



TIMBER NOTICE OF SALE

SALE NAME: DRAG

AGREEMENT NO: 30-99095

AUCTION: January 30, 2020 starting at 10:00 a.m., COUNTY: Grays Harbor
Pacific Cascade Region Office, Castle Rock, WA

SALE LOCATION: Sale located approximately 8 miles west of Oakville

PRODUCTS SOLD AND SALE AREA: All timber, except trees marked with blue paint, trees bound out by yellow "Leave Tree Area" tags and all down timber existing 5 years prior to the day of sale, bound by the following: White "Timber Sale Boundary" tags, pink flagging, reprod, and Property line in Unit 1; white "Timber Sale Boundary" tags, reprod, and property line in Unit 2; white "Timber Sale Boundary" tags, reprod, the V-1000 and the V-1600 roads in Unit 3 on part(s) of Sections 4 all in Township 15 North, Range 5 West, Sections 33 and 34 all in Township 16 North, Range 5 West, W.M., containing 116 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: PwC-SFIFM-513)

ESTIMATED SALE VOLUMES AND QUALITY:

Table with columns: Species, Avg DBH, Ring Count, Total MBF, and MBF by Grade (1P, 2P, 3P, SM, 1S, 2S, 3S, 4S, UT). Rows include Douglas fir, Maple, Red alder, Red cedar, Hemlock, Grand fir, Cottonwood, and Sale Total.

MINIMUM BID: \$1,488,000.00 BID METHOD: Sealed Bids

PERFORMANCE SECURITY: \$100,000.00 SALE TYPE: Lump Sum

EXPIRATION DATE: October 31, 2021 ALLOCATION: Export Restricted

BID DEPOSIT: \$148,800.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Cable, cable assist and ground based equipment are permitted on this sale. This sale is estimated to be 55% cable harvest and 45% ground based harvest. Ground based harvesting is restricted to sustained slopes 45%. This sale was designed with a minimum tower height of 70 feet on all cable settings on all units. Intermediate supports may be required in Units 1 off of Spur A and Unit 2 off of the V-1890 road. See contract clauses H-140/H-141 for additional harvesting restrictions.



TIMBER NOTICE OF SALE

ROADS: 5.10 stations of required reconstruction. 25.60 stations of optional construction. 342.30 stations of required prehaul maintenance. 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. All road work Road construction will not be permitted from October 1 to April 30 unless authorized in writing by the Contract Administrator. The hauling of forest products will not be permitted from November 1 to February 28 unless authorized in writing by the Contract Administrator on the V-Line and the GD-9300.

ACREAGE DETERMINATION

CRUISE METHOD: The sale acres were determined by GPS delineation. Cruise was completed using variable plot cruise methods.

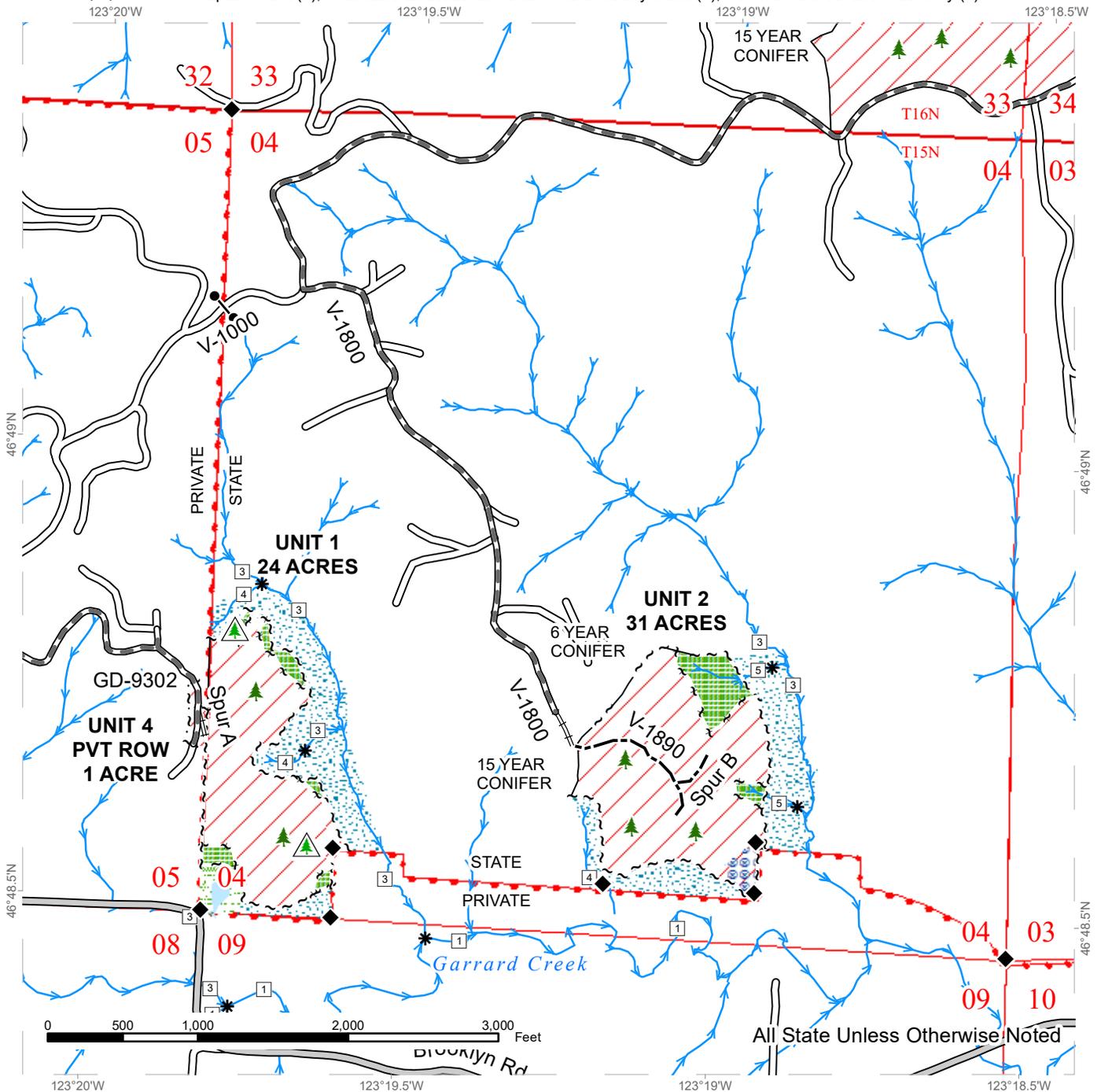
FEES: Fees of \$7,700 to Series One of Twin Creeks Timber, LLC, for the Road Use Permit between Green Diamond Management Company and the State, Dated September 1, 2019 due on day of sale. For more information see Road Use Permit. These are in addition to the bid price. \$82,688.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

SPECIAL REMARKS: This sale contains an estimated 1,716 MBF of high quality DF 2 saw, 204 MBF of high quality DF 3 saw, 44 MBF of 3P DF, derived from the cruise. See cruise for details. See driving map for gate locations. PCP 1-1 gate keys may be obtained from the Pacific Cascade Region office.

TIMBER SALE MAP

SALE NAME: DRAG
AGREEMENT #: 30-099095
TOWNSHIP(S): T15R5W, T16R5W
TRUST(S): Capitol Grant (7), Charitable/Educational/Peenal & Reformatory Instit. (6), Common School and Indemnity (3)

REGION: Pacific Cascade Region
COUNTY(S): Grays Harbor
ELEVATION RGE: 140-731



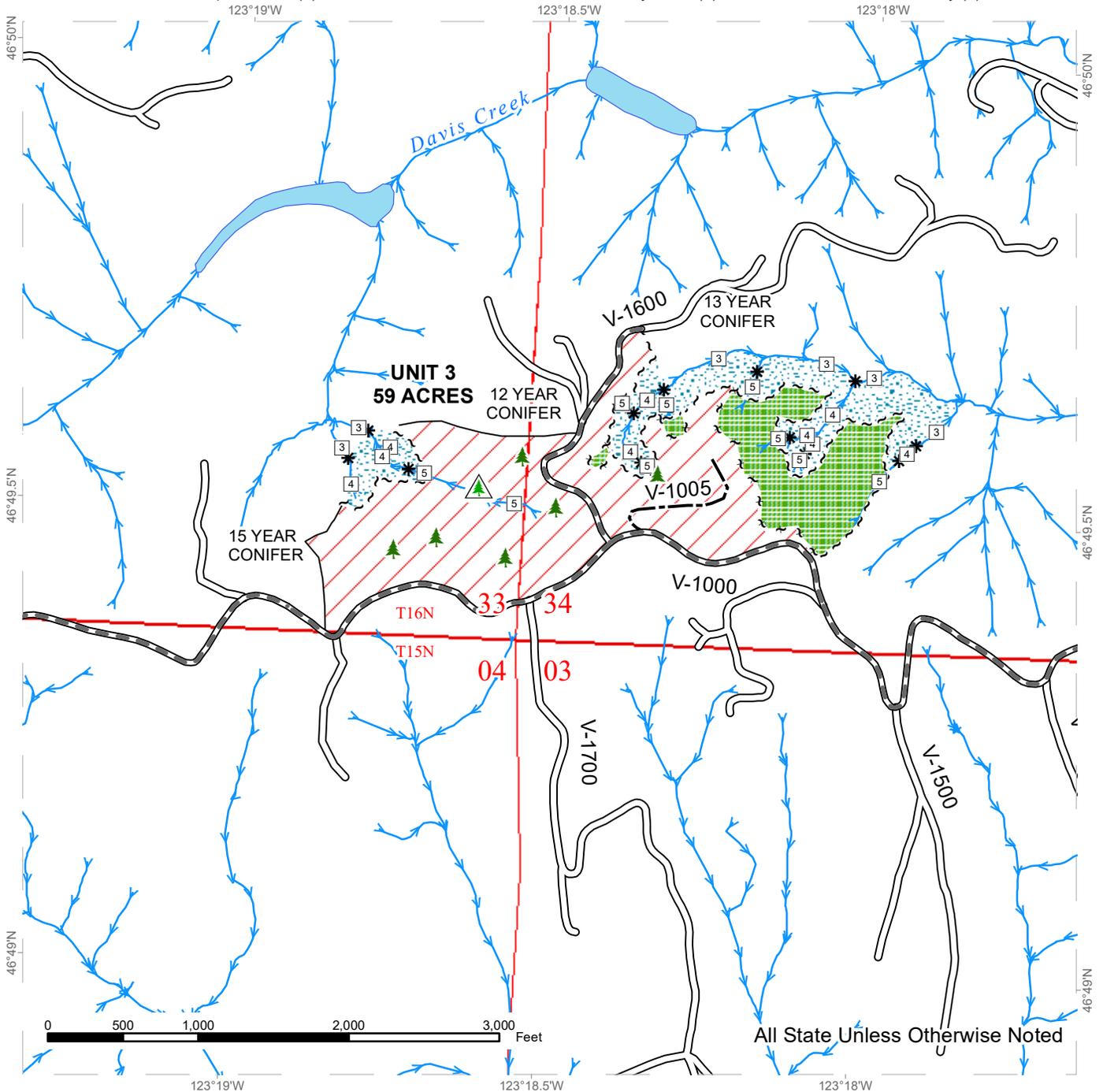
Variable Retention Harvest	County Road	Streams
Leave Tree Area	Existing Roads	Stream Type
Riparian Mgt Zone	Required Pre-Haul Maintenance	Stream Type Break
Forested Wetland	Required Reconstruction	Survey - Monumented Points
Wetland Mgt Zone	Optional Construction	Sale Boundary Tags
Hazard Abatement Area	Gate (PCP 1-1)	Leave Tree Tags
	Leave Tree Area	Right of Way Tags
	Non-Tradeable LTs	Timber Type Change



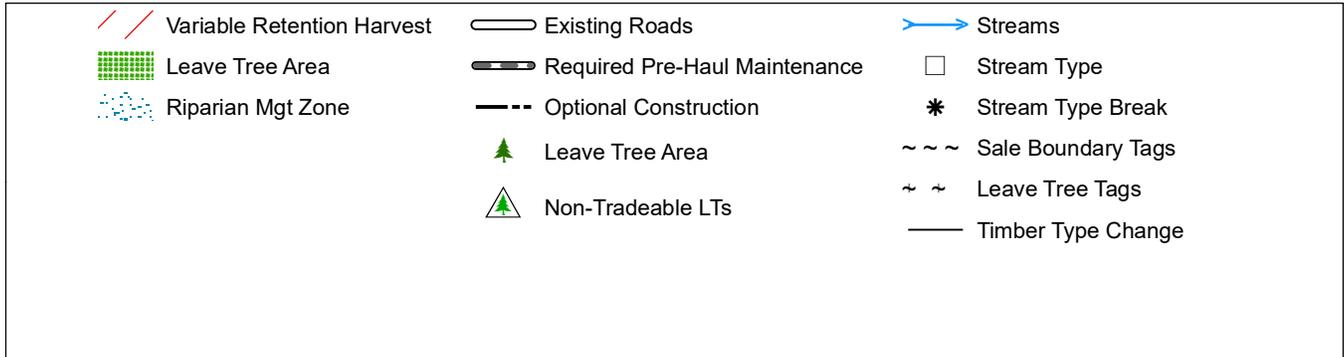
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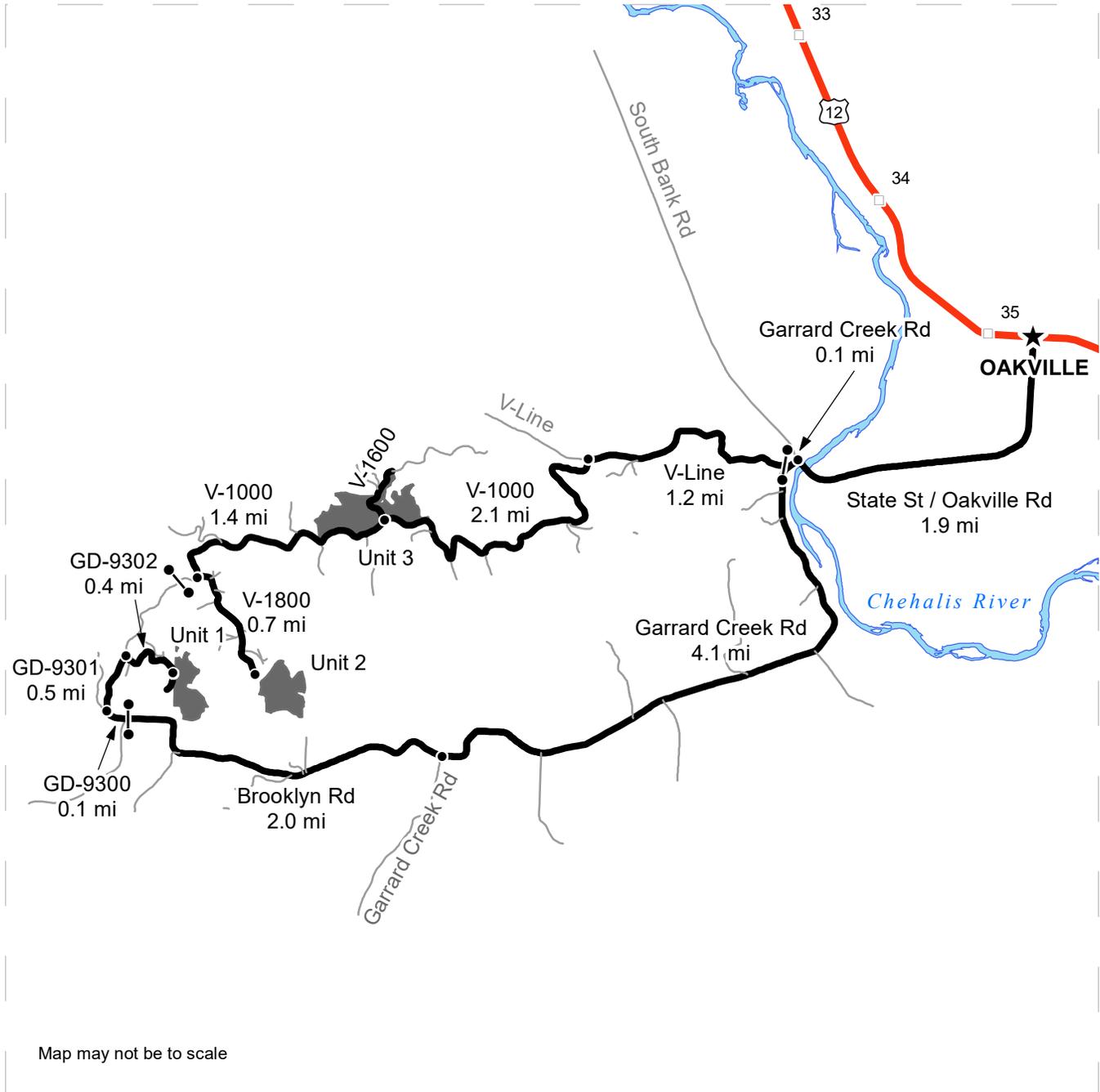
All State Unless Otherwise Noted



DRIVING MAP

SALE NAME: DRAG
 AGREEMENT#: 30-099095
 TOWNSHIP(S): T15R5W, T16R5W
 TRUST(S): Capitol Grant (7), Charitable/Educational/Penal & Reformatory Instit. (6), Common School and Indemnity (3)

REGION: Pacific Cascade Region
 COUNTY(S): Grays Harbor
 ELEVATION RGE: 140-731



Map may not be to scale

- Timber Sale Unit
- Haul Route
- Other Road
- Milepost Markers
- Gate (PCP1-1)

DRIVING DIRECTIONS:
 From intersection of US-12/Pine and State St. in Oakville, head south on State St. 1.9 miles, becoming Oakville Rd.
Unit 3: Turn left onto Garrard Creek Rd. and follow for 0.1 miles to reach V-Line. Turn right onto V-LINE (gate) and follow 1.2 miles
 Turn left onto V-1000 and follow 2.1 miles to reach Unit 3
Unit 2: Continue on V-1000 for additional 1.4 miles
 Turn left onto V-1800 and follow 0.7 miles to reach Unit 2
Unit 1: From V-Line gate, continue on Garrard Creek Rd. 4.1 miles, then keep straight onto Brooklyn Rd. and follow 2.0 miles
 Bear right onto GD-9300 (gate) for 0.1 mile, then right onto GD-9301 for 0.5 miles
 Turn right onto GD-9302 and follow 0.4 miles to reach Unit 1



**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

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

Export Restricted Lump Sum AGREEMENT NO. 30-099095

SALE NAME: DRAG

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

Section G: General Terms

G-001 Definitions

The following definitions apply throughout this contract;

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

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

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

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

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

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

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

G-011 Right to Remove Forest Products and Contract Area

Purchaser was the successful bidder on January 30, 2020 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 trees marked with blue paint, trees bound out by yellow "Leave Tree Area" tags and all down timber existing 5 years prior to the day of sale, bound by the following: White "Timber Sale Boundary" tags, pink flagging, reprod, and Property line in Unit 1; white "Timber Sale Boundary" tags, reprod, and property line in Unit 2; white "Timber Sale Boundary" tags, reprod, the V-1000 and the V-1600 roads in Unit 3, located on approximately 116 acres on part(s) of Section 4 in Township 15 North, Range 5 West, Sections 33, and 34 all in Township 16 North, Range 5 West W.M. in Grays Harbor 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, 2021.

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-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.

The pricing schedule has not been set for the sale.

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 Purchasers expense regardless of cost, to remedy deficiencies at any time.

G-140 Indemnity

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

G-150 Insurance

Purchaser shall, at its cost and expense, buy and maintain insurance of the types and amounts listed below. Failure to buy and maintain the required insurance may result in a breach and/or termination of the contract at State's option. State may suspend Purchaser operations until required insurance has been secured.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

G-160 Agents

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

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

G-170 Assignment and Delegation

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

G-180 Modifications

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

G-190 Contract Complete

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

G-200 Notice

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

G-210 Violation of Contract

G-220 State Suspends Operations

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

G-210 Violation of Contract

- a. If Purchaser violates any provision of this contract, the Contract Administrator, by written notice, may suspend those operations in violation. If the violation is capable of being remedied, Purchaser has 30 days after receipt of a suspension notice to remedy the violation. If the violation cannot be remedied (such as a violation of WAC 240-15-015) or Purchaser fails to remedy the violation within 30 days after receipt of a suspension notice, the State may terminate the rights of Purchaser under this contract and collect damages.
- b. If the contract expires pursuant to clause G-030 or G-031 without Purchaser having performed all its duties under this contract, Purchaser's right to operate is terminated and Purchaser shall not have the right to remedy the breach. This provision shall not relieve Purchaser of any payment obligations.
- c. The State has the right to remedy the breach in the absence of any indicated attempt by Purchaser or if Purchaser is unable, as determined by the State, to

remedy the breach. Any expense incurred by the State shall be charged to Purchaser and shall be paid within 30 days of receipt of billing.

- d. If Purchaser's violation is a result of a failure to make a payment when due, in addition to a. and b. above, interest shall accrue on the unpaid balance at 12 percent per annum, beginning the date payment was due.

G-220 State Suspends 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 V-Line, V-1000, V-1005, V-1600, V-1800, V-1880, V-1890, GD-9300, GD-9301, GD-9302, Spur A, and Spur B 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 V-Line, GD-9300, and the GD-9301 roads, 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 between the State and James B. and Carol L. Wolf. Dated: 5/4/1976 Expires: Indefinitely

Road Use Permit between the State and Green Diamond Resources Co. Dated: 09/01/2019 Expires: 12/31/2023.

G-396 Public Hauling Permit

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

G-430 Open Fires

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

G-450 Encumbrances

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

DATA MISSING

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 \$126,464.00. The total contract price consists of a \$0.00 contract bid price plus \$126,464.00 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 \$100,000.00. The Security provided shall guarantee performance of all provisions of this contract and payment of any damages caused by operations under this contract or resulting from Purchaser's noncompliance with any rule or law. Acceptable performance security may be in the form of a performance bond, irrevocable letter of credit, cash, savings or certificate of deposit account assignments, and must name the State as the obligee or beneficiary. A letter of credit must comply with Title 62A RCW, Article 5. Performance security must remain in full force over the duration of the contract length. Surety bonds issued shall conform to the issuance and rating requirements in clause G-150. The State shall retain the performance security pursuant to RCW 79.15.100. Purchaser shall not operate unless the performance security has been accepted by the State. If at any time the State decides that the security document or amount has become unsatisfactory, Purchaser agrees to suspend operations and, within 30 days of notification, to replace the security with one acceptable to the State or to supplement the amount of the existing security.

P-100 Performance Security Reduction

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

Section H: Harvesting Operations

H-001 Operations Outside the Sale Boundaries

No operations shall occur outside the sale boundaries, as described within the contract, unless approved in writing by the State.

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 100 square inches.
- b. A reserve tree top is broken or the live crown ratio is reduced below 30 percent.

- c. A reserve tree has more than 1/3 of the circumference of its root system injured such that the cambium layer is exposed.

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

Removal of designated reserve trees from the sale area is unauthorized, and may invoke the use of the G-230 '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-035 Fall Trees Into Sale Area

Trees shall be felled into the sale area unless otherwise approved by the Contract Administrator.

H-040 Purchaser Harvest Plan

Purchaser shall, as part of the plan of operations, prepare an acceptable harvest plan for all harvest Units. The plan shall address the felling and yarding 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-120 Harvesting Equipment

Forest products sold under this contract shall be harvested and removed using cable, including cable assist and ground based shovel systems. Authority to use other

equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.

H-125 Log Suspension Requirements

Lead-end suspension is required for all yarding activities.

H-126 Tailholds on State Land

If Purchaser tailholds on State land, methods to minimize damage to live trees outside the sale area shall be employed and must be approved in writing by the Contract Administrator.

H-127 Tailholds on Private Land

If Purchaser chooses to tailhold on private property, Purchaser shall obtain permit(s) and assumes responsibility for all costs and damages associated with the permit(s). Purchaser must provide the State with a copy of the executed permit(s) or a letter from the landowner indicating that a satisfactory tailhold permit(s) has been consummated between Purchaser and the landowner.

H-130 Hauling Schedule

The hauling of forest products will not be permitted V-Line and GD-9300 from November 1 to February 28 for all harvest units unless authorized in writing by the Contract Administrator.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

Shovel must be large enough to pick up one end of the largest log 35 feet from the machine.

Ground based yarding equipment will not be permitted on sustained slopes over 45%.

Ground based yarding equipment shall only operate during dry soil conditions.

This sale was designed with a minimum tower height of 70 feet on all cable settings in all Units.

Intermediate support may be required to prevent soil rutting in Unit(s) 1 and 2 off Spur A and V -1890 road(s).

Self-leveling ground-based yarding equipment will not be permitted on sustained slopes over 60%.

Tethered equipment will not be permitted on sustained slopes over 75%.

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:

Sediment delivery from roads will not be allowed. Hauling operations will be shut down as needed until conditions improve or work can be completed that eliminates the delivery of sediment.

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.

H-230 Tops and Limbs Outside the Sale Boundary

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

H-250 Additional Falling Requirements

Within all units, all non-merchantable hardwood stems 2 inches DBH or 10 feet tall, shall be felled concurrently with felling operations. Areas of young or immature timber may be excluded from this requirement by the Contract Administrator.

Section C: Construction and Maintenance

C-040 Road Plan

Road construction and associated work provisions of the Road Plan for this sale, dated 8/8/2019 are hereby made a part of this contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on V-1000, V-1005, V-1600, V-1800, V-1880, V-1890, Spur A, and the Spur B 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 roads not listed in Clause C-050. Purchaser shall furnish a statement in a form satisfactory to the State showing the costs incurred while performing this work. Costs shall be based on the rates set forth in the equipment rate schedule on file at the Region office or Engineering Division in Olympia. The State shall reimburse Purchaser for said costs within 30 days of receipt and approval of the statement.

C-080 Landing Locations Approved Prior to Construction

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

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

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

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

S-010 Fire Hazardous Conditions

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

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

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

S-020 Extreme Hazard Abatement

Purchaser shall provide a written Extreme Hazard Abatement plan that meets the requirements of WAC 332-24 prior to the beginning of logging operations. The plan must be acceptable to the Contract Administrator. The plan will identify how Purchaser will accomplish abatement. Purchaser shall also provide, and keep current, a written timetable for completion of all specified work in the plan. The Contract Administrator's acceptance and approval of Purchaser's hazard abatement plan shall not be construed as any statement or warranty that the hazard abatement plan is adequate for Purchaser's purposes or complies with applicable laws.

S-030 Landing Debris Clean Up

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

S-035 Logging Debris Clean Up

Slash and debris created from harvest activities shall be treated in a manner approved in writing by the Contract Administrator.

S-050 Cessation of Operations for Low Humidity

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

S-060 Pump Truck or Pump Trailer

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

S-100 Stream Cleanout

Slash or debris which enters any Type 5 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-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 10 gallons of oil, coolant, solvent or contaminated water are available on site to quickly address potential spills from any piece of equipment at all times throughout active operations. If large quantities of bulk fuel/other hazardous materials are stored on site, Purchaser must be able to effectively control a container leak and contain & recover a hazmat spill equal to the largest single on site storage container volume. (HAZWOPER reg. 29CFR 1910.120 (j) (1) (vii)).

d. Hazardous Material Release Reporting

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

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

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Purchaser

Print Name

Eric Wisch
Pacific Cascade Region Manager

Date: _____
Address: _____

Date: _____

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

STATE OF _____)

COUNTY OF _____)

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

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

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

Notary Public in and for the State of

My appointment expires _____

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOREST EXCISE TAX ROAD SUMMARY SHEET

Region: Pacific Cascade

Timber Sale Name: Drag

Application Number: 30- 099095

EXCISE TAX APPLICABLE ACTIVITIES

Construction: 2,560 linear feet
Road to be constructed (optional and required) but not abandoned

Reconstruction: 510 linear feet
Road to be reconstructed (optional and required) but not abandoned

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

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

Pre-Haul Maintenance: 34,230 linear feet
Existing road to receive maintenance work (specifically required by the contract) prior to haul

EXCISE TAX EXEMPT ACTIVITIES

Temporary Optional Construction: 0 linear feet
Optional roads to be constructed and then abandoned

Temporary Optional Reconstruction: 0 linear feet
Optional roads to be reconstructed and then abandoned

New Abandonment: 0 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: DRAG	Region: Pacific Cascade
Agreement #: 30-099095	District: Lewis
Contact Forester: Brady Dier Phone / Location: 360-751-9188 / Chehalis	County(s): Grays Harbor, Choose a county
Alternate Contact: Dave Sund Phone / Location: 360-880-5802 / Chehalis	Other information: U1: two distinct age classes; stratify? U3: root rot/snag patch in west ½

Type of Sale: Lump Sum	
Harvest System: Ground based Click here to enter text.	45%
Harvest System: Uphill Cable Click here to enter text.	55%
Enter % of sale acres	
Harvest System: Select harvest system Click here to enter text.	Click here to enter percent sale acres.

UNIT ACREAGES AND METHOD OF DETERMINATION:

Unit # Harvest R/W or RMZ WMZ	Legal Description (Enter only one legal for each unit) Sec/Twp/Rng	Grant or Trust	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)		
1	4 / 15 / 05W	3, 6	45.9	18.0	2.6	0.2	0	25.1	Combination: Trimble/Garmin
2	4 / 15 / 05W	3	49.1	13.8	4.0	0	0	31.3	Combination: Trimble/Garmin
3	33, 34 / 16 / 05W	3, 7	99.6	23.4	16.4	0.6	0	59.2	Combination: Trimble/Garmin
TOTAL ACRES			194.4	55.2	23.0	0.8	0	115.4	

HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
1	Unit 1 is bound with white "Timber Sale Boundary" tags with pink flagging to the north, west, and south; and reprod edge, property line, and white tags with pink flagging to the west.	none	*Private ROW is attached to Unit 1, will need separate cruise *8 leave trees per acre (clumped & scattered) are bounded by yellow "Leave Tree Area" tags with pink flagging; individual leave trees are marked with a single band of blue paint.
2	Unit 2 is marked by reprod edge to the north and west; and white tags with pink flagging to the east and south.	none	*8 leave trees per acre (clumped & scattered) are bounded by yellow "Leave Tree Area" tags with pink flagging; individual leave trees are marked with a single band of blue paint.
3	Unit 3 is bound by the V-1600 and reprod edge to the north; white tags with pink flagging to the east; the V-1000 to the south; and reprod edge and white tags with pink flagging to the west.	none	*8 leave trees per acre (clumped & scattered) are bounded by yellow "Leave Tree Area" tags with pink flagging; individual leave trees are marked with a single band of blue paint.

OTHER PRE-CRUISE INFORMATION:

Unit #	Primary,secondary Species / Estimated Volume (MBF)	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	DF, WH / 1125	No easement across Green Diamond; walk in from Brooklyn Rd.	See logging plan maps
2	DF, WH / 1395	V-Line/V-1000; PCP 1-1	See logging plan maps
3	DF, WH / 2655	V-Line/V-1000; PCP 1-1	See logging plan maps
TOTAL MBF	5175		

REMARKS:

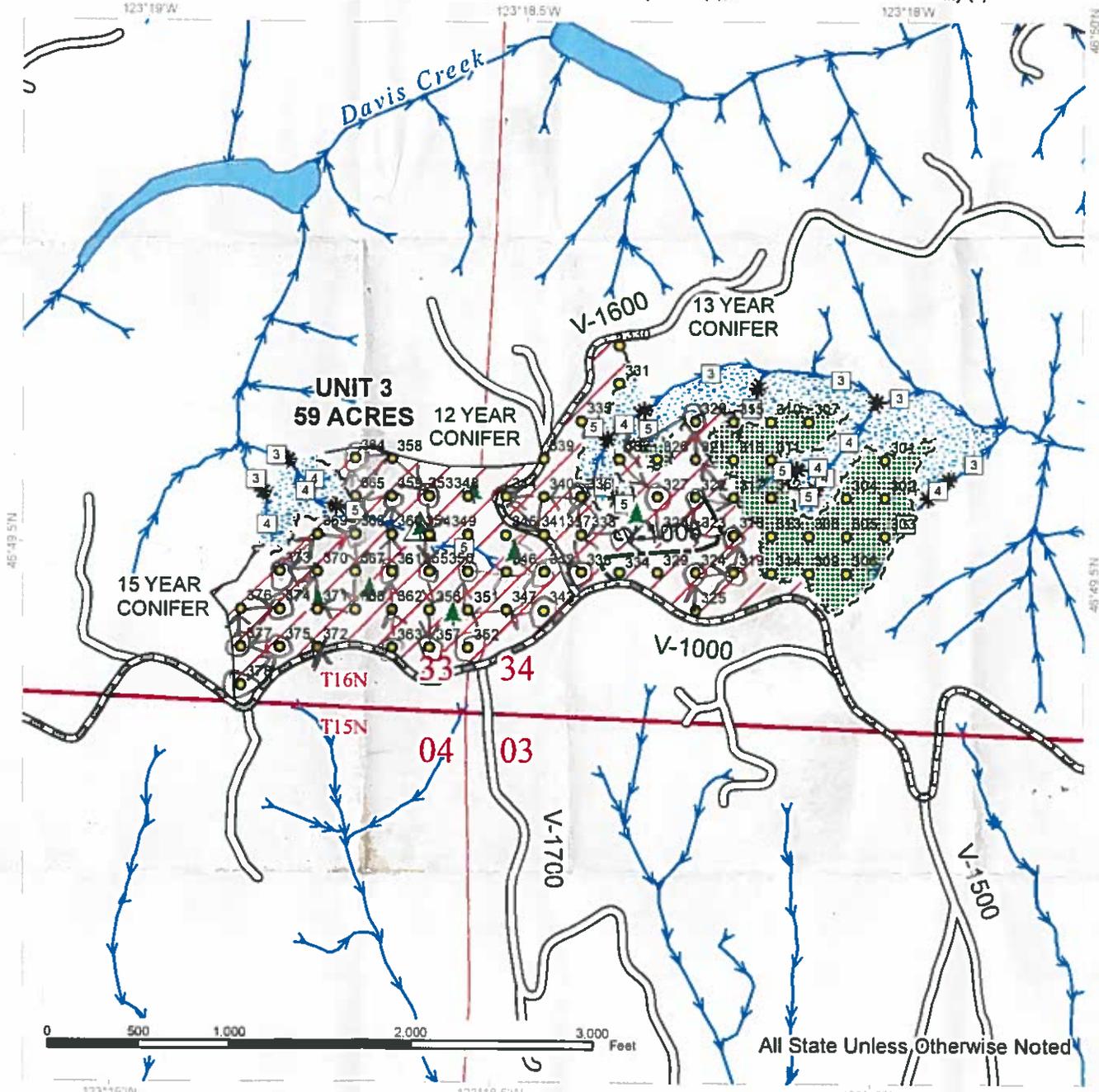
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Prepared By: Brady Dier Date: 6 Dec. 2018	Title: NRS1	CC: Dave Sund, Calvin Bailey
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TIMBER SALE MAP

SALE NAME: DRAG
AGREEMENT #: None
TOWNSHIP(S): T15R5W, T16R5W
TRUST(S): Capitol Grant (7), Charitable/Educational/Penal & Reformatory Instit. (6), Common School and Indemnity (3)

REGION: Pacific Cascade Region
COUNTY(S): Grays Harbor
ELEVATION RGE: 140-731



Sale Area	Existing Roads	Streams
Leave Tree Area	Required Pre-Haul Maintenance	Stream Type
Riparian Mgt Zone	Optional Construction	Stream Type Break
Sale Boundary Tags	Leave Tree Area	
Leave Tree Tags	Non-Tradeable LTs	
Timber Type Change		

27.78 All other species

Prepared By: bdlie490

Modification Date: Dcrk490 6/10/2019

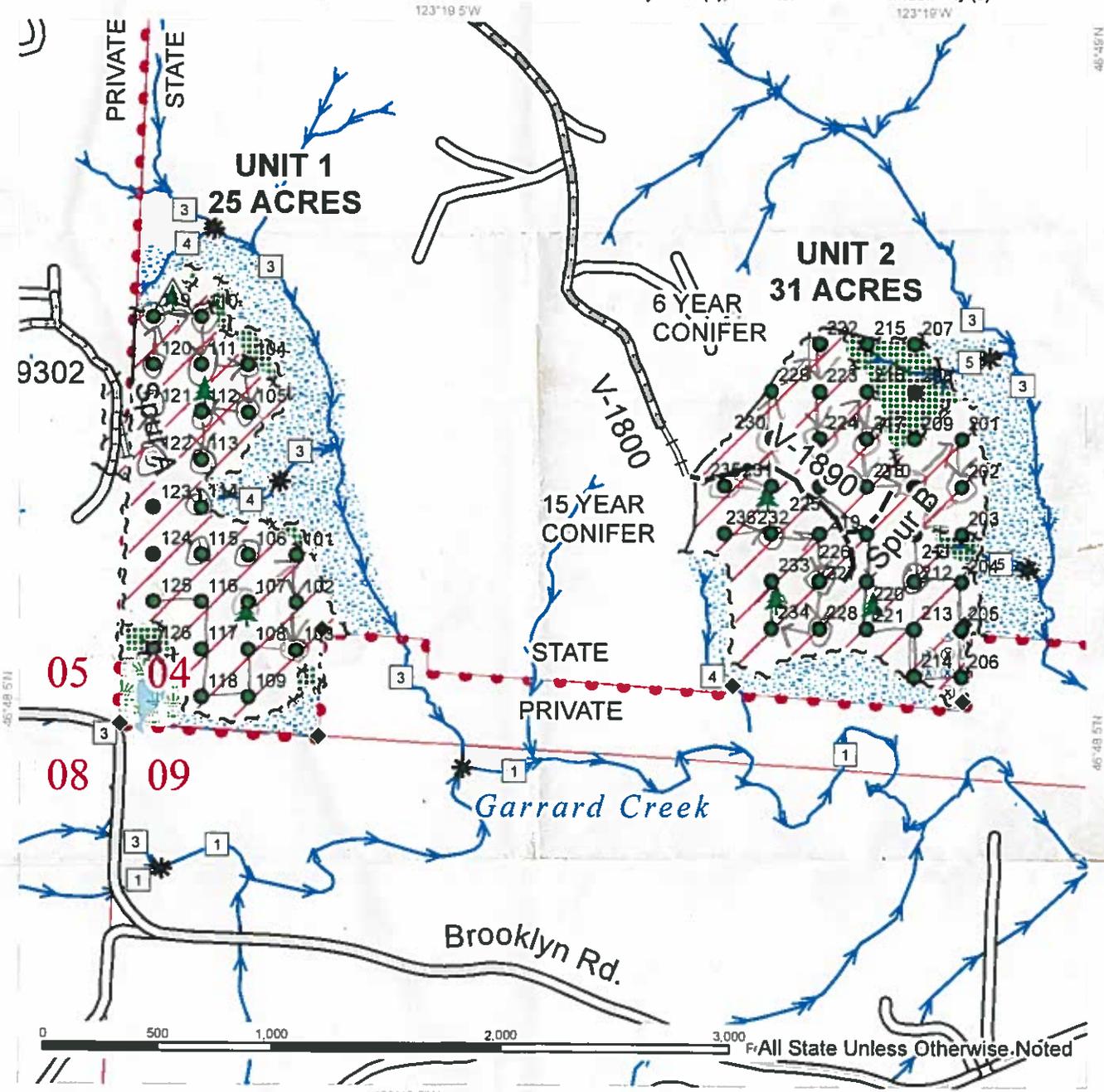
40 BAF DF



TIMBER SALE MAP

SALE NAME: DRAG
 AGREEMENT #: None
 TOWNSHIP(S): T15R5W, T16R5W
 TRUST(S): Capitol Grant (7), Charitable/Educational/Penal & Reformatory Instit. (6), Common School and Indemnity (3)

REGION: Pacific Cascade Region
 COUNTY(S): Grays Harbor
 ELEVATION RGE: 140-731



Variable Retention Harvest	County Road	Streams
Leave Tree Area	Existing Roads	Stream Type
Riparian Mgt Zone	Required Pre-Haul Maintenance	Stream Type Break
Forested Wetland	Required Reconstruction	Survey - Monumented Points
Wetland Mgt Zone	Optional Construction	
Hazard Abatement Area	Leave Tree Area	
Sale Boundary Tags	Non-Tradeable LTs	
Leave Tree Tags		
Timber Type Change		

Prepared By: bdie490

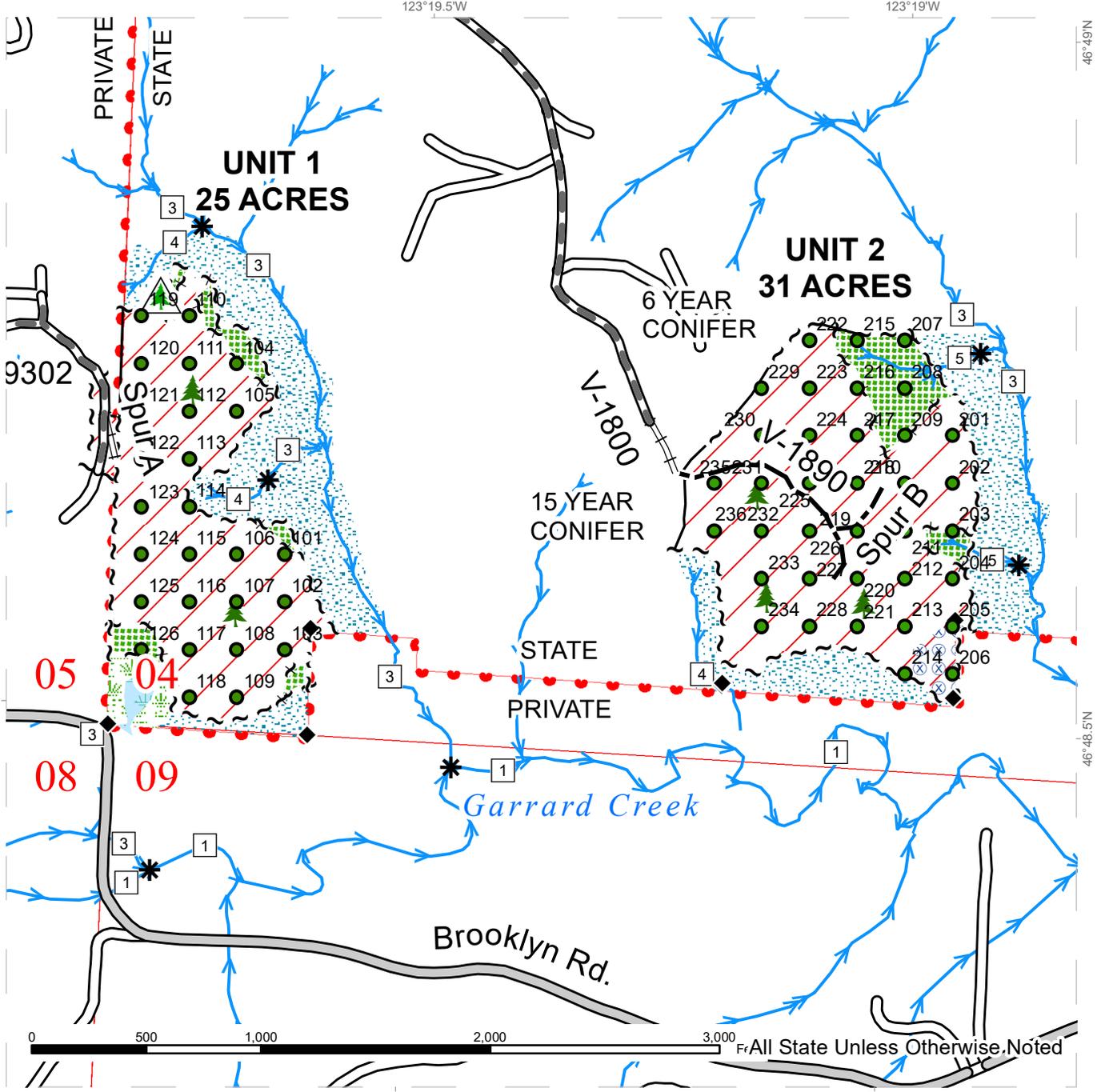
Modification Date: Dcrk490 6/10/2019

40 BAF DF
 27.78 all other

TIMBER SALE MAP

SALE NAME: DRAG
AGREEMENT #: None
TOWNSHIP(S): T15R5W, T16R5W
TRUST(S): Capitol Grant (7), Charitable/Educational/Penal & Reformatory Instit. (6), Common School and Indemnity (3)

REGION: Pacific Cascade Region
COUNTY(S): Grays Harbor
ELEVATION RGE: 140-731



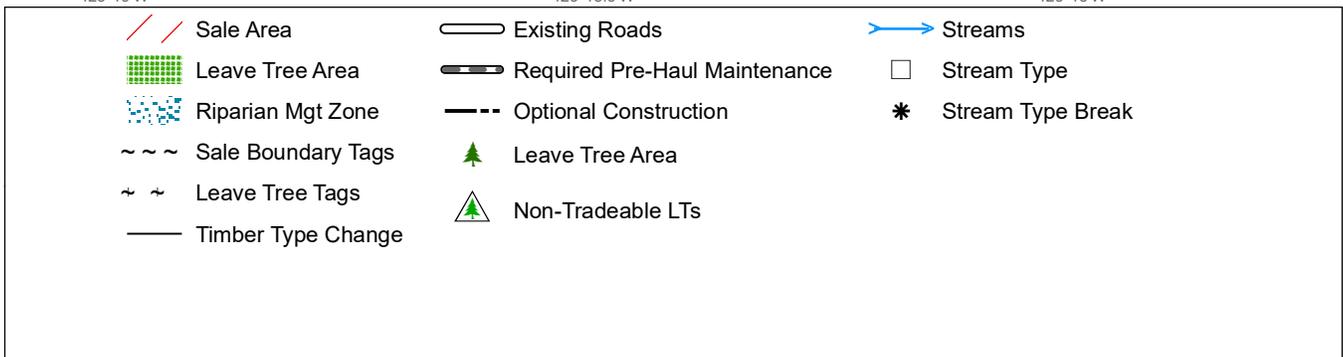
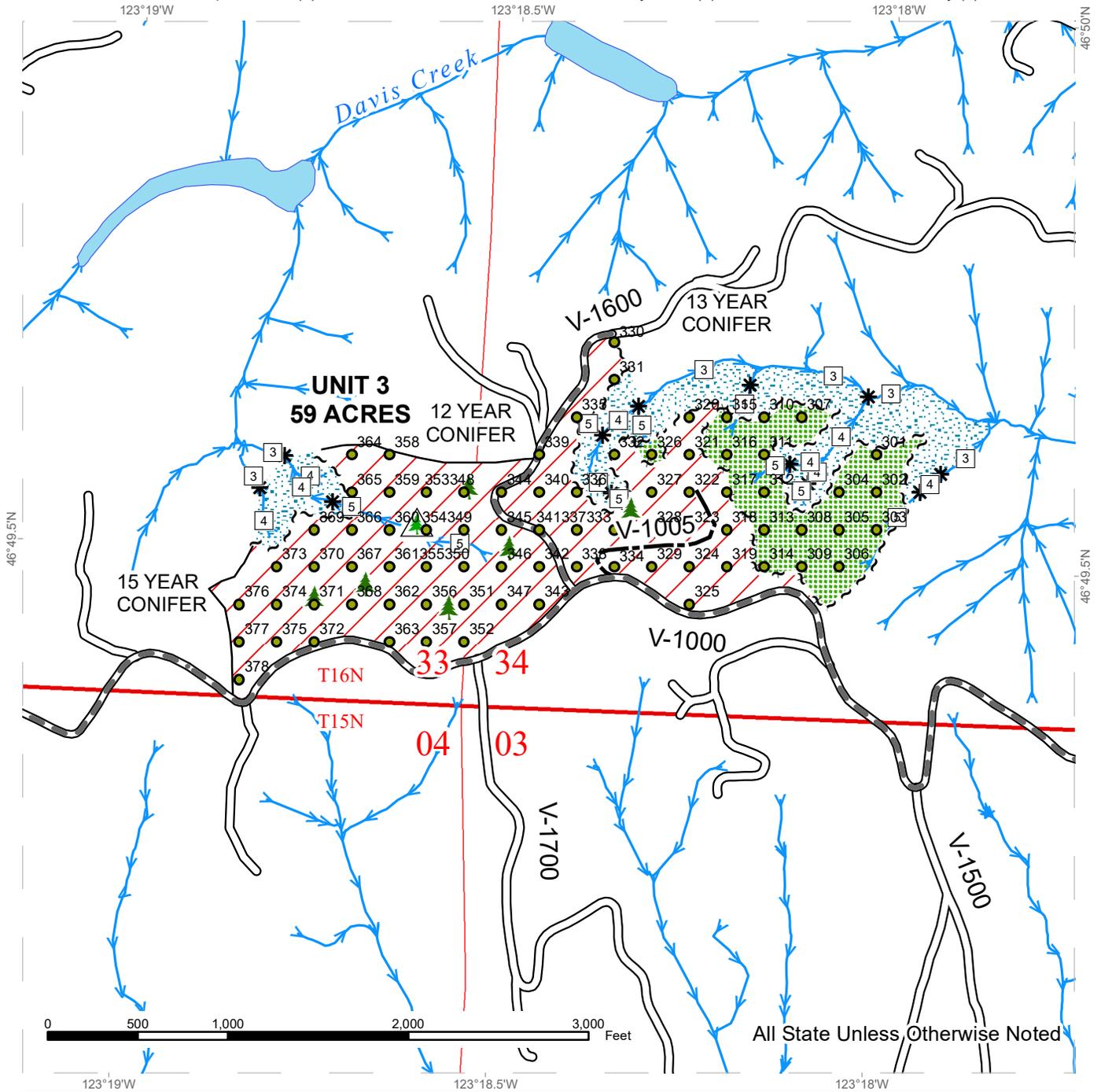
	Variable Retention Harvest		County Road		Streams
	Leave Tree Area		Existing Roads		Stream Type
	Riparian Mgt Zone		Required Pre-Haul Maintenance		Stream Type Break
	Forested Wetland		Required Reconstruction		Survey - Monumented Points
	Wetland Mgt Zone		Optional Construction		
	Hazard Abatement Area		Leave Tree Area		
	Sale Boundary Tags		Non-Tradeable LTs		
	Leave Tree Tags				
	Timber Type Change				

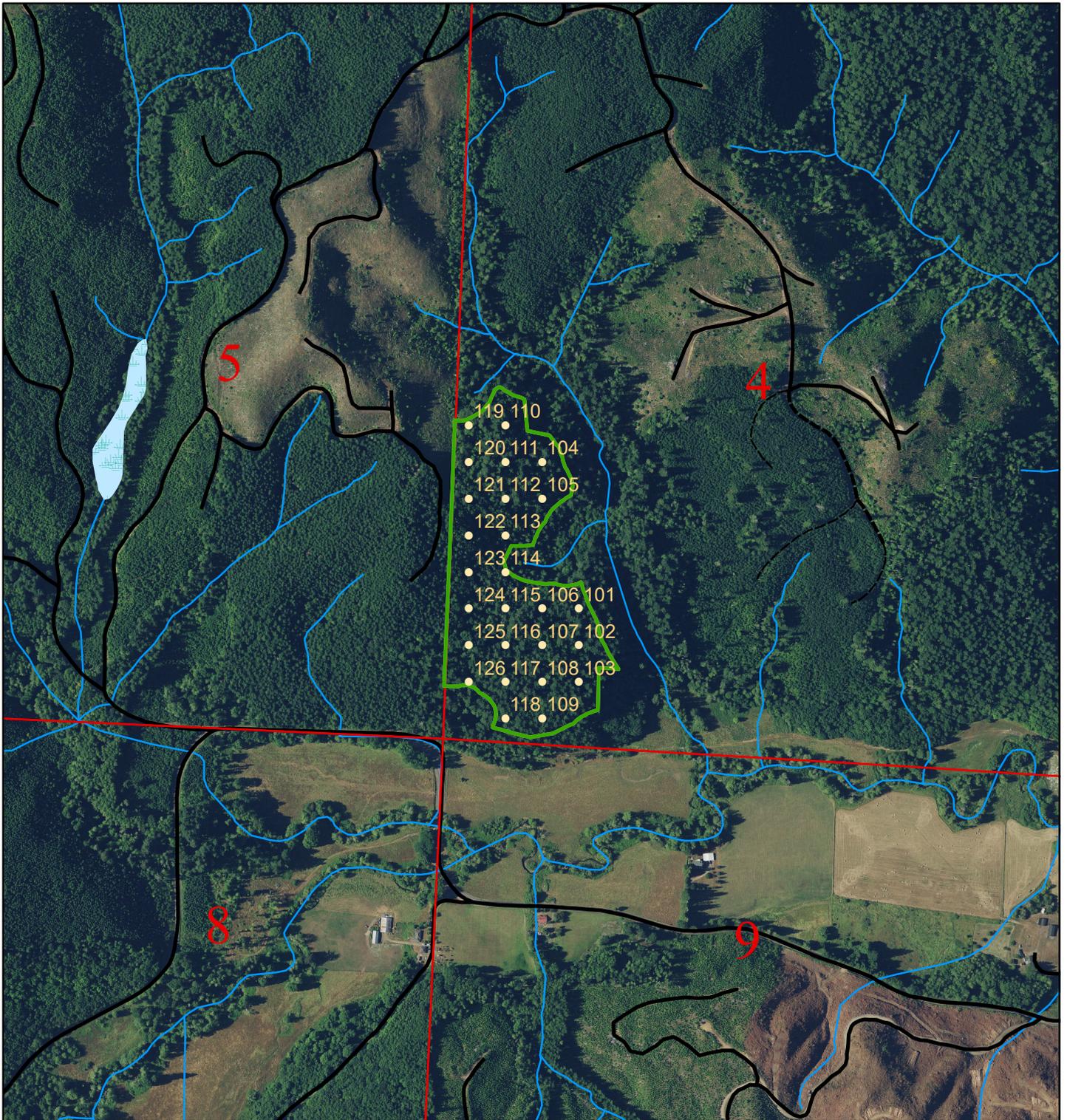


TIMBER SALE MAP

SALE NAME: DRAG
AGREEMENT #: None
TOWNSHIP(S): T15R5W, T16R5W
TRUST(S): Capitol Grant (7), Charitable/Educational/Penal & Reformatory Instit. (6), Common School and Indemnity (3)

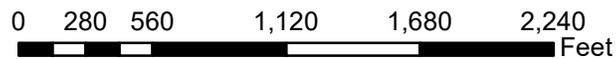
REGION: Pacific Cascade Region
COUNTY(S): Grays Harbor
ELEVATION RGE: 140-731





FMA POLYGON AND SAMPLE POINT INFORMATION

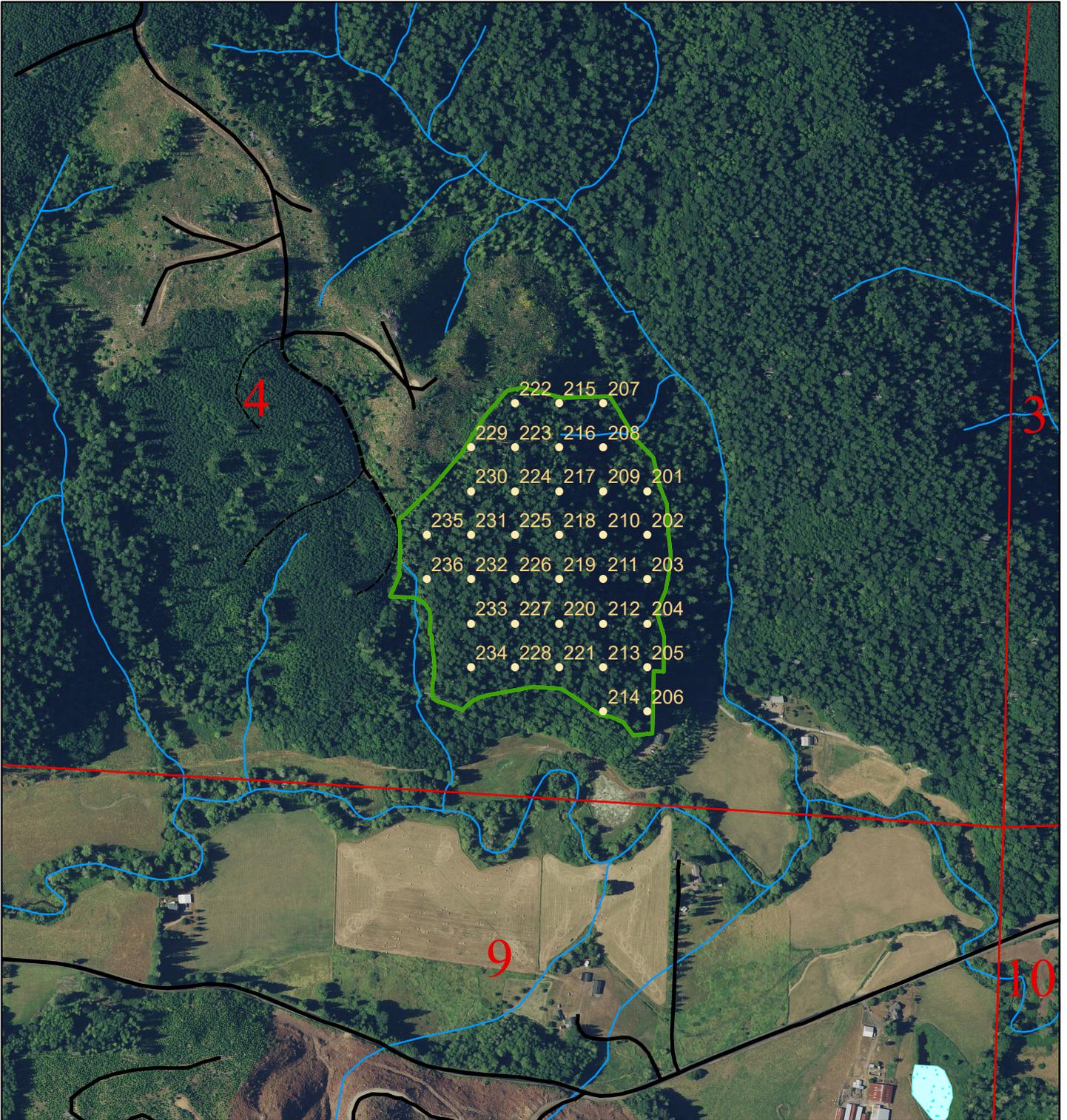
FMA_NM:	DRAG U1	Township:	T15R05W
FMA_ID:	258978	DNR Region:	PACIFIC CASC
Acres:	27	Total Sample Points:	26
County:	GRAYS HARBOR	Spacing Between Points:	Width: 208 Height: 208
Imagery:	2017 Orthophoto (1-ft Color) [HXIP]	Point Rotation Degrees:	0



Scale 1:9,600

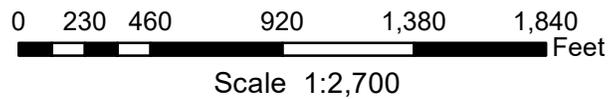
Legend

- Sample Points
- FMA polys
- Public Land Survey Sections



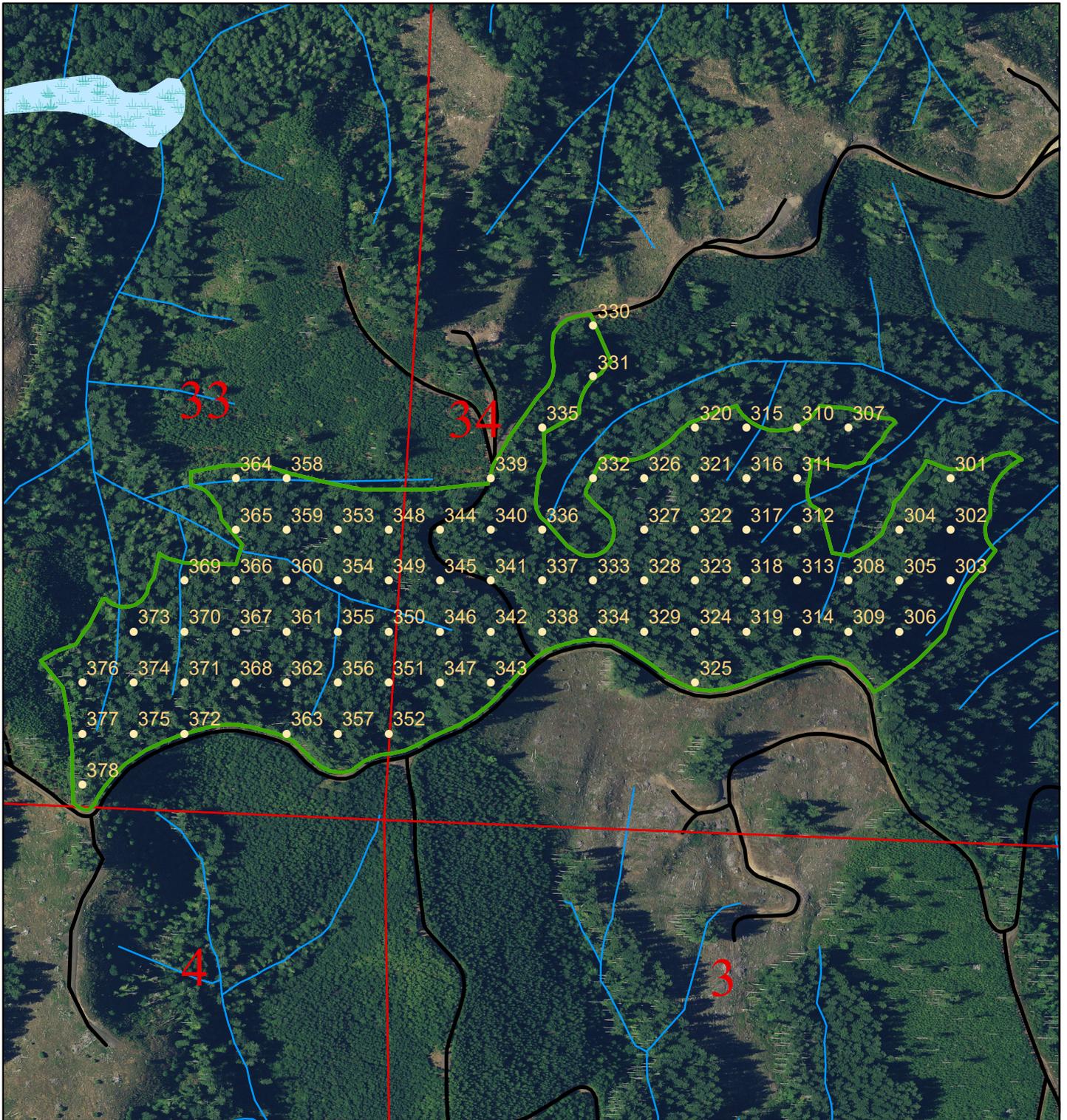
FMA POLYGON AND SAMPLE POINT INFORMATION

FMA_NM:	DRAG U2	Township:	T15R05W
FMA_ID:	257599	DNR Region:	PACIFIC CASC
Acres:	35	Total Sample Points:	36
County:	GRAYS HARBOR	Spacing Between Points:	Width: 208 Height: 208
Imagery:	2017 Orthophoto (1-ft Color) [HXIP]	Point Rotation Degrees:	0



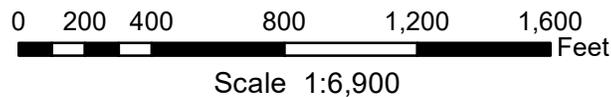
Legend

- Sample Points
- FMA polys
- Public Land Survey Sections



FMA POLYGON AND SAMPLE POINT INFORMATION

FMA_NM:	DRAG U3	Township:	T16R05W
FMA_ID:	258977	DNR Region:	PACIFIC CASC
Acres:	76	Total Sample Points:	78
County:	GRAYS HARBOR	Spacing Between Points:	Width: 208 Height: 208
Imagery:	2017 Orthophoto (1-ft Color) [HXIP]	Point Rotation Degrees:	0



Legend

- Sample Points
- FMA polys
- Public Land Survey Sections

Cruise Narrative

Sale Name: DRAG	Region: Pacific Cascade
App. #: 30-099095	District: Lewis
Lead Cruiser: DPClark	Completion date: 7-18-2019
Other Cruisers:	

Unit acreage specifications:

Unit #	Cruised acres	Cruised acres agree with sale acres? Yes/No	If acres do not agree explain why.
1	25.1	YES	
2	31.3	YES	
3	59.2	YES	
Total	115.6	YES	

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 (Cru./Tally)	Total number of plots
1	VP	27.78/40	16'	208	8:1	25
2	VP	27.78/40	16'	208	1:1	31
3	VP	27.78/40	16'	208	1:1	59

Sale/Cruise Description:

Minor species cruise intensity:	Cruised on appropriate plots.						
Minimum cruise spec:	40% Of Form- Factor at 16 feet D.O.B or 5 inch Top, and merchantable top.						
Avg. ring count by sp:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black;">DF =</td> <td style="border: 1px solid black; text-align: center;">6</td> <td style="border: 1px solid black;">WH =</td> <td style="border: 1px solid black; text-align: center;">6</td> <td style="border: 1px solid black;">SS =</td> <td style="border: 1px solid black; text-align: center;">NA</td> </tr> </table>	DF =	6	WH =	6	SS =	NA
DF =	6	WH =	6	SS =	NA		
Leave/take tree description:							
Sort Description:	<p>HA– Logs meeting the following criteria: Surface characteristics for a high quality A sort will have sound tight knots not to exceed 1 ½" 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 ½" 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. (min dia 8".)</p> <p>HB – DF Logs meeting the following criteria: Surface characteristics for a B sort will have sound tight knots not to exceed 1 ½" in diameter. May include logs with not more than two larger knots up to 2 ½" 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. (min dia 8".)</p> <p>R – Logs meeting the following criteria: Gross diameter of 12 inches or greater, excessive knots greater than 2 ½ inches with recovery less than 65% of the net scale.</p> <p>D - Domestic</p>						

Field observations:

DRAG is a timber sale of mature timber comprised of three units located in the Lower Chehalis block in steep and broken ground.

Unit 1: This unit is a mix of stands and timber types. Along the western property boundary is a 35 year old DF plantation, approximately 6 acres in size that has sustained heavy ice storm damage. The rest of the unit is mature mixed conifer and hardwoods and has two general age classes: 70 years and 110 years. Plenty of species are present in marketable quantities, but most of the volume is in big DF. Low mortality, low defect in the older DF.

Unit 2: This stand is mixed conifers and hardwoods and is approximately 75 years old. Stand stocking is variable. The DF is fairly clean and tight. Some could be marketed as poles. RA has passed its prime and is fading out. WH is mostly in the understory. RC is straight but has old butt scars. The BM is healthy and growing strong but not very straight. Some insect and disease mortality in stand but no major kill pockets.

Unit 3: This stand is mixed conifer and hardwoods and is approximately 80 years old. Stand stocking is highly variable. Most of the volume is in the east half and along the center ridge. Dense DF and RC populate the ridge and slopes. DF is high quality and approximately 43mbf of the RC could be marketed as poles. Patches of moderate quality RA and scattered WH. The west end is over ripe and has fallen apart from root disease and bark beetles. Scattered DF and clumps of BM are all that's left. Red Ring Rot observed in stand.

ROW: This small Right Of Way is on Green Diamond Resource Co land. The timber type is 35 year old DF and RA and has heavy ice storm damage.

Grants: 3,6,and 7

Prepared by: DPClark

Title: Timber Cruiser

TC PSPCSTGR **Species, Sort Grade - Board Foot Volumes (Project)**

T15N R05W S04 Ty00U1 25.10 T15N R05W S04 Ty00U2 31.30 T15N R05W S04 Ty00U3 59.20	Project: DRAG Acres 115.60	Page 1 Date 10/3/2019 Time 12:31:35PM
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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		
									5-7	8-11	12-15	16+	12-20	21-30	31-35	36-40						
BM	CU	CU			100.0	481											12	7		0.00	29.3	
BM	D	UT		27	4.5	861	822	95	25	39	23	13	32	44	12	11	25	8	58	0.71	14.1	
BM	D	1S		8	6.5	230	215	25				100	15	85			24	18	289	2.67	.7	
BM	D	2S		26	10.3	870	781	90				100	18	43	11	28	28	13	160	1.51	4.9	
BM	D	3S		16	8.3	518	475	55				100	34	30		36	26	11	93	0.96	5.1	
BM	D	4S		12	12.6	402	351	41				100		35		65	33	9	70	0.87	5.0	
BM	D	4S		11	5.6	315	297	34	100					19		81	38	6	51	0.61	5.8	
BM	Totals			7	20.0	3,677	2,942	340	17	39	33	11	20	41	6	33	21	8	45	0.65	65.0	
RC	CU	CU			100.0	136											11	10		0.00	7.6	
RC	D	3S		87	4.7	1,210	1,153	133	5	29	9	58	3	1	22	74	36	11	213	1.82	5.4	
RC	D	4S		13		163	163	19	72	25	3		7	57	19	17	27	6	31	0.45	5.2	
RC	Totals			3	12.8	1,509	1,316	152	13	28	8	51	4	8	22	67	23	9	72	0.99	18.2	
RA	CU	CU			100.0	149											11	8		0.00	7.0	
RA	D	UT		7		190	190	22	40	43	17		27	43	7	23	28	8	62	0.63	3.1	
RA	D	1S		1		36	36	4				100		100			24	16	240	1.90	.2	
RA	D	2S		47	4.6	1,276	1,217	141				100	4	33		63	34	13	201	1.45	6.0	
RA	D	3S		15	4.6	410	391	45				100		66		34	32	10	122	0.87	3.2	
RA	D	4S		15	8.4	403	369	43				100		45		55	34	9	78	0.71	4.8	
RA	D	4S		15	7.4	412	381	44	100				6	29	7	58	31	6	38	0.43	10.1	
RA	Totals			6	10.1	2,876	2,585	299	18	33	48	1	5	41	2	53	28	9	75	0.74	34.3	
DF	CU	CU			100.0	50											3	7		0.00	8.9	
DF	HA	3P		1		384	384	44				100				33	67	37	26	1281	5.48	.3
DF	HB	2S		43	1.4	15,052	14,845	1,716				27	73			13	87	38	16	427	2.10	34.8
DF	HB	3S		5	1.2	1,790	1,769	204				100				3	97	40	10	145	0.79	12.2
DF	D	2S		37	1.7	12,737	12,516	1,447				18	82	0	0	20	79	37	18	523	2.64	23.9
DF	D	3S		8	2.3	2,763	2,699	312	17	83				5	25	27	44	33	8	83	0.71	32.4
DF	D	4S		3	2.4	965	942	109	88	12				24	51	3	22	25	6	29	0.33	32.3
DF	D	UT				205	205	24	5	15	27	53		85			15	19	12	123	1.19	1.7
DF	RO	3S		3		794	794	92				100				10	90	38	24	1033	4.38	.8
DF	Totals			81	1.7	34,740	34,154	3,948	4	12	19	65	2	4	16	79	32	11	232	1.45	147.2	
WH	CU	CU															0	7		0.00	2.3	
WH	HB	2S		9	2.8	86	84	10				100				100	32	13	205	1.30	.4	
WH	HB	3S		5	4.8	49	47	5				100				100	34	10	115	0.75	.4	
WH	D	2S		23		218	218	25				60	40				40	14	321	1.80	.7	
WH	D	3S		23	3.4	218	211	24	19	81				2	34	63	37	8	81	0.76	2.6	
WH	D	4S		31		292	292	34	100					12	31	9	48	29	5	29	0.34	10.2
WH	D	UT		9		77	77	9	65	35				35	65		22	6	27	0.37	2.9	
WH	Totals			2	1.3	940	928	107	41	26	23	9	7	16	25	53	26	6	48	0.54	19.4	
CW	CU	CU			100.0	4											12	11		0.00	.3	
CW	D	UT		100		56	56	6				24	76			24	76	30	13	210	1.44	.3
CW	Totals			0	6.7	60	56	6				24	76			24	76	21	12	105	1.03	.5

Species, Sort Grade - Board Foot Volumes (Project)

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">T15N R05W S04 Ty00U1</td> <td style="width: 30%;">25.10</td> </tr> <tr> <td>T15N R05W S04 Ty00U2</td> <td>31.30</td> </tr> <tr> <td>T15N R05W S04 Ty00U3</td> <td>59.20</td> </tr> </table>	T15N R05W S04 Ty00U1	25.10	T15N R05W S04 Ty00U2	31.30	T15N R05W S04 Ty00U3	59.20	Project: DRAG Acres 115.60	Page 2 Date 10/3/2019 Time 12:31:35PM
T15N R05W S04 Ty00U1	25.10							
T15N R05W S04 Ty00U2	31.30							
T15N R05W S04 Ty00U3	59.20							

S Spp	So T	Gr rt 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	
								5-7	8-11	12-15	16+	12-20	21-30	31-35	36-40					
GF	CU	CU		100.0	3											15	14		0.00	.0
GF	D	2S	84	4.9	96	92	11					100			100	40	29	1470	6.01	.1
GF	D	UT	16		17	17	2					100			100	40	18	530	2.73	.0
GF Totals			0	7.0	116	108	12					100			100	34	23	868	4.37	.1
Totals				4.2	43,919	42,088	4,865	7	16	21	56	3	9	15	73	28	10	148	1.14	284.8

TC PSTATS		PROJECT STATISTICS							PAGE	1	
		PROJECT DRAG							DATE	10/3/2019	
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt	
15N	05	04	DRAG	00U1		115.60	115	558	S	W	
15N	05W	04	DRAG	00U2							
15N	05W	04	DRAG	00U3							
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES				
TOTAL			115	558	4.9						
CRUISE			66	278	4.2	13,494	2.1				
DBH COUNT REFOREST											
COUNT			46	263	5.7						
BLANKS			3								
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	146	52.7	22.0	98	29.7	139.1	34,740	34,154	6,782	6,770	
BL MAPLE	47	28.3	16.3	53	10.1	40.9	3,677	2,942	1,058	905	
R ALDER	36	14.1	16.5	72	5.2	21.1	2,876	2,585	741	700	
WHEMLOCK	22	13.5	11.9	47	3.0	10.4	940	928	272	272	
WR CEDAR	25	8.0	18.8	60	3.5	15.3	1,509	1,316	445	416	
GRAND F	1	.0	42.0	140	0.0	.3	116	108	19	18	
COTWOOD	1	.1	21.0	87	0.1	.3	60	56	13	11	
TOTAL	278	116.7	18.9	76	52.3	227.4	43,919	42,088	9,329	9,092	
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		96.5	8.1	1,132	1,232	1,332					
BL MAPLE		82.3	12.0	127	144	161					
R ALDER		51.6	8.6	198	217	236					
WHEMLOCK		162.3	37.2	107	171	234					
WR CEDAR		103.3	21.1	429	544	659					
GRAND F											
COTWOOD											
TOTAL		132.6	8.0	712	774	836	702	358	176		
CL	68.1	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		81.4	6.8	215	230	246					
BL MAPLE		61.7	9.0	37	41	44					
R ALDER		45.8	7.6	53	58	62					
WHEMLOCK		127.4	29.2	31	44	57					
WR CEDAR		86.2	17.6	120	146	171					
GRAND F											
COTWOOD											
TOTAL		109.1	6.6	144	154	164	475	242	119		
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		115.2	10.7	47	53	58					
BL MAPLE		163.8	15.3	24	28	33					
R ALDER		193.2	18.0	12	14	17					
WHEMLOCK		272.0	25.3	10	13	17					
WR CEDAR		345.8	32.2	5	8	11					
GRAND F		1072.4	99.9	0	0	0					
COTWOOD		1072.4	99.9	0	0	0					
TOTAL		64.0	6.0	110	117	124	164	83	41		

PROJECT STATISTICS**PROJECT DRAG**

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
15N	05	04	DRAG	00U1	115.60	115	558	S	W
15N	05W	04	DRAG	00U2					
15N	05W	04	DRAG	00U3					
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		89.4	8.3	127	139	151			
BL MAPLE		161.2	15.0	35	41	47			
R ALDER		187.8	17.5	17	21	25			
WHEMLOCK		252.6	23.5	8	10	13			
WR CEDAR		262.1	24.4	12	15	19			
GRAND F		1072.4	99.9	0	0	1			
COTWOOD		1072.4	99.9	0	0	1			
TOTAL		53.9	5.0	216	227	239	116	59	29
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		91.7	8.5	31,237	34,154	37,070			
BL MAPLE		157.5	14.7	2,510	2,942	3,373			
R ALDER		207.0	19.3	2,086	2,585	3,083			
WHEMLOCK		288.1	26.8	679	928	1,177			
WR CEDAR		268.0	25.0	988	1,316	1,645			
GRAND F		1072.4	99.9	0	108	216			
COTWOOD		1072.4	99.9	0	56	111			
TOTAL		69.3	6.5	39,369	42,088	44,808	192	98	48
CL	68.1	COEFF	NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10
DOUG FIR		90.8	8.5	6,197	6,770	7,343			
BL MAPLE		159.4	14.8	770	905	1,039			
R ALDER		200.3	18.7	570	700	831			
WHEMLOCK		269.9	25.1	204	272	341			
WR CEDAR		259.6	24.2	315	416	516			
GRAND F		1072.4	99.9	0	18	37			
COTWOOD		1072.4	99.9	0	11	23			
TOTAL		62.7	5.8	8,561	9,092	9,624	157	80	39
CL	68.1	COEFF	V BAR/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10
DOUG FIR				225	246	267			
BL MAPLE		39.0	3.6	61	72	82			
R ALDER		140.4	13.1	99	123	146			
WHEMLOCK		276.3	25.7	65	89	113			
WR CEDAR		227.6	21.2	65	86	107			
GRAND F		1072.4	99.9	0	361	721			
COTWOOD		1072.4	99.9	0	175	349			
TOTAL		64.9	6.0	173	185	197	168	86	42

T TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)										Page 1								
		Project: DRAG										Date 10/3/2019								
												Time 12:31:36PM								
T15N R05W S04 T00U1										T15N R05W S04 T00U1										
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt											
15N	05W	04	DRAG	00U1	25.10	25	82	S	W											
S Sp	So T	Gr rt	%	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	
								5-7	8-11	12-15	16+	12-20	21-30	31-35	36-40	Ft	In	Ft		
DF	CU	CU		100.0	50											3	8		0.00	7.2
DF	HA	3P	6		1,770	1,770	44					100		33	67	37	26	1281	5.48	1.4
DF	HB	2S	39	.9	11,389	11,281	283			22	78			7	93	39	18	528	2.48	21.4
DF	HB	3S	1		257	257	6		100						100	40	10	150	0.73	1.7
DF	DM	2S	27	1.7	7,944	7,807	196			20	80		1	1	23	35	17	497	2.57	15.7
DF	DM	3S	11	6.2	3,627	3,402	85	19	81				6	3	46	35	8	82	0.70	41.7
DF	DM	4S	5		1,437	1,437	36	97	3				33	50	17	23	5	26	0.26	55.6
DF	DM	UT	2	.0	338	338	8	13					100			16	9	129	1.31	2.6
DF	RO	3S	9		2,562	2,562	64								100	40	29	1607	6.09	1.6
DF	Totals		78	1.8	29,374	28,854	724	7	11	14	68	4	3	16	77	29	10	194	1.28	148.9
BM	CU	CU		100.0	546											12	8		0.00	32.2
BM	DM	UT	20		490	490	12	30	58	13			70		30	25	9	60	0.67	8.2
BM	DM	1S	24	6.4	605	566	14				100		26	74		22	18	297	2.95	1.9
BM	DM	2S	36	4.7	895	853	21				100		16	62	22	26	13	152	1.45	5.6
BM	DM	4S	9	9.2	229	208	5		100					49	51	29	8	58	0.93	3.6
BM	DM	4S	11		256	256	6	100						100		30	7	50	0.53	5.1
BM	Totals		6	21.4	3,021	2,373	60	17	21	39	24	26	55	18		18	9	42	0.62	56.6
WH	CU	CU														5			0.00	5.4
WH	DM	2S	22		435	435	11				100				100	40	12	200	1.28	2.2
WH	DM	3S	23	3.7	449	433	11	19	81					38	62	37	8	80	0.77	5.4
WH	DM	4S	36		701	701	18	100					23	21	57	27	5	27	0.32	26.3
WH	DM	UT	19		356	356	9	65	35				35	65		22	6	27	0.37	13.4
WH	Totals		5	.9	1,941	1,924	48	53	25	23		15	20	9	57	25	6	37	0.46	52.6
RA	CU	CU		100.0	276											15	7		0.00	9.4
RA	DM	UT	8		201	201	5	100							100	40	5	48	0.53	4.2
RA	DM	1S	8		166	166	4				100			100		24	16	240	1.90	.7
RA	DM	2S	35	4.4	817	781	20				100			55	45	32	13	181	1.38	4.3
RA	DM	3S	23	5.5	560	529	13		100					38	62	33	10	125	0.93	4.2
RA	DM	4S	11	7.3	263	244	6		100					100		40	10	128	0.89	1.9
RA	DM	4S	15		331	331	8	100					10	19	71	32	6	41	0.41	8.0
RA	Totals		6	13.8	2,614	2,252	57	24	34	35	7	1	38	60		29	8	69	0.66	32.7
RC	CU	CU		100.0	195											6	32		0.00	1.2
RC	DM	3S	92	4.6	1,464	1,397	35		8	11	81			34	66	36	17	468	3.03	3.0
RC	DM	4S	8		117	117	3	74	7	19			21	19	60	26	6	31	0.50	3.7
RC	Totals		4	14.7	1,775	1,514	38	6	8	11	75	2	1	36	61	27	14	190	1.77	8.0
Type Totals				4.7	38,725	36,917	927	11	13	17	58	6	9	15	70	26	9	124	1.00	298.7

T15N R05W S04 T00U2 T15N R05W S04 T00U2
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 15N 05W 04 DRAG 00U2 31.30 31 73 S W

Spp	S T	So rt	Gr ad	% 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 Ft	Dia In	Bd Ft	CF/ Lf		
									5-7	8-11	12-15	16+	12-20	21-30	31-35	36-40						
DF	CU	CU			100.0	44												3	7		0.00	17.0
DF	HB	2S	40	1.8	16,714	16,412	514			38	62			13	87			39	16	374	1.87	43.9
DF	HB	3S	7	.9	2,955	2,929	92		100						100			40	10	146	0.77	20.1
DF	DM	2S	40	2.4	17,055	16,653	521			15	85			10	90			38	18	521	2.53	32.0
DF	DM	3S	9	.5	3,350	3,334	104	18	82				5	27	17	51		34	8	90	0.72	37.2
DF	DM	4S	3	6.9	1,266	1,179	37	81	19				8	65	9	18		27	6	33	0.38	35.8
DF	DM	UT			117	117	4		100							100		37	9	110	0.92	1.1
DF	RO	3S	1		293	293	9			100						100		32	17	370	1.99	.8
DF	Totals		80	2.1	41,793	40,914	1,281	4	15	21	60		1	4	12	84		32	11	218	1.36	187.8
BM	CU	CU			100.0	593												19	6		0.00	24.5
BM	DM	UT	35	11.1	1,297	1,153	36	17	47	23	13		11	56	13	20		29	8	66	0.74	17.4
BM	DM	2S	33	7.3	1,174	1,088	34			100				74		26		32	14	209	1.64	5.2
BM	DM	3S	23	9.1	831	755	24		100				45	17		38		25	10	89	0.93	8.5
BM	DM	4S	9		263	263	8	100								100		40	6	60	0.43	4.4
BM	Totals		6	21.6	4,157	3,258	102	14	40	41	5		14	48	5	33		25	8	54	0.60	60.0
RA	CU	CU			100.0	72												7	9		0.00	10.3
RA	DM	UT	3		169	169	5	30		70			70		30			21	11	78	0.93	2.2
RA	DM	2S	55	5.6	3,029	2,861	90			100			6	32		63		34	13	206	1.49	13.9
RA	DM	3S	19	4.2	1,065	1,019	32		100					78		22		31	11	120	0.84	8.5
RA	DM	4S	10	8.1	562	517	16		100					37		63		35	9	84	0.71	6.1
RA	DM	4S	13	5.3	693	656	21	100						24	16	60		34	5	40	0.43	16.5
RA	Totals		10	6.6	5,591	5,222	163	14	29	57			5	39	3	53		28	9	91	0.83	57.4
WH	DM	2S	41		454	454	14			30	70					100		40	19	600	3.02	.8
WH	DM	3S	32		349	349	11		100					5	39	56		35	9	89	0.77	3.9
WH	DM	4S	27		287	287	9	100						31	36	34		30	5	31	0.40	9.4
WH	Totals		2		1,090	1,090	34	26	32	13	29			10	22	68		32	7	77	0.69	14.1
RC	CU	CU			100.0	35												2	14		0.00	3.0
RC	DM	3S	100		426	426	13	17	13		70				39	61		38	10	210	1.49	2.0
RC	Totals		1	7.7	462	426	13	17	13		70				39	61		17	12	84	1.37	5.1
GF	CU	CU			100.0	13												15	14		0.00	.1
GF	DM	2S	84	4.9	355	338	11			100						100		40	29	1470	6.01	.2
GF	DM	UT	16		61	61	2			100						100		40	18	530	2.73	.1
GF	Totals		1	7.0	429	399	12			100						100		34	23	868	4.37	.5
Type Totals				4.1	53,522	51,311	1,606	6	18	26	50		2	11	11	77		30	10	158	1.13	324.8

T15N R05W S04 T00U3 T15N R05W S04 T00U3
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdBft
 15N 05W 04 DRAG 00U3 59.20 59 124 S W

S Sp	So T	Gr rt ad	% 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 Ft	Dia In	Bd Ft	CF/ Lf			
								5-7	8-11	12-15	16+	12-20	21-30	31-35	36-40							
DF	CU	CU		100.0	53													4	7		0.00	5.2
DF	HB	2S	47	1.3	15,727	15,527	919			23	77			14	86			38	17	435	2.16	35.7
DF	HB	3S	5	1.5	1,824	1,796	106		100					5	95			40	10	144	0.81	12.5
DF	DM	2S	38	1.3	12,485	12,326	730			19	81		0	0	26	73		36	18	531	2.75	23.2
DF	DM	3S	6	1.0	2,085	2,065	122	14	86				4	38	22	37		32	9	79	0.71	26.0
DF	DM	4S	2		607	607	36	86	14				30	39		30		25	6	30	0.35	20.5
DF	DM	UT	1		195	195	12			55	45		100					15	14	124	1.34	1.6
DF	RO	3S	1		310	310	18				100					100		40	21	760	3.50	.4
DF	Totals		83	1.4	33,287	32,826	1,943	2	11	18	68		1	3	18	77		33	12	262	1.59	125.1
BM	CU	CU		100.0	394													9	7		0.00	30.7
BM	DM	UT	26		789	789	47	31	27	26	16		39	46	15			23	8	53	0.70	14.8
BM	DM	1S	6	6.7	193	180	11				100			100				26	17	280	2.36	.6
BM	DM	2S	19	16.0	699	588	35			100			36		30	35		27	13	134	1.44	4.4
BM	DM	3S	18	7.6	572	529	31		100				25	40		36		27	11	96	0.99	5.5
BM	DM	4S	19	13.1	687	597	35		100					33		67		34	9	72	0.86	8.3
BM	DM	4S	12	9.4	368	334	20	100								100		40	6	49	0.69	6.9
BM	Totals		8	18.6	3,702	3,015	179	19	44	26	10		22	32	10	37		20	8	42	0.70	71.2
RC	CU	CU		100.0	164													12	8		0.00	12.6
RC	DM	3S	84	5.5	1,517	1,434	85	4	40	10	46		5	1	14	80		35	11	174	1.67	8.3
RC	DM	4S	16		269	269	16	72	28				4	64	12	20		27	6	31	0.44	8.6
RC	Totals		4	12.7	1,950	1,703	101	15	38	8	39		5	11	14	70		23	8	58	0.87	29.5
RA	CU	CU		100.0	136													11	8		0.00	4.2
RA	DM	UT	14		196	196	12	19	81				19	81				24	7	64	0.63	3.1
RA	DM	2S	40	1.8	543	534	32			100				25		75		36	13	203	1.39	2.6
RA	DM	4S	26	8.9	379	345	20		100					65		35		33	8	66	0.68	5.2
RA	DM	4S	20	13.6	297	257	15	100					12	40		48		29	6	34	0.43	7.6
RA	Totals		3	14.2	1,551	1,332	79	22	38	40			5	47		48		27	8	58	0.64	22.8
WH	CU	CU																1	10		0.00	2.1
WH	HB	2S	38	2.8	168	163	10			100				100				32	13	205	1.30	.8
WH	HB	3S	22	4.8	96	92	5		100					100				34	10	115	0.75	.8
WH	DM	3S	11	14.3	51	44	3	100								100		40	7	60	0.67	.7
WH	DM	4S	29	.0	121	121	7	100						56		44		30	5	32	0.32	3.8
WH	Totals		1	3.8	437	420	25	39	22	39				16	61	23		24	8	51	0.56	8.2
CW	CU	CU		100.0	8													12	11		0.00	.5
CW	DM	UT	100		109	109	6		24	76				24		76		30	13	210	1.44	.5
CW	Totals		0	6.7	116	109	6		24	76				24		76		21	12	105	1.03	1.0
Type Totals				4.0	41,043	39,405	2,333	5	16	20	59		3	7	17	72		27	10	153	1.22	257.8

TC TSTATS				STATISTICS						PAGE	1
				PROJECT	DRAG				DATE	10/3/2019	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
15N	05W	04	DRAG	00U1	25.10	25	115	S	W		
				TREES	ESTIMATED	PERCENT					
				PER PLOT	TOTAL	SAMPLE					
				PLOTS	TREES	TREES	TREES				
TOTAL		25	115	4.6							
CRUISE		19	82	4.3	3,757		2.2				
DBH COUNT											
REFOREST											
COUNT		6	33	5.5							
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	38	71.3	17.6	84	28.8	121.2	29,374	28,854	5,616	5,607	
BL MAPLE	13	20.1	16.7	57	7.5	30.6	3,021	2,373	795	646	
WHEMLOCK	12	39.3	11.0	45	7.8	25.8	1,941	1,924	604	604	
R ALDER	12	14.7	15.9	73	5.1	20.4	2,614	2,252	702	618	
WR CEDAR	7	4.2	23.7	54	2.7	12.9	1,775	1,514	409	376	
TOTAL	82	149.7	16.1	68	52.6	210.9	38,725	36,917	8,126	7,851	
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	133.7	22.3		1,211	1,558	1,905					
BL MAPLE	93.0	26.8		137	187	237					
WHEMLOCK	78.2	26.0		74	100	126					
R ALDER	66.2	19.9		151	189	227					
WR CEDAR	72.2	29.4		711	1,007	1,303					
TOTAL	178.2	20.2		705	883	1,061	1,268	647	317		
CL:	68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR	118.5	19.7		219	273	326					
BL MAPLE	73.8	21.3		37	47	57					
WHEMLOCK	68.6	22.8		24	31	39					
R ALDER	56.9	17.1		42	51	59					
WR CEDAR	65.3	26.6		166	227	287					
TOTAL	150.1	17.0		138	166	194	899	459	225		
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	127.6	26.0		53	71	90					
BL MAPLE	173.8	35.4		13	20	27					
WHEMLOCK	165.3	33.7		26	39	52					
R ALDER	190.4	38.8		9	15	20					
WR CEDAR	290.2	59.2		2	4	7					
TOTAL	64.6	13.2		130	150	169	174	89	43		
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	91.2	18.6		99	121	144					
BL MAPLE	158.2	32.3		21	31	41					
WHEMLOCK	162.4	33.1		17	26	34					
R ALDER	181.3	37.0		13	20	28					
WR CEDAR	192.9	39.3		8	13	18					
TOTAL	49.8	10.2		190	211	232	103	53	26		
CL:	68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT	DRAG			DATE	10/3/2019	
TWP	RGE	SECT	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt
15N	05W	04	DRAG	00U1	25.10		25	115	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	
DOUG FIR		107.1	21.8	22,552	28,854	35,157				
BL MAPLE		164.6	33.6	1,576	2,373	3,169				
WHEMLOCK		181.8	37.1	1,211	1,924	2,638				
R ALDER		244.6	49.9	1,129	2,252	3,375				
WR CEDAR		229.8	46.9	804	1,514	2,223				
TOTAL		<i>79.4</i>	<i>16.2</i>	<i>30,937</i>	<i>36,917</i>	<i>42,896</i>	<i>262</i>	<i>134</i>	<i>66</i>	
CL:	68.1 %	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR		100.1	20.4	4,462	5,607	6,751				
BL MAPLE		154.3	31.5	443	646	849				
WHEMLOCK		177.8	36.2	385	604	823				
R ALDER		222.3	45.3	338	618	898				
WR CEDAR		211.1	43.1	214	376	538				
TOTAL		<i>67.4</i>	<i>13.7</i>	<i>6,773</i>	<i>7,851</i>	<i>8,930</i>	<i>189</i>	<i>96</i>	<i>47</i>	
CL:	68.1 %	COEFF		V-BAR/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR		45.6	9.3	186	238	290				
BL MAPLE		129.8	26.5	51	77	103				
WHEMLOCK		172.0	35.1	47	75	102				
R ALDER		247.9	50.5	55	110	166				
WR CEDAR		231.0	47.1	62	117	172				
TOTAL		<i>161.3</i>	<i>32.9</i>	<i>147</i>	<i>175</i>	<i>203</i>	<i>1,082</i>	<i>552</i>	<i>270</i>	

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	DRAG			DATE	10/3/2019	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
15N	05W	04	DRAG	00U2	31.30	31	173	S	W	
		PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES				
TOTAL		31	173	5.6						
CRUISE		17	73	4.3	3,812	1.9				
DBH COUNT										
REFOREST										
COUNT		14	84	6.0						
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	35	61.1	22.3	104	35.2	166.2	41,793	40,914	8,243	8,237
BL MAPLE	13	28.3	15.8	59	9.7	38.6	4,157	3,258	1,121	909
R ALDER	16	20.9	17.8	80	8.5	36.0	5,591	5,222	1,367	1,351
WHEMLOCK	5	9.8	14.1	51	2.8	10.5	1,090	1,090	312	312
WR CEDAR	3	1.6	22.4	58	0.9	4.4	462	426	121	116
GRAND F	1	.1	42.0	140	0.2	1.1	429	399	70	68
TOTAL	<i>73</i>	<i>121.8</i>	<i>19.7</i>	<i>85</i>	<i>57.9</i>	<i>256.8</i>	<i>53,522</i>	<i>51,311</i>	<i>11,236</i>	<i>10,993</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	58.7	10.1		924	1,027	1,130				
BL MAPLE	58.0	16.7		122	146	171				
R ALDER	32.8	8.5		249	272	295				
WHEMLOCK	168.8	83.9		50	312	574				
WR CEDAR	78.2	54.1		269	587	904				
GRAND F										
TOTAL	<i>101.8</i>	<i>12.0</i>		<i>586</i>	<i>666</i>	<i>746</i>	<i>414</i>	<i>211</i>	<i>103</i>	
CL:	68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	51.2	8.8		182	200	217				
BL MAPLE	56.0	16.1		34	41	48				
R ALDER	31.9	8.2		65	70	76				
WHEMLOCK	145.3	72.2		20	73	125				
WR CEDAR	70.2	48.6		72	141	209				
GRAND F										
TOTAL	<i>85.8</i>	<i>10.1</i>		<i>123</i>	<i>136</i>	<i>150</i>	<i>294</i>	<i>150</i>	<i>74</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	94.1	16.9		51	61	71				
BL MAPLE	130.0	23.3		22	28	35				
R ALDER	148.6	26.7		15	21	27				
WHEMLOCK	195.1	35.0		6	10	13				
WR CEDAR	432.9	77.7		0	2	3				
GRAND F	556.8	99.9		0	0	0				
TOTAL	<i>38.5</i>	<i>6.9</i>		<i>113</i>	<i>122</i>	<i>130</i>	<i>59</i>	<i>30</i>	<i>15</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	89.8	16.1		139	166	193				
BL MAPLE	120.8	21.7		30	39	47				
R ALDER	142.0	25.5		27	36	45				
WHEMLOCK	197.7	35.5		7	11	14				
WR CEDAR	409.4	73.5		1	4	8				
GRAND F	556.8	99.9		0	1	2				

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT	DRAG			DATE	10/3/2019	
TWP	RGE	SECT	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt
15N	05W	04	DRAG	00U2	31.30		31	173	S	W
CL:	68.1 %	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	7	10	
TOTAL		44.3	8.0	236	257	277	78	40	20	
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		90.5	16.2	34,267	40,914	47,561				
BL MAPLE		119.1	21.4	2,562	3,258	3,955				
R ALDER		141.2	25.3	3,899	5,222	6,546				
WHEMLOCK		239.3	42.9	622	1,090	1,558				
WR CEDAR		469.1	84.2	67	426	785				
GRAND F		556.8	99.9	0	399	798				
TOTAL		62.1	11.1	45,591	51,311	57,031	154	79	39	
CL:	68.1 %	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR		90.4	16.2	6,902	8,237	9,573				
BL MAPLE		117.6	21.1	717	909	1,101				
R ALDER		142.0	25.5	1,007	1,351	1,695				
WHEMLOCK		215.9	38.7	191	312	434				
WR CEDAR		420.7	75.5	28	116	204				
GRAND F		556.8	99.9	0	68	136				
TOTAL		55.9	10.0	9,890	10,993	12,097	125	64	31	
CL:	68.1 %	COEFF		V-BAR/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR				206	246	286				
BL MAPLE				66	84	102				
R ALDER		60.7	10.9	108	145	182				
WHEMLOCK		209.0	37.5	59	104	148				
WR CEDAR		469.1	84.2	15	96	178				
GRAND F		556.8	99.9	0	361	721				
TOTAL		271.5	48.7	178	200	222	2,943	1,502	736	

TC TSTATS				STATISTICS						PAGE	1
				PROJECT	DRAG		DATE				10/3/2019
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
15N	05W	04	DRAG	00U3	59.20	59	270	S	W		
		PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES					
TOTAL		59	270	4.6							
CRUISE		30	123	4.1	5,926		2.1				
DBH COUNT											
REFOREST											
COUNT		26	146	5.6							
BLANKS		3									
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	73	40.4	24.5	105	26.7	132.3	33,287	32,826	6,504	6,488	
BL MAPLE	21	31.8	16.4	50	11.5	46.5	3,702	3,015	1,136	1,012	
WR CEDAR	15	12.9	17.7	61	5.2	22.1	1,950	1,703	632	591	
R ALDER	8	10.3	15.5	63	3.4	13.5	1,551	1,332	426	391	
WHEMLOCK	5	4.5	12.6	52	1.1	3.9	437	420	110	110	
COTWOOD	1	.3	21.0	87	0.1	.6	116	109	25	22	
TOTAL	<i>123</i>	<i>100.1</i>	<i>20.0</i>	<i>75</i>	<i>48.9</i>	<i>218.8</i>	<i>41,043</i>	<i>39,405</i>	<i>8,832</i>	<i>8,614</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	55.7	6.6		1,090	1,166	1,242					
BL MAPLE	76.3	17.0		96	116	136					
WR CEDAR	110.0	29.4		225	319	413					
R ALDER	57.8	21.8		116	149	181					
WHEMLOCK	110.4	54.8		77	170	263					
COTWOOD											
TOTAL	<i>92.0</i>	<i>8.3</i>		<i>704</i>	<i>768</i>	<i>831</i>		<i>338</i>	<i>172</i>	<i>84</i>	
CL:	68.1 %	COEFF	SAMPLE TREES - CF						# OF TREES REQ.		INF. POP.
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH		5	7	10	
DOUG FIR	49.3	5.8		211	224	237					
BL MAPLE	52.1	11.6		32	37	41					
WR CEDAR	98.6	26.3		80	109	138					
R ALDER	46.1	17.4		35	43	50					
WHEMLOCK	90.2	44.8		23	41	59					
COTWOOD											
TOTAL	<i>79.4</i>	<i>7.2</i>		<i>146</i>	<i>157</i>	<i>168</i>		<i>252</i>	<i>128</i>	<i>63</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	104.2	13.6		35	40	46					
BL MAPLE	171.8	22.3		25	32	39					
WR CEDAR	285.5	37.1		8	13	18					
R ALDER	237.6	30.9		7	10	14					
WHEMLOCK	407.8	53.0		2	4	7					
COTWOOD	768.1	99.9		0	0	1					
TOTAL	<i>72.2</i>	<i>9.4</i>		<i>91</i>	<i>100</i>	<i>109</i>		<i>208</i>	<i>106</i>	<i>52</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	86.8	11.3		117	132	147					
BL MAPLE	171.8	22.4		36	47	57					
WR CEDAR	232.5	30.2		15	22	29					
R ALDER	231.7	30.1		9	13	18					
WHEMLOCK	424.3	55.2		2	4	6					
COTWOOD	768.1	99.9		0	1	1					

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT	DRAG			DATE	10/3/2019	
TWP	RGE	SECT	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt
15N	05W	04	DRAG	00U3	59.20		59	270	S	W
CL:	68.1 %	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E. %	LOW	AVG	HIGH	5	7	10	
TOTAL		60.6	7.9	202	219	236	147	75	37	
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		85.0	11.1	29,197	32,826	36,455				
BL MAPLE		175.2	22.8	2,328	3,015	3,703				
WR CEDAR		241.0	31.4	1,169	1,703	2,237				
R ALDER		236.8	30.8	921	1,332	1,742				
WHEMLOCK		519.8	67.6	136	420	704				
COTWOOD		768.1	99.9	0	109	217				
TOTAL		68.3	8.9	35,903	39,405	42,907	186	95	47	
CL:	68.1 %	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR. %	S.E. %	LOW	AVG	HIGH	5	7	10	
DOUG FIR		85.3	11.1	5,768	6,488	7,207				
BL MAPLE		172.6	22.4	785	1,012	1,239				
WR CEDAR		229.0	29.8	415	591	767				
R ALDER		234.5	30.5	272	391	511				
WHEMLOCK		474.7	61.7	42	110	178				
COTWOOD		768.1	99.9	0	22	45				
TOTAL		63.4	8.2	7,903	8,614	9,324	161	82	40	
CL:	68.1 %	COEFF		V-BAR/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR. %	S.E. %	LOW	AVG	HIGH	5	7	10	
DOUG FIR				221	248	276				
BL MAPLE				50	65	80				
WR CEDAR		184.9	24.1	53	77	101				
R ALDER		119.0	15.5	68	99	129				
WHEMLOCK		515.6	67.1	35	109	183				
COTWOOD		768.1	99.9	0	175	349				
TOTAL		230.1	29.9	164	180	196	2,114	1,078	528	

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

T15N R05W S04 Ty00U	25.1
T15N R05W S04 Ty00U	31.3
T15N R05W S04 Ty00U	59.2

Project DRAG
Acres 115.60

Page No 1
Date: 10/3/2019
Time 12:31:37PM

Species	Total	Total	Total	Net Cubic Ft/		CF/	Total CCF		Total MBF	
	Trees	Logs	Tons	Tree	Log	LF	Gross	Net	Gross	Net
DOUG FIR	6,093	15,997	22,344	128.44	48.92	1.47	7,840	7,826	4,016	3,948
BL MAPLE	3,271	4,120	3,240	31.97	25.38	0.90	1,223	1,046	425	340
R ALDER	1,636	3,160	2,355	49.50	25.62	0.81	856	810	332	299
WR CEDAR	919	1,230	1,210	52.26	39.06	1.25	515	480	174	152
WHEMLOCK	1,556	1,986	1,006	20.21	15.83	0.53	314	315	109	107
GRAND F	4	11	70	589.59	196.53	4.91	22	21	13	12
COTWOOD	15	31	36	86.13	43.07	1.44	15	13	7	6
Totals	13,494	26,534	30,261	77.89	39.61	1.24	10,785	10,511	5,077	4,865

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	8,572	19,224	24,630	100.82	44.96	1.37	8,691	8,642	4,313	4,220
H	4,922	7,311	5,631	37.96	25.56	0.86	2,094	1,869	764	645
Totals	13,494	26,534	30,261	77.89	39.61	1.24	10,785	10,511	5,077	4,865



Forest Practices Application/Notification
Notice of Decision

FPA/N No: 2936984
Effective Date: 10/22/2019
Expiration Date: 10/22/2022
Shut Down Zone: 655; 651N
EARR Tax Credit: Eligible Non-eligible
Reference: DRAG TBS 30-099095
04,05-15-05W, 33,34-16-05W

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 FPA/N.

FPA/N Classification

Number of Years Granted on Multi-Year Request

Class II Class III Class IVG Class IVS 4 years 5 years

Conditions on Approval / Reasons for Disapproval

Notify the Department of Natural Resources two business days before beginning operations. Call 360-577-2025 or email (pcforestpractices@dnr.wa.gov and the Forest Practices Forester) and provide the application number and legal description for your activity.

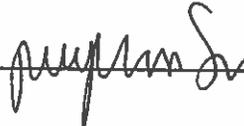
Issued By: Alex Lilla

Region: Pacific Cascade

Title: Forest Practices Forester

Date: 10/22/2019

Copies to: Landowner, Timber Owner and Operator.

Issued in person: Landowner Timber Owner Operator By: 

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.eluho.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
Pacific Cascade Region
PO Box 280
Castle Rock WA 98611

Other Applicable Laws

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

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

Use the "Notice of Transfer of Approved Forest Practices Application/Notification" form. This form is available at region offices and on the Forest Practices website: <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)

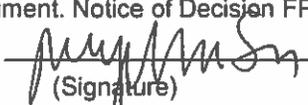
Obligations include reforestation, road maintenance and abandonment plans, conversions of forest land to non-forestry use and/or harvest strategies on perennial non-fish habitat (Type Np) waters in Eastern Washington.

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.

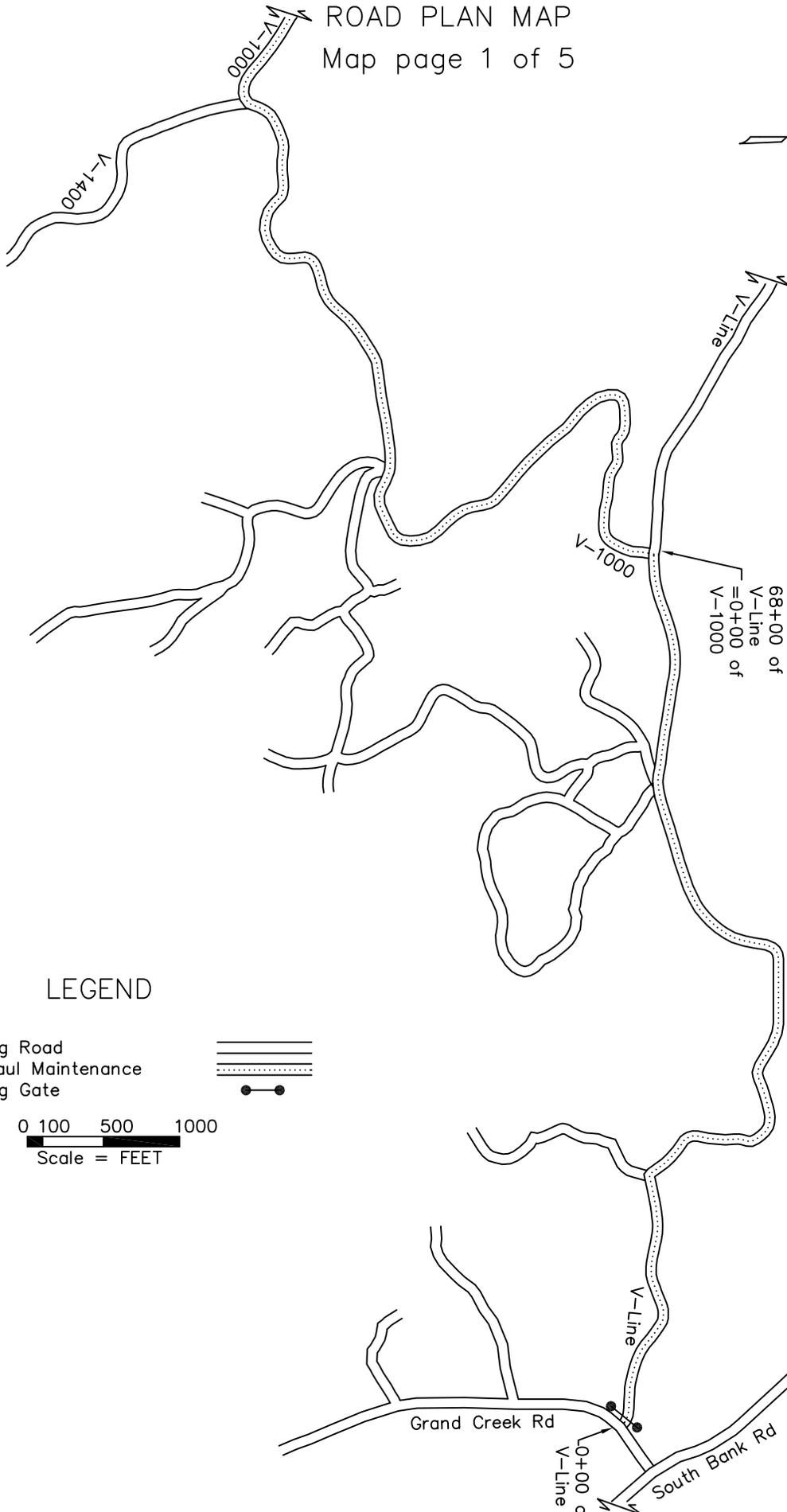
Failure by the seller to send the required notice to the DNR at the time of sale will be prima facie evidence in an action by the buyer against the seller for costs related to the continuing forest land obligation prior to sale.

DNR affidavit of mailing:

On this day <u>10/22/2019</u>	, I placed in the United States mail at <u>Castle Rock</u>	, WA,
(date)	(post office location)	
postage paid, a true and accurate copy of this document. Notice of Decision FPA # <u>2936984</u>		
<u>Tonya Johnston</u>		
(Printed name)	(Signature)	

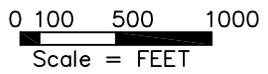
DRAG

ROAD PLAN MAP Map page 1 of 5



LEGEND

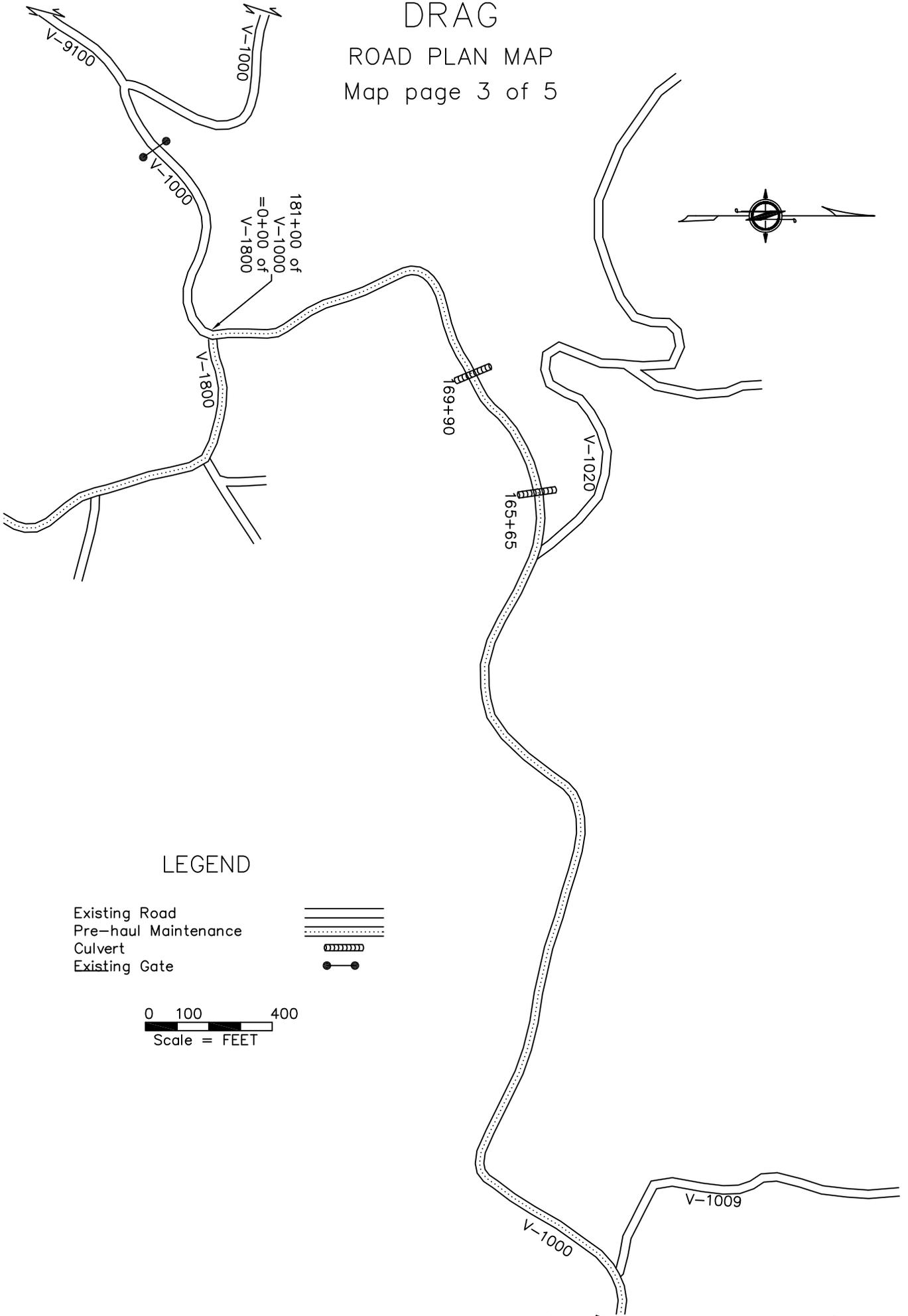
- Existing Road 
- Pre-haul Maintenance 
- Existing Gate 



DRAG

ROAD PLAN MAP

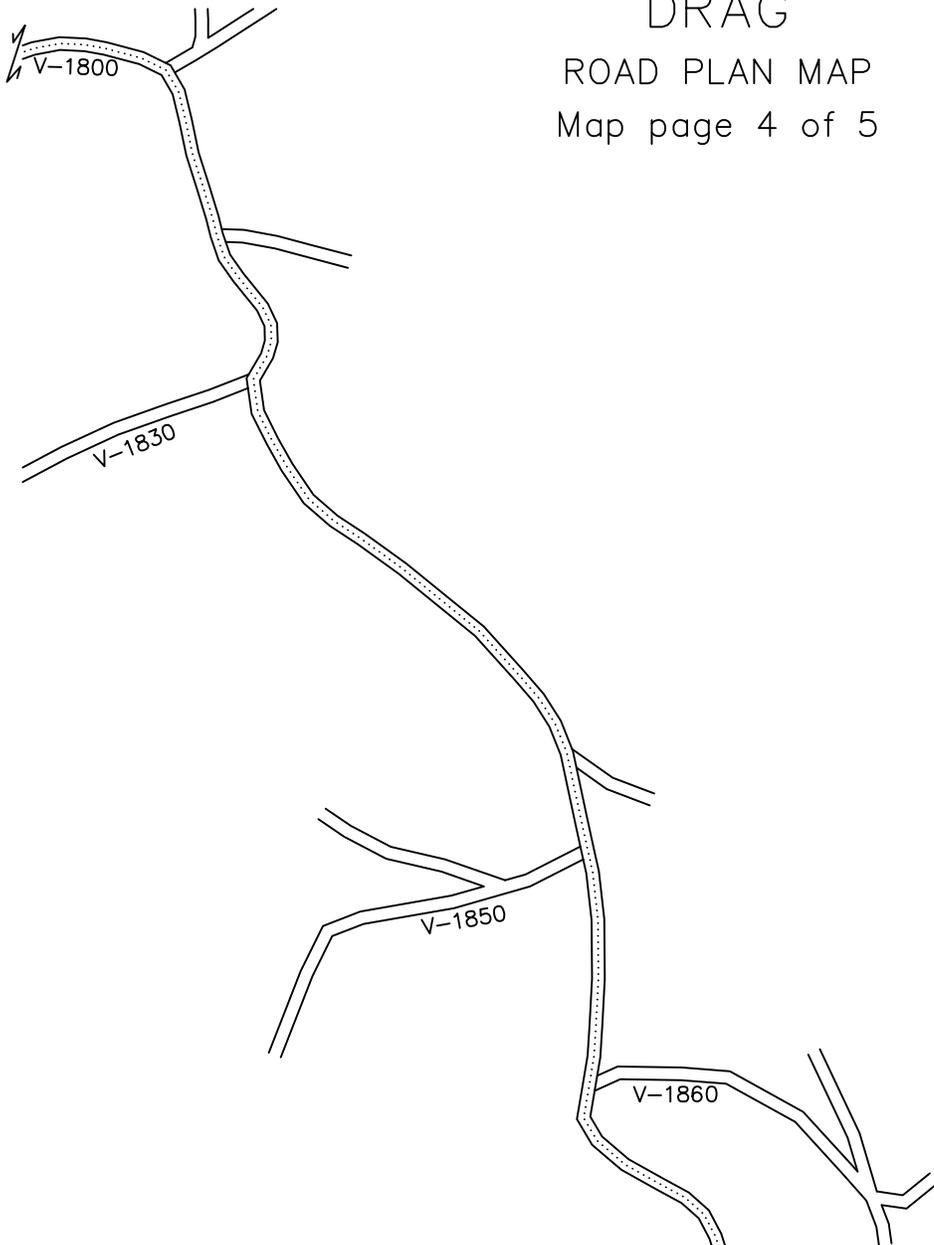
Map page 3 of 5



DRAG

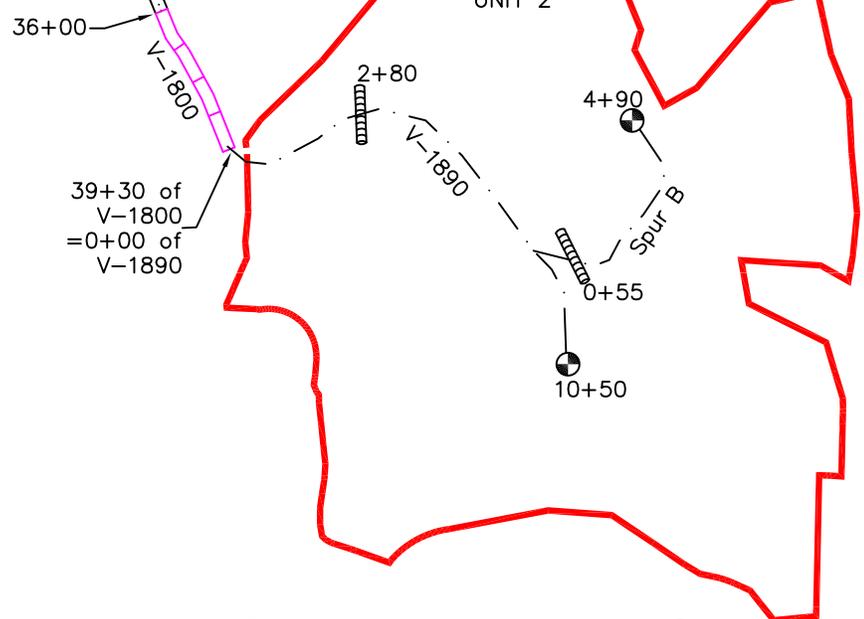
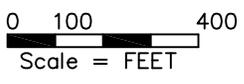
ROAD PLAN MAP

Map page 4 of 5



LEGEND

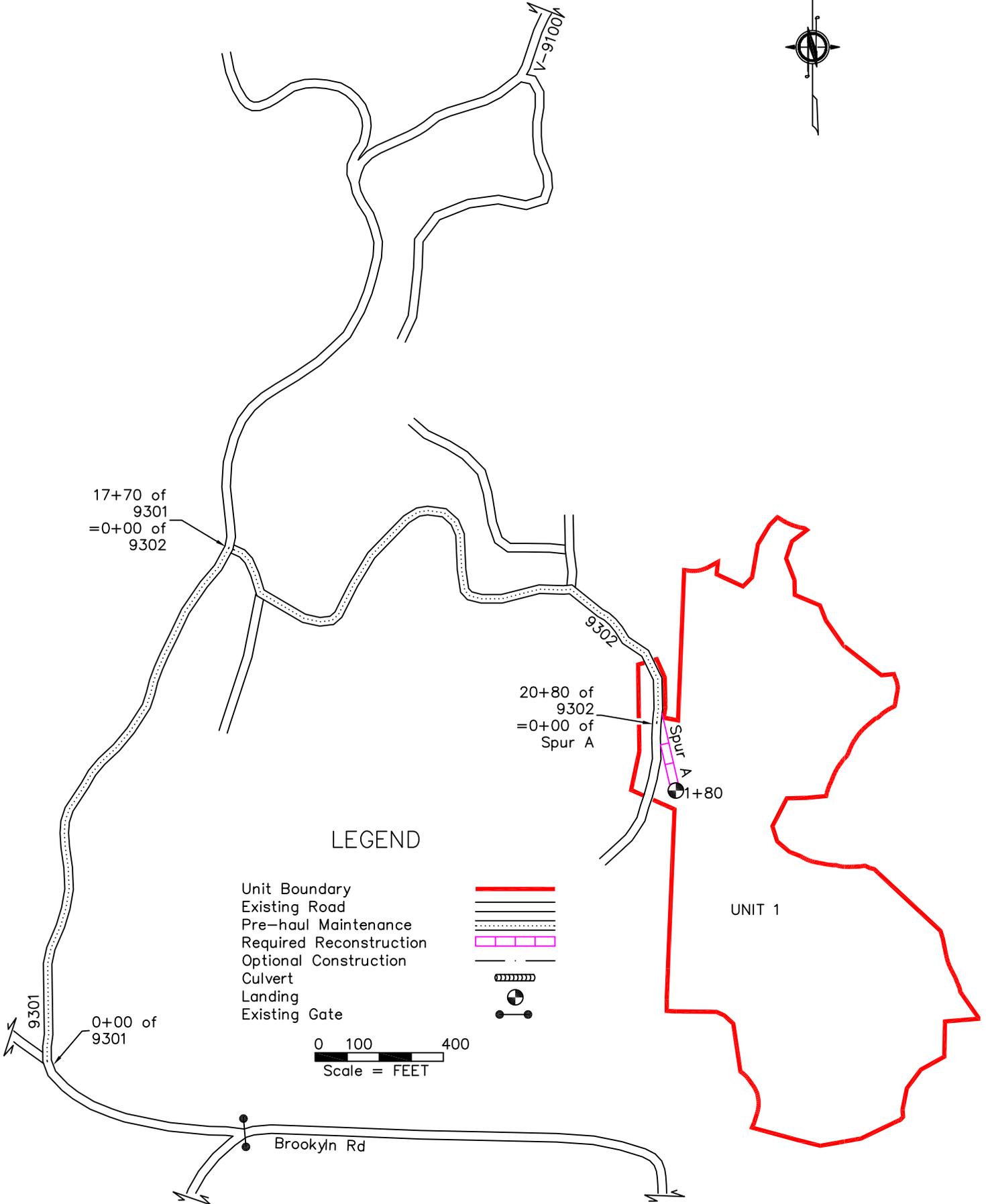
- Unit Boundary — (thick red line)
- Existing Road — (solid line)
- Pre-haul Maintenance — (dotted line)
- Required Reconstruction — (dashed line)
- Optional Construction — (dotted line)
- Culvert — (line with cross-ticks)
- Landing — (line with semi-circles)



DRAG

ROAD PLAN MAP

Map page 5 of 5



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

DRAG TIMBER SALE ROAD PLAN
GRAYS HARBOR COUNTY
LEWIS DISTRICT
PACIFIC CASCADE REGION

AGREEMENT NO.: 30-099095

STAFF ENGINEER: OLIVIA CANTWELL

DRAWN & COMPILED BY: ALICIA COMPTON

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>
V-Line	0+00 to 68+00	Pre-haul Maintenance
V-1000	0+00 to 181+00	Pre-haul Maintenance
V-1600	0+00 to 18+80	Pre-haul Maintenance
V-1800	0+00 to 36+00	Pre-haul Maintenance
V-1800	36+00 to 39+30	Reconstruction
Spur A	0+00 to 1+80	Reconstruction
9301	0+00 to 17+70	Pre-haul Maintenance
9302	0+00 to 20+80	Pre-haul Maintenance

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>
V-1005	0+00 to 10+20	Construction
V-1890	0+00 to 10+50	Construction
Spur B	0+00 to 4+90	Construction

0-4 CONSTRUCTION

Construction includes, but is not limited to clearing, grubbing, right-of-way debris disposal, excavation and/or embankment to subgrade, compaction, acquisition and installation of drainage structures, ditch construction, ditch-out construction, landing construction; acquisition and application of rock, and grass seeding.

0-5 RECONSTRUCTION

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
V-1800	36+00 to 39+30	Reconstruction shall conform to original road location. Restore road prism to dimensions according to TYPICAL SECTION SHEET. Grade, shape, and compact road surface. Ditch road in accordance with Clause 2-7. Apply and compact rock per ROCK LIST.
Spur A	0+00 to 1+80	Reconstruction shall conform to original road location. Restore road prism to dimensions according to TYPICAL SECTION SHEET. Grade, shape, and compact road surface. Ditch road in accordance with Clause 2-7. Apply and compact rock per ROCK LIST.

0-6 PRE-HAUL MAINTENANCE

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
V-Line	0+00 to 68+00	Grade, shape, and compact road surface. Apply and compact SPOT ROCK per ROCK LIST.
V-1000	0+00 to 181+00	Brush road according to Clause 3-1 and BRUSHING DETAIL. Grade, shape, and compact road surface. Clean inlets and outlets of culverts per Clause 2-6. Apply and compact SPOT ROCK per ROCK LIST.
V-1600	0+00 to 18+80	Grade, shape, and compact road surface. Apply and compact SPOT ROCK per ROCK LIST.
V-1800	0+00 to 36+00	Brush road according to Clause 3-1 and BRUSHING DETAIL. Grade, shape, and compact road surface. Apply and compact SPOT ROCK per ROCK LIST.
9301	0+00 to 17+70	Grade, shape, and compact road surface. Ditch according to Clause 2-7 and TYPICAL SECTION SHEET. Apply and compact SPOT ROCK per ROCK LIST.
9302	0+00 to 20+80	Grade, shape, and compact road surface. Ditch according to Clause 2-7 and TYPICAL SECTION SHEET. Clean inlets and outlets of culverts per Clause 2-6. Apply and compact SPOT ROCK per ROCK LIST.

0-7 POST-HAUL MAINTENANCE

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

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

If the Purchaser desires a change from this road plan including, but not limited to, relocation, extension, change in design, or adding roads; a revised road plan must be submitted in writing to the Contract Administrator for consideration. Before work begins, Purchaser shall obtain approval from the State for 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 plan, unless controlled by construction stakes or design data (plan, profile, and cross-sections).

1-4 ROAD TOLERANCES

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

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

1-6 ORDER OF PRECEDENCE

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

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

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

1-7 TEMPORARY ROAD CLOSURE

Purchaser shall notify the Contract Administrator a minimum of 2 calendar days before the closure of any road. Construction may not close any road for more than 21 consecutive calendar days.

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

1-15 ROAD MARKING

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

- New construction is marked with orange paint, orange flagging, and wooden stakes on centerline.
- Reconstruction is marked with orange paint, orange flagging, and wooden stakes at beginning of work
- Prehaul maintenance is marked with orange paint, orange flagging, and wooden stakes offset in ditch.

1-16 CONSTRUCTION STAKES SET BY STATE

Purchaser shall perform work on the following road in accordance with the construction stakes and reference points set in the field for grade and alignment. Reconstruction of existing road grades must conform to the original location except where construction staked or designed.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
V-1005	2+40 to 5+50	Full bench endhaul construction controlled by slope stakes and RP tags

1-18 REFERENCE POINT DAMAGE

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

1-20 COMPLETE BY DATE

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

1-21 HAUL APPROVAL

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

1-22 WORK NOTIFICATIONS

Purchaser shall notify the Contract Administrator a minimum of 2 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:

- Subgrade compaction
- Rock compaction

1-25 ACTIVITY TIMING RESTRICTION

The specified activities are not allowed during the listed closure period unless authorized in writing by the Contract Administrator. Restrictions for hauling forest products are specified in Contract Clause H-130 HAULING SCHEDULE.

<u>Road</u>	<u>Stations</u>	<u>Activity</u>	<u>Closure Period</u>
All roads	All stations	All road work	October 1 st to April 30 th

1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTION or Contract Clause H-130 HAULING SCHEDULE, Purchaser shall provide a maintenance plan to include further protection of state resources. Purchaser shall obtain written approval from the Contract Administrator for the maintenance plan, and shall put preventative measures in place before operating during the closure period. Purchaser is required to maintain all haul roads at their own expense including those listed in Contract Clause C-060 DESIGNATED ROAD MAINTAINER. If other operators are using, or desire to use these designated maintainer roads, a joint operating plan must be developed. All parties shall follow this plan.

1-29 SEDIMENT RESTRICTION

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

1-30 CLOSURE TO PREVENT DAMAGE

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

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

Operations must stop unless authority to continue working or hauling is granted in writing by the Contract Administrator. In the event that surface or base stability problems persist, 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 ASPHALT SURFACE RESTRICTION

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

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

Purchaser shall have asphalt surfaces reviewed by a third party, specializing in asphalt construction and repair. The third party's scope of the damage and repairs must be agreed upon between the Purchaser and the Contract Administrator. Damage to the asphalt from transporting equipment will be repaired at the Purchaser's expense.

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. 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 all roads in a condition that will allow the passage of light administrative vehicles.

2-5 MAINTENANCE GRADING – EXISTING ROAD

On the following roads, Purchaser shall use a grader to shape the existing surface before timber haul. Purchaser shall accomplish all grading using a motor grader with a minimum of 175 horsepower.

<u>Road</u>	<u>Stations</u>
V-Line	0+00 to 68+00
V-1000	0+00 to 181+00
V-1600	0+00 to 18+80
V-1800	0+00 to 36+00
9301	0+00 to 17+70
9302	0+00 to 20+80

2-6 CLEANING CULVERTS

On the following roads, Purchaser shall clean the inlets and outlets of all culverts and shall obtain written approval from the Contract Administrator before timber haul.

<u>Road</u>	<u>Stations</u>
V-1000	182+00
9301	9+00
9302	6+15

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

On the following roads, 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. Pulling ditch material across the road or mixing in with the road surface is not allowed.

<u>Road</u>	<u>Stations</u>
9302	10+00 to 11+70
V-1800	36+00 to 39+30
Spur A	0+00 to 1+80

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

3-1 BRUSHING

On the following roads, 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>
V-1000	167+00 to 181+00
V-1800	0+00 to 11+00, 22+00 to 36+00

3-2 BRUSHING RESTRICTION

Pulling, digging, pushing over, and other non-cutting methods used for vegetation removal may not be used for brushing. Purchaser shall submit a detailed list of equipment and methods to be used during brushing, for approval by the Contract Administrator before starting work. Excavator buckets, log loaders and similar equipment may not be used for brushing unless otherwise approved in writing by the Contract Administrator.

3-5 CLEARING

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

3-7 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 the grubbing limits.
- Within 50 feet of any stream.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- On slopes greater than 45%.
- Against standing trees.

3-10 GRUBBING

Purchaser shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET and within waste and debris areas. Purchaser shall also remove stumps with undercut roots outside the grubbing limits. Purchaser shall remove stumps using a hydraulic mounted excavator unless authorized in writing by the Contract Administrator. Stumps over 22 inches diameter must be split. Stumps over 40 inches must be quartered. Grubbing must be completed before starting excavation and embankment.

3-12 STUMP PLACEMENT

Purchaser shall place grubbed stumps outside of the clearing limits and in compliance with all other clauses in this road plan. Stumps must be positioned upright and on stable locations.

3-14 STUMPS WITHIN DESIGNATED WASTE AREAS

Purchaser is not required to remove stumps within waste areas if they are cut flush with the ground.

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 before subgrade compaction on new construction, or before rock application on existing road reconstruction and pre-haul maintenance.

3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS

Waste areas for organic debris are located within the cleared right-of-way or in natural openings as designated, and at areas approved in writing by the Contract Administrator.

<u>Road</u>	<u>Disposal Location</u>	<u>Requirements</u>
V-1000	106+00	Left side of road. Pile organic waste separately from soil waste.

3-23 PROHIBITED DISPOSAL AREAS

Purchaser shall not place organic debris in the following areas:

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

3-24 BURYING ORGANIC DEBRIS RESTRICTED

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

3-25 SCATTERING ORGANIC DEBRIS

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

3-32 END HAULING ORGANIC DEBRIS

On the following road, and on slopes greater than 45%, Purchaser shall end haul or push organic debris to the designated waste areas specified in Clause 3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS or to a waste area located by the Contract Administrator.

<u>Road</u>	<u>Stations</u>
V-1005	2+40 to 5+50

SECTION 4 – EXCAVATION

4-1 EXCAVATOR CONSTRUCTION

On the following roads, Purchaser shall use a track mounted hydraulic excavator for construction work, unless authorized in writing by the Contract Administrator.

<u>Road</u>	<u>Stations</u>
V-1005	2+40 to 5+50
Spur B	0+00 to 4+90

4-2 PIONEERING

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

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

4-3 ROAD GRADE AND ALIGNMENT STANDARDS

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

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 16 percent favorable and 10 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Maximum grade change for sag vertical curves is 5% in 100 feet.
- Maximum grade change for crest vertical curves is 4% in 100 feet.

4-4 SWITCHBACK STANDARDS

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

Purchaser shall follow these standards for switchbacks:

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

4-5 CUT SLOPE RATIO

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

<u>Material Type</u>	<u>Excavation Slope Ratio</u>	<u>Excavation Slope Percent</u>
Common Earth	1:1	100
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.

4-12 FULL BENCH CONSTRUCTION

On the following road, Purchaser shall use full bench construction for the entire subgrade width. Purchaser shall end haul waste material to the location specified in Clause 4-37 WASTE AREA LOCATION.

<u>Road</u>	<u>Full Bench Location</u>
V-1005	2+40 to 5+50

4-21 TURNOUTS

Purchaser shall construct turnouts intervisible with a maximum distance of 1,000 feet between turnouts. Locations may be adjusted to fit the final subgrade alignment and sight distances. Minimum dimensions are shown on the TYPICAL SECTION SHEET.

4-22 TURNAROUNDS

Turnarounds must be no larger than 40 feet long and 30 feet wide. Locations are subject to written approval by the Contract Administrator.

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

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

4-27 DITCH WORK – MATERIAL USE PROHIBITED

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

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

4-35 WASTE MATERIAL DEFINITION

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

4-36 DISPOSAL OF WASTE MATERIAL

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

4-37 WASTE AREA LOCATION

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 as listed.

<u>Road</u>	<u>Waste Area Location</u>	<u>Comments</u>	<u>Volume</u>
V-1000	106+00	Place waste within marked area. Keep soil and organic waste separate.	5000cy

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

4-48 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.

4-55 ROAD SHAPING

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

4-56 DRY WEATHER SHAPING

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

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.

4-61 SUBGRADE COMPACTION

Purchaser shall compact constructed and reconstructed subgrades deeper than 5 feet at the road shoulder in accordance with the COMPACTION LIST by routing equipment over the entire width except ditch. Purchaser shall obtain written approval from the Contract Administrator for subgrade compaction before rock application.

4-62 DRY WEATHER COMPACTION

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

4-63 EXISTING SURFACE COMPACTION

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

SECTION 5 – DRAINAGE

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. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts must be new material and must meet the specifications in Clauses 10-17 and 10-22.

5-6 CULVERT TYPE

Purchaser shall install culverts made of plastic in accordance with Clauses 10-17 and 10-22.

5-10 CULVERT MARKER INSTALLATION

At all new culverts Purchaser shall provide and install culvert markers at the inlet in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL.

5-12 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". Culverts over 15 inches diameter shall be banded using lengths of no less than 10 feet, and no more than one length less than 16 feet. Shorter section of banded culvert shall be installed at the inlet end.

5-17 CROSS DRAIN SKEW AND SLOPE

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

5-18 CULVERT DEPTH OF COVER

All 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.

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

Purchaser shall construct headwalls in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all culverts on the CULVERT LIST that specify the placement of rock. Rock used for headwalls must be QUARRY SPALLS. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets. Minimum specifications require that rock be placed at a width of one culvert diameter on each side of the culvert opening, and to a height of one culvert diameter above the top of the culvert. Rock may not restrict the flow of water into culvert inlets or catch basins. Placement must be with a zero-drop-height only. QUARRY SPALLS shall meet the specifications in Clause 6-43 QUARRY SPALLS.

5-33 NATIVE SURFACE ROADS

If overwintered, native surface roads must be waterbarred by November 1. Purchaser shall construct waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical distance of no more than 10 feet between waterbars or between natural drainage paths, and with a maximum spacing of 300 feet.

SECTION 6 – ROCK AND SURFACING

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.

<u>Possible Source</u>	<u>Location</u>
Northwest Rock	6801 SR 12, Oakville

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.

6-23 ROCK GRADATION TYPES

Purchaser shall provide 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. The exact point of evaluation for conformance to specifications will be determined by the Contract Administrator. Purchaser shall provide a sieve analysis upon request from the Contract Administrator.

6-28 1 ¼-INCH MINUS CRUSHED ROCK

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

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

6-39 6-INCH JAW RUN ROCK

% Passing 6" in one dimension	100%
% Passing 3" square sieve	45 - 65%

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

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 depths using the compaction methods required in this road plan. Estimated quantities specified in the ROCK LIST are loose 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, unless otherwise stated in Clause 6-75 OPTIONAL ROCK EXCEPTION.

6-57 ROCK MEASUREMENT BY TRUCK SCALE

Measurement of the CULVERT BACKFILL, SPOT ROCK, and QUARRY SPALLS is on scaled truck weight. Purchaser shall provide scaled weight using a commercial scale. Purchaser shall provide the Contract Administrator with all scale sheets.

6-59 WEIGHT PER CUBIC YARD MEASUREMENT

At the start of operations, a weight per cubic yard will be calculated as follows:

- a) Measure the box of a truck to be used for rock haul.
- b) Weigh the truck for tare weight at a state certified platform scale.
- c) Flatten off a load of rock in the truck and calculate its exact volume in cubic yards.
- d) Weigh the truck for gross weight at a state certified platform scale.
- e) Divide the net weight of the load by the volume calculated in step c.

Calculated conversion factors will be valid for no more than 30 days or until rock density or moisture changes significantly, as determined by the Contract Administrator.

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for subgrade compaction before rock application.

6-71 ROCK APPLICATION

Purchaser shall apply rock in accordance with the specifications and quantities shown on the ROCK LIST. Rock must be spread, shaped, and compacted full width concurrent with rock hauling operations. The Contract Administrator will direct locations for rock that is to be applied as spot patching. Road surfaces must be compacted in accordance with the COMPACTION LIST by routing equipment over the entire width.

6-73 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 provide and 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.

6-76 DRY WEATHER ROCK COMPACTION

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

SECTION 7 – STRUCTURES

7-70 GATE CLOSURE

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

<u>Road</u>	<u>Station</u>
V-Line	1+00
9300	0+00

SECTION 8 – EROSION CONTROL

8-2 PROTECTION FOR EXPOSED SOIL

Purchaser shall provide and evenly spread a 4-inch layer of straw to all exposed soils within 50 feet of a stream or wetland. Soils must be covered before the first anticipated storm event. Soils may not sit exposed during any rain event.

8-15 REVEGETATION

Purchaser shall spread grass seed on all exposed soils resulting from road work activities using manual dispersal. Other methods of covering must be approved in writing by the Contract Administrator. Required seed not spread by the termination of this contract will become the property of the state.

<u>Road</u>	<u>Qty (lbs)*</u>
V-1005	26.4
V-1890	26.8
Spur B	12.4
V-1800	3.2
Spur A	1.6
Total	70.4

*Quantities are estimates only. Actual quantities may vary and are the responsibility of the Purchaser.

8-16 REVEGETATION SUPPLY

The Purchaser shall provide the grass seed.

8-17 REVEGETATION TIMING

Purchaser shall revegetate after road work is completed. Soils may not be allowed to sit exposed for longer than one month without receiving revegetation treatment unless otherwise approved in writing by the Contract Administrator.

8-18 PROTECTION FOR SEED

Purchaser shall provide a protective cover for seed on all exposed soils within 50 feet of streams or wetlands. The protective cover may consist of straw. Seed must be covered before the first anticipated storm event. Seed may not be allowed to sit exposed during any rain 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 additional cost to the state.

8-25 GRASS SEED

Purchaser shall evenly spread the seed mixture listed below on all exposed soil at a rate of 40 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

9-3 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.

9-10 LANDING DRAINAGE

Purchaser shall provide for drainage of the landing surface.

9-11 LANDING EMBANKMENT

Purchaser shall slope landing embankments to the original construction specifications.

SECTION 10 MATERIALS

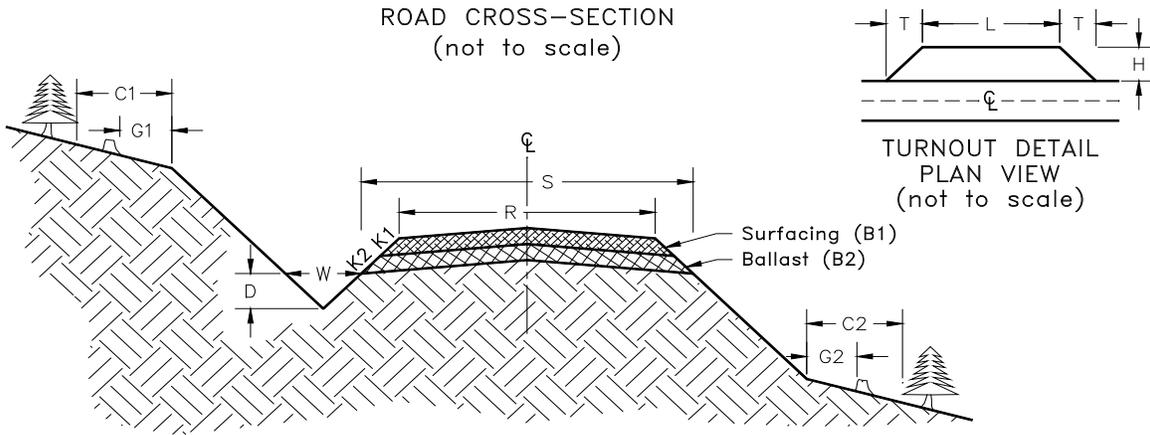
10-17 CORRUGATED PLASTIC CULVERT

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.

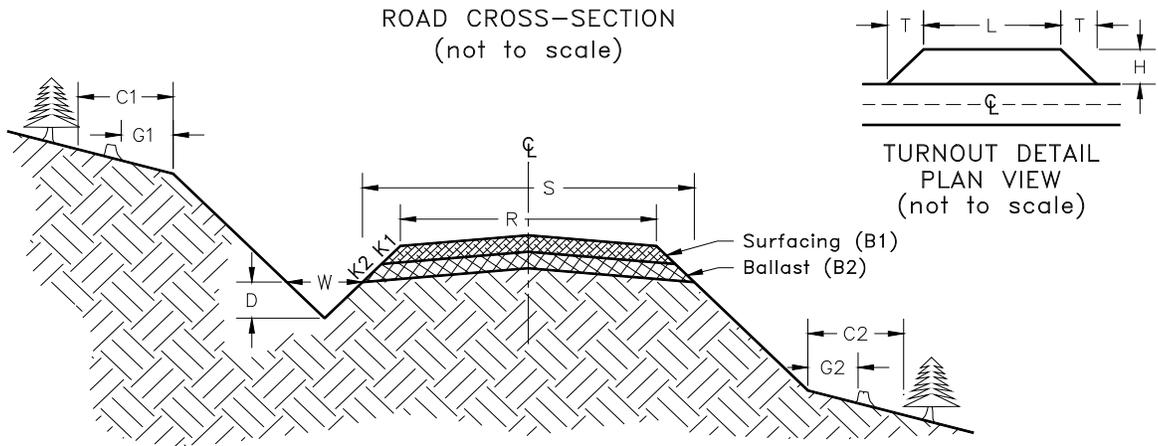
10-22 PLASTIC BAND

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. Couplings must be split coupling band. Split coupling bands must have a minimum of four corrugations, two on each side of the pipe joint.

TYPICAL SECTION SHEET



Road Number	From Station	To Station	Tolerance Class	Subgrade Width		Ditch		Crown in. @ CL	Grubbing Limits		Clearing Limits	
				(feet)	(feet)	Width (feet)	Depth (feet)		(feet)	(feet)	(feet)	(feet)
				S	R	W	D		G1	G2	C1	C2
V-1005	0+00	10+20	C	16	12	3	1	4	5	5	10	10
V-1890	0+00	10+50	C	16	12	3	1	4	5	5	10	10
Spur B	0+00	4+90	C	16	12	3	1	4	5	5	10	10
V-Line	0+00	68+00	A	-	-	3	1	4	-	-	-	-
V-1000	0+00	181+00	A	-	-	3	1	4	-	-	-	-
V-1600	0+00	18+80	A	-	-	3	1	4	-	-	-	-
V-1800	0+00	36+00	B	-	-	3	1	4	-	-	-	-
V-1800	36+00	39+30	B	16	12	3	1	4	5	5	10	10
Spur A	0+00	1+80	B	16	12	3	1	4	5	5	10	10
9301	0+00	17+70	B	-	-	3	1	4	-	-	-	-
9302	0+00	20+80	B	-	-	3	1	4	-	-	-	-



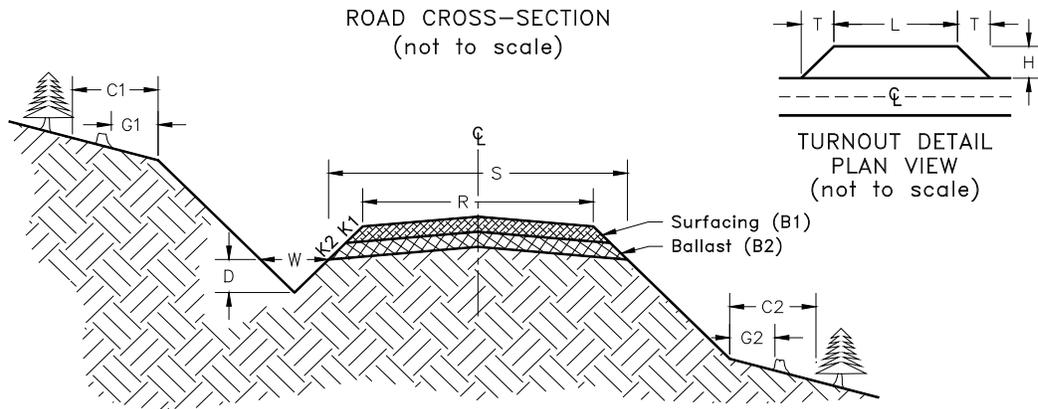
BALLAST

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth (in)	C.Y. per Station or Unit	# of Stations or Units	C.Y. Subtotal	Rock Source
			K2	B2	6" MINUS			
V-1005	0+00	10+20	1 1/2:1	15	81	10.20	826	
	Turnarounds				43	1	43	
	Curve Widening						29	
	Junctions				30	1	30	
	Landings				67.5	2	135	
V-1890	0+00	10+50		15	81	10.50	850	
	Turnarounds				43	1	43	
	Curve Widening						30	
	Junctions				30	1	30	
	Landings				68	1	68	
Spur B	0+00	4+90	1 1/2:1	15	81	4.90	397	
	Curve Widening						14	
	Junctions				30	1	30	
	Landings				68	1	68	
V-1800	* 36+00	39+30	1 1/2:1	10	52	3.30	170	
	* Curve Widening						6	
Spur A	* 0+00	1+80	1 1/2:1	10	52	1.80	93	
	* Curve Widening							

REQUIRED BALLAST: 2593 CY

OPTIONAL BALLAST: 272 CY

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



SURFACE

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth (in)	C.Y. per Station or Unit	# of Stations or Units	C.Y. Subtotal	Rock Source
			K2	B2	1 1/4" MINUS			Commercial
V-Line		Culvert Backfill			20	1	20	
		Spot Rock		4	20	5	100	
V-1000		Culvert Backfill			20	3	60	
		Spot Rock		4	20	10	200	
V-1600		Spot Rock		4	20	3	60	
V-1800		Spot Rock		4	20	8	160	
9302	*	Spot Rock		4	20	1.5	30	

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

REQUIRED CRUSHED ROCK: 600 CY
 OPTIONAL CRUSHED ROCK: 30 CY

QUARRY SPALLS

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth (in)	C.Y. per Station or Unit	# of Stations or Units	C.Y. Subtotal	Rock Source
			K2	B2	QUARRY SPALLS			Commercial
V-1005					1	1	1	
V-1890					1	1	1	
Spur B					1	1	1	
V-Line					1	1	1	
V-1000					1	3	3	

REQUIRED QUARRY SPALLS: 7 CY

CULVERT LIST

Road Number	Location	Culvert		Length (ft)			(C.Y.)			Backfill Material	Placement Method
		Dia	Gauge	Culvert	Down-spout	Flume	Inlet	Outlet	Type		
		in.	if Steel								
V-1005	6+45	18		40			0.5	0.5	QS	CR	ZDH
V-1890	2+80	18		30			0.5	0.5	QS	CR	ZDH
Spur B	0+55	18		30			0.5	0.5	QS	CR	ZDH
V-1000	105+40	18		30			0.5	0.5	QS	CR	ZDH
V-1000	165+65	18		30			0.5	0.5	QS	CR	ZDH
V-1000	169+90	18		30			0.5	0.5	QS	CR	ZDH

Key:

- SP - Select Pit Run
- NT - Native (bank run)
- CR - 2 1/2 Inch Minus Crushed
- QS - Quarry Spalls
- ZDH - Zero Drop Height

COMPACTION LIST

Road	Type	Max Depth Per Lift (inches)	Equipment Type	Equipment Weight (lbs)	Minimum Number of Passes	Maximum Operating Speed (mph)
All Roads	Subgrade	12	Vibratory Smooth Drum	14,000	4	3
All Roads	Fill	24	Vibratory Smooth Drum	14,000	4	3
All Roads	Waste Area	24	Excavation	28,000	-	-
All Roads	Pre-haul Surface	6	Vibratory Smooth Drum	14,000	5	3
All Roads	Rock	9	Vibratory Smooth Drum	14,000	3	3

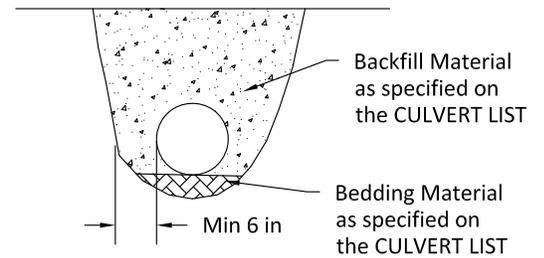
CULVERT AND DRAINAGE SPECIFICATION DETAIL
PAGE 1 OF 2

INSTALLATION REQUIREMENTS:

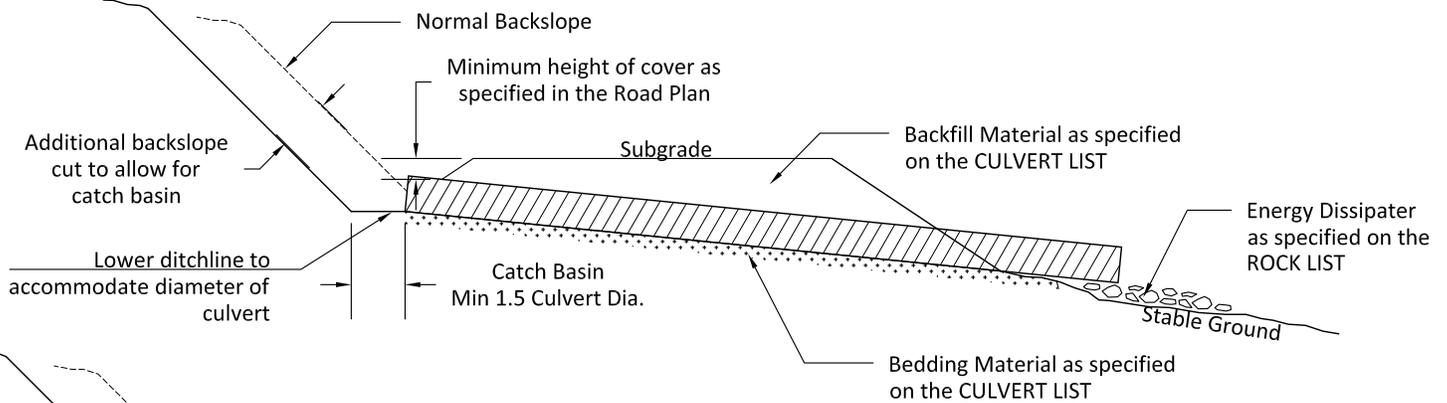
1. Proper preparation of foundation and placement of any required bedding material shall precede the installation of all culverts. This includes necessary leveling of the native trench bottom and compaction of required bedding material to form a uniform, dense, unyielding base. The pipe must be uniformly supported along the barrel.
2. Backfill material shall be compacted under the culvert haunches, around the sides, and above the culvert in accordance with the COMPACTION LIST.

ALL DRAWINGS ARE NOT TO SCALE

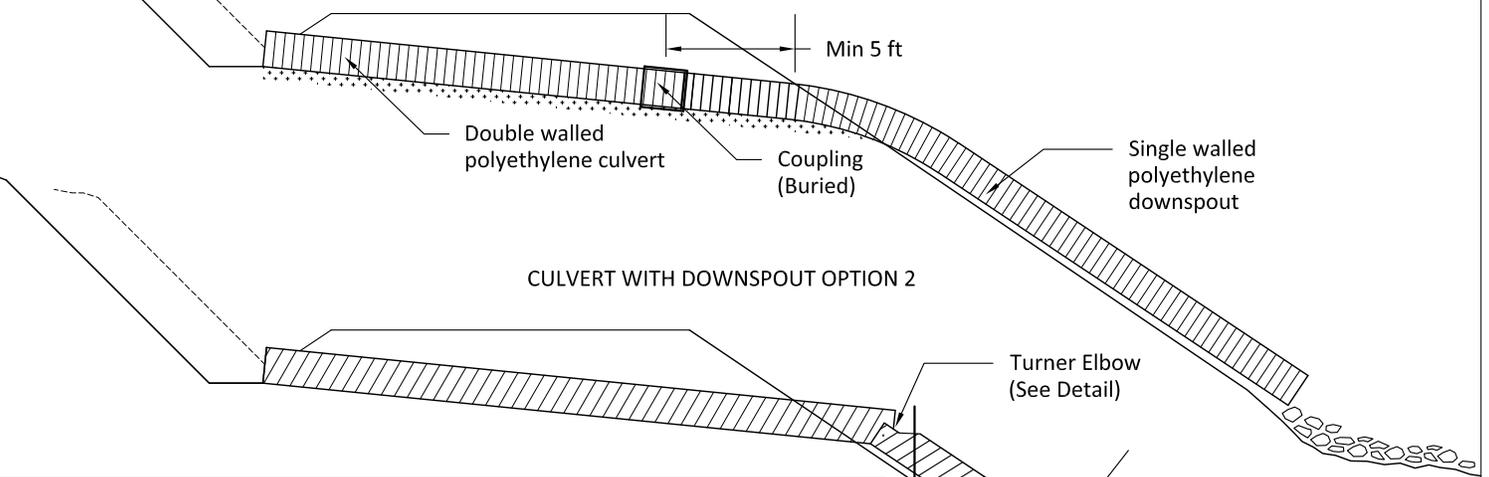
CROSS SECTION



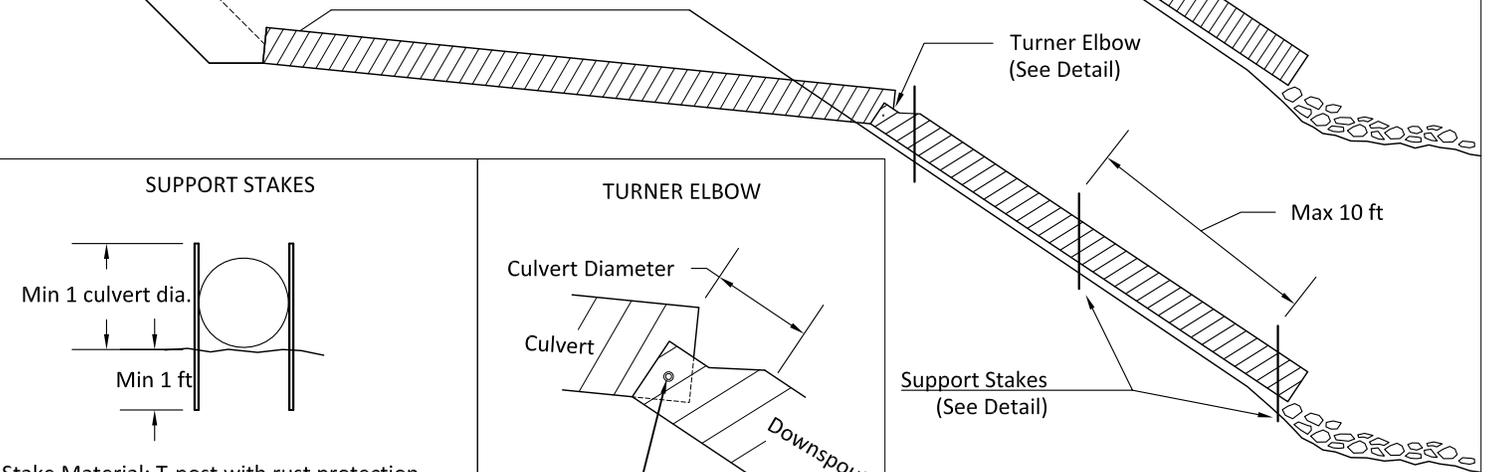
CULVERT PROFILE (TYPICAL)



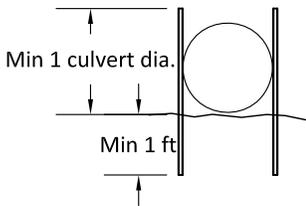
CULVERT WITH DOWNSPOUT OPTION 1



CULVERT WITH DOWNSPOUT OPTION 2

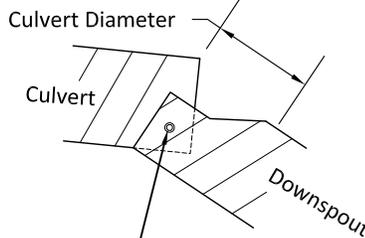


SUPPORT STAKES



Stake Material: T-post with rust protection coating.
Connections: Bolt support stakes to the culvert with $\frac{5}{8}$ " u-bolts, with washers on both the inside and outside of the culvert.
Alternative staking methods may be approved, in writing, by the Contract Administrator.

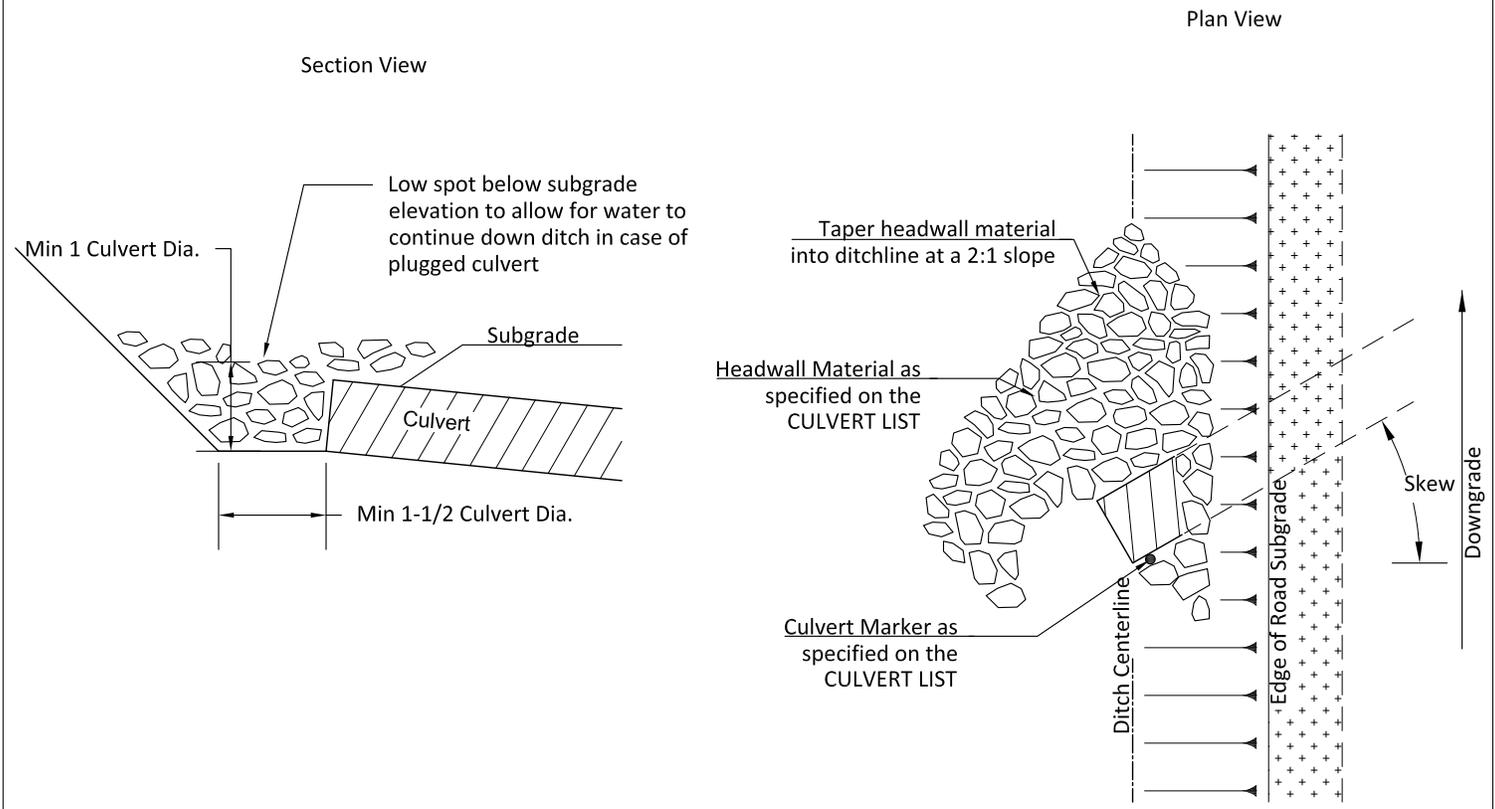
TURNER ELBOW



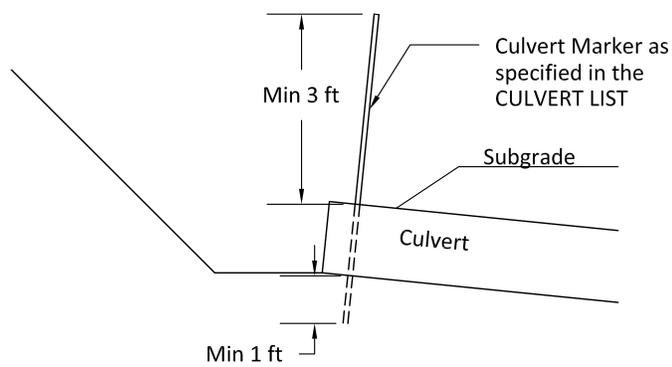
Bolted with $\frac{5}{8}$ " galvanized bolts and washers (both sides)
Downspout must be 6 inches larger in diameter than the culvert.

CULVERT AND DRAINAGE SPECIFICATION DETAIL
PAGE 2 OF 2

HEADWALLS

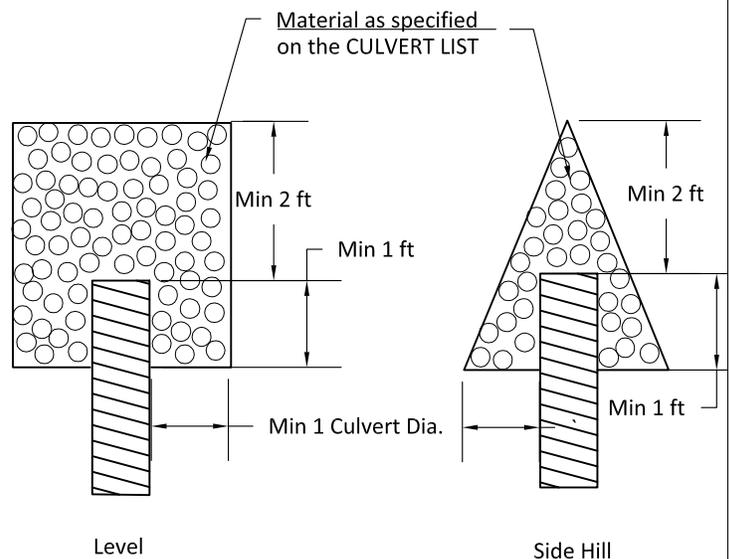


CULVERT MARKERS



Culvert Marker Material: 1 Inch I.D., Schedule 40 PVC Pipe, White. Marker must be capped on the top.
 Culvert Marker Placement: Place on uphill side of culvert, between corrugations if possible.
 Alternative culvert marker types may be approved, in writing, by the Contract Administrator.

ENERGY DISSIPATORS



Min Energy Dissipater Depth: 1 Culvert Dia.

Cuts and Fills

- Maintain slope lines to a stable gradient compatible with the cut slope/fill slope ratios. Remove slides up to 100 cubic yards in volume from ditches and the roadway. Repair fill-failures, in accordance with Clause 4-6 EMBANKMENT SLOPE RATIO, with selected material or material approved by the Contract Administrator. Remove overhanging material from the top of cut slopes.
- Waste material from slides or other sources shall be placed and compacted in stable locations identified in the road plan or approved by the Contract Administrator, so that sediment will not deliver to any streams or wetlands.
- Slide material and debris shall not be mixed into the road surface materials, unless approved by the Contract Administrator.

Surface

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

Drainage

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

Preventative Maintenance

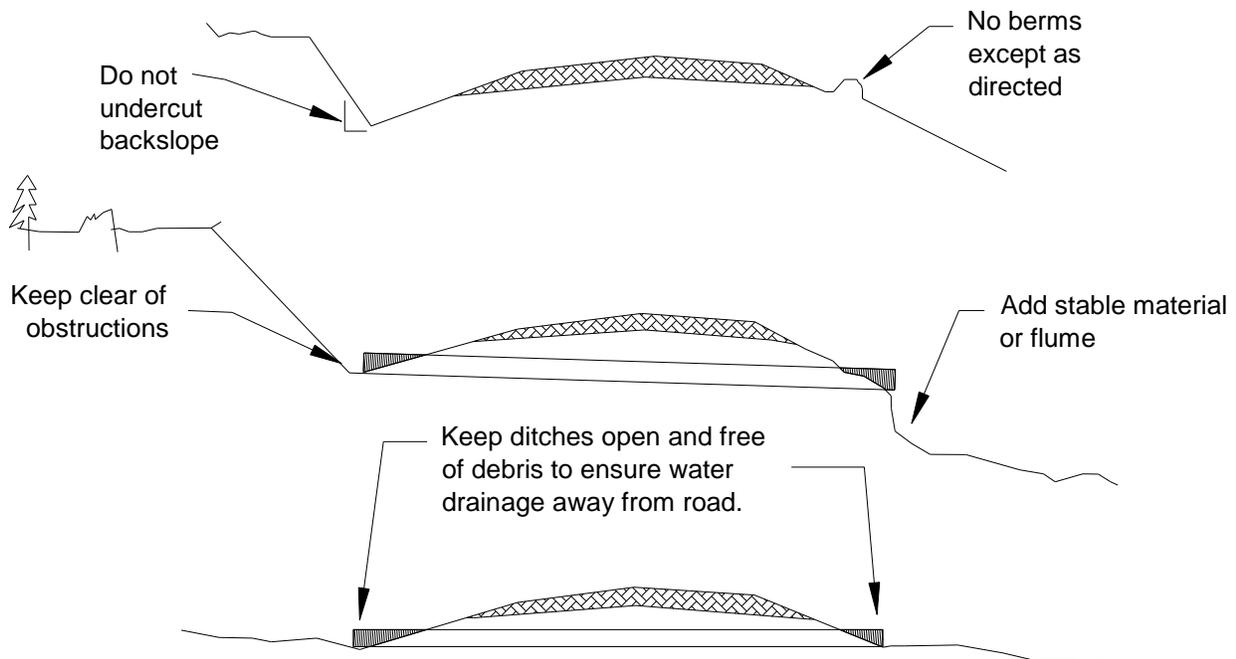
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

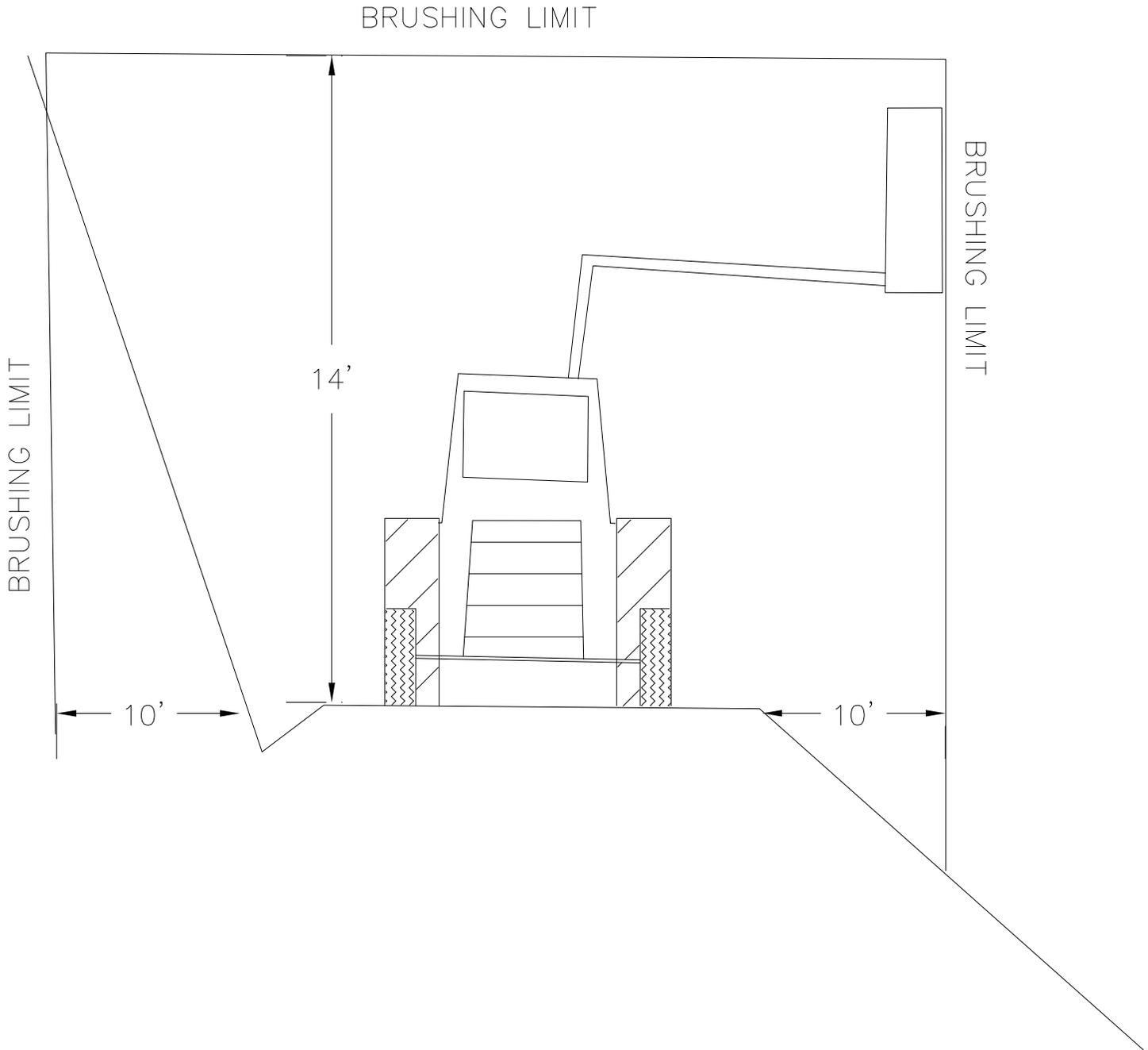
- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

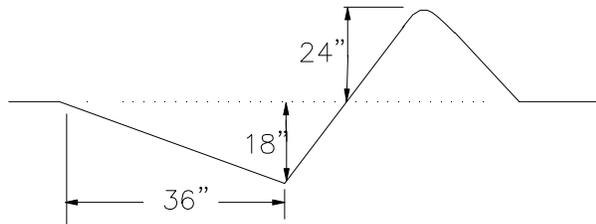
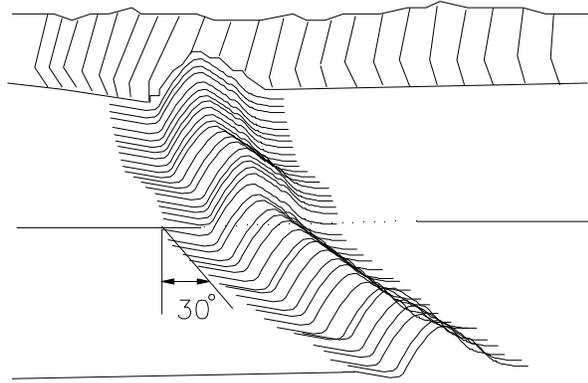
- Remove fallen timber, limbs, and stumps from the slopes, roadway, ditchlines, and culvert inlets.



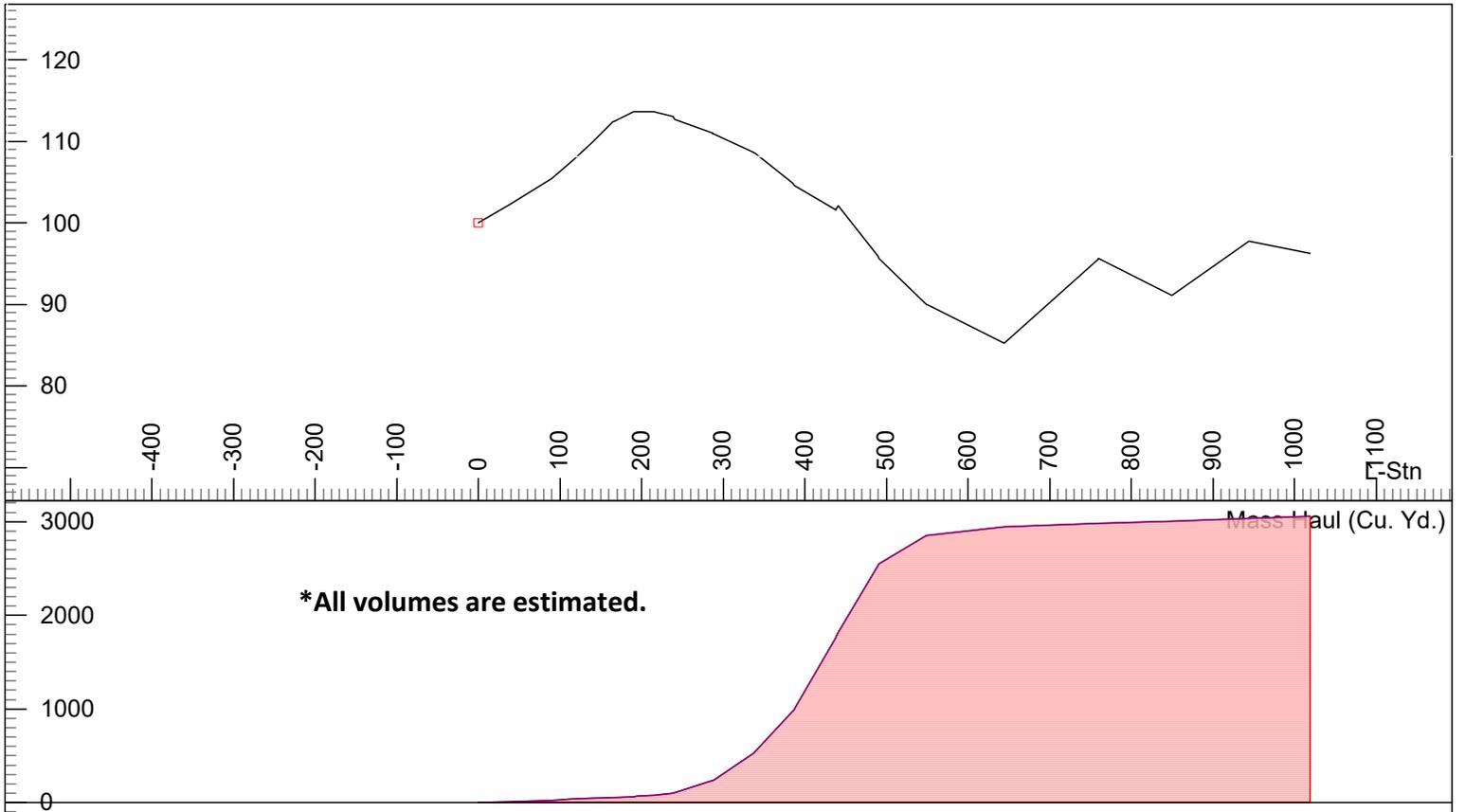
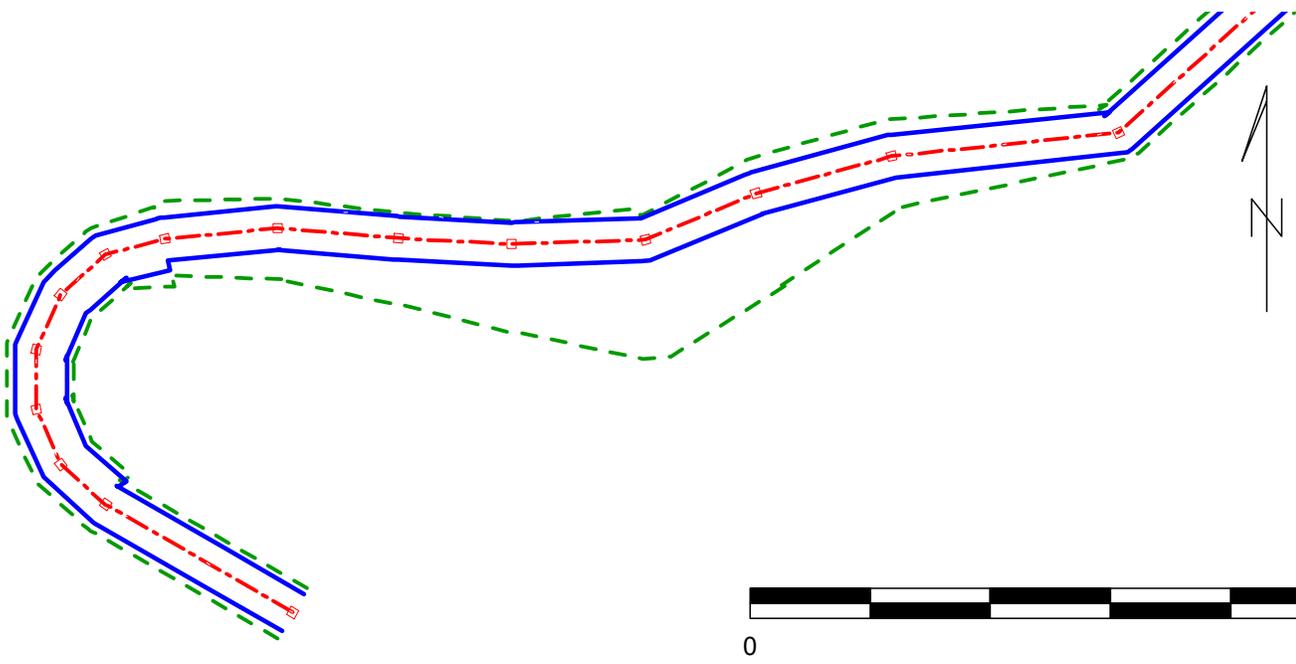
BRUSHING SECTION DETAIL



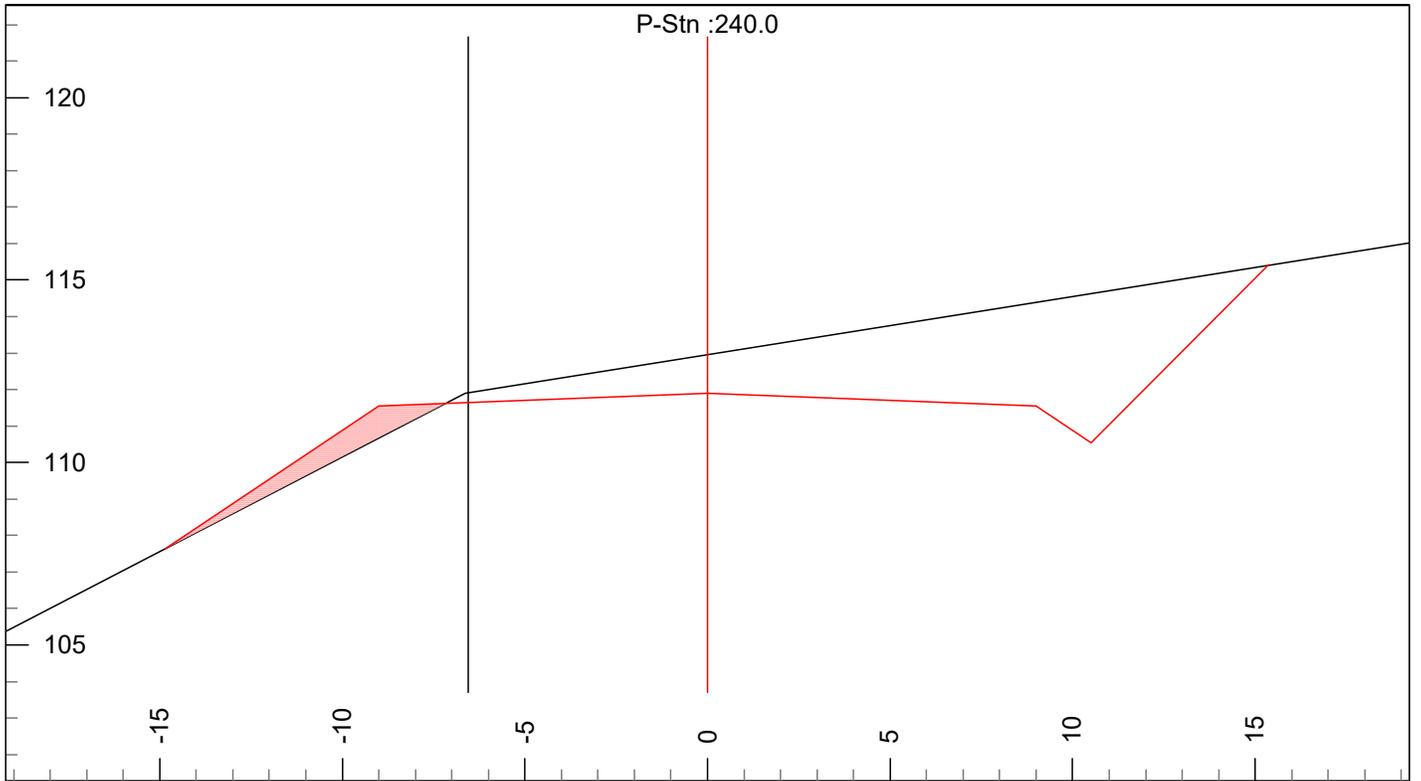
NON-DRIVABLE WATER BAR DETAIL



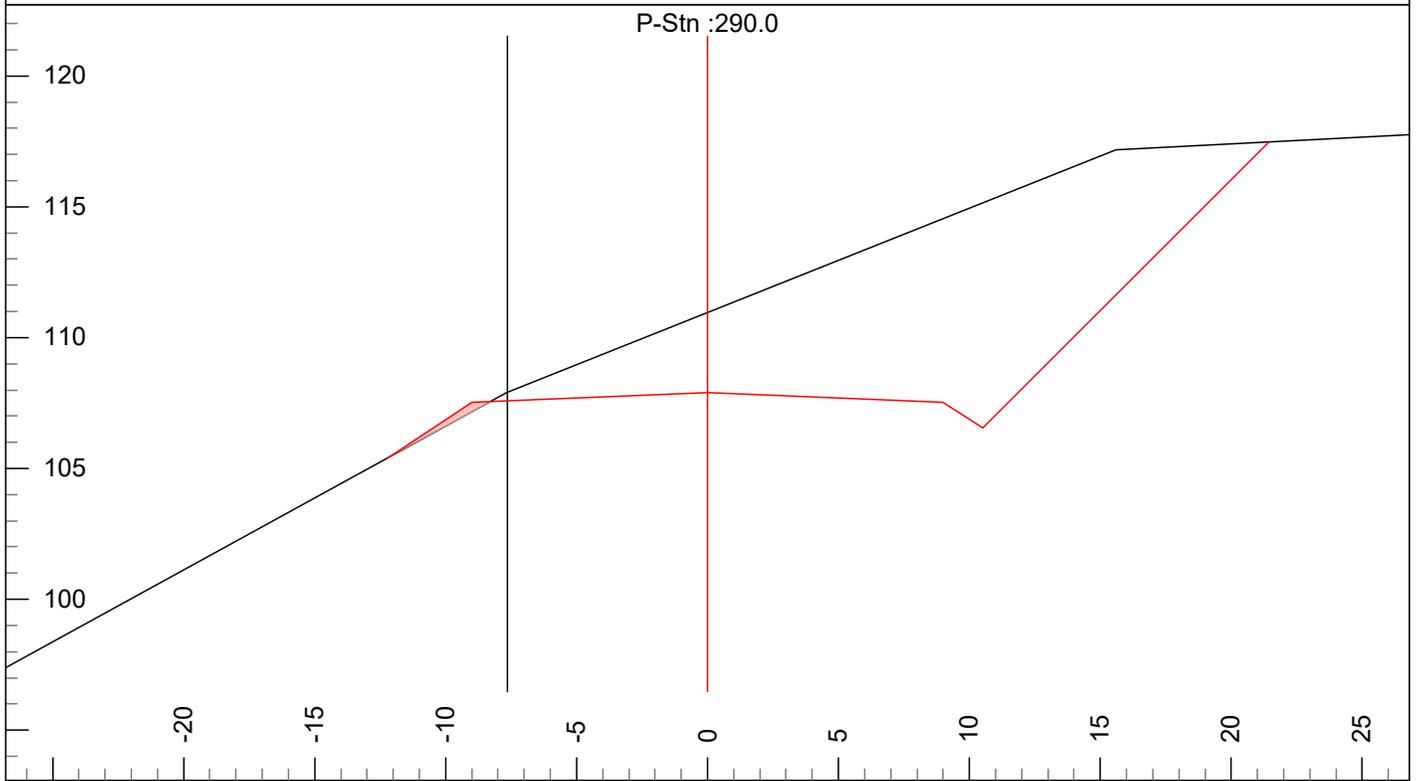
Drag V-1005 Optional Construction



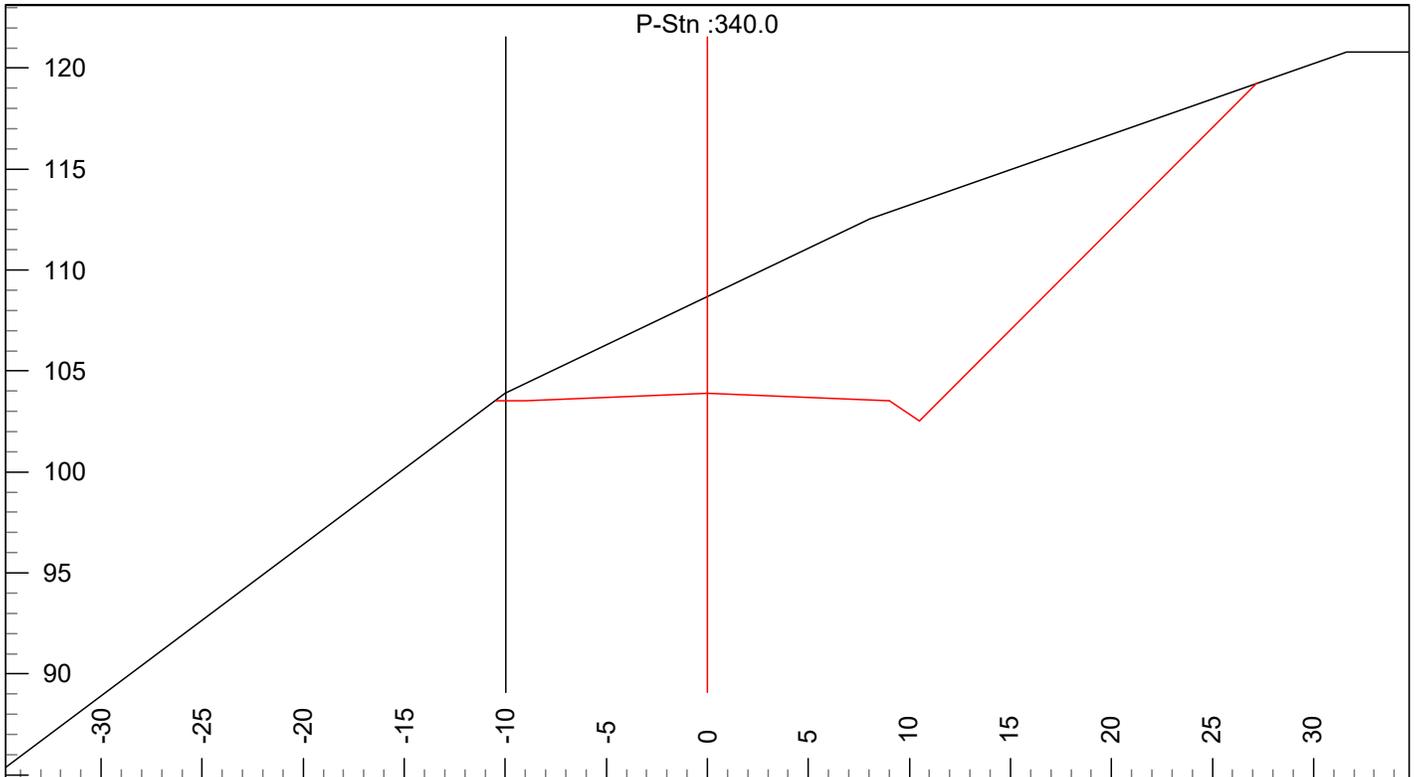
Legend	
<p>—□— Plan L-line Location</p> <p>— Plan Slope Stakes</p>	<p>— Plan Road Edges</p>



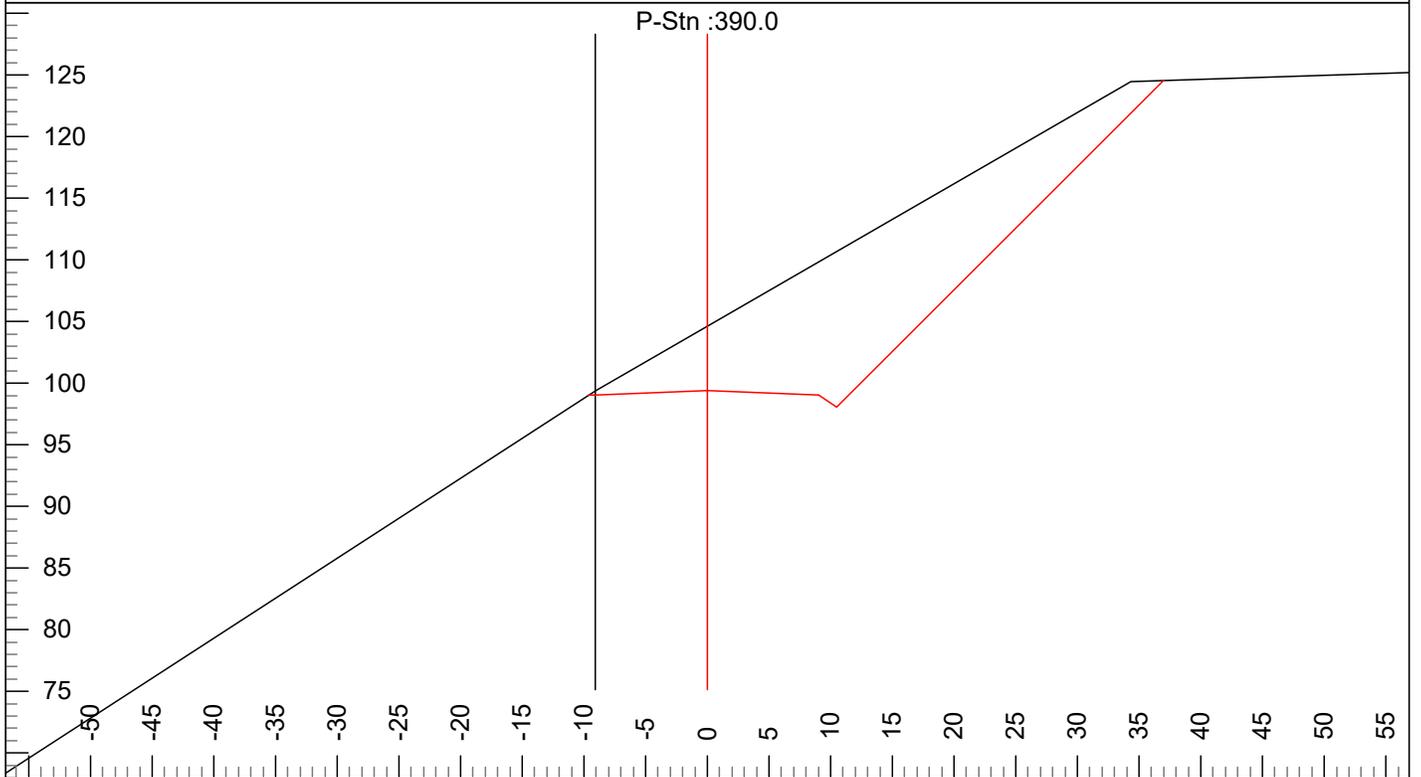
L-Stn : 239.6 Grd.Lst: 7 L-Ssl: -28 F Slope L: -67
 Grd.Nxt.: n/a Cut Dp: 1.1 L-Ssr: 16 F Slope R: 100



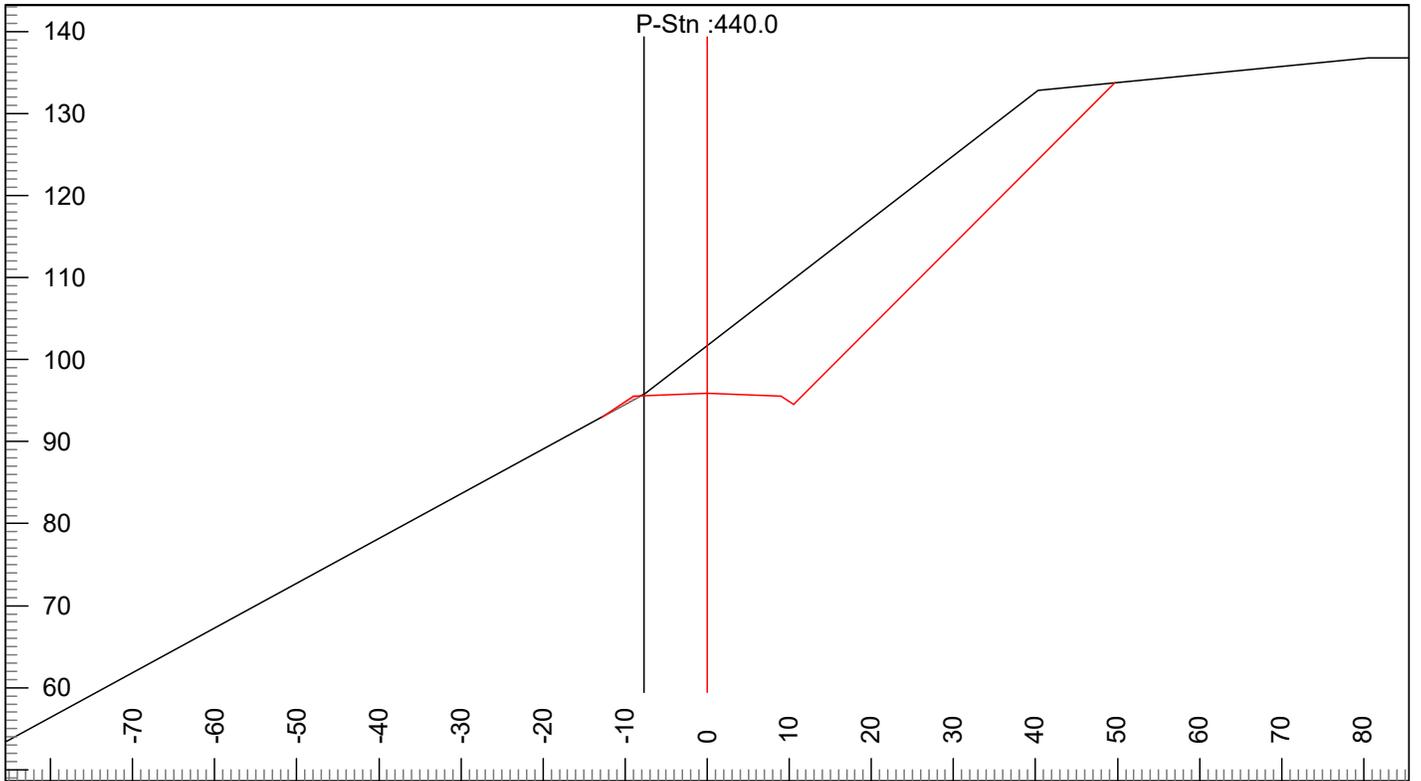
L-Stn : 287.7 Grd.Lst: 5 L-Ssl: -43 F Slope L: -67
 Grd.Nxt.: n/a Cut Dp: 3.1 L-Ssr: 40 F Slope R: 100



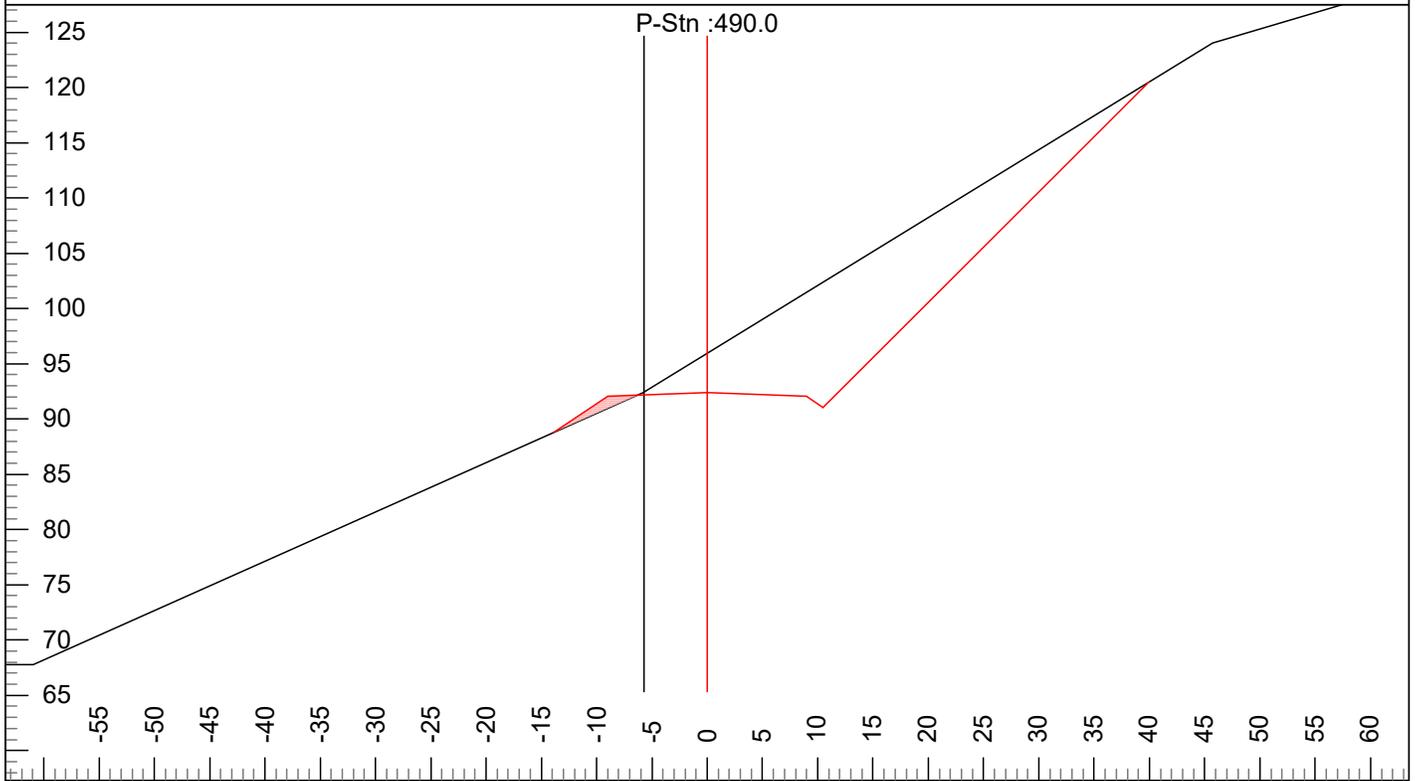
P-Stn : 340.0
 L-Stn : 336.9 Grd.Lst: 2 L-Ssl: -48 F Slope L: 0
 Grd.Nxt.: n/a Cut Dp: 4.8 L-Ssr: 45 F Slope R: 100



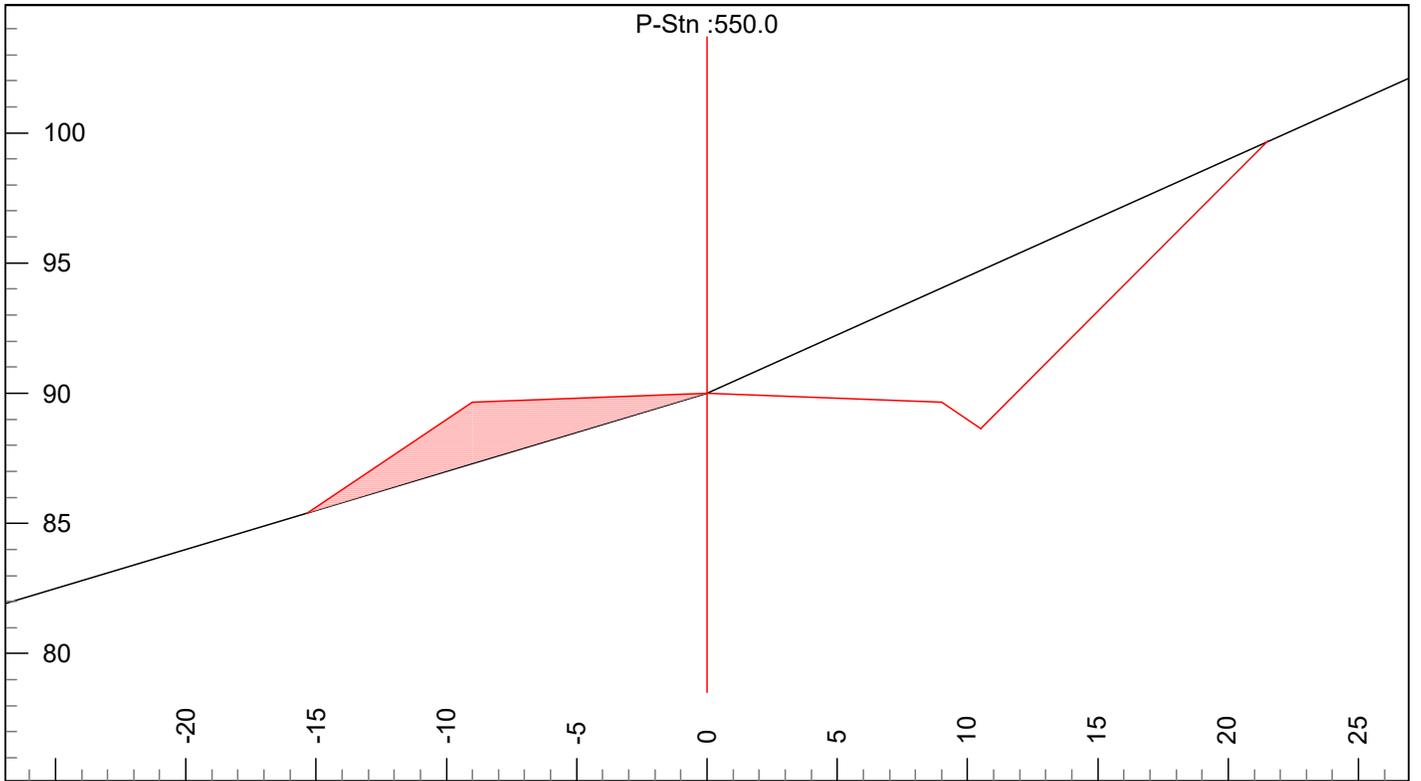
P-Stn : 390.0
 L-Stn : 387.1 Grd.Lst: 0 L-Ssl: -59 F Slope L: 0
 Grd.Nxt.: n/a Cut Dp: 5.2 L-Ssr: 58 F Slope R: 100



L-Stn : 438.7 Grd.Lst: -2 L-Ssl: -71 F Slope L: -67
 Grd.Nxt.: n/a Cut Dp: 5.8 L-Ssr: 77 F Slope R: 100



L-Stn : 489.7 Grd.Lst: -3 L-Ssl: -54 F Slope L: -67
 Grd.Nxt.: n/a Cut Dp: 3.5 L-Ssr: 61 F Slope R: 100



L-Stn : 549.5 Grd.Lst: -3 L-Ssl: -30 F Slope L: -67
 Grd.Nxt.: n/a Cut Dp: 0.0 L-Ssr: 45 F Slope R: 100

SUMMARY - Road Development Costs

REGION: Pacific Cascade

DISTRICT: Lewis

SALE/PROJECT NAME: Emphysema

AGREEMENT #: 30-099095

ROAD NUMBERS: Optional: V-1005, V-1890, Spur B

Required: V-Line, V-1000, V-1600, V-1800, 9301, 9302, V-1880, Spur A

ROAD STANDARD:	Construction	Reconstruction	Maintenance
NUMBER OF STATIONS:	25.60	5.10	342.30
CLEARING & GRUBBING, EXCAVATION AND FILL, MISC.:	\$23,368.58	\$1,170.38	\$10,843.34
ROAD ROCK:			
Optional:	\$0.00	\$7,039.68	\$1,037.40
Required:	\$63,472.59	\$0.00	\$18,990.40
Total:	\$63,472.59	\$7,039.68	\$20,027.80
STOCKPILE:	-	-	\$0.00
CULVERTS AND FLUMES:	\$2,260.00	\$0.00	\$2,043.60
STRUCTURES:	-	-	-
MOBILIZATION:	\$1,919.71	\$96.15	\$890.77
 TOTAL COSTS:	 \$91,020.88	 \$8,306.21	 \$33,805.51
 COST PER STATION:	 \$3,556	 \$1,629	 \$99
ROAD DEACTIVATION & ABANDONMENT COSTS:	\$0.00	\$0.00	\$0

10% OVERHEAD AND GENERAL EXPENSE =	\$13,313.26
TOTAL (All Roads) =	\$146,445.86
TOTAL (Minus Optional Rock) =	\$138,368.78
SALE VOLUME MBF =	4,139
TOTAL \$/MBF =	\$35.38
TOTAL \$/MBF (Minus Optional Rock) =	\$33.43

Profit and Risk costs are accounted on an individual basis.

SUMMARY OF ROAD

Sale:	Emphysema		Road: V-1005
Required Pre-Haul Maintenance-	0.00	stations miles	Required Reconstruction -
	0.00	stations miles	stations miles
Required Abandonment-	0.00	stations miles	Optional Reconstruction -
	0.00	stations miles	stations miles
			Required Construction -
			stations miles
			Optional Construction -
			10+20 stations 0.19 miles

CONSTRUCTION

CLEARING/GRUBBING

Scattering Organic Debris	10.20	sta @	\$230.00	per sta	\$2,346.00
Endhaul Organic Debris	0.700	acres @	\$1,500.00	per acre	\$1,050.00
Construct waste areas -	1.50	hours @	\$252.00	per hour	\$378.00

EXCAVATION

Road Construction Earthwork	10.20	sta. @	\$109.57	per sta. =	\$1,117.61
Grade and shape subgrade -	10.20	stations @	\$11.00	per station	\$112.20
Full Bench	3200	cy. @	\$1.62	per c.y. =	\$5,184.00

MISC.

Roll subgrade w/ vibratory roller prior to rocking -	10.20	stations @	\$9.09	per station	\$92.72
Construct turnaround @ sta. -	1.00	@	\$96.93	each	\$96.93
Construct landing	2.00	@	\$387.70	each	\$775.40
Grass seed and fertilize -	26.40	lbs @	\$2.80	per lbs	\$73.92

ENDHAUL

Full Bench	3200	cy. @	\$1.48	per c.y. =	\$4,736.00
TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC.					\$15,962.78

CULVERTS - MATERIALS & INSTALLATION

<u>Culverts</u>	40	LF of 18"	\$897.60		
			\$897.60		
<u>Culvert Stakes & Markers</u>					
1 markers			\$8.00		
TOTAL CULVERTS					\$897.60

ROCK

0+00 to	10+20	1,063	cy. of	Ballast	@	\$22.76	per c.y. =	\$24,193.88
Energy Dissipator	0+00	1	cy. of	QuarrySpalls	@	\$35.01	per c.y. =	\$35.01
TOTAL ROCK								\$24,228.89

SUBTOTAL **\$41,089.27**

Optional Rock? NO

TOTAL \$41,089.27
COST PER STATION \$4,028.36

SUMMARY OF ROAD

Sale: Emphysema

Road: V-1890

Required Pre-Haul Maintenance - 0.00 stations miles	Required Reconstruction - 0.00 stations miles	Required Construction - 0.00 stations miles
Required Abandonment- 0.00 stations miles	Optional Reconstruction - 0.00 stations miles	Optional Construction - 10+50 stations 0.20 miles

CONSTRUCTION

CLEARING/GRUBBING

Scattering Organic Debris 10.50 sta @ \$230.00 per sta \$2,415.00

EXCAVATION

Road Construction Earthwork 10.50 sta. @ \$193.85 per sta. = \$2,035.43
 Grade and shape subgrade - 10.50 stations @ \$11.00 per station \$115.50

MISC.

Roll subgrade w/ vibratory roller prior to rocking - 10.50 stations @ \$9.09 per station \$95.45
 Construct turnaround @ sta. - 1.00 @ \$96.93 each \$96.93
 Construct landing - 1.00 @ \$387.70 each \$387.70
 Grass seed and fertilize - 26.80 lbs @ \$2.80 per lbs \$75.04

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$5,221.05**

CULVERTS - MATERIALS & INSTALLATION

<u>Culverts</u>	30 LF of 18"	\$673.20
		\$673.20
<u>Culvert Stakes & Markers</u>	1 markers	\$8.00
		\$8.00

TOTAL CULVERTS \$681.20

ROCK

0+00 to	10+50	1,021 cy. of	Ballast	@	\$25.60	per c.y.=	\$26,137.60
Energy Dissipator	0+00	1 cy. of	QuarrySpalls	@	\$37.85	per c.y.=	\$37.85
							TOTAL ROCK

\$26,175.45

SUBTOTAL \$32,077.70

Optional Rock? NO

TOTAL \$32,077.70

COST PER STATION \$3,055.02

SUMMARY OF ROAD

Sale:	Emphysema		Road:	Spur B	
Required Pre-Haul Maintenance-	0.00	stations miles	Required Reconstruction -	0.00	stations miles
Required Abandonment-	0.00	stations miles	Optional Reconstruction -	0.00	stations miles
			Required Construction -	0.00	stations miles
			Optional Construction -	4+90	stations miles
	0.00			0.09	

CONSTRUCTION

CLEARING/GRUBBING

Scattering Organic Debris 4.90 sta @ \$230.00 per sta \$1,127.00

EXCAVATION

Road Construction Earthwork 4.90 sta. @ \$109.57 per sta. = \$536.89
 Grade and shape subgrade - 4.90 stations @ \$11.00 per station \$53.90

MISC.

Roll subgrade w/ vibratory roller prior to rocking - 4.90 stations @ \$9.09 per station \$44.54
 Construct landing - 1.00 @ \$387.70 each \$387.70
 Grass seed and fertilize - 12.40 lbs @ \$2.80 per lbs \$34.72

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$2,184.75**

CULVERTS - MATERIALS & INSTALLATION

<u>Culverts</u>	30 LF of 18"	\$673.20
		\$673.20
<u>Culvert Stakes & Markers</u>	1 markers	\$8.00
		\$8.00

TOTAL CULVERTS **\$681.20**

ROCK

0+00 to 4+90	509 cy. of	Ballast	@	\$25.60	per c.y.=	\$13,030.40
Energy Dissipator 0+00	1 cy. of	QuarrySpalls	@	\$37.85	per c.y.=	\$37.85
						TOTAL ROCK

\$13,068.25

SUBTOTAL **\$15,934.20**

TOTAL \$15,934.20

Optional Rock? NO

COST PER STATION \$3,251.88

SUMMARY OF ROAD

Sale:	Emphysema		Road: V-Line
Required Pre-Haul Maintenance-	68+00 <hr style="width: 100%;"/> 1.29	stations miles	Required Reconstruction -
			0.00 <hr style="width: 100%;"/>
			stations miles
Required Abandonment-	0.00 <hr style="width: 100%;"/>	stations miles	Optional Reconstruction -
			0.00 <hr style="width: 100%;"/>
			stations miles
			Required Construction -
			0.00 <hr style="width: 100%;"/>
			stations miles
			Optional Construction -
			0.00 <hr style="width: 100%;"/>
			stations miles

PRE-HAUL MAINTENANCE

EXCAVATION

Construct waste area at station 106+00 - 1.00 @ \$387.70 each \$387.70

MISC.

Grade and shape existing road surface - 68.00 stations @ \$13.75 per station \$935.00

Roll shaped road surface w/ vibratory roller prior to rocking - 68.00 stations @ \$7.27 per station \$494.36

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$1,817.06**

ROCK

Culvert Backfill 0+00 20 cy. of Crushed @ \$30.42 per c.y.= \$608.40

Spot Rock 0+00 100 cy. of Crushed @ \$30.42 per c.y.= \$3,042.00

Energy Dissipator 0+00 1 cy. of QuarrySpalls @ \$34.67 per c.y.= \$34.67

TOTAL ROCK **\$3,685.07**

SUBTOTAL **\$5,502.13**

Optional Rock? NO

TOTAL \$5,502.13

COST PER STATION \$80.91

SUMMARY OF ROAD

Sale: Emphysema

Road: V-1000

Required Pre-Haul Maintenance- 181+00 stations 3.43 miles	Required Reconstruction - 0.00 stations 0.00 miles	Required Construction - 0.00 stations 0.00 miles
Required Abandonment- 0.00 stations 0.00 miles	Optional Reconstruction - 0.00 stations 0.00 miles	Optional Construction - 0.00 stations 0.00 miles

PRE-HAUL MAINTENANCE

CLEARING

Roadside Brushing 0.30 miles @ \$855.00 per mile = \$256.50

EXCAVATION

Construct landings at stations 120+00 and 127+90 - 2.00 @ \$387.70 each \$775.40
 Remove culverts from state lands - 2.00 @ \$211.10 total \$211.10

MISC.

Grade and shape existing road surface - 181.00 stations @ \$13.75 per station \$2,488.75
 Roll shaped road surface w/ vibratory roller prior to rocking - 181.00 stations @ \$7.27 per station \$1,315.87

ENDHAUL

Endhaul landing material 1800 cy. @ \$1.29 per c.y. \$2,322.00

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$7,369.62**

CULVERTS - MATERIALS & INSTALLATION

<u>Culverts</u>	90	LF of 18"	\$2,019.60
			\$2,019.60
<u>Culvert Stakes & Markers</u>	3	markers	\$24.00
			\$24.00

TOTAL CULVERTS **\$2,043.60**

ROCK

Culvert Backfill	0+00	60	cy. of	Crushed	@	\$30.86	per c.y.=	\$1,851.60
Spot Rock	0+00	200	cy. of	Crushed	@	\$30.86	per c.y.=	\$6,172.00
Energy Dissipator	0+00	3	cy. of	Quarry Spalls	@	\$35.11	per c.y.=	\$105.33
								\$8,128.93

SUBTOTAL **\$17,542.15**

Optional Rock? NO

TOTAL \$17,542.15
COST PER STATION \$96.92

SUMMARY OF ROAD

Sale: Emphysema

Road: V-1600

Required Pre-Haul Maintenance- 18+80 stations $\frac{0.36}{\text{miles}}$	Required Reconstruction - 0.00 stations $\frac{0.00}{\text{miles}}$	Required Construction - 0.00 stations $\frac{0.00}{\text{miles}}$
Required Abandonment- 0.00 stations $\frac{0.00}{\text{miles}}$	Optional Reconstruction - 0.00 stations $\frac{0.00}{\text{miles}}$	Optional Construction - 0.00 stations $\frac{0.00}{\text{miles}}$

PRE-HAUL MAINTENANCE

MISC.

Grade and shape existing road surface -	18.80	stations @	\$13.75	per station	\$258.50	
Roll shaped road surface w/ vibratory roller prior to rocking -	18.80	stations @	\$7.27	per station	\$136.68	
			TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC.			\$395.18

ROCK

Spot Rock	0+00	60	cy. of	Crushed	@	\$32.62	per c.y. =	\$1,957.20	
								TOTAL ROCK	\$1,957.20

SUBTOTAL **\$2,352.38**

Optional Rock?	NO		TOTAL	\$2,352.38
			COST PER STATION	\$125.13

SUMMARY OF ROAD

Sale: Emphysema

Road: V-1800

Required
Pre-Haul Maintenance- 36+00 stations
0.68 miles

Required Abandonment- stations
0.00 miles

Required
Reconstruction - stations
0.00 miles

Optional
Reconstruction - stations
0.00 miles

Required
Construction - stations
0.00 miles

Optional
Construction - stations
0.00 miles

PRE-HAUL MAINTENANCE

CLEARING

Roadside Brushing 0.40 miles @ \$855.00 per mile = \$342.00

MISC.

Grade and shape existing road surface - 36.00 stations @ \$13.75 per station \$495.00
 Roll shaped road surface w/ vibratory roller prior to rocking - 36.00 stations @ \$7.27 per station \$261.72
 TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$1,098.72**

ROCK

Spot Rock 0+00 160 cy. of Crushed @ \$32.62 per c.y. = \$5,219.20
 TOTAL ROCK **\$5,219.20**

SUBTOTAL **\$6,317.92**

Optional Rock? NO

TOTAL \$6,317.92
COST PER STATION \$175.50

SUMMARY OF ROAD

Sale:	Emphysema		Road:	V-1800				
Required Pre-Haul Maintenance-	0.00	stations miles	Required Reconstruction -	3+30	stations miles	Required Construction -	0.00	stations miles
Required Abandonment-	0.00	stations miles	Optional Reconstruction -	0.00	stations miles	Optional Construction -	0.00	stations miles

RECONSTRUCTION

CLEARING/GRUBBING

Scattering Organic Debris 3.30 sta @ \$115.00 per sta \$379.50

EXCAVATION

Pull and clean ditch- 3.30 stations @ \$53.75 per station \$177.38
 Grade and shape subgrade - 3.30 stations @ \$11.00 per station \$36.30

MISC.

Roll subgrade w/ vibratory roller prior to rocking - 3.30 stations @ \$9.09 per station \$30.00
 Grass seed and fertilize - 3.20 lbs @ \$2.80 per lbs \$8.96

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$632.14**

ROCK

36+00 to 39+30 176 cy. of Ballast @ \$25.50 per c.y. = \$4,488.00 **\$4,488.00**
TOTAL ROCK

SUBTOTAL **\$5,120.14**

Optional Rock? YES

TOTAL \$5,120.14
COST PER STATION \$1,551.56

SUMMARY OF ROAD

Sale: Emphysema

Road: 9301

Required
Pre-Haul Maintenance- 17+70 stations
0.34 miles

Required Abandonment- stations
0.00 miles

Required
Reconstruction - stations
0.00 miles

Optional
Reconstruction - stations
0.00 miles

Required
Construction - stations
0.00 miles

Optional
Construction - stations
0.00 miles

PRE-HAUL MAINTENANCE

EXCAVATION

Pull and clean ditch-

0.10 stations @ \$53.75 per station \$5.38
TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC.

\$5.38

SUBTOTAL

\$5.38

Optional Rock?

NO

TOTAL

\$5.38

COST PER STATION

\$0.30

SUMMARY OF ROAD

Sale: Emphysema

Road: 9302

Required
Pre-Haul Maintenance- 20+80 stations
0.39 miles

Required Abandonment- stations
0.00 miles

Required
Reconstruction - stations
0.00 miles

Optional
Reconstruction - stations
0.00 miles

Required
Construction - stations
0.00 miles

Optional
Construction - stations
0.00 miles

PRE-HAUL MAINTENANCE

EXCAVATION

Pull and clean ditch- 1.70 stations @ \$53.75 per station \$91.38

MISC.

Grade and shape existing road surface - 4.80 stations @ \$13.75 per station \$66.00

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$157.38**

ROCK

Spot Rock 0+00 30 cy. of Crushed @ \$34.58 per c.y. = \$1,037.40

TOTAL ROCK **\$1,037.40**

SUBTOTAL **\$1,194.78**

Optional Rock? YES

TOTAL \$1,194.78

COST PER STATION \$57.44



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 (optional and required) prior to haul

EXCISE TAX EXEMPT ACTIVITIES

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

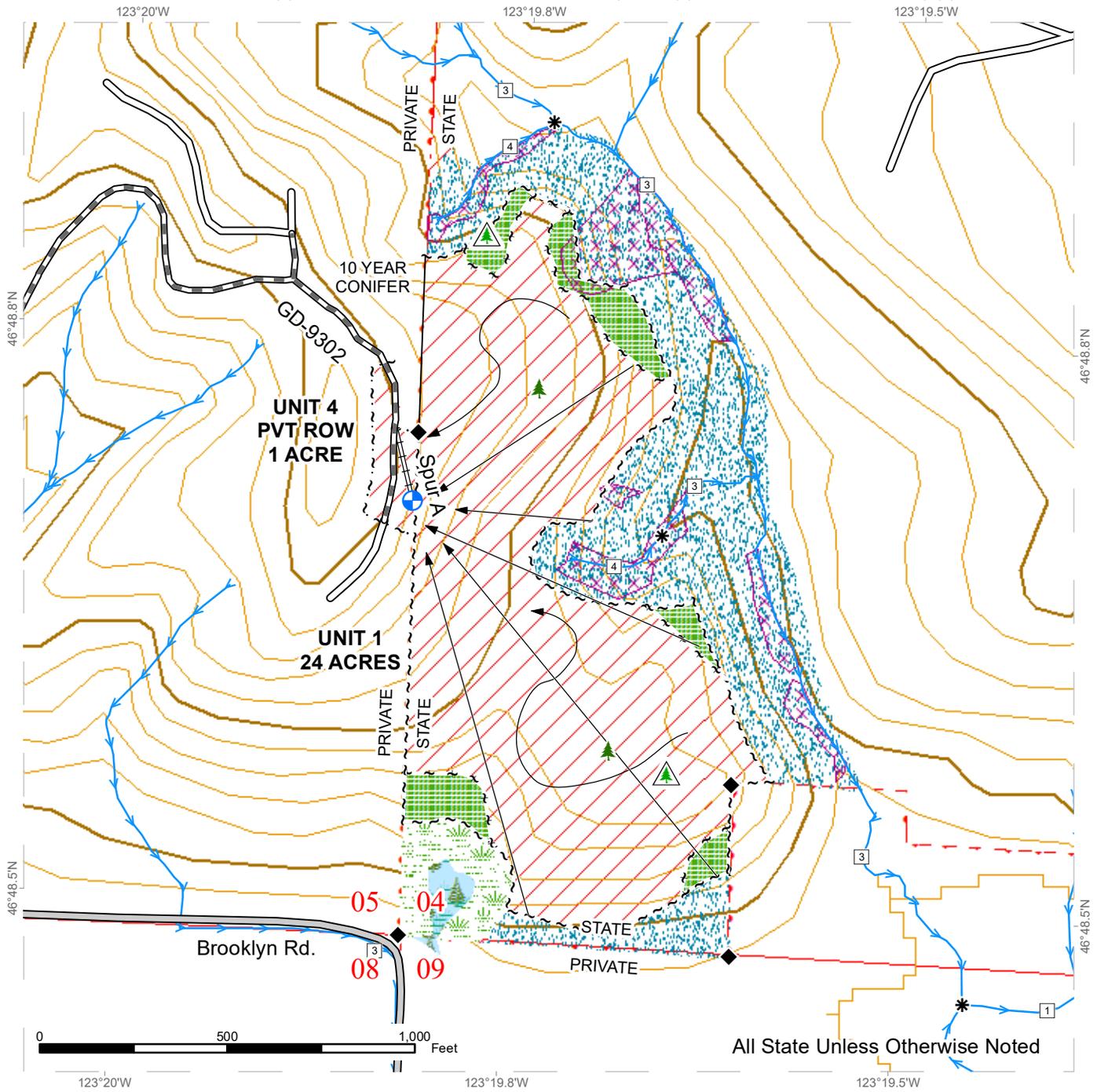
Temporary Reconstruction: **linear feet**
Roads to be reconstructed (optional and required) and then abandoned

All parties must make their own assessment of the taxable or non-taxable status of any work performed under the timber sale contract. The Department of Revenue bears responsibility for determining forest road excise taxes. The Department of Natural Resources developed this form to help estimate the impact of forest excise taxes. However, the information provided may not precisely calculate the actual amount of taxes due. The Department of Revenue is available for consultation by calling 1.800.548.8829.
(Revised 9/18)

LOGGING PLAN MAP

SALE NAME: DRAG
AGREEMENT#: None
TOWNSHIP(S): T15R5W, T16R5W
TRUST(S): Capitol Grant (7), Charitable/Educational/Peal & Reformatory Instit. (6), Common School and Indemnity (3)

REGION: Pacific Cascade Region
COUNTY(S): Grays Harbor
ELEVATION RGE: 140-731



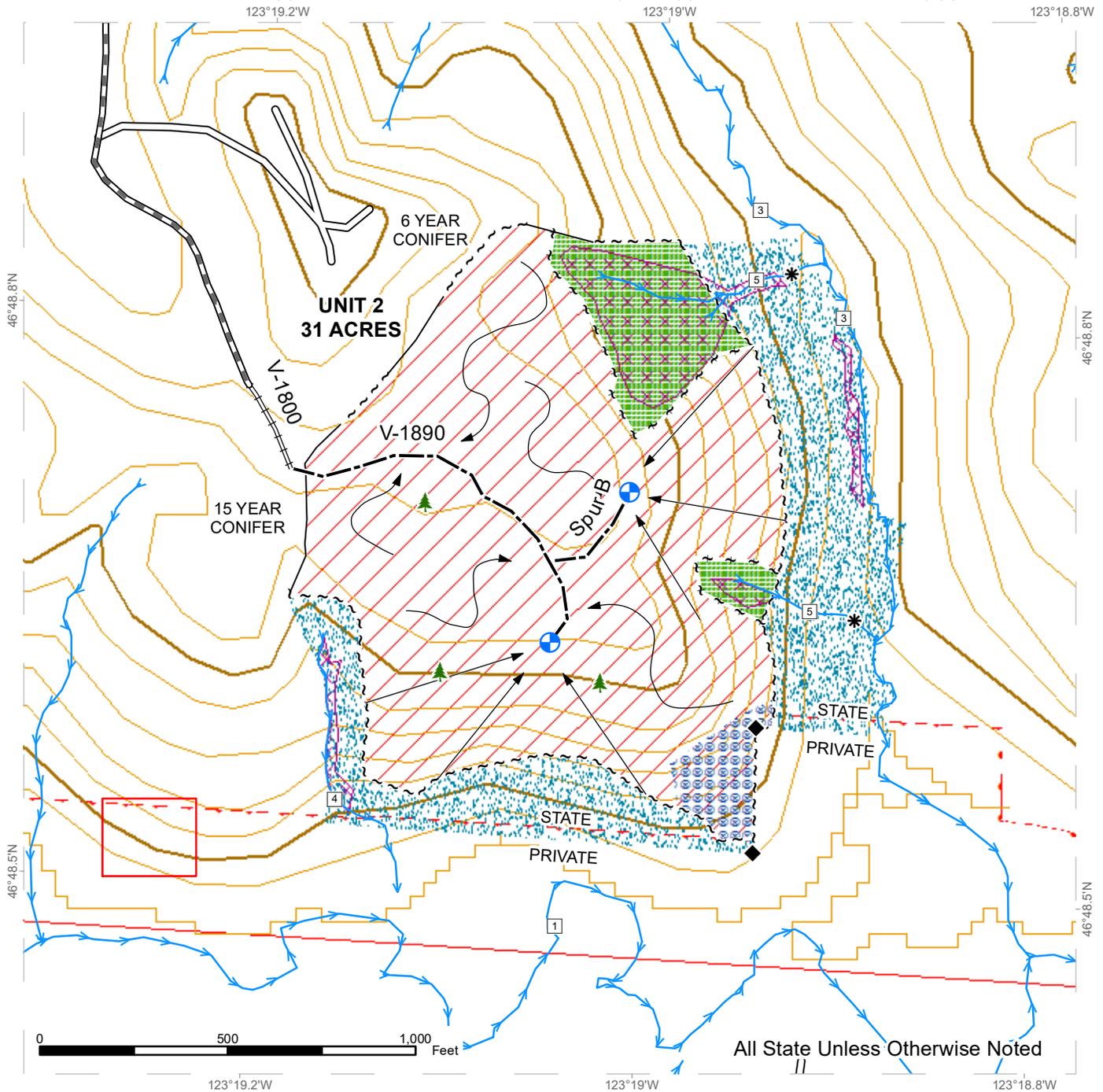
	Variable Retention Harvest		County Road		Streams
	Leave Tree Area		Existing Roads		Stream Type
	Riparian Mgt Zone		Required Pre-Haul Maintenance		Stream Type Break
	Forested Wetland		Required Reconstruction		Survey Monument
	Wetland Mgt Zone		Sale Boundary Tags		Landing - Proposed
	Potentially Unstable Slopes		Timber Type Change		Leave Tree Area <1/4-acre
	Ground Harvest		Leave Tree Tags		Non-Tradeable Leave Trees
	Cable Harvest		Right of Way Tags		



LOGGING PLAN MAP

SALE NAME: DRAG
 AGREEMENT#: None
 TOWNSHIP(S): T15R5W, T16R5W
 TRUST(S): Capitol Grant (7), Charitable/Educational/Penal & Reformatory Inst. (6), Common School and Indemnity (3)

REGION: Pacific Cascade Region
 COUNTY(S): Grays Harbor
 ELEVATION RGE: 140-731



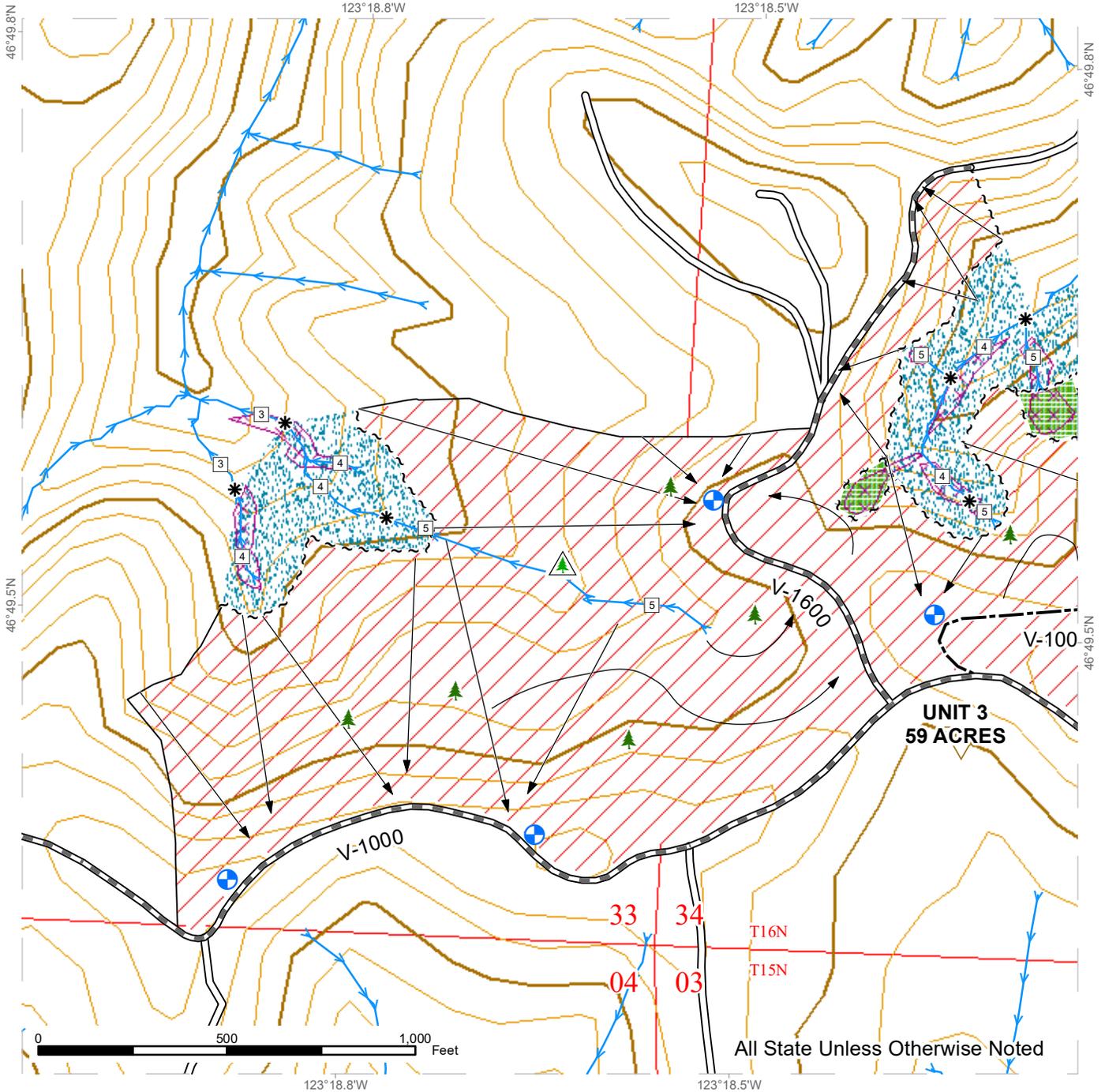
	Variable Retention Harvest		Existing Roads		Streams
	Leave Tree Area		Required Pre-Haul Maintenance		Stream Type
	Riparian Mgt Zone		Required Reconstruction		Stream Type Break
	Hazard Abatement Area		Optional Construction		Survey Monument
	Potentially Unstable Slopes		Sale Boundary Tags		Landing - Proposed
	Ground Harvest		Timber Type Change		Leave Tree Area <1/4-acre
	Cable Harvest		Leave Tree Tags		



LOGGING PLAN MAP

SALE NAME: DRAG
AGREEMENT#: None
TOWNSHIP(S): T15R5W, T16R5W
TRUST(S): Capitol Grant (7), Charitable/Educational/Penal & Reformatory Instit. (6), Common School and Indemnity (3)

REGION: Pacific Cascade Region
COUNTY(S): Grays Harbor
ELEVATION RGE: 140-731

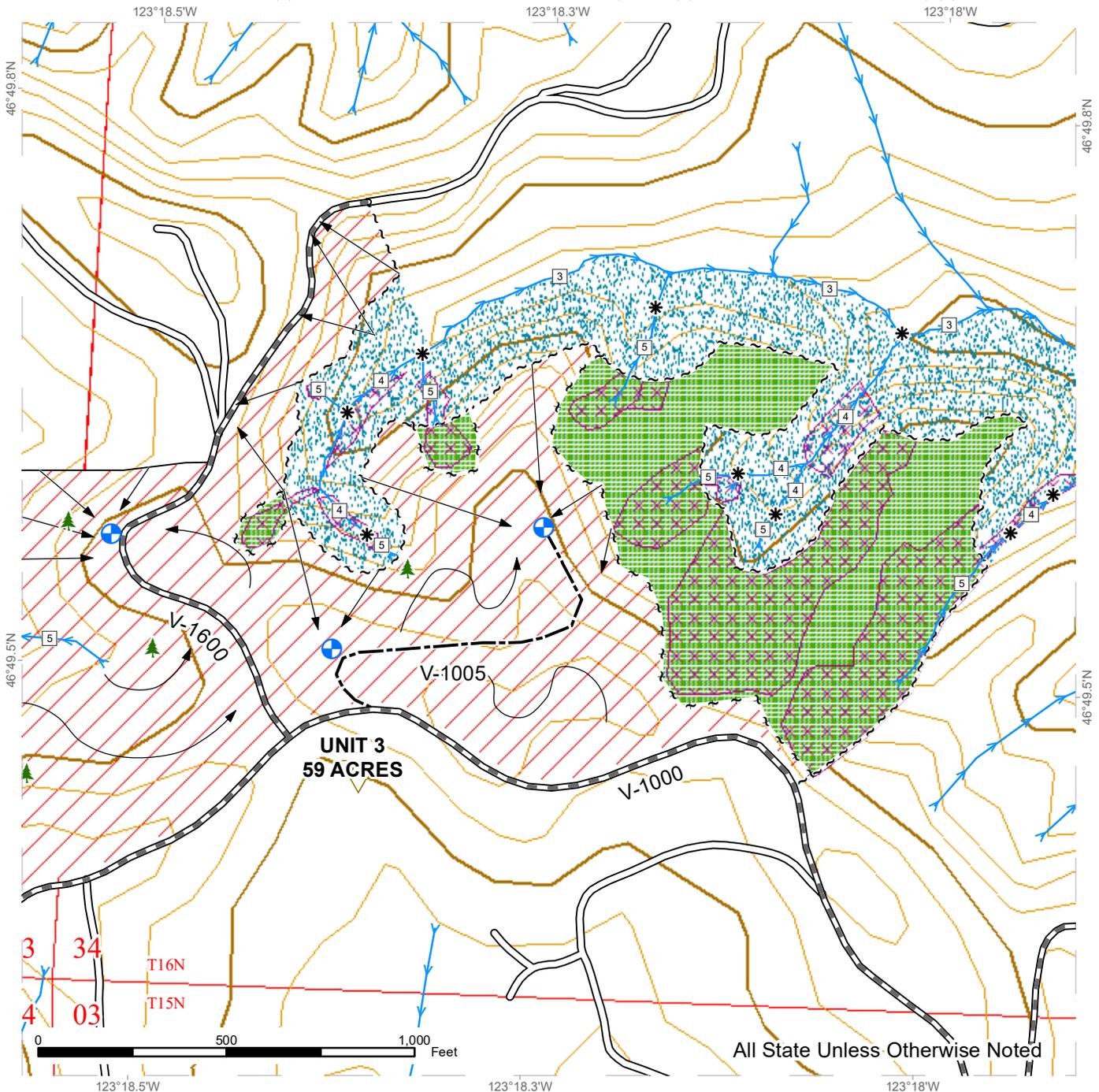


Variable Retention Harvest	Existing Roads	Streams
Leave Tree Area	Required Pre-Haul Maintenance	Stream Type
Riparian Mgt Zone	Optional Construction	Stream Type Break
Potentially Unstable Slopes	Sale Boundary Tags	Landing - Proposed
Ground Harvest	Timber Type Change	Leave Tree Area <1/4-acre
Cable Harvest	Leave Tree Tags	Non-Tradeable Leave Trees
		Waste Area

LOGGING PLAN MAP

SALE NAME: DRAG
AGREEMENT#: None
TOWNSHIP(S): T15R5W, T16R5W
TRUST(S): Capitol Grant (7), Charitable/Educational/Penal & Reformatory Instit. (6), Common School and Indemnity (3)

REGION: Pacific Cascade Region
COUNTY(S): Grays Harbor
ELEVATION RGE: 140-731



All State Unless Otherwise Noted

	Variable Retention Harvest		Existing Roads		Streams
	Leave Tree Area		Required Pre-Haul Maintenance		Stream Type
	Riparian Mgt Zone		Optional Construction		Stream Type Break
	Potentially Unstable Slopes		Sale Boundary Tags		Landing - Proposed
	Ground Harvest		Timber Type Change		Leave Tree Area <1/4-acre
	Cable Harvest		Leave Tree Tags		Waste Area



REAL ESTATE EXCISE TAX
EXEMPT TRANSACTION
RONALD A. STRABBING, TREASURER
Grays Harbor County, Montesano, WA

By J Blafford 4-9-02

AFTER RECORDING RETURN TO:
DEPARTMENT OF NATURAL RESOURCES
~~P.O. BOX 4014 1405 RUSH RD.~~
~~OLYMPIA WA 98504-7014~~
CHEHALIS, WA 98532

PLEASE PRINT OR TYPE ALL INFORMATION

DOCUMENT TITLE(S) (OR TRANSACTIONS CONTAINED THEREIN):
Easement Exchange

REFERENCE NUMBER(S) OF DOCUMENTS ASSIGNED/RELEASED:
55-073169 50-073168

GRANTOR (LAST NAME FIRST, FIRST NAME AND INITIALS):
Wolf, James B. and Wolf, Carol L.

ADDITIONAL NAMES LISTED ON PAGE ____ OF DOCUMENT.

GRANTEE/ASSIGNEE (LAS NAME FIRST, FIRST NAME AND INITIALS):

State of Washington, Department of Natural Resources

ADDITIONAL NAMES LISTED ON PAGE ____ OF DOCUMENT.

LEGAL DESCRIPTION (ABBREVIATED: I.E. LOT, BLOCK, PLAT OR SECTION, TOWNSHIP, RANGE)

SE1/4SW1/4 Section 35, Township 16 North, Range 5 West, W.M.

COMPLETE LEGAL DESCRIPTION IS LISTED ON PAGE ____ OF DOCUMENT.

ASSESSOR'S TAX PARCEL NUMBER(S)
160535310000



2002-04090002

Page: 1 of 17

04/09/2002 09:06A

25.00 ESMT

Grays Harbor Co

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
DOUG SUTHERLAND, Commissioner of Public Lands

EASEMENT EXCHANGE

Easement No. 55-073169
Application No. 50-073168

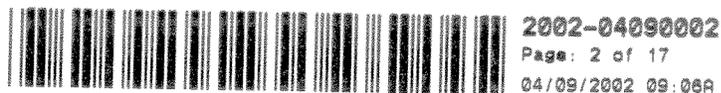
This Easement, made and entered into this 29th day of March, 2002, by and between JAMES B. WOLF and CAROL L. WOLF, husband and wife, herein called "Exchanger" and the STATE OF WASHINGTON, acting by and through the Department of Natural Resources, herein called "State".

Consideration.

In exchange for the mutual promises and covenants herein contained, and other good and valuable consideration, the mutual receipt and sufficiency of which is hereby acknowledged, the parties agree to the following terms and conditions.

Conveyances.

- A. To State. Exchanger hereby grants, conveys, and warrants to State, its successors and assigns, a permanent, non-exclusive easement over a parcel of land in Grays Harbor County legally described as set forth in Exhibit A, said easement to be forty (40) feet in width running twenty (20) feet on each side of a center line of a road located approximately as shown on Exhibit B (hereafter Easement Area).
- B. To Exchanger. State hereby grants and conveys to Exchanger, its successors and assigns, a permanent, non-exclusive easement over a parcel of land in Grays Harbor County legally described as set forth in Exhibit A, said easement to be forty (40) feet in width running twenty (20) feet on each side of a center line of a road located approximately as shown on Exhibit B (hereafter Easement Area).



Purpose.

The easements are conveyed to provide ingress and egress to and from lands owned by each party for any and all purposes. Authorized use shall include the right to travel, maintain, repair, construct or reconstruct each respective Easement Area subject to the restrictions set forth hereafter.

Nature of Estate.

These easements shall be deemed appurtenant to real property located in Grays Harbor County legally described as set forth in Exhibit A.

Reservations.

Each fee owner reserves all rights incident to fee ownership of the Easement Area on their respective lands and the profits thereon (including timber) and the right of use for any purpose including but not limited to the right to remove profits within the Easement Area on its land; the right at all times to cross and re-cross the Easement Area at any place on grade or otherwise; and the right to use, maintain, patrol, reconstruct or repair the Easement Area so long as it does not unreasonably interfere with the rights granted herein. Each fee owner may grant to third parties any and all rights reserved on its land. Timber or other profits of the land may be removed by the easement holder where reasonably necessary to use the easement area, but the fee owner shall be entitled to the market value of the material removed. Each fee owner reserves the right to relocate the Easement Area. If the fee owner relocates the Easement Area on its sole initiative, the fee owner shall construct the relocated Easement Area to the standards existing at the time of relocation.

Permittees.

Each easement holder may permit its respective family members, designees, employees, agents, contractors, licensees, lessees, Purchasers of timber or other profits and their agents, herein individually referred to as "Permittee" and collectively referred to as "Permittees", to exercise the rights granted to the easement holder herein. Acts of the Permittees operating under this Agreement shall be deemed an act of the easement holder. Restrictions or requirements placed on the easement holder herein shall apply equally to the Permittees.

Maintenance.

Maintenance is defined as work normally necessary to preserve and keep the Roads in their present condition or as hereafter improved. At a minimum, the Roads will be maintained to meet forest practice standards set forth in WAC 222-24-050 as now written or hereafter amended.



When a road is being used solely by one party, that party shall be solely responsible for maintaining that portion of the Road so used to the standards existing at the time sole use is commenced until joint use begins.

During periods when either party and/or other parties with an easement or license jointly use the Road(s), or any portion thereof, the cost of maintenance and resurfacing shall be allocated among such users on the basis of their respective use including that of their Permittees. During periods of joint maintenance, the users shall meet at times to be set by mutual agreement and establish necessary maintenance provisions. Such provisions shall include, but not be limited to the following:

- (1) The appointment of a maintainer, which may be one of the parties or any third party, to perform or contract the maintenance.
- (2) The extent of resurfacing necessary to keep the Road safe and to reduce environmental impacts.
- (3) A method of payment by which each party using the Road or a portion thereof shall pay its pro rata share of the cost of maintenance and resurfacing.

Repairs.

Each party shall repair, or cause to be repaired at its sole cost, that damage to the Road arising out of the easement holder's use which is in excess of that which it would cause through normal and prudent usage. Should damage be caused by an unauthorized user, the cost of repair shall be treated as ordinary maintenance and handled as set forth above.

Improvements.

The easement holder will not make improvements to the Easement Area without prior written consent of the fee owner which shall not be unreasonably withheld. Unless the parties agree in writing to share the cost of improvements, improvements shall be at the sole expense of the improver. Any improvements to the Easement Area shall become the property of the fee owner unless otherwise agreed in writing.

Compliance with the Habitat Conservation Plan (HCP).

State has entered into a Habitat Conservation Plan (HCP) with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (the Services) to address state trust land management activities and compliance with the federal Endangered Species Act. The easement activities are located within State's HCP area (Permit Lands) and are subject to the terms and conditions of the HCP, Incidental Take Permit No. PRT-812521 (ITP), Exhibit C, and the HCP requirements, if any, that are set forth in Exhibit D which may be modified from time to time to comply with HCP requirements for species covered by the ITP. All HCP materials, including the ITP, are



available for review at State's Region Offices and the administrative headquarters in Olympia, Washington.

By signing this easement, Exchanger agrees to comply with the terms and conditions of the ITP and the HCP for easement activities on Permit Lands. If the Exchanger's easement activities comply with the terms and conditions of the ITP and HCP, Exchanger's actions will be deemed in compliance with the HCP. Non-compliance with the terms and conditions of the HCP and ITP will be deemed a breach of this easement and may subject the Exchanger to liability for violation of the endangered Species Act.

All road use, construction, reconstruction and/or maintenance on the Easement Area must comply with the current HCP requirements and with Region road guidelines and may be restricted or not permitted at certain times of the year. Any Forest Practices Permit application submitted for activities on the Easement Area must comply with the ITP and HCP and identify that the Easement Area is within an area covered by a Habitat Conservation Plan and part of Incidental Take Permit No. PRT 812521.

Exchanger shall communicate to all employees, contractors or agents, who are or will be conducting activities in the Easement Area, that the Easement Area is subject to HCP requirements.

Construction/Operation Plan.

Thirty (30) days prior to any construction or reconstruction of a road by an easement holder on lands of the fee owner, the easement holder will submit a written plan of construction to the fee owner outlining the construction or activity for approval, which shall not be unreasonably withheld. All construction and reconstruction shall comply with applicable state or local laws. In the event of an emergency that requires immediate action to protect person or property, an easement holder may take reasonable corrective action without prior notice to the fee owner.

Notice of Operations.

When an easement holder or one of its Permittees plans to use any portion of the road for the purpose of hauling timber, farm products or other profits, such party shall notify the fee owner thereof at least fifteen (15) days prior to the commencement of such use, advising of the portion of road to be used, the approximate dates when such use will begin and end, and of the approximate volumes of timber, forest products, farm products or other profits to be hauled and promptly upon the completion of such use notify the other party thereof.

Waste.

An easement holder shall not cause nor permit any filling activity to occur in or on the Easement Areas, except by prior written approval of the fee owner. An easement holder shall not deposit refuse, garbage, or other waste matter or use, store, generate, process, transport, handle, release,



or dispose of any hazardous substance, or other pollutants in or on the Easement Areas except in accordance with all applicable laws. The term hazardous substance means any substance or material as those terms are now or are hereafter defined or regulated under any federal, state, or local law including but not limited to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA 42 USC 9601 *et seq.*), or the Washington Model Toxic Control Act (MTCR RCW 70.105D.010.). An easement holder shall immediately notify the fee owner if the easement holder becomes aware of any release or threatened release of hazardous substance on the Easement Areas or adjoining property. If a release of hazardous substance occurs in, on, under, or above the Easement Areas arising out of any action of the easement holder, its contractors, subcontractors, invitees, agents, employees, licensees, or permittees, the easement holder shall, at its sole expense, promptly take all actions necessary or advisable to clean up, contain, and remove the hazardous substance in accordance with applicable laws. Any cleanup shall be performed in an approved manner.

Indemnification.

The Exchanger recognizes and accepts that the State has no authority to indemnify and is not obligated to do so under this section. The Exchanger, agrees to indemnify and hold State harmless against all loss or liability in any way arising out of injury or death of persons or damage to property including Exchanger's property, in any way arising in or about, in connection with or as a result of Exchanger's use of the permitted property.

Survey Markers.

An easement holder shall not destroy any survey markers (including but not limited to corner markers, witness objects, or line markers) without prior written approval from the land owner, which shall not be unreasonably withheld. Markers that must necessarily be disturbed or destroyed during construction must be adequately referenced and replaced, at the easement holder's cost, in accordance with all applicable laws of the State of Washington in force at the time of construction, including but not limited to RCW 58.24, and all Department of Natural Resources regulations pertaining to preservation of such markers. The markers shall be reestablished using a licensed land surveyor or public official as prescribed by law according to U.S. General Land Office standards.

Insurance.

The State of Washington, including all its agencies and departments, is self insured for all exposures to tort liability, general liability, property damage liability and vehicle liability, as provided in statute, but only as respects the negligence of the State.

Before using any of said rights granted herein and at its own expense, the Exchanger shall obtain and keep in force during the term of this agreement and require its contractors, sub-contractors, or other permittees to obtain while operating on its Easement area, the following liability insurance policies, insuring Exchanger against liability arising out of its operations, including use



of vehicles. The limits of insurance, which may be increased by State, as deemed necessary, shall not be less than as follows:

When the premises is being used for non-commercial or non-business related uses:

Liability insurance with a minimum of \$100,000 per occurrence, which covers liability arising out of an insured premises and liability assumed under a written contract is required. Such insurance may be provided under a personal liability insurance policy, commercial liability insurance policy, or package property and liability insurance policy. All insurance shall cover liability arising out of premises, operations, personal injury and liability assumed under an insured contract (including tort liability of another party), and contain separation of insureds (cross liability) condition.

When the premises is being used to conduct business operations:

Commercial General Liability (CGL) insurance is required with a limit of not less than \$1,000,000 per each occurrence. If such CGL insurance contains aggregate limits, the general aggregate limits shall be at least twice the "each occurrence" limit, and the products-completed operations aggregate limit shall be at least twice the "each occurrence" limit.

- a. Employer's liability ("Stop Gap") insurance, and if necessary, commercial umbrella liability insurance with limits not less than \$1,000,000 each accident for bodily injury by accident or \$1,000,000 each employee for bodily injury by disease.
- b. Business Auto Policy (BAP) insurance, and if necessary, commercial umbrella liability insurance with a limit of not less than \$1,000,000 per accident, with such insurance covering liability arising out of "Any Auto."
- c. Exchanger shall comply with all State of Washington workers' compensation statutes and regulations. Workers' compensation coverage shall be provided for all employees of Exchanger and employees of any contractors, sub-contractors or permittees. Except as prohibited by law, Exchanger waives all rights of subrogation against State for recovery of damages to the extent they are covered by workers compensation, employers liability, commercial general liability or commercial umbrella liability insurance.

All insurance must be purchased on an occurrence basis and should be issued by companies admitted to do business within the State of Washington and have a rating of A- or better in the most recently published edition of Best's Reports. Any exception shall be reviewed and approved in advance by the Risk Manager for the Department of Natural Resources. 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, its elected and appointed officials, agents and employees shall be named as an additional insured on all general liability, excess, and umbrella insurance policies.

Before using any said rights granted herein, Exchanger shall furnish State with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements specified above. Certificate(s) must reference the State's easement number.

State shall be provided written notice before cancellation or non-renewal of any insurance referred to herein, as prescribed in statute (Chapter 48.18 RCW or Chapter 48.15 RCW).

Exchanger shall include all contractors, sub-contractors and permittees as insureds under all required insurance policies, or shall furnish separate certificates of insurance and endorsements for each. Contractors, sub-contractors and permittees must comply with all insurance requirements stated herein. Failure of contractors, sub-contractors and permittees to comply with insurance requirements does not limit Exchanger liability or responsibility.

All insurance provided in compliance with this agreement shall be primary as to any other insurance or self-insurance programs afforded to or maintained by State. Exchanger 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 agreement.

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

If Exchanger is self-insured, evidence of its status as a self-insured entity shall be provided to State. If requested by State, Exchanger must describe its financial condition and the self-insured funding mechanism.

Notice.

Unless otherwise specified herein, any notices required or permitted under this Agreement may be delivered personally, sent by facsimile machine or mailed certified, return receipt requested, to the following addresses or to such other place as the parties hereafter direct. Notice will be deemed given upon delivery, confirmation of facsimile, or three days after being mailed, whichever is applicable.



To State:
DEPARTMENT OF NATURAL RESOURCES
Central Region
1405 Rush Road
Chehalis, WA 98532

To Exchanger:

James B. & Carol L. Wolf
31527 46th Avenue South
Auburn, WA 98001

Modifications.

This Agreement shall not be modified except by written approval of both parties.

Severability.

If any provision of this Agreement shall be held invalid, it shall not affect the validity of any other provision herein.

Successors and Assigns.

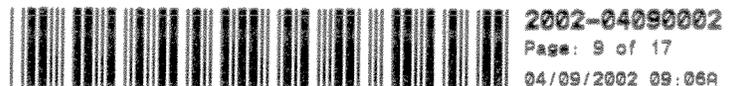
This Agreement shall be binding upon and shall inure to the benefit of the parties, their successors and assigns except to the extent that this section conflicts with the section labeled "Nature of Estate" in which case the Nature of Estate section will control.

Compliance With Laws.

Each party shall, at its own expense, conform to all applicable laws, regulations, permits, or requirements of any public authority affecting the Easement Areas and the use thereof.

Construction.

The terms of this Agreement shall be given their ordinary meaning unless defined herein and shall not be presumptively construed against either party.



Exhibits.

All exhibits referenced in this Agreement are incorporated as part of the Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this instrument, in duplicates to become effective as of the day and year first above written.

Dated: March 18, 2002

By: James B Wolf
James B. Wolf
31527 46th Avenue South
Auburn, WA 98001
By: Carol L Wolf
Carol L. Wolf

Dated: 3/29/2, 20

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
By: Doug Sutherland
Doug Sutherland
Commissioner of Public Lands

Affix Seal of Commissioner
of Public Lands



Revisions To Exchange of Easement

APPROVED AS TO FORM ONLY
this 27th day of May, 1999.

Christine O. Gregoire
Attorney General
By James Schwartz
Assistant Attorney General

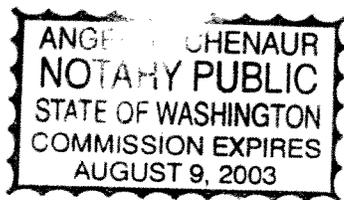


INDIVIDUAL ACKNOWLEDGEMENT

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this day personally appeared before me JANIS B & CAROL L. VOK, to me known to be the individual S described in and who executed the within and foregoing instrument and acknowledged that he/she/they signed the same as his/her/their free and voluntary act and deed for the uses and purposes therein mentioned.

Given under my hand and official seal this 18 of MARCH, 2002.



[Signature]
Notary Public in and for the State of
Washington, residing at Fed City.

My appointment expires 8/9/03.



EXHIBIT A

Grays Harbor County

1. Wolf

An easement crossing property legally described as N1/2, W1/2SW1/4 Section 35, Township 16 North, Range 5 West, W.M., in Grays Harbor County for the benefit of property legally described as E1/2SW1/4, N1/2SE1/4 Section 35, Township 16 North, Range 5 West, W.M., in Grays Harbor County.

2. State

An easement crossing property legally described as SE1/4SW1/4 Section 35, Township 16 North, Range 5 West, W.M., in Grays Harbor County for the benefit of property legally described as S1/2SE1/4 Section 35, Township 16 North, Range 5 West, W.M., and NE1/4NW1/4, NE1/4 Section 2, Township 15 North, Range 5 West, W.M., all in Grays Harbor County.

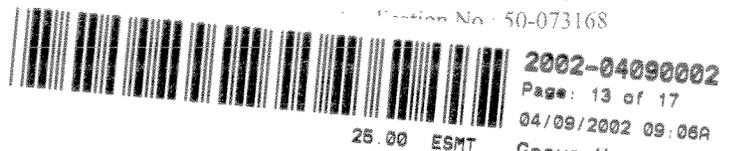
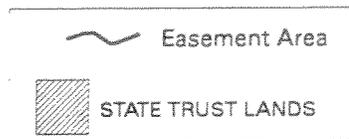
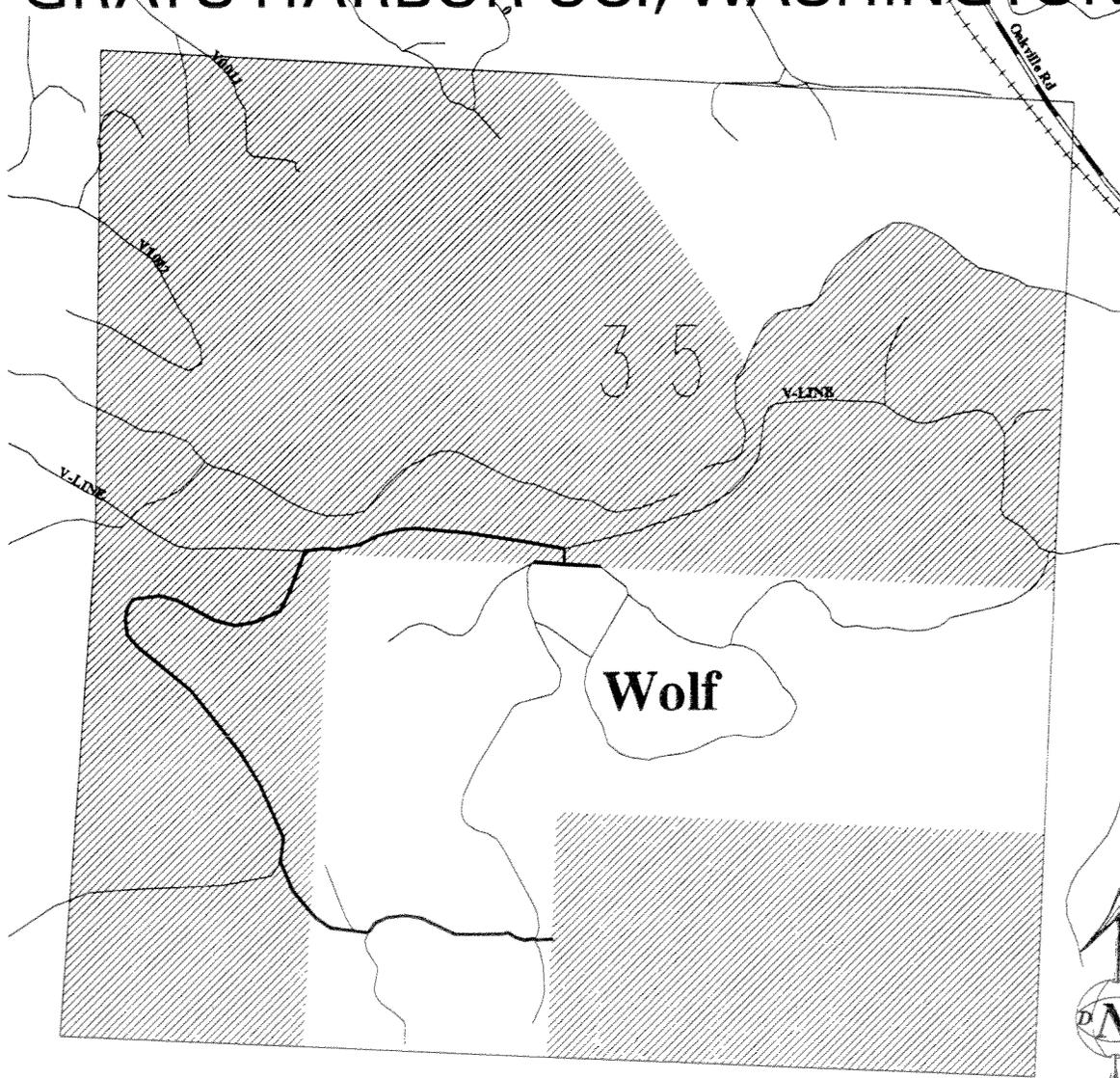


EXHIBIT B EASEMENT AREA SEC 35 T16R05W GRAYS HARBOR CO., WASHINGTON



55-073169

50-073168

APPLICATION NUMBER



WASHINGTON STATE DEPARTMENT OF
Natural Resources

MAPSC AUTO S.G.

This map is a planning tool,
subject to adaptive management
practices and site-specific considerations.



2002-04090002

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25.00 ESMT

Grays Harbor Co

EXHIBIT C

REQUIREMENTS OF THE STATE'S INCIDENTAL TAKE PERMIT (ITP)

1. The ITP is subject to the provisions of Title 50 *Code of federal Regulations Parts* 10, 13, and 17.
2. The Exchanger shall immediately notify the Contract Administrator of new locations of permit species covered in the State's Incidental Take permit (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; and Oregon silverspot butterflies. In all circumstances notification must occur within a 24 hour time period.
3. Section 9 of the Endangered Species Act and Federal regulations pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in any such conduct. Harm is further defined by the U.S. Fish and Wildlife Service (FWS) to include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by FWS as an act or omission which create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Upon locating any live, dead, injured, or sick specimens of any listed species covered by the ITP the Exchanger shall immediately notify the Contract Administrator. In all circumstances notification must occur within a 24 hour time period. The Exchanger shall notify the Contract Administrator if there is any doubt as to the identification of a discovered permit species. Exchanger 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 listed species discovered, until the proper disposition of such specimens can be determined by the Contract Administrator. Any such requirements will be explained to the Exchanger by the Contract Administrator during the Pre-Work Conference.

4. Exchanger shall refer to State's ITP number PRT-812521 (a copy of the ITP is located for reference in the region office) in all correspondence and reports concerning permit activities.



5. All applicable provisions of the ITP and this schedule must be presented and clearly explained by Exchanger to all authorized officers, employees, contractors, or agents of Exchanger conducting authorized activities on the State's Land. Any questions Exchanger may have about the ITP should be directed to the Contract Administrator.
6. All applicable provisions of the ITP and this schedule must be presented and clearly explained by Exchanger to all authorized officers, employees, contractors, or agents of Exchanger conducting authorized activities on the State's land. Any questions Exchanger may have about the ITP should be directed to the Contract Administrator.
7. The ITP term for grizzly bears shall expire on January 30, 2002. No activities resulting in the incidental take of grizzly bears after January 30th, 2002 will be authorized, unless and until the State receives a permit extension.



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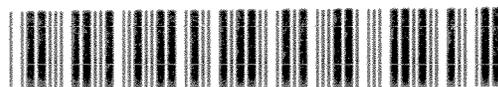
Grays Harbor Co

25.00 ESMT

EXHIBIT D

Road Use, Construction, Reconstruction, and/or Maintenance

All road use, reconstruction and/or maintenance on the State's Land must comply with the current HCP procedures. Any Forest Practices Permit Application submitted for activities on the State's Land must comply with the requirements of the HCP and identify that the State's Land is within a Habitat Conservation Plan to implement Incidental Take Permit No. 812521.



SERIES ONE OF TWIN CREEKS TIMBER, LLC

**TEMPORARY ROAD USE AGREEMENT
WASHINGTON TIMBERLANDS**

This TEMPORARY ROAD USE Agreement (the "Permit") is made by and between SERIES ONE OF TWIN CREEKS TIMBER, LLC, a Delaware limited liability company, by its authorized property manager, Green Diamond Management Company (hereinafter "Owner") and WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES, a state agency (hereinafter "Permittee").

1. GRANT OF PERMISSION AND PERMIT AREA

In consideration of Permittee's promises contained in this Permit, Owner hereby grants to Permittee the non-exclusive permission, pursuant to the terms and conditions herein, for reconstruction of an existing road(s) and vehicular use of existing roads located in Section(s) 5 Township 15 North Range 5 West, W.M., as more specifically defined in Exhibit A, attached hereto and incorporated herein by this reference (the "Permit Area"). Permittee shall acquaint itself with and confine the Activities within the Permit Area boundaries, and shall be responsible and liable for any trespass outside such boundaries that occurs as a result of the Activities.

2. PERMITTED USE

The Permit Area and any existing improvements in the Permit Area may be used by Permittee for the sole purpose of ingress and egress from the property located in the southwest quarter of Section(s) 4 Township 15 North Range 5 West, W.M. and the southe ¼ of the southeast ¼ of , (the "Appurtenant Area"), for the purpose of

- (i) hauling timber harvested thereupon, approximately 927 MBF;
- (ii) reconstructing approximately 2 stations of new road identified as "Spur A" on Exhibit A;
- (iii) hauling approximately 126 cubic yards of rock along existing Owner's roads to the road reconstruction segment identified as "Spur A" on Exhibit A,
- (iv) transporting heavy equipment for timber harvest;
- And (v) other forestry management activities in conjunction with the timber harvest activities on the Appurtenant Area (the "Activities").

Permittee is solely responsible for the cost of the Activities including the maintenance, removal, and (when permitted) installation of improvements in the Permit Area. Unless otherwise authorized herein, before installing new improvements to the Permit Area, Permittee shall obtain Owner's written approval of a written proposal to install such improvements in the Permit Area. The entry permission herein shall extend only to Permittee, its employees, agents or contractors involved in the Activities, as well as to governmental officials, such as forestry department personnel, if they are engaged in examining a regulated project on the Appurtenant Area, and they shall collectively be described herein as "Permittee."

3. PERMIT TERM

The term of this Permit shall commence on September 1, 2019 (the "Effective Date") and shall expire on December 31, 2023 (the "Initial Term") unless the Permit is earlier terminated in accordance with the terms hereof.

The Initial Term and any Extension Terms shall be the "Term" of this Permit.

4. RESERVATION OF RIGHTS

A. This Permit and Permittee's privileges hereunder are personal and shall not be assigned, in whole or in part, without the express written consent of Owner, which may grant or deny such consent within its sole discretion.

B. Permittee will never assail or resist Owner's title or claim any interest or estate whatever in the Permit Area by virtue of this Permit or the exercise or privileges given hereunder.

C. By acceptance of this Permit, Permittee acknowledges that the Permit Area and Owner's property surrounding the Permit Area are commercial timberland, and Owner manages its property for timber production including, but not limited to, harvesting, slash burning, and herbicide application. Permittee shall exercise its privileges under this Permit so as to avoid any interference with Owner's use of its own property as commercial timberland or with the exercise by other permittees of privileges that Owner may give them in the Permit Area. Permittee further agrees that Permittee will not object to any lawfully conducted timber harvesting, management activities and/or development of property carried out by Owner or its agents, other permittees, lessees, contractors, successors, or assigns.

D. The privileges granted herein to Permittee are given expressly subject to existing encumbrances, regulatory requirements, and other matters of record affecting the privileges in any manner whatsoever. Owner does not warrant that it has authority to permit the Activities on behalf of any third party and Permittee shall secure all other permits, privileges or rights required for the lawful conduct of the Activities. Owner does not warrant title to the Permit Area and shall not be liable for defects thereto or failure thereof.

E. Owner makes no representation as to the present or future conditions of the Permit Area and its fitness for the Activities under this Permit. Permittee accepts this Permit subject to all danger or injury to persons and damages or destruction to property while Permittee is on or about the Permit Area. In this regard, Permittee assumes all risk of injury or death to individuals who are on the Permit Area pursuant to this Permit and all risk of damage to property upon or in proximity to the Permit Area with Permittee's knowledge or consent, without regard to whether such injury or damage is occasioned by known or unknown, hidden or disclosed defects in the Permit Area or by the negligence of Owner or any person in the employ or service of Owner.

- F. Owner reserves the right to enter and inspect the Permit Area at any time.
- G. Prior to the first day of road use hereunder, Permittee shall contact the following Owner representative:

Green Diamond Management Company
Attn: Glen P. Wood,
Property Engineer
215 N Third Street
Shelton, WA 98584
360-426-3381
gwood@greendiamond.com

and shall obtain his/her concurrence that Permittee's use of the Permit Area on that day will not adversely affect Owner operations. Notwithstanding the concurrence of Owner for road use on any day, Permittee acknowledges that its use is not exclusive, and that others are entitled to use the road(s) described hereunder, including use for hauling operations, and that it is responsible for coordination and cooperation with all road users. Permittee agrees to cooperate and coordinate with Owner and Owner's contractors, timber purchasers and other users of Owner's roads in the Permit Area, and to assure that CB channels are assigned to all of Permittee's employees, contractors and agents and that such users have, carry and use CB radios in an appropriate manner.

H. Except for Permittee's conditional authorization to remove merchantable timber from the Right of Way Area described below, Owner retains ownership of all merchantable and pre-merchantable timber on the Permit Area. For purposes of this Permit, "merchantable timber" means stands of timber which, in Owner's judgment, have a higher value for current harvest than their present value for possible future harvest. If timber must be removed to accommodate the Activities, Permittee shall provide Owner with three (3) months advance notice. Within sixty (60) days of receiving such notice, Owner shall notify Permittee whether Owner considers the timber merchantable or pre-merchantable. If Owner considers the timber merchantable, it shall harvest the timber within twelve (12) months of receiving Permittee's notice. Permittee may request an alternative harvest plan and Owner shall consider any such request in good faith but has no obligation to grant Permittee's request. If Owner determines that the timber is pre-merchantable, Permittee shall purchase it at Owner's estimate of its present value, based on the value the timber is expected to have at the time it most likely would be harvested in the ordinary course of Owner's timber management program, discounted from that time to the present at generally prevailing interest rates for long term borrowings of companies with Owner's credit rating. After paying for pre-merchantable timber, Permittee may destroy or salvage it but must do so with reasonable care to avoid damage to adjoining timber stands not being purchased.

All timber within the right-of-way for new road construction authorized under this Permit within area on map indicated by lime green polygon beginning approximately 110 feet north of junction of mapped roads identified as "Spur A" and "GD-9302" in west ditch of GD-9302 expanding west of and south along GD-9302 in triangular fashion from start point in triangular

fashion to a width of 50 feet and continuing south along GD-9302 at a width of 50 feet on each side of GD-9302 for an additional distance of approximately 200 feet as marked in field by flogged flagging, paint, and harvest boundary markers as viewed on August 14, 2019 (the "Right-of-Way Area"), shall become the property of Permittee upon severance and removal from the Permit Area by Permittee during the Term of this Permit. Permittee may at their discretion remove and market any merchantable or non-merchantable timber removed from the Right-of-Way Area at Permittee's sole expense during the Term. Permittee shall pay expenses of every kind and nature for the new road construction and related removal of timber, including but not limited to, labor, materials, equipment, and taxes, incident to the cutting, logging, hauling, and delivery of logs cut from the Right-of-Way Area.

5. COMPENSATION

As consideration for the rights granted in this Permit, Permittee agrees to pay to Owner a flat fee of seven thousand, seven hundred dollars (\$7,700.00), due upon execution of this Permit. Fee includes road tolls for timber haul and rock haul, and stumpage for 7,251 board feet of timber sold from Right-of Way Area by Owner to Permittee

Payment shall be made by check, made out to:
Series One of Twin Creeks Timber, LLC

And delivered to Owner's office,
Green Diamond Management Company
Attn: Glen P. Wood,
Property Engineer
215 N Third Street
Shelton, WA 98584
360-426-3381
gwood@greendiamond.com

Electronic Payments (Wire or ACH):

Bank Name:	MUFG Union Bank, N.A.
Bank Address:	400 California Street San Francisco, CA 94104
Bank Routing Number (ABA):	021052053
Swift Code:	BOFCUS33MPK
Beneficiary Account Name:	Series One of Twin Creeks Timber, LLC
Beneficiary Account Number:	76067343

Check Payments:

94778312.4 0066634-00001

Series One of Twin Creeks Timber, LLC
PO Box 740932
Atlanta, GA 30374-0932

At all times during the term of this Permit, and to the full extent that the payments to Owner are dependent in any way on Permittee's maintenance of records, Permittee shall maintain records and books to reflect the basis for such payment. Permittee shall preserve any such records, books, documents and other supporting evidence for five (5) years after it makes final payment to Owner. Owner, through such of its employees or agents as it shall from time to time designate, shall have the right at any reasonable time to enter upon the premises of Permittee and to inspect any such records, books, documents and other supporting evidence, except Permittee's fringe benefit records, in order to verify that such payments have been computed and allocated in accordance with this Permit. Permittee agrees to cooperate fully with Owner in the exercise of the rights herein granted

6. CONDITIONS FOR USE OF THE PERMIT AREA

A. Permittee shall carry on all Activities in a diligent, workmanlike manner in accordance with the highest standards and practices recognized in the industry. Permittee shall not perform any disorderly conduct or commit any nuisance on the Permit Area, and shall maintain the Permit Area in an orderly, clean and sanitary manner as required by Owner. Permittee shall carry on all Activities in the Permit Area in a careful manner and shall comply, at Permittee's expense, with all laws, regulations and permits of any municipal, state, or federal authority that are applicable to Permittee's activities. Permittee's agreement to comply shall include any programmatic or generally applicable local, state or federal government regulatory permits held by Owner and applicable to the Permit Area, including, without limitation, incidental take permits held by Owner. Owner reserves the right to require Permittee to take affirmative steps to review and comply with permits noticed by Owner and to promptly comply when Owner requests specific action to conform the Activities with the requirements of a permit noticed to Permittee.

B. Permittee shall keep the Permit Area free from any liens or encumbrances arising out of any work performed by Permittee, materials furnished by Permittee, or obligations incurred by Permittee. Owner shall have the right to pay and discharge any lien imposed against Owner's property due to Permittee's breach of the aforesaid covenant. Permittee shall reimburse Owner for the amount so paid, including the reasonable expenses of Owner in connection therewith, within thirty (30) days of receiving notice from Owner of any such payment with interest thereon at the rate of seven (7) percent per annum from the date of payment thereof by Owner until the repayment thereof by Permittee. If Owner shall exercise the option to make such payments, it shall not be obligatory on Owner to inquire into the validity of any such lien unless Permittee shall have given notice to Owner that said lien was being challenged and shall have furnished to Owner the bond of a surety company or other security satisfactory to Owner, in an amount satisfactory to Owner, securing Owner against the payment of the lien so contested and against any loss, damage, or penalty arising from Permittee's failure to pay it.

C. Permittee shall promptly report to Owner any violations of any laws, regulations, or permits relating to the Activities of which Permittee has knowledge and shall promptly send to Owner a copy of any notice of violation received by Permittee that relates to the Activities. A copy of all citations or other written documents Permittee receives from any agency shall accompany the notice of violation.

D. Permittee shall take reasonable care to prevent wildfires from igniting on or spreading onto the Permit Area. If a wildfire should occur on or near the Permit Area, Permittee shall immediately notify Owner and appropriate government agencies and shall make any on-site equipment available to help suppress or contain the fire. Permittee shall comply with all fire prevention and suppression measures that Owner may specify from time to time relating to Permittee's use of the Permit Area. Permittee shall comply with all applicable state fire safety standards including requirements (if any) to maintain special equipment in vehicles. Permittee shall reimburse Owner or all damages (including loss or damage to timber, and fire suppression costs) resulting from wildfires caused by Permittee's activities, even if not attributable to negligence by Permittee or its agents.

E. During the fire season, and in all periods of hazardous fire weather, Permittee shall comply with all applicable state fire safety standards and shall do the following:

maintain, in good working order at its principal landing, a 300-gallon tank of water with a pump capable of producing at least ten (10) gallons per minute at 150 psi and 300 feet of 1-inch hose.

maintain, in good working order in Permittee's vehicles, suitable and serviceable tools in the amounts, manner and location prescribed by section 333-24-405 of the Washington Administrative Code.

F. In the event of dangerous fire weather, possible damage to roads, or potential or actual interference with Owner's operations, Owner shall notify Permittee's representative and Permittee shall immediately suspend the Activities or take steps to remedy the situation as Owner may direct.

G. Permittee agrees to cease using vehicles on Owner's roads during periods when weather conditions make driving hazardous or may have a detrimental impact to the environment including, but not limited to, the occurrence of rain in sufficient quantity and duration that driving would result in rutting and deformation of the road surface, degradation of water bars, or tracking of mud onto public roadways. Vehicles used on unsurfaced (dirt) roads shall also be limited to All Terrain Vehicles (ATVs). If any water bars are traversed, Permittee shall maintain and, if necessary, repair all damages caused by traveling across such water bars.

H. If Permittee is the primary user of the road(s) Permittee shall provide for properly winterizing the road(s) immediately upon completion of hauling (if applicable) in any season. This will include, but is not limited to, clearing all logs and debris from the roads, clearing ditches, opening culverts, grading the road surfaces smooth, eliminating berms, properly ditching

the roads and cross-draining them, and leaving the roads in a condition that will insure minimum damage from winter storms.

I. Any labor, equipment, materials and supplies to complete any road construction or reconstruction authorized pursuant to this Permit shall be performed and paid for by Permittee. New road construction or reconstruction shall conform to state law and any permits, and shall be performed in accordance with any site-specific standards to be described in a separate schedule called the Road Construction Standards to be attached to this Exhibit. The location and widths of any new roads permitted hereunder shall be specified in Exhibit A to this Agreement. Any changes to the location or specifications for any road construction or reconstruction hereunder shall not proceed until approved in writing by Owner.

J. Permittee shall repair any damage to Owner's roads when such damage is caused by Permittee's use of the Permit Area. In the event that Permittee is the primary user of the road(s) Permittee shall maintain the road(s), at its sole cost and expense, on an ongoing basis during all periods of road use, including: periodic spot rocking and grading to prevent damage to subgrades; ditching and culvert maintenance to prevent water damage to the roads and creeks; and maintenance of all erosion control devices in good working order. In the event that both Permittee and Owner are using the road(s) for hauling during the Permit term, then during that period Permittee shall pay to Owner a share of maintenance costs associated with hauling activities, prorated during the time of use in proportion to the use.

K. Unless otherwise permitted herein, the Activities shall be confined to normal business hours.

L. Permittee shall obey all posted traffic and speed regulations on Owner's roads.

M. If any portion of the Permit Area requires access through a locked gate owned or maintained by Owner, Permittee shall keep gates closed and locked unless otherwise instructed by an Owner representative. Owner shall either:

(1) assign a lock position on multi-lock boxes for Permittee's use, or establish a lock splitter if not a multi-lock box, where Permittee is responsible for providing locks and ensuring the gate remains secure, or

(2) issue copies of key(s) needed to open gates for the Activities herein. Permittee shall not copy the key(s) provided by Owner unless permitted to do so in writing by Owner. Permittee shall return any key(s) that has been so issued at the termination or expiration of this Permit. Permittee shall pay a five hundred dollar (\$500) fee per key for any key(s) that is not so returned.

N. Permittee shall not dump, deposit, or place any of the materials being hauled on the Permit Area or any other property of Owner.

O. Permittee shall obtain prior written permission from Owner's authorized representative before gating, obstructing, or storing equipment on the Permit Area, and before

causing or allowing any dirt, mud or other materials to be placed on or graded over any roads owned by Owner.

7. SECURITY DEPOSIT

No security deposit is required for this Permit.

8. INDEMNITY

A. Permittee shall, to the fullest extent permitted by law, indemnify, defend, and hold harmless Owner and its agents, contractors, successors, or assigns from and against any and all liability for damages, costs, losses, and expenses resulting from, arising out of, or in any way connected with the occupation or use of the Permit Area by Permittee or anyone else entering the Permit Area at Permittee's direction or invitation, or the failure on the part of Permittee to perform fully its promises contained herein. This indemnity obligation shall apply whether such liability is caused by or contributed to by Owner or any other party indemnified herein, unless caused by the sole active negligence or willful misconduct of Owner.

B. In any and all claims against Owner by any employee of Permittee, any contractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, Permittee's indemnification obligation shall not be limited in any way by any limitation on the amount or type of damage, compensation, or benefits payable by or for Permittee or any contractor under any industrial insurance act, workers' compensation act, disability benefit act, or other employee benefit act, and Permittee hereby expressly waives any immunity it may have under such acts to the extent necessary or permitted under the law to assure the validity and enforceability by Owner of Permittee's aforesaid indemnification obligation.

9. HAZARDOUS MATERIALS

In the event of a spill or release of Hazardous Materials, Permittee shall promptly comply with all federal, state, and local spill notification and response requirements and shall notify Owner of the spill event. Permittee shall be responsible for the response and restoration costs of any release of Hazardous Materials in connection with the Permit, and shall indemnify, defend, and hold harmless Owner from any liability arising from claims or damages in connection with such release. "Hazardous Materials" shall mean any pollutant, contaminant, chemical, or hazardous, toxic or dangerous waste, substance, chemical, or material, or any other substance or material regulated or controlled pursuant to any environmental laws now or at any time hereafter in effect.

10. INSURANCE

Permittee is a state agency that is self-insured pursuant to Section 4.92.130 of the Revised Code of Washington. All Activities associated with this Permit shall be conducted by Washington State Employees, and no contractors are permitted under this Permit.

11. TERMINATION

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A. Subject to notice from Owner to Permittee and a fifteen (15)-day opportunity for Permittee to cure, Owner shall have the right to terminate this Permit at any time in the event of Permittee's breach or default in the performance of its obligations hereunder. Such termination may occur even though Permittee may have expended time and money on the Activities.

B. Whether by expiration or earlier termination or surrender of this Permit, Permittee shall, at Permittee's cost, restore the Permit Area to the conditions that existed before the Permit. Permittee shall repair all damage and deterioration of the road or road segments caused by its use, and remove all debris from road surfaces and drainage structures. Permittee shall remove all personal property, fixtures and improvements from the Permit Area, and if Permittee fails to do so, Owner shall have the right to make such removal at Permittee's expense, the amount of which Permittee shall pay to Owner on demand, and if Owner so elects, it shall have the right to take possession of and appropriate to itself without payment therefore any property of Permittee, or anyone claiming under Permittee, then remaining on the Permit Area. This term will not apply to roads or road improvements constructed by Permittee that Permittee and Owner agree, in the Road Construction Standards, or any document altering the road location or specifications approved by Owner, will remain or become permanent. Owner may, by written notice to Permittee within fifteen (15) days after termination or expiration of this Permit, elect to waive removal requirements and retain fixtures, improvements or conditions created during the term of this Permit.

12. NOTICE

Any notice required or permitted to be delivered hereunder shall be in writing and shall be deemed given and received when personally delivered or three (3) days after deposit in the United States Mail, postage prepaid, Certified or Registered Mail, Return Receipt requested, addressed to Permittee or Owner, as the case may be, to the following address:

If to Permittee:

WASHINGTON STATE
DEPT OF NATURAL RESOURCES
PACIFIC CASCADE REGION
Attn: Wayde Schaible
601 Bond Road
Castle Rock, WA 98611
Ph: 360-575-5052
Email: wayde.schaible@dnr.wa.gov

If to Owner:

GREEN DIAMOND MANAGEMENT
COMPANY
Attn: Glen P. Wood
215 North Third Street
Shelton, WA 98584
Ph: 360-426-3381
Email: gwood@greendiamond.com

13. INTERPRETATION

- A. This Permit shall be governed by and construed in accordance with the laws of the State of Washington, without regard to the conflicts of law principles of such state.
- B. A party's waiver of any right hereunder or of any other party's breach or failure to perform shall not be deemed a waiver of any other right hereunder or of any other breach or failure by the other party, whether of a similar nature or otherwise.
- C. If any term or condition of this Permit is found unenforceable, the remaining terms and conditions will remain binding upon the parties as though said unenforceable provision were not contained herein.
- D. Terms and conditions of this Permit which, by their sense and context, survive the termination, cancellation, or expiration of this Permit, including, but not limited to, Permittee's obligations under Sections 8, 9, 10 and 14, shall so survive.
- E. This Permit constitutes the entire agreement of the parties with respect to the matters described herein and supersedes all prior written or oral negotiations or agreements with respect thereto. Each party to this Permit acknowledges that no representations, inducements, promises, or agreements, orally or otherwise, have been made by either party, or anyone acting on behalf of either party, which are not embodied herein, and that no other agreement, statement or promise not contained in this Permit shall be valid or binding. Any modification of this Permit will be effective only if it is in writing signed by both parties, and the amended Permit remains subject to the enforcement provisions of this Permit.
- F. This Permit shall bind and inure to the benefit of the successors, personal representatives, and permitted assignees of the respective parties.
- G. Each of the parties hereto has been or has had the opportunity to be represented, to the extent desired, by legal counsel of its choice in respect to this transaction. No provision of this Permit shall be construed against one party as the drafter of the Permit for that provision.

14. ENFORCEMENT

- A. If an action is instituted to enforce any of the terms, covenants, conditions or agreements contained in this Permit or if an action is commenced because of any breach hereof, then the prevailing party in such action shall be entitled to all of its costs and reasonable attorneys' fees as fixed by the trial and appellate courts in said action.
- B. Permittee and Owner hereby expressly and irrevocably waive all right to a trial by jury in any action, proceeding, claim, counterclaim or other litigation arising out of or relating to the Permit or any of the activities or events referenced in this Permit.

15. EXECUTION

A. Unless otherwise provided herein, this Permit shall be effective on the last date of execution by the undersigned parties. This Permit shall not be binding upon either Party until approved and signed by each Party.

B. Each of the undersigned represents that they have sufficient authority to execute this binding Permit on behalf of the party they represent.

C. This Permit may be executed in one or more counterparts, each of which shall be deemed an original and all of which counterparts together shall constitute the same instrument, which may be sufficiently evidenced by one counterpart.

D. Each Party agrees that the electronic signatures, whether digital or encrypted, of the parties included in this Permit are intended to authenticate this writing and to have the same force and effect as manual signatures. Electronic signature means any electronic sound, symbol, or process attached to or logically associated with a record and executed and adopted by a party with the intent to sign such record, including facsimile or email electronic signatures.

IN WITNESS WHEREOF the parties hereto have caused this instrument to be executed as below subscribed.

THE TERMS OF THIS PERMIT ARE HEREBY ACCEPTED.

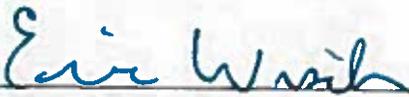
PERMITTEE:

WASHINGTON STATE
DEPARTMENT OF NATURAL RESOURCES

OWNER:

SERIES ONE OF
TWIN CREEKS TIMBER LLC

By: GREEN DIAMOND MANAGEMENT
COMPANY, Owner's agent



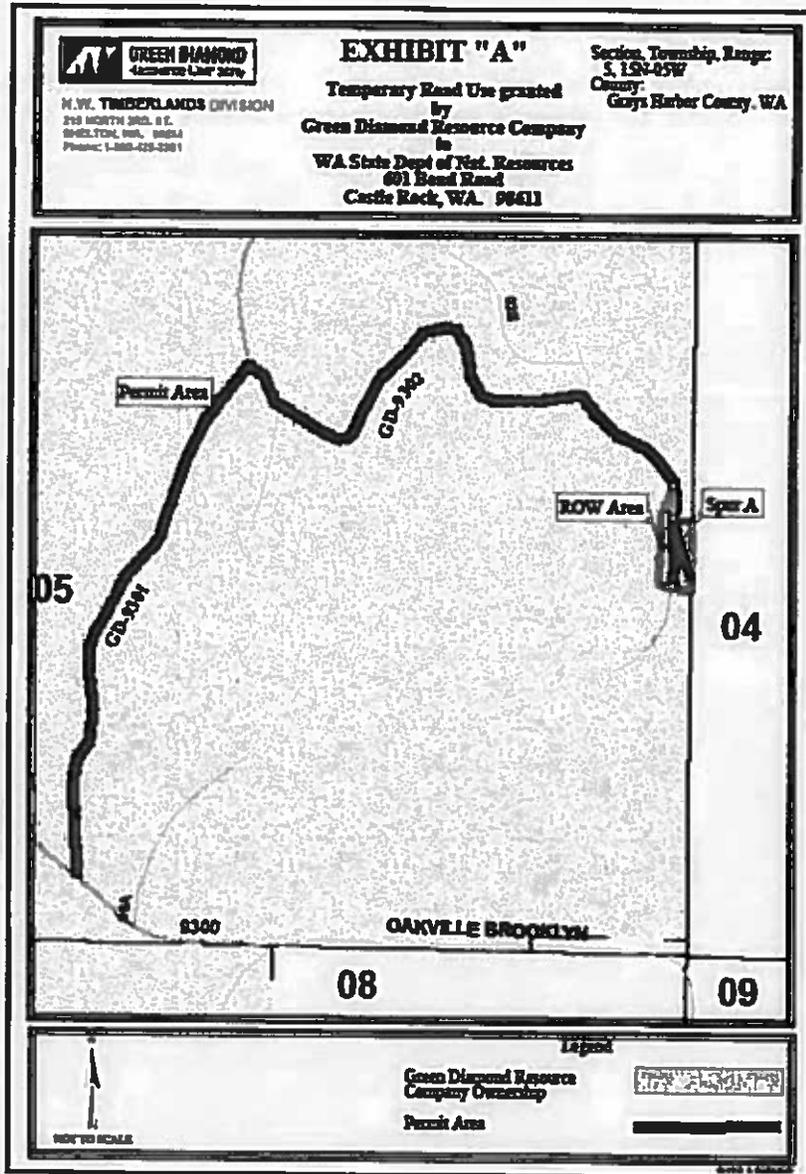
Name: Eric Wisch
Title: Pacific Cascade Region Manager

Date: 8/26/19



Blayde Fry, Vice President,
General Manager, Northwest Timberlands

Date: 9-4-19



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