DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 203 AND HARRISON ST.

LOOP	PHASE (Ø)	LOOP SIZE (FT X FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1. NB CCO A	6	6 X 6	6	354.5	2.6
2. NB CCO B	6	6 X 6	6	351.7	2.6
3. NB LT CD	1	6 X 50Q	3-6-3	798.1	1.9
4. NB THRU CD A	6	6 X 50Q	3-6-3	796.0	1.8
5. NB THRU CD B	6	6 X 50Q	3-6-3	793.5	1.8
6. WB THRU CD	NA	NA	NA	NA	NA
7. WB RT CD	NA	NA	NA	NA	NA
8. SB CCO A	2	6 X 6	6	381.2	3.2
9. SB CCO B	2	6 X 6	6	379.0	3.2
10. SB LT CD	5	6 X 50Q	3-6-3	836.8	2.7
11. SB THRU CD A	2	6 X 50Q	3-6-3	834.4	2.7
12. SB THRU CD B	2	6 X 50Q	3-6-3	832	2.6
13. EB THRU CD	NA	NA	NA	NA	NA
14. EB RT CD	NA	NA	NA	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.

Q=QUADRAPOLE

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 203 AND 3RD ST.

LOOP	PHASE (Ø)	LOOP SIZE (FT X FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1. NB CCO A	6	6 X 6	6	351	2.5
2. NB CCO B	6	6 X 6	6	348.6	2.5
3. NB LT CD	1	6 X 50Q	3-6-3	800.3	1.9
4. WB THRU CD	NA	NA	NA	NA	NA
5. SB CCO A	2	6 X 6	6	349.3	2.5
6. SB CCO B	2	6 X 6	6	351.7	2.6
7. SB LT CD	5	6 X 50Q	3-6-3	821.4	2.4
8. EB THRU CD	NA	NA	NA	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.

Q=QUADRAPOLE

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 203 AND 6TH ST.

LOOP	PHASE (Ø)	LOOP SIZE (FT X FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1. NB CCO A	6	6 X 6	6	360.9	2.8
2. NB CCO B	6	6 X 6	6	358.5	2.7
3. NB LT CD	1	6 X 50Q	3-6-3	831.5	2.6
4. NB THRU CD A	6	6 X 50Q	3-6-3	828.9	2.6
5. NB THRU CD B	6	6 X 50Q	3-6-3	826.3	2.5
6. WB THRU CD	NA	NA	NA	NA	NA
7. SB CCO A	2	6 X 6	6	314.7	1.7
8. SB CCO B	2	6 X 6	6	312.3	1.7
9. SB LT CD	5	6 X 50Q	3-6-3	800.3	1.9
10. SB THRU CD A	2	6 X 50Q	3-6-3	797.2	1.8
11. SB THRU CD B	2	6 X 50Q	3-6-3	793.9	1.8
12. EB THRU CD	NA	NA	NA	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.

Q=QUADRAPOLE

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 203 AND 20TH ST.

LOOP	PHASE (Ø)	LOOP SIZE (FT X FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1. NB CCO A	6	6 X 6	6	350	2.5
2. NB CCO B	6	6 X 6	6	347.5	2.5
3. NB LT CD	1	6 X 50Q	3-6-3	844.7	2.9
4. NB THRU CD A	6	6 X 50Q	3-6-3	830.4	2.6
5. NB THRU CD B	6	6 X 50Q	3-6-3	827.8	2.5
6. WB THRU CD	NA	NA	NA	NA	NA
7. SB CCO A	2	6 X 6	6	316.3	1.8
8. SB CCO B	2	6 X 6	6	313.6	1.7
9. SB LT CD	2	6 X 50Q	3-6-3	813.1	2.2
10. SB THRU CD	2	6 X 50Q	3-6-3	823.6	2.4
11. SB RT CD	2	6 X 31Q	3-6-3	539.1	1.9
12. EB CCO A	NA	NA	NA	NA	NA
13. EB CCO B	NA	NA	NA	NA	NA
14. EB LT CD	NA	NA	NA	NA	NA
15. EB RT CD A	NA	NA	NA	NA	NA
16. EB RT CD B	NA	NA	NA	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.

Q=QUADRAPOLE

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 203 AND IL 162

LOOP	PHASE (Ø)	LOOP SIZE (FT X FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1. EB LT CD	6	6 X 50Q	3-6-3	828.0	2.5
2. SB LT CD	NA	NA	NA	NA	NA
3. SB RT CD	NA	NA	NA	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.

Q=QUADRAPOLE

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - ___	REVISED - ___
		DRAWN - ___	REVISED - ___
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ___
	PLOT DATE = $DATE$	DATE - _____	REVISED - ___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT TABLE

SCALE: _____ | SHEET NO. 2 OF 7 SHEETS | STA. _____ TO STA. _____

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
594	(61-63)_8S-3	MADISON	40	35
		CONTRACT NO. 76871		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		