

# CEE 4333 - Estimating Planning and Control

*Spring 2006*

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## **Homework 6**

**Homework due: 04/05/06, in class**

March 22, 2006

### **Problem 1**

Develop a cash flow for the project information provided below. For this project *15 Points*

Table 1: Cost for the Activities of a Sports Facility Project

Activity	Duration	Predecessors	Cost
Mobilize	2	-	\$5,000
Stock Materials	4	Mobilize	\$22,000
Clearing and Grubbing	6	Mobilize	\$8,000
Grading of Road	7	Mobilize	\$2,500
Finish Grade	5	Stock Materials, Clearing and Grubbing	\$3,000
Prefab Bleachers	16	Stock Materials	\$18,000
Landscape	12	Stock Materials Clearing and Grubbing	\$35,000
Pave Road	8	Grading for Road	\$30,000
Place Tennis Court	10	Finish grade	\$20,000
Erect/paint bleachers	7	Prefab bleachers, Clearing and Grubbing	\$16,000
Curbing	5	Landscape, Pave roadway	\$6,000
Final Inspection/Clean-up	3	Place tennis court, erect/paint bleachers, curbing	\$4,000

the total expenditures amount to \$150,000 and the receipts are \$170,000 for a total profit of \$20,000. The retainage is 10% and the owner makes payments on the 10th and the 25th of the month.

- Find the total duration of the project
- Perform a cash flow analysis and find the net worth of the profit for interest rates of 6% and 12%.