

PROJECT ENGR. RANDY LANINGA 309-671-4477

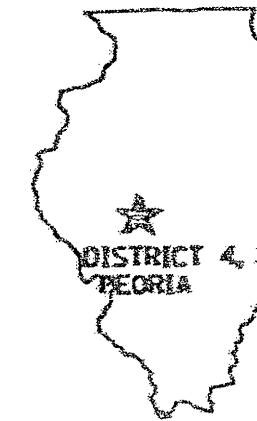
DESIGN ENGR. ERIC HOWALD 309-671-4481

INDEX OF SHEETS

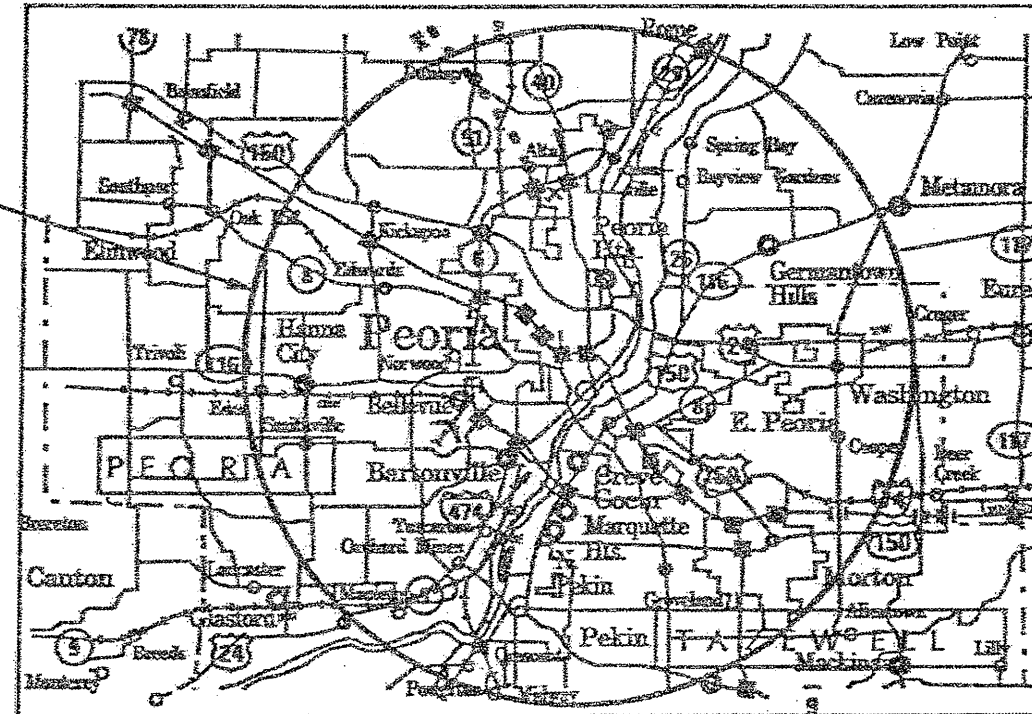
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IL 29 & TRUITT

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 VARIOUS ROUTES
 PEORIA & TAZEWELL COUNTIES
 SECTION D4 SIGNAL WORK 2010-2
 C-94-103-10

SHEET 1 OF 9
D-94-048-10



21 INTERSECTIONS IN
 PEORIA COUNTY ALONG
 US 24, IL 8, IL 9, IL 29
 IL 98, AND IL 116



21 INTERSECTIONS IN
 TAZEWELL COUNTY ALONG
 I-474, US 24, US 150,
 IL 29, AND IL 98

STANDARDS

- 701001-02
- 701006-03
- 701011-02
- 701101-02
- 701106-02
- 701701-06
- 701901-01

LOCATION OF IMPROVEMENT

TWENTY-ONE SIGNALIZED INTERSECTIONS LOCATED ALONG US ROUTE 24, IL ROUTES 8, 9, 29, 98, AND 116 IN PEORIA COUNTY; TWENTY-ONE SIGNALIZED INTERSECTIONS LOCATED ALONG INTERSTATE 474, US ROUTES 24 AND 150, AND IL ROUTES 29 AND 98 IN TAZEWELL COUNTY

CONTRACT NO. 68983
 CATALOG NO. 034458-00D

DESCRIPTION OF WORK

THIS PROJECT CONSISTS OF INSTALLING ELECTRICAL CABLE IN CONDUIT AT EXISTING TRAFFIC SIGNAL INSTALLATIONS TO PROVIDE A LOW IMPEDANCE GROUND-FAULT PATH BACK TO THE ELECTRICAL SERVICE. BONDING ALL EXISTING TRAFFIC SIGNAL STRUCTURES TO THIS CABLE IN ACCORDANCE WITH NEC REQUIREMENTS, THE INSTALLATION OF NEW ADA COMPLIANT PEDESTRIAN PUSHBUTTONS, CONVERTING THREE INTERSECTIONS TO FLASHING YELLOW ARROW OPERATION, AND PERFORMING ALL COLLATERAL WORK REQUIRED TO COMPLETE THE IMPROVEMENTS.

J.U.L.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-0123

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED March 24, 2010

[Signature]
 DISTRICT ENGINEER

May 7, 2010
Scott E. Stitt, P.E., Inc.
 acting ENGINEER OF DESIGN AND ENVIRONMENT

May 7, 2010
Christine M. Reed, Inc.
 DIRECTOR, DIVISION OF HIGHWAYS

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OF THE STATE OF ILLINOIS

COMMITMENTS: THERE ARE NO COMMITMENTS FOR THIS PROJECT.

CONSTRUCTION NOTES

1. ANY MAINTENANCE OF EXISTING TRAFFIC SIGNALS WILL BE CONSIDERED EXTRA WORK IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
2. THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY COMPONENTS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.
4. ELECTRICAL WORK SHALL CONFORM WITH NATIONAL, STATE, AND LOCAL CODES.
5. ALL TRAFFIC SIGNAL SECTIONS SHALL HAVE 12" SINGLE LED LENSES.
6. THE RED SECTIONS OF THE SIGNAL HEADS SHARING THE SAME MAST ARM SHALL BE LEVEL WITH ONE ANOTHER AND MAINTAIN A 16 FT. MINIMUM CLEARANCE FROM THE HIGHEST POINT OF THE ROADWAY.
7. ALL TRAFFIC SIGNAL HEAD BRACKETS ARE TO BE ALUMINUM WITH A NATURAL FINISH.
8. THE EXISTING TRAFFIC SIGNALS SHALL REMAIN IN OPERATION DURING THE CONSTRUCTION OF THE PROPOSED TRAFFIC SIGNALS.
9. THE CONTRACTOR SHALL PROVIDE ELECTRICAL CABLE SLACK IN ACCORDANCE WITH ARTICLE 873.03.
10. ELECTRICAL CABLE WILL BE MEASURED FOR PAYMENT IN ACCORDANCE WITH ARTICLE 873.04.
11. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.
12. REMOVAL OF EXISTING TRAFFIC SIGNAL ITEMS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICES FOR THE PROPOSED ITEMS.
13. ALL TRAFFIC SIGNAL STRUCTURES SHALL BE BONDED IN ACCORDANCE WITH NEC REQUIREMENTS. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR "BOND TRAFFIC SIGNAL STRUCTURE" AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS (INCLUDING CLAMPS, HARDWARE, ELECTRICAL CABLE, AND ALL OTHER ITEMS REQUIRED TO BOND THE STRUCTURES).
14. A FIVE FOOT PIECE OF GREEN INSULATED #6 1/C XLP-USE CABLE SHALL BE USED TO CONNECT THE HANDHOLE LID TO THE FRAME. THE COST OF THIS WIRE SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR "BOND TRAFFIC SIGNAL STRUCTURE".
15. THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINETS SHALL BE GROUNDED AND SAFETY BONDED IN ACCORDANCE WITH NEC REQUIREMENTS. THE CONTRACTOR SHALL CONNECT THE PROPOSED GROUND CABLES TO THE CABINETS USING UL LISTED MECHANICAL CONNECTORS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR "ELECTRIC CABLE IN CONDUIT, GROUNDING, 1C, NO. 6" AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO BOND THE CABINET.
16. THE EXISTING PEDESTRIAN SIGNAL POST LOCATED IN THE SOUTHWEST QUADRANT AT THE INTERSECTION OF IL 8/116 (MACARTHUR) & ADAMS SHALL BE SAFETY BONDED BY UTILIZING THE SPARE CONDUCTORS IN THE TRAFFIC SIGNAL CABLE FOR THE POST. THIS WORK SHALL BE PAID FOR UNDER THE PAY ITEM FOR BOND TRAFFIC SIGNAL STRUCTURE.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONSTRUCTION NOTES AND COMMITMENTS		ROUTES	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SCALE: NONE	STA. _____ TO STA. _____	VARIOUS (VARIOUS)	D4 SIGNAL WORK 2010-2	VARIOUS	9	2
CONTRACT NO. 68983							

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES				PEORIA COUNTY								TAZEWELL COUNTY							
CODE	ITEM DESCRIPTION	UNIT	TOTAL QTY.	CONST. TYPE CODE Y031-1F 100% STATE 0% CITY URBAN (6 LOCATIONS)	CONST. TYPE CODE Y031-1F 95% STATE 5% CITY URBAN (2 LOCATIONS) PEORIA	CONST. TYPE CODE Y031-1F 93.3% STATE 6.7% CITY URBAN (2 LOCATIONS) PEORIA	CONST. TYPE CODE Y031-1F 90% STATE 10% CITY URBAN (2 LOCATIONS) BARTONVILLE	CONST. TYPE CODE Y031-1F 90% STATE 10% CITY URBAN (3 LOCATIONS) CHILlicoTHE	CONST. TYPE CODE Y031-1F 90% STATE 10% CITY URBAN (5 LOCATIONS) PEORIA	CONST. TYPE CODE Y031-1F 50% STATE 50% CITY URBAN (3 LOCATIONS) MAINTENANCE PEORIA	CONST. TYPE CODE Y031-1F 0% STATE 100% CITY URBAN (1 LOCATION) BARTONVILLE	CONST. TYPE CODE Y031-1F 100% STATE 0% CITY URBAN (8 LOCATIONS)	CONST. TYPE CODE Y031-1F 93.3% STATE 6.7% CITY URBAN (1 LOCATION) NORTH PEKIN	CONST. TYPE CODE Y031-1F 93.3% STATE 6.7% CITY URBAN (1 LOCATION) PEKIN	CONST. TYPE CODE Y031-1F 90% STATE 10% CITY URBAN (1 LOCATION) CREVE COEUR	CONST. TYPE CODE Y031-1F 90% STATE 10% CITY URBAN (3 LOCATIONS) MORTON	CONST. TYPE CODE Y031-1F 90% STATE 10% CITY URBAN (3 LOCATIONS) PEKIN	CONST. TYPE CODE Y031-1F 90% STATE 10% CITY URBAN (3 LOCATIONS) WASHINGTON	CONST. TYPE CODE Y031-1F 0% STATE 100% CITY URBAN (2 LOCATIONS) WASHINGTON
67100100	MOBILIZATION	L SUM	1.0	0.15	0.05	0.05	0.05	0.08	0.06			0.20	0.03	0.03	0.03	0.07	0.07	0.08	0.05
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.0	0.15	0.05	0.05	0.05	0.08	0.06			0.20	0.03	0.03	0.03	0.07	0.07	0.08	0.05
72000105	SIGN PANEL - TYPE 1 (SPECIAL)	SQ FT	18.0					18.0											
80501000	SERVICE INSTALLATION (SPECIAL)	EACH	1.0							1.0									
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2476.0					2476.0											
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4.0					4.0											
88800100	PEDESTRIAN PUSH-BUTTON	EACH	54.0			4.0	6.0	18.0	4.0							4.0	2.0	16.0	
89502105	REBUILD EXISTING SIGNAL HEAD, LED	EACH	20.0					20.0											
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	3.0					3.0											
X0324134	BATTERY BACKUP SYSTEM WITH CABINET	EACH	3.0					3.0											
X0326101	BOND TRAFFIC SIGNAL STRUCTURE	EACH	380.0	57.0	18.0	18.0	17.0	24.0	46.0		3.0	74.0	8.0	9.0	7.0	24.0	22.0	34.0	19.0
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	10631.0	1961.0	446.0	257.0	431.0	388.0	1425.0		126.0	2790.0	378.0	314.0	168.0	463.0	100.0	877.0	507.0
X8950200	REBUILD EXISTING HANDHOLE	EACH	2.0							2.0									

STATE OF ILLINOIS
DEPARTMENT
OF TRANSPORTATION

**SUMMARY OF QUANTITIES
(PEORIA COUNTY)**

SCALE: NONE

STA. _____ TO STA. _____

ROUTES	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS (VARIOUS)	D4 SIGNAL WORK 2010-2	VARIOUS	9	3
CONTRACT NO. 68983				

INTERSECTION	IDOT MAINT %	CITY MAINT %	PEDESTRIAN PUSHBUTTON	ELCBL C GROUND 6 1C	TRAFFIC STRUCTURES TO BE SAFETY BONDED			
					ELECTRIC SERVICE	HANDHOLE (DBL, HD, STD)	MAST ARM	SIGNAL POST
BARTONVILLE								
US 24 (ADAMS) & I-474 RAMP	100	0		82.0		4		4
US 24 (ADAMS) & MCCLURE	50	50	2	268.0	1	4	2	2
US 24 (ADAMS) & PFEFFER	50	50	4	163.0		5	1	2
US 24 (ADAMS) & KEY STONE ENTRANCE	0	100		126.0		1	2	
CHILLICOTHE								
IL 29 (FOURTH) & TRUITT	50	50	6			6		
IL 29 (FOURTH) & CLOVERDALE	50	50	4	243.0	1	5	2	1
IL 29 (FOURTH) & WALNUT	50	50	8	145.0	1	4	4	
CREVE COEUR								
IL 29 & I-474 RAMPS B&C	100	0		386.0		4	3	1
IL 29 & I-474 RAMPS A&D	100	0		492.0		6	2	2
IL 29 & FISCHER	50	50		168.0	1	4	2	
MORTON								
IL 98 & I-155 RAMPS	100	0		228.0		2	2	1
IL 98 (BIRCHWOOD) & DETROIT	50	50		109.0		7	2	
US 150 (JACKSON) & DETROIT	50	50		354.0		5	4	
US 150 (JACKSON) & VETERANS	50	50	4			5		1
NORTH PEKIN								
IL 29 & IL 98	100	0		360.0		5	2	3
IL 98 & MAIN	67	33		378.0		4	2	2
PEKIN								
IL 29 (COURT) & ALLENTOWN	67	33		314	1	4	2	2
IL 29 & MANITO BLACKTOP/FEDERAL PRISON ENTRANCE	50	50		33	1	6	1	
IL 29 (COURT) & PARKWAY/SUNSET	50	50	2	18	1			1
IL 29 (COURT) & VALLE VISTA	50	50		49.0	1	9		2
TOTALS			30.0	3916.0	8.0	90.0	33.0	24.0

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES				ROUTES	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
					VARIOUS (VARIOUS)	D4 SIGNAL WORK 2010-2	VARIOUS	9	4
SCALE: NONE		STA. _____ TO STA. _____			CONTRACT NO. 68983				

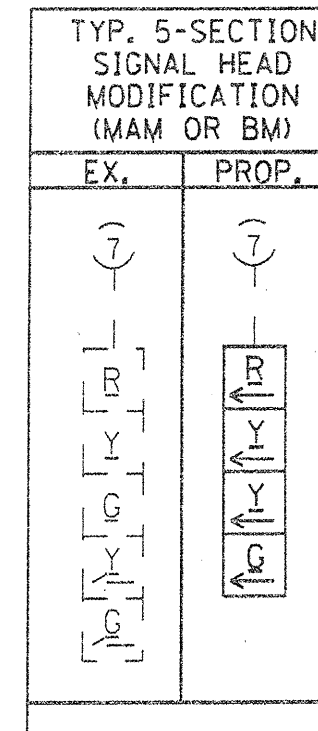
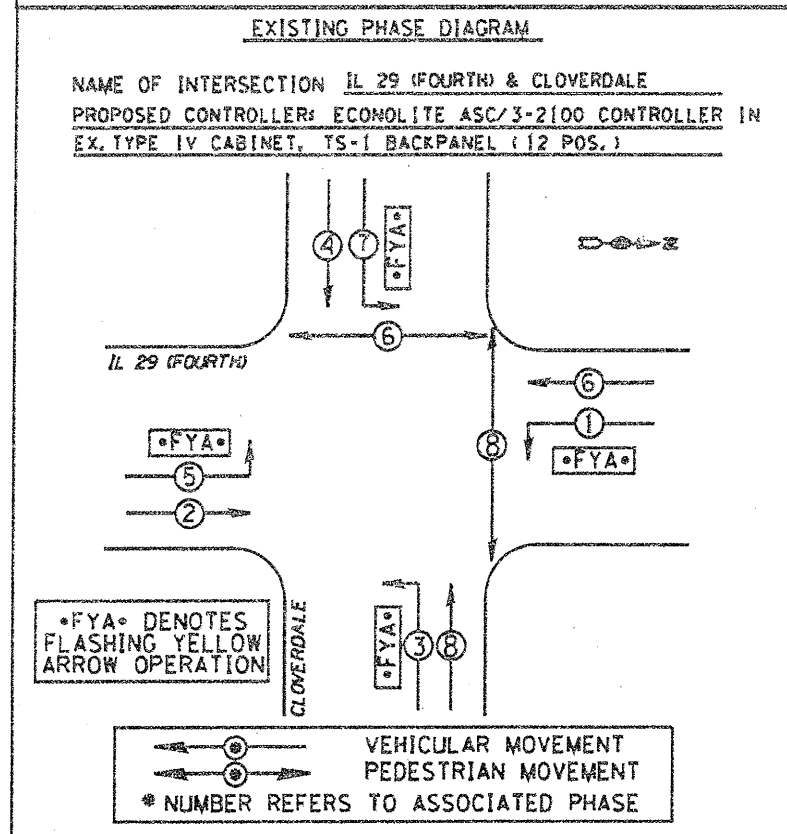
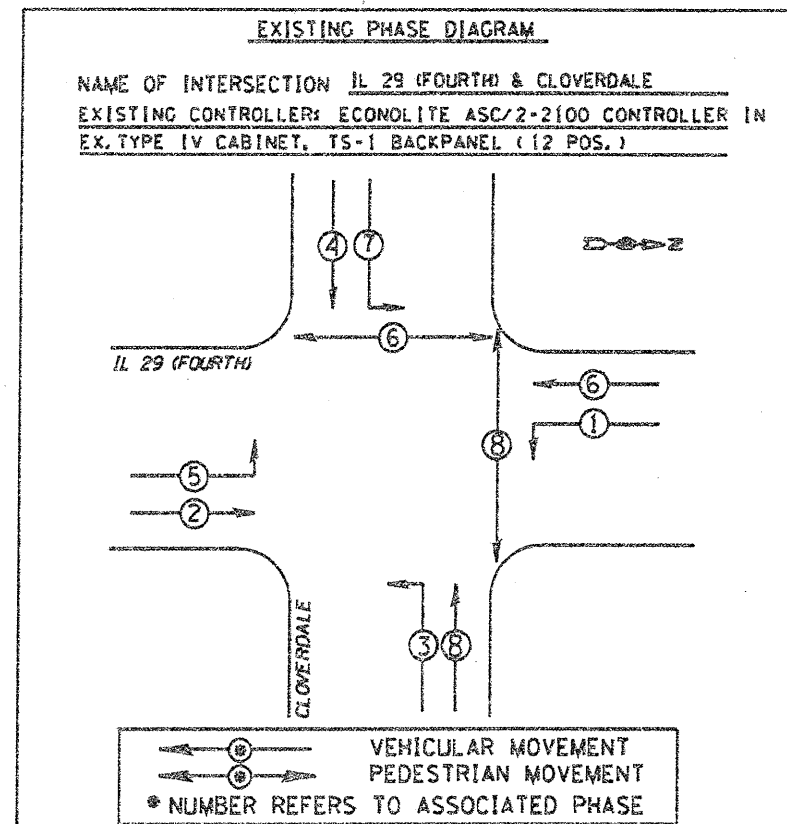
INTERSECTION	IDOT MAINT %	CITY MAINT %	PEDESTRIAN PUSHBUTTON	ELCBL C GROUND 6 1C	TRAFFIC STRUCTURES TO BE SAFETY BONDED			
					ELECTRIC SERVICE	HANDHOLE (DBL, HD, STD)	MAST ARM	SIGNAL POST
PEORIA								
IL 8/116 (LINCOLN) & JEFFERSON	50	50		232.0		2	2	1
IL 8 (MACARTHUR) & IL 116 (ADAMS)	75	25		245.0	1	2	2	1
IL 8/116 (JEFFERSON) & MACARTHUR	50	50		444.0	1	4	3	1
IL 29 (GALENA) & GARDNER	67	33		52.0		6		3
US 24/IL 29 (JEFFERSON) & IL 40 (HAMILTON)	50	50		344.0		4		4
US 24 (WASHINGTON) & LIBERTY	50	50	4	221.0		4	4	4
US 24 (WASHINGTON) & FULTON	67	33	4	205.0		3	3	3
US 24 (WASHINGTON) & MAIN	50	50		184.0		4	4	4
US 24 (WASHINGTON) & IL 40 (HAMILTON)	75	25		201.0		4	4	4
PEORIA COUNTY								
IL 29 & CEDAR HILLS	100	0		628.0	1	5	2	3
IL 8 (FARMINGTON) & STERLING	100	0		293.0	1	7	1	2
IL 8 (FARMINGTON) & SOUTHPORT	100	0		315.0	1	4	2	1
IL 116 (AIRPORT) & DIRKSEN PKWY/I-474 RAMP	100	0		350.0		3	2	3
US 24 & IL 9	100	0		293.0	1	7	1	2
TAZEWELL COUNTY								
IL98 & PARKWAY	100	0		378.0		7	4	
US 24 BYPASS (BOYD PKWY) & N. MAIN/CH 3	100	0		695.0		7	2	4
US 24 & GRANGE	100	0		29.0	1	5		
WASHINGTON								
BUSINESS 24 & IL 8	100	0		222.0	1	8		2
BUSINESS 24 & CUMMINS	50	50	8	145.0	1	5	1	4
BUSINESS 24 & WILMOR	50	50	8	125.0	1	5	4	
US 24 BYPASS (BOYD PKWY) & CUMMINS	50	50		607.0		7	2	4
BUSINESS 24 & FREEDOM PKWY/CENTENNIAL	0	100		85.0		7		2
BUSINESS 24 & TRACTOR SUPPLY	0	100		422.0	1	4	2	3
TOTALS			24.0	6715.0	11.0	114.0	45.0	55.0

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES (CONTINUED)				ROUTES	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
					VARIOUS (VARIOUS)	D4 SIGNAL WORK 2010-2	VARIOUS	9	5
	SCALE: NONE	STA. _____ TO STA. _____		CONTRACT NO. 68983					

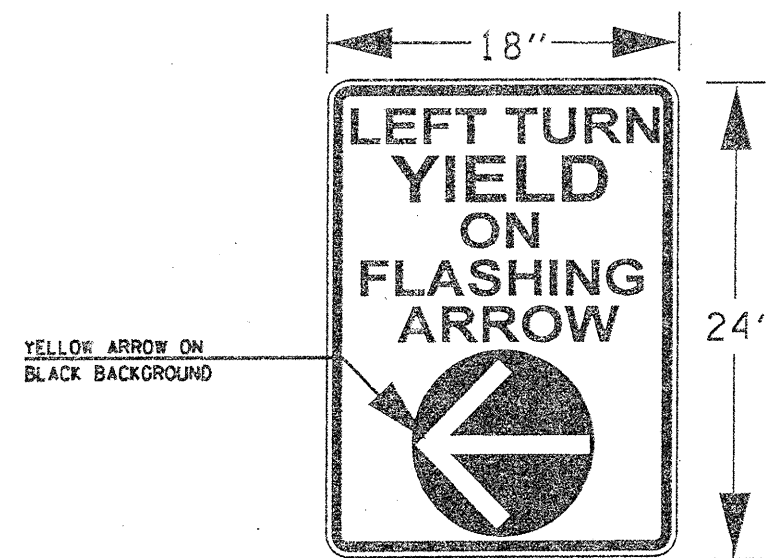
INTERSECTION	STATE MAINT (%)	CITY MAINT (%)	REBUILD EX SIG HD LED (EACH)				ELCBL C SIGNAL 14 5C (FOOT)	SH LED 1F4S MAM (EACH)	SH LED 1F4S BM (EACH)	TS BACK PLATE (EACH)	SH LED 1F3S BM (EACH)	MOD EX CONTR CAB (EACH)	EX CONTR CAB TYPE	SIGN PANEL T1 SPL (SQ FT)	BBS (EACH)
			5-SECT (MAM)	4-SECT (MAM)	5-SECT (BM)	4-SECT (BM)									
CHILlicothe															
IL29 (4TH) & CLOVERDALE	50	50	4.0		4.0		1163.0				2.0	1.0	ECON	6.0	1.0
IL29 (4TH) & WALNUT	50	50	4.0		4.0		964.0				2.0	1.0	ECON	6.0	1.0
IL29 (4TH) & TRUITT	50	50		2.0	2.0		349.0					1.0	ECON	6.0	1.0
TOTALS			8.0	2.0	10.0		2476.0				4.0	3.0		18.0	3.0

INTERSECTION	STATE MAINT (%)	CITY MAINT (%)	REBUILD EX HANDHOLE (EACH)	SERV INSTALL SPL (EACH)
PEORIA				
US 24 (WASHINGTON) & MAIN	50	50	1.0	
IL 9/116 (MACARTHUR) & JEFFERSON	50	50	1.0	1.0
TOTALS			2.0	1.0

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES (CONTINUED)				ROUTES	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SCALE: NONE	STA. _____ TO STA. _____			VARIOUS (VARIOUS)	D4 SIGNAL WORK 2010-2	VARIOUS	9	6
								CONTRACT NO. 68983	



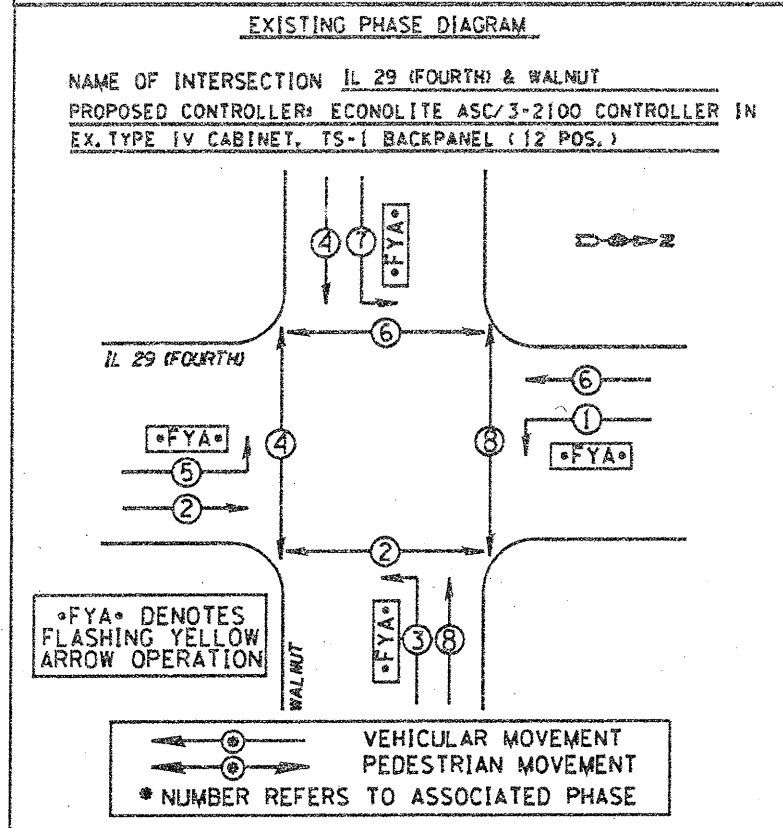
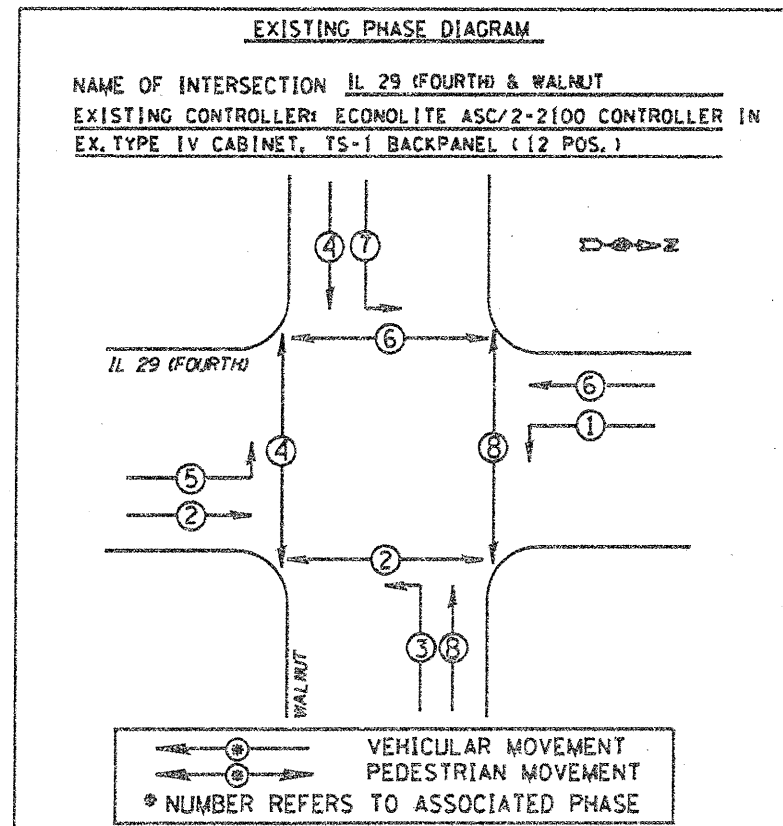
REBUILD EXISTING SIGNAL HEAD, LED



SIGN PANEL-TYPE 1 (SPECIAL)

SIGN BACKGROUND: WHITE
 SIGN LETTERING: BLACK

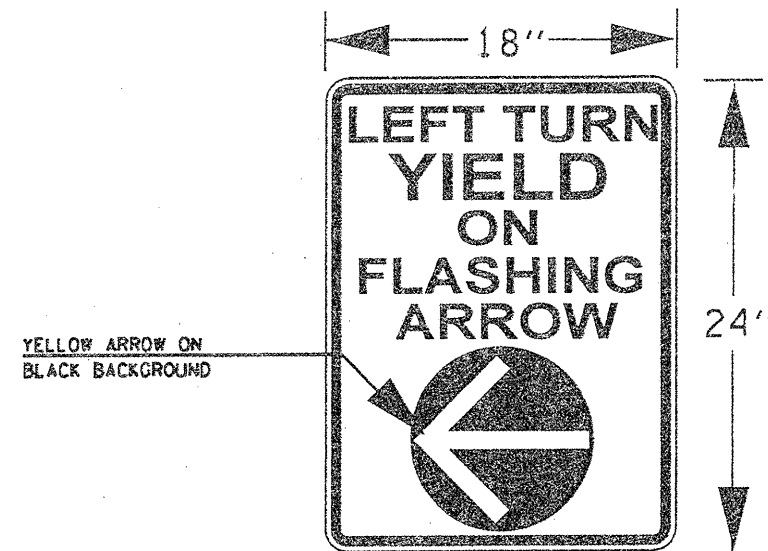
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED PHASE AND CABLE DIAGRAMS IL 29 (FOURTH) & CLOVERDALE		ROUTES	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SCALE: NONE	STA. _____ TO STA. _____	VARIOUS (VARIOUS)	D4 SIGNAL WORK 2010-2	VARIOUS	9	7
						CONTRACT NO. 68983	



TYP. 5-SECTION SIGNAL HEAD MODIFICATION (MAM OR BM)

EX.	PROP.
(7)	(7)
[R]	[R]
[Y]	[Y]
[G]	[G]
[Y]	[Y]
[G]	[G]

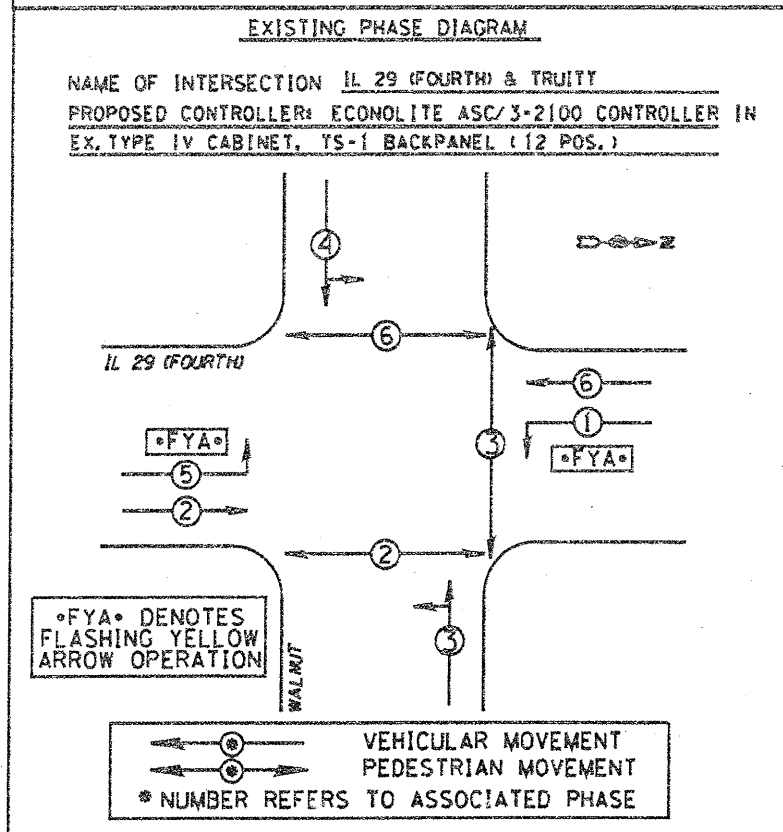
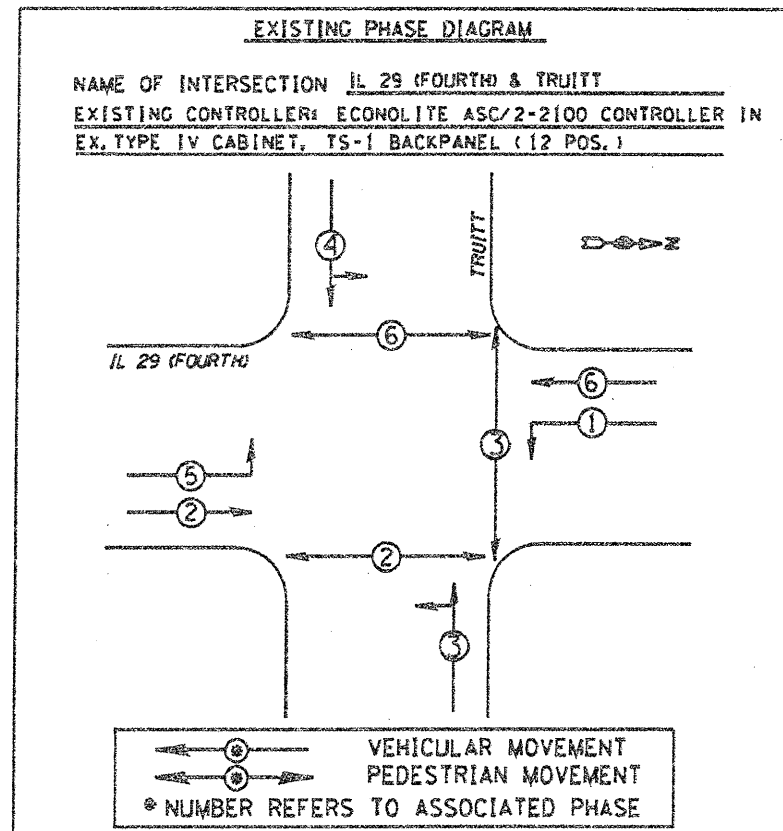
REBUILD EXISTING SIGNAL HEAD, LED



SIGN PANEL-TYPE 1 (SPECIAL)

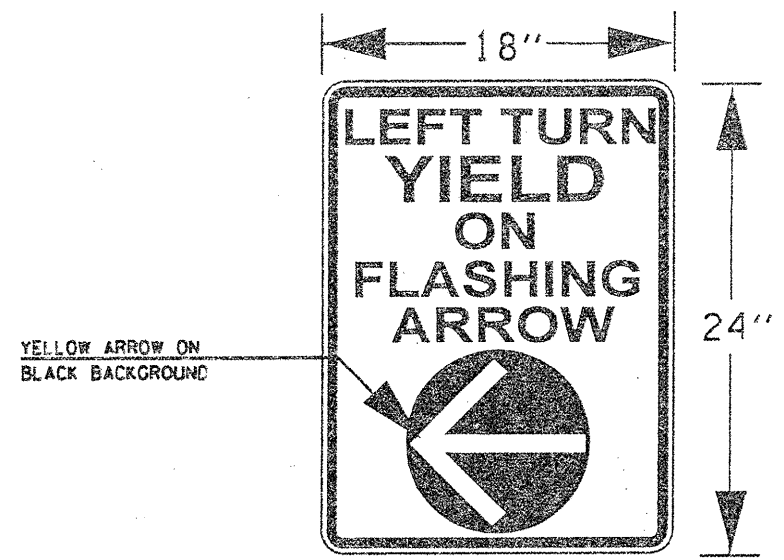
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SIGN LETTERING: BLACK

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED PHASE AND CABLE DIAGRAMS IL 29 (FOURTH) & WALNUT		ROUTES	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SCALE: NONE	STA. _____ TO STA. _____	VARIOUS (VARIOUS)	D4 SIGNAL WORK 2010-2	VARIOUS	9	8
CONTRACT NO. 68983							



TYP. 4-SECTION SIGNAL HEAD MODIFICATION (MAM)		TYP. 5-SECTION SIGNAL HEAD MODIFICATION (BM)	
EX.	PROP.	EX.	PROP.
(7)	(7)	(7)	(7)
[R]	[R]	[R]	[R]
[Y]	[← Y]	[Y]	[← Y]
[G]	[← Y]	[G]	[← Y]
[Y/G]	[← G]	[Y]	[← G]
		[G]	

REBUILD EXISTING SIGNAL HEAD, LED



SIGN PANEL-TYPE 1 (SPECIAL)

SIGN BACKGROUND: WHITE
 SIGN LETTERING: BLACK

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED PHASE AND CABLE DIAGRAMS IL 29 (FOURTH) & WALNUT		ROUTES	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	SCALE: NONE	STA. _____ TO STA. _____	VARIOUS (VARIOUS)	D4 SIGNAL WORK 2010-2	VARIOUS	9	9	
							CONTRACT NO. 68983	