

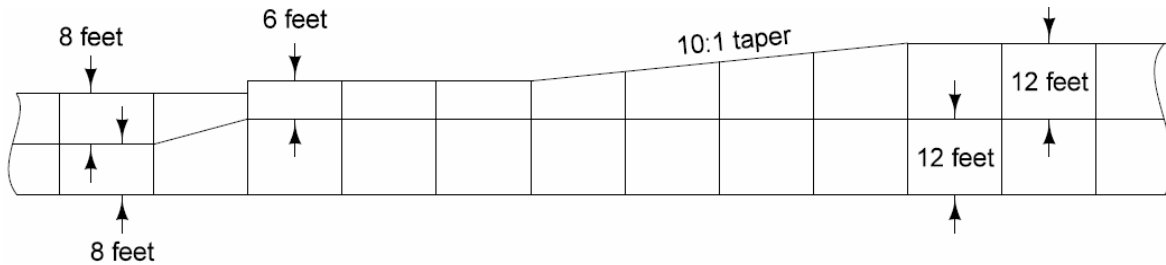
# Jointing Ramp and Loop Terminals

Design Manual  
Chapter 7  
Pavement

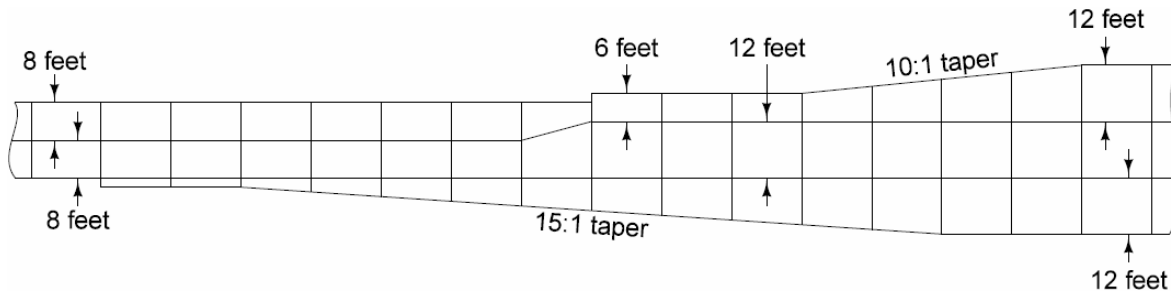
Originally Issued: 01-15-19  
Revised: 04-23-20

Standard Road Plans [PV-410](#), [PV-411](#), [PV-412](#), and [PV-414](#) along with Design Details [533-1](#), [533-2](#), and [533-3](#) provide jointing details for 16 foot and 18 foot ramps and loops. Important to note is spacing on the mainline is reduced to 15 feet from the header of the centerline joint through the gore area. This is to match the jointing along the ramp or loop. Joint spacing on ramps and loops is reduced to 15 feet because the panels are narrower (8 feet for ramps and 9 feet for loops) than mainline panels (12 feet and 14 feet).

A common situation designers encounter is transitioning from a 16 foot ramp to a two or three lane terminal. Figures 1 and 2 show layouts for the transitions. Maintain 15 foot joint spacing to the end of the ramp. Refer to Section [6A-1](#) for tapers (typically 10:1, but may be 15:1 for a major right turn).



**Figure 1:** Jointing at a two lane terminal.



**Figure 2:** Jointing at a three lane terminal (shown with major right turn lane).

For jointing at the at-grade terminals, refer to Sections [7A-3](#) (urban intersection) and [7A-4](#) (rural intersection).

## Chronology of Changes to Design Manual Section:

### 007A-006 Jointing Ramp and Loop Terminals

4/23/2020	Revised Changed 4 feet to 6 feet in Figures 1 and 2 to account for the extra 2 foot width of the header.
1/15/2019	NEW New.