

**TIMBER NOTICE OF SALE**

**SALE NAME: HUZZA**

**AGREEMENT NO: 30-091787**

**AUCTION:** April 26, 2016 starting at 10:00 a.m., **COUNTY:** King  
South Puget Sound Region Office, Enumclaw, WA

**SALE LOCATION:** Sale located approximately 7 miles southwest of North Bend.

**PRODUCTS SOLD AND SALE AREA:** All timber, except leave trees marked with blue paint or bounded out by yellow leave tree area tags, snags, and down timber existing more than 5 years prior to the day of sale, bounded by the following: white timber sale boundary tags and the 5500 Road in Units #1 and #2 on part(s) of Sections 19 all in Township 23 North, Range 8 East, W.M., containing 85 acres, more or less.

**CERTIFICATION:** This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: BV-SFIS-US09000572)

**ESTIMATED SALE VOLUMES AND QUALITY:**

Species	Avg DBH	Ring Count	Total MBF	MBF by Grade								
				1P	2P	3P	SM	1S	2S	3S	4S	UT
Douglas fir	15.1	4	1,133						347	505	261	20
Hemlock	10.8	5	493						38	298	157	
Silver fir	16.6		90						33	38	19	
Red alder	9.9		38								34	4
Cottonwood	15.6		12								12	
Red cedar	12.7		5								5	
Sale Total			1,771									

**MINIMUM BID:** \$326,000.00 **BID METHOD:** Sealed Bids

**PERFORMANCE SECURITY:** \$60,000.00 **SALE TYPE:** Lump Sum

**EXPIRATION DATE:** October 31, 2018 **ALLOCATION:** Export Restricted

**BID DEPOSIT:** \$32,600.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

**HARVEST METHOD:** Cable and shovel logging equipment, with shovel logging equipment limited to sustained slopes that are 40 percent and less. Rubber tired and tracked skidders will not be allowed. Yarding may be restricted if rutting becomes excessive, per clause H-017.

Falling, yarding and timber haul will not be permitted from November 1st to April 30th, nor on weekends or state recognized holidays, unless authority to do so is granted, in writing, by the Contract Administrator. If permission is granted to operate from November 1st to April 30th, the purchaser shall be required to operate under a Winter Operating Plan to include further protection of water, soil, roads and other forest assets at the Purchaser's expense. Preventive measures required in the Winter Operating Plan must be put in place prior to commencing any winter operations.

**ROADS:** 13.30 stations of optional reconstruction. 19.61 stations of required decommissioning. 345.35 stations of required post-haul maintenance. 108.85 stations of required pre-haul maintenance. Purchaser maintenance on the 5500, 5510, 5520 and 5550 Roads.

## TIMBER NOTICE OF SALE

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Designated maintenance on all other roads used. Rock for this proposal can be obtained from the state owned Rattlesnake and 5550 Rock Pits. Borrow material only may be obtained from the Esker Pit.

Operation of road construction equipment will not be permitted from November 1st to April 30th, nor on weekends or state recognized holidays, unless authority to do so is granted, in writing, by the Contract Administrator. If permission is granted to operate from November 1st to April 30th, the purchaser shall be required to operate under a Winter Operating Plan to include further protection of water, soil, roads and other forest assets at the Purchaser's expense. Preventive measures required in the Winter Operating Plan must be put in place prior to commencing any winter operations.

In addition to the above restriction, operation of equipment will not be permitted on the 5510 Road from September 1st to May 31st.

### **ACREAGE DETERMINATION**

**CRUISE METHOD:** Acreage was determined by traversing boundaries by GPS. Traverse GPS files are available upon request by emailing [rachel.mason@dnr.wa.gov](mailto:rachel.mason@dnr.wa.gov). See cruise narrative for cruise method.

**FEES:** \$31,435.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

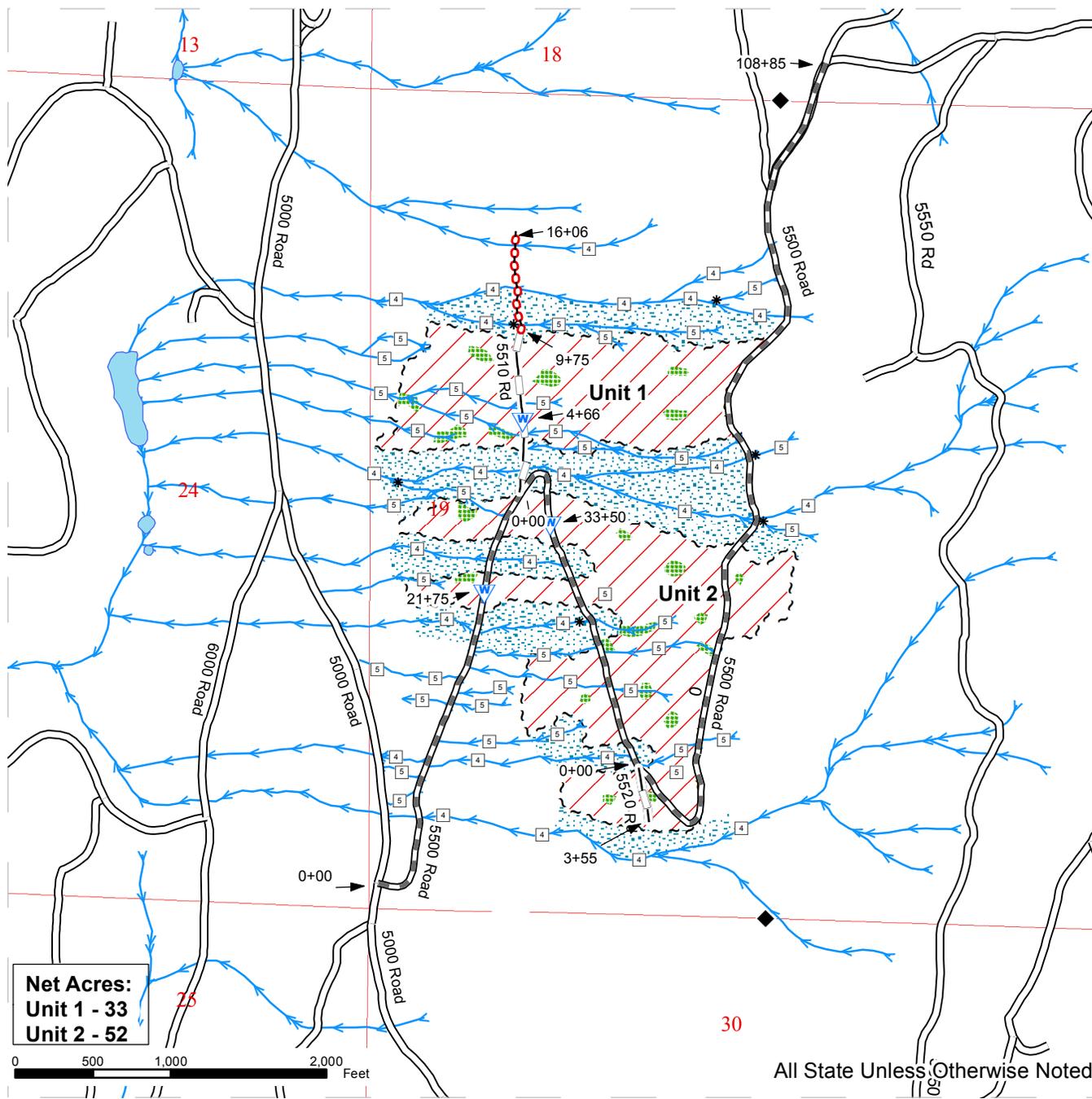
**SPECIAL REMARKS:** Purchaser shall cut vine maple and sever from the stump in the harvest area. Stumps will be 12 inches or less in height.

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 Paul Footen at (425) 736-1708.

# TIMBER SALE MAP

**SALE NAME:** Huzza  
**AGREEMENT#:** 30-091787  
**TOWNSHIP(S):** T23NR08E  
**TRUST(S):** Common School Indemnity (3)

**REGION:** South Puget Sound  
**COUNTY(S):** King  
**ELEVATION RGE:** 1763-2590 ft.

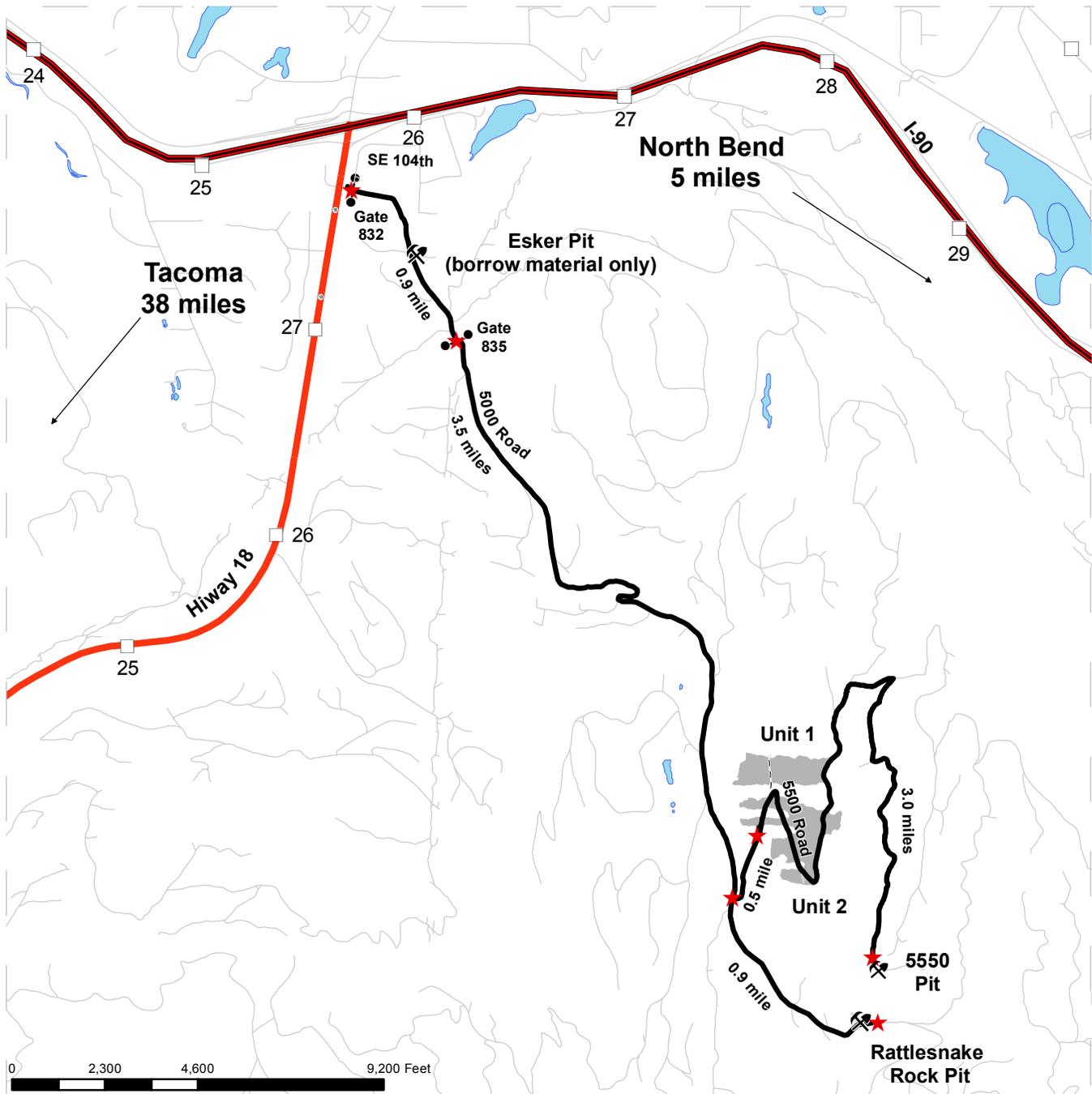


	Public Land Survey Sections		Existing Roads		Open Water
	Variable Retention Harvest		Required Decommissioning		Streams
	Riparian Management Zone		Optional Reconstruction		Stream Type
	Yellow Leave Tree Area Tags		Required Pre-Haul Maintenance		Stream Type Break
	White Timber Sale Boundary Tags				Monumented Corners
					Waste Area

# DRIVING MAP

**SALE NAME:** Huzza  
**AGREEMENT#:** 30-091787  
**TOWNSHIP(S):** 23NR08E  
**TRUST(S):** Common School Indemnity (3)

**REGION:** South Puget Sound  
**COUNTY(S):** King  
**ELEVATION RGE:** 1763-2590 ft.



- Open Water
- Existing Rock Pits
- Gate (Master 786)
- Haul Route
- Distance Indicator
- Milepost Marker

Traveling east on Highway 18 turn right onto S.E. 104th St. (right before I-90 junction) go straight 300 ft to gate 832 (786 lock) to the 5000 Road (Rattlesnake Mainline). Take 5000 Road approx. 0.9 mile to gate 835 (786 lock). Continue on 5000 Road for 3.5 miles to the 5500 Road. Take left on 5500 Road and travel approx. 0.5 mile and you will reach the south boundary of Unit 1.



**STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES**

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

**Export Restricted Lump Sum AGREEMENT NO. 30-091787**

**SALE NAME: HUZZA**

**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 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-011 Right to Remove Forest Products and Contract Area

Purchaser was the successful bidder on April 26, 2016 and the sale was confirmed on \_\_\_\_\_. The State, as owner, agrees to sell to Purchaser, and Purchaser agrees to purchase as much of the following forest products as can be cut and removed during the term of this contract: All timber, except leave trees marked with blue paint or bounded out by yellow leave tree area tags, snags, and down timber existing more than 5 years prior to the day of sale, bounded by the following: white timber sale boundary tags and the 5500 Road in Units #1 and #2, located on approximately 85 acres on part(s) of Section 19 in Township 23 North, Range 8 East W.M. in King County(s) as designated on the sale area and as shown on the attached timber sale map.

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-031 Contract Term

Purchaser shall complete all work required by this contract prior to October 31, 2018.

**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-051 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 total contract price.

For the second extension, not to exceed 1 year, payment of at least 90 percent of the total contract price.

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 total contract price.

All payments, except the initial deposit, will be deducted from the total contract price to determine the unpaid portion of the contract.

- e. Payment of \$652.00 per acre per annum for the acres on which an operating release has not been issued within the harvest area.
- 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. 812521 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, PRT-812521 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-091 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, the added forest products become a part of this contract. The State shall determine the volume added and shall

calculate the increase to the total contract price using the rates set forth in clause G-101, G-102, or G-103. If the sale area is reduced, the State shall determine the volume to be reduced. The State shall calculate the reduction to the total contract price using the rates set forth in clause G-101, G-102, or G-103.

**G-101 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 the Scribner log scale volume, as defined by the Northwest Log Rules Advisory Group, shall be determined by the Contract Administrator. Added forest products shall be paid for at the following contract payment rates per Mbf Scribner log scale.

Contract Item	Appraised Price	Overbid Factor	Price	Fees	Contract Payment Rate
Cottonwood	\$74.47	0	\$0.00	\$9.00	\$9.00
Douglas fir	\$194.23	0	\$0.00	\$9.00	\$9.00
Hemlock	\$163.57	0	\$0.00	\$9.00	\$9.00
Red alder	\$202.92	0	\$0.00	\$9.00	\$9.00
Red cedar	\$299.64	0	\$0.00	\$9.00	\$9.00
Silver fir	\$168.85	0	\$0.00	\$9.00	\$9.00
Other	\$201.77	0	\$0.00	\$9.00	\$9.00

**G-106 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 State's 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 rate set forth in clause G-101, G-102 or G-103.

**G-111 Title and Risk of Loss**

Title to the forest products under this contract passes to the Purchaser after they are removed from the sale area, if adequate advance payment or payment security has been provided to the State under this contract. Purchaser bears all risk of loss of, or damage to, and has an insurable interest in, the forest products described in this contract from the time the sale is confirmed under RCW 79.15.120. Breach of this contract shall have no effect on this provision.

**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: BV-SFIS-US09000572.

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.

Road is defined as the road bed, including but not limited to its component parts, such as 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. 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.

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 Purchaser's 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 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 post office address:

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 Operation

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; on the 5000, 5500, 5510, 5520, and 5550 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 5000 Road, unless authority is granted in writing by the Contract Administrator.

## G-380 Road Easement and Road Use Permit Requirements

Purchaser agrees to comply with the terms and conditions of the attached:

Easement #55-000026, entered into between the State of Washington, Department of Natural Resources and Weyerhaeuser Company, dated March 7, 1976.

## 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:

Easement, including the terms and provisions thereof,  
For: Road  
In Favor of: The Trust for Public Land

Disclosed by Application No.: 50-072383  
Granted: 12/15/1993  
Expires: Indefinite

Easement, including the terms and provisions thereof,  
For: Road  
In Favor of: US Forest Service  
Disclosed by Application No.: 50-084937  
Granted: 5/24/1962  
Expires: Indefinite

Easement, including the terms and provisions thereof,  
For: Road  
In Favor of: WA State Patrol  
Disclosed by Application No.: 50-084938  
Granted: 1/1/1964  
Expires: Indefinite

Easement, including the terms and provisions thereof,  
For: Road  
In Favor of: The Pacific Telephone & Telegraph Company  
Disclosed by Application No.: 50-084939  
Granted: 7/21/1955  
Expires: Indefinite

Easement, including the terms and provisions thereof,  
For: Road  
In Favor of: Weyerhaeuser Company  
Disclosed by Application No.: 50-084947  
Granted: 10/20/1999  
Expires: Indefinite

Easement, including the terms and provisions thereof,  
For: Road  
In Favor of: The Trust for Public Land  
Disclosed by Application No.: 50-090374  
Granted: 12/15/1993  
Expires: Indefinite

Lease, including the terms and provisions thereof,  
For: Communications Site  
In Favor of: Spok, Inc.  
Disclosed by Application No.: 52-085353  
Granted: 2/16/2010  
Expires: 2/15/2016

Lease, including the terms and provisions thereof,  
For: Communications Site  
In Favor of: Muckleshoot Indian Tribe  
Disclosed by Application No.: 52-A73939  
Granted: 7/1/2010  
Expires: 6/30/2020

Covenant, including the terms and provisions thereof,  
For: Agreement  
In Favor of: King County  
Disclosed by Application No.: 54-084960  
Granted: 5/19/2009  
Expires: Indefinite

Easement, including the terms and provisions thereof,  
For: Agreement  
In Favor of: King County  
Disclosed by Application No.: 54-084961  
Granted: 5/18/2009  
Expires: Indefinite

Lease, including the terms and provisions thereof,  
For: Special Use  
In Favor of: WA State Department of Fish & Wildlife  
Disclosed by Application No.: 60-WS0622  
Granted: 12/10/2012  
Expires: 12/31/2016

Lease, including the terms and provisions thereof,  
For: Special Use  
In Favor of: Upper Snoqualmie Elk Management Group  
Disclosed by Application No.: 60-WS0542  
Granted: 4/15/2011  
Expires: 12/31/2015

Section P: Payments and Securities

P-011 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 Clause P-020, 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-020 Payment for Forest Products

Purchaser agrees to pay the total, lump sum contract price of \$47,374.00. The total contract price consists of a \$0.00 contract bid price plus \$47,374.00 in fees. Fees collected shall be retained by the state unless the contract is adjusted via the G-066 clause. Purchaser shall be liable for the entire purchase price, and will not be entitled to any refunds or offsets unless expressly stated in this contract.

THE PURCHASE PRICE SHALL NOT BE AFFECTED BY ANY FACTORS, INCLUDING: the amount of forest products actually present within the contract area, the actual acreage covered by the contract area, the amount or volume of forest products actually cut or removed by purchaser, whether it becomes physically impossible or uneconomic to remove the forest products, and whether the subject forest products have been lost or damaged by fire or any other cause. The only situations Purchaser may not be liable for the full purchase price are governed by clause G-066, concerning governmental regulatory actions taken during the term of the contract.

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-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 \$60,000.00. 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 H: Harvesting Operations

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 area, 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 'Trespass and 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-040 Purchaser Harvest Plan

Purchaser shall, as part of the plan of operations, prepare an acceptable harvest plan for harvest operations. The plan shall address the timing and logistics of operations, 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-051 Branding and Painting

Purchaser shall provide a State of Washington registered log brand, acceptable to the State, unless the State agrees to furnish the brand. 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-120 Harvesting Equipment

Forest products sold under this contract shall be yarded by cable and shovel logging equipment, with shovel logging equipment limited to sustained slopes that are 40 percent and less. Rubber tired and tracked skidders will not be allowed unless authority to use other equipment is granted in writing by the State.

H-125 Log Suspension Requirements

Lead-end suspension is required for all yarding activities.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

- A) Any existing downed trees or logs yarded to the landing will be dispersed back into the harvest unit, except for down timber existing fewer than 5 years prior to day of sale.
- B) Equipment limitation zones are required within 30 feet of Type 5 streams.
- C) Crossings of Type 5 streams must be 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. Slash may be used in dry stream channels. All material 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) To facilitate proper reforestation in areas of high slash concentrations, Purchaser shall, in concurrence with ground based yarding, clear plantable spots at 10 foot by 10 foot spacing.
- F) Purchaser shall pull vine maple and leave roots exposed and detached from the soil in the ground based harvest area. Purchaser shall cut vine maple and sever from the stump in the cable harvest area.
- G) 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 replaced with a suitable tree of similar size and species as approved by the Contract Administrator.
- H) Within shovel logging areas, and when yarding and loading operations are occurring simultaneously, an additional shovel will be required for loading to avoid extra trips to the landing.
- I) Falling, yarding and timber haul will not be permitted from November 1st to April 30th, nor on weekends or state recognized holidays, unless authority to do so is granted, in writing, by the Contract Administrator. If permission is granted to operate from November 1st to April 30th, the purchaser shall be required to operate under a Winter Operating Plan to include further protection of water, soil, roads and other forest assets at the Purchaser's expense. Preventive measures required in the Winter Operating Plan must be put in place prior to commencing any winter operations.

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

#### H-141 Additional Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

- A) 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.

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

#### H-190 Completion of Settings

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

#### H-220 Protection of Residual or Adjacent Trees

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

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

Road construction and associated work provisions of the Road Plan for this sale, dated 3/1/2015 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 5500, 5510, 5520, and 5550 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-060. 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 State current Equipment Rate Schedule on file at the region and Olympia offices. The State shall reimburse Purchaser for said costs within 30 days of receipt and approval of the statement.

**C-140 Water Bars**

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

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

An Emergency Response Plan (ERP) shall be provided to the Contract Administrator containing but not limited to, valid contact numbers and procedures for medical emergencies, fire, hazardous spills, forest practice violations and any unauthorized or unlawful activity on or in the vicinity of the sale area. The Contract Administrator and the State shall be promptly notified whenever an incident occurs requiring an emergency response.

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

**S-010 Fire Hazardous Conditions**

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

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

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

**S-030 Landing Debris Clean Up**

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

**S-050 Cessation of Operations for Low Humidity**

During the "closed season", 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 any stream as a result of operations under this contract and which is identified by the Contract Administrator shall be removed and deposited in a stable position. Removal of slash or debris shall be accomplished in a manner that avoids damage to the natural stream bed and bank vegetation.

**S-110 Resource Protection**

No equipment may operate within the leave tree areas unless authority is granted in writing by the Contract Administrator.

**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.

**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 4 to 6 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, the Purchaser is responsible for notifying the following:

Appropriate Department of Ecology regional office (contact information below).

DNR Contract Administrator

ECY - Northwest Region:

1-425-649-7000

(Island, King, Kitsap, San Juan, Skagit, Snohomish, and Whatcom counties)

ECY - Southwest Region:

1-360-407-6300

(Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, and Wahkiakum counties)

ECY - Central Region:

1-509-575-2490

(Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, and Yakima counties)

ECY - Eastern Region:

1-509-329-3400

(Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, and Whitman counties)

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-013 Liquidated Damages or Failure to Perform

The following clauses provide for payments by Purchaser to the State for breaches of the terms of this contract other than failure to perform. These payments are agreed to as liquidated damages and not as penalties. They are reasonable estimates of anticipated harm to the State, which will be 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.

Clause P-020 governs Purchaser's liability in the event Purchaser fails to perform any of the contract requirements other than the below liquidated damage clauses without written approval by the State. Purchaser's failure to pay for all or part of the forest products sold in this contract prior to expiration of the contract term results in substantial injury to the State. Therefore, Purchaser agrees to pay the State the full lump sum contract price in P-020 in the event of failure to perform.

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 the harvest area.

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

STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_  
Purchaser

\_\_\_\_\_  
Art Tasker  
South Puget Sound Region Manager

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Address:

CORPORATE ACKNOWLEDGEMENT

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 \_\_\_\_\_



## WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

### FOREST EXCISE TAX ROAD SUMMARY SHEET

**Region:**

**Timber Sale Name:**

**Application Number:**

#### EXCISE TAX APPLICABLE ACTIVITIES

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

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

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

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

**Pre-Haul Maintenance:** **linear feet**  
*Existing road to receive maintenance work (specifically required by the contract) prior to haul*

#### EXCISE TAX EXEMPT ACTIVITIES

**Temporary Optional Construction:** **linear feet**  
*Optional roads to be constructed and then abandoned*

**Temporary Optional Reconstruction:** **linear feet**  
*Optional roads to be reconstructed and then abandoned*

**New Abandonment:** **linear feet**  
*Abandonment of roads constructed or reconstructed under the contract*

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

(Revised 6/13)

## PRE-CRUISE NARRATIVE

Sale Name: <b>Huzza</b>	Region: <b>South Puget Sound</b>
Agreement #: <b>30-091787</b>	District: <b>Snoqualmie</b>
Contact Forester: <b>Paul Footen</b>	Phone/ Location: <b>(425)-736-1708</b> Ext: <b>/</b>
Alternate Contact: <b>Tyler Traweek</b>	Phone/ Location: <b>(253)-350-4452</b> Ext: <b>/</b>

Type of Sale (lump sum, mbf scale, tonnage scale or contract harvest): **Lump Sum**  
 Required or Optional removal of utility as pulp: **Optional**  
 Evaluated for RFRS Implementation?: **N/A**  
 Percentage cable (specify downhill vs uphill): **30%**  
 Percentage ground based: **70%**  
 Species Onsite: RC, DF, WH, RA, BC, BLM, NF, SF, SS,  Other:(Please List)

### UNIT ACREAGES AND METHOD OF DETERMINATION:

Unit #	Harvest R/W or RMZ WMZ	Legal Description Sec/Twp/Rng	Grant	Gross Proposal Acres	Deductions from Gross Acres (No harvest acres)				Net Harvest Acres	Acreage Determination  (List method and error of closure if applicable)
					RMZ/WMZ Acres	Leave Tree Acres	Existing Road Acres	Other Acres (describe)		
Unit 1		Sec 19/ T 23N/ R 08 E	03	34.9		1.6			33.3	GPS
Unit 2		Sec / T N/R E	03	54.0		2.1			51.9	GPS
<b>TOTAL ACRES</b>				<b>88.9</b>		<b>3.7</b>			<b>85.2</b>	

### HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Mark leave, take, etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
1	VRH, Individual leave trees painted with blue, leave tree groups tagged with yellow leave tree area tags and pink flashers	None	7 groups 0.1 - 0.3 acres (224 total), plus 62 individual
2	Same	None	15 groups 0.1 - 0.3 acres (334 total), plus 108 individual

### OTHER PRE-CRUISE INFORMATION:

Unit #	Estimated Volume	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	See cruise	Traveling east on Highway 18 turn right onto S.E. 104th St. (right before I-90 junction) go 300 ft to gate 832 (786 lock) to Rattlesnake Mainline. Take Rattlesnake Mainline approx. 0.9 miles to gate 835 (786 lock). Continue on Rattlesnake Mainline for 3.5 miles to the Zig Zag road. Take left on Zig Zag road and travel approx. 0.5 miles	

		and you will reach the South boundary of Unit 1.	
2	See cruise	Traveling east on Highway 18 turn right onto S.E. 104th St. (right before I-90 junction) go 300 ft to gate 832 (786 lock) to Rattlesnake Mainline. Take Rattlesnake Mainline approx. 0.9 miles to gate 835 (786 lock). Continue on Rattlesnake Mainline for 3.5 miles to the Zig Zag road. Take left on Zig Zag road and travel approx. 0.4 miles and you will reach the NW section of Unit 2 boundary.	

**REMARKS:**

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<b>Prepared By:</b> Paul Footen <b>Date:</b> 2/16/2015	<b>Title:</b> NRS 1	<b>CC:</b>
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*Revised 2/23/2007 (PSLD)*

# Cruise Narrative

<b>Sale Name:</b> Huzza	<b>Region:</b> South Puget Sound
<b>Agree. #:</b> 30-091787	<b>District:</b> Rainier
<b>Lead cruiser:</b> John Piety	<b>Completion date:</b> 3-9-2015
<b>Other cruisers on sale:</b> None	

**Unit acreage specifications:**

Unit #	Cruised acres	Cruised acres agree with sale acres? Yes/No	If acres do not agree explain why.
1	33.3	Yes	
2	51.9	Yes	
Total	85.2		

**Unit cruise specifications:**

Unit #	Sample type (VP, FP, ITS,100%)	Expansion factor (BAF, full/half)	Sighting height (4.5 ft, 16 ft.)	Grid size (Plot spacing or % of area)	Plot ratio (cruise:count)	Total number of plots
1	VP	40.0 BAF	4.5	240' X240'	1:1	26
2	VP	46.9 BAF	4.5	240' X240'	1:1	35

**Sale/Cruise Description:**

<b>Minor species cruise intensity:</b>	<b>100% up to 5 trees per species</b>
<b>Minimum cruise spec:</b>	<p>HA - Logs meeting the following criteria: Surface characteristics for a high quality A sort will have sound tight knots not to exceed 1 1/2" in diameter, numbering not more than an average of one per foot of log length. May include logs with not more than two larger knots. Knots and knot indicators 1/2" in diameter and smaller shall not be a determining factor. Logs will have a growth ring count of 6 or more rings per inch in the outer third top end of the log. (High Quality sort. Grades SM, 2S, 3S. Lengths 16ft-40ft, 2ft multiples min TDIB 8". Max butt 27")</p> <p>HB - Logs meeting the following criteria: Surface characteristics for an Intermediate B sort will have sound tight knots not to exceed 1 1/2" in diameter. May include logs with not more than two larger knots up to 2 1/2" in diameter. Logs will have a growth ring count of 6 or more rings per inch in the outer third to end of the log. (Intermediate sort. Grades 2S, 3S. Lengths 16ft-40ft, 2ft multiples min TDIB 8". Max butt 27").</p> <p>D - Domestic quality logs that do not meet high quality or intermediate definitions. (Domestic sort. Grades 2S, 3S, 4S and utility. Lengths 16ft-40ft, min TDIB 2in.)</p> <p>O- Logs exceeding 27" on the large end. (Oversize sort. Grade 2S. Lengths</p>

	16ft-40ft, 2ft multiples butt diameter min dia. 27 in. +) R - Logs meeting the following criteria: Surface characteristics for a rough log sort will not meet the requirements for a domestic 2S, but still be in limitations for a domestic 3S. Meaning logs will contain excessive knots in excess of 2 1/2" and not exceeding 3" with a recovery of less than 65% of the net scale and greater than 33% of the gross scale. (Rough oversize sort. Grade 3S. Lengths 16ft-40ft, 2ft multiples TDIB 12"+)			
<b>Avg ring count by sp:</b>	<b>DF =</b>	4	<b>WH =</b>	5
<b>Leave/take tree description:</b>	Leave trees are banded with blue paint and tagged out with yellow leave tree tags.			
<b>Other conditions</b>				

**Field observations:**

These are young conifer stands. No high quality seen. The defect seen include mistletoe, sinuosity and sweep, butt rot, lots of bear damage and bear killed snags.
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**Grants:**

**Prepared by:**

**John Piety**

**Title:**

**Cruiser**

**CC:**

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TC PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																						
T23N R08E S19 Ty0001		33.30		Project: <b>HUZZA</b>										Page <b>1</b>										
T23N R08E S19 Ty0002		51.90		Acres <b>85.20</b>										Date <b>3/3/2016</b>										
														Time <b>2:33:34PM</b>										
Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre			
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf				
									2-4	5-7	8-11	12+	12-20	21-30	31-35	36-99								
DF	D	2S		30	7.0	4,380	4,074	347						100	6	3	91	39	13	205	1.48	19.9		
DF	D	3S		45	4.4	6,225	5,950	507						100	2	8	91	38	9	110	0.82	54.0		
DF	D	4S		23	.4	3,071	3,060	261						100	16	34	6	45	29	5	32	0.38	95.5	
DF	D	UT		2		231	231	20	28					72	34	38		28	29	3	17	0.25	13.9	
<b>DF Totals</b>				64	4.3	13,907	13,315	1,134	0	23	45	32	4	11	6	79	33	7	73	0.66	183.4			
WH	D	2S		7	18.6	553	450	38						100			100	40	14	262	2.02	1.7		
WH	D	3S		61	5.4	3,688	3,490	297						100	1	5	95	39	9	116	0.89	30.0		
WH	D	4S		32	5.1	1,946	1,847	157						100	20	27		52	28	5	31	0.35	59.8	
WH	D	UT																26	2		0.11	74.3		
<b>WH Totals</b>				28	6.5	6,187	5,787	493		32	60	8	6	9	3	82	29	5	35	0.41	165.8			
SF	D	2S		36	27.7	535	386	33						100			100	40	12	151	1.39	2.6		
SF	D	3S		42	5.6	475	448	38						100			100	40	9	113	0.73	4.0		
SF	D	4S		22	2.7	229	223	19						100	11	32		57	29	5	34	0.38	6.5	
SF	D	UT																16	2		0.11	.9		
<b>SF Totals</b>				5	14.6	1,238	1,057	90		21	42	37	2	7		91	34	7	76	0.71	13.9			
RC	D	4S		100		54	54	5									58	42	35	5	34	0.52	1.6	
<b>RC Totals</b>				0		54	54	5									58	42	35	5	34	0.52	1.6	
RA	D	4S		88		391	391	33						100			53	23	24	30	5	32	0.34	12.2
RA	D	UT		12		52	52	4						100				100	40	4	30	0.22	1.7	
<b>RA Totals</b>				2		442	442	38	12	88					47	21	33	31	5	32	0.32	14.0		
CW	D	2S		92	2.8	128	125	11						100			100	40	9	117	0.85	1.1		
CW	D	4S		8		11	11	1						100			100	28	5	30	0.40	.4		
CW	D	UT																24	2		0.19	.7		
<b>CW Totals</b>				1	2.6	139	135	12		8	92				8		92	33	6	63	0.62	2.1		
<b>Totals</b>					5.4	21,968	20,791	1,771	1	27	48	24	5	11	5	79	31	6	55	0.55	380.8			

TC PSTATS		PROJECT STATISTICS							PAGE	1	
		PROJECT HUZZA							DATE	3/3/2016	
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt	
23N	08E	19	HUZZA	0001		85.20	61	322	S	W	
23N	08E	19	HUZZA	0002							
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES				
TOTAL			61	322	5.3						
CRUISE			31	159	5.1	21,581	.7				
DBH COUNT											
REFOREST											
COUNT			30	162	5.4						
BLANKS											
100 %											
STAND SUMMARY											
	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC	
DOUG FIR	100	109.9	15.1	56	35.0	135.9	13,907	13,315	3,979	3,979	
WHEMLOCK	42	120.2	10.8	42	23.3	76.8	6,187	5,787	1,958	1,958	
PS FIR	6	6.5	16.6	71	2.4	9.8	1,238	1,057	332	331	
R ALDER	7	14.0	9.9	34	2.4	7.5	442	442	138	138	
WR CEDAR	2	1.6	12.7	36	0.4	1.4	54	54	29	29	
COTWOOD	2	1.1	15.6	60	0.4	1.4	139	135	43	43	
<b>TOTAL</b>	<i>159</i>	<i>253.3</i>	<i>13.0</i>	<i>48</i>	<i>64.6</i>	<i>232.8</i>	<i>21,968</i>	<i>20,791</i>	<i>6,480</i>	<i>6,479</i>	
CONFIDENCE LIMITS OF THE SAMPLE											
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR											
CL	68.1	COEFF	SAMPLE TREES - BF			# OF TREES REQ.		INF. POP.			
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		51.4	5.2	157	165	174					
WHEMLOCK		85.0	13.1	94	108	122					
PS FIR		28.1	12.5	146	167	187					
R ALDER		14.9	6.0	31	33	35					
WR CEDAR		20.2	18.9	28	35	42					
COTWOOD		53.6	50.2	72	145	218					
<b>TOTAL</b>		<i>63.5</i>	<i>5.0</i>	<i>135</i>	<i>142</i>	<i>150</i>	<i>161</i>	<i>82</i>	<i>40</i>		
CL	68.1	COEFF	TREES/ACRE			# OF PLOTS REQ.		INF. POP.			
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		92.8	11.9	97	110	123					
WHEMLOCK		139.1	17.8	99	120	142					
PS FIR		269.8	34.5	4	7	9					
R ALDER		355.1	45.4	8	14	20					
WR CEDAR		571.2	73.1	0	2	3					
COTWOOD		578.3	74.0	0	1	2					
<b>TOTAL</b>		<i>72.6</i>	<i>9.3</i>	<i>230</i>	<i>253</i>	<i>277</i>	<i>210</i>	<i>107</i>	<i>53</i>		
CL	68.1	COEFF	BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.			
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		66.1	8.5	124	136	147					
WHEMLOCK		110.8	14.2	66	77	88					
PS FIR		253.9	32.5	7	10	13					
R ALDER		347.3	44.4	4	8	11					
WR CEDAR		554.1	70.9	0	1	2					
COTWOOD		554.1	70.9	0	1	2					
<b>TOTAL</b>		<i>40.0</i>	<i>5.1</i>	<i>221</i>	<i>233</i>	<i>245</i>	<i>64</i>	<i>33</i>	<i>16</i>		
CL	68.1	COEFF	NET BF/ACRE			# OF PLOTS REQ.		INF. POP.			
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		65.3	8.4	12,202	13,315	14,428					
WHEMLOCK		117.9	15.1	4,914	5,787	6,659					
PS FIR		276.3	35.3	684	1,057	1,431					

TC PSTATS		<b>PROJECT STATISTICS</b>							PAGE	<b>2</b>
		<b>PROJECT HUZZA</b>							DATE	3/3/2016
<b>TWP</b>	<b>RGE</b>	<b>SC</b>	<b>TRACT</b>	<b>TYPE</b>	<b>ACRES</b>	<b>PLOTS</b>	<b>TREES</b>	<b>CuFt</b>	<b>BdFt</b>	
23N	08E	19	HUZZA	0001	85.20	61	322	S	W	
23N	08E	19	HUZZA	0002						
CL	68.1		COEFF	<b>NET BF/ACRE</b>			<b># OF PLOTS REQ.</b>		<b>INF. POP.</b>	
SD:	1.00		VAR.	S.E.%	LOW	AVG	HIGH	5	7	10
R ALDER			355.0	45.4	241	442	643			
WR CEDAR			554.4	70.9	16	54	92			
COTWOOD			548.4	70.2	40	135	230			
<b>TOTAL</b>			<i>41.2</i>	<i>5.3</i>	<i>19,694</i>	<i>20,791</i>	<i>21,887</i>	<i>68</i>	<i>35</i>	<i>17</i>

T	TSPCSTGR	Species, Sort Grade - Board Foot Volumes (Type)										Page	1									
												Date	3/3/2016									
												Time	2:33:34PM									
T23N R08E S19 T0001										T23N R08E S19 T0001												
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt													
23N	08E	19	HUZZA	0001	33.30	26	63	S	W													
Spp	S	So	Gr	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre		
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln	Dia	Bd		CF/Lf	
								2-4	5-7	8-11	12+	12-20	21-30	31-35	36-99	Ft	In	Ft	Lf			
DF	DM	2S		40	8.0	5,450	5,015									40	13	224	1.54		22.4	
DF	DM	3S		38	4.5	5,064	4,834			100						39	9	115	0.85		41.9	
DF	DM	4S		18	.0	2,239	2,239		100			12	27	8	53	31	5	35	0.43		64.5	
DF	DM	UT		4		427	427			100		48	52			20	5	39	0.53		11.0	
<b>DF</b>	<b>Totals</b>			61	5.0	13,180	12,515			18	39	43	4	7	1	88	34	8	90	0.79		139.8
WH	DM	2S		16	18.6	1,415	1,152									40	14	262	2.02		4.4	
WH	DM	3S		61	3.8	4,472	4,301			100				2		98	39	9	124	0.90		34.8
WH	DM	4S		23	7.3	1,743	1,615		100			38	6		56	28	5	27	0.36		59.8	
WH	DM	UT														27	2		0.14		25.5	
<b>WH</b>	<b>Totals</b>			34	7.4	7,630	7,068			23	61	16	9	2		89	31	6	57	0.58		124.5
SF	DM	2S		81	35.0	548	356									40	12	130	1.47		2.7	
SF	DM	4S		19		82	82		100							26	5	30	0.46		2.7	
<b>SF</b>	<b>Totals</b>			2	30.4	630	438			19		81				33	9	80	1.08		5.5	
RA	DM	4S		59		194	194			100			45		55	31	5	35	0.32		5.6	
RA	DM	UT		41		132	132		100						100	40	4	30	0.22		4.4	
<b>RA</b>	<b>Totals</b>			2		327	327		40	60			27		73	35	5	33	0.27		10.0	
RC	DM	4S		100		58	58			100					100	40	5	40	0.60		1.5	
<b>RC</b>	<b>Totals</b>			0		58	58			100					100	40	5	40	0.60		1.5	
CW	DM	2S		85	5.6	164	155			100					100	40	11	170	1.12		.9	
CW	DM	4S		15		27	27		100						100	28	5	30	0.40		.9	
<b>CW</b>	<b>Totals</b>			1	4.8	191	182			15	85				15	85	34	8	100	0.82		1.8
<b>Type Totals</b>					6.5	22,016	20,589			1	20	45	34	5	6	1	88	33	7	73	0.69	283.1

TC TSTATS		<b>STATISTICS</b>							PAGE	1	
		<b>PROJECT HUZZA</b>							DATE	3/3/2016	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
23N	08E	19	HUZZA	0001	33.30	26	140	S	W		
				TREES	ESTIMATED		PERCENT				
				PER PLOT	TOTAL		SAMPLE				
		PLOTS	TREES		TREES		TREES				
TOTAL		26	140	5.4							
CRUISE		13	62	4.8	5,514		1.1				
DBH COUNT											
REFOREST											
COUNT		13	77	5.9							
BLANKS											
100 %											
<b>STAND SUMMARY</b>											
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET	
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC	
DOUG FIR	37	72.4	17.4	68	28.7	120.0	13,180	12,515	3,754	3,754	
WHEMLOCK	19	78.1	13.8	50	21.9	81.5	7,630	7,068	2,273	2,273	
PS FIR	1	2.7	20.3	67	1.4	6.2	630	438	195	194	
R ALDER	3	10.0	9.2	45	1.5	4.6	327	327	93	93	
WR CEDAR	1	1.5	13.9	42	0.4	1.5	58	58	35	35	
COTWOOD	1	.9	17.6	70	0.4	1.5	191	182	51	51	
<b>TOTAL</b>	<b>62</b>	<b>165.6</b>	<b>15.4</b>	<b>58</b>	<b>54.8</b>	<b>215.4</b>	<b>22,016</b>	<b>20,589</b>	<b>6,401</b>	<b>6,400</b>	
CONFIDENCE LIMITS OF THE SAMPLE											
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR											
CL: 68.1 %	COEFF	<b>SAMPLE TREES - BF</b>					<b># OF TREES REQ.</b>		<b>INF. POP.</b>		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10			
DOUG FIR	44.6	7.3	185	199	214						
WHEMLOCK	72.8	17.2	119	144	169						
PS FIR											
R ALDER	17.3	12.0	29	33	37						
WR CEDAR											
COTWOOD											
<b>TOTAL</b>	<b>58.0</b>	<b>7.4</b>	<b>159</b>	<b>171</b>	<b>184</b>	<b>134</b>	<b>69</b>	<b>34</b>			
CL: 68.1 %	COEFF	<b>TREES/ACRE</b>					<b># OF PLOTS REQ.</b>		<b>INF. POP.</b>		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10			
DOUG FIR	62.1	12.4	63	72	81						
WHEMLOCK	90.4	18.1	64	78	92						
PS FIR	239.2	47.8	1	3	4						
R ALDER	509.9	102.0		10	20						
WR CEDAR	509.9	102.0		1	3						
COTWOOD	509.9	102.0		1	2						
<b>TOTAL</b>	<b>43.6</b>	<b>8.7</b>	<b>151</b>	<b>166</b>	<b>180</b>	<b>79</b>	<b>40</b>	<b>20</b>			
CL: 68.1 %	COEFF	<b>BASAL AREA/ACRE</b>					<b># OF PLOTS REQ.</b>		<b>INF. POP.</b>		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10			
DOUG FIR	61.1	12.2	105	120	135						
WHEMLOCK	94.6	18.9	66	82	97						
PS FIR	239.2	47.8	3	6	9						
R ALDER	509.9	102.0		5	9						
WR CEDAR	509.9	102.0		2	3						
COTWOOD	509.9	102.0		2	3						
<b>TOTAL</b>	<b>34.9</b>	<b>7.0</b>	<b>200</b>	<b>215</b>	<b>230</b>	<b>51</b>	<b>26</b>	<b>13</b>			
CL: 68.1 %	COEFF	<b>NET BF/ACRE</b>					<b># OF PLOTS REQ.</b>		<b>INF. POP.</b>		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10			
DOUG FIR	62.3	12.5	10,956	12,515	14,074						
WHEMLOCK	101.3	20.3	5,637	7,068	8,500						
PS FIR	239.2	47.8	229	438	648						

TC TSTATS				<b>STATISTICS</b>				PAGE	2	
				<b>PROJECT HUZZA</b>				DATE	3/3/2016	
<b>TWP</b>	<b>RGE</b>	<b>SECT</b>	<b>TRACT</b>	<b>TYPE</b>	<b>ACRES</b>	<b>PLOTS</b>	<b>TREES</b>	<b>CuFt</b>	<b>BdFt</b>	
<b>23N</b>	<b>08E</b>	<b>19</b>	<b>HUZZA</b>	<b>0001</b>	33.30	26	140	S	W	
CL:	68.1 %	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E. %	LOW	AVG	HIGH	5	7	10	
R ALDER		509.9	102.0		327	660				
WR CEDAR		509.9	102.0		58	118				
COTWOOD		509.9	102.0		182	368				
<b>TOTAL</b>		<i>37.0</i>	<i>7.4</i>	<i>19,067</i>	<i>20,589</i>	<i>22,111</i>	<i>57</i>	<i>29</i>	<i>14</i>	

Species, Sort Grade - Board Foot Volumes (Type)											Page 1										
T TSPCSTGR											Date 3/3/2016										
Project: HUZZA											Time 2:33:34PM										
T23N R08E S19 T0002											T23N R08E S19 T0002										
Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt											BdFt										
23N 08E 19 HUZZA 0002 51.90 35 97 S											W										
Spp	S	So	Gr	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre	
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln	Dia	Bd		CF/Lf
								2-4	5-7	8-11	12+	12-20	21-30	31-35	36-99	Ft	In	Ft	Lf		
DF	DM	2S		25	6.0	3,693	3,471	180					100	11	6	83	38	12	189	1.43	18.3
DF	DM	3S		48	4.4	6,970	6,666	346		100			2	11	86	38	9	108	0.80	61.8	
DF	DM	4S		26	.5	3,605	3,586	186	100			17	37	4	41	28	5	31	0.36	115.4	
DF	DM	UT		1		106	106	5	100						100	33	2	7	0.17	15.8	
<b>DF</b>	<b>Totals</b>			66	3.8	14,374	13,829	718	1	26	48	25	4	14	8	74	32	7	65	0.60	211.3
WH	DM	3S		59	6.8	3,185	2,969	154		100				9	91	38	9	110	0.87	26.9	
WH	DM	4S		41	3.9	2,076	1,995	104	100			11	39		50	28	5	33	0.34	59.8	
WH	DM	UT														26	2		0.11	105.6	
<b>WH</b>	<b>Totals</b>			24	5.7	5,262	4,964	258	40	60		4	15	5	75	28	4	26	0.32	192.3	
SF	DM	2S		27	22.9	526	406	21		100					100	40	12	167	1.33	2.4	
SF	DM	3S		51	5.6	780	736	38		100					100	40	9	113	0.73	6.5	
SF	DM	4S		22	3.1	323	313	16	100			13	20		66	30	5	35	0.36	8.9	
SF	DM	UT														16	2		0.11	1.4	
<b>SF</b>	<b>Totals</b>			7	10.7	1,629	1,455	76	22	51	28	3	4		93	34	7	75	0.65	19.3	
RA	DM	4S		100		517	517	27	100				55	29	16	30	5	31	0.34	16.5	
<b>RA</b>	<b>Totals</b>			2		517	517	27	100				55	29	16	30	5	31	0.34	16.5	
CW	DM	2S		100		105	105	5	100						100	40	8	90	0.71	1.2	
CW	DM	UT														24	2		0.19	1.2	
<b>CW</b>	<b>Totals</b>			1		105	105	5	100						100	32	5	45	0.51	2.3	
RC	DM	4S		100		51	51	3	100						100	32	5	30	0.46	1.7	
<b>RC</b>	<b>Totals</b>			0		51	51	3	100						100	32	5	30	0.46	1.7	
<b>Type Totals</b>					4.6	21,938	20,920	1,086	1	31	50	19	4	14	8	74	30	5	47	0.48	443.4

TC TSTATS				STATISTICS				PAGE	1	
PROJECT				HUZZA				DATE	3/3/2016	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
23N	08E	19	HUZZA	0002	51.90	35	182	S	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
				TREES	TREES	TREES				
TOTAL	35	182	5.2							
CRUISE	18	97	5.4		16,067		.6			
DBH COUNT										
REFOREST										
COUNT	17	85	5.0							
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR	63	134.0	14.1	52	38.8	146.1	14,374	13,829	4,123	4,123
WHEMLOCK	23	147.3	9.6	39	23.8	73.7	5,262	4,964	1,757	1,756
PS FIR	5	8.9	15.7	72	3.0	12.1	1,629	1,455	420	419
R ALDER	4	16.5	10.2	30	2.9	9.4	517	517	167	167
COTWOOD	1	1.2	14.5	55	0.4	1.3	105	105	38	38
WR CEDAR	1	1.7	12.0	32	0.4	1.3	51	51	25	25
<b>TOTAL</b>	<b>97</b>	<b>309.6</b>	<b>12.0</b>	<b>45</b>	<b>70.4</b>	<b>243.9</b>	<b>21,938</b>	<b>20,920</b>	<b>6,530</b>	<b>6,529</b>
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL:	68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	52.6	6.7		136	145	155				
WHEMLOCK	87.1	18.5		64	78	93				
PS FIR	31.0	15.4		142	168	194				
R ALDER	15.4	8.8		30	33	35				
COTWOOD										
WR CEDAR										
<b>TOTAL</b>	<b>64.0</b>	<b>6.5</b>		<b>116</b>	<b>124</b>	<b>132</b>	<b>164</b>	<b>84</b>	<b>41</b>	
CL:	68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	84.9	14.3		115	134	153				
WHEMLOCK	132.8	22.4		114	147	180				
PS FIR	235.0	39.7		5	9	12				
R ALDER	296.6	50.1		8	17	25				
COTWOOD	591.6	99.9		0	1	2				
WR CEDAR	591.6	99.9		0	2	3				
<b>TOTAL</b>	<b>62.9</b>	<b>10.6</b>		<b>277</b>	<b>310</b>	<b>342</b>	<b>158</b>	<b>81</b>	<b>39</b>	
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	64.6	10.9		130	146	162				
WHEMLOCK	121.8	20.6		59	74	89				
PS FIR	237.5	40.1		7	12	17				
R ALDER	292.1	49.3		5	9	14				
COTWOOD	591.6	99.9		0	1	3				
WR CEDAR	591.6	99.9		0	1	3				
<b>TOTAL</b>	<b>39.0</b>	<b>6.6</b>		<b>228</b>	<b>244</b>	<b>260</b>	<b>61</b>	<b>31</b>	<b>15</b>	
CL:	68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	65.2	11.0		12,307	13,829	15,350				
WHEMLOCK	133.8	22.6		3,842	4,964	6,086				
PS FIR	240.6	40.6		864	1,455	2,046				
R ALDER	294.6	49.8		260	517	774				
COTWOOD	591.6	99.9		0	105	210				

TC TSTATS				<b>STATISTICS</b>				PAGE	2	
				PROJECT <b>HUZZA</b>				DATE	3/3/2016	
<b>TWP</b>	<b>RGE</b>	<b>SECT</b>	<b>TRACT</b>	<b>TYPE</b>	<b>ACRES</b>	<b>PLOTS</b>	<b>TREES</b>	<b>CuFt</b>	<b>BdFt</b>	
<b>23N</b>	<b>08E</b>	<b>19</b>	<b>HUZZA</b>	<b>0002</b>	51.90	35	182	S	W	
CL:	68.1 %	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E. %	LOW	AVG	HIGH	5	7	10	
WR CEDAR		591.6	99.9	0	51	102				
<b>TOTAL</b>		42.5	7.2	19,420	20,920	22,421	72	37	18	

**Species Summary - Trees, Logs, Tons, CCF, MBF**

T23N R08E S19 Ty0001	33.3
T23N R08E S19 Ty0002	51.9

**Project HUZZA**  
**Acres 85.20**

**Page No 1**  
**Date: 3/3/2016**  
**Time 2:33:35PM**

Species	Total	Total	Total	Net Cubic Ft/		CF/	Total CCF		Total MBF	
	Trees	Logs	Tons	Tree	Log	LF	Gross	Net	Gross	Net
DOUG FIR	9,363	15,622	9,661	36.21	21.70	0.65	3,390	3,390	1,185	1,134
WHEMLOCK	10,245	14,125	5,340	16.28	11.81	0.41	1,669	1,668	527	493
PS FIR	555	1,183	810	50.92	23.87	0.71	283	282	106	90
R ALDER	1,190	1,190	323	9.88	9.88	0.31	118	118	38	38
COTWOOD	91	182	90	40.50	20.25	0.62	37	37	12	12
WR CEDAR	137	137	58	18.06	18.06	0.52	25	25	5	5
<b>Totals</b>	21,581	32,440	16,283	25.58	17.02	0.54	5,521	5,520	1,872	1,771

Wood Type Species	Total	Total	Total	Net Cubic Ft/		CF/	Total CCF		Total MBF	
	Trees	Logs	Tons	Tree	Log	LF	Gross	Net	Gross	Net
C	20,299	31,068	15,869	26.43	17.27	0.55	5,366	5,365	1,822	1,722
H	1,281	1,372	414	12.05	11.25	0.36	154	154	50	49
<b>Totals</b>	21,581	32,440	16,283	25.58	17.02	0.54	5,521	5,520	1,872	1,771



WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**  
 Peter Goldmark - Commissioner of Public Lands

**Forest Practices Application/Notification  
 Notice of Decision**

FPA/N No: 2418028  
 Effective Date: 07/22/2015  
 Expiration Date: 07/22/2018  
 Shut Down Zone: 659N  
 EARR Tax Credit:  Eligible     Non-eligible  
 Reference: Huzza

**Decision**

- Notification      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.
- Closed                Applicant has withdrawn approved FPA/N

**FPA/N Classification**

**Number of Years Granted on Multi-Year Request**

Class II     Class III     Class IVG     Class IVS     4 yrs     5 yrs

**Conditions on Approval / Reasons for Disapproval**

Notify Forest Practices forester 48 hours prior to start of road work.  
 Eric Dasso 425-466-4772

Issued By: Eric Dasso

Region: South Puget Sound

Title: Resource Protection Forester

Date: 07/22/2015

Copies to:     Landowner, Timber Owner and Operator.

Issued in person:     Landowner  Timber Owner  Operator By: Charlotte Bass - Charlotte Bass

*AEM 7-22-15*

**Appeal Information**

You have thirty (30) days to appeal this Decision and any related State Environmental Policy Act determinations to the Pollution Control Hearings Board in writing at the following addresses:

**Physical address: 1111 Israel Rd. SW, Ste 301, Tumwater, WA 98501**

**Mailing address: P.O. BOX 40903, OLYMPIA, WA 98504-0903**

Information regarding the Pollution Control Hearings Board can be found at: <http://www.eho.wa.gov/>

At the same time you file an appeal with the Pollution Control Hearings Board, also send a copy of the appeal to the Department of Natural Resources' region office and the Office of the Attorney General at the following addresses:

Office of the Attorney General  
Natural Resources Division  
1125 Washington Street SE  
PO Box 40100  
Olympia, WA 98504-0100

And

Department Of Natural Resources  
South Puget Sound Region  
950 Farman Ave. N  
Enumclaw, WA 98022

**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.

**Hydraulic Project Approval (HPA) (Chapter 77.55RCW and WAC 222-50-020(2))**

The Department of Fish and Wildlife (WDFW), as the jurisdictional agency issuing HPAs, has final authority for approving water crossing structures in Type S and F waters. WDFW continues to have authority on Type N waters and may exercise that authority on some Type N waters.

Notice: The HPA water crossing requirements supersede what is indicated on the FPA. Landowners are required by law to follow the provisions as directed on the HPA.

**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: <http://www.dnr.wa.gov/businesspermits/forestpractices>. Notify DNR of new Operators within 48 hours.

**Continuing Forest Land 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 forest land 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 land 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 forest land obligation, the seller must pay the buyer's costs related to continuing forest land obligations, including all legal costs and reasonable attorneys' fees incurred by the buyer in enforcing the continuing forest land obligation against the seller.

Failure by the seller to send the required notice to the 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 forest land obligation prior to sale.

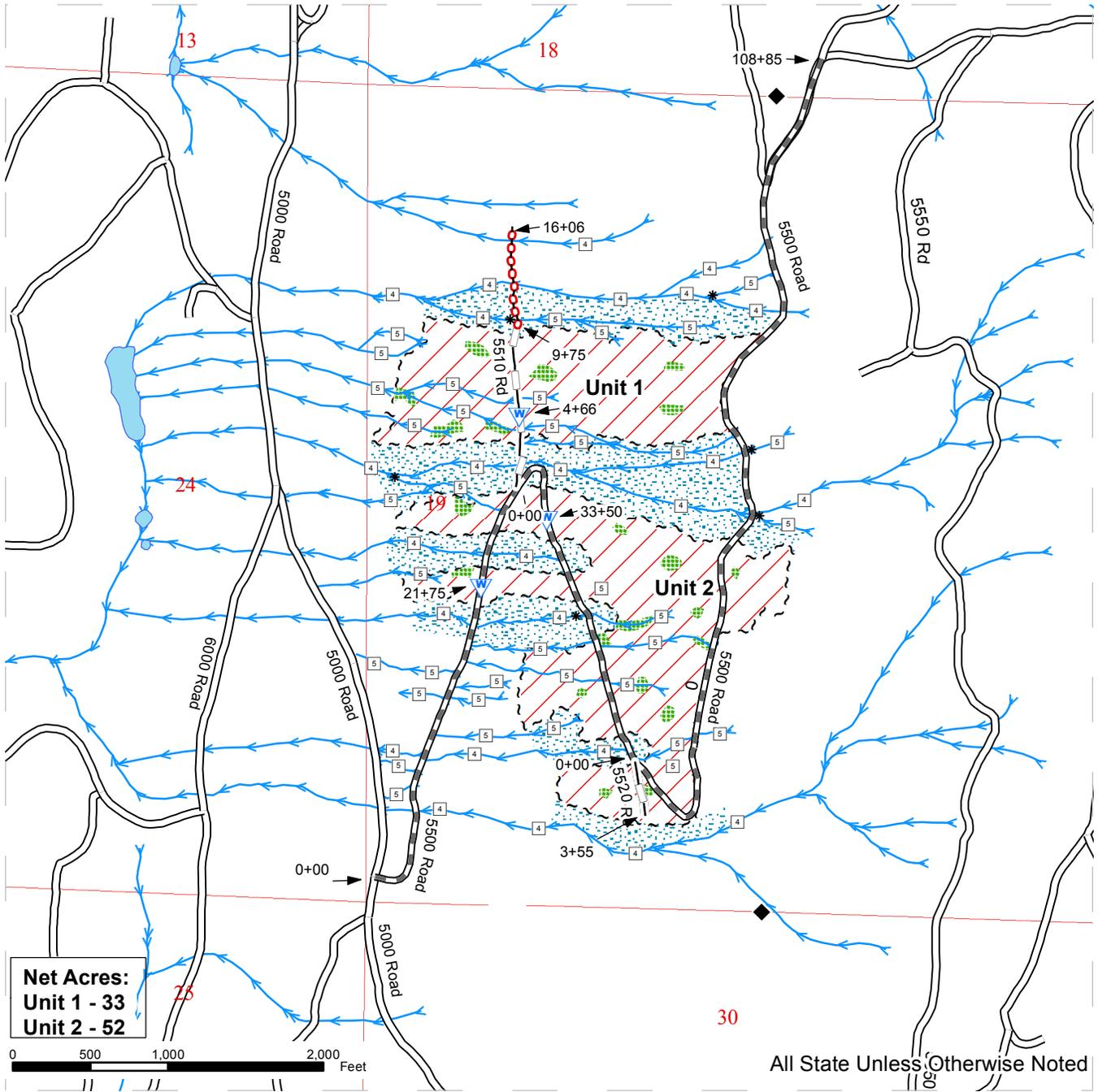
**DNR affidavit of mailing:**

On this day _____, I placed in the United States mail at _____, WA,	
(date mm/dd/yyyy)	(post office location)
postage paid, a true and accurate copy of this document. Notice of Decision FPA # _____	
_____	_____
(Printed name)	(Signature)

# ROAD PLAN MAP

**SALE NAME:** Huzza  
**AGREEMENT#:** 30-091787  
**TOWNSHIP(S):** T23NR08E  
**TRUST(S):** Common School Indemnity (3)

**REGION:** South Puget Sound  
**COUNTY(S):** King  
**ELEVATION RGE:** 1763-2590 ft.



**Net Acres:**  
**Unit 1 - 33**  
**Unit 2 - 52**

All State Unless Otherwise Noted

Public Land Survey Sections	Existing Roads	Open Water
Variable Retention Harvest	Required Decommissioning	Streams
Riparian Management Zone	Optional Reconstruction	Stream Type
Yellow Leave Tree Area Tags	Required Pre-Haul Maintenance	Stream Type Break
White Timber Sale Boundary Tags		Monumented Corners
		Waste Area

Prepared By: Paul Footen

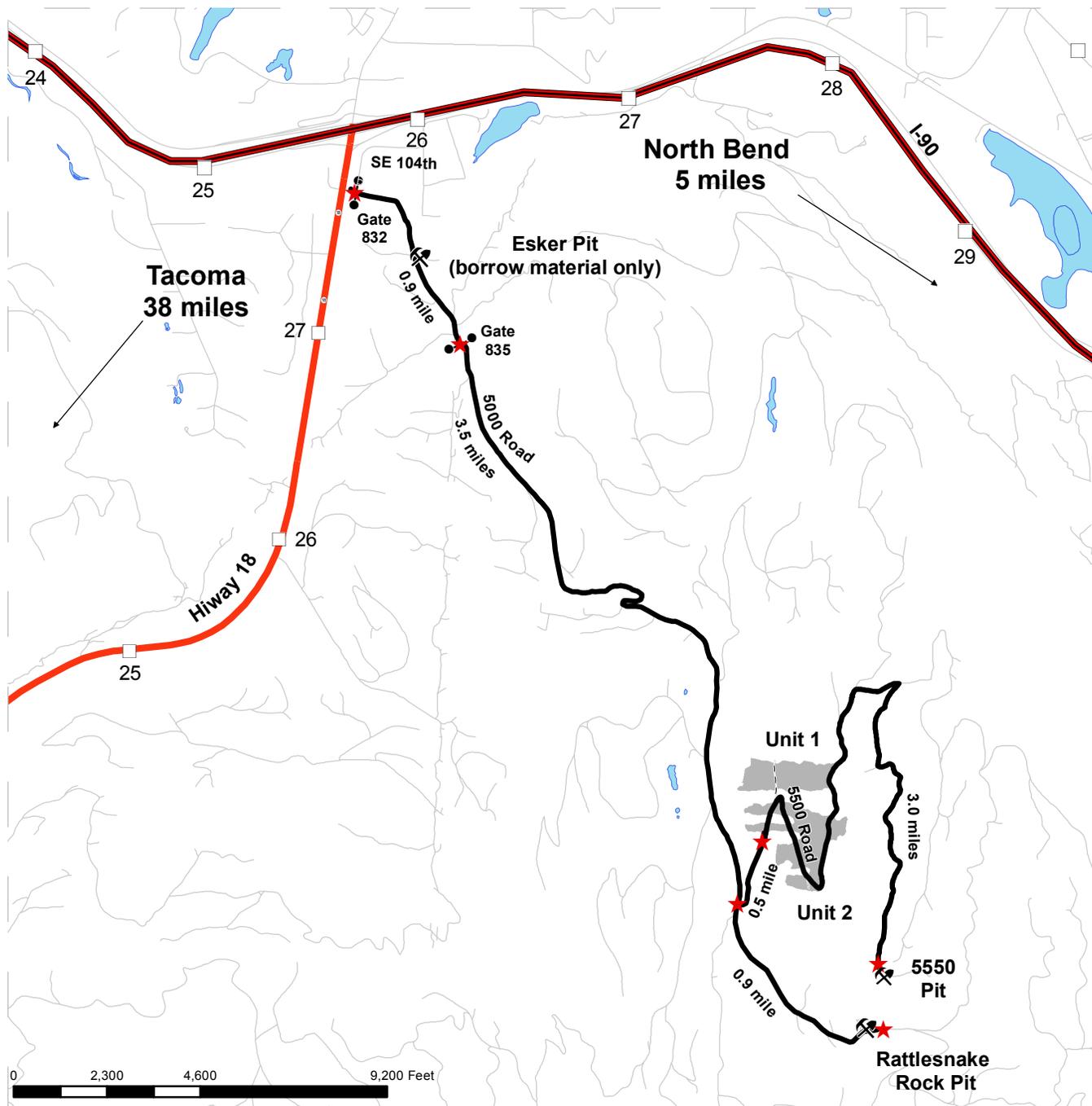
Creation Date: 03/03/2015

Modification Date: 05/13/2015  
kfy490 - 2/17/2016

# DRIVING MAP

**SALE NAME:** Huzza  
**AGREEMENT#:** 30-091787  
**TOWNSHIP(S):** 23NR08E  
**TRUST(S):** Common School Indemnity (3)

**REGION:** South Puget Sound  
**COUNTY(S):** King  
**ELEVATION RGE:** 1763-2590 ft.



- Open Water
- Existing Rock Pits
- Gate (Master 786)
- Haul Route
- Distance Indicator
- Milepost Marker

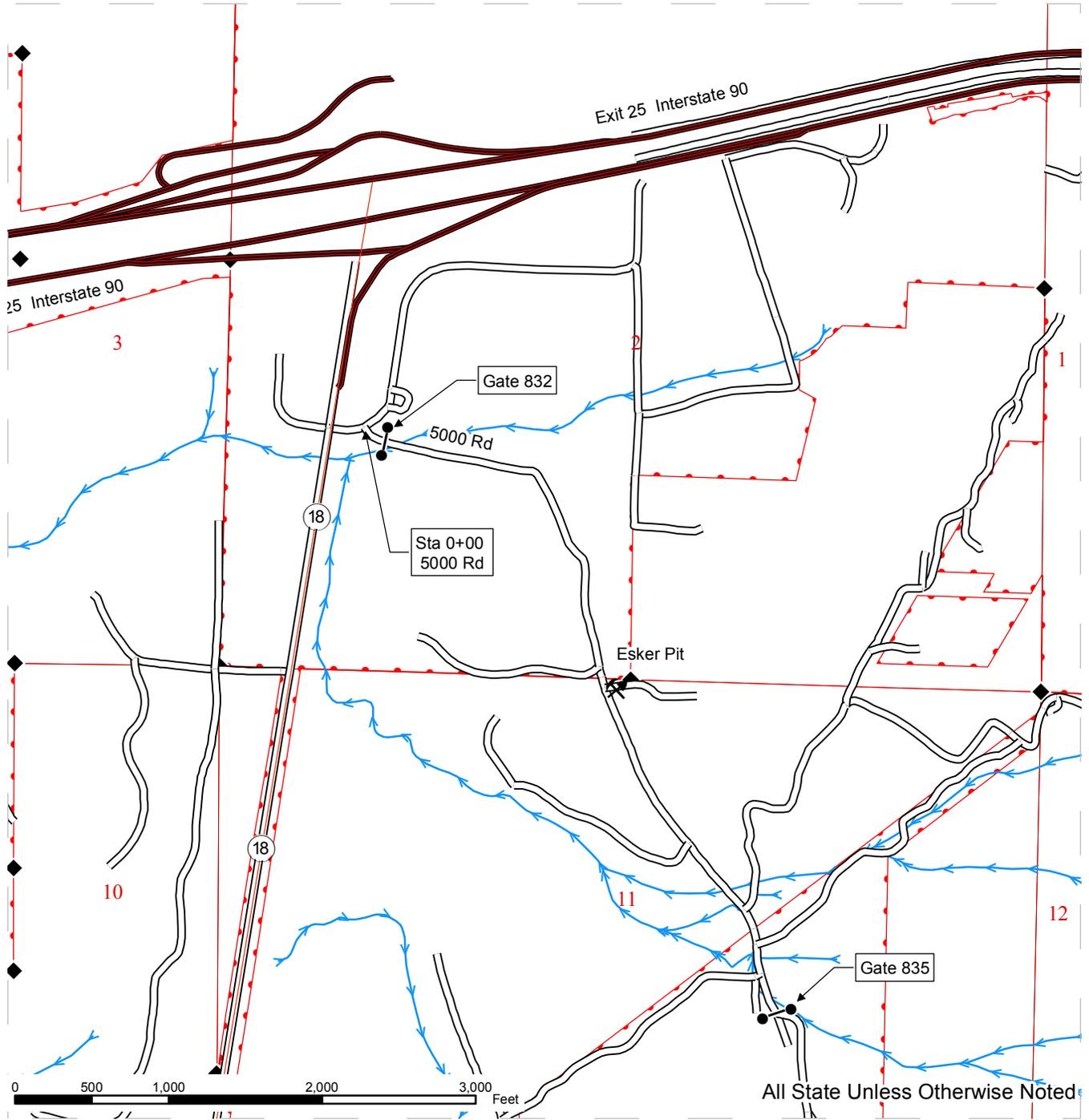
Traveling east on Highway 18 turn right onto S.E. 104th St. (right before I-90 junction) go straight 300 ft to gate 832 (786 lock) to the 5000 Road (Rattlesnake Mainline). Take 5000 Road approx. 0.9 mile to gate 835 (786 lock). Continue on 5000 Road for 3.5 miles to the 5500 Road. Take left on 5500 Road and travel approx. 0.5 mile and you will reach the south boundary of Unit 1.



# ROAD VIEW MAP

**SALE NAME:** HUZZA  
**AGREEMENT#:** 91787  
**TOWNSHIP(S):** T23R08E  
**TRUST(S):** Common School and Indemnity(3)

**REGION:** South Puget Sound Region  
**COUNTY(S):** KING  
**ELEVATION RGE:** 1720-2892



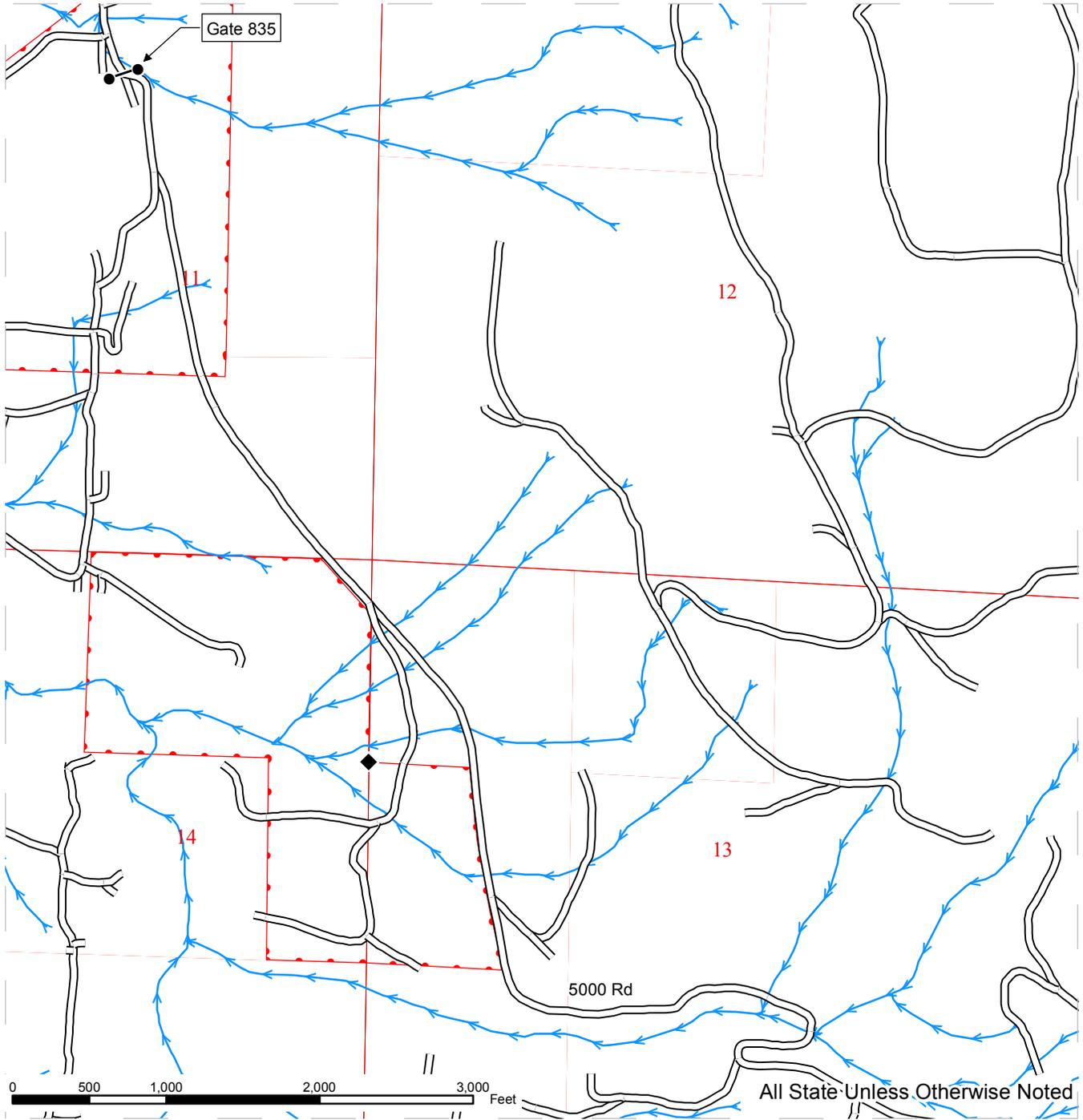
### Legend

Existing Roads	Culverts	Waste Area
Pre-Haul Maintenance	Rock Pit	Public Land Survey Sections
Optional Reconstruction	Streams	DNR Managed Lands
Required Decommissioning	Gates	Unit Boundary
Monumented Corners		

# ROAD VIEW MAP

**SALE NAME:** HUZZA  
**AGREEMENT#:** 91787  
**TOWNSHIP(S):** T23R08E  
**TRUST(S):** Common School and Indemnity(3)

**REGION:** South Puget Sound Region  
**COUNTY(S):** KING  
**ELEVATION RGE:** 1720-2892

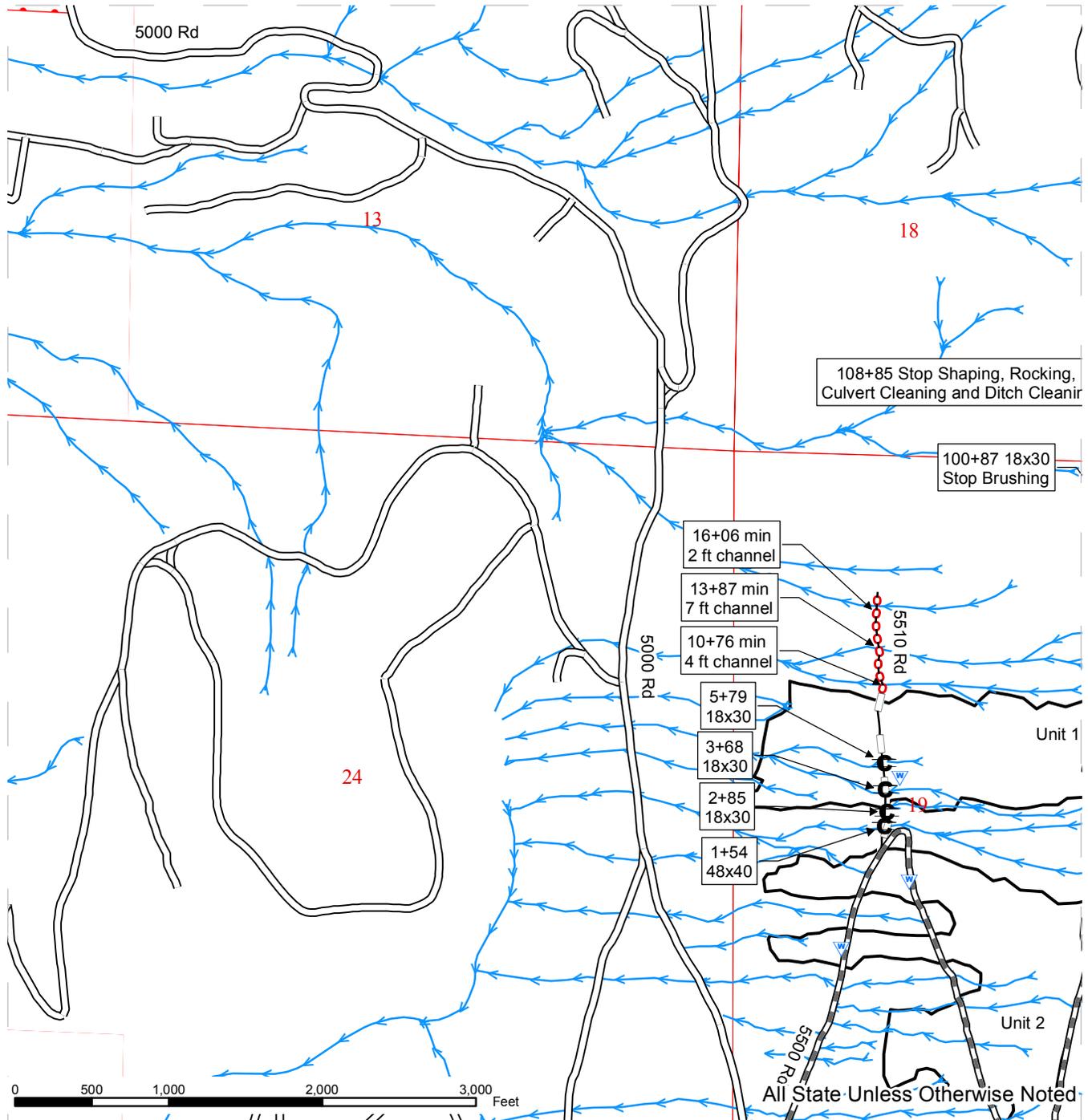


Legend			
	Existing Roads		Waste Area
	Pre-Haul Maintenance		Public Land Survey Sections
	Optional Reconstruction		DNR Managed Lands
	Required Decommissioning		Streams
	Monumented Corners		Gates
	Gates		Unit Boundary
	Culverts		
	Rock Pit		

# ROAD VIEW MAP

**SALE NAME:** HUZZA  
**AGREEMENT#:** 91787  
**TOWNSHIP(S):** T23R08E  
**TRUST(S):** Common School and Indemnity(3)

**REGION:** South Puget Sound Region  
**COUNTY(S):** KING  
**ELEVATION RGE:** 1720-2892



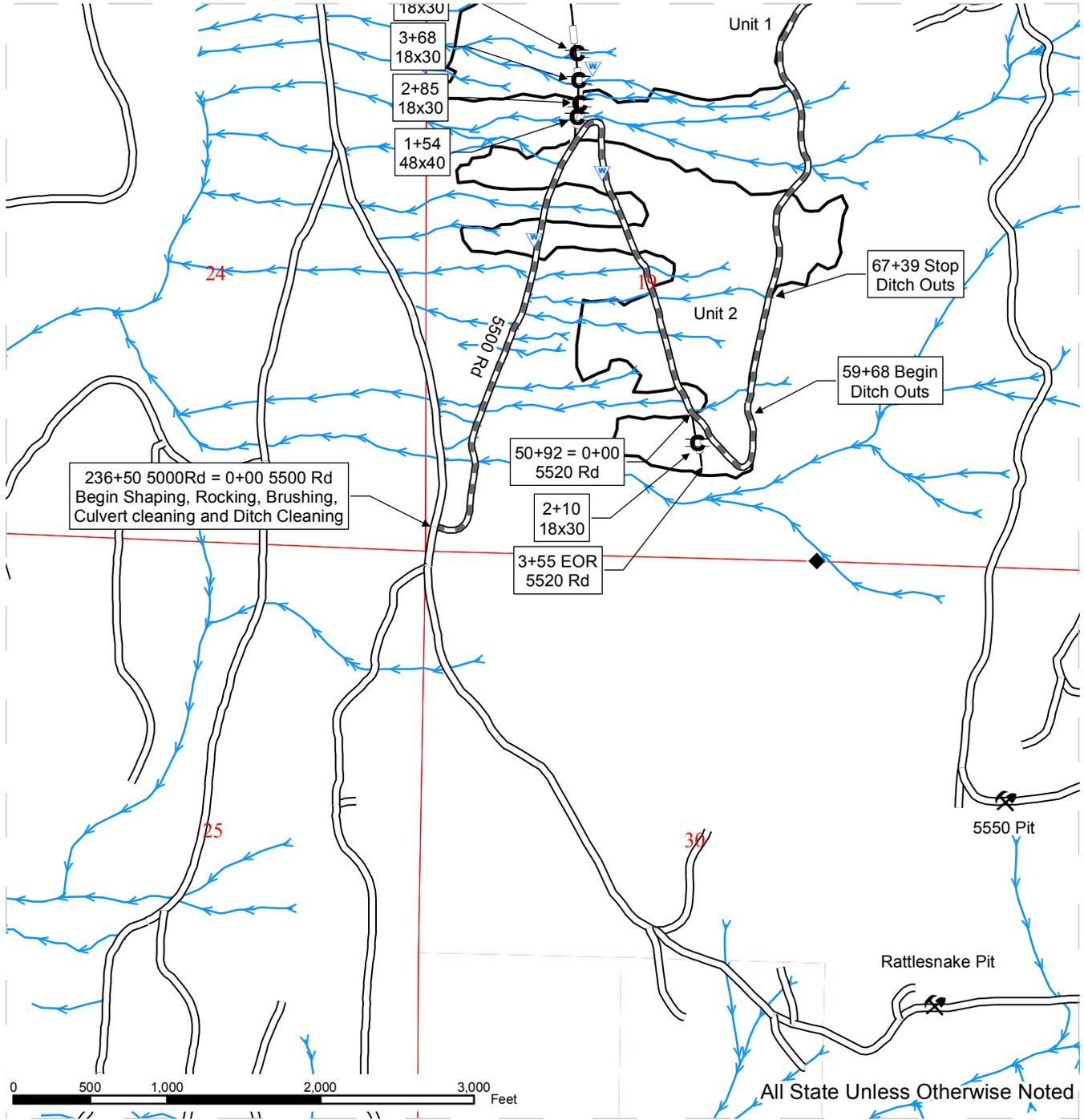
Legend			
	Existing Roads		Waste Area
	Pre-Haul Maintenance		Public Land Survey Sections
	Optional Reconstruction		DNR Managed Lands
	Required Decommissioning		Unit Boundary
	Monumented Corners		Culverts
	Rock Pit		Streams
	Gates		



# ROAD VIEW MAP

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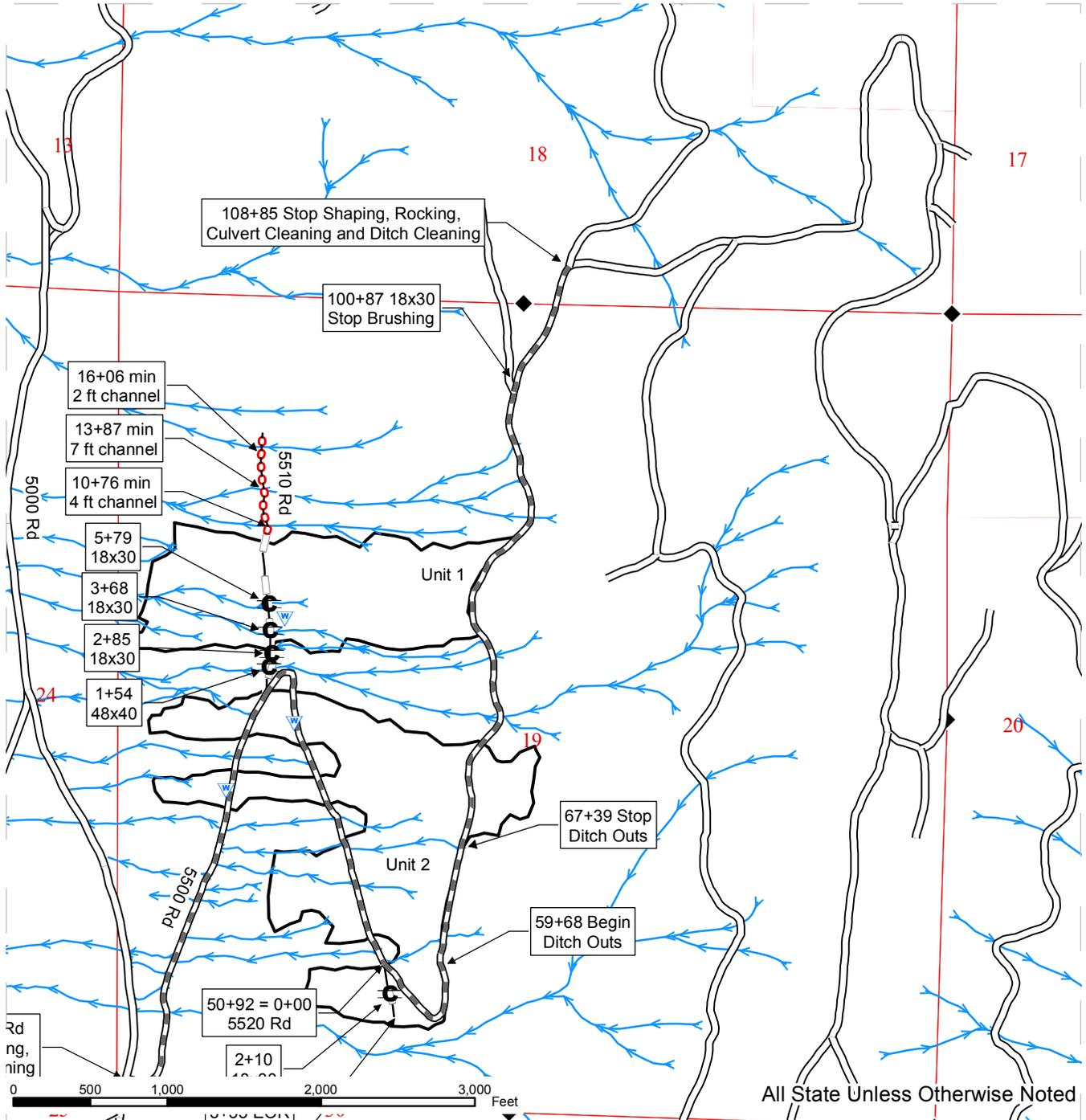
Legend			
	Existing Roads		Waste Area
	Pre-Haul Maintenance		Public Land Survey Sections
	Optional Reconstruction		DNR Managed Lands
	Required Decommissioning		Unit Boundary
	Monumented Corners		Rock Pit
			Streams
			Gates



# ROAD VIEW MAP

**SALE NAME:** HUZZA  
**AGREEMENT#:** 91787  
**TOWNSHIP(S):** T23R08E  
**TRUST(S):** Common School and Indemnity(3)

**REGION:** South Puget Sound Region  
**COUNTY(S):** KING  
**ELEVATION RGE:** 1720-2892



### Legend

Existing Roads	Culverts	Waste Area
Pre-Haul Maintenance	Rock Pit	Public Land Survey Sections
Optional Reconstruction	Streams	DNR Managed Lands
Required Decommissioning	Gates	Unit Boundary
Monumented Corners		

STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES

HUZZA TIMBER SALE ROAD PLAN  
KING COUNTY  
SNOQUALMIE UNIT, RAINIER DISTRICT

AGREEMENT NO.: 30-091787

STAFF ENGINEER: B. BALLARD

DATE: 3/1/2015

DRAWN & COMPILED BY: B. BALLARD

SECTION 0 – SCOPE OF PROJECT

**0-1 ROAD PLAN SCOPE**

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

**0-2 REQUIRED ROADS**

The specified work on the following roads is required.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
5000	0+00 to 236+50	Post Haul Maintenance
5500	0+00 to 108+85	Pre/Post Haul Maintenance
5510	0+00 to 16+06	Decommission
5520	0+00 to 3+55	Decommission

**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.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
5510	0+00 to 9+75	Reconstruction
5520	0+00 to 3+55	Reconstruction

**0-5 RECONSTRUCTION**

Reconstruction includes, but is not limited to:

- clearing existing excavation and embankment slopes;
- grubbing existing excavation and embankment slopes;
- debris disposal;
- landing construction;
- cleaning ditches;
- constructing ditches;

acquisition and installation of additional drainage structures;  
widening road segments;  
shaping existing road surface and turnouts;  
compaction of road surface;  
acquisition, manufacture, and application of rock;  
road decommissioning.

**0-6 PRE-HAUL MAINTENANCE**

Pre-haul maintenance includes, but is not limited to;

brushing right-of-way;  
removing fallen right-of-way debris;  
cleaning ditches;  
constructing/reconstructing catch basin and headwall;  
cleaning culvert inlets and outlets;  
grading and shaping existing road surface and turnouts;  
compaction of road surface;  
removing berms from road shoulders;  
acquisition, manufacture, and application of rock; including existing turnouts;

**0-7 POST-HAUL MAINTENANCE**

This project includes post-haul road maintenance listed in Clause 9-5 POST-HAUL MAINTENANCE9-5 .

**0-9 DECOMMISSIONING**

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

**0-12 DEVELOP ROCK SOURCE**

Purchaser may develop an existing rock source. Rock source development will involve clearing, stripping, crushing, and moving overburden. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

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 the submitted plan.

**1-2 UNFORESEEN CONDITIONS**

Quantities established in this road plan are minimum acceptable values. Additional quantities required by the state due to unforeseen conditions, or 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.

**1-4 ROAD TOLERANCES**

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

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

**1-6 ORDER OF PRECEDENCE**

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

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

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

**1-7 TEMPORARY ROAD CLOSURE**

Purchaser shall notify the Contract Administrator a minimum of 7 calendar days before the closure of any road.

**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.

**1-10 WSDOT STANDARD SPECIFICATION REFERENCE**

References in this road plan to “WSDOT Standard Specifications” mean the Washington State Department of Transportation’s Standard Specifications for Road, Bridge, and Municipal Construction 2012 (M41-10).

**1-20 COMPLETE BY DATE**

Purchaser shall complete pre-haul road work before the start of timber haul.

**1-21 HAUL APPROVAL**

Purchaser shall not use roads under this road plan for any timber hauling, without written approval from the Contract Administrator.

**1-22 WORK NOTIFICATIONS**

Purchaser shall notify the Contract Administrator a minimum of 7 calendar days before work begins.

**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:

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

**1-25 ACTIVITY TIMING RESTRICTION**

The operation of road construction equipment is not allowed on weekends or state recognized holidays, unless authorized in writing by the Contract Administrator.

The specified activities are not allowed during the listed closure period(s) unless authorized in writing by the Contract Administrator.

<u>Road</u>	<u>Stations</u>	<u>Activity</u>	<u>Closure Period</u>
All Roads	All Stations	Operation of road construction equipment	November 1 to April 30

If reconstructed, the following road shall be reconstructed, used and decommissioned in a single operation season limited to the months of June through August.

Reconstruction/decommissioning will be stopped when in the opinion of the Contract Administrator excessive damage may occur.

<u>Road</u>	<u>Stations</u>	<u>Activity</u>	<u>Closure Period</u>
5510	All Stations	Operation of equipment	September 1 to May 31

**1-26 OPERATING DURING CLOSURE PERIOD**

If permission is granted to operate during a closure period listed in Clause 1-25

ACTIVITY TIMING RESTRICTION, Purchaser shall operate under a maintenance plan to include further protection of state resources. Purchaser shall obtain written approval from the Contract Administrator for the maintenance plan, and shall put preventative measures in place before operating during the closure period. Purchaser is required to maintain all haul roads at their own expense including those listed in Contract Clause C-060 DESIGNATED ROAD MAINTAINER. If other operators are using, or desire to use these designated maintainer roads, a joint operating plan must be developed. All parties shall follow this plan.

**1-29 SEDIMENT RESTRICTION**

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

**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:

- Weather is such that satisfactory results cannot be obtained in an area of operations.
- When, in the opinion of the Contract Administrator excessive road damage or rutting may occur.

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

**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.

Any dirt, rock, or other material tracked or spilled on bridge or asphalt surface(s) shall be removed immediately. Any damage to the surface(s) shall 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 Contract 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.

**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.

**2-4 PASSAGE OF LIGHT VEHICLES**

Purchaser shall maintain the following roads in a condition that will allow the passage of light administrative vehicles.

<u>Road</u>	<u>Stations</u>
5000	0+00 to 236+50

**2-6 CLEANING CULVERTS**

On the following road(s), Purchaser shall clean the inlets and outlets of all culverts.

<u>Road</u>	<u>Stations</u>
5500	0+00 to 108+85

**2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS**

On the following road(s), Purchaser shall clean ditches, headwalls, and catchbasins. Work must be completed before timber haul and must be done in accordance with the TYPICAL SECTION SHEET DETAIL. Pulling ditch material across the road or mixing in with the road surface is not allowed.

<u>Road</u>	<u>Stations</u>
5500	0+00 to 108+85

**SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL**

**3-1 BRUSHING**

On the following road(s), Purchaser shall cut vegetative material up to 3 inches in diameter, including limbs, as shown on the BRUSHING DETAIL. Brushing must be achieved by manual or mechanical cutting of brush, trees, and branches. Root systems and stumps of cut vegetation may not be disturbed unless directed by the Contract Administrator. Purchaser shall remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets.

<u>Road</u>	<u>Stations</u>
5500	0+00 to 100+87

**3-2 BRUSHING RESTRICTION**

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

<u>Road</u>	<u>Stations</u>
5500	0+00 to 100+87

**3-7 RIGHT-OF-WAY DECKING**

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

**3-8 PROHIBITED DECKING AREAS**

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

- Within 50 feet of any stream.
- In locations that interfere with the reconstruction of the road prism.
- In locations that impede drainage.
- Against standing trees unless approved by the Contract Administrator.

**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 clearing 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, except by burning, before rock application.

**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 locations where brush can fall into the ditch or onto the road surface.

**3-24 BURYING ORGANIC DEBRIS RESTRICTED**

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

SECTION 4 – EXCAVATION

**4-5 CUT SLOPE RATIO**

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

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

**4-6 EMBANKMENT SLOPE RATIO**

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

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

**4-7 SHAPING CUT AND FILL SLOPE**

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

**4-8 CURVE WIDENING**

The minimum widening placed on the inside of curves is:

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

**4-9 EMBANKMENT WIDENING**

The minimum embankment widening is:

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

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

**4-25 DITCH CONSTRUCTION AND RECONSTRUCTION**

On all reconstruction roads, purchaser shall reconstruct ditches into the subgrade as specified on the TYPICAL SECTION SHEET.

**4-27 DITCH WORK – MATERIAL USE PROHIBITED**

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

**4-28 DITCH DRAINAGE**

Ditches must drain to cross-drain culverts or ditchouts.

**4-29 DITCHOUTS**

Purchaser shall construct ditchouts every 100 feet as identified and as directed by the Contract Administrator. Ditchouts must be constructed in a manner that diverts ditch water onto the forest floor and must have excavation backslopes no steeper than a 1:1 ratio. L or R denotes ditchout left or ditchout right.

<u>Road</u>	<u>Stations</u>	<u>L or R</u>
5500	59+68 to 67+39	L

**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**

All waste material must be end hauled to the designated waste areas identified in Clause 4-37 WASTE AREA LOCATION.

**4-37 WASTE AREA LOCATION**

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

<u>Road</u>	<u>Waste Area Location</u>	<u>Comments</u>
5500	Sta 21+75	Waste material below road at turnout
5500	Sta 38+77	Waste material below road at turnout
5510	Sta 4+66	Waste in old borrow pit after cleared

**4-38 PROHIBITED WASTE DISPOSAL AREAS**

Purchaser shall not deposit waste material in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- Within a riparian management zone.
- In locations that impede drainage.

**4-45 SELECT BORROW**

Select borrow consists of granular material, either naturally occurring or processed, and contains no more than 5% clay, organic debris, or trash by volume.

**4-47 NATIVE MATERIAL**

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

**4-49 BORROW SOURCE**

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

<u>Source</u>	<u>Location</u>	<u>Comments</u>
Esker Pit	NE 1/4, NW 1/4, Sec 11 T23N R07E W.M.	For Culvert Backfill if needed

**4-55 ROAD SHAPING**

On the following roads, Purchaser shall shape the surface as shown on the TYPICAL SECTION SHEET. The surface shape must ensure runoff in an even, un-concentrated manner, and must be uniform, firm, and rut-free. Purchaser shall accomplish all shaping using a motor grader with a minimum of 175 horsepower.

<u>Road</u>	<u>Stations</u>	<u>Comments</u>
5500	0+00 to 108+85	Prior to rock application

**4-56 DRY WEATHER SHAPING**

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

**4-60 FILL COMPACTION**

Purchaser shall compact all embankment and waste material in accordance with the COMPACTION LIST by routing equipment over the entire width of each lift. Waste material may be placed by end-dumping or sidecasting until sufficiently wide enough to support the equipment.

**4-62 DRY WEATHER COMPACTION**

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

**4-63 EXISTING SURFACE COMPACTION**

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

SECTION 5 – DRAINAGE

**5-1 REMOVAL OF SHOULDER BERMS**

Purchaser shall remove berms from road shoulders.

**5-5 CULVERTS**

Purchaser shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction

and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the Culvert List.

**5-6 USED CULVERT MATERIAL**

Purchaser may install used culverts on the following roads.

<u>Road</u>	<u>Stations</u>
5510	0+00 to 9+75
5520	0+00 to 3+55

**5-11 UNUSED MATERIALS STATE PROPERTY**

On required roads, any materials listed on the Culvert List that are not installed will become the property of the state. Purchaser shall stockpile materials as directed by the Contract Administrator.

**5-15 CULVERT INSTALLATION**

Culvert installation must be in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL and the Corrugated Polyethylene Pipe Association’s “Recommended Installation Practices for Corrugated Polyethylene Pipe and Fittings”. Corrugated Polyethylene pipe must be installed in a manner consistent with the manufacturer’s recommendations.

**5-16 APPROVAL FOR LARGER CULVERT INSTALLATION**

Purchaser shall obtain written approval from the Contract Administrator for the installation of culverts 30 inches in diameter and over before backfilling.

**5-17 CROSS DRAIN SKEW AND SLOPE**

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

**5-18 CULVERT DEPTH OF COVER**

Cross drain culverts must be installed with a depth of cover of not less than 1 foot of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts must be installed with a depth of cover recommended by the culvert manufacturer for the type and size of the pipe.

**5-25 CATCH BASINS**

Purchaser shall construct catch basins in accordance with CULVERT AND DRAINAGE SPECIFICATION DETAIL. Minimum dimensions of catch basins are 2 feet wide and 4 feet long.

**5-27 ARMORING FOR STREAM CROSSING CULVERTS**

Purchaser shall place Quarry Spalls in conjunction with or immediately following construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets. Rock may not restrict the flow of water into culvert inlets or catch basins.

**SECTION 6 – ROCK AND SURFACING**

**6-2 ROCK SOURCE ON STATE LAND**

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following source(s) on state land at no charge to the Purchaser. Purchaser shall obtain written approval from the Contract Administrator for the use of material from any other source. If other operators are using, or desire to use the rock source(s), a joint operating plan must be developed. All parties shall follow this plan. Purchaser shall notify the Contract Administrator a minimum of 7 calendar days before starting any operations in the listed locations.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
Rattlesnake Pit	NW¼SE¼ Section 30,T23R08E	1 ¼ inch minus 4 Inch In-Place Quarry Spalls
5550 Pit	NE ¼ Section 30, T23NR08E	1 ¼ inch minus 4 Inch In-Place Quarry Spalls

**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. Rock source(s) must be a WSDOT certified source.

**6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE**

Purchaser shall conduct rock source development and use at the following sources, in accordance with the written ROCK SOURCE DEVELOPMENT PLAN prepared by the state and included in this road plan. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN, and approved in writing by the Contract Administrator.

<u>Source</u>	<u>Rock Type</u>
Rattlesnake Pit	1 ¼ inch Minus 4 inch in Place Quarry Spalls

**6-11 ROCK SOURCE DEVELOPMENT PLAN BY PURCHASER**

Purchaser shall conduct rock source development and use at the following sources, in accordance with a written ROCK SOURCE DEVELOPMENT PLAN to be prepared by the Purchaser. The plan is subject to written approval by the Contract Administrator before any rock source operations. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN, and approved in writing by the Contract Administrator.

<u>Source</u>	<u>Rock Type</u>
5550	1 ¼ inch Minus 4 Inch in Place Quarry Spalls

Rock source development plans prepared by the Purchaser must show the following information:

- Rock source location.
- Rock source overview showing access roads, development areas, stockpile locations, waste areas, and floor drainage.
- Rock source profiles showing development areas, bench locations including widths, and wall faces including heights.
- Rock source reclamation plan describing how the area will be left in a condition that will ensure public safety and minimize environmental impacts.

**6-12 ROCK SOURCE SPECIFICATIONS**

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

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

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

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

#### **6-14 DRILL AND SHOOT**

Rock drilling and shooting must meet the following specifications:

- Drilling and shooting must produce a minimum of 10,000 cubic yards of crushable material, less any oversized allowed.
- Oversize material remaining in the rock source at the conclusion of the timber sale may not exceed 5% of the total volume mined in that source.
- Oversize material is defined as rock fragments too large to be converted by the Purchaser to a size that will meet specifications used for the roads in this sale.
- Oversized rock that exceeds the maximum allowable amount must be reduced in size by means of a hydraulic hammer or other approved methods.
- Purchaser shall notify the Contract Administrator a minimum of 5 working days before blasting operations.
- Purchaser shall submit an informational drilling and shooting plan to the Contract Administrator 10 working days before any drilling (Form #M-126PAC).
- All operations must be carried out in compliance with the Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration and the Safety Standards for Construction Work (296-155 WAC), Washington Department of Labor and Industries.
- Purchaser shall block access roads before blasting operations.

#### **6-20 ROCK GRADATION TYPES**

Purchaser shall manufacture rock in accordance with the types and amounts listed in the ROCK LIST. Rock must meet the following specifications for gradation and uniform quality when placed in hauling vehicles. Purchaser shall provide a sieve analysis upon request from the Contract Administrator.

#### **6-21 IN-PLACE PROCESSING**

Purchaser may use in-place processing, such as a grid roller or other method, if suitable crushing can be demonstrated to meet the surfacing size-specified in Clause 6-38 4-INCH IN-PLACE ROCK. Purchaser shall remove any existing organic debris before the start of

in-place crushing operations. The use of in-place processing methods is subject to written approval by the Contract Administrator.

<u>Road</u>	<u>Stations</u>
5510	0+00 to 9+75
5520	0+00 to 3+55

**6-22 FRACTURE REQUIREMENT FOR ROCK**

A minimum of 50% by visual inspection of coarse aggregate must have at least one fractured face. Coarse aggregate is the material greater than 1/4-inch in size.

**6-28 1 ¼-INCH MINUS CRUSHED ROCK**

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

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

**6-38 4-INCH IN-PLACE ROCK**

4-inch in-place rock must have a minimum of 90 percent of the top 4 inches of the running surface pass a 4-inch square opening.

In-place rock may not contain more than 5 percent by weight of organic debris and trash. No more than 50 percent of rock may be larger than 8 inches in any dimension and no rock may be larger than 12 inches in any dimension.

**6-43 QUARRY SPALLS**

% Passing 8" square sieve	100%
% Passing 3" square sieve	40% maximum
% Passing 3/4" square sieve	10% maximum

Rock may not contain more than 5 percent vegetative debris or trash. All percentages are by weight.

**6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH**

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

**6-70 APPROVAL BEFORE ROCK APPLICATION**

Purchaser shall obtain written approval from the Contract Administrator for shaping of existing surface before rock application.

**6-71 ROCK APPLICATION**

Purchaser shall apply rock in accordance with the specifications and quantities shown on the ROCK LIST. Rock must be spread, shaped, and compacted full width concurrent with rock hauling operations. Road surfaces must be compacted in accordance with the COMPACTION LIST by routing equipment over the entire width.

**6-73 ROCK FOR WIDENED PORTIONS**

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

**6-75 OPTIONAL ROCK EXCEPTION**

On the following roads, if hauling takes place from May 1 to September 30 Purchaser may place less rock than shown on the ROCK LIST, when approved in writing by the Contract Administrator.

If less rock is applied, Purchaser shall submit a written plan, for approval, describing how these roads will be constructed, used, maintained, and treated post-haul. Purchaser shall meet post-haul specifications in Section 9 POST-HAUL ROAD WORK, the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS, or other conditions of the approved plan.

<u>Road</u>	<u>Stations</u>
5510	0+00 to 9+75
5520	0+00 to 3+55

**SECTION 7 – STRUCTURES**

**7-5 STRUCTURE DEBRIS**

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

**7-6 STREAM CROSSING INSTALLATION**

Purchaser shall install stream crossing structures in accordance with the manufacturer's requirements.

**7-7 BANK PROTECTION FOR STREAM CROSSING STRUCTURES**

Bank protection must be constructed to prevent the undermining of the structure.

**7-70 GATE CLOSURE**

On the following road(s), Purchaser shall keep gates closed and locked except during periods of haul. All gates must be closed at termination of use.

<u>Road</u>	<u>Station</u>	<u>Gate No.</u>
5000	1+45	832
5000	51+15	835

**SECTION 8 – EROSION CONTROL**

**8-15 REVEGETATION**

Purchaser shall spread grass seed on all exposed soils at a rate of 50 lbs per acre at stream culvert removals.

**8-18 PROTECTION FOR SEED**

Purchaser shall provide a protective cover for seed on all exposed soils at stream culvert removals. The protective cover may consist of a layer of straw. Seed must be covered before the first anticipated storm event.

**8-19 ASSURANCE FOR SEEDED AREA**

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

**8-25 GRASS SEED**

Purchaser shall evenly spread the seed mixture listed below on all exposed soil at stream culvert removals at a rate of 50 pounds per acre of exposed soil. Grass seed must meet the following specifications:

1. Weed seed may not exceed 0.5% by weight.
2. All seed species must have a minimum 90% germination rate, unless otherwise specified.
3. Seed must be certified.
4. Seed must be furnished in standard containers showing the following information:
  - a. Common name of seed
  - b. Net weight
  - c. Percent of purity
  - d. Percentage of germination

- e. Percentage of weed seed and inert material
5. Seed must conform to the following mixture unless a comparable mix is approved in writing by the Contract Administrator.

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

## SECTION 9 – POST-HAUL ROAD WORK

### 9-2 CULVERT REMOVAL FROM LIVE STREAM

On the following road(s), Purchaser shall remove existing culverts from live streams and leave the resulting channel open with excavation slope and excavated channel width as specified. End haul excavated material to a waste area designated in Clause 4-37 WASTE AREA LOCATION designated by the Contract Administrator. Culvert removal from live streams must be in accordance with the Forest Practice Application.

<u>Road</u>	<u>Stations</u>	<u>Excavated Channel Width</u>	<u>Slope Ratio</u>
5510	1+54	11 feet	2H:1V
5510	10+76	4 feet	2H:1V
5510	13+87	7 feet	2H:1V

### 9-3 CULVERT MATERIAL REMOVED FROM STATE LAND

Culverts removed from roads become the property of the Purchaser and must be removed from state land.

### 9-5 POST-HAUL MAINTENANCE

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

<u>Road</u>	<u>Stations</u>	<u>Additional Requirements</u>
5000	0+00 to 236+50	Grading and Compaction
5500	0+00 to 108+85	Grading and Compaction

### 9-10 LANDING DRAINAGE

Purchaser shall provide for drainage of the landing surface.

**9-20 ROAD DECOMMISSIONING**

Purchaser shall decommission the following roads, according to the specification in Clause 9-22 DECOMMISSIONING.

<u>Road</u>	<u>Stations</u>
5510	0+00 to 16+06
5520	0+00 to 3+55

**9-22 DECOMMISSIONING**

- Remove road shoulder berms except as directed.
- Construct non-drivable waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical drop of no more than 10 feet between waterbars or between natural drainage paths and with a maximum spacing of 400 feet, or as marked in the field.
- Skew waterbars at least 30 degrees from perpendicular to the road centerline on roads in excess of 3 percent grade.
- Key waterbars into the cut-slope to intercept the ditch. Waterbars must be outsloped to provide positive drainage. Outlets must be on stable locations.
- Remove culverts.
- Remove ditch cross drain culverts and leave the resulting trench open.
- Transport all removed culverts off site. All removed culverts are the property of the Purchaser.
- Slope all trench walls and approach embankments no steeper than 1.5:1, except as listed in Clause 9-2 CULVERT REMOVAL FROM LIVE STREAM.
- Pull back unstable fill that has potential of failing and entering any Type 1 through 5 waters or wetlands. Place removed material in a stable location.
- Clean ditches and ensure water flows to waterbars.
- Apply grass seed concurrently with abandonment and in accordance with Section 8 EROSION CONTROL.

**SECTION 10 MATERIALS**

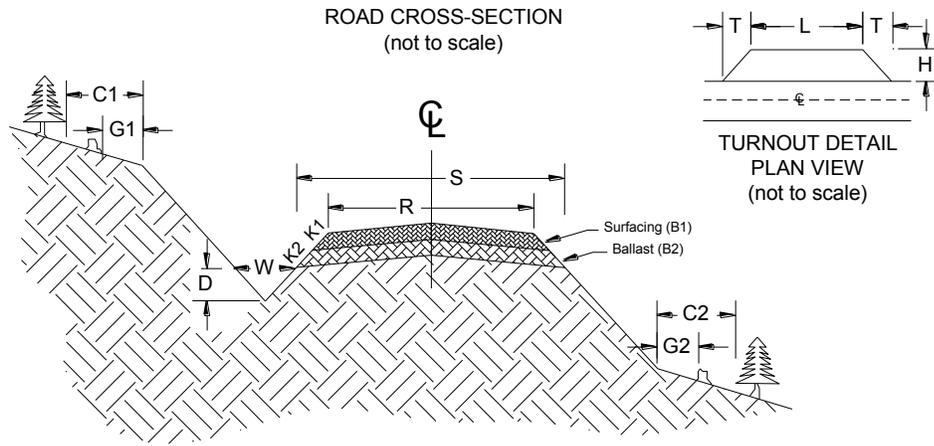
**10-17 CORRUGATED PLASTIC CULVERT**

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

**10-22 PLASTIC BAND**

Plastic coupling and end bands must meet the AASHTO specification designated for the culvert. Only fittings supplied or recommended by the culvert manufacturer may be used.

# TYPICAL SECTION SHEET



Road Number	From Station	To Station	Tolerance Class	Subgrade Width (feet)	Road Width (feet)	Ditch		Crown in. @ CL	Grubbing Limits (feet)		Clearing Limits (feet)		Cut Slope Ratio %	Fill Slope Ratio %
						Width (feet)	Depth (feet)		G1	G2	C1	C2		
5000	0+00	236+50	C	18	15	N/A	N/A	4	N/A	N/A	N/A	N/A	N/A	N/A
5500	0+00	108+85	C	18	15	3	2	4	N/A	N/A	N/A	N/A	N/A	N/A
5510	0+00	9+75	C	15	12	3	1		N/A	N/A	N/A	N/A	100%	67%
5520	0+00	3+55	C	15	12	3	1		N/A	N/A	N/A	N/A	100%	67%

### COMPACTION LIST

Road	From Station	To Station	Type	Max Depth Per Lift (inches)	Equipment Type	Equipment Weight (lbs) minimum	Minimum Number of Passes	Maximum Operating Speed (mph)
5000	0+00	236+50	Subgrade	-	Vibrating Compactor	12,000	3	3 MPH
			Fill	12				
			Waste Area	24				
5500	0+00	108+85	Pre-haul surface	-				
			Rock	6				
			Embankment	12				
			Post-haul surface	-				

## ROCK LIST

### BALLAST

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth	C.Y. Station	# of Stations	C.Y. Subtotal	Rock Source	
			K2	B2	4 Inch in Place				
5510	0+00	9+75	67%	8	30	9.75	293	Rattlesnake Pit or 5550 Pit or Commercial	
5520	0+00	3+55	67%	8	30	3.55	107		
Culvert installations	Headwalls and energy dissipators				Quarry Spalls				
					6	1	6		
					Light Loose Riprap				

BALLAST TOTAL: 406 Cubic Yards

### SURFACE

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth	Yards Station	# of Stations	Yards	Rock Source
			K1	B1	1 ¼ Inch Minus			
5500	0+00	108+85	67%	6	28	108.85	3048	Rattlesnake Pit or 5550 Pit or Commercial

SURFACE TOTAL: 3048 Yards

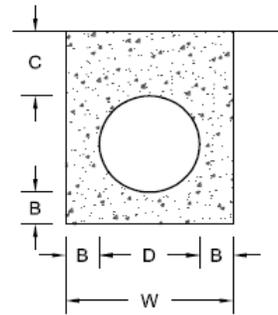


## CROSS DRAIN CULVERT INSTALLATION DETAIL INSTALLATION REQUIREMENTS

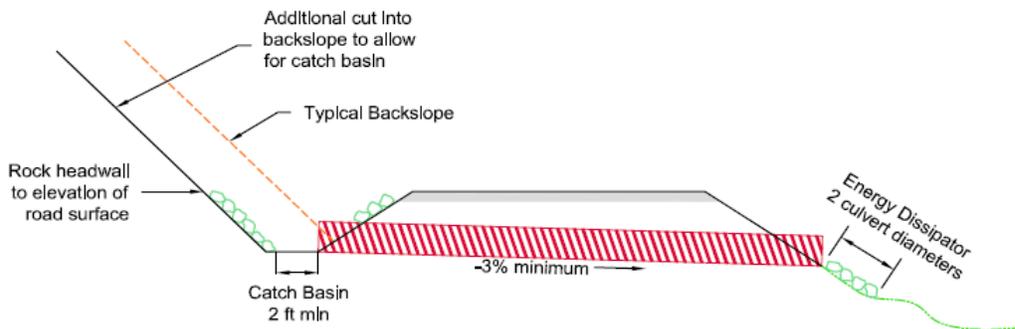
(Page 1 of 2)

1. Preparation of foundation and placement of bedding material shall precede the installation of all culvert pipes. This includes necessary leveling of the native trench bottom and compaction of required bedding material to form a uniform, dense, unyielding, base. The backfill material shall be placed so that the pipe is uniformly supported along the barrel.
2. A 3 Inch minus Crushed Rock may be used as the bedding and envelope material around the culvert. The aggregate size shall not exceed  $\frac{1}{6}$  the pipe diameter or 4", whichever is smaller.
3. The corrugated pipe shall be installed at a minimum grade of 3%, on a layer of bedding material as shown. Backfill material shall be well compacted in six inch layers under the haunches, around the sides, and above the pipe to the recommended minimum height of cover. Acceptable compaction methods include mechanical hand tamping, vibratory plate compactor, and vibratory roller.
4. A catch basin, headwall, and energy dissipater shall be constructed at each cross drain culvert as shown below. Catch basin, headwall, and energy dissipater shall be constructed of rock ranging from 6 inches to 10 inches.

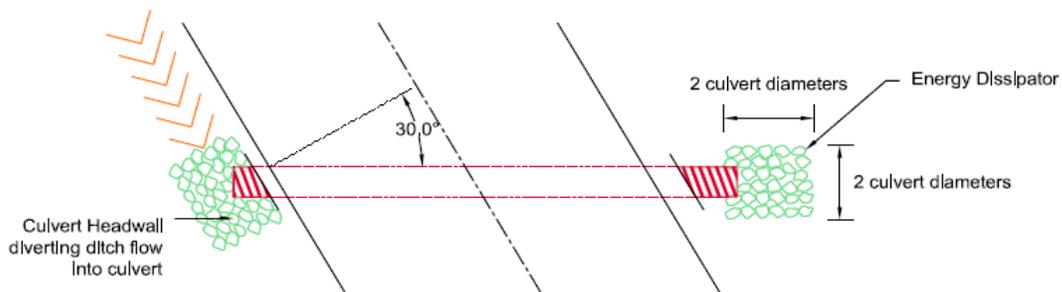
MINIMUM TRENCH DIMENSIONS			
Nominal Diameter	Minimum Thickness	Minimum Cover	Min. Trench Width
D	B	C	W
18"	6"	12"	36"
24"	6"	12"	42"
30"	6"	12"	48"
36"	6"	12"	54"



PROFILE VIEW

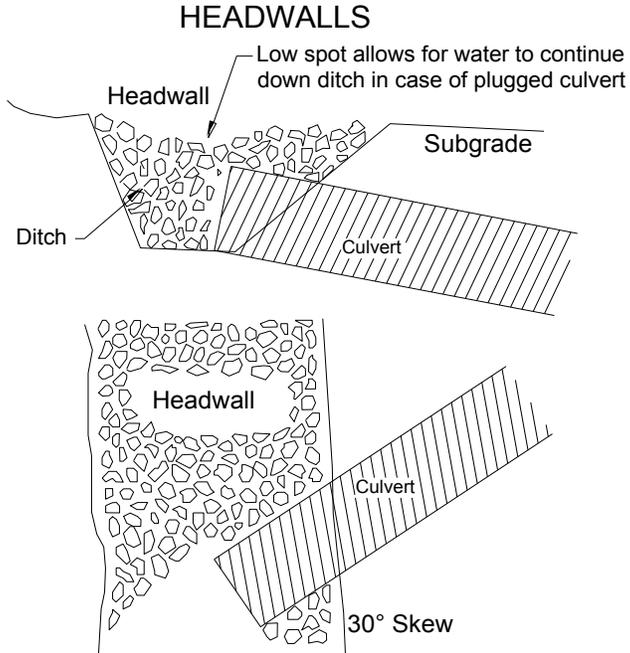


PLAN VIEW



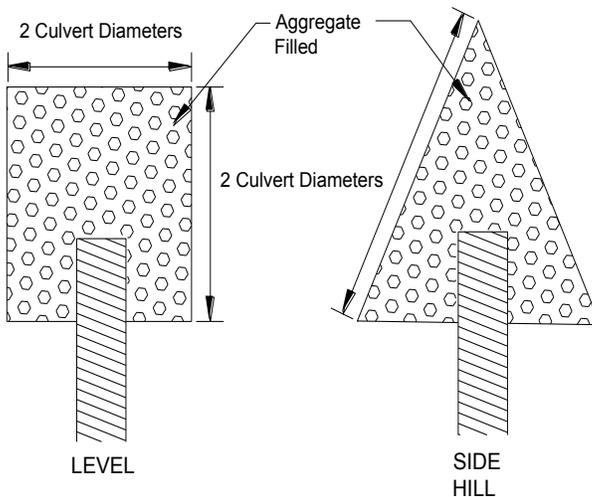
## CULVERT AND DRAINAGE SPECIFICATION DETAIL

(Page 2 of 2)



Headwalls to be constructed of material that will resist erosion.

## ENERGY DISSIPATORS



Dissipator Specifications:  
Depth: 1 culvert diameter  
Average: as specified in the  
CULVERT LIST

## FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS, Page 1 of 2

### Cuts and Fills

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

### Surface

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

### Drainage

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

## FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS, Page 2 of 2

### Preventative Maintenance

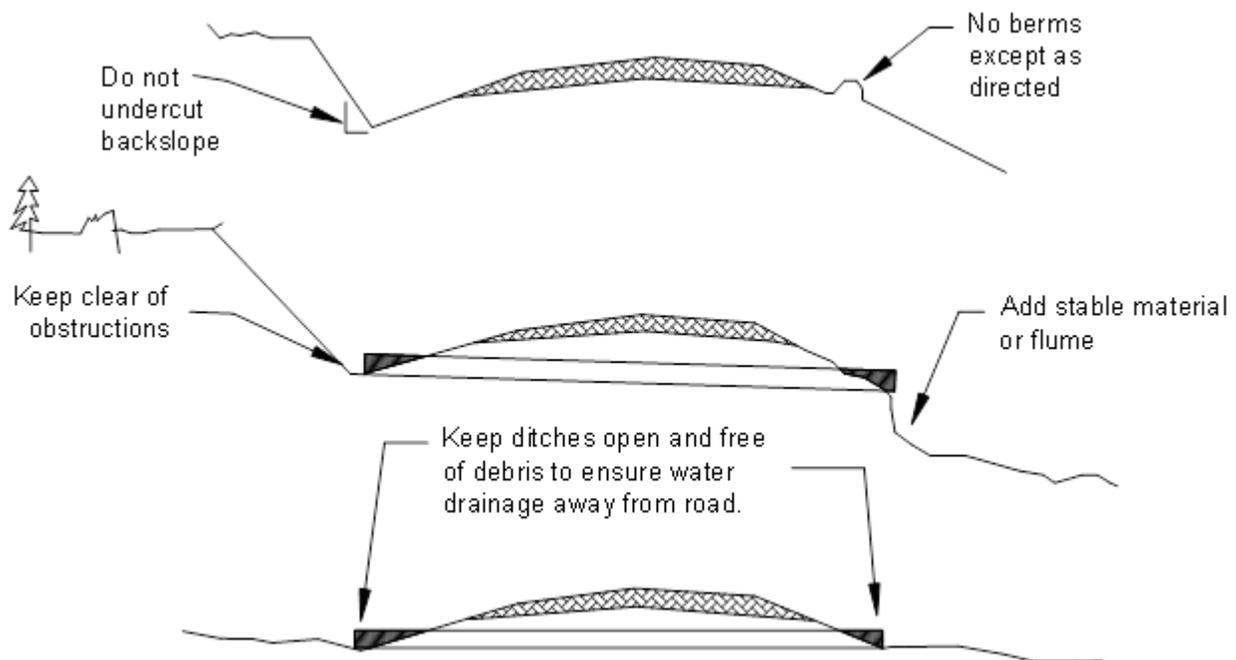
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

### Termination of Use or End of Season

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

### Debris

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



## PIT DEVELOPMENT PLAN

Legal Description: NW¼SE¼ Section 30,T23R08E

Rock Pit Name: Rattlesnake Pit

1. Development shall begin at bench at top face edge, as marked on the map. Development shall lower bench elevation or proceed north.
2. Rock may be pushed over top face edge to pit floor.
3. Overburden shall be pushed or end hauled along access trail to disposal site, access trail must be lowered a minimum 6 feet or new access trail created.
4. All vegetation including stumps shall be cleared a minimum of 20 feet beyond the top of all working faces.
5. Root wads and organic debris larger than one cubic foot in volume shall be separated from overburden and piled in the designated waste area.
6. A minimum stripping width of 10 feet must be maintained from all pit faces.
7. Pit faces and walls shall be sloped no steeper than 1 1/2H: 1V.
8. No development work will be allowed in pit floor.
9. The pit floor shall have smooth continuity of slope, providing drainage. No ponding will be allowed.
10. At the end of operations, faces shall be scaled and cleared of loose and overhanging material, including overburden pushed over the face.
11. Oversize material remaining in the pit at the conclusion of operations shall not exceed 5 percent of the total volume mined during the operation. Oversize material is defined as rock or rock fragments larger than two feet in any direction. Oversize shall be piled in designated area.
12. Quantity and Quality of ballast pit is not guaranteed by the State.

**Rattlesnake Pit**  
**Rock Source Development Plan**  
 NW ¼, SE ¼, Sec. 30 T23R08E



Overburden  
 not to obstruct access trails

Push overburden along access trail to disposal site. Access trail must be lowered minimum 6 feet or create new access trail below.

Bench. Minimum dimensions: 20 feet wide, by 20 feet deep. Push rock over top face edge to pit floor for crushing.



new access trail

access trail

access trail

**DO NOT DEVELOP.**  
 Future bench

bottom face edge

top face edge

pit floor

pit floor elevation not to be lowered

bottom face edge

Stockpile

pit floor to drain to existing cross drain

**5000 Road**

pit floor

Oversize

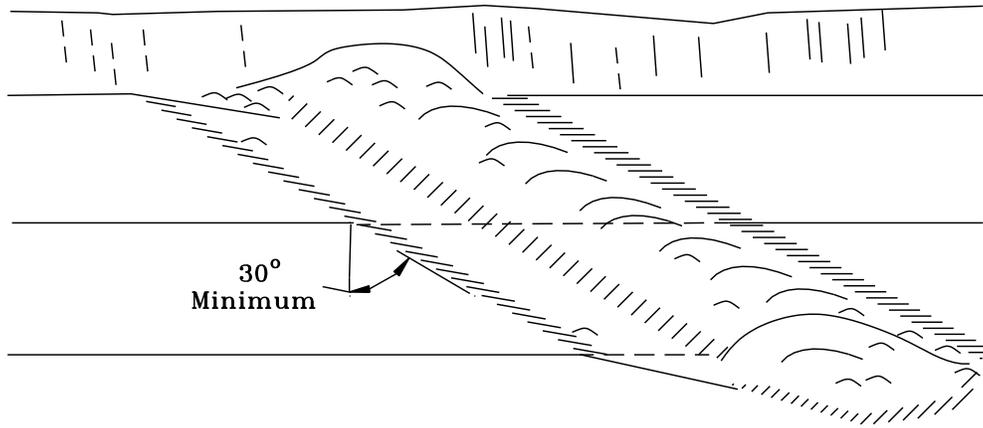


Huza Timber Sale  
 30-091787  
 1/23/2015  

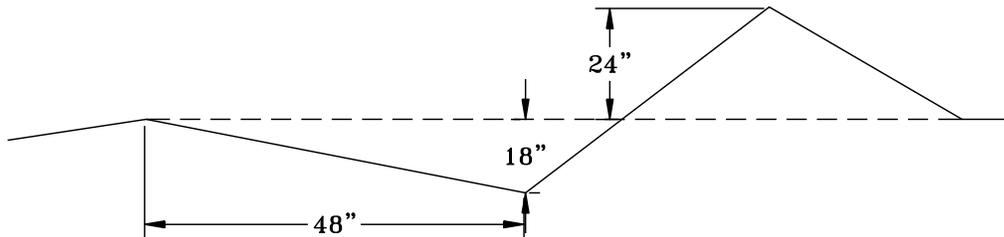
 Washington State Department of Natural Resources

# Non-Drivable Water Bar Detail

## Cross Ditch



## Cross Section at Centerline



Date:  
Scale : None  
App#  
Drawn by: M.A.D.

Water Bar Detail	
	WASHINGTON STATE DEPARTMENT OF Natural Resources
<small>SPS Region</small>	

DEPARTMENT OF NATURAL RESOURCES

FORM 9-87(Rev. 01-08)

SUMMARY - Road Development Costs  
 REGION: SOUTH PUGET SOUND  
 DISTRICT: Rainier

SALE/PROJECT NAME: Huzza timber Sale

CONTRACT NUMBER: 30-091787

LEGAL DESCRIPTION: T23-N R8-E S19

	Construction	Reconstruction	Pre-haul Maintenance
ROAD NUMBER:	N/A	5510, 5520	5500
ROAD STANDARD:	0	12	15
NUMBER OF STATIONS:	1.00	13.30	108.85
SIDESLOPE:	0%	0%	0%
CLEARING AND GRUBBING:	\$0	\$1,592	
EXCAVATION AND FILL:	\$0	\$1,197	
MISC. MAINTENANCE:			\$3,656
ROCK TOTALS (Cu. Yds.):			
Ballast: 532	\$0	\$6,263	\$0
Surface: 3919	\$0	\$0	\$48,330
Commercial 6	\$0	\$71	\$0
CULVERTS AND FLUMES:	\$0	\$2,948	\$0
STRUCTURES:	\$0	\$0	\$0
GENERAL EXPENSES:	\$0	\$1,207	\$4,679
MOBILIZATION:	\$2,447	\$2,447	\$2,447
TOTAL COSTS:	\$2,447	\$15,725	\$59,112
COST PER STATION:	\$ 2,447	\$1,182	\$543
ROAD DEACTIVATION AND ABANDONMENT COSTS:		\$13,247	

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

TOTAL (All Roads) = \$90,531

SALE VOLUME MBF = 1,771

TOTAL COST PER MBF = \$51.12

Plans to be furnished by:

Compiled by: Washington St. DNR

Date: 03/08/15

## HCP CHECKLIST

(Used to identify which HCP strategies are actually applied to this proposed management activity, i.e. those that affect the activity)

Name of Proposed Activity: Huzza Agreement #30-091787 FPA# 2418028 Planning Unit: North Puget

Location (provide for activities other than timber sales) T 23 N R 08E (E/W; W.M.) Sec 19

HCP strategy or component	Criteria for strategy application	Applicable planning units	Yes	No
<b>Riparian conservation</b>				
Potentially unstable slopes	Area of proposed activity includes potentially unstable landforms or proposal is modified to avoid potentially unstable landforms	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rain-on-snow	Proposed activity is in the rain-on-snow zone of a subbasin where greater than 2/3 of DNR managed land must remain hydrologically mature	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roads – General	Road construction or maintenance activities are proposed	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roads – In RMZ	Proposed road or recreation trail construction in an RMZ	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roads – In WMZ	Proposed road or recreation trail construction in a WMZ	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
RMZ – Managed	Proposed activity includes riparian forest restoration (RMZ thinning, riparian hardwood conversion, or riparian individual conifer release)	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
RMZ – Unmanaged	Proposed activity is adjacent to an unmanaged RMZ	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WMZ – Managed	Proposed activity includes WMZ thinning	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WMZ – Unmanaged	Proposed activity is adjacent to an unmanaged WMZ	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Northern spotted owl conservation</b>				
Northern spotted owl	Proposed activity is in a NRF or dispersal/DFC management area or a timing restriction area; or adjacent to a 300-acre nest patch core area or a 200-acre buffer area	W O E	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Marbled murrelet conservation</b>				
Marbled murrelet	Different thresholds and strategies apply depending on Planning Unit	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Uncommon Habitats, Federally listed species and unlisted species conservation</b>				
Large, structurally unique trees	Proposed final harvest activity retains 2 upland large structurally unique trees, 3 additional upland green trees, and 3 snags, if available (if snags are unavailable, replace with upland green trees), for each acre of final harvest	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Balds	Proposed activity is on or adjacent to a bald	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Caves	Proposed activity is adjacent to a cave buffer	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cliffs	Proposed activity is on or adjacent to cliffs greater than 25 feet tall at an elevation of less than 5000 feet or cliffs greater than 150 feet tall	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mineral springs	Proposed activity is within 200 feet of a mineral spring	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Oak woodlands	Proposed activity is in or adjacent to oak woodlands	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Talus	Proposed activity area is within or adjacent to non-forested or forested talus fields or a buffer or requires road construction or rock mining through forested or non-forested talus	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Bats	Area of proposed activity includes myotis bats communal roosts or maternity colonies	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
California wolverine	Proposed activity is within 0.5 miles of an active California wolverine den site located in a spotted owl NRF management area	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Common loon	Proposed activity is within 500 feet of a common loon nest	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gray wolf	Proposed activity is within 8 miles of a class 1 gray wolf observation that occurred in the past 5 years	W O E	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Harlequin duck	Proposed activity is within 165 feet of a harlequin duck nest	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Northern goshawk	Proposed activity is within 0.55 miles of a northern goshawk nest site located in a NRF management area	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Oregon silverspot butterfly	Proposed activity is within 0.25 miles of an Oregon silverspot butterfly occurrence	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pacific fisher	Proposed activity is within 0.5 miles of an active Pacific fisher den site located in a northern spotted owl NRF management area	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pileated woodpecker	Area of proposed activity includes known pileated woodpecker nesting sites	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vaux's swift	Area of proposed activity includes Vaux's swift night roosts	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>

W=Westside HCP Planning Units

O=OESF

E=Eastside HCP Planning Units

### SIGNATURES

Proponent: Paul Footen

Title: NRS 1

Date: 2/26/15

Approved by: 

Title: Assistant Region Manager

Date: 6/10/2015  
AFM 6-2-15

This checklist is required for the following activities: 1) Timber harvest activities 2) Construction or expansion of footprint of a road, rock pit, recreation site, communication site, leasing site (for example: antenna, wind turbine, etc.), or right-of-way.

Checklist must be filed with the timber sale packet or sent to [implementation.monitoring@dnr.wa.gov](mailto:implementation.monitoring@dnr.wa.gov)

Revised 12/2013

DEPARTMENT OF NATURAL RESOURCES

FORM 9-87(Rev. 01-08)

SUMMARY - Road Development Costs  
 REGION: SOUTH PUGET SOUND  
 DISTRICT: Rainier

SALE/PROJECT NAME: Huzza timber Sale

CONTRACT NUMBER: 30-091787

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TOTAL COST PER MBF = \$51.12

Plans to be furnished by:

Compiled by: Washington St. DNR

Date: 03/08/15

SOUTH PUGET SOUND REGION - ROAD COST ESTIMATE - CONSTRUCTION

SALE NAME: Huzza timber Sale

CONTRACT NUMBER: 30-091787

I. CLEARING AND GRUBBING:

Flat Rate -	% Side Slope	MBF/ac	Disposal Factor	Production Factor	Cost/Station	Width Factor	Total Stations	Sub Total
			1.00	1.00	\$45	1.00		\$0
			1.00	1.00	\$45	1.00		\$0
			1.00	1.00	\$45	1.00		\$0
			1.00	1.00	\$45	1.00		\$0
			1.00	1.00	\$45	1.00		\$0
							0.00	
Clear and Grub TOTAL =								\$0

II. EXCAVATION:

Flat Rate -	% Side Slope	Exc. Type Fact.	Production Factor	Cost/Station	Width Factor	Total Stations	Sub Total
		1.0	1.00	\$90	1.00		\$0
		1.0	1.00	\$90	1.00		\$0
		1.0	1.00	\$90	1.00		\$0
		1.0	1.00	\$90	1.00		\$0
		1.0	1.00	\$90	1.00		\$0
						0.00	
*End Haul, Over Haul, Large Fills/Cuts							Sub Total
End Haul/ Over Haul Large Fills/ Cuts				Estimated Vol. (cy)	No. of Equip. Days	Cost/day	\$0
							\$0
Excavation TOTAL = \$0							

III. BALLAST AND SURFACING :

Ballast source:   
 Surface source:   
 Riprap source :

Description	cu.yds/sta x stations =	cubic yards
Ballast (4"-)		0
Surfacing (2 1/2"-)		0
Riprap		0

\* Haul Formula: (R.T.Miles/MPH+Delay)(\$/hr / Cy/load)

R.T. Miles =	4.0
Ave. Speed =	20
Delay (Hrs.)=	0.2
Cost / Hour =	\$100.00
CY / Load =	10

Ballast (4"-)	0 Cu. yds @	\$4.00 /cu. yd =	\$0
Surfacing (2 1/2"-)	0 Cu. yds @	\$4.00 /cu. yd =	\$0
Riprap	0 Cu. yds @	\$4.00 /cu. yd =	\$0

Rock total = \$0

UNIT COSTS	Ballast	Surfacing	Riprap
Drill & Shoot			
Dig and load			
Crushing			
Purchase			
Haul *	\$4.00	\$4.00	\$4.00
Spread			
Compact			
Strip			
Reclamation			
Use tax	\$0.00	\$0.00	\$0.00
<b>TOTAL (\$/cy)</b>	<b>\$4.00</b>	<b>\$4.00</b>	<b>\$4.00</b>

IV. CULVERTS AND FLUMES:

Description	Qty.	Gauge	Diameter	No/Length	Installed Cost/ft	Sub-total
CPP			18		\$17.00	\$0
			24		\$30.00	\$0
			36		\$52.00	\$0
			48		\$94.00	\$0
Bands & Gaskets						\$0

Culvert total = \$0

V. STRUCTURES

Description	Type	Width	Length	Cost/ft.	Sub-total
geotextile				\$1.5	\$0
					\$0
					\$0

Structure total = \$0

Sub-TOTAL = \$0

VI. GENERAL EXPENSES:

Overhead & General Exp. Add 12% \$0

VII. MOBILIZATION:

Total Mobilization = \$7,342 Mobilization sub-total = \$2,447

Road No. N/A  
Standard: 0  
Stations: 1.00  
By: Washington St. DNR

Sheet 2 of 5

Date: 03/08/15

SHEET TOTAL = \$2,447

Note: Used a factor of 1.3 x final CY needed after compaction. Example: 12" of rock on 12 ft wide road need 50 CY/sta. 50CY x 1.3 = 65CY before compaction.

SOUTH PUGET SOUND REGION - ROAD COST ESTIMATE - RECONSTRUCTION

SALE NAME: Huzza timber Sale

CONTRACT NUMBER: 30-091787

I. CLEARING AND GRUBBING:

Flat Rate -	% Side Slope	MBF/ac	Disposal Factor	Production Factor	Cost/ Station	Width Factor	Total Stations	Sub Total
5510	0	35	1.00	2.66	\$45	1.0	9.75	\$1,167
5520	0	35	1.00	1.00	\$45	1.0	3.55	\$425
			1.00	1.00	\$45	1.0		\$0
			1.00	1.00	\$45	1.0		\$0
			1.00	1.00	\$45	1.0		\$0

Clear and Grub TOTAL = \$1,592

II. EXCAVATION:

Flat Rate -	% Side Slope	Exc. Type Fact.	Production Factor	Cost/ Station	Width Factor	Total Stations	Sub Total
5510	0	1.0	1.00	\$90	1.00	9.75	\$878
5520	0	1.0	1.00	\$90	1.00	3.55	\$320
		1.0	1.00	\$90	1.00		\$0
		1.0	1.00	\$90	1.00		\$0
		1.0	1.00	\$90	1.00		\$0

\*End Haul, Over Haul, Large Fills/Cuts

End Haul/ Over Haul  
Large Fills/ Cuts

Estimated Vol. (cy)	No. of Equip. Days	Cost/day	Sub Total
			\$0
			\$0

Excavation TOTAL = \$1,197

III. BALLAST AND SURFACING :

Ballast source: Rattlesnake Pit

Commercial source :

Description	cu.yds/sta x stations =	cubic yards
Ballast (4"-)	40	13.30
Surfacing (1 1/4"-)		0
Quarry Spalls	6	1.00

\* Haul Formula: (R.T.Miles/MPH+Delay)/(\$/hr / Cy/load)

R.T. Miles =	4.0
Ave. Speed =	20
Delay (Hrs.)=	0.2
Cost / Hour =	\$100.00
CY / Load =	10

Ballast (4"-)	532 Cu. yds @	\$11.77 /cu. yd =	\$6,263
Surfacing (1 1/4"-)	0 Cu. yds @	\$4.32 /cu. yd =	\$0
Quarry Spalls	6 Cu. yds @	\$11.77 /cu. yd =	\$71

Rock total = \$6,333

UNIT COSTS	Ballast	Surfacing	Quarry Spalls
Drill & Shoot	\$2.25		\$2.25
Dig and load	\$0.90		\$0.90
Crushing	\$2.75		\$2.75
Purchase			
Haul *	\$4.00	\$4.00	\$4.00
Spread	\$1.00		\$1.00
Compact			
Strip			
Reclamation			
Use tax	\$0.08	\$0.08	\$0.08
<b>TOTAL (\$/cy)</b>	<b>\$11.77</b>	<b>\$4.32</b>	<b>\$11.77</b>

IV. CULVERTS AND FLUMES:

Description	Qty.	Gauge	Diameter (in.)	No/Length (ft)	Installed Cost/ft	Sub-total
Temp Culverts installation only	1		18	120	\$8.50	\$1,020
			24		\$14.50	\$0
	1		36		\$26.00	\$0
	1		48	40	\$47.00	\$1,880
Bands & Gaskets	1			1	\$48.00	\$48

Culvert total = \$2,948

V. STRUCTURES

Description	Type	Width	Length	Cost/ft.	Sub-total
					\$0

Structure total = \$0

Sub-TOTAL = \$12,070

VI. GENERAL EXPENSES:

Overhead & General Exp. Add 10% \$1,207

VII. MOBILIZATION:

Total Mobilization = \$7,342 Mobilization sub-total = \$2,447

Road No. 5510, 5520  
Standard: 12  
Stations:

By: Washington St. DNR

Sheet 3 of 5

SHEET TOTAL = \$15,725

Date: 03/08/15

Note: Used a factor of 1.3 x final CY needed after compaction. Example: 12" of rock on 12 ft wide road need 50 CY/sta. 50CY x 1.3 = 65CY before compaction.

SOUTH PUGET SOUND REGION - ROAD COST ESTIMATE - PRE-HAUL MAINTENANCE

SALE NAME: Huzza timber Sale

CONTRACT NUMBER: 30-091787

Total stations Pre-Haul Maintenance = 108.85

I. MISC. MAINTENANCE ITEMS:

	Cost/ Station	Total Stations	Sub Total
mechanical brushing =	15.00	108.85	\$1,633
hand brushing =			\$0
ditch cleaning =	39.00	46.70	\$1,821
grading =			\$0
culvert cleanout =	2.00	100.87	\$202
compacting=			\$0
			\$0
			\$0
			\$0
			\$0

Misc TOTAL = \$3,656

III. BALLAST AND SURFACING :

Ballast source: Rattlesnake Pit  
 Surface source: Rattlesnake Pit  
 Riprap source :

Description	cu.yds/sta x stations =	cubic yards	
Culvert installs	0 1.00	0	
Surfacing (1 1/4"-)	36 108.85	3,919	
Quarry Spalls	0 1.00	0	

UNIT COSTS	culvert	Surfacing	Quarry Spalls
Drill & Shoot			
Dig and load	\$0.90	\$0.90	\$0.90
Crushing	\$5.00	\$5.00	\$2.75
Purchase			
Haul *	\$4.00	\$4.00	\$4.00
Spread	\$1.00	\$1.00	\$1.00
Compact	\$0.52	\$0.52	
Strip			
Reclamation			
Use tax	\$0.08	\$0.08	\$0.08
<b>TOTAL (\$/cy)</b>	<b>\$12.33</b>	<b>\$12.33</b>	<b>\$9.34</b>

\* Haul Formula: (R.T.Miles/MPH+Delay)/(\$/hr / Cy/load)

R.T. Miles = 4.0  
 Ave. Speed = 20  
 Delay (Hrs.)= 0.2  
 Cost / Hour = \$100.00  
 CY / Load = 10

Culvert installs	0 Cu. yds @	\$12.33 /cu. yd =	\$0
Surfacing (1 1/4"-)	3919 Cu. yds @	\$12.33 /cu. yd =	\$48,330
Quarry Spalls	0 Cu. yds @	\$9.34 /cu. yd =	\$0

Rock total = \$48,330

IV. CULVERTS AND FLUMES:

Description	Qty.	Gauge	Diameter (in.)	No/Length (ft)	Installed Cost/ft	Sub-total
	1		18		\$17.50	\$0
	1		24		\$30.00	\$0
	1		36		\$52.00	\$0
			48		\$94.00	\$0
						\$0
Bands & Gaskets	1		1		\$200.00	\$0

Culvert total = \$0

V. PIT DEVELOPEMNT

Description	Type	Width	Length	Cost/ft.	Sub-total
Drill and Shoot					\$0
					\$0
					\$0

Structure total = \$0

Sub-TOTAL = \$51,986

VI. GENERAL EXPENSES:

Overhead & General Exp. Add 9% \$4,679

VII. MOBILIZATION:

Total Mobilization = \$7,342 Mobilization sub-total = \$2,447

Road No. 5500  
 Standard: 15  
 Stations: 108.85  
 By: Washington St. DNR

Sheet 4 of 5

SHEET TOTAL = \$59,112

Date: 03/08/15

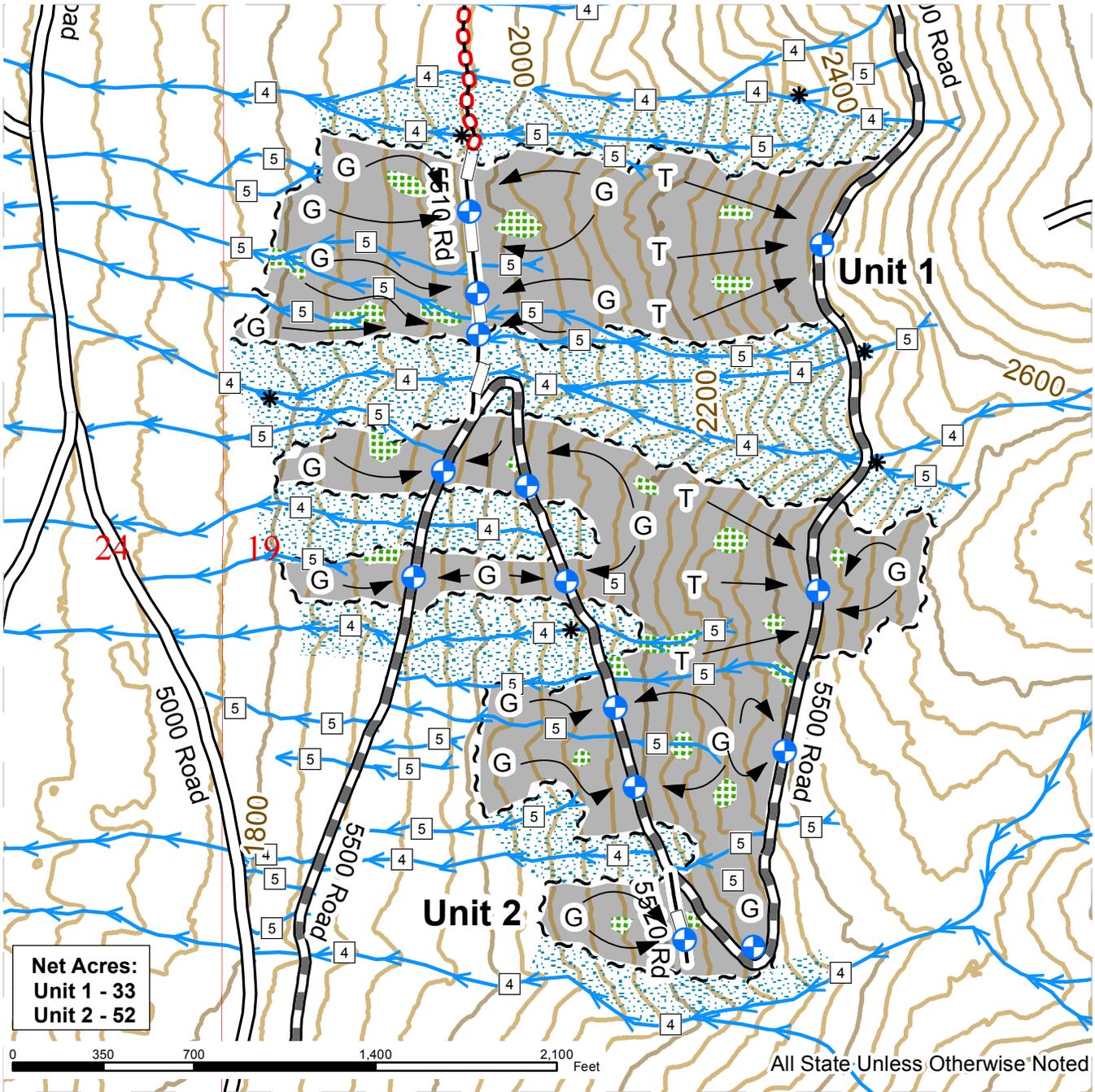
Note: Used a factor of 1.3 x final CY needed after compaction. Example: 12" of rock on 12 ft wide road need 50 CY/sta. 50CY x 1.3 = 65CY before compaction.



# LOGGING PLAN MAP

**SALE NAME:** Huzza  
**AGREEMENT#:** 30-091787  
**TOWNSHIP(S):** T23NR08E  
**TRUST(S):** Common School Indemnity (3)

**REGION:** South Puget Sound  
**COUNTY(S):** King  
**ELEVATION RGE:** 1763-2590 ft.



**Net Acres:**  
 Unit 1 - 33  
 Unit 2 - 52

All State Unless Otherwise Noted

Public Land Survey Sections	Existing Roads	Streams
Variable Retention Harvest	Required Pre-Haul Maintenance	Stream Type
Riparian Management Zone	Required Decommissioning	Stream Type Break
Yellow Leave Tree Boundary Tags	Optional Reconstruction	Proposed Landings
White Timber Sale Boundary Tags		Contours 40 ft
Cable Based Yarding		
Ground Based Yarding		