

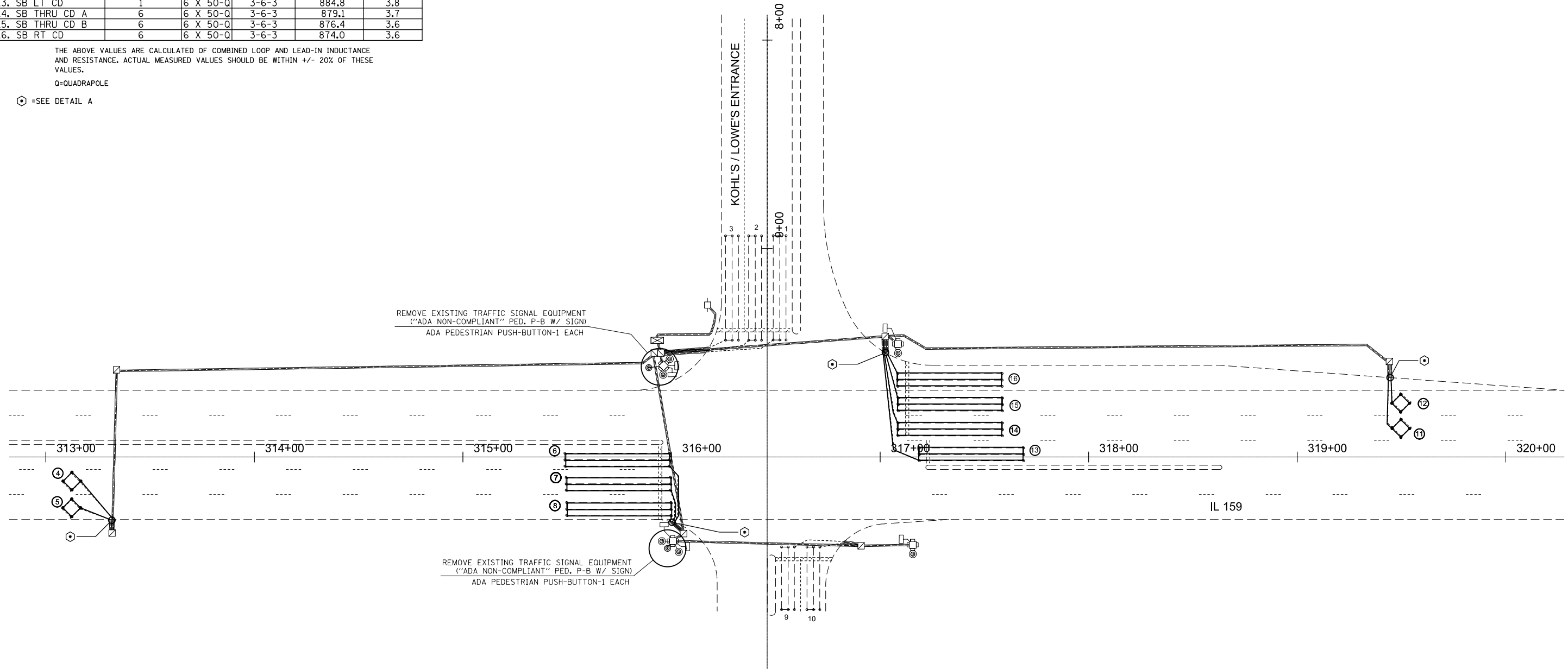
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 159 & KOHL'S /LOWE'S ENTRANCE

| LOOP# | PHASE # | LOOP SIZE (FT. X FT.) | REQUIRED # OF TURNS | CALCULATED INDUCTANCE MICROHENRIES | CALCULATED RESISTANCE OHMS |
|------------------|---------|-----------------------|---------------------|------------------------------------|----------------------------|
| 1. EB LT CD | 4 | 6 X 50-Q | 3-6-3 | 802.7 | 2.0 |
| 2. EB THRU CD A | 4 | 6 X 50-Q | 3-6-3 | 800.1 | 1.9 |
| 3. EB THRU CD B | 4 | 6 X 50-Q | 3-6-3 | 797.4 | 1.9 |
| 4. NB CCO A | 2 | 6 X 6 | 6 | 341.8 | 2.3 |
| 5. NB CCO B | 2 | 6 X 6 | 6 | 340.0 | 2.3 |
| 6. NB LT CD | 5 | 6 X 50-Q | 3-6-3 | 820.1 | 2.4 |
| 7. NB THRU CD A | 2 | 6 X 50-Q | 3-6-3 | 817.2 | 2.3 |
| 8. NB THRU CD B | 2 | 6 X 50-Q | 3-6-3 | 817.2 | 2.3 |
| 9. WB LT CD | 3 | 6 X 50-Q | 3-6-3 | 840.3 | 2.8 |
| 10. WB THRU CD | 3 | 6 X 50-Q | 3-6-3 | 837.5 | 2.8 |
| 11. SB CCO A | 6 | 6 X 6 | 6 | 346.2 | 2.4 |
| 12. SB CCO B | 6 | 6 X 6 | 6 | 343.1 | 2.4 |
| 13. SB LT CD | 1 | 6 X 50-Q | 3-6-3 | 884.8 | 3.8 |
| 14. SB THRU CD A | 6 | 6 X 50-Q | 3-6-3 | 879.1 | 3.7 |
| 15. SB THRU CD B | 6 | 6 X 50-Q | 3-6-3 | 876.4 | 3.6 |
| 16. SB RT CD | 6 | 6 X 50-Q | 3-6-3 | 874.0 | 3.6 |

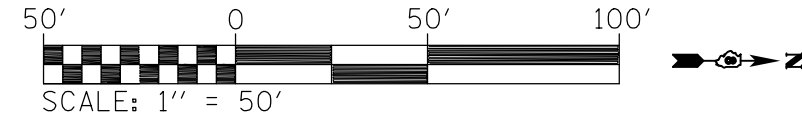
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

Q=QUADRAPOLE

⊕ =SEE DETAIL A



IL 159 & KOHL'S /LOWE'S ENTRANCE



| | | | |
|---|-----------------------|------------|-----------|
| FILE NAME = | USER NAME = prestonme | DESIGNED - | REVISED - |
| et:\pw\work\p\dot\prestonme\d0344817\d876g55-sh1-TS.dgn | | DRAWN - | REVISED - |
| PLOT SCALE = 50.0000' / in. | | CHECKED - | REVISED - |
| PLOT DATE = 7/8/2014 | | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN
IL 159 & KOHL'S /LOWE'S ENTRANCE

SCALE: SHEET NO. 7 OF 10 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------------|-----------|--------------|-----------|
| 600 | (130-1, 130-2)RS-2 | ST. CLAIR | 36 | 33** |
| CONTRACT NO. 76G55 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |