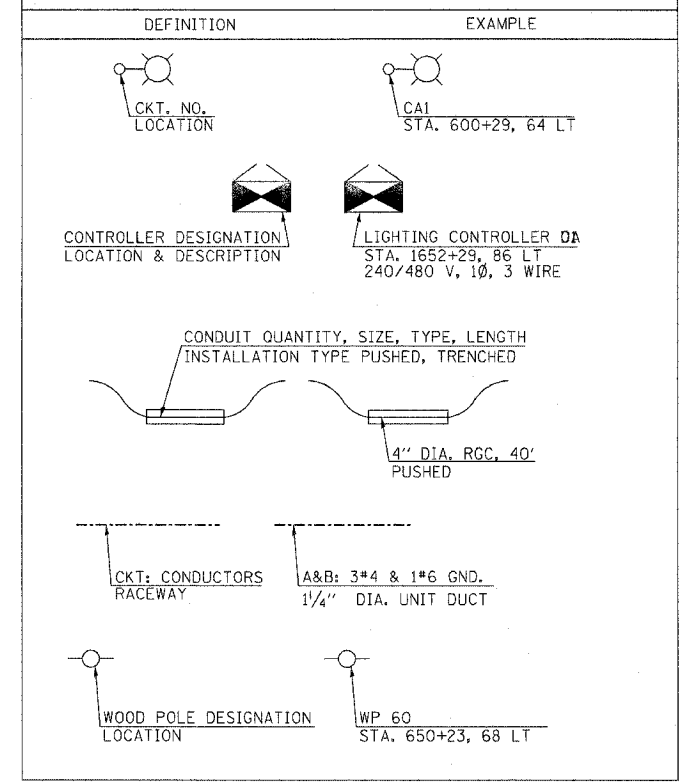


### ROADWAY ELECTRICAL SYMBOL

SYMBOL	DESCRIPTION
	PROPOSED LIGHTING UNIT: 47'-6" M.H., 15' MAST ARM WITH 400W HPS LUMINAIRE M-C-III
	EXISTING RELOCATED AND MODIFIED LIGHTING UNIT WITH NEW 15'-0" MAST ARM AND 20A, 120V, GFI DUPLEX RECEPTACLE WITH WP COVER
	EXISTING LIGHTING UNIT TO REMAIN
	EXISTING COMBINATION LIGHTING TRAFFIC POLE
	EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
	EXISTING LIGHTING UNIT TO BE REMOVED AND REINSTALLED AT A NEW LOCATION
	EXISTING RELOCATED LIGHTING UNIT
	TEMPORARY LIGHTING UNIT: 60 FT., CLASS 4 WOOD POLE, 20 FT. MAST ARM AND 400W SODIUM VAPOR, CUTOFF ARCHITECTURAL LUMINAIRE WITH IES TYPE IV DISTRIBUTION UNLESS NOTED OTHERWISE
	EXPOSED CONDUIT
	RACEWAY OR DIRECT BURIAL CABLE UNDERGROUND WITHOUT ENCASEMENT
	EXISTING UNDERGROUND WIRING TO REMAIN
	EXISTING UNIT DUCT TO BE ABANDONED
	AERIAL ELECTRIC CABLE
	EXISTING AERIAL ELECTRIC CABLE
	RIGID GALVANIZED STEEL CONDUIT SLEEVE, TRENCHED OR PUSHED
	EXISTING LIGHTING CONTROLLER, DUPLEX
	EXISTING UTILITY SERVICE CONNECTION, POLE MOUNTED
	EXISTING UTILITY SERVICE CONNECTION, PAD MOUNTED
	PROPOSED LIGHTING CONTROLLER, DUPLEX
	PROPOSED UTILITY SERVICE CONNECTION, POLE MOUNTED
	PROPOSED UTILITY SERVICE CONNECTION, PAD MOUNTED
	PAD MOUNTED VILLAGE OF ORLAND PARK TRANSFORMER
	TEMPORARY WOOD POLE
	ELECTRIC UTILITY POLE
	ELECTRIC GROUND ROD
	20A, 120V, WP RECEPTACLE WITH GFCI DEVICE

### CALL-OUT SAMPLES



### ABBREVIATIONS

SYMBOL	DESCRIPTION
AC	ALTERNATING CURRENT
A/C	AERIAL CABLE
AFG	ABOVE FINISHED GRADE
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CT	CURRENT TRANSFORMER
CP	CONTROL PANEL
DIA	DIAMETER
E	EXISTING UNIT TO REMAIN
FT	FEET OR FOOT
FU	FUSE
GND	GROUND
JB	JUNCTION BOX
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
MA	MAST ARM
MH	MOUNTING HEIGHT
NO. *	NUMBER
P	PROPOSED
PNL	PANEL
R	EXISTING UNIT TO BE REMOVED (OWNER SALVAGED U.N.O.)
RECP	RECEPTACLE
RGC	RIGID GALVANIZED CONDUIT
SEL SW	SELECTOR SWITCH
SPARE	SPARE
SPACE	SPACE
STA	STATION
T	TEMPORARY LIGHTING UNIT
UD	UNIT DUCT
U.N.O.	UNLESS NOTED OTHERWISE
WP	WOOD POLE
XFMR	TRANSFORMER

### GENERAL ELECTRICAL NOTES:

- ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST CODES, STANDARDS, NEC, IES, THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2002, SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, AND THE VILLAGE OF ORLAND PARK ORDINANCES, UNLESS SPECIFICALLY NOTED OTHERWISE IN THE CONTRACT DOCUMENTS.
- CONSULT AND COORDINATE WITH ALL TRADES AND AUTHORITIES INVOLVED TO AVOID INTERFERENCE WITH EXISTING AND NEW UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL EXERCISE UTMOST CARE IN EXCAVATING AND BACKFILLING THE TRENCHES TO AVOID CUTTING OR DAMAGING EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE DRAWINGS.
- ALL CONDUIT, EQUIPMENT AND APPURTENANCES ARE ILLUSTRATED DIAGRAMMATICALLY. THE ACTUAL LOCATION IN THE FIELD SHALL MEET THE APPROVAL OF THE ENGINEER.
- WHERE THE CONTRACTOR'S EXCAVATION MEETS AN OBSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR DIRECTIONS IN WRITING PRIOR TO FURTHER EXCAVATION. THE CONTRACTOR SHALL RESTORE ANY DAMAGE TO EXISTING SYSTEMS OR UTILITIES TO THE SATISFACTION OF THE ENGINEER. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THIS CONTRACT.
- ALL LUMINAIRES SHALL BE ORIENTED WITH THE OPTICS PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER. THE LUMINAIRES MAY REQUIRE NIGHT-TIME OPTICAL ADJUSTMENT UPON INSPECTION BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE APPROPRIATE LUMINAIRE PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS PROJECT.
- CONDUIT AND UNIT DUCT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30 INCHES BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL INCREASE DEPTH OF UNIT DUCTS AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST TO THE VILLAGE. COORDINATE RACEWAY DEPTHS WITH THE DETAILS AND THE ENGINEER.
- THE CONTRACTOR SHALL PREPARE A PRELIMINARY SCHEDULE WHEN THE CONTRACT COMMENCES WHICH ESTABLISHES THE DATE WHEN THE ELECTRICAL SERVICES WILL BE REQUIRED. THIS SCHEDULE SHALL BE FORWARDED IN WRITING TO C.E.CO. SUBSEQUENT UPDATING OF THE SERVICE REQUIREMENTS, FIVE (5) DAYS BEFORE THE ELECTRICAL SERVICES ARE REQUIRED. THE CONTRACTOR SHALL NOTIFY C.E.CO. BY PHONE AND CONFIRM THE REQUEST IN WRITING. ALL C.E.CO. ELECTRIC SERVICE CONTRACTS AND AGREEMENTS SHALL BE FORWARDED TO THE VILLAGE OF ORLAND PARK FOR REVIEW AND SIGNATURE.
- ALL PITS USED FOR INSTALLING PUSHED (JACKED) STEEL CONDUITS UNDER EXISTING ROADWAYS SHALL BE LOCATED 5'-0" (MINIMUM) CLEAR FROM THE EDGE OF SHOULDER. LOCATIONS OF THE CONDUIT CROSSINGS SHOWN ARE APPROXIMATE AND MAY BE SHIFTED AS NECESSARY TO AVOID THE MOTORISTS. THE CONTRACTOR SHALL SUBMIT PLANS FOR THE LOCATION AND SIZE OF EACH PIT AND MAINTENANCE AND PROTECTION OF TRAFFIC AT THE SITE OF EACH PIT FOR THE APPROVAL OF THE ENGINEER BEFORE THE EXCAVATION OF ANY PIT MAY BEGIN.
- ALL EXISTING AREAS THAT ARE DAMAGED AS PART OF THIS WORK, INCLUDING BUT NOT LIMITED TO FENCING, CURB AND CUTTER, SIDEWALKS, AND WHERE RESTORATION IS NOT COVERED BY APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS, SHALL BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THIS CONTRACT. NO SEPARATE PAYMENT WILL BE MADE.
- ALL CONDUCTORS SHALL RUN CONTINUOUS WITHOUT ANY UNDERGROUND SPLICES. SPLICING OF CONDUCTORS WILL BE PERMITTED ONLY IN THE BASE OF THE LIGHTING UNITS UNLESS NOTED OTHERWISE.
- GROUNDING CONNECTIONS AT ALL EQUIPMENT FOUNDATIONS SHALL BE EXOTHERMICALLY WELDED, UNLESS NOTED OTHERWISE AND SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO POURING CONCRETE OR BACKFILLING, AS APPLICABLE.
- THE QUANTITIES OF CONDUITS WHERE INDICATED ON THESE PLAN DRAWINGS ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL RACEWAYS IN COMPLIANCE WITH THE SPECIFIED REQUIREMENTS. CONDUITS SHALL EXTEND 5'-0" BEYOND BACK OF CURB.
- ALL EXISTING LIGHTING UNITS SHALL REMAIN OPERATIONAL FOR NORMAL NIGHT TIME HOURS UNTIL THE NEW SYSTEM HAS BEEN INSTALLED, TESTED AND ENERGIZED FROM THE NEW LIGHTING CONTROLLER.
- CONTRACTOR SHALL COORDINATE ALL ELECTRICAL WORK WITH THE CONSTRUCTION STAGING PLANS.
- TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE LIGHT POLES, THEY SHALL NOT BE ERECTED AND/OR LEFT TO STAND WITHOUT LUMINAIRES. THE CONTRACTOR WILL NOT BE PAID FOR POLES UNTIL LUMINAIRES ARE INSTALLED, ENERGIZED, TESTED AND ACCEPTED BY THE ENGINEER.
- ALL PERMANENT LIGHTING UNITS WHETHER THEY ARE NEW OR EXISTING UNITS INSTALLED ON NEW FOUNDATIONS, SHALL BE PROVIDED WITH ALUMINUM BREAKAWAY TRANSFORMER BASE WITH BOLTED METAL COVER PLATE IN ACCORDANCE WITH SPECIAL PROVISIONS.
- WHERE MULTIPLE CONDUITS ADJACENT TO EACH OTHER ARE INSTALLED IN A COMMON TRENCH, TRENCH AND BACKFILL WILL NOT BE PAID FOR EACH CONDUIT, BUT WILL BE PAID FOR THE LENGTH OF THE COMMON TRENCH ONLY.
- EXISTING LIGHTING UNITS ALONG 159TH STREET WITHIN THE LIMITS OF THIS CONSTRUCTION ARE 47.5 FOOT MOUNTING HEIGHT WITH 12-FOOT MAST ARM AND 400W HPS LUMINAIRE. THESE POLES SHALL BE REMOVED AND MODIFIED AS SPECIFIED IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND SHALL BE REINSTALLED ON NEW FOUNDATIONS AS INDICATED ON THE DRAWINGS.
- EXISTING LIGHTING UNITS ALONG LAGRANGE ROAD WITHIN THE LIMITS OF THIS CONSTRUCTION ARE 40 FOOT MOUNTING HEIGHT WITH 12-FOOT MAST ARM. THESE LIGHTING UNITS SHALL BE REMOVED AND SHALL BE TURNED OVER TO THE VILLAGE OF ORLAND PARK PUBLIC WORKS IN ACCORDANCE WITH SPECIAL PROVISIONS.
- REPLACE LIGHT POLE/UNIT IDENTIFICATION ON ALL EXISTING, MODIFIED AND REINSTALLED LIGHT POLES, AS INDICATED ON THE PLANS, TO CORRESPOND TO ACTUAL CIRCUITING. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "MODIFY EXISTING LIGHT POLE, ALUMINUM 47.5 FT, M.H., WITH NEW 15 FT MAST ARM AND 20A, 120V, GFI RECEPTACLE" PAY ITEM.
- REMOVAL OF TEMPORARY LIGHTING CONTROLLER AND ASSOCIATED WOOD POLE, AERIAL CABLES AND APPURTENANCES SHALL BE INCLUDED IN THE COST OF "REMOVAL OF TEMPORARY LIGHTING UNITS" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.

GE-1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**ELECTRICAL SYMBOL LIST,  
 ABBREVIATIONS AND  
 GENERAL NOTES**  
 SCALE: NONE DRAWN BY: MB  
 DATE: 7-07-06 CHECKED BY: KMY

**McDonough Associates Inc.**  
 Engineers / Architects