1. DESIGN STANDARD:

1.1 The design include a reference in the Contract Documents requiring a dimensioned drawing of all ductbank runs below grade on the Site. Conduits to be recorded include conduits in use, future conduit runs (spare conduits), conduit ductbanks and conduit stub-outs. Conduit stub-outs shall also include a dimensioned drawing indicating the end of the conduit run.

1.2 Profile record drawings of the ductbank are not required, but the dimensioned plan view of the ductbank runs shall include the burial depths to the top of duct, noted at various points along the route.

1.3 Use of tunnel system for various conduit ductbanks shall be discussed with the Rice University Project Manager.

2. PRODUCT STANDARD:

2.1 Where below grade, duct to be encased in red concrete, with rebar where PVC conduit is used.

2.2 Where used in tunnel system, ductbank shall be Aluminum conduit. Where routed above grade, not in tunnel system, ductbank shall be Rigid Steel Conduit.

2.3 Where routed below grade, provide Rigid Steel Conduit under non-paved areas, Schedule 40 PVC in paved areas.

2.4 Minimum conduit size in ductbank to be 5”.

2.5 In general, no in-grade pullboxes will be allowed in ductbank runs greater than 600 volts. Provide manholes, at least 6’ deep (room to stand). Provide lighting and sump pump in each manhole. Manhole cover to be either round or hinged.

2.6 Where PVC is used, ductbank conduit run shall transition to Rigid Steel Conduit elbows at all turns in the ductbank. Rigid Steel Conduit shall also be used where ever the conduits exit the ductbank, either turning or straight.

3. PERFORMANCE STANDARDS:

3.1 Install all ductbanks with red concrete encasement.