

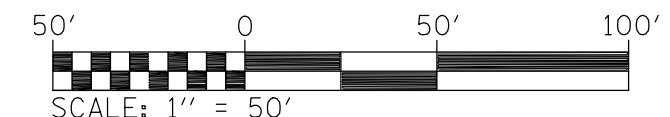
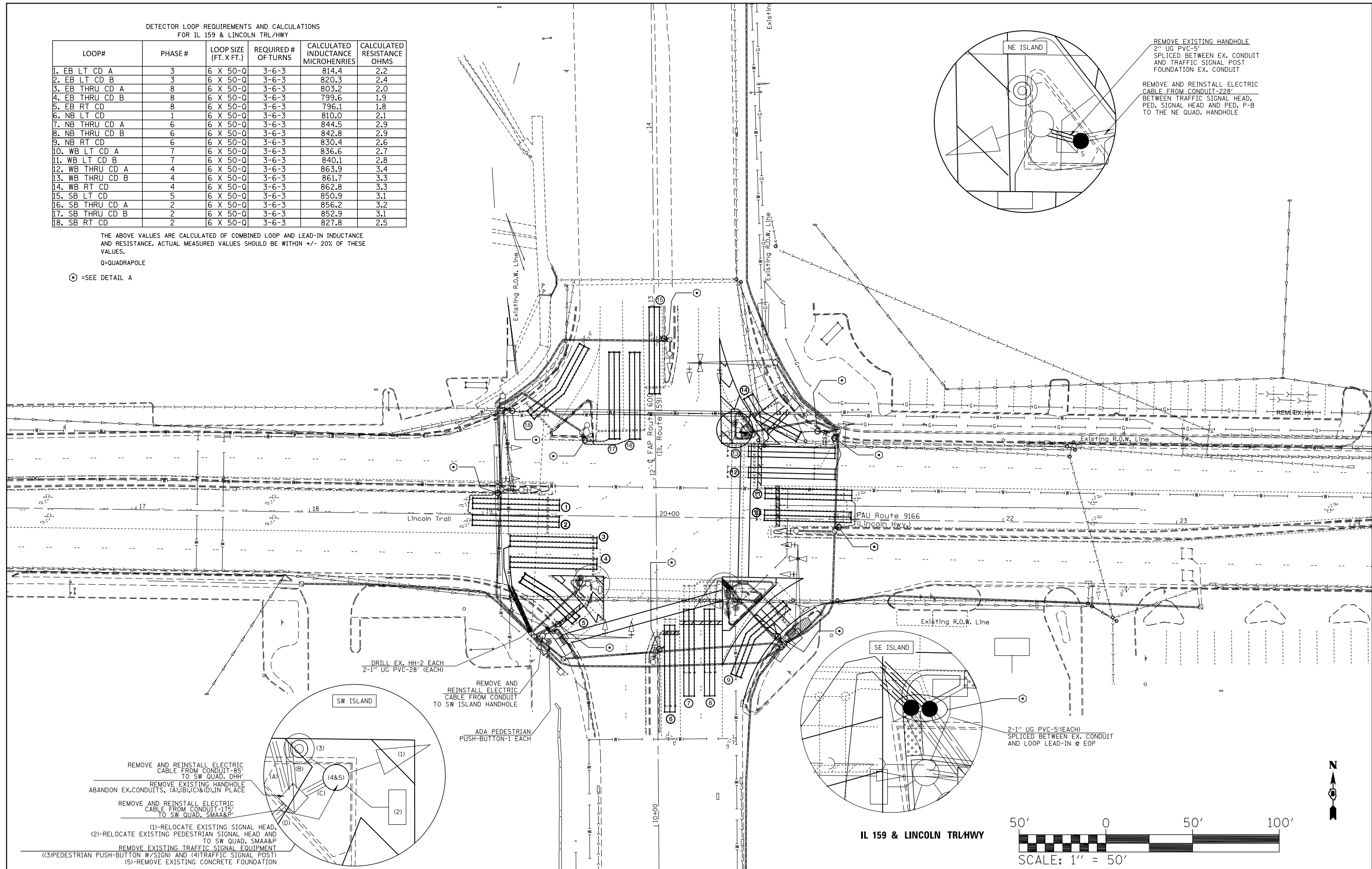
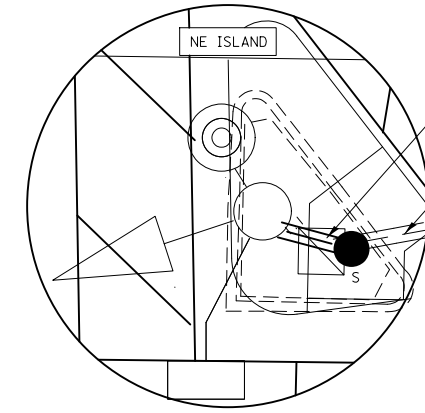
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 159 & LINCOLN TRL/HWY

LOOP#	PHASE#	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB LT CD A	3	6 X 50-0	3-6-3	814.4	2.2
2. EB LT CD B	3	6 X 50-0	3-6-3	820.3	2.4
3. EB THRU CD A	8	6 X 50-0	3-6-3	803.2	2.0
4. EB THRU CD B	8	6 X 50-0	3-6-3	799.6	1.9
5. EB RT CD	8	6 X 50-0	3-6-3	796.1	1.8
6. NB LT CD	1	6 X 50-0	3-6-3	810.0	2.1
7. NB THRU CD A	6	6 X 50-0	3-6-3	844.5	2.9
8. NB THRU CD B	6	6 X 50-0	3-6-3	842.8	2.9
9. NB RT CD	6	6 X 50-0	3-6-3	830.4	2.6
10. WB LT CD A	7	6 X 50-0	3-6-3	836.6	2.7
11. WB LT CD B	7	6 X 50-0	3-6-3	840.1	2.8
12. WB THRU CD A	4	6 X 50-0	3-6-3	863.9	3.4
13. WB THRU CD B	4	6 X 50-0	3-6-3	861.7	3.3
14. WB RT CD	4	6 X 50-0	3-6-3	862.8	3.3
15. SB LT CD	5	6 X 50-0	3-6-3	850.9	3.1
16. SB THRU CD A	2	6 X 50-0	3-6-3	856.2	3.2
17. SB THRU CD B	2	6 X 50-0	3-6-3	852.9	3.1
18. SB RT CD	2	6 X 50-0	3-6-3	827.8	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



FILE NAME =	USER NAME = prestonne	DESIGNED -	REVISED -
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		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN
IL 159 & LINCOLN TRL/HWY

SCALE: SHEET NO. 6 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	32**
CONTRACT NO. 76G55				
ILLINOIS FED. AID PROJECT				