

DESIGN FILE: I:\FIELD\ELECTRICAL\SIGNAL\DWG\R39Illinois.dwg
WORKSTATION: roney DATE: 1/28/2009

EXISTING MATERIAL

ITEM	UNIT	DESCRIPTION	QTY.
625	LIN.FT.	CONDUIT, 713.04, 1"	1216
625	LIN.FT.	CONDUIT, 713.04, 3"	19
625	EACH	PULL BOX, 713.08, 18"	12
625	EACH	GROUND ROD, APP	3
632	LIN.FT.	MESSENGER WIRE, 7-STRAND, 3/8" DIA. W/ ACC.	110
632	LIN.FT.	SIGNAL CABLE, 5/C, #14 AWG	368
632	EACH	STRAIN POLE FOUNDATION, APP (10'x3' dia.)	2
632	LIN.FT.	LOOP DETECTOR LEAD-IN CABLE, 2/C, NO. 14 AWG	925
632	LIN.FT.	POWER CABLE, 2/C, NO. 6 AWG	51
632	LIN.FT.	POWER CABLE, 3/C, NO. 6 AWG	28
632	EACH	POWER SERVICE, APP	1
632	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 7, 30 FEET,	2
632	LIN.FT.	LOOP DETECTOR WIRE, TYPE E, APP	1092
633	SQ.FT.	CONTROLLER WORKPAD (3'x4')	12.0

MATERIAL REQUIRED - PROJ. 43(01)

REF.NO.	ITEM	UNIT	DESCRIPTION	QTY.
15	625	EACH	PULL BOX, 713.08, 18"	2
21	630	LIN.FT.	SIGN HANGER ASSEMBLY, SPANWIRE, AS PER PLAN	2
22	630	SQ.FT.	SIGN, FLAT SHEET, TYPE G	10.0
25	630	EACH	SIGN DATA COLLECTION	2
30	632	EACH	VEHICULAR SIGNAL HEAD, 3-SECTION, 12" LENS, 1-WAY **	6
31	632	EACH	VEHICULAR SIGNAL HEAD, 5-SECTION, 12" LENS, 1-WAY **	2
37	632	EACH	COVERING OF VEHICULAR SIGNAL HEAD	4
39	632	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE	8
42	632	LIN.FT.	SIGNAL CABLE, 3/C, #14 AWG	265
44	632	LIN.FT.	SIGNAL CABLE, 5/C, #14 AWG	225
49	632	LIN.FT.	LOOP DETECTOR LEAD-IN CABLE, 2/C, #14 AWG	1221
65	632	EACH	REMOVAL OF CONTROLLER	1
75	632	EACH	REMOVE AND REINSTALL VEHICULAR SIGNAL HEADS, APP *	4
79	632	LIN.FT.	LOOP DETECTOR PAVEMENT CUTTING, APP	132
81	632	LIN.FT.	LOOP DETECTOR WIRE, TYPE E, APP	420
87	633	EACH	CONTROLLER, ACTUATED, 8-PHASE, SOLID-STATE DIGITAL MICROPROCESSOR	1

* EXISTING 2-WAY SIGNAL HEADS ARE TO BE REMOVED FOR DISPOSAL.

** 1-WAY VEHICULAR SIGNAL HEADS ③ & ⑦ ARE TO BE CONSTRUCTED AS A SINGLE 2-WAY HEAD
1-WAY VEHICULAR SIGNAL HEADS ① & ⑤ ARE TO BE CONSTRUCTED AS A SINGLE 2-WAY HEAD

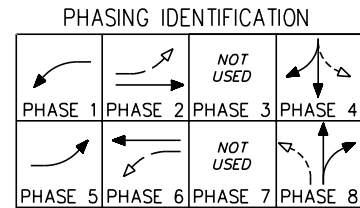
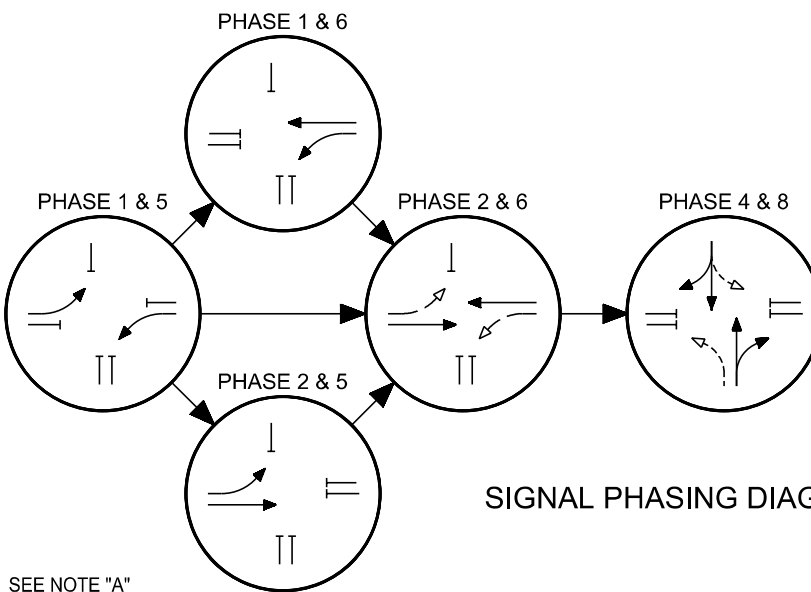
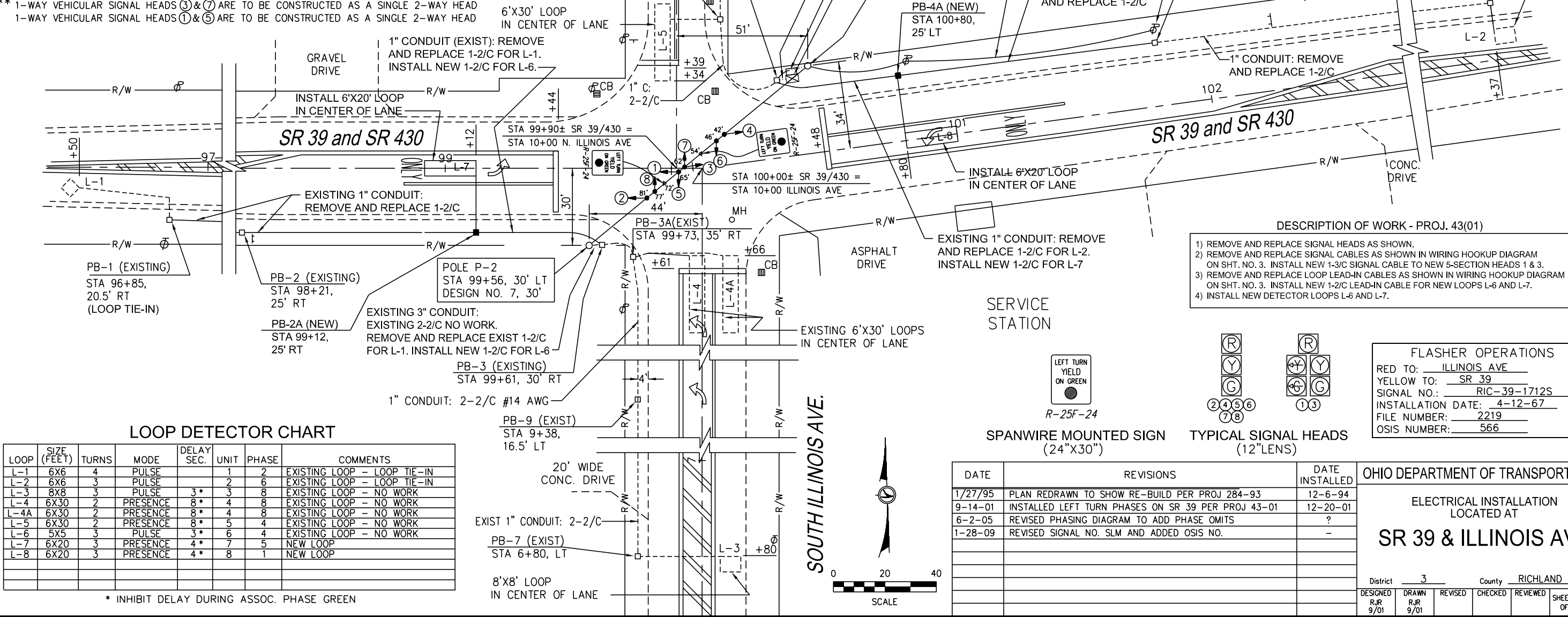
NOTES

- A) 3" CONDUIT: EXIST 3-2/C NO WORK. REMOVE AND REPLACE 2-2/C FOR L-1 & L-2. INSTALL NEW 2-2/C FOR L-6 & L-7. EXIST 1-2/C #6 POWER CABLE TO REMAIN. EXIST 4-5/C SIGNAL CABLES TO REMAIN. INSTALL NEW 2-3/C SIGNAL CABLES FOR HEADS ① & ③.
- B) 3" CONDUIT: EXIST 2-2/C NO WORK. REMOVE AND REPLACE 1-2/C FOR L-1. INSTALL NEW 1-2/C FOR L-6. EXIST 1-2/C #6 POWER CABLE TO REMAIN. EXIST 4-5/C SIGNAL CABLES TO REMAIN. INSTALL NEW 2-3/C SIGNAL CABLES FOR HEADS ① & ③.

EXIST 5'X5' LOOP
IN CENTER OF LANE

NORTH ILLINOIS AVENUE

SOUTH ILLINOIS AVE.



OMIT PHASE 1 WHEN PHASE 2 IS ON
OMIT PHASE 5 WHEN PHASE 6 IS ON

SIGNAL PHASING DIAGRAM

POWER SOURCE
OHIO EDISON POLE NO. 86DX10-24
STA 101+81, 30' LT

EXISTING 6'X8'
LOOP (NO WORK)

PB-6 (EXISTING)
STA 103+37, 22' LT
(LOOP TIE-IN)

PB-5 (EXISTING)
STA 101+81,
25' LT

POLE P-1
STA 100+46, 34' RT
DESIGN NO. 7, 27'

REMOVE EXISTING 2-PHASE CONTROLLER AND
CABINET. INSTALL NEW 8-PHASE CONTROLLER
AND CABINET ON EXISTING FOUNDATION.

PB-4A (NEW)
STA 100+80,
25' LT

POWER SERVICE
CABLE BY OHIO EDISON
1" CONDUIT: REMOVE
AND REPLACE 1-2/C

1" CONDUIT: REMOVE
AND REPLACE 1-2/C

SR 39 and SR 430

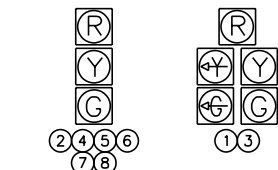
DESCRIPTION OF WORK - PROJ. 43(01)

- 1) REMOVE AND REPLACE SIGNAL HEADS AS SHOWN.
- 2) REMOVE AND REPLACE SIGNAL CABLES AS SHOWN IN WIRING HOOKUP DIAGRAM ON SHT. NO. 3. INSTALL NEW 1-3/C SIGNAL CABLE TO NEW 5-SECTION HEADS 1 & 3.
- 3) REMOVE AND REPLACE LOOP LEAD-IN CABLES AS SHOWN IN WIRING HOOKUP DIAGRAM ON SHT. NO. 3. INSTALL NEW 1-2/C LEAD-IN CABLE FOR NEW LOOPS L-6 AND L-7.
- 4) INSTALL NEW DETECTOR LOOPS L-6 AND L-7.

SERVICE
STATION



SPANWIRE MOUNTED SIGN
(24"X30")



TYPICAL SIGNAL HEADS
(12" LENS)

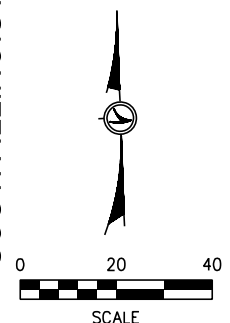
FLASHER OPERATIONS

RED TO: ILLINOIS AVE
YELLOW TO: SR 39
SIGNAL NO.: RIC-39-1712S
INSTALLATION DATE: 4-12-67
FILE NUMBER: 2219
OSIS NUMBER: 566

LOOP DETECTOR CHART

LOOP	SIZE (FEET)	TURNS	MODE	DELAY SEC.	UNIT	PHASE	COMMENTS
L-1	6X6	4	PULSE		1	2	EXISTING LOOP - LOOP TIE-IN
L-2	6X6	3	PULSE		2	6	EXISTING LOOP - LOOP TIE-IN
L-3	8X8	3	PULSE	3*	3	8	EXISTING LOOP - NO WORK
L-4	6X30	2	PRESENCE	8*	4	8	EXISTING LOOP - NO WORK
L-4A	6X30	2	PRESENCE	8*	4	8	EXISTING LOOP - NO WORK
L-5	6X30	2	PRESENCE	8*	5	4	EXISTING LOOP - NO WORK
L-6	5X5	3	PULSE	3*	6	4	EXISTING LOOP - NO WORK
L-7	6X20	3	PRESENCE	4*	7	5	NEW LOOP
L-8	6X20	3	PRESENCE	4*	8	1	NEW LOOP

* INHIBIT DELAY DURING ASSOC. PHASE GREEN



DATE	REVISIONS	DATE INSTALLED
1/27/95	PLAN REDRAWN TO SHOW RE-BUILD PER PROJ 284-93	12-6-94
9-14-01	INSTALLED LEFT TURN PHASES ON SR 39 PER PROJ 43-01	12-20-01
6-2-05	REVISED PHASING DIAGRAM TO ADD PHASE OMTS	?
1-28-09	REVISED SIGNAL NO. SLM AND ADDED OSIS NO.	-

OHIO DEPARTMENT OF TRANSPORTATION

ELECTRICAL INSTALLATION
LOCATED AT

SR 39 & ILLINOIS AVE

District 3 County RICHLAND

DESIGNED RJR 9/01 DRAWN RJR 9/01 REVISED CHECKED REVIEWED SHEET OF