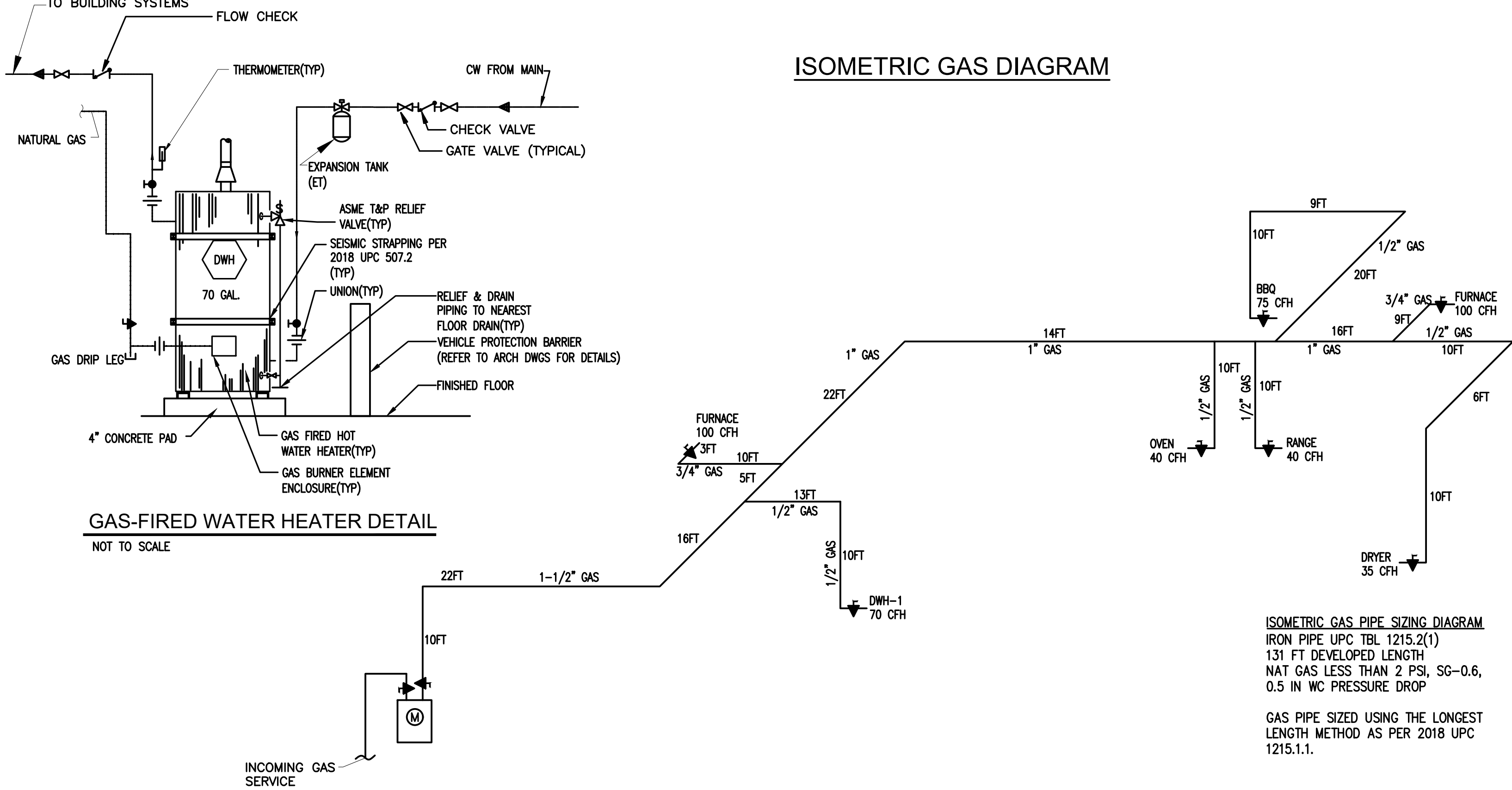
DFU(UPC 702.1)			
FIXTURE	UNITS	QTY	TOTAL
3 BATHROOMS	9	1	9
ADD 1/2 BATH	0.5	1	0.5
BT	2	1	2
SH	2	2	4
KS/DW	2	1	2
LAU GROUP	3	1	3
UTILITY SINK	2	1	2
TOTALS	8		22.5

METER & PIPE SIZE-UPC 610.4			
STREET WATER PRESSURE	MAX LENGTH	# FIXTURES UNITS	METER/SUPPLY
80	150	33.5	1 IN



PLUMBING PLAN
SCALE: 3/16" = 1'-0"

ISOMETRIC GAS DIAGRAM



PLUMBING GENERAL NOTES

- DRAWINGS ARE DIAGRAMMATIC, MINOR DEVIATIONS TO PIPE MAY BE NECESSARY DUE TO STRUCTURAL CONDITIONS. ANY DEVIATIONS TO PIPE SIZING AS INDICATED SHALL BE TRANSMITTED TO ENGINEER FOR REVIEW BEFORE STARTING ANY WORK.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2018 UPC PLUMBING CODE AND THE LATEST EDITION OF THE APPLICABLE INTERNATIONAL RESIDENTIAL CODES, MECHANICAL CODES, AND FEDERAL, STATE, AND LOCAL REGULATIONS.
- PER 2018 IECC ALL UNITS TO BE LABELED WITH THEIR INPUT RATING AND EFFICIENCY. ALL EQUIPMENT SHALL BE BALANCED, ADJUSTED AND TESTED TO PROVIDE SAFE STABLE AND QUIET OPERATION.
- CONTRACTOR SHALL
 - PROVIDE PRESSURE REGULATOR AND STRAINER, NOT TO EXCEED 80 PSI
 - PROVIDE A MEANS FOR HW EXPANSION WHEN ANY DEVICE IS INSTALLED PROHIBITING EXPANSION THRU BLDGS. SUPPLY, UPC 608.3 SIZE
 - BE RESPONSIBLE TO VERIFY THAT WATER PRESSURE AND METER STATED ON PLANS ARE THE MINIMUMS AVAILABLE IN FIELD.
- WATER HEATERS W/PIPE RISERS SHALL HAVE HEAT TRAPS ON BOTH THE INLET AND OUTLET OF THE WATER HEATER UNLESS THE WATER HEATER HAS INTEGRAL HEAT TRAPS OR IS PART OF A CIRCULATION SYSTEM
- DOMESTIC WATER PIPING
 - HOT WATER SYSTEMS: INSTALL R-2 INSULATION ON THE HOT WATER SERVICES OF THE RE-CIRCULATIONS SYSTEMS AND NON-CIRCULATION HOT WATER LINES UN UNCONDITIONED SPACES, PER AMENDED 2018 IECC
 - ABOVE GROUND: PEX PIPING AND FITTINGS PER SCHEDULE
 - BELOW SLAB: PEX PIPING AND FITTINGS PER SCHEDULE
- SANITARY WASTE AND VENT PIPING
 - ABS (IAPMO 15 11-2003) OR PVC (IAPMO 15-9-2003) PAINT WITH LATEX PAINT WHERE EXPOSED.
- CONDENSATE DRAIN PIPING
 - TYPE "M" (IAPMO 15 3-2003) WROUGHT FITTINGS PVC, OR A CODE APPROVED MATERIAL
- GAS PIPING
 - INSIDE SCHEDULE 40 BLACK IRON, THREADED MALLEABLE FITTINGS. OUTSIDE/EXPOSED USE GALVANIZED FITTINGS AND PIPE, JOINT COMPOUND AND PROVIDE PROTECTION THAT IS CODE APPROVED. CAN USE CORRUGATED STAINLESS STEEL TUBING PROVIDED IT IS LISTED W/ AN APPROVED AGENCY. PROVIDE A SHUTOFF VALVE THAT IS ACCESSIBLE IN THE SAME ROOM WITHIN 3 FEET FROM THE EQUIPMENT BEING SERVED.
 - SUSPENDED PIPING SHALL BE SUPPORTED AT THE FOLLOWING INTERVALS; 6 FEET FOR 1/2", 8 FEET FOR 3/4" AND 1", 10 FEET FOR 1-1/4" AND LARGER
- PLUMBING FIXTURES
 - PROVIDE CP ANGLE STOPS TO FINISH PLUMBING FIXTURES
 - PROVIDE PRESSURE BALANCED MIXING VALVES AND 2.5 GAL/MIN MAX FLOW RATES AT ALL BATHTUBS AND SHOWERS, PER 2018 IECC
 - PROVIDE SHUTOFF VALVES WITH UNIONS TO ALL OTHER PLUMBING FIXTURES (IE: WATER HEATER) TO FACILITATE ISOLATION FOR REPAIR
 - ALL PLUMBING FIXTURES SHALL COMPLY WITH LOCAL AUTHORITIES CURRENT WATER CONSERVATION CODES.

PLUMBING MATERIALS SCHEDULE

SYSTEM	LOCATION	SIZE	MATERIAL	JOINTS	FITTINGS
SOIL, WASTE, VENT	BELOW GRADE	ALL	SCHED. 40 PVC OR ABS	SOLVENT WELD	MATCH PIPE
SOIL, WASTE, VENT	ABOVE GRADE	ALL	SCHED. 40 PVC OR ABS	SOLVENT WELD	MATCH PIPE
DOMESTIC WATER	BELOW GRADE	ALL	PEX TUBING	ENGINEERED PLASTIC	PRO PEX
DOMESTIC WATER	ABOVE GRADE	ALL	PEX TUBING	ENGINEERED PLASTIC	PRO PEX
GAS	ABOVE GRADE	ALL	FLEX STEEL TUBING	BRASS	BRASS

PLUMBING EQUIPMENT SCHEDULE

TAG	EQUIPMENT DESCRIPTION
DWH-1	DOMESTIC WATER HEATER, RHEEM MODEL RHGPRO75-70N, 75 GALLON STORAGE, 70.7 GPH RECOVERY AT 90 DEGREE F RISE, 70,000 BTU NATURAL GAS INPUT, SET HEATER AT 120F
RG-1	GAS SEALED GAS COOKTOP MODEL AS SELECTED BY OWNER, 5 BURNER, 40,000 BTU NATURAL GAS INPUT
OV-1	GAS SEALED GAS OVEN MODEL AS SELECTED BY OWNER, 40,000 BTU NATURAL GAS INPUT

PLUMBING MATERIALS SCHEDULE

TAG	SIZE IN INCHES				REMARKS
	SOIL	VENT	CW	HW	
WC-1 WATER CLOSET	3"	2"	1/2"	-	WATER CLOSET AS SELECTED BY OWNER, ANGLE STOP
L-1 LAVATORY	1 1/2"	1 1/2"	1/2	1/2	LAVATORY AS SELECTED BY OWNER, ANGLE STOPS, P-TRAP
L-2 LAVATORY	1 1/2"	1 1/2"	1/2	1/2	LAVATORY AS SELECTED BY OWNER, ANGLE STOPS, P-TRAP
BT-1 BATH TUB	2"	2"	1/2"	1/2"	BATH TUB AS SELECTED BY OWNER, P-TRAP
BT-2 BATH TUB	2"	2"	1/2"	1/2"	BATH TUB AS SELECTED BY OWNER, P-TRAP
SH-1 SHOWER	2"	2"	1/2"	1/2"	SHOWER AS SELECTED BY OWNER, P-TRAP
KS-1 KITCHEN SINK	2"	2"	1/2"	1/2"	SINK AS SELECTED BY OWNER, ANGLE STOPS, P-TRAP
KS-2 KITCHEN SINK	2"	2"	1/2"	1/2"	SINK AS SELECTED BY OWNER, ANGLE STOPS, P-TRAP
KS-3 KITCHEN SINK	2"	2"	1/2"	1/2"	SINK AS SELECTED BY OWNER, ANGLE STOPS, P-TRAP
US-1 UTILITY SINK	1 1/2"	1 1/2"	1/2	1/2	SINK AS SELECTED BY OWNER, ANGLE STOPS, P-TRAP
HB-1 HOSE BIBB	-	-	1/2"	-	WOODFORD, VACUUM BREAKER, CHROME FINISH
WB-1 WALL BOX	2"	2"	1/2"	1/2"	WOODFORD, VACUUM BREAKER, CHROME FINISH
DW-1 DISHWASHER	-	-	1/2"	-	DISHWASHER AS SELECTED BY OWNER, SAN & VENT ROUTED THROUGH KS-1

REVISIONS

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