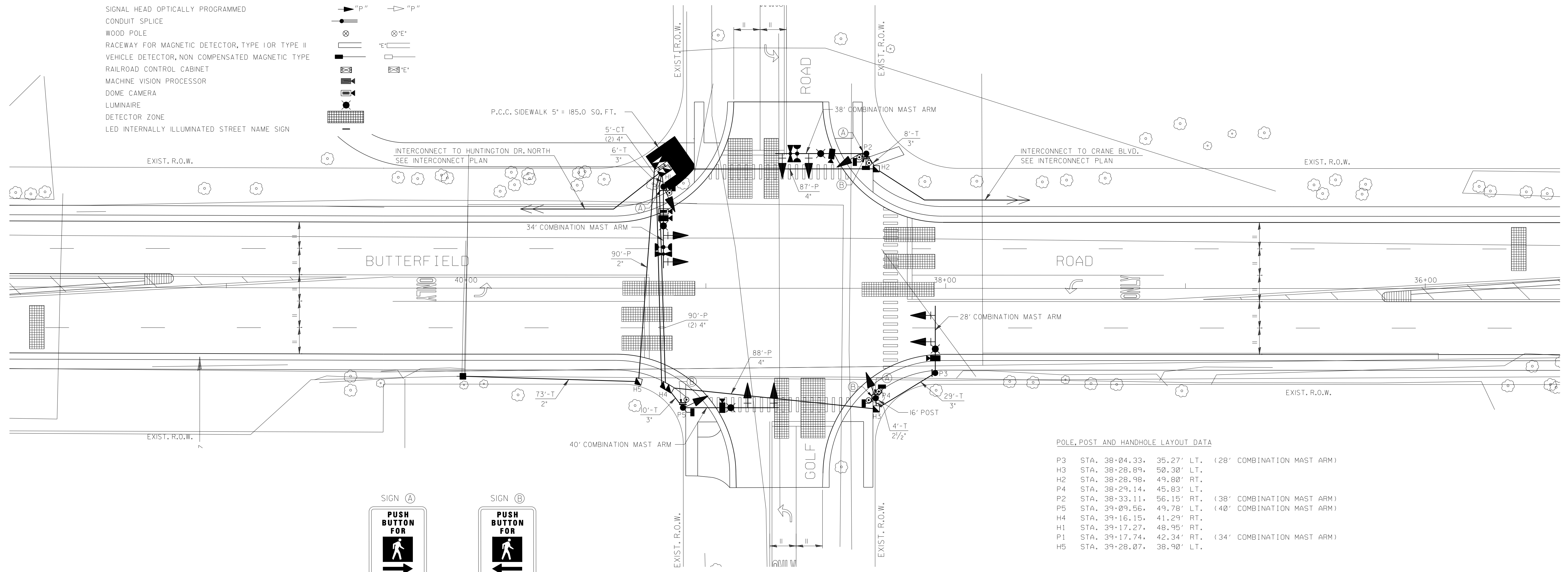
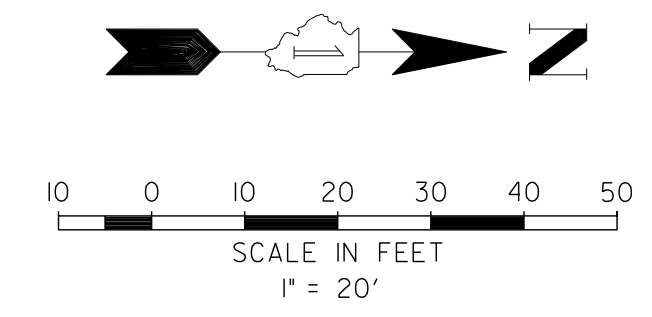
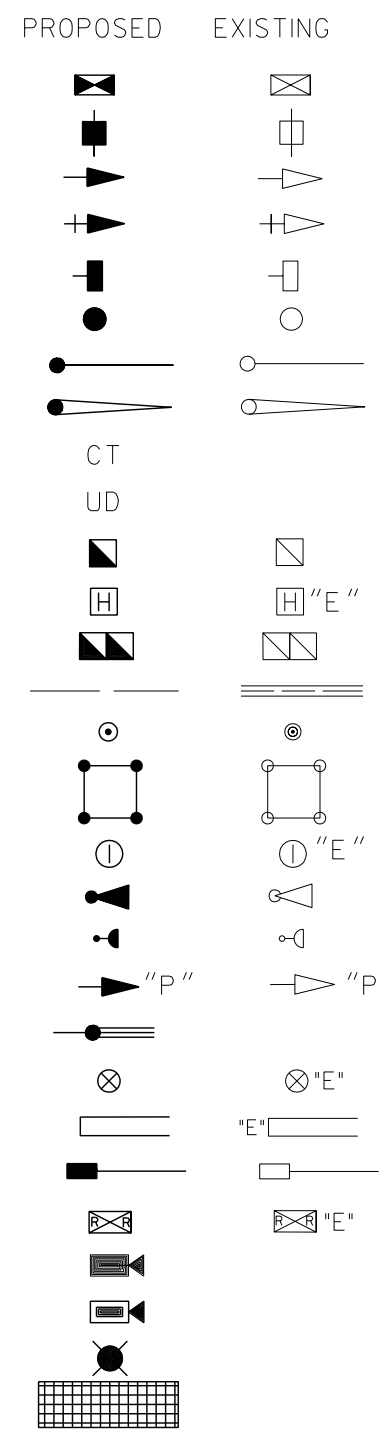


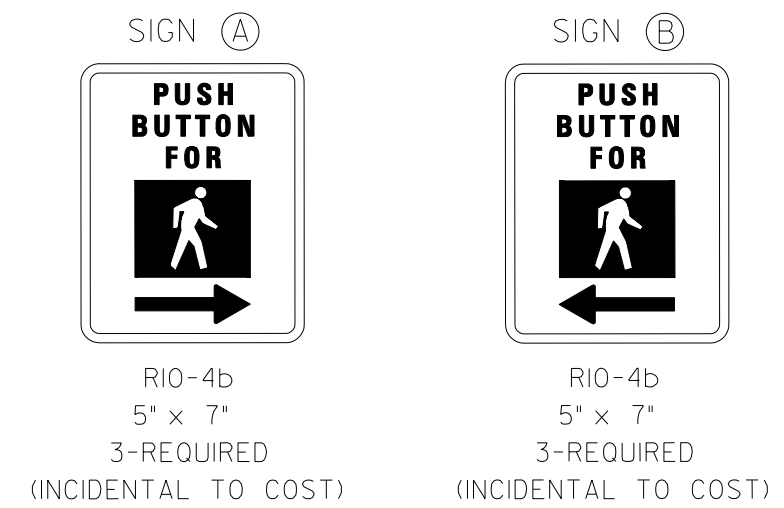
TRAFFIC SIGNAL LEGEND

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMMON TRENCH
- UNIT DUCT
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH OR PUSHED
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP
- CAST IRON JUNCTION BOX
- EMERGENCY VEHICLE SYSTEM DETECTOR
- CONFIRMATION BEACON
- SIGNAL HEAD OPTICALLY PROGRAMMED
- CONDUIT SPLICE
- WOOD POLE
- RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
- VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
- RAILROAD CONTROL CABINET
- MACHINE VISION PROCESSOR
- DOVE CAMERA
- LUMINAIRE
- DETECTOR ZONE
- LED INTERNALLY ILLUMINATED STREET NAME SIGN



POLE, POST AND HANDHOLE LAYOUT DATA

P3	STA. 38+04.33,	35.27' LT.,	(28' COMBINATION MAST ARM)
H3	STA. 38+28.89,	50.30' LT.,	
H2	STA. 38+28.98,	49.80' RT.,	
P4	STA. 38+29.14,	45.83' LT.,	
P2	STA. 38+33.11,	56.15' RT.,	(38' COMBINATION MAST ARM)
P5	STA. 39+09.56,	49.78' LT.,	(40' COMBINATION MAST ARM)
H4	STA. 39+16.15,	41.29' RT.,	
H1	STA. 39+17.27,	48.95' RT.,	
P1	STA. 39+17.74,	42.34' RT.,	(34' COMBINATION MAST ARM)
H5	STA. 39+28.07,	38.90' LT.,	



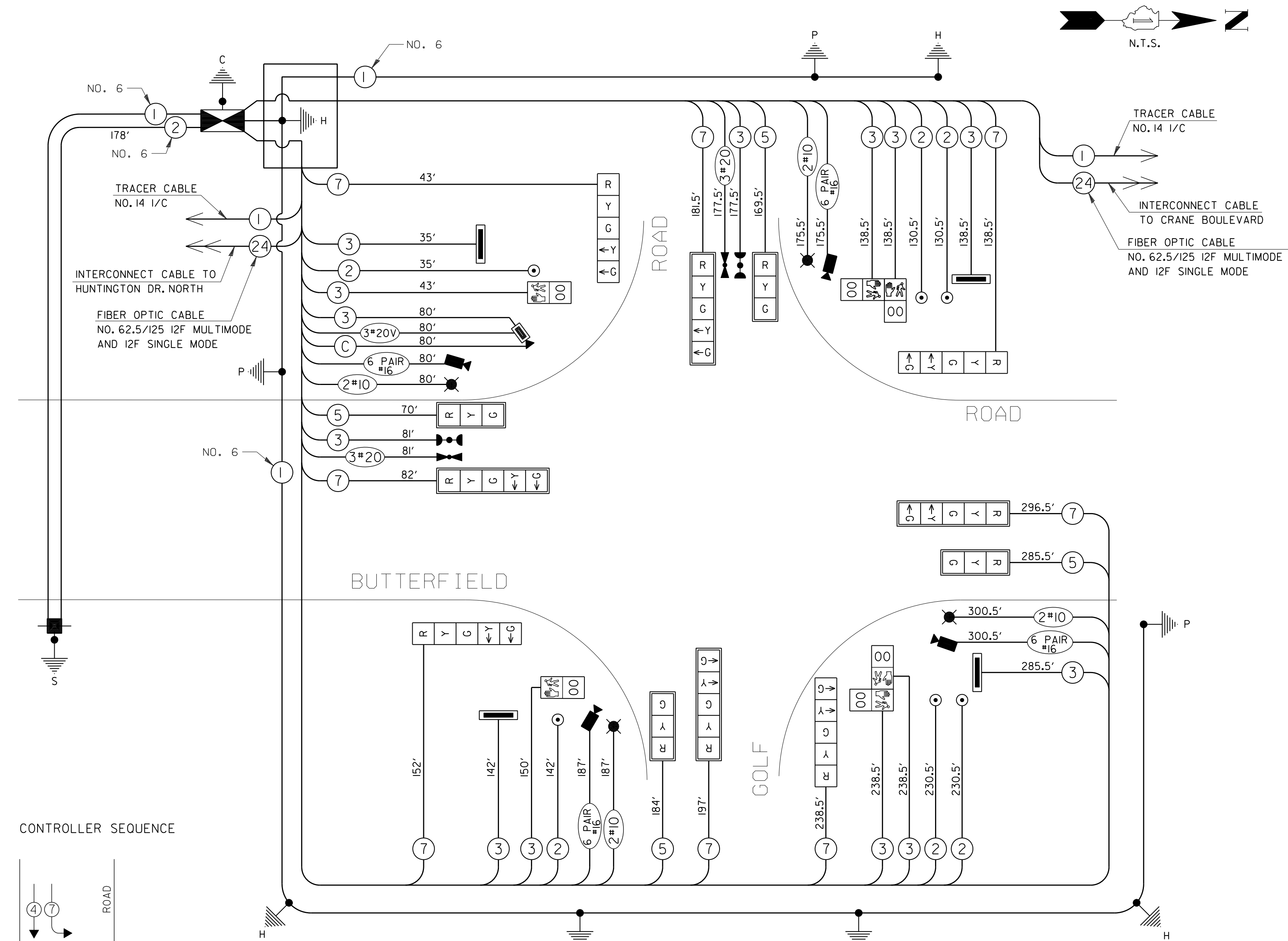
NO.	DATE	NATURE OF REVISION	CHKD.

SCHEDULE OF QUANTITIES

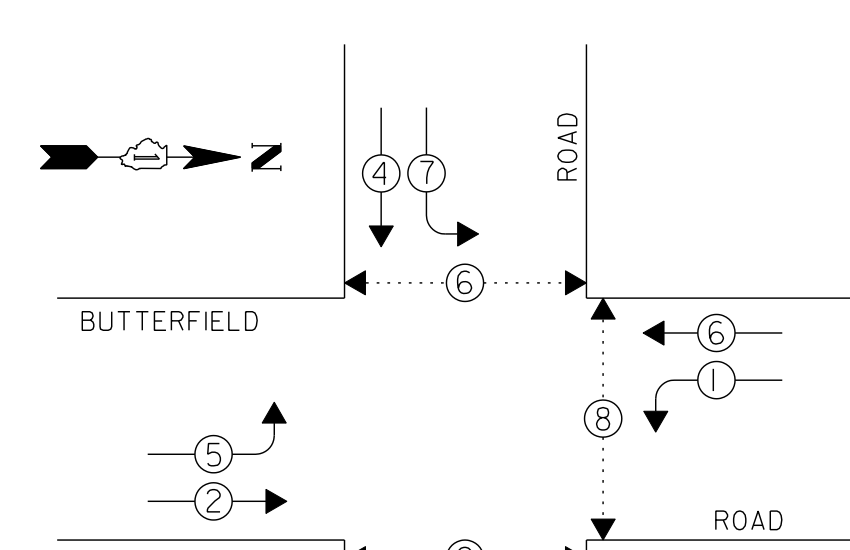
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	185
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	73
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	53
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	90
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	355
HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	617
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 2-1/C NO. 10	FOOT	743
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	899
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1909
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	709
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1329
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	743
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	178
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	80
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 3C	FOOT	80
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	259
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	60
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE	EACH	8
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	6
TRANSCEIVER - FIBER OPTIC	EACH	1
SERVICE INSTALLATION, POLE MOUNT	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	237
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	9
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
VIDEO DETECTION SYSTEM	EACH	1

CABLE PLAN LEGEND

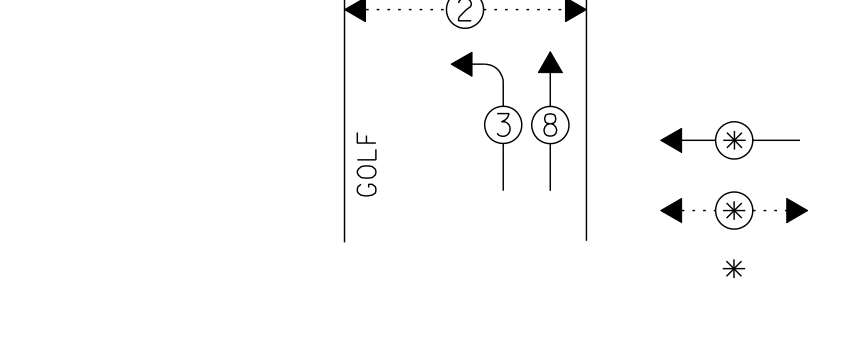
EXISTING	PROPOSED	DESCRIPTION
		8' TRAFFIC SIGNAL SECTION
		12' TRAFFIC SIGNAL SECTION
		12' PEDESTRIAN SIGNAL SECTION
		12' PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY 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 2-MMI2F & SMI2F
		SIGNAL FACE WITH BACKPLATE. 'P' INDICATES PROGRAMMED HEAD.
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN, FIBER OPTIC 'NO LEFT TURN'
		ILLUMINATED SIGN, FIBER OPTIC 'NO RIGHT TURN'
		GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
		GROUND ROD AT POST OR MAST ARM POLE
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		LUMINAIRE
		COAXIAL CABLE
		MACHINE VISION PROCESSOR
		DOME CAMERA
		VIDEO CABLE, NO. 20 3/C
		LED INTERNALLY ILLUMINATED STREET NAME SIGN



CONTROLLER SEQUENCE



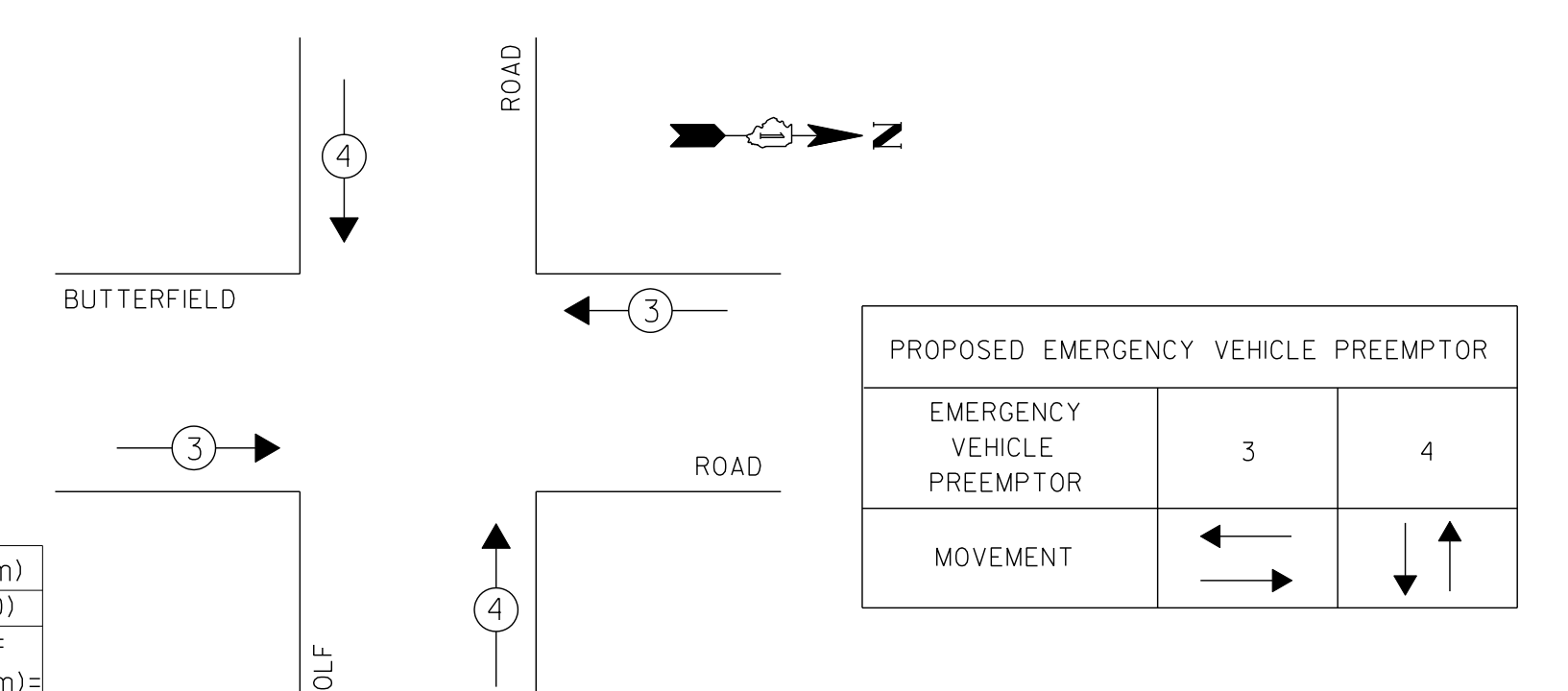
PHASE DESIGNATION DIAGRAM



LEGEND

- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

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. OF LAMPS	INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	8		12	0.10	9.6
PED. SIGNAL	6		25	1.00	150
CONTROLLER	1		300	1.00	300

ENERGY COSTS TO: TOTAL = 681.6

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT I  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: PAUL CRUZ  
 PHONE: (847) 816-5331  
 COMPANY: COMED

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=
C - 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)

**CHRISTOPHER B. BURKE** ENGINEERING LTD.  
 9575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

CLIENT:

NO.	DATE	NATURE OF REVISION	CHKD.

DESIGN: ABR  
 DRAWN: FPB  
 CHECKED: GMZ  
 SCALE: N.T.S.  
 DATE: 11/02/2001

TITLE: SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM  
 BUTTERFIELD ROAD AT GOLF ROAD

PROJECT NO. 99-455  
 SHEET 101 OF 226  
 DRAWING NO. TSD 3-5