



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary South Coast Range Sale 341-04-46

District: Tillamook

Date: 8/6/03

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$372,215.80	\$91,817.00	\$464,032.80
		Project Work	(\$124,891.07)
		Advertised Value	\$339,141.73



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Timber Description South Coast Range Sale 341-04-46

District: Tillamook

Location: Section 25, T2S, R8W, W.M., Tillamook County.

Date: 8/6/03

Stand Stocking: 80%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	13	0	95
Alder (Red)	13	0	95

Volume by Grade	Douglas - Fir	Alder (Red)	Total
2S	24	0	24
3S	1,395	0	1,395
4S	361	0	361
Camprun	0	340	340
Total	1,780	340	2,120

Comments: Pond Values Used: 2nd Quarter 2003

Road Maintenance Total: \$2.58/MBF

Grading: \$500/mile (final) x 6.5 miles x 1 time/2120mbf = \$1.53/mbf

Surfacing: 25 cy/mile x 6.5 miles x 2.1mmbf x \$6.50/yard /2120mbf = \$1.05

Other Costs (plus profit and risk): Total = \$4240

Brand and Paint: \$2.00/mbf x 2120mbf = \$4240

Other Costs (profit and risk included): Total = \$773

Non-project Road

5 stations x \$100/station = \$500

Block OHV trail (1) @ \$75 = \$75

Slash piling and sorting

\$110/hr/50 acres cable harvest x 90 acres = 1.8 hrs = \$198



Timber Sale Appraisal Logging Conditions South Coast Range Sale 341-04-46

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	55.50%	
	Alder (Red)	59.89%	
Yarding Distance:	Medium (800 ft)		Downhill Yarding: No
Logging System:	Cable: Small Tower <=40		Process: Stroke Delimber
Tree Size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
Loads/Day:	5		Bd. Ft./Load: 3,200
Cost/MBF:	\$173.30		
Machines:			
	Log Loader (A)		
	Stroke Delimber (A)		
	Tower Yarder (Small)		
Combination#: 2	Douglas - Fir	44.50%	
	Alder (Red)	40.11%	
Yarding Distance:	Short (400 ft)		Downhill Yarding: Yes
Logging System:	Track Skidder		Process: Manual Falling/Delimiting
Tree Size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
Loads/Day:	8		Bd. Ft./Load: 3,200
Cost/MBF:	\$127.56		
Machines:			
	Log Loader (B)		
	Track Skidder		



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs South Coast Range Sale 341-04-46

Date: 8/6/03

Operating Seasons: 2.0

Profit & Risk: 15%

Project Costs: \$124,891

Other Costs (P/R): \$4,240

Slash Disposal: \$0

Other Costs: \$773

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

Road Maintenance: \$2.58

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	2.0	3.5
Alder (Red)	\$0.00	3.0	3.2



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown South Coast Range Sale 341-04-46

Costs	Douglas - Fir	Alder (Red)
Logging	152.94	154.95
Road Maintenance	2.72	2.72
Fire Protection	2.56	2.56
Hauling	69.16	46.11
Other (P/R appl.)	2.00	2.00
Profit & Risk	34.41	31.25
Slash Disposal	0.00	0.00
Scaling	2.00	0.00
Other	0.36	0.36
Total	266.15	239.95

Amortization	0.00	0.00
Pond Value	475.26	510.00
Stumpage	209.11	270.05
Amortized	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary South Coast Range Sale 341-04-46

Amortized

	Douglas - Fir	Alder (Red)
MBF	0.00	0.00
Value	0.00	0.00
Total	0.00	0.00

Unamortized

	Douglas - Fir	Alder (Red)
MBF	1,780.00	340.00
Value	209.11	270.05
Total	372,215.80	91,817.00

Gross Timber Sale Value

Recovery \$464,032.80

Prepared by: Don Everingham

Date: 8/6/03

District: Tillamook

Phone: (503) 842-2545

PROJECT SUMMARY SHEET

Sale: South Coast Range

CONSTRUCTION

Point	A to B	19+10	stations =	\$23,035.00
Point	I to J	5+05	stations =	\$11,739.67
Point	K to L	3+85	stations =	\$7,724.81
SUBTOTAL CONSTRUCTION				\$42,499.48

IMPROVEMENT

Point	A to B	14+40	stations =	\$17,366.71
Point	C to D	8+65	stations =	\$7,179.73
Point	E to F	10+90	stations =	\$8,802.43
Point	G to H	22+50	stations =	\$44,203.37
SUBTOTAL IMPROVEMENT				\$77,552.24

SPECIAL PROJECTS

Remove Culverts from State Lands				\$30.00
Road Vacating	25+05	Stations of road		\$1,840.44
SUBTOTAL SPECIAL PROJECTS				\$1,870.44

MOVE IN

\$2,968.91

GRAND TOTAL

\$124,891.07

SUMMARY OF CONSTRUCTION COST

Sale:	<u>South Coast Range</u>	Road:	<u>Road Vacating</u>
Construction -	<u>0</u> stations <u>0.00</u> miles	Improvement -	<u>0</u> stations <u>0.00</u> miles
CLEARING AND GRUBBING -			
Scattering	0.00 acres @	\$790.00 per acre =	<u>\$0.00</u>
Waste Area	0.00 acres @	\$513.00 per acre =	<u>\$0.00</u>
		TOTAL CLEARING AND GRUBBING	\$0.00
EXCAVATION -			
w/ Dozer	0 Hrs. @	\$130.31 per Hr. =	<u>\$0.00</u>
		TOTAL EXCAVATION	\$0.00
CULVERTS - MATERIALS & INSTALLATION			
	Culverts		
	0 LF of 18" \$0.00	0 LF of 24" \$0.00	
	0 LF of 30" \$0.00	0 LF of 36" \$0.00	
	0 LF of 42" \$0.00	0 LF of 48" \$0.00	
	0 LF of 54" <u>\$0.00</u>	0 LF of 60" <u>\$0.00</u>	
	\$0.00	\$0.00	
	Half Rounds		
	0 LF of 21" \$0.00	0 LF of 30" \$0.00	
	0 LF of 36" \$0.00	0 LF of 42" \$0.00	
	0 LF of 48" \$0.00	0 LF of 54" \$0.00	
	0 LF of 60" <u>\$0.00</u>	0 LF of 66" <u>\$0.00</u>	
	\$0.00	\$0.00	
	Culvert Stakes		
	0 stakes <u>\$0.00</u>		
		TOTAL CULVERTS	\$0.00
SURFACING-			
	0 cy. of Pit-Run @	\$0.00 per c.y.=	<u>\$0.00</u>
	0 cy. of 2-1/2" @	\$0.00 per c.y.=	<u>\$0.00</u>
		TOTAL FOR STOCKPILE	\$0.00
SPECIAL PROJECTS			
Road Vacating: Spur off of A to B (13+00 Stations) [only vacate portion on STATE]	13.0 Stations @ \$9.75/Station		\$126.75
---Remove Log Fills (Stations: 7+00, 11+70, & 13+00)	11 Hour @ \$130/Hour		\$1,430.00
---Grass Seed and Fertilize	0.15 Acres @ \$180/Acre		\$27.00
---Straw Mulch around areas with water (machine blower)	0.1 Acres @ \$600/Acre		\$60.00
Road Vacating: Existing Road next to new A to B realignment	12.05 Stations @ \$9.75/Station		\$117.49
---Grass Seed and Fertilize	0.44 Acres @ \$180/Acre		\$79.20
		TOTAL SPECIAL PROJECTS	\$1,840.44
		GRAND TOTAL	\$1,840.44

SUMMARY OF CONSTRUCTION COST

Sale:	<u>South Coast Range</u>				Road:	<u>A to B</u>				
Construction -	<u>19+10 stations</u> <u>0.36 miles</u>				Improvement -	<u>14+40 stations</u> <u>0.27 miles</u>				
CLEARING AND GRUBBING -										
Widening				0.066 acres @	\$540.00 per acre =			\$35.64		
Scattering				1.920 acres @	\$815.00 per acre =			\$1,564.80		
Piling				0.000 acres @	\$905.00 per acre =			\$0.00		
Endhaul				0.000 acres @	\$1,500.00 per acre =			\$0.00		
					TOTAL CLEARING AND GRUBBING				\$1,600.44	
EXCAVATION -										
Road Earthwork (Sta. 0+00 - 7+15)				7.15 sta. @	\$65.00 per sta. =			\$464.75		
Excavation (Common) -				1950 cy. @	\$1.15 per c.y.=			\$2,242.50		
Widening				581 cy. @	\$1.40 per c.y.=			\$813.40		
Road Earthwork (Sta. 26+45 - 33+50)				7.05 sta. @	\$100.00 per sta. =			\$705.00		
					TOTAL EXCAVATION				\$4,225.65	
ENDHAUL -										
Road Work Waste	9+35	to	22+00	120 cy. @	\$1.78 per c.y.=			\$213.60		
Log Fill/Material	6+95	to	7+35	3 Hrs. @	\$57.00 per Hour =			\$171.00		
Log Fill/Material	15+90	to	16+50	2 Hrs. @	\$57.00 per Hour =			\$114.00		
Log Fill/Material	31+40	to	32+40	1 Hrs. @	\$57.00 per Hour =			\$57.00		
Widening	3+40	to	4+20	196 cy. @	\$1.03 per c.y.=			\$201.88		
Widening	8+20	to	9+35	385 cy. @	\$1.18 per c.y.=			\$454.30		
Spread & Compact (waste)				120 cy. @	\$0.20 per c.y.=			\$24.00		
Spread & compact (Fill)				1830 cy. @	\$0.35 per c.y.=			\$640.50		
					TOTAL ENDHAUL				\$1,876.28	
CULVERTS - MATERIALS & INSTALLATION										
				<u>Culverts</u>						
	270		LF of 18"	\$3,982.50		46	LF of 24"	\$816.50		
	0		LF of 30"	\$0.00		0	LF of 36"	\$0.00		
	0		LF of 42"	\$0.00		0	LF of 48"	\$0.00		
	0		LF of 54"	\$0.00		0	LF of 60"	\$0.00		
	0		LF of 66"	\$0.00		0	LF of 72"	\$0.00		
				\$3,982.50				\$816.50		
				<u>Half Rounds</u>						
	0		LF of 21"	\$0.00		0	LF of 30"	\$0.00		
	0		LF of 36"	\$0.00		0	LF of 42"	\$0.00		
				\$0.00				\$0.00		
				<u>Culvert Stakes & Markers</u>						
	0		stakes	\$0.00						
	8		markers	\$48.00						
				\$48.00						
					TOTAL CULVERTS				\$4,847.00	
SURFACING-										
Culvert Backfill	7+15	25	cy. of	Crushed	@	\$5.45 per c.y.=		\$136.25		
Fill/Dissipator	7+15	75	cy. of	Riprap	@	\$7.72 per c.y.=		\$579.00		
0+00 to	26+45	1,993	cy. of	Pit-Run	@	\$8.39 per c.y.=		\$16,721.27		
26+45 to	33+50	405	cy. of	Pit-Run	@	\$8.73 per c.y.=		\$3,535.65		
Backfill	7+15	90	cy. of	Pit-Run	@	\$8.02 per c.y.=		\$721.80		
Junction Rock	0+00, 17+15, 20+00, & 26+45	120	cy. of	Pit-Run	@	\$8.13 per c.y.=		\$975.60		
						TOTAL SURFACING				\$22,669.57
SPECIAL PROJECTS										
Construct waste areas -				1.50	hours @	\$130.00 per hour		\$195.00		
Grade and shape road (ditched) -				28.10	stations @	\$14.20 per station		\$399.02		
Construct Rolling Dips				2.00	@	\$150.00 each		\$300.00		
Grade and Shape road (outsloped) -				5.40	stations @	\$9.75 per station		\$52.65		
Roll subgrade w/ vibratory roller prior to rocking -				33.50	stations @	\$11.00 per station		\$368.50		
Remove log culvert @ stations: 6+95 - 7+35				4.00	hours @	\$130.00 per hour		\$520.00		
Remove logs in fill @ stations: 15+90 - 16+50 & 31+40 - 32+40				3.00	hours @	\$130.00 per hour		\$390.00		
Remove large stumps -				\$2,600.00	lump sum			\$2,600.00		
Grass seed and fertilize -				1.92	acres @	\$180.00 per acre		\$345.60		
Mulching -				0.020	acres @	\$600.00 per acre		\$12.00		
						TOTAL SPECIAL PROJECTS				\$5,182.77
GRAND TOTAL								\$40,401.71		

SUMMARY OF CONSTRUCTION COST

Sale:	<u>South Coast Range</u>	Road:	<u>C to D</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles	Improvement -	<u>8+65</u> stations <u>0.16</u> miles
CLEARING AND GRUBBING -			
Scattering	0.790	acres @	\$815.00 per acre = \$643.85
Piling	0.00	acres @	\$905.00 per acre = \$0.00
Endhaul	0.00	acres @	\$1,500.00 per acre = \$0.00
			TOTAL CLEARING AND GRUBBING \$643.85
EXCAVATION -			
Road Earthwork	8.65	sta. @	\$100.00 per sta. = \$865.00
Remove outside berm	25	cy. @	\$1.15 per c.y.= \$28.75
			TOTAL EXCAVATION \$893.75
ENDHAUL -			
Remove outside berm	0+00 to 1+60 and 3+40 to 8+65	0	cy. @ \$0.86 per c.y.= \$0.00
Spread & compact		0	cy. @ \$0.20 per c.y.= \$0.00
			TOTAL ENDHAUL \$0.00
CULVERTS - MATERIALS & INSTALLATION			
	<u>Culverts</u>		
	0	LF of 18"	\$0.00
	0	LF of 30"	\$0.00
	0	LF of 42"	\$0.00
	0	LF of 54"	\$0.00
	0	LF of 66"	\$0.00
			<u>\$0.00</u>
	<u>Half Rounds</u>		
	0	LF of 21"	\$0.00
	0	LF of 36"	\$0.00
			<u>\$0.00</u>
	<u>Culvert Stakes & Markers</u>		
	0	stakes	\$0.00
	0	markers	\$0.00
			<u>\$0.00</u>
			TOTAL CULVERTS \$0.00
SURFACING-			
0+00 to	8+65	463	cy. of Pit-Run @ \$8.28 per c.y.= \$3,833.64
			TOTAL SURFACING \$3,833.64
SPECIAL PROJECTS			
Grade and shape road -	8.65	stations @	\$9.75 per station \$84.34
Construct Rolling Dips	2.00	@	\$150.00 each \$300.00
Roll subgrade w/ vibratory roller prior to rocking -	8.65	stations @	\$11.00 per station \$95.15
Remove logs in Fill; Station 3+65 -	1.00	hours @	\$130.00 per hour \$130.00
Remove large stumps -	\$910.00	lump sum	\$910.00
Grass seed and fertilize -	0.50	acres @	\$180.00 per acre \$90.00
			TOTAL SPECIAL PROJECTS \$1,808.49
		GRAND TOTAL	\$7,179.73

SUMMARY OF CONSTRUCTION COST

Sale:	<u>South Coast Range</u>		Road: <u>E to F</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles		Improvement - <u>10+90</u> stations <u>0.21</u> miles
CLEARING AND GRUBBING -			
Scattering	1.000	acres @	\$815.00 per acre = \$815.00
Piling	0.00	acres @	\$905.00 per acre = \$0.00
Endhaul	0.00	acres @	\$1,500.00 per acre = \$0.00
			<u>TOTAL CLEARING AND GRUBBING</u> \$815.00
EXCAVATION -			
Road Earthwork	10.90	sta. @	\$100.00 per sta. = <u>\$1,090.00</u>
			<u>TOTAL EXCAVATION</u> \$1,090.00
ENDHAUL -			
			\$0.00
CULVERTS - MATERIALS & INSTALLATION			
<u>Culverts</u>			
	0	LF of 18"	\$0.00
	0	LF of 30"	\$0.00
	0	LF of 42"	\$0.00
	0	LF of 54"	\$0.00
	0	LF of 66"	\$0.00
			<u>\$0.00</u>
	0	LF of 24"	\$0.00
	0	LF of 36"	\$0.00
	0	LF of 48"	\$0.00
	0	LF of 60"	\$0.00
	0	LF of 72"	\$0.00
			<u>\$0.00</u>
<u>Half Rounds</u>			
	0	LF of 21"	\$0.00
	0	LF of 36"	\$0.00
			<u>\$0.00</u>
	0	LF of 30"	\$0.00
	0	LF of 42"	\$0.00
			<u>\$0.00</u>
<u>Culvert Stakes & Markers</u>			
	0	stakes	\$0.00
	0	markers	\$0.00
			<u>\$0.00</u>
			<u>TOTAL CULVERTS</u> \$0.00
SURFACING-			
0+00 to	10+90	615 cy. of	Pit-Run @ \$8.59 per c.y. = \$5,282.85
			<u>TOTAL SURFACING</u> \$5,282.85
SPECIAL PROJECTS			
Grade and shape road -	10.90	stations @	\$9.75 per station \$106.28
Construct Rolling Dips	2.00	@	\$150.00 each \$300.00
Roll subgrade w/ vibratory -	10.90	stations @	\$11.00 per station \$119.90
Remove large stumps -	\$780.00	lump sum	\$780.00
Construct Turnaround	1.00	@	\$75.00 each \$75.00
Construct Turnout	2.00	@	\$60.00 each \$120.00
Grass seed and fertilize -	0.63	acres @	\$180.00 per acre \$113.40
			<u>TOTAL SPECIAL PROJECTS</u> \$1,614.58
GRAND TOTAL			\$8,802.43

SUMMARY OF CONSTRUCTION COST

Sale:	<u>South Coast Range</u>		Road: <u>G to H</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles		Improvement - <u>22+50</u> stations <u>0.43</u> miles
CLEARING AND GRUBBING -			
Roadside Brushing	0.00 miles @		\$1,000.00 per mile = \$0.00
Side cast	0.124 acres @		\$540.00 per acre = \$66.96
Widening	0.159 acres @		\$540.00 per acre = \$85.86
Scattering	0.820 acres @		\$815.00 per acre = \$668.30
Piling	0.00 acres @		\$905.00 per acre = \$0.00
Endhaul	0.00 acres @		\$1,500.00 per acre = \$0.00
			TOTAL CLEARING AND GRUBBING
			\$821.12
EXCAVATION -			
Excavation (Common)	3455.00 cy. @		\$1.15 per c.y.= \$3,973.25
Pullback	410 cy. @		\$1.40 per c.y.= \$574.00
Widening	1074 cy. @		\$1.40 per c.y.= \$1,503.60
Road Earthwork	9.75 Sta. @		\$100.00 per Sta.= \$975.00
			TOTAL EXCAVATION
			\$7,025.85
ENDHAUL -			
Pullback	1+95 to 3+05	147 cy. @	\$1.14 per c.y.= \$167.58
Pullback	7+10 to 8+15	140 cy. @	\$1.03 per c.y.= \$144.20
Pullback	8+15 to 8+70	123 cy. @	\$0.99 per c.y.= \$121.77
Pullback/Log Cribbing	8+70 to 10+00	3 Hrs. @	\$57.00 per Hour = \$171.00
Log Fill/Material	4+20 to 4+60	4 Hrs. @	\$57.00 per Hour = \$228.00
Log Fill/Material	14+80 to 16+10	4 Hrs. @	\$57.00 per Hour = \$228.00
Widening	1+95 to 3+05	489 cy. @	\$0.86 per c.y.= \$420.54
Widening	3+65 to 4+45	235 cy. @	\$0.86 per c.y.= \$202.10
Widening	6+25 to 8+15	350 cy. @	\$0.86 per c.y.= \$301.00
Road Earthwork/Waste	9+50 to 17+10	2288 cy. @	\$1.09 per c.y.= \$2,493.92
Road Earthwork/Waste	17+10 to 22+50	124 cy. @	\$1.09 per c.y.= \$135.16
Spread & Compact (Fill)		2045 cy. @	\$0.35 per c.y.= \$715.75
Spread & compact (Waste)		4250 cy. @	\$0.20 per c.y.= \$850.00
			TOTAL ENDHAUL
			\$6,179.02
CULVERTS - MATERIALS & INSTALLATION			
	<u>Culverts</u>		
	108 LF of 18"	\$1,593.00	40 LF of 24" \$710.00
	0 LF of 30"	\$0.00	44 LF of 36" \$809.60
	0 LF of 42"	\$0.00	0 LF of 48" \$0.00
	0 LF of 54"	\$0.00	0 LF of 60" \$0.00
	0 LF of 66"	\$0.00	0 LF of 72" \$0.00
		<u>\$1,593.00</u>	<u>\$1,519.60</u>
	<u>Half Rounds</u>		
	0 LF of 21"	\$0.00	0 LF of 30" \$0.00
	0 LF of 36"	\$0.00	0 LF of 42" \$0.00
		<u>\$0.00</u>	<u>\$0.00</u>
	<u>Culvert Stakes & Markers</u>		
	0 stakes	\$0.00	Bands for 36" Culvert 64.70
	5 markers	\$30.00	1:1 Bevel on Inlet of 36" 34.55
		<u>\$30.00</u>	
			TOTAL CULVERTS
			\$3,241.85
SURFACING-			
3+65 to 5+60	47 cy. of	Crushed @	\$7.00 per c.y.= \$329.00
Culvert Backfill 3+05, 4+60, and 14+80	80 cy. of	Crushed @	\$6.25 per c.y.= \$500.00
Fill/Dissipator 4+60 & 14+80	400 cy. of	Riprap @	\$8.47 per c.y.= \$3,388.00
Fill Armor 4+60	50 cy. of	Riprap @	\$8.43 per c.y.= \$421.50
0+00 to 20+55	1,538 cy. of	Pit-Run @	\$8.91 per c.y.= \$13,703.58
3+65 to 5+60	108 cy. of	Pit-Run @	\$8.80 per c.y.= \$950.40
Backfill 4+60 and 14+80	400 cy. of	Pit-Run @	\$8.55 per c.y.= \$3,420.00
Junction Rock 0+00	30 cy. of	Pit-Run @	\$8.41 per c.y.= \$252.30
			TOTAL SURFACING
			\$22,964.78
SPECIAL PROJECTS			
Construct waste areas -	4.00 hours @	\$130.00 per hour	\$520.00
Remove log cribbing @ 8+70 - 10+00	4.00 hours @	\$130.00 per hour	\$520.00
Grade and shape road (Ditched) -	17.05 stations @	\$14.20 per station	\$242.11
Construct Rolling Dip	1.00 @	\$150.00 each	\$150.00
Grade and Shape road (outsloped) -	5.45 stations @	\$9.75 per station	\$53.14
Roll subgrade w/ vibratory roller prior to rocking -	22.50 stations @	\$11.00 per station	\$247.50
Remove log culvert @ stations: 4+20 - 4+80, & 14+80 - 16+10	8.00 hours @	\$130.00 per hour	\$1,040.00
Remove large stumps -	\$910.00 lump sum		\$910.00
Grass seed and fertilize -	1.30 acres @	\$180.00 per acre	\$234.00
Mulching -	0.090 acres @	\$600.00 per acre	\$54.00
			TOTAL SPECIAL PROJECTS
			\$3,970.75

GRAND TOTAL **\$44,203.37**

SUMMARY OF CONSTRUCTION COST

Sale:	<u>South Coast Range</u>				Road: <u>I to J</u>	
Construction -	<u>5+05</u> stations <u>0.10</u> miles				Improvement - <u>+00</u> stations <u>0.00</u> miles	
CLEARING AND GRUBBING -						
Scattering		0.00	acres @	\$815.00 per acre =	\$0.00	
Piling		0.00	acres @	\$905.00 per acre =	\$0.00	
Endhaul		0.35	acres @	\$1,500.00 per acre =	\$525.00	
				TOTAL CLEARING AND GRUBBING	\$525.00	
EXCAVATION -						
Excavation (Common)		2150	cy. @	\$1.40 per c.y.=	\$3,010.00	
Excavation (Rippable)		310	cy. @	\$3.20 per c.y.=	\$992.00	
				TOTAL EXCAVATION	\$4,002.00	
ENDHAUL -						
Full Bench		2150	cy. @	\$1.16 per c.y.=	\$2,494.00	
Spread & Compact (Fill)		150	cy. @	\$0.35 per c.y.=	\$52.50	
Spread & compact (Waste Area)		2000	cy. @	\$0.20 per c.y.=	\$400.00	
				TOTAL ENDHAUL	\$2,946.50	
CULVERTS - MATERIALS & INSTALLATION						
	<u>Culverts</u>					
	28 LF of 18"	\$413.00		0 LF of 24"	\$0.00	
	0 LF of 30"	\$0.00		0 LF of 36"	\$0.00	
	0 LF of 42"	\$0.00		0 LF of 48"	\$0.00	
	0 LF of 54"	\$0.00		0 LF of 60"	\$0.00	
	0 LF of 66"	\$0.00		0 LF of 72"	\$0.00	
		\$413.00			\$0.00	
	<u>Half Rounds</u>					
	0 LF of 21"	\$0.00		0 LF of 30"	\$0.00	
	0 LF of 36"	\$0.00		0 LF of 42"	\$0.00	
		\$0.00			\$0.00	
	<u>Culvert Stakes & Markers</u>					
	0 stakes	\$0.00				
	1 markers	\$6.00				
		\$6.00				
				TOTAL CULVERTS	\$419.00	
SURFACING-						
0+00 to	5+05	278	cy. of	Pit-Run @	\$9.71 per c.y.= \$2,699.38	
Junction Rock	0+00	30	cy. of	Pit-Run @	\$9.36 per c.y.= \$280.80	
					TOTAL SURFACING	\$2,980.18
SPECIAL PROJECTS						
Construct ditchouts -		1.00	@	\$60.00 each	\$60.00	
Grade and shape road -		5.05	stations @	\$9.75 per station	\$49.24	
Roll subgrade w/ vibratory roller -		5.05	stations @	\$11.00 per station	\$55.55	
Remove large stumps -		\$650.00	lump sum		\$650.00	
Grass seed and fertilize -		0.29	acres @	\$180.00 per acre	\$52.20	
				TOTAL SPECIAL PROJECTS	\$866.99	
GRAND TOTAL					\$11,739.67	

SUMMARY OF CONSTRUCTION COST

Sale:	<u>South Coast Range</u>		Road:	<u>K to L</u>
Construction -	<u>3+85</u> stations <u>0.07</u> miles		Improvement -	<u>+00</u> stations <u>0.00</u> miles
CLEARING AND GRUBBING -				
Scattering		0.310 acres @	\$815.00 per acre =	\$252.65
Piling		0.00 acres @	\$905.00 per acre =	\$0.00
Endhaul		0.00 acres @	\$1,500.00 per acre =	\$0.00
			TOTAL CLEARING AND GRUBBING	\$252.65
EXCAVATION -				
Excavation (Common)		1005 cy. @	\$1.15 per c.y.=	\$1,155.75
Excavation (Rippable)		170 cy. @	\$2.25 per c.y.=	\$382.50
Full Bench		cy. @	\$1.40 per c.y.=	\$0.00
Widening/Full Bench		cy. @	\$1.40 per c.y.=	\$0.00
			TOTAL EXCAVATION	\$1,538.25
ENDHAUL -				
Excavated material (excess)	0+00 to 0+00	586 cy. @	\$1.20 per c.y.=	\$703.20
Spread & Compact (Fill Material)		589 cy. @	\$0.35 per c.y.=	\$206.15
Spread & Compact (Waste Area)		586 cy. @	\$0.20 per c.y.=	\$117.20
			TOTAL ENDHAUL	\$1,026.55
CULVERTS - MATERIALS & INSTALLATION				
		<u>Culverts</u>		
	50	LF of 18"	\$737.50	
	0	LF of 30"	\$0.00	
	0	LF of 42"	\$0.00	
	0	LF of 54"	\$0.00	
	0	LF of 66"	\$0.00	
			<u>\$737.50</u>	
				0 LF of 24" \$0.00
				0 LF of 36" \$0.00
				0 LF of 48" \$0.00
				0 LF of 60" \$0.00
				0 LF of 72" \$0.00
				<u>\$0.00</u>
				<u>\$0.00</u>
		<u>Haqf Rounds</u>		
	0	LF of 21"	\$0.00	
	0	LF of 36"	\$0.00	
			<u>\$0.00</u>	
				0 LF of 30" \$0.00
				0 LF of 42" \$0.00
				<u>\$0.00</u>
		<u>Culvert Stakes & Markers</u>		
		0 stakes	\$0.00	
		1 markers	\$6.00	
			<u>\$6.00</u>	
				TOTAL CULVERTS \$743.50
SURFACING-				
0+00 to	3+85	98 cy. of	Crushed	@ \$7.59 per c.y.= \$743.82
Junction Rock	0+00	10 cy. of	Crushed	@ \$6.86 per c.y.= \$68.60
0+00 to	3+85	224 cy. of	Pit-Run	@ \$9.63 per c.y.= \$2,157.12
Junction Rock	0+00	30 cy. of	Pit-Run	@ \$9.59 per c.y.= \$287.70
				TOTAL SURFACING \$3,257.24
SPECIAL PROJECTS				
Construct waste areas -		2.00 hours @	\$130.00 per hour	\$260.00
Construct ditchouts -		2.00 @	\$60.00 each	\$120.00
Grade and shape road -		3.85 stations @	\$14.20 per station	\$54.67
Roll subgrade w/ vibratory roller -		3.85 stations @	\$11.00 per station	\$42.35
Remove large stumps -		\$390.00 lump sum		\$390.00
Grass seed and fertilize -		0.22 acres @	\$180.00 per acre	\$39.60
			TOTAL SPECIAL PROJECTS	\$906.62
			GRAND TOTAL	\$7,724.81

MOVE-IN CALCULATIONS

Sale: South Coast Range

LOWBOY HAUL (Round Trip)		
DISTANCE	ROADWAY	AVE SPEED (MPH)
28.0	Highway	37
10.2	Main Lines (Off Road)	15
1.8	Pulling Steep Grades	4

No.	EQUIPMENT DESCRIPTION	Move in Cost	Pilot Cars	Within Area Move (\$/mile)	Begin Mileage	End Mileage	Total Miles	Within Area Cost	Total Cost
0	Drill & Compressor	\$0.00		\$46.00	0.00	0.00	0	\$0.00	\$0.00
0	Brush Cutter	\$0.00		\$4.00	0.00	0.00	0	\$0.00	\$0.00
1	Graders	\$138.23		\$3.65	0.00	2.66	2.66	\$9.71	\$147.94
0	Loader (Small)	\$0.00	1	\$3.55	0.00	0.00	0	\$0.00	\$0.00
0	Loader (Med. & Large)	\$0.00	1	\$9.00	0.00	0.00	0	\$0.00	\$0.00
1	Rollers & Compactors	\$281.85		\$5.00	0.00	2.66	2.66	\$13.30	\$295.15
0	Excavators (Small)	\$0.00		\$22.00	0.00	0.00	0	\$0.00	\$0.00
0	Excavators (Med.)	\$0.00		\$35.50	0.00	0.00	0	\$0.00	\$0.00
2	Excavators (Large)	\$896.64	1	\$44.80	0.00	1.33	1.33	\$119.17	\$1,015.81
1	Rubber Tired Backhoes/Skidlers	\$281.85		\$3.00	0.00	2.66	2.66	\$7.98	\$289.83
0	Tractors (D6)	\$0.00	2	\$7.10	0.00	0.00	0	\$0.00	\$0.00
0	Tractors (D7)	\$0.00	2	\$11.30	0.00	0.00	0	\$0.00	\$0.00
2	Tractor (D8)	\$861.41	2	\$15.10	0.00	1.33	1.33	\$40.17	\$901.58
2	Dump Truck (10 cy +)	\$186.34		\$2.85	0.00	2.66	2.66	\$15.16	\$201.50
0	Dump Truck (Off Hiway)	\$0.00	1	\$4.75	0.00	0.00	0	\$0.00	\$0.00
0	Water Truck (1500 Gal)	\$0.00		\$2.85	0.00	0.00	0	\$0.00	\$0.00
1	Water Truck (2500 Gal)	\$109.52		\$2.85	0.00	2.66	2.66	\$7.58	\$117.10
0	Jaw	\$1,119.30							
0	2-Stage Crusher	\$1,676.85							
0	3-Stage Crusher	\$2,613.45							

TOTAL MOVE-IN COSTS:	\$2,968.91
-----------------------------	-------------------

ROCK DEVELOPMENT COST SUMMARY

Pit:	Joyce Creek (RipRap)	Location:	E 1/2, NW 1/4, Sec 13, T2S, R8W, W.M.
Sale:	South Coast Range	Road:	525 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	525 c.y.
Drill Pct.:	0%	In Place Total:	375 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. \$704.61

Drill & Shoot:	\$2.10	/cu.yd.	x	0	cu.yds.	=	\$0.00
Rip Rock	\$1.75	/cu.yd.	x	0	cu.yds.	=	\$0.00
Load Dump Truck:	\$1.40	/cu.yd.	x	525	cu.yds.	=	\$735.00

Subtotal \$1,439.61

Move In and set up Drill and Compressor	0	@	\$281.85	=	\$0.00
Move in Roller and Compactor	0	@	\$281.85	=	\$0.00
Move in Grader	0	@	\$131.64	=	\$0.00
Move in D-8	0	@	\$398.01	=	\$0.00
Move in Loader	0	@	\$294.97	=	\$0.00
Move in Excavator	Within Area Move: 3.8 Miles @ \$44.80/Mile			=	\$170.24
Move in Trucks	Within Area Move: 3.8 Miles @ \$2.85/Mile/ Truck			=	\$32.49
Move in Water Truck	0	@	\$104.30	=	\$0.00
				Subtotal	\$202.73

Base Cost= \$3.13 Per Cu.Yd.

TOTAL PRODUCTION COSTS \$1,642.34

Road Segment	Haul Cost /cu.yd.	Proc Cost /cu.yd.	Base Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	ROCK COST
A to B Fill/Dissipator	\$3.19	\$1.40	\$3.13	\$7.72	75	\$579.00
G to H Fill/Dissipator	\$3.94	\$1.40	\$3.13	\$8.47	400	\$3,388.00
G to H Fill Armor	\$3.90	\$1.40	\$3.13	\$8.43	50	\$421.50
				Total C.Y.	525	Sub Total
						\$4,388.50

TOTAL ROCKING COSTS \$4,388.50

ROCK DEVELOPMENT COST SUMMARY

Pit:	Bushong (Pit-Run)	Location:	NW 1/4, SE 1/4, Sec19, T2S, R9W, W.M.
Sale:	South Coast Range	Road:	6324 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	6324 c.y.
Drill Pct.:	0%	In Place Total:	4517 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. \$1,821.73

Drill & Shoot:	\$2.10 /cu.yd.	x	0 cu.yds.	=	\$0.00
Rip Rock	\$1.75 /cu.yd.	x	4517 cu.yds.	=	\$7,904.75
Load Dump Truck:	\$0.60 /cu.yd.	x	6324 cu.yds.	=	\$3,794.40

Subtotal \$13,520.88

Move In and set up Drill and Compressor	0	@	\$281.85	=	\$0.00
Move in Roller and Compactor	0	@	\$281.85	=	\$0.00
Move in Grader	0	@	\$131.64	=	\$0.00
Move in D-8	1	@	\$307.59	=	\$307.59
Move in Loader	1	@	\$294.97	=	\$294.97
Move in Excavator	1	@	\$338.59	=	\$338.59
Move in Trucks	Within Area Move: 4.81 Miles @ \$2.85/Mile/Truck			=	\$41.13
Move in Water Truck	0	@	\$104.30	=	\$0.00
Subtotal					\$982.28

TOTAL PRODUCTION COSTS \$14,503.16

Base Cost= \$2.29 Per Cu.Yd.

Road Segment	Haul Cost /cu.yd.	Proc Cost /cu.yd.	Base Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	ROCK COST
A to B 0+00 to 26+45	\$5.20	\$0.90	\$2.29	\$8.39	1993	\$16,721.27
A to B 26+45 to 33+50	\$5.54	\$0.90	\$2.29	\$8.73	405	\$3,535.65
A to B Backfill	\$5.13	\$0.60	\$2.29	\$8.02	90	\$721.80
A to B Junction Rock	\$5.24	\$0.60	\$2.29	\$8.13	120	\$975.60
C to D	\$5.09	\$0.90	\$2.29	\$8.28	463	\$3,833.64
E to F	\$5.40	\$0.90	\$2.29	\$8.59	615	\$5,282.85
G to H	\$5.72	\$0.90	\$2.29	\$8.91	1538	\$13,703.58
G to H	\$5.61	\$0.90	\$2.29	\$8.80	108	\$950.40
G to H Backfill	\$5.66	\$0.60	\$2.29	\$8.55	400	\$3,420.00
G to H Junction Rock	\$5.52	\$0.60	\$2.29	\$8.41	30	\$252.30
I to J	\$6.52	\$0.90	\$2.29	\$9.71	278	\$2,699.38
I to J Junction Rock	\$6.47	\$0.60	\$2.29	\$9.36	30	\$280.80
K to L	\$6.44	\$0.90	\$2.29	\$9.63	224	\$2,157.12
K to L Junction Rock	\$6.40	\$0.90	\$2.29	\$9.59	30	\$287.70
Total C.Y.					6324	Sub Total
						\$54,822.09

TOTAL ROCKING COSTS \$54,822.09

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	<u>Stockpile Source</u>	Location:	<u>SW 1/4, SE 1/4, Sec 12, T2S, R8W, W.M.</u>
Sale:	<u>South Coast Range</u>	Road:	<u>260 c.y.</u>
Swell:	<u>1.40</u>	Stockpile:	<u> c.y.</u>
Shrinkage:	<u>1.16</u>	Total Truck Loads:	<u>260 c.y.</u>
Drill Pct.:	<u>0%</u>	In Place Total:	<u>186 c.y.</u>

Drill & Shoot:	<u> </u>	<u>\$2.10 /cu.yd.</u>	x	<u> </u>	<u>0 cu.yds.</u>	=	<u> </u>	<u>\$0.00</u>
Rip Rock	<u> </u>	<u>\$1.75 /cu.yd.</u>	x	<u> </u>	<u>0 cu.yds.</u>	=	<u> </u>	<u>\$0.00</u>
Load Dump Truck:	<u> </u>	<u>\$0.60 /cu.yd.</u>	x	<u> </u>	<u>260 cu.yds.</u>	=	<u> </u>	<u>\$156.00</u>
							Subtotal	<u>\$156.00</u>

Move In and set up Drill and Compressor	0	@	\$281.85	=	\$0.00
Move in Roller and Compactor	0	@	\$281.85	=	\$0.00
Move in Grader	0	@	\$131.64	=	\$0.00
Move in D-8	0	@	\$398.01	=	\$0.00
Move in Loader	1	@	\$294.97	=	\$294.97
Move in Excavator	0	@	\$431.97	=	\$0.00
Move in Trucks			Within Area Move: 4.0 Miles @ \$2.85/Mile/Truck	=	\$34.20
Move in Water Truck	0	@	\$104.30	=	\$0.00
				Subtotal	<u>\$329.17</u>

Base Cost= \$1.87 Per Cu.Yd. TOTAL PRODUCTION COSTS \$485.17

Road Segment	Haul Cost /cu.yd.	Proc Cost /cu.yd.	Base Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	ROCK COST	
A to B Culvert Backfill	2.98	0.60	1.87	5.45	25	\$136.25	
G to H	3.83	1.30	1.87	7.00	47	\$329.00	
G to H Culvert Backfill	3.78	0.60	1.87	6.25	80	\$500.00	
K to L	4.42	1.30	1.87	7.59	98	\$743.82	
K to L Junction Rock	4.39	0.60	1.87	6.86	10	\$68.60	
				Total C.Y.	260	Sub Total	\$1,777.67

TOTAL ROCKING COSTS \$1,777.67

OREGON DEPARTMENT OF FORESTRY
CRUISE REPORT



"STEWARDSHIP IN FORESTRY"

South Coast Range

1. **Type of Sale:**

Clearcut Harvest, Recovery.

2. **Legal Description:**

Section 25, T2S, R8W, W.M., Tillamook County, Oregon.

3. **Sale Acreage:**

The sale boundaries were plotted on a digital orthophotograph and the acreage was calculated with GIS.

ACRES				
Area	Harvest Type	Sale	Total	Net
1	Clearcut	74	81	72
2	Clearcut	101	98	88
Total		175	179	160

Sale acres:

Area within the Timber Sale Boundary signs.

Total acres:

Sale acres; plus green tree retention acres outside the sale boundary; less roads and riparian areas classified as Special Stewardship in LMCS inside the sale boundary. For accomplishment reporting - clearcut (regeneration) harvest.

Net acres:

Less green tree retention, roads, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary. For calculating the advertised volume.

4. **Cruise Measures:**

A: Cruise Method:

A 400 x 400-ft. cruise grid was established on the sale area using variable radius full point plots. Plot lines were run to obtain the most efficient cruise possible. A total of 43 count tree plots were established, with 20 of the plots measured and graded to determine a V-BAR for the stand. On Area 1, 18 plots were recorded, with every other plot measured and graded. On Area 2, 25 plots were recorded, 11 were measured and graded. Alder height and grade was measured on every plot. For all species, diameters 9 inches and above were recorded to the nearest inch, and heights to the nearest foot. Diameters were taken at 4.5' above the ground on the uphill side. Diameters smaller than 9 inches were not included in this cruise. The cruise had a coefficient of variation of 32.3 and a SE% of 4.9 for net board feet/acre.

B: Plot size

A 20 BAF was used for Douglas-fir. A 10 BAF was used for other species and snags.

C: Grading System:

Douglas-fir was measured and graded to a 6" top favoring 40 foot log lengths using Columbia River rules. Alder was measured to an 8" top and graded camprun.

5. **Computation Procedure:**

Plot data was entered into SuperAce for computation of basal area, V-BAR, stand tables and diameters. This data was then entered into the Volume Summary Worksheet to compute sale volumes.

6. **Defect and Breakage:**

A 5% reduction for defect and breakage was applied to the volume.

7. **Timber Description:**

The sale area burned in the 1933, 1939, and 1951 Tillamook fires. The majority of Area 1 was planted from 1958 to 1962 and partially replanted in 1970. Area 2 was planted in 1961 and 1962. The predominately 39-year-old Douglas-fir in this area is showing severe signs of Swiss needle cast. Partially deformed alder is present within draws, on abandoned roads and scattered throughout the sale area.

8. **Cruiser Names/Dates:**

Everingham, Wells, Sanford. June 2003.

9. **Revenue Distribution:**

100% FDF

Tax Code: 8-1

Deed Numbers: 169, 230

Rehabilitation Obligated: 84%

10. **Attachments:**

Volume Summary

Logging Plan



"STEWARDSHIP IN FORESTRY"

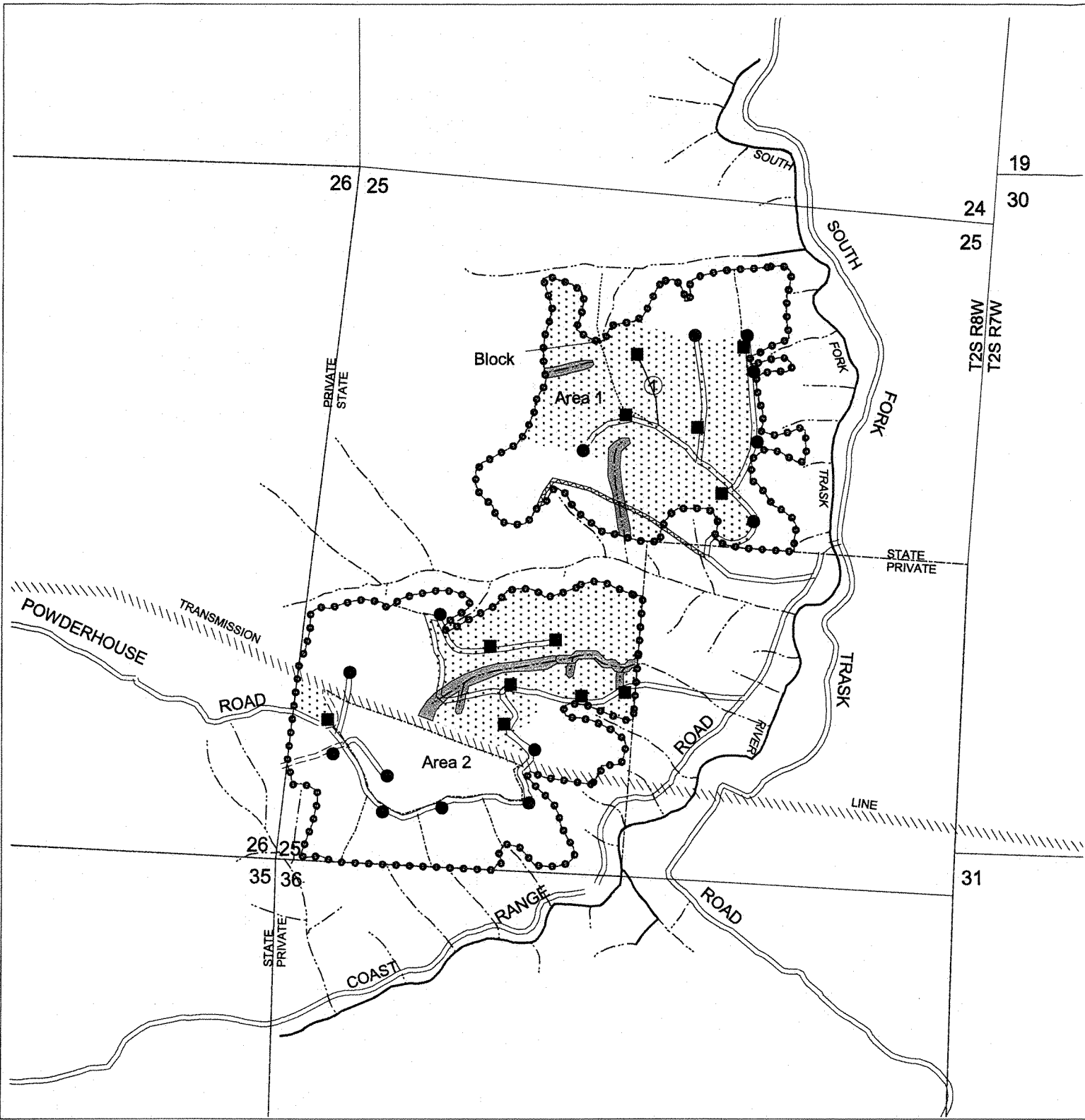
<h2 style="margin: 0;">South Coast Range</h2> <h3 style="margin: 0;">Volume Summary</h3>
--

AREA 1							
72 ACRES							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	13.4	119	88	10.5	756	5%	718
Red Alder	14.2	21	60	1.3	94	5%	89
TOTAL				11.8	850		807

AREA 2							
88 ACRES							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	12.8	126	101	12.7	1118	5%	1062
Red Alder	12.3	37	82	3.0	264	5%	251
TOTAL				15.7	1382		1313

TOTAL SALE VOLUME

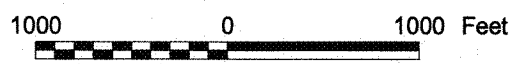
SPECIES	QMD	MBF		Net Vol. (MBF)
		AREA 1	AREA 2	
Douglas-fir	13.1	718	1062	1,780
Red Alder	12.8	89	251	340
TOTAL				2120



- Tractor landing
- Cable landing
- Cable yarding
- ▨ Ground yarding
- Buffer
- Setting boundary
- Area boundary
- Sale boundary
- Ownership boundary
- Type-F stream
- Type-N stream
- == Surfacd road
- Unsurfaced road
- State highway
- County road
- ② Non-project road
- Swing road
- Abandoned road
- OHV trail
- Non-motorized trail

LOGGING PLAN
 Timber Sale Contract No. 341-04-46
 South Coast Range
 Portions of Section 25, T2S, R8W, W. M.
 Tillamook County, Oregon

Area	Type of Operation	Acres	
		Sale	Net
1	clearcut	74	72
2	clearcut	101	88
Total		175	160





Oregon Department of Forestry

WRITTEN PLAN

SALE NAME: South Coast Range

PROTECTED WATERS: South Fork of the Trask River.

LOCATION: Portions of Section 25, T2S, R8W, W.M., Tillamook County, Oregon.

Riparian Management Area:

The area measured 100 feet slope distance from the high water mark on the South Fork of the Trask, a large Type F stream.

Protection Measures:

Yarding Systems, Layout, and Stream Protection

When yarding with cables hanging within or across the streams, cables will be pulled out of the Riparian Management Area prior to rigging the next yarding road. Yarding roads will be spaced an average of 150 feet apart where they extend over or through the riparian management area.

Date: July 9, 2003
By: Don Everingham

OREGON DEPARTMENT OF FORESTRY
WRITTEN PLAN
FOR PROJECT WORK ONLY

SALE NAME: South Coast Range

PROTECTED WATERS South Fork Trask and Unnamed Tributaries of South Fork Trask.

LOCATIONS: Portions of the following: Sections 25, T2S, R8W, W.M. Tillamook County, Oregon.

ACTIVITIES: Log culvert removals, steel culvert installations, riprap placement, road vacating, and road reconstruction will occur within 500 feet of a small Type F stream. Road reconstruction will occur within 100 feet of a large Type F stream (South Fork Trask).

PROTECTION MEASURES:

- No in stream activity will be conducted prior to July 1st or after September 15th without prior written approval.
- All necessary measures will be taken to prevent sediment from entering "live" streams, including but not limited to:
 - Machine activity in the stream and disturbance of existing vegetation will be kept to a minimum.
 - Work will be performed only during dry weather periods and low water stream flows.
 - Operations will cease when rain or periods of high stream flows result in a visual increase in turbidity.
 - Stream water will be diverted around the work areas when water quality is likely to be jeopardized.
 - Ditchouts and culvert leadoff ditches will be constructed to direct water with sediment away from streams.
 - Sediment catch basins will be constructed to remove sediment from ditchline water.
 - Fill material will be placed and compacted in 8 inch lifts. Fill slopes will be constructed at a 1 ½:1 fill width to height ratio.
 - Waste material will be end-hauled to stable locations marked in the field.
 - Riprap rock will be placed by a track mount excavator to minimize erosion.
 - All disturbed soil will be grass seeded, fertilized and mulched to minimize erosion.
 - Waterbars will be installed on vacated road segments to divert water from existing road ditchline and surface.
 - Log fills will be removed and placed on stable locations on existing road prism.
 - Surfacing will be spread and compacted on roads that have sedimentation delivery potential to "live" water.

PREPARED BY: Vanessa M. Stone, Road Specialist
July 8, 2003