

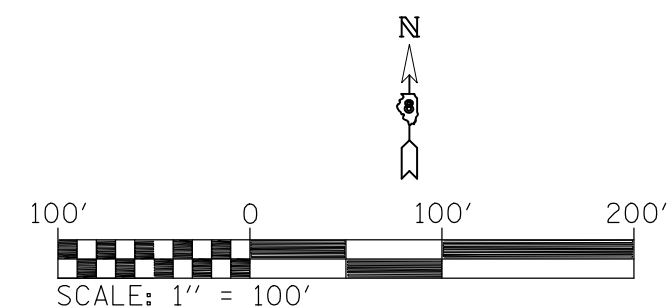
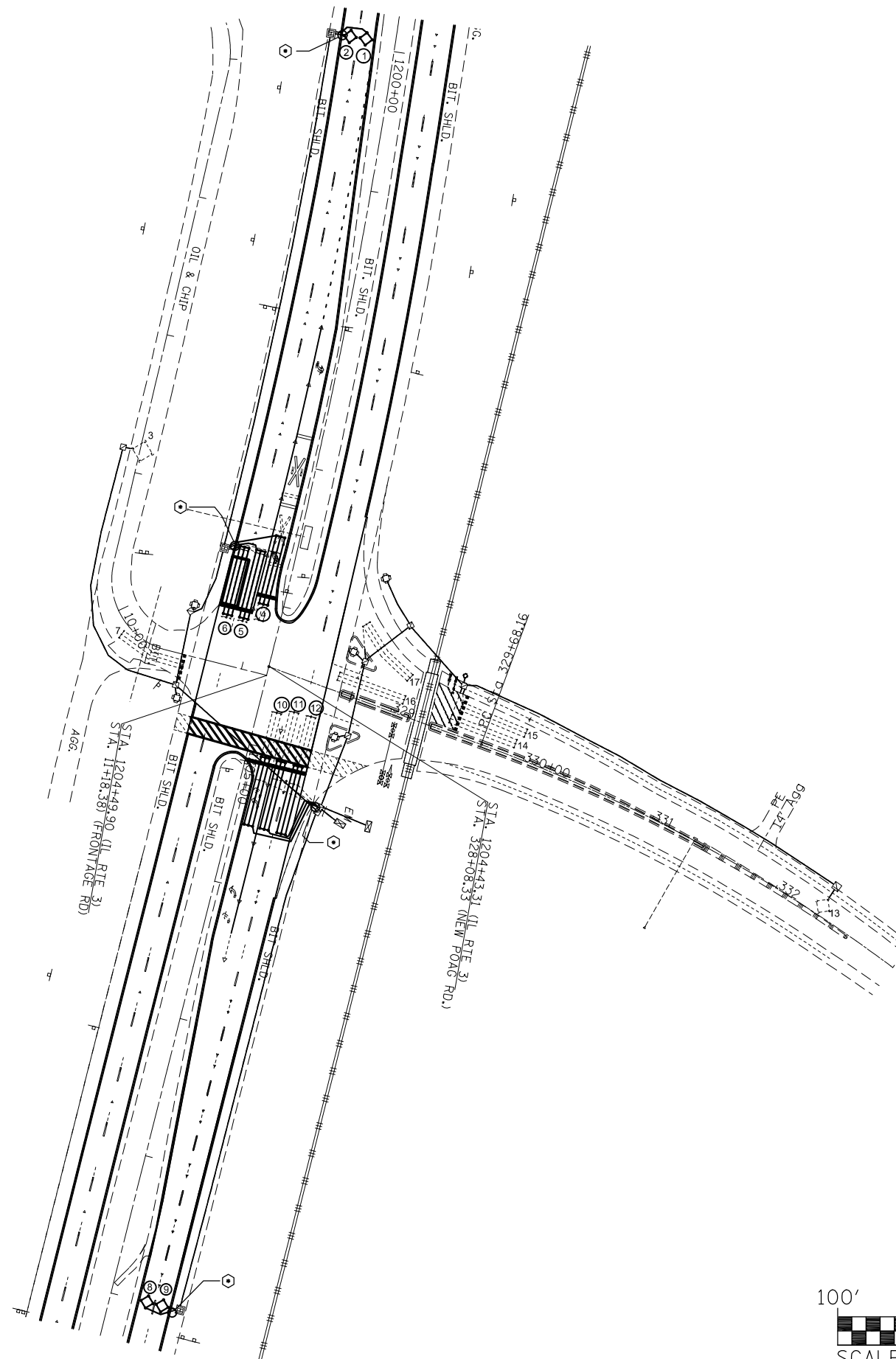
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS  
FOR IL 003 AND NEW POAG RD.

Z	LOOP*	6 X 6	PHASE #	LOOP SIZE FT X FT	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS	μ
2	6 X 6	7				514.5		3.8
4	6 X 6							3.7
1. SB COO A	6 X 6	2	6 X 6	7	NA	NA	NA	3.1
2. SB COO B D	6 X 50-Q	2	6 X 50-Q	7	1584.2	NA	NA	3.1
3. SB LT CD	6 X 50-Q	5	6 X 50-Q	3-6-3	NA	NA	NA	3.0
4. SB THRU CO	6 X 50-Q	2	6 X 50-Q	3-6-3	1584.2	NA	NA	NA
5. SB RT CD	6 X 50-Q	2	6 X 50-Q	3-6-3	NA	NA	NA	2.5
6. EB COO A Z	6 X 50-Q	4	6 X 50-Q	7	1584.2	2.8	2.8	2.5
7. EB COO B	6 X 50-Q	4	6 X 50-Q	7	468.7	2.8	2.8	2.5
8. EB LT CD A	6 X 50-Q	7	6 X 50-Q	3-6-3	854.1	2.3	2.3	2.0
9. EB THRU CD A	6 X 50-Q	4	6 X 50-Q	3-6-3	816	2.3	2.3	1.9
10. EB THRU CD B	6 X 6	4	6 X 6	3-6-3	468.7	2.2	2.2	1.8
11. NB COO A	6 X 6	6	6 X 6	7	468.7	2.6	2.6	NA
12. NB COO B D	6 X 6	6	6 X 6	7	468.7	2.6	2.6	NA
13. NB LT CD	6 X 50-Q	1	6 X 50-Q	3-6-3	848.4	2.9	2.9	NA
14. NB THRU CD	6 X 50-Q	6	6 X 50-Q	3-6-3	1584.2	2.9	2.9	NA
15. NB RT CD	6 X 50-Q	6	6 X 50-Q	3-6-3	836.2	2.7	2.7	NA
16. WB COO A D	6 X 50-Q	8	6 X 50-Q	7	1584.2	2.0	2.0	NA
17. WB COO B	6 X 50-Q	8	6 X 50-Q	7	432.7	1.9	1.9	NA
18. WB LT CD	6 X 20-Q	3	6 X 20-Q	3-6-3	880.2	3.0	3.0	NA
19. WB THRU CD A	6 X 50-Q	8	6 X 50-Q	3-6-3	803.1	2.0	2.0	NA
20. WB THRU CD B	6 X 6	8	6 X 6	3-6-3	803.1	1.9	1.9	NA
3	6 X 50-Q	NA			NA	NA	NA	NA
3	6 X 50-Q	NA			NA	NA	NA	NA
3	6 X 50-Q	NA			NA	NA	NA	NA
3	6 X 50-Q	NA			NA	NA	NA	NA

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 = elyaskordio	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN IL003 AND NEW POAG RD.</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\id\el\elyaskordio\d\0316383\0316383-06-shd-TSplan.dgn	DRAWN -	REVISED -	2			(101,102)RS-2, 202RS-4	MADISON	69	67	
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 76G06							
PLOT DATE = 4/12/2013	DATE -	REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
				SCALE:	SHEET NO. OF SHEETS STA. TO STA.					