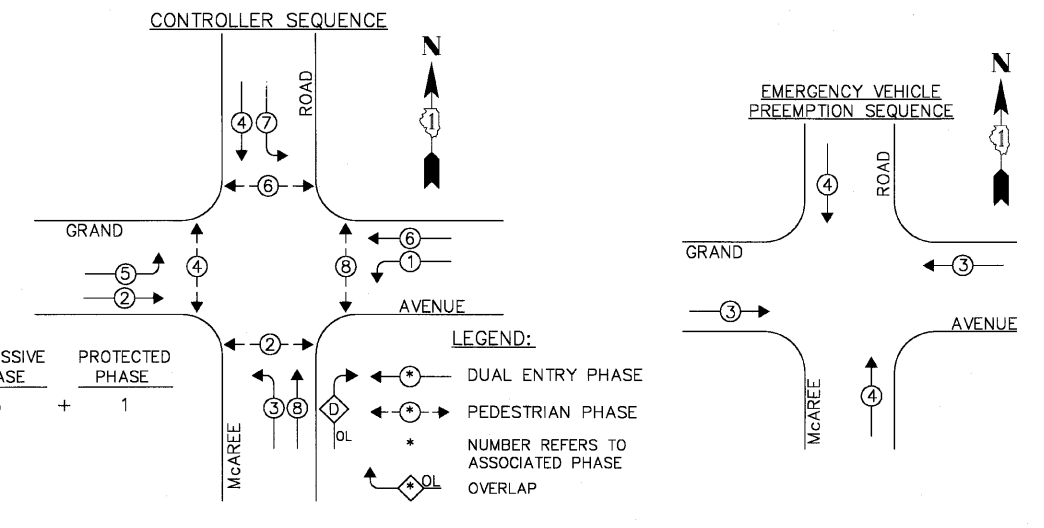
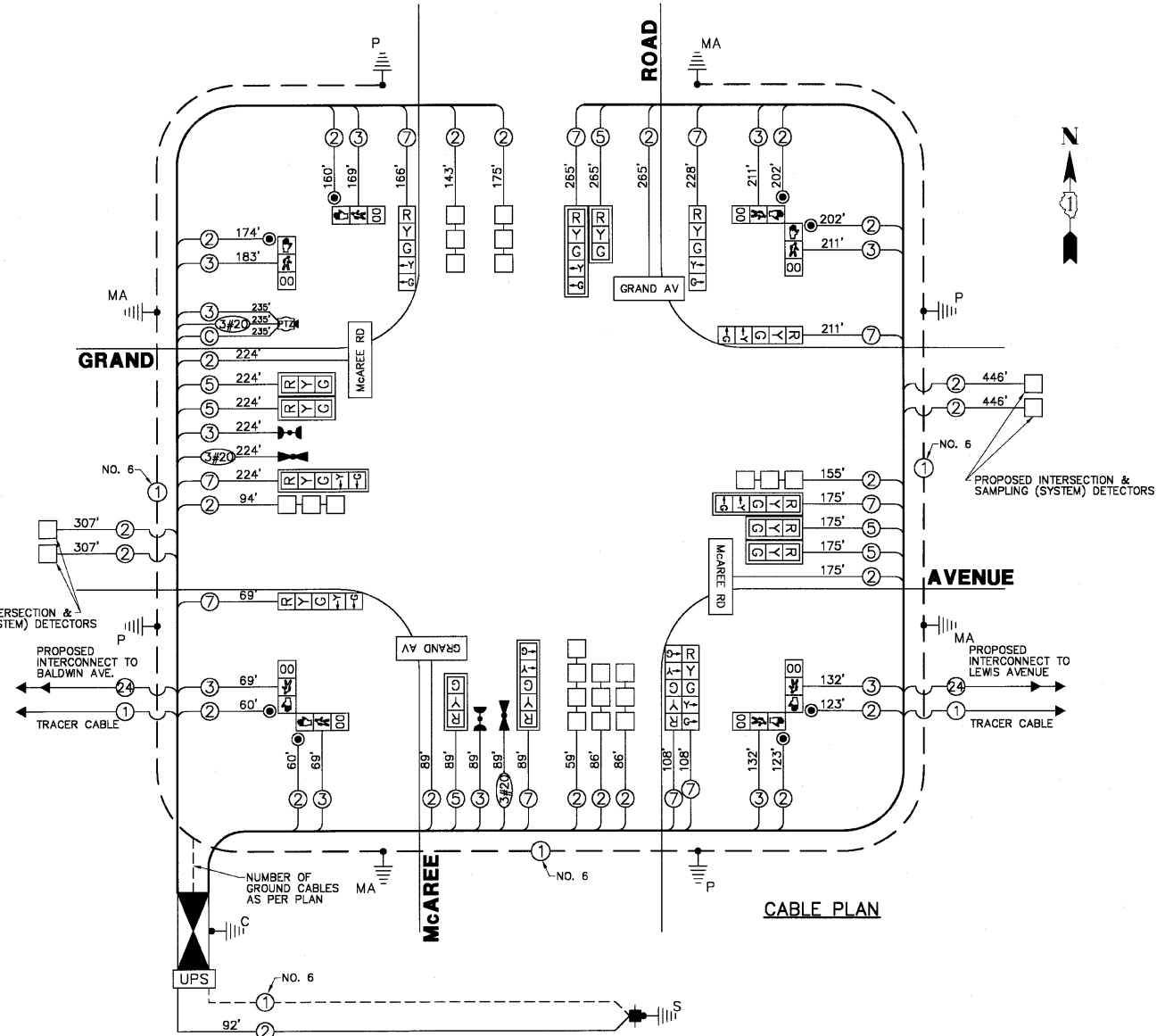


**SCHEDULE OF QUANTITIES**

GRAND AVENUE AT McAREE ROAD TRAFFIC SIGNAL MODERNIZATION

NO.	QUANT.	UNIT
1.	2	CU YD EARTH EXCAVATION
2.	8	SQ YD AGGREGATE BASE COURSE, TYPE B 4"
3.	1,415	SQ FT PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
4.	110	SQ FT DETECTABLE WARNINGS
5.	170	FOOT COMBINATION CURB AND GUTTER REMOVAL
6.	1,050	SQ FT SIDEWALK REMOVAL
7.	6	EACH FRAMES AND LIDS TO BE ADJUSTED
8.	170	FOOT COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
9.	500	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 6"
10.	70	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 24"
11.	360	SQ FT PAVEMENT MARKING REMOVAL
12.	255	FOOT CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
13.	53	FOOT CONDUIT IN TRENCH, 2-1/2" DIA., GALVANIZED STEEL
14.	84	FOOT CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
15.	25	FOOT CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
16.	530	FOOT CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
17.	305	FOOT CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
18.	4	EACH HANDHOLE
19.	4	EACH HEAVY-DUTY HANDHOLE
20.	2	EACH DOUBLE HANDHOLE
21.	359	FOOT TRENCH AND BACKFILL FOR ELECTRICAL WORK
22.	1	EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
23.	1,655	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
24.	1,724	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
25.	1,152	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
26.	1,643	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
27.	2,604	FOOT ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
28.	92	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
29.	1	EACH STEEL MAST ARM ASSEMBLY AND POLE 28 FT. (SPECIAL)
30.	1	EACH STEEL MAST ARM ASSEMBLY AND POLE 30 FT. (SPECIAL)
31.	1	EACH STEEL MAST ARM ASSEMBLY AND POLE 36 FT. (SPECIAL)
32.	1	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.	30	FOOT CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
36.	30	FOOT CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
37.	6	EACH SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
38.	4	EACH SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
39.	4	EACH SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
40.	1	EACH SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
41.	2	EACH PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
42.	3	EACH PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
43.	10	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
44.	11	EACH INDUCTIVE LOOP DETECTOR
45.	887	FOOT DETECTOR LOOP, TYPE 1
46.	2	EACH LIGHT DETECTOR
47.	1	EACH LIGHT DETECTOR AMPLIFIER
48.	8	EACH PEDESTRIAN PUSH-BUTTON
49.	1	EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
50.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
51.	10	EACH REMOVE EXISTING HANDHOLE
52.	9	EACH REMOVE EXISTING CONCRETE FOUNDATION
53.	1	EACH MEDIA CONVERTER
54.	1	EACH TEMPORARY TRAFFIC SIGNAL TIMINGS
55.	1	EACH SERVICE INSTALLATION POLE MOUNT
56.	1	EACH UNINTERRUPTIBLE POWER SUPPLY
57.	568	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
58.	548	FOOT ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED
59.	235	FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL
60.	4	EACH TRAFFIC SIGNAL POST, 16 FOOT (SPECIAL)
61.	4	EACH LED INTERNALLY ILLUMINATED STREET NAME SIGN
62.	1	EACH REMOTE CONTROLLED VIDEO SYSTEM
63.	1	EACH LAYER II (DATA LINK) SWITCH
64.	1	EACH VIDEO ENCODER



EMERGENCY VEHICLE PREEMPTOR	MOVEMENT
3	4

TYPE	NO LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	L.E.D.		
SIGNAL (RED)	16	135	10	0.50	80.0
SIGNAL (YELLOW)	16	135	19	0.10	30.4
SIGNAL (GREEN)	16	135	11	0.40	70.4
ARROW	20	135	9	0.10	18.0
PEDESTRIAN SIGNAL	8	90	9	1.00	72.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	128.0
L.E.D. ST. NAME SIGN	4	-	64	1.00	150.0
VIDEO SYSTEM	1	-	150	1.00	150.0
BATTERY BACKUP	1	-	25	1.00	25.0
<b>TOTAL =</b>					<b>673.8</b>

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

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'-1-2"
TYPE E - M-ARM POLE	15	SIGNAL POST	2	BRACKET MOUNTED	13
		CONTROLLER CAB.	1	PEDESTRIAN PUSHBUTTON	4
		FIBER OPTIC	13	ELECTRIC SERVICE	13.5
		ELECTRIC SERVICE	1	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: GERRY GRANDBERRY (PHONE) (847) 816-5463 (COMPANY) COM-ED, LIBERTYVILLE

FILE NAME = 4136.800-TR2.dwg  
 USER NAME = GHA  
 DESIGNED - JRD  
 DRAWN - ZCW  
 CHECKED - DPB  
 PLOT SCALE = 1" = .0833'  
 PLOT DATE = 3/10/10

REVISIONS:  
 REVISED -  
 REVISED -  
 REVISED -  
 DATE - 3/10/10



**CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES**  
 GRAND AVENUE AT McAREE ROAD  
 SCALE: NONE  
 SHEET NO. OF SHEETS STA. TO STA.

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	08-00279-00-TL	LAKE	64	20
CONTRACT #: 63436				
ILLINOIS FED. AID PROJECT				

GHA #4136.800