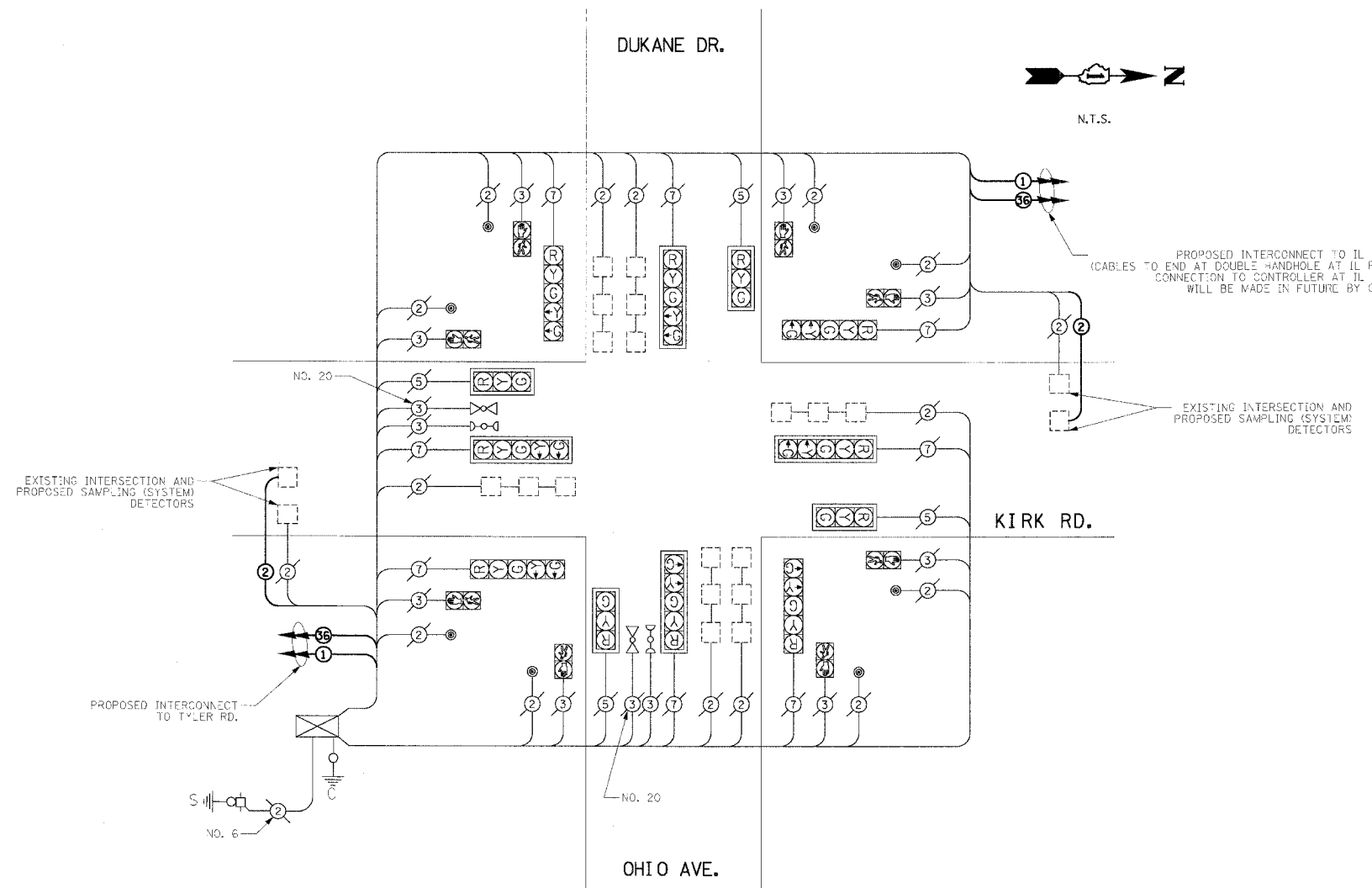


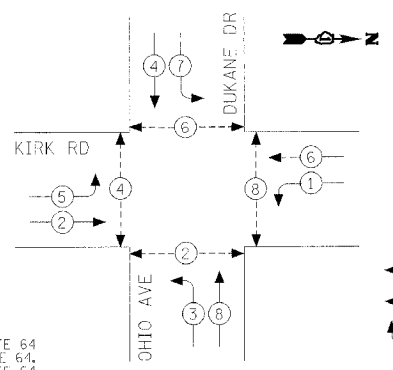
### CABLE PLAN LEGEND

- |  |   |
|--|---|
|  | <b>8"</b> (200mm) TRAFFIC SIGNAL SECTION  |
|  | <b>12"</b> (300mm) TRAFFIC SIGNAL SECTION   |
|  | <b>12"</b> (300mm) PEDESTRIAN SIGNAL SECTION  |
|  | CONTROLLER CABINET  |
|  | SERVICE INSTALLATION  |
|  | TELEPHONE CONNECTION  |
|  | VEHICLE DETECTOR, INDUCTION LOOP  |
|  | MAGNETIC DETECTOR   |
|  | EMERGENCY VEHICLE LIGHT DETECTOR  |
|  | CONFIRMATION BEACON   |
|  | PUSHBUTTON DETECTOR   |
|  | DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
|  | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)  |
|  | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F   |
|  | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.  |
|  | RAILROAD CONTROL CABINET  |
|  | ILLUMINATED SIGN "NO LEFT TURN"   |
|  | ILLUMINATED SIGN "NO RIGHT TURN"  |
|  | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (HH), OR CONTROLLER (C)   |
|  | GROUND ROD AT POST (P) OR MAST ARM POLE (MA)  |
|  | GROUND ROD AT ELECTRIC SERVICE INSTALLATION   |
|  | MICROWAVE VEHICLE SENSOR  |
|  | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM24F SM12F   |

### CABLE PLAN



### EXISTING CONTROLLER SEQUENCE



- #### LEGEND
- DUAL ENTRY PHASE
  - SINGLE ENTRY PHASE
  - OVERLAP
  - PEDESTRIAN PHASE
  - NUMBER REFERS TO ASSOCIATED PHASE

### SCHEDULE OF QUANTITIES

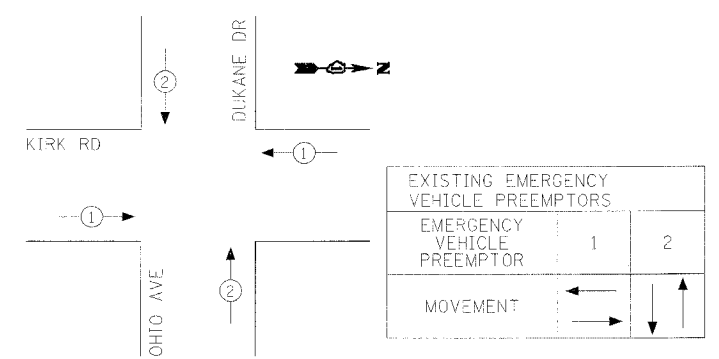
QTY	UNIT	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRANSCEIVER - FIBER OPTIC
780	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
2	EACH	DRILL EXISTING HANDHOLE
2	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	MODIFY EXISTING CONTROLLER

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	LED	% OPERATION	
SIGNAL (RED)	12	135	17	0.50	810.0
(YELLOW)	12	135	25	0.25	405.0
(GREEN)	12	135	15	0.25	405.0
ARROW	16	135	12	0.10	216.0
PED. SIGNAL	8	90	25	1.00	720.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
TOTAL =					2656.0

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

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

### EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



**KENIG, LINDGREN, O'HARA, ABOONA, INC.**  
9575 West Higgins Road, Suite 400  
Rosemont, Illinois 60018  
(847) 518-9990 FAX (847) 518-9987

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES

KIRK RD AT OHIO AVE/DUKANE DR

SCALE: NONE  
DATE: 07/19/05  
DRAWN BY: DMS  
DESIGNED BY: DMS  
CHECKED BY: DMS