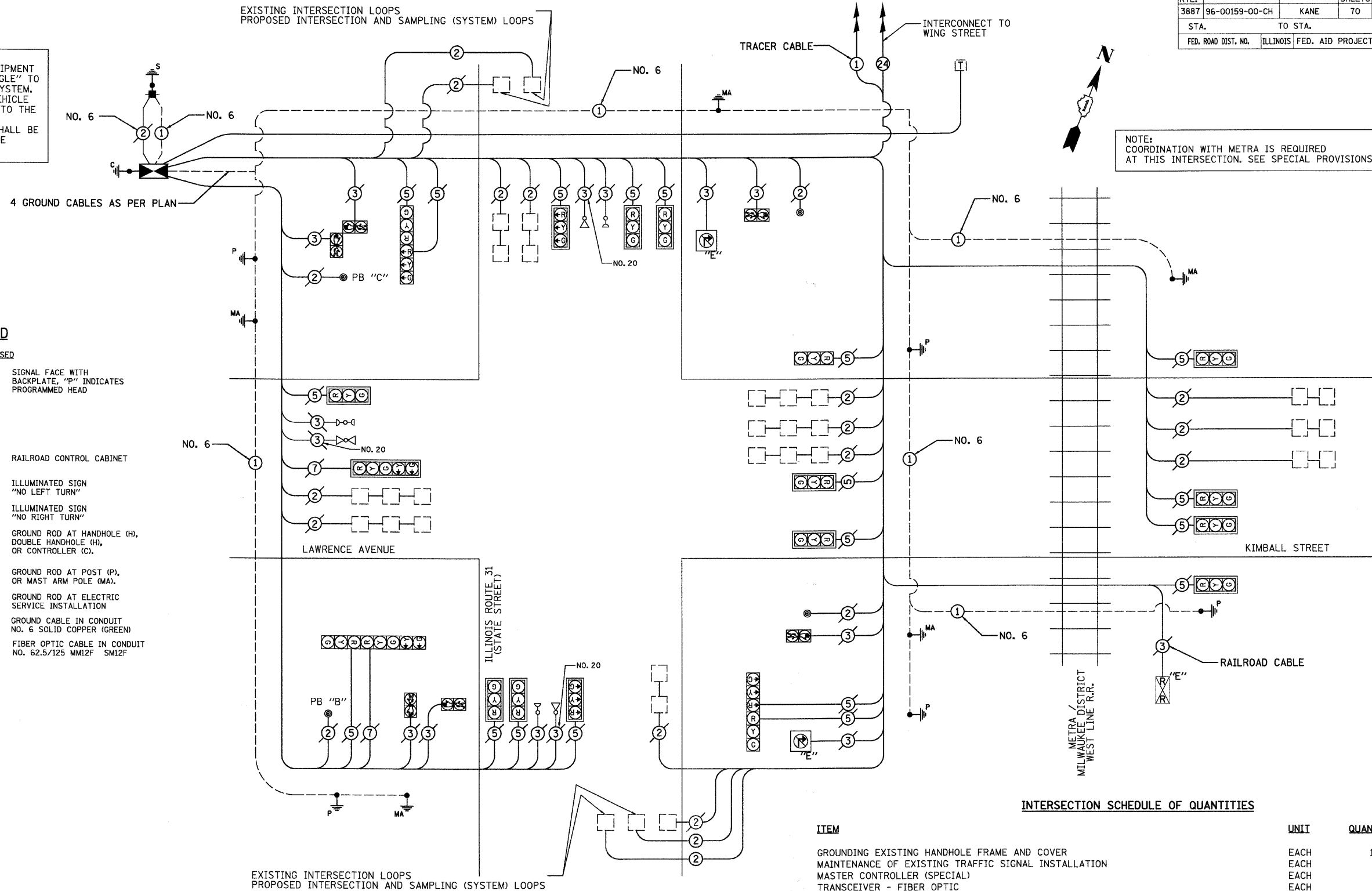


| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------|----------------|---------------------------|--------------|-----------|
| 3887 | 96-00159-00-CH | KANE | 70 | 37 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

CONTROLLER CABINET NOTES:
 1. THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.
 2. RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO THE NEW CONTROLLER CABINET.
 3. THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

NOTE: COORDINATION WITH METRA IS REQUIRED AT THIS INTERSECTION. SEE SPECIAL PROVISIONS.



CABLE PLAN LEGEND

| EXISTING | | PROPOSED | | DESCRIPTION |
|----------|--|----------|--|---------------------------------------|
| | | | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | | | CONTROLLER CABINET |
| | | | | SERVICE INSTALLATION |
| | | | | TELEPHONE CONNECTION |
| | | | | MAGNETIC DETECTOR |
| | | | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | | | CONFIRMATION BEACON |
| | | | | PUSHBUTTON DETECTOR |
| | | | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | | | MICROWAVE VEHICLE SENSOR |

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET, COMPLETE

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 SERVICE INSTALLATION

INTERSECTION SCHEDULE OF QUANTITIES

| ITEM | UNIT | QUANTITY |
|---|-------|----------|
| GROUNDING EXISTING HANDHOLE FRAME AND COVER | EACH | 13 |
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 |
| MASTER CONTROLLER (SPECIAL) | EACH | 1 |
| TRANSCIVER - FIBER OPTIC | EACH | 1 |
| ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 | FOOT | 1378 |
| INDUCTIVE LOOP DETECTOR | EACH | 16 |
| RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT | EACH | 1 |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EACH | 1 |
| RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET (SPECIAL) | EACH | 1 |
| SERVICE INSTALLATION - POLE MOUNTED | EACH | 1 |
| ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 | FOOT | 794 |
| RAILROAD LIABILITY INSURANCE | L SUM | 1 |

| I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS | | | | | TOTAL WATTAGE |
|--|------------|---------------------|-------------|--|---------------|
| TYPE | NO. LAMPS* | WATTAGE INCAND. LED | % OPERATION | | |
| SIGNAL (RED) | 21 | 135 | 0.50 | | 1417.50 |
| (YELLOW) | 21 | 135 | 0.25 | | 708.75 |
| (GREEN) | 21 | 135 | 0.25 | | 708.75 |
| ARROW (G, Y) | 4 | 135 | 0.10 | | 54.00 |
| PED. SIGNAL | 6 | 90 | 1.00 | | 540.00 |
| CONTROLLER | 2 | 100 | 1.00 | | 200.00 |
| ILLUM. SIGN | 2 | 25 | 0.05 | | 2.50 |
| TOTAL = | | | | | 3631.50 |

| 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' HL-2= (6m HL-0.6m)= |
| E - M. ARM POLE | | SIGNAL POST | 2 (1.0) | BRACKET MOUNTED | 13 (4.0) |
| | | CONTROLLER CAB. | 1 (0.5) | PED. PUSHBUTTON | 4 (1.2) |
| | | 30" (750mm) | 15 (4.6) | ELECTRIC SERVICE | 13.5 (4.1) |
| | | 36" (900mm) | 15 (4.6) | SERVICE TO GROUND | 13.5 (4.1) |
| | | FIBER OPTIC | 13 (4.0) | POST MOUNTED | 6 (1.8) |
| | | ELECTRIC SERVICE | 1 (0.5) | | |
| | | GROUND CABLE | 1 (0.5) | | |

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

RH&A
 Robert H. Anderson & Associates, Inc.
 Consulting Engineers
 Timbers Professional Center
 220 West River Drive, St. Charles, IL 60174
 Phone - 630.584.3530 Fax - 630.584.3047

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILLINOIS ROUTE 31 AND WING STREET
 ILL. RTE. 31 AT KIMBALL STREET/LAWRENCE AVENUE
 CABLE PLAN
 SCALE: VERT. DATE: FEBRUARY 13, 2008
 DRAWN BY: KLJ
 DESIGN BY: CMC
 CHECKED BY: JS

H:\ELG\N\29814\DESIGN\DDON\37K1\MBALL\CABLE.DGN 2/11/2008