

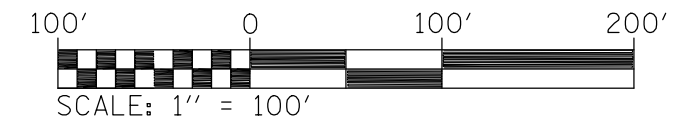
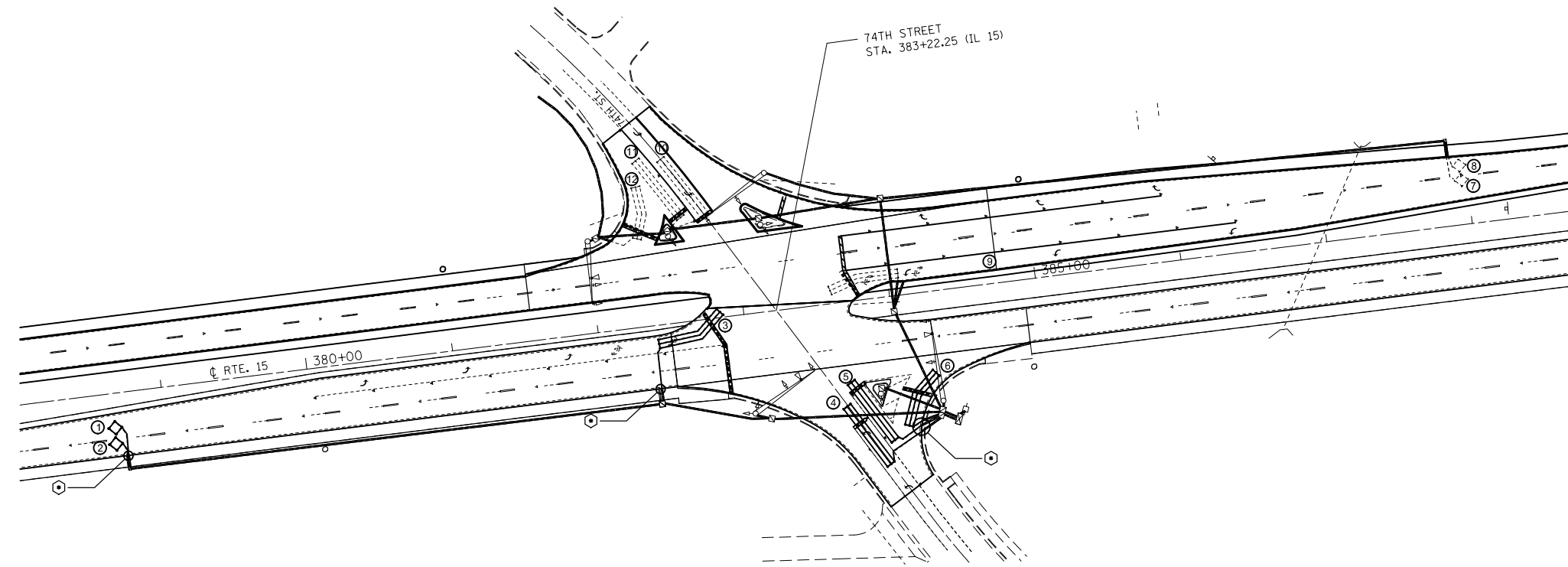
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 015 AND 74TH ST.

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1. EB CCO A	6	6 x 6	7	502	3.5
2. EB CCO B	6	6 x 6	7	499	3.4
3. EB LT CD	1	6 x 50-Q	3-6-3	842	2.9
4. NB LT CD	4	6 x 40-Q	3-6-3	651	1.6
5. NB THRU CD	4	6 x 50-Q	3-6-3	798	1.9
6. NB RT CD	4	6 x 50-Q	3-6-3	795	1.8
7. WB CCO A	2	6 x 6	7	506	3.6
8. WB CCO B	2	6 x 6	7	504	3.6
9. WB LT CD	5	6 x 50-Q	3-6-3	822	2.4
10. SB LT CD	3	6 x 50-Q	3-6-3	877	3.7
11. SB THRU CD	3	6 x 50-Q	3-6-3	873	3.6
12. SB RT CD	3	6 x 40-Q	3-6-3	723	3.3

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 = conoverpj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN IL015 AND 74TH ST.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\idot\conoverpj\d0340733\d076g37-sht-T9plan.dgn	PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -			103	(29-1,28-1,28-2,26-1)RS-1	ST. CLAIR	96	89
	PLOT DATE = 10/18/2013	CHECKED -	REVISED -			CONTRACT NO. 76G37				
		DATE -	REVISED -			SCALE:	SHEET NO. 4 OF 7 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.