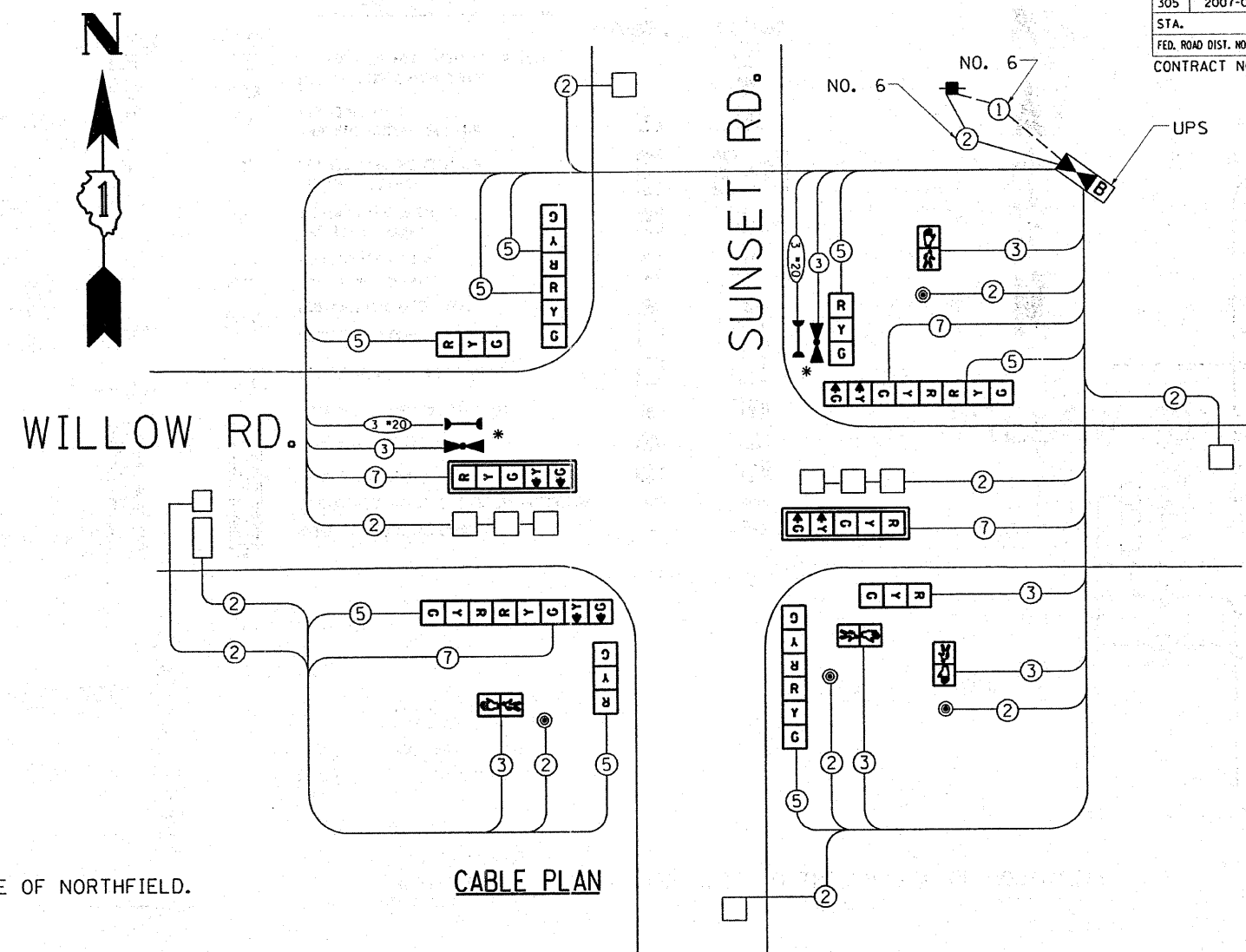


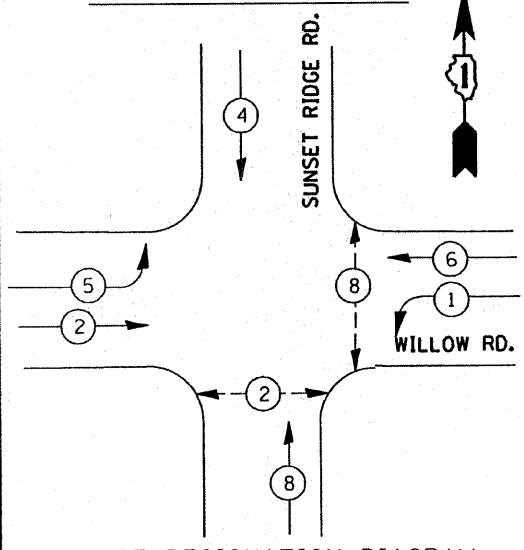
| | | | | |
|-----------------------|------------|------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 305 | 2007-02BRS | COOK | 36 | 22 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |
| CONTRACT NO. 60004 | | | | |

CABLE PLAN LEGEND

| | PROPOSED | EXISTING | | PROPOSED | EXISTING |
|--|----------|----------|--|----------|----------|
| CONTROLLER CABINET | | | 12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE | | |
| RAILROAD CONTROL CABINET | | | 12" (300mm) TRAFFIC SIGNAL SECTION | | |
| SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT | | | 12" (300mm) PEDESTRIAN SIGNAL SECTION | | |
| TELEPHONE CONNECTION | | | ILLUMINATED SIGN "NO LEFT TURN" | | |
| GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE | | | ILLUMINATED SIGN "NO RIGHT TURN" | | |
| FIBER OPTIC CABLE IN CONDUIT, NUMBER OF FIBERS AS NOTED | | | PUSHBUTTON DETECTOR | | |
| ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED, NUMBER OF CONDUCTORS AS NOTED | | | DETECTOR LOOP | | |
| GROUND CABLE IN CONDUIT NO. 6 COPPER (GREEN) | | | PREFORMED DETECTOR LOOP | | |
| SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD | | | MICROWAVE VEHICLE SENSOR | | |
| | | | VIDEO DETECTOR | | |
| | | | CLOSED CIRCUIT TV | | |
| | | | EMERGENCY VEHICLE SYSTEM DETECTOR | | |
| | | | CONFIRMATION BEACON | | |



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND

| | |
|--|-----------------------------------|
| | DUAL ENTRY PHASE |
| | PROTECTED LEFT TURN PHASE |
| | OVERLAP |
| | PEDESTRIAN PHASE |
| | NUMBER REFERS TO ASSOCIATED PHASE |

* 100% COST TO THE VILLAGE OF NORTHFIELD.

SCHEDULE OF QUANTITIES

| ITEM | UNIT | QUANTITY | ITEM | UNIT | QUANTITY |
|---|------|----------|---|------|----------|
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 | PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRKT. MTD. | EACH | 4 |
| CONDUIT IN PUSH, 2" DIA., GALVANIZED STEEL | FOOT | 90 | * LIGHT DETECTOR, TYPE I | EACH | 2 |
| HANDHOLE | EACH | 1 | * LIGHT DETECTOR, AMPLIFIER | EACH | 1 |
| HEAVY-DUTY HANDHOLE | EACH | 1 | PEDESTRIAN PUSH-BUTTON | EACH | 4 |
| FULL-ACTUATED CONTROLLER AND TYPE IV CABINET | EACH | 1 | INDUCTIVE LOOP DETECTOR | EACH | 7 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C | FOOT | 575 | DETECTOR LOOP, TYPE I | FOOT | 144 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C | FOOT | 611 | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM | EACH | 2 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 1655 | SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRKT. MNTD. | EACH | 4 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 685 | SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, M.A. MNTD. | EACH | 2 |
| * ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3/C TWISTED SHIELDED | FOOT | 50 | SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRKT. MNTD. | EACH | 2 |
| ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR | FOOT | 2322 | SIGNAL HEAD, L.E.D., 2-FACE, 1-3-SECT. 1-5 SECT. | EACH | 2 |
| ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C | FOOT | 32.5 | SERVICE INSTALLATION, POLE MOUNT | EACH | 1 |
| TRAFFIC SIGNAL POST, GALVANIZED STEEL 16FT. | EACH | 2 | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EACH | 1 |
| TRAFFIC SIGNAL POST, GALVANIZED STEEL 18FT. | EACH | 1 | UNINTERRUPTIBLE POWER SUPPLY | EACH | 1 |
| ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 | FOOT | 18 | | | |

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

| TYPE | NO. LAMPS | WATTAGE (INCAN.) | WATTAGE LED | % OPERATION | TOTAL WATTAGE |
|------------------|----------------|------------------|-------------|-------------|---------------|
| SIGNAL (RED) | 14 | 135 | 17 | 0.50 | 119.00 |
| (YELLOW) | 14 | 135 | 25 | 0.25 | 87.50 |
| (GREEN) | 14 | 135 | 15 | 0.25 | 52.50 |
| ARROW | 4 | 135 | 12 | 0.10 | 16.10 |
| PED. SIGNAL | 4 | 90 | 25 | 1.00 | 100.00 |
| CONTROLLER | 1 | 100 | 100 | 1.00 | 100.00 |
| ILLUM. SIGN | | 84 | | 0.05 | |
| FLASHER | | | | 0.50 | |
| ENERGY COSTS TO: | TOTAL = | | | | 363.80 |

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAMBURG, ILLINOIS 60196-1096
CONTACT: LARRY D. SHANK
PHONE: (847) 291-3214
COMPANY: COM. EDISON

| 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' +/- 2' (6m +/- 0.6m) |
| E - M. ARM POLE | | SIGNAL POST | 2 (0.6) | BRACKET MOUNTED | 13 (4.0) |
| 24" (600mm) | 10 (3.0) | CONTROLLER CAB. | 1 (0.5) | PED. PUSHBUTTON | 4 (1.2) |
| 30" (750mm) | 15 (4.6) | FIBER OPTIC | 13 (4.0) | ELECTRIC SERVICE | 13.5 (4.1) |
| 36" (900mm) | 15 (4.6) | ELECTRIC SERVICE | 1 (0.5) | SERVICE TO GROUND | 13.5 (4.1) |
| | | GROUND CABLE | 1 (0.5) | POST MOUNTED | 6 (1.8) |

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. 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 SEEDED. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.

REVISIONS

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED TRAFFIC SIGNAL CABLE PLAN, AND SEQUENCE OF OPERATION WILLOW RD. AND SUNSET RIDGE RD.
SCALE: 1"=20'
DATE: 3/4/2008
DRAWN BY: BCK
DESIGN BY: BCK
CHECKED BY: DAD