

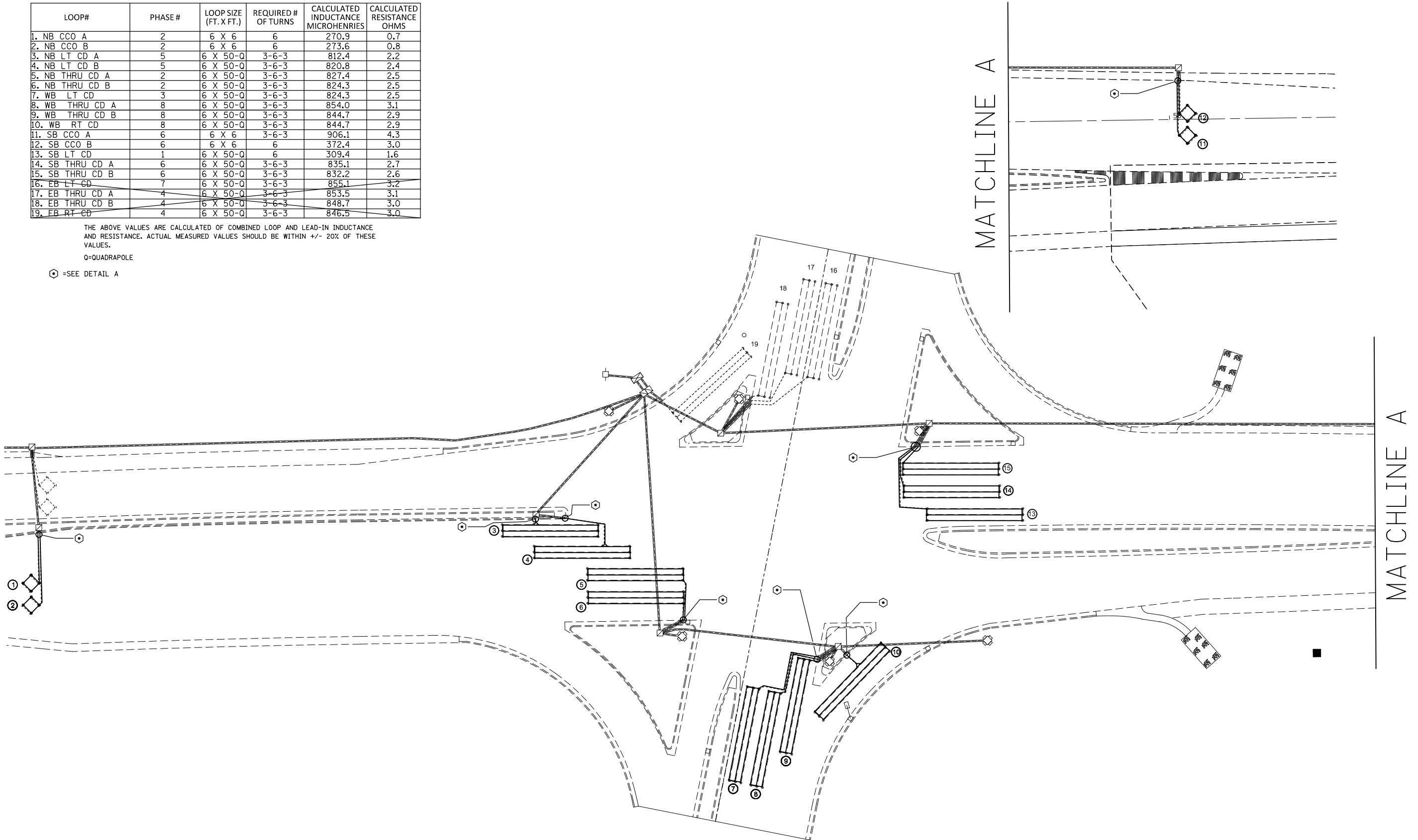
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 159 & FOUNTAINS PRKWY.

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. NB CCO A	2	6 X 6	6	270.9	0.7
2. NB CCO B	2	6 X 6	6	273.6	0.8
3. NB LT CD A	5	6 X 50-Q	3-6-3	812.4	2.2
4. NB LT CD B	5	6 X 50-Q	3-6-3	820.8	2.4
5. NB THRU CD A	2	6 X 50-Q	3-6-3	827.4	2.5
6. NB THRU CD B	2	6 X 50-Q	3-6-3	824.3	2.5
7. WB LT CD	3	6 X 50-Q	3-6-3	824.3	2.5
8. WB THRU CD A	8	6 X 50-Q	3-6-3	854.0	3.1
9. WB THRU CD B	8	6 X 50-Q	3-6-3	844.7	2.9
10. WB RT CD	8	6 X 50-Q	3-6-3	844.7	2.9
11. SB CCO A	6	6 X 6	3-6-3	906.1	4.3
12. SB CCO B	6	6 X 6	6	372.4	3.0
13. SB LT CD	1	6 X 50-Q	6	309.4	1.6
14. SB THRU CD A	6	6 X 50-Q	3-6-3	835.1	2.7
15. SB THRU CD B	6	6 X 50-Q	3-6-3	832.2	2.6
16. EB LT CD	7	6 X 50-Q	3-6-3	855.1	3.2
17. EB THRU CD A	4	6 X 50-Q	3-6-3	853.5	3.1
18. EB THRU CD B	4	6 X 50-Q	3-6-3	848.7	3.0
19. EB RT CD	4	6 X 50-Q	3-6-3	846.5	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

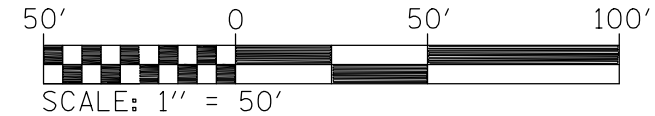
⊙ =SEE DETAIL A



MATCHLINE A

MATCHLINE A

IL 159 & FOUNTAINS PRKWY.



FILE NAME =	USER NAME = prestonme	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN IL 159 & FOUNTAINS PRKWY.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\idot\prestonme\d0344817\d876g55-sh1-TS.dgn	PLOT SCALE = 50.0000' / in.	DRAWN -	REVISED -			600	(130-1, 130-2)RS-2	ST. CLAIR	36	28**
PLOT DATE = 7/8/2014	DATE -	CHECKED -	REVISED -			CONTRACT NO. 76G55				
		DATE -	REVISED -			SCALE:	SHEET NO. 2 OF 10 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT