

Table 6H-2. Meaning of Symbols on Typical Application Diagrams

	Arrow panel
	Arrow panel support or trailer (shown facing down)
	Changeable message sign or support trailer
	Channelizing device
	Crash Cushion
	Direction of temporary traffic detour
	Direction of traffic
	Flagger
	High level warning device (Flag tree)
	Luminaire
	Pavement markings that should be removed for a long term project
	Sign (shown facing left)
	Surveyor
	Temporary barrier
	Temporary barrier with warning lights
	Traffic or Pedestrian signal
	Truck mounted attenuator
	Type III Barricade
	Warning lights
	Work space
	Work vehicle

Figure 6E-1. Use of Hand-Signaling Devices by Flaggers

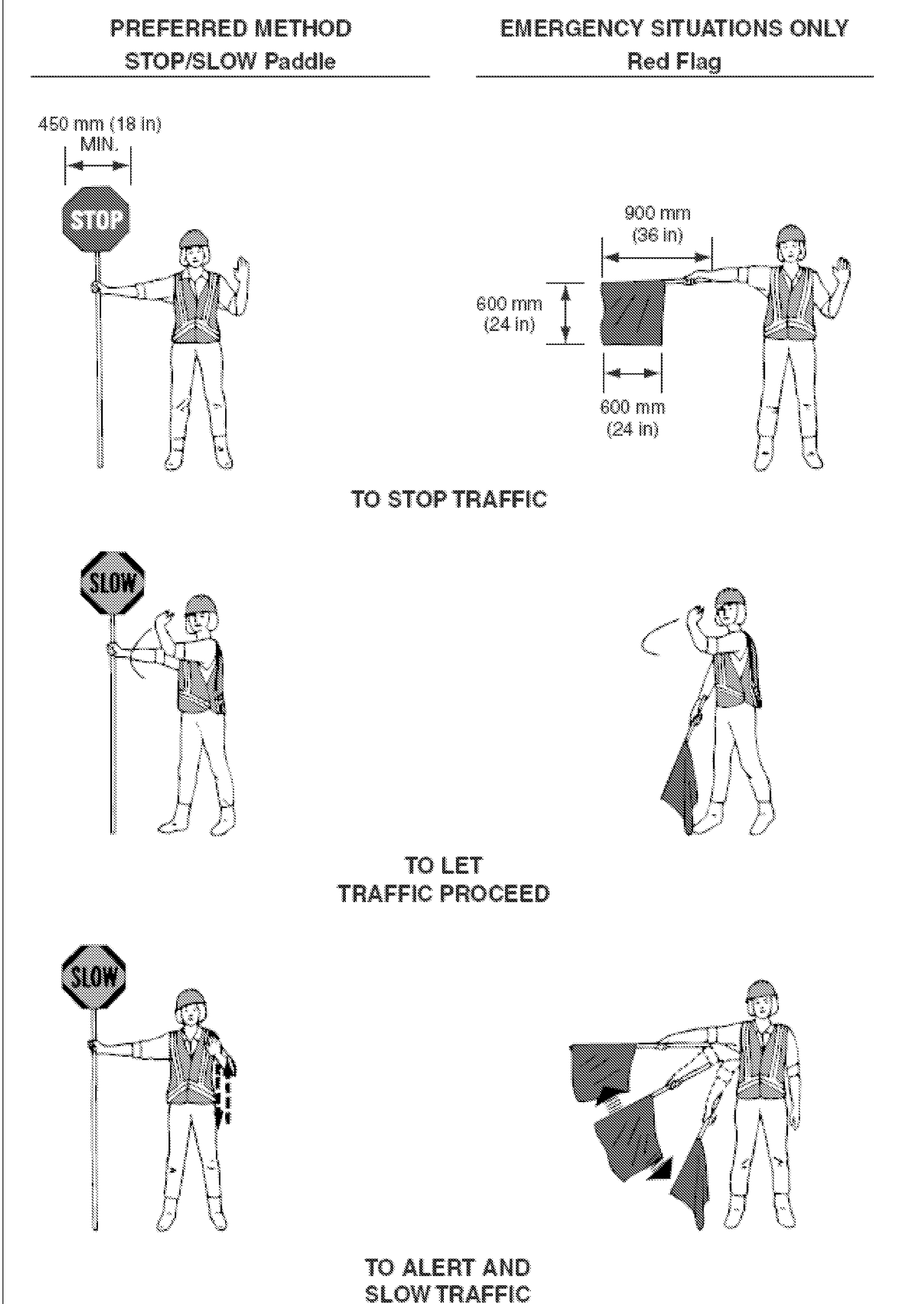
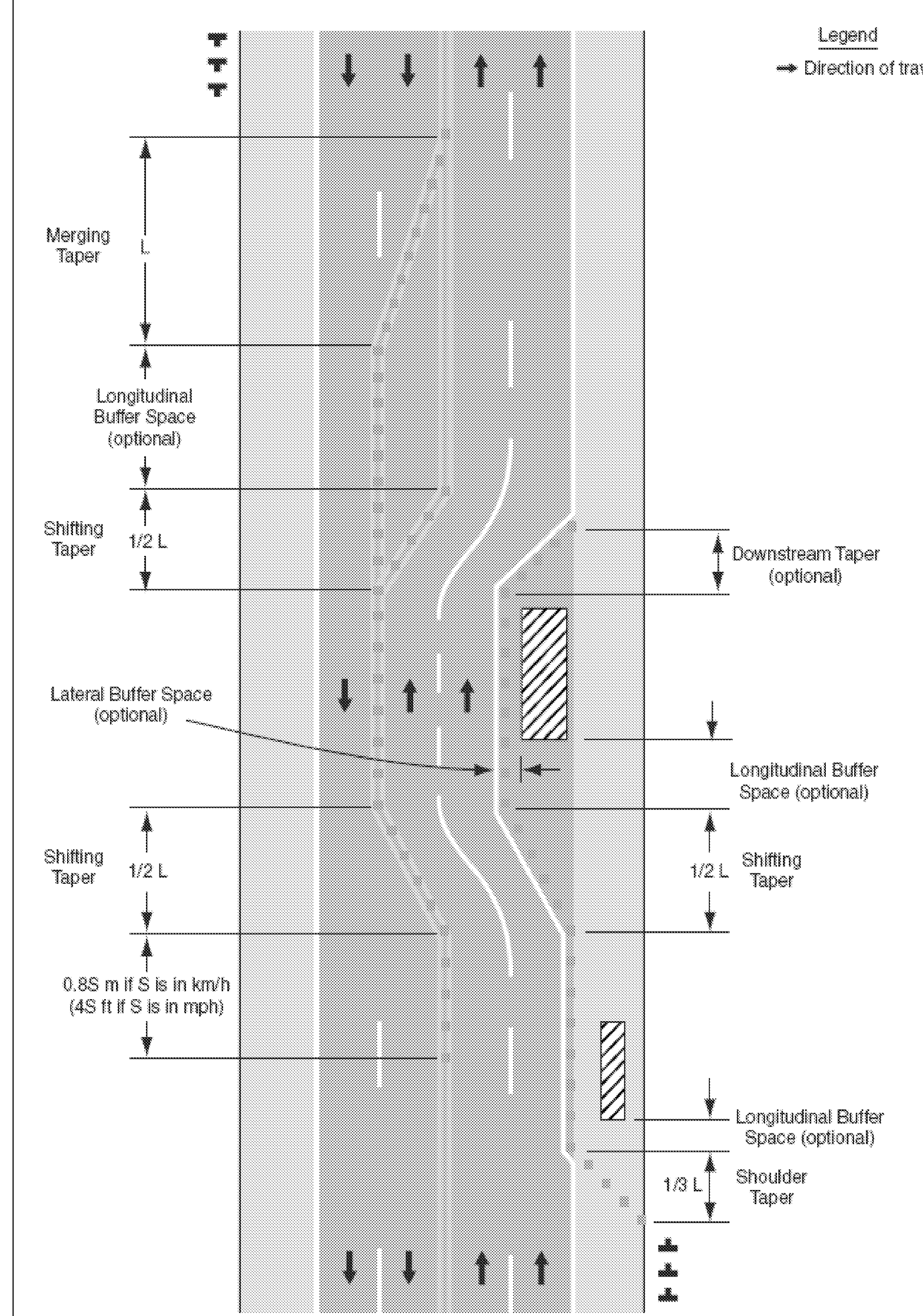


Figure 6C-2. Types of Tapers and Buffer Spaces



TEMPORARY TRAFFIC CONTROL NOTES

- ALL TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THESE PROJECT PLANS, APPLICABLE VTRANS E-SERIES STANDARD DRAWINGS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), DATED 2003, AND ITS LATEST REVISIONS, OR AS DIRECTED BY THE RESIDENT ENGINEER. IF THE CONTRACTOR DOES NOT WISH TO FOLLOW THE TEMPORARY TRAFFIC CONTROL PROVIDED, HE/SHE MAY SUBMIT AN ALTERNATE PROPOSAL AT THE PRE-CONSTRUCTION MEETING IMPLEMENTING THE PROPOSED CHANGES FOR REVIEW AND APPROVAL BY THE RESIDENT ENGINEER.
- THE CONTRACTOR MUST PROVIDE ACCESS THROUGH THE WORK ZONE FOR EMERGENCY VEHICLES AT ALL TIMES.
- THE CONTRACTOR SHALL CONDUCT THE WORK AT ALL TIMES IN SUCH A MANNER AND IN SUCH SEQUENCE SO AS TO ENSURE THE LEAST INTERFERENCE WITH TRAFFIC.
- SIGNS SHALL ONLY BE VISIBLE TO MOTORIST AT THE TIMES WHEN THE MESSAGE IS PERTINENT, I.E. A 'FLAGGER AHEAD' SIGN SHALL ONLY BE VISIBLE TO MOTORIST WHEN THE FLAGGER IS ACTUALLY PRESENT PERFORMING THEIR DUTIES.
- THE BID PRICE FOR ITEM 641.0, 'TRAFFIC CONTROL', SHALL INCLUDE ALL OF THE FOLLOWING, AS NEEDED: APPROACH AND ON-PROJECT CONSTRUCTION SIGNING, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN VTRANS STANDARDS. ALL ADJUSTING, RELOCATING, AND REMOVING OF THESE DEVICES AS DIRECTED BY THE RESIDENT ENGINEER SHALL ALSO BE INCLUDED. THE FOLLOWING ITEMS WILL BE PAID FOR SEPARATELY: 630.10 AND 630.15 - UNIFORMED TRAFFIC OFFICERS AND FLAGGERS, 641.5 - PORTABLE CHANGEABLE MESSAGE SIGN, 641.6 PORTABLE ARROW BOARD.
- TRAFFIC CONTROL FOR THE REMOVAL OF THE OVERHEAD SIGN BRIDGES AT INTERCHANGE 18, AND THE REMOVAL AND REPLACEMENT OF THE OVERHEAD SIGN BRIDGE AT INTERCHANGE 19 SHALL BE IN ACCORDANCE WITH TYPICAL APPLICATIONS SHOWN ON THESE PLANS AND RELEVANT SECTIONS OF THE MUTCD. ADDITIONALLY, SHORT TERM TRAFFIC STOPPAGES WILL BE NECESSARY FOR THE REMOVAL AND REPLACEMENT OF THESE STRUCTURES. TRAFFIC STOPPAGES SHALL NOT EXCEED 15 MINUTE PERIODS. TRAFFIC STOPPAGES FOR THE REMOVAL AND REPLACEMENT OF THE OVERHEAD SIGN BRIDGES SHALL BE PERFORMED ON A SUNDAY MORNING BEFORE THE HOUR OF 10:00 A.M. A QUANTITY OF ITEM 641.5 'PORTABLE CHANGEABLE MESSAGE SIGN' HAS BEEN INCLUDED TO ALLOW THE CONTRACTOR TO NOTIFY THE PUBLIC OF EXPECTED STOPPAGES. NOTICE OF STOPPAGES SHALL BEGIN NO LESS THAN 1 WEEK PRIOR TO THE FIRST STOPPAGE.

Figure 6F-7. Channelizing Devices (Sheet 1 of 2)

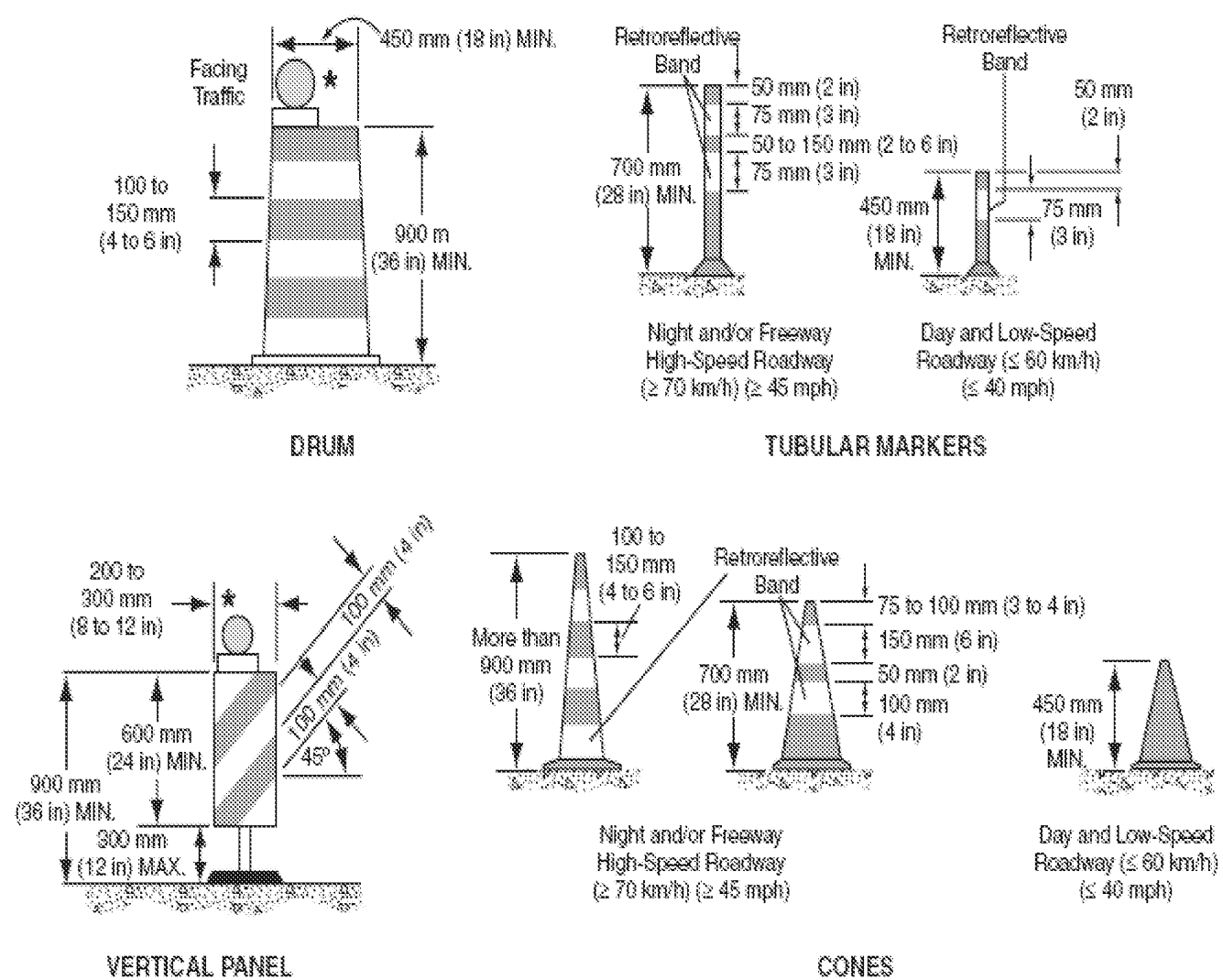


Table 6C-3. Taper Length Criteria for Temporary Traffic Control Zones

Type of Taper	Taper Length (L)*
Merging Taper	at least L
Shifting Taper	at least 0.5L
Shoulder Taper	at least 0.33L
One-Lane, Two-Way Traffic Taper	30 m (100 ft) maximum
Downstream Taper	30 m (100 ft) per lane

Table 6C-4. Formulas for Determining Taper Lengths

Speed Limit (S)	Taper Length (L) Meters	Speed Limit (S)	Taper Length (L) Feet
60 km/h or less	$L = \frac{WS^2}{155}$	40 mph or less	$L = \frac{WS^2}{60}$
70 km/h or more	$L = \frac{WS}{1.6}$	45 mph or more	$L = WS$

Where: L = taper length in meters (feet)
W = width of offset in meters (feet)
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in km/h (mph)

TRAFFIC CONTROL DETAILS SHEET 1

PROJECT NAME: COLCHESTER-HIGHGATE
PROJECT NUMBER: IMG SIGN (17)

FILE NAME: 09A016.DGN PLOT DATE: 8/21/2009
PROJECT LEADER: EPD DRAWN BY: BMB
DESIGNED BY: BMB CHECKED BY: EPD
PLOT FILE: 09A016TCD-I.I SHEET 212 OF 221

* Warning lights (optional)
Note: If drums, cones, or tubular markers are used to channelize pedestrians, they shall be located such that there are no gaps between the bases of the devices, in order to create a continuous bottom, and the height of each individual drum, cone, or tubular marker shall be no less than 900 mm (36 in) to be detectable to users of long canes.