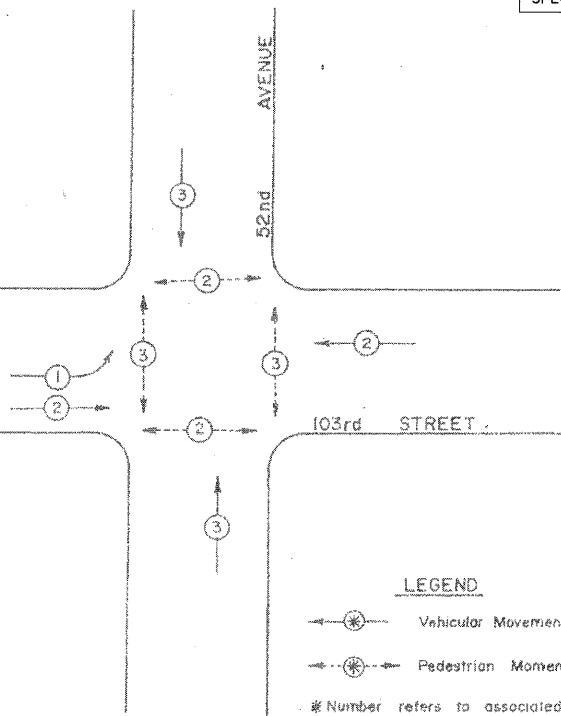


CONTROLLER SEQUENCE II

Referring to Standard 2393, the vehicular and pedestrian phases used are designate blow (Show Movements and Phase Numbers)

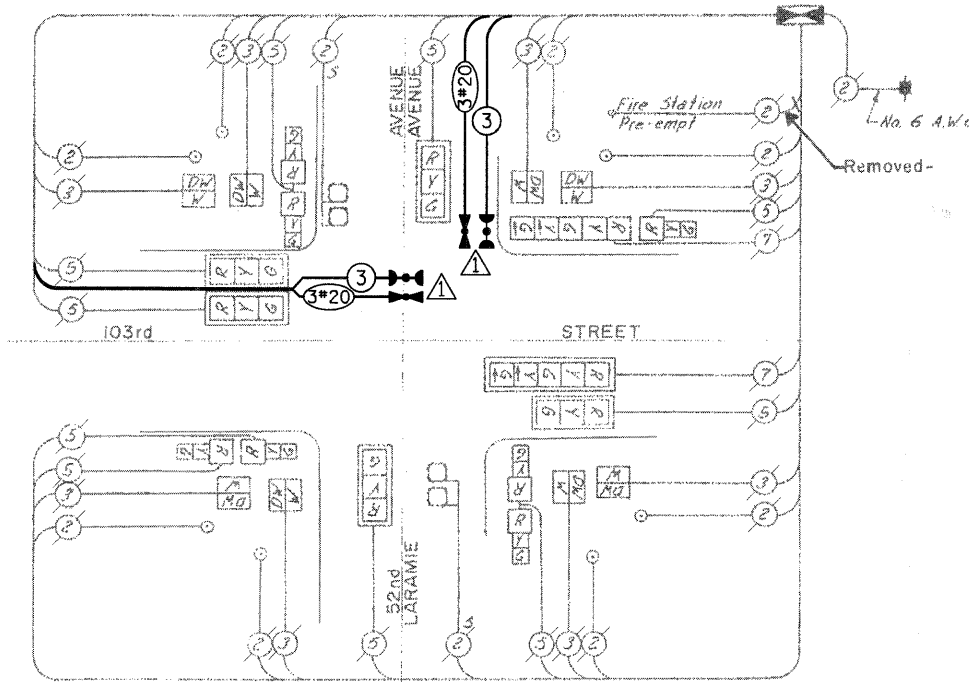


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL 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.

CARE IS TO BE TAKEN BY THE CONTRACTOR TO AVOID DAMAGE TO THE EXISTING TRAFFIC SIGNAL CONDUIT, DETECTORS, AND EQUIPMENT. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED CONDUIT OR EQUIPMENT AT NO COST TO THE COUNTY OR VILLAGE.

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

CABLE PLAN



CABLE PLAN LEGEND

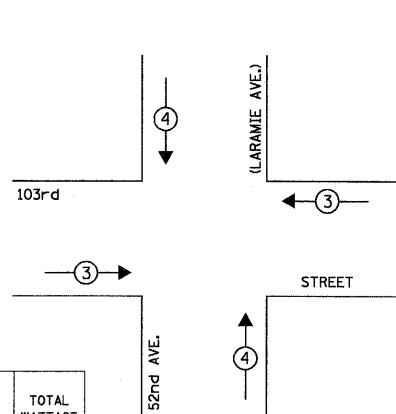
- 8" traffic signal section
- 12" traffic signal section
- Controller cabinet
- Service installation
- Vehicle detector, induction loop
- Denotes number of conductors (new). All loop detector cable to be shielded. All cable no. 14 except as indicated
- Shielded
- Pedestrian push button
- Pedestrian signal head
- Signal face with backplate
- EMERGENCY VEHICLE LIGHT DETECTOR CONFIRMATION BEACON

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "OPTICOM" TO MATCH THE EXISTING SYSTEM AND MUNICIPAL REQUIREMENTS

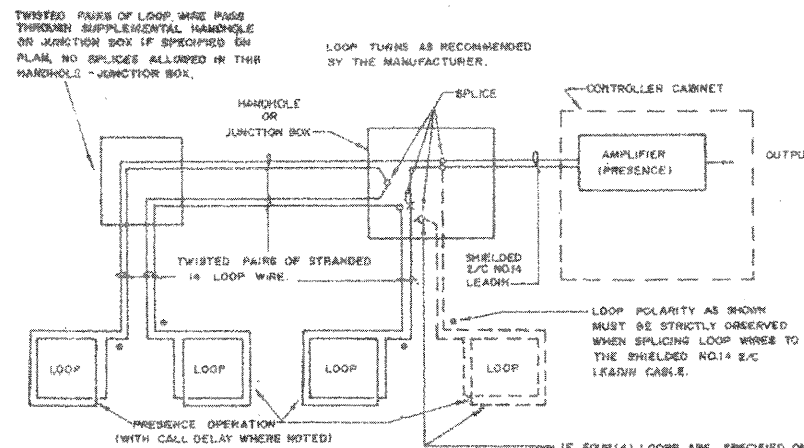
PHASE DESIGNATION DIAGRAM

NOTE: Phase 1 shall be recalled from 4:30 PM. to 5:30 PM. Phase 2 shall be recalled at all other times. See sheet 5 for emergency vehicle Pre-Empt sequence

EMERGENCY VEHICLE PREEMPTION SEQUENCE



| PROPOSED EMERGENCY VEHICLE PREEMPTORS | | |
|---------------------------------------|-----|-----|
| EMERGENCY VEHICLE PREEMPTOR | 3 | 4 |
| MOVEMENT | ← → | ↑ ↓ |



LOOP DETECTOR SCHEMATIC

SCHEDULE OF QUANTITIES

| ITEM | UNIT | TOTAL |
|---|------|-------|
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 |
| FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL | EACH | 1 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C | FOOT | 237 |
| LIGHT DETECTOR | EACH | 2 |
| LIGHT DETECTOR AMPLIFIER | EACH | 1 |
| MODIFY EXISTING CONTROLLER CABINET | EACH | 1 |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EACH | 1 |
| ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED | FOOT | 237 |
| TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | EACH | 1 |

SCHEDULE OF SIGNAL HEADS

- 5 each Traffic signal head, aluminum, 1-face 3-section with 12" lenses, Mast arm mounted.
- 1 each Traffic signal head, aluminum, 1-face 5-section with 12" lenses, Mast Arm mounted.
- 3 each Traffic signal head, aluminum, 2-face 2-3 section with 12" red lens, bracket mounted.
- 1 each Traffic signal head, aluminum, 2-face 1-3 section with 12" red lens, 1-5 section with 12" lenses, bracket mounted.
- 8 each Pedestrian signal head, aluminum, 1-face 2-section with 12" lenses, bracket mounted.

| I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS | | | | TOTAL WATTAGE |
|--|--------------|---------|-----------------|---------------|
| TYPE | NO. OF LAMPS | WATTAGE | LED % OPERATION | |
| SIGNAL (RED) | 14 | 135 | 0.50 | 945.00 |
| (YELLOW) | 14 | 135 | 0.25 | 472.00 |
| (GREEN) | 14 | 135 | 0.25 | 472.00 |
| ARROW | 4 | 135 | 0.10 | 54.00 |
| PED. SIGNAL | 8 | 90 | 1.00 | 720.00 |
| CONTROLLER | 1 | 100 | 1.00 | 100.00 |
| ILLUM. SIGN | - | 252 | 0.05 | - |
| FLASHER | | | 0.50 | |
| TOTAL = | | | | 2763.00 |

ENERGY COSTS TO: COOK COUNTY HIGHWAY DEPARTMENT

69 WEST WASHINGTON ROOM 2139 CHICAGO, ILLINOIS 60602-3134

ENERGY SUPPLY CONTACT: PHONE: COMPANY:

| 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- |
| E - M. ARM POLE | 10 (3.0) | SIGNAL POST | 2 (0.6) | BRACKET MOUNTED | 13 (4.0) |
| 24" (600mm) | 10 (3.0) | CONTROL CAB. | 1 (0.3) | 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 (0.3) | SERVICE TO GROUND | 13.5 (4.1) |
| | | GROUND CABLE | 1 (0.3) | POST MOUNTED | 6 (1.8) |

INSTALLATION OF EMERGENCY VEHICLE PREEMPTION
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

VILLAGE OF OAKLAWN
CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES
 103rd STREET AND 52nd AVENUE
 NO SCALE
 DATE 11/81
 CHECKED BY M. J.J.

| REVISIONS | |
|-----------|---------|
| NAME | DATE |
| GPO | 8/82 |
| KJK | 1/83 |
| RJL | 3/90 |
| CBBEL | 6-27-08 |