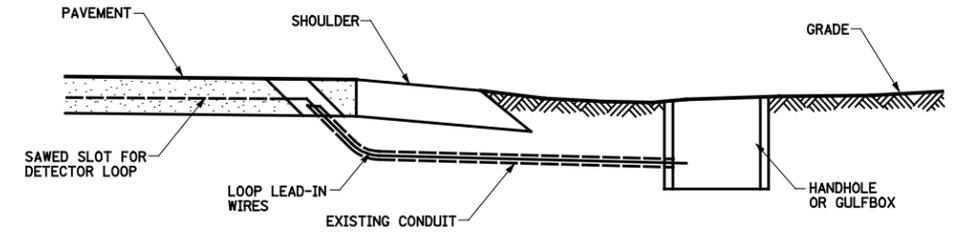


DETECTOR LOOP REQUIREMENTS AND CALCULATIONS					
C.H. 35 AND I-255 RAMP					
LOOP	RAMP	FT X FT	CALCULATED INDUCTANCE (MICROHENRIES)	CALCULATED RESISTANCE (OHMS)	REQUIRED NUMBER OF TURNS
SB CCO	RAMP 1	4 X 25	504.6	3.28	3-6-3
SB CCO	RAMP 3	6 X 12	304.22	3.10	6

SCHEDULE OF QUANTITIES		
ITEM	LOCATION	LENGTH (FT)
DETECTOR LOOP REPLACEMENT	RAMP 1	69
DETECTOR LOOP REPLACEMENT	RAMP 3	52
TOTAL		121



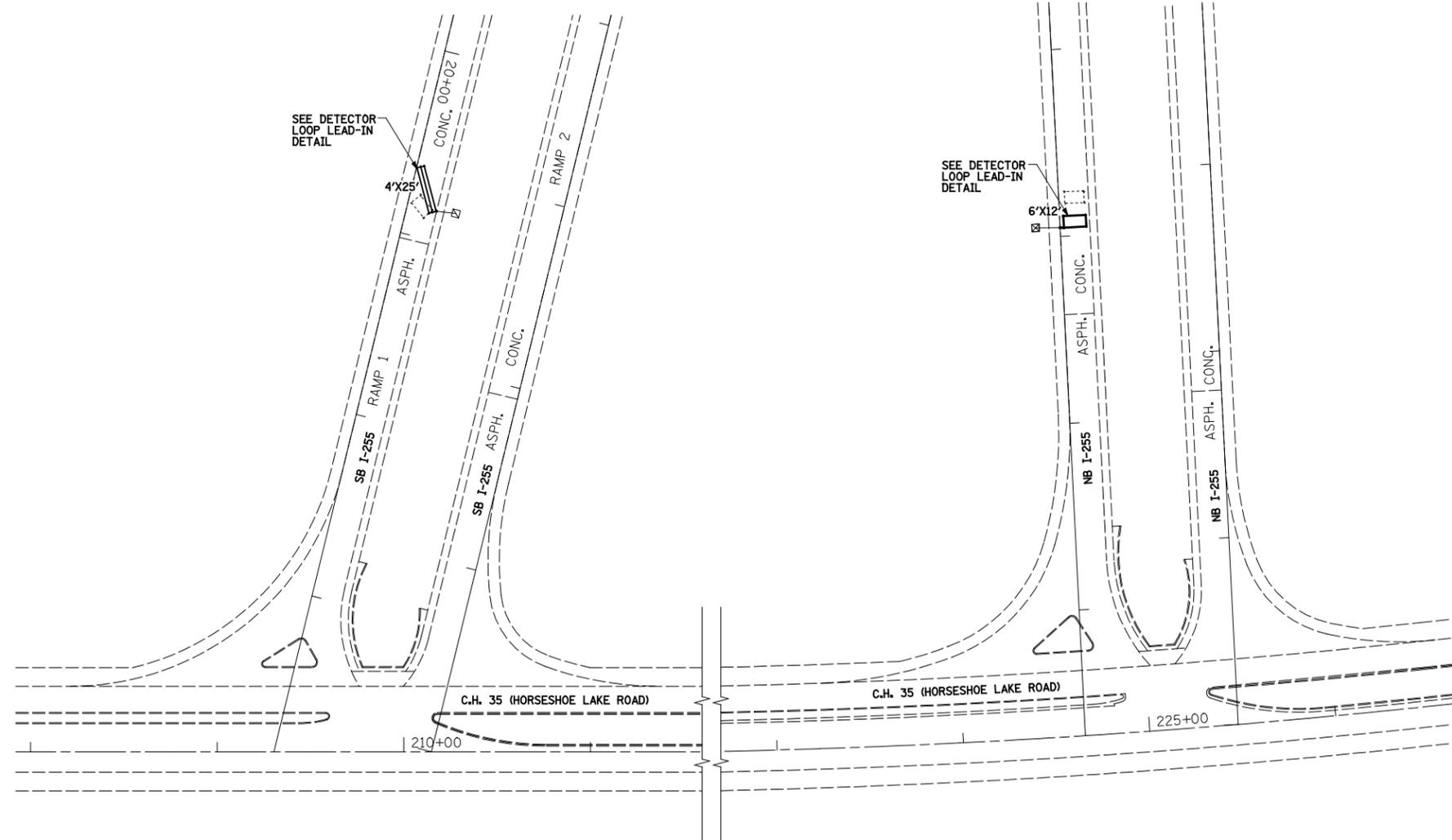
**DETECTOR LOOP LEAD-IN DETAIL**  
(USE EXISTING CONDUIT)

1. DRILL OUT PAVEMENT SEALANT AND CLEAN EXISTING CONDUIT.
2. REMOVE EXISTING DETECTOR LOOP WIRES TO HANDHOLE OR GULFBX.
3. INSTALL NEW LOOP LEAD-IN WIRES IN EXISTING CONDUIT.
4. SPLICE NEW DETECTOR LOOP WIRES TO EXISTING LOOP LEAD-IN CABLE IN HANDHOLE OR GULFBX.
5. FILL HOLE WITH APPROVED SEALER. PREVENT SEALER FROM ENTERING INTO CONDUIT.
6. LOCATING UNDERGROUND CABLE WILL BE PAID FOR SEPARATELY.

THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "DETECTOR LOOP REPLACEMENT"

SEE TABLE "DETECTOR LOOP REQUIREMENTS AND CALCULATIONS" FOR LOOP SIZE AND CALCULATED NUMBER OF TURNS.

1. DETECTOR LOOPS SHALL BE PLACED IN THE PAVEMENT AFTER MILLING AND PRIOR TO RESURFACING.
2. THE LOCATION OF ALL DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY SLOTS ARE SAWED IN THE PAVEMENT.
3. DETECTOR LOOP LEAD-IN SPLICES SHALL BE MADE ACCORDING TO HIGHWAY STANDARD 886001. CONDUCTORS SHALL BE SPLICED IN A RIGID MOLD. ROSIN-CORE SOLDER SHALL BE USED. THE COST OF LABOR AND MATERIAL FOR REMOVING EXISTING DETECTOR LOOP CABLES FROM THE CONDUIT AND SPLICING INTO THE EXISTING LEAD-IN CABLES SHALL BE INCLUDED IN THE PAY ITEM "DETECTOR LOOP REPLACEMENT".



**DETECTOR LOOP REPLACEMENT DETAIL**

- LEGEND**
- EXISTING VISIBLE DETECTOR LOOP TO BE REPLACED
  - EXISTING HANDHOLE
  - EXISTING CONDUIT

FILE NAME =	USER NAME = Paul	DESIGNED - JWS	REVISED -
S:\Projects\410-0022-211 255 S\dm\CADD Sheets\DR16A\9-ah1-miscdet01.dgn		DRAWN - LEC	REVISED -
	PLOT SCALE = 40.0000' / IN.	CHECKED - BRM	REVISED -
	PLOT DATE = 7/31/2012	DATE - 7-14-11	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FAI 255 MISCELLANEOUS DETAIL**

SCALE: SHEET NO. 6 OF 6 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-(7,8)RS-2	MADISON	261	195
<b>CONTRACT NO. 76A89</b>				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				