"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Salmon Belly
Sale FG-341-2018-22-

District: Forest Grove

Date: October 26, 2017

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$2,754,070.56	$0.00	$2,754,070.56
		Project Work:	$0.00
		Advertised Value:	$2,754,070.56

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District: Forest Grove **Date: October 26, 2017**

Timber Description

Location: Portions of Section 20, T3N, R6W, W.M., Tillamook County, Oregon.

Stand Stocking: 20%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	25	0	98
Western Hemlock / Fir	26	0	95

Volume by Grade	2S	3S	4S	Total
Douglas - Fir	4,455	764	73	5,292
Western Hemlock / Fir	86	3	1	90
Total	4,541	767	74	5,382

Comments: Pond Values Used: Local Pond Values, August 2017.

Western redcedar and Other Cedars
Stumpage Price = Pond Value minus Logging Cost:
$1377.65/MBF = $1,599.11/MBF - $221.46/MBF

Red alder and other hardwoods
Stumpage Price = Pond Value minus Logging Cost:
$371.77/MBF = $593.23/MBF - $221.46/MBF

SCALING COST ALLOWANCE = $5.00/MBF

BRANDING AND PAINTING COST ALLOWANCE = $2.00/MBF

FUEL COST ALLOWANCE = $3.00/Gallon

HAULING COST ALLOWANCE
Hauling costs equivalent to $780 daily truck cost.

Other Costs (with Profit & Risk to be added):
Non Project Road: 4 Stations @ $1000/Station=$4000

Other Costs (No Profit & Risk added):
Machine Time to Block/Waterbar Roads,and Skid Trails:
20 hours x $150/hour = $3,000
Machine Time to Pile Landing Slash and Sort Firewood:
20 hours x $150/hour = $3,000
Equipment Cleaning: 4 pieces x $1,000/Piece = $4,000
Slash Treatment: 35 acres x $200/acre = $7,000

TOTAL Other Costs (No Profit & Risk added) = $17,000

ROAD MAINTENANCE
Move-in: $4,000
General Road Maintenance: 7.1 miles x $1,200/mile = $8,520
TOTAL Road Maintenance: $12,520/5382 MBF = $2.33/MBF

Logging Conditions

Combination#: 1

Douglas - Fir	32.00%
Western Hemlock / Fir	32.00%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber

yarding distance: Medium (800 ft) **downhill yarding:** No

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

loads / day: 8 **bd. ft / load:** 4600

cost / mbf: $163.04

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

Combination#: 2

Douglas - Fir	68.00%
Western Hemlock / Fir	68.00%

Logging System: Shovel **Process:** Harvester Head Delimbing

yarding distance: Medium (800 ft) **downhill yarding:** No

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

loads / day: 14 **bd. ft / load:** 4600

cost / mbf: $82.98

machines: Forwarder
Harvester

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Sale FG-341-2018-22-

District: Forest Grove **Date: October 26, 2017**

Logging Costs

Operating Seasons:	1.00	**Profit Risk:**	10%
Project Costs:	$0.00	**Other Costs (P/R):**	$4,000.00
Slash Disposal:	$0.00	**Other Costs:**	$17,000.00

Miles of Road

Road Maintenance: $2.33

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	2.0	5.0
Western Hemlock / Fir	$0.00	2.0	4.5

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Salmon Belly

Sale FG-341-2018-22-

District: Forest Grove

Date: October 26, 2017

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling / Brand & Paint	Other	Total
Douglas - Fir									
$108.60	$2.38	$0.81	$79.56	$0.74	$19.21	$0.00	$7.00	$3.16	$221.46
Western Hemlock / Fir									
$108.60	$2.45	$0.81	$91.00	$0.74	$20.36	$0.00	$7.00	$3.16	$234.12

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	$0.00	$735.34	$513.88	$0.00
Western Hemlock / Fir	$0.00	$618.76	$384.64	$0.00

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Salmon Belly
Sale FG-341-2018-22-

District: Forest Grove **Date: October 26, 2017**

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	5,292	$513.88	$2,719,452.96
Western Hemlock / Fir	90	$384.64	$34,617.60

Gross Timber Sale Value

Recovery: $2,754,070.56

Prepared By: Eric Foucht **Phone:** 503-359-7473

TIMBER SALE SUMMARY
Salmon Belly
Contract No. 341-18-22

1. **Location:** Portions of Section 20, T3N, R6W, W.M., Tillamook County, Oregon.

2. **Type of Sale:** This timber sale is 114 net acres of Modified Clearcut. The timber will be sold on a recovery basis at a sealed bid auction.

3. **Revenue Distribution:** 100% BOF, Tillamook County, Tax Code 56-1.

4. **Sale Acreage:** Acres are net of stream buffers and road prisms. Acreage was determined using ESRI ArcMap GIS software.

5. **Cruise**: The Timber Sale was cruised by ODF Cruisers in October of 2017. For more information see Cruise Report.

6. **Timber Description:** The Timber Sale Area consists of a well-stocked 73 year old Douglas-fir stand with minor amounts of western hemlock and noble fir. The stand has an average of 197 ft^2 of basal area (all species), an average Douglas-fir DBH of 25 inches, and an estimated average net Douglas-fir volume of approximately 46.4 MBF per acre.

7. **Volume Summary**

SPECIES		2 SAW	3 SAW	4 SAW	TOTAL
Douglas-fir	Cruise Volume	4,546	780	75	5,401
	Hidden D&B (2%)	(91)	(16)	(2)	(109)
	NET TOTAL	4,455	764	73	5,292
	% of Total	84	14	1	
Western hemlock and other conifer	Cruise Volume	88	3	1	92
	Hidden D&B (2%)	(2)	()	()	(2)
	NET TOTAL	86	3	1	90
	% of Total	96	3	1	

SALE TOTAL

SPECIES	2 SAW	3 SAW	4 SAW	TOTAL
Douglas-fir	4,455	764	73	5,292
Western hemlock/Other Conifer	86	3	1	90
TOTAL	4,541	767	74	5,382

8. **Topography and Logging Method:** Slopes within the sale areas generally range from 10% to 70%, with a northeastern aspect. The timber sale is 68% ground-based yarding and/or 32% cable yarding. The average cable corridor length is 500 feet and the longest corridor is approximately 1023 feet. The average horizontal skid trail length is approximately 480 feet and the maximum is approximately 600 feet.

9. **Access:** All access to the Timber Sale Area is on surfaced all-weather roads. From Forest Grove, travel north on Highway 47 through Banks then merge onto Highway 26 west-bound and continue for approximately 20 miles. Between the 31 and the 32 mile markers, turn left onto the Salmonberry Road and continue for approximately 5½ miles to the north side of the Timber Sale Area.

10. **Projects: None**

CRUISE REPORT
Salmon Belly
341-18-22

1. LOCATION: Portions of Sections 20, T3N, R6W, W.M., Tillamook County, Oregon

2. CRUISE DESIGN:
Pre-cruise evaluation indicated that the stand's average DBH is approximately 25 inches and the Coefficient of Variation is about 55%. For sales of this size and approximate value, ODF cruise standards require a Sampling Error of 9% at a 68% confidence level, and a minimum sample size of 100 graded trees. The cruise design chosen for this sale is a variable radius sample plot using a 40 BAF prism.

3. SAMPLING METHOD:
The Timber Sale Area was sampled in October, 2017 with 37 variable radius grade plots using a 40 BAF prism. Plots were laid out on a 3 chain x 7 chain grid. Plots falling on or near existing roads or no-harvest areas were offset 1 chain.

4. CRUISE RESULTS
182 trees were measured and graded producing a cumulative Sampling Error of 5.2% on the Douglas-fir Basal Area and 5.5% on the Douglas-fir Board Foot Volume.

5. TREE MEASUREMENT AND GRADING:
All sample trees were measured and graded following Columbia River Log Scale grade rules and favored 40 foot segments.

a) **Height Standards:**
Total tree heights were measured to the nearest foot. Bole heights were calculated to a six inch top.

b) **Diameter Standards:** Diameters were measured outside bark at breast height to the nearest inch.

c) **Form Factors** were measured for each grade tree using a form point of 16 feet.

5. DATA PROCESSING

a) **Volumes and Statistics**, Cruise estimates and sampling statistics, were derived from Super Ace 2008 cruise software

b) **Deductions:** Two percent of the volume was subtracted from the computed volumes to account for hidden defect and breakage.

6. Cruisers: The sale was cruised by ODF cruiser Kenton Burns.

Prepared by: _____ 10/10/17
ODF Forester Date

Reviewed by: Eric Foucht 10/10/2017
Eric Foucht Date

TC PSTATS

PROJECT STATISTICS

PROJECT SLMBFIN2

DATE 10/10/2017

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
T3N	R6	20	A1	00MC	114.00	37	182	S	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	37	182	4.9		
CRUISE	37	182	4.9	6,687	2.7
DBH COUNT					
REFOREST					
COUNT					
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
DOUG FIR	176	57.5	24.6	140	38.3	190.3	48,358	47,389	9,656	9,656
NOB FIR	1	.4	23.0	142	0.2	1.1	266	266	56	56
NOB FIR-L	3	.3	42.3	162	0.5	3.2	1,042	1,024	177	177
WHEMLOCK	2	.5	29.2	122	0.4	2.2	545	545	106	106
TOTAL	*182*	*58.7*	*24.8*	*140*	*39.5*	*196.8*	*50,211*	*49,225*	*9,995*	*9,995*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	SAMPLE TREES - BF LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
DOUG FIR	53.7	4.0	1,006	1,048	1,091			
NOB FIR								
NOB FIR-L	12.0	8.3	2,824	3,080	3,336			
WHEMLOCK	50.8	47.6	679	1,295	1,911			
TOTAL	*56.9*	*4.2*	*1,037*	*1,083*	*1,128*	*129*	*32*	*14*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	SAMPLE TREES - CF LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
DOUG FIR	46.2	3.5	201	208	215			
NOB FIR								
NOB FIR-L	13.0	9.0	484	531	579			
WHEMLOCK	43.1	40.3	148	247	347			
TOTAL	*48.6*	*3.6*	*206*	*213*	*221*	*94*	*24*	*10*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	TREES/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DOUG FIR	51.0	8.4	53	57	62			
NOB FIR	608.3	99.9	0	0	1			
NOB FIR-L	341.4	56.1	0	0	1			
WHEMLOCK	439.2	72.1	0	0	1			
TOTAL	*50.0*	*8.2*	*54*	*59*	*63*	*100*	*25*	*11*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	BASAL AREA/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DOUG FIR	32.6	5.4	180	190	200			
NOB FIR	608.3	99.9	0	1	2			
NOB FIR-L	341.3	56.1	1	3	5			
WHEMLOCK	424.1	69.7	1	2	4			
TOTAL	*31.9*	*5.2*	*186*	*197*	*207*	*41*	*10*	*5*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	NET BF/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DOUG FIR	33.7	5.5	44,767	47,389	50,012			
NOB FIR	608.3	99.9	0	266	532			
NOB FIR-L	343.8	56.5	446	1,024	1,602			
WHEMLOCK	426.7	70.1	163	545	927			

TC PSTATS

PROJECT STATISTICS

PROJECT **SLMBFIN2**

DATE 10/10/2017

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
T3N	R6	20	A1	00MC	114.00	37	182	S	W

NET BF/ACRE

CL 68.1 SD: 1.00	COEFF VAR.	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
TOTAL	*33.5*	*5.5*	*46,519*	*49,225*	*51,930*	*45*	*11*	*5*

NET CUFT FT/ACRE

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DOUG FIR	32.6	5.4	9,139	9,656	10,174			
NOB FIR	608.3	99.9	0	56	111			
NOB FIR-L	344.1	56.5	77	177	277			
WHEMLOCK	424.6	69.7	32	106	180			
TOTAL	*32.3*	*5.3*	*9,464*	*9,995*	*10,525*	*42*	*10*	*5*

TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

TT3N RR6W S20 Ty00MC 114.00

Project: SLMBFIN2
Acres 114.00

Page 1
Date 10/10/2017
Time 1:40:55PM

Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent of Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log: Ln Ft	Dia In	Bd Ft	CF/ Lf	Logs Per /Acre
DF			CU														17	22		0.00	.7
DF			2M	84	2.2	40,758	39,881	4,546			35	65	0	1		99	40	17	474	2.25	84.2
DF			3M	14	1.3	6,938	6,846	780		95	3	2	0	1	6	93	38	8	108	0.78	63.5
DF			4M	2		662	662	75		100			40	60			20	6	25	0.40	26.2
DF Totals				96	2.0	48,358	47,389	5,402		15	30	55	1	2	1	97	36	12	272	1.53	174.5
WH			2M	96		528	528	60			11	89				100	40	18	568	2.66	.9
WH			3M	2		9	9	1		100				100			26	8	50	0.96	.2
WH			4M	2		9	9	1		100			100				18	7	30	0.53	.3
WH Totals				1		545	545	62		3	11	86	2	2		97	34	14	391	2.26	1.4
NF	L		CU														13	23		0.00	.2
NF	L		2M	96	1.8	1,010	992	113			2	98	8			92	38	25	1117	4.96	.9
NF	L		3M	3		29	29	3		100				34		66	32	10	134	1.50	.2
NF	L		4M	1		2	2	0		100			100				12	8	20	0.57	.1
NF Totals				2	1.7	1,042	1,024	117		3	2	95	8	1		91	31	21	711	3.96	1.4
NF			2M	92		247	247	28			30	70				100	40	15	330	1.64	.7
NF			3M	8		19	19	2		100					100		34	6	50	0.49	.4
NF Totals				1		266	266	30		7	28	65			7	93	38	12	237	1.30	1.1
Totals					2.0	50,211	49,225	5,612		15	29	57	1	2	1	96	36	12	276	1.55	178.5

TC PLOGSTVB

Log Stock Table - MBF

TT3N RR6W S20 Ty00MC 114.00

Project: SLMBFIN2
Acres 114.00

Page 1
Date 10/10/2017
Time 1:40:57PM

Spp	S T	So Grt	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+
DF		2M		16	7		7	.1									7			
DF		2M		18	3	27.3	2	.0						2						
DF		2M		20	5		5	.1									5			
DF		2M		24	14	9.8	13	.2										13		
DF		2M		26	31	7.5	29	.5									29			
DF		2M		40	4,586	2.1	4,491	83.1						378	676	1604	1301	532		
DF		3M		20	1		1	.0				1								
DF		3M		24	1		1	.0				1								
DF		3M		28	4		4	.1			3	1								
DF		3M		30	3		3	.1				3								
DF		3M		32	20		20	.4			18	1								
DF		3M		34	27		27	.5			24	3								
DF		3M		36	57		57	1.1			22	29	7							
DF		3M		38	41		41	.8			16	19	6							
DF		3M		40	638	1.6	627	11.6			92	127	371		24	14				
DF		4M		12	11		11	.2			10	1								
DF		4M		14	3		3	.1			2	1								
DF		4M		16	6		6	.1			5	1								
DF		4M		18	7		7	.1			6		1							
DF		4M		20	3		3	.1			3									
DF		4M		22	5		5	.1			5									
DF		4M		24	7		7	.1			6	1								
DF		4M		26	5		5	.1			5									
DF		4M		28	11		11	.2			11									
DF		4M		30	17		17	.3			17									
DF		Totals			5,513	2.0	5,402	96.3			244	189	384	380	700	1618	1342	545		
WH		2M		40	60		60	96.8						7		29		24		
WH		3M		26	1		1	1.6				1								
WH		4M		18	1		1	1.6			1									
WH		Totals			62		62	1.1			1	1		7		29		24		
NF	L	2M		20	9		9	7.6										9		
NF	L	2M		40	106	1.9	104	89.3						3		6		28	68	
NF	L	3M		24	1		1	1.0					1							
NF	L	3M		40	2		2	1.9					2							

TC PLOGSTVB

Log Stock Table - MBF

TT3N RR6W S20 Ty00MC 114.00

Project: SLMBFIN2
Acres 114.00

Date 10/10/2017
Time 1:40:57PM

Spp	ST	Sort	Grade	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+
NF	L	4M		12	0		0	.2				0								
NF		Totals			119	1.7	117	2.1				0	3	3		6		37		68
NF		2M		40	28		28	93.0						9		20				
NF		3M		34	2		2	7.0			2									
NF		Totals			30		30	.5			2			9		20				
Total		All Species			5,724	2.0	5,612	100.0			247	191	388	398	700	1673	1342	606		68

TC PSTNDSUM

Stand Table Summary

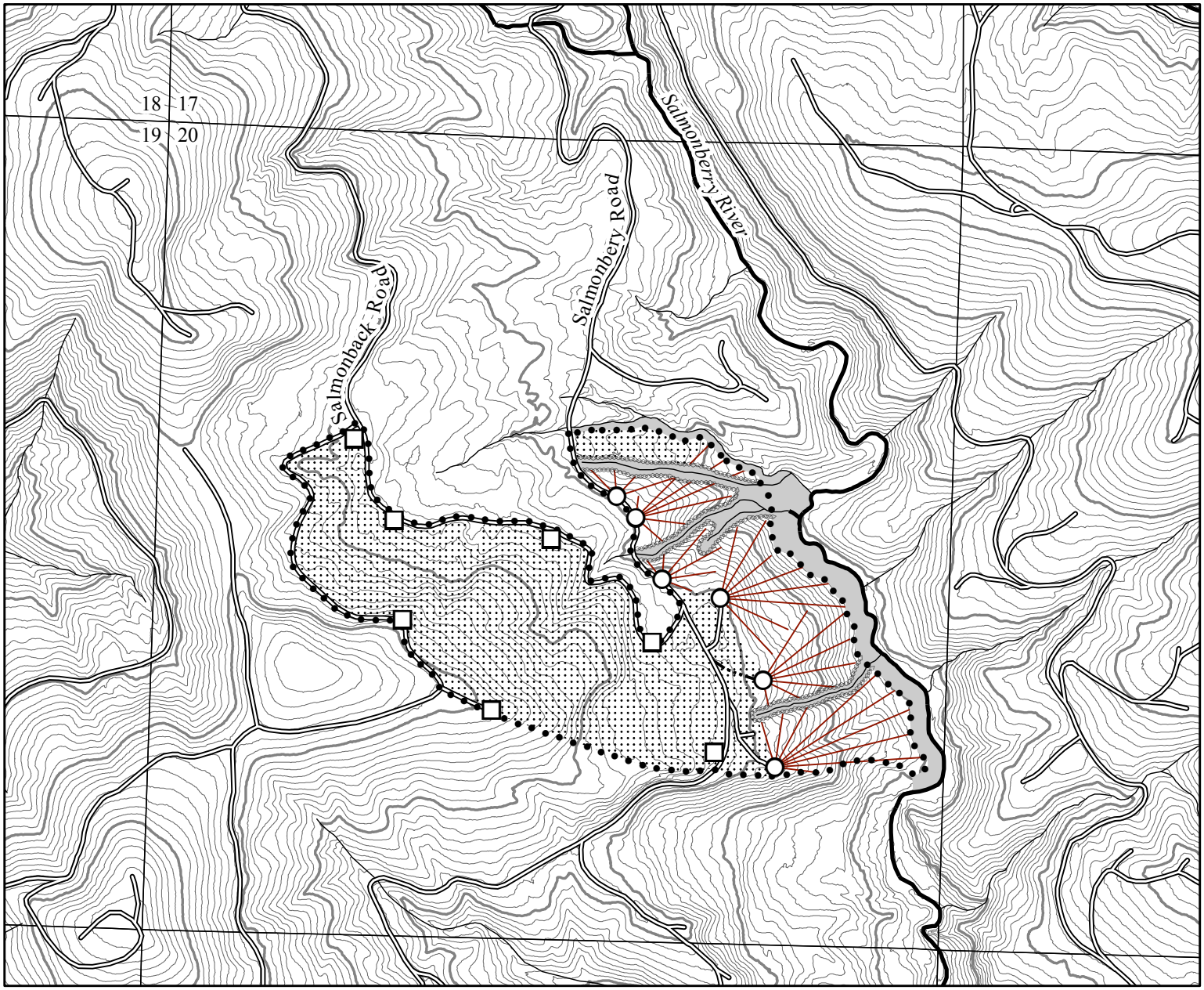
Page 1
Date: 10/10/2017

TT3N RR6W S20 Ty00MC 114.00

Project SLMBFIN2
Acres 114.00

Time: 1:40:54PM
Grown Year:

Spc	S T	DBH	Sample Trees	FF 16'	Tot Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		12	1	88	99	1.376	1.08	2.75	12.8	55.0	1.01	35	151	115	40	17
DF		14	1	89	127	1.011	1.08	2.02	22.1	75.0	1.27	45	152	145	51	17
DF		15	2	88	103	1.762	2.16	3.52	22.1	95.0	2.22	78	335	253	89	38
DF		16	2	89	115	1.549	2.16	3.10	27.4	117.5	2.42	85	364	276	97	41
DF		17	4	89	128	2.743	4.32	7.54	25.1	107.3	5.40	190	809	616	216	92
DF		18	1	89	148	.612	1.08	1.84	28.9	133.3	1.51	53	245	173	61	28
DF		19	3	79	101	1.647	3.24	3.29	36.8	125.0	3.46	121	412	394	138	47
DF		20	7	89	137	3.469	7.57	10.41	34.1	152.4	10.11	355	1,586	1,153	405	181
DF		21	10	89	136	4.495	10.81	13.48	38.1	177.7	14.66	514	2,396	1,671	586	273
DF		22	13	89	138	5.324	14.05	15.97	43.2	201.0	19.65	689	3,211	2,240	786	366
DF		23	7	90	139	2.623	7.57	7.87	47.1	218.6	10.56	370	1,720	1,204	422	196
DF		24	15	89	142	5.162	16.22	15.49	51.8	239.3	22.86	802	3,706	2,606	914	423
DF		25	12	89	150	3.806	12.97	13.32	50.6	241.2	19.21	674	3,213	2,190	769	366
DF		26	13	90	146	3.812	14.05	12.31	59.4	294.3	20.83	731	3,624	2,375	833	413
DF		27	10	89	149	2.719	10.81	8.70	66.2	333.1	16.41	576	2,898	1,870	656	330
DF		28	18	90	154	4.551	19.46	15.67	66.5	336.0	29.71	1,043	5,266	3,387	1,188	600
DF		29	7	90	159	1.650	7.57	5.89	70.5	364.0	11.83	415	2,145	1,349	473	245
DF		30	13	89	150	2.863	14.05	9.25	78.7	393.3	20.76	728	3,638	2,366	830	415
DF		31	7	89	151	1.444	7.57	4.95	81.3	425.8	11.48	403	2,108	1,308	459	240
DF		32	6	90	149	1.161	6.49	3.68	92.4	469.5	9.69	340	1,727	1,105	388	197
DF		33	1	90	137	.182	1.08	.55	99.9	463.3	1.55	55	253	177	62	29
DF		34	7	89	155	1.200	7.57	4.12	99.7	534.6	11.70	410	2,200	1,333	468	251
DF		35	3	89	157	.485	3.24	1.78	101.9	570.9	5.17	181	1,016	589	207	116
DF		36	6	89	148	.918	6.49	2.91	118.5	644.7	9.82	344	1,874	1,119	393	214
DF		37	1	90	164	.145	1.08	.58	106.2	575.0	1.75	61	333	200	70	38
DF		38	1	89	164	.137	1.08	.55	113.5	595.0	1.78	62	327	202	71	37
DF		39	4	90	166	.521	4.32	1.95	125.2	714.7	6.98	245	1,397	795	279	159
DF		41	1	89	155	.118	1.08	.35	140.4	806.7	1.42	50	285	161	57	33
DF		Totals	176	89	140	57.484	190.27	173.85	55.5	272.6	275.21	9,656	47,389	31,374	11,008	5,402
NF	L	42	2	91	170	.225	2.16	.90	141.2	811.3	3.05	127	729	347	145	83
NF	L	43	1	91	147	.107	1.08	.32	154.9	916.7	1.20	50	295	136	57	34
NF	L	Totals	3	91	162	.332	3.24	1.22	144.8	839.0	4.24	177	1,024	484	201	117
WH		26	1	93	119	.293	1.08	.88	57.4	276.7	1.61	50	243	184	58	28
WH		34	1	93	127	.171	1.08	.51	107.6	586.7	1.77	55	302	202	63	34
WH		Totals	2	93	122	.465	2.16	1.39	75.9	391.1	3.39	106	545	386	121	62
NF		23	1	90	142	.375	1.08	1.12	49.4	236.7	1.33	56	266	152	63	30
NF		Totals	1	90	142	.375	1.08	1.12	49.4	236.7	1.33	56	266	152	63	30
Totals			182	89	140	58.656	196.76	177.59	56.3	277.2	284.17	9,995	49,225	32,395	11,394	5,612



LOGGING PLAN

FOR TIMBER SALE CONTRACT 341-18 -22
SALMON BELLY
PORTIONS OF SECTION 20
T3N, R6W, W.M.,
TILLAMOOK COUNTY, OREGON

Legend

- Timber Sale Boundary
- Surfaced Roads
- Non-Project Road
- Type F Stream
- Type N Stream
- Stream Buffer
- Posted Stream Buffer Boundary
- Cable Yarding Area
- Tractor Yarding Area
- Cable Landing
- Tractor Landing
- ODF Ownership Boundary
- Section Line
- 20 Foot Contour
- 200 Foot Contour

Forest Grove District GIS
Seotember, 2017
This product is for informational use and may not be suitable for legal, engineering, or surveying purposes.

1:12,000
1 inch = 1,000 feet

0 500 1,000 2,000
Feet

N

APPROXIMATE NET ACRES

TRACTOR YARDING AREA	77
CABLE YARDING AREA	37
TOTAL	114