



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Kentucky Plantation Sale 341-07-62

District: Coos

Date: 11/2/06

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$414,353.02	\$38,646.27	\$452,999.29
		Project Work	(\$31,173.00)
		Advertised Value	\$421,826.29



Timber Sale Appraisal Timber Description Kentucky Plantation Sale 341-07-62

"STEWARDSHIP IN FORESTRY"

District: Coos

Location: Portions of Sections of 23, 24, and 25, T24S, R12W, W.M.,
Coos County, Oregon.

Date: 11/2/06

Stand Stocking: 80%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	14	0	95
Western Hemlock / Fir	17	0	90
Alder (Red)	12	0	90

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Alder (Red)	Total
2S	403	13	0	416
3S	544	3	0	547
3S 12"+	53	6	0	59
4S	236	4	0	240
6"	0	0	157	157
10" - 11"	0	0	64	64
Total	1,236	26	221	1,483

Comments: Pond Values Used: 3rd Quarter Calendar Year 2006.

Western Red Cedar Stumpage Price = Pond Value minus Logging Costs.
 $\$570/\text{MBF} = \$825/\text{MBF} - \$255/\text{MBF}$

Hauling costs adjusted to make equivalent to \$700 daily truck cost.

Hauling Cost Calculation Conifers:

$\$700 - \% \text{ Profit \& Risk } (\$700 / 1.15) = \$608 \text{ Daily Truck Cost.}$

$\$608 \text{ Daily Truck Cost} / (4 \text{ trips per day} \times 4.0 \text{ MBF per load}) = \$38.00/\text{MBF Hauling Cost.}$

Hauling Cost Calculation Hardwoods:

$\$700 - \% \text{ Profit \& Risk } (\$700 / 1.15) = \$608 \text{ Daily Truck Cost.}$

$\$608 \text{ Daily Truck Cost} / (4 \text{ trips per day} \times 3.5 \text{ MBF per load}) = \$43.43/\text{MBF Hauling Cost.}$

Summary of "Other Costs" (See attached sheet).



Timber Sale Appraisal Logging Conditions Kentucky Plantation Sale 341-07-62

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	100.00%	
	Western Hemlock / Fir	100.00%	
	Alder (Red)	100.00%	
Yarding Distance:	Long (1,500 ft)		Downhill Yarding: No
Logging System:	Cable: Medium Tower >40 - <70		Process: Manual Delimiting
Tree Size:	Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF		
Loads/Day:	6		Bd. Ft./Load: 3,500
Cost/MBF:	\$157.93		
Machines:			
	Log Loader (A)		
	Tower Yarder (Medium)		



Timber Sale Appraisal Logging Costs Kentucky Plantation Sale 341-07-62

"STEWARDSHIP IN FORESTRY"

Date: 11/2/06

Operating Seasons: 1.0

Profit & Risk: 15%

Project Costs: \$31,173

Other Costs (P/R): \$7,383

Slash Disposal: \$0

Other Costs: \$0

Road Maintenance: \$0.00

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
0.4	0.0	2.0	0.0

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$38.00	4.0	4.0
Western Hemlock / Fir	\$38.00	3.0	4.0
Alder (Red)	\$43.43	4.0	3.5

Local Pond Values

Date	Species	Grade	Value
11/2/06	Douglas - Fir	2S	\$620.00
11/2/06	Douglas - Fir	3S	\$565.00
11/2/06	Douglas - Fir	3S 12"+	\$370.00
11/2/06	Douglas - Fir	4S	\$545.00
11/2/06	Western Hemlock / Fir	2S	\$435.00
11/2/06	Western Hemlock / Fir	3S	\$415.00
11/2/06	Western Hemlock / Fir	3S 12"+	\$260.00
11/2/06	Western Hemlock / Fir	4S	\$410.00
11/2/06	Alder (Red)	6"	\$355.00
11/2/06	Alder (Red)	10" - 11"	\$590.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Kentucky Plantation Sale 341-07-62

Costs	Douglas - Fir	Westem Hemlock / Fir	Alder (Red)
Logging	157.93	157.93	157.93
Road Maintenance	1.01	1.07	1.07
Fire Protection	1.83	1.83	1.83
Hauling	40.00	42.22	48.26
Other (P/R appl.)	4.98	4.98	4.98
Profit & Risk	30.86	31.20	32.11
Slash Disposal	0.00	0.00	0.00
Scaling	2.00	2.00	2.00
Other	0.00	0.00	0.00
Total	238.61	241.23	248.18

Amortization	0.00	0.00	0.00
Pond Value	570.75	388.46	423.05
Stumpage	332.14	147.23	174.87
Amortized	0.00	0.00	0.00



Timber Sale Appraisal Summary Kentucky Plantation Sale 341-07-62

"STEWARDSHIP IN FORESTRY"

Amortized

	Douglas - Fir	Westem Hemlock / Fir	Alder (Red)
MBF	0.00	0.00	0.00
Value	0.00	0.00	0.00
Total	0.00	0.00	0.00

Unamortized

	Douglas - Fir	Westem Hemlock / Fir	Alder (Red)
MBF	1,236.00	26.00	221.00
Value	332.14	147.23	174.87
Total	410,525.04	3,827.98	38,646.27

Gross Timber Sale Value

Recovery \$452,999.29

Prepared by: Gloria Clary

Date: 11/2/06

District: Coos

Phone: (541) 267-1757

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Kentucky Plantation

Additional "Other Costs" with additional Profit and Risk to be added:

	<u>Units</u>	<u>Quantity</u>	<u>Cost/Unit</u>	<u>Total Cost</u>
Felling				
Directional Felling	MBF	900	\$ 2.00	\$1,800
Yarding and Loading				
Brand and paint logs	MBF	1,483	\$ 1.00	\$1,483
Loader time for firewood stacking	Hours	8	\$ 75.00	\$ 600
Snag Creation				
Tree Topping	Trees	21	\$ 100.00	\$2,100
Tree Girdling	Trees	20	\$ 20.00	\$ 400
Miscellaneous Costs				
Additional Fire Equipment	Seasons	1	\$1,000.00	\$1,000

Total additional "Other Costs" with additional Profit and Risk to be added:

\$7,383.00

SUMMARY OF CONSTRUCTION COST
Kentucky Plantation

Project 1A: Road and Landing Construction

Points: B to C Length: 675' Type: 14' subgrade no ditch

Clearing and Grubbing

Clear and Grub	<u>0.6</u>	acres at	<u>\$870.00</u>	per acre	<u>\$522.00</u>
					Total Clear and Grub
					\$522.00

Excavation

Excavator	<u>25</u>	hrs at	<u>\$120.00</u>	per hr	<u>\$3,000.00</u>
Cat time (road work & prep waste area Pt I)	<u>30</u>	hrs at	<u>\$120.00</u>	per hr	<u>\$3,600.00</u>
Dump Truck	<u>15</u>	hrs at	<u>\$75.00</u>	per hr	<u>\$1,125.00</u>
Laborer	<u>30</u>	hrs at	<u>\$30.00</u>	per hour	<u>\$900.00</u>
					Total Excavation
					\$8,625.00

Grader

Grader to smooth road surface	<u>1</u>	hrs at	<u>\$75.00</u>	per hour	<u>\$75.00</u>
					Total Grader
					\$75.00
					Total Project 1A
					\$9,222.00

Project 1B: Landing Construction

Points: D Length: n/a Type: n/a

Excavator - create pad above road	<u>4</u>	hrs at	<u>\$120.00</u>	per hr	<u>\$480.00</u>
Dump Truck - haul waste material to Pt I (0.3 mi one-way)	<u>2</u>	hrs at	<u>\$75.00</u>	per hr	<u>\$150.00</u>
Laborer	<u>4</u>	hrs at	<u>\$30.00</u>	per hour	<u>\$120.00</u>
					Total Project 1B
					\$750.00

Project 1C: Landing Construction

Points: G Length: n/a Type: n/a

Excavator (excavate all material and place portion of material below road at Pt G)	<u>6</u>	hrs at	<u>\$120.00</u>	per hr	<u>\$720.00</u>
Cat time (shape waste areas at G and J)	<u>4</u>	hrs at	<u>\$120.00</u>	per hr	<u>\$480.00</u>
Dump Truck - haul waste material to Pt J	<u>6</u>	hrs at	<u>\$75.00</u>	per hr	<u>\$450.00</u>
Laborer	<u>6</u>	hrs at	<u>\$30.00</u>	per hour	<u>\$180.00</u>
					Total Project 1C
					\$1,830.00

**SUMMARY OF CONSTRUCTION COST
Kentucky Plantation**

Project 1D: Landing Construction

Points: H Length: n/a Type: n/a

Excavator	40	hrs at	\$120.00	per hr	\$4,800.00
Cat time (road work & prep waste area Pt J)	20	hrs at	\$120.00	per hr	\$2,400.00
Drill and shoot	390	yds at	\$3.75	per yd	\$1,462.50
Dump Truck - haul waste material to Pt J (0.5 mi one-way)	40	hrs at	\$75.00	per hr	\$3,000.00
Laborer	40	hrs at	\$30.00	per hour	\$1,200.00

Total Project 1D \$12,862.50

Move-in (includes lowboy return trip for next piece of equipment)

Equipment	Miles	hrs	Lowboy Rate/hr	Total
Excavator	20	2.5	\$95.00	\$237.50
Cat	20	4	\$95.00	\$380.00
Grader	20	4	\$95.00	\$380.00
Drill & Comp	20	4	\$95.00	\$380.00
Dump Truck	20	4	\$95.00	\$380.00

Total Move-in: \$1,757.50

Project 1 Total \$26,422.00

Project 2A: Landing Improvement

Points: E Length: n/a Type: n/a

Excavator to remove material piles	4	hrs at	\$120.00	per hour	\$480.00
Dump truck to haul material to Pt F	4	hrs at	\$75.00	per hour	\$300.00

Total Project 2A \$780.00

Project 2B: Landing Improvement

Points: F Length: n/a Type: n/a

Cat time for shaping waste material	2	hrs at	\$120.00	per hour	\$240.00
Excavator	2	hrs at	\$120.00	per hour	\$240.00

Total Project 2B \$480.00

Project 2 Total \$1,260.00

Project 3: Road Surfacing

Points: Landing locations
Rock Type: 1 1/2"-0" Hard Crushed Quarry
Depth: As needed after logging

1 1/2"-0" Rock (1.5 hr RT)	180	yds at	\$15.89	per yd	\$2,860.20
Grader to prepare road surface and to process rock (includes move-in)	180	yds at	\$3.50	per yd	\$630.00

Project 3 Total \$3,491.00

Total Project Costs \$31,173.00

TIMBER SALE SUMMARY

Kentucky Plantation

1. **Type of sale:** Final harvest; Recovery, Sealed Bid.
2. **Boundary Lines:** Sale boundaries are marked on the ground with "Timber Sale Boundary" posters, red paint, and red flagging at locations shown on the Exhibit A.
3. **Revenue Distribution:** 100% CSL; 100% Coos County.
4. **Sale Acreage:** The total sale area is 82 net acres. Grouped green trees and buffer areas are posted outside the sale area and are not included in the net acreage calculation. The acreage was determined using orthophoto imagery on the ARCVIEW Geographic Information System program.
5. **Volume by Species, Fund, and County:** See attached table.
6. **Grade by Percent:**

Species	3 Peeler	Special Mill	2 Saw	3 Saw	3 Saw Large Diameter	4 Saw/Camp
Douglas-fir	-----	-----	33 %	44 %	4 %	19 %
Red Alder	-----	-----	-----	29 %	-----	71 %
Western Red Cedar	-----	-----	-----	-----	-----	-----
Western Hemlock	-----	-----	51 %	12 %	23 %	14 %
Sitka Spruce	-----	-----	-----	-----	-----	-----

7. **Cruise:** The unit was variable plot cruised using the Big BAF cruise design, which consisted of 94 nested plots. Each plot consists of both a full 40 BAF count plot and a full 250 BAF measure plot. The 40 BAF count plot was used to tally the number of trees by species to determine the stand basal area. The 40 BAF plot was then used to select hardwoods and minor species to cruise and the 250 BAF plot to select Douglas-fir trees to cruise. Selected trees were cruised for diameter at breast height, height, grade and defect. Sixty-four Douglas-fir Big BAF trees were cruised for diameter, height, grade and defect. The cruise was analyzed using the SuperACE cruising program.

A. Cruise Summary Data:

Diameter	Top Diameter	Form Point	Form Factor	CV %	SE %
D4H	Total Height	Conifer: 16' Hardwood: 16'	Estimated or measured on all trees	65.8	8.4

B. Stand Summary:

Species	D4H	Trees per Acre	Basal Area (ft ² /ac)	BF per acre
Douglas-fir	14	110	146	15,073
Red Alder	12	42	41	1,886
Western Cedar	0	0	0	0
Big Leaf Maple	12	1	2	808
Western Hemlock	17	1	2	317

C. Green Tree Retention Summary: Most green trees were posted outside of the timber sale, except scattered trees which will be removed from the cruise. These scattered trees are marked with a "W" in red.

8. **Timber Description:** The timber sale is a moderately stocked stand of approximately 39 year old second growth Douglas-fir, of good to average quality, with red alder, western red cedar, and western hemlock in the understory. Conifers range from 70 to 115 feet tall while hardwoods are about 40 to 60 feet.

9. **Topography:** The unit ranges from 15% to 90% slope. There are a few benches as well as steep drainages.

10. **Logging Method:** The sale will be cable logged mostly uphill with single-end suspension over the unit; full suspension will be required over designated streams and RMAs. A motorized carriage will be required to obtain the necessary suspension. Tailtrees may need to be placed for yarding the sale area as approved in the operations plan.

11. **Access:** From Coos Bay, proceed north on highway 101 to North Bay Road, proceed for 2 miles and then enter the forest from the west on Larson Way, take the 3000 Rd. to approximately the 3 miles, and then proceed down the 3200 Rd. for $\frac{3}{4}$ of a mile to the timber sale area.

12. **Projects:**

Project No. 1: Road and Landing Construction

Project No. 2: Landing Improvement

Project No. 3: Road/Landing Surfacing

NET VOLUMES AND ACREAGE

SALE AREA & SPECIES		Tree cnt. 100% Units	NET VOLUMES (MBF)							
			By County and Fund						Total Vols.	Vol. per Acre
			Coos			Douglas				
Area	Spec	CSL	BOF	Total	CSL	BOF	Total			
I	D-fir	1236		1236			0	1236	15.07	
	Hdwd	221		221			0	221	2.70	
	Cedar	0		0			0	0	0.00	
	Spruce	0		0			0	0	0.00	
	Hemlock	26		26			0	26	0.32	
TOTALS		1483	0	1483	0	0	0	1483		

TOTAL SALE VOLUME BY SPECIES

Douglas-fir	1236	MBF
Hemlock	26	MBF
Cedar	0	MBF
Spruce	0	
Hardwoods	221	MBF
Total	1483	MBF

Report by: Kentucky Plantation

Date: 03/06/2006

Unit For. *[Signature]* 3/6/06
Date

Asst. Dist. For. *[Signature]* 3.6.2006
Date

UTILITY VOLUME NOT SHOWN TO PROVIDE FOR RETENTION OF DOWN LOGS
NO INGROWTH INCLUDED

ACREAGE BY COUNTY (to nearest acre)

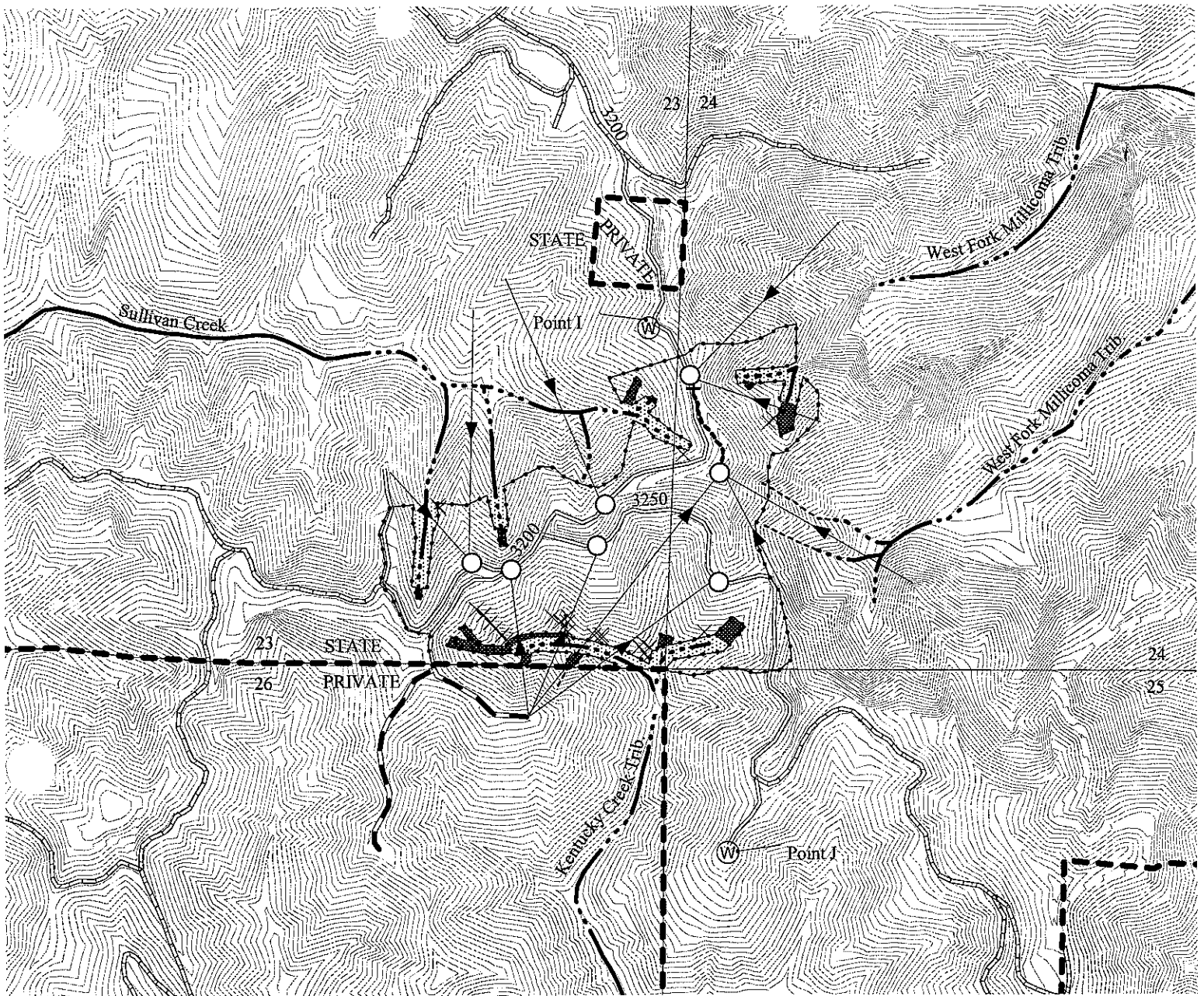
Sale Area	Coos County						Douglas County						TOTAL ACRES
	CSL			BOF			CSL			BOF			
	Conifer		Hard wood	Conifer		Hard woods	Conifer		Hard woods	Conifer		Hard woods	
cc	pc	cc		pc	cc		pc	cc		pc			
I	82												82
													0
													0
													0
SUM	82	0	0	0	0	0	0	0	0	0	0	0	82

cc- clearcut

pc- partial cut

BOF - Board of Forestry

CSL - Common School Land



LEGEND

- Landing
- + Project Point
- Ⓜ Waste Area
- ▬ Posted Sale Boundary
- ▬ Elliott State Forest Boundary
- Roads**
- ▬ State Maintained Roads
- ▬ Purchaser Maintained (STATE) Roads
- ▬ New Road Construction
- ▬ Purchaser Maintained (PRIVATE) Roads
- ▬ Yarding Corridor
- Streams**
- ▬ Type F
- ▬ Type N Perennial
- ▬ Type N Seasonal
- ▬ Stream Buffer
- ▬ Reforestation Area
- ▬ Green Tree Retention Group
- × Green Tree Retention Single
- ▬ Contours: 20 Foot

LOGGING PLAN

KENTUCKY PLANTATION
 341-07-62
 PORTIONS OF SECTIONS 23, 24 AND 25
 T24S, R12W
 COOS COUNTY, OREGON
 APPROXIMATELY 82 NET HARVEST ACRES



APPROX. SCALE: 1"=1000'

