

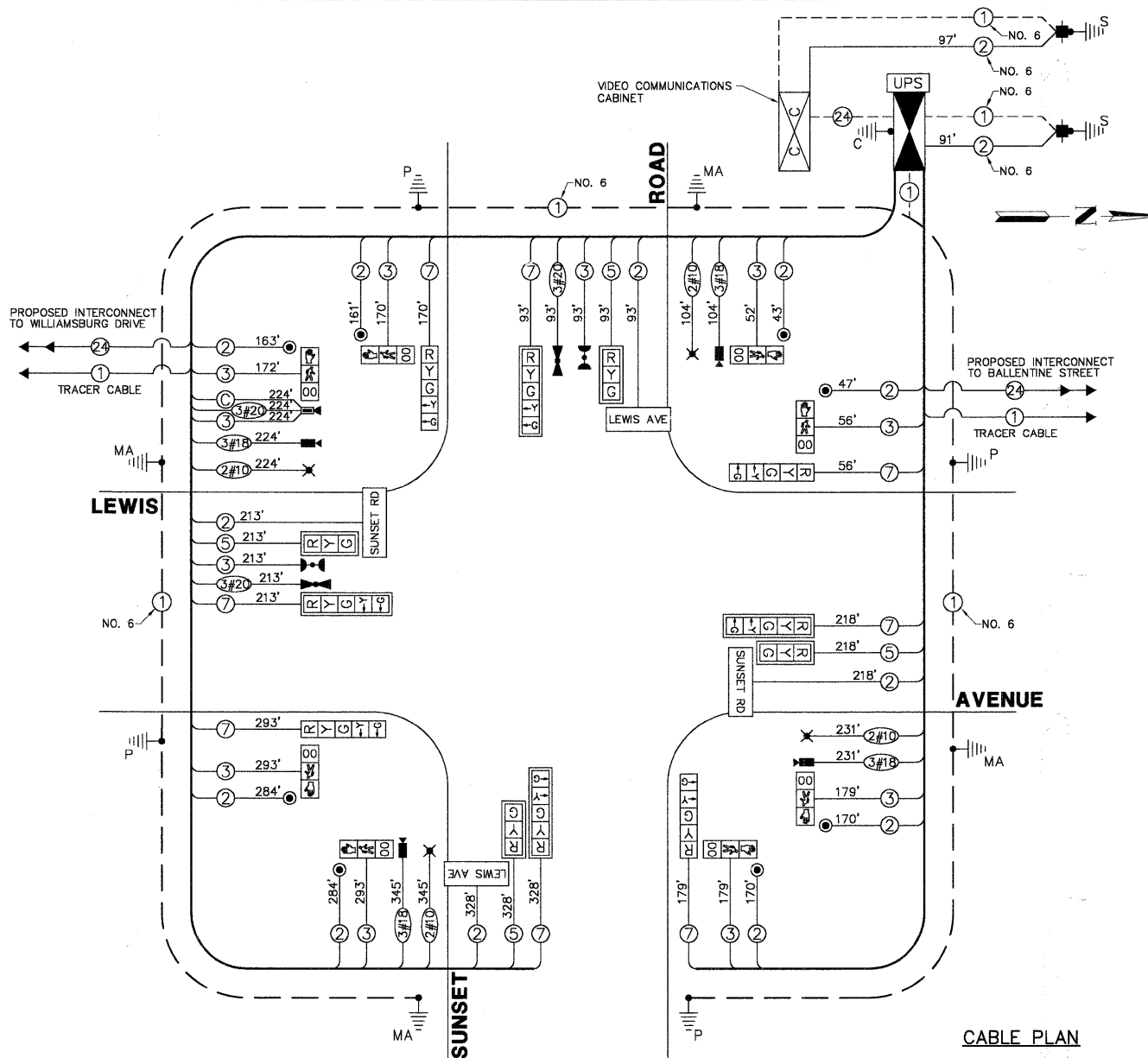
SCHEDULE OF QUANTITIES

LEWIS AVENUE AT SUNSET AVENUE TRAFFIC SIGNAL MODERNIZATION

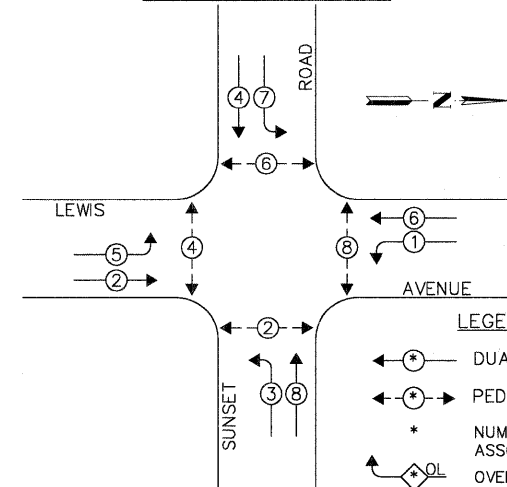
NO.	QUANT.	UNIT
1.	10	CU. YD. EARTH EXCAVATION
2.	30	SQ. YD. AGGREGATE BASE COURSE, TYPE B, 4"
3.	2,000	SQ. FT. PORTLAND CEMENT CONCRETE SIDEWALK, 5"
4.	96	SQ. FT. DETECTABLE WARNINGS
5.	185	FOOT COMBINATION CURB AND GUTTER REMOVAL
6.	1,755	SQ. FT. SIDEWALK REMOVAL
7.	2	EACH FRAMES AND LIDS TO BE ADJUSTED
8.	185	FOOT COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.12
9.	565	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 12"
10.	140	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 24"
11.	820	SQ. FT. PAVEMENT MARKING REMOVAL
12.	149	FOOT CONDUIT IN TRENCH, 2" DIA, GALVANIZED STEEL
13.	58	FOOT CONDUIT IN TRENCH, 2-1/2" DIA, GALVANIZED STEEL
14.	76	FOOT CONDUIT IN TRENCH, 3-1/2" DIA, GALVANIZED STEEL
15.	15	FOOT CONDUIT IN TRENCH, 4" DIA, GALVANIZED STEEL
16.	224	FOOT CONDUIT PUSHED, 4" DIA, GALVANIZED STEEL
17.	100	FOOT CONDUIT PUSHED, 5" DIA, GALVANIZED STEEL
18.	2	EACH HANDHOLE
19.	2	EACH DOUBLE HANDHOLE
20.	904	FOOT ELECTRIC CABLE IN CONDUIT, 600 (EPR-TYPE RHW) 2-1/C NO. 10
21.	239	FOOT TRENCH AND BACKFILL FOR ELECTRICAL WORK
22.	4	EACH LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL 250 WATT
23.	1	EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)
24.	1	EACH TRANSCEIVER - FIBER OPTIC
25.	2,174	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
26.	1,924	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
27.	852	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
28.	1,550	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
29.	188	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
30.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 28 FT (SPECIAL)
31.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT (SPECIAL)
32.	2	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 34 FT (SPECIAL)
33.	16	FOOT CONCRETE FOUNDATION, TYPE A
34.	4	FOOT CONCRETE FOUNDATION, TYPE C
35.	4	FOOT CONCRETE FOUNDATION, TYPE D
36.	60	FOOT CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER
37.	4	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
38.	4	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
39.	4	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
40.	8	EACH PEDESTRIAN COUNTDOWN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED
41.	8	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
42.	2	EACH LIGHT DETECTOR
43.	1	EACH LIGHT DETECTOR AMPLIFIER
44.	8	EACH PEDESTRIAN PUSH-BUTTON
45.	1	EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
46.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
47.	10	EACH REMOVE EXISTING HANDHOLE
48.	11	EACH REMOVE EXISTING CONCRETE FOUNDATION
49.	3	EACH MEDIA CONVERTER
50.	2	EACH SERVICE INSTALLATION, POLE MOUNT
51.	726	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
52.	530	FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, GROUNDED
53.	224	FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL
54.	904	FOOT ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 18, 3C
55.	1	EACH VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)
56.	4	EACH L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN
57.	4	EACH TRAFFIC SIGNAL POST, 16 FT (SPECIAL)
58.	1	EACH REMOTE-CONTROLLED VIDEO SYSTEM
59.	1	EACH VIDEO COMMUNICATIONS SYSTEM AND CABINET
60.	1	EACH UNINTERRUPTIBLE POWER SUPPLY
61.	1	EACH VIDEO ENCODER
62.	2	EACH LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE

CABLE PLAN LEGEND

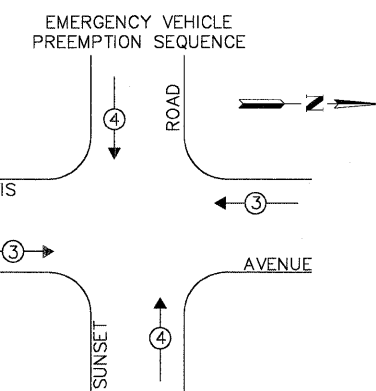
EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	12" TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	TELEPHONE INSTALLATION
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[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, 24 SINGLEMODE
[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]	BELDEN 1694A RG-6/4 COAXIAL CABLE
[Symbol]	[Symbol]	ISDN LINE
[Symbol]	[Symbol]	LUMINAIRE
[Symbol]	[Symbol]	VIDEO DETECTION CAMERA
[Symbol]	[Symbol]	PTZ CAMERA
[Symbol]	[Symbol]	VIDEO COMMUNICATIONS CABINET
[Symbol]	[Symbol]	L.E.D. STREET NAME SIGN
[Symbol]	[Symbol]	UNINTERRUPTIBLE POWER SUPPLY



CONTROLLER SEQUENCE



LEGEND:
 ←*→ DUAL ENTRY PHASE
 ←*→ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE
 ←*OL OVERLAP



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE NTCP" COMPLIANT.

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	12	135	10	0.50	60.0
SIGNAL (YELLOW)	12	135	19	0.10	22.8
SIGNAL (GREEN)	12	135	11	0.40	52.8
ARROW	16	135	9	0.10	14.4
PED. SIGNAL	8	90	9	1.00	72.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	4	-	250	0.50	500.0
L.E.D. ST. NAME SIGN	4	-	6.4	0.50	128.0
VIDEO SYSTEM	1	-	150	1.00	150.0
BATTERY BACKUP	1	-	25	1.00	25.0
TOTAL =					1,250.0

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 - M.ARM POLE	15	SIGNAL POST	2	BRACKET MOUNTED	13
		CONTROLLER CAB.	1	PED. PUSHBUTTON	4
		FIBER OPTIC	13	ELECTRIC SERVICE	13.5
		ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
		GROUND CABLE	1	POST MOUNTED	6

PHASE DESIGNATION DIAGRAM

ENERGY COSTS - BILLED TO: CITY OF WAUKEGAN
 (ADDRESS) 100 N. M.L.K. JR. AVENUE
 (ADDRESS) WAUKEGAN, IL
 ENERGY SUPPLY - CONTACT: NEW BUSINESS
 PHONE: (886) 639-3552
 COMPANY: COM-ED, LIBERTYVILLE

FILE NAME = 4135.315-TR1.dwg
 USER NAME = GHA
 PLOT SCALE = 1" = .08'
 PLOT DATE = 10/19/2009

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - DPB
 DATE - 10/19/09

REVISED - 9/15/09 (LCDOT)
 REVISED - 9/25/09 (IDOT)
 REVISED - 10/19/09 (LCDOT)
 REVISED -



CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
LEWIS AVENUE AT SUNSET ROAD
 SCALE: NONE SHEET NO. 48 OF 86 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2730	08-00259-00-TL	LAKE	86	48
CONTRACT #:				63344
ILLINOIS FED. AID PROJECT				

GHA #4135.800