SCOPE OF WORK

PROVIDE NEW HEPATIP SPLIT SYSTEM WITH BIPOLAR IONIZATION STRIPS ON INDOOR UNIT. PROVIDE NEW HEPA FILTERS FOR EXHAUST FAN. PROVIDE NEW UV SANITARY LIGHTS WITH SENSORS. PROVIDE NEW CEILING MOUNTED EXHAUST FAN. PROVIDE NEW UV SANITARY LIGHTS WITH SENSORS.
1. INSTALL FIXTURE ABOVE DOORWAY. MATCH HEIGHT WITH EXISTING EXTERIOR FIXTURE. COORDINATE WITH ARCHITECT.

2. RELOCATE RECEPTACLE AS SHOWN ON PLAN. EXTEND EXISTING WIRE AND CONDUIT THROUGH REFRIGERANT PIPING CHASE AND COVER. CIRCUIT RECEPTACLE THROUGH TOGGLE SWITCH WITH 3/4" MC CABLE. COORDINATE EXACT LOCATION WITH ARCHITECT.

3. EXTEND AND CONNECT EXISTING BRANCH CIRCUIT TO NEW LIGHT FIXTURES IN NEW CEILING.

4. CONTRACTOR SHALL CONFIGURE OCCUPANCY SENSOR TO MAXIMUM SHUTOFF TIME INTERVAL.

5. SWITCH SHALL CONTROL NEW EXHAUST FAN.

6. EXTEND CONDUIT AND WIRE FROM EXISTING DISCONNECTS TO RELOCATED HVAC UNITS.

RENOVATION NOTES

1. REMOVE EXISTING LIGHT FIXTURES IN THIS SPACE TURNOVER TO OWNER.

2. REMOVE EXISTING IRRIGATION CONTROLLER AND RELOCATE EXISTING RECEPTACLE PER RENOVATION PLAN. CCU SHALL REMOVE IRRIGATION CONTROLLER AND ELECTRICAL CONTRACTOR SHALL REMOVE AND RELOCATE SWITCH, RECEPTACLE, AND CONDUIT.

3. PROTECT FIRE ALARM DEVICE IN PLACE.

4. REMOVE EXISTING WIREMOLD. ENSURE CIRCUIT P1B:1 REMAINS CONNECTED TO FIXTURES SHOWN IN RENOVATION PLAN.

5. NEW CEILING IS LOWER THAN EXISTING.

6. EXISTING EXTERIOR FIXTURE MATCHES HEIGHT WITH FIXED.CCC.

GENERAL NOTES

1. REMOVE EXISTING LIGHT FIXTURES IN THIS SPACE TURNOVER TO OWNER.

2. REMOVE EXISTING IRRIGATION CONTROLLER AND RELOCATE EXISTING RECEPTACLE PER RENOVATION PLAN. CCU SHALL REMOVE IRRIGATION CONTROLLER AND ELECTRICAL CONTRACTOR SHALL REMOVE AND RELOCATE SWITCH, RECEPTACLE, AND CONDUIT.

3. PROTECT FIRE ALARM DEVICE IN PLACE.

4. REMOVE EXISTING WIREMOLD. ENSURE CIRCUIT P1B:1 REMAINS CONNECTED TO FIXTURES SHOWN IN RENOVATION PLAN.

5. NEW CEILING IS LOWER THAN EXISTING.
1. BRANCH CIRCUITS: INSTALL EQUIPMENT GROUNDING CONDUCTORS WITH ALL FEEDERS AND POWER AND LIGHTING BRANCH CIRCUITS.

2. COPPER ELECTRICAL GROUNDING CONDUCTORS SIZED ACCORDING TO NEC OR AS SHOWN OR SPECIFIED. PROVIDE GREEN EQUIPMENT GROUNDING CONDUCTOR TERMINATIONS AT PANELBOARDS.

3. USE NON-FERROUS FOR CONDUCTORS EXCEPT FOR SPECIFIED GROUNDING SYSTEMS.

4. INSTALL HARDWARE AND SUPPORTS AS REQUIRED TO ADEQUATELY AND SECURELY SUPPORT ELECTRICAL SYSTEM COMPONENTS.

5. DO NOT ATTACH CONDUIT TO CEILING SUPPORTS OR OTHER MATERIALS.

6. INTERRUPTION OF SERVICES: INTERRUPTIONS OF SERVICES NECESSARY FOR CONNECTION TO OR MODIFICATION OF EXISTING SYSTEMS AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN. ALL MATERIALS AND EQUIPMENT USED SHALL BE NEW, LISTED, AND CLASSIFIED BY UNDERWRITERS LABORATORIES INC. AS SUITABLE FOR THE PURPOSE SPECIFIED AND REMAIN IN THAT CONDITION AT ALL TIMES.

7. ANCHORS AND FASTENERS: PROVIDE LUGS IN EACH BOX AND ENCLOSURE FOR EQUIPMENT GROUNDING CONDUCTOR TERMINATION.

8. FIELD ASSEMBLY OF SUPPORTS AND CONNECTORS SHALL BE AS SHOWN OR SPECIFIED.

9. PROVIDE THROUGH CONDUIT AND BOX ENCLOSURES THROUGH WHICH THE CONDUCTOR PASSES (EXCEPT FOR SPECIAL GROUNDING SYSTEMS FOR THE FACP ONLY, WITHOUT ACTIVATION OF THE GENERAL EVACUATION SYSTEM OR THROUGH USE OF FAULTY MATERIALS OR WORKMANSHIP SHALL BE PROMPTLY REPAIRED, REPLACED, OR OTHERWISE REPAIRED TO SATISFACTORY EFFECT). ANCHORS AND FASTENERS SHALL BE AS SHOWN OR SPECIFIED.

10. FIRE ALARMS AND團隊 AND OTHER ENCLOSURES THROUGH WHICH THE CONDUCTOR PASSES (EXCEPT FOR SPECIAL GROUNDING SYSTEMS FOR THE FACP ONLY, WITHOUT ACTIVATION OF THE GENERAL EVACUATION SYSTEM OR THROUGH USE OF FAULTY MATERIALS OR WORKMANSHIP SHALL BE PROMPTLY REPAIRED, REPLACED, OR OTHERWISE REPAIRED TO SATISFACTORY EFFECT). ANCHORS AND FASTENERS SHALL BE AS SHOWN OR SPECIFIED.

11. ELECTRICAL PRODUCTS: LISTED AND CLASSIFIED BY UNDERWRITERS LABORATORIES INC. AS SUITABLE FOR THE PURPOSE SPECIFIED AND REMAIN IN THAT CONDITION AT ALL TIMES.

12. ALL MATERIALS AND EQUIPMENT USED SHALL BE NEW, LISTED, AND CLASSIFIED BY UNDERWRITERS LABORATORIES INC. AS SUITABLE FOR THE PURPOSE SPECIFIED AND REMAIN IN THAT CONDITION AT ALL TIMES.

13. PROVIDE LUGS IN EACH BOX AND ENCLOSURE FOR EQUIPMENT GROUNDING CONDUCTOR TERMINATION.

14. INSTALL SUPPORTS, HARDWARE AND CONNECTORS IN COMPLIANCE WITH THE MANUFACTURER’S INSTALLATION INSTRUCTIONS, IF PROVIDED, OR OTHERWISE AS SHOWN OR SPECIFIED.

15. INSTALL ELECTRICAL CONDUCTORS AND BOXES IN COMPLIANCE WITH THE MANUFACTURER’S INSTALLATION INSTRUCTIONS, IF PROVIDED, OR OTHERWISE AS SHOWN OR SPECIFIED.

16. PROVIDE HARDWARE AND CONNECTORS IN COMPLIANCE WITH THE MANUFACTURER’S INSTALLATION INSTRUCTIONS, IF PROVIDED, OR OTHERWISE AS SHOWN OR SPECIFIED.

17. PROVIDE SUPPORTS, HARDWARE AND CONNECTORS IN COMPLIANCE WITH THE MANUFACTURER’S INSTALLATION INSTRUCTIONS, IF PROVIDED, OR OTHERWISE AS SHOWN OR SPECIFIED.

18. PROVIDE LUGS IN EACH BOX AND ENCLOSURE FOR EQUIPMENT GROUNDING CONDUCTOR TERMINATION.

19. INSTALL HARDWARE AND SUPPORTS AS REQUIRED TO ADEQUATELY AND SECURELY SUPPORT ELECTRICAL SYSTEM COMPONENTS.

20. DO NOT ATTACH CONDUIT TO CEILING SUPPORTS OR OTHER MATERIALS.

21. INTERRUPTION OF SERVICES: INTERRUPTIONS OF SERVICES NECESSARY FOR CONNECTION TO OR MODIFICATION OF EXISTING SYSTEMS AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN. ALL MATERIALS AND EQUIPMENT USED SHALL BE NEW, LISTED, AND CLASSIFIED BY UNDERWRITERS LABORATORIES INC. AS SUITABLE FOR THE PURPOSE SPECIFIED AND REMAIN IN THAT CONDITION AT ALL TIMES.

22. ANCHORS AND FASTENERS: PROVIDE LUGS IN EACH BOX AND ENCLOSURE FOR EQUIPMENT GROUNDING CONDUCTOR TERMINATION.

23. FIELD ASSEMBLY OF SUPPORTS AND CONNECTORS SHALL BE AS SHOWN OR SPECIFIED.

24. PROVIDE THROUGH CONDUIT AND BOX ENCLOSURES THROUGH WHICH THE CONDUCTOR PASSES (EXCEPT FOR SPECIAL GROUNDING SYSTEMS FOR THE FACP ONLY, WITHOUT ACTIVATION OF THE GENERAL EVACUATION SYSTEM OR THROUGH USE OF FAULTY MATERIALS OR WORKMANSHIP SHALL BE PROMPTLY REPAIRED, REPLACED, OR OTHERWISE REPAIRED TO SATISFACTORY EFFECT). ANCHORS AND FASTENERS SHALL BE AS SHOWN OR SPECIFIED.

25. ELECTRICAL PRODUCTS: LISTED AND CLASSIFIED BY UNDERWRITERS LABORATORIES INC. AS SUITABLE FOR THE PURPOSE SPECIFIED AND REMAIN IN THAT CONDITION AT ALL TIMES.

26. ALL MATERIALS AND EQUIPMENT USED SHALL BE NEW, LISTED, AND CLASSIFIED BY UNDERWRITERS LABORATORIES INC. AS SUITABLE FOR THE PURPOSE SPECIFIED AND REMAIN IN THAT CONDITION AT ALL TIMES.

27. PROVIDE LUGS IN EACH BOX AND ENCLOSURE FOR EQUIPMENT GROUNDING CONDUCTOR TERMINATION.

28. INSTALL SUPPORTS, HARDWARE AND CONNECTORS IN COMPLIANCE WITH THE MANUFACTURER’S INSTALLATION INSTRUCTIONS, IF PROVIDED, OR OTHERWISE AS SHOWN OR SPECIFIED.

29. INSTALL ELECTRICAL CONDUCTORS AND BOXES IN COMPLIANCE WITH THE MANUFACTURER’S INSTALLATION INSTRUCTIONS, IF PROVIDED, OR OTHERWISE AS SHOWN OR SPECIFIED.

30. PROVIDE HARDWARE AND CONNECTORS IN COMPLIANCE WITH THE MANUFACTURER’S INSTALLATION INSTRUCTIONS, IF PROVIDED, OR OTHERWISE AS SHOWN OR SPECIFIED.

31. PROVIDE SUPPORTS, HARDWARE AND CONNECTORS IN COMPLIANCE WITH THE MANUFACTURER’S INSTALLATION INSTRUCTIONS, IF PROVIDED, OR OTHERWISE AS SHOWN OR SPECIFIED.

32. PROVIDE LUGS IN EACH BOX AND ENCLOSURE FOR EQUIPMENT GROUNDING CONDUCTOR TERMINATION.

33. INSTALL HARDWARE AND SUPPORTS AS REQUIRED TO ADEQUATELY AND SECURELY SUPPORT ELECTRICAL SYSTEM COMPONENTS.
MECHANICAL SYSTEMS
HVAC SYMBOL LEGEND

AIR TERMINAL TAG, X=TYPE MARK, Y=CFM

DUCTWORK (X" = WIDTH, Y" = HEIGHT)

AIR TERMINAL DIFFUSER (CEILING MOUNTED)

AIR TERMINAL RETURN GRILLE (CEILING MOUNTED)

THEIR SUPPORTS AND ATTACHMENTS, SHALL BE DESIGNED FOR SEISMIC FORCES IN ACCORDANCE WITH CHAPTER 13 OF ASCE 7-16.

B.

EXTERIOR EQUIPMENT (INCLUDING ROOF CURBS, RAILS, SUPPORTS) EXPOSED TO WIND SHALL BE DESIGNED AND INSTALLED TO RESIST EQUIPMENT CLEARANCE.

F.

SIGNED DRAWINGS AND CALCULATIONS. WHERE SEISMIC RESTRAINT IS REQUIRED, HOUSEKEEPING PADS NEEDED FOR THE INSTALLATION OF EQUIPMENT UNDER THIS REQUIREMENT NOTED.

MECHANICAL COMPONENT IMPORTANCE FACTOR (I)

+/- 0.5

ASME DESIGN CATEGORY S I P

COMPONENT IMPORTANCE FACTOR (I)

I I I I I

COMPONENT DESCRIPTION

1. RESTRAIN ALL COMPONENTS AND CONNECTIONS AS NEEDED TO ASSURE SEISMIC STABILITY.

2. PROVIDE SEISMIC RESTRAINT FOR ALL EXISTING PIPING AND CONDUIT.

GENERAL HVAC NOTES

1. ALL PIPING SHALL BE HARD DRAWN COPPER TUBING WITH SOLDERED JOINTS.

2. SUCTION LINE INSULATION OUTDOORS SHALL BE PAINTED WITH METAL JACKET.

3. ALL PIPING ON TRAPEZE SHALL BE RESTRAINED. COMPONENT CERTIFICATION MUST BE SUPPLIED BY THE EQUIPMENT MANUFACTURER AT TIME OF SUBMITTAL FOR REVIEW BY ENGINEER OF RECORD.

MECHANICAL SYSTEMS SEISMIC AND WIND REQUIREMENTS

PER IBC/2016/ASCE 7-16

MECHANICAL CODES AND STANDARDS (WITH ALL SOUTH CAROLINA MODIFICATIONS)

MECHANICAL NOTES

1. THE DRAWINGS SHOWN ON THIS SHEET ARE FOR THE GENERAL ARRANGEMENT AND LOCATION OF THE MECHANICAL EQUIPMENT, DUCTWORK, PIPING, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE MECHANICAL SYSTEMS WITH THE STRUCTURAL AND OTHER TRADES TO AVOID INTERFEROING WITH THE PRECIPITATING SYSTEM.

2. THE CONTRACTOR SHALL Cooper WITH AUTHORITY HAVING JURISDICTION AND OBTAIN ALL PERMITS AND INSPECATIONS.

3. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IF RECOMMENDED CLEARANCES ARE NOT POSSIBLE BEFORE INSTALLING EQUIPMENT.

4. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF SEVEN DAYS ADVANCE NOTICE OF INSTALLATION.

5. DUCT DIMENSIONS ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.

6. PROVIDE LOW AMBIENT SEACOAST COATING.

7. FLEXIBLE CONNECTIONS REQUIRED FOR PIPING CONNECTIONS ONLY.

8. ALL ELECTRICAL, REGARDLESS OF SIZE, DESIGNED TO CARRY TONS, HExisting TOXIC, OR EXCESSIVE GAI SE IN USE FOR BORES CANNOT BE USED.

9. COMPONENT CERTIFICATION MUIST BE SUPPLIED BY THE EQUIPMENT MANUFACTURER AT TIME OF SUBMITTAL FOR REVI BY ENGINEER OF RECORD.

SPLIT SYSTEM HEAT PUMP SCHEDULE

LAB EXHAUST FAN SCHEDULE

CONSTRUCTION DOCUMENTS

Hvac NOTES & LEGENDS

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MECHANICAL SYSTEMS HEAT PUMP SCHEDULE

NOTES:

1. PROVIDE BACKPACK DESIGNS, BIRD SCREEN, AND SPEED CONTROLLER.
MECHANICAL RENOVATION PLAN

SCALE: 1/4" = 1'-0" M101

1. MECHANICAL DEMOLITION PLAN

SCALE: 1/4" = 1'-0" M101

2. MECHANICAL SECTION

3. MECHANICAL SECTION

4. MECHANICAL SECTION

5. MECHANICAL SECTION

6. MECHANICAL SECTION

7. MECHANICAL SECTION

GENERAL NOTES

1. MECHANICAL CONTRACTOR SHALL MAKE JUSTIFICATIONS TO THE REMAINING GRILLES AND DIFFUSERS SERVED BY AHU-6 TO ELIMINATE ANY NOISE DUE TO REMOVAL OF AIR DEVICES IN ISOLATION ROOM.

2. REFER TO ARCHITECTURAL DRAWINGS FOR COORDINATION.

3. REMOVE AIR DEVICE AND ASSOCIATED DUCTWORK. CAP AND INSULATE AT MAIN. REBALANCE ALL OTHER AIR DEVICES SERVED BY AHU-6 TO ENSURE THAT RE-DISTRIBUTION OF AIR DOES NOT CAUSE EXCESSIVE NOISE. CONCRETE EQUIPMENT PAD SHALL BE DEMOLISHED TO ACCOMMODATE SIDEWALK.

4. EXHAUST DUCT SHALL BE ROUTED TO ROOF. COORDINATE WITH EXISTING DUCT IN ATTIC. SEE DETAIL 3/M101. HP-7 SHALL BE LOCATED A MINIMUM OF 2 FT FROM SIDEWALK, TO EXHAUST AWAY FROM HP-6. REMOVE FIRST SHRUB TO MAKE ROOM FOR OUTDOOR UNIT. CONTRACTOR SHALL PROVIDE AIRFLOW DIRECTION INCORPORATED ADI-69-VN (OR EQUAL) TO SERVE AS A VISUAL AIDE TO ENSURE THAT THE ISOLATION ROOM REMAINS AT A NEGATIVE PRESSURE TO THE CORRIDOR. CONTRACTOR SHALL PROVIDE GLOBAL PLASMA SOLUTIONS GPS-IRIB-18 (OR EQUAL) ADIPURIFICATION DEVICE ON EACH SIDE OF SUPPLY AIR OUTLET.

5. ROUTE REFRIGERANT & CONDENSATE LINES THROUGH WALL SLEEVE AND INSIDE RECTORSLEAN SLIMDUCT SDK100W COVER (OR EQUAL) ON EXTERIOR WALL. CONDENSATE SHALL DISCHARGE TO GRADE. UNDERCUT DOOR BY 1".

6. HP-6 AND HP-5 SHALL BE SHIFTED TO ACCOMMODATE SIDEWALK. DISCONNECT REFRIGERANT LINES FROM HP-5 & HP-6 AND CONNECT TO RELOCATED HEAT PUMP. RELOCATE CONDENSATE LINES IF REQUIRED.

7. MECHANICAL RENOVATION KEY NOTES

1. MECHANICAL CONTRACTOR SHALL MAKE JUSTIFICATIONS TO THE REMAINING GRILLES AND DIFFUSERS SERVED BY AHU-6 TO ELIMINATE ANY NOISE DUE TO REMOVAL OF AIR DEVICES IN ISOLATION ROOM.

2. REFER TO ARCHITECTURAL DRAWINGS FOR COORDINATION.