

## NOTES:

- 1. ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY, SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SULTABLE FOR 3-WIRE SERVICE EVEN THOUGH INITIALLY WIRED FOR 2-WIRE SERVICE.
- 2. THE POLE-MOUNTED ELECTRIC SERVICE BOX DETAIL DEPICTS
  THE BASIC CONSTRUCTION OF THE EQUIPMENT. SLIGHT
  MODIFICATIONS APPLY FOR DIFFERING SERVICES AND
  APPLICATIONS AS FOLLOWS:
  - TYPE A FULLY EQUIPPED FOR 240/120V. 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER
  - TYPE AL FULLY EQUIPPED FOR 240/120V. 3W SERVICE. BLANK COVER IN LIEU OF LIGHTING MAIN BREAKER
  - EQUIPPED FOR 120V. SERVICE, COMPLETE WITH 1P, 60A. TRAFFIC SIGNALS MAIN BREAKER
  - TYPE B1 EQUIPPED FOR 120V. SERVICE, COMPLETE WITH 1P, 40A. TRAFFIC SURVEILLANCE MAIN BREAKER
- 3. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
- 4. THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE
  NEMA 4X STAINLESS STEEL, NOMINALLY 12"W X 16"H X 8"D, WITH
  A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING
  STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS
  AND DOOR STOP, HOFFMAN CATALOG NO. A-16H1208SS6LP/A-16
  P12/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.
- 5. CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/
- 6. THE SURGE PROTECTOR SHALL BE SUITABLE FOR 240/120 VOLT SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO-SECONDS, RATED -40 TO 60 DEGREES C, WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER
- 7. BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISCLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRL2A OR APPROVED EDUAL
- B. THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
- THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
- A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN
- 12. LUGS AND CONNECTORS SHALL BE RATED FOR 75°C CONDUCTOR.
- 13. THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.

RDL-3 OF

COUNTY TOTAL SHEE SHEETS NO.

SECTION 117 R-2B-R KANE 40 16 CONTRACT NO. 60E63 FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

DESIGNED - R.A.S. REVISED SPAAN Tech, Inc. DRAWN - R.P.J. REVISED CHECKED - I.A.B. REVISED DATE JANUARY 26, 2009 REVISED

ILE NAME = D16ØE63-RDL-3.dgn

PLOT DATE = 1/26/2009

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

**ELECTRIC SERVICE DISCONNECT, LIGHTING AND TRAFFIC SIGNAL** U.S. 30 OVER EAST & WEST BRANCH BIG ROCK CREEK SCALE: NONE SHEET NO. OF SHEETS STA.