

| | | | | |
|---------------------|----------|---------------------------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 330 | 1Y-B-R-1 | LAKE | 12/ | 9/ |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |
| CONTRACT #: 62032 | | | | |

CABLE PLAN LEGEND

| | PROPOSED | EXISTING |
|--|----------|----------|
| CONTROLLER CABINET | | |
| RAILROAD CONTROL CABINET | | |
| SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT | | |
| TELEPHONE CONNECTION | | |
| GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE | | |
| FIBER OPTIC CABLE IN CONDUIT, NUMBER OF FIBERS AS NOTED | | |
| ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED. NUMBER OF CONDUCTORS AS NOTED | | |
| GROUND CABLE IN CONDUIT NO. 6 COPPER (GREEN) | | |
| SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD | | |

NOTE:

PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6

12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE

12" (300mm) TRAFFIC SIGNAL SECTION

12" (300mm) PEDESTRIAN SIGNAL SECTION

ILLUMINATED SIGN "NO LEFT TURN"

ILLUMINATED SIGN "NO RIGHT TURN"

PUSHBUTTON DETECTOR

DETECTOR LOOP

PREFORMED DETECTOR LOOP

MICROWAVE VEHICLE SENSOR

VIDEO DETECTOR

CLOSED CIRCUIT TV

EMERGENCY VEHICLE SYSTEM DETECTOR

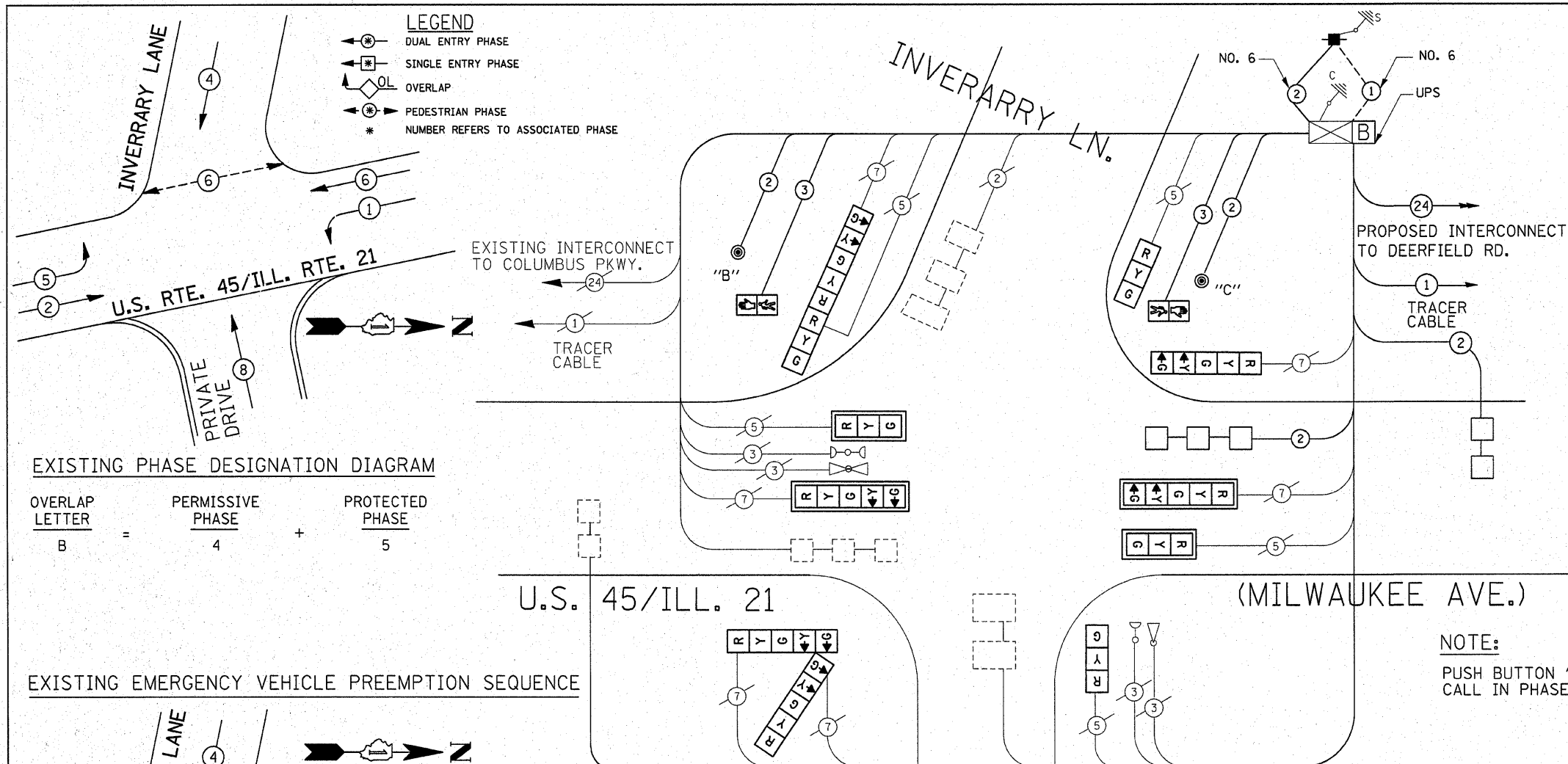
CONFIRMATION BEACON

UNINTERRUPTIBLE POWER SUPPLY

| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION |
|-----------|------|---|
| NAME | DATE | |
| | | PROPOSED CABLE PLAN US RTE. 45/ILL. RTE. 21 (MILWAUKEE AVE.) @ INVERRARY LN. DRAWN BY: BCK DESIGNED BY: BCK CHECKED BY: DAD DATE: 12/27/2007 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

LEGEND

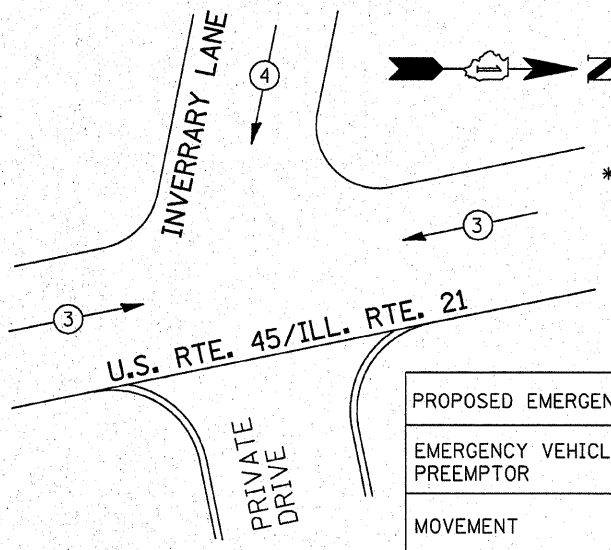
| | |
|---|-----------------------------------|
| | DUAL ENTRY PHASE |
| | SINGLE ENTRY PHASE |
| | OVERLAP |
| | PEDESTRIAN PHASE |
| * | NUMBER REFERS TO ASSOCIATED PHASE |



EXISTING PHASE DESIGNATION DIAGRAM

| OVERLAP LETTER | PERMISSIVE PHASE | PROTECTED PHASE |
|----------------|------------------|-----------------|
| B | 4 | 5 |

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



** IF A NEW POST IS NEEDED TO REPLACE EXISTING TO INSTALL BIKE PATH, (SEE PLAN FOR LOCATION)

PROPOSED EMERGENCY VEHICLE PREEMPTORS

| EMERGENCY VEHICLE PREEMPTOR | 3 | 4 |
|-----------------------------|---|---|
| MOVEMENT | | |

CABLE PLAN

SCHEDULE OF QUANTITIES

| QUANTITY | UNIT | ITEM |
|----------|-------|---|
| 40 | METER | THERMOPLASTIC PAVEMENT MARKING-LINE 100MM (TYP.) |
| 9.0 | METER | THERMOPLASTIC PAVEMENT MARKING-LINE 600MM (TYP.) |
| ** 5 | METER | CONDUIT PUSHED, 64mm GALVANIZED STEEL |
| ** 5 | METER | TRENCH AND BACKFILL FOR ELECTRICAL WORK |
| 1 | EACH | HANDHOLE |
| 61 | METER | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C |
| 61 | METER | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C |
| 31 | METER | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C |
| 83 | METER | ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR |
| 37 | METER | ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2C |
| 37 | METER | ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C |
| 1 | EACH | DRILL EXISTING HANDHOLE |
| 2 | EACH | PEDESTRIAN PUSHBUTTON |
| 52 | METER | DETECTOR LOOP, TYPE 1 |
| 1 | EACH | TEMPORARY WIRELESS INTERCONNECT |
| 1 | EACH | MODIFY EXISTING CONTROLLER |
| ** 1 | EACH | CONCRETE FOUNDATION, TYPE A |
| 1 | EACH | TRAFFIC SIGNAL POST, 4.3M |
| 3 | EACH | TRAFFIC SIGNAL POST, 5.0M |
| 4 | EACH | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM |
| ** 1 | EACH | REMOVE EXISTING CONCRETE FOUNDATION |
| 1 | EACH | REMOVE EXISTING HANDHOLE |
| ** 37 | METER | REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT |
| 1 | EACH | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT |
| 2 | EACH | SIGNAL HEAD, L.E.D., 1 FACE, 3-SECTION, M.A. MNTD. |
| 2 | EACH | SIGNAL HEAD, L.E.D., 1 FACE, 5-SECTION, M.A. MNTD. |
| 2 | EACH | SIGNAL HEAD, L.E.D., 1 FACE, 3-SECTION, BRKT. MNTD. |
| 1 | EACH | SIGNAL HEAD, L.E.D., 2 FACE, 1-3, 1-5 -SECTION, BRKT. MNTD. |
| 1 | EACH | SIGNAL HEAD, L.E.D., 2 FACE, 5 -SECTION, BRKT. MNTD. |
| 2 | EACH | PEDESTRIAN SIGNAL HEAD, L.E.D., 1 FACE, BRKT.MNTD. |
| 1 | EACH | SERVICE INSTALLATION, POLE MOUNT |
| 1 | EACH | UNINTERRUPTIBLE POWER SUPPLY |

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

| TYPE | NO. LAMPS | WATTAGE (INCAND.) | WATTAGE LED | % OPERATION | TOTAL WATTAGE |
|------------------|-----------|-------------------|-------------|-------------|----------------|
| SIGNAL (RED) | 11 | 135 | 17 | 0.50 | 93.50 |
| (YELLOW) | 11 | 135 | 25 | 0.25 | 68.75 |
| (GREEN) | 11 | 135 | 15 | 0.25 | 41.25 |
| ARROW | 12 | 135 | 12 | 0.10 | 14.40 |
| PED. SIGNAL | 8 | 90 | 25 | 1.00 | 200.00 |
| CONTROLLER | 1 | 100 | 100 | 1.00 | 100.00 |
| ILLUM. SIGN | | 84 | | 0.05 | |
| FLASHER | | | | 0.50 | |
| ENERGY COSTS TO: | | | | | TOTAL = 517.90 |

| FOUNDATION (DEPTH) | FT. (m) | CABLE SLACK | FT. (m) |
|--------------------|----------|------------------|-----------|
| TYPE A - POST | 4 (1.2) | HANDHOLE | 6.5 (2.0) |
| D - CONTROLLER | 4 (1.2) | DOUBLE HANDHOLE | 13 (4.0) |
| E - M. ARM POLE | | SIGNAL POST | 2 (1.0) |
| 24" (600mm) | 10 (3.0) | CONTROLLER CAB. | 1 (0.5) |
| 30" (750mm) | 15 (4.6) | FIBER OPTIC | 13 (4.0) |
| 36" (900mm) | 15 (4.6) | ELECTRIC SERVICE | 1 (0.5) |
| | | GROUND CABLE | 1 (0.5) |