Sign Spacing, Device Spacing and Channelizing Taper Lengths

<table>
<thead>
<tr>
<th>Speed (MPH)</th>
<th>Minimum Taper Length (L) for Lane Width (W)</th>
<th>Maximum Channelizer Spacing (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15</td>
<td>20 ft, 25 ft, 245 ft, 45 ft, 40 ft</td>
<td>Through Paper, Through Work Area</td>
</tr>
<tr>
<td>40-45</td>
<td>650 ft, 695 ft, 540 ft, 40 ft, 80 ft</td>
<td></td>
</tr>
<tr>
<td>50-55</td>
<td>530 ft, 600 ft, 660 ft, 30 ft, 80 ft</td>
<td></td>
</tr>
<tr>
<td>60-70</td>
<td>700 ft, 770 ft, 840 ft, 60 ft, 120 ft</td>
<td></td>
</tr>
</tbody>
</table>

Longitudinal Buffer Space (B):

<table>
<thead>
<tr>
<th>Speed (MPH)</th>
<th>Buffer Space (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15</td>
<td>200</td>
</tr>
<tr>
<td>40-45</td>
<td>400</td>
</tr>
<tr>
<td>50-55</td>
<td>560</td>
</tr>
<tr>
<td>60-70</td>
<td>840</td>
</tr>
</tbody>
</table>

Sign Spacing (s) for Advance Sign Series (1) (2):

<table>
<thead>
<tr>
<th>Speed (MPH)</th>
<th>Undivided Highways (FT)</th>
<th>Divided Highways (FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>40-45</td>
<td>350</td>
<td>350</td>
</tr>
<tr>
<td>50-55</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>60-70</td>
<td>1000</td>
<td>1000</td>
</tr>
</tbody>
</table>

Taper Length (L):

L = 10 ft for 40 MPH or more
L = 5 ft for 35 MPH or less
L = Taper Length in Feet
L = C = Lateral Shift in Feet
S = Posted Speed in MPH

Notes:
Dimensions in Feet unless otherwise noted.
1) Spacing between signs and spacing between last sign and flagger, beginning of taper, or signed condition.
2) Spacing may be adjusted as necessary to meet field conditions.

Traffic Control Devices

General Notes:
1. See Standard Plan $18.10 for details and items not shown.
2. Existing signs shall be covered during working hours only if in conflict with traffic control plans.
3. No direct payment will be made for relocating, covering, uncovering or removing signs.
4. Cones allowable for daytime operations only.
5. Locate flashing arrow panels at beginning of taper when feasible. Arrow panels are always located behind channelizers or cones.

Traffic Control Legend

- Sign (Single Symbol)
- Sign (Double Symbol)
- Flag
- Directional indicator barncase
- Channelizer
- Barricade
- Changeable Message Board
- Traffic Mouted Attenuator
- Flashing Arrow
WORK BEYOND RIGHT SHOULDER - UNDIVIDED OR DIVIDED ROADWAYS

NOTES:
See TCP Sheet 1 for sign spacing and taper lengths.

For divided roadways, signs shall be provided on left and right side of roadway with downstream sign being omitted.

SHOULDER WORK - UNDIVIDED ROADWAYS

NOTES:
See TCP Sheet 1 for sign spacing and taper lengths.
RIGHT SHOULDER WORK - HIGH SPEED DIVIDED ROADWAYS

NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.

USED FOR WORK ON SHOULDER OR FOR WORK OFF SHOULDER WITH WORK VEHICLES PARKED ON THE SHOULDER OF A HIGH SPEED ROADWAY.

RIGHT SHOULDER WORK - MULTI-LANE FREeways WITH MEDIAN BARRIER

NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.
LEFT SHOULDER WORK - HIGH SPEED DIVIDED ROADWAYS

USED FOR WORK ON SHOULDER OR FOR WORK OFF SHOULDER
WITH WORK VEHICLES PARKED ON THE SHOULDER OF A HIGH SPEED ROADWAY.

NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.

ONE-LANE TWO-WAY OPERATION WITH FLAGGERS

A MINIMUM OF TWO FLAGGERS WILL BE REQUIRED TO DIRECT TRAFFIC.
ADDITIONAL FLAGGERS MAY BE REQUIRED WHEN WORKING AT INTERSECTING
STREETS OR RAMPS AS DIRECTED BY THE ENGINEER. NO DIRECT PAYMENT
WILL BE MADE FOR FLAGGERS

NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.
NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.

SINGLE LANE CLOSURE

PARTIAL RAMP CLOSURE

NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.
NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.

(1) SIGN ONLY REQUIRED WHEN RAMP WIDTH IS REDUCED.

(2) THE LOCATION OF THE SIGN SEQUENCE AND MERGE TAPER SHOULD BE ADJUSTED SO THAT THE ARROW PANEL LOCATION IS NOT CONFUSING TO MOTORIST ON THE RAMP.

ENTRANCE RAMP AREA
MAINLINE WORK

NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.

(1) SIGN ONLY REQUIRED WHEN RAMP WIDTH IS REDUCED.

(2) SIGN SHOULD BE PLACED ON THE RAMP TO PROVIDE ADEQUATE VISIBILITY OF MAINLINE TRAFFIC.

(3) THE LOCATION OF THE SIGN SEQUENCE AND MERGE TAPER SHOULD BE ADJUSTED SO THAT THE ARROW PANEL LOCATION IS NOT CONFUSING TO MOTORIST ON THE RAMP.

(4) CHANNELIZER SPACING AT 30'.

ENTRANCE RAMP AREA
ACCELERATION LANE WORK
NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.
(1) SIGN ONLY REQUIRED WHEN RAMP WIDTH IS REDUCED.
(2) CHANNELIZER SPACING AT 50'.

EXIT RAMP AREA
MAINLINE WORK

EXIT RAMP AREA
DECELERATION LANE WORK

NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.
(1) SIGN ONLY REQUIRED WHEN RAMP WIDTH IS REDUCED.
(2) CHANNELIZER SPACING AT 50'.
RAMP CLOSURE

NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.
(1) CHANNELIZER SPACING AT 50'.
DOUBLE LANE CLOSURE

NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.

INTERIOR LANE CLOSURE

NOTES:
SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.