

FIG. 1
TYPICAL SECTION OF ROUNDED SLOPES

Rate of Slope	TABLE OF ROUNING DIMENSIONS			
	A	B		
	When B's 5.0' or less	When B is more than 5.0'	When D's 15.0' or less	When D is more than 15.0'
3:1 or flatter	B	5.0'	5.0'	5.0'
2:1	B	5.0'	5.0'	D/3
1.5:1	B	5.0'	5.0'	D/3
1:1	B	D/3, Max. 10.0'		D/3

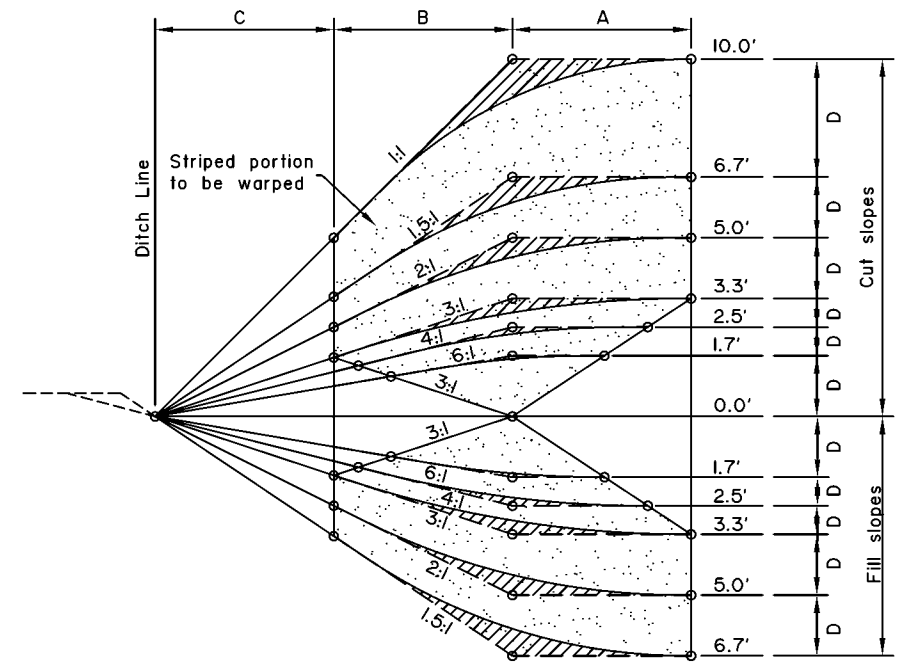


FIG. 4
TYPICAL GRADING FOR WARPING SLOPES

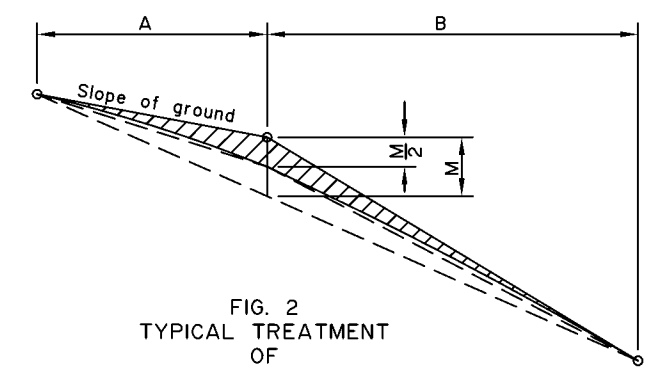


FIG. 2
TYPICAL TREATMENT
OF
POSITIVE SLOPE INTERSECTION

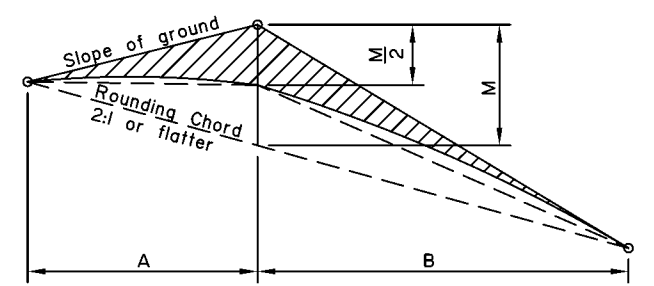


FIG. 3
TYPICAL TREATMENT
OF
NEGATIVE SLOPE INTERSECTION

TYPICAL SLOPE ROUNING

- GENERAL NOTES
- Cut and fill slopes shall be rounded as shown in fig. 1, 2, and 3 when required by the plans or special provisions. Rounding of fill slopes shall be done in the same manner as shown for cut slopes.
 - Intersections of cut and fill slopes shall be warped as shown in fig. 4 and 5 when required by the plans or special provisions.
 - Warping of cut and fill slopes is for the purpose of attaining a more pleasing appearance and to promote the growth of natural vegetation by causing the fill slope to flow smoothly into the cut slope. The length of slope warping is relatively proportional to the character of the topography, the distance between end limits of warped surfaces being lessened as the terrain steepens and lengthened as the topography flattens out. The procedure as outlined herein is typical and shall be varied to meet special conditions and shall be as staked by the Engineer.
 - SUGGESTED PROCEDURE FOR WARPING SLOPING
 - Select end points for warping to fit specified slope ratios as follows:-
 - The dimensions A, B, and C shall all be constant throughout the full length of warping, E.
 - When the average depth of cut or fill is such that the dimension B+C exceeds 10 feet, the ends of warping shall be at points where B+C is 10 feet, provided the warping distance E does not exceed 100 feet. That is, as shown in fig. 4 and 5, warping shall begin at a cut or fill depth of 6.7 feet for 1.5:1 slopes, at 50 feet for 2:1 slopes, etc. if the dimension E exceeds 100 feet, the dimension B+C shall be reduced until the intersections of the prescribed slopes with the natural ground are 100 feet apart.
 - When the average depth of cut or fill is such that the distance B+C is between 5 feet and 10 feet, the ends of warping shall be at points where C is 0 feet, but such points shall not be more than 150 feet apart.
 - When the average depth of cut or fill is such that the dimension B is less than 5 feet, the ends of warping shall be 200 feet apart.
 - Set slope stakes at end of warping.
 - Set additional slope stakes at various intervals between end stakes and at the same distance from centerline.
 - Flatten and round warped slopes as shown in figure 4 for each section.
 - A layer of earth overlying a rock cut shall be rounded as far as possible as though the total height of slope were in earth cut.

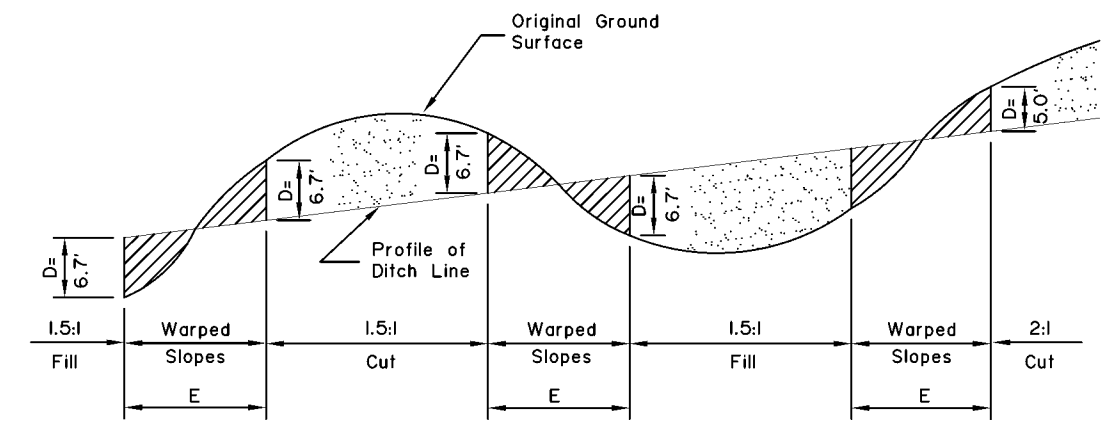


FIG. 5
TYPICAL PROFILE OF WARPED SLOPES
TYPICAL SLOPE WARPING

REVISIONS		
Date	Description	By

State of Alaska
Department of Transportation
& Public Facilities

SLOPE
ROUNDING & WARPING

APPROVED
7/15/82

Date