



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Dry Beard GNA
Sale NC-341-2024-GF8623-01

District: N Cascade

Date: December 18, 2023

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,182,892.97	\$0.00	\$1,182,892.97
		Project Work:	(\$417,531.00)
		Advertised Value:	\$765,361.97



Timber Sale Appraisal Dry Beard GNA Sale NC-341-2024-GF8623-01

District: N Cascade

Date: December 18, 2023

Timber Description

Location: T10S, R6E, Section 17, 18, 19, 20, 29, 30, 31, 32 and T10S, R5E, Section 25.

Stand Stocking: 60%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	13	0	100
Western Hemlock / Fir	13	0	100
Red Cedar	14	0	100

Volume by Grade	2S	3S & 4S 6"-11"	3S	4S	Total
Douglas - Fir	742	5,670	0	0	6,412
Western Hemlock / Fir	11	233	0	0	244
Red Cedar	0	0	87	56	143
Total	753	5,903	87	56	6,799

Comments: SOURCE OF POND VALUES
Pond Values Used: Local Pond Values, December, 2023.

PRICING FOR ANY SPECIES THAT DOES NOT HAVE ANY VOLUME LISTED IN THE APPRAISAL (ALL HARDWOODS 10 INCHES DBH AND ABOVE ARE TO BE RESERVED FROM HARVEST)
Red Alder and other hardwoods Stumpage Price = Pond Value minus Logging Cost:
\$134.50/MBF = \$500/MBF - \$365.50/MBF

PULP PRICE
Pulp (Conifer and Hardwood) Price = \$1/Ton

OTHER COSTS WITH PROFIT & RISK TO BE ADDED

Seeding and application of weed-free straw to all disturbed sites with seed provided by STATE = \$2,000 (flat rate)

Intermediate support/tail trees \$100/ support at 30 supports = \$3,000

Artificial anchor (dead man) for 10 anchors at \$500/ anchor = \$5,000

TOTAL OTHER COSTS (with Profit & Risk to be added) = \$10,000

OTHER COSTS WITH NO PROFIT & RISK ADDED

Prior to wet weather season or heavy rain events, landings and temporary roads water barred: \$2,000 x 3 wet seasons = \$6,000

Temporary road subsoiled to depth of 20 inches, water bars installed, seeded, mulched and entrance blocked: \$4,000/mi x 1.93 mi (10,190 ft.) = \$7,720

Landing subsoiled to depth of 20 inches, seeded, and application of mulch or weed-free straw: \$100 x 43 landings = \$4,300

Primary skid trails subsoiled to depth of 20 inches, water bars installed, seeded, mulched and entrance blocked: $\$2,000 \times 14$ skid trails = $\$28,000$
 Equipment move-in: $((\$120/\text{hr} + (\$22/\text{hr} \times 2 \text{ pilots})) \times 5 \text{ hr move cycle} \times 5 \text{ machines}) = \$4,100$
 Equipment weed wash: $((\$120/\text{hr} + (\$22/\text{hr} \times 2 \text{ pilots})) \times 2.5 \text{ hr wash} = \$410 \times 5 \text{ machines} = \$2,050$
 Firewood Sorting & Landing Piling: 118 landings @ $\$180/\text{landing}$: $\$21,240$
 Machine Time to Block/Waterbar Roads, and Skid Trails: $80 \text{ hours} \times \$150/\text{hour} = \$12,000$
 Tree Marking: 417 acres at $\$130/\text{acre}$ plus $\$54,410$
 TOTAL Other Costs (No Profit & Risk added) = $\$139,820$

PROJECT COSTS

Project No. 1: Road Improvement = $\$215,741.99$
 Project No. 2: Noxious Weed Control = $\$2,893.01$
 Project No. 3: Fire Trail Construction = $\$90,000.00$
 Project No. 4: Decommission of non-project roads and landings = $\$38,896.71$
 Project No. 5: Hand Piling Slash = $\$70,000$

TOTAL PROJECT COSTS: $\$417,531.00$

IDENTIFY SLASH DISPOSAL COSTS

Move-In: $((\$120/\text{hour loaded transport}) + (\$22/\text{hour} \times 2 \text{ pilots})) \times 4 \text{ hour Move-In Cycle} = \656×1
 Excavator = $\$656$
 Equipment Weed Wash: $((\$120/\text{hour loaded transport}) + (\$22/\text{hour} \times 1 \text{ pilot/wash personnel})) \times 2.5 \text{ hour wash time} = \$355 \times 1 \text{ Excavator} = \355
 Roadside grapple piling along temporary and system roads: $\$1,000/\text{mi} \times 1.935$
 mi = $\$1,935.48$
 Pile landing slash: 118 Landings (118hrs @ $\$100/\text{hr}$) = $\$11,800$
 In-Unit Piling: $\$50/\text{acre} \times 303 \text{ acres} = \$15,150$
 Covering Piles: $(\$12/\text{pile} \times 724 \text{ piles}) + (\$22/\text{hour} \times 4 \text{ covering personnel} \times 72 \text{ hours}) = \$15,024$

TOTAL Slash Disposal Costs = $\$45,144.48$

IDENTIFY ROAD MAINTENANCE COSTS

ROAD MAINTENANCE

Move-in: $\$4,000$
 General Road Maintenance: $10.16 \text{ miles} \times \$1,200/\text{mile} = \$13,412.50$
 TOTAL Road Maintenance: $\$13,412.50/6,799 \text{ MBF} = \$1.97/\text{MBF}$

See cost summary sheet for more information.



Timber Sale Appraisal
Dry Beard GNA
Sale NC-341-2024-GF8623-01

District: N Cascade

Date: December 18, 2023

Logging Conditions

Combination#: 1	Douglas - Fir	32.19%
	Western Hemlock / Fir	45.08%
	Red Cedar	36.92%
Logging System:	Cable: Large Tower >=70	Process: Harvester Head Delimbing
yarding distance:	Medium (800 ft)	downhill yarding: No
tree size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF	
loads / day:	5.5	bd. ft / load: 3700
cost / mbf:	\$421.57	
machines:	Log Loader (A) Forwarder Harvester Tower Yarder (Large)	
Combination#: 2	Douglas - Fir	35.21%
	Western Hemlock / Fir	16.23%
	Red Cedar	3.92%
Logging System:	Shovel	Process: Harvester Head Delimbing
yarding distance:	Short (400 ft)	downhill yarding: No
tree size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF	
loads / day:	13	bd. ft / load: 3700
cost / mbf:	\$207.90	
machines:	Forwarder Harvester	
Combination#: 3	Douglas - Fir	14.18%
	Western Hemlock / Fir	8.11%
	Red Cedar	0.98%
Logging System:	Cable: Small Tower <=40	Process: Manual Falling/Delimbing
yarding distance:	Short (400 ft)	downhill yarding: No
tree size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF	
loads / day:	6	bd. ft / load: 3700
cost / mbf:	\$334.76	
machines:	Log Loader (A) Tower Yarder (Small)	
Combination#: 4	Douglas - Fir	18.42%
	Western Hemlock / Fir	30.57%
	Red Cedar	58.18%
Logging System:	Helicopter	Process: Non Pre-Bunching
yarding distance:	Medium (1 mile)	downhill yarding: No
tree size:	Small / Thinning 50% (130 Bft/tree), 12-17 logs/MBF	
loads / day:	11	bd. ft / load: 3700
cost / mbf:	\$989.90	
machines:	Log Loader (A)	



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Dry Beard GNA Sale NC-341-2024-GF8623-01

District: N Cascade

Date: December 18, 2023

Logging Costs

Operating Seasons: 3.00	Profit Risk: 15%
Project Costs: \$417,531.00	Other Costs (P/R): \$10,000.00
Slash Disposal: \$45,144.48	Other Costs: \$139,820.00

Miles of Road

Road Maintenance: \$1.89

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	4.5
Western Hemlock / Fir	\$0.00	3.0	4.5
Red Cedar	\$150.00	2.0	4.5



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Dry Beard GNA Sale NC-341-2024-GF8623-01

District: N Cascade

Date: December 18, 2023

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
\$438.71	\$1.89	\$1.94	\$92.59	\$1.47	\$80.49	\$6.64	\$2.00	\$20.56	\$646.29
Western Hemlock / Fir									
\$553.61	\$1.89	\$1.94	\$92.59	\$1.47	\$97.72	\$6.64	\$2.00	\$20.56	\$778.42
Red Cedar									
\$743.02	\$1.89	\$1.94	\$150.00	\$1.47	\$134.75	\$6.64	\$2.00	\$20.56	\$1,062.27

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$828.82	\$182.53	\$0.00
Western Hemlock / Fir	\$0.00	\$779.18	\$0.76	\$0.00
Red Cedar	\$0.00	\$1,148.46	\$86.19	\$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
Red Cedar	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	6,412	\$182.53	\$1,170,382.36
Western Hemlock / Fir	244	\$0.76	\$185.44
Red Cedar	143	\$86.19	\$12,325.17

Gross Timber Sale Value

Recovery: \$1,182,892.97

Prepared By: Kolton Vickers

Phone: 971-375-6232

TIMBER SALE SUMMARY
Dry Beard GNA
Contract No. NC-341-2024-GF8623-01

1. **Location:** T10S R5E Sec 25, and T10S R6E Sec 17, 18, 19, 20, 29, 30, 31, 32 W.M, Linn County, Oregon.
2. **Type of Sale:** This timber sale has 24 units and 9 DTRs. The timber will be sold on a recovery basis at a sealed bid auction.
3. **Sale Acreage:** Acreage was determined by traversing with ESRI ArcMap GIS software. Total sale acreage is 416 acres.
4. **Cruise:** The Timber Sale was cruised by ODF Cruisers in August of 2023. For more information see the Cruise Report.
5. **Timber Description:** The Timber Sale Area consists of multiple stands with approximate ages of 40 years. The predominate tree species is Douglas-fir with a moderate component of Western hemlock. A minor component of Western red cedar, true firs, and hardwood spp. are also present. The average DBH for all species is 13.3" for take trees. The estimated net volume/ac. for all take species and trees is 17 MBF/Acre.
6. **Volume Summary:**

SALE VOLUME BY GRADE MBF						
Species	2 Saw	3 Saw	4 Saw	5 Saw	6 Saw	Total
DF	742	4,930	740	--	--	6,412
WH	11	233	--	--	--	244
RC	--	87	56	--	--	143
Sale Volume	754	5,249	796	--	--	6,799

Volume summary is for "take" trees. See attached SuperAce outputs: Project Statistics, Stand Table Summary, Log Stock Table, and Species, Sort, Grade Table for more cruise volume summary information.

7. **Topography and Logging Method:** The elevation for the Timber Sale is 2,880 feet. Slopes within the sale areas range from 5-85%. The Timber Sale Area is 31% ground-based, 51% cable-yarded and 18% helicopter logged.
8. **Access:** The Timber Sale Area is located south of Detroit, Oregon, within the Willamette National Forest on the Detroit Ranger District. Access to the Timber Sale Area is as follows: from the town of Detroit, Oregon, continue on Hwy. 22 east for approximately 4.2 miles until you reach Blowout Road, turn right. Continue on Blowout Road for approximately 1 mile take a left on the Tom Creek Mainline 1003. Continue on the Tom Creek Mainline 1003 for approximately 1.5 miles to the beginning of the project. Then drive an additional 2.5 miles to the middle of the timber sale area which is the intersection of the 1003, 409, and 416 roads. To get to the furthest east unit drive 2.2 miles on the 1003 from the intersection. Then to get to the furthest south unit drive on the 416 road for 2 miles. To get to the furthest western units drive 1 mile on the 409 road, then turn left on the 411 road. Then drive 1.2 miles on the 411 road to the furthest west unit.

Take Tree Stats

Data Entry Fields						Calculated Fields =>		
Unit	Stand	Take trees Only		NWW		Board Feet		
		Species	SE%	Vol/Ac	Acres	Volume	SE Vol	SE Vol Squared
DxD 14	DF		10.3	15,450	40.0	618,000	63,654	4,051,831,716
DxD 14	RC			180	40.0	7,200	0	0
DxD 14	WH			242	40.0	9,680	0	0
DxD 15	DF		9.4	12,579	91.2	1,147,205	107,837	11,628,872,746
DxD 15	WH		19.2	818	91.0	74,602	14,324	205,162,859
DxD 16	DF		4.2	17,433	154.0	2,682,939	112,683	12,697,554,360
DxD 17	DF		6.7	17,723	94.0	1,658,873	111,144	12,353,094,901
DxD 17	RC		24.3	727	94.0	68,047	16,535	273,421,755
DxD 17	WH		19.2	1,282	94.0	119,995	23,039	530,799,134
DxD 18	DF		17	14,831	38.0	572,477	97,321	9,471,381,323
DxD 18	RC		21.6	1,906	38.0	73,572	15,891	252,538,679
DxD 18	WH		18.6	1,298	38.0	49,324	9,174	84,167,120
Volume Sum						7,081,913	571,604	51,548,824,592
							standard error	227,044
							Total SE%	3.21%
Field Cull Volume:						Volume Low Estimate	6,854,869	Board Feet
						Volume High Estimate	7,308,956	Board Feet

Net Sale Volume:

7,081,913

From the Superace Statistics Report enter take tree statistics in colored boxes to right
Add fields for additional species if necessary.
Be careful not to type over the formulas.

short log conversion (vol*28%)
8,774,232.11
9,355,463.89

n-sample plots/trees				
Plots		Sample Trees		Total
Measure	Total	Measure	Count	
7	14	79	72	151
				0
				0
16	28	154	115	269
				0
26	52	315	294	609
18	36	222	221	443
				0
				0
7	14	67	92	159
				0
				0
74	144	837	794	1631

Plots N = SQRT(CV)/SE.
SE% = CV/SQRT(N)
CV = SE%*(N)^1/2

837 n (measured trees)

CV Measured trees
92.75163

Volume By Tail											
CRUSH VOLUME PER ACRE (BPS)				TOTAL VOLUME BY							
Species (Tales)	2 Saw	3 Saw	4 Saw	NET ACRES	2 Saw	3 Saw	4 Saw	Total Volume			
df	Stand 14	8,822	8,722	1,824	46.0	280,880	324,020	42,240	630,040		
rc	Stand 14	0	180	0	46.0	0	7,200	0	7,200		
wh	Stand 14	0	0	0	0	0	0	0	0		
df	Stand 15	1,442	9,871	1,464	91.2	331,130	881,991	133,699	1,346,220		
rc	Stand 15	0	814	0	91.2	0	74,400	0	74,400		
wh	Stand 15	0	0	0	0	0	0	0	0		
df	Stand 16	302	15,242	1,809	153.0	46,470	2,343,744	290,871	2,680,991		
rc	Stand 17	1,852	11,062	2,679	93.4	82,707	1,223,441	750,764	1,656,911		
wh	Stand 17	0	1,180	0	93.4	0	84,400	0	84,400		
df	Stand 17	0	430	294	93.4	0	40,240	27,760	67,994		
rc	Stand 18	4,444	8,962	1,709	58.6	173,693	347,091	53,654	574,438		
wh	Stand 18	0	1,113	703	58.6	0	42,062	30,610	71,572		
df	Stand 18	0	0	0	0	0	0	0	0		
Sub Volume										14,263	50,408
										9,579	407.3
										785,135	5,468,064
										829,514	7,082,722

*Adjusted 4% for hidden cull and breakage

SLAB				
Species	2 Saw	3 Saw	4 Saw	Total
df	177,360	5,125,764	771,243	6,074,367
wh	11,811	312,451	0	324,264
rc	0	30,410	30,211	143,776
Sub Volume	785,135	5,468,064	829,434	7,082,722

SALE VOLUME BY GRADE PERCENTAGE				
Species	2 Saw	3 Saw	4 Saw	Total
df	11%	70%	11%	92%
wh	0%	45%	0%	45%
rc	0%	7%	0%	7%
Sub Volume	12%	80%	12%	100%

ADJUSTED VOLUME BY GRADE												
Stand	Species (Tales)	ADJUSTED VOLUME BY GRADE			NET ACRES	ADJUSTED TOTAL VOLUME BY			ADJUSTED TOTAL VOLUME MBF for T&S REPORT			
		2 Saw	3 Saw	4 Saw		2 Saw	3 Saw	4 Saw	Total Volume	2 Saw	3 Saw	4 Saw
df	Stand 14	5,781.1	8,820.1	1,033.8	46.0	271,245	317,223	40,630	590,214	231	322	41
rc	Stand 14	0	172.8	0.0	46.0	0	6,012	0	6,012	0	7	0
wh	Stand 14	0	0	0.0	0	0	0	0	0	0	0	0
df	Stand 15	1,384.3	9,784.2	1,407.4	91.2	326,250	846,513	128,351	1,301,113	126	847	129
rc	Stand 15	0	76.5	0.0	91.2	0	71,604	0	71,604	0	71	0
wh	Stand 15	0	0	0.0	0	0	0	0	0	0	0	0
df	Stand 16	289.0	14,612.3	1,814.4	153.0	44,619	2,251,014	279,236	2,375,769	45	2252	279
rc	Stand 17	1,873.0	12,566.3	2,713.4	93.4	178,999	1,176,399	206,724	1,562,124	175	1176	241
wh	Stand 17	0	412.8	284.2	93.4	0	38,636	26,997	65,734	0	39	27
df	Stand 18	4,414	8,932.3	1,734.4	58.6	164,825	333,208	51,508	549,541	165	333	52
rc	Stand 18	0	1,008.5	761.8	58.6	0	41,243	29,185	70,629	0	41	29
wh	Stand 18	0	0	0.0	0	0	0	0	0	0	0	0
Sub Volume		13,721.3	58,181.8	9,187.2	473.7	753,249	5,249,544	796,353	6,799,481	6,799,481	6,799,481	6,799,481

*Adjusted 4% for hidden cull and breakage

SALE VOLUME BY GRADE MBF				
Species	2 Saw	3 Saw	4 Saw	Total
df	11%	70%	11%	92%
wh	0%	45%	0%	45%
rc	0%	7%	0%	7%
Sub Volume	785,135	5,468,064	829,434	7,082,722

SALE VOLUME BY GRADE MBF				
Species	2 Saw	3 Saw	4 Saw	Total
df	11%	70%	11%	92%
wh	0%	45%	0%	45%
rc	0%	7%	0%	7%
Sub Volume	785,135	5,468,064	829,434	7,082,722

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SUMMARY OF ROAD COSTS

DRY BEARD GNA PROJECT COSTS

Project No. 1 Road Improvement (includes brushing, grading, gate removal)

ROAD IMPROVEMENT:

Segments	Length	Rocking				Construct \$
		Pit Run 6"+	Other (endhaul/soil)	1.5"- 0" Crushed	Culverts 1.5"- 0"	
17	20+42			225 cy		\$ 8,986.57
1003	235+42	393 cy	240 cy	1,437 cy	24 cy	\$ 89,942.64
405	10+43			31 cy		\$ 1,866.88
305	13+35	30 cy		40 cy		\$ 2,233.66
306	29+84			90 cy		\$ 4,614.68
307	1+06			3 cy		\$ 160.37
420	4+50			14 cy		\$ 680.83
479	13+54			41 cy		\$ 2,048.55
476	7+98			24 cy		\$ 1,207.34
416	106+47	240 cy		639 cy		\$ 37,132.65
480	16+40	60 cy		180 cy		\$ 9,683.35
409	70+28	180 cy	60 cy	422 cy		\$ 27,637.99
411	60+46	153 cy		387 cy	24 cy	\$ 29,546.46
Totals	590+15	1,056 cy	300 cy	3,531 cy	48 cy	\$ 215,741.99

11.18

11.18 Miles

Project No 1

\$ 215,741.99

SUMMARY OF ROAD COSTS

Segments	Station	Length	1.5"- 0" Crushed					
17	0+00 to 20+42	20+42	225 cy					
1003	As needed	235+42	1,437 cy					
405	0+00 to 10+43	10+43	31 cy					
305	As needed	13+35	40 cy					
306	As needed	29+84	90 cy					
307	As needed	1+06	3 cy					
420	As needed	4+50	14 cy	Rock Totals	1 1/2"-0" Crushed	Culvert Bedding 1 1/2"-0"	Pit Run 6"+	Other (end haul/soil)
479	As needed	13+54	41 cy	LOOSE TRUCK Cu.	3,531 cy	48 cy	1,056 cy	48 cy
476	As needed	7+98	24 cy					
416	As needed	106+47	639 cy					
480	0+00 to 16+40	16+40	180 cy					
409	As needed	70+28	422 cy					
411	As needed	60+46	387 cy					
Total		590+15	3,531 cy					

SUMMARY OF ROAD COSTS

PROJECT NO. 1

NEW CONSTRUCTION

Sale: _____

Road Segment: _____

NEW CONSTRUCTION:

	Station	Designed Cubic Yards/Station			
	Quantity	Pit Run 8"+	1.5"- 0"	Reclaim	Soil
New Construct	3+83			48 cy	
Landing	1			30 cy	
			10 cy	20 cy	
Two-way Junction	1				
Culvert Bedding	1	3 cy	24 cy		

CULVERTS:

Description	Type	Size	Total	Cost	Bevel	Bands	Cost	Sub Total
			Length					
1 - 24" x 30'	ACSP	24"	30	\$ 780.00	\$ -	0	\$ -	\$ 780.00
				\$ -	\$ -	2	\$ -	\$ -

CPP = corrugated plastic pipe

ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)

Install 6' long steel "T" post.

Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
1	\$ -	\$ 8.50	\$ 8.50
1		\$ 8.50	\$ 8.50
1		\$ 75.00	\$ 75.00

SURFACING:

Size	Roads	Landing	Turn Arounds	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"				10 cy	24 cy			34 cy
Reclaim Rock	184 cy	30 cy		20 cy				234 cy
Pit Run 8"+							3 cy	3 cy

Total = 271 cy

RAND TOTAL

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)

Quantity	Designed Cubic Yards/Station			
Station or Acre	Dissapator 6"+	1.5"- 0"	Bedding 1.5"	Soil
20+42		11 cy		

CULVERTS:

Description	Type	Size	Total Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -		\$ -	\$ -

CPP = corrugated plastic pipe

ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)

Install 6' long steel "T" post.

Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
	\$ 5.00	\$ 8.50	\$ -
		\$ 8.50	\$ -
		\$ 75.00	\$ -

SURFACING:

Size	Roads	Landing	Ditch Soils	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	225 cy							225 cy
other								cy
Pit Run 6"+		cy						cy

Total = 225 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)
ditch improvement
install ditchouts

culvert replacement hual-away
Landing Improvement

Quantity	Designed Cubic Yards/Station			
Station or Acre	Dissapator 6"+	1.5"- 0"	Bedding 1.5"	Soil
235+42		6 cy		
37+87				240 cy
2				
	3 cy		24 cy	
1				
13	30 cy			

CULVERTS:

			Total					
Description	Type	Size	Length	Cost	Bevel	Bands	Cost	Sub Total
1-24" x 50'	ACSP	24	50	\$ 1,500.00	\$ -	1	\$ 60.00	\$ 1,560.00

CPP = corrugated plastic pipe

ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)

Install 6' long steel "T" post.

Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
1	\$ 5.00	\$ 8.50	\$ 13.50
1		\$ 8.50	\$ 8.50
1		\$ 75.00	\$ 75.00

SURFACING:

Size	Roads	Landing	Ditch Soils	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	1,413 cy				24 cy			1,437 cy
other			240 cy					240 cy
Pit Run 6"+		390 cy					3 cy	393 cy

Total = 2,070 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)
Two way Junction
Landing Construction

Quantity	Designed Cubic Yards/Station			
Station or Acre	Pit Run 8"+	1.5"- 0"	Other	Soil
10+43		3 cy		
1				
1	30 cy			

CULVERTS:

Description	Type	Size	Total Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -	0	\$ -	\$ -

CPP = corrugated plastic pipe

ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)

Install 6' long steel "T" post.

Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
	\$ 5.00	\$ 8.50	\$ -
		\$ 8.50	\$ -
		\$ 75.00	\$ -

SURFACING:

Size	Roads	Landing	Turn Arouds	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	31 cy							31 cy
other								cy
Pit Run 8"+		30 cy						30 cy

Total = 61 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)
Landing Improvement

Quantity	Designed Cubic Yards/Station			
Station or Acre	Pit Run 6"+	1.5"- 0"	other	Soil
13+35		3 cy		
1	30 cy			

CULVERTS:

			Total					
Description	Type	Size	Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -	0	\$ -	\$ -

CPP = corrugated plastic pipe
ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)
Install 6' long steel "T" post.
Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
	\$ 5.00	\$ 8.50	\$ -
		\$ 8.50	\$ -
		\$ 75.00	\$ -

SURFACING:

Size	Roads	Landing	Turn Arounds	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	40 cy							40 cy
other								
Pit Run 6"+		30 cy						30 cy

Total = 70 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)
Gate Removal and haul away

Quantity	Designed Cubic Yards/Station			
Station or Acre	Pit Run 6"+	1.5"- 0"	other	Soil
29+84		3 cy		
1				

CULVERTS:

Description	Type	Size	Total Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -	0	\$ -	\$ -

CPP = corrugated plastic pipe

ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)

Install 6' long steel "T" post.

Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
	\$ 5.00	\$ 8.50	\$ -
		\$ 8.50	\$ -
		\$ 75.00	\$ -

SURFACING:

Size	Roads	Landing	Turn Arouds	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	90 cy							90 cy
other								
Pit Run 6"+								

Total = 90 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)

Quantity	Designed Cubic Yards/Station			
Station or Acre	Pit Run 8"+	1.5"- 0"	other	Soil
1+06		3 cy		

CULVERTS:

Description	Type	Size	Total Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -	0	\$ -	\$ -

CPP = corrugated plastic pipe
ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)
Install 6' long steel "T" post.
Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
	\$ 5.00	\$ 8.50	\$ -
		\$ 8.50	\$ -
		\$ 75.00	\$ -

SURFACING:

Size	Roads	Landing	Turn Arouds	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	3 cy							3 cy
other								
Pit Run 8"+								

Total = 3 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)
Gate 2 Removal

Quantity	Designed Cubic Yards/Station			
Station or Acre	Pit Run 8"+	1.5"- 0"	other	Soil
1				

CULVERTS:

			Total					
Description	Type	Size	Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -	0	\$ -	\$ -

CPP = corrugated plastic pipe
ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)
Install 6' long steel "T" post.
Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
	\$ 5.00	\$ 8.50	\$ -
		\$ 8.50	\$ -
		\$ 75.00	\$ -

SURFACING:

Size	Roads	Landing	Turn Arounds	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	cy							cy
other								
Pit Run 8"+								

Total = cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)

Quantity	Designed Cubic Yards/Station			
Station or Acre	Pit Run 8"+	1.5"- 0"	other	Soil
4+50		3 cy		

CULVERTS:

Description	Type	Size	Total Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -	0	\$ -	\$ -

CPP = corrugated plastic pipe

ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)

Install 6' long steel "T" post.

Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
	\$ 5.00	\$ 8.50	\$ -
		\$ 8.50	\$ -
		\$ 75.00	\$ -

SURFACING:

Size	Roads	Landing	Turn Arouds	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	14 cy							14 cy
other								
Pit Run 8"+								

Total = 14 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)

Quantity	Designed Cubic Yards/Station			
Station or Acre	Pit Run 8"+	1.5"- 0"	other	Soil
7+98		3 cy		

CULVERTS:

			Total					
Description	Type	Size	Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -	0	\$ -	\$ -

CPP = corrugated plastic pipe
ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)
Install 6' long steel "T" post.
Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
	\$ 5.00	\$ 8.50	\$ -
		\$ 8.50	\$ -
		\$ 75.00	\$ -

SURFACING:

Size	Roads	Landing	Turn Arounds	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	24 cy							24 cy
other		cy						cy
Pit Run 8"+								

Total = 24 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)

Quantity	Designed Cubic Yards/Station			
Station or Acre	Pit Run 8"+	1.5"- 0"	other	Soil
13+54		3 cy		

CULVERTS:

			Total					
Description	Type	Size	Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -	0	\$ -	\$ -

CPP = corrugated plastic pipe
ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)
Install 6' long steel "T" post.
Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
	\$ 5.00	\$ 8.50	\$ -
		\$ 8.50	\$ -
		\$ 75.00	\$ -

SURFACING:

Size	Roads	Landing	Turn Arounds	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	41 cy							41 cy
other								
Pit Run 8"+								

Total = 41 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)
ditch improvement
install ditchouts

Landing Improvment

Quantity	Designed Cubic Yards/Station			
Station or Acre	Dissapator 6"+	1.5"- 0"	Bedding 1.5"	Soil
106+47		6 cy		
6+93				60 cy
2				
8	30 cy			

CULVERTS:

			Total					
Description	Type	Size	Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -		\$ -	\$ -

CPP = corrugated plastic pipe

ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)

Install 6' long steel "T" post.

Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
0	\$ 5.00	\$ 8.50	\$ -
0		\$ 8.50	\$ -
0		\$ 75.00	\$ -

SURFACING:

Size	Roads	Landing	Turn Arounds	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	639 cy				#REF!			639 cy
other								
Pit Run 6"+		240 cy						240 cy

Total = 879 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)
ditch improvement
install ditchouts

Turn out improvement
Landing Construction
Landing Imporvement

Quantity	Designed Cubic Yards/Station			
Station or Acre	Dissapator 6"+	1.5"- 0"	Bedding 1.5"	Soil
16+40		11 cy		
		30 cy		
1				
1	30 cy			
1	30 cy			

CULVERTS:

			Total					
Description	Type	Size	Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -		\$ -	\$ -

CPP = corrigated plastic pipe
ACSP = aluminum corrigated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)
Install 6' long steel "T" post.
Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
0	\$ 5.00	\$ 8.50	\$ -
0		\$ 8.50	\$ -
0		\$ 75.00	\$ -

SURFACING:

			Turn	Two-way	Culvert	Turn	Dissipator	Total
Size	Roads	Landing	Arounds	Junctions	Bedding	outs	(cy/pipe)	
1.5"- 0"	180 cy				cy			180 cy
Other								
Pit Run 6"+		60 cy						60 cy

Total = 240 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)
ditch improvement
Landing Improvment

Landing Construction

Quantity	Designed Cubic Yards/Station			
Station or Acre	Dissapator 6"+	1.5"- 0"	Bedding 1.5"	Soil
70+28		6 cy		
2+24				60 cy
4	30 cy			
	30 cy			
2				

CULVERTS:

			Total					
Description	Type	Size	Length	Cost	Bevel	Bands	Cost	Sub Total
				\$ -	\$ -		\$ -	\$ -

CPP = corrugated plastic pipe

ACSP = aluminum corrugated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)

Install 6' long steel "T" post.

Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
0	\$ 5.00	\$ 8.50	\$ -
0		\$ 8.50	\$ -
0		\$ 75.00	\$ -

SURFACING:

Size	Roads	Landing	Ditch soil	Two-way Junctions	Culvert Bedding	Turn outs	Dissipator (cy/pipe)	Total
1.5"- 0"	422 cy							422 cy
other			60 cy					60 cy
Pit Run 6"+		180 cy						180 cy

Total = 662 cy

SUMMARY OF ROAD COSTS

PROJECT NO. 2

ROAD IMPROVEMENT

Sale: Dry Beard

ROAD IMPROVEMENT:

Road Improvement (Grading and Brushing)
ditch improvement
Waterbar removal

culvert replacement hual-away
Landing Improvment
Landing Construction
Heli landing/deck

Quantity	Designed Cubic Yards/Station			
Station or Acre	Dissapator 6"+	1.5"- 0"	Bedding 1.5"	Soil
60+46		6 cy		
1				
	3 cy		24 cy	
1				
5	30 cy			
1	30 cy			
1				

CULVERTS:

			Total					
Description	Type	Size	Length	Cost	Bevel	Bands	Cost	Sub Total
1-24" x 30'	ACSP	24	30	\$ 900.00	\$ -	1	\$ 60.00	\$ 960.00

CPP = corrigated plastic pipe

ACSP = aluminum corrigated steel pipe

Seed/mulch (1-bales and 1-lbs seed per culvert site)

Install 6' long steel "T" post.

Install outlet dissipator.

Quantity	Seed	Cost	Sub Total
1	\$ 5.00	\$ 8.50	\$ 13.50
1		\$ 8.50	\$ 8.50
1		\$ 75.00	\$ 75.00

SURFACING:

			Turn	Two-way	Culvert	Turn	Dissipator	Total
Size	Roads	Landing	Arounds	Junctions	Bedding	outs	(cy/pipe)	
1.5"- 0"	363 cy				24 cy			387 cy
other								
Pit Run 6"+		150 cy					3 cy	153 cy

Total = 540 cy

SUMMARY OF ROAD COSTS

Turnidge Creek Thin						
Road Segment: Point L (Parking lot at the beginning of Monument Peak Road)				Point to Point		Sta. to Sta.
Application	Rock Size/Type	Location	Rock Depth	L		Parking Lot
				Volume (CY) Per		Number of
Road Top Rock (Pot holes)	1.5"- 0" Crushed	Parking Lot	varies	Station	24	Stations
Total Rock for Road Segment:						
Road Segment: Point M (1.15 - mile Monument Peak Road))				Point to Point		Sta. to Sta.
Application	Rock Size/Type	Location	Rock Depth	M		1.15 mile
				Volume (CY) Per		Number of
Two-way Junction	1.5"- 0" Crushed	1.15 mile	Varies	Site	10	Site
Culvert Bedding Rock	1.5"- 0" Crushed	1.15 mile	Varies	Site	30	Site
Culvert Dissipator Rock	Pit Run	1.15 mile	Varies	Site	3	Site
Total Rock for Road Segment:						
Road Segment: Point O (1.49 - mile Monument Peak Road))				Point to Point		Sta. to Sta.
Application	Rock Size/Type	Location	Rock Depth	O		1.49 mile
				Volume (CY) Per		Number of
Culvert Bedding Rock	1.5"- 0" Crushed	1.49 mile	Varies	Site	24	Site
Culvert Dissipator Rock	Pit Run	1.49 mile	Varies	Site	3	Site
Total Rock for Road Segment:						
Road Segment: A to A1				Point to Point		Sta. to Sta.
Application	Rock Size/Type	Location	Rock Depth	A	to	A1
				Volume (CY) Per		Number of
Road Base Rock	Reclaim	0+00 to 10+14	8	Station	48	Stations
Road Top Rock	1.5"- 0" Crushed	0+00 to 10+14	3	Station	17	Stations
Two-way Junction	Reclaim	0+00 to 0+30	8	Station	20	Stations
Two-way Junction	1.5"- 0" Crushed	0+00 to 0+30	3	Station	10	Stations
Landing	Reclaim	10+14	Piled	Site	30	Site
Truck Turnaround	Reclaim	7+00	8	Station	20	Stations
Truck Turnaround	1.5"- 0" Crushed	7+00	3	Station	10	Stations
Culvert Bedding Rock	1.5"- 0" Crushed	8+00	Varies	Site	24	Site
Culvert Dissipator Rock	Pit Run	8+00	Varies	Site	3	Site
Total Rock for Road Segment:						
Road Segment: A2 to A3				Point to Point		Sta. to Sta.
Application	Rock Size/Type	Location	Rock Depth	A2	to	A3
				Volume (CY) Per		Number of
Road Base Rock	Reclaim	0+00 to 2+48	8	Station	48	Stations
Road Top Rock	1.5"- 0" Crushed	0+00 to 2+48	3	Station	17	Stations
Two-way Junction	Reclaim	0+00 to 0+30	8	Station	20	Stations
Two-way Junction	1.5"- 0" Crushed	0+00 to 0+30	3	Station	10	Stations
Landing	Reclaim	2+48	Piled	Site	30	Site
Culvert Bedding Rock	1.5"- 0" Crushed	1+10	Varies	Site	24	Site
Culvert Dissipator Rock	Pit Run	1+10	Varies	Site	3	Site
Total Rock for Road Segment:						
Road Segment: B to B1				Point to Point		Sta. to Sta.
Application	Rock Size/Type	Location	Rock Depth	B	to	B1
				Volume (CY) Per		Number of
Road Top Rock	1.5"- 0" Crushed	0+00 to 1+67	3	Station	17	Stations
Landing	Reclaim	1+67	Piled	Site	36	Site
Total Rock for Road Segment:						

SUMMARY OF ROAD COSTS

Road Segment: C to C1				Point to Point			Sta. to Sta.	
Application	Rock Size/Type	Location	Rock Depth	C	to	C1	0+00	to
				Volume (CY) Per			Number of	
Road Top Rock	1.5"- 0" Crushed	0+00 to 3+40	3	Station		17	Stations	
Total Rock for Road Segment:								

Road Segment: C1 to C2				Point to Point			Sta. to Sta.	
Application	Rock Size/Type	Location	Rock Depth	C1	to	C2	0+00	to
				Volume (CY) Per			Number of	
Road Base Rock	Reclaim	0+00 to 5+92	8	Station		48	Stations	
Road Top Rock	1.5"- 0" Crushed	0+00 to 5+92	3	Station		17	Stations	
Two-way Junction	Reclaim	0+00 to 5+92	8	Site		20	Site	
Two-way Junction	1.5"- 0" Crushed	0+00 to 0+30	3	Site		10	Site	
Truck Turnaround	Reclaim	4+64	8	Site		20	Site	
Truck Turnaround	1.5"- 0"	4+64	3	Site		10	Site	
Landing	Reclaim	5+92	Piled	Site		30	Site	
Total Rock for Road Segment:								

Road Segment: D to D1				Point to Point			Sta. to Sta.	
Application	Rock Size/Type	Location	Rock Depth	D	to	D1	0+00	to
				Volume (CY) Per			Number of	
Road Base Rock	Reclaim	0+00 to 1+00	8	Station		48	Stations	
Two-way Junction	Reclaim	0+00 to 1+00	8	Site		20	Site	
Two-way Junction	1.5"- 0" Crushed	0+00 to 0+30	3	Site		10	Site	
Total Rock for Road Segment:								

Road Segment: E to E1				Point to Point			Sta. to Sta.	
Application	Rock Size/Type	Location	Rock Depth	E	to	E1	0+00	to
				Volume (CY) Per			Number of	
Road Base Rock	Reclaim	0+00 to 6+50	8	Station		48	Stations	
Road Top Rock	1.5"- 0" Crushed	0+00 to 6+50	3	Station		17	Stations	
Landing	Reclaim	6+50	Piled	Site		30	Site	
Two-way Junction	Reclaim	0+00 to 1+00	8	Site		20	Site	
Two-way Junction	1.5"- 0" Crushed	0+00 to 0+30	3	Site		10	Site	
Total Rock for Road Segment:								

Road Segment: F to F1				Point to Point			Sta. to Sta.	
Application	Rock Size/Type	Location	Rock Depth	F	to	F1	0+00	to
				Volume (CY) Per			Number of	
Road Base Rock	Reclaim	0+00 to 2+25	8	Station		48	Stations	
Landing	Reclaim	2+25	Piled	Site		30	Site	
Two-way Junction	Reclaim	0+00 to 1+00	8	Site		20	Site	
Two-way Junction	1.5"- 0" Crushed	0+00 to 0+30	3	Site		10	Site	
Total Rock for Road Segment:								

Road Segment: G to G1				Point to Point			Sta. to Sta.	
Application	Rock Size/Type	Location	Rock Depth	G	to	G1	0+00	to
				Volume (CY) Per			Number of	
Road Base Rock	Reclaim	0+00 to 4+48	8	Station		48	Stations	
Landing	Reclaim	4+48	Piled	Site		30	Site	
Two-way Junction	Reclaim	0+00 to 0+30	8	Site		20	Site	
Two-way Junction	1.5"- 0" Crushed	0+00 to 0+30	3	Site		10	Site	
Total Rock for Road Segment:								

SUMMARY OF ROAD COSTS

Road Segment: H to H1				Point to Point		Sta. to Sta.
Application	Rock Size/Type	Location	Rock Depth	H	to H1	0+00 to
				Volume (CY) Per		Number of
Road Base Rock	Reclaim	0+00 to 2+95	8	Station	48	Stations
Landing	Reclaim	2+95	Piled	Site	30	Site
Two-way Junction	Reclaim	0+00 to 0+30	8	Site	20	Site
Two-way Junction	1.5"- 0" Crushed	0+00 to 0+30	3	Site	10	Site
Total Rock for Road Segment:						

Road Segment: I to I1				Point to Point		Sta. to Sta.
Application	Rock Size/Type	Location	Rock Depth	I	to I1	0+00 to
				Volume (CY) Per		Number of
Road Top Rock	1.5"- 0" Crushed	0+00 to 10+36	3	Station	17	Stations
Landing	Reclaim	10+36	Piled	Site	30	Site
Culvert Bedding Rock	1.5"- 0" Crushed	1+92 and 6+91	Varies	Sites	36	Sites
Culvert Dissipator Rock	Pit Run	1+92 and 6+91	Varies	Sites	24	Sites
Two-way Junction	Reclaim	0+00 to 0+30	8	Site	20	Site
Two-way Junction	1.5"- 0" Crushed	0+00 to 0+30	3	Site	10	Site
Total Rock for Road Segment:						

Road Segment: J to J1				Point to Point		Sta. to Sta.
Application	Rock Size/Type	Location	Rock Depth	J	to J1	0+00 to
				Volume (CY) Per		Number of
Road Top Rock	1.5"- 0" Crushed	0+00 to 6+22	3	Station	17	Stations
Landing	Reclaim	6+22	Piled	Site	36	Site
Culvert Bedding Rock	1.5"- 0" Crushed	0+25	Varies	Sites	24	Sites
Culvert Dissipator Rock	Pit Run	0+25	Varies	Sites	3	Sites
Truck Turnaround	Reclaim	5+02	8	Station	30	Stations
Truck Turnaround	1.5"- 0" Crushed	5+02	3	Station	24	Stations
Total Rock for Road Segment:						

Road Segment: K to K1				Point to Point		Sta. to Sta.
Application	Rock Size/Type	Location	Rock Depth	K	to K1	0+00 to
				Volume (CY) Per		Number of
Road Base Rock	Reclaim	0+00 to 3+93	8	Station	48	Stations
Landing	Reclaim	3+93	Piled	Site	30	Site
Two-way Junction	Reclaim	0+00 to 1+00	8	Site	20	Site
Two-way Junction	1.5"- 0" Crushed	0+00 to 0+30	3	Site	10	Site
Total Rock for Road Segment:						

Road Segment: N to N1				Point to Point		Sta. to Sta.
Application	Rock Size/Type	Location	Rock Depth	N	to N1	0+00 to
				Volume (CY) Per		Number of
Road Base Rock	Reclaim	0+00 to 3+83	8	Station	48	Stations
Landing	Reclaim	3+83	Piled	Site	30	Site
Two-way Junction	Reclaim	0+00 to 1+00	8	Site	20	Site
Two-way Junction	1.5"- 0" Crushed	0+00 to 0+30	3	Site	10	Site
Culvert Bedding Rock	1.5"- 0" Crushed	1+10	Varies	Sites	24	Sites
Culvert Dissipator Rock	Pit Run	1+10	Varies	Sites	3	Sites
Total Rock for Road Segment:						

Sizes	8"+ Pit Run	Reclaim	1.5"-0 Crushed
Rock Totals	42 cy	2,743 cy	1,204 cy

SUMMARY OF ROAD COSTS

Turnidge Creek Thin

Move in costs							
No.	Equipment Description	Transport Cost	Hours of Transport	Cost to Move	Weedwash Time (Hrs)	Weedwash Labor (\$65/hour)	Total Cost
1	Grader	\$ 180.00	7	\$ 1,260.00	2	\$ 130.00	\$ 1,390.00
1	Rollers & Comp	\$ 165.00	7	\$ 1,155.00	2	\$ 130.00	\$ 1,285.00
1	Excavator	\$ 220.00	7	\$ 1,540.00	6	\$ 390.00	\$ 1,930.00
0	Small backhoe	\$ 165.00	7	\$ 1,155.00	3	\$ 195.00	\$ -
1	Tractors Dozer (	\$ 220.00	7	\$ 1,540.00	6	\$ 390.00	\$ 1,930.00
2	Dump Truck (10	\$ 95.00	2	\$ 190.00	1	\$ 65.00	\$ 510.00
0	Loader	\$ 180.00	7	\$ 1,260.00	0	\$ -	\$ -
1	Road Brusher	\$ 165.00	7	\$ 1,155.00	5	\$ 325.00	\$ 1,480.00
1	Water Truck (10	\$ 95.00	2	\$ 190.00	1	\$ 65.00	\$ 255.00
Total one time							\$ 8,780.00

TOTAL MOVE-IN COSTS =	\$ 8,780.00
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SUMMARY OF ROAD COSTS

Dry Beard GNA

Pit Name: **Commerical Source**

1.5" - 0 Crushed

\$/cu.yd.==> **\$ 12.35** This cost will be added to the road cost sheet

Swell:	1.30			
Shrinkage/Compact:	1.16			
Drill Pct.:	100%			
Oversize Pct.:	10%			
		Truck measure		3,579 cy

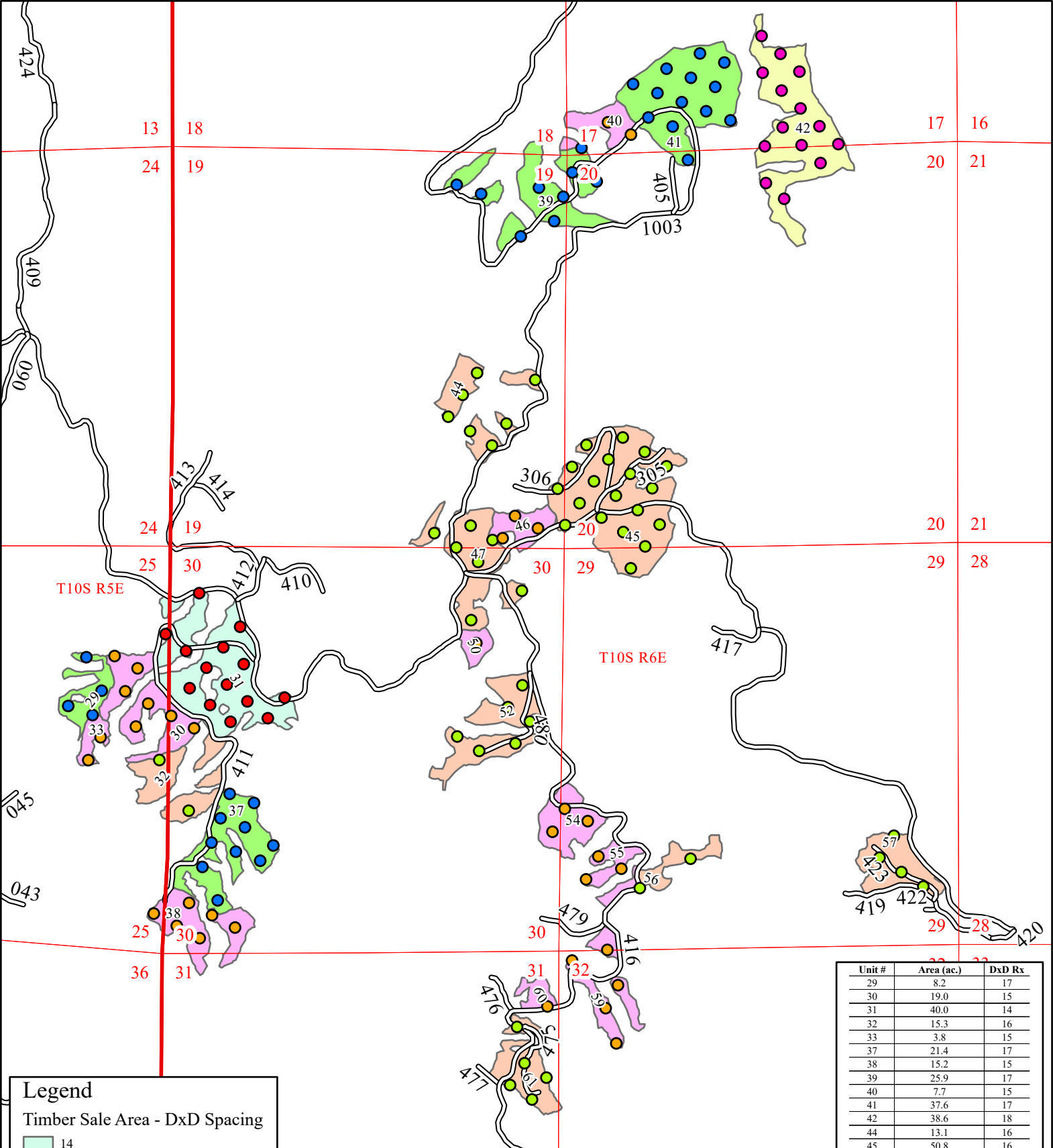
Scalp & Clear Overburden:	\$350.00 /hr	x	2 hrs	=	\$ 700.00
Drill & Shoot:	\$ 3.00 /cy	x	3,579 cy	=	\$ 10,736.70
Sort and split oversize rock:	\$ 4.25 /cy	x	358 cy	=	\$ 1,521.03
Load Crusher:	\$ 1.25 /cy	x	3,579 cy	=	\$ 4,473.63
Crushing	\$ 2.50 /cy	x	3,579 cy	=	\$ 8,947.25

Screening Rock	\$ 2.30 /cy	x	3,579 cy	=	\$ 8,231.47
Clean Up Pit	\$ 270.00 /hr	x	1 hrs	=	\$ 270.00
			Subtotal		\$ 34,880.08

MOVE IN COSTS

3-stage crusher	1	\$ 3,450.00			\$ 3,450.00
Move in and set up Drill and Comp	1	\$ 1,200.00			\$ 1,200.00
Move in D-8 (w/Wash)	1	\$ 1,615.00			\$ 1,615.00
Move in Loaders	1	\$ 1,225.00			\$ 1,225.00
Move in Excavator (w/Wash)	1	\$ 1,615.00			\$ 1,615.00
Move in Trucks	1	\$ 140.00			\$ 140.00
Gradation Tests		\$ 70.00 per	3,579 cy	=	\$ 70.00
					\$ 9,315.00

ESTIMATED TOTAL COST **\$ 44,195.08**



CRUISE REPORT
DRY BEARD GNA
Contract No. NC-341-2024-GF8623-01

1. **Locations:** T10S R05E Sec 25 and T10S R06E Sec 17, 18, 19, 20, 29, 30, 31, 32 W.M., Linn County, Oregon.

2. **Cruise Design:**

A Coefficient of Variation of 60% and an average stand diameter of 11 inches (take trees) was estimated prior to cruising. For sales of this size and approximate value, ODF cruise standards require a sampling error of 15% at a 68% confidence level. Based on silvicultural prescription, the cruise design chosen for this sale was a variable radius cruise broken up into 5 different strata to account for the varying commercial thinning prescriptions (DxD 14, 15, 16, 17, and 18 ft). Trees were collected using a 20 BAF.

3. **Sampling Methods:**

TRIS was used to design the cruise. Plots were laid out on a 490 ft. x 490 ft. grid, respective to each unit's prescription—across 24 units. Plots falling on or near the Timber Sale Boundary or existing roads were offset by 1 chain length (66 ft.). Plots that fell in DTR (Dominant Tree Release) areas recorded all conifers as 'take' except for the dominant Douglas-Fir within the ¼ acre or ½ acre prescription. A ratio of a 1:1 grade-to-count was used. Odd plots were recorded as count and even plots were recorded as measure. The likely 'take' trees were cruised based on each area's silviculture DxD prescription. No hardwoods were collected.

4. **Cruise Report:**

Cruise reports were generated using SuperAce. Additional and more specific cruise summaries are included in the SuperAce outputs: Project Statistics, Stand Table Summary, Log Stock Table, Species, Sort, and Grade Table.

5. **Tree Measurement and Grading:**

All grade plot sample trees were measured and graded following Columbia River Log Scale grade rules.

- a) **Height Standards:** Total tree heights were measured to the nearest foot. Bole heights were measured to a minimum of a 6" DIB.
- b) **Diameter Standards:** Diameters were measured from the outside bark at breast height to the nearest tenth of an inch. Minimum merchantable diameter is 7" DBH with maximum of 29" DBH for all conifers. *Diameters over 30" are considered Legacy Trees and are recorded as a 'leave tree.'*
- c) **Form Factors:** Measured or estimated for each grade tree using a form point of 16 feet.
- d) **Tree Segments:** Log segments were recorded in 40' lengths whenever possible. Preferred lengths are 40', 38', 36', 32', 28', 26', and descending 2' multiples. The maximum segment is 40' and the minimum is 12' for all grades.
- e) **Sort and Grade:** Conifers were graded to a merchantable top specified by the official log scaling rules. For all Douglas-fir, 2S segments were graded to a 12" top DIB and minimum net volume 60 bf (12' @ 12"), 3S to 6" top DIB and minimum net volume 50 bf (34' @ 6") and 4S to a 6" top DIB and minimum net volume 10 bf (5' @ 6").

- f) **Field Procedures:** Plot center was marked with a blue pin flag, or a stick with green flagging, with the plot number written on it. 'Take trees' were flagged in green; and 'leave trees,' based on their diameter size and DxD spacing were flagged in red.

5. Data Processing:

- a) **Volumes and Statistics:** Cruise design was created using TRIS. Volume estimates and sampling statistics were derived from Super Ace 2008 cruise software.
- b) **Deductions:** An estimate visible defect or damage was recorded as a percentage deduction. A 4 percent volume deduction was used for all conifer species' log segments to account for hidden defect and breakage, in addition to any visible defect.
- c) **Acreage:** The total timber sale area is 416 net acres.
- 6. Cruisers:** The sale was cruised by ODF cruisers Luciani, McVeigh-Walker, Reardon, Erdmann, and Vickers.

TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																	
Matthew Luciani																					
T10S R06E S20 TyTIMB40.00								Project: FLIPS								Page 1					
								Acres 40.00								Date 9/19/2023					
																Time 9:53:34AM					
S So Gr Spp T rt ad				% Net BdFt	Bd. Ft. per Acre Def% Gross Net			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre
				Log Scale Dia.					Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf					
				4-5					6-11	12-16	17+	12-20					21-30	31-35	36-99		
DF	L	DO	2M	43	.5	8,450	8,410	336			93	7			100	40	14	294	1.60	28.6	
DF	L	DO	3M	54	.2	10,611	10,585	423	1	97	2			4	96	39	9	124	0.81	85.5	
DF	L	DO	4M	3		459	459	18	28	72				100		25	6	41	0.38	11.2	
DF Totals				54	.3	19,520	19,455	778	1	54	41	3		5	95	38	10	155	0.98	125.4	
DF	T	DO	2M	38	1.4	6,107	6,022	241			100				100	40	13	235	1.52	25.6	
DF	T	DO	3M	55	1.0	8,460	8,373	335			100				100	40	8	105	0.65	79.8	
DF	T	DO	4M	7		1,056	1,056	42	34	66			36	64		21	6	29	0.33	36.0	
DF Totals				43	1.1	15,624	15,450	618	2	59	39		2	4	93	35	9	109	0.78	141.5	
WH T DO 3M				100		242	242	10	29	71				100		34	7	70	0.52	3.5	
WH Totals				1		242	242	10	29	71				100		34	7	70	0.52	3.5	
RC	L	DO	3M	100	1.5	658	649	26		22	78				100	40	10	173	1.72	3.8	
RC Totals				2	1.5	658	649	26		22	78				100	40	10	173	1.72	3.8	
RC	T	DO	3M	100		180	180	7		100					100	40	11	180	1.42	1.0	
RC Totals				1		180	180	7		100					100	40	11	180	1.42	1.0	
Totals					0.7	36,224	35,976	1,439	2	56	41	2	1	4	1	94	36	9	131	0.89	275.1

TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																
Matthew Luciani																				
T10S R06E S20 TyTIMB				91.20		Project:		FLIPS								Page		1		
						Acres		91.20								Date		9/19/2023		
																Time		10:00:58AM		
S So Gr Spp T rt ad			% Net BdFt	Bd. Ft. per Acre Def% Gross Net			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre
			Log Scale Dia.					Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf					
			4-5	6-11	12-16	17+		12-20	21-30	31-35	36-99									
DF	L	DO 2M	42	.0	5,607	5,607	511			84	16				100	40	14	280	1.59	20.0
DF	L	DO 3M	53		7,071	7,071	645	2	92	6			9	1	91	37	8	95	0.69	74.2
DF	L	DO 4M	5		595	595	54	24	61	15		16	54	18	11	26	7	52	0.52	11.4
DF Totals			50		13,273	13,273	1,210	2	52	39	7	1	7	1	91	37	9	126	0.86	105.7
DF	T	DO 2M	11		1,442	1,442	132			100					100	40	13	229	1.39	6.3
DF	T	DO 3M	77	.3	9,701	9,671	882	1	98	2			2		98	39	8	91	0.61	105.7
DF	T	DO 4M	12		1,466	1,466	134	22	78			13	44	12	31	26	6	39	0.34	37.5
DF Totals			47	.2	12,608	12,579	1,147	3	84	13		1	7	1	90	36	8	84	0.60	149.6
WH T DO 3M			100		818	818	75		100						100	40	8	104	0.71	7.9
WH Totals			3		818	818	75		100						100	40	8	104	0.71	7.9
Totals				0.1	26,700	26,670	2,432	3	69	26	3	1	7	1	91	36	8	101	0.71	263.1

TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																	
Matthew Luciani																					
T10S R06E S20 TyTIMB153.90								Project: FLIPS								Page 1					
								Acres153.90								Date 9/19/2023					
																Time 10:05:32AM					
S So Gr Spp T rt ad			% Net BdFt	Bd. Ft. per Acre Def%GrossNet			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre	
			Log Scale Dia.					Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf						
			4-5					6-11	12-16	17+	12-20					21-30	31-35	36-99			
DF	T	DO 2M	1	1.6	306	302	46	100				100				40	12	209	1.29	1.4	
DF	T	DO 3M	88	.3	15,289	15,242	2,346	99		1	100				40	8	97	0.64	156.4		
DF	T	DO 4M	11	.4	1,897	1,890	291	30	70	10				67	3	20	24	6	37	0.36	51.3
DF Totals			53	.3	17,492	17,433	2,683	3	94	2	1	7	0	91	36	8	83	0.60	209.2		
DF	L	DO 2M	16	2,602		2,602	400	100			100				40	13	260	1.52	10.0		
DF	L	DO 3M	72	.2	11,245	11,218	1,726	0	80	18	1	1		99	39	9	131	0.87	85.7		
DF	L	DO 4M	12	1,790		1,790	275	25	73	3	18	64	7	11	25	7	48	0.49	37.0		
DF Totals			47	.2	15,637	15,610	2,402	3	66	30	1	2	8	1	89	35	9	118	0.85	132.7	
Totals				0.3	33,129	33,043	5,085	3	81	15	0	2	8	1	90	36	8	97	0.70	341.8	

TC PLOGSTVB Matthew Luciani				Log Stock Table - MBF																
T10S R06E S20 TyTIMB 40.00				Project:		FLIPS										Page 1				
				Acres		40.00										Date 9/19/2023				
																Time 9:53:33AM				
Spp	S T	So Gr rt 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	L	DO	2M	40	338		336	43.2					112		114	111				
DF	L	DO	3M	24	6		6	.8				6								
DF	L	DO	3M	26	3		3	.4		3										
DF	L	DO	3M	30	8		8	1.1		2		6								
DF	L	DO	3M	40	407		406	52.2			39	90	267	9						
DF	L	DO	4M	22	6		6	.8			6									
DF	L	DO	4M	23	3		3	.4		3										
DF	L	DO	4M	28	7		7	.9					7							
DF	L	DO	4M	30	2		2	.3		2										
DF		Totals			781		778	54.1		11	46	102	274	121	114	111				
DF	T	DO	2M	40	244	1.4	241	39.0					142		99					
DF	T	DO	3M	40	338	1.0	335	54.2			36	211	88							
DF	T	DO	4M	20	15		15	2.5			7		8							
DF	T	DO	4M	21	11		11	1.7		6		4								
DF	T	DO	4M	22	14		14	2.3		6	5	3								
DF	T	DO	4M	23	2		2	.4		2										
DF		Totals			625	1.1	618	42.9		14	48	219	96	142	99					
WH	T	DO	3M	34	10		10	100.0		3		7								
WH		Totals			10		10	.7		3		7								
RC	L	DO	3M	40	26	1.5	26	100.0			6		9		11					
RC		Totals			26	1.5	26	1.8			6		9		11					
RC	T	DO	3M	40	7		7	100.0					7							
RC		Totals			7		7	.5					7							
Total		All Species			1,449		1,439	100.0		28	99	328	377	271	224	111				

TC PSTATS		PROJECT STATISTICS							PAGE	1	
Matthew Luciani			PROJECT		FLIPS			DATE		9/19/2023	
TWP	RGE	SC	TRACT	TYPE		ACRES		PLOTS	TREES	CuFt	BdFt
10S	06E	20	DB14	TIMB		40.00		14	151	S	W
			PLOTS	TREES	TREES	ESTIMATED TOTAL		PERCENT SAMPLE			
					PER PLOT	TREES		TREES			
TOTAL			14	151	10.8						
CRUISE			7	79	11.3		7,766		1.0		
DBH COUNT											
REFOREST											
COUNT			7	72	10.3						
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
DOUG FIR-L			34	75.1	18.0	110	31.2	132.1	19,520	19,455	4,616
DOUG FIR-T			39	108.0	15.1	95	34.6	134.6	15,624	15,450	3,905
WR CEDAR-L			4	8.3	16.2	60	3.0	11.9	658	649	259
WR CEDAR-T			1	1.0	19.5	85	0.5	2.1	180	180	57
WHEMLOCK-T			1	1.7	14.3	90	0.5	1.9	242	242	62
TOTAL			79	194.1	16.3	99	69.9	282.6	36,224	35,976	8,897
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-L			52.6	9.0	272	299	326				
DOUG FIR-T			64.4	10.3	173	193	213				
WR CEDAR-L			98.0	56.0	73	165	257				
WR CEDAR-T											
WHEMLOCK-T											
TOTAL			62.9	7.1	220	236	253	158	39	18	
CL	68.1	COEFF	SAMPLE TREES - CF					# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15	
DOUG FIR-L			47.3	8.1	64	70	76				
DOUG FIR-T			63.7	10.2	44	49	54				
WR CEDAR-L			89.3	51.0	31	63	96				
WR CEDAR-T											
WHEMLOCK-T											
TOTAL			58.3	6.6	55	59	63	136	34	15	
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-L			44.6	12.3	66	75	84				
DOUG FIR-T			46.8	13.0	94	108	122				
WR CEDAR-L			209.6	58.1	3	8	13				
WR CEDAR-T			374.2	103.6		1	2				
WHEMLOCK-T			374.2	103.6		2	4				
TOTAL			33.8	9.4	176	194	212	49	12	5	
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-L			43.8	12.1	116	132	148				
DOUG FIR-T			52.5	14.5	115	135	154				
WR CEDAR-L			239.1	66.2	4	12	20				
WR CEDAR-T			374.2	103.6		2	4				
WHEMLOCK-T			374.2	103.6		2	4				
TOTAL			29.7	8.2	259	283	306	38	10	4	

Matthew Luciani

PROJECT**FLIPS**

DATE

9/19/2023

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
10S	06E	20	DB14	TIMB	40.00	14	151	S	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
DOUG FIR-L		47.2	13.1	16,913	19,455	21,997			
DOUG FIR-T		53.7	14.9	13,153	15,450	17,748			
WR CEDAR-L		302.9	83.9	104	649	1,193			
WR CEDAR-T		374.2	103.6		180	367			
WHEMLOCK-T		374.2	103.6		242	494			
TOTAL		38.2	10.6	32,171	35,976	39,782	63	16	7

CL	68.1	COEFF	NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR-L		45.8	12.7	4,030	4,616	5,201			
DOUG FIR-T		55.5	15.4	3,303	3,902	4,502			
WR CEDAR-L		302.9	83.9	42	259	476			
WR CEDAR-T		374.2	103.6		57	116			
WHEMLOCK-T		374.2	103.6		62	125			
TOTAL		36.9	10.2	7,985	8,895	9,805	59	15	7

TC PSTNDSUM		Stand Table Summary											Page 1			
Matthew Luciani													Date:	9/19/2023		
T10S R06E S20 TyTIMB 40.00					Project FLIPS								Time:		9:53:34AM	
					Acres 40.00								Grown Year:			
S SpC	T	Tot			Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	T o t a l s			
		DBH	Sample Trees	FF 16'				Av Ht	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits	MBF
DF L		13	1	90	118	3.871	3.73	11.61	12.3	60.0	4.08	143	697	163	57	28
DF L		14	1	91	107	3.205	3.57	3.20	29.3	150.0	2.68	94	481	107	38	19
DF L		15	2	87	94	6.708	7.97	6.71	30.6	120.0	5.85	205	805	234	82	32
DF L		16	4	88	100	10.701	15.30	13.23	34.1	139.1	12.86	451	1,840	514	180	74
DF L		17	6	88	109	14.871	23.13	24.70	30.3	127.4	21.30	747	3,147	852	299	126
DF L		18	5	86	107	11.442	19.98	15.74	40.1	156.9	17.97	631	2,469	719	252	99
DF L		19	4	86	114	8.229	16.20	16.34	37.1	143.7	17.26	606	2,348	690	242	94
DF L		20	1	89	120	1.747	3.73	5.24	31.2	140.0	4.66	163	734	186	65	29
DF L		21	6	90	122	9.244	22.04	18.49	49.1	221.7	25.85	907	4,099	1,034	363	164
DF L		24	3	87	119	3.725	11.73	7.45	64.1	280.7	13.60	477	2,092	544	191	84
DF L		25	1	80	126	1.354	4.73	2.71	70.2	275.0	5.42	190	745	217	76	30
DF L		Totals	34	88	110	75.098	132.10	125.42	36.8	155.1	131.54	4,616	19,455	5,262	1,846	778
DF T		9	1	89	54	6.806	3.21									
DF T		10	1	89	86	5.443	3.21	5.44	12.8	60.0	1.98	69	327	79	28	13
DF T		11	4	87	83	19.893	13.56	18.82	11.3	47.3	6.07	212	891	243	85	36
DF T		12	1	89	95	4.021	3.21	4.02	20.0	80.0	2.31	80	322	93	32	13
DF T		13	2	88	93	7.379	6.65	7.38	22.7	90.0	4.77	167	664	191	67	27
DF T		14	6	87	101	19.208	20.42	31.29	19.0	77.3	16.92	594	2,418	677	237	97
DF T		15	4	86	101	11.568	13.99	16.97	23.3	96.1	11.25	395	1,631	450	158	65
DF T		16	1	89	104	2.358	3.21	2.36	35.5	150.0	2.38	84	354	95	33	14
DF T		17	1	88	109	2.034	3.36	4.07	30.9	120.0	3.59	126	488	143	50	20
DF T		18	3	88	104	5.606	9.93	11.07	30.1	119.6	9.51	334	1,325	380	133	53
DF T		19	5	86	107	8.807	17.22	12.38	45.3	180.0	16.00	561	2,229	640	225	89
DF T		20	3	87	105	4.680	10.21	6.06	53.8	225.1	9.30	326	1,364	372	130	55
DF T		21	3	84	105	4.608	10.91	9.07	40.6	145.2	10.50	369	1,317	420	147	53
DF T		22	1	84	130	1.402	3.60	2.80	50.6	215.0	4.07	142	603	163	57	24
DF T		23	3	80	112	4.186	11.90	9.74	45.5	156.0	12.64	443	1,519	506	177	61
DF T		Totals	39	87	95	107.997	134.59	141.47	27.6	109.2	111.29	3,902	15,450	4,451	1,561	618
RC L		11	1	80	47	4.553	2.79									
RC L		16	1	80	63	1.998	2.79	2.00	33.3	70.0	1.56	66	140	62	27	6
RC L		25	1	75	82	.962	3.17	.96	98.0	230.0	2.21	94	221	89	38	9
RC L		27	1	74	96	.798	3.17	.80	122.7	360.0	2.30	98	287	92	39	11
RC L		Totals	4	79	60	8.312	11.93	3.76	68.8	172.5	6.08	259	649	243	103	26
WH T		14	1	86	90	1.732	1.93	3.46	17.8	70.0	1.97	62	242	79	25	10
WH T		Totals	1	86	90	1.732	1.93	3.46	17.8	70.0	1.97	62	242	79	25	10
RC T		20	1	83	85	1.000	2.07	1.00	56.8	180.0	1.34	57	180	53	23	7
RC T		Totals	1	83	85	1.000	2.07	1.00	56.8	180.0	1.34	57	180	53	23	7
Totals			79	87	99	194.138	282.62	275.12	32.3	130.8	252.21	8,895	35,976	10,088	3,558	1,439

TC PLOGSTVB Matthew Luciani				Log Stock Table - MBF																
T10S R06E S20 TyTIMB91.20				Project: FLIPS										Page 2						
				Acres 91.20										Date 9/19/2023						
														Time 10:00:58AM						
Spp	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+
WH	T	DO	3M	40	75		75	100.0			15	39	20							
WH		Totals			75		75	3.1			15	39	20							
Total		All Species			2,435		2,432	100.0	63		492	778	397	417	184	77	25			

TC PSTATS			PROJECT STATISTICS							PAGE 1		
Matthew Luciani			PROJECT		FLIPS			DATE		9/19/2023		
TWP	RGE	SC	TRACT	TYPE		ACRES		PLOTS	TREES	CuFt	BdFt	
10S	06E	20	DB15	TIMB		91.20		28	273	S	W	
			PLOTS	TREES	TREES PER PLOT		ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES				
TOTAL			28	273	9.8							
CRUISE			16	154	9.6		23,750	.6				
DBH COUNT												
REFOREST												
COUNT			12	115	9.6							
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-L			64	77.4	16.1	95	27.3	109.6	13,273	13,273	3,335	
DOUG FIR-T			85	174.9	12.0	82	39.4	136.4	12,608	12,579	3,196	
WHEMLOCK-T			4	7.9	13.8	91	2.2	8.1	818	818	224	
WR CEDAR-L			1	.3	30.0	107	0.2	1.3				
TOTAL			154	260.4	13.4	86	69.8	255.5	26,700	26,670	6,755	
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-L			100.9	12.6	217	248	280					
DOUG FIR-T			86.5	9.4	100	110	121					
WHEMLOCK-T			33.6	19.2	91	113	134					
WR CEDAR-L												
TOTAL			113.1	9.1	152	167	182	511	128	57		
CL	68.1	COEFF	SAMPLE TREES - CF					# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15		
DOUG FIR-L			86.3	10.8	53	60	66					
DOUG FIR-T			84.0	9.1	26	28	31					
WHEMLOCK-T			34.0	19.4	25	31	37					
WR CEDAR-L												
TOTAL			99.0	8.0	38	41	44	391	98	43		
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-L			48.1	9.3	70	77	85					
DOUG FIR-T			65.7	12.6	153	175	197					
WHEMLOCK-T			328.0	63.1	3	8	13					
WR CEDAR-L			529.2	101.8		0	1					
TOTAL			48.4	9.3	236	260	285	97	24	11		
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-L			51.1	9.8	99	110	120					
DOUG FIR-T			46.9	9.0	124	136	149					
WHEMLOCK-T			328.0	63.1	3	8	13					
WR CEDAR-L			529.2	101.8		1	3					
TOTAL			32.8	6.3	239	255	272	45	11	5		
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-L			64.2	12.3	11,634	13,273	14,912					
DOUG FIR-T			62.6	12.0	11,065	12,579	14,093					
WHEMLOCK-T			328.0	63.1	302	818	1,334					
WR CEDAR-L												

TC PSTATS				<u>PROJECT STATISTICS</u>					PAGE	2
Matthew Luciani				PROJECT	FLIPS				DATE	9/19/2023
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
10S	06E	20	DB15	TIMB	91.20	28	273	S	W	
CL	68.1		COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD:	1.00		VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
TOTAL			46.1	8.9	24,307	26,670	29,034	88	22	10
CL	68.1		COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR-L			62.8	12.1	2,932	3,335	3,738			
DOUG FIR-T			58.6	11.3	2,836	3,196	3,556			
WHEMLOCK-T			328.0	63.1	83	224	365			
WR CEDAR-L										
TOTAL			44.3	8.5	6,179	6,755	7,330	81	20	9

TC		PSTNDSUM										Stand Table Summary										Page		1					
		Matthew Luciani																				Date:		9/19/2023					
T10S R06E S20 TyTIMB					91.20					Project					FLIPS					Time:					10:00:59AM				
										Acres					91.20					Grown Year:									
S	T	Tot							Average Log		Net			Net			Totals												
		DBH	Sample Trees	FF 16'	Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Net Cu.Ft.	Net Bd.Ft.	Tons/ Acre	Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF													
DF L		11	1	86	69	2.739	1.71																						
DF L		12	4	87	75	8.759	6.73	8.76	18.4	64.9	4.60	161	568	419		147	52												
DF L		13	6	87	79	11.295	10.04	9.45	21.1	70.0	5.67	199	661	517		181	60												
DF L		14	7	86	87	11.401	12.05	11.40	26.1	94.0	8.47	297	1,072	772		271	98												
DF L		15	7	86	93	9.608	12.01	8.21	30.7	120.0	7.19	252	986	656		230	90												
DF L		16	5	86	99	6.067	8.55	4.84	36.3	150.0	5.00	176	726	456		160	66												
DF L		17	5	87	103	5.377	8.37	6.37	38.6	160.5	7.00	246	1,023	638		224	93												
DF L		18	5	87	109	4.781	8.48	13.45	24.5	98.5	9.39	330	1,324	857		301	121												
DF L		19	5	84	114	4.611	8.97	12.04	29.2	111.3	10.00	351	1,340	912		320	122												
DF L		20	7	86	111	5.600	12.14	12.89	36.0	136.4	13.22	464	1,757	1,205		423	160												
DF L		21	3	84	115	2.263	5.44	5.37	38.9	152.4	5.95	209	818	542		190	75												
DF L		22	3	87	119	1.954	5.03	4.62	43.5	193.8	5.72	201	895	522		183	82												
DF L		23	3	88	122	1.793	4.95	4.82	43.6	196.7	5.99	210	949	547		192	87												
DF L		25	1	86	128	.522	1.71	1.57	50.1	223.3	2.24	78	350	204		72	32												
DF L		28	1	86	138	.403	1.71	.81	89.8	445.0	2.06	72	359	188		66	33												
DF L		34	1	87	153	.267	1.71	1.07	83.8	417.5	2.55	89	445	232		81	41												
DF L		Totals	64	86	95	77.439	109.62	105.66	31.6	125.6	95.05	3,335	13,273	8,668		3,042	1,210												
DF T		7	2	87	57	10.925	3.18																						
DF T		8	3	86	55	13.135	4.76																						
DF T		9	9	87	68	32.864	14.26	10.18	7.0	33.8	2.04	72	344	186		65	31												
DF T		10	7	87	78	20.641	10.97	18.00	11.1	51.2	5.71	200	922	521		183	84												
DF T		11	8	87	80	19.778	12.60	22.23	13.5	53.4	8.53	299	1,187	778		273	108												
DF T		12	9	86	101	18.196	14.30	22.11	17.4	69.3	10.99	386	1,532	1,002		352	140												
DF T		13	8	88	90	13.529	12.31	13.53	22.9	86.8	8.84	310	1,174	806		283	107												
DF T		14	10	86	96	15.023	16.18	18.09	24.4	94.5	12.57	441	1,709	1,147		402	156												
DF T		15	8	87	98	10.143	12.43	11.32	29.6	123.3	9.55	335	1,395	871		306	127												
DF T		16	6	86	94	6.964	9.68	9.30	28.6	113.6	7.58	266	1,056	692		243	96												
DF T		17	3	86	96	2.998	4.84	4.02	36.1	137.2	4.13	145	551	377		132	50												
DF T		18	5	84	106	4.743	8.36	8.22	34.3	125.5	8.04	282	1,031	733		257	94												
DF T		19	3	76	100	3.065	6.02	4.75	40.3	121.5	5.44	192	577	497		175	53												
DF T		20	2	87	108	1.508	3.18	3.78	32.0	123.6	3.45	121	467	315		111	43												
DF T		21	1	85	150	.676	1.62	2.70	29.9	132.5	2.30	81	358	210		74	33												
DF T		22	1	83	125	.669	1.70	1.34	49.9	205.0	1.90	67	274	173		61	25												
DF T		Totals	85	86	82	174.857	136.39	149.55	21.4	84.1	91.09	3,196	12,579	8,307		2,915	1,147												
WH T		11	1	87	70	2.809	1.89	2.81	17.1	60.0	1.54	48	169	140		44	15												
WH T		14	1	84	100	1.841	2.02	1.84	30.2	120.0	1.78	56	221	162		51	20												
WH T		15	1	83	105	1.718	2.02	1.72	33.4	120.0	1.83	57	206	167		52	19												
WH T		16	1	80	105	1.484	2.18	1.48	42.4	150.0	2.02	63	223	184		57	20												
WH T		Totals	4	84	91	7.852	8.11	7.85	28.5	104.2	7.17	224	818	654		204	75												
RC L		30	1	72	107	.273	1.34																						
RC L		Totals	1	72	107	.273	1.34																						
Totals			154	86	86	260.421	255.46	263.06	25.7	101.4	193.31	6,755	26,670	17,629		6,160	2,432												

[illegible]

TC PLOGSTVB Matthew Luciani										Log Stock Table - MBF													
T10S R06E S20 TyTIMB153.90										Project:		FLIPS						Page		2			
										Acres		153.90						Date		9/19/2023			
																		Time		10:05:32AM			
S T Spp	So Gr rt 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+					
Total	All Species		5,099		5,085	100.0	163		882	1664	1574	547	173	84									

TC PSTATS			PROJECT STATISTICS							PAGE	1
Matthew Luciani			PROJECT		FLIPS			DATE		9/19/2023	
TWP	RGE	SC	TRACT	TYPE		ACRES		PLOTS	TREES	CuFt	BdFt
10S	06E	20	DB16	TIMB		153.90		52	611	S	W
			PLOTS		TREES	ESTIMATED TOTAL		PERCENT SAMPLE			
					PER PLOT	TREES		TREES			
TOTAL			52	611	11.8						
CRUISE			26	315	12.1		44,030		.7		
DBH COUNT											
REFOREST											
COUNT			26	294	11.3						
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
DOUG FIR-L			129	93.6	16.2	95	33.3	134.0	15,637	15,610	3,998
DOUG FIR-T			186	192.5	13.0	89	49.1	176.9	17,492	17,433	4,511
TOTAL			315	286.1	14.1	91	82.7	310.9	33,129	33,043	8,509
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-L			61.8	5.4	192	203	214				
DOUG FIR-T			57.2	4.2	106	111	115				
TOTAL			70.1	3.9	142	148	154	196	49	22	
CL	68.1	COEFF		SAMPLE TREES - CF					# OF TREES REQ.		INF. POP.
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH			5	10	15
DOUG FIR-T			53.7	3.9	27	28	29				
DOUG FIR-L			55.2	4.9	48	51	53				
TOTAL			64.1	3.6	36	38	39	164	41	18	
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-L			39.3	5.5	88	94	99				
DOUG FIR-T			40.0	5.5	182	193	203				
TOTAL			32.2	4.5	273	286	299	41	10	5	
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-L			39.5	5.5	127	134	141				
DOUG FIR-T			40.3	5.6	167	177	187				
TOTAL			30.9	4.3	298	311	324	38	10	4	
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-L			41.4	5.7	14,714	15,610	16,506				
DOUG FIR-T			46.4	6.4	16,314	17,433	18,553				
TOTAL			35.4	4.9	31,421	33,043	34,665	50	13	6	
CL	68.1	COEFF		NET CUFT FT/ACRE					# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH			5	10	15
DOUG FIR-L			40.8	5.6	3,772	3,998	4,223				
DOUG FIR-T			44.7	6.2	4,232	4,512	4,791				
TOTAL			33.4	4.6	8,116	8,509	8,903	45	11	5	

TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																		
Matthew Luciani																						
T10S R06E S20 TyTIMB153.90								Project: FLIPS								Page 1						
								Acres153.90								Date 9/19/2023						
																Time 10:05:32AM						
S So Gr Spp T rt ad			% Net BdFt	Bd. Ft. per Acre Def%GrossNet			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre		
			Log Scale Dia.					Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf							
			4-5					6-11	12-16	17+	12-20					21-30	31-35	36-99				
DF	T	DO 2M	1	1.6	306	302	46	100				100				40	12	209	1.29	1.4		
DF	T	DO 3M	88	.3	15,289	15,242	2,346	99		1	100				40	8	97	0.64	156.4			
DF	T	DO 4M	11	.4	1,897	1,890	291	30	70					10	67	3	20	24	6	37	0.36	51.3
DF Totals			53	.3	17,492	17,433	2,683	3	94	2	1				7	0	91	36	8	83	0.60	209.2
DF	L	DO 2M	16	2,602		2,602	400	100				100				40	13	260	1.52	10.0		
DF	L	DO 3M	72	.2	11,245	11,218	1,726	0	80	18	1	1			99	39	9	131	0.87	85.7		
DF	L	DO 4M	12	1,790		1,790	275	25	73	3	18		64	7	11	25	7	48	0.49	37.0		
DF Totals			47	.2	15,637	15,610	2,402	3	66	30	1	2	8	1	89	35	9	118	0.85	132.7		
Totals				0.3	33,129	33,043	5,085	3	81	15	0	2	8	1	90	36	8	97	0.70	341.8		

TC PSTNDSUM		Stand Table Summary											Page	1	
Matthew Luciani													Date:	9/19/2023	
T10S R06E S20 TyTIMB 153.90					Project FLIPS						Time:	10:05:33AM			
					Acres 153.90						Grown Year:				
S Sp	T	Tot			Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	T o t a l s		
		DBH	Sample Trees	FF 16'				Av Ht	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits
DF T		7	1	84 43	3.487	.96									
DF T		8	2	88 51	5.280	1.77									
DF T		9	3	83 75	6.829	3.00	4.24	5.0	30.0	.60	21	127	93	33	20
DF T		10	10	85 80	16.991	9.36	20.56	9.7	43.7	5.66	199	899	871	306	138
DF T		11	20	86 85	28.242	18.61	23.48	16.4	63.4	10.94	384	1,489	1,684	591	229
DF T		12	23	83 86	29.401	22.97	30.79	17.1	60.5	14.97	526	1,863	2,304	810	287
DF T		13	30	85 90	30.165	28.14	31.20	22.8	82.0	20.32	713	2,558	3,127	1,097	394
DF T		14	23	86 95	20.180	21.37	21.84	25.7	100.8	16.03	562	2,203	2,466	865	339
DF T		15	33	85 99	26.046	31.39	31.44	27.5	107.9	24.65	865	3,392	3,794	1,332	522
DF T		16	16	86 106	10.843	14.90	20.86	23.0	94.0	13.66	479	1,962	2,103	737	302
DF T		17	17	83 104	10.991	17.00	15.65	31.4	118.9	14.03	492	1,861	2,159	757	286
DF T		18	5	86 108	2.688	4.63	5.40	28.9	116.4	4.45	156	628	684	240	97
DF T		19	3	86 120	1.376	2.75	3.68	31.0	122.9	3.25	114	453	500	176	70
DF T		Totals	186	85 89	192.519	176.86	209.15	21.6	83.4	128.56	4,512	17,433	19,785	6,944	2,683
DF L		11	3	88 71	4.478	2.97	7.53	9.6	37.7	2.06	72	284	317	111	44
DF L		12	4	86 76	5.275	4.05	6.63	15.0	55.6	2.83	99	369	436	153	57
DF L		13	4	86 82	4.458	4.07	4.46	22.1	74.7	2.81	98	333	432	152	51
DF L		14	15	85 89	15.049	15.71	15.05	26.1	92.0	11.21	393	1,384	1,726	605	213
DF L		15	13	83 92	11.721	14.23	11.72	31.4	111.6	10.50	369	1,308	1,617	567	201
DF L		16	16	86 97	11.708	16.41	11.71	35.9	147.2	12.00	421	1,724	1,846	647	265
DF L		17	23	85 100	15.336	24.14	17.94	36.8	146.3	18.80	660	2,625	2,893	1,015	404
DF L		18	19	85 103	11.347	19.85	24.98	26.6	102.3	18.94	665	2,555	2,915	1,023	393
DF L		19	7	87 109	3.627	7.09	7.28	31.8	125.3	6.60	232	912	1,016	357	140
DF L		20	12	86 111	5.741	12.31	12.31	36.3	143.6	12.72	446	1,769	1,958	687	272
DF L		21	3	87 116	1.279	3.04	3.84	32.2	138.9	3.52	124	533	542	190	82
DF L		22	4	86 116	1.542	4.10	3.85	43.1	180.2	4.72	166	693	727	255	107
DF L		23	3	86 123	1.056	3.04	2.83	46.0	204.1	3.70	130	577	570	200	89
DF L		24	2	86 113	.658	2.02	1.65	47.4	208.7	2.23	78	345	344	121	53
DF L		25	1	87 130	.297	1.01	.89	50.4	223.3	1.28	45	199	197	69	31
DF L		Totals	129	85 95	93.574	134.03	132.67	30.1	117.7	113.94	3,998	15,610	17,535	6,152	2,402
Totals			315	85 91	286.092	310.89	341.82	24.9	96.7	242.50	8,509	33,043	37,321	13,096	5,085

TC PLOGSTVB Matthew Luciani				Log Stock Table - MBF																
T10S R06E S20 TyTIMB 93.60				Project:		FLIPS												Page 1		
				Acres		93.60												Date 9/19/2023		
																		Time 10:09:23AM		
Spp	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+
DF	L	DO	2M	40	1,007		1,005	60.2					381	309	268		18		28	
DF	L	DO	3M	24	14		14	.9		5		10								
DF	L	DO	3M	29	7		7	.4					7							
DF	L	DO	3M	30	2		2	.1		2										
DF	L	DO	3M	40	506		506	30.3			73	196	209	9	19					
DF	L	DO	4M	20	8		8	.5			8									
DF	L	DO	4M	22	10		10	.6		6		4								
DF	L	DO	4M	23	2		2	.1		2										
DF	L	DO	4M	24	14		14	.8					14							
DF	L	DO	4M	25	5		5	.3		5										
DF	L	DO	4M	26	24		24	1.4		4			20							
DF	L	DO	4M	28	19		19	1.1		4			14							
DF	L	DO	4M	29	9		9	.6		2			7							
DF	L	DO	4M	30	2		2	.1		2										
DF	L	DO	4M	32	10		10	.6		2			8							
DF	L	DO	4M	33	8		8	.5						8						
DF	L	DO	4M	34	10		10	.6		2				8						
DF	L	DO	4M	36	2		2	.1		2										
DF	L	DO	4M	40	14		14	.8			14									
DF		Totals			1,673		1,671	46.0		37	95	210	280	406	328	268		18		28
DF	T	DO	2M	40	187	2.1	183	11.0					145	37						
DF	T	DO	3M	22	5		5	.3		2		4								
DF	T	DO	3M	40	1,231		1,220	73.5			361	377	467	16						
DF	T	DO	4M	20	33		33	2.0			22	12								
DF	T	DO	4M	21	37		37	2.2		14	11	12								
DF	T	DO	4M	22	51		51	3.1		33	9	9								
DF	T	DO	4M	23	4		4	.2				4								
DF	T	DO	4M	24	46		46	2.7		13	11	22								
DF	T	DO	4M	26	11		11	.6		11										
DF	T	DO	4M	28	13	12.5	12	.7		5		7								
DF	T	DO	4M	33	8		8	.5					8							
DF	T	DO	4M	34	24		24	1.4		7			17							
DF	T	DO	4M	40	26		26	1.6			26									
DF		Totals			1,675		1,659	45.6		84	439	445	491	162	37					
RC	T	DO	3M	40	40		40	59.2			33	8								

TC PLOGSTVB Matthew Luciani				Log Stock Table - MBF																
T10S R06E S20 TyTIMB93.60				Project:		FLIPS										Page		2		
				Acres		93.60										Date		9/19/2023		
																Time		10:09:23AM		
Spp	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+
RC	T	DO	4M	20	6		6	9.4				6								
RC	T	DO	4M	22	18		18	26.3		5		7	6							
RC	T	DO	4M	23	3		3	5.0		3										
RC		Totals			68		68	1.9		9		39	20							
RC	L	DO	3M	40	40		40	100.0				12		14	14					
RC		Totals			40		40	1.1				12		14	14					
WH	T	DO	2M	40	13	10.0	12	9.9					12							
WH	T	DO	3M	40	112	3.7	108	90.1				76	19	13						
WH		Totals			126	4.4	120	3.3				76	19	13	12					
WH	L	DO	2M	40	26	4.1	25	32.3					12		13					
WH	L	DO	3M	40	37		37	48.0				3	9	25						
WH	L	DO	4M	20	6		6	7.6				6								
WH	L	DO	4M	21	4		4	5.1		4										
WH	L	DO	4M	26	5		5	7.0		1			4							
WH		Totals			78	1.4	77	2.1		5		9	9	29	12	13				
Total		All Species			3,660		3,635	100.0		135		671	704	827	605	378	268		18	28

TC PSTATS				PROJECT STATISTICS					PAGE	1	
Matthew Luciani				PROJECT		FLIPS		DATE		9/19/2023	
TWP	RGE	SC	TRACT	TYPE		ACRES		PLOTS	TREES	CuFt	BdFt
10S	06E	20	DB17	TIMB		93.60		36	455	S	W
			PLOTS	TREES	TREES	ESTIMATED TOTAL	PERCENT SAMPLE				
				PER PLOT	TREES	TREES					
TOTAL			36	455	12.6						
CRUISE			18	222	12.3	30,524		.7			
DBH COUNT											
REFOREST											
COUNT			18	221	12.3						
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-L			71	72.8	17.6	99	29.3	122.8	17,921	17,895	4,286
DOUG FIR-T			107	170.9	13.2	93	44.5	161.3	17,895	17,723	4,482
WR CEDAR-L			8	20.6	11.6	59	4.4	15.0	428	428	154
WR CEDAR-T			13	24.3	11.2	62	5.0	16.7	727	727	265
WHEMLOCK-L			10	16.6	10.7	66	3.2	10.5	833	821	197
WHEMLOCK-T			13	20.8	11.5	81	4.4	15.1	1,341	1,282	338
TOTAL			222	326.1	13.9	88	91.7	341.4	39,145	38,877	9,723
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-L		117.7	14.0	320	372	424					
DOUG FIR-T		69.6	6.7	127	136	146					
WR CEDAR-L		156.4	59.0	23	55	87					
WR CEDAR-T		84.2	24.3	32	42	53					
WHEMLOCK-L		118.9	39.6	72	119	166					
WHEMLOCK-T		66.5	19.2	63	78	93					
TOTAL		143.2	9.6	180	199	218	819	205	91		
CL	68.1	COEFF		SAMPLE TREES - CF					# OF TREES REQ.		INF. POP.
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH			5	10	15
DOUG FIR-L		91.2	10.8	76	85	94					
DOUG FIR-T		65.6	6.3	32	34	37					
WR CEDAR-L		156.0	58.8	8	20	31					
WR CEDAR-T		91.5	26.4	12	16	20					
WHEMLOCK-L		120.6	40.1	17	29	40					
WHEMLOCK-T		62.1	17.9	17	20	24					
TOTAL		112.9	7.6	44	48	51	509	127	57		
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-L		46.7	7.8	67	73	78					
DOUG FIR-T		56.0	9.3	155	171	187					
WR CEDAR-L		187.7	31.3	14	21	27					
WR CEDAR-T		224.9	37.4	15	24	33					
WHEMLOCK-L		298.2	49.7	8	17	25					
WHEMLOCK-T		282.2	47.0	11	21	31					
TOTAL		37.9	6.3	306	326	347	57	14	6		
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-L		42.1	7.0	114	123	131					
DOUG FIR-T		50.5	8.4	148	161	175					
WR CEDAR-L		184.8	30.8	10	15	20					
WR CEDAR-T		220.2	36.7	11	17	23					

TC PSTATS				PROJECT STATISTICS				PAGE	2	
Matthew Luciani				PROJECT		FLIPS		DATE	9/19/2023	
TWP	RGE	SC	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt
10S	06E	20	DB17	TIMB	93.60		36	455	S	W
CL	68.1	COEFF		BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.
SD:	1.00	VAR.		S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK-L		250.7		41.7	6	10	15			
WHEMLOCK-T		268.1		44.6	8	15	22			
TOTAL		21.3		3.6	329	341	354	18	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
DOUG FIR-L		43.6		7.3	16,595	17,895	19,194			
DOUG FIR-T		51.3		8.5	16,209	17,723	19,237			
WR CEDAR-L		236.5		39.4	260	428	597			
WR CEDAR-T		256.2		42.7	417	727	1,037			
WHEMLOCK-L		227.3		37.8	511	821	1,132			
WHEMLOCK-T		250.4		41.7	747	1,282	1,817			
TOTAL		23.8		4.0	37,333	38,877	40,420	23	6	3
CL	68.1	COEFF		NET CUFT FT/ACRE				# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR.%		S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR-L		43.3		7.2	3,977	4,286	4,595			
DOUG FIR-T		50.9		8.5	4,102	4,482	4,862			
WR CEDAR-L		238.5		39.7	93	154	215			
WR CEDAR-T		254.1		42.3	153	266	378			
WHEMLOCK-L		229.3		38.2	122	198	273			
WHEMLOCK-T		250.7		41.7	197	337	478			
TOTAL		23.6		3.9	9,341	9,723	10,104	22	6	2

TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																	
Matthew Luciani																					
T10S R06E S20 TyTIMB 93.60						Project: FLIPS												Page 1			
						Acres 93.60												Date 9/19/2023			
																		Time 10:09:23AM			
S So Gr Spp T rt ad			%	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre	
			Net BdFt					Def%	Gross	Net	Log Scale Dia.				Log Length				Ln Ft		Dia In
			4-5	6-11	12-16	17+					12-20	21-30	31-35	36-99							
DF	L	DO 2M	60	.2	10,762	10,736	1,005			86	14				100	40	14	300	1.68	35.7	
DF	L	DO 3M	31		5,655	5,655	529	1	94	5			4		96	39	9	111	0.77	50.9	
DF	L	DO 4M	9		1,458	1,458	136	22	66	12		6	62	20	12	27	7	57	0.53	25.4	
DF Totals			46	.1	17,874	17,848	1,671	2	35	54	9	1	6	2	91	36	10	159	1.05	112.0	
DF	T	DO 2M	11	2.1	1,994	1,952	183			100					100	40	13	222	1.38	8.8	
DF	T	DO 3M	73	.9	13,204	13,092	1,225	0	99	1			0		100	40	8	97	0.62	135.3	
DF	T	DO 4M	16	.7	2,697	2,679	251	33	67			13	64	13	10	24	6	34	0.34	78.6	
DF Totals			46	1.0	17,895	17,723	1,659	5	83	12		2	10	2	86	34	8	80	0.59	222.7	
RC	T	DO 3M	59		430	430	40		100						100	40	7	71	0.74	6.1	
RC	T	DO 4M	41	.0	296	296	28	32	68			23	77			22	6	31	0.42	9.4	
RC Totals			2		727	727	68	13	87			9	31		59	29	7	47	0.59	15.5	
RC	L	DO 3M	100		428	428	40		66	34					100	40	8	114	1.03	3.7	
RC Totals			1		428	428	40		66	34					100	40	8	114	1.03	3.7	
WH	T	DO 2M	9	10.0	141	127	12			100					100	40	12	180	1.10	.7	
WH	T	DO 3M	91	3.7	1,200	1,155	108		100						100	40	7	76	0.51	15.1	
WH Totals			3	4.4	1,341	1,282	120		90	10					100	40	7	81	0.53	15.8	
WH	L	DO 2M	32	4.1	277	265	25			100					100	40	13	252	1.53	1.1	
WH	L	DO 3M	48		394	394	37		100						100	40	9	127	0.77	3.1	
WH	L	DO 4M	20		162	162	15	35	65			39	61			22	6	32	0.34	5.1	
WH Totals			2	1.4	833	821	77	7	61	32		8	12		80	30	8	88	0.71	9.3	
Totals				0.7	39,098	38,830	3,635	4	61	32	4	1	8	2	89	35	8	102	0.74	379.1	

TC		PSTNDSUM										Stand Table Summary										Page		1	
		Matthew Luciani																				Date:		9/19/2023	
		T10S R06E S20 TyTIMB 93.60				Project				FLIPS				Time:				10:09:24AM							
						Acres				93.60				Grown Year:											
S SpC	T	Tot			Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net		Net	T o t a l s												
		DBH	Sample Trees	FF 16'				Av Ht	Net Cu.Ft.	Net Bd.Ft.	Tons/ Acre		Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF								
DF L		7	1	87	47	5.780	1.73																		
DF L		10	1	87	66	2.984	1.73	5.97	5.8	25.0	.98	34	149	92	32	14									
DF L		12	1	86	78	2.127	1.73	2.13	18.5	70.0	1.12	39	149	105	37	14									
DF L		13	3	87	82	5.640	5.14	5.64	22.4	76.3	3.61	127	431	338	118	40									
DF L		14	4	86	95	6.771	7.03	6.77	27.0	104.7	5.22	183	709	489	171	66									
DF L		15	3	86	93	4.167	5.18	4.17	31.2	120.0	3.71	130	500	347	122	47									
DF L		16	2	87	97	2.473	3.45	2.47	35.5	150.0	2.50	88	371	234	82	35									
DF L		17	4	86	101	4.436	6.91	5.60	35.4	144.7	5.65	198	810	529	186	76									
DF L		18	11	86	105	10.857	19.31	15.55	39.0	148.2	17.27	606	2,305	1,617	567	216									
DF L		19	7	87	110	5.993	11.94	15.39	31.1	125.4	13.64	479	1,930	1,277	448	181									
DF L		20	5	86	113	3.981	8.63	9.54	34.7	137.7	9.45	331	1,313	884	310	123									
DF L		21	8	86	116	5.871	13.81	13.90	40.3	167.1	15.98	561	2,324	1,496	525	218									
DF L		22	6	86	120	3.973	10.36	9.25	45.9	202.3	12.10	425	1,872	1,133	398	175									
DF L		23	5	86	123	3.014	8.63	6.63	54.0	241.7	10.19	358	1,602	954	335	150									
DF L		24	5	86	122	2.752	8.63	5.50	60.1	271.0	9.43	331	1,492	882	310	140									
DF L		25	1	86	130	.506	1.73	1.52	50.4	223.3	2.18	77	339	204	72	32									
DF L		26	2	86	132	.941	3.45	1.88	78.6	365.0	4.22	148	687	395	138	64									
DF L		28	1	86	137	.419	1.73	.84	88.4	420.0	2.11	74	352	197	69	33									
DF L		46	1	86	173	.153	1.73	.46	212.5	1223.3	2.78	97	561	260	91	53									
DF L		Totals	71	86	99	72.838	122.83	113.20	37.9	158.1	122.14	4,286	17,895	11,432	4,012	1,675									
DF T		8	2	88	72	7.570	2.88																		
DF T		9	2	85	80	7.302	3.09	14.60	4.5	20.0	1.88	66	292	176	62	27									
DF T		10	8	86	84	22.055	12.01	27.59	8.9	41.1	6.98	245	1,135	653	229	106									
DF T		11	11	86	81	25.677	16.71	30.50	12.9	51.9	11.25	395	1,582	1,053	369	148									
DF T		12	13	86	92	25.410	19.73	29.21	16.9	61.9	14.06	494	1,810	1,316	463	169									
DF T		13	12	86	93	19.946	18.22	21.69	21.6	78.8	13.35	469	1,710	1,250	439	160									
DF T		14	9	86	98	12.920	13.54	15.70	22.9	86.4	10.28	359	1,357	962	336	127									
DF T		15	10	86	103	12.525	15.20	14.99	28.9	117.4	12.35	433	1,760	1,156	405	165									
DF T		16	16	86	103	17.401	24.08	30.33	24.9	99.9	21.50	754	3,031	2,012	706	284									
DF T		17	10	86	109	9.544	15.00	13.40	36.0	144.5	13.73	482	1,936	1,285	451	181									
DF T		18	5	87	108	4.248	7.41	9.32	28.4	111.6	7.53	264	1,040	705	247	97									
DF T		19	6	86	113	4.549	8.93	11.30	30.4	115.0	9.78	343	1,299	916	321	122									
DF T		21	1	87	106	.643	1.49	.64	62.1	240.0	1.14	40	154	106	37	14									
DF T		22	2	87	130	1.144	2.98	3.43	40.1	179.9	3.91	138	617	366	129	58									
DF T		Totals	107	86	93	170.934	161.27	222.72	20.1	79.6	127.75	4,482	17,723	11,957	4,195	1,659									
WH T		9	1	90	71	2.812	1.11																		
WH T		10	2	89	80	4.363	2.22	2.20	12.8	60.0	.90	28	132	84	26	12									
WH T		11	2	88	81	3.506	2.29	3.51	17.3	65.1	1.96	61	228	183	57	21									
WH T		12	4	85	80	6.472	4.94	6.47	19.8	70.0	4.10	128	453	384	120	42									
WH T		14	1	90	81	1.115	1.11	1.11	25.0	80.0	.91	28	89	85	26	8									
WH T		15	1	86	90	.992	1.19	.99	30.2	120.0	.96	30	119	90	28	11									
WH T		16	1	90	99	.835	1.11	.83	38.0	160.0	1.01	32	134	94	30	13									
WH T		17	1	90	99	.703	1.11	.70	44.0	180.0	.98	31	127	92	29	12									
WH T		Totals	13	88	81	20.798	15.06	15.83	21.3	81.0	10.81	337	1,282	1,012	316	120									
WHL		7	1	90	48	3.742	1.03																		
WHL		8	1	89	57	2.673	1.03																		
WHL		9	2	90	61	4.557	2.06																		
WHL		10	1	89	64	2.090	1.03	4.18	5.7	25.0	.76	24	105	71	22	10									
WHL		13	1	90	85	1.051	1.03	1.05	25.4	90.0	.85	27	95	80	25	9									
WHL		16	2	89	96	1.474	2.06	1.47	37.7	180.0	1.78	56	265	167	52	25									
WHL		19	1	85	106	.572	1.13	1.14	40.2	140.0	1.47	46	160	137	43	15									

TC		PSTNDSUM										Stand Table Summary					Page		2	
		Matthew Luciani															Date:		9/19/2023	
		T10S R06E S20 TyTIMB				93.60		Project		FLIPS							Time:		10:09:24AM	
								Acres		93.60							Grown Year:			
S	Sp	T	Tot			Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	T o t a l s						
			Sample DBH	FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF				
WH	L		21	1	86	111	.480	1.10	1.44	31.6	136.7	1.46	46	197	136	43	18			
WH	L		Totals	10	89	66	16.639	10.46	9.29	21.3	88.4	6.32	198	821	591	185	77			
RC	T		8	1	80	50	3.443	1.20												
RC	T		9	2	79	58	5.566	2.40												
RC	T		10	1	75	50	2.318	1.37												
RC	T		11	1	75	63	2.231	1.37												
RC	T		12	1	75	71	1.832	1.37	3.66	8.1	30.0	.70	30	110	65	28	10			
RC	T		13	4	78	67	5.410	4.94	8.29	14.3	42.3	2.79	119	351	261	111	33			
RC	T		14	2	74	74	2.615	2.74	2.62	29.9	70.0	1.84	78	183	172	73	17			
RC	T		17	1	75	80	.921	1.37	.92	42.3	90.0	.92	39	83	86	36	8			
RC	T		Totals	13	77	62	24.337	16.75	15.49	17.2	46.9	6.24	266	727	584	249	68			
RC	L		10	3	79	55	10.449	5.53												
RC	L		11	2	77	57	6.371	3.94												
RC	L		13	1	80	65	2.165	1.84	2.16	22.4	60.0	1.14	48	130	106	45	12			
RC	L		20	1	79	86	.846	1.84	.85	61.3	180.0	1.22	52	152	114	49	14			
RC	L		22	1	80	90	.732	1.84	.73	73.4	200.0	1.26	54	146	118	50	14			
RC	L		Totals	8	79	59	20.562	15.01	3.74	41.1	114.5	3.62	154	428	339	144	40			
Totals			222		85	88	326.107	341.38	380.27	25.6	102.2	276.88	9,723	38,877	25,916	9,100	3,639			

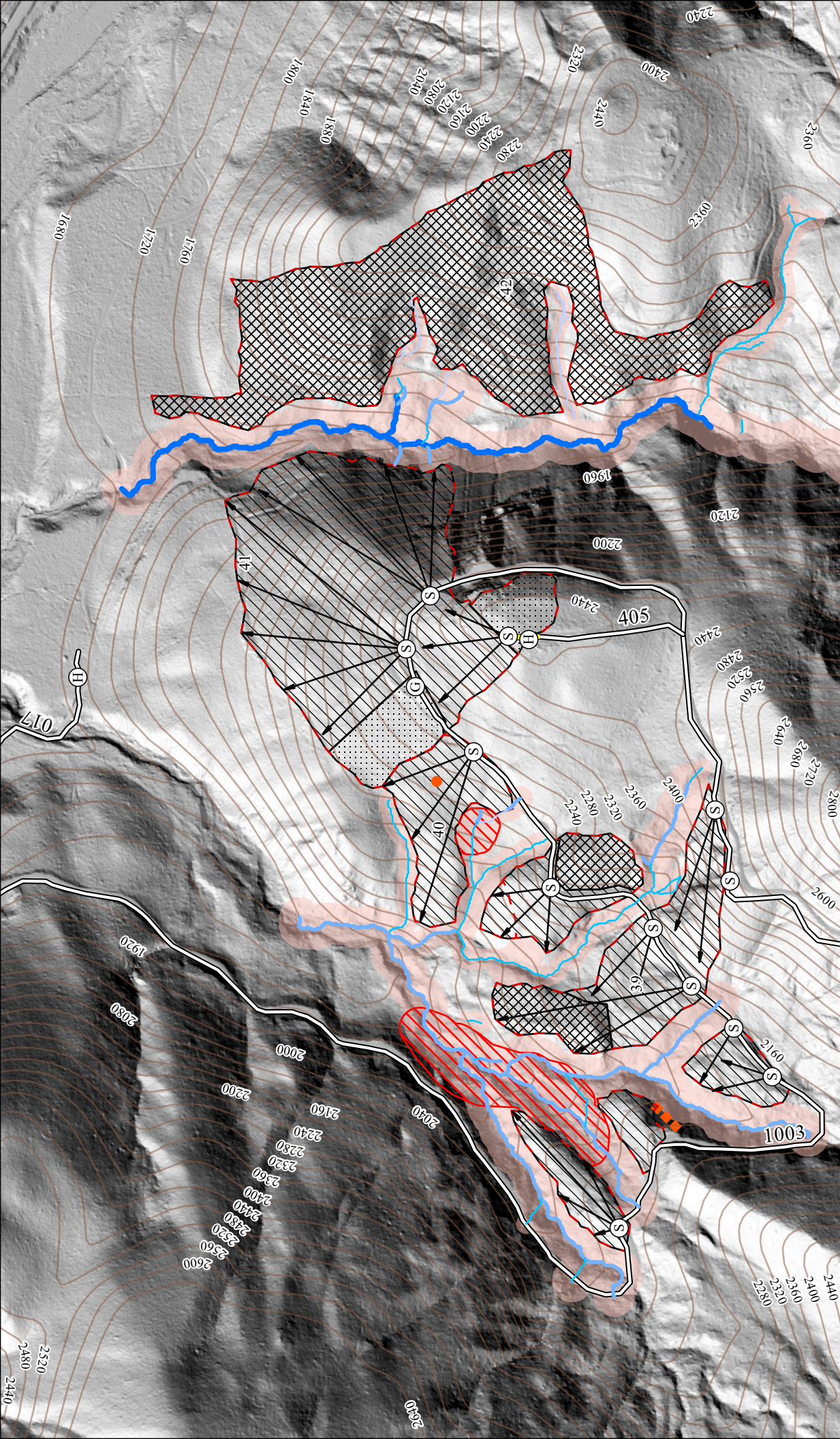
TC PLOGSTVB Matthew Luciani										Log Stock Table - MBF											
T10S R06E S20 TyTIMB38.60										Project:		FLIPS						Page		2	
										Acres		38.60						Date		9/19/2023	
																		Time		10:12:12AM	
S T Spp	So Gr rt de	Log Len	Gross MBF	Def %	Net MBF	%	Spc	Net Volume by Scaling Diameter 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+		
Total	All Species		1,389		1,386		100.0	51		154293		256272		170190							

PROJECT STATISTICS							PAGE		1			
PROJECT							FLIPS		DATE		9/19/2023	
TC PSTATS												
Matthew Luciani												
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt		
10S	06E	20	DB18	TIMB		38.60	14	159	S	W		
			PLOTS	TREES	TREES	ESTIMATED TOTAL	PERCENT SAMPLE					
				PER PLOT	TREES	TREES	TREES					
TOTAL			14	159	11.4							
CRUISE			7	67	9.6	11,692	.6					
DBH COUNT												
REFOREST												
COUNT			7	92	13.1							
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	
DOUG FIR-L			22	52.3	18.7	103	23.1	100.0	16,160	16,160	3,770	
DOUG FIR-T			26	170.5	12.2	83	39.8	139.2	14,864	14,831	3,568	
WR CEDAR-L			3	16.1	12.3	61	3.8	13.4	686	686	247	
WR CEDAR-T			10	45.0	11.7	62	9.8	33.4	1,944	1,906	687	
WHEMLOCK-L			2	6.3	16.0	95	2.2	8.8	1,033	1,033	240	
WHEMLOCK-T			4	12.7	13.5	84	3.5	12.7	1,298	1,298	336	
TOTAL			67	302.9	13.6	83	83.3	307.6	35,984	35,913	8,848	
											8,847	
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-L		54.3	11.8	374	425	475						
DOUG FIR-T		84.9	17.0	141	170	199						
WR CEDAR-L		94.4	65.3	28	80	132						
WR CEDAR-T		64.8	21.6	44	56	68						
WHEMLOCK-L		12.9	12.0	145	165	185						
WHEMLOCK-T		32.6	18.6	88	108	127						
TOTAL		93.7	11.4	202	229	255	351		88	39		
CL	68.1	COEFF		SAMPLE TREES - CF					# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH			5	10	15	
DOUG FIR-L		49.2	10.7	87	97	107						
DOUG FIR-T		81.7	16.3	34	41	47						
WR CEDAR-L		90.7	62.8	11	28	46						
WR CEDAR-T		70.3	23.4	16	21	26						
WHEMLOCK-L		10.5	9.8	35	38	42						
WHEMLOCK-T		18.4	10.5	24	27	30						
TOTAL		84.1	10.3	49	55	60	283		71	31		
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-L		55.0	15.2	44	52	60						
DOUG FIR-T		58.8	16.3	143	171	198						
WR CEDAR-L		139.1	38.5	10	16	22						
WR CEDAR-T		163.7	45.4	25	45	65						
WHEMLOCK-L		235.8	65.3	2	6	10						
WHEMLOCK-T		153.8	42.6	7	13	18						
TOTAL		33.1	9.2	275	303	331	47		12	5		
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-L		53.0	14.7	85	100	115						
DOUG FIR-T		52.8	14.6	119	139	160						
WR CEDAR-L		119.8	33.2	9	13	18						
WR CEDAR-T		161.2	44.6	18	33	48						

TC PSTATS		<u>PROJECT STATISTICS</u>							PAGE	2
Matthew Luciani		PROJECT			FLIPS				DATE	9/19/2023
TWP	RGE	SC	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt
10S	06E	20	DB18	TIMB	38.60		14	159	S	W
CL	68.1	COEFF		BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.
SD:	1.00	VAR.		S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK-L		235.7		65.3	3	9	15			
WHEMLOCK-T		153.1		42.4	7	13	18			
TOTAL		27.5		7.6	284	308	331	33	8	4
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-L		54.6		15.1	13,716	16,160	18,603			
DOUG FIR-T		66.7		18.5	12,089	14,831	17,572			
WR CEDAR-L		143.9		39.9	412	686	959			
WR CEDAR-T		184.6		51.1	931	1,906	2,881			
WHEMLOCK-L		235.8		65.3	358	1,033	1,708			
WHEMLOCK-T		158.8		44.0	727	1,298	1,869			
TOTAL		37.5		10.4	32,183	35,913	39,643	60	15	7
CL	68.1	COEFF		NET CUFT FT/ACRE				# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR.%		S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR-L		54.4		15.1	3,202	3,770	4,338			
DOUG FIR-T		64.8		18.0	2,928	3,569	4,211			
WR CEDAR-L		143.7		39.8	149	247	345			
WR CEDAR-T		169.0		46.8	364	685	1,005			
WHEMLOCK-L		235.8		65.3	83	240	397			
WHEMLOCK-T		156.1		43.2	191	336	481			
TOTAL		34.4		9.5	8,004	8,847	9,690	51	13	6

TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																	
Matthew Luciani																					
T10S R06E S20 TyTIMB38.60								Project: FLIPS								Page 1					
								Acres38.60								Date9/19/2023					
																Time10:12:12AM					
S S o Gr Spp T r t 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	Dia In	Bd Ft	CF/ Lf					
					4-5		6-11	12-16	17+	12-20	21-30	31-35					36-99				
DF	L	DO	2M	72	11,674	11,674	451			73	27				100	40	14	304	1.69	38.3	
DF	L	DO	3M	16	2,648	2,648	102			100					100	40	8	101	0.69	26.3	
DF	L	DO	4M	12	1,838	1,838	71	26	61	13			85	15		24	7	46	0.47	39.8	
DF Totals		45	.0	16,160	16,160	624	3	23	54	19		10		90	34	10	155	1.06	104.4		
DF	T	DO	2M	30	4,448	4,448	172			100					100	40	13	254	1.49	17.5	
DF	T	DO	3M	60	.4	9,026	8,992	347			100				100	40	9	118	0.73	76.3	
DF	T	DO	4M	10		1,390	1,390	54	41	59		32	68			21	6	25	0.25	56.4	
DF Totals		41	.2	14,864	14,831	572	4	66	30		3	6		91	33	8	99	0.72	150.3		
WH	T	DO	3M	100		1,298	1,298	50		100					100	40	8	102	0.66	12.7	
WH Totals		4		1,298	1,298	50		100						100	40	8	102	0.66	12.7		
WH	L	DO	3M	100		1,033	1,033	40		100					100	40	10	164	0.95	6.3	
WH Totals		3		1,033	1,033	40		100						100	40	10	164	0.95	6.3		
RC	T	DO	3M	58	3.3	1,151	1,113	43		100					100	40	7	73	0.74	15.2	
RC	T	DO	4M	42		793	793	31	36	64		21	79			22	6	28	0.38	28.3	
RC Totals		5	2.0	1,944	1,906	74	15	85			9	33		58	28	7	44	0.56	43.5		
RC	L	DO	3M	52		363	363	14		100					100	40	10	150	1.26	2.4	
RC	L	DO	4M	48		323	323	12		100					100	40	8	90	0.87	3.6	
RC Totals		2		686	686	26		100						100	40	9	114	1.03	6.0		
Totals			0.2	35,984	35,913	1,386	4	51	37	9	2	9		90	33	9	111	0.83	323.2		

TC		PSTNDSUM											Stand Table Summary					Page		1	
		Matthew Luciani											Date:		9/19/2023						
		T10S R06E S20 TyTIMB				38.60		Project		FLIPS				Time:		10:12:13AM					
								Acres		38.60				Grown Year:							
S SpC	T	Sample		Tot		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	T o t a l s							
		DBH	Trees	FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF					
DF L		11	1	87	69	7.282	4.55	14.56	6.8	30.0	2.82	99	437	109	38	17					
DF L		13	2	86	81	10.120	9.09	10.12	21.8	79.5	6.30	221	804	243	85	31					
DF L		18	5	87	105	12.811	22.73	28.19	28.8	114.4	23.17	813	3,226	894	314	125					
DF L		19	1	87	111	2.215	4.55	6.65	28.0	120.0	5.30	186	797	205	72	31					
DF L		20	1	86	114	2.023	4.55	6.07	30.1	120.0	5.21	183	728	201	71	28					
DF L		21	2	86	116	3.836	9.09	9.56	38.2	160.3	10.41	365	1,533	402	141	59					
DF L		22	2	86	120	3.430	9.09	6.86	54.2	240.0	10.59	372	1,646	409	143	64					
DF L		23	1	86	125	1.523	4.55	3.05	62.2	275.0	5.40	189	837	208	73	32					
DF L		24	2	86	126	2.907	9.09	5.81	62.8	282.4	10.41	365	1,642	402	141	63					
DF L		25	2	87	130	2.670	9.09	6.63	59.8	265.4	11.31	397	1,760	437	153	68					
DF L		27	3	87	135	3.466	13.64	6.93	83.7	396.4	16.53	580	2,747	638	224	106					
DF L		Totals	22	87	103	52.281	100.03	104.44	36.1	154.7	107.44	3,770	16,160	4,147	1,455	624					
DF T		8	4	89	68	63.204	20.43	30.25	4.1	20.0	3.50	123	605	135	47	23					
DF T		9	2	89	66	25.477	10.04														
DF T		10	1	87	73	9.467	5.37	18.93	6.2	30.0	3.36	118	568	130	45	22					
DF T		12	1	87	100	6.955	5.37	6.96	18.5	70.0	3.68	129	487	142	50	19					
DF T		13	2	87	83	11.396	10.74	11.40	23.2	79.8	7.53	264	909	291	102	35					
DF T		14	2	85	106	10.595	11.00	10.59	27.3	120.0	8.23	289	1,271	318	112	49					
DF T		15	2	86	100	9.057	10.74	9.06	30.2	120.0	7.80	274	1,087	301	106	42					
DF T		17	3	86	107	10.355	16.12	24.33	25.1	100.8	17.36	610	2,452	670	235	95					
DF T		18	2	84	93	6.477	11.26	6.48	44.7	180.0	8.26	290	1,166	319	112	45					
DF T		19	2	85	116	5.470	11.00	8.17	45.5	186.8	10.59	371	1,526	409	143	59					
DF T		20	3	86	130	7.388	16.12	14.78	44.2	188.2	18.61	653	2,780	718	252	107					
DF T		21	2	85	128	4.663	11.00	9.33	48.1	212.3	12.79	449	1,979	494	173	76					
DF T		Totals	26	88	83	170.502	139.19	150.27	23.8	98.7	101.70	3,569	14,831	3,926	1,378	572					
RC T		8	1	79	43	9.920	3.13														
RC T		10	1	79	49	5.730	3.13														
RC T		11	1	74	73	5.589	3.56	11.18	7.1	25.0	1.86	79	279	72	31	11					
RC T		12	2	77	66	8.565	6.68	17.13	9.0	30.0	3.63	154	514	140	60	20					
RC T		13	2	77	69	7.296	6.68	7.30	23.7	54.8	4.10	173	400	158	67	15					
RC T		14	1	79	83	2.923	3.13	2.92	28.4	90.0	1.95	83	263	75	32	10					
RC T		15	1	74	73	2.936	3.56	2.94	33.0	70.0	2.30	97	206	89	37	8					
RC T		18	1	74	80	2.035	3.56	2.03	48.2	120.0	2.31	98	244	89	38	9					
RC T		Totals	10	77	62	44.994	33.40	43.50	15.7	43.8	16.14	685	1,906	623	264	74					
WH T		12	1	89	80	3.802	3.09	3.80	21.1	70.0	2.56	80	266	99	31	10					
WH T		13	1	85	93	3.933	3.46	3.93	25.4	90.0	3.20	100	354	123	39	14					
WH T		15	2	89	79	5.001	6.17	5.00	31.2	135.5	5.01	156	678	193	60	26					
WH T		Totals	4	88	84	12.736	12.72	12.74	26.4	101.9	10.77	336	1,298	416	130	50					
WH L		16	2	89	95	6.285	8.82	6.29	38.2	164.3	7.68	240	1,033	296	93	40					
WH L		Totals	2	89	95	6.285	8.82	6.29	38.2	164.3	7.68	240	1,033	296	93	40					
RC L		9	1	80	52	10.105	4.46														
RC L		15	1	80	73	3.590	4.46	3.59	34.9	90.0	2.94	125	323	114	48	12					
RC L		18	1	80	82	2.418	4.46	2.42	50.3	150.0	2.86	122	363	110	47	14					
RC L		Totals	3	80	61	16.113	13.39	6.01	41.1	114.1	5.80	247	686	224	95	26					
Totals			67	85	83	302.911	307.55	323.23	27.4	111.1	249.53	8,847	35,913	9,632	3,415	1,386					



Legend

- Timber Sale Area
- No Harvest Buffers
- Sensitive No Harvest Area
- Special Habitat Protection Areas
- Logging System
 - Cable
 - Ground Based
 - Helicopter
- Potential Cable Corridors
- Ground Based Landings
- Cable Landings
- Helicopter Landings
- Roads
- New Construction Temp Roads
- DTR Size
 - 1/4 ac
- Stream Class
 - 2
 - 3
 - 4
 - 5

LOGGING PLAN

FOR TIMBER SALE CONTRACT

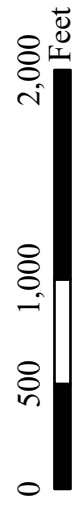
#NC-341-2024-GF8623-01

DRY BEARD GNA

PORTIONS OF SECTION 17, 18, 19, 20, 29, 30, 31
AND 32 OF T10S, R6E AND 25,

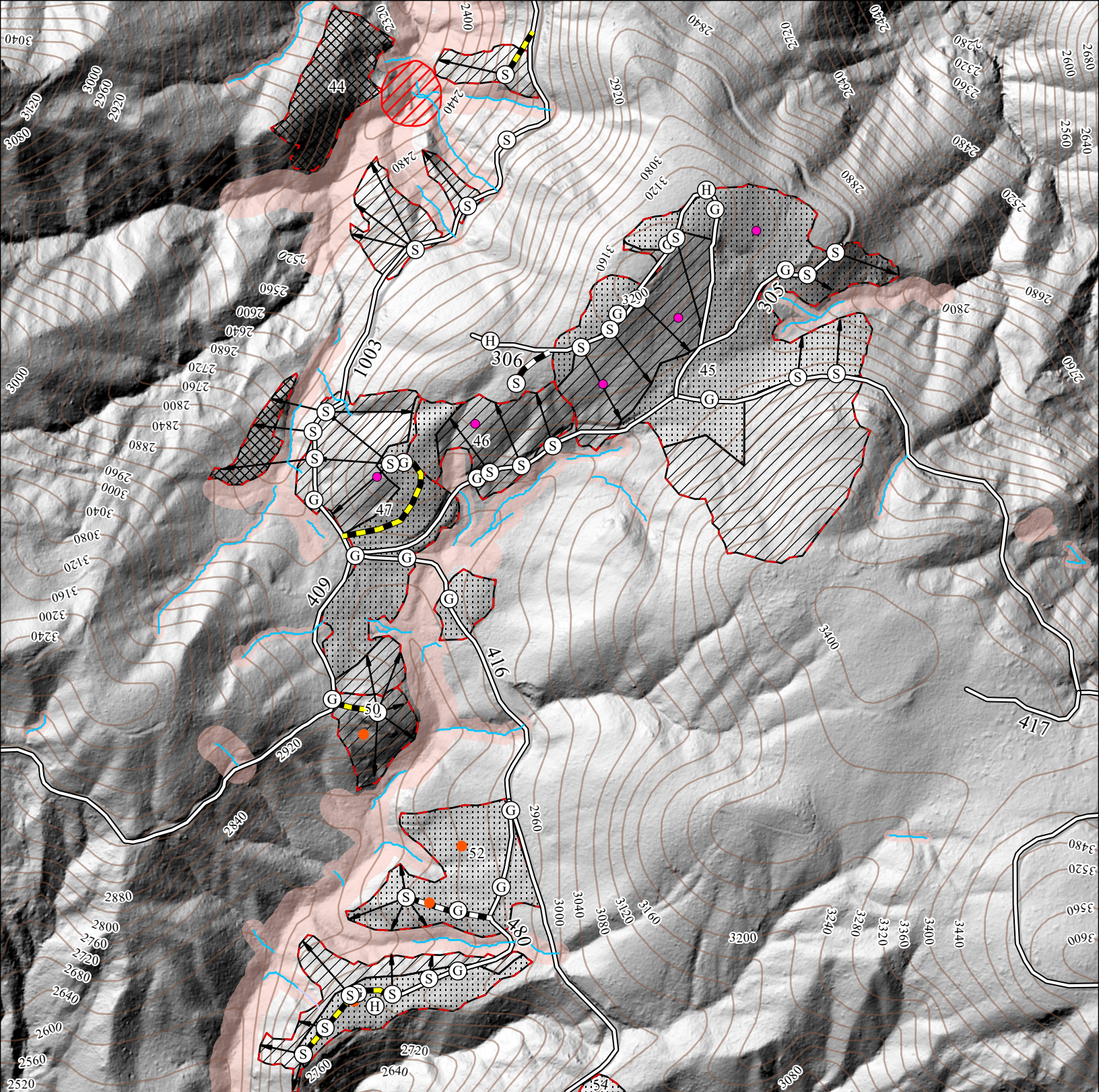
T10S, R5E, W.M.,

LINN COUNTY, OREGON



Area Acres	Rx	DxD Spacing	Rx Species (cut)
39	space off DF. Ignore all else	17'	DF
40	space off DF. Ignore all else	15'	DF
41	space off DF, WH, WRC	17'	DF, WH, WRC
42	space off DF, WH, WRC	18'	DF, WH, WRC

North Cascade District GIS
September 2023
This product is for informational use and may not be
suitable for legal, engineering, or surveying purposes.



Legend

- Timber Sale Area
- No Harvest Buffers
- Special Habitat Protection Areas
- New Construction Temp Roads
- Existing Temp Roads
- Roads
- Logging System
 - Cable
 - Ground Based
 - Helicopter
 - Potential Cable Corridors
- DTR Size
 - 1/2 ac
 - 1/4 ac
- Stream Class
 - 4
 - 5
- Landings
 - Ground Based Landings (G)
 - Cable Landings (S)
 - Helicopter Landings (H)

EXHIBIT A

FOR TIMBER SALE CONTRACT

#NC-341-2024-GF8623-01

DRY BEARD GNA

PORTIONS OF SECTION 17, 18, 19, 20, 29, 30, 31

AND 32 OF T10S, R6E AND 25,

T10S, R5E, W.M.,

LINN COUNTY, OREGON

North Cascade District GIS

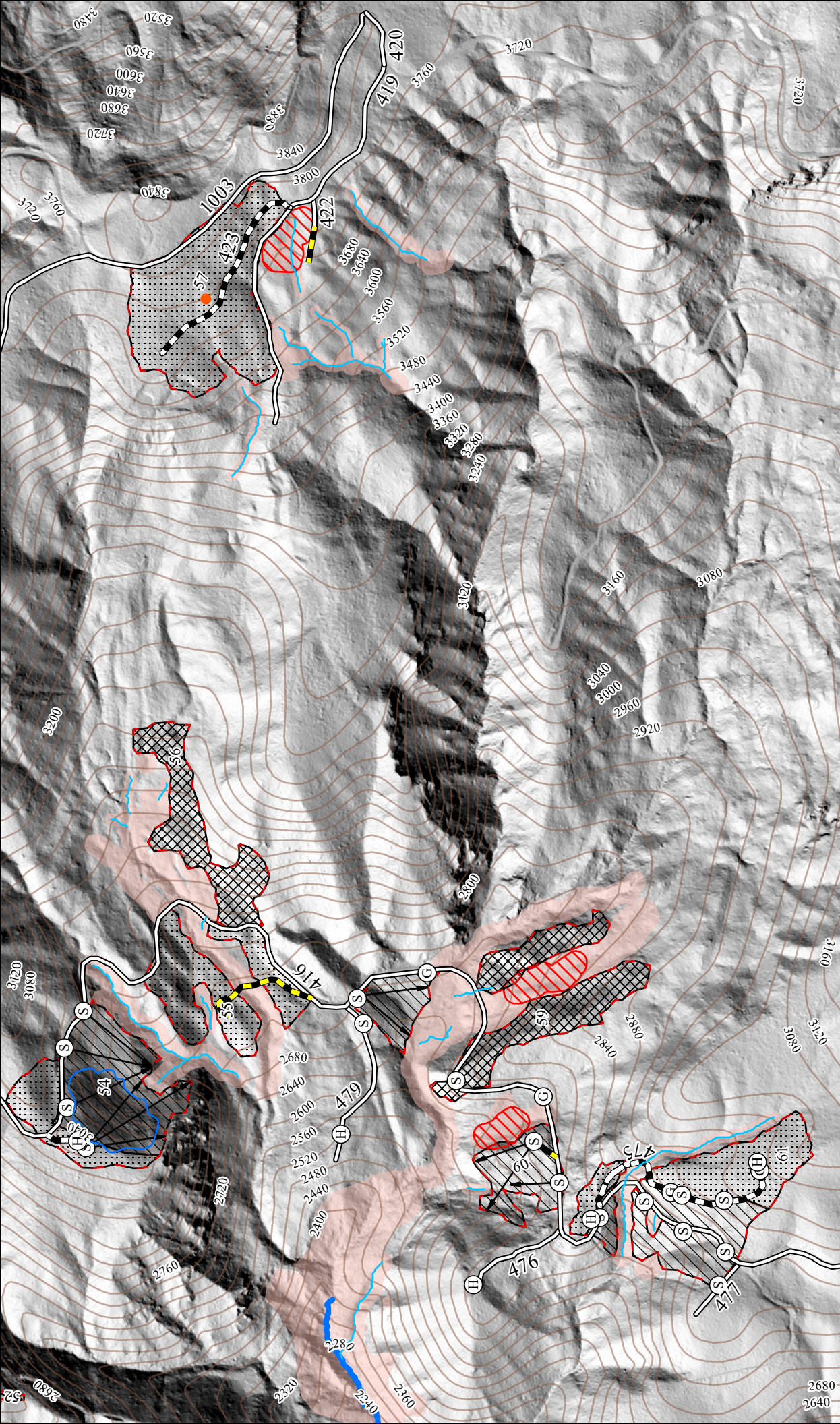
September 2023

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suitable for legal, engineering, or surveying purposes.

0 500 1,000 2,000 Feet

Unit	Acres	Rx	DxD Spacing	Rx Species (cut)
44	13	space off DF, WH, PSF. Ignore WRC	16'	DF, WH, PSF
45	50	space off DF	16'	DF
46	7	space off DF	15'	DF
47	21	space off DF	16'	DF
50	4	space off DF. Ignore all else	15'	DF
52	19	space off DF, WH, PSF. Ignore WRC	16'	DF, WH, PSF





Legend

- Timber Sale Area
- Sugar Pine Restoration Area
- No Harvest Buffers
- Special Habitat Protection Areas
- Logging System
 - Cable
 - Ground Based
 - Helicopter
 - Potential Cable Corridors
 - Ground Based Landings
 - Cable Landings
- DTR Size
 - 1/4 ac
- Stream Class
 - 2
 - 4
- Helicopter Landings
- Roads
 - Existing Temp Roads
 - New Construction Temp Roads

LOGGING PLAN

FOR TIMBER SALE CONTRACT

#NC-341-2024-GF8623-01

DRY BEARD GNA

PORTIONS OF SECTION 17, 18, 19, 20, 29, 30, 31
AND 32 OF T10S, R6E AND 25,

T10S, R5E, W.M.,

LINN COUNTY, OREGON

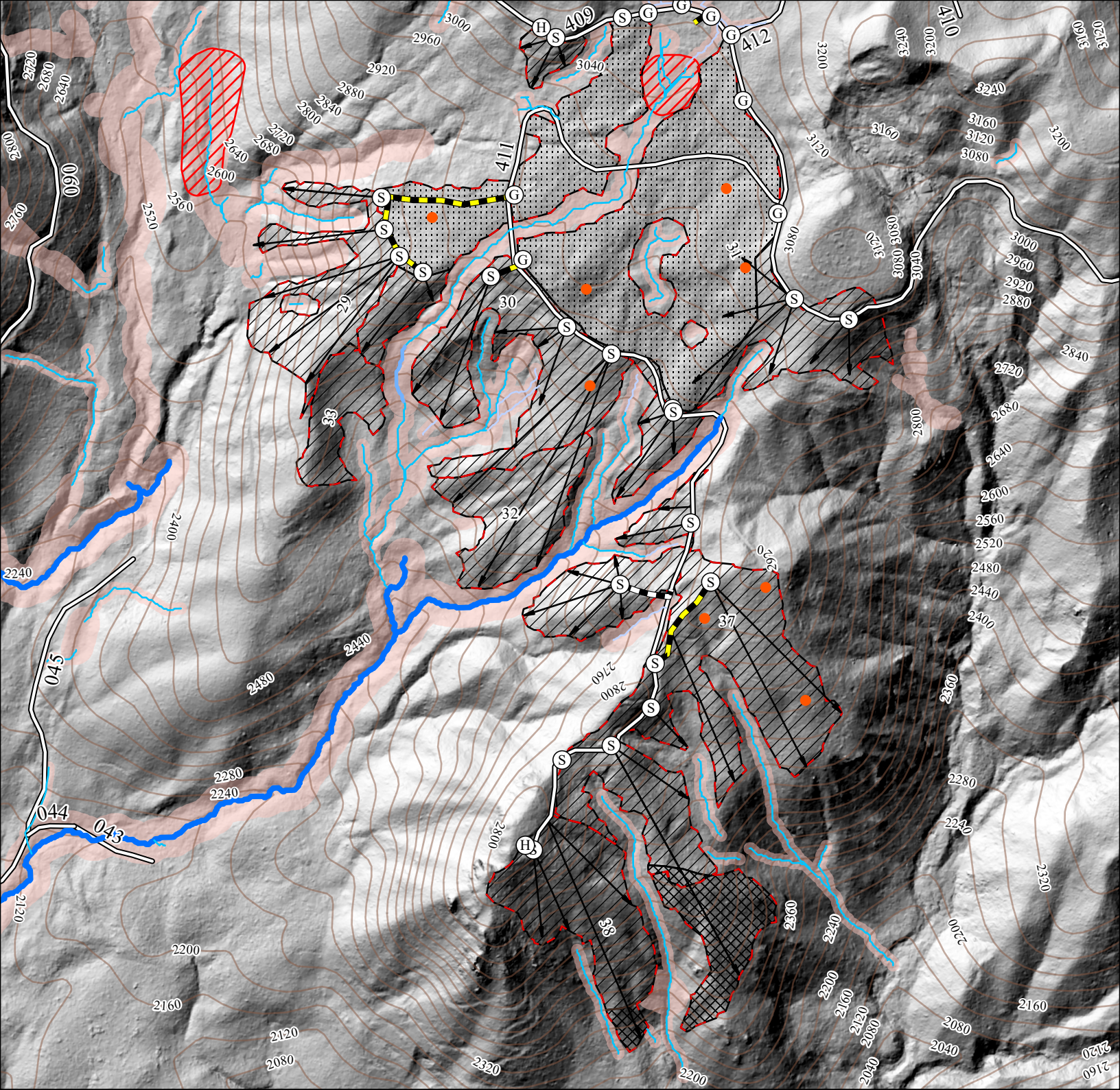
0 500 1,000 2,000 Feet



Unit Acres	Rx	DxD Spacing	Rx Species (cut)
54	space off DF	15'	DF
55	space off DF	15'	DF
56	space off DF	16'	DF
57	space off DF	16'	DF
59	space off DF, WH, NF	15'	DF, WH
60	space off DF, WH, PSF	15'	DF, WH, PSF
61	space off DF, WH, PSF, Ignore WRC	16'	DF, WH, PSF

North Cascade District GIS
September 2023

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Legend

- Timber Sale Area
- No Harvest Buffers
- Special Habitat Protection Areas
- Logging System
 - Cable
 - Ground Based
 - Helicopter
 - Potential Cable Corridors
- Ground Based Landings
- Cable Landings
- Helicopter Landings
- Roads
 - Existing Temp Roads
 - New Construction Temp Roads
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LOGGING PLAN

FOR TIMBER SALE CONTRACT
#NC-341-2024-GF8623-01
DRY BEARD GNA
PORTIONS OF SECTION 17, 18, 19, 20, 29,
30, 31 AND 32 OF T10S, R6E AND 25,
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LINN COUNTY, OREGON

North Cascade District GIS

September 2023

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Unit	Acres	Rx	DxD Spacing	Rx Species (cut)
29	8.24	space off DF, WRC. Ignore WH	17'	DF, WRC
30	20	space off DF	15'	DF
31	40	space off DF, WH, PSF. Ignore WRC	14'	DF, WH, PSF
32	15.3	Space off DF. Ignore WH, WRC	16'	DF
33	3.8	Space off DF, WH, WRC	15	DF, WH, WRC
37	21.3	space off DF. Ignore all else	17'	DF
38	15.1	space off DF. Ignore all else	15'	DF

0 500 1,000 2,000 Feet