



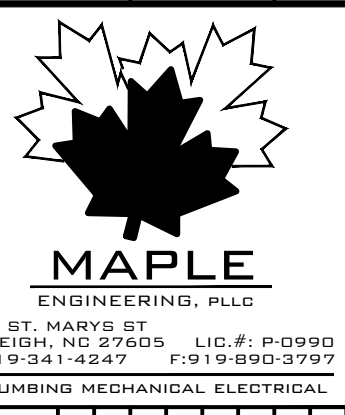




PLANWORX ARCHITECTURE

5711 SIX FORKS ROAD, SUITE 100 RALEIGH NC 27609 website www.planworx.com

Inspiration at Southpoint Apartments Zimmer Development Company Fort Meyers, Florida PERMIT SET



MAPLE ENGINEERING, PLLC 700 ST. HARVEY ST. RALEIGH, NC 27605 LIC.#: P-0090 P-01241-0247 P-019-000-3797 PLUMBING MECHANICAL ELECTRICAL

Table with columns: PROGRESS DATE, ISSUE DATE, REVISIONS NUMBER, INITIALS, DESCRIPTION

PROJECT NO: 010819 DRAWN BY: RMH CHECKED BY: ZLT SHEET TITLE: MECHANICAL SCHEDULES SHEET NUMBER: M0.02

MINI-SPLIT HEAT PUMP/AC SCHEDULE table with columns: UNIT TAG, AREA SERVED, MANUF. MODEL, FAN CFM, ESP, MOTOR, OA, COOLING, HEAT, ELECTRICAL DATA, GENERAL DATA, ELECTRICAL DATA, NOTES

- NOTES: 1. COOLING CAPACITIES ARE RATED IN ACCORDANCE WITH AHRI STANDARD 210/240 AT 95°F AMBIENT OUTDOOR AIR TEMP., 80°F DRY BULB, 67°F WET BULB ENTERING AIR TEMP., AND AIR QUANTITY LISTED BY MFG. UNITS ABOVE 5 TONS ARE RATED IN ACCORDANCE WITH AHRI STANDARD 340/360. 2. INDOOR UNIT POWERED VIA WIRING FROM OUTDOOR UNIT. SEE MFG'S INSTRUCTIONS. 3. REFRIG. PIPING TO BE SIZED PER TOTAL INSTALL. EQUIV. LENGTH. LONG-LINE APP TO BE PROVIDED WHENEVER MFG. RECOMM. LENGTHS ARE EXCEEDED, INCL. LIQ. LINE SOLENOID VALVES, ACCUMULATOR, ETC. MAX T.E.I. IS PER MFG. 4. PROVIDE 2 SETS OF NEW FILTERS FOR EACH UNIT. PROVIDE ONE AT INSTALLATION AND AT TURNOVER TO OWNER. 5. PROVIDE W/ MFG'S WIRELESS REMOTE CONTROLLER KIT. 6. OUTDOOR UNITS SHALL HAVE A MINIMUM 14.0 SEER RATING. 7. CONDENSATE TO BE ROUTED TO AREA HUB DRAIN. SEE SHEET M1.10. 8. CONDENSATE TO BE ROUTED TO EXTERIOR GRADE AWAY FROM FOOT TRAFFIC. 9. PROVIDE HEAT PUMP W/ OPTIONAL SEA COAST CORROSION RESISTANCE KIT.

Ventilation Calculations table with columns: AH/RTU, Spaces, Occupancy, Area, Occ. Density, # People, CFM/Sqft, CFM/Person, Area CFM, People CFM, Total Gross CFM, Vent. Eff., Req'd CFM, Total Supplied CFM

FAN SCHEDULE table with columns: UNIT NO., SERVICE, AREA SERVED, CFM, S.P., RPM, TYPE & ARRANGEMENT, MIN. MOTOR HP & VOLTAGE, MANUFACTURER & MODEL NO., DRIVE, CONTROL SCHEME, NOTES

- NOTES: 1. SCREEN 2. BACKDRAFT DAMPER 3. COLOR BY ARCHITECT 4. INTEGRAL DISCONNECT SWITCH 5. NOT USED 6. CORROSION RESISTANT CONTROL OPTIONS: A. CONTROL W/ ROOM LIGHTS B. CONTROL W/ THERMOSTAT C. CONTROL W/ SWITCH D. CONTINUOUS OPERATION E. CONTROL W/ TIMER SWITCH (VENTILATION: 19 MINUTES/HR. DELAY 10 MINUTES) F. CONTROL W/ TIMER SWITCH (VENTILATION: 28 MINUTES/HR. DELAY 10 MINUTES)

DIFFUSER SCHEDULE table with columns: SYMBOL, CFM, NECK SIZE, MODULE SIZE, FRAME TYPE, PATTERN, DAMPER, MATERIAL, SERVICE, FINISH, MANUFACTURER & MODEL NO., NOTES

- NOTES: GENERAL - MC RESPONSIBLE FOR VERIFYING QTY, COLOR & FRAME TYPE OF DIFFUSERS/GRILLES BEFORE ORDERING. PROVIDE SQR TO RND TRANSITIONS & PLENUMS AS NECESSARY. 1. DIFFUSER DESIGNATIONS ON PLANS AS FOLLOWS: DIFFUSER OR NECK SIZE, AIR QUANTITY, VERTICAL BLADE SPREAD (WHERE APPLICABLE), DIFFUSER TYPE AS NOTED ABOVE 2. FINISH TO MATCH / BE ABLE MATCH CEILING OR WALL OR DOOR. 3. FACTORY INSULATION BACKING ON GRILLES EXPOSED TO NON-CONDITIONED AREAS. ALTERNATELY, FIELD SUPPLY AND INSTALL.

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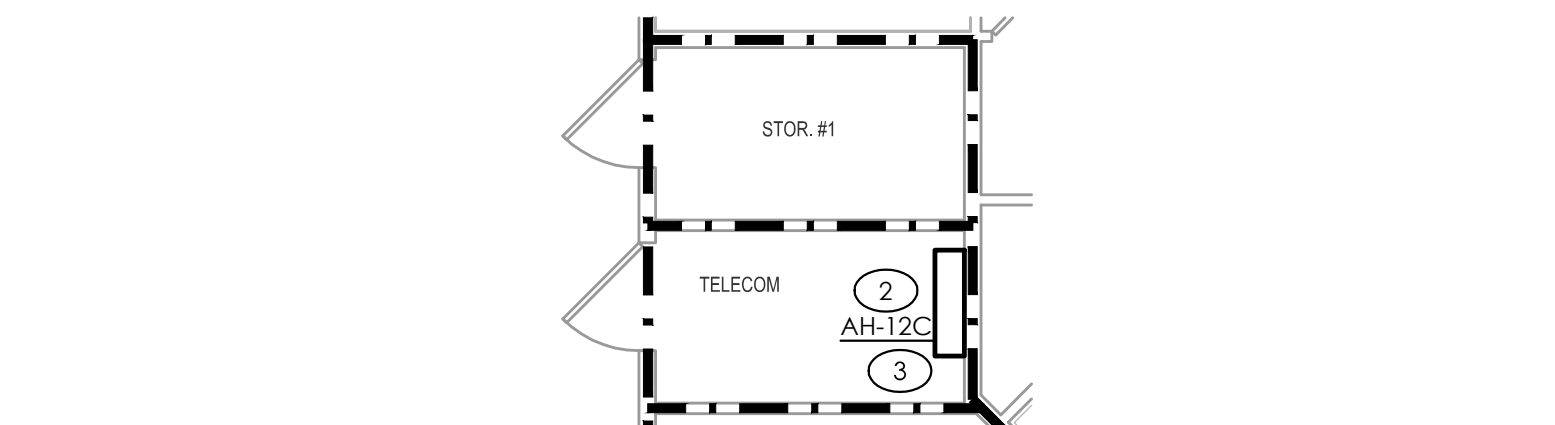




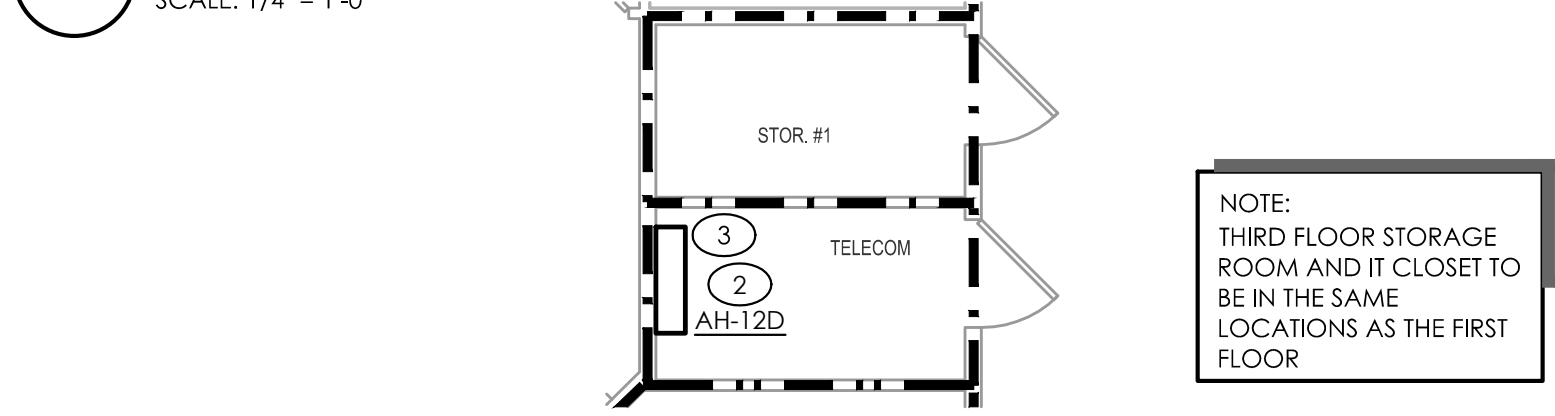
FIRE RATING LEGEND	
	1-HR WALL
	2-HR WALL
	* FLOOR/CEILING IS 1-HR RATED

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ARCHITECTURE

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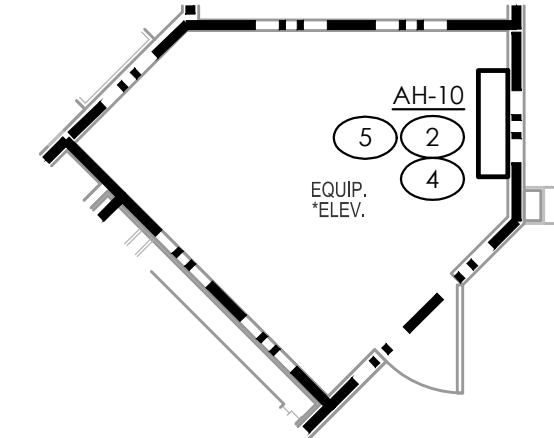


**4 MECHANICAL THIRD FLOOR LEFT TELECOM ROOM PLAN**  
SCALE: 1/4" = 1'-0"



**3 MECHANICAL THIRD FLOOR RIGHT TELECOM ROOM PLAN**  
SCALE: 1/4" = 1'-0"

NOTE:  
THIRD FLOOR STORAGE ROOM AND IT CLOSET TO BE IN THE SAME LOCATIONS AS THE FIRST FLOOR

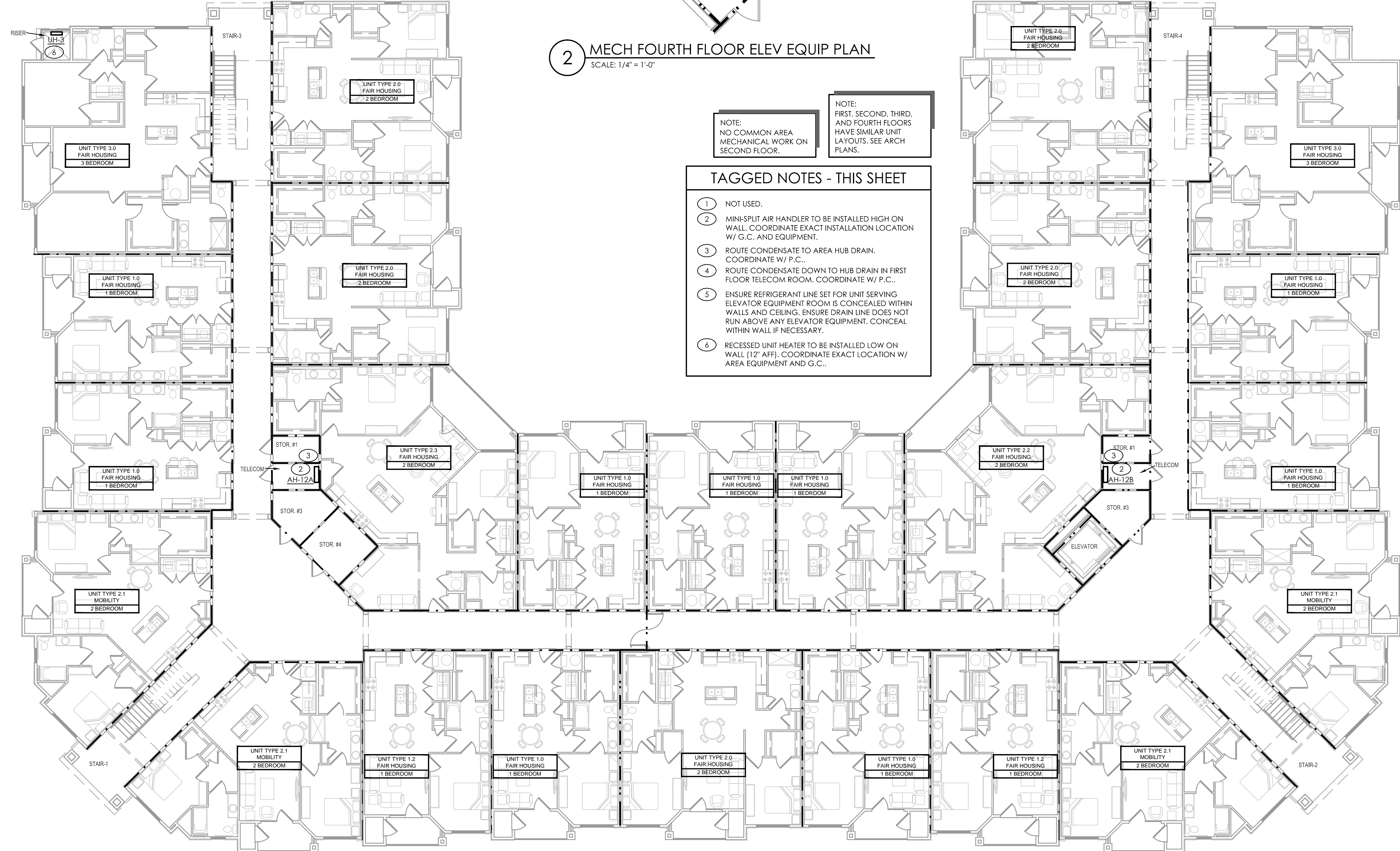


**2 MECH FOURTH FLOOR ELEV EQUIP PLAN**  
SCALE: 1/4" = 1'-0"

NOTE:  
NO COMMON AREA MECHANICAL WORK ON SECOND FLOOR.

NOTE:  
FIRST, SECOND, THIRD, AND FOURTH FLOORS HAVE SIMILAR UNIT MECHANICAL LAYOUTS. SEE ARCH PLANS.

- TAGGED NOTES - THIS SHEET**
- 1 NOT USED.
  - 2 MINI-SPLIT AIR HANDLER TO BE INSTALLED HIGH ON WALL. COORDINATE EXACT INSTALLATION LOCATION W/ G.C. AND EQUIPMENT.
  - 3 ROUTE CONDENSATE TO AREA HUB DRAIN. COORDINATE W/ P.C..
  - 4 ROUTE CONDENSATE DOWN TO HUB DRAIN IN FIRST FLOOR TELECOM ROOM. COORDINATE W/ P.C..
  - 5 ENSURE REFRIGERANT LINE SET FOR UNIT SERVING ELEVATOR EQUIPMENT ROOM IS CONCEALED WITHIN WALLS AND CEILING. ENSURE DRAIN LINE DOES NOT RUN ABOVE ANY ELEVATOR EQUIPMENT. CONCEAL WITHIN WALL IF NECESSARY.
  - 6 RECESSED UNIT HEATER TO BE INSTALLED LOW ON WALL (12" AFF), COORDINATE EXACT LOCATION W/ AREA EQUIPMENT AND G.C..



**1 MECHANICAL BUILDING TYPE 2 - FIRST FLOOR PLAN**  
SCALE: 3/32" = 1'-0"

Inspiration at Southpoint Apartments  
Zimmer Development Company  
Fort Meyers, Florida  
PERMIT SET

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PLUMBING MECHANICAL ELECTRICAL

PROGRESS DATE:	10/15/21
ISSUE DATE:	11/24/21
REVISIONS NUMBER	DATE INITIALS DESCRIPTION
PROJECT NO:	010819
DRAWN BY:	RMH
CHECKED BY:	ZLT
SHEET TITLE:	MECHANICAL BUILDING TYPE 2 - FIRST FLOOR PLAN
SHEET NUMBER:	M1.20

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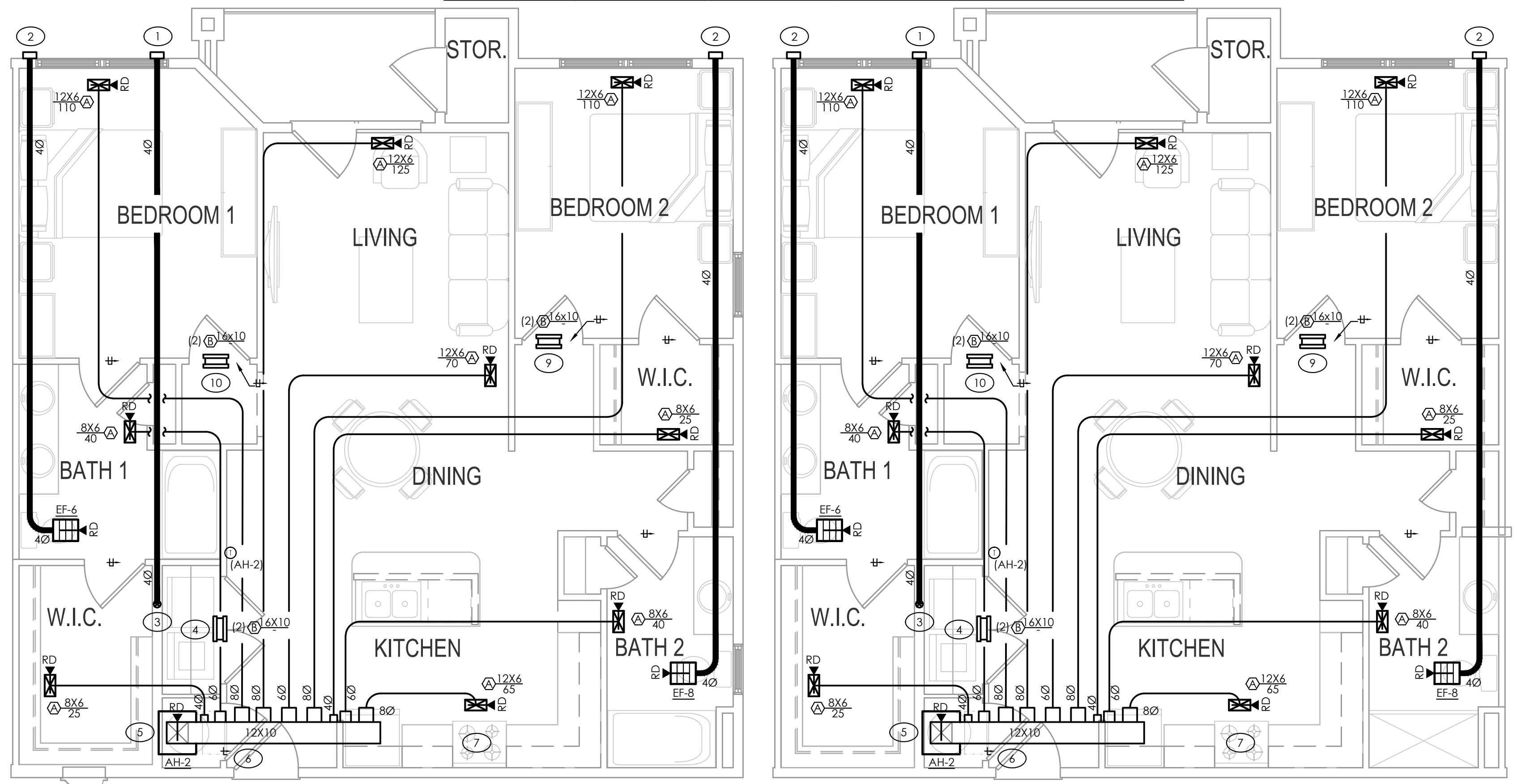
TAGGED NOTES - THIS SHEET

- 1 DRYER VENT TO WALL CAP W/ BDD (NO SCREEN). CAULK BEHIND AND AROUND CAP WITH 100% SILICONE. MAINTAIN 10' CLEARANCE FROM ALL BUILDING AIR INTAKES.
- 2 BATHROOM EXHAUST TO WALL CAP W/ BDD AND INSECT SCREEN. CAULK BEHIND AND AROUND CAP WITH 100% SILICONE. MAINTAIN 10' CLEARANCE FROM ALL BUILDING AIR INTAKES.
- 3 40" DRYER VENT UP WALL. PROVIDE RECESSED DRYER BOX. SEE DETAIL REGARDING FIRE STOPPING OF DRYER VENT DUCTS.
- 4 PROVIDE TRANSFER GRILLE CENTERED OVER LAUNDRY CLOSET DOOR. GRILLE TO HAVE MINIMUM FREE AREA OF 100 SQIN. TURN BLADES TO FACE UP.
- 5 AIR HANDLER TO BE INSTALLED ON WALL IN CLOSET. SUPPLY TO DISCHARGE FROM TOP OF UNIT AND TO ABOVE CEILING. RETURN THROUGH FRONT OF UNIT. PROVIDE WITH FILTER. SEE DETAIL.
- 6 PROVIDE DOOR WITH LOUVER. LOUVER MINIMUM FREE AREA TO BE 480 SQIN. COORDINATE LOUVER SELECTION W/ ARCHITECT.

- 7 U.L. LISTED RE-CIRCULATING EXHAUST HOOD BY G.C..
- 8 AIR HANDLER TO BE INSTALLED ON WALL IN CLOSET. SUPPLY TO DISCHARGE FROM TOP OF UNIT AND TO ABOVE CEILING. PROVIDE AIR HANDLER W/ MFG'S WALL PANEL FOR RETURN AIR AND AIR HANDLER ACCESS. SEE DETAIL.
- 9 PROVIDE TRANSFER GRILLE CENTERED OVER BEDROOM DOOR. GRILLE TO HAVE MINIMUM GRILLE AREA OF 75 SQIN. TURN BLADES TO FACE UP. PROVIDE 1" DOOR UNDERCUT.
- 10 PROVIDE TRANSFER GRILLE CENTERED OVER BEDROOM DOOR. GRILLE TO HAVE MINIMUM GRILLE AREA OF 100 SQIN. TURN BLADES TO FACE UP. PROVIDE 1" DOOR UNDERCUT.
- 11 UNITS TYPE 1.0 ADJACENT TO UNITS TYPE 2.2 TO HAVE BATHROOM AND/OR DRYER EXHAUST DUCT SERVING UNIT TYPE 2.2 ROUTED ABOVE CEILING IN AREA SHOWN BY DASHED LINE. SEE SHEET M132 FOR UNIT TYPE 2.2 DUCT ROUTING DETAILS.

MECHANICAL VENTILATION CALCULATIONS (CONT.)

APARTMENT UNIT	EXHAUST FAN	EXHAUST FAN CFM	AUTOMATIC OPERATION TIME PER HOUR (MINUTES)	PROVIDED VENTILATION (CFM)
TYPE 2.0 FAIR HOUSING	EF-8	110	28	51
TYPE 1.0 FAIR HOUSING	EF-7	110	19	35
TYPE 2.0 FAIR HOUSING	EF-8	110	28	51



6 MECHANICAL FAIR HOUSING UNIT TYPE 2.0 (EXTERIOR) SCALE: 1/4" = 1'-0"

5 MECHANICAL FAIR HOUSING UNIT TYPE 2.0 (INTERIOR) SCALE: 1/4" = 1'-0"

DRYER VENT LENGTH

2020 FLMC SEC 504.8  
 \*UNIT TYPE 1.2 & 1.3 FAIR HOUSING\*;  
 (1) 90° BEND = 5' + 9' (V) + 26' (H) = 40' > 35'

1. INSTALLED DRYER MUST BE RATED BY MFG FOR VENT LENGTH OF 40' OR GREATER WHEN INSTALLED W/ (1) 40° 90° ELBOW(S).
2. PROVIDE A PERMANENT PLACARD WITHIN 4' OF THE DRYER EXHAUST CONNECTION STATING EQUIVALENT LENGTH OF EXHAUST VENT. (2020 FLMC 504.8.5)
3. DRYER VENT DUCT EXCEEDS 35 EQUIVALENT FEET. M.C. IS TO PROVIDE FIELD INSPECTOR WITH INSTALLATION INSTRUCTIONS FOR MAKE AND MODEL OF DRYER TO BE INSTALLED. IF DRYER DUCT IS TO BE CONCEALED, FIELD INSPECTOR IS TO INSPECT DUCT BEFORE BEING ENCLOSED IN STRUCTURE. (2020 FLMC 504.8.4.2)
4. PROVIDE SHIELD PLATES ON THE FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4" OF MATERIAL BETWEEN DRYER DUCT AND FACE OF FRAMING MEMBER. SHIELD PLATES ARE TO BE OF STEEL AND HAVE A MINIMUM THICKNESS OF 0.062 INCHES AND EXTEND A MINIMUM OF 2 INCHES ABOVE SOLE PLATES AND BELOW TOP PLATES. (2020 FLMC 504.7)

DRYER VENT LENGTH

2020 FLMC SEC 504.8  
 \*UNIT TYPE 2.0 FAIR HOUSING INTERIOR, EXTERIOR LAUNDRY\*;  
 (1) 90° BEND = 5' + 9' (V) + 26' (H) = 40' > 35'

1. INSTALLED DRYER MUST BE RATED BY MFG FOR VENT LENGTH OF 40' OR GREATER WHEN INSTALLED W/ (1) 40° 90° ELBOW(S).
2. PROVIDE A PERMANENT PLACARD WITHIN 4' OF THE DRYER EXHAUST CONNECTION STATING EQUIVALENT LENGTH OF EXHAUST VENT. (2020 FLMC 504.8.5)
3. DRYER VENT DUCT EXCEEDS 35 EQUIVALENT FEET. M.C. IS TO PROVIDE FIELD INSPECTOR WITH INSTALLATION INSTRUCTIONS FOR MAKE AND MODEL OF DRYER TO BE INSTALLED. IF DRYER DUCT IS TO BE CONCEALED, FIELD INSPECTOR IS TO INSPECT DUCT BEFORE BEING ENCLOSED IN STRUCTURE. (2020 FLMC 504.8.4.2)
4. PROVIDE SHIELD PLATES ON THE FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4" OF MATERIAL BETWEEN DRYER DUCT AND FACE OF FRAMING MEMBER. SHIELD PLATES ARE TO BE OF STEEL AND HAVE A MINIMUM THICKNESS OF 0.062 INCHES AND EXTEND A MINIMUM OF 2 INCHES ABOVE SOLE PLATES AND BELOW TOP PLATES. (2020 FLMC 504.7)

DRYER VENT LENGTH

2020 FLMC SEC 504.8  
 \*UNIT TYPE 1.0 FAIR HOUSING, MOBILITY LAUNDRY\*;  
 (1) 90° BEND = 5' + 9' (V) + 18' (H) = 32' < 35'

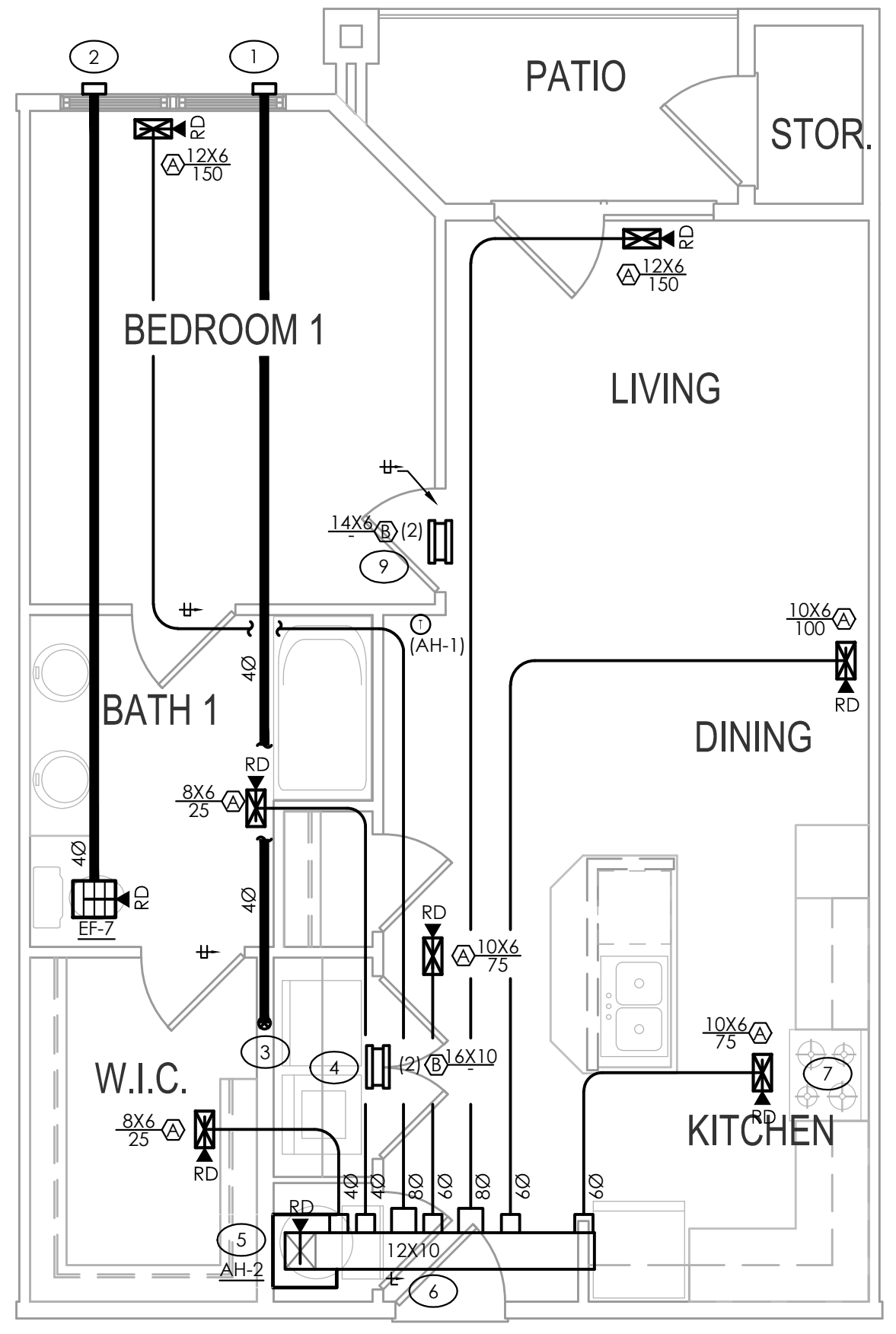
1. INSTALLED DRYER MUST BE RATED BY MFG FOR VENT LENGTH OF 32' OR GREATER WHEN INSTALLED W/ (1) 40° 90° ELBOW(S).
2. PROVIDE SHIELD PLATES ON THE FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4" OF MATERIAL BETWEEN DRYER DUCT AND FACE OF FRAMING MEMBER. SHIELD PLATES ARE TO BE OF STEEL AND HAVE A MINIMUM THICKNESS OF 0.062 INCHES AND EXTEND A MINIMUM OF 2 INCHES ABOVE SOLE PLATES AND BELOW TOP PLATES. (2020 FLMC 504.7)

GENERAL NOTES - THIS SHEET

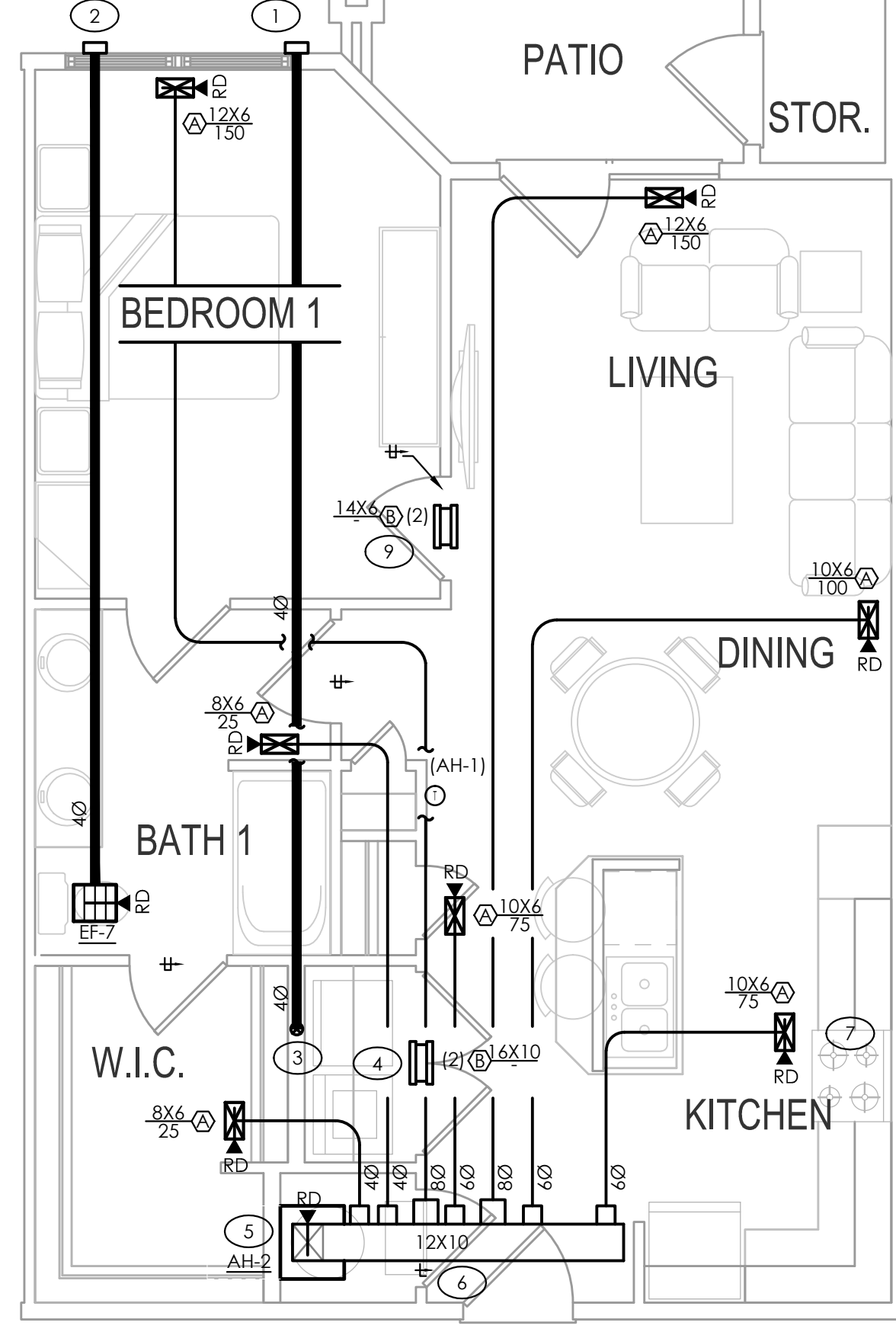
1. DUCTWORK ROUTING TO BE COORDINATED WITH STRUCTURE AND TRUSS SPACING.
2. SEE BLDG'S ROOF PLAN FOR HEAT PUMP LOCATIONS.
3. NO FLEXIBLE DUCTWORK TO BE USED FOR EXHAUST APPLICATIONS. RIGID METAL DUCTWORK ONLY.
4. AIR HANDLERS STACKED ABOVE WATER HEATERS. SEE DETAIL AND COORDINATE WITH P.C..
5. SEE BUILDING PLANS FOR UNIT DEMISING WALL AND FLOOR/CEILING RATINGS.
6. MECHANICAL CLOSETS AND THEIR CONTENTS MUST BE PLENUM RATED IN UNIT TYPE 2.0.
7. M.C. TO COORDINATE DUCT LOCATIONS WITH P.C. AND AREA PLUMBING STACKS AND OVERHEAD WASTE AND VENT PIPING.
8. M.C. TO COORDINATE WITH E.C. AND AREA PANEL FEEDER LOCATIONS.
9. M.C. TO COORDINATE WITH FIRE SPRINKLER CONTRACTOR AND AREA SPRINKLER PIPING.
10. SEE DETAILS REGARDING FIRE STOPPING OF DRYER EXHAUST DUCTS.

MECHANICAL VENTILATION CALCULATIONS

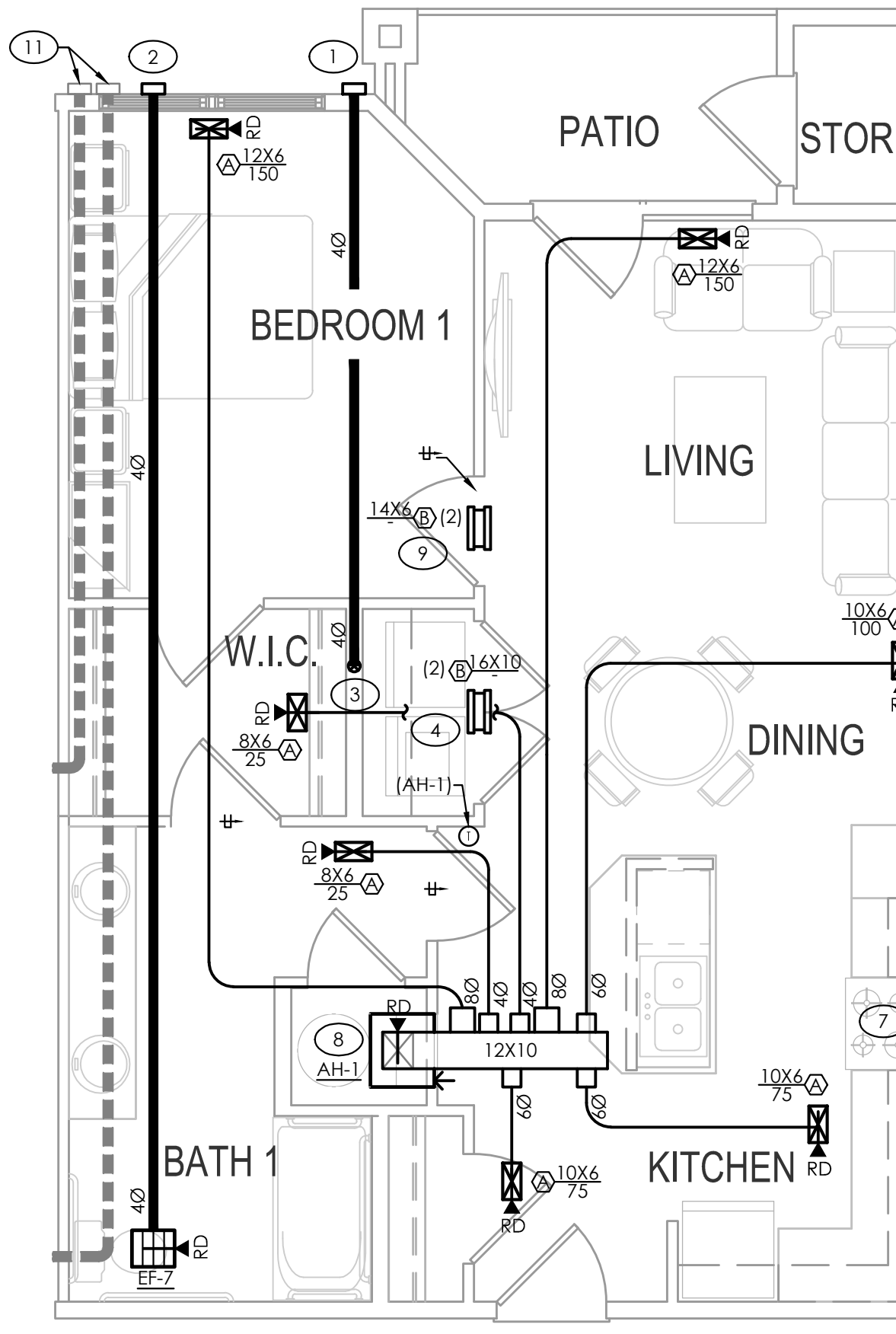
ROOM	LIVING AREA (SQFT)	AVG. CEILING HEIGHT (FT)	LIVING AREA VOLUME (CU. FT)	# OF BEDROOMS	# OF OCCUPANTS	REQUIRED OUTSIDE AIR (CFM)
TYPE 1.0 FAIR HOUSING	657	9	5913	1	2	34
TYPE 1.0 MOBILITY	657	9	5913	1	2	34
TYPE 2.0 FAIR HOUSING (EXTERIOR)	965	9	8685	2	3	51
TYPE 2.0 FAIR HOUSING (INTERIOR)	965	9	8685	2	3	51



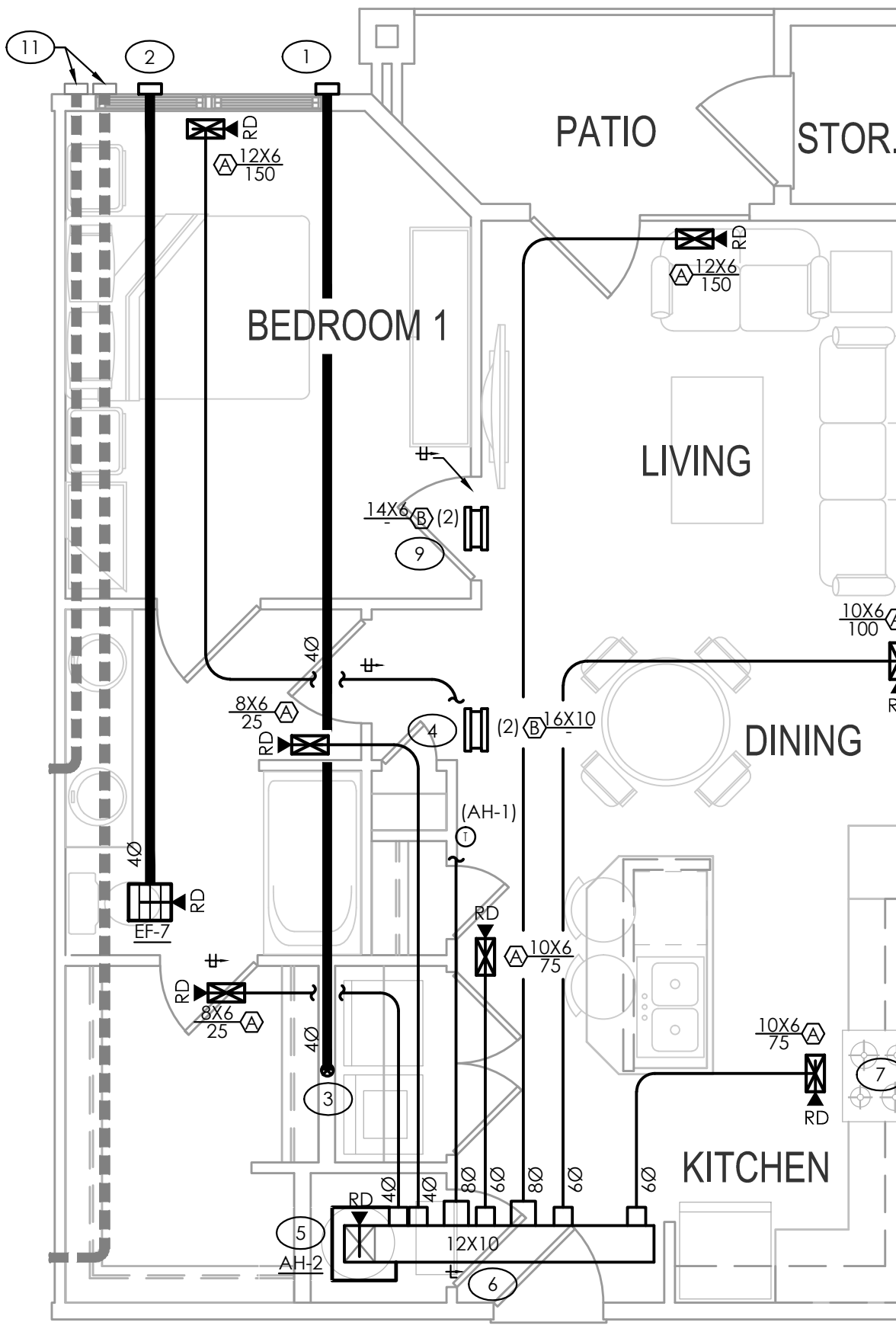
4 MECHANICAL FAIR HOUSING UNIT TYPE 1.3 SCALE: 1/4" = 1'-0"



3 MECHANICAL FAIR HOUSING UNIT TYPE 1.2 SCALE: 1/4" = 1'-0"



2 MECHANICAL MOBILITY UNIT TYPE 1.0 SCALE: 1/4" = 1'-0"



1 MECHANICAL FAIR HOUSING UNIT TYPE 1.0 SCALE: 1/4" = 1'-0"

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 PLUMBING MECHANICAL ELECTRICAL

PROGRESS DATE:	10/15/21
ISSUE DATE:	11/24/21
REVISIONS NUMBER	DATE INITIALS DESCRIPTION
PROJECT NO:	010819
DRAWN BY:	RMIL
CHECKED BY:	ZLT
SHEET TITLE:	MECHANICAL UNIT PLANS
SHEET NUMBER:	M1.30

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MECHANICAL VENTILATION CALCULATIONS						
ROOM	LIVING AREA (SQFT)	AVG. CEILING HEIGHT (FT)	LIVING AREA VOLUME (CU. FT)	# OF BEDROOMS	# OF OCCUPANTS	REQUIRED OUTSIDE AIR (CFM)
TYPE 2.1 FAIR HOUSING	977	9	8793	2	3	51
TYPE 2.1 MOBILITY	977	9	8793	2	3	51
TYPE 2.0 FAIR HOUSING	965	9	8685	2	3	51
TYPE 2.0 MOBILITY	948	9	8532	2	3	50

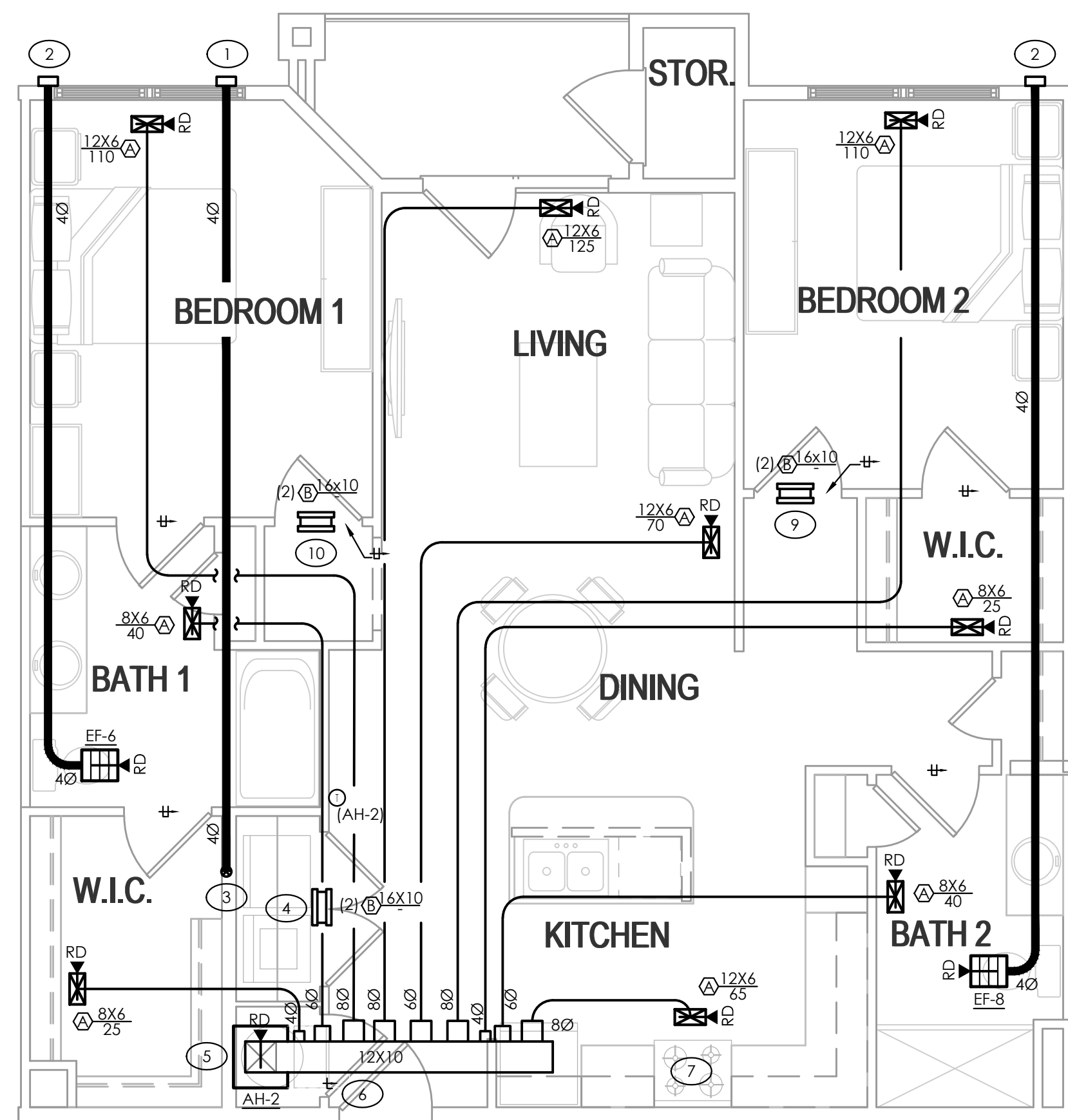
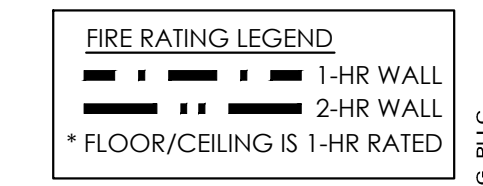
MECHANICAL VENTILATION CALCULATIONS (CONT.)				
APARTMENT UNIT	EXHAUST FAN	EXHAUST FAN CFM	AUTOMATIC OPERATION TIME PER HOUR (MINUTES)	PROVIDED VENTILATION (CFM)
TYPE 2.1 FAIR HOUSING, MOBILITY	EF-8	110	28	51
TYPE 2.0 FAIR HOUSING, MOBILITY	EF-8	110	28	51
TYPE 2.1 FAIR HOUSING, MOBILITY	EF-8	110	28	51
TYPE 2.0 FAIR HOUSING, MOBILITY	EF-8	110	28	51

**TAGGED NOTES - THIS SHEET**

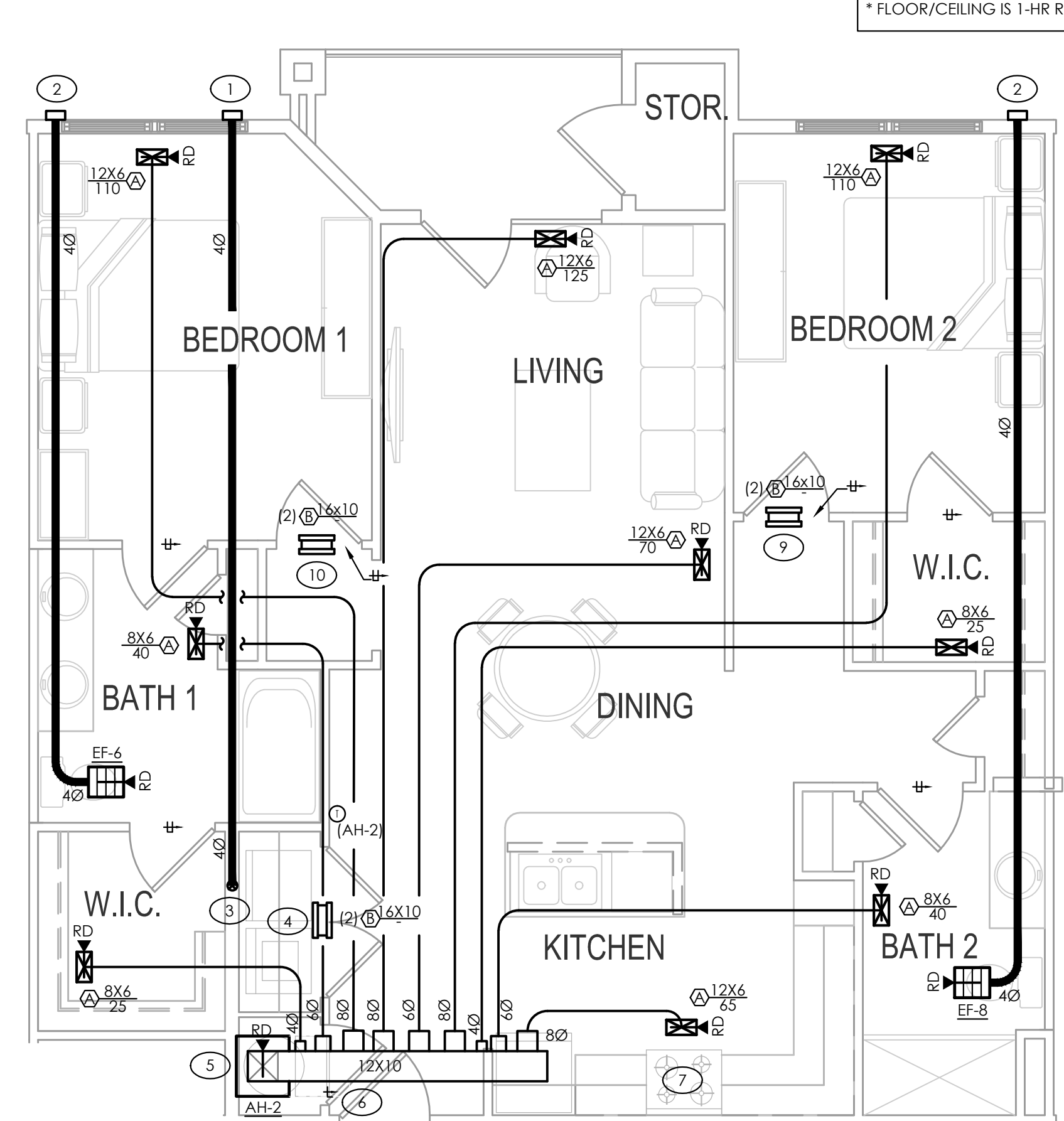
- 1 DRYER VENT TO WALL CAP W/ BDD (NO SCREEN). CAULK BEHIND AND AROUND CAP WITH 100% SILICONE. MAINTAIN 1" CLEARANCE FROM ALL BUILDING AIR INTAKES.
- 2 BATHROOM EXHAUST TO WALL CAP W/ BDD AND INSECT SCREEN. CAULK BEHIND AND AROUND CAP WITH 100% SILICONE. MAINTAIN 1" CLEARANCE FROM ALL BUILDING AIR INTAKES.
- 3 40 DRYER VENT UP WALL. PROVIDE RECESSED DRYER BOX. SEE DETAIL REGARDING FIRE STOPPING OF DRYER VENT DUCTS.
- 4 PROVIDE TRANSFER GRILLE CENTERED OVER LAUNDRY CLOSET DOOR. GRILLE TO HAVE MINIMUM FREE AREA OF 100 SQIN. TURN BLADES TO FACE UP.
- 5 AIR HANDLER TO BE INSTALLED ON WALL IN CLOSET. SUPPLY TO DISCHARGE FROM TOP OF UNIT AND TO ABOVE CEILING. RETURN THROUGH FRONT OF UNIT. SEE DETAIL.
- 6 PROVIDE DOOR WITH LOUVER. LOUVER MINIMUM FREE AREA TO BE 480 SQIN. COORDINATE LOUVER SELECTION W/ ARCHITECT.
- 7 U.L. LISTED RE-CIRCULATING EXHAUST HOOD BY G.C..
- 8 PROVIDE TRANSFER GRILLE CENTERED OVER BEDROOM DOOR. GRILLE TO HAVE MINIMUM GRILLE AREA OF 75 SQIN. TURN BLADES TO FACE UP. PROVIDE 1" DOOR UNDERCUT.
- 9 PROVIDE TRANSFER GRILLE CENTERED OVER BEDROOM DOOR. GRILLE TO HAVE MINIMUM GRILLE AREA OF 100 SQIN. TURN BLADES TO FACE UP. PROVIDE 1" DOOR UNDERCUT.

**GENERAL NOTES - THIS SHEET**

1. DUCTWORK ROUTING TO BE COORDINATED WITH STRUCTURE AND TRUSS SPACING.
2. SEE BLDG PLAN FOR HEAT PUMP LOCATIONS.
3. NO FLEXIBLE DUCTWORK TO BE USED FOR EXHAUST APPLICATIONS. RIGID METAL DUCTWORK ONLY.
4. AIR HANDLERS STACKED ABOVE WATER HEATER. SEE DETAIL AND COORDINATE WITH P.C..
5. SEE BUILDING PLANS FOR UNIT DEMISING WALL AND FLOOR/CEILING RATINGS.
6. MECHANICAL CLOSETS AND THEIR CONTENTS MUST BE PLENUM RATED.
7. M.C. TO COORDINATE DUCT LOCATIONS WITH P.C. AND AREA PLUMBING STACKS AND OVERHEAD WASTE AND VENT PIPING.
8. M.C. TO COORDINATE WITH E.C. AND AREA PANEL FEEDER LOCATIONS.
9. M.C. TO COORDINATE WITH FIRE SPRINKLER CONTRACTOR AND AREA SPRINKLER PIPING.
10. SEE DETAILS REGARDING FIRE STOPPING OF DRYER EXHAUST DUCTS.



**4 MECHANICAL FAIR HOUSING UNIT TYPE 2.0 (INTERIOR WITH SHAFT)**  
SCALE: 1/4" = 1'-0"



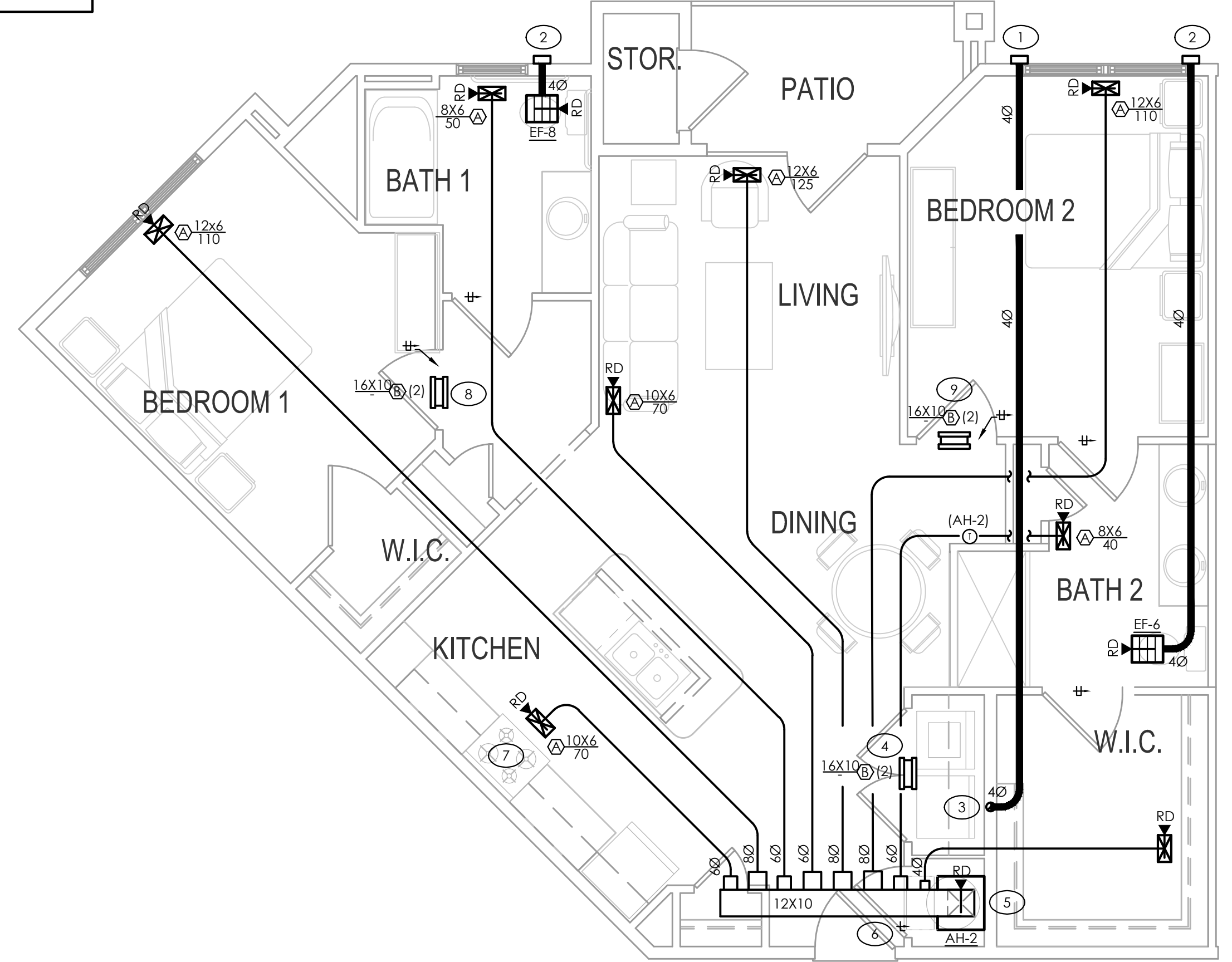
**3 MECHANICAL FAIR HOUSING UNIT TYPE 2.0 (INTERIOR WITH IDF)**  
SCALE: 1/4" = 1'-0"

**DRYER VENT LENGTH**  
2020 FLMC SEC 504.8  
"UNIT TYPE 2.1 FAIR HOUSING, MOBILITY LAUNDRY":  
(2) 90° BEND = 10' + 9" (V) + 29" (H) = 48" > 35"

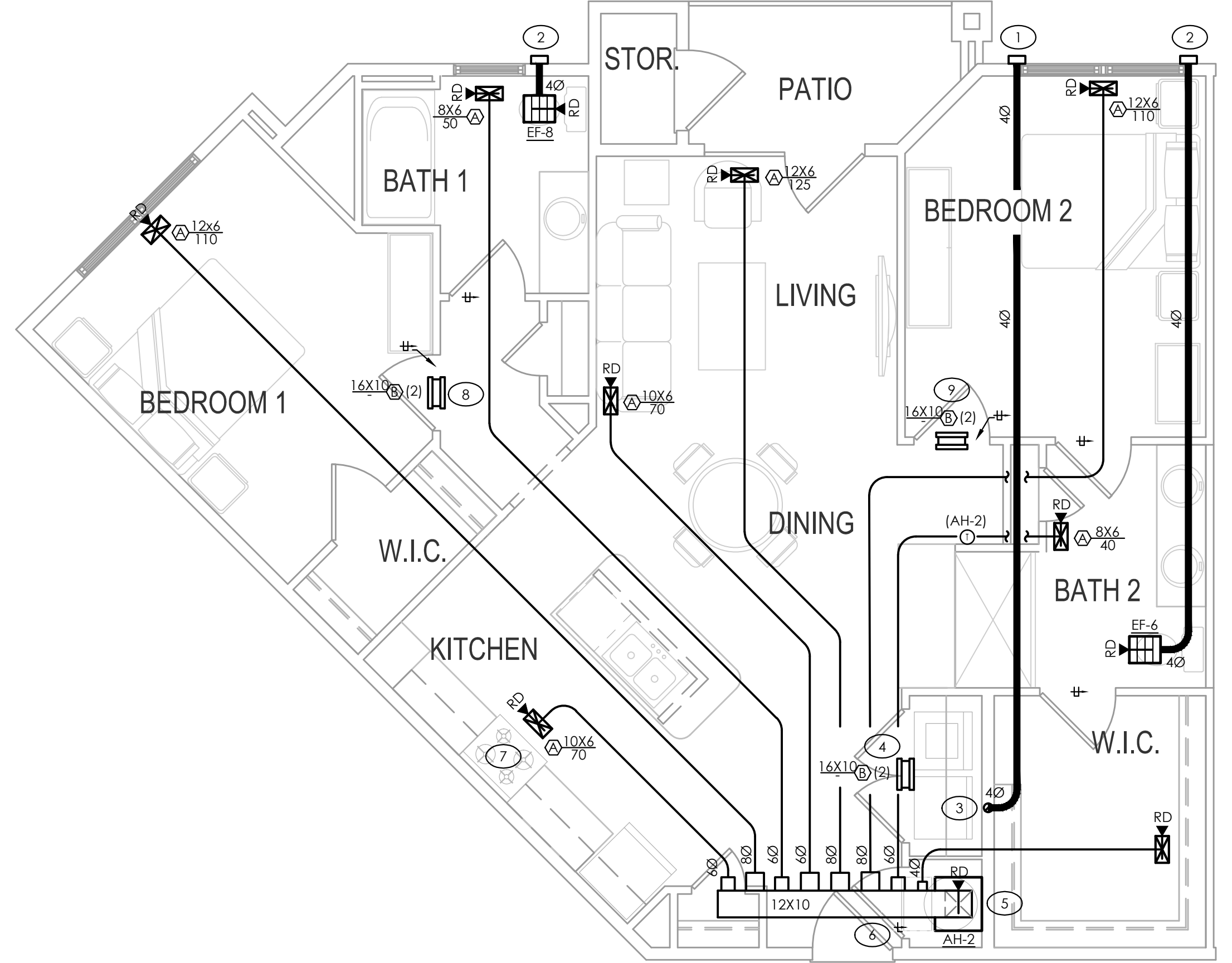
1. INSTALLED DRYER MUST BE RATED BY MFG FOR VENT LENGTH OF 48" OR GREATER WHEN INSTALLED W/ (2) 40° 90° ELBOW(S).
2. PROVIDE A PERMANENT PLACARD WITHIN 6' OF THE DRYER EXHAUST CONNECTION STATING EQUIVALENT LENGTH OF EXHAUST VENT. (2020 FLMC 504.8.5)
3. DRYER VENT DUCT EXCEEDS 35 EQUIVALENT FEET, M.C. IS TO PROVIDE FIELD INSPECTOR WITH INSTALLATION INSTRUCTIONS FOR MAKE AND MODEL OF DRYER TO BE INSTALLED. IF DRYER DUCT IS TO BE CONCEALED, FIELD INSPECTOR IS TO INSPECT DUCT BEFORE BEING ENCLOSED IN STRUCTURE. (2020 FLMC 504.8.4.2)
4. PROVIDE SHIELD PLATES ON THE FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4" OF MATERIAL BETWEEN DRYER DUCT AND FACE OF FRAMING MEMBER. SHIELD PLATES ARE TO BE OF STEEL AND HAVE A MINIMUM THICKNESS OF 0.062 INCHES AND EXTEND A MINIMUM OF 2 INCHES ABOVE SOLE PLATES AND BELOW TOP PLATES. (2020 FLMC 504.7)

**DRYER VENT LENGTH**  
2020 FLMC SEC 504.8  
"UNIT TYPE 2.0 FAIR HOUSING W/ SHAFT, W/ IDF LAUNDRY":  
(1) 90° BEND = 5' + 9" (V) + 26" (H) = 40" > 35"

1. INSTALLED DRYER MUST BE RATED BY MFG FOR VENT LENGTH OF 40" OR GREATER WHEN INSTALLED W/ (1) 40° 90° ELBOW(S).
2. PROVIDE A PERMANENT PLACARD WITHIN 6' OF THE DRYER EXHAUST CONNECTION STATING EQUIVALENT LENGTH OF EXHAUST VENT. (2020 FLMC 504.8.5)
3. DRYER VENT DUCT EXCEEDS 35 EQUIVALENT FEET, M.C. IS TO PROVIDE FIELD INSPECTOR WITH INSTALLATION INSTRUCTIONS FOR MAKE AND MODEL OF DRYER TO BE INSTALLED. IF DRYER DUCT IS TO BE CONCEALED, FIELD INSPECTOR IS TO INSPECT DUCT BEFORE BEING ENCLOSED IN STRUCTURE. (2020 FLMC 504.8.4.2)
4. PROVIDE SHIELD PLATES ON THE FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4" OF MATERIAL BETWEEN DRYER DUCT AND FACE OF FRAMING MEMBER. SHIELD PLATES ARE TO BE OF STEEL AND HAVE A MINIMUM THICKNESS OF 0.062 INCHES AND EXTEND A MINIMUM OF 2 INCHES ABOVE SOLE PLATES AND BELOW TOP PLATES. (2020 FLMC 504.7)



**2 MECHANICAL MOBILITY UNIT TYPE 2.1**  
SCALE: 1/4" = 1'-0"



**1 MECHANICAL FAIR HOUSING UNIT TYPE 2.2**  
SCALE: 1/4" = 1'-0"

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708 ST. HARVEY ST.  
RALEIGH, NC 27605 U.G.#: P-0090  
P-01241-4247 F-018480-3797  
PLUMBING MECHANICAL ELECTRICAL

PROJECT NO:	010819
DRAWN BY:	RM/L
CHECKED BY:	ZLT
SHEET TITLE:	MECHANICAL UNIT PLANS
SHEET NUMBER:	M1.31

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FLC2 08-01.31.DWG

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MECHANICAL VENTILATION CALCULATIONS						
ROOM	LIVING AREA (SQFT)	AVG. CEILING HEIGHT (FT)	LIVING AREA VOLUME (CU. FT)	# OF BEDROOMS	# OF OCCUPANTS	REQUIRED OUTSIDE AIR (CFM)
TYPE 2.2 FAIR HOUSING	1305	9	11745	2	3	69
TYPE 2.2 FAIR HOUSING	1305	9	11745	2	3	69

MECHANICAL VENTILATION CALCULATIONS (CONT.)				
APARTMENT UNIT	EXHAUST FAN	EXHAUST FAN CFM	AUTOMATIC OPERATION TIME PER HOUR (MINUTES)	PROVIDED VENTILATION (CFM)
TYPE 2.2 FAIR HOUSING	EF-7	110	19	35
TYPE 2.2 FAIR HOUSING	EF-7	110	19	35
TYPE 2.2 FAIR HOUSING	EF-7	110	19	35
TYPE 2.2 FAIR HOUSING	EF-7	110	19	35

**DRYER VENT LENGTH**

2020 FLMC SEC 504.8  
 \*UNIT TYPE 2.2, UNIT TYPE 2.3 "LAUNDRY";  
 (2) 90° BEND = 10' + 9' (V) + 22' (H) = 41' > 35'

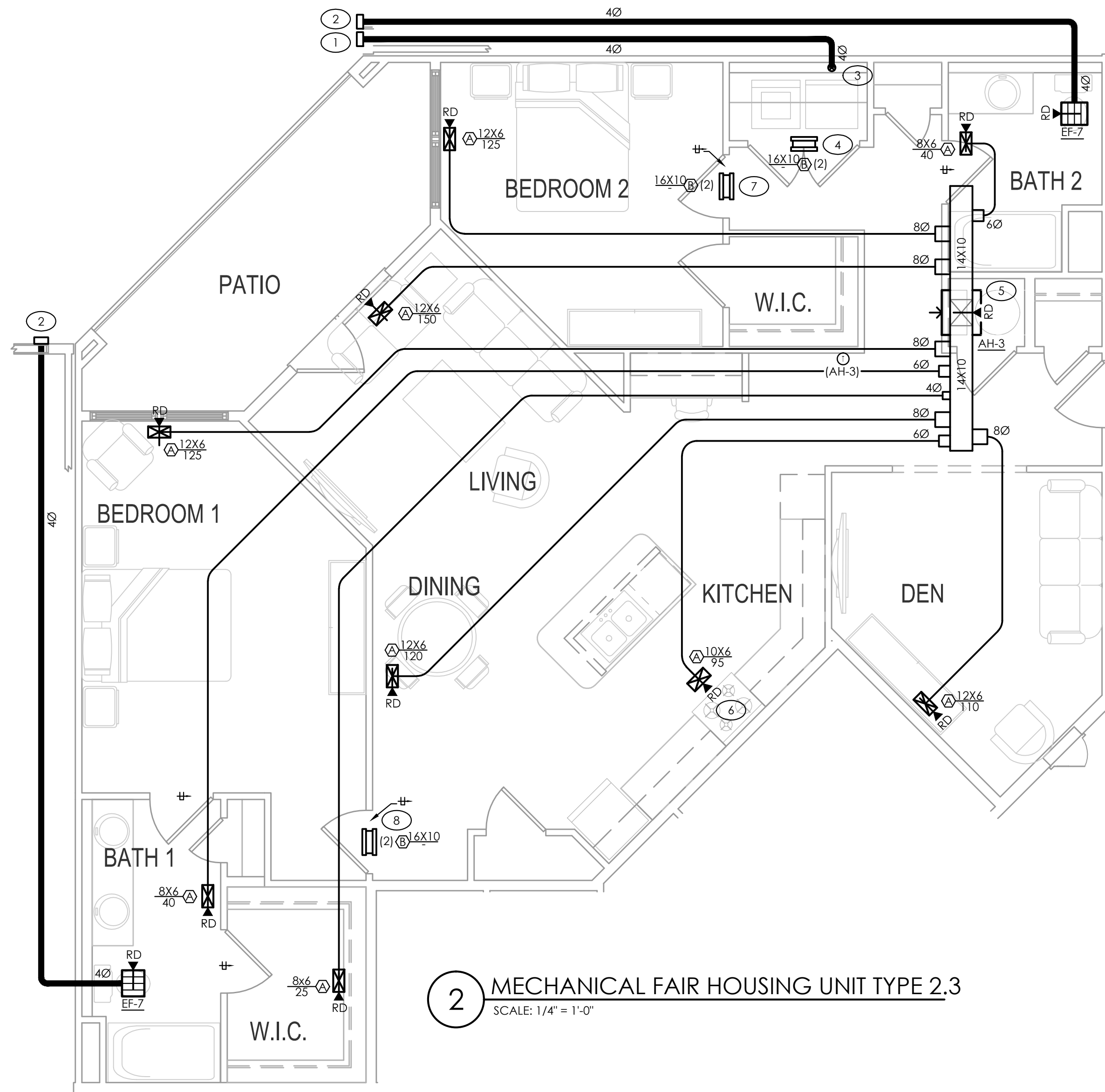
1. INSTALLED DRYER MUST BE RATED BY MFG FOR VENT LENGTH OF 41' OR GREATER WHEN INSTALLED W/ (2) 40° 90° ELBOWS).
2. PROVIDE A PERMANENT PLACARD WITHIN 6' OF THE DRYER EXHAUST CONNECTION STATING EQUIVALENT LENGTH OF EXHAUST VENT. (2020 FLMC 504.8.5)
3. DRYER VENT DUCT EXCEEDS 35 EQUIVALENT FEET. M.C. IS TO PROVIDE FIELD INSPECTOR WITH INSTALLATION INSTRUCTIONS FOR MAKE AND MODEL OF DRYER TO BE INSTALLED. IF DRYER DUCT IS TO BE CONCEALED, FIELD INSPECTOR IS TO INSPECT DUCT BEFORE BEING ENCLOSED IN STRUCTURE. (2020 FLMC 504.8.4.2)
4. PROVIDE SHIELD PLATES ON THE FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4" OF MATERIAL BETWEEN DRYER DUCT AND FACE OF FRAMING MEMBER. SHIELD PLATES ARE TO BE OF STEEL AND HAVE A MINIMUM THICKNESS OF 0.062 INCHES AND EXTEND A MINIMUM OF 2 INCHES ABOVE SOLE PLATES AND BELOW TOP PLATES. (2020 FLMC 504.7)

**TAGGED NOTES - THIS SHEET**

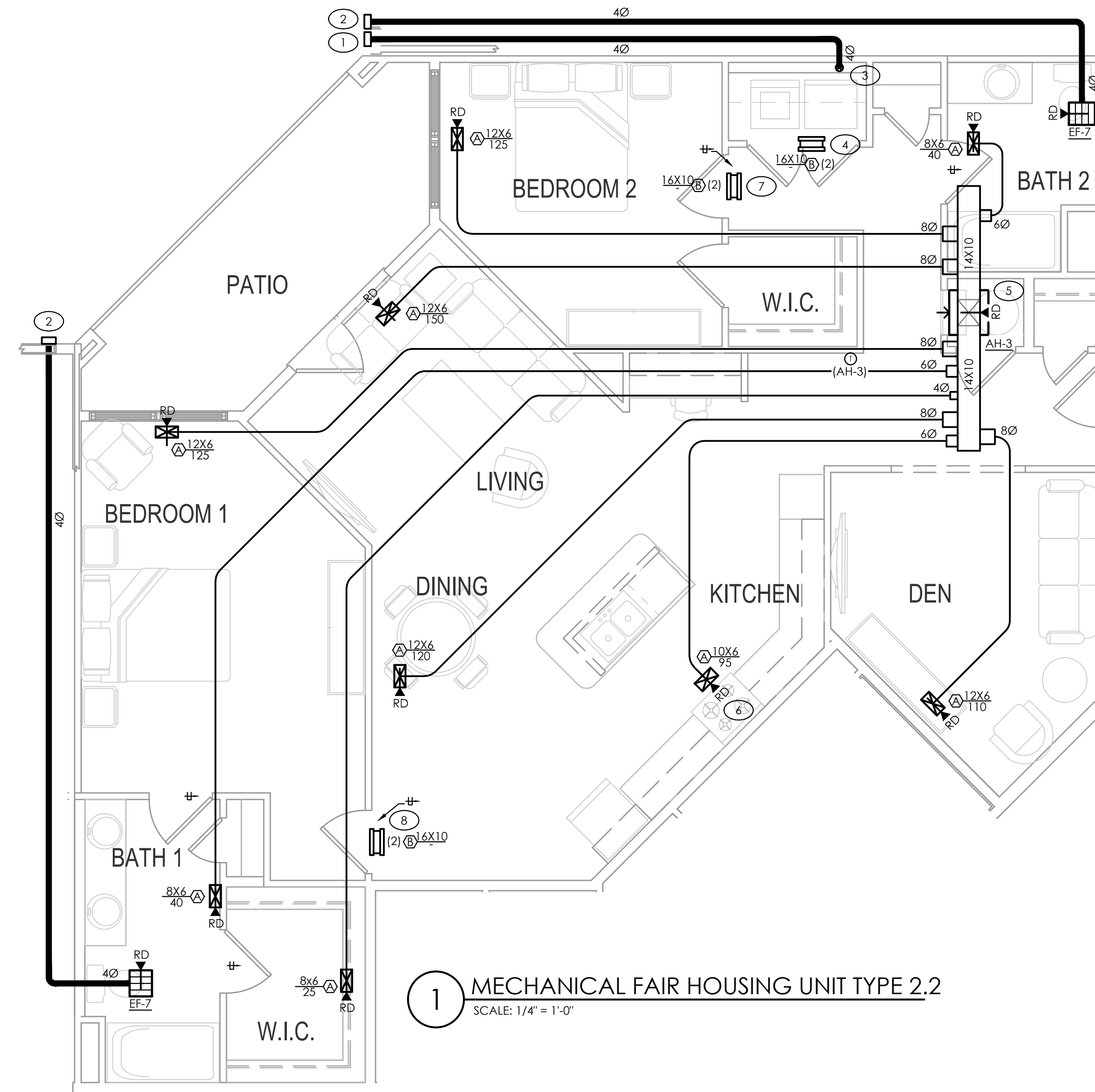
1. DRYER VENT ABOVE CEILING IN ADJACENT UNIT TYPE 1.0 TO WALL CAP W/ BDD (NO SCREEN). CAULK BEHIND AND AROUND CAP WITH 100% SILICONE. MAINTAIN 10' CLEARANCE FROM ALL BUILDING AIR INTAKES.
2. BATHROOM EXHAUST ABOVE CEILING IN ADJACENT UNIT TYPE 1.0 TO WALL CAP W/ BDD AND INSECT SCREEN. CAULK BEHIND AND AROUND CAP WITH 100% SILICONE. MAINTAIN 10' CLEARANCE FROM ALL BUILDING AIR INTAKES.
3. 40 DRYER VENT UP WALL. PROVIDE RECESSED DRYER BOX. SEE DETAIL REGARDING FIRE STOPPING OF DRYER VENT DUCTS.
4. PROVIDE TRANSFER GRILLE CENTERED OVER LAUNDRY CLOSET DOOR. GRILLE TO HAVE MINIMUM FREE AREA OF 100 SQIN. TURN BLADES TO FACE UP. AIR HANDLER TO BE INSTALLED ON WALL IN CLOSET. SUPPLY TO DISCHARGE FROM TOP OF UNIT AND TO ABOVE CEILING. PROVIDE AIR HANDLER W/ MFG'S WALL PANEL FOR RETURN AIR AND AIR HANDLER ACCESS. SEE DETAIL.
5. U.L. LISTED RE-CIRCULATING EXHAUST HOOD BY G.C..
6. PROVIDE TRANSFER GRILLE CENTERED OVER BEDROOM DOOR. GRILLE TO HAVE MINIMUM GRILLE AREA OF 75 SQIN. TURN BLADES TO FACE UP. PROVIDE 1" DOOR UNDERCUT.
7. PROVIDE TRANSFER GRILLE CENTERED OVER BEDROOM DOOR. GRILLE TO HAVE MINIMUM GRILLE AREA OF 100 SQIN. TURN BLADES TO FACE UP. PROVIDE 1" DOOR UNDERCUT.
8. PROVIDE TRANSFER GRILLE CENTERED OVER BEDROOM DOOR. GRILLE TO HAVE MINIMUM GRILLE AREA OF 100 SQIN. TURN BLADES TO FACE UP. PROVIDE 1" DOOR UNDERCUT.

**GENERAL NOTES - THIS SHEET**

1. DUCTWORK ROUTING TO BE COORDINATED WITH STRUCTURE AND TRUSS SPACING.
2. SEE BLDG PLAN FOR HEAT PUMP LOCATIONS.
3. NO FLEXIBLE DUCTWORK TO BE USED FOR EXHAUST APPLICATIONS. RIGID METAL DUCTWORK ONLY.
4. AIR HANDLERS STACKED ABOVE WATER HEATERS. SEE DETAIL AND COORDINATE WITH P.C..
5. SEE BUILDING PLANS FOR UNIT DEMISING WALL AND FLOOR/CEILING RATINGS.
6. M.C. TO COORDINATE DUCT LOCATIONS WITH P.C. AND AREA PLUMBING STACKS AND OVERHEAD WASTE AND VENT PIPING.
7. M.C. TO COORDINATE WITH E.C. AND AREA PANEL FEEDER LOCATIONS.
8. M.C. TO COORDINATE WITH FIRE SPRINKLER CONTRACTOR AND AREA SPRINKLER PIPING.
9. SEE DETAILS REGARDING FIRE STOPPING OF DRYER EXHAUST DUCTS.



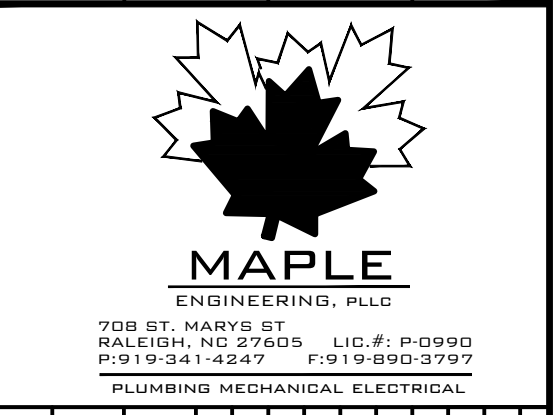
**2 MECHANICAL FAIR HOUSING UNIT TYPE 2.3**  
 SCALE: 1/4" = 1'-0"



**1 MECHANICAL FAIR HOUSING UNIT TYPE 2.2**  
 SCALE: 1/4" = 1'-0"



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CHECKED BY:	ZLT
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MECHANICAL VENTILATION CALCULATIONS						
ROOM	LIVING AREA (SQFT)	AVG. CEILING HEIGHT (FT)	LIVING AREA VOLUME (CU. FT)	# OF BEDROOMS	# OF OCCUPANTS	REQUIRED OUTSIDE AIR (CFM)
TYPE 3.0 FAIR HOUSING	1192	9	10728	3	4	63
TYPE 3.0 FAIR HOUSING B1 ALT	1192	9	10728	3	4	63
TYPE 3.0 FAIR HOUSING B2 ALT	1334	9	12006	3	4	70
TYPE 3.0 MOBILITY	1192	9	10728	3	4	63

MECHANICAL VENTILATION CALCULATIONS (CONT.)				
APARTMENT UNIT	EXHAUST FAN	EXHAUST FAN CFM	AUTOMATIC OPERATION TIME PER HOUR (MINUTES)	PROVIDED VENTILATION (CFM)
TYPE 3.0 FAIR HOUSING	EF-7	110	19	35
TYPE 3.0 FAIR HOUSING B1 ALT	EF-7	110	19	35
TYPE 3.0 FAIR HOUSING B2 ALT	EF-7	110	19	35
TYPE 3.0 MOBILITY	EF-7	110	19	35

**GENERAL NOTES - THIS SHEET**

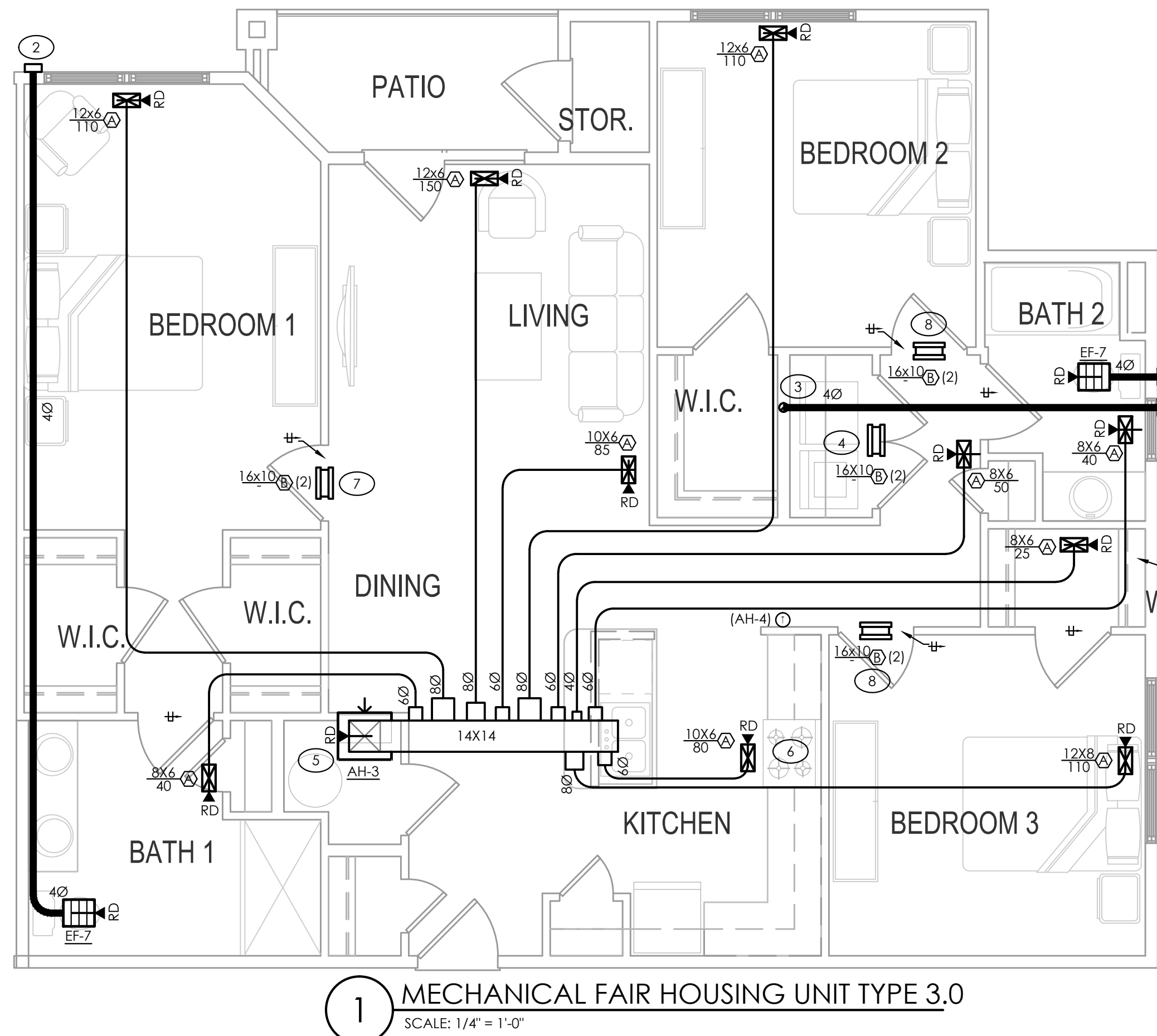
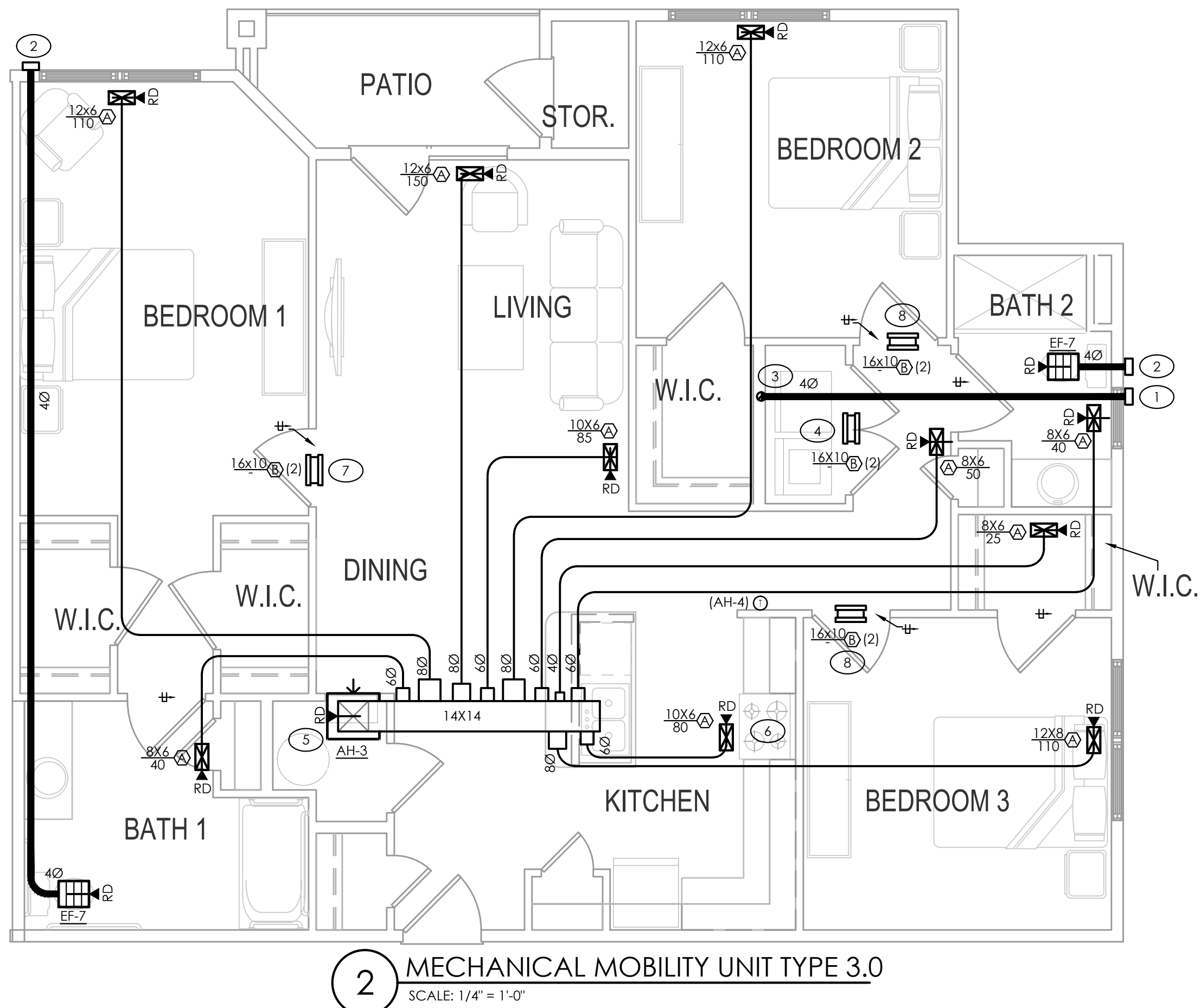
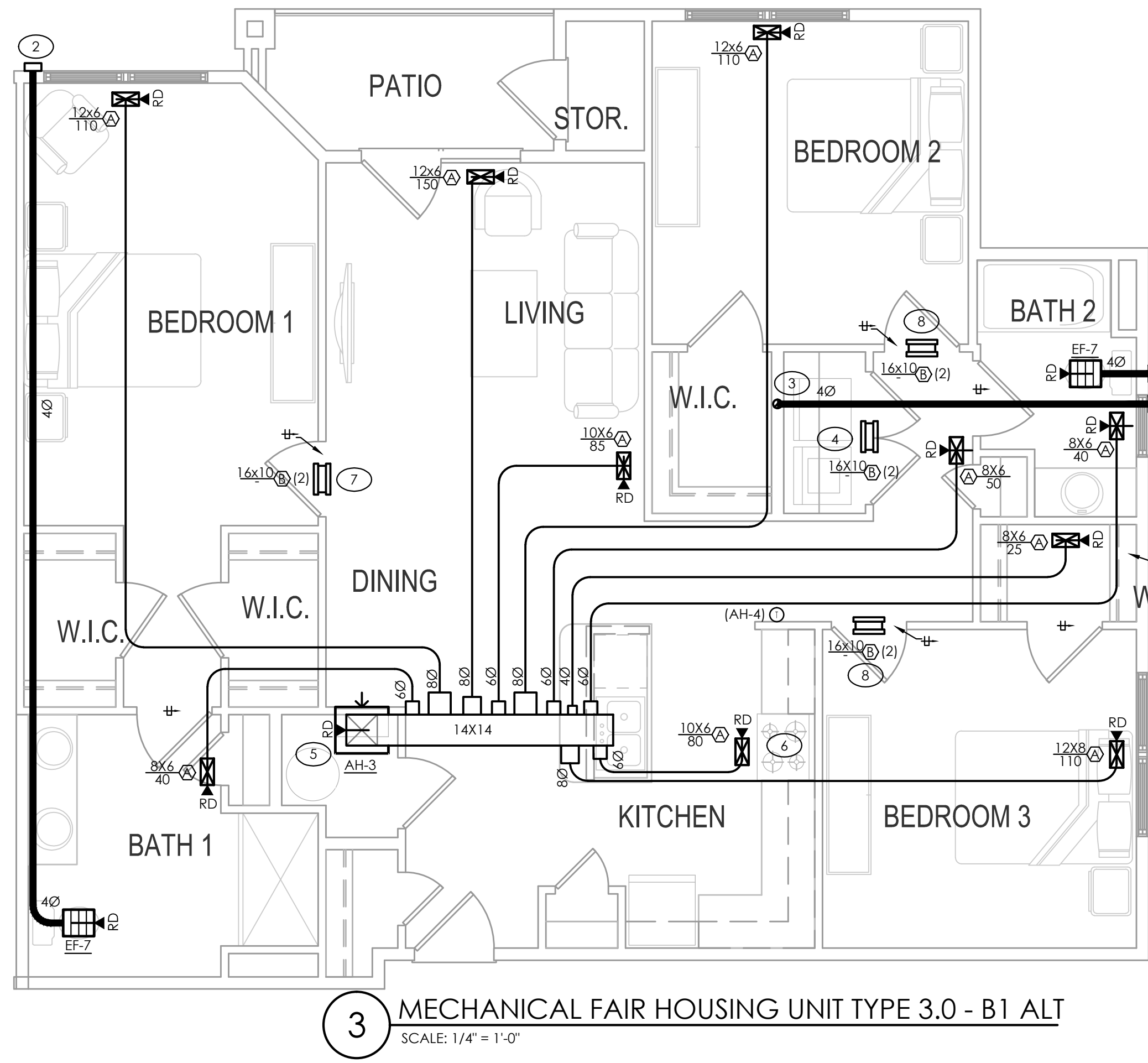
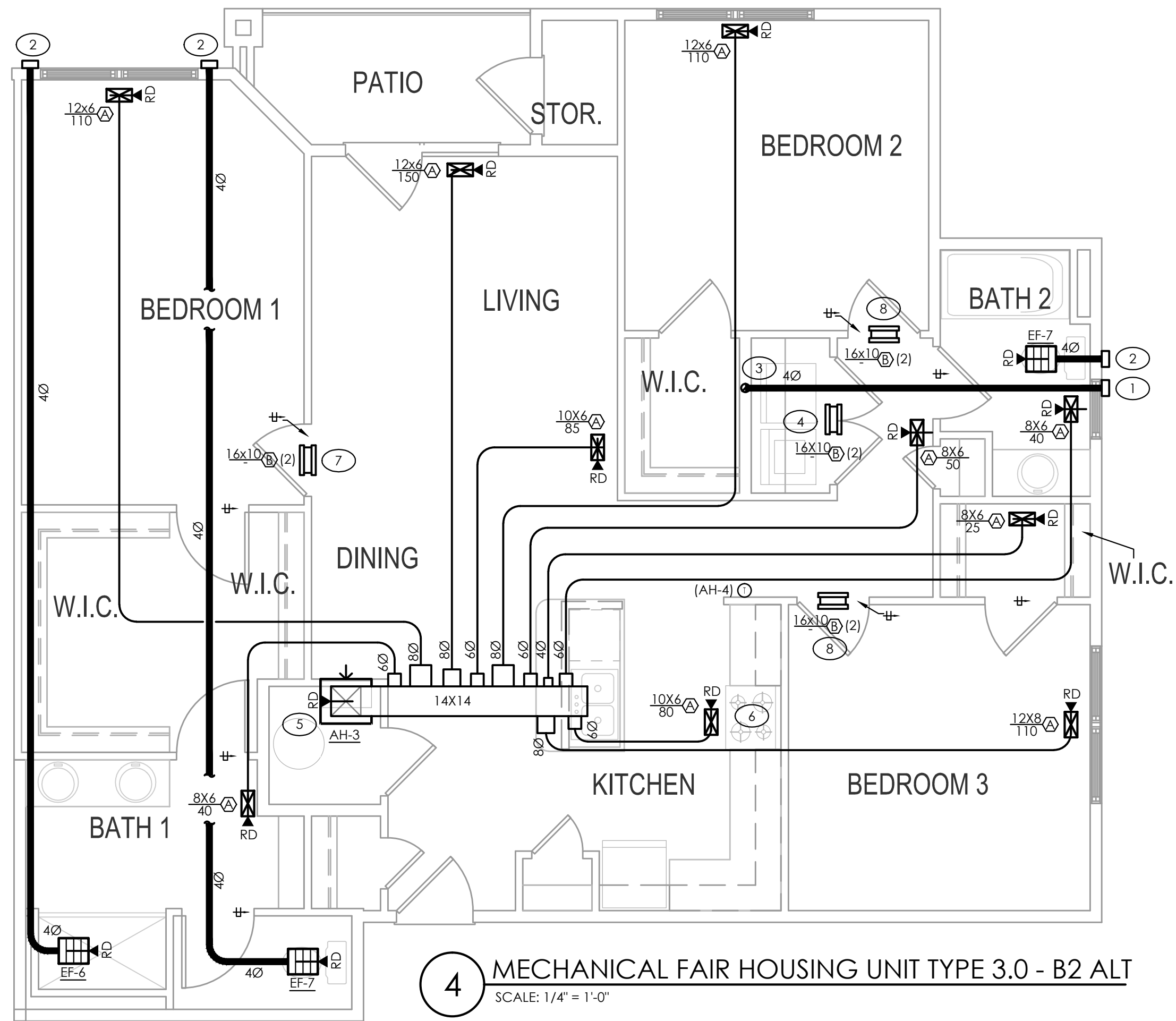
- DUCTWORK ROUTING TO BE COORDINATED WITH STRUCTURE AND TRUSS SPACING.
- SEE BLDG PLAN FOR HEAT PUMP LOCATIONS.
- NO FLEXIBLE DUCTWORK TO BE USED FOR EXHAUST APPLICATIONS. RIGID METAL DUCTWORK ONLY.
- SEE BUILDING PLANS FOR UNIT DEMISING WALL AND FLOOR/CEILING RATINGS.
- M.C. TO COORDINATE DUCT LOCATIONS WITH P.C. AND AREA PLUMBING STACKS AND OVERHEAD WASTE AND VENT PIPING.
- M.C. TO COORDINATE WITH E.C. AND AREA PANEL FEEDER LOCATIONS.
- M.C. TO COORDINATE WITH FIRE SPRINKLER CONTRACTOR AND AREA SPRINKLER PIPING.
- SEE DETAILS REGARDING FIRE STOPPING OF DRYER EXHAUST DUCTS AND BATHROOM EXHAUST DUCTWORK.

**DRYER VENT LENGTH**

- 2020 FLMC SEC 504.8  
 "UNIT TYPE 3.0, B1 ALT, B2 ALT, AND MOBILITY LAUNDRY":  
 (1) 90° BEND = 5' + 9" (V) + 14" (H) = 28' < 35'
- INSTALLED DRYER MUST BE RATED BY MFG FOR VENT LENGTH OF 28' OR GREATER WHEN INSTALLED W/ (1) 40° 90° ELBOW(S).
  - PROVIDE SHIELD PLATES ON THE FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4" OF MATERIAL BETWEEN DRYER DUCT AND FACE OF FRAMING MEMBER. SHIELD PLATES ARE TO BE OF STEEL AND HAVE A MINIMUM THICKNESS OF 0.062 INCHES AND EXTEND A MINIMUM OF 2 INCHES ABOVE SOLE PLATES AND BELOW TOP PLATES. (2020 FLMC 504.7)

**TAGGED NOTES - THIS SHEET**

- DRYER VENT TO WALL CAP W/ BDD (NO SCREEN). CAULK BEHIND AND AROUND CAP WITH 100% SILICONE. MAINTAIN 1" CLEARANCE FROM ALL BUILDING AIR INTAKES.
- BATHROOM EXHAUST TO WALL CAP W/ BDD AND INSECT SCREEN. CAULK BEHIND AND AROUND CAP WITH 100% SILICONE. MAINTAIN 1" CLEARANCE FROM ALL BUILDING AIR INTAKES.
- 40° DRYER VENT UP WALL. PROVIDE RECESSED DRYER BOX. SEE DETAIL REGARDING FIRE STOPPING OF DRYER VENT DUCTS.
- PROVIDE TRANSFER GRILLE CENTERED OVER LAUNDRY CLOSET DOOR. GRILLE TO HAVE MINIMUM FREE AREA OF 100 SQIN. TURN BLADES TO FACE UP.
- AIR HANDLER TO BE INSTALLED ON WALL IN CLOSET. SUPPLY TO DISCHARGE FROM TOP OF UNIT AND TO ABOVE CEILING. PROVIDE AIR HANDLER W/ MFG'S WALL PANEL FOR RETURN AIR AND AIR HANDLER ACCESS. SEE DETAIL.
- U.L. LISTED RE-CIRCULATING EXHAUST HOOD BY G.C..
- PROVIDE TRANSFER GRILLE CENTERED OVER BEDROOM DOOR. GRILLE TO HAVE MINIMUM GRILLE AREA OF 135 SQIN. TURN BLADES TO FACE UP. PROVIDE 1" DOOR UNDERCUT.
- PROVIDE TRANSFER GRILLE CENTERED OVER BEDROOM DOOR. GRILLE TO HAVE MINIMUM GRILLE AREA OF 110 SQIN. TURN BLADES TO FACE UP. PROVIDE 1" DOOR UNDERCUT.



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PROGRESS DATE:	10/15/21
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INITIALS	
DESCRIPTION	
PROJECT NO:	010819
DRAWN BY:	RM/L
CHECKED BY:	ZLT
SHEET TITLE:	MECHANICAL UNIT PLANS
SHEET NUMBER:	M1.33

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**2 CLUBHOUSE GAS PIPING RISER**  
SCALE: 3/16" = 1'-0"

**UNDILUTED PROPANE CALCULATIONS TABLE 402.4(28)**

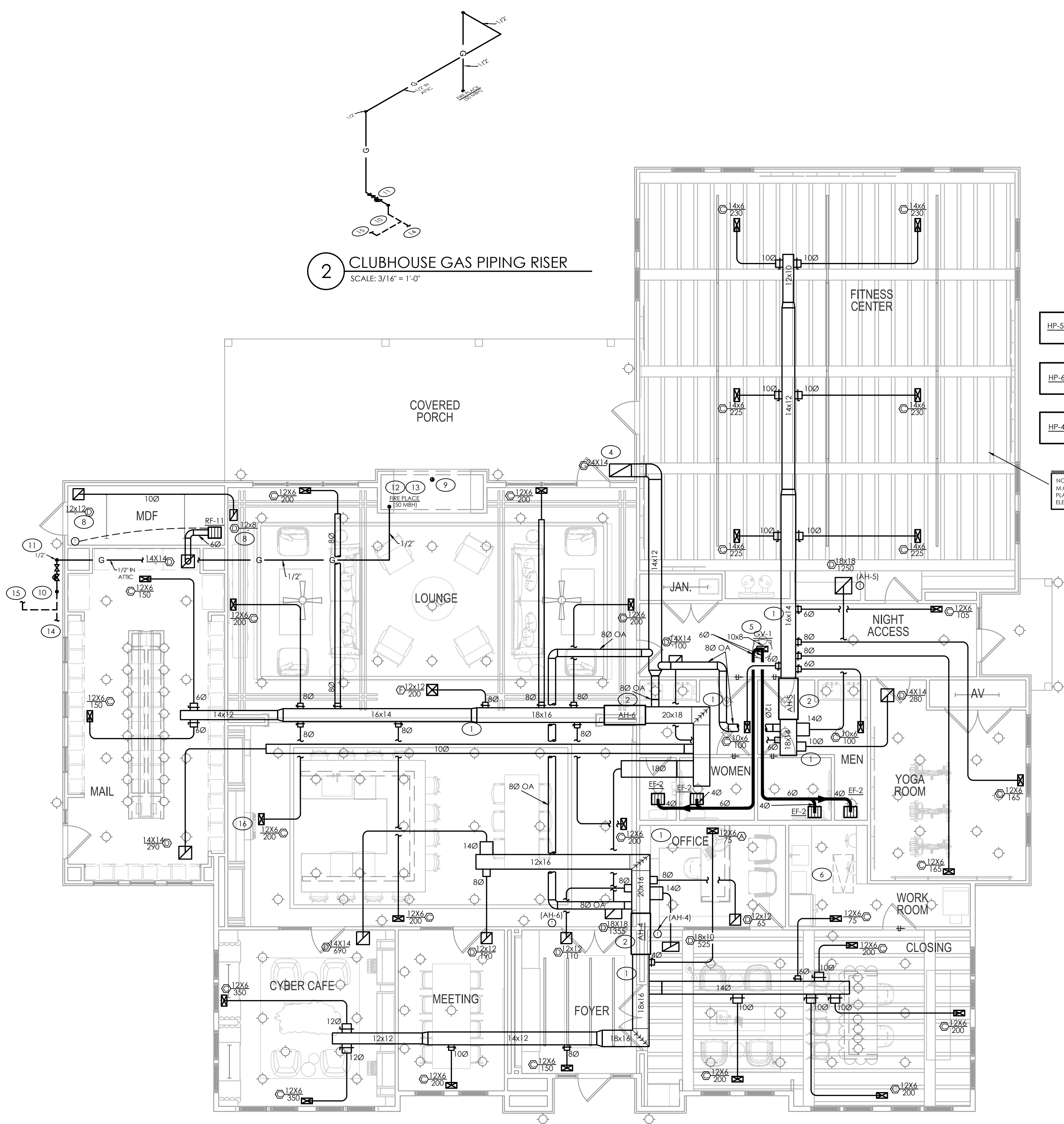
PIPE SIZE (IN.)	MAX CAPACITY OF PIPE IN MBH	
	EQUIV. LENGTH =	60 FT
1/2"		110
3/4"		231
1"		434

BASED UPON CHAPTER 4 OF THE 2018 NORTH CAROLINA FUEL GAS CODE, 11.0" WC INLET PRESSURE, 0.5" WC PRESSURE DROP.

GAS SYSTEM LOAD	
EQUIPMENT	MBH (INPUT)
FIRE PLACE	50.0
<b>TOTAL:</b>	<b>50.0</b>

- GENERAL NOTES - THIS SHEET**
- ENSURE THAT ALL SOURCES OF BUILDING EXHAUST ARE A MINIMUM OF 10' HORIZONTALLY FROM OR A MINIMUM OF 3' ABOVE ANY AREA MECHANICAL OUTSIDE AIR INTAKES.
  - SEE SHEET M3.10 FOR A GAS PIPING MATERIAL AND EXECUTION NOTES.

- TAGGED NOTES - THIS SHEET**
- SUPPLY/RETURN DUCTWORK INSTALLED IN ATTIC SPACE. COORDINATE DUCT ROUTING W/ AREA TRUSSES.
  - AIR HANDLER INSTALLED IN ATTIC ON MECHANICAL PLATFORM. ENSURE AH IS POSITIONED SO THAT REQ'D MAINTENANCE CLEARANCES ARE MAINTAINED. SEE DETAIL.
  - HEAT PUMP TO BE INSTALLED ON EQUIPMENT PAD. COORDINATE EXACT LOCATION AND PAD W/ G.C. ENSURE ALL MFG REQUIRED CLEARANCES ARE MAINTAINED.
  - LOUVERED OUTSIDE AIR INTAKE GRILLE TO BE INSTALLED IN COVERED PORCH CEILING. TURN LOUVER BLADES TOWARD WALL.
  - EXHAUST UP TO GRAVITY VENT ON ROOF WITH INSECT SCREEN. MAINTAIN 10' HORIZONTAL OR 3' VERTICAL CLEARANCE FROM ALL BUILDING AIR INTAKES. SEE DETAIL. ENSURE GRAVITY VENTILATOR IS ON BACK SIDE OF ROOF TO REDUCE VISIBILITY.
  - G.C. TO PROVIDE 30x22 ATTIC ACCESS.
  - RE-CIRC FAN TO DISCHARGE TO LOUVERED TRANSFER GRILLE IN MAIL ROOM.
  - LOUVERED TRANSFER GRILLE TO BE INSTALLED IN GYPSUM CEILING. TURN LOUVER BLADES TOWARD WALL.
  - PROVIDE TYPE "B" FLUE VENT FOR FIREPLACE. ROUTE TO ROOF AND TERMINATE WITH FLUE CAP. SEE MFG'S INSTALLATION INSTRUCTIONS FOR FLUE MATERIALS AND VENTING REQUIREMENTS/LIMITATIONS. MAINTAIN REQUIRED CLEARANCE TO COMBUSTIBLE MATERIALS.
  - HIGH PRESSURE PROPANE LINE UP FROM BELOW GRADE TO SECOND STAGE 11" W.C. REGULATOR INSTALLED ABOVE GRADE. REGULATOR SIZED FOR TOTAL ESTIMATED FUEL LOAD OF 50 MBH AT 80 FEET TOTAL EFFECTIVE LENGTH. PROVIDE FUEL LINE BRANCH WITH EMERGENCY SHUTOFF VALVE.
  - FUEL LINE UP EXTERIOR WALL AND ENTERS BUILDING IN ATTIC SPACE.
  - FUEL LINE DOWN FROM ATTIC TO INSIDE EQUIPMENT HOUSING.
  - PROVIDE FIREPLACE W/ ACCESSIBLE MANUAL SHUTOFF VALVE.
  - COORDINATE FUEL LINE ROUTING FROM TANK W/ PROPANE PROVIDER.
  - FUEL LINE TO BRANCH OFF PRIOR TO SECOND STAGE 11" W.C. REGULATOR. BRANCH TO CONTINUE TO POOL HOUSE. SEE SHEET M3.10 FOR ADDITIONAL INFORMATION. COORDINATE W/ PROPANE PROVIDER.
  - G.C. TO PROVIDE U.L. LISTED RE-CIRC MICROWAVE FOR RANGE OPERATION.

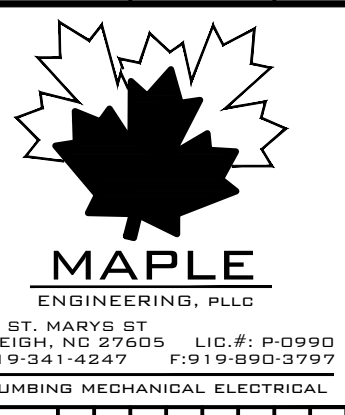


**1 MECHANICAL CLUBHOUSE PLAN**  
SCALE: 3/16" = 1'-0"

- HP-5 3
- HP-6 3
- HP-4 3

NOTE: M.C. TO COORDINATE DIFFUSER PLACEMENT WITH ARCH CEILING ELEMENTS.

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PROJECT NO:	010819
DRAWN BY:	RML
CHECKED BY:	ZLT
SHEET TITLE:	MECHANICAL CLUBHOUSE PLAN
SHEET NUMBER:	M2.10

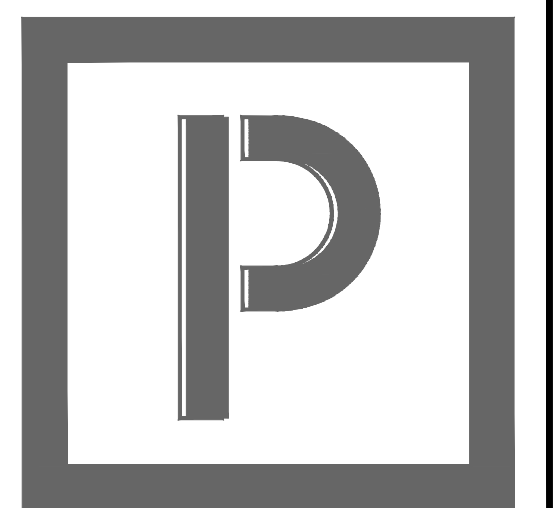
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---	1-HR WALL
---	* POOL EQUIPMENT AND CHEM. HAVE 1-HR RATED CEILING



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**GENERAL NOTES - THIS SHEET**

- ENSURE THAT ALL SOURCES OF BUILDING EXHAUST ARE A MINIMUM OF 10' HORIZONTALLY FROM OR A MINIMUM OF 3' ABOVE ANY AREA OUTSIDE AIR INTAKES.

NOTE (VENTILATION CALCULATIONS):  
POOL EQUIPMENT: 10' [H] \* 115 SQFT = 1150 CUFT @ 10 ACH = 192 CFM \*200 CFM PROVIDED  
CHEMICAL STORAGE: 10' [H] \* 20 SQFT = 200 CUFT @ 10 ACH = 33 CFM \*50 CFM PROVIDED

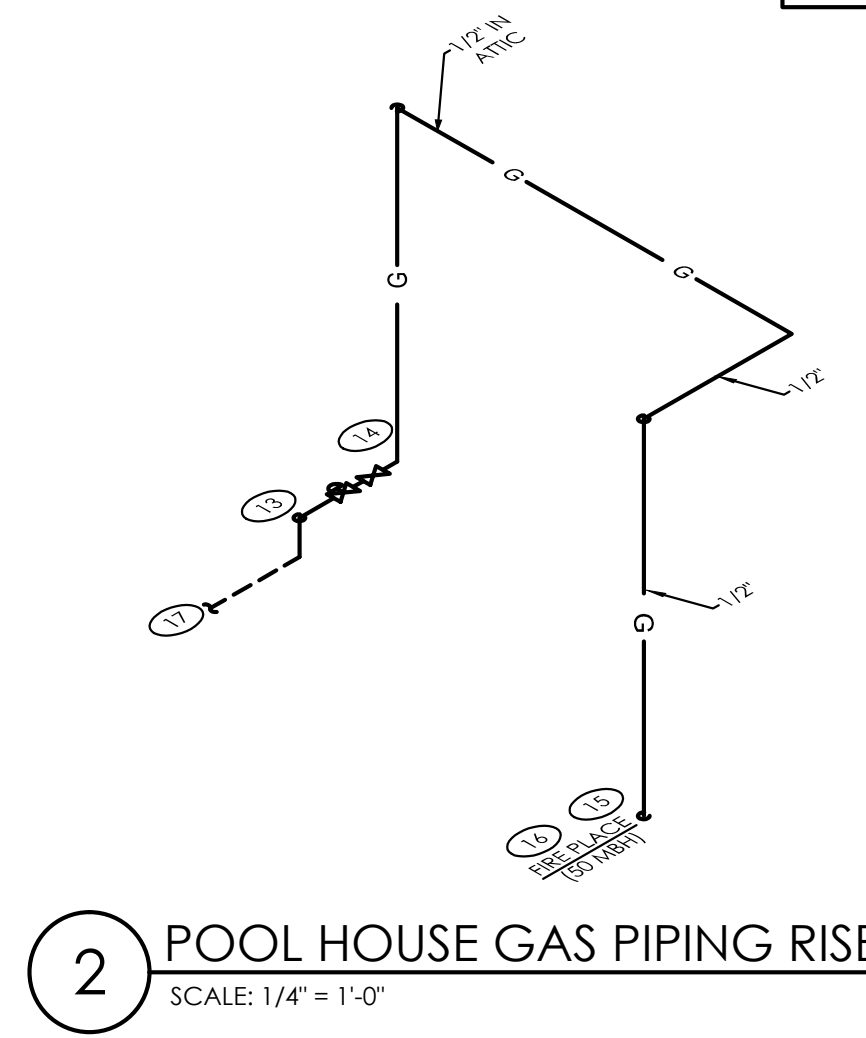
**UNDILUTED PROPANE CALCULATIONS TABLE 402.4(28)**

PIPE SIZE (IN.)	MAX CAPACITY OF PIPE IN MBH	
	EQUIV. LENGTH =	40 FT
1/2"		137
3/4"		287
1"		541

BASED UPON CHAPTER 4 OF THE 2018 NORTH CAROLINA FUEL GAS CODE, 11.0' WC INLET PRESSURE, 0.5' WC PRESSURE DROP.

**GAS SYSTEM LOAD**

EQUIPMENT	MBH (INPUT)
FIRE PLACE	50.0
<b>TOTAL:</b>	<b>50.0</b>

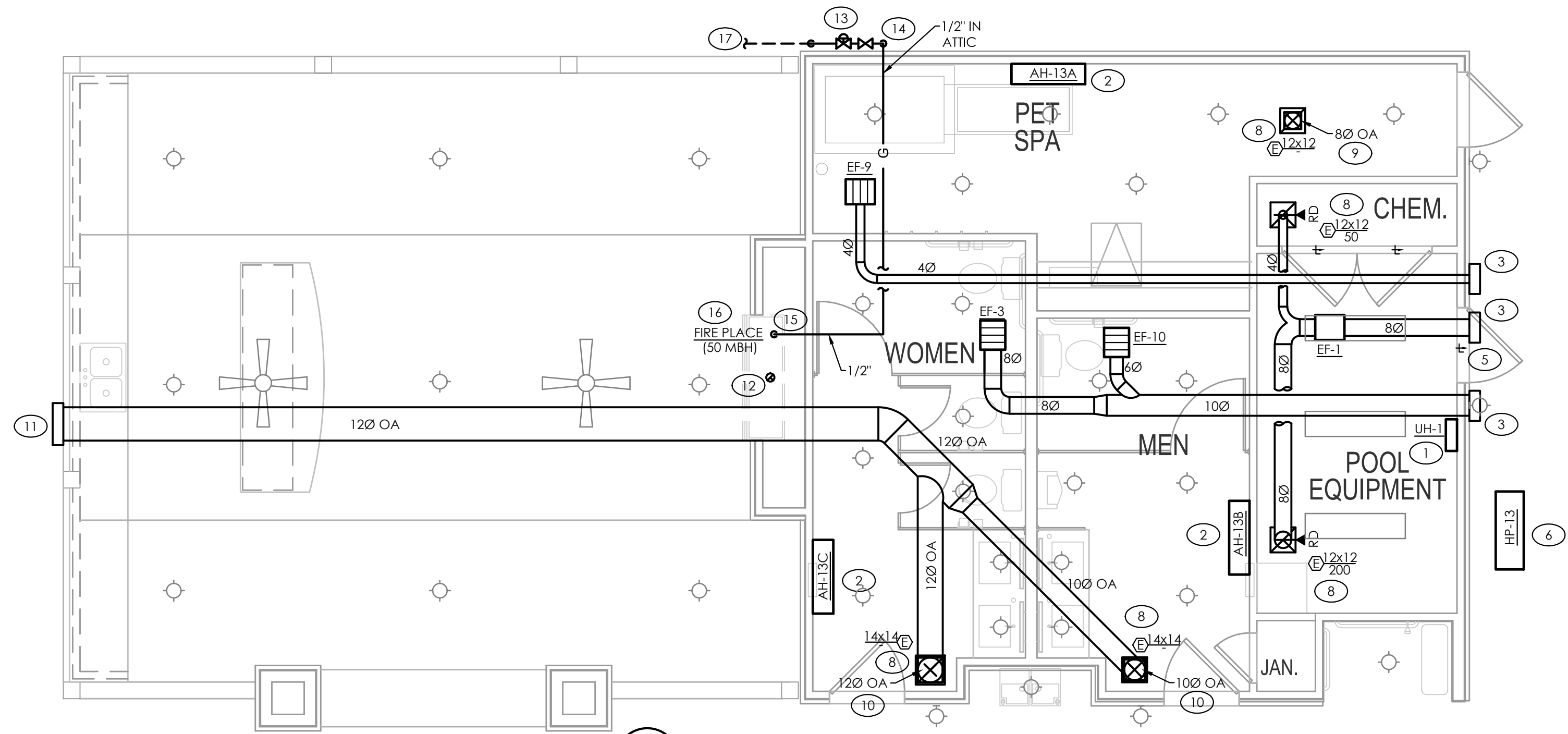


**TAGGED NOTES - THIS SHEET**

- SURFACE MOUNTED UNIT HEATER. COORDINATE LOCATION W/ G.C. AND AREA EQUIPMENT.
- MINI-SPLIT AIR HANDLER TO BE INSTALLED HIGH ON WALL. COORDINATE EXACT INSTALLATION LOCATION W/ G.C. AND EQUIPMENT. CONDENSATE TO BE ROUTED TO GRADE/GRASSY AREA AWAY FROM FOOT TRAFFIC. COORDINATE CONDENSATE ROUTING W/ G.C..
- EXHAUST DUCT TO GABLE VENT W/ INSECT SCREEN. EXACT LOCATION AND SELECTION OF VENT PER ARCHITECT AND G.C.. MINIMUM FREE AREA OF GABLE VENT TO BE 130 SQIN.
- DOOR WITH WEATHERPROOF LOUVER AND INSECT SCREEN BY G.C.. LOUVER TO HAVE MINIMUM FREE AREA OF 120 SQIN.
- DOOR WITH WEATHERPROOF LOUVER AND INSECT SCREEN BY G.C.. EACH LOUVER TO HAVE MINIMUM FREE AREA OF 120 SQIN.
- HEAT PUMP TO BE INSTALLED AT GRADE. COORDINATE MOUNTING PAD REQUIREMENTS W/ G.C.. ENSURE ALL MFG MAINTENANCE CLEARANCES ARE MAINTAINED. NOT USED.
- LOUVERED TRANSFER GRILLE TO BE INSTALLED IN GYPSUM CEILING. TURN LOUVERS TOWARDS WALL.
- OUTSIDE AIR DUCTWORK W/ NORMALLY CLOSED DAMPER UP TO MFG ROOF JACK WITH INSECT SCREEN. 120 VOLT DAMPER TO BE TIED TO AREA LIGHTS AND EXHAUST FAN. DAMPER TO OPEN WHEN LIGHTS AND FAN ARE ON AND CLOSE WHEN LIGHTS AND FAN TURN OFF.
- OUTSIDE AIR DUCTWORK W/ NORMALLY CLOSED DAMPER UP TO ATTIC SPACE. 120 VOLT DAMPER TO BE TIED TO AREA LIGHTS AND EXHAUST FAN. DAMPER TO OPEN WHEN LIGHTS AND FAN ARE ON AND CLOSE WHEN LIGHTS AND FAN TURN OFF.
- OUTSIDE AIR DUCT TO GABLE VENT W/ INSECT SCREEN. EXACT LOCATION AND SELECTION OF VENT PER ARCHITECT AND G.C.. MINIMUM FREE AREA OF GABLE VENT TO BE 180 SQIN.
- PROVIDE TYPE "B" FLUE VENT FOR FIREPLACE. ROUTE TO ROOF AND TERMINATE WITH FLUE CAP. SEE MFG'S INSTALLATION INSTRUCTIONS FOR FLUE MATERIALS AND VENTING REQUIREMENTS/LIMITATIONS. MAINTAIN REQUIRED CLEARANCE TO COMBUSTIBLE MATERIALS.
- HIGH PRESSURE PROPANE LINE UP FROM BELOW GRADE TO SECOND STAGE 11" W.C. REGULATOR INSTALLED ABOVE GRADE. REGULATOR SIZED FOR TOTAL ESTIMATED FUEL LOAD OF 50 MBH AT 80FEET TOTAL EFFECTIVE LENGTH. PROVIDE FUEL LINE BRANCH WITH EMERGENCY SHUTOFF VALVE.
- FUEL LINE UP EXTERIOR WALL AND ENTERS BUILDING IN ATTIC SPACE.
- FUEL LINE DOWN FROM ATTIC TO INSIDE EQUIPMENT HOUSING.
- PROVIDE FIREPLACE W/ ACCESSIBLE MANUAL SHUTOFF VALVE.
- COORDINATE FUEL LINE ROUTING FROM TANK W/ PROPANE PROVIDER. SEE SHEET M2.10 FOR ADDITIONAL INFORMATION.

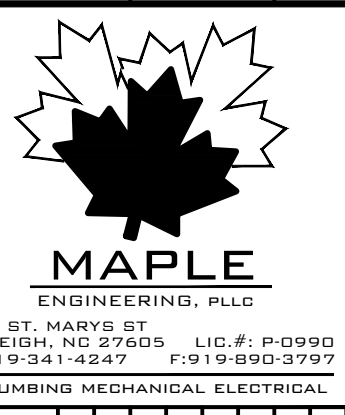
**GAS MATERIAL AND EXECUTION NOTES**

<p><b>MATERIALS:</b></p> <ol style="list-style-type: none"> <li>GAS PIPING TO BE:             <ol style="list-style-type: none"> <li>1.1. ABOVE GRADE - SCHEDULE 40 BLACK STEEL PIPE W/ THREADED FITTINGS. THREADED FITTINGS IN SIZES LARGER THAN 4" SHALL NOT BE USED. APPROVED FLEXIBLE GAS PIPING MAY BE USED AT CONNECTION TO EQUIPMENT.</li> </ol> </li> <li>GAS PIPE FITTINGS IN CONCEALED LOCATIONS SHALL BE LIMITED TO:             <ol style="list-style-type: none"> <li>2.1. THREADED, ELBOWS, TEES AND COUPLINGS.</li> <li>2.2. WELDED FITTINGS.</li> <li>2.3. FITTINGS LISTED TO ANSI LC-1/CSA 6.26 OR ANSI LC-4.</li> </ol> </li> </ol> <p><b>EXECUTION:</b></p> <ol style="list-style-type: none"> <li>GAS PIPING SHALL NOT BE INSTALLED IN OR THROUGH A DUCTED SUPPLY, RETURN OR EXHAUST, OR A CLOTHES CHUTE, CHIMNEY OR GAS VENT, DUMBWAITER OR ELEVATOR SHAFT.</li> <li>GAS PIPING SHALL NOT BE LOCATED IN SOLID PARTITIONS AND SOLID WALLS, UNLESS INSTALLED IN A CHASE OR CASING.</li> <li>ABOVE-GROUND OUTDOOR GAS PIPING SHALL BE PROTECTED IN ACCORDANCE WITH FLFGC 404.9. PIPING SHALL NOT BE ELEVATED LESS THAN 3-1/2" ABOVE GROUND AND ROOF SURFACES.</li> <li>EXPOSED GAS PIPING SHALL BE LABELED PER THE REQUIREMENTS OF THE 2020 FLFGC 401.5.</li> <li>SUPPORT ALL PIPING IN ACCORDANCE W/ 2020 FL FUEL GAS CODE. ANY SUSPENDED MATERIALS SHALL BE DIRECTLY SUPPORTED BY THE BUILDING STRUCTURE. DO NOT ATTACH ANYTHING TO THE ROOF DECK.</li> <li>WHERE A SEDIMENT TRAP IS NOT INCORPORATED AS PART OF THE APPLIANCE, SEDIMENT TRAPS SHALL BE INSTALLED PER THE REQUIREMENTS OF FLFGC 408.4.</li> <li>EACH GAS-FIRED APPLIANCE SHALL BE PROVIDED WITH A SHUTOFF VALVE IN ACCORDANCE WITH FLFGC 409.5 AND SHALL BE LOCATED WITHIN 6 FEET OF THE APPLIANCE.</li> </ol>	<ol style="list-style-type: none"> <li>GAS SHUTOFF VALVES SHALL BE OF AN APPROVED TYPE; SHALL BE CONSTRUCTED OF MATERIALS COMPATIBLE WITH THE PIPING; AND SHALL COMPLY WITH THE STANDARD THAT IS APPLICABLE FOR THE PRESSURE AND APPLICATION IN ACCORDANCE WITH FLFGC TABLE 409.1.1. SHUTOFF VALVES SHALL BE ACCESSIBLE AND PROTECTED PER FLFGC 409.1.3.</li> <li>MEDIUM PRESSURE REGULATORS (REDUCING PRESSURE FROM 0.5 PSI - 5 PSI TO A LOWER PRESSURE) SHALL BE INSTALLED IN COMPLIANCE WITH FLFGC 410.1 &amp; 410.2 BUT NOT LIMITED TO THE FOLLOWING:             <ol style="list-style-type: none"> <li>9.1. THE MP REGULATOR SHALL BE PROVIDED WITH ACCESS.</li> <li>9.2. WHERE LOCATED INDOORS, THE REGULATOR SHALL BE VENTED TO THE OUTDOORS OR SHALL BE EQUIPPED WITH A LEAK-LIMITING DEVICE IN EITHER CASE COMPLYING WITH FLFGC 410.3.</li> <li>9.3. A TEE FITTING WITH ONE OPENING CAPPED OR PLUGGED SHALL BE INSTALLED BETWEEN THE MP REGULATOR AND ITS UPSTREAM SHUTOFF VALVE. SUCH TEE FITTING SHALL BE POSITIONED TO ALLOW CONNECTION OF A PRESSURE-MEASURING INSTRUMENT AND TO SERVE AS A SEDIMENT TRAP. A MEANS TO TEST PRESSURE SHALL BE INSTALLED NOT LESS THAN 10 PIPE DIAMETERS DOWNSTREAM OF THE MP REGULATOR OUTLET. SUCH FITTING SHALL BE POSITIONED TO ALLOW CONNECTION OF A PRESSURE-MEASURING INSTRUMENT. A LISTED SHUTOFF VALVE SHALL BE INSTALLED IMMEDIATELY AHEAD OF EACH MP REGULATOR (FLFGC 409.4).</li> </ol> </li> <li>A UNION FITTING SHALL BE PROVIDED FOR APPLIANCES CONNECTED BY RIGID METALLIC PIPE PER THE REQUIREMENTS OF FLFGC 411.1.6. SUCH UNIONS SHALL BE ACCESSIBLE AND LOCATED WITHIN 6 FEET OF THE APPLIANCE.</li> <li>EACH NON-CSST ABOVE-GRADE PORTION OF THE GAS PIPING SYSTEM THAT IS LIKELY TO BE ENERGIZED SHALL BE ELECTRICALLY CONTINUOUS AND BONDED TO AN EFFECTIVE GROUND-FAULT CURRENT PATH. CSST GAS PIPING SYSTEMS CONTAINING ONE OR MORE SEGMENTS OF CSST SHALL BE BONDED TO THE ELECTRICAL SERVICE GROUNDING ELECTRODE SYSTEM. BONDING SHALL BE IN ACCORDANCE WITH FLFGC SECTION 310. BONDING CONNECTIONS SHALL BE IN ACCORDANCE WITH NFPA 70. DEVICES USED FOR MAKING THE BONDING CONNECTIONS SHALL BE LISTED FOR THE APPLICATION IN ACCORDANCE WITH UL 467.</li> <li>M.C. RESPONSIBLE FOR EXECUTING ALL CODE REQUIRED TESTS AND INSPECTIONS INCLUDING BUT NOT LIMITED TO THE LEAK AND PRESSURE TESTING OF GAS AS DESCRIBED IN FLFGC SECTION 406. PURGING OF GAS LINES SHALL BE PERFORMED IN ACCORDANCE WITH FLFGC 406.7.</li> </ol>
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**1 MECHANICAL POOL HOUSE PLAN**  
SCALE: 1/4" = 1'-0"

Inspiration at Southpoint Apartments  
Zimmer Development Company  
Fort Meyers, Florida  
PERMIT SET



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PLUMBING MECHANICAL ELECTRICAL

PROGRESS DATE:	10/15/21
ISSUE DATE:	11/24/21
REVISIONS:	
NUMBER	DATE INITIALS DESCRIPTION

PROJECT NO: **010819**  
DRAWN BY: **RM/L**  
CHECKED BY: **ZLT**

SHEET TITLE:  
**MECHANICAL POOL HOUSE PLAN**

SHEET NUMBER:  
**M3.10**

11/24/2021 11:44 AM  
FLC2 08M3.10.DWG

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