

### NUMBER OF CHANNELIZING DEVICES NEEDED

LENGTH (FT.)	V < 35 MPH		35 MPH < V ≤ 45 MPH		45 MPH < V ≤ 55 MPH	
	TAPER	BUFFER/WORK	TAPER	BUFFER/WORK	TAPER	BUFFER/WORK
100	5	2-3	5	2-3	5	2-3
150	6	3-5	6	2-4	6	2-3
200	7	3-6	6	3-5	6	2-4
250	9	4-8	7	3-6	6	3-5
300	10	5-9	8	4-7	6	3-6
350	11	5-10	9	4-8	8	4-7
400	13	6-12	10	5-9	9	4-8
450	14	7-13	11	5-10	10	5-9
500	16	8-15	13	6-12	11	5-10
550	17	8-16	14	7-13	11	5-10
600	19	9-18	15	7-14	12	6-11
650	20	10-19	16	8-15	13	6-12





### TAPER LENGTH CRITERIA FOR WORK ZONES

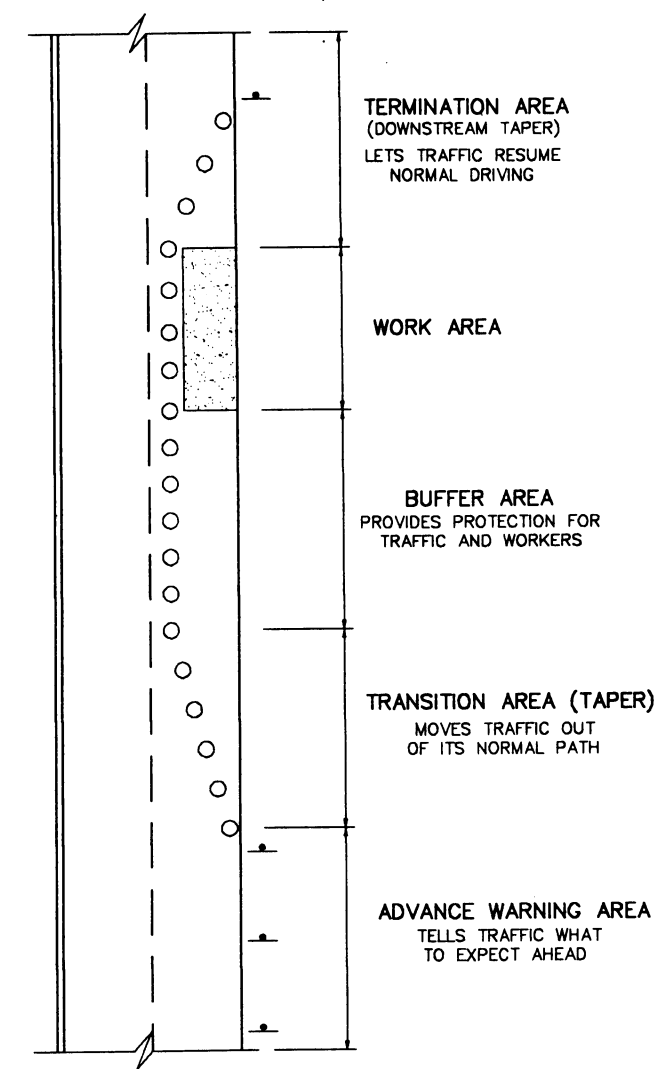
TYPE OF TAPER	TAPER LENGTH
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/3 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FT. MAXIMUM
DOWNSTEAM TAPERS (USE IS OPTIONAL)	100 FT. PER LANE
FORMULAS FOR L (FT.)	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	$L = W \times S$

**LEGEND:**

- L - TAPER LENGTH IN FEET
- W - WIDTH OF OFFSET IN FEET
- S - POSTED SPEED OR OFF-PEAK 85 PERCENTILE SPEED IN MPH.

**LEGEND:**

-  TRAFFIC SIGNS
-  FLAGGER
-  CHANNELIZING DEVICE
-  WORK AREA
- V - POSTED SPEED IN MPH



**FIVE PARTS OF A TRAFFIC CONTROL ZONE**

EFFECTIVE DATE: APRIL 1996

COMMONWEALTH OF PUERTO RICO  
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS  
HIGHWAY AND TRANSPORTATION AUTHORITY

**MAINTENANCE AND PROTECTION OF TRAFFIC**

**WORK ZONE DESIGN CRITERIA**

RECOMMENDED BY: <i>[Signature]</i> DESIGN AREA DIRECTOR DATE: <i>May 11, 96</i>	APPROVED BY: <i>[Signature]</i> EXECUTIVE DIRECTOR DATE: <i>5/11/96</i>
APPROVED BY: <i>[Signature]</i> DIV. ADM. ENVA-PB DIVISION DATE: <i>5/11/96</i>	

DATE	REVISION	BY
		STD. MPT
		DWG. 10 OF 22