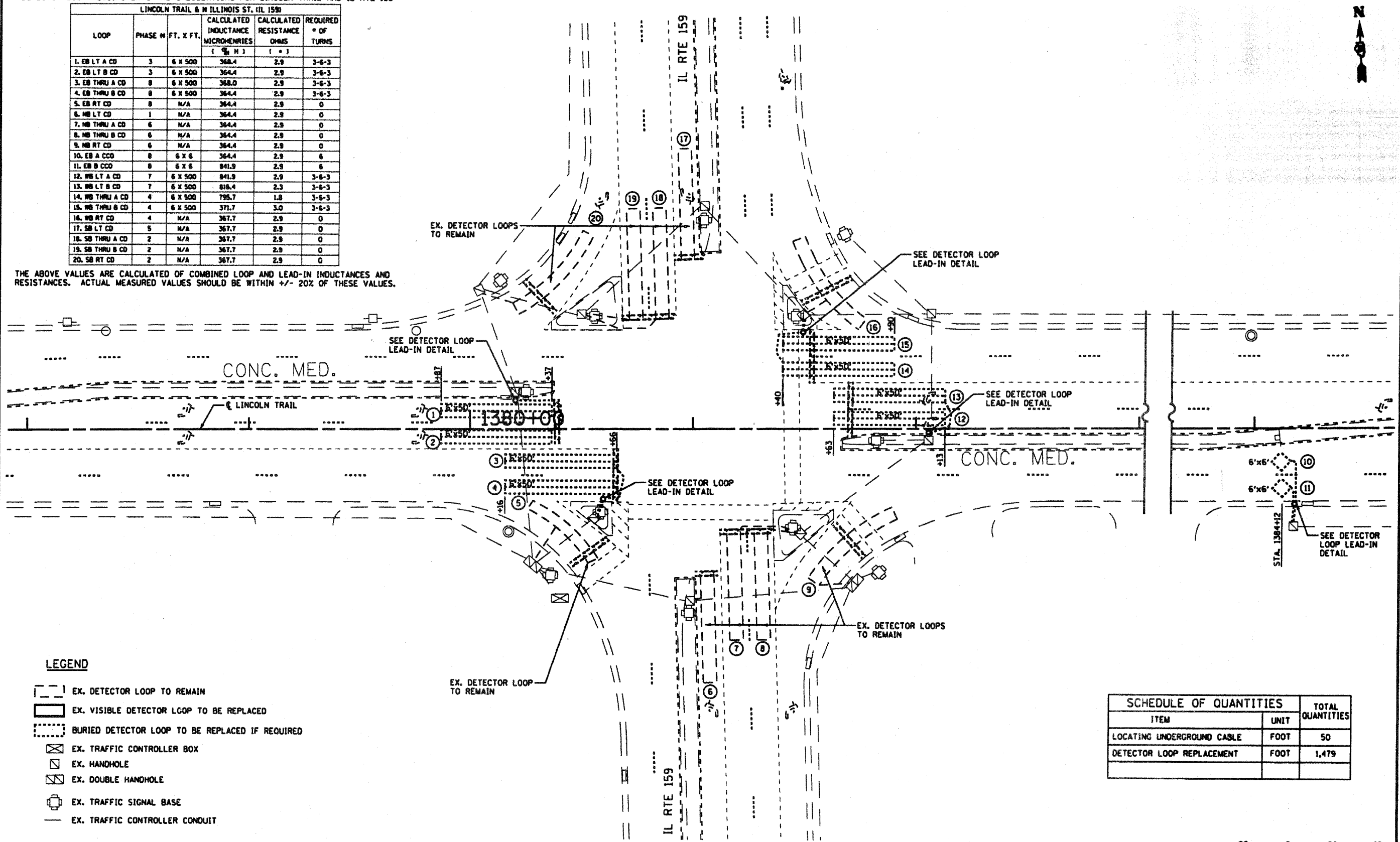


DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR LINCOLN TRAIL AND IL RTE 159

LOOP	PHASE #	FT. X FT.	CALCULATED	CALCULATED	REQUIRED
			INDUCTANCE MICROHENRIES (μ H)	RESISTANCE OHMS (Ω)	
1. EB LT A CD	3	6 X 500	368.4	2.9	3-6-3
2. EB LT B CD	3	6 X 500	364.4	2.9	3-6-3
3. EB THRU A CD	8	6 X 500	368.0	2.9	3-6-3
4. EB THRU B CD	8	6 X 500	364.4	2.9	3-6-3
5. EB RT CD	8	N/A	364.4	2.9	0
6. NB LT CD	1	N/A	364.4	2.9	0
7. NB THRU A CD	6	N/A	364.4	2.9	0
8. NB THRU B CD	6	N/A	364.4	2.9	0
9. NB RT CD	6	N/A	364.4	2.9	0
10. EB A CCO	8	6 X 6	364.4	2.9	6
11. EB B CCO	8	6 X 6	841.9	2.9	6
12. NB LT A CD	7	6 X 500	841.9	2.9	3-6-3
13. NB LT B CD	7	6 X 500	816.4	2.3	3-6-3
14. NB THRU A CD	4	6 X 500	795.7	1.8	3-6-3
15. NB THRU B CD	4	6 X 500	371.7	3.0	3-6-3
16. NB RT CD	4	N/A	367.7	2.9	0
17. SB LT CD	5	N/A	367.7	2.9	0
18. SB THRU A CD	2	N/A	367.7	2.9	0
19. SB THRU B CD	2	N/A	367.7	2.9	0
20. SB RT CD	2	N/A	367.7	2.9	0

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



LEGEND

- EX. DETECTOR LOOP TO REMAIN
- EX. VISIBLE DETECTOR LOOP TO BE REPLACED
- BURIED DETECTOR LOOP TO BE REPLACED IF REQUIRED
- EX. TRAFFIC CONTROLLER BOX
- EX. HANDHOLE
- EX. DOUBLE HANDHOLE
- EX. TRAFFIC SIGNAL BASE
- EX. TRAFFIC CONTROLLER CONDUIT

SCHEDULE OF QUANTITIES		TOTAL QUANTITIES
ITEM	UNIT	
LOCATING UNDERGROUND CABLE	FOOT	50
DETECTOR LOOP REPLACEMENT	FOOT	1,479



FILE NAME	USER NAME	DESIGNED - CMV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT LINCOLN TRAIL & N. ILLINOIS ST. (IL 159)	P.A.U. NO. 9166	SECTION 34-IRS-3	COUNTY ST. CLAIR	TOTAL SHEETS
#FILE#		DRAWN - SJS	REVISED -						87
CONSULTING ENGINEERS Springfield, Illinois	PLOT SCALE	CHECKED - CMV	REVISED -						83
	PLOT DATE	DATE - 10/21/2010	REVISED -						CONTRACT NO. 78098