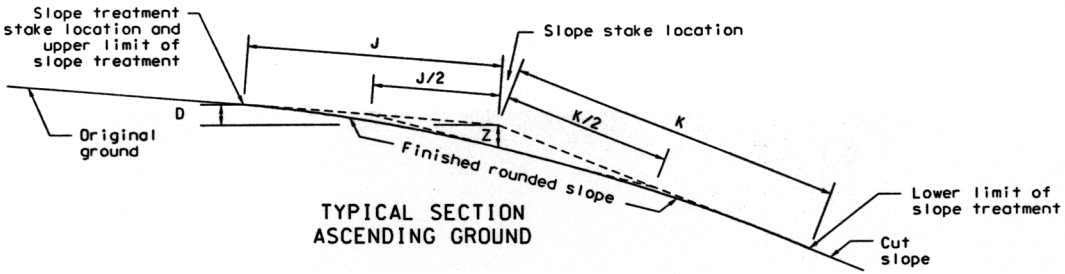
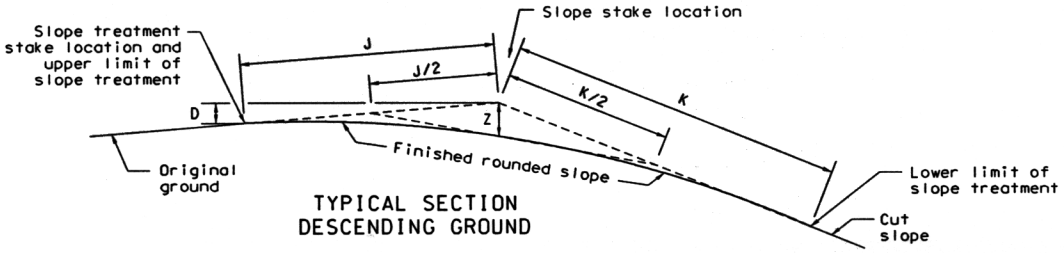
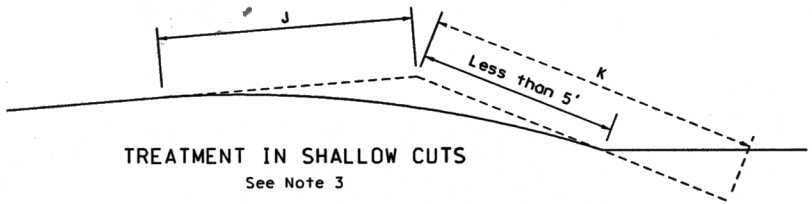


TYPICAL SECTION
ASCENDING GROUND

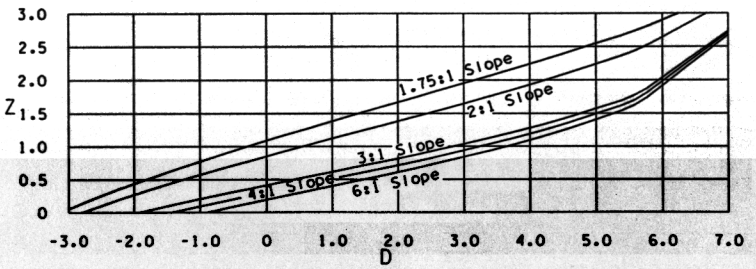


TYPICAL SECTION
DESCENDING GROUND



TREATMENT IN SHALLOW CUTS
See Note 3

VALUES OF Z (feet)
For Class A Slope Treatment



$$Z = \frac{\frac{K}{2}\sqrt{\left(\frac{J}{2}\right)^2 - \left(\frac{D}{2}\right)^2} \pm \left(\frac{DKS}{4}\right)}{\frac{KS}{2} + \left(\sqrt{1+S^2}\right)\left(\sqrt{\left(\frac{J}{2}\right)^2 - \left(\frac{D}{2}\right)^2}\right)}$$

In this equation the term $\pm DKS/4$ is positive when the slope treatment stake is lower than the slope stake (descending ground); and negative when the slope treatment stake is higher than the slope stake (ascending ground).

NOTES

1. Slope treatment shall be constructed simultaneously with the roadway excavation. Ordinarily hand trimming will not be required if satisfactory results are obtained with mechanical equipment.
2. It is essential that the construction of cut and fill slopes and the application of slope treatment fit as naturally as possible into the existing landscape to provide an aesthetically and geometrically satisfactory completed roadway.
3. When the distance K is greater than the distance from the top of cut to the bottom of ditch, slope treatment shall begin at bottom of ditch.

LEGEND:

- J Distance from slope stake to slope treatment stake, measured on natural ground slope.
- K Distance from slope stake to lower limit of slope treatment, measured down face of cut slope.
- H Difference in elevation between finished shoulder grade and slope stake.
- D Difference in elevation between slope stake and slope treatment stake.
- Z Depth of slope treatment at slope stake as determined by a straight line between the midpoints of J and K.
- S Horizontal distance per foot cut for the slope under consideration. (For a 3:1 slope, S=3)

CUT SLOPE	Class A		Class B
	J	K	J and K
4:1	7'	5'	5'
3:1	7'	5'	5'
2:1	7'	9'	5'
1.75:1	7'	12'	5'

DENNIS C. JACKSON
STATE OF WASHINGTON
14061
REGISTERED
PROFESSIONAL ENGINEER

EXPIRES NOVEMBER 8, 1998

SLOPE TREATMENT

STANDARD PLAN H-8

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PLA AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. UPON REQUEST.

CITY OF RENTON

ADOPTED
CITY OF RENTON
STANDARD PLANS

LAST DATE: 04/2004

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