

SEE SHEET 2 FOR INDEX OF SHEETS

**HIGHWAY STANDARDS**

SEE SHEET 2 FOR A LIST OF  
 APPLICABLE HIGHWAY  
 STANDARDS

**PROJECT DESCRIPTION**

INSTALLATION OF TRAFFIC SIGNAL CONTROLLER  
 CABINETS, MASTER CONTROLLERS, AND  
 BATTERY BACKUP SYSTEMS AT VARIOUS  
 INTERSECTIONS WITHIN DISTRICT 4.

J.U.L.I.E.  
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
 1-800-892-0123  
 OR 811

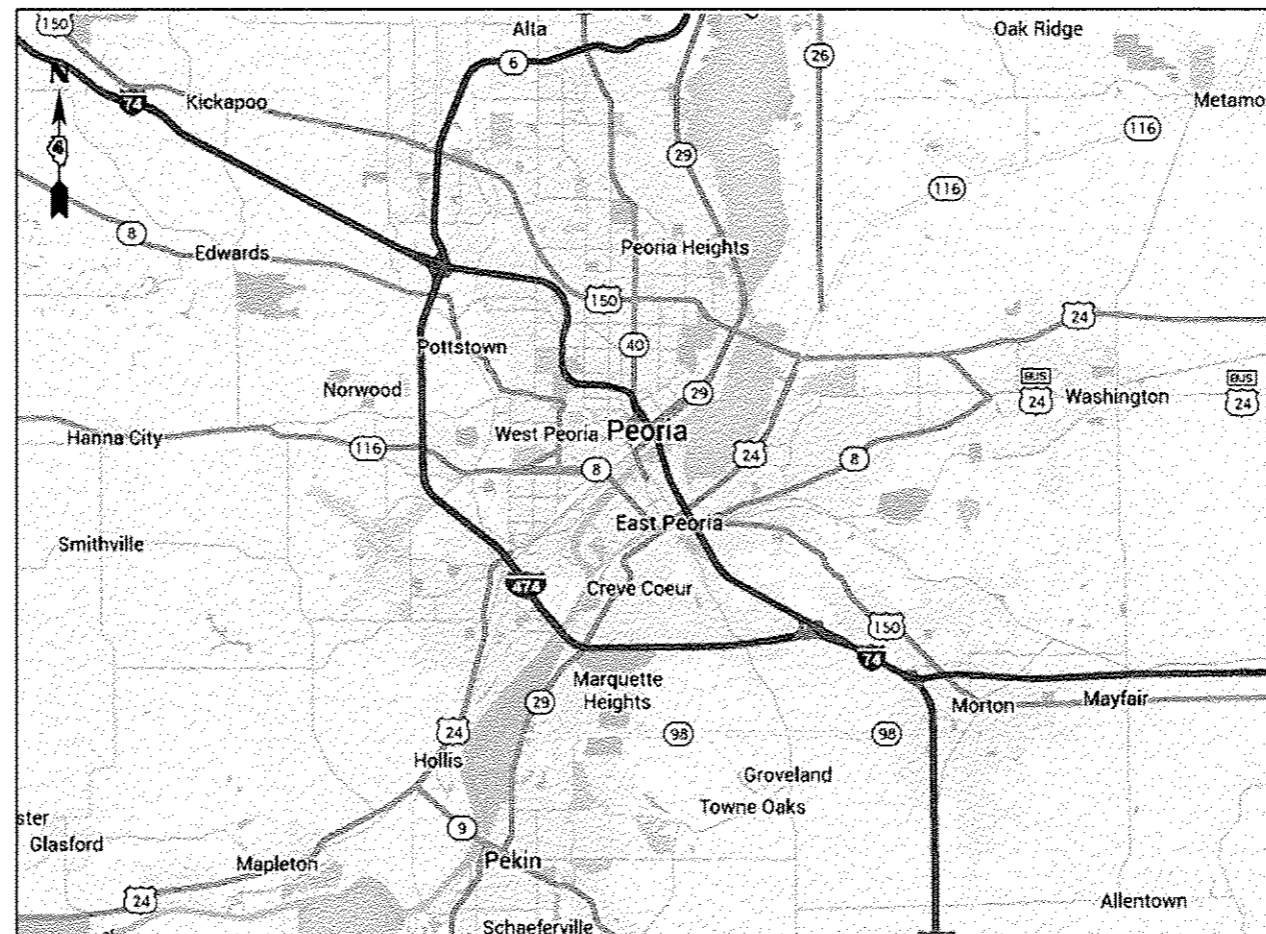
PROJECT ENGINEER: ERIC HOWALD (309) 671-4481  
 PROJECT MANAGER: RANDY LANINGA (309) 671-4477  
 CATALOG NO. 35319-00D  
 CONTRACT NO. 68C83

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

**PROPOSED  
 HIGHWAY PLANS**

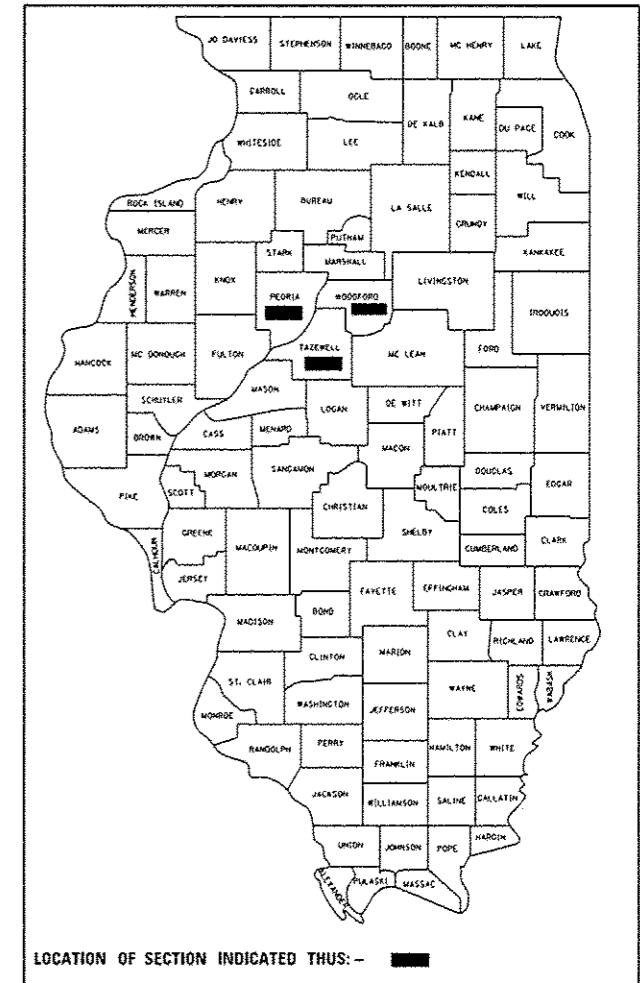
VARIOUS ROUTES  
 SECTION D4 TRAFFIC SIGNALS 2015-1  
 VARIOUS COUNTIES

C-94-105-15



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 TRAFFIC SIGNALS 2015-1	VARIOUS	26	1
		ILLINOIS	CONTRACT NO. 68C83	

D-94-065-15



STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED 07-17 20 15  
*Kenneth A. Garnett*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Aug 14 20 15  
*John D. Baranzelli, P.E.*  
 acting ENGINEER OF DESIGN AND ENVIRONMENT

Aug 14 20 15  
*Omer Osman, P.E.*  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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 OF THE STATE OF ILLINOIS**

COMMITMENTS

THERE ARE NO COMMITMENTS MADE IN CONJUCTION WITH THIS PROJECT.

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CONTROLLER CABINET REPLACEMENT - CONSTRUCTION NOTES	
1.	THE CONTRACTOR WILL BE ALLOWED TO PLACE THE INTERSECTION INTO ALL-RED FLASH MODE AND ALL-WAY STOP CONTROL ONLY DURING THE HOURS SPECIFIED ABOVE TO PERFORM MODIFICATIONS TO THE EXISTING CONTROLLER CABINETS.
2.	THE CONTRACTOR SHALL FURNISH AND INSTALL A MINIMUM OF TWO STOP SIGNS PER APPROACH WHEN THE INTERSECTION IS OPERATING IN ALL-RED FLASH MODE OR ALL-WAY STOP CONTROL. THE STOP SIGNS SHALL BE DISPLAYED IN ACCORDANCE WITH ALL APPLICABLE MUTCD REQUIREMENTS.
3.	ALL COSTS (LABOR, MATERIALS, AND EQUIPMENT) ASSOCIATED WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE MODIFY EXISTING CONTROLLER CABINET PAY ITEM. THERE WILL BE NO ADDITIONAL COMPENSATION FOR THIS WORK.

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.	THE EXISTING TRAFFIC SIGNALS SHALL REMAIN IN OPERATION DURING THE CONSTRUCTION OF THE PROPOSED TRAFFIC SIGNALS.
6.	ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.
7.	REMOVAL OF EXISTING TRAFFIC SIGNAL COMPONENTS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICES FOR THE PROPOSED ITEMS.
8.	THE CONTRACTOR SHALL REMOVE THE EXISTING TRAFFIC SIGNAL CABINETS AND PERIPHERAL EQUIPMENT AND DELIVER THEM TO THE IDOT TRAFFIC BUILDING LOCATED AT 1025 W. DETWEILLER DR, PEORIA. THE CONTRACTOR SHALL NOTIFY PAUL GRANT AT (309) 671-4474 FORTY-EIGHT HOURS IN ADVANCE OF EQUIPMENT DELIVERY. THE CONTRACTOR SHALL DISPOSE OF ALL OTHER ITEMS OFF OF THE RIGHT OF WAY AND REFLECT THE SALVAGE VALUE OF THESE ITEMS IN CONTRACT UNIT BID PRICES.
9.	THE CONTRACTOR SHALL REMOVE THE EXISTING TRAFFIC SIGNAL CABINETS AND PERIPHERAL EQUIPMENT FROM THE INTERSECTIONS LOCATED IN THE CITY OF PEORIA AND DELIVER THEM TO THE PEORIA PUBLIC WORKS BUILDING LOCATED AT 3200 N. DRIES LN., PEORIA. THE CONTRACTOR SHALL NOTIFY IRV LEBLANC AT (309) 303-7440 FORTY-EIGHT HOURS IN ADVANCE OF EQUIPMENT DELIVERY.
10.	THE CONTRACTOR SHALL REMOVE EXISTING PHOTOCCELL RELAYS, DIN RAIL MOUNTED COMMUNICATIONS EQUIPMENT, TRAFFIC SIGNAL INTERCONNECT EQUIPMENT, EVP EQUIPMENT, AND FIBER OPTIC ENCLOSURES FROM EXISTING TRAFFIC SIGNAL CONTROLLER CABINETS AND INSTALL THE EQUIPMENT IN THE PROPOSED CONTROLLER CABINETS AT EACH LOCATION. THIS WORK SHALL BE INCLUDED IN THE PAY ITEMS FOR THE CONTROLLER CABINETS.
11.	THE CONTRACTOR SHALL REMOVE EXISTING BATTERY BACKUP SYSTEM CABINETS AND COMPONENTS FROM EXISTING TRAFFIC SIGNAL CONTROLLER CABINETS AND INSTALL THEM IN THE PROPOSED CONTROLLER CABINETS AT EACH LOCATION. THIS WORK SHALL BE INCLUDED IN THE PAY ITEMS FOR THE CONTROLLER CABINETS.

HIGHWAY STANDARDS	
STANDARD	APPLICATION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 4.5 M (15') AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 4.5 M (15') TO 600 MM (24") FROM PAVEMENT EDGE
701101-04	OFF-ROAD OPERATIONS, MULTILANE, 4.5 M (15') TO 600 MM (24") FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 4.5 (15') AWAY
701701-09	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-04	TRAFFIC CONTROL DEVICES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)

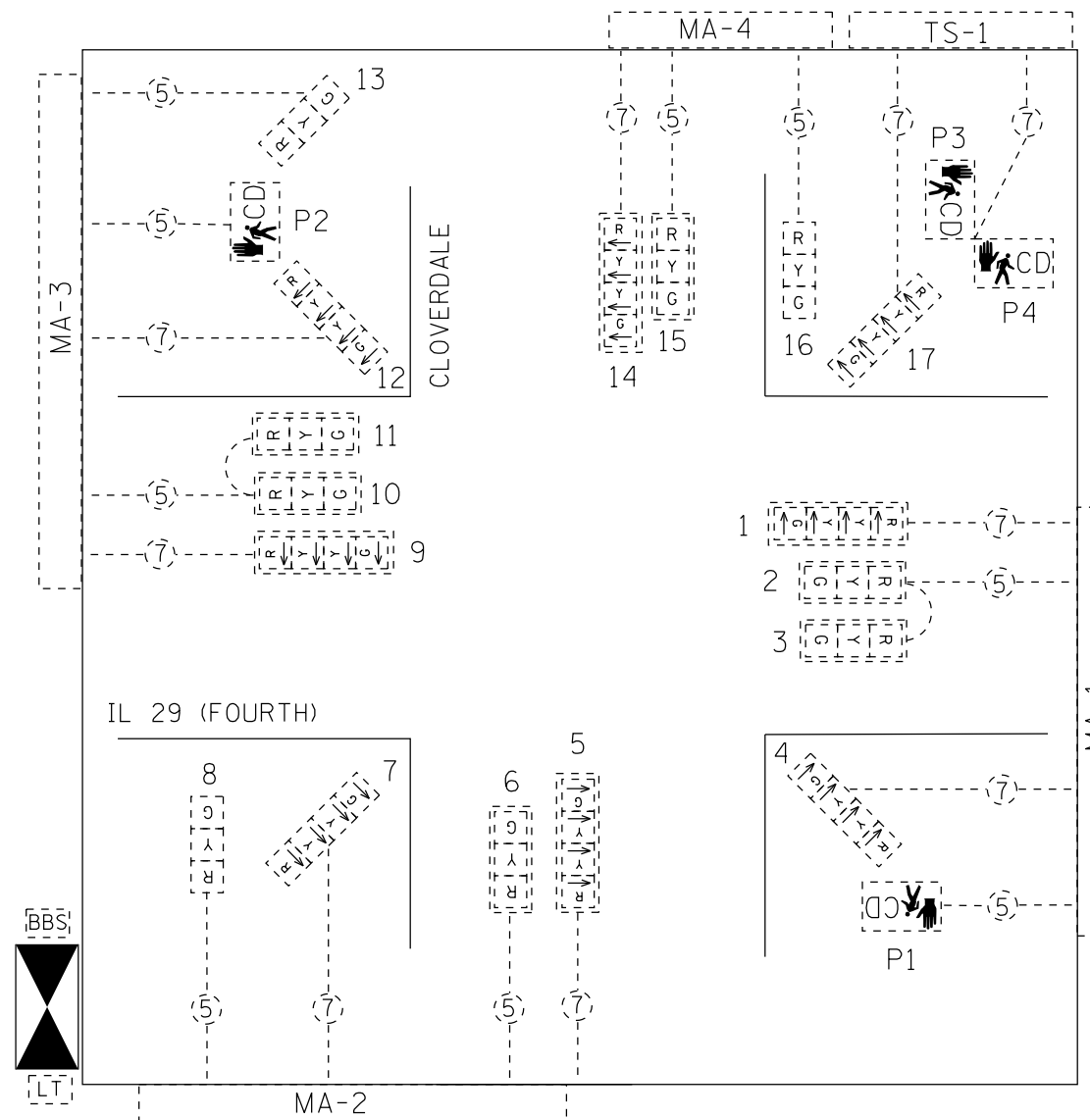
SUMMARY OF QUANTITIES				0130,01 02		0180 03		04 05		06 07		08 09		10
				PEORIA COUNTY		TAZEWELL COUNTY		WARREN COUNTY		WOODFORD COUNTY				
CODE	ITEM DESCRIPTION	UNIT	TOTAL QTY.	CONST. TYPE CODE 0021 90% STATE 10% CITY URBAN CHILLICOTHE 2 LOCATIONS	CONST. TYPE CODE 0021 90% STATE 10% CITY URBAN PEORIA 4 LOCATIONS	CONST. TYPE CODE 0021 100% STATE 0% CITY URBAN NORTH PEKIN 1 LOCATION	CONST. TYPE CODE 0021 93.3% STATE 6.7% CITY URBAN NORTH PEKIN 1 LOCATION	CONST. TYPE CODE 0021 90% STATE 10% CITY URBAN CREVE COEUR 2 LOCATIONS	CONST. TYPE CODE 0021 90% STATE 10% CITY URBAN EAST PEORIA 1 LOCATION	CONST. TYPE CODE 0021 90% STATE 10% CITY URBAN PEKIN 1 LOCATION	CONST. TYPE CODE 0021 90% STATE 10% CITY URBAN WASHINGTON 1 LOCATION	CONST. TYPE CODE 0021 95% STATE 5% CITY URBAN MONMOUTH 1 LOCATION	CONST. TYPE CODE 0021 90% STATE 10% CITY URBAN MONMOUTH 2 LOCATIONS	CONST. TYPE CODE 0021 90% STATE 10% CITY URBAN GERMANTOWN HILLS 3 LOCATIONS
67100100	MOBILIZATION	L SUM	1.0	0.10	0.21	0.06	0.05	0.11	0.05	0.05	0.05	0.06	0.10	0.16
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.0	0.10	0.21	0.06	0.05	0.11	0.05	0.05	0.05	0.06	0.10	0.16
X8600105	MASTER CONTROLLER (SPECIAL)	EACH	2.0									1.0		1.0
86300400	CONTROLLER CABINET TYPE IV	EACH	7.0	2.0	4.0						1.0			
86300500	CONTROLLER CABINET TYPE V	EACH	2.0					1.0	1.0					
88500100	INDUCTIVE LOOP DETECTOR	EACH	170.0	22.0	36.0	8.0	6.0	10.0	14.0	6.0	10.0	12.0	20.0	26.0
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	4.0										2.0	2.0
X8570231	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	2.0									1.0		1.0
X8630104	CONTROLLER CABINET TYPE IV, SPECIAL	EACH	3.0			1.0	1.0			1.0				
Z0033068	TRAFFIC SIGNAL BATTERY BACKUP SYSTEM	EACH	5.0		1.0	1.0		2.0			1.0			

## SCHEDULE OF QUANTITIES

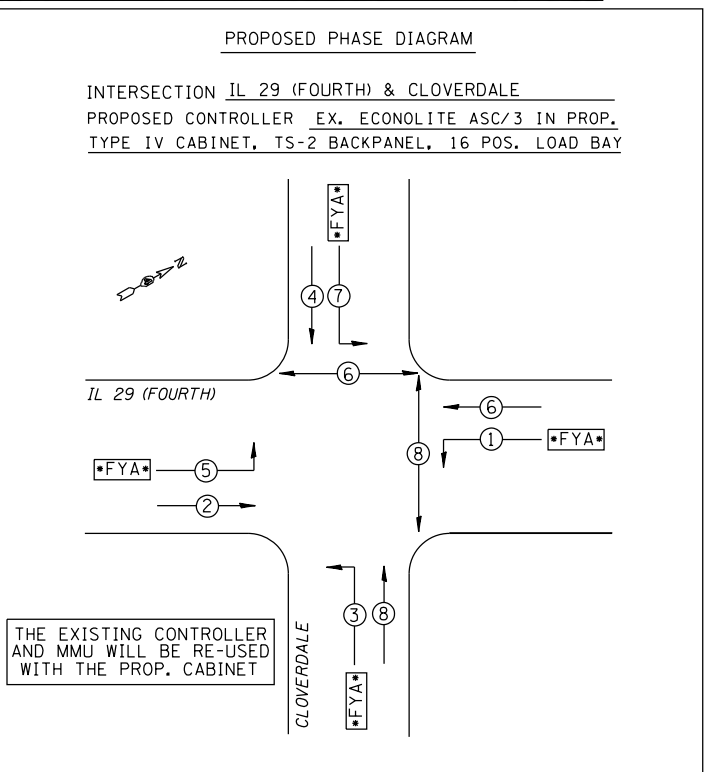
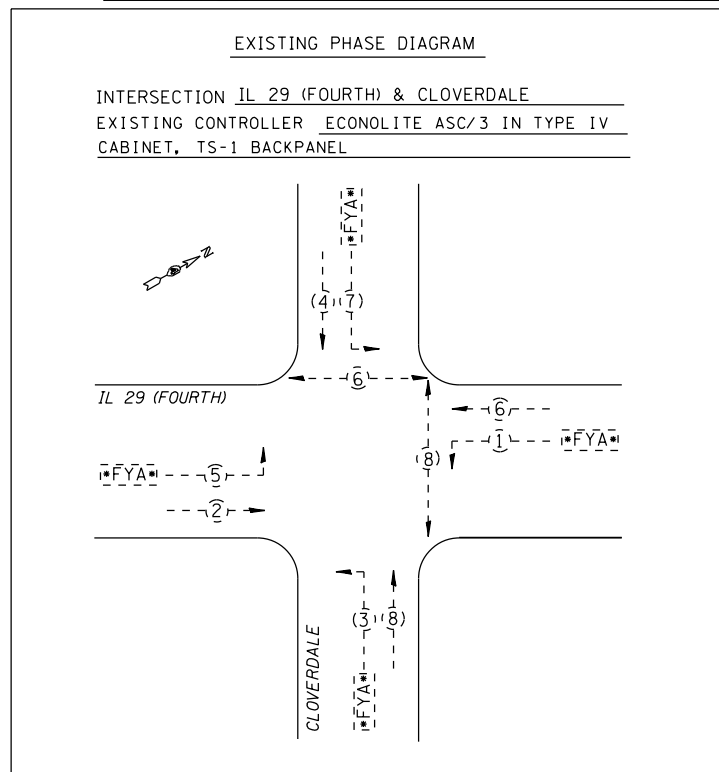
SCHEDULE OF QUANTITIES			PEORIA COUNTY						TAZEWELL COUNTY				
			CHILLICOTHE		PEORIA				TAZ CTY	N. PEKIN	CREVE COEUR		EAST PEORIA
			IL 29 (FOURTH) & CLOVERDALE 90% IDOT 10% CITY	IL 29 (FOURTH) & WALNUT 90% IDOT 10% CITY	US 150 (WAR MEMORIAL) & BRANDYWINE / MEADOWBROOK 90% IDOT 10% CITY	US 150 (WAR MEMORIAL) & MOUNTELO 90% IDOT 10% CITY	IL 40 (KNOXVILLE) & GLEN 90% IDOT 10% CITY	IL 40 (KNOXVILLE) & RICHMOND 90% IDOT 10% CITY	IL 98 (EDGEWATER) & PARKWAY 100% IDOT 0% CITY	IL 98 (EDGEWATER) & MAIN 93.3% IDOT 6.7 CITY	IL 29 (MAIN) & FISCHER 90% IDOT 10% CITY	IL 29 (MAIN) & HIGHLAND/RUSCHE 90% IDOT 10% CITY	IL 116 (MAIN) & WASHINGTON 90% IDOT 10% CITY
ITEM DESCRIPTION	UNIT	TOTAL QTY.											
MOBILIZATION	L SUM	1.0	0.05	0.05	0.06	0.05	0.05	0.05	0.06	0.05	0.06	0.05	0.05
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.0	0.05	0.05	0.06	0.05	0.05	0.05	0.06	0.05	0.06	0.05	0.05
MASTER CONTROLLER	EACH	2.0											
CONTROLLER CABINET TYPE IV	EACH	7.0	1.0	1.0	1.0	1.0	1.0						
CONTROLLER CABINET TYPE V	EACH	2.0								1.0			1.0
INDUCTIVE LOOP DETECTOR	EACH	170.0	10.0	12.0	10.0	8.0	12.0	6.0	8.0	6.0	10.0		14.0
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	4.0											
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	2.0											
CONTROLLER CABINET TYPE IV, SPECIAL	EACH	3.0							1.0	1.0			
TRAFFIC SIGNAL BATTERY BACKUP SYSTEM	EACH	5.0			1.0				1.0		1.0	1.0	



SCHEDULE OF QUANTITIES (CONTINUED)			TAZEWELL COUNTY		WARREN COUNTY			WOODFORD COUNTY		
			PEKIN	WASHINGTON	MONMOUTH			GERMANTOWN HILLS		
			IL 29 & MANITO BLACKTOP 90% IDOT 10% CITY	BUS 24 (PEORIA) & CUMMINS 90% IDOT 10% CITY	US 34/US 67 & US 67/MAIN	US 34 & SIXTH	US 34 & ELEVENTH	IL 116 & WOODLAND KNOLLS/TEN MILE CREEK	IL 116 & SCHMITT	IL 116 & FANDEL
ITEM DESCRIPTION	UNIT	TOTAL QTY.								
MOBILIZATION	L SUM	1.0	0.05	0.05	0.06	0.05	0.05	0.06	0.05	0.05
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.0	0.05	0.05	0.06	0.05	0.05	0.06	0.05	0.05
MASTER CONTROLLER	EACH	2.0			1.0			1.0		
CONTROLLER CABINET TYPE IV	EACH	7.0		1.0						
CONTROLLER CABINET TYPE V	EACH	2.0								
INDUCTIVE LOOP DETECTOR	EACH	170.0	6.0	10.0	12.0	12.0	8.0	10.0	8.0	8.0
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	4.0				1.0	1.0		1.0	1.0
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	2.0			1.0			1.0		
CONTROLLER CABINET TYPE IV, SPECIAL	EACH	3.0	1.0							
TRAFFIC SIGNAL BATTERY BACKUP SYSTEM	EACH	5.0		1.0						



(5) EX. CABLE    BBS EX. BBS    (5) EX. HEAD  
 LT EX. LIGHTING CONTROLLER    PROP. SIGNAL CABINET

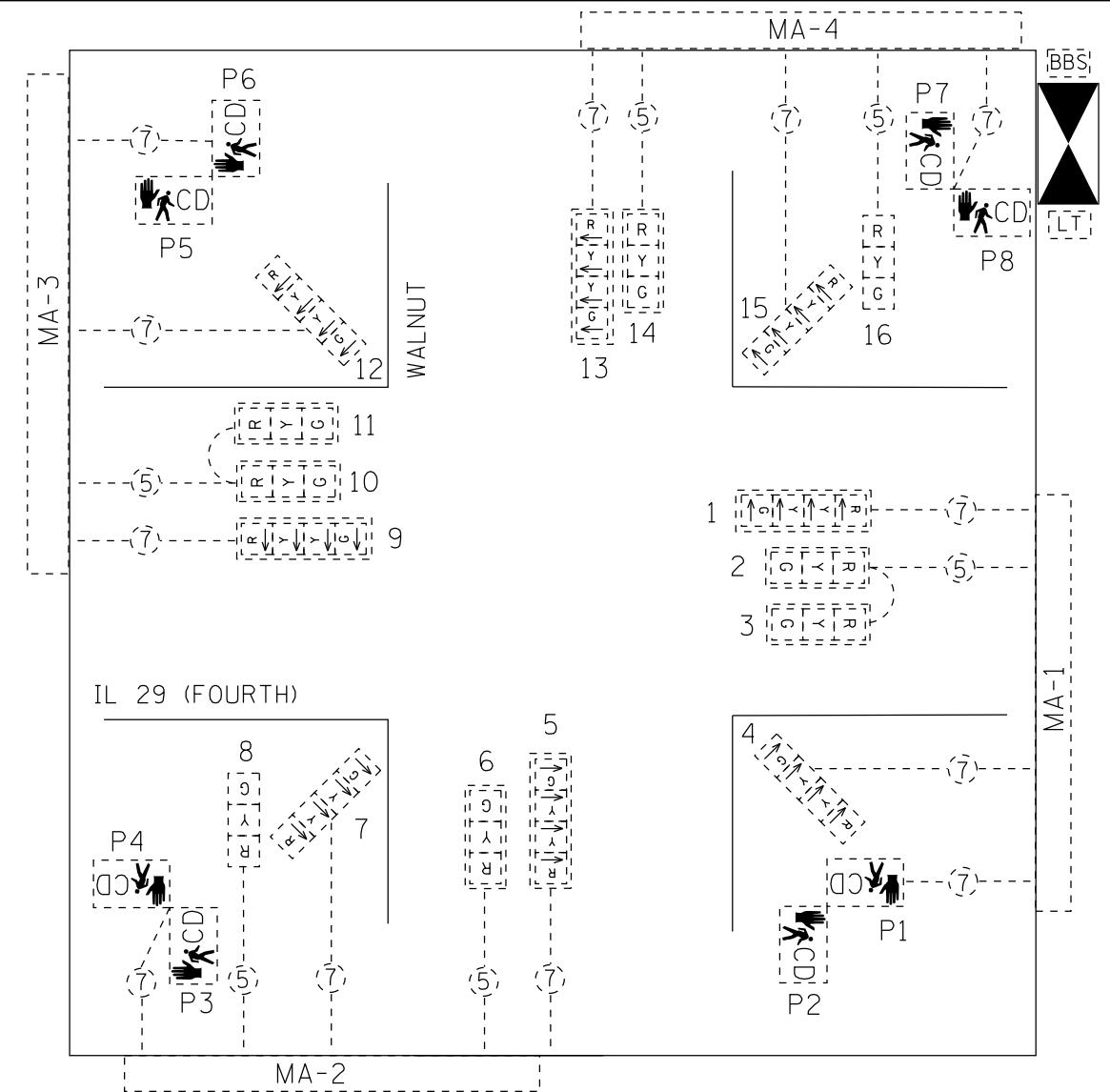


**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE**  
IL 29 (FOURTH) & CLOVERDALE  
CHILLICOTHE

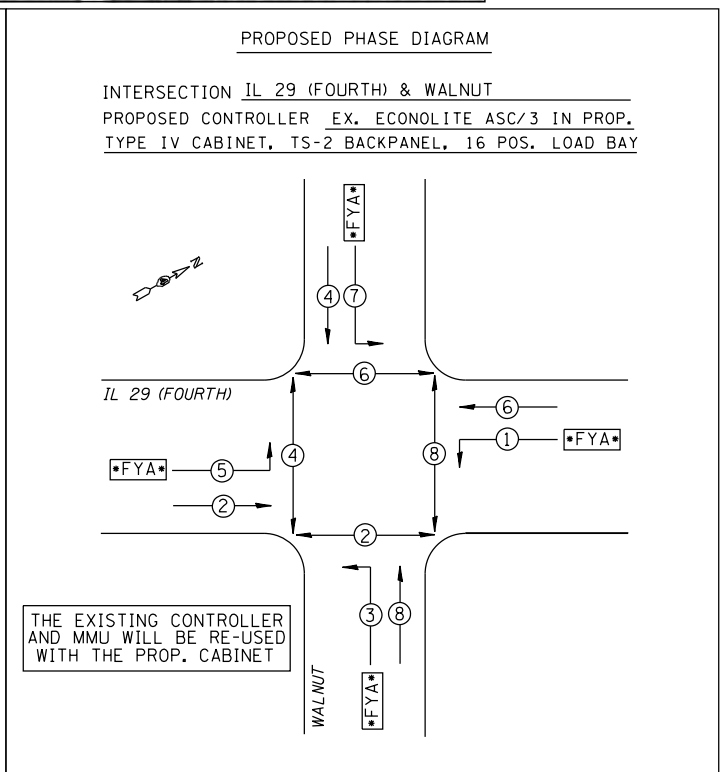
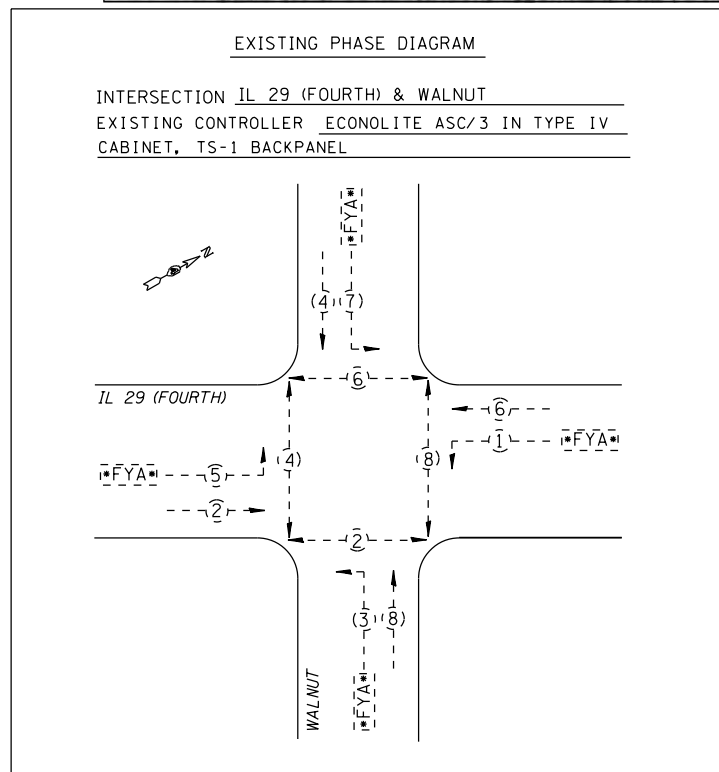
DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D1	1	1
D-2A, D-2B	2 (ADV)	2
D3	3	1
D4	4	1
D5	5	1
D-6A, D-6B	6 (ADV)	2
D7	7	1
D8	8	1
<b>TOTAL:</b>		<b>10</b>

**BILL OF MATERIALS - IL 29 (FOURTH) & CLOVERDALE (CHILLICOTHE)**

ITEM DESCRIPTION	UNIT	TOTAL QTY.
CONTROLLER CABINET TYPE IV	EACH	1.0
INDUCTIVE LOOP DETECTOR	EACH	10.0



(5) - EX. CABLE    BBS - EX. BBS    [R] [Y] [G] - EX. HEAD  
 [LT] - EX. LIGHTING CONTROLLER    [Signal Cabinet Symbol] - PROP. SIGNAL CABINET

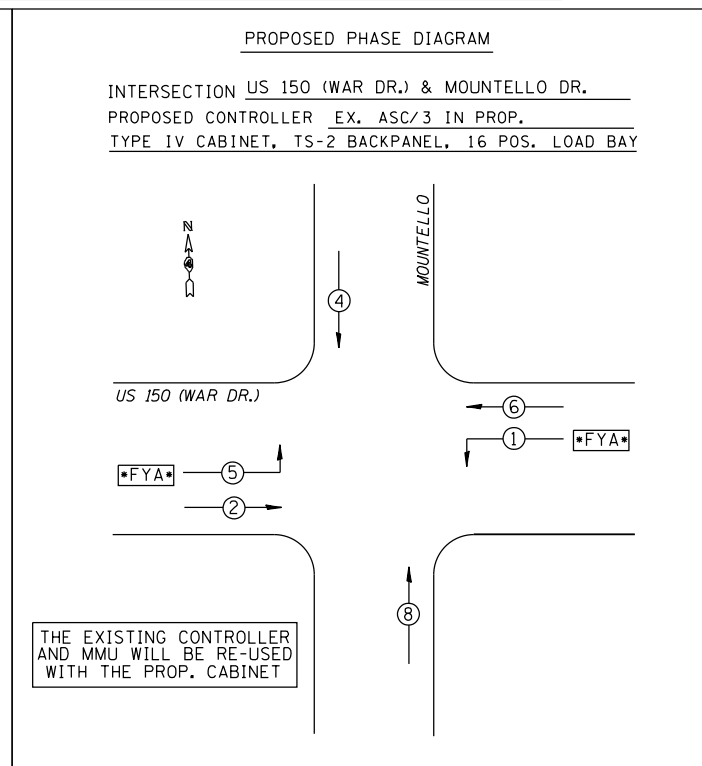
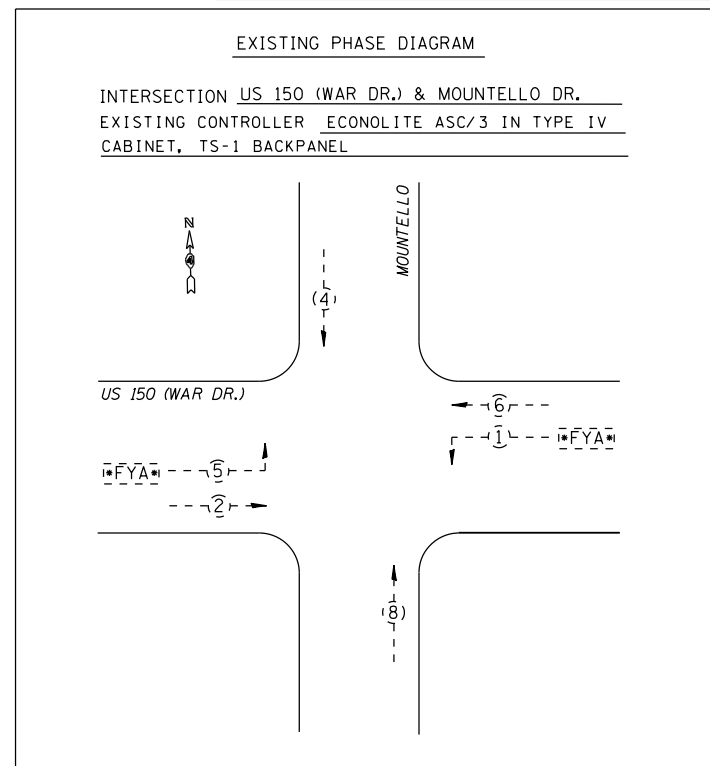
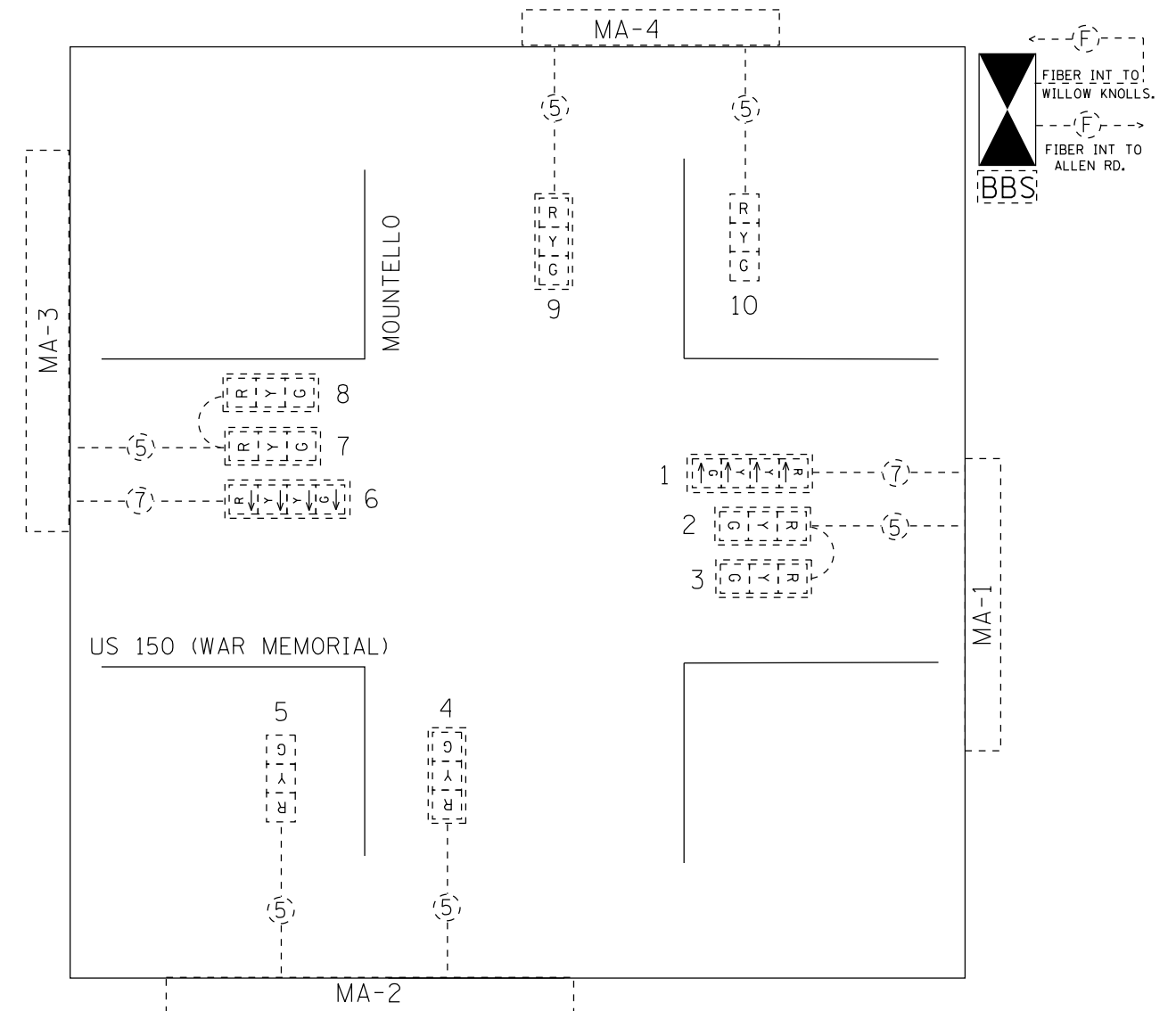
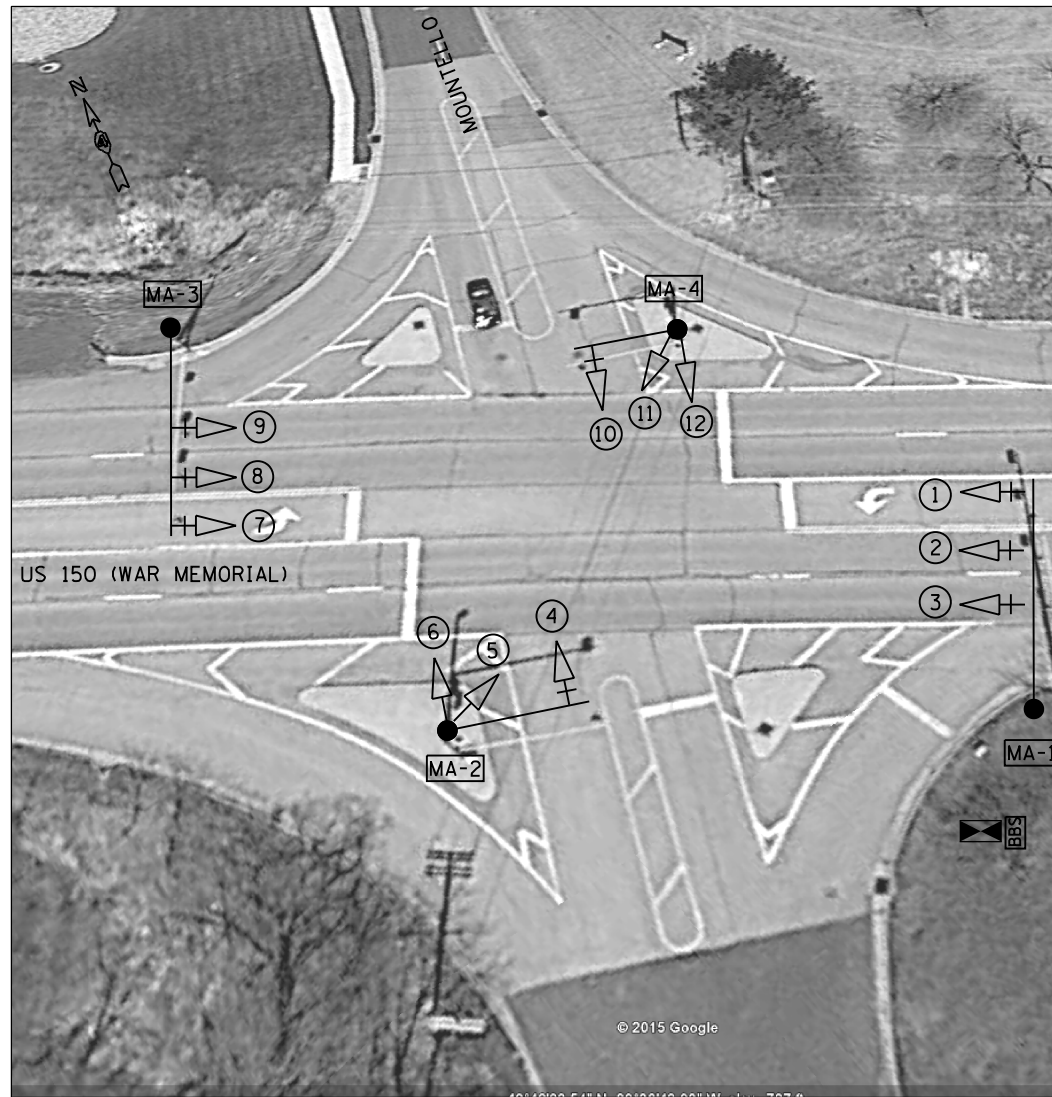


**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE  
IL 29 (FOURTH) & WALNUT  
CHILLICOTHE**

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D1	1	1
D2A, D2B	2 (ADV)	2
D3	3	1
D4A, D4B	4	2
D5	5	1
D6A, D6B	6 (ADV)	2
D7	7	1
D8A, D8B	8	2
<b>TOTAL:</b>		<b>12</b>

**BILL OF MATERIALS - IL 29 (FOURTH) & WALNUT (CHILLICOTHE)**

ITEM DESCRIPTION	UNIT	TOTAL QTY.
CONTROLLER CABINET TYPE IV	EACH	1.0
INDUCTIVE LOOP DETECTOR	EACH	12.0



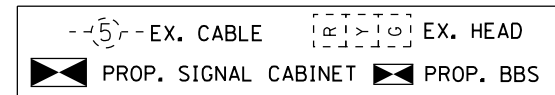
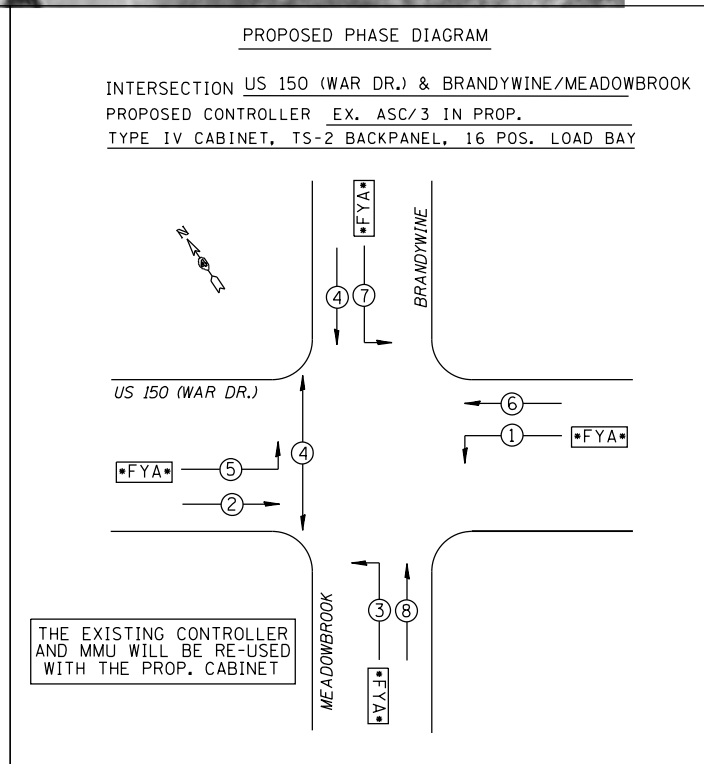
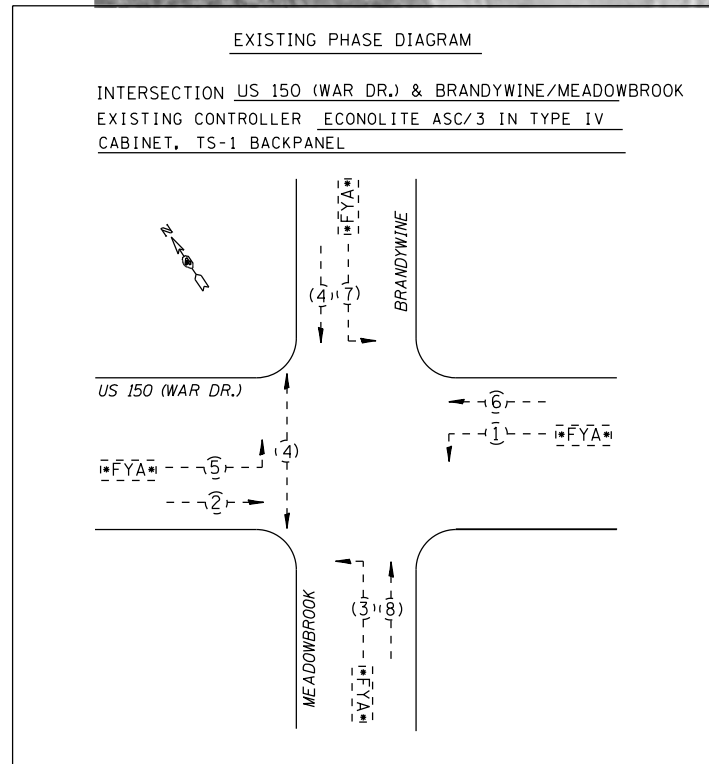
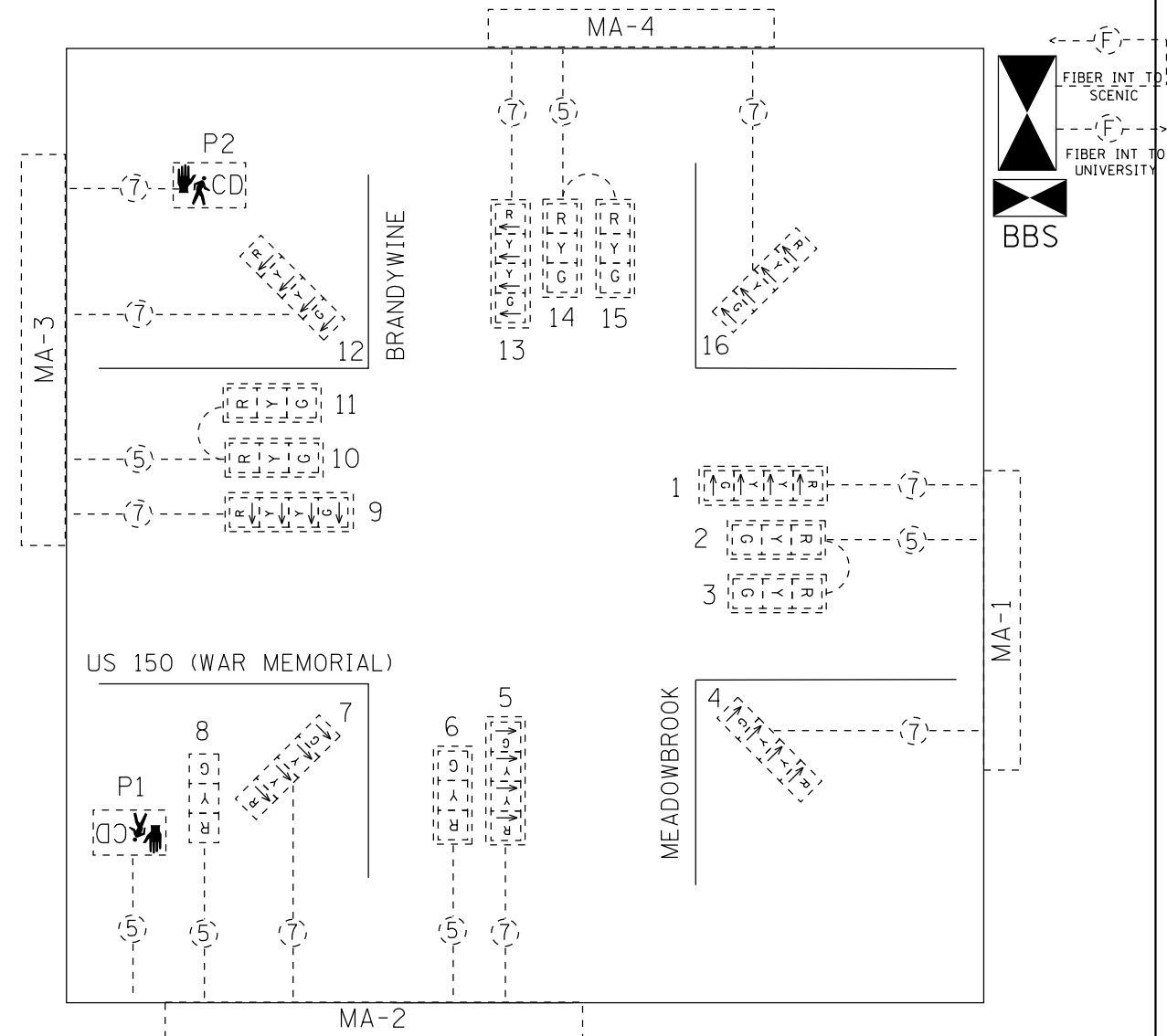
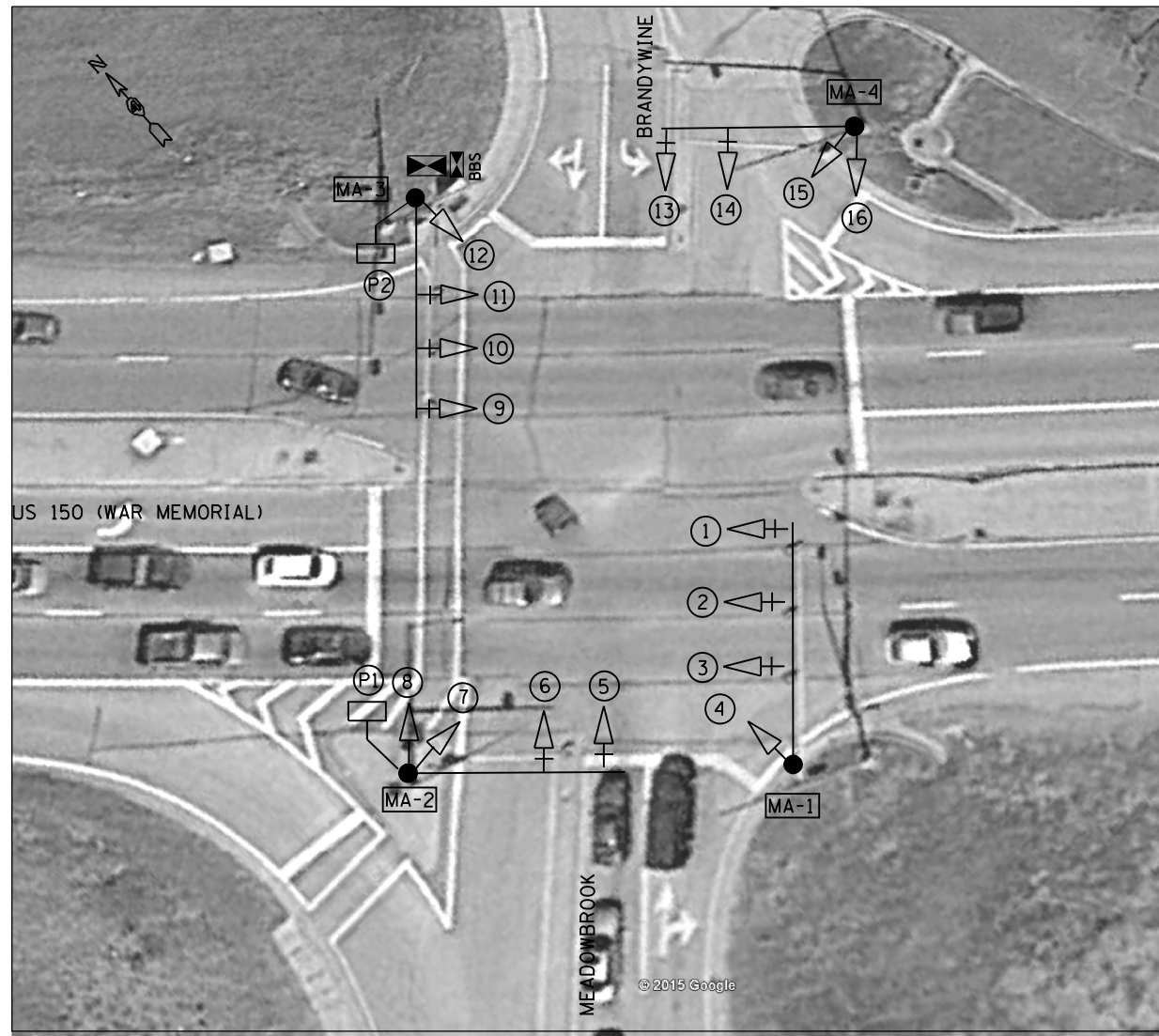
--(5)-- EX. CABLE    [R] [Y] [G] EX. HEAD  
 PROP. SIGNAL CABINET    [B] [B] [S] EX. BBS

**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE**  
**US 150 (WAR MEMORIAL) & MOUNTELLO PEORIA**

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D1	1	1
D2A, D2B	2 (ADV)	2
D4A, D4B	4	2
D5	5	1
D6A, D6B	6 (ADV)	2
D8A, D8B	8	2
<b>TOTAL:</b>		<b>10</b>

**BILL OF MATERIALS - US 150 (WAR MEMORIAL) & MOUNTELLO DR. (PEORIA)**

ITEM DESCRIPTION	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	10.0
CONTROLLER CABINET TYPE IV	EACH	1.0



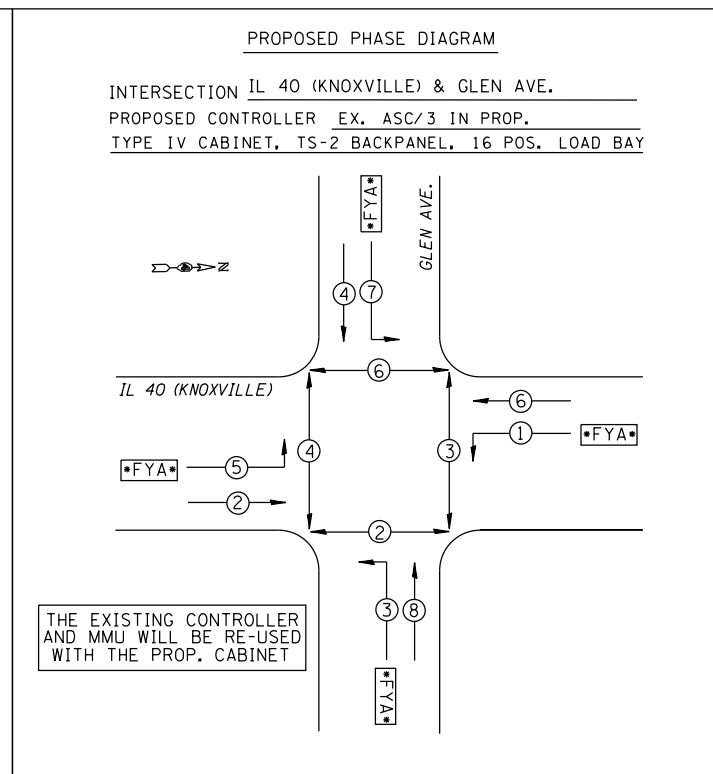
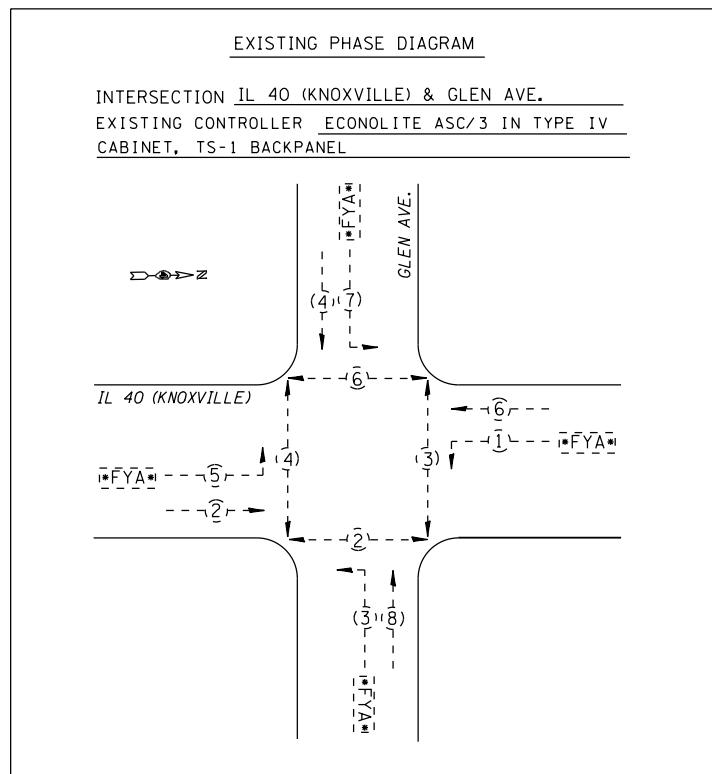
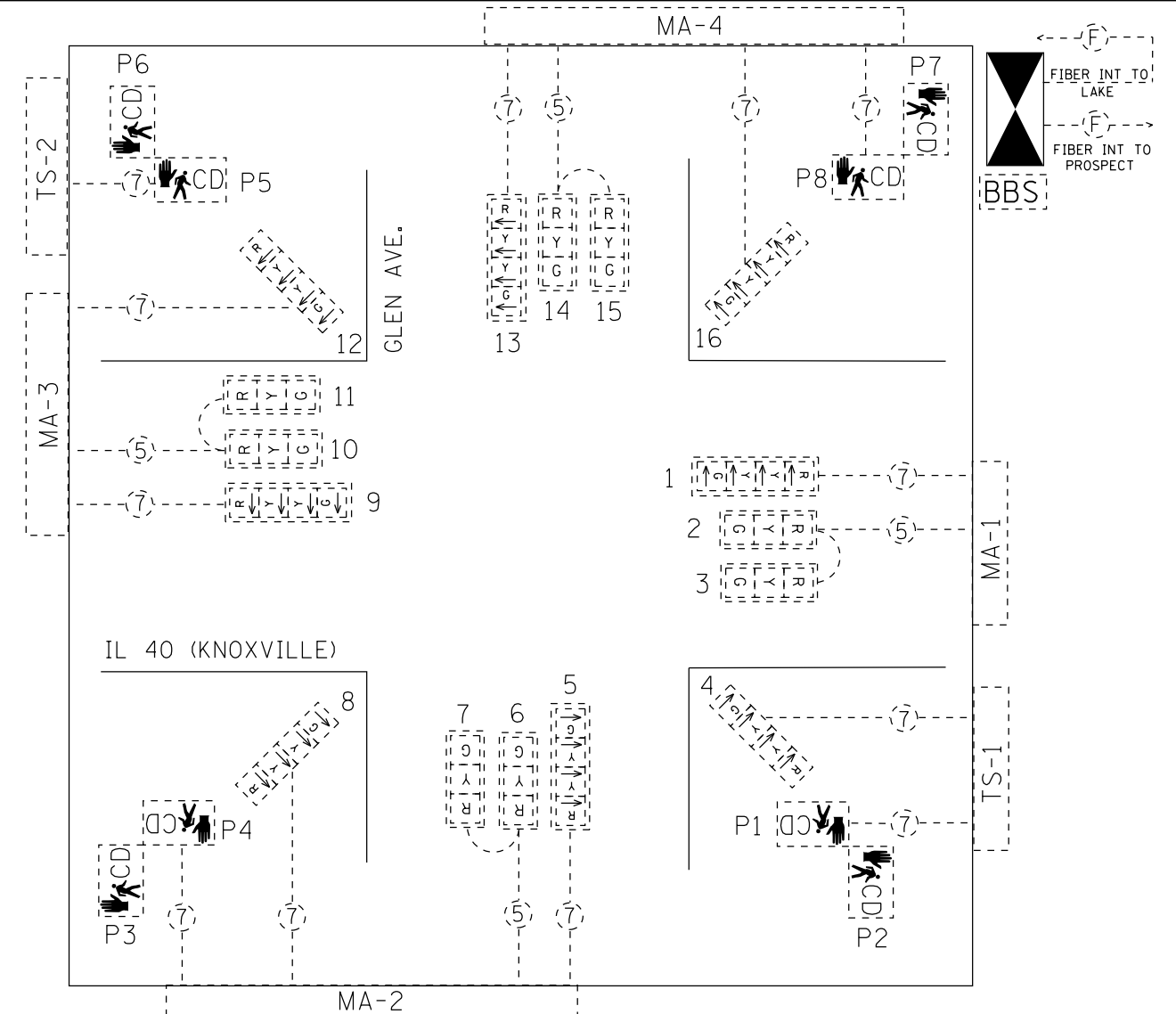
**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE  
US 150 (WAR MEMORIAL) &  
BRANDYWINE/MEADOWBROOK**

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D1	1	1
D2A, D2B	2 (ADV)	2
D3	3	1
D4	4	1
D5	5	1
D6A, D6B	6 (ADV)	2
D7	7	1
D8	8	1
<b>TOTAL:</b>		<b>10</b>

**BILL OF MATERIALS - US 150 (WAR MEMORIAL) & BRANDYWINE/MEADOWBROOK**

	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	10.0
CONTROLLER CABINET TYPE IV	EACH	1.0
TRAFFIC SIGNAL BATTERY BACKUP SYSTEM	EACH	1.0



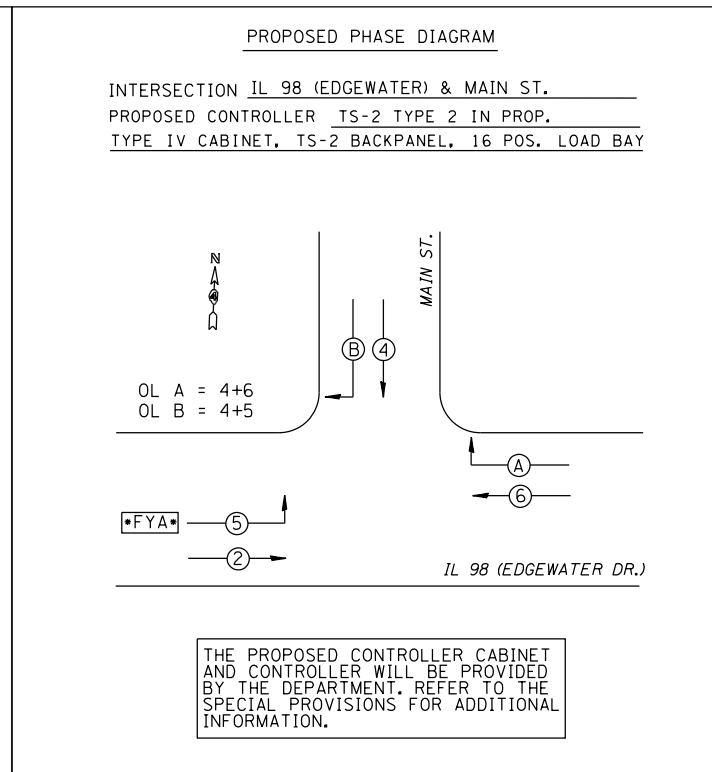
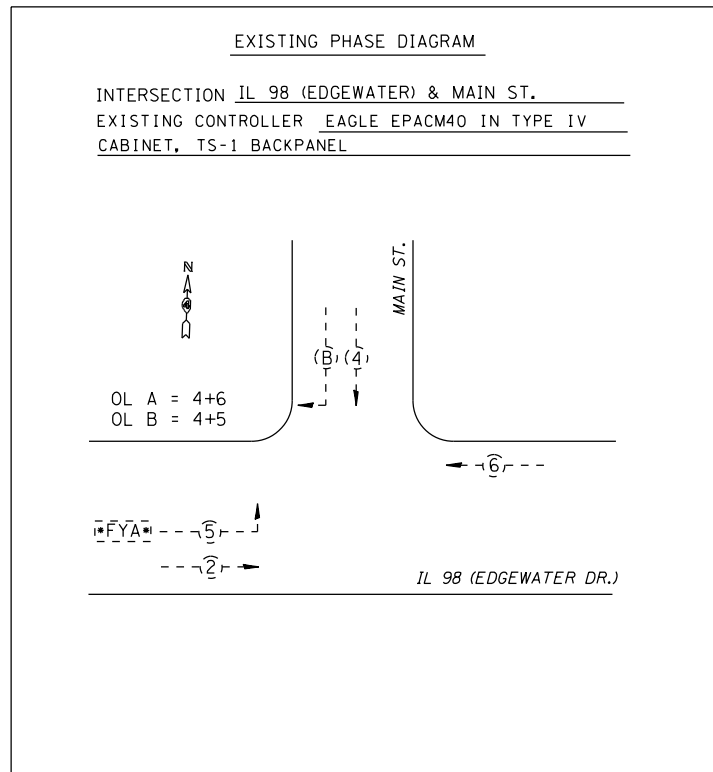
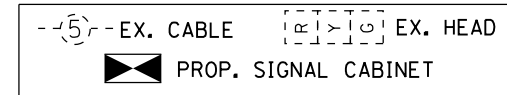
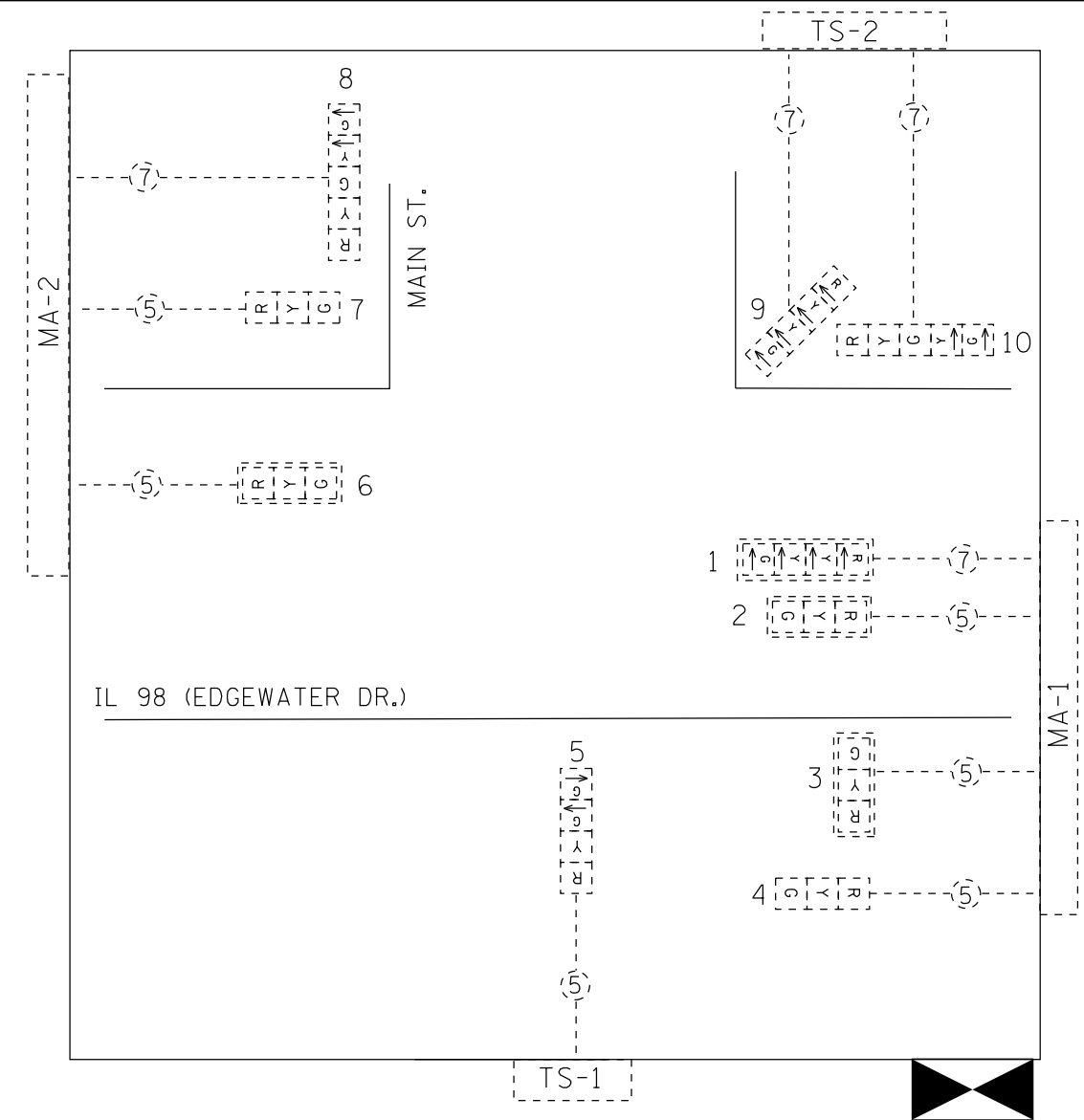
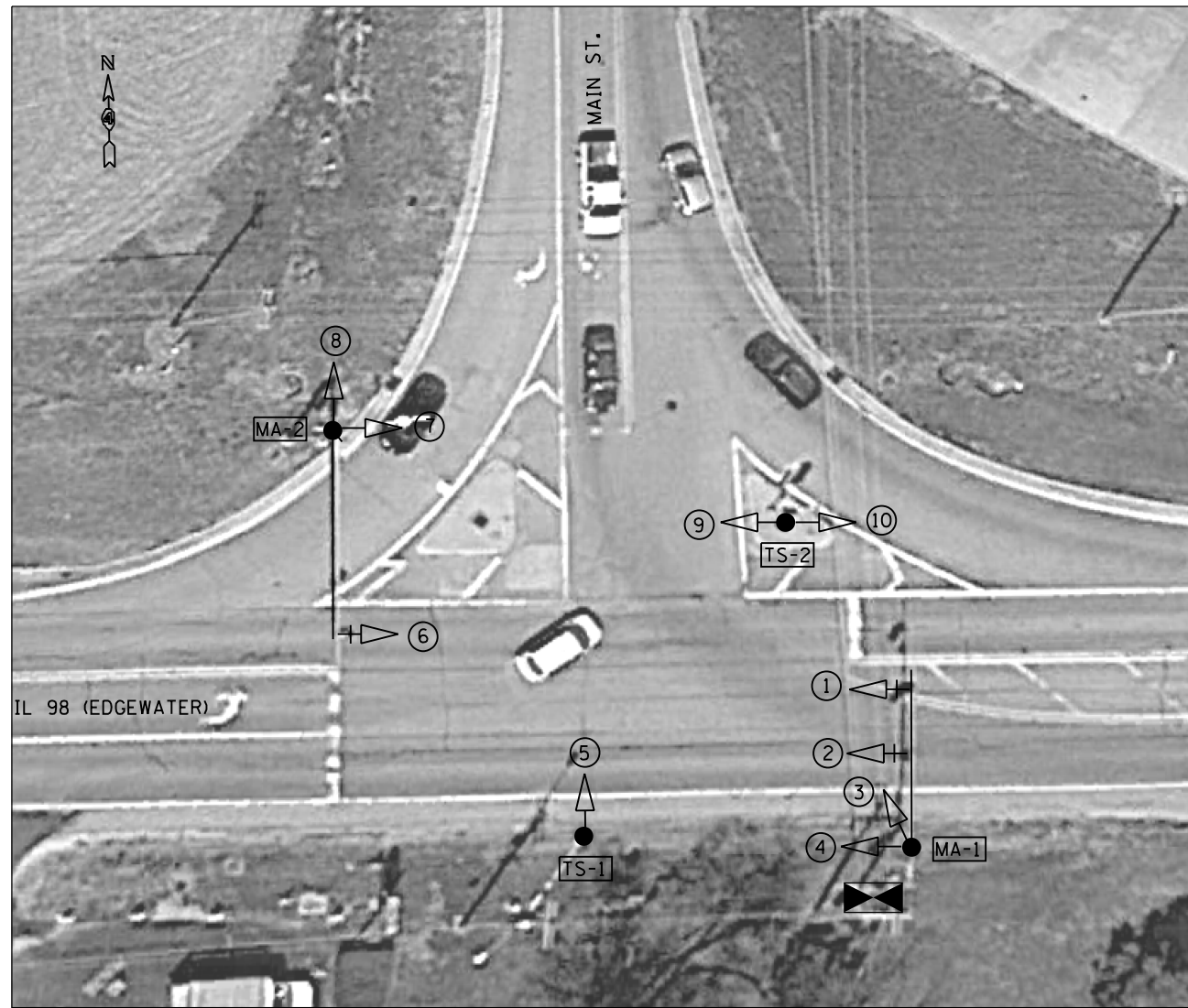


EX. CABLE   
 EX. HEAD  
 PROP. SIGNAL CABINET   
 EX. BBS

DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE IL 40 (KNOXVILLE) & GLEN PEORIA		
DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D1	1	1
D2A, D2B	2 (ADV)	2
D3	3	1
D4A, D4B	4	2
D5	5	1
D6A, D6B	6 (ADV)	2
D7	7	1
D8A, D8B	8	2
<b>TOTAL:</b>		<b>12</b>

BILL OF MATERIALS - IL 40 (KNOXVILLE) & GLEN (PEORIA)		
ITEM DESCRIPTION	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	12.0
CONTROLLER CABINET TYPE IV	EACH	1.0



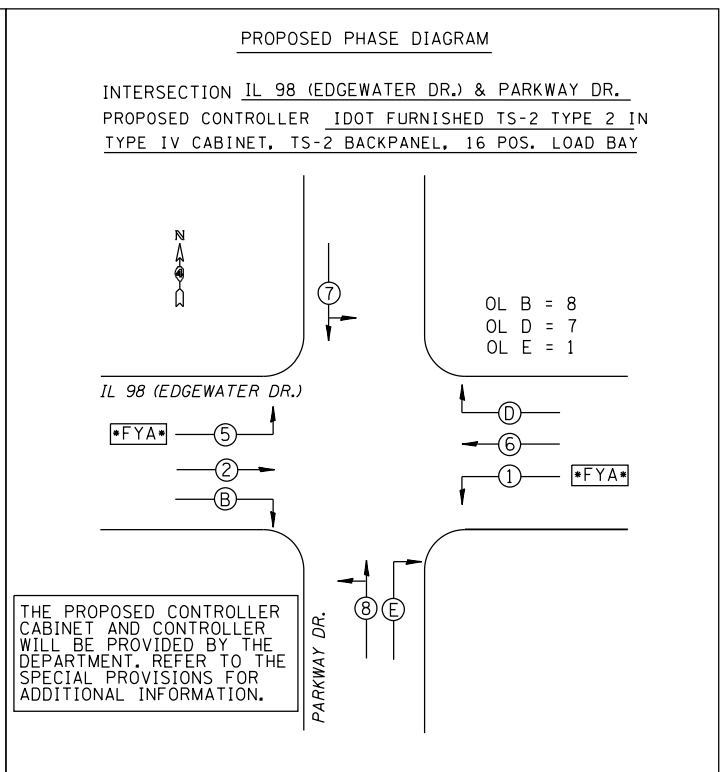
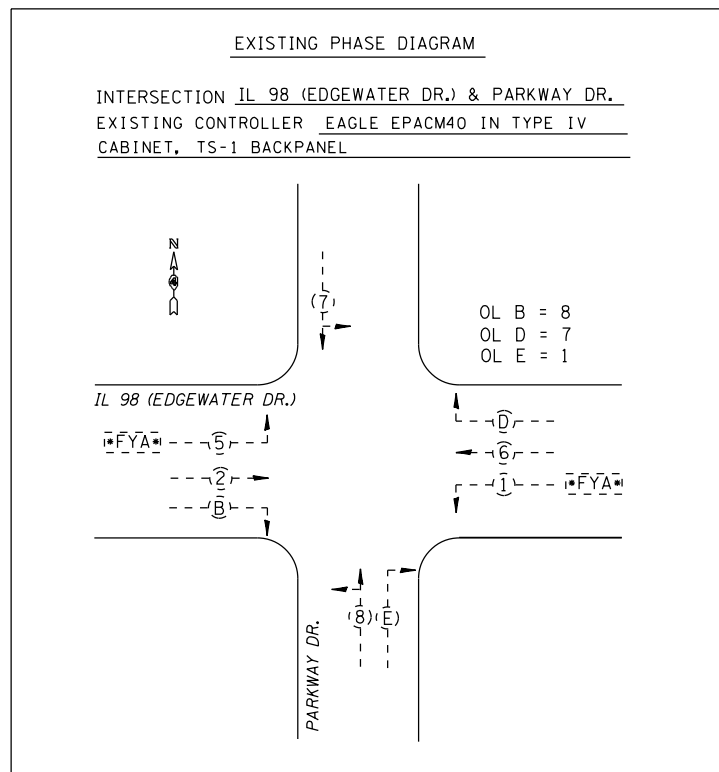
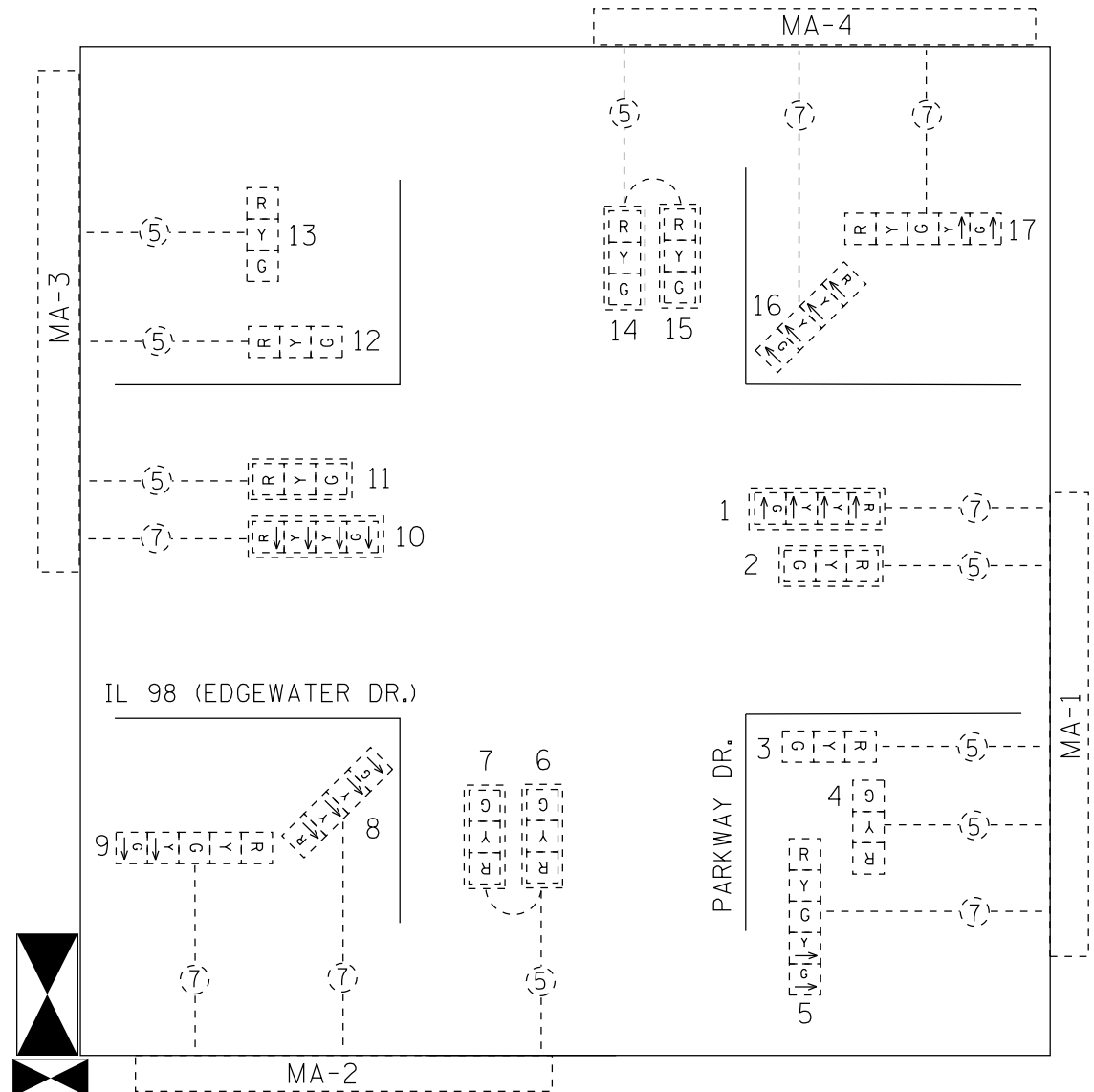
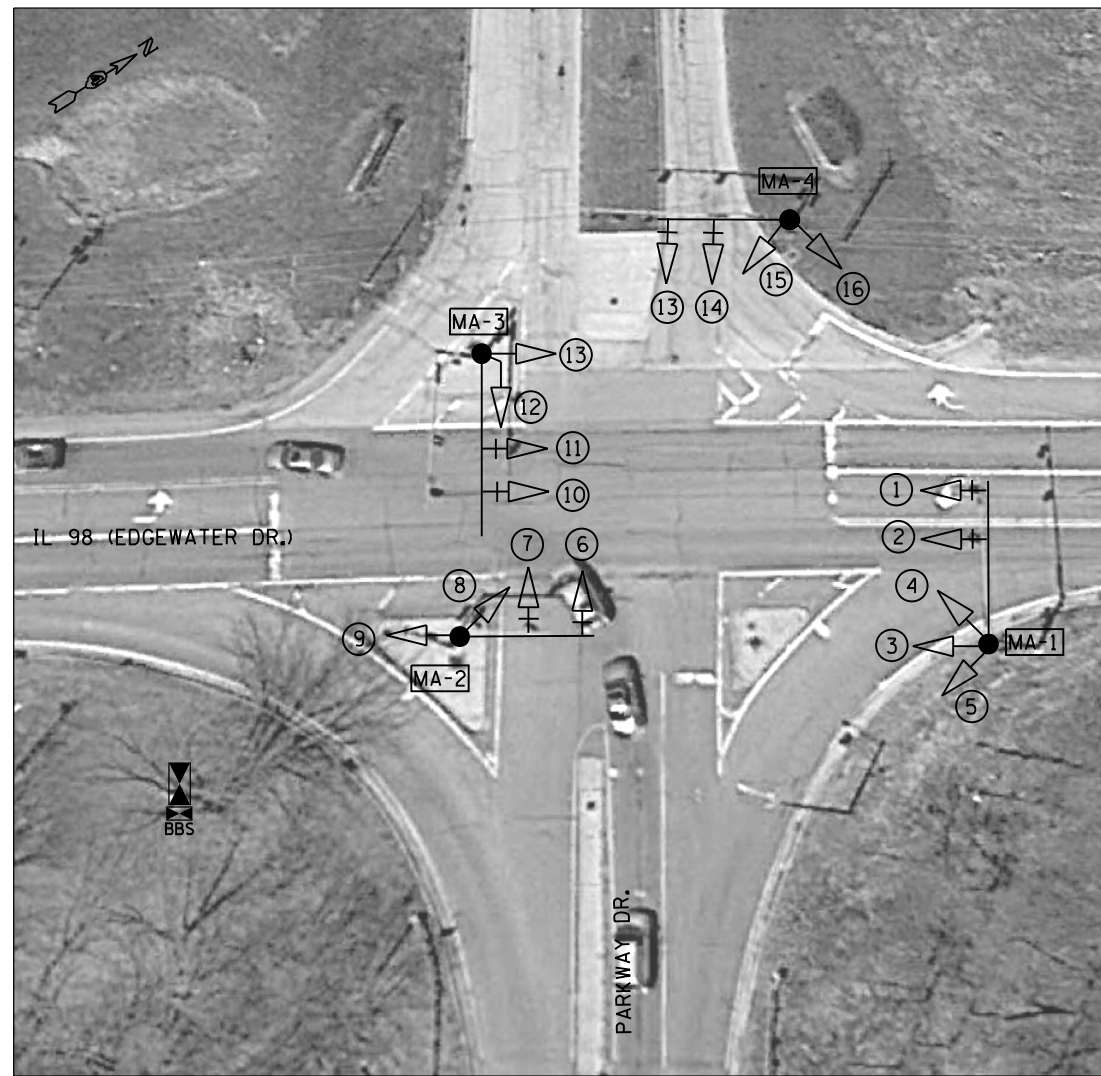


**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE  
IL 98 (EDGEWATER DR.) & MAIN ST.  
NORTH PEKIN**

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D2	2 (ADV)	1
D4A, D4B	4	2
D5	5	1
D6A, D6B	6 (ADV)	2
<b>TOTAL:</b>		<b>6</b>

**BILL OF MATERIALS - IL 98 & MAIN ST. (NORTH PEKIN)**

ITEM DESCRIPTION	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	6.0
CONTROLLER CABINET TYPE IV, SPECIAL	EACH	1.0



(5) - EX. CABLE    [R] [Y] [G] EX. HEAD  
▣ PROP. SIGNAL CABINET    ▣ PROP. BBS

**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE  
IL 98 (EDGEWATER DR.) & PARKWAY  
TAZEWELL COUNTY**

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D1	1	1
D2A, D2B	2 (ADV)	2
D-6	6 (ADV)	1
D7	7	2
D8A, D-8B	8	2
<b>TOTAL:</b>		<b>8</b>

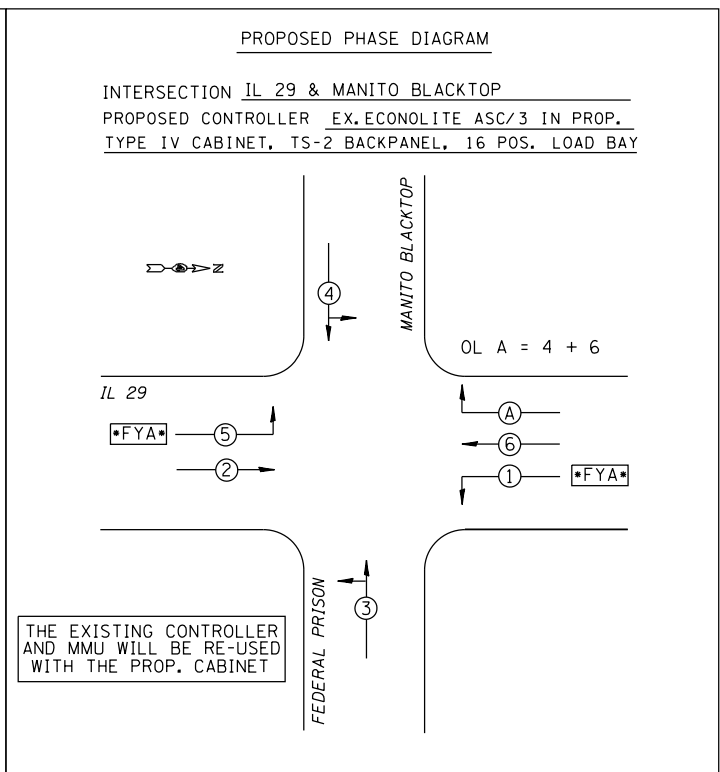
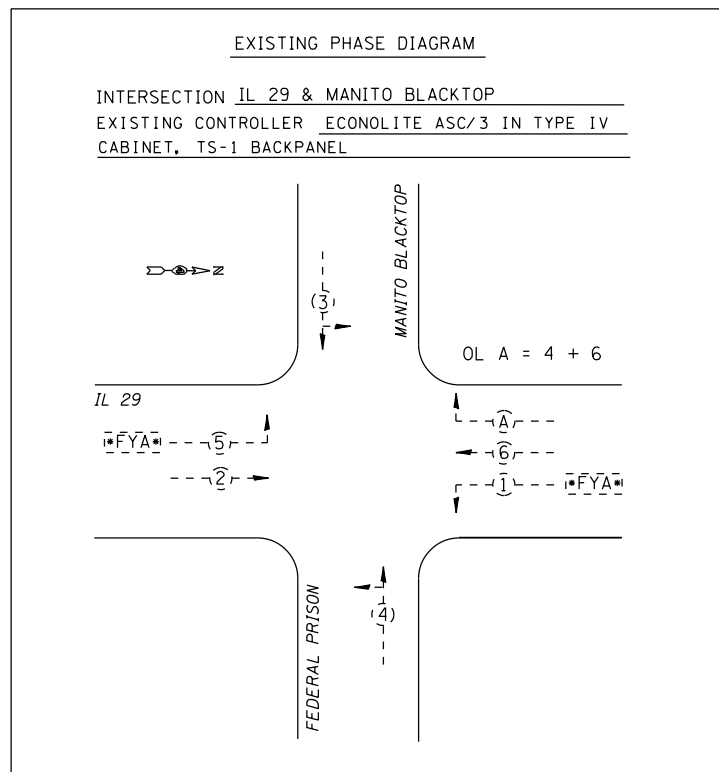
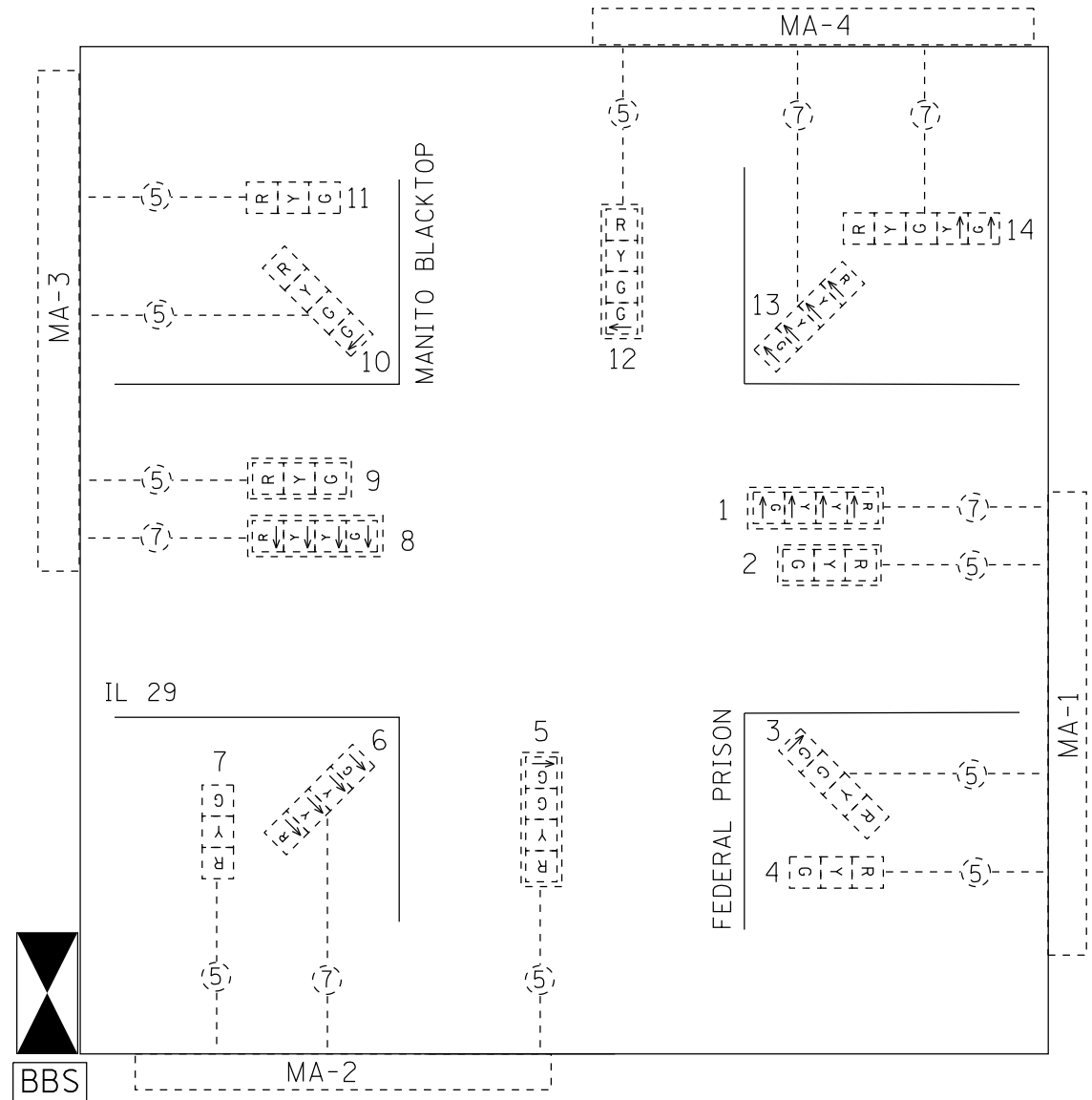
**BILL OF MATERIALS - IL 98 & PARKWAY (TAZEWELL COUNTY)**

ITEM DESCRIPTION	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	8.0
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1.0
TRAFFIC SIGNAL BATTERY BACKUP SYSTEM	EACH	1.0









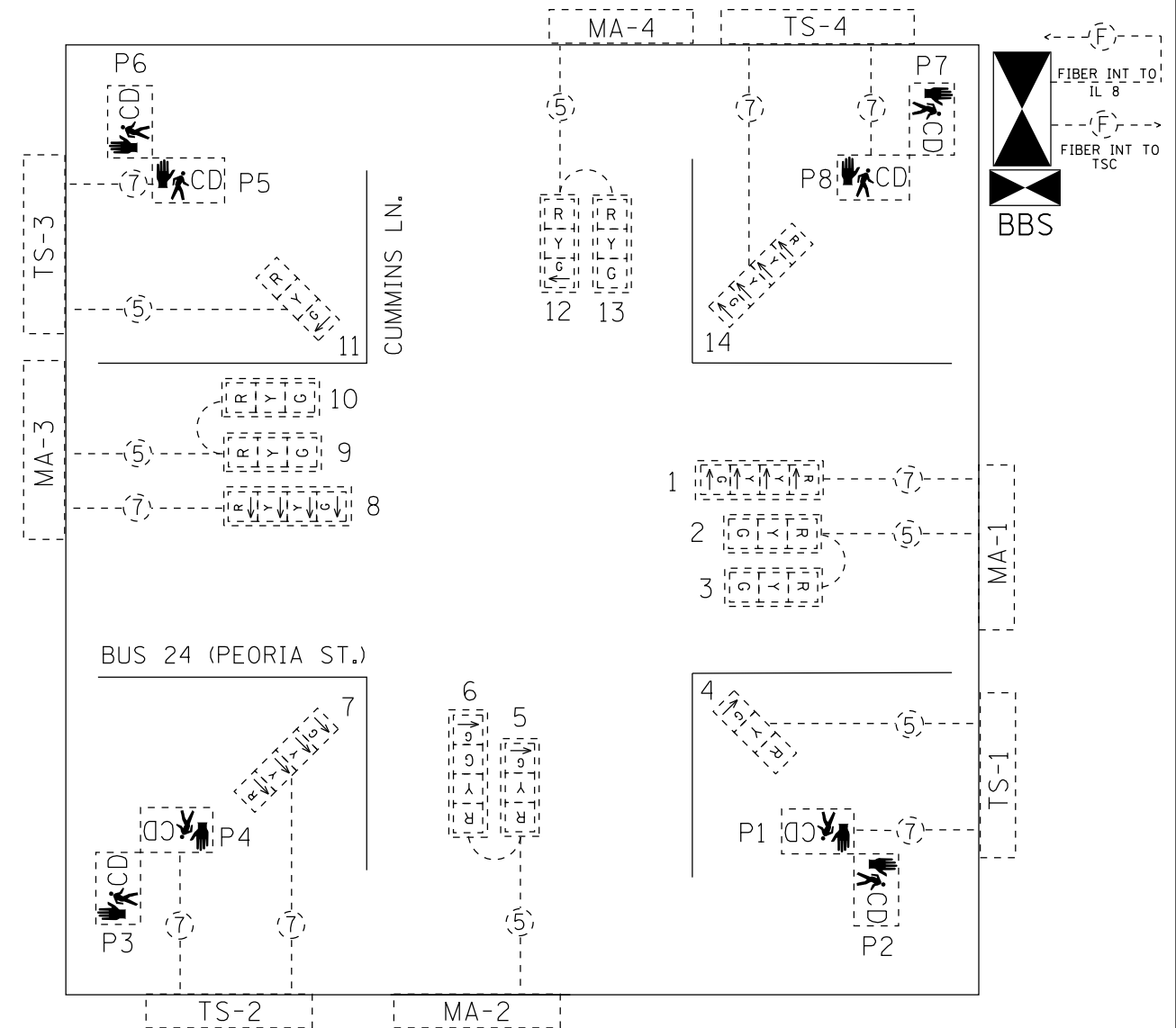
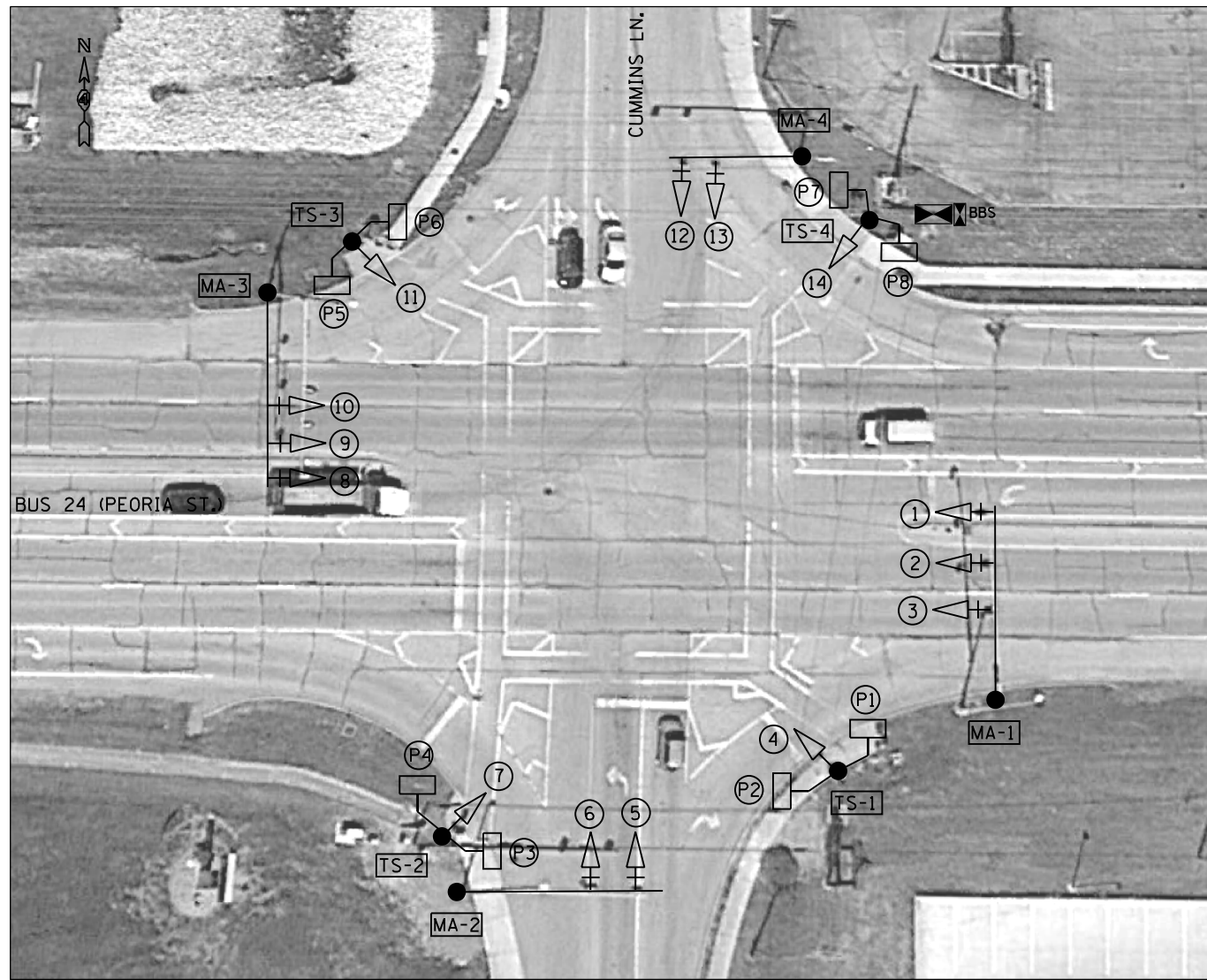
(5) -- EX. CABLE    [R] [Y] [G] EX. HEAD  
[R] [Y] [G] PROP. SIGNAL CABINET    BBS EX. BBS

**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE  
IL 29 & MANITO BLACKTOP  
PEKIN**

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D1	1	1
D2	2 (ADV)	1
D3	3	1
D4	4	1
D5	5	1
D6	6 (ADV)	1
<b>TOTAL:</b>		<b>6</b>

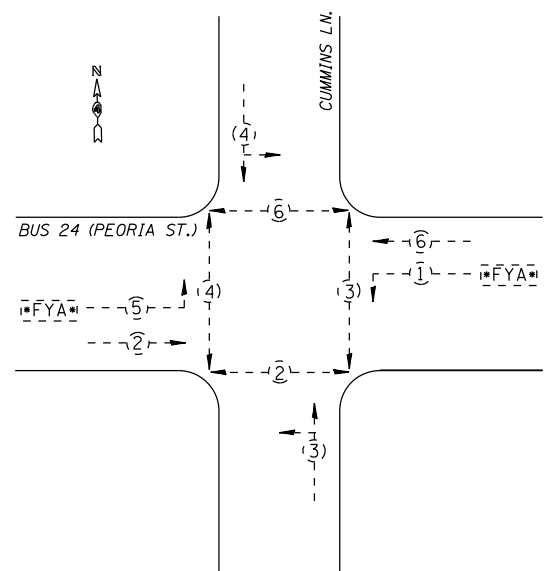
**BILL OF MATERIALS - IL 29 & MANITO BLACKTOP (PEKIN)**

ITEM DESCRIPTION	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	6.0
CONTROLLER CABINET TYPE IV	EACH	1.0



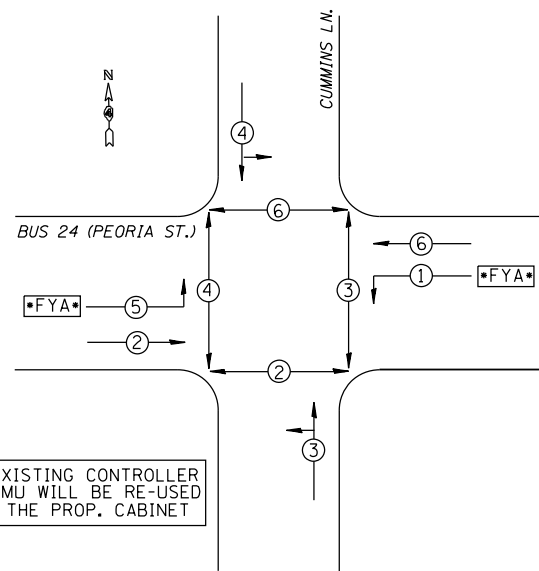
**EXISTING PHASE DIAGRAM**

INTERSECTION BUS 24 (PEORIA ST.) & CUMMINS LN.  
 EXISTING CONTROLLER EAGLE EPACM42 IN TYPE IV  
 CABINET, TS-1 BACKPANEL



**PROPOSED PHASE DIAGRAM**

INTERSECTION BUS 24 (PEORIA ST.) & CUMMINS LN.  
 PROPOSED CONTROLLER EX. EAGLE EPACM42 IN PROP.  
 TYPE IV CABINET, TS-2 BACKPANEL, 16 POS. LOAD BAY



**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE**  
**BUS 24 (PEORIA ST.) & CUMMINS LN.**  
**WASHINGTON**

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D1	1	1
D2A, D2B	2 (ADV)	2
D3A, D3B	3	2
D4A, D4B	4	2
D5	5	1
D6A, D6B	6 (ADV)	2
<b>TOTAL:</b>		<b>10</b>

**BILL OF MATERIALS - BUS 24 (PEORIA ST.) & CUMMINS LN. (WASHINGTON)**

	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	10.0
CONTROLLER CABINET TYPE IV	EACH	1.0
TRAFFIC SIGNAL BATTERY BACKUP SYSTEM	EACH	1.0

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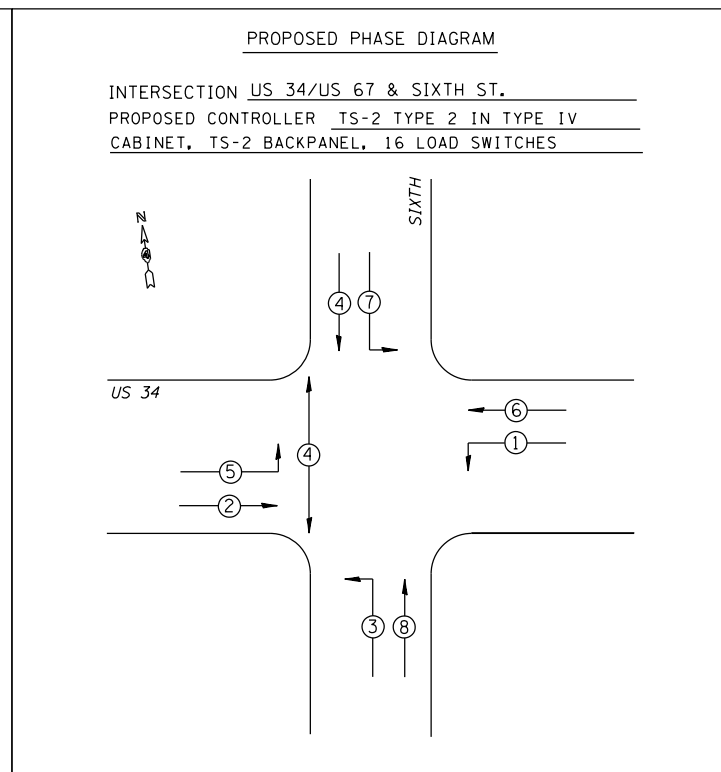
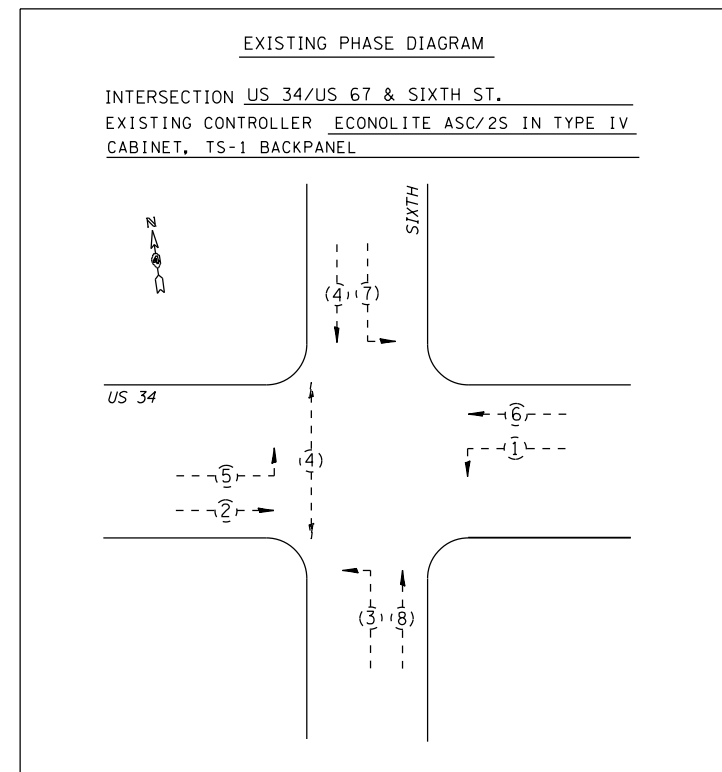
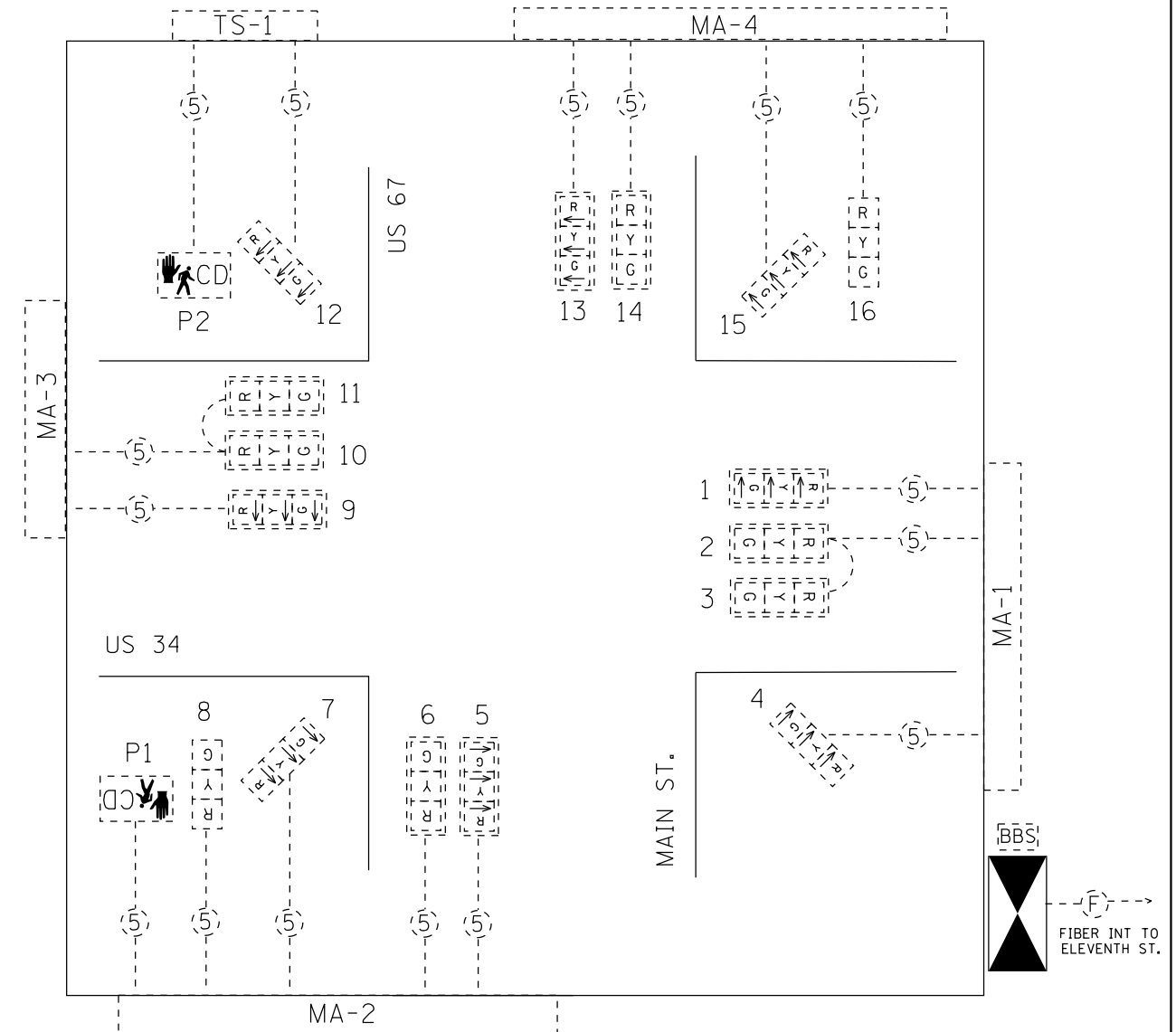
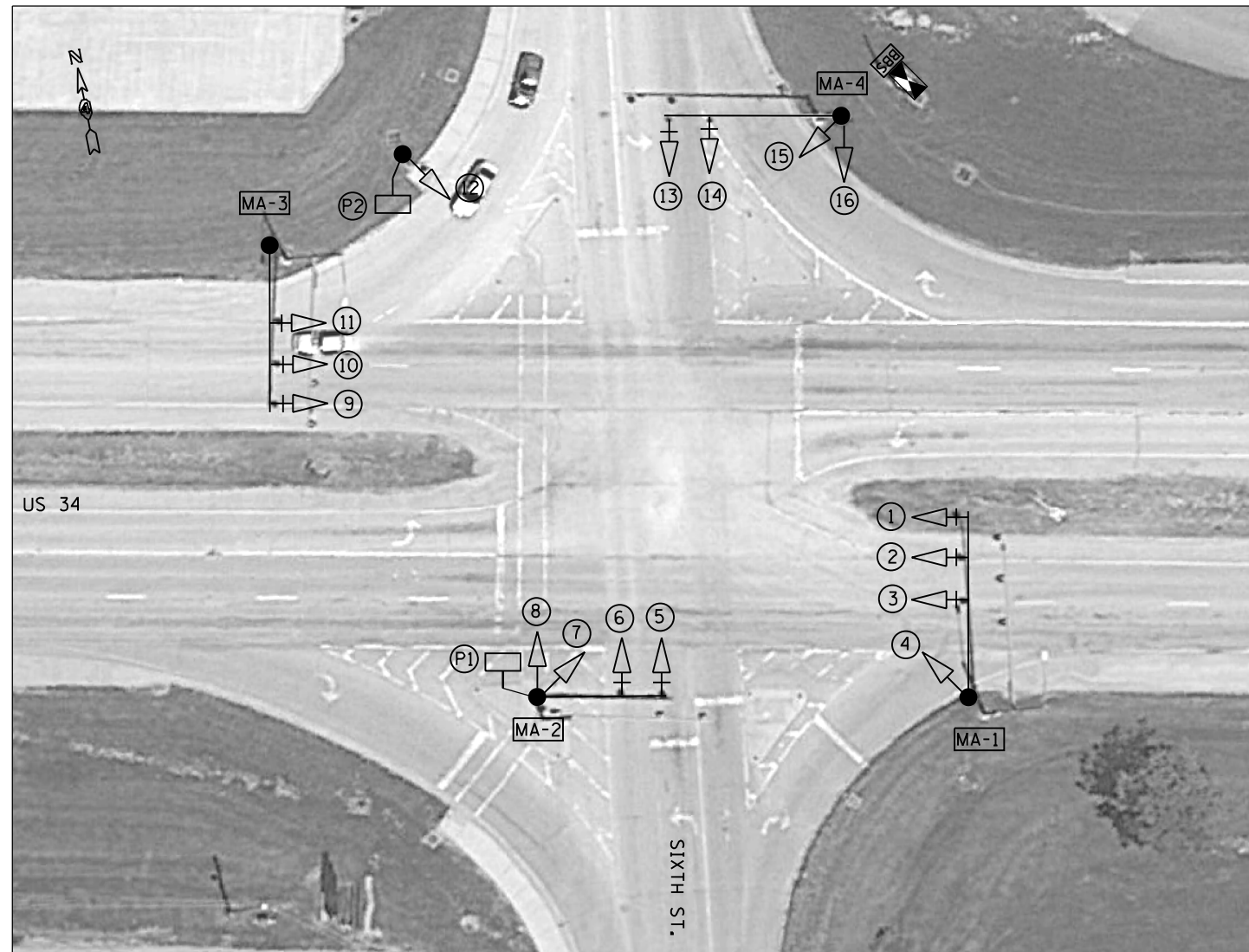
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PROPOSED TRAFFIC SIGNALS**  
**BUS 24 (PEORIA ST.) & CUMMINS LN. - WASHINGTON**

SCALE:	STA.	TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			VAR.	D4 TRAFFIC SIGNALS 2015-1	VARIOUS	26	17
						CONTRACT NO. 68C83	
ILLINOIS FED. AID PROJECT							







(5) EX. CABLE [BBS] EX. BBS [R] [Y] [G] EX. HEAD  
 [Signal Cabinet Symbol] PROP. SIGNAL CABINET

**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE  
US 34 & SIXTH ST. (MONMOUTH)**

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D1	1	1
D-2A, D-2B	2 (ADV)	2
D3	3	1
D4A, D4B	4	2
D5	5	1
D-6A, D-6B	6 (ADV)	2
D7	7	1
D8A, D8B	8	2
<b>TOTAL:</b>		<b>12</b>

THE PROP. CONTROLLER CABINET SHALL BE EQUIPPED WITH AN INTEGRATED AUTOMATIC BBS TRANSFER SWITCH FROM ALPHA TECHNOLOGIES.

**BILL OF MATERIALS - US 34 & SIXTH ST. (MONMOUTH)**

ITEM DESCRIPTION	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	10.0
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1.0

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 PLOT DATE = 7/17/2015

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

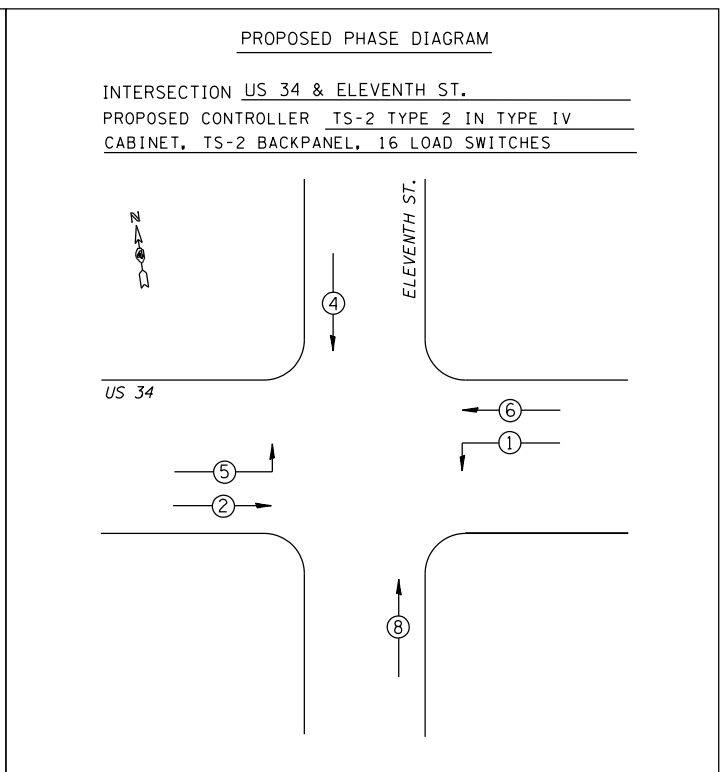
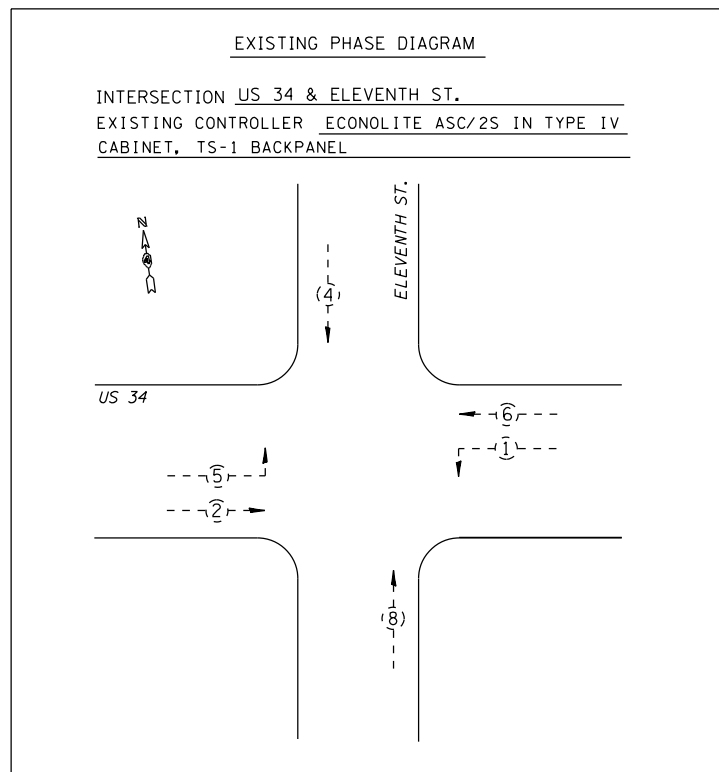
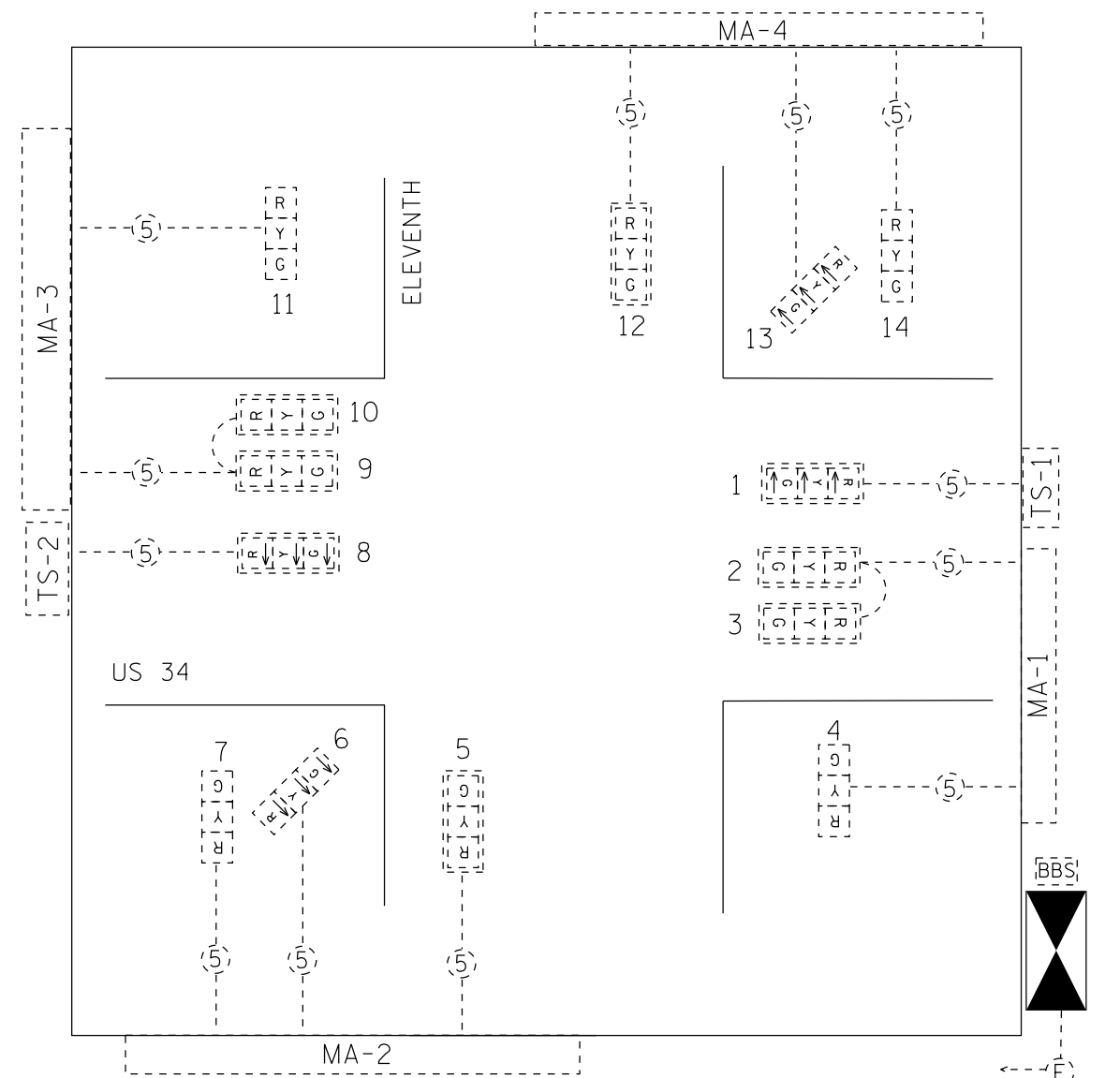
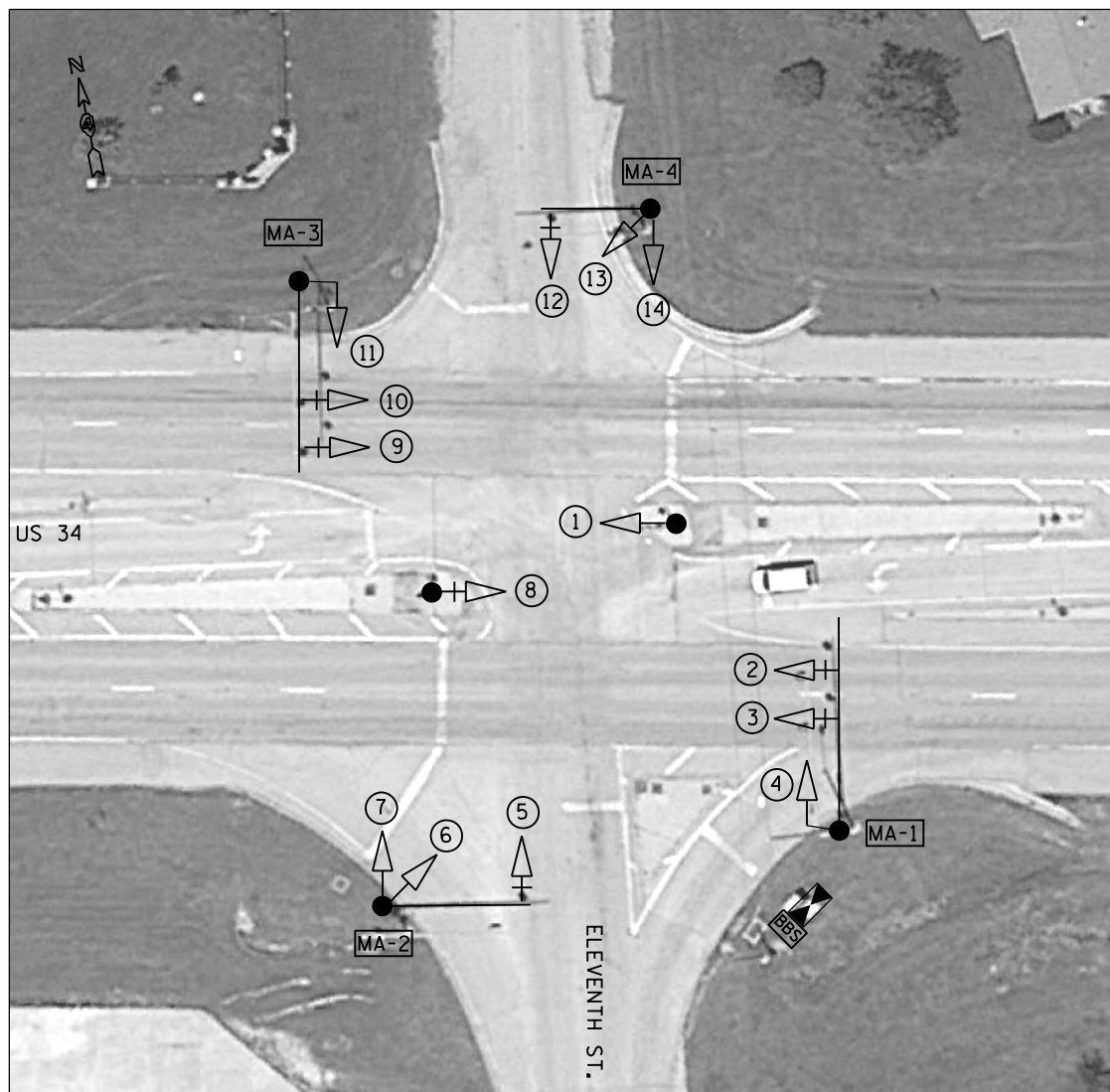
**PROPOSED TRAFFIC SIGNALS  
US 34 & SIXTH ST. - MONMOUTH**

SCALE: STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 TRAFFIC SIGNALS 2015-1	VARIOUS	26	19

CONTRACT NO. 68C83  
ILLINOIS FED. AID PROJECT





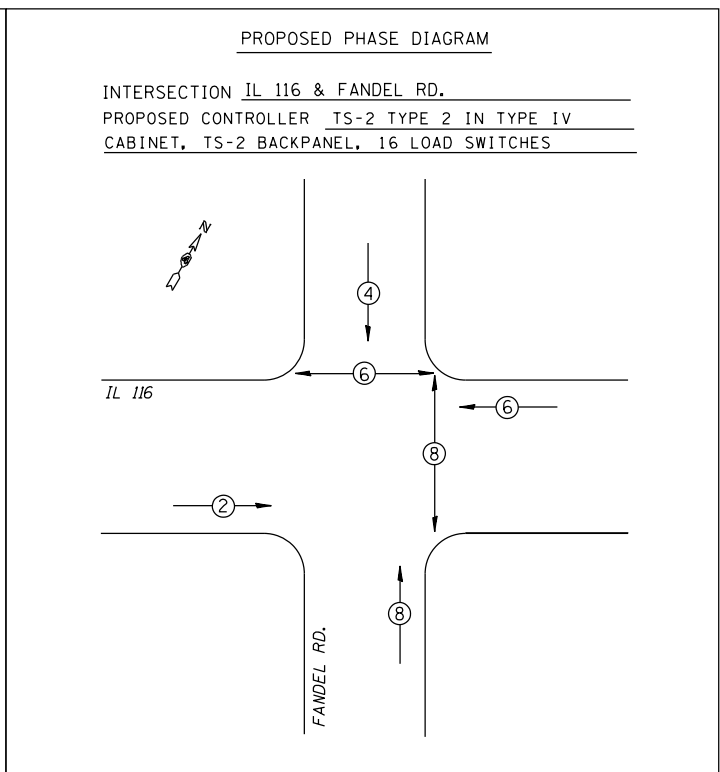
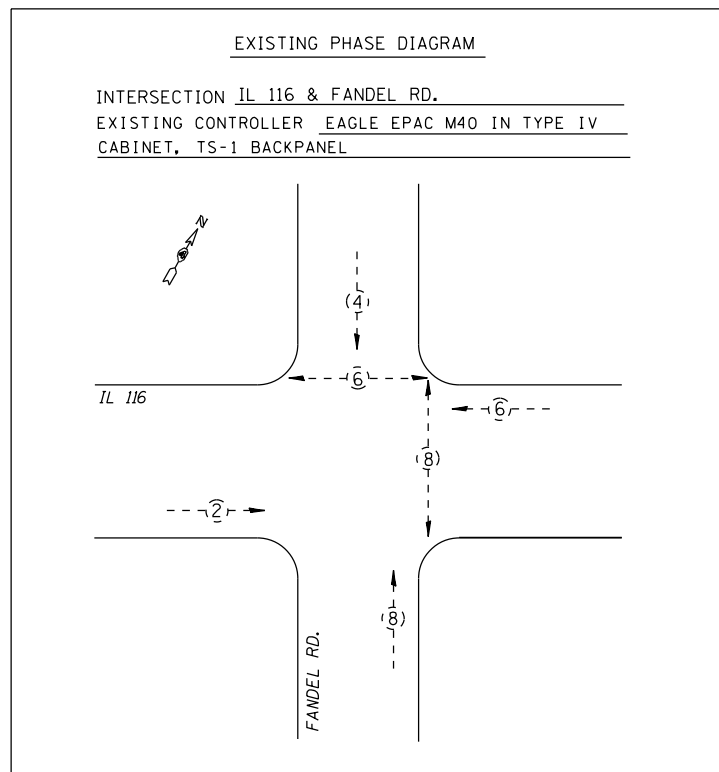
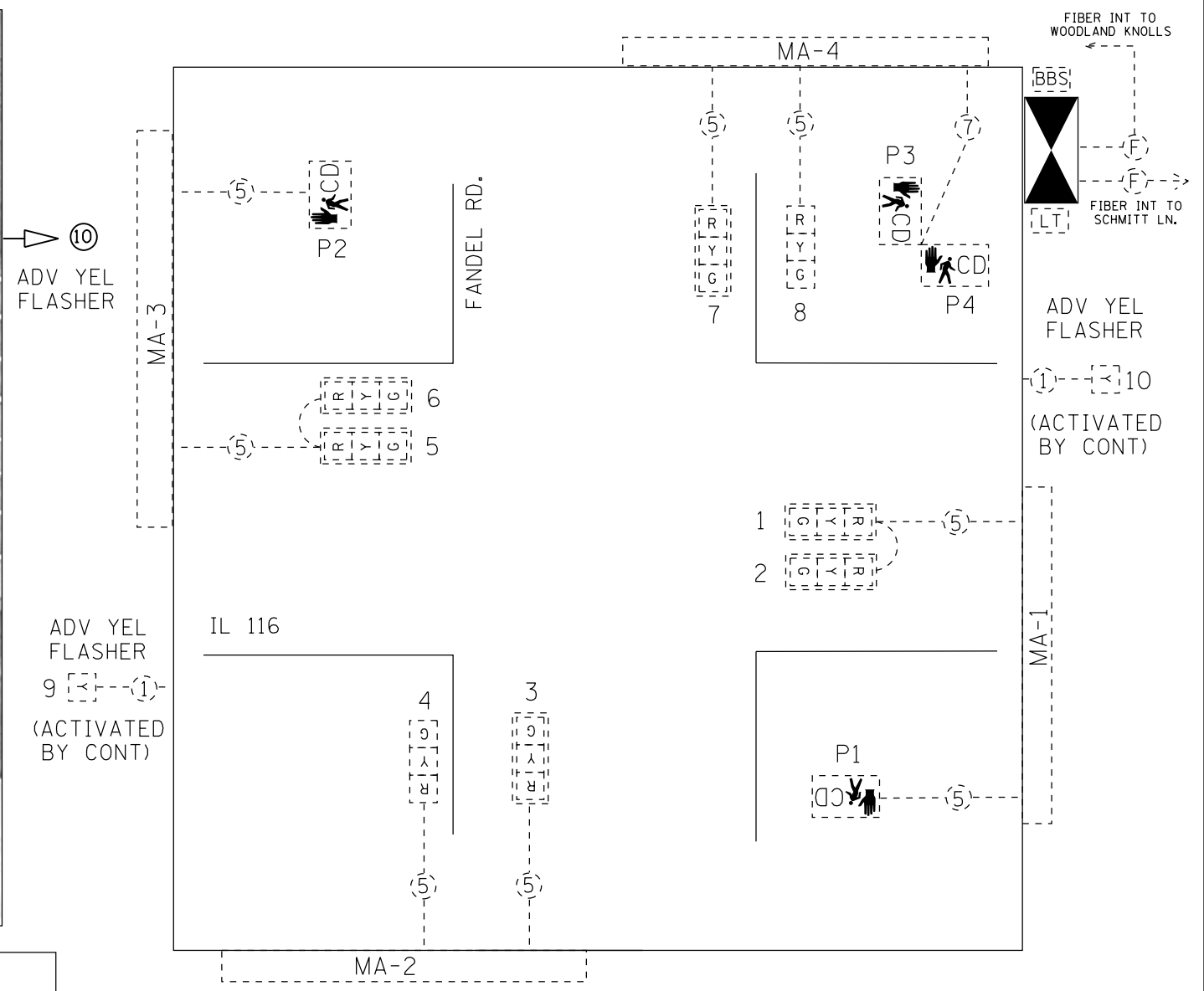
--(5)-- EX. CABLE [BBS] EX. BBS [R] [Y] [G] EX. HEAD  
 PROP. SIGNAL CABINET

**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE  
US 34 & ELEVENTH ST. (MONMOUTH)**

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D1	1	1
D-2A, D-2B	2 (ADV)	2
D4	4	1
D5	5	1
D-6A, D-6B	6 (ADV)	2
D8	8	1
<b>TOTAL:</b>		<b>8</b>

**BILL OF MATERIALS - US 34 & ELEVENTH ST. (MONMOUTH)**

ITEM DESCRIPTION	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	10.0
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1.0



(5) EX. CABLE [BBS] EX. BBS [R] [Y] [G] EX. HEAD  
 [BBS] PROP. SIGNAL CABINET [LT] EX. LT CONT

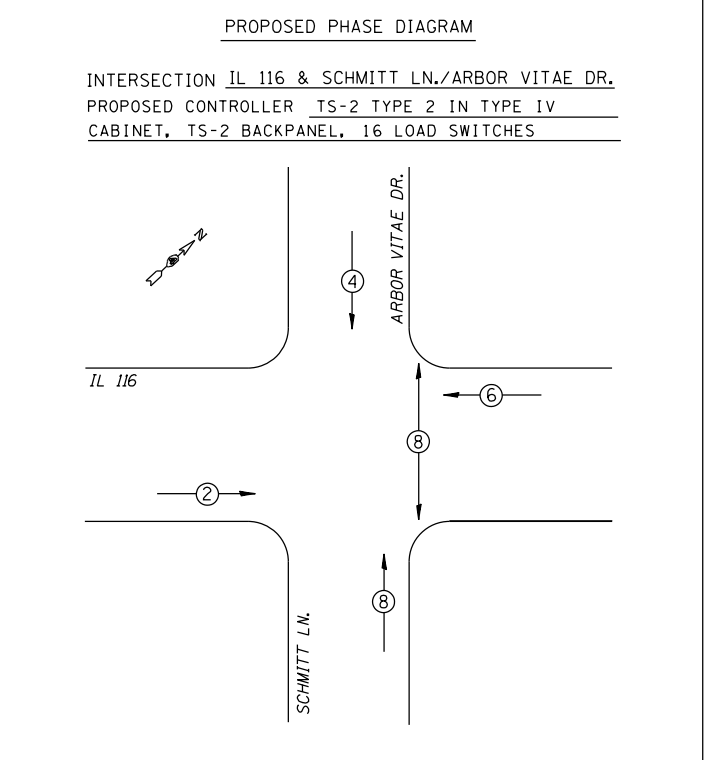
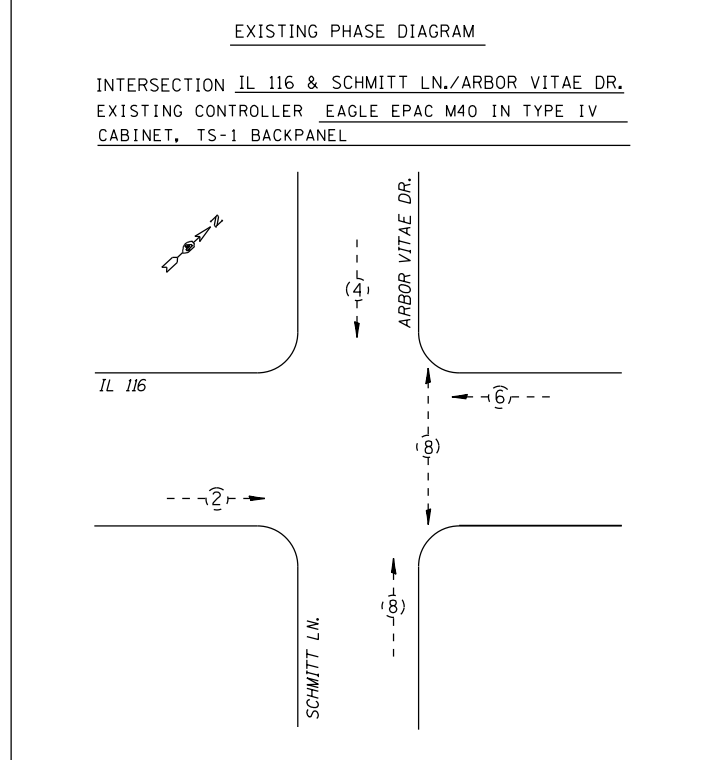
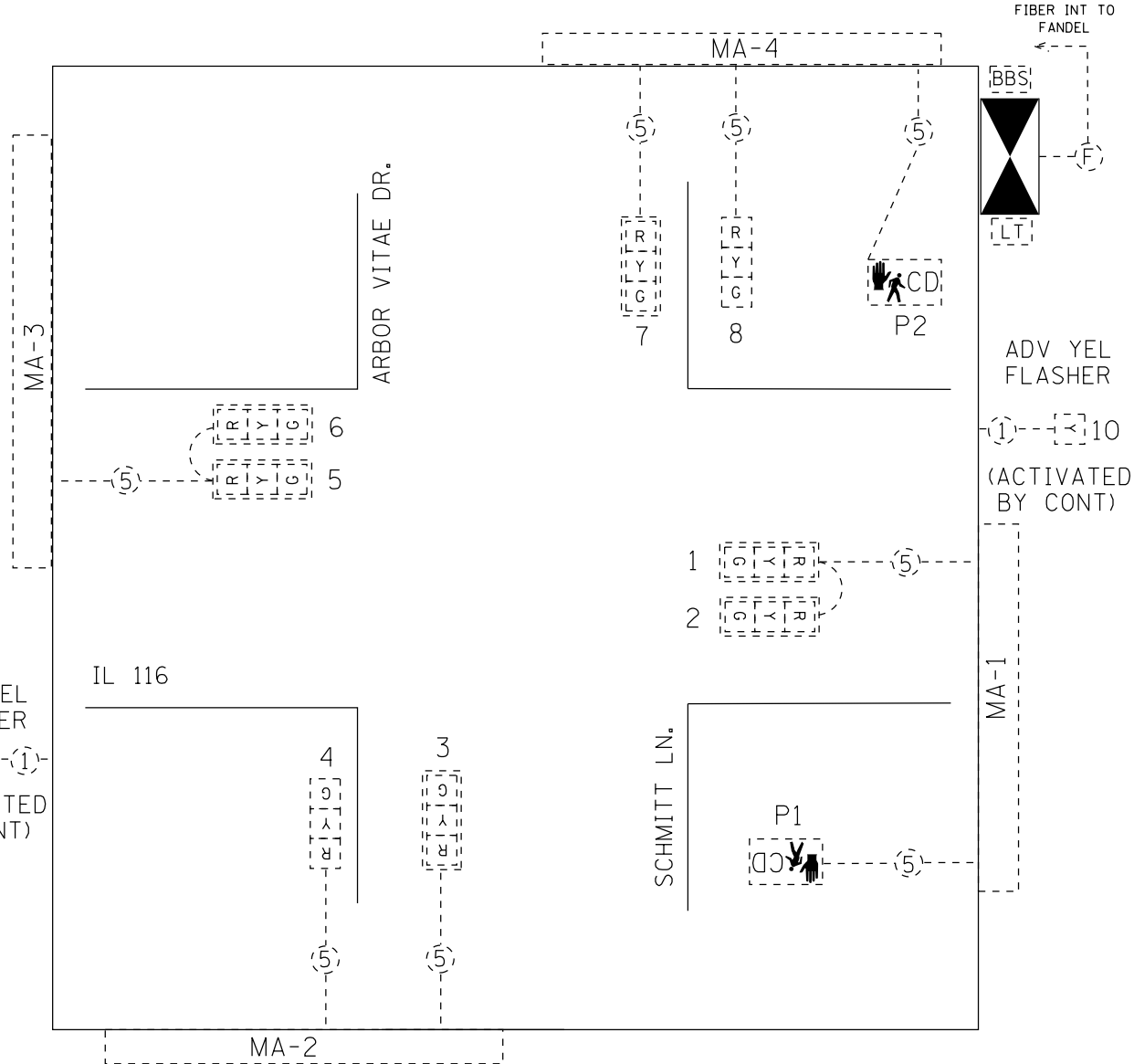
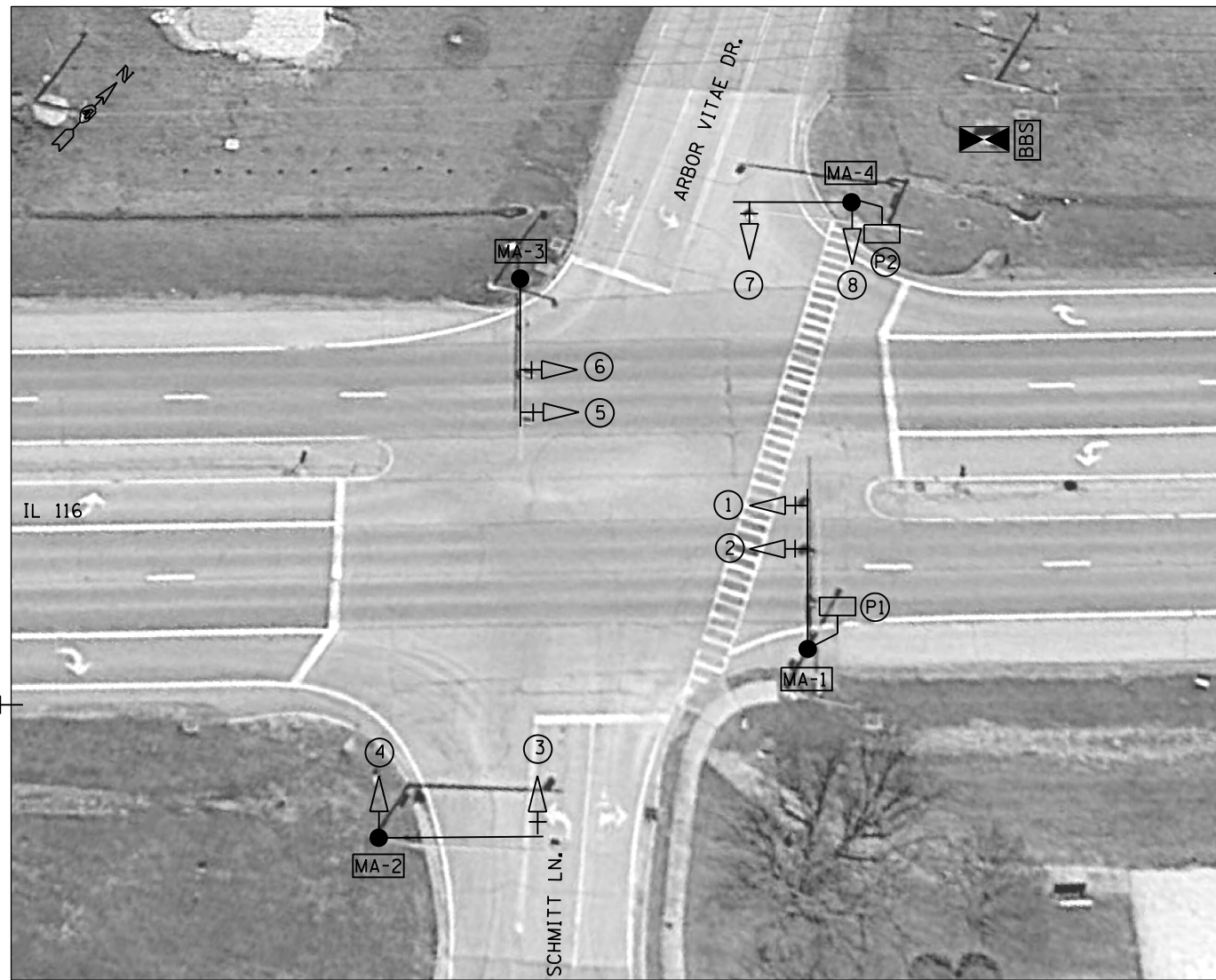
THE PROP. CONTROLLER CABINET SHALL BE EQUIPPED WITH ALL COMPONENTS REQUIRED TO INTEGRATE THE EX. SCHOOL FLASHING BEACONS WITH A TOD SCHEDULER BASED UPON THE SCHOOL YEAR CALENDAR.

**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE**  
 IL 116 & FANDEL RD. GERMANTOWN HILLS

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D2A, D2B	2	2
D4A, D4B	4	2
D6A, D6B	6	2
D8A, D-8B	8	2
<b>TOTAL:</b>		<b>8</b>

**BILL OF MATERIALS - IL 116 & FANDEL RD. (GERMANTOWN HILLS)**

ITEM DESCRIPTION	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	8.0
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1.0



(5) - EX. CABLE    BBS - EX. BBS    (R) > (G) - EX. HEAD  
 [ ] - PROP. SIGNAL CABINET    (LT) - EX. LT CONT

**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE**  
IL 116 & SCHMITT /ARBOR VITAE GERMANTOWN HILLS

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D2A, D2B	2	2
D4A, D4B	4	2
D6A, D6B	6	2
D8A, D-8B	8	2
<b>TOTAL:</b>		<b>8</b>

THE PROP. CONTROLLER CABINET SHALL BE EQUIPPED WITH ALL COMPONENTS REQUIRED TO INTEGRATE THE EX. SCHOOL FLASHING BEACONS WITH A TOD SCHEDULER BASED UPON THE SCHOOL YEAR CALENDAR.

**BILL OF MATERIALS - IL 116 & SCHMITT LN./ARBOR VITAE DR. (GERMANTOWN HILLS)**

ITEM DESCRIPTION	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	8.0
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1.0

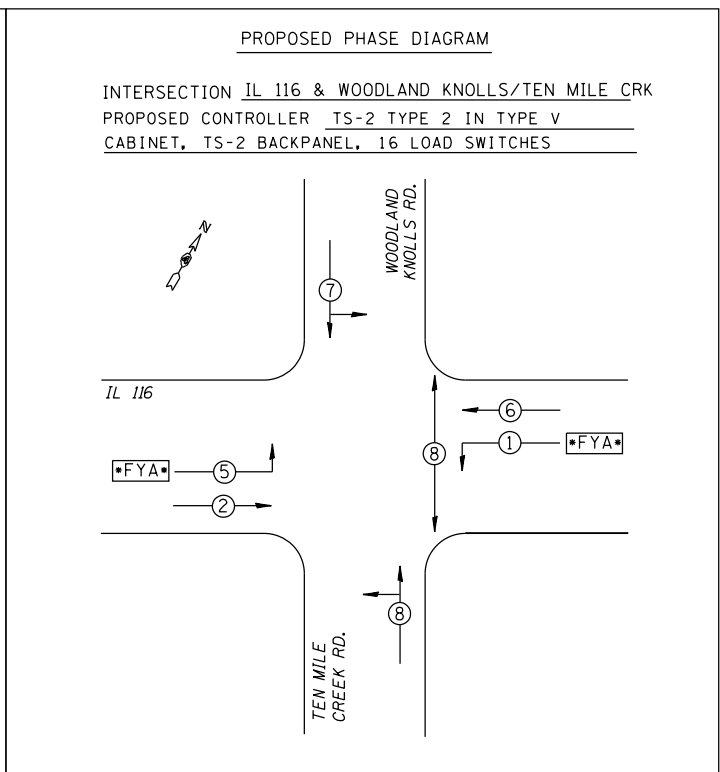
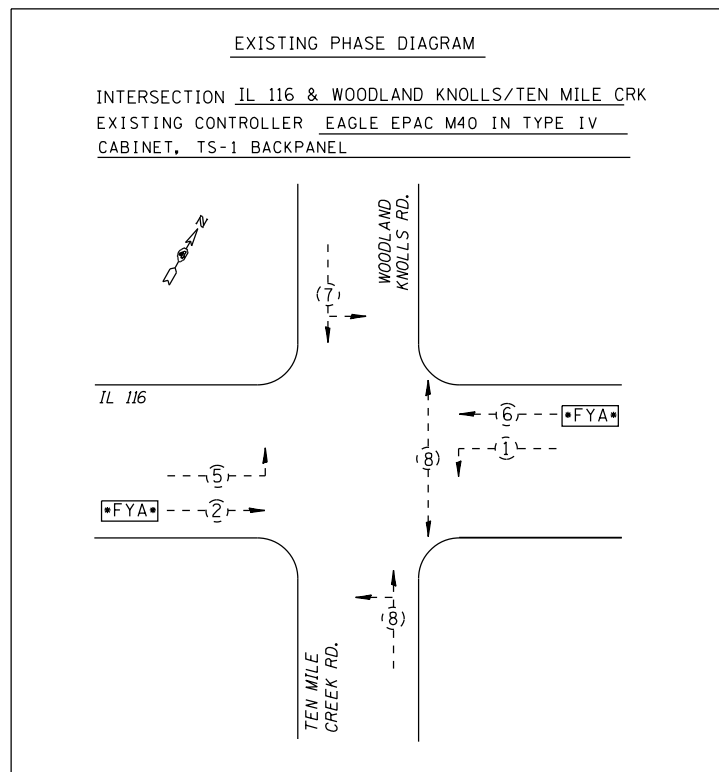
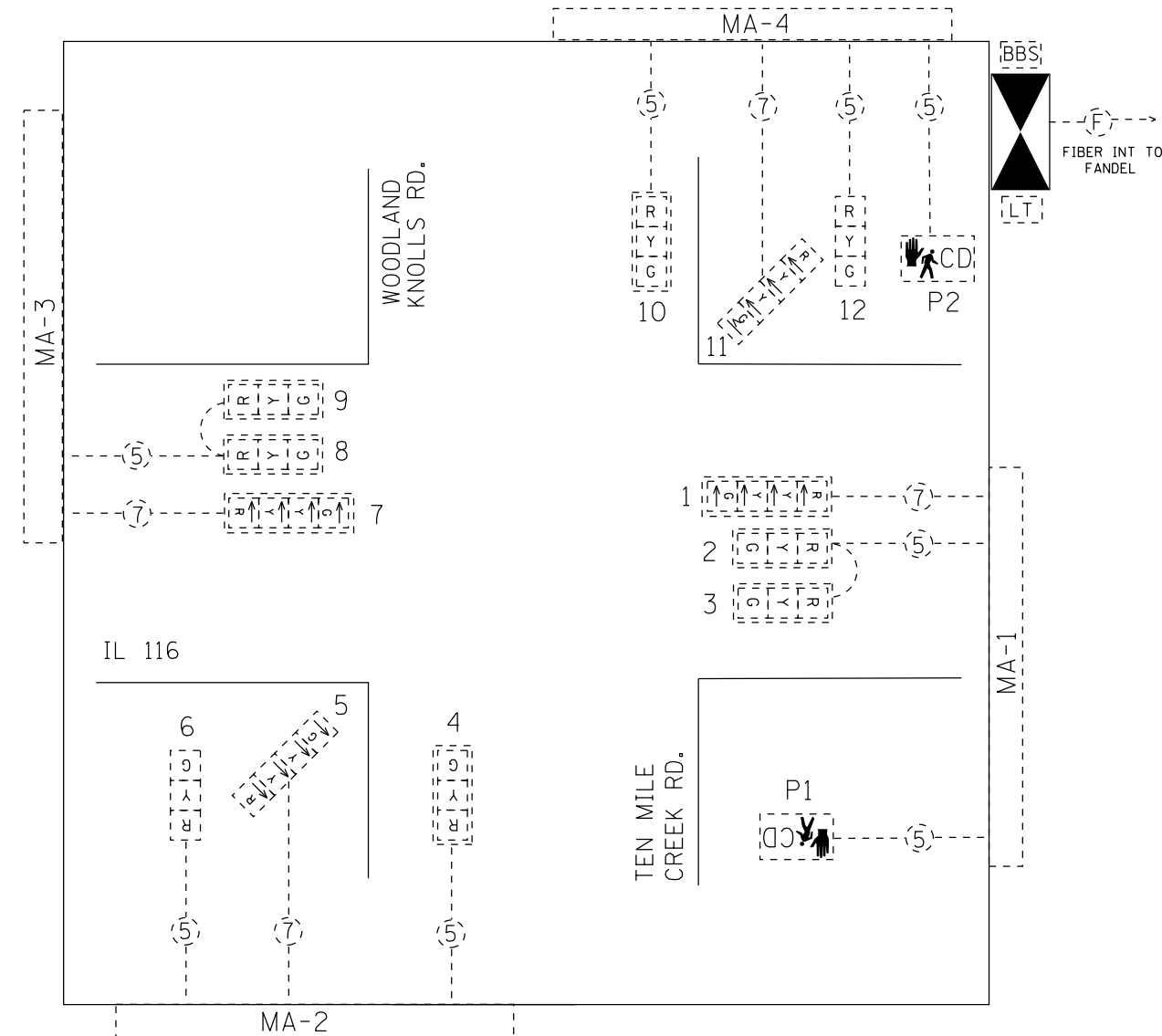
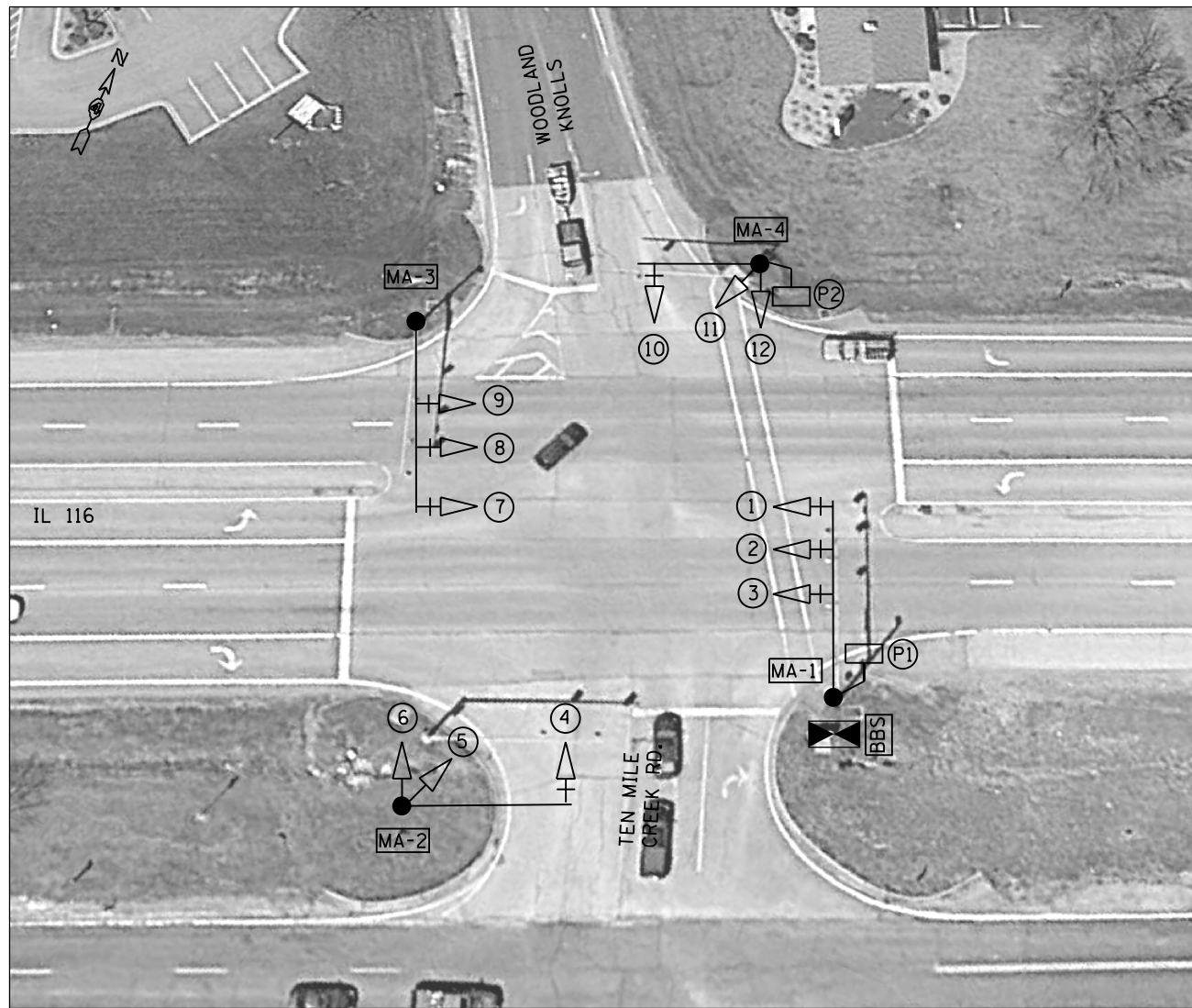
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 CHECKED -  
 DATE -  
 PLOT DATE = 7/17/2015

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED TRAFFIC SIGNALS**  
**IL 116 & SCHMITT LN. - GERMANTOWN HILLS**  
 SCALE: STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 TRAFFIC SIGNALS 2015-1-1	VARIOUS	26	22

CONTRACT NO. 68C83  
ILLINOIS FED. AID PROJECT



(5) EX. CABLE    BBS EX. BBS    (R) (Y) (G) EX. HEAD  
 PROP. SIGNAL CABINET    LT EX. LT CONT

**DETECTOR LOOP AND DETECTOR ASSIGNMENT SCHEDULE**  
IL 116 & WOODLAND KNOLLS/TEN MILE CREEK - GERMANTOWN HILLS

DETECTOR LOOP	ASSIGNED PHASE	CHANNELS REQUIRED
D-1	1	1
D-2A, D2B	2	2
D-4A, D4B	4	2
D-5	5	1
D-6A, D6B	6	2
D-8A, D-8B	8	2
<b>TOTAL:</b>		<b>10</b>

**BILL OF MATERIALS - IL 116 & WOODLAND KNOLLS/TEN MILE CREEK (GERMANTOWN HILLS)**

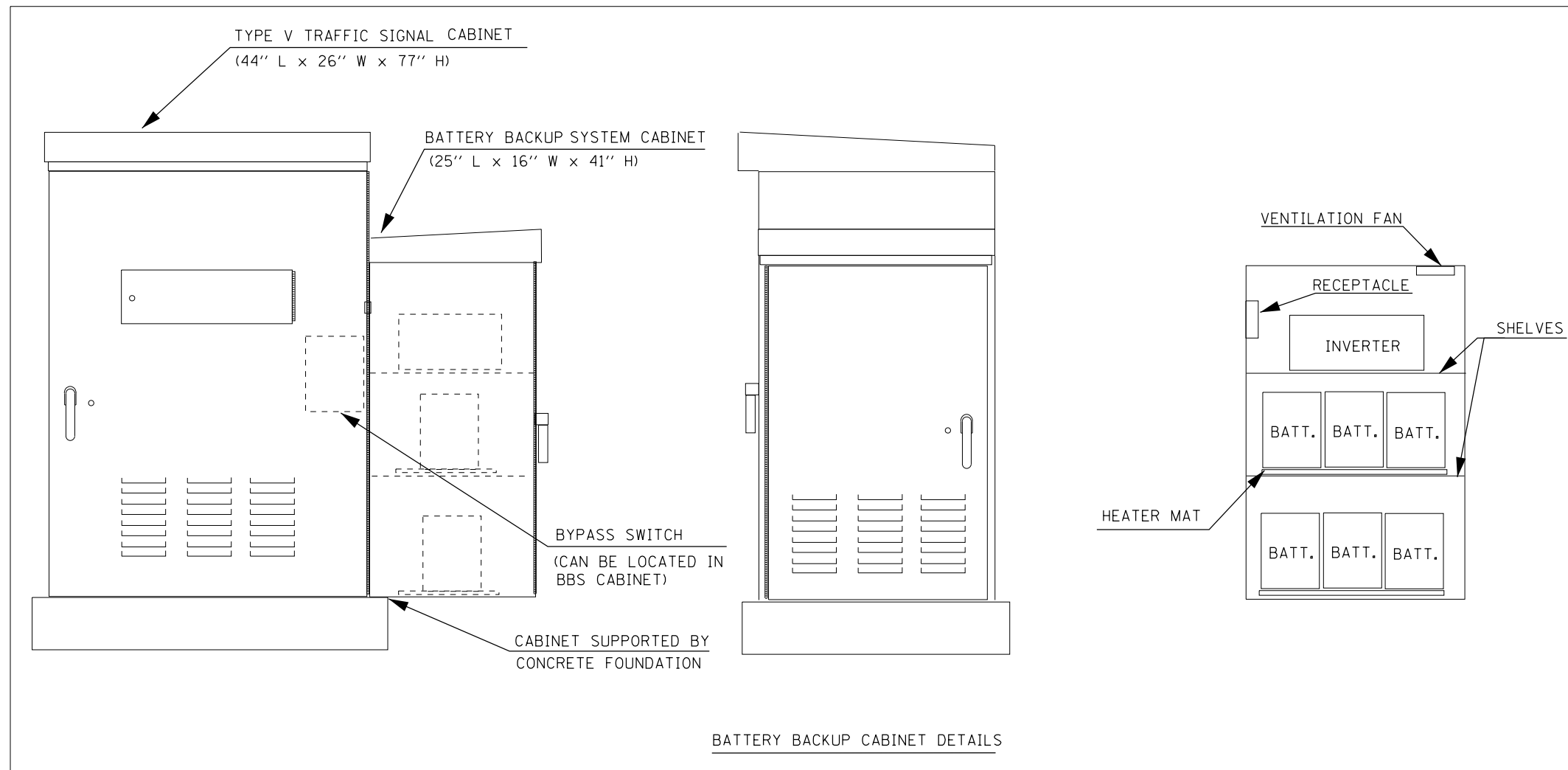
ITEM DESCRIPTION	UNIT	TOTAL QTY.
INDUCTIVE LOOP DETECTOR	EACH	10.0
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1.0
MASTER CONTROLLER	EACH	1.0

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 REVISIONS:  
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 REVISIONS:  
 PLOT SCALE = 38.0588' / in.  
 CHECKED -  
 DATE -  
 PLOT DATE = 7/17/2015

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PROPOSED TRAFFIC SIGNALS**  
**IL 116 & WOODLAND KNOLLS/TEN MILE CREEK - GERMANTOWN HILLS**

SCALE:	STA.	TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			VAR.	D4 TRAFFIC SIGNALS 2015-1	VARIOUS	26	23
						CONTRACT NO. 68C83	
ILLINOIS FED. AID PROJECT							

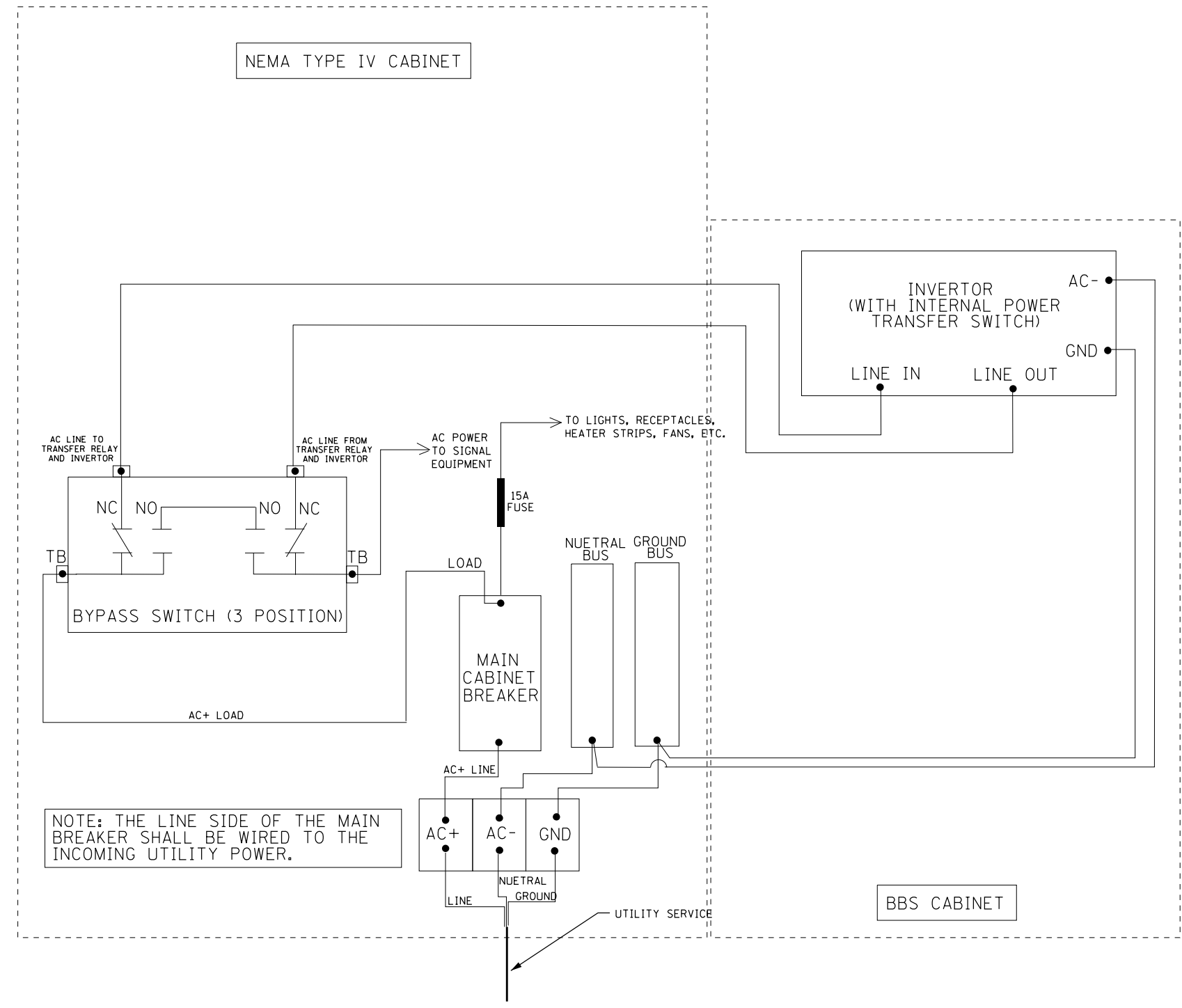


NOTES

1. THE BATTERY BACKUP SYSTEM CABINET SHALL BE A NEMA TYPE 3R CABINET WITH MINIMUM OUTSIDE DIMENSIONS OF 41" (H) X 25" (W) X 16" (D). THE CABINET SHALL BE EQUIPPED WITH A THREE POINT LATCHING MECHANISM, TWO SHELVES, THERMOSTATICALLY CONTROLLED VENTILATION FAN, AND A POWER RECEPTACLE. THE CABINET SHALL BE MOUNTED TO THE SIDE OF THE PROPOSED TYPE IV CABINET WITH THE BOTTOM OF THE CABINET SUPPORTED BY THE CONCRETE FOUNDATION.
2. ALL CABINET LIGHTS, HEATER STRIPS, VENTILATION FANS, AND SERVICE RECEPTACLES SHALL BE BYPASSED WHEN THE BATTERY BACKUP UNIT IS OPERATING IN BATTERY MODE.
3. THE BATTERY BACKUP UNITS CONTACTS SHALL BE WIRED TO PROVIDE LOCAL CONTROLLER ALARMS (AS AVAILABLE IN THE SIGNAL CABINETS).

FILE NAME =	USER NAME = aubreys	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BATTERY BACKUP SYSTEM CABINET DETAIL</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
C:\Users\aubreys\Desktop\68C83 Howald	68C83 - Controller Replacement Project (Final)	DRAWN -	REVISED -			VAR.	D4 TRAFFIC SIGNALS 2015-1	VARIOUS	26	24	
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	PLOT DATE = 7/17/2015	DATE -	REVISED -			SCALE:	STA.	TO STA.	ILLINOIS FED. AID PROJECT		





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C:\Users\aubreys\Desktop\68C83 Howald	68C83 - Controller Replacement Project (Final)	DRAWN -	REVISED -
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	PLOT DATE = 7/17/2015	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BATTERY BACKUP SYSTEM CABINET WIRING DIAGRAM**

SCALE: \_\_\_\_\_ STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 TRAFFIC SIGNALS 2015-1	VARIOUS	26	25
CONTRACT NO. 68C83				
ILLINOIS FED. AID PROJECT				

