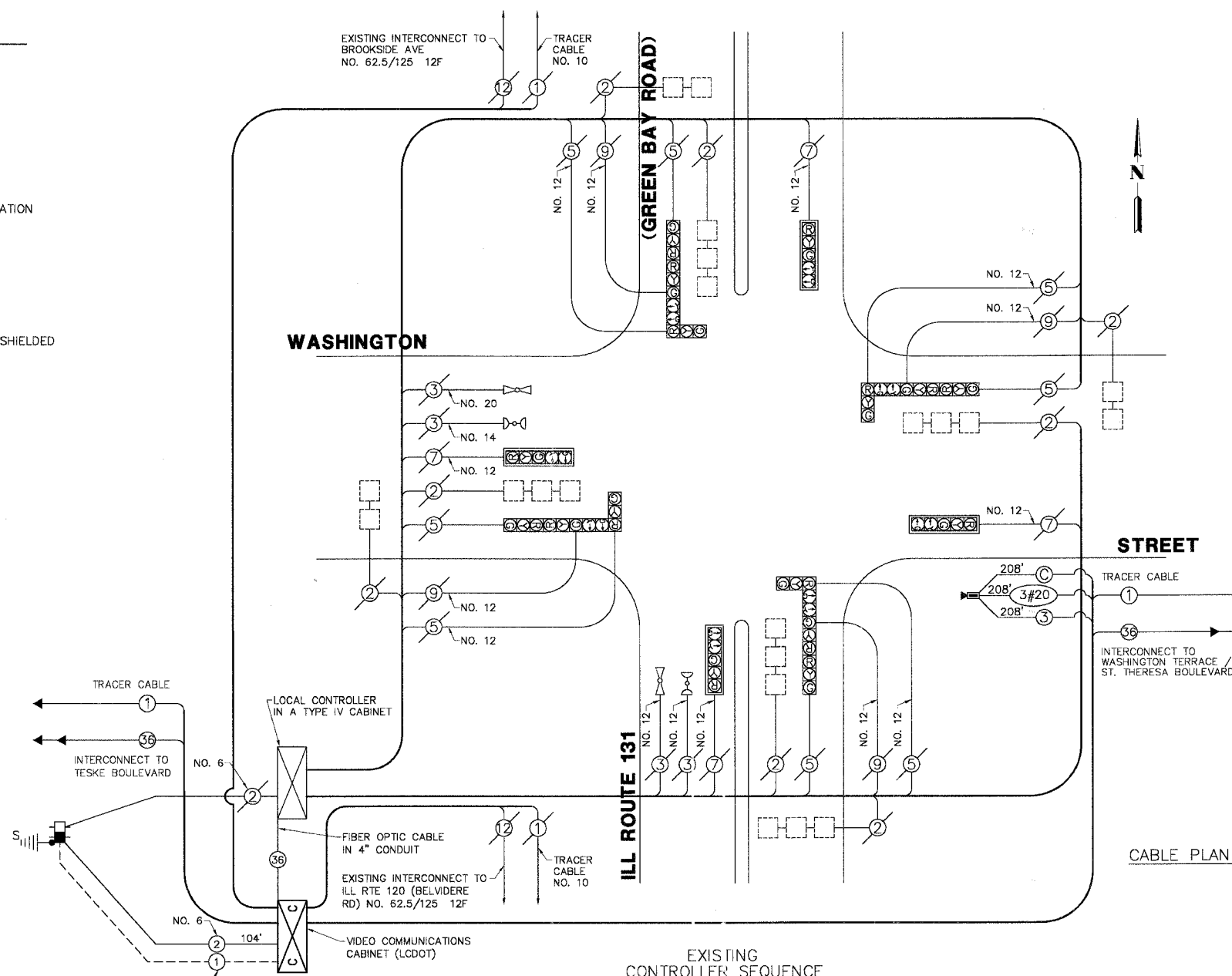


F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1223	04-00272-00-TL	LAKE	72	8
CABLE PLAN, PHASE DESIGNATION DIAGRAM				
ILLINOIS				

**SCHEDULE OF QUANTITIES**

WASHINGTON STREET AND IL RTE 131 (GREEN BAY ROAD)

QUANT.	UNIT	ITEM
<b>ROADWAY IMPROVEMENTS</b>		
1.	130 SQ.FT.	PORTLAND CEMENT CONCRETE SIDEWALK, 5"
2.	130 SQ.FT.	SIDEWALK REMOVAL
<b>TRAFFIC SIGNAL IMPROVEMENTS</b>		
3.	98 FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
4.	22 FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
5.	127 FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
6.	103 FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
7.	1 EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
8.	208 FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 3C
9.	104 FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE NO.6 2C
10.	4 FOOT	CONCRETE FOUNDATION, TYPE D
11.	3 EACH	DRILL EXISTING HANDHOLE
12.	1 EACH	MODIFY EXISTING CONTROLLER
13.	1 EACH	REMOTE-CONTROLLED VIDEO SYSTEM
14.	208 FOOT	ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED
15.	12 EACH	TERMINATE FIBER IN CABINET
16.	1 EACH	LAYER III (NETWORK) SWITCH
17.	1 EACH	VIDEO COMMUNICATIONS SYSTEM AND CABINET
18.	1 EACH	CAMERA MOUNTING ASSEMBLY
19.	208 FOOT	ELECTRIC CABLE IN CONDUIT, COAXIAL
20.	1 EACH	SERVICE INSTALLATION, POLE MOUNT
21.	1 EACH	FIBER OPTIC PATCH PANEL

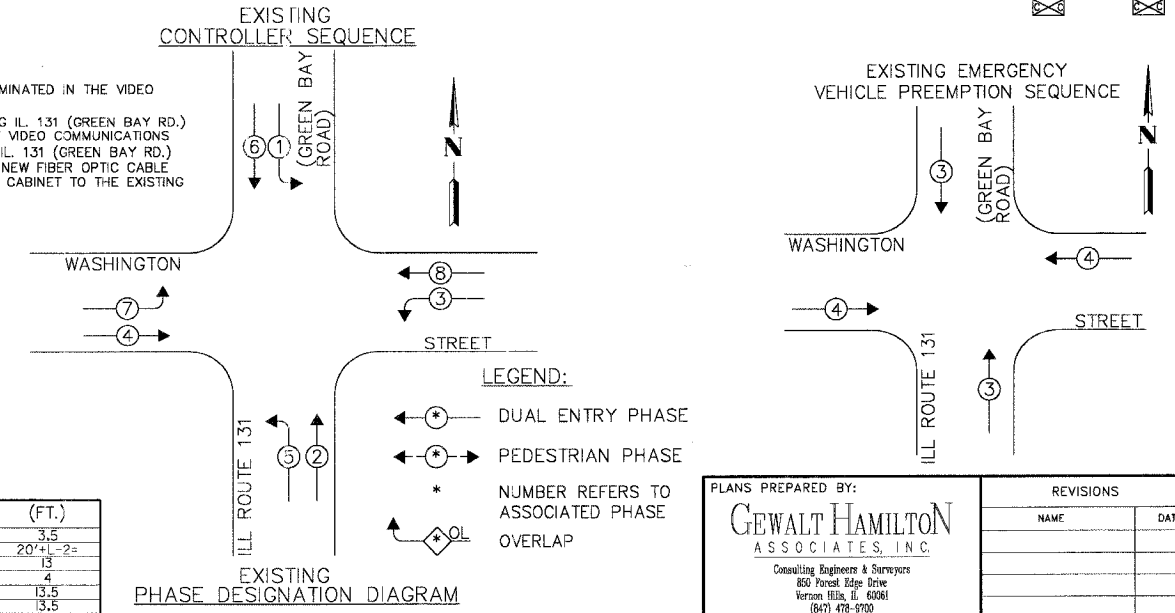


**CABLE PLAN LEGEND**

EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	8" (200mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	TELEPHONE
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	MAGNETIC DETECTOR
[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]	PTZ CAMERA
[Symbol]	[Symbol]	VIDEO COMMUNICATIONS CABINET

NOTE: MULTI MODE FIBERS SHALL BE TERMINATED IN THE VIDEO COMMUNICATIONS CABINET. EXISTING FIBER OPTIC CABLE ALONG IL. 131 (GREEN BAY RD.) SHALL BE RELOCATED TO THE NEW VIDEO COMMUNICATIONS CABINET. COMMUNICATIONS ALONG IL. 131 (GREEN BAY RD.) SHALL BE RE-ESTABLISHED USING NEW FIBER OPTIC CABLE FROM NEW VIDEO COMMUNICATIONS CABINET TO THE EXISTING CONTROLLER CABINET.

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



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	16	135	10	0.50	1080.0
SIGNAL (YELLOW)	16	135	19	0.10	216.0
SIGNAL (GREEN)	16	135	11	0.40	864.0
ARROW	16	135	9	0.10	216.0
PED.SIGNAL	-	90	9	1.00	-
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	-	252	-	0.05	-
FLASHER	-	-	-	0.50	-
TOTAL =					2476.0

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	10	SIGNAL POST	2	BRACKET MOUNTED	13
30" (36"-30")	10	CONTROLLER CAB.	1	PED. PUSHBUTTON	4
30" (30"-40")	13'-6"	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
36" (40"-48")	13	ELECTRIC SERVICE	1	SERVICE TO GROUND	3.5
36" (50"-55")	15	GROUND CABLE	1	POST MOUNTED	6

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES**  
**WASHINGTON STREET AND IL ROUTE 131 (GREEN BAY ROAD)**

EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT		==

SCALE: NONE  
DATE: MAY 1, 2007

DRAWN BY: ZCW  
DESIGNED BY: JRD  
CHECKED BY: BLS