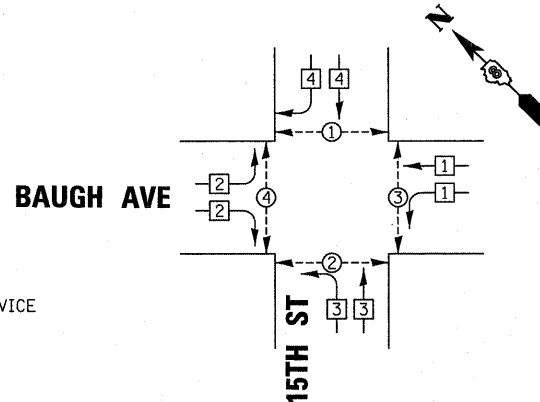


CABLE PLAN

PROPOSED TRAFFIC SIGNAL LEGEND

- ⊕ DENOTES NUMBER OF CONDUCTORS
- ⊗ CONTROLLER
- ⊙ PEDESTRIAN PUSHBUTTON
- ⊠ PEDESTRIAN SIGNAL
- RYG VEHICULAR SIGNAL FACE WITH BACKPLATE
- 6'x50' VEHICULAR DETECTOR WITH INDUCTION LOOP SIZE
- S CABLE SPLICE



PHASE DESIGNATION DIAGRAM

- ⊕ VEHICULAR PHASE
- ⊙ PEDESTRIAN PHASE
- # ASSOCIATED PHASE NUMBER

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	←	↔	↗	↘	-	-	-	-
CONCURRENT MOVEMENT PERMITTED	-	-	-	-	NOT USED	NOT USED	NOT USED	NOT USED

PROPOSED SEQUENCE OF OPERATION

- PROTECTED VEHICULAR MOVEMENT
- - - PERMISSIVE VEHICULAR MOVEMENT
- - - PEDESTRIAN MOVEMENT

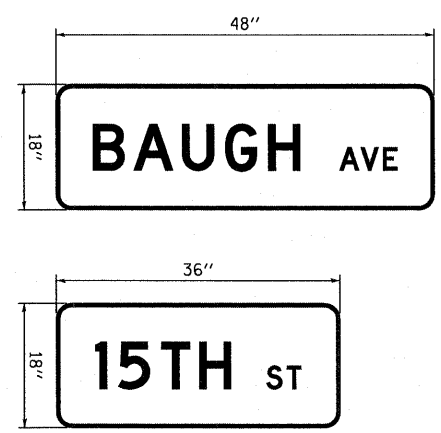
LOOP FINAL CONFIGURATION	PHASE ϕ	LOOP SIZE (FT)	REQUIRED * OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
NB 15TH LT TURN LN	3	6' x 50'	3-6-3	795.152	1.798
NB 15TH THRU LN	3	6' x 50'	3-6-3	792.675	1.742
SB 15TH RT TURN LN	4	6' x 50'	3-6-3	793.480	1.760
SB 15TH THRU LN	4	6' x 50'	3-6-3	796.076	1.819
WB BAUGH LT TURN LN	1	6' x 50'	3-6-3	793.106	1.752
WB BAUGH THRU/RT LN	1	6' x 50'	3-6-3	793.172	1.753
EB BAUGH LT TURN LN	2	6' x 50'	3-6-3	794.162	1.776
EB BAUGH RT TURN LN	2	6' x 50'	3-6-3	791.478	1.715

THE ABOVE VALUES ARE CALCULATED FOR COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN $\pm 20\%$ OF THESE VALUES.

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
72000100	SIGN PANEL - TYPE 1	SQ FT	32
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
81012300	CONDUIT IN TRENCH, 1" DIA., PVC	FOOT	176
81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	182
81012800	CONDUIT IN TRENCH, 3" DIA., PVC	FOOT	190
81013000	CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	19
81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	233
81400100	HANDHOLE	EACH	3
81400300	DOUBLE HANDHOLE	EACH	1
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	313
81900302	TRENCH AND BACKFILL WITH SCREENINGS OR SAND	FOOT	254
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
87100160	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, 24F	FOOT	426
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	621
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	625
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3269
87301405	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 16 1 PAIR	FOOT	1342
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	101
87502490	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	1
87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
87702730	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 50 FT.	EACH	1
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	3.5
87800300	CONCRETE FOUNDATION, TYPE E 24-INCH DIAMETER	FOOT	3
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	27
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
88200100	TRAFFIC SIGNAL BACKPLATE	EACH	17
88500100	INDUCTIVE LOOP DETECTOR	EACH	4
88800100	DETECTOR LOOP, TYPE I	FOOT	1431
88800100	PEDESTRIAN PUSH-BUTTON	EACH	4
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	422

SCHEDULE OF QUANTITIES



MAST ARM MOUNTED STREET NAME SIGNS

FILE NAME =	USER NAME = IDOT	DESIGNED - GDO	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL INSTALLATION	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#	DRAWN - GDO	REVISED -	64			82-1-2HB	ST. CLAIR	345	191	
PLOT SCALE = 20.0000' / IN.	CHECKED - JAH	REVISED -	D-98-058-089			CONTRACT NO. 76C49				
PLOT DATE = 3/17/2010	DATE - 3/19/2010	REVISED -	FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT FAP 998							
				SCALE: NONE	SHEET NO. 4 OF 4 SHEETS	STA. TO STA.				