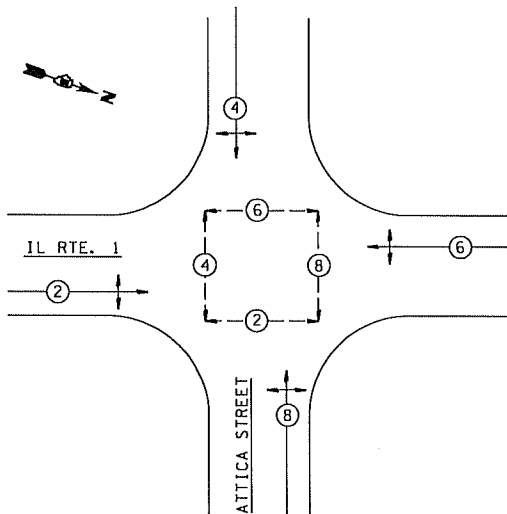


| F.A. RTE.           | SECTION    | COUNTY                    | TOTAL SHEETS | SHEET NO. |
|---------------------|------------|---------------------------|--------------|-----------|
| 332                 | (482-2) TS | VERMILION                 | 7            | 6         |
| STA.                |            | TO STA.                   |              |           |
| FED. ROAD DIST. NO. |            | ILLINOIS FED. AID PROJECT |              |           |

PHASE DESIGNATION DIAGRAM

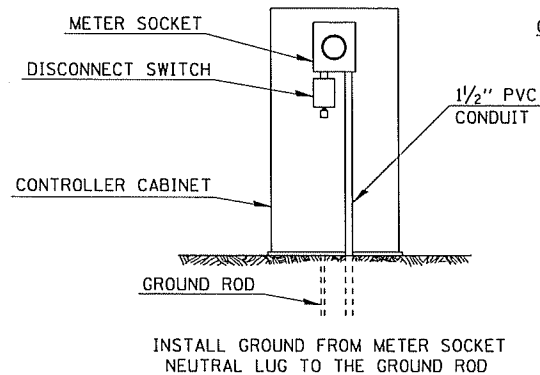
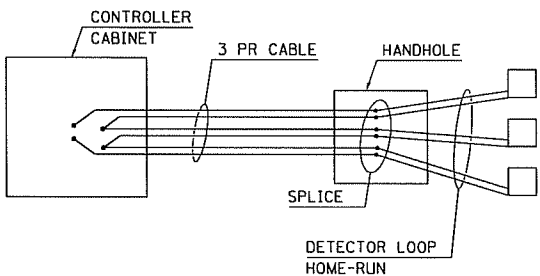


A PEDESTRIAN CLEARANCE INTERVAL OF 16 SECONDS SHALL BE USED FOR PHASE 2; 19 SECONDS FOR PHASE 4; 19 SECONDS FOR PHASE 6; 19 SECONDS FOR PHASE 8.

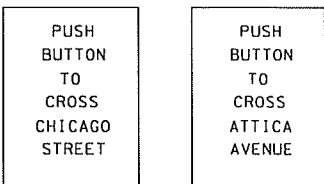
NOTE: THE ANTI-BACKUP FEATURE SHALL BE HARDWIRED ON THE CONTROLLER CABINET BACKPANEL.

DETAIL OF DETECTOR LOOP WIRING

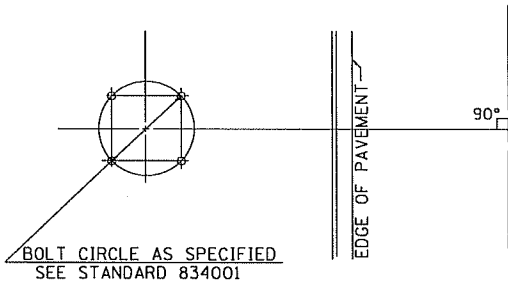
WIRED IN SERIES WITH MULTI-PAIR CABLE



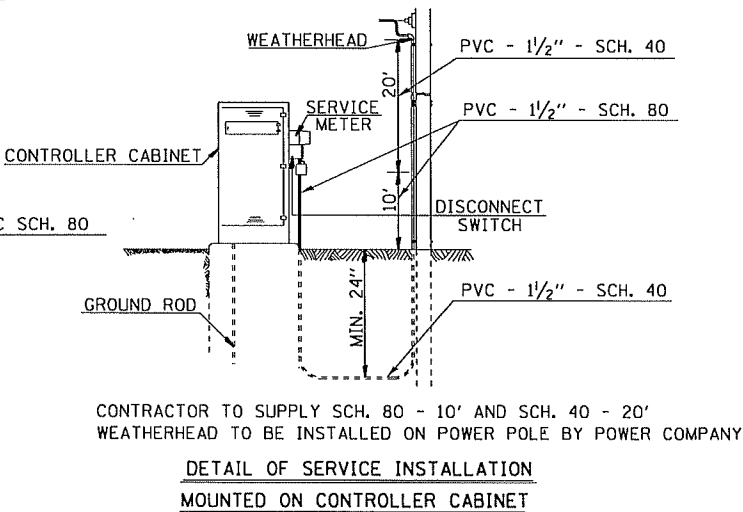
PEDESTRIAN PUSH-BUTTON SIGNS



NOTE: PEDESTRIAN PUSH-BUTTON SIGNS SHALL BE MOUNTED ABOVE THE PEDESTRIAN PUSH-BUTTONS. THE SIGNS SHALL BE BOLTED TO THE POSTS. THE SIGNS SHALL BE CONSIDERED AS INCLUDED IN THE COST OF PEDESTRIAN PUSH-BUTTONS IN ACCORDANCE WITH SECTION 862 OF THE STANDARD SPECIFICATIONS.



DETAIL OF MAST ARM FOUNDATION BOLT PATTERN



DETAIL OF SERVICE INSTALLATION MOUNTED ON CONTROLLER CABINET

BILL OF MATERIALS  
IL. ROUTE 1 & ATTICA STREET

| ITEM   | UNIT | QUANTITY |
|--|------|----------|
| SERVICE INSTALLATION, TYPE A (MODIFIED)                              | EACH | 1        |
| CONDUIT IN TRENCH, 1" DIA., PVC                                      | FOOT | 72       |
| CONDUIT IN TRENCH, 2" DIA., PVC                                      | FOOT | 175      |
| CONDUIT IN TRENCH, 5" DIA., PVC                                      | FOOT | 18       |
| CONDUIT, AUGERED 1 1/2" DIA., PVC                                    | FOOT | 545      |
| CONDUIT, AUGERED 3" DIA., PVC  | FOOT | 215      |
| HANDHOLE   | EACH | 5        |
| DOUBLE HANDHOLE  | EACH | 1        |
| TRENCH AND BACKFILL FOR ELECTRICAL WORK                              | FOOT | 265      |
| FULL-ACTUATED CONTROLLER AND TYPE IV CABINET                         | EACH | 1        |
| GULFBOX JUNCTION   | EACH | 2        |
| GULFBOX JUNCTION REMOVAL   | EACH | 2        |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C                          | FOOT | 555      |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 4C                          | FOOT | 932      |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C                          | FOOT | 1508     |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C                          | FOOT | 160      |
| ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 3 PAIR                    | FOOT | 945      |
| TRAFFIC SIGNAL POST, ALUMINUM 14 FT.                                 | EACH | 4        |
| PEDESTRIAN PUSH-BUTTON POST, GALVANIZED STEEL, TYPE II               | EACH | 4        |
| STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.                             | EACH | 1        |
| STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.                             | EACH | 2        |
| STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.                             | EACH | 1        |
| CONCRETE FOUNDATION, TYPE A  | FOOT | 12.4     |
| CONCRETE FOUNDATION, TYPE D  | EACH | 3.5      |
| CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER                         | FOOT | 41       |
| TRAFFIC SIGNAL BACKPLATE   | EACH | 8        |
| INDUCTIVE LOOP DETECTOR  | EACH | 7        |
| DETECTOR LOOP, TYPE I  | FOOT | 389      |
| PEDESTRIAN PUSH-BUTTON   | EACH | 8        |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                             | EACH | 1        |
| REMOVE EXISTING HANDHOLE   | EACH | 4        |
| REMOVE EXISTING CONCRETE FOUNDATION                                  | EACH | 8        |
| ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C                       | FOOT | 624      |
| SIGNAL HEAD ,POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED  | EACH | 4        |
| SIGNAL HEAD ,POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED | EACH | 8        |
| PEDESTRIAN SIGNAL HEAD, POLYCARBONATE,LED, 1-FACE, BRACKET MOUNTED   | EACH | 6        |
| PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, BRACKET MOUNTED  | EACH | 1        |
| ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 1C                          | EACH | 609      |

GENERAL NOTES

1. THE FOLLOWING SIGNAL HEADS SHALL BE WIRED IN PARALLEL AT THE MAST POLE HANDHOLE:  
(A2, A3), (B2, B3), (C2, C3), (D2, D3) - EACH MAST ARM MOUNTED SIGNAL HEAD SHALL HAVE ITS OWN INDIVIDUAL CABLE FROM THE MAST POLE HANDHOLE TO THE SIGNAL HEAD.
2. THE ACTUAL LOCATION OF ALL SIGNAL FOUNDATIONS, HANDHOLES, AND TRAFFIC CONTROLLER WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. POST MOUNTED SIGNALS SHALL BE INSTALLED SO THAT NO PART OF THE SIGNAL HEAD IS WITHIN 2 FT. OF THE FACE OF CURB.
4. ALIGN ADJACENT RED INDICATIONS TO SAME HEIGHT ABOVE PAVEMENT.
5. THE BASE FOR A TRAFFIC SIGNAL POST SHALL BE SITUATED SUCH THAT THE HANDHOLE IS LOCATED ON A SIDE AWAY FROM A TRAVELED LANE.
6. PEDESTRIAN PUSHBUTTON SIGNAL SIGNS SHALL BE MOUNTED ABOVE THE APPROPRIATE PEDESTRIAN PUSHBUTTON.
7. THE ANTI-BACKUP FEATURE SHALL BE HARDWIRED ON THE BACKPANEL OF THE CONTROLLER CABINET.
8. EACH DETECTOR LOOP SHALL BE WIRED TO INDIVIDUAL PAIRS OF THE LEAD-IN CABLE. DETECTOR LOOPS SHALL BE WIRED IN SERIES AT THE CONTROLLER CABINET DETECTOR PANEL.

ITEMS TO BE RETURNED TO IL. DEPT. OF TRANSPORTATION

| ITEM       | QUANTITY |
|------------|----------|
| CONTROLLER | 1 EACH   |