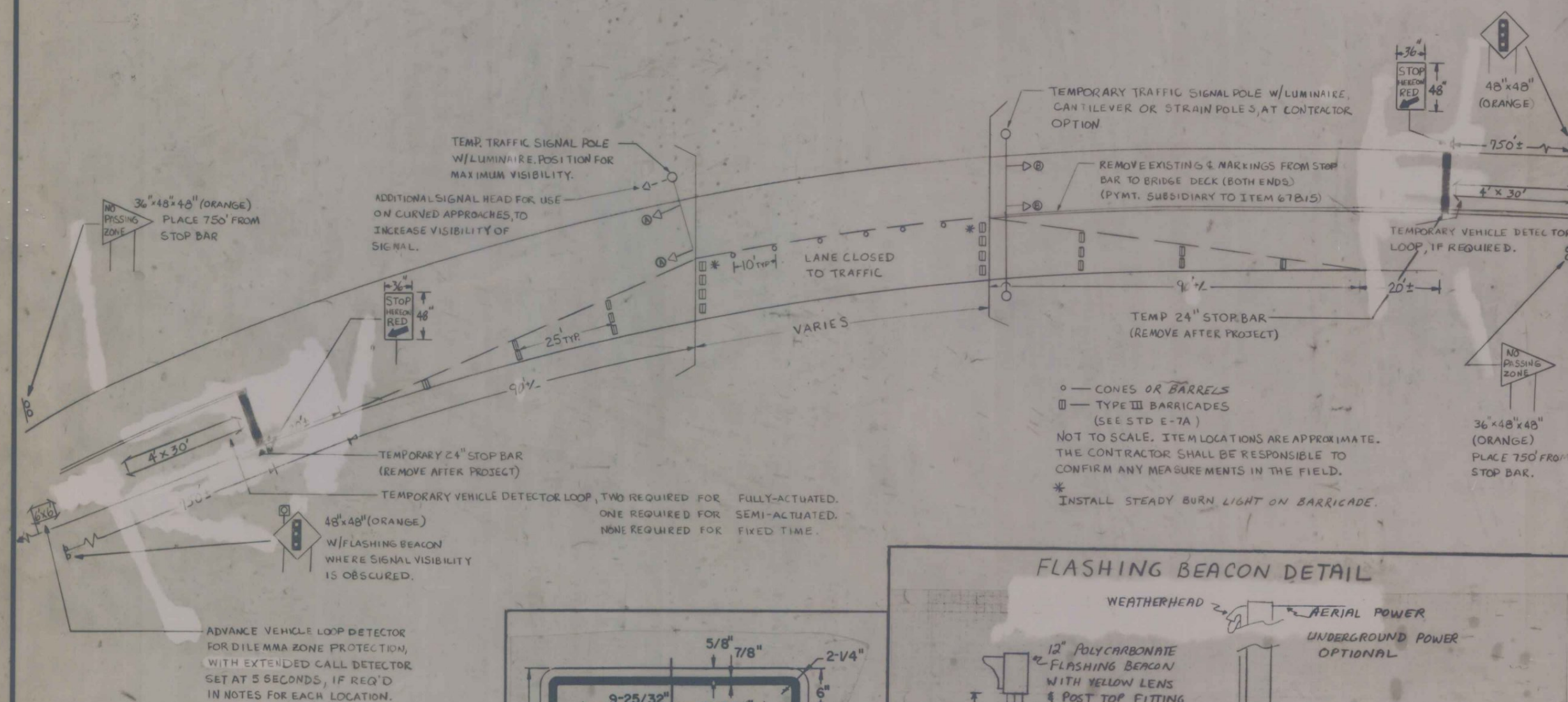


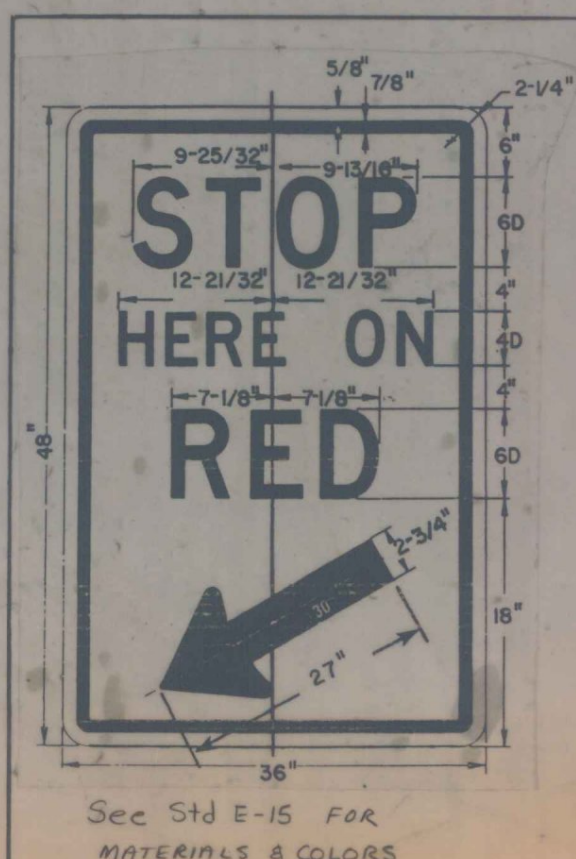
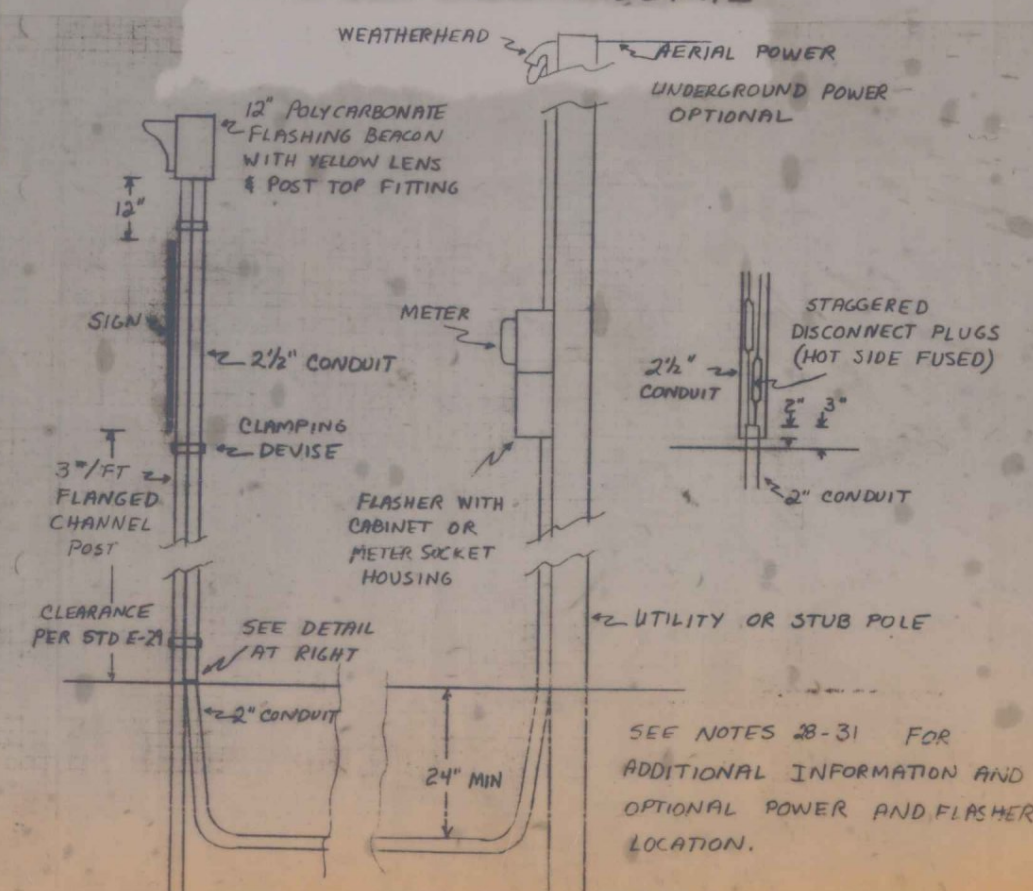
ONE-WAY TEMPORARY TRAFFIC SIGNAL (TYPICAL)

NOTE: THIS TYPICAL IS APPLICABLE ONLY IN SITUATIONS WHERE THERE ARE NO TOWN HIGHWAYS WITHIN THE AREA BETWEEN THE STOP BARS.

SEE NOTES FOR INDIVIDUAL PHASING DIAGRAMS AND ANY SPECIAL INSTRUCTIONS AT EACH LOCATION



FLASHING BEACON DETAIL



See Std E-15 FOR MATERIALS & COLORS

TEMPORARY TRAFFIC SIGNAL NOTES

- CERTIFICATION SHALL NOT BE NECESSARY FOR TEMPORARY TRAFFIC SIGNAL EQUIPMENT.
- THE CONTRACTOR SHALL INSURE THAT THE SIGNAL INSTALLATION CONFORMS TO THE MANUAL OF TRAFFIC CONTROL DEVICES WITH THE SUPPORTING STRUCTURES AS PER AASHTO'S STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGN, LUMINAIRES AND TRAFFIC SIGNALS.
- 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 35 MPH. THE RESIDENT ENGINEER SHALL MAKE SEVERAL TRIAL RUNS TO DETERMINE THE PROPER ALL-RED CLEARANCE INTERVAL.
- SIGNAL FACES SHALL CONSIST OF 12" LENSES, (RED, YELLOW AND GREEN)
- THE BOTTOM OF THE HOUSING OF A SIGNAL FACE SUSPENDED OVER A ROADWAY SHALL BE NOT 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 SIDEWALK OR, IF NONE, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY. 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.
- 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 PWT. MARKINGS SHALL BE CONSIDERED AS SUBSIDIARY TO THE TRAFFIC SIGNAL ITEM.
- 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' FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 40' FROM THE SIGNAL HEAD. CONSULT THE MUTCD FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
- A * LUMINAIRE AND MAST ARM SHALL BE PROVIDED ON A POLE ON EACH APPROACH AT A MOUNTING HEIGHT OF 30' ABOVE ROADWAY CENTER-LINE. 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. * 400 WATT MER/200 WATT HPS.
- 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.
- TEMP PWT. MARKINGS AND SIGNING AS SUBSIDIARY TO THE ITEM 678.15, TRAFFIC CONTROL SIGNALS, (STOP BARS, "STOP HERE ON RED", "SIGNAL AHEAD", "NO PASSING ZONE").
- SIGNAL HEAD PLACEMENT SHOWN IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES.
- STOP BARS SHALL BE LOCATED A MINIMUM OF 40' AND A MAXIMUM OF 120' FROM THE NEAREST SIGNAL HEAD.
- 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-34 FOR ADDITIONAL INFORMATION ON SIGNALS AND DETECTORS.
- THE SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS AND POSTS, TEMPORARY PAVEMENT MARKINGS AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. ALSO INCLUDES PERMITS AND COST ASSOCIATED WITH PROVIDING ELECTRICAL POWER.
- 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.
- VEHICLE DETECTOR LOOPS SHALL BE 4'x30' FOR PRESENCE DETECTION AT THE STOP BAR WITH THE NEAR PORTION LOCATED 5' FEET BEHIND THE STOP BAR. A 6'x6' EXTENDED CALL DETECTOR SHALL BE PROVIDED AS NECESSARY. LOCATE 3.50' FROM STOP BAR, OR AS NOTED, FOR DILEMMA ZONE PROTECTION.
- TWO-WAY TRAFFIC SHALL BE MAINTAINED ON THE DETOUR WHENEVER POSSIBLE. DURING TWO-WAY TRAFFIC, THE SIGNALS SHALL BE SET ON FLASHING.
- APPROACH WIDTHS SHALL BE AS DETAILED IN SECTION 638.04(13) TO MINIMIZE VEHICLE DELAY. SIGNAL POLES SHALL BE PLACED SO AS TO USE AS MUCH OF THE AVAILABLE APPROACH AS POSSIBLE.
- INTERVAL TIMING SHOWN IN SECONDS.
- INTERCONNECT BETWEEN SIGNAL POLES BY WHATEVER MEANS POSSIBLE OR CONVENIENT.
- 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..
- PLACE TEMPORARY POLES BEHIND GUARDRAIL WHERE POSSIBLE.
- PAYMENT FOR TEMPORARY VEHICLE DETECTOR LOOP(S) SHALL BE LINEAL FOOT OF SANSLOT IN THE PAVEMENT UNDER ITEM 678.22 (MODIFIED).
- 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.
- IF NEARBY TOWN HIGHWAYS ENTER BETWEEN THE SIGNAL HEADS AND THE STOP BAR THEY SHALL HAVE SEPARATE SIGNAL CONTROL, AND ARE DETAILED ON SEPARATE SHEETS.

- ON SEMI-ACTUATED SIGNALS, PARTICULARLY WITH LONG BRIDGES, THE CONTROLLER SHOULD BE LOCATED ON THE SAME SIDE OF THE BRIDGE AS THE LOOP.
- ALL ELECTRICAL WORK SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND THE STATE INSPECTOR. FLASHING BEACON NOTES
- 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.
- AT THE CONTRACTORS' OPTION:
 - THE POWER SUPPLY MAY BE AERIAL OR UNDERGROUND.
 - POWER MAY BE COMBINED WITH THE TRAFFIC SIGNAL OR SEPARATE.
 - 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.
- THE FLASHER UNIT SHALL BE ONE CIRCUIT AND INCLUDE A RADIO INTERFERENCE FILTER.
- THE FLASHING BEACON INSTALLATION SHALL BE SUBSIDIARY TO THE TRAFFIC SIGNAL ITEM.
- BATTERY OPERATED FLASHERS SHALL NOT BE ALLOWED

PHASING DIAGRAMS AND SPECIAL NOTES FOR EACH LOCATION

SIGNAL PHASING DIAGRAM

PHASE	A			B		
INTERVAL	1	2	3	4	5	6
MINIMUM	15			15		
EXTENSION						
MAXIMUM		3	2		3	2
HEAD A	G	Y	R	R	R	R
HEAD B	R	R	R	G	Y	R

- Controller shall be 2 phase - pretimed.
- All clearing on road widening shall be done to maximize signal visibility.
- Flashing beacons required on both approaches.

TEMPORARY TRAFFIC SIGNAL
SURVEYED BY DAR DATE 12/86
DRAWN BY DATE
TRACED BY DATE
MORRISTOWN-WOLCOTT
VT 15 BRIDGE 48
OVER GREEN RIVER
PROJ. F NO 030-2(16)S
SHEET 40 OF 108