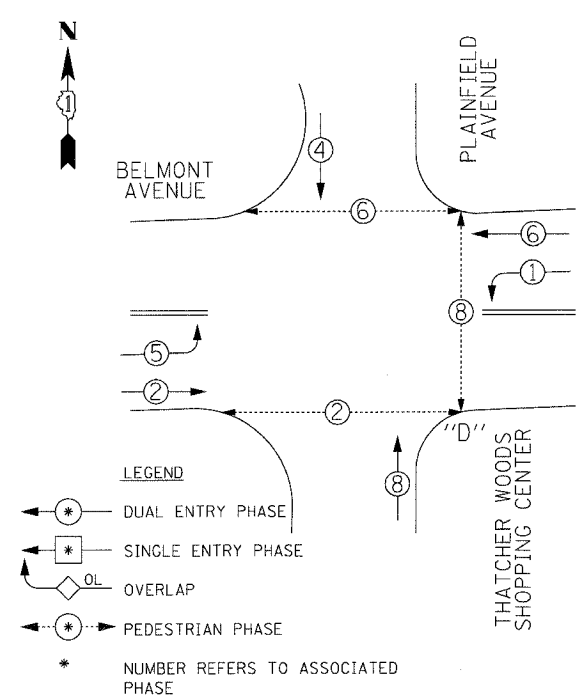


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0106 WRS	COOK	42	18
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		D-91-106-07	

CONTROLLER SEQUENCE



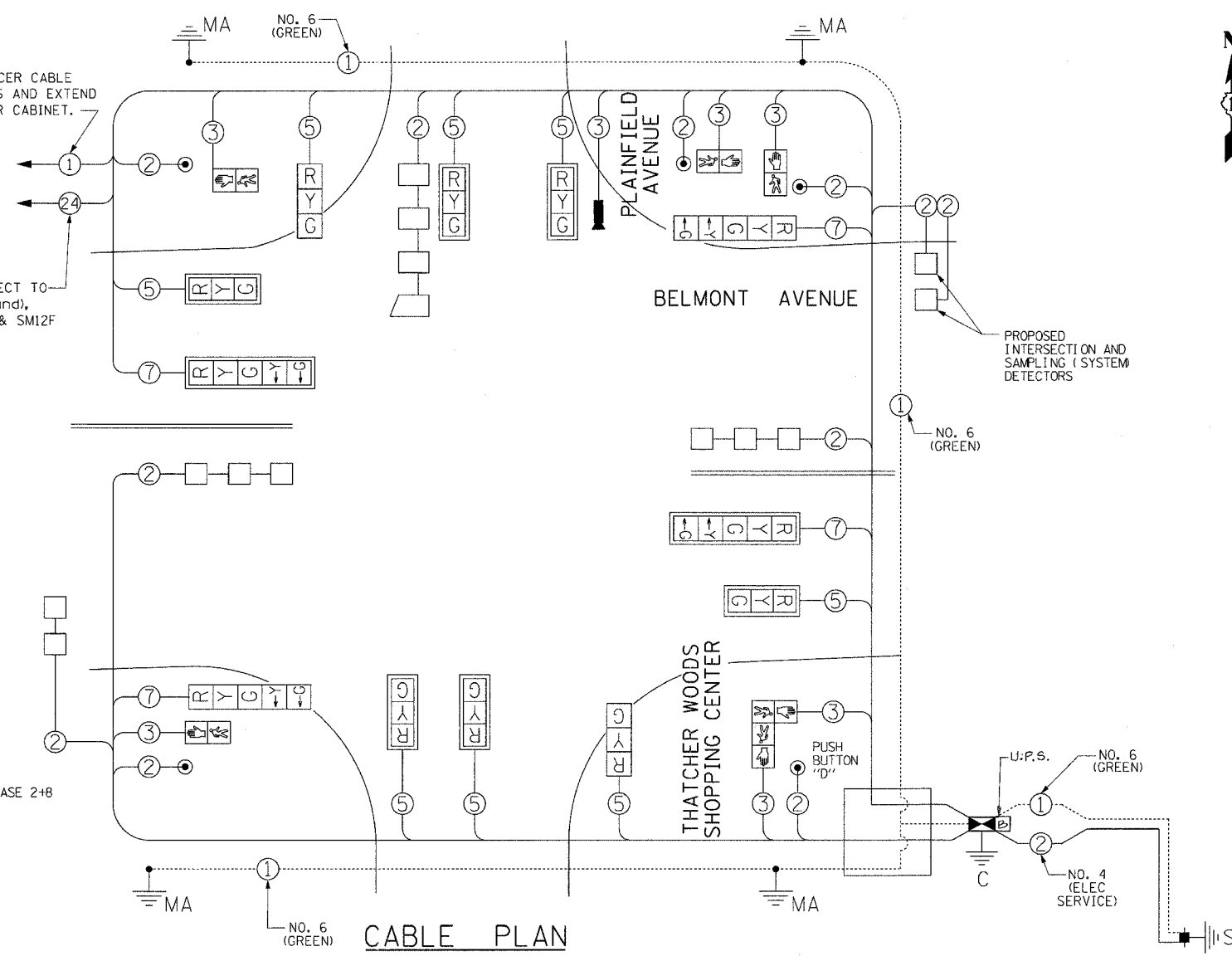
- LEGEND**
- DUAL ENTRY PHASE
 - SINGLE ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

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

PROPOSED INTERCONNECT TO IL. Rte. 171(Cumberland), NO. 62.5/125, MM12F & SM12F

PUSH BUTTON "D" SHALL PLACE A CALL IN PHASE 2+8



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY	ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	34.5	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT.	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	574	CONCRETE FOUNDATION, TYPE A	FOOT	4
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	6	CONCRETE FOUNDATION, TYPE C	FOOT	4
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	18	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	350	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	55	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	225	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
HANDHOLE	EACH	6	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
HEAVY-DUTY HANDHOLE	EACH	2	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	4
DOUBLE HANDHOLE	EACH	1	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	748	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1	INDUCTIVE LOOP DETECTOR	EACH	6
TRANSCEIVER - FIBER OPTIC	EACH	1	DETECTOR LOOP, TYPE 1	FOOT	607
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	639	PEDESTRIAN PUSH-BUTTON	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	911	SERVICE INSTALLATION, POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1292	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	842
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	591	VIDEO CAMERA DETECTION SYSTEM (COMPLETE)	L SUM	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1559	UPS BATTERY BACK-UP	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 4 2 C	FOOT	398	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL II	L SUM	1
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1			

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 (0.6)		(6m±L-0.6m)±
30" (750mm)	10 (3.0)	CONTROLLER CAB.	1 (0.3)	BRACKET MOUNTED	13 (4.0)
36" (900mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.3)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.3)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

THE BRAND OF CONTROLLER SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM INSTALLATION.

INFRASTRUCTURE ENGINEERING, INC.
 33 W. MONROE ST., SUITE 1540
 CHICAGO, IL 60603-5322
 PHONE 312.425.9560
 FAX 312.425.9564

- 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 |
| | | ① GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | ②④ 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 (H), OR CONTROLLER (C) |
| | | GROUND ROD AT POST (P) OR MAST ARM POLE (MA) |
| | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | VIDEO CAMERA DETECTOR |
| | | UNINTERRUPTIBLE POWER SUPPLY |

NOTE: EQUIPMENT GROUND CONDUCTOR (GREEN COLOR CODED) SPLICE TO FRAME AND COVER IS REQUIRED FOR ALL HANDHOLES OR DOUBLE HANDHOLES THAT CARRY SIGNAL CABLES AND SERVICE CABLES.

REVISIONS

NAME	DATE
60% PRELIMINARY SUBMITTAL	01-22-07
90% PRE-FINAL SUBMITTAL	02-27-07
100% FINAL SUBMITTAL	03-12-07
REVISION 1	04-16-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES (VIDEO CAMERA DETECTION OPTION)
 BELMONT AVENUE AT PLAINFIELD AVENUE
 SCALE: VERT. NONE
 HORIZ. NONE
 DATE 04-16-07
 DRAWN BY TPC
 DESIGNED BY TPC
 CHECKED BY ER

PLOT DATE = 04/16/07
 FILE NAME = 0106 WRS
 PLOT SCALE = 1/8"=1'-0"
 USER NAME = WRS

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

TYPE	NO. LAMPS*	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102.00
(YELLOW)	12	135	25	0.25	75.00
(GREEN)	12	135	15	0.25	45.00
ARROW	8	135	12	0.10	9.60
PED. SIGNAL	12	90	25	1.00	300.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN	0	84		0.05	0.00
FLASHER	0				0.00
ENERGY COSTS TO: TOTAL =					631.60

ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 WEST CENTER COURT
 SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY CONTACT: MR. LARRY KESLINKE
 PHONE: (708) 410-5314
 COMPANY: COM. ED.