TIMBER NOTICE OF SALE

SALE NAME: COPPER RIDGE 2022 VDT & VRH  AGREEMENT NO: 30-100997

AUCTION: November 16, 2021 starting at 10:00 a.m.,  COUNTY: Thurston
South Puget Sound Region Office, Enumclaw, WA

SALE LOCATION: Sale located approximately 10 miles southwest of Olympia.

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, the B-8300 and B-8400 roads, and timber type change marked with pink flagging in Unit #1; white Timber Sale Boundary tags, blue Special Management Boundary tags, the B-8400, B-8430, and B-8450 roads, and timber type change marked with pink flagging in Unit #2;

All timber as described in Schedule A, bounded out by the following: white Timber Sale Boundary tags, blue Special Management Boundary tags, the B-8450 and B-8470 roads, and timber type change marked with pink flagging in Unit #3.

All forest products above located on part(s) of Sections 14, 15, 21 and 22 all in Township 18 North, Range 3 West, W.M., containing 65 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: PwC-SFIFM-513) and FSC 100% raw materials under the Forest Stewardship Council® Standard (cert no: BV-FM/COC-080501).

ESTIMATED SALE VOLUMES AND QUALITY:

<table>
<thead>
<tr>
<th>Species</th>
<th>Avg Ring DBH</th>
<th>Total MBF</th>
<th>Total $/MBF</th>
<th>MBF by Grade</th>
<th>1P</th>
<th>2P</th>
<th>3P</th>
<th>SM</th>
<th>1S</th>
<th>2S</th>
<th>3S</th>
<th>4S</th>
<th>UT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas fir</td>
<td>19.5</td>
<td>1,292</td>
<td>$460.00</td>
<td>60</td>
<td>885</td>
<td>293</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maple</td>
<td>15</td>
<td>62</td>
<td>$70.00</td>
<td>19</td>
<td>6</td>
<td>35</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Alder</td>
<td>17.4</td>
<td>15</td>
<td>$340.00</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Cedar</td>
<td>17.7</td>
<td>11</td>
<td>$840.00</td>
<td>9</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemlock</td>
<td>19.7</td>
<td>7</td>
<td>$290.00</td>
<td>5</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Hardwood</td>
<td></td>
<td></td>
<td>$70.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Conifer</td>
<td></td>
<td></td>
<td>$290.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cottonwood</td>
<td></td>
<td></td>
<td>$20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale Total</td>
<td></td>
<td></td>
<td>1,387</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MINIMUM BID: $460/MBF (est. value $615,000.00)  BID METHOD: Sealed Bids

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

EXPIRATION DATE: June 30, 2022  ALLOCATION: Export Restricted

BIDDABLE SPECIES: Douglas fir

BID DEPOSIT: $61,500.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.
TIMBER NOTICE OF SALE

HARVEST METHOD: Harvesting activities are estimated to be 70 percent cable and 30 percent ground based harvest. Cable and cable-tethered equipment allowed on all slopes. Ground based equipment is limited to tracked equipment, with non-tethered self-leveling equipment limited to sustained slopes of 55 percent or less, all other tracked equipment limited to sustained slopes that are 45 percent or less. Rubber tired skidders not allowed, except 6-wheeled rubber tired skidders with over-the-tire tracks spanning both sets of rear tires are allowed on sustained slopes that are 45 percent or less. Yarding may be restricted during wet weather if rutting becomes excessive, per clause H-017.

ROADS: Road work on this sale only includes optional landing construction. Purchaser maintenance on the B-8300, B-8400, B-8430, B-8431, B-8450, B-8470, and B-8471 roads. Designated maintenance on all other roads used.

Rock for this proposal may be obtained from the State owned Perry Creek Quarry at no cost to the Purchaser or any commercial rock source at the Purchaser’s expense.

Road work is not allowed from November 1 to April 30, nor on weekends or State recognized holidays, unless authorized in writing by the Contract Administrator.

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. If permission is granted to operate from November 1 to April 30, preventative measures may be required to protect water, soil, roads and other forest assets.

ACREAGE DETERMINATION

CRUISE METHOD: Acreage was determined by traversing boundaries by GPS in all units. GPS data files are available at DNR’s website for timber sale auction packets. See cruise narrative for cruise method.

FEES: $23,579.00 is due on day of sale. $9.00 per MBF is due upon removal. These are in addition to the bid price.

SPECIAL REMARKS: See map for gate locations. Gate keys may be obtained by contacting the South Puget Sound Region office at (360) 825-1631 or by contacting the Tumwater work center at (425) 681-0448.

This sale is part of a research project in partnership with the Forest Service. Unit #1 includes 13 group cuts of 0.1-1.5 acres each, labeled as G1-G13. Unit #2 includes four patch cuts of 1.5-5 acres each, labeled as P1-P4. There are no leave trees within the group or patch cut areas. Unit #3 is a thinning per Schedule A. Due to the research schedule requirements, the operation window for this sale is shorter than usual - December 1, 2021 through June 30, 2022.

Extreme Hazard abatement of 200 feet is required for Unit #2 P2.

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

Any timber harvest within two tree lengths of the Williams NW Pipeline right-of-way will require at least one week advance notice to the Williams Northwest Pipeline (Unit #1).
TIMBER NOTICE OF SALE

No timber is to be felled into, decked on, or yarded through the gas pipeline right-of-way. No equipment is allowed to cross the gas pipelines nor park in the associated right-of-way.

For the safety of the public, please remove from roads all string from string boxes used during appraising or cruising this sale.
**DRIVING DIRECTIONS:**
From US HWY 8 turn south at approximately Mile Marker 16 onto the Rock Candy Mountain RD SW. Continue on the B-Line for 0.4 miles. Turn east onto the B-8000 for 2.1 miles to Unit 1.

Continue on the B-8000 for 0.1 miles, and turn east on the B-8400 for 2.0 miles to access Unit 2.

Continue on the B-8400 for another 0.5 miles to access Unit 3.

From the B-8400 and B-8430 junction, continue on the B-8430 for 0.3 miles and turn left on the B-8431 to access the Perry Creek Quarry.
STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

BILL OF SALE AND CONTRACT FOR
FOREST PRODUCTS

Export Restricted MBF Scale AGREEMENT NO. 30-100997

SALE NAME: COPPER RIDGE 2022 VDT & VRH

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 16, 2021 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, the B-8300 and B-8400 roads, and timber type change marked with pink flagging in Unit #1; white Timber Sale Boundary tags, blue Special Management Boundary tags, the B-8400, B-8430, and B-8450 roads, and timber type change marked with pink flagging in Unit #2;

All timber as described in Schedule A, bounded out by the following: white Timber Sale Boundary tags, blue Special Management Boundary tags, the B-8450 and B-8470 roads, and timber type change marked with pink flagging in Unit #3., located on approximately 65 acres on part(s) of Sections 14, 15, 21, and 22 all in Township 18 North, Range 3 West W.M. in Thurston 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:

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Harvest Prescription Unit #3</td>
</tr>
<tr>
<td>B</td>
<td>Prescription Compliance in Unit #3</td>
</tr>
</tbody>
</table>

G-030 Contract Term
Purchaser shall remove the forest products conveyed and complete all work required by this contract prior to June 30, 2022.

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 $3.00 per acre per annum for the acres on which an operating release has not been issued within the VDT units. Payment of $16.00 per acre per annum for the acres on which an operating release has not been issued within the VRH units.

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-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-115 Forest Stewardship Council® (FSC®) Certification

Forest products purchased under this contract are FSC 100% certified as being in conformance with the Forest Stewardship Council Standard under certificate number: BV-FM/COC-080501.

G-116 Sustainable Forestry Initiative® (SFI) Certification

Forest products purchased under this contract are certified as being in conformance with the Sustainable Forestry Initiative program Standard under certificate number: PwC-SFIFM-513.

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® program 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 B-line, B-8000, B-8300, B-8400, B-8430, B-8431, B-8450, B-8470, and B-8471 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 B-8300 and B-8400 roads, 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:

Lease, including the terms and provisions thereof,
For: Brush
In Favor of: Product Evergreen
Disclosed by Application No.: 35-100901
Granted: 7/1/2020
Expires: 6/30/2023

Easement, including the terms and provisions thereof,
For: Overhead Transmission Power and Road
In Favor of: Bonneville Power Administration
Disclosed by Application No.: 50-050064
Granted: 4/10/1970
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Gas Pipeline
In Favor of: El Paso Natural Gas Company
Disclosed by Application No.: 50-050065
Granted: 6/14/1963
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Overhead Transmission Power and Road
In Favor of: Bonneville Power Administration
Disclosed by Application No.: 50-050074
Granted: 6/4/1957
Expires: Indefinite
Easement, including the terms and provisions thereof,
For: Gas Pipeline and Road
In Favor of: Northwest Pipeline Corporation
Disclosed by Application No.: 50-073640
Granted: 3/13/2003
Expires: 3/12/2033

Easement, including the terms and provisions thereof,
For: Road
In Favor of: Port Blakely Tree Farms LP
Disclosed by Application No.: 50-076920
Granted: 2/26/2005
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Land Use License
In Favor of: Washington Department of Fish & Wildlife
Disclosed by Application No.: 60-095576
Granted: 5/2/2017
Expires: 6/30/2022

Easement, including the terms and provisions thereof,
For: Land Use License
In Favor of: Bonneville Power Administration
Disclosed by Application No.: 60-102268
Granted: 8/17/2021
Expires: 12/31/2023

Region Encumbrances

Lease, including the terms and provisions thereof,
For: Minor Forest Products
In Favor of: DNR- South Puget Sound Region
Disclosed by Application No.: 35-SPSC01
Granted: 1/1/2015
Expires: Indefinite

Special Notations

Located within the Medicine Creek Treaty area. Intergovernmental agreements for vehicle access with Squaxin Island Tribe (92-095269), Puyallup Tribe (92-095272), Muckleshoot Tribe (92-095267), and Nisqually Indian Tribe (92-097198).
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 $23,579.00 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 Mismanufacture

Forest products included in this agreement which are destroyed, damaged, stolen, lost, or mismanufactured 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 cable, cable-tethered, and tracked ground based equipment. Cable and cable-tethered equipment allowed on all slopes. Ground based equipment is limited to tracked equipment, with non-tethered self-leveling equipment limited to sustained slopes of 55 percent or less, all other tracked equipment limited to sustained slopes that are 45 percent or less. Rubber tired skidders not allowed, except 6-wheeled rubber tired skidders with over-the-tire tracks spanning both sets of rear tires are allowed 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 timber sale boundary.

f. Purchaser shall 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.

g. Within units 1 and 2, the shovel operator shall break up concentrations of logging debris greater than 11.5 feet by 11.5 feet to allow exposure of natural forest soils to ensure proper reforestation.

h. Cable yarding corridors are subject to the following requirements in thinning Unit 3:

• Location of cable yarding corridors must be marked by Purchaser and approved by the Contract Administrator prior to use.

• Cable corridor shall not exceed 12 feet in width, including rub trees.

• Cable yarding corridors shall be a minimum of 100 feet apart as measured from the center of the corridors.
• Excessive soil damage is not permitted within corridors. Excessive soil damage is described in clause H-017.

• Avoid cable yarding in, across, adjacent, or parallel to stream channels where possible. When it is necessary to yard across stream channels, crossings need to be as close to perpendicular as possible and cribbing shall be in place when full suspension is not possible.

• Corridors shall be located in a manner to minimize the damage to or removal of leave and/or reserve trees. Leave tree damage is described in clause H-012. Reserve tree damage is described in clause H-013.

• Timber in cable yarding corridors shall be felled prior to the falling of adjacent timber.

• Corridors shall be water barred at the time of completion of yarding, if required by the Contract Administrator.

• Once a cable yarding corridor is closed, Purchaser may not reopen that cable yarding corridor unless approved in writing by the Contract Administrator.

i. 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 thinning Unit 3:

• 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 in Unit 2.

• 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.

j. The Purchaser shall 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
H-141  Additional Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

a. Within Units 1 and 2, Purchaser shall 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.

b. No equipment or tailholds may operate within, nor logs yarded through or over, tailhold restriction areas identified on the Logging Plan and Timber Sale Maps (in Units 1, 2, and 3). Tailhold restriction area locations must be identified and avoided in a harvest plan by the Purchaser and approved by the Contract Administrator prior to operations.

c. The Williams NW Pipeline runs along and through Unit 1. CA should ensure that Purchaser notifies Williams NW Pipeline at least one week prior of harvesting operations within two tree lengths of the line. The contact person is Kevin Scrivner (425-305-9531). No timber is to be cut into or yarded across the right-of-way. No decking or parking of equipment in the right-of-way is allowed (north of the B-8300). No crossing of the gas line is allowed.

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:

<table>
<thead>
<tr>
<th>Species</th>
<th>Net bd ft</th>
<th>Log length (ft)</th>
<th>Log dib</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Conifer</td>
<td>10</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>All Hardwood</td>
<td>20</td>
<td>16</td>
<td>5</td>
</tr>
</tbody>
</table>

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.
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.

Mismanufacture

Mismanufacture 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 mismanufacture 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.

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.

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.

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.

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.
H-250 Additional Falling Requirements

Within Units #1 and #2, all hardwood stems 2 inches DBH or greater, or 6 feet tall or greater, shall be felled. The remaining stump shall be no more than 12 inches in height. Areas of young or immature timber may be excluded from this requirement 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 4/1/2021 are hereby made a part of this contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on the B-8300, B-8400, B-8430, B-8431, B-8450, B-8470, and B-8471 roads. All work shall be completed to the specifications detailed in the Road Plan.

C-060 Designated Road Maintainer

If required by the State, Purchaser shall perform maintenance and replacement work as directed by the Contract Administrator on all other roads used not covered in clause C-050. 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-020 Extreme Hazard Abatement
Purchaser shall provide a written Extreme Hazard Abatement plan that meets the requirements of WAC 332-24 prior to the beginning of logging operations. The plan must be acceptable to the Contract Administrator. The plan will identify how Purchaser will accomplish abatement. Purchaser shall also provide, and keep current, a written timetable for completion of all specified work in the plan. The Contract Administrator's acceptance and approval of Purchaser's hazard abatement plan shall not be construed as any statement or warranty that the hazard abatement plan is adequate for Purchaser's purposes or complies with applicable laws.

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-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 (contact information below).
-National Response Center (contact information below).
-Appropriate Department of Ecology (ECY) regional office (contact information below).
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: Interest = \( r \times LD \times N \).

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  
____________________  
Print Name

Date: ________________  
Date: ________________  
Address:

Scott Sargent  
South Puget Sound Region Manager
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 ______________
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).

<table>
<thead>
<tr>
<th>Unit #</th>
<th>Residual Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>43</td>
</tr>
</tbody>
</table>

- Only live trees 6 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 units to achieve the RD following harvest.
- Leave trees shall be thoroughly distributed across the harvest units 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

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

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) Douglas-fir
2) western red cedar
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

The Purchaser shall comply with the reserve tree selection guidelines listed in “Guidelines for Selecting Reserve Trees” published by the Washington Department of Labor and Industries. The Purchaser is not required to leave any unsafe tree.
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 400x400 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 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. 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 each unit will be based on actual plot data.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Target RD</th>
<th>Average TPA</th>
<th>Average Basal Area per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>43</td>
<td>60</td>
<td>200</td>
</tr>
</tbody>
</table>

If a plot indicates that the BA 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.
**PRE-Cruise Narrative**

**Sale Name:** Copper Ridge 2022  
**Region:** South Puget Sound  
**Agreement #:** 30-100997  
**District:** Black Hills  
**Contact Forrester:** Dee Dee Korsikas-Fogg  
**Phone/Location:** (425) 681-0448 (Cell)  
**Alternate Contact:** Brody Coval  
**Phone/Location:** (Cell) (253)-293-0264

**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):**  
**Evaluated for RFRS Implementation?:** No  
**Percentage cable-uphill:** 70%  
**Percentage cable-downhill:** 0%  
**Percentage ground based:** 30%  
**Species Onsite:** [RC, DF, WH, RA, BC, BLM, NF, SF, SS, Other](Please List) Madrona, Poison Oak

**Unit Acreages* and Method of Determination:**

<table>
<thead>
<tr>
<th>Unit #</th>
<th>Harvest R/W or RMZ WMZ</th>
<th>Legal Description Sec/Twp/Rng</th>
<th>Grant</th>
<th>Gross Traversed Acres</th>
<th>RMZ/WMZ Acres</th>
<th>Leave Tree Acres</th>
<th>Existing Road Acres</th>
<th>Other Acres (describe)</th>
<th>Net Harvest Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sec 21/ T 18N/ R 03 W</td>
<td>42, 01</td>
<td></td>
<td>58.0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>45.0</td>
<td>13.0</td>
</tr>
<tr>
<td>2</td>
<td>Sec 15/ T 18N/ R 03 W</td>
<td>01, 02</td>
<td></td>
<td>70.0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>56.2</td>
<td>13.8</td>
</tr>
<tr>
<td>3</td>
<td>Sec 14/ T 18N/ R 03 W</td>
<td>01, 02</td>
<td></td>
<td>40.2</td>
<td>0</td>
<td>0</td>
<td>2.0</td>
<td>0</td>
<td>38.2</td>
</tr>
<tr>
<td><strong>TOTAL ACRES</strong></td>
<td></td>
<td></td>
<td></td>
<td>168.2</td>
<td>0</td>
<td>0</td>
<td>2.0</td>
<td>101.2</td>
<td>65.0</td>
</tr>
</tbody>
</table>

**Harvest Plan and Special Conditions:**

<table>
<thead>
<tr>
<th>Unit #</th>
<th>Harvest Prescription: (Mark leave, take, paint color, tags, flagging etc.)</th>
<th>Special Management areas:</th>
<th>Other conditions (# leave trees, etc.) <em>For all marked thinnings, include a tree count by species.</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>U1</td>
<td>This unit is comprised of 13 regeneration groups which are bounded by white “Timber Sale Boundary” tags and pink flagging.</td>
<td>N/A</td>
<td>There are 58 gross acres in this harvest unit that is comprised of 13 small regeneration cuts totaling 13 net harvest acres. The remaining 45 acres in the unit contain the leave trees.</td>
</tr>
</tbody>
</table>
This unit is comprised of 4 regeneration patches which are bounded by white “Timber Sale Boundary” tags and pink flagging.

There are 70 gross acres in this harvest unit that is comprised of 4 small regeneration cuts totaling 14 net harvest acres. The remaining 56 acres in the unit contain the leave trees.

Thinning unit is bounded by white “Timber Sale Boundary” tags and pink flagging. Unit is based on a prescription, and leave or take trees are not marked on the ground.

OTHER PRE-Cruise INFORMATION:

<table>
<thead>
<tr>
<th>Unit #</th>
<th>Estimated Volume</th>
<th>Access information (Gates, locks, etc.)</th>
<th>Photos, traverse maps required</th>
</tr>
</thead>
<tbody>
<tr>
<td>U1</td>
<td>See Cruise</td>
<td>Both the B-8300 and B-8400 gates have a Master Lock 957.</td>
<td>Traverse map with contours and roads. Photo (Scale 1’ to 500’)</td>
</tr>
<tr>
<td>U2</td>
<td>See Cruise</td>
<td>Behind the B-8400 gate with a Master Lock 957.</td>
<td>Traverse map with contours and roads. Photo (Scale 1’ to 500’)</td>
</tr>
<tr>
<td>U3</td>
<td>See Cruise</td>
<td>Behind the B-8400 gate with a Master Lock 957.</td>
<td>Traverse map with contours and roads. Photo (Scale 1’ to 500’)</td>
</tr>
</tbody>
</table>

REMARKS:

This sale is a research area comprised of 13 group cuts, 4 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 is 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.

Patch Unit 4 and the thinning unit share a boundary. The boundary trees have “White Timber Sale” tags and pink flagging on both sides of the same trees. The thinning area may have some special mill and pole material. The patch cuts and group cuts are small VRH’s with the leave trees located in the acres surrounding the patches and groups.

Poison oak was found in the U2 (patch) and U3 (thinning) units. Mainly as a vine growing up mature douglas-fir.

Prepared By: Dave Dalzotto
Date: 4.1.2021
Title: Forester
CC: Dee Dee Korsikas-Fogg

Revised 2/23/2007 (PSLD), Revised 1/22/20 (SPS)
Timber Sale Cruise Report
Copper Ridge 2022

Sale Name: COPPER RIDGE 2022
Sale Type: MBF SCALE
Region: SO PUGET
District: BLACK HILLS
Lead Cruiser: Aaron Coleman
Other Cruisers:

Cruise Narrative:
Copper Ridge is part of a long term joint study unit in partnership with the USFS. It consists of 13 regeneration group units, 4 regeneration patch units, and 1 variable density thinning (VDT) located off the B-8300, B-8400, and B-8450 roads in the Capitol State Forest. It is a mix of shovel and uphill cable ground, generally around 70-80 years old in the patch and group units. There is a pocket of older timber in the eastern and southeastern portions of the thinning unit. A 957 key is needed to access all units. All roads are in good condition.

The primary species is as follows:

Douglas-fir (93%) with an average diameter of 19 inches.
Bigleaf maple, Red alder (6%) with an average diameter of 15 / 17 inches.
Western red cedar/Western Hemlock (1%) with an average diameter of 17 / 19 inches.

Unit 3 VDT is to be thinned to the prescription outlined in "Schedule A" of the contract: Thinning from below to 60 trees per acre and 200 square feet of basal area.

Unit 1 is the combined acreage of all 13 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.

*Revised 6/29/21 by AC: Units 2 & 3 acreage reductions*

Timber Sale Notice Volume (MBF)

<table>
<thead>
<tr>
<th>Sp</th>
<th>DBH</th>
<th>Rings/In</th>
<th>Age</th>
<th>ALL</th>
<th>Spec Mill</th>
<th>2 Saw</th>
<th>3 Saw</th>
<th>4 Saw</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>19.5</td>
<td>10.6</td>
<td></td>
<td>1,291</td>
<td>60</td>
<td>885</td>
<td>293</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>15.0</td>
<td></td>
<td></td>
<td>62</td>
<td>19</td>
<td>6</td>
<td>36</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RA</td>
<td>17.4</td>
<td></td>
<td></td>
<td>15</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC</td>
<td>17.7</td>
<td></td>
<td></td>
<td>11</td>
<td>10</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WH</td>
<td>19.7</td>
<td></td>
<td></td>
<td>7</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>18.2</td>
<td>10.6</td>
<td></td>
<td>1,387</td>
<td>60</td>
<td>915</td>
<td>317</td>
<td>93</td>
<td>3</td>
</tr>
</tbody>
</table>

1 of 10
### Timber Sale Notice Weight (tons)

<table>
<thead>
<tr>
<th>Sp</th>
<th>All</th>
<th>Spec Mill</th>
<th>2 Saw</th>
<th>3 Saw</th>
<th>4 Saw</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>8,585</td>
<td>339</td>
<td>5,460</td>
<td>2,345</td>
<td>442</td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>663</td>
<td>144</td>
<td>41</td>
<td>463</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>RA</td>
<td>137</td>
<td>39</td>
<td>67</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC</td>
<td>101</td>
<td>91</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WH</td>
<td>65</td>
<td>46</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>9,551</td>
<td>339</td>
<td>5,689</td>
<td>2,562</td>
<td>936</td>
<td>24</td>
</tr>
</tbody>
</table>

### Timber Sale Overall Cruise Statistics (Cut + Leave Trees)

<table>
<thead>
<tr>
<th>BA (sq ft/acre)</th>
<th>BA SE (%)</th>
<th>V-BAR (bf/sq ft)</th>
<th>V-BAR SE (%)</th>
<th>Net Vol (bf/acre)</th>
<th>Vol SE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>240.6</td>
<td>3.4</td>
<td>181.8</td>
<td>3.9</td>
<td>43,623</td>
<td>5.2</td>
</tr>
</tbody>
</table>

### Timber Sale Unit Cruise Design

<table>
<thead>
<tr>
<th>Unit</th>
<th>Design</th>
<th>Cruise Acres</th>
<th>FMA Acres</th>
<th>N Plots</th>
<th>N Cruise Plots</th>
<th>N Void Plots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>B1C: VR, 1 BAF (54.44) Measure/Count Plots, Sighting Ht = 4.5 ft</td>
<td>13.0</td>
<td>28</td>
<td>13</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Unit 2</td>
<td>B1C: VR, 1 BAF (54.44) Measure/Count Plots, Sighting Ht = 4.5 ft</td>
<td>13.8</td>
<td>26</td>
<td>12</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Unit 3</td>
<td>B1C: VR, 1 BAF (33.61) Measure/Count Plots, Sighting Ht = 4.5 ft</td>
<td>38.2</td>
<td>40.2</td>
<td>39</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td>65.0</td>
<td>40.2</td>
<td>93</td>
<td>43</td>
<td>1</td>
</tr>
</tbody>
</table>

### Timber Sale Log Grade x Sort Summary

<table>
<thead>
<tr>
<th>Sp</th>
<th>Status</th>
<th>Grade</th>
<th>Sort</th>
<th>Dia</th>
<th>Len</th>
<th>BF Gross</th>
<th>BF Net</th>
<th>Defect %</th>
<th>Tons</th>
<th>MBF Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>2 SAW</td>
<td>Domestic</td>
<td>17.7</td>
<td>37</td>
<td>6,534</td>
<td>6,382</td>
<td>2.3</td>
<td>2,464.2</td>
<td>414.8</td>
</tr>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>2 SAW</td>
<td>HQ-B</td>
<td>14.6</td>
<td>37</td>
<td>7,267</td>
<td>7,230</td>
<td>0.5</td>
<td>2,996.0</td>
<td>470.0</td>
</tr>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>3 SAW</td>
<td>Domestic</td>
<td>8.4</td>
<td>36</td>
<td>2,702</td>
<td>2,702</td>
<td>0.0</td>
<td>1,498.1</td>
<td>175.6</td>
</tr>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>3 SAW</td>
<td>HQ-B</td>
<td>9.9</td>
<td>37</td>
<td>1,809</td>
<td>1,807</td>
<td>0.1</td>
<td>846.5</td>
<td>117.4</td>
</tr>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>4 SAW</td>
<td>Domestic</td>
<td>5.9</td>
<td>23</td>
<td>828</td>
<td>825</td>
<td>0.4</td>
<td>441.6</td>
<td>53.6</td>
</tr>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>SPECIAL MILL</td>
<td>HQ-A</td>
<td>17.2</td>
<td>36</td>
<td>915</td>
<td>915</td>
<td>0.0</td>
<td>338.6</td>
<td>59.5</td>
</tr>
<tr>
<td>MA</td>
<td>LIVE</td>
<td>2 SAW</td>
<td>Domestic</td>
<td>14.6</td>
<td>27</td>
<td>322</td>
<td>299</td>
<td>7.0</td>
<td>144.0</td>
<td>19.4</td>
</tr>
<tr>
<td>MA</td>
<td>LIVE</td>
<td>3 SAW</td>
<td>Domestic</td>
<td>11.3</td>
<td>24</td>
<td>94</td>
<td>87</td>
<td>7.3</td>
<td>41.4</td>
<td>5.7</td>
</tr>
<tr>
<td>MA</td>
<td>LIVE</td>
<td>4 SAW</td>
<td>Domestic</td>
<td>6.1</td>
<td>33</td>
<td>594</td>
<td>547</td>
<td>8.0</td>
<td>463.3</td>
<td>35.5</td>
</tr>
<tr>
<td>MA</td>
<td>LIVE</td>
<td>CULL</td>
<td>Cull</td>
<td>13.6</td>
<td>9</td>
<td>38</td>
<td>0</td>
<td>100.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
### Timber Sale Log Sort x Diameter Bin Summary

<table>
<thead>
<tr>
<th>Sp</th>
<th>Bin</th>
<th>Status</th>
<th>Sort</th>
<th>Dia</th>
<th>Len</th>
<th>BF Net Tons</th>
<th>MBF Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA</td>
<td>LIVE</td>
<td>3 SAW</td>
<td>11.5</td>
<td>26</td>
<td>24</td>
<td>0.0 14.0</td>
<td>1.7</td>
</tr>
<tr>
<td>RA</td>
<td>LIVE</td>
<td>2 SAW</td>
<td>13.1</td>
<td>29</td>
<td>84</td>
<td>11.1 39.0</td>
<td>4.8</td>
</tr>
<tr>
<td>RA</td>
<td>LIVE</td>
<td>3 SAW</td>
<td>10.9</td>
<td>34</td>
<td>119</td>
<td>9.1 66.6</td>
<td>7.1</td>
</tr>
<tr>
<td>RA</td>
<td>LIVE</td>
<td>4 SAW</td>
<td>7.2</td>
<td>25</td>
<td>56</td>
<td>6.7 31.5</td>
<td>3.4</td>
</tr>
<tr>
<td>RC</td>
<td>LIVE</td>
<td>3 SAW</td>
<td>11.5</td>
<td>35</td>
<td>171</td>
<td>10.8 91.2</td>
<td>9.9</td>
</tr>
<tr>
<td>RC</td>
<td>LIVE</td>
<td>CULL</td>
<td>19.3</td>
<td>15</td>
<td>25</td>
<td>0.0 100.0</td>
<td>0.0</td>
</tr>
<tr>
<td>RC</td>
<td>LIVE</td>
<td>2 SAW</td>
<td>13.6</td>
<td>38</td>
<td>90</td>
<td>3.7 46.3</td>
<td>5.7</td>
</tr>
<tr>
<td>WH</td>
<td>LIVE</td>
<td>3 SAW</td>
<td>6.3</td>
<td>40</td>
<td>23</td>
<td>2.9 18.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Sp</td>
<td>Bin</td>
<td>Status</td>
<td>Sort</td>
<td>Dia</td>
<td>Len</td>
<td>BF Net</td>
<td>Defect %</td>
</tr>
<tr>
<td>----</td>
<td>-----</td>
<td>--------</td>
<td>----------</td>
<td>-----</td>
<td>-----</td>
<td>--------</td>
<td>----------</td>
</tr>
<tr>
<td>RC</td>
<td>15 - 19</td>
<td>LIVE</td>
<td>Cull</td>
<td>19.3</td>
<td>15</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>WH</td>
<td>5 - 8</td>
<td>LIVE</td>
<td>Domestic</td>
<td>6.3</td>
<td>40</td>
<td>22</td>
<td>2.9</td>
</tr>
<tr>
<td>WH</td>
<td>12 - 14</td>
<td>LIVE</td>
<td>Domestic</td>
<td>12.3</td>
<td>40</td>
<td>40</td>
<td>7.7</td>
</tr>
<tr>
<td>WH</td>
<td>15 - 19</td>
<td>LIVE</td>
<td>Domestic</td>
<td>15.5</td>
<td>36</td>
<td>47</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Cruise Unit Report

Unit 1

Unit Sale Notice Volume (MBF): Unit 1

<table>
<thead>
<tr>
<th>Sp</th>
<th>DBH</th>
<th>Rings/In</th>
<th>Age</th>
<th>All</th>
<th>Spec Mill</th>
<th>2 Saw</th>
<th>3 Saw</th>
<th>4 Saw</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>17.5</td>
<td>12.0</td>
<td></td>
<td>532</td>
<td>17</td>
<td>320</td>
<td>164</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>14.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>WH</td>
<td>19.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RA</td>
<td>16.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>RC</td>
<td>35.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>17.2</td>
<td>12.0</td>
<td></td>
<td>554</td>
<td>17</td>
<td>328</td>
<td>169</td>
<td>38</td>
<td>2</td>
</tr>
</tbody>
</table>

Unit Cruise Design: Unit 1

<table>
<thead>
<tr>
<th>Design</th>
<th>Cruise Acres</th>
<th>FMA Acres</th>
<th>N Plots</th>
<th>N Cruise Plots</th>
<th>N Void Plots</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1C: VR, 1 BAF (54.44) Measure/Count Plots, Sighting Ht = 4.5 ft</td>
<td>13.0</td>
<td>28</td>
<td>13</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Unit Cruise Summary: Unit 1

<table>
<thead>
<tr>
<th>Sp</th>
<th>Cruised Trees</th>
<th>All Trees</th>
<th>Trees/Plot</th>
<th>Ring-Count Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>49</td>
<td>122</td>
<td>4.4</td>
<td>1</td>
</tr>
<tr>
<td>MA</td>
<td>6</td>
<td>6</td>
<td>0.2</td>
<td>0</td>
</tr>
<tr>
<td>WH</td>
<td>2</td>
<td>2</td>
<td>0.1</td>
<td>0</td>
</tr>
<tr>
<td>RA</td>
<td>2</td>
<td>2</td>
<td>0.1</td>
<td>0</td>
</tr>
<tr>
<td>RC</td>
<td>1</td>
<td>1</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>ALL</td>
<td>60</td>
<td>133</td>
<td>4.8</td>
<td>1</td>
</tr>
</tbody>
</table>

Unit Cruise Statistics (Cut + Leave Trees): Unit 1

<table>
<thead>
<tr>
<th>Sp</th>
<th>BA (sq ft/acre)</th>
<th>BA CV (%)</th>
<th>BA SE (%)</th>
<th>V-BAR (bf/sq ft)</th>
<th>V-BAR CV (%)</th>
<th>V-BAR SE (%)</th>
<th>Net Vol (bf/acre)</th>
<th>Vol CV (%)</th>
<th>Vol SE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>237.2</td>
<td>34.9</td>
<td>6.6</td>
<td>172.6</td>
<td>30.2</td>
<td>4.3</td>
<td>40,932</td>
<td>46.1</td>
<td>7.9</td>
</tr>
<tr>
<td>MA</td>
<td>11.7</td>
<td>265.1</td>
<td>50.1</td>
<td>53.4</td>
<td>50.2</td>
<td>20.5</td>
<td>623</td>
<td>269.8</td>
<td>54.1</td>
</tr>
<tr>
<td>WH</td>
<td>3.9</td>
<td>367.2</td>
<td>69.4</td>
<td>140.7</td>
<td>4.4</td>
<td>3.1</td>
<td>547</td>
<td>367.2</td>
<td>69.5</td>
</tr>
<tr>
<td>RA</td>
<td>3.9</td>
<td>367.2</td>
<td>69.4</td>
<td>102.4</td>
<td>9.4</td>
<td>6.6</td>
<td>398</td>
<td>367.3</td>
<td>69.7</td>
</tr>
<tr>
<td>RC</td>
<td>1.9</td>
<td>529.2</td>
<td>100.0</td>
<td>72.4</td>
<td>0.0</td>
<td>0.0</td>
<td>141</td>
<td>529.2</td>
<td>100.0</td>
</tr>
<tr>
<td>ALL</td>
<td>258.6</td>
<td>33.2</td>
<td>6.3</td>
<td>164.9</td>
<td>37.3</td>
<td>4.8</td>
<td>42,642</td>
<td>50.0</td>
<td>7.9</td>
</tr>
</tbody>
</table>
## Unit Summary: Unit 1

<table>
<thead>
<tr>
<th>Sp</th>
<th>Status</th>
<th>Rx</th>
<th>N</th>
<th>D</th>
<th>DBH</th>
<th>BL</th>
<th>THT</th>
<th>BF Gross</th>
<th>BF Net</th>
<th>Defect %</th>
<th>TPA</th>
<th>BA</th>
<th>RD</th>
<th>MBF Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>CUT</td>
<td>42</td>
<td>ALL</td>
<td>17.3</td>
<td>79</td>
<td>98</td>
<td>37,979</td>
<td>37,913</td>
<td>0.2</td>
<td>134.6</td>
<td>219.7</td>
<td>52.8</td>
<td>492.9</td>
</tr>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>POLE</td>
<td>7</td>
<td>ALL</td>
<td>18.9</td>
<td>96</td>
<td>122</td>
<td>3,025</td>
<td>3,020</td>
<td>0.2</td>
<td>9.0</td>
<td>17.5</td>
<td>4.0</td>
<td>39.3</td>
</tr>
<tr>
<td>MA</td>
<td>LIVE</td>
<td>CUT</td>
<td>6</td>
<td>ALL</td>
<td>14.0</td>
<td>45</td>
<td>55</td>
<td>745</td>
<td>623</td>
<td>16.4</td>
<td>10.9</td>
<td>11.7</td>
<td>3.1</td>
<td>8.1</td>
</tr>
<tr>
<td>RA</td>
<td>LIVE</td>
<td>CUT</td>
<td>2</td>
<td>ALL</td>
<td>16.3</td>
<td>65</td>
<td>127</td>
<td>413</td>
<td>398</td>
<td>3.5</td>
<td>2.7</td>
<td>3.9</td>
<td>1.0</td>
<td>5.2</td>
</tr>
<tr>
<td>RC</td>
<td>LIVE</td>
<td>CUT</td>
<td>1</td>
<td>ALL</td>
<td>35.0</td>
<td>91</td>
<td>91</td>
<td>180</td>
<td>141</td>
<td>21.8</td>
<td>0.3</td>
<td>1.9</td>
<td>0.3</td>
<td>1.8</td>
</tr>
<tr>
<td>WH</td>
<td>LIVE</td>
<td>CUT</td>
<td>2</td>
<td>ALL</td>
<td>19.7</td>
<td>88</td>
<td>100</td>
<td>567</td>
<td>547</td>
<td>3.5</td>
<td>1.8</td>
<td>3.9</td>
<td>0.9</td>
<td>7.1</td>
</tr>
<tr>
<td>ALL</td>
<td>LIVE</td>
<td>POLE</td>
<td>7</td>
<td>ALL</td>
<td>18.9</td>
<td>96</td>
<td>122</td>
<td>3,025</td>
<td>3,020</td>
<td>0.2</td>
<td>9.0</td>
<td>17.5</td>
<td>4.0</td>
<td>39.3</td>
</tr>
<tr>
<td>ALL</td>
<td>LIVE</td>
<td>CUT</td>
<td>53</td>
<td>ALL</td>
<td>17.1</td>
<td>76</td>
<td>95</td>
<td>39,884</td>
<td>39,622</td>
<td>0.7</td>
<td>150.3</td>
<td>241.1</td>
<td>58.1</td>
<td>515.1</td>
</tr>
<tr>
<td>ALL</td>
<td>ALL</td>
<td>ALL</td>
<td>60</td>
<td>ALL</td>
<td>17.3</td>
<td>78</td>
<td>97</td>
<td>42,909</td>
<td>42,642</td>
<td>0.6</td>
<td>159.3</td>
<td>258.6</td>
<td>62.1</td>
<td>554.4</td>
</tr>
</tbody>
</table>
Cruise Unit Report
Unit 2

Unit Sale Notice Volume (MBF): Unit 2

<table>
<thead>
<tr>
<th>Sp</th>
<th>DBH</th>
<th>Rings/In</th>
<th>Age</th>
<th>All</th>
<th>Spec</th>
<th>Mill</th>
<th>2 Saw</th>
<th>3 Saw</th>
<th>4 Saw</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>21.1</td>
<td>9.3</td>
<td>600</td>
<td>15</td>
<td>471</td>
<td>96</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC</td>
<td>14.4</td>
<td></td>
<td>10</td>
<td>8</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>21.5</td>
<td></td>
<td>7</td>
<td>6</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>20.1</td>
<td>9.3</td>
<td>617</td>
<td>15</td>
<td>477</td>
<td>105</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unit Cruise Design: Unit 2

<table>
<thead>
<tr>
<th>Design</th>
<th>Cruise Acres</th>
<th>FMA Acres</th>
<th>N Plots</th>
<th>N Cruise Plots</th>
<th>N Void Plots</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1C: VR, 1 BAF (54.44) Measure/Count Plots, Sighting Ht = 4.5 ft</td>
<td>13.8</td>
<td>26</td>
<td>12</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Unit Cruise Summary: Unit 2

<table>
<thead>
<tr>
<th>Sp</th>
<th>Cruised Trees</th>
<th>All Trees</th>
<th>Trees/Plot</th>
<th>Ring-Count Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>47</td>
<td>99</td>
<td>3.8</td>
<td>4</td>
</tr>
<tr>
<td>RC</td>
<td>5</td>
<td>5</td>
<td>0.2</td>
<td>0</td>
</tr>
<tr>
<td>MA</td>
<td>3</td>
<td>3</td>
<td>0.1</td>
<td>0</td>
</tr>
<tr>
<td>ALL</td>
<td>55</td>
<td>107</td>
<td>4.1</td>
<td>4</td>
</tr>
</tbody>
</table>

Unit Cruise Statistics (Cut + Leave Trees): Unit 2

<table>
<thead>
<tr>
<th>Sp</th>
<th>BA (sq ft/acre)</th>
<th>BA CV (%)</th>
<th>BA SE (%)</th>
<th>V-BAR (bf/sq ft)</th>
<th>V-BAR CV (%)</th>
<th>V-BAR SE (%)</th>
<th>Net Vol (bf/acre)</th>
<th>Vol CV (%)</th>
<th>Vol SE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>207.3</td>
<td>49.3</td>
<td>9.7</td>
<td>209.8</td>
<td>23.2</td>
<td>3.4</td>
<td>43,482</td>
<td>54.5</td>
<td>10.2</td>
</tr>
<tr>
<td>RC</td>
<td>10.5</td>
<td>255.6</td>
<td>50.1</td>
<td>66.7</td>
<td>40.4</td>
<td>18.1</td>
<td>698</td>
<td>258.7</td>
<td>53.3</td>
</tr>
<tr>
<td>MA</td>
<td>6.3</td>
<td>282.4</td>
<td>55.4</td>
<td>85.7</td>
<td>23.0</td>
<td>13.3</td>
<td>538</td>
<td>283.3</td>
<td>57.0</td>
</tr>
<tr>
<td>ALL</td>
<td>224.0</td>
<td>45.2</td>
<td>8.9</td>
<td>199.6</td>
<td>33.3</td>
<td>4.5</td>
<td>44,718</td>
<td>56.2</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Unit Summary: Unit 2

<table>
<thead>
<tr>
<th>Sp</th>
<th>Status</th>
<th>Rx</th>
<th>N</th>
<th>D</th>
<th>DBH</th>
<th>BL</th>
<th>THT</th>
<th>BF Gross</th>
<th>BF Net</th>
<th>Defect %</th>
<th>TPA</th>
<th>BA</th>
<th>RD</th>
<th>MBF Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>CUT</td>
<td>47</td>
<td>ALL</td>
<td>21.1</td>
<td>88</td>
<td>112</td>
<td>44,332</td>
<td>43,482</td>
<td>1.9</td>
<td>85.4</td>
<td>207.3</td>
<td>45.1</td>
<td>600.1</td>
</tr>
<tr>
<td>MA</td>
<td>LIVE</td>
<td>CUT</td>
<td>3</td>
<td>ALL</td>
<td>21.5</td>
<td>48</td>
<td>62</td>
<td>604</td>
<td>538</td>
<td>11.0</td>
<td>2.5</td>
<td>6.3</td>
<td>1.4</td>
<td>7.4</td>
</tr>
<tr>
<td>RC</td>
<td>LIVE</td>
<td>CUT</td>
<td>5</td>
<td>ALL</td>
<td>14.4</td>
<td>45</td>
<td>58</td>
<td>867</td>
<td>698</td>
<td>19.4</td>
<td>9.3</td>
<td>10.5</td>
<td>2.8</td>
<td>9.6</td>
</tr>
<tr>
<td>Sp</td>
<td>Status</td>
<td>Rx</td>
<td>N</td>
<td>D</td>
<td>DBH</td>
<td>BL</td>
<td>THT</td>
<td>BF Gross</td>
<td>BF Net</td>
<td>Defect %</td>
<td>TPA</td>
<td>BA</td>
<td>RD</td>
<td>MBF Net</td>
</tr>
<tr>
<td>----</td>
<td>--------</td>
<td>-----</td>
<td>----</td>
<td>----</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
<td>----------</td>
<td>--------</td>
<td>----------</td>
<td>-----</td>
<td>----</td>
<td>----</td>
<td>--------</td>
</tr>
<tr>
<td>ALL</td>
<td>LIVE</td>
<td>CUT</td>
<td>55</td>
<td>ALL</td>
<td>20.6</td>
<td>83</td>
<td>106</td>
<td>45,803</td>
<td>44,718</td>
<td>2.4</td>
<td>97.2</td>
<td>224.1</td>
<td>49.3</td>
<td>617.1</td>
</tr>
<tr>
<td>ALL</td>
<td>ALL</td>
<td>ALL</td>
<td>55</td>
<td>ALL</td>
<td>20.6</td>
<td>83</td>
<td>106</td>
<td>45,803</td>
<td>44,718</td>
<td>2.4</td>
<td>97.2</td>
<td>224.1</td>
<td>49.3</td>
<td>617.1</td>
</tr>
</tbody>
</table>
Cruise Unit Report
Unit 3

Unit Sale Notice Volume (MBF): Unit 3

<table>
<thead>
<tr>
<th>Sp</th>
<th>DBH</th>
<th>Rings/In</th>
<th>Age</th>
<th>All</th>
<th>Spec Mill</th>
<th>2 Saw</th>
<th>3 Saw</th>
<th>4 Saw</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>20.2</td>
<td>159</td>
<td>27</td>
<td>94</td>
<td>33</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>14.2</td>
<td>47</td>
<td>14</td>
<td>5</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA</td>
<td>17.9</td>
<td>10</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>15.5</td>
<td>216</td>
<td>27</td>
<td>110</td>
<td>43</td>
<td>36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unit Cruise Design: Unit 3

Design Cruise Acres FMA Acres N Plots N Cruise Plots N Void Plots
B1C: VR, 1 BAF (33.61) Measure/Count Plots, Sighting Ht = 4.5 ft 38.2 40.2 39 18 0

Unit Cruise Summary: Unit 3

<table>
<thead>
<tr>
<th>Sp</th>
<th>Cruised Trees</th>
<th>All Trees</th>
<th>Trees/Plot</th>
<th>Ring-Count Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>9</td>
<td>253</td>
<td>6.5</td>
<td>1</td>
</tr>
<tr>
<td>MA</td>
<td>23</td>
<td>23</td>
<td>0.6</td>
<td>0</td>
</tr>
<tr>
<td>RA</td>
<td>3</td>
<td>3</td>
<td>0.1</td>
<td>0</td>
</tr>
<tr>
<td>ALL</td>
<td>35</td>
<td>279</td>
<td>7.2</td>
<td>1</td>
</tr>
</tbody>
</table>

Unit Cruise Statistics (Cut + Leave Trees): Unit 3

<table>
<thead>
<tr>
<th>Sp</th>
<th>BA (sq ft/acre)</th>
<th>BA CV (%)</th>
<th>BA SE (%)</th>
<th>V-BAR (bf/sq ft)</th>
<th>V-BAR CV (%)</th>
<th>V-BAR SE (%)</th>
<th>Net Vol (bf/acre)</th>
<th>Vol CV (%)</th>
<th>Vol SE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>218.0</td>
<td>32.8</td>
<td>5.2</td>
<td>193.0</td>
<td>25.2</td>
<td>8.4</td>
<td>42,071</td>
<td>41.4</td>
<td>9.9</td>
</tr>
<tr>
<td>MA</td>
<td>19.8</td>
<td>201.1</td>
<td>32.2</td>
<td>61.8</td>
<td>50.8</td>
<td>10.6</td>
<td>1,226</td>
<td>207.4</td>
<td>33.9</td>
</tr>
<tr>
<td>RA</td>
<td>2.6</td>
<td>624.5</td>
<td>100.0</td>
<td>102.5</td>
<td>17.1</td>
<td>9.9</td>
<td>265</td>
<td>624.7</td>
<td>100.5</td>
</tr>
<tr>
<td>ALL</td>
<td>240.4</td>
<td>27.3</td>
<td>4.4</td>
<td>181.2</td>
<td>37.0</td>
<td>6.2</td>
<td>43,562</td>
<td>46.0</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Unit Summary: Unit 3

<table>
<thead>
<tr>
<th>Sp</th>
<th>Status</th>
<th>Rx</th>
<th>N</th>
<th>D</th>
<th>DBH</th>
<th>BL</th>
<th>THT</th>
<th>BF Gross</th>
<th>BF Net</th>
<th>Defect %</th>
<th>TPA</th>
<th>BA</th>
<th>RD</th>
<th>MBF Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>CUT</td>
<td>9</td>
<td>ALL</td>
<td>20.2</td>
<td>33</td>
<td>42</td>
<td>4,157</td>
<td>4,157</td>
<td>0.0</td>
<td>9.7</td>
<td>21.5</td>
<td>4.8</td>
<td>158.8</td>
</tr>
<tr>
<td>MA</td>
<td>LIVE</td>
<td>CUT</td>
<td>23</td>
<td>ALL</td>
<td>14.2</td>
<td>44</td>
<td>57</td>
<td>1,355</td>
<td>1,226</td>
<td>9.6</td>
<td>18.0</td>
<td>19.8</td>
<td>5.3</td>
<td>46.8</td>
</tr>
<tr>
<td>RA</td>
<td>LIVE</td>
<td>CUT</td>
<td>3</td>
<td>ALL</td>
<td>17.9</td>
<td>69</td>
<td>89</td>
<td>301</td>
<td>265</td>
<td>11.9</td>
<td>1.5</td>
<td>2.6</td>
<td>0.6</td>
<td>10.1</td>
</tr>
<tr>
<td>Sp</td>
<td>Status</td>
<td>Rx</td>
<td>N</td>
<td>D</td>
<td>DBH</td>
<td>BL</td>
<td>THT</td>
<td>BF Gross</td>
<td>BF Net</td>
<td>Defect %</td>
<td>TPA</td>
<td>BA</td>
<td>RD</td>
<td>MBF Net</td>
</tr>
<tr>
<td>----</td>
<td>--------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
<td>---------</td>
<td>--------</td>
<td>----------</td>
<td>-----</td>
<td>------</td>
<td>------</td>
<td>---------</td>
</tr>
<tr>
<td>ALL</td>
<td>LIVE</td>
<td>CUT</td>
<td>35</td>
<td>ALL</td>
<td>16.6</td>
<td>42</td>
<td>54</td>
<td>5,813</td>
<td>5,648</td>
<td>2.8</td>
<td>29.2</td>
<td>43.9</td>
<td>10.7</td>
<td>215.7</td>
</tr>
<tr>
<td>ALL</td>
<td>ALL</td>
<td>ALL</td>
<td>35</td>
<td>ALL</td>
<td>16.6</td>
<td>42</td>
<td>54</td>
<td>5,813</td>
<td>5,648</td>
<td>2.8</td>
<td>29.2</td>
<td>43.9</td>
<td>10.7</td>
<td>215.7</td>
</tr>
</tbody>
</table>
Unit 1
13 Group Units
13 Acres

Variable Retention Harvest
Riparian Mgt Zone
Potentially Unstable Slopes
Utility Right of Way
Public Land Survey Sections
DNR Managed Lands

Sale Boundary Tags
Timber Type Change
Flag Line
Existing Roads
Contours 40-foot
Gates (Master 957)
Streams
Stream Type Break
Landing - Proposed
Survey Monument

SALE NAME: COPPER RIDGE 2022
AGREEMENT#: 30-100997
TOWNSHIP(S): T18R3W
TRUST(S): Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

Regional 
COPPER RIDGE 2022 
13 Group Units 
13 Acres

Prepared By: bcover
Modification Date: acol490 5/11/2021

Region:
South Puget Sound Region

County(s):
Thurston

Elevation Rge:
547-1164
Unit 2
4 Patch Units
14 Acres
Unit 3
1 Thinning Unit
38 Acres
Forest Practices Application/Notification
Notice of Decision

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  Number of Years Granted on Multi-Year Request
☐ Class II  ☐ Class III  ☐ Class IVG  ☒ Class IVS  ☐ 4 years  ☐ 5 years

Conditions on Approval/Reasons for Disapproval

Due to the potential for sediment to enter typed water from equipment crossing of Ns streams, please notify DNR (2) two business days prior to this activity. Contact Matt Brady at (360)538-7661 and/or email southpuget.forestpractices@dnr.wa.gov.

Issued By: Matt Brady  Region: South Puget Sound
Title: Resource Protection Forester  Date: 9/3/2021
Copy to: ☒ Landowner, Timber Owner and Operator
Issued in person: ☒ Landowner ☒ Timber Owner ☒ Operator  By: [Signature]
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:

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

Information regarding the Pollution Control Hearings Board can be found at: [http://www.eluho.wa.gov/](http://www.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](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 Affidavit of Mailing
On this day 9/3/2021, I placed in the United States mail at Olympia, WA, postage paid, a true and accurate copy of this document. Notice of Decision FPA #2422522.

Meredith Dessens
(Printed Name) (Signature)
STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

COPPER RIDGE 2022 TIMBER SALE ROAD PLAN
THURSTON COUNTY
DELPHI UNIT
BLACK HILLS DISTRICT

AGREEMENT NO.: 30-100997
STAFF ENGINEER: JACOB GROSS

DATE: APRIL 1, 2021
DRAWN & COMPiled BY: JACOB GROSS

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.

0-3 OPTIONAL ROADS
The specified work on the following roads is not required. Any optional roads built by the Purchaser must meet all the specifications in the road plan.

<table>
<thead>
<tr>
<th>Road</th>
<th>Stations</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landings</td>
<td>Timber Sale Units</td>
<td>Construction</td>
</tr>
</tbody>
</table>

0-4 CONSTRUCTION
Construction includes, but is not limited to:
- Clearing
- Grubbing
- Right-of-way debris disposal
- Landing construction
- Acquisition and application of rock

0-7 POST-HAUL MAINTENANCE
This project includes post-haul road maintenance listed in Clause 9-5 POST-HAUL MAINTENANCE.

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.

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

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.
7. Road Plan Maps.

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

1-8 **REPAIR OR REPLACEMENT OF DAMAGED MATERIALS**

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.

1-23 ROAD WORK PHASE APPROVAL
Purchaser shall obtain written approval from the Contract Administrator upon completion of each of the following phases of road work:
- Rock compaction

SUBSECTION RESTRICTIONS

1-25 ACTIVITY TIMING RESTRICTION
The specified activities are not allowed during the listed closure period(s) and the operation of road construction equipment is not allowed on weekends or state recognized holidays unless authorized in writing by the Contract Administrator.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Closure Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Work</td>
<td>November 1 to April 30</td>
</tr>
</tbody>
</table>

1-26 OPERATING DURING CLOSURE PERIOD
If permission is granted to operate during a seasonal closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTION and Contract Clause H-130 HAULING SCHEDULE, the Purchaser shall comply with a maintenance plan to include further protection of water, soil, roads, and other forest assets at the Purchaser’s expense. Preventative measures shall be in place prior to 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 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.

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.

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.

**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 state owned standing trees.

**SUBSECTION GRUBBING**

3-10 **GRUBBING**
Purchaser shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET and within waste and debris areas. Purchaser shall also remove stumps with undercut roots outside the grubbing limits. Grubbing must be completed before starting excavation and embankment.
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**

4-5 **CUT SLOPE RATIO**
Purchaser shall construct excavation slopes no steeper than shown on the following table, unless construction staked or designed:

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Excavation Slope Ratio</th>
<th>Excavation Slope Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Earth (on side slopes up to 55%)</td>
<td>1:1</td>
<td>100</td>
</tr>
<tr>
<td>Common Earth (56% to 70% side slopes)</td>
<td>¾:1</td>
<td>133</td>
</tr>
<tr>
<td>Common Earth (on slopes over 70%)</td>
<td>½:1</td>
<td>200</td>
</tr>
<tr>
<td>Fractured or loose rock</td>
<td>½:1</td>
<td>200</td>
</tr>
<tr>
<td>Hardpan or solid rock</td>
<td>¼:1</td>
<td>400</td>
</tr>
</tbody>
</table>
4-6  **EMBANKMENT SLOPE RATIO**  
Purchaser shall construct embankment slopes no steeper than shown on the following table:

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Embankment Slope Ratio</th>
<th>Embankment Slope Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy Soils</td>
<td>2:1</td>
<td>50</td>
</tr>
<tr>
<td>Common Earth and Rounded Gravel</td>
<td>1½:1</td>
<td>67</td>
</tr>
<tr>
<td>Angular Rock</td>
<td>1¼:1</td>
<td>80</td>
</tr>
</tbody>
</table>

4-7  **SHAPING CUT AND FILL SLOPE**  
Purchaser shall construct excavation and embankment slopes to a uniform line and left rough for easier revegetation.

**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.

4-28  **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 45% if the waste material is compacted and free of organic debris.

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 45%.
- In locations that interfere with the construction of the road prism.
In locations that impede drainage.
- Within the operational area for cable landings.
- Against standing timber.

SUBSECTION SHAPING

4-55 ROAD SHAPING
Purchaser shall shape each lift of 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.

SECTION 6 – ROCK AND SURFACING

SUBSECTION ROCK SOURCE

6-3 ROCK SOURCE STATE LAND, EXISTING STOCKPILE
Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following existing stockpile(s) on state land at no charge to the Purchaser. Purchaser shall not remove additional yardage without prior written approval from the Contract Administrator.

<table>
<thead>
<tr>
<th>Source</th>
<th>Location</th>
<th>Rock Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perry Creek Quarry</td>
<td>Quarry Floor (Previously shot)</td>
<td>Select Pit Run</td>
<td>300 CY</td>
</tr>
</tbody>
</table>

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 GRADATIONS

6-41 SELECT PIT RUN ROCK
No more than 50 percent of the rock may be larger than 6 inches in any dimension and no rock may be larger than 10 inches in any dimension. Pit Run rock may not contain more than 5 percent by weight of organic debris, and trash. Rock may require processing to meet this specification.

SUBSECTION ROCK APPLICATION

6-71 ROCK APPLICATION
Purchaser shall apply rock in accordance with the specifications and quantities shown on the ROCK LIST.
6-75 OPTIONAL ROCK EXCEPTION
On the following roads, the Purchaser may place less rock than shown on the ROCK LIST, as 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. The Purchaser shall meet post-haul specifications in Section 9 POST-HAUL ROAD WORK, or other conditions of the approved plan as required by the Contract Administrator.

<table>
<thead>
<tr>
<th>Road</th>
<th>Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landings</td>
<td>All</td>
</tr>
</tbody>
</table>

SECTION 8 – EROSION CONTROL

8-1 SEDIMENT CONTROL STRUCTURES
Sediment control shall be accomplished using sediment traps, silt fences, rock berms, settling ponds or other methods as approved, in writing, by the Contract Administrator.

SECTION 9 – POST-HAUL ROAD WORK

9-5 POST-HAUL MAINTENANCE
Purchaser shall perform post-haul maintenance in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

SUBSECTION POST-HAUL LANDING MAINTENANCE

9-10 LANDING DRAINAGE
Purchaser shall provide for drainage of the landing surface.
### Road Number

<table>
<thead>
<tr>
<th>Road Number</th>
<th>From Station</th>
<th>To Station</th>
<th>Tolerance Class</th>
<th>Subgrade Width (feet)</th>
<th>Road Width (feet)</th>
<th>Ditch Width (feet)</th>
<th>Crown Depth in. @ CL</th>
<th>Grubbing Limits (feet)</th>
<th>Clearing Limits (feet)</th>
<th>Cut Slope Ratio</th>
<th>Fill Slope Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-Line</td>
<td>663+50</td>
<td>685+10</td>
<td>A</td>
<td>16</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B-8000</td>
<td>0+00</td>
<td>117+60</td>
<td>A</td>
<td>16</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B-8300</td>
<td>0+00</td>
<td>65+79</td>
<td>A</td>
<td>14</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B-8400</td>
<td>0+00</td>
<td>140+00</td>
<td>A</td>
<td>14</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B-8430</td>
<td>0+00</td>
<td>17+25</td>
<td>A</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B-8431</td>
<td>0+00</td>
<td>2+93</td>
<td>A</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B-8450</td>
<td>0+00</td>
<td>32+76</td>
<td>A</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B-8470</td>
<td>0+00</td>
<td>14+75</td>
<td>A</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B-8471</td>
<td>0+00</td>
<td>5+35</td>
<td>A</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## ROCK LIST

### BALLAST

<table>
<thead>
<tr>
<th>Road Number</th>
<th>From Station</th>
<th>To Station</th>
<th>Rock Slope</th>
<th>Compacted Rock Depth (inches)</th>
<th>C.Y./Station</th>
<th># of Stations</th>
<th>C.Y. Subtotal</th>
<th>Rock Source</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>K2</td>
<td>B2</td>
<td>Select Pit Run</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Perry Creek Quarry Stockpile</td>
<td></td>
</tr>
</tbody>
</table>

Landing Rock* 300

Select Pit Run 300 Cubic Yards
Ballast Total 300 Cubic Yards

*Optional Rock: If Purchaser elects to haul on optional rock roads in wet weather, the depth listed above is recommended but not required.

NOTE: Yardages are estimated on a compacted (In-Place) basis. Compliance of required rock will be based on compacted depth measurement. **Apply appropriate factors to determine loose amounts for estimating purposes.** Roads and rock quantities are designed for dry weather use. If Purchaser elects to haul in wet weather additional rock may be obtained from the rock pits listed in Section 6 at the Purchaser’s expense and with prior written approval from the Contract Administrator.
Cuts and Fills
- Maintain slope lines to a stable gradient compatible with the cut slope/fill slope ratios. 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
- 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.
- 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.

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.

- Do not undercut backslope

- Keep clear of obstructions

- Add stable material or flume

- Keep ditches open and free of debris to ensure water drainage away from road.

- No berms except as directed
1. Stockpiled rock may be used per the Copper Ridge 2022 Road Plan Specifications.

2. If needed, Development for ballast rock shall begin in area A as indicated on the Perry Creek Quarry Plan View below.

3. All vegetation including stumps shall be cleared a minimum of 35 feet beyond the top of all working faces. Trees shall be cleared to a minimum of ¾ of the height of the tallest tree adjacent to the pit. Surface shall be scalped of all overburden within 20 feet of working face at all times.

4. Overburden shall be end hauled or pushed to the designated waste area (as shown in the Plan View) and compacted. Minimal acceptable compaction is achieved by placing waste material in 2 foot or shallower lifts and routing excavation equipment over entire width of the lifts.

5. Root wads and organic debris larger than one cubic foot in volume shall be separated from overburden material and piled in the vegetative waste area as shown in the Plan View.

6. Quarry faces shall not exceed 30 feet in height and shall be sloped no steeper than 1/4:1.

7. Working bench width shall be a minimum of 30 feet.

8. The quarry floor shall have continuity of slope be left in a smooth and neat condition, providing drainage to the southwest at a minimum of 2 percent. All knobs, bumps, or extrusions shall be removed to the designated floor level by excavation or drill and shoot techniques. No sediment shall enter live water.

9. Oversize material remaining in the rock source at the conclusion of use shall not exceed 10 percent of the total volume mined during that operation. Oversize material is defined as rock fragments larger than two feet in any direction. At the conclusion of operations, oversize material shall be placed as directed by the Contract Administrator.

10. All operations shall be carried out in compliance with all regulations of:
   b. Safety Standards – Metal and Nonmetallic Mines, Quarries, Pits, and Crushing Operations” (296-61 WAC), Washington Department of Labor and Industries.
11. The Operator shall submit an informational drilling and shooting plan to the Contract Administrator 5 working days prior to any drilling (Form #M-126PAC).

12. At the completion of rock source operations, Purchaser shall ask Contract Administrator for written approval of final rock source condition and compliance with the terms of this plan.

13. At the end of operations, quarry faces and walls shall be scaled and cleared of loose and overhanging material, benches shall have safety berms constructed or access blocked to highway vehicles. The site shall be cleared of all temporary structures, equipment and rubbish, and shall be left in a neat and presentable condition.

14. The quarry area shall be worked and left in a condition that future operations may proceed in an orderly manner.

Vicinity Map
## Road Development Cost Estimate

*For internal DNR use only. Costs are estimates only & are not guaranteed by the State or part of the Road Plan.*

<table>
<thead>
<tr>
<th>ROAD NUMBER:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Landings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ROAD STANDARD:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Construction</td>
<td>Reconstruction</td>
<td>Pre-haul maintenance</td>
</tr>
</tbody>
</table>

| NUMBER OF STATIONS: | 2.00 | 0.00 | 0.00 |
| SIDESLOPE:         | 20-40% | 30% | 0% |

| CLEARING AND GRUBBING: | $567 | $0 |
| EXCAVATION AND FILL:  | $600 | $0 |
| MISC. MAINTENANCE:    | $0   | $0 |

### ROCK TOTALS (Cu. Yds.):

- **Ballast/Quarry Spalls**: 300 | $2,211 | $0 | $0
- **Crushed Rock**: 0 | $0 | $0 | $0
- **Crushed Stockpile**: 0 | $0 | $0 |

| CULVERTS AND FLUMES: | $0 | $0 | $0 |
| STRUCTURES:         | $0 | $0 | $0 |
| GENERAL EXPENSES:   | $405 | $0 | $0 |
| MOBILIZATION:       | $2,200 | $0 | $0 |

| TOTAL COSTS:        | $5,983 | $0 | $0 |
| COST PER STATION:   | $2,991 | $0 | $0 |

**ROAD DEACTIVATION AND ABANDONMENT COSTS:** $0

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

- **TOTAL (All Roads)** = $5,983
- **SALE VOLUME MBF** = 1,387
- **TOTAL COST PER MBF** = $4.31

**Date**: 04/21/21