## Bond Rate Guidelines for 2006

Bond rate guideline calculations were completed using the previously established procedure. The data used was for the contracts for the 2002 through 2004 contract years. Weighted averaging was used. Frequency distribution was used to analyze the grading data.

The following table summarizes the new guidelines and provides a comparison with the previous guidelines:

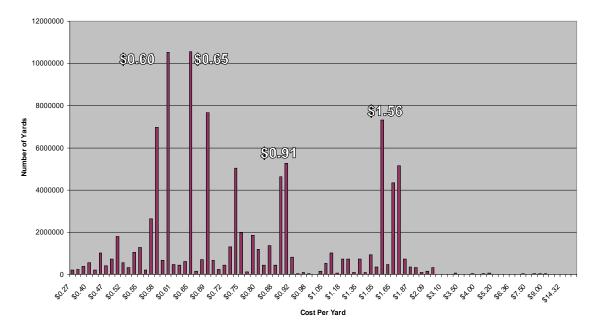
					Proposed 2006 BRG	
	Unit	BRG 8/01	2003 BRG	2004 BRG	2005 BRG	
Grading1	Yd	\$0.50	\$0.55	\$0.55	\$0.55	\$0.60
Grading2	Yd	\$0.80	\$0.80	\$0.80	\$0.80	\$0.90
Select Grading	Acre	\$625.00	\$800.00	\$875.00	\$985.00	\$1,100.00
Reveg	Acre	\$1,000.00	\$1,160.00	\$1,210.00	\$1,250.00	\$1,300.00
Trees	each	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15
Ditch Ex	Yd	\$3.19	\$4.50	\$4.50	\$4.25	\$4.50
Jute	sq yd	\$1.62	\$2.00	\$2.00	\$2.20	\$2.20
HV Erosion	sq yd	\$1.71	\$2.40	\$2.40	\$2.00	\$2.00
R3	sq yd	\$16.00	\$16.00	\$18.50	\$18.00	\$18.00
R4	sq yd	\$16.14	\$20.00	\$19.50	\$18.00	\$23.75
R5	sq yd	\$20.00	\$18.50	\$19.00	\$17.00	\$17.00
Geotex	sq yd	\$0.75	\$1.50	\$2.50	\$2.75	\$2.00
PVC lining	sq yd	\$5.38	\$8.00	\$11.00	\$9.50	\$9.50
Subdrain	foot	\$7.75	\$15.00	\$16.00	\$13.25	\$10.00

The calculations resulted in increases in the bond rate guidelines for grading, select grading, revegetation, ditch excavation, and R-4 rock lining. The most significant increases are in the grading, select grading and revegetation.

The analysis of the grading costs shows a substantial increase compared to previous years with peaks at \$0.60 per yard and \$0.65 per yard and a cluster around \$0.90 per yard. The three-year average for all earthmoving has increased from \$0.62 for the 2001-2003 period to \$0.88 per yard for the 2002-2004 time frame. This represents a 42% increase.

The frequency distribution used in previous years were not weighted. This year the both weighted and unweighted frequency distributions were used. The unweighted frequency distribution shows an unusual peak at \$1.10 per yard. The weighted frequency distribution (accounting for the number of yards at a particular rate) eliminates this unusual peak. Another peak on the weighted distribution deserves further explanation. There is a large peak at \$1.56 per yard. This results from one contract where the second lowest bidder on a large earthmoving contract bid this amount. The low bid for earthmoving on this same contract was \$0.69 per yard. Therefore the peak at \$1.56 has been disregarded.

## **Grading Weighted Frequency 2002-2004**



The calculations resulted in decreases in the Bond Rate Guidelines for Geotextile and Subdrain installation.

The Bond Rate Guidelines for Jute matting, High Velocity erosion control blankets, R-3 rock-lining, R-5 rock-lining and PVC lining remain the same as last year. In addition, the rates established in the middle of 2005 for the stage 3 maintenance bond remain the same.

A new bond rate guideline has been established for tire removal. This guideline (\$300.00 per tire) is based upon the contract price for removal and disposal of equipment tires under a contract coordinated by the Bureau of Waste Management.

A five-year average was used for selective grading due to the low quantity for 2003(27 acres) and 2004 (16 acres).

For revegetation the three-year average is \$1,339, the four-year average is \$1,304 and the five-year average is \$1291. Therefore \$1,300 is proposed as the bond rate guideline.

The rates for the stage three maintenance bond did not increase. These were calculated by taking the tasks that are included in the revegetation calculation, but not usually necessary in corrective planting (mulching, seed bed preparation and, for grassland, seed) and subtracting them from the \$1,300 guideline for revegetation. This results in a \$700 cost for cropland and a little less than \$500 for grassland.