

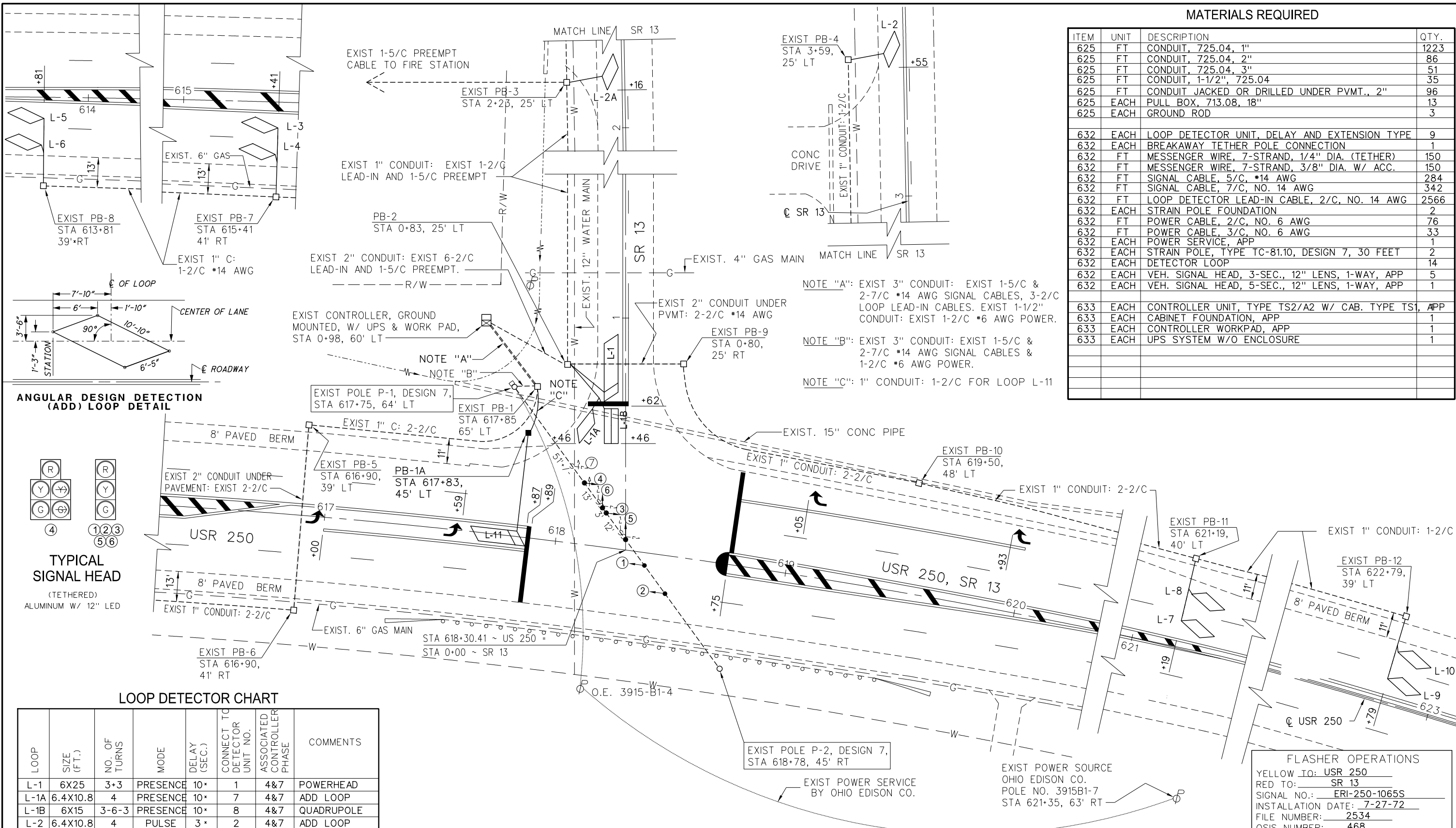
**MATERIALS REQUIRED**

ITEM	UNIT	DESCRIPTION	QTY.
625	FT	CONDUIT, 725.04, 1"	1223
625	FT	CONDUIT, 725.04, 2"	86
625	FT	CONDUIT, 725.04, 3"	51
625	FT	CONDUIT, 1-1/2", 725.04	35
625	FT	CONDUIT JACKED OR DRILLED UNDER PVMT., 2"	96
625	EACH	PULL BOX, 713.08, 18"	13
625	EACH	GROUND ROD	3
632	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE	9
632	EACH	BREAKAWAY TETHER POLE CONNECTION	1
632	FT	MESSENGER WIRE, 7-STRAND, 1/4" DIA. (TETHER)	150
632	FT	MESSENGER WIRE, 7-STRAND, 3/8" DIA. W/ ACC.	150
632	FT	SIGNAL CABLE, 5/C, #14 AWG	284
632	FT	SIGNAL CABLE, 7/C, NO. 14 AWG	342
632	FT	LOOP DETECTOR LEAD-IN CABLE, 2/C, NO. 14 AWG	2566
632	EACH	STRAIN POLE FOUNDATION	2
632	FT	POWER CABLE, 2/C, NO. 6 AWG	76
632	FT	POWER CABLE, 3/C, NO. 6 AWG	33
632	EACH	POWER SERVICE, APP	1
632	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 7, 30 FEET	2
632	EACH	DETECTOR LOOP	14
632	EACH	VEH. SIGNAL HEAD, 3-SEC., 12" LENS, 1-WAY, APP	5
632	EACH	VEH. SIGNAL HEAD, 5-SEC., 12" LENS, 1-WAY, APP	1
633	EACH	CONTROLLER UNIT, TYPE TS2/A2 W/ CAB. TYPE TS1, APP	1
633	EACH	CABINET FOUNDATION, APP	1
633	EACH	CONTROLLER WORKPAD, APP	1
633	EACH	UPS SYSTEM W/O ENCLOSURE	1

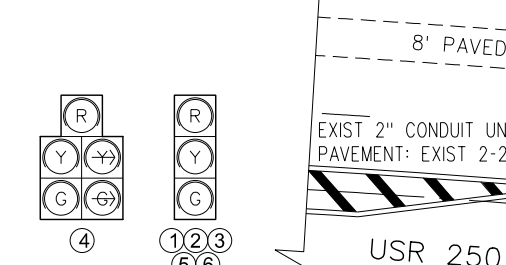
NOTE "A": EXIST 3" CONDUIT: EXIST 1-5/C & 2-7/C #14 AWG SIGNAL CABLES, 3-2/C LOOP LEAD-IN CABLES. EXIST 1-1/2" CONDUIT: EXIST 1-2/C #6 AWG POWER.

NOTE "B": EXIST 3" CONDUIT: EXIST 1-5/C & 2-7/C #14 AWG SIGNAL CABLES & 1-2/C #6 AWG POWER.

NOTE "C": 1" CONDUIT: 1-2/C FOR LOOP L-11



**ANGULAR DESIGN DETECTION (ADD) LOOP DETAIL**

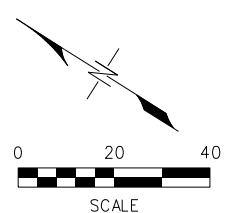
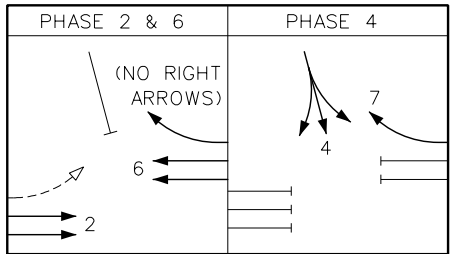


**LOOP DETECTOR CHART**

LOOP	SIZE (FT.)	NO. OF TURNS	MODE	DELAY (SEC.)	CONNECT TO DETECTOR UNIT NO.	ASSOCIATED CONTROLLER PHASE	COMMENTS
L-1	6X25	3+3	PRESENCE	10*	1	4&7	POWERHEAD
L-1A	6.4X10.8	4	PRESENCE	10*	7	4&7	ADD LOOP
L-1B	6X15	3-6-3	PRESENCE	10*	8	4&7	QUADRUPOLE
L-2	6.4X10.8	4	PULSE	3*	2	4&7	ADD LOOP
L-2A	6.4X10.8	4	PULSE	3*	2	4&7	ADD LOOP
L-3	6.4X10.8	4	PULSE		3	2	ADD LOOP
L-4	6.4X10.8	4	PULSE		3	2	ADD LOOP
L-5	6.4X10.8	4	PULSE		4	2	ADD LOOP
L-6	6.4X10.8	4	PULSE		4	2	ADD LOOP
L-7	6.4X10.8	4	PULSE		5	6	ADD LOOP
L-8	6.4X10.8	4	PULSE		5	6	ADD LOOP
L-9	6.4X10.8	4	PULSE		6	6	ADD LOOP
L-10	6.4X10.8	4	PULSE		6	6	ADD LOOP
L-11	6X20	3+3	PRESENCE		9	2	POWERHEAD

\* INHIBIT DELAY DURING ASSOCIATED PHASE GREEN INTERVAL

**SIGNAL PHASING DIAGRAM**



DATE	REVISIONS	DATE INSTALLED
7-21-93	UPGRADE TO STOP-AND-GO OPERATION PROJ. 284-93	10-18-93
2-23-04	INSTALLED TETHER WIRE PER PROJ. 62-03	5-26-04
5-30-06	PLAN REDRAWN FOR EB USR 250 RIGHT TURN OVLP PER PROJ. 233(05)	9-20-06
5-21-07	UPDATED LOOP DETECTOR CHART SETTINGS AND SLM	3-7-07
12-10-07	INSTALLED UPS & NEW LOOP L-2A. RELOCATED CONTROLLER. MODIFIED RT TURN PHASING ON USR 250 PER PROJ. 410-06	11-30-07
8-26-10	UPGRADE DETECTOR LOOPS PER PROJ. ?	?
9-16-10	PROJ 58(10)-INSTALLED BREAKAWAY TETHER POLE CONNECTION	4-23-10
8-3-11	PROJ 194(11)-UPGRADED LOOPS FOR MOTORCYCLE DETECTION	8-27-11

**FLASHER OPERATIONS**  
 YELLOW TO: USR 250  
 RED TO: SR 13  
 SIGNAL NO.: ERI-250-1065S  
 INSTALLATION DATE: 7-27-72  
 FILE NUMBER: 2534  
 OSIS NUMBER: 468

**OHIO DEPARTMENT OF TRANSPORTATION**

**ELECTRICAL INSTALLATION**  
 LOCATED AT  
**USR 250 & SR 13**  
 Signal No. ERI-250-1065s

District 3 County ERIE

DESIGNED	DESIGNED	REVISED	CHECKED	REVIEWED
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SHEET 1 OF 1

DESIGN FILE: I:\FIELD\IN\ELECTRICAL\SIGNAL\CON\E250&13.dgn  
 WORKSTATION: rrone DATE: 9/1/2011