



H (FT)	VERTICAL		0.25 H : 1 V OR FLATTER	
	⑤ W <sub>T</sub> (FT)	W <sub>1</sub> (FT)	W <sub>T</sub> (FT)	W <sub>1</sub> (FT)
0-40	21	0	21	0
40-50	21	0	27	6
50-60	24	3	33	12
60-70	28	7	37	16
70-80	32	11	41	20
80-120	36	15	45	24
120-160	40	19	51	30
160-200	52	31	63	42

TABLE 1. ROCK CUT PRESPLIT SLOPES

FIGURE 1. ROCK CUT SLOPE AND CATCHMENT WIDTH DETAILS

FOOTNOTES

- ① SEE GEOTECHNICAL REPORT FOR ALLOWABLE OVERBURDEN CUT SLOPE RECOMMENDATIONS.
- ② OVERBURDEN BENCH TO BE MINIMUM OF 10' WIDE AS SPECIFIED IN GEOTECHNICAL REPORT. NO INTERMEDIATE BENCHES ARE TO BE USED UNLESS RECOMMENDED IN THE REPORT.
- ③ TOP OF WEATHERED ROCK ZONE (HENCE, THE THICKNESS -T) WILL BE VARIABLE. GEOTECHNICAL REPORT WILL PROVIDE PROJECT SPECIFIC GUIDANCE ON THICKNESS TO USE IN THE CROSS-SECTION DEVELOPMENT. THIS ZONE MAY CONTAIN ROCK PINNACLES, ROCK LENSES, OR WEATHERED ROCK MIXED WITH SOIL. BLASTING MAY BE REQUIRED TO REMOVE. CONSIDER EXCAVATION ITEM IN THIS ZONE TO BE UNCLASSIFIED, COMMON.
- ④ PRESPLIT SLOPE TO BE PROVIDED FOR SPECIFIC ROCK CUT INTERVALS IN GEOTECHNICAL REPORT. IT IS ASSUMED PRESPLIT FACES WILL BE FORMED OR SCALED OF LOOSE ROCKS AND OVERHANGS IN ACCORDANCE WITH TDOT STANDARD SPECIFICATIONS.
- ⑤ W<sub>T</sub> IS HORIZONTAL DISTANCE FROM SHOULDER (MID-POINT OF SLOPE ROUNDING) TO BASE OF PRESPLIT ROCK SLOPE. W<sub>T</sub> WILL BE 21 FEET OR GREATER IN ALL CASES. FOR ALL FORESLOPES OTHER THAN 6:1, SEE GEOTECHNICAL REPORT.

GENERAL NOTES

- (A) IF W<sub>T</sub> CANNOT BE ACHIEVED DUE TO RIGHT-OF-WAY RESTRICTIONS OR EXCESSIVE EXCAVATION, THEN A COMBINATION OF A NARROWER ROCKFALL DITCH (W<sub>1</sub>), ROCKFALL CATCHMENT FENCE OR BARRIER, OR ROCKSLOPE MESHING WILL BE REQUIRED. CONTACT GEOTECHNICAL ENGINEERING SECTION OR GEOTECHNICAL CONSULTANT FOR GUIDANCE.
- (B) A UNIFORM CATCHMENT WIDTH (W<sub>T</sub>) BASED ON THE HIGHEST ROCK CUT SLOPE (H), SHOULD BE USED.
- (C) FOR LONG CUT SLOPES WHERE A PREDOMINANT CUT HEIGHT EXISTS FOR SEVERAL STATIONS, UTILIZE W<sub>T</sub> FOR THAT GIVEN CUT HEIGHT (H). TRANSITION TO VARIOUS CATCHMENT WIDTHS ON A RATIO NO GREATER THAN 4 FEET HORIZONTAL W<sub>T</sub> PER 100 FOOT STATION INTERVAL.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

DESIGN AND  
CONSTRUCTION  
DETAILS  
FOR ROCK CUT SLOPE  
AND CATCHMENT

10-15-02 RDO1-S-11B