PART 1 - GENERAL  (NOT USED)

PART 2 - PRODUCTS

2.1 EMT: Rain and concrete tight compression fittings only. Insulated throats at connectors.

2.2 No Die-cast fittings, boxes, or raceway allowed.

PART 3 - EXECUTION

3.1 Abandoned raceways: confirm with owner raceways to be abandoned.

3.2 Unused raceways:
   A. Label unused raceways left in place as to access points and terminations, and show on the as-built drawings. Provide dimensions to access points and terminations from a known building feature such as wall lines, column lines, etc.
   B. Provide "pull strings" in installed empty raceways for future conductor installation.
   C. Cap and stake empty raceways terminating exterior of the building and underground. Mark on the as-built drawings location based off building corners. Seal to prevent moisture migration as specified elsewhere.

3.3 Flush mounted panelboards: Provide spare ¾” raceways stubbed into accessible ceiling space and capped in the panel. Provide enough spare raceways to utilize all possible spare breakers. Minimum of 2 spare raceways.

3.4 No home runs smaller than ¾” trade size for lighting and receptacle circuits.

3.5 Dust infiltration: Where raceways penetrate areas prone to high levels of dust (i.e. wood shop, soils lab, etc):
   A. Seal raceway entering room inside of the room at the nearest feasible point where joints in the raceway between the seal and the room penetration do not defeat the purpose of the seal.
   B. Utilize weathertight boxes for exposed construction
   C. Utilize liquid tight flexible raceway
   D. Utilize dust-tight fixtures and equipment
3.6 Air, moisture, and water infiltration:

A. Where raceways penetrate building envelopes, seal the raceway inside of the building at the nearest feasible point where joints in the raceway between the seal and the building penetration do not defeat the purpose of the seal.

B. Where a raceway passes into or through an air intake duct, refrigerator, etc., install in such a manner to prevent the buildup of moisture or ice which would cause damage to the raceway or its contents.

C. Where raceways penetrate the building envelope close to grade, landscape to prevent standing water from reaching the penetration.

D. Design raceways penetrating building so water will not enter the building through the raceway. Raceway entering a building below grade shall be designed so that water in raceway will not flow into electrical equipment.

E. Design raceways to encourage the drainage of water from inside the raceway. Conduit penetrating into electrical equipment shall be sloped to not allow water to flow into the equipment.

F. Do not bury conduit bodies or allow any soil coverage.

G. Design raceways with attention to frost heaving to prevent damage to itself and/or attached equipment and/or structures.

3.7 On roofs:

A. Horizontal runs on roof surfaces: Intermediate metal conduit (IMC) or rigid metal conduit (RMC).

B. Secure horizontal runs of 1/2 inch conduit at least every eight (8) feet.

C. At transitions from horizontal to vertical, secure conduits within three (3) feet of the transition.

D. Provide drainage at low points of conduit runs.

3.8 Use a junction box at transitions between different types of raceway. EXCEPTION: Use one piece manufactured transition fittings between rigid and flexible conduit. Use manufactured transition fitting between conduit and MOA.

END OF SECTION