

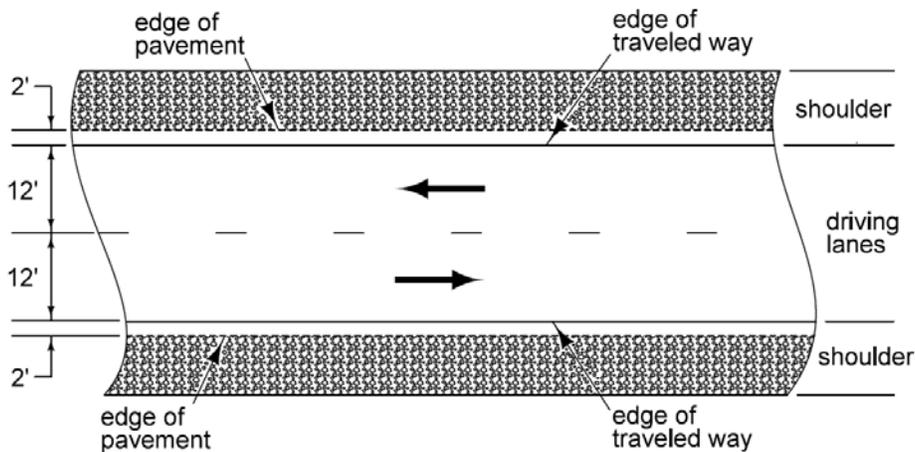
# Pavement Widening on Resurfacing Projects for Non-NHS Highways

Non-NHS highways that do not qualify for paved shoulders and that have lane pavement widths of 12 feet or less should be widened to 14 feet.

## Design Considerations

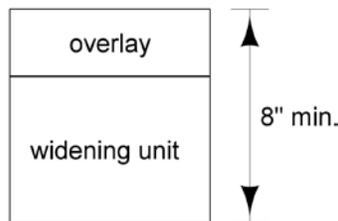
Areas where a widening unit has already been placed should be evaluated on a case-by-case basis to determine if an additional widening unit is appropriate. In most cases, the roadway will be widened.

Two lane highways should have 14-foot pavement widths for both lanes. As Figure 1 shows, the white edge line should be painted 12 feet from the centerline, leaving a 2-foot section at the pavement edge, which is considered part of the shoulder.



**Figure 1:** Lane markings for widened pavement.

For PCC pavement widening, use Standard Road Plan [PV-105](#). For HMA pavement widening, use Standard Road Plan [PV-203](#). The thickness of the widening unit plus overlay should total a minimum of 8 inches, see Figure 2.



**Figure 2:** Minimum pavement widening thickness.

Fillets should be used at non-paved sideroads. Runouts should be used at paved sideroads. At entrances, designers have the option to include fillets where the pavement has been widened to 14 feet if other entrances along the corridor already have them. However, fillets already in place due to earlier resurfacing projects should be resurfaced.

Counties have expressed an interest in paying for placing fillets that extend out 50 feet or more (see Design Detail [7149](#)) at non-paved sideroads. This allows counties to grade their non-paved roads without their equipment infringing on the primary highway. Designers should take advantage of this whenever

possible. Since counties will need to budget for this, designers should contact counties as early as possible in the design process.

## Highways That Should Not Be Widened

Highways with less than a 32-foot top (width of existing lanes and shoulders) should not be widened because a minimum two-foot granular shoulder is desirable outside of the pavement to stabilize the widening unit.

Where the lane pavement widths must remain at 12 feet or less, fillets should be used at non-paved side roads and entrances.

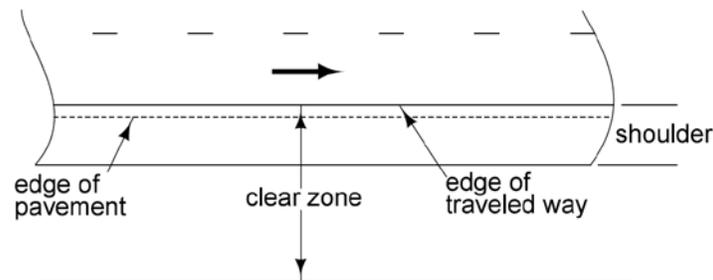
## Shoulders

On a widened pavement, the designer should regard the 2-foot section of pavement outside the traffic lane as part of the normal shoulder, as Figure 1 shows. The normal shoulder will be composed of the 2-foot pavement width outside the traffic lane plus the additional width added to complete the shoulder.

If the paved portion of the shoulder after widening will be less than 4 feet, a safety edge (see [3C-6](#) and Standard Road Plan [PV-3](#)) should be included on the widening unit or overlay.

## Clear Zones on Widened Pavement

Figure 3 shows the clear zone to be used with a widened pavement. In all cases, the clear zone is measured from the edge of the traveled way, not from the edge of the widened part.



**Figure 3:** Clear zones on widened pavement.

## Chronology of Changes to Design Manual Section:

### 007D-008 Pavement Widening on Resurfacing Projects for Non-NHS-Highways

1/15/2014	Revised Revise to include adding 50 foot fillets at non-paved sideroads and eliminate stating rumble strips should not be placed in outermost 2 feet of a lane.
7/18/2013	Revised Revise Standard Road Plan references. Allow option for fillets at entrances where pavement has been widened.
1/23/2004	Previously Updated