

PHASING DIAGRAM AND SPECIAL NOTES FOR EACH LOCATION

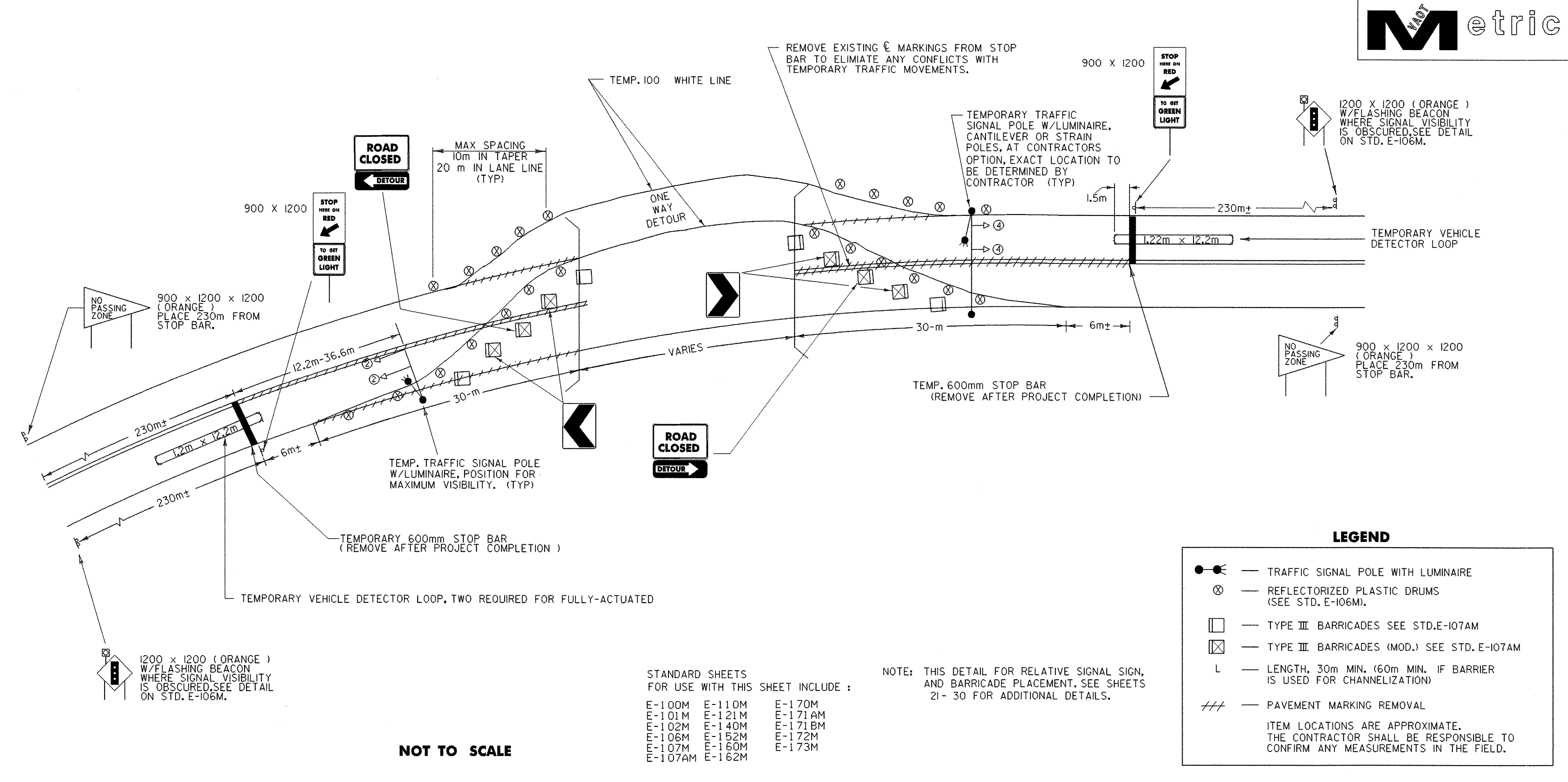
PHASE	2			6			4		
MINIMUM	12	4	50				12	4	50
EXTENSION	2						2		
MAXIMUM	16						16		
HEAD 2	G	Y	R				R	R	R
HEAD 6									
HEAD 4	R	R	R				G	Y	R

APPROACH 4 IS A SIDE STREET APPROACH-IF REQUIRED

SPECIAL REQUIREMENTS

APPROACH	TEMPORARY VEHICLE DETECTOR	FLASHING BEACON ON ADVANCED WARNING SIGN
2	X	
6		
4	X	

ENTER CHECK MARK IN APPROPRIATE BOX WHEN REQUIRED ON THIS PROJECT



NOT TO SCALE

GENERAL TEMPORARY TRAFFIC SIGNAL NOTES

- THE CONTRACTOR SHALL INSURE THAT THE SIGNAL INSTALLATION CONFORMS TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 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.
- SIGNAL TIMING/TIMING ADJUSTMENTS REQUESTED BY THE RESIDENT ENGINEER SHALL BE ACCOMPLISHED WITHIN A 48 HOUR PERIOD AND PAYMENT SHALL BE SUBSIDIARY TO ITEM 678.40 "TEMPORARY TRAFFIC SIGNAL SYSTEM". THE ALL-RED CLEARANCE INTERVAL IS BASED ON AN ASSUMED SPEED OF 16-32 KM/H, THE RESIDENT ENGINEER SHALL MAKE SEVERAL TRIAL RUNS TO DETERMINE THE PROPER ALL-RED CLEARANCE INTERVAL.
- SIGNAL FACES SHALL CONSIST OF 300 mm LENSES. (RED, YELLOW, AND GREEN)
- THE BOTTOM OF THE HOUSING OF A SIGNAL FACE SUSPENDED OVER A ROADWAY SHALL NOT BE LESS THAN 5m NOR MORE THAN 5.8m 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 2.4m NOR MORE THAN 4.5m 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.
- SIGNAL FACES FOR ANY ONE APPROACH SHALL NOT BE LESS THAN 2.44M APART MEASURED HORIZONTALLY BETWEEN CENTER OF FACES.
- 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 4.42M FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 12.2M FROM THE SIGNAL HEAD. CONSULT THE M.U.T.C.D. FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
- SIGNAL HEAD PLACEMENT IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES.
- THE SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS AND POSTS, WARNING SIGN, LUMINAIRES, FLASHING BEACONS, AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. IT 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 AND ALL OTHER SIGNAL EQUIPMENT SHALL MEET OR EXCEED ALL NEMA STANDARDS.
- VEHICLE DETECTOR LOOPS SHALL BE 1.22M X 12.2M FOR PRESENCE DETECTION AT THE STOP BAR WITH THE NEAR PORTION LOCATED 1.5M BEYOND THE STOP BAR.
- ALL SIGNAL RELATED SIGNS SHALL BE REMOVED OR COVERED WHEN THE SIGNAL IS NOT OPERATING.
- INTERVAL TIMING SHOWN IN SECONDS.
- INTERCONNECT BETWEEN SIGNAL POLES BY WHATEVER MEANS POSSIBLE OR CONVENIENT TO PROVIDE FOR A SAFE INSTALLATION.
- PLACE TEMPORARY POLES BEHIND GUARDRAIL WHERE POSSIBLE.
- 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 TRAVELLING PUBLIC.
- ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC., SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT AND THEY SHALL BE RESPONSIBLE FOR THEIR REMOVAL, INCLUDING ANY TEMPORARY PAVEMENT MARKINGS, UTILITY POLES, WIRES, VEHICLE DETECTOR LOOPS, ETC.
- A 250 WATT MER/150 WATT HPS LUMINAIRE AND MAST ARM SHALL BE PROVIDED ON A POLE ON EACH APPROACH AT A MOUNTING HEIGHT OF 9.1M 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.
- STOP BARS SHALL BE LOCATED A MINIMUM OF 12.2M AND A MAXIMUM OF 36.6M FROM THE NEAREST SIGNAL HEAD.
- PAYMENT FOR THE TEMPORARY VEHICLE DETECTOR LOOP ITEM SHALL BE MADE UNDER ITEM 678.42 "TEMPORARY DETECTOR".
- PAYMENT FOR THE TEMPORARY 600 STOP BAR SHALL BE MADE UNDER ITEM 646.66 "TEMPORARY 600mm STOP BAR".
- SEE STD. E-140M FOR "STOP HERE ON RED" SIGN DETAIL AND E-152M FOR "SIGNAL AHEAD" SYMBOL SIGN. THE "SIGNAL AHEAD" SIGN SHALL HAVE AN ORANGE BACKGROUND (REFLECTORIZED). SEE STANDARD E-121M FOR SIGN PLACEMENT. SEE STANDARD E-170M THROUGH E-172M FOR ADDITIONAL INFORMATION ON SIGNALS AND DETECTORS.
- A "SIGNAL AHEAD" SIGN SHALL BE PLACED AT LEAST 230M FROM THE SIGNAL OR AT A POSITION TO BE DETERMINED BY THE ENGINEER.
- THE "NO PASSING" SIGN SHALL BE USED TO PREVENT PASSING FOR 230M IN ADVANCE OF THE STOP BAR. THE SIGN SHALL BE PER STANDARD E-152M, EXCEPT THE COLOR SHALL BE A BLACK TEXT AND BORDER ON A REFLECTORIZED ORANGE BACKGROUND.
- ALL ELECTRICAL WORK SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND STATE INSPECTOR.
- TWO-WAY TRAFFIC SHALL BE MAINTAINED ON THE DETOUR WHENEVER POSSIBLE. DURING TWO-WAY TRAFFIC, THE SIGNALS SHALL BE SET ON FLASHING YELLOW.
- APPROACH WIDTHS SHALL BE AS DETAILED IN SECTION 528.04 TO MINIMIZE VEHICLE DELAY.
- PAYMENT FOR ALL SIGNS AND POSTS FOR CONSTRUCTION APPROACH SIGNS, DETOUR SIGNS AND TRAFFIC CONTROL SIGNAL SIGNS SHALL BE MADE UNDER ITEM 527.10 "MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS".
- THE "TO GET GREEN LIGHT" SIGN IS TO BE USED ON ALL APPROACHES WITH TEMPORARY VEHICLE DETECTOR LOOPS.
- IN SITUATIONS WHERE EXISTING PASSING ZONES EXTEND THROUGH THE AREA BETWEEN THE STOP BAR AND THE "NO PASSING ZONE" SIGN, THEN TEMPORARY DOUBLE YELLOW LINES SHALL BE INSTALLED FROM THE STOP BAR TO THE "NO PASSING ZONE" SIGN. PAYMENT FOR THESE MARKINGS SHALL BE MADE UNDER ITEM 646.61 "TEMPORARY 100mm YELLOW LINE"
- TEMPORARY TRAFFIC BARRIER SHOULD BE SUBSTITUTED FOR THE CHANNELIZING DEVICES SHOWN WHEN IN THE JUDGEMENT OF THE RESIDENT ENGINEER TEMPORARY BARRIER IS NEEDED.
- WHEN TEMPORARY BARRIER IS USED, BARRIER ENDS FACING ONCOMING TRAFFIC SHALL BE TAPERED BEYOND THE CLEAR ZONE, OR PROTECTED WITH AN APPROVED END TREATMENT.
- PAYMENT FOR TEMPORARY BARRIER USED SHALL BE MADE UNDER ITEM 621.90 "TEMPORARY TRAFFIC BARRIER".

REFER TO SHEETS 20 - 30 FOR SITE SPECIFIC DETAILS

PROJECT:	BARTON	PROJECT NO. :	STP 0113 (58) S
DESIGN FILE NAME:	96c116/structures/sc116trf.dgn	PLOT DATE:	03-JAN-2002
IPARM FILE NAME:	sc116trafdet.i	SURVEY DATE:	8/96,5/99
SURVEYED BY:	R. BULLOCK, R. GILMAN	DRAWN BY:	D.G. BASSETT
SQUAD LEADER:	C.P. WILLIAMS	SHEET:	19 OF 120
ONE WAY DETOUR SHEET			