

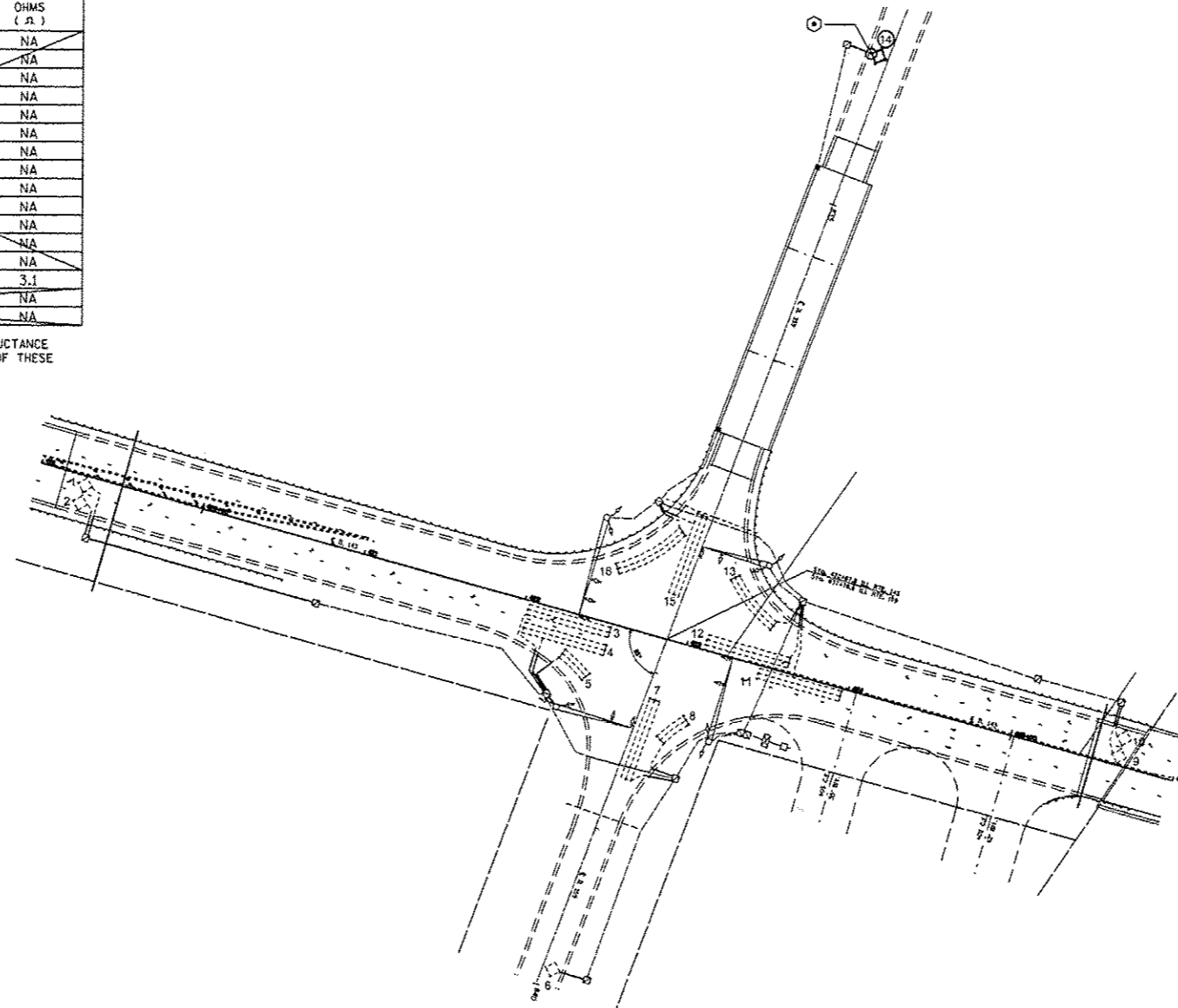
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 143 AND IL 159

LOOP	PHASE (Ø)	LOOP SIZE(FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1. SEB CCO	6	6 X 6	6	NA	NA
2. SEB CCO	6	6 X 6	6	NA	NA
3. SEB LT CD	1	6 X 50-0	3-6-3	NA	NA
4. SEB THRU CD	6	6 X 50-0	3-6-3	NA	NA
5. SEB RT CD	6	6 X 20-0	3-6-3	NA	NA
6. NEB CCO	4	6 X 6	6	NA	NA
7. NEB THRU-LT CD	4	6 X 50-0	3-6-3	NA	NA
8. NEB RT CD	4	6 X 20-0	3-6-3	NA	NA
9. NWB CCO	2	6 X 6	6	NA	NA
10. NWB CCO	2	6 X 6	6	NA	NA
11. NWB LT CD	5	6 X 50-0	3-6-3	NA	NA
12. NWB THRU CD	2	6 X 50-0	3-6-3	NA	NA
13. NWB RT CD	2	6 X 40-0	3-6-3	NA	NA
14. SWB CCO	3	6 X 6	6	374.8	3.1
15. SWB THRU-LT CD	3	6 X 50-0	3-6-3	NA	NA
16. SWB RT CD	3	6 X 45-0	3-6-3	NA	NA

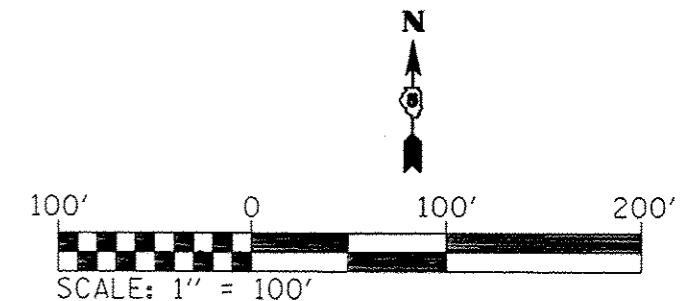
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

Ø=QUADRAPOLE

⊙=SEE DETAIL A



△ SHEET ADDED 2-18-14



FILE NAME =	USER NAME = chollendaske	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN IL 159 AND IL 143	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\chollendaske\d0332017	0876025-sh1-detail.dgn	DRAWN -	REVISED -			604	(103.125)RS-2, 125-BR-2	MADISON	46	30	
	PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -			CONTRACT NO. T6625					
	PLOT DATE = 12/10/2013	DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
				SCALE:		SHEET NO. OF SHEETS		STA. TO STA.			