



TIMBER NOTICE OF SALE

SALE NAME: RUSTY RIDGE 2024 VRH & VDT

AGREEMENT NO: 30-103588

AUCTION: November 14, 2023 starting at 10:00 a.m., **COUNTY:** Grays Harbor
South Puget Sound Region Office, Enumclaw, WA

SALE LOCATION: Sale located approximately 7 miles east of Porter, WA.

**PRODUCTS SOLD
AND SALE AREA:**

All timber, except snags and down timber existing more than 5 years from the day of sale, bounded by the following: white Timber Sale Boundary tags, timber type change marked with pink flagging, and the C-Line in Unit #1; white Timber Sale Boundary tags, timber type change marked with pink flagging, and the C-Line and C-1020 Road in Unit #2;

All timber as described in Schedule A bounded out by the following: white Timber Sale Boundary tags, timber type change marked with pink flagging, and the C-Line in Unit #3.

All forest products above located on part(s) of Sections 19 and 30 all in Township 17 North, Range 4 West, W.M., containing 52 acres, more or less.

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

ESTIMATED SALE VOLUMES AND QUALITY:

Species	Avg DBH	Ring Count	Total MBF	Total \$/MBF	MBF by Grade								
					1P	2P	3P	SM	1S	2S	3S	4S	UT
Douglas fir	19.6	7	836	\$458.00				20		503	264	47	2
Hemlock	20.1		147	\$224.00						102	39	5	1
Red alder	20.1		39	\$286.00						30		9	
Noble fir	30		8	\$224.00						8			
Other Hardwood				\$40.00									
Other Conifer				\$224.00									
Redcedar				\$960.00									
Sale Total			1,030										

MINIMUM BID: \$458/MBF (est. value \$428,000.00) **BID METHOD:** Sealed Bids

PERFORMANCE SECURITY: \$100,000.00 **SALE TYPE:** MBF Scale

EXPIRATION DATE: June 30, 2024 **ALLOCATION:** Export Restricted

BIDDABLE SPECIES: Douglas fir

BID DEPOSIT: \$42,800.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Harvesting activities are estimated to be 100 percent ground based harvest. Ground based equipment limited to tracked equipment and 6-wheeled rubber tired skidders with over-the-tire tracks spanning both sets of rear tires on sustained slopes that are 45 percent or



TIMBER NOTICE OF SALE

less. Yarding may be restricted during wet weather if rutting becomes excessive, per clause H-017.

ROADS:

31.59 stations of optional prehaul maintenance. Designated maintenance on all roads used.

Road work activities will not be permitted from November 1 to April 30, nor on weekends or State recognized holidays, unless authority to do so is granted, in writing, by the Contract Administrator. If permission is granted to operate from November 1 to April 30, a maintenance plan is required per Road Plan clause 1-26.

The hauling of forest products will not be permitted from November 1 to April 30, nor on weekends or State recognized holidays, unless authorized in writing by the Contract Administrator. Due to the short contract term, permission to operate between November 1 and April 30 will be permitted, dependent upon weather, with a maintenance plan in place to protect water, soil, roads, and other forest assets.

ACREAGE DETERMINATION

CRUISE METHOD:

Acreeage was determined by traversing boundaries by GPS in all units, and length times width for existing roads in Units #1 and #2. GPS data files are available at DNR's website for timber sale auction packets. See cruise narrative for cruise method.

FEES:

\$17,510.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

SPECIAL REMARKS:

This sale is part of a research project in partnership with the Forest Service. Unit #1 includes ten group cuts of 0.4-1.8 acres each, labeled as G1-G10. Unit #2 includes five patch cuts of 0.9-3.8 acres each, labeled as P1-P5. There are no leave trees within the group or patch cut areas. Unit #3 is a thinning per Schedules A and B.

Purchaser is required to fell 15 trees for down woody debris, and create 10 snags within the RMZ thinning for Unit #3 (VDT). See Schedule A.

No equipment shall operate within 50 feet of the 100-year floodplain or ordinary high water mark of the stream, nor within 25 feet of the white Timber Sale Boundary tags within the Equipment Exclusion Zone in Unit #3 where shown on the Timber Sale map.

There are permanent research plots throughout the units marked with white, round, plastic stakes and aluminum tags on trees. Trees with aluminum tags may be removed, but the white plastic stakes shall be protected from disturbance.

Due to the research schedule requirements, the operation window for this sale is shorter than usual - December 1, 2023 through June 30, 2024.

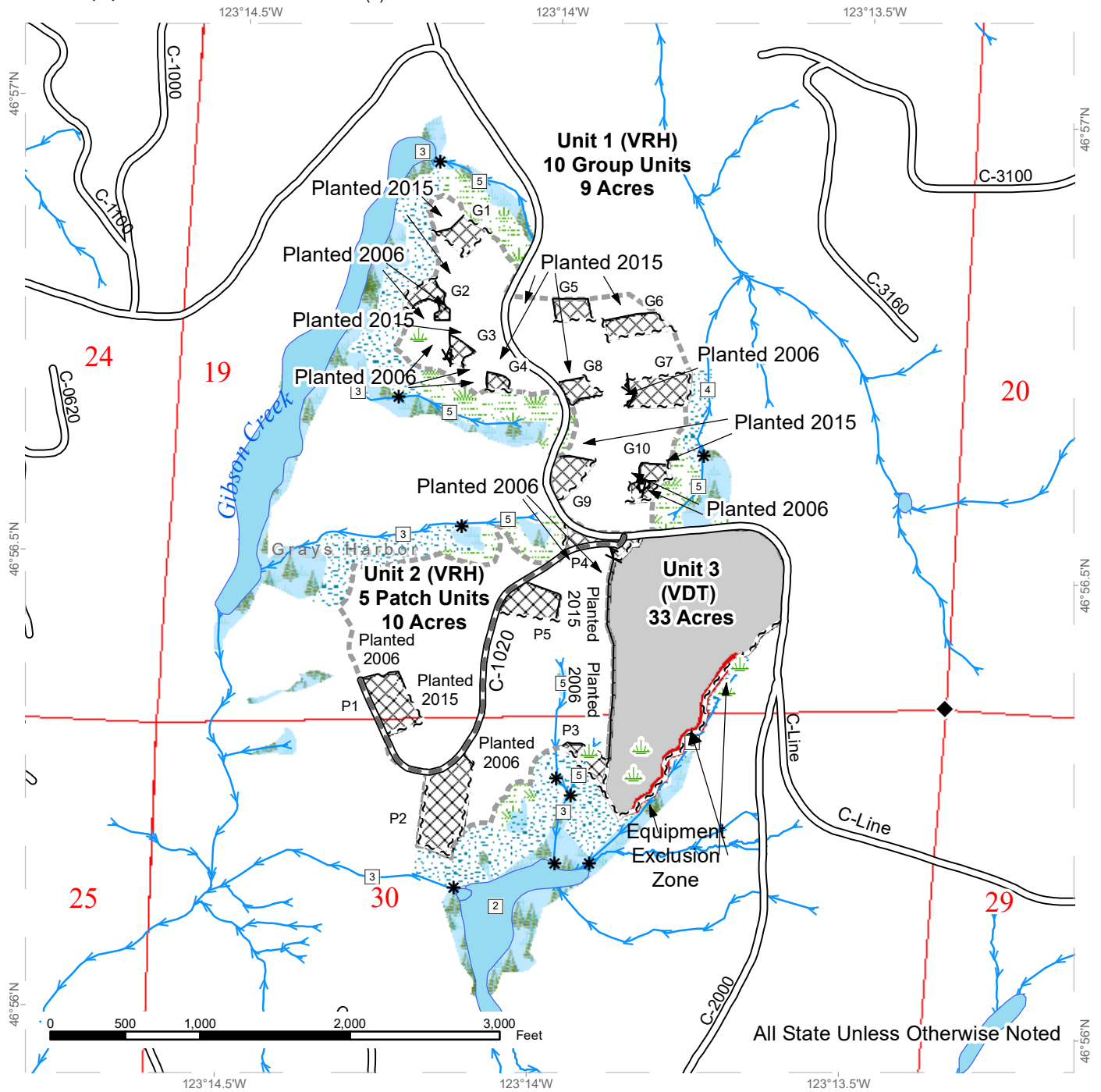
Purchaser shall cut all stems 6 feet tall and greater within Units #1 and #2, leaving a stump no more than 12 inches in height.

Note to cruisers and appraisers: Please refrain from leaving pink, orange, or blue flagging from your cruises in or around the sale area to avoid confusion with DNR's marking. Additionally, for the safety of the public, please remove from roads and trails all string from string boxes used during appraising or cruising this sale.

TIMBER SALE MAP

SALE NAME: RUSTY RIDGE 2024 VRH AND VDT
AGREEMENT #: 30-103588
TOWNSHIP(S): T17R4W
TRUST(S): State Forest Purchase (2)

REGION: South Puget Sound Region
COUNTY(S): Grays Harbor
ELEVATION RGE: 1218-1371



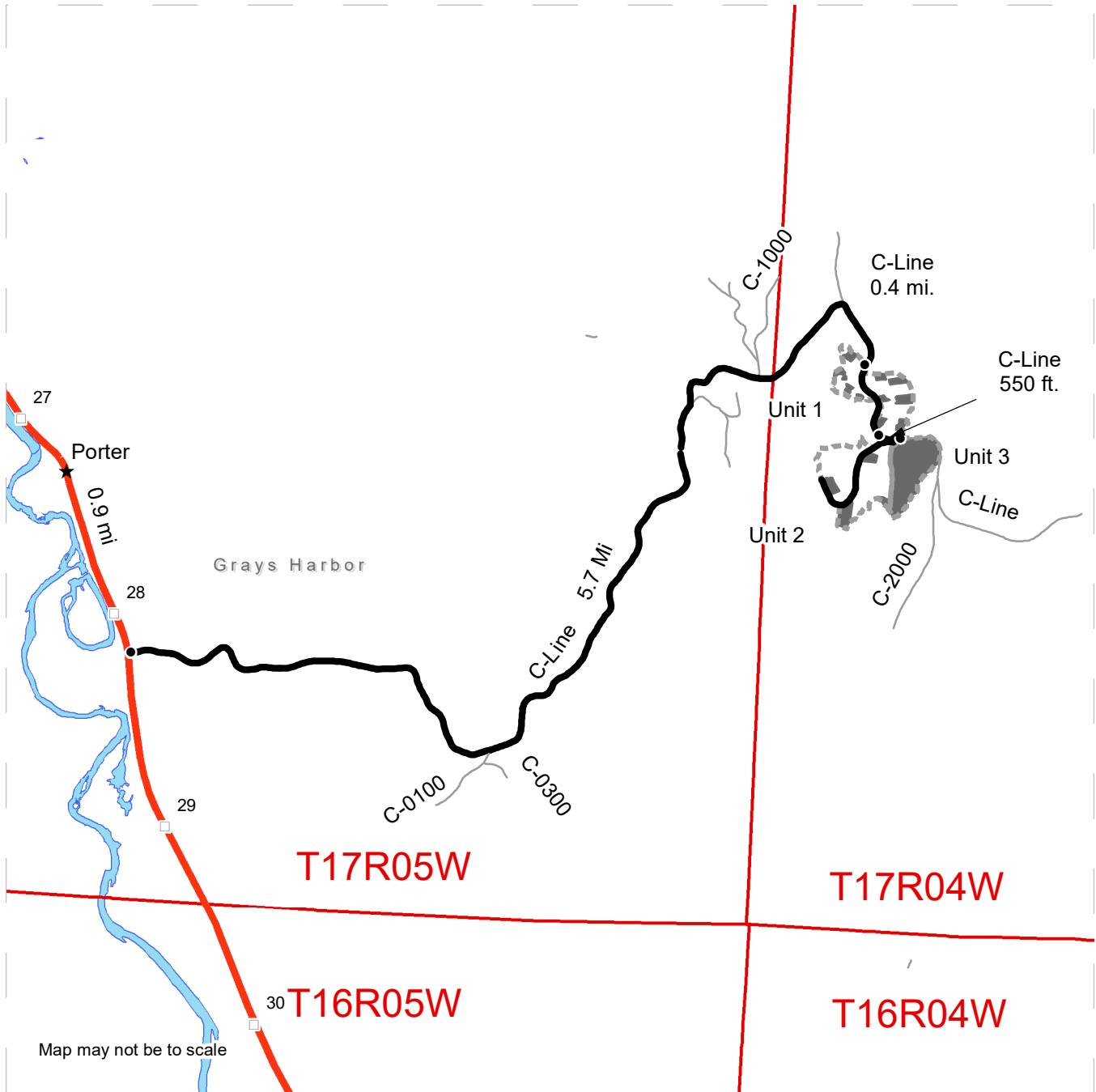
All State Unless Otherwise Noted

VRH (patch & groups)	Existing Roads	Survey Monument
Sale Area	Required Pre-Haul Maintenance	Wetland Mgt Zone
Equipment Exclusion Zone	Streams	
Riparian Mgt Zone	Stream Type	
Forested Wetland	Stream Type Break	
Wetland Mgt Zone		
Open Water		

DRIVING MAP

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REGION: South Puget Sound Region
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	Timber Sale Unit
	Highway
	Haul Route
	Other Road
	Milepost Markers
	Distance Indicator
	Town

DRIVING DIRECTIONS:

"From US Highway 12 (milepost 28), turn East onto the C-LINE and follow for 5.7 miles Unit 1.
 Continue following the C-Line for 0.4 mile to Unit 2
 Continue following the C-Line for 550 ft. to Unit 3."



**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

**BILL OF SALE AND CONTRACT FOR
FOREST PRODUCTS**

Export Restricted MBF Scale AGREEMENT NO. 30-103588

SALE NAME: RUSTY RIDGE 2024 VRH & VDT

**THE STATE OF WASHINGTON DEPARTMENT OF NATURAL
RESOURCES, HEREINAFTER ACTING SOLELY, IN ITS PROPRIETARY
CAPACITY, STATE, AND PURCHASER, AGREE AS FOLLOWS:**

Section G: General Terms

G-001 Definitions

The following definitions apply throughout this contract;

Bill of Sale and Contract for Forest Products: Contract between the Purchaser and the State, which sets forth the procedures and obligations of the Purchaser in exchange for the right to remove forest products from the sale area. The Bill of Sale and Contract for Forest Products may include a Road Plan for any road construction or reconstruction, where applicable.

Contract Administrator: Region Manager's designee responsible for assuring that the contractual obligations of the Purchaser are met.

Forest Product: Any material derived from the forest for commercial use.

Purchaser: The company or individual that has entered into a Bill of Sale and Contract for Forest Products with the State for the right to harvest and remove forest products from the timber sale area.

Road Construction: Includes building new and maintaining existing forest roads and associated work that may be optional or required as described in the Road Plan.

State: The Washington State Department of Natural Resources, landowner and seller of Forest Products from the timber sale area. The State is represented by the Region Manager as designated on the contract signature page. Contractual obligations to the State are enforced by the Region Manager or the designated Contract Administrator.

Subcontractor: Individual or company employed by the Purchaser to perform a portion or all of the services required by The Bill of Sale and Contract for Forest Products. The Purchaser is responsible for independently negotiating, procuring and paying for all subcontracted services rendered.

G-010 Products Sold and Sale Area

Purchaser was the successful bidder on November 14, 2023 and the sale was confirmed on _____. The State, as owner, agrees to sell to Purchaser, and Purchaser agrees to purchase, cut, and remove the following forest products: All timber, except snags and down timber existing more than 5 years from the day of sale, bounded by the following: white Timber Sale Boundary tags, timber type change marked with pink flagging, and the C-Line in Unit #1; white Timber Sale Boundary tags, timber type change marked with pink flagging, and the C-Line and C-1020 Road in Unit #2;

All timber as described in Schedule A bounded out by the following: white Timber Sale Boundary tags, timber type change marked with pink flagging, and the C-Line in Unit #3., located on approximately 52 acres on part(s) of Sections 19, and 30 all in Township 17 North, Range 4 West W.M. in Grays Harbor County(s) as shown on the attached timber sale map and as designated on the sale area.

All forest products described above from the bole of the tree that meet or exceed 2 inches diameter inside bark on the small end are eligible for removal. Above ground components of a tree that remain as by-products after the manufacture of logs, including but not limited to tree tops, branches, limbs, needles, leaves, stumps, are not eligible for removal under the terms of this contract.

Forest products purchased under a contract that is designated as export restricted shall not be exported until processed. Forest products purchased under a contract that is designated as exportable may be exported prior to processing.

G-020 Inspection By Purchaser

Purchaser hereby warrants to the State that they have had an opportunity to fully inspect the sale area and the forest products being sold. Purchaser further warrants to the State that they enter this contract based solely upon their own judgment of the value of the forest products, formed after their own examination and inspection of both the timber sale area and the forest products being sold. Purchaser also warrants to the State that they enter this contract without any reliance upon the volume estimates, acreage

estimates, appraisals, pre-bid documentation, or any other representations by the State Department of Natural Resources.

G-025 Schedules

The following attached schedules are hereby incorporated by reference:

Schedule	Title
A	RMZ Thinning Prescription for Unit #3
B	Prescription Compliance in Unit #3

G-030 Contract Term

Purchaser shall remove the forest products conveyed and complete all work required by this contract prior to June 30, 2024.

G-040 Contract Term Adjustment - No Payment

Purchaser may request an adjustment in the contract term. A claim must be submitted in writing and received by the State within 30 days after the start of interruption or delay. The claim must also indicate the actual or anticipated length of interruption or delay. The State may grant an adjustment without charge only if the cause for contract term adjustment is beyond Purchaser's control. The cause must be one of the following and the adjustment may be granted only if operations or planned operations under this contract are actually interrupted or delayed:

- a. Road and bridge failures which deny access.
- b. Access road closures imposed by road owner.
- c. Excessive suspensions as provided in clause G-220.
- d. Regulatory actions not arising from Purchaser's failure to comply with this contract which will prevent timber harvest for a period less than 6 months.

G-050 Contract Term Extension - Payment

Extensions of this contract term may be granted only if, in the judgment of the State, Purchaser is acting in good faith and is endeavoring to remove the forest products conveyed. The term of this contract may be extended for a reasonable time by the State if all of the following conditions are satisfied:

- a. A written request for extension of the contract term must be received prior to the expiration date of the contract.
- b. Completion of all required roads and compliance with all contract and regulatory requirements.
- c. For the first extension, not to exceed 1 year, payment of at least 25 percent of the contract value based on the contract payment rate and advertised volume.

For the second extension, not to exceed 1 year, payment of at least 90 percent of the contract value based on the contract payment rate base and advertised volume.

The payments shall not include the initial deposit which shall be held according to the provisions of RCW 79.15.100.

- d. Payment of an amount based on 12 percent interest per annum on the unpaid portion of the timber value of the contract.

To determine the unpaid portion of the contract, multiply the contract payment rate for each item by the remaining volume for each item based on the volumes from the Timber Notice of Sale. In addition, all cash deposits that can be used for timber payments, except the initial deposit, will be deducted from the unpaid portion of the contract.

- e. Payment of \$16.00 per acre per annum for the acres on which an operating release has not been issued within the VRH units. Payment of \$3.00 per acre per annum for the acres on which an operating release has not been issued within the VDT unit.
- f. In no event will the extension charge be less than \$200.00.
- g. Extension payments are non-refundable.

G-053 Surveys - Sensitive, Threatened, Endangered Species

Whenever the State determines that a survey for sensitive, threatened, or endangered species is prudent, or when Purchaser determines a survey is prudent and the State agrees, Purchaser shall perform such surveys at Purchaser's expense and to the standards required by the State. The survey information shall be supplied to the State.

G-060 Exclusion of Warranties

The PARTIES AGREE that the IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE and ALL OTHER WARRANTIES EXPRESSED OR IMPLIED ARE EXCLUDED from this transaction and shall not apply to the goods sold. For example, THE FOLLOWING SPECIFIC MATTERS ARE NOT WARRANTED, and are EXCLUDED from this transaction:

- a. The MERCHANTABILITY of the forest products. The use of the term "merchantable" in any document is not intended to vary the foregoing.
- b. The CONDITION of the forest products. The forest products will be conveyed "AS IS."
- c. The ACREAGE contained within any sale area. Any acreage descriptions appearing in the timber notice of sale, timber sale contract, or other documents

are estimates only, provided solely for administrative and identification purposes.

- d. The VOLUME, QUALITY, OR GRADE of the forest products. The State neither warrants nor limits the amount of timber to be harvested. The descriptions of the forest products to be conveyed are estimates only, made solely for administrative and identification purposes.
- e. The CORRECTNESS OF ANY SOIL OR SURFACE CONDITIONS, PRE-SALE CONSTRUCTION APPRAISALS, INVESTIGATIONS, AND ALL OTHER PRE-BID DOCUMENTS PREPARED BY OR FOR THE STATE. These documents have been prepared for the State's appraisal purposes only.
- f. THAT THE SALE AREA IS FREE FROM THREATENED OR ENDANGERED SPECIES or their habitat. The State is not responsible for any interference with forestry operations that result from the presence of any threatened or endangered species, or the presence of their habitat, within the sale area.
- g. THAT THE FORESTRY OPERATIONS to be performed under this contract WILL BE FREE FROM REGULATORY ACTIONS by governmental agencies. The State is not responsible for actions to enforce regulatory laws, such as the Washington Forest Practices Act (chapter 76.09 RCW), taken by the Department of Natural Resources or any other agency that may affect the operability of this timber sale.
- h. Items contained in any other documents prepared for or by the State.

G-061 Inadvertent Discovery of Cultural Resources

Purchaser acknowledges that cultural resources as defined in WAC 222-16-010 may exist within the timber sale area and that the existence and location of such resources may be unknown at the time this contract is executed. Purchaser has a duty to exercise due care in its operations and in the event any human skeletal remains are discovered by the Purchaser or the State during the course of operations Purchaser shall immediately halt operations and notify local law enforcement in the most expeditious manner possible then notifying the Contract Administrator. In the event cultural resources are discovered by the Purchaser or the State during the course of operations Purchaser shall immediately halt operations and notify the Contract Administrator. Any potential resources shall not be removed or disturbed. Purchaser shall resume operations as directed in writing by the Contract Administrator.

G-062 Habitat Conservation Plan

The State has entered into a Habitat Conservation Plan (HCP) with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services) to address state trust land management issues relating to compliance with the Federal Endangered Species Act. The activities to be carried out under this contract are located within the State's HCP area and are subject to the terms and conditions of the HCP, and the

Services' Incidental Take Permit Nos. TE812521-1 and 1168 (collectively referred to as ITP), or as amended hereafter by the Services. The ITP authorizes the incidental take of certain federally listed threatened and endangered species, as specified in the ITP conditions. All HCP materials, including the ITP, are available for review at the State's Regional Offices and the administrative headquarters in Olympia, Washington.

By signing this contract, Purchaser agrees to comply with the terms and conditions of the ITP, and the HCP, which shall become terms of this contract. The State agrees to authorize the lawful activities of the Purchaser carried out pursuant to this contract, PROVIDED the Purchaser remains in compliance with the terms and conditions of both the HCP and ITP. The requirements set forth in this contract are intended to comply with the terms and conditions of the HCP and ITP. Accordingly, non-compliance with the terms and conditions of the HCP and ITP will render the authorization provided in this paragraph void, be deemed a breach of the contract and may subject Purchaser to liability for violation of the Endangered Species Act.

Any modifications to the contract shall be proposed in writing by Purchaser, shall continue to meet the terms and conditions of the HCP and ITP, and shall require the prior written approval of the Region Manager before taking effect.

G-063 Incidental Take Permit Notification Requirements

- a. Purchaser shall immediately notify the Contract Administrator of new locations of permit species covered by the Incidental Take Permits (ITP) that are discovered within the area covered by the State's Habitat Conservation Plan (HCP), including, but not limited to: locations of occupied murrelet habitat; spotted owl nest sites; wolves; grizzly bears; nests, communal roosts, or feeding concentrations of bald eagles; peregrine falcon nests; Columbian white-tailed deer; Aleutian Canada geese; Oregon silverspot butterflies; and additional stream reaches found to contain bull trout. Purchaser is required to notify the Contract Administrator upon discovery of any fish species found in streams or bodies of water classified as non-fish bearing. In all circumstances, notification must occur within a 24 hour time period.
- b. Upon locating any live, dead, injured, or sick specimens of any permit species covered by the ITP, Purchaser shall immediately notify the Contract Administrator. Purchaser shall notify the Contract Administrator if there is any doubt as to the identification of a discovered permit species. Purchaser may be required to take certain actions to help the Contract Administrator safeguard the well-being of any live, injured or sick specimens of any permit species discovered, until the proper disposition of such specimens can be determined by the Contract Administrator. Any such requirements will be explained to Purchaser by the Contract Administrator during the Pre-Work Conference. In all circumstances, notification must occur within a 24 hour time period.

- c. Purchaser shall refer to a specific ITP number, ITP TE812521-1 or ITP 1168 (copies which are located in the region office) in all correspondence and reports concerning permit activities.
- d. Provisions and requirements of the ITP shall be clearly presented and explained to Purchaser by Contract Administrator during the Pre-Work Conference as per contract clause G-330. All applicable provisions of the ITP and this schedule must be presented and clearly explained by Purchaser to all authorized officers, employees, contractors, or agents of Purchaser conducting authorized activities in the timber sale area. Any questions Purchaser may have about the ITP should be directed to the Contract Administrator.

G-064 Permits

Purchaser is responsible for obtaining any permits not already obtained by the State that relate to Purchaser's operation. Forest Practice Application / Hydraulic Project Approval permits obtained by the State shall be transferred to Purchaser. Purchaser is responsible for all permits, amendments and renewals.

G-065 Regulatory Disclaimer

The State disclaims any responsibility for, or liability relating to, regulatory actions by any government agency, including actions pursuant to the Forest Practices Act, Ch. 76.09 RCW that may affect the operability of the timber sale.

G-066 Governmental Regulatory Actions

a. Risk

Purchaser shall be responsible for any increased operational costs arising from any applicable foreign or domestic governmental regulation or order that does not cause contract performance to become commercially impracticable or that does not substantially frustrate the purpose of the contract. If impracticability or frustration results from Purchaser's failure to comply with this contract, Purchaser shall remain responsible for payment of the total contract price notwithstanding the impracticability or frustration.

b. Sale Area

When portions of the sale area become subject to a foreign or domestic governmental regulation or order that will likely prevent timber harvest for a period that will exceed the expiration date of this contract, and Purchaser has complied with this contract, the following shall apply:

- i. RCW 79.15.140 shall govern all adjustments to the contract area.

c. Adjustment of Price

The State shall adjust the total contract price by subtracting from the total contract price an amount determined in the following manner: The State shall

cause the timber sale area subject to governmental regulation or order to be measured. The State shall calculate the percentage of the total sale area subject to the governmental regulation or order. The State shall reduce the total contract price by that calculated percentage. However, variations in species, value, costs, or other items pertaining to the affected sale area will be analyzed and included in the adjustment if deemed appropriate by the State. The State will further reduce the total contract price by the reasonable cost of unamortized roads Purchaser constructed but was unable to fully use for removing timber. A reduction in total contract price terminates all of the Purchaser's rights to purchase and remove the timber and all other interest in the affected sale area.

G-070 Limitation on Damage

In the event of a breach of any provision of this contract by the State, the exclusive remedy available to Purchaser will be limited to a return of the initial deposit, unapplied payments, and credit for unamortized improvements made by Purchaser. The State shall not be liable for any damages, whether direct, incidental or consequential.

G-080 Scope of State Advice

No advice by any agent, employee, or representative of the State regarding the method or manner of performing shall constitute a representation or warranty that said method, manner or result thereof will conform to the contract or be suitable for Purchaser's purposes under the contract. Purchaser's reliance on any State advice regarding the method or manner of performance shall not relieve Purchaser of any risk or obligation under the contract. Purchaser retains the final responsibility for its operations under this contract and State shall not be liable for any injuries resulting from Purchaser's reliance on any State advice regarding the method or manner of performance.

G-090 Sale Area Adjustment

The Parties may agree to adjustments in the sale area boundary. The cumulative changes to the sale area during the term of the contract shall not exceed more than four percent of the original sale area. If the sale area is increased, added forest products become a part of this contract and shall be paid for at the same rate and manner as other forest products under this contract.

G-100 Forest Products Not Designated

Any forest products not designated for removal, which must be removed in the course of operations authorized by the State, shall be approved and designated by the Contract Administrator. Added forest products become a part of this contract and shall be paid for at the same rate and manner as other forest products under this contract.

G-105 Adding Naturally Damaged Forest Products

Any forest products not designated for removal that are seriously damaged by disease, insects or wind, or that may contribute seriously to the spread of insect or disease damage may be added to this sale by the Contract Administrator. Additions must be in unlogged areas of the sale and added volume shall not exceed an amount equal to 10

percent of the original advertised volume. Added forest products become a part of this contract and shall be paid for at the same rate and manner as other forest products under this contract.

G-110 Title and Risk of Loss

Title to the forest products conveyed passes at confirmation of the sale. Purchaser bears the risk of loss of or damage to and has an insurable interest in the forest products in this contract from the time of confirmation of the sale of forest products. In the event of loss of or damage to the forest products after passage of title, whether the cause is foreseeable or unforeseeable, the forest products shall be paid for by Purchaser. Breach of this contract shall have no effect on this provision. Title to the forest products not removed from the sale area within the period specified in this contract shall revert to the State as provided in RCW 79.15.100.

G-116 Sustainable Forestry Initiative® (SFI®) Certification

Forest products purchased under this contract are certified as being in conformance with the Sustainable Forestry Initiative 2022 Forest Management Standard under certificate number: BVC-SFIFM-018227.

Purchaser shall have at least one person regularly on-site during active operations that have completed training according to the requirements outlined within the SFI Standard. Purchaser shall designate in writing the name(s) of the individual(s) who will be on-site and provide proof of their successful completion of an approved training program prior to active operations.

G-120 Responsibility for Work

All work, equipment, and materials necessary to perform this contract shall be the responsibility of Purchaser. Any damage to improvements, except as provided in clause G-121 or unless the State issues an operating release pursuant to clause G-280, shall be repaired promptly to the satisfaction of the State and at Purchaser's expense.

G-121 Exceptions

Exceptions to Purchaser's responsibility in clause G-120 shall be limited exclusively to the following. These exceptions shall not apply where road damage occurs due to Purchaser's failure to take reasonable precautions or to exercise sound forest engineering and construction practices.

The State will bear the cost to repair damages caused by a third party. In all other cases, the Purchaser shall bear responsibility for the costs as described below.

Road is defined as the road bed, including but not limited to its component parts, such as cut and fill slopes, subgrade, ditches, culverts, bridges, and cattle guards.

For the purposes of this clause, damage will be identified by the State and is defined as:

1. Failure of (a) required improvements or roads designated in clause C-050, or (b) required or optional construction completed to the point that authorization to haul has been issued;
2. Caused by a single event from forces beyond the control of Purchaser, its employees, agents, or invitees, including independent contractors; and
3. Includes, but is not limited to natural disasters such as earthquakes, volcanic eruptions, landslides, and floods.

The repair work identified by the State shall be promptly completed by Purchaser at an agreed price. The State may elect to accomplish repairs by means of State-provided resources.

For each event, Purchaser shall be solely responsible for the initial \$5,000 in repairs. For repairs in excess of \$5,000, the parties shall share equally the portion of costs between \$5,000 and \$15,000. The State shall be solely responsible for the portion of the cost of repairs that exceed \$15,000.

Nothing contained in clauses G-120 and G-121 shall be construed as relieving Purchaser of responsibility for, or damage resulting from, Purchaser's operations or negligence, nor shall Purchaser be relieved from full responsibility for making good any defective work or materials. Authorization to haul does not warrant that Purchaser built roads are free from material defect and the State may require additional work, at Purchasers expense regardless of cost, to remedy deficiencies at any time.

G-140 Indemnity

To the fullest extent permitted by law, Purchaser shall indemnify, defend and hold harmless State, agencies of State and all officials, agents and employees of State, from and against all claims arising out of or resulting from the performance of the contract. "Claim" as used in this contract means any financial loss, claim, suit, action, damage, or expense, including but not limited to attorneys' fees, attributable for bodily injury, sickness, disease or death, or injury to or destruction of tangible property including loss of use resulting therefrom. Purchasers' obligations to indemnify, defend, and hold harmless includes any claim by Purchasers' agents, employees, representatives, or any subcontractor or its employees. Purchaser expressly agrees to indemnify, defend, and hold harmless State for any claim arising out of or incident to Purchasers' or any subcontractors' performance or failure to perform the contract. Purchasers' obligation to indemnify, defend, and hold harmless State shall not be eliminated or reduced by any actual or alleged concurrent negligence of State or its agents, agencies, employees and officials. Purchaser waives its immunity under Title 51 RCW to the extent it is required to indemnify, defend and hold harmless State and its agencies, officials, agents or employees.

G-150 Insurance

Purchaser shall, at its cost and expense, buy and maintain insurance of the types and amounts listed below. Failure to buy and maintain the required insurance may result in

a breach and/or termination of the contract at State's option. State may suspend Purchaser operations until required insurance has been secured.

All insurance and surety bonds should be issued by companies admitted to do business within the State of Washington and have a rating of A-, Class VII or better in the most recently published edition of Best's Reports. If an insurer is not admitted, all insurance policies and procedures for issuing the insurance policies must comply with Chapter 48.15 RCW and 284-15 WAC.

The State of Washington, Department of Natural Resources region office of sale origin shall be provided written notice before cancellation or non-renewal of any insurance referred to therein, in accord with the following specifications:

1. Insurers subject to Chapter 48.18 RCW (admitted and regulated by the Insurance Commissioner): The insurer shall give the State 45 days advance notice of cancellation or non-renewal. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.
2. Insurers subject to Chapter 48.15 RCW (surplus lines): The State shall be given 20 days advance notice of cancellation. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.

Before starting work, Purchaser shall furnish State of Washington, Department of Natural Resources with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements specified in the contract. Insurance coverage shall be obtained by the Purchaser prior to operations commencing and continually maintained in full force until all contract obligations have been satisfied or an operating release has been signed by the State.

Purchaser shall include all subcontractors as insured under all required insurance policies, or shall furnish separate certificates of insurance and endorsements for each subcontractor. Subcontractor(s) must comply fully with all insurance requirements stated herein. Failure of subcontractor(s) to comply with insurance requirements does not limit Purchaser's liability or responsibility.

The State of Washington, Department of Natural Resources, its elected and appointed officials, agents and employees shall be named as an additional insured via endorsement on all general liability, excess, umbrella, and property insurance policies.

All insurance provided in compliance with this contract shall be primary as to any other insurance or self-insurance programs afforded to or maintained by State. Purchaser waives all rights against State for recovery of damages to the extent these damages are covered by general liability or umbrella insurance maintained pursuant to this contract.

By requiring insurance herein, State does not represent that coverage and limits will be adequate to protect Purchaser and such coverage and limits shall not limit Purchaser's liability under the indemnities and reimbursements granted to State in this contract.

The limits of insurance, which may be increased as deemed necessary by State of Washington, Department of Natural Resources, shall not be less than as follows:

Commercial General Liability (CGL) Insurance. Purchaser shall maintain general liability (CGL) insurance, and, if necessary, commercial umbrella insurance with a limit of not less than \$1,000,000.00 per each occurrence. If such CGL insurance contains aggregate limits, the General Aggregate limit shall be at least twice the "each occurrence" limit. CGL insurance shall have products-completed operations aggregate limit of at least two times the "each occurrence" limit. CGL coverage shall include a Logging and Lumbering Endorsement (i.e. Logger's Broad-Form) to cover the events that include, but are not limited to, fire suppression expenses, accidental timber trespasses, and wildfire property damage with limits of not less than \$2,000,000.00 each occurrence.

CGL insurance shall be written on Insurance Services Office (ISO) occurrence form CG 00 01 (or a substitute form providing equivalent coverage). All insurance shall cover liability arising out of premises, operations, independent contractors, products completed operations, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another party assumed in a business contract), and contain separation of insured (cross liability) condition.

Employer's Liability "Stop Gap" Insurance. Purchaser shall buy employers liability insurance, and, if necessary, commercial umbrella liability insurance with limits not less than \$1,000,000.00 each accident for bodily injury by accident or \$1,000,000.00 each employee for bodily injury by disease.

Workers' Compensation Coverage. Purchaser shall comply with all State of Washington workers' compensation statutes and regulations. Workers' compensation coverage shall be provided for all employees of Purchaser and employees of any subcontractor or sub-subcontractor. Coverage shall include bodily injury (including death) by accident or disease, which exists out of or in connection with the performance of this contract. Except as prohibited by law, Purchaser waives all rights of subrogation against State for recovery of damages to the extent they are covered by workers' compensation, employer's liability, commercial general liability, or commercial umbrella liability insurance.

If Purchaser, subcontractor or sub-subcontractor fails to comply with all State of Washington workers' compensation statutes and regulations and State incurs fines or is required by law to provide benefits to or obtain coverage for such employees, Purchaser shall indemnify State. Indemnity shall include all fines, payment of benefits to Purchaser or subcontractor employees, or their heirs or legal representatives, and the cost of effecting coverage on behalf of such employees.

Business Auto Policy (BAP). Purchaser shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit not less than \$1,000,000.00 per accident. Such insurance shall cover liability arising out of "Any Auto". Business auto coverage shall be written on ISO form CA 00 01, or substitute liability form providing equivalent coverage. If necessary the policy shall be endorsed to provide contractual liability coverage and cover a "covered pollution cost or expense" as provided in the 1990 or later editions of CA 00 01. Purchaser waives all rights against State for the recovery of damages to the extent they are covered by business auto liability or commercial umbrella liability insurance.

G-160 Agents

The State's rights and duties will be exercised by the Region Manager at Enumclaw, Washington. The Region Manager will notify Purchaser in writing who is responsible for administering the contract. The Region Manager has sole authority to waive, modify, or amend the terms of this contract in the manner prescribed in clause G-180. No agent, employee, or representative of the State has any authority to bind the State to any affirmation, representation, or warranty concerning the forest products conveyed beyond the terms of this contract.

Purchaser is required to have a person on site during all operations who is authorized to receive instructions and notices from the State. Purchaser shall inform the State in writing who is authorized to receive instructions and notices from the State, and any limits to this person's authority.

G-170 Assignment and Delegation

No rights or interest in this contract shall be assigned by Purchaser without prior written permission of the State. Any attempted assignment shall be void and ineffective for all purposes unless made in conformity with this paragraph. Purchaser may perform any duty through a delegate, but Purchaser is not thereby relieved of any duty to perform or any liability. Any assignee or delegate shall be bound by the terms of the contract in the same manner as Purchaser.

G-180 Modifications

Waivers, modifications, or amendments of the terms of this contract must be in writing signed by Purchaser and the State.

G-190 Contract Complete

This contract is the final expression of the Parties' agreement. There are no understandings, agreements, or representations, expressed or implied, which are not specified in this contract.

G-200 Notice

Notices required to be given under the following clauses shall be in writing and shall be delivered to Purchaser's authorized agent or sent by certified mail to Purchaser's address of record:

G-210 Violation of Contract
G-220 State Suspends Operations

All other notices required to be given under this contract shall be in writing and delivered to the authorized agent or mailed to the Party's post office address. Purchaser agrees to notify the State of any change of address.

G-210 Violation of Contract

- a. If Purchaser violates any provision of this contract, the Contract Administrator, by written notice, may suspend those operations in violation. If the violation is capable of being remedied, Purchaser has 30 days after receipt of a suspension notice to remedy the violation. If the violation cannot be remedied (such as a violation of WAC 240-15-015) or Purchaser fails to remedy the violation within 30 days after receipt of a suspension notice, the State may terminate the rights of Purchaser under this contract and collect damages.
- b. If the contract expires pursuant to clause G-030 or G-031 without Purchaser having performed all its duties under this contract, Purchaser's right to operate is terminated and Purchaser shall not have the right to remedy the breach. This provision shall not relieve Purchaser of any payment obligations.
- c. The State has the right to remedy the breach in the absence of any indicated attempt by Purchaser or if Purchaser is unable, as determined by the State, to remedy the breach. Any expense incurred by the State shall be charged to Purchaser and shall be paid within 30 days of receipt of billing.
- d. If Purchaser's violation is a result of a failure to make a payment when due, in addition to a. and b. above, interest shall accrue on the unpaid balance at 12 percent per annum, beginning the date payment was due.

G-220 State Suspends Operations

The Contract Administrator may suspend any operation of Purchaser under this contract when the State is suffering, or there is a reasonable expectation the State will suffer environmental, monetary, or other damage if the operation is allowed to continue.

Purchaser shall be in breach of this contract if the operation continues after the suspension notice or if the operation resumes without prior approval and notice from the Contract Administrator.

Purchaser may request a modification of a suspension within 30 days of the start of suspension through the dispute resolution process in clause G-240. If this process results in a finding that the suspension exceeded the time reasonably necessary to stop or prevent damage to the State, Purchaser is entitled to request a contract term adjustment under clause G-040.

If it reasonably appears that the damage that the State is suffering, or can reasonably be expected to suffer if the operation is allowed to continue, will prevent harvest for a period that will exceed 6 months, and Purchaser has complied with this contract, the provisions of clause G-066 shall govern just as if the harvest was prevented by an applicable foreign or domestic governmental regulation or order.

G-230 Unauthorized Activity

Any cutting, removal, or damage of forest products by Purchaser, its employees, agents, or invitees, including independent contractors, in a manner inconsistent with the terms of this contract or State law, is unauthorized. Such activity may subject Purchaser to liability for triple the value of said forest products under RCW 79.02.320 or RCW 79.02.300 and may result in prosecution under RCW 79.02.330 or other applicable statutes.

G-240 Dispute Resolution

The following procedures apply in the event of a dispute regarding interpretation or administration of this contract and the parties agree that these procedures must be followed before a lawsuit can be initiated.

- a. In the event of a dispute, Purchaser must make a written request to the Region Manager for resolution prior to seeking other relief.
- b. The Region Manager will issue a written decision on Purchaser's request within ten business days.
- c. Within ten business days of receipt of the Region Manager's decision, Purchaser may make a written request for resolution to the Deputy Supervisor - Uplands of the Department of Natural Resources.
- d. Unless otherwise agreed, a conference will be held by the Deputy Supervisor - Uplands within 30 calendar days of the receipt of Purchaser's request for review of the Region Manager's written decision. Purchaser and the Region Manager will have an opportunity to present their positions. The Deputy Supervisor - Uplands will issue a decision within a reasonable time of being presented with both Parties' positions.

G-250 Compliance with All Laws

Purchaser shall comply with all applicable statutes, regulations and laws, including, but not limited to; chapter 27.53 RCW, chapter 68.50 RCW, WAC 240-15 and WAC 296-54. Failure to comply may result in forfeiture of this contract.

G-260 Venue

This contract shall be governed by the laws of the State of Washington. In the event of a lawsuit involving this contract, venue shall be proper only in Thurston County Superior Court.

G-270 Equipment Left on State Land

All equipment owned or in the possession of Purchaser, its employees, agents, or invitees, including independent contractors, shall be removed from the sale area and other State land by the termination date of this contract. Equipment remaining unclaimed on State land 60 days after the expiration of the contract period is subject to disposition as provided by law. Purchaser shall pay to the State all costs of moving, storing, and disposing of such equipment. The State shall not be responsible for any damages to or loss of the equipment or damage caused by the moving, storing or disposal of the equipment.

G-280 Operating Release

An operating release is a written document, signed by the State and Purchaser, indicating that Purchaser has been relieved of certain rights or responsibilities with regard to the entire or a portion of the timber sales contract. Purchaser and State may agree to an operating release for this sale, or portion of this sale, prior to the contract expiration, when all contract requirements pertaining to the release area have been satisfactorily completed. Upon issuance of a release, Purchaser's right to cut and remove forest products on the released area will terminate.

G-310 Road Use Authorization

Purchaser is authorized to use the following State roads and roads for which the State has acquired easements and road use permits; the C-Line and C-1020 roads. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

G-330 Pre-work Conference

Purchaser shall arrange with the Contract Administrator to review this contract and to examine the sale area before beginning any operations. A plan of operations shall be developed and agreed upon by the Contract Administrator and Purchaser before beginning any operations. To the extent that the plan of operations is inconsistent with the contract, the terms of the contract shall prevail. State's acceptance and approval of Purchaser's plan of operations shall not be construed as any statement or warranty that the plan of operations is adequate for Purchaser's purposes or complies with applicable laws.

G-340 Preservation of Markers

Any legal land subdivision survey corners and witness objects are to be preserved. If such are destroyed or disturbed, the Purchaser shall, at the Purchaser's own expense, re-establish them through a licensed land surveyor in accordance with U.S. General Land Office standards. Corners and/or witness objects that must be disturbed or destroyed in the process of road construction or logging shall be adequately referenced and/or replaced in accordance with RCW 58.24.040(8). Such references must be approved by the Contract Administrator prior to removal of said corners and/or witness objects.

G-360 Road Use Reservation

The State shall have the right to use, without charge, all existing roads and any road constructed or reconstructed on State lands by Purchaser under this contract. The State

may extend such rights to others. If the State grants such rights to others, the State shall require performance or payment, as directed by the State, for their proportionate share of maintenance based on their use.

G-370 Blocking Roads

Purchaser shall not block the C-Line road, unless authority is granted in writing by the Contract Administrator.

G-396 Public Hauling Permit

The hauling of forest products, rock or equipment may require a state, county, or city hauling permit. Purchaser is responsible for obtaining any necessary permit and any costs associated with extra maintenance or repair levied by the permitting agency. Purchaser must provide the Contract Administrator with a copy of the executed permit.

G-430 Open Fires

Purchaser shall not set, or allow to be set by Purchaser's employees, agents, invitees and independent contractors, any open fire at any time of the year without first obtaining permission, in writing, from the Contract Administrator.

G-450 Encumbrances

This contract and Purchaser's activities are subject to the following:

To be determined approximately one month prior to the day of sale.

Section P: Payments and Securities

P-010 Initial Deposit

Purchaser paid DATA MISSING initial deposit, which will be maintained pursuant to RCW 79.15.100(3). If the operating authority on this contract expires without Purchaser's payment of the full amount specified in the 'Payment for Forest Products' clause, the initial deposit will be immediately forfeited to the State, and will be offset against Purchaser's remaining balance due. Any excess initial deposit funds not needed to ensure full payment of the contract price, or not needed to complete any remaining obligations of the Purchaser existing after contract expiration, will be refunded to the Purchaser.

P-021 Payment for Forest Products

Purchaser agrees to pay the following rates per MBF Scribner net log scale for forest products conveyed and cut or removed from the sale area plus \$17,510.00 on day of sale and \$9.00 per MBF upon removal in fees. Fees collected shall be retained by the state unless the contract is adjusted via the G-066 clause.

DATA MISSING

Species that are conveyed but are not listed in the table above shall be paid for at a rate to be determined by the State.

Utility logs, special cull and peelable cull logs of all species, included on loads of logs that are required to be removed and scaled per clause H-150 will be paid for on an adjusted gross scale basis at the rate of \$20.00 per MBF plus fees.

P-027 Payment for Removal of Optional Forest Products

Purchaser agrees to weigh all loads and pay the rate of \$2.00 per ton for forest products approved for removal from the sale area under clause H-157.

P-040 Weighing and Scaling Costs

Purchaser agrees to pay for all scaling and weighing costs for logs and other products sold under this contract. Purchaser also agrees to pay for all costs associated with the transmission and reporting of scale or weight data.

P-045 Guarantee of Payment

Purchaser will pay for forest products prior to cutting or will guarantee payment by posting an approved payment security. The amount of cash or payment security shall be determined by the State and shall equal or exceed the value of the cutting proposed by Purchaser.

P-050 Billing Procedure

The State will compute and forward to Purchaser statements of charges provided for in the contract. Purchaser shall deliver payment to the State on or before the date shown on the billing statement.

P-052 Payment Procedure

If a third party Log and Load Reporting Service (LLRS) is required by this contract the State will compute and forward to the Purchaser statements of charges provided for in the contract. Purchaser shall deliver payment to the South Puget Sound region office on or before the date shown on the billing statement.

If a third party LLRS is not required by this contract, Purchaser shall pay for forest products removed on a monthly basis. Payments will be submitted to the office listed above on or before the fourteenth of the month following the month in which the timber was removed or, according to an alternate payment schedule as approved by the State with at least one payment each month for timber removed. The alternate payment schedule, once approved by the State, shall become part of this contract and may be changed only with written approval of the State.

Payment will be based on the contract rate multiplied by the tons (tonnage contracts) or volume (mbf contracts) removed during the month or payment period. Included with the payment will be a summary report along with all related load tickets and the corresponding certified weight tickets for the payment period. The summary report will be generated using a computer spreadsheet and list the load tickets in ascending numerical order with the corresponding ticket number and weight or volume for each load.

P-070 Payment for Products: Damage, Theft, Loss, or Mismatch

Forest products included in this agreement which are destroyed, damaged, stolen, lost, or mismatched shall be paid for by Purchaser on demand of the State. The rates contained in clause P-021 shall apply.

P-080 Payment Account Refund

Advance payments made under P-045 or P-045.2 remaining on account above the value for the charges shall be returned to Purchaser within 30 days following the final report of charges. Refunds not made within the 30 day period will accrue interest at the interest rate, as established by WAC 332-100-030, computed on a daily basis until paid.

P-090 Performance Security

Purchaser agrees to furnish, within 30 days of the confirmation date, security acceptable to the State in the amount of \$100,000.00. The Security provided shall guarantee performance of all provisions of this contract and payment of any damages caused by operations under this contract or resulting from Purchaser's noncompliance with any rule or law. Acceptable performance security may be in the form of a performance bond, irrevocable letter of credit, cash, savings or certificate of deposit account assignments, and must name the State as the obligee or beneficiary. A letter of credit must comply with Title 62A RCW, Article 5. Performance security must remain in full force over the duration of the contract length. Surety bonds issued shall conform to the issuance and rating requirements in clause G-150. The State shall retain the performance security pursuant to RCW 79.15.100. Purchaser shall not operate unless the performance security has been accepted by the State. If at any time the State decides that the security document or amount has become unsatisfactory, Purchaser agrees to suspend operations and, within 30 days of notification, to replace the security with one acceptable to the State or to supplement the amount of the existing security.

P-100 Performance Security Reduction

The State may reduce the performance security after an operating release has been issued if the State determines that adequate security exists for any remaining obligations of Purchaser.

Section L: Log Definitions and Accountability

L-010 Forest Products Conveyed

Forest products conveyed are all logs or parts of logs described by the 'Products Sold and Sale Area' (G-010) clause meeting the removal requirements listed in the 'Required Removal of Forest Products' (H-150) clause.

L-020 Short Logs - Peeler Blocks

Logs or parts of logs which are removed from the sale area that fail to meet the minimum gross length requirements shall be scaled and graded as short logs or peeler blocks. Such material shall be paid for at the forest products rates specified in this contract.

L-040 Utility Logs

Utility logs are logs that meet the minimum utility log standards as described by the log scaling rules applicable for this contract.

L-060 Load Tickets

Purchaser shall complete and use load tickets as directed by the Contract Administrator and, if required, use other identification as directed by the State to ensure accounting of forest products removed from the sale area. A load ticket must be fixed, as designated by the Contract Administrator, to each truck and trailer load prior to leaving the landing.

Purchaser shall account for all load tickets issued by the Contract Administrator and return unused tickets at termination of the contract, or as otherwise required by the Contract Administrator. Unused tickets not returned shall be subject to liquidated damages per clause D-030.

The State may also treat load tickets either not accounted for or not returned as lost forest products per clause P-070. All costs associated with computing the billings for lost forest products shall be borne by Purchaser

L-071 Log and Load Reporting Service

This contract requires the use of a State approved third party Log and Load Reporting Service (LLRS). Purchaser shall ensure log volume measurement data and/or load and weight data is received by the LLRS within 1 business day of logs being measured or weighed. Purchaser agrees to pay the LLRS for log and load data supplied to the State.

If during the term of this contract, the State discontinues use of the LLRS, the State will notify the Purchaser in writing and the Purchaser will then be responsible to send log scale and/or weight information to the State.

L-080 Scaling Rules

Determination of volume and grade of any forest products shall be conducted by a state approved third party scaling organization and in accordance with the Westside log scaling and grading rules and Scribner Volume Table, revised July 1, 1972, contained in the Northwest Log Rules Eastside and Westside Log Scaling Handbook (developed and produced by the Northwest Log Rules Advisory Group) and in effect on the date of confirmation of this contract.

Special scaling specifications shall be noted on the State's Brand Designation form which is hereby incorporated to this contract by reference.

L-110 State Approval of Log Scaling and Weighing Locations

Forest Product measurement and weighing facilities required by this contract must be approved by the State. Forest products sold under the contract which require log scaling shall be scaled, measured, or counted by a State approved third party log scaling organization. Forest products sold under the contract which require weighing shall be weighed at a location that meets Washington State Department of Agriculture approval.

Prior to forest products being hauled, the Contract Administrator must authorize in writing the use of State approved measurement and/or weighing facilities that are at or enroute to final destinations. Forest products from this sale shall be measured or weighed at facilities, which are currently approved for use by the State and are currently authorized for this sale. The State reserves the right to verify load volume and weights with State employees or contractors at the State's own expense. The State reserves the right to revoke the authorization of previously approved measurement locations.

L-120 Long Log Taper Distribution

Forest products over 40 feet long plus trim shall be segment scaled and the lower segment diameters shall be determined using actual taper. In order to utilize taper rules for determining segment diameters for poles and pilings greater than 40 feet in length plus trim, Purchaser must request use of a Pole and Piling Scaling Specification Agreement on file in the region office. Approval for usage of a special Pole and Piling Scaling Specification Agreement may be granted at the sole discretion of the State.

Following State approval for usage of the Pole and Piling Scaling Specification Agreement, the Brand Designation form shall be amended to incorporate the long log taper rules. The volume reported by the scaling organization for forest products over 40 feet plus trim will be expanded by 5 percent and the additional 5 percent volume shall be billed to the purchaser at the contract rate.

L-130 Conversion Factors

Forest products removed from the sale area that are not measured in units specified in the 'Payment for Forest Products' clause of this contract shall be converted to board feet using Department of Natural Resources' standard conversion factors.

Section H: Harvesting Operations

H-011 Certification of Fallers and Yarder Operators

All persons engaged in the felling and yarding of timber must receive certification in writing from the Contract Administrator. Certification may be revoked when the Contract Administrator determines that non-compliance of leave tree selection criteria or cut tree selection criteria is occurring, or excessive damage to leave trees or skid trails is occurring.

Excessive damage for leave trees is defined in clause H-012.

Excessive damage for reserve trees is defined in clause H-013.

Excessive skid trail damage is defined in clause H-015 or H-016.

When leave tree damage exceeds the limits set forth in clause H-012, Purchaser shall be subject to liquidated damages (clause D-040)

When reserve tree damage exceeds the limits set forth in clause H-013, Purchaser shall be subject to liquidated damages (clause D-041).

H-012 Leave Tree Damage Definition

Leave trees are trees required for retention within the sale boundary. Purchaser shall protect leave trees from being cut, damaged, or removed during operations.

Leave tree damage exists when more than 5 percent of the leave trees are damaged in a unit and when one or more of the following criteria occur as a result of Purchaser's operation, as determined by the Contract Administrator:

- a. A leave tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 144 square inches.
- b. A leave tree top is broken or the live crown ratio is reduced below 30 percent.
- c. A leave tree has more than 1/3 of the circumference of its root system injured such that the cambium layer is exposed.

If the Contract Administrator determines that a leave tree has been cut or damaged, the Purchaser may be required to pay liquidated damages for Excessive Leave Tree Damage as detailed in clause D-040.

H-013 Reserve Tree Damage Definition

Reserve trees are trees required and designated for retention within the sale boundary. Purchaser shall protect reserve trees from being cut, damaged, or removed during operations.

Reserve tree damage exists when one or more of the following criteria occur as a result of Purchaser's operation, as determined by the Contract Administrator:

- a. A reserve tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 144 square inches.
- b. A reserve tree top is broken or the live crown ratio is reduced below 30 percent.
- c. A reserve tree has more than 1/3 of the circumference of its root system injured such that the cambium layer is exposed.

If the Contract Administrator determines that a reserve tree has been cut or damaged, the Purchaser shall provide a replacement reserve tree of like condition, size, and species within the sale unit containing the damaged leave tree, as approved by the Contract Administrator. Purchaser may be required to pay liquidated damages for Excessive Reserve Tree Damage as detailed in clause D-041.

Removal of designated reserve trees from the sale area is unauthorized, and may invoke the use of the G-230 'Unauthorized Activity' clause. Purchaser is required to leave all cut or damaged reserve trees on site.

- H-017 Preventing Excessive Soil Disturbance
Operations may be suspended when soil rutting exceeds 12 inches as measured from the natural ground line. To reduce soil damage, the Contract Administrator may require water bars to be constructed, grass seed to be placed on exposed soils, or other mitigation measures. Suspended operations shall not resume unless approval to do so has been given, in writing, by the Contract Administrator.
- H-025 Timing Requirements for Timber Removal
All felled merchantable timber within the sale area must be removed within 30 days of being felled.
- H-030 Timber Falling
Trees shall be felled and logs shall be bucked to obtain the greatest practicable utilization of forest products and other valuable materials conveyed.
- H-035 Fall Trees Into Sale Area
Trees shall be felled into the sale area unless otherwise approved by the Contract Administrator.
- H-040 Purchaser Harvest Plan
Purchaser shall, as part of the plan of operations, prepare an acceptable harvest plan for the sale area. The plan shall address the operations in all units, which are part(s) of this contract. The harvest plan shall be approved by the Contract Administrator prior to beginning the harvest operation. Purchaser shall not deviate from the harvest plan without prior written approval by the Contract Administrator.
- H-050 Rub Trees
Trees designated for cutting along skid trails and cable corridors shall be left standing as rub trees until all timber that is tributary to the skid trail or cable corridor has been removed.
- H-052 Branding and Painting
Forest products shall be branded with a brand furnished by the State prior to removal from the landing. All purchased timber shall be branded in a manner that meets the requirements of WAC 240-15-030(2)(a)(i). All timber purchased under a contract designated as export restricted shall also be painted in a manner that meets the requirements of WAC 240-15-030(2)(a)(ii).

For pulp loads purchased under a contract designated as export restricted, Purchaser shall brand at least 3 logs with legible brands at one end. Also, 10 logs shall be painted at one end with durable red paint.
- H-080 Snags Not to be Felled
Snags not required to be felled for safety reasons may be left standing. Snags felled for safety reasons shall not be removed and must remain where felled.

H-110 Stump Height

Trees shall be cut as close to the ground as practicable. Stump height shall not exceed 12 inches in height measured on the uphill side, or 2 inches above the root collar, whichever is higher.

H-120 Harvesting Equipment

Forest products sold under this contract shall be harvested and removed using ground based equipment limited to tracked equipment and 6-wheeled rubber tired skidders with over-the-tire tracks spanning both sets of rear tires on sustained slopes that are 45 percent or less. Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.

H-125 Log Suspension Requirements

Lead-end suspension is required for all yarding activities.

H-130 Hauling Schedule

The hauling of forest products will not be permitted from November 1 to April 30, nor on weekends or State recognized holidays, unless authorized in writing by the Contract Administrator.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

a. There are permanent plots located within the sale area. They are marked with white, round, plastic tubes at plot center and aluminum tags on the trees. Harvesting is to occur through the plots as it normally would. The aluminum tags should be ignored, but where possible the plot center stakes should be left.

b. Equipment limitation zones are required within 30 feet of Type 5 streams.

c. Crossings of Type 5 streams may be allowed at locations approved in writing by the Contract Administrator. Purchaser shall place a culvert or log puncheon at crossing locations (when water is present) to protect the stream bank and prevent sedimentation. All materials placed in and/or over the stream at these crossings shall be removed immediately upon completion of yarding on that skid trail.

d. Any and all operations associated with this sale may be temporarily suspended when, in the opinion of the Contract Administrator, there is the potential for delivery to typed water.

e. No equipment shall operate or trees felled or damaged outside the unit area.

f. Accommodate passage of equipment for one mobilization and demobilization associated with the Hornet Timber Sale on the C-1020 upon receipt of two (2) weekdays' advance notice.

g. Take measures throughout operations to control soil erosion, water channelization, and prevent sediment delivery to streams or wetlands. Methods may include construction of water bars, "sweeping" with logs, silt traps, or other measures on skid trails, yarding corridors and haul roads.

h. Within Units #1-#2, cut all stems 6 feet tall and greater, leaving a stump no more than 12 inches in height.

i. To facilitate proper reforestation in areas of high slash concentrations, Purchaser shall, clear plantable spots at a 11.5 foot by 11.5 foot spacing for units 1-2. Debris shall be disposed of in a manner approved in writing by the Contract Administrator.

j. A skid trail is defined as an area that is used for more than three passes by any equipment. Purchaser shall comply with the following during the yarding operation in all units:

- Skid trails will not exceed 12 feet in width, including rub trees.
- Skid trails shall not cover more than 10 percent of the total acreage on one unit.
- Skid trail location will be pre-approved by the Contract Administrator.
- Except for rub trees, skid trails shall be felled prior to the felling of adjacent timber.
- Rub trees shall be left standing until all timber tributary to the skid trail has been removed.
- Excessive soil damage is not permitted. Excessive soil damage is described in clause H-017.
- Skid trails will be water barred at the time of completion of yarding, if required by the Contract Administrator.

k. Notify all employees and contractors working on this sale that any danger tree marked or unmarked may be felled. Any marked danger tree will be replaced with a suitable tree of similar size and species as approved by the Contract Administrator.

Permission to do otherwise must be granted in writing by the Contract Administrator.

H-141 Additional Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

a. Within Units #1 and #2, leave 2 down logs per acre. A log is defined as having a minimum diameter of 12 inches on the small end of the log and a minimum length of 20 feet or at least 100 board feet.

Permission to do otherwise must be granted in writing by the State.

H-150 Required Removal of Forest Products

Purchaser shall remove from the sale area and present for scaling or weighing all forest products conveyed in the G-010 clause that meet the following minimum dimensions:

Species	Net bd ft	Log length (ft)	Log dib
All Conifer	10	12	5
All Hardwood	20	16	5

The State may treat failure to remove forest products left on the sale area that meet the above specifications as a breach of this contract. At the State's option, forest products that meet the above specifications and are left on the sale area may be scaled for volume or measured and converted to weight by the State or a third party scaling organization and billed to Purchaser at the contract payment rate. All costs associated with scaling, measuring and computing the billing will be borne by the Purchaser.

H-157 Optional Removal of Forest Products Not Designated

If in the course of operations, Purchaser decides to remove forest products that are below the minimum designated removal specifications per the 'Required Removal of Forest Products' (H-150), the payment rates in clause P-027 shall apply.

Forest products designated as optional shall be decked separately from forest products designated as required for removal. Prior to removal from the sale area, optional forest products as described in this clause must be inspected and approved by the Contract Administrator. Optional forest products may not be mixed with forest products that are required for removal by this contract and shall be removed from the sale area in separate truck loads using load tickets specified by the Contract Administrator.

All material removed under this clause is subject to the same log and load accountability rules as defined in the Log Definitions and Accountability section of this contract. Purchaser shall follow the payment procedures as required in the P-052 clause and will submit a separate summary report for all forest products removed from the sale area under the authority of this clause.

H-160 Mismatch

Mismatch is defined as forest products remaining on the sale area that would have met the specifications in clause H-150 if bucking lengths had been varied to include such products.

The State may treat mismatch as a breach of this contract. At the State's option, forest products that are left on the sale area may be scaled for volume by the State or a third party scaling organization and billed to Purchaser at the contract payment rate. All costs associated with scaling and computing the billing will be borne by Purchaser.

H-180 Removal of Specialized Forest Products or Firewood

Prior to the removal of conveyed specialized forest products or firewood from the sale area, Purchaser and the State shall agree in writing to the method of accounting for/and removal of such products.

H-190 Completion of Settings

Operations begun on any setting of the sale area shall be completed before any operation begins on subsequent settings unless authorized in writing by the Contract Administrator.

H-220 Protection of Residual or Adjacent Trees

Unless otherwise specified by this contract, the Contract Administrator shall identify damaged adjacent or leave trees that shall be paid for according to clause G-230.

H-230 Tops and Limbs Outside the Sale Boundary

Tops and limbs outside the sale boundary as a result of Purchaser's operation shall be removed concurrently with the yarding operation unless otherwise directed by the Contract Administrator.

Section C: Construction and Maintenance**C-040 Road Plan**

Road construction and associated work provisions of the Road Plan for this sale, dated 4/17/2023 are hereby made a part of this contract.

C-060 Designated Road Maintainer

If required by the State, Purchaser shall perform maintenance and replacement work as directed by the Contract Administrator on the C-Line and C-1020 roads. Purchaser shall furnish a statement in a form satisfactory to the State showing the costs incurred while performing this work. Costs shall be based on the rates set forth in the equipment rate schedule on file at the Region office or Engineering Division in Olympia. The State shall reimburse Purchaser for said costs within 30 days of receipt and approval of the statement.

C-080 Landing Locations Approved Prior to Construction

Landings shall be marked by Purchaser and approved by the Contract Administrator prior to construction.

C-140 Water Bars

Purchaser shall, as directed by the Contract Administrator, construct water bars across haul roads, skid trails and fire trails as necessary to control soil erosion and water pollution.

Section S: Site Preparation and Protection**S-001 Emergency Response Plan**

An Emergency Response Plan (ERP) shall be provided to the Contract Administrator containing but not limited to, valid contact numbers and procedures for medical

emergencies, fire, hazardous spills, forest practice violations and any unauthorized or unlawful activity on or in the vicinity of the sale area. The Contract Administrator and the State shall be promptly notified whenever an incident occurs requiring an emergency response.

The ERP must be presented for inspection at the prework meeting and kept readily available to all personnel, including subcontractors, on site during active operations.

S-010 Fire Hazardous Conditions

Purchaser acknowledges that operations under this Contract may increase the risk of fire. Purchaser shall conduct all operations under this agreement following the requirements of WAC 332-24-005 and WAC 332-24-405 and further agrees to use the highest degree of care to prevent uncontrolled fires from starting.

In the event of an uncontrolled fire, Purchaser agrees to provide equipment and personnel working at the site to safely and effectively engage in first response fire suppression activity.

Purchaser's failure to effectively engage in fire-safe operations is considered a breach and may result in suspension of operations.

S-030 Landing Debris Clean Up

Landing debris shall be disposed of in a manner approved in writing by the Contract Administrator.

S-050 Cessation of Operations for Low Humidity

When the humidity is 30 percent or lower on the sale area, all operations must cease unless authority to continue is granted by the State in writing.

S-060 Pump Truck or Pump Trailer

Purchaser shall provide a fully functional pump truck or pump trailer equipped to meet the specifications of WAC 332-24-005 and WAC 332-24-405 during the "closed season" or as extended by the State and shall provide trained personnel to operate this equipment on the sale area during all operating periods.

S-100 Stream Cleanout

Slash or debris which enters Type 5 streams as a result of operations under this contract and which is identified by the Contract Administrator shall be removed and deposited in a stable position. Removal of slash or debris shall be accomplished in a manner that avoids damage to the natural stream bed and bank vegetation.

S-110 Resource Protection

No yarding equipment may operate within the Riparian Management Zones within Units #1 and #2 unless authority is granted in writing by the Contract Administrator.

S-120 Stream Protection

No timber shall be felled into, across, or yarded through Type 3 or Type 4 streams.

S-130 Hazardous Materials

a. Hazardous Materials and Waste - Regulatory Compliance

Purchaser is responsible for understanding and complying with all applicable local, state, and federal hazardous material/waste laws and regulations for operations conducted under this contract. Such regulations pertain to, but may not be limited to, hazardous material storage, handling and transport, personnel protection, release notification and emergency response, cleanup, and waste disposal.

Purchaser shall be responsible for restoring the site in the event of a spill or other releases of hazardous material/waste during operations conducted under this contract.

b. Hazardous Materials Spill Prevention

All operations shall be conducted in a manner that avoids the release of hazardous materials, including petroleum products, into the environment (water, air or land).

c. Hazardous Materials Spill Containment, Control and Cleanup

If safe to do so, Purchaser shall take immediate action to contain and control all hazardous material spills. Purchaser shall ensure that enough quick response spill kits capable of absorbing 10 gallons of oil, coolant, solvent or contaminated water are available on site to quickly address potential spills from any piece of equipment at all times throughout active operations. If large quantities of bulk fuel/other hazardous materials are stored on site, Purchaser must be able to effectively control a container leak and contain & recover a hazmat spill equal to the largest single on site storage container volume. (HAZWOPER reg. 29CFR 1910.120 (j) (1) (vii)).

d. Hazardous Material Release Reporting

Releases of oil or hazardous materials to the environment must be reported according to the State Department of Ecology (ECY). It is the responsibility of the Purchaser to have all emergency contact information readily available and a means of remote communication for purposes of quick notification. In the event of a spill covered in part a., the Purchaser is responsible for immediately notifying all the following:

- Department of Emergency Management at 1-800-258-5990
- National Response Center at 1-800-424-8802
- Appropriate Department of Ecology (ECY) at 1-800-645-7911
- DNR Contract Administrator

S-131 Refuse Disposal

As required by RCW 70.93, All Purchaser generated refuse shall be removed from state lands for proper disposal prior to termination of this contract. No refuse shall be burned, buried or abandoned on state forest lands. All refuse shall be transported in a manner such that it is in compliance with RCW 70.93 and all loads or loose materials shall be covered/secured such that these waste materials are properly contained during transport.

Section D: Damages

D-010 Liquidated Damages

The clauses in the DAMAGES section of this contract provide for payments by Purchaser to the State for certain breaches of the terms of this contract. These payments are agreed to as liquidated damages and not as penalties. They are reasonable estimates of anticipated harm to the State caused by Purchaser's breach. These liquidated damages provisions are agreed to by the State and Purchaser with the understanding of the difficulty of proving loss and the inconvenience or infeasibility of obtaining an adequate remedy. These liquidated damages provisions provide greater certainty for the Purchaser by allowing the Purchaser to better assess its responsibilities under the contract.

D-020 Failure to Remove Forest Products

Purchaser's failure to remove all or part of the forest products sold in this agreement prior to the expiration of the contract term results in substantial injury to the State. The value of the forest products sold at the time of breach is not readily ascertainable. Purchaser's failure to perform disrupts the State's management plans, the actual cost of which is difficult to assess. A resale involves additional time and expense and is not an adequate remedy. Therefore, Purchaser agrees to pay the State as liquidated damages a sum calculated using the following formula:

$$LD = .35V-ID-P+C+A$$

Where:

LD = Liquidated Damage value.

V = The unremoved value at the date of breach of contract. The value is determined by subtracting the removal volume to date from the State's cruise volume multiplied by the contract bid rates.

ID = Initial Deposit paid at date of contract that has not been applied to timber payments.

P = Advance payments received but not yet applied to specific contract requirements.

C = Charges assessed for contract requirements completed prior to breach of contract but not paid for.

A = Administrative Fee = \$2,500.00.

The above formula reflects the Purchaser's forfeiture of the initial deposit in accordance with clause P-010 by deducting the initial deposit from the amount owed. In no event shall the liquidated damages be less than zero. Interest on the liquidated damage is owed from the date of breach until final payment, calculated using the following formula: $\text{Interest} = r \times \text{LD} \times N$.

Where:

r = daily equivalent of an annual interest at current interest rate as established by WAC 332-100-030.

LD = Liquidated damage value.

N = Number of days from date of breach to date payment is received.

D-030 Inadequate Log Accountability

Removal of forest products from the sale area without adequate branding and/or valid load tickets attached to the load and scaling forest products in a location other than the facility approved by the State can result in substantial injury to the State. Failure to properly account for loads and scaling and/or weighing information can result in loss to the State. The potential loss from not having proper branding, ticketing, scaling and/or weighing location and accountability is not readily ascertainable. Purchaser's failure to perform results in a loss of log weight and scale accountability, increases the potential for unauthorized removal of forest products, and increases the State's administration costs, the actual costs of which are difficult to assess.

Enforcement actions for unauthorized removal of forest products for each improperly branded load, improperly ticketed load, lost or unaccounted for tickets, or use of a facility not authorized for this sale or improper submission of scaling data are impractical, expensive, time consuming and are not an adequate remedy. Therefore, Purchaser agrees to pay the State, as liquidated damages, a sum of \$100 each time a load of logs does not have branding as required in the contract, \$250 each time a load of logs does not have a load ticket as required by the contract, \$250 each time a load ticket has not been filled out as required by the plan of operations, \$250 each time a load is weighed or scaled at a location not approved as required under this contract, \$250 each time a log ticket summary report is not submitted properly, and if a third party Log and Load Reporting Service is required, \$250 each time scaling or weight data is not properly submitted to the Log and Load Reporting Service per clause L-071, and \$250 each unused ticket that is not returned to the State, for any reason.

D-040 Leave Tree Excessive Damage

When Purchaser's operations exceed the damage limits set forth in clause H-012, Leave Tree Damage Definition, the trees damaged result in substantial injury to the State. The value of the damaged leave trees at the time of the breach is not readily ascertainable.

Therefore, Purchaser agrees to pay the State as liquidated damages at the rate of \$1,000.00 per tree for all damaged trees in Unit #3.

D-041 Reserve Tree Excessive Damage

When Purchaser’s operations exceed the damage limits set forth in clause H-013, Reserve Tree Damage Definition, and when the Contract Administrator determines that a suitable replacement for a damaged reserve tree is not possible, the damaged trees result in substantial injury to the State. The value of the damaged reserve trees at the time of the breach is not readily ascertainable. Therefore, the Purchaser agrees to pay the State as liquidated damages at the rate of \$1,000.00 per tree for all damaged reserve trees that are not replaced in Units #1 and #2.

SIGNATURES

This agreement may be executed in any number of counterparts (including by electronic mail in portable document format (.pdf), or by facsimile) each of which shall be deemed an original but all of which, when taken together, shall constitute one and the same Agreement binding on all parties.

IN WITNESS WHEREOF, the Parties hereto have entered into this contract.

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Purchaser

Don Melton, Acting
South Puget Sound Region Manager

Print Name

Date: _____

Date: _____

Address:

CORPORATE ACKNOWLEDGEMENT
(Required for both LLC and Inc. Entities)

STATE OF _____)

COUNTY OF _____)

On this _____ day of _____, 20____, before me personally appeared _____

_____ to me known to be the _____ of the corporation that executed the within and foregoing instrument and acknowledged said instrument to be the free and voluntary act and deed of the corporation, for the uses and purposes therein mentioned, and on oath stated that (he/she was) (they were) authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Notary Public in and for the State of

My appointment expires _____

Schedule A
RMZ Thinning Prescription for Unit #3

Harvest Prescription:

This harvest is to enhance habitat by a variable density thinning to achieve the Curtis' relative density (RD) target below. To accomplish this prescription, trees may be harvested that are six (6) to thirty-six (36) inches in diameter at breast height (DBH). No trees that are thirty-seven (37) inches or larger in DBH shall be felled, with the exception of those trees which pose a safety hazard. Any such trees felled for safety purposes shall not be removed.

Unit #	Residual Target RD
--------	-----------------------

3	40
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- Only live trees six inches or greater in DBH will be used to calculate RD. Conifers that are less than 6 inches in DBH are to be protected during harvest operations where possible, with special attention given to Douglas-fir and western red cedar.
- The RD target is an average at the unit level.
- In any given area, the residual RD shall not vary by more than five (5) points above or below the unit target.
- The RD listed for each unit is required; Purchaser shall leave sufficient trees and basal area per acre in the unit to achieve the RD following harvest.
- Leave trees shall be evenly distributed across the harvest unit on an acre by acre basis. Leave trees shall be selected using the Leave Tree Selection Criteria.
- Relative Density (RD) will be calculated using the following formula

$$RD=BA/\sqrt{QMD}$$

Leave Tree Selection Criteria:

The Purchaser shall select leave trees from the dominant and co-dominant canopy by comparing with other trees in the stand, first by using species preference, then by form preference listed below.

Species preference (in descending order of priority):

- 1) western red cedar
- 2) Douglas-fir
- 3) western hemlock
- 4) hardwoods (red alder and bigleaf maple)

Form preference (in descending order of priority):

- 1) Free of disease, major defect and damage
- 2) Largest diameter
- 3) Fullest and most vigorous crown
- 4) Tallest height

Equipment Restriction:

No equipment shall operate within 50 feet of the 100 year floodplain or ordinary high water mark of the stream, nor within 25 feet of the white timber sale boundary tags in the area shown on the Timber Sale map as Equipment Exclusion Zone.

Structure Creation:

In Units #3, the Purchaser shall enhance habitat by identifying and creating structure as part of the DNR’s Riparian Forest Restoration Strategy (RFRS).

Prior to thinning operations beginning, Purchaser shall mark structure creation trees and receive approval in writing from the Contract Administrator. Five (5) trees from the largest conifer diameter class per thinned RMZ acre shall be selected to serve as down woody debris (DWD) and snags as designated in the table below. These trees are to be selected from within 25 feet from the white “Timber Sale Boundary” tags.

Down woody debris (DWD) creation

At least three (3) of the five trees are to serve as DWD. These trees are to be felled towards the stream, but not across. Contract clause H-110 does not apply to DWD in these units; trees may be felled using any stump height that accommodates safe falling practices.

Snag creation

Up to two (2) of the five trees per RMZ thinning acre are to serve as snag creation. Snags may be created by either girdling or topping. If the Purchaser elects to girdle the trees, girdling shall be completely around the bole of the tree in a manner approved by Contract Administrator. If the Purchaser elects to top the tree, the topping shall occur above 20 feet.

Unit #	RMZ thinned acres	Total # of DWD	Total # of snags
3	3.6	15	10

Schedule B
Prescription Compliance in Unit #3

Compliance:

To ensure that the Purchaser is in compliance with the unit prescription in Unit #3 the Purchaser shall measure sample plots across the landscape concurrently while harvesting in each unit. These plots shall be pre-determined, with approval by the Contract Administrator (CA), on a 400 foot by 400 foot grid covering each unit to ensure random and unbiased plot locations. If 400 x 400 grid is not possible due to configuration of the unit, another unbiased grid will be agreed upon by the CA.

At each plot location, stand conditions will be measured using a fixed plot of 1/10 acre and a variable plot with a 20 BAF prism. (A different BAF may be used if approved by the CA).

All compliance plots, as described above will be marked in the field. The perimeter of the plot will be marked with fluorescent pink flagging. On each plot, the count trees will be marked with one yellow band of paint, and BA trees with two yellow bands of paint. The Purchaser shall demonstrate, to the satisfaction of the CA, a working knowledge and ability to accurately measure and calculate Relative Density (RD). The Purchaser shall submit compliance plot data to the CA at the following intervals:

Unit #3 after 20% of the unit has been cut and every 30% of the total unit acreage thereafter.

The following tables include residual trees per acre (TPA) and basal area (BA) averages that are recommended based on cruise information and modeling to achieve the RD prescription for the respective units. These are estimates only. Compliance of the RD achieved for Unit #3 will be based on actual plot data.

Unit	Target RD	Average TPA	Average Basal Area per Acre
3	40	80	180

If a plot indicates that the BA is more than ten (10) percent above or below the unit target, the CA must be notified immediately. The CA shall determine if this deviation will require recertification of the fallers.

The Purchaser shall not deviate from the requirements set forth in this schedule without prior written approval by the CA.



WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOREST EXCISE TAX ROAD SUMMARY SHEET

Region: South Puget Sound

Timber Sale Name: Rusty Ridge 2024 VRH & VDT

Application Number: 30- 103588

EXCISE TAX APPLICABLE ACTIVITIES

Construction: 0 linear feet
Road to be constructed (optional and required) but not abandoned

Reconstruction: 0 linear feet
Road to be reconstructed (optional and required) but not abandoned

Abandonment: 0 linear feet
Abandonment of existing roads not reconstructed under the contract

Decommission: 0 linear feet
Road to be made undriveable but not officially abandoned.

Pre-Haul Maintenance: 3159 linear feet
Existing road to receive maintenance work (optional and required) prior to haul

EXCISE TAX EXEMPT ACTIVITIES

Temporary Construction: 0 linear feet
Roads to be constructed (optional and required) and then abandoned

0 linear feet
Temporary Reconstruction:
Roads to be reconstructed (optional and required) and then abandoned

All parties must make their own assessment of the taxable or non-taxable status of any work performed under the timber sale contract. The Department of Revenue bears responsibility for determining forest road excise taxes. The Department of Natural Resources developed this form to help estimate the impact of forest excise taxes. However, the information provided may not precisely calculate the actual amount of taxes due. The Department of Revenue is available for consultation by calling 1.800.548.8829.

(Revised 9/18)

PRE-CRUISE NARRATIVE

Sale Name: Rusty Ridge 2024 VRH and VDT	Region: South Puget Sound
Agreement #: 30-103588	District: Black Hills
Contact Forester: Carson Bennett	Phone/ Location: (564) 669-3390
Alternate Contact: Derwood Duncan	Phone/ Location: (360) 280-3113

Type of Sale (lump sum, mbf scale, tonnage scale or contract harvest): **MBF Scale**
 Required or Optional removal of utility as pulp (*for scale sales only*): **Required**
 Evaluated for RFRS Implementation?: **Units 1 and 2 were not considered for RFRS. Unit 3 VDT RMZ will be thinned for research and RFRS.**
 Percentage cable-uphill: 0%
 Percentage cable-downhill: 0%
 Percentage ground based: 100%
 Species Onsite: RC, DF, WH, RA, BC, BLM, NF, SF, SS, Other:(Please List)

UNIT ACREAGES* AND METHOD OF DETERMINATION:

Unit # Harvest R/W or RMZ WMZ	Legal Description Sec/Twp/Rng	Grant	Gross Traversed Acres	Deductions from Gross Acres (No harvest acres)				Net Harvest Acres	Acreage Determination (List method, dimensions and error of closure if applicable)
				RMZ/ WMZ Acres	Leave Tree Acres	Existing Road Acres	Other Acres (describe)		
Unit 1 (VRH) Groups	Sec 19/T17N/ R04 W	02	47.0	0	0	0.8	36.7 Unharvested	9.5	GPS (Trimble 6400), existing Rd. L 825' x W 40' = 0.8 acre.
Unit 2 (VRH) Patches	Secs 19 and 30/T17N/ R04 W	02	60.0	0	0	2.4	47.9 Unharvested	9.7	GPS (Trimble 6400), existing Rd. L 3159' x W 33' = 2.4 acres.
Unit 3 (VDT)	Secs 19 and 30/T17N/ R04 W	02	36.5	RMZ *1.8 WMZ **1.8	0	0	0	32.9	GPS (Trimble 6400)
TOTAL ACRES			143.5	3.6	0	3.2	84.6	52.1	

*Thinning 3.6 acres of 5.4 RMZ acres. 1.8 RMZ acres are excluded from the thinning.

**Thinning 1.8 acres of 3.6 WMZ acres. 1.8 WMZ acres are excluded from the thinning.

HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Mark leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.) *For all marked thinnings, include a tree count by species.
Unit 1 (VRH) Groups	This Unit is comprised of 10 regeneration groups which are bounded by white "Timber Sale Boundary" tags and pink flagging, timber type change, and C-Line road.	N/A	There are 46.2 gross acres in this harvest unit that is comprised of 10 small regeneration cuts totaling 9.5 net harvest acres. The remaining 36.7 acres in the unit contain the leave trees.

Unit 2 (VRH) Patches	This Unit is comprised of 5 regeneration patches which are bounded by white "Timber Sale Boundary" tags and pink flagging, timber type change, C-Line and C-1020.	N/A	There are 57.6 gross acres in this harvest unit that is comprised of 5 small regeneration cuts totaling 9.7 net harvest acres. The remaining 47.9 acres in the unit contains the leave trees.
Unit 3 (VDT)	This unit is a Variable Density Thinning (VDT) bounded by white "Timber Sale Boundary" tags with pink flagging, timber type change, and C-Line.	N/A	The inner zone (within 25' of stream) of a Type 3 stream was excluded from the thinning harvest. Unit is based on a prescription, and leave or take trees are not marked on the ground.

OTHER PRE-CRUISE INFORMATION:

Unit #	Estimated Volume	Access information (Gates, locks, etc.)	Photos, traverse maps required
Unit 1 (VRH) (Groups)	See Cruise	C-Line	Traverse map with contours and roads. Photo (Scale 1' to 400')
Unit 2 (VRH) Patches	See Cruise	C-Line	Traverse map with contours and roads. Photo (Scale 1' to 400')
Unit 3 (VDT)	See Cruise	C-Line	Traverse map with contours and roads. Photo (Scale 1' to 400')

REMARKS:

This sale is a research area comprised of 10 group cuts, 5 patch cuts, and 1 thinning area.

Gross traversed acres is total acres for all of the Group and/or Patch Units of the research study area. Other Acres are all of the acreage that will not be cut as part of this ten-year cycle. Net harvest acres is the actual acres to be cut for this year's research project.

Within Unit 3 thinning, produce a stand table showing existing TPA. RD, QMD, and BA will be needed. Compliance of the RD achieved for each unit will be based on actual plot data.

Unit	Target RD	Average TPA	Average Basal Area per Acre
<u>3</u>	<u>40</u>	<u>78</u>	<u>180</u>

See Schedule A for thinning prescription.

Prepared By: Derwood Duncan Date: 4/30/2023	Title: NRS3	CC: Product Sales
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Revised 2/23/2007 (PSLD), Revised 1/22/20 (SPS)

Timber Sale Cruise Report Rusty Ridge 2024 VRH & VDT

Sale Name: RUSTY RIDGE 2024 VRH AND VDT

Sale Type: MBF SCALE

Region: SO PUGET

District: BLACK HILLS

Lead Cruiser: Aaron Coleman

Other Cruisers: Blake Warnstadt, Dylan Buchanan

Cruise Narrative:

Rusty Ridge 24 is part of a long term joint study unit in partnership with the USFS. It consists of 10 regeneration group units, 5 regeneration patch units, and 1 variable density thinning (VDT) located off the C-Line in the Capitol State Forest. No keys were needed to access all units. The C-Line is in good condition, but the C-1020 has spots of overgrown brush.

The primary species is as follows:

Douglas-fir (81%) with an average diameter of 19 inches.

Western hemlock (14%) with an average diameter of 20 inches.

Unit 3 VDT is to be thinned to a RD 40, per the prescription outlined in "Schedule A" of the contract. Unit 1 is the combined acreage of all 10 regen group units, and Unit 2 is the combined acreage of all 4 regen patch units.

Overall defect across all units is low, but most commonly observed defect was old logging damage from past harvest activity, broken/forked tops and spike knots.

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	19.6	7.0		836	20	502	264	47	2
WH	20.1			147		102	39	5	1
RA	20.1			39		30		9	0
NF	30.0			8		7		0	
ALL	19.7	7.0		1,030	20	642	303	61	4

Timber Sale Notice Weight (tons)

Sp	Tons by Grade					
	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	6,136	126	3,495	2,085	411	20
WH	1,221		796	369	46	10
RA	309		207		99	3
NF	51		48		3	
ALL	7,717	126	4,546	2,454	558	33

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 (%)
229.3	3.7	172.9	2.1	39,579	4.3

Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
Unit 1 VRH (Groups)	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	9.5		14	14	0
Unit 2 VRH (Patches)	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	9.7		12	12	1
RUSTY RIDGE 24 U3 THIN	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	32.9	32.9	33	33	0
All		52.1	32.9	59	59	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	14.9	40	5,613	5,368	4.4	1,956.5	279.7
DF	LIVE	2 SAW	HQ-A	13.8	40	718	718	0.0	259.5	37.4
DF	LIVE	2 SAW	HQ-B	14.2	40	3,392	3,325	2.0	1,196.3	173.2
DF	LIVE	2 SAW	Pole	13.9	40	234	229	1.8	82.3	12.0
DF	LIVE	3 SAW	Domestic	9.0	39	3,904	3,811	2.4	1,584.6	198.5
DF	LIVE	3 SAW	HQ-B	10.2	40	1,074	1,044	2.8	411.0	54.4
DF	LIVE	3 SAW	Pole	8.8	40	217	217	0.0	89.1	11.3
DF	LIVE	4 SAW	Domestic	6.0	23	902	899	0.4	410.7	46.8
DF	LIVE	CULL	Cull	5.7	5	34	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	17.1	40	390	388	0.5	126.0	20.2
DF	LIVE	UTILITY	Pulp	6.4	13	46	45	1.2	20.3	2.4
NF	LIVE	2 SAW	Domestic	16.6	40	140	140	0.0	48.4	7.3
NF	LIVE	4 SAW	Domestic	5.2	22	4	4	0.0	2.6	0.2
RA	LIVE	2 SAW	Domestic	14.6	30	628	579	7.7	207.1	30.2
RA	LIVE	4 SAW	Domestic	7.1	34	170	170	0.0	98.7	8.9
RA	LIVE	UTILITY	Pulp	6.9	14	5	5	0.0	2.8	0.3
WH	LIVE	2 SAW	Domestic	16.3	40	2,128	1,965	7.6	795.8	102.4
WH	LIVE	3 SAW	Domestic	9.7	39	752	742	1.3	369.1	38.7
WH	LIVE	4 SAW	Domestic	6.2	19	98	98	0.0	46.0	5.1
WH	LIVE	CULL	Cull	8.2	3	3	0	100.0	0.0	0.0
WH	LIVE	UTILITY	Pulp	7.5	13	17	17	0.0	9.8	0.9

Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	< 5	LIVE	Pulp	4.9	12	3	0.0	1.7	0.2
DF	5 - 7	LIVE	Cull	5.7	5	0	100.0	0.0	0.0
DF	5 - 7	LIVE	Domestic	6.3	27	1,491	1.8	693.5	77.7
DF	5 - 7	LIVE	Pulp	6.5	13	34	1.6	14.4	1.8
DF	5 - 7	LIVE	Pole	6.8	40	46	0.0	21.9	2.4
DF	8 - 11	LIVE	Pulp	9.2	14	8	0.0	4.2	0.4
DF	8 - 11	LIVE	Domestic	9.6	38	3,187	2.1	1,290.3	166.0
DF	8 - 11	LIVE	HQ-B	10.0	40	996	2.1	392.4	51.9
DF	8 - 11	LIVE	Pole	10.1	40	171	0.0	67.2	8.9
DF	12 - 15	LIVE	Domestic	13.6	40	3,244	3.3	1,234.7	169.0
DF	12 - 15	LIVE	HQ-B	13.6	40	2,481	2.2	915.6	129.2
DF	12 - 15	LIVE	HQ-A	13.7	40	718	0.0	259.5	37.4
DF	12 - 15	LIVE	Pole	13.9	40	229	1.8	82.3	12.0
DF	16 - 19	LIVE	HQ-A	16.9	40	315	0.0	102.8	16.4
DF	16 - 19	LIVE	HQ-B	17.0	40	892	2.1	299.2	46.5
DF	16 - 19	LIVE	Domestic	17.5	40	1,447	6.1	501.7	75.4
DF	20+	LIVE	HQ-A	20.4	40	72	2.6	23.2	3.8
DF	20+	LIVE	Domestic	22.0	40	708	5.4	231.7	36.9
NF	5 - 7	LIVE	Domestic	5.2	22	4	0.0	2.6	0.2
NF	12 - 15	LIVE	Domestic	12.4	40	31	0.0	14.9	1.6
NF	20+	LIVE	Domestic	20.7	40	109	0.0	33.5	5.7
RA	5 - 7	LIVE	Domestic	6.5	34	118	0.0	73.6	6.1
RA	5 - 7	LIVE	Pulp	6.9	14	5	0.0	2.8	0.3
RA	8 - 11	LIVE	Domestic	10.1	31	52	0.0	25.1	2.7
RA	12 - 15	LIVE	Domestic	14.2	30	494	7.3	181.3	25.7
RA	20+	LIVE	Domestic	20.1	30	85	10.1	25.8	4.4
WH	5 - 7	LIVE	Domestic	6.4	23	142	0.0	70.0	7.4
WH	5 - 7	LIVE	Cull	6.7	2	0	100.0	0.0	0.0
WH	5 - 7	LIVE	Pulp	7.5	13	11	0.0	6.2	0.6
WH	8 - 11	LIVE	Pulp	8.5	12	5	0.0	3.6	0.3
WH	8 - 11	LIVE	Cull	9.2	3	0	100.0	0.0	0.0
WH	8 - 11	LIVE	Domestic	10.2	39	698	1.4	345.0	36.4
WH	12 - 15	LIVE	Domestic	14.0	40	805	4.9	330.4	42.0
WH	16 - 19	LIVE	Domestic	17.3	40	672	2.8	250.3	35.0
WH	20+	LIVE	Domestic	21.9	40	488	17.2	215.2	25.4

Cruise Unit Report Unit 1 VRH (Groups)

Unit Sale Notice Volume (MBF): Unit 1 VRH (Groups)

Sp	DBH	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	19.3	7.0		292	15	173	86	18	1
WH	20.0			72		55	14	3	1
ALL	19.4	7.0		364	15	228	99	21	2

Unit Cruise Design: Unit 1 VRH (Groups)

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	9.5		14	14	0

Unit Cruise Summary: Unit 1 VRH (Groups)

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	64	64	4.6	1
WH	15	15	1.1	0
ALL	79	79	5.6	1

Unit Cruise Statistics: Unit 1 VRH (Groups)

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	182.9	44.3	11.9	167.9	19.5	2.4	30,700	48.4	12.1
WH	42.9	118.4	31.6	177.7	25.4	6.6	7,616	121.1	32.3
ALL	225.7	23.7	6.3	169.8	20.8	2.3	38,316	31.5	6.7

Unit Summary: Unit 1 VRH (Groups)

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	64	ALL	19.3	88	112	31,643	30,700	3.0	90.0	182.9	41.6	291.6
WH	LIVE	CUT	15	ALL	20.0	69	86	7,905	7,616	3.7	19.6	42.9	9.6	72.4
ALL	LIVE	CUT	79	ALL	19.4	85	108	39,548	38,316	3.1	109.6	225.7	51.2	364.0
ALL	ALL	ALL	79	ALL	19.4	85	108	39,548	38,316	3.1	109.6	225.7	51.2	364.0

Unit Stand Table: Unit 1 VRH (Groups)

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	12	LIVE	CUT	4	12.1	70	88	1,405	0.0	14.3	11.4	3.3	13.4
DF	14	LIVE	CUT	4	14.0	82	104	1,506	4.5	10.7	11.4	3.1	14.3
DF	16	LIVE	CUT	4	15.9	84	107	1,674	2.1	8.3	11.4	2.9	15.9
DF	18	LIVE	CUT	8	18.1	89	114	3,444	3.9	12.8	22.9	5.4	32.7
DF	20	LIVE	CUT	13	19.8	92	117	5,834	2.8	17.3	37.1	8.3	55.4
DF	22	LIVE	CUT	7	21.9	94	119	3,512	2.6	7.6	20.0	4.3	33.4
DF	24	LIVE	CUT	9	24.0	100	128	4,768	4.5	8.2	25.7	5.2	45.3
DF	26	LIVE	CUT	7	25.4	103	132	3,919	2.2	5.7	20.0	4.0	37.2
DF	28	LIVE	CUT	6	27.9	105	134	3,506	2.7	4.1	17.1	3.2	33.3
DF	30	LIVE	CUT	1	30.0	104	133	589	2.5	0.6	2.9	0.5	5.6
DF	36	LIVE	CUT	1	35.7	96	122	541	1.9	0.4	2.9	0.5	5.1
WH	8	LIVE	CUT	1	8.5	31	36	181	0.0	7.3	2.9	1.0	1.7
WH	18	LIVE	CUT	1	17.0	79	99	428	0.0	1.8	2.9	0.7	4.1
WH	20	LIVE	CUT	1	20.4	85	107	451	0.6	1.3	2.9	0.6	4.3
WH	22	LIVE	CUT	1	22.2	101	128	615	4.9	1.1	2.9	0.6	5.8
WH	24	LIVE	CUT	4	23.8	97	123	2,324	1.6	3.7	11.4	2.3	22.1
WH	26	LIVE	CUT	3	26.0	92	116	1,549	3.0	2.3	8.6	1.7	14.7
WH	30	LIVE	CUT	2	29.9	87	110	938	9.7	1.2	5.7	1.0	8.9
WH	32	LIVE	CUT	1	31.7	103	130	701	4.7	0.5	2.9	0.5	6.7
WH	34	LIVE	CUT	1	33.5	82	103	429	7.1	0.5	2.9	0.5	4.1

Cruise Unit Report Unit 2 VRH (Patches)

Unit Sale Notice Volume (MBF): Unit 2 VRH (Patches)

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	20.1			268	170	85	14
WH	20.5			46	28	17	1
ALL	20.2			314	198	102	15

Unit Cruise Design: Unit 2 VRH (Patches)

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	9.7		12	12	1

Unit Cruise Summary: Unit 2 VRH (Patches)

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	45	45	3.8	0
WH	9	9	0.8	0
ALL	54	54	4.5	0

Unit Cruise Statistics: Unit 2 VRH (Patches)

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	150.0	45.7	13.2	184.5	10.4	1.6	27,671	46.8	13.3
WH	30.0	115.5	33.3	157.3	27.1	9.0	4,719	118.6	34.5
ALL	180.0	42.9	12.4	179.9	14.5	2.0	32,389	45.3	12.5

Unit Summary: Unit 2 VRH (Patches)

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	45	ALL	20.1	101	127	28,055	27,671	1.4	68.1	150.0	33.5	268.4
WH	LIVE	CUT	9	ALL	20.5	94	119	5,205	4,719	9.3	13.1	30.0	6.6	45.8
ALL	LIVE	CUT	54	ALL	20.2	100	126	33,260	32,389	2.6	81.2	180.0	40.1	314.2
ALL	ALL	ALL	54	ALL	20.2	100	126	33,260	32,389	2.6	81.2	180.0	40.1	314.2

Unit Stand Table: Unit 2 VRH (Patches)

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	14	LIVE	CUT	1	14.0	78	98	468	0.0	3.1	3.3	0.9	4.5
DF	16	LIVE	CUT	1	16.0	122	122	602	0.0	2.4	3.3	0.8	5.8
DF	18	LIVE	CUT	13	17.8	97	124	7,206	0.3	25.2	43.3	10.3	69.9
DF	20	LIVE	CUT	11	19.8	102	131	6,952	1.3	17.1	36.7	8.2	67.4
DF	22	LIVE	CUT	7	21.7	103	131	4,484	2.1	9.1	23.3	5.0	43.5
DF	24	LIVE	CUT	7	23.6	106	136	4,813	0.9	7.7	23.3	4.8	46.7
DF	26	LIVE	CUT	2	25.5	102	130	1,185	4.2	1.9	6.7	1.3	11.5
DF	30	LIVE	CUT	1	30.0	111	143	623	6.9	0.7	3.3	0.6	6.0
DF	34	LIVE	CUT	1	34.0	101	129	630	4.9	0.5	3.3	0.6	6.1
DF	36	LIVE	CUT	1	36.0	108	138	708	0.0	0.5	3.3	0.6	6.9
WH	16	LIVE	CUT	1	16.0	90	113	580	0.0	2.4	3.3	0.8	5.6
WH	18	LIVE	CUT	1	18.0	82	103	289	0.0	1.9	3.3	0.8	2.8
WH	20	LIVE	CUT	4	19.5	97	123	2,419	2.6	6.4	13.3	3.0	23.5
WH	22	LIVE	CUT	1	22.0	100	126	675	0.0	1.3	3.3	0.7	6.6
WH	34	LIVE	CUT	1	33.0	105	133	328	49.9	0.6	3.3	0.6	3.2
WH	36	LIVE	CUT	1	35.0	102	129	427	18.2	0.5	3.3	0.6	4.1

Cruise Unit Report RUSTY RIDGE 24 U3 THIN

Unit Sale Notice Volume (MBF): RUSTY RIDGE 24 U3 THIN

Sp	DBH	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	19.4			276	6	160	93	16	1
RA	20.1			39		30		9	0
WH	19.9			29		19	8	1	0
NF	30.0			8		7		0	
ALL	19.6			352	6	217	102	26	2

Unit Cruise Design: RUSTY RIDGE 24 U3 THIN

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	32.9	32.9	33	33	0

Unit Cruise Summary: RUSTY RIDGE 24 U3 THIN

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
SS		1	0.0	0
SF		3	0.1	0
DF	40	169	5.1	0
WH	4	20	0.6	0
RA	8	8	0.2	0
NF	1	1	0.0	0
ALL	53	202	6.1	0

Unit Cruise Statistics: RUSTY RIDGE 24 U3 THIN

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 (%)
SS	1.2	574.5	100.0						
SF	3.6	574.5	100.0						
DF	204.8	43.6	7.6	172.9	21.2	3.3	35,415	48.5	8.3
WH	24.2	210.1	36.6	181.2	30.4	15.2	4,393	212.3	39.6
RA	9.7	449.9	78.3	123.2	14.5	5.1	1,195	450.1	78.5
NF	1.2	574.5	100.0	187.5	0.0	0.0	227	574.5	100.0
ALL	244.8	25.1	4.4	171.8	23.0	3.2	42,063	34.1	5.4

Unit Summary: RUSTY RIDGE 24 U3 THIN

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	40	ALL	19.4	94	120	8,757	8,382	4.3	23.6	48.5	11.0	275.8
DF	LIVE	LEA	128	ALL	20.9	100	128	28,242	27,033	4.3	65.6	156.4	34.2	889.4
NF	LIVE	CUT	1	ALL	30.0	92	117	227	227	0.0	0.2	1.2	0.2	7.5
RA	LIVE	CUT	8	ALL	20.1	68	83	1,272	1,195	6.0	4.4	9.7	2.2	39.3
SF	LIVE	LEA	3	ALL	32.8	99	127				0.6	3.6	0.6	
SS	LIVE	LEA	1	ALL	25.0	97	124				0.4	1.2	0.2	
WH	LIVE	CUT	4	ALL	19.9	82	102	929	879	5.4	2.2	4.8	1.1	28.9
WH	LIVE	LEA	16	ALL	19.3	85	109	3,715	3,515	5.4	9.5	19.4	4.4	115.6
ALL	LIVE	LEA	148	ALL	20.9	98	126	31,956	30,548	4.4	76.1	180.6	39.5	1,005.0
ALL	LIVE	CUT	53	ALL	19.6	89	113	11,184	10,683	4.5	30.4	64.2	14.5	351.5
ALL	ALL	ALL	201	ALL	20.5	95	122	43,141	41,231	4.4	106.5	244.8	54.0	1,356.5

Unit Stand Table: RUSTY RIDGE 24 U3 THIN

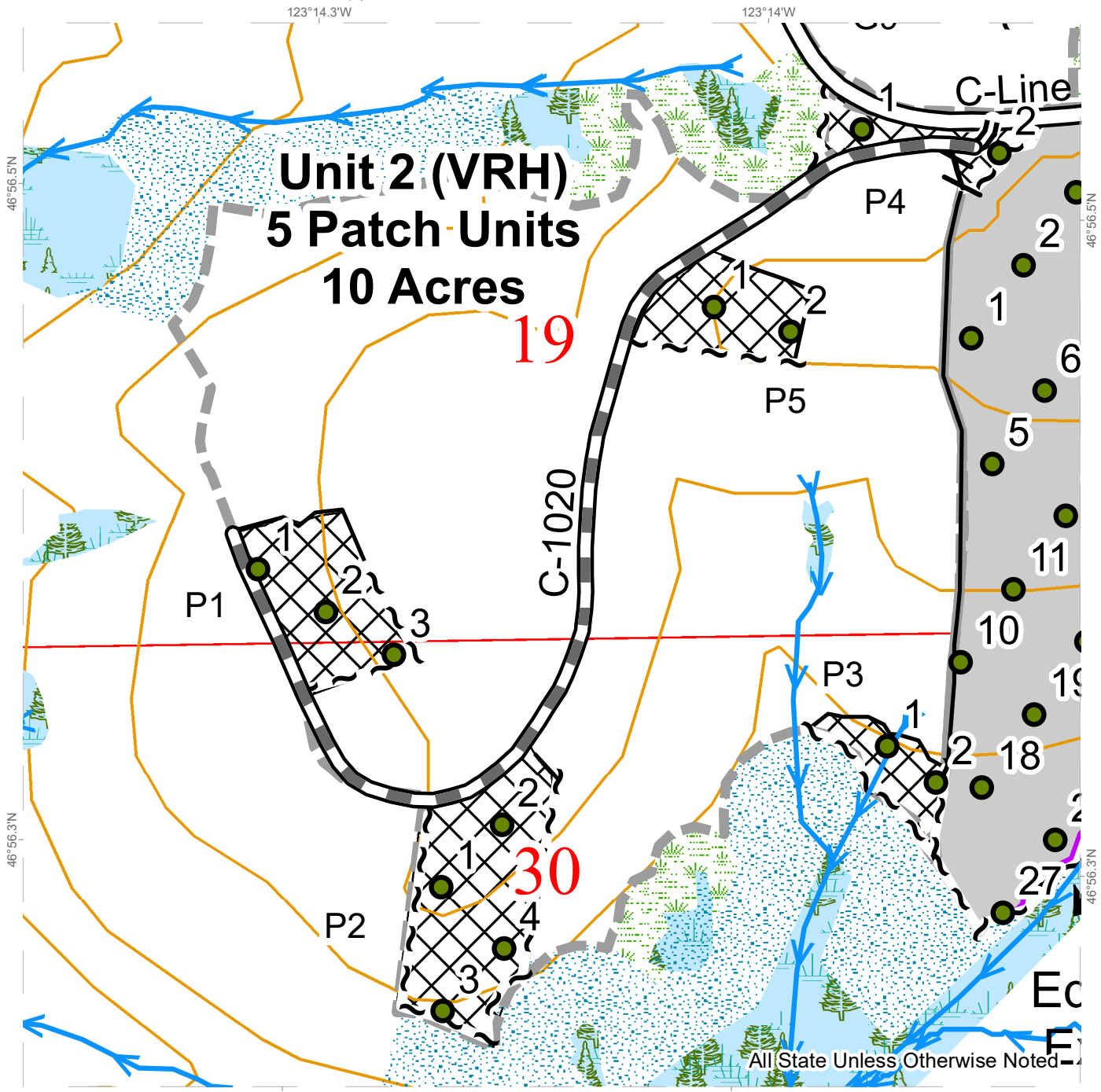
Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	12	LIVE	CUT	1	12.7	60	81	110	12.1	1.4	1.2	0.3	3.6
DF	14	LIVE	CUT	2	13.7	79	102	363	6.4	2.4	2.4	0.7	11.9
DF	16	LIVE	CUT	4	16.0	86	108	660	6.3	3.5	4.8	1.2	21.7
DF	18	LIVE	CUT	6	18.0	95	122	1,161	4.6	4.1	7.3	1.7	38.2
DF	20	LIVE	CUT	9	20.0	100	128	1,941	1.4	5.0	10.9	2.4	63.9
DF	22	LIVE	CUT	10	21.7	102	131	2,153	4.6	4.7	12.1	2.6	70.8
DF	24	LIVE	CUT	3	23.2	106	138	749	2.6	1.2	3.6	0.8	24.7
DF	26	LIVE	CUT	2	25.5	102	131	486	0.0	0.7	2.4	0.5	16.0
DF	30	LIVE	CUT	2	30.4	110	142	523	13.0	0.5	2.4	0.4	17.2
DF	34	LIVE	CUT	1	33.9	100	128	236	2.4	0.2	1.2	0.2	7.8
DF	12	LIVE	LEA	2	12.3	79	99	277	7.1	3.0	2.4	0.7	9.1
DF	14	LIVE	LEA	2	13.4	87	115	346	2.1	2.5	2.4	0.7	11.4
DF	16	LIVE	LEA	6	15.8	92	117	1,148	0.9	5.3	7.3	1.8	37.8
DF	18	LIVE	LEA	19	18.0	98	125	3,419	4.3	13.0	23.0	5.4	112.5
DF	20	LIVE	LEA	22	20.0	100	128	4,443	2.6	12.8	27.9	6.2	146.2
DF	22	LIVE	LEA	18	21.7	102	131	3,768	2.9	8.5	21.8	4.7	124.0
DF	24	LIVE	LEA	26	23.7	107	137	5,845	2.4	10.3	31.5	6.5	192.3
DF	26	LIVE	LEA	24	26.2	106	136	5,496	3.5	7.8	29.1	5.7	180.8
DF	28	LIVE	LEA	5	27.3	114	146	1,246	5.1	1.5	6.1	1.2	41.0
DF	30	LIVE	LEA	2	30.2	109	139	461	13.1	0.5	2.4	0.4	15.2
DF	32	LIVE	LEA	1	31.2	120	155	289	4.3	0.2	1.2	0.2	9.5
DF	34	LIVE	LEA	1	33.3	117	151	295	0.0	0.2	1.2	0.2	9.7

Sp	D	Status	Rx	N	DBH	BL	THT	BF Net	Defect %	TPA	BA	RD	MBF Net
NF	30	LIVE	CUT	1	30.0	92	117	227	0.0	0.2	1.2	0.2	7.5
RA	18	LIVE	CUT	3	18.3	66	81	432	0.0	2.0	3.6	0.9	14.2
RA	20	LIVE	CUT	3	20.3	70	86	449	9.8	1.6	3.6	0.8	14.8
RA	22	LIVE	CUT	1	21.1	67	83	151	7.9	0.5	1.2	0.3	5.0
RA	28	LIVE	CUT	1	27.9	66	81	163	8.5	0.3	1.2	0.2	5.4
SF	30	LIVE	LEA	1	30.6	100	129			0.2	1.2	0.2	
SF	32	LIVE	LEA	1	31.6	95	121			0.2	1.2	0.2	
SF	38	LIVE	LEA	1	37.2	103	133			0.2	1.2	0.2	
SS	26	LIVE	LEA	1	25.0	97	124			0.4	1.2	0.2	
WH	16	LIVE	CUT	1	15.1	57	70	129	0.0	1.0	1.2	0.3	4.2
WH	20	LIVE	CUT	1	19.8	101	128	234	2.6	0.6	1.2	0.3	7.7
WH	22	LIVE	CUT	1	21.3	96	121	227	5.3	0.5	1.2	0.3	7.5
WH	34	LIVE	CUT	1	33.0	111	140	289	9.7	0.2	1.2	0.2	9.5
WH	10	LIVE	LEA	1	9.3	63	78	156	7.1	2.6	1.2	0.4	5.1
WH	18	LIVE	LEA	3	18.2	76	110	542	1.7	2.0	3.6	0.9	17.8
WH	20	LIVE	LEA	3	20.3	104	131	756	1.6	1.6	3.6	0.8	24.9
WH	22	LIVE	LEA	3	21.9	96	121	662	5.9	1.4	3.6	0.8	21.8
WH	24	LIVE	LEA	4	24.2	96	121	893	3.3	1.5	4.8	1.0	29.4
WH	32	LIVE	LEA	1	32.0	107	135	274	4.9	0.2	1.2	0.2	9.0
WH	34	LIVE	LEA	1	33.3	104	131	230	17.0	0.2	1.2	0.2	7.6

CRUISE MAP

SALE NAME: RUSTY RIDGE 2024 VRH AND VDT
AGREEMENT#: 30-103588
TOWNSHIP(S): T17R4W
TRUST(S): State Forest Purchase (2)

REGION: South Puget Sound Region
COUNTY(S): Grays Harbor
ELEVATION RGE: 1218-1371



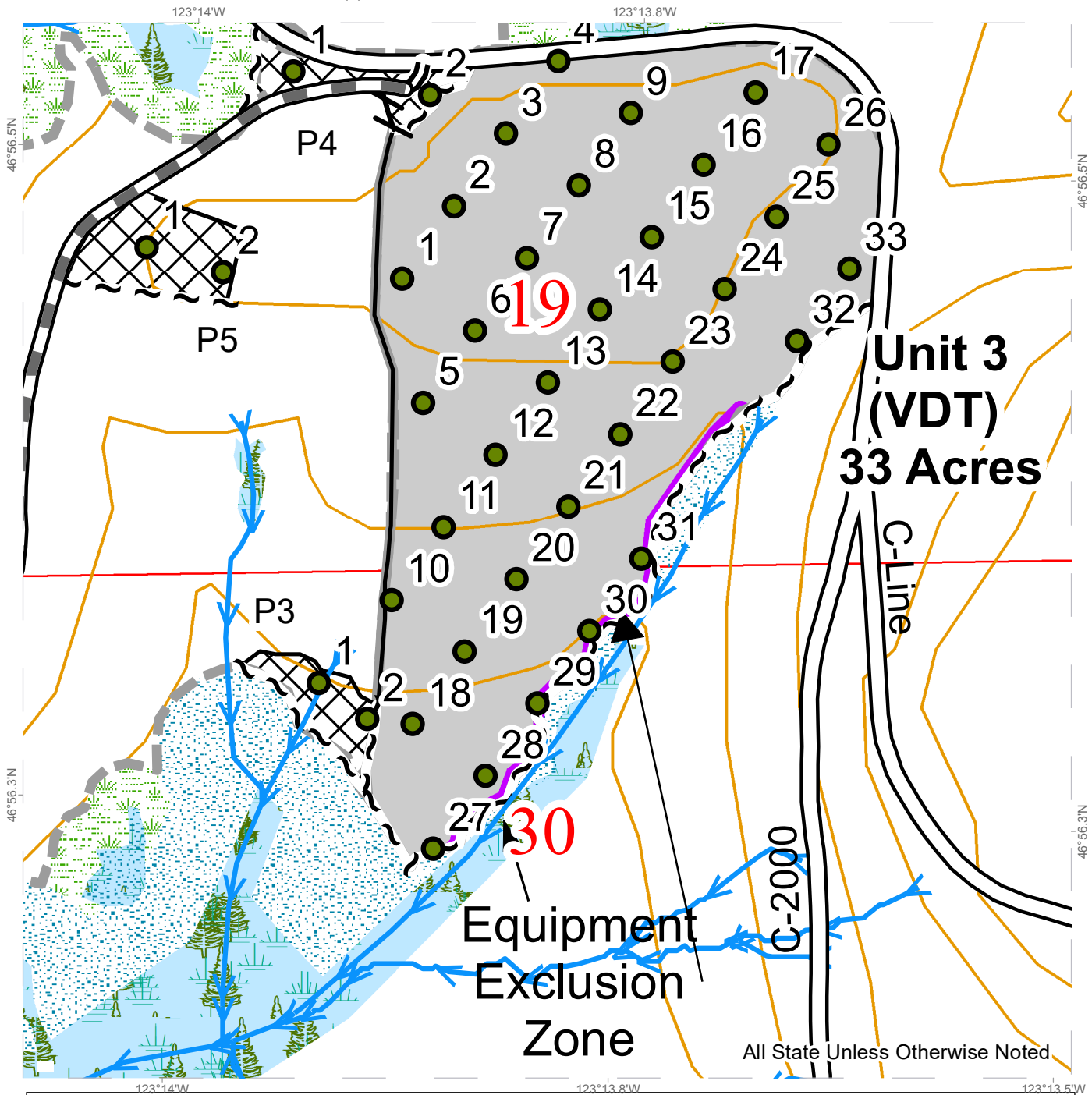
Unit Area	Existing Roads	Streams
Thinning	Required Pre-Haul Maintenance	Stream Type
Regeneration Harvest	Optional Pre-Haul Maintenance	Stream Break
Riparian Mgt Zone	Sale Boundary Tags	
Forested Wetland	Timber Type Change	
Wetland Mgt Zone	Flag Line	
Equipment Exclusion Zone		



CRUISE MAP

SALE NAME: RUSTY RIDGE 2024 VRH AND VDT
AGREEMENT#: 30-103588
TOWNSHIP(S): T17R4W
TRUST(S): State Forest Purchase (2)

REGION: South Puget Sound Region
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ELEVATION RGE: 1218-1371



Unit Area	Existing Roads	Streams
Thinning	Required Pre-Haul Maintenance	Stream Type
Regeneration Harvest	Optional Pre-Haul Maintenance	Stream Break
Riparian Mgt Zone	Sale Boundary Tags	
Forested Wetland	Timber Type Change	
Wetland Mgt Zone	Flag Line	
Equipment Exclusion Zone		





Forest Practices Application/Notification Notice of Decision

FPA/N No: 2423562

Effective Date: 8/15/2023

Expiration Date: 8/15/2026

Shut Down Zone: 651 N

EARR Tax Credit: Eligible Non-eligible

Reference: Rusty Ridge #30-103588

Decision

- Notification Accepted** Operations shall not begin before the effective date.
- Approved** This Forest Practices Application is subject to the conditions listed below.
- Disapproved** This Forest Practices Application is disapproved for the reasons listed below.
- Withdrawn** Applicant has withdrawn the Forest Practices Application/Notification (FPA/N).
- Closed** All forest practices obligations are met.

FPA/N Classification

- Class II
- Class III
- Class IVG
- Class IVS

Number of Years Granted on Multi-Year Request

- 4 years
- 5 years

Conditions on Approval/Reasons for Disapproval

Issued By: Matt Brady

Region: South Puget Sound Region

Title: Resource Protection Forester

Date: 8/15/2023

Copies to: Landowner, Timber Owner and Operator

Issued in person: LO TO OP By: *M. Jensen*

Date: 8/15/2023

Appeal Information

You have thirty (30) days to **file** (i.e., **actually deliver**) an appeal in writing of this Decision and any related State Environmental Policy Act (SEPA) determinations to the Pollution Control Hearings Board, the Attorney General’s Office, and the Department of Natural Resources’ region office. See RCW 76.09.205. The appeal period starts when the applicant receives this decision, which usually happens electronically on the date indicated below.

You must file your appeal at all three addresses below:

Pollution Control Hearings Board	Office of the Attorney General Natural Resources Division	Department Of Natural Resources South Puget Sound Region
<u>Physical Address</u> 1111 Israel Road SW Suite 301 Tumwater, WA 98501 <u>Mailing address</u> Post Office Box 40903 Olympia, WA 98504-0903	<u>Physical Address</u> 1125 Washington Street, SE Olympia, WA 98504 <u>Mailing Address</u> Post Office Box 40100 Olympia, WA 98504-0100	<u>Physical Address</u> 950 Farman Ave N Enumclaw, WA 98022 <u>Mailing Address</u> 950 Farman Ave N Enumclaw, WA 98022

Information regarding the Pollution Control Hearings Board can be found at: <https://eluho.wa.gov/>

Other Applicable Laws

Operating as described in this application/notification does not ensure compliance with the Endangered Species Act, or other federal, state, or local laws.

Transfer of Forest Practices Application/Notification (WAC 222-20-010)

Use the “Notice of Transfer of Approved Forest Practices Application/Notification” form. This form is available at region offices and on the Forest Practices website <https://www.dnr.wa.gov/programs-and-services/forest-practices/review-applications-fpars/forest-practices-forms-and>. Notify DNR of new Operators within 48 hours.

Continuing Forestland Obligations (RCW 76.09.060, RCW 76.09.070, RCW 76.09.390, and WAC 222-20-055)

Obligations include reforestation, road maintenance and abandonment plans, conversions of forestland to non- forestry use and/or harvest strategies on perennial non-fish habitat (Type Np) waters in Eastern Washington.

Before the sale or transfer of land or perpetual timber rights subject to continuing forest and obligations, the seller must notify the buyer of such an obligation on a form titled “Notice of Continuing Forest Land Obligation”. The seller and buyer must both sign the “Notice of Continuing Forest Land Obligation” form and send it to the DNR Region Office for retention. This form is available at DNR region offices.

If the seller fails to notify the buyer about the continuing forestland obligation, the seller must pay the buyer’s costs related to continuing forestland obligations, including all legal costs and reasonable attorneys’ fees incurred by the buyer in enforcing the continuing forestland obligation against the seller.

Failure by the seller to send the required notice to DNR at the time of sale will be prima facie evidence in an action by the buyer against the seller for costs related to the continuing forestland obligation prior to sale.

DNR Declaration of Mailing

I, **Meredith Dessens**, caused the Notice of Decision for FPA/N No. **2423562** to be placed in the United States mail at **Olympia, WA**; postage paid. I declare under penalty of perjury of the laws of the State of Washington, that the foregoing is true and correct.

8/15/2023
(Date)

Enumclaw, WA
(City & State where signed)

(Signature)

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

RUSTY RIDGE VRH & VDT 2024 TIMBER SALE ROAD PLAN
GRAYS HARBOR
LITTLEROCK UNIT
BLACK HILLS DISTRICT

AGREEMENT NO.: 30-103588

STAFF ENGINEER: GRANT GERRITSEN

DATE: 17 APRIL 2023

DRAWN & COMPILED BY: DERWOOD DUNCAN III

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>
C-1020	0+00 to 31+59	Pre-Haul maintenance

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>
C-1020	0+00 to 31+59	Remove barricade, fill existing waterbars, blade vegetation and sod off the existing road surface. Crown road, and apply optional spot rock as necessary.

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

If the Purchaser 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, Purchaser shall obtain approval from the State for any submitted plan that changes the scope of work or environmental condition from the original road 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 Purchaser's choice of construction season or techniques will be at the Purchaser's expense. Unforeseen conditions include, but are not limited to, solid subsurface rock, subsurface springs, saturated ground, and unstable soils.

1-3 ROAD DIMENSIONS

Purchaser 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

Purchaser 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 Work Map

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

1-7 TEMPORARY ROAD CLOSURE

Purchaser shall notify the Contract Administrator a minimum of 5 calendar days before the closure of any road. Construction may not close the following roads for more than the specified number of days.

<u>Road</u>	<u>Number of Allowable Closed Days</u>
C-Line	Daily full closure is not allowed.

1-8 REPAIR OR REPLACEMENT OF DAMAGED MATERIALS

Purchaser 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 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.

SUBSECTION TIMING

1-21 HAUL APPROVAL

Purchaser shall not use roads under this road plan for any hauling, other than timber cut on the right-of-way, without written approval from the Contract Administrator.

1-22 WORK NOTIFICATIONS

Purchaser shall notify the Contract Administrator a minimum of 5 calendar days before work begins.

SUBSECTION RESTRICTIONS

1-25 ACTIVITY TIMING RESTRICTION

No operation of road construction equipment or rock haul will be allowed on weekends or state recognized holidays, unless authorized in writing by the Contract Administrator.

<u>Activity</u>	<u>Closure Period</u>
The operation of roadwork equipment	November 1 to April 30

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, Purchaser shall provide a maintenance plan to include further protection of state resources. Purchaser 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. Purchaser is required to maintain all haul roads at their own expense including those listed in Contract Clause C-060 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

Purchaser shall not allow silt-bearing runoff to enter any streams. Purchaser shall accomplish sediment removal through silt traps, silt fences, settling ponds, or other methods as approved, in writing by the Contract Administrator.

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 roads.
- Wheel track rutting exceeds 4 inches on crushed rock roads.
- Surface or base stability problems persist.

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, Purchaser shall cease operations, or perform corrective maintenance or repairs, subject to specifications within this road plan.

1-32 BRIDGE AND ASPHALT SURFACE RESTRICTION

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

If tracked equipment is used on bridge or asphalt surfaces, Purchaser shall immediately cease all operations. Purchaser shall remove any dirt, rock, or other material tracked or spilled on the bridge or asphalt surface(s) and have surface(s) evaluated for any damage caused by transporting equipment. Any damage to the surface(s) will be repaired, at the Purchaser's expense, as directed by the Contract Administrator.

1-33 SNOW PLOWING RESTRICTION

Snowplowing will be allowed after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contact Administrator upon request. Purchaser 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

Purchaser 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 Purchaser’s expense, as directed by the Contract Administrator when authorized by the county or WSDOT.

<u>Road Name</u>
Sherman Valley Road
State Route - 12

1-42 COUNTY HAUL PERMIT

The hauling of forest products or equipment may require a county road, hauling permit. The Purchaser is responsible for obtaining a permit and any costs associated with extra maintenance or repair levied by a county. Purchaser must provide the Contract Administrator with a copy of the executed permit.

SECTION 2 – MAINTENANCE

2-1 GENERAL ROAD MAINTENANCE

Purchaser 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 – PURCHASER MAINTENANCE

Purchaser shall perform maintenance on roads listed in Contract Clause C-050 PURCHASER ROAD MAINTENANCE AND REPAIR in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-3 ROAD MAINTENANCE – DESIGNATED MAINTAINER

Purchaser may be required to perform maintenance on roads listed in Contract Clause C-060 DESIGNATED ROAD MAINTAINER as directed by the Contract Administrator. Purchaser shall maintain roads in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-4 PASSAGE OF LIGHT VEHICLES

Purchaser shall maintain the following 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), Purchaser shall use a grader to shape the existing surface before application of rock, or if not applying rock, before timber haul. Purchaser shall accomplish all grading using a motor grader with a minimum of 175 horsepower.

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
C-1020	0+00 to 31+59	Blade vegetation and sod off the existing road surface, and crown road.

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

SUBSECTION CLEARING

3-5 CLEARING

Purchaser shall fall all vegetative material larger than 2 inches DBH or over 5 feet high between the marked right-of-way boundaries or if not marked in the field, between the clearing limits specified on the TYPICAL SECTION SHEET. Clearing must be completed before starting excavation and embankment.

3-8 PROHIBITED DECKING AREAS

Purchaser 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.
- Against standing trees unless approved by the Contract Administrator.

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

Purchaser shall remove organic debris from the road surface, ditchlines, and culvert inlets and outlets. Purchaser shall complete all disposal of organic debris, before the application of rock and/or timber haul.

3-23 PROHIBITED DISPOSAL AREAS

Purchaser 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 55%.
- 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 State owned standing timber.

3-24 BURYING ORGANIC DEBRIS RESTRICTED

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

3-25 SCATTERING ORGANIC DEBRIS

Purchaser shall scatter organic debris outside of the clearing limits in natural openings. Where natural openings are unavailable or restrictive, alternate debris disposal methods are subject to the written approval of the Contract Administrator.

SECTION 4 – EXCAVATION

4-3 ROAD GRADE AND ALIGNMENT STANDARDS

Purchaser shall follow these standards for road grade and alignment except as designed:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 15 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.

4-5 CUT SLOPE RATIO

Purchaser shall construct excavation slopes no steeper than shown on the following table:

<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

Purchaser shall construct embankment slopes no steeper than shown on the following table:

<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

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

4-9 EMBANKMENT WIDENING

The minimum embankment widening is:

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

Purchaser shall apply embankment widening equally to both sides of the road to achieve the required width.

SUBSECTION DITCH CONSTRUCTION

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

Purchaser shall construct or reconstruct 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

Purchaser shall not pull ditch material across the road or mix in with the road surface. Excavated material must be scattered outside the grubbing limits.

4-28 DITCH DRAINAGE

Ditches shall be constructed concurrently with construction of the subgrade. Ditches must drain to cross-drain culverts or ditchouts.

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

Purchaser may sidecast waste material on side slopes up to 55% if the waste material is compacted and free of organic debris.

4-37 WASTE AREA LOCATION

Purchaser shall deposit waste material in the listed designated areas. Additional waste areas will be identified or approved by the Contract Administrator. The amount of material allowed in a waste area is at the discretion of the Contract Administrator.

4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas, except as otherwise specified in this plan:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- On side slopes steeper than 55%.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Within the operational area for cable landings.
- Against State owned standing timber.

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.

4-47 NATIVE MATERIAL

Native material consists of naturally occurring material that is free of organic debris, trash, and rocks greater than 6 inches in any dimension.

4-48 BORROW MATERIAL

Borrow material may not contain more than 5% organic debris, or trash by volume.

4-49 BORROW SOURCE

Purchaser shall obtain borrow material from borrow sources identified or approved by the Contract Administrator. Development of the borrow source must be in accordance with a written BORROW SOURCE DEVELOPMENT PLAN to be submitted by the Purchaser and approved in writing by the Contract Administrator.

SUBSECTION SHAPING

4-55 ROAD SHAPING

Purchaser 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.

SUBSECTION COMPACTION

4-63 EXISTING SURFACE COMPACTION

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

SECTION 5 – DRAINAGE

5-1 REMOVAL OF SHOULDER BERMS

Purchaser shall remove berms from road shoulders to permit escape of runoff.

SECTION 6 – ROCK AND SURFACING

SUBSECTION ROCK SOURCE

6-5 ROCK FROM COMMERCIAL SOURCE

Rock used in accordance with the quantities on the ROCK LIST may be obtained from any commercial source at the Purchaser's expense. Rock sources are subject to written approval by the Contract Administrator before their use.

SUBSECTION ROCK GRADATION

6-34 4-INCH MINUS CRUSHED ROCK

% Passing 4" square sieve 100%
% Passing 2" square sieve 55 - 75%
% Passing U.S. #4 sieve 15 - 45%

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

SUBSECTION ROCK MEASUREMENT

6-57 ROCK MEASUREMENT BY TRUCK SCALE

Measurement of the 4-INCH Minus crushed rock is on scaled truck weight. Purchaser shall provide scaled weight using a commercial scale. Purchaser shall provide the Contract Administrator with all scale sheets.

SUBSECTION ROCK APPLICATION

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for subgrade including: ditches, headwalls, catch basins, culverts, energy dissipaters, ditch-outs, subgrade shaping and compacting before rock application.

6-71 ROCK APPLICATION

Purchaser 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.

6-75 OPTIONAL ROCK EXCEPTION

On the following road, the Purchaser may place less rock than shown on the ROCK LIST if approved in writing by the Contract Administrator. If less rock is applied, the Purchaser shall submit a written plan, for approval, describing how these roads shall be constructed, used, maintained, and treated post-haul. On optional rock roads designated in the table below as Purchaser’s Choice, the Purchaser may apply commercial rock.

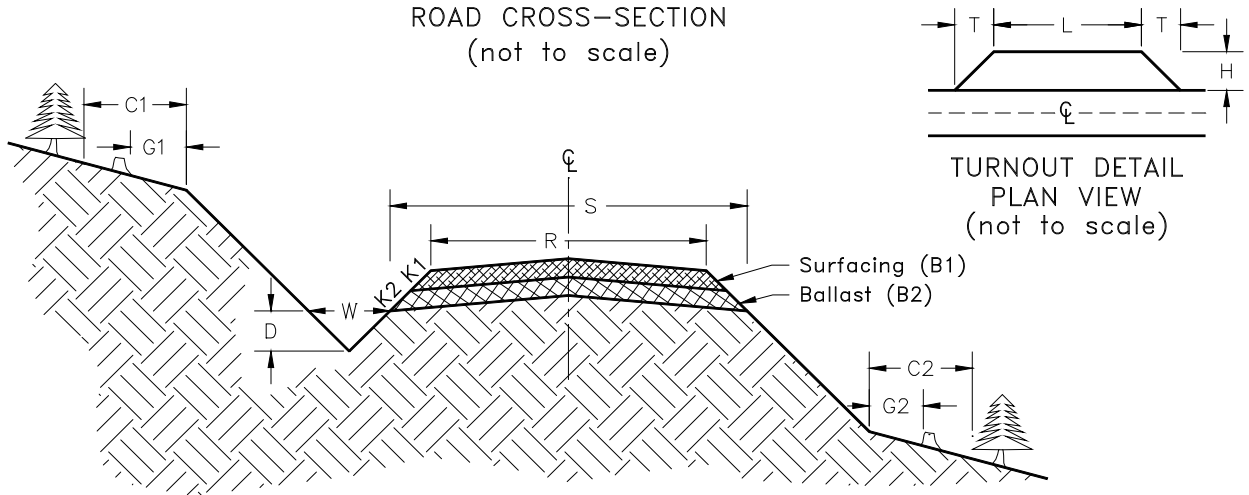
<u>Road</u>	<u>Stations</u>	<u>Options</u>
C-1020	0+00 to 31+59	Optional

SECTION 8 – EROSION CONTROL

8-1 SEDIMENT CONTROL STRUCTURES

Sediment control shall be accomplished using sediment traps, silt fence, settling ponds or other methods as approved, in writing, be the Contract Administrator. Purchaser shall install sediment traps in accordance with the SEDIMENT TRAP DETAIL.

TYPICAL SECTION SHEET



Road Number	From Station	To Station	Tolerance Class	Subgrade Width (feet)	Road Width (feet)	Ditch		Crown in. @ CL	Grubbing Limits (feet)		Clearing Limits (feet)		Cut Slope Ratio	Fill Slope Ratio
						Width (feet)	Depth (feet)		G1	G2	C1	C2		
C-Line	0+00	47+20	A	-	16	3	1	4	-	-	5	5	4-5	4-6
C-1020 (Pre-haul)	0+00	31+59	C	16	12	3	1	4	2	2	5	5	4-5	4-6

ROCK LIST

Ballast

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth	C.Y./ Station	# of Stations	C.Y. Subtotal	Rock Source	Comments
			K2	B2					
					4 Inch Jaw Run				
*C-1020	0+00	31+59	1½ : 1	N/A	N/A	N/A	100	Commercial	For spot rocking. Locations as directed by CA.

4 Inch Minus Total 100 Cubic Yards
Ballast Total 100 Cubic Yards

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Page 1 of 2

Cuts and Fills

- Maintain slope lines to a stable gradient compatible with the construction materials. Remove slides up to 100 cubic yards in volume from ditches and the roadway. Repair fill-failures 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 and shape 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

Page 2 of 2

Preventative Maintenance

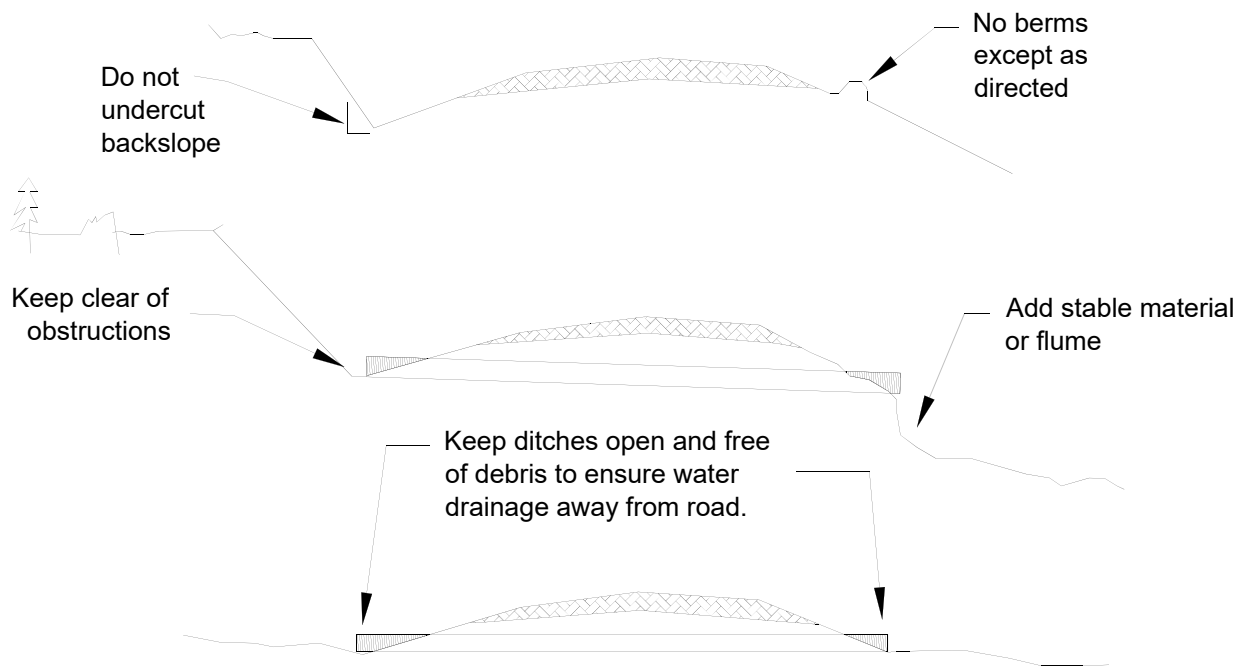
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

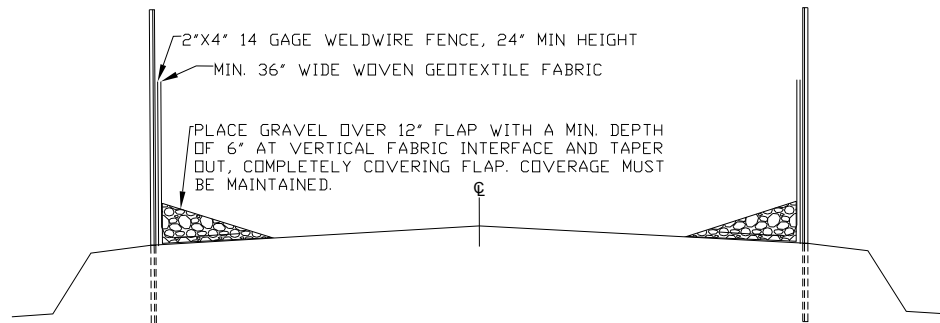
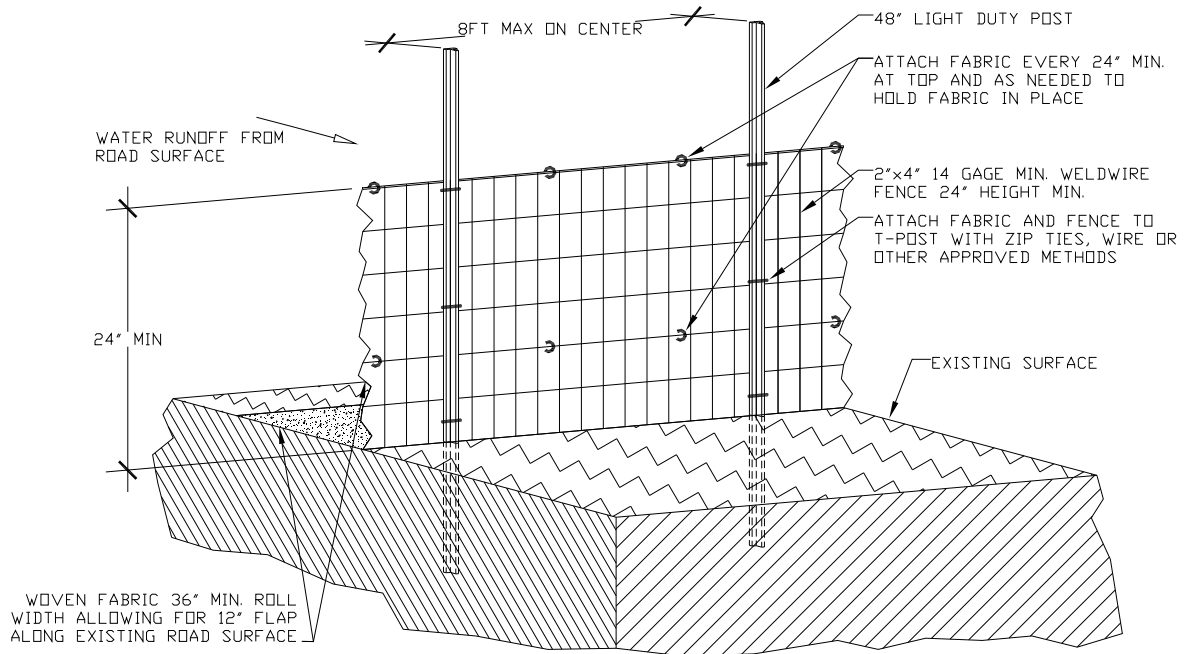
- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

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



SILT FENCE DETAIL



1. Silt fence shall be installed with Contract Administrator approval prior to haul.
2. Silt fence shall be installed with a minimum of 6" of cover starting at fabric/weldwire and tapering toward road centerline. Coverage of fabric shall be maintained.
3. Light Duty T-Posts shall be placed on the down slope side of the fabric/weldwire. If conditions exist that a taller silt fence is required, such as splash, longer T-Posts, wider fabric rolls and taller fence maybe necessary or other methods as approved by the Contract Administrator.
4. When a silt fence is continued from another run, the end T-Posts shall be connected together and not overlapped.
5. If runoff of silt laden water flows around the sides and additional fence may be used, realignment of the fence, removal of built up sediment and/or other BMP's such as ditch filters shall be used until controlled. Until under control haul shall be suspended.
6. FABRIC SPECS - min tensile strength: 120lbs, min puncture strength: 50lbs, min tear strength: 40lbs, min burst strength: 200lbs, min permittivity: 0.1 sec-1, UV resistance: 70%.

**SUMMARY - ROAD DEVELOPMENT COSTS
(FOR INTERNAL DNR USE ONLY)**

UNIT: **Littlerock**

SALE/PROJECT NAME: **Rusty Ridge 2024 VRH & VDT**

CONTRACT NUMBER: **30-103588**

LEGAL DESCRIPTION: T17N R04W Sec 19

ROAD NUMBER:	C-1020		
TYPE:	CONSTRUCTION	RECONSTRUCTION	PRE-HAUL MAINT
NUMBER OF STATIONS:	0.00	0.00	31.59
AVG. SIDESLOPE:	0	0	10
CLEARING AND GRUBBING:	\$0	\$0	\$0
EXCAVATION AND FILL:	\$0	\$0	\$0
MISC. MAINTENANCE:			\$0
ROCK TOTALS (Cu. Yds.):			
Ballast: 100	\$0	\$0	\$2,840
Surface: 0	\$0	\$0	\$0
Riprap: 0	\$0	\$0	\$0
CULVERTS AND FLUMES:	\$0	\$0	\$0
STRUCTURES:	\$0	\$0	\$0
GENERAL EXPENSES:	\$0	\$0	\$341
MOBILIZATION:	\$0	\$0	\$4,280
TOTAL COSTS:	\$0	\$0	\$7,461
COST PER STATION:	\$0	\$0	\$236
ROAD DEACTIVATION AND ABANDONMENT COSTS:	\$0		

NOTE: This appraisal has no allowance for profit and risk.

TOTAL (All Roads) =	\$7,461
SALE VOLUME MBF =	1,030
TOTAL COST PER MBF =	\$7.24

Plans to be furnished by:

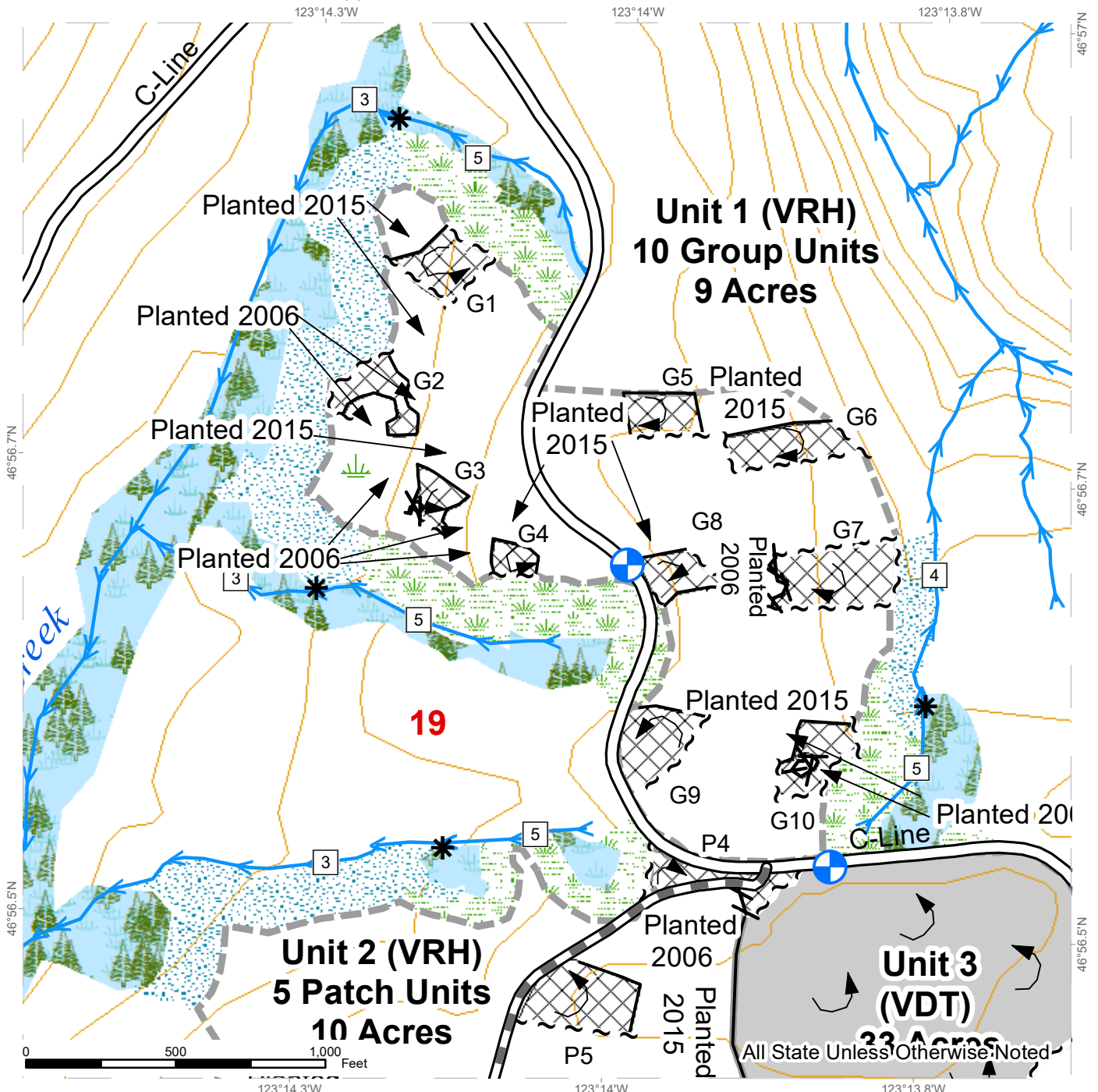
Compiled by: Derwood Duncan III

Date: 04/17/23

LOGGING PLAN MAP

SALE NAME: RUSTY RIDGE 2024 VRH AND VDT
 AGREEMENT#: 30-103588
 TOWNSHIP(S): T17R4W
 TRUST(S): State Forest Purchase (2)

REGION: South Puget Sound Region
 COUNTY(S): Grays Harbor
 ELEVATION RGE: 1218-1371



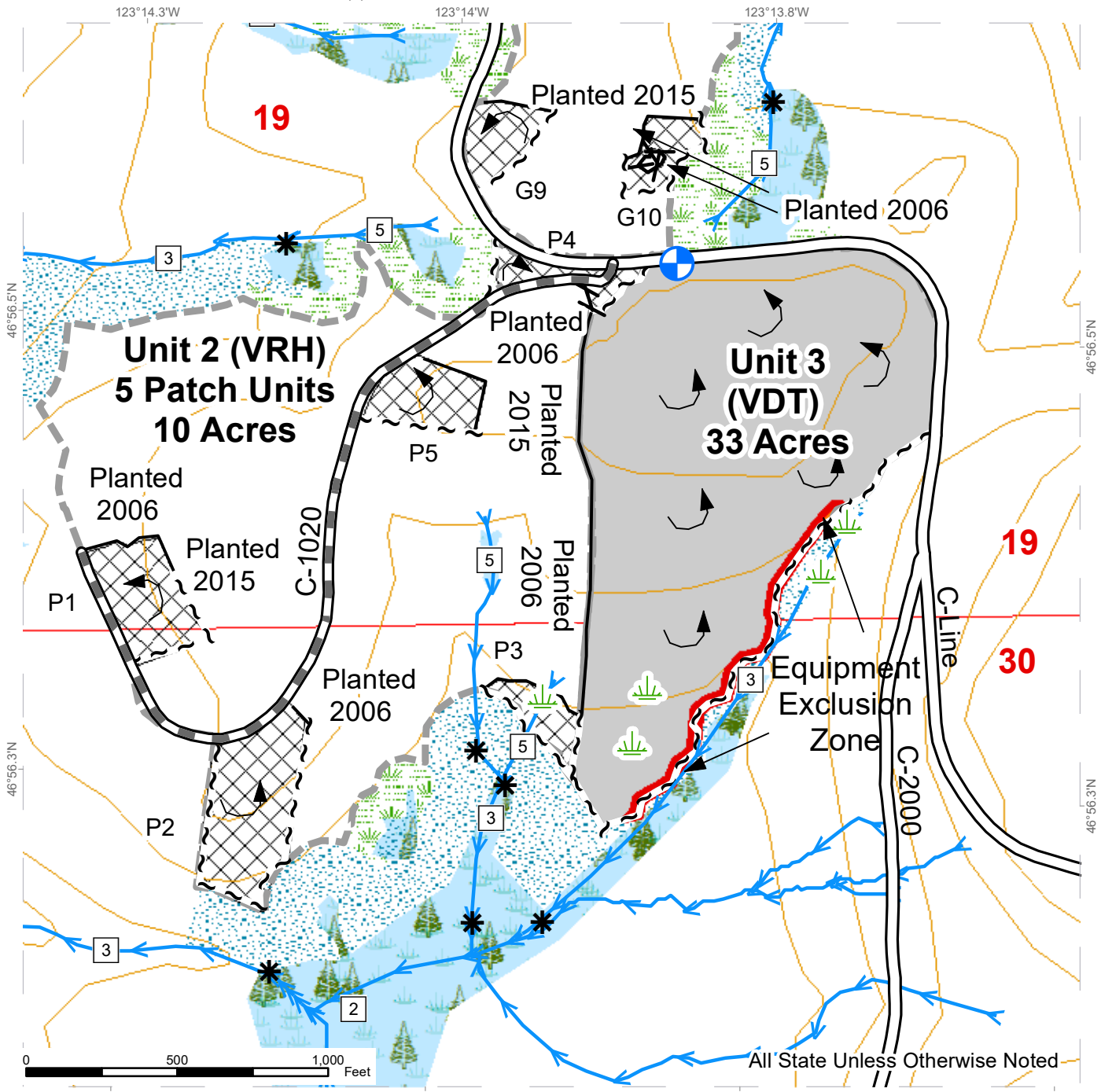
Unit Area	Existing Roads	Streams
Variable Density Thinning	Required Pre-Haul Maintenance	Ground Harvest
VRH (patch & groups)	Sale Boundary Tags	Landing - Proposed
Riparian Mgt Zone	Timber Type Change	Wetland Mgt Zone
Forested Wetland	Flag Line	Stream Type
Wetland Mgt Zone		Stream Break



LOGGING PLAN MAP

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	Unit Area		Existing Roads		Streams
	Variable Density Thinning		Required Pre-Haul Maintenance		Ground Harvest
	VRH (patch & groups)		Sale Boundary Tags		Landing - Proposed
	Riparian Mgt Zone		Timber Type Change		Wetland Mgt Zone
	Forested Wetland		Flag Line		Stream Type
	Wetland Mgt Zone				Stream Break
	Equipment Exclusion Zone				

