



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
East Side Combination
Sale 341-11-12

District: Astoria

Date: May 16, 2011

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,254,216.30	\$0.00	\$1,254,216.30
		Project Work:	\$(299,920.00)
		Advertised Value:	\$954,296.30



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timber description

Location: Portions of Sections 13, 14, 15, 16, 21, 22, 23, and 24, T7N, R6W, W.M., Clatsop County, Oregon.

Stand Stocking: 60%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	16	0	98
Western Hemlock / Fir	16	0	96

Volume by Grade	2S	3S	4S	Total
Douglas - Fir	794	744	115	1,653
Western Hemlock / Fir	1,501	1,460	192	3,153
Total	2,295	2,204	307	4,806



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comments: Pond Values Used: 1st Quarter Calendar Year 2011.

Expected Log Markets: Warrenton, Tillamook, Garibaldi, Forest Grove, Clatskanie, and Mist, OR; Morton and Longview, WA.

Sitka Spruce Stumpage Price = Pond Value minus Logging Cost
 $\$218.71/\text{MBF} = \$397.00/\text{MBF} - \$178.29/\text{MBF}$

Western redcedar Stumpage Price = Pond Value minus Logging Cost
 $\$771.71/\text{MBF} = \$950.00/\text{MBF} - \$178.29/\text{MBF}$

Red Alder and Other Hardwoods Stumpage Price = Pond Value minus Logging Cost
 $\$366.71/\text{MBF} = \$545.00/\text{MBF} - \$178.29/\text{MBF}$

SCALING COST ALLOWANCE = \$5.00/MBF

FUEL COST ALLOWANCE = \$3.00/Gallon

HAULING COST ALLOWANCE

Hauling costs equivalent to \$700 daily truck cost.

Other Costs (with Profit & Risk to be added):

Additional Logging Costs:

Branding and Painting: $\$1\text{MBF} \times 4,806 \text{ MBF} = \$4,806$

Log Loader Slash & Landing Piling (includes Move-In and Pile Materials) = \$9,545 (see attached appraisal)

Close Dirt Spur(s): 2 hrs @ \$120/hr = \$240

Machine washing for noxious weed compliance = \$2,000

TOTAL Other Costs (with Profit & Risk to be added) = \$16,591

Other Costs (No Profit & Risk added):

"Loggers Choice" spur road in Area 4: 2 sta. x \$106/sta. = \$212

TOTAL Other Costs (No Profit & Risk added) = \$212



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logging conditions

combination#: 1 Douglas - Fir 33.65%
Western Hemlock / Fir 35.42%

yarding distance: Medium (800 ft) **downhill yarding:** No
logging system: Shovel **Process:** Manual Falling/Delimiting

tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF

loads / day: 8.0 **bd. ft / load:** 4,300

cost / mbf: \$72.81

machines: Shovel Logger

combination#: 2 Douglas - Fir 59.82%
Western Hemlock / Fir 62.96%

yarding distance: Long (1,500 ft) **downhill yarding:** No
logging system: Cable: Large Tower >=70 **Process:** Stroke Delimber

tree size: Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF

loads / day: 8.0 **bd. ft / load:** 4,500

cost / mbf: \$106.30

machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Large)

combination#: 3 Douglas - Fir 6.53%
Western Hemlock / Fir 1.62%

yarding distance: Short (400 ft) **downhill yarding:** No
logging system: Track Skidder **Process:** Harvester Head Delimiting

tree size: Small / Thinning 10in (90 Bft/tree), 18-20 logs/MBF

loads / day: 8.0 **bd. ft / load:** 3,500

cost / mbf: \$148.39

machines: Forwarder
Harvester



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District: Astoria

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logging costs

Operating Seasons:	3.00	Profit Risk:	15.00%
Project Costs:	\$299,920.00	Other Costs (P/R):	\$16,591.00
Slash Disposal:	\$0.00	Other Costs:	\$212.00

Miles of Road

Road Maintenance: \$5.20

Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	0.0	0.0	0.0

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	3.0	4.0
Western Hemlock / Fir	\$0.00	2.0	4.0



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District: Astoria

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logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$97.78	\$5.30	\$2.74	\$51.73	\$3.45	\$24.15	\$0.00	\$5.00	\$0.04	\$190.19
Western Hemlock / Fir									
\$95.12	\$5.41	\$2.74	\$79.13	\$3.45	\$27.88	\$0.00	\$5.00	\$0.04	\$218.77

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$525.07	\$334.88	\$0.00
Western Hemlock / Fir	\$0.00	\$440.99	\$222.22	\$0.00



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summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Western Hemlock / Fir	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	1,653	\$334.88	\$553,556.64
Western Hemlock / Fir	3,153	\$222.22	\$700,659.66

Gross Timber Sale Value

Recovery: \$1,254,216.30

Prepared by: Kraig Kirkpatrick

Phone: 503-325-5451

Site Prep Appraisal

Sale Number: 341-11-12
 Sale Name: East Side Combination
 Date: 02/10/2011

Vegetation Type/Zone	Vegetation Type/Zone Code	Production Rate (hr/ac)	Estimated Piles/Acre
Doug-fir	A	1.0	3.0
Hemlock/Fir	B	1.5	4.5
Hemlock/Spruce	C	2.0	6.0
Hemlock	D	2.0	6.0
Conifer/Hardwood	E	1.5	4.5

Sale Area	Harvest Type	Veg Type/Zone	Ground Based Yarding Acres	Estimated Piling		Total Cost/Area
				Hours/Area	Cost/Hour	
2	MC	B	10	15	\$110.00	\$1,650.00
4	MC	B	30	45	\$110.00	\$4,950.00

In-unit Piling Sub Total = \$6,600.00

Sale Area	Number of Landings to be Piled	Cost/Landing Pile*	Total Cost/Area	Number of In-Unit Piles	Material Cost/Pile	Total Cost/Area
4	3	\$220.00	\$660.00	135	\$5.00	\$675.00
					\$5.00	\$0.00

*Cost includes separating firewood

Materials Sub Total = \$900.00

Landing Piling Sub Total = \$1,100.00

Move-In Allowance	Number of Move-In's	Total Move-In Allowance	Sub Total =
\$945.00	1	\$945.00	\$945.00

Grand Total = \$9,545.00

Road Maintenance Cost Summary (Interim and Post Harvest)

Sale: East Side Combination
Date: February 10, 2011
By: Kraig Kirkpatrick

MBF: 4,806
\$/MBF: \$5.20

FL

Type	Equipment/Rationale	Move-in Rate	Times	Hours	Rate	Cost
Progressive Operations Entries (1)	Grader 14G	\$675	1	32	\$93	\$3,651
	Dump Truck 12CY	\$141	1	20	\$73	\$1,601
	FE Loader C966	\$675	1	10	\$77	\$1,445
Final Haul Road Maintenance Haul Route	Grader 14G	\$675	1	60	\$93	\$6,255
	Dump Truck 12CY	\$141	2	20	\$73	\$1,742
	FE Loader C966	\$675	1	10	\$77	\$1,445
	Vibratory Roller	\$675	1	60	\$72	\$4,995
	Water Truck 2,500 gallon Labor	\$165	1	40	\$83	\$3,485
				10	\$38	\$380
Total						\$24,999

Interim Maintenance (1)

Production Rates
Grader

Miles/day	Distance(miles)	Days	Hours
2.5	8.0	3	32

Final Road Maintenance

Production Rates
Grader
Vibratory Roller

Miles/day	Distance(miles)	Days	Hours
1.5	9.0	6.0	60.00
1.5	9.0	6.0	60.00

***Maintenance calculations were determined as follows:**

Haul Route is determined from sale areas north to Highway 30
West Kerry, East Kerry, West Creek Ridge Road

Total Miles: 9 Miles

SUMMARY OF ALL PROJECT COSTS

SALE NAME: East Side Combination

NEW CONSTRUCTION:

	<u>Road segment</u>	<u>Length/Sta</u>	<u>Cost</u>
Project No. 1	2A-2B and A-B.	32.30	\$58,991
TOTALS		32.30	\$58,991

ROAD IMPROVEMENT:

	<u>Road segment</u>	<u>Length/Sta</u>	<u>Cost</u>
Project No. 2	I1-I2, I3-I4, I5-I6, and C to D.	418.10	\$90,914
TOTALS		418.10	\$90,914

SPECIAL PROJECTS:

	<u>Description</u>	<u>Cost</u>
Project No. 3	Rock Crushing - Viewpoint Quarry	\$101,006
Project No. 4	Road Vacating	\$21,188
Project No. 5	Roadside Brushing	\$10,252
	Project Road Maintenance	\$10,874
TOTAL		\$143,320

MOVE IN:

	<u>Equipment</u>	<u>Cost</u>
	Excavator (C330)	\$ 1,220
	Excavator (C315)	\$ 699
	Dozer (D8)	\$ 1,220
	Rubber Tired Skidder	\$ 622
	Vibratory Roller	\$ 675
	10-12 yd dump truck (X 3 @ \$141 each)	\$ 423
	Grader (14G)	\$ 675
	Water Truck (2,500 gal)	\$ 165
	20yd dump truck w/pup trailer (X 6 @ \$166)	\$ 996
TOTAL		\$ 6,695

GRAND TOTAL **\$299,920**

Compiled By: Kraig Kirkpatrick

Date: 04/07/2011

SURFACING		Description	Stations/amount	x	Rate/ sta/amt	Cost
Subgrade prep:		Grade, Shape and Ditch 16'	32.30	x	\$21.55	\$696.07
		Subgrade Compaction	32.30	x	\$17.52	\$565.90

ROAD SEGMENT		2A to 2B		POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost
Application	Rock Size and Type	Location	Depth of Rock (inches)	2A to 2B Volume (CY) per	0+00 to 7+00 Number of					
Base Rock	4"-0"	0+00-7+00	8	station 50	stations 7.00			350	\$6.69	\$2,342
Junctions	4"-0"	0+00	8	junction 33	junctions 1			33	\$6.69	\$221
Turnouts	4"-0"	6+00	8	TO 22	TO's 1			22	\$6.69	\$147
Turnarounds	4"-0"	6+00	8	TA 11	TA's 1			11	\$6.69	\$74
Landings	6"-0"	7+00	N/A	Landing 80	Landings 1			80	\$9.94	\$795
Total Rock for Road Segment:				2A to 2B				496		

\$3,578

ROAD SEGMENT		A to B		POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost
Application	Rock Size and Type	Location	Depth of Rock (inches)	A to B Volume (CY) per	0+00 to 25+30 Number of					
Base Rock	4"-0"	0+00-25+30	8	station 50	stations 20.4			1,020	\$6.69	\$6,824
Base Rock (Reclaim from V3-V4)	4"-0"	0+00-25+30	10	station 63	stations 4.9			309	\$6.69	\$2,065
Curve Widening Base Rock	4"-0"	2+60-3+75, 5+00-6+10, 6+30-7+35, 12+90-13+55, 17+40-18+75, 21+05-22+10	8	curves N/A	curve 6			252	\$6.69	\$1,686
Surfacing Rock	3/4"-0"	0+00-22+00	4	station 25	stations 25.3			633	\$6.69	\$4,231
Curve Widening Surface Rock	3/4"-0"	2+60-3+75, 5+00-6+10, 6+30-7+35, 12+90-13+55, 17+40-18+75, 21+05-22+10	4	curves N/A	curves 6			120	\$6.69	\$803
Turnouts	4"-0"	3+25, 12+75	8	TO 44	TO's 2			88	\$6.69	\$589
Turnouts	3/4"-0"	3+25, 12+75	4	TO 22	TO's 2			44	\$6.69	\$294
Junctions	4"-0"	0+00, 25+30	8	junction 33	junctions 2			66	\$6.69	\$442
Junctions	3/4"-0"	0+00, 25+30	4	junction 22	junctions 2			44	\$6.69	\$294
Dissipator	24"-6"	19+40	N/A	dissipator 11	dissipator 1			11	\$10.58	\$116
Fill Armor	24"-6"	4+20, 10+70, 22+35	N/A	fill 11	fills 3			649	\$10.58	\$6,866
Total Rock for Road Segment:				A to B				3,235		

\$24,211

Processing:		Description	No. sta	Rate/sta	Cost
		Water, Process & Compact Base Rock (process in 1 lift):	32.30	\$49.02	\$1,583
		Water, Process & Compact Surface Rock:	25.30	\$49.02	\$1,240

SUB TOTAL FOR SURFACING

24"-6"	6"-0" pr	4"-0"	3/4"-0"	Total
680	80	2,151	841	3,731

3,731

\$31,875

SPECIAL PROJECTS

Description	Cost

SUB TOTAL FOR SPECIAL PROJECTS

\$0

Subtotal of Surfacing & Spec. Proj. \$31,875
Subtotal of Cleaning, Exc., Curv. \$27,116

GRAND TOTAL

\$58,991

Compiled By: Kraig Kirkpatrick

Date: 04/07/2011

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: East Side Combination
 ROAD: 2A-2B (7.0) and A-B(25.3)
 POINTS:

NEW CONSTRUCTION: 32.30 STATIONS 0.61 MILES
 IMPROVEMENT: STATIONS MILES

Method	Acres/amount	x	Rate	=	Cost
Scatter Outside of RW	3.70	x	\$1,161.00	=	\$4,295.70
		x		=	
		x		=	

SUB TOTAL FOR CLEARING & GRUBBING \$4,296

Material	Cy/amount	x	Rate	=	Cost
2A-2B		x		=	
Balanced Construction-Field Design	7.00	x	\$106.00	=	\$742.00
Landing Construction	1.00	x	\$338.00	=	\$338.00
A-B		x		=	
Common Drift less than 50% slopes	2,180.00	x	\$1.60	=	\$3,488.00
Common Drift greater than 50% slopes	1,750.00	x	\$1.80	=	\$3,150.00
End-haul excavated material (fill construction)	2,000.00	x	\$3.50	=	\$7,000.00
Embankment Compaction	5,930.00	x	\$0.60	=	\$3,558.00
Cut Slope Rounding	5.00	x	\$37.00	=	\$185.00

SUB TOTAL FOR EXCAVATION \$18,461

CULVERT MATERIALS AND INSTALLATION									
Location	Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type	Lineal ft.	Rate	Cost
2A-2B									
1+00	18"CPP	30	\$17.64	\$529.20					
3+50	18"CPP	30	\$17.64	\$529.20					
A-B									
2+45	18"CPP	35	\$17.64	\$617.40					
4+90	18"CPP	50	\$17.64	\$882.00					
11+20	18"CPP	30	\$17.64	\$529.20					
16+00	18"CPP	35	\$17.64	\$617.40					
19+40	18"CPP	30	\$17.64	\$529.20					

Other/miscellaneous:		Description	Quantity	Rate	Cost
Culvert stakes & markers:		Culvert Markers	7	\$18.00	\$126.00

SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION \$4,360

Subtotal of Clearing, Exc., Culv. **\$27,116**

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: East Side Combination
 ROAD: I1-I2(223.0), I3-I4(146.0), I5-I6(41.3)
 POINTS: C-D(7.8)

NEW CONSTRUCTION: _____ STATIONS
 IMPROVEMENT: 418.10 STATIONS

_____ MILES
 7.92 MILES

CLEARING & GRUBBING

Method	Acres/amount	x	Rate	=	Cost
Scatter outside of R/W		x		=	
		x		=	
		x		=	

SUB TOTAL FOR CLEARING & GRUBBING

EXCAVATION

Material	Cy/amount	x	Rate	=	Cost
C-D		x		=	
Common Drift less than 50% slopes	995.00	x	\$1.60	=	\$1,592.00
Embankment compaction	995.00	x	\$0.60	=	\$597.00
		x		=	
		x		=	
		x		=	
		x		=	
		x		=	
		x		=	
		x		=	

SUB TOTAL FOR EXCAVATION

\$2,189

CULVERT MATERIALS AND INSTALLATION

Location	Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type	Lineal ft.	Rate	Cost
I1-I2									
59+15	18	40	\$17.64	\$705.60					
131+95	18	40	\$17.64	\$705.60					
136+70	18	35	\$17.64	\$617.40					
156+40	18	30	\$17.64	\$529.20					
169+50	18	30	\$17.64	\$529.20					
C-D	18	35	\$17.64	\$617.40					

	Description	Quantity	Rate	Cost
Other/miscellaneous:	Culvert Markers	14.00	\$18.00	\$252.00
Culvert stakes & markers:				

SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION

\$3,956

Subtotal of Clearing, Exc., Culv.

\$6,145

SUMMARY OF ROCK DEVELOPMENT AND CRUSHING COSTS

PROJECT NO. 3 Timber Sale Name: East Side Combination
 Quarry: _____ Swell: _____
 Location: SE1/4,SE1/4 Section 4, T7N, R6W, W.M. Shrink: 16%
 County: Clatsop
 By: d.mellison Loading Hopper: Yes
 Date: 08/31/10

ROCK SIZE	REJECT	GRADATION	STOCKPILE CU. YDS.	TRUCK MEAS CU. YDS.	TOTAL CU. YDS.
3/4"-0"	10%	CR		3,975	3,975
1-1/2"-0"	10%	CR		4,182	4,182
4"-0"	10%	CR		2,974	2,974
6"-0"		PR		80	80
24"-6"		RR		682	682
36"		RR			
TOTAL CUBIC YARDS OF ROCK:				11,893	11,893

1) MOBILIZATION & SET UP:

EQUIPMENT	QUANTITY	RATE	COST	EQUIPMENT	QUANTITY	RATE	COST
Dump Trucks	1	\$141	\$141				
Screening Plants		\$515		Screening Plant	1	\$515	\$515
D8 Cat	1	\$1,220	\$1,220	Loading Hopper	1	\$515	\$515
D6 Cat		\$675		Loader	2	\$699	\$1,398
Drill & Compressor	1	\$1,180	\$1,180				
Powder	1	\$327	\$327	3 Stage Crusher	1	\$2,694	\$2,694
Excavator	1	\$1,220	\$1,220				

SUB TOTAL FOR MOBILIZATION \$9,211

EQUIPMENT SET UP	TIMES	RATE	COST
3 Stage Crusher	1	\$3,205	\$3,205
Screening Plants	1	\$273	\$273
Loading Hopper	1	\$273	\$273
Original Calibration	1	\$507	\$507

SUB TOTAL FOR SET UP COSTS \$4,258

TOTAL MOBILIZATION & SET UP COSTS **\$13,469**

2) CLEARING & GRUBBING

DESCRIPTION	QUANTITY	UNIT	RATE	COST
Clear, Load, Haul to Waste Area		hr		
Slash and Stumps (1 truck, 1 exc.)				
Pile & Burn Slash and Stumps(1 exc)		hr		
Move-in Fire Truck for the burning of the Clearing Debris		ea		

TOTAL CLEARING & GRUBBING COSTS

3) EXCAVATION

MATERIAL DESCRIPTION	QUANTITY	UNIT	RATE	COST
Overburden Removal (excavate, load haul, spread)				
Spread Area 1 unsuitable material(D8)	8	hrs.	\$147.00	\$1,176

TOTAL EXCAVATION COSTS \$1,176

4) DEVELOP ROCK

ROCK SUMMARY			METHOD	%	QUANTITY	RATE	COST
Type	Cu. yd. Vol.	Weight	Ripping			\$2.20	
crushed	11,131	94%	Drill & shoot	75%	9,755	\$2.30	\$22,436
pit run	80	1%	Oversize red	5%	561	\$5.80	\$3,251
rip rap	682	6%	Other				
Total	11,893						
reject	1,113	9.4%					

Note: There is a estimated 25% of needed rock source already drilled and shot.

TOTAL ROCK DEVELOPMENT COSTS \$25,687

5) CALIBRATION & TESTING

DESCRIPTION	NO.	\$/TEST	COST
Calibrate	3	\$507.00	\$1,521
Calibrate			
Test	6	\$57.30	\$344
Test			

TOTAL CALIBRATION & TESTING COSTS \$1,865

6) SCREENING

	CU. YD. QUANTITY	SCREEN TYPE	HOURLY PRODUCTION	\$/ HOUR	\$/ C.Y.	TOTAL COST
Feeding Screen	7,500		100	\$102	\$1.02	\$7,650
Screening Rock	7,500	1"-0" Mesh	100	\$150	\$1.50	\$11,250

Note: Loader feeding the screen will also load the reject material to be hauled to the waste area.

TOTAL SCREENING COST \$18,900

7) FEEDING & LOADING CRUSHER

DESCRIPTION	CU. YD. QUANTITY	COST CU. YD.	TOTAL COST
Dig & Feed Rock	11,131	\$0.78	\$8,684

TOTAL FEEDING & LOADING COSTS \$8,684

8) ROCK CRUSHING

ROCK SIZE	ROCK TYPE	CU. YD. QUANTITY	CRUSHER TYPE	HOURLY PRODUCTION	RATE CU. YD.	TOTAL COST
3/4"-0"	crushed	3,975	3 stage	110	\$2.99	\$11,889
1-1/2"-0"	crushed	4,182	3 stage	120	\$2.74	\$11,466
4"-0"	crushed	2,974	2 Stage Crusher	140	\$2.05	\$6,097

TOTAL ROCK CRUSHING COSTS \$29,451

9) STOCKPILING

STOCKPILE SITE PREPARATION

Equipment	Hours	Rate	Total
Dozer		\$120.00	
Compactor		\$72.00	
Grader		\$90.00	
Excavator		\$138.00	

Rock for Floor (CY)	\$/CY Haul	Total

SUB TOTAL

HAUL & STOCKPILE

STOCKPILE LOCATION	SIZE	# of TRUCKS	CU. YDS.	RATE	COST
--------------------	------	-------------	----------	------	------

1. _____
2. _____
3. _____
4. _____
5. _____

6. SUB TOTAL

TOTAL STOCKPILING COSTS

10) MISCELLANEOUS COSTS

DESCRIPTION	COST
Haul, spread and compact the reject material at the waste area.	
\$1.40 /CY 1,113 CY	\$1,558
Final Quarry Dev., Access Road Const., Waterbarring, Drainage, Block Quarry Access	
Cat 330 Excavator 1.5 Hrs. \$144	\$216

TOTAL MISCELLANEOUS COSTS \$1,774

\$101,006

11) GRAND TOTAL:

\$/Cubic Yard \$9.07

East Side Combination										
Vacating Costs (Segment V1 to V2)										
Work Description	Station	C.Y.s	C330	D24 Trk	D12 Trk	Mobilization	Labor	B.Straw	Hl. Seed	Compaction
Begin vacating, block road	0+00		0.50							
Construct Waterbar	3+11		0.25							
Begin side cast pullback	4+75		1.5							
Remove culvert, end pullback	6+56		0.5					2	0.01	
Begin fill and culvert removal	6+93	6114	46	30	60			12	0.04	
End fill and culvert removal	8+43									
Remove culvert	9+00		0.5							
Optional waste area	12+04									
Construct Waterbar	12+54		0.25							
Remove fill and culvert, and block road	14+79	50	1.5					2	0.01	
Haul off culverts			2		4					
Waste Areas								4	0.01	6164
Mobilization										
2nd Excavator						\$1,220				
D24 Dump Truck						\$672				
Total Quantity (Hours)			53.00	30	64	0	0	20	0.07	0.0
Total Cubic yards		6,164								6,164
Rates			\$144.00	\$119.00	\$73.00		\$38.00	\$10.00	\$545.00	\$0.30
Total Dollars			\$7,632	\$3,570	\$4,672	\$1,892	\$0	\$200	\$38	\$1,849

Total Segment Cost **\$19,853**

SUMMARY OF VACATING COSTS

SALE NAME: East Side Combination
 ROADS: _____
 POINTS: V3 to V4

VACATING: 12.50 STATIONS 0.24 MILES

AGGREGATE SALVAGE					
Method	CY	x	Rate	=	Cost
Aggregate Salvage (lifting + loading) (\$/cy)	312.00	x	\$1.90	=	\$592.80
		x		=	
		x		=	
		x		=	
		x		=	
SUB TOTAL FOR AGGREGATE SALVAGE					\$593

EXCAVATION					
Material	CY/Amount	x	Rate	=	Cost
		x		=	
		x		=	
Subgrade ripping and tilling	12.50	x	\$21.40	=	\$267.50
Construct Waterbars - Small Excavator (\$/hr)	1.00	x	\$94.00	=	\$94.00
		x		=	
		x		=	
		x		=	
SUB TOTAL FOR EXCAVATION					\$362

SEEDING AND MULCHING			Cost
Description			
Hand Grass Seeding Pasture Mix (seed, fertilizer, labor)	.7 ac @ \$545/ac		\$381.00
SUB TOTAL FOR SEEDING AND MULCHING			\$381

MISCELLANEOUS		Cost
Description		
SUB TOTAL FOR MISCELLANEOUS		

GRAND TOTAL **\$1,335**

Compiled By: Kraig Kirkpatrick Date: 02/08/2011

Project No. 5 Roadside Brushing Costs				
Road Name	Block Number	Miles	Cost	
West Kerry Block	1	3.53	\$2,223	
West Creek Ridge	2	4.90	\$1,960	
East Kerry Block	3	5.46	\$4,054	
West Creek Block	4	3.06	\$2,015	
Total		16.95	\$10,252	

Projects Road Maintenance Cost Summary

Sale: East Side Combination
Date: February 10, 2011
By: Kraig Kirkpatrick

Type	Equipment/Rationale	Hours	Rate	Cost
Post-Projects Road	Grader 14G	40	\$93	\$3,720
	Dump Truck 12CY (2 trucks)	16	\$73	\$1,168
	FE Loader C966	8	\$77	\$616
	Vibratory Roller	40	\$72	\$2,880
	Water Truck 2500 gallon	30	\$83	\$2,490
Total				\$10,874

Interim Maintenance

Miles/day	Distance(miles)	Days	Hours

Final Road Maintenance

Miles/day	Distance(miles)	Days	Hours
1.5	6.00	4.0	40.00
1.5	6.00	4.0	40.00

*Maintenance calculations were determined as follows:

Nicolai Mainline, East Kerry Rd., Ross Creek Tie-Thru Rd.

Total Miles: 6 miles.

**EAST SIDE COMBINATION
FY 2011
TIMBER CRUISE REPORT**

1. **Sale Area Location:** Areas 1, 2, 3, 4, and 5 R/W are located in portions of Sections 13, 14, 15, 16, 21, 22, 23, and 24 T7N, R6W, W.M., Clatsop County, Oregon.

All timber sale areas are posted with ODF "Timber Sale Boundary", "Area Boundary" signs and pink ribbon. Area 5 R/W is posted with ODF "Right-of-Way Boundary" signs.

2. **Fund Distribution:** **Fund:** BOF (100%)
 Tax Code: 30-05 (100%)

3. **Sale Acreage by Area:**

Area	Harvest Type	Gross Acres	New R/W Acres	Stream Buffer Acres	Existing R/W Acres	Green Tree Retention Area	Net Acreage
1	PC	38	0	0	1	0	37
2	MC	43	1	1	0	0	41
3	PC	15	0	0	1	0	14
4	MC	78	0	0	2	1	75
5	R/W	2	3*	0	0	0	3
TOTALS		176		1	4	1	170

*An additional 2 acres of R/W is located outside of the sale area, Pt. A to B and C to D.

4. **Cruisers and Cruise Dates:** Areas 1 and 3 were cruised by Bryce Rodgers and John Tillotson. Areas 2 and 4 were cruised by Kraig Kirkpatrick, Derek Bangs, Ed Holloran, Jon Long and Jay Morey. All areas were cruised in January 2011.

5. **Cruise Method and Computation:** Cruises used Corvallis MicroTechnology (CMT) and Juniper Allegro data collectors, and were downloaded to the Atterbury Super A.C.E. program in District for computing. See the attached Cruise Design for more details on the cruise method. The cruise calculations were processed in the Astoria District office.

Areas 1 and 3 (Partial Cut), were variable plot cruised with a 20 BAF. 23 plots were sampled on a cruise grid of 4 chains by 6 chains, with a count/cruise ratio of 1:1.

Areas 2 and 4 (Modified Clearcut), were variable plot cruised with a 54.4 BAF. 44 plots were sampled on a cruise grid of 4 chains by 7 chains, with a count/cruise ratio of 2:1.

Area 5 R/W, was calculated applying road R/W acreage using cruise volumes per acre for the modified clearcut areas.

<u>AREAS</u>	<u>PROJECT</u>	<u>TRACT</u>	<u>CRUISE TYPE</u>
1 and 3	EASTSIDE	A13	00PC, TAKE, LEAV
2 and 4	EASTSIDE	A24	00MC, TAKE, LEAV
5R/W	EASTSIDE	A24	RW

6. **Timber Description:** Areas 1 and 3 (Partial Cut) – These stands are approximately 30 years old. They are Douglas-fir dominant mixed conifer stands. These stands will be harvested to an SDI of approximately 32, with a basal area target of 120 ft², while removing approximately 81 trees per acre and 3.4MBF/acre. The average "take" tree size is 11" DBH and 28 feet to a merchantable top (6"d.i.b). Although the average volume per acre is approximately 3.4MBF, portions of these sale areas have low

stocking and are non thinnable. In portions of the sale areas that are fully stocked the average volume per acre to be removed is approximately 4.2 MBF and approximately 106 TPA.

Areas 2 and 4 (Modified Clearcut) – These stands range from 55 to 69 years old, consisting of Douglas-fir, hemlock, and noble fir. The stands average 16 inches DBH, with an average merchantable height of 62 feet to a merchantable top (6" d.i.b.). The average volume (net) to be harvested is 39 MBF/acre.

Area 5 R/W – The average volume (net) is approximately 40 MBF/acre with similar timber types as in Areas 2 and 4.

7. Statistical Analysis: (See also "Statistics Reports," attached.)

Area	Target CV	Target SE%	Actual CV	Actual SE%
1 and 3	45	13	28.1	6.0
2 and 4	55	11	41.1	6.2

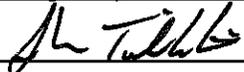
The statistics for all areas are "Take" and "Leave" stands combined.

8. Take Volumes by Species and Log Grades for All Sale Areas by MBF: (See "Species, Sort Grade-Board Feet Volumes (Project)" and the "Stand Table Summary" attached, of the thinning and regeneration harvest areas combined.) Volumes do not include "ingrowth." The majority of defect and breakage was culled out during the cruise.

Species	DBH	Net Vol.	2 Saw	3Saw	4 Saw	Camp Run	% D & B	% Sale
Douglas-fir	15.7	1,653	794	744	115		3.5%	34%
Hemlock	14.7	2,749	1,247	1,326	176		8.6%	57%
True fir	18.4	404	254	134	16		14.3%	9%
TOTAL		4,806						

9. Prepared by: Kraig Kirkpatrick

Date: 1-21-11

10. Approved by: 

Date: 3-8-11

11. Attachments:
- Cruise Plans & Maps (6 pages)
 - Species, Sort, Grade Reports (4 pages)
 - Statistics Reports (8 pages)
 - Stand Table Summary Reports (3 pages)
 - Take - Log Stock Table Reports (2 pages)

X:\Sunset Unit\2011 FY Sales\East Side Combination\Sale Prep\Cruise\Cruise Report.doc

Project: Eastside, TWN: 07N, RGE: 06W, SEC: 11, TYPE: OOPC,
TRACT: A13, ACRES: 53, B1 = 20.0

Revised August, 2002

**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: East Side Combination Areas 1 & 3

Harvest Type: (PC) Partial Cut

Approx. Cruise Acres: 53 Estimated CV% 45 Net BF/Acre SE% Objective 13

Planned Sale Volume : 318 MBF Estimated Sale Area Value/Acre: \$1,500/Ac
(6 MBF/Ac.)

A. **Cruise Goals:** (a) Grade minimum 100 conifer and 10 hardwood trees:
(b) Sample 25 cruise plots (1 grade/1 count); (c) Other goals (X Determine
volume and quality; Determine pole density for sale value

B. Cruise Design:

1. **Plot Cruises:** BAF 20.0 (Full point) Half point) (circle one)
Cruise Line Direction(s) Area 1 = East - West, Area 3 = North - South
Cruise Line Spacing 6 (chains)
Cruise Plot Spacing 4 (chains)
Grade/Count Ratio 1:1

Basal Area target of 120ft², leave 6 trees per plot. If a plot ends up in a buffer adjust by
pacing on through or offsetting one chain. Take plots as marked on map. All cedar are
leave trees. Record all snags as SN. Grade all hardwoods as CampRun.

C. Tree Measurements:

- 1. Diameter:** Minimum DBH to cruise is 8" for conifers and 10" for hardwoods.
Record dbh to nearest $\frac{1}{2}$ " for trees < 16", to nearest 1" for trees 16-24", and to nearest
2" for trees > 24".
- 2. Bole Length:** Record bole length to nearest foot at TCD. For trees greater than 100
feet in merchantable height, estimating to the nearest 5 feet is acceptable.
- 3. Top Cruise Diameter (TCD):** Minimum top outside bark is 7" for conifers and 7" for
hardwoods or 40 % of dob at 16' form point. Generally, use 7" outside bark for
trees < 18" dbh and 40% of dob @ FP for trees > 18" dbh.
- 4. Form Factors:** (1) Measure or estimate a 16' form factor for every conifer tree
measured/graded; OR (2) Measure a minimum of 20 form factors for each major
conifer species on the cruise area, and use these to calculate average FF for the
species on the cruise. Hardwood form factors are a Standard 87.
- 5. Tree Segments:** Record log segments in "standard" log lengths in general use, such
as 32' and 40' lengths, whenever possible. Do not record odd segments just to
maximize grade. Cull segments can be any length. For conifers, minimum

merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merchantable segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.

6. Species, Sort, and Grade Codes:

- A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); SF (Silver fir); A (Red alder); M (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DL, HL, CL, etc.)
- B. Sort: Use code "1" (Domestic).
- C. Grade: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull
Hardwoods: R = CampRun

7. Deductions: Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.

8. Standard Field Procedures: Plot Type Cruises: Mark cruise line beginning and end points with blue/yellow flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at inter-visible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.

9. Cruising Equipment: Relaskop, Rangefinder, Logger's Tape (with dbh on back) Biltmore Stick, Compass, Cruise Cards in Tatum OR Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint.

10. Attachments: A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.

Cruise Design by: Jay Morey Approved by: _____ Date: _____

Project: Eastside, TWN: 07N, RGE: 06W, Sec: 22, Type: OOMC
Tract: A24, Acres: 118, B1 = 54.44

Revised August, 2002

**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: East Side Combination Areas 2 & 4

Harvest Type: (CC) Clearcut

Approx. Cruise Acres: 118 Estimated CV% 55 Net BF/Acre SE% Objective 11

Planned Sale Volume: 4,720 MBF Estimated Sale Area Value/Acre: \$5,200/Ac
(40 MBF/Ac.)

A. **Cruise Goals:** (a) Grade minimum 100 conifer and 20 hardwood trees:
(b) Sample 45 cruise plots (1 grade/2 count); (c) Other goals (X Determine
volume and quality; Determine pole density for sale value.

B. Cruise Design:

1. **Plot Cruises:** BAF 54.44 (Full point) Half point) (circle one)
Cruise Line Direction(s) East - West
Cruise Line Spacing 7 (chains)
Cruise Plot Spacing 4 (chains)
Grade/Count Ratio 1:2

If a plot ends up in a buffer adjust by pacing on through or offsetting one chain. Take plots as marked on map. All cedar are leave trees. Record all snags as SN. Grade all hardwoods as CampRun.

C. Tree Measurements:

- 1. Diameter:** Minimum DBH to cruise is 8" for conifers and 10" for hardwoods.
Record dbh to nearest $\frac{1}{2}$ " for trees < 16", to nearest 1" for trees 16-24", and to nearest 2" for trees > 24".
- 2. Bole Length:** Record bole length to nearest foot at TCD. For trees greater than 100 feet in merchantable height, estimating to the nearest 5 feet is acceptable.
- 3. Top Cruise Diameter (TCD):** Minimum top outside bark is 7" for conifers and 7" for hardwoods or 40 % of dob at 16' form point. Generally, use 7" outside bark for trees < 18" dbh and 40% of dob @ FP for trees > 18" dbh.
- 4. Form Factors:** (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer species on the cruise area, and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.
- 5. Tree Segments:** Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull segments can be any length. For conifers, minimum

merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merchantable segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.

6. Species, Sort, and Grade Codes:

- A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); SF (Silver fir); A (Red alder); M (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DL, HL, CL, etc.)
- B. Sort: Use code "1" (Domestic).
- C. Grade: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull
Hardwoods: R = CampRun

7. Deductions: Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.

8. Standard Field Procedures: Plot Type Cruises: Mark cruise line beginning and end points with blue/yellow flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at inter-visible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.

9. Cruising Equipment: Relaskop, Rangefinder, Logger's Tape (with dbh on back) Biltmore Stick, Compass, Cruise Cards in Tatum OR Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint.

10. Attachments: A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.

Cruise Design by: Jay Morey Approved by: _____ Date: _____.

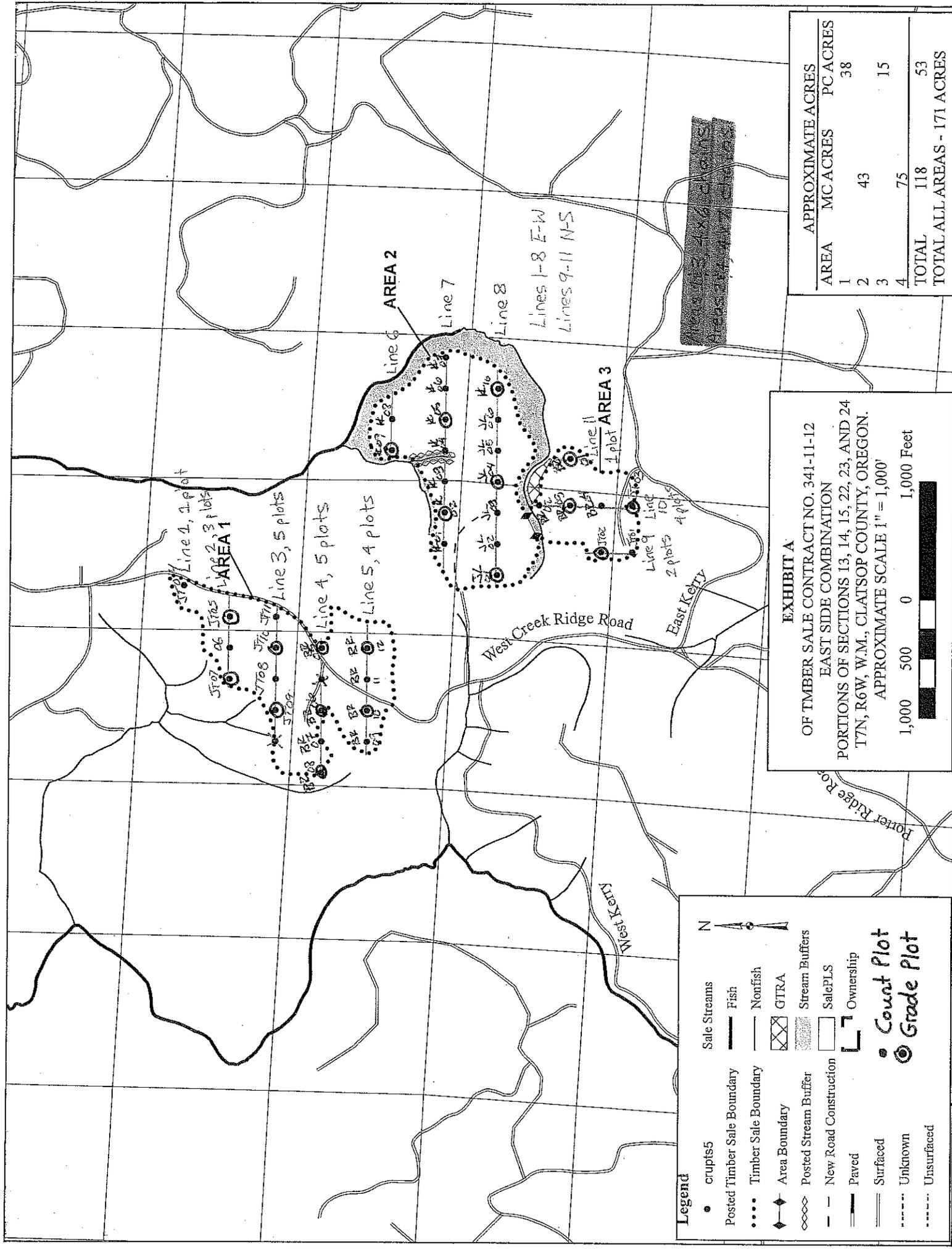
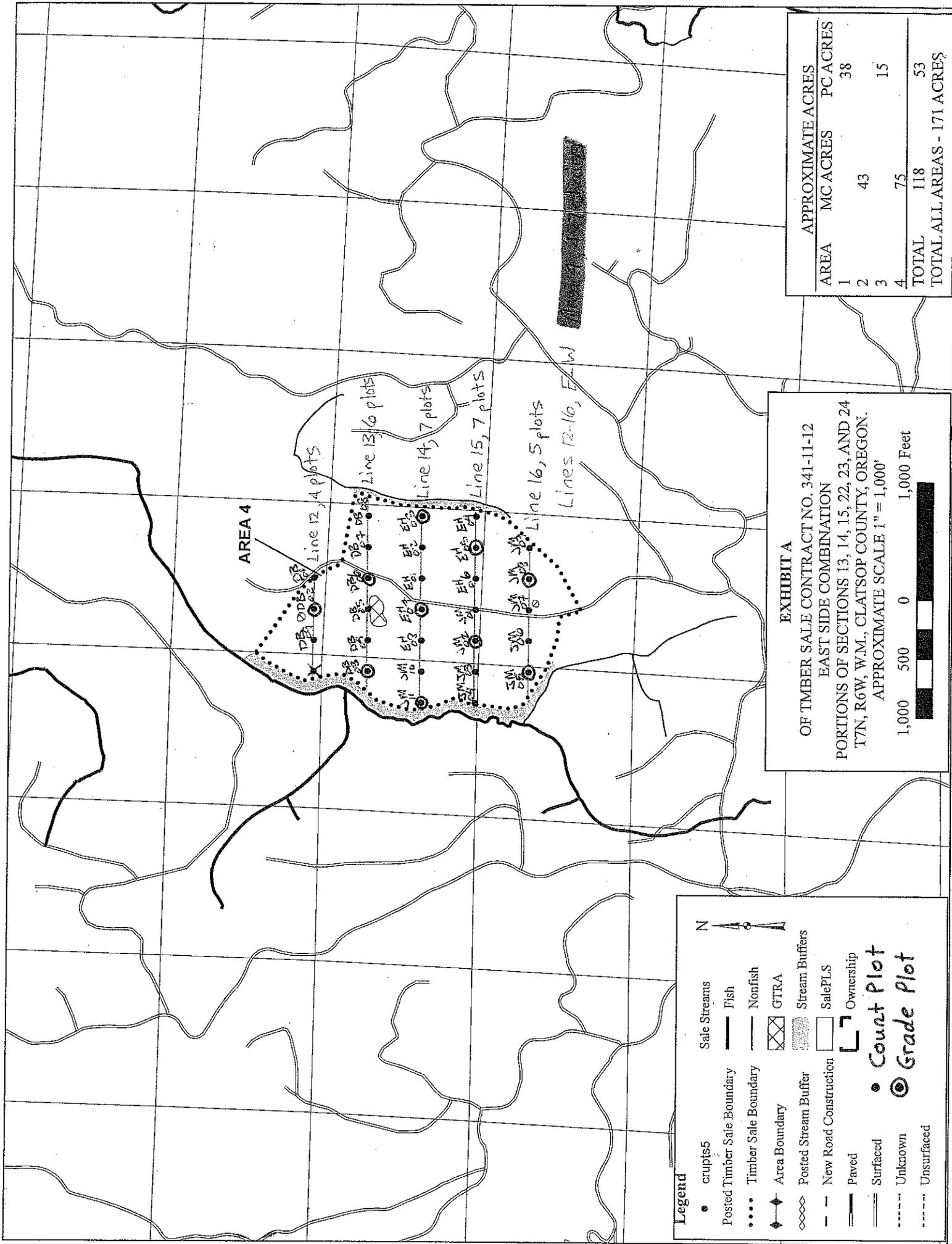


EXHIBIT A
 OF TMBER SALE CONTRACT NO. 341-11-12
 EAST SIDE COMBINATION
 PORTIONS OF SECTIONS 13, 14, 15, 22, 23, AND 24
 T7N, R6W, W.M., CLATSOP COUNTY, OREGON.
 APPROXIMATE SCALE 1" = 1,000'

Legend

- cruptis5
- Posted Timber Sale Boundary
- Timber Sale Boundary
- Area Boundary
- Posted Stream Buffer
- New Road Construction
- Paved
- Surfaced
- Unknown
- Unsurfaced
- Sale Streams
- Fish
- Nonfish
- GTRA
- Stream Buffers
- SalePLS
- Ownership
- Count Plot
- Grade Plot



Legend

- crupts5
- Posted Timber Sale Boundary
- Timber Sale Boundary
- ◆ Area Boundary
- ∞∞∞∞ Posted Stream Buffer
- - - New Road Construction
- ▬ Paved
- ▬ Surfaced
- Unknown
- Unsurfaced
- ▬ Sale Streams
- ▬ Fish
- ▬ Nonfish
- ▬ GTRA
- ▬ Stream Buffers
- ▬ SalePLS
- ▬ Ownership
- Count Plot
- ◎ Grade Plot

EXHIBIT A

OF TMBER SALE CONTRACT NO. 341-11-12
EAST SIDE COMBINATION
PORTIONS OF SECTIONS 13, 14, 15, 22, 23, AND 24
17N, R6W, W.M., CLATSOP COUNTY, OREGON.
APPROXIMATE SCALE 1" = 1,000'

1,000 500 0 1,000 Feet

AREA	APPROXIMATE ACRES	
	MC ACRES	PC ACRES
1		38
2	43	
3		15
4	75	
TOTAL	118	53
TOTAL ALL AREAS - 171 ACRES		

Species, Sort Grade - Board Foot Volumes (Project)

T07N R06W S11 TyTAKE	51.00
T07N R06W S22 TyRW	3.00
T07N R06W S22 TyTAKE	116.00

Project: EASTSIDE
Acres 170.00

Page 1
Date 1/21/2011
Time 1:26:20PM

S Spp	So T	Gr rt	ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log			Logs Per /Acre	
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf		
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
D	DOCU				100.0	153											6		0.00	2.7	
D	DO2S	48			1.9	4,758	4,669	794		5	78	18		5		16	78	35	220	1.58	21.2
D	DO3S	45			1.0	4,421	4,375	744	1	94	5		1	1	28	71	37	85	0.70	51.3	
D	DO4S	7			9.3	746	676	115	4	96			20	56	24		24	29	0.40	23.0	
D Totals				34	3.5	10,077	9,720	1,652	1	51	40	8	4	4	22	69	32	99	0.85	98.3	
H	DOCU				100.0	1,218											7		0.00	27.1	
H	DO2S	45			1.4	7,445	7,337	1,247		4	69	28				25	75	37	290	1.81	25.3
H	DO3S	48			1.8	7,938	7,797	1,325		95	5		1	3	36	61	36	85	0.69	91.6	
H	DO4S	7			4.7	1,088	1,038	176		100			83	17			18	22	0.39	47.5	
H Totals				57	8.6	17,689	16,171	2,749	54	33	13	6	2	29	63	27	84	0.82	191.6		
NF	DOCU				100.0	362											6		0.00	4.3	
NF	DO2S	62			2.3	1,530	1,495	254			100					100	40	274	1.67	5.5	
NF	DO3S	34				791	791	134		100					17	83	39	88	0.68	8.9	
NF	DO4S	4				93	93	16		100			100				17	20	0.35	4.6	
NF Totals				8	14.3	2,776	2,379	404	37	63	4	6	90	29	102	0.94	23.3				
Totals					7.4	30,542	28,270	4,806	0	52	38	10	5	3	25	68	29	90	0.84	313.2	

T07N R06W S22 TTAKE										T07N R06W S22 TTAKE			
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt				
07N	06W	22	A24	TAKE	116.00	44	87	1	W				

Spp	Sp	So	Gr	ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre	
						Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf		
										4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
H		DO	CU			00.0	1,680											6	0.00	35.9		
H		DO	2S		46	1.4	10,621	10,468	1,214		4	69	28			25	75	37	289	1.81	36.2	
H		DO	3S		48	1.8	11,097	10,895	1,264		95	5		1	2	35	62	36	86	0.69	126.6	
H		DO	4S		6	5.3	1,367	1,294	150		100			85	15			18	21	0.40	60.3	
H	Totals				58	8.5	24,764	22,657	2,628		53	34	13	5	2	29	64	28	87	0.83	259.0	
D		DO	CU			00.0	175											8	0.00	2.3		
D		DO	2S		51	1.9	6,789	6,663	773		5	78	18	5		16	78	35	220	1.58	30.3	
D		DO	3S		44	1.1	5,725	5,659	656		1	94	6	1	1	26	73	37	90	0.73	63.2	
D		DO	4S		5	9.5	702	635	74		100			9	75	16		24	30	0.40	21.4	
D	Totals				33	3.2	13,390	12,957	1,503		0	48	42	3	4	21	72	33	111	0.91	117.2	
NF		DO	CU			00.0	513											6	0.00	6.1		
NF		DO	2S		62	2.3	2,177	2,128	247			100				100		40	274	1.67	7.8	
NF		DO	3S		34		1,129	1,129	131		100					17	83	39	88	0.68	12.8	
NF		DO	4S		4		132	132	15		100			100				17	20	0.35	6.6	
NF	Totals				9	14.2	3,951	3,388	393		37	63		4	6	90		29	102	0.94	33.3	
Type Totals						7.4	42,106	39,003	4,524		0	50	39	10	5	2	24	69	30	95	0.87	409.4

T07N R06W S11 TTAKE	T07N R06W S11 TTAKE
Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt	
07N 06W 11 A13 TAKE 51.00 23 31 1 W	

Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf	
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99				
D		DO	CU		00.0	96											4		0.00	3.6
D		DO	3S	63		1,355	1,355	69		100				48	52		36	58	0.50	23.5
D		DO	4S	37	9.0	849	772	39	11	89			40	20	40		24	29	0.39	26.9
D	Totals			68	7.5	2,299	2,127	108	4	96			15	7	45	33	28	39	0.45	54.0
H		DO	CU		00.0	131											14		0.00	6.5
H		DO	3S	56		571	571	29		100				36	64		32	58	0.60	9.9
H		DO	4S	44		440	440	22		100			71	29			18	25	0.37	17.8
H	Totals			32	11.5	1,141	1,011	52		100			31	33	36		21	29	0.42	34.3
Type Totals					8.8	3,441	3,138	160	3	97			20	15	42	22	25	36	0.44	88.3

T07N R06W S22 TRW	T07N R06W S22 TRW
Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt	BdFt
07N 06W 22 A24 RW 3.00 44 91 1	W

Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre	
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf		
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
H		DO	CU		00.0	1,804											6	0.00	36.9		
H		DO	2S	47	1.9	11,192	10,983	33		3	67	30			24	76	37	296	1.84	37.2	
H		DO	3S	47	1.8	11,047	10,846	33		95	5			1	2	35	62	36	86	0.69	126.0
H		DO	4S	6	5.3	1,360	1,288	4		100				85	15			18	21	0.40	60.0
H	Totals			57	9.0	25,404	23,117	69		52	34	14		5	2	28	65	28	89	0.85	260.1
D		DO	CU		00.0	288											10	0.00	3.5		
D		DO	2S	51	1.8	7,096	6,971	21		4	79	17		5		16	79	35	226	1.61	30.9
D		DO	3S	44	1.4	6,135	6,048	18		1	89	10		1	1	29	69	37	92	0.75	65.7
D		DO	4S	5	9.5	693	627	2		100				9	75	16		24	30	0.40	21.1
D	Totals			34	4.0	14,212	13,646	41		0	46	45	9	3	4	22	71	33	113	0.93	121.2
NF		DO	CU		00.0	679											7	0.00	7.1		
NF		DO	2S	65	2.4	2,526	2,466	7			100					100	40	285	1.68	8.6	
NF		DO	3S	31		1,185	1,185	4		100					16	84	39	89	0.70	13.4	
NF		DO	4S	4		125	125	0		100			100				17	20	0.35	6.3	
NF	Totals			9	16.4	4,515	3,776	11		35	65			3	5	92	29	107	0.96	35.4	
Type Totals					8.1	44,130	40,539	122		0	48	40	11	4	2	24	70	30	97	0.88	416.6

TC TSTATS				STATISTICS				PAGE 1		
				PROJECT EASTSIDE		DATE 1/21/2011				
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
07N	06W	11	A13	00PC	51.00	23	197	1	W	
				TREES	ESTIMATED TOTAL	PERCENT SAMPLE				
		PLOTS	TREES	PER PLOT	TREES	TREES				
TOTAL		23	197	8.6						
CRUISE		14	108	7.7	9,984	1.1				
DBH COUNT										
REFOREST										
COUNT		9	79	8.8						
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUGLEAV	56	81.9	13.7	40		84.3	6,184	6,110	2,019	2,013
DOUG FIR	23	49.4	11.2	31		33.9	2,299	2,127	698	680
HEMLEAV	18	28.6	14.4	46		32.2	3,231	3,198	903	903
WHEMLOCK	8	31.4	10.3	24		18.3	1,141	1,011	335	302
ALDRLEAV	1	2.5	8.0	14		.9	50	50	10	10
NFIRLEAV	1	.8	14.0	50	0	.9	89	89	25	25
SNAG	1	1.1	12.0	28		.9	33		16	
TOTAL	108	195.8	12.7	36		171.3	13,029	12,585	4,006	3,934
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUGLEAV	50.0	6.7	77	83	88					
DOUG FIR	51.4	10.9	43	48	54					
HEMLEAV	40.9	9.9	111	123	136					
WHEMLOCK	66.6	25.1	31	41	52					
ALDRLEAV										
NFIRLEAV										
SNAG										
TOTAL	60.2	5.8	73	78	82	145	36	16		
CL: 68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUGLEAV	54.1	11.5	73	82	91					
DOUG FIR	79.9	17.0	41	49	58					
HEMLEAV	131.2	28.0	21	29	37					
WHEMLOCK	188.1	40.1	19	31	44					
ALDRLEAV	479.6	102.2		2	5					
NFIRLEAV	479.6	102.2		1	2					
SNAG	479.6	102.2		1	2					
TOTAL	31.0	6.6	183	196	209	40	10	4		
CL: 68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUGLEAV	50.5	10.8	75	84	93					
DOUG FIR	80.4	17.1	28	34	40					
HEMLEAV	129.5	27.6	23	32	41					
WHEMLOCK	183.6	39.1	11	18	25					
ALDRLEAV	479.6	102.2		1	2					
NFIRLEAV	479.6	102.2		1	2					
SNAG	479.6	102.2		1	2					
TOTAL	21.7	4.6	163	171	179	20	5	2		
CL: 68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		

STATISTICS
PROJECT EASTSIDE

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
07N	06W	11	A13	00PC	51.00	23	197	1	W
CL:	68.1%	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
DOUGLEAV		52.1	11.1	5,431	6,110	6,788			
DOUG FIR		82.6	17.6	1,753	2,127	2,502			
HEMLEAV		133.1	28.4	2,291	3,198	4,105			
WHEMLOCK		178.7	38.1	626	1,011	1,396			
ALDRLEAV		479.6	102.2		50	101			
NFIRLEAV		479.6	102.2		89	181			
SNAG									
TOTAL		<i>28.1</i>	<i>6.0</i>	<i>11,831</i>	<i>12,585</i>	<i>13,339</i>	<i>33</i>	<i>8</i>	<i>4</i>

TC TSTATS				STATISTICS				PAGE 1		
PROJECT EASTSIDE				DATE 1/21/2011						
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
07N	06W	11	A13	TAKE	51.00	23	60	1	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
					TREES	TREES				
TOTAL		23	60	2.6						
CRUISE		11	31	2.8	4,122		.8			
DBH COUNT										
REFOREST										
COUNT		9	29	3.2						
BLANKS		3								
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR	23	49.4	11.2	31		33.9	2,299	2,127	698	680
WHEMLOCK	8	31.4	10.3	24		18.3	1,141	1,011	335	302
TOTAL	<i>31</i>	<i>80.8</i>	<i>10.9</i>	<i>28</i>		<i>52.2</i>	<i>3,441</i>	<i>3,138</i>	<i>1,033</i>	<i>982</i>
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	51.4	10.9	43	48	54					
WHEMLOCK	66.6	25.1	31	41	52					
TOTAL	<i>54.3</i>	<i>9.8</i>	<i>42</i>	<i>46</i>	<i>51</i>	<i>118</i>	<i>29</i>	<i>13</i>		
CL: 68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	79.9	17.0	41	49	58					
WHEMLOCK	188.1	40.1	19	31	44					
TOTAL	<i>68.2</i>	<i>14.5</i>	<i>69</i>	<i>81</i>	<i>93</i>	<i>194</i>	<i>49</i>	<i>22</i>		
CL: 68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	80.4	17.1	28	34	40					
WHEMLOCK	183.6	39.1	11	18	25					
TOTAL	<i>64.1</i>	<i>13.7</i>	<i>45</i>	<i>52</i>	<i>59</i>	<i>171</i>	<i>43</i>	<i>19</i>		
CL: 68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	82.6	17.6	1,753	2,127	2,502					
WHEMLOCK	178.7	38.1	626	1,011	1,396					
TOTAL	<i>62.9</i>	<i>13.4</i>	<i>2,718</i>	<i>3,138</i>	<i>3,558</i>	<i>165</i>	<i>41</i>	<i>18</i>		

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT EASTSIDE				DATE	2/24/2011	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
07N	06W	11	A13	LEAV	51.00	23	137	1	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
					TREES	TREES				
TOTAL		23	137	6.0						
CRUISE		14	77	5.5	5,862		1.3			
DBH COUNT										
REFOREST										
COUNT		9	54	6.0						
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUGLEAV	56	81.9	13.7	40		84.3	6,184	6,110	2,019	2,013
HEMLEAV	18	28.6	14.4	46		32.2	3,231	3,198	903	903
ALDRLEAV	1	2.5	8.0	14		.9	50	50	10	10
NFIRLEAV	1	.8	14.0	50	0	.9	89	89	25	25
SNAG	1	1.1	12.0	28		.9	33		16	
TOTAL	77	114.9	13.8	41		119.1	9,588	9,447	2,973	2,952
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF					# OF TREES REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUGLEAV	50.0	6.7	77	83	88					
HEMLEAV	40.9	9.9	111	123	136					
ALDRLEAV										
NFIRLEAV										
SNAG										
TOTAL	52.8	6.0	85	91	96	111	28	12		
CL: 68.1 %	COEFF	TREES/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUGLEAV	54.1	11.5	73	82	91					
HEMLEAV	131.2	28.0	21	29	37					
ALDRLEAV	479.6	102.2		2	5					
NFIRLEAV	479.6	102.2		1	2					
SNAG	479.6	102.2		1	2					
TOTAL	14.0	3.0	112	115	118	8	2	1		
CL: 68.1 %	COEFF	BASAL AREA/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUGLEAV	50.5	10.8	75	84	93					
HEMLEAV	129.5	27.6	23	32	41					
ALDRLEAV	479.6	102.2		1	2					
NFIRLEAV	479.6	102.2		1	2					
SNAG	479.6	102.2		1	2					
TOTAL	3.5	.7	118	119	120	1	0	0		
CL: 68.1 %	COEFF	NET BF/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUGLEAV	52.1	11.1	5,431	6,110	6,788					
HEMLEAV	133.1	28.4	2,291	3,198	4,105					
ALDRLEAV	479.6	102.2		50	101					
NFIRLEAV	479.6	102.2		89	181					
SNAG										
TOTAL	22.6	4.8	8,992	9,447	9,902	21	5	2		

TC TSTATS				STATISTICS				PAGE 1		
				PROJECT EASTSIDE		DATE 1/21/2011				
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
07N	06W	22	A24	00MC	116.00	44	239	1	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
					TREES	TREES				
TOTAL		44	239	5.4						
CRUISE		19	95	5.0	24,218		.4			
DBH COUNT										
REFOREST										
COUNT		25	135	5.4						
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
WHEMLOCK	50	130.1	15.1	57		160.8	24,765	22,657	6,340	6,004
DOUG FIR	31	60.3	17.0	67		95.3	13,390	12,957	3,602	3,571
NOB FIR	6	12.8	18.4	79	6	23.5	3,951	3,388	992	897
SNAG	4	2.6	20.8	61		6.2	100		25	
DOUGLEAV	2	1.7	22.9	87		4.9	798	686	206	187
HEMLEAV	1	.4	32.0	95		2.5	580	434	117	102
NFIRLEAV	1	.9	23.0	94	1	2.5	515	377	111	89
TOTAL	95	208.8	16.1	62		295.7	44,099	40,500	11,394	10,850
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF					# OF TREES REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
WHEMLOCK	95.4	13.5	257	297	337					
DOUG FIR	59.6	10.7	250	280	310					
NOB FIR	37.5	16.7	272	327	381					
SNAG										
DOUGLEAV	29.7	27.8	292	405	518					
HEMLEAV										
NFIRLEAV										
TOTAL	84.6	8.7	266	292	317	286	72	32		
CL: 68.1 %	COEFF	TREES/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
WHEMLOCK	112.2	16.9	108	130	152					
DOUG FIR	109.8	16.5	50	60	70					
NOB FIR	212.3	32.0	9	13	17					
SNAG	325.1	49.0	1	3	4					
DOUGLEAV	320.5	48.3	1	2	3					
HEMLEAV	463.6	69.8	0	0	1					
NFIRLEAV	463.6	69.8	0	1	1					
TOTAL	56.5	8.5	191	209	227	128	32	14		
CL: 68.1 %	COEFF	BASAL AREA/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
WHEMLOCK	99.8	15.0	137	161	185					
DOUG FIR	104.7	15.8	80	95	110					
NOB FIR	214.2	32.3	16	24	31					
SNAG	282.5	42.6	4	6	9					
DOUGLEAV	319.9	48.2	3	5	7					
HEMLEAV	463.6	69.8	1	2	4					
NFIRLEAV	463.6	69.8	1	2	4					
TOTAL	40.0	6.0	278	296	314	64	16	7		
CL: 68.1 %	COEFF	NET BF/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		

STATISTICS
PROJECT **EASTSIDE**

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
07N	06W	22	A24	00MC	116.00	44	239	1	W
CL:	68.1%	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK		96.7	14.6	19,357	22,657	25,957			
DOUG FIR		104.0	15.7	10,927	12,957	14,987			
NOB FIR		214.8	32.4	2,292	3,388	4,485			
SNAG									
DOUGLEAV		321.3	48.4	354	686	1,018			
HEMLEAV		463.6	69.8	131	434	737			
NFIRLEAV		463.6	69.8	114	377	641			
TOTAL		<i>41.1</i>	<i>6.2</i>	<i>37,992</i>	<i>40,500</i>	<i>43,008</i>	<i>67</i>	<i>17</i>	<i>7</i>

TC TSTATS		STATISTICS						PAGE 1		
		PROJECT EASTSIDE				DATE 1/21/2011				
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
07N	06W	22	A24	TAKE	116.00	44	226	1	W	
		PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES				
TOTAL		44	226	5.1						
CRUISE		17	87	5.1	23,563	4				
DBH COUNT										
REFOREST										
COUNT		27	133	4.9						
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
WHEMLOCK	50	130.1	15.1	57		160.8	24,765	22,657	6,340	6,004
DOUG FIR	31	60.3	17.0	67		95.3	13,390	12,957	3,602	3,571
NOB FIR	6	12.8	18.4	79	6	23.5	3,951	3,388	992	897
TOTAL	87	203.1	15.9	62		279.6	42,106	39,003	10,934	10,472
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
WHEMLOCK	95.4	13.5	257	297	337					
DOUG FIR	59.6	10.7	250	280	310					
NOB FIR	37.5	16.7	272	327	381					
TOTAL	81.1	8.7	267	293	318	263	66	29		
CL: 68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
WHEMLOCK	112.2	16.9	108	130	152					
DOUG FIR	109.8	16.5	50	60	70					
NOB FIR	212.3	32.0	9	13	17					
TOTAL	57.9	8.7	185	203	221	134	33	15		
CL: 68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
WHEMLOCK	99.8	15.0	137	161	185					
DOUG FIR	104.7	15.8	80	95	110					
NOB FIR	214.2	32.3	16	24	31					
TOTAL	41.3	6.2	262	280	297	68	17	8		
CL: 68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
WHEMLOCK	96.7	14.6	19,357	22,657	25,957					
DOUG FIR	104.0	15.7	10,927	12,957	14,987					
NOB FIR	214.8	32.4	2,292	3,388	4,485					
TOTAL	41.1	6.2	36,589	39,003	41,417	67	17	7		

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT		EASTSIDE		DATE	1/21/2011	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
07N	06W	22	A24	LEAV	116.00	44	13	1	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
					TREES	TREES				
TOTAL		44	13	.3						
CRUISE		7	8	1.1	655		1.2			
DBH COUNT										
REFOREST										
COUNT		5	5	1.0						
BLANKS		32								
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
SNAG	4	2.6	20.8	61		6.2	100		25	
DOUGLEAV	2	1.7	22.9	87		4.9	798	686	206	187
HEMLEAV	1	.4	32.0	95		2.5	580	434	117	102
NFIRLEAV	1	.9	23.0	94	1	2.5	515	377	111	89
TOTAL	8	5.6	22.8	77		16.1	1,993	1,497	460	378
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF					# OF TREES REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
SNAG										
DOUGLEAV	29.7	27.8	292	405	518					
HEMLEAV										
NFIRLEAV										
TOTAL	126.8	47.8	145	279	412	732	183	81		
CL: 68.1 %	COEFF	TREES/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
SNAG	325.1	49.0	1	3	4					
DOUGLEAV	320.5	48.3	1	2	3					
HEMLEAV	463.6	69.8	0	0	1					
NFIRLEAV	463.6	69.8	0	1	1					
TOTAL	193.4	29.1	4	6	7	1,494	373	166		
CL: 68.1 %	COEFF	BASAL AREA/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
SNAG	282.5	42.6	4	6	9					
DOUGLEAV	319.9	48.2	3	5	7					
HEMLEAV	463.6	69.8	1	2	4					
NFIRLEAV	463.6	69.8	1	2	4					
TOTAL	172.4	26.0	12	16	20	1,187	297	132		
CL: 68.1 %	COEFF	NET BF/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
SNAG										
DOUGLEAV	321.3	48.4	354	686	1,018					
HEMLEAV	463.6	69.8	131	434	737					
NFIRLEAV	463.6	69.8	114	377	641					
TOTAL	216.3	32.6	1,010	1,497	1,985	1,868	467	208		

Log Stock Table - MBF

T07N R06W S11 TyTAKE	51.00
T07N R06W S22 TyRW	3.00
T07N R06W S22 TyTAKE	116.00

Project: EASTSIDE
Acres 170.00

Page 2
Date 1/21/2011
Time 2:04:58PM

S T	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
								2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
H	DO	2S	32	321	1.5	317	11.5					207	70	40					
H	DO	2S	40	944	1.4	931	33.9					44	164	257	215	250			
H	DO	3S	18	4		4	.1					4							
H	DO	3S	20	6		6	.2					6							
H	DO	3S	28	17		17	.6												
H	DO	3S	30	18		18	.6												
H	DO	3S	31	11		11	.4												
H	DO	3S	32	391	1.9	384	14.0					211		173					
H	DO	3S	33	10		10	.4					10							
H	DO	3S	34	59		59	2.1					5		54					
H	DO	3S	35	10	12.5	9	.3												
H	DO	3S	36	20		20	.7												
H	DO	3S	40	804	1.9	789	28.7					228	220	281	60				
H	DO	4S	12	2		2	.1												
H	DO	4S	14	9		9	.3					9							
H	DO	4S	16	112	7.7	104	3.8					104							
H	DO	4S	18	4		4	.1												
H	DO	4S	20	28		28	1.0												
H	DO	4S	24	6		6	.2												
H	DO	4S	28	16		16	.6												
H	DO	4S	30	6		6	.2												
H	Totals			3,007	8.6	2,749	57.2					663	262	561	431	327	255	250	
NF	DO	CU	8	37	100.0														
NF	DO	CU	10	25	100.0														
NF	DO	2S	40	260	2.3	254	62.9							93	161				
NF	DO	3S	32	23		23	5.7							23					
NF	DO	3S	40	111		111	27.5							28	83				
NF	DO	4S	16	12		12	2.9							12					
NF	DO	4S	20	4		4	1.0							4					
NF	Totals			472	14.3	404	8.4							44	83	23	93	161	
Total	All Species			5,192	7.4	4,806	100.0					11	1115	444	924	969	647	404	292

TC		PSTNDSUM		Stand Table Summary							Page		1			
										Date:		1/21/2011				
T07N R06W S11 TyTAKE 51.00				Project EASTSIDE							Time:		2:05:47PM			
T07N R06W S22 TyRW 3.00				Acres 170.00							Grown Year:					
T07N R06W S22 TyTAKE 116.00																
S Spec	T	Sample		Tot		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
		DBH	Trees	FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
H		8	2	92	19	3.924	1.37	1.96	5.0	20.0		10	39		17	7
H		9	6	85	50	15.290	6.75	15.29	8.7	33.3		133	510		225	87
H		10	8	87	49	15.342	8.12	19.47	8.2	29.8		160	580		272	99
H		11	6	87	98	10.235	6.75	17.06	14.2	52.0		242	887		412	151
H		12	2	90	57	1.744	1.37	2.62	13.3	46.7		35	122		59	21
H		13	5	90	84	5.628	5.19	10.51	18.4	70.9		193	746		329	127
H		14	4	90	88	4.212	4.50	8.42	21.2	85.0		179	716		304	122
H		15	8	87	94	7.339	9.01	14.68	22.3	82.5		327	1,211		555	206
H		16	13	86	84	10.166	14.19	18.23	29.4	95.4		536	1,739		911	296
H		17	14	87	103	9.999	15.76	21.43	30.3	112.7		650	2,414		1,105	410
H		19	10	89	96	5.718	11.26	11.44	41.2	150.0		471	1,715		801	292
H		20	4	90	101	2.064	4.50	4.13	50.5	200.0		208	826		354	140
H		21	4	83	89	1.872	4.50	3.74	28.2	97.5		106	365		180	62
H		22	4	89	93	1.706	4.50	3.41	55.2	195.0		188	665		320	113
H		23	2	83	94	.780	2.25	1.56	61.0	210.0		95	328		162	56
H		24	4	87	104	1.433	4.50	3.58	53.4	210.0		191	753		325	128
H		25	2	83	104	.661	2.25	1.32	73.5	255.0		97	337		165	57
H		28	6	90	103	1.580	6.75	3.69	73.3	340.0		270	1,253		459	213
H		32	3	86	124	.413	2.31	1.23	97.3	463.8		120	570		203	97
H		34	2	89	115	.357	2.25	.71	118.0	555.0		84	396		143	67
H		Totals	109	87	77	100.463	118.11	164.48	26.1	98.3		4,296	16,171		7,302	2,749
D		8	1	86	42	1.267	.44	1.27	5.0	20.0		6	25		11	4
D		9	3	88	42	5.869	2.59	5.87	6.7	28.3		39	166		66	28
D		10	5	88	56	4.055	2.21	4.06	11.2	40.0		45	162		77	28
D		11	7	87	54	4.692	3.10	4.69	13.7	42.9		64	201		109	34
D		12	2	86	66	1.126	.88	1.13	19.0	60.0		21	68		36	11
D		13	6	88	78	5.626	5.19	7.96	19.5	61.7		155	491		264	84
D		14	3	88	75	2.426	2.59	4.44	18.3	66.3		81	294		138	50
D		15	4	88	83	2.473	3.04	4.23	24.1	84.9		102	359		173	61
D		16	13	86	90	9.558	13.35	18.80	24.0	86.2		451	1,621		766	276
D		17	5	85	101	3.009	4.74	6.02	30.6	110.8		184	667		313	113
D		18	8	87	102	4.868	8.60	9.74	35.4	123.7		344	1,205		585	205
D		19	8	85	99	4.369	8.60	8.74	37.7	127.5		330	1,114		561	189
D		20	2	91	87	.986	2.15	1.97	40.5	130.0		80	256		136	44
D		21	6	86	118	2.682	6.45	7.15	41.1	158.8		294	1,136		500	193
D		22	5	85	97	1.650	4.35	3.30	40.1	140.2		132	463		225	79
D		23	2	89	122	.745	2.15	2.24	46.3	196.7		104	440		176	75
D		24	1	86	105	.017	.05	.03	64.5	245.0		2	8		4	1
D		25	4	89	112	1.262	4.30	3.15	59.4	242.0		187	763		319	130
D		32	2	82	103	.385	2.15	.77	108.0	365.0		83	281		141	48
D		Totals	87	87	81	57.067	76.95	95.54	28.3	101.7		2,707	9,720		4,601	1,652
NF		12	2	88	90	3.487	2.74	6.97	14.0	55.0		98	384		166	65
NF		20	2	86	104	1.255	2.74	2.51	46.5	145.0		117	364		198	62
NF		21	4	84	117	2.277	5.48	5.69	38.8	148.0		221	843		376	143
NF		23	5	86	116	1.921	5.54	3.84	50.5	205.2		194	788		330	134
NF		Totals	13	86	104	8.942	16.50	19.02	33.1	125.1		629	2,379		1,070	404
Totals			209	87	80	166.471	211.56	279.05	27.3	101.3		7,632	28,270		12,974	4,806

TC TSTNDSUM		Stand Table Summary													
Project EASTSIDE															
T07N R06W S11 TLEAV								T07N R06W S11 TLEA							
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:							
07N	06W	11	A13	LEAV	51.00	23	77	1	Date:	02/24/20					
								Time:	1:10:22PM						
S Spc	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits
DL		11	5	86	58	11.412	7.53	11.41	14.4	48.0	164	548	84	28	
DL		12	9	88	56	17.260	13.56	17.26	18.0	52.2	311	901	158	46	
DL		13	11	87	57	17.975	16.57	19.61	19.2	54.2	377	1,062	193	54	
DL		14	6	88	60	8.454	9.04	12.68	17.1	48.9	217	620	111	32	
DL		15	7	88	63	8.592	10.54	14.73	18.7	60.0	275	884	140	45	
DL		16	11	86	55	11.866	16.57	18.34	20.8	62.4	382	1,143	195	58	
DL		17	4	88	66	3.822	6.02	7.64	22.2	78.8	170	602	87	31	
DL		18	3	85	61	2.557	4.52	4.26	27.4	82.0	117	349	60	18	
DL	Totals	56	87	58		81.937	84.35	105.93	19.0	57.7	2,013	6,110	1,027	312	
HL		11	1	88	66	2.708	1.79	2.71	17.0	60.0	46	163	23	8	
HL		12	1	92	43	2.276	1.79	2.28	16.0	50.0	36	114	19	6	
HL		13	2	92	64	3.878	3.57	7.76	14.0	55.0	109	427	55	22	
HL		14	6	90	60	10.032	10.72	16.72	17.3	55.0	289	920	148	47	
HL		15	2	92	59	2.913	3.57	5.83	17.5	70.0	102	408	52	21	
HL		16	3	90	64	3.840	5.36	7.68	20.7	76.7	159	589	81	30	
HL		17	1	86	57	1.134	1.79	2.27	22.0	75.0	50	170	25	9	
HL		19	2	92	67	1.816	3.57	3.63	31.0	112.5	113	409	57	21	
HL	Totals	18	90	61		28.598	32.17	48.87	18.5	65.4	903	3,198	461	163	
NFL		14	1	91	66	.813	.87	1.63	15.5	55.0	25	89	13	5	
NFL	Totals	1	91	66		.813	.87	1.63	15.5	55.0	25	89	13	5	
AL		8	1	86	17	2.491	.87	2.49	4.0	20.0	10	50	5	3	
AL	Totals	1	86	17		2.491	.87	2.49	4.0	20.0	10	50	5	3	
SN		12	1	89	38	1.107	.87								
SN	Totals	1	89	38		1.107	.87								
Totals		77	88	58		114.947	119.13	158.92	18.6	59.4	2952	9,447	1,505	482	

TC TSTNDSUM

Stand Table Summary

Project EASTSIDE

T07N R06W S22 TLEAV

T07N R06W S22 TLEA

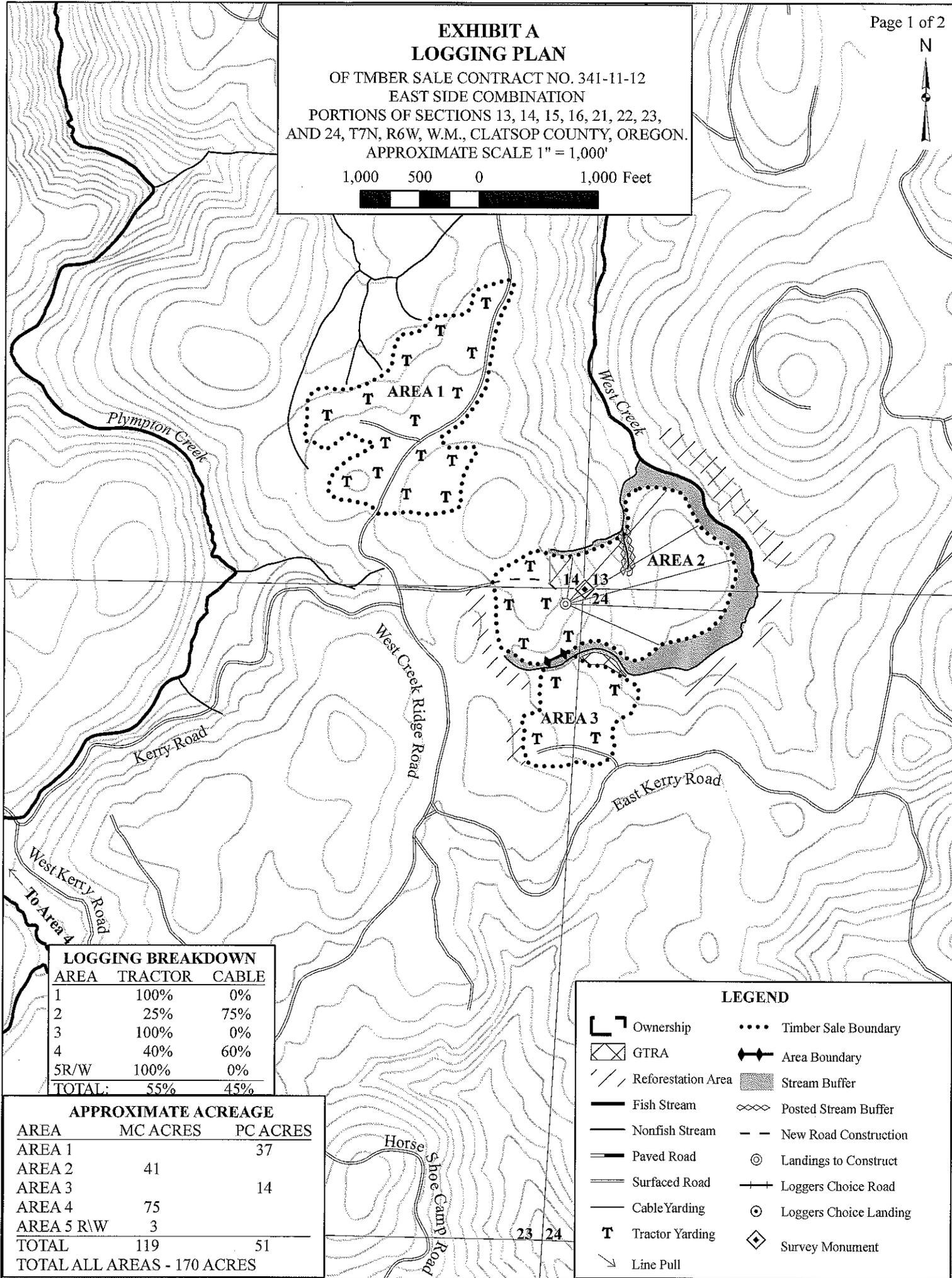
Twp Rge Sec Tract
07N 06W 22 A24Type Acres Plots Sample Trees
LEAV 116.00 44 8Page: 1
Date: 01/21/20
Time: 2:07:25PM

S Spc	T	Sample DBH	FF Trees	Av Ht 16' Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals			
								Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF	
DL		22	1	81	112	.937	2.47	1.87	45.5	160.0		85	300		99	35
DL		24	1	86	105	.788	2.47	1.58	64.5	245.0		102	386		118	45
DL		Totals	2	83	109	1.725	4.95	3.45	54.2	198.8		187	686		217	80
HL		32	1	85	116	.443	2.47	.89	115.0	490.0		102	434		118	50
HL		Totals	1	85	116	.443	2.47	.89	115.0	490.0		102	434		118	50
NFL		23	1	89	115	.858	2.47	1.72	52.0	220.0		89	377		103	44
NFL		Totals	1	89	115	.858	2.47	1.72	52.0	220.0		89	377		103	44
SN		16	1	86	41	1.108	1.55									
SN		17	1	89	87	.981	1.55									
SN		30	1	88	100	.315	1.55									
SN		36	1	88	111	.219	1.55									
SN		Totals	4	88	71	2.623	6.19									
Totals			8	86	93	5.649	16.08	6.05	62.5	247.5		378	1,497		438	174

EXHIBIT A LOGGING PLAN

OF TMBER SALE CONTRACT NO. 341-11-12
EAST SIDE COMBINATION
PORTIONS OF SECTIONS 13, 14, 15, 16, 21, 22, 23,
AND 24, T7N, R6W, W.M., CLATSOP COUNTY, OREGON.
APPROXIMATE SCALE 1" = 1,000'

1,000 500 0 1,000 Feet



LOGGING BREAKDOWN

AREA	TRACTOR	CABLE
1	100%	0%
2	25%	75%
3	100%	0%
4	40%	60%
5R/W	100%	0%
TOTAL:	55%	45%

APPROXIMATE ACREAGE

AREA	MC ACRES	PC ACRES
AREA 1		37
AREA 2	41	
AREA 3		14
AREA 4	75	
AREA 5 R/W	3	
TOTAL	119	51
TOTAL ALL AREAS - 170 ACRES		

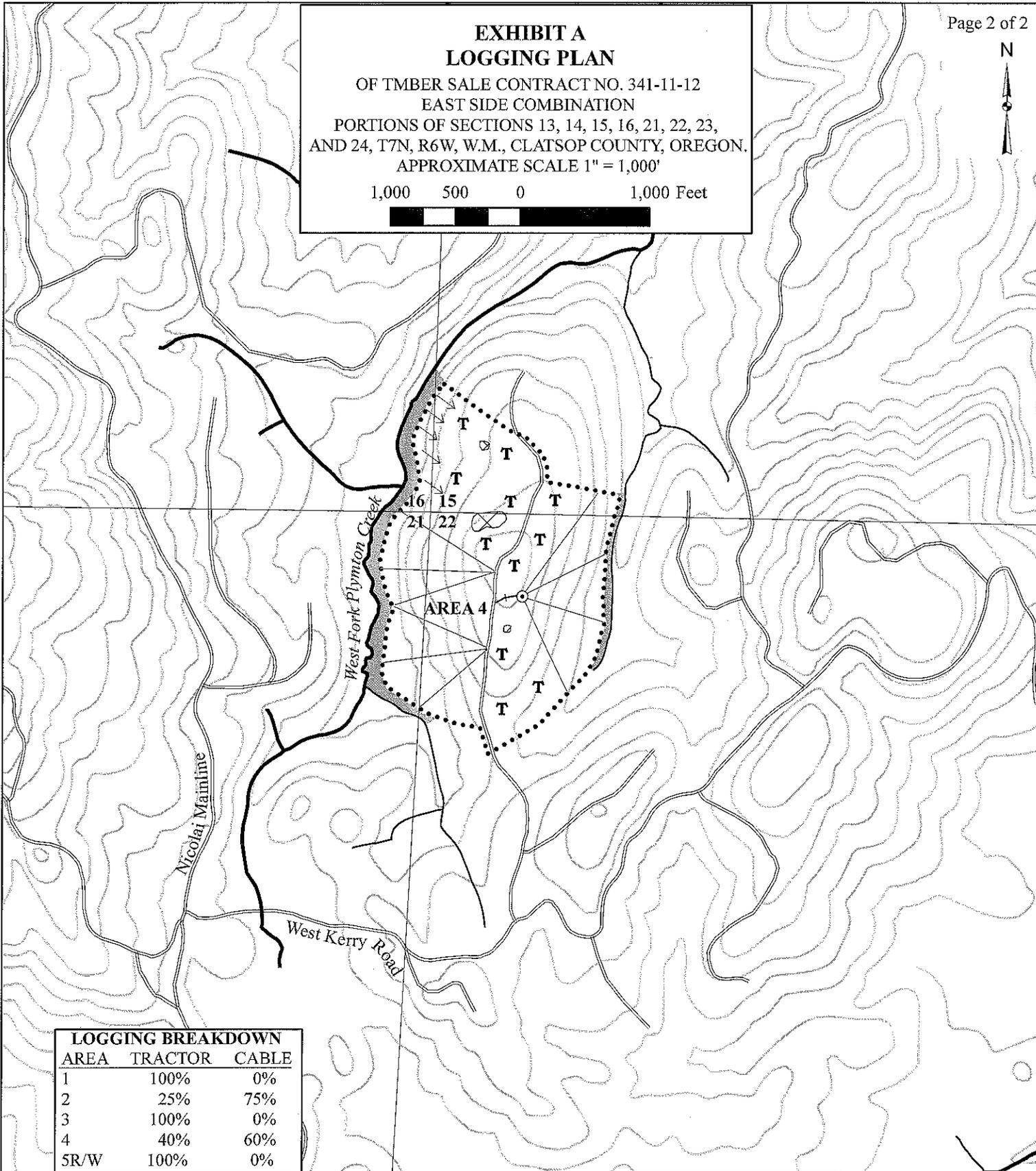
LEGEND

- Ownership
- GTRA
- Reforestation Area
- Fish Stream
- Nonfish Stream
- Paved Road
- Surfaced Road
- Cable Yarding
- Line Pull
- Timber Sale Boundary
- Area Boundary
- Stream Buffer
- Posted Stream Buffer
- New Road Construction
- Landings to Construct
- Loggers Choice Road
- Loggers Choice Landing
- Survey Monument

EXHIBIT A LOGGING PLAN

OF TMBER SALE CONTRACT NO. 341-11-12
EAST SIDE COMBINATION
PORTIONS OF SECTIONS 13, 14, 15, 16, 21, 22, 23,
AND 24, T7N, R6W, W.M., CLATSOP COUNTY, OREGON.
APPROXIMATE SCALE 1" = 1,000'

1,000 500 0 1,000 Feet



LOGGING BREAKDOWN		
AREA	TRACTOR	CABLE
1	100%	0%
2	25%	75%
3	100%	0%
4	40%	60%
5R/W	100%	0%
TOTAL:	55%	45%

APPROXIMATE ACREAGE		
AREA	MC ACRES	PC ACRES
AREA 1		37
AREA 2	41	
AREA 3		14
AREA 4	75	
AREA 5 R/W	3	
TOTAL	119	51
TOTAL ALL AREAS - 170 ACRES		

LEGEND	
	Ownership
	GTRA
	Fish Stream
	Nonfish Stream
	Stream Buffers
	Paved Road
	Surfaced Road
	Timber Sale Boundary
	Line Pull
	Tractor Yarding
	Cable Yarding
	New Road Construction
	Loggers Choice Landing
	Loggers Choice Road