

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	05-00207-00-PV	ST. CLAIR	89	41
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

- ALL SIGNAL HEADS SHALL BE POLYCARBONATE AND SHALL HAVE 12" LENSES. 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.
- 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. MAST ARM POLES SHALL BE LOCATED A MINIMUM OF TEN (10) FEET FROM THE EDGE OF PAVEMENT OR TWO (2) FEET FROM THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. IN CURBED SECTIONS, THE MAST ARM POLES SHALL BE LOCATED A MINIMUM OF FIVE (5) FEET FROM THE FACE OF THE 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. THERE SHALL BE FOUR (4) GROUND RODS IN THE CONTROLLER CABINET. GROUND WIRES SHALL BE #6 AWG STRANDED, BARE COPPER.
- ALL PROPOSED CONDUIT SHALL BE PVC UNLESS NOTED OTHERWISE. ALL CONDUIT SHALL BE PLACED AND BACKFILLED PRIOR TO CONSTRUCTION OF NEW PAVEMENT, SHOULDER AND CURB. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PUSHING OR PULLING CONDUIT AFTER SUCH WORK HAS BEEN COMPLETED.
- THE LOCATION OF ALL DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY SLOTS ARE SAWED IN THE PAVEMENT.
- THE OPTICAL UNIT OF ALL TRAFFIC AND PEDESTRIAN SIGNAL HEAD SHALL BE LIGHT EMITTING DIODES (LED) INSTEAD OF INCANDESCENT BULBS.
- 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 FILLED WITH NON-HARDENING EPOXY FILLER. RESIN CORE SOLDER SHALL BE USED.
- ALL INDUCTION LOOP DETECTOR AMPLIFIERS SUPPLIED FOR THIS INTERSECTION SHALL BE RACK MOUNTED AND SHALL HAVE THE CAPACITY OF OPERATING WITH BOTH DELAY AND EXTENSION MODES ACTIVE, IF A TIME SETTING IS PROGRAMMED.
- 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:

ATT (TELEPHONE)
 CHARTER (CABLE)
 ILLINOIS-AMERICAN WATER (WATER)
 AMERENIP (GAS & ELECTRIC)
 CITY OF BELLEVILLE (SANITARY SEWER, STORM SEWER, & TRAFFIC SIGNALS)

THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE PLANS HAVE BEEN LOCATED AT THE TIME OF SURVEY, OR BASED ON AVAILABLE EXISTING 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.
- THE CONTRACTOR SHALL INSTALL THE STREET NAME SIGNS ON THE MAST ARMS AS SHOWN ON THE PLANS AS FOLLOWS:

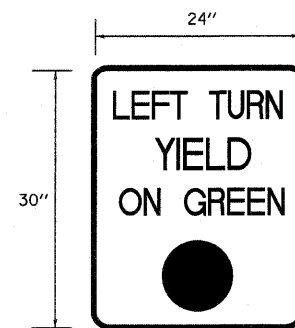
WEST MAIN STREET INTERSECTIONS:
 ONE SIGN, N.W. QUAD., VISIBLE TO W.B. TRAFFIC (F)
 ONE SIGN, S.W. QUAD., VISIBLE TO S.B. TRAFFIC (C)
 ONE SIGN, N.E. QUAD., VISIBLE TO N.B. TRAFFIC (C)
 ONE SIGN, S.E. QUAD., VISIBLE TO E.B. TRAFFIC (E)

IL RTE 13 (SOUTH BELT WEST) INTERSECTION:
 ONE SIGN, N.W. QUAD., VISIBLE TO W.B. TRAFFIC (B)
 ONE SIGN, S.W. QUAD., VISIBLE TO S.B. TRAFFIC (D)
 ONE SIGN, S.E. QUAD., VISIBLE TO E.B. TRAFFIC (D)
 ONE SIGN, N.E. QUAD., VISIBLE TO N.B. TRAFFIC (B)

THE CONTRACTOR SHALL FABRICATE, DELIVER AND INSTALL A STREET NAME SIGN AT EACH OF THE ABOVE SPECIFIED LOCATIONS. THE SIGNS AND INSTALLATION SHALL CONFORM TO SECTION 720 OF THE "STANDARD SPECIFICATION" AND HIGHWAY STANDARDS 720001, 720006 AND 720018, EXCEPT THAT THE SIGN PANELS SHALL BE POSITIONED IMMEDIATELY TO THE RIGHT OF THE RIGHT-HAND MAST ARM MOUNTED SIGNAL HEAD.

- THE LOCATION OF SIGNAL HEADS ON MAST ARMS SHALL BE APPROVED BY THE ENGINEER BEFORE MAST ARMS ARE INSTALLED.
- SEE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND CONSTRUCTION STAGING REQUIREMENTS.

- THE ENGINEER WILL PROVIDE SOIL BORINGS TO DETERMINE ACTUAL MAST ARM FOUNDATION DEPTHS. THE CONTRACTOR SHALL VERIFY REQUIRED DEPTHS PRIOR TO STEEL FABRICATION AND CONSTRUCTION OF CONCRETE FOUNDATIONS.
- PEDESTRIAN PUSH BUTTONS SHALL BE PELCO SE-2039, SE-2040 OR EQUIVALENT. PUSH BUTTONS SHALL BE MOUNTED 30" ABOVE SURFACE OF SIDEWALK AND AT A RIGHT ANGLE TO THE CROSSWALK.
- PUSH-BUTTON SIGNS TO BE PELCO SF-1017-08 AND SF 1018-08 OR EQUIVALENT.



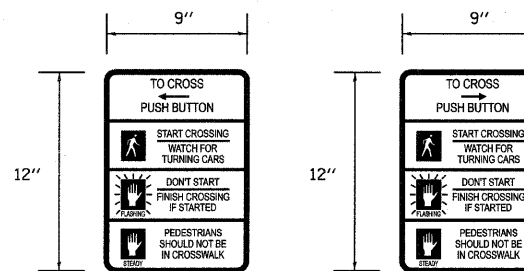
FURNISH & INSTALL FOUR (4) EACH SIGNS - EIGHT (8) TOTAL R10-12

MOUNT SIGNS ON THE MAST ARMS, 2'-8" FROM THE CENTER OF THE SIGN TO THE CENTER OF THE 5-SECTION SIGNAL HEAD. (8" SPACING BETWEEN THE EDGE OF THE SIGN AND THE EDGE OF THE SIGNAL HEAD BACK PLATE)

TRAFFIC SIGNAL LEGEND

- PROPOSED SIGNAL HEAD WITH BACKPLATE (SEE HIGHWAY STANDARD 880006)
- PROPOSED SIGNAL HEAD (SEE HIGHWAY STANDARD 880006)
- PROPOSED HANDHOLE (SEE HIGHWAY STANDARD 814001)
- PROPOSED DOUBLE HANDHOLE (SEE HIGHWAY STANDARD 814006)
- PROPOSED DETECTOR LOOP 6'X50' (SEE HIGHWAY STANDARDS 886001 & 886006)
- PROPOSED CONDUIT, SIZE SPECIFIED
- PROPOSED PEDESTRIAN SIGNAL HEAD
- PROPOSED PEDESTRIAN PUSH-BUTTON
- PROPOSED SIGN
- PROPOSED MAST ARM (LENGTH SPECIFIED) (SEE HIGHWAY STANDARD 877001 & 878001)
- SERVICES POLE (SEE HIGHWAY STANDARD 805001)
- PROPOSED CONTROLLER
- PROPOSED EMERGENCY VEHICLE PRIORITY SYSTEM WITH CONFIRMATION BEACON (PAY ITEM: LIGHT DETECTOR)

DETAIL OF SIGN PANEL - TYPE 1 (NOT TO SCALE)



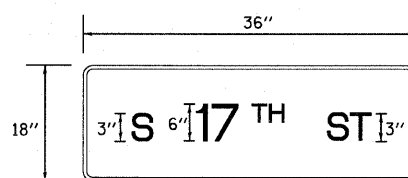
FURNISH & INSTALL EIGHT (8) EACH SIGNS AT WEST MAIN ST. & 17TH ST. SIX (6) EACH SIGNS AT IL RTE. 13 & 17TH ST. - FOURTEEN (14) TOTAL

DETAIL OF SIGN PANEL - TYPE 1 (SPECIAL) (NOT TO SCALE)

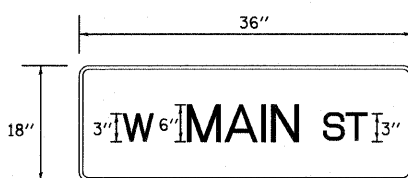
NOTE:
 LOCATE PEDESTRIAN PUSH BUTTON AT RIGHT ANGLE TO CROSSWALK

TRAFFIC SIGNAL QUANTITIES

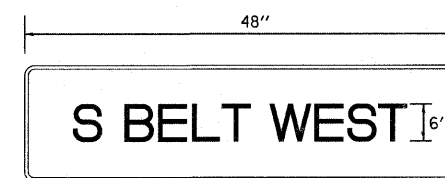
CODE NO.	ITEM	UNIT	TOTAL QUANTITIES
80300100	LOCATING UNDERGROUND CABLE	FOOT	100
80500100	SERVICE INSTALLATION, TYPE A	EACH	2
81000300	CONDUIT IN TRENCH, 1" DIA., GALVANIZED STEEL	FOOT	25
81000500	CONDUIT IN TRENCH, 1 1/2" DIA., GALVANIZED STEEL	FOOT	25
81012300	CONDUIT IN TRENCH, 1" DIA., PVC	FOOT	193
81012700	CONDUIT IN TRENCH, 2 1/2" DIA., PVC	FOOT	55
81012800	CONDUIT IN TRENCH, 3" DIA., PVC	FOOT	12
81013100	CONDUIT IN TRENCH, 5" DIA., PVC	FOOT	4
81013200	CONDUIT IN TRENCH, 6" DIA., PVC	FOOT	5
81028070	CONDUIT, BORED AND PULLED, COILABLE NON-METALLIC CONDUIT, 2 1/2"	FOOT	186
81028080	CONDUIT, BORED AND PULLED, COILABLE NON-METALLIC CONDUIT, 3"	FOOT	212
81028090	CONDUIT, BORED AND PULLED, COILABLE NON-METALLIC CONDUIT, 3 1/2"	FOOT	76
81028100	CONDUIT, BORED AND PULLED, COILABLE NON-METALLIC CONDUIT, 4"	FOOT	77
81400100	HANDHOLE	EACH	6
81400300	DOUBLE HANDHOLE	EACH	2
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	319
85000300	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	L SUM	1
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	2
87300305	ELECTRIC CABLE IN TRENCH, LEAD-IN, NO. 14 1 PAIR	FOOT	2,009
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,603
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3,180
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,851
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,089
87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	3
87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	3
87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	2
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	6
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	104
88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	9
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
88040160	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	16
88102710	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	14
88200100	TRAFFIC SIGNAL BACKPLATE	EACH	33
88500100	INDUCTIVE LOOP DETECTOR	EACH	17
88600100	DETECTOR LOOP, TYPE I	FOOT	3,235
88700200	LIGHT DETECTOR	EACH	8
88700300	LIGHT DETECTOR AMPLIFIER	EACH	8
88800100	PEDESTRIAN PUSH-BUTTON	EACH	14
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
89502380	REMOVE EXISTING HANDHOLE	EACH	4
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
XX003164	EMERGENCY VEHICLE PRIORITY SYSTEM LEAD-IN CABLE IN CONDUIT	FOOT	1,474
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	1,083



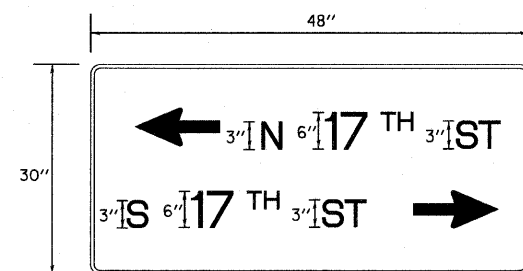
FURNISH & INSTALL TWO (2) EACH SIGNS



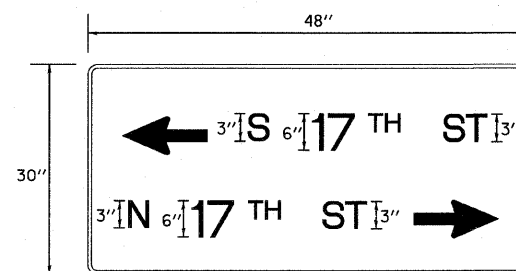
FURNISH & INSTALL TWO (2) EACH SIGNS



FURNISH & INSTALL TWO (2) EACH SIGNS



FURNISH & INSTALL ONE (1) EACH SIGN



FURNISH & INSTALL ONE (1) EACH SIGN

DETAIL OF SIGN PANEL - TYPE 1 (SPECIAL) (NOT TO SCALE)