GENERAL NOTES FOR ALL ELECTRICAL WORK

1. The location of all conduits, junction boxes, ground boxes, and electrical services is
   dependent upon the field conditions. Failure to accurately mark the location of the
   conduit, junction boxes, and ground boxes may be sanctioned by the TxDOT
   Engineering Services. Acceptable alternate methods of marking include:
   a. White spray-paint, if not otherwise specified on the plans.
   b. Black spray-paint, if not otherwise specified on the plans.
   c. White spray-paint on a black background, if not otherwise specified on the plans.
   d. Black spray-paint on a white background, if not otherwise specified on the plans.
   e. White or black spray-paint, if not otherwise specified on the plans.

2. Provide new and unused materials. Ensure that all materials and equipment comply with
   the applicable documents of the National Electrical Code (NEC), TxDOT standards and
   specifications, the Texas Electrical Contractors Association (TECA) Standard
   Specifications, and the Slag Plant Association Standard Specifications. Metal
   conduit, junction boxes, fittings, and hardware shall be new and unused. Metal
   conduit, junction boxes, fittings, and hardware shall be new and unused.

3. Electrical equipment, conduit, junction boxes, fittings, and hardware shall be
   acceptable and in accordance with the Texas Department of Transportation (TxDOT)
   and the National Electrical Code (NEC). Electrical equipment, conduit, junction
   boxes, fittings, and hardware shall be acceptable and in accordance with the
   Texas Department of Transportation (TxDOT) and the National Electrical Code (NEC).

4. Junction boxes with an internal volume of less than 100 cu. in. and supported by
   metal poles; luminaires; and metal enclosures are bonded to the equipment grounding
   system. Properly bond all metal conduits.

5. Use two-hole straps when supporting 2 in. and larger conduits. On electric service poles,
   properly sized stainless steel or hot-dipped galvanized overhead strap straps are allowed on
   the service transformer.

6. Provide the following test equipment as required by the Engineer to confirm compliance with
   the requirements of the plans:
   a. A calibrated ohmmeter within the last year.
   b. A calibrated multimeter within the last year.
   c. A calibrated Oscilloscope within the last year.
   d. A calibrated Function Generator within the last year.
   e. A calibrated Power Supply within the last year.
   f. A calibrated Calibration Certificate to the Engineer upon request.

7. During construction, temporarily cap or plug open ends of all conduit and raceways immediately
   after installation. Seal conduit immediately after completion of conductor installation and pull
   from the bottom of the box. See the ground box detail on sheet ED(4).

8. Remove all electrical conduit systems, unless otherwise noted on the plans. Use only a
   visible electrical system, such as a metal conduit system, and separate from all non-electrical
   system. The electrical system shall be clearly and permanently identified as such on the plans.

9. When required, provide high-density polyethylene (HDPE) conduit with factory-installed
   internal 12 AWG or 10 AWG conductors. See the Engineer's request for the specific size and
   length of HDPE conduit to be provided. HDPE conduit shall be provided with no conductors for
   bored schedule 40 or schedule 80 PVC conduit. See the Engineer's request for the specific size and
   length of HDPE conduit to be provided.

10. Make the transition of HDPE conduit to PVC (or RMC elbow when required) at the bore
   pit. Provide conduit of the size and length specified in the plans. See the Engineer's request for
   the specific size and length of HDPE conduit to be provided.

11. Use two-hole straps when supporting 2 in. and larger conduits. On electric service poles,
    properly sized stainless steel or hot-dipped galvanized overhead strap straps are allowed on
    the service transformer.

12. Supply the following test equipment as required by the Engineer to confirm compliance with
    the requirements of the plans:
    a. A calibrated ohmmeter within the last year.
    b. A calibrated multimeter within the last year.
    c. A calibrated Oscilloscope within the last year.
    d. A calibrated Function Generator within the last year.
    e. A calibrated Power Supply within the last year.
    f. A calibrated Calibration Certificate to the Engineer upon request.

13. Use two-hole straps when supporting 2 in. and larger conduits. On electric service poles,
    properly sized stainless steel or hot-dipped galvanized overhead strap straps are allowed on
    the service transformer.

14. File smooth the cut ends of all mounting strut and conduit. Before installing, paint the field
    conduit sealant.