

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
619	120BR,CR	PUTNAM	77	35
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH STANDARD 701321. FOUR PHASE SIGNAL OPERATION WITH RAILROAD PREEMPTION IS REQUIRED. THE ENGINEER OF TRAFFIC AND THE ICC SHALL APPROVE ALL TIMING PARAMETERS. THE CONTRACTOR SHALL CONTACT PAUL GRANT, DISTRICT 4 TRAFFIC SIGNAL TECHNICIAN, AT (309) 671-4474, A MINIMUM OF FORTY-EIGHT HOURS PRIOR TO SIGNAL TURN ON.

THE CONTRACTOR SHALL INSTALL A CONVENTIONAL TRAFFIC SIGNAL INSTALLATION WITH IN-PAVEMENT DETECTOR LOOPS THAT HAS ALL OF THE REQUIRED FUNCTIONALITY DESCRIBED WITHIN THE CONTRACT PLANS AND SPECIAL PROVISIONS. THE USE OF SOLAR POWERED TRAILER MOUNTED TRAFFIC SIGNALS WILL NOT BE ALLOWED.

THE CONTRACTOR SHALL FURNISH AND INSTALL A NEW TYPE IV TRAFFIC SIGNAL CABINET COMPLETE WITH 16 POSITION TS-2 BACK PANEL, TS-2 TYPE 2 CONTROLLER, MMU, 8 CHANNELS OF DETECTION, RAILROAD PREEMPTION, AND ALL OTHER ACCESSORIES FOR INTERCONNECTION WITH THE RAILROAD CROSSING SIGNALS. THE CABINET AND INSTALLATION SHALL BE SUBJECT TO APPROVAL BY THE ICC. THE CONTRACTOR SHALL SUBMIT CATALOG CUT SHEETS FOR THE CONTROLLER CABINET AND ALL RELATED COMPONENTS TO THE DEPARTMENT FOR APPROVAL. AFTER REMOVAL OF THE TEMPORARY BRIDGE TRAFFIC SIGNALS, THE CABINET SHALL BECOME THE PROPERTY OF THE DEPARTMENT AND THE CONTRACTOR SHALL DELIVER IT TO THE IDOT TRAFFIC BUILDING LOCATED AT 1025 W. DETWEILLER DR., PEORIA, IL 61614.

THE CONTRACTOR SHALL INSTALL DETECTOR LOOPS FOR USE WITH THE TEMPORARY TRAFFIC SIGNALS IN ACCORDANCE WITH HIGHWAY STANDARD 701321 EXCEPT THAT THE ADVANCED DETECTOR LOOPS FOR BOTH MAINLINE APPROACHES SHALL BE LOCATED 100 FT. FROM THE STOP BAR.

THE CONTRACTOR SHALL INSTALL RAILROAD INTERCONNECT CABLE FROM THE CONTROLLER CABINET TO THE RAILROAD EQUIPMENT FACILITY. THE INTERCONNECT CABLE SHALL BE INSTALLED IN 1" DIAMETER GALVANIZED STEEL CONDUIT. THE INSTALLATION SHALL BE IN ACCORDANCE WITH HIGHWAY STANDARD 857006.

RAILROAD INTERCONNECT CABLE SHALL BE INDIVIDUALLY SHIELDED AND RATED FOR 300V.

ALL DETECTOR LOOPS SHALL HAVE SIX TURNS.

ALL TRAFFIC SIGNAL SECTIONS SHALL HAVE 12" DIAMETER LED LENSES.

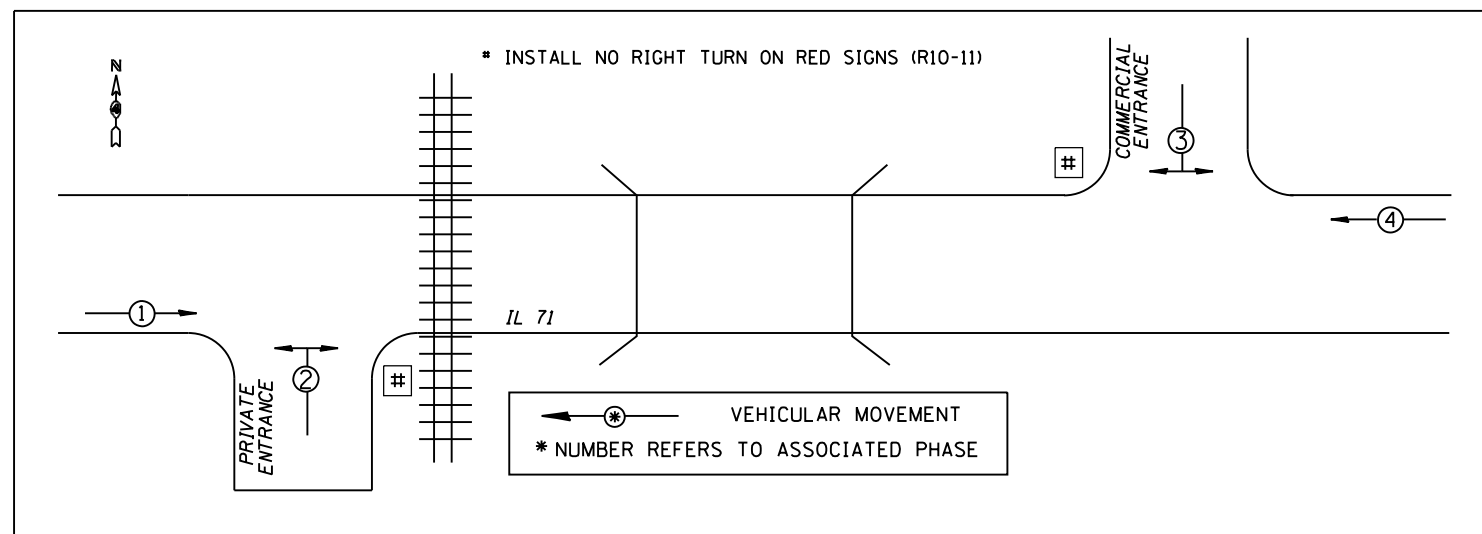
THE TEMPORARY TRAFFIC SIGNAL HEADS SHALL BE PLACED AT THE LOCATIONS INDICATED ON THE PLAN SHEETS OR DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL FURNISH AND INSTALL A TEMPORARY ELECTRICAL SERVICE FOR THE TRAFFIC SIGNALS. THE CONTRACTOR SHALL PROVIDE ELECTRICAL CABLE, WOOD POLES, SERVICE DISCONNECT, AND ALL OTHER ITEMS REQUIRED FOR THE TEMPORARY SERVICE INSTALLATION. THE CONTRACTOR SHALL FIELD VERIFY THE DISTANCE FROM THE TEMPORARY TRAFFIC SIGNALS TO THE TEMPORARY ELECTRICAL SERVICE PRIOR TO BIDDING.

THE CONTRACTOR SHALL INSTALL "NO RIGHT TURN ON RED" AND "STOP HERE ON RED" SIGNS FOR ALL PRIVATE AND COMMERCIAL ENTRANCE APPROACHES. THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL CONFORM TO ALL MUTCD REQUIREMENTS.

ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED FOR THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL BE INCLUDED IN THE BID PRICE FOR THE PAY ITEM "TEMPORARY BRIDGE TRAFFIC SIGNALS (SPECIAL)". THERE WILL BE NO ADDITIONAL COMPENSATION.

TEMPORARY PHASE DIAGRAM



EQUIPMENT NOTES

1. THE TRAFFIC SIGNAL CONTROLLER AND CABINET SHALL BE EQUIPPED WITH CRC SECURITY OR T&F SIGNATURE SECURITY TO PREVENT TIMING CHANGES THAT WOULD AFFECT THE PREEMPTION SEQUENCE.
2. THE SUPERVISORY INTERCONNECT CABLE SHALL HAVE INDIVIDUALLY SHIELDED CONDUCTORS WHERE THE BRAIDING OR SHIELDING FROM EACH CONDUCTOR IS TIED TOGETHER TO AC-IN THE TRAFFIC SIGNAL CONTROLLER TO ENSURE FUSE FAILURE IN THE EVENT OF A SHORT IN THE CABLE.
3. THE RAILROAD INTERCONNECT CABLE SHALL BE NO. 16, 3-PAIR, TWISTED/SHEILDED CABLE RATED FOR 300 VAC OR GREATER.

THE ALL-RED CLEARANCE TIME FOR PHASES 1 AND 4 HAS BEEN CALCULATED AT 30 SECONDS. THIS TIME MAY BE MODIFIED DEPENDING UPON FIELD CONDITIONS.

PHASE TIMING INFORMATION

PHASE	1	2	3	4
MINIMUM GREEN	10.0	6.0	6.0	10.0
YELLOW CLEARANCE	4.0	4.0	4.0	4.0
RED CLEARANCE	2.0	2.0	2.0	2.0

RECOMMENDED MINIMUM PREEMPTION TIMING

TIMING PARAMETERS	VALUE (SEC)
DELAY	1.0
MINIMUM GREEN	1.0
YELLOW INTERVAL	USE PHASE VALUE
ALL-RED INTERVAL	USE PHASE VALUE
MAX. TIME PRIOR TO TRACK CLEARANCE PHASE	8.0
TRACK CLEARANCE TIME	0
MINIMUM HOLD TIME	15.0
MINIMUM PREEMPTION TIME REQUIRED	20.0

RAILROAD PREEMPTION SEQUENCE

I.	II.	III.
TRACK CLEAR	HOLD PHASES (GREEN)	EXIT PHASES
N/A	NONE (ALL PHASES RED DURING PREEMPT)	I. ALL-RED PERIOD OF 30 SECONDS II. CALLS PLACED IN PHASES 1 & 4 FOR SERVICE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY BRIDGE TRAFFIC SIGNALS (SPECIAL) DETAILS CULVERT 12+530
 DRAWN BY ERH 3/27/13
 CHECKED BY
 DATE