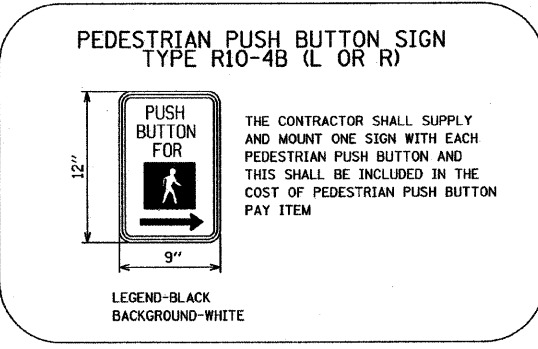
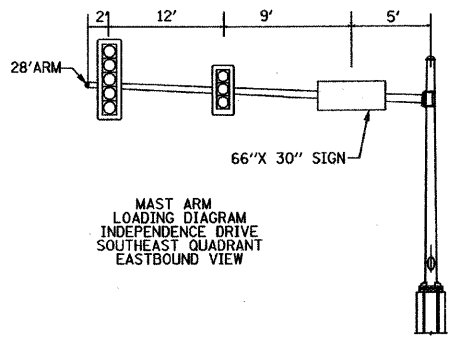
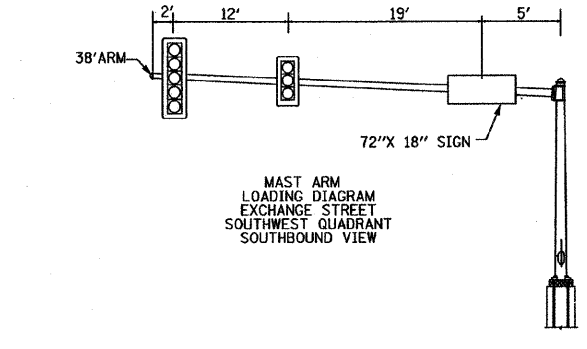
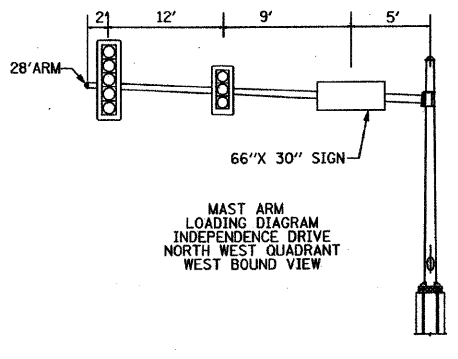
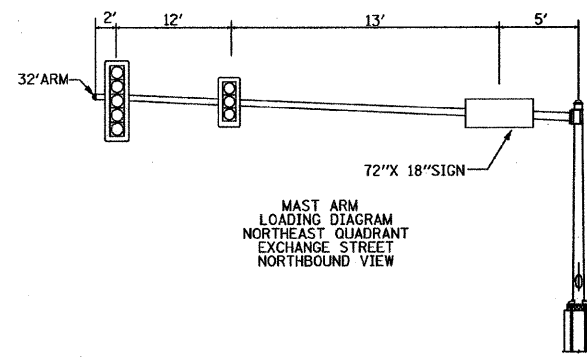


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1638*	**	WILL	38	22
STA.		TO STA.		
FED. ROAD DIST. NO. -		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 63316		* EXCHANGE STREET ** 09-00044-01-TL		



**GENERAL NOTES FOR TRAFFIC CONTROL SIGNALS**

1. THE WILL COUNTY DEPARTMENT OF HIGHWAYS SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO TURNING ON ANY FLASHER OR CONTROLLER UNIT. CONTACT JEFF RONALDSON, PERMIT ENGINEER, OR BRUCE GOULD, ASSISTANT COUNTY ENGINEER AT (815) 727-8476 PRIOR TO BEGINNING WORK AND PUTTING THE TRAFFIC SIGNALS IN OPERATION.
2. ALL TRAFFIC SIGNAL HEADS SHALL BE 12-INCH POLYCARBONATE.
3. 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 SIGNAL PAY ITEMS.
4. 1/4" 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 COST OF CONDUIT PAY ITEMS.
5. ALL MAST ARM MOUNTED SIGNAL HEADS ON AN INDIVIDUAL MAST ARM SHALL BE MOUNTED SO THAT THE RED INDICATIONS ARE LEVEL WITH EACH OTHER.
6. THE ELECTRICAL CONDUCTORS FOR ALL TRAFFIC SIGNAL HEADS SHALL BE SOLID, SOFT COPPER.
7. ALL THREADS OF BOLTS USED IN ASSEMBLY OF TRAFFIC SIGNAL COMPONENTS SHALL BE COATED WITH A NON-LEAD BASED ANTI-SEIZE COMPOUND, SIMILAR LEAD PLATE, PRIOR TO ASSEMBLY.
8. ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED WITH SEED TO THE SATISFACTION OF THE ENGINEER.
9. ALL HARDWARE SHALL BE TIGHTENED AND WELL SECURED. CABLES SHALL BE NEATLY WOUND IN HANDHOLES. CABLES SHALL BE NEATLY TRAINED IN THE CONTROLLER CABINET.
10. ALL NEW TRAFFIC AND PEDESTRIAN SIGNAL WIRING SHALL EXTEND FROM CONTROLLER TO SIGNAL SPLICES IN JUNCTION BOXES
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ELECTRICAL SERVICE FOR THE TRAFFIC SIGNAL AND STREET LIGHTING. REMOTE MONITORING CAPABILITIES NEED TO BE INSTALLED INCLUDING PHONE SERVICE, CONDUIT, AND ALL NECESSARY EQUIPMENT FOR TWO-WAY COMMUNICATION WITHIN THE TRAFFIC SIGNAL CONTROL EQUIPMENT. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANY PRIOR TO BEGINNING WORK TO OBTAIN THE UTILITY COMPANY REQUIREMENTS FOR THE SERVICE INSTALLATION.
12. DOUBLE BREAKAWAY FUSED FUSE HOLDERS AND SURGE ARRESTERS ARE TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR IN THE BASE OF THE COMBINATION MAST ARMS AS INCIDENTAL TO THE PAY ITEM.
13. THE CONTROLLER SHALL BE TS1 AND TS2 COMPATIBLE.
14. ALL GROUNDING MATERIALS FOR TRAFFIC SIGNAL CONCRETE FOUNDATIONS SHALL REFER TO SECTION 807 IN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2002.
15. THE YELLOW AND GREEN LED ARROW SECTIONS SHALL HAVE THREE ROWS OF LEDS LIEU OF TWO ROWS.
16. ALL DETECTOR LOOPS SHALL CONSIST OF THE NUMBER OF TURNS REQUIRED AND SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE LOOP DETECTOR AMPLIFIER MANUFACTURE'S RECOMMENDATIONS.
17. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITES CALL J.U.L.I.E. 1-800-892-0123.
18. ALL SIGNAL AND PEDESTRIAN HEADS SHALL BE LIGHT EMITTING DIODE (LED) BASED ON ADVANCED INDIUM-BASED LED TECHNOLOGY BY THE DIALIGHT COMPANY (MAXIMUM 18 LED'S / 12" HEAD) OR APPROVED EQUAL INCLUDING POLYCARBONATE BACKPLATES WITH DEEP BACK FLANGE.
19. THE EXACT LOCATION OF THE DETECTOR LOOPS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
20. THE PROPOSED TRAFFIC SIGNAL CONTROL CABINET SHALL BE FURNISHED WITH A MANUAL CONTROL SWITCH AND MANUAL CORD WITHIN THE POLICE DOOR COMPARTMENT AS WELL AS A PHONE MODEM INSIDE THE CABINET AS INCIDENTAL TO THE CONTROLLER PAY ITEM. THE FULL ACTUATED CONTROLLER SHALL BE ECONOLITE.
21. THE CONTRACTOR SHALL ARRANGE FOR A FACTORY OR SUPPLY REPRESENTATIVE TO BE PRESENT AT THE INTERSECTION WHEN THE SIGNAL IS TURNED ON AS INCIDENTAL TO THE CONTROLLER PAY ITEM. HE/SHE SHALL BE CAPABLE OF MAKING CERTAIN THAT THE CONTROL EQUIPMENT IS WORKING TO THE SATISFACTION OF THE ENGINEER.
22. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT GREATER THAN 30" MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
23. THE CONTROLLER CABINET SHALL BE PLACED SO A TECHNICIAN CAN SEE THE INTERSECTION OVER THE TOP OF THE CABINET WHILE WATCHING THE COMPONENTS IN THE CABINET.
24. THE CONTRACTOR SHALL PROVIDE A SELF-ADHERED PHASE DIAGRAM ON THE INSIDE OF THE CONTROLLER CABINET DOOR.
25. THE DIMENSIONS AND LOCATIONS OF UTILITY FACILITIES AS SHOWN ON THE PLANS ARE AN ESTIMATE FOR DESIGN PURPOSES ONLY AND ARE NOT INTENDED FOR USE AS FIELD LOCATIONS FOR CONSTRUCTION.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY ARE NOT SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR OWNER.
27. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS PRIOR TO BIDDING ON THIS PROJECT. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR FAILURE TO VERIFY EXISTING CONDITIONS OR DIMENSIONS.
28. THE CONTRACTOR AT HIS OWN EXPENSE SHALL BE REQUIRED TO RELOCATE ALL ROAD SIGNS WHICH INTERFERE WITH HIS CONSTRUCTION OPERATIONS AND TO TEMPORARILY RESET SUCH SIGNS DURING HIS CONSTRUCTION OPERATIONS. ALL WORK INVOLVING SIGNS SHALL BE COVERED BY THE FOLLOWING REQUIREMENTS:
  - A. SIGNS SHALL NOT BE REMOVED UNTIL PROGRESS OF WORK NECESSITATES REMOVAL.
  - B. EVERY SIGN REMOVED MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORK-MANLIKE MANNER VISIBLE TO TRAFFIC ON THE ROADWAY. ALL SUCH SIGNS SHALL BE MAINTAINED STRAIGHT AND NEAT LOOKING FOR THE DURATION OF THE TEMPORARY SETTING.
  - C. ALL SIGNS MUST BE RE-ERECTED IN THEIR PERMANENT LOCATIONS AS DESIGNATED BY THE ENGINEER AS THE SIGNAL WORK IS COMPLETED.
  - D. ANY SIGNS OR POSTS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT HIS OWN EXPENSE.
29. A BATTERY BACK-UP SYSTEM, NOVUS XT 1000P UNIT OR APPROVED EQUAL, CAPABLE OF THREE (3) HOURS MINIMUM BATTERY LIFE TO PROVIDE ONE (1) HOUR OF FULL FUNCTIONING SIGNALS AND TWO (2) HOURS OF FLASHING RED SHALL BE INSTALLED IN THE CONTROLLER CABINET (TYPE IV CABINET WITH AN EXTERNAL BATTERY ENCLOSURE).
30. THE CONTROLLER CABINET SHALL BE EQUIPPED WITH A 9600 BAND, AUTO DIAL / AUTO ANSWER, MODEM. IT SHALL BE A U.S. ROBOTICS 33.6K BAND RATE OR APPROVED EQUAL.

COLBY ZEMAITIS, P.E. ; ROBERT E. HAMILTON CONSULTING ENGINEERS, P.C. ; 815-730-3444

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JOLIET, ILLINOIS 60431  
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FAX: 815-730-6703

REVISIONS		
NO.	NAME	DATE
1	PER IDOT	8-13-09
2	PER IDOT	10-29-09

**McBRIDE ENGINEERING, INC.**  
CIVIL ENGINEERS & SURVEYORS  
ILLINOIS PROFESSIONAL DESIGN FIRM #184-000803  
CORPORATE: 3645 W. 183rd Street Suite 124  
Hazel Crest, IL 60429-2409  
708-799-1350  
ARLINGTON HEIGHTS DIVISION: 320 S. Belmont Avenue  
Arlington Heights, IL 60005-2038  
847-394-4810

VILLAGE OF CRETE  
EXCHANGE STREET IMPROVEMENTS  
CRETE, WILL COUNTY, ILLINOIS  
**MAST ARM & SIGNAL POST  
LOADING DIAGRAMS & GENERAL NOTES**  
DATE: 7-3-09  
DRAWN BY: PG/ADM  
CHECKED BY: LGB

REH PROJECT: 06902 SCALE: NTS

MEI PROJECT: 04119.806 SCALE: NONE

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