ELECTRICAL SYMBOL LIST (Cont.)

- **ABBREVIATIONS**
  - A: AMMETER
  - AR: RMS CURRENT
  - AWG: AMERICAN WIRE GAUGE
  - H4: HORIZONTAL 4 INCH
  - H6: HORIZONTAL 6 INCH
  - H8: HORIZONTAL 8 INCH
  - I: INCHES
  - L: GROUND
  - M: MILLIAMPERE
  - N: FOOT
  - P: POUND
  - PWR: POWER
  - TH: THUNDERHEAD
  - T: THERMOMETER
  - V: VOLTS
  - VB: VOLTAGE
  - WP: WATTAGE

- **ELECTRICAL GENERAL NOTES**
  1. THE CONTRACTOR SHALL PROVIDE ALL WORK REQUIRED AND COORDINATE WITH OTHER TRADES AS SHOWN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NOT SPECIFIED OR SHOWN IN THE CONTRACT DOCUMENTS. PLEASE CONFIRM ALL SPECIFICATIONS AND DRAWINGS WITH THE CONCERNED TRADES.
  2. PROVIDE ALL WORK REQUIRED TO COMPLETE THE JOB AS SHOWN IN THE CONTRACT DOCUMENTS. PLEASE CONFIRM ALL SPECIFICATIONS AND DRAWINGS WITH THE CONCERNED TRADES.
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- **MECHANICAL EQUIPMENT**
  - **Abbreviations**
    - **ABBREVIATIONS**
      - A: ALUMINUM
      - AWG: AMERICAN WIRE GAUGE
      - B: BRASS
      - C: COPPER
      - G: GALVANIZED STEEL
      - I: INCHES
      - P: POUND
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      - V: VOLTS
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- **WIRE AND RACEWAYS**
  - **Abbreviations**
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## Lighting Fixture Schedule

<table>
<thead>
<tr>
<th>Type</th>
<th>Manufacturer</th>
<th>Model / Series</th>
<th>Type</th>
<th>Color</th>
<th>Lumen</th>
<th>Watt</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL</td>
<td>WINLED</td>
<td>RC1</td>
<td>LED</td>
<td>3500K</td>
<td>2000</td>
<td>20</td>
<td>3' Diameter Decorative Drum Style Fixture with Frosted Acrylic Lens and Provided with 0-10V Dimming Capability.</td>
</tr>
<tr>
<td>CL</td>
<td>WINLED</td>
<td>RC2</td>
<td>LED</td>
<td>4000K</td>
<td>2000</td>
<td>20</td>
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### Lighting Fixture Schedule Notes (2)
1. Locate the lighting fixtures with reference to the architectural plans, and consult with the electrical contractor to ensure proper installation of electrical connections.
2. Ensure that all light fixtures are compatible with the project's electrical system and comply with local electrical codes.
3. Provide all necessary information to the electrical contractor, including fixture type, manufacturer, model number, and any special requirements.
4. Verify that all fixtures are listed by the Underwriter's Laboratories (UL) and meet the project's fire resistance and safety requirements.
5. Confirm all mounting locations with the architect.
6. Provide all necessary marking and instructions for the contractor's reference.
7. Ensure that all fixtures are installed in accordance with the manufacturer's guidelines and local electrical codes.
8. Confirm that all fixtures meet the project's aesthetic and functional requirements.
ELECTRICAL SITE PLAN

1. 2#8, 1#10G, 1"C, 24" BELOW GRADE & 2#12 SHIELDED CABLE (0-10V DC) 1"C, 24" BELOW GRADE.

SITE WIRING LEGEND:

1. DO NOT RUN ANY UNDERGROUND RACEWAYS WITHIN PLANTING AREAS OR LEACHING FIELDS. REFER TO DRAWINGS FOR LOCATIONS.

2. REFER TO CIVIL DRAWINGS FOR EXACT ROUTING OF UTILITIES. REFER TO LANDSCAPE DRAWINGS FOR EXACT LOCATION OF 'SITE' FIXTURES.

3. ALL SITE WIRING SHALL BE 2#8#10G, 1"C MINIMUM UNLESS SHOWN OTHERWISE.

4. ALL EXTERIOR LIGHTING TO BE PROGRAMMED FOR PHOTOCELL "ON", TIMED "OFF" AND DIMMED LEVELS (VIA 0-10V SIGNAL). PROVIDE INDIVIDUAL CONTROL FOR EACH CIRCUIT. COORDINATE PROGRAMMING WITH OWNER. (REFER TO ALCS ONE-LINE DIAGRAM & SPECIFICATIONS).

5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF EXTERIOR WALL MOUNTED LIGHTING.

6. REMOVE ALL SITE ELECTRICS WHEN NO LONGER REQUIRED.

7. PROVIDE 17"x30"x12"D GROUND MOUNTED PULL BOX (QUAZITE #PC1730BA12 WITH COVER #PC1730CA17 OR SAME BY CARSON, HIGHLINE, STRONGWELL, OR EQUAL. RUN ALL SITE LIGHTING VIA PULL BOX. ALSO PROVIDE (1) 1"SPARE WITH PULL LINE BETWEEN PULL BOX AND NEAREST ELECTRIC ROOM. LABEL @ EACH END.

8. PROVIDE LIGHTNING PROTECTION SYSTEM FOR COVERAGE OF ENTIRE FACILITY.

9. PROVIDE 12"x12"x12"D GROUND MOUNTED PULL BOX (QUAZITE #PC1212BG12 WITH #PC1212HG00 COVER OR SAME BY CARSON, HIGHLINE, STRONGWELL, OR EQUAL) AT ALL POLES WITH THREE PAIRS OF 1" CONDUITS APPROACHING BASE TO ALLOW FOR SINGLE PAIR TO ENTER BASE.

10. GENERATOR EMISSIONS EXHAUST SHALL MAINTAIN 25 FEET CLEARANCE FROM ANY OPERABLE WINDOWS OR INTAKE LOUVERS. COMPLY WITH ALL FEDERAL EPA AND STATE DEP REQUIREMENTS.
1. Place Concrete Slab on Floor Area. The Slab Shall be Thoroughly Wetted and Hardened Before Placing Slab.

2. Upon Completion of the Slab and the Installation of Conduit, Fill the Open Area Around the Conduit with Concrete and Grout the Conduit to Seal This Area.


4. Ground Grid to be Installed Below Undisturbed Earth and the Ground Grid Shall Be Placed 1" in Front of the Slab Rather Than 2". In No Case Shall Any Portion of Ground Grid Lie Within the Gravel or Stone Layers.

5. Refer to NEC for Grounding Requirements.


NOTE 3.

1. Conduit Height is kept to a Minimum to Facilitate Placing Completed Spaced in Handhole From Slab.

2. Conduit Minimum Strength: 4500 psi.

3. Roof Opening 3'-2" x 3'-2".

4. Handhole Frame, Ring and Cover Shall Be Furnished by E.C.

5. Handhole Frame, Ring and Cover To Be Installed by G.C.
1. NON SEPARATELY DERIVED GENERATOR SYSTEM

2. GENERATOR PAD DETAIL 'A-A'

3. GENERATOR PAD DETAIL

NON SEPARATELY DERIVED SYSTEM

SCALE: N.T.S

COMPACTED TO 95%

PITCH @ 1.5%

8" 2" 12"

REINFORCING (2" CLEAR) (4,000# CONCRETE)

8" CRUSHED STONE

24" HAUNCH

5' (W) x 12' (L) 6"x6" NO. 6 WIRE MESH

FINISHED GRADE

CONNECT TO GENERATOR GROUNDING TERMINAL.

E0.4C

PAD SHALL BE PROVIDED BY G.C. IN ACCORDANCE WITH APPROVED SHOP DRAWINGS.

NOTE:

1. #4/0 CU. GROUND CONDUCTOR CONNECTED TO BUILDING GROUND SYSTEM

2. 12" HIGH CONCRETE HOUSEKEEPING PAD W/ STRUCTURAL REINFORCING

3. OPENING FOR FEEDER CONDUITS AS REQUIRED CONFIRM WITH APPROVED SHOP DRAWINGS.

DISCONNECT TRANSFORMER BONDING JUMPER
GENERAL LIGHTING NOTES:
1. It is the intent of the Architect and Engineer that all areas be properly lighted. The design and selection of lighting fixtures shall be based on the functions of the space and the lighting levels required to meet the lighting criteria presented in the Architectural Plans, Elevations, Sections and the Work of Other Trades prior to Rough-in.

2. Wiring and conduit or MC cable shall be required between all lighting fixtures and electrical equipment.

3. All Branch Circuit conductors shall be 98% conductivity, Copper minimum #12 AWG Size, THWN/THHN Insulation, 600 volts rated unless otherwise noted.

4. Utilities shall not penetrate stair enclosures, elevator shafts, and machine rooms.

5. Metal roof decks shall not be tapped for support of any lighting fixtures or electrical equipment.

6. All exposed conduits, raceways, wireways, boxes, fittings and similar components shall be painted to match surrounding finishes with equal type fixtures, switches, dimmers, sensors, power packs, relays, and other controls.

7. Fixtures on plans shall be provided with 0-10v dimming driver(s) or light engine for specific routes or special conditions. It is the intent of these documents that a complete branch circuit and control wiring system be installed.

8. Indirect and direct/indirect fixtures shall be suspended with aircraft cable to conform to the ceiling plans.

9. Fixtures on plans shall be provided with 0-10v dimming driver(s) or light engine for specific routes or special conditions. It is the intent of these documents that a complete branch circuit and control wiring system be installed.

10. All Exterior Equipment, fixtures, and devices shall be rated IP65 (minimum) and protected against contaminants and moisture that would normally impair correct operation of the fixture or device.

11. All exterior equipment, fixtures, and devices shall be located in accordance with the Architectural Plans, Elevations, Sections and the Work of Other Trades for final review and approval.

12. E.C. shall provide the sensor vendor(s) with all information required to fully understand the conditions of each space.

13. E.C. shall provide a ceiling plan locating all sensors which has been fully coordinated with the work of other trades for final review and approval.

14. E.C. shall provide a data sheet containing all sensor information to the Architect and Engineer for final review.

15. All night lighting shall be coordinated with the Architect and Engineer for proper lighting levels.

16. All non-programmable sensors shall be located in accordance with the Architectural Plans, Elevations, Sections and the Work of Other Trades for final review and approval.

17. All occupancy and day lighting photo sensors shall be located in accordance with the Architectural Plans, Elevations, Sections and the Work of Other Trades for final review and approval.

18. All lighting control shall be provided with 0-10v dimming driver(s) or light engine for specific routes or special conditions. It is the intent of these documents that a complete branch circuit and control wiring system be installed.

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GENERAL POWER NOTES:
1. COORDINATE EXACT LOCATION OF ALL DEVICES AND EQUIPMENT WITH ARCHITECT PRIOR TO INSTALLATION.
2. REFER TO MECHANICAL PLANS FOR ANY CHANGES AND FOR EXACT LOCATION OF ALL HVAC EQUIPMENT.
3. WIRING IS SHOWN ON DRAWINGS ONLY FOR SPECIFIC ROUTES OR SPECIAL CONDITIONS.
4. WIRING AND CONDUIT SHALL BE REQUIRED BETWEEN ALL OUTLETS INDICATED WITH CIRCUIT NUMBERS AND PANEL DESIGNATIONS.
5. ALTHOUGH ALL BRANCH CIRCUIT WIRE AND CONDUIT IS NOT SHOWN, IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE BRANCH CIRCUIT WIRING SYSTEM BE INSTALLED.
6. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE MC 98% CONDUCTIVITY, COPPER MINIMUM #12 AWG SIZE, THWN/THHN INSULATION, 600 VOLTS RATED UNLESS OTHERWISE NOTED.
7. REFER TO FIRE PROTECTION PLANS FOR ANY CHANGES AND FOR EXACT LOCATION OF ALL FLOW SWITCH, TAMPER SWITCH, ETC.
8. DO NOT PENETRATE STAIRS WITH ANY UTILITIES EXCEPT FOR UTILITIES SPECIFICALLY SERVING THAT STAIR.
9. WHERE CONDUITS AND/OR BOXES CANNOT BE FLUSH MOUNTED IN BUILDING PROVIDE A SYSTEM OF SURFACE METAL RACEWAYS AND BOXES IN ACCORDANCE WITH ARTICLE 386, EQUAL TO WIREMOLD FOR ALL FINISH SPACES WHERE PUBLIC HAS ACCESS, INCLUDING CORRIDORS, CLASSROOMS, OFFICES, ETC.
10. CONFIRM RATINGS & FINAL LOCATIONS OF EQUIPMENT WITH OWNER PRIOR TO ROUGHING.
11. ALL OUTLETS ON EXTERIOR WALLS WITH CASEWORK SHALL BE MOUNTED 6" ABOVE CASEWORK. CONFIRM HEIGHT OF CASEWORK WITH HVAC AND ARCHITECT PRIOR TO ROUGHING.
12. TYPICALLY PROVIDE GROUND FAULT INTERRUPTER TYPE RECEPTACLES WITHIN 6 FEET OF WATER SOURCES.
13. PROVIDE ALL EMPTY CONDUITS WITH PULL-STRINGS.
14. TYPICALLY PROVIDE (2) 4" SLEEVES OVER EACH CORRIDOR DOOR.
15. PROVIDE (2) 2" THROUGH-WALL SLEEVES ABOVE CEILING OVER THE DOORS INTO EACH ROOM LEADING FROM THE CORRIDOR FOR COMMUNICATIONS/DATA WIRING.
16. LOCATE ALL WALL TELEPHONE OUTLETS 12 INCHES AWAY FROM ALL OTHER OUTLETS/DEVICES.
17. PROVIDE (2) 1" SLEEVES OVER EACH DOOR FOR TEL./DATA SECURITY AND SOUND SYSTEM WIRING. TEL./DATA SHALL BE DEDICATED TO (1) OF THE CONDUITS.
18. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL BOXES AND CONDUITS REQUIRED FOR AUDIO/VISUAL SYSTEMS SECTION 274100 DEVICES AS SHOWN ON AV DRAWINGS. ALL LOCATIONS OF POWER AND A/V OUTLET BOXES SHALL BE COORDINATED WITH ARCHITECT PRIOR TO ROUGHING.
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1. THE LIGHTNING PROTECTION SYSTEM AS SHOWN ON DRAWING HAS BEEN DESIGNED IN ACCORDANCE WITH UL96A & NFPA-780 LIGHTNING PROTECTION SYSTEM STANDARDS.

2. CONDUCTORS SHALL MAINTAIN A HORIZONTAL OR DOWNWARD COURSE, FREE FROM "U" OR "V" (DOWN AND UP) POCKETS.

3. NO BEND OF CONDUCTOR SHALL FORM AN ANGLE OF LESS THAN 90° NOR SHALL HAVE A RADIUS OF BEND LESS THAN 8".

4. AIR TERMINALS SHALL BE SPACED EVERY 20'-0" MAXIMUM AROUND THE ROOF PERIMETER AND/OR ALONG ROOF RIDGES. AIR TERMINALS SHALL BE LOCATED WITHIN 2'-0" OF OUTSIDE CORNERS.

5. AIR TERMINALS SHALL BE SPACED EVERY 50'-0" MAXIMUM IN CENTER ROOF AREAS.

6. ACTUAL JOBSITE CONDITIONS MAY REQUIRE SLIGHT ALTERATIONS IN AIR TERMINAL, DOWN CONDUCTOR AND GROUND ROD LOCATIONS.

7. BARE COPPER MATERIALS SHALL NOT BE INSTALLED ON ALUMINUM OR GALVALUM SURFACES, AND ALUMINUM MATERIALS SHALL NOT BE INSTALLED ON COPPER SURFACES.

8. ALL LIGHTNING PROTECTION CONDUCTORS SHALL BE FASTENED EVERY 3'-0" MAX.

9. ALL BOLTS ON BOLT-PRESSURE CONNECTORS SHALL BE TORQUED AT 150 POUND-INCHES.

10. ALL CONNECTIONS MUST BE USED WITH UL LISTED CABLE OF SAME METAL TYPE.

11. SMALL METALLIC BODIES OF INDUCTANCE SITUATED WITHIN 6'-0" OF A LIGHTNING CONDUCTOR OR ANOTHER BONDED METAL BODY SHALL BE INTERCONNECTED TO THE LIGHTNING CONDUCTOR SYSTEM, UNLESS INHERENTLY GROUNDED.

12. ALL LARGE METAL BODIES SHALL BE BONDED TO THE MAIN LIGHTNING PROTECTION CONDUCTOR. (I.E.; EXHAUST FANS, ROOF VENTS, METAL COOLING TOWERS, HVAC UNITS, LADDERS, RAILINGS, ANTENNAS, SKYLIGHTS, METAL STACKS AND ANY OTHER LARGE METAL BODY WHOSE HEIGHT EXCEEDS THAT OF THE AIR TERMINAL IN USE, UNLESS PROTECTED BY HIGHER ROOF ELEVATIONS).
AIR TERMINAL ADAPTER

THE ROOF MANUFACTURER'S WARRANTY.

THE ELECTRICAL CONTRACTOR MUST FURNISH AND INSTALL ALL PROPER ROOF FLASHINGS AS REQUIRED BY THE ROOFING CONTRACTOR SHALL

NOTE:

#CBHB-8 CONCEALED BASE ASSEMBLY
STAINLESS STEEL THRU-ROOF/CABLE CONNECTOR

AIR TERMINAL #CCHB-308 3/8" x 12" COPPER
AIR TERMINAL AT RIDGE

NOTS ATTIC SPACE
SYMBOL COPPER LIGHTNING CONDUCTOR #CCHB-29-17 CONDUCTOR AND WASHER (TYPICAL)
STAINLESS STEEL NUT

SPACE ATTIC
12" MIN.

LIGHTNING PROTECTION AT ROOF TOP UNIT

SYMBOL
NOTES LIGHTNING PROTECTION AT ROOF TOP UNIT
3/8" x 12" COPPER AIR TERMINAL #CCHB-308 (LOCATED WITHIN 24" OF OUTSIDE CORNERS) FASTEN CABLE EVERY 3'-0" MAX.
WITH ADHESIVE CABLE FASTENERS #CFHB-72 COPPER CONDUCTOR #CCHB-29-17 COPPER ADHESIVE BASE #CBHB-23D ADHERED TO TOP OF UNIT BOND PLATE #PPHB-54D
NOTE: SEAL ALL PENETRATIONS WITH SILICONE SEALANT.
CONNECT TO NEAREST LIGHTNING CONDUCTOR WITH CABLE CONNECTOR #CNHB-44D COPPER CONDUCTOR #CCHB-29-17

LIGHTNING PROTECTION GROUNDING

SYMBOL
NOTES LIGHTNING PROTECTION GROUNDING
#AAHB-301 AIR TERMINAL (ADHERED TO TOP AIR TERMINAL BASE)
1/2" x 10" ALUMINUM OF FAN) #ABHB-23D ALUMINUM BONDING BIMETAL CONNECTION ALUMINUM CONDUCTOR PLATE #APHB-54D #MNHB-93 #ACHB-24-14 COPPER CONDUCTOR #CCHB-29-17 CONNECT TO THRU-ROOF ROD
NOTE: AIR TERMINALS ARE REQUIRED ON ROOF VENTILATORS/EXH. FANS THAT ARE NOT WITHIN A ZONE OF PROTECTION OR WHEN HIGHER THAN ADJACENT AIR TERMINALS.

8" MIN. RADIUS BEND IN CABLE 20FT. MAX. (TYP.) AIR TERMINALS SHALL BE LOCATED WITHIN 24" OF OUTSIDE CORNERS

NOTE: AIR TERMINALS ARE REQUIRED ON ROOF VENTILATORS/EXH. FANS THAT ARE NOT WITHIN A ZONE OF PROTECTION OR WHEN HIGHER THAN ADJACENT AIR TERMINALS.

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### MAIN DISTRIBUTION PANEL "MDP" SCHEDULE

<table>
<thead>
<tr>
<th>No.</th>
<th>Location</th>
<th>Panel Type</th>
<th>Branch Breaker (Amps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EMERGENCY ELECTRICAL LOAD</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>2</td>
<td>ELECTRICAL ROOM</td>
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<td>3</td>
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<tr>
<td>9</td>
<td>ELECTRICAL ROOM</td>
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<tr>
<td>10</td>
<td>LOW VOLTAGE MAIN</td>
<td>200</td>
<td>225</td>
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<tr>
<td>11</td>
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<tr>
<td>20</td>
<td>HIGH VOLTAGE MAIN</td>
<td>200</td>
<td>225</td>
</tr>
</tbody>
</table>

**NOTES:**
- PROVIDE CURRENT LIMITING BREAKERS. UL LISTED SERIES RATED FOR 42,000A RMS @ RATED VOLTAGE WITH DOWNSTREAM BREAKERS IS ACCEPTABLE.
- PROVIDE ENERGY REDUCING MAINTENANCE SWITCHING WITH LOCAL STATUS INDICATOR FOR ARC ENERGY REDUCTION.
NOTES:

1. SUPPORTING CLAMP ACCEPT VARIOUS SIZED SUPPORTS TO BE ADDED AS NEEDED. SUPPORT CLAMPS ACCEPT VARIOUS SIZED SUPPORTS TO BE ADDED AS NEEDED.

2. SUPPORTABLE OTHER THAN WALLS OR REINFORCED TO SUPPORTS

3. TYPICAL LOW VOLTAGE CABLE SUPPORT DETAIL

4. CARBON MONOXIDE GAS SOLNOID SHUT DOWN DETAIL

5. TRAPEZE MOUNTED TRANSFORMER DETAIL

NOTE: CONFIRM WITH STRUCTURAL ENGINEER.

1. CARBON MONOXIDE GAS DETECTORS SHALL BE PROGRAMMABLE IN A PRIORITY FOR MODES INCREASED DETECTION LEVELS SHALL BE INTERRUPTED TO THE BUC AND THE GAS SHUTOFF PINS.

2. GAS FLOW MAY BE RESTARTED AFTER THE DETECTION AND THE INCREASED MODES DETECTION LEVELS ARE TURNED OFF IN THE INDICATION TO THE BUC AND THE GAS SHUTOFF PINS.

3. VOLT LOW RESISTANCE DEVICES MOUNTED MOUNTED ACROSS THE OUTPUT POWER CAPABILITY TO THE BUC AND THE GAS SHUTOFF PINS. THIS LOW RESISTANCE DEVICES MUST BE CAPABLE OF ADJUSTING THE GAS FLOW TO AVOID DAMAGE TO THE BUC AND THE GAS SHUTOFF PINS. THE GAS FLOW WILL BE ADJUSTED TO AVOID DAMAGE TO THE BUC AND THE GAS SHUTOFF PINS.

NOTE: CONFIRM WITH STRUCTURAL ENGINEER.
MECHANICAL SCHEDULE KEY NOTES:

1. PROVIDE 120VAC, 1 POWER SUPPLY.

2. PROVIDE REMOTE CONNECTION TO EQUIPMENT FOR INTERFACE.

3. CONTROLS/DISTRIBUTION PANEL (DC) ARE INTENDED TO BE LOCATED IN ONE ANOTHER'S NEIGHBORHOOD.

4. PROVIDE TYPICAL VALUES FOR DUCTWORK AND PIPEWORK.

5. ELECTRIC MACHINERY DEVICES ARE TO BE WIRING BY HVAC.

6. MECHANICAL SCHEDULE GENERAL NOTES:

1. PROVIDE 120V POWER SUPPLY.

2. PROVIDE REMOTE CONNECTION TO EQUIPMENT FOR INTERFACE.

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<thead>
<tr>
<th>UNIT NO.</th>
<th>DESCRIPTION</th>
<th>LOCATION</th>
<th>LOAD CHARACTERISTICS</th>
<th>VOLT.</th>
<th>PANEL</th>
<th>CIRCUIT LOCATION</th>
<th>REMARKS</th>
</tr>
</thead>
</table>

**PLUMBING SCHEDULE KEY NOTES:**
- Provide the circuit number to feed on project.
- A panel in the above table is installed by PC, 120V connection to EWC circuits.
- Provide GFCI type circuit breaker to feed EWC circuits.

PLUMBING & FIRE PROTECTION EQUIPMENT SCHEDULE

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**SCHEDULE OF PLUMBING & FIRE PROTECTION EQUIPMENT**

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GENERAL FIRE ALARM NOTES:

1. All fire alarm equipment shall be in accordance with Section 2960.0.0 of the IMC 2009.
2. All smoke detectors shall be in accordance with Section 607.3.3.2.1 of the IMC 2009.
3. Smoke detectors shall be located within 5' of HVAC diffusers serving the room via duct.
4. Smoke detectors with (*) shall be located within 5' of HVAC diffusers serving the room via duct.
5. All pull stations in gyms, locker rooms, mechanical rooms, etc. shall have stopper II covers.
6. Mechanical equipment, motorized fire/smoke damper furnished and installed by HVAC.
7. All PULL STATIONS TO BE PROVIDED WITH TAMPERPROOF COVERS WITH LOCAL ALARM.
8. A MONITOR MODULE FOR EACH CARBON MONOXIDE DETECTOR. ALSO CONNECT CO
9. Connect to the nearest 120V branch circuit.
10. MECHANICAL EQUIPMENT, MOTORIZED FIRE/SMOKE DAMPER - FURNISHED AND INSTALLED BY HVAC.
11. PROVIDE EACH FIRE ALARM TERMINAL CABINET AND FIRE ALARM CONTROL PANEL WITH AN ADA POWER
12. MECHANICAL EQUIPMENT, MOTORIZED FIRE/SMOKE DAMPER - FURNISHED AND INSTALLED BY HVAC.
13. MECHANICAL EQUIPMENT, MOTORIZED FIRE/SMOKE DAMPER - FURNISHED AND INSTALLED BY HVAC.
14. SMOKE DETECTORS WITH (*) SHALL BE LOCATED WITHIN 5' OF HVAC DIFFUSER SERVING THE ROOM VIA DUCT-
15. ALL PULL STATIONS IN GYMS, LOCKER ROOMS, MECH RMS, ETC. TO HAVE STOPPER II COVERS. (*)
16. E.C. SHALL FURNISH DUCT TYPE SMOKE DETECTOR FOR INSTALLATION BY HVAC. E.C. SHALL WIRE FOR
17. PROVIDE EACH FIRE ALARM TERMINAL CABINET AND FIRE ALARM CONTROL PANEL WITH AN ADA POWER
18. MECHANICAL EQUIPMENT, MOTORIZED FIRE/SMOKE DAMPER - FURNISHED AND INSTALLED BY HVAC.
19. CONNECT CONTROL MODULE TO FIRE SHUTTER CONTROL PANEL TO RELEASE UPON ANY FIRE ALARM
20. MECHANICAL EQUIPMENT, MOTORIZED FIRE/SMOKE DAMPER - FURNISHED AND INSTALLED BY HVAC.
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22. MECHANICAL EQUIPMENT, MOTORIZED FIRE/SMOKE DAMPER - FURNISHED AND INSTALLED BY HVAC.
23. CONNECT CONTROL MODULE TO FIRE SHUTTER CONTROL PANEL TO RELEASE UPON ANY FIRE ALARM
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33. PROVIDE EACH FIRE ALARM TERMINAL CABINET AND FIRE ALARM CONTROL PANEL WITH AN ADA POWER
34. MECHANICAL EQUIPMENT, MOTORIZED FIRE/SMOKE DAMPER - FURNISHED AND INSTALLED BY HVAC.
35. CONNECT CONTROL MODULE TO FIRE SHUTTER CONTROL PANEL TO RELEASE UPON ANY FIRE ALARM
36. MECHANICAL EQUIPMENT, MOTORIZED FIRE/SMOKE DAMPER - FURNISHED AND INSTALLED BY HVAC.
ACTUATION OF ADJACENT SMOKE DAMPER PER INTERNATIONAL MECHANICAL CODE (IMC) 2009, 607.3.3.2.1.

WORK WITH FIRE/SMOKE DAMPER INSTALLED WITHIN IT.

ETC.

MOUNTED SMOKE DETECTORS. DUCT DETECTORS FURNISHED AND WIRED BY E.C.; INSTALLED BY HVAC.

SUPPLY TO SERVE ALL SPEAKER/STROBE UNITS ON RESPECTIVE FLOORS.

SHALL BE INSTALLED IN CONDUIT OR SURFACE METAL RACEWAY. MC CABLE IS ALLOWED WHERE CONCEALED.

HARDWARE EQUIPMENT AFFECTING THIS SECTION. PROVIDE ALL WORK AS REQUIRED.

HARDWARE SUPPLIER PRIOR TO ROUGHING.

DETECTORS TO SECURITY SYSTEM FOR REMOTE CENTRAL STATION REPORTING.

CONTRACTOR, WIRED BY E.C.. FIRE ALARM INTERLOCK WIRING BY E. C. PROVIDE A CONTROL MODULE FOR EACH UNIT AND INTERLOCK EACH DAMPER SO THAT DAMPER IS POWERED OPEN AND IS SPRING CLOSED. LOCATE CONTROL MODULES ADJACENT TO DAMPERS. REFER TO HVAC DRAWINGS FOR DAMPER LOCATIONS. CONNECT TO THE NEAREST 120 VOLT BRANCH CIRCUIT.

CONDITION OR AS DIRECTED BY FIRE DEPT. COORDINATE LOCATIONS OF FIRE SHUTTERS WITH ARCHITECT.

CONTRACTOR 120V AND FIRE ALARM INTERLOCK WIRING BY E. C. PROVIDE A CONTROL MODULE, FOR EACH UNIT AND INTERLOCK EACH DAMPER SO THAT DAMPER IS POWERED OPEN AND IS SPRING CLOSED. LOCATE CONTROL MODULES ADJACENT TO DAMPERS. REFER TO HVAC DRAWINGS FOR DAMPER LOCATIONS.

15. ALL PULL STATIONS IN GYMS, LOCKER ROOMS, MECH RMS, ETC. TO HAVE STOPPER II COVERS. (*)

16. E.C. SHALL FURNISH DUCT TYPE SMOKE DETECTOR FOR INSTALLATION BY HVAC. E.C. SHALL WIRE FOR GENERAL FIRE ALARM NOTES:

2. E.C. SHALL REFER TO HVAC DRAWINGS FOR EXACT LOCATION OF HVAC UNITS AND FOR LOCATIONS OF DUCT

3. PROVIDE EACH FIRE ALARM TERMINAL CABINET AND FIRE ALARM CONTROL PANEL WITH AN ADA POWER

4. TYPICALLY FIRE ALARM SYSTEM POWER CONDUCTORS SHALL BE #14 AWG, TYPE THHN SOLID. ALL WIRING

5. TYPICALLY ALL SPEAKER/STROBE UNITS SHALL BE WIRED IN A FASHION THAT THE SPEAKER & STROBE IS

6. ALL ELECTRICAL ROOMS ARE (2) HOUR RATED. FIREPROOF PENETRATIONS AS REQUIRED.

8. COORDINATE FINAL LOCATIONS OF MAGNETIC DOOR HOLDERS AND OTHER HARDWARE DEVICES WITH

9. TYPICALLY PROVIDE (1) MONITOR MODULE FOR EACH CARBON MONOXIDE DETECTOR. ALSO CONNECT CO

10. MECHANICAL EQUIPMENT, MOTORIZED FIRE/SMOKE DAMPER - FURNISHED & INSTALLED BY HVAC

11. ALL PULL STATIONS TO BE PROVIDED WITH TAMPERPROOF COVERS WITH LOCAL ALARM.

12. CONNECT CONTROL MODULE TO FIRE SHUTTER CONTROL PANEL TO RELEASE UPON ANY FIRE ALARM

13. MECHANICAL EQUIPMENT, MOTORIZED FIRE/SMOKE DAMPER - FURNISHED AND INSTALLED BY HVAC

14. SMOKE DETECTORS WITH (*) SHALL BE LOCATED WITHIN 5' OF HVAC DIFFUSER SERVING THE ROOM VIA DUCT-
**Cohasset Town Hall - Schematic Design**

**Jackman Construction**

**Cohasset, MA**

**Drawn By:**

**Date:**

---

**RISER NOTES**

1. E.C. SHALL REFER TO SPECIFICATIONS AND DRAWINGS FOR ROOM, CONTROL SPACE, CONTROL ROOM, AND OR HOISTWAY AND WILL REACT TO THE FACP AND EACH ANNUNCIATOR. COORDINATE LOCATION WITH FIRE DEPARTMENT AND ELEVATOR MANUFACTURER.

2. FIVE (5) CONTROL MODULES WILL BE LOCATED IN THE ELEVATOR MACHINE ROOM.

3. THE SMOKE DETECTORS ON THE REMAINING ELEVATOR LEVELS WILL ACTUATE THE SECOND CONTROL MODULE IN THE MACHINE ROOM.

4. THE SMOKE DETECTORS ON THE REMAINING ELEVATOR LEVELS WILL ACTUATE THE SECOND CONTROL MODULE IN THE MACHINE ROOM.

5. PRIOR TO SUBMITTING SHOP DRAWINGS, COORDINATE WITH SELECTED SYSTEM MANUFACTURER.

6. ALL HORN/STROBE SHALL BE MOUNTED IN ACCORDANCE WITH ADA/NFPA ROOM SPACING.

7. ALL DEVICES SHALL BE LABELED WITH CLEAR MARKING WITH LOCAL, FIRE DEPARTMENT AND WITH IDENTIFYING LOOP NUMBER, AS PER NFPA.

8. ALL DEVICES SHALL BE LABELED WITH CLEAR MARKING WITH LOCAL, FIRE DEPARTMENT AND WITH IDENTIFYING LOOP NUMBER, AS PER NFPA.

9. PROVIDE ISOLATION MODULES TO PERFORM ALL FUNCTIONS OF THE ALARM SYSTEM.

10. PROVIDE ISOLATION MODULES TO PERFORM ALL FUNCTIONS OF THE ALARM SYSTEM.

11. PRIOR TO SUBMITTING SHOP DRAWINGS, COORDINATE WITH LOCAL SUPERVISORY ALARM CONDITION UPON PROGRAMMED TO TURN "ON".

12. COORDINATE WITH SELECTED SYSTEM MANUFACTURER.

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2. IESS TO COORDINATE FINAL SECURITY ZONES WITH OWNER. PROGRAM PER OWNER'S DIRECTIONS.

3. COORDINATE FINAL LOCATIONS OF MAGNETIC DOOR HOLDERS AND OTHER HARDWARE DEVICES WITH HARDWARE SUPPLIER PRIOR TO ROUGHING.

4. SECURITY PANIC SWITCH. DOOR SHALL REMAIN SECURED UPON ACTIVATION OF PANIC STATION. SECURITY PERSONEL SHALL BE NOTIFIED.

5. INTERFACE HANDICAP DOOR CONTROLLER WITH RESPECTIVE ACCESS CONTROL HARDWARE AT EACH DOOR WITH EITHER POWER ASSIST OR HANDICAP PUSH PLATE.
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