



TIMBER NOTICE OF SALE

SALE NAME: PISTOL PETE SORTS

AGREEMENT NO: 30-106408 - 30-106418

AUCTION: July 24, 2024, starting at 10:00 a.m.

COUNTY: Clallam

Olympic Region Office, Forks, WA

SALE LOCATION: Sale located approximately 8 miles southeast of Port Angeles, WA

PRODUCTS SOLD AND SALE AREA:

Contractor shall harvest and deliver, all timber except trees painted with blue paint or bounded out by yellow “Leave Tree Area” tags, bounded by the following: Timber Sale Boundary tags and timber type change in Units 1; Timber Sale Boundary tags and red painted take trees in Unit 2; Timber Sale Boundary tags, timber type change and the PA-F-3100 road in Unit 3; Timber Sale Boundary tags, timber type change and the PA-F-3210 road in Unit 4; Timber Sale Boundary tags, red painted take trees, and a flag line in Unit 5; Timber Sale Boundary tags, Special Management Area Boundary tags and timber type change in Unit 6; Timber Sale Boundary tags, red painted take trees and timber type change in Unit 8; Timber Sale Boundary tags, and Transfer Station Road_213 in Unit 9; Timber Sale Boundary tags, timber type change, Transfer Station road and Blue Mountain road in Unit 11; Timber Sale Boundary tags, red painted take trees, timber type change and Blue Mountain road in Unit 12.

All timber marked with red paint, bounded by the following: Timber Sale Boundary Tags, Special Management Unit Boundary tags, and a timber type change in Unit 7.

All timber bounded by Right-of-Way Boundary tags on the PA-F-3120, PA-F-3125.1 and Blue Emery Spur 1 roads meeting the specifications described below; on parts of Section 1 in Township 29 North, Range 5 West, Section 31 in Township 30 North, Range 4 West, Sections 23, 24, and 36 all in Township 30 North, Range 5 West W.M., containing 150 acres, more or less.

MINIMUM BID AND ESTIMATED LOG VOLUMES:

Agreement #	Sort #	Species and Sort Specifications	Average Log Length	Estimated Volume		Tons Per MBF	Minimum Bid Delivered Prices		Total Appraised Value	Bid Deposit
				Mbf	Tons		\$/mbf	\$/Ton		
106408	01	DF High Quality B Sort 12" to 19" dib	28	643	3086	4.8				\$0.00
106409	02	DF Sawlog 5" to 11" dib	28	1396	10051	7.2				\$0.00
106410	03	DF Sawlog 12" to 19" dib	28	349	1954	5.6				\$0.00
106411	04	DF Sawlog 20" + dib	26	72	353	4.9				\$0.00
106412	05	RC Camprun 5" + dib	26	183	1116	6.1				\$0.00



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TIMBER NOTICE OF SALE

106413	06	Whitewood Sawlog 5" to 11" dib	28	257	1825	7.1			\$0.00
106414	07	Whitewood Sawlog 12"+ dib	26	46	258	5.6			\$0.00
106415	08	Red Alder SL 6" + dib	26	199	1393	7			\$0.00
106416	09	Conifer Pulp 2" + dib	N/A	4	36	9			\$0.00
106417	10	Hardwood Pulp 2" + dib	N/A	97	873	9			\$0.00
106418	11	DF Poles 35'+	N/A	393	2279	5.8			\$0.00

Totals: **3639** **23224** **\$0.00**

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: BVC-SFIFM-018227)

BID METHOD: Sealed Bids **UNIT OF MEASURE:** MBF Scale/Tonnage Scale

EXPIRATION DATE: March 14, 2025, **ALLOCATION:** Export Restricted

PAYMENT SECURITY: To be determined by the State as described in Clause P-045.2 of the Purchaser's Contract.

BIDDING PROCEDURES: A separate sealed bid and envelope must be submitted for each log sort. Prospective Purchasers may bid on any or all log sorts. On the day of sale, the Purchaser must bring their bid deposit up to 10% of their total bid price. Complete bidding procedures and auction information may be obtained from the Olympic Region Office in Forks WA. Phone number (360)374-2800.

TIMBER EXCISE TAX: Purchaser must pay the forest excise taxes associated with the log sorts delivered to them. The tax rate for this sale is 4.2 %. Taxable Stumpage = Total Delivered Value – (Harvest Cost + Estimated Haul Cost + ARRF). For more information contact the Department of Revenue, Forest Tax Section at 1-800-548-8829.

Use the following rates for estimating taxable stumpage:

Harvest Cost = \$0.00 per MBF for sorts 01, 02, 03, 04, 05, 06, 07, 08 and 11 and \$12.00 per Ton for sorts 09 and 10.

Hauling Services Payment Rate per Ton
= (Base Rate + Mileage Rate) x (Contractor's hauling bid factor)

Base Rate = \$2.35 per ton

Mileage Rate = ((\$0.16 x C miles) + (\$0.11 x A miles)) x Fuel Index Factor

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ARRF = \$0.00 per MBF for sorts 09 and 10 and \$26.00 per MBF for sorts 01, 02, 03, 04, 05, 06, 07, 08 and 11.

Note: To calculate ARRF rates per ton use the tons\mbf conversion factor in the table above.

Long-haul surcharge: An additional haul payment of \$25/mbf net scale for mbf scale sorts or \$4.60/ton for tonnage sorts will be added for delivery destinations in excess of 250 total one-way miles (A miles plus C miles).

CONFIRMATION: Each sort is subject to confirmation following auction. Sorts will not be confirmed until at least 10 days after auction. Final contract award is contingent upon the State's haul cost analysis. Actual haul route may vary and is subject to change at the State's discretion.

SPECIAL REMARKS: The successful Purchaser(s) will be required to purchase logs from the sale area upon delivery to their location specified in the bid submitted. Logs will be delivered to the Purchaser's delivery location by the State's contract harvester. Purchaser is responsible for weighing and scaling costs. All tonnage loads will be weighed and all mbf loads will be scaled at State approved locations. The State reserves the right to determine where logs are authorized to be scaled and weighed.

There are locked gates on the PA-F-3100, PA-F-3200 and the Transfer Station Road - contact the Olympic Region Dispatch Center at (360) 374-2811 to obtain an AA-1 key.

Road Building operations on the PA-F-3080, PA-F-3081 and the 2+05 Spur must be completed between the dates of 9/3/2024 and 9/30/2024.

Units 5,6,7, 8 and 10 must be harvested before any subsequent timber on the sale area.

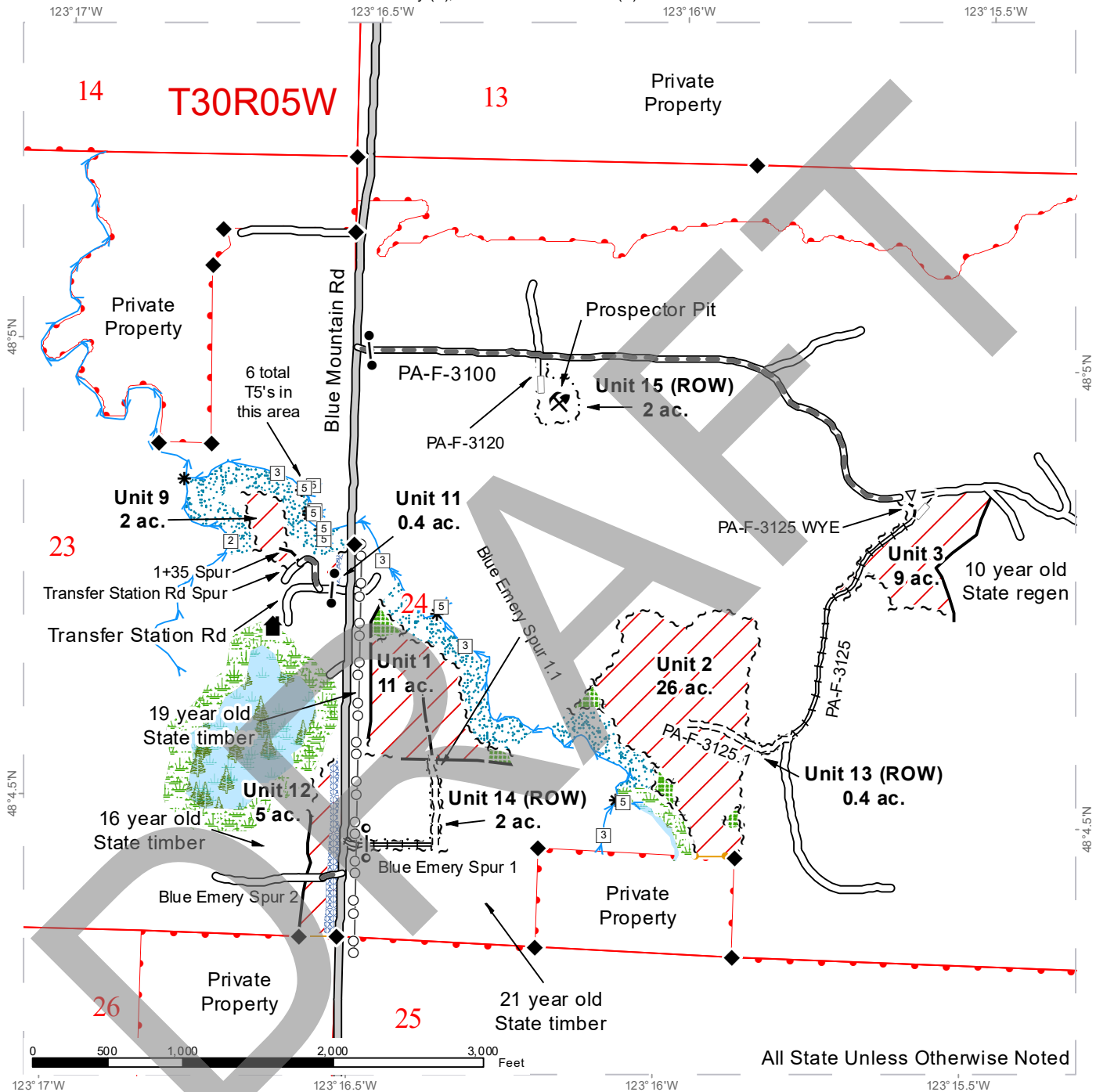
*This directly affects the Purchaser's timeline delivery of specialized wood products.

For more information regarding this log sort sale visit our web site: <http://www.dnr.wa.gov/programs-and-services/product-sales-and-leasing/timber-sales/timber-auction-packets>. If you have questions call Jeremy Brown at the Olympic Region Office at (360)391-5976 or Steve Teitzel at the Product Sales and Leasing Division Office in Olympia at (360)902-1741.

TIMBER SALE MAP

SALE NAME: PISTOL PETE SORTS
AGREEMENT #: 30-104814
TOWNSHIP(S): T29R5W, T30R4W, T30R5W
TRUST(S): Common School and Indemnity (3), State Forest Transfer (1)

REGION: Olympic Region
COUNTY(S): Clallam
ELEVATION RGE: 440'-1080'



All State Unless Otherwise Noted

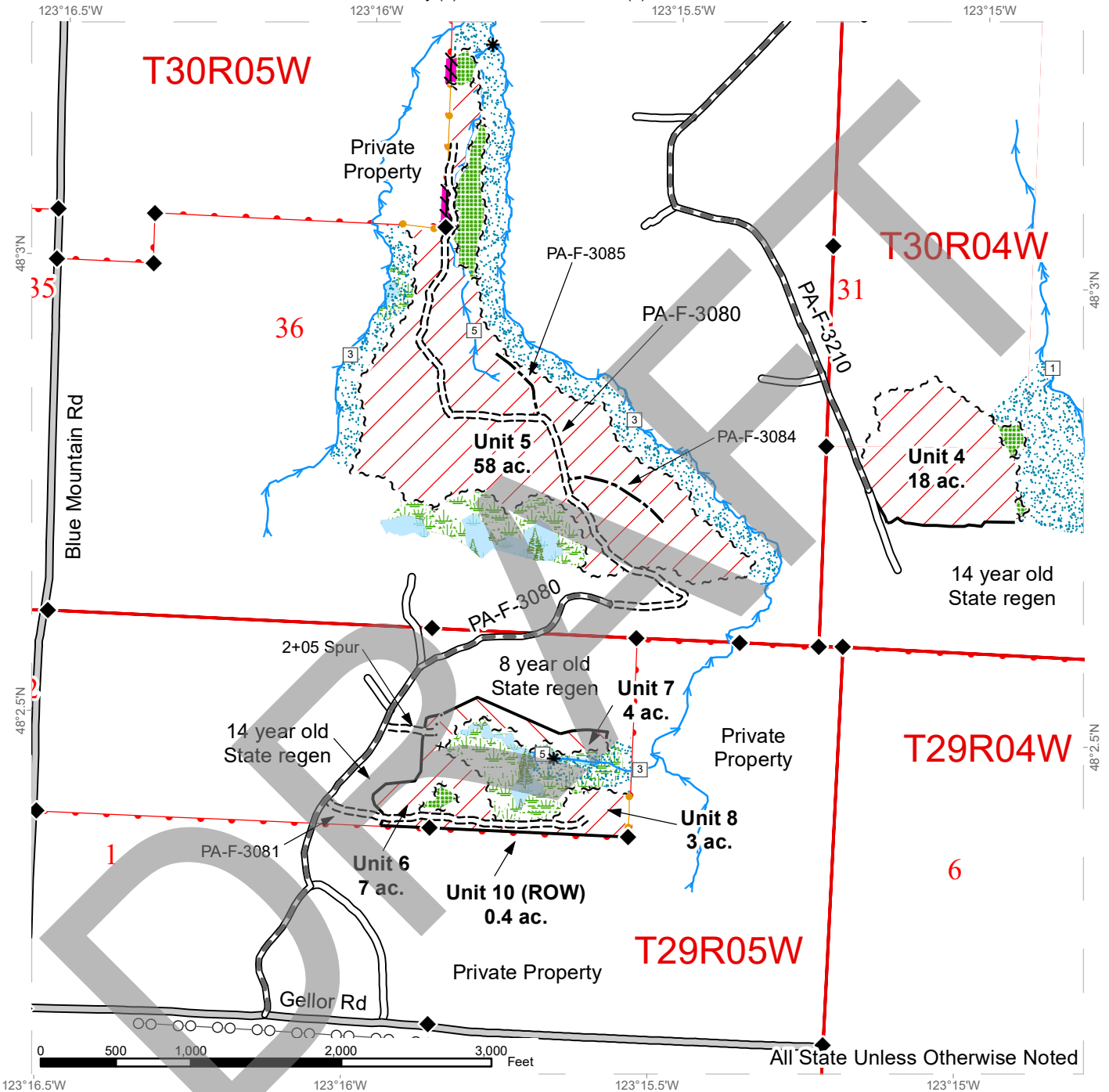
Variable Retention Harvest	Streams	Sale Boundary Tags	County Road
Variable Density Thinning	Stream Type	Special Mgmt Area	Existing Roads
DNR Managed Lands	Stream Type Break	Leave Tree Tags	Required Pre-Haul Maintenance
Riparian Management Zone	Survey Monument	Right of Way Tags	Required Reconstruction
Forested Wetland	Gate (AA1)	Take / Removal Trees	Optional Pre-Haul Maintenance
Wetland Management Zone	Gate Installation	Property Line	Optional Construction
Leave Tree Area	Rock Pit	Flag Line	Optional Reconstruction
Hazard Abatement Area	Structure	Timber Type Change	
Power Lines			



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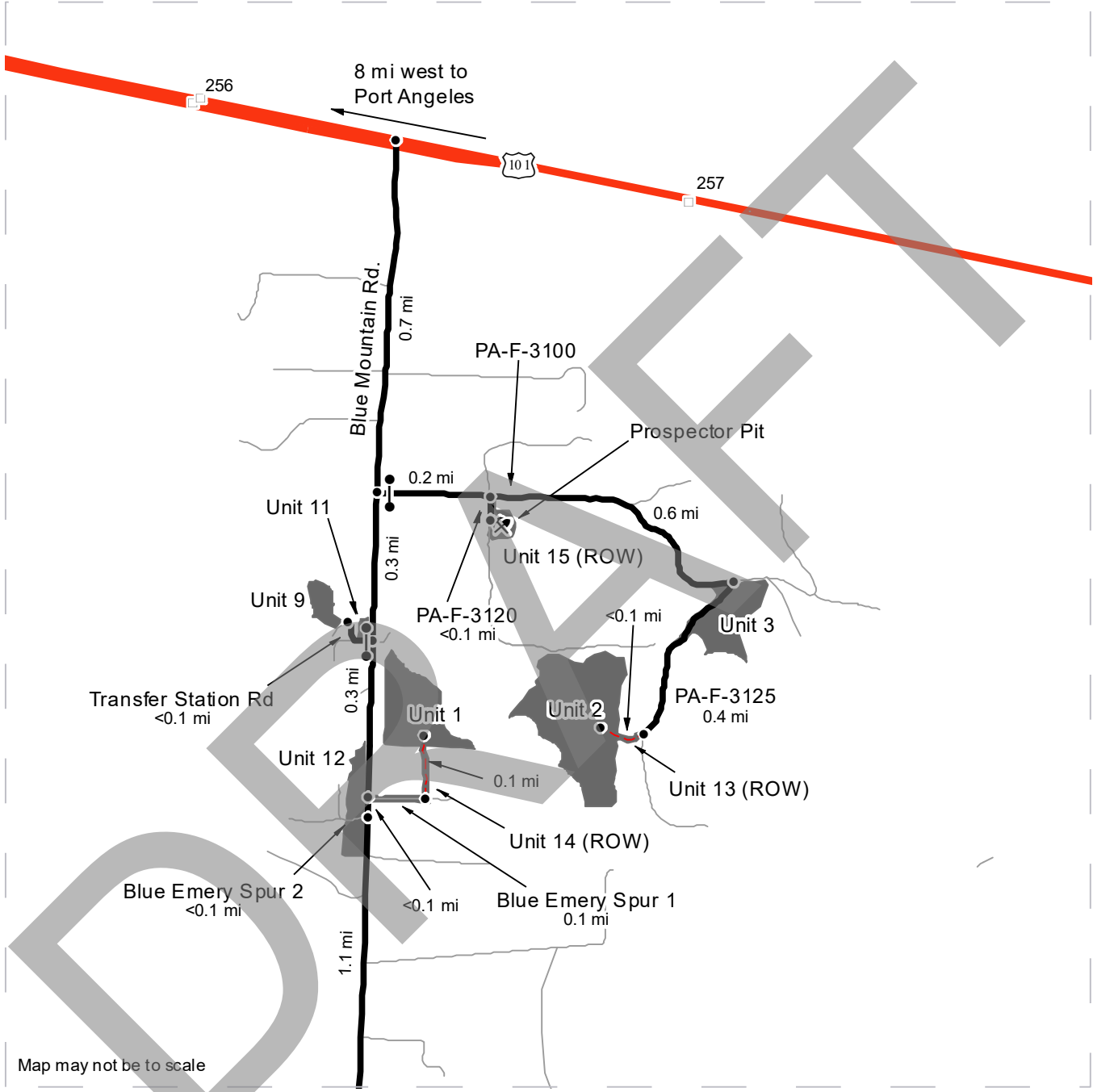


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Map may not be to scale

	Timber Sale Unit
	Highway
	Haul Route
	Other Road
	View Only Route
	Milepost Markers
	Distance Indicator
	Gate (AA1)
	Rock Pit

DRIVING DIRECTIONS

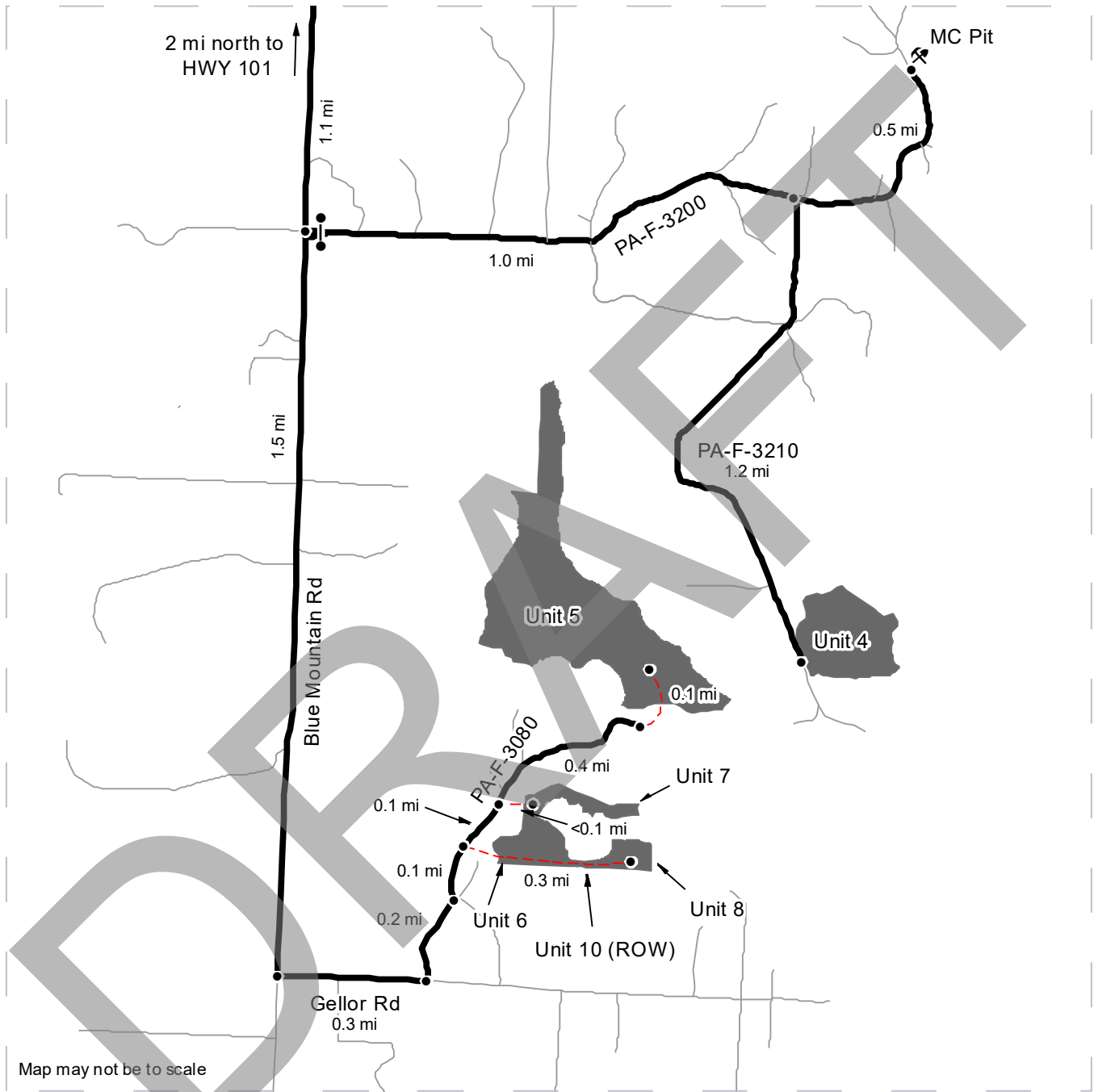
See attached directions.



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	Timber Sale Unit
	Highway
	Haul Route
	Other Road
	View Only Route
	Milepost Markers
	Distance Indicator
	Gate (AA1)
	Rock Pit

DRIVING DIRECTIONS

See attached directions.



DRIVING DIRECTIONS

From Hwy 101, turn south onto Blue Mountain Rd and travel for 0.7 mi.

Units 2, 3, 13 (ROW) & 15 (ROW)/Prospector Pit: Turn east onto PA-F-3100, proceed through the gate and drive for 0.2 mi, then turn south onto PA-F-3120 to reach Unit 15 (ROW) and Prospector Pit. Unit 3 is 0.6 mi further down PA-F-3100. From Unit 3, turn south onto PA-F-3125 and proceed 0.4 mi to arrive at Unit 13 (ROW). Walk west through Unit 13 (ROW) for less than a mile to reach Unit 2.

Units 9 & 11: From PA-F-3100, proceed 0.3 mi south onto Blue Mountain Rd and turn west onto Transfer Station Rd. Proceed through the gate and take the right fork. Unit 9 will be to the north and Unit 11 to the east.

Units 1,12 & 14 (ROW): From Transfer Station Rd, drive south on Blue Mountain Rd for 0.3 mi. Unit 14 (ROW) will be immediately to the east. To reach Unit 1, walk east on Blue Emery Spur 1 then north through Unit 14 (ROW) for approximately 1 mile each. Unit 12 is less than 0.1 mi further south down Blue Mountain Rd from Unit 14 (ROW) to the west off of Blue Emery Spur 2.

Unit 4 & MC Pit: From Blue Emery Spur 2, continue south on Blue Mountain Rd for 1.1 mi and turn east onto PA-F-3200. Proceed through the gate and drive for 1 mi. Continue east on PA-F-3200 at the spur for another 0.5 mi to reach MC Pit. Back at the spur with PA-F-3200, veer south onto PA-F-3210 and drive for 1.2 mi to reach Unit 4.

Units 5, 6, 7, 8 & 10 (ROW): From the PA-F-3200, drive south on Blue Mountain Rd for 1.5 mi and turn east onto Gellor Rd. Drive for 0.3 mi and turn north onto PA-F-3080. Drive for 0.2 mi before veering left at the next intersection. Approximately 0.1 mi further north on PA-F-3080, Units 6, 8, and 10 (ROW) can be accessed by walking 0.3 mi to the east. Drive another 0.1 mi further north on PA-F-3080 then again walk east 0.1 mi to reach Unit 7. Back on the PA-F-3080, drive 0.4 mi further north then walk 0.1 mi north to reach Unit 5.

Timber Sale Cruise Report Pistol Pete

Sale Name: PISTOL PETE

Sale Type: SORT

Region: OLYMPIC

District: STRAITS

Lead Cruiser: Kevin Peterson

Other Cruisers:

Cruise Narrative:

Location:

This sale is located up Blue Mountain road, east of Port Angeles. Access to units is pretty good, an AA1 key is needed to access.

Cruise Design:

Please look at the cruise design table to see what BAFs were used on the units. Merch height was determined at 40% of the diameter at 16'. Logs were cruised in multiple lengths to maximize sort volumes.

Timber Quality:

This sale is mostly DF that varies from 60-100+ years old. A third of the DF is high quality and 400 MBF is DF poles, I also found some RC poles. Most of the units are homogeneous DF stands, but some units have a mixture of RA, WH, RC and RF thru out.

Logging and Stand Conditions:

This sale is 100% ground based harvest. Most of the units are easy to walk through except unit 5, Unit 5 has lots of down large trees due to root rot, salmon berry and black berry.

Timber Sale Notice Volume (MBF)

Sp	DBH	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	15.7	9.4		2,857	122	1,041	1,303	386	4
RA	13.9			281		30	62	176	13
RC	15.0			183			134	49	
WH	15.9			177		32	114	32	
GF	13.1			126		15	60	51	
MA	24.0			15		11			4
ALL	15.2	9.5		3,638	122	1,129	1,672	694	21

Timber Sale Notice Weight (tons)

Sp	Tons by Grade					
	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	22,837	805	7,514	11,176	3,313	30
RA	2,965		297	577	1,992	99
WH	1,902		357	1,172	373	

Tons by Grade						
Sp	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
RC	1,722			1,307	414	
GF	1,213		112	597	504	
MA	115		86			29
ALL	30,754	805	8,366	14,829	6,597	157

Timber Sale Overall Cruise Statistics

BA (sq ft/acre)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR SE (%)	Net Vol (bf/acre)	Vol SE (%)
216.7	3.2	113.4	2.3	24,880	3.9

Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
PISTOL PETE SORTS U1	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 0 ft	11.2	12.2	10	10	0
PISTOL PETE SORTS U2	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	26.6	27.5	16	16	0
PISTOL PETE SORTS U3	B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	9.2	9.2	6	6	0
PISTOL PETE SORTS U4	B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	18.0	18.8	11	11	0
PISTOL PETE SORTS U5	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	58.1	62.4	34	17	0
PISTOL PETE SORTS U6	B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	6.8	7.4	5	5	0
PISTOL PETE SORTS U7	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	3.7	3.7	3	3	0
PISTOL PETE SORTS U8	B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	3.3	3.4	2	2	0
PISTOL PETE SORTS U9	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	2.4	2.4	3	3	0
PISTOL PETE SORTS U10	B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	0.4	0.4	1	1	0
PISTOL PETE SORTS U11	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.4	0.5	2	2	0
PISTOL PETE SORTS U12	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	5.2	5.2	5	5	1
PISTOL PETE	B1: VR, 1 BAF (40) Measure All, Sighting	0.4	0.4	1	1	0

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
SORTS U13	Ht = 4.5 ft					
PISTOL PETE SORTS U14	FX: FR plots (1 tree / acre expansion)	1.7	1.7	1	1	0
PISTOL PETE SORTS U15	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	2.1	2.1	2	2	0
All		149.5	157.3	102	85	1

Timber Sale Log Grade x Sort Summary

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	14.2	38	2,273	2,176	4.3	2,299.5	325.3
DF	LIVE	2 SAW	HQ-A	14.5	37	921	914	0.7	892.9	136.6
DF	LIVE	2 SAW	HQ-B	14.3	35	2,949	2,813	4.6	3,213.9	420.6
DF	LIVE	2 SAW	Pole	13.9	39	1,059	1,059	0.0	1,107.7	158.4
DF	LIVE	3 SAW	Domestic	8.4	38	7,418	7,105	4.2	9,268.9	1,062.2
DF	LIVE	3 SAW	HQ-B	10.6	34	198	198	0.0	232.8	29.6
DF	LIVE	3 SAW	Pole	10.1	37	1,413	1,413	0.0	1,674.1	211.2
DF	LIVE	4 SAW	Domestic	5.5	25	2,470	2,428	1.7	3,082.5	363.0
DF	LIVE	4 SAW	Pole	6.6	29	153	153	0.0	230.1	22.9
DF	LIVE	SPECIAL MILL	HQ-A	17.2	34	861	819	4.9	804.6	122.5
DF	LIVE	UTILITY	Pulp	6.8	18	30	30	0.0	29.7	4.4
GF	LIVE	2 SAW	Domestic	14.5	32	102	99	3.2	111.7	14.8
GF	LIVE	3 SAW	Domestic	9.0	39	417	401	3.8	597.3	60.0
GF	LIVE	4 SAW	Domestic	5.1	29	344	342	0.6	504.1	51.2
MA	LIVE	2 SAW	Domestic	16.5	30	87	76	13.3	86.5	11.3
MA	LIVE	UTILITY	Pulp	10.6	24	25	25	0.0	28.8	3.7
RA	LIVE	2 SAW	Domestic	12.8	38	223	202	9.5	297.0	30.2
RA	LIVE	3 SAW	Domestic	10.5	37	459	414	10.0	577.0	61.8
RA	LIVE	4 SAW	Domestic	6.6	33	1,279	1,176	8.1	1,992.2	175.7
RA	LIVE	CULL	Cull	6.9	27	75	0	100.0	0.0	0.0
RA	LIVE	UTILITY	Pulp	6.0	19	110	86	21.9	98.9	12.8
RC	LIVE	3 SAW	Domestic	9.2	36	831	731	12.0	1,137.4	109.3
RC	LIVE	3 SAW	Pole	10.6	36	163	163	0.0	169.9	24.4
RC	LIVE	4 SAW	Domestic	5.3	24	323	319	1.4	404.6	47.6
RC	LIVE	4 SAW	Pole	7.9	28	9	9	0.0	9.7	1.4
WH	LIVE	2 SAW	Domestic	12.0	40	248	211	14.8	356.8	31.6
WH	LIVE	3 SAW	Domestic	9.2	35	804	760	5.4	1,172.2	113.7
WH	LIVE	4 SAW	Domestic	5.5	29	220	215	2.4	373.4	32.1

Timber Sale Log Grade x Diameter Bin Summary

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5-7	LIVE	4 SAW	5.5	26	2,497	1.6	3,200.1	373.3
DF	5-7	LIVE	UTILITY	6.0	16	23	0.0	18.7	3.4
DF	5-7	LIVE	3 SAW	6.9	39	2,512	3.3	3,496.5	375.6
DF	8-11	LIVE	4 SAW	8.4	22	80	1.7	109.3	12.0
DF	8-11	LIVE	UTILITY	8.6	24	7	0.0	11.0	1.0
DF	8-11	LIVE	3 SAW	9.7	37	5,958	3.5	7,393.5	890.7
DF	12-15	LIVE	3 SAW	12.3	37	246	4.1	285.7	36.7
DF	12-15	LIVE	4 SAW	13.1	16	3	0.0	3.2	0.5
DF	12-15	LIVE	2 SAW	13.6	36	5,331	3.2	5,959.5	797.1
DF	16-19	LIVE	SPECIAL MILL	17.0	35	641	6.1	658.4	95.8
DF	16-19	LIVE	2 SAW	17.5	38	1,332	4.4	1,298.1	199.1
DF	20+	LIVE	SPECIAL MILL	21.2	37	178	0.0	146.2	26.6
DF	20+	LIVE	2 SAW	21.7	40	300	0.0	256.5	44.8
GF	5-7	LIVE	4 SAW	5.1	27	342	0.6	504.1	51.2
GF	5-7	LIVE	3 SAW	7.5	32	38	6.9	52.1	5.7
GF	8-11	LIVE	3 SAW	9.3	38	363	3.5	545.2	54.3
GF	12-15	LIVE	2 SAW	13.6	32	65	4.8	78.4	9.7
GF	16-19	LIVE	2 SAW	19.3	32	34	0.0	33.3	5.0
MA	8-11	LIVE	UTILITY	10.6	24	25	0.0	28.8	3.7
MA	16-19	LIVE	2 SAW	16.5	30	76	13.3	86.5	11.3
RA	< 6	LIVE	CULL	5.0	13	0	100.0	0.0	0.0
RA	< 6	LIVE	4 SAW	5.2	33	459	3.1	728.8	68.7
RA	< 6	LIVE	UTILITY	5.2	18	39	0.0	47.0	5.8
RA	6-9	LIVE	UTILITY	6.5	19	47	34.0	51.8	7.0
RA	6-9	LIVE	4 SAW	7.8	33	716	11.0	1,263.4	107.0
RA	6-9	LIVE	CULL	8.7	40	0	100.0	0.0	0.0
RA	10-11	LIVE	3 SAW	10.5	36	414	10.0	577.0	61.8
RA	12-15	LIVE	2 SAW	12.6	36	202	9.5	297.0	30.2
RC	5+	LIVE	4 SAW	5.3	23	328	1.3	414.4	49.0
RC	5+	LIVE	3 SAW	9.6	35	895	10.0	1,307.3	133.7
WH	5-7	LIVE	4 SAW	5.5	26	215	2.4	373.4	32.1
WH	5-7	LIVE	3 SAW	6.7	40	182	2.1	310.1	27.1
WH	8-11	LIVE	3 SAW	10.3	34	579	6.4	862.0	86.5
WH	12-15	LIVE	2 SAW	12.0	40	211	14.8	356.8	31.6

Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	5.9	30	4,840	2.6	6,440.2	723.6
DF	5 - 7	LIVE	Pole	6.0	32	170	0.0	256.4	25.4
DF	5 - 7	LIVE	Pulp	6.0	16	23	0.0	18.7	3.4
DF	8 - 11	LIVE	Pulp	8.6	24	7	0.0	11.0	1.0
DF	8 - 11	LIVE	HQ-B	9.4	33	105	0.0	114.2	15.7
DF	8 - 11	LIVE	Domestic	9.6	37	4,537	4.6	5,740.8	678.3
DF	8 - 11	LIVE	Pole	10.1	35	1,396	0.0	1,647.8	208.7
DF	12 - 15	LIVE	Domestic	13.1	35	1,587	3.9	1,739.7	237.3
DF	12 - 15	LIVE	Pole	13.1	37	809	0.0	877.9	121.0
DF	12 - 15	LIVE	HQ-B	13.8	34	2,383	4.7	2,837.1	356.3
DF	12 - 15	LIVE	HQ-A	14.4	38	800	0.8	793.6	119.6
DF	16 - 19	LIVE	Pole	16.7	40	250	0.0	229.8	37.3
DF	16 - 19	LIVE	HQ-A	17.1	34	721	5.5	731.4	107.7
DF	16 - 19	LIVE	Domestic	17.5	40	745	5.6	730.0	111.4
DF	16 - 19	LIVE	HQ-B	18.1	33	258	6.4	265.2	38.5
DF	20+	LIVE	HQ-B	21.3	40	265	0.0	230.1	39.7
DF	20+	LIVE	HQ-A	21.8	37	212	0.0	172.5	31.8
GF	5 - 7	LIVE	Domestic	5.5	28	380	1.3	556.2	56.9
GF	8 - 11	LIVE	Domestic	9.3	38	363	3.5	545.2	54.3
GF	12 - 15	LIVE	Domestic	13.6	32	65	4.8	78.4	9.7
GF	16 - 19	LIVE	Domestic	19.3	32	34	0.0	33.3	5.0
MA	8 - 11	LIVE	Pulp	10.6	24	25	0.0	28.8	3.7
MA	16 - 19	LIVE	Domestic	16.5	30	76	13.3	86.5	11.3
RA	< 6	LIVE	Cull	5.0	13	0	100.0	0.0	0.0
RA	< 6	LIVE	Domestic	5.2	33	459	3.1	728.8	68.7
RA	< 6	LIVE	Pulp	5.2	18	39	0.0	47.0	5.8
RA	6 - 9	LIVE	Pulp	6.5	19	47	34.0	51.8	7.0
RA	6 - 9	LIVE	Domestic	7.8	33	716	11.0	1,263.4	107.0
RA	6 - 9	LIVE	Cull	8.7	40	0	100.0	0.0	0.0
RA	10 - 11	LIVE	Domestic	10.5	36	414	10.0	577.0	61.8
RA	12 - 15	LIVE	Domestic	12.6	36	202	9.5	297.0	30.2
RC	5+	LIVE	Domestic	6.7	28	1,050	9.0	1,542.0	156.9
RC	5+	LIVE	Pole	10.7	34	173	0.0	179.7	25.8
WH	5 - 7	LIVE	Domestic	5.9	31	396	2.3	683.5	59.3
WH	8 - 11	LIVE	Domestic	10.3	34	579	6.4	862.0	86.5
WH	12 - 15	LIVE	Domestic	12.0	40	211	14.8	356.8	31.6

Cruise Unit Report PISTOL PETE SORTS U1

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U1

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	15.0			215	82	86	45	3
GF	19.7			20	15	5	0	
WH	11.5			11		8	3	
ALL	14.8			247	97	99	48	3

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U1

Sp	Tons by Grade				
	All	2 Saw	3 Saw	4 Saw	Utility
DF	1,786	603	692	476	15
GF	180	112	62	6	
WH	131		102	29	
ALL	2,097	715	856	511	15

Unit Cruise Design: PISTOL PETE SORTS U1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 0 ft	11.2	12.2	10	10	0

Unit Cruise Summary: PISTOL PETE SORTS U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	46	46	4.6	0
GF	4	4	0.4	0
WH	4	4	0.4	0
ALL	54	54	5.4	0

Unit Cruise Statistics: PISTOL PETE SORTS U1

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	184.0	34.3	10.8	104.6	24.8	3.7	19,239	42.3	11.4
GF	16.0	129.1	40.8	110.6	48.9	24.5	1,769	138.1	47.6

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
WH	16.0	174.8	55.3	62.7	26.3	13.1	1,003	176.8	56.8
ALL	216.0	26.5	8.4	101.9	29.1	4.0	22,011	39.3	9.3

Unit Summary: PISTOL PETE SORTS U1

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	46	ALL	15.0	56	72	19,728	19,239	2.5	149.9	184.0	47.5	215.5
GF	LIVE	CUT	4	ALL	19.7	68	85	2,054	1,769	13.9	7.6	16.0	3.6	19.8
WH	LIVE	CUT	4	ALL	11.5	34	45	1,124	1,003	10.8	22.2	16.0	4.7	11.2
ALL	LIVE	CUT	54	ALL	14.8	54	69	22,906	22,011	3.9	179.7	216.0	55.8	246.5
ALL	ALL	ALL	54	ALL	14.8	54	69	22,906	22,011	3.9	179.7	216.0	55.8	246.5

Unit Stand Table: PISTOL PETE SORTS U1

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	8	LIVE	CUT	2	8.0	22	32	458	0.0	22.9	8.0	2.8	5.1
DF	10	LIVE	CUT	1	10.0	36	52	249	0.0	7.3	4.0	1.3	2.8
DF	12	LIVE	CUT	3	12.0	45	60	657	0.0	15.3	12.0	3.5	7.4
DF	14	LIVE	CUT	7	14.0	60	77	2,653	7.1	26.2	28.0	7.5	29.7
DF	16	LIVE	CUT	11	15.9	67	84	5,239	1.1	31.9	44.0	11.0	58.7
DF	18	LIVE	CUT	16	17.9	69	86	7,295	1.8	36.5	64.0	15.1	81.7
DF	20	LIVE	CUT	4	20.0	73	92	1,957	2.3	7.3	16.0	3.6	21.9
DF	22	LIVE	CUT	2	22.0	58	76	730	6.6	3.0	8.0	1.7	8.2
GF	16	LIVE	CUT	1	16.0	53	65	203	50.0	2.9	4.0	1.0	2.3
GF	18	LIVE	CUT	1	18.0	75	95	441	9.3	2.3	4.0	0.9	4.9
GF	22	LIVE	CUT	1	22.0	69	87	397	8.4	1.5	4.0	0.9	4.4
GF	28	LIVE	CUT	1	28.0	99	116	727	0.0	0.9	4.0	0.8	8.1
WH	8	LIVE	CUT	1	8.0	20	29	172	11.8	11.5	4.0	1.4	1.9
WH	14	LIVE	CUT	2	14.0	47	59	554	1.3	7.5	8.0	2.1	6.2
WH	16	LIVE	CUT	1	15.0	55	69	277	24.8	3.3	4.0	1.0	3.1

Unit Log Grade Summary: PISTOL PETE SORTS U1

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	12.8	33	7,322	1.3	603.0	82.0
DF	LIVE	3 SAW	9.5	33	7,691	4.0	691.9	86.1
DF	LIVE	4 SAW	5.8	30	3,997	1.8	476.2	44.8

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	UTILITY	6.3	16	229	0.0	14.6	2.6
GF	LIVE	2 SAW	14.5	32	1,319	3.2	111.7	14.8
GF	LIVE	3 SAW	8.7	32	422	33.5	62.2	4.7
GF	LIVE	4 SAW	5.1	19	29	50.0	6.4	0.3
WH	LIVE	3 SAW	7.9	35	718	10.3	102.3	8.0
WH	LIVE	4 SAW	5.7	16	284	12.1	28.8	3.2

Unit Log Sort Summary: PISTOL PETE SORTS U1

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	8.3	31	15,350	3.1	1,444.5	171.9
DF	LIVE	Pole	8.0	33	3,660	0.0	326.6	41.0
DF	LIVE	Pulp	6.3	16	229	0.0	14.6	2.6
GF	LIVE	Domestic	10.1	30	1,769	13.9	180.4	19.8
WH	LIVE	Domestic	6.5	23	1,003	10.8	131.1	11.2

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U1

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	12.8	33	6,966	1.4	573.3	78.0
DF	LIVE	2 SAW	Pole	12.8	32	355	0.0	29.6	4.0
DF	LIVE	3 SAW	Domestic	9.1	34	5,345	5.7	515.1	59.9
DF	LIVE	3 SAW	Pole	10.5	32	2,346	0.0	176.8	26.3
DF	LIVE	4 SAW	Domestic	5.8	29	3,039	2.3	356.1	34.0
DF	LIVE	4 SAW	Pole	5.7	33	958	0.0	120.2	10.7
DF	LIVE	UTILITY	Pulp	6.3	16	229	0.0	14.6	2.6
GF	LIVE	2 SAW	Domestic	14.5	32	1,319	3.2	111.7	14.8
GF	LIVE	3 SAW	Domestic	8.7	32	422	33.5	62.2	4.7
GF	LIVE	4 SAW	Domestic	5.1	19	29	50.0	6.4	0.3
WH	LIVE	3 SAW	Domestic	7.9	35	718	10.3	102.3	8.0
WH	LIVE	4 SAW	Domestic	5.7	16	284	12.1	28.8	3.2

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U1

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	4 SAW	5.8	30	3,997	1.8	476.2	44.8
DF	5 - 7	LIVE	UTILITY	6.3	16	229	0.0	14.6	2.6
DF	5 - 7	LIVE	3 SAW	6.6	36	1,036	1.7	123.1	11.6
DF	8 - 11	LIVE	3 SAW	10.3	32	6,655	4.4	568.8	74.5

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	12 - 15	LIVE	2 SAW	12.8	33	7,322	1.3	603.0	82.0
GF	5 - 7	LIVE	4 SAW	5.1	19	29	50.0	6.4	0.3
GF	5 - 7	LIVE	3 SAW	7.6	32	181	17.2	25.0	2.0
GF	8 - 11	LIVE	3 SAW	9.7	32	240	42.1	37.2	2.7
GF	12 - 15	LIVE	2 SAW	13.6	32	870	4.8	78.4	9.7
GF	16 - 19	LIVE	2 SAW	19.3	32	449	0.0	33.3	5.0
WH	5 - 7	LIVE	4 SAW	5.7	16	284	12.1	28.8	3.2
WH	5 - 7	LIVE	3 SAW	6.0	40	228	3.2	34.9	2.6
WH	8 - 11	LIVE	3 SAW	9.0	32	490	13.3	67.4	5.5

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U1

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Pole	5.7	33	958	0.0	120.2	10.7
DF	5 - 7	LIVE	Domestic	6.0	30	4,075	2.1	479.2	45.6
DF	5 - 7	LIVE	Pulp	6.3	16	229	0.0	14.6	2.6
DF	8 - 11	LIVE	Domestic	10.2	32	4,309	6.6	392.0	48.3
DF	8 - 11	LIVE	Pole	10.5	32	2,346	0.0	176.8	26.3
DF	12 - 15	LIVE	Domestic	12.8	33	6,966	1.4	573.3	78.0
DF	12 - 15	LIVE	Pole	12.8	32	355	0.0	29.6	4.0
GF	5 - 7	LIVE	Domestic	6.5	26	210	24.0	31.4	2.4
GF	8 - 11	LIVE	Domestic	9.7	32	240	42.1	37.2	2.7
GF	12 - 15	LIVE	Domestic	13.6	32	870	4.8	78.4	9.7
GF	16 - 19	LIVE	Domestic	19.3	32	449	0.0	33.3	5.0
WH	5 - 7	LIVE	Domestic	5.8	20	513	8.3	63.7	5.7
WH	8 - 11	LIVE	Domestic	9.0	32	490	13.3	67.4	5.5

Cruise Unit Report PISTOL PETE SORTS U2

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U2

Sp	DBH	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	18.3	10.0		779	40	468	228	42	1
RC	16.0			51			46	5	
WH	13.5			23			15	7	
ALL	17.7	10.0		853	40	468	289	55	1

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U2

Sp	Tons by Grade					
	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	5,497	222	3,028	1,883	352	11
RC	532			481	51	
WH	210			122	87	
ALL	6,239	222	3,028	2,487	491	11

Unit Cruise Design: PISTOL PETE SORTS U2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	26.6	27.5	16	16	0

Unit Cruise Summary: PISTOL PETE SORTS U2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	53	53	3.3	1
RC	12	12	0.8	0
WH	1	2	0.1	0
ALL	66	67	4.2	1

Unit Cruise Statistics: PISTOL PETE SORTS U2

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	180.3	40.8	10.2	162.4	29.6	4.1	29,282	50.4	11.0
RC	30.0	114.2	28.5	64.0	38.0	11.0	1,920	120.4	30.6

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
WH	6.8	400.0	100.0	126.8	0.0	0.0	863	400.0	100.0
ALL	217.1	31.1	7.8	147.7	39.6	4.9	32,064	50.3	9.2

Unit Summary: PISTOL PETE SORTS U2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	53	ALL	18.3	78	98	29,370	29,282	0.3	98.7	180.3	42.2	778.9
RC	LIVE	CUT	12	ALL	16.0	51	64	1,930	1,920	0.5	21.5	30.0	7.5	51.1
WH	LIVE	CUT	1	ALL	13.5	74	92	924	863	6.7	6.8	6.8	1.9	22.9
ALL	LIVE	CUT	66	ALL	17.7	73	92	32,224	32,064	0.5	127.0	217.1	51.5	852.9
ALL	ALL	ALL	66	ALL	17.7	73	92	32,224	32,064	0.5	127.0	217.1	51.5	852.9

Unit Stand Table: PISTOL PETE SORTS U2

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	10	LIVE	CUT	1	10.6	45	54	217	0.0	5.6	3.4	1.0	5.8
DF	12	LIVE	CUT	6	12.4	63	79	2,099	0.0	24.5	20.4	5.8	55.8
DF	14	LIVE	CUT	4	13.6	67	83	1,511	2.2	13.6	13.6	3.7	40.2
DF	16	LIVE	CUT	2	15.8	77	97	955	1.3	5.0	6.8	1.7	25.4
DF	18	LIVE	CUT	6	17.9	82	104	2,830	0.0	11.6	20.4	4.8	75.3
DF	20	LIVE	CUT	6	19.9	87	111	3,095	0.0	9.5	20.4	4.6	82.3
DF	22	LIVE	CUT	10	22.1	91	115	5,754	0.2	12.8	34.0	7.2	153.1
DF	24	LIVE	CUT	7	23.9	91	116	4,053	0.7	7.6	23.8	4.9	107.8
DF	26	LIVE	CUT	4	25.7	114	146	3,248	0.0	3.8	13.6	2.7	86.4
DF	28	LIVE	CUT	3	27.3	110	140	2,345	0.0	2.5	10.2	2.0	62.4
DF	30	LIVE	CUT	2	30.2	100	128	1,443	0.0	1.4	6.8	1.2	38.4
DF	32	LIVE	CUT	2	31.2	119	153	1,732	0.0	1.3	6.8	1.2	46.1
RC	14	LIVE	CUT	4	13.6	46	59	535	0.0	10.0	10.0	2.7	14.2
RC	16	LIVE	CUT	2	16.0	58	72	347	0.0	3.6	5.0	1.3	9.2
RC	18	LIVE	CUT	5	17.6	50	62	717	1.4	7.4	12.5	3.0	19.1
RC	28	LIVE	CUT	1	28.4	85	108	321	0.0	0.6	2.5	0.5	8.5
WH	14	LIVE	CUT	1	13.5	74	92	863	6.7	6.8	6.8	1.9	22.9

Unit Log Grade Summary: PISTOL PETE SORTS U2

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	15.1	39	17,596	0.2	3,027.9	468.0

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	3 SAW	8.9	35	8,576	0.2	1,883.2	228.1
DF	LIVE	4 SAW	6.2	22	1,587	2.3	352.2	42.2
DF	LIVE	SPECIAL MILL	18.8	38	1,486	0.0	222.4	39.5
DF	LIVE	UTILITY	8.6	24	38	0.0	11.0	1.0
RC	LIVE	3 SAW	8.3	36	1,714	0.6	481.3	45.6
RC	LIVE	4 SAW	5.3	21	206	0.0	51.1	5.5
WH	LIVE	3 SAW	10.3	26	582	7.6	122.4	15.5
WH	LIVE	4 SAW	5.5	40	281	4.7	87.4	7.5

Unit Log Sort Summary: PISTOL PETE SORTS U2

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	8.5	31	14,236	0.5	2,820.8	378.7
DF	LIVE	HQ-A	15.5	38	5,683	0.0	944.0	151.2
DF	LIVE	HQ-B	17.0	39	3,064	0.3	522.8	81.5
DF	LIVE	Pole	11.5	36	6,261	0.0	1,198.1	166.5
DF	LIVE	Pulp	8.6	24	38	0.0	11.0	1.0
RC	LIVE	Domestic	7.3	31	1,920	0.5	532.4	51.1
WH	LIVE	Domestic	7.9	33	863	6.7	209.8	22.9

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U2

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	15.5	40	5,931	0.4	993.9	157.8
DF	LIVE	2 SAW	HQ-A	14.8	38	4,198	0.0	721.6	111.7
DF	LIVE	2 SAW	HQ-B	17.0	39	3,064	0.3	522.8	81.5
DF	LIVE	2 SAW	Pole	14.1	39	4,403	0.0	789.6	117.1
DF	LIVE	3 SAW	Domestic	8.7	35	6,890	0.3	1,513.1	183.3
DF	LIVE	3 SAW	Pole	9.6	35	1,686	0.0	370.1	44.8
DF	LIVE	4 SAW	Domestic	6.0	22	1,415	2.6	313.8	37.6
DF	LIVE	4 SAW	Pole	8.3	23	172	0.0	38.4	4.6
DF	LIVE	SPECIAL MILL	HQ-A	18.8	38	1,486	0.0	222.4	39.5
DF	LIVE	UTILITY	Pulp	8.6	24	38	0.0	11.0	1.0
RC	LIVE	3 SAW	Domestic	8.3	36	1,714	0.6	481.3	45.6
RC	LIVE	4 SAW	Domestic	5.3	21	206	0.0	51.1	5.5
WH	LIVE	3 SAW	Domestic	10.3	26	582	7.6	122.4	15.5
WH	LIVE	4 SAW	Domestic	5.5	40	281	4.7	87.4	7.5

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U2

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	4 SAW	5.9	22	1,289	2.8	279.8	34.3
DF	5 - 7	LIVE	3 SAW	6.9	35	939	0.0	227.8	25.0
DF	8 - 11	LIVE	4 SAW	8.3	23	298	0.0	72.4	7.9
DF	8 - 11	LIVE	UTILITY	8.6	24	38	0.0	11.0	1.0
DF	8 - 11	LIVE	3 SAW	9.3	35	7,636	0.2	1,655.4	203.1
DF	12 - 15	LIVE	2 SAW	14.0	39	10,110	0.1	1,847.5	268.9
DF	16 - 19	LIVE	SPECIAL MILL	16.0	40	484	0.0	76.2	12.9
DF	16 - 19	LIVE	2 SAW	17.5	39	5,994	0.4	950.3	159.4
DF	20+	LIVE	SPECIAL MILL	21.2	37	1,002	0.0	146.2	26.6
DF	20+	LIVE	2 SAW	21.3	40	1,492	0.0	230.1	39.7
RC	5+	LIVE	4 SAW	5.3	21	206	0.0	51.1	5.5
RC	5+	LIVE	3 SAW	8.3	36	1,714	0.6	481.3	45.6
WH	5 - 7	LIVE	4 SAW	5.5	40	281	4.7	87.4	7.5
WH	8 - 11	LIVE	3 SAW	10.3	26	582	7.6	122.4	15.5

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U2

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	6.1	25	2,228	1.6	507.7	59.3
DF	8 - 11	LIVE	Pulp	8.6	24	38	0.0	11.0	1.0
DF	8 - 11	LIVE	Domestic	9.2	35	6,077	0.3	1,319.3	161.6
DF	8 - 11	LIVE	Pole	9.3	33	1,858	0.0	408.5	49.4
DF	12 - 15	LIVE	Pole	13.4	39	2,999	0.0	559.8	79.8
DF	12 - 15	LIVE	Domestic	13.7	39	2,201	0.0	408.4	58.6
DF	12 - 15	LIVE	HQ-B	14.3	40	1,119	0.9	224.7	29.8
DF	12 - 15	LIVE	HQ-A	14.6	39	3,790	0.0	654.6	100.8
DF	16 - 19	LIVE	Pole	16.7	40	1,404	0.0	229.8	37.3
DF	16 - 19	LIVE	HQ-A	16.8	37	892	0.0	143.2	23.7
DF	16 - 19	LIVE	Domestic	17.6	40	3,730	0.6	585.5	99.2
DF	16 - 19	LIVE	HQ-B	19.7	34	453	0.0	68.0	12.0
DF	20+	LIVE	HQ-A	21.2	37	1,002	0.0	146.2	26.6
DF	20+	LIVE	HQ-B	21.3	40	1,492	0.0	230.1	39.7
RC	5+	LIVE	Domestic	7.3	31	1,920	0.5	532.4	51.1
WH	5 - 7	LIVE	Domestic	5.5	40	281	4.7	87.4	7.5
WH	8 - 11	LIVE	Domestic	10.3	26	582	7.6	122.4	15.5

Cruise Unit Report PISTOL PETE SORTS U3

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U3

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	14.5	8.0		343	105	179	59
WH	12.0			10		8	2
ALL	14.4	8.0		353	105	187	62

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U3

Sp	Tons by Grade			
	All	2 Saw	3 Saw	4 Saw
DF	2,808	789	1,521	499
WH	92		78	14
ALL	2,900	789	1,599	512

Unit Cruise Design: PISTOL PETE SORTS U3

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	9.2	9.2	6	6	0

Unit Cruise Summary: PISTOL PETE SORTS U3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	31	31	5.2	1
WH	1	1	0.2	0
ALL	32	32	5.3	1

Unit Cruise Statistics: PISTOL PETE SORTS U3

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	281.3	25.7	10.5	132.7	25.4	4.6	37,311	36.2	11.5
WH	9.1	244.9	100.0	118.4	0.0	0.0	1,074	244.9	100.0
ALL	290.3	25.6	10.5	132.2	25.2	4.4	38,385	35.9	11.4

Unit Summary: PISTOL PETE SORTS U3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	31	ALL	14.5	77	97	38,793	37,311	3.8	245.3	281.3	73.9	343.3
WH	LIVE	CUT	1	ALL	12.0	70	87	1,074	1,074	0.0	11.6	9.1	2.6	9.9
ALL	LIVE	CUT	32	ALL	14.4	77	97	39,867	38,385	3.7	256.9	290.3	76.5	353.1
ALL	ALL	ALL	32	ALL	14.4	77	97	39,867	38,385	3.7	256.9	290.3	76.5	353.1

Unit Stand Table: PISTOL PETE SORTS U3

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	10	LIVE	CUT	3	10.0	63	79	2,146	0.0	49.9	27.2	8.6	19.7
DF	12	LIVE	CUT	6	11.3	69	86	5,916	4.0	78.1	54.4	16.2	54.4
DF	14	LIVE	CUT	3	13.6	75	94	2,826	4.9	26.8	27.2	7.4	26.0
DF	16	LIVE	CUT	3	15.3	80	101	3,376	2.6	21.3	27.2	7.0	31.1
DF	18	LIVE	CUT	6	17.3	91	115	7,785	2.6	33.3	54.4	13.1	71.6
DF	20	LIVE	CUT	3	19.3	99	127	4,357	2.1	13.4	27.2	6.2	40.1
DF	22	LIVE	CUT	4	21.2	102	130	6,109	5.5	14.8	36.3	7.9	56.2
DF	24	LIVE	CUT	2	23.0	105	134	3,016	7.8	6.3	18.1	3.8	27.7
DF	26	LIVE	CUT	1	25.0	115	147	1,781	5.0	2.7	9.1	1.8	16.4
WH	12	LIVE	CUT	1	12.0	70	87	1,074	0.0	11.6	9.1	2.6	9.9

Unit Log Grade Summary: PISTOL PETE SORTS U3

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	14.0	35	11,411	4.5	788.7	105.0
DF	LIVE	3 SAW	8.4	40	19,440	4.6	1,520.7	178.9
DF	LIVE	4 SAW	5.6	27	6,460	0.1	498.8	59.4
WH	LIVE	3 SAW	7.4	40	832	0.0	78.2	7.7
WH	LIVE	4 SAW	5.0	20	243	0.0	13.6	2.2

Unit Log Sort Summary: PISTOL PETE SORTS U3

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	6.9	34	23,454	4.0	1,842.5	215.8
DF	LIVE	HQ-B	14.2	34	9,896	4.9	681.1	91.0
DF	LIVE	Pole	9.4	36	3,962	0.0	284.6	36.4
WH	LIVE	Domestic	6.2	30	1,074	0.0	91.8	9.9

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U3

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	13.3	40	612	5.0	36.3	5.6
DF	LIVE	2 SAW	HQ-B	14.2	34	9,896	4.9	681.1	91.0
DF	LIVE	2 SAW	Pole	12.5	40	903	0.0	71.3	8.3
DF	LIVE	3 SAW	Domestic	8.3	40	16,590	5.3	1,322.7	152.6
DF	LIVE	3 SAW	Pole	9.2	40	2,850	0.0	198.0	26.2
DF	LIVE	4 SAW	Domestic	5.6	28	6,252	0.1	483.5	57.5
DF	LIVE	4 SAW	Pole	7.8	20	208	0.0	15.3	1.9
WH	LIVE	3 SAW	Domestic	7.4	40	832	0.0	78.2	7.7
WH	LIVE	4 SAW	Domestic	5.0	20	243	0.0	13.6	2.2

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U3

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	4 SAW	5.6	28	6,331	0.1	488.9	58.2
DF	5 - 7	LIVE	3 SAW	6.8	40	6,299	4.8	512.2	58.0
DF	8 - 11	LIVE	4 SAW	8.0	22	129	0.0	9.9	1.2
DF	8 - 11	LIVE	3 SAW	9.8	40	13,141	4.5	1,008.5	120.9
DF	12 - 15	LIVE	2 SAW	13.8	35	10,429	4.4	725.9	95.9
DF	16 - 19	LIVE	2 SAW	17.4	34	982	5.9	62.8	9.0
WH	5 - 7	LIVE	4 SAW	5.0	20	243	0.0	13.6	2.2
WH	5 - 7	LIVE	3 SAW	7.4	40	832	0.0	78.2	7.7

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U3

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	5.9	32	12,008	2.6	957.1	110.5
DF	5 - 7	LIVE	Pole	7.4	29	622	0.0	44.0	5.7
DF	8 - 11	LIVE	Domestic	9.7	39	10,834	5.4	849.1	99.7
DF	8 - 11	LIVE	Pole	10.0	40	2,436	0.0	169.3	22.4
DF	12 - 15	LIVE	Pole	12.5	40	903	0.0	71.3	8.3
DF	12 - 15	LIVE	Domestic	13.3	40	612	5.0	36.3	5.6
DF	12 - 15	LIVE	HQ-B	14.0	34	8,914	4.7	618.3	82.0
DF	16 - 19	LIVE	HQ-B	17.4	34	982	5.9	62.8	9.0
WH	5 - 7	LIVE	Domestic	6.2	30	1,074	0.0	91.8	9.9

Cruise Unit Report PISTOL PETE SORTS U4

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U4

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	Spec Mill	2 Saw	3 Saw	4 Saw
DF	13.7	9.0		251	10	49	153	39
RC	12.5			78			47	31
RA	11.2			58		5	11	42
WH	13.9			21			19	2
ALL	12.8	9.0		407	10	54	230	114

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U4

Sp	Tons by Grade				
	All	Spec Mill	2 Saw	3 Saw	4 Saw
DF	2,165	66	402	1,386	311
RC	697			445	252
RA	581		43	97	441
WH	220			199	20
ALL	3,662	66	445	2,127	1,025

Unit Cruise Design: PISTOL PETE SORTS U4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	18.0	18.8	11	11	0

Unit Cruise Summary: PISTOL PETE SORTS U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	22	25	2.3	1
RC	11	17	1.5	0
RA	11	12	1.1	0
WH	3	3	0.3	0
ALL	47	57	5.2	1

Unit Cruise Statistics: PISTOL PETE SORTS U4

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	123.7	111.5	33.6	112.6	25.4	5.4	13,931	114.3	34.0
RC	61.8	154.1	46.5	70.3	36.1	10.9	4,344	158.3	47.7
RA	47.6	145.9	44.0	67.2	31.1	9.4	3,198	149.2	45.0
WH	12.2	174.0	52.5	94.7	37.4	21.6	1,157	177.9	56.7
ALL	245.3	25.1	7.6	92.2	35.9	5.2	22,630	43.8	9.2

Unit Summary: PISTOL PETE SORTS U4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	22	ALL	13.7	66	83	14,527	13,931	4.1	120.9	123.7	33.4	250.8
RA	LIVE	CUT	11	ALL	11.2	44	52	3,432	3,198	6.8	69.5	47.6	14.2	57.6
RC	LIVE	CUT	11	ALL	12.5	41	49	4,896	4,344	11.3	72.5	61.8	17.5	78.2
WH	LIVE	CUT	3	ALL	13.9	62	76	1,185	1,157	2.3	11.6	12.2	3.3	20.8
ALL	LIVE	CUT	47	ALL	12.8	54	66	24,040	22,630	5.9	274.5	245.3	68.4	407.3
ALL	ALL	ALL	47	ALL	12.8	54	66	24,040	22,630	5.9	274.5	245.3	68.4	407.3

Unit Stand Table: PISTOL PETE SORTS U4

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	8	LIVE	CUT	1	8.0	50	61	425	0.0	14.2	4.9	1.7	7.7
DF	10	LIVE	CUT	1	10.0	50	61	363	0.0	9.1	4.9	1.6	6.5
DF	12	LIVE	CUT	4	11.4	62	77	3,251	3.4	48.9	34.6	10.3	58.5
DF	14	LIVE	CUT	3	13.6	68	85	1,413	7.6	14.6	14.8	4.0	25.4
DF	16	LIVE	CUT	2	15.0	73	91	1,012	4.6	8.1	9.9	2.6	18.2
DF	18	LIVE	CUT	4	17.2	80	100	2,470	0.0	12.2	19.8	4.8	44.5
DF	20	LIVE	CUT	2	19.5	87	111	1,166	3.5	4.8	9.9	2.2	21.0
DF	22	LIVE	CUT	3	22.0	95	121	2,139	7.8	5.6	14.8	3.2	38.5
DF	24	LIVE	CUT	1	23.0	100	127	846	3.5	1.7	4.9	1.0	15.2
DF	26	LIVE	CUT	1	25.0	100	127	845	6.9	1.5	4.9	1.0	15.2
RA	10	LIVE	CUT	5	10.0	40	47	1,457	3.5	44.8	24.4	7.7	26.2
RA	12	LIVE	CUT	3	11.3	44	53	646	7.0	17.6	12.2	3.6	11.6
RA	16	LIVE	CUT	1	16.0	65	80	365	10.8	2.6	3.6	0.9	6.6
RA	18	LIVE	CUT	2	17.5	68	83	730	10.7	4.4	7.3	1.7	13.1
RC	8	LIVE	CUT	1	8.0	30	35	656	0.0	31.3	10.9	3.9	11.8
RC	12	LIVE	CUT	2	11.4	36	43	801	4.4	25.8	18.2	5.4	14.4
RC	16	LIVE	CUT	2	16.0	68	85	755	3.7	5.2	7.3	1.8	13.6

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
RC	18	LIVE	CUT	1	17.0	72	91	399	0.0	2.3	3.6	0.9	7.2
RC	20	LIVE	CUT	1	20.0	60	75	242	28.6	1.7	3.6	0.8	4.4
RC	22	LIVE	CUT	2	21.5	71	90	611	21.6	2.9	7.3	1.6	11.0
RC	24	LIVE	CUT	2	24.0	72	90	880	20.2	3.5	10.9	2.2	15.8
WH	12	LIVE	CUT	1	12.0	60	74	264	9.5	4.6	3.6	1.0	4.8
WH	14	LIVE	CUT	1	14.0	55	67	245	0.0	3.4	3.6	1.0	4.4
WH	16	LIVE	CUT	1	16.0	70	87	649	0.0	3.5	4.9	1.2	11.7

Unit Log Grade Summary: PISTOL PETE SORTS U4

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	14.2	35	2,726	4.7	402.1	49.1
DF	LIVE	3 SAW	7.8	40	8,511	4.4	1,385.5	153.2
DF	LIVE	4 SAW	5.2	25	2,158	1.7	311.0	38.8
DF	LIVE	SPECIAL MILL	17.1	34	536	5.9	66.3	9.6
RA	LIVE	2 SAW	12.3	30	282	6.8	42.8	5.1
RA	LIVE	3 SAW	10.8	35	597	12.0	97.4	10.8
RA	LIVE	4 SAW	5.4	32	2,319	5.4	440.8	41.7
RC	LIVE	3 SAW	10.4	35	2,602	16.5	444.5	46.8
RC	LIVE	4 SAW	5.2	25	1,741	2.1	252.4	31.3
WH	LIVE	3 SAW	8.0	40	1,051	2.6	199.2	18.9
WH	LIVE	4 SAW	5.1	28	106	0.0	20.4	1.9

Unit Log Sort Summary: PISTOL PETE SORTS U4

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	6.3	32	8,369	4.9	1,334.0	150.6
DF	LIVE	HQ-A	17.1	34	536	5.9	66.3	9.6
DF	LIVE	HQ-B	14.4	34	2,281	5.5	327.6	41.1
DF	LIVE	Pole	10.6	40	2,745	0.0	437.0	49.4
RA	LIVE	Domestic	5.9	32	3,198	6.8	580.9	57.6
RC	LIVE	Domestic	6.2	27	3,671	13.1	611.0	66.1
RC	LIVE	Pole	10.3	36	673	0.0	85.9	12.1
WH	LIVE	Domestic	7.3	37	1,157	2.3	219.6	20.8

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U4

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	HQ-B	14.4	34	2,281	5.5	327.6	41.1
DF	LIVE	2 SAW	Pole	12.9	40	445	0.0	74.5	8.0
DF	LIVE	3 SAW	Domestic	7.3	40	6,211	5.9	1,023.0	111.8
DF	LIVE	3 SAW	Pole	10.3	40	2,300	0.0	362.5	41.4
DF	LIVE	4 SAW	Domestic	5.2	25	2,158	1.7	311.0	38.8
DF	LIVE	SPECIAL MILL	HQ-A	17.1	34	536	5.9	66.3	9.6
RA	LIVE	2 SAW	Domestic	12.3	30	282	6.8	42.8	5.1
RA	LIVE	3 SAW	Domestic	10.8	35	597	12.0	97.4	10.8
RA	LIVE	4 SAW	Domestic	5.4	32	2,319	5.4	440.8	41.7
RC	LIVE	3 SAW	Domestic	10.4	35	1,929	21.1	358.6	34.7
RC	LIVE	3 SAW	Pole	10.3	36	673	0.0	85.9	12.1
RC	LIVE	4 SAW	Domestic	5.2	25	1,741	2.1	252.4	31.3
WH	LIVE	3 SAW	Domestic	8.0	40	1,051	2.6	199.2	18.9
WH	LIVE	4 SAW	Domestic	5.1	28	106	0.0	20.4	1.9

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U4

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	4 SAW	5.2	25	2,158	1.7	311.0	38.8
DF	5 - 7	LIVE	3 SAW	6.6	40	3,820	4.2	637.1	68.8
DF	8 - 11	LIVE	3 SAW	9.6	40	4,436	4.2	712.6	79.9
DF	12 - 15	LIVE	3 SAW	12.0	40	256	10.2	35.7	4.6
DF	12 - 15	LIVE	2 SAW	14.2	35	2,726	4.7	402.1	49.1
DF	16 - 19	LIVE	SPECIAL MILL	17.1	34	536	5.9	66.3	9.6
RA	< 6	LIVE	4 SAW	5.1	33	2,104	4.6	403.4	37.9
RA	6 - 9	LIVE	4 SAW	7.7	21	215	12.3	37.4	3.9
RA	10 - 11	LIVE	3 SAW	10.8	35	597	12.0	97.4	10.8
RA	12 - 15	LIVE	2 SAW	12.3	30	282	6.8	42.8	5.1
RC	5+	LIVE	4 SAW	5.2	25	1,741	2.1	252.4	31.3
RC	5+	LIVE	3 SAW	10.4	35	2,602	16.5	444.5	46.8
WH	5 - 7	LIVE	4 SAW	5.1	28	106	0.0	20.4	1.9
WH	5 - 7	LIVE	3 SAW	7.1	40	509	5.2	115.5	9.2
WH	8 - 11	LIVE	3 SAW	10.1	40	542	0.0	83.7	9.8

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U4

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	5.8	31	5,977	3.3	948.2	107.6
DF	8 - 11	LIVE	Domestic	9.1	40	2,136	8.3	350.1	38.4
DF	8 - 11	LIVE	Pole	10.3	40	2,300	0.0	362.5	41.4
DF	12 - 15	LIVE	Domestic	12.0	40	256	10.2	35.7	4.6
DF	12 - 15	LIVE	Pole	12.9	40	445	0.0	74.5	8.0
DF	12 - 15	LIVE	HQ-B	14.4	34	2,281	5.5	327.6	41.1
DF	16 - 19	LIVE	HQ-A	17.1	34	536	5.9	66.3	9.6
RA	< 6	LIVE	Domestic	5.1	33	2,104	4.6	403.4	37.9
RA	6 - 9	LIVE	Domestic	7.7	21	215	12.3	37.4	3.9
RA	10 - 11	LIVE	Domestic	10.8	35	597	12.0	97.4	10.8
RA	12 - 15	LIVE	Domestic	12.3	30	282	6.8	42.8	5.1
RC	5+	LIVE	Domestic	6.2	27	3,671	13.1	611.0	66.1
RC	5+	LIVE	Pole	10.3	36	673	0.0	85.9	12.1
WH	5 - 7	LIVE	Domestic	6.5	36	615	4.3	135.9	11.1
WH	8 - 11	LIVE	Domestic	10.1	40	542	0.0	83.7	9.8

Cruise Unit Report PISTOL PETE SORTS U5

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U5

Sp	DBH	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	15.0	10.0		755	69	197	388	101	
RA	14.6			220		25	51	131	13
GF	11.9			101			52	50	
WH	17.9			78		32	32	14	
RC	17.8			24			18	6	
MA	24.0			15		11			4
ALL	14.7	10.0		1,194	69	265	541	302	17

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U5

Sp	Tons by Grade					
	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	6,250	494	1,640	3,337	780	
RA	2,358		254	480	1,526	99
GF	998			508	490	
WH	892		357	355	180	
RC	293			225	68	
MA	115		86			29
ALL	10,906	494	2,337	4,904	3,044	128

Unit Cruise Design: PISTOL PETE SORTS U5

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	58.1	62.4	34	17	0

Unit Cruise Summary: PISTOL PETE SORTS U5

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	34	61	1.8	2
RA	19	45	1.3	0
GF	6	13	0.4	0
WH	2	8	0.2	0

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RC	4	6	0.2	0
MA	1	2	0.1	0
ALL	66	135	4.0	2

Unit Cruise Statistics: PISTOL PETE SORTS U5

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	97.7	103.4	17.7	133.0	24.6	4.2	12,995	106.3	18.2
RA	52.9	114.2	19.6	71.7	40.5	9.3	3,794	121.2	21.7
GF	20.8	232.3	39.8	83.8	31.1	12.7	1,745	234.4	41.8
WH	12.8	278.0	47.7	104.3	2.3	1.6	1,336	278.0	47.7
RC	7.9	306.0	52.5	53.2	45.7	22.8	421	309.4	57.2
MA	2.4	406.0	69.6	109.8	0.0	0.0	258	406.0	69.6
ALL	194.5	37.8	6.5	105.7	40.8	5.0	20,549	55.6	8.2

Unit Summary: PISTOL PETE SORTS U5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	34	ALL	15.0	72	91	13,830	12,995	6.0	79.6	97.7	25.2	755.0
GF	LIVE	CUT	6	ALL	11.9	51	62	1,745	1,745	0.0	27.0	20.8	6.0	101.4
MA	LIVE	CUT	1	ALL	24.0	65	80	288	258	10.4	0.7	2.4	0.5	15.0
RA	LIVE	CUT	19	ALL	14.6	54	65	4,416	3,794	14.1	45.5	52.9	13.9	220.4
RC	LIVE	CUT	4	ALL	17.8	47	57	508	421	17.2	4.6	7.9	1.9	24.4
WH	LIVE	CUT	2	ALL	17.9	72	90	1,495	1,336	10.7	7.3	12.8	3.0	77.6
ALL	LIVE	CUT	66	ALL	14.7	63	78	22,282	20,549	7.8	164.7	194.5	50.5	1,193.9
ALL	ALL	ALL	66	ALL	14.7	63	78	22,282	20,549	7.8	164.7	194.5	50.5	1,193.9

Unit Stand Table: PISTOL PETE SORTS U5

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	8	LIVE	CUT	2	8.0	33	38	346	8.7	16.5	5.7	2.0	20.1
DF	10	LIVE	CUT	1	10.0	70	88	332	0.0	5.3	2.9	0.9	19.3
DF	12	LIVE	CUT	3	12.0	70	88	973	2.6	11.0	8.6	2.5	56.5
DF	14	LIVE	CUT	6	13.6	74	93	1,823	2.5	17.0	17.2	4.7	105.9
DF	16	LIVE	CUT	2	16.0	80	101	772	2.8	4.1	5.7	1.4	44.8
DF	18	LIVE	CUT	7	17.6	87	110	2,665	5.9	12.0	20.1	4.8	154.9
DF	20	LIVE	CUT	4	19.7	101	129	1,781	6.0	5.4	11.5	2.6	103.4

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	22	LIVE	CUT	2	21.0	105	135	927	6.2	2.4	5.7	1.3	53.8
DF	24	LIVE	CUT	4	23.2	110	141	2,069	7.4	3.9	11.5	2.4	120.2
DF	26	LIVE	CUT	2	26.0	103	132	811	16.0	1.6	5.7	1.1	47.1
DF	30	LIVE	CUT	1	29.0	110	141	497	8.6	0.6	2.9	0.5	28.9
GF	8	LIVE	CUT	1	8.0	40	48	268	0.0	9.9	3.5	1.2	15.6
GF	12	LIVE	CUT	2	12.0	45	55	371	0.0	8.8	6.9	2.0	21.6
GF	14	LIVE	CUT	2	14.0	68	86	727	0.0	6.5	6.9	1.9	42.2
GF	20	LIVE	CUT	1	19.0	75	95	379	0.0	1.8	3.5	0.8	22.0
MA	24	LIVE	CUT	1	24.0	65	80	258	10.4	0.7	2.4	0.5	15.0
RA	10	LIVE	CUT	2	10.0	45	54	369	0.0	9.7	5.3	1.7	21.4
RA	12	LIVE	CUT	2	12.0	51	62	337	5.7	6.7	5.3	1.5	19.6
RA	14	LIVE	CUT	3	13.6	56	68	599	9.4	7.8	7.9	2.2	34.8
RA	16	LIVE	CUT	4	15.7	59	72	761	23.3	7.8	10.6	2.7	44.2
RA	18	LIVE	CUT	6	17.3	56	68	1,220	17.1	11.4	18.5	4.5	70.9
RA	20	LIVE	CUT	1	20.0	65	80	250	8.8	1.2	2.6	0.6	14.5
RA	22	LIVE	CUT	1	22.0	70	86	258	11.4	1.0	2.6	0.6	15.0
RC	14	LIVE	CUT	1	14.0	30	35	47	0.0	1.6	1.7	0.4	2.7
RC	18	LIVE	CUT	2	18.0	52	64	218	16.7	2.2	4.0	0.9	12.7
RC	24	LIVE	CUT	1	23.0	65	81	156	21.8	0.8	2.3	0.5	9.0
WH	18	LIVE	CUT	1	17.0	70	87	679	8.7	4.1	6.4	1.6	39.4
WH	20	LIVE	CUT	1	19.0	75	93	657	12.6	3.3	6.4	1.5	38.2

Unit Log Grade Summary: PISTOL PETE SORTS U5

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	13.7	36	3,388	10.2	1,639.6	196.9
DF	LIVE	3 SAW	8.6	40	6,674	4.4	3,336.6	387.8
DF	LIVE	4 SAW	5.3	24	1,742	2.7	780.0	101.2
DF	LIVE	SPECIAL MILL	16.8	33	1,190	7.6	493.7	69.2
GF	LIVE	3 SAW	9.1	40	888	0.0	508.0	51.6
GF	LIVE	4 SAW	5.1	29	857	0.0	490.4	49.8
MA	LIVE	2 SAW	16.5	30	195	13.3	86.5	11.3
MA	LIVE	UTILITY	10.6	24	64	0.0	28.8	3.7
RA	LIVE	2 SAW	12.9	40	432	10.1	254.2	25.1
RA	LIVE	3 SAW	10.4	37	879	9.6	479.7	51.1
RA	LIVE	4 SAW	7.0	34	2,262	9.1	1,525.6	131.4
RA	LIVE	CULL	6.9	27	0	100.0	0.0	0.0
RA	LIVE	UTILITY	6.0	19	221	21.9	98.9	12.8

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
RC	LIVE	3 SAW	9.9	36	316	21.6	225.0	18.3
RC	LIVE	4 SAW	5.4	26	105	0.0	67.7	6.1
WH	LIVE	2 SAW	12.0	40	543	14.8	356.8	31.6
WH	LIVE	3 SAW	10.5	40	557	10.5	355.1	32.3
WH	LIVE	4 SAW	5.6	30	236	0.0	179.9	13.7

Unit Log Sort Summary: PISTOL PETE SORTS U5

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	7.1	32	8,838	6.1	4,351.0	513.5
DF	LIVE	HQ-A	15.7	34	1,472	7.2	619.3	85.5
DF	LIVE	HQ-B	13.6	34	1,798	7.7	867.5	104.5
DF	LIVE	Pole	10.6	40	886	0.0	412.1	51.5
GF	LIVE	Domestic	6.1	32	1,745	0.0	998.4	101.4
MA	LIVE	Domestic	16.5	30	195	13.3	86.5	11.3
MA	LIVE	Pulp	10.6	24	64	0.0	28.8	3.7
RA	LIVE	Cull	6.9	27	0	100.0	0.0	0.0
RA	LIVE	Domestic	7.7	35	3,573	9.3	2,259.5	207.6
RA	LIVE	Pulp	6.0	19	221	21.9	98.9	12.8
RC	LIVE	Domestic	7.4	30	421	17.2	292.7	24.4
WH	LIVE	Domestic	8.4	35	1,336	10.7	891.8	77.6

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U5

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	13.9	40	1,308	14.2	646.5	76.0
DF	LIVE	2 SAW	HQ-A	13.1	34	282	5.9	125.6	16.4
DF	LIVE	2 SAW	HQ-B	13.6	34	1,798	7.7	867.5	104.5
DF	LIVE	3 SAW	Domestic	8.4	40	5,788	5.0	2,924.5	336.3
DF	LIVE	3 SAW	Pole	10.6	40	886	0.0	412.1	51.5
DF	LIVE	4 SAW	Domestic	5.3	24	1,742	2.7	780.0	101.2
DF	LIVE	SPECIAL MILL	HQ-A	16.8	33	1,190	7.6	493.7	69.2
GF	LIVE	3 SAW	Domestic	9.1	40	888	0.0	508.0	51.6
GF	LIVE	4 SAW	Domestic	5.1	29	857	0.0	490.4	49.8
MA	LIVE	2 SAW	Domestic	16.5	30	195	13.3	86.5	11.3
MA	LIVE	UTILITY	Pulp	10.6	24	64	0.0	28.8	3.7
RA	LIVE	2 SAW	Domestic	12.9	40	432	10.1	254.2	25.1
RA	LIVE	3 SAW	Domestic	10.4	37	879	9.6	479.7	51.1
RA	LIVE	4 SAW	Domestic	7.0	34	2,262	9.1	1,525.6	131.4

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
RA	LIVE	CULL	Cull	6.9	27	0	100.0	0.0	0.0
RA	LIVE	UTILITY	Pulp	6.0	19	221	21.9	98.9	12.8
RC	LIVE	3 SAW	Domestic	9.9	36	316	21.6	225.0	18.3
RC	LIVE	4 SAW	Domestic	5.4	26	105	0.0	67.7	6.1
WH	LIVE	2 SAW	Domestic	12.0	40	543	14.8	356.8	31.6
WH	LIVE	3 SAW	Domestic	10.5	40	557	10.5	355.1	32.3
WH	LIVE	4 SAW	Domestic	5.6	30	236	0.0	179.9	13.7

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U5

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	4 SAW	5.3	24	1,708	2.6	760.3	99.3
DF	5 - 7	LIVE	3 SAW	7.0	40	2,056	3.3	1,076.0	119.4
DF	8 - 11	LIVE	4 SAW	8.3	22	34	9.8	19.7	2.0
DF	8 - 11	LIVE	3 SAW	9.8	40	4,305	4.8	2,129.2	250.1
DF	12 - 15	LIVE	3 SAW	12.1	40	314	5.5	131.4	18.2
DF	12 - 15	LIVE	2 SAW	13.3	36	2,910	7.7	1,369.9	169.0
DF	16 - 19	LIVE	SPECIAL MILL	16.8	33	1,190	7.6	493.7	69.2
DF	16 - 19	LIVE	2 SAW	17.2	37	479	22.5	269.7	27.8
GF	5 - 7	LIVE	4 SAW	5.1	29	857	0.0	490.4	49.8
GF	8 - 11	LIVE	3 SAW	9.1	40	888	0.0	508.0	51.6
MA	8 - 11	LIVE	UTILITY	10.6	24	64	0.0	28.8	3.7
MA	16 - 19	LIVE	2 SAW	16.5	30	195	13.3	86.5	11.3
RA	< 6	LIVE	CULL	5.0	13	0	100.0	0.0	0.0
RA	< 6	LIVE	UTILITY	5.2	18	101	0.0	47.0	5.8
RA	< 6	LIVE	4 SAW	5.3	34	531	1.3	325.4	30.8
RA	6 - 9	LIVE	UTILITY	6.5	19	120	34.0	51.8	7.0
RA	6 - 9	LIVE	4 SAW	7.9	34	1,732	11.2	1,200.2	100.6
RA	6 - 9	LIVE	CULL	8.7	40	0	100.0	0.0	0.0
RA	10 - 11	LIVE	3 SAW	10.4	37	879	9.6	479.7	51.1
RA	12 - 15	LIVE	2 SAW	12.9	40	432	10.1	254.2	25.1
RC	5+	LIVE	4 SAW	5.4	26	105	0.0	67.7	6.1
RC	5+	LIVE	3 SAW	9.9	36	316	21.6	225.0	18.3
WH	5 - 7	LIVE	4 SAW	5.6	30	236	0.0	179.9	13.7
WH	8 - 11	LIVE	3 SAW	10.5	40	557	10.5	355.1	32.3
WH	12 - 15	LIVE	2 SAW	12.0	40	543	14.8	356.8	31.6

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U5

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	5.9	29	3,764	3.0	1,836.3	218.7
DF	8 - 11	LIVE	Domestic	9.6	39	3,452	6.0	1,736.8	200.6
DF	8 - 11	LIVE	Pole	10.6	40	886	0.0	412.1	51.5
DF	12 - 15	LIVE	Domestic	13.1	40	1,413	8.5	633.3	82.1
DF	12 - 15	LIVE	HQ-A	13.1	34	282	5.9	125.6	16.4
DF	12 - 15	LIVE	HQ-B	13.3	34	1,529	6.9	742.3	88.8
DF	16 - 19	LIVE	HQ-A	16.8	33	1,190	7.6	493.7	69.2
DF	16 - 19	LIVE	Domestic	16.9	40	209	33.0	144.5	12.1
DF	16 - 19	LIVE	HQ-B	17.4	34	270	11.7	125.2	15.7
GF	5 - 7	LIVE	Domestic	5.1	29	857	0.0	490.4	49.8
GF	8 - 11	LIVE	Domestic	9.1	40	888	0.0	508.0	51.6
MA	8 - 11	LIVE	Pulp	10.6	24	64	0.0	28.8	3.7
MA	16 - 19	LIVE	Domestic	16.5	30	195	13.3	86.5	11.3
RA	< 6	LIVE	Cull	5.0	13	0	100.0	0.0	0.0
RA	< 6	LIVE	Pulp	5.2	18	101	0.0	47.0	5.8
RA	< 6	LIVE	Domestic	5.3	34	531	1.3	325.4	30.8
RA	6 - 9	LIVE	Pulp	6.5	19	120	34.0	51.8	7.0
RA	6 - 9	LIVE	Domestic	7.9	34	1,732	11.2	1,200.2	100.6
RA	6 - 9	LIVE	Cull	8.7	40	0	100.0	0.0	0.0
RA	10 - 11	LIVE	Domestic	10.4	37	879	9.6	479.7	51.1
RA	12 - 15	LIVE	Domestic	12.9	40	432	10.1	254.2	25.1
RC	5+	LIVE	Domestic	7.4	30	421	17.2	292.7	24.4
WH	5 - 7	LIVE	Domestic	5.6	30	236	0.0	179.9	13.7
WH	8 - 11	LIVE	Domestic	10.5	40	557	10.5	355.1	32.3
WH	12 - 15	LIVE	Domestic	12.0	40	543	14.8	356.8	31.6

Cruise Unit Report PISTOL PETE SORTS U6

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U6

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	15.1	8.0		222	62	121	38
WH	17.5			19		17	2
ALL	15.2	8.0		241	62	139	40

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U6

Sp	Tons by Grade			
	All	2 Saw	3 Saw	4 Saw
DF	1,902	492	1,064	345
WH	191		171	20
ALL	2,093	492	1,236	365

Unit Cruise Design: PISTOL PETE SORTS U6

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	6.8	7.3	5	5	0

Unit Cruise Summary: PISTOL PETE SORTS U6

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	25	25	5.0	1
WH	2	2	0.4	0
ALL	27	27	5.4	1

Unit Cruise Statistics: PISTOL PETE SORTS U6

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	272.2	14.1	6.3	119.7	27.8	5.6	32,575	31.2	8.4
WH	21.8	136.9	61.2	128.4	10.0	7.1	2,796	137.3	61.6
ALL	294.0	10.1	4.5	120.3	26.8	5.1	35,372	28.6	6.9

Unit Summary: PISTOL PETE SORTS U6

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	25	ALL	15.1	71	90	33,653	32,575	3.2	218.9	272.2	70.0	221.5
WH	LIVE	CUT	2	ALL	17.5	79	99	2,796	2,796	0.0	13.0	21.8	5.2	19.0
ALL	LIVE	CUT	27	ALL	15.2	72	90	36,449	35,372	3.0	231.9	294.0	75.3	240.5
ALL	ALL	ALL	27	ALL	15.2	72	90	36,449	35,372	3.0	231.9	294.0	75.3	240.5

Unit Stand Table: PISTOL PETE SORTS U6

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	10	LIVE	CUT	1	10.0	50	61	819	0.0	20.0	10.9	3.4	5.6
DF	12	LIVE	CUT	5	11.6	61	76	4,885	0.0	74.6	54.4	16.0	33.2
DF	14	LIVE	CUT	3	13.6	67	83	2,977	5.5	32.2	32.7	8.8	20.2
DF	16	LIVE	CUT	4	15.7	75	94	5,161	0.0	32.3	43.6	11.0	35.1
DF	18	LIVE	CUT	2	18.0	85	108	2,884	3.7	12.3	21.8	5.1	19.6
DF	20	LIVE	CUT	5	19.2	87	110	6,673	3.1	27.1	54.4	12.4	45.4
DF	22	LIVE	CUT	3	21.3	100	127	5,502	5.6	13.2	32.7	7.1	37.4
DF	24	LIVE	CUT	2	23.0	108	138	3,676	6.5	7.5	21.8	4.5	25.0
WH	18	LIVE	CUT	2	17.5	79	99	2,796	0.0	13.1	21.8	5.2	19.0

Unit Log Grade Summary: PISTOL PETE SORTS U6

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	14.0	34	9,096	4.4	492.1	61.9
DF	LIVE	3 SAW	8.6	40	17,847	3.2	1,064.3	121.4
DF	LIVE	4 SAW	5.4	28	5,632	1.0	345.3	38.3
WH	LIVE	3 SAW	9.6	40	2,554	0.0	171.4	17.4
WH	LIVE	4 SAW	5.3	33	242	0.0	19.5	1.6

Unit Log Sort Summary: PISTOL PETE SORTS U6

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	6.9	34	22,556	2.8	1,356.0	153.4
DF	LIVE	HQ-B	13.8	34	10,019	4.0	545.7	68.1
WH	LIVE	Domestic	8.5	38	2,796	0.0	190.9	19.0

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U6

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	HQ-B	14.0	34	9,096	4.4	492.1	61.9
DF	LIVE	3 SAW	Domestic	8.5	40	16,924	3.4	1,010.7	115.1
DF	LIVE	3 SAW	HQ-B	12.5	34	924	0.0	53.6	6.3
DF	LIVE	4 SAW	Domestic	5.4	28	5,632	1.0	345.3	38.3
WH	LIVE	3 SAW	Domestic	9.6	40	2,554	0.0	171.4	17.4
WH	LIVE	4 SAW	Domestic	5.3	33	242	0.0	19.5	1.6

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U6

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	4 SAW	5.4	28	5,632	1.0	345.3	38.3
DF	5 - 7	LIVE	3 SAW	7.1	40	5,831	2.6	383.0	39.7
DF	8 - 11	LIVE	3 SAW	9.9	40	11,093	3.8	627.8	75.4
DF	12 - 15	LIVE	3 SAW	12.5	34	924	0.0	53.6	6.3
DF	12 - 15	LIVE	2 SAW	14.0	34	9,096	4.4	492.1	61.9
WH	5 - 7	LIVE	4 SAW	5.3	33	242	0.0	19.5	1.6
WH	5 - 7	LIVE	3 SAW	6.0	40	388	0.0	25.5	2.6
WH	8 - 11	LIVE	3 SAW	11.3	40	2,166	0.0	145.9	14.7

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U6

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	6.0	32	11,464	1.8	728.3	78.0
DF	8 - 11	LIVE	Domestic	9.9	40	11,093	3.8	627.8	75.4
DF	12 - 15	LIVE	HQ-B	13.8	34	10,019	4.0	545.7	68.1
WH	5 - 7	LIVE	Domestic	5.6	36	630	0.0	45.0	4.3
WH	8 - 11	LIVE	Domestic	11.3	40	2,166	0.0	145.9	14.7

Cruise Unit Report PISTOL PETE SORTS U7

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U7

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	20.1			44	23	19	2
ALL	20.1			44	23	19	2

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U7

Sp	Tons by Grade			
	All	2 Saw	3 Saw	4 Saw
DF	355	183	153	19
ALL	355	183	153	19

Unit Cruise Design: PISTOL PETE SORTS U7

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	3.7	3.7	3	3	0

Unit Cruise Summary: PISTOL PETE SORTS U7

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
WH		1	0.3	0
DF	6	16	5.3	0
ALL	6	17	5.7	0

Unit Cruise Statistics: PISTOL PETE SORTS U7

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
WH	13.3	173.2	100.0						
DF	213.3	10.8	6.3	149.7	13.3	5.4	31,941	17.2	8.3
ALL	226.7	10.2	5.9	149.7	13.3	5.4	33,938	16.8	8.0

Unit Summary: PISTOL PETE SORTS U7

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	6	ALL	20.1	95	121	12,621	11,978	5.1	36.3	80.0	17.8	44.3
DF	LIVE	LEA	10	ALL	11.2	56	70	21,036	19,963	5.1	194.9	133.3	39.8	73.9
WH	LIVE	LEA	1	ALL	18.0	84	105				7.5	13.3	3.1	
ALL	LIVE	LEA	11	ALL	11.5	57	71	21,036	19,963	5.1	202.4	146.7	43.0	73.9
ALL	LIVE	CUT	6	ALL	20.1	95	121	12,621	11,978	5.1	36.3	80.0	17.8	44.3
ALL	ALL	ALL	17	ALL	13.2	63	79	33,657	31,941	5.1	238.7	226.7	60.8	118.2

Unit Stand Table: PISTOL PETE SORTS U7

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	18	LIVE	CUT	1	18.0	85	108	1,834	0.0	7.5	13.3	3.1	6.8
DF	20	LIVE	CUT	2	19.0	93	118	3,461	3.4	13.5	26.7	6.1	12.8
DF	22	LIVE	CUT	2	21.5	100	127	4,382	8.3	10.6	26.7	5.8	16.2
DF	24	LIVE	CUT	1	23.0	110	141	2,301	5.1	4.6	13.3	2.8	8.5
DF	8	LIVE	LEA	2	8.0	40	48	3,066	0.0	76.4	26.7	9.4	11.3
DF	10	LIVE	LEA	1	10.0	50	61	1,437	0.0	24.4	13.3	4.2	5.3
DF	12	LIVE	LEA	3	11.6	66	82	5,795	0.0	54.2	40.0	11.7	21.4
DF	14	LIVE	LEA	1	14.0	75	94	1,949	7.6	12.5	13.3	3.6	7.2
DF	16	LIVE	LEA	2	16.0	80	101	5,283	0.0	19.1	26.7	6.7	19.5
DF	18	LIVE	LEA	1	18.0	85	108	2,434	7.4	7.5	13.3	3.1	9.0
WH	18	LIVE	LEA	1	18.0	84	105			7.5	13.3	3.1	

Unit Log Grade Summary: PISTOL PETE SORTS U7

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	14.0	34	6,179	5.4	182.7	22.9
DF	LIVE	3 SAW	9.3	40	5,186	5.3	152.7	19.2
DF	LIVE	4 SAW	7.1	19	613	0.0	19.2	2.3

Unit Log Sort Summary: PISTOL PETE SORTS U7

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	8.6	33	5,799	4.8	171.9	21.5
DF	LIVE	HQ-B	14.0	34	6,179	5.4	182.7	22.9

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U7

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	HQ-B	14.0	34	6,179	5.4	182.7	22.9
DF	LIVE	3 SAW	Domestic	9.3	40	5,186	5.3	152.7	19.2
DF	LIVE	4 SAW	Domestic	7.1	19	613	0.0	19.2	2.3

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U7

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	3 SAW	6.0	40	475	0.0	14.3	1.8
DF	5 - 7	LIVE	4 SAW	7.1	19	613	0.0	19.2	2.3
DF	8 - 11	LIVE	3 SAW	10.0	40	4,710	5.8	138.3	17.4
DF	12 - 15	LIVE	2 SAW	14.0	34	6,179	5.4	182.7	22.9

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U7

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	6.8	25	1,089	0.0	33.6	4.0
DF	8 - 11	LIVE	Domestic	10.0	40	4,710	5.8	138.3	17.4
DF	12 - 15	LIVE	HQ-B	14.0	34	6,179	5.4	182.7	22.9

Cruise Unit Report PISTOL PETE SORTS U8

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U8

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	14.5			78	16	47	15
WH	17.0			11		9	2
ALL	14.7			89	16	55	17

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U8

Sp	Tons by Grade			
	All	2 Saw	3 Saw	4 Saw
DF	746	131	476	139
WH	111		88	24
ALL	857	131	564	162

Unit Cruise Design: PISTOL PETE SORTS U8

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	3.3	3.4	2	2	0

Unit Cruise Summary: PISTOL PETE SORTS U8

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	9	9	4.5	0
WH	1	1	0.5	0
ALL	10	10	5.0	0

Unit Cruise Statistics: PISTOL PETE SORTS U8

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	245.0	15.7	11.1	96.4	20.1	6.7	23,618	25.5	13.0
WH	27.2	141.4	100.0	119.3	0.0	0.0	3,247	141.4	100.0
ALL	272.2	0.0	0.0	98.7	19.9	6.3	26,865	19.9	6.3

Unit Summary: PISTOL PETE SORTS U8

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	9	ALL	14.5	65	81	24,106	23,618	2.0	213.6	245.0	64.3	77.9
WH	LIVE	CUT	1	ALL	17.0	75	94	3,247	3,247	0.0	17.3	27.2	6.6	10.7
ALL	LIVE	CUT	10	ALL	14.7	66	82	27,353	26,865	1.8	230.9	272.2	70.9	88.7
ALL	ALL	ALL	10	ALL	14.7	66	82	27,353	26,865	1.8	230.9	272.2	70.9	88.7

Unit Stand Table: PISTOL PETE SORTS U8

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	12	LIVE	CUT	2	11.5	55	67	3,957	0.0	75.9	54.4	16.1	13.1
DF	14	LIVE	CUT	2	13.5	63	78	4,666	4.2	55.0	54.4	14.8	15.4
DF	16	LIVE	CUT	2	15.5	70	88	5,377	0.0	41.7	54.4	13.8	17.7
DF	20	LIVE	CUT	3	19.3	83	106	9,617	2.8	40.1	81.7	18.6	31.7
WH	18	LIVE	CUT	1	17.0	75	94	3,247	0.0	17.3	27.2	6.6	10.7

Unit Log Grade Summary: PISTOL PETE SORTS U8

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	13.0	34	4,866	0.0	130.7	16.1
DF	LIVE	3 SAW	8.2	40	14,168	2.7	476.5	46.8
DF	LIVE	4 SAW	5.2	27	4,584	2.1	138.8	15.1
WH	LIVE	3 SAW	10.8	40	2,642	0.0	87.5	8.7
WH	LIVE	4 SAW	5.3	33	604	0.0	23.7	2.0

Unit Log Sort Summary: PISTOL PETE SORTS U8

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	6.5	34	16,443	2.9	550.3	54.3
DF	LIVE	HQ-B	12.8	34	7,175	0.0	195.7	23.7
WH	LIVE	Domestic	8.1	37	3,247	0.0	111.2	10.7

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U8

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	HQ-B	13.0	34	4,866	0.0	130.7	16.1
DF	LIVE	3 SAW	Domestic	7.8	40	11,859	3.2	411.5	39.1
DF	LIVE	3 SAW	HQ-B	12.5	34	2,309	0.0	65.0	7.6
DF	LIVE	4 SAW	Domestic	5.2	27	4,584	2.1	138.8	15.1

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
WH	LIVE	3 SAW	Domestic	10.8	40	2,642	0.0	87.5	8.7
WH	LIVE	4 SAW	Domestic	5.3	33	604	0.0	23.7	2.0

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U8

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	4 SAW	5.2	27	4,584	2.1	138.8	15.1
DF	5 - 7	LIVE	3 SAW	7.3	40	7,646	4.9	269.1	25.2
DF	8 - 11	LIVE	3 SAW	9.2	40	4,213	0.0	142.4	13.9
DF	12 - 15	LIVE	3 SAW	12.5	34	2,309	0.0	65.0	7.6
DF	12 - 15	LIVE	2 SAW	13.0	34	4,866	0.0	130.7	16.1
WH	5 - 7	LIVE	4 SAW	5.3	33	604	0.0	23.7	2.0
WH	8 - 11	LIVE	3 SAW	10.8	40	2,642	0.0	87.5	8.7

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U8

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	6.1	33	12,230	3.8	407.8	40.4
DF	8 - 11	LIVE	Domestic	9.2	40	4,213	0.0	142.4	13.9
DF	12 - 15	LIVE	HQ-B	12.8	34	7,175	0.0	195.7	23.7
WH	5 - 7	LIVE	Domestic	5.3	33	604	0.0	23.7	2.0
WH	8 - 11	LIVE	Domestic	10.8	40	2,642	0.0	87.5	8.7

Cruise Unit Report PISTOL PETE SORTS U9

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U9

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	Spec Mill	2 Saw	3 Saw	4 Saw
DF	14.5			49	4	16	20	9
RC	19.2			24			22	3
WH	12.0			5			5	
RA	12.0			3				3
ALL	15.0			81	4	16	46	14

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U9

Sp	Tons by Grade				
	All	Spec Mill	2 Saw	3 Saw	4 Saw
DF	360	22	96	161	81
RC	169			147	21
WH	56			56	
RA	26				26
ALL	611	22	96	365	128

Unit Cruise Design: PISTOL PETE SORTS U9

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	2.4	2.4	3	3	0

Unit Cruise Summary: PISTOL PETE SORTS U9

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	12	12	4.0	0
RC	7	7	2.3	0
WH	2	2	0.7	0
RA	1	1	0.3	0
ALL	22	22	7.3	0

Unit Cruise Statistics: PISTOL PETE SORTS U9

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	160.0	129.9	75.0	126.8	46.2	13.3	20,295	137.9	76.2
RC	93.3	173.2	100.0	107.8	30.7	11.6	10,060	175.9	100.7
WH	26.7	173.2	100.0	80.2	0.0	0.0	2,139	173.2	100.0
RA	13.3	173.2	100.0	80.2	0.0	0.0	1,070	173.2	100.0
ALL	293.3	41.7	24.1	114.4	42.6	9.1	33,563	59.6	25.7

Unit Summary: PISTOL PETE SORTS U9

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	12	ALL	14.5	56	73	21,044	20,295	3.6	139.5	160.0	42.0	48.7
RA	LIVE	CUT	1	ALL	12.0	45	73	1,070	1,070	0.0	17.0	13.3	3.8	2.6
RC	LIVE	CUT	7	ALL	19.2	56	71	10,163	10,060	1.0	46.4	93.3	21.3	24.1
WH	LIVE	CUT	2	ALL	12.0	48	65	2,139	2,139	0.0	34.0	26.7	7.7	5.1
ALL	LIVE	CUT	22	ALL	15.1	54	71	34,416	33,563	2.5	236.9	293.3	74.9	80.6
ALL	ALL	ALL	22	ALL	15.1	54	71	34,416	33,563	2.5	236.9	293.3	74.9	80.6

Unit Stand Table: PISTOL PETE SORTS U9

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	10	LIVE	CUT	1	10.0	30	41	685	0.0	24.4	13.3	4.2	1.6
DF	12	LIVE	CUT	3	11.6	48	65	3,415	0.0	54.2	40.0	11.7	8.2
DF	14	LIVE	CUT	1	14.0	60	74	1,484	0.0	12.5	13.3	3.6	3.6
DF	16	LIVE	CUT	3	15.6	75	93	4,937	13.2	30.0	40.0	10.1	11.8
DF	18	LIVE	CUT	1	18.0	80	101	1,909	0.0	7.5	13.3	3.1	4.6
DF	20	LIVE	CUT	1	20.0	75	94	1,779	0.0	6.1	13.3	3.0	4.3
DF	26	LIVE	CUT	1	26.0	99	126	3,016	0.0	3.6	13.3	2.6	7.2
DF	34	LIVE	CUT	1	34.0	90	115	3,069	0.0	2.1	13.3	2.3	7.4
RA	12	LIVE	CUT	1	12.0	45	73	1,070	0.0	17.0	13.3	3.8	2.6
RC	12	LIVE	CUT	1	12.0	28	35	475	0.0	17.0	13.3	3.8	1.1
RC	18	LIVE	CUT	1	18.0	69	87	1,464	0.0	7.5	13.3	3.1	3.5
RC	20	LIVE	CUT	1	20.0	66	83	1,486	0.0	6.1	13.3	3.0	3.6
RC	22	LIVE	CUT	1	22.0	76	96	1,515	0.0	5.1	13.3	2.8	3.6
RC	24	LIVE	CUT	1	24.0	75	95	1,663	0.0	4.2	13.3	2.7	4.0
RC	26	LIVE	CUT	1	26.0	77	98	1,653	0.0	3.6	13.3	2.6	4.0
RC	30	LIVE	CUT	1	30.0	80	102	1,804	5.4	2.7	13.3	2.4	4.3
WH	12	LIVE	CUT	2	12.0	47	65	2,139	0.0	34.0	26.7	7.7	5.1

Unit Log Grade Summary: PISTOL PETE SORTS U9

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	15.2	35	6,764	0.0	96.1	16.2
DF	LIVE	3 SAW	8.8	35	8,224	7.5	161.4	19.7
DF	LIVE	4 SAW	5.7	27	3,571	2.4	80.7	8.6
DF	LIVE	SPECIAL MILL	19.7	32	1,736	0.0	22.3	4.2
RA	LIVE	4 SAW	6.5	40	1,070	0.0	25.8	2.6
RC	LIVE	3 SAW	12.1	33	8,995	1.1	147.4	21.6
RC	LIVE	4 SAW	6.4	27	1,065	0.0	21.2	2.6
WH	LIVE	3 SAW	6.2	40	2,139	0.0	56.1	5.1

Unit Log Sort Summary: PISTOL PETE SORTS U9

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	6.5	30	6,652	10.1	148.0	16.0
DF	LIVE	HQ-A	19.0	34	4,895	0.0	61.9	11.7
DF	LIVE	HQ-B	9.7	33	6,838	0.0	114.9	16.4
DF	LIVE	Pole	9.4	38	1,909	0.0	35.6	4.6
RA	LIVE	Domestic	6.5	40	1,070	0.0	25.8	2.6
RC	LIVE	Domestic	9.3	29	4,336	2.3	74.8	10.4
RC	LIVE	Pole	10.9	33	5,724	0.0	93.7	13.7
WH	LIVE	Domestic	6.2	40	2,139	0.0	56.1	5.1

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U9

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	14.6	32	1,394	0.0	21.3	3.3
DF	LIVE	2 SAW	HQ-A	18.5	35	3,159	0.0	39.7	7.6
DF	LIVE	2 SAW	HQ-B	18.1	26	731	0.0	9.3	1.8
DF	LIVE	2 SAW	Pole	12.4	40	1,479	0.0	25.8	3.5
DF	LIVE	3 SAW	Domestic	7.8	37	2,118	23.8	55.7	5.1
DF	LIVE	3 SAW	HQ-B	9.4	33	6,106	0.0	105.7	14.7
DF	LIVE	4 SAW	Domestic	5.7	27	3,141	2.7	70.9	7.5
DF	LIVE	4 SAW	Pole	6.4	36	430	0.0	9.8	1.0
DF	LIVE	SPECIAL MILL	HQ-A	19.7	32	1,736	0.0	22.3	4.2
RA	LIVE	4 SAW	Domestic	6.5	40	1,070	0.0	25.8	2.6
RC	LIVE	3 SAW	Domestic	12.2	31	3,861	2.6	63.3	9.3
RC	LIVE	3 SAW	Pole	11.9	35	5,134	0.0	84.0	12.3
RC	LIVE	4 SAW	Domestic	5.5	26	475	0.0	11.5	1.1
RC	LIVE	4 SAW	Pole	7.9	28	589	0.0	9.7	1.4

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
WH	LIVE	3 SAW	Domestic	6.2	40	2,139	0.0	56.1	5.1

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U9

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	4 SAW	5.6	28	3,366	2.5	77.5	8.1
DF	5 - 7	LIVE	3 SAW	6.5	40	1,455	0.0	34.9	3.5
DF	8 - 11	LIVE	3 SAW	9.6	33	6,769	8.9	126.5	16.2
DF	12 - 15	LIVE	4 SAW	13.1	16	205	0.0	3.2	0.5
DF	12 - 15	LIVE	2 SAW	13.8	35	3,900	0.0	60.5	9.4
DF	16 - 19	LIVE	2 SAW	18.1	26	731	0.0	9.3	1.8
DF	16 - 19	LIVE	SPECIAL MILL	19.7	32	1,736	0.0	22.3	4.2
DF	20+	LIVE	2 SAW	24.1	40	2,132	0.0	26.3	5.1
RA	6 - 9	LIVE	4 SAW	6.5	40	1,070	0.0	25.8	2.6
RC	5+	LIVE	4 SAW	6.4	27	1,065	0.0	21.2	2.6
RC	5+	LIVE	3 SAW	12.1	33	8,995	1.1	147.4	21.6
WH	5 - 7	LIVE	3 SAW	6.2	40	2,139	0.0	56.1	5.1

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U9

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	5.7	29	4,390	1.9	102.7	10.5
DF	5 - 7	LIVE	Pole	6.4	36	430	0.0	9.8	1.0
DF	8 - 11	LIVE	HQ-B	9.4	33	6,106	0.0	105.7	14.7
DF	8 - 11	LIVE	Domestic	10.7	32	663	50.0	20.8	1.6
DF	12 - 15	LIVE	Pole	12.4	40	1,479	0.0	25.8	3.5
DF	12 - 15	LIVE	Domestic	14.2	28	1,599	0.0	24.5	3.8
DF	12 - 15	LIVE	HQ-A	15.3	32	1,027	0.0	13.4	2.5
DF	16 - 19	LIVE	HQ-B	18.1	26	731	0.0	9.3	1.8
DF	16 - 19	LIVE	HQ-A	19.7	32	1,736	0.0	22.3	4.2
DF	20+	LIVE	HQ-A	24.1	40	2,132	0.0	26.3	5.1
RA	6 - 9	LIVE	Domestic	6.5	40	1,070	0.0	25.8	2.6
RC	5+	LIVE	Domestic	9.3	29	4,336	2.3	74.8	10.4
RC	5+	LIVE	Pole	10.9	33	5,724	0.0	93.7	13.7
WH	5 - 7	LIVE	Domestic	6.2	40	2,139	0.0	56.1	5.1

Cruise Unit Report PISTOL PETE SORTS U10

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U10

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	3 Saw	4 Saw
DF	14.0			9	6	3
RC	11.0			1	1	
ALL	13.4			11	7	3

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U10

Sp	Tons by Grade		
	All	3 Saw	4 Saw
DF	84	53	31
RC	9	9	
ALL	93	62	31

Unit Cruise Design: PISTOL PETE SORTS U10

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	0.4	0.4	1	1	0

Unit Cruise Summary: PISTOL PETE SORTS U10

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	4	4	4.0	0
RC	1	1	1.0	0
ALL	5	5	5.0	0

Unit Cruise Statistics: PISTOL PETE SORTS U10

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	217.8	0.0	0.0	105.6	21.2	10.6	22,988	21.2	10.6
RC	40.0	0.0	0.0	86.4	0.0	0.0	3,455	0.0	0.0
ALL	257.8	0.0	0.0	102.6	20.7	9.3	26,442	20.7	9.3

Unit Summary: PISTOL PETE SORTS U10

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	4	ALL	14.0	66	82	23,456	22,988	2.0	203.7	217.8	58.2	9.2
RC	LIVE	CUT	1	ALL	11.0	50	61	3,455	3,455	0.0	60.6	40.0	12.1	1.4
ALL	LIVE	CUT	5	ALL	13.4	62	77	26,910	26,442	1.7	264.3	257.8	70.3	10.6
ALL	ALL	ALL	5	ALL	13.4	62	77	26,910	26,442	1.7	264.3	257.8	70.3	10.6

Unit Stand Table: PISTOL PETE SORTS U10

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	10	LIVE	CUT	1	10.0	55	68	4,292	0.0	99.8	54.4	17.2	1.7
DF	16	LIVE	CUT	1	16.0	70	88	5,186	8.3	39.0	54.4	13.6	2.1
DF	18	LIVE	CUT	2	17.5	80	101	13,510	0.0	65.3	108.9	26.0	5.4
RC	12	LIVE	CUT	1	11.0	50	61	3,455	0.0	60.6	40.0	12.1	1.4

Unit Log Grade Summary: PISTOL PETE SORTS U10

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	3 SAW	10.4	40	14,885	3.0	53.0	6.0
DF	LIVE	4 SAW	5.2	37	8,102	0.0	31.1	3.2
RC	LIVE	3 SAW	6.0	36	3,455	0.0	9.1	1.4

Unit Log Sort Summary: PISTOL PETE SORTS U10

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	6.9	38	22,988	2.0	84.0	9.2
RC	LIVE	Domestic	6.0	36	3,455	0.0	9.1	1.4

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U10

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	3 SAW	Domestic	10.4	40	14,885	3.0	53.0	6.0
DF	LIVE	4 SAW	Domestic	5.2	37	8,102	0.0	31.1	3.2
RC	LIVE	3 SAW	Domestic	6.0	36	3,455	0.0	9.1	1.4

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U10

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	4 SAW	5.2	37	8,102	0.0	31.1	3.2
DF	8 - 11	LIVE	3 SAW	10.4	40	14,885	3.0	53.0	6.0

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
RC	5+	LIVE	3 SAW	6.0	36	3,455	0.0	9.1	1.4

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U10

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	5.2	37	8,102	0.0	31.1	3.2
DF	8 - 11	LIVE	Domestic	10.4	40	14,885	3.0	53.0	6.0
RC	5+	LIVE	Domestic	6.0	36	3,455	0.0	9.1	1.4

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Cruise Unit Report PISTOL PETE SORTS U11

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U11

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	10.1			6	1	2	3	0
ALL	10.1			6	1	2	3	0

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U11

Sp	Tons by Grade				
	All	2 Saw	3 Saw	4 Saw	Utility
DF	43	6	14	20	2
ALL	43	6	14	20	2

Unit Cruise Design: PISTOL PETE SORTS U11

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.4	0.5	2	2	0

Unit Cruise Summary: PISTOL PETE SORTS U11

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	9	10	5.0	0
ALL	9	10	5.0	0

Unit Cruise Statistics: PISTOL PETE SORTS U11

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	200.0	28.3	20.0	80.5	48.3	16.1	16,106	56.0	25.7
ALL	200.0	28.3	20.0	80.5	48.3	16.1	16,106	56.0	25.7

Unit Summary: PISTOL PETE SORTS U11

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	9	ALL	9.8	26	36	16,106	16,106	0.0	381.8	200.0	63.9	6.4
ALL	LIVE	CUT	9	ALL	9.8	26	36	16,106	16,106	0.0	381.8	200.0	63.9	6.4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
ALL	ALL	ALL	9	ALL	9.8	26	36	16,106	16,106	0.0	381.8	200.0	63.9	6.4

Unit Stand Table: PISTOL PETE SORTS U11

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	8	LIVE	CUT	5	8.0	21	31	6,481	0.0	286.5	100.0	35.4	2.6
DF	10	LIVE	CUT	1	10.0	22	27	953	0.0	36.7	20.0	6.3	0.4
DF	12	LIVE	CUT	1	12.0	38	49	993	0.0	25.5	20.0	5.8	0.4
DF	16	LIVE	CUT	2	16.0	61	76	4,770	0.0	28.6	40.0	10.0	1.9
DF	24	LIVE	CUT	1	24.0	75	95	2,909	0.0	6.4	20.0	4.1	1.2

Unit Log Grade Summary: PISTOL PETE SORTS U11

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	17.3	32	2,610	0.0	6.0	1.0
DF	LIVE	3 SAW	10.1	33	4,856	0.0	14.5	1.9
DF	LIVE	4 SAW	6.1	21	7,558	0.0	20.2	3.0
DF	LIVE	UTILITY	5.7	16	1,082	0.0	2.2	0.4

Unit Log Sort Summary: PISTOL PETE SORTS U11

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	6.1	20	6,762	0.0	17.7	2.7
DF	LIVE	HQ-A	17.3	32	2,610	0.0	6.0	1.0
DF	LIVE	HQ-B	9.5	34	2,564	0.0	8.5	1.0
DF	LIVE	Pole	8.7	32	3,088	0.0	8.5	1.2
DF	LIVE	Pulp	5.7	16	1,082	0.0	2.2	0.4

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U11

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	HQ-A	17.3	32	2,610	0.0	6.0	1.0
DF	LIVE	3 SAW	HQ-B	9.5	34	2,564	0.0	8.5	1.0
DF	LIVE	3 SAW	Pole	11.0	32	2,292	0.0	6.0	0.9
DF	LIVE	4 SAW	Domestic	6.1	20	6,762	0.0	17.7	2.7
DF	LIVE	4 SAW	Pole	6.3	32	796	0.0	2.5	0.3
DF	LIVE	UTILITY	Pulp	5.7	16	1,082	0.0	2.2	0.4

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U11

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	UTILITY	5.7	16	1,082	0.0	2.2	0.4
DF	5 - 7	LIVE	4 SAW	6.1	21	7,558	0.0	20.2	3.0
DF	8 - 11	LIVE	3 SAW	10.1	33	4,856	0.0	14.5	1.9
DF	16 - 19	LIVE	2 SAW	17.3	32	2,610	0.0	6.0	1.0

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U11

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Pulp	5.7	16	1,082	0.0	2.2	0.4
DF	5 - 7	LIVE	Domestic	6.1	20	6,762	0.0	17.7	2.7
DF	5 - 7	LIVE	Pole	6.3	32	796	0.0	2.5	0.3
DF	8 - 11	LIVE	HQ-B	9.5	34	2,564	0.0	8.5	1.0
DF	8 - 11	LIVE	Pole	11.0	32	2,292	0.0	6.0	0.9
DF	16 - 19	LIVE	HQ-A	17.3	32	2,610	0.0	6.0	1.0

Cruise Unit Report PISTOL PETE SORTS U12

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U12

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	14.3			71	22	38	11
GF	11.0			5		4	1
RC	8.8			4			4
ALL	13.0			79	22	42	15

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U12

Sp	Tons by Grade			
	All	2 Saw	3 Saw	4 Saw
DF	529	145	293	91
GF	34		27	7
RC	22			22
ALL	586	145	320	121

Unit Cruise Design: PISTOL PETE SORTS U12

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	5.2	5.2	5	5	1

Unit Cruise Summary: PISTOL PETE SORTS U12

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	15	15	3.0	0
GF	1	1	0.2	0
RC	2	2	0.4	0
ALL	18	18	3.6	0

Unit Cruise Statistics: PISTOL PETE SORTS U12

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	120.0	70.7	31.6	113.9	22.9	5.9	13,668	74.3	32.2
GF	8.0	223.6	100.0	113.6	0.0	0.0	909	223.6	100.0

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
RC	16.0	136.9	61.2	42.7	19.9	14.1	683	138.4	62.8
ALL	144.0	63.9	28.6	106.0	31.2	7.4	15,260	71.2	29.5

Unit Summary: PISTOL PETE SORTS U12

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	15	ALL	14.3	53	66	13,829	13,668	1.2	107.6	120.0	31.7	71.1
GF	LIVE	CUT	1	ALL	11.0	50	71	909	909	0.0	12.1	8.0	2.4	4.7
RC	LIVE	CUT	2	ALL	8.8	18	30	683	683	0.0	37.9	16.0	5.4	3.6
ALL	LIVE	CUT	18	ALL	12.9	44	58	15,422	15,260	1.0	157.6	144.0	39.5	79.4
ALL	ALL	ALL	18	ALL	12.9	44	58	15,422	15,260	1.0	157.6	144.0	39.5	79.4

Unit Stand Table: PISTOL PETE SORTS U12

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	8	LIVE	CUT	1	8.0	20	27	435	0.0	22.9	8.0	2.8	2.3
DF	12	LIVE	CUT	2	12.0	50	64	1,487	0.0	20.4	16.0	4.6	7.7
DF	14	LIVE	CUT	1	14.0	55	68	689	16.4	7.5	8.0	2.1	3.6
DF	16	LIVE	CUT	6	16.0	62	77	5,592	0.0	34.4	48.0	12.0	29.1
DF	18	LIVE	CUT	4	18.0	73	91	4,338	0.6	18.1	32.0	7.5	22.6
DF	20	LIVE	CUT	1	20.0	80	101	1,126	0.0	3.7	8.0	1.8	5.9
GF	12	LIVE	CUT	1	11.0	50	71	909	0.0	12.1	8.0	2.4	4.7
RC	8	LIVE	CUT	1	8.0	18	34	390	0.0	22.9	8.0	2.8	2.0
RC	10	LIVE	CUT	1	10.0	19	24	293	0.0	14.7	8.0	2.5	1.5

Unit Log Grade Summary: PISTOL PETE SORTS U12

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	13.0	33	4,220	0.0	145.1	21.9
DF	LIVE	3 SAW	8.9	34	7,382	2.1	292.9	38.4
DF	LIVE	4 SAW	5.5	21	2,065	0.0	91.4	10.7
GF	LIVE	3 SAW	7.5	32	703	0.0	27.1	3.7
GF	LIVE	4 SAW	5.0	16	206	0.0	7.2	1.1
RC	LIVE	4 SAW	5.6	16	683	0.0	22.0	3.6

Unit Log Sort Summary: PISTOL PETE SORTS U12

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	6.9	25	5,640	2.8	220.0	29.3
DF	LIVE	Pole	9.0	31	8,028	0.0	309.5	41.7
GF	LIVE	Domestic	6.3	24	909	0.0	34.3	4.7
RC	LIVE	Domestic	5.6	16	683	0.0	22.0	3.6

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U12

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	13.0	32	874	0.0	28.2	4.5
DF	LIVE	2 SAW	Pole	13.0	34	3,346	0.0	116.9	17.4
DF	LIVE	3 SAW	Domestic	8.7	33	3,525	4.4	144.3	18.3
DF	LIVE	3 SAW	Pole	9.3	34	3,857	0.0	148.7	20.1
DF	LIVE	4 SAW	Domestic	5.3	19	1,241	0.0	47.5	6.5
DF	LIVE	4 SAW	Pole	6.1	25	824	0.0	43.9	4.3
GF	LIVE	3 SAW	Domestic	7.5	32	703	0.0	27.1	3.7
GF	LIVE	4 SAW	Domestic	5.0	16	206	0.0	7.2	1.1
RC	LIVE	4 SAW	Domestic	5.6	16	683	0.0	22.0	3.6

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U12

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	4 SAW	5.3	21	1,888	0.0	84.0	9.8
DF	5 - 7	LIVE	3 SAW	7.1	35	2,249	1.2	108.6	11.7
DF	8 - 11	LIVE	4 SAW	9.6	16	177	0.0	7.4	0.9
DF	8 - 11	LIVE	3 SAW	10.6	32	5,134	2.6	184.3	26.7
DF	12 - 15	LIVE	2 SAW	13.0	33	4,220	0.0	145.1	21.9
GF	5 - 7	LIVE	4 SAW	5.0	16	206	0.0	7.2	1.1
GF	5 - 7	LIVE	3 SAW	7.5	32	703	0.0	27.1	3.7
RC	5+	LIVE	4 SAW	5.6	16	683	0.0	22.0	3.6

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U12

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Pole	5.7	31	1,456	0.0	79.9	7.6
DF	5 - 7	LIVE	Domestic	5.9	23	2,680	1.0	112.8	13.9
DF	8 - 11	LIVE	Domestic	10.3	32	2,085	6.1	79.0	10.8
DF	8 - 11	LIVE	Pole	10.6	29	3,225	0.0	112.7	16.8

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	12 - 15	LIVE	Domestic	13.0	32	874	0.0	28.2	4.5
DF	12 - 15	LIVE	Pole	13.0	34	3,346	0.0	116.9	17.4
GF	5 - 7	LIVE	Domestic	6.3	24	909	0.0	34.3	4.7
RC	5+	LIVE	Domestic	5.6	16	683	0.0	22.0	3.6

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Cruise Unit Report PISTOL PETE SORTS U13

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U13

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	3 Saw	4 Saw
DF	14.2	7.0		6	5	1
ALL	14.2	7.0		6	5	1

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U13

Sp	Tons by Grade		
	All	3 Saw	4 Saw
DF	43	32	10
ALL	43	32	10

Unit Cruise Design: PISTOL PETE SORTS U13

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.4	0.4	1	1	0

Unit Cruise Summary: PISTOL PETE SORTS U13

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	2	3	3.0	1
ALL	2	3	3.0	1

Unit Cruise Statistics: PISTOL PETE SORTS U13

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	120.0	0.0	0.0	117.3	8.9	6.3	14,077	8.9	6.3
ALL	120.0	0.0	0.0	117.3	8.9	6.3	14,077	8.9	6.3

Unit Summary: PISTOL PETE SORTS U13

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	2	ALL	14.2	65	81	14,250	14,077	1.2	109.1	120.0	31.8	5.6
ALL	LIVE	CUT	2	ALL	14.2	65	81	14,250	14,077	1.2	109.1	120.0	31.8	5.6

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
ALL	ALL	ALL	2	ALL	14.2	65	81	14,250	14,077	1.2	109.1	120.0	31.8	5.6

Unit Stand Table: PISTOL PETE SORTS U13

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	14	LIVE	CUT	1	13.0	65	82	4,297	3.9	43.4	40.0	11.1	1.7
DF	16	LIVE	CUT	1	15.0	65	81	9,780	0.0	65.2	80.0	20.7	3.9

Unit Log Grade Summary: PISTOL PETE SORTS U13

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	3 SAW	9.4	34	11,383	0.0	32.2	4.6
DF	LIVE	4 SAW	5.6	24	2,694	6.1	10.4	1.1

Unit Log Sort Summary: PISTOL PETE SORTS U13

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	7.5	29	14,077	1.2	42.6	5.6

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U13

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	3 SAW	Domestic	9.4	34	11,383	0.0	32.2	4.6
DF	LIVE	4 SAW	Domestic	5.6	24	2,694	6.1	10.4	1.1

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U13

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5-7	LIVE	4 SAW	5.6	24	2,694	6.1	10.4	1.1
DF	8-11	LIVE	3 SAW	9.4	34	11,383	0.0	32.2	4.6

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U13

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5-7	LIVE	Domestic	5.6	24	2,694	6.1	10.4	1.1
DF	8-11	LIVE	Domestic	9.4	34	11,383	0.0	32.2	4.6

Cruise Unit Report PISTOL PETE SORTS U14

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U14

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	4 Saw	Utility
DF	8.8			1	0	0
ALL	8.8			1	0	0

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U14

Sp	Tons by Grade		
	All	4 Saw	Utility
DF	4	2	2
ALL	4	2	2

Unit Cruise Design: PISTOL PETE SORTS U14

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
FX: FR plots (1 tree / acre expansion)	1.7	1.7	1	1	0

Unit Cruise Summary: PISTOL PETE SORTS U14

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	21	22	22.0	0
ALL	21	22	22.0	0

Unit Cruise Statistics: PISTOL PETE SORTS U14

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	9.3	0.0	0.0	44.5	10.0	2.2	412	10.0	2.2
ALL	9.3	0.0	0.0	44.5	10.0	2.2	412	10.0	2.2

Unit Summary: PISTOL PETE SORTS U14

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	21	ALL	8.8	20	22	412	412	0.0	21.9	9.3	3.1	0.7
ALL	LIVE	CUT	21	ALL	8.8	20	22	412	412	0.0	21.9	9.3	3.1	0.7
ALL	ALL	ALL	21	ALL	8.8	20	22	412	412	0.0	21.9	9.3	3.1	0.7

Unit Stand Table: PISTOL PETE SORTS U14

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	8	LIVE	CUT	16	8.0	19	20	264	0.0	16.0	5.6	2.0	0.4
DF	10	LIVE	CUT	4	10.0	22	28	97	0.0	4.0	2.2	0.7	0.2
DF	12	LIVE	CUT	2	11.5	21	24	51	0.0	2.0	1.5	0.4	0.1

Unit Log Grade Summary: PISTOL PETE SORTS U14

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	4 SAW	6.3	17	162	0.0	1.8	0.3
DF	LIVE	UTILITY	5.8	16	249	0.0	1.9	0.4

Unit Log Sort Summary: PISTOL PETE SORTS U14

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	6.3	17	162	0.0	1.8	0.3
DF	LIVE	Pulp	5.8	16	249	0.0	1.9	0.4

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U14

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	4 SAW	Domestic	6.3	17	162	0.0	1.8	0.3
DF	LIVE	UTILITY	Pulp	5.8	16	249	0.0	1.9	0.4

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U14

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5-7	LIVE	UTILITY	5.8	16	249	0.0	1.9	0.4
DF	5-7	LIVE	4 SAW	6.3	17	162	0.0	1.8	0.3

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U14

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5-7	LIVE	Pulp	5.8	16	249	0.0	1.9	0.4
DF	5-7	LIVE	Domestic	6.3	17	162	0.0	1.8	0.3

Cruise Unit Report PISTOL PETE SORTS U15

Unit Sale Notice Volume (MBF): PISTOL PETE SORTS U15

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	3 Saw	4 Saw
DF	11.3			28	11	17
ALL	11.3			28	11	17

Unit Sale Notice Weight (tons): PISTOL PETE SORTS U15

Sp	Tons by Grade		
	All	3 Saw	4 Saw
DF	266	110	155
ALL	266	110	155

Unit Cruise Design: PISTOL PETE SORTS U15

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	2.1	2.1	2	2	0

Unit Cruise Summary: PISTOL PETE SORTS U15

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	9	9	4.5	0
ALL	9	9	4.5	0

Unit Cruise Statistics: PISTOL PETE SORTS U15

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	180.0	15.7	11.1	73.5	13.8	4.6	13,233	20.9	12.0
ALL	180.0	15.7	11.1	73.5	13.8	4.6	13,233	20.9	12.0

Unit Summary: PISTOL PETE SORTS U15

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	9	ALL	11.3	50	61	13,308	13,233	0.6	258.5	180.0	53.5	27.8
ALL	LIVE	CUT	9	ALL	11.3	50	61	13,308	13,233	0.6	258.5	180.0	53.5	27.8

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
ALL	ALL	ALL	9	ALL	11.3	50	61	13,308	13,233	0.6	258.5	180.0	53.5	27.8

Unit Stand Table: PISTOL PETE SORTS U15

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	10	LIVE	CUT	3	10.0	45	54	3,960	0.0	110.0	60.0	19.0	8.3
DF	12	LIVE	CUT	3	11.3	51	63	4,465	0.0	86.1	60.0	17.8	9.4
DF	14	LIVE	CUT	3	13.3	57	70	4,808	1.5	62.1	60.0	16.4	10.1

Unit Log Grade Summary: PISTOL PETE SORTS U15

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	3 SAW	7.7	34	5,266	1.4	110.3	11.1
DF	LIVE	4 SAW	5.1	29	7,967	0.0	155.4	16.7

Unit Log Sort Summary: PISTOL PETE SORTS U15

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	5.7	30	13,233	0.6	265.7	27.8

Unit Log Grade x Sort Summary: PISTOL PETE SORTS U15

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	3 SAW	Domestic	7.7	34	5,266	1.4	110.3	11.1
DF	LIVE	4 SAW	Domestic	5.1	29	7,967	0.0	155.4	16.7

Unit Log Grade x Diameter Bin Summary: PISTOL PETE SORTS U15

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5-7	LIVE	4 SAW	5.1	29	7,967	0.0	155.4	16.7
DF	5-7	LIVE	3 SAW	7.7	34	5,266	1.4	110.3	11.1

Unit Log Sort x Diameter Bin Summary: PISTOL PETE SORTS U15

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5-7	LIVE	Domestic	5.7	30	13,233	0.6	265.7	27.8

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

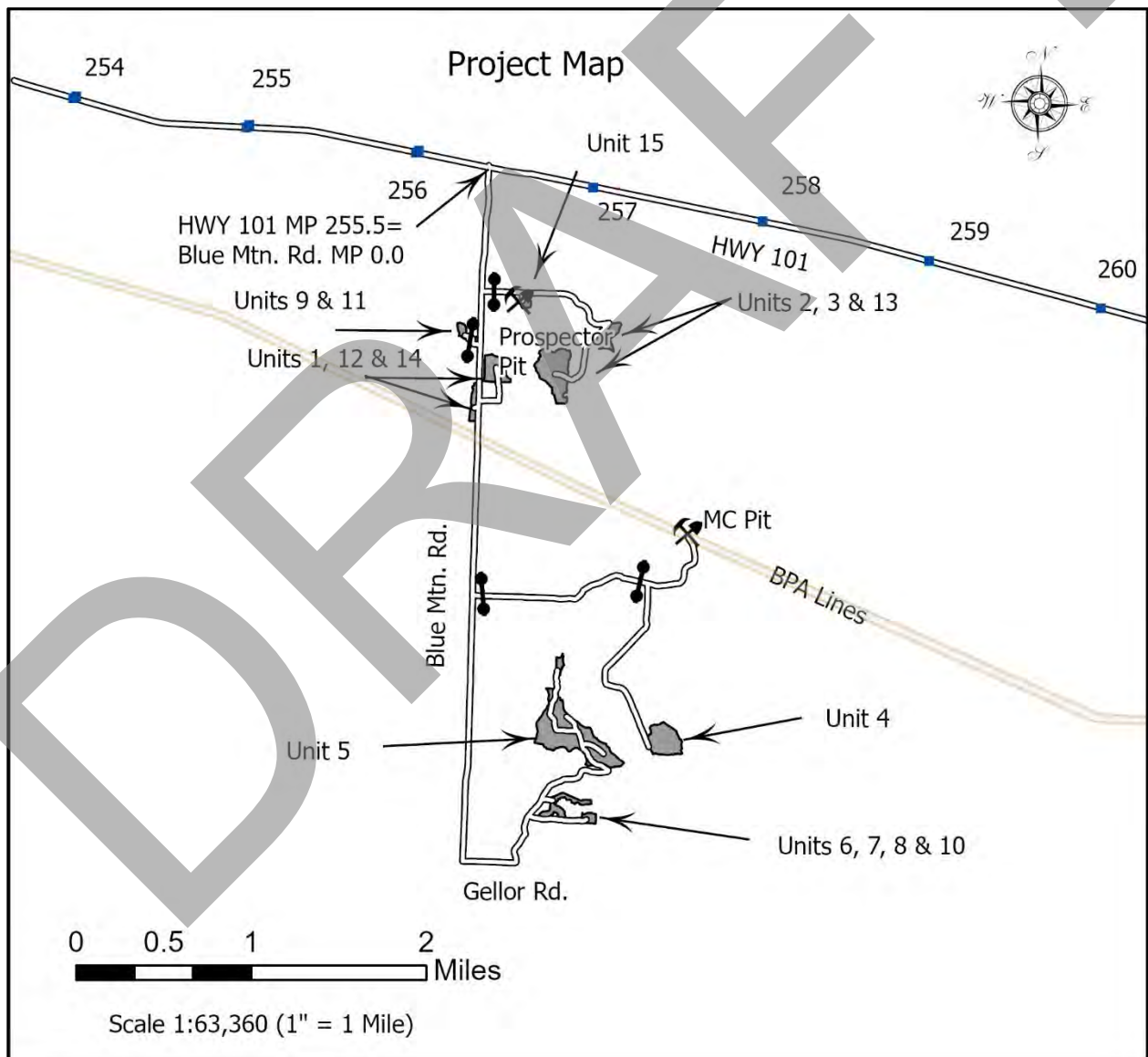
PISTOL PETE SORTS TIMBER SALE ROAD PLAN
CLALLAM COUNTY
STRAITS DISTRICT
OLYMPIC REGION

AGREEMENT NO.: 30-104814

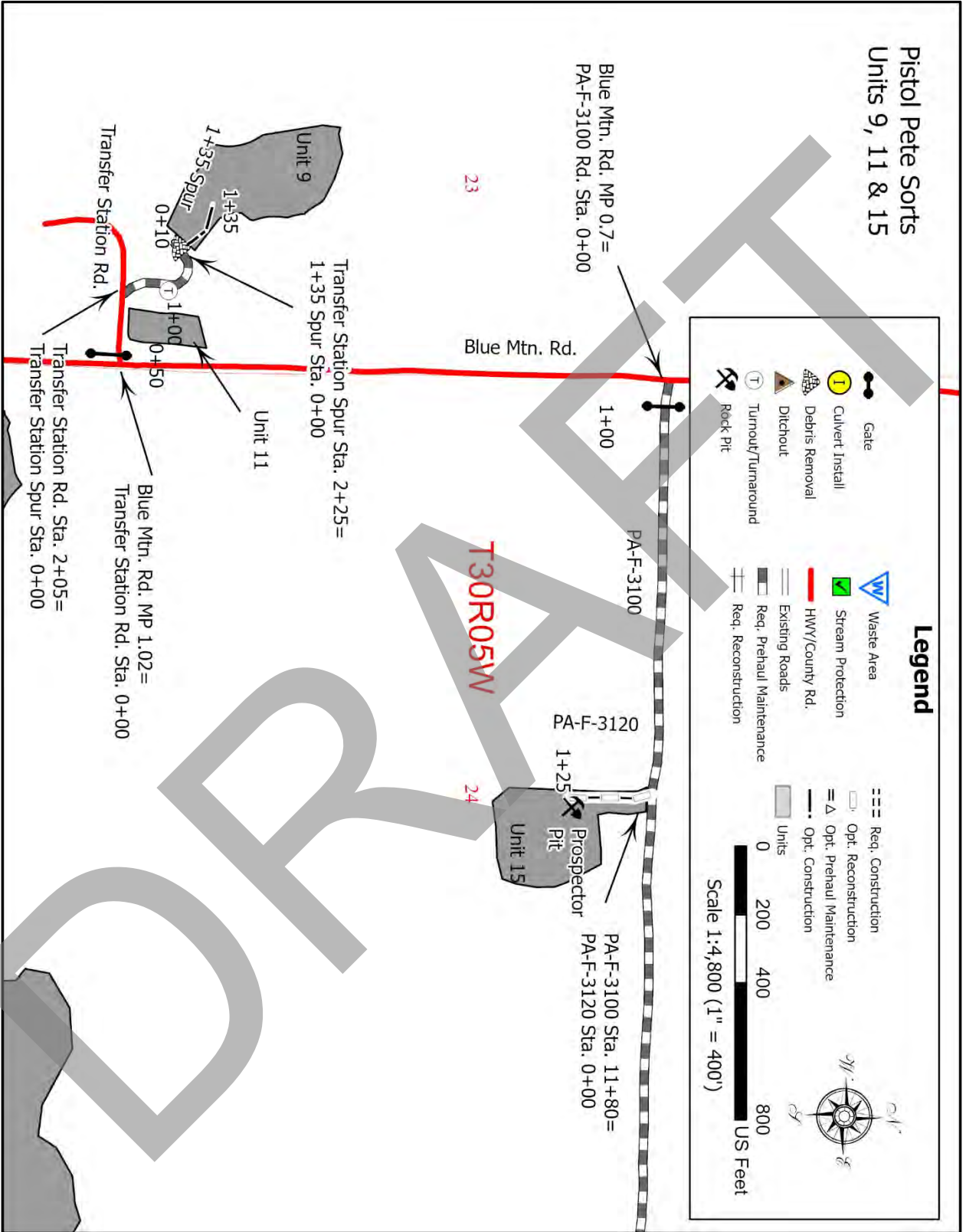
DISTRICT ENGINEER: GREGORY ELLIS

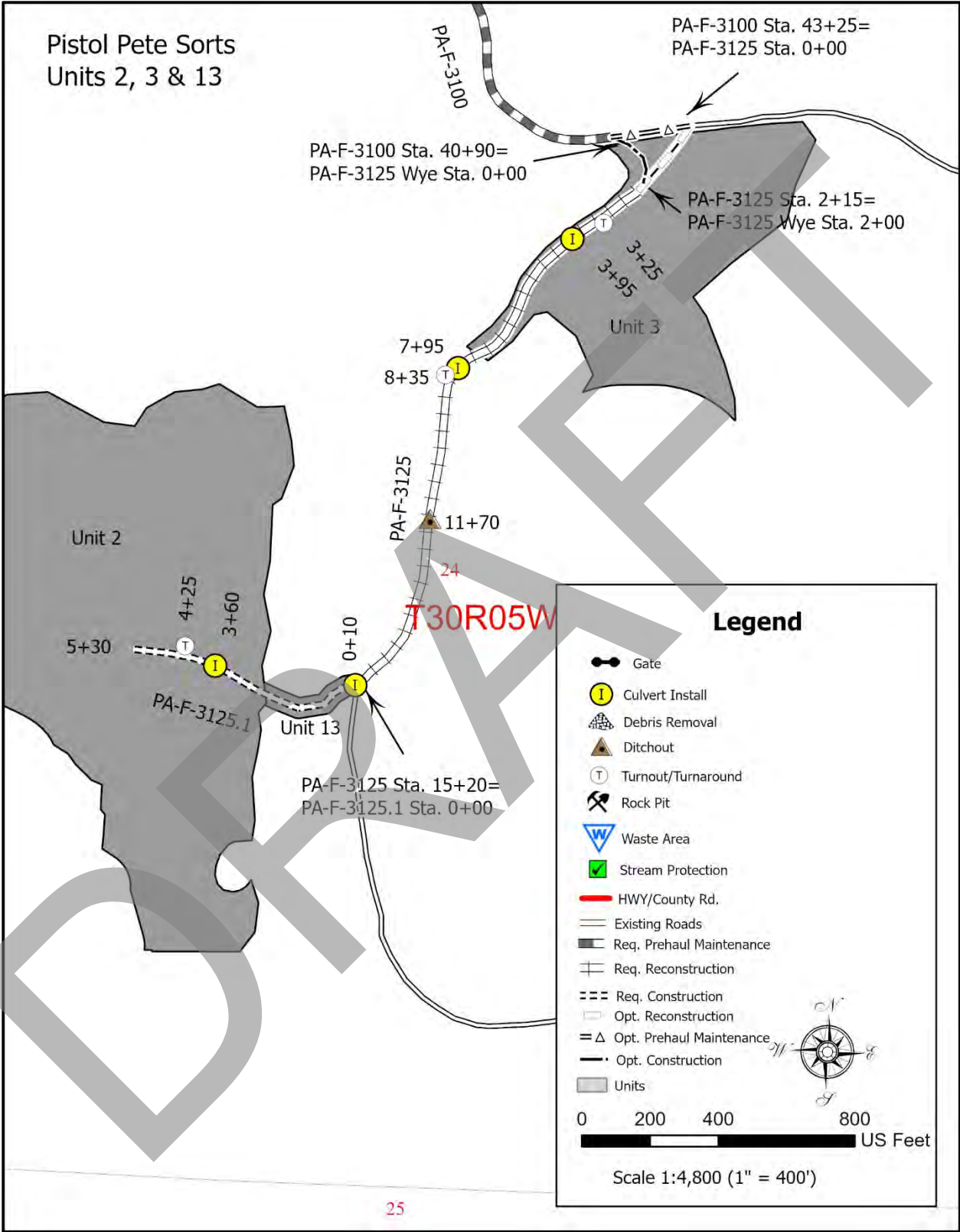
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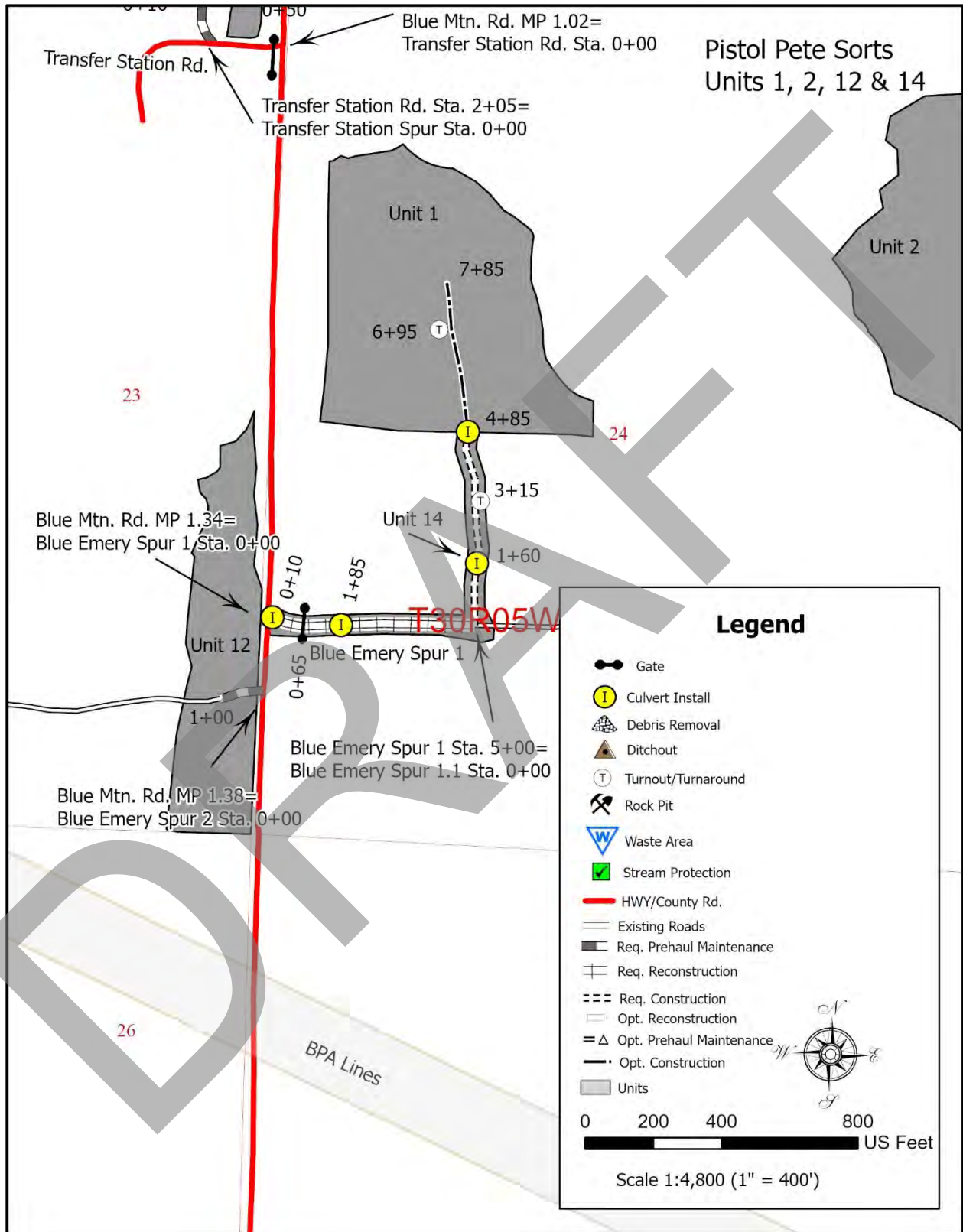
DRAWN & COMPILED BY: GREGORY ELLIS

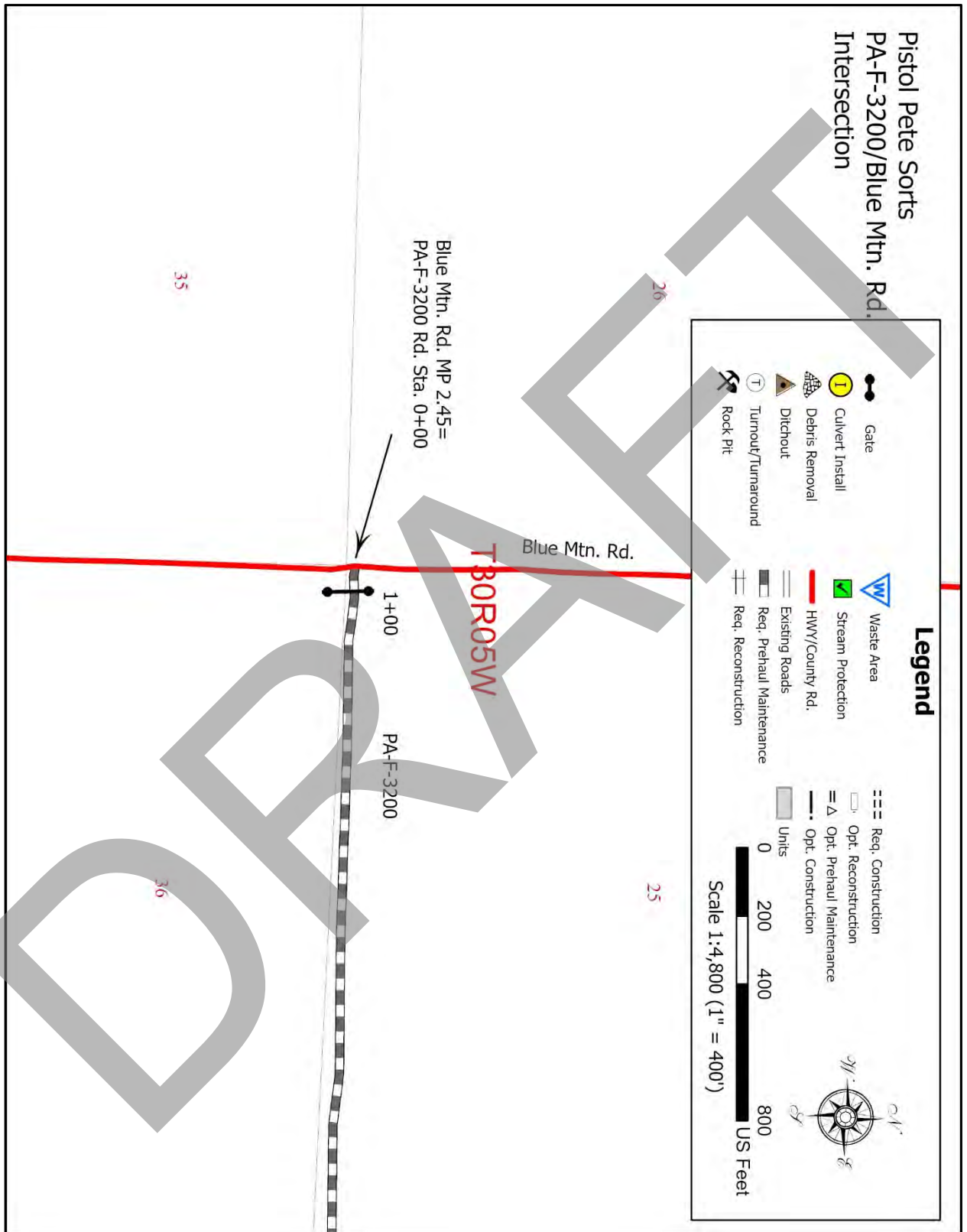


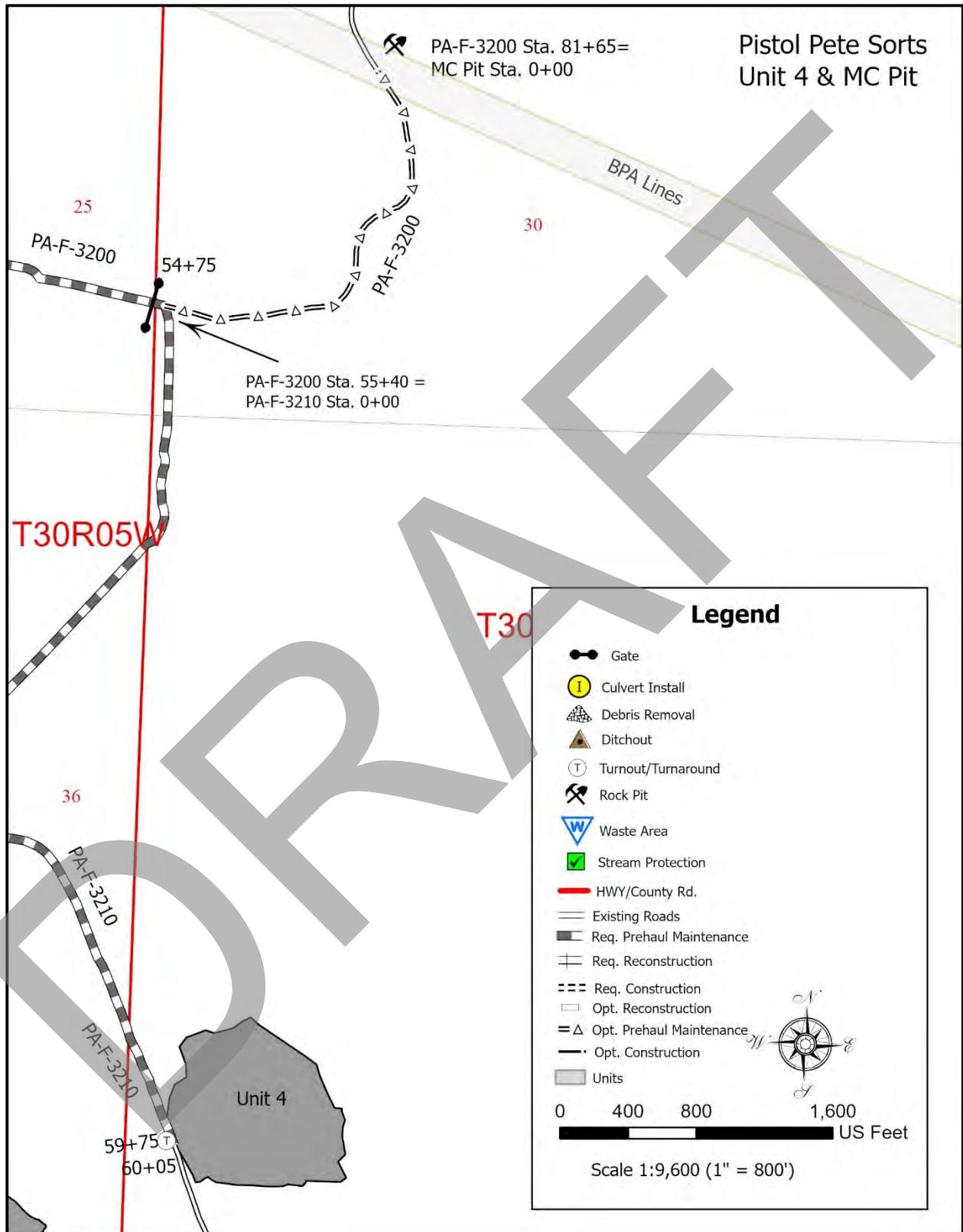
Pistol Pete Sorts Units 9, 11 & 15

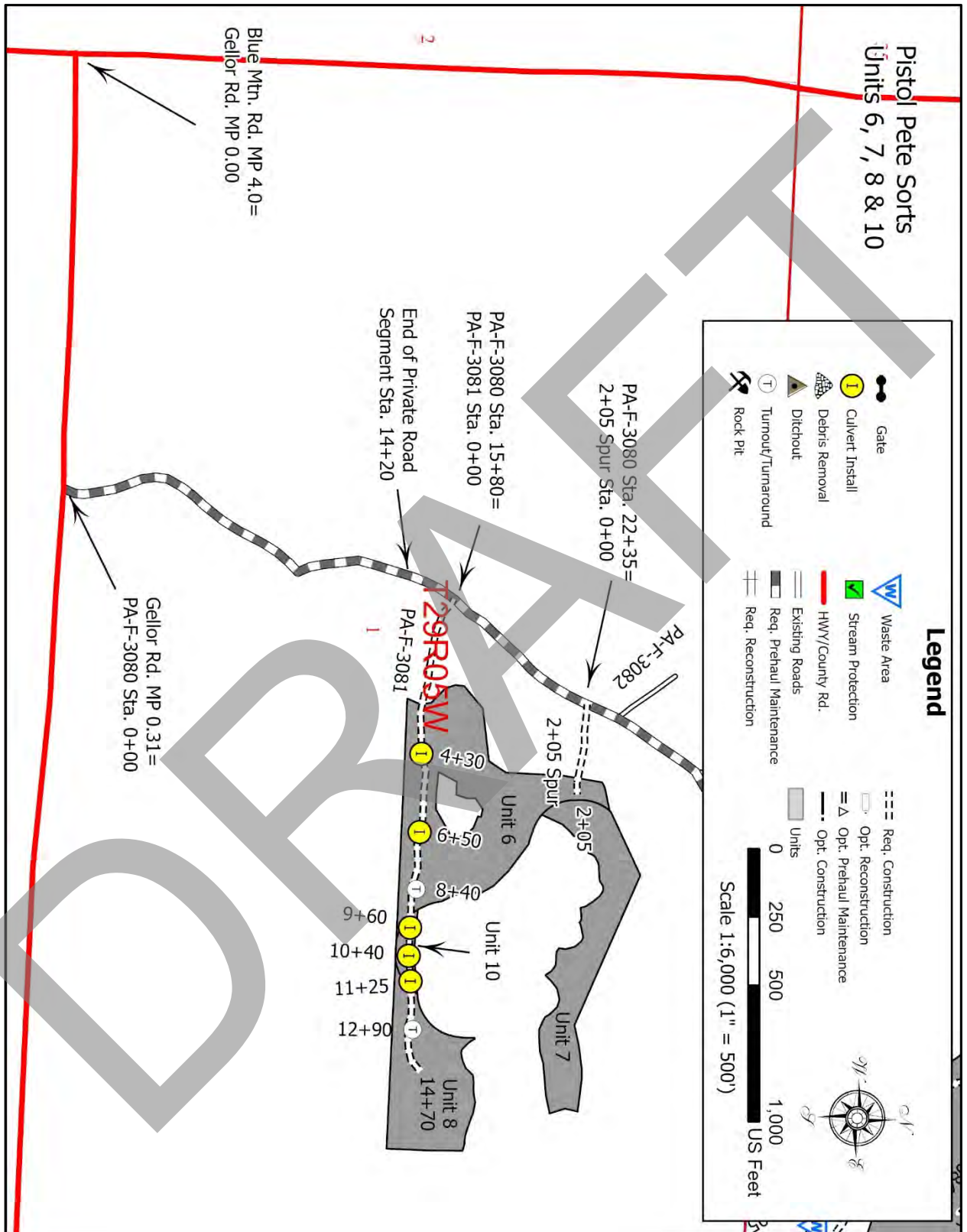




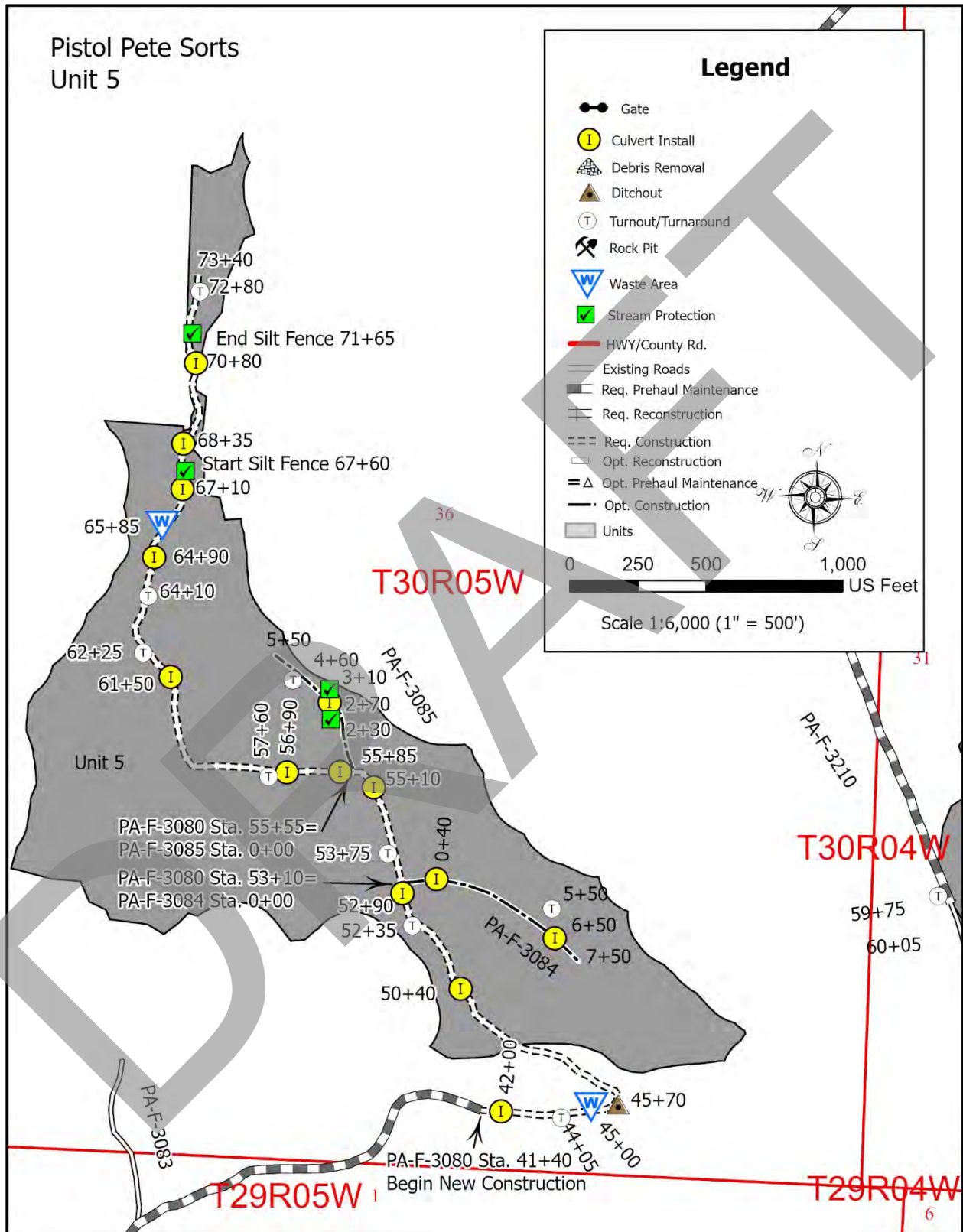








Pistol Pete Sorts
Unit 5



SECTION 0 – SCOPE OF PROJECT

0-1 ROAD PLAN SCOPE

Clauses in this road plan apply to all road related work, including landings and rock source development, unless otherwise noted.

0-2 REQUIRED ROADS

The specified work on the following roads is required.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
PA-F-3100	0+00 – 40+90	Pre-Haul Maintenance
PA-F-3125	2+15 – 15+20	Reconstruction
PA-3125.1	0+00 – 5+30	Construction
Transfer Station Spur	0+00 – 2+70	Pre-Haul Maintenance
Blue Emery Spur 1	0+00 – 5+00	Reconstruction
Blue Emery Spur 1.1	0+00 – 4+85	Construction
Blue Emery Spur 2	0+00 – 1+00	Pre-Haul Maintenance
PA-F-3200	0+00 – 55+40	Pre-Haul Maintenance
PA-F-3210	0+00 – 60+05	Pre-Haul Maintenance
PA-F-3080	0+00 – 41+40	Pre-Haul Maintenance
PA-F-3080	41+40 – 73+40	Construction
PA-F-3081	0+00 – 14+70	Construction
2+05 Spur	0+00 – 2+05	Construction

0-3 OPTIONAL ROADS

The specified work on the following roads is not required. Any optional roads built by the Contractor must meet all the specifications in the road plan.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
PA-F-3100	40+90 – 43+25	Pre-Haul Maintenance
PA-F-3120	0+00 – 1+25	Reconstruction
PA-F-3125	0+00 – 2+15	Reconstruction
PA-F-3125 Wye	0+00 – 2+00	Construction
1+35 Spur	0+00 – 1+35	Construction
Blue Emery Spur 1.1	4+85 – 7+85	Construction
PA-F-3200	55+40 – 81+65	Pre-Haul Maintenance
PA-F-3084	0+00 – 7+50	Construction
PA-F-3085	0+00 – 5+50	Construction

0-4 CONSTRUCTION

This project includes, but is not limited to the following construction requirements:

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
PA-F-3125 Wye	0+00 – 2+00	See Below
PA-F-3125.1	0+00 – 5+30	
1+35 Spur	0+00 – 1+35	
Blue Emery Spur 1.1	0+00 – 7+85	
PA-F-3080	41+40 – 73+40	
PA-F-3081	0+00 – 14+70	
2+05 Spur	0+00 – 2+05	
PA-F-3084	0+00 – 7+50	
PA-F-3085	0+00 – 5+50	
Total Stations	78.25 Stations	

Construction includes, but is not limited to: Clearing, grubbing, right-of-way debris disposal, excavation and/or embankment to subgrade, end hauling material for construction, compacting road surfaces, constructing ditchlines, constructing ditchouts, constructing turnouts and turnarounds, curve widening, acquisition and installation of drainage structures, application of rock, spreading grass seed and hay.

0-5 RECONSTRUCTION

This project includes, but is not limited to the following reconstruction requirements:

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
PA-F-3120	0+00 – 1+25	See Below
PA-F-3125	0+00 – 15+20	
Blue Emery Spur 1	0+00 – 5+00	
Total Stations	21.45 Stations	

Reconstruction includes, but is not limited to: Removal of all vegetative material with minimum loss of rock and dispose of in accordance with Clause 2-9 and Clause 3-23. Cleaning ditches and constructing ditches, constructing headwalls, cleaning culvert inlets and outlets in accordance with Clause 2-6 and Clause 2-7. Brushing road in accordance with Clause 3-1. Installing additional culverts and replacing culverts in accordance with the culvert list. Grading, shaping and compacting existing road surface, turnouts and turnaround in accordance with Clause 2-5, realigning road segments, spreading grass seed and hay, and the application of rock in accordance with the Rock List.

0-6 PRE-HAUL MAINTENANCE

This project includes, but is not limited to the following pre-haul maintenance requirements:

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
PA-F-3100	0+00 – 40+90	Grade, shape and compact existing running surface in accordance to Clause 2-5, apply rock in accordance with Rock list, clean/construct ditch lines in accordance with Clause 2-7, Brush road in accordance with Clause 3-1 and perform gate maintenance in accordance with Clause 7-75.
PA-F-3100	40+90 – 43+25	Grade, shape and compact existing running surface in accordance to Clause 2-5, apply rock in accordance with Rock list, clean/construct ditch lines in accordance with Clause 2-7 and Brush road in accordance with Clause 3-1.
Transfer Station Spur	0+00 – 2+70	Grade, shape and compact existing running surface in accordance to Clause 2-5 and apply rock in accordance with Rock list.
Blue Emery Spur 2	0+00 – 1+00	Grade, shape and compact existing running surface in accordance to Clause 2-5, Remove all vegetative material with a minimum loss of rock and dispose of in accordance with Clause 2-9, apply rock in accordance with Rock list, clean/construct ditch lines in accordance with Clause 2-7 and Brush road in accordance with Clause 3-1.
PA-F-3200	0+00 – 55+40	Grade, shape and compact existing running surface in accordance to Clause 2-5, apply rock in accordance with Rock list, Brush road in accordance with Clause 3-1 and perform gate maintenance in accordance with Clause 7-75.
PA-F-3200	55+40 – 81+65	Grade, shape and compact existing running surface in accordance to

		Clause 2-5, apply rock in accordance with Rock list, clean/construct ditch lines in accordance with Clause 2-7 and Brush road in accordance with Clause 3-1.
PA-F-3210	0+00 – 60+05	Grade, shape and compact existing running surface in accordance to Clause 2-5, apply rock in accordance with Rock list and Brush road in accordance with Clause 3-1.
PA-F-3080	0+00 – 41+40	Grade, shape and compact existing running surface in accordance to Clause 2-5*, apply rock in accordance with Rock list, Brush road in accordance with Clause 3-1 and apply water for dust abatement in accordance with Clause 6-80.
Total Stations	230.05 Stations	

Pre-haul maintenance includes, but is not limited to: Brushing right-of-way, right-of-way debris disposal, cleaning ditches, constructing ditches, installing additional culverts, widening road segments, constructing headwalls, cleaning culvert inlets and outlets, cross drain culvert replacements, installing erosion control materials and sediment removal structures, spot rocking, grading and shaping existing road surface and turnouts, constructing additional turnouts, compaction of road surface, application of rock, acquisition and application of grass seed and hay. * See Clause 2-5 for grading method changes on PA-F-3080.

0-7 POST-HAUL MAINTENANCE

This project includes post-haul road maintenance listed in Clause 9-5 POST-HAUL MAINTENANCE.

0-9 DECOMMISSIONING

This project includes decommissioning listed in Clause 9-20 ROAD DECOMMISSIONING.

0-12 DEVELOP ROCK SOURCE

Contractor may develop an new rock source called Prospector Pit. Rock source development will involve stripping approximately 1.2 acres, digging and loading useable rock out of the bank to obtain a minimum of 10400 yds³ of Pit Run Rock and the manufacture of a minimum of 2070 yds³ of 3" minus Jaw Run Rock in accordance with Clause 6-20.

Contractor may develop an existing rock source called MC Pit. Rock source development will involve stripping approximately 0.5 acres, digging and loading useable rock out of

the bank to obtain a minimum of 10400 yds³ of Pit Run Rock and the manufacture of a minimum of 2070 yds³ of 3" minus Jaw Run Rock in accordance with Clause 6-20.

Rock Source development may be performed at Prospector Pit and/or MC Pit. Rock totals listed above are total yards for the sale. Contractor may divide yardage between pits as long as total yardage is manufactured as listed in the ROCK LIST and above.

Work for developing rock sources is listed in Section 6 ROCK AND SURFACING. All rock manufactured out of rock sources listed above shall meet specifications as listed in Section 6 ROCK AND SURFACING. In the event that the rock pit(s) listed above cannot meet rock specifications in accordance to specifications listed in Section 6, subsection rock gradations and in the opinion of the Contract Administrator, Contractor shall obtain rock meeting rock specification from a commercial source at their own expense.

0-13 STRUCTURES

Contractor shall provide and install all structures. Requirements for these structures are listed in Section 7 STRUCTURES.

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

If the Contractor desires a change from this road plan including, but not limited to, relocation, extension, change in design, or adding roads; a revised road plan must be submitted in writing to the Contract Administrator for consideration. Before work begins, Contractor shall obtain approval from the State for the submitted plan.

1-2 UNFORESEEN CONDITIONS

Quantities established in this road plan are minimum acceptable values. Additional quantities required by the state due to unforeseen conditions, or Contractor's choice of construction season or techniques will be at the Contractor's expense. Unforeseen conditions include, but are not limited to, solid subsurface rock, subsurface springs, saturated ground, and unstable soils.

1-3 ROAD DIMENSIONS

Contractor shall perform road work in accordance with the dimensions shown on the TYPICAL SECTION SHEET and the specifications within this road plan , unless controlled by construction stakes or design data (plan, profile, and cross-sections).

1-4 ROAD TOLERANCES

Contractor shall perform road work within the tolerances listed below. The tolerance class for each road is listed on the TYPICAL SECTION SHEET.

<u>Tolerance Class</u>	<u>A</u>	<u>B</u>	<u>C</u>
Road and Subgrade Width (feet)	+1.5	+1.5	+2.0
Subgrade Elevation (feet +/-)	0.5	1.0	2.0
Centerline alignment (feet lt./rt.)	1.0	1.5	3.0

1-6 ORDER OF PRECEDENCE

Any conflict or inconsistency in the road plan will be resolved by giving the documents precedence in the following order:

1. Addenda.
2. Designs or Plans. On designs and plans, figured dimensions shall take precedence over scaled dimensions.
3. Road Plan Clauses.
4. Typical Section Sheet.
5. Standard Lists.
6. Standard Details.
7. Road Plan maps.

In case of any ambiguity or dispute over interpreting the road plan, the Contract Administrator's or designee's decision will be final.

1-8 REPAIR OR REPLACEMENT OF DAMAGED MATERIALS

Contractor shall repair or replace all materials, roadway infrastructure, and road components damaged during road work or operation activities. The Contract Administrator will direct repairs and replacements. Repairs to structural materials must be made in accordance with the manufacturer's recommendation, and may not begin without written approval from the Contract Administrator.

1-9 DAMAGED METALLIC COATING

Any cut ends, or damaged galvanized or aluminized coating on existing or new bridge components, culverts, downspouts, and flumes must be cleaned and treated with a minimum of two coats of zinc rich paint or cold galvanizing compound.

1-12 SURVEY MONUMENTS

At no time during construction, reconstruction, or maintenance shall survey monuments, witness trees, or bearing trees be disturbed or damaged. If damaged or disturbed, Contractor shall hire a licensed land surveyor to repair, replace, and/or reset them.

1-13 LOG LOADING

At no time shall the loading of logs occur on the Transfer Station, Blue Mountain, PA-F-3100 roads. In addition, no debris from harvesting operations shall be allowed on this road.

SUBSECTION ROAD MARKING

1-15 ROAD MARKING

Contractor shall perform road work in accordance with the state's marked location. All road work is marked as follows:

- Orange ribbon and paint for construction centerlines.
- Construction stakes for everything else.

1-18 REFERENCE POINT DAMAGE

Contractor shall reset reference points (RPs) that were moved or damaged at any time during construction to their original locations. Excavation and embankment may not proceed on road segments controlled by said RPs until Contractor resets all moved or damaged RPs.

SUBSECTION TIMING

1-20 COMPLETE BY DATE

Contractor shall complete reconstruction, construction and pre-haul road work before the start of timber haul.

Contractor shall complete construction on the PA-F-3080, PA-F-3081, 2+05 Spur prior to 9/30/24.

1-21 HAUL APPROVAL

Contractor shall not use roads under this road plan without written approval from the Contract Administrator.

1-22 WORK NOTIFICATIONS

Contractor shall notify the Contract Administrator a minimum of 14 calendar days before work begins.

1-23 ROAD WORK PHASE APPROVAL

Contractor shall obtain written approval from the Contract Administrator upon completion of each of the following phases of road work:

- Subgrade construction
- Drainage installation
- Subgrade compaction
- Rock application
- Rock compaction

SUBSECTION RESTRICTIONS

1-25 ACTIVITY TIMING RESTRICTION

On the following road(s), are not allowed during the listed closure period(s) unless authorized in writing by the Contract Administrator.

<u>Road</u>	<u>Stations</u>	<u>Activity</u>	<u>Closure Period</u>
All	All	All	Weekends and State Recognized Holidays
All	All	All	8:00pm – 6:00am

1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTION or Contract Clause H-130 HAULING SCHEDULE, Contractor shall provide a maintenance plan to include further protection of state resources. Contractor shall obtain written approval from the Contract Administrator for the maintenance plan, and shall put preventative measures in place before operating during the closure period. Contractor is required to maintain all haul roads at their own expense including those listed in Contract Clause C-060.1 DESIGNATED ROAD MAINTAINER. If other operators are using, or desire to use these designated maintainer roads, a joint operating plan must be developed. All parties shall follow this plan.

1-29 SEDIMENT RESTRICTION

Contractor shall not allow silt-bearing runoff to enter any streams.

1-30 CLOSURE TO PREVENT DAMAGE

In accordance with Contract Clause G-220 STATE SUSPENDS OPERATION, the Contract Administrator will suspend road work or hauling right-of-way timber, forest products, or rock under the following conditions:

- Wheel track rutting exceeds 6 inches on jaw run or pit run roads.
- Wheel track rutting exceeds 4 inches on crushed rock roads.
- Wheel track rutting exceeds 4 inches on native surface roads.
- Surface or base stability problems persist.
- Weather is such that satisfactory results cannot be obtained in an area of operations.
- When, in the opinion of the Contract Administrator excessive road damage or rutting may occur.

Operations must stop unless authority to continue working or hauling is granted in writing by the Contract Administrator. In the event that surface or base stability problems persist, Contractor shall cease operations, or perform corrective maintenance or repairs, subject to specifications within this road plan. Before and during any suspension, Contractor shall protect the work from damage or deterioration.

1-32 ASPHALT SURFACE RESTRICTION

The use of metal tracked equipment is not allowed on asphalt surfaces at any time. If Contractor must run equipment on asphalt surfaces, then rubber tired equipment or other methods, approved in writing by Contract Administrator, must be used.

If tracked equipment is used on asphalt surfaces, Contractor shall immediately cease all road construction and hauling operations. Contractor shall remove any dirt, rock, or other material tracked or spilled on the asphalt surface(s) and have surface(s) evaluated by the District Engineer or their designee for any damage caused by transporting equipment. Any damage to the surface(s) will be repaired, at the Contractor’s expense, as directed by the Contract Administrator.

1-33 SNOW PLOWING RESTRICTION

On the following road(s), snowplowing will be allowed after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contact Administrator upon request. Contractor shall request a SNOW PLOWING AGREEMENT each time plowing occurs. If damage occurs while plowing, further permission to plow may be revoked by the Contract Administrator.

SUBSECTION OTHER INFRASTRUCTURE

1-40 ROAD APPROACHES TO COUNTY ROADS AND STATE HIGHWAYS

Contractor shall immediately remove any mud, dirt, rock, or other material tracked or spilled on to county roads and state highways.

If additional damage to the surface, signs, guardrails, etc. occurs then the damage will be repaired, at the Contractor’s expense, as directed by the Contract Administrator when authorized by the county or WSDOT.

The following county roads and state highways are affected by this sale:

<u>Road Name</u>
Blue Mtn. Rd.
Gellor Rd.
Transfer Station Rd.
HWY 101

1-41 REQUIREMENTS FOR PAVED ROAD APPROACHES

Requirements for all paved road approaches associated with this sale:

Contractor shall build up approaches to allow a smooth grade transition between the DNR roads and all paved roads associated with this sale. The top of the DNR road surfacing must be kept level with the surface of all paved roads associated with this sale at all times.

The surface of the DNR road approaches must slope from the edge of the paved roads at the rate of 2%, unless otherwise directed by the Contract Administrator.

1-42 UTILITY ACCESS ROAD

The following road(s) intersect(s) existing utility access roads. Contractor shall conduct road work on the intersecting roads so that the utility access roads are accessible at all times.

<u>Road</u>	<u>Stations</u>
PA-F-3200	80+00 – 81+65

1-43 ROAD WORK AROUND UTILITIES

Road work is in close proximity to a utility. Known utilities are listed, but it is the Contractor’s responsibility to identify any utilities not listed. Contractor shall work in accordance with all applicable laws or rules concerning utilities. Contractor is responsible for all notification, including “call before you dig”, and liabilities associated with the utilities and their rights-of-way. Contractor shall notify the Bonneville Power Administration and/or utility before starting road work.

<u>Road</u>	<u>Stations</u>	<u>Utility</u>	<u>Utility Contact</u>
PA-F-3100	0+00 – 20+20	Buried Utilities	811
PA-F-3200	80+00 – 81+65	Overhead Utilities BPA	811

SECTION 2 – MAINTENANCE

2-1 GENERAL ROAD MAINTENANCE

Contractor shall maintain all roads used under this contract in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS for the entire term of this contract. Maintenance is required even during periods of inactivity.

2-2 ROAD MAINTENANCE – CONTRACTOR MAINTENANCE

Contractor shall perform maintenance on roads listed in Contract Clause C-050.1 CONTRACTOR ROAD MAINTENANCE AND REPAIR in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-3 ROAD MAINTENANCE – DESIGNATED MAINTAINER

Contractor may be required to perform maintenance on roads listed in Contract Clause C-060.1 DESIGNATED ROAD MAINTAINER as directed by the Contract Administrator. Contractor shall maintain roads in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-4 PASSAGE OF LIGHT VEHICLES

Contractor shall maintain road(s) in a condition that will allow the passage of light administrative vehicles.

2-5 MAINTENANCE GRADING – EXISTING ROAD

On the following road(s), Contractor shall use a grader to shape the existing surface.

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
PA-F-3100	0+00 – 43+25	Grade, shape, compact and remove shoulder vegetation and berms.
PA-F-3120	0+00 – 1+25	Grade, shape, compact and remove shoulder vegetation and berms.
PA-F-3125	0+00 – 15+20	Grade, shape, compact and remove shoulder vegetation and berms.
Transfer Station Spur	0+00 – 2+70	Grade, shape, compact and remove shoulder vegetation and berms as required by contract administrator.
Blue Emery Spur 1	0+00 – 5+00	Grade, shape, compact and remove shoulder vegetation and berms.
Blue Emery Spur 2	0+00 – 1+00	Grade, shape, compact and remove shoulder vegetation and berms.
PA-F-3200	0+00 – 81+65	Grade, shape, compact and remove shoulder vegetation and berms.
PA-F-3210	0+00 – 60+05	Grade, shape, compact and remove shoulder vegetation and berms.
PA-F-3080	0+00 – 14+20	Grade, shape and compact. Care shall be taken to not disturb shoulder vegetation.
PA-F-3080	14+20 – 41+40	Grade, shape, compact and remove shoulder vegetation and berms.

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

On the following road(s), Contractor shall clean and/or construct ditches, headwalls, and catchbasins. Work must be completed before the start of timber haul and must be done in accordance with the Typical Section Sheet. Pulling ditch material across the road or mixing in with the road surface is not allowed. Ditchlines, headwalls, and catch basins shall not encroach into the existing road.

<u>Road</u>	<u>Stations</u>	<u>Left and/or Right</u>	<u>Comments</u>
PA-F-3100	0+00 – 43+25	Right	Ditching
PA-F-3125	0+00 – 15+20	Left and/or Right	Ditching where ditchlines are present
Blue Emery Spur 1	0+00 – 5+00	Right	Ditching
Blue Emery Spur 2	0+00 – 1+00	Right	Ditching

PA-F-3200	55+40 – 81+65	Left	Ditching
PA-F-3085	2+30	Left	Catch Basin Install x 2
PA-F-3085	3+10	Right	Catch Basin Install x 2

2-9 REMOVING VEGETATIVE MATERIAL

On the following road(s), Contractor shall remove all vegetative material, dirt, mud and other debris on the existing road surface with a minimum loss of rock. Material must be disposed of as specified in Clauses 4-35 through 4-38.

<u>Road</u>	<u>Stations</u>
PA-F-3120	0+00 – 1+25
PA-F-3125	0+00 – 15+20
Blue Emery Spur 1	0+00 – 5+00
Blue Emery Spur 2	0+00 – 1+00

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

SUBSECTION BRUSHING

3-1 BRUSHING

On the following road(s), Contractor shall cut vegetative material up to 5 inches in diameter, including limbs, as shown on the BRUSHING DETAIL. Brushing must be achieved by mechanical cutting of brush, trees, and branches. Root systems and stumps of cut vegetation may not be disturbed unless directed by the Contract Administrator. Contractor shall remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets.

<u>Road</u>	<u>Stations</u>
PA-F-3100	0+00 – 43+25
PA-F-3120	0+00 – 1+25
PA-F-3125	0+00 – 15+20
Blue Emery Spur 1	0+00 – 5+00
Blue Emery Spur 2	0+00 – 1+00
PA-F-3200	0+00 – 55+40
PA-F-3200	55+40 – 81+65
PA-F-3210	0+00 – 60+05
PA-F-3080	14+30 – 41+40

3-2 BRUSHING RESTRICTION

Pulling, digging, pushing over, and other non-cutting methods used for vegetation removal may not be used for brushing. Excavator buckets, log loaders and similar equipment may not be used for brushing unless otherwise approved in writing by the Contract Administrator.

3-3 BRUSH REMOVAL

Remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets. Brush should be disposed of so that it will not fall back onto the road prism.

SUBSECTION CLEARING

3-5 CLEARING

Contractor shall fall all vegetative material larger than 5 inches DBH or over 15 feet high between the marked right-of-way boundaries, or as approved by Contract Administrator. Clearing must be completed before starting excavation and embankment.

3-7 RIGHT-OF-WAY DECKING

Contractor shall deck all right-of-way timber. Decks must be parallel to the road centerline and placed within the cleared right-of-way. Decks must be free of dirt, limbs, and other right-of-way debris, and removable by standard log loading equipment from the roadbed.

3-8 PROHIBITED DECKING AREAS

Contractor shall not deck right-of-way timber in the following areas:

- Within the grubbing limits.
- Within 50 feet of any stream.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- On slopes greater than 40%.
- Against standing trees.

SUBSECTION GRUBBING

3-10 GRUBBING

Contractor shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET. Contractor shall also remove stumps with undercut roots outside the grubbing limits. Contractor shall remove stumps using a hydraulic mounted excavator unless authorized in writing by the Contract Administrator. Grubbing must be completed before starting excavation and embankment.

3-12 STUMP PLACEMENT

Contractor shall place grubbed stumps outside of the clearing limits, as directed by the Contract Administrator and in compliance with all other clauses in this road plan. Stumps must be positioned upright, with root wads in contact with the forest floor and on stable locations.

3-13 STUMPS FOR PUNCHEON MATERIAL

On the following road(s), stumps from within the grubbing limits may be overturned and driven flush with the ground surface for use as subgrade puncheon material.

Road	Stations
PA-F-3080	50+40 – 73+40
PA-F-3081	0+00 – 14+70
PA-F-3084	0+00 – 7+50
PA-F-3085	0+00 – 5+50

3-14 STUMPS WITHIN DESIGNATED WASTE AREAS

In the following waste area(s), Contractor is not required to remove stumps within waste areas if they are cut flush with the ground.

Road	Waste Area
PA-F-3080	Waste Area Location PA-F-3080 Sta. 45+00
PA-F-3080	Waste Area Location PA-F-3080 Sta. 65+85

SUBSECTION ORGANIC DEBRIS

3-20 ORGANIC DEBRIS DEFINITION

Organic debris is defined as all vegetative material not eligible for removal by Contract Clause G-010 PRODUCTS SOLD AND SALE AREA or G-011 RIGHT TO REMOVE FOREST PRODUCTS AND CONTRACT AREA, that is larger than one cubic foot in volume within the grubbing limits as shown on the TYPICAL SECTION SHEET.

3-21 DISPOSAL COMPLETION

Contractor shall remove organic debris from the road surface, ditchlines, and culvert inlets and outlets. Contractor shall complete all disposal of organic debris, before the application of rock.

3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS

Waste areas for organic debris are located as listed below.

<u>Road</u>	<u>Stations</u>	<u>Disposal Location</u>	<u>Requirements</u>
PA-F-3080	47+90 – 49+00	Waste Area Location PA-F-3080 Sta. 45+00	Deposit organic waste from road building into waste area between stations 47+90 – 49+00
PA-F-3080	68+05 – 71+65	Waste Area Location PA-F-3080 Sta. 65+85	Deposit organic waste from road building into waste area between stations 68+05 – 71+65

3-23 PROHIBITED DISPOSAL AREAS

Contractor shall not place organic debris in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland. On road subgrades, or excavation and embankment slopes.
- On slopes greater than 45%.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush can fall into the ditch or onto the road surface.
- Against standing timber.

3-24 BURYING ORGANIC DEBRIS RESTRICTED

Contractor shall not bury organic debris unless otherwise stated in this plan.

3-25 SCATTERING ORGANIC DEBRIS

Contractor shall scatter organic debris outside of the grubbing limits in accordance with Clause 3-23 unless otherwise detailed in this road plan and as directed by the Contract Administrator.

SUBSECTION PILE

3-30 EXCLUSION OF DOZER BLADES

Contractor shall not use dozer blades for the piling of organic debris.

3-31 PILING

Contractor shall pile organic debris no closer than 20 feet from standing timber and no higher than 20 feet in areas specified in Clause 3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS. Piles must be free of rock and soil.

3-32 END HAULING ORGANIC DEBRIS

On the following road(s), and on slopes greater than 45%, Contractor shall end haul or push organic debris to the designated waste areas specified in Clause 3-22 DESIGNATED

WASTE AREA FOR ORGANIC DEBRIS, or to a waste area located by the Contract Administrator.

<u>Road</u>	<u>Stations</u>
PA-F-3080	47+90 – 49+00

SECTION 4 – EXCAVATION

4-1 EXCAVATOR CONSTRUCTION

Contractor shall use a track mounted hydraulic excavator for construction, reconstruction and maintenance work unless stated otherwise within this Road Plan or authorized in writing by the Contract Administrator.

4-2 PIONEERING

Pioneering may not extend past construction that will be completed during the current construction season. Pioneering may not extend more than 1000 feet beyond completed construction unless approved in writing by the Contract Administrator. In addition, the following actions must be taken as pioneering progresses:

- Drainage must be provided on all uncompleted construction.
- Road pioneering operations may not undercut the final cut slope or restrict drainage.
- Culverts at live stream crossings must be installed during pioneering operations.

4-3 ROAD GRADE AND ALIGNMENT STANDARDS

Contractor shall follow these standards for road grade and alignment:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 16 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Maximum grade change for sag vertical curves is 5% in 100 feet.
- Maximum grade change for crest vertical curves is 4% in 100 feet.

4-4 SWITCHBACK STANDARDS

A switchback is defined as a curved segment of road between a beginning and end of the same curve, where the change of traffic travel direction is greater than 90 degrees.

Contractor shall follow these standards for switchbacks:

- Maximum adverse grades for switchbacks is 10%.
- Maximum favorable grades for switchbacks is 12%.
- Maximum transition grades entering and leaving switchbacks is a 5% grade change.
- Transition grades required to meet switchback grade limitations must be constructed on the tangents preceding and departing from the switchbacks.

4-5 CUT SLOPE RATIO

Contractor shall construct excavation slopes no steeper than shown on the following table, unless construction staked or designed:

<u>Material Type</u>	<u>Excavation Slope Ratio</u>	<u>Excavation Slope Percent</u>
Common Earth (on side slopes up to 55%)	1:1	100
Common Earth (56% to 70% side slopes)	¾:1	133
Common Earth (on slopes over 70%)	½:1	200
Fractured or loose rock	½:1	200
Hardpan or solid rock	¼:1	400

4-6 EMBANKMENT SLOPE RATIO

Contractor shall construct embankment slopes no steeper than shown on the following table, unless construction staked or designed:

<u>Material Type</u>	<u>Embankment Slope Ratio</u>	<u>Embankment Slope Percent</u>
Sandy Soils	2:1	50
Common Earth and Rounded Gravel	1½:1	67
Angular Rock	1¼:1	80

4-7 SHAPING CUT AND FILL SLOPE

Contractor shall construct excavation and embankment slopes to a uniform line and left rough for easier revegetation.

4-8 CURVE WIDENING

The minimum widening placed on the inside of curves is:

- 6 feet for curves of 50 to 79 feet radius.
- 4 feet for curves of 80 to 100 feet radius.

4-9 EMBANKMENT WIDENING

The minimum embankment widening is:

- 2 feet for embankment heights at centerline of 2 to 6 feet.
- 4 feet for embankment heights at centerline of greater than 6 feet.

4-12 FULL BENCH CONSTRUCTION

On the following road(s), and where side slopes exceed 45%, Contractor shall use full bench construction for the entire subgrade width. If designated, Contractor shall end haul waste material to the location specified in Clause 4-37 WASTE AREA LOCATION.

<u>Road</u>	<u>Full Bench Location</u>
PA-F-3080	47+90 – 49+00

SUBSECTION INTERSECTIONS, TURNOUTS AND TURNAROUNDS

4-21 TURNOUTS

Contractor shall construct turnouts intervisible with a maximum distance of 1,000 feet between turnouts unless otherwise shown on drawings. Locations may be adjusted to fit the final subgrade alignment and sight distances. Locations changes are subject to written approval by the Contract Administrator. Minimum dimensions are shown on the TYPICAL SECTION SHEET.

4-22 TURNAROUNDS

Turnarounds must be no larger than 50 feet long and 30 feet wide. Locations are subject to written approval by the Contract Administrator.

SUBSECTION DITCH CONSTRUCTION

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

Contractor shall construct ditches into the subgrade as specified on the TYPICAL SECTION SHEET. Ditches must be constructed concurrently with construction of the subgrade.

4-27 DITCH WORK – MATERIAL USE PROHIBITED

Contractor shall not pull ditch material across the road or mix in with the road surface. Excavated material must be end hauled to the location specified in Clauses 4-36 through 4-38.

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

4-29 DITCHOUTS

Contractor shall construct ditchouts as identified in the table below and as needed to fit as built conditions. Ditchouts must be constructed in a manner that diverts ditch water onto the forest floor and must have excavation backslopes no steeper than a 1:1 ratio. L or R denotes ditchout left or ditchout right.

<u>Road</u>	<u>Stations</u>	<u>L or R</u>
PA-F-3125	11+70 (approx. 20')	L and R
PA-F-3080	45+70 (approx. 25')	R

SUBSECTION WASTE MATERIAL (DIRT)

4-35 WASTE MATERIAL DEFINITION

Waste material is defined as all dirt, rock, mud, or related material that is extraneous or unsuitable for construction material. Waste material, as used in Section 4 EXCAVATION, is not organic debris.

4-36 DISPOSAL OF WASTE MATERIAL

Contractor may sidecast waste material on side slopes up to 45% if the waste material is compacted and free of organic debris. On side slopes greater than 45%, all waste material must be end hauled or pushed to the designated embankment sites and waste areas identified in Clause 4-37 WASTE AREA LOCATION.

4-37 WASTE AREA LOCATION

Contractor shall deposit waste material in the listed designated areas. The amount of material allowed in a waste area is at the discretion of the Contract Administrator.

Note: All amount values are estimated bank yards.

<u>Waste Area Location</u>	<u>Waste Generated From Road</u>	<u>Waste Generated at Stations</u>	<u>Estimated Volume</u>
PA-F-3080 Sta. 45+00	PA-F-3080	47+90 – 49+00	1400 yds ³
PA-F-3080 Sta. 65+85	PA-F-3080	68+05 – 71+65	2000 yds ³

4-38 PROHIBITED WASTE DISPOSAL AREAS

Contractor shall not deposit waste material in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- Within a riparian management zone.
- On side slopes steeper than 45%.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Within the operational area for cable landings.
- Against standing timber.

4-39 WASTE AREA COMPACTION

Excavated material may be deposited adjacent to the road prism on side slopes up to 45% if the waste material is compacted and free of debris. On side slopes of 45% or more, all excavation shall be end hauled or pushed to designated waste areas. All waste material shall be compacted. The minimum acceptable compaction is achieved by placing embankments in 2 foot or shallower lifts and routing excavation equipment over the entire width of the lifts, with the exception of side hill embankments too narrow to accommodate excavation equipment which may be placed by end-dumping or sidecasting until sufficiently wide to support the equipment.

SUBSECTION BORROW

4-46 COMMON BORROW

Common borrow consists of soil, and/or aggregate that is non-plastic and contains no more than 5% clay, organic debris, or trash by volume. The material is considered non-plastic if the fines in the sample cannot be rolled, between the hand and a smooth surface, into a thread at any moisture content.

SUBSECTION SHAPING

4-55 ROAD SHAPING

Contractor shall shape the subgrade and surface as shown on the TYPICAL SECTION SHEET. The subgrade and surface shape must ensure runoff in an even, un-concentrated manner, and must be uniform, firm, and rut-free.

4-56 DRY WEATHER SHAPING

The Contract Administrator may require the application of water to facilitate shaping activities. The method of water application is subject to written approval by the Contract Administrator.

SUBSECTION COMPACTION

4-60 FILL COMPACTION

Contractor shall compact all embankment and waste material in accordance with the COMPACTION LIST by routing equipment over the entire width of each lift. A plate compactor must be used for areas specifically requiring keyed embankment construction and for embankment segments too narrow to accommodate equipment.

4-61 SUBGRADE COMPACTION

Contractor shall compact constructed and reconstructed subgrades in accordance with the COMPACTION LIST by routing equipment over the entire width, except ditch. Contractor shall obtain written approval from the Contract Administrator for subgrade compaction before placement of rock.

4-62 DRY WEATHER COMPACTION

The Contract Administrator may require the application of water to facilitate compaction activities. The method of water application is subject to written approval by the Contract Administrator.

4-63 EXISTING SURFACE COMPACTION

Contractor shall compact maintained road surfaces in accordance with the COMPACTION LIST by routing equipment over the entire width.

4-64 WASTE MATERIAL COMPACTION

All waste material shall be compacted by running equipment over it or bucket tamping.

4-65 CULVERT BACKFILL COMPACTION

Culvert backfills shall be accomplished by using a jumping jack compactor, performing at least 2 passes per lift, in lifts not to exceed 8 inches.

4-66 COMPACTION BY METHOD

Compaction shall consist of three complete passes over the entire width of each lift with a vibratory drum roller weighing a minimum of 6,000 pounds at a maximum operating speed of 3 mph. For embankment segments too narrow to accommodate a drum roller, a plate compactor shall be used.

SUBSECTION SUBGRADE REINFORCEMENT

4-70 SUBGRADE REINFORCEMENT

On the following road(s), Purchaser shall provide and install geotextile fabric and geogrid directed by the Contract Administrator or as specified in the Engineer's design. Subgrade reinforcement must be installed to a width of 15 feet for the geotextile for stabilization and a width of 12.5 feet for the large aperture geogrid with the center of geotextile and geogrid centered on the subgrade, except at turnouts and/or turnarounds. Turnouts and/or turnarounds shall be incorporated for the full width and length of turnout and/or turnaround and overlapped with roadway geotextile and geogrid. Geotextile fabric and geogrid must overlap by a minimum of 2 feet at all joints and geogrid shall be placed on top of geotextile. The geotextile fabric and geogrid must be covered with a minimum of 18 inches of compacted rock as specified in the ROCK LIST. Geotextile fabric must meet the specifications in Clause 10-2 GEOTEXTILE FOR SEPARATION and Geogrid must meet the specifications in Clause 10-9 LARGE APPERTURE GEOGRID. Contact administrator shall be given product information from roll prior to placement of Geotextile and Geogrid.

<u>Road</u>	<u>Stations</u>
PA-F-3080	53+75 – 59+25, 67+65 – 71+65
PA-F-3081	4+25 – 11+25

SECTION 5 – DRAINAGE

5-1 REMOVAL OF SHOULDER BERMS

On the following road(s), Contractor shall remove berms from road shoulders. The construction of ditchouts is required where ponding could result from the effects of sidecast debris.

5-3 PUNCHEON PLACEMENT

On the following road(s), puncheon may be utilized in the subgrade on the following road. Puncheon shall consist of logs of at least 4 inches in diameter and shall be at least 17 feet long.

<u>Road</u>	<u>Stations</u>
PA-F-3080	50+40 – 73+40
PA-F-3081	0+00 – 14+70
PA-F-3084	0+00 – 7+50
PA-F-3085	0+00 – 5+50

5-4 PUNCHEON RESTRICTED

At no time shall puncheon be used in the subgrade, unless approved by the Contract Administrator or above table.

SUBSECTION CULVERTS

5-5 CULVERTS

Contractor shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the CULVERT LIST. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts must be new material and meet the specifications in Clauses 10-15 through 10-24.

5-6 CULVERT TYPE

Contractor may install culverts made of steel and/or plastic in accordance with Clauses 10-15 through 10-24.

5-12 UNUSED MATERIALS STATE PROPERTY

On required roads, any materials listed on the CULVERT LIST and ROCK LIST that are not installed will become the property of the state. Contractor shall stockpile materials as directed by the Contract Administrator.

5-13 CONTINGENCY CULVERTS

The following culverts will be supplied by the Contractor and are available for installation as directed by the Contract Administrator. In the event that culverts are not used, culverts shall be stockpiled at Port Angeles Work Center.

<u>Road</u>	<u>Size</u>
On any portion of road used for timber or rock haul.	1 - 18" x 30' culvert
	1 - 18" culvert band
	1 – 24" x 30' culvert

SUBSECTION CULVERT INSTALLATION

5-15 CULVERT INSTALLATION

Culvert installation must be in accordance with the TYPICAL CROSS DRAIN CULVERT INSTALLATION DETAIL SHEET, TYPICAL TYPE NS NP CULVERT INSTALLATION DETAIL SHEET, the National Corrugated Metal Pipe Association's "Installation Manual for Corrugated Steel Drainage Structures" and the Corrugated Polyethylene Pipe Association's "Recommended Installation Practices for Corrugated Polyethylene Pipe and Fittings". Corrugated Polyethylene pipe must be installed in a manner consistent with the manufacturer's recommendations. Culverts over 15 inches diameter shall be banded using lengths of no less than 10 feet, and no more than one length less than 16 feet. Shorter section of banded culvert shall be installed at the inlet end.

5-17 CROSS DRAIN SKEW AND SLOPE

Cross drains, on road grades in excess of 3%, must be skewed at least 30 degrees from perpendicular to the road centerline, except where the cross drain is at the low point in the road culverts will not be skewed. Cross drain culverts must be installed at a slope steeper than the incoming ditch grade, but not less than 3% or more than 10%.

5-18 CULVERT DEPTH OF COVER

Cross drain culverts must be installed with a depth of cover of not less than 18 inches of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts must be installed with a depth of cover specified in the Engineer's design, TYPICAL TYPE NS NP DETAIL SHEET, or recommended by the culvert manufacturer for the type and size of the pipe, whichever is greater.

SUBSECTION CATCH BASINS, HEADWALLS, AND ARMORING

5-25 CATCH BASINS

Contractor shall construct catch basins to resist erosion. Minimum dimensions of catch basins are 1-2 feet wide, 1-2 feet deep and 2-4 feet long.

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

Contractor shall construct headwalls in accordance with the TYPICAL CROSS DRAIN CULVERT INSTALLATION DETAIL at all cross drain culverts that specify the placement of rock. Rock used for headwalls must consist of oversize or quarry spall material. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets. Minimum specifications require that rock be placed at a width of one culvert diameter on each side of the culvert opening, and to a height of one culvert diameter above the top of the culvert. Rock may not restrict the flow of water into culvert inlets or catch basins. No placement by end dumping or dropping of rock is allowed.

SECTION 6 – ROCK AND SURFACING

SUBSECTION ROCK SOURCE

6-2 ROCK SOURCE ON STATE LAND

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following source(s) on state land at no charge to the Contractor. Contractor shall obtain written approval from the Contract Administrator for the use of material from any other source. If other operators are using, or desire to use the rock source(s), a joint operating plan must be developed. All parties shall follow this plan. Contractor shall notify the Contract Administrator a minimum of 5 business days before starting any operations in the listed locations.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
Prospector Pit	T30N R05W Sec24	Pit Run Ballast 3" Jaw run rock
MC Pit	T30N R04W Sec30	Pit Run Ballast 3" Jaw run rock

6-5 ROCK FROM COMMERCIAL SOURCE

Rock used in accordance with the quantities on the ROCK LIST may/shall be obtained from any commercial source at the Contractor's expense. Rock sources are subject to written approval by the Contract Administrator before their use. Prior to approval, Contractor shall submit a passing sieve test performed by procedure described in WSDOT FOP for WAQTC T 27/11.

SUBSECTION ROCK SOURCE DEVELOPMENT

6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE

Contractor shall conduct rock source development and use at the following sources, in accordance with the written ROCK SOURCE DEVELOPMENT PLAN prepared by the state and included in this road plan. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN, and approved in writing by the Contract Administrator. Contractor shall notify the Contract Administrator a minimum of 5 business days before starting any operations in the rock source. Either or both sources may be used to manufacture rock.

<u>Source</u>	<u>Rock Type</u>
Prospector Pit	Pit Run Ballast 3" Jaw run rock
MC Pit	Pit Run Ballast

	3" Jaw run rock
--	-----------------

6-12 ROCK SOURCE SPECIFICATIONS

Rock sources must be in accordance with the following specifications , unless otherwise specified in the ROCK SOURCE DEVELOPMENT PLAN:

- Pit walls may not be undermined or over steepened. The maximum slope of the walls must be consistent with recognized engineering standards for the type of material being excavated in accordance with the following table:

Material	Maximum Slope Ratio (Horiz. :Vert.)	Maximum Slope Percent
Sand	2:1	50
Gravel	1.5:1	67
Common Earth	1:1	100
Fractured Rock	0.5:1	200
Solid Rock	0:1	vertical

- Pit walls must be maintained in a condition to minimize the possibility of the walls sliding or failing.
- The width of pit benches must be a minimum of 1.5 times the maximum length of the largest machine used.
- The surface of pit floors and benches must be uniform and free-draining at a minimum 2% outslope gradient.
- All operations must be carried out in compliance with all regulations of the Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration and Safety Standards for Construction Work (296-155 WAC), Washington Department of Labor and Industries.
- All vehicle access to the top of the pit faces must be blocked.

SUBSECTION ROCK MANUFACTURE

6-20 ROCK CRUSHING OPERATIONS

Rock crushing operations must conform to the following specifications:

- Operations and placement of oversize material must be conducted in or near the rock source site, as approved in writing by the Contract Administrator.
- The crushing operation must be concluded within 30 working days from the time it begins.
- All testing and operations must be performed in accordance with the attached ROCK CRUSHING COMPLIANCE PROCEDURE.
- Contractor may use a commercial testing lab to produce sieve analyses.

- Sieve analysis for acceptance of aggregate shall be performed by procedure described in WSDOT FOP for WAQTC T 27/11.

6-23 ROCK GRADATION TYPES

Contractor may manufacture rock in accordance with the types and amounts listed in the Manufacturing list below. Rock must meet the following specifications for gradation and uniform quality during manufacture and placement into a stockpile. Contractor shall provide a sieve analysis upon request from the Contract Administrator.

<u>Rock Type</u>	<u>Amount</u>
3" Jaw Run Rock	2070 yds ³

6-24 ROCK CRUSHING COMPLIANCE PROCEDURE

Phase I. Equipment Adjustment

Step 1:

At start up of crushing operations, the Contractor will notify the Contract Administrator when the rock meets the gradation specifications in the contract. None of the rock crushed during this calibration period will be counted toward the amount required to be crushed, and this rock must be kept separate from accepted rock crushed later.

Step 2:

The Contractor will test the rock. Two samples will be taken. If the rock meets specifications, crushing may begin. If the rock does not meet specifications, return to Step 1.

Phase II. Production

Step 3:

The Contractor will continue periodic testing to ensure that rock stays in spec. Testing will take place according to the following schedule:

- After the first 500 yards
 - After every 2,000 yards thereafter.
- a) Any time a sample is out of spec, but is within 5%*, the Contractor will be notified and a second sample will be taken later in the day. If the second sample meets specifications, the rock crushed during that day will be accepted. If the second sample also fails to meet spec, none of the rock crushed since the last acceptable test will be counted toward the amount to be crushed.
 - b) Any time a sample is out of spec and is more than 5% off in any category, none of the rock crushed since the last acceptable test will be accepted and that rock must be kept separate from the stockpile. Return to Step 1.
 - c) Contractor is strongly encouraged to take their own samples regularly and keep their operations in spec to avoid unnecessary expenses.

- The 5% will be applied only to sieve specs for 2" to ¼"; rock that is out of spec in larger sizes must be kept separate from the acceptable rock. Periodic visual inspection required for all rock gradations larger than 2". If in the opinion of the Contract Administrator that gradations are not meeting specifications, Contract Administrator may require testing of material 2" or larger.

SUBSECTION ROCK GRADATIONS

6-28 1 ¼-INCH MINUS CRUSHED ROCK

% Passing 1 ¼" square sieve	100%
% Passing 5/8" square sieve	50 - 80%
% Passing U.S. #4 sieve	30 - 50%
% Passing U.S. #40 sieve	3 - 18%
% Passing U.S. #200 sieve	5%

The portion of aggregate retained on the No. 4 sieve may not contain more than 0.2 percent organic debris and trash. All percentages are by weight.

6-34 3-INCH JAW RUN ROCK

% Passing 3" square sieve	100%
% Passing 1 ½" square sieve	45 - 65%

Rock may contain no more than 5 percent organic debris, dirt, and trash. All percentages are by weight.

6-41 PIT RUN ROCK

No more than 50 percent of the rock may be larger than 8 inches in any dimension and no rock may be larger than 12 inches in any dimension. Pit Run rock may not contain more than 5 percent by weight of organic debris, dirt, and trash. Rock may require processing to meet this specification.

SUBSECTION ROCK MEASUREMENT

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

Measurement of specified rock depths, are defined as the compacted depth(s) using the compaction methods required in this road plan. Estimated quantities specified in the ROCK LIST are estimated truck yards. Contractor shall apply adequate amounts of rock to meet the specified rock depths. Specified rock depths are minimum requirements and are not subject to reduction.

SUBSECTION ROCK APPLICATION

6-70 APPROVAL BEFORE ROCK APPLICATION

Contractor shall obtain written approval from the Contract Administrator for subgrade drainage installation included grading and compaction before rock application.

6-71 ROCK APPLICATION

Contractor shall apply rock in accordance with the specifications and quantities shown on the ROCK LIST. Rock must be spread, shaped, and compacted full width concurrent with rock hauling operations. The Contract Administrator will direct locations for rock that is to be applied as spot patching. Road surfaces must be compacted in accordance with the COMPACTION LIST by routing equipment over the entire width and in lifts not to exceed 6 inches.

6-72 ROCK APPLICATION AFTER HAULING

On the following road(s), upon completion of all hauling operations, Contractor shall apply rock in accordance with the quantities shown on the ROCK LIST and listed below.

<u>Road</u>	<u>Stations</u>	<u>Rock Type</u>	<u>Amount</u>
PA-F-3100	0+00 – 43+25	1 ¼" Minus Crushed Rock	200 yd ³
PA-F-3200	0+00 – 55+40	1 ¼" Minus Crushed Rock	200 yd ³
PA-F-3200	55+40 – 81+65	3" minus Jaw Run Rock	100 yd ³
PA-F-3210	0+00 – 60+05	Pit Run Rock	100 yd ³
PA-F-3080	0+00 – 14+20	1 ¼" Minus Crushed Rock	50 yd ³
PA-F-3080	14+20 – 73+40	3" minus Jaw Run Rock	200 yd ³

6-73 ROCK FOR WIDENED PORTIONS

Contractor shall apply rock to turnarounds, turnouts, and areas with curve widening to the same depth and specifications as the traveled way.

6-76 DRY WEATHER ROCK COMPACTION

On the following roads, The Contract Administrator may require the application of water to facilitate compaction of the rock surfacing. The method of water application is subject to approval by the Contract Administrator.

6-77 ROCK OVER GEOTEXTILE

On the following road(s), rock shall be applied over geotextiles in accordance with manufacturer's specifications.

<u>Road</u>	<u>Stations</u>
PA-F-3080	53+75 – 59+25, 67+65 – 71+65
PA-F-3081	4+25 – 11+25

6-78 ROCK FOR SPOT PATCHING

Rock for spot patching shall be applied before any grading is done and before any rock lifts are applied. Once applied, spot patches shall be graded into the existing running surface.

SUBSECTION DUST ABATEMENT

6-80 WATERING FOR DUST ABATEMENT

Contractor shall use water for dust abatement on the following roads as directed by the Contract Administrator.

<u>Road</u>	<u>Stations</u>
PA-F-3080	0+00 – 15+80

SECTION 7 – STRUCTURES

SUBSECTION SIGNS

7-2 SIGN INSTALLATION (NON-HIGHWAY)

The Contractor shall be responsible for the purchase, installation, and maintenance of the following road signs. Signs shall be installed a minimum of 7 days before hauling logs and/or rock. Signs shall be at least 2 feet in any direction, and shall be orange with black lettering.

<u>Road</u>	<u>Station</u>	<u>Sign</u>
Blue Mtn. Rd.	Junction of PA-F-3100 and Blue Mtn. Rd. MP 0.7	2 Truck Crossing Signs inbound and outbound
Blue Mtn. Rd.	Junction of Transfer Station Rd. and Blue Mtn. Rd. MP 1.02	2 Truck Crossing Signs inbound and outbound
Blue Mtn. Rd.	Junction of Blue Emery Spur 1 and Blue Mtn. Rd. MP 1.34	2 Truck Crossing Signs inbound and outbound

Blue Mtn. Rd.	Junction of Blue Emery Spur 1 and Blue Mtn. Rd. MP 1.38	2 Truck Crossing Signs inbound and outbound
Blue Mtn. Rd.	Junction of PA-F-3200 and Blue Mtn. Rd. MP 2.45	2 Truck Crossing Signs inbound and outbound
Gellor Rd.	Junction of PA-F-3080 and Gellor Rd. MP 0.31	2 Truck Crossing Signs inbound and outbound

SUBSECTION STREAM CROSSING STRUCTURES GENERAL

7-5 STRUCTURE DEBRIS

Contractor shall not allow debris from the installation or removal of structures to enter any stream. Components removed from existing structure(s) must be removed from state land or, as directed in writing, by the Contract Administrator. Contractor shall maintain a clean jobsite, with all materials stored away from the high water mark or other area presenting a risk of the materials entering a stream. Debris entering any stream must be removed immediately, and placed in the site(s) designated for stockpiling or disposal. Contractor shall retrieve all material carried downstream from the jobsite.

7-6 STREAM CROSSING INSTALLATION

Contractor shall install stream crossing structures in accordance with the manufacturer's requirements, and as directed by the District Engineer or their designee.

7-7 BANK PROTECTION FOR STREAM CROSSING STRUCTURES

Contractor shall design and construct bank protection to prevent the undermining of the structure.

SUBSECTION GATE CLOSURE

7-70 GATE CLOSURE

On the following road(s), Contractor shall keep gates closed and locked except during periods of haul. All gates that remain open during haul must be locked or securely fastened in the open position. All gates must be closed at termination of use.

<u>Road</u>	<u>Station</u>
PA-F-3100	1+00
Transfer Station Rd.	0+50
PA-F-3200	1+00

SUBSECTION GATES AND FENCES

7-75 GATE MAINTENANCE

Contractor shall conduct gate maintenance as listed. Contractor shall remove all old gate material from state land before the termination of the contract.

<u>Road</u>	<u>Station</u>	<u>Requirements</u>
PA-F-3100	1+00	Gate shall be painted Safety Yellow color using high gloss alkyd enamel paint. Prior to painting, surfaces shall be prepared by cleaning, sanding and removing all loose rust and paint. All surfaces shall be dry at the time of painting. Two coats of paint shall be applied, using the procedures described in the product instructions, with a minimum of eight hours drying time between coats. Grease lubrication points. 6 ecoblock shall be placed to block go-around.
PA-F-3200	1+00	Grease lubrication points.
PA-F-3200	54+75	Replace Gate Support Arm with like materials. Gate shall be painted Safety Yellow color using high gloss alkyd enamel paint. Prior to painting, surfaces shall be prepared by cleaning, sanding and removing all loose rust and paint. All surfaces shall be dry at the time of painting. Two coats of paint shall be applied, using the procedures described in the product instructions, with a minimum of eight hours drying time between coats. Grease lubrication points.

7-76 GATE INSTALLATION

Contractor shall install the listed gate(s). Gate installation(s) must be completed prior to timber haul approval.

<u>Road</u>	<u>Station</u>	<u>Type*</u>	<u>Provided by</u>
Blue Emery Spur 1	0+65	Medium Gate	Contractor

Medium gate installation(s) must be in accordance with the Medium Gate Detail.

The gate and lock box must be installed plumb and aligned to ensure all mating components match with precision. Each post must be filled with concrete, capped and set in a minimum of 2 cubic yards of poured-in-place concrete. The gate must be installed with a post and locking device to allow the gate to be locked in an open position. The Contract Administrator will provide Contractor with a padlock.

If Contractor wishes to install an alternate design, detailed plans for the construction of the gate must be submitted to the Contract Administrator. Contractor shall obtain written approval for the plans from the Contract Administrator or their designee, before gate installation begins.

The gate must be primed and painted yellow.

7-78 GATE SUPPLIED BY CONTRACTOR

Contractor shall provide all gates specified for installation in Clause 7-76 GATE INSTALLATION. Contractor shall obtain written approval for the gates from the Contract Administrator before installation.

SECTION 8 – EROSION CONTROL

8-1 SEDIMENT CONTROL STRUCTURES

On the following road(s), Sediment control shall be as listed below or other methods as approved in writing by the Contract Administrator.

<u>Road</u>	<u>Stations</u>	<u>Left and/or Right</u>	<u>Comments</u>
PA-F-3080	67+60 – 68+45	Right	Roadside Silt Fence
PA-F-3080	68+15 – 70+90	Left	Roadside Silt Fence
PA-F-3080	70+60 – 71+65	Right	Roadside Silt Fence
PA-F-3085	2+30	Left	Silt Fence in Ditch x 2
PA-F-3085	3+10	Right	Silt Fence in Ditch x 2

8-2 PROTECTION FOR EXPOSED SOIL

Contractor shall provide and evenly spread a 3-inch layer of straw or hay to all exposed soils at culvert installations within 100 feet of a stream or wetland. Soils must be covered before the first anticipated storm event. Soils may not sit exposed during any rain event.

SUBSECTION REVEGETATION

8-15 REVEGETATION

Contractor shall spread grass seed and straw and/or hay mulch on all exposed soils including, but not limited to, stream culverts, waste areas, sidecast pullback areas, stream crossing removals, bridge installations, and other areas directed by the Contract Administrator. Revegetation of exposed soils shall be accomplished by manual dispersal of grass seed unless otherwise detailed in this Road Plan. Other methods of covering must be approved in writing by the Contract Administrator.

8-16 REVEGETATION SUPPLY

The Contractor shall provide the all seed, mulch, straw and/or hay, matting etc..

8-17 REVEGETATION TIMING

Contractor shall revegetate during the first available opportunity. Soils may not be allowed to sit exposed for longer than one month without receiving revegetation treatment unless otherwise approved in writing by the Contract Administrator. Soils shall not be allowed to sit exposed during any rain event.

8-18 PROTECTION FOR SEED

Contractor shall provide a protective cover over the revegetated area. The protective cover may consist of but not be limited to, such items as dispersed straw and/or hay mulch 3" thick or jute matting. Seed must be covered before the first anticipated storm event.

8-19 ASSURANCE FOR SEEDED AREA

Contractor shall ensure the growth of a uniform and dense crop (at least 50% coverage) of 3-inch tall grass. Contractor shall reapply the grass seed and/or straw and/or hay mulch in areas that have failed to germinate or have been damaged through any cause, restore eroded or disturbed areas, clean up and properly dispose of eroded materials, and reapply the grass seed and/or straw and/or hay mulch at no addition cost to the state.

SUBSECTION SEED, FERTILIZER, AND MULCH

8-25 GRASS SEED

Contractor shall evenly spread the seed mixture listed below on all exposed soil at a rate of 60 pounds per acre of exposed soil. Grass seed must meet the following specifications:

1. Weed seed may not exceed 0.5% by weight.
2. All seed species must have a minimum 90% germination rate, unless otherwise specified.
3. Seed must be certified.
4. Seed must be furnished in standard containers showing the following information:
 - a. Common name of seed
 - b. Net weight
 - c. Percent of purity
 - d. Percentage of germination
 - e. Percentage of weed seed and inert material
5. Seed must conform to the following mixture unless a comparable mix is approved in writing by the Contract Administrator.

<u>Kind and Variety of Seed in Mixture</u>	<u>% by Weight</u>	<u>Minimum % germination</u>
Perennial Rye	35-45	90
Red Fescue	30-40	90
Highland Bent	5-15	85
White Clover	10-20	90
Inert and Other Crop	0.5	

SECTION 9 – POST-HAUL ROAD WORK

SUBSECTION STRUCTURES

9-1 EARTHEN BARRICADES

Contractor shall construct barricades in accordance with the EARTHEN BARRICADE DETAIL.

<u>Road</u>	<u>Stations</u>
1+35 Spur	0+10
Blue Emery Spur 2	0+10

SUBSECTION POST-HAUL MAINTENANCE

9-5 POST-HAUL MAINTENANCE

Contractor shall perform post-haul maintenance in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS and as specified below.

<u>Road</u>	<u>Stations</u>	<u>Additional Requirements</u>
All	All	Clean culverts, clean ditches, grade road shape and compact as directed by the Contract Administrator.
PA-F-3100	0+00 – 43+25	Apply post haul rock per Clause 6-72.
PA-F-3200	0+00 – 81+65	Apply post haul rock per Clause 6-72.
PA-F-3210	0+00 – 60+05	Apply post haul rock per Clause 6-72.
PA-F-3080	0+00 – 73+40	Apply post haul rock per Clause 6-72.

SUBSECTION POST-HAUL LANDING MAINTENANCE

9-10 LANDING DRAINAGE

Contractor shall provide for drainage of the landing surface as approved in writing by the Contract Administrator.

9-11 LANDING EMBANKMENT

Contractor shall slope landing embankments to the original construction specifications.

SUBSECTION DECOMMISSIONING AND ABANDONMENT

9-20 ROAD DECOMMISSIONING

Contractor shall decommission the following roads before the termination of this contract.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
1+35 Spur	0+00 – 1+35	Light Decommissioning
Blue Emery Spur 2	0+00 – 1+00	
Total Stations	2.35	

9-22 LIGHT DECOMMISSIONING

- Remove road shoulder berms except as directed.
- Construct non-drivable waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical drop of no more than 10 feet between waterbars or between natural drainage paths and with a maximum spacing of 100 feet, or as marked in the field.

- Skew waterbars at least 30 degrees from perpendicular to the road centerline on roads in excess of 3 percent grade.
- Key waterbars into the cut-slope to intercept the ditch. Waterbars must be outsloped to provide positive drainage. Outlets must be on stable locations.
- Block roads with earthen barricades in accordance with the attached EARTHEN BARRICADE DETAIL.

SECTION 10 MATERIALS

SUBSECTION GEOTEXTILES

10-2 GEOTEXTILE FOR SEPARATION

Geotextiles must meet the following minimum requirements for strength and property qualities, and must be designed by the manufacturer to be used for separation. Material must be free of defects, cuts, and tears. Mifafi 140N or 160N meet or exceed these requirements for geotextile for separation.

	<u>ASTM Test</u>	<u>Requirements</u>
Type	--	Non-woven
Apparent opening size	D 4751	No. 70 max
Water permittivity	D 4491	0.02 sec ⁻¹
Grab tensile strength	D 4632	160 lb
Grab tensile elongation	D 4632	>= 50%
Puncture strength	D 6241	310 lb
Tear strength	D 4533	50 lb
Ultraviolet stability	D 4355	50% retained after 500 hours of exposure

10-3 GEOTEXTILE FOR STABILIZATION

Geotextiles must meet the following minimum requirements for strength and property qualities, and must be designed by the manufacturer to be used for stabilization or reinforcement, and filtration. Material must be free of defects, cuts, and tears.

	<u>ASTM Test</u>	<u>Requirements</u>
Type	--	Woven
Apparent opening size	D 4751	No. 40 max
Water permittivity	D 4491	0.10 sec ⁻¹
Grab tensile strength	D 4632	315 lb
Grab tensile elongation	D 4632	<50%
Puncture strength	D 6241	620 lb
Tear strength	D 4533	112 lb
Ultraviolet stability	D 4355	50% retained after 500 hours of exposure

10-6 GEOTEXTILE FOR TEMPORARY SILT FENCE

Geotextiles must meet the following minimum requirements for strength and property qualities, and must be designed by the manufacturer to be used for filtration. Woven slit-film geotextiles are not allowed. Material must be free of defects, cuts, and tears.

	<u>ASTM Test</u>	<u>Requirements</u>
Type	--	Unsupported between posts
Apparent opening size	D 4751	No. 30 max., No. 100 min.
Water permittivity	D 4491	0.02 sec ⁻¹
Grab tensile strength	D 4632	180 lb in machine direction, 100lb in cross-machine direction
Grab tensile elongation	D 4632	30% max. at 180 lb or more
Ultraviolet stability	D 4355	70% retained after 500 hours of exposure

10-9 LARGE APERTURE GEOGRID

Geogrids must meet the following minimum requirements for strength and property qualities, and must be designed by the manufacturer to be used for stabilization or reinforcement, and filtration. Material must be free of defects, cuts, and tears. Tensar NX650 and NX750 meet or exceed the requirements for Large Aperture Geogrid.

	<u>ASTM Test</u>	<u>Requirements</u>
Type		Grid
Aperture Shapes		Hexagonal, Trapezoidal, & Triangular
Rib Shape		Rectangular
Rib Pitch (in)		3.2
Rib aspect Ratio		>1.0
Node Thickness (in)		0.13

SUBSECTION CULVERTS

10-15 CORRUGATED STEEL CULVERT

Metallic coated steel culverts must meet AASHTO M-36 (ASTM A-760) specifications. Culverts must be aluminized (aluminum type 2 coated meeting AASHTO M-274).

10-17 CORRUGATED PLASTIC CULVERT

Polyethylene culverts must meet AASHTO M-294 specifications, or ASTM F-2648 specifications for recycled polyethylene. Culverts must be Type S – double walled with a corrugated exterior and smooth interior.

10-21 METAL BAND

Metal coupling and end bands must meet the AASHTO specification designated for the culvert and must have matching corrugations. Culverts 24 inches and smaller must have bands with a minimum width of 12 inches. Culverts over 24 inches must have bands with a minimum width of 24 inches.

10-22 PLASTIC BAND

Plastic coupling and end bands must meet the AASHTO specification designated for the culvert. Only fittings supplied or recommended by the culvert manufacturer may be used. Couplings must be split coupling band. Split coupling bands must have a minimum of four corrugations, two on each side of the pipe joint.

10-23 RUBBER CULVERT GASKETS

Rubber gaskets must be continuous closed cell, synthetic expanded rubber gaskets conforming to the requirements of ASTM D 1056. Rubber gaskets must be used with all corrugated metal pipe coupling bands.

10-24 GAUGE AND CORRUGATION

Unless otherwise stated in the engineer’s design, metal culverts must conform to the following specifications for gage and corrugation as a function of diameter.

<u>Diameter</u>	<u>Gauge</u>	<u>Corrugation</u>
18"	16 (0.064")	2 2/3" X 1/2"
24" to 48"	14 (0.079")	2 2/3" X 1/2"
54" to 96"	12 (0.109")	5" x 1"

SECTION 11 SPECIAL NOTES

11-5 INSLOPED/OUTSLOPED ROAD SEGMENTS

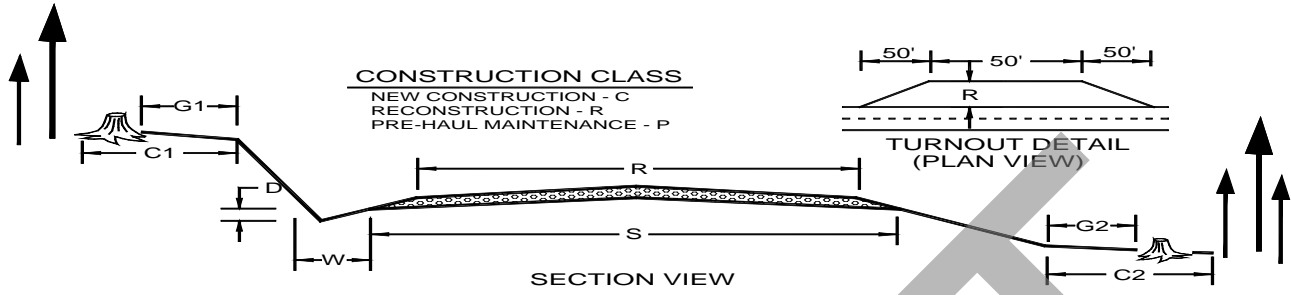
Contractor shall inslope/outslope road segments as listed in table below. Inslope/outslope grade shall be in accordance with TYPICAL SECTION SHEET and Typical Inslope/outslope Detail Sheet.

<u>Road</u>	<u>Stations</u>	<u>Inslope/Outslope</u>
PA-F-3080	67+60 – 71+65	Outslope

11-7 COUNTY ROAD APPROACH PERMITS

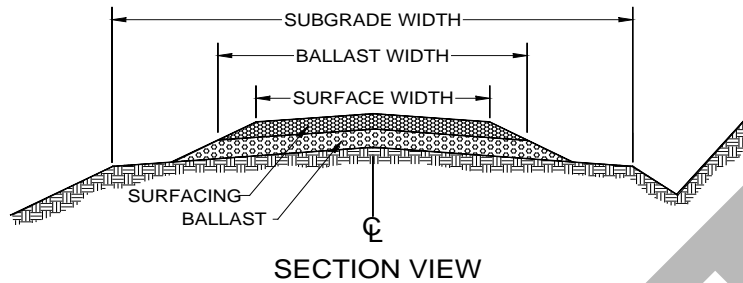
All county road approach permit(s) must be followed. This includes posting, correspondence with the County Public works department and construction requirements.

TYPICAL SECTION SHEET



ROAD NAME	START STATION	END STATION	CONSTRUCTION CLASS	TOLERANCE CLASS	SUBGRADE WIDTH (S)	ROAD WIDTH (R)	CROWN AT CL (in)	DITCH WIDTH (W)	DITCH DEPTH (D)	GRUBBING CUT BANK (G1)	GRUBBING FILL TOE (G2)	ROAD CUT CLEARING (C1)	ROAD FILL CLEARING (C2)
PA-F-3100	0+00	43+25	P			12'	3"	3'	1'				
PA-F-3120	0+00	1+25	R	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-3125	0+00	15+20	R	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-3125 Wye	0+00	2+00	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-3125.1	0+00	5+30	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
Transfer Station Spur	0+00	2+70	P			12'	3"	3'	1'				
1+35 Spur	0+00	1+35	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
Blue Emery Spur 1	0+00	5+00	R	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
Blue Emery Spur 1.1	0+00	7+85	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
Blue Emery Spur 2	0+00	1+00	P			12'	3"	3'	1'				
PA-F-3200	0+00	81+65	P			12'	3"	3'	1'				
PA-F-3210	0+00	60+05	P			12'	3"	3'	1'				
PA-F-3080	0+00	41+40	P			12'	3"	3'	1'				
PA-F-3080	41+40	67+60	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-3080	67+60	68+35	C	C	17'	12'	-3/3"			5'	5'	10'	5'
PA-F-3080	68+35	70+80	C	C	17'	12'	3/-3"			5'	5'	10'	5'
PA-F-3080	70+80	71+65	C	C	17'	12'	-3/3"			5'	5'	10'	5'
PA-F-3080	71+85	73+40	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-3081	0+00	14+70	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
2+05 Spur	0+00	2+05	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-3084	0+00	7+50	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-3085	0+00	5+50	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'

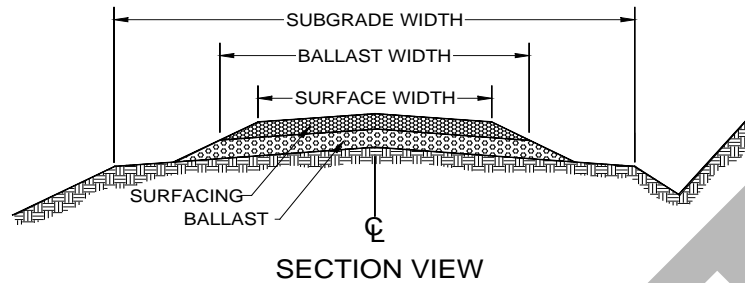
ROCK LIST SHEET



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4. All rock sources are subject to approval by the Contract Administrator.
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6. Rock sources= 1: Prospector or MC Pit Ballast, 2: Prospector or MC 3" Jaw Run Rock, 3: Commerical Source 1 ¼" minus, 4: Prospector or MC Pit Oversized.

ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
PA-F-3100															
Misc.	0+00	43+25							3				100		
Post Haul	0+00	43+25							3				200		
PA-F-3120															
Lift	0+00	1+25	17	1	12	18	110	140							
PA-F-3125															
Lift	0+00	2+15	17	1	12	12	70	150							
Lift	2+15	15+20	17	1	12	12	70	920							
Turnaround	3+25			1				50							
Culvert Install	3+95			1				20							
Culvert Install	7+95			1				20							
Turnout	8+35			1				30							
PA-F-3125.1															
Lift	0+00	5+30	17	1	12	18	110	580							
Culvert Install	0+10			1				20							
Culvert Install	3+60			1				20							
Turnaround	4+25			1				50							
PA-F-3125 WYE															
Lift	0+00	2+00	17	1	12	18	110	220							
Totals:								1: 2220					3: 300		

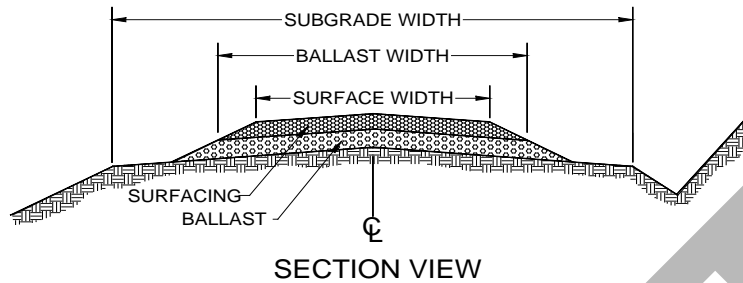
ROCK LIST SHEET CONTINUED



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ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd³/sta)	Pitrun SUBTOTAL(yd³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd³/sta)	Crushed Subtotal(yd³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd³)
Transfer Station Spur															
Lift	0+00	2+70							3	12	6	35	100		
Turnout	1+00			1				30							
1+35 Spur															
Lift	0+00	1+35	17	1	12	18	110	150							
Blue Emery Spur 1															
Lift	0+00	1+00		1	13	6	30	30	3	12	6	30	30		
Culvert Install	0+10			1				10	3				10		
Lift	1+00	5+00		1	13	6	35	140	2	12	6	35	140		
Culvert Install	1+85			1				20							
Blue Emery Spur 1.1															
Lift	0+00	4+85	17	1	13	12	70	340	2	12	6	40	200		
Culvert Install	1+60			1				20							
Turnout	3+15			1				30							
Culvert Install	4+85			1				20							
Lift	4+85	7+85	17	1	12	18	110	330							
Turnaround	6+95			1				50							
Totals:								1: 1170					2: 340, 3: 140		

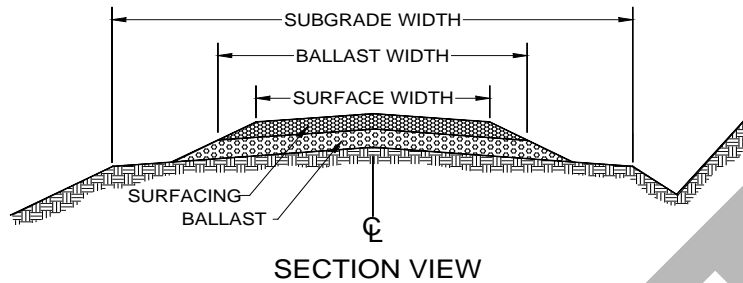
ROCK LIST SHEET CONTINUED



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ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
Blue Emery Spur 2															
Lift	0+00	1+00							3	12	6	40	40		
PA-F-3200															
Misc.	0+00	55+40							3				100		
Misc.	55+40	81+65							2				150		
Post Haul	0+00	55+40							3				200		
Post Haul	55+40	81+65							2				100		
PA-F-3210															
Misc.	0+00	60+05		1				100							
Turnaround	59+75			1				50							
Post Haul	0+00	60+05		1				100							
PA-F-3080															
Lift	0+00	14+20							3	12	4	20	280		
Lift	41+40	73+40	17	1	13	12	70	2240	2	12	6	40	1280		
Culvert Install	42+00			1				20							
Turnout	44+05			1				30							
Culvert Install	50+40			1				20							
Turnout	52+35			1				30							
Culvert Install	52+90			1				20							
Totals:								1: 2610					2: 1530, 3: 620		

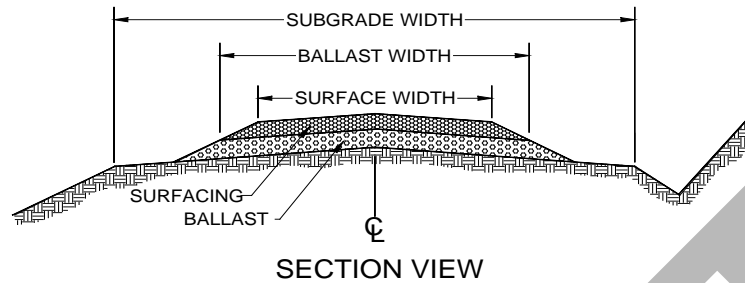
ROCK LIST SHEET CONTINUED



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PA-F-3080															
Turnaround	53+75			1				50							
Culvert Install	55+10			1				20							
Culvert Install	55+85			1				20							
Culvert Install	56+90			1				20							
Turnout	57+60			1				30							
Culvert Install	61+50			1				20							
Turnaround	62+25			1				50							
Turnout	64+10			1				30							
Culvert Install	64+90			1				100							
Culvert Install	67+10			1				20							
Culvert Install	68+35			1				100							
Culvert Install	70+80			1				100							
Turnaround	72+80			1				100							
Post Haul	0+00	14+20							3				50		
Post Haul	14+20	73+40							2				200		
Totals:								1: 660			2:200, 3: 50				

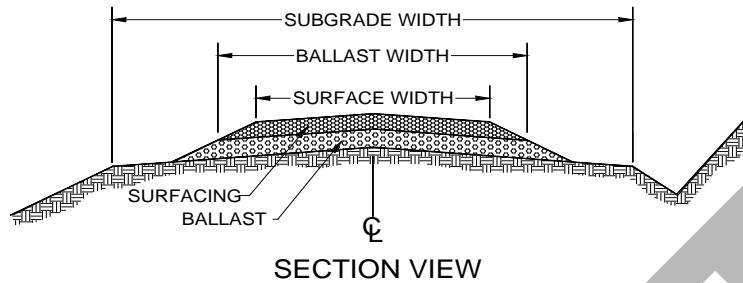
ROCK LIST SHEET CONTINUED



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ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
PA-F-3081															
Lift	0+00	14+70	17	1	12	18	110	1620							
Culvert Install	4+30			1				20							
Culvert Install	6+50			1				20							
Turnout	8+40			1				30							
Culvert Install	9+60			1				20							
Culvert Install	10+40			1				100							
Culvert Install	11+25			1				20							
Turnaround	12+90			1				50							
2+05 Spur															
Lift	0+00	2+05		1	12	18	110	230							
PA-F-3084															
Lift	0+00	7+50	17	1	12	18	110	830							
Culvert Install	0+40			1				20							
Turnaround	5+50			1				50							
Culvert Install	6+50			1				20							
Totals:								1: 3030							

ROCK LIST SHEET CONTINUED



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ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
PA-F-3085															
Lift	0+00	5+50	17	1	12	18	110	610							
Culvert Install	2+70			1				50							
Turnaround	4+60			1				50							
Totals:								1: 710							
Grand Totals:								1: 10,400				2: 2070, 3: 1110			

CULVERT LIST

ROAD NAME	STATION	CULVERT DIAMETER (in)	CULVERT LENGTH (ft)	FLUME LENGTH (ft)		RIP RAP - INLET (cy)	RIP RAP - OUTLET (cy)	BACKFILL MATERIAL	NOTES
PA-F-3125	3+95	18	30					PR	Culvert Install
PA-F-3125	7+95	18	30					PR	Culvert Install
PA-F-3125.1	0+10	18	40					PR	Culvert Install
PA-F-3125.1	3+60	18	30					PR	Culvert Install
Blue Emery Spur 1	0+10	12	40					PR	Culvert Install
Blue Emery Spur 1	1+85	18	30					PR	Culvert Install
Blue Emery Spur 1.1	1+60	18	30					PR	Culvert Install
Blue Emery Spur 1.1	4+85	18	30					PR	Culvert Install
PA-F-3080	42+00	18	30					PR	Culvert Install
PA-F-3080	50+40	18	30					PR	Culvert Install
PA-F-3080	52+90	18	30					PR	Culvert Install
PA-F-3080	55+10	18	30					PR	Culvert Install
PA-F-3080	55+85	18	30					PR	Culvert Install
PA-F-3080	56+90	18	30					PR	Culvert Install
PA-F-3080	61+50	18	30					PR	Culvert Install
PA-F-3080	64+90	18	40					PR	Culvert Install
PA-F-3080	67+10	18	30					PR	Culvert Install
PA-F-3080	68+35	24	40					PR	Culvert Install*
PA-F-3080	70+80	24	40					PR	Culvert Install*
PA-F-3081	4+30	18	30					PR	Culvert Install
PA-F-3081	6+50	18	30					PR	Culvert Install
PA-F-3081	9+60	18	30					PR	Culvert Install
PA-F-3081	10+40	24	30					PR	Culvert Install
PA-F-3081	11+25	18	30					PR	Culvert Install
PA-F-3084	0+40	18	30					PR	Culvert Install
PA-F-3084	6+50	18	30					PR	Culvert Install
PA-F-3085	2+70	24	50					PR	Culvert Install
Contingency Culvert		18	30					NT	As per Contract Administrator
Contingency Culvert		24	30					NT	As per Contract Administrator

All rip rap shall be Oversize unless specified in the Rock List, or in the field.

All backfill shall be native material (NT) unless specified otherwise. CR= crushed rock, PR= Pit Run Rock.

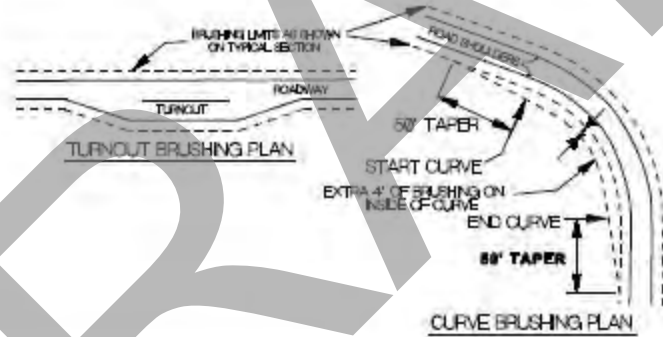
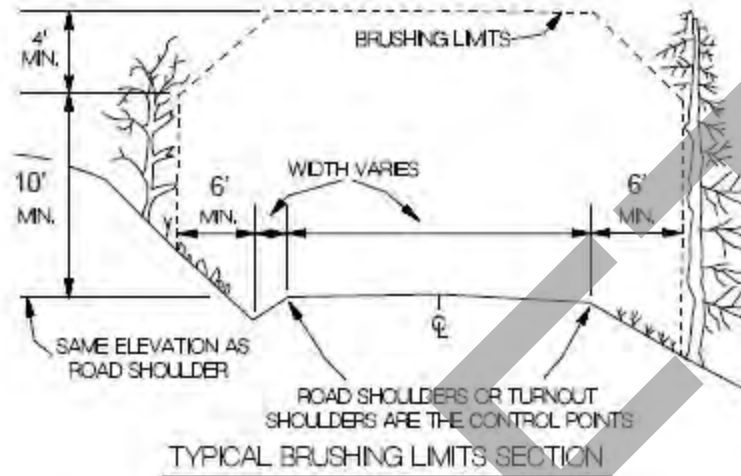
*** Live water**

COMPACTION LIST

Alternate forms/methods to using vibratory smooth drum compactor to compact the road classes listed in the table below shall be approved per District Engineer.

Road	Stations	Type	Max Depth Per Lift (inches)	Equipment Type	Minimum Equipment Weight (lbs)	Minimum Number of Passes	Maximum Operating Speed (mph)
Pre-haul	All	Culvert Backfill	8"	Jumping Jack		3	
Pre-haul	All	Rock Lifts	6"	Vibratory Smooth Drum	6,000	3	3
Pre-haul	All	Pre-haul Surface		Vibratory Smooth Drum	6,000	3	3
Construction	All	Subgrade (Except Puncheon)	6"	Vibratory Smooth Drum	6,000	2	3
Construction	All	Culvert Backfill	8"	Jumping Jack		3	
Construction	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3
Reconstruction	All	Subgrade (Except Puncheon)	6"	Vibratory Smooth Drum	6,000	2	3
Reconstruction	All	Culvert Backfill	8"	Jumping Jack		3	
Reconstruction	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3
Post-haul Maintenance	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3

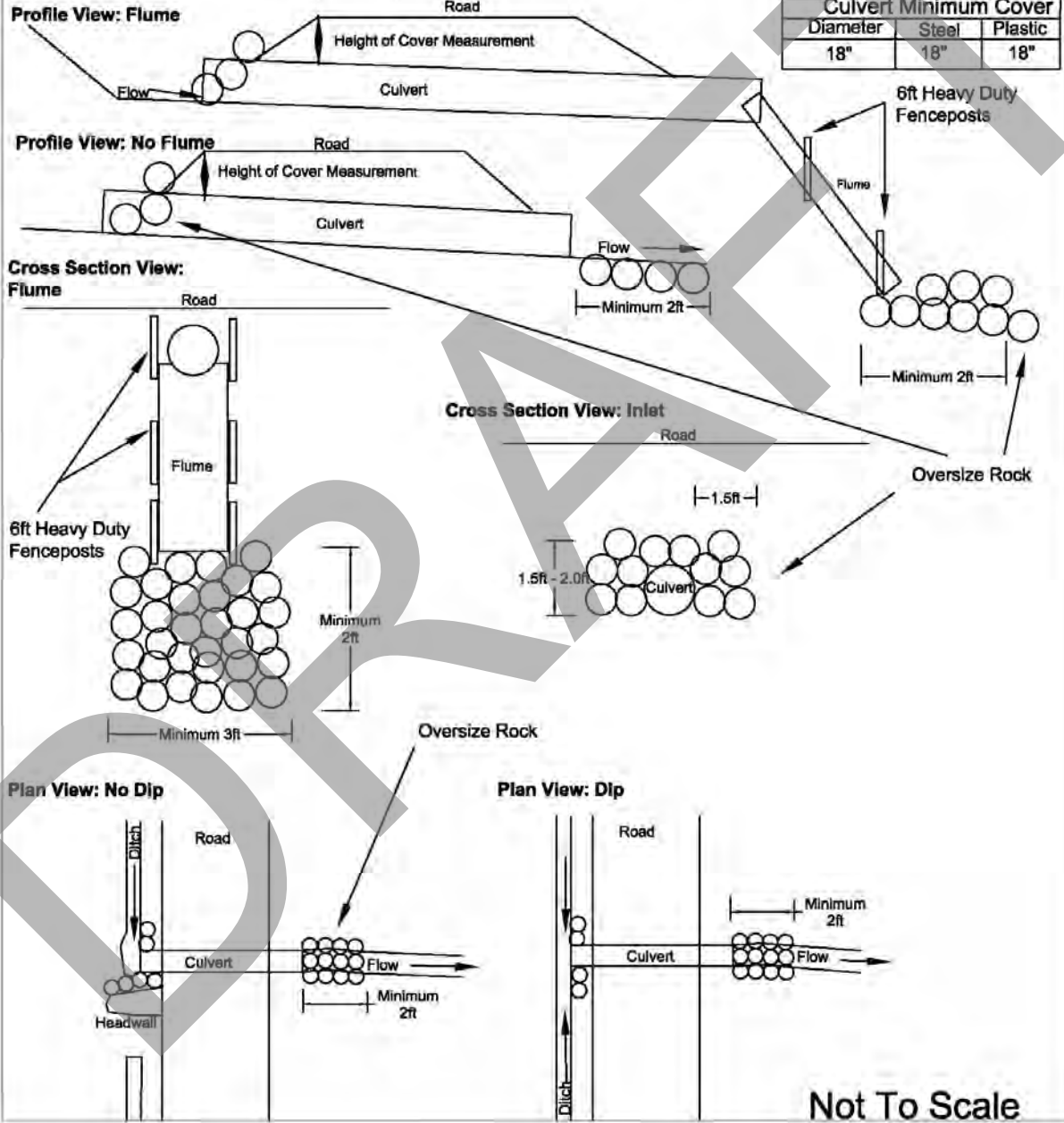
BRUSHING DETAIL



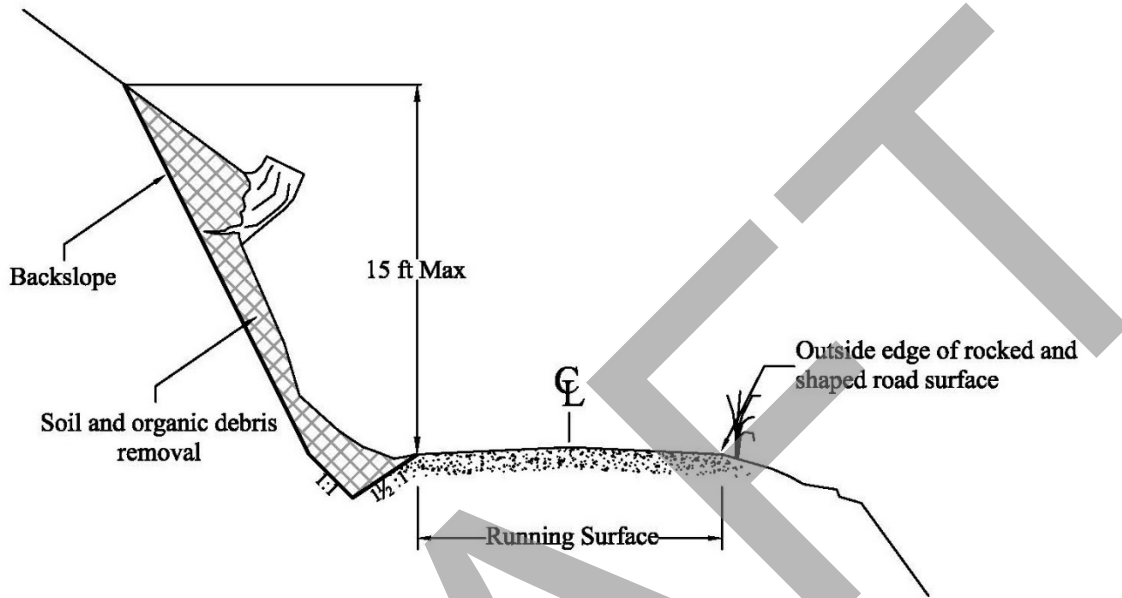
1. All vegetation within the brushing limits shall be cut to within 3 inches of the ground, unless otherwise directed by the Contract Administrator
2. All brush, trees, limbs, etc. shall be removed from the road surface, cut banks, culvert inlets/outlets, and ditch lines
3. All debris that may roll or move into the ditch line shall be removed and placed in a stable location

Typical Cross Drain Culvert Installation Detail Sheet

- Culvert lay shall not exceed 10%.
- Flumes longer than 10ft shall be staked on both sides at maximum intervals of 10ft with 6ft heavy duty steel fence posts, and fastened securely to the posts with No. 10 galvanized smooth wire or bolted to the fence posts.
- Oversize shall be placed using a "zero height drop method", and shall be set in conjunction with the culvert installation.
- Oversize shall be placed at headwalls, along the fill at the inlet, and at the end off flumes in accordance with this Detail. On culverts with no flume oversize shall be placed at the outlet as an energy dissipater as specified in this Detail. All oversize distance to be determined by the Contract Administrator.
- Backfill compaction for installations on existing roads shall be achieved using a jumping jack, or plate compactor on lifts not to exceed 8in. 3 complete passes per lift is required for compaction. Backfill shall be placed and compacted evenly on both sides of the culvert. Care shall be taken to ensure adequate compaction of backfill material under the haunches of the pipe. Excavation trench width shall be at least culvert diameter plus at least the width of the compactor footprint used.

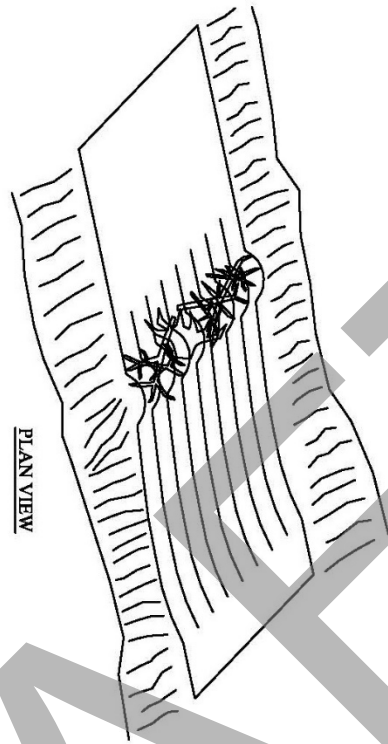


Ditch Cleaning Detail

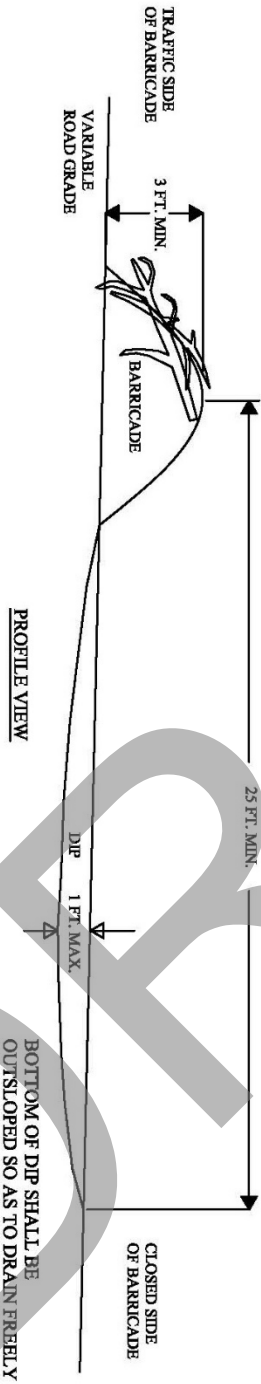


1. The backslope shall be no steeper than $\frac{1}{2}:1$, unless the material is hardpan or solid rock, in which case it may be $\frac{1}{4}:1$.
2. If there is sufficient width for the ditch without affecting the cut bank, then removing bank material is not required.
3. Bank material above the ditch shall be removed to a maximum height of 15 feet, if needed to meet the requirements of this detail.
4. If there is insufficient width to clean or construct a ditch without disturbing more than 15 vertical feet of bank, the Contract Administrator may authorize changes to this plan in order to still meet the intent of having a ditch, while staying within the excavation limits already set.
5. Ditch cleaning or construction shall not shrink the running surface of the road.

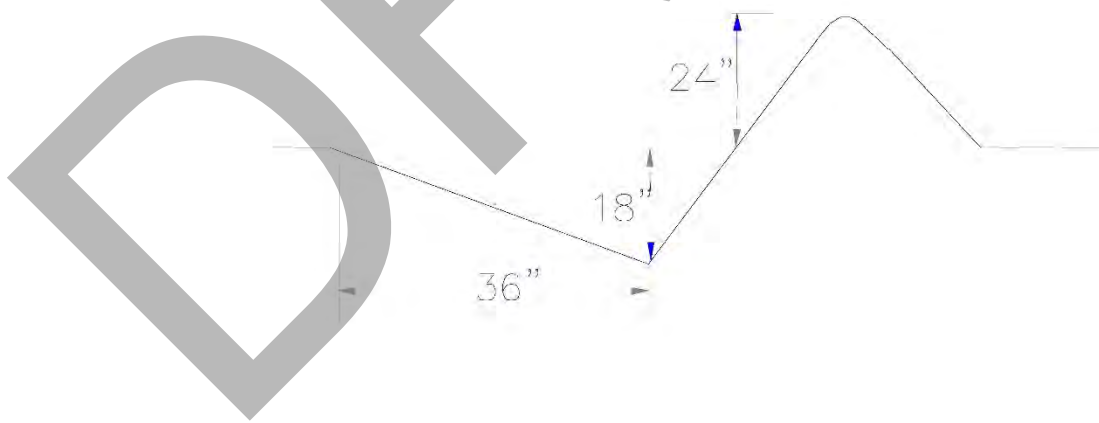
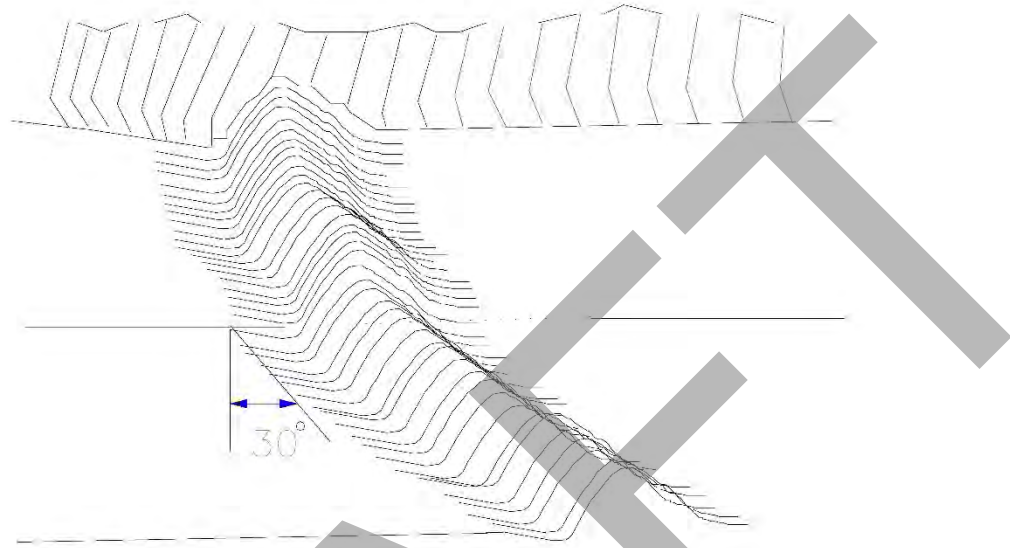
EARTHEN BARRICADE DETAIL

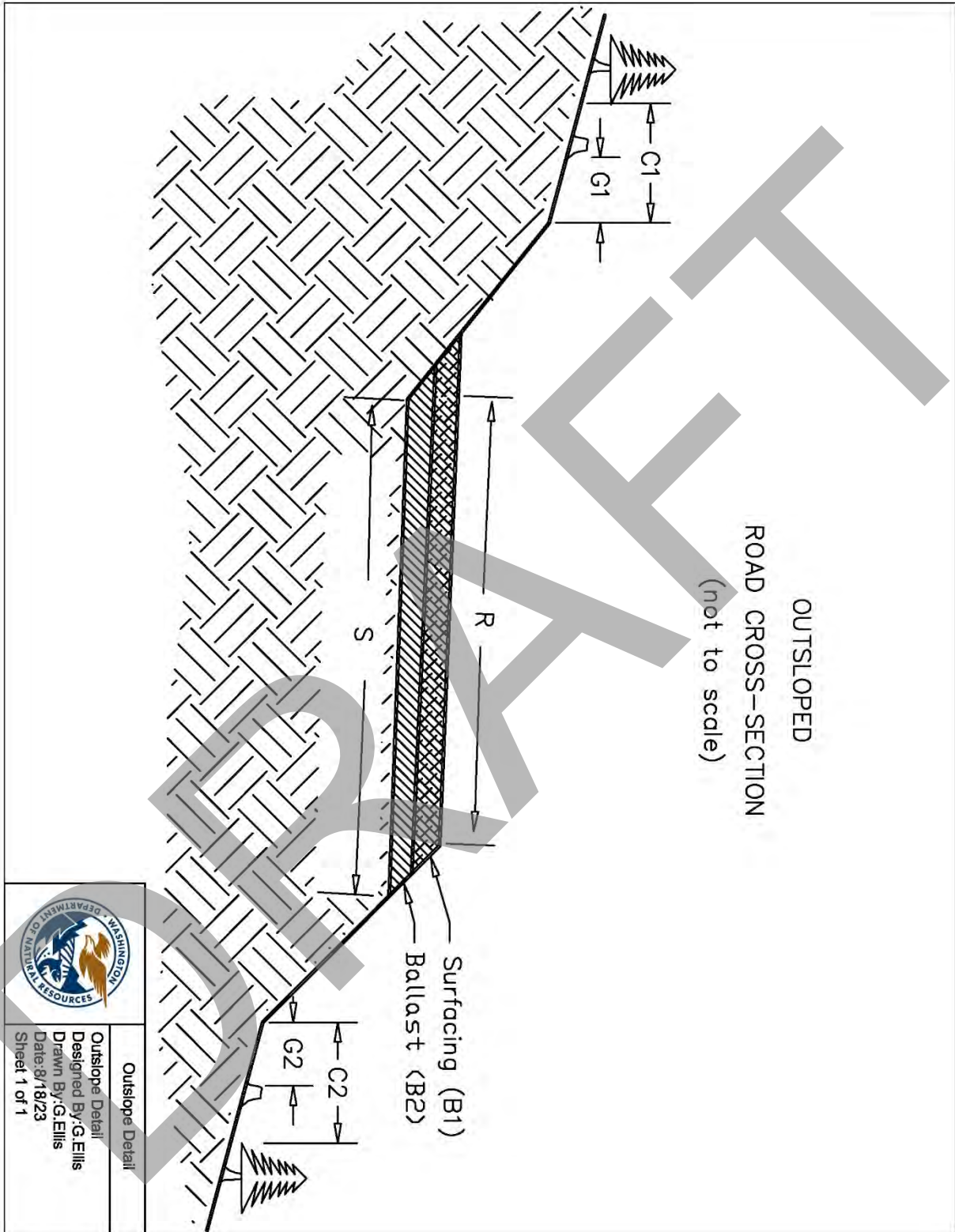


SLASH AND ROOT WADS SHALL BE INCORPORATED INTO THE TRAFFIC SIDE OF THE BARRICADE.



NON-DRIVABLE WATER BAR DETAIL

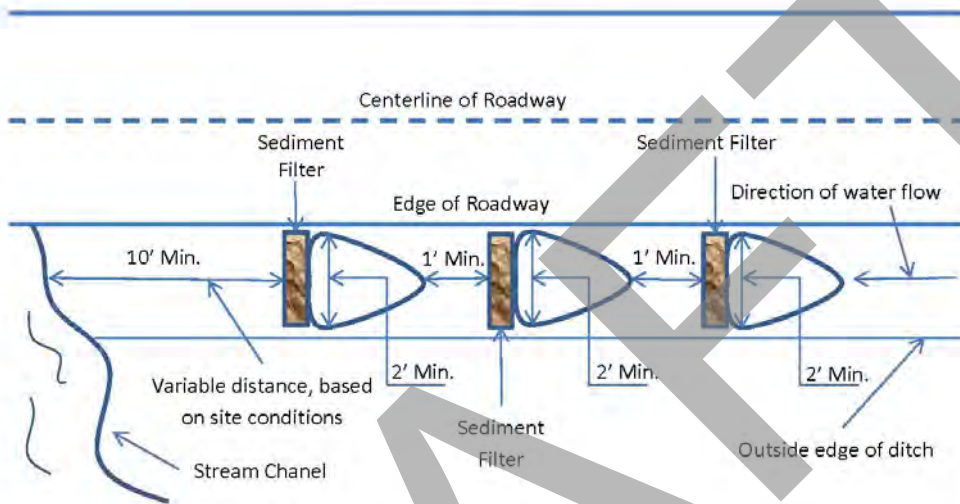




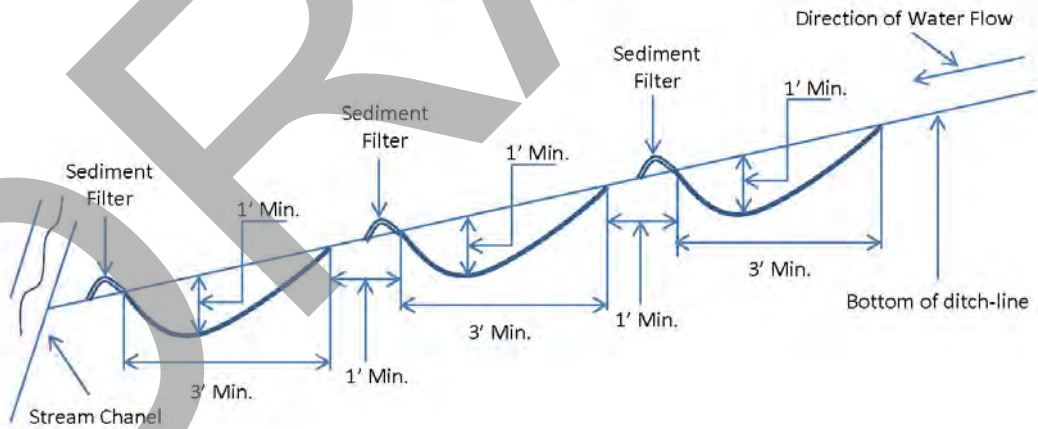
	Outslope Detail
Outslope Detail Designed By: G.Ellis Drawn By: G.Ellis Date: 6/18/23 Sheet 1 of 1	

SEDIMENT TRAP DETAIL

Top View



Profile View



Typical Type Ns, Np Culvert Installation Detail Sheet.

-Water shall be diverted away from the work site before any "in stream" work begins, and shall continue until culvert installation is complete.

-Culvert lay shall match stream gradient up to 5%.

-Flumes longer than 10ft shall be staked on both sides at maximum intervals of 10ft with 6ft heavy duty steel fence posts, and fastened securely to the posts with No. 10 galvanized smooth wire or bolted to the fence posts.

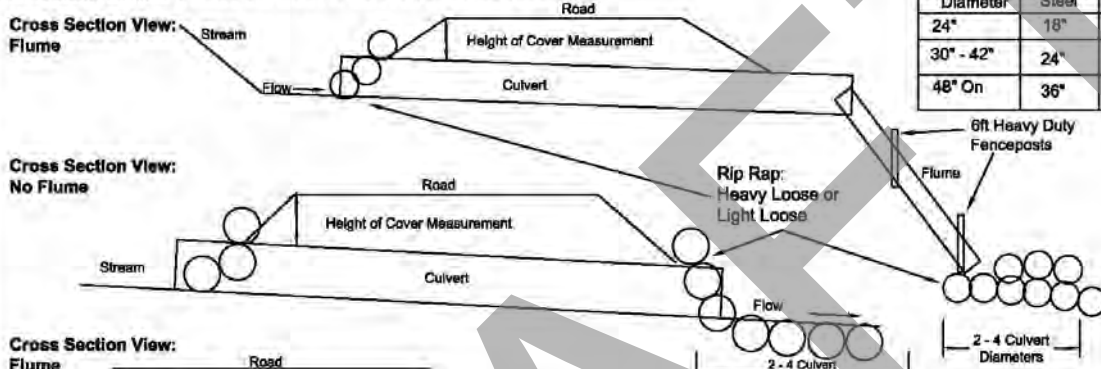
-Rip rap shall be placed using a "zero height drop method", and shall be set in conjunction with the culvert installation.

-Rip rap shall be placed at headwalls, along the fill at the inlet, and at the end off flumes in accordance with this Detail. On culverts with no flume rip rap shall be placed along the fill at the outlet, unless there is stream drop or it is called for in the Road Plan, at which point it will be installed as an energy dissipater at the end of the culvert as specified in this Detail. All rip rap distance to be determined by the Contract Administrator or the District Engineer.

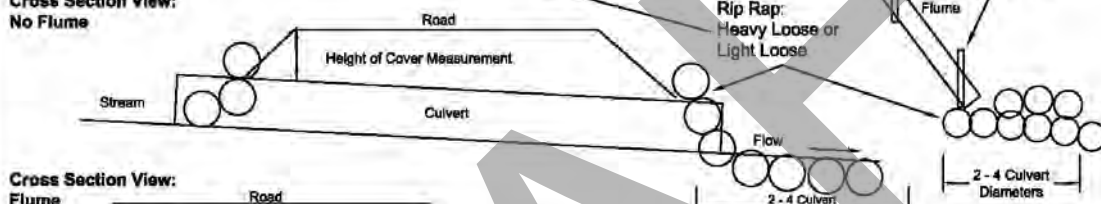
-Backfill compaction shall be achieved using a jumping jack, walk behind vibratory roller, or plate compactor on lifts not to exceed 8in. 3 complete passes per lift is required for compaction. Backfill shall be placed and compacted evenly on both sides of the culvert. Care shall be taken to ensure adequate compaction of backfill material under the haunches of the pipe. Excavation trench width shall be at least culvert diameter plus 3 times the width of the compactor footprint used.

Culvert Diameter	Culvert Minimum Cover	
	Steel	Plastic
24"	18"	24"
30" - 42"	24"	24"
48" On	36"	36"

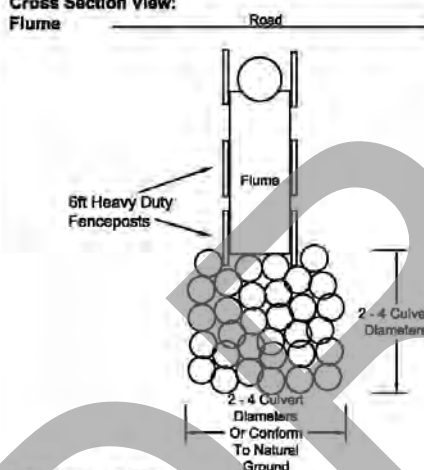
Cross Section View: Flume



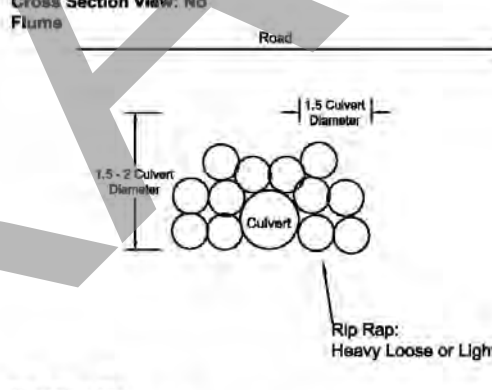
Cross Section View: No Flume



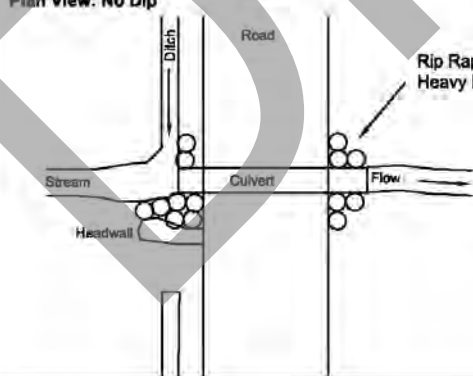
Cross Section View: Flume



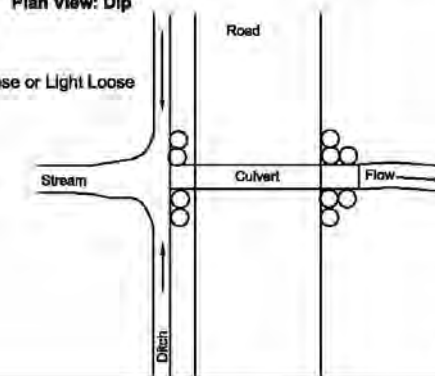
Cross Section View: No Flume



Plan View: No Dip

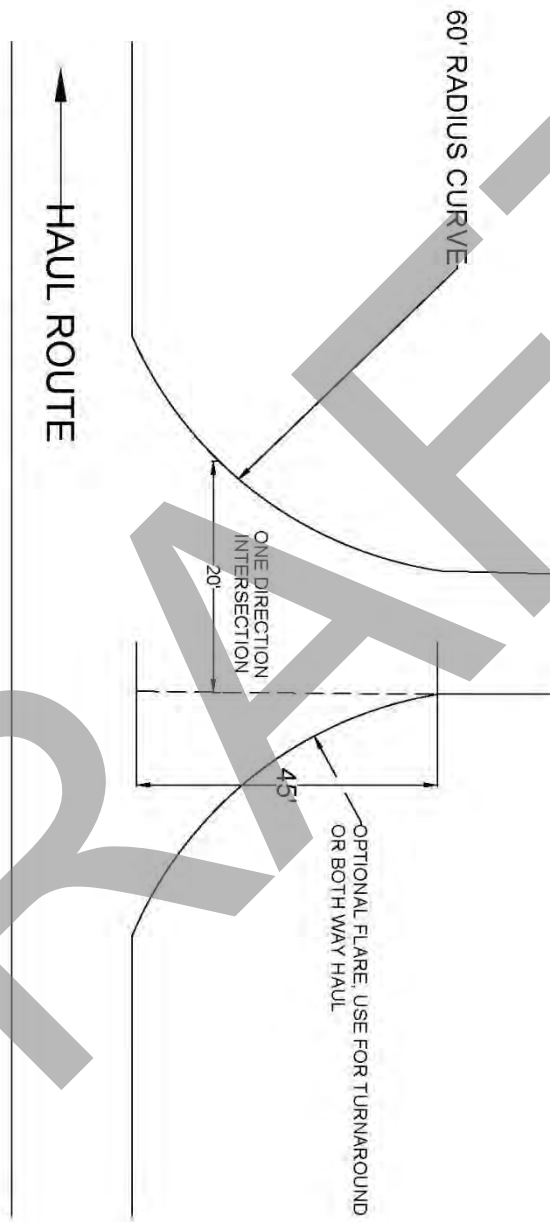


Plan View: Dip

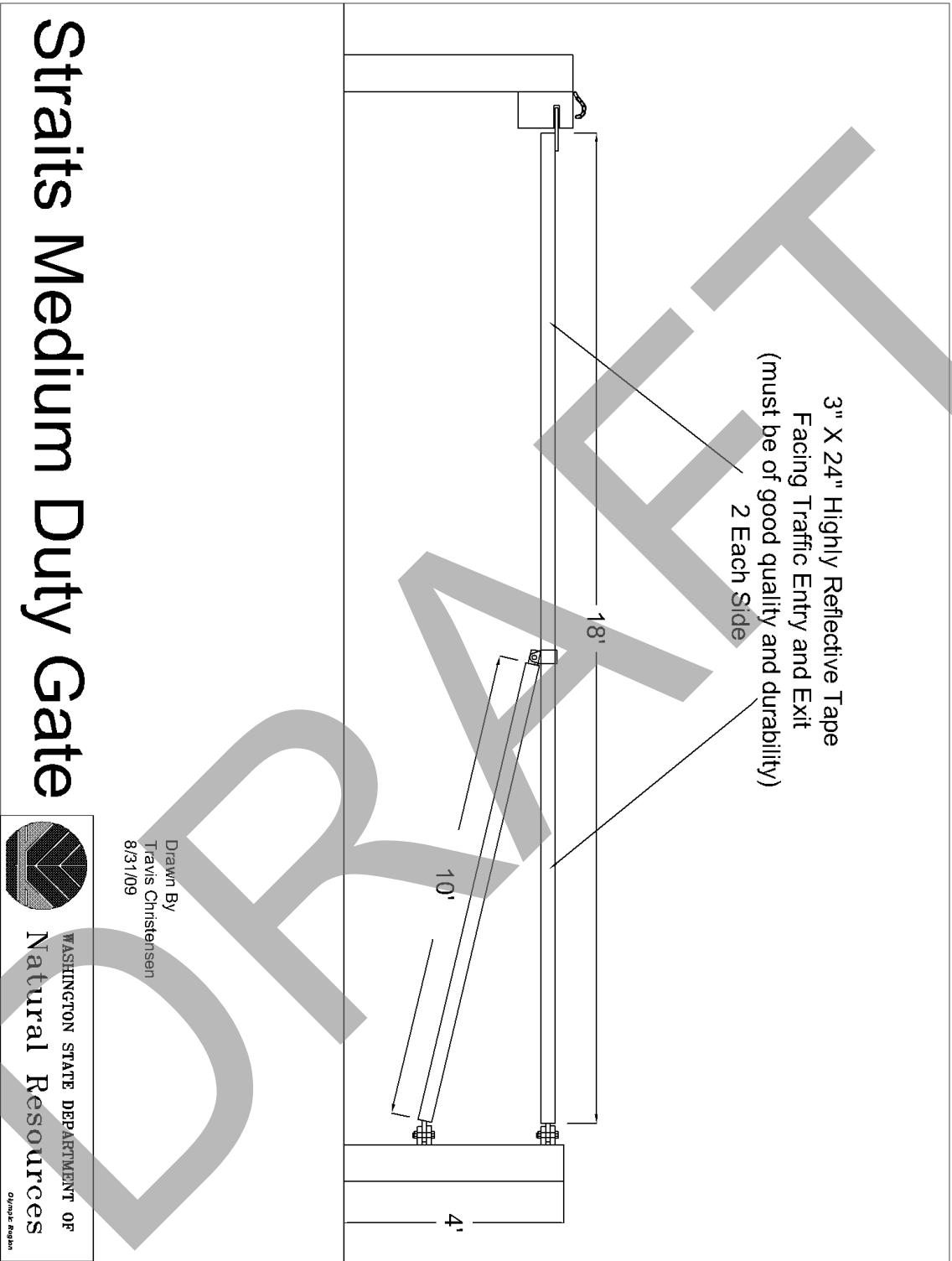


Not To Scale

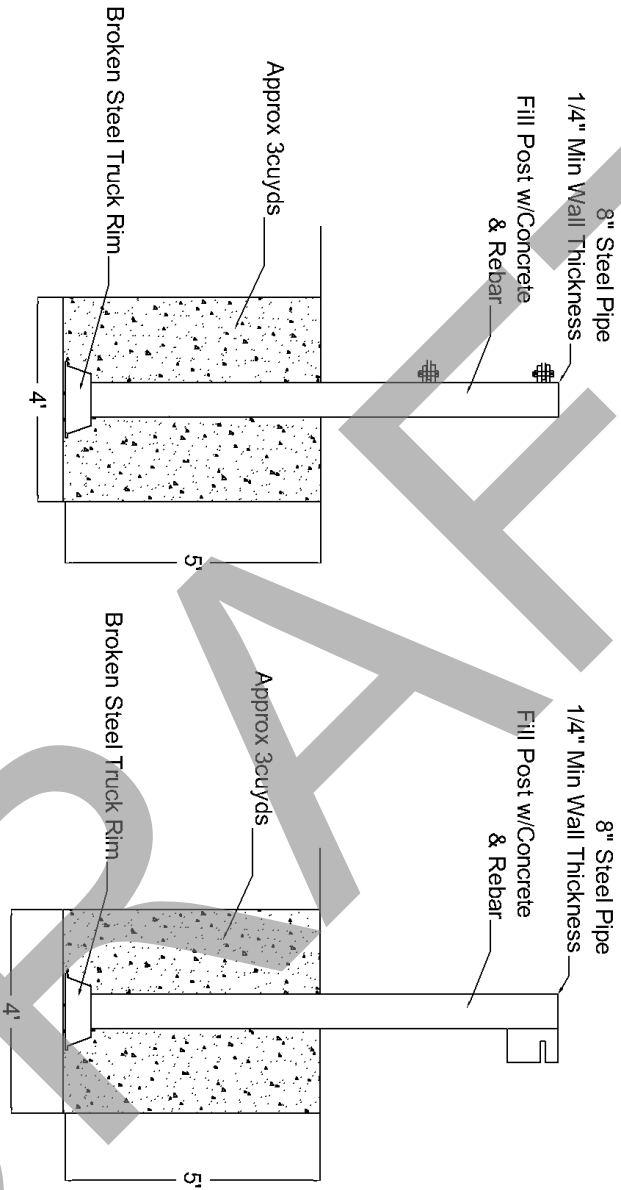
TYPICAL INTERSECTION



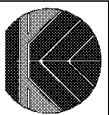
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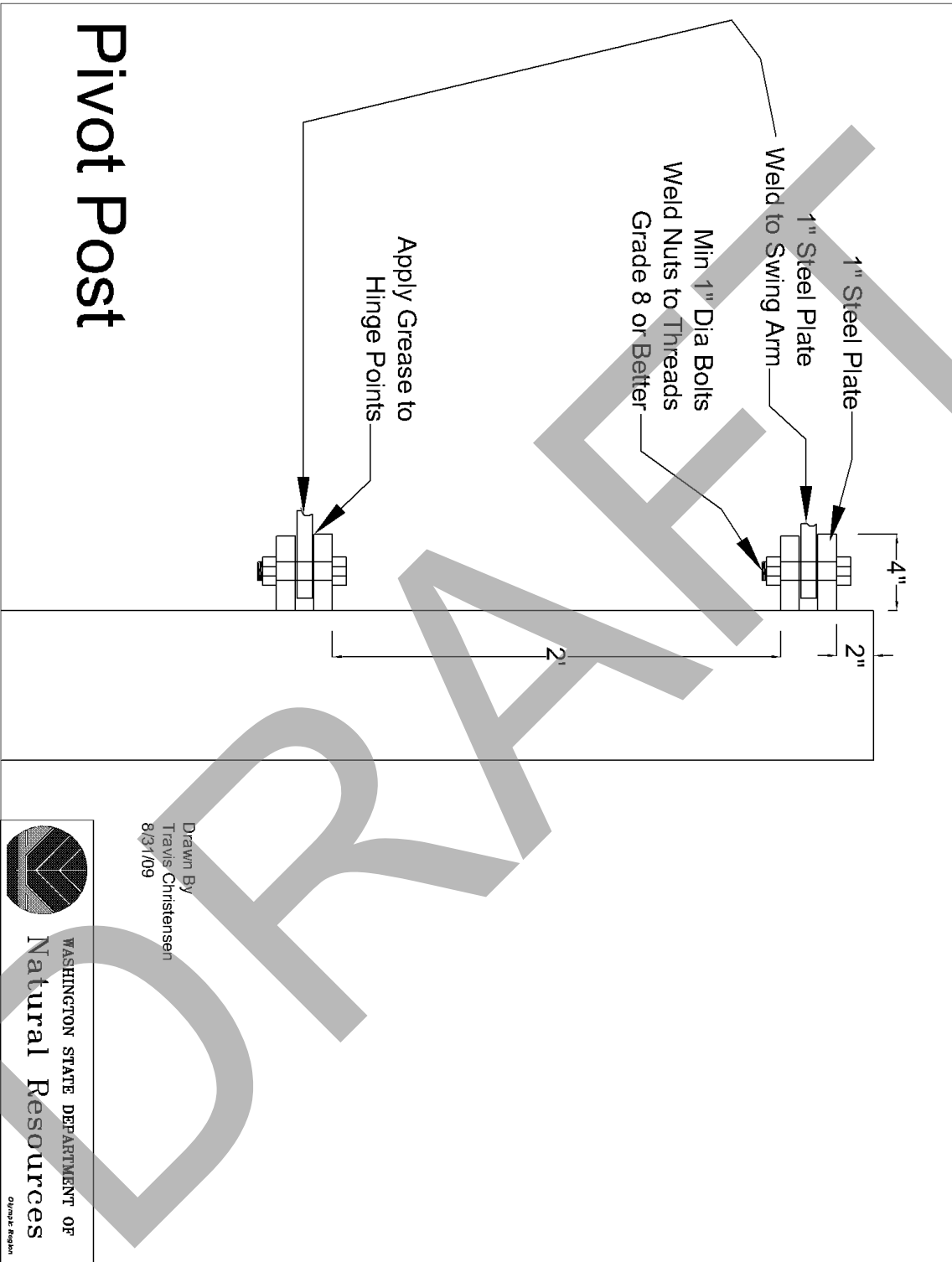
Lock & Pivot Posts



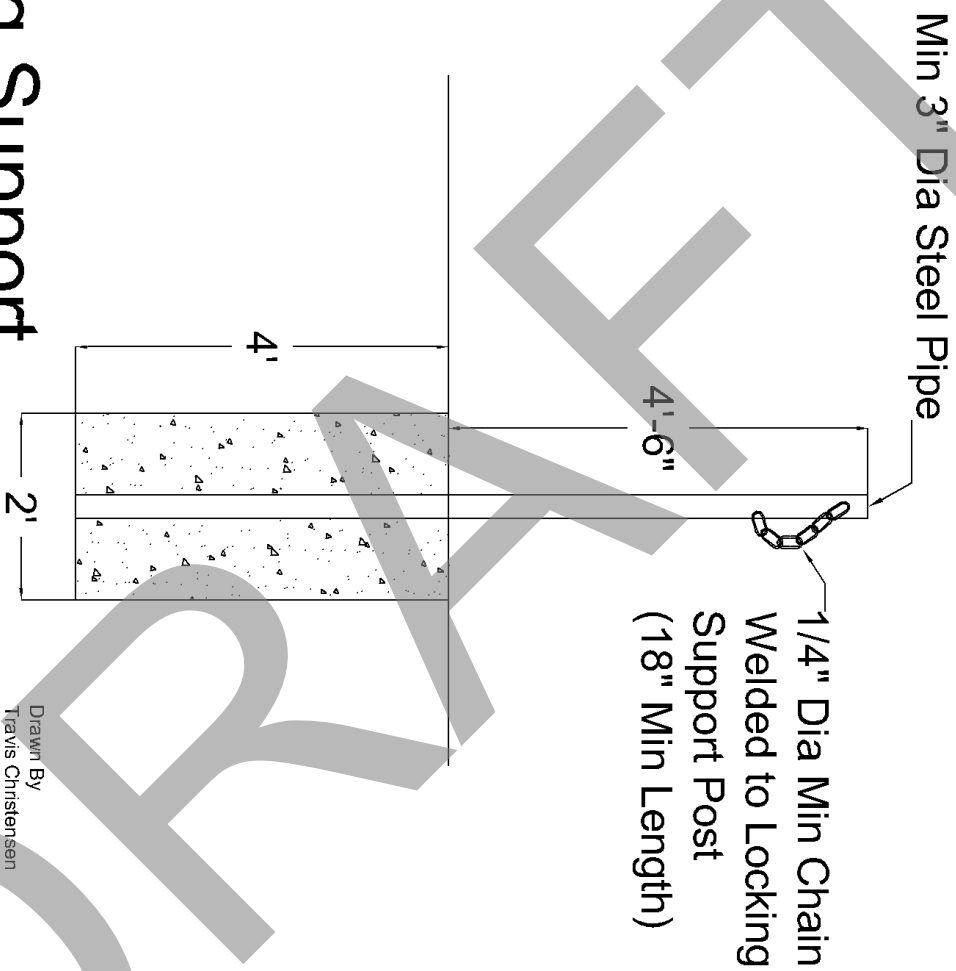
Drawn By
Travis Christensen
8/31/09



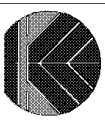
WASHINGTON STATE DEPARTMENT OF
Natural Resources
Olympic Region



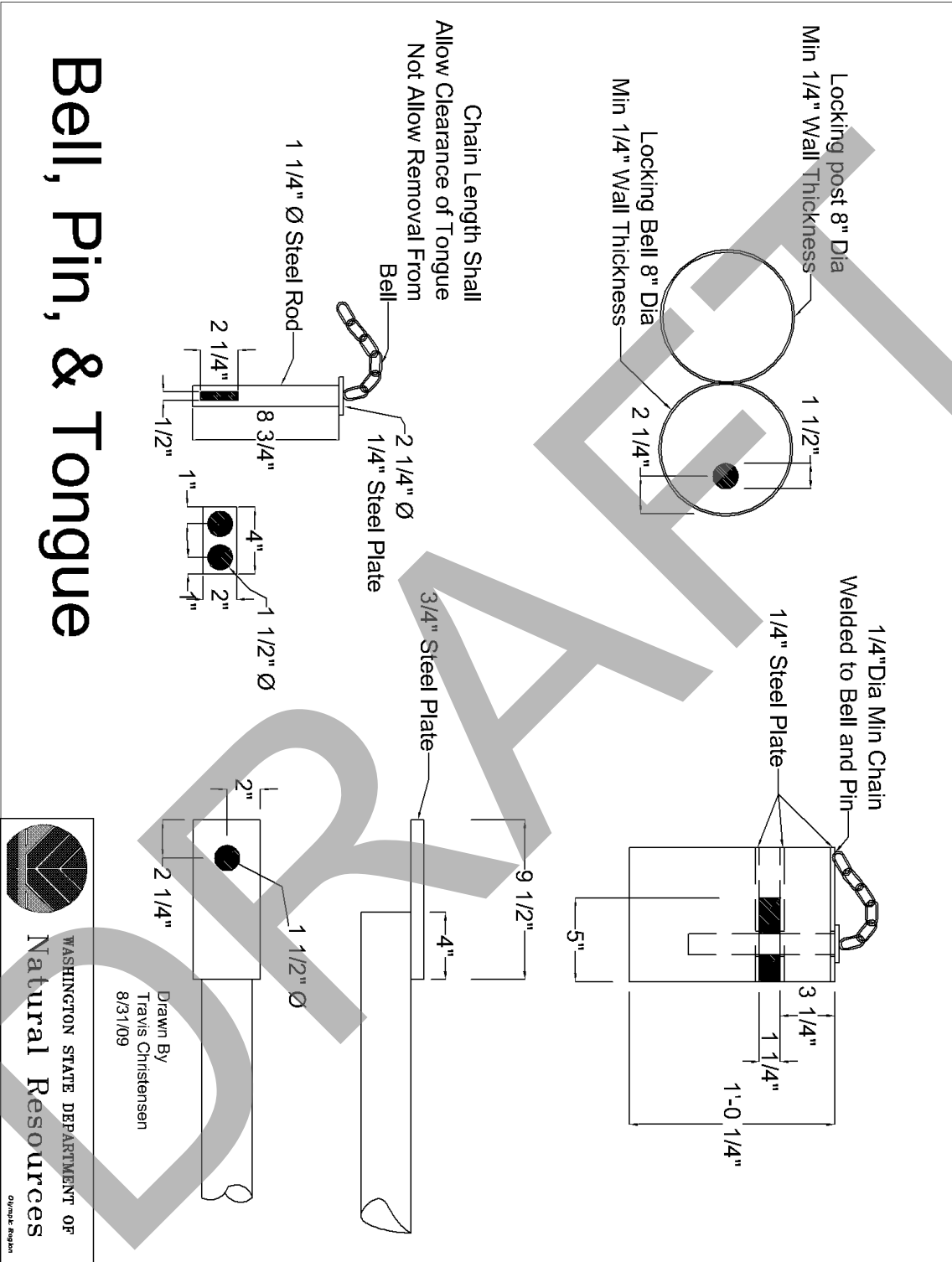
Locking Support Post (Open Position)



Drawn By
Travis Christensen
8/31/09



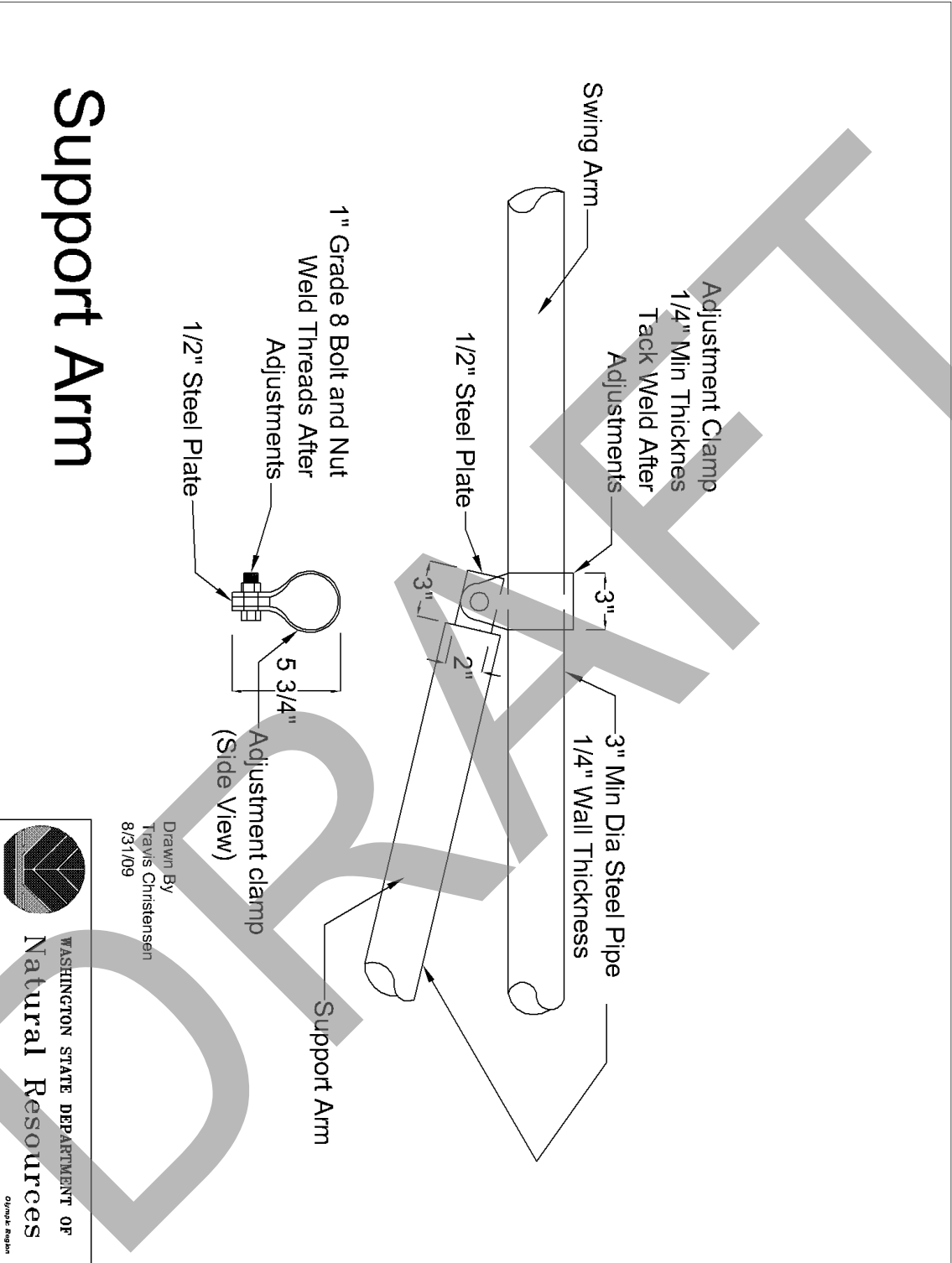
WASHINGTON STATE DEPARTMENT OF
Natural Resources
Olympic Region



Bell, Pin, & Tongue

Drawn By
 Travis Christensen
 8/31/09

WASHINGTON STATE DEPARTMENT OF
Natural Resources
Olympic Region

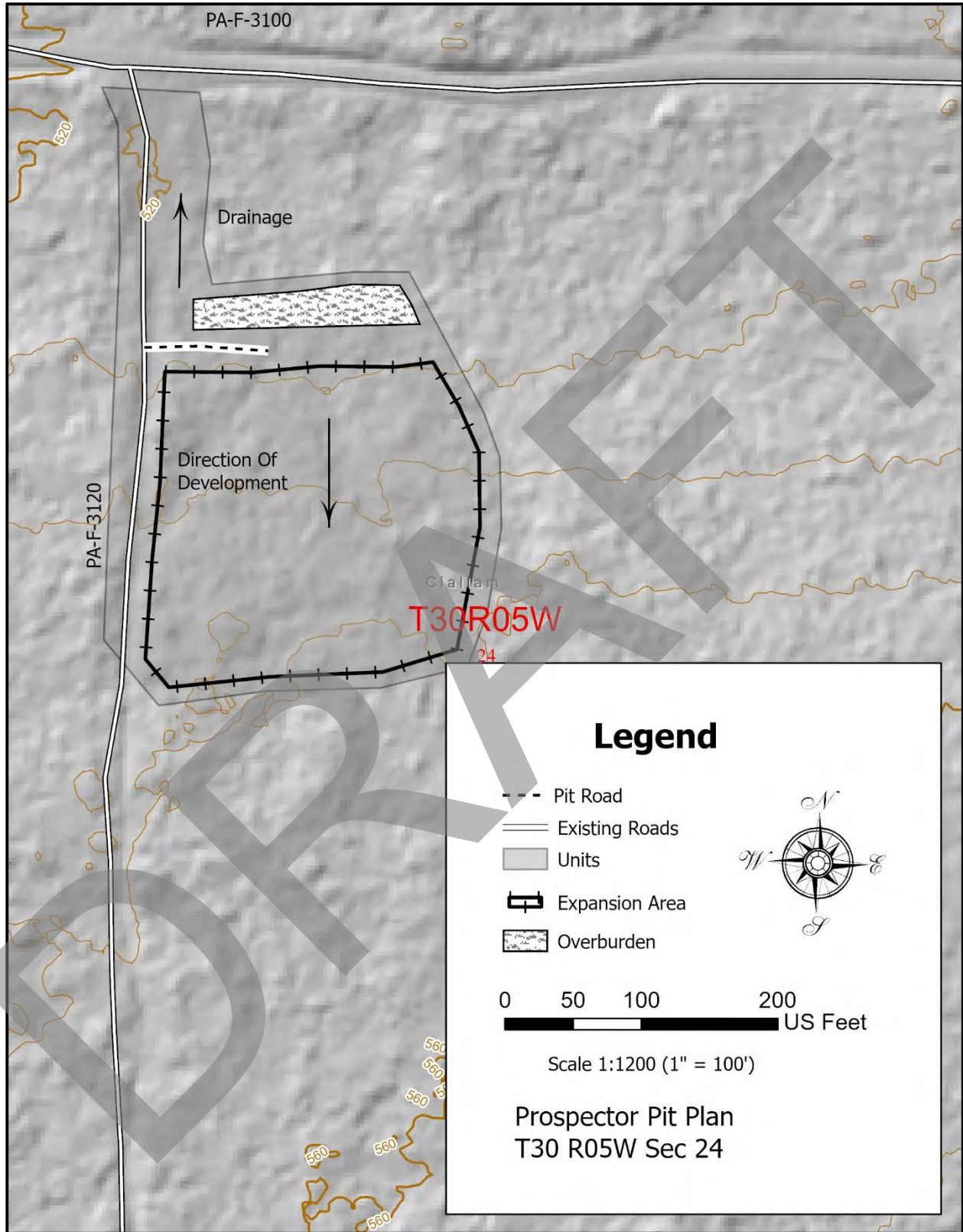


Support Arm

Drawn By
 Travis Christensen
 8/31/09



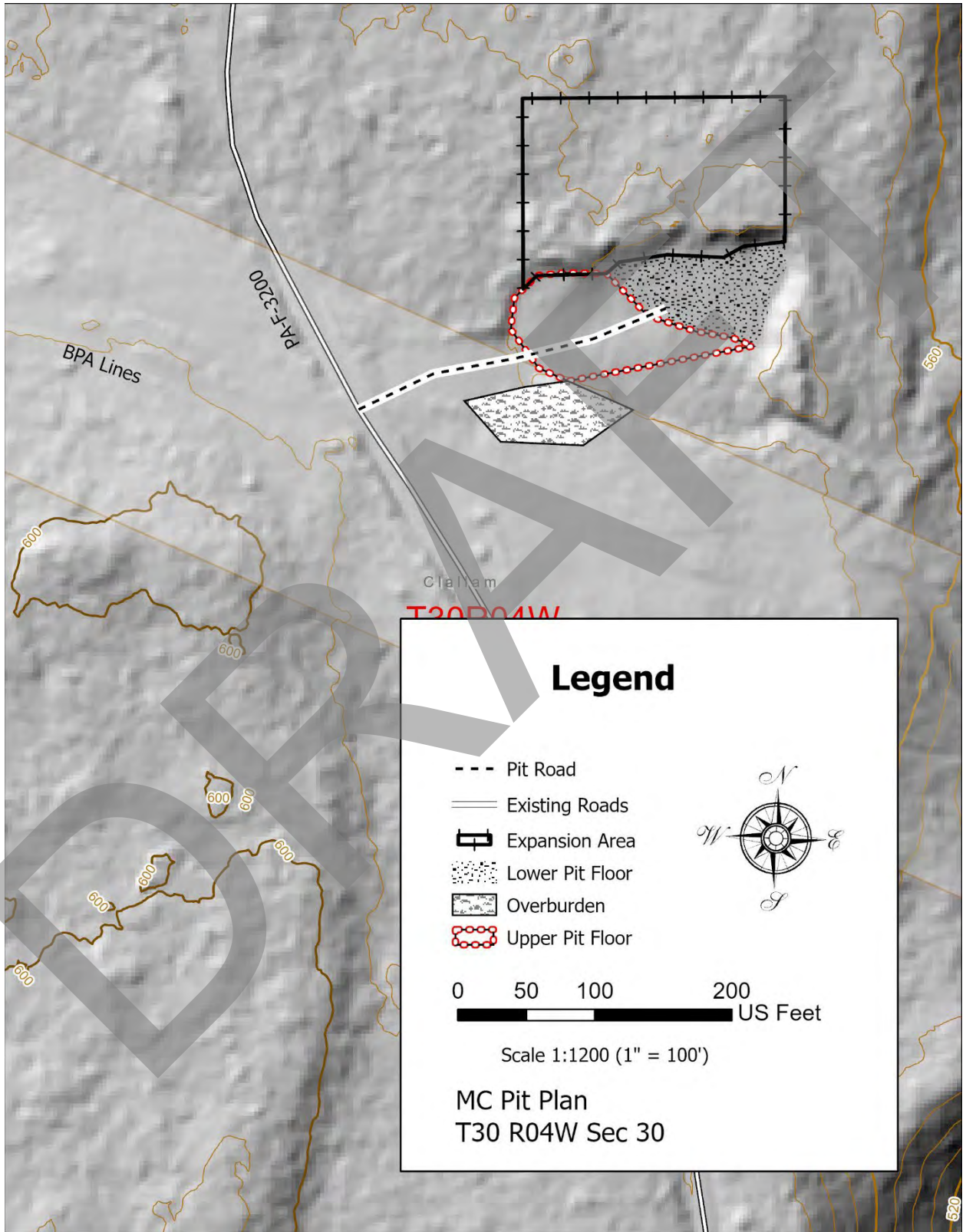
WASHINGTON STATE DEPARTMENT OF
Natural Resources
Olympic Region



**Prospector Pit
ROCK SOURCE DEVELOPMENT PLAN
Sec. 24, T.30N., R.05W.
PIT USE REQUIREMENTS**

PIT USE REQUIREMENTS include but are not limited to the following:

1. Contractor shall give the Contract Administrator a minimum of 7 days' notice prior to commencing any operations, and prepare an approved ROCK SOURCE DEVELOPMENT PLAN as per **Clause 6-10**.
2. Only the quantities and sorts specified in this road plan for this sale may be used or manufactured, unless otherwise approved by the Contract Administrator in writing.
3. If Contractor elects to use rock from a stockpile or from a pit face, Contractor shall remove no more than the following volume of material (cubic yards truck measure) from the existing stockpile or pit face as shown on the PLAN VIEW and PROFILE VIEW, unless otherwise approved by the Contract Administrator in writing.
4. Maintain drainage of the pit floor and all drainage structures within the pit boundaries at all times to the designated settling ponds.
5. Excavated face height shall not exceed 15 feet.
6. All excavated slopes shall have a 1 1/2:1 backslope or less at the completion of operations.
7. A minimum 4 foot high berm shall be constructed and constantly maintained along the upper edge of excavated pit faces. No pit faces shall be left unblocked at any time.
8. All operations shall be completed prior to the end of each operating season, including but not limited to: drainage maintenance, sloping of the excavated face, and construction of berms, unless otherwise approved in writing by the Contract Administrator.
9. The quality and quantity of rock and materials are not guaranteed.
10. All material shall remain the property of the State.
11. At the conclusion of operations, Contractor shall ask the Contract Administrator for written approval of the final rock source condition and compliance with the terms of this plan.
12. All operations shall be carried out in compliance with the regulation of:
 - a. Regulations and Standards Applicable to "Metal and Nonmetal Mining and Milling Operations" (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration
13. All work shall be conducted according to relevant specifications in this Road Plan, and the Contract Administrator.



MC Pit
ROCK SOURCE DEVELOPMENT PLAN
Sec. 30, T.30N., R.04W.
PIT USE REQUIREMENTS

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13. All work shall be conducted according to relevant specifications in this Road Plan, and the Contract Administrator.

Clallam County Public Works Department
 223 East Fourth Street, Suite 6 Port Angeles, WA 98362
 360-417-2379 Phone; 360-417-2613 Fax
\$180 FEE Minimum Due With Application

ROAD NO. **41770**
 ROAD NAME **BLUE MOUNTAIN RD.**
 PERMIT NO. **RDP2023-00188**
 COUNTY USE ONLY

CLALLAM COUNTY ROAD APPROACH PERMIT

In Clallam County, an approved Road Approach is required if your parcel is accessed from a County Road. Building permits will not be finalized until a legal Road Approach is in place and functioning as permitted.

PLEASE PRINT Building Permit Application Submitted? Yes <input type="checkbox"/> No <input type="checkbox"/>	
County Road: BLUE MOUNTAIN ROAD	Tax Parcel #: 053023430000 053024220075
Landowner: WADNR	Prepared By (Agent): Scott Rose
Mailing Address: 411 Tillcum Lane	Address:
City, State, Zip: Forks, WA 98331	City, State, Zip:
Phone/Cell Phone/Fax: 360-460-5327	Phone/Cell Phone/Fax:
Email: Scott.Rose@dnr.wa.gov	Contractor's Name/Address/Phone:
Short Plat Name & Lot No.: 53295 53322	

Do you have critical areas on your property? Yes No If "No", proceed with this application. If "Yes", or you are not sure, STOP. See the Planning Department for a determination before you proceed.

ROAD APPROACH PERMISSION IS REQUESTED FOR:

Check all that apply below:

- Single-lot driveway
- Multiple-lot driveway
- Commercial driveway
- Agricultural driveway
- Permanent access
- Temporary access
- Upgrade of existing approach
- Review of existing approach
- Pave Approach

WHEN APPROVED:

Check one item below:

- Mail permit to Landowner
- Mail permit to Contractor/Agent
- Call when approved

ATTACH AN ACCURATE AND DETAILED SITE PLAN MAP (NO LARGER THAN 11" X 17") THAT MARKS THE LOCATION OF THE PROPOSED ROAD APPROACH PROJECT. A SITE PLAN FORM IS PROVIDED.

THE EXACT LOCATION OF THE DRIVEWAY OR ACCESS ROAD MUST BE MARKED BY A WOOD STAKE PLACED AT THE CENTER OF THE WORK AREA BEFORE SUBMITTING THIS FORM. THE STAKE MUST BE LABELED WITH THE NAME OF THE APPLICANT. FAILURE TO COMPLY WILL RESULT IN DELAY OF THE PROCESSING OF THIS PERMIT.

It is the responsibility of the applicant to notify all utilities and private property owners when such property is liable to injury or damage through the performance of the permitted work. The applicant shall make all necessary arrangements relative to the protection of such property and/or utilities.

By signing this permit, the applicant agrees to comply with all conditions as stated on the PERMIT and on Form RDPCOND082412. Applicant has 10 days from permit approval date to request clarification of or modification to permit conditions stated below or attached.

Signed *[Signature]* Date **11/28/23**

Check one: Owner Contractor Agent

PERMISSION IS HEREBY GRANTED DENIED

Inspections Required: Prior to Cover Prior to Paving Final

Amount/Date Paid **\$180- 11/28/23**
 Receipt # **37678 CHECKED #56827B**
 Rec'd By **ALP**
 Building Permit BPT#

PERMIT CONDITIONS:

The approved Permit must be posted on site until Final Inspection. POSTING COPY PROVIDED TO:

- Underground utility location required prior to start date. "Call Before You Dig" phone number 1-800-424-5555.
- High-visibility safety apparel required when working or flagging within road right of way (see back).
- Traffic control signs are required (see back).
- Must comply with County utility location standards.
- Driveway shall not protrude into County road. Landowner, applicant, contractor or agent shall not damage or leave mud or other debris on a County road.
- No landscaping or decorative electrical utilities permitted in County right of way.
- Private contractor to install. See inspection requirements.
- Compaction in 6-inch lifts required.
- Backfill must be compacted, granular material.
- Driveway shall be built in accordance with County's Road Approach Details.

Remove Rose West once work is complete. Culvert required for Rose east. Maintain 20' radius of returns. Temp approach must be 20' @ RW. Permanent must be 24' @ RW

- Certified flag person required at all times (see back).
- Certified flag person required as needed (see back).
- Truck Crossing Ahead signs required.
- No culvert required
- Approach to be paved
- Culvert required: 12" Diameter
- Allowable Type(s): Concrete Galvanized steel Aluminum Aluminized Corrugated poly. with smooth interior
- Culvert shall not impede drainage

This permit shall be void unless the work herein contemplated is completed before the following date: **09/01/24**

Supervisor/Design Review Engineer *[Signature]* Date **12/1/23**

Final Inspection By: _____ Date: _____

CLALLAM COUNTY ROAD APPROACH PERMIT
INSTRUCTIONS AND CONDITIONS FOR APPLICANTS

Persons desiring to install road approaches onto County property, including County roads, shall first file a "Clallam County Road Approach Permit" with the County Engineer and shall obtain approval prior to beginning work. The work and materials shall conform to the conditions below, the conditions stated on the face of the permit, and shall conform to the requirements on the detail sheet for residential applications or commercial applications, whichever is applicable.

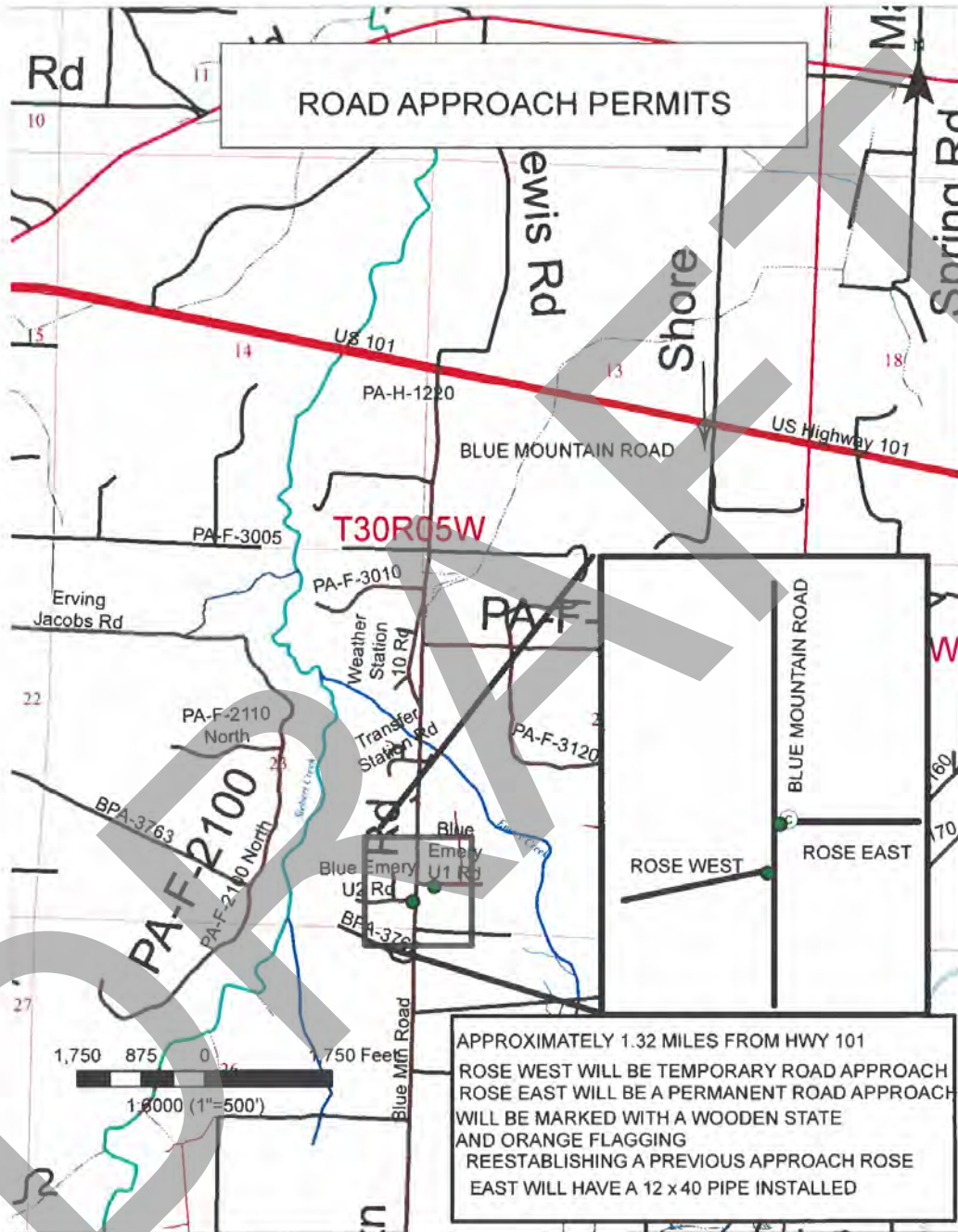
UPON COMPLETION OF THE WORK, THE APPLICANT SHALL NOTIFY THE COUNTY PUBLIC WORKS DEPARTMENT AT (360) 417-2379 FOR FINAL INSPECTION AND APPROVAL.

PERMIT CONDITIONS

1. The applicant, designated herein as the "grantee", his agents, successors and assigns, shall have the right and authority to enter upon the right of way of the County road, street, alley, public place or structure as indicated on the front of this form, for the purpose of doing such work as applied for, and approved by the County Engineer.
2. The location, type of work, materials and equipment used, manner of erection or construction, safeguarding of public traffic during work or after doing same, mode of operation and manner of maintenance of project petitioned for, shall be approved by the County Engineer prior to start of work and shall be subject to the inspection of the County Engineer so as to assure proper compliance with the terms of this permit.
3. The grantee shall commence work within 30 days after the granting of this permit, if the grantee shall have not completed the installation by the date specified on the permit, the rights herein conferred shall cease and terminate unless additional time is requested by the grantee and approved by the county.
4. The grantee shall leave all roads, streets, alleys, public places, and structures after installation and operation or removal of utility in as good and safe a condition in all respects as same were in before commencement of work by grantee.
5. In case of any damage to any roads, streets, public places, structures or public property of any kind on account of said work by the grantee, he will at once repair said damage at his own sole cost and expense.
6. The County Engineer, his agents or representatives may do, order, or have done any and all work considered necessary to restore to a safe condition any street, alley, public place or structure which is in a condition dangerous to a life or property resulting from the grantee's facility or its installation as permitted herein, and upon demand the grantee shall pay to the County all costs of such work and material.
7. If at any time the County deems it advisable to widen, grade, regrade, plant, pave, improve, alter or repair any road, street, public place or structure, the County will not be obligated to spend time nor money due to the permitted installation. The grantee will, at his own sole cost and expense, raise, lower, change, move or reconstruct such installation to conform to the plans or work contemplated or ordered by the County.
8. If upon written notice by the County Engineer the grantee fails to relocate any portion or all of the project as granted under this permit, the County, its agents or representatives may do any work at the cost and expense of the grantee, and all costs to remove or reconstruct same, shall be born by the grantee.
9. All such changes, reconstruction or relocation by the grantees shall be done in such a manner as will cause the least interference with any of the County's work and shall be subject to the same provisions which control an original installation. The County shall in no wise be held liable for any damage to the grantee by reason of any such work by the County, its agents or representatives, or by the exercise of any rights by the County upon roads, streets, public places or structures in question. The grantee shall have twenty-four (24) hours written notice by the County Engineer or his representatives or agents of any blasting contiguous to the grantee's permit rights in order that he may protect his interests.
10. This grant or privilege shall not be deemed or held to be an exclusive franchise, nor prohibit the County from granting other permits of franchise rights of like or other nature to other public or private entities, nor shall it prevent the County from using any of its roads, street, public places for any and all public use, or affect its jurisdiction over all or any part of them.
11. All the provisions, conditions, regulations and requirements herein contained shall be binding upon the successors and assigns of the grantee and all privileges of the grantee shall inure to such successors and assigns as if they were specifically mentioned.
12. The County Engineer may revoke, annul or terminate this permit if grantee fails to comply with any or all of its provisions, requirements or regulations as herein set forth or through willful or unreasonable neglect, fails to heed or comply with notices given him or if the work herein permitted is not installed or operated and maintained in conformity herewith or at all.
13. The Board of County Commissioners may at any time, change, amend, modify, or terminate any of the conditions herein enumerated so as to conform to any state statute or county regulation pertaining to the public welfare, safety, health, or highway regulations as are, or may hereinafter be enacted, adopted or amended, etc. The Board may terminate this permit if grantee fails to comply with any such changes.
14. In accepting this permit the grantee agrees to notify and check with all utilities regarding their installations before commencing work, together with private property owners when such property is liable to injury or damage through the performance of such work, and the applicant shall make all necessary arrangements relative to the protection of such property and/or utilities.
15. In accepting this permit the grantee, his agents, successors and assigns, agrees to protect and save harmless the County from all claims, actions or damages of every kind and description which may accrue to or be suffered by any person or persons, corporation or property by reason of the performance of any such work, character of materials used or manner of installation, maintenance and operation or by the improper occupancy of rights of way or public place or public structure, and in case any such suit or action is brought against said County for damages arising out of or by reason of any of the above causes, the grantee, his agents, successors or assigns will upon written notice to him or them or commencement of such action defend the same at his or their sole cost and expense and will fully satisfy any judgment after the said suit or action shall have finally been determined if adversely to the County.
16. All workers and/or flaggers within the right of way shall wear high visibility apparel per the 2009 MUTCD (available online) or subsequent revisions.
17. Traffic control signs are required, and shall conform to the standards specified in the 2009 MUTCD (available online) or subsequent revisions.

FORM ROPCOND082412

Road Approach Page 2 of 2 (11/12 DOC)



SUMMARY - Road Development Costs															
SALE NAME:	Pistol Pete Sorts	CONTRACT#:	30-104814	REGION:	Olympic	DISTRICT:	Straits								
LEGAL DESCRIPTION:	0														
ROAD NAME:	F-3125 Wye	F-3125.1	1+35 Spur	BE Spur 1.1 R	BE Spur 1.1 O	F-3080	F-3081	2+05 Spur	F-3084	F-3085	F-3120	TOTAL: SHEET #2-4			
ROAD TYPE:	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Construction	Recon.	TOTAL			
NUMBER OF STATIONS:	2.00	5.30	1.35	4.85	3.00	32.00	14.70	2.05	7.50	5.50	1.25	79.50			
SIDESLOPE:	5%	15%	25%	10%	21%	25%	15%	10%	15%	15%	10%	166%			
CLEARING AND GRUBBING:	\$231	\$777	\$178	\$560	\$483	\$5,153	\$2,154	\$203	\$1,208	\$886	\$124	\$11,956			
ROAD BRUSHING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23	\$4,199			
EXCAVATION AND FILL:	\$328	\$1,215	\$398	\$953	\$786	\$14,590	\$3,370	\$403	\$1,719	\$1,261	\$246	\$25,268			
ROAD GRADING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11	\$4,881			
DITCH CLEANING/CONSTRUCTION:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49	\$3,537			
ROCK TOTALS (Cu. Yds.)/ROCK COSTS:															
Ballast:	10398	10,400	220	670	150	410	380	3,020	1,880	230	920	710	140	8728	1670
Surface:	3180	3,180	0	0	0	200	0	1,280	0	0	0	0	0	1480	1700
Over-size:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CULVERTS AND FLUMES:	\$0	\$2,156	\$0	\$1,848	\$0	\$11,537	\$4,788	\$0	\$1,848	\$1,821	\$0	\$23,998	\$3,252		
STRUCTURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,800	
MISC. EXPENSES:	\$16	\$42	\$11	\$38	\$24	\$11,397	\$6,628	\$16	\$59	\$146	\$10	\$18,387	\$6,858		
OVERHEAD:	\$202	\$857	\$153	\$835	\$365	\$8,664	\$3,204	\$276	\$1,243	\$991	\$131	\$16,920	\$9,873		
TOTAL COSTS:	\$2,721	\$11,572	\$2,066	\$11,278	\$4,926	\$116,965	\$43,249	\$3,720	\$16,777	\$13,376	\$1,584	\$228,233	\$119,578		
COST PER STATION:	\$1,360	\$2,183	\$1,530	\$2,325	\$1,642	\$3,655	\$2,942	\$1,815	\$2,237	\$2,432	\$1,267	\$2,871	207,007,2584		
MOBILIZATION:		\$22,100													
ROAD DEVIATION AND ABANDONMENT COSTS:		\$1,274													
PIT WORK:		\$40,000													
NOTE:	This appraisal has no allowance for profit and risk.														
Sheet 1 of 4															
Plans to be furnished by:	Greg Ellis														

	Road Standard	Const.	Reconst.	Prehaul	Posthaul	TOTAL (All Roads) =
Total Costs =	275,375	48,834	51,150	37,753	SALE VOLUME MBF =	3,687
Total Sta. =	78	21	230	327	TOTAL COST PER MBF =	\$112.39
Cost per Sta. =	3,519	2,277	222	115	TOTAL COST PER STATION =	\$630.58
Compiled by:	G. Ellis					Date: 11/14/23

SUMMARY - Road Development Costs													
SALE NAME:	Pistol Pete Sorts	CONTRACT#:	30-104814	REGION:	Olympic	DISTRICT:	Straits						
LEGAL DESCRIPTION:	0												
ROAD NAME:	F-3125 O	F-3125 R	BE Spur 1	BE Spur 1 Sta.1-5	F-3100 R	F-3100 O	TS Spur	BE Spur 2	F-3200 R	F-3200 O	F-3210	F-3080	F-3100
ROAD TYPE:	Recon.	Recon.	Recon.	Recon.	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Posthaul
NUMBER OF STATIONS:	2.15	13.05	1.00	4.00	40.90	2.35	2.70	1.00	55.40	26.25	60.05	41.40	43.25
SIDESLOPE:	15%	15%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CLEARING AND GRUBBING:	\$248	\$1,507	\$132	\$528	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROAD BRUSHING:	\$39	\$235	\$18	\$72	\$736	\$42	\$0	\$18	\$997	\$473	\$1,081	\$488	\$0
EXCAVATION AND FILL:	\$493	\$2,992	\$197	\$786	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROAD GRADING:	\$18	\$110	\$8	\$34	\$346	\$20	\$23	\$8	\$468	\$222	\$507	\$350	\$365
DITCH CLEANING/CONSTRUCTION:	\$84	\$509	\$39	\$156	\$1,595	\$92	\$0	\$39	\$0	\$1,024	\$0	\$0	\$0
ROCK TOTALS (Cu. Yds.)/ROCK COSTS:													
Ballast:	151	1,040	40	160	0	0	30	0	0	0	150	0	0
	\$968	\$9,543	\$333	\$1,331	\$0	\$0	\$261	\$0	\$0	\$0	\$1,925	\$0	\$0
Surface:	0	0	40	140	100	0	100	40	100	150	0	280	200
	\$0	\$0	\$1,428	\$1,200	\$3,463	\$0	\$3,535	\$1,429	\$3,679	\$3,389	\$0	\$10,599	\$6,926
Oversize:	0	0	0	0	0	0	0	0	0	0	0	0	0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CULVERTS AND FLUMES:	\$0	\$1,848	\$480	\$924	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
STRUCTURES:	\$0	\$0	\$10,000	\$0	\$800	\$0	\$0	\$0	\$2,000	\$0	\$0	\$0	\$0
MISC. EXPENSES:	\$39	\$1,413	\$105	\$464	\$323	\$19	\$421	\$40	\$438	\$207	\$474	\$327	\$342
OVERHEAD:	\$170	\$1,634	\$1,147	\$495	\$654	\$16	\$382	\$138	\$682	\$478	\$359	\$1,059	\$687
TOTAL COSTS:	\$2,058	\$19,791	\$13,886	\$5,990	\$7,917	\$188	\$4,622	\$1,673	\$8,265	\$5,792	\$4,346	\$12,822	\$8,321
COST PER STATION:	\$957	\$1,517	\$13,886	\$1,497	\$194	\$80	\$1,712	\$1,673	\$149	\$221	\$72	\$310	\$192

SUMMARY - Road Development													
SALE NAME:	Pistol Pete Sorts	CONTRACT#:	30-104814	REGION:	Olympic	DISTRICT:	Straits						
LEGAL DESCRIPTION:	0												
ROAD NAME:	F-3120	F-3125	.3125 WY	F-3125.1	TS Spur	BE Spur 1	BE Spur 1.1	F-3200 R	F-3200 O	F-3210	F-3080 P	F-3080 S	F-3081
ROAD TYPE:	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul
NUMBER OF STATIONS:	1.25	15.20	2.00	5.30	2.70	5.00	7.85	55.40	26.25	60.05	14.20	59.20	14.70
SIDE SLOPE:	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CLEARING AND GRUBBING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROAD BRUSHING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EXCAVATION AND FILL:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROAD GRADING:	\$11	\$128	\$17	\$45	\$23	\$42	\$66	\$468	\$222	\$507	\$120	\$500	\$124
DITCHING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROCK TOTALS (Cu. Yds.)/ROCK COSTS:													
Ballast:	0	0	0	0	0	0	0	0	0	100	0	0	0
Surface:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,283	\$0	\$0	\$0
Overize:	0	0	0	0	0	0	0	200	100	0	50	200	0
CULVERTS AND FLUMES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,358	\$2,119	\$0	\$1,893	\$4,634	\$0
STRUCTURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MISC. EXPENSES:	\$10	\$120	\$16	\$42	\$21	\$40	\$62	\$438	\$207	\$474	\$112	\$468	\$116
OVERHEAD:	\$2	\$22	\$3	\$8	\$4	\$7	\$12	\$744	\$229	\$204	\$191	\$504	\$22
TOTAL COSTS:	\$22	\$271	\$36	\$94	\$48	\$89	\$140	\$9,008	\$2,778	\$2,469	\$2,316	\$6,106	\$262
COST PER STATION:	\$18	\$18	\$18	\$18	\$18	\$18	\$18	\$163	\$106	\$41	\$163	\$103	\$18

SUMMARY - Road Development Costs												
SALE NAME:	Pistol Pete Sorts	CONTRACT#:	30-104814	REGION:	Olympic	DISTRICT:	Straits					
LEGAL DESCRIPTION:	0											
ROAD NAME:	2+05 Spur	F-3084	F-3085	0	0	0	0	0	0	0	0	0
ROAD TYPE:	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul
NUMBER OF STATIONS:	2.05	7.50	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SIDESLOPE:	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CLEARING AND GRUBBING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROAD BRUSHING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EXCAVATION AND FILL:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROAD GRADING:	\$17	\$63	\$46	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DITCHING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROCK TOTALS (Cu. Yds.):	ROCK COSTS:											
Ballast:	1630	0	0	0	0	0	0	0	0	0	0	0
Surface:	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Over-size:	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CULVERTS AND FLUMES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
STRUCTURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MISC. EXPENSES:	\$16	\$59	\$43	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OVERHEAD:	\$3	\$11	\$8	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COSTS:	\$37	\$134	\$98	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
COST PER STATION:	\$18	\$18	\$18	0	0	0	0	0	0	0	0	0

Forest Access Road Maintenance Specifications

Cuts and Fills

- Maintain slope lines to a stable gradient compatible with the cut slope/fill slope ratios. Remove slides from ditches and the roadway. Repair fill-failures , in accordance with Clause 4-6 EMBANKMENT SLOPE RATIO, with selected material or material approved by the Contract Administrator. Remove overhanging material from the top of cut slopes.
- Waste material from slides or other sources shall be placed and compacted in stable locations identified in the road plan or approved by the Contract Administrator, so that sediment will not deliver to any streams or wetlands.
- Slide material and debris shall not be mixed into the road surface materials, unless approved by the Contract Administrator.

Surface

- Grade, shape and compact the road surface, turnouts, and shoulders to the original shape on the TYPICAL SECTION SHEET to provide a smooth, rut-free traveled surface and maintain surface water runoff in an even, unconcentrated manner.
- Blading shall not undercut the backslope or cut into geotextile fabric on the road.
- If required by the Contract Administrator, water shall be applied as necessary to control dust and retain fine surface rock.
- Surface material shall not be bladed off the roadway. Replace surface material when lost or worn away , or as directed by the Contract Administrator.
- Remove shoulder berms, created by grading, to facilitate drainage, except as marked or directed by the Contract Administrator.
- For roads with geotextile fabric: spread surface aggregate to fill in soft spots and wheel ruts (barrel spread) to prevent damage to the geotextile fabric.

Drainage

- Prevent silt bearing road surface and ditch runoff from delivering sediment to any streams or wetlands.
- Maintain rolling dips and drivable waterbars as needed to keep them functioning as intended.
- Maintain headwalls to the road shoulder level with material that will resist erosion.
- Maintain energy dissipaters at culvert outlets with non-erodible material or rock.
- Keep ditches, culverts, and other drainage structures clear of obstructions and functioning as intended.
- Inspect and clean culverts at least monthly, with additional inspections during storms and periods of high runoff. This shall be done even during periods of inactivity.

Forest Access Road Maintenance Specifications

Preventative Maintenance

- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

- Remove fallen timber, limbs, and stumps from the slopes, roadway, ditchlines, and culvert inlets.

