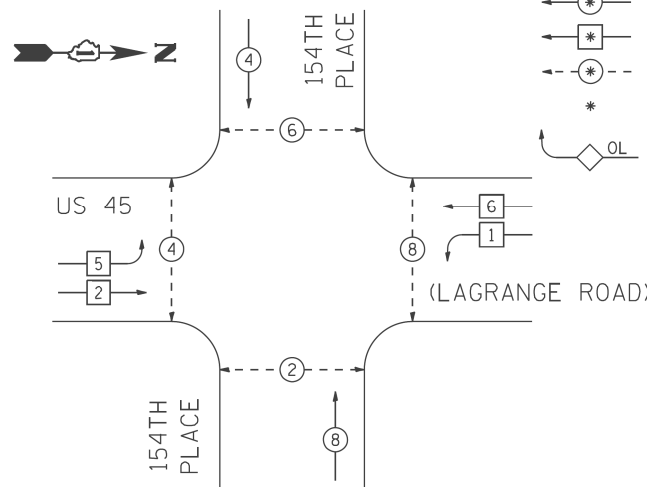
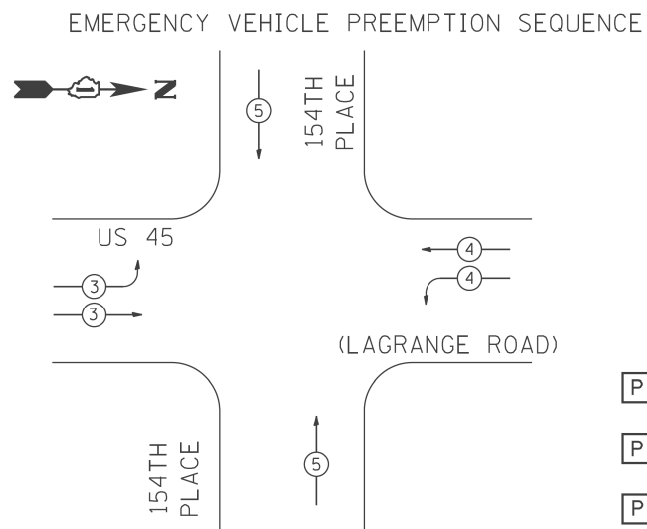


CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTORS	3	4	5
MOVEMENT			

PHASE DESIGNATION DIAGRAM LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE
- RIGHT TURN OVERLAP

NOTE:
ALL TRAFFIC SIGNAL POLES, MAST ARM ASSEMBLIES, SIGNAL/PEDESTRIAN HEADS AND HOUSINGS, MOUNTING BRACKETS/PLATES/BOLTS, PEDESTRIAN PUSH BUTTONS, CONTROLLER CABINETS, AND ILLUMINATED SIGNS WITHIN THE VILLAGE OF ORLAND PARK SHALL BE PAINTED BLACK, IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

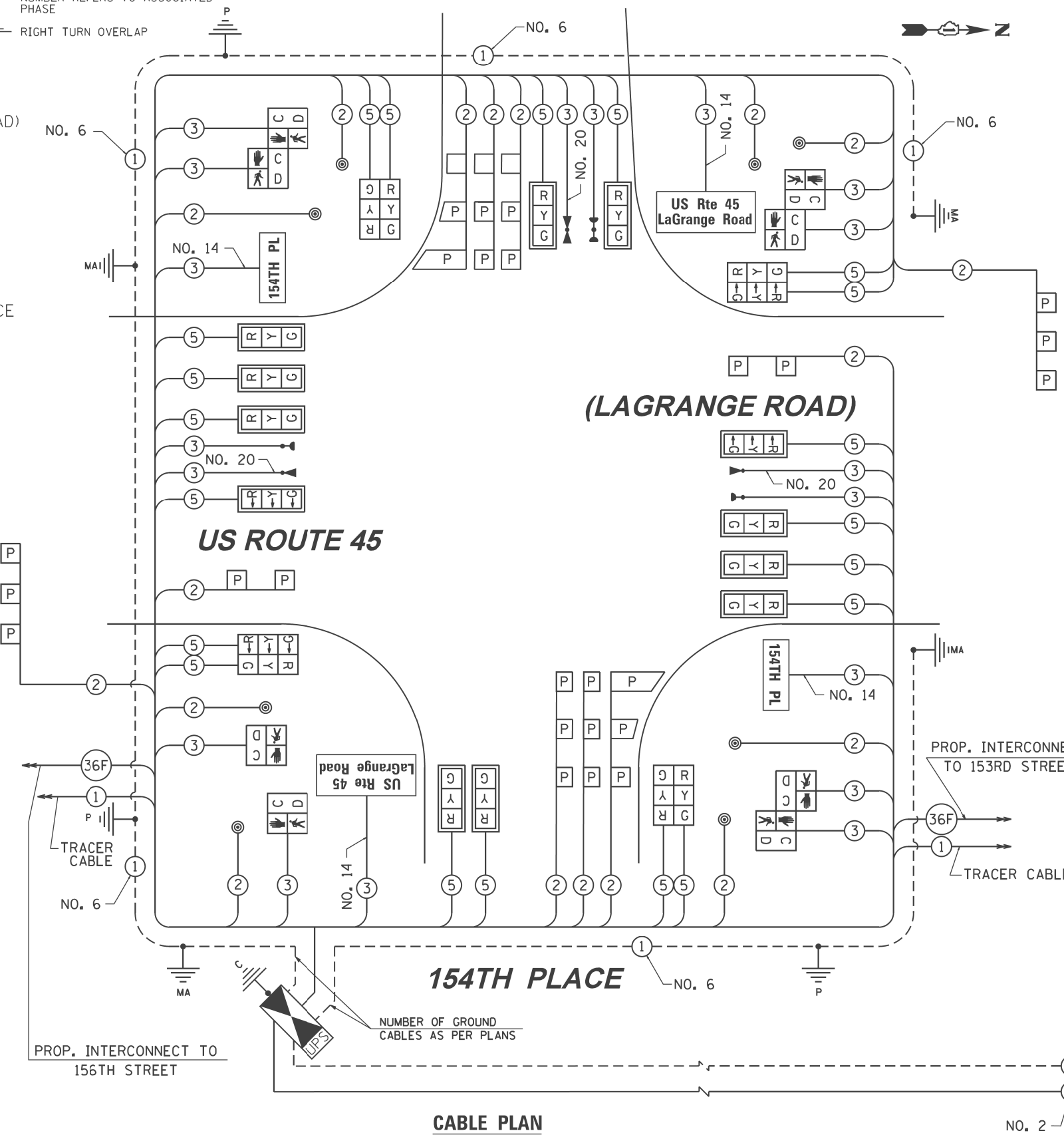
NOTE:
NEW PERMANENT SERVICE INSTALLATIONS WITH ILLUMINATED SIGNS AND/OR COMBINATION MAST ARM SIGNAL POLES SHALL BE METERED.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
SIGN PANEL - TYPE 1	SO FT	60
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1894
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	30
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	43
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3 1/2" DIA.	FOOT	7
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	568
HANDHOLE	EACH	7
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	3
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1384
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2771
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3350
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1854
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 2 2 C	FOOT	1216
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1654
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT.	EACH	3
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	3
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	12
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	FOOT	10
DETECTOR LOOP, TYPE I	FOOT	109
PREFORMED DETECTOR LOOP	EACH	909
* LIGHT DETECTOR	EACH	3
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
* ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	668
** LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
ELECTRIC SERVICE DISCONNECT, LIGHTING AND TRAFFIC SIGNAL	EACH	1

* 100% COST TO ORLAND FIRE PROTECTION DISTRICT
** 100% COST TO VILLAGE OF ORLAND PARK

154TH PLACE



CABLE PLAN

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

TYPE	NO. OF LAMPS	WATTAGE (INCANDE)	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	17		0.50	170.0
(YELLOW)	20	25		0.25	125.0
(GREEN)	20	15		0.25	75.0
ARROW	0	12		0.10	-
PED. SIGNAL	8	25		1.00	200.0
CONTROLLER	1	100		1.00	100.0
FLASHER		25		0.50	
ENERGY COST TO: 100% Village of Orland Park					670.0

VILLAGE OF ORLAND PARK
14700 SOUTH RAVINIA AVE.
ENERGY SUPPLY: CONTACT: KATHRYN SUGRUE
PHONE: (708) 235-2337
COMPANY: COMMONWEALTH EDISON

FILE NAME =	USER NAME = #USER#	DESIGNED - BA	REVISED -
		DRAWN - BA	REVISED -
		CHECKED - DB	REVISED -
		DATE - 03/13/2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US 45 (LAGRANGE ROAD) AND 154TH PLACE
SCALE: 1"=20' SHEET 4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	103R-4	COOK	877	334
TD-20D			CONTRACT NO. 60M61	
ILLINOIS FED. AID PROJECT				