PROJECT NO.: U-5873 SHEET 1 OF 1

COMPUTED BY: A. Weeks
CHECKED BY: F. Masterson

HECKED BY: F. Masterson SECTION: 226

## **GRADING (LUMP SUM)**

(THIS COMPUTATION SHEET APPLIES ONLY TO PROJECTS WHICH HAVE BEEN PREDETERMINED TO USE THIS PAY ITEM. SEE ROADWAY DESIGN MANUAL, PART I, 11-6)

ITEM	QUANTITIES	UNIT	UNIT PRICE		PRICE	
CLEARING AND GRUBBING	5.90	ACRES	\$	10,000.00	\$	59,000.00
UNCLASSIFIED EXCAVATION	6,700	$YD^3$	\$	15.00	\$	100,500.00
BORROW EXCAVATION	19,000	$YD^3$	\$	20.00	\$	380,000.00
SHOULDER BORROW		$YD^3$	\$	6.25	\$	
FINE GRADING	9,020	$YD^2$	\$	2.50	\$	22,550.00
REMOVAL OF EXISTING ASPHALT PAVEMENT	3,350	YD <sup>2</sup>	\$	2.50	\$	8,375.00
REMOVAL OF EXISTING CONCRETE PAVEMENT		$YD^2$	\$	10.00	\$	
BREAKING OF EXISTING ASPHALT PAVEMENT		$YD^2$	\$	2.00	\$	
BREAKING OF EXISTING CONCRETE PAVEMENT		YD <sup>2</sup>	\$	5.00	\$	
				TOTAL	\$	570,425.00

IF THE SUMMATION OF THE ITEM AMOUNTS IS \$1,000,000.00 OR LESS, THEN THE GRADING MAY BE LET ON A "LUMP SUM" BASIS WITH CONCURRENCE OF THE DIVISION ENGINEER. IF THE COST OF ANY ONE OF THE ITEMS, EXCLUDING CLEARING AND GRUBBING AND FINE GRADING, IS 50% OR MORE OF THE TOTAL COST CALCULATED, THEN THAT ITEM SHALL BE INCLUDED AS AN INDIVIDUAL ITEM WITH THE OTHER ITEMS BEING DONE ON A "LUMP SUM GRADING" BASIS. A SPECIAL PROVISION WILL BE NEEDED IN THIS CASE AND THE PAY ITEM "GRADING" SHOULD BE INDICATED AS A "SP" IN THE ESTIMATE. IF THE SUM OF THE LUMP SUM ITEMS AMOUNTS EXCEEDS \$1,000,000.00 OR IS 25% MORE OF THE TOTAL COST OF THE PROJECT, THE PROJECT SHALL CONTAIN THE INDIVIDUAL ITEMS, IT WILL BE NECESSARY TO CALCULATE AND SHOW THE PAVEMENT STRUCTURE VOLUME ON THE SUMMARY OF EARTHWORK.

OTHER CONSIDERATIONS FOR LUMP SUM GRADING MAY UTILIZE A DOLLAR LIMIT. FOR EXAMPLE 3R PROJECTS WITH "TRENCHING & WIDENING" AND MINOR GRADING SHOULD BE CONSIDERED WHEN USE OF CROSS-SECTIONS FOR EARTHWORK BY THE RESIDENT ENGINEER IS NOT PRACTICAL. WHEN APPLYING LUMP SUM GRADING TO THESE SPECIAL APPLICATIONS, APPROVAL BY THE ASSISTANT STATE ROADWAY DESIGN ENGINEER AND PROPOSALS AND CONTRACTS SECTION ENGINEER IS REQUIRED ON A PROJECT-BY-PROJECT BASIS.

<sup>\*</sup> LIST ALL QUANTITIES ON THE CALCULATION SHEET EVEN IF THE PAY ITEM PRICE EXCEEDS 50% OR MORE OF THE TOTAL COST.