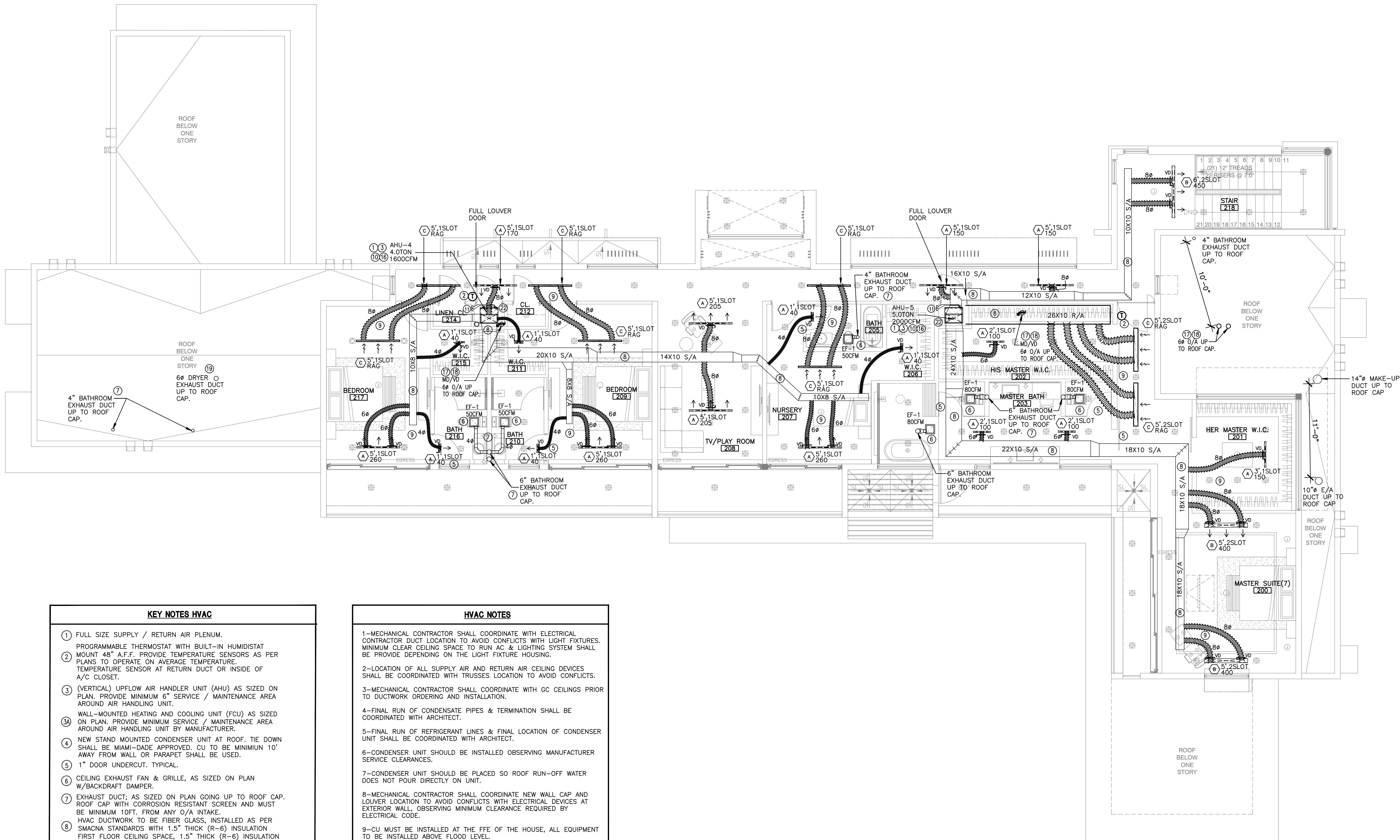




KEY NOTES HVAC

- 1 FULL SIZE SUPPLY / RETURN AIR PLENUM.
PROGRAMMABLE THERMOSTAT WITH BUILT-IN HUMIDISTAT
MOUNT 48" A.F.F. PROVIDE TEMPERATURE SENSORS AS PER
PLANS TO OPERATE ON AVERAGE TEMPERATURE.
TEMPERATURE SENSOR AT RETURN DUCT OR INSIDE OF
A/C CLOSET.
- 3 (VERTICAL) UPFLOW AIR HANDLER UNIT (AHU) AS SIZED ON
PLAN, PROVIDE MINIMUM 6" SERVICE / MAINTENANCE AREA
AROUND AIR HANDLING UNIT.
- 3A WALL-MOUNTED HEATING AND COOLING UNIT (FCU) AS SIZED
ON PLAN, PROVIDE MINIMUM SERVICE / MAINTENANCE AREA
AROUND AIR HANDLING UNIT BY MANUFACTURER.
- 4 NEW STAND MOUNTED CONDENSER UNIT AT ROOF, TIE DOWN
SHALL BE MIAMI-DADE APPROVED, CU TO BE MINIMUM 10'
AWAY FROM WALL OR PARAPET SHALL BE USED.
- 5 1" DOOR UNDERCUT, TYPICAL.
- 6 CEILING EXHAUST FAN & GRILLE, AS SIZED ON PLAN
W/BACKDRAFT DAMPER.
- 7 EXHAUST DUCT, AS SIZED ON PLAN GOING UP TO ROOF CAP.
ROOF CAP WITH CORROSION RESISTANT SCREEN AND MUST
BE MINIMUM 10FT. FROM ANY O/A INTAKE.
HVAC DUCTWORK TO BE FIBER GLASS, INSTALLED AS PER
SMACNA STANDARDS WITH 1.5" THICK (R-6) INSULATION
FIRST FLOOR CEILING SPACE, 1.5" THICK (R-6) INSULATION
WHEN RUNNING IN ATTIC SPACE, UNLESS NOTED OTHERWISE.
- 9 FLEXIBLE INSULATED DUCTWORK WITH 1.5" FIBERGLASS
INSULATION WITH FRK VAPOR BARRIER, CLASS 1 AIR DUCT,
U.L. R-6.0 INSULATION, TYPICAL FIRST FLOOR CEILING.
- 10 PROVIDE FLEXIBLE DUCT CONNECTION WITH AHU.
- 11 CONDENSATE DRAIN LINE TO DRYWELL CONNECTION, 2"
WHEN RUNNING UNDERGROUND.
- 11A CONDENSATE DRAIN LINE RUNNING AT CEILING SPACE TO
PARTITION WALL.
- 12 REFRIGERANT PIPES RUNNING AT CEILING SPACE
REFRIGERANT SUCTION LINE TO BE INSULATED WITH INSULATION
HAVING A THERMAL RESISTIVITY OF AT LEAST R-4 AND HAVING
AN EXTERNAL PERMEANCE NOT EXCEEDING 0.05 PERM WHEN
TESTED IN ACCORDANCE WITH ASTM E96. PROVIDE UV COAT
PROTECTION.
- 14 REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL
BE FITTED WITH LOCKING-TYPE TAMPER-RESISTANT CAPS OR
SHALL BE OTHERWISE SECURED TO PREVENT UNAUTHORIZED
ACCESS UNLESS THE PORTS ARE LOCATED INSIDE THE
CONDENSING UNIT CABINET (F80R-M1411.8)
- 15 CONTRACTOR MUST VERIFY TOTAL REFRIGERANT PIPING LENGTH
AND PIPING LIFT THAT IS NOT GREATER THAN THOSE VALUES
RECOMMENDED BY MANUFACTURER. NOTIFY THE ENGINEER'S OFFICE
WITH THIS SITUATION AND TO FIND THE BEST SOLUTION.
- 16 PROVIDE AUXILIARY CONDENSATE DRAINPAN SYSTEM TO AHU, SEE
DETAIL.
- 17 6"Ø DOUBLE WALL INSULATED R-8 SHEET METAL 22 GA.
OUTSIDE AIR (O/A) DUCT, AS SIZED ON PLAN, O/A SHALL
BE MINIMUM 10' AWAY FROM ANY EXHAUST OR VENT.
- 18 PROVIDE MOTORIZED DAMPER MD TO O/A DUCTWORKS, THE
MOTORIZED DAMPER OPEN WHILE THE A/C UNIT IS WORKING, AND
RETURNING TO CLOSE POSITION WHEN CU IS OFF.
- 19 DRYER EXHAUST (26 GAUGE, MN), WITHIN RECESSED DRYER
VENT BOX, TERMINATING WITH ROOF CAP OR WALL CAP, NO
SCREEN, DRYER EXHAUST DUCTS ENCLOSED IN WALL SHALL
ALLOW THE INSTALLATION OF THE DUCT WITHOUT DEFORMATION.
- 20 RANGE EXHAUST DUCT GALVANIZED SHEET METAL 26GA; AS
SIZED ON PLAN TERMINATING WITH ROOF OR WALL CAP
WITH BACK DRAFT DAMPER, PROVIDE CORROSION RESISTANT
SCREEN.
- 21 MOTORIZED DAMPER INTERLOCK WITH HOOD OPERATION, W/
ACCESS PANEL. CONTRACTOR MUST PROVIDE HOOD WITH
CONTROL FOR M/A AND M/DAMPER.
- 22 AC CLOSET AS A RETURN AIR PLENUM, NO COMBUSTIBLE MATERIAL
INSIDE OF CLOSET, AC CLOSET DOOR AND AC CLOSET PLENUM
SHALL MEET ASTM E-84, 25/50 FLAME/SMOKE DEVELOP MATERIAL.

HVAC NOTES

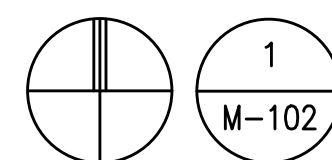
- 1-MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL
CONTRACTOR DUCT LOCATION TO AVOID CONFLICTS WITH LIGHT FIXTURES.
MINIMUM CLEAR CEILING SPACE TO RUN AC & LIGHTING SYSTEM SHALL
BE PROVIDE DEPENDING ON THE LIGHT FIXTURE HOUSING.
- 2-LOCATION OF ALL SUPPLY AIR AND RETURN AIR CEILING DEVICES
SHALL BE COORDINATED WITH TRUSSES LOCATION TO AVOID CONFLICTS.
- 3-MECHANICAL CONTRACTOR SHALL COORDINATE WITH GC CEILINGS PRIOR TO
DUCTWORK ORDERING AND INSTALLATION.
- 4-FINAL RUN OF CONDENSATE PIPES & TERMINATION SHALL BE
COORDINATED WITH ARCHITECT.
- 5-FINAL RUN OF REFRIGERANT LINES & FINAL LOCATION OF CONDENSER
UNIT SHALL BE COORDINATED WITH ARCHITECT.
- 6-CONDENSER UNIT SHOULD BE INSTALLED OBSERVING MANUFACTURER
SERVICE CLEARANCES.
- 7-CONDENSER UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER
DOES NOT POUR DIRECTLY ON UNIT.
- 8-MECHANICAL CONTRACTOR SHALL COORDINATE NEW WALL CAP AND
LOUVER LOCATION TO AVOID CONFLICTS WITH ELECTRICAL DEVICES AT
EXTERIOR WALL, OBSERVING MINIMUM CLEARANCE REQUIRED BY
ELECTRICAL CODE.
- 9-CU MUST BE INSTALLED AT THE FFE OF THE HOUSE, ALL EQUIPMENT TO
BE INSTALLED ABOVE FLOOD LEVEL.
- 10-THE AC SYSTEM MUST BE TESTING AND BALANCE BY CERTIFY THIRD
PART.
- 11-PROVIDE INSULATION TO ALL EXHAUST AND MAKE UP AIR DUCTS
WHEN RUNNING INSIDE A/C SPACE AND UNVESTED ATTIC.
- 12-BACK DRAFT DAMPER TO BE INSTALLED TO ALL EXHAUST DUCT AT
THE OUTLET LOCATION EITHER WALL CAP OR ROOF CAP

SCOPE OF WORK:

NEW AC SYSTEMS IN NEW HOUSE.
NEW AIR DISTRIBUTION, NEW EXHAUST FAN
AND DUCTWORK EXHAUST IN RESTROOM.

ENERGY CONSERVATION NOTES:

ALL HVAC EQUIPMENT SHALL BE EQUIPPED WITH
PROGRAMMABLE THERMOSTAT TO ALLOW SYSTEM
SHUT DOWN AFTER HOURS OF OPERATION. ALL
LIGHTING HAS AFTER HOURS SHUT DOWN. ALL AC
EQUIPMENT PROVIDE WITH OUTSIDE AIR MOTORIZED
DAMPERS TO SHUT DOWN WHEN SPACE IS NOT
USED.



MECHANICAL SECOND FLOOR PLAN

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

This item has been digitally signed and sealed by Amarilis Rodriguez, P.E. on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified
on any electronic copies.

arpe
Engineering inc
2020 Ponce de Leon Blvd., Suite 1002
Coral Gables, Florida 33134
Phone > 305 444 9809
Fax > 305 444 9827
www.arpe-eng.com

Engineering Design:
> Mechanical > Electrical
> Plumbing > Fire Protection

Agreed By: 2023.12.12
License Number: 1212
Signature: 16:01:1
Date: 6-05'00'

PROJECT DESCRIPTION:
SINGLE FAMILY RESIDENCE

FAO ARCHITECTURE, LLC
DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS
INCLUDING THOSE IN ELECTRONIC FORM, PREPARED BY
FAO ARCHITECTURE, LLC, AND THE CONSULTANTS ARE
INSTRUMENTS OF SERVICE FOR USE SOLELY WITH
RESPECT TO THIS PROJECT. THE ARCHITECT AND THE
CONSULTANTS SHALL BE DEEMED THE AUTHORS AND
OWNERS OF THESE RESPECTIVE INVENTIONS, OF
SERVICE AND SHALL RETAIN ALL COMMON LAW,
PATENT AND OTHER RESERVED RIGHTS, INCLUDING
COPYRIGHTS.

SCALE:

FELIPE ALVARADO AR 91841

PHASE:
CONSTRUCTION DOCUMENTSISSUE DATE:
DECEMBER 12, 2023SHEET TITLE:
MECHANICAL SECOND FLOOR PLAN

SHEET: