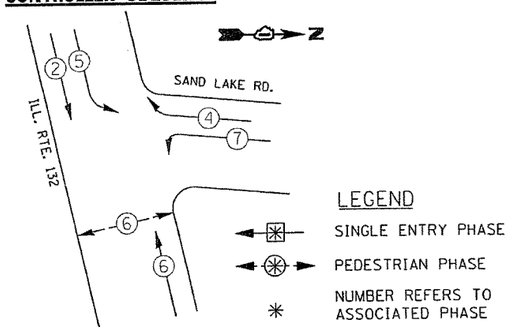
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	2004-121 TS	LAKE	19	16
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

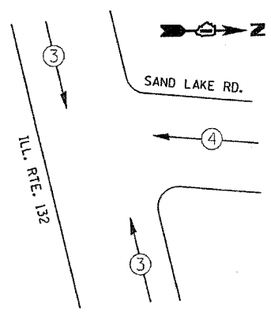
CONTRACT NO. 62B87

CONTROLLER SEQUENCE

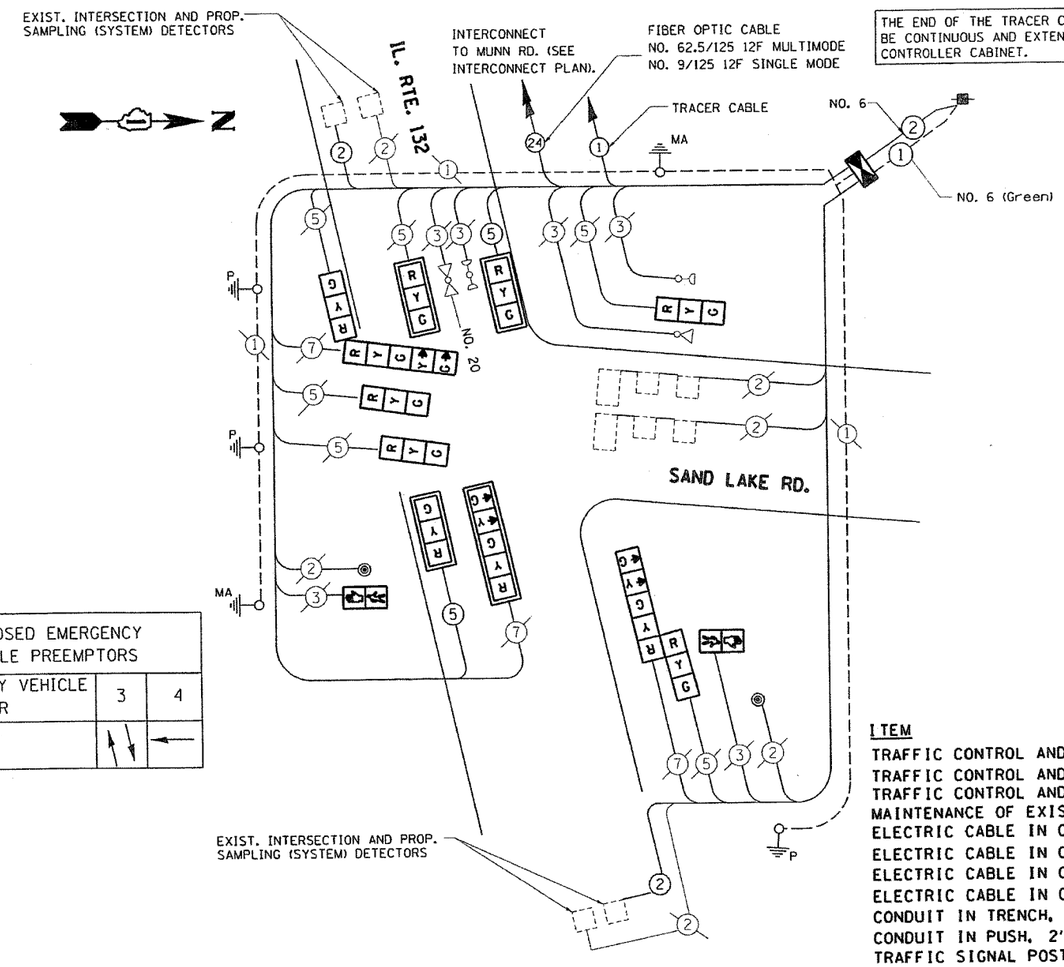


PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		



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

CABLE PLAN

CABLE PLAN LEGEND

EXISTING	PROPOSED	
		8" (200mm) TRAFFIC SIGNAL SECTION
		12" (300mm) TRAFFIC SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE CONNECTION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.

EXISTING	PROPOSED	
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MMI2F SMI2F
R Y G "P"	R Y G "P"	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
"E"		RAILROAD CONTROL CABINET
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C).
P	P	GROUND ROD AT POST (P), OR MAST ARM POLE (MA).
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	.17
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	.17
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	.17
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1 C	FOOT	37
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	FOOT	705
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2 C	FOOT	37
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	295.5
CONDUIT IN TRENCH, 2" DIA. GALVANIZED STEEL	FOOT	395
CONDUIT IN PUSH, 2" DIA. GALVANIZED STEEL	FOOT	48
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED.	EACH	3
SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION BRK. MNTED.	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED.	EACH	3
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED.	EACH	1
TRANSCEIVER-FIBER OPTIC	EACH	1
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	37
INDUCTIVE LOOP DETECTOR	EACH	6
DRILL EXISTING HANDHOLE	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
PEDESTRIAN PUSH-BUTTON	EACH	2

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	135	17	0.50	93.50
(YELLOW)	9	135	25	0.25	68.75
(GREEN)	9	135	15	0.25	41.25
ARROW	6	135	12	0.10	7.20
PED. SIGNAL	2	90	25	1.00	50.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
				TOTAL =	360.70

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: AMADOR VELEZ
PHONE: (847) 816-5248
COMPANY: COM. EDISON

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'+L-2=	(6m+L-0.6m)=
E - M. ARM POLE			SIGNAL POST	2	(1.0)			
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)
			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)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE, AND SCHEDULE OF QUANTITIES
IL. RTE. 132 @ SAND LAKE RD.

SCALE: VERT. 1"=20' HORIZ.
DATE 5/3/2006

DRAWN BY: BCK
DESIGNED BY: BCK
CHECKED BY: DAD

5/3/2006
c:\projects\traffic\t013100\132\granada.m32
kanthaphixaybc

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