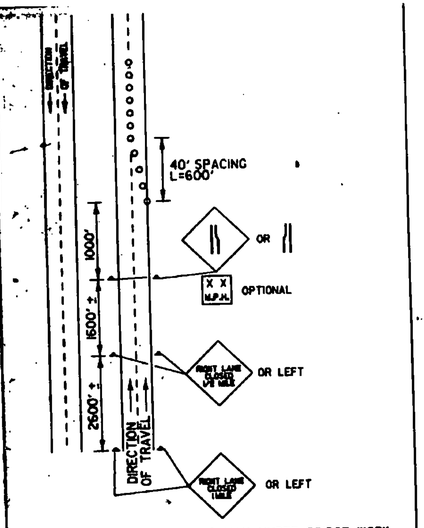
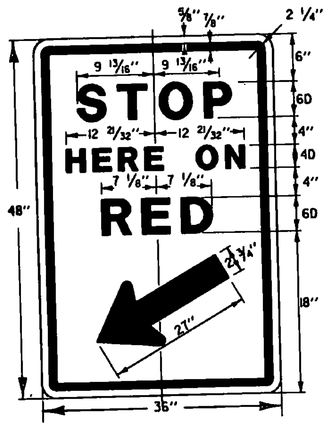
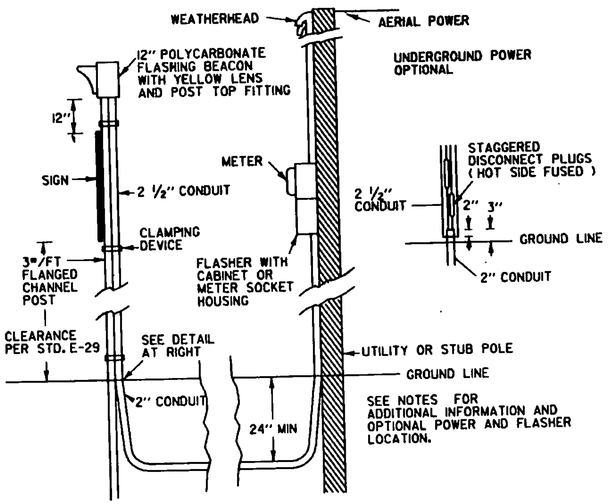


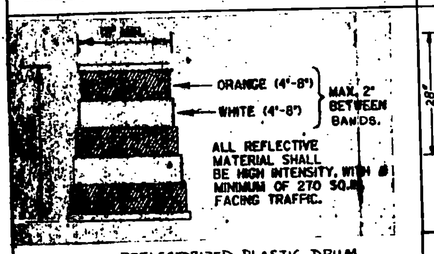
TRAFFIC CONTROL FOR A HIGHWAY UNDER BRIDGE WORK, WHERE DEBRIS MAY FALL ON THE HIGHWAY BELOW AND LANE CLOSURE IS NECESSARY, AS DIRECTED BY THE ENGINEER. PAYMENT SUBSIDIARY TO OTHER ITEMS.



SEE STD. E-15 FOR MATERIALS AND COLORS



FLASHING BEACON DETAIL (EASTBOUND APPROACH)



REFLECTORIZED PLASTIC DRUM

1) ALL REFLECTIVE MATERIAL SHALL BE HIGH INTENSITY.
2) THE MARKERS SHALL BE MADE TO WITHSTAND THE IMPACT OF VEHICLES WITHOUT DAMAGE TO THE MARKER OR THE VEHICLE
3) THE MARKERS SHALL BE SECURED TO THE PAVEMENT

TUBULAR MARKER DETAIL

PHASING DIAGRAM AND SPECIAL NOTES FOR EACH LOCATION

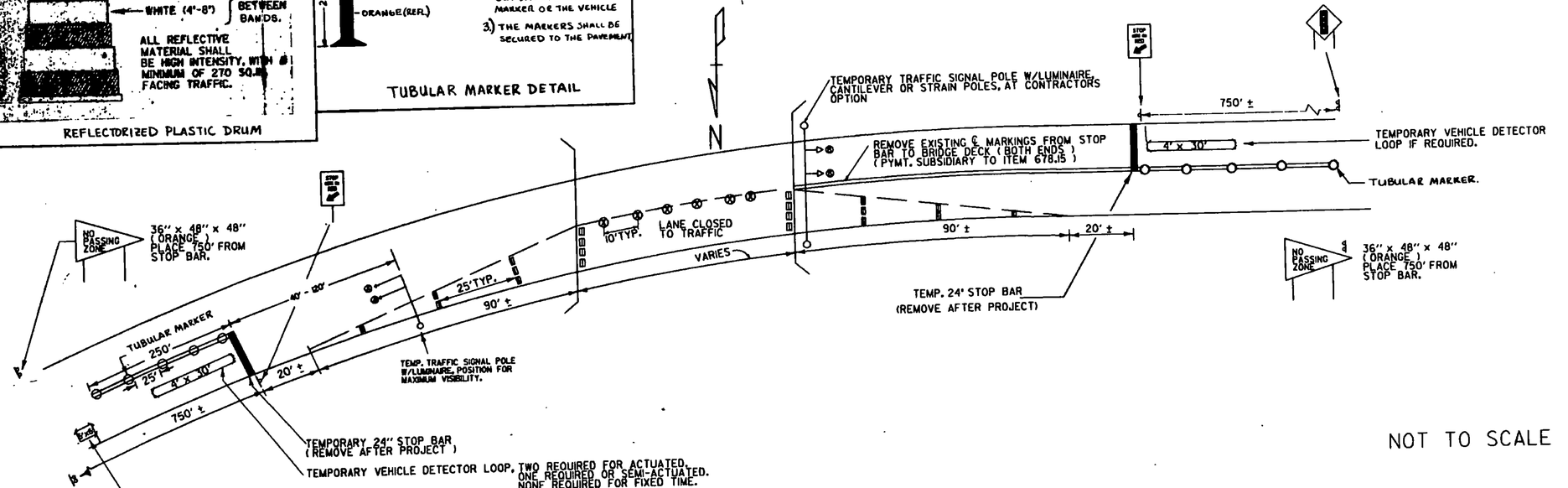
SIGNAL PHASING DIAGRAM

PHASE	A			B		
INTERVAL	1	2	3	4	5	6
MINIMUM	12			12		
EXTENSION	2			2.5		
MAXIMUM	25	3	27	25	3	27
HEAD A	G	Y	R	R	R	R
HEAD B	R	R	R	G	Y	R
SIGNAL SHALL DWELL ON PHASE B.	←					→

BR. 65A US4

1) TIMINGS ARE APPROXIMATE AND SHALL BE ADJUSTED TO ACCOMMODATE AM AND PM PEAK FLOWS.
2) SIGNAL SYSTEM TO BE FULLY ACTUATED WITH ADVANCE DETECTION USED ON THE EASTBOUND APPROACH.
3) USE FLASHING WARNING BEACON ON THE EASTBOUND APPROACH.
4) ON PROJECT SIGNS PER STD. E-6 AND PLAN SHEET 5 OF 39. PAYMENT SUBSIDIARY TO ITEM 527.10.

ALL SIGNAL RELATED SIGNS SHALL BE REMOVED OR COVERED WHEN THE SIGNAL IS NOT OPERATING.



NOT TO SCALE

IF THE CONTRACTOR SO CHOOSES HE MAY INSTALL POSITIVE BARRIER AT HIS EXPENSE TO PROTECT THE WORKSITE. THE APPROACH ENDS OF THE BARRIER SHALL BE TAPERED AT A RATE OF 1:11 AND AS A RESULT WILL REQUIRE PLACING THE STOP BARS OTHER THAN AS SHOWN ABOVE. BARRIER ENDS SHALL BE PLACED 20 FEET FROM EDGE OF SHOULDER OR TREATED WITH A CRASH ATTENUATOR. DELINEATORS SHALL BE PLACED ON TOP OF THE BARRIER AT 30' SPACING, WHITE ON DRIVERS RIGHT SIDE WITH YELLOW ON THE DRIVER'S LEFT SIDE.

LEGEND

- ○ —— SURFACE MOUNTED FLEXIBLE TUBULAR MARKER
- ⊗ —— REFLECTORIZED PLASTIC DRUMS
- Ⅲ —— TYPE III BARRICADES (SEE STD. E-7A)

ITEM LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONFIRM ANY MEASUREMENTS IN THE FIELD.

TD-2A

ORIGINAL PREPARED NOV. 1986		
DATE	REVISIONS	BY

TEMPORARY TRAFFIC SIGNAL NOTES

1) THE CONTRACTOR SHALL INSURE THAT THE SIGNAL INSTALLATION CONFORMS TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WITH THE SUPPORTING STRUCTURES AS PER AASHTO'S STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. CERTIFICATION SHALL NOT BE NECESSARY FOR TEMPORARY TRAFFIC SIGNAL EQUIPMENT.
2) SIGNAL TIMING/TIMING ADJUSTMENTS REQUESTED BY THE RESIDENT ENGINEER SHALL BE ACCOMPLISHED WITHIN A 48 HOUR PERIOD AND PAYMENT SHALL BE SUBSIDIARY TO THE TRAFFIC SIGNAL ITEM. THE ALL-RED CLEARANCE INTERVAL IS BASED ON AN ASSUMED SPEED OF 10 MPH. THE RESIDENT ENGINEER SHALL MAKE SEVERAL TRIAL RUNS TO DETERMINE THE PROPER ALL-RED CLEARANCE INTERVAL.
3) SIGNAL FACES SHALL CONSIST OF 12" LENSES. (RED, YELLOW, AND GREEN)
4) THE BOTTOM OF THE HOUSING OF A SIGNAL FACE SUSPENDED OVER A ROADWAY SHALL NOT BE LESS THAN 16 1/2 FEET NOR MORE THAN 19 FEET ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY. THE BOTTOM OF A SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL NOT BE LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE GROUND. CAUTION SHOULD BE USED TO INSURE COMPLIANCE WITH THE HEIGHT REQUIREMENTS IN THE EVENT THE NEW APPROACH GRADES DIFFER SIGNIFICANTLY FROM THE OLD ROAD GRADE.
5) SIGNAL FACES FOR ANY ONE APPROACH SHALL NOT BE LESS THAN 8 FEET APART MEASURED HORIZONTALLY BETWEEN CENTER OF FACES.
6) SIGNAL HEADS MAY BE HUNG ON A SPAN WIRE OR ON A CANTILEVER MAST ARM. AT LEAST ONE SIGNAL HEAD SHALL BE UNMISTAKABLY IN LINE WITH THE CENTER OF APPROACHING TRAFFIC AT ALL TIMES. THE SECOND SIGNAL HEAD MAY BE POST MOUNTED, LOCATED AT A DISTANCE NO GREATER THAN 14 1/2 FEET FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 40 FEET FROM THE SIGNAL HEAD. CONSULT THE M.U.T.C.D. FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
7) SIGNAL HEAD PLACEMENT IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES.
8) THE SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS AND POSTS, TEMPORARY PAVEMENT MARKINGS (AND REMOVALS) AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. IT ALSO INCLUDES PERMITS AND COST ASSOCIATED WITH PROVIDING ELECTRICAL POWER.
9) THE CONTRACTOR SHALL PROVIDE AN ACTUATED CONTROLLER. THE APPROACHES NOTED SHALL HAVE A TEMPORARY VEHICLE DETECTOR. THE TYPE OF DETECTION SHALL BE INDUCTANCE. THE CONTROLLER, VEHICLE DETECTORS AND ALL OTHER SIGNAL EQUIPMENT SHALL MEET OR EXCEED ALL NEMA STANDARDS.
10) VEHICLE DETECTOR LOOPS SHALL BE 4' x 30' FOR PRESENCE DETECTION AT THE STOP BAR WITH THE REAR PORTION LOCATED 5 FEET BEHIND THE STOP BAR. A 6' x 6' EXTENDED CALL DETECTOR SHALL BE PROVIDED IF REQUIRED IN THE SPECIAL NOTES. LOCATE 350' FROM STOP BAR, OR AS NOTED, FOR DILEMMA ZONE PROTECTION.
11) ON SEMI-ACTUATED SIGNALS, PARTICULARLY WITH LONG BRIDGES, THE CONTROLLER SHOULD BE LOCATED ON THE SAME SIDE OF THE BRIDGE AS THE LOOP.
12) INTERVAL TIMING SHOWN IN SECONDS.
13) INTERCONNECT BETWEEN SIGNAL POLES BY WHATEVER MEANS POSSIBLE OR CONVENIENT.
14) PLACE TEMPORARY POLES BEHIND GUARDRAIL WHERE POSSIBLE.
15) POLES SUPPORTING SPAN WIRES AND/OR MAST ARMS SHALL BE ADEQUATELY BRACED OR GUYED AND SHALL NOT BE PLACED SO AS TO CREATE A HAZARD TO THE TRAVELING PUBLIC.
16) ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC., SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT AND HE SHALL BE RESPONSIBLE FOR THEIR REMOVAL, INCLUDING ANY TEMPORARY PAVEMENT MARKINGS, UTILITY POLES, WIRES, ETC.
17) A 400 WATT MER/200 WATT HPS LUMINAIRE AND MAST ARM SHALL BE PROVIDED ON A POLE ON EACH APPROACH AT A MOUNTING HEIGHT OF 30' ABOVE ROADWAY CENTERLINE. THE INTENT IS TO LIGHT UP THE AREA AROUND THE SIGNAL HEADS AND STOP BAR FOR INCREASED VISIBILITY. THE RESIDENT ENGINEER SHALL DETERMINE THE ADEQUACY OF THE LIGHTING AND DIRECT CHANGES IF THE LIGHTING IS INSUFFICIENT.
18) STOP BARS SHALL BE LOCATED A MINIMUM OF 40' AND A MAXIMUM OF 120' FROM THE NEAREST SIGNAL HEAD.
19) PAYMENT FOR TEMPORARY VEHICLE DETECTOR LOOP(S) SHALL BE LINEAR FOOT OF SAWSLOT IN THE PAVEMENT ITEM 678.22 (MODIFIED).
20) TEMPORARY PAVEMENT MARKINGS (AND REMOVALS) AND SIGNING AS SUBSIDIARY TO THE ITEM 678.15, TRAFFIC CONTROL SIGNALS, (STOP BARS, "STOP HERE ON RED", "SIGNAL AHEAD", "NO PASSING ZONE").
21) SEE THIS SHEET FOR "STOP HERE ON RED" SIGN DETAIL AND E-19B FOR "SIGNAL AHEAD" SYMBOL SIGN. THE "SIGNAL AHEAD" SIGN SHALL HAVE AN ORANGE BACKGROUND (REFLECTORIZED). SEE STANDARD E-29 FOR SIGN PLACEMENT. SEE STANDARD E-36 FOR ADDITIONAL INFORMATION ON SIGNALS AND DETECTORS.
22) A "SIGNAL AHEAD" SIGN SHALL BE PLACED AT LEAST 750' FROM THE SIGNAL OR AT A POSITION TO BE DETERMINED BY THE ENGINEER. ALL POST, SIGNS, AND TEMP. PVMT. MARKINGS SHALL BE CONSIDERED AS SUBSIDIARY TO THE TRAFFIC SIGNAL ITEM.
23) THE "NO PASSING" SIGN SHALL BE USED TO PREVENT PASSING FOR 750' IN ADVANCE OF THE STOP BAR. THE SIGN SHALL BE PER STANDARD E-19B, EXCEPT THE COLOR SHALL BE A BLACK TEXT AND BORDER ON A REFLECTORIZED ORANGE BACKGROUND.
24) ALL ELECTRICAL WORK SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND STATE INSPECTOR.
25) TWO-WAY TRAFFIC SHALL BE MAINTAINED ON THE DETOUR WHENEVER POSSIBLE. DURING TWO-WAY TRAFFIC, THE SIGNALS SHALL BE SET ON FLASHING YELLOW.
26) APPROACH WIDTHS SHALL BE AS DETAILED IN SECTION 638.04(3) TO MINIMIZE VEHICLE DELAY.
27) AN ADVANCED CONSTRUCTION WARNING SIGN PACKAGE SHALL BE PROVIDED ON EACH APPROACH PER STANDARD E-2. PAYMENT FOR THESE SIGNS, THE REFLECTORIZED PLASTIC DRUMS, TUBULAR MARKERS, TYPE III BARRICADES, ETC. SHALL BE PAID AS A PART OF "MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS" - ITEM 527.10 OR "TRAFFIC CONTROL" - ITEM 641.10.

FLASHING BEACON NOTES

A) WIRE CONNECTIONS AT THE BASE OF THE POST SHALL BE FUSED WITH A WATER-TIGHT DISCONNECT PLUG-IN TYPE CONNECTOR WHICH WILL DISCONNECT WITHOUT DAMAGE DURING A KNOCKDOWN. EACH INSTALLATION SHALL BE GROUNDED.
B) AT THE CONTRACTOR'S OPTION
   A. THE POWER SUPPLY MAY BE AERIAL OR UNDERGROUND
   B. POWER MAY BE COMBINED WITH THE TRAFFIC SIGNAL OR SEPARATE.
   C. THE FLASHER MAY BE INSTALLED ON A STUB POLE NEAR THE SIGN, ON A UTILITY POLE (WITH UTILITY COMPANY APPROVAL) OR AT THE SAME LOCATION AS THE TRAFFIC SIGNAL CONTROLLER.
C) THE FLASHER UNIT SHALL BE ONE CIRCUIT AND INCLUDE A RADIO INTERFERENCE FILTER.
D) THE FLASHING BEACON INSTALLATION SHALL BE SUBSIDIARY TO THE TRAFFIC SIGNAL ITEM.
E) BATTERY OPERATED FLASHERS SHALL NOT BE ALLOWED.

ONE-WAY TEMPORARY TRAFFIC SIGNAL DETAIL

BRIDGE NO. 65A-US4

PREPARED BY DAR DATE
CHECKED BY DSP DATE 12/86
DESIGN SUPERVISOR DATE
PROJ. HARTLAND, HARTFORD, SHARON IR-DECK (15)S
TRAFFIC SHEET NO. 606
SHEET 10 OF 39 SHEETS

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