1.0 CONSTRUCTION NOTES:

1.1 For all new construction, a 36” minimum depth is preferred above the highest corner of the manhole vault top slab to final grade. Refer to Distribution Engineer when a 36” depth cannot be achieved.

1.2 For maintenance only, a 6” minimum asphalt cover is required over the highest corner of the manhole vault lid.

1.3 The frame and cover shall be brought to final grade by installing a 36” diameter steel manhole riser tube.

1.4 Install 4” - 6” of a stiff mixture of 3,000 psi Portland Cement Concrete (PCC) around steel manhole riser tube at top of manhole.

1.5 Base for vault shall be compacted ¾” minus crushed rock. Excavated area around vault shall be compacted and backfilled to final grade with ¾” minus crushed rock. The required compaction for backfill in paved public or private roads shall be at least 95% maximum density, unless more stringent requirements are outlined by the local governing agency. In Non-paved streets outside of public street right-a-ways, compaction shall be at least 90% of maximum density.

1.6 Install 3,000 psi Rapid Set Concrete or Portland Cement Concrete depending on time constraints, under the manhole frame, 3”- 4” high to 6” horizontally out from manhole frame.

1.7 Conduits shall enter and exit vaults in the positions indicated on the Construction Drawing, level and perpendicular to the vault and shall be grouted to provide a watertight seal with a smooth finish. Grout to be Redline “Speedcrete” or equivalent.

1.8 Conduits shall extend into the vault 1 ½” ± ½”, cut off square, chamfered, free of any sharp edges and temporarily sealed to prevent rocks or other materials from entering them after mandreling.

1.9 Vaults shall be clean and free of rocks, dirt and debris prior to final inspection.

1.10 No adhesive anchors shall be installed in vault lid. Mechanical anchors shall only be installed in a vault lid with prior approval from a Distribution Engineer.

2.0 DESIGN NOTES:

2.1 Preferred conduit entry location shall be the upper vault section starting with the bottom knockout level working upward (see Page 1). Duct rollers require additional space between
conduits entering the vault, each knockout level will accommodate either (2) - 5” or (3) - 3” conduits.

### 3.0 REFERENCE STANDARDS:

**A** Refer to **GC5-2.2600** for 7’ 11” x 13’ x 8’ 7” concrete manhole vault with 2’ 10” opening.

**B** Refer to **EC5-3.1700** for Grounding detail.

**C** Refer to **EC5-3.2000** for Grounding wire detail, 7’ 11” x 13’ x 8’ 7” switch vault.

**D** Refer to **EC5-2.8000** for Solid and steel manhole vault riser tubes.

**E** Refer to **EC5-2.8500** for Manhole vault frame and covers.

**F** Refer to **GC5-2.8500** for temporary steel plating, core cut and manhole vault frame and cover adjustment requirements for traffic area grade changes.