

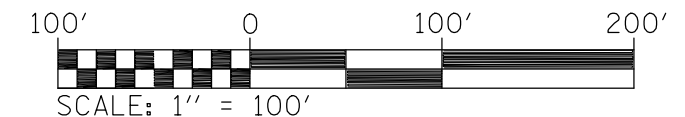
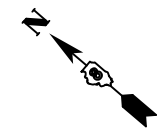
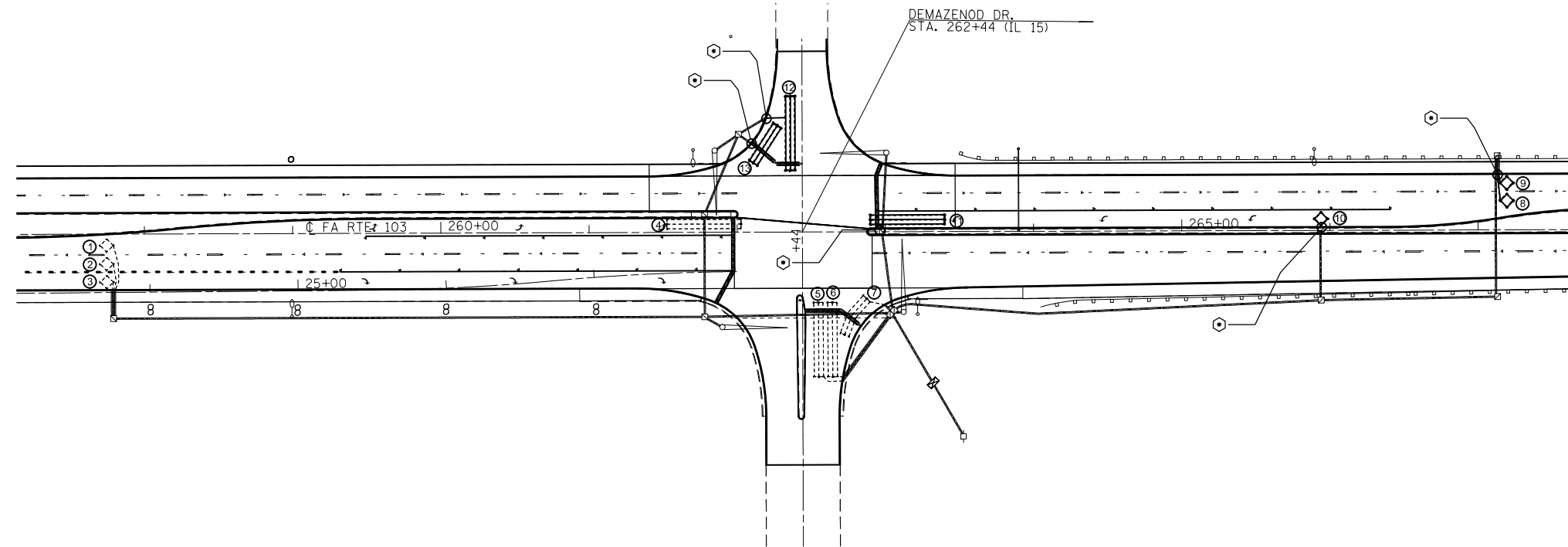
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 015 AND DEMAZENOD DR.

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1. EB GCO A	1	6 x 6	7	511.2	3.7
2. EB CCO B	1	6 x 6	7	508.4	3.7
3. EB CCO C	1	6 x 6	7	505.7	3.6
4. EB LT CD	6	6 x 50-Q	3-6-3	847.8	3.0
5. NB LT CD	3	6 x 50-Q	3-6-3	813.1	2.2
6. NB THRU CD	3	6 x 50-Q	3-6-3	810.4	2.1
7. NB CCO CD	3	6 x 30-Q	3-6-3	504.3	1.4
8. WB CCO A	5	6 x 6	7	459.5	3.5
9. WB CCO B	2	6 x 6	7	388.5	1.0
10. WB CCO C	2	6 x 6	7	500.5	2.5
11. WB LT CD	2	6 x 50-Q	3-6-3	816.1	2.3
12. SB THRU-LT CD	2	6 x 50-Q	3-6-3	868.9	3.5
13. SB RT CD	2	6 x 50-Q	3-6-3	865.0	3.4

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 = conoverpj	DESIGNED -	REVISED -
et:\pw\work\p1dot\conoverpj\d0340760\d076g38-sht-Tspln.dgn		DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 10/18/2013	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN
IL 015 AND DEMAZENOD DR.

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	(29-1,28-1,28-2,26-1)RS-2	ST. CLAIR	97	87
CONTRACT NO. 76G38				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				