

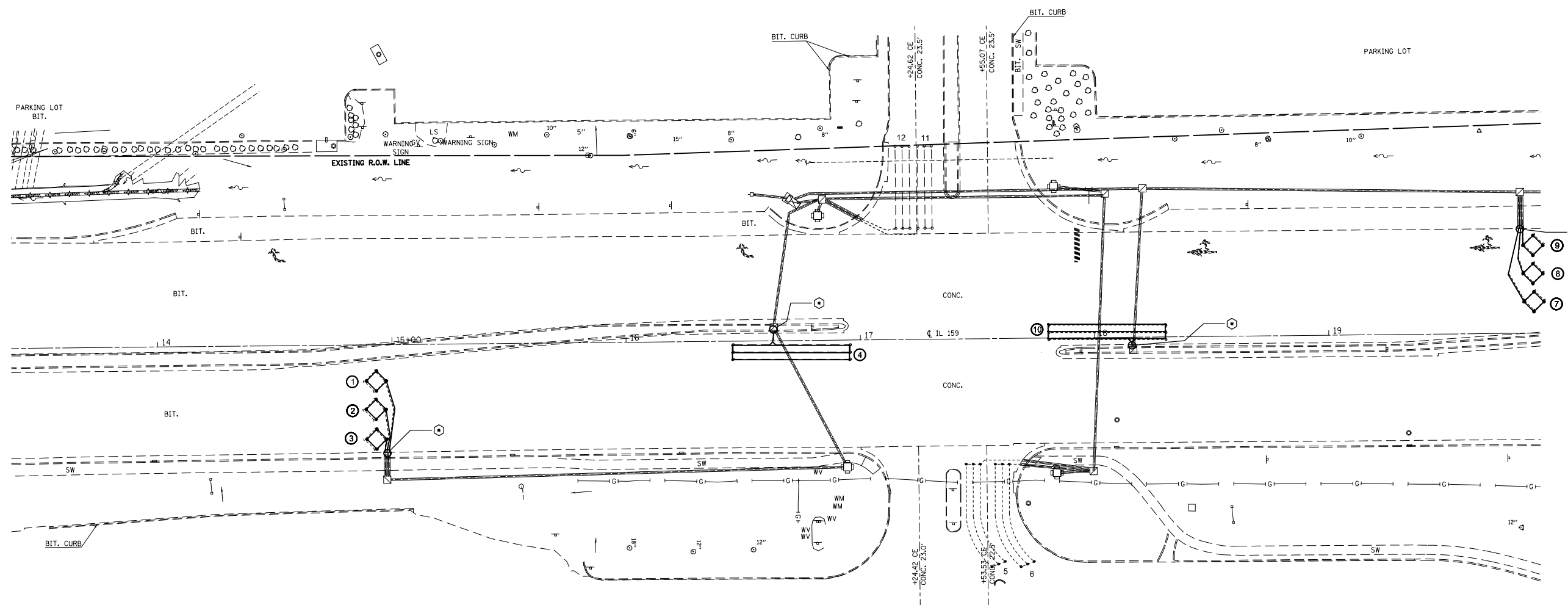
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS  
FOR IL 159 & ST. CLAIR SQUARE-S.

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. NB CCO A	6	6 X 6	6	344.9	2.4
2. NB CCO B	6	6 X 6	6	342.0	2.3
3. NB CCO C	6	6 X 6	6	339.1	2.3
4. NB LT CD	1	6 X 40-Q	3-6-3	809.5	2.1
5. WB LT CD	3	6 X 40-Q	3-6-3	707.1	2.9
6. WB THRU CD	3	6 X 40-Q	3-6-3	704.6	2.9
7. SB CCO A	2	6 X 6	6	341.8	2.3
8. SB CCO B	2	6 X 6	6	338.7	2.3
9. SB CCO C	2	6 X 6	6	336.1	2.2
10. SB LT CD	5	6 X 50-Q	3-6-3	843.6	1.6
11. EB LT CD	4	6 X 35-Q	3-6-3	577.5	1.5
12. EB THRU CD	4	6 X 35-Q	3-6-3	574.6	1.5

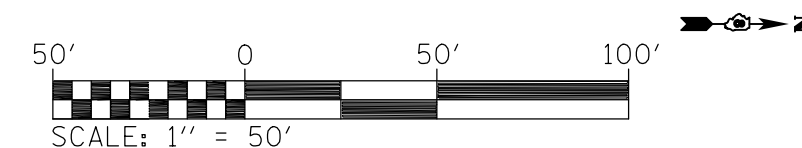
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

Q=QUADRAPOLE

⊙ =SEE DETAIL A



IL 159 & ST. CLAIR SQUARE-S.



FILE NAME =	USER NAME = prestonme	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN IL 159 &amp; ST. CLAIR SQUARE-S.</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\idot\prestonme\d0344817\d876g55-sh-t-TS.dgn	PLOT SCALE = 50.0000' / in.	DRAWN -	REVISED -					600	(130-1, 130-2)RS-2	ST. CLAIR	36	31**
PLOT DATE = 7/8/2014	DATE -	CHECKED -	REVISED -		CONTRACT NO. 76G55							
		DATE -	REVISED -		SCALE:	SHEET NO. 5 OF 10 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			