

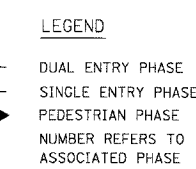
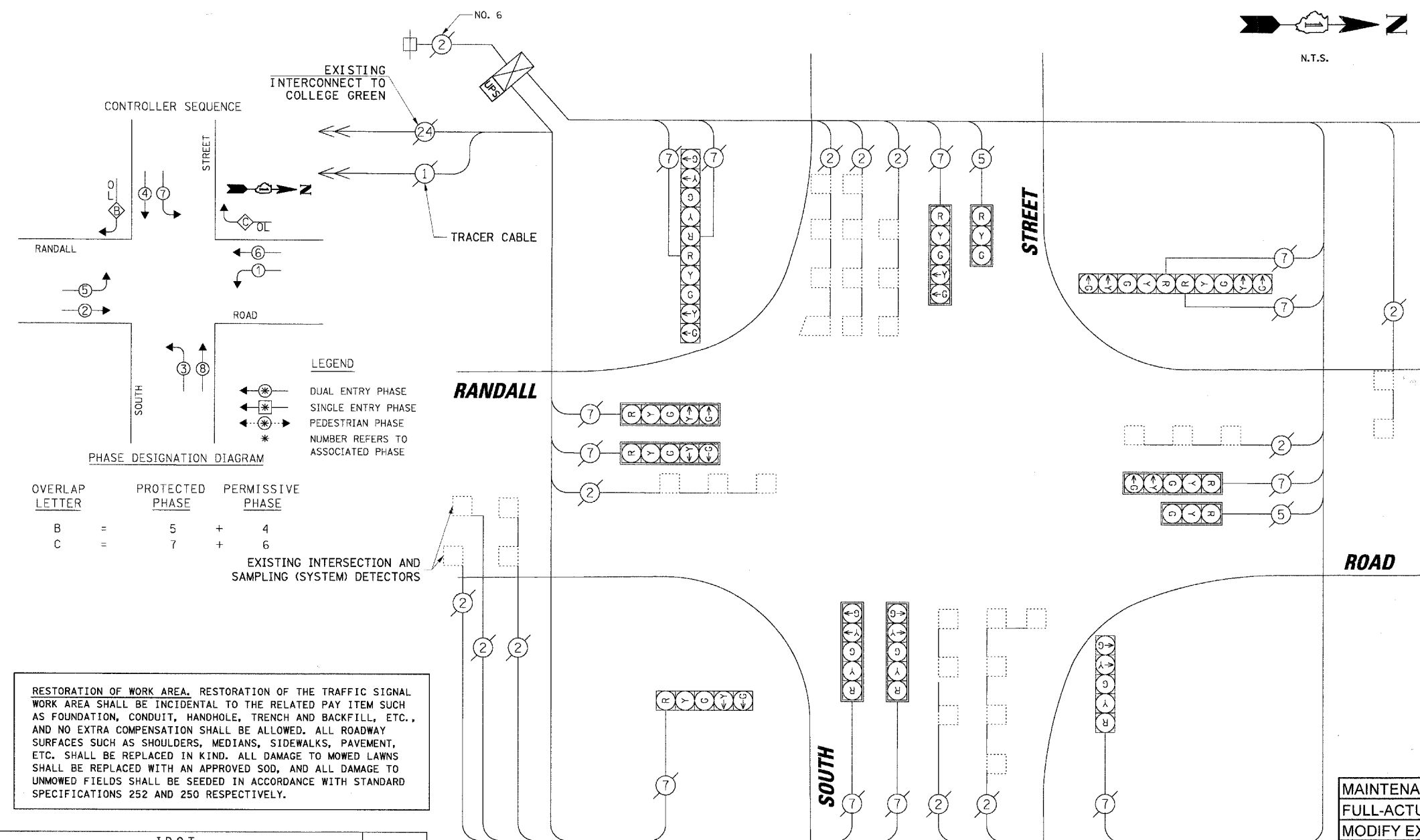
DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 PROFILE SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 9575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
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 DATE: \_\_\_\_\_

**CABLE PLAN LEGEND**

- |          |          |   |
|----------|----------|---|
| EXISTING | PROPOSED |   |
|          |          | 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   |
|          |          | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM24F   |
|          |          | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.  |
|          |          | RAILROAD CONTROL CABINET  |
|          |          | ILLUMINATED SIGN "NO LEFT TURN"   |
|          |          | ILLUMINATED SIGN "NO RIGHT TURN"  |
|          |          | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)  |
|          |          | GROUND ROD AT POST (P) OR MAST ARM POLE (MA)  |
|          |          | GROUND ROD AT ELECTRIC SERVICE INSTALLATION   |
|          |          | UNINTERRUPTIBLE POWER SUPPLY  |
|          |          | VENDOR SPECIFIC CABLE   |
|          |          | DOMED CAMERA (PAN/TILT/ZOOM)  |
|          |          | VIDEO DETECTION CAMERA  |



**PHASE DESIGNATION DIAGRAM**

| OVERLAP LETTER | PROTECTED PHASE | PERMISSIVE PHASE |
|----------------|-----------------|------------------|
| B              | = 5             | + 4              |
| C              | = 7             | + 6              |

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.

**NOTE:**  
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

**SCHEDULE OF QUANTITIES**

| ITEM  | UNIT | TOTAL |
|---|------|-------|
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION   | EACH | 1     |
| FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL | EACH | 1     |
| MODIFY EXISTING CONTROLLER CABINET                    | EACH | 1     |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT              | EACH | 1     |
| UNINTERRUPTIBLE POWER SUPPLY                          | EACH | 1     |
| ETHERNET KIT  | EACH | 1     |
| CONFLICT MONITOR                                      | EACH | 1     |

- CONSTRUCTION NOTES:**
- REPLACE EXISTING CONTROLLER AND CONFLICT MONITOR.
  - INSTALL ETHERNET KIT.
  - INSTALL UPS UNIT IN SIDE MOUNTED CABINET ATTACHED TO EXISTING TRAFFIC SIGNAL CABINET.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1 EACH CONTROLLER AND CONFLICT MONITOR

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

| TYPE         | NO. OF LAMPS | WATTAGE | INCAND. | LED  | % OPERATION | TOTAL WATTAGE |
|--------------|--------------|---------|---------|------|-------------|---------------|
| SIGNAL (RED) | 14           |         | 17      | 0.50 |             | 119.00        |
| (YELLOW)     | 14           |         | 25      | 0.25 |             | 87.50         |
| (GREEN)      | 14           |         | 15      | 0.25 |             | 52.50         |
| ARROW        | 24           |         | 12      | 0.10 |             | 28.80         |
| PED. SIGNAL  | -            |         | 25      | 1.00 |             | -             |
| CONTROLLER   | 1            |         | 100     | 1.00 |             | 100.00        |
| ILLUM. SIGN  | -            |         | 25      | 0.05 |             | -             |
| VIDEO SYSTEM | -            |         | 150     | 1.00 |             | -             |
| FLASHER      | -            |         | 0.50    |      |             | -             |

ENERGY COSTS TO: TOTAL = 387.80  
**KANE COUNTY DIVISION OF TRANSPORTATION**  
 41W011 BURLINGTON ROAD  
 ST. CHARLES, IL 60175  
 ENERGY SUPPLY CONTACT: MIKE WIDHALM  
 PHONE: (847) 608-2376  
 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' | (6m+L-0.6m) |
| E - M. ARM POLE    |     |         | SIGNAL POST      | 2   | (1.0) |                   |          |             |
|                    | 24" | (600mm) | CONTROLLER CAB.  | 1   | (0.5) | BRACKET MOUNTED   | 13       | (4.0)       |
|                    | 30" | (750mm) | FIBER OPTIC      | 13  | (4.0) | PED. PUSHBUTTON   | 4        | (1.2)       |
|                    | 36" | (900mm) | 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)       |