



DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR ILL 129 AND WEATHERSTONE

LOOP	LOOP SIZE(FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
NB LT TURN LN	6 x 50	3-6-3	838	2.78
NB THRU LN	6 x 50	3-6-3	838	2.78
NB CCD	6 x 6	6	374	3.1
SB LT TURN LN	6 x 50	3-6-3	819	2.35
SB THRU LN	6 x 50	3-6-3	819	2.35
SB CCD	6 x 6	6	355	2.6
EB CD	6 x 19	3-6-3	371	1.80
EB CD	6 x 18.5	3-6-3	365	1.82

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

FILE NAME =	USER NAME = froytr	DESIGNED -	REVISED -
al:\pe_work\peidost\176162\08760	shl-TS.dgn	DRAWN -	REVISED -
	PLOT SCALE = 48.1825' / IN.	CHECKED -	REVISED -
	PLOT DATE = 3/16/2010	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETECTOR LOOP REPLACEMENT**

SCALE: 1" = 20'    SHEET NO. 2 OF 4 SHEETS    STA.    TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
Various		ST. CLAIR	49 46
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	
		CONTRACT NO. 76066	

• Dist 8 Resurfacing 2010-4