Saw cut
(Full depth of existing asphalt pavement)

New asphalt pavement

New base course

Existing asphalt pavement

Existing base course

NOTE:

Provide a transition length in feet that is not less than the value obtained by multiplying the effective overlay thickness in inches (difference between the existing and overlaid elevations) by the K value from the Table for the posted speed of the roadway.
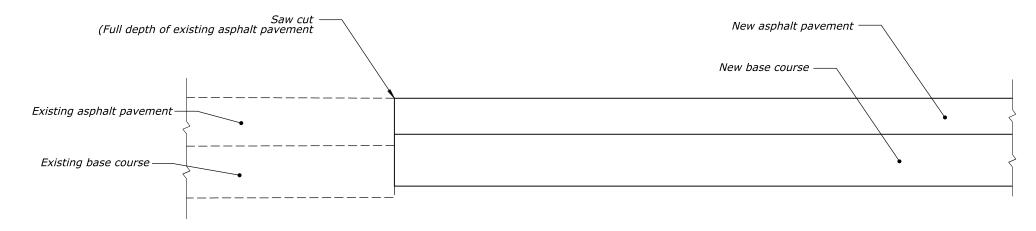
Use $K*[e_1-e_2]=T$, or $K*[d_1-d_2]=T$ (whichever applies), to obtain the transition length. (Minimum transition length=30 feet)

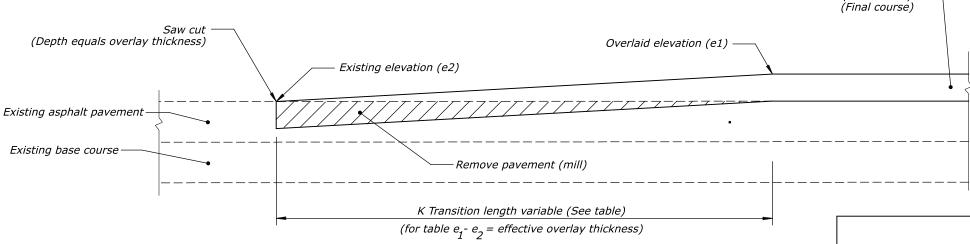Example :
If the posted speed is 55 MPH
Effective overlay thickness = 2 inches
Then the minimum transition length =
2 inches x 42.5 ft./in. = 85 feet.

NEW PAVEMENT

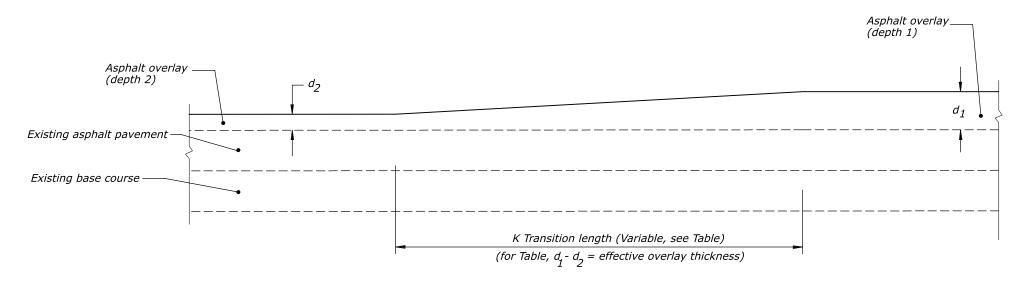Asphalt overlay
(Final course)

Saw cut
(Depth equals overlay thickness)

Overlaid elevation (e_1)

Existing elevation (e_2)

Existing asphalt pavement

Existing base course

Remove pavement (mill)

K Transition length variable (See table)
(for table e_1- e_2 = effective overlay thickness)

OVERLAY

K VALUE TABLE (ft/in)

POSTED SPEED (MPH) *	30	35	40	45	50	55	60	65	70	75
K	30	32.5	35	37.5	40	42.5	45	47.5	50	52.5

* Use a K Value of 30 for speeds less than 30 MPH.

Asphalt overlay
(depth 1)

Asphalt overlay
(depth 2)

d_2

d_1

Existing asphalt pavement

Existing base course

K Transition length (Variable, see Table)
(for Table, d_1- d_2 = effective overlay thickness)

OVERLAY - DEPTH TRANSITIONS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

EFLHD DETAIL

PAVEMENT TRANSITIONS

NO SCALE

DETAIL APPROVED FOR USE	DETAIL
APPROVED: FEBRUARY 2013 REVISED: SEPTEMBER 2020	E401-01