

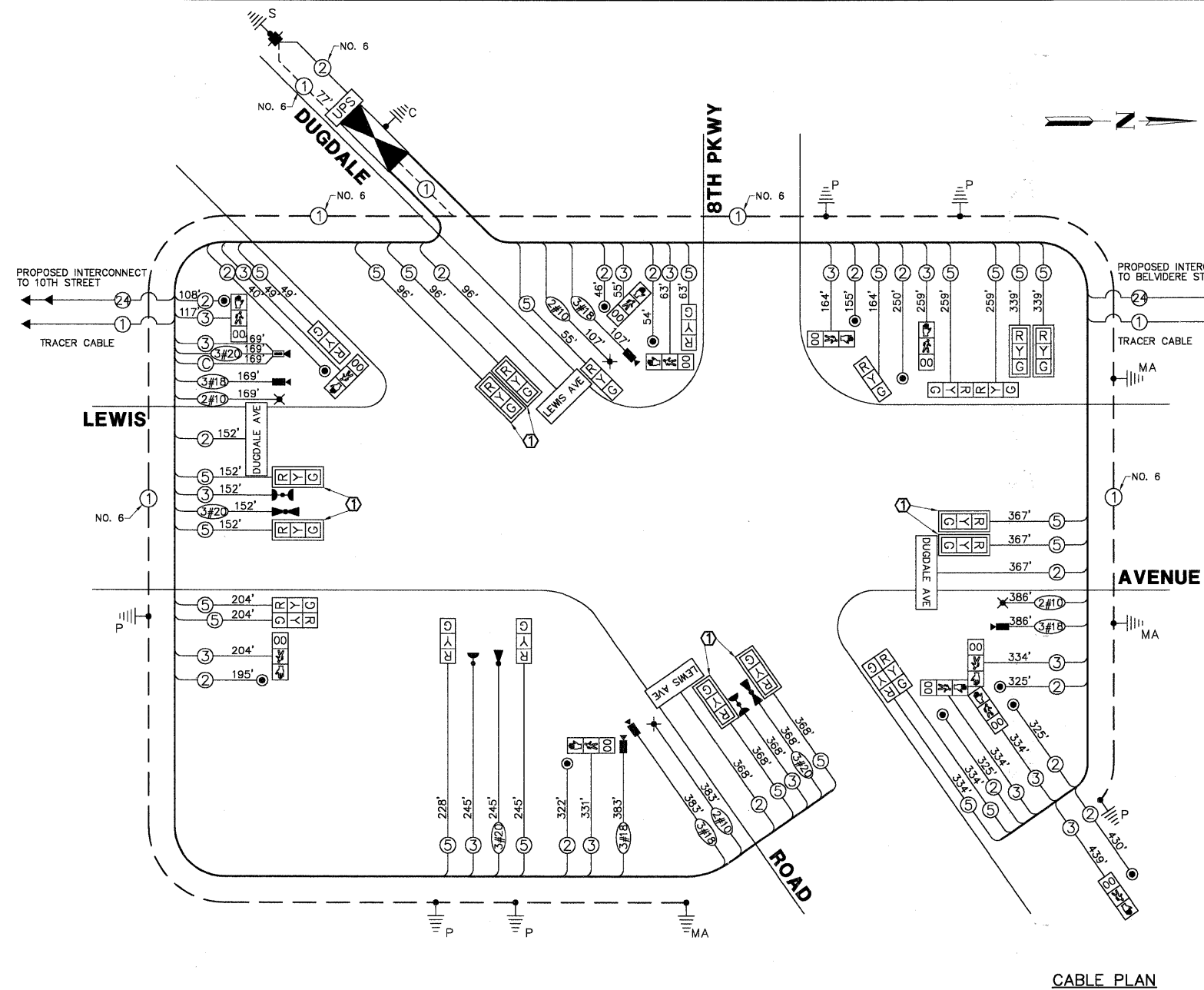
SCHEDULE OF QUANTITIES

LEWIS AVENUE AT DUGDALE ROAD TRAFFIC SIGNAL MODERNIZATION

NO.	QUANT.	UNIT
1.	40	CU.YD. EARTH EXCAVATION
2.	80	SQ.YD. AGGREGATE BASE COURSE, TYPE B, 4"
3.	1,945	SQ.FT. PORTLAND CEMENT CONCRETE SIDEWALK, 5"
4.	144	SQ.FT. DETECTABLE WARNINGS
5.	245	FOOT COMBINATION CURB AND GUTTER REMOVAL
6.	2,250	SQ.FT. SIDEWALK REMOVAL
7.	3	EACH FRAMES AND LIDS TO BE ADJUSTED
8.	190	FOOT COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.12
9.	75	FOOT COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.24
10.	485	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 12"
11.	130	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 24"
12.	510	SQ.FT. PAVEMENT MARKING REMOVAL
13.	55	FOOT CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
14.	165	FOOT CONDUIT IN TRENCH, 2-1/2" DIA., GALVANIZED STEEL
15.	163	FOOT CONDUIT IN TRENCH, 3-1/2" DIA., GALVANIZED STEEL
16.	110	FOOT CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
17.	100	FOOT CONDUIT PUSHED, 3-1/2" DIA., GALVANIZED STEEL
18.	143	FOOT CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
19.	152	FOOT CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL
20.	5	EACH HANDHOLE
21.	3	EACH DOUBLE HANDHOLE
22.	1,045	FOOT ELECTRIC CABLE IN CONDUIT, 600 (EPR-TYPE RHM) 2-1/C NO. 10
23.	381	TRENCH AND BACKFILL FOR ELECTRICAL WORK
24.	4	EACH LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL 250 WATT
25.	1	EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)
26.	1	EACH TRANSCEIVER - FIBER OPTIC
27.	3,558	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
28.	3,619	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
29.	4,839	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
30.	77	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
31.	1	EACH STEEL MAST ARM ASSEMBLY AND POLE 20 FT. (SPECIAL)
32.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 26 FT (SPECIAL)
33.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 28 FT (SPECIAL)
34.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 30 FT (SPECIAL)
35.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 34 FT (SPECIAL)
36.	32	FOOT CONCRETE FOUNDATION, TYPE A
37.	4	FOOT CONCRETE FOUNDATION, TYPE C
38.	15	FOOT CONCRETE FOUNDATION, TYPE E, 30-INCH DIAMETER
39.	60	FOOT CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER
40.	11	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
41.	5	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
42.	3	EACH SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED
43.	9	EACH PEDESTRIAN COUNTDOWN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED
44.	1	EACH PEDESTRIAN COUNTDOWN SIGNAL HEAD, L.E.D., 3-FACE, BRACKET MOUNTED
45.	10	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
46.	3	EACH LIGHT DETECTOR
47.	1	EACH LIGHT DETECTOR AMPLIFIER
48.	12	EACH PEDESTRIAN PUSH-BUTTON
49.	1	EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
50.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
51.	7	EACH REMOVE EXISTING HANDHOLE
52.	11	EACH REMOVE EXISTING CONCRETE FOUNDATION
53.	1	EACH SERVICE INSTALLATION, POLE MOUNT
54.	980	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
55.	934	FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, GROUNDED
56.	169	FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL
57.	1,428	FOOT ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 18, 3C
58.	1	EACH VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)
59.	4	EACH L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN
60.	1	EACH TRAFFIC SIGNAL POST, 10 FT (SPECIAL)
61.	6	EACH TRAFFIC SIGNAL POST, 14 FT (SPECIAL)
62.	1	EACH TRAFFIC SIGNAL POST, 18 FT (SPECIAL)
63.	1	EACH REMOTE-CONTROLLED VIDEO SYSTEM
64.	1	EACH UNINTERRUPTIBLE POWER SUPPLY
65.	1	EACH VIDEO ENCODER

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

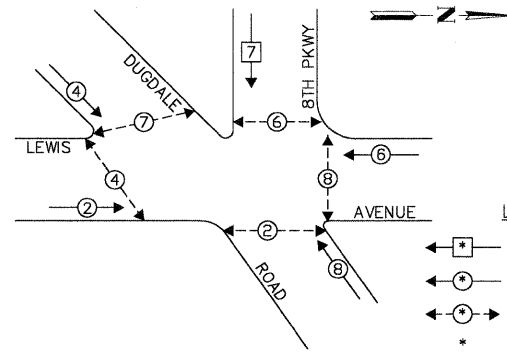


CABLE PLAN

CONSTRUCTION NOTES:

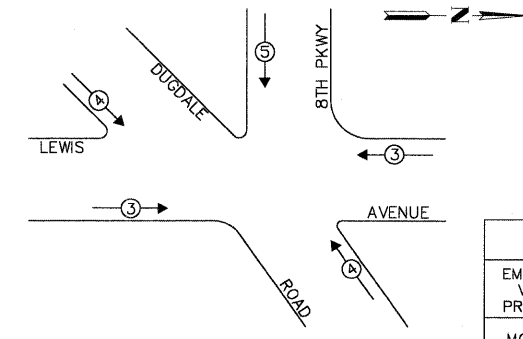
- 1 CONTRACTOR SHALL INSTALL LOUVERS FOR MAST ARM MOUNTED TRAFFIC SIGNALS HEADS, COST OF LOUVERS TO BE CONSIDERED INCIDENTAL TO ITEM "SIGNAL HEAD, L.E.D. 1-FACE, 3-SECTION, MAST ARM MOUNTED."

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	[Symbol]	[Symbol]

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	22	135	10	0.50	110.0
SIGNAL (YELLOW)	22	135	19	0.10	41.8
SIGNAL (GREEN)	22	135	11	0.40	96.8
ARROW		135	9	0.10	
PED.SIGNAL	12	90	9	1.00	108.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	4	-	250	0.50	500.0
L.E.D. ST. NAME SIGN	4	-	64	0.50	128.0
VIDEO SYSTEM	1	-	150	1.00	150.0
BATTERY BACKUP	1	-	25	1.00	25.0
TOTAL =					1,259.6

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

FOUNDATION (DEPTH) (FT.)	CABLE SLACK (FT.)	VERTICAL (FT.)
TYPE A - POST	4	HANDHOLE 6.5
TYPE D - CONTROLLER	4	DOUBLE HANDHOLE 13
TYPE E - M.ARM POLE	15	SIGNAL POST 2
		CONTROLLER CAB. 1
		PED. PUSHBUTTON 4
		FIBER OPTIC 13
		ELECTRIC SERVICE 13.5
		SERVICE TO GROUND 13.5
		GROUND CABLE 1
		POST MOUNTED 6

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 DUGDALE ROAD
 SCALE: NONE SHEET NO. 15 OF 86 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2730	08-00259-00-TL	LAKE	86	15
CONTRACT #:				63344

GHA #4135.800

ILLINOIS FED. AID PROJECT