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125 West Columbus Street
Dadeville, Alabama 36853



South Allen Avenue Development

Anniston Housing Authority /
Housing Development Corporation

Gregg Fortner, Executive Director

Volume Two - Re-Issued

Mechanical, Plumbing, and Electrical Drawings

South Allen Avenue Development
Anniston Housing Authority /
Housing Development Corporation

Title Sheet
2

TDA Comm. No.

440

DATE:

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T2

Revision Table			
No.	Date	Revised By	Description

HVAC LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	CEILING DIFFUSER - SUPPLY RECTANGULAR WITH ROUND NECK 4-WAY THROW UNLESS OTHERWISE INDICATED		CEILING EXHAUST FAN		VANED TEE (PROVIDE ALL SQUARE OR RECTANGULAR TEES WITH VANES EVEN IF SYMBOL IS MISSING)
	CEILING DIFFUSER - RETURN RECTANGULAR WITH SQUARE NECK		MANUAL VOLUME DAMPER OPPOSED BLADE		STANDARD DUCT SIZE TRANSITION
	SIDEWALL DIFFUSER - SUPPLY WITH MULTI-VANE DEFLECTOR		THERMOSTAT/HUMIDISTAT LOCATION		STANDARD SQUARE TO ROUND TRANSITION
	SIDEWALL DIFFUSER - RETURN WITH 30° FIXED DEFLECTION		STANDARD 90° RADIUS ELBOW		HVAC CONDENSATE DRAIN PIPING
	DIFFUSER TAG REFERENCE SCHEDULE FOR SIZING		STANDARD 45° RADIUS ELBOW		HVAC REFRIGERANT LINE
	NEW RECTANGULAR DUCT WIDTH X DEPTH		90° VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EVEN IF SYMBOL IS MISSING)		
	NEW ROUND DUCT DIAMETER		45° VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EVEN IF SYMBOL IS MISSING)		

HVAC NOTES

- | | |
|---|--|
| <p>1 ALL DUCT DIMENSIONS SHOWN ARE NET INTERNAL.</p> <p>2 INSTALL OPPOSED BLADE BALANCING DAMPERS IN ALL NEW DIFFUSERS AND GRILLES.</p> <p>3 THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE HVAC SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, APPURTENANCES, AND CONTROLS, COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL REQUIREMENTS OF THESE DOCUMENTS SHALL BE STRICTLY CONFORMED WITH. ANY ITEMS AND LABOR REQUIRED FOR A COMPLETE HVAC SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS, AND THESE CONTRACT DOCUMENTS SHALL BE FURNISHED WITHOUT INCURRING ANY ADDITIONAL COST TO THE CONTRACT. CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS.</p> <p>4 COORDINATE DUCTWORK AND PIPING WITH STRUCTURAL, PLUMBING, FIRE PROTECTION AND ELECTRICAL. MAKE OFFSETS AND TRANSITIONS AS REQUIRED TO CLEAR STRUCTURAL MEMBERS, ETC. COORDINATE WITH OTHER TRADES WITHOUT ADDITIONAL EXPENSE TO THE OWNER.</p> <p>5 REFER TO ARCHITECTURAL CEILING PLANS FOR EXACT LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES; COORDINATE EXACT LOCATION OF GRILLES, REGISTERS, AND DIFFUSERS WITH ARCHITECTURAL AND INTERIOR REFLECTED CEILING PLANS AND LIGHTING FIXTURES. FOR PARTICULAR ITEMS NOT SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLAN, PREPARE A DRAWING AND PRESENT IT TO THE ARCHITECT FOR REVIEW AND/OR APPROVAL.</p> <p>6 COORDINATE ALL ROOF AND SLAB PENETRATIONS WITH THE STRUCTURAL ENGINEER. TRANSITIONS RECTANGULAR DUCTWORK ON THE BOTTOM AND THE SIDES. MAINTAIN DUCTWORK LEVEL AS HIGH AS POSSIBLE UNLESS NOTED OTHERWISE.</p> <p>7 THE HVAC CONTRACTOR IS TO REVIEW THE ENTIRE SET OF PLANS FOR COORDINATION WITH OTHER TRADES. SHOP DRAWINGS WITH ALL TRADES COORDINATED WILL BE REQUIRED.</p> <p>8 THE HVAC CONTRACTOR SHALL REVIEW THE ARCHITECTURAL PLANS FOR FINAL LOCATIONS OF ALL RATED WALLS, CEILINGS, FLOORS, ETC. THE HVAC CONTRACTOR SHALL FURNISH AND INSTALL FIRE OR FIRE/SMOKE DAMPERS IN ALL RATED LOCATIONS WHETHER SHOWN ON THE MECHANICAL PLANS OR NOT.</p> <p>9 CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE OF EACH PIECE OF EQUIPMENT WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING.</p> <p>10 CONTRACTOR TO COORDINATE ALL CEILING TYPES WITH DIFFUSERS. ALL DIFFUSERS IN GYPSUM CEILING SHALL INCLUDE PLASTER FRAME.</p> <p>11 ALL DISTRIBUTION DEVICES SHALL HAVE FACE OPERABLE DAMPERS. ALL DIFFUSER RUNOUTS SHALL INCLUDE SPIN-IN WITH DAMPER IN ROUND DUCTS.</p> <p>12 INSULATE TOP SIDE/BACK OF ALL DIFFUSERS/GRILLES, ETC.</p> <p>13 CONDENSATE DRAIN PIPING SHALL BE SLOPED A MINIMUM OF 1/8" PER FOOT AND SHALL BE SIZED PER TABLE 307.2.2 IN THE 2021 INTERNATIONAL MECHANICAL CODE UNLESS SHOWN LARGER ON PLANS.</p> <p>14 ALL 3/4" AND 1" CONDENSATE DRAIN TRAPS SHALL BE EZ-TRAP OR APPROVED EQUAL WITH FLOAT SWITCH.</p> <p>15 INSTALL AUXILIARY DRAIN PAN UNDER ALL UNITS MOUNTED IN ATTIC, ABOVE CEILINGS, ETC. INSTALL FLOAT SWITCH FOR UNIT SHUT DOWN IN AUXILIARY DRAIN PAN.</p> <p>16 REFERENCE PLUMBING PLANS FOR CONDENSATE PIPING. IF CONDENSATE DRAINS ARE NOT SHOWN ON THE PLUMBING PLANS, ALL CONDENSATE DRAINS SHALL BE FURNISHED AND INSTALLED BY THE HVAC CONTRACTOR.</p> | <p>17 VERIFY WITH THE ARCHITECTURAL DRAWINGS, SIZE, LOCATION, AND MOUNTING HEIGHT OF ALL LOUVERS. VERIFY COLOR AND FINISH WITH ARCHITECT.</p> <p>18 ALL THERMOSTATS TO BE AUTOMATIC CHANGE OVER TYPE.</p> <p>19 ALL THERMOSTATS TO BE MOUNTED 4'-0" A.F.F. TO HIGHEST OPERABLE CONTROL UNLESS OTHERWISE INDICATED.</p> <p>20 ALL REFRIGERANT LINES SHALL BE SIZED/APPROVED BY THE EQUIPMENT VENDOR/COMPRESSOR MANUFACTURER.</p> <p>21 PAINT ALL EXTERIOR EXPOSED ARMAFLEX INSULATION FOR UV PROTECTION.</p> <p>22 PORTIONS OF DUCTWORK VISIBLE THROUGH GRILLES, REGISTERS, AND DIFFUSERS IN FINISHED AREAS SHALL BE PAINTED FLAT BLACK.</p> <p>23 FLEXIBLE DUCT (SUPPLY RUNOUTS ONLY) SHALL NOT EXCEED 6'-0" IN LENGTH.</p> <p>24 DUCTWORK SHALL BE INSULATED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:
RECTANGULAR SUPPLY: 1" INTERNAL
ROUND SUPPLY: 1-1/2" EXTERNAL
FLEXIBLE SUPPLY: 1" PRE INSULATED
RECTANGULAR RETURN: 1" INTERNAL
OSA/EXHAUST: 1-1/2" EXTERNAL</p> <p>25 DUCTWORK SHALL BE GALVANIZED AND INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS.</p> <p>26 ROUND DUCT SHALL BE INSULATED WITH DUCT WRAP EQUAL TO CERTAINTED SOFT TOUCH DUCT WRAP WITH FSK VAPOR RETARDER FACING TYPE 75 WITH MINIMUM INSTALLED R-VALUE 4.2. ROUND DUCTS LOCATED WITHIN THE ATTIC SHALL BE INSULATED WITH DUCT WRAP EQUAL TO CERTAINTED SOFT TOUCH DUCT WRAP WITH FSK VAPOR RETARDER FACING TYPE 100 WITH MINIMUM INSTALLED R-VALUE 6.0</p> <p>27 ALL OPEN ENDED DUCT SHALL BE CAPPED WITH 1/2"x1/2" WIRE MESH.</p> <p>28 DUCT LINER FOR RECTANGULAR DUCTS SHALL BE EQUAL TO CERTAINTED TG2 DUCT LINER WITH A MINIMUM R-VALUE OF 4.0. RECTANGULAR DUCTS LOCATED WITHIN THE ATTIC SHALL BE LINED WITH DUCT LINER EQUAL TO CERTAINTED TG2 DUCT LINER WITH A MINIMUM R-VALUE OF 4.0 AND WRAPPED EXTERNALLY WITH DUCT WRAP EQUAL TO CERTAINTED SOFT TOUCH DUCT WRAP WITH FSK VAPOR RETARDER FACING TYPE 75 WITH A MINIMUM INSTALLED R-VALUE OF 4.2.</p> <p>29 WARRANTIES SHALL BEGIN AT DATE OF SUBSTANTIAL COMPLETION. ALL COMPRESSORS SHALL INCLUDE MIN. OF FIVE YEAR WARRANTY. ONE YEAR WARRANTY FOR LABOR, PARTS, UNITS, ETC. IS REQUIRED FOR ALL EQUIPMENT.</p> <p>30 CONTRACTOR SHALL ANCHOR OUTDOOR UNITS TO CONCRETE PAD IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION, WIND LOAD REQUIREMENTS, AND AS PER PLANS/SPECIFICATIONS. COORDINATE CONCRETE PAD SIZE, UNIT CLEARANCES, ETC. WITH STRUCTURAL AND ARCHITECTURAL PLANS, FRAMING, ETC.</p> <p>31 THE CONTRACTOR SHALL INSTALL ANY CURB-MOUNTED EQUIPMENT IN SUCH A WAY THAT NO WATER LEAKAGE IS INTRODUCED INTO THE BUILDING.</p> <p>32 ALL INDOOR AND OUTDOOR UNITS SHALL BE LOCATED SO THAT MAINTENANCE CLEARANCES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION AND AS PER PLANS/SPECIFICATIONS ARE MAINTAINED. COORDINATE MAINTENANCE CLEARANCES WITH STRUCTURAL AND ARCHITECTURAL PLANS, FRAMING, ETC.</p> |
|---|--|

EXHAUST FAN SCHEDULE

MARK NO.	BUILDING TYPE	MOUNTING	CFM	STATIC IN W.G.	SONES	WATTS	VOLTAGE	MANUFACTURER (OR APPROVED EQUAL)	MODEL NO.	WEIGHT (LBS.)	NOTES
EF 2A	TYPE 2	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 2B	TYPE 2	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 2C	TYPE 2	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 2D	TYPE 2	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 2E	TYPE 2	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 2F	TYPE 2	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 2G	TYPE 2	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 2H	TYPE 2	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 3A	TYPE 3	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 3B	TYPE 3	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 3C	TYPE 3	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 4A	TYPE 4 (BLDG. 1)	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 4B	TYPE 4 (BLDG. 1)	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 4A	TYPE 4 (BLDG. 2)	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW
EF 4B	TYPE 4 (BLDG. 2)	CEILING	50	0.25	1.0	42	115-1-60	LOREN COOK	GC-124	26	SEE BELOW

1 FAN TO INCLUDE FACTORY MOUNTED/PRE-WIRED FAN SPEED CONTROL.
2 FAN TO BE SWITCHED WITH WALL SWITCH.

APPROVED EQUALS: BREIDERT, GREENHECK, AND PENN.

HVAC UNITS/EQUIPMENT MAY BE LIGHT COMMERCIAL/RESIDENTIAL BRAND UNITS. EQUIPMENT SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL.

CODES AND STANDARDS

- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- ASHRAE 90.1-2013 ENERGY STANDARD

HVAC DRAWING INDEX

SHEET NO.	SHEET TITLE
M1.1	HVAC LEGEND, NOTES, AND SCHEDULES
M1.2	HVAC SCHEDULES AND DETAILS
M1.3	HVAC SCHEDULES AND COMPLIANCE CALCULATIONS
M2.1	HVAC DETAILS
M3.1	BUILDING TYPE 2 - HVAC PLANS
M3.2	BUILDING TYPE 3 - HVAC PLANS
M3.3	BUILDING TYPE 4 - HVAC PLANS

HVAC LEGEND, NOTES, AND SCHEDULES

WHORTON ENGINEERING, INC.

HVAC - PLUMBING - PROCESS CONTROL

RANDALL WHORTON, P.E.
PHONE: (256) 820-9897

25 SUMMERALL GATE ROAD
ANNISTON, ALABAMA 36205

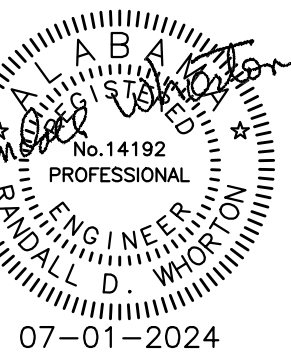
WHORTON ENGINEERING PROJECT NO. 23208

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South Allen Avenue Development
Anniston Housing Authority /
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**HVAC
LEGEND,
NOTES,
AND
SCHEDULES**

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M1.1

HEAT PUMP EQUIPMENT SCHEDULE

MARK NO.	BUILDING TYPE	NOMINAL FAN CFM	MINIMUM OSA CFM	EXT. STATIC (IN. W.G.)	COOLING CAPACITY					HEATING CAPACITY			MODEL NO. DATA			APPROXIMATE REFRIG. PIPING SIZE		NOTES	
					TOTAL CAP. MBH	SENS. CAP. MBH	COND. E.A.T.	EVAP. E.W.B. TEMP	MIN. SEER	MIN. IEER	LOW TEMP 17' E.A.T. MBH	HIGH TEMP 47' E.A.T. MBH	MIN. HSPF	MANUFACTURER (OR APPROVED EQUAL)	INDOOR UNIT MODEL NO.	OUTDOOR UNIT MODEL NO.	GAS/SUCTION (IN. O.D.)		LIQUID (IN. O.D.)
HP 2A	TYPE 2	1,000	60	0.5"	29.1	22.3	95	80/67	SEER 14.5	N/A	17.5	26.6	HSPF 8.5	TRANE	GAM5B0B30	4TWR4030	3/4	3/8	SEE BELOW
HP 2B	TYPE 2	1,000	60	0.5"	29.1	22.3	95	80/67	SEER 14.5	N/A	17.5	26.6	HSPF 8.5	TRANE	GAM5B0B30	4TWR4030	3/4	3/8	SEE BELOW
HP 2C	TYPE 2	1,000	60	0.5"	29.1	22.3	95	80/67	SEER 14.5	N/A	17.5	26.6	HSPF 8.5	TRANE	GAM5B0B30	4TWR4030	3/4	3/8	SEE BELOW
HP 2D	TYPE 2	1,000	60	0.5"	29.1	22.3	95	80/67	SEER 14.5	N/A	17.5	26.6	HSPF 8.5	TRANE	GAM5B0B30	4TWR4030	3/4	3/8	SEE BELOW
HP 3A	TYPE 3	600	50	0.8"	18.6	13.6	95	80/67	14.5	N/A	10.6	16.3	8.5	TRANE	GAM5B0A18	4TWR4018	3/4	3/8	SEE BELOW
HP 3B	TYPE 3	600	50	0.8"	18.6	13.6	95	80/67	14.5	N/A	10.6	16.3	8.5	TRANE	GAM5B0A18	4TWR4018	3/4	3/8	SEE BELOW
HP 3C	TYPE 3	600	50	0.8"	18.6	13.6	95	80/67	14.5	N/A	10.6	16.3	8.5	TRANE	GAM5B0A18	4TWR4018	3/4	3/8	SEE BELOW
HP 4A	TYPE 4 (BLDG. 1)	600	50	0.8"	18.6	13.6	95	80/67	14.5	N/A	10.6	16.3	8.5	TRANE	GAM5B0A18	4TWR4018	3/4	3/8	SEE BELOW
HP 4B	TYPE 4 (BLDG. 1)	600	50	0.8"	18.6	13.6	95	80/67	14.5	N/A	10.6	16.3	8.5	TRANE	GAM5B0A18	4TWR4018	3/4	3/8	SEE BELOW
HP 4A	TYPE 4 (BLDG. 2)	600	50	0.8"	18.6	13.6	95	80/67	14.5	N/A	10.6	16.3	8.5	TRANE	GAM5B0A18	4TWR4018	3/4	3/8	SEE BELOW
HP 4B	TYPE 4 (BLDG. 2)	600	50	0.8"	18.6	13.6	95	80/67	14.5	N/A	10.6	16.3	8.5	TRANE	GAM5B0A18	4TWR4018	3/4	3/8	SEE BELOW
TOTAL			590		246.6														

- ① UNIT TO INCLUDE A 7-DAY PROGRAMMABLE AUTOMATIC CHANGEOVER ELECTRONIC SETBACK THERMOSTAT/HUMIDISTAT.
- ② UNIT TO INCLUDE OUTDOOR THERMOSTAT.
- ③ UNIT TO INCLUDE CONDENSER HAIL GUARD.
- ④ VERTICAL UNIT TO BE MOUNTED ON A STEEL ANGLE PLENUM. PRIME AND PAINT STEEL TO MATCH UNIT. VERIFY PLENUM HEIGHT WITH EQUIPMENT SUPPLIER.
- ⑤ REFRIGERANT R-410A.
- ⑥ ALL INDOOR UNITS TO INCLUDE 2" MERV 13 PLEATED FILTER AND FILTER RACK ON UNIT RETURN.
- ⑦ VERIFY FINAL REFRIGERANT PIPING SIZE AND LENGTH WITH MANUFACTURER.
- ⑧ ALL UNITS SHALL BE ASHRAE 90.1-2013 COMPLIANT.
- ⑨ UNIT ELECTRIC STRIP HEAT SHALL BE WIRED TO PROVIDE DEHUMIDIFICATION. COOLING MODE SHALL OVERRIDE DEHUMIDIFICATION MODE.

APPROVED EQUALS: AMERICAN STANDARD, BRYANT, CARRIER, LENNOX, AND RHEEM

INTAKE VENT SCHEDULE

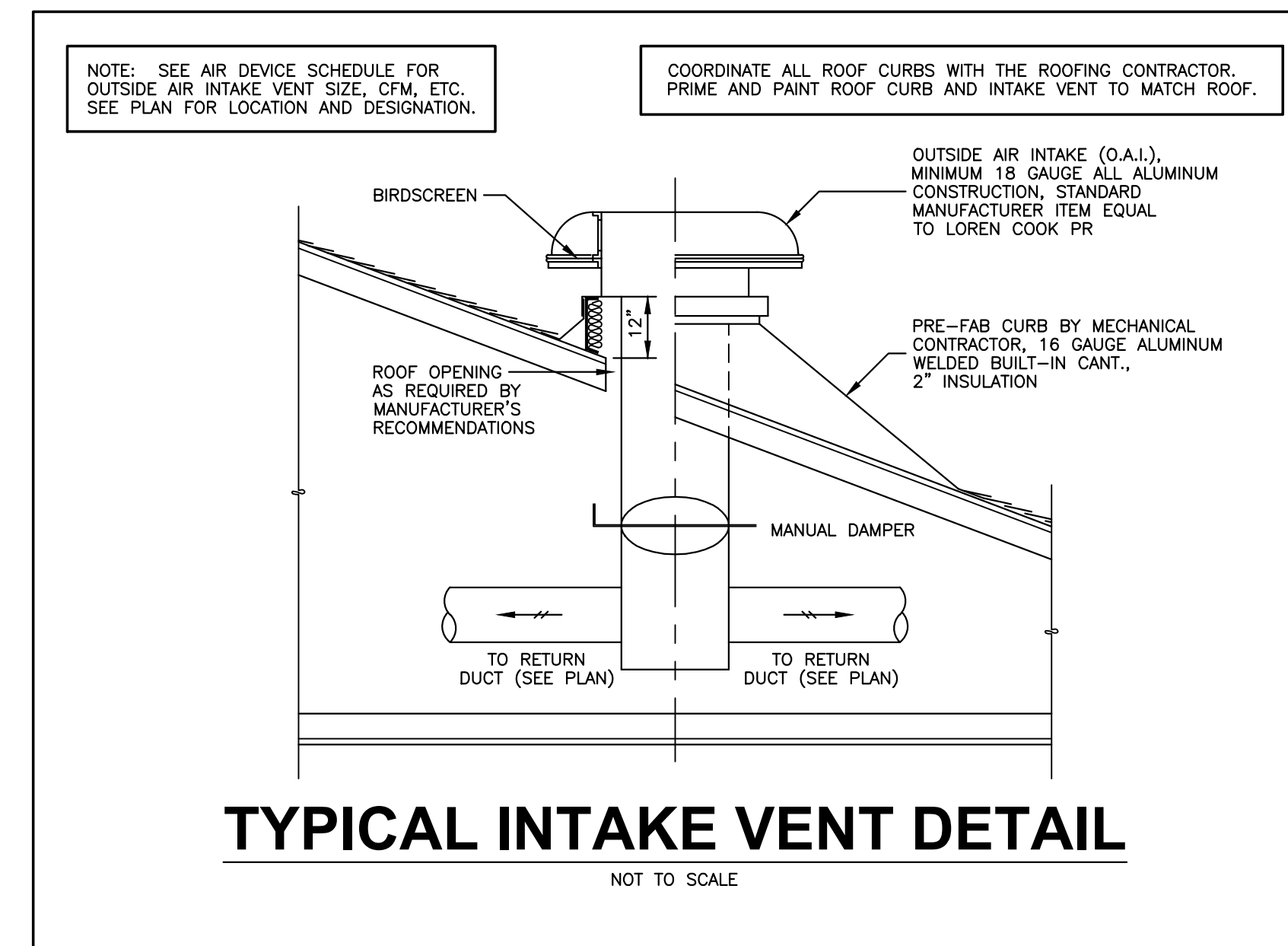
MARK NO.	BUILDING TYPE	CFM	THROAT AREA S.F.	P.D.	MATERIAL	MANUFACTURER (OR APPROVED EQUAL)	MODEL NO.	NOTES
IV 2B	TYPE 2	60	0.394	0.05	SPUN ALUMINUM	LOREN COOK	PR-8	SEE BELOW
IV 2C	TYPE 2	60	0.394	0.05	SPUN ALUMINUM	LOREN COOK	PR-8	SEE BELOW
IV 2D	TYPE 2	60	0.394	0.05	SPUN ALUMINUM	LOREN COOK	PR-8	SEE BELOW
IV 3A	TYPE 3	50	0.394	0.05	SPUN ALUMINUM	LOREN COOK	PR-8	SEE BELOW
IV 3B	TYPE 3	50	0.394	0.05	SPUN ALUMINUM	LOREN COOK	PR-8	SEE BELOW
IV 3C	TYPE 3	50	0.394	0.05	SPUN ALUMINUM	LOREN COOK	PR-8	SEE BELOW
IV 4A	TYPE 4 (BLDG. 1)	50	0.394	0.05	SPUN ALUMINUM	LOREN COOK	PR-8	SEE BELOW
IV 4B	TYPE 4 (BLDG. 1)	50	0.394	0.05	SPUN ALUMINUM	LOREN COOK	PR-8	SEE BELOW
IV 4A	TYPE 4 (BLDG. 2)	50	0.394	0.05	SPUN ALUMINUM	LOREN COOK	PR-8	SEE BELOW
IV 4B	TYPE 4 (BLDG. 2)	50	0.394	0.05	SPUN ALUMINUM	LOREN COOK	PR-8	SEE BELOW

- ① INTAKE VENT TO INCLUDE FACTORY ROOF CURB. COORDINATE ALL ROOF CURBS WITH THE ROOFING CONTRACTOR. PRIME AND PAINT ROOF CURB AND INTAKE VENT TO MATCH ROOF.
- ② INTAKE VENT TO INCLUDE FACTORY MANUAL DAMPER AND BIRDSCREEN.

APPROVED EQUALS: CARNES, GREENHECK, AND PENN

HEAT PUMP EQUIPMENT ELECTRICAL DATA

MARK NO.	BUILDING TYPE	OUTDOOR UNIT					INDOOR UNIT					SINGLE POINT CONNECTION		
		VOLTAGE	COMPRESSOR R.L.A. (EACH)	OUTDOOR FAN F.L.A. (EACH)	MINIMUM CIRCUIT AMPS (MCA)	MAXIMUM OVERCURRENT PROTECTION	WEIGHT (LBS.)	VOLTAGE	INDOOR FAN H.P.	ELECTRIC STRIP HEAT K.W.	MINIMUM CIRCUIT AMPS (MCA)		MAXIMUM OVERCURRENT PROTECTION	WEIGHT (LBS.)
HP 2A	TYPE 2	208/230-1-60	12.8	0.71	17	25	250	208/230-1-60	1/3	5.76/7.68	38/44	40/45	140	YES
HP 2B	TYPE 2	208/230-1-60	12.8	0.71	17	25	250	208/230-1-60	1/3	5.76/7.68	38/44	40/45	140	YES
HP 2C	TYPE 2	208/230-1-60	12.8	0.71	17	25	250	208/230-1-60	1/3	5.76/7.68	38/44	40/45	140	YES
HP 2D	TYPE 2	208/230-1-60	12.8	0.71	17	25	250	208/230-1-60	1/3	5.76/7.68	38/44	40/45	140	YES
HP 3A	TYPE 3	208/230-1-60	9.0	0.54	12	20	165	208/230-1-60	1/3	3.6/4.8	25/29	25/30	130	YES
HP 3B	TYPE 3	208/230-1-60	9.0	0.54	12	20	165	208/230-1-60	1/3	3.6/4.8	25/29	25/30	130	YES
HP 3C	TYPE 3	208/230-1-60	9.0	0.54	12	20	165	208/230-1-60	1/3	3.6/4.8	25/29	25/30	130	YES
HP 4A	TYPE 4 (BLDG. 1)	208/230-1-60	9.0	0.54	12	20	165	208/230-1-60	1/3	3.6/4.8	25/29	25/30	130	YES
HP 4B	TYPE 4 (BLDG. 1)	208/230-1-60	9.0	0.54	12	20	165	208/230-1-60	1/3	3.6/4.8	25/29	25/30	130	YES
HP 4A	TYPE 4 (BLDG. 2)	208/230-1-60	9.0	0.54	12	20	165	208/230-1-60	1/3	3.6/4.8	25/29	25/30	130	YES
HP 4B	TYPE 4 (BLDG. 2)	208/230-1-60	9.0	0.54	12	20	165	208/230-1-60	1/3	3.6/4.8	25/29	25/30	130	YES



HVAC SCHEDULES AND DETAILS

WHORTON ENGINEERING, INC.

HVAC - PLUMBING - PROCESS CONTROL

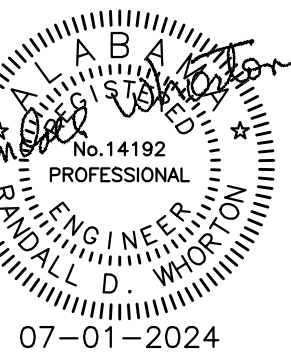
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WHORTON ENGINEERING PROJECT NO. 23208



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South Allen Avenue Development
Anniston Housing Authority /
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**HVAC
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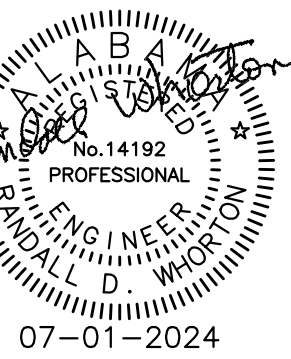
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**HVAC
SCHEDULES,
AND
COMPLIANCE
CALCS.**

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M1.3

**BUILDING TYPE 2 (FOUR - TWO BEDROOM APARTMENT BUILDING)
2021 IMC TABLE 403.3 COMPLIANCE CALCULATIONS**

ROOM NAME	AREA (SF)	PEOPLE (QTY)	OUTDOOR AIR CALCULATIONS			EZ	VOZ CFM	VPZ CFM	ZP VOZ/VPZ	EV	VOT	REQUIRED OSA CFM	DESIGN OSA CFM	EXHAUST AIR					NOTES			
			PEOPLE (CFM/PERSON)	AREA (CFM/SF)	TOTAL (VOU)									CFM/SF	FIXTURES	UNIT	REQUIRED CFM	DESIGN CFM				
TYP. TWO BEDROOM UNIT	1,295	3	15	0	45	1.0	45				45	60									HEAT PUMP (HP-2#)	
TYPICAL BATHROOM	VARIES															50	50					EXHAUST FAN (EF-2#)

**BUILDING TYPE 3 (THREE - ONE BEDROOM APARTMENT BUILDING)
2021 IMC TABLE 403.3 COMPLIANCE CALCULATIONS**

ROOM NAME	AREA (SF)	PEOPLE (QTY)	OUTDOOR AIR CALCULATIONS			EZ	VOZ CFM	VPZ CFM	ZP VOZ/VPZ	EV	VOT	REQUIRED OSA CFM	DESIGN OSA CFM	EXHAUST AIR					NOTES			
			PEOPLE (CFM/PERSON)	AREA (CFM/SF)	TOTAL (VOU)									CFM/SF	FIXTURES	UNIT	REQUIRED CFM	DESIGN CFM				
TYP. ONE BEDROOM UNIT	724	2	15	0	30	1.0	30				30	50										HEAT PUMP (HP-3#)
TYPICAL BATHROOM	59															50	50					EXHAUST FAN (EF-3#)

**BUILDING TYPE 4 - BUILDING 1 (TWO - ONE BEDROOM APARTMENT BUILDING)
2021 IMC TABLE 403.3 COMPLIANCE CALCULATIONS**

ROOM NAME	AREA (SF)	PEOPLE (QTY)	OUTDOOR AIR CALCULATIONS			EZ	VOZ CFM	VPZ CFM	ZP VOZ/VPZ	EV	VOT	REQUIRED OSA CFM	DESIGN OSA CFM	EXHAUST AIR					NOTES			
			PEOPLE (CFM/PERSON)	AREA (CFM/SF)	TOTAL (VOU)									CFM/SF	FIXTURES	UNIT	REQUIRED CFM	DESIGN CFM				
TYP. ONE BEDROOM UNIT	715	2	15	0	30	1.0	30				30	50										HEAT PUMP (HP-4#)
TYPICAL BATHROOM	59															50	50					EXHAUST FAN (EF-4#)

**BUILDING TYPE 4 - BUILDING 2 (TWO - ONE BEDROOM APARTMENT BUILDING)
2021 IMC TABLE 403.3 COMPLIANCE CALCULATIONS**

ROOM NAME	AREA (SF)	PEOPLE (QTY)	OUTDOOR AIR CALCULATIONS			EZ	VOZ CFM	VPZ CFM	ZP VOZ/VPZ	EV	VOT	REQUIRED OSA CFM	DESIGN OSA CFM	EXHAUST AIR					NOTES			
			PEOPLE (CFM/PERSON)	AREA (CFM/SF)	TOTAL (VOU)									CFM/SF	FIXTURES	UNIT	REQUIRED CFM	DESIGN CFM				
TYP. ONE BEDROOM UNIT	715	2	15	0	30	1.0	30				30	50										HEAT PUMP (HP-4#)
TYPICAL BATHROOM	59															50	50					EXHAUST FAN (EF-4#)

RANGE HOOD SCHEDULE

MARK NO.	BUILDING TYPE	HOOD DEPTH	HOOD LENGTH	EXHAUST CFM	VOLTAGE	AMPS	MANUFACTURER (OR APPROVED EQUAL)	MODEL NO.	NOTES
RH 2A	TYPE 2	17.5"	30"	260	115-1-60	1.8	BROAN	433004	SEE BELOW
RH 2B	TYPE 2	17.5"	30"	260	115-1-60	1.8	BROAN	433004	SEE BELOW
RH 2C	TYPE 2	17.5"	30"	260	115-1-60	1.8	BROAN	433004	SEE BELOW
RH 2D	TYPE 2	17.5"	30"	260	115-1-60	1.8	BROAN	433004	SEE BELOW
RH 3A	TYPE 3	17.5"	30"	260	115-1-60	1.8	BROAN	433004	SEE BELOW
RH 3B	TYPE 3	17.5"	30"	260	115-1-60	1.8	BROAN	433004	SEE BELOW
RH 3C	TYPE 3	17.5"	30"	260	115-1-60	1.8	BROAN	433004	SEE BELOW
RH 4A	TYPE 4 (BLDG. 1)	17.5"	30"	260	115-1-60	1.8	BROAN	433004	SEE BELOW
RH 4B	TYPE 4 (BLDG. 1)	17.5"	30"	260	115-1-60	1.8	BROAN	433004	SEE BELOW
RH 4A	TYPE 4 (BLDG. 2)	17.5"	30"	260	115-1-60	1.8	BROAN	433004	SEE BELOW
RH 4B	TYPE 4 (BLDG. 2)	17.5"	30"	260	115-1-60	1.8	BROAN	433004	SEE BELOW

- HOOD TO BE NON-DUCTED. FURNISH AND INSTALL FACTORY COVER PLATE AND NON-DUCTED FILTER ON ALL HOODS. HOOD CONVERTS TO NON-DUCTED BY INSTALLING COVER PLATE INTO GRILLE AND INSTALLING THE NON-DUCTED FILTER.
- HOOD TO INCLUDE INFINITE SPEED FAN CONTROL WITH HIGH/LOW/OFF SWITCH.
- HOOD TO BE U.L. LISTED, STAINLESS STEEL.
- HOOD TO BE RECIRCULATING. HOOD SHALL BE LISTED AND LABELED DOMESTIC DUCTLESS RANGE HOOD IN ACCORDANCE WITH 2021 IMC 501.3 EXCEPTION 3 AND 505.3 EXCEPTION 1.

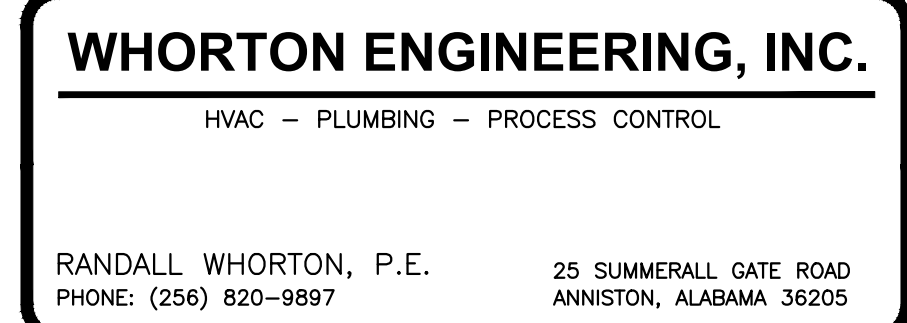
WALL MOUNTED ELECTRIC HEATER SCHEDULE

MARK NO.	BUILDING TYPE	VOLTAGE	WATTS	BTU/HR	AMPS	MANUFACTURER (OR APPROVED EQUAL)	UNIT MODEL NO.	UNIT WEIGHT (LBS)	NOTES
WEH 2	TYPE 2	208-1-60	1,500	5,120	7.2	BERKO	FRC4024F	25	SEE BELOW
WEH 3	TYPE 3	208-1-60	1,500	5,120	7.2	BERKO	FRC4024F	25	SEE BELOW
WEH 4	TYPE 4 (BLDG. 1)	208-1-60	1,500	5,120	7.2	BERKO	FRC4024F	25	SEE BELOW
WEH 4	TYPE 4 (BLDG. 2)	208-1-60	1,500	5,120	7.2	BERKO	FRC4024F	25	SEE BELOW

- UNIT TO INCLUDE BUILT-IN TAMPER-PROOF THERMOSTAT.
- UNIT TO INCLUDE FACTORY DISCONNECT SWITCH - MOUNTED BEHIND FRONT GRID PANEL.
- UNIT TO INCLUDE THERMAL CUTOFF.
- UNIT TO INCLUDE SEMI-RECESSED MOUNTING FRAME.
- UNIT TO BE MOUNTED AT 16" AFF.

APPROVED EQUALS: INDEECO, MARKEL, QMARK, AND RAYWALL.

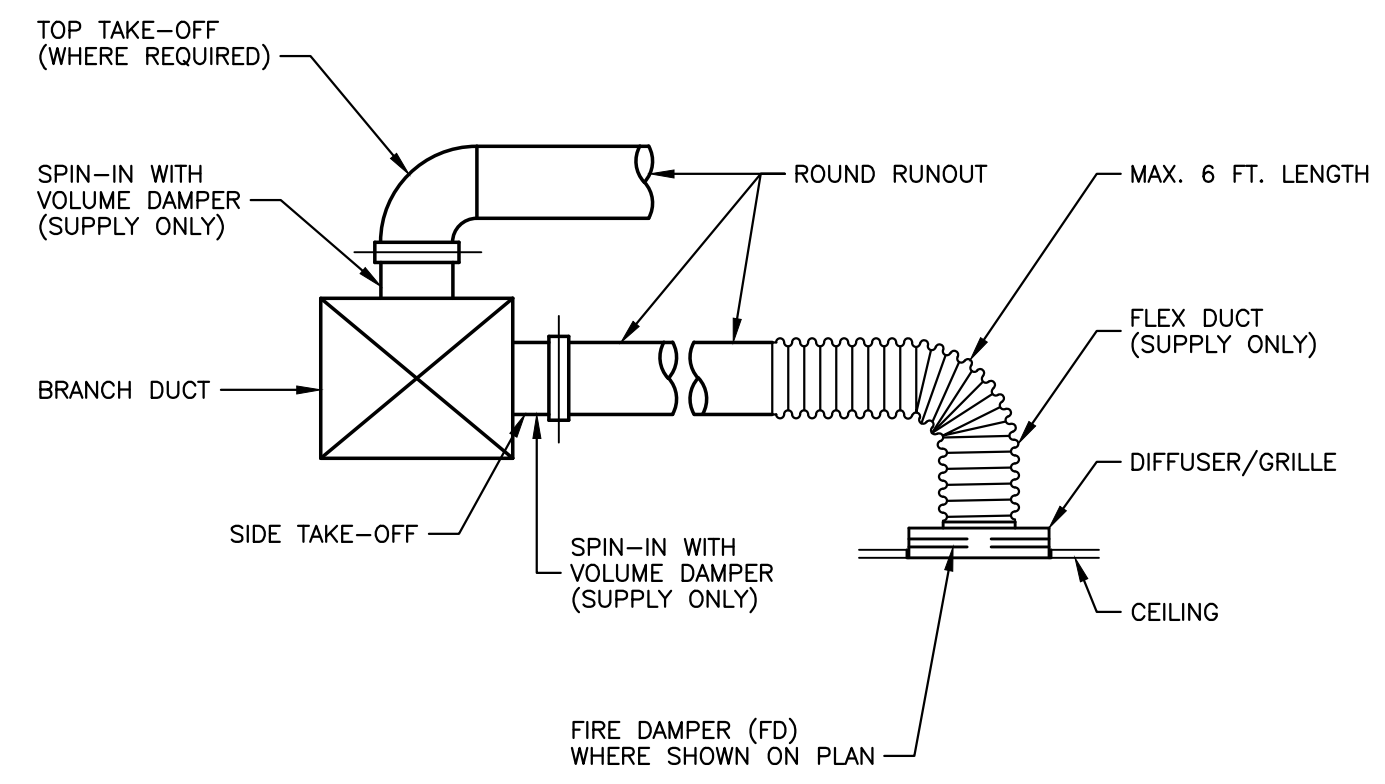
**HVAC SCHEDULES AND
COMPLIANCE CALCULATIONS**



RANDALL WHORTON, P.E.
PHONE: (256) 820-9897

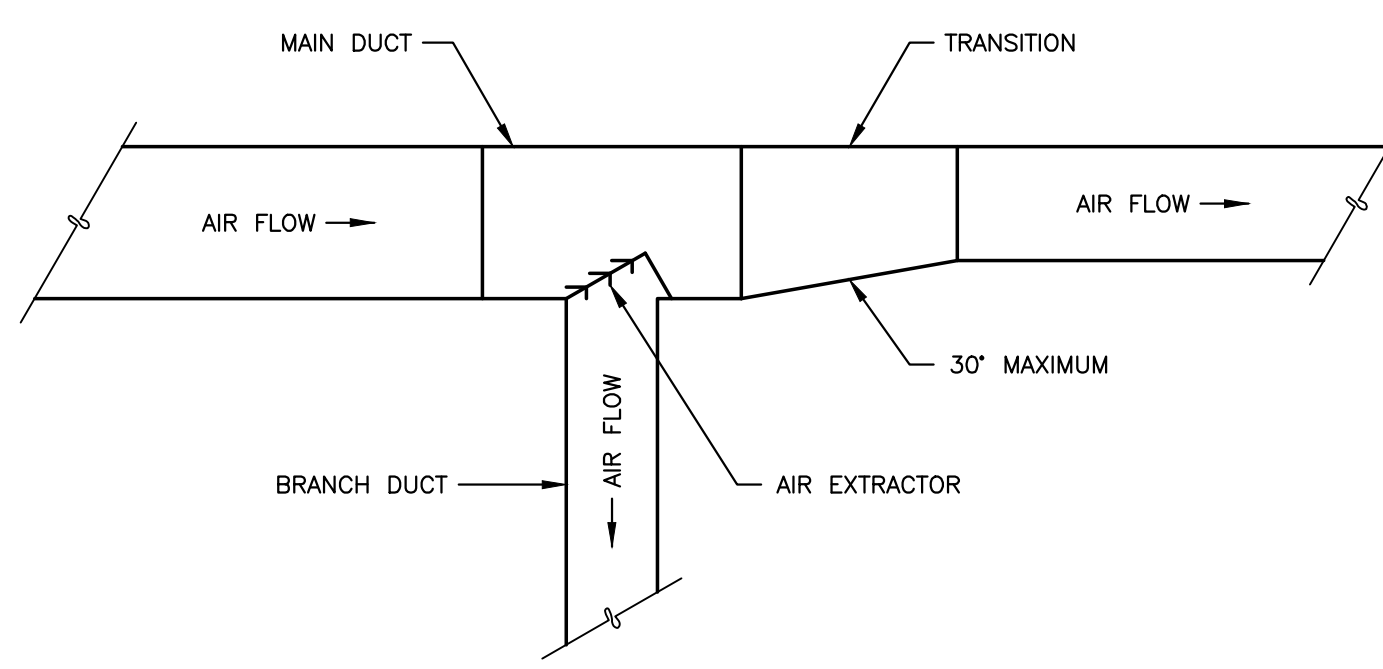
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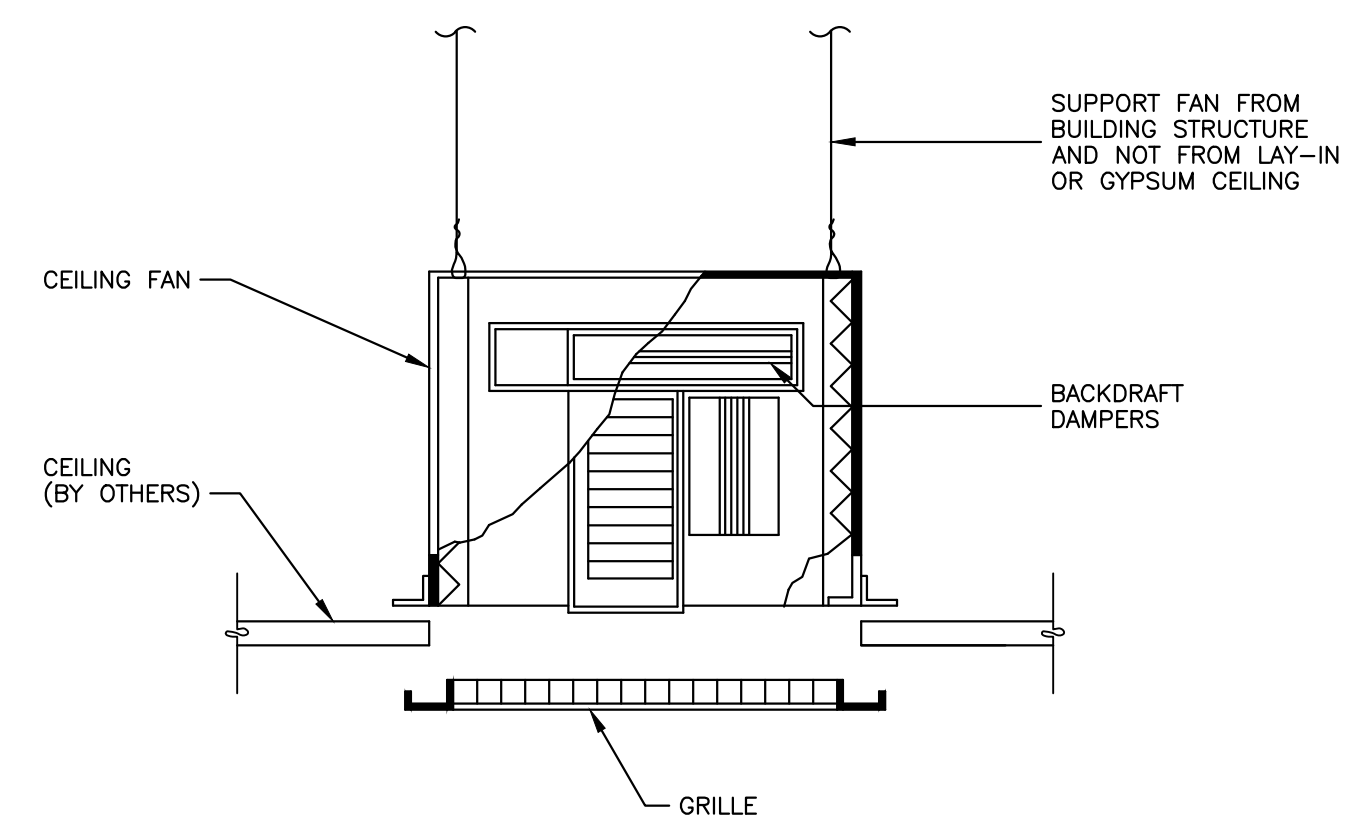
DIFFUSER / GRILLE RUNOUT DETAIL

NOT TO SCALE



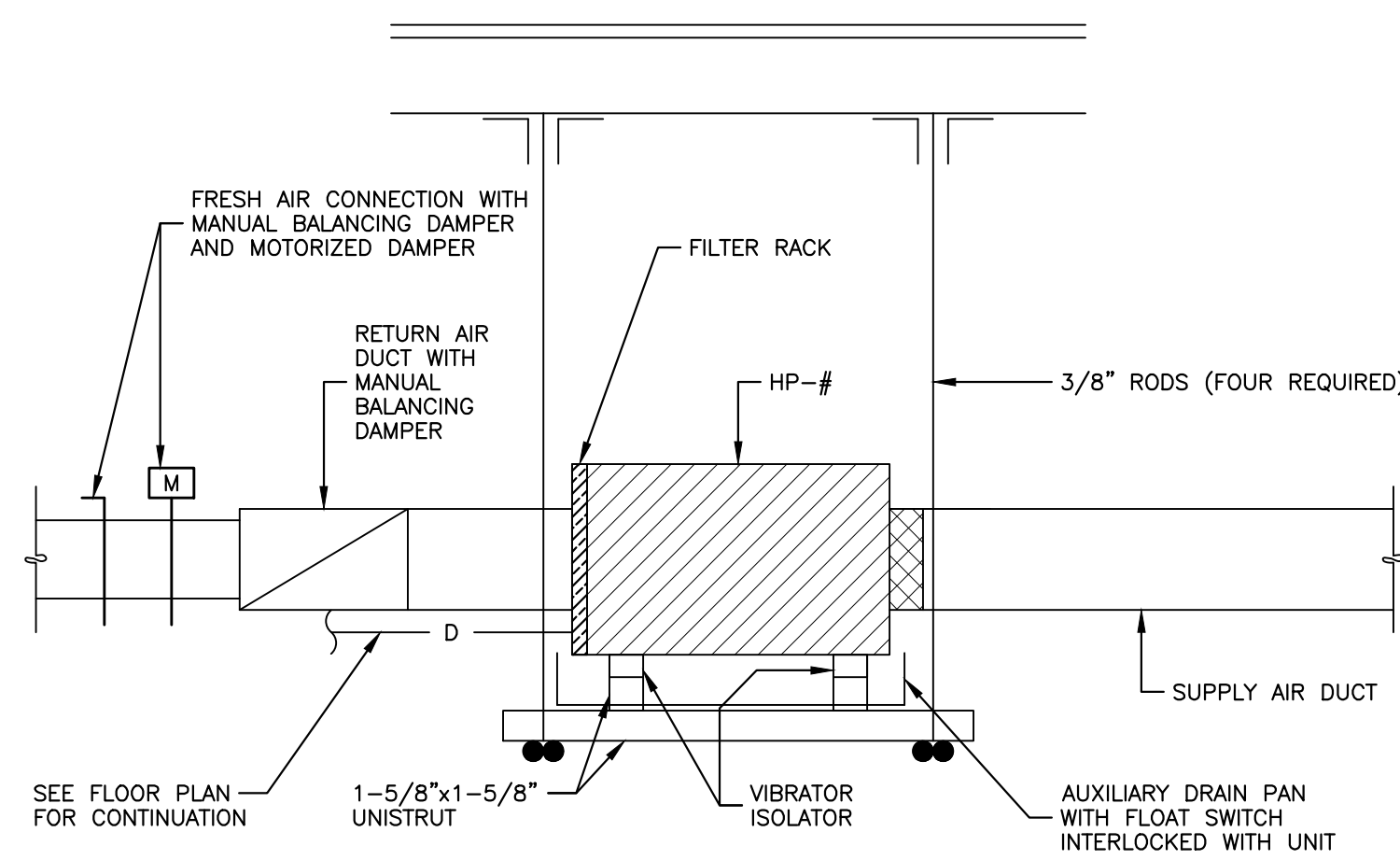
TYPICAL DUCT TAKE OFF DETAIL

NOT TO SCALE



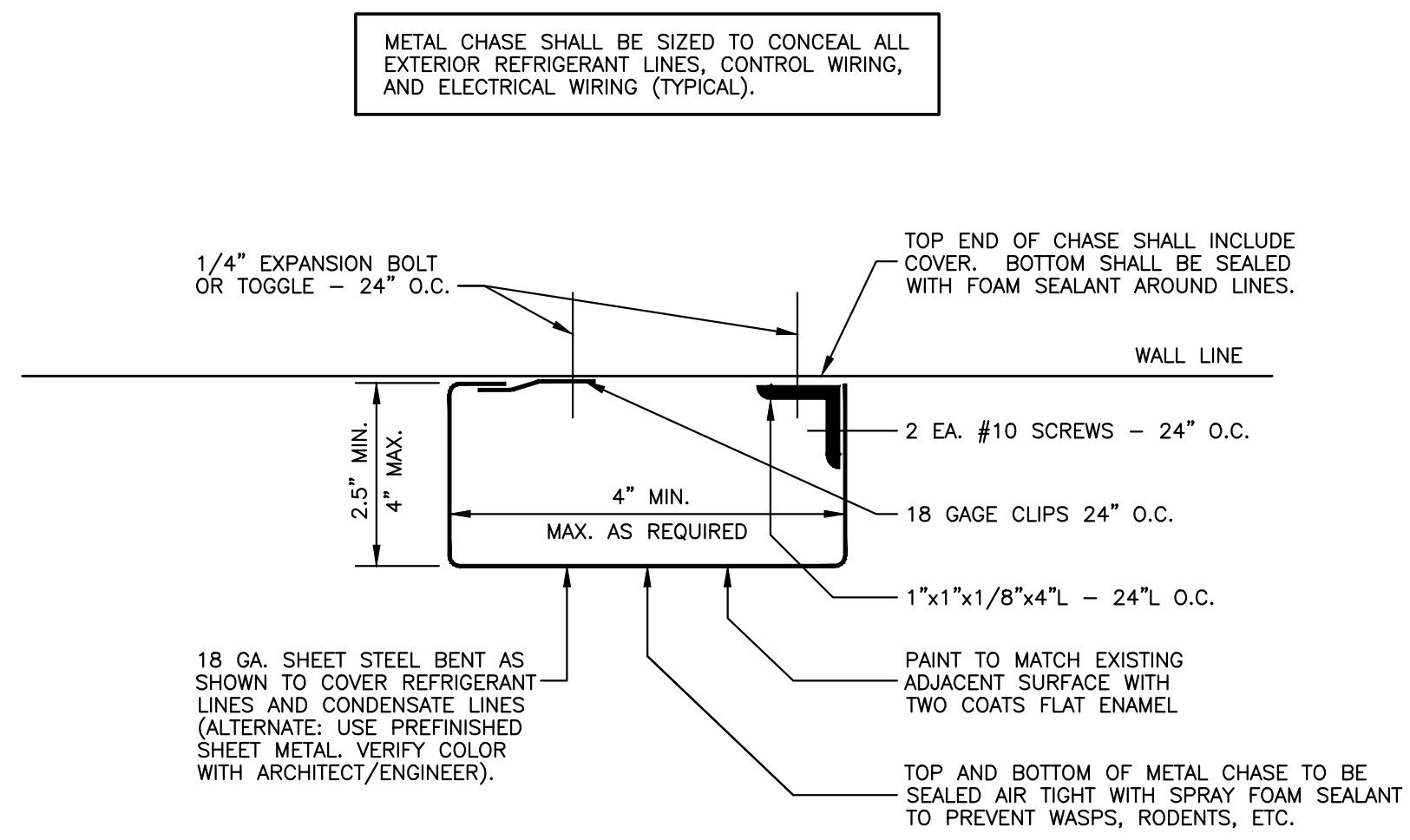
TYPICAL CEILING EXHAUST FAN DETAIL

NOT TO SCALE



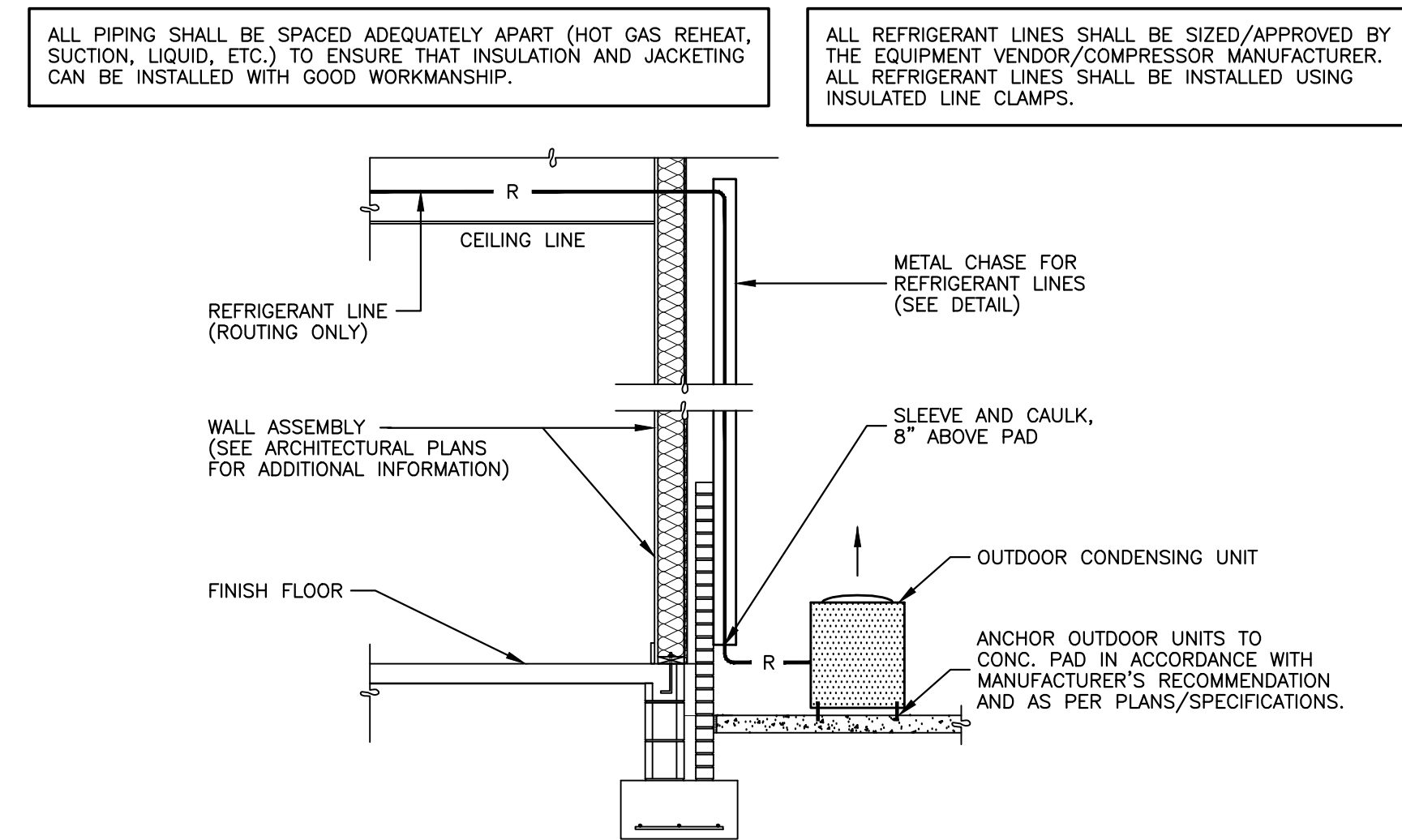
TYPICAL SECTION AT HORIZONTAL HEAT PUMP

NOT TO SCALE



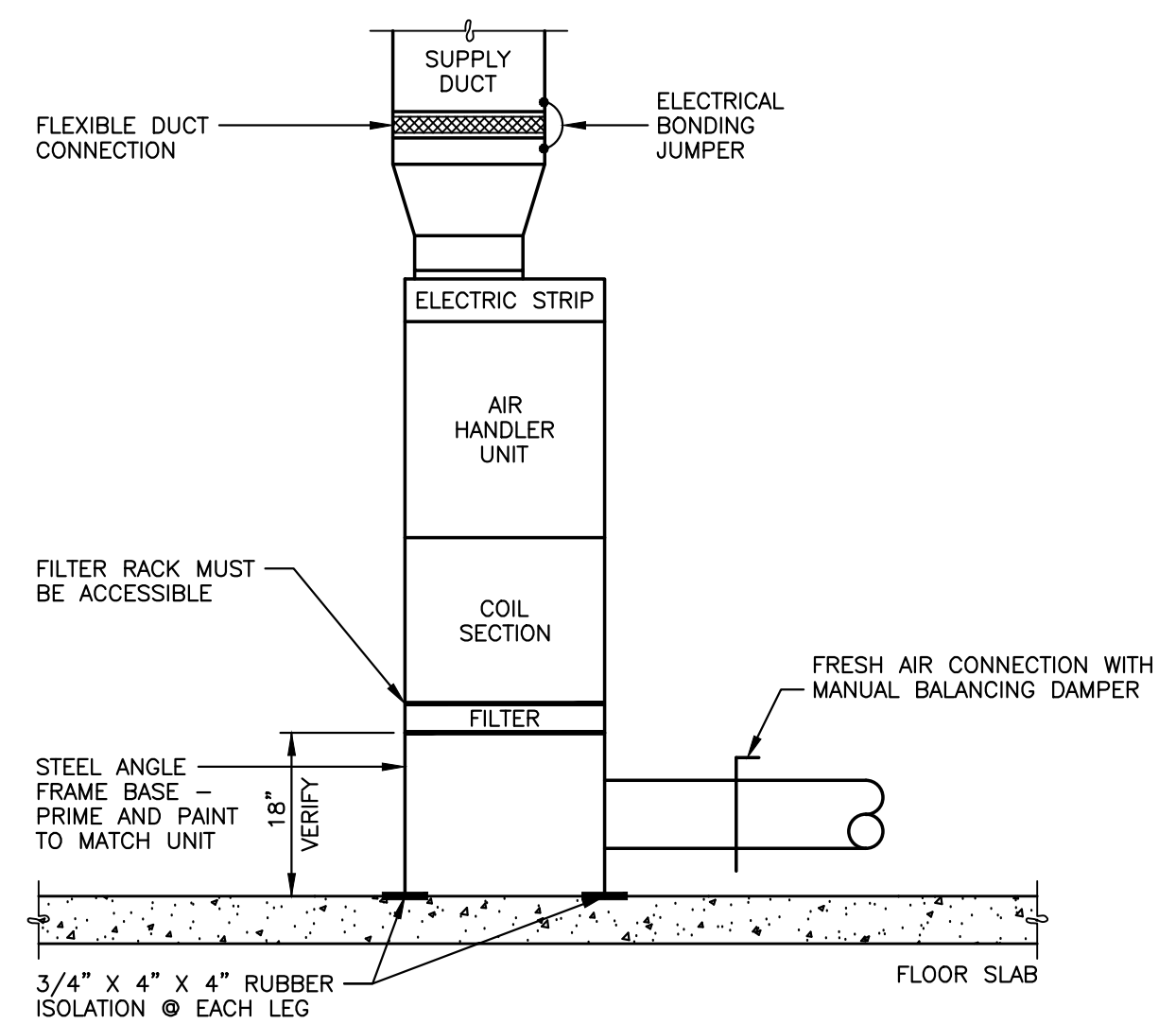
SECTION THROUGH METAL CHASE

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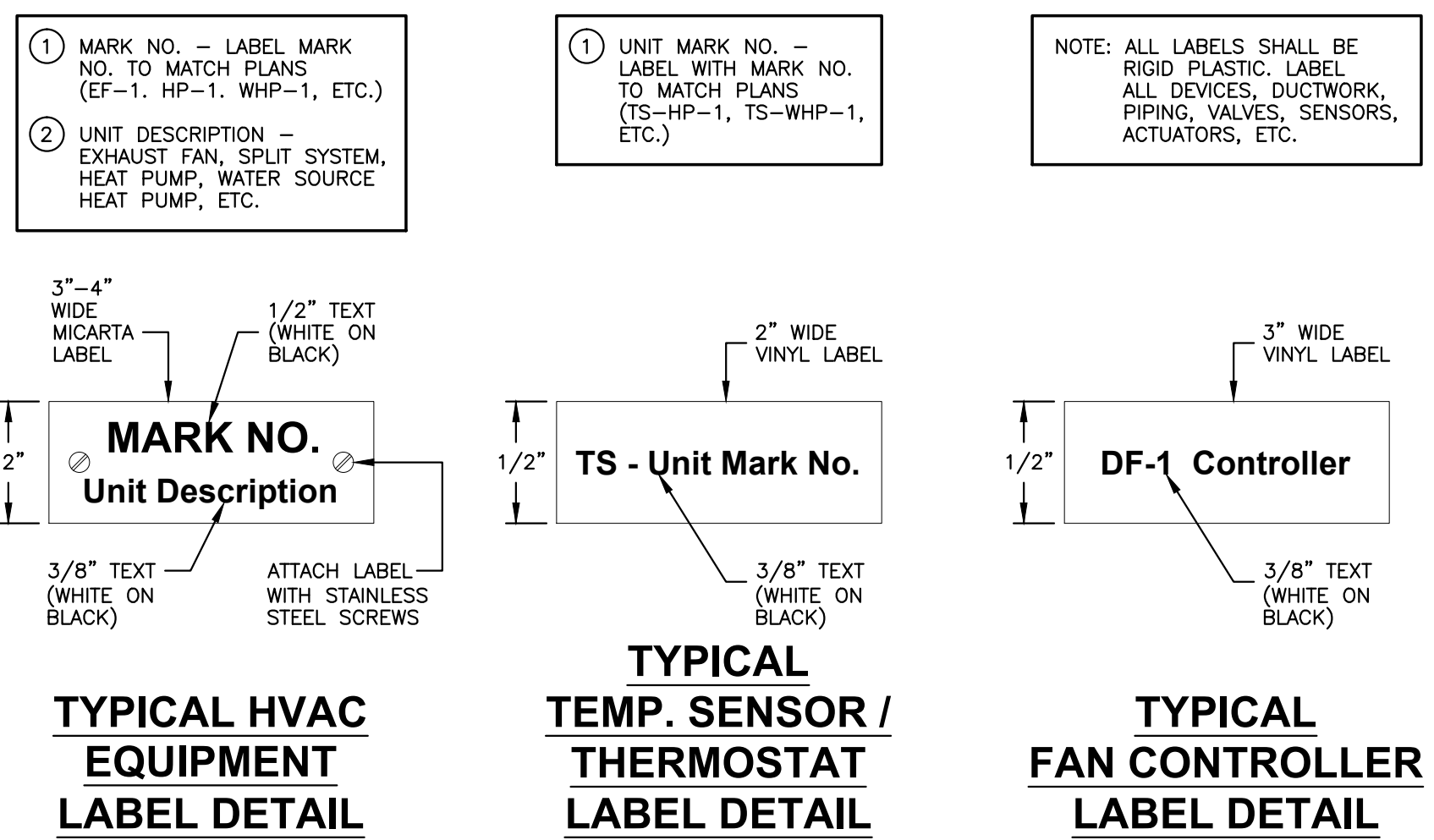
REFRIGERANT LINE ROUTING DETAIL

NOT TO SCALE



TYPICAL SECTION AT INDOOR UNIT

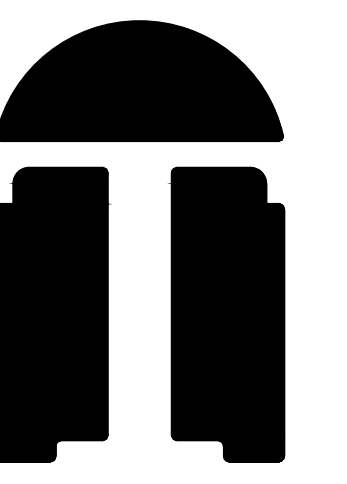
NOT TO SCALE



HVAC EQUIPMENT LABELING DETAILS

NOT TO SCALE

HVAC DETAILS



TDA Architects LLC

125 West Columbus Street
Dadeville, Alabama 36853



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Anniston Housing Authority /
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HVAC
DETAILS

TDA Comm. No.
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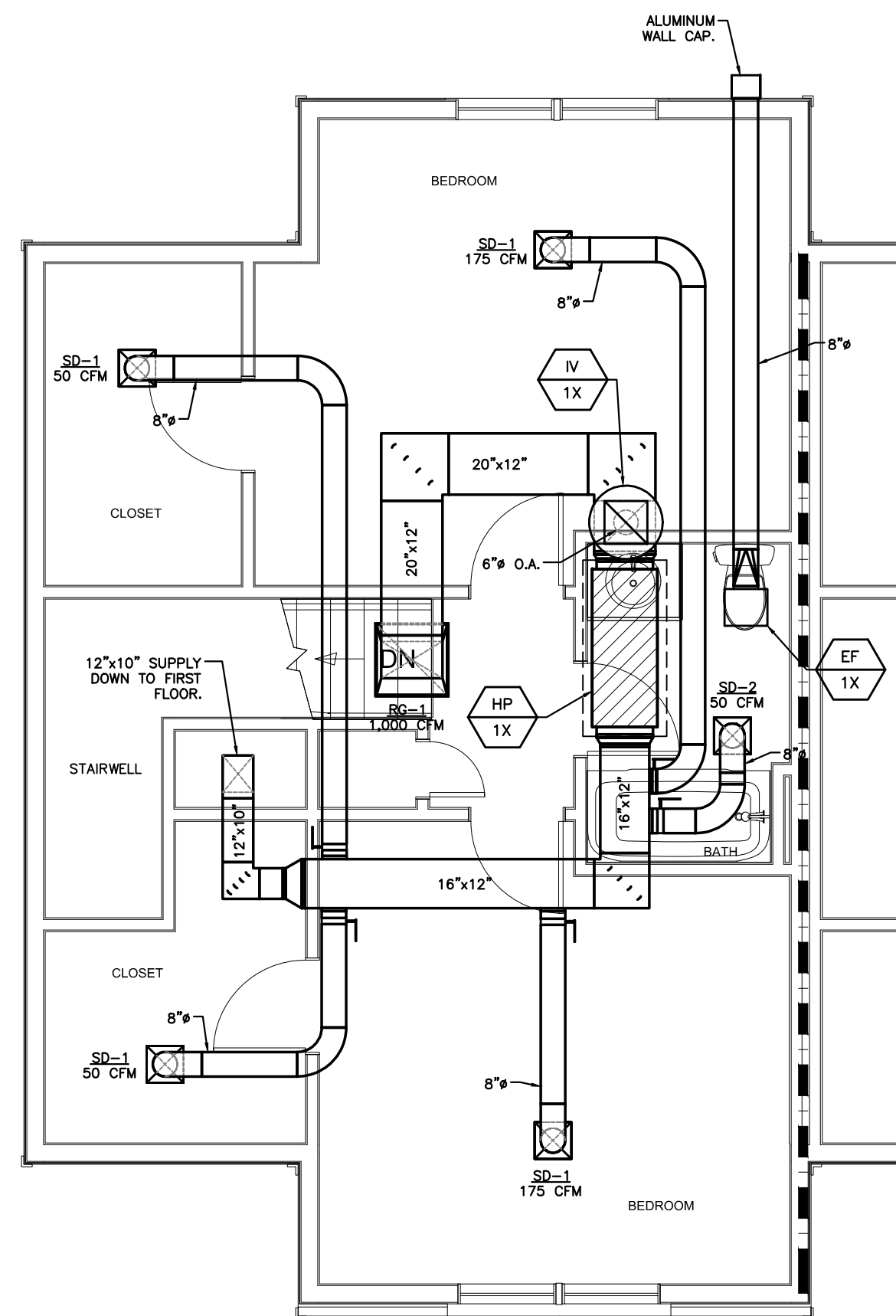
DATE:
11/22/23

SCALE:
AS NOTED

SHEET
M2.1

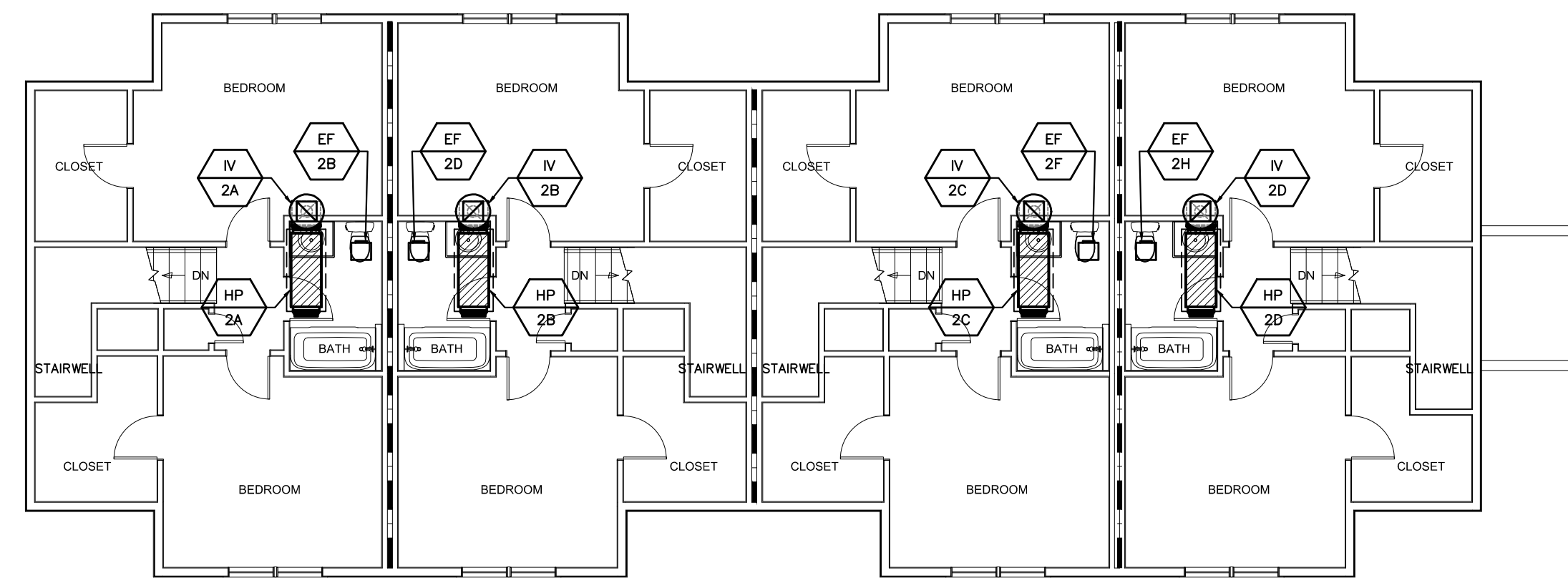
WHORTON ENGINEERING, INC.
HVAC - PLUMBING - PROCESS CONTROL
RANDALL WHORTON, P.E. 25 SUMMERALL GATE ROAD
PHONE: (256) 820-9897 ANNISTON, ALABAMA 36205
WHORTON ENGINEERING PROJECT NO. 23208

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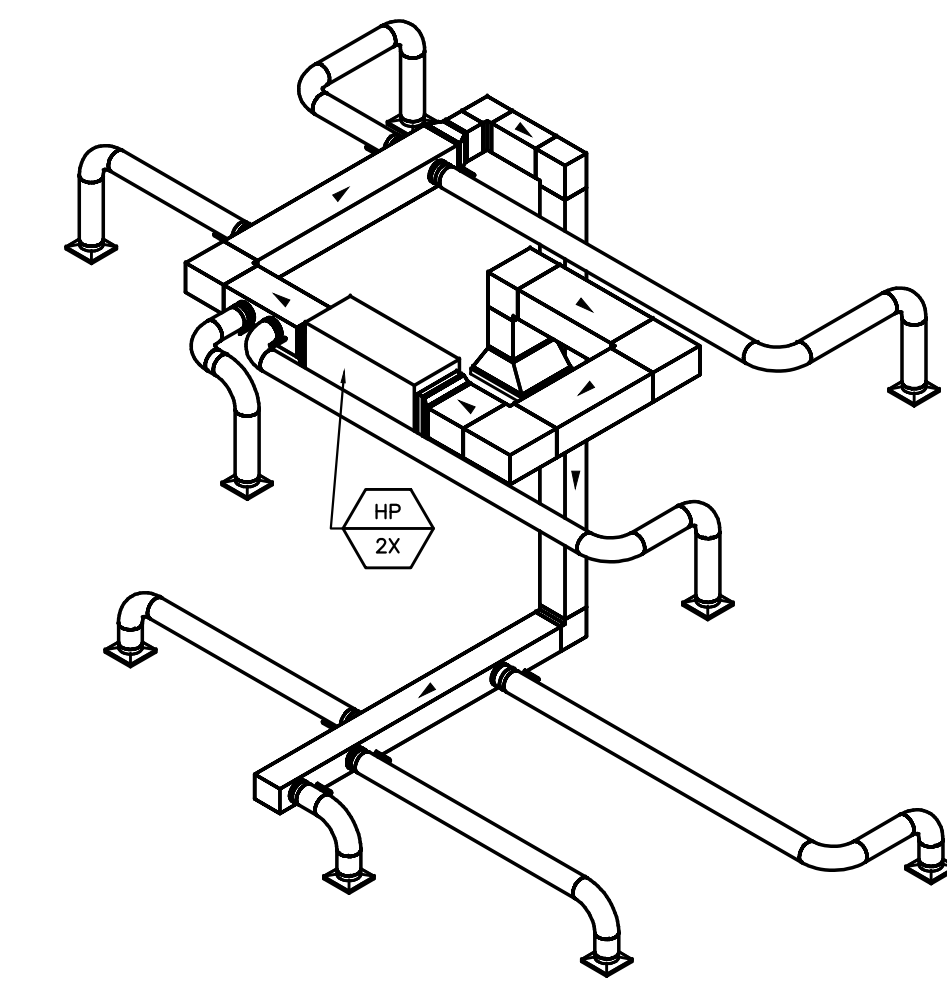
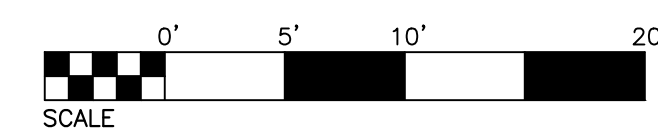
**TYPICAL ENLARGED
SECOND FLOOR HVAC PLAN**

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



SECOND FLOOR HVAC PLAN

SCALE: 1/8" = 1'-0"

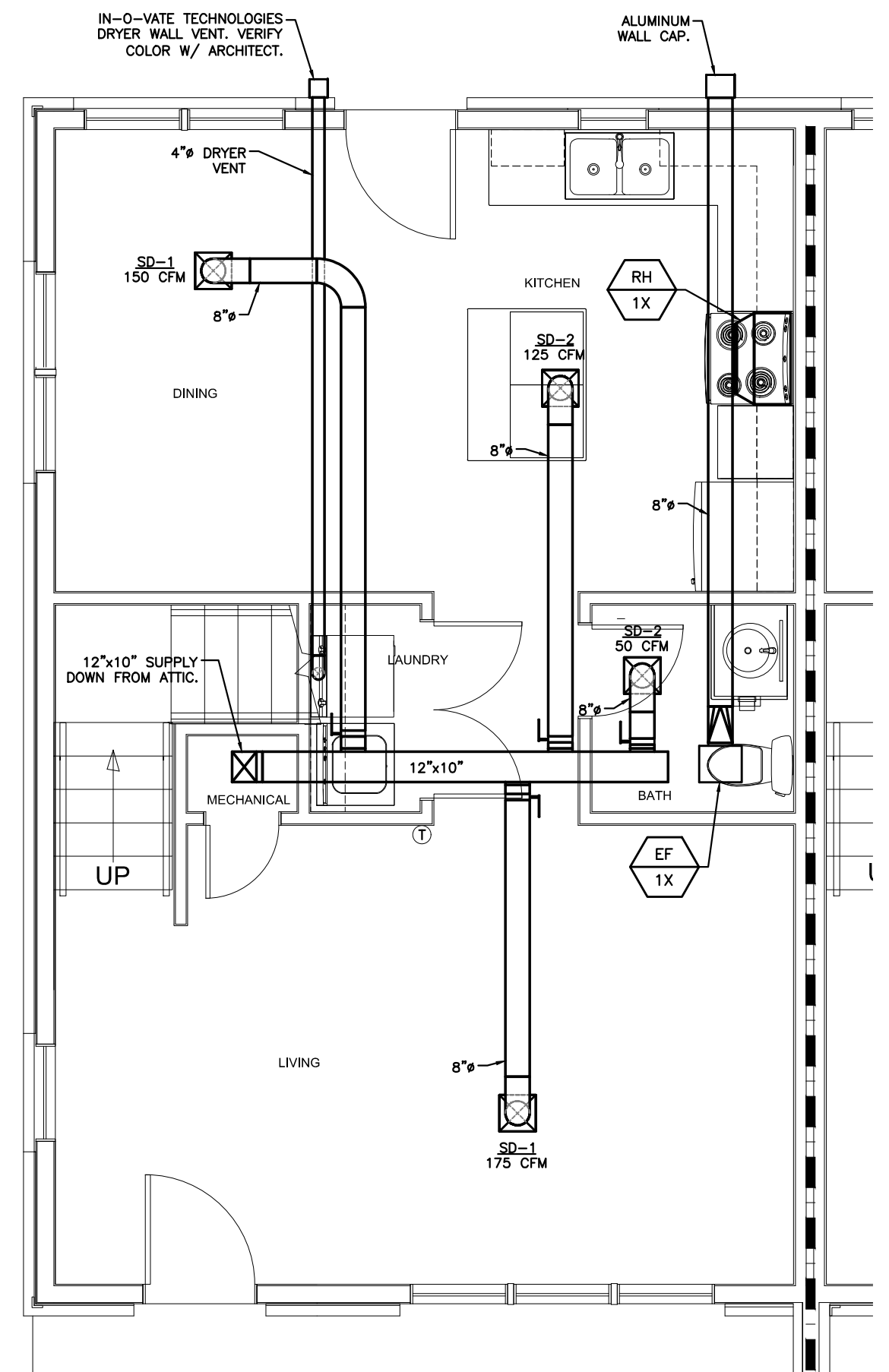


TYPICAL DUCT SCHEMATIC

**BUILDING TYPE 2
DIFFUSER SCHEDULE**

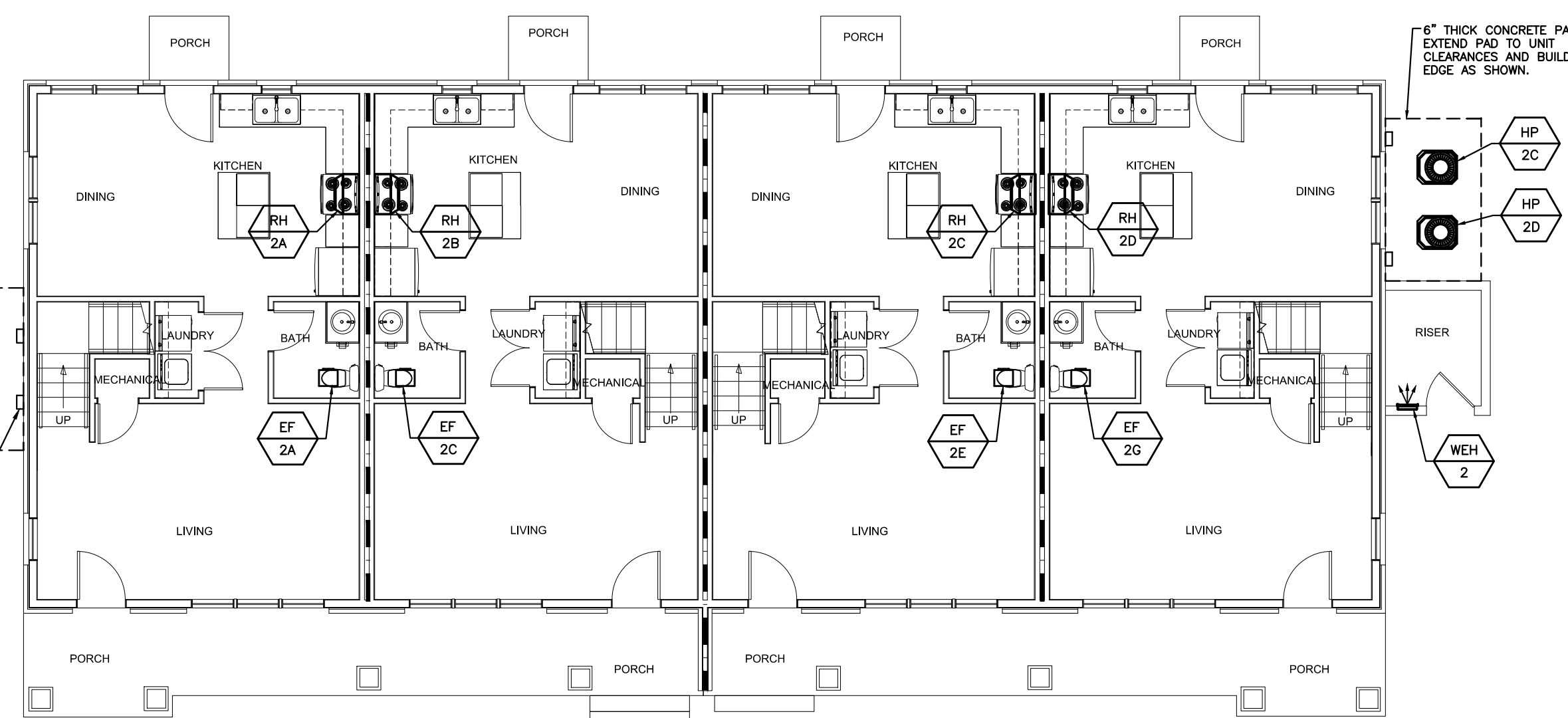
TAG	Size	Neck Size	Quantity	Manufacturer	Model Number	Type	Notes
RG-1	24"x24"	24X24	4	TITUS	33RL	RETURN	20"x20"x1" FILTER
SD-1	12"x12"	8"φ	20	TITUS	TDC	SUPPLY	
SD-2	12"x12"	8"φ	16	TITUS	TDC-AA	SUPPLY	
			40				

NOTE: FURNISH AND INSTALL AN INSULATION BLANKET ON THE BACK OF ALL CEILING MOUNTED DIFFUSERS AND GRILLES.



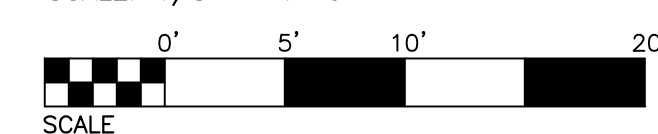
**TYPICAL ENLARGED
FIRST FLOOR HVAC PLAN**

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



FIRST FLOOR HVAC PLAN

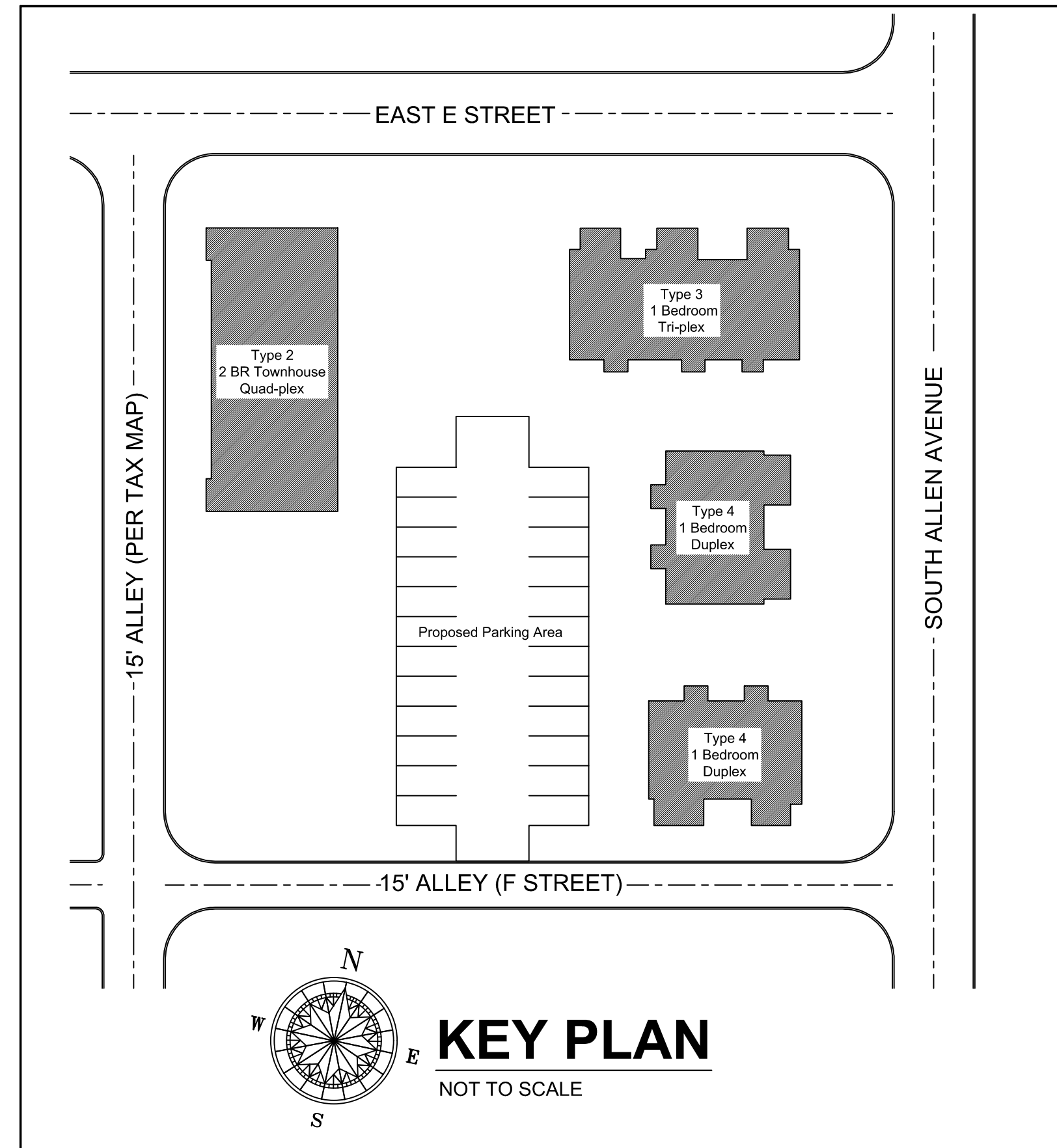
SCALE: 1/8" = 1'-0"



BUILDING TYPE 2 - HVAC PLANS

OUTSIDE AIR RUNOUTS SHALL INCLUDE MANUAL BALANCING DAMPER

REFERENCE PLUMBING PLANS FOR CONDENSATE PIPING



KEY PLAN

NOT TO SCALE

FIRE WALL LEGEND

1 HOUR WALL - - - - -

WHORTON ENGINEERING, INC.
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 WHORTON ENGINEERING PROJECT NO. 23208



**TDA
Architects
LLC**

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Dadeville, Alabama 36853



South Allen Avenue Development
 Anniston Housing Authority /
 Housing Development Corporation

**BUILDING
TYPE 2 -
HVAC
PLANS**

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SCALE:

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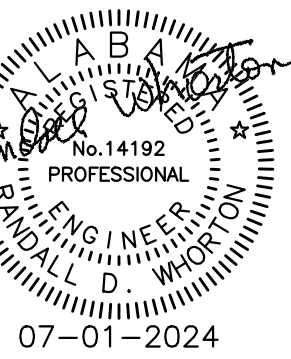
SHEET

M3.1



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**BUILDING
TYPE 3 -
HVAC
PLANS**

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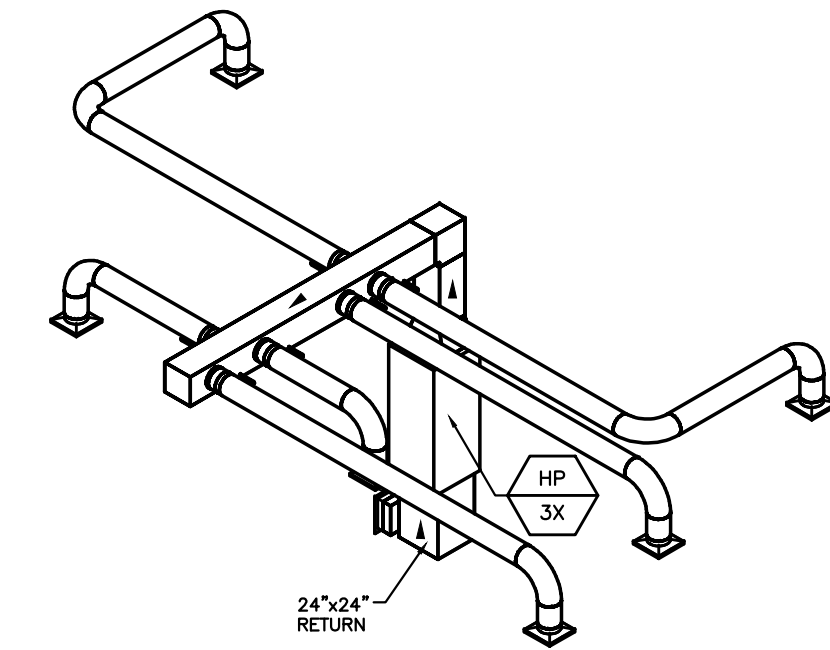
SCALE:

AS NOTED

SHEET

M3.2

REFERENCE DETAIL ON SHEET M2.1
FOR OUTSIDE AIR CONNECTION.

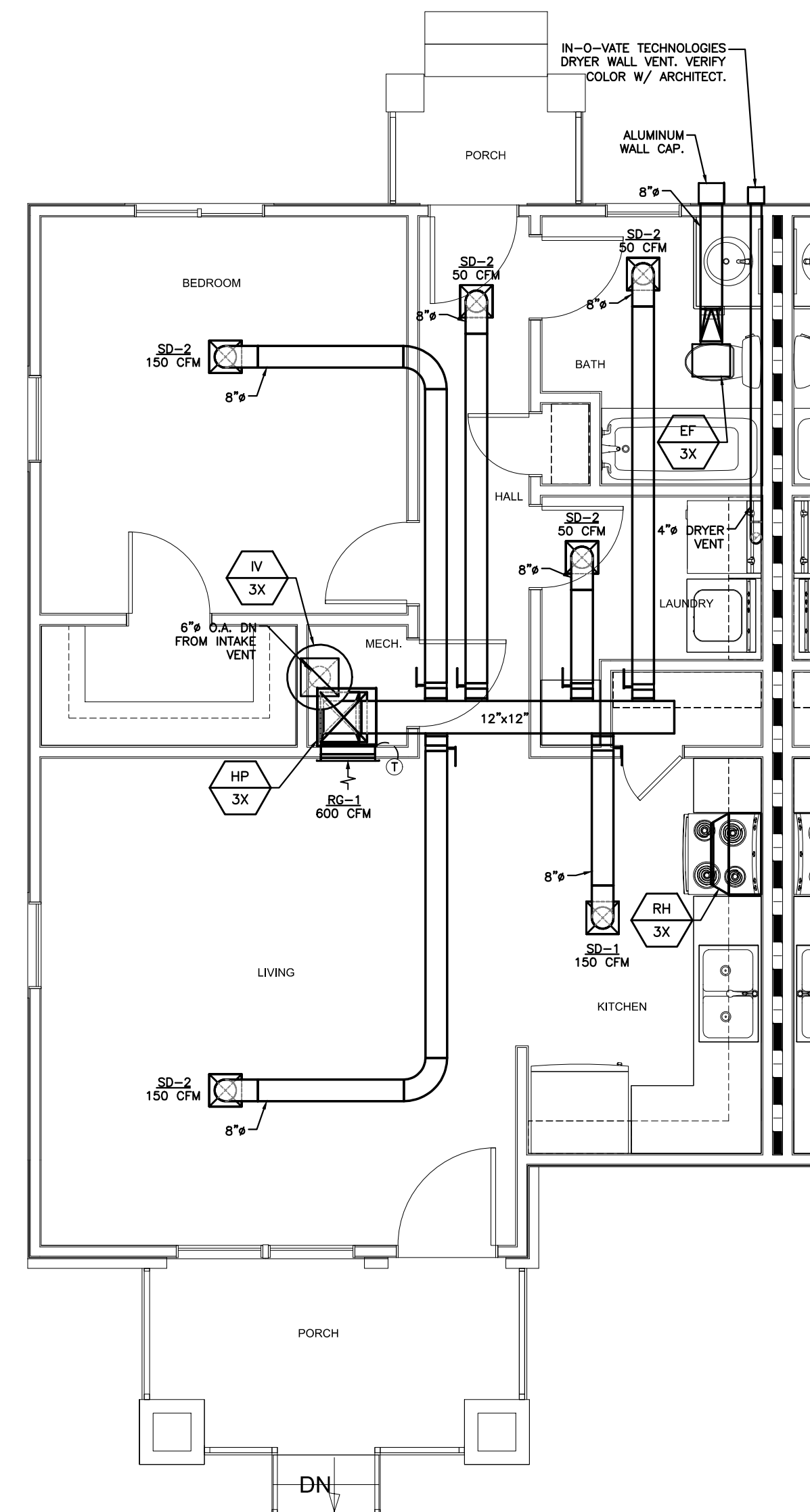


TYPICAL DUCT SCHEMATIC

**BUILDING TYPE 3
DIFFUSER SCHEDULE**

TAG	Size	Neck Size	Quantity	Manufacturer	Model Number	Type	Notes
RG-1	24"x24"	24x24	3	TITUS	33RL	RETURN	20"x20"x1" FILTER
SD-1	12"x12"	8"ø	9	TITUS	TDC	SUPPLY	
SD-2	12"x12"	8"ø	9	TITUS	TDC-AA	SUPPLY	
			21				

NOTE: FURNISH AND INSTALL AN INSULATION BLANKET ON THE BACK OF ALL CEILING MOUNTED DIFFUSERS AND GRILLES.

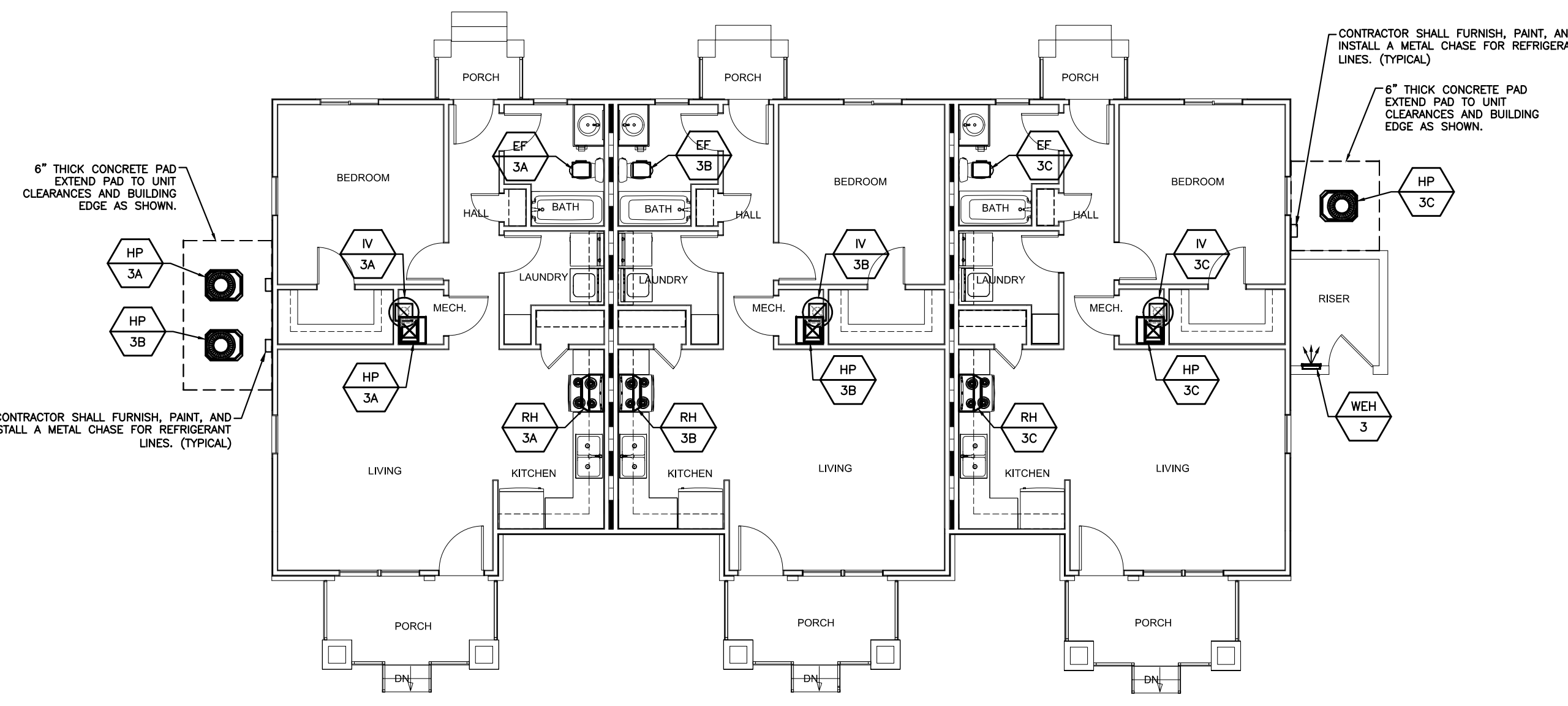


**TYPICAL ENLARGED
HVAC PLAN**

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

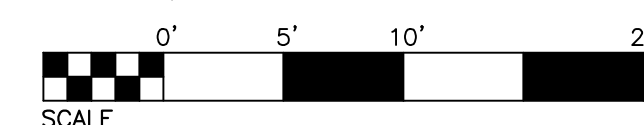
OUTSIDE AIR RUNOUTS SHALL INCLUDE
MANUAL BALANCING DAMPER

REFERENCE PLUMBING PLANS FOR CONDENSATE PIPING



HVAC PLAN

SCALE: 1/8" = 1'-0"



BUILDING TYPE 3 - HVAC PLANS

FIRE WALL LEGEND

1 HOUR WALL - - - - -

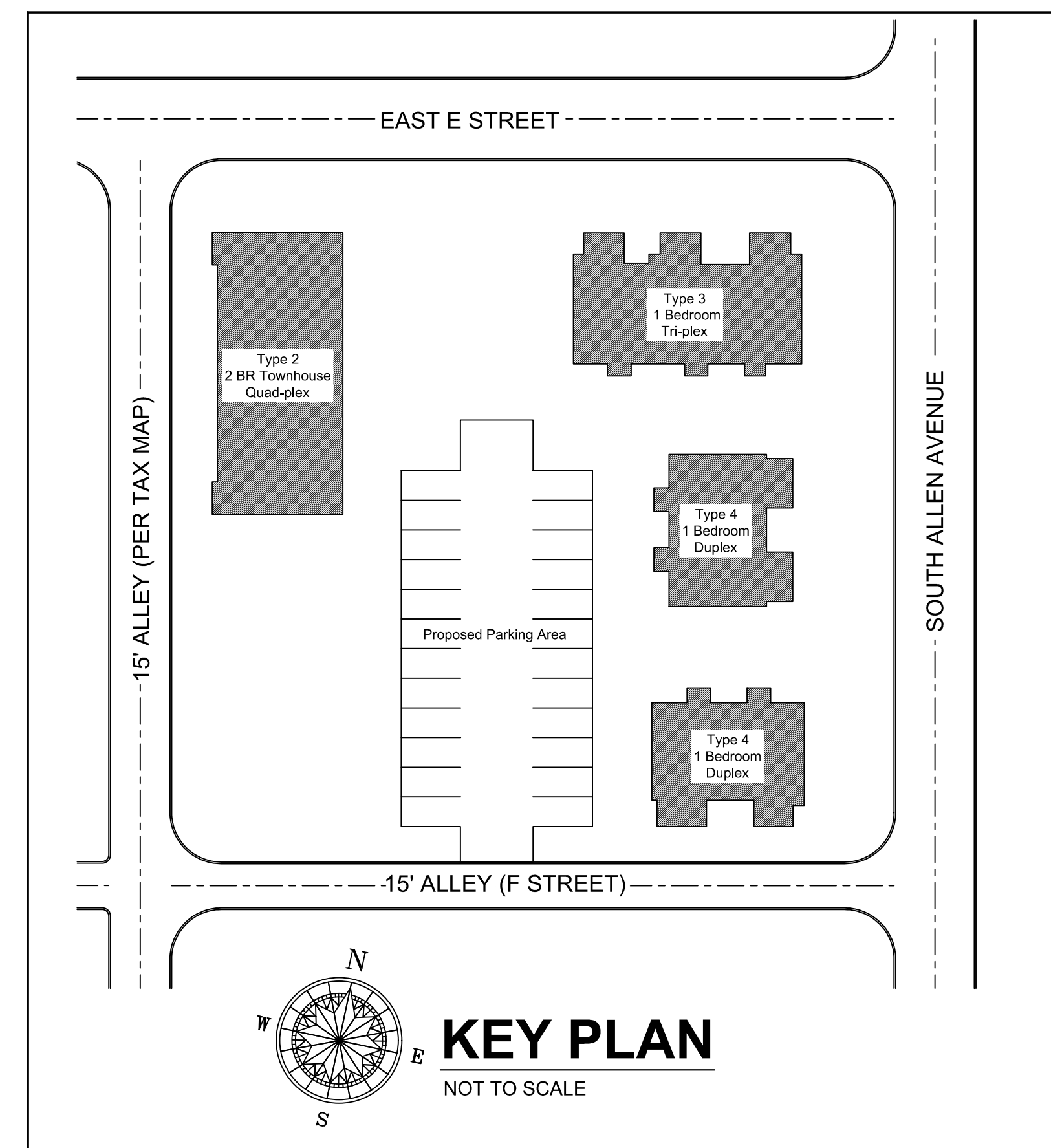
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HVAC - PLUMBING - PROCESS CONTROL

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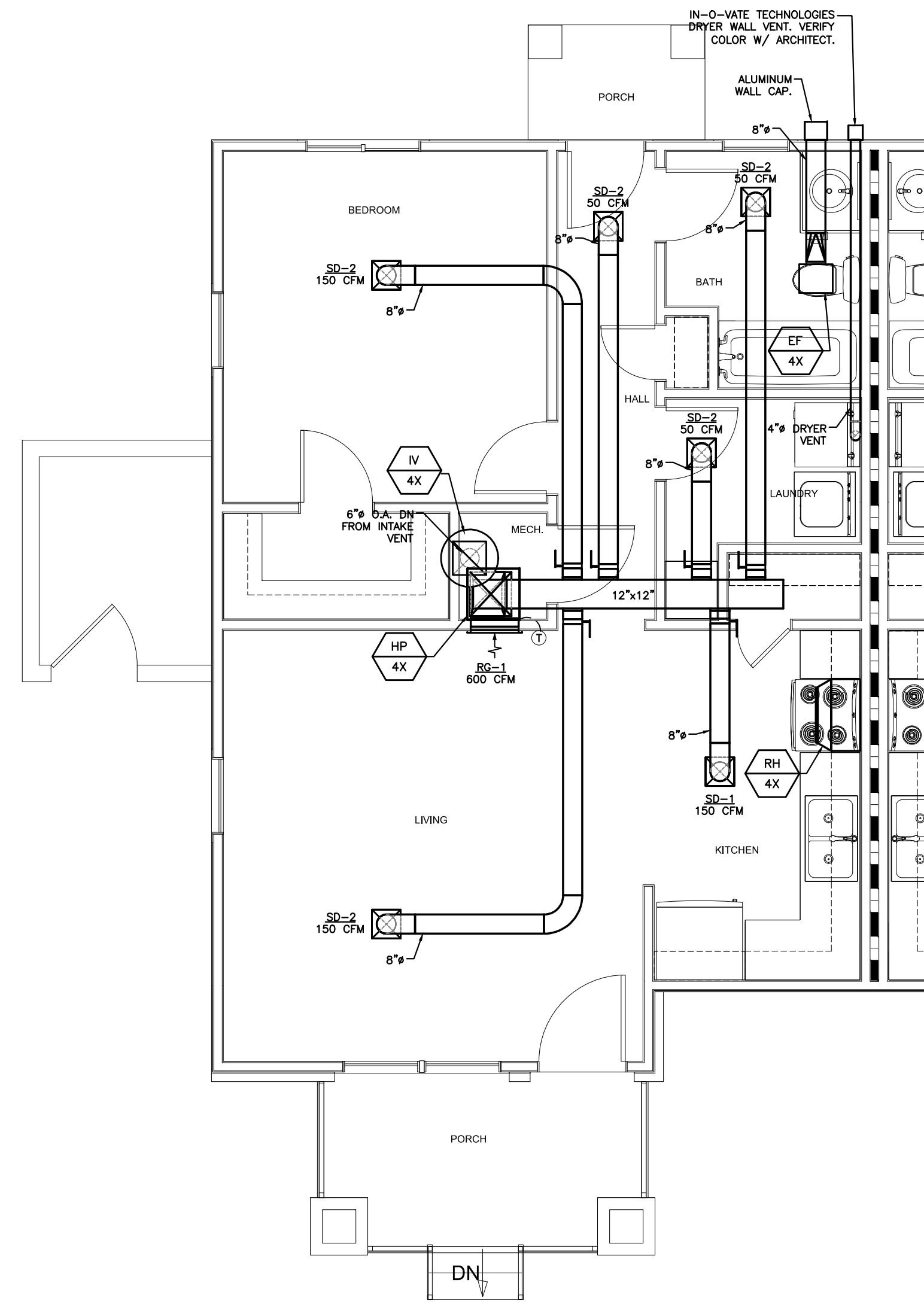
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KEY PLAN

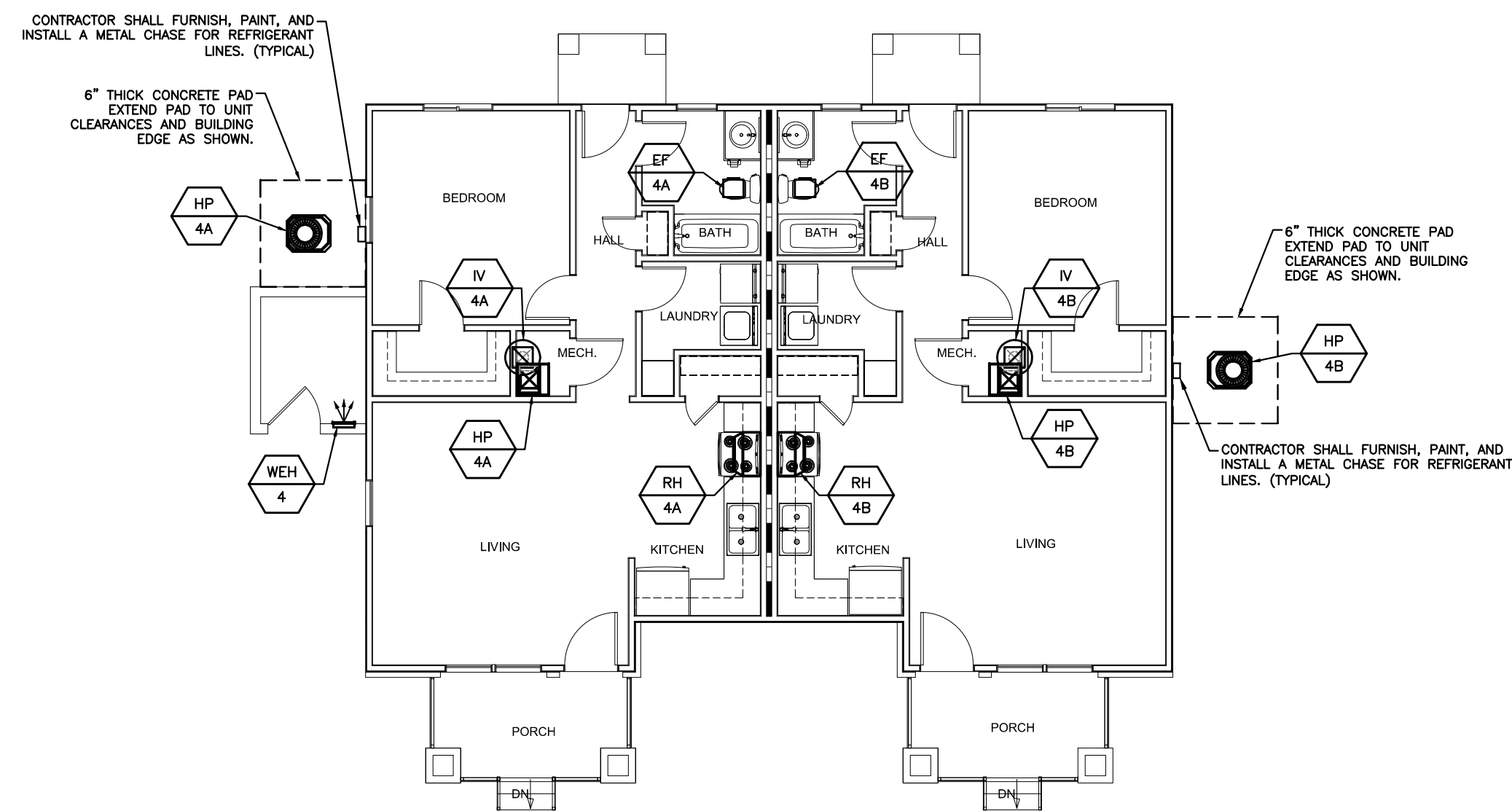
NOT TO SCALE



TYPICAL ENLARGED HVAC PLAN
SCALE: 1/4" = 1'-0"

OUTSIDE AIR RUNOUTS SHALL INCLUDE MANUAL BALANCING DAMPER

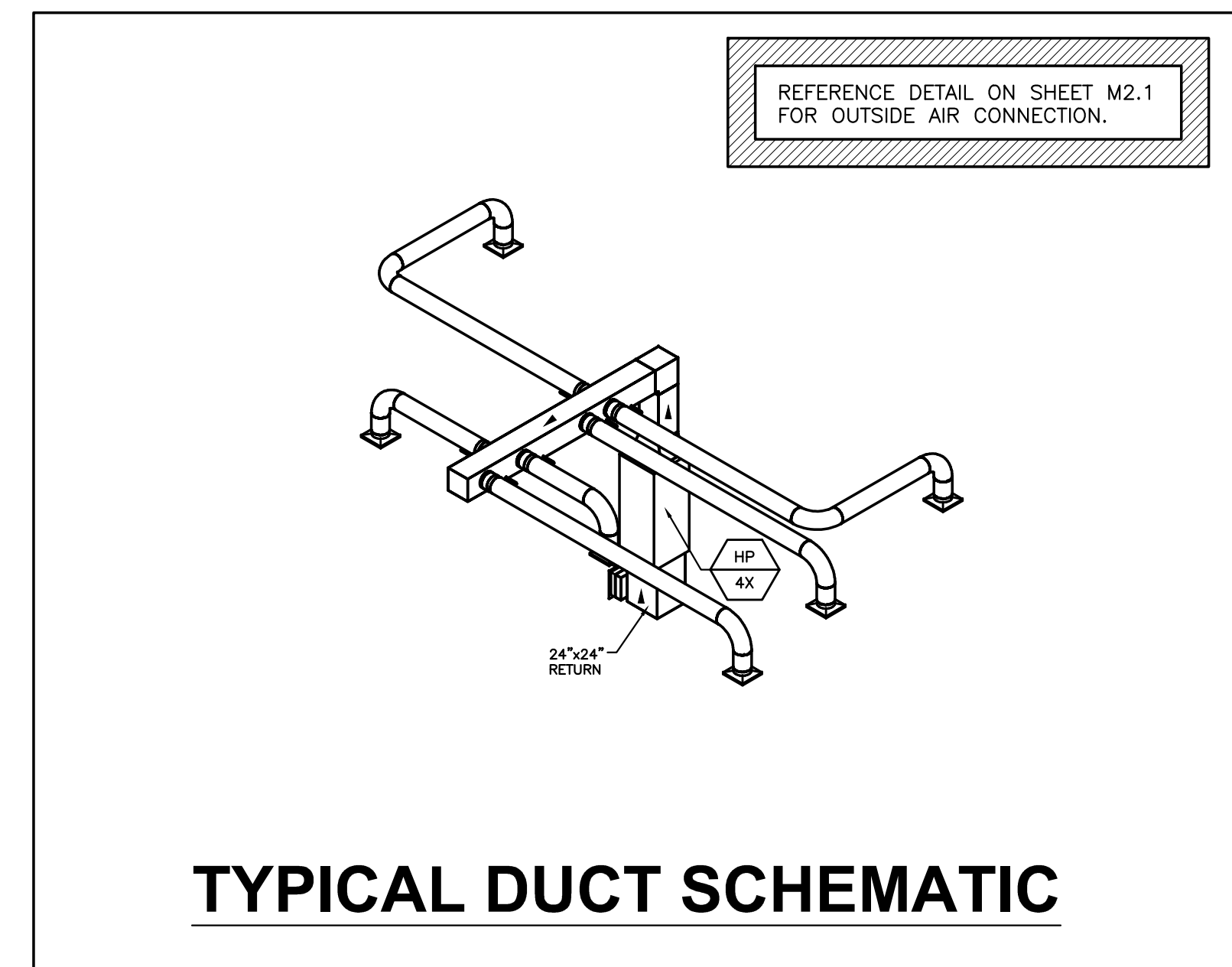
REFERENCE PLUMBING PLANS FOR CONDENSATE PIPING



HVAC PLAN

SCALE: 1/8" = 1'-0"
0' 5' 10' 20'
SCALE

BUILDING TYPE 4 - HVAC PLANS

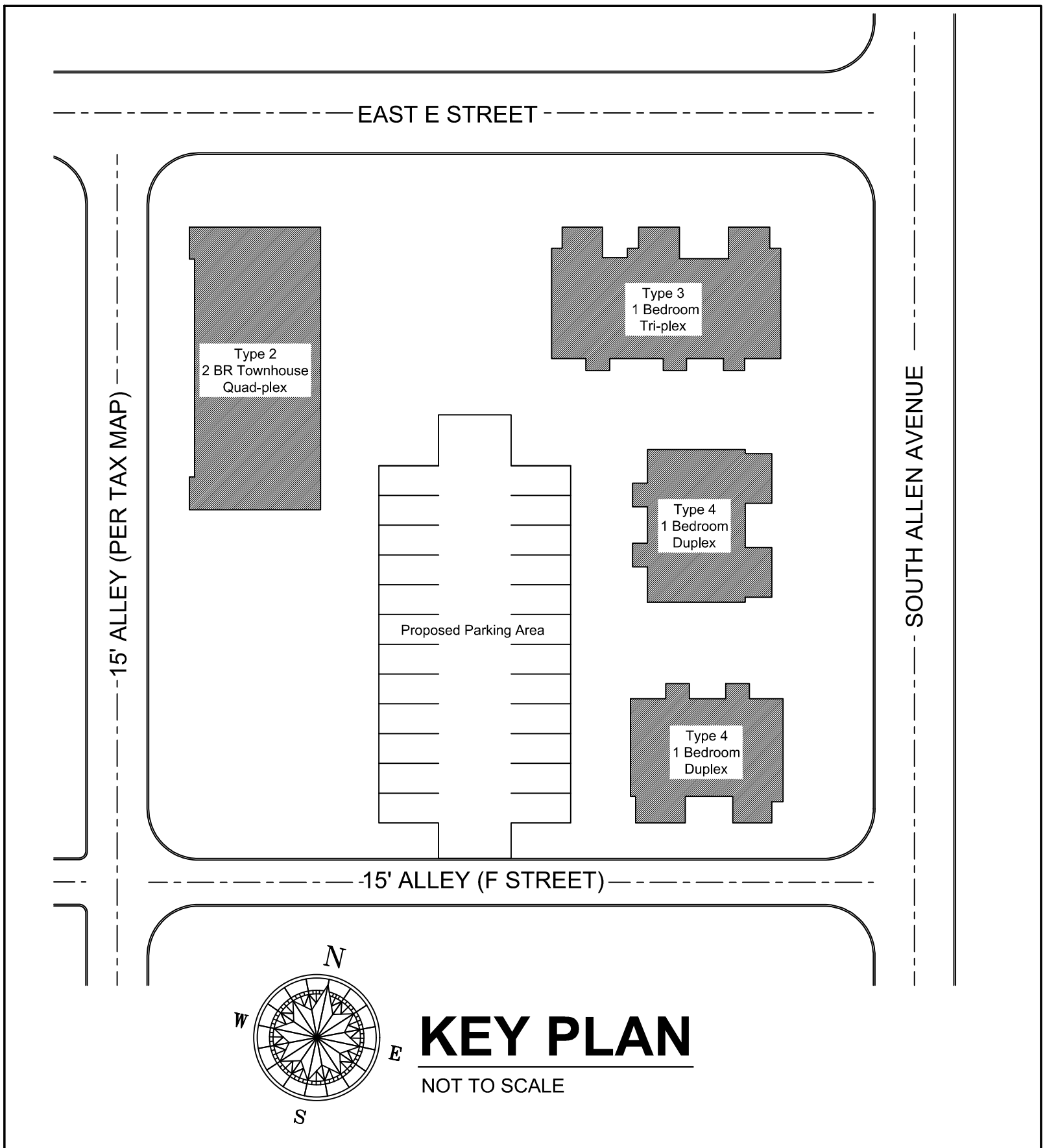


TYPICAL DUCT SCHEMATIC

BUILDING TYPE 4 DIFFUSER SCHEDULE

TAG	Size	Neck Size	Quantity	Manufacturer	Model Number	Type	Notes
RG-1	24"x24"	24X24	2	TITUS	33RL	RETURN	20"X20"X1" FILTER
SD-1	12"x12"	8"φ	6	TITUS	TDC	SUPPLY	
SD-2	12"x12"	8"φ	6	TITUS	TDC-AA	SUPPLY	
			14				

NOTE: FURNISH AND INSTALL AN INSULATION BLANKET ON THE BACK OF ALL CEILING MOUNTED DIFFUSERS AND GRILLES.



KEY PLAN
NOT TO SCALE

FIRE WALL LEGEND
1 HOUR WALL - - - - -

WHORTON ENGINEERING, INC.
HVAC - PLUMBING - PROCESS CONTROL

RANDALL WHORTON, P.E.
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25 SUMMERALL GATE ROAD
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WHORTON ENGINEERING PROJECT NO. 23208

TDA Architects LLC
125 West Columbus Street
Dadeville, Alabama 36853

07-01-2024

South Allen Avenue Development
Anniston Housing Authority /
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BUILDING TYPE 4 - HVAC PLANS

TDA Comm. No. 440
DATE: 11/22/23
SCALE: AS NOTED
SHEET M3.3

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PLUMBING NOTES

- THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE PLUMBING SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, ACCESSORIES, AND CONTROLS COMPLETELY COORDINATED WITH ALL TRADES. ALL REQUIREMENTS GIVEN IN THESE DOCUMENTS SHALL BE STRICTLY CONFORMED TO, ANY ITEMS AND LABOR REQUIRED FOR A COMPLETE PLUMBING SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS, LOCAL AUTHORITIES, AND THESE CONTRACT DOCUMENTS SHALL BE FURNISHED WITHOUT INCURRING ANY ADDITIONAL COST TO THE OWNER. CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS.
- COORDINATE ALL WORK WITH ARCHITECTURAL, STRUCTURAL, HVAC, AND ELECTRICAL TRADES. PIPE ROUTING SHOWN IS DIAGRAMMATIC. PROVIDE ALL OFFSETS, ETC., TO AVOID INTERFERENCES WITH EQUIPMENT, PIPING, DUCTWORK, LIGHTS, CONDUIT, ETC.
- FIELD VERIFY EXACT SIZE, MATERIAL, AND LOCATION OF ALL EXISTING UTILITIES BEFORE BEGINNING WORK.
- VERIFY LOCATION OF ALL FIXTURES WITH ARCHITECTURAL PLANS.
- VERIFY ALL FIXTURE MOUNTING HEIGHTS WITH ENGINEER AND ARCHITECT.
- COORDINATE ALL FLOOR PENETRATIONS WITH STRUCTURAL DRAWINGS. SET SLEEVES IN FLOORS/WALLS AND ATTACHMENTS FOR HANGERS AS CONSTRUCTION PROGRESSES. ALL PENETRATIONS MUST BE SEALED AND HELD AS TIGHT TO COLUMNS OR WALLS AS POSSIBLE.
- PROVIDE 12"X12" ACCESS PANEL FOR SHOCK ABSORBERS, TRAP PRIMERS, AND ALL VALVES LOCATED ABOVE NON-ACCESSIBLE CEILING AND INSIDE PIPE CHASES. EXACT LOCATION MUST BE COORDINATED WITH ARCHITECTURAL AND APPROVED BY ARCHITECT PRIOR TO INSTALLATION.
- ALL PIPING SHALL BE CONCEALED INSIDE WALLS, WITHIN PIPE CHASES, OR ABOVE CEILING. HOLD ALL PIPING ABOVE CEILING AS HIGH AS POSSIBLE.
- COORDINATE ALL UNDERGROUND PIPING WITH GRADE BEAMS, WALL FOOTINGS, AND OTHER STRUCTURAL CONDITIONS.
- PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ALL EQUIPMENT INDICATED ON DRAWINGS FINAL CONNECTION SHALL INCLUDE ANY ADAPTORS, NIPPLES, SHUT-OFF VALVES, PRV'S, SHOCK ABSORBERS, BACKFLOW PREVENTION DEVICES, REGULATORS, ETC.
- ALL STRUCTURAL PENETRATIONS (SLEEVES, BLOCK OUTS, ETC.) ARE TO BE LOCATED AND COORDINATED IN THE FIELD BY THE CONTRACTOR IN RELATION TO THE REQUIREMENTS OF FINAL EQUIPMENT AND FIXTURES SELECTED.
- CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ALL DOMESTIC WATER AND SANITARY SEWERS, UNLESS OTHERWISE NOTED.
- ALL PLUMBING COMPONENTS TO BE LEAD-FREE.
- HORIZONTAL DRAINAGE PIPING OF 2-1/2" DIAMETER OR LESS SHALL BE INSTALLED WITH A FALL OF NOT LESS THAN 1/4" PER FOOT. PIPING 3" AND LARGER SHALL BE INSTALLED WITH A FALL OF NOT LESS THAN 1/8" PER FOOT.
- ALL CONDENSATE DRAIN PIPING LOCATED WITHIN RETURN AIR PLENUM, SHALL BE TYPE "L" COPPER. ALL COPPER PIPING MUST BE INSULATED WITH 1/2" ARMAFLEX OR APPROVED EQUAL. PIPING CAN ALSO BE SCHEDULE 40 CPVC. ALL CONDENSATE DRAIN PIPING THAT IS NOT LOCATED WITHIN RETURN AIR PLENUM MAY BE SCHEDULE 40 PVC WITH 1/2" ARMAFLEX INSULATION (OR APPROVED EQUAL). INSULATION SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION. COORDINATE WITH HVAC PLAN FOR REQUIREMENT AND LOCATION OF AIR PLENUM(S).
- VERIFY ORIENTATION OF FLUSHING MECHANISM ON TOILET/URINAL WITH ARCHITECT/ENGINEER PRIOR TO ROUGH-IN.
- PROVIDE WATER PRESSURE REDUCING/REGULATING VALVE ON MAIN SERVICE WHEN MAIN PRESSURE EXCEEDS 75 PSI AT ANY TIME OF DAY. COORDINATE WITH LOCAL UTILITY.
- ALL OVERHEAD WATER PIPING SHALL BE INSTALLED BELOW CEILING INSULATION.
- INSTALL BACKFLOW PREVENTION IN ACCORDANCE WITH CITY AND STATE REQUIREMENTS. INSTALL ON MAIN DOMESTIC WATER SERVICE TO THE BUILDING.
- CONTRACTOR SHALL INSTALL WATER HAMMER ARRESTOR EQUAL TO ZURN SERIES 1700 AT EACH PLUMBING GROUP.
- CONTRACTOR TO FURNISH AND INSTALL ANTI-SIPHON VALVE ON EACH WATER HEATER.
- CONTRACTOR SHALL FURNISH AND INSTALL BALL VALVES FOR WATER SHUT-OFF AT FIXTURE GROUPINGS.
- TRAP PRIMERS TO BE PRECISION PLUMBING PRODUCTS MODEL NO. PP-500 WITH AG-500 AIR GAPS OR APPROVED EQUAL. DISTRIBUTION CUP (DU-4) ABOVE CEILING OR BEHIND ACCESS PANEL FOR UP TO FOUR FLOOR DRAINS.
- WATER HEATERS SHALL INCLUDE HEAT TRAP FITTING ON INLET AND OUTLET WATER CONNECTIONS.
- ALL STOPS/SUPPLIES SHALL BE CHROME PLATED BRASS.

PLUMBING EQUIPMENT SCHEDULE

MARK NO.	FIXTURE TYPE	MANUFACTURER'S MODEL NO.	MOUNT	MOUNT HEIGHT	WASTE SIZE	VENT SIZE	C.W. SIZE	H.W. SIZE	NOTES
WC-1	WATER CLOSET TANK TYPE	AMER. STANDARD 3251A101.020 BOWL W/ 4192A004.020 TANK OR APPROVED EQUAL	FLOOR	16-1/2" TO RIM	4"	2"	1/2"	-	WHITE ELONGATED VITREOUS CHINA. WHITE C10-1100 COMFORT SEAT W/ LID ZURN Z8804-XL-CR-PC SUPPLY KIT; OATEY 31190 MAX RING W/ HERCULES 90-210 JOHN-RING WAX GASKET; CO2-033 BRASS CLOSET BOLT
L-1	LAVATORY 17-1/8"X14-1/8" UNDERMOUNT	AMERICAN STANDARD 0495.221.020 OR APPROVED EQUAL	CABINET	-	1-1/4"	1-1/4"	1/2"	1/2"	WHITE VITREOUS CHINA. OPEN GRID STRAINER. DELTA MODEL NO. B2596LF WINDMERE FAUCET. W/ 0.5 GPM AERATOR. ZURN Z-8700-PC P-TRAP W/ CLEANOUT. ZURN Z-8700-PC SUPPLIES W/ STOPS
BT-1	TUB/SHOWER	BOOTT MODEL 3396 STEEL TUB OR APPROVED EQUAL	FLOOR	-	2"	1-1/2"	1/2"	1/2"	DELTA FAUCET WINDMERE #B14496 CHROME TRIM KIT W/ SINGLE-SPRAY SHOWER HEAD; DELTA R100-DIWS VALVE; JONES STEPHENS D40-140 NO OULET S.S. SHOWER DRAIN W/ BRASS BODY. REF. PLAN FOR ORIENTATION (RIGHT/LEFT HAND)
S-1	STAINLESS SINK TWO COMPARTMENT	ELKAY "DAYTON" NO. DSEW4023322 OR APPROVED EQUAL	CABINET	-	1-1/2"	1-1/4"	1/2"	1/2"	DEARBORN DB-14 STRAINER. DELTA 400-DST FAUCET; ZURN Z8804-XL-LR-PC SUPPLY KIT; ZURN Z-8702B-PC P-TRAP W/ CLEANOUT; ZURN Z-8751-SC CONT WASTE

EQUALS BY ELJER, KOHLER, TOTO, AND AMERICAN STANDARD WILL BE ACCEPTED.

PLUMBING SPECIALITY SCHEDULE

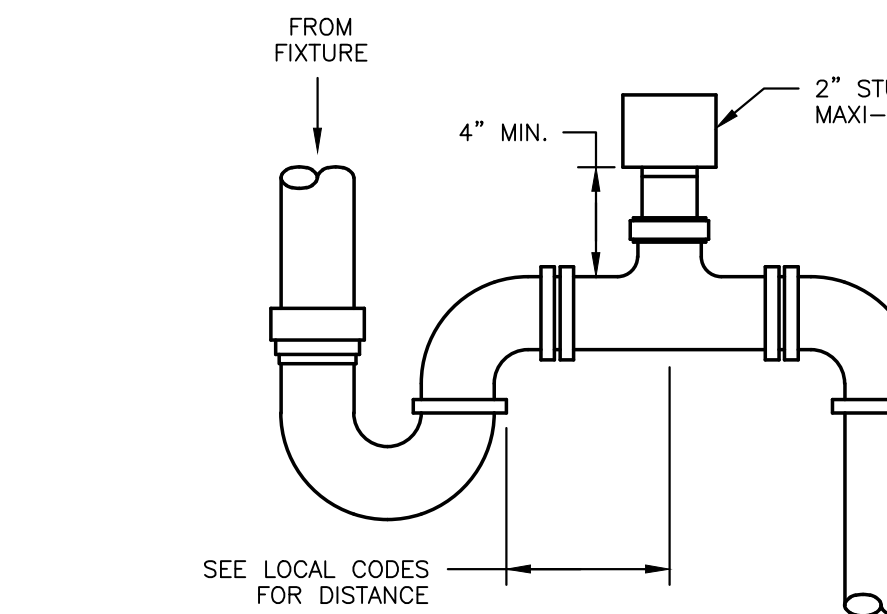
MARK NO.	FIXTURE TYPE	MANUFACTURER'S MODEL NO.	MOUNT	MOUNT HEIGHT	WASTE SIZE	VENT SIZE	C.W. SIZE	H.W. SIZE	MIXED WATER SIZE	NOTES
FD-1	FLOOR DRAIN	ZURN MODEL NO. ZN-415B OR APPROVED EQUAL	FLOOR	-	4"	2"	-	-	-	6" DIA. NICKEL BRONZE ADJUSTABLE TOP PROSET SYSTEM INC. TG34P RETROFIT TRAP GUARD
HD-1	HUB DRAIN (CONDENSATE)	PROSET MODEL SYSTEM INC. MODEL NO. TG22P OR APPROVED EQUAL	FLOOR	-	2"	-	-	-	-	STUB TO 1" A.F.F.
WB-1	ICEMAKER WALLBOX	OATEY MODEL NO. 38574 OR APPROVED EQUAL	WALL	36" A.F.F.	-	-	1/2"	-	-	1/4 TURN BRASS BALL VALVE - COPPER SWEAT - STANDARD PACK WITH 6" STAINLESS STEEL HOSE
WB-2	WASHER WALLBOX	OATEY MODEL NO. 38541 OR APPROVED EQUAL	WALL	36" A.F.F.	2"	1-1/2"	1/2"	1/2"	-	WITH 1/4 TURN VALVES AND CPVC CONNECTION AND MOUNTED WATER HAMMER ARRESTOR
WH-1	WALL HYDRANT	WOODFORD MODEL NO. B65 OR APPROVED EQUAL	WALL	18" TO 24"	-	-	3/4"	-	-	FREEZELESS, ANTI-SIPHON, LOCKING BOX
W.H.A.	WATER HAMMER ARRESTOR	ZURN SERIES 1700 OR APPROVED EQUAL	-	-	-	-	VARIABLES	VARIABLES	-	

EQUALS BY SMITH, OATEY, ZURN, OR JONES WILL BE ACCEPTED

ELECTRIC WATER HEATER SCHEDULE

MARK	FIXTURE TYPE	MANUFACTURER'S MODEL NO.	BLDG TYPE	FIXTURE QTY TOTAL	SIZE	VOLTAGE	WATTS SIZE	DIMENSIONS	C.W. INLET	H.W. INLET	NOTES
EW-1A THRU EW-1C											NOT USED
EW-2A THRU EW-2D	ELECTRIC WATER HEATER	A.O. SMITH MODEL NO. DEN-40 OR APPROVED EQUAL	2	4	40 GAL.	240-1-60	4,500	20-1/2" x 45-1/8"H	3/4"	3/4"	UPPER AND LOWER 4,500 WATT NON-SIMULTANEOUS ELEMENTS; ASHRAE 90.1 COMPLIANT; TOP CONNECTIONS
EW-3A THRU EW-3C	ELECTRIC WATER HEATER	A.O. SMITH MODEL NO. DEN-40 OR APPROVED EQUAL	3	3	40 GAL.	240-1-60	4,500	20-1/2" x 45-1/8"H	3/4"	3/4"	UPPER AND LOWER 4,500 WATT NON-SIMULTANEOUS ELEMENTS; ASHRAE 90.1 COMPLIANT; TOP CONNECTIONS
EW-4A THRU EW-4B	ELECTRIC WATER HEATER	A.O. SMITH MODEL NO. DEN-40 OR APPROVED EQUAL	4	4	40 GAL.	240-1-60	4,500	20-1/2" x 45-1/8"H	3/4"	3/4"	UPPER AND LOWER 4,500 WATT NON-SIMULTANEOUS ELEMENTS; ASHRAE 90.1 COMPLIANT; TOP CONNECTIONS

TOTAL NUMBER OF WATER HEATERS = 14



TYP. ADMITTANCE VALVE DETAIL

PLUMBING LEGEND

SS	SANITARY SEWER	C.O.	CLEANOUT UP TO GRADE
V	VENT	⊗	FIRE SPRINKLER HEAD
CW	COLD WATER	SV	BALL VALVE
HW	140° HOT WATER	VTR	VENT THRU ROOF
CD	CONDENSATE DRAIN	AAV	AIR ADMITTANCE VALVE (SBCCI APPROVED)

PVC PIPE HANGER SPACING GUIDE

NPS (INCHES)	MAXIMUM SUPPORT SPACING (FEET)		
	OPERATING TEMPERATURE (°F)		
	60	100	140
1/2	4.5	4	2.5
3/4	5	4	2.5
1	5.5	4.5	2.5
1-1/4	5.5	5	3
1-1/2	6	5	3
2	6	5	3
3	7	6	3.5
4	7.5	6.5	4
6	8.5	7.5	4.5
8	9	8	4.5

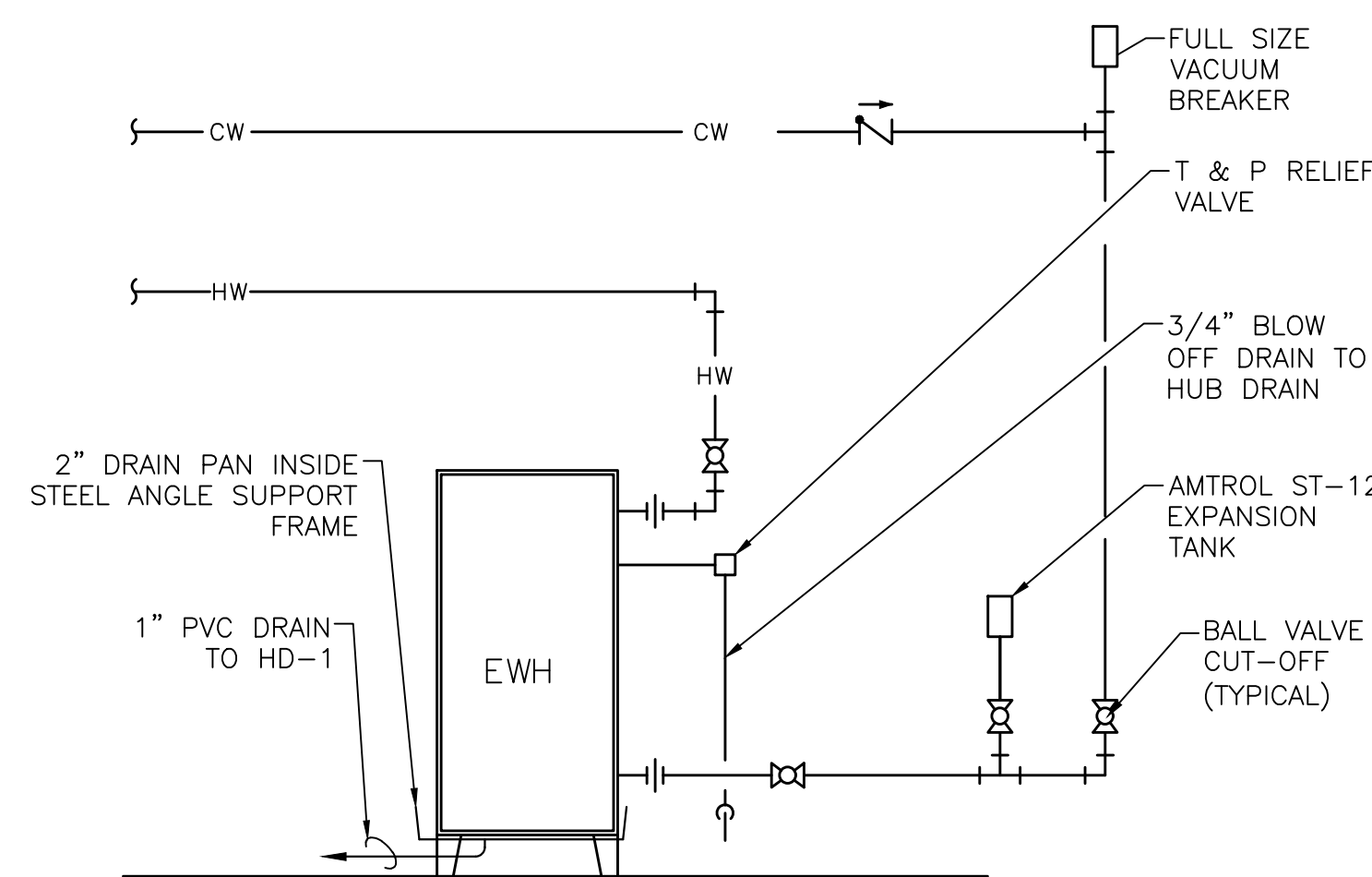
NOTE: PLASTIC PIPE SUPPORTS SHALL BE AS NOTED ABOVE UNLESS MANUFACTURER'S RECOMMENDATION IS MORE STRINGENT FOR THE APPLICATION.

CODES AND STANDARDS

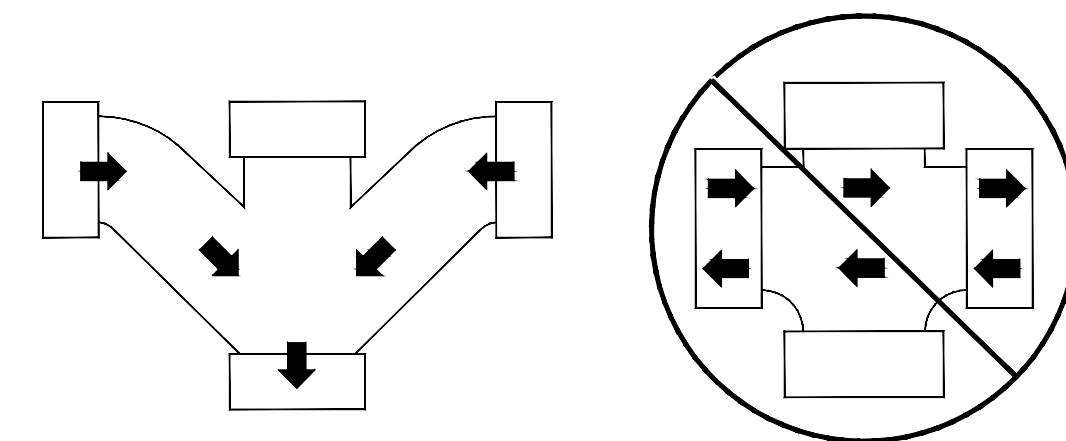
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2021 INTERNATIONAL FIRE CODE

PLUMBING DRAWING INDEX

SHEET NO.	SHEET TITLE
P1.1	PLUMBING SCHEDULES, LEGEND, NOTES, AND DETAILS
P2.1	OVERALL PLUMBING PLANS
P3.1	TYPICAL ENLARGED 1 BEDROOM PLUMBING PLANS
P3.2	TYPICAL ENLARGED 2 BEDROOM PLUMBING PLANS

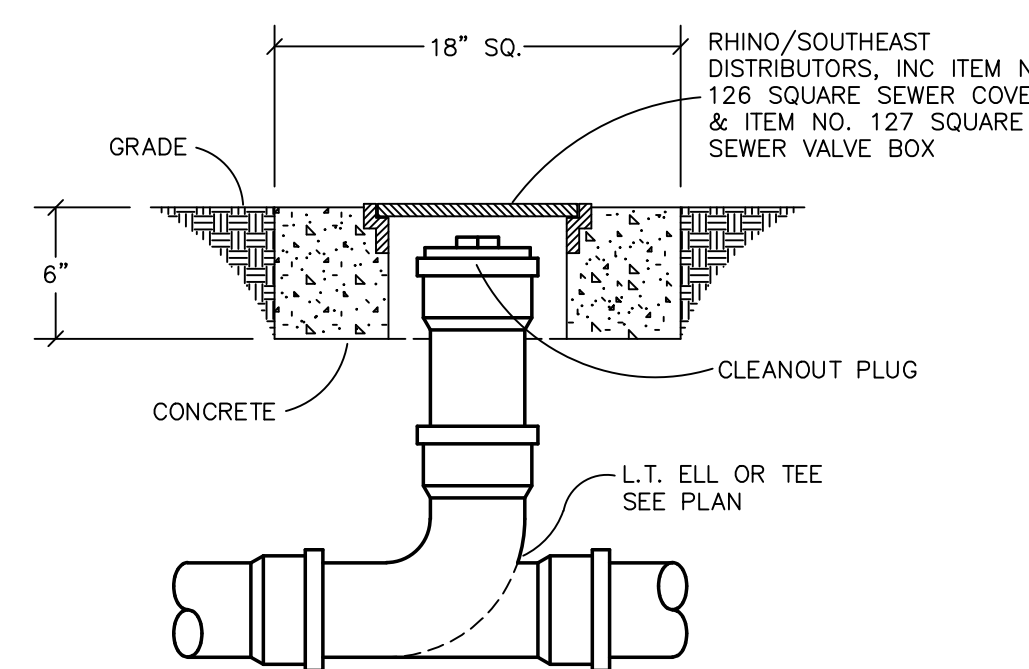


ELECTRIC WATER HEATER DETAIL



USE A 45° DOUBLE WYE FITTING. DO NOT USE A DOUBLE SANITARY TEE.

TYPICAL BACK TO BACK INSTALLATION FITTINGS



CLEANOUT UP TO GRADE

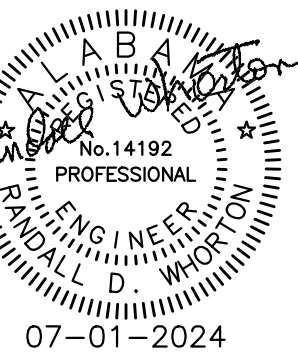
PLUMBING SCHEDULES, LEGEND, NOTES, AND DETAILS

NOT TO SCALE



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PLUMBING
SCHEDULES,
LEGEND,
NOTES, AND
DETAILS

TDA Comm. No.
440

DATE:
11/22/23

SCALE:
AS NOTED

SHEET
P1.1

WHORTON ENGINEERING, INC.

HVAC - PLUMBING - PROCESS CONTROL

RANDALL WHORTON, P.E.
PHONE: (256) 820-9897

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ANNISTON, ALABAMA 36205

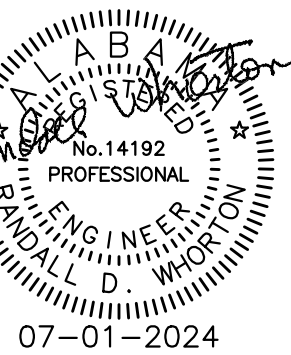
WHORTON ENGINEERING PROJECT NO. 23208

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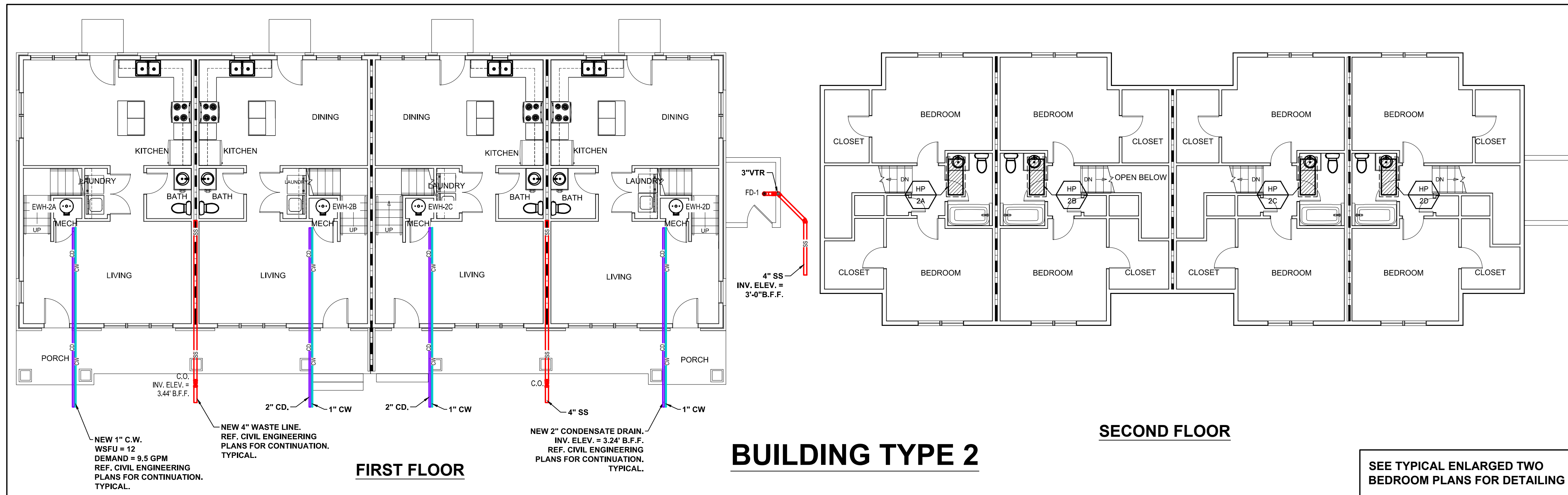


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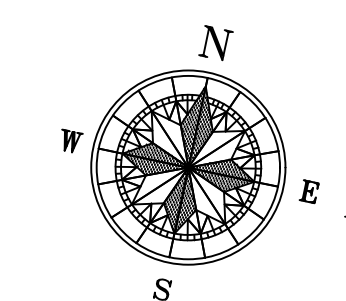
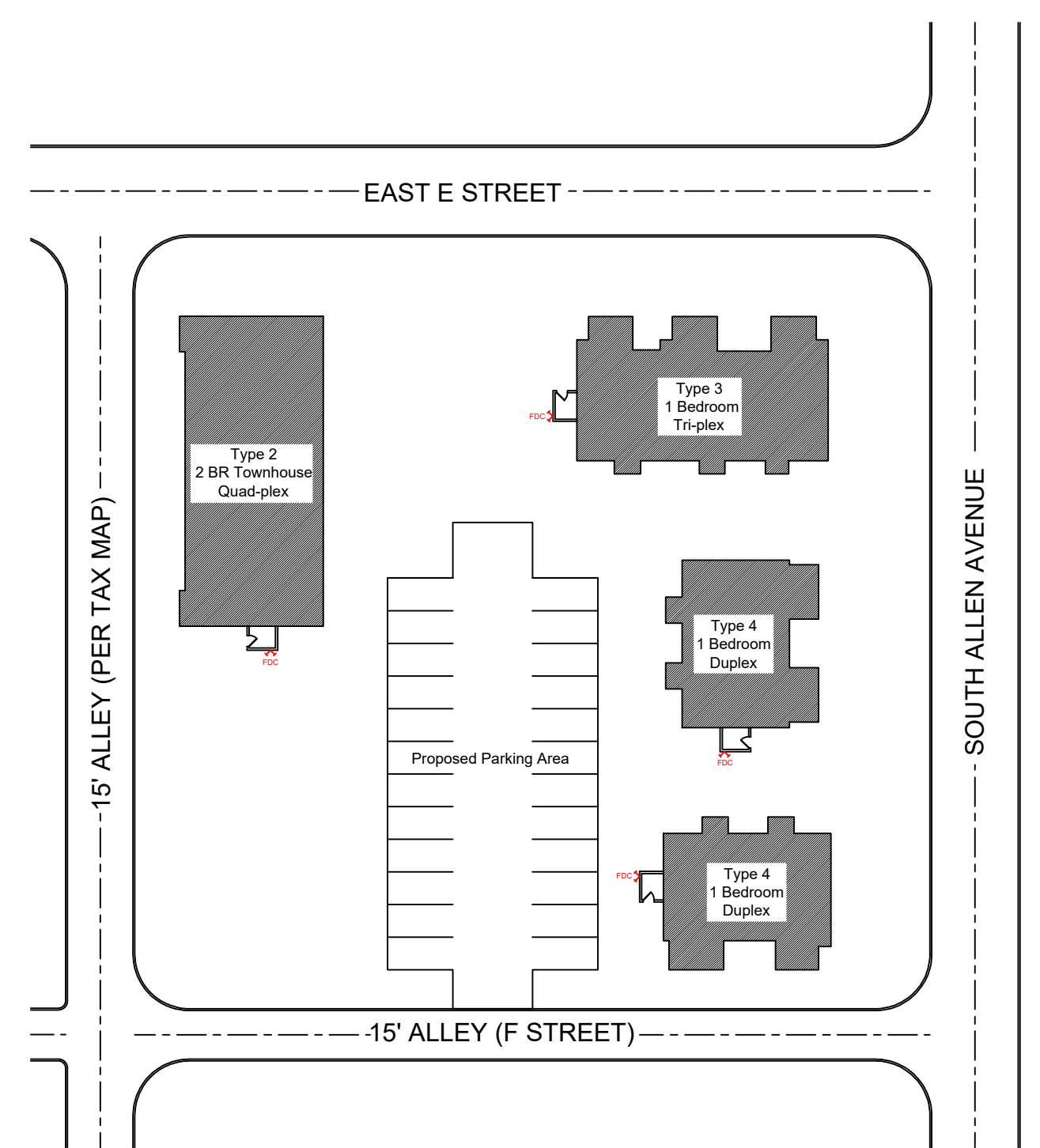
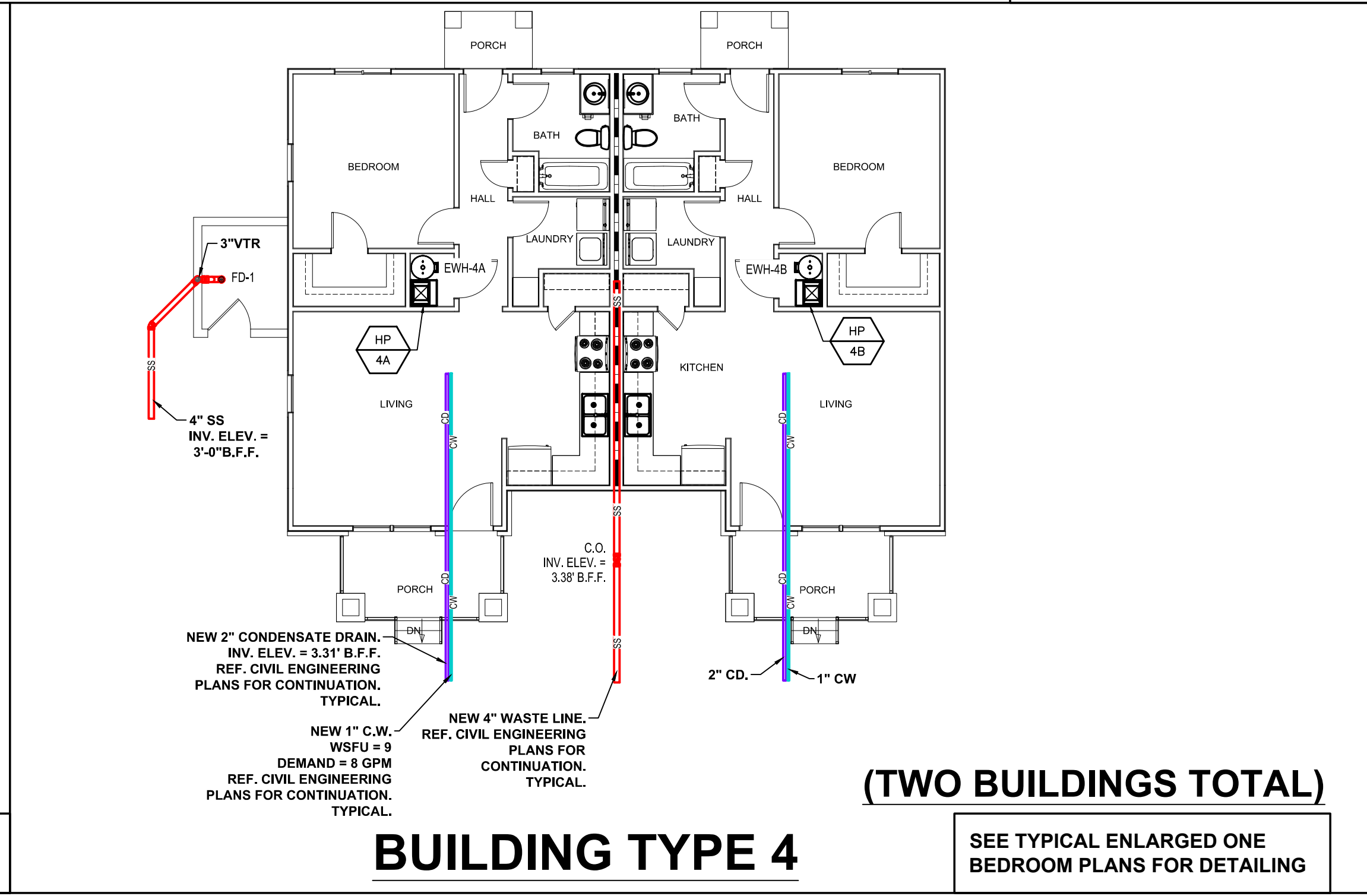
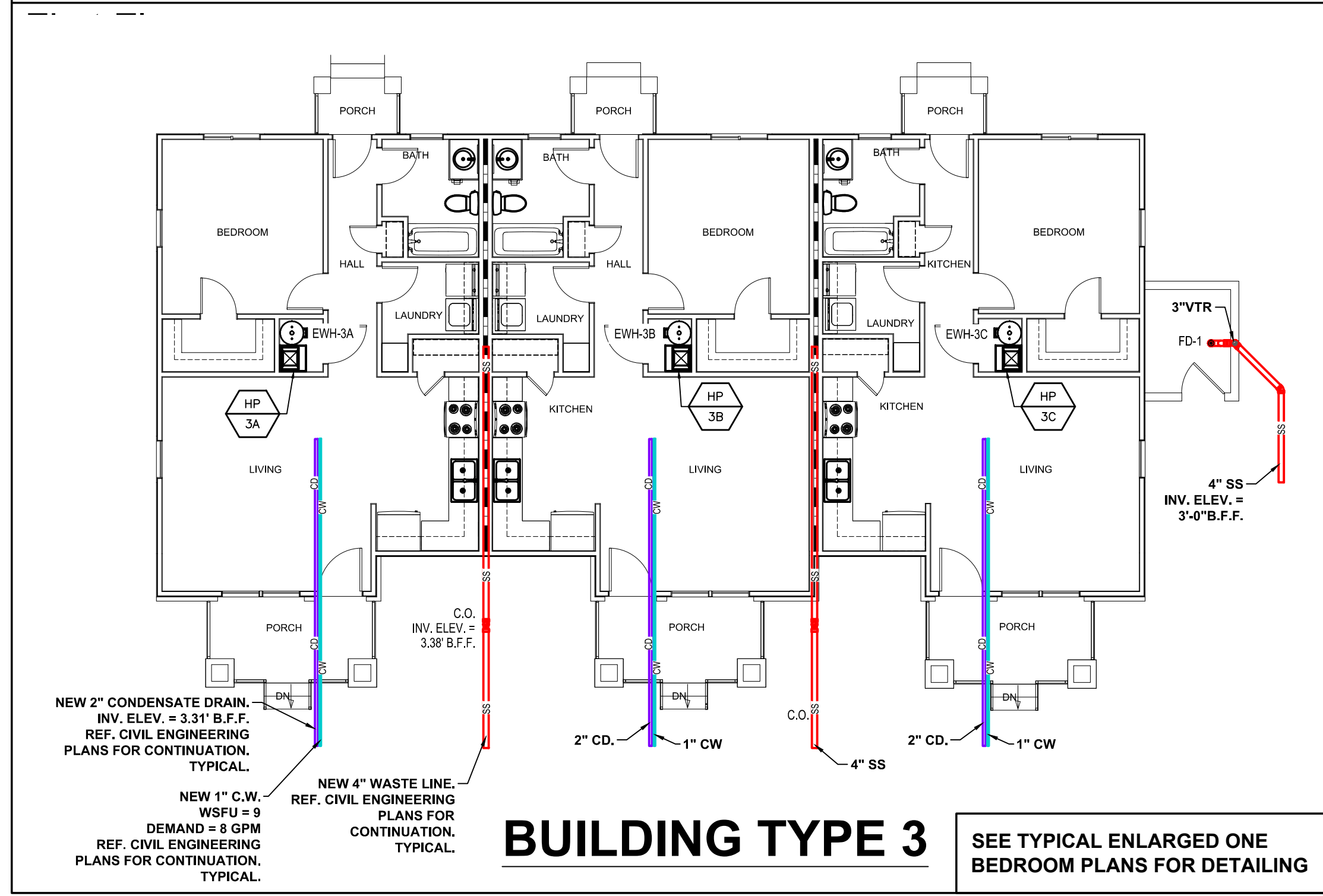
125 West Columbus Street
Dadeville, Alabama 36853



07-01-2024



- PLUMBING LAYOUT NOTES:**
1. ALL PLUMBING LAYOUTS ARE TYPICAL FOR EACH LIKE UNITS / APARTMENTS, AS SHOWN ON ENLARGED PLANS. SEE SHEET(S) P3.1/P3.2.
 2. ALL PLUMBING LAYOUTS IN MIRRORED APARTMENT PLAN WILL ALSO BE MIRRORED. HOT & COLD WATER CONNECTIONS SHALL BE SWAPPED TO PROVIDE PROPER CONNECTIONS TO FIXTURE (HOT - LEFT , COLD - RIGHT).
 3. MIRRORED APARTMENT LAYOUTS SHARING A COMMON CHASE WALL WILL SHARE WASTE AND VENT PIPING. PROVIDE AND INSTALL OFFSET CONNECTIONS OR WYE FITTINGS, AS SHOWN ON DETAIL (SEE SHEET P1.1). WATER PIPING SHALL REMAIN SEPARATE.



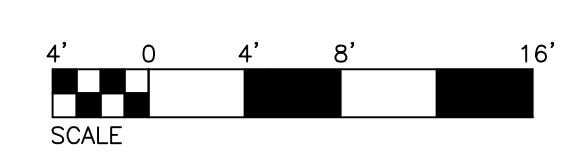
WHORTON ENGINEERING, INC.

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OVERALL PLUMBING PLANS

SCALE: 1/8" = 1'-0"

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Anniston Housing Authority /
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OVERALL PLUMBING PLANS

TDA Comm. No.	440
DATE:	11/22/23
SCALE:	AS NOTED
SHEET	P2.1

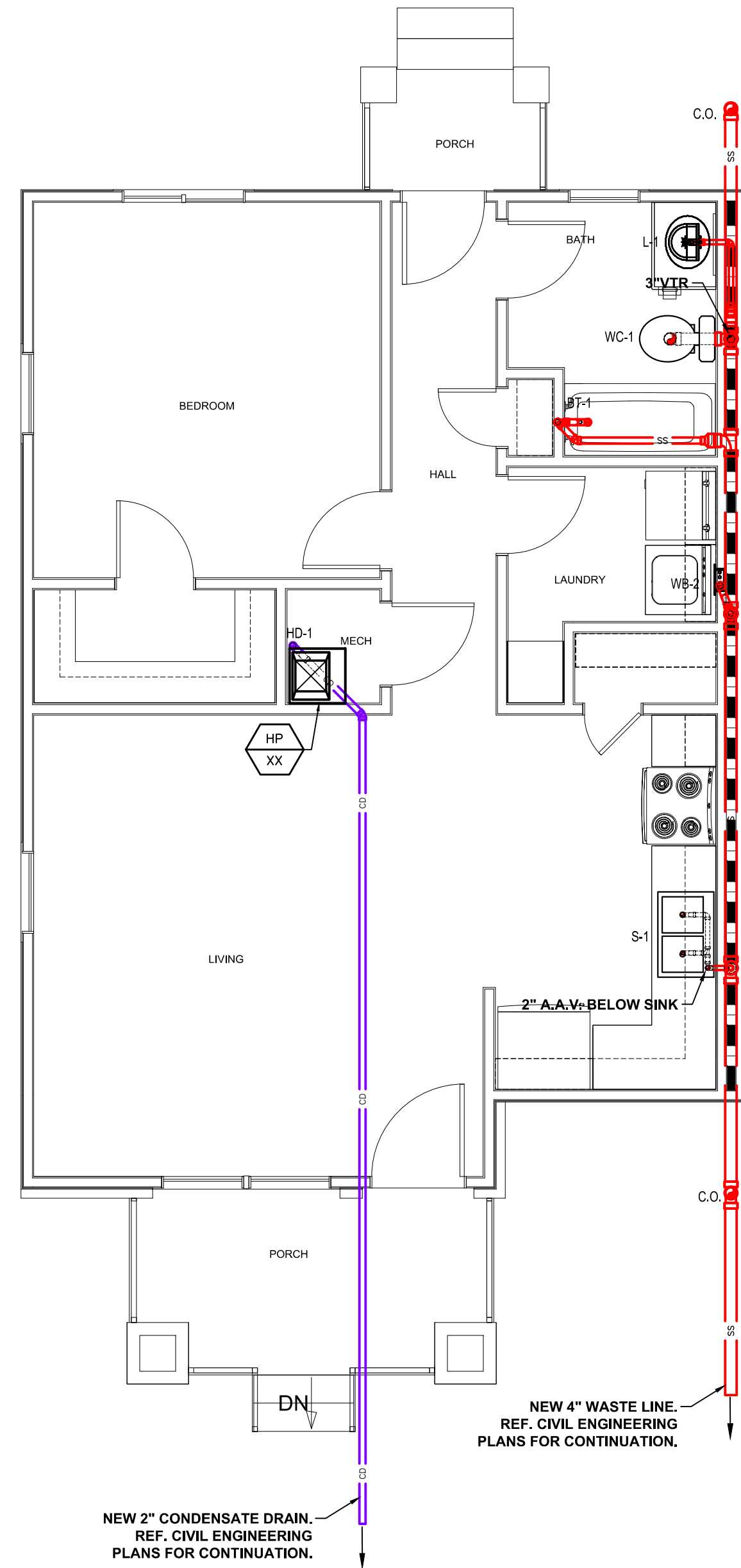


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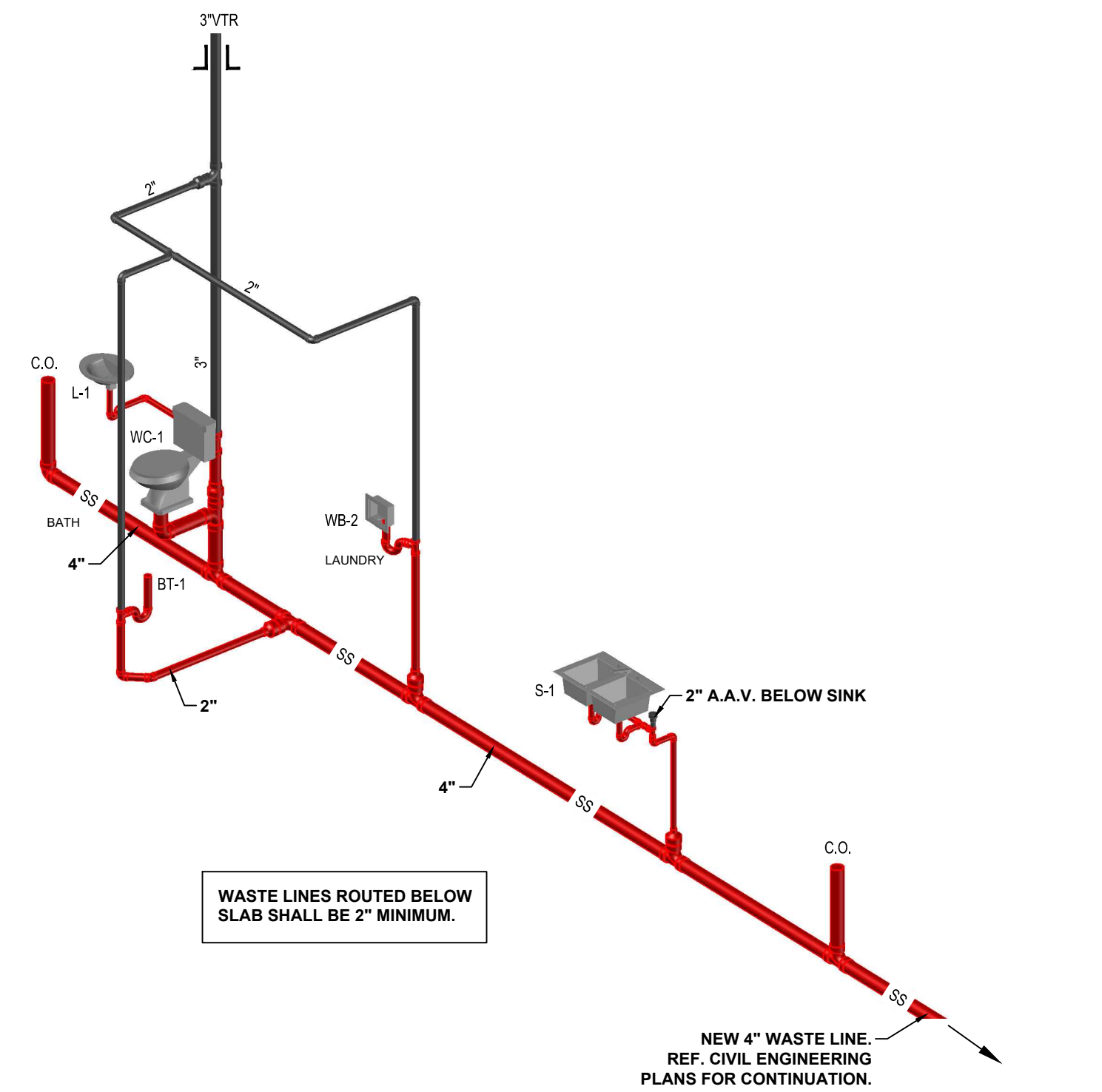


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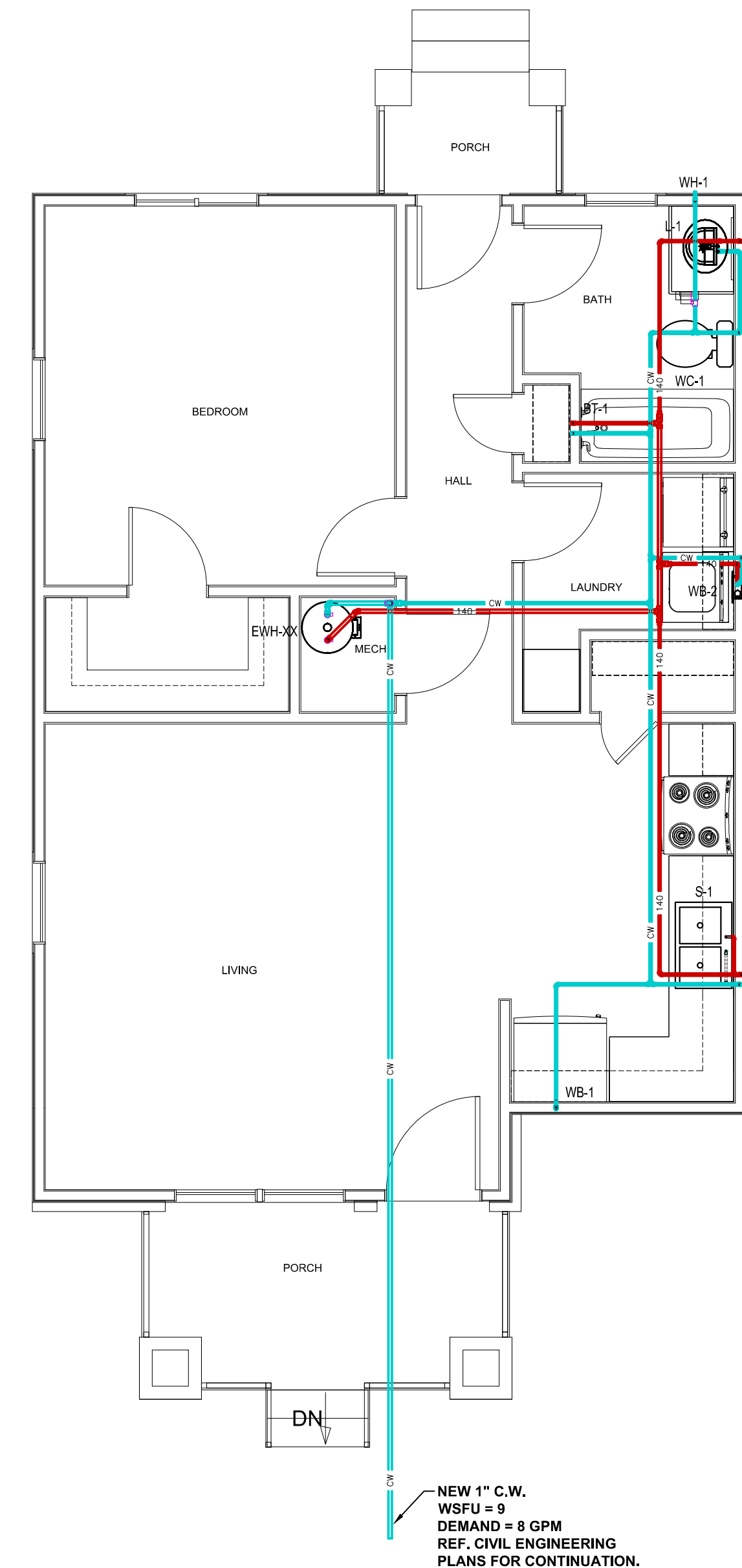
WASTE & CONDENSATE PLUMBING PLAN

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



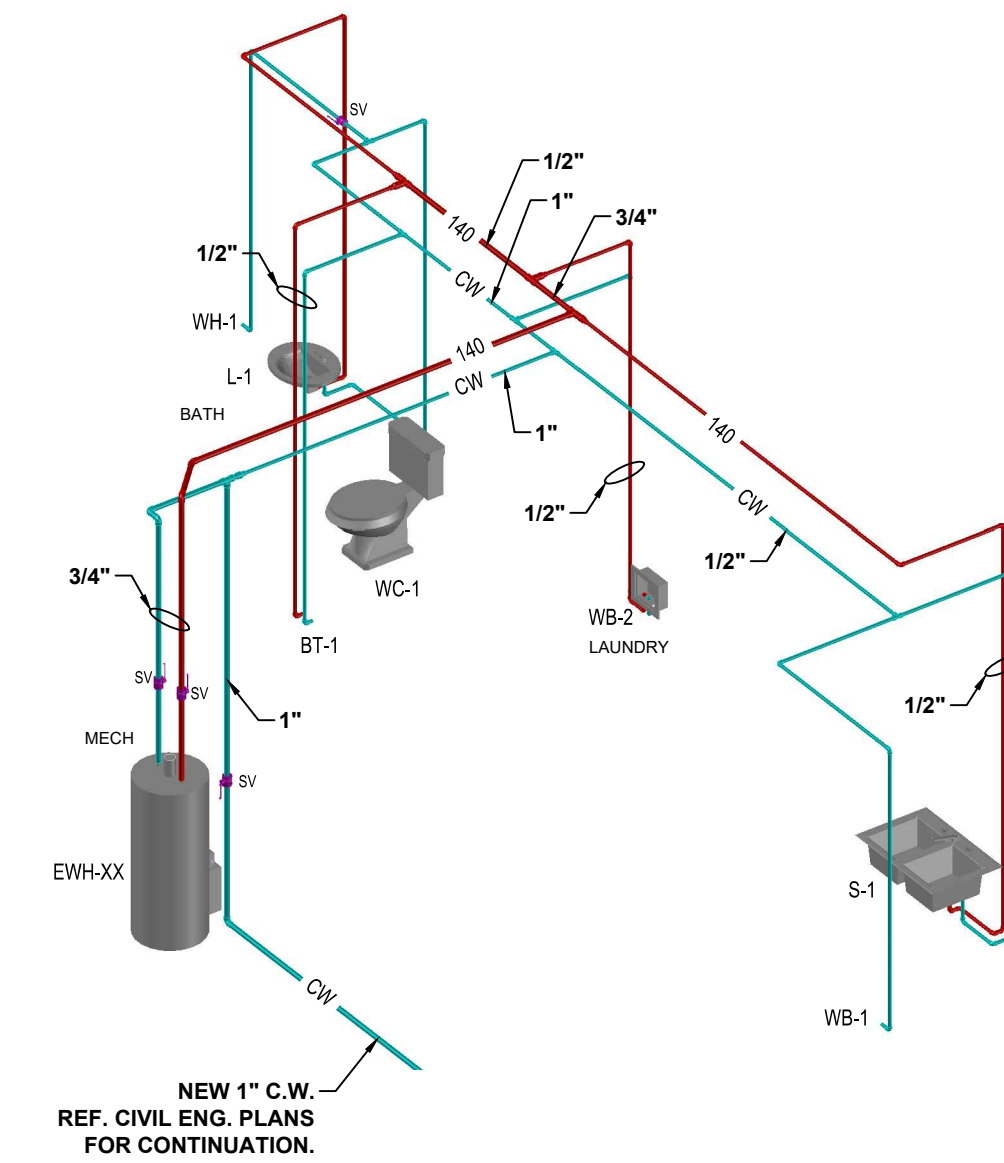
WASTE PLUMBING RISER DIAGRAM

NOT TO SCALE



WATER & FIRE SPRINKLER PLUMBING PLAN

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



WATER PLUMBING RISER DIAGRAM

NOT TO SCALE

TYPICAL ENLARGED 1 BEDROOM PLUMBING PLANS

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



SCALE

FIRE WALL LEGEND

1 HOUR WALL - - - - -

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WHORTON ENGINEERING PROJECT NO. 23208

TYPICAL
ENLARGED
1 BEDROOM
PLUMBING
PLANS

TDA Comm. No.

440

DATE:

11/22/23

SCALE:

AS NOTED

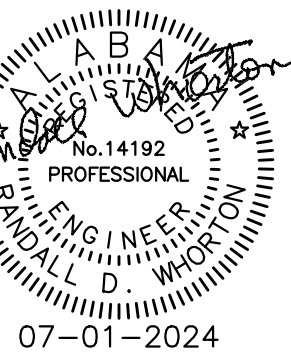
SHEET

P3.1



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South Allen Avenue Development
Anniston Housing Authority /
Housing Development Corporation

TYPICAL
ENLARGED
2 BEDROOM
PLUMBING
PLANS

TDA Comm. No.

440

DATE:

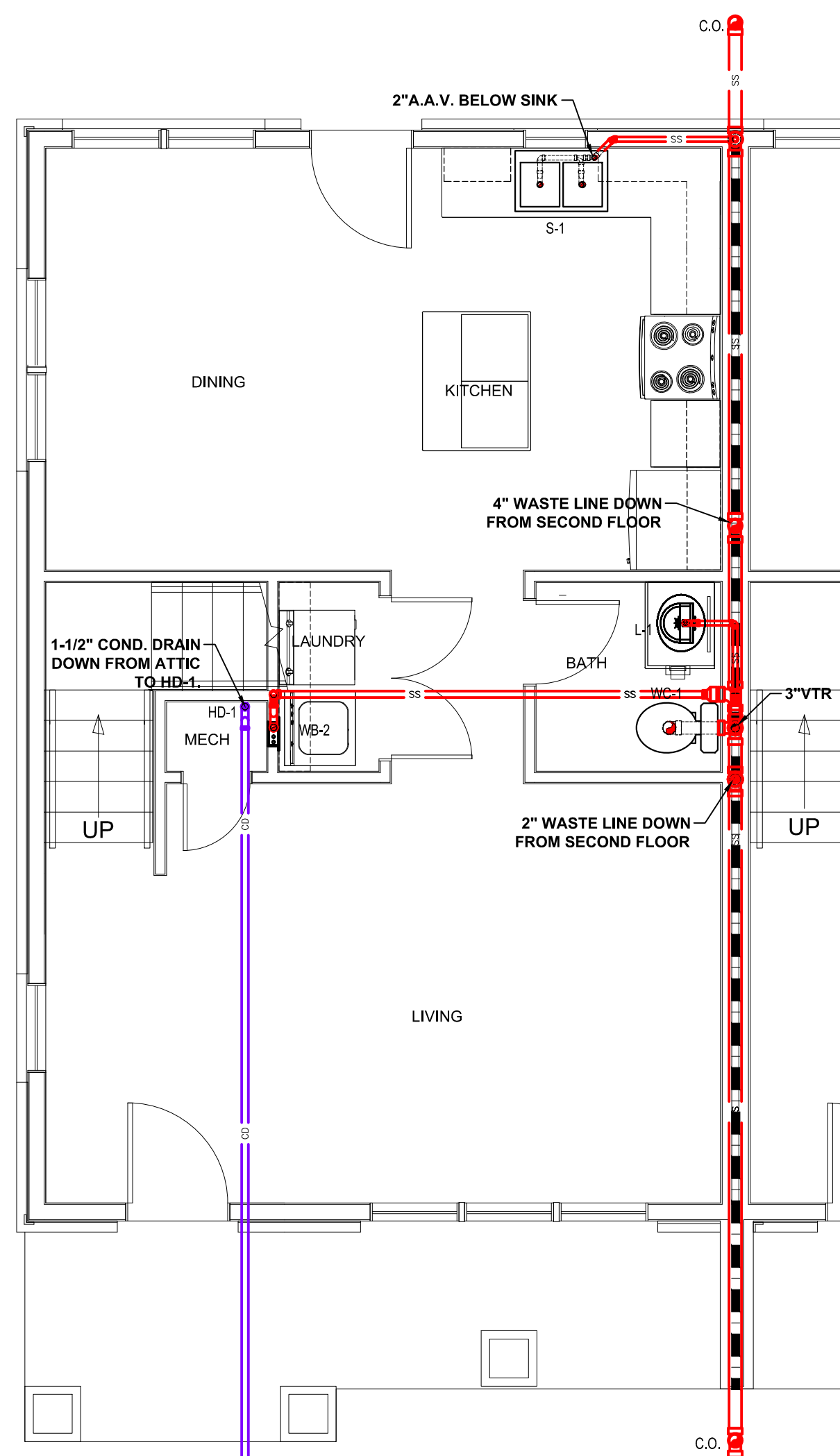
11/22/23

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AS NOTED

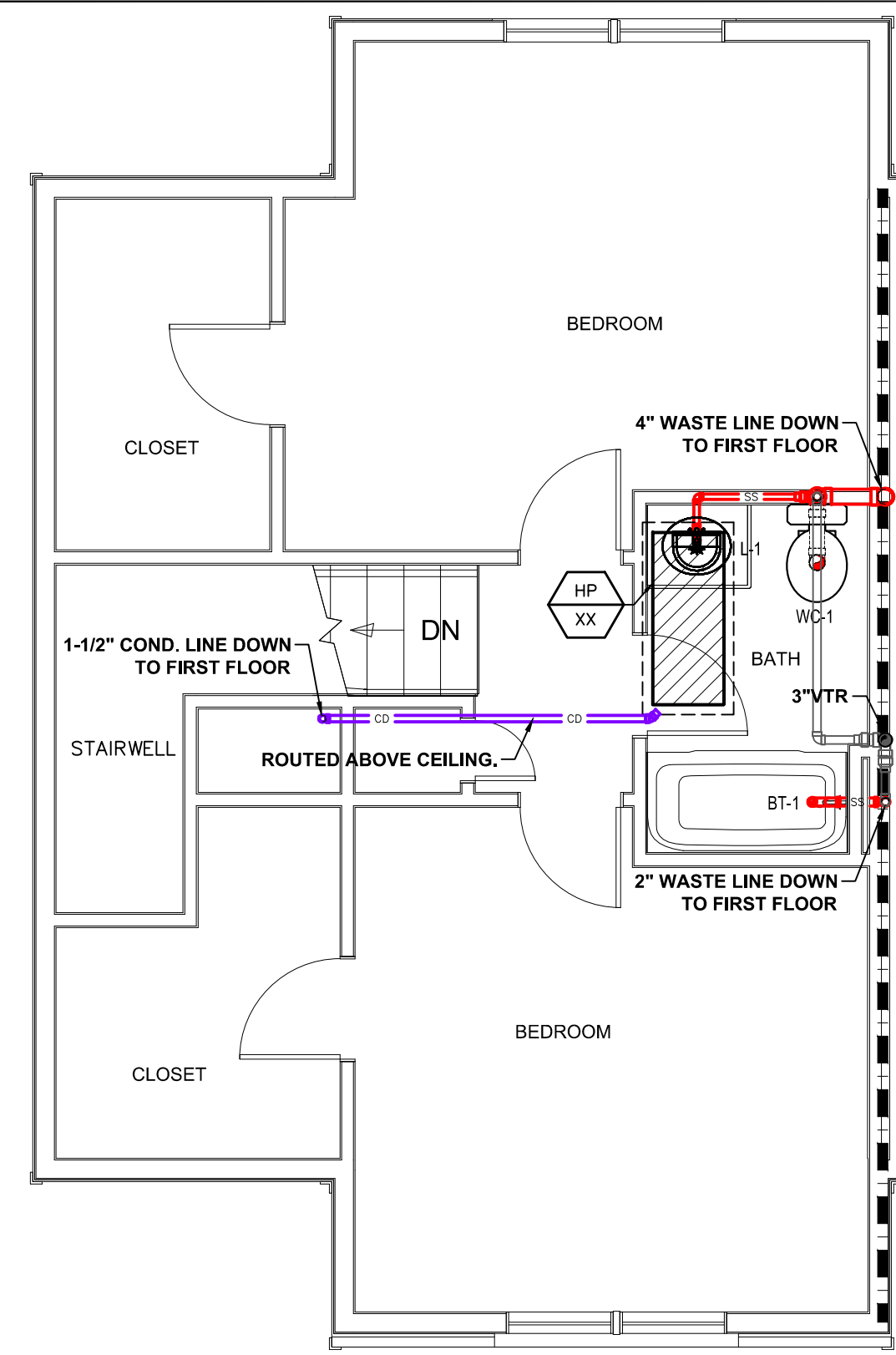
SHEET

P3.2



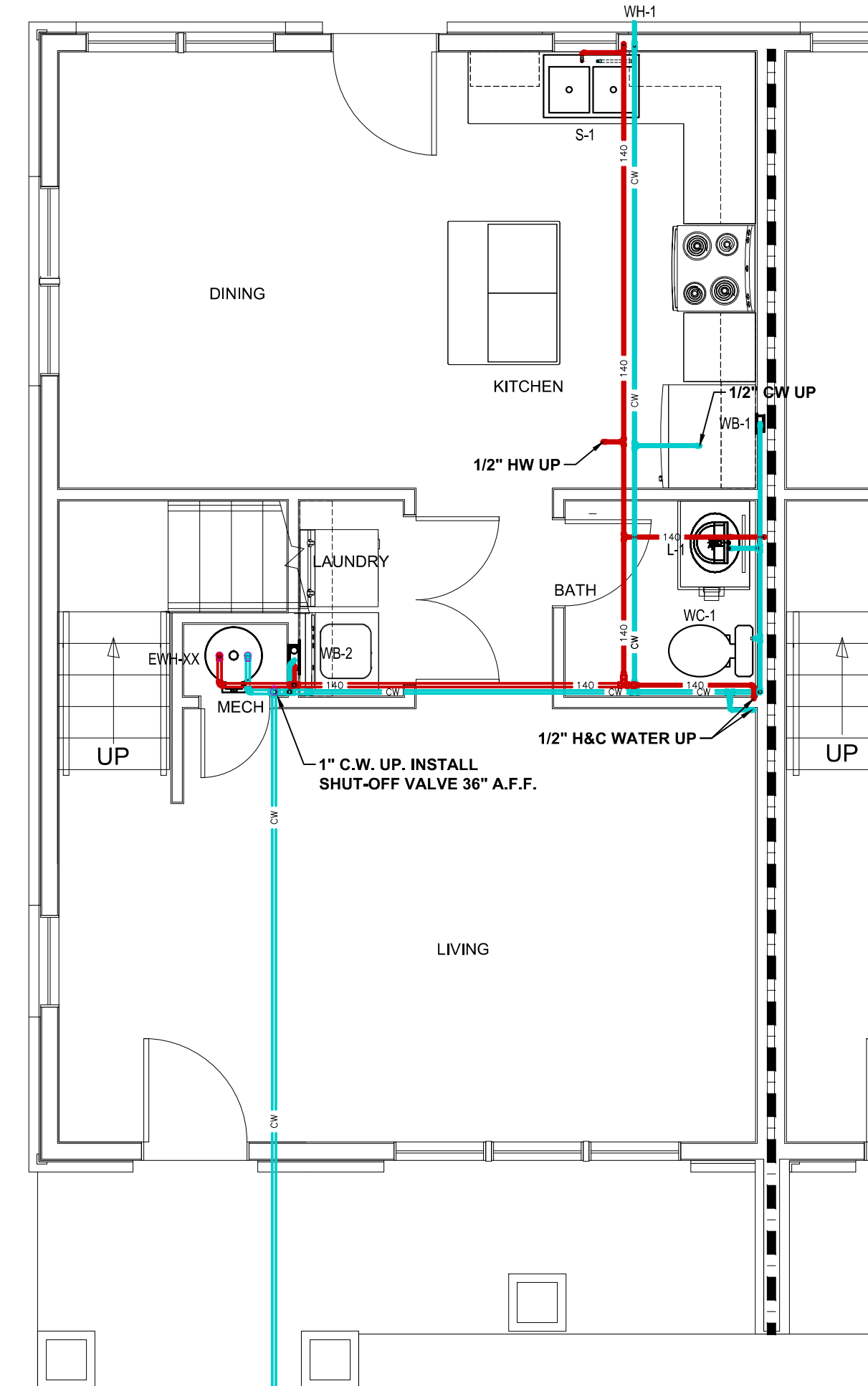
SECOND FLOOR WASTE & CONDENSATE PLUMBING PLAN

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



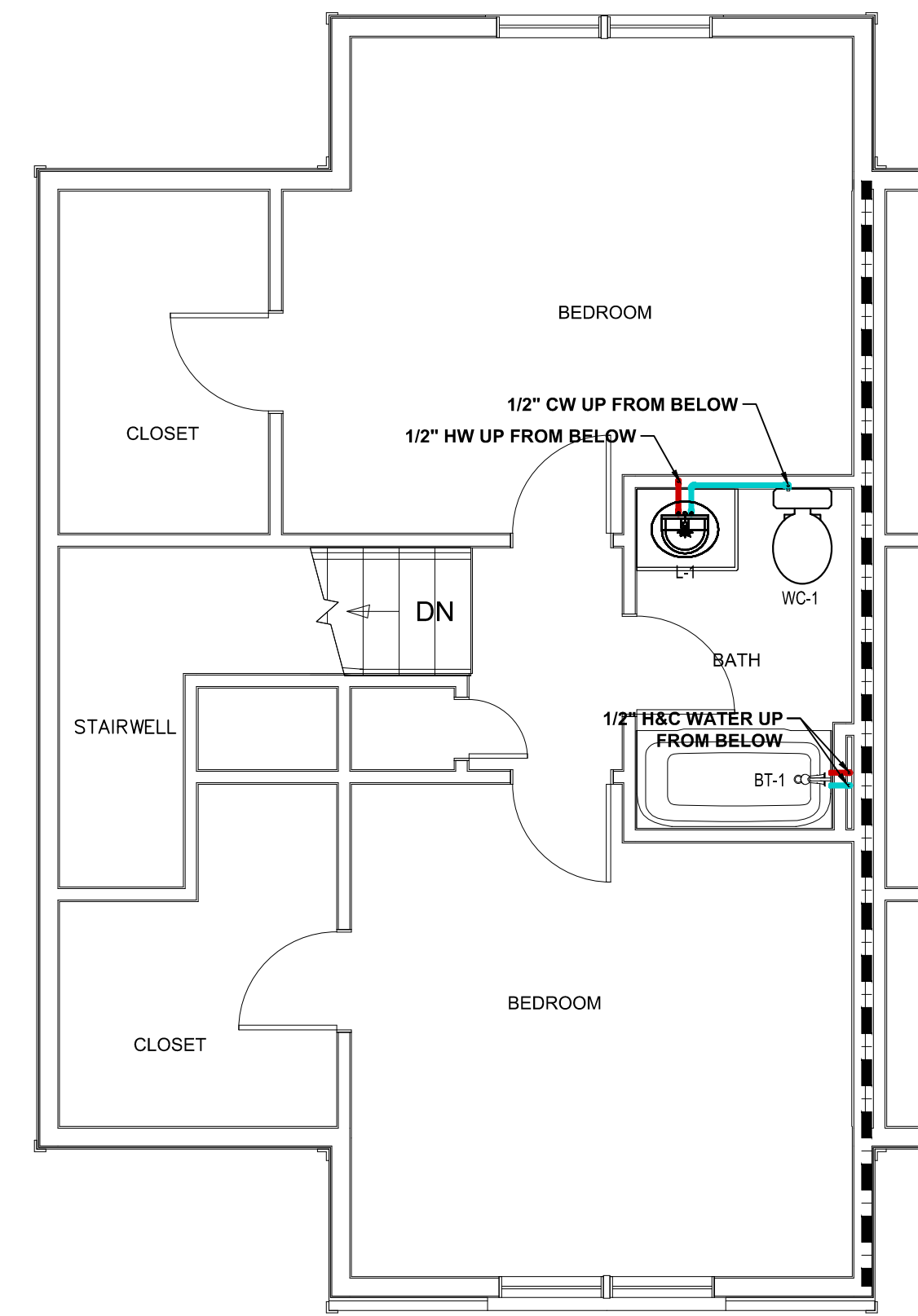
FIRST FLOOR WATER PLUMBING PLAN

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



SECOND FLOOR WATER PLUMBING PLAN

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

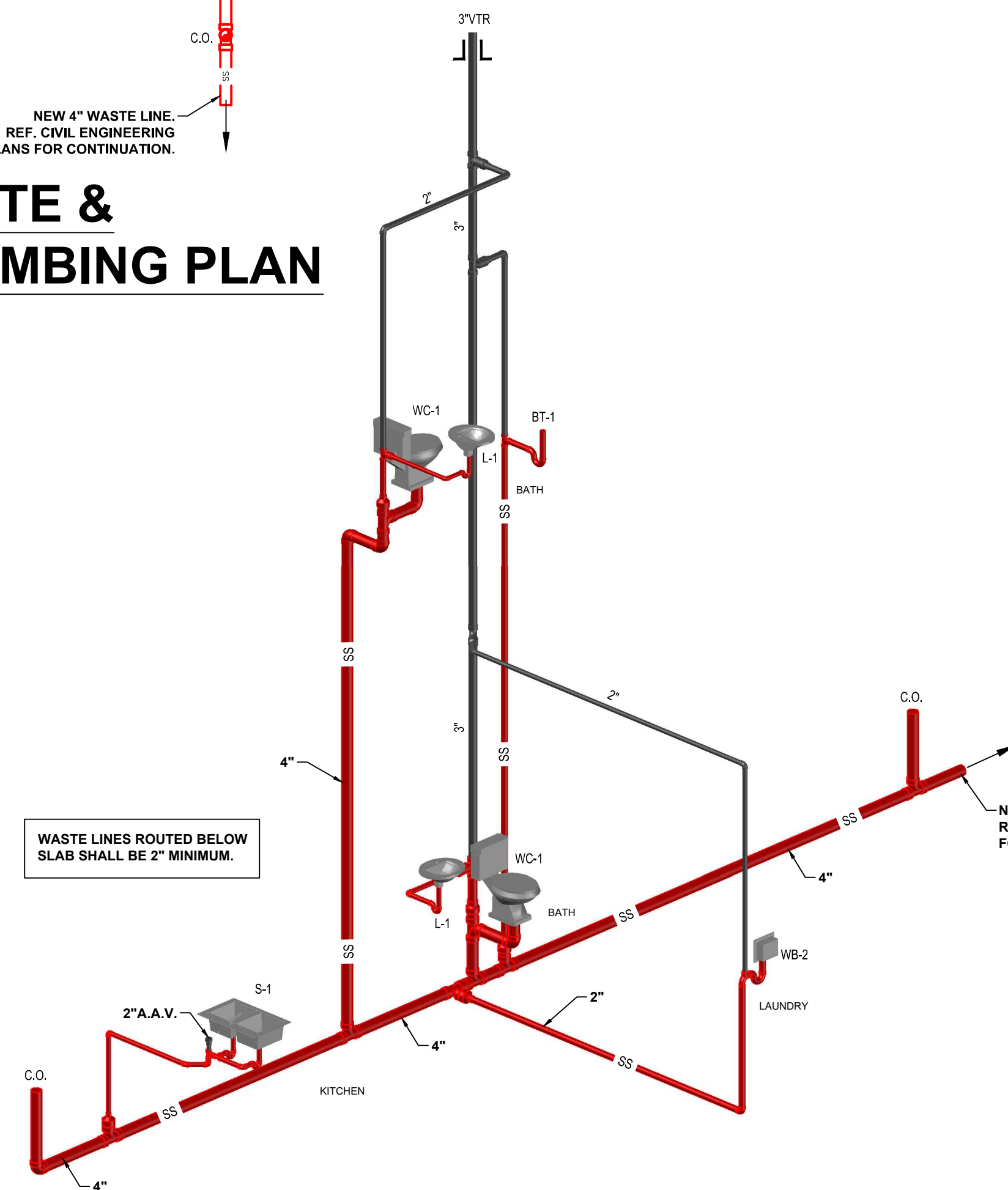


FIRST FLOOR WASTE & CONDENSATE PLUMBING PLAN

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

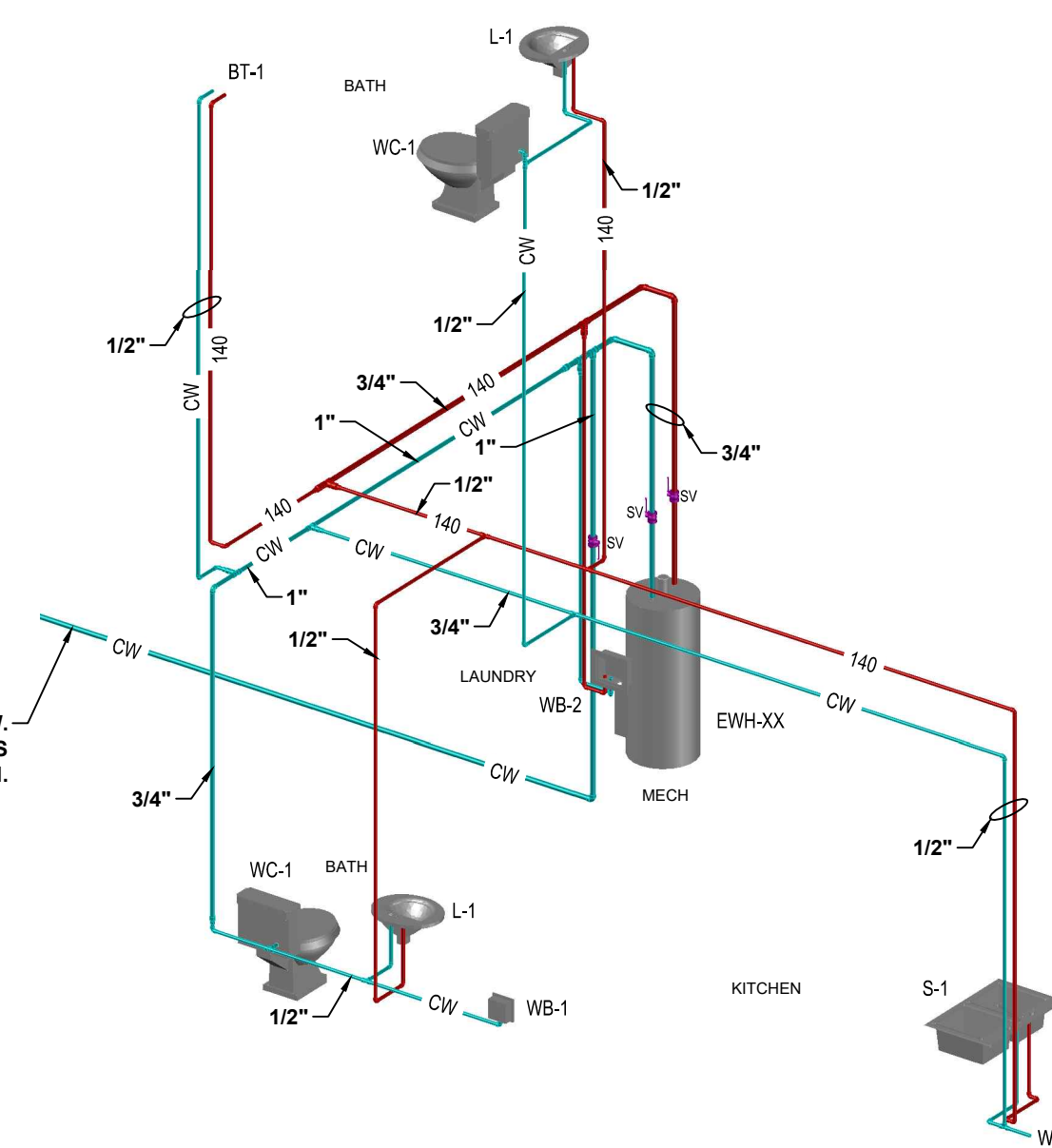
NEW 2" CONDENSATE DRAIN. REF. CIVIL ENGINEERING PLANS FOR CONTINUATION.

NEW 4" WASTE LINE. REF. CIVIL ENGINEERING PLANS FOR CONTINUATION.



WASTE PLUMBING RISER DIAGRAM

NOT TO SCALE



WATER PLUMBING RISER DIAGRAM

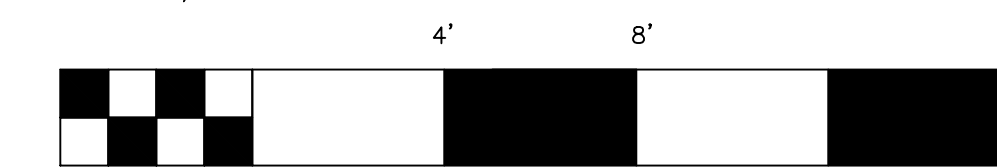
NOT TO SCALE

FIRE WALL LEGEND

1 HOUR WALL - - - - -

TYPICAL ENLARGED 2 BEDROOM PLUMBING PLANS

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



SCALE

WHORTON ENGINEERING, INC.

HVAC - PLUMBING - PROCESS CONTROL

RANDALL WHORTON, P.E.
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ANNISTON, ALABAMA 36205

WHORTON ENGINEERING PROJECT NO. 23208

NFPA 13R FIRE SPRINKLER SPECIFICATIONS

ALTERNATE EQUAL PRODUCTS SHALL BE SUBMITTED FOR ENGINEER / ARCHITECT APPROVAL.



PART 1 - GENERAL

1.0 PRODUCT DESCRIPTION

A. BlazeMaster® CPVC fire sprinkler pipe and fittings are extruded/molded from CPVC compounds manufactured by Lubrizol Advanced Materials. The pipe and fitting compounds shall meet cell class 23547 and 24447, respectively, as defined by ASTM D1794, and shall be certified by NSF International for use with potable water. Both pipe and fitting compounds shall be pressure rated by Plastics Pipe Institute (PPI).

1.1 PIPE AND FITTINGS

A. Pipe shall meet or exceed the requirements of ASTM F442 material designation CPVC 4120-06 in standard dimension ratio (SDR) 13.5. Additionally, the pipe must be marked with the following pressure ratings: "320 PSI @ 73° F", "175 PSI @ 150° F" and "100 PSI @ 180° F".
 B. Fittings shall meet or exceed the requirements of ASTM F437 (schedule 80 threaded), ASTM F438 (schedule 40 socket) and ASTM F439 (schedule 80 socket).
 C. Both pipe and fittings shall be Listed by Underwriters Laboratories for use in wet automatic fire sprinkler systems and shall bear the logo of the Listing Agency. See UL Fire Protection Equipment Directory, categories VFWT and HPFH.
 D. Ancillary products coming into contact with pipe and fittings must be chemically compatible as determined by CPVC pipe and fittings manufacturer or compound manufacturer, and thus Listed on pipe, fittings or compound manufacturer's chemical compatibility program (i.e. FCG/IMCC™ System Compatible Program).

1.2 SOLVENT CEMENT

A. All socket type joints shall be made up employing solvent cements that meet or exceed the requirements of ASTM F493. The standard practice for safe handling of solvent cements shall be in accordance with ASTM F402. Solvent cement shall be certified by NSF International for use with potable water, and approved by the manufacturers. The solvent cements shall be compatible with their CPVC pipe and fittings.
 B. Follow manufacturer's instructions for set and cure times for solvent cement joints. Avoid significant stresses during set and cure times. Do not apply any stress that will disturb an un-dried joint. Sprinkler fittings shall be allowed to cure in accordance with the manufacturer's guidelines and the contractor shall assure the outlets are clear of any excess cement prior to installing sprinklers.

ALTERNATE EQUAL PRODUCTS SHALL BE SUBMITTED FOR ENGINEER / ARCHITECT APPROVAL.



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ALTERNATE EQUAL PRODUCTS SHALL BE SUBMITTED FOR ENGINEER / ARCHITECT APPROVAL.

3.0 SYSTEM DESIGN

A. System design shall be in accordance with standard industry practice for fire sprinkler systems and the manufacturer's instructions. The design shall take into consideration such factors as pressure and flow requirements, friction loss, operating temperatures, support spacing, joining methods, and thermal expansion and contraction.
 B. The fire sprinkler piping system shall be hydraulically calculated using a Hazen-Williams C Factor of 150, and designed in accordance with the Standard for Installation of Sprinkler Systems, NFPA 13.
 C. The maximum design temperature/pressure rating shall not exceed 175 psi at 150°F.

3.1 INSTALLATION PROCEDURES

A. Installation practices such as pipe support spacing, bracing, allowance for thermal expansion/contraction, solvent cementing and handling and storage shall be in accordance with the manufacturer's instructions and the UL Listing which includes installation limitations.

3.2 LIMITATIONS

A. BlazeMaster® CPVC pipe and fittings are intended for use at a maximum working pressure of 175 psi at 150°F in accordance with the manufacturer's instructions and appropriate listing agencies.

3.3 TECHNICAL DATA

A. APPLICABLE STANDARDS
 a. ANSINSP Standard 14 Plastic Piping Components and Related Materials
 b. ANSINSP Standard 01 Drinking Water System Components - Health Effects
 c. ASTM D1794 Specification for Rigid Poly(Vinyl Chloride)(CPVC) Compounds and Chlorinated Poly(Vinyl Chloride)(CPVC) Compounds
 d. ASTM F402 Practice for Safe Handling of Solvent Cements, Primers and Cleaners Used for Joining Thermoplastic Pipe and Fittings
 e. ASTM F437 Specification for Threaded Chlorinated Poly(Vinyl Chloride) CPVC Plastic Pipe Fittings, Schedule 80
 f. ASTM F438 Specification Socket-Type Chlorinated Poly(Vinyl Chloride) CPVC Plastic Pipe Fittings, Schedule 40
 g. ASTM F439 Specification Socket-Type Chlorinated Poly(Vinyl Chloride) CPVC Plastic Pipe Fittings, Schedule 80
 h. ASTM F442 Specification Chlorinated Poly(Vinyl Chloride) CPVC Plastic Pipe (SDRPR)
 i. ASTM F493 Specification for Solvent Cements for Chlorinated Poly(Vinyl Chloride) CPVC Plastic Pipe and Fittings
 j. NFPA 13 Standard for Installation of Sprinkler Systems
 k. NFPA 24 Installation of Private Fire Service Mains and Their Appurtenances
 l. NFPA 25 Standard for the Inspection, Testing and Maintenance of Water Based Extinguishing Systems
 m. NFPA 13R Standard for Installation of Sprinklers in Residential Occupancies up to Four Stories in Height
 n. NFPA 13D Standard for Installation of Sprinkler Systems in One and Two Family Dwellings
 o. NFPA 90A Standard for Installation of Air Conditioning and Ventilating Systems
 p. UL 1887 Fire Test of Plastic Sprinkler Pipe for Flame and Smoke Characterization
 q. UL 1821 Outline of Proposed Investigation for Thermoplastic Sprinkler Pipe and Fittings for Fire Protection Service
 r. Fitting compound has a 180°F Hydrostatic Design Basis (HDB) of 1250 psi as listed by the Plastic Pipe Institute

ALTERNATE EQUAL PRODUCTS SHALL BE SUBMITTED FOR ENGINEER / ARCHITECT APPROVAL.

s. Fitting compound has a 180°F Hydrostatic Design Basis (HDB) of 1000 psi as listed by the Plastic Pipe Institute

3.4 TESTING

A. After the system is installed and any solvent cement is cured per the manufacturer's installation instructions, the systems shall be hydrostatically tested per the requirements of the applicable NFPA Standard (NFPA 13, 13R or 13D).

3.5 MAINTENANCE

A. Maintenance shall be in accordance with the Standard for Inspection, Testing and Maintenance of Water Based Extinguishing Systems as defined by NFPA 25.

3.6 WARRANTY

A. Consult the manufacturer for specific warranty information.

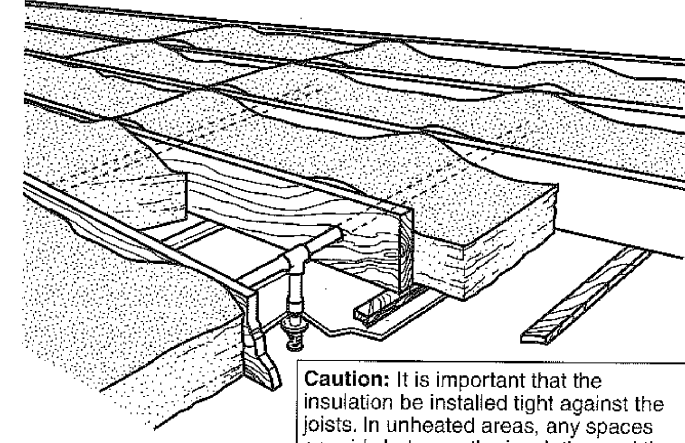


FIGURE A.5.4.2(a) Insulation Recommendations — Arrangement 1.

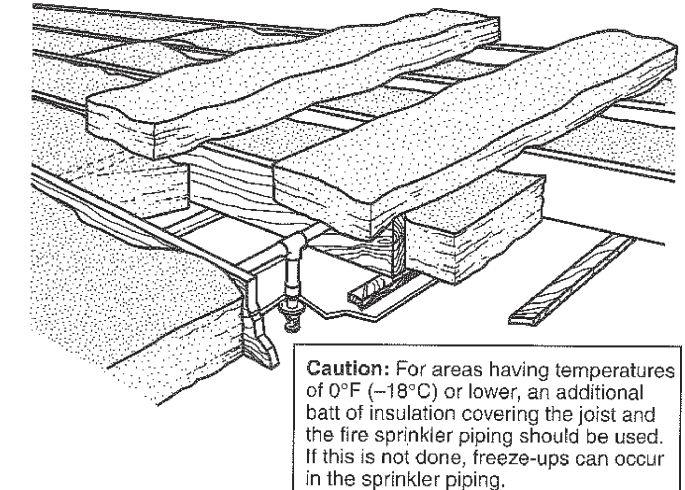


FIGURE A.5.4.2(b) Insulation Recommendations — Arrangement 2.

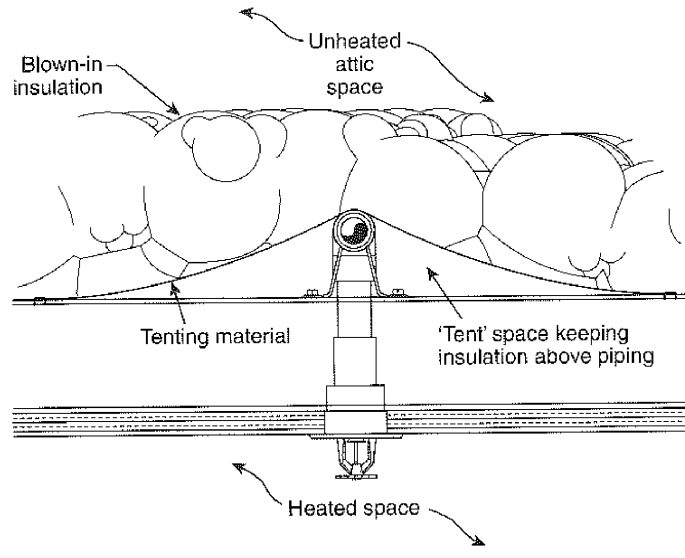
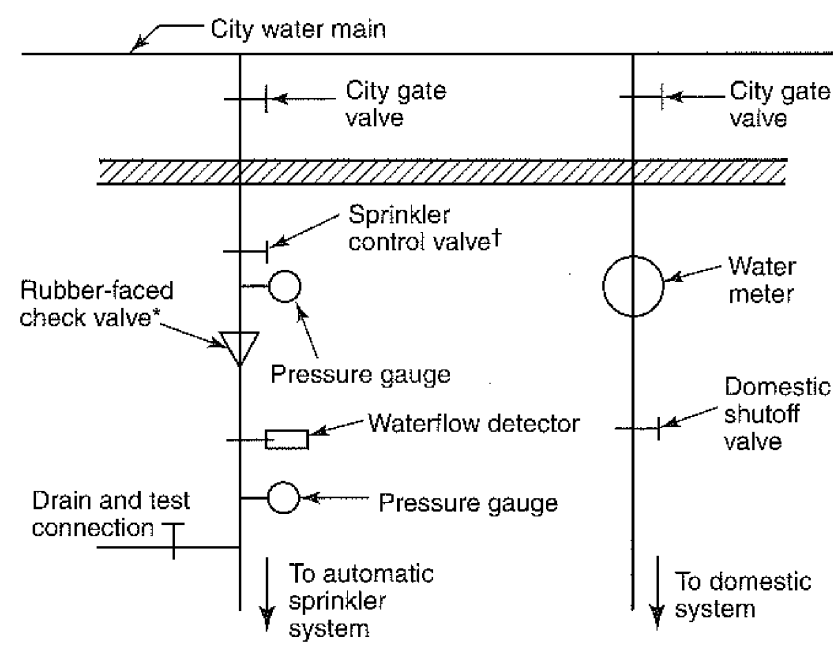


FIGURE A.5.4.2(f) Insulation Recommendations — Arrangement 6.

NFPA 13R INSTALLATION DETAILS



*Rubber-faced check valves are optional.
 †Optional valve; See 6.8.2.

FIGURE A.9.3(b) Acceptable Arrangement with Valve Supervision — Option 1 (see 6.8.2).

NFPA 13R FIRE ENTRANCE DETAIL

FIRE SPRINKLER SYSTEM NOTES

- THE FIRE PROTECTION SYSTEM IS SHOWN IN SCHEMATIC FORM ONLY. THE SUCCESSFUL FIRE PROTECTION VENDOR SHALL LOCATE AND SIZE ALL SPRINKLER HEADS, FIRE DEPARTMENT CONNECTIONS, STANDPIPE SYSTEMS, PIPING, ETC. IN COMPLETE ACCORDANCE WITH NFPA 13R AND THE 2021 INTERNATIONAL BUILDING CODE AND LOCAL REQUIREMENTS.
- SYSTEM DESIGN TO BE IN ACCORDANCE WITH WRITTEN SPECIFICATIONS. ALL HYDRAULIC CALCULATIONS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL.
- ALL PIPING SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID PLUMBING AND HVAC INSTALLATIONS. FAILURE TO COORDINATE WORK WILL RESULT IN REWORK AT CONTRACTOR'S EXPENSE. MAINTAIN MINIMUM STAIR WELL EGRESS CLEARANCE.
- INSTALL ALL ABOVE CEILING PIPING BELOW DUCT.
- INSTALL ALL EXPOSED PIPING AS HIGH AS POSSIBLE.
- ROUTE ALL EXPOSED PIPING IN CHASES WHERE POSSIBLE.
- COORDINATE ALL WORK WITH ARCHITECTURAL, STRUCTURAL, HVAC AND ELECTRICAL TRADES, PLUMBING. PIPE ROUTING SHOWN IS DIAGRAMMATIC. PROVIDE ALL OFFSETS, ETC., TO AVOID INTERFERENCES WITH EQUIPMENT, PIPING, DUCTWORK, LIGHTS, CONDUIT, ETC..
- COORDINATE ALL FLOOR PENETRATIONS WITH STRUCTURAL DRAWINGS. SET SLEEVES IN FLOORS AND WALLS AND ATTACHMENTS FOR HANGERS AS CONSTRUCTION PROGRESSES. ALL PENETRATIONS MUST BE SEALED AND HELD AS TIGHT TO COLUMNS OR WALLS AS POSSIBLE.
- ALL PIPING SHALL BE CONCEALED INSIDE WALLS AND IN PIPE CHASES OR ABOVE CEILINGS. HOLD ALL PIPING ABOVE CEILING AS HIGH AS POSSIBLE.
- ALL STRUCTURAL PENETRATIONS (SLEEVES, BLOCKOUTS, ETC.) ARE TO BE LOCATED AND COORDINATED IN THE FIELD BY THE CONTRACTOR IN RELATION TO THE REQUIREMENTS OF FINAL EQUIPMENT AND FIXTURES SELECTED.
- FIELD VERIFY EXACT SIZE, MATERIAL, AND LOCATION OF ALL EXISTING UTILITIES BEFORE BEGINNING WORK.
- FIRE SPRINKLER CONTRACTOR SHALL BE LICENSED BY THE ALABAMA STATE FIRE MARSHALL'S OFFICE.
- ALL WET PIPING TO BE ROUTED BELOW CEILING INSULATION.

FIRE SPRINKLER LEGEND

NEW FIRE PROTECTION PIPING

FIRE SPRINKLER ZONE LEGEND

ZONE NO.	AREA DESCRIPTION	SYSTEM TYPE	ZONE COVERAGE (SQFT PER BLDG)	ZONE HATCH PATTERN
1	NOT USED	WET PIPE	4,124	
2	BUILDING TYPE 2	WET PIPE	5,450	
3	BUILDING TYPE 3	WET PIPE	2,262	
4	BUILDING TYPE 4	WET PIPE	1,525	

FIRE SPRINKLER DRAWING INDEX

SHEET NO.	SHEET TITLE
SP.1.1	FIRE SPRINKLER LEGEND, NOTES, AND DETAILS
SP.2.1	FIRE SPRINKLER PLUMBING PLANS

FIRE SPRINKLER LEGEND, NOTES, AND DETAILS

NOT TO SCALE

WHORTON ENGINEERING, INC.

HVAC - PLUMBING - PROCESS CONTROL

RANDALL WHORTON, P.E.
 PHONE: (256) 820-9897

25 SUMMERALL GATE ROAD
 ANNISTON, ALABAMA 36205

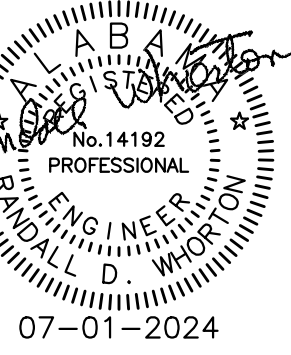
WHORTON ENGINEERING PROJECT NO. 23208

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FIRE
 SPRINKLER
 LEGEND,
 NOTES,
 AND
 DETAILS

TDA Comm. No.

440

DATE:

11/22/23

SCALE:

AS NOTED

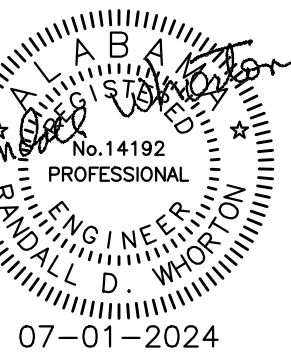
SHEET

SP1.1



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**FIRE
SPRINKLER
PLUMBING
PLANS**

TDA Comm. No.

440

DATE:

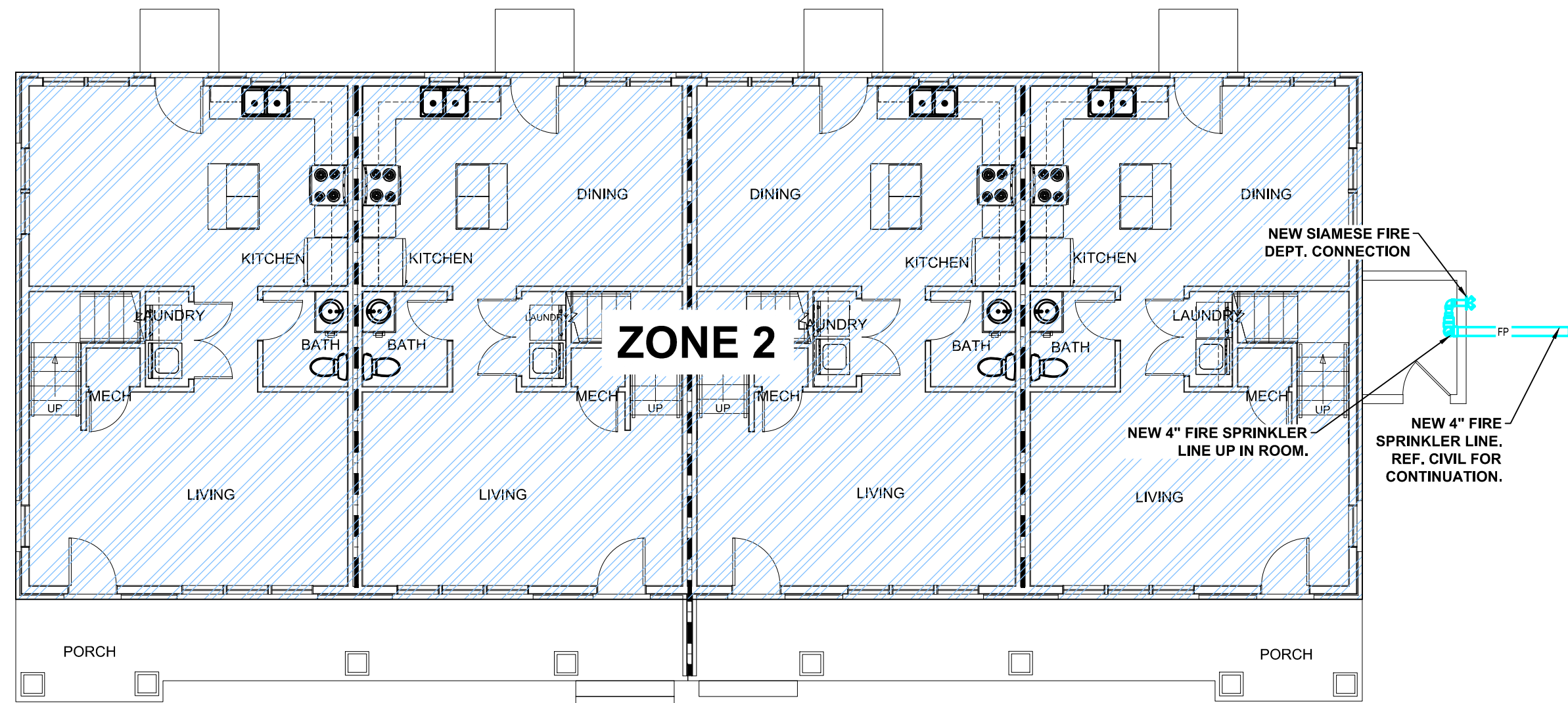
11/22/23

SCALE:

AS NOTED

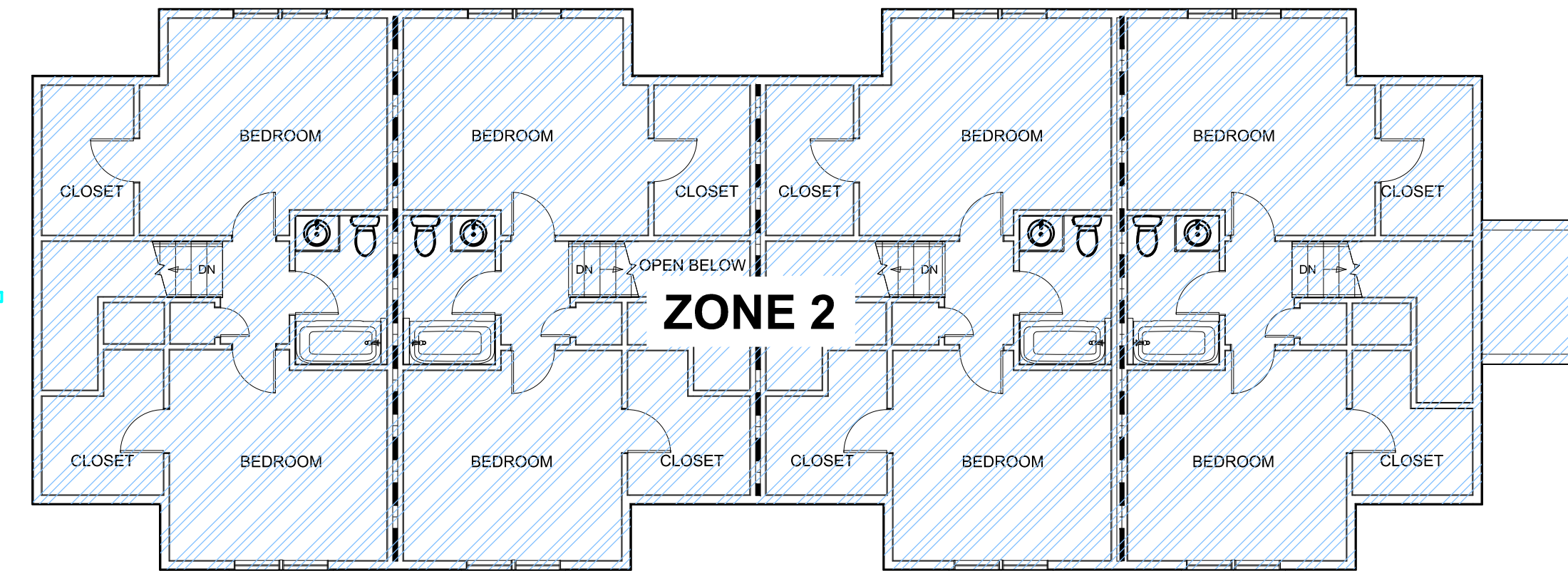
SHEET

SP2.1

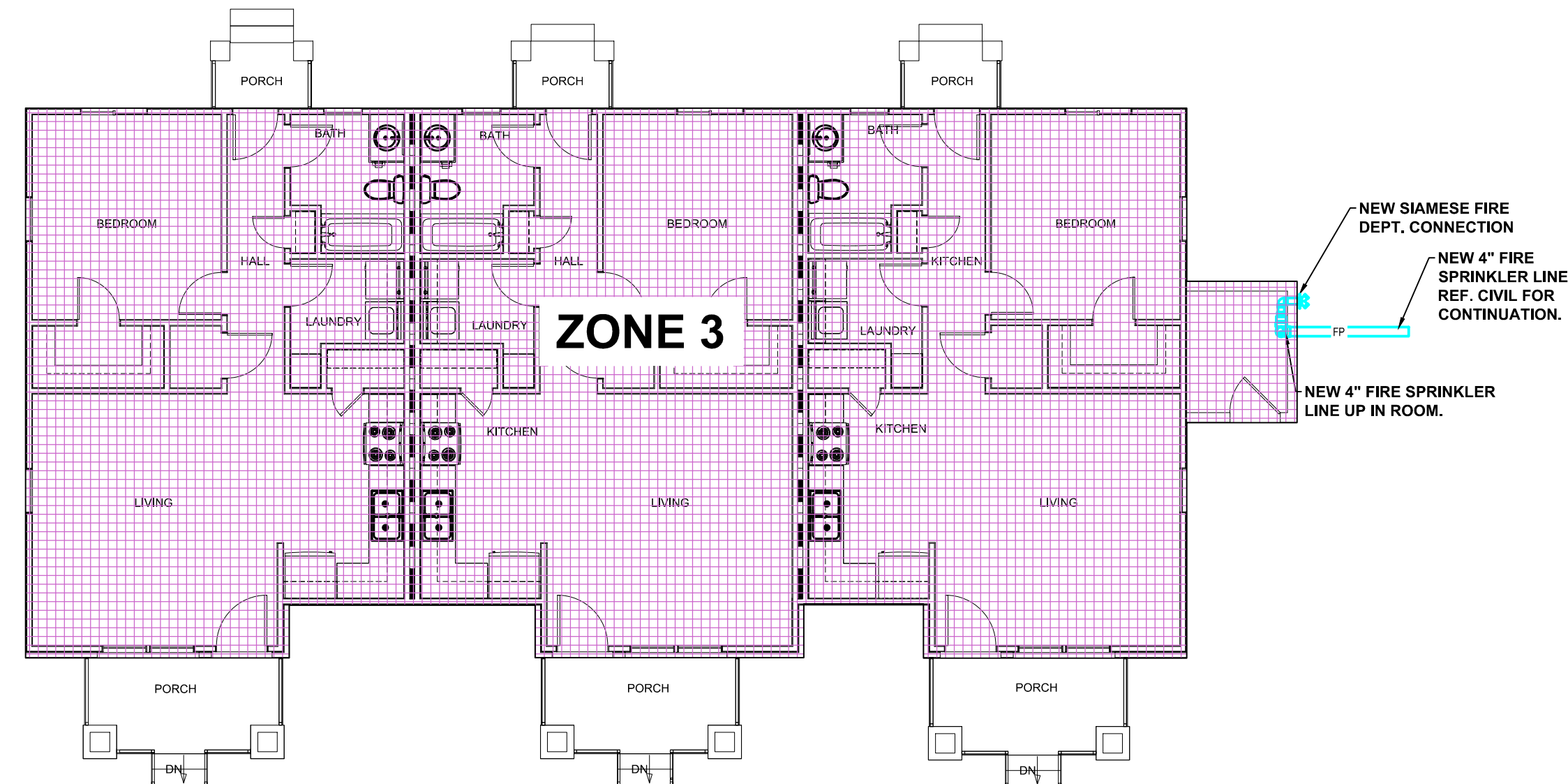


FIRST FLOOR

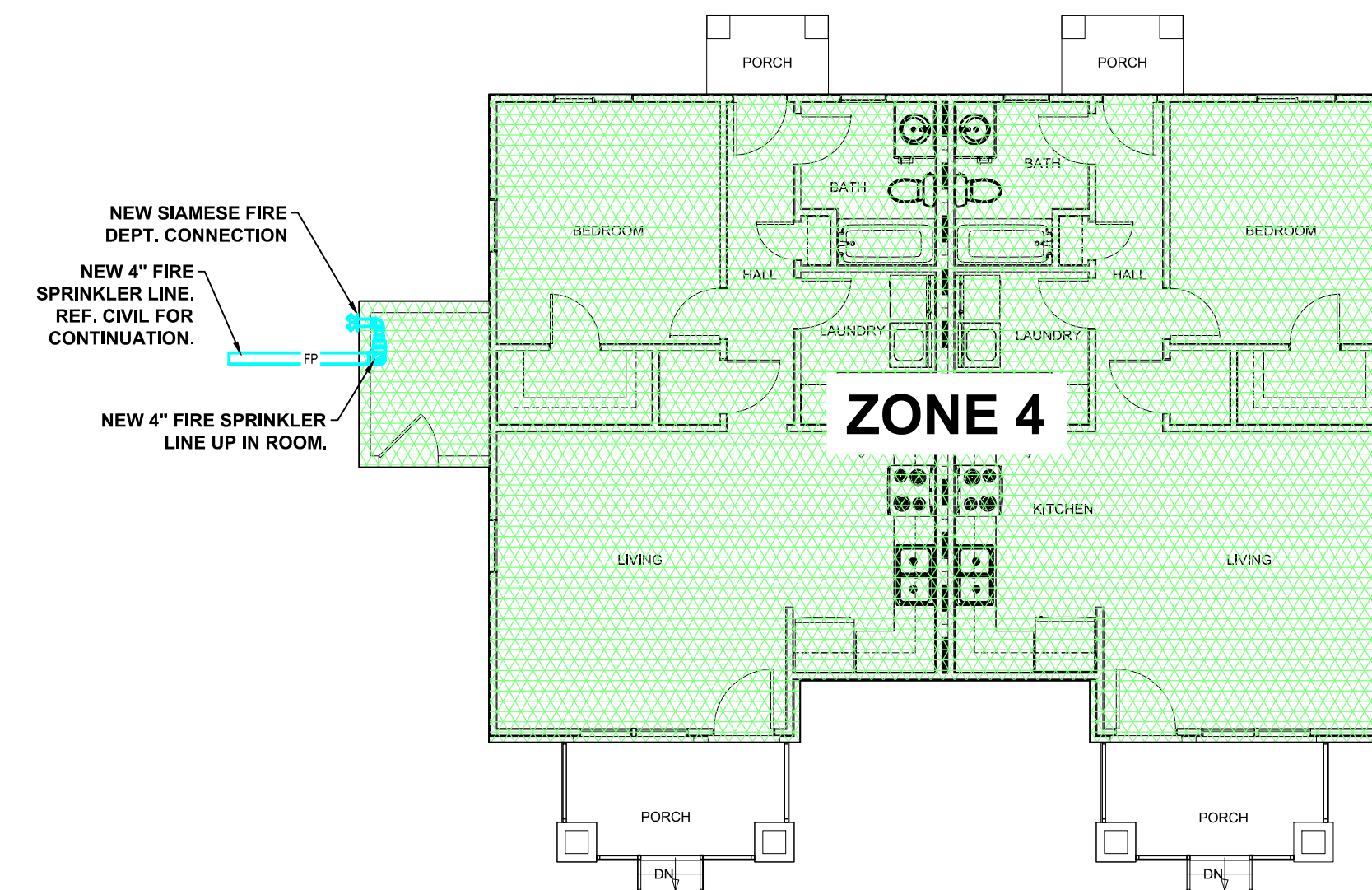
BUILDING TYPE 2



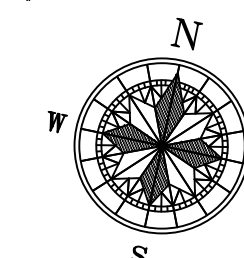
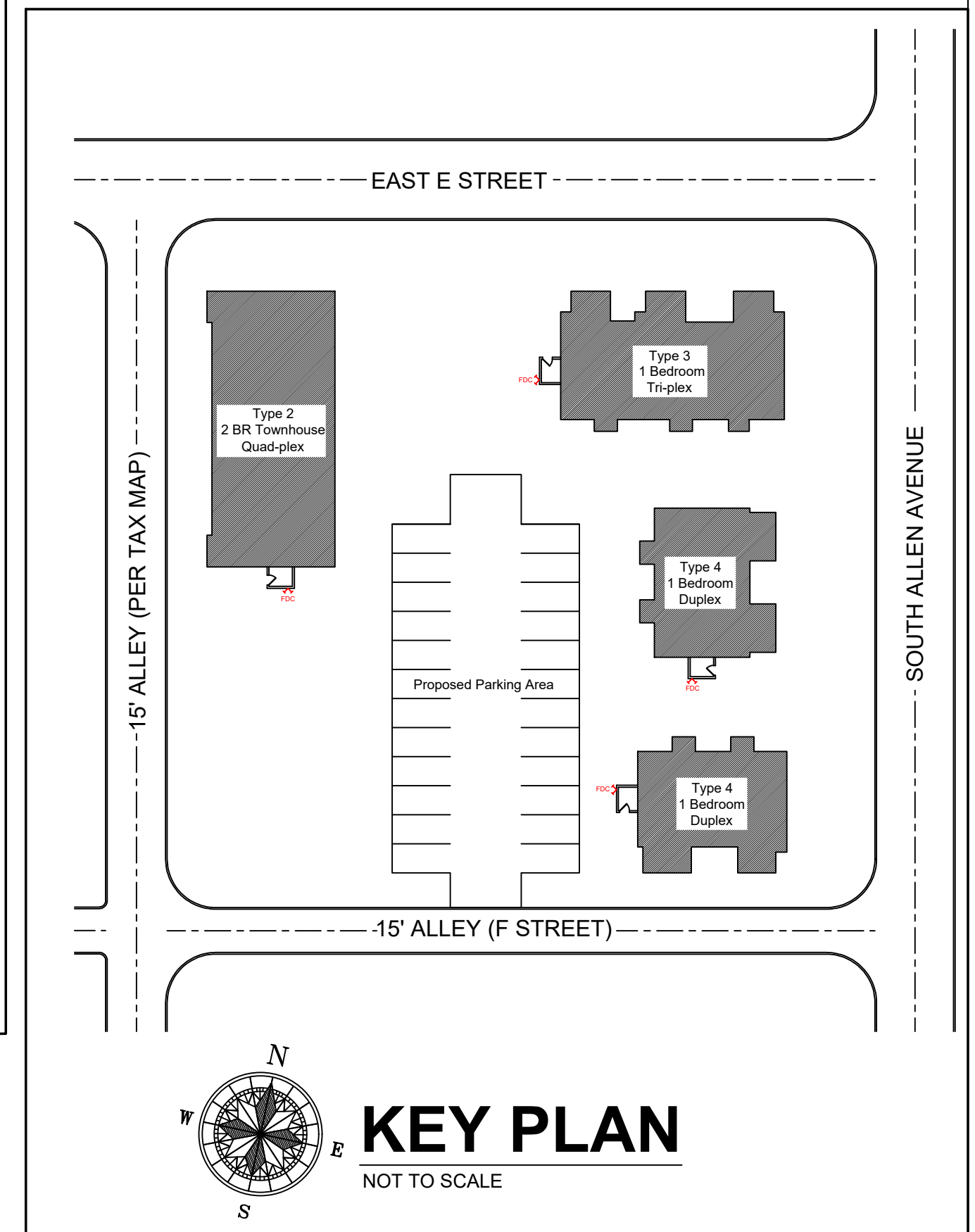
SECOND FLOOR



BUILDING TYPE 3



**BUILDING TYPE 4
(TWO BUILDINGS TOTAL)**



KEY PLAN

NOT TO SCALE

FIRE WALL LEGEND

1 HOUR WALL - - - - -

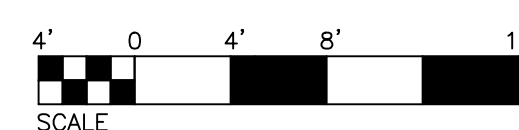
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WHORTON ENGINEERING PROJECT NO. 23208



FIRE SPRINKLER PLUMBING PLANS

SCALE: 1/8" = 1'-0"

ELECTRICAL SYMBOLS

	CEILING OUTLET – LED DOWNLIGHT.
	CEILING OUTLET – SURFACE LED FIXTURE.
	CEILING OUTLET – PENDANT LED FIXTURE.
	WALL OUTLET – LED BRACKET TYPE.
	WALL OUTLET – LED BRACKET TYPE.
	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, HUBBELL #5362 – GREY. (*WP* DENOTES EXTRA DUTY METAL IN-USE WEATHERPROOF COVER)(TR DENOTES TAMPER RESISTANT RECEPTACLE)
	WALL OUTLET – GFCI DUPLEX OUTLET, 20A, 125V, GROUNDED, WEATHERPROOF, HUBBELL #GF-5362-GY – GREY WITH #S-26 PLATE. (*WP* DENOTES EXTRA DUTY METAL IN-USE WEATHERPROOF COVER)
	WALL OUTLET – DUPLEX OUTLET, MOUNTED 6" ABOVE COUNTER.
	WALL OUTLET – GFCI DUPLEX OUTLET, MOUNTED 6" ABOVE COUNTER.
	WALL OUTLET – SINGLE OUTLET, 30A, 250V, 3W. VERIFY NEMA CONFIGURATION WITH ACTUAL EQUIPMENT.
	WALL OUTLET – SINGLE OUTLET, 50A, 120/250V, 4W, VERIFY NEMA CONFIGURATION WITH ACTUAL EQUIPMENT.
	FLOOR OUTLET – CONDUIT STUB UP.
	CEILING OUTLET – JUNCTION BOX.
	WALL OUTLET – JUNCTION BOX WITH FLEXIBLE CONNECTION TO EQUIPMENT.
	SWITCH OUTLET – AC TYPE, SINGLE POLE, 20A, 120/277V, HUBBELL #1221 – GREY.(“N” DENOTES NARROW)
	SWITCH OUTLET – AC TYPE, TWO POLE, 20A, 120/277V, HUBBELL #1222 – GREY.
	SWITCH OUTLET – AC TYPE, THREE WAY, 20A, 120/277V, HUBBELL #1223 – GREY.
	SWITCH OUTLET – AC TYPE, FOUR WAY, 20A, 120/277V, HUBBELL #1224 – GREY.
	SWITCH MANUAL MOTOR STARTER, SINGLE POLE WITH OVERLOAD PROTECTION.
	LIGHTING PANEL – SEE SPECIFICATIONS AND SCHEDULE.
	POWER PANELS – SEE SPECIFICATIONS AND SCHEDULE.
	BRANCH CIRCUIT CONCEALED IN WALL OR CEILING.
	BRANCH CIRCUIT CONCEALED IN FLOOR OR GROUND.
	HOMERUN TO PANELBOARD – ANY CIRCUIT WITHOUT FURTHER DESIGNATION 2 # 12 & 1 # 12(G) – 1/2" CONDUIT. ← 3 # 12 & 1 # 12(G) – 3/4" CONDUIT. ← 4 # 12 & 1 # 12(G) – 3/4" CONDUIT.
	EMPTY CONDUIT – (1)-1".
	BRANCH CIRCUIT EXPOSED.
	LOW VOLTAGE WIRING.
	CONDUIT RUN DOWN WALLS, CONCEALED
	CONDUIT RUN UP WALLS, CONCEALED
	MOTOR SHOWN 5hp (TYPICAL) OR 40 AMPS (TYPICAL).
	EXHAUST FAN MOTOR – FRACTIONAL HORSEPOWER.

	MAGNETIC MOTOR STARTER.
	NON-FUSED DISCONNECT SWITCH. (RT – RAINIGHT).
	FUSED DISCONNECT SWITCH. (RT – RAINIGHT).
	THERMOSTAT – WALL OUTLET 48" AFF OR AS DIRECTED BY MECHANICAL DRAWINGS. RUN EMPTY 3/4" CONDUIT TO UNIT.
	HUMIDISTAT – WALL OUTLET 48" AFF OR AS DIRECTED BY MECHANICAL DRAWINGS. RUN EMPTY 3/4" CONDUIT TO UNIT.
A.F.F.	ABOVE FINISHED FLOOR.
A.F.G.	ABOVE FINISHED GRADE.
B.F.C.	BELOW FINISHED CEILING.
VER.	VERIFY LOCATION.
N.E.C.	NATIONAL ELECTRICAL CODE.
	TELEPHONE OUTLET – 3/4" CONDUIT TO ATTIC WITH CAT. 3 CABLE TO 110 BLOCKS IN TJB. PROVIDE THE NECESSARY 110 PUNCH DOWN BLOCKS IN TUB TO PUNCH DOWN THE CAT. 3 CABLING FOR EACH UNIT. INSTALL FACEPLATE AND TERMINATE.
	CATV OUTLET – 3/4" CONDUIT TO ATTIC WITH RG6 CABLING ROUTED TO CATV-JB. INSTALL CATV FACEPLATE AND TERMINATE CABLING.
	FIRE ALARM – 120V SINGLE STATION SMOKE DETECTOR WITH BATTERY BACKUP – BRK 9120B OR EQUAL. INTERCONNECT ALL DEVICES WITHIN EACH UNIT.

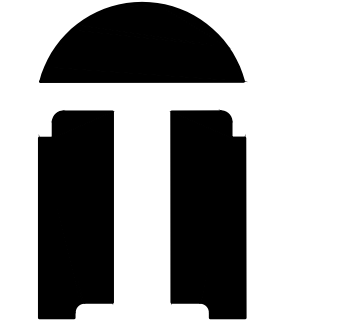
GENERAL NOTES

- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2020 NATIONAL ELECTRICAL CODE AND LOCAL ORDINANCES. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS.
- CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL DETAILS OF THE WORK AND ALL EXISTING FIELD CONDITIONS.
- CONTRACTOR SHALL PROVIDE A COMPLETE ELECTRICAL INSTALLATION INCLUDING ALL WORK CUSTOMARILY INCLUDED EVEN IF NOT SPECIFICALLY CALLED OUT.
- THE ELECTRICAL CONTRACTOR SHALL CAREFULLY COORDINATE HIS WORK WITH OTHER CONTRACTORS THROUGH THE GENERAL CONTRACTOR FOR SPACE REQUIREMENTS, ETC.
- CONTRACTOR SHALL VERIFY ALL MECHANICAL EQUIPMENT NAMEPLATE DATA BEFORE ANY WORK IS DONE AND MAKE ANY ADJUSTMENTS IN BREAKER AND WIRE SIZE AS MAY BE REQUIRED.
- SHOULD THE CONTRACTOR FIND DISCREPANCIES OR OMISSIONS IN THE CONTRACT DOCUMENTS OR BE IN DOUBT AS TO INTENT, HE SHALL IMMEDIATELY OBTAIN CLARIFICATION FROM THE ARCHITECT OR ENGINEER.
- THE ELECTRICAL DRAWINGS ARE SCHEMATIC AND ARE NOT INTENDED TO SHOW THE EXACT LOCATION OF CONDUIT, OUTLETS, ETC. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL AND PLUMBING DRAWINGS AND SHALL FIT HIS WORK TO CONFORM WITH THE BUILDING CONSTRUCTION AND WITH THE OTHER TRADES.
- MOUNTING HEIGHTS OF ALL WALL OUTLETS SHALL BE AS FOLLOWS UNLESS OTHERWISE INDICATED:
WALL SWITCHES.....4'-0" (TO CENTER OF BOX)
RECEPTACLES.....1'-6" (TO CENTER OF BOX)
TELEPHONE OUTLET.....1'-6" (TO CENTER OF BOX)
DATA OUTLET.....1'-6" (TO CENTER OF BOX)
CATV OUTLET.....1'-6" (TO CENTER OF BOX)
- ELECTRICAL CONTRACTOR SHALL VERIFY EXACT HEIGHT OF ALL COUNTER TOPS AND BACKSPASHES ON CASEWORK SHOP DRAWINGS AND CHANGE SPECIFIED MOUNTING HEIGHT OF WALL OUTLETS AS REQUIRED SO THAT BOTTOM OF OUTLET BOX IS 2" ABOVE TOP OF BACKSPASH OR IF NO BACKSPASH IS USED, 4" ABOVE COUNTERTOP.
- ALL OUTLET BOXES MOUNTED BACK-TO-BACK IN WALLS SHALL HAVE FIREPROOF SOUND INSULATING MATERIAL INSTALLED BETWEEN THE BOXES TO PREVENT SOUND TRANSMISSION FROM ONE ROOM TO ANOTHER.
- VERIFY ALL DOOR SWINGS WITH THE ARCHITECT BEFORE ROUGHING IN LIGHT SWITCHES.
- CONTRACTOR SHALL CHECK ALL LIGHT FIXTURES FOR EXACT MOUNTING TYPE AND SPACE REQUIRED PRIOR TO ROUGH-IN.
- BRANCH CIRCUITS SHALL BE #12 AWG AND 1/2" CONDUIT MINIMUM. CONDUCTORS SHALL BE 98% CONDUCTIVITY COPPER. SEE SPECIFICATIONS FOR INSULATION TYPE.
- ALL CONDUITS CROSSING EXPANSION JOINTS SHALL HAVE EXPANSION TYPE FITTINGS.
- VERIFY EXACT LOCATION OF ALL MOTORS AND EQUIPMENT BEFORE ROUGHING IN.
- SUPPORT OF ALL LIGHTING FIXTURES SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. SEE SPECIFICATIONS FOR SUPPORTING METHODS.
- COORDINATE SERVICES WITH POWER AND COMMUNICATION COMPANIES. REMOVE OR RELOCATE ALL POWER AND COMMUNICATIONS CIRCUITS ABOVE OR BELOW GRADE THAT WOULD OBSTRUCT CONSTRUCTION OF THE PROJECT OR CONFLICT IN ANY MANNER WITH COMPLETION OF THE PROJECT OR ANY CODE PERTAINING THERETO. IF UTILITY COMPANY REQUIREMENTS ARE AT A VARIANCE WITH THESE DRAWINGS AND SPECIFICATIONS, THE CONTRACT PRICE SHALL INCLUDE THE ADDITIONAL COST.
- THIS CONTRACTOR SHALL INSTALL EQUIPMENT GROUNDS THROUGHOUT THIS PROJECT, USING GREEN INSULATED CONDUCTORS. USE OF CONDUIT AS THE ONLY GROUND CONDUCTOR WILL NOT BE ALLOWED. SIZE GROUND CONDUCTORS PER N.E.C..
- ALL UTILITY FEES ASSOCIATED WITH THIS PROJECT SHALL BE INCLUDED IN BID. IF THESE FEES CANNOT BE OBTAINED FROM THE UTILITY PRIOR TO BID, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY.
- CONTRACTOR SHALL FIELD MARK ALL ELECTRICAL EQUIPMENT WITH ARC-FLASH WARNING LABELS PER NEC 110.16.
- CONTRACTOR SHALL PROVIDE RECORD DRAWINGS AND MANUALS THAT PROVIDE INSTRUCTION ABOUT OPERATION AND MAINTENANCE OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM TO THE OWNER WITHIN 30 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE.
- CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE OF EACH PIECE OF ELECTRICAL EQUIPMENT WITH THE ELECTRICAL CONTRACTOR PRIOR TO SUBMITTING AND ORDERING EQUIPMENT.
- VERIFY EXACT LOCATION AND EXACT MOUNTING HEIGHT OF ALL ELECTRICAL EQUIPMENT AND ELECTRICAL CONNECTIONS WITH THE ARCHITECT AND THE OWNER PRIOR TO ROUGH-IN.

LIGHTING FIXTURE SCHEDULE

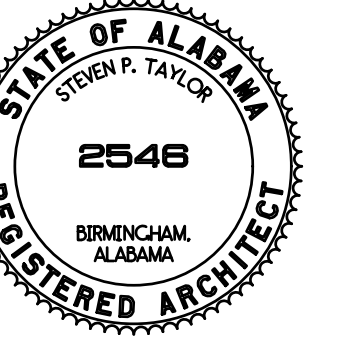
MARK	MANUFACTURER	CATALOG NO.	LAMPS			MOUNTING HEIGHT	TYPE MOUNTING	RECESS DEPTH	REMARKS
			NO.	WATTS	TYPE				
D12	PROGRESS	P730000-030-30	FURNISHED WITH FIXTURE			CEILING	SURFACE		SEE NOTES 1 & 3
F6	PROGRESS	P3110-30	SEE NOTE 4(QTY. 4 LAMPS)			ABOVE MIRROR	SURFACE		SEE NOTES 1 & 3
S	PROGRESS	P3697-30	SEE NOTE 4(QTY. 3 LAMPS)			CEILING	SURFACE		SEE NOTES 1 & 3
T	PROGRESS	P3688-30	SEE NOTE 4(QTY. 1 LAMPS)			CEILING	SURFACE		SEE NOTES 1 & 3
U	PROGRESS	P5745-30	SEE NOTE 4(QTY. 2 LAMPS)			CEILING	SURFACE		SEE NOTES 1, 2, 3 & 5
V	PROGRESS	P3925-30	SEE NOTE 4(QTY. 2 LAMPS)			CEILING	SURFACE		SEE NOTES 1 & 3
W	PROGRESS	P7279-30/30K9	FURNISHED WITH FIXTURE			CEILING	SURFACE		SEE NOTES 1 & 3
Y	PROGRESS	P8061-28-30K	FURNISHED WITH FIXTURE			CEILING	RECESSED	4"	SEE NOTES 1 & 3

- NOTES:
- EQUAL FIXTURE BY THOMAS LIGHTING WILL BE ACCEPTABLE.
 - VERIFY FINISH WITH ARCHITECT.
 - CONTRACTOR SHALL VERIFY LIGHT FIXTURE SELECTION WITH THE OWNER PRIOR TO ORDERING.
 - CONTRACTOR SHALL PROVIDE 60W EQUIVALENT LED LAMPS FOR FIXTURE.
 - PROVIDE AND INSTALL BLOCKING AS REQUIRED TO INSTALL LIGHTING FIXTURE LEVEL ON FLAT SURFACE.



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SYMBOLS,
NOTES
AND
LIGHTING
FIXTURE
SCHEDULE

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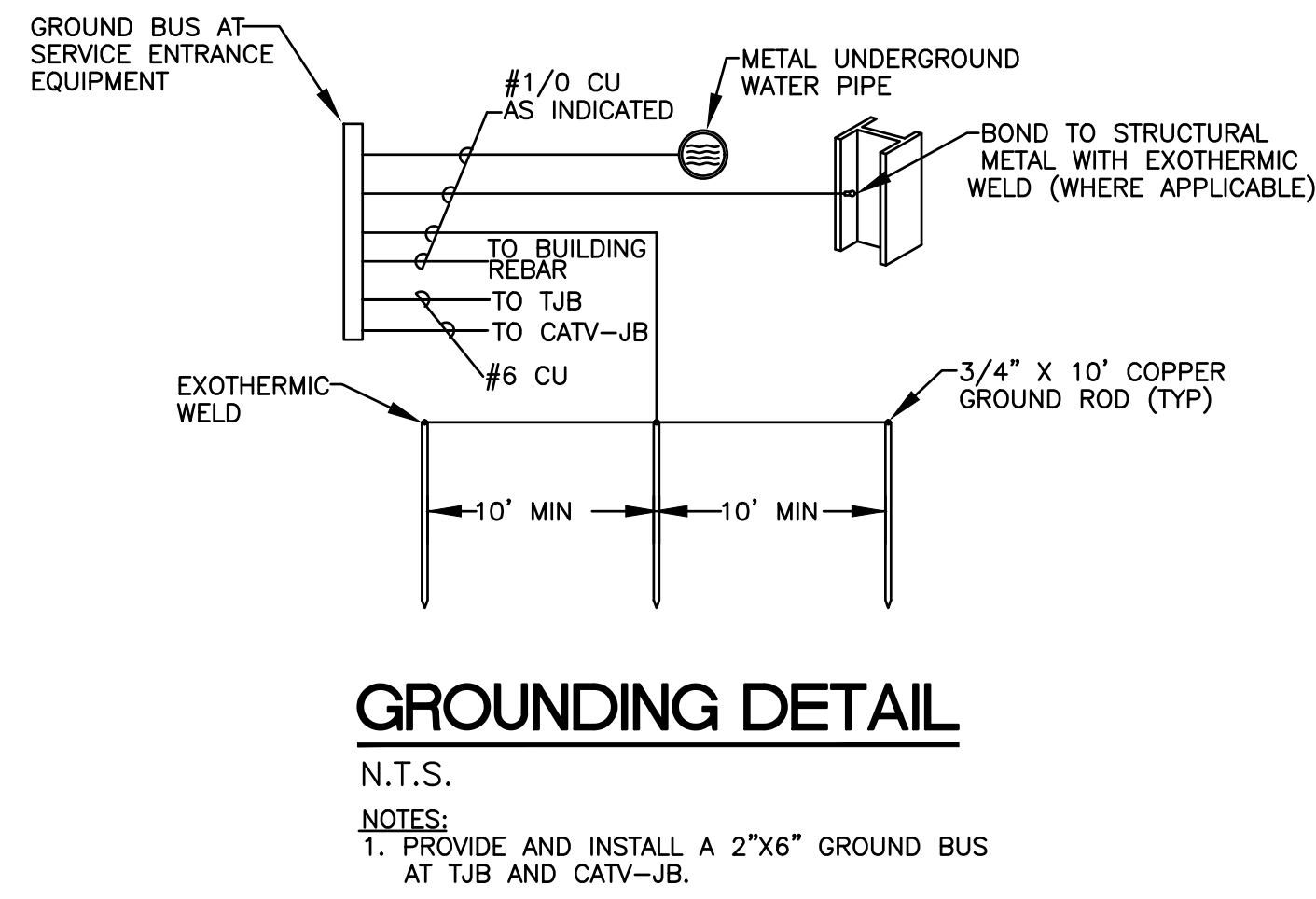
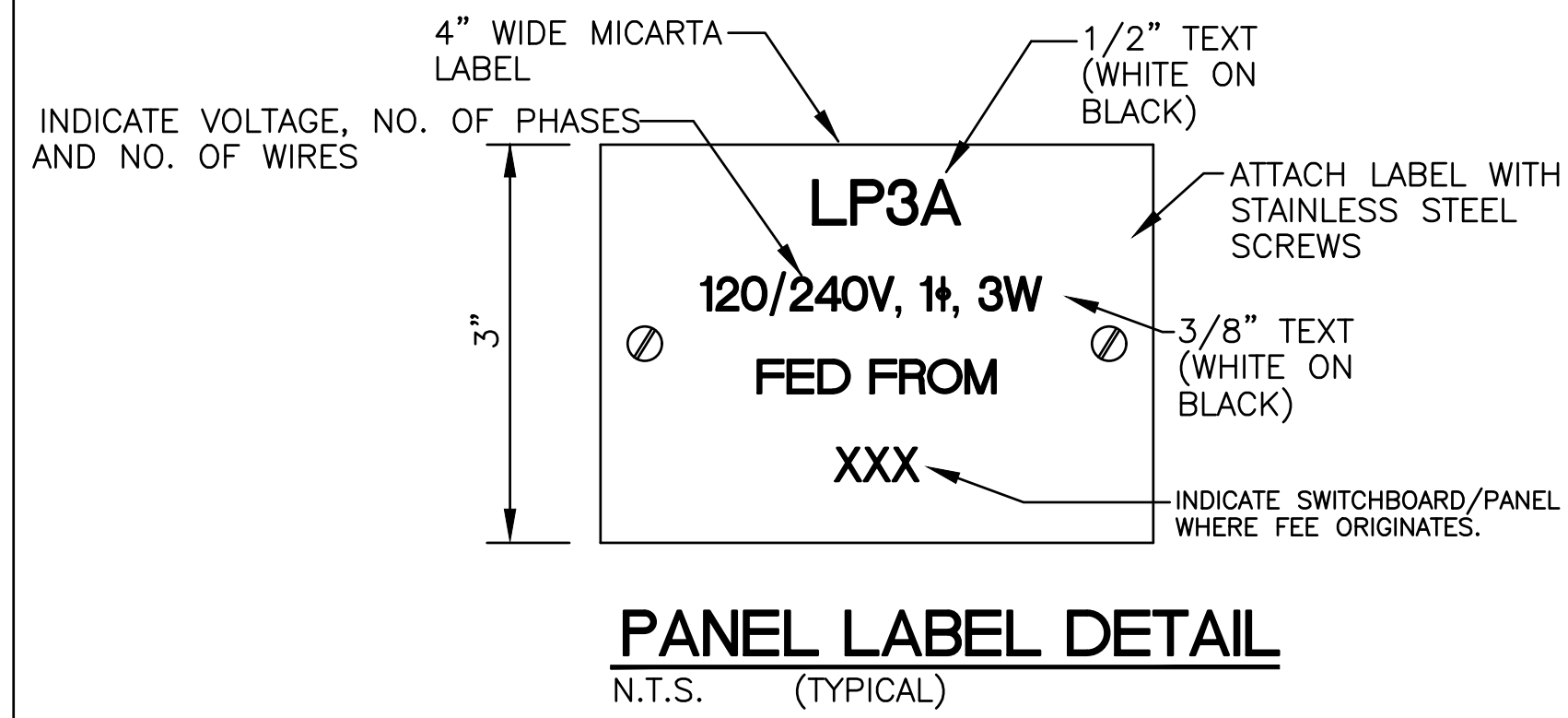
DATE:
11/22/23

SCALE:
AS NOTED

SHEET
E-1

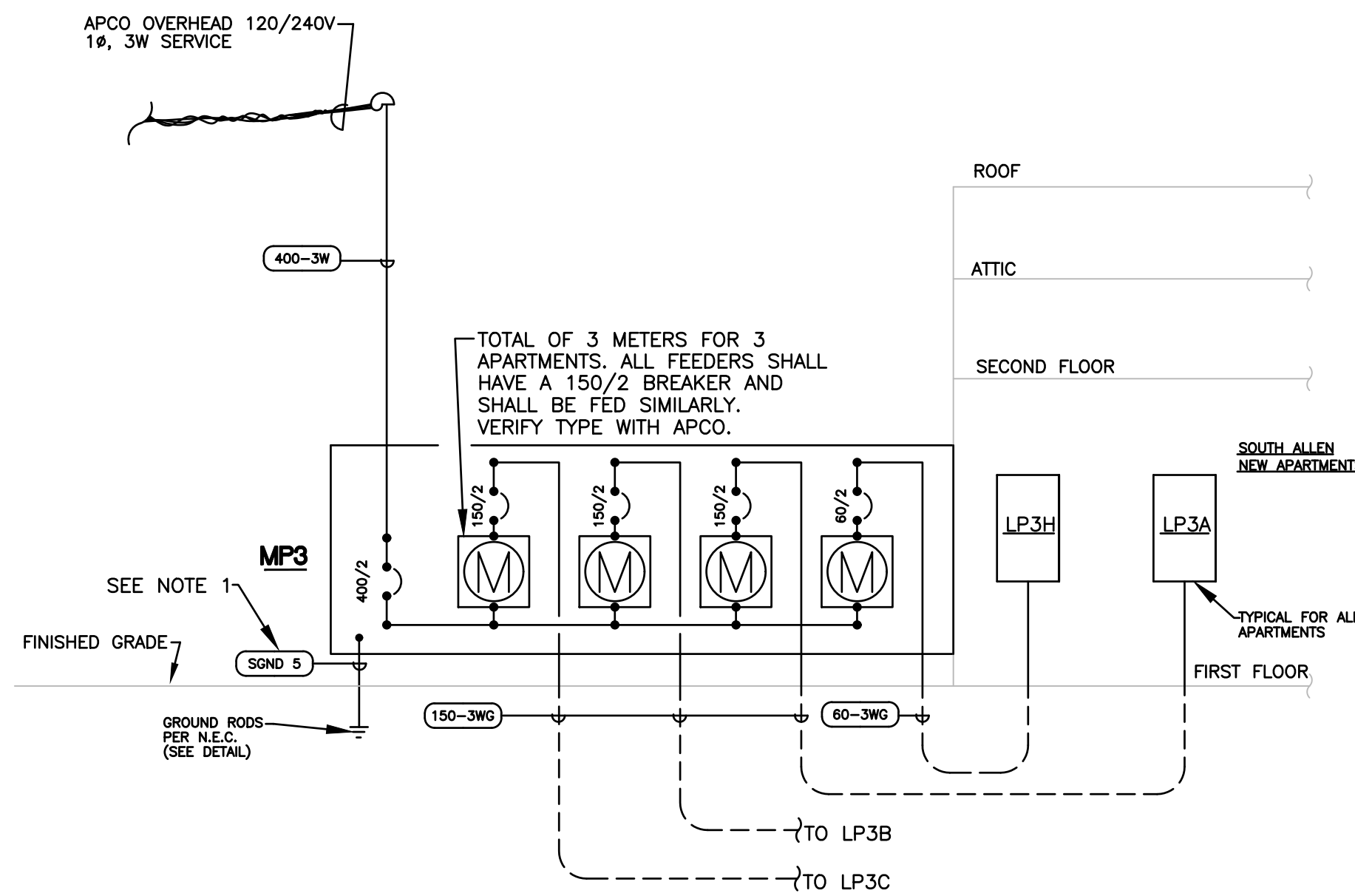


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878 AVALON LANE
ANNISTON, AL 36207
M.E. JOB #2333



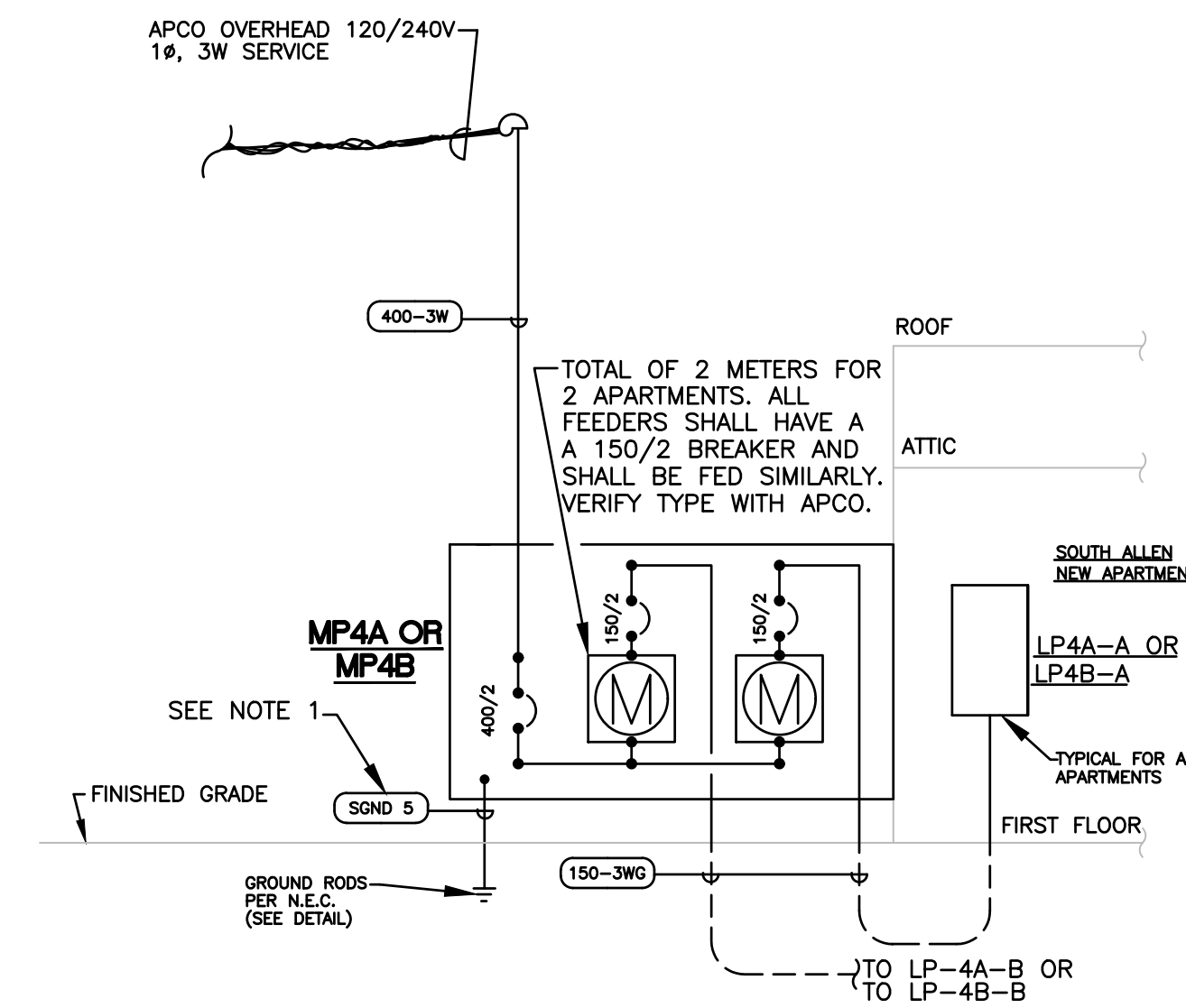
FEEDER/GROUND CONDUCTOR SCHEDULE

AMPS	1 φ WIRE TAG	SINGLE PHASE FEEDER/EQUIPMENT
60 W/ GND	60-3WG	3 #4 & 1 #10(G) IN 1" C.
150 W/ GND	150-3WG	3 #1/0 & 1 #6(G) IN 1-1/2" C.
400 W/O GND	400-3W	3 #500 MCM IN 3" C.
MISCELLANEOUS TAGS		
	SGND 5	1 #1/0 CU IN 3/4" C.



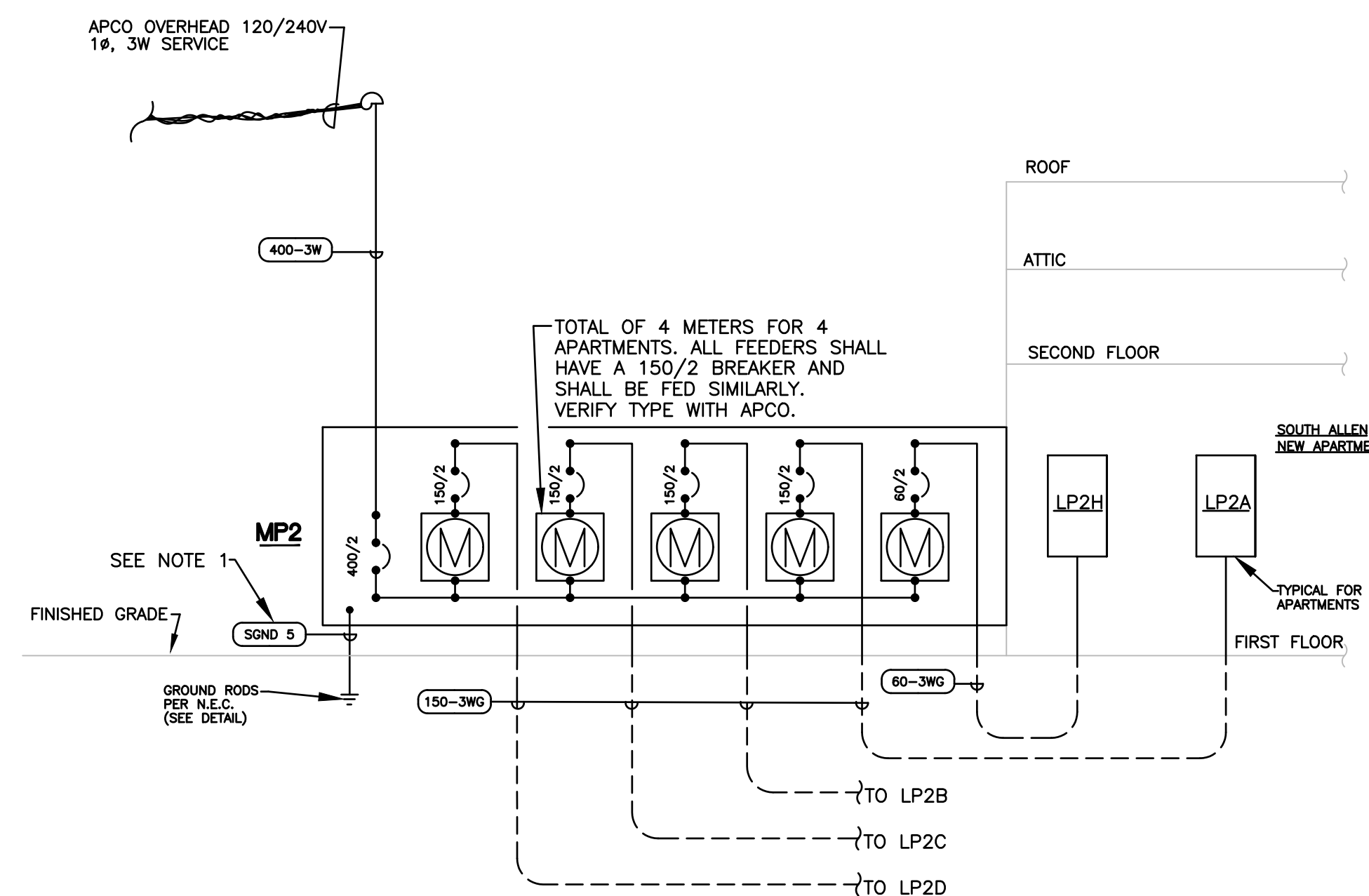
BUILDING TYPE 3 ELECTRICAL SINGLE LINE DIAGRAM

N.T.S.
 NOTES:
 1. SEE SCHEDULE ON THIS SHEET FOR WIRE SIZE. (TYP)



BUILDING TYPES 4A AND 4B ELECTRICAL SINGLE LINE DIAGRAM

N.T.S.
 NOTES:
 1. SEE SCHEDULE ON THIS SHEET FOR WIRE SIZE. (TYP)



BUILDING TYPE 2 ELECTRICAL SINGLE LINE DIAGRAM

N.T.S.
 NOTES:
 1. SEE SCHEDULE ON THIS SHEET FOR WIRE SIZE. (TYP)



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South Allen Avenue Development
 Anniston Housing Authority /
 Housing Development Corporation

SINGLE LINE DIAGRAMS, DETAILS AND SCHEDULE

TDA Comm. No. 440

DATE: 11/22/23

SCALE: AS NOTED

SHEET E-2

TDA Architects LLC
 125 West Columbus Street
 Dadeville, Alabama 36853
 REGISTERED ARCHITECT
 2546

TYPE 3 APARTMENTS PANELBOARD SCHEDULE

MARK	TYPE	MAINS			BRANCHES					LUG LOCATION	TYPE MOUNTING	MINIMUM AIC RATING	REMARKS
		TYPE	AMPS	SERVICE	1 POLE	2 POLE	3 POLE	SPARES	SPACES				
MP3	SQUARE D EZ METER PAK	MB	400	120/240V 1Ø, 3W		3-150/2				TOP	SURFACE	VERIFY WITH AFPCO	SEE NOTES 2, 3, 4 & 5
LP3A	QO	MB	150	120/240V 1Ø, 3W	12-20AF 1-20AG	1-20 2-30 1-30GF 1-50GF		6-20/1AF	13-1PS	BOTTOM	RECESSED	VERIFY WITH AFPCO	SEE NOTE 1
LP3B	QO	MB	150	120/240V 1Ø, 3W	12-20AF 1-20AG	1-20 2-30 1-30GF 1-50GF		6-20/1AF	13-1PS	BOTTOM	RECESSED	VERIFY WITH AFPCO	SEE NOTE 1
LP3C	QO	MB	150	120/240V 1Ø, 3W	12-20AF 1-20AG	1-20 2-30 1-30GF 1-50GF		6-20/1AF	13-1PS	BOTTOM	RECESSED	VERIFY WITH AFPCO	SEE NOTE 1
LP3H	QO	MB	60	120/240V 1Ø, 3W	2-20AF	1-15		6-20/1AF	8-1PS	BOTTOM	SURFACE	VERIFY WITH AFPCO	SEE NOTE 1

NOTES:

- PANEL SHALL BE FULLY RATED AND SHALL HAVE A HINGED FRONT TRIM.
 - PANEL SHALL BE RATED FOR SERVICE ENTRANCE EQUIPMENT.
 - FIELD MARK ELECTRIC SERVICE EQUIPMENT WITH A CONSPICUOUS & PERMANENT LABEL THAT INDICATES THE AVAILABLE FAULT CURRENT PER NEC 110.24.
 - PANELBOARD SHALL HAVE MICARTA LABELS BESIDE EACH BREAKER, INDICATING LOAD SERVED.
 - PANEL SHALL BE FULLY RATED AND SHALL BE NEMA 3R RATED.
- AF - INDICATES AFCI CIRCUIT BREAKER.
AG - INDICATES DUAL FUNCTION ARC FAULT/GROUND FAULT CIRCUIT BREAKER.
GF - INDICATES GROUND FAULT CIRCUIT BREAKER.

TYPE 4 APARTMENTS PANELBOARD SCHEDULE

MARK	TYPE	MAINS			BRANCHES					LUG LOCATION	TYPE MOUNTING	MINIMUM AIC RATING	REMARKS
		TYPE	AMPS	SERVICE	1 POLE	2 POLE	3 POLE	SPARES	SPACES				
MP4A	SQUARE D EZ METER PAK	MB	400	120/240V 1Ø, 3W		2-150/2				TOP	SURFACE	VERIFY WITH AFPCO	SEE NOTES 2, 3, 4 & 5
MP4B	SQUARE D EZ METER PAK	MB	400	120/240V 1Ø, 3W		2-150/2				TOP	SURFACE	VERIFY WITH AFPCO	SEE NOTES 2, 3, 4 & 5
LP4A-A	QO	MB	150	120/240V 1Ø, 3W	12-20AF 1-20AG	1-20 2-30 1-30GF 1-50GF		6-20/1AF	13-1PS	BOTTOM	RECESSED	VERIFY WITH AFPCO	SEE NOTE 1
LP4A-B	QO	MB	150	120/240V 1Ø, 3W	12-20AF 1-20AG	1-20 2-30 1-30GF 1-50GF		6-20/1AF	13-1PS	BOTTOM	RECESSED	VERIFY WITH AFPCO	SEE NOTE 1
LP4B-A	QO	MB	150	120/240V 1Ø, 3W	12-20AF 1-20AG	1-20 2-30 1-30GF 1-50GF		6-20/1AF	13-1PS	BOTTOM	RECESSED	VERIFY WITH AFPCO	SEE NOTE 1
LP4B-B	QO	MB	150	120/240V 1Ø, 3W	12-20AF 1-20AG	1-20 2-30 1-30GF 1-50GF		6-20/1AF	13-1PS	BOTTOM	RECESSED	VERIFY WITH AFPCO	SEE NOTE 1

NOTES:

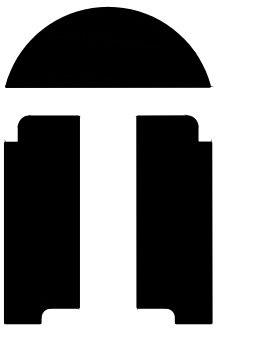
- PANEL SHALL BE FULLY RATED AND SHALL HAVE A HINGED FRONT TRIM.
 - PANEL SHALL BE RATED FOR SERVICE ENTRANCE EQUIPMENT.
 - FIELD MARK ELECTRIC SERVICE EQUIPMENT WITH A CONSPICUOUS & PERMANENT LABEL THAT INDICATES THE AVAILABLE FAULT CURRENT PER NEC 110.24.
 - PANELBOARD SHALL HAVE MICARTA LABELS BESIDE EACH BREAKER, INDICATING LOAD SERVED.
 - PANEL SHALL BE FULLY RATED AND SHALL BE NEMA 3R RATED.
- AF - INDICATES AFCI CIRCUIT BREAKER.
AG - INDICATES DUAL FUNCTION ARC FAULT/GROUND FAULT CIRCUIT BREAKER.
GF - INDICATES GROUND FAULT CIRCUIT BREAKER.

TYPE 2 APARTMENTS PANELBOARD SCHEDULE

MARK	TYPE	MAINS			BRANCHES					LUG LOCATION	TYPE MOUNTING	MINIMUM AIC RATING	REMARKS
		TYPE	AMPS	SERVICE	1 POLE	2 POLE	3 POLE	SPARES	SPACES				
MP2	SQUARE D EZ METER PAK	MB	400	120/240V 1Ø, 3W		4-150/2				TOP	SURFACE	VERIFY WITH AFPCO	SEE NOTES 2, 3, 4 & 5
LP2A	QO	MB	150	120/240V 1Ø, 3W	19-20AF 1-20AG	1-25 1-30 1-30GF 1-45 1-50GF		6-20/1AF	6-1PS	BOTTOM	RECESSED	VERIFY WITH AFPCO	SEE NOTE 1
LP2B	QO	MB	150	120/240V 1Ø, 3W	19-20AF 1-20AG	1-25 1-30 1-30GF 1-45 1-50GF		6-20/1AF	6-1PS	BOTTOM	RECESSED	VERIFY WITH AFPCO	SEE NOTE 1
LP2C	QO	MB	150	120/240V 1Ø, 3W	19-20AF 1-20AG	1-25 1-30 1-30GF 1-45 1-50GF		6-20/1AF	6-1PS	BOTTOM	RECESSED	VERIFY WITH AFPCO	SEE NOTE 1
LP2D	QO	MB	150	120/240V 1Ø, 3W	19-20AF 1-20AG	1-25 1-30 1-30GF 1-45 1-50GF		6-20/1AF	6-1PS	BOTTOM	RECESSED	VERIFY WITH AFPCO	SEE NOTE 1
LP2H	QO	MB	60	120/240V 1Ø, 3W	2-20AF	1-15		6-20/1AF	8-1PS	BOTTOM	SURFACE	VERIFY WITH AFPCO	SEE NOTE 1

NOTES:

- PANEL SHALL BE FULLY RATED AND SHALL HAVE A HINGED FRONT TRIM.
 - PANEL SHALL BE RATED FOR SERVICE ENTRANCE EQUIPMENT.
 - FIELD MARK ELECTRIC SERVICE EQUIPMENT WITH A CONSPICUOUS & PERMANENT LABEL THAT INDICATES THE AVAILABLE FAULT CURRENT PER NEC 110.24.
 - PANELBOARD SHALL HAVE MICARTA LABELS BESIDE EACH BREAKER, INDICATING LOAD SERVED.
 - PANEL SHALL BE FULLY RATED AND SHALL BE NEMA 3R RATED.
- AF - INDICATES AFCI CIRCUIT BREAKER.
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GF - INDICATES GROUND FAULT CIRCUIT BREAKER.



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PANELBOARD
SCHEDULES

TDA Comm. No.

440

DATE:

11/22/23

SCALE:

AS NOTED

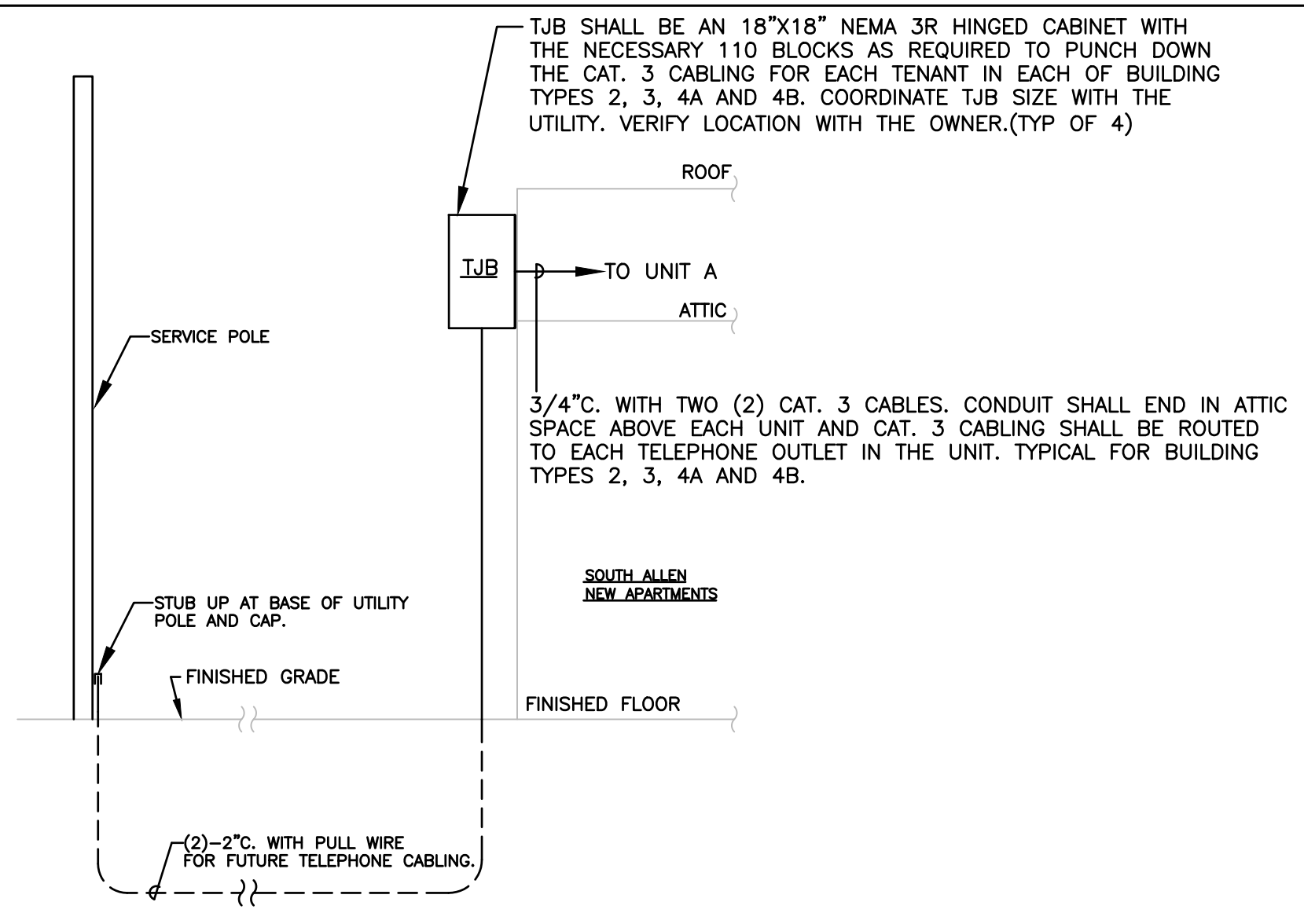
SHEET

E-3

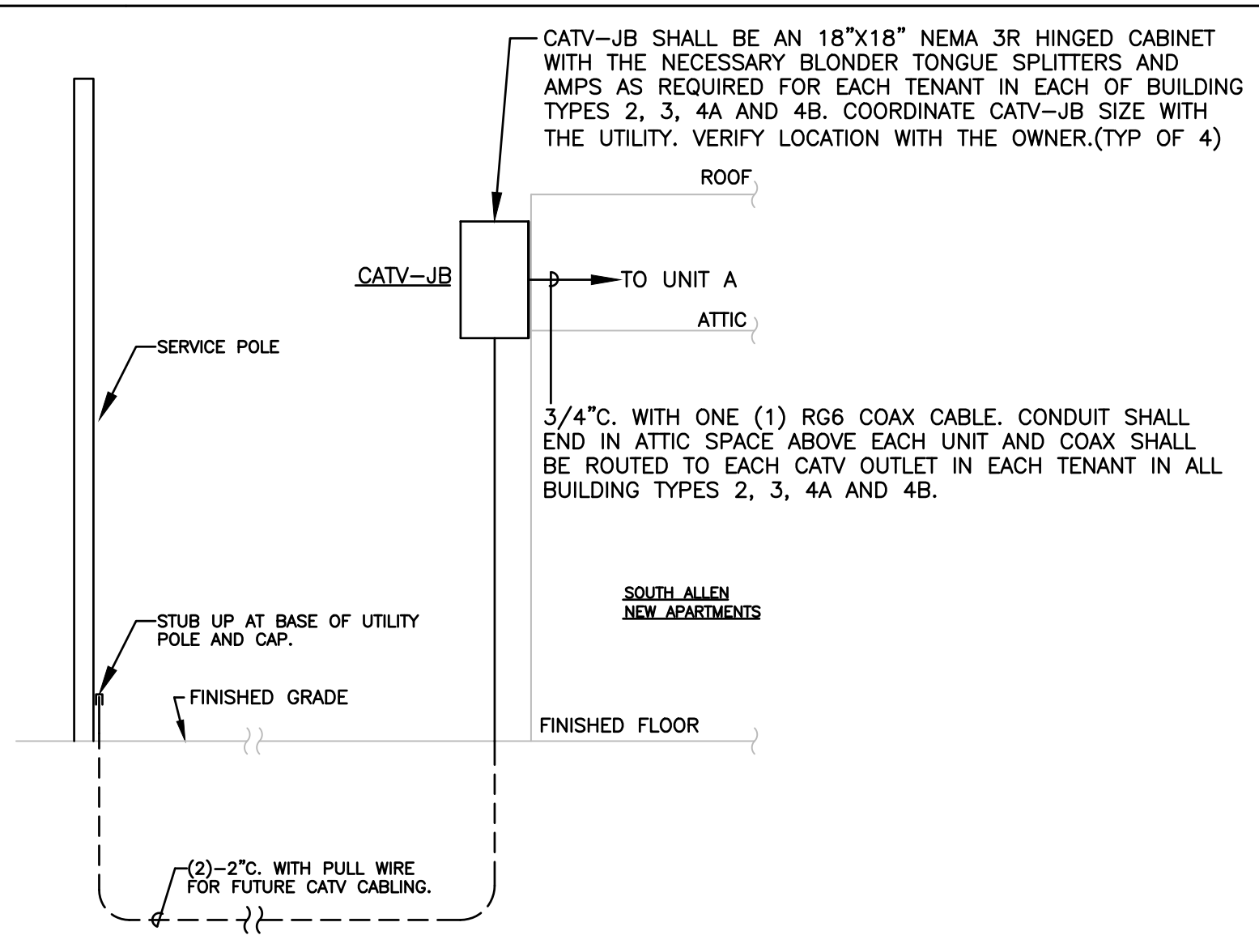


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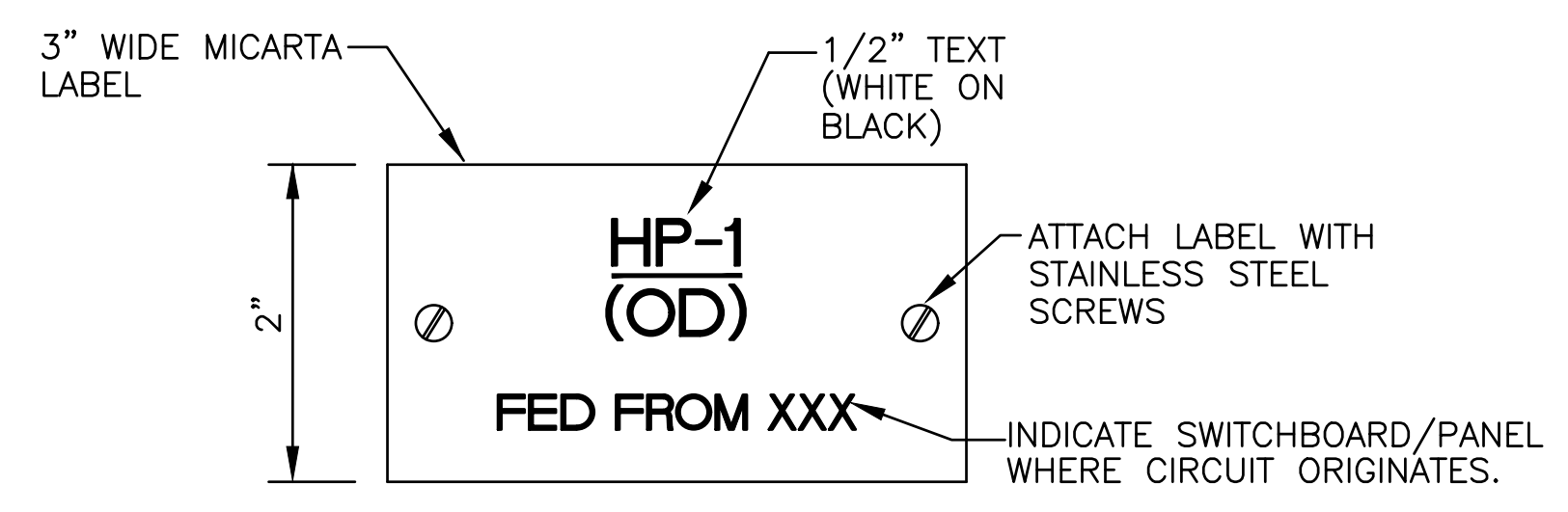
11-22-23



TELEPHONE RISER DIAGRAM
N.T.S

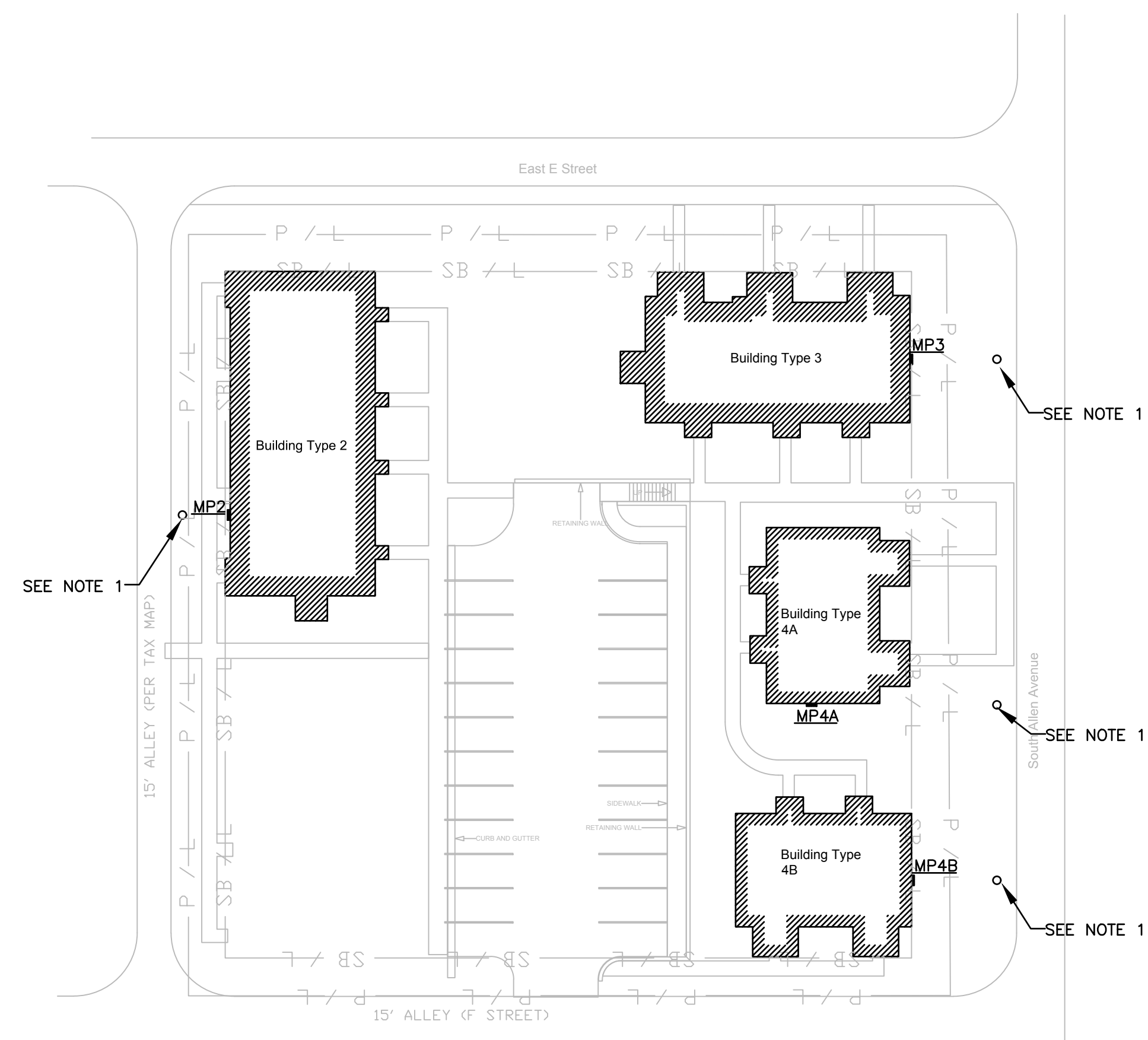


CATV RISER DIAGRAM
N.T.S



EQUIPMENT LABEL DETAIL
N.T.S. (TYPICAL)

NOTES:
1. INSTALL LABEL ON ALL DISCONNECTING MEANS FOR EACH PIECE OF EQUIPMENT.



ELECTRICAL SITE PLAN
SCALE: 1" = 30'-0"
NOTES:
1. APCCO SERVICE POLE.(VER.)

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STATE OF ALABAMA
STANLEY J. MCCARTER
2548
REGISTERED ARCHITECT

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ELECTRICAL
SITE PLAN
AND DETAILS

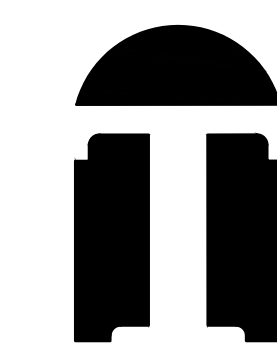
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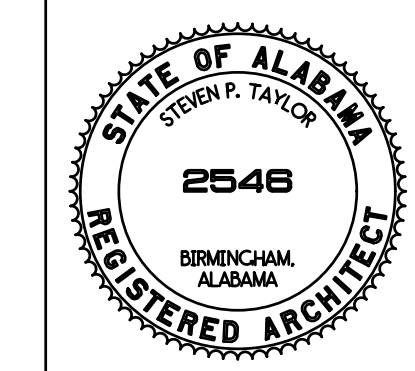
SHEET
E-4

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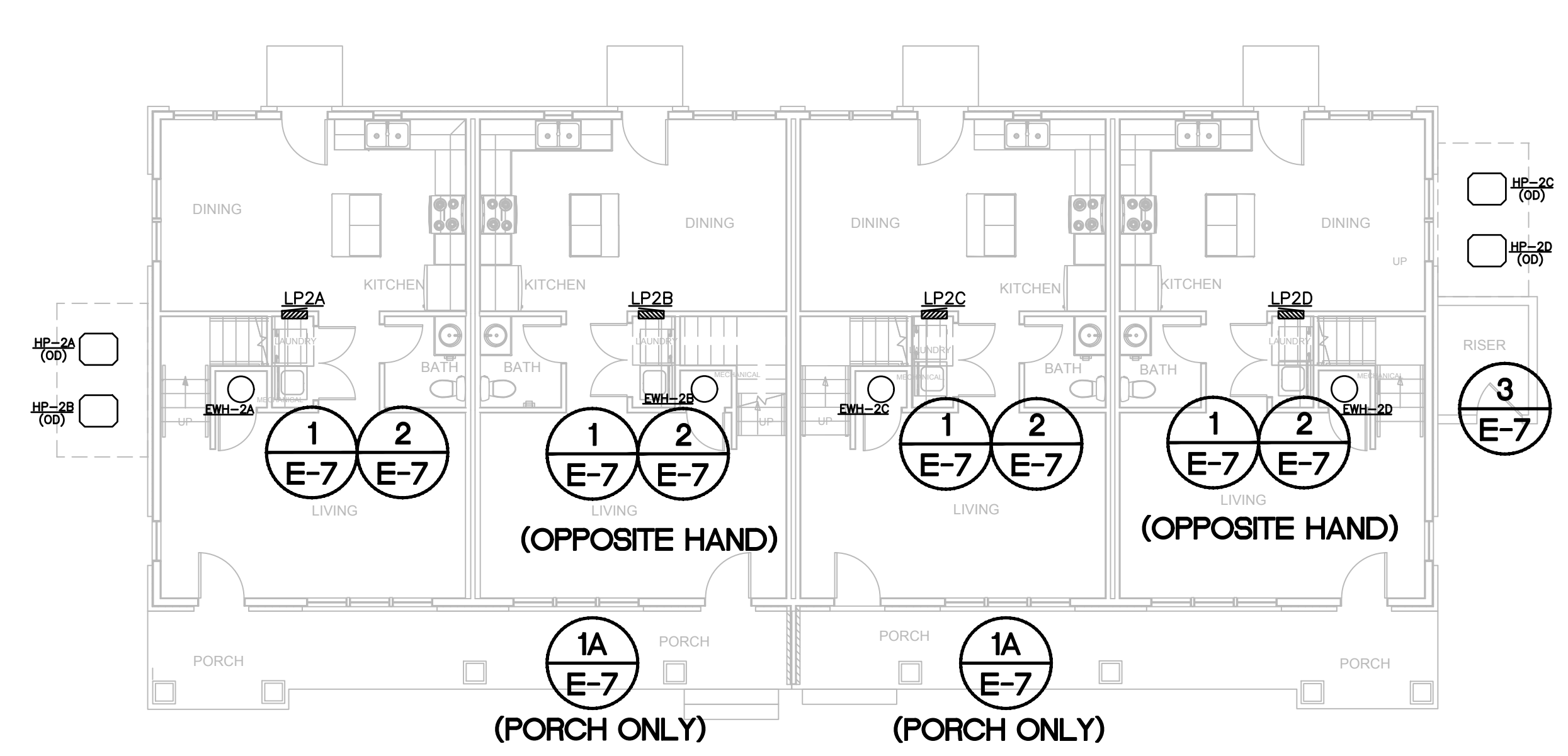
BUILDING
TYPE 2 FIRST
AND SECOND
FLOOR
OVERALL
PLANS

TDA Comm. No.
440

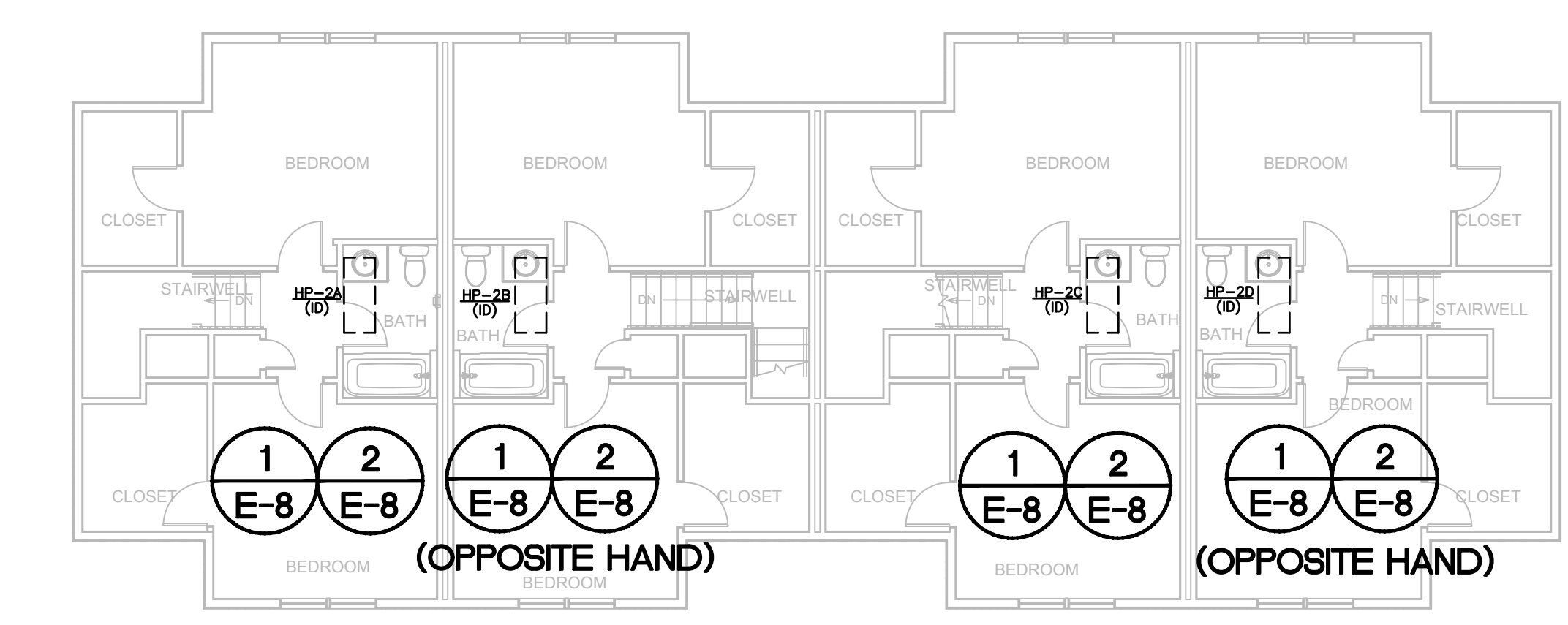
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SCALE:
AS NOTED

SHEET
E-5



BUILDING TYPE 2 FIRST FLOOR OVERALL PLAN
SCALE: 1/8" = 1'-0"

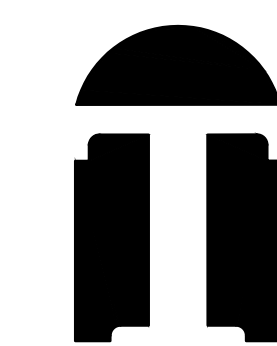


BUILDING TYPE 2 SECOND FLOOR OVERALL PLAN
SCALE: 1/8" = 1'-0"

NOTE:
ALL 120 VOLT CIRCUIT WIRE SIZES SHALL BE BASED UPON
DISTANCE FROM PANELBOARD FEEDING THE CIRCUITS AS
FOLLOWS AND THE CIRCUITS SHALL HAVE A 3% VOLTAGE
DROP OR LESS:
LESS THAN 75 FEET.....#12 AWG
BETWEEN 76' AND 125'.....#10 AWG
BETWEEN 126' AND 190'....#8 AWG

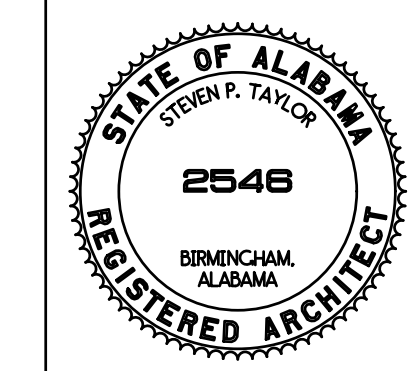


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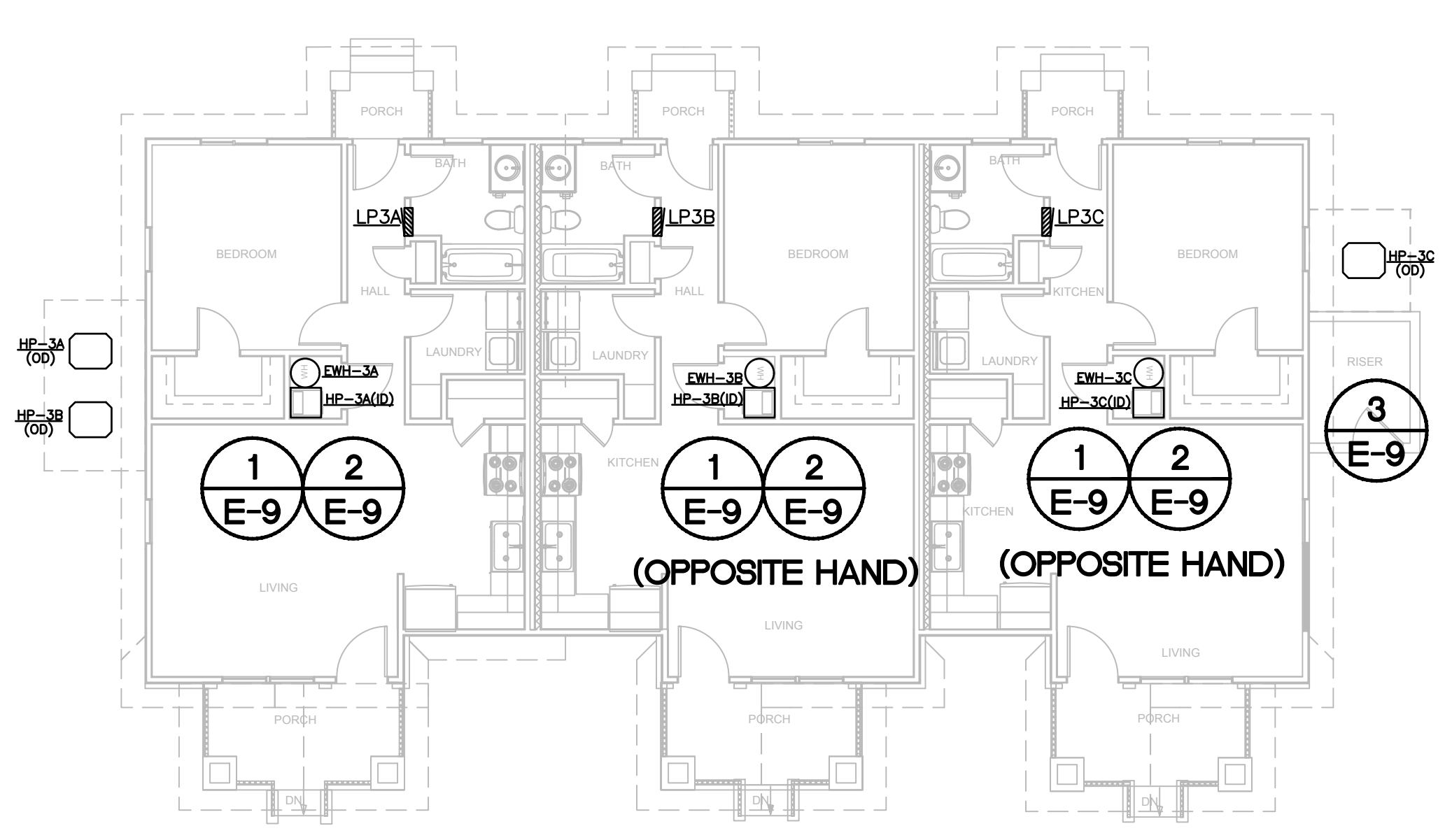


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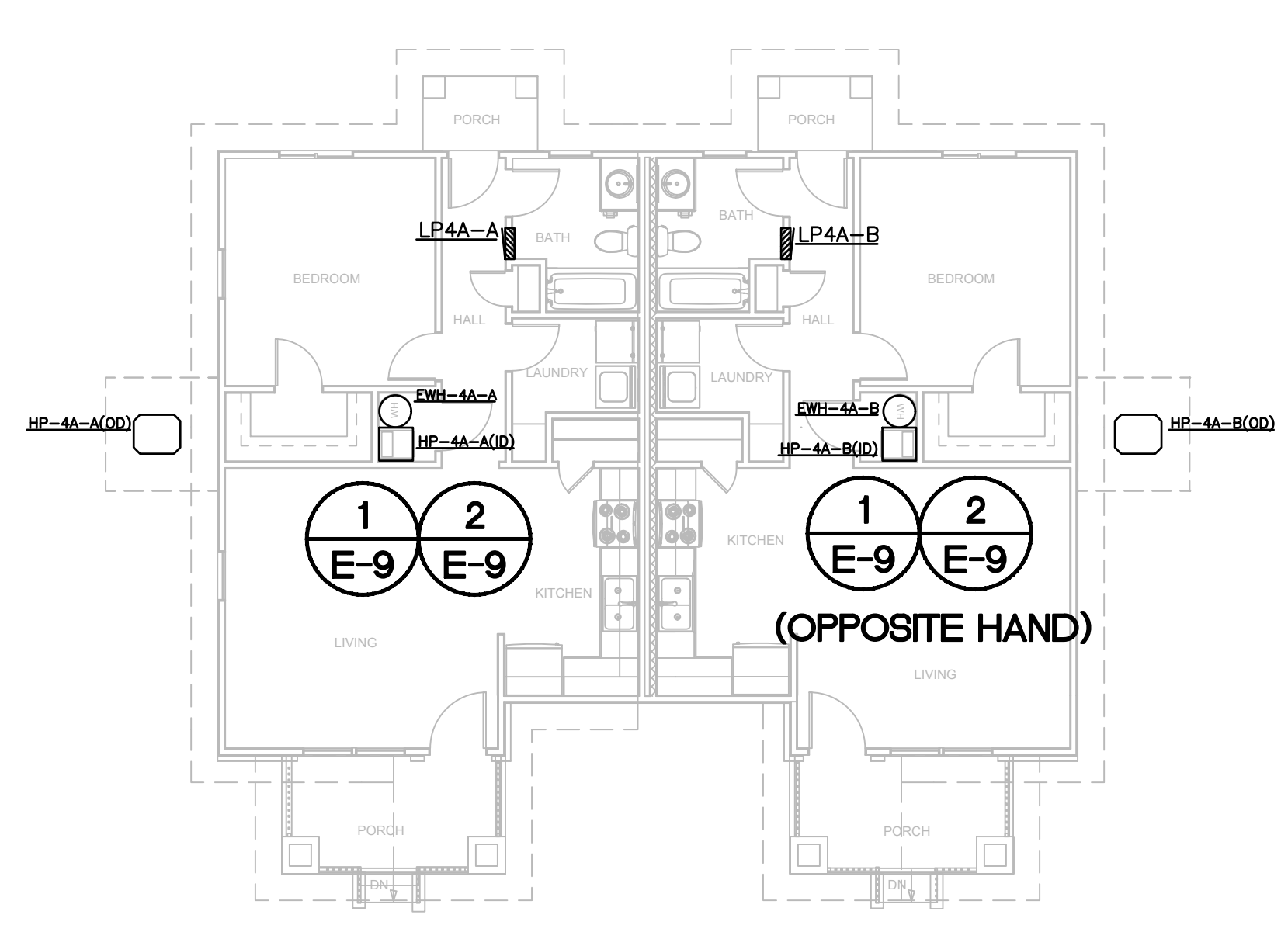
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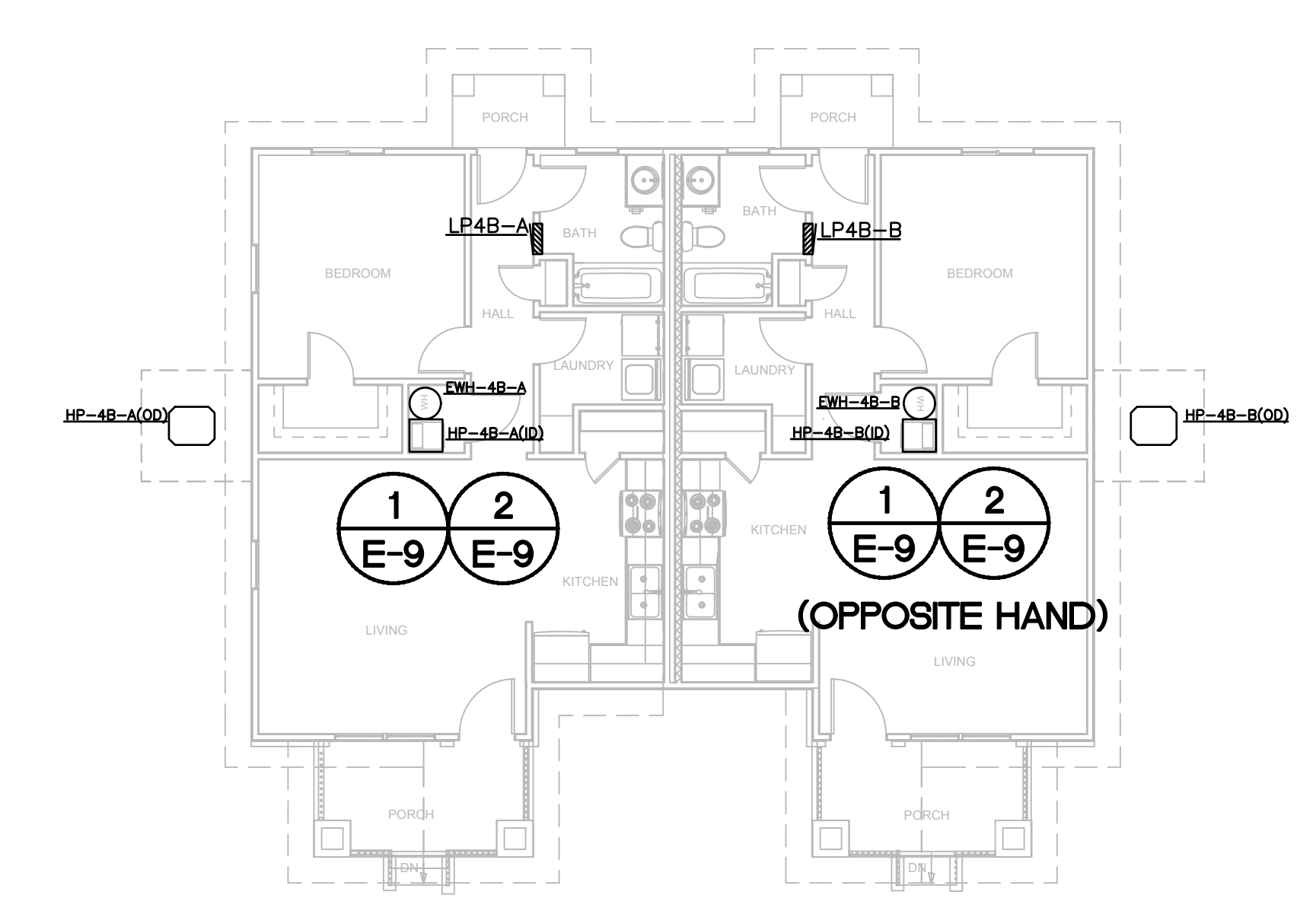
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BUILDING TYPE 3 OVERALL PLAN
SCALE: 1/8" = 1'-0"



BUILDING TYPE 4A OVERALL PLAN
SCALE: 1/8" = 1'-0"



BUILDING TYPE 4B OVERALL PLAN
SCALE: 1/8" = 1'-0"

NOTE:
ALL 120 VOLT CIRCUIT WIRE SIZES SHALL BE BASED UPON
DISTANCE FROM PANELBOARD FEEDING THE CIRCUITS AS
FOLLOWS AND THE CIRCUITS SHALL HAVE A 3% VOLTAGE
DROP OR LESS:
LESS THAN 75 FEET.....#12 AWG
BETWEEN 76' AND 125'.....#10 AWG
BETWEEN 126' AND 190'.....#8 AWG

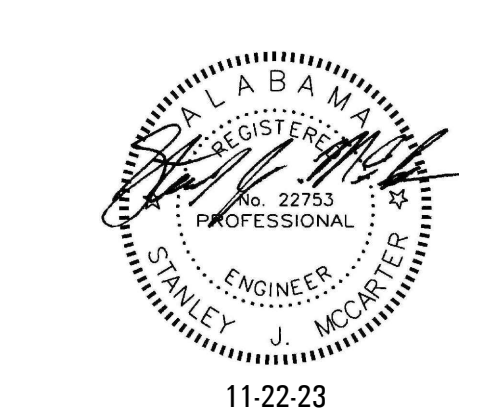
BUILDING
TYPES 3, 4A
AND 4B
OVERALL
PLANS

TDA Comm. No.
440

DATE:
11/22/23

SCALE:
AS NOTED

SHEET
E-6



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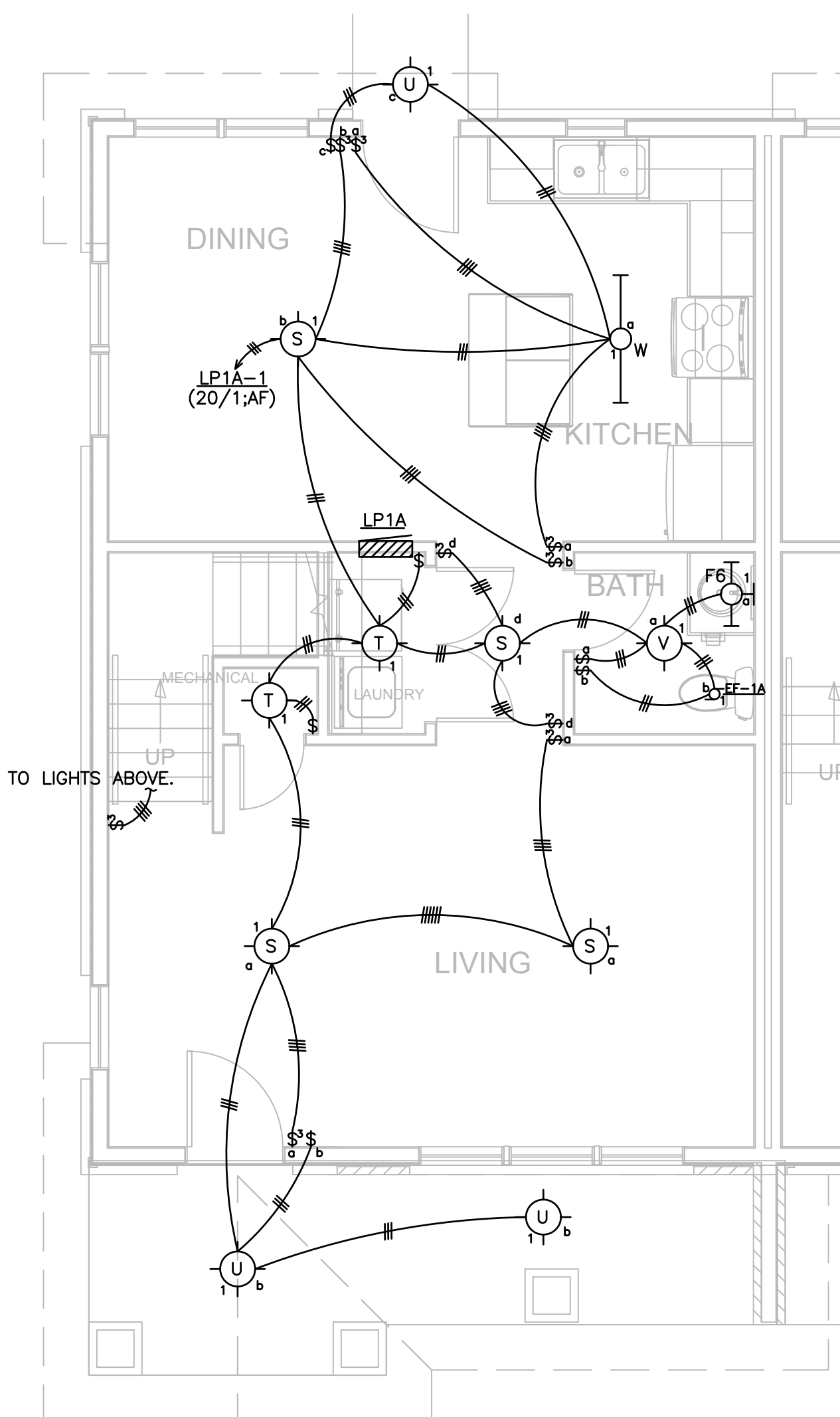
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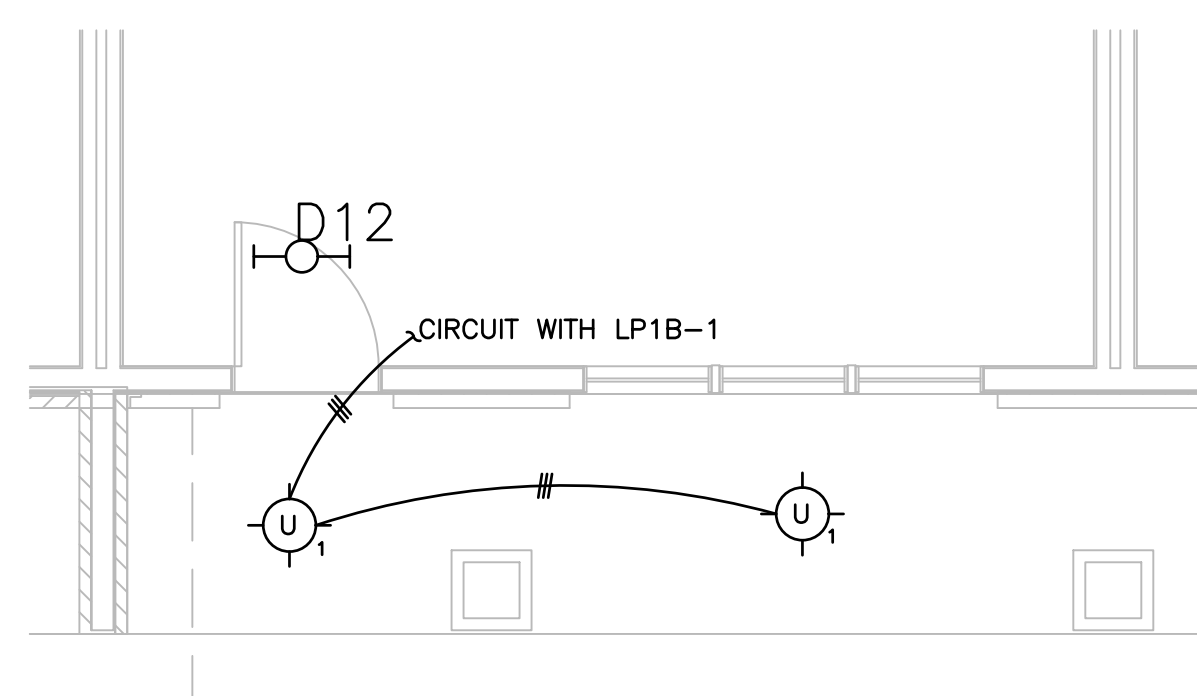
BUILDING TYPE 2 MECHANICAL EQUIPMENT CIRCUIT SCHEDULE

UNIT ID	CIRCUIT NUMBER	BREAKER SIZE	WIRE SIZE	GROUND SIZE	CONDUIT SIZE	DISCONNECT TYPE
HP-2A(OD)	LP2A-27,28	25/2	2 #10	#10	1/2"	30/2, F, RT
HP-2B(OD)	LP2B-27,28	25/2	2 #10	#10	1/2"	30/2, F, RT
HP-2C(OD)	LP2C-27,28	25/2	2 #10	#10	1/2"	30/2, F, RT
HP-2D(OD)	LP2D-27,28	25/2	2 #10	#10	1/2"	30/2, F, RT
HP-2A(ID)	LP2A-29,30	45/2	2 #6	#10	3/4"	60/2, NF
HP-2B(ID)	LP2B-29,30	45/2	2 #6	#10	3/4"	60/2, NF
HP-2C(ID)	LP2C-29,30	45/2	2 #6	#10	3/4"	60/2, NF
HP-2D(ID)	LP2D-29,30	45/2	2 #6	#10	3/4"	60/2, NF
WEH-2	LP2H-3,4	15/2	2 #12	#12	1/2"	NONE
EWH-2A	LP2A-25,26	30/2	2 #10	#10	1/2"	30/2, NF
EWH-2B	LP2B-25,26	30/2	2 #10	#10	1/2"	30/2, NF
EWH-2C	LP2C-25,26	30/2	2 #10	#10	1/2"	30/2, NF
EWH-2D	LP2D-25,26	30/2	2 #10	#10	1/2"	30/2, NF

F - FUSED (FUSE PER MANUFACTURERS RECOMMENDATIONS)
 RT - RAIN TIGHT
 TS - TOGGLE SWITCH ("WP" INDICATES WEATHERPROOF)
 DPTS - DOUBLE POLE TOGGLE SWITCH
 MRS - MOTOR RATED SWITCH
 S/T - SHUNT TRIP BREAKER
 NOTE: MAINTAIN CODE REQUIRED CLEARANCES FOR DISCONNECTS.

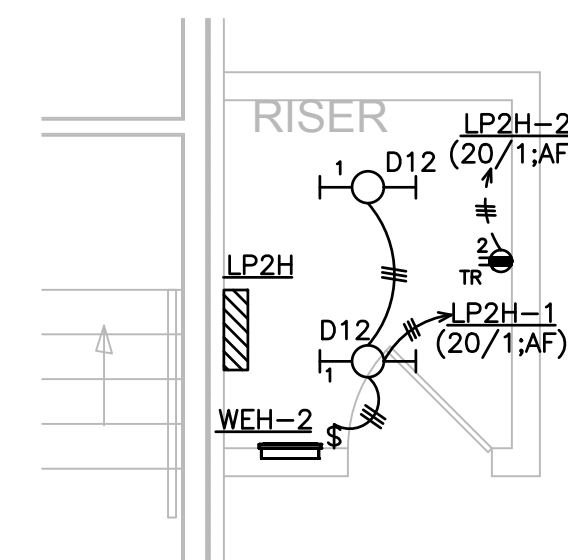


1
E-7
BUILDING TYPE 2
FIRST FLOOR LIGHTING PLAN
SCALE: 1/4" = 1'-0" (OPPOSITE HAND SIMILAR)

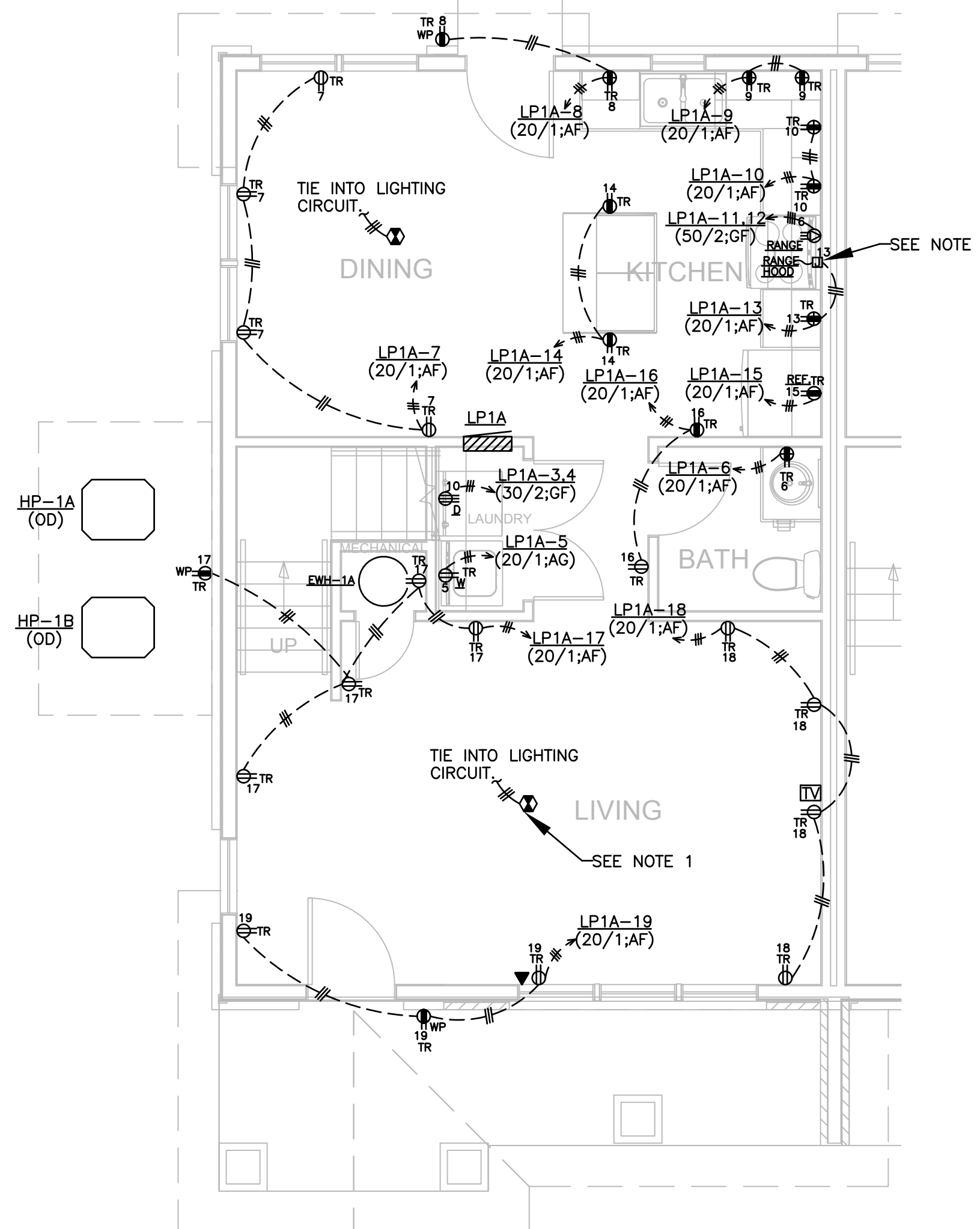


1A
E-7
BUILDING TYPE 2
PORCH LIGHTING PLAN
SCALE: 1/4" = 1'-0" (OPPOSITE HAND SIMILAR)

NOTE:
 ALL 120 VOLT CIRCUIT WIRE SIZES SHALL BE BASED UPON DISTANCE FROM PANELBOARD FEEDING THE CIRCUITS AS FOLLOWS AND THE CIRCUITS SHALL HAVE A 3% VOLTAGE DROP OR LESS:
 LESS THAN 75 FEET.....#12 AWG
 BETWEEN 76' AND 125'.....#10 AWG
 BETWEEN 126' AND 190'.....#8 AWG

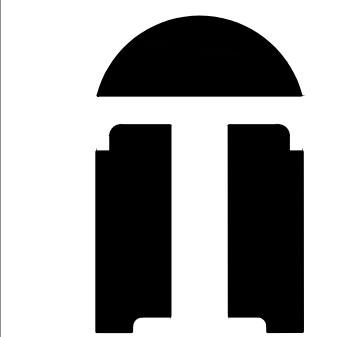


3
E-7
BUILDING TYPE 2
RISER ROOM LIGHTING AND POWER PLAN
SCALE: 1/4" = 1'-0"



2
E-7
BUILDING TYPE 2
FIRST FLOOR POWER AND AUXILIARIES PLAN
SCALE: 1/4" = 1'-0" (OPPOSITE HAND SIMILAR)

NOTES:
 1. ALL SINGLE STATION DETECTORS IN MULTIPLE ROOM UNITS SHALL BE WIRED IN TANDEM SO IF ONE DEVICE ALARMS, ALL WILL ALARM.(TYP)
 2. VERIFY LOCATION OF CONTROL SWITCH FOR HOOD.(TYP)



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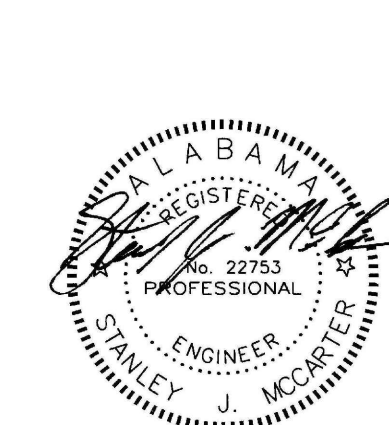
BUILDING
 TYPE 2 FIRST
 FLOOR
 LIGHTING,
 POWER AND
 AUXILIARIES
 PLANS

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DATE:
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SCALE:
 AS NOTED

SHEET
E-7

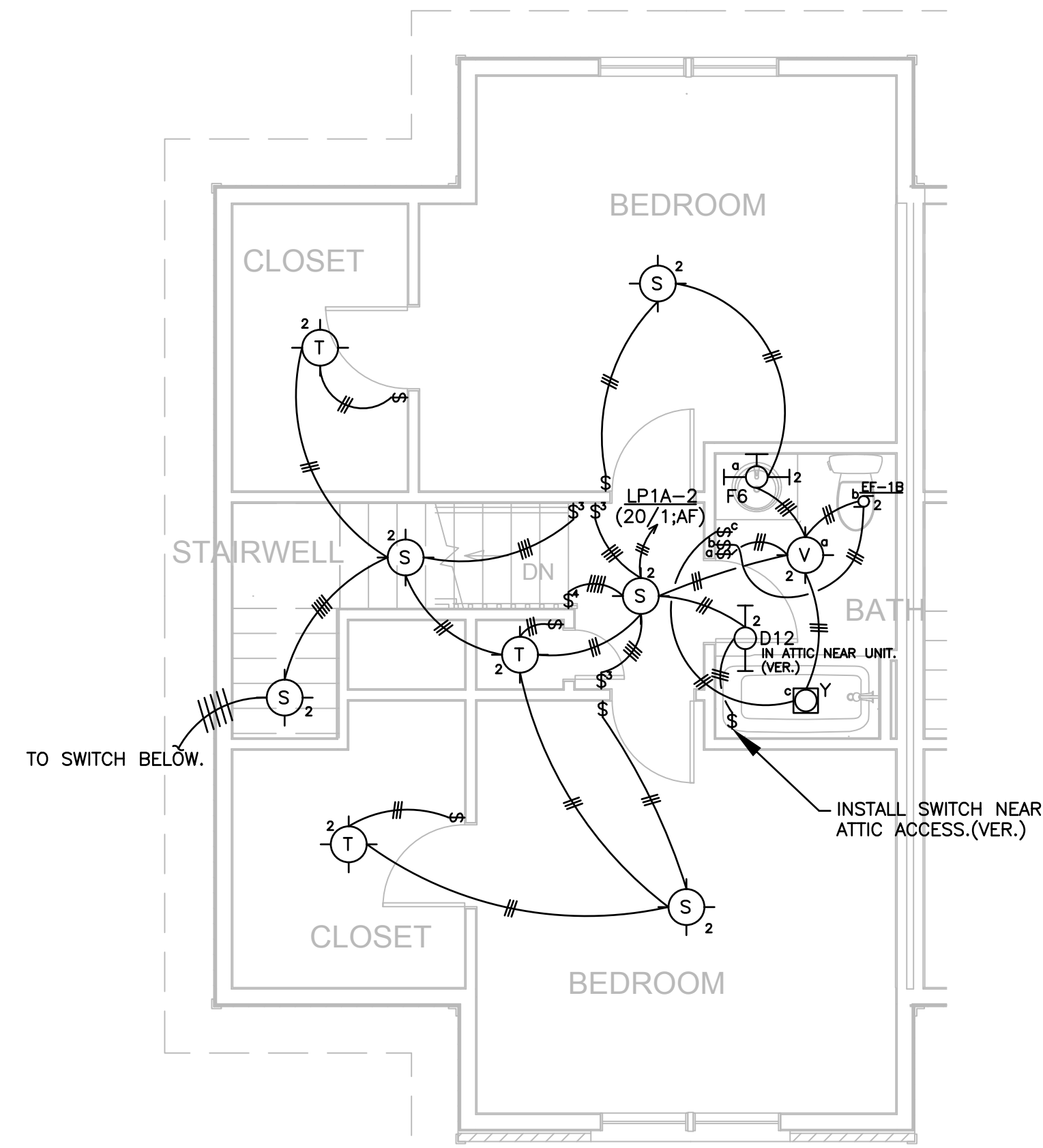


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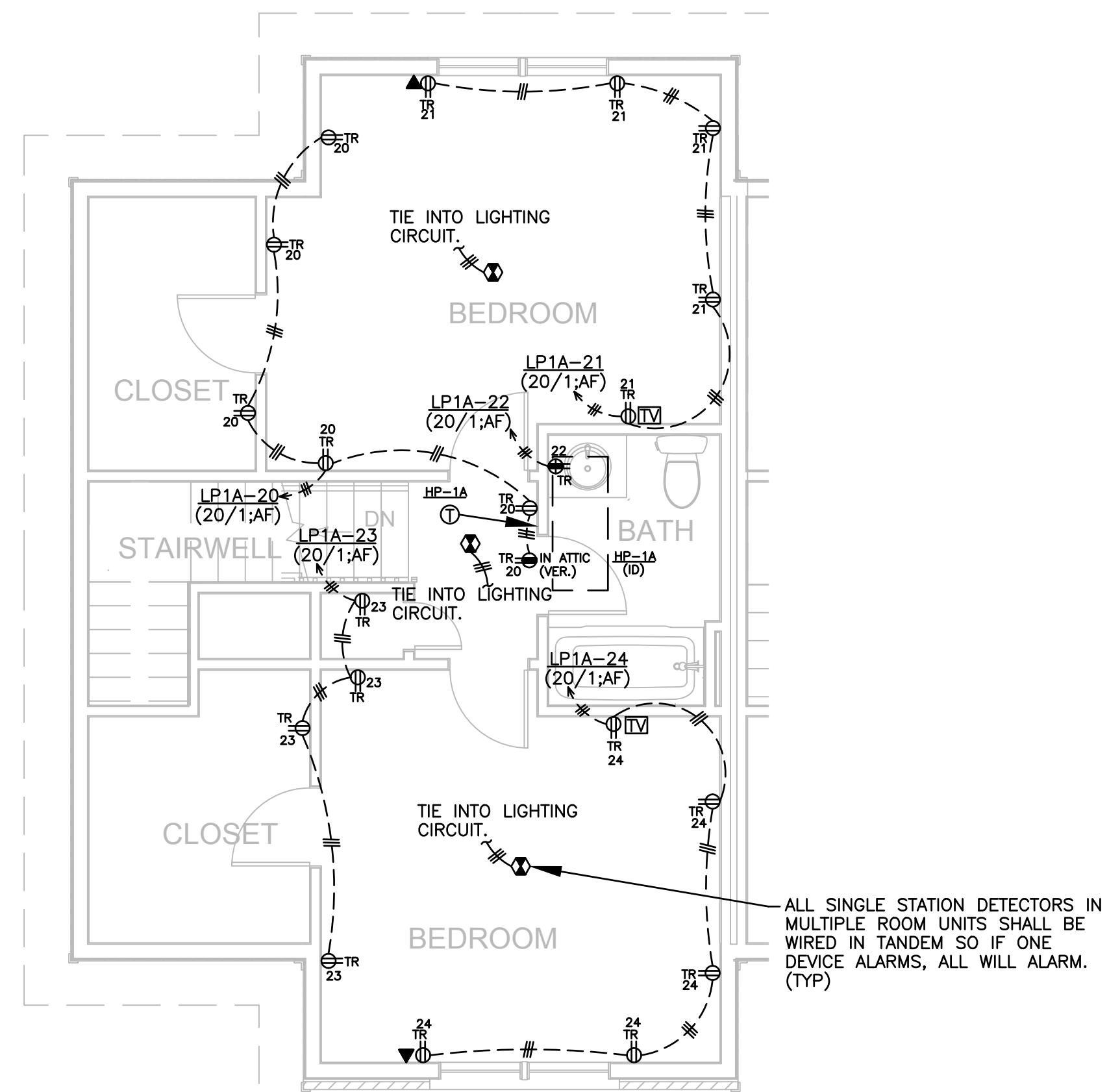
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NOTE:
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 FOLLOWS AND THE CIRCUITS SHALL HAVE A 3% VOLTAGE
 DROP OR LESS:
 LESS THAN 75 FEET.....#12 AWG
 BETWEEN 76' AND 125'.....#10 AWG
 BETWEEN 126' AND 190'.....#8 AWG



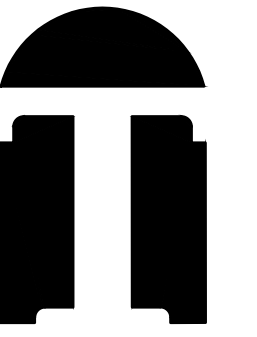
1
E-8

**BUILDING TYPE 2
 SECOND FLOOR LIGHTING PLAN**
 SCALE: 1/4" = 1'-0" (OPPOSITE HAND SIMILAR)



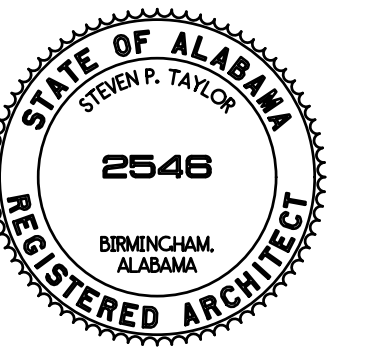
2
E-8

**BUILDING TYPE 2
 SECOND FLOOR POWER AND AUXILIARIES PLAN**
 SCALE: 1/4" = 1'-0" (OPPOSITE HAND SIMILAR)



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BUILDING TYPE
 2 SECOND
 FLOOR
 LIGHTING,
 POWER AND
 AUXILIARIES
 PLANS

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DATE:

11/22/23

SCALE:

AS NOTED

SHEET

E-8



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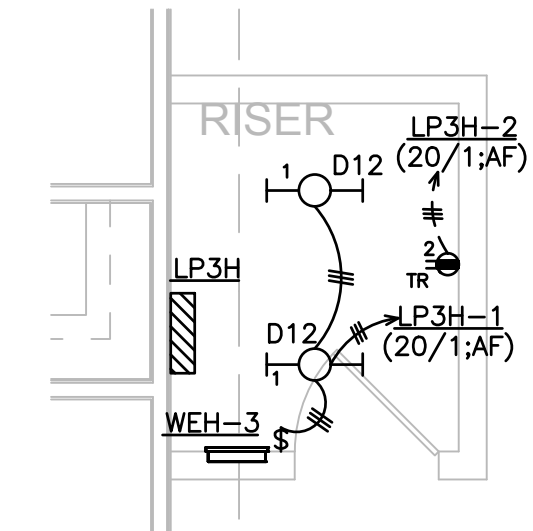
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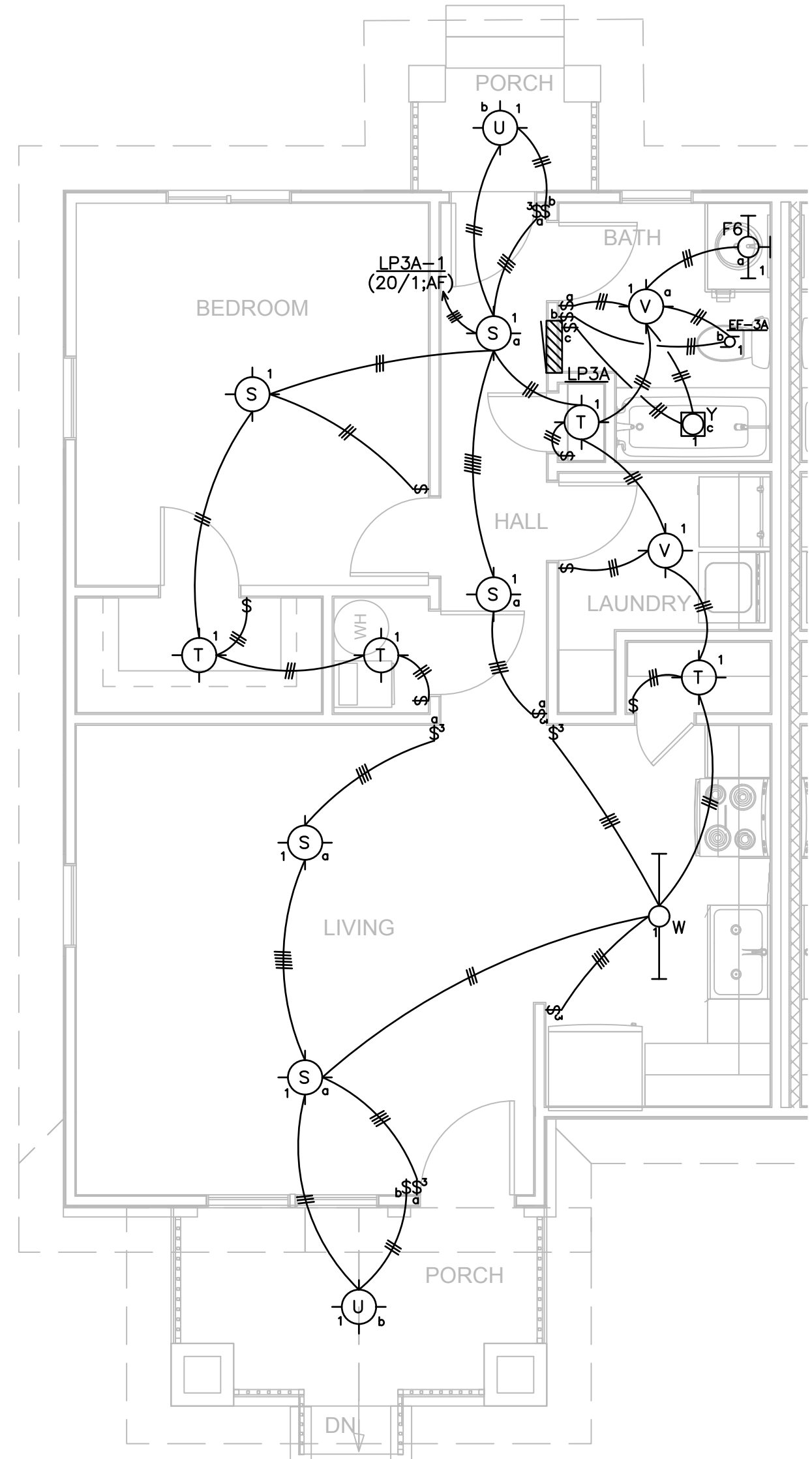
**BUILDING TYPE 3 AND 4
MECHANICAL EQUIPMENT CIRCUIT SCHEDULE**

UNIT ID	CIRCUIT NUMBER	BREAKER SIZE	WIRE SIZE	GROUND SIZE	CONDUIT SIZE	DISCONNECT TYPE
HP-3A(OD)	LP3A-20,21	20/2	2 #12	#12	1/2"	30/2, F, RT
HP-3B(OD)	LP3B-20,21	20/2	2 #12	#12	1/2"	30/2, F, RT
HP-3C(OD)	LP3C-20,21	20/2	2 #12	#12	1/2"	30/2, F, RT
HP-4A-A(OD)	LP4A-A-20,21	20/2	2 #12	#12	1/2"	30/2, F, RT
HP-4A-B(OD)	LP4A-B-20,21	20/2	2 #12	#12	1/2"	30/2, F, RT
HP-4B-A(OD)	LP4B-A-20,21	20/2	2 #12	#12	1/2"	30/2, F, RT
HP-4B-B(OD)	LP4B-B-20,21	20/2	2 #12	#12	1/2"	30/2, F, RT
HP-3A(ID)	LP3A-22,23	30/2	2 #10	#10	1/2"	30/2, NF
HP-3B(ID)	LP3B-22,23	30/2	2 #10	#10	1/2"	30/2, NF
HP-3C(ID)	LP3C-22,23	30/2	2 #10	#10	1/2"	30/2, NF
HP-4A-A(ID)	LP4A-A-22,23	30/2	2 #10	#10	1/2"	30/2, NF
HP-4A-B(ID)	LP4A-B-22,23	30/2	2 #10	#10	1/2"	30/2, NF
HP-4B-A(ID)	LP4B-A-22,23	30/2	2 #10	#10	1/2"	30/2, NF
HP-4B-B(ID)	LP4B-B-22,23	30/2	2 #10	#10	1/2"	30/2, NF
WEH-3	LP3H-3,4	15/2	2 #12	#12	1/2"	NONE
EWH-3A	LP3A-18,19	30/2	2 #10	#10	1/2"	30/2, NF
EWH-3B	LP3B-18,19	30/2	2 #10	#10	1/2"	30/2, NF
EWH-3C	LP3C-18,19	30/2	2 #10	#10	1/2"	30/2, NF
EWH-4A-A	LP4A-A-18,19	30/2	2 #10	#10	1/2"	30/2, NF
EWH-4A-B	LP4A-B-18,19	30/2	2 #10	#10	1/2"	30/2, NF
EWH-4B-A	LP4B-A-18,19	30/2	2 #10	#10	1/2"	30/2, NF
EWH-4B-B	LP4B-B-18,19	30/2	2 #10	#10	1/2"	30/2, NF

F - FUSED (FUSE PER MANUFACTURERS RECOMMENDATIONS)
 RT - RAINTIGHT
 TS - TOGGLE SWITCH ("WP" INDICATES WEATHERPROOF)
 DPTS - DOUBLE POLE TOGGLE SWITCH
 MRS - MOTOR RATED SWITCH
 S/T - SHUNT TRIP BREAKER
 NOTE: MAINTAIN CODE REQUIRED CLEARANCES FOR DISCONNECTS.

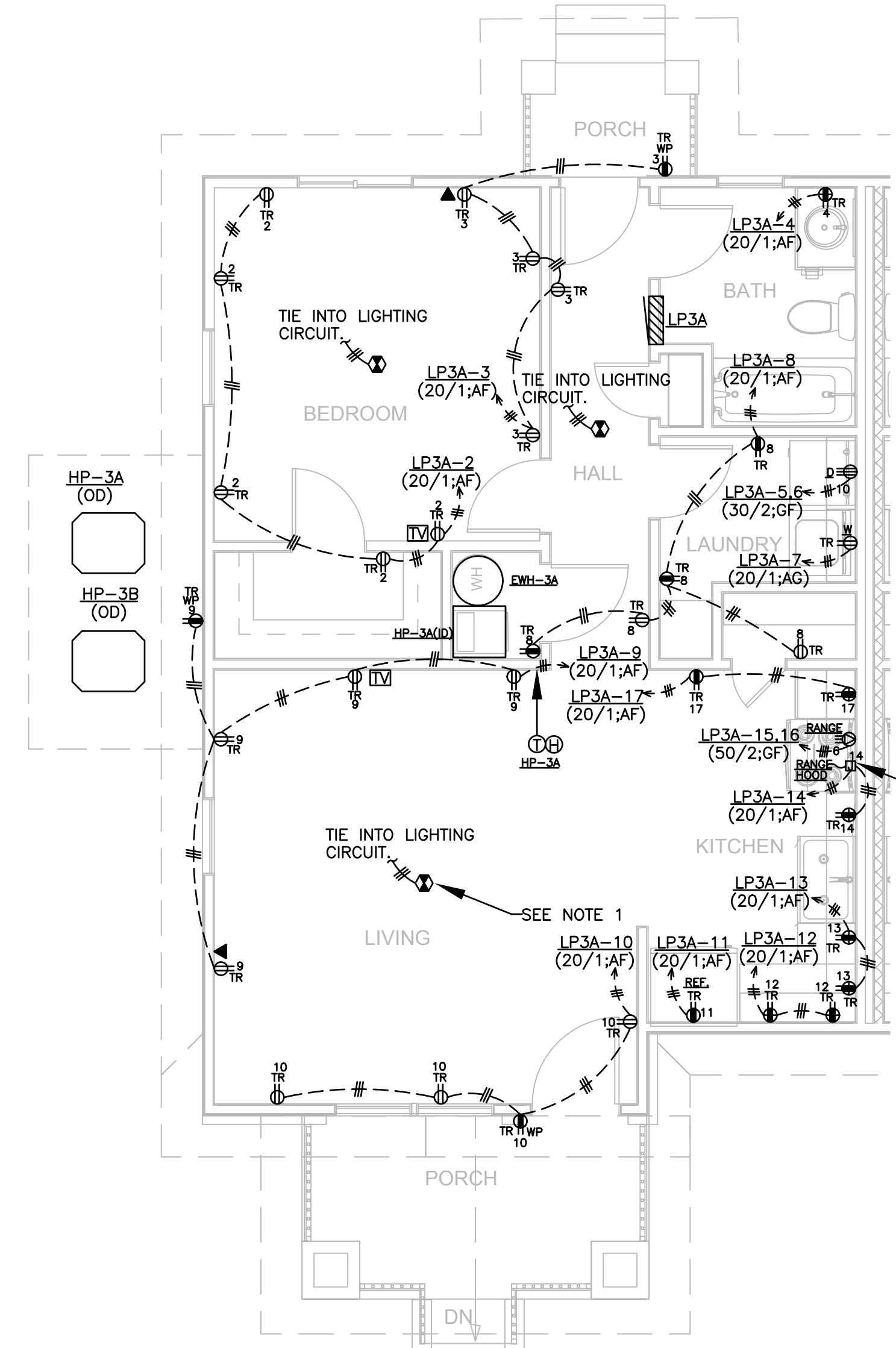


**BUILDING TYPE 3
RISER ROOM LIGHTING AND POWER PLAN**
 SCALE: 1/4" = 1'-0"



1
E-9 BUILDING TYPES 3 AND 4 LIGHTING PLAN
 SCALE: 1/4" = 1'-0" (OPPOSITE HAND SIMILAR)

NOTE:
 ALL 120 VOLT CIRCUIT WIRE SIZES SHALL BE BASED UPON DISTANCE FROM PANELBOARD FEEDING THE CIRCUITS AS FOLLOWS AND THE CIRCUITS SHALL HAVE A 3% VOLTAGE DROP OR LESS:
 LESS THAN 75 FEET.....#12 AWG
 BETWEEN 76' AND 125'.....#10 AWG
 BETWEEN 126' AND 190'.....#8 AWG



2
E-9 BUILDING TYPES 3 AND 4 POWER AND AUXILIARIES PLAN
 SCALE: 1/4" = 1'-0" (OPPOSITE HAND SIMILAR)

NOTES:
 1. ALL SINGLE STATION DETECTORS IN MULTIPLE ROOM UNITS SHALL BE WIRED IN TANDEM SO IF ONE DEVICE ALARMS, ALL WILL ALARM.(TYP)
 2. VERIFY LOCATION OF CONTROL SWITCH FOR HOOD.(TYP)



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BUILDING TYPES 3 AND 4 LIGHTING, POWER AND AUXILIARIES PLANS

TDA Comm. No. 440

DATE: 11/22/23

SCALE: AS NOTED

SHEET E-9



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