



**SEQUENCE OF OPERATION**

MOVEMENT	1	2	3	4	5	6	7	8	9	10A	10B	11	12A	12B	13	14A	14B	14C	14D	
PHASE	1 + 5		1 + 6		2 + 5		2 + 6		3		4		4		4		4		4	
INTERVAL	1	2	3	4	5	6	7	8	9	10A	10B	11	12A	12B	13	14A	14B	14C	14D	
CHANGE TO		1+6	2+5	2+6	2+5	2+6	2+6	3	4	1+5	1+6	2+5	2+6	4	1+5	1+6	2+5	2+6		
ILL. RTE. 134 END MAST ARM AND FAR LEFT SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
ILL. RTE. 134 FAR RIGHT SIGNAL	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
ILL. RTE. 134 END MAST ARM AND FAR LEFT SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
ILL. RTE. 134 FAR RIGHT SIGNAL	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
HART ROAD END MAST ARM AND FAR LEFT SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
HART ROAD FAR RIGHT SIGNAL	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
HART ROAD (NORTH OF TRACKS) ALL SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
HART ROAD (SOUTH OF TRACKS) END MAST ARM AND FAR LEFT SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
HART ROAD (SOUTH OF TRACKS) FAR RIGHT SIGNAL	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

PHASES 2 AND 6 SHALL BE PLACED ON RECALL.

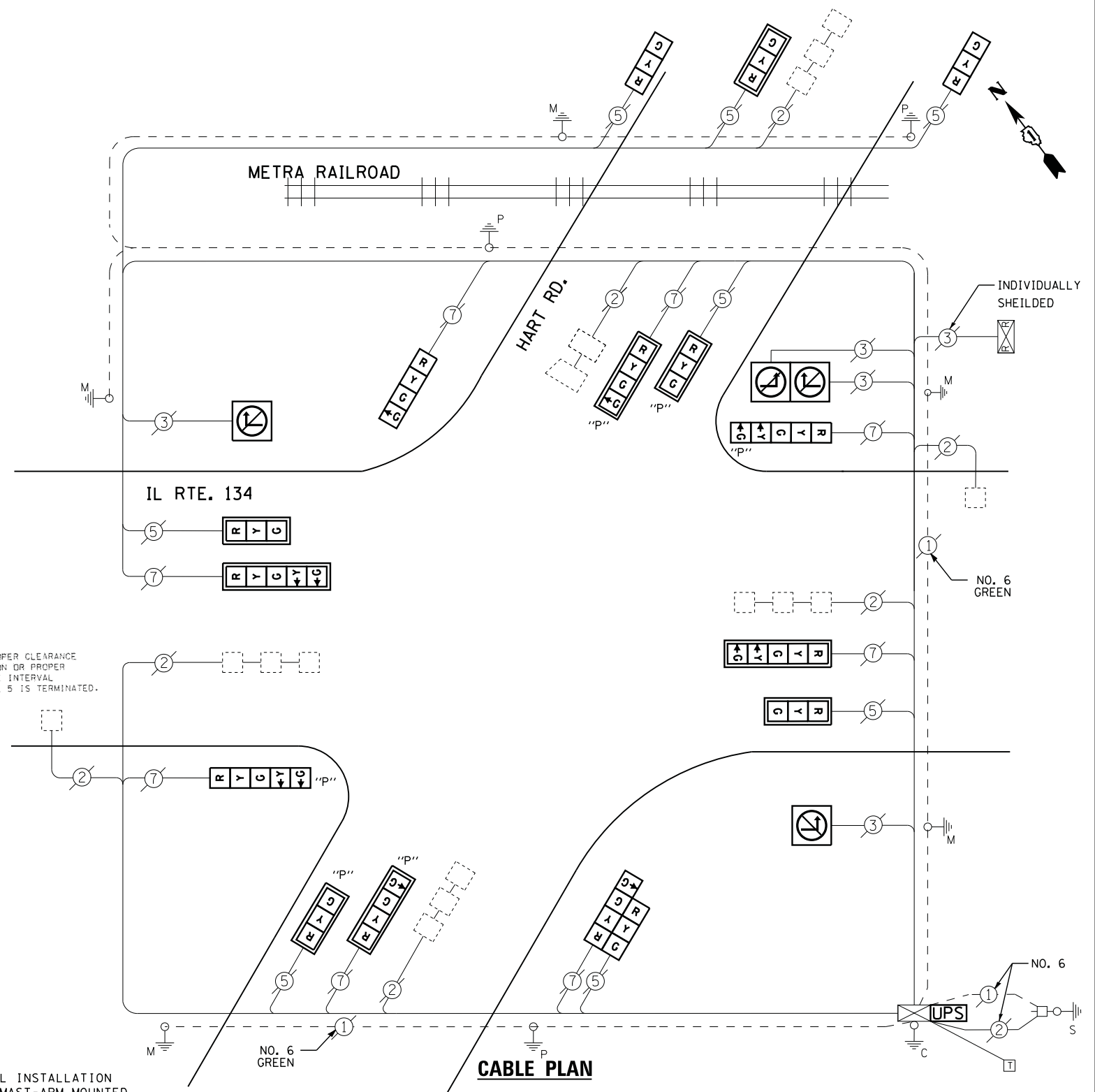
**RAILROAD PREEMPTION SEQUENCE OF OPERATION**

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	5	7	9	11	13	PREEMPTOR NUMBER 2
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	1C	2	1E	2	1G	2
ILL. RTE. 134 END MAST ARM AND FAR LEFT SIGNALS	E/B	R	R	R	R	R	R
ILL. RTE. 134 FAR RIGHT SIGNAL	E/B	R	R	R	R	R	R
ILL. RTE. 134 END MAST ARM AND FAR LEFT SIGNALS	W/B	R	R	R	R	R	R
ILL. RTE. 134 FAR RIGHT SIGNAL	W/B	R	R	R	R	R	R
HART ROAD END MAST ARM AND FAR LEFT SIGNALS	N/B	R	R	R	R	R	R
HART ROAD FAR RIGHT SIGNAL	N/B	R	R	R	R	R	R
HART ROAD (NORTH OF TRACKS) ALL SIGNALS	S/B	R	R	R	R	R	R
HART ROAD (SOUTH OF TRACKS) END MAST ARM AND FAR LEFT SIGNALS	S/B	R	R	R	R	R	R
HART ROAD (SOUTH OF TRACKS) FAR RIGHT SIGNAL	S/B	R	R	R	R	R	R
INTERNALLY ILLUMINATED NRT SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT
INTERNALLY ILLUMINATED NLT SIGNS	NLT	NLT	NLT	NLT	NLT	NLT	NLT

NRT = "NO RIGHT TURN" OR

NLT = "NO LEFT TURN" OR

△ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.



**I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	20	135	15	0.25	75
ARROW	8	135	12	0.10	10
PED. SIGNAL	--	90	25	1.00	--
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	4	252	25	0.05	5
VIDEO SYSTEM	--	150	-	1.00	--
TOTAL =					426

CONTRACTOR SHALL CONTACT METRA PRIOR TO START OF CONSTRUCTION AND REQUEST THEIR FLAGGING SERVICES. PAYMENT WILL BE MADE BY THE CONTRACTOR DIRECTLY TO METRA, AND THE CONTRACTOR WILL BE REIMBURSED FOR THIS COST ACCORDING TO SECTION 109.05 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

**SCHEDULE OF QUANTITIES**

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	ILLUMINATED SIGN, LED
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

ENERGY COSTS- BILLED TO: VILLAGE OF ROUND LAKE  
442 N. CEDAR LAKE ROAD  
ROUND LAKE, IL 60073

ENERGY SUPPLY - CONTACT TERRI BLECK  
PHONE 847-816-5239  
COMMONWEALTH EDISON

FILE NAME =	USER NAME = \$USER\$	DESIGNED - DW	REVISED -
N:\Projects\3\12004\DesignCAD\Sheet Files\12-004 Sheets NW Lake Co\21625.CAB.LAKE.dgn		DRAWN - JDH	REVISED -
		CHECKED - KMM	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ILL ROUTE 134 AT HART ROAD  
SEQUENCE OF OPERATIONS, EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATIONS  
AND RAILROAD PREEMPTION SEQUENCE OF OPERATIONS

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2012-040TS	LAKE	60	47
CONTRACT NO. 60T85				
ILLINOIS FED. AID PROJECT				

TS# 21625  
ROUND LAKE