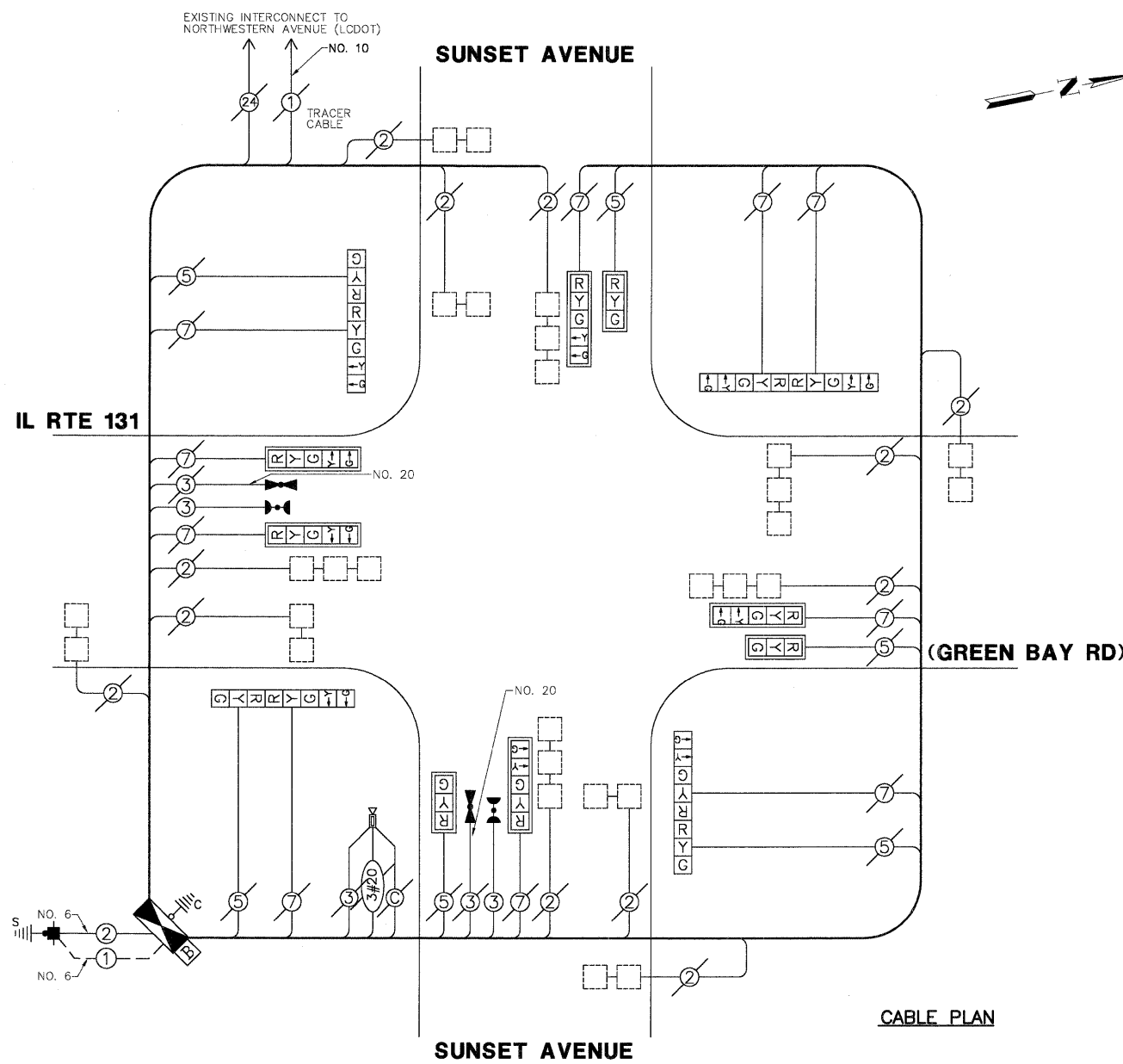


**SCHEDULE OF QUANTITIES**

ILLINOIS ROUTE 131 (GREEN BAY ROAD) AND SUNSET AVENUE

QUANT.	UNIT	ITEM
1.	0.20	L.SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701606-06
2.	0.20	L.SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701701-06
3.	1	EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4.	1	EACH FULL-ACTUATED CONTROLLER, SPECIAL
*5.	313	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C
6.	22	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
7.	22	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
8.	4	EACH TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT
9.	3	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
10.	5	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
11.	1	EACH SIGNAL HEAD, L.E.D., 2-FACE, 5-SECTION, BRACKET MOUNTED
12.	3	EACH SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
13.	8	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
*14.	2	EACH LIGHT DETECTOR
*15.	1	EACH LIGHT DETECTOR AMPLIFIER
16.	13	FOOT REMOVE ELECTRICAL CABLE FROM CONDUIT
17.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
18.	1	EACH SERVICE INSTALLATION - POLE MOUNTED
19.	1	EACH UNINTERRUPTIBLE POWER SUPPLY (UPS)

\*100% COST TO THE CITY OF WAUKEGAN



**CABLE PLAN LEGEND**

EXISTING	PROPOSED	DESCRIPTION
(Symbol)	(Symbol)	8" (200mm) TRAFFIC SIGNAL SECTION
(Symbol)	(Symbol)	12" (300mm) TRAFFIC SIGNAL SECTION
(Symbol)	(Symbol)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(Symbol)	(Symbol)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(Symbol)	(Symbol)	CONTROLLER CABINET
(Symbol)	(Symbol)	SERVICE INSTALLATION
(Symbol)	(Symbol)	TELEPHONE
(Symbol)	(Symbol)	VEHICLE DETECTOR, INDUCTION LOOP
(Symbol)	(Symbol)	MAGNETIC DETECTOR
(Symbol)	(Symbol)	EMERGENCY VEHICLE LIGHT DETECTOR
(Symbol)	(Symbol)	CONFIRMATION BEACON
(Symbol)	(Symbol)	PUSHBUTTON DETECTOR
(Symbol)	(Symbol)	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
(Symbol)	(Symbol)	GROUND CABLE IN CONDUIT NO.6 SOLID COPPER (GREEN)
(Symbol)	(Symbol)	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM24F
(Symbol)	(Symbol)	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD
(Symbol)	(Symbol)	RAILROAD CONTROL CABINET
(Symbol)	(Symbol)	ILLUMINATED SIGN "NO LEFT TURN"
(Symbol)	(Symbol)	ILLUMINATED SIGN "NO RIGHT TURN"
(Symbol)	(Symbol)	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
(Symbol)	(Symbol)	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
(Symbol)	(Symbol)	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
(Symbol)	(Symbol)	PTZ CAMERA
(Symbol)	(Symbol)	UNINTERRUPTIBLE POWER SUPPLY (UPS)

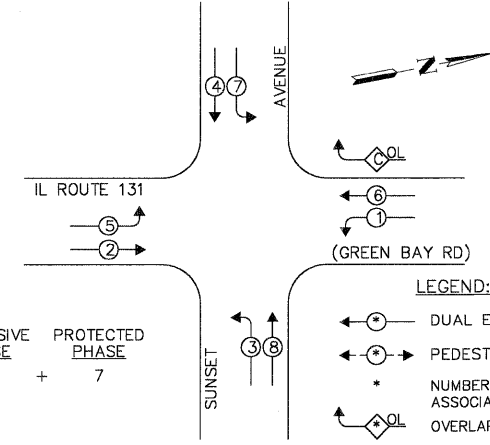
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO LAMPS	INCAND.	L.E.D.	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	135	17	0.50	136.0
SIGNAL (YELLOW)	16	135	25	0.25	100.0
SIGNAL (GREEN)	16	135	15	0.25	60.0
ARROW	20	135	12	0.10	24.0
PED.SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
<b>TOTAL =</b>					<b>445.0</b>

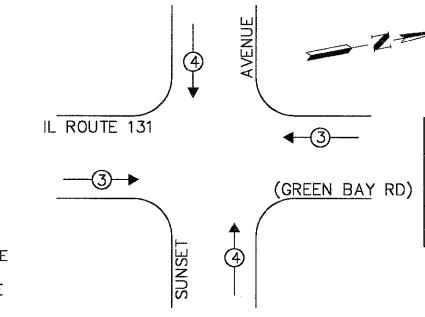
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
TYPE D - CONTROLLER	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20'-L-2"
TYPE E - MAST ARM POLE	10	SIGNAL POST	2	BRACKET MOUNTED	13
30" (16'-30")	10	CONTROLLER CAB.	1	PED. PUSHBUTTON	4
30" (30'-40")	13.5	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
36" (40'-48")	13	ELECTRIC SERVICE	1	SERVICE TO GROUND	3.5
36" (50'-55")	15	GROUND CABLE	1	POST MOUNTED	6

**EXISTING AND PROPOSED CONTROLLER SEQUENCE**



**EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



ENERGY COSTS - BILLED TO: CITY OF WAUKEGAN (ADDRESS) 100 N. M.L.K. JR. AVENUE (ADDRESS) WAUKEGAN, IL  
 ENERGY SUPPLY - CONTACT: NEW BUSINESS (PHONE) 1-866-639-3552 (COMPANY) COMED

FILE NAME 4085.800-TR1.dgn	USER NAME	DESIGNED JRD	REVISED -
PLOT SCALE = NONE	CHECKED - KLB	REVISIONS	REVISED -
PLOT DATE = 1/29/09	DATE - 1/29/09	REVISED	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES**  
ILL RTE 131 (GREEN BAY RD.) AND SUNSET AVE

SCALE: NONE SHEET NO. 14 OF 21 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
27H	2009-005 TS	097LAKEJLK	21	14
CONTRACT NO. 60601				

ILLINOIS FED. AID PROJECT

GHA #4085.804