

SCHEDULE OF QUANTITIES

DESCRIPTION	UNIT	TOTAL QUANTITY
SIGN PANEL - TYPE 1	SQ FT	23
CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	2,182
CONDUIT IN TRENCH, 2 1/2" DIA., PVC	FOOT	195
CONDUIT IN TRENCH, 3" DIA., PVC	FOOT	212
CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	122
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	565
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	1,111
HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	7
DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	3,049
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, EXTENDED	EACH	1
TRANSCIVER-FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	185
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,553
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	5,700
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	7,394
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	463
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3C	FOOT	448
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	7
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 58 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 44 FT. AND 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	36
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	40
SIGNAL HEAD, POLYCARBONITE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8
SIGNAL HEAD, POLYCARBONITE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	10
PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	18
INDUCTIVE LOOP DETECTOR	EACH	19
DETECTOR LOOP, TYPE 1	FOOT	2,402
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	4
PEDESTRIAN PUSH-BUTTON	EACH	2
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	900
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 20 3/C, TWISTED, SHIELDED	FOOT	1,199
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

NOTES:

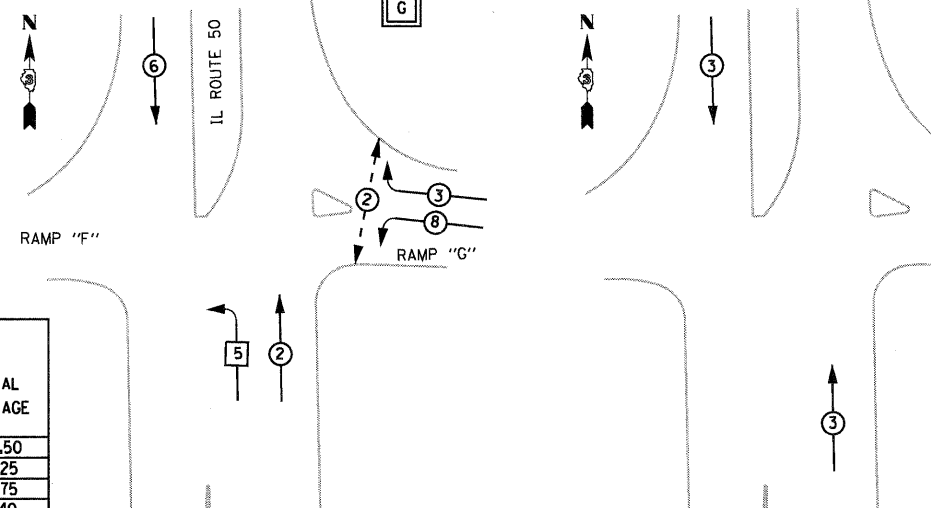
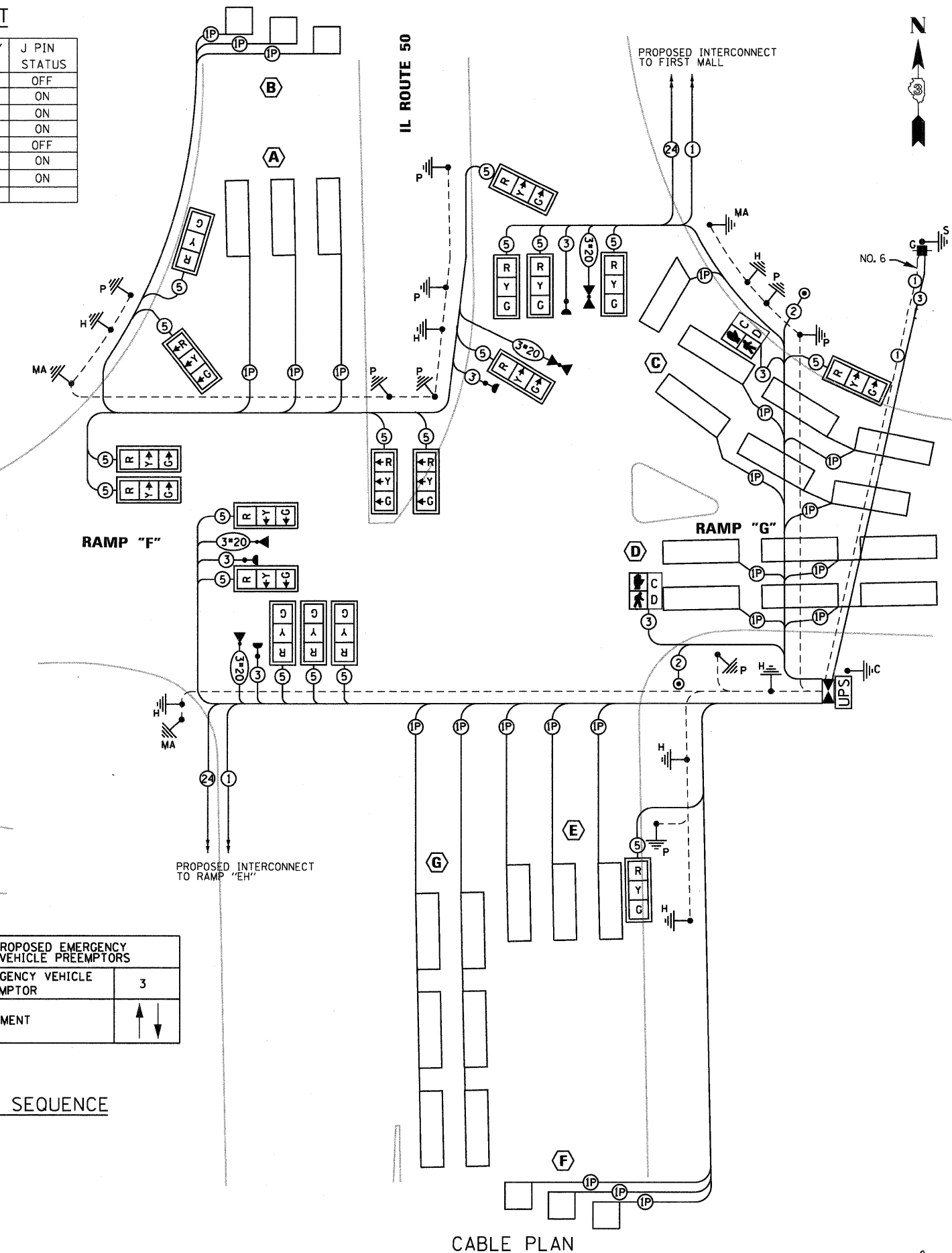
1. THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.
2. PEDESTRIAN PUSH BUTTON SHALL BE "BULLDOG" BRAND.
3. THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET
4. CONTRACTOR SHALL CALL MR. DAN DEVINE AT 815-434-8505 PRIOR TO ORDERING THE DETECTOR LOOP MATERIALS TO VERIFY THE DESIGN.

DETECTOR LOOP INDUCTANCE CHART

DETECTOR LOOP SYSTEM	TURNS PER LOOP	INDUCTANCE READING (MICROHENRIES)	FREQUENCY (HERTZ)	J PIN STATUS
A	4	327	33742	OFF
B	6	419	29815	ON
C	4	292	35700	ON
D	4	267	37334	ON
E	6	284	36221	OFF
F	4	395	30704	ON
G	4	301	35163	ON

LEGEND:

- ← * → DUAL ENTRY PHASE
- ← * → PROTECTED LEFT TURN PHASE
- ← * OL → OVER LAP
- ← * → PEDESTRIAN MOVEMENT
- * NUMBER REFERS TO ASSOCIATED PHASE
- C GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE
- CONFIRMATION BEACON
- EMERGENCY VEHICLE LIGHT DETECTOR
- PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL WITH COUNTDOWN TIMER
- POWER SERVICE INSTALLATION-GROUND MOUNTED
- PEDESTRIAN PUSH BUTTON (SEE NOTE 2)
- CONTROLLER AND CABINET (SEE NOTE 1)
- DETECTOR LOOP
- DETECTOR LOOP SYSTEM
- TRAFFIC SIGNAL HEAD WITH BACK PLATE



PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	↑ ↓

CONTROLLER SEQUENCE

EMERGENCY VEHICLE PREEMPTOR SEQUENCE

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)	BRACKET MOUNTED	13 (4.0)
		30" (750mm)	15 (4.6)	PED. PUSHBUTTON	4 (1.2)
		36" (900mm)	15 (4.6)	ELECTRIC SERVICE	13.5 (4.1)
				SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	13	17		0.50	110.50
(YELLOW)	13	25		0.25	81.25
(GREEN)	13	15		0.25	48.75
ARROW	12	12		0.10	14.40
PED. SIGNAL	2	25		1.00	50.00
CONTROLLER	1	100		1.00	100.00
FLASHER				0.50	

ENERGY COSTS TO: VILLAGE OF BRADLEY TOTAL = 404.90
 147 S. MICHIGAN AVE.
 BRADLEY, ILLINOIS 60915
 (815) 932-2125

ENERGY SUPPLY CONTACT:
 PHONE: _____
 COMPANY: _____

FILE NAME =	USER NAME = kkhon	DESIGNED - JA	REVISED -
Grzd40403\ts-13.dgn		DRAWN - RM/IS	REVISED -
		CHECKED - HS	REVISED -
		DATE - 12-17-2010	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SCHEDULE OF QUANTITIES, CABLE PLAN & PHASE DESIGNATION DIAGRAM-RAMP FG & IL 50

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(46-2) I, HBR, VBR	KANKAKEE	558	238

CONTRACT NO. 66409
 FED. ROAD DIST. NO. 3 [ILLINOIS] FED. AID PROJECT

Delta Engineering, Inc. CONSULTING ENGINEERS, CONSTRUCTION MANAGERS, SURVEYORS 111 West Jackson Blvd., Suite 910 Chicago, IL 60604-2001