

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 159 & CHATEAU DR.

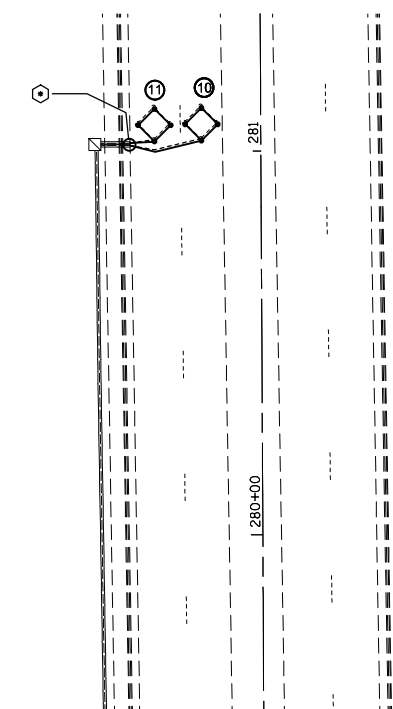
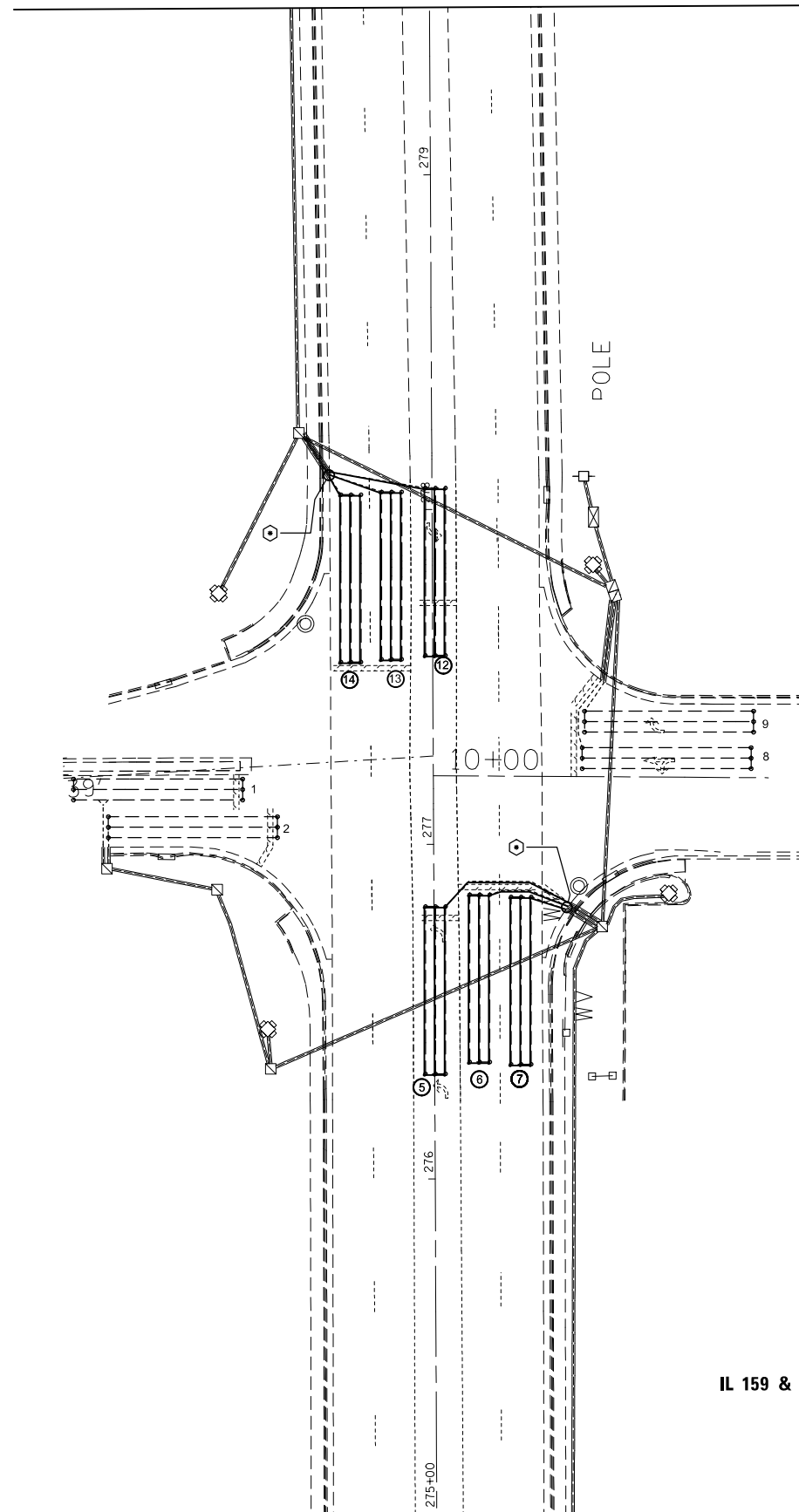
LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB LT CD	4	6 X 50-Q	3-6-3	893.6	4.0
2. EB THRU CD	4	6 X 50-Q	3-6-3	890.5	4.0
3. NB CCO A	6	6 X 6	7	504.4	3.6
4. NB CCO B	6	6 X 6	7	501.8	3.5
5. NB LT CD	1	6 X 50-Q	3-6-3	899.7	4.2
6. NB THRU CD A	6	6 X 50-Q	3-6-3	896.4	4.1
7. NB THRU CD B	6	6 X 6	3-6-3	893.6	4.0
8. WB LT CD	3	6 X 50-Q	3-6-3	830.9	2.6
9. WB THRU CD	3	6 X 50-Q	3-6-3	828.2	2.6
10. SB CCO A	2	6 X 6	6	358.9	2.7
11. SB CCO B	2	6 X 6	6	356.1	2.7
12. SB LT CD	5	6 X 50-Q	3-6-3	831.5	2.6
13. SB THRU CD A	2	6 X 50-Q	3-6-3	828.9	2.6
14. SB THRU CD B	2	6 X 50-Q	3-6-3	826.7	2.5

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

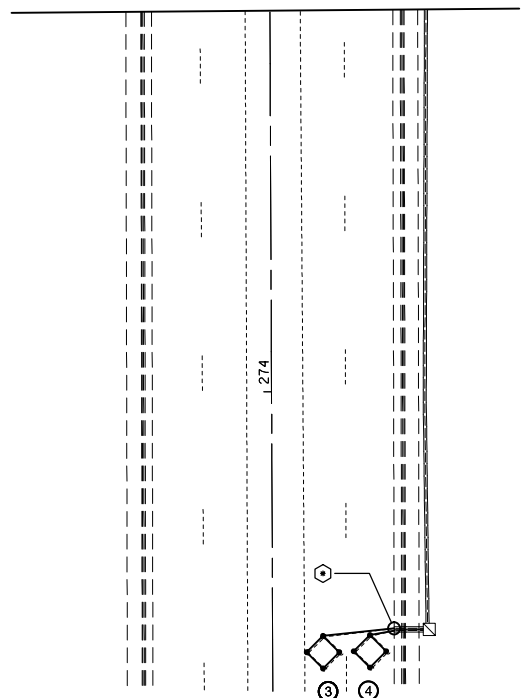
⊙=SEE DETAIL A

MATCHLINE A



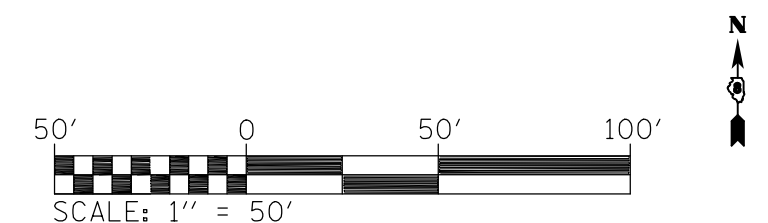
MATCHLINE A

MATCHLINE B



MATCHLINE B

IL 159 & CHATEAU DR.



FILE NAME =	USER NAME = prestonme	DESIGNED -	REVISED -
et:\pw\work\p\dot\prestonme\d0344817\d876g955-sh1-TS.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/8/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN
IL 159 & CHATEAU DR.

SCALE: SHEET NO. 8 OF 10 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130-1, 130-2)RS-2	ST. CLAIR	36	34**
CONTRACT NO. 76G55			ILLINOIS FED. AID PROJECT	