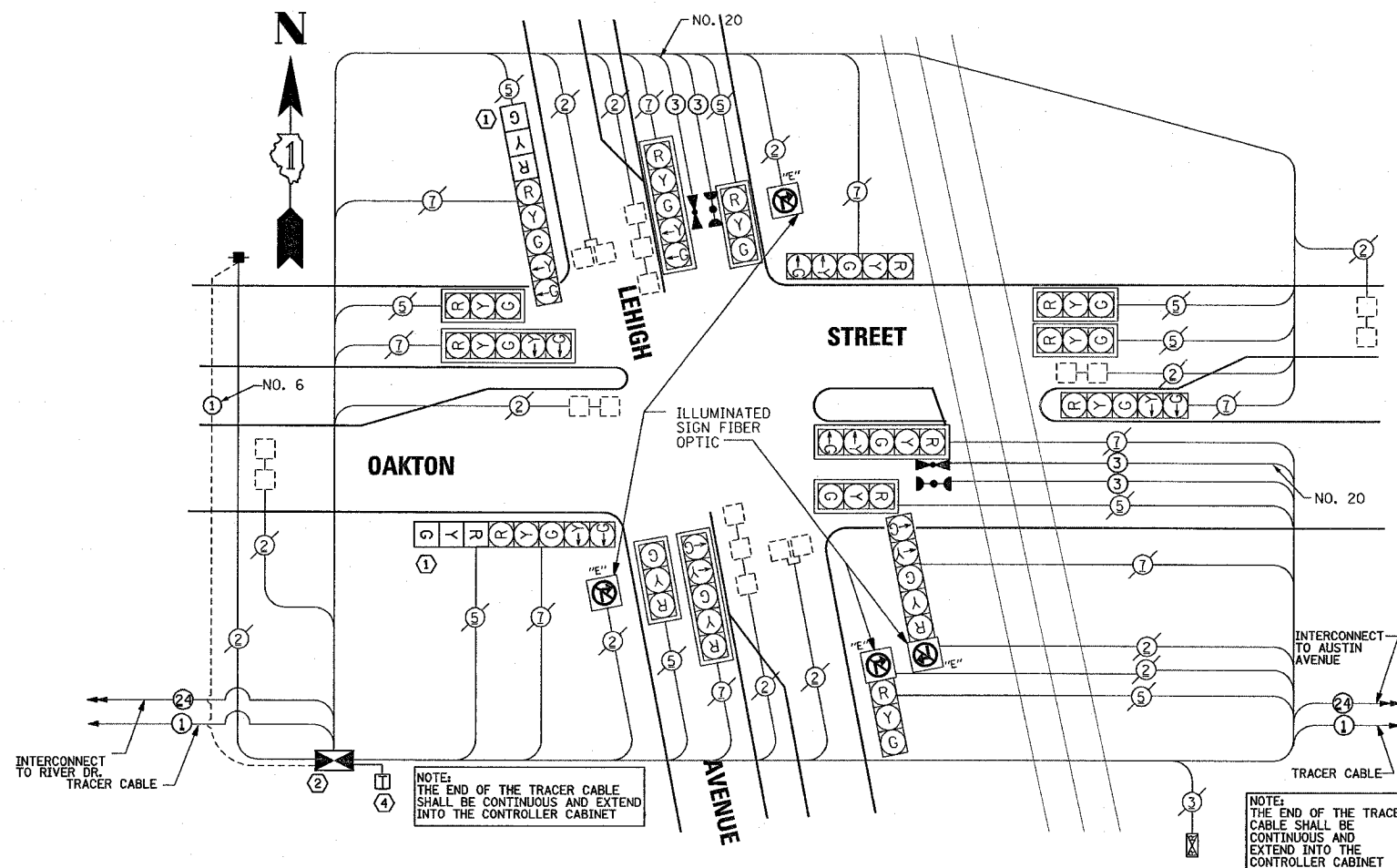


| | | | | |
|---------------------|------------|------------------|--------------|-----------|
| F.A. DIST. NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1332 | 2004-022TS | COOK | 20 | 10 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |
| CONTRACT NO. 62741 | | | | |

SCHEDULE OF QUANTITIES

| ITEM | UNIT | QUANTITY |
|---|------|----------|
| CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL | FOOT | 15 |
| TRENCH AND BACKFILL FOR ELECTRICAL WORK | FOOT | 15 |
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 |
| LIGHT DETECTOR | EACH | 2 |
| LIGHT DETECTOR AMPLIFIER | EACH | 1 |
| FULL-ACTUATED CONTROLLER AND TYPE V CABINET | EACH | 1 |
| TRANSMITTER-FIBER OPTIC | EACH | 1 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 8C | FOOT | 570 |
| ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C | FOOT | 114 |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EACH | 1 |
| SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED | EACH | 2 |
| INDUCTIVE LOOP DETECTOR | EACH | 8 |
| SERVICE INSTALLATION, POLE MOUNTED | EACH | 1 |
| ELECTRIC CABLE IN CONDUIT, NO. 20 8C, TWISTED, SHIELDED | FOOT | 570 |

* 100% COST TO VILLAGE OF MORTON GROVE



NOTE: THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET

NOTE: THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET

CABLE PLAN LEGEND

| EXISTING | PROPOSED | 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 CONNECTION |
| ⊠ | ⊠ | ⊠ | ⊠ | VEHICLE DETECTOR, INDUCTION LOOP |
| ⊠ | ⊠ | ⊠ | ⊠ | MAGNETIC DETECTOR |
| ⊠ | ⊠ | ⊠ | ⊠ | EMERGENCY VEHICLE LIGHT DETECTOR |
| ⊠ | ⊠ | ⊠ | ⊠ | CONFIRMATION BEACON |
| ⊠ | ⊠ | ⊠ | ⊠ | PUSHBUTTON DETECTOR |
| ⊠ | ⊠ | ⊠ | ⊠ | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| ⊠ | ⊠ | ⊠ | ⊠ | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F |
| ⊠ | ⊠ | ⊠ | ⊠ | 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 |
| ⊠ | ⊠ | ⊠ | ⊠ | MICROWAVE VEHICLE SENSOR |

| I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS | | | | | TOTAL WATTAGE |
|--|-----------|-----------------|-------------|---------------|---------------|
| TYPE | NO. LAMPS | WATTAGE INCAND. | WATTAGE LED | X % OPERATION | |
| SIGNAL (RED) | 18 | 135 | 17 | 0.50 | 1215.00 |
| (YELLOW) | 18 | 135 | 25 | 0.25 | 607.50 |
| (GREEN) | 18 | 135 | 15 | 0.25 | 607.50 |
| ARROW | 18 | 135 | 12 | 0.10 | 243.00 |
| PED. SIGNAL | 0 | 90 | 25 | 1.00 | 0.00 |
| CONTROLLER | 1 | 100 | 100 | 1.00 | 100.0 |
| ILLUM. SIGN | 4 | 84 | 35 | 0.05 | 16.8 |
| FLASHER | 0 | | | 0.50 | 0.00 |
| TOTAL = | | | | | 2789.80 |

CONSTRUCTION NOTES:

- REMOVE EXISTING 8" SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED, INSTALL NEW 12" SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED.
- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL MASTER CONTROLLER AND LOCAL CONTROLLER IN TYPE V CABINET, RE-USE EXISTING FOUNDATION.
- THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.
- INSTALL 1" UNIT DUCT FOR THE AMERITECH SERVICE FROM THE POINT OF ENTRY OF THE TELEPHONE CONDUIT IN THE DOUBLE HANDHOLE THROUGH THE CONTROLLER CABINET FOUNDATION. THIS WORK SHALL BE INCIDENTAL TO THE MASTER CONTROLLER PAY ITEM.

| 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) | 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) |
| | | ELECTRIC SERVICE | 1 (0.5) | SERVICE TO GROUND | 13.5 (4.1) |
| | | GROUND CABLE | 1 (0.5) | POST MOUNTED | 6 (1.8) |

SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS

19 S. BOWHILL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

SETON PROJECT # 2002031-001-206

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
OAKTON STREET AT LEHIGH AVENUE
MORTON GROVE, ILLINOIS

SCALE: 1/8"=1'-0"
DATE: 09-20-2004
DRAWN BY: BR
DESIGNED BY: VO
CHECKED BY: TJM