



DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR IL 159 AND IL 151

LOOP	LOOP SIZE(FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
NB CCO	6 x 6	7	505	3.57
NB CCO	6 x 6	7	505	3.57
NB LT TURN LN	6 x 50	3-6-3	852	3.09
NB LT TURN LN	6 x 50	3-6-3	852	3.09
NB THRU LN	6 x 50	3-6-3	848	3.00
NB RIGHT TURN LN	6 x 50	3-6-3	844	2.92
EB RIGHT TURN LN	6 x 50	3-6-3	812	2.19
WB LEFT TURN LN	6 x 50	3-6-3	886	2.19

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

Dist 8 Resurfacing 2010-4

FILE NAME =	USER NAME = froyer	DESIGNED -	REVISED -
as\p...work\p...froyer\175152\187508	3-shr-TS.dgn	DRAWN -	REVISED -
	PLOT SCALE = 48.1826 "/> <td>CHECKED -</td> <td>REVISED -</td>	CHECKED -	REVISED -
	PLOT DATE = 3/16/2010	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETECTOR LOOP REPLACEMENT

SCALE: 1" = 20' SHEET NO. 3 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various		ST. CLAIR	49	47
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 76066	