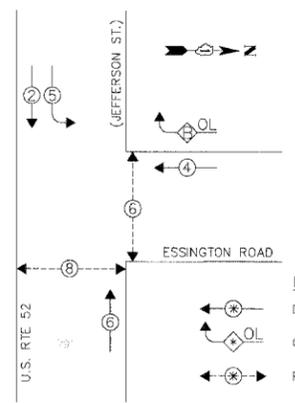


| | | | | |
|---------------------|----------------|----------|------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 326 | 05-00395-00-TL | WILL | 31 | 8 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS | FED. AID PROJECT | |
| CONTRACT NO: 83992 | | | | |

CABLE PLAN LEGEND

| EXISTING | PROPOSED | DESCRIPTION |
|----------|----------|---|
| ⊗ | ⊗ | 8" (200mm) TRAFFIC SIGNAL SECTION |
| ⊗ | ⊗ | 12" (300mm) TRAFFIC SIGNAL SECTION |
| ⊗ | ⊗ | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| ⊗ | ⊗ | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| ⊗ | ⊗ | CONTROLLER CABINET |
| ⊗ | ⊗ | SERVICE INSTALLATION |
| ⊗ | ⊗ | TELEPHONE INSTALLATION |
| ⊗ | ⊗ | VEHICLE DETECTOR, INDUCTION LOOP |
| ⊗ | ⊗ | MAGNETIC DETECTOR |
| ⊗ | ⊗ | EMERGENCY VEHICLE LIGHT DETECTOR |
| ⊗ | ⊗ | CONFIRMATION BEACON |
| ⊗ | ⊗ | PUSHBUTTON DETECTOR |
| ⊗ | ⊗ | DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| ⊗ | ⊗ | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| ⊗ | ⊗ | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F |
| ⊗ | ⊗ | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD. |
| ⊗ | ⊗ | RAILROAD CONTROL CABINET |
| ⊗ | ⊗ | ILLUMINATED SIGN "NO LEFT TURN" |
| ⊗ | ⊗ | ILLUMINATED SIGN "NO RIGHT TURN" |
| H/C | C | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C) |
| P | P | GROUND ROD AT POST (P) OR MAST ARM POLE (MA) |
| S | S | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| ⊕ | ⊕ | RADIO ANTENNA |
| ⊗ | ⊗ | COAXIAL CABLE |

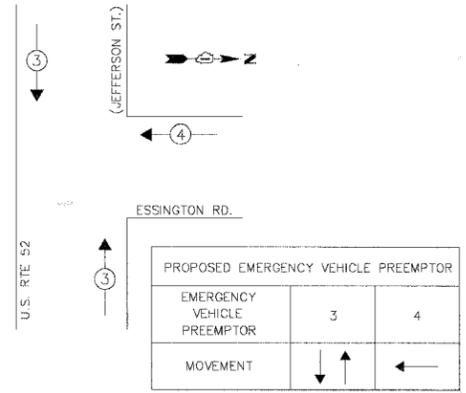
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

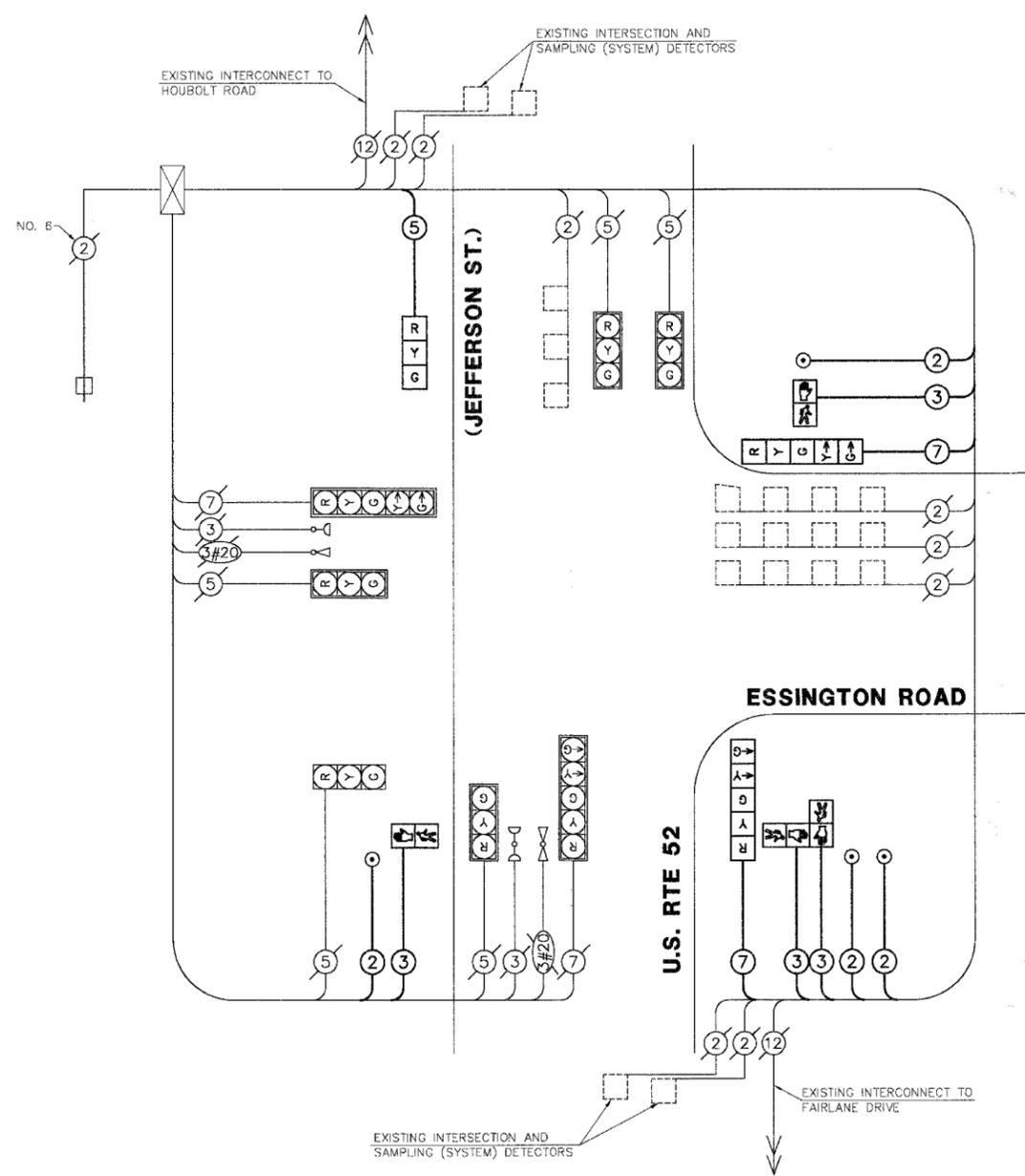
| OVERLAP LETTER | PERMISSIVE PHASE | PROTECTED PHASE |
|----------------|------------------|-----------------|
| B | = 4 | + 5 |

EMERGENCY VEHICLE PREEMPTION SEQUENCE



RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

CABLE PLAN



1.D.D.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

| TYPE | NO. OF LAMPS | WATTAGE (INCAND.) | LED | % OPERATION | TOTAL WATTAGE |
|--------------|--------------|-------------------|-----|-------------|---------------|
| SIGNAL (RED) | 10 | 135 | | 0.50 | 675.0 |
| (YELLOW) | 10 | 135 | | 0.25 | 337.5 |
| (GREEN) | 10 | 135 | | 0.25 | 337.5 |
| ARROW | 8 | 135 | | 0.10 | 108.0 |
| PED. SIGNAL | 4 | 90 | | 1.00 | 360.0 |
| CONTROLLER | 1 | 100 | | 1.00 | 100.0 |

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE."

ESSINGTON ROAD AT U.S. RTE 52 (JEFFERSON ST.)

SCHEDULE OF INTERSECTION QUANTITIES

| ITEM | UNIT | QUANTITY |
|---|-------|----------|
| SIGN PANEL - TYPE I | SQ FT | 0.97 |
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C | FOOT | 919 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C | FOOT | 955 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 60 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 489 |
| TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT. | EACH | 1 |
| TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. | EACH | 2 |
| SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED | EACH | 1 |
| SIGNAL HEAD, 1-FACE, 5-SECTION, BRACKET MOUNTED | EACH | 2 |
| PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED | EACH | 2 |
| PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED | EACH | 1 |
| PEDESTRIAN PUSHBUTTON | EACH | 4 |
| REMOVE ELECTRIC CABLE FROM CONDUIT | FOOT | 1952 |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EACH | 1 |

ENERGY COSTS TO: TOTAL = 1918.0

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: BETTY BRULC
PHONE: (815) 724-5052
COMPANY: COMED

| FOUNDATION (DEPTH) | FT. (m) | CABLE SLACK | FT. (m) | VERTICAL | FT. (m) |
|--------------------|----------|------------------|-----------|-------------------|------------|
| TYPE A - POST | 4 (1.2) | HANDHOLE | 6.5 (2.0) | ALL FOUNDATIONS | 3.5 (1.0) |
| D - CONTROLLER | 4 (1.2) | DOUBLE HANDHOLE | 13 (4.0) | MAST ARM (L) POLE | 20'L-2"= |
| C - M. ARM POLE | | SIGNAL POST | 2 (1.0) | (6m+L-0.6m)= | |
| 24" (600mm) | 10 (3.0) | CONTROLLER CAB. | 1 (0.5) | BRACKET MOUNTED | 13 (4.0) |
| 30" (750mm) | 15 (4.6) | FIBER OPTIC | 13 (4.0) | PED. PUSHBUTTON | 4 (1.2) |
| 36" (900mm) | 15 (4.6) | ELECTRIC SERVICE | 1 (0.5) | ELECTRIC SERVICE | 13.5 (4.1) |
| | | GROUND CABLE | 1 (0.5) | SERVICE TO GROUND | 13.5 (4.1) |
| | | | | POST MOUNTED | 6 (1.8) |

PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
Consulting Engineers & Surveyors
650 Forest Edge Drive
Version 10/11, IL 60001
(847) 478-9700
(847) 478-9701 Fax

REVISIONS

| NAME | DATE |
|------|------|
| | |
| | |
| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM

ESSINGTON ROAD AT U.S. RTE 52 (JEFFERSON ST.)
JOLIET, ILLINOIS

SCALE: N.T.S.
DATE: DECEMBER 7, 2007

DRAWN BY: LB
DESIGNED BY: TCM
CHECKED BY: BLS