

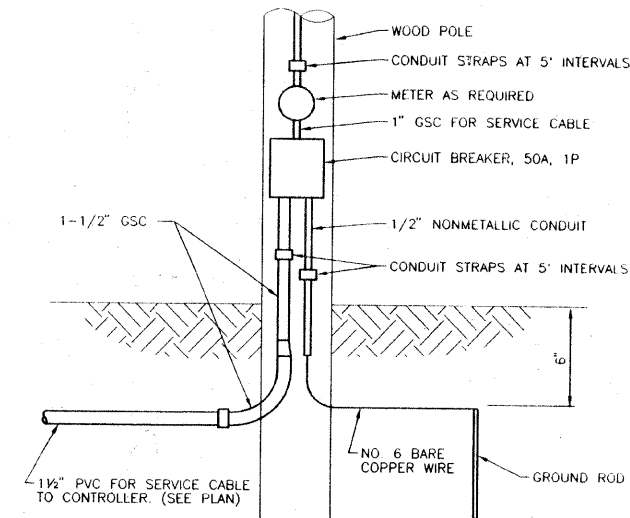
F.A.U. ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
9249	09-00015-02-TL	ST. CLAIR	4	2
FEDERAL AID PROJECT			CONTRACT 97411	

SUMMARY OF QUANTITIES			
CONSTRUCTION CODE	ITEM	UNIT	QUANTITY
67100100	MOBILIZATION	L SUM	1
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1
80500100	SERVICE INSTALLATION, TYPE A	EACH	1
81012500	CONDUIT IN TRENCH, 1-1/2" DIA., PVC	FOOT	74
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	44
81400100	HANDHOLE	EACH	2
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	74
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	128
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	166
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	445
87301805	ELECTRICAL CABLE IN CONDUIT, SERVICE NO. 6 2C	FOOT	40
87700130	STEEL MAST ARM ASSEMBLY AND POLE, 18 FT.	EACH	2
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	25
88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
88102820	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 2-SECTION BRACKET MOUNTED	EACH	2
88200100	TRAFFIC SIGNAL BACKPLATE	EACH	4
88800100	PEDESTRIAN PUSH-BUTTON	EACH	2
X0322861	INSTALL TRAFFIC SIGNAL CONTROLLER AND CABINET	EACH	1
X8730027	ELECTRICAL CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	281

SPECIALTY ITEMS

## ELECTRICAL GENERAL NOTES

- ALL SIGNAL HEADS SHALL BE POLYCARBONATE AND SHALL HAVE 300 MM (12") LENSES. MOUNTING HARDWARE SHALL BE UNPAINTED ALUMINUM. ALL BOLTS, SCREWS, NUTS AND WASHERS SHALL BE STAINLESS STEEL. ANTI-SIEZE PASTE COMPOUND SHALL BE USED ON ALL MOUNTING HARDWARE FIELD CONNECTIONS.
- BACKPLATES SHALL BE ABS PLASTIC.
- CONTROLLER CABINETS, SIGNAL POSTS, AND BASES SHALL BE UNPAINTED ALUMINUM.
- THE LOCATION OF MAST ARM SUPPORTS SHALL BE APPROVED BY THE ENGINEER BEFORE FOUNDATIONS ARE CONSTRUCTED. THE MAST ARM POLES SHALL BE LOCATED A MINIMUM OF SIX (6) FEET FROM THE BACK OF CURB. THESE DISTANCES ARE TO THE NEAR FACE OF THE MAST ARM POLE.
- ALL TRAFFIC SIGNAL CABLE SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED. TERMINAL ENDS SHALL HAVE CRIMPED-ON FULL RING TONGUE CONNECTORS.
- ALL PROPOSED CONDUIT SHALL BE PVC UNLESS NOTED OTHERWISE.
- SLOPE HANDHOLE COVERS TO MATCH PROPOSED GRADE ELEVATIONS.
- 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 FACILITIES WITHIN THE LIMITS OF THIS IMPROVEMENT ARE THE FOLLOWING:  
CITY OF LEBANON (WATER & SEWER)  
AMEREN IP (GAS & ELECTRIC)  
AT & T (TELEPHONE)  
CHARTER COMMUNICATIONS (CABLE TV)  
THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE PLANS HAVE LOCATED AT THE TIME OF SURVEY, OR BASE ON EXISTING AVAILABLE INFORMATION. NO GUARANTEE IS IMPLIED THAT ALL UTILITIES HAVE BEEN LOCATED OR DEPICTED ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT LOCATION OF ALL UTILITIES. IT MAY BE NECESSARY TO HAND DIG TEST HOLES TO EXPOSE EXISTING UTILITIES AT SOME LOCATIONS.
- SEE "JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS" (JULIE) IN THE SPECIAL PROVISIONS. CALL (800) 892-0123 ONE WEEK BEFORE PLANNING TO DIG.
- CONDUIT SPLICES WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED PART OF THE NEW CONDUIT INSTALLATION.
- ESTIMATED DEPTHS OF THE CONCRETE FOUNDATIONS FOR THE MAST ARM SUPPORT POLES ARE 12'-6" (EACH). FINAL DEPTHS WILL BE DETERMINED BY THE CITY FROM THE SOIL BORING DATA.
- SEE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND CONSTRUCTION STAGING REQUIREMENTS.



### NOTES

- VERTICAL CONDUIT SECTIONS ATTACHED TO THE SERVICE POLE SHALL BE INCIDENTAL TO THE SERVICE INSTALLATION. SUCH INSTALLATION OF CONDUIT ON THE SERVICE POLE SHALL BE DONE TO THE SATISFACTION OF THE UTILITY COMPANY.
- HORIZONTAL CONDUIT LEADING FROM THE UTILITY COMPANY POLE TO CONTROLLER CABINET SHALL BE PAID FOR SEPARATELY. THE TRENCH SHALL BE PAID FOR AS "TRENCH AND BACKFILL FOR ELECTRICAL WORK".
- THE CONTROLLER SHALL SUPPLY AND INSTALL ATTACHMENT FOR AMEREN IP'S SERVICE LINE TO THE SATISFACTION OF THE UTILITY COMPANY.

## DETAIL OF SERVICE INSTALLATION - TYPE A