



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Benson Thin Sale 341-02-41

District: Coos

Date: 7/10/01

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$191,710.08	\$6,722.58	\$198,432.66
		Project Work	(\$17,462.00)
		Advertised Value	\$180,970.66



Timber Sale Appraisal Timber Description Benson Thin Sale 341-02-41

"STEWARDSHIP IN FORESTRY"

District: Coos

Location: Portions of: Sections 34 and 35,
T22S, R11W, Douglas Co. and
Sections 3, 4, 8, 9, 10, 15, and 16,
T23S, R11W, and Section 12, T23S, R12W, Coos Co.

Date: 7/10/01

Stand Stocking: 40%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	10	0	95
Alder (Red)	9	0	90

Volume by Grade	Douglas - Fir	Alder (Red)	Total
2S	132	0	132
3S	414	0	414
4S	657	0	657
Camprun	0	57	57
Total	1,203	57	1,260

Comments: Pond Values Used: 2nd Quarter 2001

Automark Thinning, 375 Acres Net, 407 Acres Gross
Tractor yarding for areas not feasible for cable logging



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal

Logging Conditions

Benson Thin

Sale 341-02-41

Combination#: 1	Douglas - Fir	95.00%	
	Alder (Red)	95.00%	
Yarding Distance:	Medium (800 ft)		Downhill Yarding No
Logging System:	Cable: Small Tower <=40		Process: Manual Delimiting
Tree Size:	Small / Thinning 9in (70 Bft/tree), 20+ logs/MBF		
Loads/Day:	3		Bd. Ft./Load: 3,400
Cost/MBF:	\$252.75		
Machines:			
	Log Loader (A)		
	Tower Yarder (Small)		
Combination#: 2	Douglas - Fir	5.00%	
	Alder (Red)	5.00%	
Yarding Distance:	Short (400 ft)		Downhill Yarding Yes
Logging System:	Wheel Skidder		Process: Manual Falling/Delimiting
Tree Size:	Small / Thinning 9in (70 Bft/tree), 20+ logs/MBF		
Loads/Day:	3		Bd. Ft./Load: 3,400
Cost/MBF:	\$294.19		
Machines:			
	Log Loader (B)		
	Tire Skidder		



Timber Sale Appraisal Logging Costs Benson Thin Sale 341-02-41

"STEWARDSHIP IN FORESTRY"

Date: 7/10/01

Operating Seasons: 1.0

Profit & Risk: 16%

Project Costs: \$17,462

Other Costs (P/R): \$0

Slash Disposal: \$0

Other Costs: \$0

Road Maintenance: \$0.00

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
2.0	0.5	0.0	0.0

Hauling Costs

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



Timber Sale Appraisal Logging Costs Breakdown Benson Thin Sale 341-02-41

"STEWARDSHIP IN FORESTRY"

Costs	Douglas - Fir	Alder (Red)
Logging	254.82	254.82
Road Maintenance	0.91	0.96
Fire Protection	2.15	2.15
Hauling	46.11	56.78
Other (P/R appl.)	0.00	0.00
Profit & Risk	48.64	50.35
Slash Disposal	0.00	0.00
Scaling	2.00	2.00
Other	0.00	0.00
Total	354.63	367.06

Amortization	0.00	0.00
Pond Value	513.99	485.00
Stumpage	159.36	117.94
Amortized	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary Benson Thin Sale 341-02-41

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	1,203.00	57.00
Value	159.36	117.94
Total	191,710.08	6,722.58

Gross Timber Sale Value

Recovery \$198,432.66

Prepared by: Chris Rudd

Date: 7/10/01

District: Coos

Phone: (541) 267-1757

**SUMMARY OF CONSTRUCTION COST
Benson Thin**

Project 1: Road Improvement

Project 1A: Road Improvement

Points A to B
Length: 963'
Type: 14' no ditch

Re-shape Road Surface

Saw time to clear road	<u>5.0</u>	hrs @	<u>\$30.00</u>	per hr	<u>\$150.00</u>
Cat time to work material into road surface and improve approach from 2000 Rd	<u>5.0</u>	hrs @	<u>\$95.00</u>	per hr	<u>\$475.00</u>
Grader time for shaping road surface	<u>1.0</u>	hrs Grade @	<u>\$75.00</u>	per hr	<u>\$75.00</u>

Project 1A Cost:	\$700
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Project 1B: Road Improvement

Points B to C
Length: 3357'
Type: 14' no ditch

Re-shape Road Surface

Saw time to clear road	<u>10.0</u>	hrs @	<u>\$30.00</u>	per hr	<u>\$300.00</u>
Cat time to remove cutbank slough, work material into road surface	<u>10.0</u>	hrs @	<u>\$95.00</u>	per hr	<u>\$950.00</u>
Grader time for shaping road surface	<u>2.0</u>	hrs Grade @	<u>\$75.00</u>	per hr	<u>\$150.00</u>

Project 1B Cost:	\$1,400
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Project 1C: Road Improvement

Points C to D
Length: 850'
Type: 14' no ditch

Re-shape Road Surface

Saw time to clear road	<u>10.0</u>	hrs @	<u>\$30.00</u>	per hr	<u>\$300.00</u>
Cat time to remove stumps and shape road surface	<u>5.0</u>	hrs at	<u>\$95.00</u>	per hr	<u>\$475.00</u>
Grader time to shape road surface	<u>1.0</u>	hrs Grade @	<u>\$75.00</u>	per hour	<u>\$75.00</u>

Project 1C Cost:	\$850
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**SUMMARY OF CONSTRUCTION COST
Benson Thin**

Project 1D: Road and Landing Improvement

Points G to H
Length: 3930'
Type: 14', no ditch

Re-shape Road Surface

Cat time to remove cutbank slough and smooth road surface	<u>10.0</u>	hrs @	<u>\$95.00</u>	per hr	<u>\$950.00</u>
Excavator to remove any small slides and widen road where necessary	<u>10.0</u>	hrs @	<u>\$95.00</u>	per hr	<u>\$950.00</u>
Haul time to move slide and widen material	<u>10.0</u>	hrs @	<u>\$60.00</u>	per hr	<u>\$600.00</u>
Grader time for shaping road surface	<u>2.0</u>	hrs Grade @	<u>\$75.00</u>	per hr	<u>\$150.00</u>

Project 1D Cost:	\$2,650
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Project 1E: Road Improvement

Points I to J
Length 1421'
Type: 14', no ditch

Re-shape Road Surface

Saw time to clear road	<u>10.0</u>	hrs @	<u>\$30.00</u>	per hr	<u>\$300.00</u>
Cat time to shape road surface	<u>10.0</u>	hrs @	<u>\$95.00</u>	per hr	<u>\$950.00</u>
Grader time for shaping road surface	<u>1.0</u>	hrs Grade @	<u>\$75.00</u>	per hr	<u>\$75.00</u>

Project 1E Cost:	\$1,325
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Project 1F: Road Improvement

Points N to O
Length 3816'
Type 14', no ditch

Re-shape Road Surface

Cat time to remove cutbank slough	<u>15.0</u>	hrs @	<u>\$95.00</u>	per hr	<u>\$1,425.00</u>
Grader time for shaping road surface	<u>2.0</u>	hrs Grade @	<u>\$75.00</u>	per hr	<u>\$150.00</u>

Project 1F Cost:	\$1,575
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SUMMARY OF CONSTRUCTION COST

Benson Thin

Project 1G: Road and Landing Improvement

Points O to P
 Length: 3337'
 Type: 14' no ditch

Re-shape Road Surface

Excavator to clean up slides and load trucks for hauling	10.0	hrs at	\$95.00	per hr	\$950.00
Cat time to smooth road surface and distribute slough material in road	15.0	hrs at	\$95.00	per hr	\$1,425.00
Haul time to move slide material	5.0	hrs @	\$60.00	per hr	\$300.00
Grader to smooth road surface	2.0	hrs Grade @	\$75.00	per hour	\$150.00

Project 1G Cost: \$2,825

Project 1H: Road and Landing Improvement

Points O to Q
 Length: 3840'
 Type: 14' no ditch

Re-shape Road Surface

Cat time to remove cutbank slough	15.0	hrs @	\$95.00	per hr	\$1,425.00
Excavator time	10.0	hrs @	\$95.00	per hr	\$950.00
Grader time for shaping road surface	2.0	hrs Grade @	\$75.00	per hr	\$150.00

Project 1H Cost: \$2,525

Project 1i: Road and Landing Improvement

Points R to S
 Length: 9020'
 Type: 14' with 3' ditch

Re-shape Road Surface

Grader time for shaping road surface	5.0	hrs Grade @	\$75.00	per hr	\$375.00
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Project 1i Cost: \$375

Move-in

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Excavator	25	0.58	\$533.00	\$309.14
Cat	25	0.58	\$533.00	\$309.14
Grader	25	0.58	\$241.00	\$139.78
Dump Truck	25	0.58	\$144.00	\$83.52

Total Move-in \$842

**SUMMARY OF CONSTRUCTION COST
Benson Thin**

Move between sale areas (about 10 miles)

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Excavator	10	0.58	\$533.00	\$309.14
Cat	10	0.58	\$533.00	\$309.14
Grader	10	0.58		\$75.00
Dump Truck	10	0.58		\$45.00

Total Move-between	\$738
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Total Project 1	\$15,805
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Project No. 2: Spot Rock

Points: F
Type: Landing Area
Round Trip: 2.6 hrs

Rock (1 1/2" - 0")	72.0	yds at	\$7.00	per yd	\$504.00
Haul	72.0	yds at	\$8.67	per yd	\$624.24
Processing (grader)	72.0	yds at	\$0.75	per yd	\$54.00

Total Project 2	\$1,182
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Project No. 3: Rechannel Stream Crossing

Point: Q

Excavator time to rechannel and remove road fill	5.0	hrs @	\$95.00	per hr	\$475.00
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Total Project 3	\$475
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Total Project Costs	\$17,462
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TIMBER SALE SUMMARY

Benson Thin

1. **Type of sale:** Thinning, Recovery, Sealed Bid.
2. **Boundary Lines:** The timber sale area is posted with red flagging, posters, and red paint except along major timber type changes where the thin unit abuts a clear-cut, or mature timber.) or streams. Stream buffers are shown on the Exhibit A. Area boundaries for areas 1-4 are posted in yellow with "Area Boundary" posters, flagging, and yellow paint. Group selection areas amounting to a total of 18 acres are not posted but will be designated as part of the Operations Plan development process. Road locations for project work are marked with centerline stakes.
3. **Revenue Distribution:** Coos County encompasses 55% of the sale area and Douglas County covers 45%. The revenue distribution is 82% CSL and 18% BOF. Area 7 (BOF) has significantly larger, older timber than the other units.
4. **Sale Acreage:** There are seven sale areas in this sale. All volume calculations are based on net acres believed to be the likely operational acres. Total net acres are 375. The sale boundaries are posted on the gross acres. It may be possible to log the full gross acres (407) if the operator can meet the prescription and logging requirements.

Area	1	2	3	4	5	6	7	Total
Net Acres	100	29	17	37	137	17	38	375
Gross Acres	103	29	18	49	146	24	38	407

5. **Volume by Species, Fund, and County:** See attached table.

6. Grade by Percent:

Area	Species	2 saw	3 Saw	4 Saw	Camp Run
1	Douglas-fir			100%	
2	Douglas-fir	5%	63%	32%	
3	Douglas-fir		37%	63%	
4	Douglas-fir	10%	60%	30%	
5	Douglas-fir		25%	75%	
6	Douglas-fir	15%	68%	17%	
7	Douglas-fir	40%	46%	14%	
All	Hardwood	-----	-----	-----	100%

7. **Cruise:** Areas 1, 3, 5, and 7 were cruised by Second Growth Inc in 1999. Half of the plots were fully measured and half were count only. Areas 2, 4, and 6 were cruised by ODF foresters in spring of 2001. All cruise compilation was done using the Superace program.

A. Cruise Summary Data:

Diameter	Top Diameter	Form Point	Form Factor	SE %
D4H	Total Height	Conifer: 16' Hardwood: 4'	Estimated or measured on all trees	7%

C. Summary of cut trees including group selection areas (GSA's)

Area (acres) & Group Selection Areas (GSA's)	Species	Ave. D4H	Trees per Acre	Basal Area (ft ² /ac)	MBF Per acre Net
1 (96)	Douglas-fir	8.1	183	65	3.2
1 (4) GSA's	Douglas-fir	9.4	385	188	10.5
2 (28)	Douglas-fir	10	115	60	3.0
2 (1) GSA	Douglas-fir	12.3	253	187	9.0
3 (16)	Douglas-fir	9.8	115	60	4.3
3 (1) GSA's	Douglas-fir	11.9	253	195	16
4 (35)	Douglas-fir	10.8	84	54	3.4
4 (2.0) GSA's	Douglas-fir	13.3	147	151	12
5 (129)	Douglas-fir	9.6	60	30	1.7
5 (8.0) GSA's	Douglas-fir	10.2	223	130	8
6 (15)	Douglas-fir	14.1	76	83	7.8
6 (2.0) GSA's	Douglas-fir	15.6	176	241	21
7 (38)	Douglas-fir	16.8	28	42	6.3

8. **Timber Description:** Benson Ridge Thin is composed of plantations that range- between 26 years for area 1 and 50 years for area 7 (Kulja Ridge). Current diameters for cut trees range from about 8 to 17 inches as shown on the table above.. Dominant trees are growing almost 0.5 inches in diameter and 2 feet in height per year. Stocking varies throughout the stand. Only areas that exceed the maximum basal area requirements are required to be thinned. A small amount of alder will be removed from the sale from logging corridors and landings. Hemlock, cedar, and spruce are reserved from cutting except in logging corridors and for safety reasons. Timber is very small in in portions of some of the units. A reduced price for utility grade logs is assigned along with a pencil buck scaling requirement.

9. **Topography:** Each area of the sale has unique topography. The two smaller isolated units (areas 6 and 7) are steep south facing slopes that will be logged from a ridge road. Areas 1 through 4 are medium slopes with ridge and mid-ridge roads dissected by draws and streams shown on Exhibit A. Area 5 is similar with medium westward slopes, draws, streams, and mid-ridge roads. A topographic map (part of Exhibit A) has is attached to display important slope, stream, and road features.

10. **Logging Method:** . The Purchaser can log portions of this sale in the winter along the rocked ridgeline roads (2000 and 5000). A winter option has been provided in the Projects section outlining the amount of patch rock required. The majority of this sale will be cable logged with a small amount of skidding as approved by the STATE on moderate ground (<30% slope). The portion of Area 1 that is seasonally restricted should be logged between September 15th and April 1st. Eighteen acres of Group selection areas, with a residual of 5-20 TPA, will be Purchaser selected as approved by the State. The Purchaser will submit an operations plan that will be approved on the basis of meeting the contract specifications and maximizing the area treated.

- 11. Access:** The timber sale can be easily accessed from Lakeside or Coos Bay. From Coos Bay, take the Coos River Highway to Allegany. Turn left on the West Fork Millicoma Rd continuing for about 5 miles to the 2000 Rd (Trail Butte Rd) Drive 10.6 miles to Area 5. Areas 1-4 are at the junction of the 2000 and 5000 Rd 13.6 miles up the 2000 Rd. Area 5 and 6 are located off the 4000 Rd. (Benson Ridge Rd.) The 4000 Road can be accessed by turning West off the 2000 Rd. at the 11.5 mile mark, or by heading East from Lakeside off North Lake Rd. Area 7 is approximately 3.2 miles up the 4000 at the end of the 4100 Rd. Area 6 is 5.6 miles up the 4000 Rd.
- 12. Projects:** See section 70 and the Exhibit A of the contract for the project point locations, the “Summary of Project Costs”, and Section 72 credit for project work. The total cost of project work will be credited as project work is completed

Project No. 1: Road and Landing Improvement:

Project No. 2: Surfacing

Project No. 3: Remove Temporary Stream Crossing

NET VOLUMES AND ACREAGE

Benson Thin

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					315		315	315	3.2
	Hdwd					35		35	34	0.3
II	D-fir					86		86	86	3.0
	Hdwd									
III	D-fir					73		73	73	4.3
	Hdwd					7		7	6	0.2
IV	D-fir		72		72	52		52	124	3.4
	Hdwd							0	0	0.0
V	D-fir		234		234			0	234	1.7
	Hdwd				0			0	0	0.0
VI	D-fir		133		133			0	133	7.8
	Hdwd				0			0	0	0.0
VII	D-fir			239	239			0	239	6.3
	Hdwd			16	16			0	16	0.4
TOTALS			439	255	694	568	0	568	1260	

TOTAL SALE VOLUME BY SPECIES

Douglas-fir 1203 MBF
 Hardwoods 57 MBF

Report by: Chris Rudd

Date: _____

Unit For: Alan P. Tracy 6/29/01

Asst. Dist. For: Meggy L. Therman 6/24/2001

NO INGROWTH INCLUDED

ACREAGE BY COUNTY (to nearest acre)

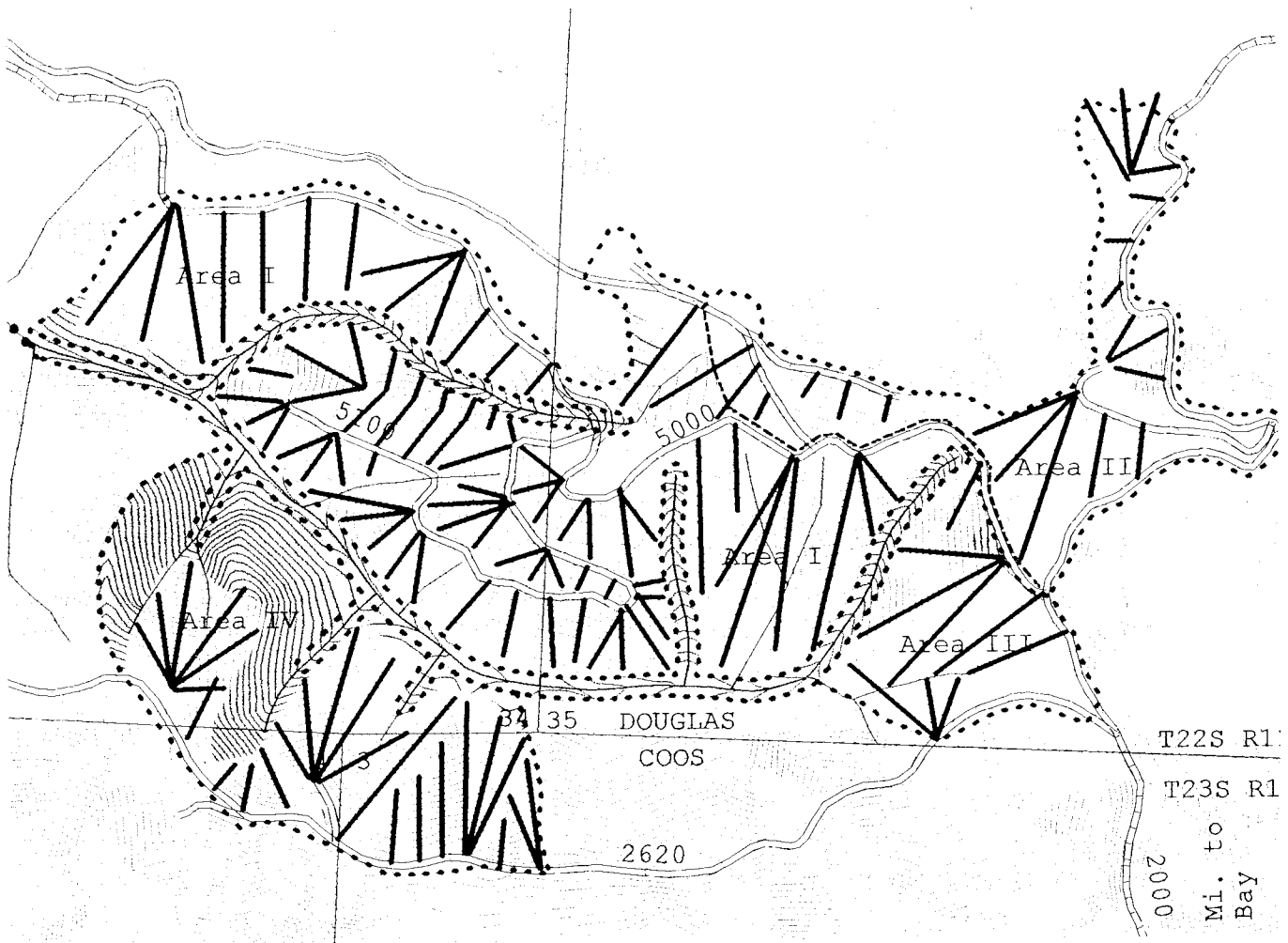
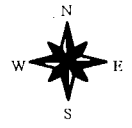
Sale Area	Coos County						Douglas County						TOTAL NET ACRES	
	CSL			BOF			CSL			BOF				
	Conifer	Hard		Conifer	Hard		Conifer	Hard		Conifer	Hard			
	cc	pc	wood	cc	pc	woods	cc	pc	woods	cc	pc	woods		
I								100						100
II								29						29
III								17						17
IV		21						16						37
V		137												137
VI		17												17
VII					38									38
SUM	0	175	0	0	38	0	0	162	0	0	0	0		375

cc- clearcut

pc- partial cut

CSL- Common School Land

BOF- Board of Forestry



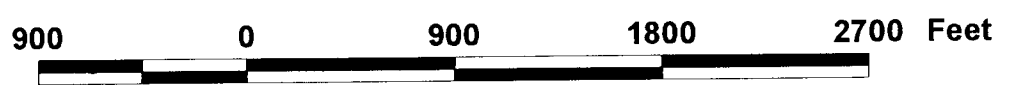
- Project Point
- End Fish-Bearing Stream
- ~ Harvest Roads
- 2311.shp
- 2211.shp
- Draws 2 clipped.shp
- Streams
- Roads
- Operator Maintained
- State Maintained
- Sections
- Areas: 1, 2, 3, 4 Sale Boundary
- Sale Area I-IV
- Sale Area I-IV
- Stream Buffer 50 feet
- Area Boundaries
- Area Boundary
- Sale Boundary
- Benson thin stands.shp
- Area 1 2 3 4
- Non-required Thinning
- Non-required Thinning
- Non-required Thinning
- Non-required Thinning
- Stream Buffer 50 feet

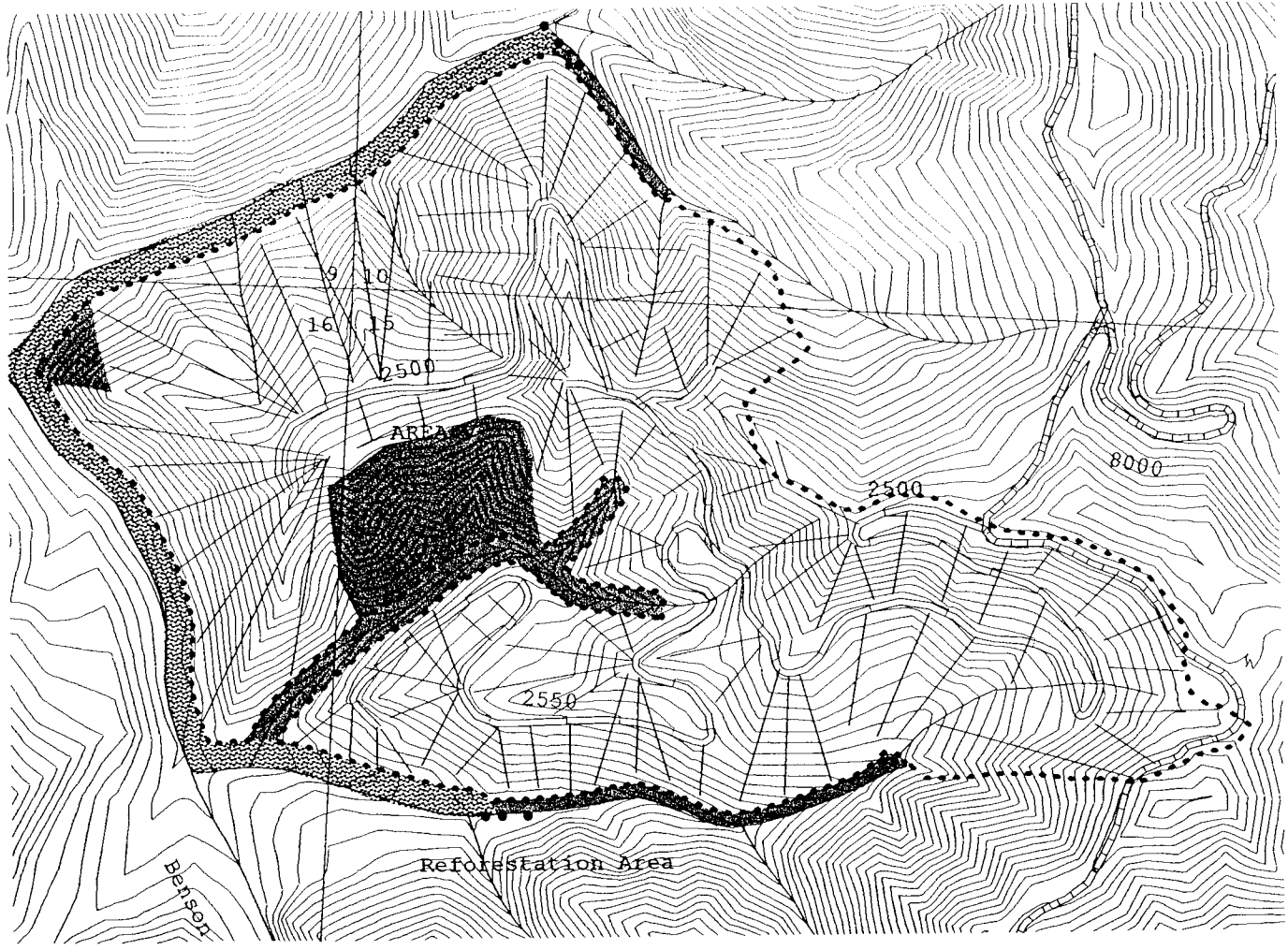
Benson Thin

Topographic and Logging Plan

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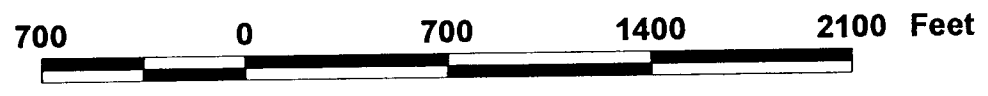
20' Contour Interval

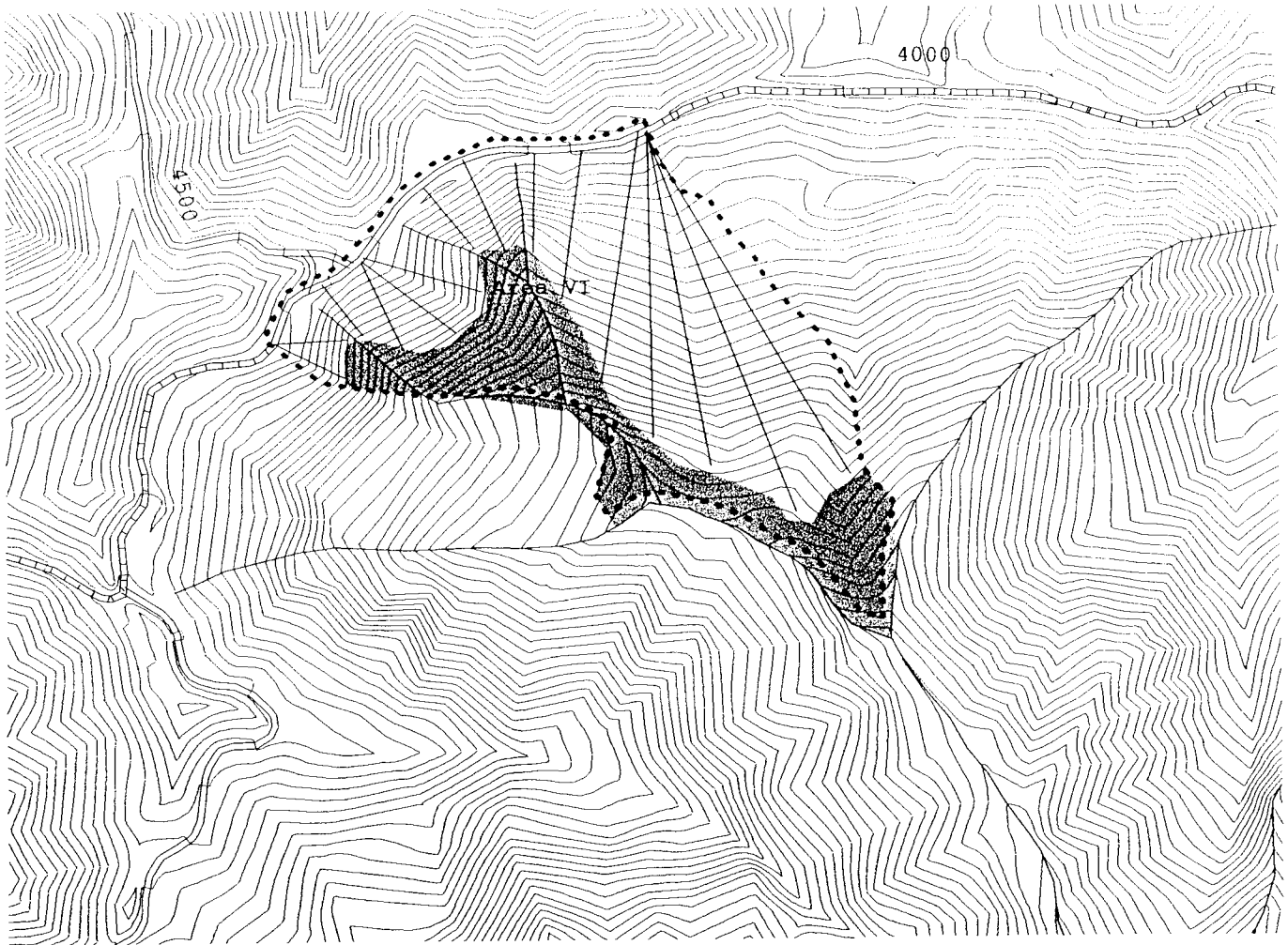




- Project Points**
 - Project Point
 - End Fish-Bearing Stream
- 2311.shp
- Roads**
 - Operator Maintained
 - State Maintained
 - Harvest Roads
- Streams**
- Sections**
- Area 5 Sale Boundary
- Benson thin stands.shp
- Area 5**
 - Non-required Thinning
 - Stream Buffer 100 feet
 - Stream Buffer 50 feet

Benson Thin
 Topographic and
 Logging Plan
 1:8000
 20' Contour Interval












Benson Thin

Topographic and Logging Plan

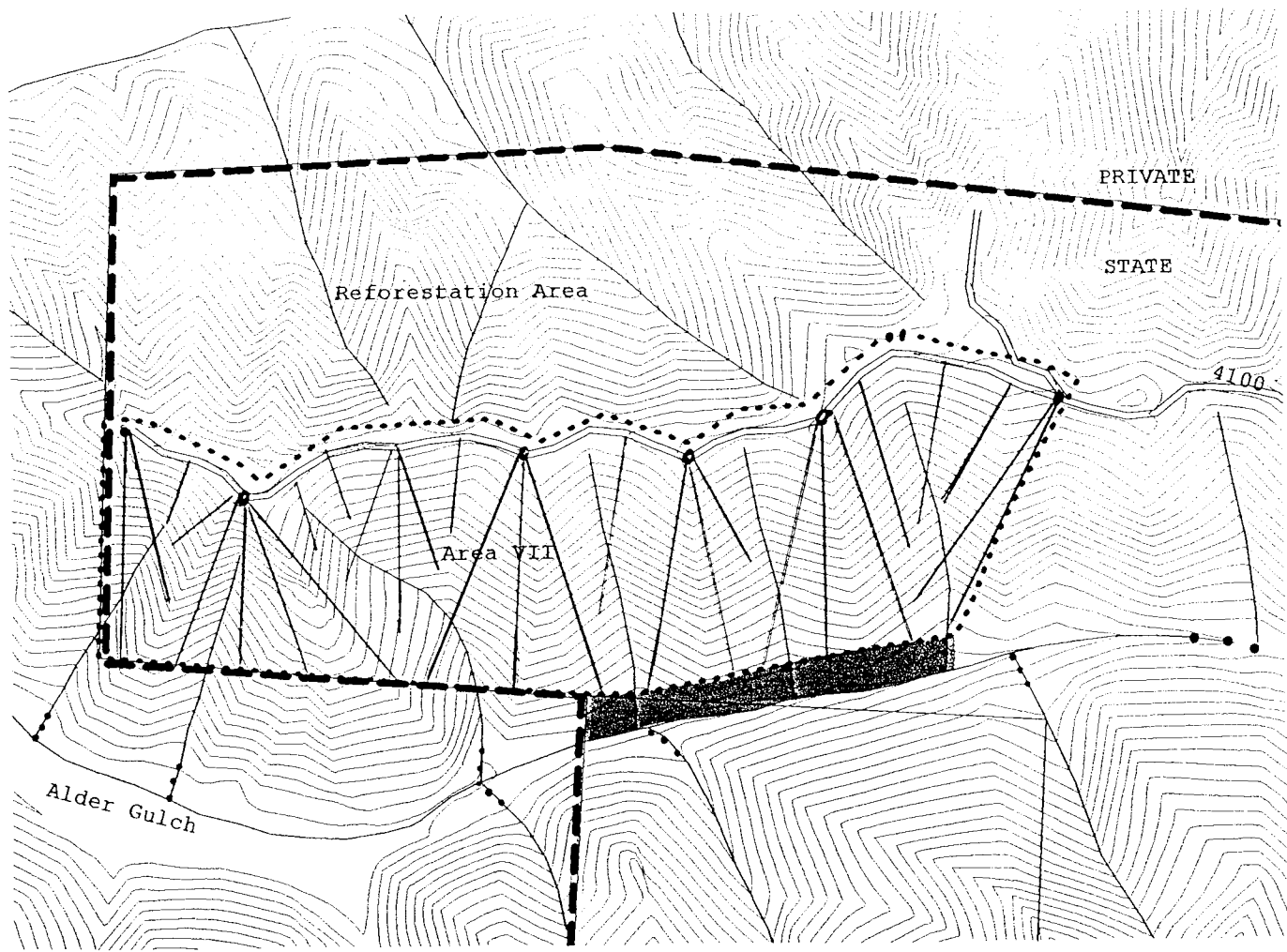
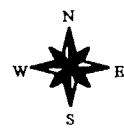
1:6000

1 inch = 500'

20' Contour Interval

-  Harvest roads
- Roads
 -  Operator Maintained
 -  State Maintained
-  Streams
-  Area 6 Sale Boundary
- Area 6
 -  Stream Buffer 50 feet
 -  Non-required Thinning





Benson Thin

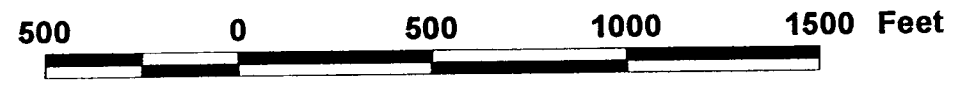
Topographic and Logging Plan

1:6000

1 inch = 500'

20' Contour Interval

- Project points.shp
 - Project Point
 - End Fish-Bearing Stream
- 2312.shp
- Esf boundary
- Ownership
 - FDF
 - FRA
- Roads
 - ▨ Operator Maintained
 - ▨ State Maintained
- Draws 2 clipped.shp
- Streams
- Area 7 Boundary
- Area 7
 - Stream Buffer 100 feet
 - Sections



WRITTEN PLAN

SALE NAME: Benson Thin

LOCATION: *Area 1, 2, and 3* are in portions of Sections 34 and 35, T22S, R11W, W.M., Douglas County, Oregon *Area 4* is in portions of Section 34, T22S, R11W, W.M., Douglas County, Oregon, and in portions of Sections 3 and 4, T23S, R11W, W.M., Coos County, Oregon. *Area 5* is in portions of Sections 9, 10, 15, and 16, T23S, R11W, W.M., Coos County, Oregon. *Area 6* is in portions of Section(s) 8 and 9, T23S, R11W, W.M., Coos County, Oregon. *Area 7* is in Section 12, T23S, R12W, W.M., Coos County, Oregon.

LANDOWNER: Oregon Department of Forestry; 63612 Fifth Road, Coos Bay, 97459-3899

CONTRACT PURCHASER: _____

NOTIFICATION NO: _____

I:\Misc. Admin (old sl6 backup)\FPAPLANS\Benson Thin.doc

This written plan is prepared to comply with the requirements for a written plan as provided for by the Forest Practices Act (ORS 629-635-130 and 624-24-113 section 1A). This plan outlines the measures to be taken to comply with the Forest Practices Act Class F stream protection requirements. The protected resources are Benson Creek (Area V) and Alder Gulch (Area VII) which are Type F streams draining into North Tenmile Lake.

SITUATION Area V abuts Benson Creek and Area VII abuts Alder Gulch. PURCHASER must leave a 100 wide foot buffer at locations shown on the Exhibit "A" to protect the resources. During yarding, care must be taken to minimize damage to the vegetation in the RMA. Protection measures required by the Forest Practices Act for the RMA are provided for in the sale contract. These measures are as follows:

FELLING AND BUCKING

1. Do not fell any trees or snags within the posted RMA boundaries.
2. Fell trees parallel to or away from the RMA so as to minimize their potential of entering the RMA or damaging RMA vegetation.

YARDING

1. Operator will use a machine capable of fully suspending logs.
2. When cables pass through or over the buffer strip shown on the contract Exhibit "A", protect the residual timber as follows:
 - a. Pull cables out of the residual timber prior to rigging the next yarding road.
 - b. Do not lower the skyline into the buffer during the yarding cycle.
 - c. Yarding roads shall be a minimum of 100 feet apart where they extend over or through the RMA.

O.D.F. REPRESENTATIVE Date

PURCHASER REPRESENTATIVE Date

OPERATOR REPRESENTATIVE Date

APPROVED BY: _____ DATE: _____

TITLE