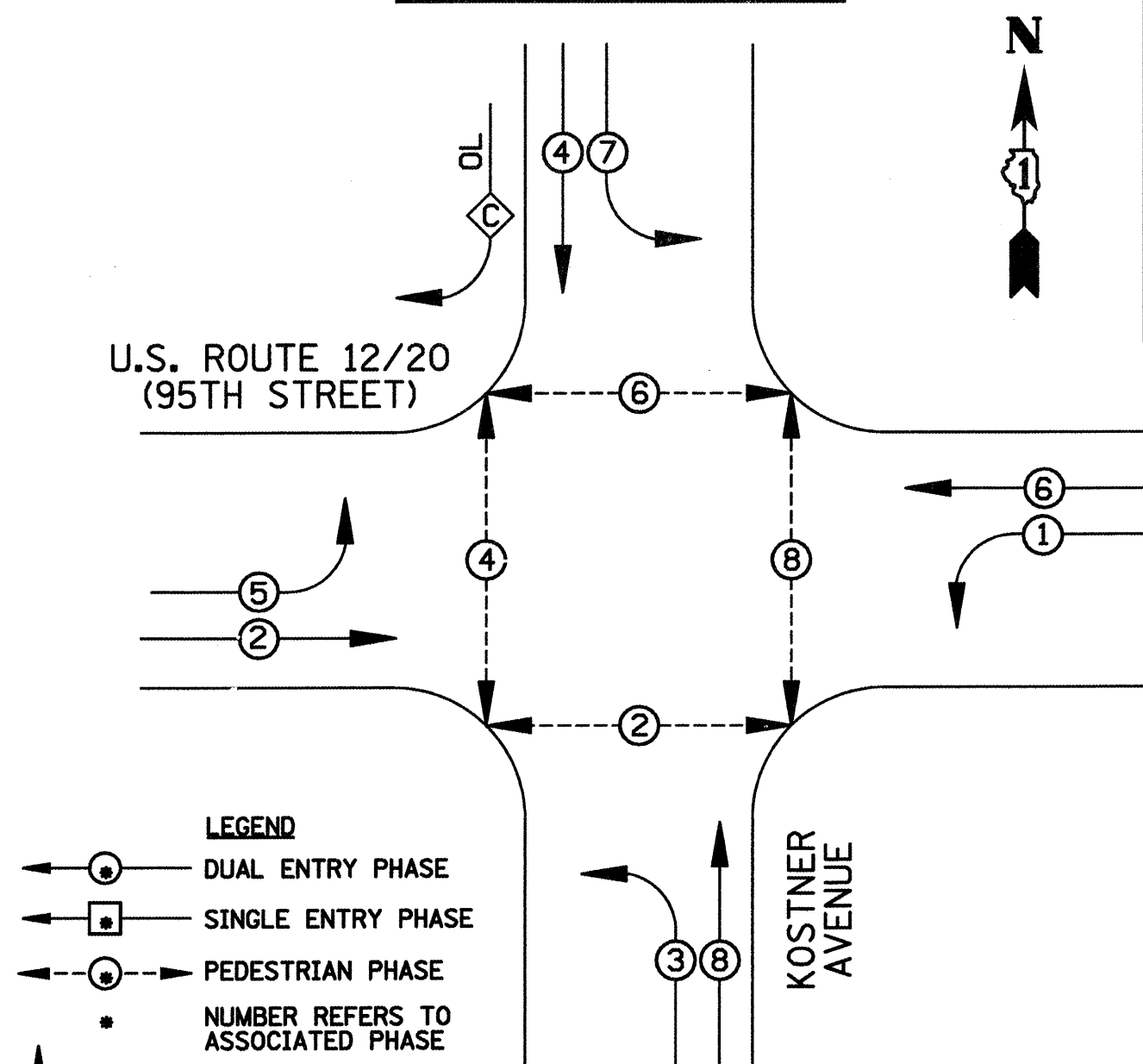
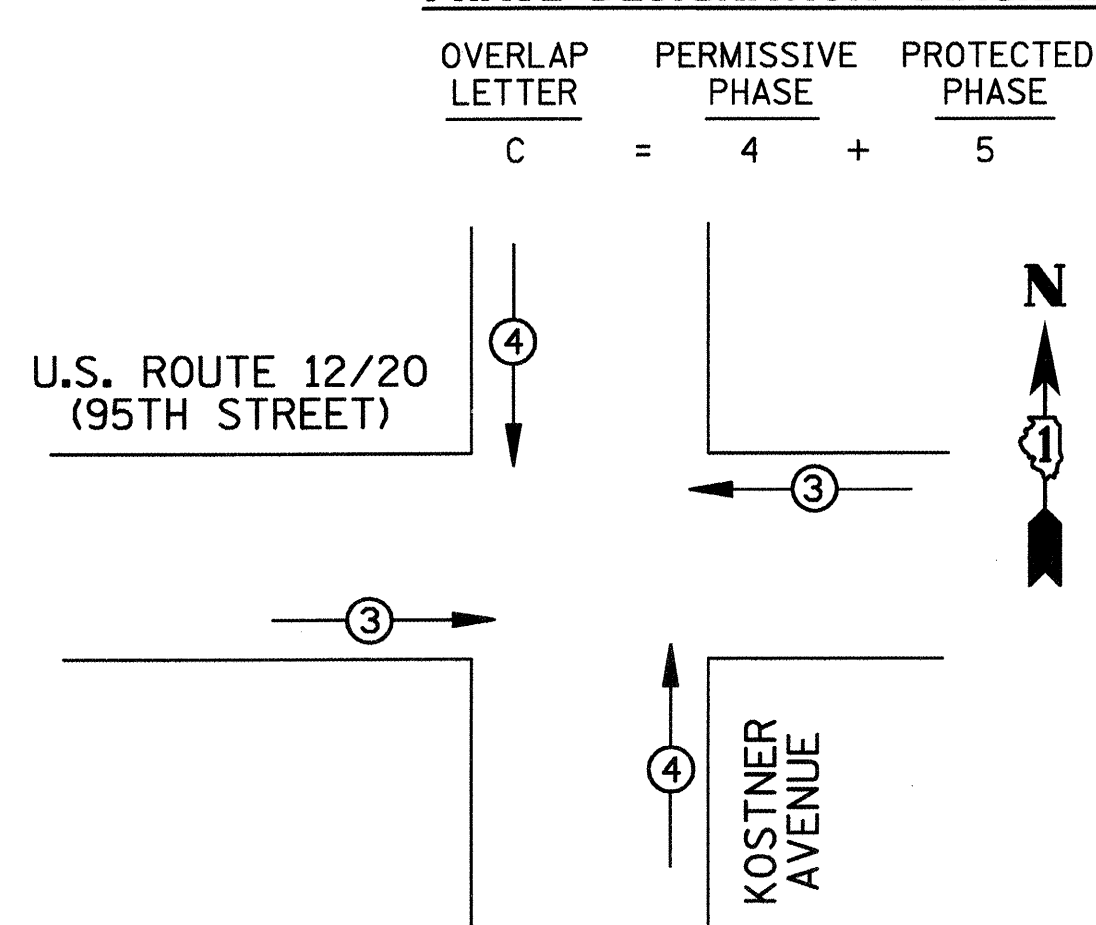


**CONTROLLER SEQUENCE**



**PHASE DESIGNATION DIAGRAM**



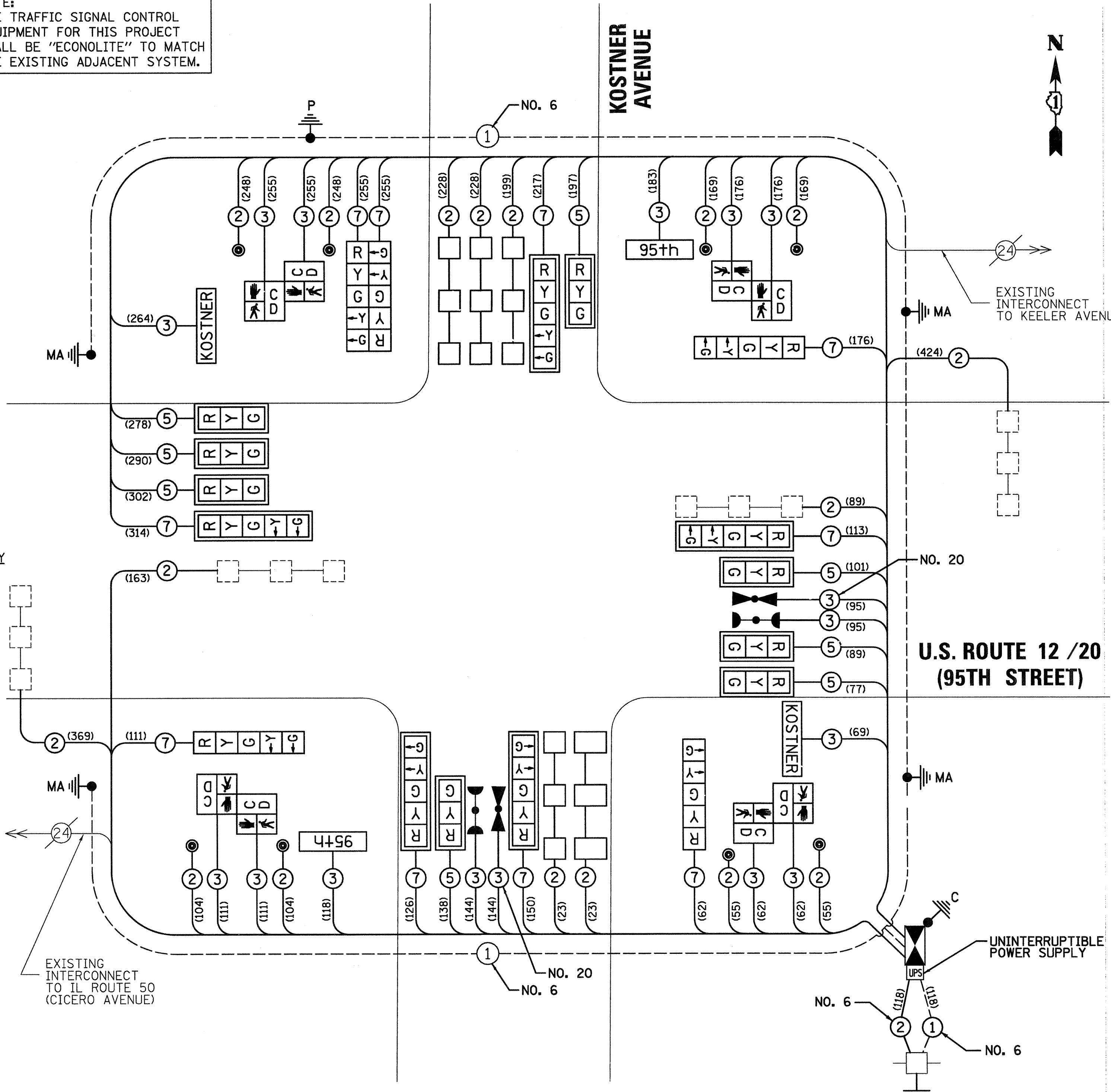
**RESTORATION OF WORK AREA**

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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
PORTLAND CEMENT CONCRETE SIDEWALK, 5"	SQ FT	322
DETECTABLE WARNINGS	SQ FT	80
SIDEWALK REMOVAL	SQ FT	322
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	27
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	152
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	9
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	48
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	376
HANDHOLE	EACH	2
HEAVY DUTY HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	2
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1152
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2081
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1472
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1779
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1746
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	118
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	441
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	27
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	13
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE 1	FOOT	516
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1019
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	3
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
* ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	239
TEMPORARY INFORMATION SIGNING	SQ FT	25.7
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
* ILLUMINATED STREET NAME SIGN, 6 FOOT	EACH	4
UNINTERRUPTIBLE POWER SUPPLY SPECIAL	EACH	1
* 100% COST TO THE VILLAGE OF OAK LAWN		



**CABLE PLAN**

NOTE: (XXX) DENOTES CABLE LENGTH TO CONTROLLER CABINET WITH SLACK CABLE.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	112.5
(GREEN)	18	135	15	0.25	67.5
ARROW	20	135	12	0.10	24
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	4		90	0.50	180
FLASHER		135	25	0.50	
ENERGY COSTS TO: 50% IDOT, 50% VILLAGE OF OAK LAWN				TOTAL =	837.0
ENERGY SUPPLY CONTACT: KATHRYN SUGRUE, (708) 235-2337, COMED					
FILE NAME =	USER NAME = JGC				DESIGNED - BPT
DRAWN - JGC					REVISED -
CHECKED - BPT					REVISED -
DATE - 10-21-11					REVISED -
PLOT SCALE = 1"=20'					
PLOT DATE = 10-21-11					

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM U.S. ROUTE 12 /20 (95TH STREET) AT KOSTNER AVENUE

PREPARED BY: CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2200 White Oak Circle, Suite 100 Aurora, Illinois 60504-9675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
029	2011-038-TS	COOK	21	15
FED. ROAD DIST. NO.				ILLINOIS FED. AID PROJECT
SCALE: N.T.S.				SHEET NO. OF SHEETS STA. TO STA.
CONTRACT NO. 60P44				