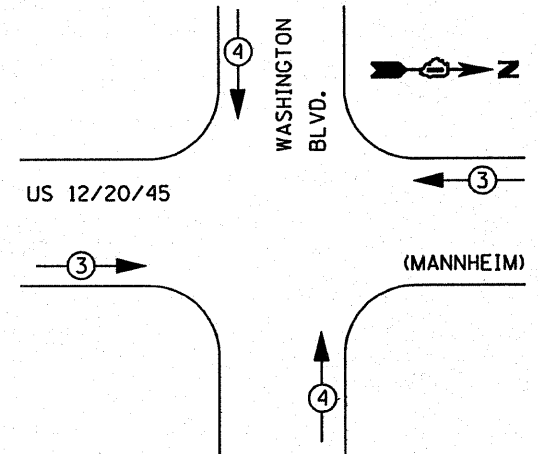


PHASE DESIGNATION DIAGRAM

PROPOSED SIGNAL INSTALLATION EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTOR			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	→	↑	↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE LED	% OPERATION	
SIGNAL (RED)	16	135	17	0.50	136.00
(YELLOW)	16	135	25	0.25	100.00
(GREEN)	16	135	15	0.25	60.00
ARROW	16	135	12	0.10	19.20
PED. SIGNAL	8	90	25	1.00	200.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER					0.50
ENERGY COSTS TO:					TOTAL = 689.20

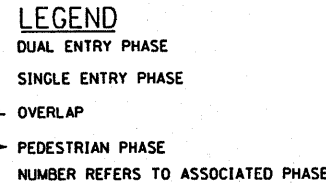
FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'-H-2'
E - M. ARM POLE		SIGNAL POST	2 (1.0)	(6m-H-0.6m)	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

ENERGY SUPPLY CONTACT:
 PHONE: 708-410-5069
 COMPANY: COM. EDISON

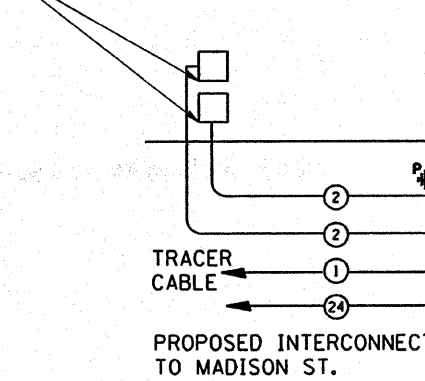
FILE NAME =
 USER NAME = kanthaphixaybc

DESIGNED - BCK
 DRAWN - BCK
 CHECKED - DAD
 DATE

REVISIONS:
 REVISED -
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 REVISED -
 REVISED -



US 12/20/45 PROPOSED INTERSECTION AND SAMPLING(SYSTEM) DETECTORS



US 12/20/45 PROPOSED INTERCONNECT TO MADISON ST.

US 12/20/45 PROPOSED INTERCONNECT TO RANDOLPH ST.

ITEM	UNIT	QUANTITY	ITEM	UNIT	QUANTITY
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO. FT	200	HANDHOLE	EACH	8
SIGN PANEL-TYPE II	SO. FT	57.50	SIDEWALK REMOVAL	SO FT	200
TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	0.1	HEAVY-DUTY HANDHOLE	EACH	4
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.1	DOUBLE HANDHOLE	EACH	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.1	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16FT.	EACH	4
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	720	CONCRETE FOUNDATION, TYPE A	FOOT	16
CONDUIT IN PUSH, 2" DIA., GALVANIZED STEEL	FOOT	401	CONCRETE FOUNDATION, TYPE C	FOOT	4
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	77	CONCRETE FOUNDATION, TYPE E 36-INCH DIA.	FOOT	60
CONDUIT IN PUSH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	18	UNINTERRUPTIBLE POWER SUPPLY	EACH	1
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	385	SIGNAL HEAD, L. E. D. 1-FACE, 3 SECTION, MAST ARM MNTD.	EACH	4
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	11	SIGNAL HEAD, L. E. D. 1-FACE, 5 SECTION, MAST ARM MNTD.	EACH	4
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	741	SIGNAL HEAD, L. E. D. 1-FACE, 1-5 SECT BRKT MNTD.	EACH	4
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET(SPECIAL) TRANSCIEVER-FIBER OPTIC	EACH	1	PEDESTRIAN PUSH-BUTTON	EACH	7
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1984	PEDESTRIAN SIGNAL HEAD, L. E. D., 1-FACE, BRKT. MNTD. with COUNTDOWN TIMER	EACH	6
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1214	PEDESTRIAN SIGNAL HEAD, L. E. D., 2-FACE, BRKT. MNTD. with COUNTDOWN TIMER	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	875	INDUCTIVE LOOP DETECTOR	EACH	12
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1595	DETECTOR LOOP TYPE I	FOOT	665
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2277	TRAFFIC SIGNAL BACKPLATE, ALUMINUM	EACH	8
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	110	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1334	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
*ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	320	REMOVE EXISTING CONCRETE FOUNDATION	EACH	25
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1	REMOVE EXISTING HANDHOLE	EACH	16
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	3	THERMOPLASTIC PAVEMENT MARKING LINE 12"	FOOT	528

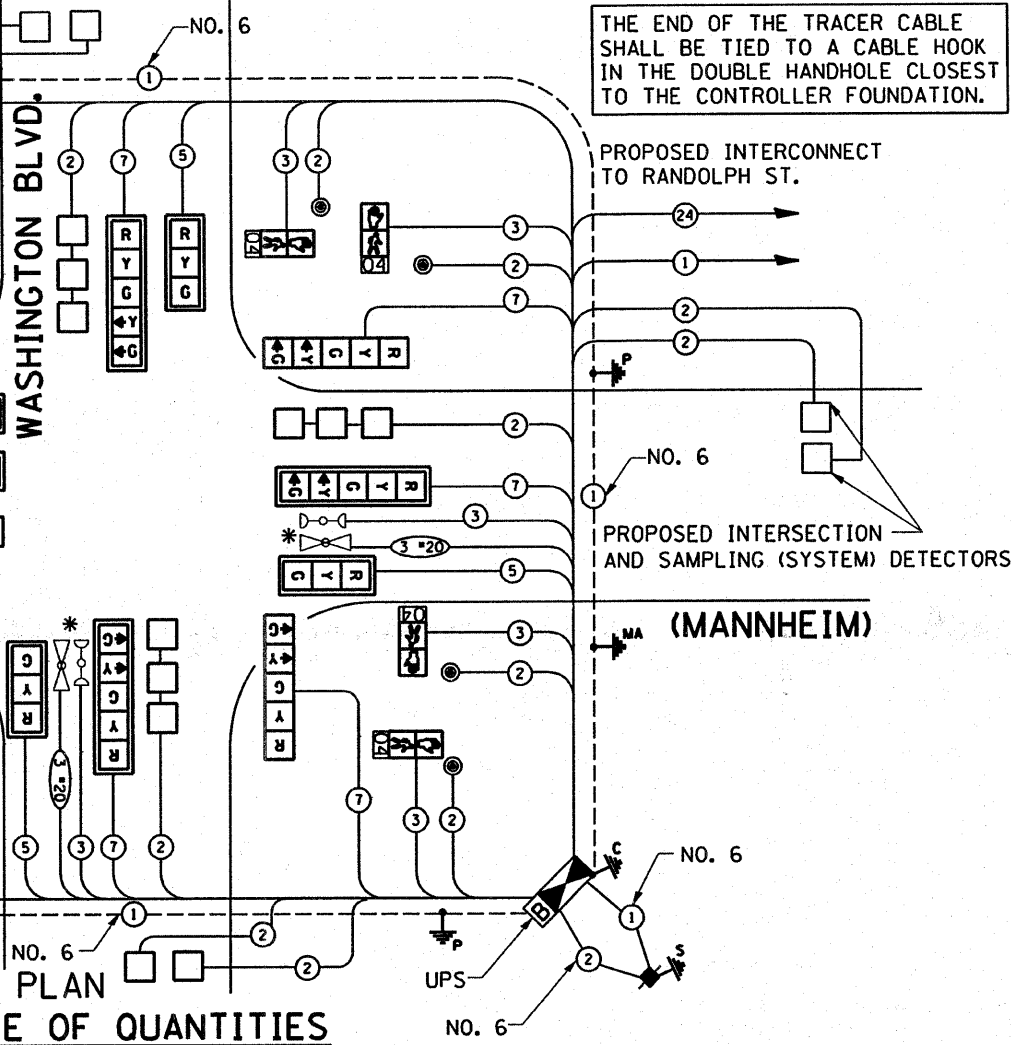
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E - M. ARM POLE		SIGNAL POST	2 (1.0)	(6m-H-0.6m)	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
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ENERGY SUPPLY CONTACT:
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CABLE PLAN SCHEDULE OF QUANTITIES

UNIT	QUANTITY	ITEM	UNIT	QUANTITY
HANDHOLE	EACH	8	TRAFFIC SIGNAL SECTION	R
SIDEWALK REMOVAL	SO FT	200	TRAFFIC SIGNAL SECTION	R
HEAVY-DUTY HANDHOLE	EACH	4	12" (300mm) PEDESTRIAN SIGNAL SECTION with COUNTDOWN TIMER	R, DW, W
DOUBLE HANDHOLE	EACH	1	ILLUMINATED SIGN "NO LEFT TURN"	R, DW, W
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16FT.	EACH	4	ILLUMINATED SIGN "NO RIGHT TURN"	R, DW, W
CONCRETE FOUNDATION, TYPE A	FOOT	16	PUSHBUTTON DETECTOR	R, DW, W
CONCRETE FOUNDATION, TYPE C	FOOT	4	DETECTOR LOOP	R, DW, W
CONCRETE FOUNDATION, TYPE E 36-INCH DIA.	FOOT	60	DETECTOR LOOP	R, DW, W
UNINTERRUPTIBLE POWER SUPPLY	EACH	1	PREFORMED DETECTOR LOOP	R, DW, W
SIGNAL HEAD, L. E. D. 1-FACE, 3 SECTION, MAST ARM MNTD.	EACH	4	MICROWAVE VEHICLE SENSOR	R, DW, W
SIGNAL HEAD, L. E. D. 1-FACE, 5 SECTION, MAST ARM MNTD.	EACH	4	VIDEO DETECTOR	R, DW, W
SIGNAL HEAD, L. E. D. 1-FACE, 1-5 SECT BRKT MNTD.	EACH	4	CLOSED CIRCUIT TV	R, DW, W
PEDESTRIAN PUSH-BUTTON	EACH	7	EMERGENCY VEHICLE SYSTEM DETECTOR	R, DW, W
PEDESTRIAN SIGNAL HEAD, L. E. D., 1-FACE, BRKT. MNTD. with COUNTDOWN TIMER	EACH	6	CONFIRMATION BEACON	R, DW, W
PEDESTRIAN SIGNAL HEAD, L. E. D., 2-FACE, BRKT. MNTD. with COUNTDOWN TIMER	EACH	1	UNINTERRUPTIBLE POWER SUPPLY	R, DW, W
INDUCTIVE LOOP DETECTOR	EACH	12		
DETECTOR LOOP TYPE I	FOOT	665		
TRAFFIC SIGNAL BACKPLATE, ALUMINUM	EACH	8		
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		
REMOVE EXISTING CONCRETE FOUNDATION	EACH	25		
REMOVE EXISTING HANDHOLE	EACH	16		
THERMOPLASTIC PAVEMENT MARKING LINE 12"	FOOT	528		
THERMOPLASTIC PAVEMENT MARKING LINE 24"	FOOT	151		
THERMOPLASTIC PAVEMENT MARKING REMOVAL	FOOT	781		
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2		
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING	EACH	1		
TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	1		

CABLE PLAN LEGEND

PROPOSED	EXISTING
CONTROLLER CABINET	[Symbol]
RAILROAD CONTROL CABINET	[Symbol]
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	[Symbol]
TELEPHONE CONNECTION	[Symbol]
GROUND ROD AT (C) CONTROLLER, (H)HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE	[Symbol]
FIBER OPTIC CABLE IN CONDUIT, NUMBER OF FIBERS AS NOTED	[Symbol]
ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED, NUMBER OF CONDUCTORS AS NOTED	[Symbol]
GROUND CABLE IN CONDUIT NO. 6 COPPER (GREEN)	[Symbol]
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD	[Symbol]
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE	[Symbol]
12" (300mm) TRAFFIC SIGNAL SECTION	[Symbol]
12" (300mm) PEDESTRIAN SIGNAL SECTION with COUNTDOWN TIMER	[Symbol]
ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]
ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]
PUSHBUTTON DETECTOR	[Symbol]
DETECTOR LOOP	[Symbol]
PREFORMED DETECTOR LOOP	[Symbol]
MICROWAVE VEHICLE SENSOR	[Symbol]
VIDEO DETECTOR	[Symbol]
CLOSED CIRCUIT TV	[Symbol]
EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]
CONFIRMATION BEACON	[Symbol]
UNINTERRUPTIBLE POWER SUPPLY	[Symbol]

* 100% COST TO VILLAGE OF BELLWOOD

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

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, MEDIAN, 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 SEEDD IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED CABLE PLAN US 12/20/45 (MANNHEIM) @ WASHINGTON BLVD.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	2008-006 TS	COOK	100	64

CONTRACT NO. 60E31

SCALE: SHEET NO. OF SHEETS STA. TO STA.

FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT