SECTION 16195D - ELECTRICAL EQUIPMENT IDENTIFICATION

A. SCOPE

1. Each disconnecting means for motors, equipment, and appliances, and each service, feeder, and branch circuit at its point of origin shall be legibly identified to indicate its purpose.

2. Identification applies to controls, low voltage, and high voltage systems.

3. Contractor shall identify and label electrical items indicated or shown on drawings and as specified herein.

4. Contractor shall also identify existing equipment.

5. Equipment and circuit identification nameplates shall be provided for electrical equipment as described herein.

6. Identification shall be installed after contract painting is completed.

7. Identification nameplates shall be in addition to manufacturer's equipment nameplates required by National Electrical Code, NEMA or UL.

8. Each identification nameplate shall have following information:
   a. Name of equipment.
   b. Nominal system voltage, phase and wire.
   c. Frequency (Hz), if other than 60 hertz.
   d. From where it receives its power or to where it provides power.

9. High voltage circuits and equipment shall have engraved nameplate suitable for environment involved.

10. In manholes, pull boxes, and similar items, provide following circuit information:
   a. Primary circuit number (B7H).
   b. Voltage (6900 V).
   c. From and to information (from MH 310 to MH 312).
   d. Cable voltage, wire size, insulation type and level, (15 KV, 500 MCM, XLP, 133%).

B. SUBMITTALS

1. Submit one sample of each type of nameplate or label to be provided.

2. Contractor to furnish list of sizes and how proposed nameplates will read for electrical equipment.

C. NAMEPLATES

1. Nameplates shall be laminated plastic mechanically fastened with front of specified color with white core.

2. Color of plates shall be as follows:
   a. Black - normal.
   b. Red - emergency.
c. Blue - special systems.
d. Other - as specified.

3. Sizes

a. Size of nameplates shall be as required for lettering involved as specified herein.
b. Multiple nameplates on equipment which describes similar functions shall be of same size.
c. Example: feeder nameplates on switchboard.
d. Different sizes are not acceptable.

4. Thickness and rigidity of nameplate shall be such that when it is mounted there is no evidence of bowing or waviness.

5. Lettering shall be engraved through outer cover to show white engraved lettering on color background.

6. Nameplate in manholes shall be made of brass, having stamped characters.

7. Materials

a. Nameplate material shall be suitable for environment.
b. Different materials may be required than indicated above.

D. WARNING SIGNS

1. Contractor shall provide OSHA warning signs where required by National Electrical Code and OSHA.

2. Low and medium voltage equipment enclosures, vaults, doors and fences shall be provided with "DANGER KEEP OUT" warning signs, showing proper voltage.

3. Non-load-break disconnects and cutouts shall have "CAUTION" warning sign to read "DO NOT OPEN UNDER LOAD."

E. INSTALLATION

1. Provide engraved nameplates at levels of overcurrent protection and at equipment loads.

2. Nameplates shall be securely fastened to device surface with either #4 Phillips, round head, corrosion resistant, steel, self-tapping screws or with pop rivets.

3. Switchgear, Switchboards, and Motor Control Centers

a. Switchgear, switchboards, motor control centers and similar pieces of equipment shall have major equipment identification plate and feeder identification plates with information as specified herein.
b. Lettering size shall be as follows:
   - Equipment identification plate: 1/2” high.
   - Feeder identification plate: 1/4” high.

4. Panelboards: Panelboards and similar pieces of equipment shall have major equipment identification plate with information as specified herein. Lettering shall be 1/4” high.

a. Panelboard schedules shall be TYPED to indicate type of load served and its location.
b. Leave schedule blank if circuit is not used (spare) or if there is no circuit protective device (space). Words "spare" or "space" shall not be used.
5. Safety Switches: Safety switches, service entrance switches, motor starters or similar pieces of equipment shall have equipment identification plate with information as specified herein.
   a. Lettering shall be 1/4" high.

6. Busway: Busways shall have major busway identification plates indicating voltage, phase, frequency, ampere rating and source of power.
   a. Lettering shall be 1/4" high.
   b. Provide identification plates every 30 feet'.

7. Transformers: Each transformer shall have engraved nameplate showing its primary and secondary voltage, KVA and feeder origin.

8. Fused Equipment
   a. Fused equipment shall have preprinted manufacturer's label or approved substitute place inside or next to fuses for devices using fuses.
   b. This applies to both power and control fuses.
   c. Label shall clearly show type and rating of fuses used.

9. Self-contained push-buttons, selector switches and control toggle switches may be identified by factory-engraved device plates, however, if not available, provide plates to identify what device controls.

10. Junction Boxes
    a. Provide nameplate on junction box for appliances and motor that do not have local disconnect.
    b. Nameplate shall indicate panel, circuit and location of panel. Lettering shall be 1/4" high.

11. Owner Furnished Equipment: Provide nameplates for equipment furnished by Owner.
    a. Lettering shall be 1/4" high.

12. Systems Control Panels:
    a. Systems schedules shall be typed to indicate device controlled and its location.
    b. All terminals in systems control panels shall be labeled (numbered or otherwise identified) so as to correspond with schedule.
    c. Systems control cabinets shall have major identification plate similar to that of panelboard/branch circuit numbering and identification system.

13. Receptacles: Receptacles shall have circuit number and panelboard identification label shall be permanently attached to the face of the respective cover plate.

END