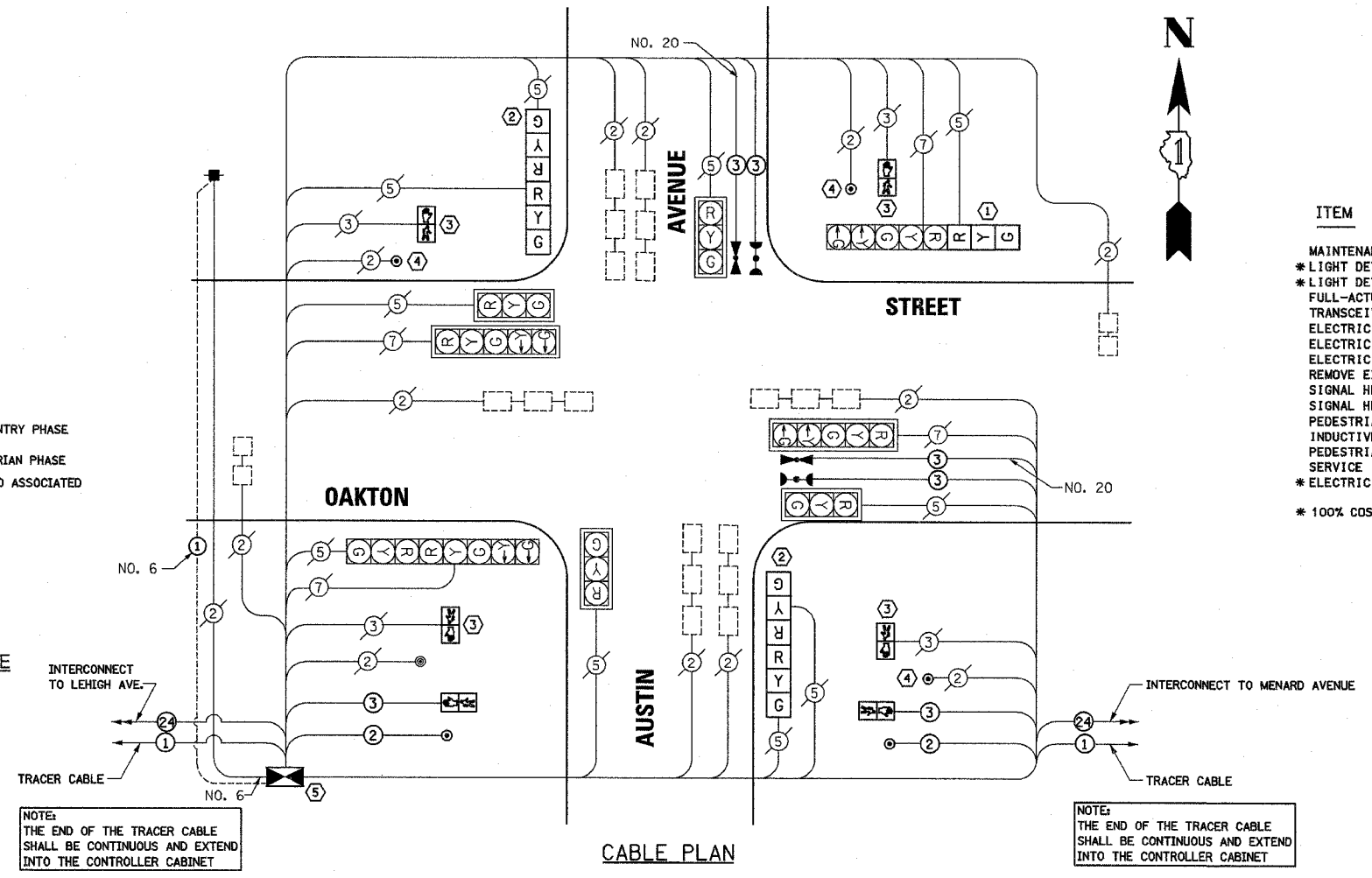


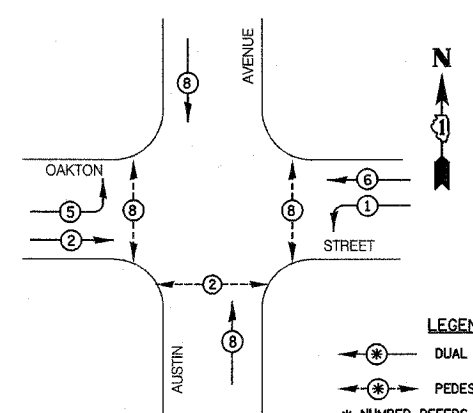
F.A.I.D. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1332	2004-022TS	COOK	20	13
STA.	TO STA.			
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
CONTRACT NO. 62741				

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
TRANSCIVER-FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	245
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	687
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	216
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	6
INDUCTIVE LOOP DETECTOR	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	5
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
* ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	422
* 100% COST TO VILLAGE OF MORTON GROVE		



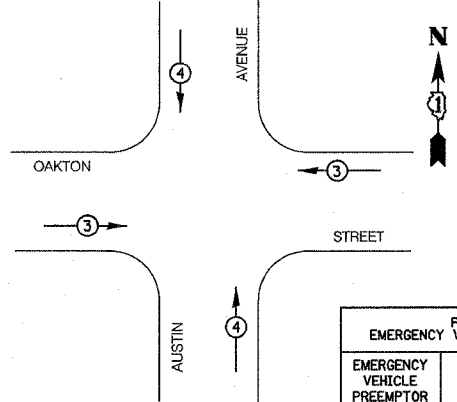
CONTROLLER SEQUENCE



LEGEND
 * (circle with arrow) DUAL ENTRY PHASE
 * (circle with pedestrian) PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

CONSTRUCTION NOTES:

- REMOVE EXISTING 8" SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED, INSTALL NEW 12" SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED.
- REMOVE EXISTING 8" SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED, AND INSTALL NEW 12" SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED.
- REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED, AND INSTALL NEW LED PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED.
- REMOVE EXISTING PEDESTRIAN PUSH-BUTTON. INSTALL NEW PEDESTRIAN PUSH-BUTTON.
- REMOVE EXISTING CONTROLLER AND CABINET, INSTALL NEW CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
- THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
(G)	(G)	(1)	(1)
(R)	(R)	(24)	(24)
(W)	(W)	(R)	(R)
(S)	(S)	(R)	(R)
(E)	(E)	(R)	(R)
(M)	(M)	(R)	(R)
(D)	(D)	(R)	(R)
(I)	(I)	(R)	(R)
(C)	(C)	(R)	(R)
(P)	(P)	(R)	(R)
(S)	(S)	(R)	(R)
(M)	(M)	(R)	(R)

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	X % OPERATION	
SIGNAL (RED)	14	135		0.50	945.0
(YELLOW)	14	135		0.25	472.5
(GREEN)	14	135		0.25	472.5
ARROW	8	135		0.10	108.0
PED. SIGNAL	6	90	25	1.00	150.0
CONTROLLER	1	100		1.00	100.0
TOTAL =					2248.0

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 - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m+L-0.6m)=
C - M. ARM POLE		SIGNAL POST	2 (0.6)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

SETON ENGINEERING
 SERVICE CORPORATION
 CIVIL ENGINEERS
 19 S. BOWEN STREET
 PALATINE, ILLINOIS 60067
 VOICES 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
 OAKTON STREET AT AUSTIN AVENUE
 MORTON GROVE, ILLINOIS

SCALE: N.T.S.
 DATE: 09-20-2004

DRAWN BY: BR
 DESIGNED BY: VO
 CHECKED BY: TJM