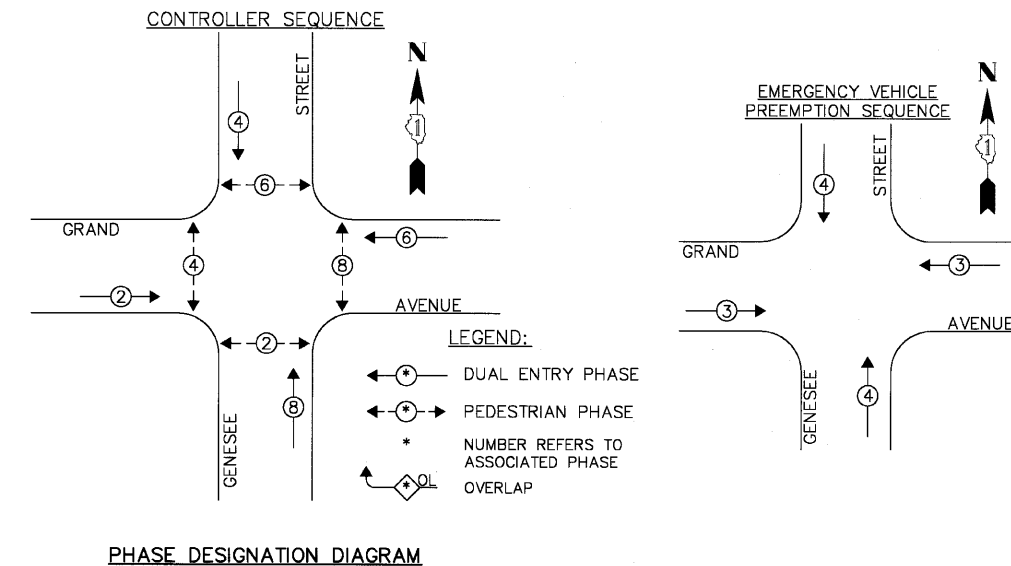
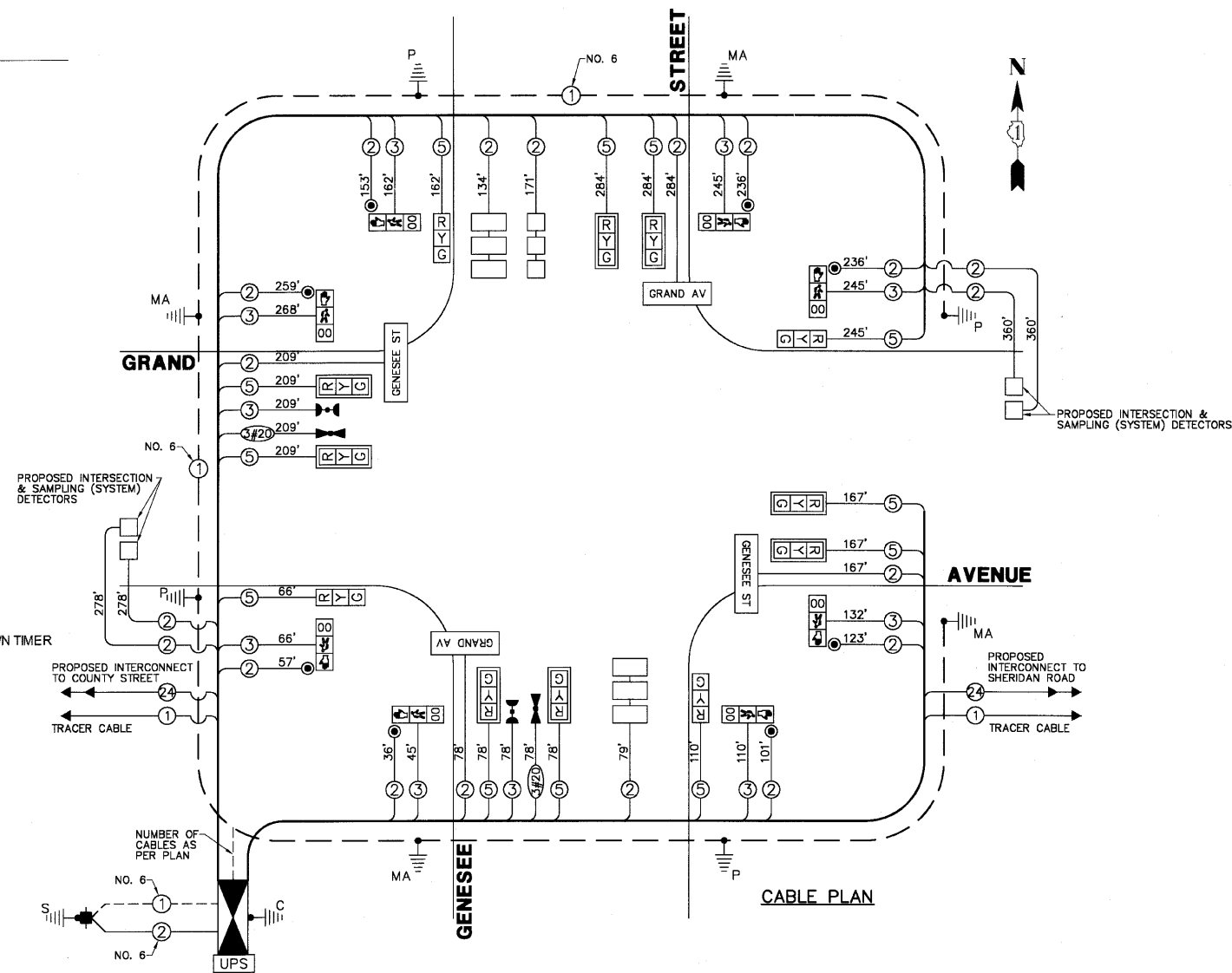


SCHEDULE OF QUANTITIES

GRAND AVENUE AT GENESEE STREET TRAFFIC SIGNAL MODERNIZATION

NO.	QUANT.	UNIT
1.	2,000	SQ FT PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
2.	140	SQ FT DETECTABLE WARNINGS
3.	255	FOOT COMBINATION CURB AND GUTTER REMOVAL
4.	2,000	SQ FT SIDEWALK REMOVAL
5.	6	EACH FRAMES AND LIDS TO BE ADJUSTED
6.	210	FOOT COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
7.	45	FOOT COMBINATION CONCRETE CURB AND GUTTER, TYPE B-8.24
8.	400	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 6"
9.	75	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 24"
10.	365	SQ FT PAVEMENT MARKING REMOVAL
11.	71	FOOT CONDUIT IN TRENCH, 2-1/2" DIA., GALVANIZED STEEL
12.	62	FOOT CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
13.	25	FOOT CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
14.	595	FOOT CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
15.	319	FOOT CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
16.	4	EACH HANDHOLE
17.	1	EACH HEAVY-DUTY HANDHOLE
18.	2	EACH DOUBLE HANDHOLE
19.	120	FOOT TRENCH AND BACKFILL FOR ELECTRICAL WORK
20.	1	EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
21.	1,939	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
22.	1,560	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
23.	2,059	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
24.	1,666	FOOT ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
25.	102	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
26.	1	EACH STEEL MAST ARM ASSEMBLY AND POLE 22 FT. (SPECIAL)
27.	1	EACH STEEL MAST ARM ASSEMBLY AND POLE 24 FT. (SPECIAL)
28.	1	EACH STEEL MAST ARM ASSEMBLY AND POLE 26 FT. (SPECIAL)
29.	1	EACH STEEL MAST ARM ASSEMBLY AND POLE 32 FT. (SPECIAL)
30.	16	FOOT CONCRETE FOUNDATION, TYPE A
31.	4	FOOT CONCRETE FOUNDATION, TYPE C
32.	30	FOOT CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
33.	30	FOOT CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
34.	8	EACH SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
35.	4	EACH SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
36.	8	EACH PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
37.	8	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
38.	7	EACH INDUCTIVE LOOP DETECTOR
39.	473	FOOT DETECTOR LOOP, TYPE 1
40.	2	EACH LIGHT DETECTOR
41.	1	EACH LIGHT DETECTOR AMPLIFIER
42.	8	EACH PEDESTRIAN PUSH-BUTTON
43.	1	EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
44.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
45.	5	EACH REMOVE EXISTING HANDHOLE
46.	7	EACH REMOVE EXISTING CONCRETE FOUNDATION
47.	1	EACH MEDIA CONVERTER
48.	1	EACH TEMPORARY TRAFFIC SIGNAL TIMINGS
49.	1	EACH SERVICE INSTALLATION POLE MOUNT
50.	1	EACH UNINTERRUPTIBLE POWER SUPPLY
51.	647	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
52.	287	FOOT ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED
53.	200	SQ FT BRICK PAVER REMOVAL AND REPLACEMENT
54.	4	EACH TRAFFIC SIGNAL POST, 14 FOOT (SPECIAL)
55.	4	EACH LED INTERNALLY ILLUMINATED STREET NAME SIGN



EMERGENCY VEHICLE PREEMPTOR MOVEMENT	3	4
EMERGENCY VEHICLE PREEMPTOR MOVEMENT	3	4

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

TYPE	NO LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	L.E.D.		
SIGNAL (RED)	12	135	10	0.50	60.0
SIGNAL (YELLOW)	12	135	11	0.40	22.8
SIGNAL (GREEN)	12	135	9	0.10	52.8
ARROW	-	135	9	0.10	-
PED. SIGNAL	8	90	9	1.00	72.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	4	-	64	0.50	128.0
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
TOTAL =					460.6

FOUNDATION (DEPTH) (FT.)	CABLE SLACK (FT.)	VERTICAL (FT.)
TYPE A - POST	4	HAND-HOLE 6.5
TYPE D - CONTROLLER	4	DOUBLE HANDHOLE 13
TYPE E - M-ARM POLE	15	SIGNAL POST 2
		BRACKET MOUNTED 13
		CONTROLLER CAB. 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: GERRY GRANDBERRY
 PHONE: (847) 816-5463
 COMPANY: COM-ED, LIBERTYVILLE

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

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - DPB
 DATE - 3/10/10
 REVISED -
 REVISED -
 REVISED -
 REVISED -



PHASE DESIGNATION DIAGRAM

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	08-00279-00-TL	LAKE	64	44
CONTRACT #:			63436	
ILLINOIS FED. AID PROJECT				

GHA #4136.800