CONTRACT NO. 76935

## ELECTRICAL GENERAL NOTES

- 1. THE CONTROLLER CABINET SHALL BE UNPAINTED ALUMINUM AND SHALL BE EQUIPPED WITH TERMINAL FACILITIES AND HARNESS FOR OPTICOM MODEL 134 PHASE SELECTOR. THIS WORK WILL BE INCLUDED IN THE PAY ITEM FOR "CONTROLLER CABINET, TYPE IV"
- 2. THE COST OF REMOVING AND REINSTALLING EXISTING TRAFFIC SIGNAL CONTROLLER AND ITS ASSOCIATED EQUIPMENT, TO FACILITATE INSTALLATION OF NEW CONTROLLER CABINET, SHALL BE INCLUDED IN THE PAY ITEM, "CONTROLLER CABINET, TYPE IV", NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 3. ANCHOR BOLTS, NUTS, AND WASHERS REQUIRED FOR THE INSTALLATION OF PROPOSED CONTROLLER CABINET, AND REMOVING OF EXISTING ANCHORS FLUSH WITH FOUNDATION SHALL BE INCLUDED IN THE THE PAY ITEM. " CONTROLLER CABINET TYPE IV".
- 4. ALL TRAFFIC SIGNAL CABLES SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED. TERMINAL ENDS SHALL HAVE CRIMPED-ON
- 5. THE LOCATION OF ALL DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY SLOTS ARE SAWED IN THE PAVEMENT. THE LOOP WIRES SHALL BE HELD TIGHTLY IN THE BOTTOM OF THE SAWED SLOT BY MEANS OF A PLASTIC FOAM TYPE MATERIAL. THE "BACKER ROD" SHALL COMPLETELY COVER THE WIRE AND PROVIDE A BARRIER BETWEEN WIRE AND THE SEALENT.
- 6. DETECTOR LOOP LEAD-IN SPLICES SHALL BE MADE IN A HANDHOLE PER SECTION 873 OF THE STANDARD SPECIFICATIONS. CONDUCTORS SHALL BE SPLICED IN A RIGID MOLD FILLED WITH NON-HARDENING EPOXY FILLER. ROSIN-CORE SOLDER SHALL BE USED.
- 7. CALL DELAY SHALL NOT FUNCTION WHEN THE RELATED PHASES ARE IN THE
- 8. ALL INDUCTIVE LOOP DETECTORS SUPPLIED FOR THIS PROJECT SHALL HAVE THE CAPACITY OF OPERATING WITH BOTH DELAY AND EXTENSION MODES ACTIVE, IF A TIME SETTING IS PROGRAMMED. THEY SHALL BE RACK MOUNTED.
- ILLINOIS STATE LAW REQUIRES A 48 HOUR NOTICE BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
  - \* AMEREN IP (GAS & ELECTRIC)
- \* CITY OF GRANITE CITY (SANITARY SEWER)
- \* CENTER POINT ENERGY (PIPELINE)
- \* ILLINOIS AMERICAN WATER
- CONSOLIDATED COMMUNICATIONS (COMM)
- CHARTER COMMUNICATIONS, INC. (CABLE TV) \* Mc LEOD USA TELECOMM., INC. (COMM)
- \* SBC (COMM)

(MEMBERS OF J.U.L.I.E. PHONE (800) - 892-0123 ARE INDICATED BY  $\bullet$ ) NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY

10. LOCATE UNDERGROUND CABLES PRIOR TO ATTEMPTING TO CONSTRUCT THIS PROJECT.

## COMMITMENTS

NON-SPECIAL WASTE DISPOSAL SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION. "NON-SPECIAL WASTE WORKING CONDITIONS" AND WITH PLAN DRAWINGS.

## DETECTOR LOOP REQUIREMENTS AND CALCULATIONS

	LOCATION IL 162 @	LOOP	PHASE (Ø)	LOOP SIZE(FT)	I# ΩE !	CALCULATED INDUCTANCE MICROHENRIES ( 4H )	CALCULATED RESISTANCE OHMS ( )
	23rd ST.	EB THRU LN	6	6 X 50	3	825	2.47
		WB THRU LN ①	2	6 X 50	3	803	1.97
		WB THRU LN 🔾	2.	6 X 50	3	800	1.90
	MARYVILLE RD.	EB THRU LN	6	6 X 50	3	825	2.46
		WB THRU LNO	2	6 X 50	. 3	818	2.32
		WB THRU LN 2	2	6 X 50	3	815	2.25

THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE, ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE

## TRAFFIC SIGNALS LEGEND

EMERGENCY VEHICLE PRIORITY SYSTEM

GSC GALVANIZED STEEL CONDUIT

POLYVINYL CHLORIDE CONDUIT

0-

EXISTING SIGNAL POST

0+1> EXISTING SIGNAL POST WITH BACKPLATE EXISTING TRAFFIC SIGNAL MAST ARM

EXISTING HANDHOLE

 $\Delta$ EXISTING DOUBLE HANDHOLE

EXISTING HEAVY DUTY HANDHOLE

EXISTING DETECTOR LOOP

 $\boxtimes$ EXISTING CONTROLLER

0 71 EXISTING STREET NAME SIGN/TRAFFIC SIGN

 $-\Box$ EXISTING ILLUMINATED SIGN

---EXISTING SERVICE INSTALLATION

EXISTING EMERGENCY VEHICLE SYSTEM DETECTOR (E.V.P.S.)

EXISTING SIGNAL HEAD, PEDESTRIAN (0)

EXISTING PEDESTRIAN PUSHBUTTON DETECTOR EXISTING GALVANIZED STEEL CONDUIT

PROPOSED SIGNAL HEAD WITH BACKPLATE, MAST ARM MOUNTED

PROPOSED EMERGENCY VEHICLE SYSTEM DETECTOR (E.V.P.S.)

PROPOSED (E.V.P.S.) CONFIRMATION BEACON

PROPOSED HANDHOLE

PROPOSED DOUBLE HANDHOLE

Н PROPOSED HEAVY DUTY HANDHOLE

PROPOSED DETECTOR LOOP

PROPOSED CONTROLLER

PROPOSED PEDESTRIAN PUSHBUTTON DETECTOR

PROPOSED SIGNAL HEAD, PEDESTRIAN

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

PROPOSED STREET NAME SIGN/TRAFFIC SIGN

PROPOSED ILLUMINATED SIGN

PROPOSED SERVICE INSTALLATION

PROPOSED SIGNAL POST

PROPOSED SIGNAL POST WITH BACKPLATE

ILLINOIS DEPARTMENT OF TRANSPORTATION GENERAL NOTES AND LEGEND FAP ROUTE 586 SECTION 57-TS-1 MADISON COUNTY SCALE: VERT. DRAWN BY

CHECKED BY