## ELECTRICAL GENERAL NOTES

- 1. ALL VEHICLES AND PEDESTRIAN SIGNAL HEADS SHALL HAVE 12 INCH SECTIONS. MOUNTING HARDWARE SHALL BE UNPAINTED ALUMINUM. ALL BOLTS, SCREWS, NUTS AND WASHERS SHALL BE STAINLESS STEEL. ANTI-SEIZE PASTE COMPOUND SHALL BE USED ON ALL MOUNTING HARDWARE FIELD CONNECTIONS.
- 2. BACKPLATES SHALL BE ABS PLASTIC.
- 3. THE LOCATION OF MAST ARM SUPPORTS SHALL BE APPROVED BY THE ENGINEER BEFORE FOUNDATIONS ARE CONSTRUCTED. MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 10 FEET FROM THE EDGE OF PAVEMENT OR 2 FEET FROM THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. IN CURBED SECTIONS, THE MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 6 FEET FROM THE FACE OF THE CURB. THESE DISTANCES ARE TO THE NEAR FACE OF THE MAST ARM POLE.
- 4. ALL TRAFFIC SIGNAL CABLES SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED. TERMINAL ENDS SHALL HAVE CRIMPED-ON RING TONGUE CONNECTORS. GROUNDING CONDUCTOR SHALL BE TYPE XLP NO. 6 A. W. G. STRANDED COPPER AND IN ACCORDANCE WITH IDOT STANDARD 873001.
- 5. CONDUIT AND CABLE LENGTHS SHOWN IN THE PLANS ARE ESTIMATED QUANTITIES. FINAL QUANTITIES SHALL BE MEASURED IN THE FIELD PER IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- 6. THE LOCATION OF ALL DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY SLOTS ARE SAWED IN THE PAVEMENT.
- 7. CENTER TO CENTER DISTANCE BETWEEN CONDUITS, WHERE TWO OR MORE LOOP LEAD-IN CONDUITS ARE INSTALLED FROM THE EDGE OF PAVEMENT TO THE NEAREST HANDHOLE, SHALL BE SIX INCHES MINIMUM AT THE EDGE OF PAVEMENT.
- 8. DETECTOR LOOP LEAD-IN SPLICES SHALL BE MADE IN A HANDHOLE PER SECTION 873 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. CONDUCTORS SHALL BE SPLICED IN A RIGID MOLD. ROSIN-CORE SOLDER SHALL BE USED.
- 9. CALL DELAY SHALL NOT FUNCTION WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
- 10. CALL CARRY-OVER SHALL FUNCTION ONLY WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
- 11. ALL INDUCTION LOOP DETECTOR AMPLIFIERS SUPPLIED FOR THIS PROJECT SHALL BE RACK MOUNTED AND SHALL HAVE THE CAPACITY OF OPERATING WITH BOTH DELAY AND EXTENSION MODES ACTIVE, IF A TIME SETTING IS PROGRAMMED.
- 12. SLOPE HANDHOLE COVERS TO MATCH PROPOSED GRADE ELEVATIONS.
- 13. THE CONDUIT ATTACHED TO THE BRIDGE STRUCTURE SHALL BE INSTALLED ON THE TOP OF THE BOTTOM FLANGE ALONG THE INSIDE FACE OF THE WESTERN-MOST WIDE-FLANGE BEAM.
- 14. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY ATTEMPT TO CONSTRUCT ANY COMPONENT OF THE VARIOUS TRAFFIC SIGNAL INSTALLATIONS. AGENCIES KNOWN TO HAVE UNDERGROUND FACILITIES WITHIN THE LIMITS OF THIS IMPROVEMENT ARE THE FOLLOWING: (MEMBERS OF J.U.L.I.E. PHONE (800)-489-0123 ARE INDICATED BY •)
  - \*ILLINOIS BELL TELEPHONE
  - \*UNION ELECTRIC
  - \*AMEREN IP (GAS)
  - \*CROWN CABLE TV
  - CITY OF O\*FALLON \* WATER
- 15. LOCATE UNDERGROUND CABLES PRIOR TO ATTEMPTING TO CONSTRUCT THIS PROJECT.
- 16. THE ACTUAL DEPTHS OF THE CONCRETE FOUNDATIONS FOR THE MAST ARM SUPPORT POLES ARE AS FOLLOWS:

SOUTH JUNCTION

STA 29+10, 58.6' RT, 22 FT ARM, 10 FT DEEP

NORTH JUNCTION

STA 38 +91. 2, 62. 8\* LT, 48 FT ARM, 13 FT DEEP

STA 39 +90.4, 51.2\* LT, 44 FT ARM, 13 FT DEEP

- 17. INSTALLATION OF THE DETECTOR LOOP ON OR NEAR THE PAVEMENT MARKING AREA SHALL BE DONE WITH EXTREME CARE. THE CONTRACTOR SHALL ALSO TAKE EXTRA CARE IN APPLYING SEALER SO THAT IT WILL NOT SPILL OVER THE PAVEMENT MARKINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE PAVEMENT MARKING AS A RESULT OF NEGLIGENCE OR POOR WORKMANSHIP. DAMAGE SHALL BE REPAIRED AT HIS/HER EXPENSE TO THE SATISFACTION OF THE ENGINEER.
- 18. LIGHT DETECTOR AMPLIFIERS MAY BE INSTALLED INTO THE EXISTING DETECTOR RACK OR AN INDEPENDENT CHASSIS PROVIDED BY THE MANUFACTURER. NO ADDITIONAL COMPENSATION WILL BE
- 19. THE REMOVED TRAFFIC SIGNAL EQUIPMENT SHALL REMAIN THE PROPERTY OF THE STATE OF ILLINOIS. UPON REMOVAL, THE CONTRACTOR SHALL DELIVER SUCH EQUIPMENT TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC AND MAINTENANCE YARD, 9601 ST. CLAIR AVE, FAIRVIEW HEIGHTS, IL.

## HIGHWAY STANDARDS FOR TRAFFIC SIGNALS

THE FOLLOWING ILLINOIS DEPARTMENT OF TRANSPORTATION HIGHWAY STANDARDS SHALL APPLY TO THIS PROJECT:

701701-06 URBAN LANE CLOSURE MULTI-LANE INTERSECTION

701901-01 TRAFFIC CONTROL DEVICES

805001-01 ELECTRIC SERVICE INSTALLATION DETAILS

814001-02 HANDHOLES

814006-02 DOUBLE HANDHOLES

857001-01 STANDARD PHASE DESIGNATION DIAGRAMS PHASING SEQUENCE

873001-02 TRAFFIC SIGNAL GROUND AND BOND

877001-04 STEEL MAST ARM ASSEMBLY AND POLE 16' THRU 55'

878001-08 CONCRETE FOUNDATION DETAILS 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS

886001-01 DETECTOR LOOP INSTALLATIONS

886006-01 TYPICAL LAYOUTS FOR DETECTION LOOPS

## TRAFFIC SIGNALS LEGEND

**EVPS** EMERGENCY VEHICLE PRIORITY SYSTEM

GSC GALVANIZED STEEL CONDUIT

PVCC POLYVINYL CHLORIDE CONDUIT

ABI ABANDON IN PLACE

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0 EXISTING SIGNAL POST

EXISTING HIGHWAY LIGHTING  $\sim$ 

EXISTING TRAFFIC SIGNAL MAST ARM

EXISTING HANDHOLE

 $\Theta$ EXISTING LIGHTED SIGN

EXISTING DETECTOR LOOP  $\boxtimes$ EXISTING CONTROLLER

\_\_\_\_ EXISTING STREET NAME SIGN/TRAFFIC SIGN

-0-EXISTING SERVICE INSTALLATION

EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM DETECTOR (EVPS) **©** 

EXISTING CONDUIT

PROPOSED SIGNAL HEAD

PROPOSED SIGNAL HEAD WITH BACKPLATE, MAST ARM MOUNTED PROPOSED SIGNAL HEAD WITH BACKPLATE

PROPOSED EMERGENCY VEHICLE PRIORITY SYSTEM DETECTOR (EVPS)

PROPOSED HANDHOLE

PROPOSED DOUBLE HANDHOLE

PROPOSED DETECTOR LOOP

PROPOSED CONDUIT: "T" TRENCH, "P" PUSH, "A" AUGERED, SIZE SPECIFIED

PROPOSED SIGNAL POST 

PROPOSED CONTROLLER

H PROPOSED HEAVY-DUTY HANDHOLE

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	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
GENERAL NOTES AND LEGEND	64	82-5K-2	ST. CLAIR	162	51
			CONTRACT	NO. 7	6D59
SCALE: SHEET NO. 1 OF 9 SHEETS STA. TO STA.	11.75	ILLINOIS FED. A	ID PROJECT		