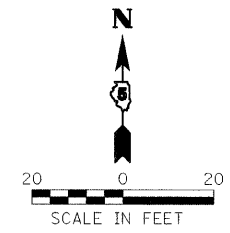
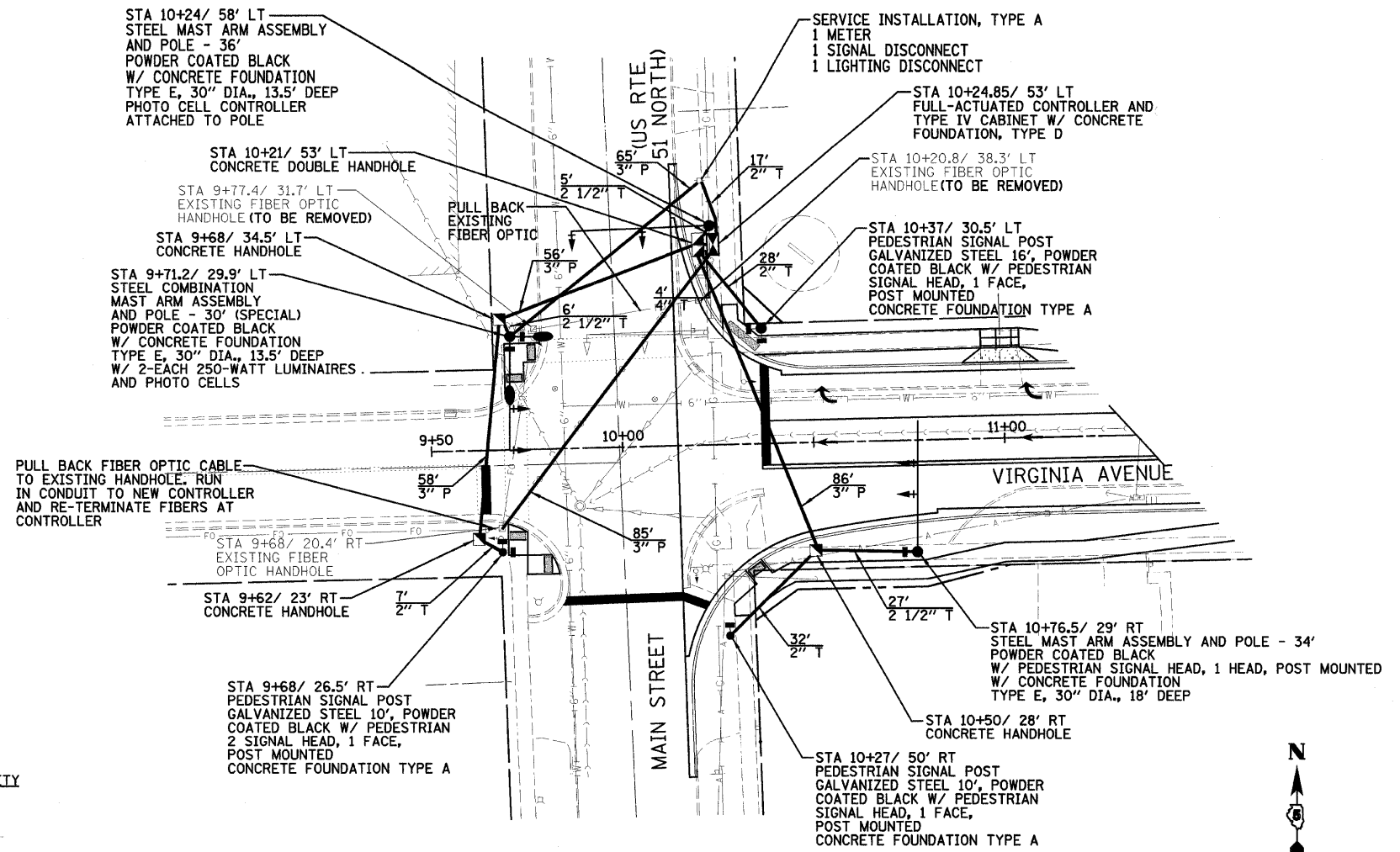


**LEGEND**

- PROPOSED
- PEDESTRIAN SIGNAL HEAD
  - LUMINAIRE
  - ☒ CONTROLLER CABINET
  - ☒ SIGNAL HEAD WITH BACKPLATE
  - STEEL MAST ARM & POLE
  - TRAFFIC SIGNAL POST
  - ☒ HANDHOLE
  - ☒ DOUBLE HANDHOLE
  - 110' / 2" T CONDUIT LENGTH AND SIZE IN TRENCH
  - 110' / 2" P CONDUIT LENGTH AND SIZE PUSHED
  - SIGNAL CONDUIT
  - LIGHTING CONDUIT
  - SERVICE INSTALLATION, TYPE A

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	QUANTITY
72000205	SIGN PANEL - TYPE 2 (SPECIAL)	SQ FT	28
80500100	SERVICE INSTALLATION, TYPE A	EACH	1
81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	85
81012700	CONDUIT IN TRENCH, 2 1/2" DIA., PVC	FOOT	40
81013000	CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	5
81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	360
81400100	HANDHOLE	EACH	3
81400300	DOUBLE HANDHOLE	EACH	1
81702415	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 6	FOOT	140
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	135
82103250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	2
85700205	FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
86200200	UNINTERRUPTIBLE POWER SUPPLY, STANDARD	EACH	1
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	990
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	800
87301815	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3/C	FOOT	45
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT.	EACH	2
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
87704080	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT. (SPECIAL)	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	9
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	3
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	45
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
88100200	PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	2
88100400	PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED	EACH	3
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	6
89502300	REMOVE ELECTRICAL CABLE FROM CONDUIT	FOOT	1500
89502380	REMOVE EXISTING HANDHOLE	EACH	2
89592375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	6
89592385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
XX002094	REMOVE AND REINSTALL FIBER OPTIC CABLE IN CABINET	L SUM	1
XX006380	PHOTO CELL CONTROLLER	EACH	1
X0323363	ELECTRIC CABLE IN CONDUIT, NO. 12 3/C	FOOT	405
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	345



**GENERAL NOTES:**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ELECTRICAL SERVICE FOR THE TRAFFIC SIGNAL. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANY PRIOR TO BEGINNING WORK TO OBTAIN THE UTILITY COMPANY REQUIREMENTS FOR THE SERVICE INSTALLATION.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY, INCIDENTAL TO THE CONTRACT.
3. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 2 FEET MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
4. GROUND RODS SHALL BE SOLID COPPER ALLOY OR COPPER CLAD STEEL. CONTROLLER CABINET GROUNDING ROD SHALL BE PLACED IN THE DOUBLE HANDHOLE INCIDENTAL TO THE CONTRACT.
5. ALL SIGNAL BASES SHALL BE LOCATED A MINIMUM OF 6 FEET FROM THE FACE OF CURB UNLESS OTHERWISE REQUESTED BY THE ENGINEER.
6. ALL MAST ARM POLE BASES SHALL BE PROTECTED BY A STAINLESS STEEL MESH SCREENING AROUND THE BASE BOLTS TO PREVENT RODENT ENTRY. THE MESH SHALL BE SECURED TO THE BASE BY STAINLESS STEEL BANDING AS INCIDENTAL TO THE INDIVIDUAL MAST ARM ASSEMBLY PAY ITEM.
7. A #10 STRANDED COPPER WIRE SHALL HAVE SIX (6) FEET OF SLACK AND SHALL BE FURNISHED AND LEFT IN PLACE IN ALL CONDUITS BETWEEN HANDHOLES AND FOUNDATIONS OR CONTROLLER AS INCIDENTAL TO THE RESPECTIVE CONDUIT PAY ITEM.
8. ALL THREADS OF BOLTS USED IN ASSEMBLY OF TRAFFIC SIGNAL COMPONENTS SHALL BE COATED WITH A NON-LEAD BASED ANTI-SEIZE COMPOUND, SIMILAR TO LEAD PLATE, PRIOR TO ASSEMBLY.
9. ALL LED SIGNAL LENSES SHALL BE OF THE SAME TYPE, DESIGN, AND APPEARANCE AND BE FROM THE SAME MANUFACTURER FOR A GIVEN INTERSECTION.
10. ALL MAST ARM MOUNTED SIGNAL HEADS ON AN INDIVIDUAL MAST ARM SHALL BE MOUNTED SO THAT THE RED INDICATIONS ARE LEVEL WITH EACH OTHER. THE ELECTRICAL CONDUCTORS FOR ALL TRAFFIC SIGNAL HEADS SHALL BE SOLID, SOFT COPPER.
11. THE CONTROLLER CABINET SHOULD BE PLACED SO THAT A TECHNICIAN MAY SEE AS MUCH OF THE INTERSECTION AS POSSIBLE OVER THE TOP OF THE CABINET WHILE WATCHING THE COMPONENTS IN THE CABINET.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE CABINET ENERGIZED, FULLY FUNCTIONAL AND READY FOR TESTING A MINIMUM OF 48 HOURS PRIOR TO SCHEDULED SIGNAL TURN ON. CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 72 HOURS BEFORE THE CABINET IS ENERGIZED.
13. THE ENGINEER SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO SIGNAL TURN ON. SIGNAL TURN ON SHALL BE SCHEDULED BETWEEN 9 AND 10 A.M. A FACTORY REPRESENTATIVE SHALL BE PRESENT DURING TURN ON.
14. ALL CONDUIT SHALL COMPLY WITH SECTION 1088.01 OF THE MOST CURRENT IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION EXCEPT THAT ALL CONDUIT SHALL BE EITHER SCH. 80 PVC OR SCH. 80 HDPE.
15. THE EXACT LOCATION OF THE AERIAL ELECTRICAL LINE IS TO BE DETERMINED AT A LATER DATE. THE CONTRACTOR SHALL COORDINATE, BUT VERIFY WITH AMEREN IP WHICH CORNER THE SERVICE SHALL BE LOCATED.
16. THE CONTRACTOR SHALL PROVIDE 3 FEET OF SLACK CABLE IN EACH TRAFFIC SIGNAL STRUCTURE: MAST ARM, POST, CONTROLLER. THE SLACK IS IN ADDITION TO THE VERTICAL LENGTH OF CABLE DEFINED IN THE SPECIFICATIONS.
17. ALL PEDESTRIAN SIGNAL HEADS SHALL MEET THE CURRENT MUTCD LOCATION STANDARDS.
18. THE DOUBLE HANDHOLE SHALL BE FURNISHED WITH RECESSED, INTEGRAL HINGED LIDS.
19. THE TOWN OF NORMAL SHALL ASSIST WITH THE PROGRAMMING OF THE TRAFFIC SIGNAL CONTROLLER. THE CONTRACTOR SHALL PROVIDE THE TOWN WITH THE CONTROLLER, CONFLICT MONITOR AND ONE SET OF THE CABINET PRINTS A MINIMUM OF 72 HOURS PRIOR TO ENERGIZING THE CABINET.

DESIGNED - JDA	REVISED -
DRAWN - DRR	REVISED -
CHECKED - PJM	REVISED -
DATE - 07/22/09	REVISED -

**TOWN OF NORMAL**

**SIGNAL PLAN**

**VIRGINIA AVENUE OVER SUGAR CREEK  
SECTION 04-00226-00-BR  
MCLEAN, COUNTY**

F.A.U.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6356	04-00226-00-BR	MCLEAN	52	19
S.N. 057-7834		CONTRACT NO. 91416		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		