

SCHEDULE OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE Y031	
CODE NO	ITEM	UNIT		CLLNSVL. RD. & I-255 RAMPS 9 & 10	CLLNSVL. RD. & I-255 RAMPS 7 & 8
80500100	LOCATING UNDERGROUND CABLE	FOOT	100	55	45
80600600	DETECTOR LOOP REPLACEMENT	FOOT	2331	1402	929

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR COLLINSVILLE ROAD AND I-255 RAMPS 9 & 10

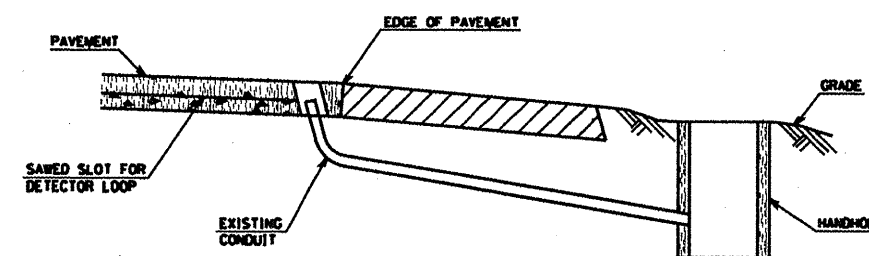
LOOP	PHASE (Ø)	LOOP SIZE(FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (µH)	CALCULATED RESISTANCE OHMS (Ω)
1. 1E SL	6	6 X 6	6	370.8	3.0
2. 1E SL	6	6 X 6	6	368.2	2.9
3. 2E OL	6	6 X 30-0	3-6-3	563.2	2.7
4. 2E OL	6	6 X 30-0	3-6-3	560.3	2.7
5. EB LT CD	1	6 X 50-0	3-6-3	832.64	2.7
6. NB LT CD	3	6 X 58-0	3-6-3	952.0	2.9
7. NB RT CD	3	6 X 65-0	3-6-3	1054.78	3.0
8. 3W SL	2	6 X 6	6	300.9	1.4
9. 3W SL	2	6 X 6	6	297.8	1.3
10. 3W SML	2	6 X 6	6	300.9	1.4
11. 3W SML	2	6 X 6	6	297.8	1.3
12. WB LT CD	5	6 X 50-0	3-6-3	835.3	2.7
13. WB LT CD	5	6 X 50-0	3-6-3	835.3	2.7
14. SB THRU CD	NA	NA	NA	NA	NA

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR COLLINSVILLE ROAD AND I-255 RAMPS 7 & 8

LOOP	PHASE (Ø)	LOOP SIZE(FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (µH)	CALCULATED RESISTANCE OHMS (Ω)
1. 4E SL	6	6 X 6	6	368.4	2.9
2. 4E SL	6	6 X 6	6	364.4	2.9
3. 4E SML	6	6 X 6	6	368.0	2.9
4. 4E SML	6	6 X 6	6	364.4	2.9
5. EB LT CD	1	6 X 50-0	3-6-3	841.9	2.9
6. EB LT CD	1	6 X 50-0	3-6-3	841.9	2.9
7. NB LT CD	4	6 X 50-0	3-6-3	816.4	2.3
8. NB RT CD	4	6 X 50-0	3-6-3	795.7	1.8
9. 5W SL	2	6 X 6	6	371.7	3.0
10. 5W SL	2	6 X 6	6	367.7	2.9

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

CD=CALL DELAY
O=QUADRAPOLE
OL=QUEUEING LOOP
SL=SYSTEM LOOP
SML=SPEED MONITOR LOOP



DETAIL A
NO SCALE
RE-USE EXISTING DETECTOR LOOP LEAD-IN CONDUIT

- 1 DRILL OUT PAVEMENT SEALANT AND CLEAN EXISTING CONDUIT.
- 2 REMOVE EXISTING CABLE TO HANDHOLE.
- 3 INSTALL LOOP LEAD-IN CONDUCTORS IN CONDUIT.
- 4 SPLICE NEW DETECTOR LOOP LEAD-IN CONDUCTORS TO EXISTING LEAD-IN CABLE IN HANDHOLE.
- 5 FILL HOLE WITH APPROVED SEALER. PREVENT SEALER FROM ENTERING INTO CONDUIT.

NOT A PAY ITEM. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "DETECTOR LOOP REPLACEMENT".
THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING THE EXISTING CONDUIT DURING CONSTRUCTION. SHOULD ANY DAMAGE TO THE CONDUIT OCCUR DUE TO THE OPERATIONS, REPAIR SHALL BE MADE TO THE SATISFACTION OF THE ENGINEER AND WILL BE DONE AT THE CONTRACTOR'S EXPENSE.

FILE NAME *	USER NAME * alfordb	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT SCHEDULE OF QUANTITIES, DETECTOR LOOP REQ. & CALC. AND DETAIL	FAJ	SECTION	COUNTY	TOTAL	SHEET
al\p\work\pedit\alfordb\08175875\0878	94-shi-plendgn	DRAWN -	REVISED -			9128	28RS-6	MADISON	33	28
PLOT SCALE * 48,0000 ' / IN.	CHECKED -	REVISED -	REVISED -			CONTRACT NO. 75084				
PLOT DATE * 3/17/2018	DATE -	REVISED -	REVISED -			ILLINOIS FED. AID PROJECT				