GENERAL NOTES

- THE CONTRACTOR SHALL CONTACT THE VILLAGE OF BOURBONNAIS A MINIMUM OF 72 HOURS PRIOR TO BECINNING WORK.
- THE TRAFFIC SIGNAL SECTION AT THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DISTRICT 3, SHALL BE NOTIFIED AT 815-434-8506 AT LEAST 72 HOURS PRIOR TO TURNING ON ANY FLASHER OR CONTROLLER UNITS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCED NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123.
- 4. ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS.
- 5. ALL TRAFFIC SIGNAL HEADS ARE TO BE 12-INCH POLYCARBONATE.
- 6. TRAFFIC SIGNAL HEADS SHALL BE PROPERLY COVERED PRIOR TO INTERSECTION TURN-ON OR AS DIRECTED BY THE ENGINEER, THIS COST SHALL BE INCLUDED WITH THE COST OF THE ASSOCIATED TRAFFIC SIGNAL PAY ITEMS.
- 7. THE CONTRACTOR SHALL ENSURE THE SIGNAL HEADS OVER THE LEFT TURN LANES ARE SET WITH AN OFFSET, SO THAT THEY ARE NOT OBSTRUCTED BY EACH OTHER, WHILE KEEPING THEM IN THE CENTER OF THE LANE. NOTIFY THE TRAFFIC SIGNALS DEPARTMENT AT 815-434-8505 FOR MORE INFORMATION.
- 8. A L/4" DIAMETER CONTINUOUS RODENT RESISTANT NYLON ROPE SHALL BE FURNISHED AND LEFT IN PLACE IN ALL CONDUITS BETWEEN HANDHOLES AND FOUNDATIONS OR CONTROLLER, THIS COST SHALL BE INCLUDED WITH THE TRAFFIC SIGNAL CONTROLLER.
- THE CONTRACTOR SHALL ARRANGE FOR A FACTORY OR SUPPLIER REPRESENTATIVE TO BE PRESENT AT THE INTERSECTION WITH THE SIGNAL IS TURNED ON, COST TO BE INCLUDED WITH THE TRAFFIC SIGNAL CONTROLLER PAY TEM.
- 10. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT A GREATER THAN 2' MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
- 11. THE ELECTRICAL CONDUCTORS FOR ALL TRAFFIC SIGNAL HEADS SHALL BE SOLID, SOFT COPPER.
- 12. ALL THREADS OF BOLTS USED IN THE ASSEMBLY OF TRAFFIC SIGNAL COMPONENTS SHALL BE COATED WITH A NON-LEAD BASED ANTI-SEIZE COMPOUND, SIMILAR TO LEAD PLATE, PRIOR TO ASSEMBLY.
- 13. ALL HARDWARE SHALL BE TIGHTENED AND WELL SECURED, CABLES SHALL BE NEATLY WOUND IN HANDHOLES, CABLES SHALL BE NEATLY TRAINED IN THE CONTROLLER CABINET.
- 14. ALL TRAFFIC SIGNAL WIRING SHALL EXTEND FROM CONTROLLER TO SIGNAL SPLICES IN JUNCTION BOXES WILL NOT BE ALLOWED.
- 15. THE CONTROLLER CABINET SHALL BE PLACED SO THAT A TECHNICIAN MAY SEE THE INTERSECTION OVER THE TOP OF THE CABINET WHILE WATCHING THE COMPONENTS IN THE CABINET.
- 16. THE PROPOSED TRAFFIC SIGNAL CONTROLLER CABINET SHALL BE FURNISHED WITH A MANUAL CONTROL SWITCH AND MANUAL CONTROL CHORD WITHIN THE POLICE DOOR COMPARTMENT, THIS WORK SHALL BE INCLUDED IN THE CONTROLLER CABINET PAY ITEM.
- 17. THE CONTRACTOR SHALL PROVIDE A SELF-ADHERED PHASE DIAGRAM ON THE INSIDE OF THE CONTROLLER CABINET DOOR
- 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ELECTRICAL SERVICE FOR THE TRAFFIC SIGNALS. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANY PRIOR TO BEGINNING WORK TO OBTAIN THE UTILITY COMPANY REQUIREMENTS FOR THE SERVICE INSTALLATION.
- 19. THE ELEVATION OF THE TOP OF THE DOUBLE HANDHOLE SHALL BE LESS THAN THE ELEVATION OF THE TOP OF THE CONTROLLER FOUNDATION.
- ALL UNINTERRUPTABLE POWER SUPPLIES SHALL BE EQUIPPED WITH ALPHA GUARD MONITORS.

- 21. ALL GROUNDING MATERIALS FOR CONCRETE FOUNDATIONS SHALL REFER TO SECTION 807 OF THE STANDARD SPECIFICATIONS.
- 22. ALL AREAS DISTURBED BY THE CONTACTOR SHALL BE RESTORED WITH SEED OR SOD TO THE SATISFACTION OF THE ENGINEER. SEEDING OR SODDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN. WET, OR IN AN UNTILLABLE CONDITION.
- 23, FIBER OPTIC CABLE SHALL BE LABELED WITH DIRECTION AND ASSIGNMENT NUMBER.
- 24. THE SURCE PROTECTOR IN THE CONTROLLER CABINET SHALL HAVE AN INDICATOR LIGHT.
- 25. THE MAST ARM FOUNDATIONS SHALL BE LOCATED A MINIMUM 8' FROM THE FACE OF CURB OR A MINIMUM 18' FROM THE EDGE OF PAVEMENT TO THE FACE OF FOUNDATION WHERE THERE IS NO CURB, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. IN CURB AREA, CET MORE THAN 6' IF POSSIBLE IF THE SIGNAL HEAD STILL LINES UP IN THE CENTER OF LANE.
- 26. THE CONTRACTOR SHALL PROVIDE 3 FEET OF SLACK CABLE IN THE CONTROLLER AND ON WOOD POLES. THE SLACK IS IN ADDITION TO THE VERTICAL LENGTH OF CABLE DEFINED IN THE STANDARD SPECIFICATIONS AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR ELECTRIC CABLE OF THE TYPE SPECIFIED.
- 27. TEMPORARY WOOD POLES SHALL BE LOCATED A MINIMUM OF 6' FROM THE FACE OF CURB OR A MINIMUM OF 18' FROM THE EDGE OF PAVEMENT WHERE THERE IS NO CURB, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
- 28. ALL TEMPORARY WOOD POLES SHALL BE INSTALLED SO THAT A MINIMUM OF 30' OF POLE IS ABOVE THE EXISTING PAVEMENT ELEVATION ADJACENT TO THE POLE. A SUFFICIENT LENGTH OF POLE SHALL BE BURIED AND BACKFILLED TO ALLOW THE INSTALLATION TO WITHSTAND A 70 M.P.H SUSTAINED WIND LOAD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE WOOD POLE LOCATIONS BEFORE ORDERING TO DETERMINE IF LONGER POLES ARE REQUIRED.
- 30. ALL SIGNAL HEADS ON AN INDIVIDUAL SPAN WIRE SHALL BE MOUNTED SO THAT THE "RED" INDICATIONS ARE LEVEL WITH EACH OTHER.

MILLING AND RESURFACING NOTES

THIS WORK SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF DETECTOR LOOPS AND AXLE DETECTORS (PIEZOCABLE SENSOR). THE DETECTOR LOOPS AND AXLE DETECTORS SHALL BE REMOVED WITH THEIR ELECTRIC CABLE ALL THE WAY TO THE EXISTING CABINET CONNECTION, AND REPLACED IN THE SAME MANNER USING THE EXISTING CONDUIT, HANDHOLE, AND GULF BOX JUNCTION.

- 31. PLACE DETECTOR LOOPS IN BINDER OR MILLED SURFACE
- 32. DETECTOR LOOPS SHALL HAVE FOUR TURNS, ADVANCED WARNINGS SHALL HAVE SIX TURNS
- 33. SAW CUT EXISTING DETECTOR LOOP TO BE ABANDONED
- 34. THE DEPARTMENT OF TRANSPORTATION (815-434-8506) SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO THE LAYOUT OF THE DETECTOR LOOPS.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (89502375) SHALL CONSIST OF REMOVING THE FOLLOWING ITEMS:

- EACH CONTROLLER & CABINET
- EACH SIGNAL HEAD, POLYCARBONATE, 1-FACE, 3-SECTION, MAST ARM MOUNTED
- 2 EACH SIGNAL HEAD, POLYCARBONATE, 1-FACE, 5-SECTION, MAST ARM MOUNTED
- 2 EACH SIGNAL HEAD, POLYCARBONATE, 1-FACE, 4-SECTION, BRACKET MOUNTED
- EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.
- EACH FULL-ACTUATED CONTROLLER, SPECIAL SEQUENCE, 6 PHASES & CABINET

| ELECTRICAL LOAD CHART | | | | | | |
|------------------------|-----------------|-----------------|------------|------------------|--|--|
| | | | WATTAGE | BURN TIME | | |
| STREET NAME | COMPONENT | NUMBER | EACH | % | | |
| IL 50 | | | | | | |
| 22.00 | RED | 10 | 7 | 35 | | |
| | YELLOW | 10 | 12 | 5 | | |
| | GREEN | 10 | 9,5 | 60 | | |
| | YELLOW ARROW LT | 4 | 6 | 5 | | |
| | GREEN ARROW LT | 4 | 6 | 10 | | |
| LARRY POWER | | | | | | |
| | RED | 8 | ? | 60 | | |
| | YELLOW | . 8 | 12 | 5 | | |
| | GREEN | 8 | 9,5 | 35 | | |
| | YELLOW ARROW LT | 6 | 6 | 5 | | |
| | GREEN ARROW LT | 6 | 6 | 10 | | |
| TRAFFIC SIGNAL CABINET | | | | | | |
| | CONTROLLER | 1 | 6 | 100 | | |
| | UPS | 1 | 50 | 100 | | |
| | DETECTOR LOOPS | 10 | 4 | 100 | | |
| | | HIGHWAY LIGHTIN | ī Ģ | | | |

| ITEM | NUMBER | WATTAGE | BURN TIME |
|------------|--------|---------|---------------|
| | | EACH | % |
| CONTROLLER | 1 | 6 | 100 |
| LUMINAIRE | 4 | 250 | 360 HR/ MONTH |

AGENCY RESPONSIBLE FOR ENERGY CHARGES: VILLAGE OF BOURBONNAIS

(NOTE: SEPARATE ENERGY BILLS FOR HIGHWAY LIGHTING AND TRAFFIC SIGNALS SHALL BE
SUBMITTED TO THE VILLAGE OF BOURBONNAIS)

SCHEDULE OF QUANTITIES

| GODE NO. | UNIT | Mari | QUANTITY |
|-------------------------------|---------|--|------------------|
| 2000100 | SO FT | SIGN PANEL- TYPE 1 | 20 |
| 2000200 | SO FT | SIGN PANEL - TYPE 2 | 60 |
| 1028240 | FOOT | UNDERGROUND CONDUIT GALVANIZED STEEL 4" DIA. | 344 |
| 81028320 | EACH | UNDERGROUND CONDUIT, PVC, 1" DIA. | 52 |
| 81028350 | FOOT | UNDERGROUND CONDULT PVC. 2" DIA. | 633 |
| 81028360 | FOOT | UNDERGROUND CONQUIT PVC, 2 1/2" DIA. | 51 84 |
| 8 0283 0 | FOOT | UNDERGROUND CONDUIT PVC, 3" DIA. | 4 |
| 8 400700 | EACH | HANDHOLE, PORTLAND CEMENT CONCRETE | 1 |
| 8 4007 2 0 8 702450 | EAUH | DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10 | 659 |
| 81/02450 81/0 2250 | E V C H | LUMINAIRE, SODIUM VAPOR, HIGH MAST, HORIZONTAL MOUNT, 250 WATT | 4 |
| 85000300 | LSHA | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | 1 |
| 86200300 | EACH | UNINTERRUPTIBLE POWER SUPPLY, EXTENDED | 1 |
| 86400100 | EACH | TRANSCEIVER- FIBER OPTIC | 3 |
| 87 00020 | FOOT | FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F | 1127 |
| 87500B25 | | ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 IC | 1127 2187 |
| 87801225 | | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C | 1684 |
| 87801245 | | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | 1654 |
| 87 01255 | COOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR | 1639 |
| 87301305 87301805 | | ELECTRIC CABLE IN CONDUIT, SERVICE NO 6 2C | 75 |
| 8770 900 | FOOT | ELECTRIC CABLE IN COUNDUIT, EQUIPMENT GROUNDING CONDUCTOR | 1073 |
| 8730,900 87502500 | EACH | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. | 3 |
| 87702940 | EACH | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 42 FT. | 1 |
| 877 2950 | EACH | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE. 44 FT. | 1 |
| 87702960 | EACH | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 46 FT. | 1 1 |
| 87702985 | EACH | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 52 FT. | Ż |
| 87800115 | EACH | CONCRETE FOUNDATION, TYPE A | ã |
| 87810150 | FOOT | CONCRETE FOUNDATION, TYPE C CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER | 54 |
| 878 0 0415 87900200 | FACH | DRILL EXISTING HANDHOLE | 4 |
| 88040070 | FACH | SIGNAL HEAD, POLYCARBONATE, LED. 1-FACE, 3-SECTION, BRACKET MOUNTED | 6 S |
| 88040090 | EACH | SIGNAL HEAD, POLYCARBONATE, LED. 1-FACE, 3-SECTION, MAST ARM MOUNTED | |
| 88440150 | FACH | SIGNAL HEAD, POLYCARBONATE, LED. 1-FACE, 5-SECTION, BRACKET MOUNTED | 4 |
| 88040160 | EACH | SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED | 4 16 |
| 88200410 | EACH | TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC | 14 |
| 88600100 | | INDUCTIVE LOOP DETECTOR | 3443 |
| 88600100 | | DETECTOR LOOP TYPE 1 | 4 |
| 88700200 88700800 | | LIGHT DETECTOR LIGHT DETECTOR AMPLIFIER | 4 |
| 84000800 | | TEMPORARY TRAFFIC SIGNAL INSTALLATION | l, |
| 8 502 00 | | REMOVE ELECTRIC CABLE FROM CONDUIT | 3821 |
| 88502175 | EACH | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | 1 |
| 89502380 | EACH | REMOVE EXISTING HANDHOLE | 3 |
| 89502.82 | | REMOVE EXISTING DOUBLE HANDHOLE | i 5 |
| 89502385 | | REMOVE EXISTING CONCRETE FOUNDATION | 590 |
| 103252D6 | F 001 | RELOCATE INTERCONNECT CABLE ELECTRIC SERVICE INSTALLATION, SPECIAL | 1 |
| \$8040102 | | LIGHTING CONTROLLER, SPECIAL | ĩ |
| K8250505 K8570215 | EACH | FULL ACTUATED CONTROLLER & TYPE IV CABINET, SPECIAL | 1 |
| x8730210 | EOOT | ELECTRIC CABLE IN CONDUIT NO. 20 3/C. TWISTED. SHIELDED | 1127 |
| X8950114 | EACH | MODIFY EXISTING CONTOLLER AND CABINET | 2 |
| Z0033044 | | RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL I | l l |
| 1 | | | Rev |
| | | F.A.P. SECTION | COUNTY TOTAL SHI |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 840 (IL 50)

SIGNALS GENERAL NOTES AND QUANTITIES

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

FA.P. SECTION COUNTY TOTAL SHEET NO.

840 (140IN, TS-3 KANKAKE 29 15 CONTRACT NO. 66C32