1 Grounding Cable Material

1.1 The new ground cable shall be soft drawn stranded bare copper size and number as shown on the Drawings.

2 Tap Material

2.1 The main taps for equipment connections shall be #2/0 soft drawn stranded, tinned, annealed, bare copper cable or as shown on the Drawings.

2.2 The taps for manhole cover, cable drain shield adapters from elbows, and concrete reinforcement shall be #4 soft drawn bare copper.

3 Manhole Grounding

3.1 Have a minimum of two (2) ¾” by 10’ ground rods

3.2 All #4/0 neutral conductors inside a manhole shall be bonded together using #4/0 neutral conductor. This conductor “bus” shall be used as the grounding point for all local grounds.

3.3 Electrical equipment mounted inside a vault, such as switches, shall be grounded by #2/0 copper conductor(s).

3.4 A #4 solid copper conductor shall ground the manhole cover ring. The ring shall be drilled and tapped to accept a ¼”-20 threaded screw.

3.5 The connectors and terminals shall be bolted to the electrical equipment using Stainless Steel bolts, flat washers, lock washers, and nuts, or by connectors supplied with the electrical equipment.

3.6 All cable drain shield adapters shall be grounded using #4 solid copper conductor. Elbow, cap, and extension surface grounds may be attached within connectors used to ground drain shields.

3.7 The concrete reinforcement shall be grounded using #4 solid copper conductor attached to each provided re-bar grounding tab inside the manhole.