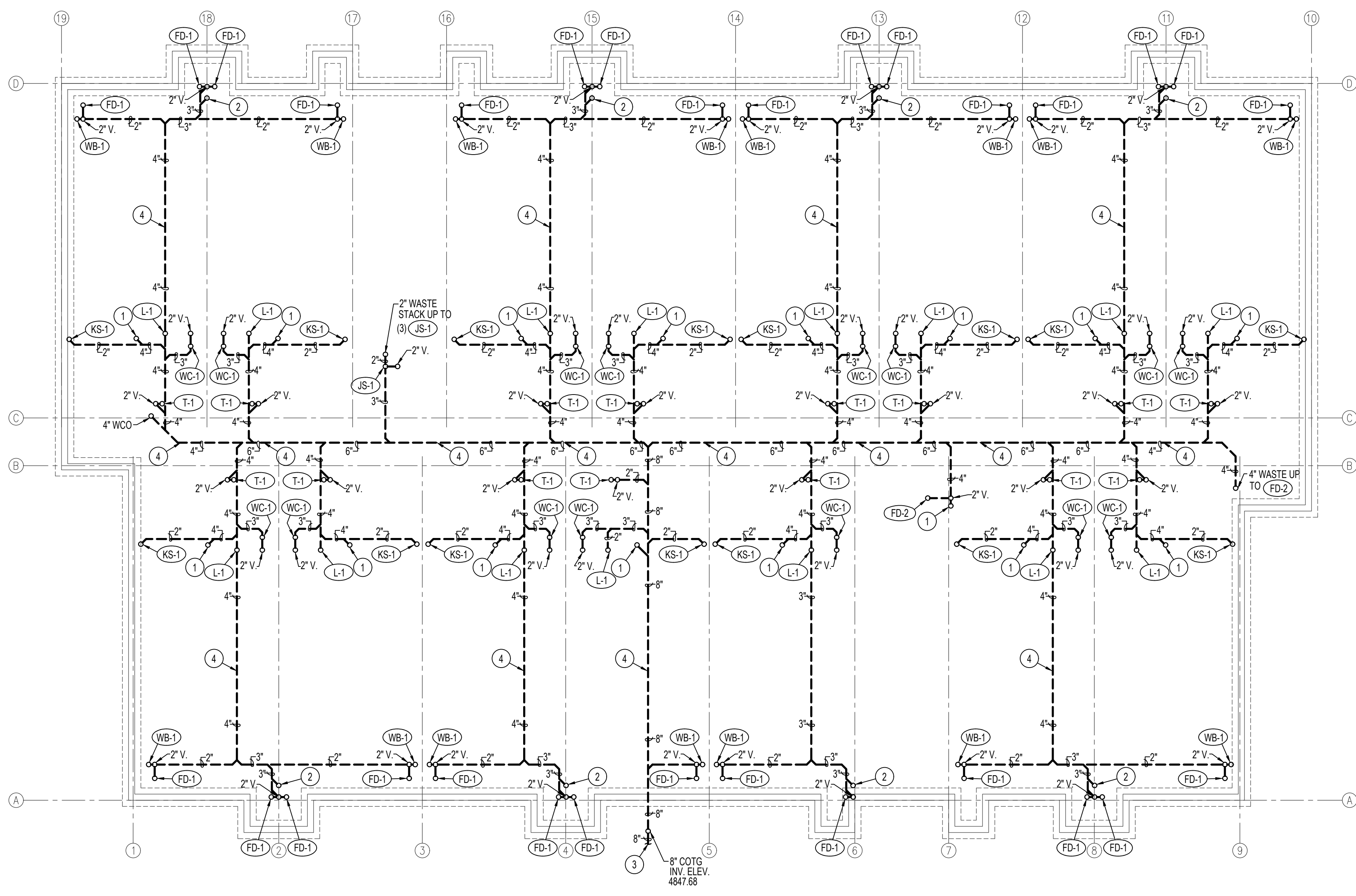


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- PLAN NOTES:**
- ① 4" WASTE STACK UP IN WALL FROM BELOW SLAB TO SERVE APT. LEVELS ABOVE.
  - ② 3" WASTE STACK UP IN WALL FROM BELOW SLAB TO SERVE APT. LEVELS ABOVE.
  - ③ SEE CIVIL SITE PLAN FOR CONTINUATION OF 8" SANITARY SEWER MAIN.
  - ④ RUN 4" OR LARGER MAIN WASTE PIPING AT 1/8" PER FT. SLOPE.



**FOUNDATION LEVEL PLUMBING FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

PLUMBING LEGEND	
SYMBOL	DESCRIPTION
V	VENT
VTR	VENT THRU ROOF
CO	CLEANOUT
WCO	WALL CLEANOUT
COTG	CLEANOUT TO GRADE
—	PIPE DROP
—	PIPE RISE
○	BALL TYPE ISOLATION VALVE
---	SOIL OR WASTE PIPING
---	VENT LINE PIPING
---	DOMESTIC COLD WATER PIPING
---	DOMESTIC HOT WATER PIPING
---	HOT WATER RECIRC. PIPING
G	GAS PIPING
F	FIRE SPRINKLER LINE



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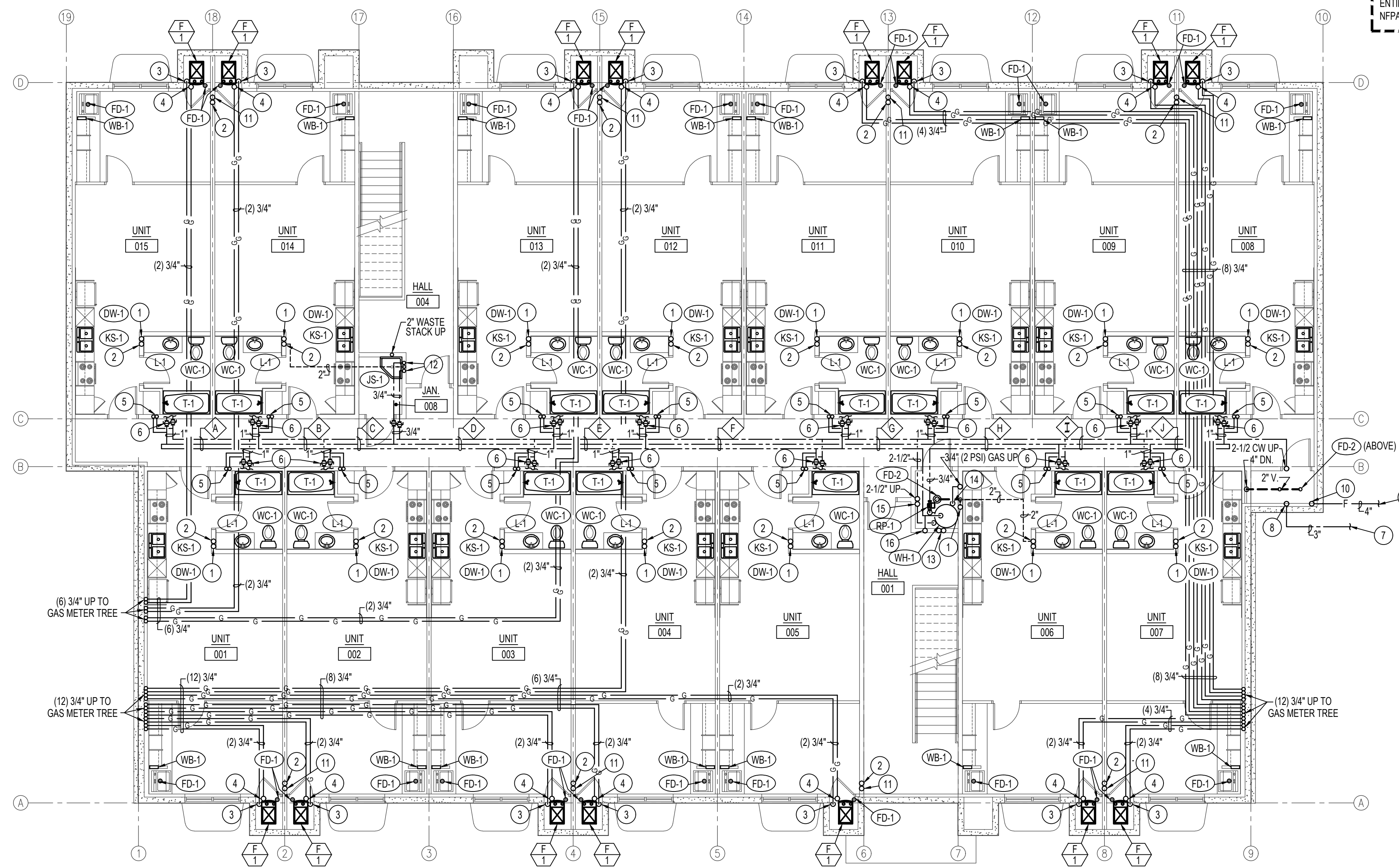


A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
LEVEL 0 MECHANICAL FLOOR PLAN

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**NOTE:**  
ENTIRE BUILDING TO BE FIRE SPRINKLED AS PER NFPA-13R CODE REQUIREMENTS.

PIPING SIZES THIS SHEET ONLY				
MARK	COLD	HOT	HOT	HWR
A	1"	1-1/2"	1-1/2"	---
B	1-1/4"	1-1/2"	1-1/2"	---
C	1-1/2"	1-1/2"	1-1/2"	---
D	1-1/2"	1-1/2"	2"	---
E	2"	1-1/2"	2"	---
F	2"	1-1/2"	2"	---
G	2"	1-1/2"	2"	---
H	2-1/2"	1-1/4"	---	3/4"
I	2-1/2"	1-1/4"	---	3/4"
J	2-1/2"	1"	---	3/4"

**LEVEL 0 PLUMBING FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

**NOTE:**  
SEE LARGE SCALE TYP. APT. PLUMBING PLANS ON SHEET P2.0 FOR PIPING SERVING INDIVIDUAL APT. TYPES.

**PLAN NOTES:**

- 1 4" WASTE STACK UP IN WALL FROM BELOW SLAB TO SERVE APT. LEVELS ABOVE.
- 2 3" VENT STACK UP IN WALL TO SERVE ALL LEVELS OF APTS.
- 3 DROP 3/4" GAS LINE DOWN THRU CEILING OF MECH. ROOM AND CONNECT TO FURNACE COMPLETE WITH SHUT-OFF VALVE, DIRT LEG AND FLEXIBLE CONNECTION. SEE DETAIL ON SHEET P3.0.
- 4 RISE 3/4" GAS LINE UP THRU FLOOR OF MECH. ROOM ABOVE TO SERVE GAS FURNACE ON LEVEL 1 ABOVE. SEE SHEET P1.1 FOR CONTINUATION OF PIPING ABOVE.
- 5 3/4" CW & 3/4" HW UP IN WALL. SEE SHEET P1.1 FOR CONTINUATION OF PIPING ABOVE.
- 6 INSTALL 3/4" BALL TYPE SHUT-OFF VALVES ON CW & HW LINES SERVING APT. ON THIS LEVEL. VALVES TO BE LOCATED IN LINES ABOVE CORRIDOR LAY-IN CEILING.
- 7 SEE CIVIL SITE PLAN FOR CONTINUATION OF 3" DOMESTIC CW MAIN.
- 8 RISE 3" DOMESTIC CW LINE UP THRU FLOOR TO WATER PRESSURE REDUCING VALVE ASSEMBLY ON LEVEL 1 ABOVE. SEE SHEET P1.1 FOR CONTINUATION.
- 9 SEE CIVIL SITE PLAN FOR CONTINUATION OF 4" FIRE LINE. VERIFY LINE SIZE WITH FIRE SPRINKLER CONTRACTOR.
- 10 RISE 4" FIRE LINE UP THRU FLOOR TO FIRE RISER VALVE ASSEMBLY ON LEVEL 1 ABOVE. SEE SHEET P1.1 FOR CONTINUATION.
- 11 3" WASTE STACK UP IN WALL FROM BELOW SLAB TO SERVE APT. LEVELS ABOVE.
- 12 TEE OFF OF 3/4" HW & CW PIPING IN WALL AND RISE 1/2" HW & CW PIPING UP TO SERVE JAN SINK ON LEVEL ABOVE AND DROP WITH 1/2" HW & CW PIPING UP TO SERVE JAN SINK ON THIS LEVEL.
- 13 RISE (2) 4" Ø FLUES SERVING WATER HEATER WH-1 ON THIS LEVEL UP IN WALL TO VERTICAL VENT TERMINATION ASSEMBLY ON ROOF.
- 14 DROP 3/4" (2 PSI) GAS LINE DOWN THRU CEILING OF MECH. ROOM AND CONNECT TO WATER HEATER. INSTALL 2 PSI TO 0.5 PSI REGULATOR SIZED FOR ACTUAL BTU LOAD OF WATER HEATER SUPPLIED. VENT REGULATOR TO THE EXTERIOR. INSTALL FLEXIBLE CONNECTION, SHUT-OFF VALVE AND DIRT LEG. SEE DETAIL ON SHEET P3.0
- 15 RISE 2" SOFT CW UP THRU FLOOR TO WATER SOFTENER LOCATED ON LEVEL 1 ABOVE. SEE SHEET P1.1 FOR CONTINUATION.
- 16 2" HW BYPASS LINE UP IN WALL TO TIE INTO HW SYSTEM ON LEVEL 2 ABOVE. SEE WATER HEATER PIPING DIAGRAM ON SHEET P3.0.

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A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
LEVEL 0 MECHANICAL FLOOR PLAN

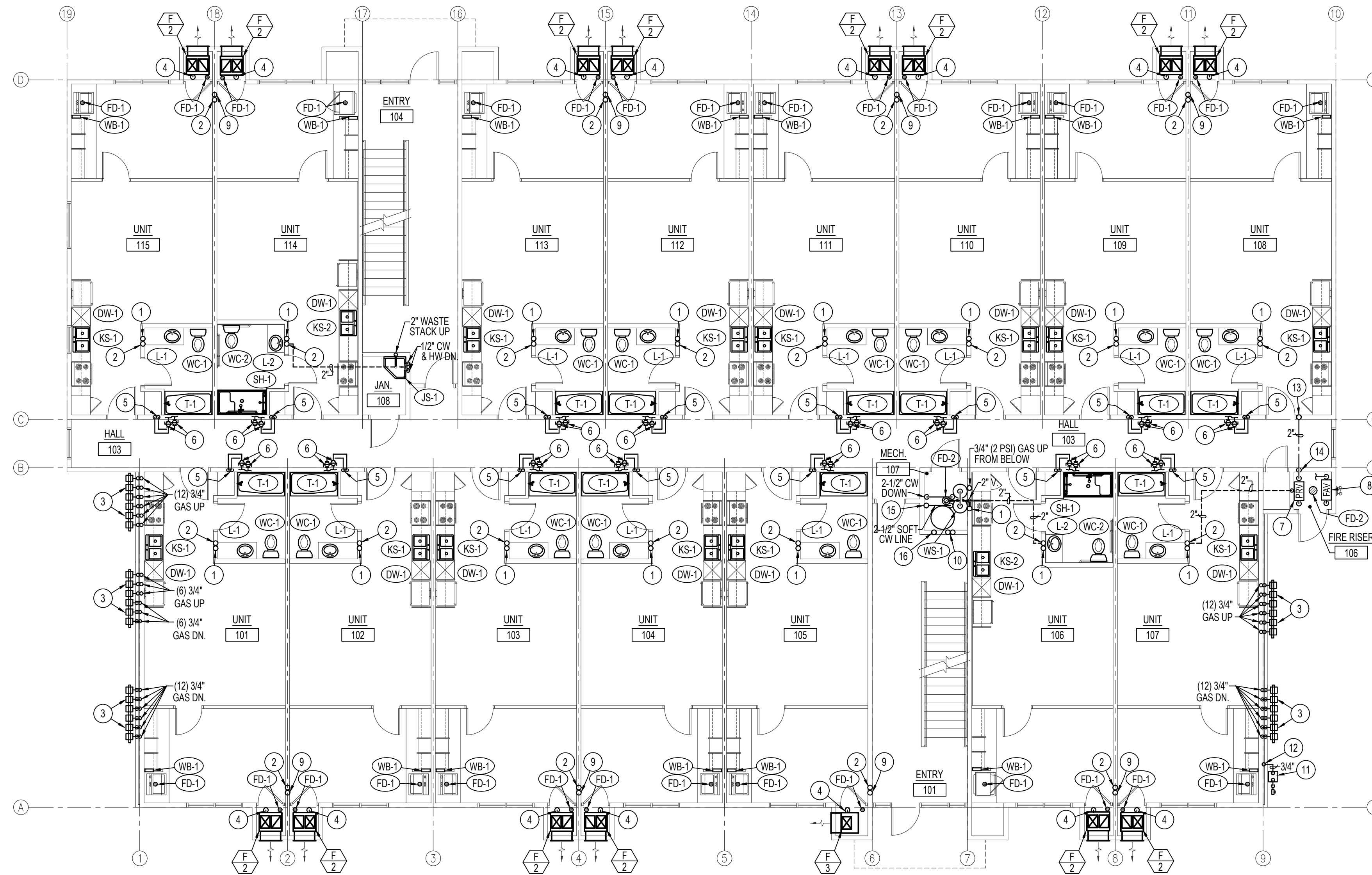
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**NOTE:**  
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**LEVEL 1 PLUMBING FLOOR PLAN**

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

**NOTE:**  
SEE LARGE SCALE TYP. APT. PLUMBING PLANS ON SHEET P2.0 FOR PIPING SERVING INDIVIDUAL APT. TYPES.

**PLAN NOTES:**

- 1 4" WASTE STACK UP IN WALL FROM BELOW TO SERVE APT. LEVELS ABOVE.
- 2 3" VENT STACK UP IN WALL TO SERVE ALL LEVELS OF APTS.
- 3 12 METER GAS TREE BY LOCAL GAS COMPANY WITH (12) GAS METERS SIZED FOR 44,000 BTU MIN. CAPACITY AT 0.5 PSI DELIVERY PRESSURE.
- 4 RISE GAS LINE UP THRU FLOOR FROM BELOW AND CONNECT 3/4" (0.5 PSI) GAS LINE TO FURNACE COMPLETE WITH SHUT-OFF VALVE, DIRT LEG AND FLEXIBLE CONNECTION. SEE DETAIL ON SHEET P3.0
- 5 3/4" CW & 3/4" HW DOWN IN WALL. SEE SHEET P1.0 FOR CONTINUATION OF PIPING BELOW.
- 6 INSTALL 3/4" BALL TYPE SHUT-OFF VALVES ON CW & HW LINES SERVING APT. ON THIS LEVEL. VALVES TO BE LOCATED IN LINES ABOVE CORRIDOR LAY-IN CEILING.
- 7 2-1/2" DOMESTIC CW PRESSURE REDUCING VALVE ASSEMBLY. SEE DETAIL ON SHEET P3.0.
- 8 6" FIRE SPRINKLER RISER. SEE DETAIL ON SHEET P3.0.
- 9 3" WASTE STACK UP IN WALL FROM BELOW TO SERVE APT. LEVELS ABOVE.
- 10 RISE (2) 4" FLUES SERVING WATER HEATER WH-1 ON LEVEL 0 BELOW UP IN WALL TO VERTICAL VENT TERMINATION ASSEMBLY ON ROOF.
- 11 GAS METER BY LOCAL GAS COMPANY SIZED FOR 500,000 BTU AT 2 PSI DELIVERY PRESSURE TO SERVE (2) GAS FIRED WATER HEATERS.
- 12 RISE 3/4" (2 PSI) GAS LINE UP IN WALL. SEE SHEET P1.2 FOR CONTINUATION OF GAS PIPING.
- 13 RISE 2" CW MAIN UP IN WALL TO SERVE LEVELS ABOVE. SEE SHEET P1.2 FOR CONTINUATION OF PIPING.
- 14 DROP 2-1/2" CW MAIN UP DOWN IN WALL TO SERVE LEVEL BELOW. SEE SHEET P1.0 FOR CONTINUATION OF PIPING.
- 15 TEE OFF OF 2-1/2" SOFT COLD WATER LINE WITH (1) 2" SOFT CW LINE SERVING LEVEL 2 WATER HEATER ABOVE AND DROP (1) 2" SOFT CW LINE DOWN TO SERVE WATER HEATER ON LEVEL 0 BELOW. SEE WATER SOFTENER DETAIL ON SHEET P3.0.
- 16 2" HW BYPASS LINE FROM WATER HEATER SYSTEM LOCATED ON LEVEL 2 ABOVE DOWN TO LEVEL 0 BELOW. SEE WATER HEATER PIPING DIAGRAM ON SHEET P3.0.

REVISIONS		



A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
LEVEL 1 PLUMBING FLOOR PLAN

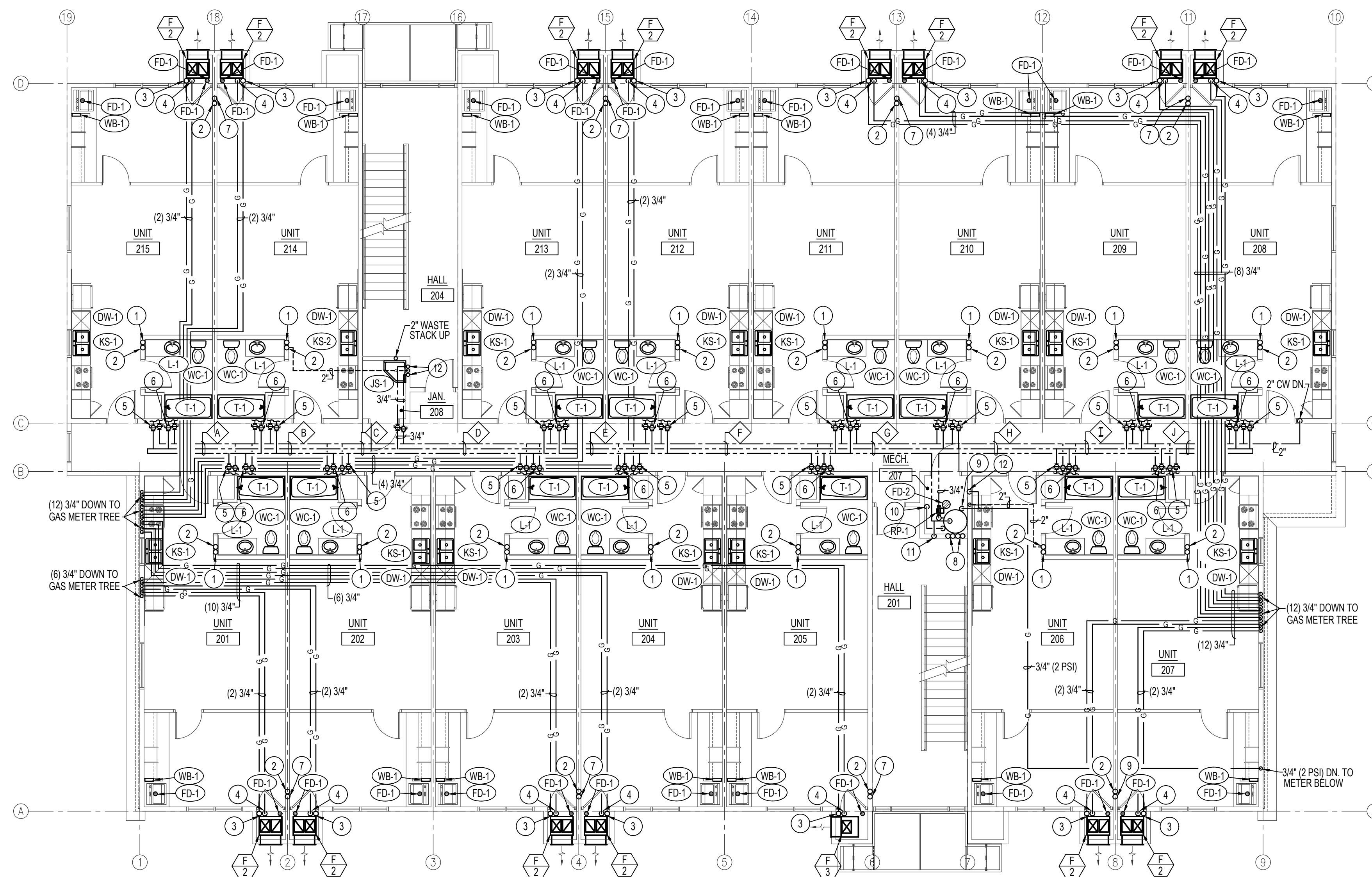
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PIPING SIZES THIS SHEET ONLY				
MARK	COLD	HOT	HOT	HWRG
A	1"	1-1/2"	1-1/2"	---
B	1-1/4"	1-1/2"	1-1/2"	---
C	1-1/2"	1-1/2"	1-1/2"	---
D	1-1/2"	1-1/2"	2"	---
E	2"	1-1/2"	2"	---
F	2"	1-1/2"	2"	---
G	2"	1-1/2"	2"	---
H	2"	1-1/4"	---	3/4"
I	2"	1-1/4"	---	3/4"
J	2"	1"	---	3/4"

**PLAN NOTES:**

- 1 4" WASTE STACK UP IN WALL FROM BELOW TO SERVE APT. LEVELS ABOVE.
- 2 3" VENT STACK UP IN WALL TO SERVE ALL LEVELS OF APTS.
- 3 DROP 3/4" GAS LINE DOWN THRU CEILING OF MECH. ROOM AND CONNECT TO FURNACE COMPLETE WITH SHUT-OFF VALVE, DIRT LEG AND FLEXIBLE CONNECTION. SEE DETAIL ON SHEET P3.0.
- 4 RISE 3/4" GAS LINE UP THRU FLOOR OF MECH. ROOM ABOVE TO SERVE GAS FURNACE ON LEVEL 3 ABOVE. SEE SHEET P1.3 FOR CONTINUATION OF PIPING ABOVE.
- 5 INSTALL 3/4" BALL TYPE SHUT-OFF VALVES ON CW & HW LINES SERVING APT. ON THIS LEVEL. VALVES TO BE LOCATED IN LINES ABOVE CORRIDOR LAY-IN CEILING.
- 6 INSTALL 3/4" BALL TYPE SHUT-OFF VALVES ON CW & HW LINES SERVING APT. ON LEVEL 3 ABOVE. VALVES TO BE LOCATED IN LINES ABOVE CORRIDOR LAY-IN CEILING. ALL WATER PIPING SERVING LEVEL 3 APTS. TO BE RUN ABOVE CEILING OF LEVEL 2.
- 7 3" WASTE STACK UP IN WALL FROM BELOW TO SERVE APT. LEVELS ABOVE.
- 8 RISE (4) 4" FLUES SERVING WATER HEATERS WH-1 ON LEVEL 0 AND THIS LEVEL UP IN WALL TO VERTICAL VENT TERMINATION ASSEMBLY ON ROOF.
- 9 DROP 3/4" (2 PSI) GAS LINE DOWN THRU CEILING OF MECH. ROOM AND CONNECT TO WATER HEATER. INSTALL 2 PSI TO 0.5 PSI REGULATOR SIZED FOR ACTUAL BTU LOAD OF WATER HEATER SUPPLIED. VENT REGULATOR TO THE EXTERIOR. INSTALL FLEXIBLE CONNECTION, SHUT-OFF VALVE AND DIRT LEG. SEE DETAIL ON SHEET P3.0.
- 10 2" SOFT CW MAIN UP FROM BELOW TO SERVE WATER HEATER ON THIS LEVEL. SEE SHEET P1.1 FOR CONTINUATION OF PIPING BELOW.
- 11 2" HW BYPASS LINE DOWN IN WALL TO TIE INTO HW SYSTEM ON LEVEL 0 BELOW. SEE WATER HEATER PIPING DIAGRAM ON SHEET P3.0.
- 12 DROP 3/4" (2 PSI) GAS LINE DOWN IN WALL TO SERVE WATER HEATER LOCATED IN MECH ROOM ON LEVEL 0. SEE SHEET P1.0 FOR CONTINUATION OF PIPING BELOW.

**LEVEL 2 PLUMBING FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

**NOTE:**  
SEE LARGE SCALE TYP. APT. PLUMBING PLANS ON SHEET P2.0 FOR PIPING SERVING INDIVIDUAL APT. TYPES.

NO.	DATE	REVISIONS

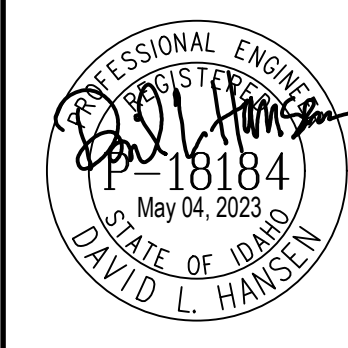


A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
LEVEL 2 PLUMBING FLOOR PLAN

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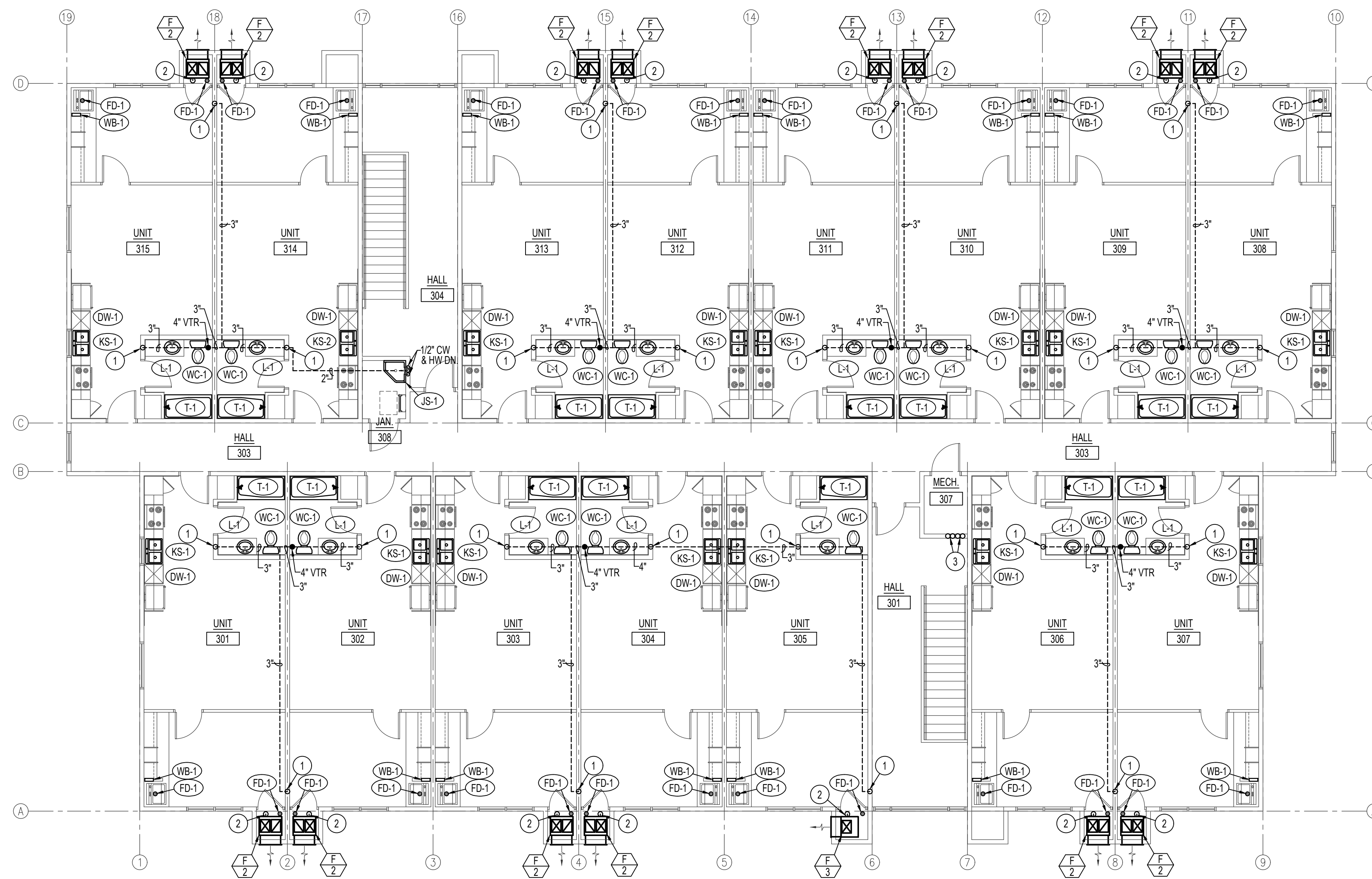
**P1.2**

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**NOTE:**  
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**LEVEL 3 PLUMBING FLOOR PLAN**

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

**NOTE:**  
SEE LARGE SCALE TYP. APT. PLUMBING PLANS ON SHEET P2.0 FOR PIPING SERVING INDIVIDUAL APT. TYPES.

**PLAN NOTES:**

- 1 3" VENT STACK UP IN WALL FROM BELOW.
- 2 RISE GAS LINE UP THRU FLOOR FROM BELOW AND CONNECT 3/4" (0.5 PSI) GAS LINE TO FURNACE COMPLETE WITH SHUT-OFF VALVE, DIRT LEG AND FLEXIBLE CONNECTION. SEE DETAIL ON SHEET P3.0
- 3 RISE (4) 4" Ø FLUES SERVING WATER HEATERS WH-1 ON LEVEL 0 AND LEVEL 2 BELOW, UP IN WALL TO VERTICAL VENT TERMINATION ASSEMBLY ON ROOF.

REVISIONS		


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A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
 LEVEL 3 PLUMBING FLOOR PLAN

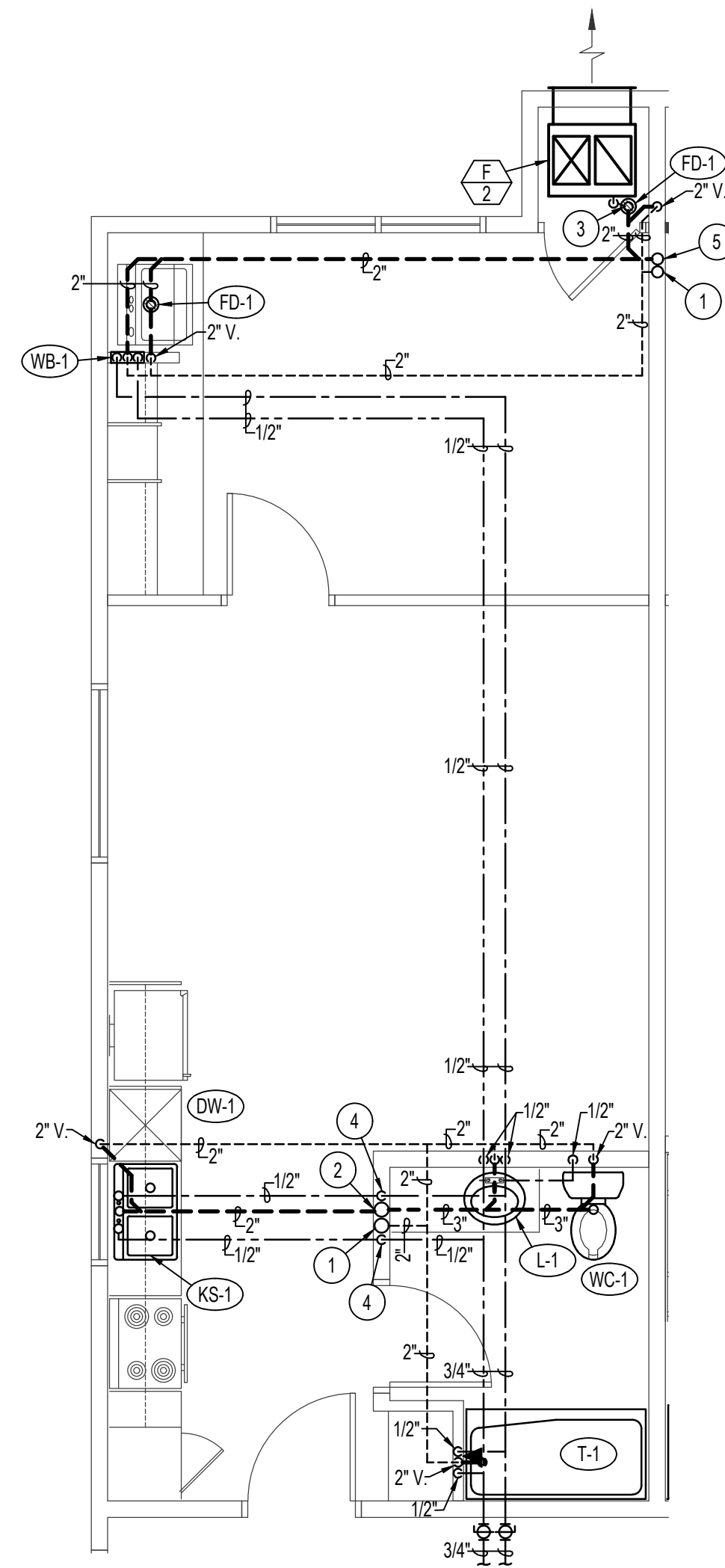
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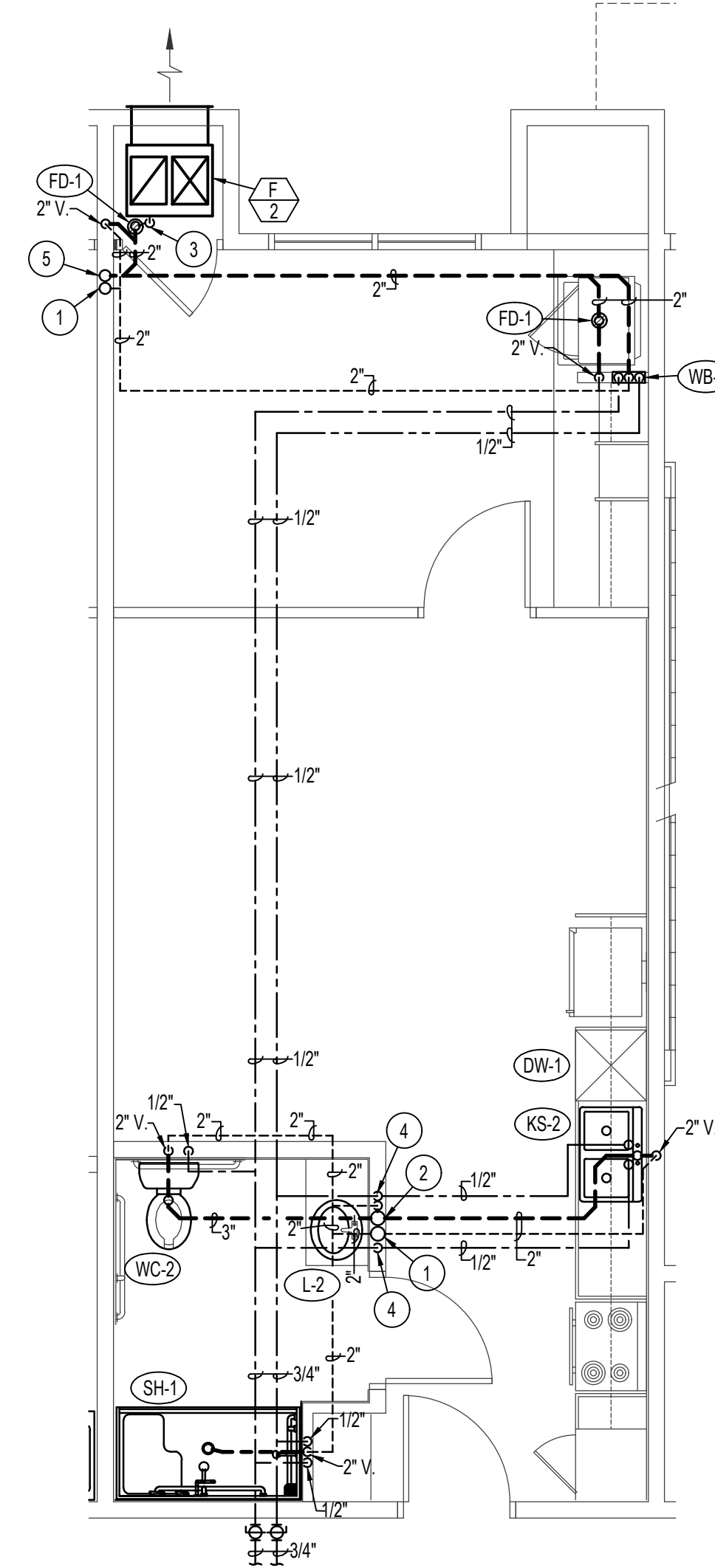
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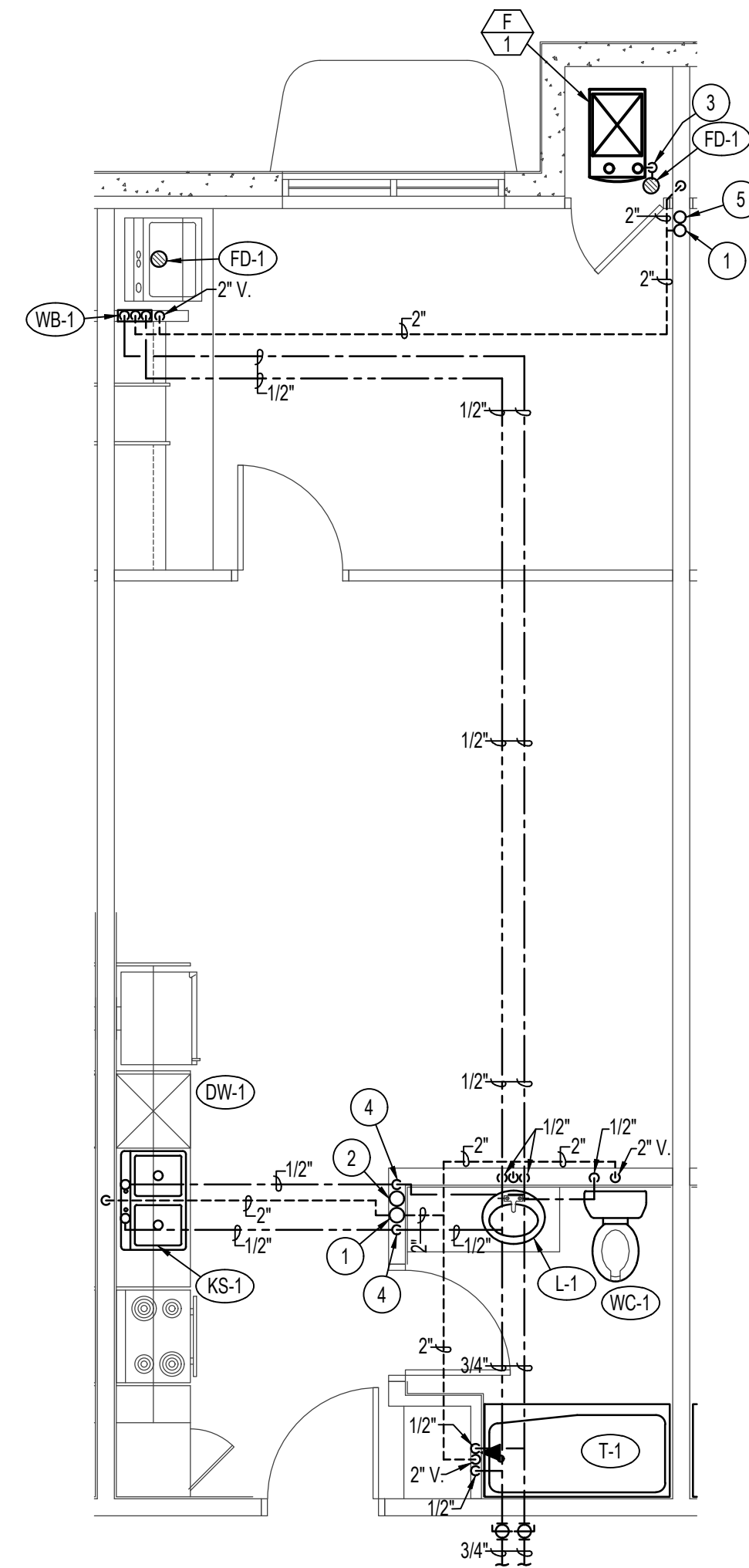
**LARGE SCALE APT. TYPE 1  
PLUMBING FLOOR PLAN**

SCALE: 1/4" = 1'-0" (TYPE 3 APT. SIMILAR)



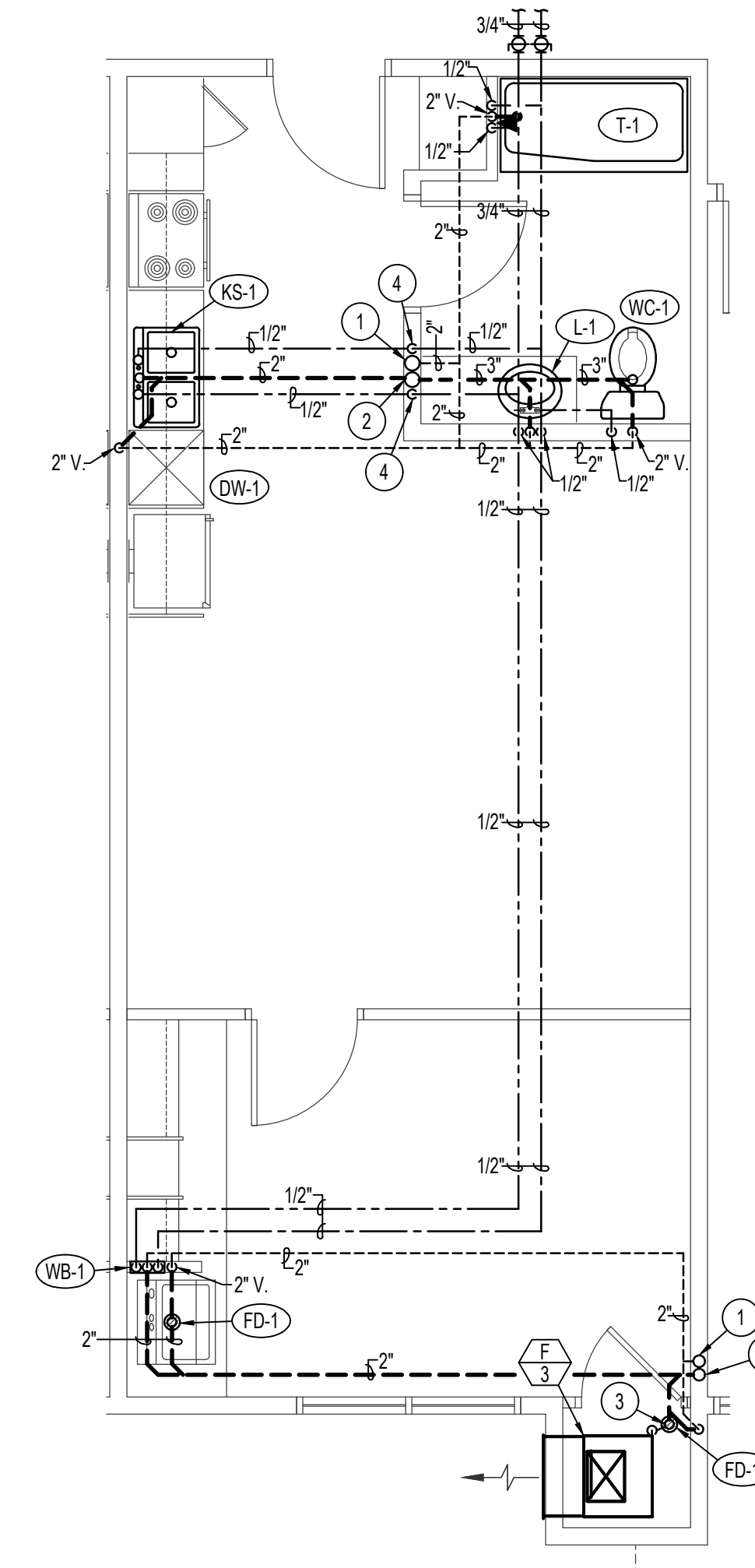
**LARGE SCALE APT. TYPE 2  
PLUMBING FLOOR PLAN**

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



**LARGE SCALE APT. TYPE 4  
PLUMBING FLOOR PLAN**

SCALE: 1/4" = 1'-0" (TYPE 5 APT. SIMILAR)



**LARGE SCALE APT. 105, 205 & 305  
PLUMBING FLOOR PLAN**

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

**NOTE:**  
REFER TO SHEET FOUNDATION  
PLUMBING PLAN ON SHEET P0.1 FOR  
WASTE PIPING SERVING THIS  
APARTMENT TYPE.

**PLAN NOTES:**

- 1 3" VENT STACK UP. SEE PLUMBING FLOOR PLANS FOR CONTINUATION OF PIPING.
- 2 4" WASTE STACK UP. SEE PLUMBING FLOOR PLANS FOR CONTINUATION OF PIPING.
- 3 RUN 3/4" CONDENSATE DRAIN LINE FROM FURNACE TO FLOOR DRAIN AND TERMINATE WITH DOWNTURNED 90° ELBOW WITH AIR GAP.
- 4 DROP 1/2" CW & HW PIPING DOWN IN WALL AND RUN PIPING UNDER FLOOR TO SERVE KITCHEN SINK.
- 5 3" WASTE STACK UP. SEE PLUMBING FLOOR PLANS FOR CONTINUATION OF PIPING.

PROFESSIONAL ENGINEER  
REGISTERED  
18184  
May 04, 2023  
STATE OF IDAHO  
DAVID L. HANSEN

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**PALISADES APARTMENTS**

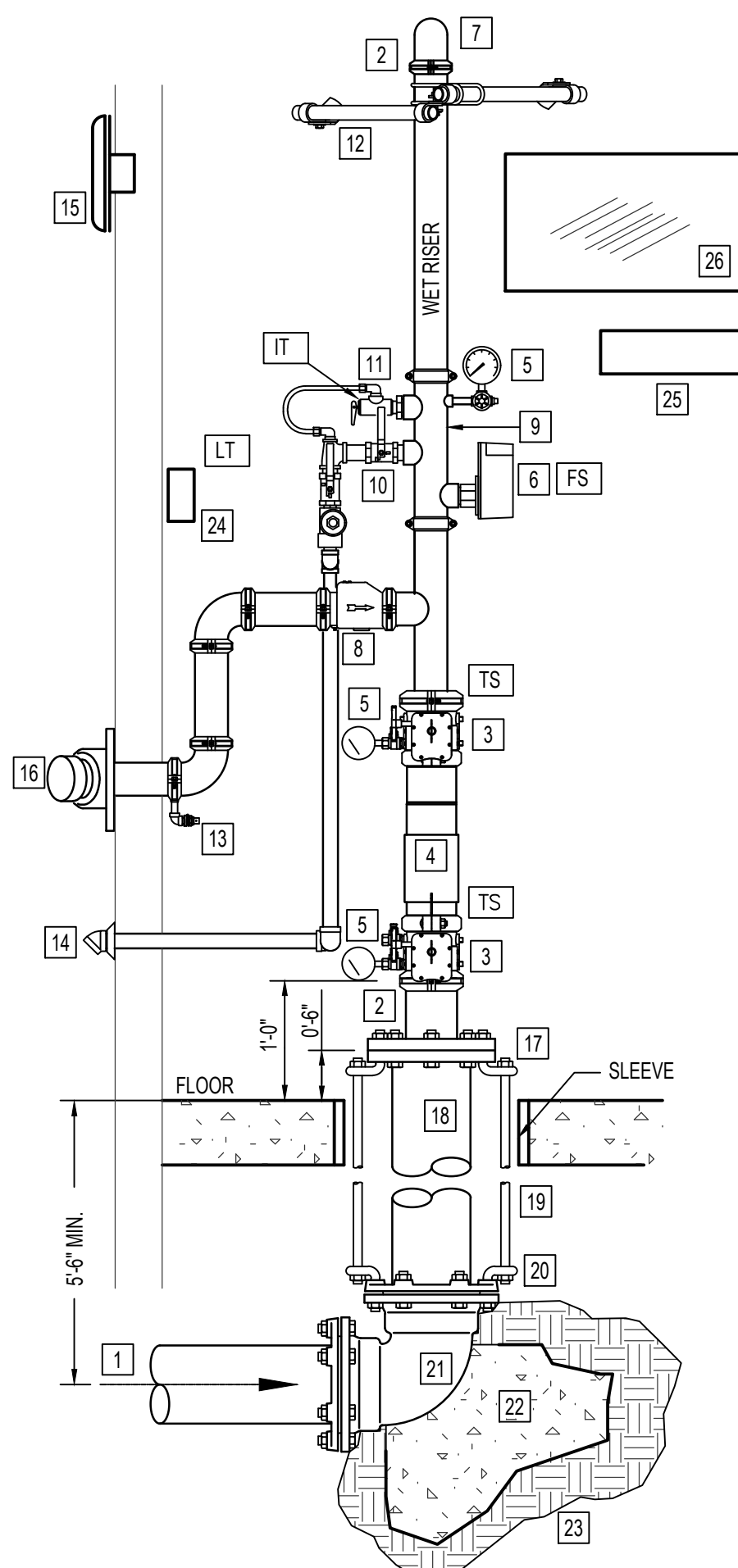
LARGE SCALE TYP. APT. PLUMBING PLANS

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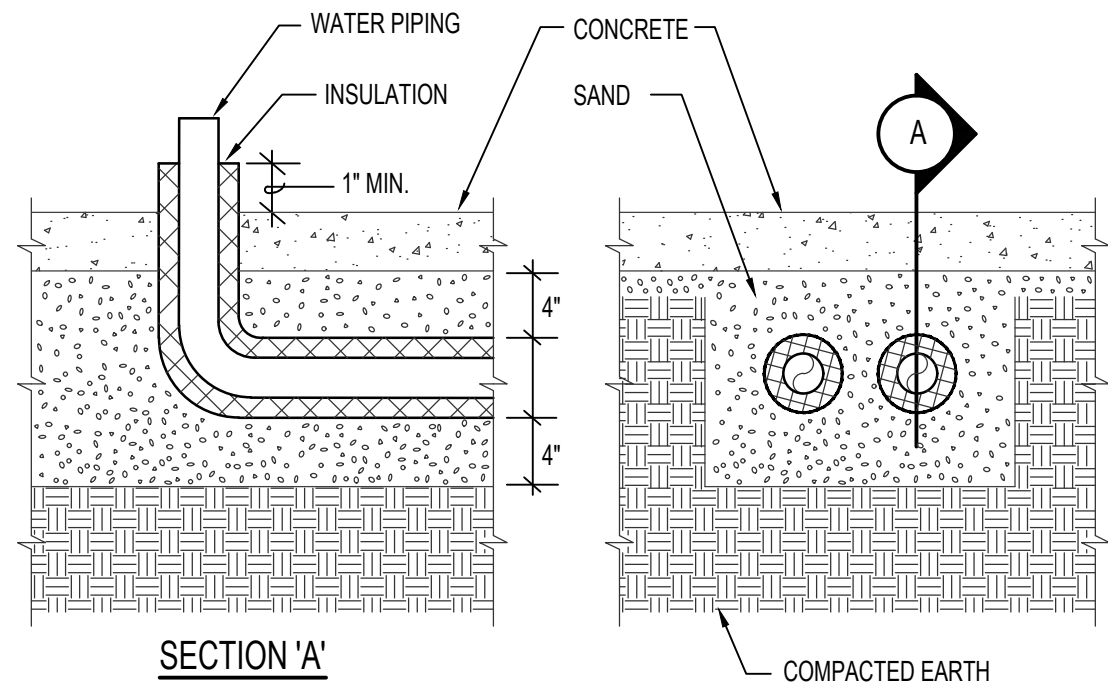


**WET RISER DETAIL NOTES**

- 1 4" WATER SUPPLY FROM CITY WATER MAIN. USE CLASS 53 DUCTILE IRON WHEN CROSSING UNDER BLDG FOUNDATION.
- 2 USE FLEXIBLE GROOVED PIPE COUPLING ONLY IF SEISMIC BRACING IS REQUIRED. SEE NOTE #12.
- 3 GROOVED BUTTERFLY VALVE WITH INTEGRAL SUPERVISORY SWITCH.
- 4 DOUBLE CHECK BACKFLOW PREVENTER WITH RELATED TRIM AND GAUGES.
- 5 3-1/2" DIAMETER WATER GAUGE WITH 1/2" TEST AND ISOLATION VALVE.
- 6 VANE TYPE WATER FLOW SWITCH.
- 7 SUPPLY TO WET PIPE FIRE SPRINKLER SYSTEM.
- 8 SWING CHECK VALVE.
- 9 RISER MANIFOLD - INCLUDES PRESSURE GAUGE, FLOW SWITCH, PRESSURE RELIEF VALVE, AND TEST AND MAIN DRAIN DEVICE.
- 10 INSPECTOR'S TEST & MAIN DRAIN DEVICE [IT] - PIPE TO OUTSIDE.
- 11 PRESSURE RELIEF VALVE SHALL BE REQUIRED SET AT 175 PSI - PIPED TO DISCHARGE OUTSIDE.
- 12 SEISMIC BRACING REQUIRED IN SEISMIC DESIGN CATEGORY C, D, E, F.
- 13 1/2" AUTOMATIC BALL DRIP VALVE.
- 14 PIPE TO DRAIN OUTSIDE.
- 15 WEATHERPROOF ELECTRIC BELL OR HORN AND STROBE (OUTSIDE).
- 16 OUT TO FIRE DEPARTMENT CONNECTION WITH GALVANIZED SCH 40 PIPING. PROVIDE BALL DRIP WHEN TRAPPING PIPE. SIZE CONNECTION AS REQUIRED. NOTE: PIPE FDC TO REMOTE LOCATION WHEN REQUIRED BY FIRE MARSHAL.
- 17 GALVANIZED FLANGE AND SPOOL PIECE
- 18 CLASS 53 D.I. FLANGED SPIGOT
- 19 3/4" A.T.R.
- 20 3/4" BENT EYE BOLT
- 21 MECHANICAL JOINT 90° ELL
- 22 CONCRETE THRUST BLOCK WITH 5 SQ. FEET BEARING AREA
- 23 UNDISTURBED EARTH
- 24 LOW TEMPERATURE SENSOR - MOUNTED ON WALL - THIS SWITCH IS PROVIDED UNDER DIVISION 28 OF THE SPECIFICATIONS.
- 25 SPARE HEAD CABINET WITH SPARE SPRINKLER HEADS AND WRENCHES.
- 26 LAMINATED SYSTEM MAP WITH SYSTEM START-UP AND SHUT-DOWN INSTRUCTIONS.

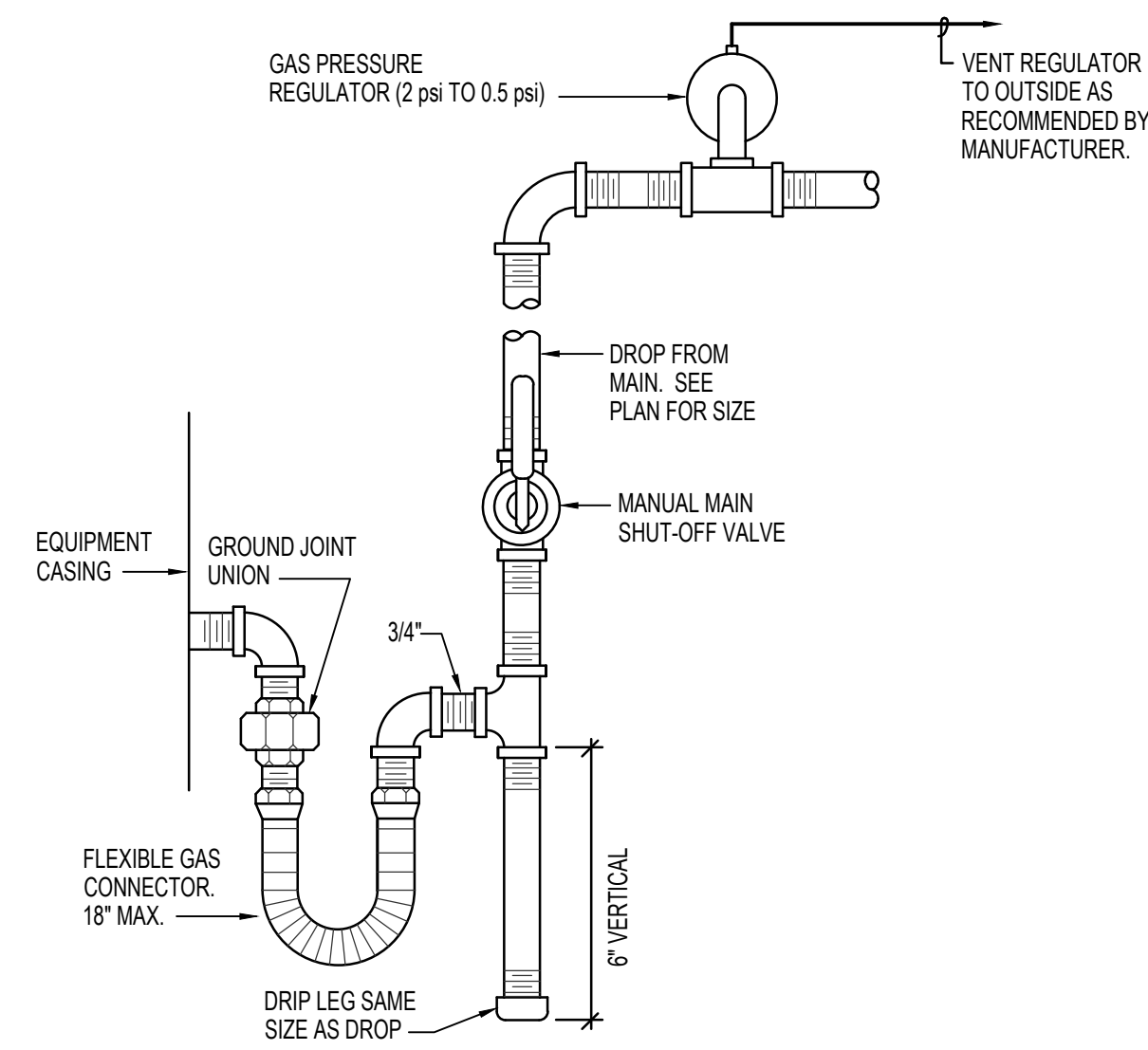
NOTE:  
PROVIDE SLEEVES WHERE PIPING PENETRATES BUILDING AT FLOOR AND WALLS. SEAL AROUND PENETRATION WITH FLEXIBLE MASTIC AT FLOOR. PROVIDE 2" ANNULAR SPACE AROUND AND RESTRAIN FLANGE SPIGOT.

**VERTICAL FIRE RISER DETAIL**  
NO SCALE

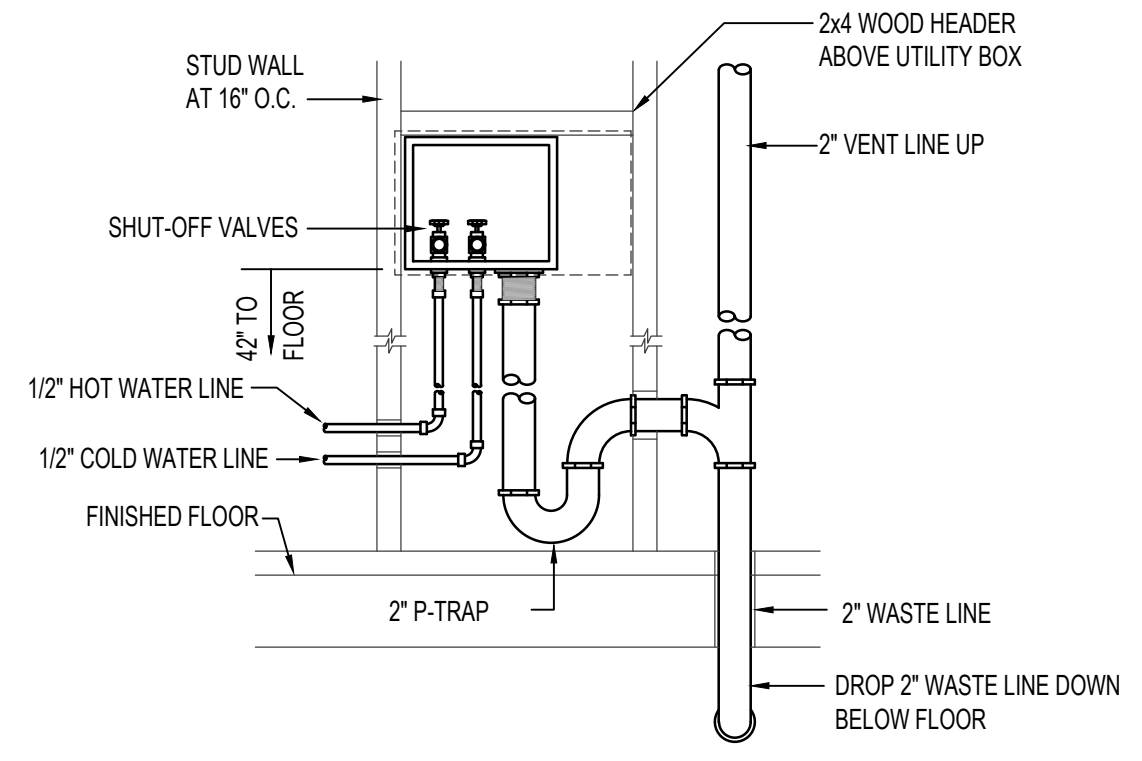


- NOTES:**
- 1 - ALL WATER PIPING INSTALLED UNDERFLOOR SHALL BE TYPE "K" COPPER OR PEX
  - 2 - WATER PIPE INSULATION ON UNDERFLOOR PIPING SHALL BE ARMAFLEX 3/4" THICK RUBBER PIPE INSULATION. TAPE INSULATION AT ALL SEAMS.
  - 3 - MINIMUM PIPE SIZE UNDERFLOOR SHALL BE 3/4"
  - 4 - SAND FILL AROUND PIPING SHALL BE A MINIMUM OF 4" THICK. MATERIAL SHALL BE HAND TAMPED, RODDED OR LIGHTLY COMPACTED DURING INSTALLATION. CARE SHOULD BE TAKEN NOT TO DEFORM OR OTHERWISE DAMAGE PIPING OR INSULATION.

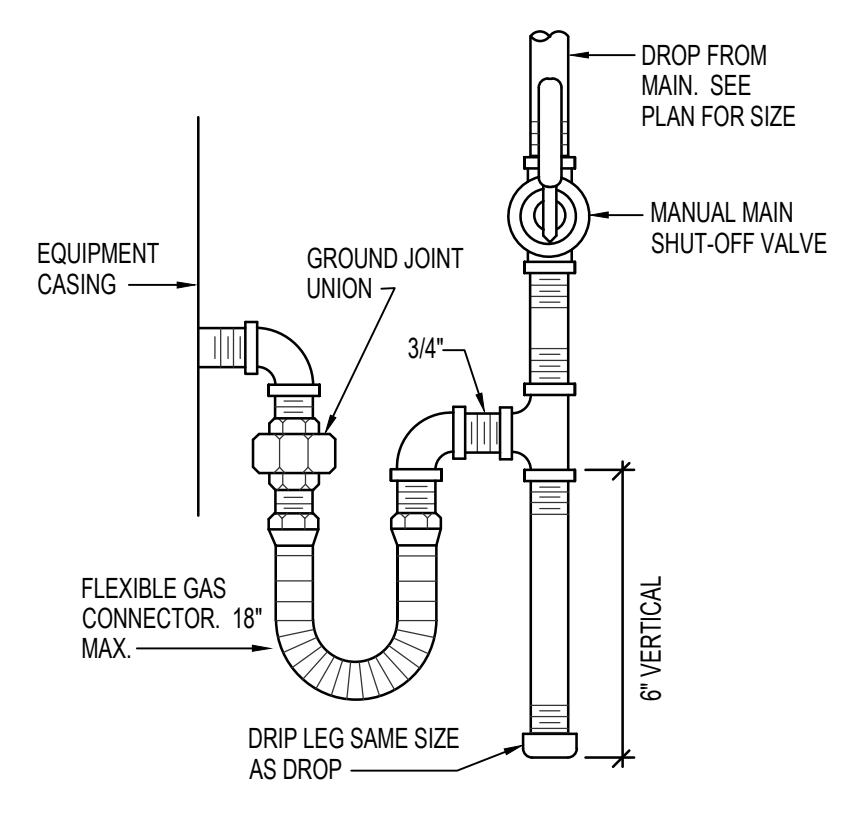
**UNDER SLAB PIPE INSTALLATION DETAIL**  
NO SCALE



**WATER HEATER GAS LINE CONNECTION DETAIL**  
NO SCALE

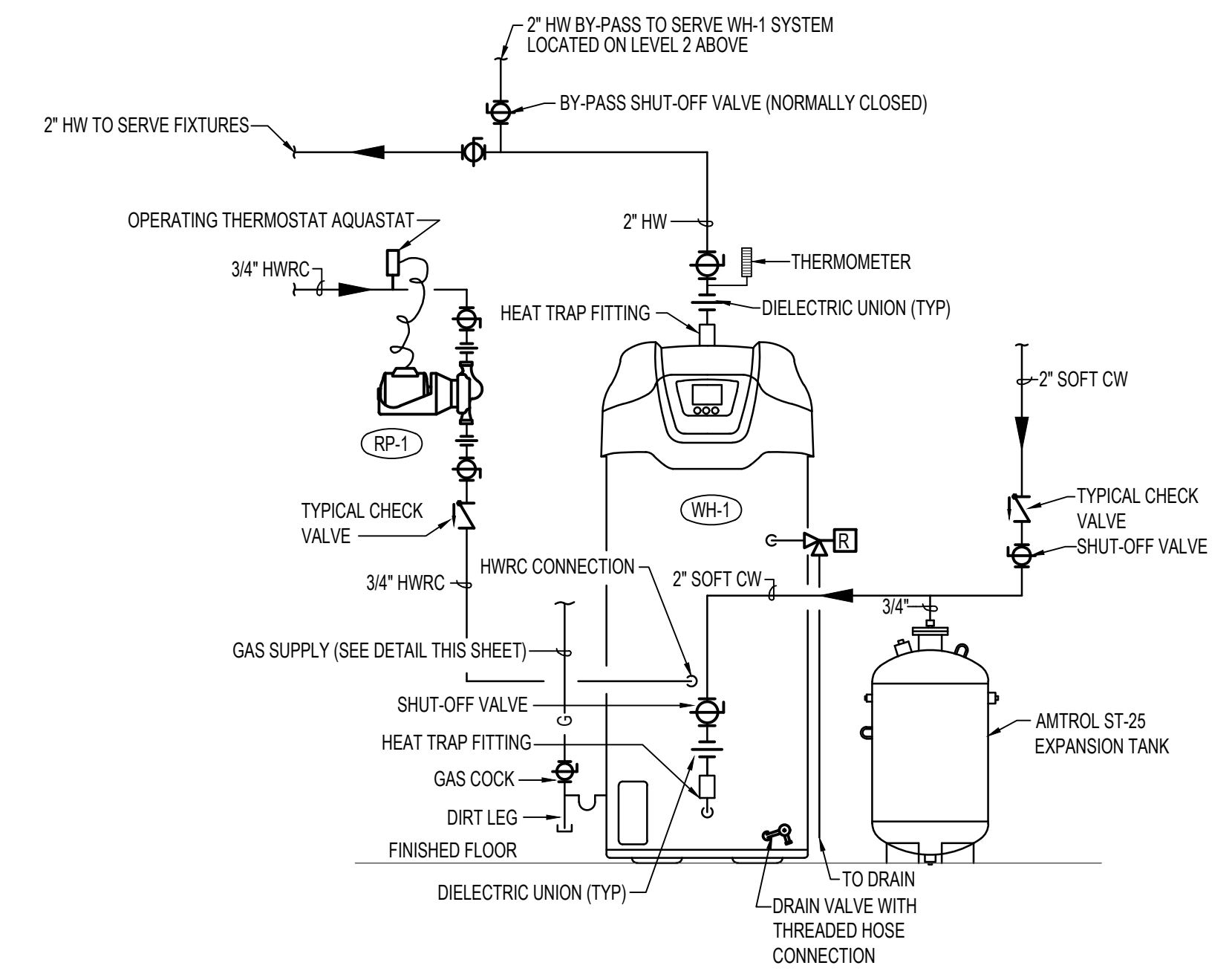


**WASHER BOX PIPING DETAIL**  
NO SCALE

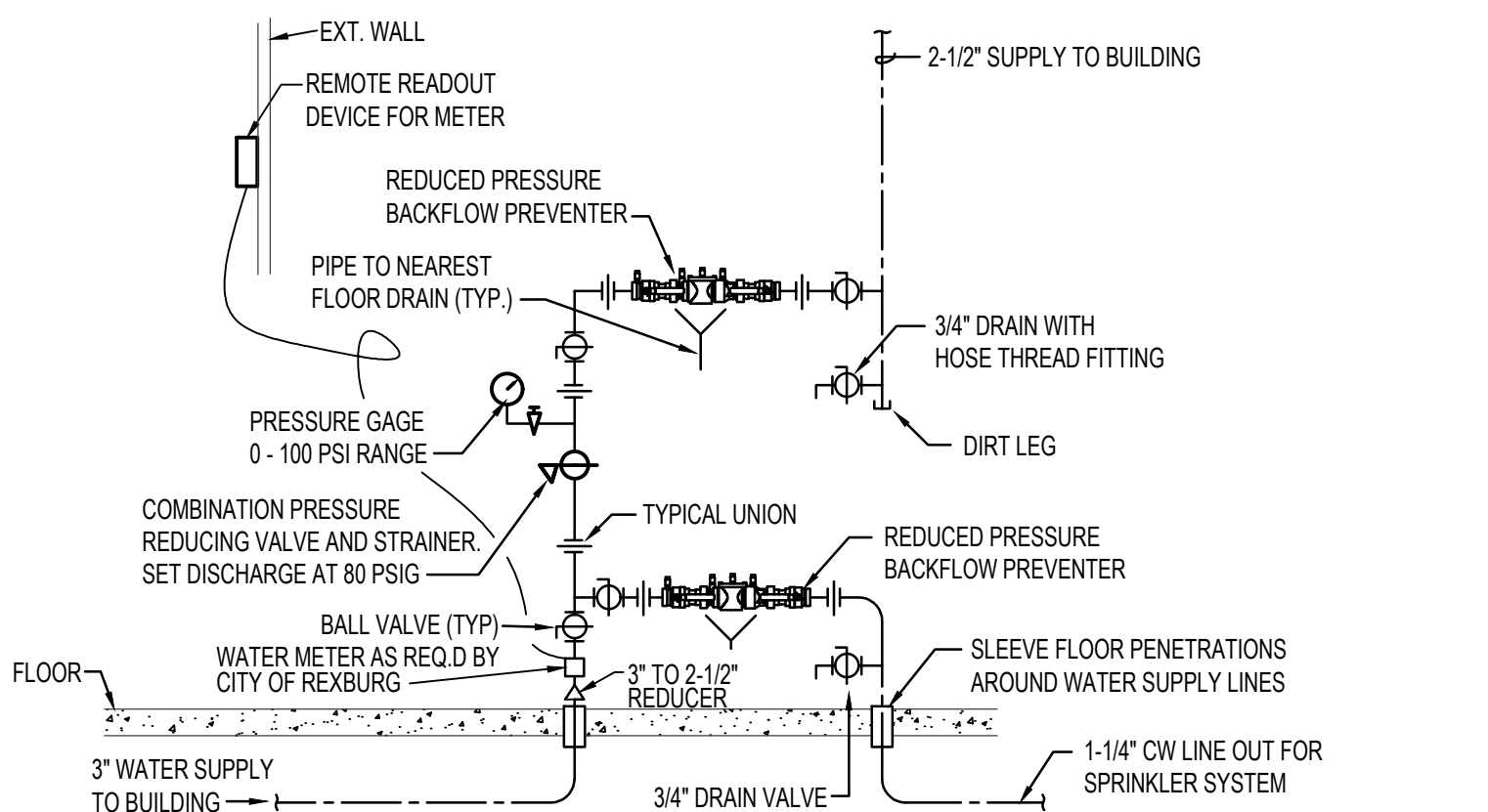


**FURNACE GAS LINE CONNECTION DETAIL**  
NO SCALE

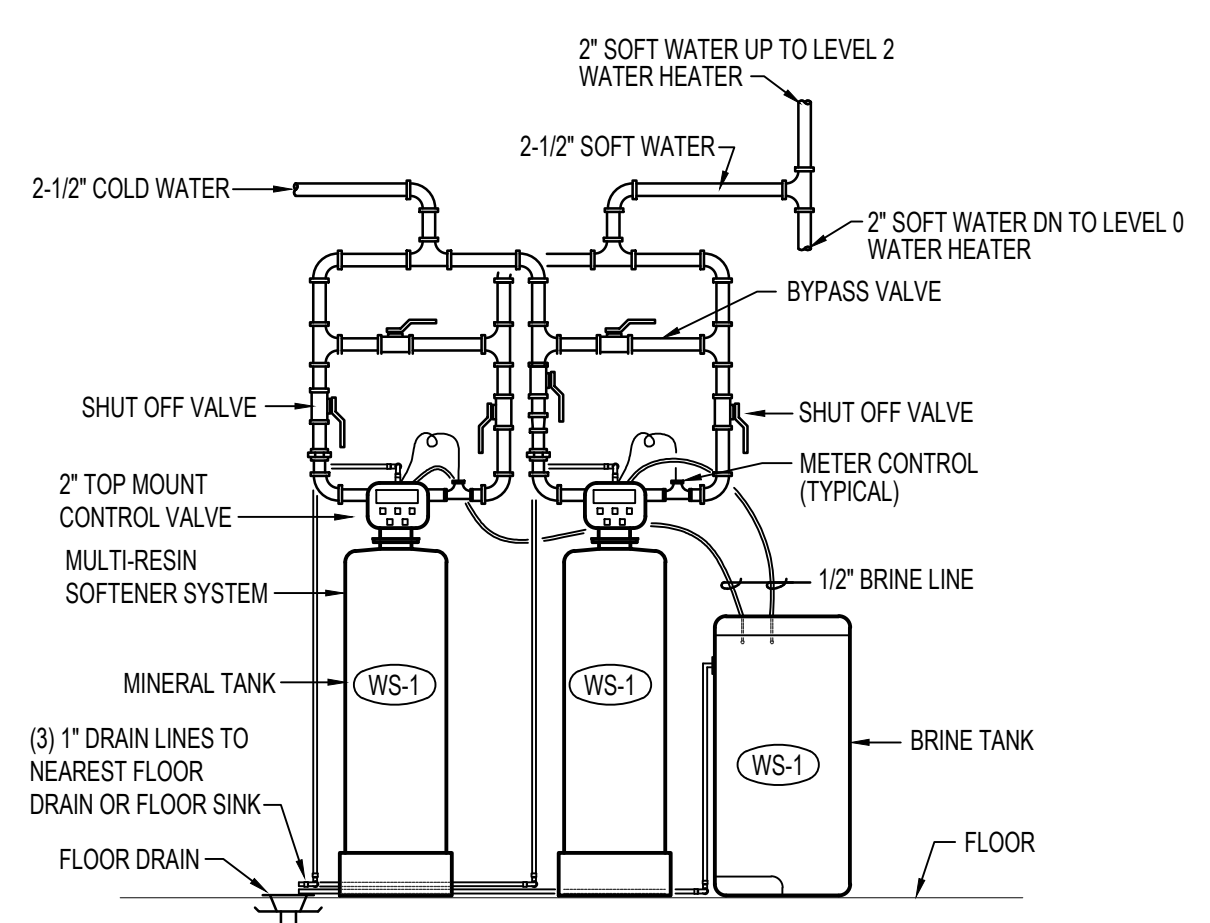
SYM.	DESCRIPTION	PIPE SIZE					REMARKS
		TRAP	WASTE	VENT	C.W.	H.W.	
(DW-1)	DISHWASHER	-	3/4"	-	-	1/2"	UNDER COUNTER - CONNECT WATER & WASTE TO ADJACENT SINK / GARBAGE DISPOSER
(FD-1)	FLOOR DRAIN	2"	2"	2"	-	-	ZURN Z-415B WITH 5"Ø NICKEL-BRONZE STRAINER AND 2" DEEP SEAL P-TRAP
(FD-2)	FLOOR SINK	4"	4"	2"	-	-	ZURN Z-415B WITH 8"Ø NICKEL-BRONZE STRAINER AND 4" DEEP SEAL P-TRAP
(KS-1)	KITCHEN SINK	2"	2"	2"	1/2"	1/2"	S.S. COUNTERTOP SINGLE COMPARTMENT WITH DISPOSER
(KS-2)	ADA KITCHEN SINK	2"	2"	2"	1/2"	1/2"	S.S. COUNTERTOP SINGLE COMPARTMENT WITH DISPOSER, OFFSET TAIL PIECE & INSULATION KIT ON DRAIN AND HW PIPING, WRIST BLADE FAUCET CONTROLS TO MEET ANSI 306.2, 306.3, 1003.12.4.3 & 1003.12.4.4
(L-1)	LAVATORY	1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	COUNTERTOP MOUNT
(L-2)	ADA LAVATORY	1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	ADA COUNTERTOP MOUNT WITH OFFSET TAIL PIECE, INSULATING JACKET ON DRAIN & HW, WRIST BLADE FAUCET CONTROLS TO MEET ANSI 306.2
(RP-1)	HW RECIRC. PUMP	-	-	-	-	3/4" HWRC	B&G SERIES PR WITH 3/4" FLANGES AND 115/60/1 VOLT MOTOR 1/6 H.P. AT 1725 RPM. 3 GPM FLOW AT 10' HEAD.
(SH-1)	ADA ACCESSIBLE SHOWER	2"	2"	2"	1/2"	1/2"	RIGHT OR LEFT HAND AS PER FLOOR PLAN WITH 59" HOSE & SLIDE BAR, AND WRIST BLADE CONTROLS TO MEET ANSI 608.4.2, 608.5, & 1003.11.2.5.2
(T-1)	TUB/SHOWER	2"	2"	2"	1/2"	1/2"	FIBERGLASS SURROUND RIGHT OR LEFT HAND AS PER FLOOR PLAN
(WB-1)	WASHER BOX	2"	2"	2"	1/2"	1/2"	FIRE RATED WASHER BOX WITH 1/2" HW AND CW STOP VALVES 2" STANDPIPE WITH P-TRAP
(WC-1)	WATER CLOSET	INT.	3"	2"	1/2"	-	ELONGATED BOWL FLUSH TANK WITH SEAT AND LID
(WC-2)	ADA WATER CLOSET	INT.	3"	2"	1/2"	-	ADA HEIGHT ELONGATED FLUSH TANK WITH RIGHT OR LEFT TRIP LEVER ON SIDE OPPOSITE GRAB BARS TO MEET ANSI 1003.11.2.4.5
(WH-1)	GAS WATER HEATER	-	-	-	1-1/2"	1-1/2"	A.O. SMITH MODEL BTH-250 WITH 100 GALLON TANK, 250,000 BTU INPUT, 1-1/2" WATER CONNECTIONS AND HEAT TRAP NIPPLES, 3/4" T&P RELIEF VALVE. 120/60/1 POWER REQUIRED
(WS-1)	WATER SOFTENER SYSTEM	-	-	-	2-1/2"	-	WATER TECH MODEL RS1805-29S204 DUPLEX WATER SOFTENER WITH (2) RESIN TANKS & (1) BRINE TANK. 120 GPM PEAK FLOW AT 14 GRAINS HARDNESS. 120/60/1. POWER REQUIREMENT AT 0.32 FLA.



**WATER HEATER PIPING DIAGRAM**  
NO SCALE



**VERTICAL WATER PRESSURE REDUCING STATION**  
NO SCALE



**WATER SOFTENER PIPING DIAGRAM**  
NO SCALE

REVISIONS

**HARRIS ARCHITECTURE**  
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A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
PLUMBING SCHEDULES & DETAILS

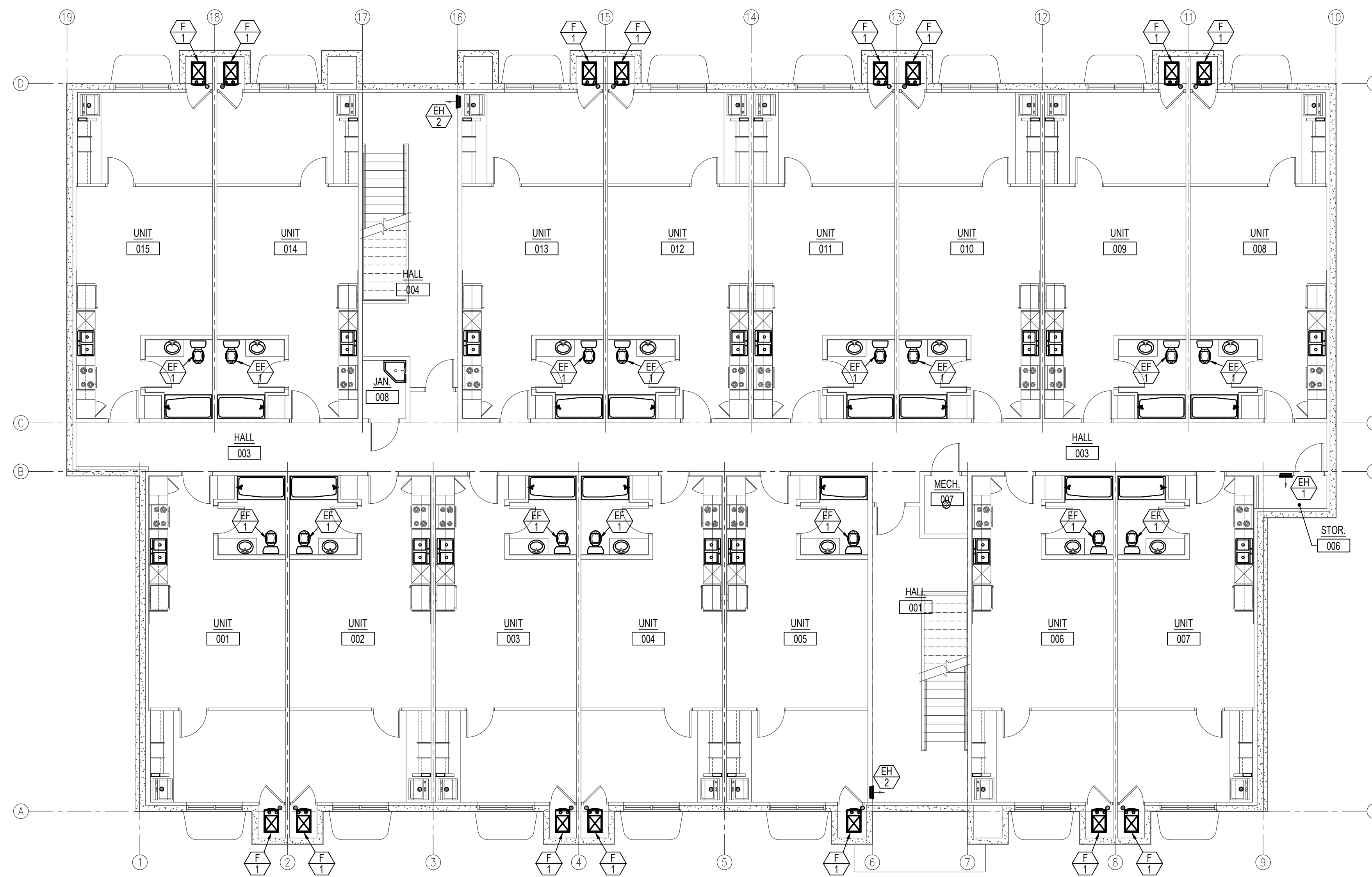
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PLAN NOTES:



**LEVEL 0 MECHANICAL FLOOR PLAN**

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

**NOTE:**  
SEE LARGE SCALE TYP. APT. MECH. PLANS ON SHEET M2.0 FOR DUCTWORK & EQUIPMENT SERVING INDIVIDUAL APT. TYPES.

MECHANICAL LEGEND	
SYMBOL	DESCRIPTION
	ELECTRONIC THERMOSTAT
	EQUIPMENT SYMBOL
	ELECTRIC WALL HEATER
	RECTANGULAR SUPPLY AND RETURN AIR DUCT TAKE-OFF
	TURNING VANES
	DUCT TRANSITION
	INSULATED FLEXIBLE DUCT
	CEILING SUPPLY REGISTER
	CEILING MOUNTED EXHAUST FAN
	SELF CONTAINED GAS FIRED FURNACE WITH EXT. GRILLES
	SELF CONTAINED GAS FIRED FURNACE WITH DX COOLING COIL

REVISIONS		

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A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
LEVEL 0 MECHANICAL FLOOR PLAN

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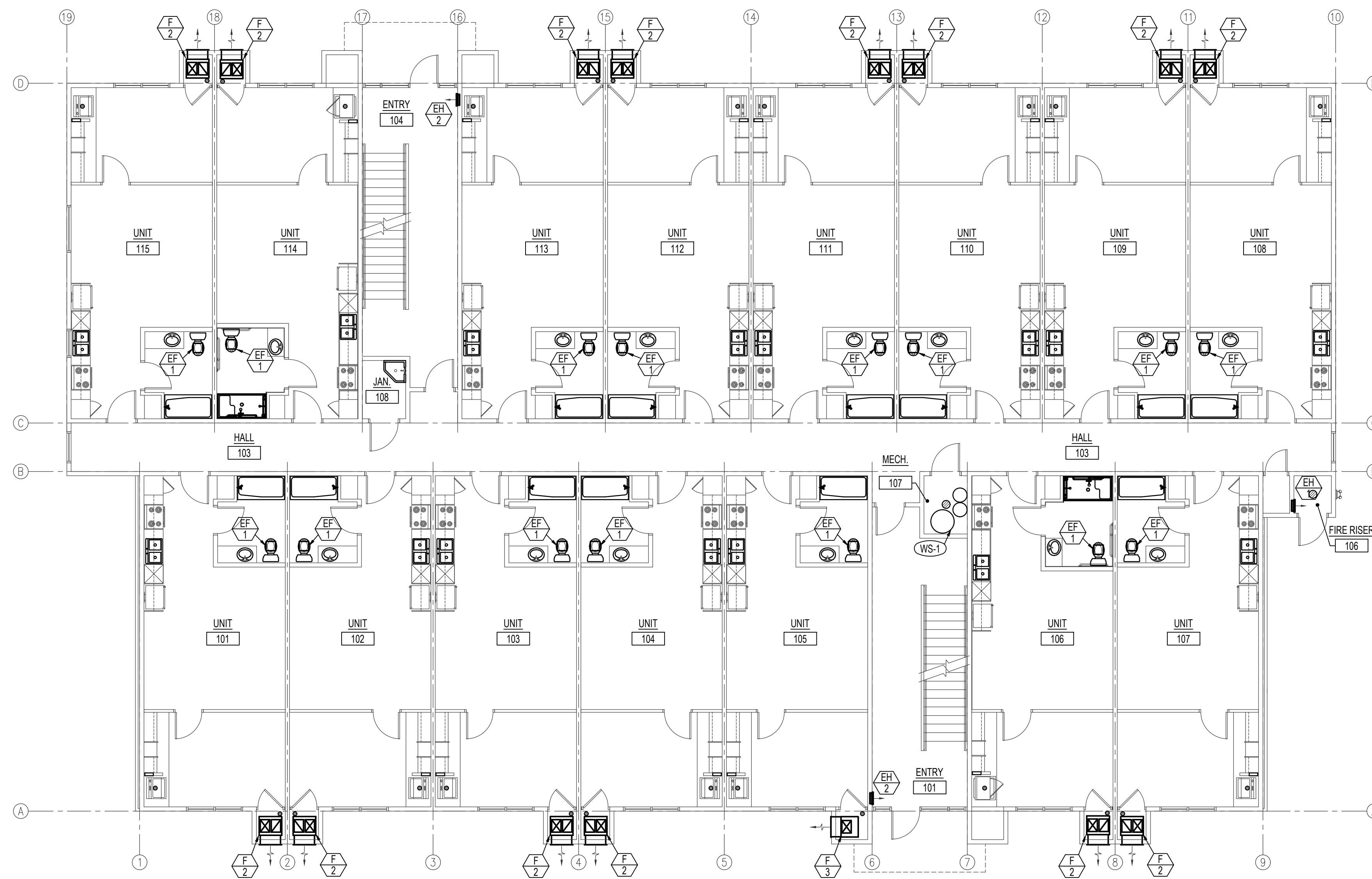
**M1.0**



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**LEVEL 1 MECHANICAL FLOOR PLAN**

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

**NOTE:**  
SEE LARGE SCALE TYP. APT. MECH.  
PLANS ON SHEET M2.0 FOR DUCTWORK &  
EQUIPMENT SERVING INDIVIDUAL APT.  
TYPES.

**PLAN NOTES:**

REVISIONS		



A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
LEVEL 1 MECHANICAL FLOOR PLAN



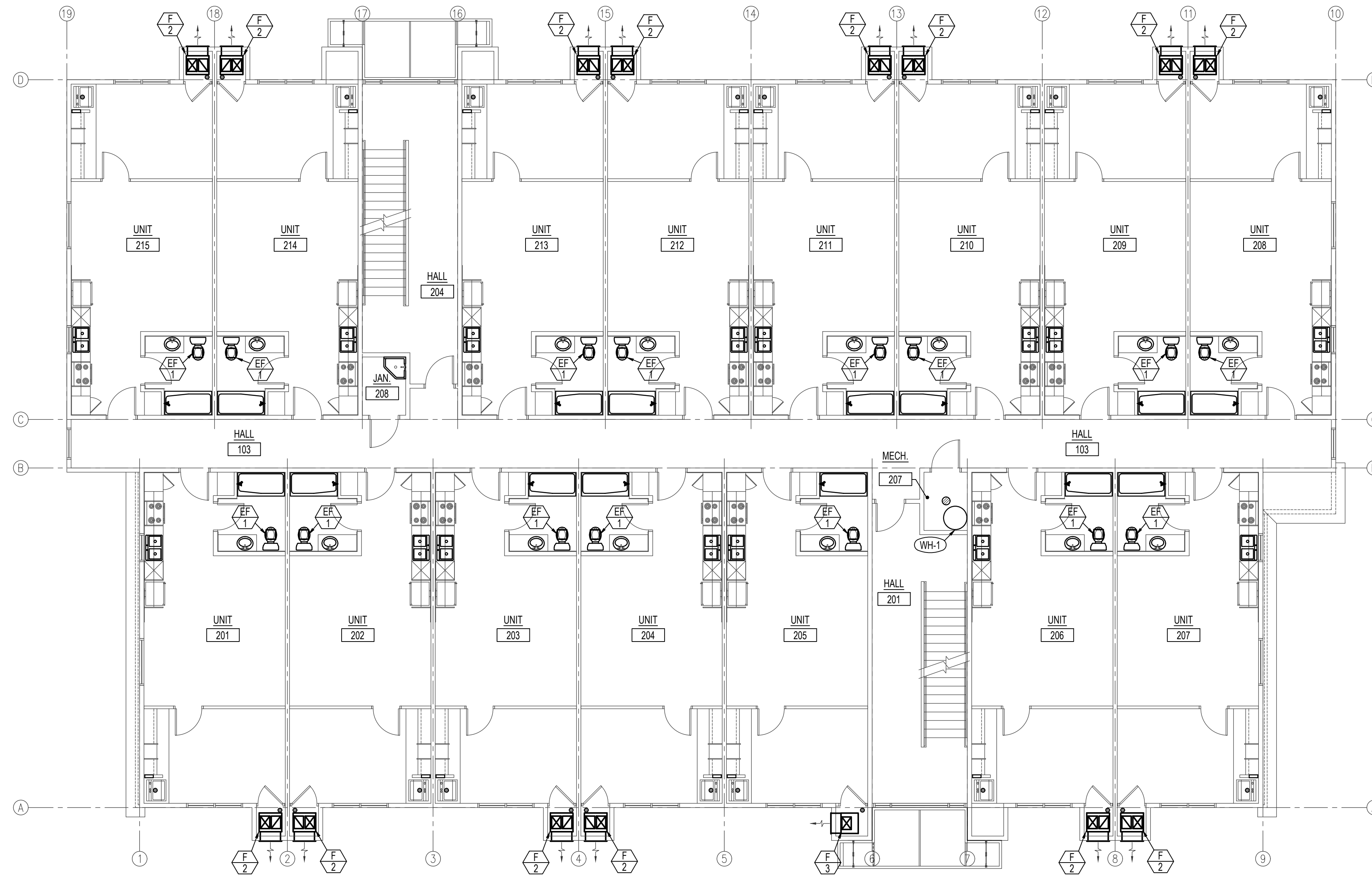
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PLAN NOTES:



**LEVEL 2 MECHANICAL FLOOR PLAN**

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

**NOTE:**  
SEE LARGE SCALE TYP. APT. MECH.  
PLANS ON SHEET M2.0 FOR DUCTWORK &  
EQUIPMENT SERVING INDIVIDUAL APT.  
TYPES.

REVISIONS		



A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
LEVEL 2 MECHANICAL FLOOR PLAN

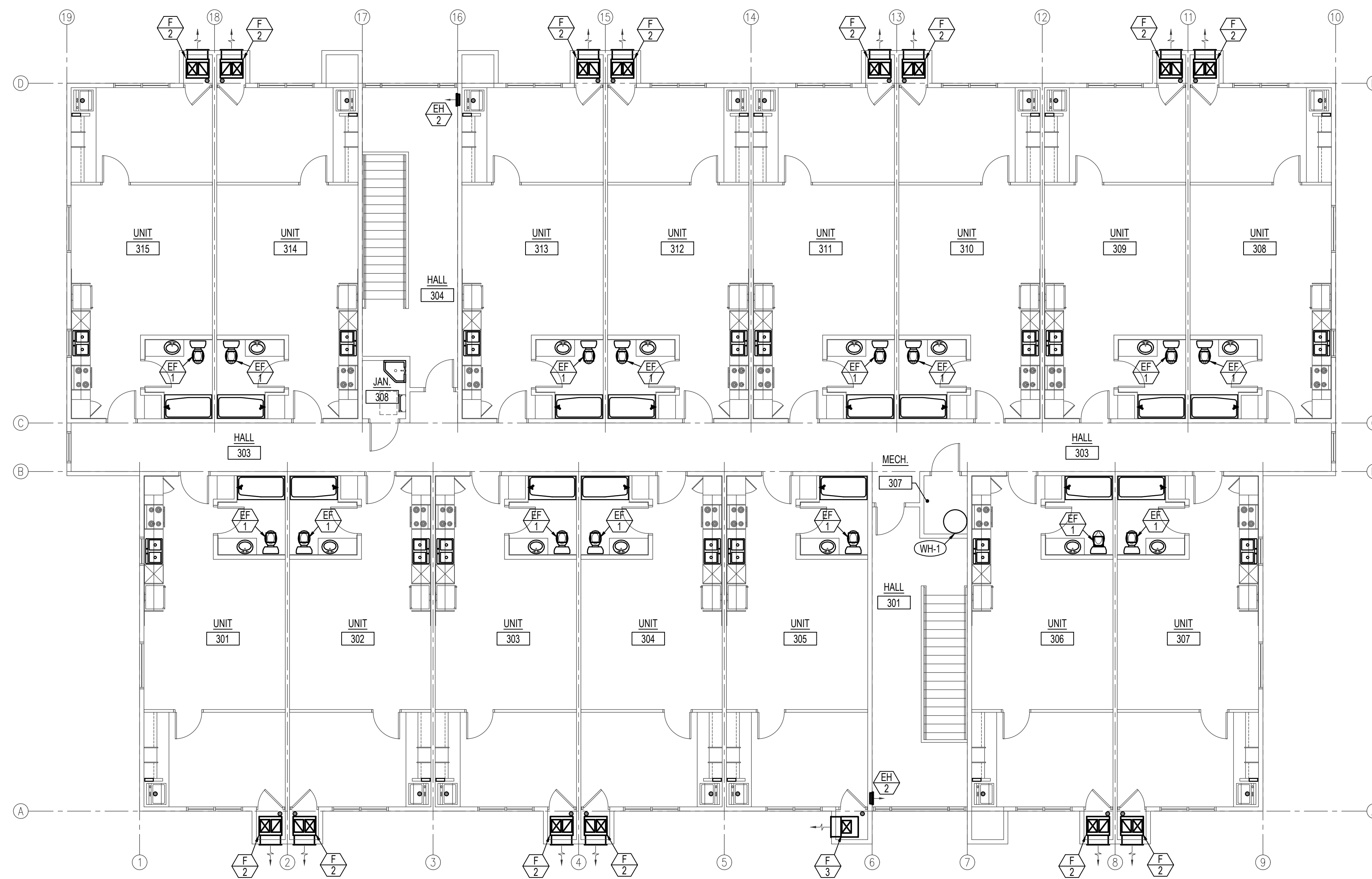


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**LEVEL 3 MECHANICAL FLOOR PLAN**

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

**NOTE:**  
SEE LARGE SCALE TYP. APT. MECH.  
PLANS ON SHEET M2.0 FOR DUCTWORK &  
EQUIPMENT SERVING INDIVIDUAL APT.  
TYPES.

**PLAN NOTES:**

NO.	REVISIONS



A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
LEVEL 3 MECHANICAL FLOOR PLAN

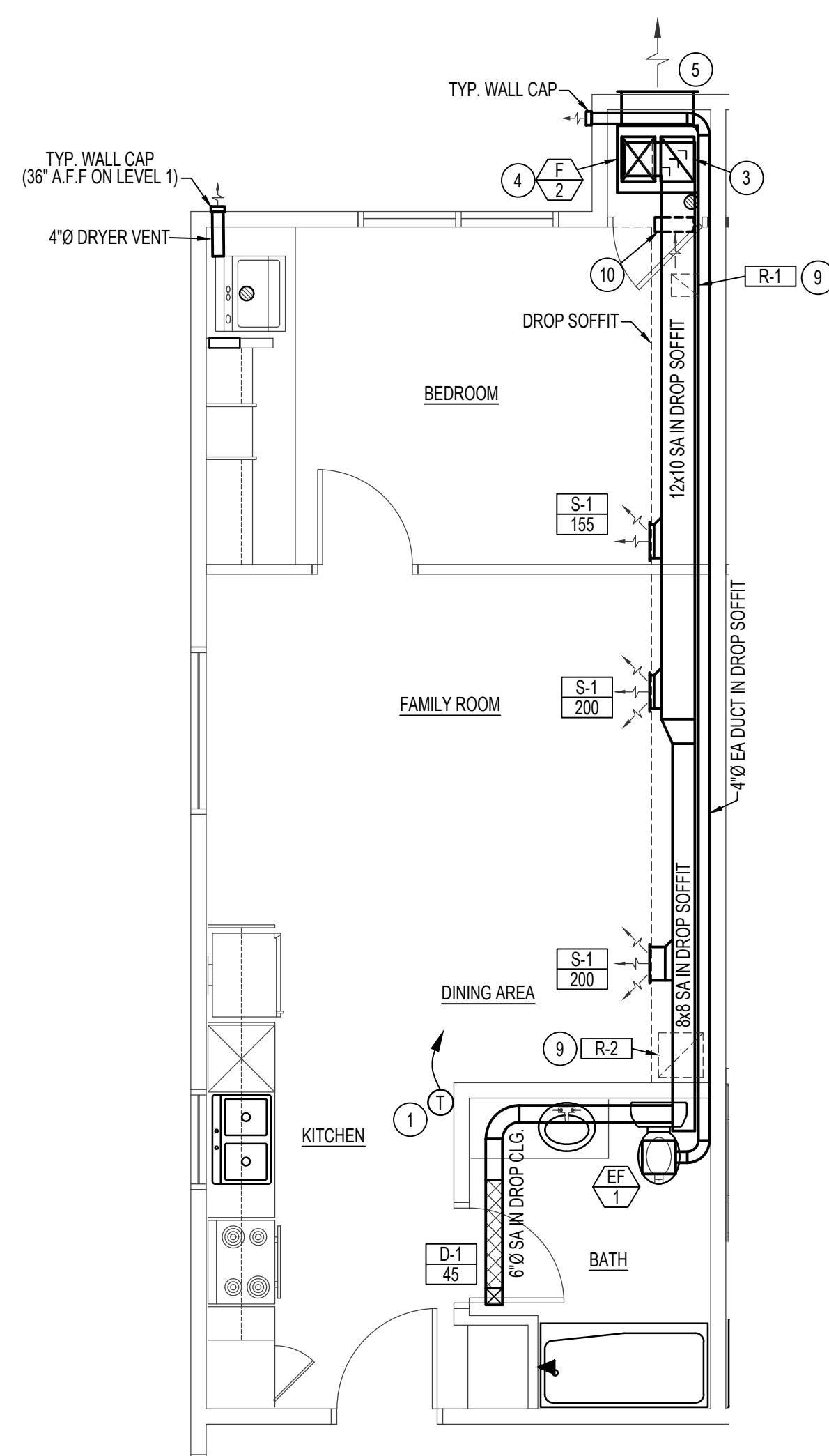


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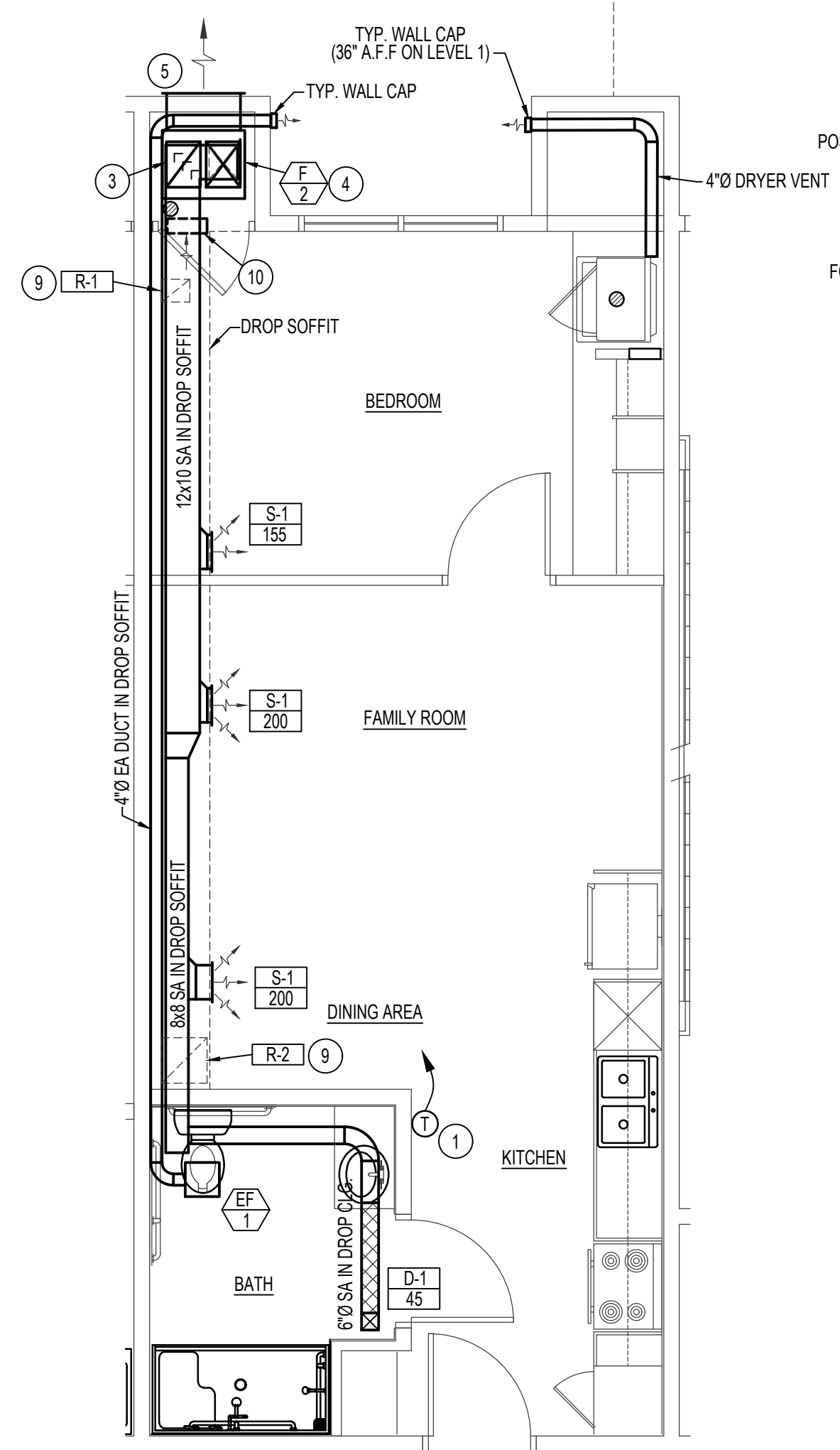
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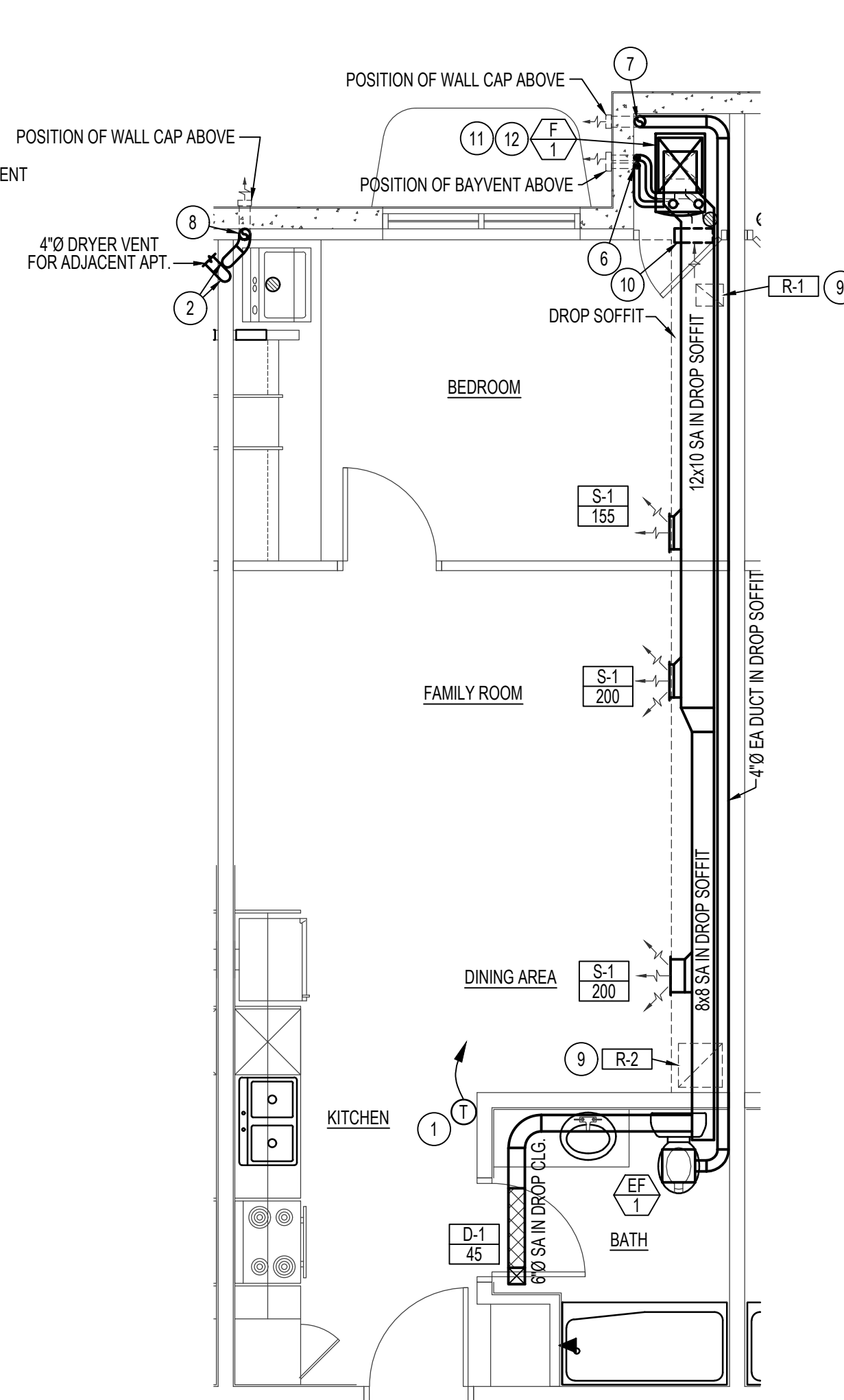
**LARGE SCALE APT. TYPE 1  
MECHANICAL FLOOR PLAN**

SCALE: 1/4" = 1'-0" (TYPE 3 APT. SIMILAR)



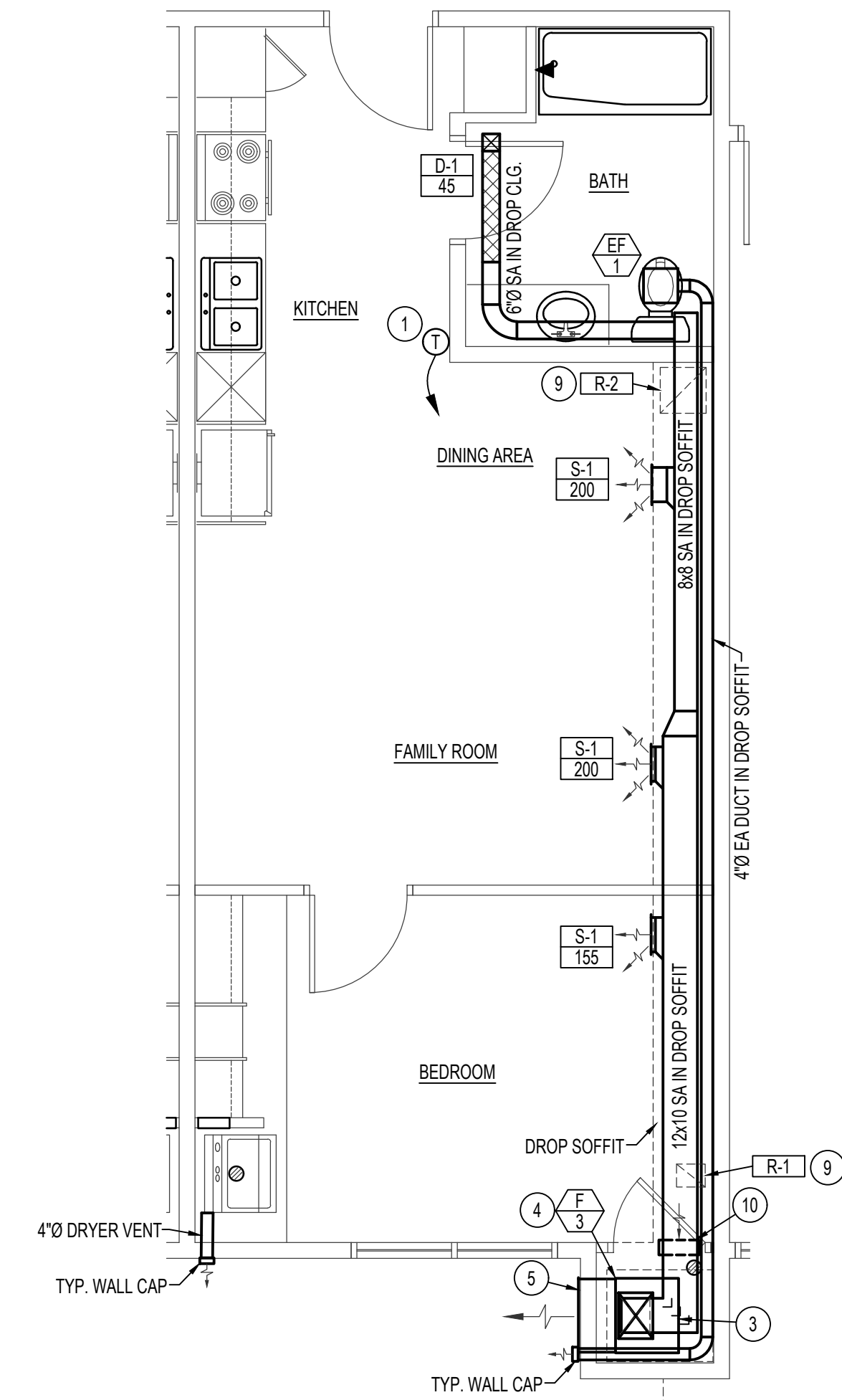
**LARGE SCALE APT. TYPE 2  
MECHANICAL FLOOR PLAN**

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



**LARGE SCALE APT. TYPE 4  
MECHANICAL FLOOR PLAN**

SCALE: 1/4" = 1'-0" (TYPE 5 APT. SIMILAR)



**LARGE SCALE APT. 105, 205 & 305  
MECHANICAL FLOOR PLAN**

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

**PLAN NOTES:**

- 1 MOUNT PROGRAMMABLE THERMOSTAT ON WALL AND RUN 5 CONDUCTOR THERMOSTAT WIRE TO FURNACE.
- 2 PROVIDE AND INSTALL DRYER WALL BOX IN WALL. DRYER BOX TO BE COMPLETE WITH 4" DUCT UP IN WALL THRU JOISTS TO WALL CAP. REFER TO DETAIL ON SHEET M2.2 FOR TYPICAL DRYER BOX INSTALLATION. OFFSET BOX AS REQUIRED IN COMMON WALL FOR BACK TO BACK APT. CONDITION.
- 3 LEAVE RETURN AIR DUCT OPEN TO FURNACE CLOSET TO PROVIDE RETURN AIR FROM RETURN AIR GRILLE LOCATED IN CEILING FURR-DOWN PLENUM.
- 4 INSTALL SELF-CONTAINED HVAC UNIT AS SPECIFIED IN FURNACE ROOM. MAINTAIN AS MUCH CLEARANCE IN FRONT OF UNIT AS POSSIBLE. REFER TO PLUMBING DRAWINGS FOR CONNECTION TO GAS PIPING & CONDENSATE DRAIN PIPED TO FLOOR DRAIN. PROVIDE EXTENSION ON COMBUSTION DISCHARGE AS REQUIRED TO MOUNT AT UPPER PORTION OF LOUVER. MOUNT FURNACE ON PLATFORM AS PER MFG. RECOMMENDATIONS.
- 5 ARCHITECTURAL LOUVER FURNISHED WITH SELF-CONTAINED HVAC UNITS. PROVIDE SLEEVE THRU WALL AS REQUIRED FOR GRILLES. COORDINATE GRILLE LOCATION WITH UNIT AND PIPING. SEAL ALL AROUND GRILLES. EXTEND COMBUSTION DISCHARGE TO UPPER SECTION OF GRILLE. MOUNT UPPER GRILLE SECTION WITH BLADE POINTING UPWARD AND LOWER GRILLE SECTION WITH BLADES POINTING DOWNWARD AS RECOMMENDED BY MANUFACTURER.
- 6 RUN (2) 2" FURNACE FLUES UP IN MECHANICAL ROOM THRU FLOOR ASSEMBLY ABOVE AND RISE UP TO BAY VENT WALL TERMINATION ASSEMBLY AT 36" A.F.F. OF LEVEL 1. SEE DETAIL ON SHEET M3.0
- 7 RISE 4" EXHAUST DUCT UP THRU FLOOR ASSEMBLY ABOVE TO HORIZONTAL WALL CAP ON SIDE WALL AT 36" A.F.F. OF LEVEL 1.
- 8 RISE 4" DRYER VENT UP IN STUD SPACE OF EXTERIOR WALL ABOVE RIM JOIST TO HORIZONTAL WALL CAP AT 36" A.F.F. OF LEVEL 1 ABOVE.
- 9 INSTALL RETURN AIR GRILLE IN BOTTOM OF DROP SOFFIT TO ALLOW RETURN AIR TO FLOW BACK TO MECHANICAL ROOM PLENUM.
- 10 INSTALL 14x8 SHEET METAL SLEEVE THRU WALL FROM MECHANICAL ROOM TO DROP SOFFIT FOR RETURN AIR TRANSFER BACK TO FURNACE.
- 11 INSTALL GAS FURNACE IN BASEMENT LEVEL ON 12" HIGH ANGLE IRON STAND TO ALLOW RETURN AIR BACK TO BOTTOM OF FURNACE.
- 12 INSTALL FILTER RACK ON BOTTOM OF FURNACE RETURN AIR OPENING. CONFIRM WITH MFG. FOR SIZE OF FILTER AND FILTER RACK REQUIRED.

REVISIONS		



A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
LARGE SCALE TYP. APT. MECHANICAL PLANS

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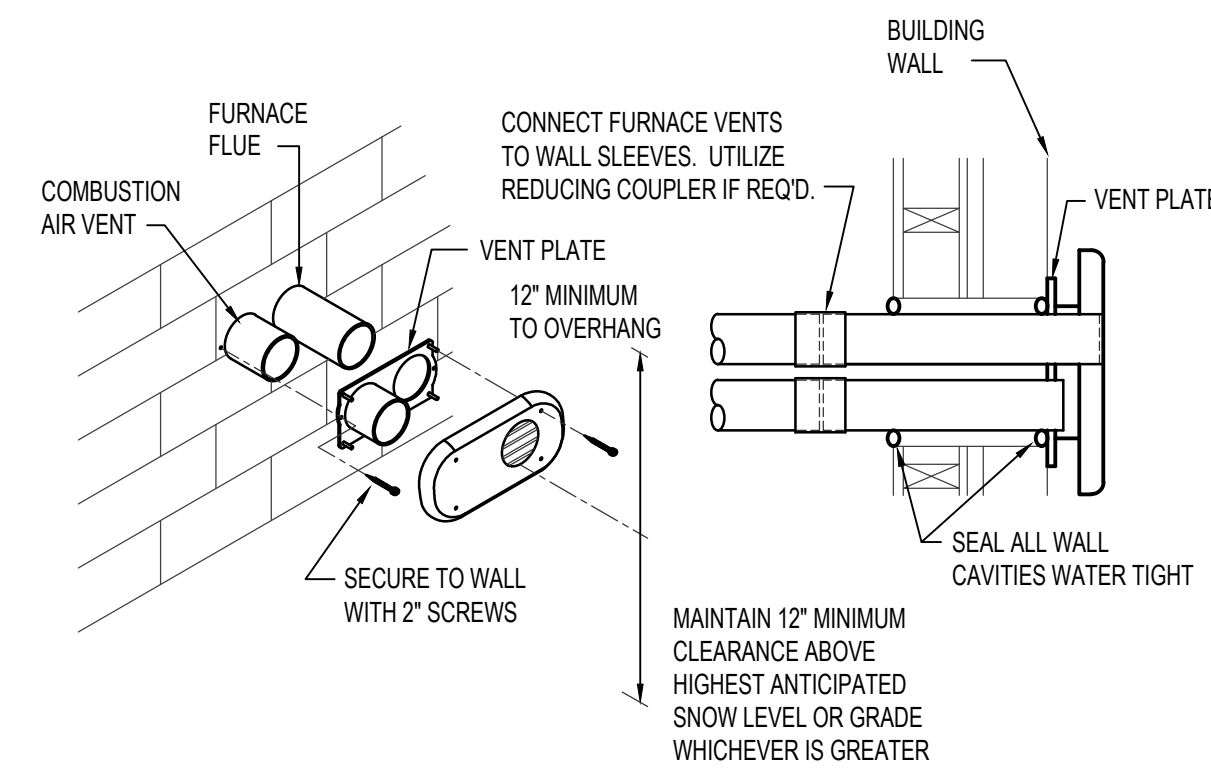
PROFESSIONAL ENGINEER  
DAVID L. HANSEN  
MAY 04, 2023  
STATE OF IDAHO



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### FURNACE AND DX COOLING COIL SCHEDULE

SYM.	TYPE	C.F.M.	SP <sub>e</sub>	SPEED	MCA	MOCP	CHAR.	NATURAL GAS			E.A.T.	L.A.T.	GAS TYPE	DX COOLING COIL				PIPING SIZES				REMARKS		
								INPUT	OUTPUT	@ ELEV.				B.T.U.	E.A.T.	L.A.T.	MAX. P.D.	LIQUID	SUCTION	C.D.	NAT GAS		INTAKE	EXHAUST
F1	UPFLOW	600	.50"	M-HIGH	1/3 H.P.	NA	120/60/1	44,000	42,000	34,440	65°F	105°F	NAT	NA	NA	NA	NA	NA	3/4"	3/4"	2"	2"	LENNOX EL195UH045P24B WITH HORIZONTAL BAYVENT TERMINAL ASSEMBLY.	
F2	UPFLOW	600	.50"	M-HIGH	10.7	15.0	208/60/1	36,000	28,800	23,616	65°F	105°F	NAT	18,000	75°F	55°F	.25"	NA	NA	3/4"	3/4"	NA	NA	MAGIC PAK MODEL 36MGE4-11-181NP1 WITH ARCHITECTURAL LOUVER TO MATCH UNIT.
F3	UPFLOW	600	.50"	M-HIGH	17.0	25.0	208/60/1	40,000	32,400	26,568	65°F	105°F	NAT	18,000	75°F	55°F	.25"	NA	NA	3/4"	3/4"	NA	NA	FIRST COMPANY MODEL ECG182N8A40BROOF WITH ARCHITECTURAL LOUVER TO MATCH UNIT.



**FURNACE VENT TERMINATION DETAIL**  
NO SCALE (APPLIES TO FURNACE F-1 ONLY)

### ELECTRIC HEATER SCHEDULE

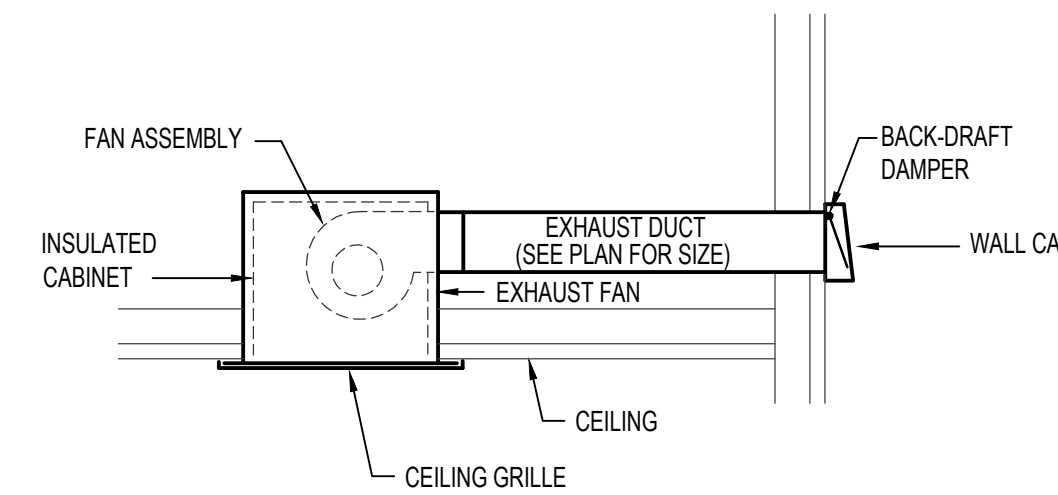
SYM.	TYPE	BTU	KW	CHAR.	CONTROL	REMARKS
EH1	SEMI-RECESSED WALL MTD	2,559	0.75	120/60/1	INTEGRAL	QMARK MODEL GFR1500T2 RECESSED HEATER.
EH2	SEMI-RECESSED WALL MTD	6,824	2.0	208/60/1	INTEGRAL	QMARK MODEL AWH-4408 WITH AWH-S-1 SEMI-RECESSED MOUNT FRAME

### EXHAUST FAN SCHEDULE

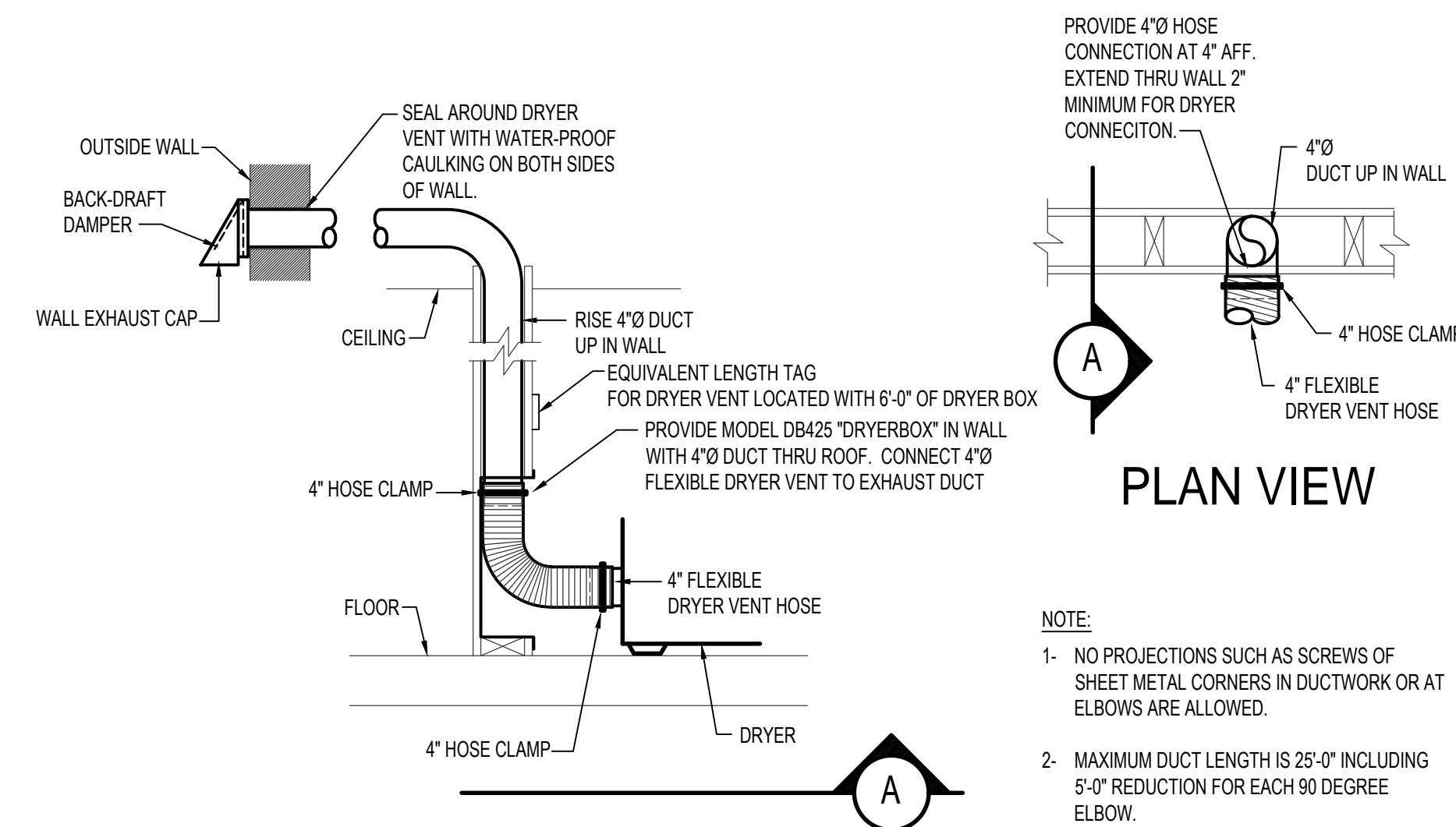
SYM.	TYPE	C.F.M.	S.P.E.	WATTS	CHAR.	R.P.M.	CONTROL	REMARKS
EF1	CEILING MOUNTED	50	0.375	19	120/60/1	760	24 HR. CONTINUOUS	PANASONIC FV-0511VF1, 4"Ø DUCT & BACKDRAFT DAMPER, CEILING MOUNTED EXHAUST GRILLE & WALL CAP.

### GRILLE AND REGISTER SCHEDULE

SYM.	SIZE	THROW	CFM	CONSTR.	FINISH	F.D.	O.B.	REMARKS
S1	12 x 8	2 WAY	100-200	STEEL	WHITE	NO	YES	ACCORD MODEL 222 WITH 2-WAY DEFLECTION. MOUNT IN SIDEWALL AS HIGH AS POSSIBLE. PROVIDE TRANSITION BOOT.
D1	6 x 6	2 WAY	40-75	STEEL	WHITE	NO	YES	ACCORD MODEL 222 WITH 2-WAY DEFLECTION. MOUNT IN CEILING AS SHOWN ON PLANS. PROVIDE TRANSITION BOOT.
R1	10 x 8	---	100-200	STEEL	WHITE	NO	NO	ACCORD MODEL 500. MOUNT IN CEILING AS SHOWN ON PLANS.
R2	16 x 16	---	400-500	STEEL	WHITE	NO	NO	ACCORD MODEL 500. MOUNT IN CEILING AS SHOWN ON PLANS.



**CEILING MOUNTED EXHAUST FAN DETAIL**  
NO SCALE



**DRYER VENT DETAIL**  
NO SCALE (FOR APTS. LOCATED IN BASEMENT ONLY)

- NOTE:
- NO PROJECTIONS SUCH AS SCREWS OF SHEET METAL CORNERS IN DUCTWORK OR AT ELBOWS ARE ALLOWED.
  - MAXIMUM DUCT LENGTH IS 25'-0" INCLUDING 5'-0" REDUCTION FOR EACH 90 DEGREE ELBOW.

REVISIONS	DATE	DESCRIPTION



A NEW BUILDING FOR  
**PALISADES APARTMENTS**  
MECHANICAL SCHEDULES & DETAILS

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