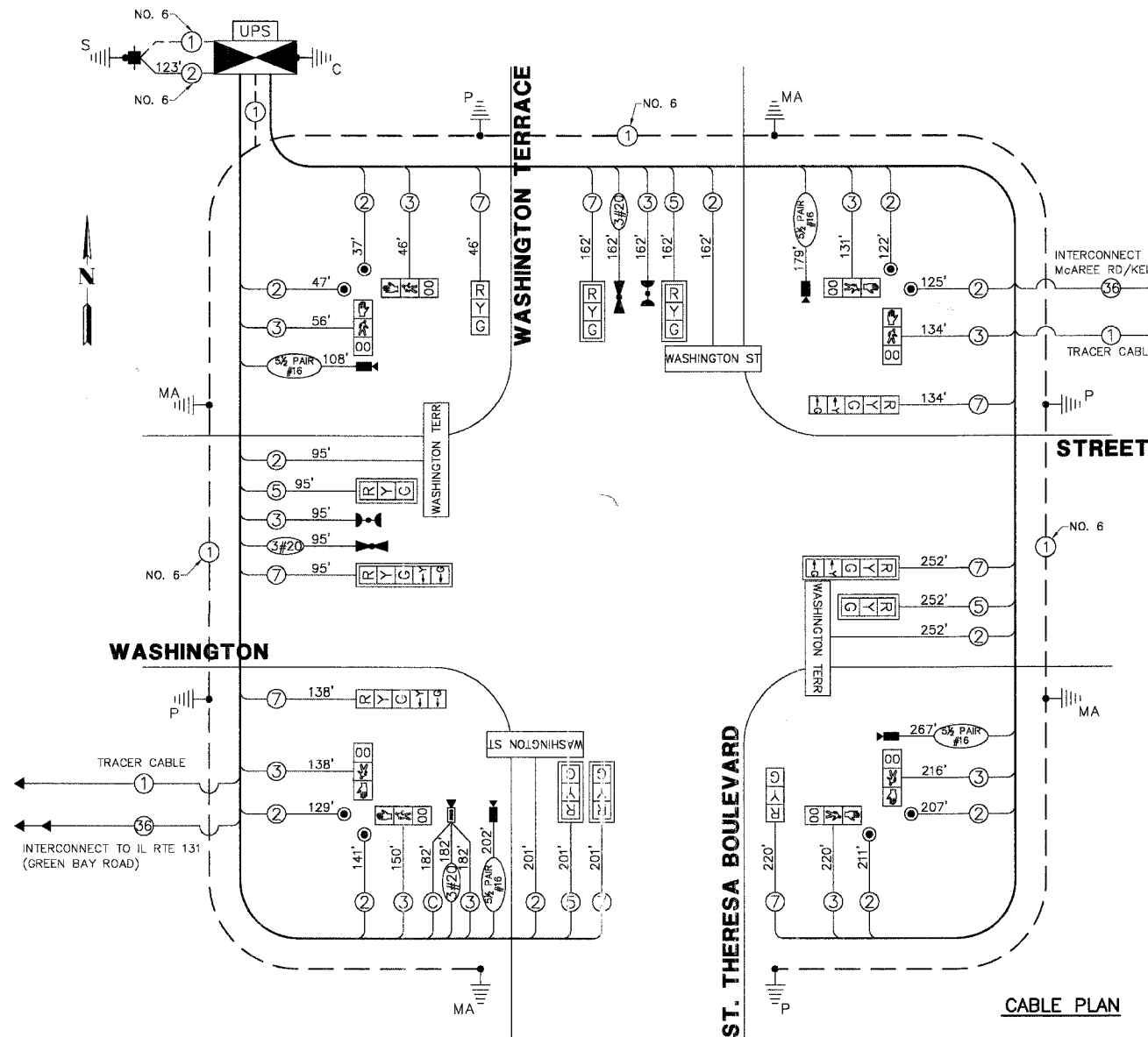


F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1223	04-00272-00-TL	LAKE	72	12
CABLE PLAN, PHASE DESIGNATION DIAGRAM				
ILLINOIS				

**SCHEDULE OF QUANTITIES**

WASHINGTON STREET AND WASHINGTON TER / ST. THERESA BLVD

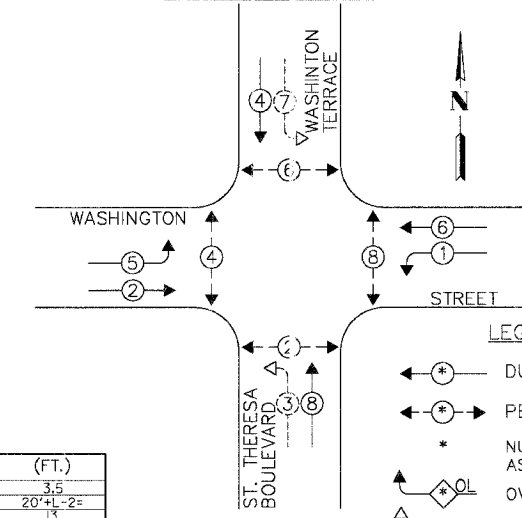
QUANT.	UNIT	ITEM
<b>ROADWAY IMPROVEMENTS</b>		
1.	7	CU.YD. EARTH EXCAVATION
2.	670	SQ.FT. PORTLAND CEMENT CONCRETE SIDEWALK, 5"
3.	96	SQ.FT. DETECTABLE WARNING
4.	110	FOOT COMBINATION CURB & GUTTER REMOVAL
5.	595	SQ.FT. SIDEWALK REMOVAL
6.	2	EACH FRAME AND LIDS, TYPE 1, OPEN LID
7.	60	FOOT COMBINATION CURB & GUTTER, TYPE B6.12
8.	50	FOOT COMBINATION CURB & GUTTER, TYPE B6.24
9.	135.5	SQ.FT. THERMOPLASTIC PAVEMENT MARKING-LETTERS AND SYMBOLS
10.	476	FOOT THERMOPLASTIC PAVEMENT MARKING-LINE 12"
11.	100	FOOT THERMOPLASTIC PAVEMENT MARKING-LINE 24"
12.	320	SQ.FT. PAVEMENT MARKING REMOVAL
<b>TRAFFIC SIGNAL IMPROVEMENTS</b>		
13.	105	FOOT CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
14.	47	FOOT CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
15.	54	FOOT CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
16.	10	FOOT CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
17.	232	FOOT CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
18.	2	EACH HANDHOLE
19.	2	EACH DOUBLE HANDHOLE
20.	204	FOOT TRENCH AND BACKFILL FOR ELECTRICAL WORK
21.	1	EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
22.	1	EACH TRANSCEIVER - FIBER OPTIC
23.	1,725	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 2C
24.	1,535	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 3C
25.	710	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 5C
26.	1,248	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 7C
27.	123	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6 2C
28.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT. (SPECIAL)
29.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 32 FT. (SPECIAL)
30.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT. (SPECIAL)
31.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT. (SPECIAL)
32.	16	FOOT CONCRETE FOUNDATION, TYPE A
33.	4	FOOT CONCRETE FOUNDATION, TYPE C
34.	60	FOOT CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
35.	8	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
36.	2	EACH LIGHT DETECTOR
37.	1	EACH LIGHT DETECTOR AMPLIFIER
38.	8	EACH PEDESTRIAN PUSH-BUTTON
39.	1	EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
40.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
41.	8	EACH REMOVE EXISTING HANDHOLE
42.	9	EACH REMOVE EXISTING CONCRETE FOUNDATION
43.	8	EACH PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
44.	4	EACH L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN
45.	1	EACH VIDEO DETECTION SYSTEM, (COMPLETE INTERSECTION)
46.	1	EACH REMOTE-CONTROLLED VIDEO SYSTEM
47.	756	FOOT ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16, 5 1/2 PAIR
48.	4	EACH TRAFFIC SIGNAL POST, 16 FT. (SPECIAL)
49.	1	EACH LAYER II (DATA LINK) SWITCH
50.	1	EACH UNINTERRUPTIBLE POWER SUPPLY
51.	471	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
52.	439	FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED
53.	6	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
54.	2	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
55.	2	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
56.	2	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
57.	182	FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL
58.	1	EACH SERVICE INSTALLATION, POLE MOUNT



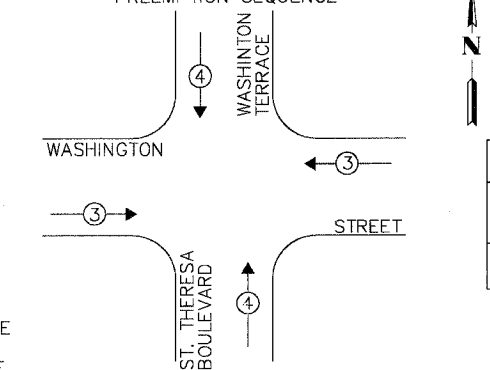
**CABLE PLAN LEGEND**

EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	12" TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" PEDESTRIAN SIGNAL SECTION
[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 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]	BELDEN 8281 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**



**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**PROPOSED EMERGENCY VEHICLE PREEMPTORS**

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	→

**L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	L.E.D.		
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	8	135	9	0.10	7.2
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	-	64	0.50	128.0
VIDEO SYSTEM	1	-	150	1.00	150.0
BATTERY BACKUP	1	-	25	1.00	25.0
TOTAL =					117.8

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

FOUNDATION (DEPTH) (FT.)	CABLE SLACK (FT.)	VERTICAL (FT.)
TYPE A - POST 4	HAND-HOLE 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 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: MS. ALICE TAYLOR  
 PHONE: (847) 816-5323  
 COMPANY: COMED - LIBERTYVILLE

PLANS PREPARED BY:  
**GEWALT HAMILTON ASSOCIATES, INC.**  
 Consulting Engineers & Surveyors  
 800 Forest Ridge Drive  
 Vernon Hills, IL 60061  
 (847) 478-9700  
 (847) 478-9701 Fax

**REVISIONS**

NAME	DATE

LAKE COUNTY DIVISION OF TRANSPORTATION  
**CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES**  
 WASHINGTON STREET AND WASHINGTON TERRACE / ST. THERESA BOULEVARD  
 SCALE: NONE  
 DATE: MAY 1, 2007  
 DRAWN BY: ZCW  
 DESIGNED BY: JRD  
 CHECKED BY: BLS