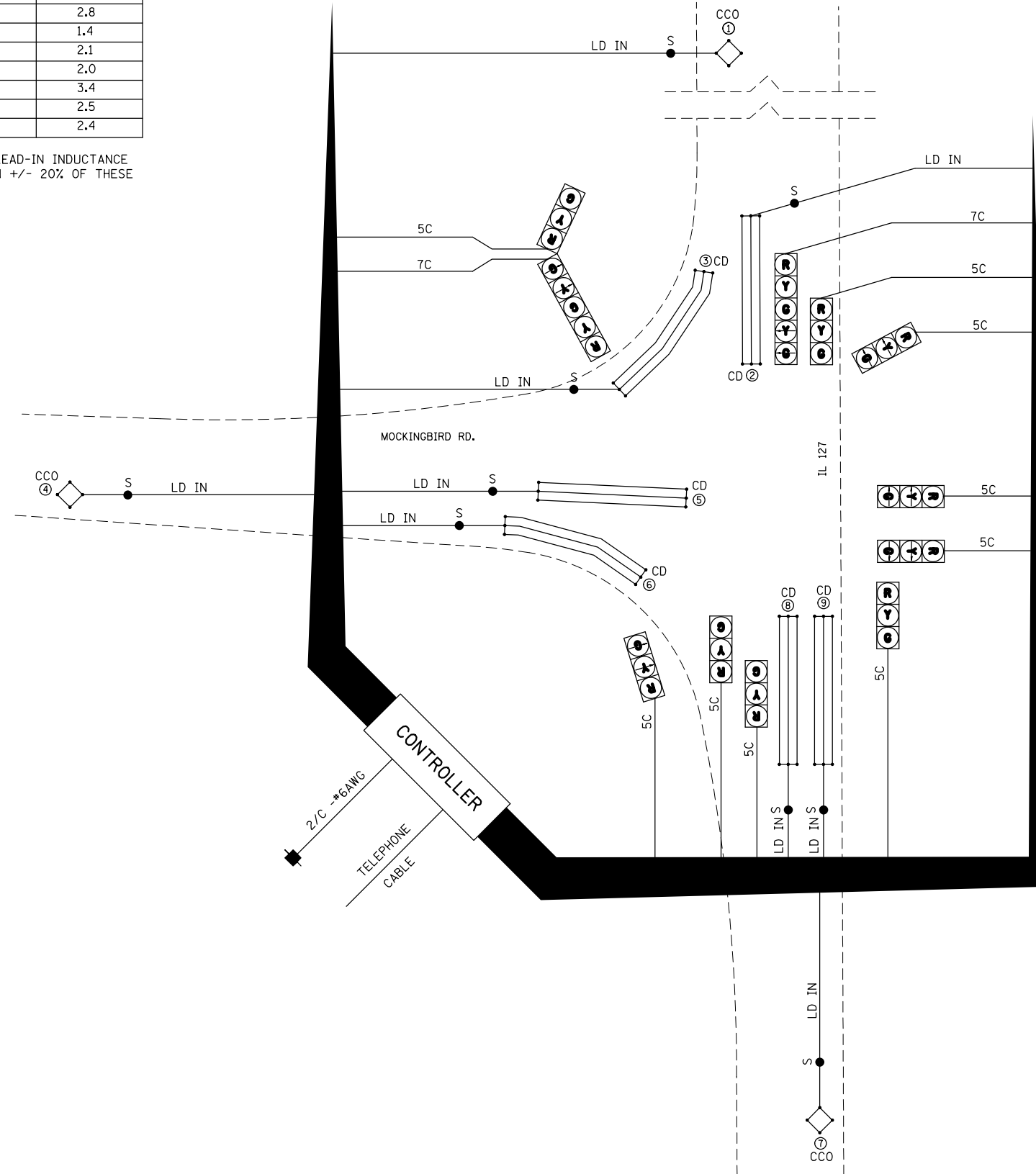


DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR MOCKINGBIRD RD. AND IL 127

LOOP	PHASE (Ø)	LOOP SIZE(FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (µH)	CALCULATED RESISTANCE OHMS (Ω)
1. SB CCO	6	6 x 6	7	506.2	3.6
2. SB THRU CD	6	6 x 50	3-6-3	839.0	2.8
3. SB RT CD	6	6 x 50	3-6-3	837.7	2.8
4. EB CCO	4	6 x 6	6	300.9	1.4
5. EB LT CD	4	6 x 50	3-6-3	807.6	2.1
6. EB RT CD	4	6 x 50	3-6-3	802.5	2.0
7. NB CCO	2	6 x 6	7	499.1	3.4
8. NB LT CD	5	6 x 50	3-6-3	824.5	2.5
9. NB THRU CD	2	6 x 50	3-6-3	821.9	2.4

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



CABLE DIAGRAM LEGEND

- ELECTRIC CABLE IN CONDUIT
- S CABLE SPLICE (SEE GENERAL NOTES)
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
- LD IN ELECTRIC CABLE LEAD-IN, 1 PAIR
- CD CALL DELAY (SEE GENERAL NOTES)
- CCO CALL CARRY OVER (SEE GENERAL NOTES)
- SERVICE INSTALLATION
- #6 INDICATES AMERICAN WIRE GAUGE (AWG) SIZE 6 CONDUCTORS (SEE GENERAL NOTES)

FILE NAME =	USER NAME = prestonme	DESIGNED -	REVISED -
et:\pw\work\p\dot\prestonme\d0287304\d076f47-sht-TS.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 10/8/2013	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MOCKINGBIRD RD. CABLE DIAGRAM

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	102-1RS-3, 102-TS	WASHINGTON	46	39
CONTRACT NO. 76F47				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				