

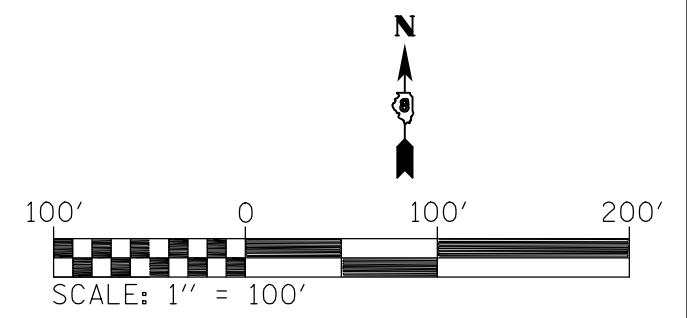
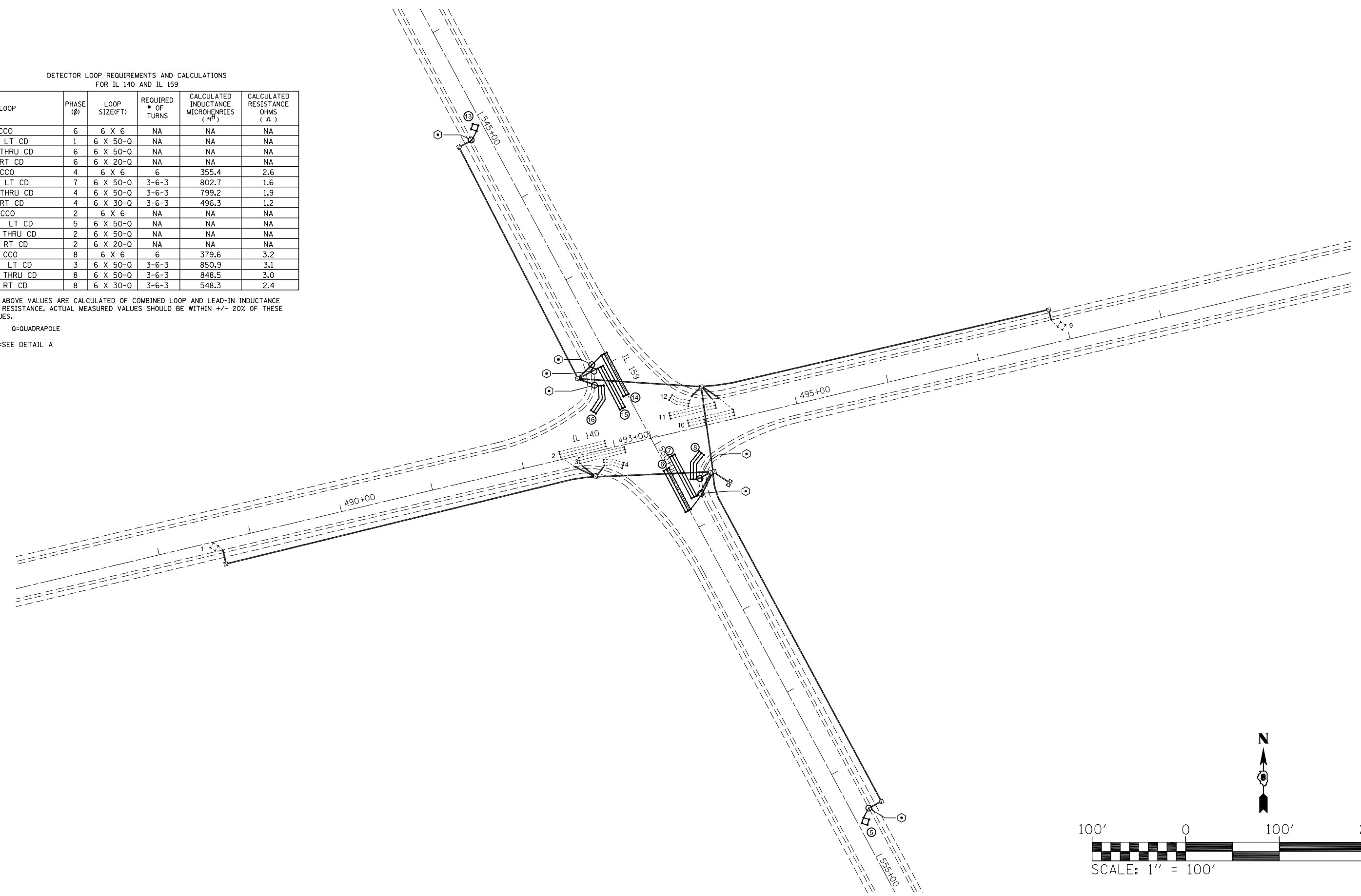
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS  
FOR IL 140 AND IL 159

LOOP	PHASE (Ø)	LOOP SIZE(FT)	REQUIRED * OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (µH)	CALCULATED RESISTANCE OHMS (Ω)
1.EB CCO	6	6 X 6	NA	NA	NA
2.EB LT CD	1	6 X 50-Q	NA	NA	NA
3.EB THRU CD	6	6 X 50-Q	NA	NA	NA
4.EB RT CD	6	6 X 20-Q	NA	NA	NA
5.NB CCO	4	6 X 6	6	355.4	2.6
6.NB LT CD	7	6 X 50-Q	3-6-3	802.7	1.6
7.NB THRU CD	4	6 X 50-Q	3-6-3	799.2	1.9
8.NB RT CD	4	6 X 30-Q	3-6-3	496.3	1.2
9.WB CCO	2	6 X 6	NA	NA	NA
10.WB LT CD	5	6 X 50-Q	NA	NA	NA
11.WB THRU CD	2	6 X 50-Q	NA	NA	NA
12.WB RT CD	2	6 X 20-Q	NA	NA	NA
13.SB CCO	8	6 X 6	6	379.6	3.2
14.SB LT CD	3	6 X 50-Q	3-6-3	850.9	3.1
15.SB THRU CD	8	6 X 50-Q	3-6-3	848.5	3.0
16.SB RT CD	8	6 X 30-Q	3-6-3	548.3	2.4

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 = challandeske	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN IL 159 AND IL 140</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pw\work\p\pidot\challandeske\d0332017	D0876625-sht-details.dgn	DRAWN -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	604	(103,125)RS-2, 125-BR-2	MADISON	46	29
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -						CONTRACT NO. 76G25					
	PLOT DATE = 12/10/2013	DATE -	REVISED -						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					