GENERAL NOTES

A. The Contractor shall accept the site in its present condition & demolish and/or remove from the area of the project all structures, both surface & subsurface, trees, brush, roots, debris, organic matter, & all other matter determined by the inspector to be deleterious. Such material shall be removed from the site by the contractor.

B. Excavations shall be adequately shored, braced & sheeted so that the earth will not slide or settle & so that all existing improvements of any kind will be fully protected from damage. Where the excavation for a conduit trench, and/or structure is five feet or more in depth, the contractor shall provide adequate sheeting, which shall conform to the applicable construction safety orders of the Division of Industrial Safety of the State of California. The contractor shall always comply with OSHA requirements.

C. Existing underground utilities & improvements are shown in their approx. locations based upon record info. available to the architect at the time of preparation of these plans. Locations may not have been verified in the field & no guarantee is made as to the accuracy or completeness of the info. shown. The contractor shall notify utility companies at least 2 working days in advance of construction to field locate utilities. Call Underground Service Alert (U.S.A.), 1-800-642-2444.

D. Property dimensions as shown are based on record info. & should be field verified by a property survey prior to construction.

E. Refer to electrical for utility information. Contractor to coordinate all trades to maintain proper clearances & avoid conflicts.
A. FOR TYPICAL PIPE THROUGH ROOF PENETRATIONS, SEE.
B. PROVIDE SEPARATE DRAIN LINES FOR ROOF DRAINS AND OVERFLOW DRAINS. PROVIDE ALL HANGERS + SUPPORTS FOR PIPE AS REQUIRED.
C. FOR EXHAUST FAN OPENING THROUGH ROOF, SEE.
D. FOR CONDUIT SUPPORT SEE 10 / A801.
UNISTRUT ATTACHED TO BLOCK HATCHED AREA DENOTES RUBBER BLOCK @ 5'-0" O.C. (MAX.)

CONDUIT/PIPE TO REMAIN

NOTE:
UP TO 2", TWO CONDUITS PER BLOCK. GREATER THAN 2", ONE CONDUIT PER BLOCK

UNISTRUT SEALANT AT HEAD OF SCREW

COOPER B-LINE 'DURA-BLOK' OR APPROVED EQUIV.

(2) #14 S.D.S. 2" FROM EA. END.

PRE DRILL ALL FASTENER LOCATIONS AND FILL WITH MASTIC APPROVED BY ROOFING MANUFACTURER PRIOR TO INSTALLATION OF FASTENER.

CLAMP FIELD CUT SINGLE PLY. TO MATCH EXISTING FLASHING SEE NOTE THIS SHEET

SINGLE PLY. MEMBRANE EXISTING ROOF DECK EXISTING SUBSTRATE BOARD SINGLE PLY. MEMBRANE COVER STRIP 6" WIDE HEAT WELDED LAPS SINGLE PLY. MEMBRANE TO MATCH EXISTING SPECIFIED ADHESIVE

SECTION A-A ROUND ALL CORNERS 6" MIN.

FOLD FLASHING OVER CURB AND FASTEN 8" O.C. WITH SPECIFIED FASTENERS SINGLE PLY. UNIVERSAL CORNER SINGLE PLY. FLASHING MEMBRANE TO MATCH EXISTING FULLY ADHERED SINGLE PLY ROOF SYSTEM O/ SUBSTRATE BOARD O/ ROSIN SHEET O/ EXISTING WOOD DECK

NOTE:
1. USE THIS DETAIL WHEN COUNTERFLASHING IS PART OF THE CURB MOUNTED EQUIPMENT
2. USE THE SPECIFIED FASTENERS AND PLATE AROUND THE CURB PER WRITTEN SPECIFICATIONS

METAL CURB COUNTERFLASHING SPECIFIED SEALANT TOOLED NEATLY TERMINATION BAR FASTENED 8" O.C. SINGLE PLY. BONDING ADHESIVE SINGLE PLY. FLASHING MEMBRANE FULLY ADHERED TO SUBSTRATE SPECIFIED FASTENER AND PLATE HEAT WELDED LAP SINGLE PLY. MEMBRANE SUBSTRATE BOARD (WHERE SPECIFIED)

EXISTING SPECIFIED ADHESIVE EXISTING ROOF DECK TF TAPE

NOTE:
1. ALL FLASHING SHALL BE A MINIMUM OF 8" HIGH.
<table>
<thead>
<tr>
<th>BRANCH SIZE (IN.)</th>
<th>MCA</th>
<th>EADB (°F)</th>
<th>LADB (°F)</th>
<th>BRANCH SIZE (IN.)</th>
<th>MOCP</th>
<th>HP</th>
<th>VFD (Y/N)</th>
<th>SCCR (kA)</th>
<th>FLA</th>
<th>AIR PD (IN. WC)</th>
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**Notes:**
- MCA: Minimum Component Area
- EADB: Energy Exhaust Air Design Temperature
- LADB: Low Air Design Temperature
- MOCP: Minimum Operating Capacity Point
- HP: Horsepower
- VFD: Variable Frequency Drive
- SCCR: Short-Circuit Rating
- FLA: Full Load Amperes
- AIR PD: Air Pressure Drop

**Additional Information:**
1. This table is for administrative use and is subject to change.
2. All values are approximate and may vary slightly.
3. Specifications are subject to manufacturer's tolerances.
4. Dimensions and weights are for reference only and may not be exact.
REMOVE AIR COOLED CHILLER.
REMOVE GROUND MOUNTED END SUCTION PUMP. (TYP OF 2)
REMOVE PIPE SHOWN HATCHED.
(E) AIR SEPARATOR AND EXPANSION TANK TO REMAIN.
(E) CHWR PIPE TO REMAIN.
(E) CHWS PIPE TO REMAIN.
(E) BOILER AND PUMPS TO REMAIN. HWS/R PIPING NOT SHOWN FOR CLARITY.
CHILLER MOUNTED ON (E) HOUSE KEEPING PAD PER DETAIL 1/M800.
PUMP FRAME MOUNTED ON (E) HOUSEKEEPING PAD PER DETAIL 2/M800.
PIPE MOUNTED ON (E) UNISTRUT FRAMES WITH (N) PIPE CLAMP. FIELD VERIFY ACTUAL PIPE SIZE AND MATCH EXISTING.
1/4" = 1'-0"

REMOVE PORTION OF AIR HANDLER CONTAINING DX COOLING COIL AND FURNACE. REMOVE INTERCONNECTING POWER AND CONTROL WIRING.

REMOVE MULTIZONE DUCT SECTION, UNIT MOUNTED CONTROL DAMPERS AND ACTUATORS.

DISCONNECT 9"Ø FLUE DUCT AND PRESERVE PENETRATION THRU ROOF, (TYP. OF 2)

REMOVE CONDENSING UNIT MOUNTED ON STRUCTURAL STAND. PRESERVE STRUCTURAL STAND FOR (N).

FAN SECTION TO REMAIN. SERVICE BY REMOVING DUST AND BUILDUP FROM CABINET AND FAN BLADES, REPLACE SHAFT BEARINGS AND BELT, ALIGN AND BALANCE FAN AND SHAFT.

FILTER SECTION TO REMAIN. SERVICE BY REMOVING DUST AND BUILDUP FROM CABINET. REPLACE FILTERS WITH 2" MERV-13 FILTERS. FIELD VERIFY SIZE/ QTY.

REMOVE 1-1/2" GAS PIPING AND CAP AT WALL FOR FUTURE.

REMOVE AND PRESERVE EXTERIOR WALL LOUVER AS NECESSARY FOR EQUIPMENT ACCESS.

PRESERVE RA PENETRATIONS THRU FLOOR, MIXING BOX, AND OSA DUCT.

REMOVE AND REPLACE DAMPER ACTUATORS.

PRESERVE SA PENETRATIONS THRU FLOOR. (TYP. OF 7)

REMOVE REFRIGERANT PIPING.

(N) PARTIAL AIR HANDLER SECTION MOUNTED ON (E) ISOLATORS AND WIDE-FLANGE BEAM PER DETAIL 7/M800. PROVIDE (N) GASKET AT CONNECTION TO FAN CABINET TO REMAIN.

SUPPLY AIR DUCT DETECTOR MOUNTED PER DETAIL 10/M800.

POC OF MULTI ZONE DUCTS TO (E) FLOOR PENETRATIONS: 20"X14", 26"X14", 16"X14", 14"X12", 15"X12", 20"X14", 20"X14".

POC OF (N) 9"Ø FLUE TO (E) ROOF PENETRATION. (TYP. OF 2)

(N) CONDENSATE DRAIN CONNECTION WITH TRAP PER DETAIL 3/M800. DISCHARGE INTO (E) FLOOR SINK WITH 1" AIR GAP.

(N) 7/8" LIQUID AND 1-5/8" SUCTION SUSPENDED PER 4/M800.

(N) CONDENSING UNIT MOUNTED ON EXISTING STRUCTURE PER 22/M800.

(N) 1-1/2" GAS ROUTED TIGHT TO STRUCTURE ON (E) SUPPORTS. PROVIDE DIRT LEG AT UNIT CONNECTION PER 6/M800.
REMOVE ROOF MOUNTED AIR HANDLER, CHW AND HHW COIL VALVE ASSEMBLY. PRESERVE CONDENSATE MAIN.

REMOVE DUCT MOUNTED BAROMETRIC RELIEF DAMPER.

REMOVE DUCT SHOWN AS HATCHED. (TYP.)

(N) AIR HANDLER MOUNTED ON (E) ROOF CURB PER DETAIL 12/M800.

P.O.C. (N) CHWS/R & HHWS/R TO (E) PIPING ABOVE ROOF. PROVIDE (N) PIPING AND VALVES FOR (N) AIR HANDLER PER DETAIL 8/M800.

P.O.C. (N) DUCT TO (E) DUCT ABOVE ROOF. (TYP.)

(E) CHWS/R & HHWS/R PIPING BELOW ROOF. (TYP.)

FIELD-INSTALLED, DUCT-MOUNTED MODULATING POWER EXHAUST. SEE EQUIPMENT SCHEDULE.

(N) ROOF-MOUNTED DUCTWORK SUPPORTED PER DETAIL 15/M800. (TYP.)

SUPPLY AIR DUCT DETECTOR MOUNTED PER DETAIL 10/M800.

CONDENSATE DRAIN CONNECTION WITH TRAP PER DETAIL 3/M800.

RE-CONNECT TO (E) CONDENSATE MAIN.
**General Notes**

1. **Provide Flex Connection with Sheet Metal Cover for Roof-Mounted Duct at Package Units.** See Detail 11/M800. (Typ.)

2. **Provide Turning Vanes at All Rectangular Elbows.**


4. **Condensate Drain Connection with Trap Per Detail 3/M800. Re-Connect To (E) Condensate Main.**

5. **Roof-Mounted Ductwork Supported Per Detail 15/M800. (Typ.)**

6. **Supply Air Duct Detector Mounted Per Detail 10/M800.**

7. **Air Handler Mounted On Floor Of Penthouse Per Detail 13/M800. Field-Installed, Duct-Mounted Modulating Power Exhaust. See Equipment Schedule.**

8. **Field-Installed, Unit-Mounted Modulating Power Exhaust. See Equipment Schedule.**

**Mechanical Connectors**

- **2-1/2" CHWS/R & 1-1/4" HHWS/R**
- **3" CHWS/R & 2" HHWS/R**
- **2-1/2" CHWS/R & 1-1/4" HHWS/R**
- **1-1/4" CHWS/R & 1" HHWS/R**
- **3/4"**
- **1/8" = 1'-0"**

**Equipment Schedules**

- **AHU S1, AHU S2, AHU S3, AHU S4, AHU S5, AHU S6, AHU S7**

**Dimensions**

- **West Yosemite Avenue**
- **Veterans Blvd.**
- **G St.**
- **MU Community College Dr. E**
- **Blue Devil Ln.**
- **Stadium Ln.**
- **M St.**
- **Community College Dr. W**
- **University Dr.**
- **Community College Dr. N**
- **M St.**
- **College**
- **Society**
- **Colleges"**

**Project No.** 1087

**Website:** www.NPCeng.com
COMPUTER ROOM AIR CONDITIONING UNIT WITH DOWN FLOW CONFIGURATION WITH MANUFACTURER'S STAND MOUNTED TO SLAB ON GRADE PER 18/M800. REMOVE PORTION OF RAISED FLOOR AS REQUIRED FOR UNIT, AND PROVIDE NEW FLOOR FRAMING AND TRIM AT CUT JOINT PER MANUFACTURER INSTRUCTIONS.

OUTDOOR CONDENSING UNIT MOUNTED ON (N) ROOF TOP SLEEPERS PER 16/M800.

REFRIGERANT PIPING ROUTED DN THRU ROOF IN (N) PIPE ENCLOSURE PER 17/M800.

SERVER RACKS ON RAISED FLOOR, SHOWN FOR REFERENCE.

UPS ON RAISED FLOOR, SHOWN FOR REFERENCE.

WALL MOUNTED FAN COIL TO REMAIN.

SUPPLY GRILLE FROM ROOF MOUNTED PACKAGE UNIT TO REMAIN (TYP OF 4)

RETURN GRILLE FROM ROOF MOUNTED PACKAGE UNIT TO REMAIN (TYP OF 2)

STORAGE SHELVES RELOCATED FROM NORTH WALL BY DISTRICT.

ROOM HUMIDIFIER TO REMAIN.

HALON SYSTEM TO REMAIN.

ROUTE REFRIGERANT PIPING UP THRU ROOF PER DETAIL 17/M800.

REFRIGERANT PIPING SUSPENDED IN ATTIC PER 4/M800.

TERMINATE 1" CONDENSATE INTO (E) MOP SINK WITH 2" AIR GAP ABOVE FLOOD RIM.

POC, 1/4" CW TO (E) CW SUPPLY AT HUMIDIFIER.

CONTROLS AUTOMATION: SEQUENCE CRAC SYSTEM AS PRIMARY SYSTEM FOR ROOM COOLING. IN THE EVENT OF CRAC FAILURE:

A. ALARM SHALL NOTIFY USER.

B. ROOF TOP PACKAGE UNIT AND IN-ROOF FAN COILS SHALL ENERGIZE TO COOL THE SPACE.

A. SUPPORT ROOF MOUNTED REFRIGERANT PIPING PER 21/M800.

B. SUPPORT SUSPENDED REFRIGERANT PIPING PER 4/M800.
EXISTING AIR HANDLER TO REMAIN. SERVICE BY REMOVING DUST AND BUILD-UP THROUGHOUT CABINET. PRESSURE WASH EVAPORATOR COIL AND HOT WATER COIL. VACUUM AND CLEAN ALL CONTROL DEVICES, AIR MONITORING STATION, AND ACTUATORS. TEST ALL DEVICES TO ENSURE PROPER FUNCTION AFTER SERVICE.

REMOVE AND REPLACE FAN WHEEL AND MOTOR WITH SAME SIZE AND ELECTRICAL. MOUNT ON (E) FAN FRAME W/ HARDWARE TO MATCH EXISTING. FIELD VERIFY FAN WHEEL AND MOTOR PRIOR TO ORDERING.

REPLACE FILTERS WITH 4" PLEATED MERV-13 FILTERS. 9EA 24"X24" AND 6EA 12"X24"

EXISTING CUSTOM DX COOLING TOWER TO REMAIN (ORIGINALLY MANUFACTURED BY ENERGY LABS INC.). SERVICE BY PRESSURE WASHING COPPER TUBES AND STAINLESS STEEL BASIN, REPLACE WATER NOZZLES, CHEMICALLY FLUSH SYSTEM TO REMOVE ALL SCALE. REPLACE FILTER MEDIA.

LEAK TEST THE EXISTING REFRIGERANT SYSTEM AND REPAIR ANY LEAKS. EVACUATE AND DISPOSE OF R22, AND REPLACE WITH R-407C. CALIBRATE AND RESET THERMAL EXPANSION VALVE, PRESSURE REGULATORS, AND HIGH-PRESSURE SAFETY CONTROLS FOR NEW REFRIGERANT. REPLACE FILTER DRIERS PER MANUFACTURER INSTRUCTIONS. PROVIDE COMPRESSOR LUBRICANT COMPATIBLE WITH NEW REFRIGERANT.

(E) CONTROL AND COMPRESSOR CABINET TO REMAIN.

REMOVE AND REPLACE TOWER PUMP WITH SAME SIZE AND ELECTRICAL. MOUNT ON (E) PLATFORM W/ HARDWARE TO MATCH EXISTING. FIELD VERIFY PRIOR TO ORDERING.
EXISTING AIR HANDLER TO REMAIN. SERVICE BY REMOVING DUST AND BUILD-UP THROUGHOUT CABINET. PRESSURE WASH EVAPORATOR COIL AND HOT WATER COIL. VACUUM AND CLEAN ALL CONTROL DEVICES, AIR MONITORING STATION, AND ACTUATORS. TEST ALL DEVICES TO ENSURE PROPER FUNCTION AFTER SERVICE.

REMOVE AND REPLACE FAN WHEEL AND MOTOR WITH SAME SIZE AND ELECTRICAL. MOUNT ON (E) FAN FRAME W/ HARDWARE TO MATCH EXISTING. FIELD VERIFY FAN WHEEL AND MOTOR PRIOR TO ORDERING.

REPLACE FILTERS WITH 4" PLEATED MERV-13 FILTERS. 8EA 24"X24" AND 4EA 12"X24"

EXISTING CUSTOM DX COOLING TOWER TO REMAIN (ORIGINALLY MANUFACTURED BY ENERGY LABS INC.). SERVICE BY PRESSURE WASHING COPPER TUBES AND STAINLESS STEEL BASIN, REPLACE WATER NOZZLES, CHEMICALLY FLUSH SYSTEM TO REMOVE ALL SCALE. REPLACE FILTER MEDIA. REPLACE 4" BASIN SUPPORT C-CHANNEL AND STAINLESS STEEL BASIN. REFER TO DETAIL 25/M800 FOR IMAGES OF BASIN SUPPORT CHANNEL AND FILTER MEDIA TO BE REPLACED.

LEAK TEST THE EXISTING REFRIGERANT SYSTEM AND REPAIR ANY LEAKS. EVACUATE AND DISPOSE OF R22, AND REPLACE WITH R-407C. CALIBRATE AND RESET THERMAL EXPANSION VALVE, PRESSURE REGULATORS, AND HIGH-PRESSURE SAFETY CONTROLS FOR NEW REFRIGERANT. REPLACE FILTER DRIERS PER MANUFACTURER INSTRUCTIONS. PROVIDE COMPRESSOR LUBRICANT COMPATIBLE WITH NEW REFRIGERANT.

REMOVE AND REPLACE TOWER PUMP WITH SAME SIZE AND ELECTRICAL. MOUNT ON (E) PLATFORM W/ HARDWARE TO MATCH EXISTING. FIELD VERIFY PRIOR TO ORDERING.
A. ELECTRICAL FACILITIES SHOWN DASHED ARE EXISTING:
1. THOSE SHOWN LIGHTWEIGHT (FADED) SHALL REMAIN AND REQUIRE MODIFICATION AS NOTED.
2. THOSE SHOWN HEAVYWEIGHT (DARK) REQUIRE REMOVAL AS NOTED.

B. EXISTING ELECTRICAL FACILITIES AND CIRCUITING SHOWN ARE BASED ON LIMITED RECORD DRAWINGS AND LIMITED SITE VISITS. THE DRAWINGS MAY NOT ACCURATELY REPRESENT ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND RING OUT EXISTING CIRCUITS TO DETERMINE EXACT ROUTING.

GENERAL NOTES

1. DISCONNECT EXISTING AIR COOLED CHILLER. DISCONNECT AND REMOVE EXISTING FLEX CONDUIT. PRESERVE EXISTING BRANCH CIRCUIT FEEDER.
2. DISCONNECT EXISTING PUMPS. DISCONNECT AND REMOVE EXISTING FLEX CONDUIT AND EXISTING CONDUCTORS TO JUNCTION BOX EQUIPMENT DISCONNECTS. MOTOR STARTERS AND CONTROL WIRING SHALL REMAIN AND BE CONNECTED IN ASSOCIATION WITH NEW PUMPS.

3. PROVIDE NEW 18"x18"x6" NEMA 3R PULLCAN. PROVIDE NEW 2" LIQUIDTIGHT FLEXIBLE CONDUIT WITH 3#2/0 CU THWN AND 1#4 CU GND AND PROVIDE CONNECTION TO 460V, 3ɸ, 145 MCA, 175 MOCP WATER CHILLER 'CH-1'.

4. PROVIDE NEW 3/4" LIQUIDTIGHT FLEXIBLE CONDUIT WITH 3#12 CU THWN AND 1#12 CU GND. PROVIDE CONNECTION TO 460V, 3ɸ, 3HP PUMP 'P-1'.

5. PROVIDE NEW 3/4" LIQUIDTIGHT FLEXIBLE CONDUIT WITH 3#12 CU THWN AND 1#12 CU GND. PROVIDE CONNECTION TO 460V, 3ɸ, 3HP PUMP 'P-2'.

KEYNOTES

DISCONNECT EXISTING AIR COOLED CHILLER. DISCONNECT AND REMOVE EXISTING FLEX CONDUIT. PRESERVE EXISTING BRANCH CIRCUIT FEEDER. DISCONNECT EXISTING PUMPS. DISCONNECT AND REMOVE EXISTING FLEX CONDUIT AND EXISTING CONDUCTORS TO JUNCTION BOX EQUIPMENT DISCONNECTS. MOTOR STARTERS AND CONTROL WIRING SHALL REMAIN AND BE CONNECTED IN ASSOCIATION WITH NEW PUMPS.

PROPERTY RIGHTS IN THESE COPYRIGHT AND OTHER RESERVES ITS COMMON LAW INSTRUMENT OF PROFESSIONAL SERVICE, IS NOT TO BE USED IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT PRIOR WRITTEN AUTHORIZATION. THIS DOCUMENT, THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN OFFICE OF PROFESSIONAL ARCHITECTS AND ENGINEERS CONNECTED TETER, LLP EXPRESSLY.
ELECTRICAL DEMOLITION PLAN - ADMINISTRATION BUILDING

1/4" = 1'-0"

KEYNOTES

A. ELECTRICAL FACILITIES SHOWN DASHED ARE EXISTING:
1. THOSE SHOWN LIGHTWEIGHT (FADED) SHALL REMAIN AND REQUIRE MODIFICATION AS NOTED.
2. THOSE SHOWN HEAVYWEIGHT (DARK) REQUIRE REMOVAL AS NOTED.

B. EXISTING ELECTRICAL FACILITIES AND CIRCUITING SHOWN ARE BASED ON LIMITED RECORD DRAWINGS AND LIMITED SITE VISITS. THE DRAWINGS MAY NOT ACCURATELY REPRESENT ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND RING OUT EXISTING CIRCUITS TO DETERMINE EXACT ROUTING.

C. PENETRATIONS THROUGH WALLS, CEILINGS, FLOORS, AND/OR ROOFS SHALL BE SEALED.

GENERAL NOTES

1. DISCONNECT EXISTING CONDENSING UNIT. DISCONNECT AND REMOVE EXISTING DISCONNECT AND EXISTING BRANCH CIRCUIT TO SOURCE CIRCUIT BREAKER.

2. REPLACE EXISTING DUCT SMOKE DETECTOR WITH NEW DUCT SMOKE DETECTOR AS DIRECTED BY MECHANICAL ENGINEER. DUCT SMOKE DETECTOR SHALL BE MONITORED THROUGH THE FIRE ALARM SYSTEM.

3. REMOVE EXISTING 70A, 3-POLE CIRCUIT BREAKER AT SPACE 8,10,12 SUPPLYING OUTDOOR CONDENSING UNIT AND PROVIDE NEW 90A, 3-POLE CIRCUIT BREAKER IN PLACE FOR PROTECTION OF NEW OUTDOOR UNIT 'ODU-1'.

ONE 1-1/4" 3#4 CU THWN AND 1#8 CU GND.

PROVIDE HEAVY DUTY WEATHERPROOF 600V, 100A, 3-POLE FUSED DISCONNECT WITH 90A FUSES. PROVIDE CONNECTION FOR 460V, 3ɸ, 66.3 MCA, 90 MOCP OUTDOOR UNIT 'ODU-1'.

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E200
### Demolition Notes

1. **Electrical Facilities Shown Dashed Are Existing:**
   - LC = 14, 16, 18
   - AHU-C2A
   - AHU-C2B
   - AHU-C3
   - AHU-C4

2. **C. Penetrations Through Walls, Ceilings, Floors, and/or Roofs**
   - Provide new 30A, 3-pole circuit breaker for air handler unit circuit, and existing conductors to fire alarm system (Siemens).
   - Provide new 30A, 3-pole disconnect with 25A fuses. Provide connection for 460V, 3ϕ, 15 MCA, 25 MOCP.
   - Provide heavy-duty weatherproof 600V, 30A, 3-pole disconnect with 25A fuses. Provide connection for 460V, 3ϕ, 15 MCA, 25 MOCP.
   - Provide heavy-duty weatherproof 600V, 30A, 3-pole disconnect with 25A fuses. Provide connection for 460V, 3ϕ, 15 MCA, 25 MOCP.
   - Provide heavy-duty weatherproof 600V, 30A, 3-pole disconnect with 15A fuses. Provide connection for 460V, 3ϕ, 6.5 FLA power exhaust at air handler unit 'AHU-C1'.
   - Provide heavy-duty weatherproof 600V, 30A, 3-pole disconnect with 15A fuses. Provide connection for 460V, 3ϕ, 2.8 FLA power exhaust at air handler unit 'AHU-C2A'.
   - Provide heavy-duty weatherproof 600V, 30A, 3-pole disconnect with 15A fuses. Provide connection for 460V, 3ϕ, 2.8 FLA power exhaust at air handler unit 'AHU-C2A'.
   - Provide new 30A, 3-pole circuit breaker for air handler unit circuit, and existing conductors to fire alarm system (Siemens).
   - Provide new 30A, 3-pole control for air handler unit circuit, and existing conductors to fire alarm system (Siemens).
   - Provide new 30A, 3-pole disconnect with 25A fuses. Provide connection for 460V, 3ϕ, 15 MCA, 25 MOCP.
   - Provide heavy-duty weatherproof 600V, 30A, 3-pole disconnect with 25A fuses. Provide connection for 460V, 3ϕ, 15 MCA, 25 MOCP.
   - Provide heavy-duty weatherproof 600V, 30A, 3-pole disconnect with 25A fuses. Provide connection for 460V, 3ϕ, 15 MCA, 25 MOCP.

### Keynotes

- **Existing Electrical Facilities and CIRCUITING SHOWN ARE DEMOLISHED AND PRESERVED EXISTING FIRE ALARM CIRCUITS. DUCT DETECTOR WIRED TO DETERMINE EXACT ROUTING.**
- **EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL FIELD BASED ON LIMITED RECORD DRAWINGS AND LIMITED SITE VISITS.**
- **EXISTING DISCONNECT, EXISTING BRANCH CIRCUIT BACK TO SOURCE IN EXISTING DISCONNECT EXISTING MECHANICAL UNIT. DISCONNECT AND REMOVE EXISTING BRANCH CIRCUIT.**
- **EXISTING DISCONNECT. PRESERVE EXISTING FLEX CONDUIT AND PROVIDE HARD WIRE TO DETERMINE EXACT ROUTING.**
- **EXISTING DISCONNECT, EXISTING BRANCH CIRCUIT BACK TO SOURCE IN EXISTING DISCONNECT EXISTING MECHANICAL UNIT. DISCONNECT AND REMOVE EXISTING BRANCH CIRCUIT.**
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- **EXISTING DISCONNECT, EXISTING BRANCH CIRCUIT BACK TO SOURCE IN EXISTING DISCONNECT EXISTING MECHANICAL UNIT. DISCONNECT AND REMOVE EXISTING BRANCH CIRCUIT.**
ACQUISITION OF NEW EQUIPMENT AND RELATED WORK
1. HANDLING UNIT 'AHU-S1'.
   PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
2. HANDLING UNIT 'AHU-S2'.
   PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
3. HANDLING UNIT 'AHU-S3'.
   PROVIDE power, 3#12 CU THWN AND 1#12 CU GND, FOR 460V, 3ɸ, 6 MCA, 15 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
4. HANDLING UNIT 'AHU-S4'.
   PROVIDE power, 3#12 CU THWN AND 1#12 CU GND, FOR 460V, 3ɸ, 6 MCA, 15 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
5. HANDLING UNIT 'AHU-S5'.
   PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
6. HANDLING UNIT 'AHU-S6'.
   PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
7. HANDLING UNIT 'AHU-S7'.
   PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
8. HANDLING UNIT 'AHU-S8'.
   PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
9. HANDLING UNIT 'AHU-S9'.
   PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
10. HANDLING UNIT 'AHU-S10'.
    PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
11. HANDLING UNIT 'AHU-S11'.
    PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
12. HANDLING UNIT 'AHU-S12'.
    PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
13. HANDLING UNIT 'AHU-S13'.
    PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
14. HANDLING UNIT 'AHU-S14'.
    PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
15. HANDLING UNIT 'AHU-S15'.
    PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
16. HANDLING UNIT 'AHU-S16'.
    PROVIDE power, 3#10 CU THWN AND 1#10 CU GND, FOR 460V, 3ɸ, 15 MCA, 25 MOCP AIR HANDLING UNIT WITH 25A FUSES. PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED MERCEDES FUEL-TAPE UNIT.
PROVIDE HEAVY DUTY WEATHERPROOF 600V, 30A, 3-POLE FUSED DISCONNECT WITH 15A FUSES, PROVIDE CONNECTION FOR 460V, 3ɸ, 9.3 MCA, 15 MOCP OUTDOOR UNIT 'ODU-2'.

PROVIDE CONNECTION FOR 460V, 3ɸ, 27 MCA, 40 MOCP INDOOR UNIT 'CRAC-1' VIA INTEGRAL DISCONNECT.

UTILIZE EXISTING 20A, 3-POLE SHUNT TRIP CIRCUIT BREAKER FOR PROTECTION OF NEW FEEDER TO OUTDOOR UNIT 'ODU-2' DISCONNECT.

PROVIDE NEW 40A, 3-POLE HACR TYPE CIRCUIT BREAKER FOR PROTECTION OF NEW FEEDER SUPPLYING INDOOR UNIT 'CRAC-1' UNIT.

ONE 1"C, 3#8 CU THWN, 1#10 CU GND.

ONE 3/4"C, 3#12 CU THWN, 1#12 CU GND.

PROVIDE CONNECTION TO 120V SHUNT TRIP UNIT AT 'ODU-2' FEEDER CIRCUIT BREAKER TO EXISTING 120V A/C SHUNT TRIP CONTROL CIRCUIT CONTROLLING EXISTING SERVER ROOM AC UNIT.

A. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.
B. PENETRATIONS THROUGH WALLS, CEILINGS, FLOORS, AND/OR ROOFS SHALL BE SEALED.
C. ALL UL LISTED AND LISTED COMPONENTS ARE TO BE USED.
### Panel M1

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## ELECTRICAL SYMBOL LEGEND

- **Transformer**: Denotes a transformer component.
- **Main Feeder**: Denotes the main feeder configuration.
- **Distribution Panel**: Denotes a distribution panel component.

### KEYNOTES

1. ※ PROVIDE ALL LCL/LML CIRCUIT BREAKER MATCHING EXISTING.
2. ※ PROVIDE ALL LCL/LML BREAKER MATCHING EXISTING.
3. ※ PROVIDE ALL LCL/LML CIRCUIT BREAKER MATCHING EXISTING.