

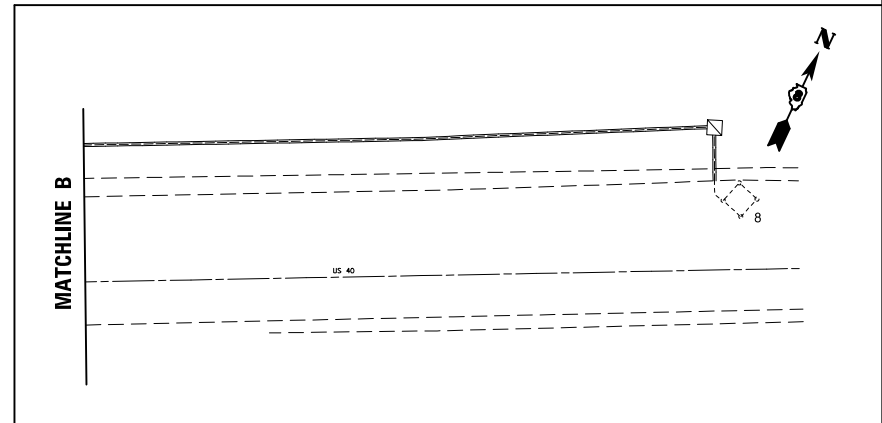
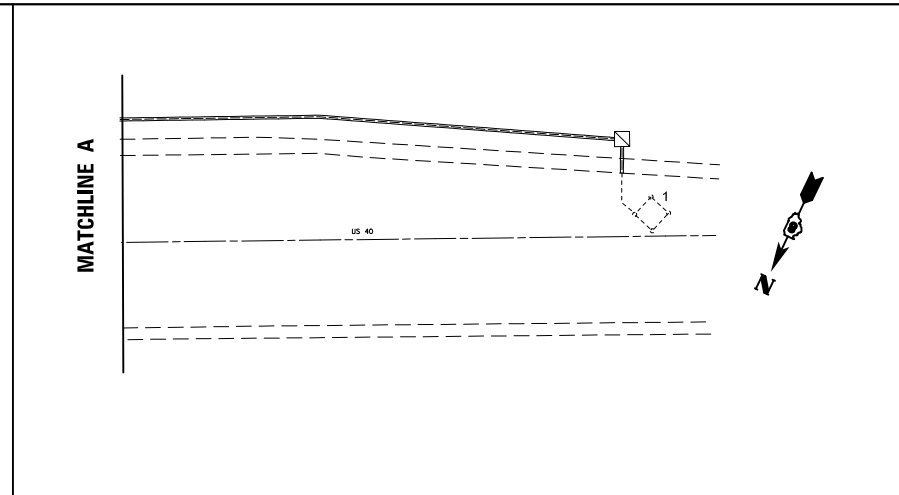
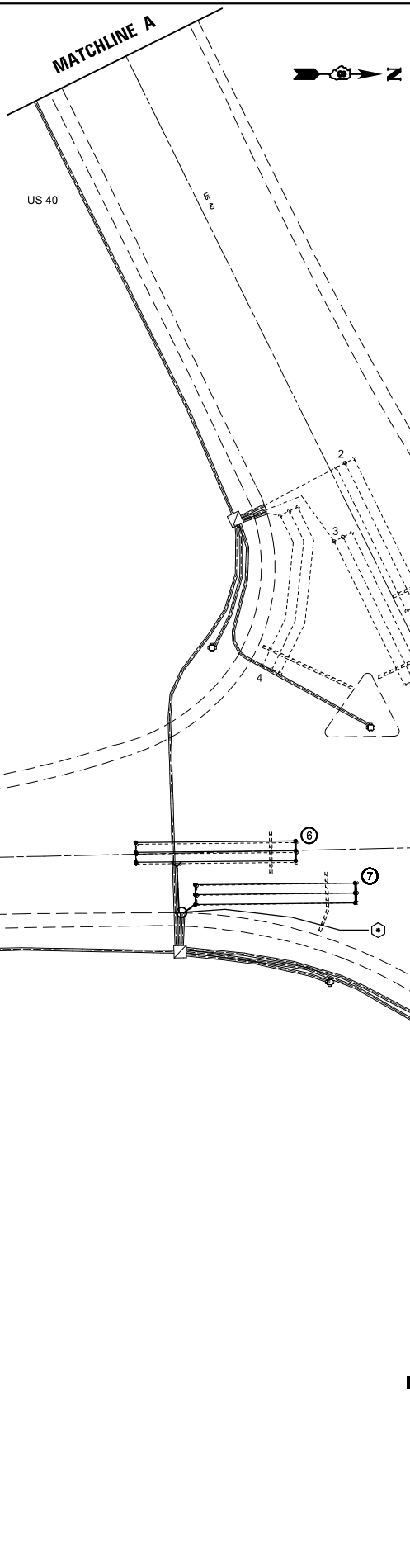
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 127 & US 40

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB CCO	4	6 X 6	6	524.0	4.0
2. EB LT CD	7	6 X 50-Q	3-6-3	885.4	3.9
3. EB THRU CD	4	6 X 50-Q	6	886.3	3.8
4. EB RT CD	4	6 X 50-Q	3-6-3	880.8	3.7
5. NB CCO	6	6 X 6	6	361.6	2.8
6. NB LT CD	1	6 X 50-Q	3-6-3	850.2	3.1
7. NB THRU CD	6	6 X 50-Q	3-6-3	849.6	3.0
8. WB CCO	8	6 X 6	6	332.1	2.1
9. WB LT CD	3	6 X 50-Q	3-6-3	793.3	1.8
10. WB THRU CD	8	6 X 50-Q	3-6-3	801.0	1.9
11. WB RT CD	8	6 X 25-Q	3-6-3	538.6	3.7
12. SB CCO	2	6 X 6	6	350.8	2.5
13. SB LT CD	5	6 X 50-Q	3-6-3	852.4	1.6
14. SB THRU CD	2	6 X 50-Q	3-6-3	849.6	3.0

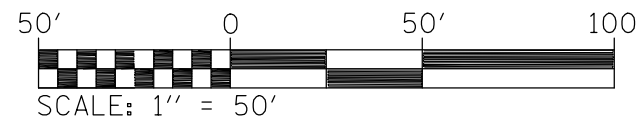
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

Q=QUADRAPOLE

⊙ =SEE DETAIL A



IL 127 & US 40



FILE NAME =	USER NAME = prestonme	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\dot\prestonme\d0355915\d876g79-sh-t-TSpln.dgn		DRAWN -	REVISED -		42	(139-1,36-1,110-1)RS-1	BOND	68	62			
PLOT SCALE = 50.0000' / in.		CHECKED -	REVISED -		CONTRACT NO. 76G79							
PLOT DATE = 6/12/2014		DATE -	REVISED -		SCALE:	SHEET NO. 3 OF 3 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			