

PROPOSED HIGHWAY PLANS

FAP 317 (US 24)
SECTION 46-1(TS-3)
PEORIA-TAZEWELL COUNTIES

C-94-060-13

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	46-1(TS-3)	PEORIA-TAZEWELL	10	1
ILLINOIS CONTRACT NO. 68B53				

INDEX OF SHEETS

1. COVER SHEET
2. CONSTRUCTION NOTES
- 3-4. SUMMARY OF QUANTITIES
5. EXISTING TRAFFIC SIGNALS AND REMOVAL PLAN
6. EXISTING TRAFFIC SIGNAL CABLE AND PHASE DIAGRAMS
7. PROPOSED TRAFFIC SIGNALS
8. PROPOSED TRAFFIC SIGNAL CABLE AND PHASE DIAGRAMS
9. MAST ARM LOADING DETAIL
10. LIGHT BOLLARD LED LAMP REPLACEMENT LOCATIONS

HIGHWAY STANDARDS

701001-02	814001-02
701006-04	814006-02
701101-03	873001-02
701106-02	876001-02
701601-08	877001-05
701701-08	877002-02
701901-02	878001-09
	880006-01

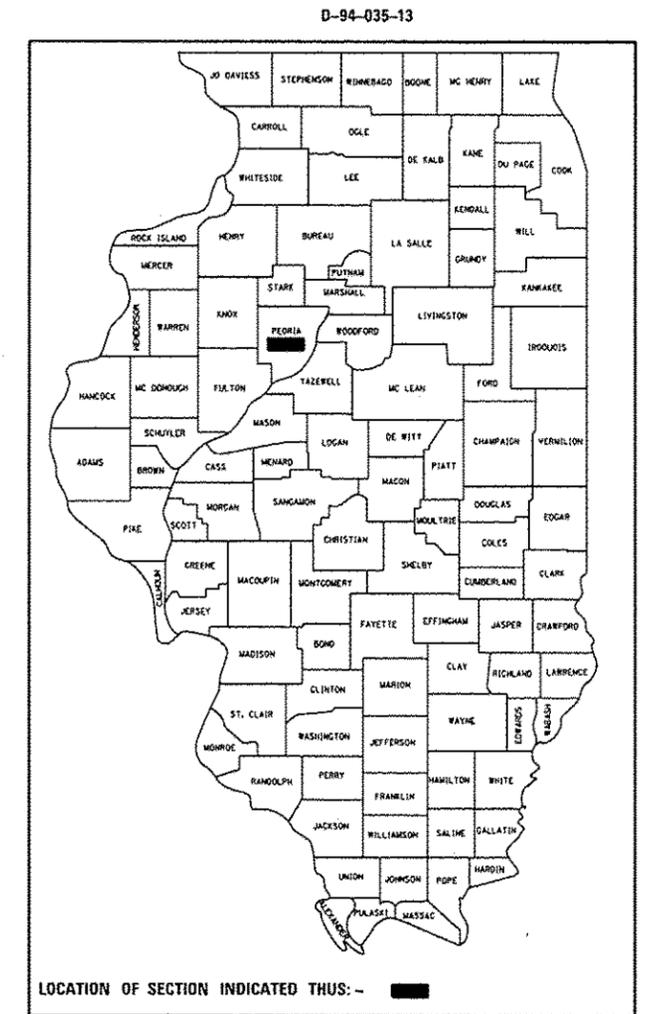
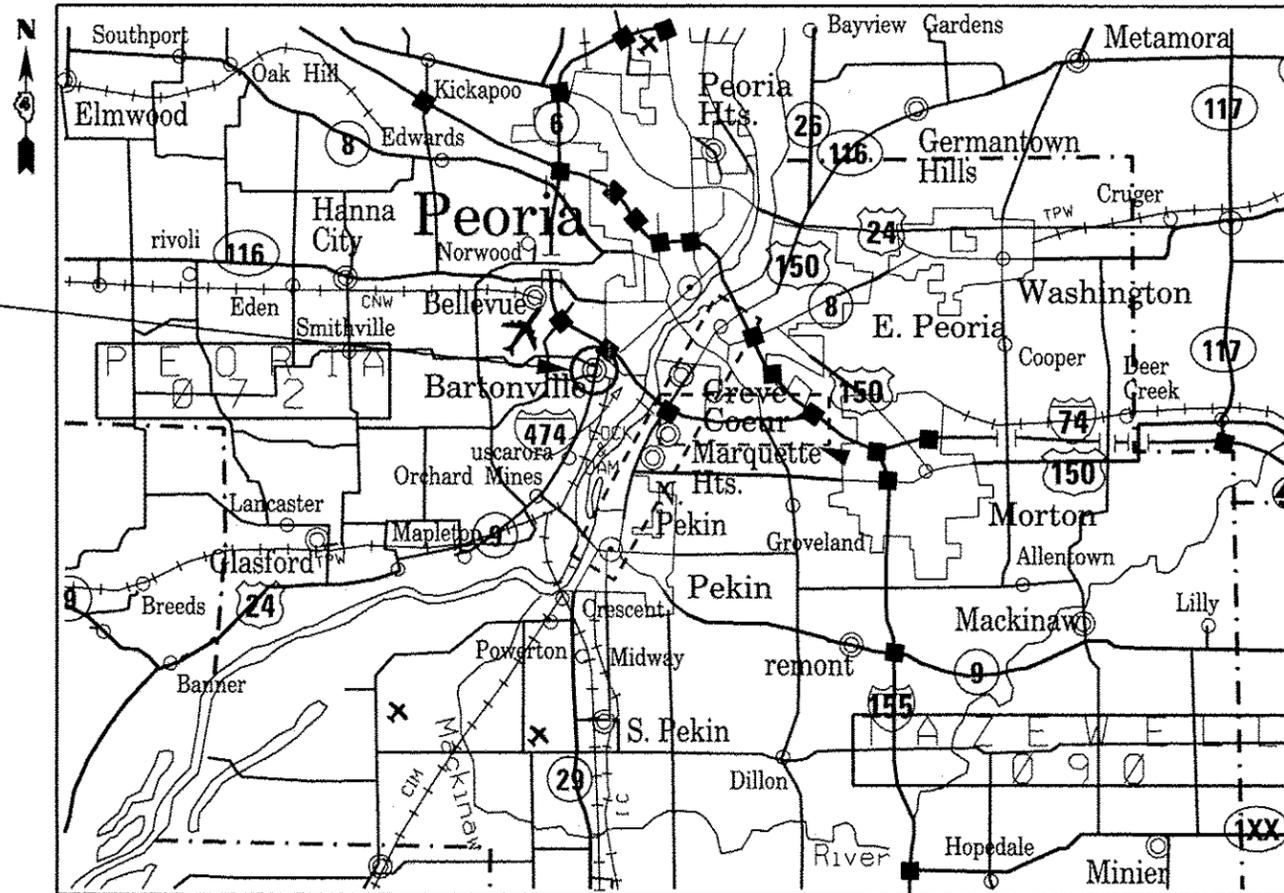
US 24 (MCKINLEY) & ADAMS/WASHINGTON
VILLAGE OF BARTONVILLE

PROJECT DESCRIPTION

TRAFFIC SIGNAL MODERNIZATION AT
US 24 (MCKINLEY) & ADAMS/WASHINGTON
IN THE VILLAGE OF BARTONVILLE AND
LIGHT BOLLARD LED REPLACEMENT AT
VARIOUS LOCATIONS IN PEORIA AND
TAZEWELL COUNTIES

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. 34944-00D
CONTRACT NO. 68B53



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Sept 4 20 13
John D. Branzelli
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 4 20 13
John D. Branzelli P.E. actg
ENGINEER OF DESIGN AND ENVIRONMENT

October 4 20 13
Omer Osman P.E. actg
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

CONSTRUCTION NOTES

1. ALL TRAFFIC SIGNAL SECTIONS SHALL HAVE 12" SINGLE LED LENSES.
2. 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.
3. THE PROPOSED MAST ARM MOUNTED TRAFFIC SIGNAL HEADS SHALL BE MOUNTED DIRECTLY OVER THE CENTER OF THEIR RESPECTIVE LANES.
4. ALL TRAFFIC SIGNAL HEAD BRACKETS ARE TO BE ALUMINUM WITH A NATURAL FINISH.
5. ALL TRAFFIC SIGNAL POSTS ARE TO BE GALVANIZED STEEL.
6. PROPOSED HANDHOLES SHALL BE CAST IN PLACE CONCRETE HANDHOLES.
7. THE HANDHOLE SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE SURFACE OF THE MEDIAN, SIDEWALK, OR GROUND LINE.
8. THE LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY TRAFFIC SIGNAL COMPONENTS.
9. COILABLE POLYETHYLENE DUCT MAY BE SUBSTITUTED FOR UNDERGROUND CONDUIT.
10. THE LOCATIONS FOR HANDHOLES, TRAFFIC SIGNAL POST FOUNDATIONS, AND MAST ARM FOUNDATIONS ARE PROVIDED FOR REFERENCE ONLY. THE ENGINEER OF TRAFFIC SHALL BE NOTIFIED FOR LOCATION VERIFICATION BEFORE INSTALLATION.
11. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATION.
12. THE EXISTING TRAFFIC SIGNALS SHALL REMAIN IN OPERATION DURING THE CONSTRUCTION OF THE PROPOSED TRAFFIC SIGNALS.
13. ANY MAINTENANCE OF EXISTING TRAFFIC SIGNALS SHALL BE CONSIDERED EXTRA WORK IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
14. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 2 FT. MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
15. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THIS COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES FOR THE CONDUITS.
16. ALL PROPOSED TRAFFIC SIGNAL MAST ARMS, POSTS, HANDHOLE LIDS AND RINGS, HANDHOLE FRAMES, CONTROLLER CABINETS, AND PHOTOCELL RELAYS SHALL BE GROUNDED IN ACCORDANCE WITH NEC REQUIREMENTS.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING DEPARTMENT LIGHTING AND TRAFFIC SIGNAL FACILITIES. THIS WORK SHALL BE INCLUDED IN THE CONTRACT BID PRICE.
18. THE PROPOSED CONDUIT SHALL BE COUPLED TO THE EXISTING CONDUIT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PROPOSED CONDUIT PAY ITEMS.
19. THE CONTRACTOR SHALL COVER ALL HOLES IN EXISTING TRAFFIC SIGNAL POSTS THAT ARE CAUSED BY THE REMOVAL OF PEDESTRIAN PUSHBUTTONS, SIGNS, AND SIGNAL HEADS BY UTILIZING POLYCARBONATE OR ALUMINUM PLUGS/PLATES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.
20. THE CONTRACTOR SHALL CUT ALL EXISTING ANCHOR BOLTS LOCATED IN ISLANDS FLUSH AND PLUG ALL CONDUITS WITH METAL PLUGS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.
21. THE CONTRACTOR SHALL FURISH AND INSTALL GALVANIZED STEEL CONDUIT AND FITTINGS AS REQUIRED TO TRANSITION THE PROPOSED 1" CONDUIT INTO THE EXISTING LIGHT POLE. ALL EXPOSED CONDUIT SHALL BE RIGID. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR UNDERGROUND CONDUIT, PVC, 1" DIAMETER.

COMMITMENTS

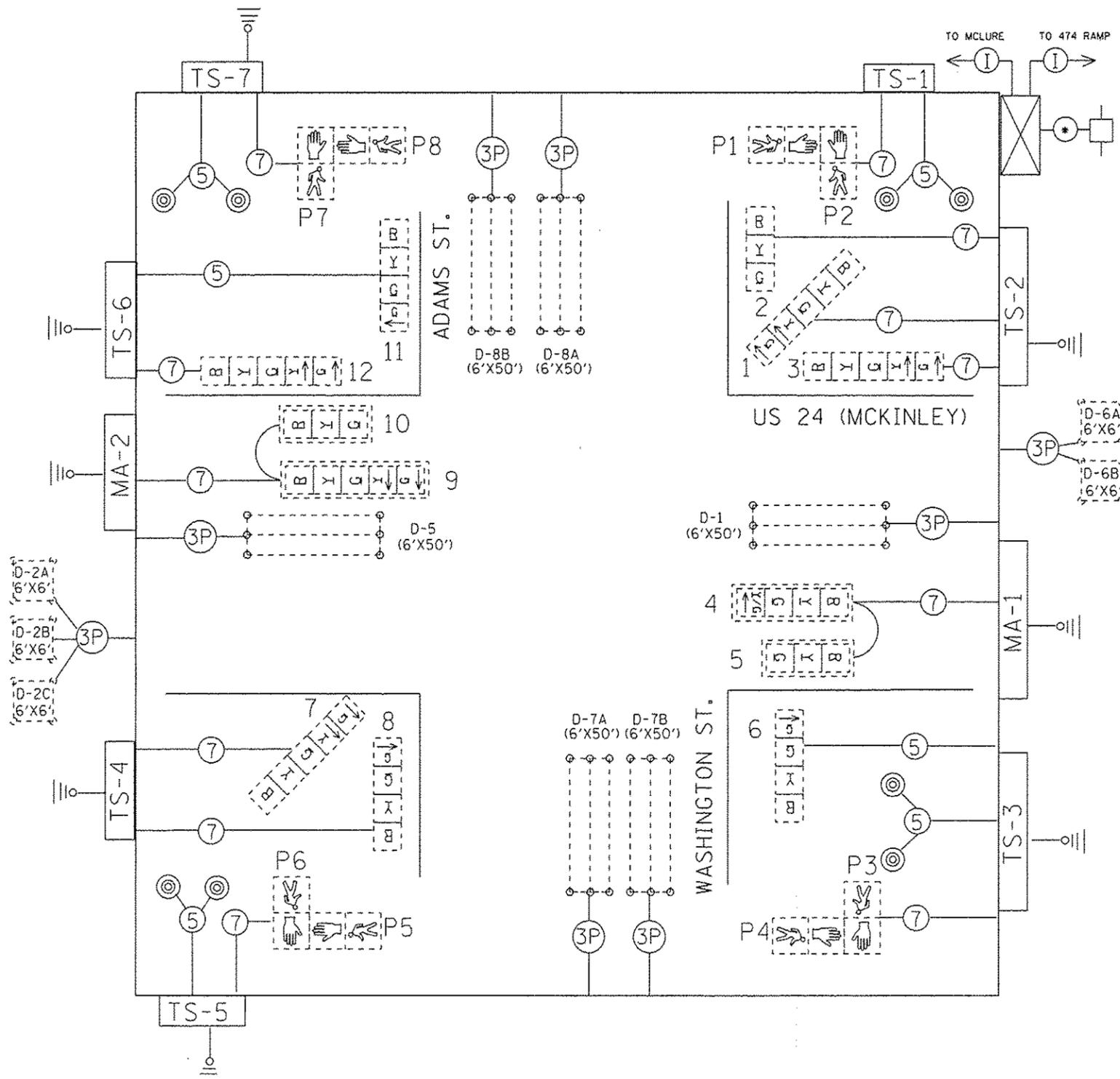
THERE ARE NO COMMITMENTS MADE IN CONJUNCTION WITH THIS PROJECT.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF TRAFFIC, RANDY LANINGA, AT (309) 671-4477 TO OBTAIN APPROVAL FOR ALL MAST ARM AND TRAFFIC SIGNAL POST FOUNDATION LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE LIABLE FOR ALL COSTS REQUIRED TO REMOVE OR RELOCATE FACILITIES THAT WERE CONSTRUCTED WITHOUT OBTAINING LOCATION APPROVAL.

FILE NAME : C:\temp\68853 - US 24 & Adams Traffic	USER NAME : keithbr Signal Plans (Final 9-2-13).dgn	DESIGNED - _____ DRAWN - _____	REVISED - _____ REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	COMMITMENTS AND CONSTRUCTION NOTES	F.A.P. RTE. 317	SECTION 46-1(TS-3)	COUNTY PEORIA-TAZEWELL	TOTAL SHEETS 10	SHEET NO. 2
PLOT SCALE : 40.0000' / 1" CHECKED - _____ REVISED - _____				SCALE: _____ STA. _____ TO STA. _____		CONTRACT NO. 68853 ILLINOIS FED. AID PROJECT				
PLOT DATE : 9/4/2013 DATE - _____ REVISED - _____										

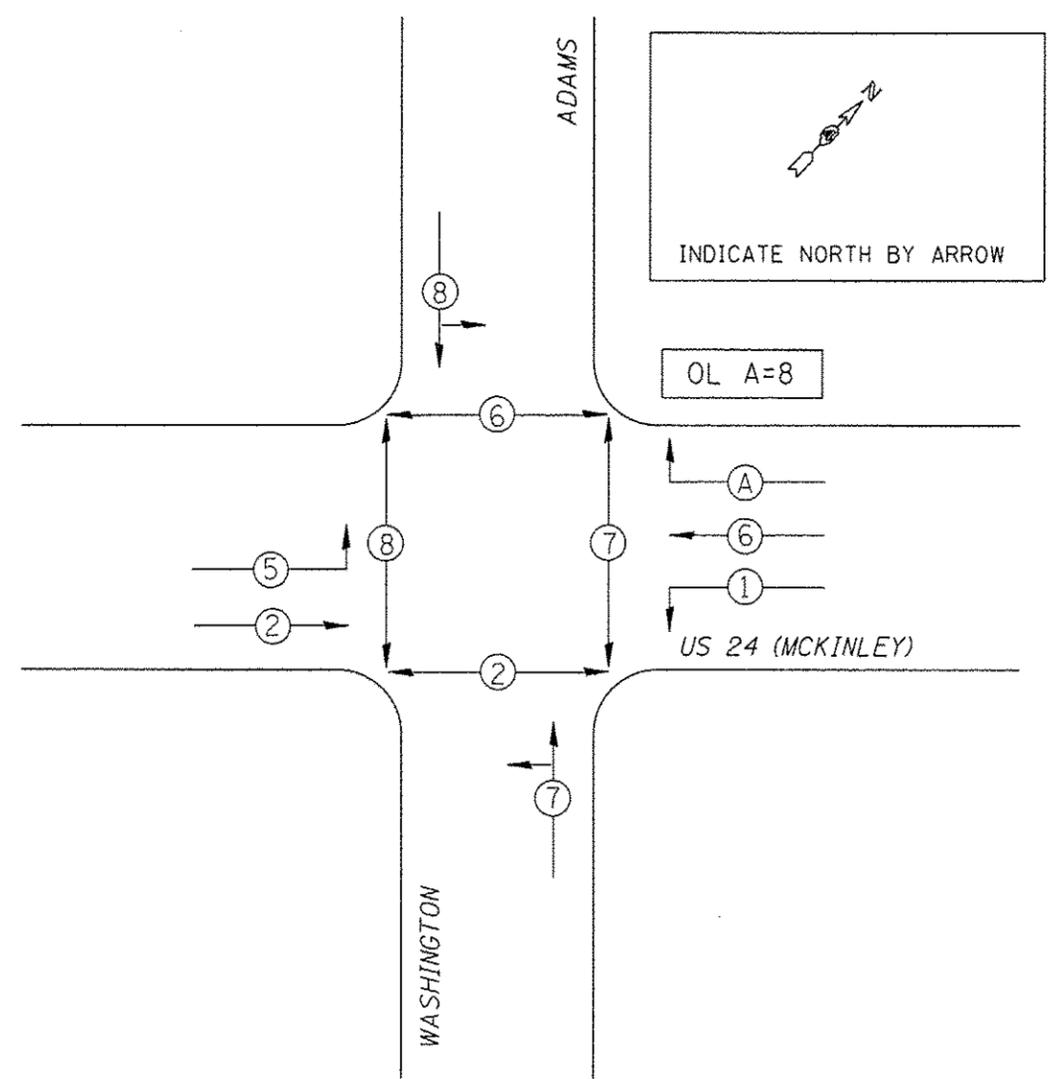
SUMMARY OF QUANTITIES

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QTY.	PEORIA COUNTY	PEORIA COUNTY	TAZEWELL COUNTY
				CONST. TYPE CODE 0021 90% STATE 10% CITY TRAFFIC SIGNALS URBAN	CONST. TYPE CODE 0021 100% STATE OVERHEAD LIGHTING URBAN	CONST. TYPE CODE 0021 100% STATE OVERHEAD LIGHTING URBAN
87700320	STEEL MAST ARM ASSEMBLY AND POLE, 55 FT.	EACH	3.0	3.0		
87700420	STEEL MAST ARM ASSEMBLY AND POLE, 70 FT.	EACH	1.0	1.0		
87800415	CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER	FOOT	45.0	45.0		
87800420	CONCRETE FOUNDATION, TYPE E, 42-INCH DIAMETER	FOOT	21.0	21.0		
87900100	DRILL EXISTING FOUNDATION	EACH	3.0	3.0		
87900200	DRILL EXISTING HANDHOLE	EACH	3.0	3.0		
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5.0	5.0		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2.0	2.0		
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	3.0	3.0		
88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	5.0	5.0		
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1.0	1.0		
88200310	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10.0	10.0		
89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	7.0	7.0		
89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	7.0	7.0		
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1.0	1.0		
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0	1.0		
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	4.0	4.0		
X0325924	CLEAN, RELAMP AND MAINTENANCE OF EXISTING LUMINAIRE	EACH	110.0		102.0	8.0
X0326812	CAT 5 ETHERNET CABLE	FOOT	261.5	261.5		
X0327905	CLOSED CIRCUIT TELEVISION DOME CAMERA, IP BASED (INSTALL ONLY)	EACH	1.0	1.0		



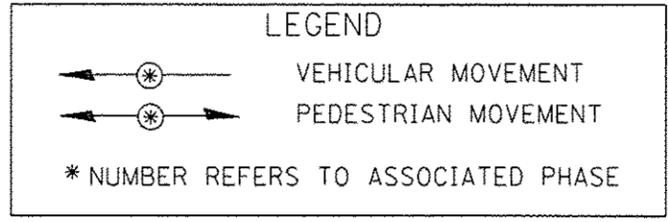
EXISTING PHASE DIAGRAM

NAME OF INTERSECTION US 24 (MCKINLEY) & ADAMS/WASHINGTON
 EXISTING CONTROLLER: FAC (TS-2 TYPE 2) IN TYPE V
 CABINET, TS-1 BACKPANEL



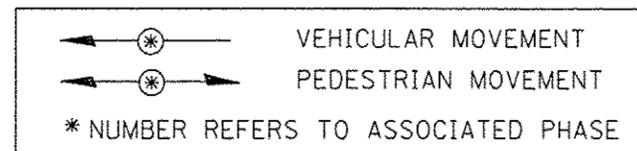
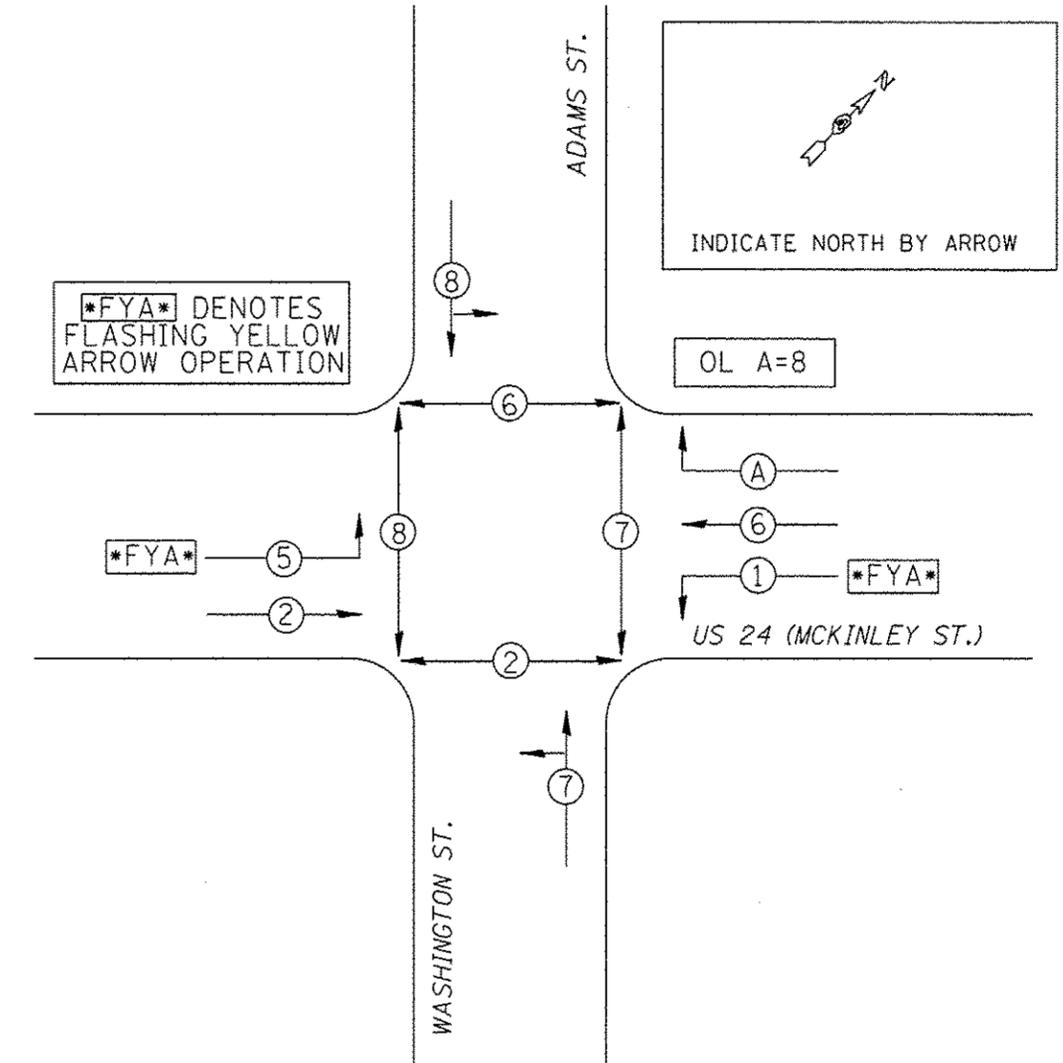
TRAFFIC SIGNALS LEGEND

- EX. CONTROLLER (SIGNAL)
- *18 3-PR DETECTOR LOOP CABLE
- EX. DETECTOR LOOP (6'X6')
- EX. 3 SEC. SIGNAL HEAD W/BACKPLATE
- 5/C NO. 14 SIGNAL CABLE
- EX. DETECTOR LOOP (QUADRAPOLE)
- EX. 3 SEC. SIGNAL HEAD
- 7/C NO. 14 SIGNAL CABLE
- EX. SERVICE INSTALLATION
- EX. GROUND/SAFETY BOND

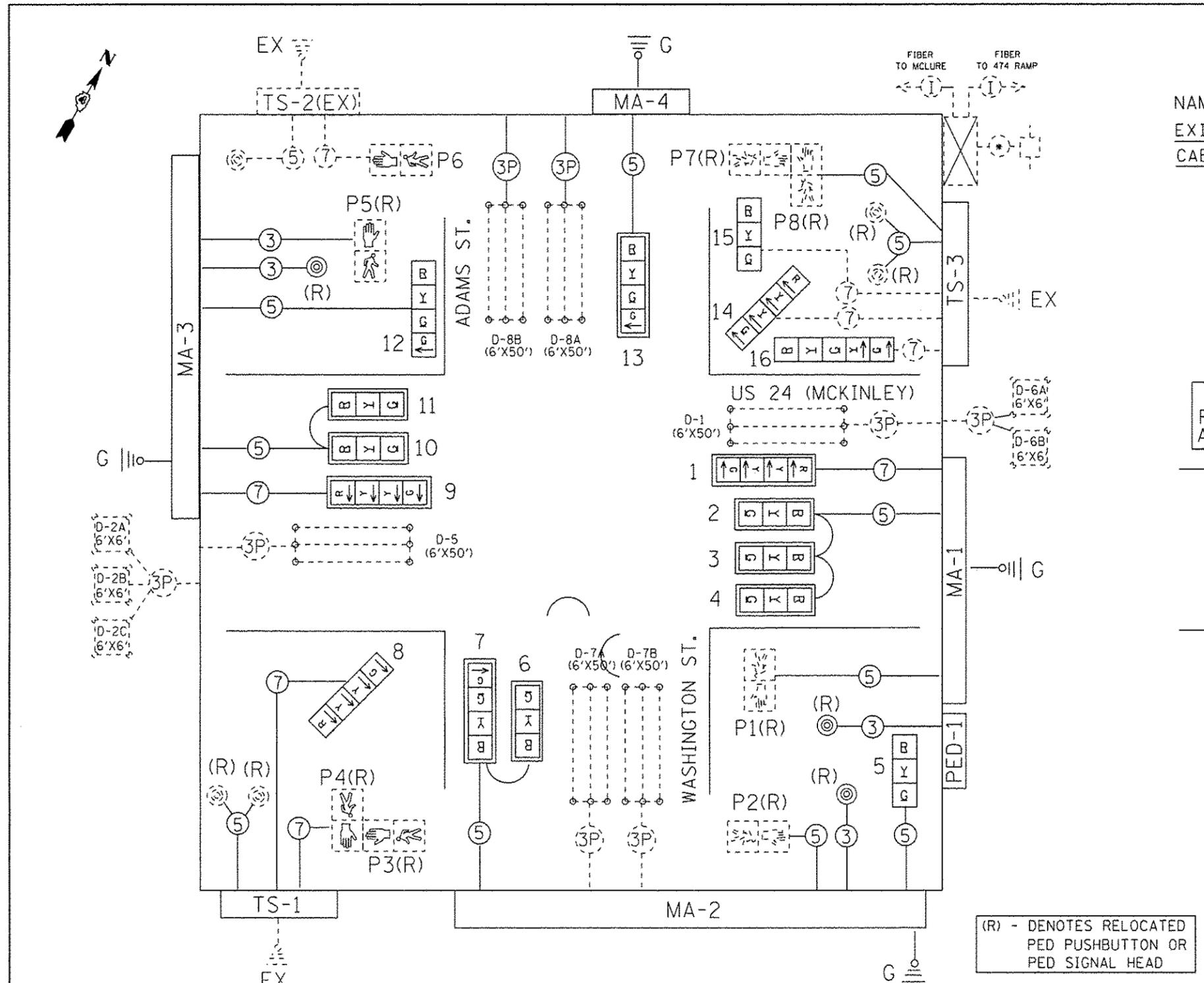


PROPOSED PHASE DIAGRAM

NAME OF INTERSECTION US 24 (MCKINLEY) & ADAMS/WASHINGTON
 EXISTING CONTROLLER: FAC (TS-2 TYPE 2) IN TYPE V
 CABINET, TS-1 BACKPANEL



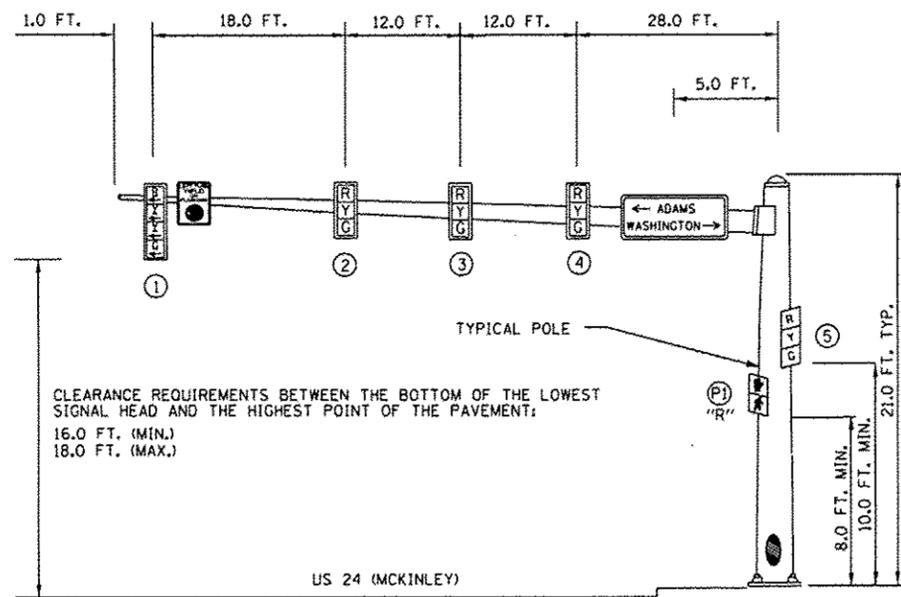
ALL PROPOSED TRAFFIC SIGNAL MAST ARMS, CABINETS, HANDHOLES (LIDS AND FRAMES), AND EXPOSED METALLIC CONDUITS SHALL BE GROUNDED AND SAFETY BONDED IN ACCORDANCE WITH NEC REQUIREMENTS. EXISTING GROUND SAFETY BONDS SHALL BE REUSED WHENEVER POSSIBLE.



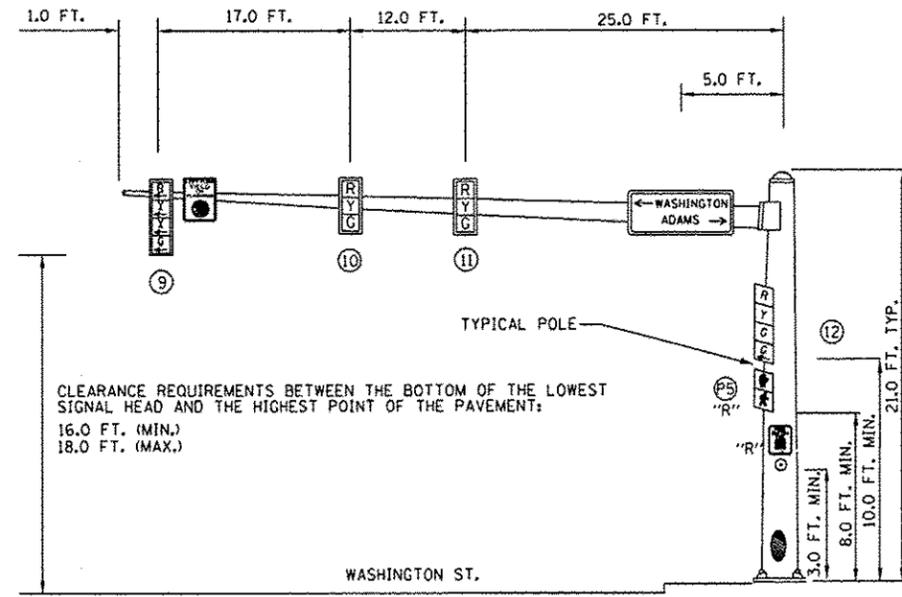
(R) - DENOTES RELOCATED PED PUSHBUTTON OR PED SIGNAL HEAD

TRAFFIC SIGNALS LEGEND

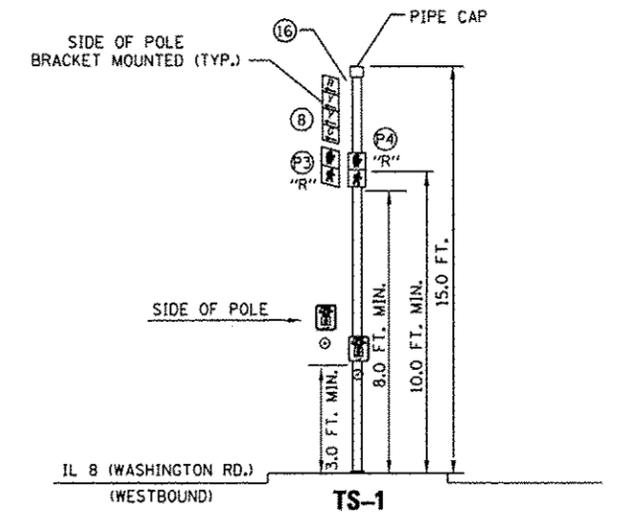
- EX. CONTROLLER (SIGNAL)
- PROP. 3 SEC. SIG HEAD W/BACKPLATE
- PROP. 3 SEC. SIGNAL HEAD
- EX. PEDESTRIAN SIGNAL HEAD
- EX. PEDESTRIAN PUSHBUTTON
- EX. #18 3-PR DETECTOR CABLE
- EX. 5/C NO. 14 SIGNAL CABLE
- EX. 7/C NO. 14 SIGNAL CABLE
- PROP. 5/C NO. 14 SIGNAL CABLE
- PROP. 7/C NO. 14 SIGNAL CABLE
- EX. DETECTOR LOOP (6'X6')
- EX. DETECTOR LOOP (QUADRAPOLE)
- EX. SERVICE INSTALLATION
- EX. GROUND/SAFETY BOND
- PROP. GROUND/SAFETY BOND



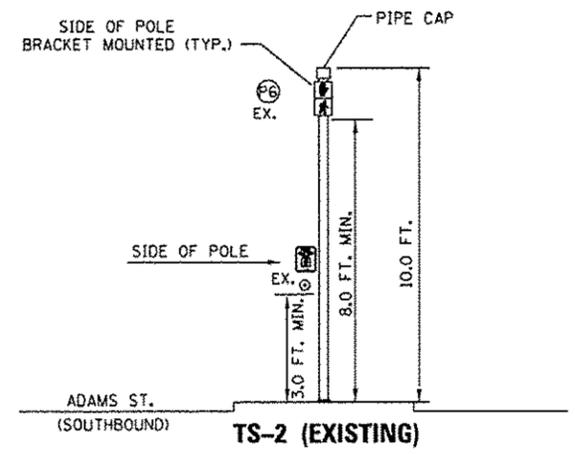
EASTBOUND TRAFFIC SIGNAL
SOUTHEAST CORNER OF US 24 (MCKINLEY) & ADAMSWASHINGTON



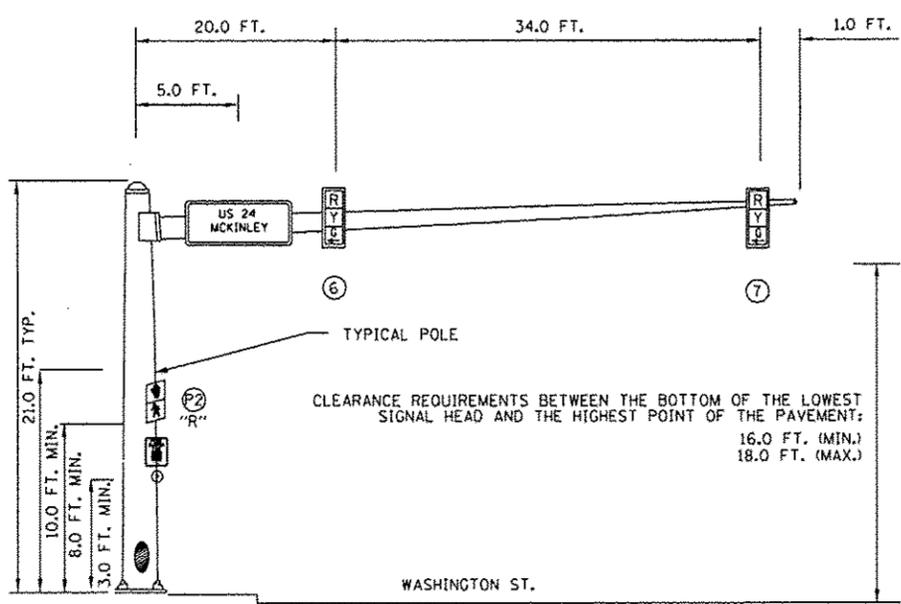
WESTBOUND TRAFFIC SIGNAL
NORTHWEST CORNER OF US 24 (MCKINLEY) & ADAMSWASHINGTON



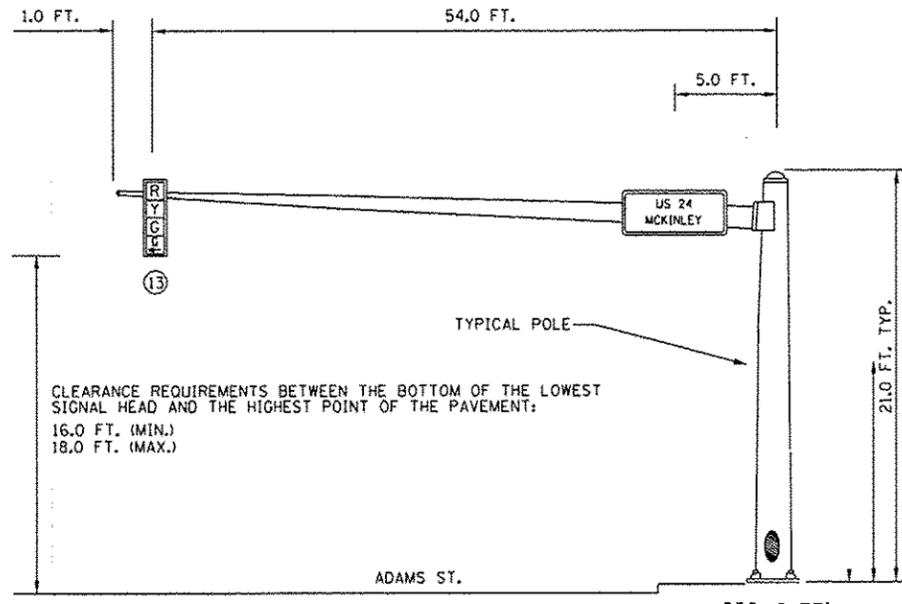
WESTBOUND TRAFFIC SIGNAL
SOUTHWEST CORNER OF US 24 (MCKINLEY) & ADAMSWASHINGTON



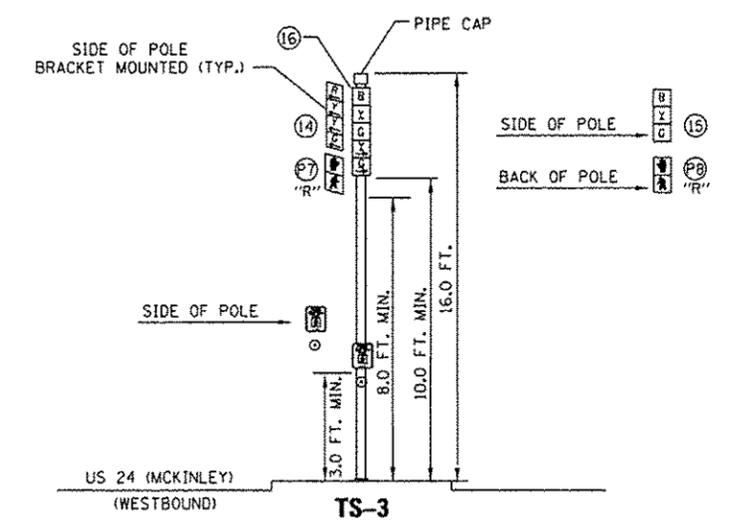
NORTHWEST PEDESTRIAN SIGNAL
NORTHWEST CORNER OF US 24 (MCKINLEY) & ADAMSWASHINGTON



SOUTHBOUND TRAFFIC SIGNAL
SOUTHEAST CORNER OF US 24 (MCKINLEY) & ADAMSWASHINGTON



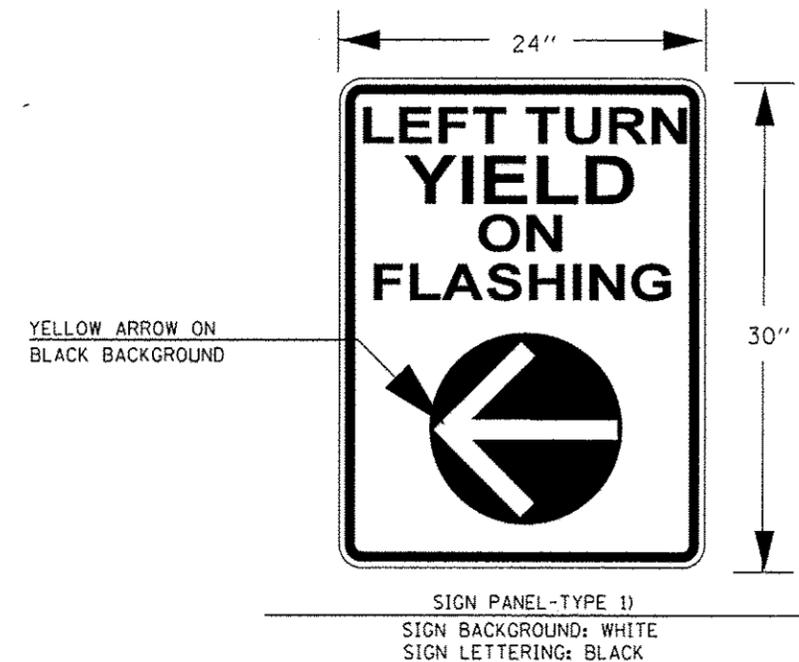
NORTHBOUND TRAFFIC SIGNAL
NORTHEAST CORNER OF US 24 (MCKINLEY) & ADAMSWASHINGTON



EAST/WESTBOUND TRAFFIC SIGNAL
NORTHEAST ISLAND OF US 24 (MCKINLEY) & ADAMSWASHINGTON

FILE NAME: C:\temp\68853 - US 24 & Adams Traffic	USER NAME: kethbr	DESIGNED: _____	REVISED: _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MAST ARM DETAILS			F.A.P. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:
	Signal Plans (Final 9-2-13).dgn	DRAWN: _____	REVISED: _____		317	46-1(TS-3)	PEORIA-TAZEWELL	10	9			
	PLOT SCALE = 1/8" = 1'-0"	CHECKED: _____	REVISED: _____		CONTRACT NO. 68B53							
	PLOT DATE = 9/4/2013	DATE: _____	REVISED: _____		ILLINOIS FED. AID PROJECT							

LIGHT BOLLARD LED LAMP REPLACEMENT LOCATIONS		
LOCATION	CITY	QUANTITY
STERLING AVE.	PEORIA	6
US 150 (WAR MEMORIAL DR.)	PEORIA	8
FORREST HILL	PEORIA	6
GALE	PEORIA	6
NEBRASKA	PEORIA	6
UNIVERSITY	PEORIA	4
BROADWAY	PEORIA	4
ELLIS	PEORIA	6
SHERIDAN	PEORIA	6
NORTH	PEORIA	6
IL 40 (KNOXVILLE) FLYOVER RAMP	PEORIA	8
IL 40 (KNOXVILLE)	PEORIA	4
PERRY	PEORIA	6
MONROE	PEORIA	6
MADISON	PEORIA	6
JEFFERSON	PEORIA	6
IL 29 (ADAMS)	PEORIA	8
IL 116 (MAIN STREET)	EAST PEORIA	4
IL 8 (WASHINGTON STREET)	EAST PEORIA	4
TOTAL		110



BILL OF MATERIAL - SHEET 10			
PAY ITEM	UNIT	QTY.	
CLEAN, RELAMP AND MAINTENANCE OF EXISTING LUMINAIRE	EACH	110.0	